567-6847

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ENVIRONMENTAL PROTECTION

96 JUL 26 PM 3:26

July 15, 1996

Mr. Brian Cobb
Environmental and Construction Manager
E-Z Serve Convenience Stores, Inc.
P.O. Box 922021
Houston, Texas 77292-2021

SUBJECT: Second Quarter 1996 Groundwater Monitoring (April through June) for E-Z Serve Facility No. 100877 located in Hayward, CA.

Dear Mr. Cobb:

Brown & Root Environmental (BRE) has been contracted by E-Z Serve Convenience Stores, Inc. (E-Z Serve) to perform groundwater monitoring at E-Z Serve Facility No. 100877. E-Z Serve Facility No. 100877 is located at 525 West A Street, Hayward, California. The site is currently vacant. The referenced facility was formally used for petroleum retail distribution. Site features are depicted on Figure 1.

This report summarizes field and analytical data collected during the current quarter (April, 1996- June 1996) for this facility. The activities summarized in this report were completed at the direction of Alameda County and costs incurred and documented are considered eligible for reimbursement through the UST Trust Fund.

MONITORING RESULTS

On June 14, 1996, BRE personnel performed the second quarter monitoring event. Depth to groundwater measurements were gauged prior to well purging and sampling. All monitoring wells were checked for free product using clear, Teflon bailers. The field protocol followed by BRE personnel during groundwater well purging and sampling is included as Appendix A. Well purging and sampling documentation logs are included as Appendix B. Documentation of purge water disposal will be forwarded to the state agency under a separate cover.

Depth to groundwater beneath the facility during this monitoring event ranged from 10.61 to 15.04 feet below land surface (bls). Depth to groundwater measurements across the study area during this quarter indicate that the groundwater table increased approximately 3 feet from the last quarter 1995 monitoring event. Free product was encountered in monitoring well MW-1A during the sampling event. Table 1 presents the groundwater elevation data.

The flow direction of the groundwater beneath the facility is to the southwest with an average hydraulic gradient of approximately 0.0009 feet per foot (ft/ft). The flow direction and gradient

have changed slightly from the first quarter monitoring event. Water table elevations and a groundwater contour map for June 14, 1996 are depicted as Figure 1.

BRE personnel collected groundwater samples from fourteen monitoring wells during this field event. Groundwater samples were transported to Centrum Analytical Laboratories, Inc., in Redlands CA, and analyzed for Total Petroleum Hydrocarbons - Gasoline range organics (TPHg) (EPA Method 8015 mod.) and total volatile organic aromatics (TVOA)(EPA Method 8020), including methyl tertiary butyl ether (MTBE).

Laboratory analysis of the groundwater samples indicated the presence of dissolved phase petroleum hydrocarbons above laboratory method detection limits (MDLs) in thirteen of the monitoring wells. Concentrations of TPHg ranged from below detection limits (MW-8, MW-12 and MW-13) to 24,000 µg/L (MW-1), and concentrations of TVOA ranged from below detection limits (MW-12 and MW-13) to 9,510 µg/L (MW-1). Table 2 presents the analytical testing data. The analytical data is depicted on a site plan as Figure 2. The complete analytical laboratory reports including chains of custody is included as Appendix C.

RECOMMENDATIONS/CONCLUSIONS

BRE recommends that the results of the quarterly sampling event be forwarded to the Colorado River Water Quality Control Board for review and comment. Based upon the monitoring data collected during the second quarter, the monitoring events should continue on a quarterly basis along with free product recovery efforts for monitoring well MW-1A. Also, MW-9 should be re-installed.

If you have any questions or comments pertaining to this correspondence, please contact Mr. Arnold Lamb or the undersigned at (954) 570-5885.

Sincerely,
BROWN & ROOT ENVIRONMENTAL

for

Thomas G. Nicotera
Hydrogeologist

Enclosures.

Distribution: (1) Addressee

(1) Ms. Madhulla Logan
Alameda County Department of Health Services
1131 Harbor Bay Parkway
Alameda, CA 94502

TABLE 1
GROUNDWATER ELEVATIONS
Former E-Z Serve Facility #100877
525 West A Street, Hayward, California

(unless other wise stated all units are in feet)

Well ID	Date	Well Casing Elevation	Free Product Thickness	Depth to Water [A]	Water Table Elevation [A]
MW-1	6/14/96	96.73	0.00	13.41	83.32
MW-2	6/14/96	98.06	0.00	15.04	83.02
MW-3	6/14/96	97.66	0.00	14.39	83.27
MW-4	6/14/96	97.10	0.00	13.92	83.18
MW-5	6/14/96	96.73	0.00	13.55	83.18
MW-6	6/14/96	97.09	0.00	13.80	83.29
MW-7	6/14/96	97.44	0.00	14.26	83.18
MW-8	6/14/96	97.61	0.00	14.06	83.55
MW-10	6/14/96	97.11	0.00	13.89	83.22
MW-11	6/14/96	92.68	0.00	10.61	82.07
MW-12	6/14/96	99.03	0.00	14.99	84.04
MW-13	6/14/96	96.80	0.00	12.91	83.89
MW-14	6/14/96	99.01	0.00	14.90	84.11
MW-1A	6/14/96	97.59	0.00	14.28	83.31

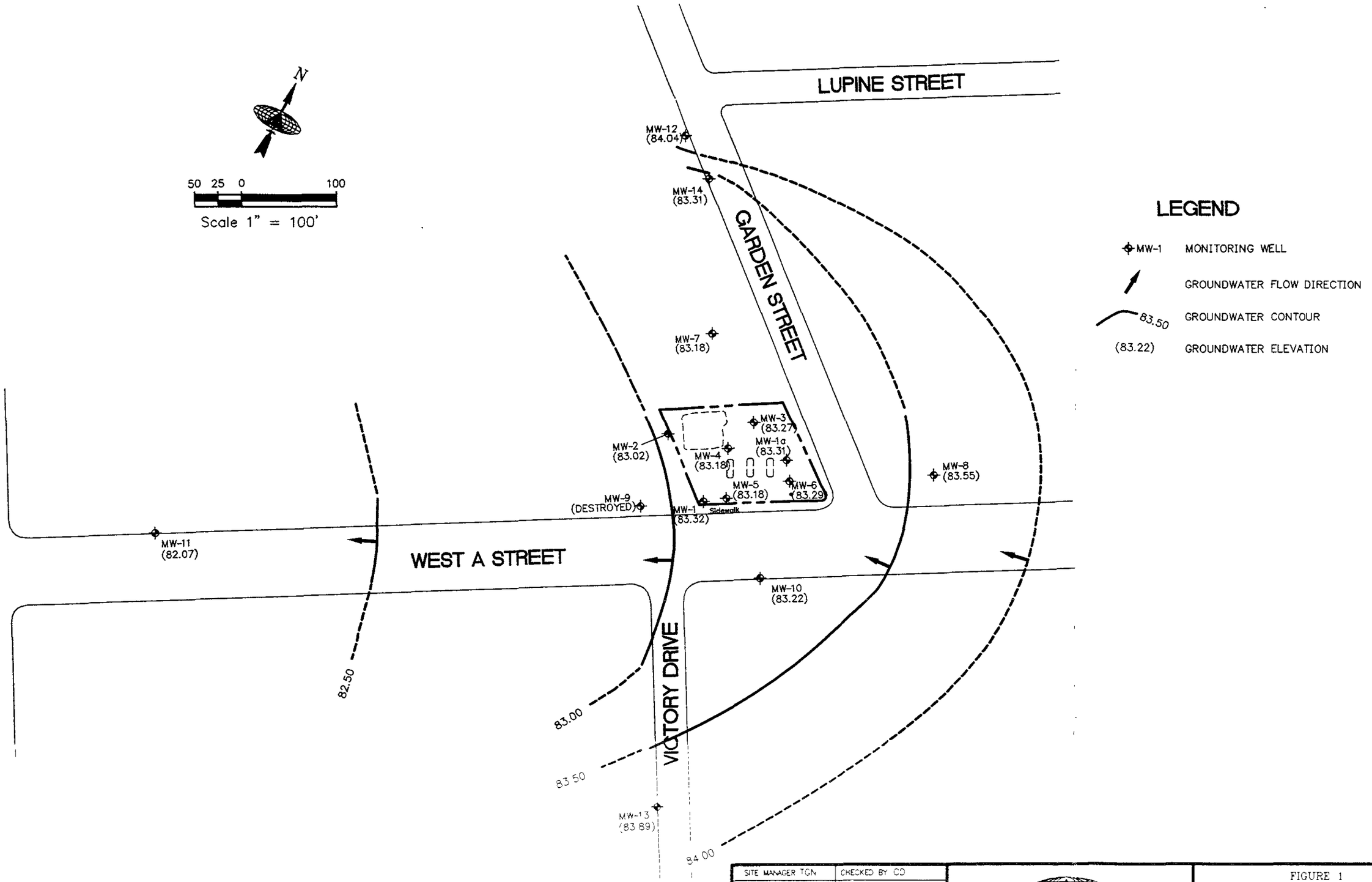
Notes:
A = Measurement relative to the marked location on the top of casing.
All elevations are referenced to an arbitrary site datum.

TABLE 2
ANALYTICAL TESTING DATA
Former E-Z Serve Facility #100877
525 West A Street, Hayward, California

(unless other wise stated all units are µg/L)

Well ID	Date Sampled	MTBE	Benzene	Toluene	Ethyl benzene	Total Xylenes	TPHg
MW-1	6/14/96	240	6,900	150	960	1,500	24,000
MW-2	6/14/96	430	3,300	120	1,500	3,600	23,000
MW-3	6/14/96	15	580	21	490	580	6,000
MW-4	6/14/96	720	4,100	720	690	1,800	17,000
MW-5	6/14/96	110	2,100	33	570	1,000	11,000
MW-6	6/14/96	61	800	99	1,500	730	14,000
MW-7	6/14/96	11	85	<2.0	470	200	4,400
MW-8	6/14/96	<1.0	<0.6	<2.0	4	<6.0	<500
MW-10	6/14/96	<1.0	<0.6	<2.0	120	<6.0	1,700
MW-11	6/14/96	36	570	99	3,000	3,500	21,000
MW-12	6/14/96	<1.0	<0.6	<2.0	<1.0	<6.0	<500
MW-13	6/14/96	<1.0	<0.6	<2.0	<1.0	<6.0	<500
MW-14	6/14/96	3	19	8	240	80	1,900
MW-4 DUP	6/14/96	710	3,000	720	700	1,800	17,000

Notes:
µg/L = micrograms per liter
MTBE = methyl tertiary butyl ether EPA Method 8020.
TPHg = Total Petroleum Hydrocarbons - Gasoline Range Organics EPA Method 8015 mod.



LEGEND

- MW-1 — MONITORING WELL
- GROUNDWATER FLOW DIRECTION
- 83.50 — GROUNDWATER CONTOUR
- (83.22) — GROUNDWATER ELEVATION

SITE MANAGER TGN	CHECKED BY CD
DRAWN BY TCB	DRAWING DATE 7/12/96
SURVEYED BY	SURVEY DATE
SCALE 1" = 100'	
CAD DWG NO MY4GRSIT	PROJ NO MY40

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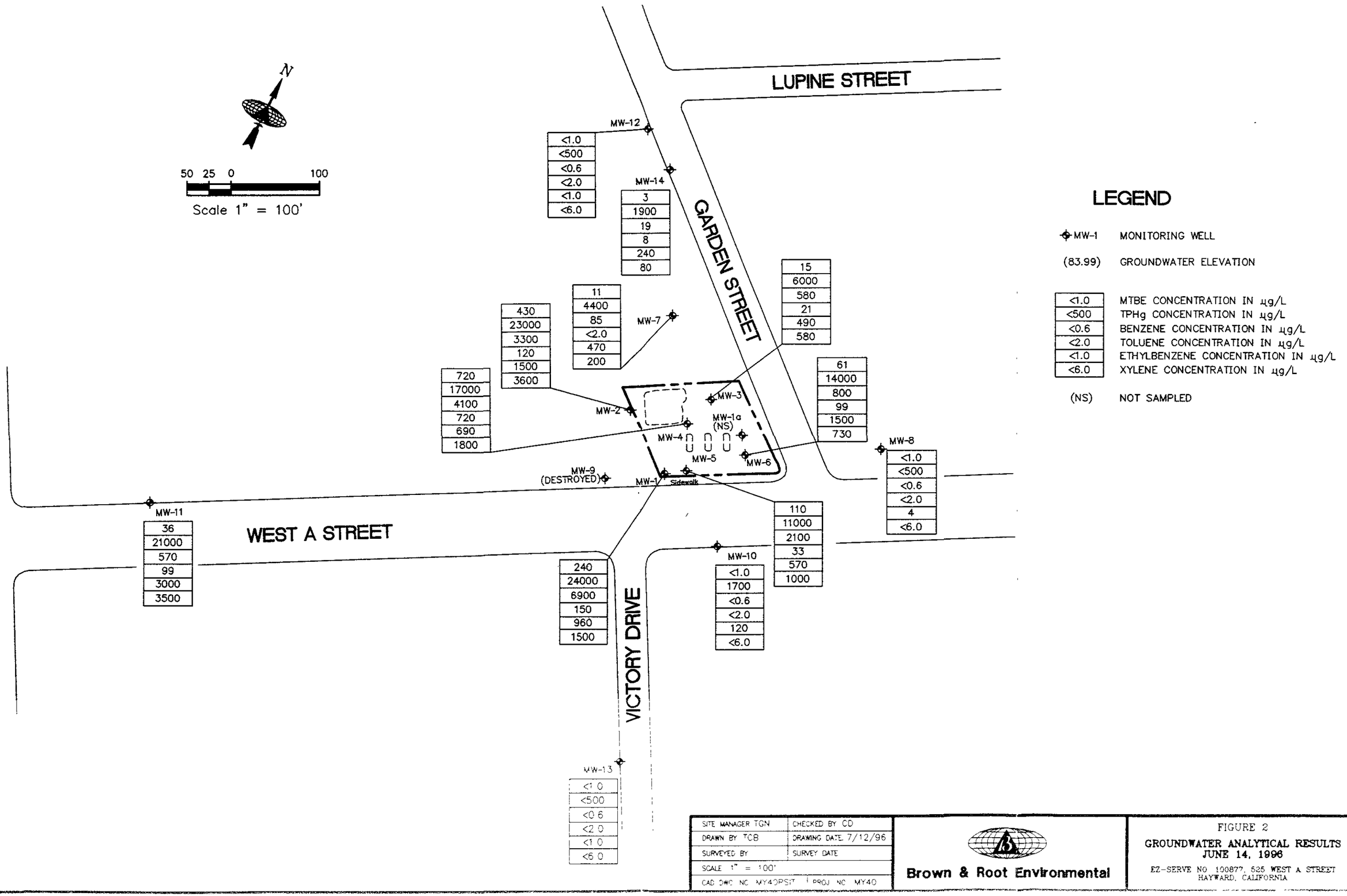
FIGURE 1

GROUNDWATER ELEVATION CONTOUR MAP
JUNE 14, 1996

EZ-SERVE NO 100877, 525 WEST A STREET
HAYWARD, CALIFORNIA



LEGEND

MW-1	MONITORING WELL
(83.99)	GROUNDWATER ELEVATION
<1.0	MTBE CONCENTRATION IN µg/L
<500	TPHg CONCENTRATION IN µg/L
<0.6	BENZENE CONCENTRATION IN µg/L
<2.0	TOLUENE CONCENTRATION IN µg/L
<1.0	ETHYLBENZENE CONCENTRATION IN µg/L
<6.0	XYLENE CONCENTRATION IN µg/L
(NS)	NOT SAMPLED

SITE MANAGER TGN	CHECKED BY CD
DRAWN BY TCB	DRAWING DATE 7/12/96
SURVEYED BY	SURVEY DATE
SCALE 1" = 100'	
CAD DWG NO MY40RSIT	PROJ NO MY40

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FIGURE 2
GROUNDWATER ANALYTICAL RESULTS
JUNE 14, 1996
EZ-SERVE NO 100877, 525 WEST A STREET
HAYWARD, CALIFORNIA

APPENDIX A

BRE STANDARD OPERATING PROCEDURES
FOR WELL PURGING AND SAMPLING

BROWN & ROOT ENVIRONMENTAL
CALIFORNIA

STANDARD OPERATING PROCEDURE
for
GROUNDWATER SAMPLING

OBJECTIVE :
The purpose of this SOP is to provide a concise guideline for the proper collection of groundwater samples. Implementation of the sampling procedures has a significant effect on the quality of the analytical data.

Sampling of existing monitoring wells and newly installed monitoring wells will consist of the following seven activities :

- Measurement of depth to water level and total depth of the well (to calculate well volume), if the total depth is not provided;
- Decontamination of sampling equipment;
- Evacuation of static water (purging);
- Measurement and recording of groundwater temperature, pH, and specific conductance;
- Collection of the sample;
- Sample preservation and;
- Sample handling and transportation to the laboratory.

DECONTAMINATION :
All sampling devices and monitoring equipment must be properly decontaminated prior to use. Equipment decontamination must be documented in the logbook. The decontamination process will consist of the following activities:

- Alconox and tap water wash;
- Tap water rinse;

- Reagent Grade Methanol rinse (the equipment shall be thoroughly wetted with Methanol);
- Analyte-free water rinse;
- Air dry.

WATER LEVEL MEASUREMENTS :

A complete round of water level measurements must be collected prior to any purging or sampling activities. Water level measurements, using an electronic water level indicator, should be taken to the nearest 0.01 foot. Where possible water level measurements shall be taken on the North Side of the monitoring well at the top of the casing, unless a measurement point has been previously established.

PURGING STATIC WATER :

- All information concerning the purging of static water including calculations must be recorded for each well. The type of equipment used to purge the well must be described in the logbook. If a pump is utilized information concerning the pump type and flow-rate must be included in the logbook.

- When a bailer is used for purging and/or sampling activities it must be lowered gently into the well such that the formation waters are disturbed as little as possible. It is very important that the turbidity of the sample not be increased by improper purging and/or sampling techniques.

- A minimum of three well volumes of the standing water column will be purged from the well prior to the collection of samples. Monitoring well purging will continue until groundwater temperature, pH, and specific conductance has stabilized for three measurements each following the removal of one well volume. If five well are removed then, only one set of water quality measurements is required on final purge volume. No more than five wells volumes shall be removed during purging activities. Over purging the well may result in the collection of non-representative groundwater samples.

- If the well does not recover quickly enough to permit the removal of three well volumes, the well will be pumped or bailed dry and sampled immediately following sufficient recovery. Generally, bailing the well dry once is adequate. Purging will be performed utilizing a properly decontaminated stainless steel or Teflon bailer or the appropriate pump. Utilization of a submersible pump is the preferable method of purging as repeatedly lowering the bailer into the monitoring well may oxygenate the formation waters and change the chemistry of the groundwater.

LANYARDS :

- Lanyards may be disposable (braided or monofilament nylon) or reusable (stainless steel Teflon coated).
- A disposable lanyard must be changed for each monitor well. But the same lanyard may used for purging and sampling operations without decontamination between purging sampling activities.
- Reusable lanyards shall be decontaminated between monitoring wells but do not require between purging and sampling operations.
- Lanyards must never come in contact with the ground or other surface which may contaminate the lanyard.

SAMPLE COLLECTION ORDER :

Samples shall be collected from the least to the most contaminated sampling locations within a site. This information can be obtained from historical data, the Site Manager, or OVA readings at the site.

Unless field conditions justify other sampling regimens, samples shall be collected in the following order :

a. Volatile Organic Contaminants (VOCs)
b. Extractable Organics [includes Total Recoverable Petroleum Hydrocarbons (TRPH), & Grease, Pesticides and Herbicides];
c. Total Metals;
d. Dissolved Metals;
e. Microbiological;
f. Inorganics (including Nutrients, Demands and Physical Properties); and
g. Radionuclides.

SAMPLE PRESERVATION :

Samples must be preserved with the appropriate preservative and maintained on ice. A laboratory certified to perform hazardous waste testing by the State of California Department of Health Services (DOHS) will dispatch prepreserved sample containers for collection of samples. It is essential that the samples be maintained at 4 degrees centigrade until delivery to the laboratory facility. A notation must be made on the Chain of Custody form (COC) as well as in the logbook concerning sample preservation.

SAMPLE HANDLING :

It is critical that proper custody procedures be followed throughout all phases of sample collection and handling. Some specific points of concern are as follows: The samples from a particular site must never be commingled with samples from another site. Samples from several sites must never be combined in the same sample cooler. Each sample group must also be under separate documentation (i.e., A COC must be generated for each site and for each sampling event). The Site Manager as well as the individual who releases the samples to the transporter must follow up to see if the samples were received at the laboratory facility.

QUALITY ASSURANCE QUALITY CONTROL :

- Trip Blanks will be utilized to verify that handling and transportation activities of the empty sample containers and collected samples has not contaminated the groundwater samples. Trip blanks will be prepared and dispatched by the analyzing Laboratory. Trip blanks will accompany the empty sample containers through sampling and return shipment of samples to the Laboratory.

- Equipment Blanks will be collected, in field, to assess the completeness of decontamination procedures for precleaned equipment and field cleaned equipment. Equipment blanks will consist of pouring analyte-free water over decontaminated sampling equipment and collecting the rinsate into the appropriate prepreserved containers.

- Duplicates will be collected to assess the representativeness and variability inherent in the sampling process. They shall be obtained by DUPLICATING (simultaneously or in rapid succession) the entire sample acquisition technique that was used to obtain the first sample.

DOCUMENTATION :

Documentation is an essential part of sample collection therefore field logbook, field forms, sample labels, and COC records must be complete and accurate. At a minimum, the following information must be included in the logbook :

- Equipment used to purge the well; include pump type and flow-rate if applicable.

- Volume of water purged from the well.

- Complete description of the decontamination procedures used to clean the sampling equipment. If the equipment was pre-cleaned at the warehouse or laboratory the lot associated with this cleaning must be recorded in the logbook.

- The source of the analyte free water utilized on site. Include any lot numbers or batch numbers in the logbook.
- Note which well was sampled using the equipment blank bailer.
- Any observable physical characteristics of the groundwater (e.g., color, sheen, odor,) as it is being sampled.
- Sample temperature, pH, and specific conductance will be recorded for each sample.
- Weather conditions (e.g., air temperature, wind conditions, recent heavy rainfall, conditions) at the time of sampling will be recorded.
- The exact time of sample collection and the person who collected the sample.
- If any field forms are utilized the forms must be referenced in the logbook. For example following should be written in the logbook to reference a form : Refer to the water quality sheets for information concerning.....

SAMPLE IDENTIFICATION :
Sample nomenclature must be unique and must always include the date of sample collection. All samples must be identified utilizing the following format :

project #/ sample id/ date (e.g. MJ50/MW-3/122094, MJ53/INF/122094, etc.)

For example, a sample collected for project site MJ50 for monitoring well MW-3 on December 20, 1994 would have the following sample id : **MJ50-MW-3-122094.**

CONTAINMENT AND DISPOSAL OF PURGE WATER :
Purge water will be collected into DOT 17-H 55 gallon drums. The drums will be transported to an appropriate treatment facility and properly disposed of. Drum removal and disposal practices shall be thoroughly documented.

APPENDIX B

WELL PURGING AND SAMPLING
DOCUMENTATION LOGS

BROWN & ROOT ENVIRONMENTAL

GROUNDWATER SAMPLE COLLECTION RECORD

Site Name: E-Z Serve #100877
Location: 525 West A Street, Hayward, CA
Samplers: T. Nicotera\A. Lamb
Weather: Clear and sunny ~80°F

Job #: MY40
Date: 6/14/96
Well ID: MW-1

WATER COLUMN INFORMATION (ft.) [1]:

a. Depth to Water: 13.41
b. Total Well Depth: 32.10
c. Length of water column: 18.69
d. Well Casing Volume: 12.22
e. Well Screen Length: 10'
f. **TOTAL WELL VOLUME:** 12.22

TOC Elevation: 96.73
Water Table Elevation: 83.32
Well Diameter: 4"

[1] All datum are reletive to a measurment point located on the TOC.

WELL PURGING DATA:

a. Purge Method: 2" Grundfros Redi-Flow submersible pump
b. Purge Vol. (@ 12.22 gal. per well vol.): 61.10 gal.
c. Field Water Quality Monitoring Equipment: pH - Cole Palmer 5900-00, Cond. - Hanna HI8733
d. Pump Flow Rate: 3 gal/min
e. Method of Purge Water Disposal: 17-H - 55 gallon drums

Volume Removed (gal.)	Time	T°c	pH	Specific Conductance	Description	Odor	Comments
15	17:44	18.5 °c	6.9	903	clear	No	
40	17:47	19.0 °c	6.9	955	clear	No	
61	17:51	19.0 °c	6.8	932	clear	No	
Sample	17:53	18.0 °c	6.8	985	clear	No	

SAMPLE COLLECTION METHOD:

Method: Disposable Teflon Bailer
Sample Containers: 40 ml VOA vials
Sample Preservation: HCL and ICE to 4°c
Analyses: EPA Method 8020 + MTBE, EPA Method 8015 mod. - TPHg
Laboratory: Centrum Analytical Laboratories, Inc. located in Redlands, CA

COMMENTS:

BROWN & ROOT ENVIRONMENTAL

GROUNDWATER SAMPLE COLLECTION RECORD

Site Name: E-Z Serve #100877
Location: 525 West A Street, Hayward, CA
Samplers: T. Nicotera\A. Lamb
Weather: Clear and sunny ~80°F

Job #: MY40
Date: 6/14/96
Well ID: MW-1A

WATER COLUMN INFORMATION (ft.) [1]:

a. Depth to Water: 14.28
b. Total Well Depth: 28.40
c. Length of water column: 14.12
d. Well Casing Volume: 2.30
e. Well Screen Length: 10'
f. TOTAL WELL VOLUME: 2.30

TOC Elevation: 97.59
Water Table Elevation: 83.31
Well Diameter: 2"

[1] All datum are reletive to a measurment point located on the TOC.

WELL PURGING DATA:

a. Purge Method: 2" Grundfros Redi-Flow submersible pump
b. Purge Vol. (@ 2.3o gal. per well vol.): 11.50 gal.
c. Field Water Quality Monitoring Equipment: pH - Cole Palmer 5900-00, Cond. - Hanna HI8733
d. Pump Flow Rate: 1 gal./min
e. Method of Purge Water Disposal: 17-H - 55 gallon drums

Volume Removed (gal.)	Time	T°c	pH	Specific Conductance	Description	Odor	Comments
4	18:27	19.5 °C	7.2	986	cloudy	yes	
7	18:30	19.0 °C	7.1	981	cloudy	yes	
12	18:32	19.0 °C	7.0	977	cloudy	yes	
Sample	NS	NS	NS	NS	Free Product - yes		

SAMPLE COLLECTION METHOD:

Method: Disposable Teflon Bailer
Sample Containers: 40 ml VOA vials
Sample Preservation: HCL and ICE to 4°c
Analyses: EPA Method 8020 + MTBE, EPA Method 8015 mod. - TPHg
Laboratory: Centrum Analytical Laboratories, Inc. located in Redlands, CA

COMMENTS: Well had Free Product in it.

BROWN & ROOT ENVIRONMENTAL

GROUNDWATER SAMPLE COLLECTION RECORD

Site Name: E-Z Serve #100877
Location: 525 West A Street, Hayward, CA
Samplers: T. Nicotera\A. Lamb
Weather: Clear and sunny ~80°F

Job #: MY40
Date: 6/14/96
Well ID: MW-2

WATER COLUMN INFORMATION (ft.) [1]:

a. Depth to Water: 15.04
b. Total Well Depth: 32.30
c. Length of water column: 17.26
d. Well Casing Volume: 11.29
e. Well Screen Length: 10'
f. TOTAL WELL VOLUME: 11.29

TOC Elevation: 98.06
Water Table Elevation: 83.02
Well Diameter: 4"

[1] All datum are relative to a measurment point located on the TOC.

WELL PURGING DATA:

a. Purge Method: 2" Grundfros Redi-Flow submersible pump
b. Purge Vol. (@ 11.29 gal. per well vol.): 56.45 gal.
c. Field Water Quality Monitoring Equipment: pH - Cole Palmer 5900-00, Cond. - Hanna HI8733
d. Pump Flow Rate: 3 gal/min
e. Method of Purge Water Disposal: 17-H - 55 gallon drums

Volume Removed (gal.)	Time	T°c	pH	Specific Conductance	Description	Odor	Comments
15	17:21	19.0°C	7.0	1089	clear	no	
30	17:27	19.0°C	7.0	1084	clear	no	
56	17:34	19.0°C	7.0	1084	clear	no	
Sample	19:04	18.5°C	7.0	1070	clear	no	

SAMPLE COLLECTION METHOD:

Method: Disposable Teflon Bailer
Sample Containers: 40 ml VOA vials
Sample Preservation: HCL and ICE to 4°c
Analyses: EPA Method 8020 + MTBE, EPA Method 8015 mod. - TPHg
Laboratory: Centrum Analytical Laboratories, Inc. located in Redlands, CA

COMMENTS:

BROWN & ROOT ENVIRONMENTAL

GROUNDWATER SAMPLE COLLECTION RECORD

Site Name: E-Z Serve #100877
Location: 525 West A Street, Hayward, CA
Samplers: T. Nicotera\A. Lamb
Weather: Clear and sunny ~80°F

Job #: MY40
Date: 6/14/96
Well ID: MW-3

WATER COLUMN INFORMATION (ft.) [1]:

a. Depth to Water: 14.39
b. Total Well Depth: 32.10
c. Length of water column: 17.71
d. Well Casing Volume: 11.58
e. Well Screen Length: 10'
f. TOTAL WELL VOLUME: 11.58

TOC Elevation: 97.66
Water Table Elevation: 83.27
Well Diameter: 4"

[1] All datum are reletive to a measurment point located on the TOC.

WELL PURGING DATA:

a. Purge Method: 2" Grundfros Redi-Flow submersible pump
b. Purge Vol. (@ 11.58 gal. per well vol.): 57.90 gal.
c. Field Water Quality Monitoring Equipment: pH - Cole-Palmer 5900-00, Cond. - Hanna HI8733
d. Pump Flow Rate: 3 gal/min
e. Method of Purge Water Disposal: 17-H - 55 gallon drums

Volume Removed (gal.)	Time	T°c	pH	Specific Conductance	Description	Odor	Comments
5	16:59	19.5°c	7.1	976	CLEAR	NO	
30	17:04	19.5°c	7.1	980	CLEAR	NO	
55	17:09	19.0°c	6.9	980	CLEAR	NO	
Sample	19:05	18.5°c	7.0	965	CLEAR	NO	

SAMPLE COLLECTION METHOD:

Method: Disposable Teflon Bailer
Sample Containers: 40 ml VOA vials
Sample Preservation: HCL and ICE to 4°c
Analyses: EPA Method 8020 + MTBE, EPA Method 8015 mod. - TPHg
Laboratory: Centrum Analytical Laboratories, Inc. located in Redlands, CA

COMMENTS:

BROWN & ROOT ENVIRONMENTAL

GROUNDWATER SAMPLE COLLECTION RECORD

Site Name: E-Z Serve #100877
Location: 525 West A Street, Hayward, CA
Samplers: T. Nicotera\A. Lamb
Weather: Clear and sunny ~80°F

Job #: MY40
Date: 6/14/96
Well ID: MW-4

WATER COLUMN INFORMATION (ft.) [1]:

a. Depth to Water: 13.92
b. Total Well Depth: 32.11
c. Length of water column: 18.19
d. Well Casing Volume: 11.90
e. Well Screen Length: 10'
f. TOTAL WELL VOLUME: 11.90

TOC Elevation: 97.10
Water Table Elevation: 83.18
Well Diameter: 4"

[1] All datum are reletive to a measurment point located on the TOC.

WELL PURGING DATA:

a. Purge Method: 2" Grundfros Redi-Flow submersible pump
b. Purge Vol. (@ 11.9 gal. per well vol.): 59.50 gal.
c. Field Water Quality Monitoring Equipment: pH - Cole Palmer 5900-00, Cond. - Hanna HI8733
d. Pump Flow Rate: 3 gal./min
e. Method of Purge Water Disposal: 17-H - 55 gallon drums

Volume Removed (gal.)	Time	T°c	pH	Specific Conductance	Description	Odor	Comments
15	1801	18.5 °c	6.9	698	cloudy	no	
40	18:03	18.5 °c	6.9	1037	cloudy	no	
65	18:09	18.5 °c	6.9	1042	cloudy	no	
Sample	19:32	18.5 °c	6.9	1011	cloudy	no	

SAMPLE COLLECTION METHOD:

Method: Disposable Teflon Bailer
Sample Containers: 40 ml VOA vials
Sample Preservation: HCL and ICE to 4°c
Analyses: EPA Method 8020 + MTBE, EPA Method 8015 mod. - TPHg
Laboratory: Centrum Analytical Laboratories, Inc. located in Redlands, CA

COMMENTS:

BROWN & ROOT ENVIRONMENTAL

GROUNDWATER SAMPLE COLLECTION RECORD

Site Name: E-Z Serve #100877
Location: 525 West A Street, Hayward, CA
Samplers: T. Nicotera\A. Lamb
Weather: Clear and sunny ~80°F

Job #: MY40
Date: 6/14/96
Well ID: MW-5

WATER COLUMN INFORMATION (ft.) [1]:

a. Depth to Water: 13.55
b. Total Well Depth: 32.48
c. Length of water column: 18.93
d. Well Casing Volume: 12.38
e. Well Screen Length: 10'
f. TOTAL WELL VOLUME: 12.38

TOC Elevation: 96.73
Water Table Elevation: 83.18
Well Diameter: 4"

[1] All datum are reletive to a measurment point located on the TOC.

WELL PURGING DATA:

a. Purge Method: 2" Grundfros Redi-Flow submersible pump
b. Purge Vol. (@ 12.38 gal. per well vol.): 61.90 gal.
c. Field Water Quality Monitoring Equipment: pH - Cole Palmer 5900-00, Cond. - Hanna HI8733
d. Pump Flow Rate: 3 gal/min
e. Method of Purge Water Disposal: 17-H - 55 gallon drums

Volume Removed (gal.)	Time	T°c	pH	Specific Conductance	Description	Odor	Comments
10	15:59	19.5°c	6.9	1018	clear	No	
30	16:06	19.5°c	6.9	1000	clear	No	
60	16:10	19.5°c	6.6	999	clear	No	
Sample	18:50	19.0°c	6.8	987	clear	No	

SAMPLE COLLECTION METHOD:

Method: Disposable Teflon Bailer
Sample Containers: 40 ml VOA vials
Sample Preservation: HCL and ICE to 4°c
Analyses: EPA Method 8020 + MTBE, EPA Method 8015 mod. - TPHg
Laboratory: Centrum Analytical Laboratories, Inc. located in Redlands, CA

COMMENTS:

BROWN & ROOT ENVIRONMENTAL

GROUNDWATER SAMPLE COLLECTION RECORD

Site Name: E-Z Serve #100877
Location: 525 West A Street, Hayward, CA
Samplers: T. Nicotera\A. Lamb
Weather: Clear and sunny ~80°F

Job #: MY40
Date: 6/14/96
Well ID: MW-6

WATER COLUMN INFORMATION (ft.) [1]:

a. Depth to Water: 13.80
b. Total Well Depth: 32.10
c. Length of water column: 18.30
d. Well Casing Volume: 11.97
e. Well Screen Length: 10'
f. TOTAL WELL VOLUME: 11.97

TOC Elevation: 97.09
Water Table Elevation: 83.29
Well Diameter: 4"

[1] All datum are reletive to a measurment point located on the TOC.

WELL PURGING DATA:

a. Purge Method: 2" Grundfros Redi-Flow submersible pump
b. Purge Vol. (@ 11.97 gal. per well vol.): 59.85 gal.
c. Field Water Quality Monitoring Equipment: pH - Cole Palmer 5900-00, Cond. - Hanna HI8733
d. Pump Flow Rate: 3 gal/min
e. Method of Purge Water Disposal: 17-H - 55 gallon drums

Volume Removed (gal.)	Time	T°c	pH	Specific Conductance	Description	Odor	Comments
15	16:19	20.0°c	6.7	1021	clear	No	
30	16:22	19.5°c	6.7	1001	clear	No	
55	16:25	19.5°c	6.6	1007	clear	No	
Sample	19:17	19.0°c	6.7	1004	clear	No	

SAMPLE COLLECTION METHOD:

Method: Disposable Teflon Bailer
Sample Containers: 40 ml VOA vials
Sample Preservation: HCL and ICE to 4°c
Analyses: EPA Method 8020 + MTBE, EPA Method 8015 mod. - TPHg
Laboratory: Centrum Analytical Laboratories, Inc. located in Redlands, CA

COMMENTS:

BROWN & ROOT ENVIRONMENTAL

GROUNDWATER SAMPLE COLLECTION RECORD

Site Name: E-Z Serve #100877
Location: 525 West A Street, Hayward, CA
Samplers: T. Nicotera\A. Lamb
Weather: Clear and sunny ~80°F

Job #: MY40
Date: 6/14/96
Well ID: MW-7

WATER COLUMN INFORMATION (ft.) [1]:

a. Depth to Water: 14.26
b. Total Well Depth: 30.06
c. Length of water column: 15.80
d. Well Casing Volume: 2.58
e. Well Screen Length: 10'
f. TOTAL WELL VOLUME: 2.58

TOC Elevation: 97.44
Water Table Elevation: 83.18
Well Diameter: 2"

[1] All datum are reletive to a meaasurment point located on the TOC.

WELL PURGING DATA:

a. Purge Method: 2" Grundfros Redi-Flow submersible pump
b. Purge Vol. (@ 1.5 gal. per well vol.): 12.90 gal.
c. Field Water Quality Monitoring Equipment: pH - Cole Palmer 5900-00, Cond. - Hanna HI8733
d. Pump Flow Rate: 1 gal/min
e. Method of Purge Water Disposal: 17-H - 55 gallon drums

Volume Removed (gal.)	Time	T°c	pH	Specific Conductance	Description	Odor	Comments
3	13:40	19.5°c	6.9	1036	clear	no	
5	14:08	19.5°c	6.7	1069	clear	no	
10	14:15	19.5°c	6.7	1039	clear	no	
Sample	14:21	19.5°c	6.7	1018	clear	no	

SAMPLE COLLECTION METHOD:

Method: Disposable Teflon Bailer
Sample Containers: 40 ml VOA vials
Sample Preservation: HCL and ICE to 4°c
Analyses: EPA Method 8020 + MTBE, EPA Method 8015 mod. - TPHg
Laboratory: Centrum Analytical Laboratories, Inc. located in Redlands, CA

COMMENTS:

BROWN & ROOT ENVIRONMENTAL

GROUNDWATER SAMPLE COLLECTION RECORD

Site Name: E-Z Serve #100877
Location: 525 West A Street, Hayward, CA
Samplers: T. Nicotera\A. Lamb
Weather: Clear and sunny ~80°F

Job #: MY40
Date: 6/14/96
Well ID: MW-8

WATER COLUMN INFORMATION (ft.) [1]:

a. Depth to Water: 14.06
b. Total Well Depth: 32.15
c. Length of water column: 18.09
d. Well Casing Volume: 2.95
e. Well Screen Length: 10'
f. TOTAL WELL VOLUME: 2.95

TOC Elevation: 97.61
Water Table Elevation: 83.55
Well Diameter: 2"

[1] All datum are reletive to a measurment point located on the TOC.

WELL PURGING DATA:

a. Purge Method: 2" Grundfros Redi-Flow submersible pump
b. Purge Vol. (@ 2.95 gal. per well vol.): 14.75 gal.
c. Field Water Quality Monitoring Equipment: pH - Cole Palmer 5900-00, Cond. - Hanna HI8733
d. Pump Flow Rate: 1 gal/min
e. Method of Purge Water Disposal: 17-H - 55 gallon drums

Volume Removed (gal.)	Time	T°c	pH	Specific Conductance	Description	Odor	Comments
3	14:51	20.7 °C	6.9	1089	cloudy	NO	
5	14:53	20.8 °C	6.9	1069	clear	NO	
15	15:00	20.8 °C	6.9	1085	clear	NO	
Sample	15:08	20.8 °C	6.9	1064	clear	NO	

SAMPLE COLLECTION METHOD:

Method: Disposable Teflon Bailer
Sample Containers: 40 ml VOA vials
Sample Preservation: HCL and ICE to 4°c
Analyses: EPA Method 8020 + MTBE, EPA Method 8015 mod. - TPHg
Laboratory: Centrum Analytical Laboratories, Inc. located in Redlands, CA

COMMENTS:

BROWN & ROOT ENVIRONMENTAL

GROUNDWATER SAMPLE COLLECTION RECORD

Site Name: E-Z Serve #100877
Location: 525 West A Street, Hayward, CA
Samplers: T. Nicotera\A. Lamb
Weather: Clear and sunny ~80°F

Job #: MY40
Date: 6/14/96
Well ID: MW-10

WATER COLUMN INFORMATION (ft.) [1]:

a. Depth to Water: 13.89
b. Total Well Depth: 31.80
c. Length of water column: 17.91
d. Well Casing Volume: 2.92
e. Well Screen Length: 10'
f. TOTAL WELL VOLUME: 2.92

TOC Elevation: 97.11
Water Table Elevation: 83.22
Well Diameter: 2"

[1] All datum are reletive to a measurment point located on the TOC.

WELL PURGING DATA:

a. Purge Method: 2" Grundfros Redi-Flow submersible pump
b. Purge Vol. (@ 2.92 gal. per well vol.): 14.60 gal.
c. Field Water Quality Monitoring Equipment: pH - Cole Palmer 5900-00, Cond. - Hanna HI8733
d. Pump Flow Rate: 1 gal./min
e. Method of Purge Water Disposal: 17-H - 55 gallon drums

Volume Removed (gal.)	Time	T°c	pH	Specific Conductance	Description	Odor	Comments
1	11:51	21.5 °c	6.9	827	clear	No	
5	11:55	21.0 °c	6.8	811	clear	No	
10	11:57	21.0 °c	6.8	808	clear	No	
Sample	12:03	20.5 °c	6.9	805	clear	No	

SAMPLE COLLECTION METHOD:

Method: Disposable Teflon Bailer
Sample Containers: 40 ml VOA vials
Sample Preservation: HCL and ICE to 4°c
Analyses: EPA Method 8020 + MTBE, EPA Method 8015 mod. - TPHg
Laboratory: Centrum Analytical Laboratories, Inc. located in Redlands, CA

COMMENTS:

BROWN & ROOT ENVIRONMENTAL

GROUNDWATER SAMPLE COLLECTION RECORD

Site Name: E-Z Serve #100877
Location: 525 West A Street, Hayward, CA
Samplers: T. Nicotera\A. Lamb
Weather: Clear and sunny ~80°F

Job #: MY40
Date: 6/14/96
Well ID: MW-11

WATER COLUMN INFORMATION (ft.) [1]:

a. Depth to Water: 10.61
b. Total Well Depth: 25.00
c. Length of water column: 14.39
d. Well Casing Volume: 2.35
e. Well Screen Length: 10'
f. **TOTAL WELL VOLUME:** 2.35

TOC Elevation: 92.68
Water Table Elevation: 82.07
Well Diameter: 2"

[1] All datum are reletive to a measurment point located on the TOC.

WELL PURGING DATA:

a. Purge Method: 2" Grundfros Redi-Flow submersible pump
b. Purge Vol. (@2.35 gal. per well vol.): 11.75 gal.
c. Field Water Quality Monitoring Equipment: pH - Cole Palmer 5900-00, Cond. - Hanna HI8733
d. Pump Flow Rate: 1 gal./min
e. Method of Purge Water Disposal: 17-H - 55 gallon drums

Volume Removed (gal.)	Time	T°c	pH	Specific Conductance	Description	Odor	Comments
4	11:17	21.5°c	6.6	1227	clear	No	
7	11:18	21.0°c	6.6	1079	clear	No	
10	11:21	20.95°c	6.6	1002	clear	No	
Sample	11:27	20.5°c	6.6	994	clear	No	

SAMPLE COLLECTION METHOD:

Method: Disposable Teflon Bailer
Sample Containers: 40 ml VOA vials
Sample Preservation: HCL and ICE to 4°c
Analyses: EPA Method 8020 + MTBE, EPA Method 8015 mod. - TPHg
Laboratory: Centrum Analytical Laboratories, Inc. located in Redlands, CA

COMMENTS:

BROWN & ROOT ENVIRONMENTAL

GROUNDWATER SAMPLE COLLECTION RECORD

Site Name: E-Z Serve #100877
Location: 525 West A Street, Hayward, CA
Samplers: T. Nicotera\A. Lamb
Weather: Clear and sunny ~80°F

Job #: MY40
Date: 6/14/96
Well ID: MW-12

WATER COLUMN INFORMATION (ft.) [1]:

a. Depth to Water: 14.99
b. Total Well Depth: 30.00
c. Length of water column: 15.01
d. Well Casing Volume: 2.45
e. Well Screen Length: 10'
f. TOTAL WELL VOLUME: 2.45

TOC Elevation: 99.03
Water Table Elevation: 84.04
Well Diameter: 2"

[1] All datum are reletive to a measurment point located on the TOC.

WELL PURGING DATA:

a. Purge Method: 2" Grundfros Redi-Flow submersible pump
b. Purge Vol. (@ 2.45 gal. per well vol.): 12.25 gal.
c. Field Water Quality Monitoring Equipment: pH - Cole Palmer 5900-00, Cond. - Hanna HI8733
d. Pump Flow Rate: 1 gal/min.
e. Method of Purge Water Disposal: 17-H - 55 gallon drums

Volume Removed (gal.)	Time	T°c	pH	Specific Conductance	Description	Odor	Comments
2	12:31	23.5 °C	7.1	700	cloudy	No	
5	12:35	22.0 °c	7.0	690	cloudy	No	
10	12.38	21.7 °c	7.0	701	clear	No	
Sample	12:43	20.7 °c	7.0	703	clear	No	

SAMPLE COLLECTION METHOD:

Method: Disposable Teflon Bailer
Sample Containers: 40 ml VOA vials
Sample Preservation: HCL and ICE to 4°c
Analyses: EPA Method 8020 + MTBE, EPA Method 8015 mod. - TPHg
Laboratory: Centrum Analytical Laboratories, Inc. located in Redlands, CA

COMMENTS:

BROWN & ROOT ENVIRONMENTAL

GROUNDWATER SAMPLE COLLECTION RECORD

Site Name: E-Z Serve #100877
Location: 525 West A Street, Hayward, CA
Samplers: T. Nicotera\A. Lamb
Weather: Clear and sunny ~80°F

Job #: MY40
Date: 6/14/96
Well ID: MW-13

WATER COLUMN INFORMATION (ft.) [1]:

a. Depth to Water: 12.91
b. Total Well Depth: 30.00
c. Length of water column: 17.09
d. Well Casing Volume: 2.79
e. Well Screen Length: 10'
f. TOTAL WELL VOLUME: 2.79

TOC Elevation: 96.80
Water Table Elevation: 83.89
Well Diameter: 2"

[1] All datum are reletive to a measurment point located on the TOC.

WELL PURGING DATA:

a. Purge Method: 2" Grundfros Redi-Flow submersible pump
b. Purge Vol. (@ 2.79 gal. per well vol.): 13.95 gal.
c. Field Water Quality Monitoring Equipment: pH - Cole Palmer 5900-00, Cond. - Hanna HI8733
d. Pump Flow Rate: 1 gal./min
e. Method of Purge Water Disposal: 17-H - 55 gallon drums

Volume Removed (gal.)	Time	T°c	pH	Specific Conductance	Description	Odor	Comments
5	10:07	21.5°c	7.0	1104	clear	no	
10	10:12	20.5°c	7.0	991	clear	no	
15	10:17	20.5°c	7.0	978	clear	no	
Sample	11:00	21.0°c	7.1	966	clear	no	

SAMPLE COLLECTION METHOD:

Method: Disposable Teflon Bailer
Sample Containers: 40 ml VOA vials
Sample Preservation: HCL and ICE to 4°c
Analyses: EPA Method 8020 + MTBE, EPA Method 8015 mod. - TPHg
Laboratory: Centrum Analytical Laboratories, Inc. located in Redlands, CA

COMMENTS:

BROWN & ROOT ENVIRONMENTAL

GROUNDWATER SAMPLE COLLECTION RECORD

Site Name: E-Z Serve #100877
Location: 525 West A Street, Hayward, CA
Samplers: T. Nicotera\A. Lamb
Weather: Clear and sunny ~80°F

Job #: MY40
Date: 6/14/96
Well ID: MW-14

WATER COLUMN INFORMATION (ft.) [1]:

a. Depth to Water: 14.90
b. Total Well Depth: 30.00
c. Length of water column: 15.10
d. Well Casing Volume: 2.45
e. Well Screen Length: 10'
f. TOTAL WELL VOLUME: 2.45

TOC Elevation: 99.01
Water Table Elevation: 84.11
Well Diameter: 2"

[1] All datum are reletive to a measurment point located on the TOC.

WELL PURGING DATA:

a. Purge Method: 2" Grundfros Redi-Flow submersible pump
b. Purge Vol. (@ 2.45 gal. per well vol.): 12.25 gal.
c. Field Water Quality Monitoring Equipment: pH - Cole Palmer 5900-00, Cond. - Hanna HI8733
d. Pump Flow Rate: 1 gal/min
e. Method of Purge Water Disposal: 17-H - 55 gallon drums

Volume Removed (gal.)	Time	T°c	pH	Specific Conductance	Description	Odor	Comments
2	13:16	20.5°c	6.9	1049	clear	No	
5	13:18	20.0°c	6.9	971	clear	No	
10	13:21	20.0°c	6.9	983	clear	No	
Sample	13:25	20.0°c	6.9	874	clear	No	

SAMPLE COLLECTION METHOD:

Method: Disposable Teflon Bailer
Sample Containers: 40 ml VOA vials
Sample Preservation: HCL and ICE to 4°c
Analyses: EPA Method 8020 + MTBE, EPA Method 8015 mod. - TPHg
Laboratory: Centrum Analytical Laboratories, Inc. located in Redlands, CA

COMMENTS:

APPENDIX C

LABORATORY ANALYTICAL REPORT AND
CHAIN OF CUSTODY

Centrum Analytical Laboratories, Inc.

IFIED HAZARDOUS WASTE TESTING LABORATORY • CHEMICAL AND BIOLOGICAL ANALYSES

Client: Brown & Root
455 Fairway Dr., Ste. 200
Deerfield Beach, FL 33441

Date Sampled: 06/14/96
Date Received: 06/18/96
Job Number: 10313

Project: EZ Serve #10877

CASE NARRATIVE

The following information applies to samples which were received on 06/18/96 :

The samples were received at the laboratory chilled and sample containers were intact.

Unless otherwise noted below, the Quality Control acceptance criteria were met for all samples for every analysis requested.

Report approved by:

Robert R. Clark, Ph.D.
Laboratory Director

ELAP # 1184

DL : Detection Limit -- The lowest level at which the compound can reliably be detected under normal laboratory conditions.
ND : Not Detected -- The compound was analyzed for but was not found to be present at or above the detection limit.
NA : Not Analyzed -- Per client request, this analyte was not on the list of compounds to be analyzed for.

Centrum
(800) 798-9336

Modified 8015 - Total Volatile Hydrocarbons as Gasoline

Client: Brown & Root
Project: EZ Serve #10877
Job No.: 10313
Matrix: Water
Analyst: GB

Date Sampled: 06/14/96
Date Received: 06/18/96
Date Analyzed: 06/21-24/96
Batch Number: 015GW0915

	Detection Limit	Petroleum Hydrocarbons as Gasoline
Sample ID	mg/L	mg/L
Method Blank	0.50	ND
MW13/877	0.50	ND
MW11/877	0.50	**21**
MW10/877	0.50	**1.7**
MW12/877	0.50	ND
MW14/877	0.50	**1.9**
MW7/877	0.50	**4.4**
MW8/877	0.50	ND
MW5/877	0.50	**11**
MW6/877	0.50	**14**
MW3/877	0.50	**6.0**
MW2/877	0.50	**23**
MW1/877	0.50	**24**
MW4/877	0.50	**17**
DUP/877	0.50	**17**
TB/877	0.50	ND
EQ/877	0.50	ND

Centrum
(800) 798-9336

QC Sample Report - EPA 8015M Gasoline

Matrix: Water
Batch #: 8015GW0915

Batch Accuracy Results

Sample ID: Laboratory Control Sample

Analyte	Spike Concentration mg/L	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
Gasoline	5.0	87	42 - 122	Pass

Analytical Notes:

Batch Precision Results

MS/MSD Sample ID: Laboratory Control Sample

Analyte	Spike Sample Recovery mg/L	Spike Duplicate Recovery mg/L	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
Gasoline	4.36	4.42	1%	24%	Pass

Analytical Notes:

MS: Matrix Spike Sample
MSD: Matrix Spike Duplicate

Centrum
(800) 798-9336

EPA 8020 - BTEX and MtBE

Client:	Brown & Root	Date Sampled:	06/14/96
Project:	EZ Serve #10877	Date Received:	06/18/96
Job No.:	10313	Date Analyzed:	06/21-24/96
Matrix:	Water	Batch Number:	8020W1076
Analyst:	GB		

	Methyl-tert Butyl Ether	Benzene	Toluene	Ethyl Benzene	Total Xylenes	Surrogate (BFB)
Detection Limit:	0.001	0.0006	0.002	0.001	0.006	Limit: >50%
Sample ID	mg/L	mg/L	mg/L	mg/L	mg/L	
Method Blank	ND	ND	ND	ND	ND	94 %
MW13/877	ND	ND	ND	ND	ND	92 %
MW11/877	**0.036**	**0.57**	**0.099**	**3.0**	**3.5**	86 %
MW10/877	ND	ND	ND	**0.12**	ND	84 %
MW12/877	ND	ND	ND	ND	ND	83 %
MW14/877	**0.003**	**0.019**	**0.008**	**0.24**	**0.080**	86 %
MW7/877	**0.011**	**0.085**	ND	**0.47**	**0.20**	89 %
MW8/877	ND	ND	ND	**0.004**	ND	79 %
MW5/877	**0.11**	**2.1**	**0.033**	**0.57**	**1.0**	82 %
MW6/877	**0.061**	**0.80**	**0.099**	**1.5**	**0.73**	90 %
MW3/877	**0.015**	**0.58**	**0.021**	**0.49**	**0.58**	88 %
MW2/877	**0.43**	**3.3**	**0.12**	**1.5**	**3.6**	93 %
MW1/877	**0.24**	**6.9**	**0.15**	**0.96**	**1.5**	91 %
MW4/877	**0.72**	**4.1**	**0.72**	**0.69**	**1.8**	89 %
DUP/877	**0.71**	**3.0**	**0.72**	**0.70**	**1.8**	91 %
TB/877	ND	ND	ND	ND	ND	105 %
EQ/877	ND	ND	ND	ND	ND	93 %

Centrum
(800) 798-9336

QC Sample Report - EPA 8020

Matrix: Water
Batch #: 8020W1076

Batch Accuracy Results

Sample ID: Laboratory Control Sample

Analyte	Spike Concentration mg/L	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
Benzene	0.02	106	70 - 130	Pass
Toluene	0.02	99	70 - 130	Pass
Ethyl Benzene	0.02	107	70 - 130	Pass
m-, p-Xylene	0.04	102	70 - 130	Pass
o-Xylene	0.02	101	70 - 130	Pass

Analytical Notes:

Batch Precision Results

MS/MSD Sample ID: Laboratory Control Sample

Analyte	Spike Sample Recovery mg/L	Spike Duplicate Recovery mg/L	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
Benzene	0.106	0.114	7%	25%	Pass
Toluene	0.099	0.108	9%	25%	Pass
Ethyl Benzene	0.107	0.111	4%	25%	Pass
m-, p-Xylene	0.102	0.112	9%	25%	Pass
o-Xylene	0.101	0.110	9%	25%	Pass

Analytical Notes:

MS: Matrix Spike Sample
MSD: Matrix Spike Duplicate

Centrum Analytical Laboratories, Inc.
290 TENNESSEE STREET
REDLANDS, CA 92373
(909) 798-9336 • (800) 798-9336
FAX (909) 793-1559

Chain of Custody Record

Centrum Job # 10313

Project No.: MY40	Project Name: EZ Serve #100877
Project Manager: Arnold C. Lamb	Phone: (954) 570-5885 Fax: (954) 570-5974
Client Name: (Company) Brown & Root	Address: 455 Fairway Dr., Suite 200 Deerfield Beach, FL 33441

Analyses Requested

Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	GCMS: 8260 8240 8010 524.2	8080: Pesticides PCBs Pest/PCB	8015M: Diesel Fuel Screen	8015M: Gasoline 8020 Gas/BTEX	418.1 (TRPH)	Semivolatiles: 8270 625	Metals: TTLC(CAM) PP RCRA	Lead Only	pH TDS TSS Conductivity COD	Flashpoint Fluoride Hex Chrome	8020 + MTBE			Remarks/ Special Instructions
1	MW13/877	6/14/96	11:00	GW	EZ Serve #100877	3-VOAs				X							X			
2	MW11/877	6/14/96	11:27	GW						X							X			
3	MW10/877	6/14/96	12:03	GW						X							X			
4	MW12/877	6/14/96	12:43	GW						X							X			
5	MW14/877	6/14/96	13:25	GW						X							X			
6	MW7/877	6/14/96	14:21	GW						X							X			
7	MW8/877	6/14/96	15:08	GW						X							X			
8	MW5/877	6/14/96	18:50	GW						X							X			
9	MW6/877	6/14/96	14:17	GW						X							X			
10	MW3/877	6/14/96	1405	GW						X							X			

Turn-around time
- ☐ 24 Hr. RUSH*
- ☐ 48 Hr. RUSH*
- ☒ Normal TAT

* Requires prior approval, additional charges apply

Relinquished by: (Sampler's Signature)	Date	Time	Relinquished by:	Date	Time
	6/17/96	1045			
Received by:	**Date**	**Time**	**Received by:**	**Date**	**Time**
			Relinquished by:	Date	Time
The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.			Received for Laboratory by: J. Eastwood	Date 6/18/96	Time 920

To be completed by laboratory personnel:
- Samples chilled? ☒ Yes ☐ No
- Custody seals? ☐ Yes ☒ No
- All sample containers intact? ☒ Yes ☐ No
- ☐ Courier ☒ UPS/Fed Ex ☐ Hand carried

Sample Disposal
- ☐ Client will pick up
- ☐ Return to client
- ☐ Lab disposal fee $5

Laboratory Notes:

Sample Locator No.: Voa

White Copy - Original (Accompanies Samples) Yellow Copy - Centrum Files Pink Copy - Client Copy

Centrum Analytical Laboratories, Inc.
290 TENNESSEE STREET
REDLANDS, CA 92373
(909) 798-9336 • (800) 798-9336
FAX (909) 793-1559

Chain of Custody Record

Centrum Job # 10313

Analyses Requested

Project No.: MY40	Project Name: EZ Serve #100877		
Project Manager: Arnold Lamb	Phone: (954) 570-5885	Fax: (954) 570-5974	
Client Name: (Company) Brown & Root	Address: 455 Fairway Drive, Suite 200 Deerfield Beach, FL 33441		

Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	GCMS: 8260 8240 8010 524.2	8080: Pesticides PCBs Pest/PCB	8015M: Diesel Fuel Screen	8015M: Gasoline 8020 Gas/BTEX	418.1 (TRPH)	Semivolatiles: 8270 625	Metals: TTLC(CAM) PP RCRA	Lead Only	pH TDS TSS Conductivity COD	Flashpoint Fluoride Hex Chrome	8020 + MTBE			Remarks/ Special Instructions
11	MW2/877	6/14/96	19:04	GW	EZ Serve #100877	3 VOHs				X							X			
12	MW1/877	6/14/96	16:53	GW						X							X			
13	MW4/877	6/14/96	19:32	GW						X							X			
14	DUP/877	6/14/96	—	GW						X							X			only received 1 VOA
15	TB/877	—	—	W		1-VOA											X			
16	EQ/877	6/14/96	10:56	W		1-VOA				X							X			

Turn-around time
- ☐ 24 Hr. RUSH*
- ☐ 48 Hr. RUSH*
- ☒ Normal TAT

* Requires prior approval, additional charges apply

Relinquished by: (Sampler's Signature)	Date	Time	Relinquished by:	Date	Time
	6/14/96	10:45			
Received by:	Date	Time	Received by:	Date	Time
			Relinquished by:	Date	Time
The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.			Received for Laboratory by: J Eastwood	Date 6/15/96	Time 920

To be completed by laboratory personnel:
- Samples chilled? ☒ Yes ☐ No
- Custody seals? ☐ Yes ☒ No
- All sample containers intact? ☒ Yes ☐ No
- ☐ Courier ☒ UPS/Fed Ex ☐ Hand carried

Sample Disposal
- ☐ Client will pick up
- ☐ Return to client
- ☐ Lab disposal fee $5

Laboratory Notes:

Sample Locator No.: VOA

White Copy - Original (Accompanies Samples) Yellow Copy - Centrum Files Pink Copy - Client Copy