3480 Buskirk Avenue Pleasant Hill, CA 94523-4342 P.O. Box 8045 Walnut Creek, CA 94596-1220 (510) 937-9010 FAX (510) 937-9026

FROTECTION

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April 10, 1995

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

11-1564-04/1

Subject:

First Quarter 1995, Groundwater Monitoring Report

Former E-Z Serve Station #100877 525 West A Street, Hayward, California

Dear Mr. Cobb:

Brown and Caldwell conducted the first quarter 1995 groundwater monitoring event at E-Z Serve Petroleum Marketing Company of California's Former Station #100877, 525 West A Street, Hayward, California on March 14 and 15, 1995. The work performed at the subject site included collecting depth-to-groundwater measurements from 15 groundwater monitoring wells, purging and sampling 14 wells, and submitting the groundwater samples to Southern Petroleum Laboratories Inc. (SPL), an analytical laboratory located in Houston, Texas and certified by the State of California Department of Toxic Substance Control for analysis of hazardous materials. Field work was performed following the procedures outlined in Attachment A.

Field Activities

Four off-site wells (MW-11, MW-12, MW-13, and MW-14) were installed on February 6-7, 1995. The well installation procedures are discussed in Step 5, Phase II Site Investigation Report, E-Z Serve Petroleum Marketing Company of California, Former Station #100877, 525 West A Street, Hayward, California.

Depth-to-water measurements were collected on March 14, 1995, using an oil-water interface probe and a clear acrylic bailer was used to check for free product. Free product was identified in Well MW-1A, therefore, this well was not sampled. A petroleum odor was identified in Wells MW-1 through MW-7, MW-10 and MW-11. A minimum of three well volumes was purged from each of the monitoring wells prior to sampling. Samples were collected from each of the monitoring wells, transferred to the appropriate sampling vials, and submitted to SPL under appropriate chain of custody. In addition, a duplicate sample was collected from Well MW-7 and a field blank was prepared prior to sampling Well MW-7.

Mr. Brian Cobb April 10, 1995 Page 2

A trip blank was prepared by SPL and accompanied the samples during shipping. Samples were analyzed by the laboratory for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylene isomers, following Environmental Protection Agency Methods 8015 modified and 8020.

Summary of Findings

Field data collected during the sampling event indicate groundwater elevations have increased relative to last quarter. The groundwater appears to flow west to southwest under an average gradient of 0.005. Analytical results indicate that petroleum hydrocarbon constituents have slightly decreased in groundwater monitoring wells MW-11, MW-5, MW-7, and MW-10, slightly increased in MW-4 and MW-9 and remained consistent in the remaining wells when compared to historical data. A summary of the depth-to-water measurements, calculated groundwater elevations, and analytical results are included in Table 1. A groundwater contour map, identifying the primary groundwater flow direction on March 14, 1995 and the analytical results from each sample, is included as Figure 1. Field notes, the chain-of-custody form and the laboratory data sheets are included in Attachment A.

If you have any question regarding the information presented herein, please contact one of us at your earliest convenience.

Sincerely,

BROWN AND CALDWELL

Todd Miller

Project Manager

Pat G. Cullen

California Registered Geologist No. 4932

TM/PC:lkg Attachments

cc: Mr. John Reeves, Attorney at Law

Ms. Madhulla Logan, Alameda County Department of Environmental Health

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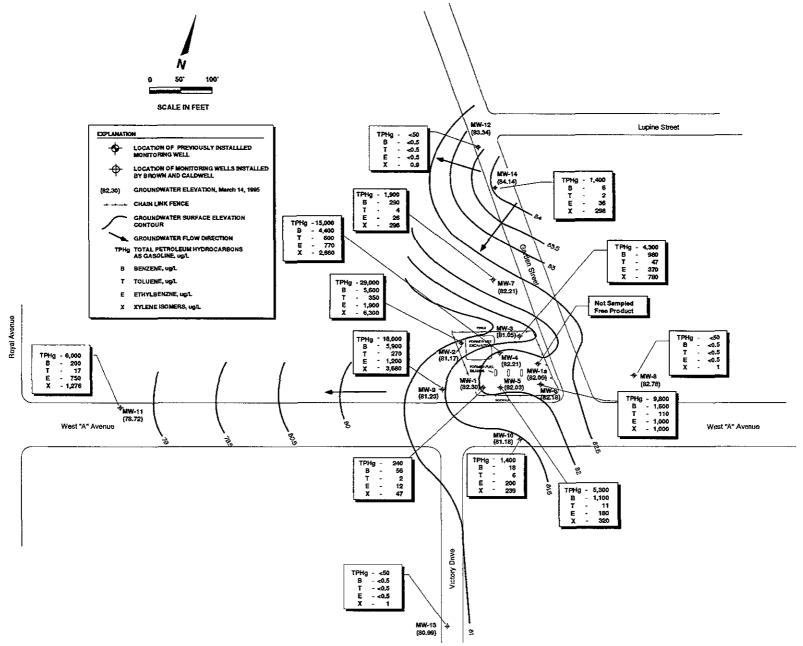


Figure 1 Groundwater Surface Elevation Contour and Petroleum Hydrocarbon Constituent Distribution Map, March 14, 1995 Former E-Z Serve Station #100877 4901 525 West A Street, Hayward, California

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	Depth	Product	Groundwater			hods 8015 an		
	Date	Elevation	to Water	Thickness	Elevation			entration (μg/		
Well I.D.	Sampled	(feet)1	(feet)2	(feet)	(feet)1	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	22022	20.08	1	79.83	48,000	9,000		, ,	4,600
	22-Dec-92		19.79	1	80.12	84,000	22,000			17,000
	3-Mar-93		16.23	t e	83.68	54,000	16,000	-		4,300
	23-Jun-93	96.73		l .	79.87	30,000	18,000	-		3,700
	30-Sep-93		18.04		78.69	33,000	10,000		1	1,700
	6-Feb-94		18.15		78.58	64,000	18,000		4,700	12,000
	2-May-94		17.26		79.47	7,200	2,100		1 1	520
	1-Jul-94		17.60		79.13	13,000	3,700		550	12,000
	20-Sep-94		20.59		76.14	10,000	3,100		l I	870
	5-Dec-94	į	17.83		78.90	8,700	3,700		520	950
	10-Mar-95		14.67		82.06	·				
	15-Mar-95		14.43		82.30	290	56	2	12	47
MW-1A	23-Jun-93	97.59	17.80	0.21	80.00	1	Samp	 le Not Analy2	l [
	30-Sep-93]	Not Recorded	i l		Wel	ll Not Sample	đ	
	6-Feb-94		18.89		78.70	8,900		•		400
	2-May-94		18.35	0.09	79.33	•		Il Not Sample	•	
	1-Jul-94		18.45		79.14	12,000	1,100	<1	920	1,100
	20-Sep-94		21.72	0.22	76.09	•	Wel	ll Not Sample	ď	
	5-Dec-94		18.87	0.07	78.79		Wel	l Not Sample	đ	
	10-Mar-95		15.83		81.76		Wel	l Not Sample	d	
	14-Mar-95		15.55	0.05	82.09		Wel	l Not Sample	đ	
	 ·					1		_		

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

	Date	Well Elevation	Depth to Water	Product Thickness	Groundwater Elevation			hods 8015 and		
Weil I.D.	1	ì			1 1	TDII-4		ntration (μg/		37.1
	Sampled	(feet)1	(feet)2	(feet)	(feet)1	TPHg ³	Benzene		Ethylbenzene	Xylenes
MW-2	5-Feb-92	101.45	22.35		79.10	67,000	13,000	4,700	1	1,300
	11-Sep-92		21.67		79.78	57,000	9,000	1,400	i .	8,400
	22-Dec-92		21.39		80.06	31,000	9,900	350		4,100
	3-Mar-93		17.75		83.70	17,000	5,100	1,300	1)	1,900
	23-Jun-93	98.06	18.42		79.64	60,000	23,000	1,500		17,000
	30-Sep-93		19.63		78.43	38,000	12,000	780	1 ' 1	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	, <u>,</u>	16.33		81.73	·	Wel	l Not Sample	1	
	15-Mar-95		16.89		81.17	29,000	5,600	350	1,900	6,300
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	ļ	19.21		78.45	20,000	4,800	430	1,500	2,900
	2-May-94		18.30		79.36	4,200	680	48		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		930
!	6-Dec-94	1	19.15		78.51	4,000	640	34	l f	480
	10-Mar-95		15.86		81.80	-,1		Not Sample		
i	15-Mar-95	ĺ	16.61		81.05	4,300	980	47		780
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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	Depth	Product	Groundwater		EPA Meth	ods 8015 an	d 8020	
	Date	Elevation	to Water	Thickness	Elevation		Conce	ntration (μg/	L)	
Well I.D.	Sampled	(feet)1	(feet)2	(feet)	(feet)1	TPHg ³	Benzene		Ethylbenzene	Xylenes
MW-4	5-Feb-92	100.50	21.31		79.19	16,000	2,700	410	<1	3,400
	11-Sep-92	ĺ	20.62		79.88	43,000	7,600	1,600	1,400	4,100
	22-Dec-92	ĺ	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	ļ	18.36		78.74	9,000	2,300	400	440	1,100
	10-Mar-95		15.25		81.85		Well	Not Sample	d	
	15-Mar-95		14.89		82.21	15,000	4,400	600	770	2,660
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	l	17.50		79.23	8,000	1,300	29	440	77 0
	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		1,600
	5-Dec-94		18.02		78.71	10,000	1,800	< 50	620	1,400
	10-Mar-95	į	14.93		81.80	•		Not Sample		·
	15-Mar-95		14.70		82.03	5,300	1,100	11	: 1	320

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	Depth	Product	Groundwater		EPA Met	hods 8015 and	d 8020	
	Date	Elevation	to Water	Thickness	Elevation		Conce	entration (μg/	L)	
Well I.D.	Sampled	(feet)1	(feet)2	(feet)	(feet)1	TPHg ³	Benzene	Toluene	Ethylbenzene	Xylenes
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	Ì	79.79	18,000	4,600	850	2,700	3,400
	30-Sep-93		19.05	0.03	78.07		Samp	le Not Analyz	zed	
	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	į	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	_	Wel	l Not Sample	d	
	15-Mar-95		14.91		82.18	9,800	1,600	110	1,000	1,000
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	Ì	78.50	30,000	3,200	71	2,800	3,400
	6-Feb-94		19.11	0.06	78.39	•	Samp	le Not Analyz	zedi .	
	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
duplicate	5-Dec-94				ļ	3,900	310	<10	540	540
	10-Mar-95		15.72		81.72	•		l Not Sample	1	
	14-Mar-95		15.23		82.21	1,900	290	4	26	296
duplicate	14-Mar-95					1,000	330	5		339
			i							

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	Depth	Product	Groundwater			ods 8015 and		
	Date	Elevation	to Water	Thickness	Elevation			ntration (µg/		
Well I.D.	Sampled	(feet)1	(feet)2	(feet)	(feet)1	TPHg ³	Benzene	Toluene	Ethylbenzene	Xylenes
MW-8	23-Jun-93	97.61	17.64		79.97	350	43	9		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	Į	18.11		79.50	< 100	<1	3	<1	7
	1-Jul-94	Ì	18.43		79.18	300	18	48		37
	20-Sep-94		21.43		76.18	< 100	<1	<1	F	<1
	5-Dec-94		18.72		78.89	<50	<0.5	< 0.5	<0.5	< 0.5
	10-Mar-95		18.69		78.92		Wel	Not Sample		
	14-Маг-95		14.83		82.78	<50	<0.5	<0.5	<0.5	1
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	Ì	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
	10-Mar-95	,	NR				Wel	Not Sample	d	
	14-Mar-95		14.18		81.23	18,000	5,900	270	1,200	3,680
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	ļ	17.83	r.	79.28	710	16	6	85	62
	1-Jui-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	1	18.43		78.68	2,700	30	13	260	430
	10-Mar-95	ļ	15.37		81.74	•	Well	Not Sample		
	14-Mar-95		15.93		81.18	1,400	18	6	1 1	239
	j i]]		1		_	

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	Depth	Product	Groundwater		EPA Met	hods 8015 and	1 8020	
	Date	Elevation	to Water	Thickness	Elevation		Conc	entration (μg/	L)	
Well I.D.	Sampled	(feet)1	(feet)2	(feet)	_(feet)1	TPHg ³	Benzene	Toluene	Ethylbenzene	Xylenes
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		Wel	l Not Sample	<u>d</u>	
	14-Mar-95		13.96		78.72	6,000	200	17	750	1,276
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	_	Wel	l Not Sample	đ.	
	14-Mar-95		15.69		83.34	<50	<0.5	<0.5	<0.5	0.9
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		Wel	l Not Sample	đ	
	14-Mar-95		15.81		80.99	<50	<0.5	<0.5	<0.5	1
MW-14	10-Feb-95	99.01	16.28	l.	82.73	12,000	42	8	740	2,100
duplicate	10-Feb-95				1	12,000	48	< 10	800	2,300
	10-Mar-95		16.33		82.68		Wel	l Not Sample		
	14-Mar-95		14.87		84.14	1,400	6	2	36	298
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				ļĮį	< 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				l i	< 50	<0.5	< 0.5	<0.5	< 0.5
Trip Blank	14-Mar-95				Ì	< 50	< 0.5	< 0.5	1	< 0.5
Field Blank	14-Mar-95				<u> </u>	< 50	<0.5	< 0.5	<0.5	<0.5

¹Relative to lower mean sea level.

²Below ground surface.

³Total Petroleum Hydrocarbons as gasoline.

ATTACHMENT A

SAMPLING AND ANALYSIS PLAN FIELD NOTES CHAIN-OF-CUSTODY LABORATORY DATA SHEETS

EZ-SERVE MANAGEMENT COMPANY 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 pump or a pre-cleaned submersible pump, depending on depth to water and the amount of sediment expected to be contained in the well. 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°C until reaching the analytical laboratory.

Laboratory Analysis

Samples were shipped, under appropriate chain-of-custody procedures, to SPL Laboratory in Houston. SPL Laboratory is certified by the State of California 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

<u>Instrument calibration.</u> 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.

<u>Duplicate</u>. 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.

<u>Field Blank.</u> 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.

EROWN & CALDWELL WELL INFORMATION DATA

JOB NAME: #Z-SERVE HAYWARD

B&C PERSONNEL: STIMAR

WEATHER: OVERCAGT COOL 550F

INSTRUMENT: ORS DIL WATER INTERFACE

DATE: 3-14-95

JOB #: 1544-04

LOCK TYPE # 2402

LID TYPE: EMCO

SWL	TD	DIA	TIME	COMMENTS
443	32.10	4"	0759	
15.55	28.40	2"	0747	FREE FLOATING PRODUCT .05'
16.89	32.30	44	0904	
16.41	32.10	4	0814	
14.55	32.11	44	0809	
14.70	32.48	44	0756	
14.91	32.10	4"	0752	
15,23	30.06	2"	0814	
14.83	32.15	24	0736	
14-18	31.60	21	0742	
15.93	31.80	2"	0822	
13.96	25'.0	2"	0835	
15.69	30.0	2"	0827	
15.61	30'.0	2"	0840	
14.87	30.0	2"	0831	
		ļ 		
:				
	14.43 15.56 16.89 16.41 14.90 14.91 15,23 14.83 14.83 14.83 14.83 15.93 15.69 15.69	H.43 32.10 15.55 28.40 16.89 32.30 16.61 32.10 14.59 32.11 14.91 32.10 15.23 30.06 14.83 32.15 14.18 31.60 15.93 31.80 15.93 31.80 15.69 30.0 15.69 3	Hi43 32.10 4" 15.55 28.40 2" 16.89 32.30 4" 14.90 32.10 4" 14.90 32.10 4" 14.83 32.15 2" 14.83 32.15 2" 15.93 31.60 2" 15.93 31.80 2" 15.93 30.0 2" 15.69 30.0 2" 15.69 30.0 2" 15.69 30.0 2" 15.69 30.0 2" 15.69 30.0 2" 15.61 30.0 3" 30.0 3	Hall 32.10 4" 0759 15.55 28.40 2" 0747 16.89 32.30 4" 0804 16.41 32.10 4" 0809 14.55 32.11 4" 0809 14.91 32.10 4" 0756 14.91 32.10 4" 0756 14.83 32.15 2" 0818 14.83 32.15 2" 0736 14.18 31.60 2" 0742 15.93 31.80 2" 0822 13.96 25'.0 2" 0835 15.69 30'.0 2" 0827 15.61 30'.0 2" 0840

			INDWATER SA					
Project Name: <u>F2-</u> Location: <u>N66T</u> Samplers Name: Weather Conditions:	A1 STI STINAR	reet	HAYWARD, CA	Job No.:	564-04 ** 1008	Date:	3-16-	95
1. WATER LEVEL a. Depth to water (b. Total Well Depth c. Length of Water d. Casing Volume e. Length of filter f. Filter pack volu g. TOTAL WELL 2. WELL PURGIN a. Purge Method	ft) h Column pack me VOLUM	= 14. = 32 = 17. = 11.4 = 16. = 6.5 E = 18.	.10 67 (b a.) GAL (c. x [ga 32 PAL (e. x [ga 30 PAL (d. + f.	d/ft filter paci		TOC Elevation (for Water Table Elev Tape Corr. (TC) Well Dia. 4 2-in. casing 6-in. casing 6.5-in. casing 8-in. casing 10-in. casing 12-in. casing	y 8 [⊀]	
b. Required Purge c. Field Testing; F d. Pump Rate e. Method of GW f. Recovery Rate:	iquipment	Used <u>B</u> m	gal DRUM	viend,	_VWR_CO			
Volume Removed (gal) Time	T ^o c_	рĦ	Spec. Conductivity	Turbidity (NTU's)		Color/ scription	SWL	Pump Placement
153 15 1207 27 1211 43.5 1222 55 1232	21.0	7.03 6.99 6.97	983 1,020 1,082 1,078 1,063			ner odor		
3. SAMPLE COI	LECTION	V: Method	DISTO BALL	6R Contair BO15	ner 3x40ml BTEX	<u>UOA</u> Preserv 8020	ration H	c L
COMMENTS, RE	MARKS (<u>AOEUE</u>		177 MW-1		BEDICATED 3			

				UNDWATER SA						
Project Name: Location: W Samplers Nam Weather Cond	e:	TG "}	reet L	YWARD HAYWARD, (Job No.: <u> </u>	564-04 ** 1008	87	Date: _	3-15-	95
 WELL I Purge M Required Field Te Pump R Method 	water (ft) ell Depth of Water C Volume of filter pa ck volume WELL V PURGING (ethod d Purge V esting; Equate of GW D	Column ck VOLUM DATA: olume (@ nipment I	= 15. = 28 = 12. = 2.1 = 9. = 5. E = 7.1	55-15.53/F 3,40 .65 (b a.) .65 (c. x [ga 53'] 13 CAL (c. x [ga 6 AL (d. + f.) .84 (d. + f.) .85 (d. + f.) .84 (d. + f.)	l/ft casing]) l/ft filter pack) olume) =	N/A	Water Table Tape Corr. Well Dia. 2-in. 4-in. 6-in. 6.5-ir 8-in. 10-in 12-in	le Elev.	4 6.5 "	=0.16 gai/ft =0.65 gai/ft =1.47 gai/ft =1.7 gai/ft =2.60 gai/ft = 4.1 gai/ft = 5.0 gai/ft
f. Recover Volume Removed (gal)	y Rate: Sl	ow (90 <i>%</i>	5 > 60 mir pH	Spec. Conductivity	Turbidity (NTU's)		Color/escription		SWL	Pump Placement
				WELL T	NOT SAL	QLED.				
3. SAMPI	E COLL			is NA	Contain	er wA	1	Preserva	ation W	A

				INDWATER SA				3-15-	15
ject Name:	EZ-5	ERUE			Job No.:	64-07 6 (0057	Date:		
ation: W	EST A	STRO	get, H	AYWARD, CA	5/A.	10087	7		· · · · ·
oplers Nam									
ather Cond	itions:	<u>Suna</u>	24						
· 							TOC Elevation (fr	om LS) _	
WATER L	EVEL D	ATA: (fr		ma f		•	Water Table Elev.	·	
a. Depth to	water (ft)	= <u>16</u>			•	Tape Corr. (TC)		
b. Total We	ell Depth		= <u>32</u>	.30			Tape Corr. (TC) Well Dia. 4	<u>x 8" </u>	
c. Length o	of Water (Column		.4\' (b a.)					
d. Casing \	Volume		= <u>_0.</u>	0 (4 L/c. x [ga	l/ft casing])		2-in. casing		=0.16 gai/ft
e. Length o	of filter pa	ıck	=	»' <i>'</i>			4-in. casing 6-in. casing		=0.65 gal/ft =1.47 gal/ft
f. Filter pa	ck volum	е	= <u>le</u> u	<u>82 74</u> 6(e. x [ga	d/ft filter pack	:])	6.5-in. casing		=1.7 gal/ft
g. TOTAL	. WELL	VOLUM	E = <u>ile.</u>	33 9AL (d. + f.)		8-in. casing		=2.60 gal/ft
_				(10-in. casing	۵.	= 4.1 gal/ft $= 5.0 gal/ft$
WELL I	PURGING	DATA	:				12-III. Casini	·	<u></u>
o Duran M	Cethod	TRA	SH PUM	D W WATE	-RAA				
	J. Thomas S	7-1	al/. 23 a	allons ner well vo	olume) = 🗗 🎾	0.5 gAL.	·		
. Require	eringe Fa	vinment	Heeri B	ECKHAN P!	+Tens	, JUR	cond.		
	31HLZ. L.U	mhmen							
J. Phone D	1000		DAA	•					
d. Pump R	late 2		PM						
d. Pump R e. Method	of GW D	isposal	155 55	GAL PAU	M				
d. Pump R	of GW D	isposal	155 55		M				
d. Pump R e. Method f. Recover Volume	of GW D	isposal	155 55	GAL PRU.), Medium (90%	30-60 min)	Fast (90% < 10	min)		Pump
d. Pump R e. Method f. Recover	of GW D	isposal	155 55	GAL PAU	M	Fast (90% < 10 Des	min)	SWL	Pump Placemen
d. Pump R e. Method f. Recover Volume Removed	of GW Ery Rate: S	Disposal _	55 %>60 min	GAL PRU 1), Medium (90% Spec.	30-60 min)	Fast (90% < 10	min)	SWL	
d. Pump R e. Method f. Recover Volume Removed (gal)	of GW Ery Rate: S	Disposal Slow (909	55 %>60 min	GAL PRU 1), Medium (90% Spec.	30-60 min)	Fast (90% < 10 Des	min)Color/ coription	SWL	
d. Pump R e. Method f. Recover Volume Removed (gal)	of GW Ery Rate: S Time	Disposal Slow (909	55 %>60 min pH	GAL DAU), Medium (90% Spec. Conductivity	30-60 min)	Punp of	min)Color/ coription	SWL	
d. Pump R e. Method f. Recover Volume Removed (gal)	of GW E ry Rate: S Time 1104 1112	T°c 19.6	55 %>60 min pH 6.86	Spec. Conductivity 1,269	30-60 min)	Punp of	min)Color/ scription U	SWL	
d. Pump R e. Method f. Recover Volume Removed (gal)	Time 1104 11120 1130	19.6 20.0	55 %>60 min pH 6.86 6.90	Spec. Conductivity 1,269 1,280 1,27%	30-60 min)	PULP OF	min)Color/ scription U	SWL	
d. Pump R e. Method f. Recover Volume Removed (gal)	of GW E ry Rate: S Time 1104 1112	T°c 19.6	55 %>60 min pH 6.86	Spec. Conductivity 1,269	30-60 min)	PUNP OF CLEAR	min)Color/ scription U	SWL	
d. Pump R e. Method f. Recover Volume Removed (gal)	Time 1104 11120 1130	19.6 20.0	55 %>60 min pH 6.86 6.90	Spec. Conductivity 1,269 1,280 1,27%	30-60 min)	PUNP OF CLEAR	min)Color/ scription U	SWL	
d. Pump R e. Method f. Recover Volume Removed (gal)	Time 1104 11120 1130	19.6 20.0	55 %>60 min pH 6.86 6.90	Spec. Conductivity 1,269 1,280 1,27%	30-60 min)	PUNP OF CLEAR	min)Color/ scription U	SWL	
d. Pump R e. Method f. Recover Volume Removed (gal)	Time 1104 11120 1130	19.6 20.0	55 %>60 min pH 6.86 6.90	Spec. Conductivity 1,269 1,280 1,27%	30-60 min)	PUNP OF CLEAR	min)Color/ scription U	SWL	
d. Pump R e. Method f. Recover Volume Removed (gal)	Time 1104 11120 1130	19.6 20.0	55 %>60 min pH 6.86 6.90	Spec. Conductivity 1,269 1,280 1,27%	30-60 min)	PUNP OF CLEAR	min)Color/ scription U	SWL	
d. Pump R e. Method f. Recover Volume Removed (gal)	Time 1104 1120 1130	19.6 20.0 19.9	pH	GAL DAU), Medium (90% Spec. Conductivity 1,269 1,280 1,278 1,281	30-60 min) Turbidity (NTU's)	PUMP OF CLEAR SAMPLE	min) Color/ scription U Color Color Color Color Color Color		Placemen
d. Pump R e. Method f. Recover Volume Removed (gal)	Time 1104 1120 1130	19.6 20.0 19.9	pH	GAL DAU (90%), Medium (90%) Spec. Conductivity 1,269 1,280 1,278 1,281	30-60 min) Turbidity (NTU's)	Fast (90% < 10 Des PUNP OF (LOUDY, FUE CLEAR SAMPLE er 3x40 ml	min) Color/ scription U Color		Placemen
d. Pump R e. Method f. Recover Volume Removed (gal)	Time 1104 1120 1130	19.6 20.0 19.9	pH	GAL DAU), Medium (90% Spec. Conductivity 1,269 1,280 1,278 1,281	30-60 min) Turbidity (NTU's)	PUMP OF CLEAR SAMPLE	min) Color/ scription U Color		Placemen
d. Pump R e. Method f. Recover Volume Removed (gal) 14 32 52.	Time 1104 1120 1130 1135	isposal flow (90:	pH	Spec. Conductivity 1,269 1,280 1,278 1,281 1,278 1,281 1,278 1,281	Turbidity (NTU's) Contain BOIS	Fast (90% < 10 Des PUNP OF (LOUDY, FUE CLEAR SAMPLE er 3x40 ml	min) Color/ scription U Color		Placemen
d. Pump R e. Method f. Recover Volume Removed (gal)	Time 1104 1120 1130 1135	isposal flow (90:	pH	GAL DAU (90%), Medium (90%) Spec. Conductivity 1,269 1,280 1,278 1,281	Turbidity (NTU's) Contain BOIS	Fast (90% < 10 Des PUNP OF (LOUDY, FUE CLEAR SAMPLE er 3x40 ml	min) Color/ scription U Color		Placemen

			GROU	INDWATER SA	MPLE COLL				
Project Name	E7-5	FRUE	HAVWA	red	Job No.:	564-04	Date:	3-15-4	25
ocation: We	57 A"	STREE	T. HA	YWARD, CA.	5TA.*	100877	<u> </u>	<u> </u>	
Samplers Nam									
Weather Cond									
		**			<u></u>	TO	C Elevation (fr	om LS)	
i. WATER I	EVEL D	ATA: (fr	om TOC)				ater Table Elev.		
a. Depth to	water (ft))				Ta	pe Corr. (TC)		
b. Total W	_		= <u>32</u>			W	ell Dia. <u>4"</u>)	(B"	
c. Length o	of Water (Column		.49 (b a.)					2.46 1/0
d. Casing \				06 9AL (c. x [ga	I/R casing])		2-in. casing	!	=0.16 gal/ft =0.65 gal/ft
e. Length o	-		=	- 	1/fr filter pack	-1)	6-in. casing	. =	= 1.47 gal/ft
f. Filter pa				82 9AL (e. x [ga		-1)	6.5-in. casin 8-in. casing	~	= 1.7 gal/ft = 2.60 gal/ft
g. TOTAL	. WELL	VOLUM	$\mathbf{E} = \underline{\mathbf{Le}}$	8 9AL (d. + f.	,		10-in. casing	; <u> </u>	= 4.1 gal/ft
A 110017 T 1	PURGINO	. DATA.					12-in, casing	<u> </u>	= 5.0 gal/ft
				WATERAA				<u> </u>	
	J D., 1	Johnson (d	A11 6 0	illone ner well vo	olume) = _5	0.6		_	·····
o. Require	esting: Ea	uipment	Used &	secknar pt	TEMP	VWR COND.		_ 	
d. Pump R	ate	1.5 9	pp		<u>, </u>	<u></u>			
a Mathod	of GW D	isposai	- 55 a	GAL. DAUM					
f. Recover	y Rate: S	low (909	% > 60 min), Medium (90%	30-60 min),	Fast (90% < 10 n	nin))		
	Ī .						·	'	
Volume Removed		1 ~	,,	Spec. Conductivity	Turbidity (NTU's)		lor/ ription	SWL	Pump Placement
(gal)	Time	T°c	pΗ	Conductivity		Pump on			
	0905	10.2	6.55	1148		CLEAR, FUL	LOVOR		30'
15			6.72			DAM6			
30 53	0940		6.74			SAME			
.5	0945		6.77			SAMPLED		<u> </u>	
<u> </u>	10,10	10.1	140·1-1					 	
	- 							_	
								<u> </u>	
<u> </u>						نه ما، ۲	lo.1 * -	; 	,
3. SAMP	LE COLL	ECTION	l: Method	DISP. BAILS	e Contair	ier 3x40 Al (Preserv	ation HC	<u></u>
			Analys	is TPH.G	8015	, OTEX	0020		
COMMEN	rs, rem	ARKS			_			ı.	
		1.4364	LED#	100877- NW	-3				
		·							

			GRO	UNDWATER SA	MPLE COLI	ECTION REC	CORD	; ;	
Project Name: Location: We Samplers Nam Weather Cond	<i>ST A"</i> ne:	STRGGI STWAR	HAYL	ARD VARD (A		564-64 877	Date:	3-15-	95
2. WELL 1 a. Purge M b. Required c. Field Te d. Pump R e. Method	water (filed Depth of Water Volume of filter puck volume WELL PURGING dethod dethod dethod dete	Column ack ne VOLUM G DATA RAGE Volume (continuous prince) prince p	= 14 = 32 = 17 = 11. = 16 = 6. E = 18 Used B	. <u>69'</u> . <u>. 11'</u> . <u>22'</u> (b a.) <u>19 9ac</u> (c. x [g:	al/ft casing]) al/ft filter pac .) AA olume) = 5	4.0 gal VWR Co	<i>v</i> s	≥ B" >> ag	
Volume Removed (gal)	Time	T⁰c	рH	Spec. Conductivity	Turbidity (NTU's)		Color/ scription	SWL	Pump Placement
	1005	20.3	6.91	1214		CLEAR, F	UGL ODOR		30'
30	1025	20.5		1,210		SAM	UEL 000R		
55.5	1042		6.88	1217		۰۱			_
	1047		6.87	1,220		SAMPLED			
					 				
3. SAMPI	rs. Rem	ARKS	Analys	DISPO. BAILE is TPH.6 ,	<u>8015</u>	er <u>3x40ml</u> , BTEX	VOK Preserv BOZO	ation _ft	cı

BROW	N = A	ND (CAL	DWELI				JII 110. 113.	
		· · · · · · · · · · · · · · · · · · ·		NDWATER SAI					
Project Name: Location: Was Samplers Nama Weather Cond	e: <u>S</u>	ST TWAR	REGT	HAYWAAD,	Job No.: _1: CA _ S	7A,# 1001	Date: _	3-15-0	15
2. WELL F a. Purge M b. Required c. Field Te d. Pump R	water (ft) ell Depth f Water C Volume of filter pa ck volume WELL PURGING Lethod d Purge V esting; Eq ate	Column ck ck column TR Tolume (uipment)	= 14. = 32 = 17. = 11.5 = 16.9 E = 18. Used Boundary Boundar	<u>.4B'</u> 7 <u>B'</u> (b a.) 559al (c. x [ga	I/ft filter pack (ERRA plume) = 5	S.13 942 VWR (X S '(<u></u>
Volume Removed (gal)	Time	T°c_	рΗ	Spec. Conductivity	Turbidity (NTU's)	Co	lor/ ription	SWL	Pump Placement
	1253					Pump on			30'
17	1303	21.6	6.74	1224		CLEAR FU			30
34	1313	21.9	6.69	1,212		SAME			
55.	1325	21.4	6.64	1,200		SAME			
15	1330	21.7	6.63	1,208		Samples			
ļ		<u> </u>							
	 	<u> </u>	ļ <u> </u>				· · · · · · · · · · · · · · · · · · ·		
		 	}						
3. SAMP		ARKS	Analys	1 DISPO. BAIL Sis TPH.G.	8012	er <u>3x40ml</u> BTEX BO	JOA Prese	rvation H(
			· • • • • • • • • • • • • • • • • • • •						

				UNDWATER SA							·	
Project Name:	: EZ-5	SERVE	HAYU	UARD	Job No.: 🔟	<u>564-</u>	04		Date:	3-1	5-	9 ≤
Location: W	EST "	4" <u>57</u>	REET	HAYWARD,	CA S	<u>t≯</u> #	1008	77_				
Samplers Nan	ne:	STINA	<u>e</u>			-						
Weather Cond	litions:	Sunn	4								γ .	
							T	OC Ele	vation (i	rom L	S)	
1. WATER I							W	ater Ta	able Elev	·		
a. Depth to			= 14	-31			T	ape Co	rr. (TC)			
b. Total W			= 32	.10 .19 (b a.)			V	Vell Di	a. <u>4'</u>	'γ8	<u> </u>	
c. Length												0.16 1/0
d. Casing				7-9AL (c. x [ga	ai/it casingj)				n. casing			=0.16 gal/ft =0.65 gal/ft
e. Length					116 Elan	I-3\		1	i. casing			=1.47 gal/ft
f. Filter pa				82 942 (e. x [g:		K))			-in. casi	_		=1.7 gal/ft
g. TOTAI	L WELL	VOLUM	$\mathbf{E} = \underline{1 + \cdot}$	99 9AL (d. + f.	.)				n. casing in. casin			= 2.60 gal/ft $= 4.1 gal/ft$
									in, casin			= 5.0 gal/ft
2. WELL	PURGING	ATAG 5	: 	رزارتها سر	0 - 6000							
a. Purge N	Aethod	<u></u>	RASH 1	Pump w/w	ALEKKA	29					·	<u></u>
b. Require	d Purge V	olume (ع (۲۰ <u>۲۲)</u> ه	allons per well v	olume) =	23 · 1 · 6	10 Ca	413			*	
c. Field Te	esting; Eq	uipment	Used	eckman pH	+ 1811.	Vu	<u> </u>				*	
d. Pump R				S. No.			.—.					
e. Method	of GW D	isposal _	55	GAL. DRUM	20.60	Fan (00	g < 10	اسند				
f. Recover	ry Rate: S	low (909	% > 60 min	ı), Medium (90%	30-00 mm)(rasi (90	70 < 10 L	<u> </u>				
Volume					_ ,,,,,		Ca	lor/				Pump
Removed (gal)	Time	T⁰c	Hg	Spec. Conductivity	Turbidity (NTU's)			ription		<u>S</u> Y	<u>VL</u>	Placement
1	1346					Pun	ره حما					
15		22.3	6,76	1,217		5419W	t Tues	FUEC	. 000K			
50		22.1	6.72	1,215		CL	GAR					
15	1416	21.5		1.167		cue	EAR.		<u></u>	<u> </u>		
54	1422	21.6		1,172		Cr	<u>ear</u>			<u> </u>		
,5		21.7		1,170		SAM	OLGO					<u> </u>
	1-16.7		4.01	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
ļ		1	 									
		 	 		<u> </u>							
L	<u></u>	<u> </u>	<u> </u>	<u> </u>	<u></u>							
3. SAMP	LE COLI	ECTION	: Method	DISPO. BAIL	ER Contain	er <u>3x4</u>	oul V	04	Preser	vation	HC	<u></u>
J. SAMIL	~~	1101	Analys	is TPH.G	B015	Вт	EX 80	20				
001 A 401 M	אביונו אין	ADIZE	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									
COMMEN	is, kem		4	100877-ML)- 6)	
		MAGE	1160	UUDTT FLE								
												<u></u>

	GR	OUNDWATER S	AMPLE COI	LECTION RECO	ORD	:	
Project Name: <u>EZ · Sea</u> Location: <u>GARDEN</u>		ward	Job No.: _	1564-04	Date:	3-14-	95
Samplers Name: 57	WAR						
Weather Conditions:Ou	ER CAST	65°F					
a. Depth to water (ft) b. Potal Well Depth c. Length of Water Colu d. Casing Volume e. Length of filter pack f. Filter pack volume g. TOTAL WELL VOL 2. WELL PURGING DA a. Purge Method	= /9 = 3 mm = 10 = 2.0 = 5 LUME = 5 ATA: RASH Put me (@ 6.11 ment Used _ 6 2 62M sal _ 55	1.80 1.80 1.57 (ba. 1.59AL (c. x [g 1.469AL (c. x [g 1.469AL (d. + f 1.469AL (d. + f 1.469AL (d. + f 1.469AL (d. + f 1.469AL (d. + f	al/ft casing]) al/ft filter pace AAA olume) = 2 + 16MP	4.33 gar	OC Elevation (for later Table Elevation (TC) ape Corr. (TC) Vell Dia. Z'y 2-in. casing 4-in. casing 6-in. casing 6.5-in. casing 10-in. casing 12-in. casing	g	
Volume Removed (gal) Time T		Spec.	Turbidity (NTU's)	Col Descri	or/	SWL	Pump Placement
1020		Conductivity		PUMP ON			
8.0 1028 21.	0 6.47	1,290		BROWNEH SIL	TY & SANDS		30'
15.0 1035 20.		1,300		CLEARING			
	5 6.51	1,320		CLEARING			
	2 6.52	1,330		SAMPLED			
		1				<u>'</u>	
3. SAMPLE COLLECTI COMMENTS, REMARKS	Analys	DISTO BAILGE IS TPH.G S			Preservat	ion <u>HC</u>	

י עי א ם	1 1	4	1 1.)	. D W E L	L-		, n	/eii 140. //	<u>w </u>
			GRO	OUNDWATER S	AMPLE COI	LECTION REC	ORD		
Project Nam Location:	GARDE	N Ave	+ "A		Job No.: _ YWARD, CA	1664-04	Date:	3-14-	95
Samplers Na Weather Cor				<u>,</u>					
1. WATER a. Depth t b. Total V c. Length d. Casing	LEVEL I o water (i Vell Depth of Water	DATA: (i ft) i Column	from TOC) = 14 = 32 = 17	.83		v	OC Elevation (Vater Table Elevation (TC) Value Corr. (TC) Well Dia	v X 6.5 4	
e. Length f. Filter p g. TOTAl	of filter p ack volun	ack 1e VOLUM	$= \underline{0}$ $= \underline{5}$ $\text{IE} = \underline{\$}$		al/ft filter pac	:k])	2-in. casing 4-in. casing 6-in. casing 6.5-in. casing 8-in. casing 10-in. casin	ត្ត	=0.16 gal/ft =0.65 gal/ft =1.47 gal/ft =1.7 gal/ft =2.60 gal/ft = 4.1 gal/ft = 5.0 gal/ft
b. Require c. Field Te d. Pump R e. Method	d Purge Vesting; Equate of GW D	Volume (in uipment / 1.5 49) Disposal	@ <u>5.23</u> g Used <u> </u>	MP / WATER allons per well ver sckman 9 th AL. Drum), Medrum (90%	olume) = _Z		nin)		
Volume Removed (gal)	Time	T⁰c	Нg	Spec. Conductivity	Turbidity (NTU's)		lor/	SWL	Pump Placement
0916 90	0916	19.8	6.42	1,280		CLOUDY, SILT	\$		
18.0	-	19.7	6.47	1,270		CLEARING, FIN	t SIUTS		30'
27.0		19.8	6.45	1,280		CLEARING			
<u>-</u> <u>-</u>	6927	19.8	6.47	1,280		SAMPLE		<u> </u>	1
								<u>!</u> ;	
						,			
					·····				
. SAMPL				DISPO. BALL TPH.G. 8		r 3x40ml TEX	VOA Preserva	uton <u>HCZ</u>	

PUT WEW 2" EXPANDING CAPT LOCK ON WELL

			GR	OUNDWATER S	AMPLE CUI	LECTION REC	.OKD	ı	
				umed Haywaed	_ Job No.: _	1564-04	Date	e: <u>3-14-</u>	95
	_			HAYWALL				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Samplers Na				104 65°				_ 	
Westurer Cor	dunions: _	/ NK L	4 100	709 WB					
ı. WATER	IEVELI	DATA	(from TOC	•		•	TOC Elevation	(from LS)	
a. Depth				1.18			Water Table El	lev	
b. Total V			$\overline{}$	1.60'		,	Tape Corr. (To	C)	
c. Length				7.42 (b a.	١		Well Dia. 2	"x6.5"	
d. Casing									
e. Length				78 942 (c. x [g	airit casmgj)		2-in. casir		=0.16 gai/ft
_	•				-1/ft Elea-	J-3\	4-in. casir 6-in. casir	_	=0.65 gal/ft = 1.47 gal/ft
f. Filter p				1.46 942 (e. x [8 24 940 (d. + f		.K.j.)	6.5-in. ca	sing	=1.7 gal/ft
g. IOIA	L WELL	VOLU	VIE = 2.4	(a. + 1	•)		8-in. casir	ng ing	= 2.60 gal/ft
o West	PURGIN	C DATA	١.				10-in. cas 12-in. cas	_	= 4.1 gal/ft = 5.0 gal/ft
				e with U	ALT-LOSS				
_						11 4 as.		,	
o. Require	anima E	A OUTINE	. <u> </u>	gallons per well v Recuma pt	$olume) = \underline{\mathcal{A}}$	4.1 942		······································	
d Down I	esting; Et	шршепі / 2 <i>5</i>	1040	ACKMON DIE	Y IEMP		 		
d. Pump I	CALE	Vienosal	55	24. 200					
				gar Denn	20 60 -i-)	Enst (00% < 10.	:	<u></u>	
1. Recove	iy Mate. S	10W (30	700 IIII	ń), Medium (90%	ло-оо иши,	1251 (90% < 10)	mm)		
Volume Removed	}			C	Tarabidian		olor/	,	7
(gal)	Time	T⁰c	Нg	Spec. Conductivity	Turbidity (NTU's)		notion	SWL	Pump Placement
	1340					PUMP ON			
9.0	1347	19.9	6.97	1,450		GREENISH, B	Rown		
15.0	1352		6.81	1,390		CLEARING	•		
21.0	1357		6.79	1,370		CLEARING			
26.0	1401	19.6	6.77	1,370		CLEARING			
	1406		6.76	1,360		Samples			
				7, 500					
	<u> </u>	-			<u> </u>		· . · · · · · · · · · · · · · · · · · ·		
			<u> </u>		<u> </u>	<u> </u>			1
የፈንፈርኮ፣	F COLL	CTION	· Method	DIGAD BAINER	Containe	- 3x40al US	A Preser	vation HC	۷
, JAMIL	COLL.	20110.1	. Managed	s TPH.6	SO/S MO	1) BTKY		!	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	C 5555.4.	חזים	VIIII N. 21;	S	<u> </u>	~/_//		<u>, , , , , , , , , , , , , , , , , , , </u>	
COMMENT	5. REMA	LKKS							

GROUNDWATER	SAMPLE	COLLECTION	RECORT
GRUUNDWALER	SAIMLE	COLLECTION	KELUKI

			GRO	DUNDWATER S	AMPLE COL	LECTION RECO	DRD		
				vard St. Hayl		1564-04	Date: _	3-14-	95
Samplers Na	me:	STIN	AR					· · · · · · · · · · · · · · · · · · ·	
•				WARMING 60	. •				
1. WATER	LEVEL I	DATA: (from TOC)		Т	OC Elevation (fr	om LS)	
a. Depth t				ź. 93			Vater Table Elev.		
b. Total V		•		1.80			ape Corr. (TC)		
c. Length			•	5. 87 (b a.)	١.	v	Vell Dia. 2"	x 6.5 °	
d. Casing				53 946 (c. x [g					
e. Length					an in compared)		2-in. casing 4-in. casing		= 0.16 gal/ft = 0.65 gal/ft
f. Filter p	_			-46 946 (e. x [g	al/ft filter nac	· Ŀ I)	6-in. casing		= 1.47 gal/ft
-				99 141 (d. + f		·•-]/	6.5-in. casin		=1.7 gal/ft
g. TOTAL	L WELLE	VOLUM	ALC = 11	11 140 (0. + 1	•)		8-in. casing 10-in. casing		= 2.60 gal/ft $= 4.1 gal/ft$
n 11255 7	ntin ciki	~ ~ ~ ~ .					12-in, casing		= 5.0 gal/ft
	PURGIN			~ w/1.10	- Δ				
a. Purge n	Method	7.1.	-7 49	IP W/WATE	-1	229			
				gallons per well v					
				SECKMAN PH	+ LEMP	VINR Co.	08.		
d. Pump R								 }	
				gar Doum					
f. Recover	ry Rate: S	low (90	% > 60 mir	n) Medium (90%	30-60 min);	Fast (90% < 10 m	un)		
Volume									
Removed (gal)	Time	T⁰c	На	Spec. Conductivity	Turbidity (NTU's)	Col Descr		SWL	Pump Placement
(Kg1)	0940		DII	Conductivity	1110 37	Pump on		<u> </u>	
9.0	0946	.0 0	(117)			GRAYISH - GREE		"	30'
				1,100) DILTS			1 00
18.0	0952		6.51	1,120		CLEARING SO.			
24.0	0958	i		1,100		CLEARING			
	1002	19-6	6.54	1,120	<u> </u>	SAMPLED			
)	
			<u> </u>				· · · · · · · · · · · · · · · · · · ·		<u> </u>
				, , ,					
<u> </u>			<u> </u>						
3. SAMPL	E COLLI	ECTION	: Method	DISPO BAILE	R Containe	er 3x40ml U	Preservat	ion <u>Ho</u>	
			Analysi	s TPH.6, 8	1015 MOD ,	BTEX			···
COMMENT	S REMA	RKS	•					•	
CONTRACTABLE VIII								1	

			GRO	DUNDWATER S	AMPLE COI	LECTION RE	CORD		
	West	A 5	TREET	ARD HAYWARD	Job No.: _	1564-04	Date:	3-14-	?5
Weather Cond				Yav					
2. WELL I a. Purge M b. Required c. Field Te d. Pump R e. Method	water (if lell Depth of Water Volume of filter pack volume, WELL. PURGING tethod	Column Column	= 13 $= 23$ $= 14$ $= 16$ $= 5$ $= 5$ $AE = 7.2$ $ASH Pure (2.22 g)$ $Used B (2.22 g)$ $Used B (2.22 g)$	3.96' 5.00' 04' (b a.: 9AU (c. x [g	al/ft casing]) al/ft filter parallel () ATERRA olume) =	21.6 VWR Co.		x 6.5 °	=0.16 gal/ft =0.65 gal/ft =1.47 gal/ft
Volume Removed (gal)	Time	T ^o c	рН	Spec. Conductivity	Turbidity (NTU's)		color/	SWL	Pump Placement
	1430 1435 1440	20.1 19.9 19.8 19.7	6.39 6.42 6.45 6.45	1290 1,310 1,310 1,300		PUMP ON	DOWN, SILTS		
3. SAMPLI			: Method	DISZO BAILER TPH.G.	Contain	3x40ml V 8015 Mo	OA Preserva ひ	ation AC	<u></u>

			GR	OUNDWATER S	AMPLE CO	LLECTION RE	ECORD		
Project Nam	e: <u>巨Z·</u>	GERVE	HAYWI	ved	Job No.:	1564-04	Date:	3-14-9	15
Location:	GARNO	N AVE	x hu	PINE ST					
Samplers Na	me:	STIA	IAR.						-
Weather Cor				5° F				\ 	-
							TOC Elevation (f	rom LS)	
i. WATER		•		· •			Water Table Elev	· 	
a. Depth t	•	-		5.69			Tape Corr. (TC)		
o. Total	•			00			Well Dia. 2"	x 4.5"	
c. Lengtu	of Water	Column		(b a.)					
d. Casing	Volume			<u>28942</u> (c. x [g	al/ft casing])		2-in, casing		=0.16 gal/ft
e. Length	of filter p	ack	=	01,			4-in. casing		=0.65 gal/ft
f. Filter p	ack volum	ne	= <u>5</u>	<u>.46 par</u> (e. x [g	al/ft filter pa	ck])	6-in. casing 6.5-in. casin		= 1.47 gal/ft $= 1.7 gal/ft$
g. TOTA	L WELL	VOLUM	$AE = \frac{7.5}{2}$	4 (d. + f	E)		8-in. casing	-	=2.60 gal/ft
				,			10-in. casing		= 4.1 gal/ft
2. WELL	PURGIN	G DATA	:				12-in, casin	<u> </u>	= 5.0 gal/ft
a. Purge l	Method _	TRAS	# Pun	p was w	ATEMA				
				gallons per well v		23.2 gal		,	
c. Field T	esting: Ed	uioment	Used 2	ECKMAN PH	+Temp	VWR Co	ows.		
d. Pump I									
-		, ,		gar Dayn					
				n), Medium (90%	30-60 min).	Fast (90% < 1	O min)	1	
1. 1.	i i	700	70 > 00 IM	n); Producti (20%		 			
_Volume					- Listian		Calaat	1	Pump
Removed (gal)	Time	T°c	рН	Spec. Conductivity	Turbidity (NTU's)		Color/ escription	SWL	Placement
	1109					Pump 6) N		
11 17	1/20	20.7	6.56	1,080		BROWNSA +	SILTY		28'
17	1126	19.9	6.60	1,100		CLEARING			
25	1134	19.7	6.61	1,090	<u> </u>	CLEARIN	4	<u> </u>	
	1140	19.6	6.62	1,080		SAMPLED		<u> </u>	
	-							<u> </u>	
	Ī								
	-		†			Ì			
	1	I	<u> </u>	<u> </u>	<u> </u>	1	<u></u>	-	<u>, </u>
3. SAMPI	E COLL	ביייוטא	· Mathod	DISPO BAILL	e Contair	ner 3x40 ml	VOI Preserva	tion _ H	°L
J. JAMALI		2011011	A 1	is <u>TPH.6</u>	8015 W	BTK	<u></u> Y	1 =	
			Anaiys	15 1/17.0 /	0-10/10	1			
COMMENT	S. REM	ARKS							
				 		<u></u>		<u> </u>	

			GRO	OUNDWATER S.	AMPLE COL	LECTION REC	CORD	:	
Project Nam	e: <i>FZ</i> -	SERVE	+ HAY	WARD	Job No.:	1564-04	Date:	3-14-8	95-
Location:						<u> </u>			
Samplers Na									
Weather Cor				797	,				
1. WATER	IEVEI I	ጉልሞል- /	from TOC	1		•	TOC Elevation	(from LS)	
		,		5.8 <u>[</u>		•	Water Table Ele	.v	
a. Depth i		·					Tape Corr. CC		
b. Total V	-		<u>-</u>	0.0' .19' (b a.)			Well Dia. 2	"x 6,54	
c. Length		Column							
d. Casing			= <u>/./</u>	2 7 942 (c. x [g	ai/n casingj)		2-in. casing	_	=0.16 gal/ft
e. Length	of filter p	nack	= 16				4-in. casin 6-in. casin	_	=0.65 gal/ft = 1.47 gal/ft
f. Filter p				46 142 (e. x [g		:k])	6.5-in. cash	_	= 1.7 gal/ft
g. TOTA	L WELL	VOLUM	ME = 7.5	13 gal (d. + f	.)		8-in. casing	-	=2.60 gal/ft
				•			10-in. casii	_	= 4.1 gal/ft
2. WELL	PURGIN	G DATA	\:				12-in. casii	ng	= 5.0 gal/ft
a. Purge l	Method _	TRAS	4 PUMF	water Was	TERRA				
_				gallons per well v	_	3.19 axes			
				ECKMAN PH +			δ		
d. Pump I									
•				gar Dann					
				Medium (90%	30-60 min)	Fast (90% < 10	min)	1	
1. ACCOVE	17 /(0.00. 6	70W (30	70 JO III	ge, Medium (50%		7			
Volume				_			3 . /		7
Removed (gal)	Time	T°c	Нq	Spec. Conductivity	Turbidity (NTU's)		olor/ cription	SWL	Pump Placement
1,0	1508	1000	4.97	1.100		PUMP ON	/		
8.0	1515	19.7	7.02	1,110		BROWNSH, SAM	512T\$ 2DS		
15.0	1522		7.03	1,120		CLEARING			
25.0	1532	19.7	7.05	1,60		ELTAR			
7.0	1	177.7	7.03	7,000	<u> </u>	LCCCIO			
					<u> </u>	<u> </u>			
<u> </u>		i						<u>'</u>	
	<u> </u>				<u> </u>				
	<u> </u>	<u> </u>							<u> </u>
3. SAMPI	LE COLL	ECTION	: Method	DISPO BAILLE	e Contain	er 3x40ml V	Preserv	ation HC	٢
			Analysi	s TPH.G,	8015 Ma	D, BTE	/		
COMMENT	S PEM	ARKS	•			, ,			
COMMENT	J. KLIMA	MAN.							

	····		GR	OUNDWATER S	AMPLE COI	LECTION RE	CORD		
Project Nam	ne. EZ	- Ser	ve H	4YWARD	Ioh No	15/04.04	Date:	3-14.	-95
	_			UPING ST.					
Samplers Na		_	•						······································
				65°F LI	GHT RAIN	ل		· · · · · · · · ·	
1. WATER	I EVET 1	DATAL	f TOC	<u> </u>		·	TOC Elevation (from LS)	
a. Depth				1.87			Water Table Elev	v	
-	ell Depti	-	= = <u></u>				Tape Corr. (TC)		
c. Length	•			6.13 (b a.	`		Well Dia. 2"	x6,5"	
-									
d. Casing e. Length				<u>42 GAZ</u> (c. x [8	(at/it casing])		2-in. casing		=0.16 gal/ft
	•				-1/6 Els	-1-3\	4-in. casing 6-in. casing		=0.65 gal/ft = 1.47 gal/ft
f. Filter p				46942 (e. x [g		:K])	6.5-in. casu		=1.7 gal/ft
g. 101A	L WELL	VOLUE	$ME = \underline{\tau}.$	<u>вбем</u> (d. + f	.)		8-in. casing		=2.60 gal/ft
	n	~ ~ . ~ .					10-in. casin 12-in. casin	_	= 4.1 gal/ft $= 5.0 gal/ft$
	PURGIN			- 44/44	^				J.O RAITH
				o w/ WATER				1	
				gallons per well v					· · · · · · · · · · · · · · · · · · ·
				eckhau off t	1EMP	Vier Con	20 .	A-17. AA)	
d. Pump I								····	
				942 DRIN		 		·····	
f. Recover	ry Rate: S	Slow (90	% > 60 mir	1), Medium (90%	30-60 min),	Fast (90% < 10	<u>min</u>)		
Volume Removed	Time	T°c	Ho	Spec. Conductivity	Turbidity (NTU's)	·	Color/ cription	SWL	Pump Placement
	1240		941	Conductivity	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Pump on			, racement
6	1246	20-1	6.93	910		Cloudy 300	JUSH SILTS		28'
/2	1253	1	6-96	940		CLEARING	· ·= · · ·	 	
13 19		1 -		930		CLEARING			
75	T		6.97	930		CLEAR		}	
^3	1310	19.8	† 	920		SAMPLE		 	
		11110	4.11	170		DAPG DC	 	 	
	<u> </u>			·				!	
			!		<u> </u>				<u> </u>
	1				 		*	1	
CAREDI	E COLLI	הריייוראי		DICZ BALLE	Contain	- 2,40,0 L	Preserva	41	C1_
, santri	لململات نفس	FCTION		TPH.G					
			Anaiysi	174.6	our m	vo i lote		······	
COMMENT	S. REMA	ARKS							
			· · · · · · · · · · · · · · · · · · ·						***



SPL, INC.

REPORT APPROVAL SHEET

WORK ORDER NUMBER: 95 - 03 - 645

Approved for release by:

Date: 3/30/95

Brent Barron, Project Manager

S. Sample, Laboratory Director

Date: 3/30/95



EZ Serve Inc.

2550 North Loop West, #600

Houston, TX 77292 ATTN: Brian Cobb

DATE: 03/30/95

PROJECT: EZ Serve #100877

SITE: West A Street/Hayward, CA

SAMPLED BY: Brown & Caldwell

SAMPLE ID: 100877-MW-1

PROJECT NO: 1564-04

MATRIX: WATER

DATE SAMPLED: 03/15/95 12:34:00

DATE RECEIVED: 03/16/95

ANALYTICAL DATA			
PARAMETER	RESULTS	DETECTION	units
BENZENE	56	LIMIT 0.5 P	μg/L
TOLUENE	2	0.5 P	μg/L
ETHYLBENZENE	12	1	μg/L
TOTAL XYLENE	47	0.5 P	μg/L
TOTAL BTEX	117		μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	86		
4-Bromofluorobenzene METHOD 5030/8020 *** Analyzed by: YN Date: 03/22/95	83		
Petroleum Hydrocarbons - Gasoline	290	50 P	μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	111		
4-Bromofluorobenzene	67		
Modified 8015 - Gasoline			
Analyzed by: YN			
Date: 03/21/95			

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA **Ref: Standard Methods for Examination of Water & Wastewater, 17th ed.

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Project Manager



EZ Serve Inc.

2550 North Loop West, #600

Houston, TX 77292 ATTN: Brian Cobb

DATE: 03/30/95

PROJECT: EZ Serve #100877

SITE: West A Street/Hayward, CA

SAMPLED BY: Brown & Caldwell

SAMPLE ID: 100877-MW-2

PROJECT NO: 1564-04

MATRIX: WATER

DATE SAMPLED: 03/15/95 11:35:00

DATE RECEIVED: 03/16/95

ANALYTICAL DATA PARAMETER RESULTS DETECTION UNIT:			
	.,,	LIMIT	V11110
BENZENE	5600	25 P	μg/L
TOLUENE	350	25 P	μg/L
ETHYLBENZENE	1900	25 P	μg/L
TOTAL XYLENE	6300	25 P	μg/L
TOTAL BTEX	14150		μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	88		
4-Bromofluorobenzene	91		
METHOD 5030/8020 ***			
Analyzed by: YN			
Date: 03/21/95			
Petroleum Hydrocarbons - Gasoline	29000	2500 P	μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	126		
4-Bromofluorobenzene	83		
Modified 8015 - Gasoline			
Analyzed by: YN			
Date: 03/21/95			

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA **Ref: Standard Methods for Examination of Water & Wastewater, 17th ed. ***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.



EZ Serve Inc.

2550 North Loop West, #600

Houston, TX 77292 ATTN: Brian Cobb

DATE: 03/30/95

PROJECT: EZ Serve #100877

SITE: West A Street/Hayward, CA

SAMPLED BY: Brown & Caldwell

SAMPLE ID: 100877-MW-3

PROJECT NO: 1564-04

MATRIX: WATER DATE SAMPLED: 03/15/95 09:45:00

DATE RECEIVED: 03/16/95

ANALYTICA	L DATA	'	
PARAMETER	RESULTS	DETECTION	units
BENZENE	980	LIMIT 5 P	u~ /T
TOLUENE	47	5 P	μg/L μg/L
ETHYLBENZENE	370	5 P	μg/L
TOTAL XYLENE	780	5 P	μg/L μg/L
TOTAL BTEX	2177		μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	91		
4-Bromofluorobenzene	89		
METHOD 5030/8020 ***			
Analyzed by: YN			
Date: 03/21/95			
Petroleum Hydrocarbons - Gasoline	4300	500 P	μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	109		
4-Bromofluorobenzene	71		
Modified 8015 - Gasoline			
Analyzed by: YN			
Date: 03/21/95			

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA **Ref: Standard Methods for Examination of Water & Wastewater, 17th ed. ***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Project Manager



EZ Serve Inc.

2550 North Loop West, #600

Houston, TX 77292 ATTN: Brian Cobb

DATE: 03/30/95

PROJECT: EZ Serve #100877

SITE: West A Street/Hayward, CA

SAMPLED BY: Brown & Caldwell

SAMPLE ID: 100877-MW-4

PROJECT NO: 1564-04 MATRIX: WATER

DATE SAMPLED: 03/15/95 10:47:00

DATE RECEIVED: 03/16/95

ANALYTICA	L DATA	i 	
PARAMETER	RESULTS	DETECTION	UNITS
		LIMIT	
BENZENE	4400	12.5 P	$\mu g/L$
TOLUENE	600		μg/L
ETHYLBENZENE	770	12.5 P	μg/L
TOTAL XYLENE	2660	12.5 P	μ g/L
TOTAL BTEX	8430		μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	98		
4-Bromofluorobenzene	87	•	
METHOD 5030/8020 ***			
Analyzed by: YN			
Date: 03/21/95			
Petroleum Hydrocarbons - Gasoline	15000	1250 P	μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	130	•	
4-Bromofluorobenzene	83		
Modified 8015 - Gasoline			
Analyzed by: YN		1	
Date: 03/21/95		,	

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA **Ref: Standard Methods for Examination of Water & Wastewater, 17th ed. ***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Project Manager



EZ Serve Inc.

2550 North Loop West, #600

Houston, TX 77292 ATTN: Brian Cobb

DATE: 03/30/95

PROJECT: EZ Serve #100877

SITE: West A Street/Hayward, CA

SAMPLED BY: Brown & Caldwell

SAMPLE ID: 100877-MW-5

PROJECT NO: 1564-04

MATRIX: WATER

DATE SAMPLED: 03/15/95 13:30:00

DATE RECEIVED: 03/16/95

ANALYTICAL DATA			
PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	1100	5 P	$\mu { m g/L}$
TOLUENE	11	5 P	μg/L
ETHYLBENZENE	180	5 P	μg/L
TOTAL XYLENE	320	5 P	μg/L
TOTAL BTEX	1611		μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	101	· ·	
4-Bromofluorobenzene METHOD 5030/8020 *** Analyzed by: YN	95		
Date: 03/22/95			
Petroleum Hydrocarbons - Gasoline	5300	250 P	μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	153		
4-Bromofluorobenzene	95		
Modified 8015 - Gasoline			
Analyzed by: YN			
Date: 03/21/95			

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA
**Ref: Standard Methods for Examination of Water & Wastewater, 17th ed.
***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SEL, Inc., - Project Manager



EZ Serve Inc.

2550 North Loop West, #600

Houston, TX 77292 ATTN: Brian Cobb

DATE: 03/30/95

PROJECT: EZ Serve #100877

SITE: West A Street/Hayward, CA

SAMPLED BY: Brown & Caldwell

SAMPLE ID: 100877-MW-6

PROJECT NO: 1564-04

MATRIX: WATER

DATE SAMPLED: 03/15/95 14:27:00

DATE RECEIVED: 03/16/95

ANALYTICA	L DATA		
PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENE TOTAL BTEX	1600 110 1000 1000 3710	12.5 P 12.5 P	μg/L μg/L μg/L μg/L
Surrogate 1,4-Difluorobenzene 4-Bromofluorobenzene METHOD 5030/8020 *** Analyzed by: YN Date: 03/21/95	% Recovery 89 90	! : :	
Petroleum Hydrocarbons - Gasoline	9800	1250 P	μg/L
Surrogate 1,4-Difluorobenzene 4-Bromofluorobenzene Modified 8015 - Gasoline Analyzed by: YN Date: 03/21/95	% Recovery 123 78	; ; ;	

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA **Ref: Standard Methods for Examination of Water & Wastewater, 17th ed. ***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager



EZ Serve Inc.

2550 North Loop West, #600

Houston, TX 77292 ATTN: Brian Cobb

DATE: 03/30/95

PROJECT: EZ Serve #100877

SITE: West A Street/Hayward, CA

Date: 03/21/95

SAMPLED BY: Brown & Caldwell

SAMPLE ID: 100877-MW-7

PROJECT NO: 1564-04

MATRIX: WATER

DATE SAMPLED: 03/14/95 10:49:00

DATE RECEIVED: 03/16/95

ANALYTICA	AL DATA		
PARAMETER	RESULTS	DETECTION	UNITS
		LIMIT	
BENZENE	290	1 P	μg/L
TOLUENE	4	1 P	μg/L
ETHYLBENZENE	26	1 P	μg/L
TOTAL XYLENE	296	1 P	μg/L
TOTAL BTEX	616		μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	110	I.	
4-Bromofluorobenzene	141		
METHOD 5030/8020 ***	2.3.2		
Analyzed by: YN			
Date: 03/22/95			
Date: 03/22/95			
Petroleum Hydrocarbons - Gasoline	1900	50 P	μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	155	•	
4-Bromofluorobenzene	187 «	1	
Modified 8015 - Gasoline			
Analyzed by: YN			
VIIGTA DA . TH			

(P) - Practical Quantitation Limit « - Recovery beyond control limits.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA **Ref: Standard Methods for Examination of Water & Wastewater, 17th ed.

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA quidelines for quality assurance.

SPL, Inc., - Project Manager



ANALYTICAL DATA

EZ Serve Inc.

PARAMETER

2550 North Loop West, #600

Houston, TX 77292 ATTN: Brian Cobb

DATE: 03/30/95

UNITS

PROJECT: EZ Serve #100877

SITE: West A Street/Hayward, CA

SAMPLED BY: Brown & Caldwell

SAMPLE ID: 100877-MW-7D

PROJECT NO: 1564-04

MATRIX: WATER

DATE SAMPLED: 03/14/95 10:51:00

DETECTION

DATE RECEIVED: 03/16/95

RESULTS

		LIMIT	
BENZENE	330	0.5 P	μg/L
TOLUENE	5	0.5 P	μg/L
ETHYLBENZENE	30	0.5 P	μg/L
TOTAL XYLENE	339	0.5 P	μg/L
TOTAL BTEX	704		μg/L
Surrogate	% Recovery		•
1,4-Difluorobenzene	119		1
4-Bromofluorobenzene	150 «		
METHOD 5030/8020 ***			
Analyzed by: YN			
Date: 03/22/95			
Petroleum Hydrocarbons - Gasoline	1000	100 P	μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	126		ı
4-Bromofluorobenzene	121		
Modified 8015 - Gasoline			
Analyzed by: YN			
Date: 03/22/95			

(P) - Practical Quantitation Limit « - Recovery beyond control limits.

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA

**Ref: Standard Methods for Examination of Water & Wastewater, 17th ed.

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance

with EPA guidelines for quality assurance.

SPL, Inc., Project Manager



EZ Serve Inc.

2550 North Loop West, #600

Houston, TX 77292 ATTN: Brian Cobb

DATE: 03/30/95

PROJECT: EZ Serve #100877

SITE: West A Street/Hayward, CA

SAMPLED BY: Brown & Caldwell

SAMPLE ID: 100877-MW-7FB

PROJECT NO: 1564-04

MATRIX: WATER

DATE SAMPLED: 03/14/95 10:53:00

DATE RECEIVED: 03/16/95

ANALYTICAL	DATA		
PARAMETER	RESULTS	DETECTION	UNITS
BENZENE	ND	LIMIT 0.5 P	uæ/T
TOLUENE	ND	0.5 P	μg/L
ETHYLBENZENE	ИD		μg/L
TOTAL XYLENE	ND	0.5 P	μg/L
TOTAL BTEX	ND	0.5 F	μg/L
TOTAL DIEA	ND		μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	77		
4-Bromofluorobenzene	72		
METHOD 5030/8020 ***			
Analyzed by: DAO			
Date: 03/20/95			
Petroleum Hydrocarbons - Gasoline	ND	50 P	μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	52		
Modified 8015 - Gasoline			
Analyzed by: DAO			
Date: 03/20/95			

ND - Not detected.

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA **Ref: Standard Methods for Examination of Water & Wastewater, 17th ed.

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager



EZ Serve Inc.

2550 North Loop West, #600

Houston, TX 77292 ATTN: Brian Cobb

DATE: 03/30/95

PROJECT: EZ Serve #100877

SITE: West A Street/Hayward, CA

SAMPLED BY: Brown & Caldwell

SAMPLE ID: 100877-MW-8

PROJECT NO: 1564+04

MATRIX: WATER DATE SAMPLED: 03/14/95 09:27:00

DATE RECEIVED: 03/16/95

ANALYTICA	L DATA	1-	
PARAMETER	RESULTS	DETECTION	UNITS
BENZENE	ND	LIMIT 0.5 P	u~ /T
TOLUENE	ND		μg/I
ETHYLBENZENE			μg/I
* - · · · · · · · · · · · · · · · · · ·	ND	0.5 P	μg/I
TOTAL XYLENE	1	0.5 P	μg/I
TOTAL BTEX	1		μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	81		
4-Bromofluorobenzene	79		
METHOD 5030/8020 ***			
Analyzed by: YN			
Date: 03/22/95		•	
Petroleum Hydrocarbons - Gasoline	ND	50 P	μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	100		
4-Bromofluorobenzene	69		
Modified 8015 - Gasoline			
Analyzed by: YN			
Date: 03/21/95			

ND - Not detected.

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA **Ref: Standard Methods for Examination of Water & Wastewater, 17th ed.

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Project Manager



EZ Serve Inc.

2550 North Loop West, #600

Houston, TX 77292 ATTN: Brian Cobb

DATE: 03/30/95

PROJECT: EZ Serve #100877

SITE: West A Street/Hayward, CA

SAMPLED BY: Brown & Caldwell

SAMPLE ID: 100877-MW-9

PROJECT NO: 1564-04

MATRIX: WATER

DATE SAMPLED: 03/14/95 14:06:00

DATE RECEIVED: 03/16/95

ANALYTICA	L DATA		
PARAMETER	RESULTS	DETECTION	UNITS
BENZENE	5900	LIMIT 12.5 P	μg/L
TOLUENE	270	12.5 P	μg/L
ETHYLBENZENE	1200	i i	μg/L
TOTAL XYLENE	3680		μg/L
TOTAL BTEX	11050	•	μg/L
Surrogate	% Recovery	•	
1,4-Difluorobenzene	106		
4-Bromofluorobenzene METHOD 5030/8020 *** Analyzed by: YN Date: 03/21/95	83		
Petroleum Hydrocarbons - Gasoline	18000	1250 P	μg/L
Surrogate 1,4-Difluorobenzene 4-Bromofluorobenzene Modified 8015 - Gasoline Analyzed by: YN Date: 03/21/95	% Recovery 125 76		

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA **Ref: Standard Methods for Examination of Water & Wastewater, 17th ed.

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Project Manager



EZ Serve Inc.

2550 North Loop West, #600

Houston, TX 77292 ATTN: Brian Cobb

DATE: 03/30/95

PROJECT: EZ Serve #100877

SITE: West A Street/Hayward, CA

SAMPLED BY: Brown & Caldwell

SAMPLE ID: 100877-MW-10

PROJECT NO: 1564-04

MATRIX: WATER

DATE SAMPLED: 03/14/95 10:02:00

DATE RECEIVED: 03/16/95

ANALYTICA PARAMETER	L DATA RESULTS	DETECTION	UNITS
FARAMELER	KESULIS	LIMIT	ONITE
BENZENE	18	0.5 P	μg/L
TOLUENE	6	0.5 P	μg/L
ETHYLBENZENE	200		μg/L
TOTAL XYLENE	239	0.5 P	μg/L
TOTAL BTEX	463	ı	μg/L
Surrogate	% Recovery	, 	
1,4-Difluorobenzene	8 - 5	•	
4-Bromofluorobenzene	135	•	
METHOD 5030/8020 ***		!	
Analyzed by: YN		!	
Date: 03/22/95			
Petroleum Hydrocarbons - Gasoline	1400	50 P	μg/L
Surrogate	% Recovery	1	
1,4-Difluorobenzene	131	}	
4-Bromofluorobenzene	152		
Modified 8015 - Gasoline			
Analyzed by: YN		!	
Date: 03/21/95		1	

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA

**Ref: Standard Methods for Examination of Water & Wastewater, 17th ed.

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPI, Inc., - Project Manager



EZ Serve Inc.

2550 North Loop West, #600

Houston, TX 77292 ATTN: Brian Cobb

DATE: 03/30/95

PROJECT: EZ Serve #100877

SITE: West A Street/Hayward, CA

SAMPLED BY: Brown & Caldwell

SAMPLE ID: 100877-MW-11

PROJECT NO: 1564-04
MATRIX: WATER

DATE SAMPLED: 03/14/95 14:50:00

DATE RECEIVED: 03/16/95

ANALYTICA		_	
PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	200	5 P	μg/I
TOLUENE	17	5 P	μg/I
ETHYLBENZENE	750	5 P	μg/I
TOTAL XYLENE	1276	5 P	μg/I
TOTAL BTEX	2243		μg/I
Surrogate	% Recovery		
1,4-Difluorobenzene	82	1	
4-Bromofluorobenzene	102	1	
METHOD 5030/8020 ***			
Analyzed by: YN			
Date: 03/21/95			
Petroleum Hydrocarbons - Gasoline	6000	500 P	μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	123		
4-Bromofluorobenzene	97		
Modified 8015 - Gasoline		!	
Analyzed by: YN			
Date: 03/21/95			

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA **Ref: Standard Methods for Examination of Water & Wastewater, 17th ed. ***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager



EZ Serve Inc.

2550 North Loop West, #600

Houston, TX 77292 ATTN: Brian Cobb

DATE: 03/30/95

PROJECT: EZ Serve #100877

SITE: West A Street/Hayward, CA

SAMPLED BY: Brown & Caldwell

SAMPLE ID: 100877-MW-12

PROJECT NO: 1564-04

MATRIX: WATER

DATE SAMPLED: 03/14/95 11:40:00

DATE RECEIVED: 03/16/95

ANALYTICA	L DATA		
PARAMETER	RESULTS	DETECTION LIMIT	UNITS
BENZENE	ND	0.5 P	μg/L
TOLUENE	ND	0.5 P	μg/L
ETHYLBENZENE	ND	0.5 P	μg/L
TOTAL XYLENE	0.9	0.5 P	μg/L
TOTAL BTEX	0.9	!	μg/L
Surrogate	% Recovery	I	
1,4-Difluorobenzene	79	1	
4-Bromofluorobenzene METHOD 5030/8020 ***	78	•	
Analyzed by: YN Date: 03/22/95			
Petroleum Hydrocarbons - Gasoline	ND	50 P	μg/L
Surrogate	% Recovery	· !	
1,4-Difluorobenzene	100	1	
4-Bromofluorobenzene	66	ı	
Modified 8015 - Gasoline			
Analyzed by: YN		1	
Date: 03/21/95		I	

ND - Not detected.

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA **Ref: Standard Methods for Examination of Water & Wastewater, 17th ed.

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA quidelines for quality assurance.

- Project Manager



EZ Serve Inc.

2550 North Loop West, #600

Houston, TX 77292 ATTN: Brian Cobb

DATE: 03/30/95

PROJECT: EZ Serve #100877

SITE: West A Street/Hayward, CA

SAMPLED BY: Brown & Caldwell

SAMPLE ID: 100877-MW-13

PROJECT NO: 1564-04

MATRIX: WATER

DATE SAMPLED: 03/14/95 15:32:00

DATE RECEIVED: 03/16/95

ANALYTICA	L DATA		
PARAMETER	RESULTS	DETECTION	UNITS
		LIMIT	
BENZENE	ND	0.5 P	μg/L
TOLUENE	ND	0.5 P	μg/L
ETHYLBENZENE	ND	0.5 P	μg/L
TOTAL XYLENE	1	0.5 P	μ g/L
TOTAL BTEX	1	!	μg/L
Surrogate	% Recovery	,	
1,4-Difluorobenzene	78		
4-Bromofluorobenzene	78		
METHOD 5030/8020 ***			,
Analyzed by: YN			
Date: 03/22/95			
Petroleum Hydrocarbons - Gasoline	ND	50 P	μg/L
Surrogate	% Recovery	'	
1,4-Difluorobenzene	98		
4-Bromofluorobenzene	71		
Modified 8015 - Gasoline			
Analyzed by: YN			
Date: 03/21/95			
2400. 00/21/33		1	

ND - Not detected.

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA **Ref: Standard Methods for Examination of Water & Wastewater, 17th ed.

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Project Manager



EZ Serve Inc.

2550 North Loop West, #600

Houston, TX 77292 ATTN: Brian Cobb

DATE: 03/30/95

PROJECT: EZ Serve #100877

SITE: West A Street/Hayward, CA

SAMPLED BY: Brown & Caldwell

SAMPLE ID: 100877-MW-14

PROJECT NO: 1564-04 MATRIX: WATER

DATE SAMPLED: 03/14/95 13:10:00

DATE RECEIVED: 03/16/95

			<u></u>
ANALYTICA	AL DATA		
PARAMETER	RESULTS	DETECTION	UNITS
		LIMIT	
BENZENE	6	0.5 P	μg/L
TOLUENE	2	0.5 P	μg/L
ETHYLBENZENE	36	0.5 P	$\mu g/L$
TOTAL XYLENE	298	0.5 P	$\mu g/L$
TOTAL BTEX	342	•	μg/L
Surrogate	% Recovery	•	
1,4-Difluorobenzene	84		
4-Bromofluorobenzene	126	1	
METHOD 5030/8020 ***		l	
Analyzed by: YN			
Date: 03/22/95		'	
Petroleum Hydrocarbons - Gasoline	1400	50 P	μg/L
Surrogate	% Recovery	· !	
1,4-Difluorobenzene	141	1	
4-Bromofluorobenzene	126	1	
Modified 8015 - Gasoline		1	
Analyzed by: YN			
Analyzed by: YN Date: 03/21/95			

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA **Ref: Standard Methods for Examination of Water & Wastewater, 17th ed. ***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

Project Manager



EZ Serve Inc.

2550 North Loop West, #600

Houston, TX 77292 ATTN: Brian Cobb

DATE: 03/30/95

PROJECT: EZ Serve #100877
SITE: West A Street/Hayward, CA
SAMPLED BY: Provided by SPL
SAMPLE ID: Trip Blank

PROJECT NO: 1564-04
MATRIX: WATER

DATE SAMPLED: 03/02/95
DATE RECEIVED: 03/16/95

ANALYTICA	L DATA		
PARAMETER	RESULTS	DETECTION	UNITS
	17D	LIMIT	
BENZENE	ND	0.5 P	μg/I
TOLUENE	ND	0.5 P	μg/I
ETHYLBENZENE	ND		μg/L
TOTAL XYLENE	ND	0.5 P	μg/L
TOTAL BTEX	ND ·		μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene	80		
4-Bromofluorobenzene	74		
METHOD 5030/8020 ***			
Analyzed by: YN		1	
Date: 03/22/95		T.	
Petroleum Hydrocarbons - Gasoline	ND	50 P	μg/L
Surrogate	% Recovery		
1,4-Difluorobenzene '	103		
4-Bromofluorobenzene	54	, 	
Modified 8015 - Gasoline			
Analyzed by: YN			
Date: 03/21/95		i	
Dacc. 03/21/33		i	

ND - Not detected.

(P) - Practical Quantitation Limit

Notes: *Ref: Methods for Chemical Analysis of Water and Wastes, 1983, EPA

**Ref: Standard Methods for Examination of Water & Wastewater, 17th ed.

***Ref: Test Methods for Evaluating Solid Waste, EPA SW846, 3rd Ed.

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

SPL, Inc., - Project Manager

QUALITY CONTROL DOCUMENTATION

SPL BATCH QUALITY CONTROL REPORT ** METHOD 8020/602

PAGE

Matrix: Units:

Aqueous μg/L

Batch Id:

HP_J950320163300

LABORATORY CONTROL SAMPLE

SPIKE	Method Blank Result <2>	Spike Added <3>	Blani Result <1>	Recovery	QC Limits(** (Mandatory) % Recovery (
MTBE	ND	50	36	72.0	56 -	135
Benzene	ND	50	46	92.0	61	123
Toluene	ND	50	44	88.0	62 -	122
EthylBenzene	ND	50	41	82.0	56 -	119
0 Xylene	ND	50	43	86.0	32 -	160
M & P Xylene	ND I	100	89	89.0	32 -	160

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results	Spike Added	Matrix Spike		Matrix SpikeDuplicate		MS/MSD Relative %	QC Limits(***)(Advisory)			
	<2>	<3>	Result	Recovery <4>	Result	Recovery <5>	Difference		Recovery R	lange	
MTBE	ND	62.5	56	89.6	71	114	24.0 *	20	39 -	150	
Benzene	ND	50	47	94.0	48	96.0	2.11	33	39 -	150	
Toluene	NO	150	120	80.0	130	86.7	8.04	35	56 -	134	
EthylBenzene	ND	50	34	68.0	35	70.0	2.90	40	61 -	128	
0 Xylene	ND	100	48	48.0	48	48.0	0	29	40 -	130	
M & P Xylene	ND	100	58	58.0	57	1	1.74	20	43 -	152	

Analyst: DAO

Sequence Date: 03/20/95

SPL ID of sample spiked: 9503645-10A

Sample File ID: J___196.TXO

Method Blank File ID:

Blank Spike File ID: J___185.TX0

Matrix Spike File ID: J___192.TX0

Matrix Spike Duplicate File ID: J___193.TXO

* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit

% Recovery = [(<1> - <2>) / <3>] x 100

LCS % Recovery = (<1> / <3>) x 100

Relative Percent Difference = |(<4> - <5>)| / [(<4> + <5>) x 0.5] x 100

(**) = Source: SPL-Houston Historical Data

(***) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9503618-03A 9503565-03A 9503619-02A 9503619-01A 9503618-07A 9503618-06A 9503618-05A 9503618-04A 9503619-06A 9503566-02B 9503565-01A 9503607-04B 9503629-09A 9503629-08A 9503645-10A 9503618-02A

Idelis Williams, Of Officer

SPL BATCH QUALITY CONTROL REPORT ** METHOD 8020

PAGE 1

Matrix: Units: Aqueous

μg/L

Batch Id: KP_J950321093300

LABORATORY CONTROL SAMPLE

SPIKE	Method	Spike	Blank	Spike	QC Limits(**) (Mandatory) % Recovery Range				
COMPOUNDS	Blank Result <2>	Added <3>	Result <1>	Recovery X					
Benzene	ND	50	58	116	61 - 123				
Toluene	ND	50	56	112	62 - 122				
EthylBenzene	ND	50	51	102	56 - 119				
0 Xyl a ne	ND	50	59	118	32 - 160				
H & P Xylene	ND	100	120	120	32 - 160				

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Spike Results Added		Matrix	Spike	Matrix SpikeDuplicate		MS/MSD Relative %	QC Limits(***)(Advisory)			
	<2>	<3>	Result <1>	Recovery <4>	Result <1>	Recovery <5>	Difference		Recovery I	Range	
Benzene	ND	20	21	105	21	105	0	25	39 -	150	
Toluene	ОМ	20	19	95.0	19	95.0	0	26	56 -	134	
EthylBenzene	ND	20	17	85.0	17	85.0	0	38	61 -	128	
0 Xylene	ND	20	16	80.0	16	80.0		20	40 -	130	
M & P Xylene	ND	40	34	85.0	33	82.5	2.99	20	43 -	152	

Analyst: YN

Sequence Date: 03/21/95

SPL ID of sample spiked: 9503804-01A

Sample File ID: J___242.TX0

Method Blank File ID:

Blank Spike File ID: J__223.TX0
Matrix Spike File ID: J__250.TX0

Matrix Spike Duplicate File ID: J__251.TX0

* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>) x 100

LCS % Recovery = (<1> / <3>) x 100

Relative Percent Difference = |(<4> - <5>)|/[(<4> + <5>)|x|0.5]|x|100

(**) = Source: SPL-Houston Historical Data (***) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9503804-01A 9503456-02A 9503645-17A 9503645-02A 9503645-11A 9503645-01A 9503645-03A 9503645-04A 9503645-05A 9503645-08A 9503645-09A 9503645-12A 9503645-14A 9503645-13A 9503645-15A 0503745-07A

9503645-06A 9503645-07A

Idelis Williams/ QC Officer



Matrix: Units:

Aqueous µg/L Batch Id:

Id: HP_J950322013500

LABORATORY CONTROL SAMPLE

SPIKE	Method	Spike	Blani	< Spike	QC Limits(**)
COMPOUNDS	Blank Result <2>	Added <3>	Result <1>	Recovery %	(Mandatory) % Recovery Range
Benzene	ND	50	47	94.0	61 - 123
Toluene	ND	50	46	92.0	62 - 122
EthylBenzene	ND	50	43	86.0	56 - 119
O Xylene	ND	50	46	92.0	32 - 160
M & P Xylene	ND	100	100	100	32 - 160

METHOD 8020

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results	Spike Added	Matrix	Spike	Matrix Dupli	Spike cate	MS/MSD Relative %		imits(***) Advisory)	
	<2>	<3>	Result <1>	Recovery <4>	Result <1>	Recovery <5>	Difference	RPD Max.	Recovery R	Range
Benzene	ND	20	21	105	19	95.0	10.0	25	39 -	150
Toluene	ND	20	20	100	17	85.0	16.2	26	56 -	134
EthylBenzene	0.6	20	17	82.0	14	67.0	20.1	38	61 -	128
O Xylene	0.6	20	15	72.0	13	62.0	14.9	20	40 -	130
4 & P Xylene	1.7	40	30	70.8	25	58.2	19.5	20	43 -	152

Analyst: YN

Sequence Date: 03/22/95

SPL ID of sample spiked: 9503710-08A

Sample File ID: J___266.TXO

Method Blank File ID:

Blank Spike File ID: J__254.TX0 Matrix Spike File ID: J__287.TX0

Matrix Spike Duplicate File ID: J __288.TX0

* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit % Recovery = $\{(<1> - <2>) / <3> \} \times 100$

LCS % Recovery = (<1> / <3>) x 100

Relative Percent Difference = |(<4> - <5>)| / [(<4> + <5>) x 0.5] x 100

(**) = Source: SPL-Houston Historical Data (***) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9503619-05A 9503619-04A 9503619-03A 9503645-15A 9503754-04A 9503754-03A 9503798-01A 9503710-09A 9503710-05A 9503710-04A 9503710-04A 9503710-07A 9503710-06A 9503710-08A

Idelis Williams, AC Officer

SPL BATCH QUALITY CONTROL REPORT ** Modified 8015 - Gasoline

PAGE 1

Matrix: Aqueous Units:

mg/L

Batch Id: HP_J950320145710

LABORATORY CONTROL SAMPLE

SPIKE	Hethod	Spike	Blank	Spike	QC Limits(**)
COMPOUNDS	Blank Result <2>	Added <3>	Result <1>	Recovery %	(Mandatory) % Recovery Range
Petroleum Hydrocarbons	ND	1.00	1.01	101	56 - 139

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results	Spike Added	Matrix	Spike	Matrix Dupli	Spike cate	MS/MSD Relative %		Limits(***) (Advisory)
	<2>	<3>	Result <1>	Recovery <4>	Result	Recovery <5>	Difference		Recovery Range
Petroleum Hydrocarbons	ND	0.9	0.64	71.1	0.64	71.1	0	18	40 - 158

Analyst: DAO

Sequence Date: 03/20/95

SPL ID of sample spiked: 9503645-10A

Sample File ID: JJ__196.TX0

Method Blank File ID:

Blank Spike File ID: JJ__188.TX0 Matrix Spike File ID: JJ__192.TX0

Matrix Spike Duplicate File ID: JJ__193.TX0

* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit % Recovery = [(<1> - <2>) / <3>] x 100

LCS % Recovery = (<1> / <3>) x 100

Relative Percent Difference = |(<4> - <5>)| / |(<4> + <5>)| x 0.51 x 100

(**) = Source: SPL-Houston Historical Data (***) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9503618-03A 9503565-03A 9503619-02A 9503619-01A 9503618-07A 9503618-06A 9503618-05A 9503618-04A 9503619-06A 9503618-01A 9503566-02B 9503629-03A 9503565-02A 9503565-01A 9503607-04B 9503629-09A 9503629-08A 9503645-10A 9503618-02A

Idelis Williams, Q¢

SPL BATCH QUALITY CONTROL REPORT **
Modified 8015 - Gasoline

PAGE

Aqueous

mg/L

Matrix:

Units:

Batch Id:

HP_J950321082500

LABORATORY CONTROL SAMPLE

SPIKE	Nethod	Spike	Blank	Spike	QC Limits(**)
COMPOUNDS	Blank Result <2>	Added <3>	Result <1>	Recovery %	(Mandatory) % Recovery Range
Petroleum Hydrocarbons	ND	1.00	0.81	81.0	56 - 139

MATRIX SPIKES

S P I K E C o n p o u n d s	Sample Results	Spike Added	Matrix	Spike	Matrix Dupli	Spike cate	MS/MSD Relative %		.imits(***) (Advisory)
	<2>	<3>	Result	Recovery <4>	Result <1>	Recovery <5>	Difference		Recovery Range
Petroleum Hydrocarbons	ND	0.9	0.40	44.4	0.78	86.7	64.5 *	18	40 - 158

Analyst: YN

Sequence Date: 03/21/95

SPL ID of sample spiked: 9503645-08A

Sample File ID: JJ__226.TX0

Method Blank File ID:

Blank Spike File ID: JJ_222.TXO
Matrix Spike File ID: JJ_252.TXO

Matrix Spike Duplicate File ID: JJ_253.TX0

* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit
% Recovery = [(<1> - <2>) / <3>) x 100

LCS % Recovery = (<1> / <3>) x 100

(**) = Source: SPL-Houston Historical Data (***) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9503645-12A 9503645-16A 9503645-14A 9503645-13A 9503804-01A 9503456-02A 9503645-17A 9503645-02A 9503645-11A 9503645-01A 9503645-03A 9503645-04A 9503645-05A 9503645-08A 9503645-15A 9503645-06A 9503645-07A

Idelis Williams, QC officer



Matrix: Units: Aqueous mg/L _

Batch Id: HP_J950322025500

LABORATORY CONTROL SAMPLE

SPIKE	Kethod	Spike	Blank	Spike	QC Limits(**)
COMPOUNDS	Blank Result <2>	Added <3>	Result <1>	Recovery %	(Mandatory) % Recovery Range
Petroleum Hydrocarbons	ND	1.00	0.83	83.0	56 - 139

MATRIX SPIKES

SPIKE COMPOUNDS	Sample Results	Spike Added	Matrix	Spike	Matrix Dupli	Spike cate	MS/MSD Relative %		Limits (Advis	-	
	<2>	<3>	Result <1>	Recovery <4>	Result <1>	Recovery <5>	Difference			overy	Range
Petroleum Hydrocarbons	ND	0.9	0.76	84.4	0.77	85.6	1.41	18		40 -	158

Analyst: YN

Sequence Date: 03/22/95

SPL ID of sample spiked: 9503619-04A

Sample File ID: JJ__262.TX0

Method Blank File ID:

Blank Spike File ID: JJ_257.TX0
Matrix Spike File ID: JJ_285.TX0

Matrix Spike Duplicate File ID: JJ_286.TXO

* = Values Outside QC Range

NC = Not Calculated (Sample exceeds spike by factor of 4 or more)

ND = Not Detected/Below Detection Limit % Recovery = ((<1> - <2>)/ <3>) x 100

LCS % Recovery = (<1> / <3>) x 100

Relative Percent Difference = |(<4> - <5>)| / [(<4> + <5>) x 0.5] x 100

(**) = Source: SPL-Houston Historical Data (***) = Source: SPL-Houston Historical Data

SAMPLES IN BATCH(SPL ID):

9503619-05A 9503619-04A 9503619-03A 9503754-04A 9503754-03A 9503798-01A 9503710-09A 9503710-05A 9503710-04A 9503710-06A 9503710-08A 9503618-01A

Idelis Williams, DC Officer

CHAIN OF CUSTODY AND SAMPLE RECEIPT CHECKLIST

7508045 BP 1 of 2



Environmental Laboratory 8880 Interchange Drive Houston, Texas 77054 713/660-0901

Analysis Request and Chain of Custody Record

Project No. SUL-OH EZ SERVE HAYWAR DOR 77 WEST "A" STREET HAYWAR RADIONATORY REMARKS Property of the content of the conten							7 13/000	000.							
Sample No. Date and Time g o o o o o o o o o o o o o o o o o o	Project No.			Clie	nt/Project Name	!					Pr	oject Locatio	n	·	
Sample Note and and and and and and and an identification and identifi	1564-E	24		E	2 SERV	E, F	AYWAR	<u>√</u>	<u> </u>	0877	_∫ι	DEST 'Y	1" STREET	HAYLLAA	A), 65
MW-R 6727 X 3X40x100A Liquid HCL TPH.G 5030 8015 BTEX \$020 100877 MW-7 1049 100877 MW-12 1140 100877 MW-13 1051 100877 MW-13 1053 Sampler (Signature) Sampler (Signature) Attiliation Relinquished by: (Signature) Relinquished by: (Signature) Attiliation Relinquished by: (Signature) Relinquished by: (Signature) Relinquished by: (Signature) Relinquished by: (Signature) Time: Received by: (Signature) Time: Time: Time: Received by: (Signature) Time: Ti	Sample No./	and	Grab	Сошр	Container	Typ	e (Liquid,		ANALYSIS DECREES (F)					LABORATORY	
MUI-P 0727 X 34904 UA LIQUID HCL TPH.G 5030 8015 BTEX \$020 05877 MUI-1049 00877 MUI-11 1310 100877 MUI-12 1632 100877 MUI-13 1632 100877 MUI-13 1653 Samplery (Signature) Felinquished by: (Signature) Affiliation Relinquished by: (Signature) Affiliation Relinquished by: (Signature) Relinquished by: (Signature) Felinquished by: (Signature) Date: (Signature) Time: Received by: (Signature) Time: Received by: (Signature) Time: Received by: (Signature) Time: Received by: (Signature) Time: Date: Time: Time: Affiliation Received by: (Signature) Time: Date: Time: Ti	00877	3-14-95	Ħ								<u></u>	_			
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COB77 NUM-9 NUM-11 NSO NOO877 NUM-13 NSO NUM-71 NOO877 NUM-7D NOO877 NUM-7D NOO877 NUM-7TF3 1053 Samplery (Signature) Relinquished by: (Signature) Relinquished by: (Signature) Relinquished by: (Signature) Time: Affiliation Relinquished by: (Signature) Time: Relinquished by: (Signature) Time: Affiliation Relinquished by: (Signature) Time: Relinquished by: (Signature) Time: Affiliation Relinquished by: (Signature) Time: Relinquished by: (Signature) Time: Affiliation Relinquished by: (Signature) Time: Relinquished by: (Signature) Time: Affiliation Relinquished by: (Signature) Time: Affiliation Relinquished by: (Signature) Time: Relinquished by: (Signature) Time: Affiliation Relinquished by: (Signature) Time: Relinquished by: (Signature) Time: Affiliation Relinquished by: (Signature) Time: Relinquished by: (Signature)	MW-14	1310						!							-
Date: Signature) Relinquished by: Signature)	00877														
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Doc Parity Pari	00877						· · · · · · · · · · · · · · · · · · ·								
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Environmental Laboratory 8880 Interchange Drive Houston, Texas 77054 713/660-0901

Analysis Request and Chain of Custody Record

<u></u>						,					
Project No. Client/Project Name					;			Project Location			
1564-0	<u> ۲</u>		E	Z-Serve	HAYWARI	2 # 1	00877	WEST "A" STREET.	HAYWARD, (CA.	
Field Sample No./ Identification	Date and Time	Grab	Сошр	Sample Container (Size/Mat'l)	Sample Type (Liquid, Sludge, Etc.)	Preser vative	r.	ANALYSIS REQUESTED		LABORATORY REMARKS	
TRIP BLANK				2>40~QUOA	Liaus	He	C TPH.G +	+ BTEX			
100877 MW-1	3-15-95			3×40,0000			TPA.6 5	030/8015 BTEX	802 S	-	
100577 MW-2 100577	1135										
:MW-3	0945									Name of the state	
100 577 MW-4	1645										
100877 MW-5	1330										
100 877 MW-6	1427	igspace		\downarrow	1	1		$\sqrt{}$			
		\bigsqcup									
Samplers: (Signature) M. Atences				Relinquished by: (Signature)	Stan		Date: 3-15-95 Time: 645	Received by: (Signature)	Date: Time:	Intact	
BROWN CANDWICE			_	Relinquished by: (Signeture)		Date: Time:	Received by: (Signature)	Date:	Intact		
			4	Relinquished by: (Signature)			Date: Time:	Received by: (Signature)	Date: Time:	Intact 3'C	
SAMPLER REMAR	RKS:			<u> </u>		·····		Received for labyratory: (Signature)	Date / C/C	Laboratory No.	
Seal #								Data Results to:			

SPL HOUSTON ENVIRONMENTAL LABORATORY

SAMPLE LOGIN CHECKLIST

	TIME: CLIENT NO. CONTRACT	IO		
SPL	sample nos.: 9503045			
1.	Is a Chain-of-Custody form present? Is the COC properly completed?		YES	NO
	If no, describe what is incomplete: If no, has the client been contacted about	it?		
3.	(Attach subsequent documentation from clients airbill/packing list/bill of lading with If yes, ID#:	t about t		n)
4. 5. 6.	Is a USEPA Traffic Report present? Is a USEPA SAS Packing List present? Are custody seals present on the package? If yes, were they intact upon receipt?			
7.	Are all samples tagged or labeled? Do the sample tags/labels match the COC? If no, has the client been contacted about (Attach subsequent documentation from clien		he situation	
8.	Do all shipping documents agree? If no, describe what is in nonconformity:			
9. 10. 11. NOTE	Condition/temperature of shipping container Condition/temperature of sample bottles: Sample Disposal?: SPL disposal S (reference item number if applicable):		MTACT 0000 rn to client	E
	ST: VERED FOR RESOLUTION: REC'D	DATE:	3/10	