

**DEPARTMENT OF TRANSPORTATION**

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Alameda County

FEB 08 2006

Environmental Health

R 28 43



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January 31, 2006

Mr. Amir K. Gholami, REHS  
 Hazardous Materials Specialist  
 Environmental Health Services  
 Environmental Protection  
 1131 Harbor Bay Parkway  
 Alameda, CA 94502-6577

Dear Mr. Gholami:

This is in reply to our recent conversation with regard to the former gasoline station (and former Church's Chicken restaurant site) located at 1766 7<sup>th</sup> Street, Oakland. As mentioned to you earlier, Caltrans purchased this site as part of the new Seventh Street undercrossing and realignment that was a component of the Cypress Freeway Reconstruction project. The former Church's Chicken site remediation included the removal of gasoline-contaminated soil, quarterly groundwater monitoring, and post-remediation soil sampling to demonstrate cleanup efficacy. The Department of Toxic Substances Control (DTSC) was the regulatory agency that oversaw these operations. Ultimately, the DTSC ruled the cleanup was complete and that no further remedial actions were necessary.

You requested copies of the documents that were prepared to chronicle and summarize the site activities be provided to your office. Enclosed, please find the reports and letters that demonstrate the completion of the remediation process. The documents include the last quarterly groundwater monitoring report for the site (from the third quarter of 2002), a January 7, 2003 letter to the DTSC detailing the monitoring well destruction work, the soil investigation report that verified contaminant attenuation, and the August 25, 2004 site closure letter from the DTSC.

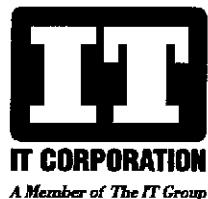
If you have any questions or concerns in this matter, please call me at (510) 286-5647.

Sincerely,



CHRISTOPHER R. WILSON  
 District Branch Chief  
 Office of Environmental Engineering

Enclosures



**IT CORPORATION**  
A Member of The IT Group

Alameda County  
FEB 08 2006  
Environmental Health

**THIRD QUARTER 2002 GROUNDWATER MONITORING REPORT**  
**FORMER CHURCH'S CHICKEN PROPERTY**  
**OAKLAND, ALAMEDA COUNTY, CALIFORNIA**

October 11, 2002

Prepared for:

California Department of Transportation  
Office of Environmental Engineering  
Box 23660  
Oakland, California 94623-0660

Prepared by:

IT Corporation  
1326 North Market Boulevard  
Sacramento, California 95834

EA No.: 04-911052  
Task Order No.: 04-0911052-WB  
Contract No.: 43A0078

IT Project No.: 830714

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## **Table of Contents**

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List of Tables.....	ii
List of Figures.....	ii
List of Appendices.....	ii
1.0 Project History .....	1-1
2.0 Groundwater Sampling Event.....	2-1
2.1 Groundwater Sampling and Analytical Program .....	2-1
2.2 Quality Assurance Program .....	2-1
3.0 Monitoring Results.....	3-1
3.1 Summary.....	3-1
3.2 Analytical Results.....	3-1
3.3 Discussion of Analytical Results .....	3-2
4.0 Recommendations .....	4-1
5.0 References .....	5-1

## ***List of Tables***

---

Table 1	Third Quarter 2002 Groundwater Elevations
Table 2	Historical Groundwater Elevations
Table 3	Third Quarter 2002 Groundwater Analytical Results – Organic Compounds
Table 4	Third Quarter 2002 Groundwater Analytical Results – Heavy Metals
Table 5	Historical Groundwater Analytical Results – Organic Compounds
Table 6	Historical Groundwater Analytical Results – Heavy Metals

## ***List of Figures***

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Figure 1	Site Location Map
Figure 2	Monitoring Well Location Map
Figure 3	Piezometric Elevation Contour Map

## ***List of Appendices***

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Appendix A	Groundwater Monitoring Procedures
Appendix B	Field Data Forms
Appendix C	Laboratory Analytical Report and Chain-of-Custody Documentation

**THIRD QUARTER 2002 GROUNDWATER MONITORING REPORT**  
**FORMER CHURCH'S CHICKEN PROPERTY**  
**OAKLAND, ALAMEDA COUNTY, CALIFORNIA**

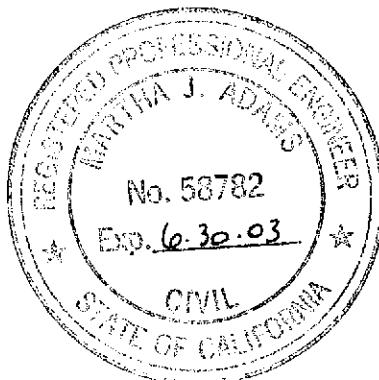
IT Corporation (IT), is pleased to submit this report for third quarterly 2002 groundwater monitoring conducted at the former Church's Chicken property, Oakland, Alameda County, California. This report is submitted in accordance with Contract No. 43A0078, Task Order No. 04-911052-WB.

The material and data in this report were prepared under the supervision and direction of the undersigned and performed consistent with generally accepted professional consulting principles and practices.

**IT Corporation**

*Martha Adams*  
Martha Adams, P.E.

Project Manager



Distribution: Chris Wilson, Caltrans  
Project File 830714

## **1.0 Project History**

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The Church's Chicken site (Figure 1) was purchased by Caltrans in 1994. According to the task order (Caltrans, 2001) and a previous site investigation report (Geocon, 2001), the site was formerly occupied by a gasoline service station between 1962 and 1983. Four 4,000-gallon gasoline underground storage tanks (USTs) and one 550-gallon waste oil UST were removed from the site in 1983. A Church's Fried Chicken restaurant occupied the site between 1983 and 1994.

In 1992, Caltrans began investigations of the site during planning for the replacement Cypress Freeway. Elevated concentrations of total petroleum hydrocarbons as gasoline (TPHg) and related gasoline constituents were reported in soil samples collected near the former gasoline USTs. Elevated concentrations of lead and mercury were also reported. A groundwater sample collected from a former monitoring well at the site was reported to contain TPHg at a concentration of 30 milligrams per liter (mg/l) and benzene at 1.0 mg/l (Geocon, 2001).

As part of the 7<sup>th</sup> Street re-alignment, approximately 2,600 cubic yards of soil impacted with petroleum hydrocarbons were excavated and removed from the site in 1996 (Geocon, 2001; Caltrans, 2001). After re-alignment of 7<sup>th</sup> Street was completed, monitoring wells were installed to monitor the contaminant trends within groundwater. Five monitoring wells were installed on and around the former Church's Chicken site in April 2001 (Geocon, 2001).

Groundwater samples were collected in April 2001. The groundwater samples were reported to contain TPHd at concentrations ranging from 0.063 mg/l to 0.24 mg/l. Total petroleum hydrocarbons as motor oil were reported at concentrations ranging from 0.085 mg/l to 0.33 mg/l. One groundwater sample was reported to contain TRPH at a concentration of 0.60 mg/l. The groundwater samples were not reported to contain TPHg; benzene, toluene, ethylbenzene, xylenes (BTEX); fuel oxygenate compounds (FOCs); or volatile organic compounds (VOCs) at concentrations exceeding the analytical method reporting limits (Geocon, 2001).

## **2.0 Groundwater Sampling Event**

---

### **2.1 Groundwater Sampling and Analytical Program**

Groundwater sampling for the third quarter of 2002 was conducted on July 11, 2002, by personnel of IT. This monitoring event included the collection and analysis of groundwater samples from two on-site and three off-site monitoring wells. Monitoring procedures are included in Appendix A. Groundwater sample field data sheets are included in Appendix B.

Groundwater samples were analyzed by Sparger Technology, Inc. (Sparger), of Sacramento, California, a California-certified analytical laboratory. Samples were collected, retained, and transported to the laboratory using chain of custody procedures. The analyses were conducted on a normal turn-around basis in general accordance with holding times specified by the U.S. Environmental Protection Agency (EPA). The analyses were performed in general accordance with the following EPA methods listed.

<b>Matrix</b>	<b>Analyses</b>
Water	Total Petroleum Hydrocarbons as Gasoline EPA Method 8015 modified
Water	Total Petroleum Hydrocarbons as Diesel EPA Method 8015 modified
Water	Total Petroleum Hydrocarbons EPA Method 1664
Water	Fuel Oxygenate Compounds EPA Method 8260B
Water	Volatile Organic Compounds EPA Method 8260B
Water	California Assessment Manual (CAM) 17 Metals EPA 6010/7470

Samples collected for CAM 17 Metals analysis were transferred into unpreserved containers in the field. The samples were filtered and preserved at the laboratory prior to analysis.

### **2.2 Quality Assurance Program**

The quality assurance (QA) program included the collection and analysis of travel blanks. These additional samples were submitted for analysis to assess potential errors introduced during transport of the groundwater samples. A trip blank was carried in the insulated chest with the groundwater samples. The trip blank consisted of three volatile organic analysis (VOA) vials filled at the laboratory with water that had been purged of volatile organic compounds. The trip blank was analyzed for TPHg, FOCs, and VOCs in accordance with the methods listed in Section 2.1. A brief assessment of the QA data is presented in this report.

The purpose of the travel blanks was to assess potential "cross contamination" of samples during storage and transport to the laboratory. During this program, one set of travel blanks was analyzed. TPHg, VOCs, and FOCs were not reported present in the travel blank set at concentrations exceeding reporting limits of the analytical methods used by the laboratory. Based on the results of the travel blank analysis, the groundwater samples are judged to be free of interferences which may have occurred during storage and transport to the laboratory.

## **3.0 Monitoring Results**

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The monitoring results from the groundwater samples collected during the third quarter 2002 sampling event are summarized below. Monitoring well locations are shown on Figure 2. Current and historical groundwater elevation data are presented on Tables 1 and 2. The current groundwater gradient is depicted on Figure 3. Current analytical results are summarized on Tables 3 and 4. Historical analytical data are presented on Tables 5 and 6.

### **3.1 Summary**

Site Location:	<u>Former Church's Chicken Property</u> <u>1766 7<sup>th</sup> Street, Oakland, California, Figure 1</u>
Current Phase of Project:	<u>Monitoring</u>
Frequency of Monitoring:	<u>Quarterly</u>
Separate-Phase Hydrocarbons Present:	<u>None present</u>
Water Purged from Wells This Quarter:	<u>16.89 gallons (from 5 monitoring wells)</u>
Range of Depth to Groundwater:	<u>8.35 to 10.63 (feet from top of casing), Table 1</u> <u>2.5 to 3.2 (meters from top of casing)</u>
Groundwater Elevation Change Since Last Quarter:	<u>Groundwater elevations decreased in all 5 wells.</u> <u>Variations ranged from -0.90 to -0.47 feet</u> <u>-0.27 to -0.14 meters</u>
Groundwater Gradient:	<u>0.006, Figure 3</u>
Groundwater Flow Direction:	<u>Southerly, Figure 3</u>

### **3.2 Analytical Results**

Total petroleum hydrocarbons (TPH), TPHg, BTEX, VOCs, and FOCs were not reported in the groundwater samples analyzed at concentrations greater than the analytical method reporting limits. TPHd was reported in well MW-4 at a concentration of 0.356 mg/l (Table 3).

The groundwater samples were reported to contain barium and zinc (Table 4). Barium was reported in groundwater samples collected from all wells at concentrations ranging from 0.026 to 0.065 mg/l. Zinc was reported in groundwater samples collected from all wells at concentrations ranging from 0.019 to 0.039 mg/L.

Laboratory analytical reports and chain-of-custody documentation are included in Appendix C.

### **3.3 Discussion of Analytical Results**

Groundwater analytical results from the Third Quarter 2002 sampling event are generally consistent with historical data.

Results for the organic compounds analysis reported a trace detection of TPHd in MW-4.

Historically, groundwater samples from the site were reported to contain arsenic, barium, chromium, cobalt, copper, lead, mercury, nickel, selenium, vanadium and zinc. Current results reported only barium and zinc in all 5 wells. Barium and zinc results are generally lower than historical concentrations (Table 6). The concentrations of barium and zinc reported for the current monitoring event are below Federal and State Maximum Contaminant Levels for drinking water (Table 4).

Historical results for some of the heavy metal detections are below the current method reporting limits. The reason for the difference between current results and historical results for the remaining metals is not known.

## **4.0 Recommendations**

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Based on the absence or trace concentrations of fuel hydrocarbons detected in groundwater samples collected at the former Church's Chicken, IT recommends the discontinuation of groundwater monitoring and requests closure for the site.

## **5.0 References**

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Caltrans (California Department of Transportation), 2001a, District 4, Office of Environmental Engineering, Task Order No. 04-911052-WB: dated August 2001.

IT (IT Corporation), 2001b, Work plan, groundwater monitoring, former Church's Chicken property, Oakland, Alameda County, California: dated December 28, 2001.

IT, 2001c, Health and Safety plan, groundwater monitoring, former Church's Chicken property, Oakland, Alameda County, California: dated December 28, 2001.

Geocon (Geotechnical & Environmental Consultants), 2001, Monitoring Well Installation and Groundwater Sampling Report: Former Church's Fried Chicken, Oakland, Alameda County, California, Task Order No. 04-190270-RS, Geocon Project No. S8225-06-111: dated June 2001.

RWQCB (Regional Water Quality Control Board, San Francisco Bay Region), 1995, San Francisco Bay basin (region 2), water quality control plan: dated June 21, 1995.

**Table 1**  
**Third Quarter 2002 Groundwater Elevations**  
**Former Church's Chicken Property**  
**Oakland, California**

Well Number	Well TOC Elevation (feet-MSL)	Screened Interval (feet bgs)	Date Measured	Depth to Groundwater (feet bTOC)	Free Product Thickness (feet)	Groundwater Elevation (feet-MSL)
MW-1	10.69	8 to 15	07/11/02	8.35	0	2.34
MW-2	12.86	8 to 15	07/11/02	10.63	0	2.23
MW-3	10.34	8 to 15	07/11/02	8.96	0	1.38
MW-4	10.54	7 to 17	07/11/02	9.15	0	1.39
MW-5	11.06	7 to 17	07/11/02	8.75	0	2.31

**Notes:**

1. MSL = Mean Sea Level
2. TOC = Top of Casing
3. bgs = below ground surface
4. bTOC = below top of casing

**Table 2**  
**Historical Groundwater Elevations**  
**Former Church's Chicken Property**  
**Oakland, California**

Well Number	Well TOC Elevation (feet-MSL)	Screened Interval (feet bgs)	Date Measured	Depth to Groundwater (feet bTOC)	Free Product Thickness (feet)	Groundwater Elevation (feet-MSL)
MW-1	10.69	8 to 15	04/26/01	7.80	0	2.89
			01/15/02	7.68	0	3.01
			04/19/02	7.88	0	2.81
			07/11/02	8.35	0	2.34
MW-2	12.86	8 to 15	04/26/01	9.83	0	3.03
			01/15/02	9.39	0	3.47
			04/19/02	9.89	0	2.97
			07/11/02	10.63	0	2.23
MW-3	10.34	8 to 15	04/26/01	8.36	0	1.98
			01/15/02	7.65	0	2.69
			04/19/02	8.22	0	2.12
			07/11/02	8.96	0	1.38
MW-4	10.54	7 to 17	04/26/01	8.41	0	2.13
			01/15/02	8.50	0	2.04
			04/19/02	8.59	0	1.95
			07/11/02	9.15	0	1.39
MW-5	11.06	7 to 17	04/26/01	7.94	0	3.12
			01/15/02	7.38	0	3.68
			04/19/02	7.85	0	3.21
			07/11/02	8.75	0	2.31

Notes:

1. MSL = Mean Sea Level
2. TOC = Top of Casing
3. bgs = below ground surface
4. bTOC = below top of casing

**Table 3**  
**Third Quarter 2002 Groundwater Analytical Results**  
**Organic Compounds**  
**Former Church's Chicken Property**  
**Oakland, California**

Sample Designation Sampling Date	MW-1 07/11/02	MW-2 07/11/02	MW-3 07/11/02	MW-4 07/11/02	MW-5 07/11/02	Trip Blank 07/11/02	Reporting Limits
EPA 1664, TPH	ND	ND	ND	ND	ND		5.0
EPA 8015m, TPH as Gasoline	ND	ND	ND	ND	ND	ND	0.050
EPA 8015m, TPH as Diesel	ND	ND	ND	0.356	ND		0.050
EPA 8260B VOCs All Compounds	ND	ND	ND	ND	ND	ND	0.002
EPA 8260B, FOCs All Compounds	ND	ND	ND	ND	ND	ND	0.002 to 0.010

**Notes:**

1. TPH = Total Petroleum Hydrocarbons
2. VOCs = Volatile Organic Compounds
3. FOCs = Fuel Oxygenate Compounds
4. Concentrations reported in milligrams per liter.
5. ND = not detected above indicated analytical method reporting limits

**Table 4**  
**Third Quarter 2002 Analytical Results**  
**Heavy Metals**  
**Former Church's Chicken Property**  
**Oakland, California**

Sample Designation Sampling Date	MW-1 07/11/02	MW-2 07/11/02	MW-3 07/11/02	MW-4 07/11/02	MW-5 07/11/02	Drinking Water Standards				Reporting Limits
	CA MCL	CA 2 MCL	US MCL	US 2 MCL						
Antimony	ND	ND	ND	ND	ND	0.006		0.006		0.060
Arsenic	ND	ND	ND	ND	ND	0.05		0.05		0.080
Barium	0.032	0.05	0.044	0.026	0.065	1		2		0.020
Beryllium	ND	ND	ND	ND	ND	0.004		0.004		0.0030
Cadmium	ND	ND	ND	ND	ND	0.005		0.005		0.0050
Chromium	ND	ND	ND	ND	ND	0.05		0.1		0.010
Cobalt	ND	ND	ND	ND	ND					0.050
Copper	ND	ND	ND	ND	ND	1.3	1	1.3	1	0.020
Lead	ND	ND	ND	ND	ND	0.015		0.015		0.010
Mercury	ND	ND	ND	ND	ND	0.002		0.002		0.00020
Molybdenum	ND	ND	ND	ND	ND					0.050
Nickel	ND	ND	ND	ND	ND	0.1				0.040
Selenium	ND	ND	ND	ND	ND	0.05		0.05		0.10
Silver	ND	ND	ND	ND	ND		0.1		0.1	0.010
Thallium	ND	ND	ND	ND	ND	0.002		0.002		0.10
Vanadium	ND	ND	ND	ND	ND					0.050
Zinc	0.024	0.031	0.039	0.019	0.037		5		5	0.015

**Notes:**

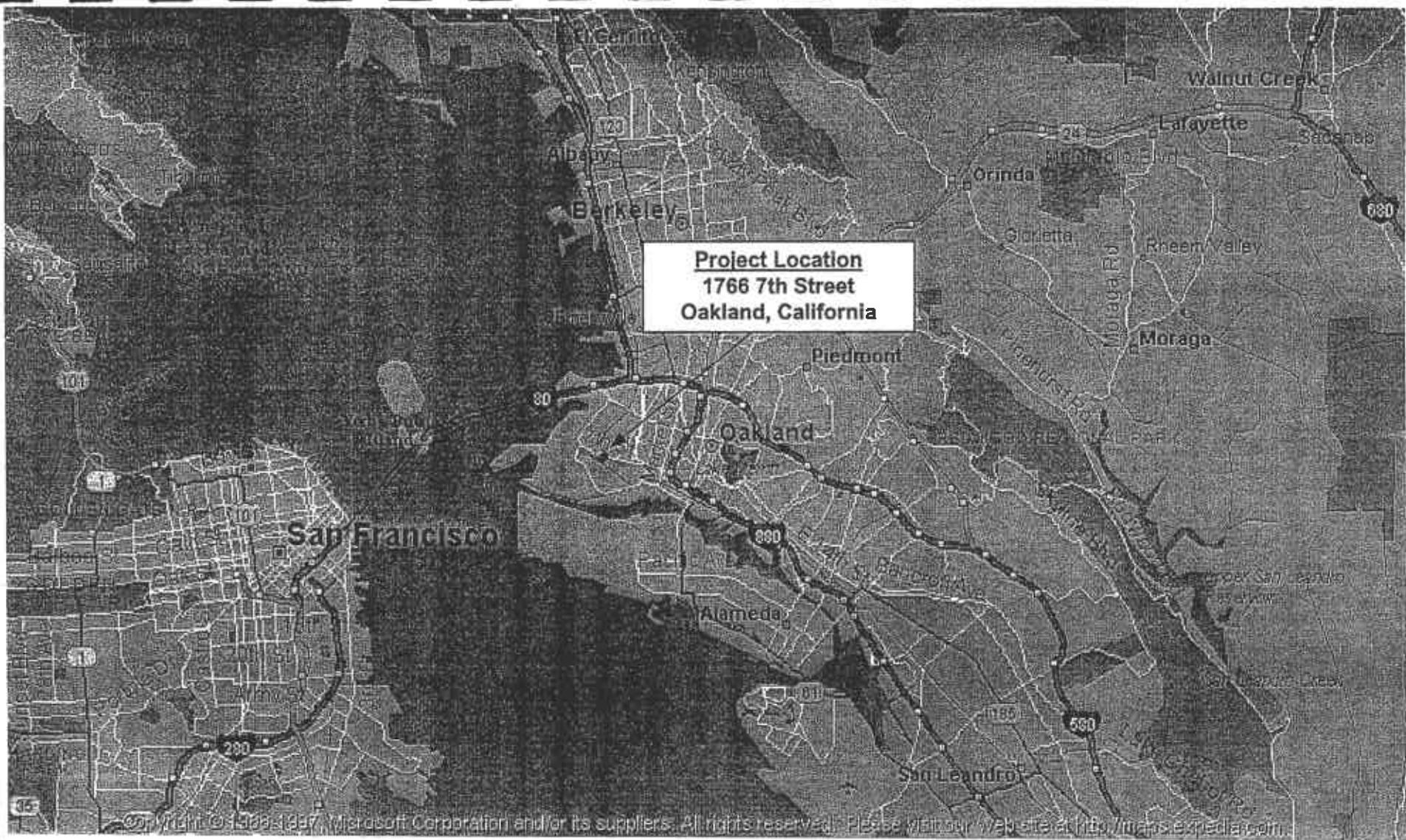
1. Metals analyses conducted in general accordance with U.S. Environmental Protection Agency (EPA) Methods 6010 and 7471.
2. Concentrations reported in milligrams per liter.
3. Bold results exceed drinking water standard levels.
4. ND = not detected in concentrations exceeding the listed reporting limit.
5. CA MCL = California primary maximum contaminant level (MCL). CA 2 MCL = California secondary MCL. US MCL = U.S. primary MCL. US 2 MCL = U.S. secondary MCL.
6. Drinking water standard for chromium is for total chromium.

**Table 6**  
**Historical Groundwater Analytical Results**  
**Heavy Metals**  
**Former Church's Chicken Property**  
**Oakland, California**

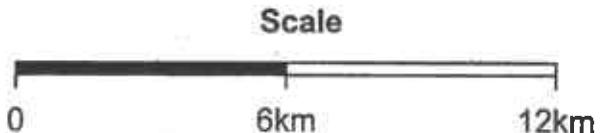
Sample Designation Sampling Date	MW-1 4/26/01	MW-1 1/15/02	MW-1 4/19/02	MW-1 7/11/02	MW-2 4/26/01	MW-2 1/15/02	MW-2 4/19/02	MW-2 7/11/02	MW-3 4/26/01	MW-3 1/15/02	MW-3 4/19/02	MW-3 7/11/02	MW-4 4/26/01	MW-4 1/15/02	MW-4 4/19/02	MW-4 7/11/02	MW-5 4/26/01	MW-5 1/15/02	MW-5 4/19/02	MW-5 7/11/02	Drinking Water Standards				Reporting Limits			
	CA MCL	CA 2 MCL	US MCL	US 2 MCL																								
Antimony	ND	0.006	0.006		0.050 to 0.060																							
Arsenic	0.0086	ND	ND	ND	0.010	ND	ND	ND	0.030	ND	ND	ND	0.010	ND	ND	ND	0.030	ND	ND	ND	ND	ND	0.05	0.05		0.050 to 0.080		
Barium	0.050	0.026	0.033	0.032	0.10	0.044	0.059	0.05	0.25	0.041	0.052	0.044	0.070	0.020	0.027	0.026	0.18	0.031	0.053	0.065	1	2		0.0030 to 0.020				
Beryllium	ND	ND	0.004	0.004		0.0030																						
Cadmium	ND	ND	0.005	0.005		0.0030 to 0.0050																						
Chromium	0.020	ND	ND	ND	0.050	ND	ND	ND	0.14	ND	ND	ND	0.030	ND	ND	ND	0.10	ND	ND	ND	ND	ND	ND	0.05	0.1		0.0030 to 0.010	
Cobalt	0.0051	ND	ND	ND	0.010	ND	ND	ND	0.030	ND	ND	ND	0.0091	ND	ND	ND	0.020	ND	ND	ND	ND	ND	ND				0.0030 to 0.050	
Copper	0.0071	ND	ND	ND	0.010	ND	ND	ND	0.030	ND	ND	ND	0.0098	ND	ND	ND	0.020	ND	ND	ND	ND	ND	ND	1.3	1	1.3	1	0.0030 to 0.020
Lead	ND	0.030	ND	0.020	ND	0.33	ND	0.015	ND	0.015			0.0050 to 0.010															
Mercury	0.0022	ND	ND	ND	0.013	ND	ND	0.002	0.002		0.00020 to 0.0020																	
Molybdenum	ND	ND				0.0050 to 0.050																						
Nickel	0.030	ND	ND	ND	0.060	ND	0.046	ND	0.16	ND	ND	ND	0.030	ND	ND	ND	0.12	ND	ND	ND	ND	ND	ND	0.1			0.0030 to 0.040	
Selenium	ND	0.0053	ND	ND	ND	ND	ND	ND	0.05	0.05		0.0050 to 0.10																
Silver	ND	ND		0.1	0.1	0.1	0.0030 to 0.010																					
Thallium	ND	ND	0.002	0.002		0.0050 to 0.10																						
Vanadium	0.010	ND	ND	ND	0.040	ND	ND	ND	0.090	ND	ND	ND	0.020	ND	ND	ND	0.070	ND	ND	ND	ND	ND	ND				0.0030 to 0.050	
Zinc	0.020	0.024	0.026	0.024	0.050	0.023	0.044	0.031	0.14	ND	0.030	0.039	0.060	0.016	0.024	0.019	0.13	ND	0.020	0.037	ND	ND	5	5	5	0.010 to 0.015		

Notes:

1. Metals analyses conducted in general accordance with U.S. Environmental Protection Agency (EPA) Methods 6010 and 7471.
2. Concentrations reported in milligrams per liter.
3. Bold results exceed drinking water standard levels.
4. ND = not detected in concentrations exceeding the listed reporting limit.
5. CA MCL = California primary maximum contaminant level (MCL). CA 2 MCL = California secondary MCL. US MCL = U.S. primary MCL. US 2 MCL = U.S. secondary MCL.
6. Drinking water standard for chromium is for total chromium.



Reference:  
Microsoft Expedia, Streets 98



**Figure 1**

SITE LOCATION MAP

Caltrans-Cypress GW (Chruch's Fried Chicken)  
Quarterly GW Monitoring  
Task Order No.04-911052-WB

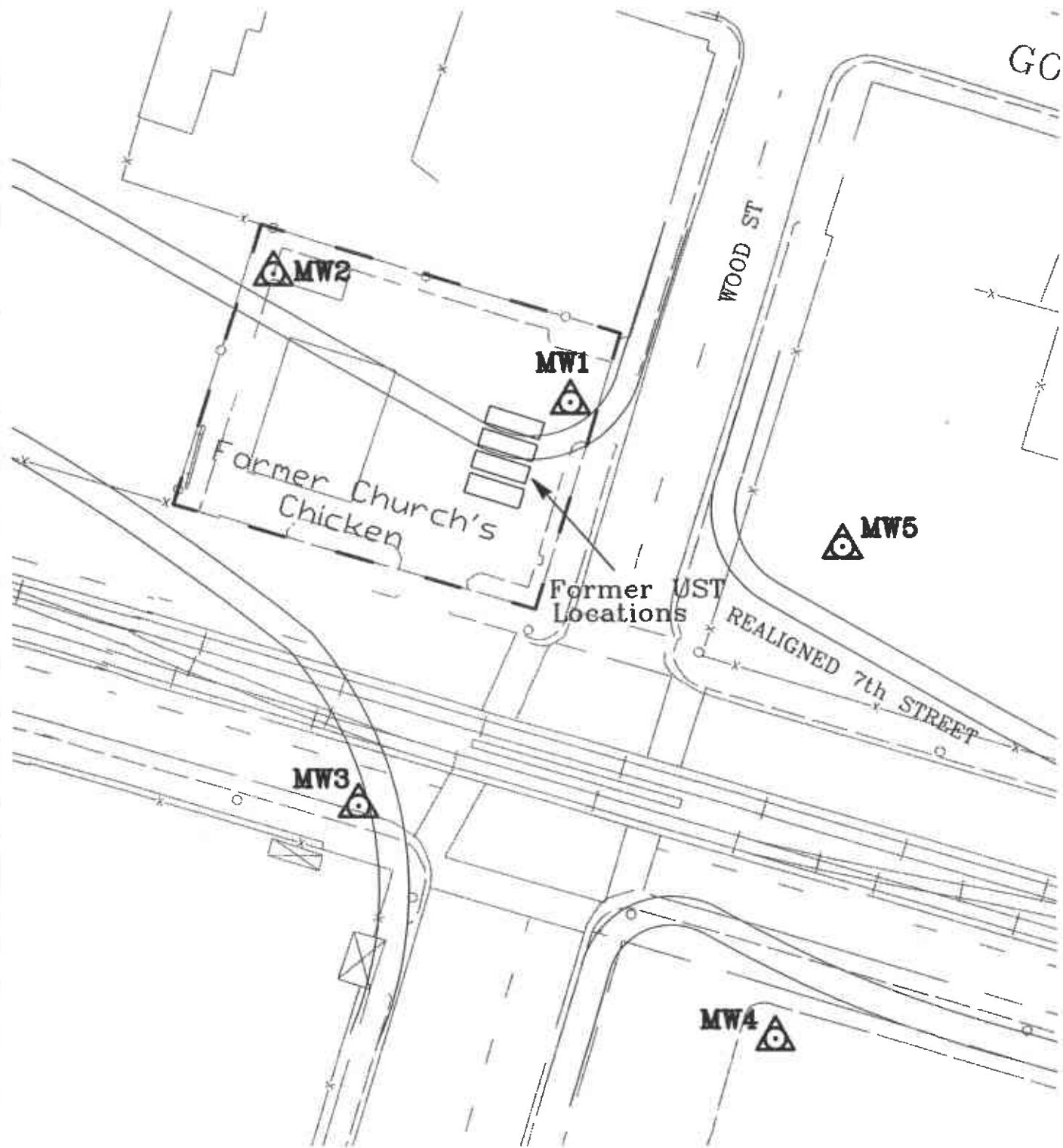
PROJECT  
NUMBER

823340

CHECKED BY  
APPROVED BY

DRAWN BY

DPB  
5/6/02



LEGEND



WELL LOCATION

Notes:

1. Base map compiled from maps provided by Caltrans.
2. All locations and dimensions are approximate.

SCALE

0      50      100 Feet  
15                    30 Meters



FIGURE 2

MONITORING WELL LOCATIONS

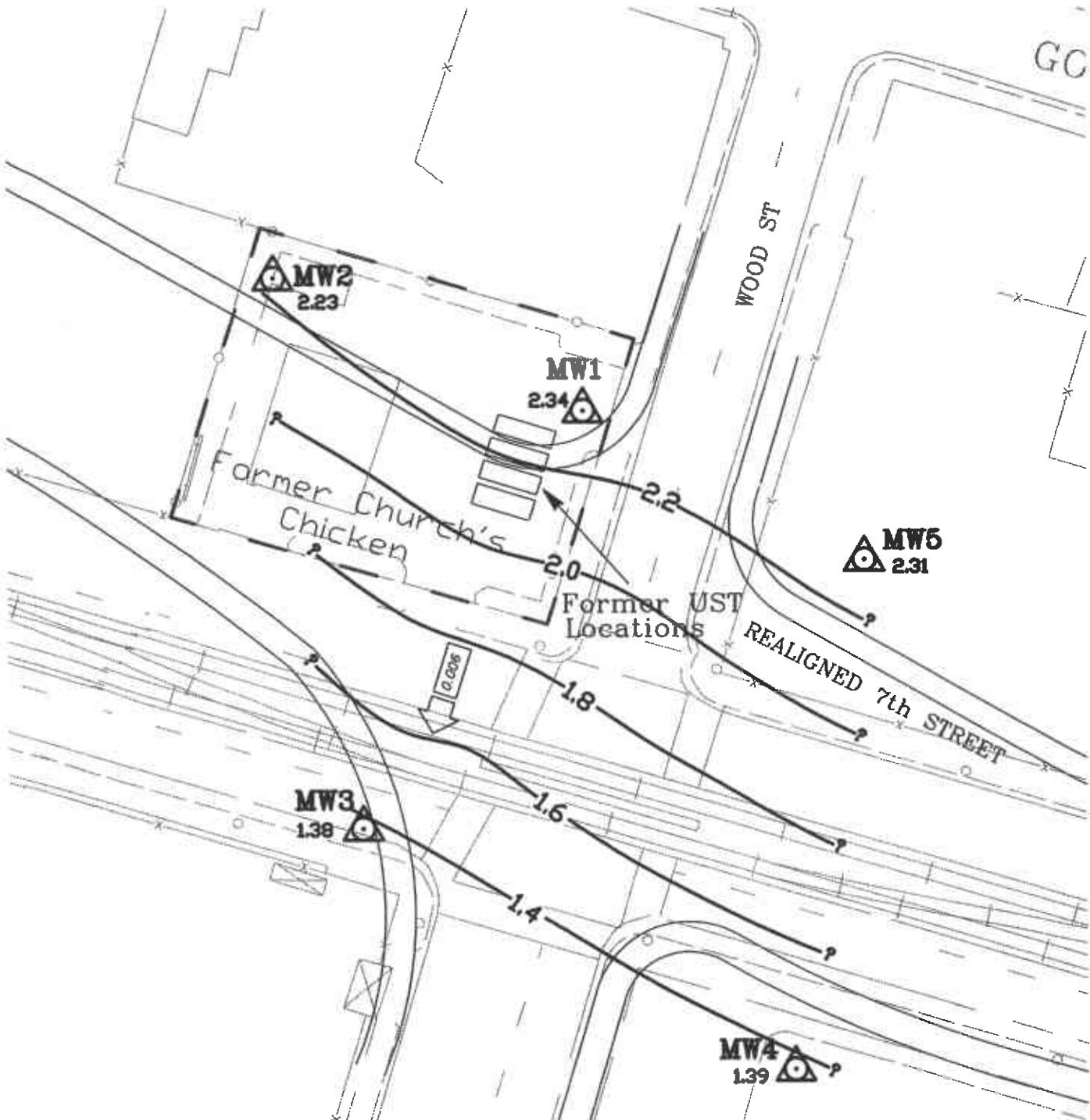
Caltrans – Former  
Church's Chicken Property  
Oakland, California



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PROJECT NUMBER  
830714

DRAWN BY  
CBD  
CHECKED BY  
APPROVED BY  
7/29/02



#### LEGEND



WELL LOCATION, DESIGNATION, AND GROUNDWATER ELEVATION IN FEET



APPROXIMATE DIRECTION OF GROUNDWATER FLOW AND GRADIENT

Notes:

1. Base map compiled from maps provided by Caltrans.
2. All locations and dimensions are approximate.
3. Groundwater elevations reported in feet above mean sea level.

SCALE

0 50 100 Feet  
15 30 Meters



FIGURE 3

PIEZOMETRIC ELEVATION CONTOUR MAP

Caltrans - Former  
Church's Chicken Property  
Oakland, California



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**APPENDIX A**  
**GROUNDWATER MONITORING PROCEDURES**

## **Appendix A**

### **Groundwater Monitoring Procedures**

The procedures that were used for collecting the groundwater samples are presented below.

- General safety procedures were reviewed with the field investigation staff prior to commencement of field activities.

#### **Groundwater Sampling Procedures**

- Field activities and equipment utilization were recorded on field report forms.
- Water levels within each well casing were measured to the nearest 0.01-foot and the presence of free-phase petroleum product evaluated. The water level meter was rinsed with deionized water between wells.
- Purging was conducted using dedicated, disposable, polyethylene bailers. A minimum of three well casing volumes of water was removed from each well during purging. Wells that purge dry were purged dry twice, if at least three casing volumes of water could not be removed. Well purging activities were recorded on groundwater sample collection forms.
- The temperature, conductivity, and pH of the groundwater removed during purging of the wells was monitored.
- Water removed from the wells was contained in 208-liter (55-gallon) drums. Labels were placed on the drums with the contents, date, well number, and job number recorded on the label. The drums were stored at the site pending disposal/recycling.
- All wells were purged before any of the samples were collected. Groundwater sample collection followed in the order that the wells were purged.
- Groundwater samples were collected following recovery of water levels within the wells to at least 90 percent (%) of the pre-purge levels. A water level measurement was made prior to sample collection to confirm the recovery of water levels within the wells.
- A dedicated, disposable, polyethylene bottom valve bailer was used for collection of each groundwater sample. Polyethylene bailers were discarded after each sample was collected. New nylon rope was used to lower the bailers into the wells. The nylon rope was discarded after each well.
- Groundwater samples were placed into laboratory-supplied containers containing preservatives, except samples retained for heavy metal analyses.

- Groundwater was discharged from the bailer via a bottom-emptying device. Discharge to the containers was conducted in a manner to minimize bubbling and agitation of the liquid. The volatile organic analysis vials were filled to the top forming a meniscus to minimize the headspace.
- Groundwater samples were collected in the following order for the indicated analyses: volatile organic compounds and fuel oxygenate compounds, total petroleum hydrocarbons as gasoline, total petroleum hydrocarbons as diesel, total recoverable petroleum hydrocarbons, and heavy metals. Groundwater grab samples collected for heavy metals analyses were not filtered in the field, but were filtered at the laboratory prior to analysis.

### **Sample Retention and Analysis Procedures**

- Chain of custody procedures, including the use of chain of custody forms, were used to document sample handling and transport from collection to delivery to the laboratory for analysis.
- The samples were placed on ice in an insulated chests overnight in the custody of an IT Corporation (IT) employee. The samples were picked up within approximately 24 hours of collection of the last sample by a courier supplied by the laboratory, or were delivered to the laboratory by IT personnel within approximately 24 hours of collection of the last sample. The samples were transported to the laboratory in a motor vehicle.
- Groundwater samples were labeled with the well number followed by the date.
- Laboratory quality assurance/quality control procedures are summarized below:
  - Method Blank Frequency = one per 20 samples
  - Matrix Spike/Matrix Spike Duplicate = one per 20 samples
  - Laboratory Control Sample/Laboratory Control Sample Duplicate = one per 20 samples

**APPENDIX B  
FIELD DATA FORMS**

**FIELD REPORT  
WATER LEVEL / FLOATING PRODUCT  
SURVEY**

SHAW Environmental & Infrastructure, Inc.

1326 North Market Boulevard  
Sacramento, California 95834

**PROJECT NO : 830714 / 01010000**

**LOCATION :** 1766 7th Street, Oakland, Ca

DATE: 7-11-02

**CLIENT : Caltrans**

## **Former Church's Chicken Property**

SAMPLER : Paul Weinhardt

**PID Readings at site:**

Comments : Up-wind: D.00  
Down-wind: C.00

Paul Wernhardt  
Signature

**Signature**

## WATER SAMPLE FIELD DATA SHEET

PROJECT NO : 830714 / 01010000

SAMPLE ID : MW1

PURGED BY : Paul Weinhardt

CLIENT NAME : Caltrans - Former Church's Chicken

SAMPLED BY : Paul Weinhardt

LOCATION : 1766 7th Street, Oakland, CA

TYPE:	Groundwater <input checked="" type="checkbox"/>	Surface Water <input type="checkbox"/>	Leachate <input type="checkbox"/>	Other <input type="checkbox"/>		
CASTING DIAMETER (inches):	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	4.5 <input type="checkbox"/>	6 <input type="checkbox"/>	Other <input type="checkbox"/>
	(.163)	(.367)		(.652)	(.826)	(1".-041 / 8"-2.61)

CASING ELEVATION (feet/MSL) :	VOLUME IN CASING (gal.) :	1.13
DEPTH OF WELL (feet) :	CALCULATED PURGE (gal.) :	3.39
DEPTH TO WATER (feet) :	ACTUAL PURGE VOL. (gal.) :	

DATE PURGED :	7-11-02	END PURGE :	1039
DATE SAMPLED :	7-11-02	SAMPLING TIME :	1128
		DTW AT SAMPLE TIME:	8.70

TIME (2400 HR)	VOLUME (gal)	pH (units)	E.C. ( $\mu$ mhos/cm@25°C)	TEMPERATURE (°C)	COLOR (visual)	TURBIDITY (visual)
1031	1.25	7.23	770	19.8°	Cloudy	mod
1035	2.50	7.03	750	19.5°	Cloudy	mod
1039	3.25	6.83	750	19.8°	Cloudy	mod

OTHER: \_\_\_\_\_ ODOR: \_\_\_\_\_  
(COBALT 0-100), (NTU 0-200)

FIELD QC SAMPLES COLLECTED AT THIS WELL ( i.e. FB-1, XDUP-1): \_\_\_\_\_

PURGING EQUIPMENT

2" Bladder Pump	Bailer (Teflon)
Centrifugal Pump	Bailer (PVC)
Submersible Pump	Bailer (Stainless Steel)
<input checked="" type="checkbox"/> Dispo Bailer	Dedicated

Other: \_\_\_\_\_

SAMPLING EQUIPMENT

2" Bladder Pump	Bailer (Teflon)
Bomb Sampler	Bailer (Stainless Steel)
Dipper	Submersible Pump
<input checked="" type="checkbox"/> Dispo Bailer	Dedicated

Other: \_\_\_\_\_

WELL INTEGRITY: Good LOCK: DOLPHINREMARKS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

pH, E.C., Temp. Meter Calibration: Date: \_\_\_\_\_ Time: \_\_\_\_\_ Meter Serial No.: \_\_\_\_\_

E.C. 1000 / pH 7 / pH 10 / pH 4 /

Temperature °C \_\_\_\_\_

SIGNATURE: Paul Weinhardt REVIEWED BY: JL PAGE 1 OF 5

# WATER SAMPLE FIELD DATA SHEET

PROJECT NO : 830714 / 01010000SAMPLE ID : MW2PURGED BY : Paul WeinhardtCLIENT NAME : Caltrans - Former Church's ChickenSAMPLED BY : Paul WeinhardtLOCATION : 1766 7th Street, Oakland, CA

TYPE:	Groundwater <input checked="" type="checkbox"/>	Surface Water <input type="checkbox"/>	Leachate <input type="checkbox"/>	Other <input type="checkbox"/>		
CASING DIAMETER (inches):	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	4.5 <input type="checkbox"/>	6 <input type="checkbox"/>	Other <input type="checkbox"/>
	(.163)	(.367)		(.652)	(.826)	(1.47) (1"-.041 / 8"-2.61)

CASING ELEVATION (feet/MSL):	VOLUME IN CASING (gal.): <u>.74</u>
DEPTH OF WELL (feet): <u>15.0</u>	CALCULATED PURGE (gal.): <u>2.22</u>
DEPTH TO WATER (feet): <u>10.63</u>	ACTUAL PURGE VOL. (gal.): <u>2.25</u>

DATE PURGED : 7-11-02  
DATE SAMPLED : 7-11-02END PURGE : 1046  
SAMPLING TIME : 1138  
DTW AT SAMPLE TIME: 10.67'

TIME (2400 HR)	VOLUME (gal.)	pH (units)	E.C. ( $\mu$ mhos/cm@25°C)	TEMPERATURE (°C)	COLOR (visual)	TURBIDITY (visual)
1042	.75	6.94	870	19.4°	cloudy	mod
1044	1.50	6.23	870	19.2°	cloudy	mod
1046	2.25	6.81	880	19.9°	cloudy	mod

OTHER: \_\_\_\_\_ ODOR: \_\_\_\_\_  
(COBALT 0-100) (NTU 0-200)

FIELD QC SAMPLES COLLECTED AT THIS WELL ( i.e. FB-1, XDUP-1 ): \_\_\_\_\_

PURGING EQUIPMENT

- 2" Bladder Pump       Bailer (Teflon)  
 Centrifugal Pump       Bailer (PVC)  
 Submersible Pump       Bailer (Stainless Steel)  
 Dispo Bailer       Dedicated  
 Other: \_\_\_\_\_

SAMPLING EQUIPMENT

- 2" Bladder Pump       Bailer (Teflon)  
 Bomb Sampler       Bailer (Stainless Steel)  
 Dipper       Submersible Pump  
 Dispo Bailer       Dedicated  
 Other: \_\_\_\_\_

WELL INTEGRITY: GoodLOCK: alphafinREMARKS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

pH, E.C., Temp. Meter Calibration: Date: \_\_\_\_\_ Time: \_\_\_\_\_ Meter Serial No.: \_\_\_\_\_

E.C. 1000 / pH 7 / pH 10 / pH 4 /

Temperature °C

SIGNATURE: Paul Weinhardt REVIEWED BY: JL PAGE 2 OF 5

# WATER SAMPLE FIELD DATA SHEET

PROJECT NO : 830714 / 01010000SAMPLE ID : mw3PURGED BY : Paul WeinhardtCLIENT NAME : Caltrans - Former Church's ChickenSAMPLED BY : Paul WeinhardtLOCATION : 1766 7th Street, Oakland, CA

TYPE: Groundwater X Surface Water \_\_\_\_\_ Leachate \_\_\_\_\_ Other \_\_\_\_\_  
 CASING DIAMETER (inches): 2 X 3 \_\_\_\_\_ 4 \_\_\_\_\_ 4.5 \_\_\_\_\_ 6 \_\_\_\_\_ Other \_\_\_\_\_  
 (1.63) (3.67) (.652) (.826) (1.47) (1"-.041 / 8"-2.61)

CASING ELEVATION (feet/MSL) :	VOLUME IN CASING (gal.) :
DEPTH OF WELL (feet) :	<u>15.00</u>
DEPTH TO WATER (feet) :	<u>8.96</u>
	CALCULATED PURGE (gal.) :
	<u>3.08</u>
	ACTUAL PURGE VOL. (gal.) :
	<u>3.00</u>

DATE PURGED :	<u>7-11-02</u>	END PURGE :	<u>11:20</u>
DATE SAMPLED :	<u>7-11-02</u>	SAMPLING TIME :	<u>11:48</u>
		DTW AT SAMPLE TIME:	<u>9.38</u>

TIME (2400 HR)	VOLUME (gal)	pH (units)	E.C. ( $\mu$ mhos/cm@25°C)	TEMPERATURE (°C)	COLOR (visual)	TURBIDITY (visual)
<u>11:4</u>	<u>1.0</u>	<u>7.53</u>	<u>900</u>	<u>20.6°</u>	<u>cloudy</u>	<u>mod</u>
<u>11:7</u>	<u>2.0</u>	<u>7.00</u>	<u>500</u>	<u>22.4°</u>	<u>cloudy</u>	<u>mod</u>
<u>11:20</u>	<u>3.0</u>	<u>6.8</u>	<u>510</u>	<u>22.7°</u>	<u>cloudy</u>	<u>mod</u>

OTHER: \_\_\_\_\_ ODOR: \_\_\_\_\_  
 (COBALT 0-100) (NTU 0-200)

FIELD QC SAMPLES COLLECTED AT THIS WELL ( i.e. FB-1, XDUP-1) : \_\_\_\_\_

PURGING EQUIPMENT

- 2" Bladder Pump
- Centrifugal Pump
- Submersible Pump
- Dispo Bailer
- Other: \_\_\_\_\_

SAMPLING EQUIPMENT

- 2" Bladder Pump
- Bailer (Teflon)
- Bailer (PVC)
- Bailer (Stainless Steel)
- Dipper
- Dispo Bailer
- Other: \_\_\_\_\_

WELL INTEGRITY: Good LOCK: openREMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

pH, E.C., Temp. Meter Calibration: Date: \_\_\_\_\_ Time: \_\_\_\_\_ Meter Serial No.: \_\_\_\_\_

E.C. 1000 \_\_\_\_\_ / pH 7 \_\_\_\_\_ / pH 10 \_\_\_\_\_ / pH 4 \_\_\_\_\_ /

Temperature °C \_\_\_\_\_

SIGNATURE: Paul Weinhardt REVIEWED BY: PF PAGE 3 OF 5

# WATER SAMPLE FIELD DATA SHEET

PROJECT NO.: 830714 / 01010000SAMPLE ID: MWSPURGED BY: Paul WeinhardtCLIENT NAME: Caltrans - Former Church's ChickenSAMPLED BY: Paul WeinhardtLOCATION: 1766 7th Street, Oakland, CA

TYPE:	Groundwater <input checked="" type="checkbox"/>	Surface Water <input type="checkbox"/>	Leachate <input type="checkbox"/>	Other <input type="checkbox"/>		
CASING DIAMETER (inches):	2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	4.5 <input type="checkbox"/>	6 <input type="checkbox"/>	Other <input type="checkbox"/>
	(.163)	(.367)		(.652)	(.826)	(1.47) (1"-.041 / 8"-2.61)

CASING ELEVATION (feet/MSL):	<u></u>	VOLUME IN CASING (gal.): <u>1.40</u>
DEPTH OF WELL (feet):	<u>17.00</u>	CALCULATED PURGE (gal.): <u>4.20</u>
DEPTH TO WATER (feet):	<u>8.75</u>	ACTUAL PURGE VOL. (gal.): <u>4.50</u>

DATE PURGED: 7-11-02END PURGE: 11:01DATE SAMPLED: 7-11-02SAMPLING TIME: 11:48DTW AT SAMPLE TIME: 9.27

TIME (HH:MM HR)	VOLUME (gal.)	pH (units)	E.C. ( $\mu$ mhos/cm@25°C)	TEMPERATURE (°C)	COLOR (visual)	TURBIDITY (visual)
10:55	1.5	6.79	950	22.8	cloudy	mod
10:58	3.0	6.51	1,090	22.6°	cloudy	mod
11:01	4.5	6.31	1,140	22.4°	cloudy	mod

OTHER: \_\_\_\_\_ ODOR: \_\_\_\_\_  
 (COBALT 0-100) (NTU 0-200)

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, XDUP-1): \_\_\_\_\_

PURGING EQUIPMENT

- 2" Bladder Pump
  - Centrifugal Pump
  - Submersible Pump
  - Dispo Bailer
  - Other: \_\_\_\_\_
- Bailer (Teflon)
  - Bailer (PVC)
  - Bailer (Stainless Steel)
  - Dedicated

SAMPLING EQUIPMENT

- 2" Bladder Pump
  - Bomb Sampler
  - Dipper
  - Dispo Bailer
  - Other: \_\_\_\_\_
- Bailer (Teflon)
  - Bailer (Stainless Steel)
  - Submersible Pump
  - Dedicated

WELL INTEGRITY: Good LOCK: DOLPHINREMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

pH, E.C., Temp. Meter Calibration: Date: \_\_\_\_\_ Time: \_\_\_\_\_ Meter Serial No.: \_\_\_\_\_

E.C. 1000: \_\_\_\_\_ / pH 7: \_\_\_\_\_ / pH 10: \_\_\_\_\_ / pH 4: \_\_\_\_\_ /

Temperature °C: \_\_\_\_\_

SIGNATURE: Paul Weinhardt REVIEWED BY: JL PAGE 5 OF 5

### Drum Inventory Record

830714 / 01010000  
Project No

Former Church's Chicken Property  
1766 7th Street, Oakland  
Location

7-11  
Date

Caltrans  
Client

Paul Weinhardt  
Sampler

Thur  
Day of Week

DRUM NUMBER OR ID	WELL OR SOURCE ID(s)	TYPE OF MATERIAL	AMOUNT OF MATERIAL IN DRUM	DATE ACCUMULATED OR GENERATED

1 Drum Full

Sketch locations of drums, include drum ID's

COMMENTS:

Number of Drums From This Event

0

Total Number of Drums At Site

1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Martha Adams  
Shaw Environmental & Infrastructure  
1326 N. Market Blvd.  
Sacramento, CA 95834

---

Client	Shaw Environmental & Infrastructure
Workorder	14924 830714 Former Church's Chicken
Received	07/12/02

---

The samples were received in EPA specified containers. The samples were transported and received under documented chain of custody and stored at four (4) degrees C until analysis was performed.

Sparger Technology, Inc. ID Suffix Keys - These descriptors will follow the Sparger Technology, Inc. ID numbers and help identify the specific sample and clarify the report.

- DUP - Matrix Duplicate
- MS - Matrix Spike
- MSD - Matrix Spike Duplicate
- LCS - Lab Control Sample
- LCSD - Lab Control Sample Duplicate
- RPD - Relative Percent Difference
- QC - Additional Quality Control
- DIL - Results from a diluted sample
- ND - None Detected
- RL - Reporting Limit

Note: In an effort to conserve paper, the results are printed on both sides of the paper.

A handwritten signature in black ink, appearing to read "Ray James".

Ray James  
Laboratory Director



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924001  
**Sample ID** MW-1  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**EPA Method 7470A Mercury - EPA 7470A**

Parameter	Prep Date	Analyzed	Result	RL Units	Dilution
Mercury	07/26/02	08/01/02	ND	0.00020 mg/L	1:1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924001  
**Sample ID** MW-1  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**8260B Oxygenates - 8260B**

Parameter	Prep Date	Analyzed	Result	RL Units	Dilution
Tertiary butanol	07/12/02	07/12/02	ND	10 ug/L	1:1
Methyl-tert-butyl-ether	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Di-isopropyl ether	07/12/02	07/12/02	ND	5.0 ug/L	1:1
Ethyl tert-butyl ether	07/12/02	07/12/02	ND	5.0 ug/L	1:1
Tertiaryamyl methylether	07/12/02	07/12/02	ND	5.0 ug/L	1:1
Surrogates	Result	Recovery	Limits		
Dibromodifluoromethane	47.9 ug/L	96 %	(76 - 135)		



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Mobile Laboratory Division  
Scientific Division

## Test Certificate of Analysis

Client ID Shaw Environmental & Infrastructure  
Workorder # 14924  
Laboratory ID 14924001  
Sample ID MW-1  
Matrix Water

Workorder ID 830714 Former Church's Chicken  
Sampled 07/11/02  
Received 07/11/02  
Reported 08/02/02

## 8260B GC/MS Volatiles - 8260B

Parameter	Prep Date	Analyzed	Result	RL Units	Dilution
Dichlorodifluoromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Chloromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Vinyl chloride	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Bromomethane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Chloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Trichlorofluoromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Acrolein	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,1-Dichloroethene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Acetone	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Methyl iodide	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Carbon disulfide	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Dichloromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Acrylonitrile	07/12/02	07/12/02	ND	2.0 ug/L	1:1
trans-1,2-Dichloroethene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,1-Dichloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Vinyl acetate	07/12/02	07/12/02	ND	2.0 ug/L	1:1
cis-1,2-Dichloroethene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
2-Butanone (MEK)	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Bromoform	07/12/02	07/12/02	ND	2.0 ug/L	1:1
2,2-dichloropropane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,1,1-Trichloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,1-dichloropropane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Carbon tetrachloride	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Benzene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,2-Dichloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Dibromomethane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Bromodichloromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,2-Dichloropropane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Trichloroethene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
2-Chloroethylvinyl ether	07/12/02	07/12/02	ND	2.0 ug/L	1:1
cis-1,3-Dichloropropene	07/12/02	07/12/02	ND	2.0 ug/L	1:1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

## Test Certificate of Analysis

Client ID Shaw Environmental & Infrastructure  
Workorder # 14924  
Laboratory ID 14924001  
Sample ID MW-1  
Matrix Water

Workorder ID 830714 Former Church's Chicken  
Sampled 07/11/02  
Received 07/11/02  
Reported 08/02/02

## 8260B GC/MS Volatiles - 8260B (continued)

Parameter	Prep Date	Analyzed	Result	RL	Units	Dilution
4-Methyl-2-pentanone	07/12/02	07/12/02	ND	2.0	ug/L	1:1
trans-1,3-Dichloropropene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1,2-Trichloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Toluene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2-Dibromoethane (EDB)	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,3-Dichloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
2-Hexanone	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Bromochloromethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Tetrachloroethene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1,1,2-Tetrachloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Chlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Ethylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
M+P-Xylene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Bromoform	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Styrene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
o-Xylene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1,2,2-Tetrachloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2,3-Trichloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Isopropylbenzene (Cumene)	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Bromobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
n-Propylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
2-Chlorotoluene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
4-Chlorotoluene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,3,5-Trimethylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
tert-Butylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2,4-Trimethylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
sec-Butylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,3-Dichlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,4-Dichlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
4-Isopropyltoluene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2-Dichlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
n-Butylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924001  
**Sample ID** MW-1  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**8260B GC/MS Volatiles - 8260B (continued)**

Parameter	Prep Date	Analyzed	Result	RL	Units	Dilut
1,2-Dibromo-3-chloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1
1,2,4-Trichlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1
Naphthalene	07/12/02	07/12/02	ND	2.0	ug/L	1
Hexachlorobutadiene	07/12/02	07/12/02	ND	2.0	ug/L	1
1,2,3-Trichlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1
Surrogates	Result	Recovery	Limits			
1,2-Dichloroethane-d4	53.7 ug/L	107 %	(76 - 135)			
Toluene d8	49.7 ug/L	99 %	(88 - 118)			
4-Bromofluorobenzene	52.8 ug/L	106 %	(86 - 121)			



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924001  
**Sample ID** MW-1  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**Metals, CAM16 - 6010B**

Parameter	Prep Date	Analyzed	Result	RL	Units	Dilution
Antimony	07/25/02	07/30/02	ND	0.060	mg/L	1:1
Arsenic	07/25/02	07/30/02	ND	0.080	mg/L	1:1
<b>Barium</b>	<b>07/25/02</b>	<b>07/30/02</b>	<b>0.032</b>	<b>0.020</b>	<b>mg/L</b>	<b>1:1</b>
Beryllium	07/25/02	07/30/02	ND	0.0030	mg/L	1:1
Cadmium	07/25/02	07/30/02	ND	0.0050	mg/L	1:1
Chromium	07/25/02	07/30/02	ND	0.010	mg/L	1:1
Cobalt	07/25/02	07/30/02	ND	0.050	mg/L	1:1
Copper	07/25/02	07/30/02	ND	0.020	mg/L	1:1
Lead	07/25/02	07/30/02	ND	0.010	mg/L	1:1
Molybdenum	07/25/02	07/30/02	ND	0.050	mg/L	1:1
Nickel	07/25/02	07/30/02	ND	0.040	mg/L	1:1
Selenium	07/25/02	07/30/02	ND	0.10	mg/L	1:1
Silver	07/25/02	07/30/02	ND	0.010	mg/L	1:1
Thallium	07/25/02	07/30/02	ND	0.10	mg/L	1:1
Vanadium	07/25/02	07/30/02	ND	0.050	mg/L	1:1
Zinc	<b>07/25/02</b>	<b>07/30/02</b>	<b>0.024</b>	<b>0.015</b>	<b>mg/L</b>	<b>1:1</b>



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924002  
**Sample ID** MW-2  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**EPA Method 7470A Mercury - EPA 7470A**

Parameter	Prep Date	Analyzed	Result	RL Units	Dilut
Mercury	07/26/02	08/01/02	ND	0.00020 mg/L	1:



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924002  
**Sample ID** MW-2  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**8260B Oxygenates - 8260B**

Parameter	Prep Date	Analyzed	Result	RL Units	Dilution
Tertiary butanol	07/12/02	07/12/02	ND	10 ug/L	1:1
Methyl-tert-butyl-ether	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Di-isopropyl ether	07/12/02	07/12/02	ND	5.0 ug/L	1:1
Ethyl tert-butyl ether	07/12/02	07/12/02	ND	5.0 ug/L	1:1
Tertiaryamyl methylether	07/12/02	07/12/02	ND	5.0 ug/L	1:1
Surrogates	Result	Recovery	Limits		
Dibromodifluoromethane	47.7 ug/L	95 %	(76 - 135)		



Environmental Laboratories

Analytical Laboratory Division  
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Scientific Division

## Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924002  
**Sample ID** MW-2  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**8260B GC/MS Volatiles - 8260B**

Parameter	Prep Date	Analyzed	Result	RL	Units	Dilut
Dichlorodifluoromethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Chloromethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Vinyl chloride	07/12/02	07/12/02	ND	2.0	ug/L	1
Bromomethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Chloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Trichlorofluoromethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Acrolein	07/12/02	07/12/02	ND	2.0	ug/L	1
1,1-Dichloroethene	07/12/02	07/12/02	ND	2.0	ug/L	1
Acetone	07/12/02	07/12/02	ND	2.0	ug/L	1
Methyl iodide	07/12/02	07/12/02	ND	2.0	ug/L	1
Carbon disulfide	07/12/02	07/12/02	ND	2.0	ug/L	1
Dichloromethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Acrylonitrile	07/12/02	07/12/02	ND	2.0	ug/L	1
trans-1,2-Dichloroethene	07/12/02	07/12/02	ND	2.0	ug/L	1
1,1-Dichloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Vinyl acetate	07/12/02	07/12/02	ND	2.0	ug/L	1
cis-1,2-Dichloroethene	07/12/02	07/12/02	ND	2.0	ug/L	1
2-Butanone (MEK)	07/12/02	07/12/02	ND	2.0	ug/L	1
Bromochloromethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Chloroform	07/12/02	07/12/02	ND	2.0	ug/L	1
2,2-dichloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1
1,1,1-Trichloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1
1,1-dichloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1
Carbon tetrachloride	07/12/02	07/12/02	ND	2.0	ug/L	1
Benzene	07/12/02	07/12/02	ND	2.0	ug/L	1
1,2-Dichloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Dibromomethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Bromodichloromethane	07/12/02	07/12/02	ND	2.0	ug/L	1
1,2-Dichloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1
Trichloroethene	07/12/02	07/12/02	ND	2.0	ug/L	1
2-Chloroethylvinyl ether	07/12/02	07/12/02	ND	2.0	ug/L	1
cis-1,3-Dichloropropene	07/12/02	07/12/02	ND	2.0	ug/L	1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

## Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924002  
**Sample ID** MW-2  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

## 8260B GC/MS Volatiles - 8260B (continued)

Parameter	Prep Date	Analyzed	Result	RL Units	Dilution
4-Methyl-2-pentanone	07/12/02	07/12/02	ND	2.0 ug/L	1:1
trans-1,3-Dichloropropene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,1,2-Trichloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Toluene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,2-Dibromoethane (EDB)	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,3-Dichloropropane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
2-Hexanone	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Dibromochloromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Tetrachloroethene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,1,1,2-Tetrachloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Chlorobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Ethylbenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
M+P-Xylene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Bromoform	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Styrene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
o-Xylene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,1,2,2-Tetrachloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,2,3-Trichloropropane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Isopropylbenzene (Cumene)	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Bromobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
n-Propylbenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
2-Chlorotoluene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
4-Chlorotoluene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,3,5-Trimethylbenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
tert-Butylbenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,2,4-Trimethylbenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
sec-Butylbenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,3-Dichlorobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,4-Dichlorobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
4-Isopropyltoluene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,2-Dichlorobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
n-Butylbenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924002  
**Sample ID** MW-2  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**8260B GC/MS Volatiles - 8260B (continued)**

Parameter	Prep Date	Analyzed	Result	RL Units	Dilution
1,2-Dibromo-3-chloropropane	07/12/02	07/12/02	ND	2.0 ug/L	1:
1,2,4-Trichlorobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:
Naphthalene	07/12/02	07/12/02	ND	2.0 ug/L	1:
Hexachlorobutadiene	07/12/02	07/12/02	ND	2.0 ug/L	1:
1,2,3-Trichlorobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:
Surrogates	Result	Recovery	Limits		
1,2-Dichloroethane-d4	52.9 ug/L	106 %	(76 - 135)		
Toluene d8	48.9 ug/L	98 %	(88 - 118)		
4-Bromofluorobenzene	52.2 ug/L	104 %	(86 - 121)		



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924002  
**Sample ID** MW-2  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

Metals, CAM16 - 6010B

Parameter	Prep Date	Analyzed	Result	RL Units	Dilution
Antimony	07/25/02	07/30/02	ND	0.060 mg/L	1:1
Arsenic	07/25/02	07/30/02	ND	0.080 mg/L	1:1
<b>Barium</b>	<b>07/25/02</b>	<b>07/30/02</b>	<b>0.050</b>	<b>0.020 mg/L</b>	<b>1:1</b>
Beryllium	07/25/02	07/30/02	ND	0.0030 mg/L	1:1
Cadmium	07/25/02	07/30/02	ND	0.0050 mg/L	1:1
Chromium	07/25/02	07/30/02	ND	0.010 mg/L	1:1
Cobalt	07/25/02	07/30/02	ND	0.050 mg/L	1:1
Copper	07/25/02	07/30/02	ND	0.020 mg/L	1:1
Lead	07/25/02	07/30/02	ND	0.010 mg/L	1:1
Molybdenum	07/25/02	07/30/02	ND	0.050 mg/L	1:1
Nickel	07/25/02	07/30/02	ND	0.040 mg/L	1:1
Selenium	07/25/02	07/30/02	ND	0.10 mg/L	1:1
Silver	07/25/02	07/30/02	ND	0.010 mg/L	1:1
Thallium	07/25/02	07/30/02	ND	0.10 mg/L	1:1
Vanadium	07/25/02	07/30/02	ND	0.050 mg/L	1:1
Zinc	07/25/02	07/30/02	0.031	0.015 mg/L	1:1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924003  
**Sample ID** MW-3  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**EPA Method 7470A Mercury - EPA 7470A**

Parameter	Prep Date	Analyzed	Result	RL Units	Dil.
Mercury	07/26/02	08/01/02	ND	0.00020 mg/L	1:



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924003  
**Sample ID** MW-3  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**8260B Oxygenates - 8260B**

Parameter	Prep Date	Analyzed	Result	RL	Units	Dilution
Tertiary butanol	07/12/02	07/12/02	ND	1.0	ug/L	1:1
Methyl-tert-butyl-ether	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Di-isopropyl ether	07/12/02	07/12/02	ND	5.0	ug/L	1:1
Ethyl tert-butyl ether	07/12/02	07/12/02	ND	5.0	ug/L	1:1
Tertiaryamyl methylether	07/12/02	07/12/02	ND	5.0	ug/L	1:1
Surrogates		<b>Result</b>	<b>Recovery</b>	<b>Limits</b>		
Dibromodifluoromethane		48 ug/L	96 %	(76 - 135)		



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

## Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924003  
**Sample ID** MW-3  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

## 8260B GC/MS Volatiles - 8260B

Parameter	Prep Date	Analyzed	Result	RL Units	Dilution Factor
Dichlorodifluoromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Chloromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Vinyl chloride	07/12/02	07/12/02	ND	2.0 ug/L	1:
Bromomethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Chloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Trichlorofluoromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Acrolein	07/12/02	07/12/02	ND	2.0 ug/L	1:
1,1-Dichloroethene	07/12/02	07/12/02	ND	2.0 ug/L	1:
Acetone	07/12/02	07/12/02	ND	2.0 ug/L	1:
Methyl iodide	07/12/02	07/12/02	ND	2.0 ug/L	1:
Carbon disulfide	07/12/02	07/12/02	ND	2.0 ug/L	1:
Dichloromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Acrylonitrile	07/12/02	07/12/02	ND	2.0 ug/L	1:
trans-1,2-Dichloroethene	07/12/02	07/12/02	ND	2.0 ug/L	1:
1,1-Dichloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Vinyl acetate	07/12/02	07/12/02	ND	2.0 ug/L	1:
cis-1,2-Dichloroethene	07/12/02	07/12/02	ND	2.0 ug/L	1:
2-Butanone (MEK)	07/12/02	07/12/02	ND	2.0 ug/L	1:
Bromochloromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Chloroform	07/12/02	07/12/02	ND	2.0 ug/L	1:
2,2-dichloropropane	07/12/02	07/12/02	ND	2.0 ug/L	1:
1,1,1-Trichloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
1,1-dichloropropane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Carbon tetrachloride	07/12/02	07/12/02	ND	2.0 ug/L	1:
Benzene	07/12/02	07/12/02	ND	2.0 ug/L	1:
1,2-Dichloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Dibromomethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Bromodichloromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
1,2-Dichloropropane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Trichloroethene	07/12/02	07/12/02	ND	2.0 ug/L	1:
2-Chloroethylvinyl ether	07/12/02	07/12/02	ND	2.0 ug/L	1:
cis-1,3-Dichloropropene	07/12/02	07/12/02	ND	2.0 ug/L	1:



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

## Test Certificate of Analysis

Client ID Shaw Environmental & Infrastructure  
Workorder # 14924  
Laboratory ID 14924003  
Sample ID MW-3  
Matrix Water

Workorder ID 830714 Former Church's Chicken  
Sampled 07/11/02  
Received 07/11/02  
Reported 08/02/02

## 8260B GC/MS Volatiles - 8260B (continued)

Parameter	Prep Date	Analyzed	Result	RL	Units	Dilution
4-Methyl-2-pentanone	07/12/02	07/12/02	ND	2.0	ug/L	1:1
trans-1,3-Dichloropropene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1,2-Trichloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Toluene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2-Dibromoethane (EDB)	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,3-Dichloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
2-Hexanone	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Dibromochloromethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Tetrachloroethene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1,1,2-Tetrachloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Chlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Ethylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
M+P-Xylene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Bromoform	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Styrene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
o-Xylene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1,2,2-Tetrachloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2,3-Trichloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Isopropylbenzene (Cumene)	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Bromobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
n-Propylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
2-Chlorotoluene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
4-Chlorotoluene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,3,5-Trimethylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
tert-Butylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2,4-Trimethylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
sec-Butylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,3-Dichlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,4-Dichlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
4-Isopropyltoluene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2-Dichlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
n-Butylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924003  
**Sample ID** MW-3  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**8260B GC/MS Volatiles - 8260B (continued)**

Parameter	Prep Date	Analyzed	Result	RL Units	Dilution
1,2-Dibromo-3-chloropropane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,2,4-Trichlorobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Naphthalene	07/12/02	07/12/02	ND	2.0 ug/L	1:
Hexachlorobutadiene	07/12/02	07/12/02	ND	2.0 ug/L	1:
1,2,3-Trichlorobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Surrogates	Result	Recovery	Limits		
1,2-Dichloroethane-d4	52.9 ug/L	106 %	(76 - 135)		
Toluene d8	49.5 ug/L	99 %	(88 - 118)		
4-Bromofluorobenzene	50.9 ug/L	102 %	(86 - 121)		



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924003  
**Sample ID** MW-3  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

Metals, CAM16 - 6010B

Parameter	Prep Date	Analyzed	Result	RL Units	Dilution
Antimony	07/25/02	07/30/02	ND	0.060 mg/L	1:1
Arsenic	07/25/02	07/30/02	ND	0.080 mg/L	1:1
<b>Barium</b>	<b>07/25/02</b>	<b>07/30/02</b>	<b>0.044</b>	<b>0.020 mg/L</b>	<b>1:1</b>
Beryllium	07/25/02	07/30/02	ND	0.0030 mg/L	1:1
Cadmium	07/25/02	07/30/02	ND	0.0050 mg/L	1:1
Chromium	07/25/02	07/30/02	ND	0.010 mg/L	1:1
Cobalt	07/25/02	07/30/02	ND	0.050 mg/L	1:1
Copper	07/25/02	07/30/02	ND	0.020 mg/L	1:1
Lead	07/25/02	07/30/02	ND	0.010 mg/L	1:1
Molybdenum	07/25/02	07/30/02	ND	0.050 mg/L	1:1
Nickel	07/25/02	07/30/02	ND	0.040 mg/L	1:1
Selenium	07/25/02	07/30/02	ND	0.10 mg/L	1:1
Silver	07/25/02	07/30/02	ND	0.010 mg/L	1:1
Thallium	07/25/02	07/30/02	ND	0.10 mg/L	1:1
Vanadium	07/25/02	07/30/02	ND	0.050 mg/L	1:1
Zinc			<b>0.039</b>	<b>0.015 mg/L</b>	<b>1:1</b>



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924004  
**Sample ID** MW-4  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**EPA Method 7470A Mercury - EPA 7470A**

Parameter	Prep Date	Analyzed	Result	RL Units	Dilut
Mercury	07/26/02	08/01/02	ND	0.00020 mg/L	1:



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924004  
**Sample ID** MW-4  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**8260B Oxygenates - 8260B**

Parameter	Prep Date	Analyzed	Result	RL	Units	Dilution
Tertiary butanol	07/12/02	07/12/02	ND	10	ug/L	1:1
Methyl-tert-butyl-ether	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Di-isopropyl ether	07/12/02	07/12/02	ND	5.0	ug/L	1:1
Ethyl tert-butyl ether	07/12/02	07/12/02	ND	5.0	ug/L	1:1
Tertiaryamyl methylether	07/12/02	07/12/02	ND	5.0	ug/L	1:1
<b>Surrogates</b>		<b>Result</b>	<b>Recovery</b>	<b>Limits</b>		
Dibromodifluoromethane		48 ug/L	96 %	(76 - 135)		



Environmental Laboratories

Analytical Laboratory Division  
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Scientific Division

## Test Certificate of Analysis

Client ID Shaw Environmental & Infrastructure  
Workorder # 14924  
Laboratory ID 14924004  
Sample ID MW-4  
Matrix Water

Workorder ID 830714 Former Church's Chicken  
Sampled 07/11/02  
Received 07/11/02  
Reported 08/02/02

## 8260B GC/MS Volatiles - 8260B

Parameter	Prep Date	Analyzed	Result	RL	Units	Dilut
Dichlorodifluoromethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Chloromethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Vinyl chloride	07/12/02	07/12/02	ND	2.0	ug/L	1
Bromomethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Chloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Trichlorofluoromethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Acrolein	07/12/02	07/12/02	ND	2.0	ug/L	1
1,1-Dichloroethene	07/12/02	07/12/02	ND	2.0	ug/L	1
Acetone	07/12/02	07/12/02	ND	2.0	ug/L	1
Methyl iodide	07/12/02	07/12/02	ND	2.0	ug/L	1
Carbon disulfide	07/12/02	07/12/02	ND	2.0	ug/L	1
Dichloromethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Acrylonitrile	07/12/02	07/12/02	ND	2.0	ug/L	1
trans-1,2-Dichloroethene	07/12/02	07/12/02	ND	2.0	ug/L	1
1,1-Dichloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Vinyl acetate	07/12/02	07/12/02	ND	2.0	ug/L	1
cis-1,2-Dichloroethene	07/12/02	07/12/02	ND	2.0	ug/L	1
2-Butanone (MEK)	07/12/02	07/12/02	ND	2.0	ug/L	1
Bromoform	07/12/02	07/12/02	ND	2.0	ug/L	1
2,2-dichloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1
1,1,1-Trichloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1
1,1-dichloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1
Carbon tetrachloride	07/12/02	07/12/02	ND	2.0	ug/L	1
Benzene	07/12/02	07/12/02	ND	2.0	ug/L	1
1,2-Dichloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Dibromomethane	07/12/02	07/12/02	ND	2.0	ug/L	1
Bromodichloromethane	07/12/02	07/12/02	ND	2.0	ug/L	1
1,2-Dichloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1
Trichloroethene	07/12/02	07/12/02	ND	2.0	ug/L	1
2-Chloroethylvinyl ether	07/12/02	07/12/02	ND	2.0	ug/L	1
cis-1,3-Dichloropropene	07/12/02	07/12/02	ND	2.0	ug/L	1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

## Test Certificate of Analysis

Client ID Shaw Environmental & Infrastructure  
Workorder # 14924  
Laboratory ID 14924004  
Sample ID MW-4  
Matrix Water

Workorder ID 830714 Former Church's Chicken  
Sampled 07/11/02  
Received 07/11/02  
Reported 08/02/02

## 8260B GC/MS Volatiles - 8260B (continued)

Parameter	Prep Date	Analyzed	Result	RL	Units	Dilution
4-Methyl-2-pentanone	07/12/02	07/12/02	ND	2.0	ug/L	1:1
trans-1,3-Dichloropropene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1,2-Trichloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Toluene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2-Dibromoethane (EDB)	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,3-Dichloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
2-Hexanone	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Dibromochloromethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Tetrachloroethene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1,1,2-Tetrachloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Chlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Ethylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
M+P-Xylene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Bromoform	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Styrene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
o-Xylene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1,2,2-Tetrachloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2,3-Trichloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Isopropylbenzene (Cumene)	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Bromobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
n-Propylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
2-Chlorotoluene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
4-Chlorotoluene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,3,5-Trimethylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
tert-Butylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2,4-Trimethylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
sec-Butylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,3-Dichlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,4-Dichlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
4-Isopropyltoluene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2-Dichlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
n-Butylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924004  
**Sample ID** MW-4  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**8260B GC/MS Volatiles - 8260B (continued)**

Parameter	Prep Date	Analyzed	Result	RL Units	Dilut
1,2-Dibromo-3-chloropropane	07/12/02	07/12/02	ND	2.0 ug/L	1
1,2,4-Trichlorobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1
Naphthalene	07/12/02	07/12/02	ND	2.0 ug/L	1
Hexachlorobutadiene	07/12/02	07/12/02	ND	2.0 ug/L	1
1,2,3-Trichlorobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1
Surrogates	Result	Recovery	Limits		
1,2-Dichloroethane-d4	49.6 ug/L	99 %	(76 - 135)		
Toluene d8	48.9 ug/L	98 %	(88 - 118)		
4-Bromofluorobenzene	51 ug/L	102 %	(86 - 121)		



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924004  
**Sample ID** MW-4  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

Metals, CAM16 - 6010B

Parameter	Prep Date	Analyzed	Result	RL Units	Dilution
Antimony	07/25/02	07/30/02	ND	0.060 mg/L	1:1
Arsenic	07/25/02	07/30/02	ND	0.080 mg/L	1:1
<b>Barium</b>	<b>07/25/02</b>	<b>07/30/02</b>	<b>0.026</b>	<b>0.020 mg/L</b>	<b>1:1</b>
Beryllium	07/25/02	07/30/02	ND	0.0030 mg/L	1:1
Cadmium	07/25/02	07/30/02	ND	0.0050 mg/L	1:1
Chromium	07/25/02	07/30/02	ND	0.010 mg/L	1:1
Cobalt	07/25/02	07/30/02	ND	0.050 mg/L	1:1
Copper	07/25/02	07/30/02	ND	0.020 mg/L	1:1
Lead	07/25/02	07/30/02	ND	0.010 mg/L	1:1
Molybdenum	07/25/02	07/30/02	ND	0.050 mg/L	1:1
Nickel	07/25/02	07/30/02	ND	0.040 mg/L	1:1
Selenium	07/25/02	07/30/02	ND	0.10 mg/L	1:1
Silver	07/25/02	07/30/02	ND	0.010 mg/L	1:1
Thallium	07/25/02	07/30/02	ND	0.10 mg/L	1:1
Vanadium	07/25/02	07/30/02	ND	0.050 mg/L	1:1
<b>Zinc</b>	<b>07/25/02</b>	<b>07/30/02</b>	<b>0.019</b>	<b>0.015 mg/L</b>	<b>1:1</b>



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924005  
**Sample ID** MW-5  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**EPA Method 7470A Mercury - EPA 7470A**

Parameter	Prep Date	Analyzed	Result	RL Units	Dilution Factor
Mercury	07/26/02	08/01/02	ND	0.00020 mg/L	1:1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Test Certificate of Analysis

Client ID Shaw Environmental & Infrastructure  
Workorder # 14924  
Laboratory ID 14924005  
Sample ID MW-5  
Matrix Water

Workorder ID 830714 Former Church's Chicken  
Sampled 07/11/02  
Received 07/11/02  
Reported 08/02/02

8260B Oxygenates - 8260B

Parameter	Prep Date	Analyzed	Result	RL	Units	Dilution
Tertiary butanol	07/12/02	07/12/02	ND	10	ug/L	1:1
Methyl-tert-butyl-ether	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Di-isopropyl ether	07/12/02	07/12/02	ND	5.0	ug/L	1:1
Ethyl tert-butyl ether	07/12/02	07/12/02	ND	5.0	ug/L	1:1
Tertiaryamyl methylether	07/12/02	07/12/02	ND	5.0	ug/L	1:1
Surrogates	Result	Recovery	Limits			
Dibromodifluoromethane	46.9 ug/L	94 %	(76 - 135)			



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

## Test Certificate of Analysis

Client ID Shaw Environmental & Infrastructure  
Workorder # 14924  
Laboratory ID 14924005  
Sample ID MW-5  
Matrix Water

Workorder ID 830714 Former Church's Chicken  
Sampled 07/11/02  
Received 07/11/02  
Reported 08/02/02

## 8260B GC/MS Volatiles - 8260B

Parameter	Prep Date	Analyzed	Result	RL Units	Dilut
Dichlorodifluoromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Chloromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Vinyl chloride	07/12/02	07/12/02	ND	2.0 ug/L	1:
Bromomethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Chloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Trichlorofluoromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Acrolein	07/12/02	07/12/02	ND	2.0 ug/L	1:
1,1-Dichloroethene	07/12/02	07/12/02	ND	2.0 ug/L	1:
Acetone	07/12/02	07/12/02	ND	2.0 ug/L	1:
Methyl iodide	07/12/02	07/12/02	ND	2.0 ug/L	1:
Carbon disulfide	07/12/02	07/12/02	ND	2.0 ug/L	1:
Dichloromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Acrylonitrile	07/12/02	07/12/02	ND	2.0 ug/L	1:
trans-1,2-Dichloroethene	07/12/02	07/12/02	ND	2.0 ug/L	1:
1,1-Dichloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Vinyl acetate	07/12/02	07/12/02	ND	2.0 ug/L	1:
cis-1,2-Dichloroethene	07/12/02	07/12/02	ND	2.0 ug/L	1:
2-Butanone (MEK)	07/12/02	07/12/02	ND	2.0 ug/L	1:
Bromochloromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Chloroform	07/12/02	07/12/02	ND	2.0 ug/L	1:
2,2-dichloropropane	07/12/02	07/12/02	ND	2.0 ug/L	1:
1,1,1-Trichloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
1,1-dichloropropane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Carbon tetrachloride	07/12/02	07/12/02	ND	2.0 ug/L	1:
Benzene	07/12/02	07/12/02	ND	2.0 ug/L	1:
1,2-Dichloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Dibromomethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Bromodichloromethane	07/12/02	07/12/02	ND	2.0 ug/L	1:
1,2-Dichloropropane	07/12/02	07/12/02	ND	2.0 ug/L	1:
Trichloroethene	07/12/02	07/12/02	ND	2.0 ug/L	1:
2-Chloroethylvinyl ether	07/12/02	07/12/02	ND	2.0 ug/L	1:
cis-1,3-Dichloropropene	07/12/02	07/12/02	ND	2.0 ug/L	1:



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

## Test Certificate of Analysis

Client ID Shaw Environmental & Infrastructure  
Workorder # 14924  
Laboratory ID 14924005  
Sample ID MW-5  
Matrix Water

Workorder ID 830714 Former Church's Chicken  
Sampled 07/11/02  
Received 07/11/02  
Reported 08/02/02

## 8260B GC/MS Volatiles - 8260B (continued)

Parameter	Prep Date	Analyzed	Result	RL	Units	Dilution
4-Methyl-2-pentanone	07/12/02	07/12/02	ND	2.0	ug/L	1:1
trans-1,3-Dichloropropene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1,2-Trichloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Toluene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2-Dibromoethane (EDB)	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,3-Dichloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
2-Hexanone	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Dibromochloromethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Tetrachloroethene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1,1,2-Tetrachloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Chlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Ethylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
M+P-Xylene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Bromoform	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Styrene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
o-Xylene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1,2,2-Tetrachloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2,3-Trichloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Isopropylbenzene (Cumene)	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Bromobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
n-Propylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
2-Chlorotoluene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
4-Chlorotoluene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,3,5-Trimethylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
tert-Butylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2,4-Trimethylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
sec-Butylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,3-Dichlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,4-Dichlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
4-Isopropyltoluene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2-Dichlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
n-Butylbenzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1



Environmental Laboratories

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Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924005  
**Sample ID** MW-5  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**8260B GC/MS Volatiles - 8260B (continued)**

Parameter	Prep Date	Analyzed	Result	RL	Units	Dil
1,2-Dibromo-3-chloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1
1,2,4-Trichlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1
Naphthalene	07/12/02	07/12/02	ND	2.0	ug/L	1
Hexachlorobutadiene	07/12/02	07/12/02	ND	2.0	ug/L	1
1,2,3-Trichlorobenzene	07/12/02	07/12/02	ND	2.0	ug/L	1
Surrogates	Result	Recovery	Limits			
1,2-Dichloroethane-d4	50.6 ug/L	101 %	(76 - 135)			
Toluene d8	49.7 ug/L	99 %	(88 - 118)			
4-Bromofluorobenzene	50.7 ug/L	101 %	(86 - 121)			



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Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924005  
**Sample ID** MW-5  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**Metals, CAM16 - 6010B**

Parameter	Prep Date	Analyzed	Result	RL Units	Dilution
Antimony	07/25/02	07/30/02	ND	0.060 mg/L	1:1
Arsenic	07/25/02	07/30/02	ND	0.080 mg/L	1:1
<b>Barium</b>	<b>07/25/02</b>	<b>07/30/02</b>	<b>0.065</b>	<b>0.020 mg/L</b>	<b>1:1</b>
Beryllium	07/25/02	07/30/02	ND	0.0030 mg/L	1:1
Cadmium	07/25/02	07/30/02	ND	0.0050 mg/L	1:1
Chromium	07/25/02	07/30/02	ND	0.010 mg/L	1:1
Cobalt	07/25/02	07/30/02	ND	0.050 mg/L	1:1
Copper	07/25/02	07/30/02	ND	0.020 mg/L	1:1
Lead	07/25/02	07/30/02	ND	0.010 mg/L	1:1
Molybdenum	07/25/02	07/30/02	ND	0.050 mg/L	1:1
Nickel	07/25/02	07/30/02	ND	0.040 mg/L	1:1
Selenium	07/25/02	07/30/02	ND	0.10 mg/L	1:1
Silver	07/25/02	07/30/02	ND	0.010 mg/L	1:1
Thallium	07/25/02	07/30/02	ND	0.10 mg/L	1:1
Vanadium	07/25/02	07/30/02	ND	0.050 mg/L	1:1
Zinc		<b>07/25/02 07/30/02</b>	<b>0.037</b>	<b>0.015 mg/L</b>	<b>1:1</b>



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Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924006  
**Sample ID** Trip Blank  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

**8260B Oxygenates - 8260B**

Parameter	Prep Date	Analyzed	Result	RL Units	Dilut
Tertiary butanol	07/12/02	07/12/02	ND	10 ug/L	1
Methyl-tert-butyl-ether	07/12/02	07/12/02	ND	2.0 ug/L	1
Di-isopropyl ether	07/12/02	07/12/02	ND	5.0 ug/L	1
Ethyl tert-butyl ether	07/12/02	07/12/02	ND	5.0 ug/L	1
Tertiaryamyl methylether	07/12/02	07/12/02	ND	5.0 ug/L	1
Surrogates	Result	Recovery	Limits		
Dibromodifluoromethane	46.9 ug/L	94 %	(76 - 135)		



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## Test Certificate of Analysis

Client ID Shaw Environmental & Infrastructure  
Workorder # 14924  
Laboratory ID 14924006  
Sample ID Trip Blank  
Matrix Water

Workorder ID 830714 Former Church's Chicken  
Sampled 07/11/02  
Received 07/11/02  
Reported 08/02/02

## 8260B GC/MS Volatiles - 8260B

Parameter	Prep Date	Analyzed	Result	RL	Units	Dilution
Dichlorodifluoromethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Chloromethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Vinyl chloride	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Bromomethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Chloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Trichlorofluoromethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Acrolein	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1-Dichloroethene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Acetone	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Methyl iodide	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Carbon disulfide	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Dichloromethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Acrylonitrile	07/12/02	07/12/02	ND	2.0	ug/L	1:1
trans-1,2-Dichloroethene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1-Dichloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Vinyl acetate	07/12/02	07/12/02	ND	2.0	ug/L	1:1
cis-1,2-Dichloroethene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
2-Butanone (MEK)	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Bromochloromethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Chloroform	07/12/02	07/12/02	ND	2.0	ug/L	1:1
2,2-dichloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1,1-Trichloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1-dichloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Carbon tetrachloride	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Benzene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2-Dichloroethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Dibromomethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Bromodichloromethane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2-Dichloropropane	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Trichloroethene	07/12/02	07/12/02	ND	2.0	ug/L	1:1
2-Chloroethylvinyl ether	07/12/02	07/12/02	ND	2.0	ug/L	1:1
cis-1,3-Dichloropropene	07/12/02	07/12/02	ND	2.0	ug/L	1:1



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Scientific Division

## Test Certificate of Analysis

Client ID Shaw Environmental & Infrastructure  
Workorder # 14924  
Laboratory ID 14924006  
Sample ID Trip Blank  
Matrix Water

Workorder ID 830714 Former Church's Chicken  
Sampled 07/11/02  
Received 07/11/02  
Reported 08/02/02

## 8260B GC/MS Volatiles - 8260B (continued)

Parameter	Prep Date	Analyzed	Result	RL Units	Dilution Factor
4-Methyl-2-pentanone	07/12/02	07/12/02	ND	2.0 ug/L	1
trans-1,3-Dichloropropene	07/12/02	07/12/02	ND	2.0 ug/L	1
1,1,2-Trichloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1
Toluene	07/12/02	07/12/02	ND	2.0 ug/L	1
1,2-Dibromoethane (EDB)	07/12/02	07/12/02	ND	2.0 ug/L	1
1,3-Dichloropropane	07/12/02	07/12/02	ND	2.0 ug/L	1
2-Hexanone	07/12/02	07/12/02	ND	2.0 ug/L	1
Dibromochloromethane	07/12/02	07/12/02	ND	2.0 ug/L	1
Tetrachloroethene	07/12/02	07/12/02	ND	2.0 ug/L	1
1,1,1,2-Tetrachloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1
Chlorobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1
Ethylbenzene	07/12/02	07/12/02	ND	2.0 ug/L	1
M+P-Xylene	07/12/02	07/12/02	ND	2.0 ug/L	1
Bromoform	07/12/02	07/12/02	ND	2.0 ug/L	1
Styrene	07/12/02	07/12/02	ND	2.0 ug/L	1
o-Xylene	07/12/02	07/12/02	ND	2.0 ug/L	1
1,1,2,2-Tetrachloroethane	07/12/02	07/12/02	ND	2.0 ug/L	1
1,2,3-Trichloropropane	07/12/02	07/12/02	ND	2.0 ug/L	1
Isopropylbenzene (Cumene)	07/12/02	07/12/02	ND	2.0 ug/L	1
Bromobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1
n-Propylbenzene	07/12/02	07/12/02	ND	2.0 ug/L	1
2-Chlorotoluene	07/12/02	07/12/02	ND	2.0 ug/L	1
4-Chlorotoluene	07/12/02	07/12/02	ND	2.0 ug/L	1
1,3,5-Trimethylbenzene	07/12/02	07/12/02	ND	2.0 ug/L	1
tert-Butylbenzene	07/12/02	07/12/02	ND	2.0 ug/L	1
1,2,4-Trimethylbenzene	07/12/02	07/12/02	ND	2.0 ug/L	1
sec-Butylbenzene	07/12/02	07/12/02	ND	2.0 ug/L	1
1,3-Dichlorobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1
1,4-Dichlorobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1
4-Isopropyltoluene	07/12/02	07/12/02	ND	2.0 ug/L	1
1,2-Dichlorobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1
n-Butylbenzene	07/12/02	07/12/02	ND	2.0 ug/L	1



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Test Certificate of Analysis

**Client ID** Shaw Environmental & Infrastructure  
**Workorder #** 14924  
**Laboratory ID** 14924006  
**Sample ID** Trip Blank  
**Matrix** Water

**Workorder ID** 830714 Former Church's Chicken  
**Sampled** 07/11/02  
**Received** 07/11/02  
**Reported** 08/02/02

8260B GC/MS Volatiles - 8260B (continued)

Parameter	Prep Date	Analyzed	Result	RL Units	Dilution
1,2-Dibromo-3-chloropropane	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,2,4-Trichlorobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Naphthalene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Hexachlorobutadiene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
1,2,3-Trichlorobenzene	07/12/02	07/12/02	ND	2.0 ug/L	1:1
Surrogates	Result	Recovery	Limits		
1,2-Dichloroethane-d4	50.4 ug/L	101 %	(76 - 135)		
Toluene d8	49.5 ug/L	99 %	(88 - 118)		
4-Bromofluorobenzene	50.6 ug/L	101 %	(86 - 121)		



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Test Certificate of Analysis

Client ID      Shaw Environmental & Infrastructure  
Workorder #    14924

Workorder ID 830714 Former Church's Chicken

Parameter      TPHdiesel  
Method          8015M DHS

Lab ID	Sample ID	Result	RL	Units	Collected	Analyzed	Matrix	Dilution
14924001	MW-1	ND	50	ug/L	07/11/02	07/15/02	Water	1:1
14924002	MW-2	ND	50	ug/L	07/11/02	07/15/02	Water	1:1
14924003	MW-3	ND	50	ug/L	07/11/02	07/15/02	Water	1:1
14924004	MW-4	356	50	ug/L	07/11/02	07/15/02	Water	1:1
14924005	MW-5	ND	50	ug/L	07/11/02	07/15/02	Water	1:1



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Test Certificate of Analysis

Client ID      Shaw Environmental & Infrastructure  
Workorder #    14924

Workorder ID 830714 Former Church's Chicken

Parameter      TPHgas  
Method          8015M DHS

Lab ID	Sample ID	Result	RL	Units	Collected	Analyzed	Matrix	Dilution
14924001	MW-1	ND	50	ug/L	07/11/02	07/12/02	Water	1:1
14924002	MW-2	ND	50	ug/L	07/11/02	07/12/02	Water	1:1
14924003	MW-3	ND	50	ug/L	07/11/02	07/12/02	Water	1:1
14924004	MW-4	ND	50	ug/L	07/11/02	07/12/02	Water	1:1
14924005	MW-5	ND	50	ug/L	07/11/02	07/12/02	Water	1:1
14924006	Trip Blank	ND	50	ug/L	07/11/02	07/12/02	Water	1:1



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Test Certificate of Analysis

Client ID Shaw Environmental & Infrastructure  
Workorder # 14924

Workorder ID 830714 Former Church's Chicken

Parameter Total Pet. Hydrocarbons  
Method EPA 1664

Lab ID	Sample ID	Result	RL	Units	Collected	Analyzed	Matrix	Dilution
14924001	MW-1	ND	5000	ug/L	07/11/02	07/15/02	Water	1:1
14924002	MW-2	ND	5000	ug/L	07/11/02	07/15/02	Water	1:1
14924003	MW-3	ND	5000	ug/L	07/11/02	07/15/02	Water	1:1
14924004	MW-4	ND	5000	ug/L	07/11/02	07/15/02	Water	1:1
14924005	MW-5	ND	5000	ug/L	07/11/02	07/15/02	Water	1:1



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**Method Blank Report**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46472  
**Sample ID** MB for HBN 152658 [SGXV/1736]  
**Matrix** Water

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Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
TPHdiesel	8015M DHS	07/12/02	07/15/02	ND	50	ug/L	1 : 1



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**Lab Control Sample Report**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46473  
**Sample ID** LCS for HBN 152658 [SGXV/1736]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
TPHdiesel	8015M DHS	07/12/02	07/15/02	375	50	ug/L	



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**Lab Control Sample Duplicate Report**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46474  
**Sample ID** LCSD for HBN 152658 [SGXV/1736]  
**Matrix** Water

<b>Parameter</b>	<b>Method</b>	<b>Prep Date</b>	<b>Analyzed</b>	<b>Result</b>	<b>RL</b>	<b>Units</b>	<b>Dilution</b>
TPHdiesel	8015M DHS	07/12/02	07/15/02	392	50	ug/L	1:1



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**Method Blank Report**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46512  
**Sample ID** MB for HBN 153045 [VGXV/2261]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilute
TPHgas	8015M DHS	07/12/02	07/12/02	ND		50 ug/L	



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Scientific Division

Lab Control Sample Report

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46513  
**Sample ID** LCS for HBN 153045 [VGXV/2261]  
**Matrix** Water

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Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
TPHgas	8015M DHS	07/12/02	07/12/02	1100	50	ug/L	1:1



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Lab Control Sample Duplicate Report

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46514  
**Sample ID** LCSD for HBN 153045 [VGXV/2261]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilute
TPHgas	8015M DHS	07/12/02	07/12/02	1100	50	ug/L	



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**Matrix Spike Report**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46515  
**Sample ID** MS for HBN 153045 [VGXV/2261]  
**Matrix** Water

---

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
TPHgas	8015M DHS	07/12/02	07/12/02	1150	50	ug/L	1:1



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Matrix Spike Duplicate Report

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46516  
**Sample ID** MSD for HBN 153045 [VGXV/2261]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilute
TPHgas	8015M DHS	07/12/02	07/12/02	1100	50	ug/L	



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## Method Blank Report

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46517  
**Sample ID** MB for HBN 153048 [VMXV/1974]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
Dichlorodifluoromethane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Chloromethane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Vinyl chloride	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Bromomethane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Chloroethane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Trichlorofluoromethane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Acrolein	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1-Dichloroethene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Acetone	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Methyl iodide	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Carbon disulfide	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Dichloromethane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Acrylonitrile	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
trans-1,2-Dichloroethene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1-Dichloroethane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Vinyl acetate	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
cis-1,2-Dichloroethene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
2-Butanone (MEK)	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Bromochloromethane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Chloroform	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
2,2-dichloropropane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1,1-Trichloroethane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,1-dichloropropane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Carbon tetrachloride	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Benzene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2-Dichloroethane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Dibromomethane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Bromodichloromethane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2-Dichloropropane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Trichloroethene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
2-Chloroethylvinyl ether	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
cis-1,3-Dichloropropene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
4-Methyl-2-pentanone	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1



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Method Blank Report

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46517  
**Sample ID** MB for HBN 153048 [VMXV/1974]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
<b>(continued)</b>							
trans-1,3-Dichloropropene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
1,1,2-Trichloroethane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
Toluene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
1,2-Dibromoethane (EDB)	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
1,3-Dichloropropane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
2-Hexanone	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
Dibromochloromethane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
Tetrachloroethene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
1,1,1,2-Tetrachloroethane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
Chlorobenzene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
Ethylbenzene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
M+P-Xylene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
Bromoform	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
Styrene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
o-Xylene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
1,1,2,2-Tetrachloroethane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
1,2,3-Trichloropropane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
Isopropylbenzene (Cumene)	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
Bromobenzene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
n-Propylbenzene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
2-Chlorotoluene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
4-Chlorotoluene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
1,3,5-Trimethylbenzene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
tert-Butylbenzene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
1,2,4-Trimethylbenzene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
sec-Butylbenzene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
1,3-Dichlorobenzene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
1,4-Dichlorobenzene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
4-Isopropyltoluene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
1,2-Dichlorobenzene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1
n-Butylbenzene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Method Blank Report

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46517  
**Sample ID** MB for HBN 153048 [VMXV/1974]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
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(continued)

1,2-Dibromo-3-chloropropane	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2,4-Trichlorobenzene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Naphthalene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
Hexachlorobutadiene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1
1,2,3-Trichlorobenzene	8260B	07/12/02	07/12/02	ND	2.0	ug/L	1:1

<b>Surrogates</b>	<b>Result</b>	<b>Recovery</b>	<b>Limits</b>
1,2-Dichloroethane-d4	52.6 ug/L	105 %	(76 - 135)
Toluene d8	48.1 ug/L	96 %	(88 - 118)
4-Bromofluorobenzene	50 ug/L	100 %	(86 - 121)



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

**Lab Control Sample Report**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46518  
**Sample ID** LCS for HBN 153048 [VMXV/1974]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilute
1,1-Dichloroethene	8260B	07/12/02	07/12/02	63	2.0	ug/L	
Benzene	8260B	07/12/02	07/12/02	49	2.0	ug/L	
Trichloroethene	8260B	07/12/02	07/12/02	46	2.0	ug/L	
Toluene	8260B	07/12/02	07/12/02	47	2.0	ug/L	
Chlorobenzene	8260B	07/12/02	07/12/02	46	2.0	ug/L	



Environmental Laboratories

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Mobile Laboratory Division  
Scientific Division

Lab Control Sample Duplicate Report

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46519  
**Sample ID** LCSD for HBN 153048 [VMXV/1974]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
1,1-Dichloroethene	8260B	07/12/02	07/12/02	66	2.0	ug/L	1:1
Benzene	8260B	07/12/02	07/12/02	57	2.0	ug/L	1:1
Trichloroethene	8260B	07/12/02	07/12/02	54	2.0	ug/L	1:1
Toluene	8260B	07/12/02	07/12/02	55	2.0	ug/L	1:1
Chlorobenzene	8260B	07/12/02	07/12/02	54	2.0	ug/L	1:1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

**Matrix Spike Report**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46520  
**Sample ID** MS for HBN 153048 [VMXV/1974]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilute
1,1-Dichloroethene	8260B	07/12/02	07/12/02	63	2.0	ug/L	
Benzene	8260B	07/12/02	07/12/02	49	2.0	ug/L	
Trichloroethene	8260B	07/12/02	07/12/02	46	2.0	ug/L	
Toluene	8260B	07/12/02	07/12/02	46	2.0	ug/L	
Chlorobenzene	8260B	07/12/02	07/12/02	47	2.0	ug/L	



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Matrix Spike Duplicate Report

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46521  
**Sample ID** MSD for HBN 153048 [VMXV/1974]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
1,1-Dichloroethene	8260B	07/12/02	07/12/02	66	2.0	ug/L	1:1
Benzene	8260B	07/12/02	07/12/02	52	2.0	ug/L	1:1
Trichloroethene	8260B	07/12/02	07/12/02	49	2.0	ug/L	1:1
Toluene	8260B	07/12/02	07/12/02	49	2.0	ug/L	1:1
Chlorobenzene	8260B	07/12/02	07/12/02	49	2.0	ug/L	1:1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Method Blank Report

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46522  
**Sample ID** MB for HBN 153145 [VMXV/1975]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
Tertiary butanol	8260B	07/12/02	07/12/02	ND	10	ug/L	
Methyl-tert-butyl-ether	8260B	07/12/02	07/12/02	ND	2.0	ug/L	
Di-isopropyl ether	8260B	07/12/02	07/12/02	ND	5.0	ug/L	
Ethyl tert-butyl ether	8260B	07/12/02	07/12/02	ND	5.0	ug/L	
Tertiaryamyl methylether	8260B	07/12/02	07/12/02	ND	5.0	ug/L	
<b>Surrogates</b>		<b>Result</b>	<b>Recovery</b>	<b>Limits</b>			
Dibromodifluoromethane		49.5 ug/L	99 %	(76 - 135)			



Environmental Laboratories

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Mobile Laboratory Division  
Scientific Division

**Lab Control Sample Report**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46523  
**Sample ID** LCS for HBN 153145 [VMXV/1975]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
Tertiary butanol	8260B	07/12/02	07/12/02	53	10	ug/L	1:1
Methyl-tert-butyl-ether	8260B	07/12/02	07/12/02	49	2.0	ug/L	1:1
Di-isopropyl ether	8260B	07/12/02	07/12/02	45	5.0	ug/L	1:1
Ethyl tert-butyl ether	8260B	07/12/02	07/12/02	46	5.0	ug/L	1:1
Tertiaryamyl methylether	8260B	07/12/02	07/12/02	45	5.0	ug/L	1:1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Lab Control Sample Duplicate Report

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46524  
**Sample ID** LCSD for HBN 153145 [VMXV/1975]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
Tertiary butanol	8260B	07/12/02	07/12/02	50	10	ug/L	
Methyl-tert-butyl-ether	8260B	07/12/02	07/12/02	50	2.0	ug/L	
Di-isopropyl ether	8260B	07/12/02	07/12/02	46	5.0	ug/L	
Ethyl tert-butyl ether	8260B	07/12/02	07/12/02	46	5.0	ug/L	
Tertiaryamyl methylether	8260B	07/12/02	07/12/02	45	5.0	ug/L	



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

**Matrix Spike Report**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46525  
**Sample ID** MS for HBN 153145 [VMXV/1975]  
**Matrix** Water

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Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
Tertiary butanol	8260B	07/12/02	07/12/02	56	10	ug/L	1:1
Methyl-tert-butyl-ether	8260B	07/12/02	07/12/02	49	2.0	ug/L	1:1
Di-isopropyl ether	8260B	07/12/02	07/12/02	46	5.0	ug/L	1:1
Ethyl tert-butyl ether	8260B	07/12/02	07/12/02	46	5.0	ug/L	1:1
Tertiaryamyl methylether	8260B	07/12/02	07/12/02	45	5.0	ug/L	1:1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

**Matrix Spike Duplicate Report**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 46526  
**Sample ID** MSD for HBN 153145 [VMXV/1975]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilute
Tertiary butanol	8260B	07/12/02	07/12/02	56	10	ug/L	
Methyl-tert-butyl-ether	8260B	07/12/02	07/12/02	48	2.0	ug/L	
Di-isopropyl ether	8260B	07/12/02	07/12/02	44	5.0	ug/L	
Ethyl tert-butyl ether	8260B	07/12/02	07/12/02	45	5.0	ug/L	
Tertiaryamyl methylether	8260B	07/12/02	07/12/02	44	5.0	ug/L	



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Method Blank Report

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 47102  
**Sample ID** MB for HBN 155256 [ICPV/3923]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
Antimony	6010B	07/25/02	07/30/02	ND	0.060	mg/L	1:1
Arsenic	6010B	07/25/02	07/30/02	ND	0.080	mg/L	1:1
Barium	6010B	07/25/02	07/30/02	ND	0.020	mg/L	1:1
Beryllium	6010B	07/25/02	07/30/02	ND	0.0030	mg/L	1:1
Cadmium	6010B	07/25/02	07/30/02	ND	0.0050	mg/L	1:1
Chromium	6010B	07/25/02	07/30/02	ND	0.010	mg/L	1:1
Cobalt	6010B	07/25/02	07/30/02	ND	0.050	mg/L	1:1
Copper	6010B	07/25/02	07/30/02	ND	0.020	mg/L	1:1
Lead	6010B	07/25/02	07/30/02	ND	0.010	mg/L	1:1
Molybdenum	6010B	07/25/02	07/30/02	ND	0.050	mg/L	1:1
Nickel	6010B	07/25/02	07/30/02	ND	0.040	mg/L	1:1
Selenium	6010B	07/25/02	07/30/02	ND	0.10	mg/L	1:1
Silver	6010B	07/25/02	07/30/02	ND	0.010	mg/L	1:1
Thallium	6010B	07/25/02	07/30/02	ND	0.10	mg/L	1:1
Vanadium	6010B	07/25/02	07/30/02	ND	0.050	mg/L	1:1
Zinc	6010B	07/25/02	07/30/02	ND	0.015	mg/L	1:1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Lab Control Sample Report

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 47103  
**Sample ID** LCS for HBN 155256 [ICPV/3923]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
Antimony	6010B	07/25/02	07/30/02	0.54	0.060	mg/L	1:1
Arsenic	6010B	07/25/02	07/30/02	0.52	0.080	mg/L	1:1
Barium	6010B	07/25/02	07/30/02	0.57	0.020	mg/L	1:1
Beryllium	6010B	07/25/02	07/30/02	0.11	0.0030	mg/L	1:1
Cadmium	6010B	07/25/02	07/30/02	0.20	0.0050	mg/L	1:1
Chromium	6010B	07/25/02	07/30/02	0.49	0.010	mg/L	1:1
Cobalt	6010B	07/25/02	07/30/02	0.20	0.050	mg/L	1:1
Copper	6010B	07/25/02	07/30/02	0.52	0.020	mg/L	1:1
Lead	6010B	07/25/02	07/30/02	0.50	0.010	mg/L	1:1
Molybdenum	6010B	07/25/02	07/30/02	0.49	0.050	mg/L	1:1
Nickel	6010B	07/25/02	07/30/02	1.0	0.040	mg/L	1:1
Selenium	6010B	07/25/02	07/30/02	0.48	0.10	mg/L	1:1
Silver	6010B	07/25/02	07/30/02	0.038	0.010	mg/L	1:1
Thallium	6010B	07/25/02	07/30/02	0.48	0.10	mg/L	1:1
Vanadium	6010B	07/25/02	07/30/02	0.19	0.050	mg/L	1:1
Zinc	6010B	07/25/02	07/30/02	0.55	0.015	mg/L	1:1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Lab Control Sample Duplicate Report

Client ID Shaw Environmental & Infrastructure  
Workorder ID 830714 Former Church's Chicken  
Laboratory ID 47104  
Sample ID LCSD for HBN 155256 [ICPV/3923]  
Matrix Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
Antimony	6010B	07/25/02	07/30/02	0.55	0.060	mg/L	1:1
Arsenic	6010B	07/25/02	07/30/02	0.53	0.080	mg/L	1:1
Barium	6010B	07/25/02	07/30/02	0.57	0.020	mg/L	1:1
Beryllium	6010B	07/25/02	07/30/02	0.11	0.0030	mg/L	1:1
Cadmium	6010B	07/25/02	07/30/02	0.20	0.0050	mg/L	1:1
Chromium	6010B	07/25/02	07/30/02	0.51	0.010	mg/L	1:1
Cobalt	6010B	07/25/02	07/30/02	0.20	0.050	mg/L	1:1
Copper	6010B	07/25/02	07/30/02	0.52	0.020	mg/L	1:1
Lead	6010B	07/25/02	07/30/02	0.50	0.010	mg/L	1:1
Molybdenum	6010B	07/25/02	07/30/02	0.49	0.050	mg/L	1:1
Nickel	6010B	07/25/02	07/30/02	1.0	0.040	mg/L	1:1
Selenium	6010B	07/25/02	07/30/02	0.50	0.10	mg/L	1:1
Silver	6010B	07/25/02	07/30/02	0.034	0.010	mg/L	1:1
Thallium	6010B	07/25/02	07/30/02	0.48	0.10	mg/L	1:1
Vanadium	6010B	07/25/02	07/30/02	0.19	0.050	mg/L	1:1
Zinc	6010B	07/25/02	07/30/02	0.55	0.015	mg/L	1:1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Duplicate Report

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 47105  
**Sample ID** DUP for HBN 155256 [ICPV/3923]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
Antimony	6010B	07/25/02	07/30/02	ND	0.060	mg/L	1:
Arsenic	6010B	07/25/02	07/30/02	ND	0.080	mg/L	1:
Barium	6010B	07/25/02	07/30/02	0.30	0.020	mg/L	1:
Beryllium	6010B	07/25/02	07/30/02	ND	0.0030	mg/L	1:
Cadmium	6010B	07/25/02	07/30/02	ND	0.0050	mg/L	1:
Chromium	6010B	07/25/02	07/30/02	ND	0.010	mg/L	1:
Cobalt	6010B	07/25/02	07/30/02	ND	0.050	mg/L	1:
Copper	6010B	07/25/02	07/30/02	ND	0.020	mg/L	1:
Lead	6010B	07/25/02	07/30/02	ND	0.010	mg/L	1:
Molybdenum	6010B	07/25/02	07/30/02	ND	0.050	mg/L	1:
Nickel	6010B	07/25/02	07/30/02	ND	0.040	mg/L	1:
Selenium	6010B	07/25/02	07/30/02	ND	0.10	mg/L	1:
Silver	6010B	07/25/02	07/30/02	ND	0.010	mg/L	1:
Thallium	6010B	07/25/02	07/30/02	ND	0.10	mg/L	1:
Vanadium	6010B	07/25/02	07/30/02	ND	0.050	mg/L	1:
Zinc	6010B	07/25/02	07/30/02	0.044	0.015	mg/L	1:



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

**Matrix Spike Report**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 47106  
**Sample ID** MS for HBN 155256 [ICPV/3923]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
Antimony	6010B	07/25/02	07/30/02	0.51	0.060	mg/L	1:1
Arsenic	6010B	07/25/02	07/30/02	0.51	0.080	mg/L	1:1
Barium	6010B	07/25/02	07/30/02	0.97	0.020	mg/L	1:1
Beryllium	6010B	07/25/02	07/30/02	0.11	0.0030	mg/L	1:1
Cadmium	6010B	07/25/02	07/30/02	0.19	0.0050	mg/L	1:1
Chromium	6010B	07/25/02	07/30/02	0.47	0.010	mg/L	1:1
Cobalt	6010B	07/25/02	07/30/02	0.19	0.050	mg/L	1:1
Copper	6010B	07/25/02	07/30/02	0.50	0.020	mg/L	1:1
Lead	6010B	07/25/02	07/30/02	0.46	0.010	mg/L	1:1
Molybdenum	6010B	07/25/02	07/30/02	0.48	0.050	mg/L	1:1
Nickel	6010B	07/25/02	07/30/02	0.97	0.040	mg/L	1:1
Selenium	6010B	07/25/02	07/30/02	0.50	0.10	mg/L	1:1
Silver	6010B	07/25/02	07/30/02	0.034	0.010	mg/L	1:1
Thallium	6010B	07/25/02	07/30/02	0.43	0.10	mg/L	1:1
Vanadium	6010B	07/25/02	07/30/02	0.17	0.050	mg/L	1:1
Zinc	6010B	07/25/02	07/30/02	0.55	0.015	mg/L	1:1



Environmental Laboratories

Analytical Laboratory Division  
Mobile Laboratory Division  
Scientific Division

Matrix Spike Duplicate Report

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 47107  
**Sample ID** MSD for HBN 155256 [ICPV/3923]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilute
Antimony	6010B	07/25/02	07/30/02	0.53	0.060	mg/L	1
Arsenic	6010B	07/25/02	07/30/02	0.52	0.080	mg/L	1
Barium	6010B	07/25/02	07/30/02	1.0	0.020	mg/L	1
Beryllium	6010B	07/25/02	07/30/02	0.11	0.0030	mg/L	1
Cadmium	6010B	07/25/02	07/30/02	0.19	0.0050	mg/L	1
Chromium	6010B	07/25/02	07/30/02	0.48	0.010	mg/L	1
Cobalt	6010B	07/25/02	07/30/02	0.20	0.050	mg/L	1
Copper	6010B	07/25/02	07/30/02	0.52	0.020	mg/L	1
Lead	6010B	07/25/02	07/30/02	0.47	0.010	mg/L	1
Molybdenum	6010B	07/25/02	07/30/02	0.50	0.050	mg/L	1
Nickel	6010B	07/25/02	07/30/02	0.96	0.040	mg/L	1
Selenium	6010B	07/25/02	07/30/02	0.49	0.10	mg/L	1
Silver	6010B	07/25/02	07/30/02	0.023	0.010	mg/L	1
Thallium	6010B	07/25/02	07/30/02	0.46	0.10	mg/L	1
Vanadium	6010B	07/25/02	07/30/02	0.20	0.050	mg/L	1
Zinc	6010B	07/25/02	07/30/02	0.54	0.015	mg/L	1



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**Method Blank Report**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 47252  
**Sample ID** MB for HBN 156080 [DIGV/1377]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
Mercury	EPA 7470A	07/26/02	08/01/02	ND0.00020	mg/L		1:1



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**Lab Control Sample Report**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 47253  
**Sample ID** LCS for HBN 156080 [DIGV/1377]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
Mercury	EPA 7470A	07/26/02	08/01/02	0.001070	0.00020	mg/L	



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Lab Control Sample Duplicate Report

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 47254  
**Sample ID** LCSD for HBN 156080 [DIGV/1377]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
Mercury	EPA 7470A	07/26/02	08/01/02	0.001040.00020	mg/L		1:1



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**Duplicate Report**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 47255  
**Sample ID** DUP for HBN 156080 [DIGV/1377]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
Mercury	EPA 7470A	07/26/02	08/01/02	ND0.00020	mg/L		1:



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**Matrix Spike Report**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 47256  
**Sample ID** MS for HBN 156080 [DIGV/1377]  
**Matrix** Water

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<b>Parameter</b>	<b>Method</b>	<b>Prep Date</b>	<b>Analyzed</b>	<b>Result</b>	<b>RL</b>	<b>Units</b>	<b>Dilution</b>
Mercury	EPA 7470A	07/26/02	08/01/02	0.0009800	0.00020	mg/L	1:1



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Matrix Spike Duplicate Report

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**Laboratory ID** 47257  
**Sample ID** MSD for HBN 156080 [DIGV/1377]  
**Matrix** Water

Parameter	Method	Prep Date	Analyzed	Result	RL	Units	Dilution
Mercury	EPA 7470A	07/26/02	08/01/02	0.001000.00020		mg/L	



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#### QC SUMMARY

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**QC Batch** ICPP 3961  
**Matrix** Water

**Original Sample** 14923001  
**Duplicate** [47105]

Parameter	RPD	RPD Limits
Antimony	00	(35)
Arsenic	00	(35)
Barium	2.3	(35)
Beryllium	00	(35)
Cadmium	00	(35)
Chromium	00	(35)
Cobalt	00	(35)
Copper	00	(35)
Lead	00	(35)
Molybdenum	00	(35)
Nickel	00	(35)
Selenium	00	(35)
Silver	00	(35)
Thallium	00	(35)
Vanadium	00	(35)
Zinc	75	(35)



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**QC SUMMARY**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**QC Batch** DIG 1383  
**Matrix** Water

**Original Sample** 14923001  
Duplicate [47255]

Parameter	RPD	RPD Limits
Mercury	0000	(35)



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QC SUMMARY

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**QC Batch** VGX 2369  
**Matrix** Water

**Original Samples** 14924001  
Matrix Spike [46515]  
Matrix Spike Duplicate [46516]

Parameter	Spike % Recovery	Spike Dup % Recovery	Recovery Limits	RPD	RPD Limits
TPHgas	115	110	(65-135)	4.4	(20 MAX)



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#### QC SUMMARY

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**QC Batch** VMX 2018  
**Matrix** Water

**Original Samples** 14923004  
Matrix Spike [46520]  
Matrix Spike Duplicate [46521]

Parameter	Spike % Recovery	Spike Dup % Recovery	Recovery Limits	RPD	RPD Limits
1,1-Dichloroethene	126	132	(61-145)	4.7	(20 MAX)
Benzene	98	104	(76-127)	5.9	(20 MAX)
Trichloroethene	92	98	(71-135)	6.3	(20 MAX)
Toluene	92	98	(76-130)	6.3	(20 MAX)
Chlorobenzene	94	98	(75-130)	4.2	(20 MAX)



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QC SUMMARY

Client ID Shaw Environmental & Infrastructure  
Workorder ID 830714 Former Church's Chicken  
QC Batch VMX 2019  
Matrix Water

Original Samples 14923004  
Matrix Spike [46525]  
Matrix Spike Duplicate [46526]

Parameter	Spike % Recovery	Spike Dup % Recovery	Recovery Limits	RPD	RPD Limits
Tertiary butanol	112	112	(76-135)	00	(20 MAX)
Methyl-tert-butyl-ether	98	96	(76-135)	2.1	(20 MAX)
Di-isopropyl ether	92	88	(76-135)	4.4	(20 MAX)
Ethyl tert-butyl ether	92	90	(76-135)	2.2	(20 MAX)
Tertiaryamyl methylether	90	88	(76-135)	2.2	(20 MAX)



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### QC SUMMARY

Client ID	Shaw Environmental & Infrastructure		
Workorder ID	830714 Former Church's Chicken		
QC Batch	ICPP 3961	Original Samples	14923001
Matrix	Water		Matrix Spike [47106]
			Matrix Spike Duplicate [47107]

Parameter	Spike % Recovery	Spike Dup % Recovery	Recovery Limits	RPD	RPD Limits
Antimony	103	105	(25-125)	1.9	(35 MAX)
Arsenic	102	104	(75-125)	1.9	(35 MAX)
Barium	131	137	(75-125)	4.5	(35 MAX)
Beryllium	107	108	(75-125)	0.90	(35 MAX)
Cadmium	94	97	(75-125)	3.1	(35 MAX)
Chromium	94	96	(75-125)	2.1	(35 MAX)
Cobalt	94	98	(75-125)	4.2	(35 MAX)
Copper	100	104	(75-125)	3.9	(35 MAX)
Lead	93	95	(75-125)	2.1	(35 MAX)
Molybdenum	97	99	(75-125)	2.0	(35 MAX)
Nickel	97	96	(75-125)	1.0	(35 MAX)
Selenium	100	98	(75-125)	2.0	(35 MAX)
Silver	67	45	(25-125)	39	(35 MAX)
Thallium	86	92	(50-125)	6.7	(35 MAX)
Vanadium	84	100	(75-125)	17	(35 MAX)
Zinc	106	104	(75-125)	1.9	(35 MAX)



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**QC SUMMARY**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**QC Batch** DIG 1383  
**Matrix** Water

**Original Samples** 14923001  
Matrix Spike [47256]  
Matrix Spike Duplicate [47257]

<b>Parameter</b>	<b>Spike % Recovery</b>	<b>Spike Dup % Recovery</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>RPD Limits</b>
Mercury	98.0	100	(75-125)	2.02	(35 MAX)



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#### QC SUMMARY

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**QC Batch** SGX 1775  
**Matrix** Water

**Samples** Lab Control Sample [46473]  
Lab Control Sample Duplicate [46474]

Parameter	Check % Recovery	Check Dup % Recovery	Recovery Limits	RPD	RPD Limits
TPHdiesel	75	78	(65-135)	3.9	(20 MAX)



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#### QC SUMMARY

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**QC Batch** VGX 2369  
**Matrix** Water

**Samples** Lab Control Sample [46513]  
Lab Control Sample Duplicate [46514]

Parameter	Check % Recovery	Check Dup % Recovery	Recovery Limits	RPD	RPD Limits
TPHgas	110	110	(65-135)	00	(20 MAX)



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### QC SUMMARY

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**QC Batch** VMX 2018  
**Matrix** Water

**Samples** Lab Control Sample [46518]  
Lab Control Sample Duplicate [46519]

Parameter	Check % Recovery	Check Dup % Recovery	Recovery Limits	RPD	RPD Limits
1,1-Dichloroethene	126	132	(65-145)	4.7	(20 MAX)
Benzene	98	114	(71-127)	15	(20 MAX)
Trichloroethene	92	108	(75-135)	16	(20 MAX)
Toluene	94	110	(76-135)	16	(20 MAX)
Chlorobenzene	92	108	(76-135)	16	(20 MAX)



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**QC SUMMARY**

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**QC Batch** VMX 2019  
**Matrix** Water

**Samples** Lab Control Sample [46523]  
Lab Control Sample Duplicate [46524]

Parameter	Check % Recovery	Check Dup % Recovery	Recovery Limits	RPD	RPD Limits
Tertiary butanol	106	100	(76-135)	5.8	(20 MAX)
Methyl-tert-butyl-ether	98	100	(76-135)	2.0	(20 MAX)
Di-isopropyl ether	90	92	(76-135)	2.2	(20 MAX)
Ethyl tert-butyl ether	92	92	(76-135)	00	(20 MAX)
Tertiaryamyl methylether	90	90	(76-135)	00	(20 MAX)



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### QC SUMMARY

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**QC Batch** ICPP 3961  
**Matrix** Water

**Samples** Lab Control Sample [47103]  
Lab Control Sample Duplicate [47104]

Parameter	Check % Recovery	Check Dup % Recovery	Recovery Limits	RPD	RPD Limits
Antimony	109	110	(70-120)	0.90	(20 MAX)
Arsenic	104	106	(80-120)	1.9	(20 MAX)
Barium	114	113	(80-120)	0.90	(20 MAX)
Beryllium	107	107	(80-120)	00	(20 MAX)
Cadmium	100	100	(80-120)	00	(20 MAX)
Chromium	98	101	(80-120)	3.0	(20 MAX)
Cobalt	102	102	(80-120)	00	(20 MAX)
Copper	104	104	(80-120)	00	(20 MAX)
Lead	100	100	(80-120)	00	(20 MAX)
Molybdenum	98	98	(80-120)	00	(20 MAX)
Nickel	100	101	(80-120)	1.0	(20 MAX)
Selenium	96	99	(80-120)	3.1	(20 MAX)
Silver	76	67	(60-120)	13	(20 MAX)
Thallium	96	96	(80-120)	00	(20 MAX)
Vanadium	97	96	(80-120)	1.0	(20 MAX)
Zinc	110	110	(80-120)	00	(20 MAX)



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#### QC SUMMARY

**Client ID** Shaw Environmental & Infrastructure  
**Workorder ID** 830714 Former Church's Chicken  
**QC Batch** DIG 1383  
**Matrix** Water

**Samples** Lab Control Sample [47253]  
Lab Control Sample Duplicate [47254]

Parameter	Check % Recovery	Check Dup % Recovery	Recovery Limits	RPD	RPD Limits
Mercury	107	104	(80-120)	2.84	(20 MAX)

**WORKORDER DATA SHEET**

Aug 06, 2002 08:47

ID 14924 WO #14924 830714 Former Church's Chicken STATUS CO  
 DESC JR

CREATED	07/12/02 01:45	PO 830714	QA	TYPE CM	ACODE REPORT_WO
CLIENT	Shaw Shaw Environmental & Infrastructure				
PROFILE	10213 Standard Standard w/o discount				

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**WORKORDER SAMPLES**

1	14924001	14924001	MW-1		
	RP	TYPE SAMPLE		MATRIX	Water
	COLLECTED	07/11/02 00:00	COMPLETED	08/02/02 12:34	DUE
					07/25/02 17:00

<u>Analyses</u>		<u>Turndays</u>
OXG/60W	8260B OXYGENATES WATR	10
8260 WATR	8260B GCMS VOLATILES WATR	10
8015M_G W	TPH Gas WATR	10
8015M_D W	TPHdiesel Water	10
1664TRPHW	TRPH 1664, Water	10
CAM16WATR	6010B ELEMENTS CAM16 WATER	10

2	14924002	14924002	MW-2		
	RP	TYPE SAMPLE		MATRIX	Water
	COLLECTED	07/11/02 00:00	COMPLETED	08/02/02 12:34	DUE
					07/25/02 17:00

<u>Analyses</u>		<u>Turndays</u>
OXG/60W	8260B OXYGENATES WATR	10
8260 WATR	8260B GCMS VOLATILES WATR	10
8015M_G W	TPH Gas WATR	10
8015M_D W	TPHdiesel Water	10
1664TRPHW	TRPH 1664, Water	10
CAM16WATR	6010B ELEMENTS CAM16 WATER	10

3	14924003	14924003	MW-3		
	RP	TYPE SAMPLE		MATRIX	Water
	COLLECTED	07/11/02 00:00	COMPLETED	08/02/02 12:34	DUE
					07/25/02 17:00

<u>Analyses</u>		<u>Turndays</u>
OXG/60W	8260B OXYGENATES WATR	10
8260 WATR	8260B GCMS VOLATILES WATR	10
8015M_G W	TPH Gas WATR	10
8015M_D W	TPHdiesel Water	10
1664TRPHW	TRPH 1664, Water	10
CAM16WATR	6010B ELEMENTS CAM16 WATER	10

**WORKORDER DATA SHEET**

Aug 06, 2002 08:47

4	14924004	14924004	MW-4		
	RP	TYPE SAMPLE		MATRIX	Water
COLLECTED	07/11/02 00:00	COMPLETED	08/02/02 12:34	DUE	07/25/02 17:00

**Analyses** **Turndays**

OXG/60W	8260B OXYGENATES WATR	10
8260 WATR	8260B GCMS VOLATILES WATR	10
8015M_G W	TPH Gas WATR	10
8015M_D W	TPHdiesel Water	10
1664TRPHW	TRPH 1664, Water	10
CAM16WATR	6010B ELEMENTS CAM16 WATER	10

5	14924005	14924005	MW-5		
	RP	TYPE SAMPLE		MATRIX	Water
COLLECTED	07/11/02 00:00	COMPLETED	08/02/02 12:34	DUE	07/25/02 17:00

**Analyses** **Turndays**

OXG/60W	8260B OXYGENATES WATR	10
8260 WATR	8260B GCMS VOLATILES WATR	10
8015M_G W	TPH Gas WATR	10
8015M_D W	TPHdiesel Water	10
1664TRPHW	TRPH 1664, Water	10
CAM16WATR	6010B ELEMENTS CAM16 WATER	10

6	14924006	14924006	Trip Blank		
	RP	TYPE SAMPLE		MATRIX	Water
COLLECTED	07/11/02 00:00	COMPLETED	07/16/02 09:14	DUE	07/25/02 17:00

**Analyses** **Turndays**

OXG/60W	8260B OXYGENATES WATR	10
8260 WATR	8260B GCMS VOLATILES WATR	10
8015M_G W	TPH Gas WATR	10

**THREE-POINT STUDY LABORATORY ANALYSIS REQUEST FORM**

SHAW Environmental & Infrastructure, Inc.

1326 North Market Boulevard, Sacramento, CA 95834

Purchase Order: # 189348 for 2nd Qtr. 2002

## Lab: Sparger Technology, Sacto