DRAFT
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
MARCH 2005 SAMPLING EVENT
BASE LANDFILL
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

CONTRACT N62470-03-D-4007
TASK ORDER 0019

Prepared For:

Naval Facilities Engineering Command
1510 Gilbert Street
Norfolk, VA 23511-2699

Prepared By:

Michael Baker Jr., Inc.

100 Airside Drive
Moon Township, PA 15108
Tel: 412-269-6000

6330 Newtown Road, Suite 309
Norfolk, VA 23502
Tel: 757-461-5335

June 7, 2005

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

ACRONYMS AND ABBREVIATIONS

Baker	Baker Environmental, Inc.
CRQL	Contract Required Quantitation Limits
EPA	United States Environmental Protection Agency
ft/day	feet per day
ft/ft	feet per foot
NAVFAC Atlantic	Naval Facilities Engineering Command, Atlantic Division
MCL	Maximum Contaminant Level
mg/L	milligrams per liter
msl	mean sea level
NAPR	Naval Activity Puerto Rico
PREQB	Puerto Rico Environmental Quality Board
QA	Quality Assurance
RBC	Risk Based Concentration
SAP	Sampling and Analysis Plan
VOC	Volatile Organic Compound

1.0 INTRODUCTION

This Semi-Annual Groundwater Monitoring Report has been prepared by Baker Environmental, Inc. (Baker) under Cape Environmental, Inc. Task Order 19 to contract N62470-03-D-4007, Indefinite Quantity Contract for Environmental Services for Naval Activities under the Atlantic Division, Naval Facilities Engineering Command (NAVFAC ALTANTIC). This report has been prepared to present results of the March 2005 Semi-Annual Groundwater Monitoring Sampling at Naval Activity Puerto Rico (NAPR) Solid Waste Landfill.

At the present time, the Navy is anticipating closure of the active areas of the landfill during 2005. A Draft Final Closure Plan and Work Plan for Existing landfill Closure were submitted to the Puerto Rico Environmental Quality Board (PREQB) and the United States Environmental Protection Agency (EPA) on December 8, 2004 PREQB approved the December 8, 2004 submittal in their letter dated March 2, 2005. NAPR provided clarification to the PREQB letter dated March 2, 2005 in a letter dated April 24, 2005. The EPA provided comments on the closure plan and work plan on March 11, 2005. The Navy responded to the EPA comments in a letter dated May 5, 2005. Copies of the revised draft Closure Plan and Work Plan were also included with this letter.

1.1 Purpose of Sampling

The Solid Waste Landfill Facility at NAPR has been in operation since the mid- 1960s on approximately 85 acres of land in the southeastern area of the base. The active landfill is approximately 36 acres and is located within the limits of the inactive 85-acre landfill. It is positioned on a peninsula bounded by Ensenada Honda to the west and Puerca Bay to the south and east. A site map is provided in Figure 1-1.

Continued use of this landfill required implementation of a Groundwater Sampling and Analysis Plan (SAP). Monitor wells were installed and background sampling at the facility was performed from June 1998 through August 2000 in nine wells. These results were presented in the Background Groundwater Monitoring Report submitted by Burns and McDonnell (2001).

Subsequent to the background sampling events, replacement of six wells was performed by Baker to restore the integrity of the wells for compliance sampling. Three existing wells were retained for compliance sampling including R7GW09, R7GW10, and R7GW11. Six rounds of semi-

annual compliance sampling have been performed on these wells (new and existing) in March 2002, September 2002, March 2003, September 2003, March 2004, and September 2004, with results presented in the Draft Semi-Annual Groundwater Monitoring Reports (Baker, 2002, 2003a, 2003b, 2004a, 2004b, 2005). The seventh round of semi-annual compliance sampling was performed on all nine monitor wells in March 2005 with results provided in this document.

1.2 Background Concentrations

Prior to the initiation of compliance round sampling, the background groundwater concentrations of parameters on the Appendix I volatile organic compounds (VOCs) and metals lists were to be established through the results of four sampling events. Although four sampling events occurred during background sampling, results for some analytes on the Appendix I lists were not obtained during these sampling events. At the completion of the September 2002 compliance sampling round, there were four concentration results for all Appendix I analytes, both volatile organic compounds and metals, at each well. Recommendations were made in previous reports to include subsequent compliance round results for those particular analytes in the background data set. In the March 2003 Monitoring Report, a final discussion of the background groundwater quality data and related statistics was included (Baker, 2003b). Appendix A contains the complete background groundwater quality statistics for the landfill facility. Comparison of current analytical results to background groundwater quality will be done in Section 3.0.

The March 2004 semi-annual groundwater monitoring report (Baker, 2004b) provided the recommendation that the first four-compliance round sample results (March 2002, September 2002; March 2003, and September 2003) be used to establish background comparison criteria for thallium and beryllium because these were not quantified during background sampling. This recommendation was implemented in the September 2004 report (Baker 2005), and the resulting background statistics for these two compounds were added to Appendix A.

1.3 Report Organization

The report is organized into five sections including this introduction. Section 2 describes the monitoring activities while Section 3 provides the results of the groundwater monitoring event. This section also includes a discussion of the results relative to background data and other comparison criteria. Section 4 provides conclusions and recommendations. Lastly, Section 5 consists of the references.

2.0 MONITORING ACTIVITIES

2.1 Groundwater Sampling

The sampling event for the semi-annual groundwater monitoring at the Solid Waste Landfill Facility occurred March 2, 2005. Nine monitor wells were sampled, and the groundwater samples were sent to a fixed-base laboratory to be analyzed for Appendix I Compounds, including VOCs and metals compounds. A list of these compounds and the analytical methods used along with the contract required quantitation limits (CRQL) are presented in Table 2-1. Chains of custody records for this investigation are presented in Appendix B.

Field parameters were obtained and sampling occurred according to the procedures listed in the SAP (Burns and McDonnell, 1999). Specifically, measurements of temperature, pH, and specific conductivity, were obtained. The multi-meter was calibrated prior to beginning the sampling. The results of the field analyses are presented in Table 2-2. Flow rates used during stabilization were approximately 0.2 – 0.3 Liters/minute, the lowest flow rate available with the peristaltic pump.

Two deviations from the sampling plan were made. First, total depth readings could not be taken in the wells due to an equipment malfunction. Also, while purging two wells, R7GW04R and R7GW07R2, it was noticed that they did not recover during purging (see Table 2-2). It is unknown why these two wells did not recover at similar rates to the other wells at the Landfill. All field notes are given in Appendix C.

2.2 Groundwater Flow

The groundwater elevations at the Solid Waste Landfill Facility were collected on March 3, 2005. Table 2-3 shows a summary of the groundwater elevation information from this round. It should be noted that the datum used is the mean sea level (msl) + 100 feet.

Figure 2-1 depicts the groundwater elevations from March 3, 2005 in the form of contours on a site map. The contours were developed numerically using the natural neighbor algorithm with a gradient nodal function interpolation scheme. Control points were not used. It was noted that two wells, R7GW04R and R7GW07R2, exhibited anomalous elevations, not consistent with the

typical groundwater flow at the site, In addition, as shown in Table 2-2, these two wells were not purged at a rate below their recovery rate during the sampling activity. Due to these two circumstances, the groundwater elevations from these two wells were not used in drawing the contours. Some modifications of the contour lines were done manually.

As shown, the highest groundwater elevation is located at R7GW11. This is to be expected because this well is located the furthest inland. Consistent highs at this location have been seen throughout the background and compliance sampling events. Another local groundwater high is seen at R7GW01R, near the Forrestal Wastewater Treatment Plant. This well is also at an inland location. Radial groundwater flow occurs from this location toward the coasts in the west, south, and east directions. There is a fairly large area of the landfill where the groundwater levels indicate little or no flow.

Three groundwater gradients were calculated from the contour drawings of the piezometric surface. The locations where the gradients were calculated from are also shown on Figure 2-1. Table 2-4 shows the summary of gradients calculated from these drawings. Also shown is the calculated groundwater velocity for each gradient. The equation used to calculate the groundwater velocity is the Darcy equation:

$$V = Ki/n$$

Where: V = average linear groundwater velocity [feet per day (ft/day)]
K = average hydraulic conductivity (ft/day)
i = hydraulic gradient [feet per foot (ft/ft)]
n = effective porosity

The hydraulic conductivity was assumed to be 0.945 ft/day as determined from Burns and McDonnell hydraulic conductivity testing, and the porosity was assumed to be 0.3 (Burns and McDonnell, 2001). Based on these assumptions, the average groundwater velocities at the Solid Waste Landfill Facility ranged from 0.0048 to 0.0126 ft/day during the semi-annual monitoring investigation. The composite average groundwater velocity at this site was 0.0093 ft/day. The average groundwater velocity at the site was approximately 24 percent lower than during the September 2004 sampling event (Baker, 2005), but still was higher than during the March 2004 sampling event.

2.3 Field Observations

It was noted that the well casing of well R7GW05R wobbles and that root growth was present in well R7GW10. Total depth measurements could not be obtained due to equipment malfunction. When the sampling effort was completed, the metal casing of each well was secured with plastic zip ties per directive from the NAPR Public Works Department. Well R7GW11 was not secured with a plastic zip tie because it is a flush mount well secured with bolts.

3.0 RESULTS OF GROUNDWATER MONITORING EVENT

The results of the Appendix I analyses are given in Table 3-1. Only compounds with positive detections are given in this table. Appendix D contains the complete set of validated Appendix I analyses results. Appendix E contains the certification from a Puerto Rican chemist, along with copies of the raw laboratory analytical summary results.

3.1 Volatile Organic Compounds

Two VOCs were detected at a total of two locations in the groundwater during March 2005. These were chlorobenzene and cis 1,2-dichloroethene (estimated concentration). Both cis 1,2-dichloroethene and chlorobenzene were found at well R7GW05. Cis 1,2-dichloroethene was found at R7GW05 during September 2004 (Baker 2005). Chlorobenzene was also found at R7GW10. This compound was found at R7GW10 during the last sampling event as well (Baker, 2005).

3.2 Inorganic Compounds

Nine metals on the Appendix I list were detected in this sampling event. These metals include arsenic, barium, beryllium, cadmium, chromium, cobalt, nickel, vanadium, and zinc. The analyses were done on both unfiltered and filtered samples to obtain total metals and dissolved metals. Beryllium was only detected in the filtered samples. In all cases, very low concentrations of metals were obtained, less than 0.16 milligrams per liter (mg/L). Well R7GW04R exhibited the most detected compounds (six), consistent with previous sampling events.

3.3 Data Quality Control and Validation

One duplicate sample was collected from R7GW02R. The results of those analyses are presented alongside the original sample in Table 3-1. Good correlation is shown between the results for the two samples for detections above the reporting limit. When the concentrations were estimated, slight discrepancies can be seen, as in the case of nickel and vanadium. Nickel was not detected in the original sample, but was estimated in the duplicate sample. The duplicate sample results will be used in the discussion when higher than the original sample.

Appendix D contains the complete set of analytical results for the quality control samples. Quality control samples included one trip blank sample, one field blank sample of lab grade deionized water, and one equipment rinsate sample of the tubing used with the peristaltic pump. Also included were matrix spike and matrix spike duplicate samples. There was one positive detection of the VOC toluene in both the equipment rinsate and field blank quality control samples obtained during this compliance round. Copper was the only metal detected in both the field blank and the equipment rinsate, as shown in Table 3-2. Zinc was also detected in the field blank.

A detailed and independent data validation was performed by Cape Environmental, Inc. to verify the qualitative and quantitative reliability of the data presented and adherence to stated analytical protocols. This review included a detailed review and interpretation of all the data generated by the laboratory for data quality Level D deliverables. The primary tools that were utilized by the experienced data validation personnel included analytical method operating procedures, Statement of Work for CLP guidance documents, EPA Region II guidelines for data validation, established criteria, and professional judgement.

The data validation reports stated that the overall laboratory performance and overall data quality was acceptable with the required qualifications. The reported results are accepted as reported by the laboratory with the noted qualifications. Several metals compound results were qualified as estimated when found below the reporting limit but above the method detection limit. Two metals detected in the quality control samples resulted in qualifying the resulting environmental samples as non-detect if concentrations were less than five times the concentrations found in the quality control samples. In two instances where non-estimated results revealed that the dissolved metal concentration exceeded the total metal concentration, the resulting data was qualified as estimated. The detection limit of the compound trichlorfluoromethane was qualified as rejected due to the percent recovery being below the acceptance criteria in the lab control sample. This compound was not found to be present in any environmental samples. Data validation reports were prepared by the data validator that provided the back-up information accompanying the qualifying statements presented in the quality assurance (QA) review. The validation report narratives can be found in Appendix F.

3.4 Criteria Comparison and Statistical Analyses

The compliance groundwater concentration data were compared to the Federal Maximum Contaminant Level (MCL) and the background concentrations for each compound. When a Federal MCL was not established for a particular compound or compounds, the tap water risk-based criteria (RBC) were used for comparison. The compliance groundwater concentration data were also compared to the established background groundwater quality data as given in Appendix A. Background groundwater quality data includes the upper limit of the mean and the upgradient concentrations as found during the background monitoring events. Background groundwater quality data was developed in Baker (2003b) and finalized in Baker (2005) for two additional compounds.

Table 3-3 presents the compliance round concentrations for all detected compounds in the current compliance round sampling event and the corresponding criteria for comparison. These criteria include the Federal MCL, the overall background upper limit of the means, and the upgradient background concentrations. Also shown for comparison on Table 3-3 is the well-specific background average or maximum for intrawell comparison.

3.4.1 Volatile Organic Compounds

Neither chlorobenzene nor cis 1,2-dichloroethene was detected at a level above background, or at a level exceeding the Federal MCL for those compounds.

3.4.2 Inorganic Compounds

There were no exceedances of Federal MCLs for metals on the Appendix I list during the current compliance round. Cadmium exceeded the overall background upper limit of means. This compound had a frequency of detection category of “C” (less than 50 percent) in its background data set. Therefore, the background statistics are not absolutely quantified and comparison statistics are not valid (Baker, 2003b).

It should be noted that higher concentrations of inorganic compounds were found in September 2004, potentially a result of the higher groundwater elevations at the landfill during that time. During the current event, the concentrations are again lower, correlating with the lower groundwater elevations during the last event.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The primary conclusion of this report is that there is no contamination resulting from the continued use of the Solid Waste Landfill Facility. Previously elevated concentrations of cadmium and lead were not present during the current sampling event. Groundwater elevations are lower than they were during September 2004, reflecting a return to average climatological conditions.

It is recommended that the semi-annual monitoring as developed be continued at this facility.

The CRQL for antimony and thallium are higher than the Federal MCL. It is recommended that the CRQL for these compounds be reduced, if possible, to match the Federal MCL. It is recommended that these two metals be analyzed by EPA SW846/6020 ICP/MS to obtain CRQL's below the Federal MCL.

5.0 REFERENCES

Baker Environmental, Inc. (Baker), 2002. *Draft Semi-Annual Groundwater Monitoring Report March 2002 Sampling Event,* Base Landfill, Naval Station Roosevelt Roads, Ceiba, Puerto Rico. September 11, 2002.

Baker, 2003a. *Draft Semi-Annual Groundwater Monitoring Report September 2002 Sampling Event,* Base Landfill, Naval Station Roosevelt Roads, Ceiba, Puerto Rico. January 6, 2003.

Baker, 2003b. *Draft Semi-Annual Groundwater Monitoring Report March 2003 Sampling Event,* Base Landfill, Naval Station Roosevelt Roads, Ceiba, Puerto Rico. June 26, 2003.

Baker, 2004a. *Draft Semi-Annual Groundwater Monitoring Report September 2003 Sampling Event,* Base Landfill, Naval Station Roosevelt Roads, Ceiba, Puerto Rico. January 22, 2004.

Baker, 2004b. *Draft Semi-Annual Groundwater Monitoring Report March 2004 Sampling Event,* Base Landfill, Naval Activity Puerto Rico, Ceiba, Puerto Rico. June 26, 2004.

Baker, 2005. *Draft Semi-Annual Groundwater Monitoring Report September 2004 Sampling Event,* Base Landfill, Naval Activity Puerto Rico, Ceiba, Puerto Rico. January 26, 2005.

Burns and McDonnell, 1999. *Groundwater Sampling and Analysis Plan*, Solid Waste Landfill Facility, NSRR, Puerto Rico, April 1999.

Burns and McDonnell, 2001. *Background Groundwater Monitoring Report*, Solid Waste Landfill Facility, NSRR, Puerto Rico, May 2001.

TABLES

TABLE 2-1

METHOD PERFORMANCE LIMITS
APPENDIX I COMPOUND LIST AND CONTRACT
REQUIRED QUANTITATION LIMITS (CRQL)

Volatiles	Quantitation Limits Water (ug/L)	Method Number
Acetone	50	8260
Acrylonitrile	100	8260
Benzene	5	8260
Bromochloromethane	5	8260
Bromodichloromethane	5	8260
Bromoform	5	8260
Carbon Disulfide	5	8260
Carbon tetrachloride	5	8260
Chlorobenzene	5	8260
Chloroethane	10	8260
Chloroform	5	8260
Dibromochloromethane	5	8260
1,2-Dibromo-3-chloropropane	5	8260
1,2-Dibromoethane (EDB)	5	8260
1,2-Dichlorobenzene	5	8260
1,4-Dichlorobenzene	5	8260
trans-1,4-Dichloro-2-butene	10	8260
1,1-Dichloroethane	5	8260
1,2-Dichloroethane	5	8260
1,1-Dichloroethene	5	8260
cis-1,2-Dichloroethene	5	8260
trans-1,2-Dichloroethene	5	8260
1,2-Dichloropropane	5	8260
cis-1,3-Dichloropropene	5	8260
trans-1,3-Dichloropropene	5	8260
Ethylbenzene	5	8260
2-Hexanone	25	8260
Bromomethane	10	8260
Chloromethane	10	8260
Dibromomethane	5	8260
Dichloromethane	5	8260
2-Butanone (MEK)	25	8260
Iodomethane	5	8260
4-Methyl-2-pentanone (MIBK)	25	8260
Styrene	5	8260
1,1,1,2-Tetrachloroethane	5	8260
1,1,2,2-Tetrachloroethane	5	8260
Tetrachloroethene	5	8260
Toluene	5	8260
1,1,1-Trichloroethane	5	8260
1,1,2-Trichloroethane	5	8260
Trichloroethene	5	8260
Trichlorofluoromethane	5	8260
1,2,3-Trichloropropane	5	8260
Vinyl acetate	10	8260
Vinyl chloride	10	8260
Xylenes, Total	10	8260

TABLE 2-1

METHOD PERFORMANCE LIMITS
APPENDIX I COMPOUND LIST AND CONTRACT
REQUIRED QUANTITATION LIMITS (CRQL)

Total and Dissolved Metals	Quantitation Limits Water (mg/L)	Method Number
Antimony	0.02	6010
Arsenic	0.01	6010
Barium	0.01	6010
Beryllium	0.004	6010
Cadmium	0.005	6010
Chromium	0.01	6010
Cobalt	0.01	6010
Copper	0.02	6010
Lead	0.005	6010
Nickel	0.04	6010
Selenium	0.01	6010
Silver	0.01	6010
Thallium	0.01	6010
Vanadium	0.01	6010
Zinc	0.02	6010

Notes:
ug/L - micrograms per liter.
mg/L - milligrams per liter.

TABLE 2-2

SUMMARY OF GROUNDWATER FIELD PARAMETERS
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Well ID/ Sample Date	Time Interval	Static Water Level (feet from top of PVC)	Temperature (^{O}F)	pH (S.U.)	Specific Conductance (uS/cm)	Sample Description
R7GW01R-11 3/2/05	1305	7.39				Sample slightly cloudy with some small black floating debris and contained a strong sulfur odor.
	1315	7.55	84.83	6.35	12,600	
	1320	7.53	83.91	6.15	11,330	
	1325	7.54	83.93	6.13	8,990	
	1330	7.53	83.97	6.17	7,550	
	1335	7.53	83.82	6.24	6,690	
	1340	7.53	83.91	6.21	5,960	
R7GW02R-11 3/2/05	0930	5.29				Sample appeared slightly cloudy with a strong sulfur odor.
	0936	5.70	83.61	6.65	28,140	
	0942	5.71	83.28	6.56	26,140	
	0948	5.72	83.30	6.54	25,600	
	0953	5.77	83.21	6.54	25,450	
R7GW04R-11 3/2/05	1129	12.20				Sample appeared slightly cloudy with a slight sulfur odor.
	1136	14.05	85.32	6.46	55,950	
	1141	15.35	84.38	6.21	55,870	
	1146	16.10	84.61	6.27	56,140	
	1151	16.90	84.49	6.25	56,960	
R7GW05R-11 3/2/05	1557	14.50				Sample appeared relatively clear with some small floating black debris and a strong sulfur odor.
	1602	14.66	84.45	6.49	32,040	
	1607	14.66	83.89	6.35	28,430	
	1612	14.66	83.77	6.29	24,590	
	1617	14.70	83.73	6.24	22,110	
	1622	14.70	83.68	6.22	21,200	
	1627	14.70	83.55	6.22	20,870	
R7GW07R2-11 3/2/05	1716	13.10				Sample appeared to be relatively clear, with no odor.
	1721	14.57	86.16	6.56	3,880	
	1726	14.70	85.53	6.42	4,750	
	1731	14.88	85.19	6.4	5,130	
	1736	14.94	84.97	6.42	5,540	
	1741	14.98	85.19	6.37	6,020	
	1746	15.01	85.06	6.37	6,210	
R7GW08R-11 3/2/05	1758	11.10				Sample appeared to be slightly cloudy with a slight sulfur odor.
	1803	11.36	81.75	6.43	19,450	
	1808	11..39	81.77	6.38	19,050	
	1813	11.38	81.70	6.34	19,010	
R7GW09-11 3/2/05						Sample appeared relatively clear with small black floating debris and a strong sulfur odor.
	1048	9.75				
	1054	9.79	84.40	6.51	53,660	
	1059	9.79	83.32	6.48	51,700	
	1104	9.79	83.12	6.41	51,310	
	1109	9.79	82.89	6.39	50,430	

TABLE 2-2

SUMMARY OF GROUNDWATER FIELD PARAMETERS
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Well ID/ Sample Date	Time Interval	Static Water Level (feet from top of PVC)	Temperature (^{O}F)	pH (S.U.)	Specific Conductance (uS/cm)	Sample Description
R7GW10-11 3/2/05	1639	13.48				Sample appeared to have a slightly yellowish tint with no apparent odor.
	1644	13.73	85.53	6.52	3,210	
	1649	13.77	84.72	6.30	3,170	
	1654	13.77	84.85	6.24	3,120	
	1659	13.77	85.03	6.24	3,100	
R7GW11-11 3/2/05	1355	5.90				Sample appeared slightly cloudy with no apparent odor.
	1400	6.01	86.70	6.42	1,150	
	1405	6.00	86.00	6.07	1,140	
	1410	6.01	85.62	6.06	1,140	
	1415	6.01	85.46	6.03	1,140	

Notes:

PVC - Polyvinyl chloride.

^{o} F - Degrees Fahrenheit.

S.U. - Standard Unit.

uS/cm - micro semens per centimeter.

TABLE 2-3

GROUNDWATER ELEVATION SUMMARY
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Well No.	Date Sampled	Top of PVC Elevation (feet msl)	Depth to Water (feet from top of PVC)	Groundwater Elevation (feet msl)
R7GW01R	03/03/05	108.90	7.39	101.51
R7GW02R	03/03/05	105.11	5.29	99.82
R7GW04R	03/03/05	112.39	12.20	100.19
R7GW05R	03/03/05	113.73	14.50	99.23
R7GW07R2	03/03/05	114.78	13.10	101.68
R7GW08R	03/03/05	111.33	11.10	100.23
R7GW09	03/03/05	109.69	9.75	99.94
R7GW10	03/03/05	113.96	13.48	100.48
R7GW11	03/03/05	110.20	5.90	104.30

Notes:
msl - mean sea level + 100 feet.
PVC - Polyvinyl Chloride.

TABLE 2-4

GROUNDWATER VELOCITY CALCULATIONS
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Event	Line Location	Line Length (ft)	Head Difference (ft)	Gradient (I)	Velocity (ft/day)
3/3/2005	1	1000.00	4.00	0.00400	0.0126
3/3/2005	2	1220.00	4.00	0.00328	0.0103
3/3/2005	3	2600.00	4.00	0.00154	0.0048

Assumption:	K =	0.945 ft/day
Assumption:	n =	0.3
V = Ki/n		

SUMMARY	
average gradient =	0.00294 ft/ft
minimum groundwater velocity =	0.0048 ft/day
maximum groundwater velocity =	0.0126 ft/day
average groundwater velocity =	0.0093 ft/day

Notes:
K = hydraulic conductivity
n = porosity
ft/day = feet per day

TABLE 3-1

POSITIVE DETECTION SUMMARY
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Site ID	R7GW01R	R7GW02R	R7GW02R (Dup)	R7GW04R	R7GW05R
Sample Description :	R7GW01R-11	R7GW02R-11	R7GW02R-11D	R7GW04R-11	R7GW05R-11
Sample Date/Time :	3/2/2005 13:45	3/2/2005 10:00	3/2/2005 10:00	3/2/2005 11:55	3/2/2005 16:30
Appendix I Volatile Organics (ug/L)					
Chlorobenzene	1 U	1 U	1 U	1 U	0.6 J
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	0.99 J
Appendix I Metals (mg/L)					
Arsenic	0.01 U	0.01 U	0.01 U	0.0065 J	0.01 U
Barium	0.045	0.033 J	0.036	0.16	0.015
Cadmium	0.005 U	0.005 U	0.005 U	0.0018 J	0.005 U
Chromium	0.01 U	0.01 U	0.01 U	0.005 J	0.01 U
Cobalt	0.01 U	0.01 U	0.01 U	0.018 J	0.01 U
Nickel	0.04 U	0.04 U	0.0021 J	0.003 J	0.04 U
Vanadium	0.014	0.011	0.0095 J	0.015 J	0.0093 J
Zinc	0.02 U	0.02 U	0.02 U	0.031	0.02 U
Appendix I Metals (Dissolved) (mg/L)					
Arsenic, (Dissolved)	0.01 U	0.01 U	0.01 U	0.0051 J	0.0077 J
Barium, (Dissolved)	0.045	0.038 J	0.037	0.16	0.015
Beryllium (Dissolved)	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Cobalt (Dissolved)	0.0017 J	0.01 U	0.01 U	0.021 J	0.0045 J
Nickel, (Dissolved)	0.04 U	0.04 U	0.04 U	0.0027 J	0.04 U
Vanadium (Dissolved)	0.014	0.011	0.0093 J	0.015 J	0.0081 J
Zinc, (Dissolved)	0.02 U	0.02 U	0.02 U	0.018 J	0.02 U

Notes:
U - Not Detected
ug/L - micrograms per liter
J - Qualified as Estimated
mg/L - milligrams per liter

TABLE 3-1

POSITIVE DETECTION SUMMARY
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Site ID	R7GW07R2	R7GW08R	R7GW09R	R7GW10R	R7GW11
Sample Description :	R7GW07R2-11	R7GW08R-11	R7GW09-11	R7GW10-11	R7GW11-11
Sample Date/Time :	3/2/2005 17:50	3/2/2005 18:16	3/2/2005 11:11	3/2/2005 17:03	3/2/2005 14:18
Appendix I Volatile Organics (ug/L)					
Chlorobenzene	1 U	1 U	1 U	0.45 J	1 U
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U
Appendix I Metals (mg/L)					
Arsenic	0.007 J	0.0071 J	0.011	0.01 U	0.01 U
Barium	0.16	0.063	0.1	0.016	0.0032 J
Cadmium	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chromium	0.01 U	0.0009 J	0.0015 J	0.0015 J	0.01 U
Cobalt	0.0029 J	0.01 U	0.0092 J	0.00096 J	0.01 U
Nickel	0.04 U	0.002 J	0.04 U	0.04 U	0.04 U
Vanadium	0.0021 J	0.0066 J	0.018 J	0.0025 J	0.0014 J
Zinc	0.02 U	0.02 U	0.0043 J	0.02 U	0.02 U
Appendix I Metals (Dissolved) (mg/L)					
Arsenic, (Dissolved)	0.007 J	0.01 U	0.0065 J	0.01 U	0.01 U
Barium, (Dissolved)	0.16	0.059	0.11	0.016	0.0032 J
Beryllium (Dissolved)	0.004 U	0.004 U	0.00015 J	0.004 U	0.004 U
Cobalt (Dissolved)	0.0035 J	0.0022 J	0.011	0.0052 J	0.0051 J
Nickel, (Dissolved)	0.04 U	0.0033 J	0.04 U	0.0024 J	0.04 U
Vanadium (Dissolved)	0.0021 J	0.0058 J	0.013 J	0.002 J	0.0016 J
Zinc, (Dissolved)	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U

Notes:
U - Not Detected
ug/L - micrograms per liter
J - Qualified as Estimated
mg/L - milligrams per liter

TABLE 3-2

POSITIVE DETECTION SUMMARY OF QUALITY ASSURANCE/QUALITY CONTROL SAMPLE ANALYSES
SEMI-ANNUAL LANDFILL MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

	Equipment Rinsate	Field Blank	Trip Blank
Site ID	R7ER01	R7FB01	R7TB01
Sample Description :	R7ER01-11	R7FB01-11	RTB01-11
Sample Date/Time :	3/2/2005 8:35	3/2/2005 8:30	3/3/2005 0:00
Appendix I Volatile Organics (ug/L)			
Toluene	1.5	1.6	1 U
Appendix I Metals (mg/L)			
Copper	0.0021 J	0.0019 J	NA
Zinc	0.02 U	0.0034 J	NA

Notes:
NA - not analyzed
ug/L - micrograms per liter
mg/L - milligrams per liter
J - Qualified as Estimated
U - not detected

TABLE 3-3

CRITERIA COMPARISON TABLE
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Site ID Sample Purpose				R7GW01 Background Intrawell (1)	R7GW01R Compliance 03/02/05
Volatiles (ug/l)	**Federal MCL (Tap Water RBC)**	*Overall Background Upper Limit of Means*	Upgradient Background Average/Max		
Chlorobenzene	100	0.8	ND	ND	1 U
cis-1,2-Dichloroethene	70	3.1	ND	ND	1 U
Total Metals (mg/l)					
Arsenic	0.01	**0.0219**	ND	ND	0.01 U
Barium	2	0.5372	0.1298	0.174	0.045
Beryllium	0.004	**0.0046**	0.003	0.00315	0.004 U
Cadmium	0.005	0.000602	ND	ND	0.005 U
Chromium	0.1	0.085	0.0259	0.028	0.01 U
Cobalt	NE (0.73)	0.0731	0.0188	0.02445	0.0017 J +
Nickel	NE (0.73)	0.0313	0.0161	0.0022	0.04 U
Vanadium	NE (0.26)	0.0939	0.0402	0.0498	0.014
Zinc	NE (10.95)	4.4103	0.1494	4.066	0.02 U

Background not absolutely quantified, too few detections

Notes:
(1) Intrawell averages determined from detections only,
maximum concentration shown if only one detection
(2) Duplicate concentrations used if higher than original sample
+ - concentrations from dissolved analyses, where higher than total
ND and U - Not Detected
NE - Not Established
J - Qualified as Estimated

Bold--indicates exceedance of Federal MCL or tap water RBC
italics - indicates exceedance of overall background upper limit of means
underline - indicates exceedance of upgradient background average/max

TABLE 3-3

CRITERIA COMPARISON TABLE
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Site ID Sample Purpose				R7GW02 Background Intrawell (1)	R7GW02R Compliance (2) 03/02/05
Volatiles (ug/l)	**Federal MCL (Tap Water RBC)**	*Overall Background Upper Limit of Means*	Upgradient Background Average/Max		
Chlorobenzene	100	0.8	ND	ND	1 U
cis-1,2-Dichloroethene	70	3.1	ND	ND	1 U
Total Metals (mg/l)					
Arsenic	0.01	**0.0219**	ND	**0.0169**	0.01 U
Barium	2	0.5372	0.1298	0.014	0.038 J +
Beryllium	0.004	**0.0046**	0.003	0.00250	0.004 U
Cadmium	0.005	0.000602	ND	ND	0.005 U
Chromium	0.1	0.085	0.0259	0.059	0.01 U
Cobalt	NE (0.73)	0.0731	0.0188	0.0016	0.01 U
Nickel	NE (0.73)	0.0313	0.0161	0.00064	0.0021 J
Vanadium	NE (0.26)	0.0939	0.0402	0.0149	0.011
Zinc	NE (10.95)	4.4103	0.1494	0.1537	0.02 U

Background not absolutely quantified, too few detections

Notes:
(1) Intrawell averages determined from detections only,
maximum concentration shown if only one detection
(2) Duplicate concentrations used if higher than original sample
+ - concentrations from dissolved analyses, where higher than total
ND and U - Not Detected
NE - Not Established
J - Qualified as Estimated
Bold--indicates exceedance of Federal MCL or tap water RBC
italics - indicates exceedance of overall background upper limit of means
underline - indicates exceedance of upgradient background average/max

TABLE 3-3

CRITERIA COMPARISON TABLE
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Site ID Sample Purpose				R7GW04 Background Intrawell (1)	R7GW04R Compliance 03/02/05
Volatiles (ug/l)	**Federal MCL (Tap Water RBC)**	*Overall Background Upper Limit of Means*	Upgradient Background Average/Max		
Chlorobenzene	100	0.8	ND	ND	1 U
cis-1,2-Dichloroethene	70	3.1	ND	ND	1 U
Total Metals (mg/l)					
Arsenic	0.01	**0.0219**	ND	ND	0.0065 J
Barium	2	0.5372	0.1298	0.343	0.16
Beryllium	0.004	**0.0046**	0.003	0.00159	0.004 U
Cadmium	0.005	0.000602	ND	ND	*0.0018* J
Chromium	0.1	0.085	0.0259	0.039	0.005 J
Cobalt	NE (0.73)	0.0731	0.0188	0.0042	0.021 J +
Nickel	NE (0.73)	0.0313	0.0161	0.0011	0.003 J
Vanadium	NE (0.26)	0.0939	0.0402	0.0239	0.015 J
Zinc	NE (10.95)	4.4103	0.1494	0.1864	0.031

Background not absolutely quantified, too few detections

Notes:
(1) Intrawell averages determined from detections only,
maximum concentration shown if only one detection
(2) Duplicate concentrations used if higher than original sample
+ - concentrations from dissolved analyses, where higher than total
ND and U - Not Detected
NE - Not Established
J - Qualified as Estimated

Bold--indicates exceedance of Federal MCL or tap water RBC
italics - indicates exceedance of overall background upper limit of means
underline - indicates exceedance of upgradient background average/max

TABLE 3-3

CRITERIA COMPARISON TABLE
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Site ID Sample Purpose				R7GW05 Background Intrawell (1)	R7GW05R Compliance 03/02/05
Volatiles (ug/l)	**Federal MCL (Tap Water RBC)**	*Overall Background Upper Limit of Means*	Upgradient Background Average/Max		
Chlorobenzene	100	0.8	ND	0.8	0.6 J
cis-1,2-Dichloroethene	70	3.1	ND	1.3	0.99 J
Total Metals (mg/l)					
Arsenic	0.01	**0.0219**	ND	0.0062	0.0077 J
Barium	2	0.5372	0.1298	0.011	0.015
Beryllium	0.004	**0.0046**	0.003	0.0025	0.004 U
Cadmium	0.005	0.000602	ND	ND	0.005 U
Chromium	0.1	0.085	0.0259	0.04	0.01 U
Cobalt	NE (0.73)	0.0731	0.0188	0.0016	0.0045 J +
Nickel	NE (0.73)	0.0313	0.0161	0.00083	0.04 U
Vanadium	NE (0.26)	0.0939	0.0402	0.0215	0.0093 J
Zinc	NE (10.95)	4.4103	0.1494	0.1432	0.02 U

Background not absolutely quantified, too few detections

Notes:
(1) Intrawell averages determined from detections only,
maximum concentration shown if only one detection
(2) Duplicate concentrations used if higher than original sample
+ - concentrations from dissolved analyses, where higher than total
ND and U - Not Detected
NE - Not Established
J - Qualified as Estimated
Bold--indicates exceedance of Federal MCL or tap water RBC
italics - indicates exceedance of overall background upper limit of means
underline - indicates exceedance of upgradient background average/max

TABLE 3-3

CRITERIA COMPARISON TABLE
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Site ID Sample Purpose				R7GW07 Background Intrawell (1)	R7GW07R2 Compliance 03/02/05
Volatiles (ug/l)	**Federal MCL (Tap Water RBC)**	*Overall Background Upper Limit of Means*	Upgradient Background Average/Max		
Chlorobenzene	100	0.8	ND	ND	1 U
cis-1,2-Dichloroethene	70	3.1	ND	ND	1 U
Total Metals (mg/l)					
Arsenic	0.01	**0.0219**	ND	ND	0.007 J
Barium	2	0.5372	0.1298	0.01	0.16
Beryllium	0.004	**0.0046**	0.003	0.002345	0.004 U
Cadmium	0.005	0.000602	ND	ND	0.005 U
Chromium	0.1	0.085	0.0259	0.012	0.01 U
Cobalt	NE (0.73)	0.0731	0.0188	0.0005	0.0029 J
Nickel	NE (0.73)	0.0313	0.0161	ND	0.04 U
Vanadium	NE (0.26)	0.0939	0.0402	0.0496	0.0021 J
Zinc	NE (10.95)	4.4103	0.1494	0.1611	0.02 U

Background not absolutely quantified, too few detections

Notes:
(1) Intrawell averages determined from detections only,
maximum concentration shown if only one detection
(2) Duplicate concentrations used if higher than original sample
+ - concentrations from dissolved analyses, where higher than total
ND and U - Not Detected
NE - Not Established
J - Qualified as Estimated
Bold--indicates exceedance of Federal MCL or tap water RBC
italics - indicates exceedance of overall background upper limit of means
underline - indicates exceedance of upgradient background average/max

TABLE 3-3

CRITERIA COMPARISON TABLE
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Site ID Sample Purpose				R7GW08 Background Intrawell (1)	R7GW08R Compliance 03/02/05
Volatiles (ug/l)	**Federal MCL (Tap Water RBC)**	*Overall Background Upper Limit of Means*	Upgradient Background Average/Max		
Chlorobenzene	100	0.8	ND	ND	1 U
cis-1,2-Dichloroethene	70	3.1	ND	ND	1 U
Total Metals (mg/l)					
Arsenic	0.01	**0.0219**	ND	ND	0.0071 J
Barium	2	0.5372	0.1298	0.035	0.063
Beryllium	0.004	**0.0046**	0.003	0.0033	0.004 U
Cadmium	0.005	0.000602	ND	ND	0.005 U
Chromium	0.1	0.085	0.0259	0.048	0.0009 J
Cobalt	NE (0.73)	0.0731	0.0188	0.001	0.0022 J +
Nickel	NE (0.73)	0.0313	0.0161	0.0006	0.0033 J +
Vanadium	NE (0.26)	0.0939	0.0402	0.0337	0.0066 J
Zinc	NE (10.95)	4.4103	0.1494	0.1948	0.02 U

Background not absolutely quantified, too few detections

Notes:
(1) Intrawell averages determined from detections only,
maximum concentration shown if only one detection
(2) Duplicate concentrations used if higher than original sample
+ - concentrations from dissolved analyses, where higher than total
ND and U - Not Detected
NE - Not Established
J - Qualified as Estimated
Bold--indicates exceedance of Federal MCL or tap water RBC
italics - indicates exceedance of overall background upper limit of means
underline - indicates exceedance of upgradient background average/max

TABLE 3-3

CRITERIA COMPARISON TABLE
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Site ID Sample Purpose				R7GW09 Background Intrawell (1)	R7GW09 Compliance 03/02/05
Volatiles (ug/l)	**Federal MCL (Tap Water RBC)**	*Overall Background Upper Limit of Means*	Upgradient Background Average/Max		
Chlorobenzene	100	0.8	ND	ND	1 U
cis-1,2-Dichloroethene	70	3.1	ND	ND	1 U
Total Metals (mg/l)					
Arsenic	0.01	**0.0219**	ND	ND	0.011
Barium	2	0.5372	0.1298	0.146	0.11
Beryllium	0.004	**0.0046**	0.003	0.00245	0.00015 J
Cadmium	0.005	0.000602	ND	0.00057	0.005 U
Chromium	0.1	0.085	0.0259	0.037	0.0015 J
Cobalt	NE (0.73)	0.0731	0.0188	0.0518	0.011 +
Nickel	NE (0.73)	0.0313	0.0161	0.0164	0.04 U
Vanadium	NE (0.26)	0.0939	0.0402	0.0447	0.018 J
Zinc	NE (10.95)	4.4103	0.1494	0.1712	0.0043 J

Background not absolutely quantified, too few detections

Notes:
(1) Intrawell averages determined from detections only,
maximum concentration shown if only one detection
(2) Duplicate concentrations used if higher than original sample
+ - concentrations from dissolved analyses, where higher than total
ND and U - Not Detected
NE - Not Established
J - Qualified as Estimated
Bold--indicates exceedance of Federal MCL or tap water RBC
italics - indicates exceedance of overall background upper limit of means
underline - indicates exceedance of upgradient background average/max

TABLE 3-3

CRITERIA COMPARISON TABLE
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Site ID Sample Purpose				R7GW10 Background Intrawell (1)	R7GW10 Compliance 03/02/05
Volatiles (ug/l)	**Federal MCL (Tap Water RBC)**	*Overall Background Upper Limit of Means*	Upgradient Background Average/Max		
Chlorobenzene	100	0.8	ND	ND	0.45 J
cis-1,2-Dichloroethene	70	3.1	ND	ND	1 U
Total Metals (mg/l)					
Arsenic	0.01	**0.0219**	ND	**0.0101**	0.01 U
Barium	2	0.5372	0.1298	0.174	0.016
Beryllium	0.004	**0.0046**	0.003	0.003	0.004 U
Cadmium	0.005	0.000602	ND	0.00054	0.005 U
Chromium	0.1	0.085	0.0259	0.015	0.0015 J
Cobalt	NE (0.73)	0.0731	0.0188	0.0081	0.0052 J +
Nickel	NE (0.73)	0.0313	0.0161	0.0068	0.0024 J +
Vanadium	NE (0.26)	0.0939	0.0402	0.052	0.0025 J
Zinc	NE (10.95)	4.4103	0.1494	0.1809	0.02 U

Background not absolutely quantified, too few detections

Notes:
(1) Intrawell averages determined from detections only,
maximum concentration shown if only one detection
(2) Duplicate concentrations used if higher than original sample
+ - concentrations from dissolved analyses, where higher than total
ND and U - Not Detected
NE - Not Established
J - Qualified as Estimated
Bold--indicates exceedance of Federal MCL or tap water RBC
italics - indicates exceedance of overall background upper limit of means
underline - indicates exceedance of upgradient background average/max

TABLE 3-3

CRITERIA COMPARISON TABLE
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Site ID Sample Purpose				R7GW11 Background Intrawell (1)	R7GW11 Compliance 03/02/05
Volatiles (ug/l)	**Federal MCL (Tap Water RBC)**	*Overall Background Upper Limit of Means*	Upgradient Background Average/Max		
Chlorobenzene	100	0.8	ND	ND	1 U
cis-1,2-Dichloroethene	70	3.1	ND	ND	1 U
Total Metals (mg/l)					
Arsenic	0.01	**0.0219**	ND	ND	0.01 U
Barium	2	0.5372	0.1298	0.044	0.0032 J
Beryllium	0.004	**0.0046**	0.003	0.00285	0.004 U
Cadmium	0.005	0.000602	ND	ND	0.005 U
Chromium	0.1	0.085	0.0259	0.024	0.01 U
Cobalt	NE (0.73)	0.0731	0.0188	0.0004	0.0051 J +
Nickel	NE (0.73)	0.0313	0.0161	0.03	0.04 U
Vanadium	NE (0.26)	0.0939	0.0402	0.0406	0.0014 J
Zinc	NE (10.95)	4.4103	0.1494	0.3318	0.02 U

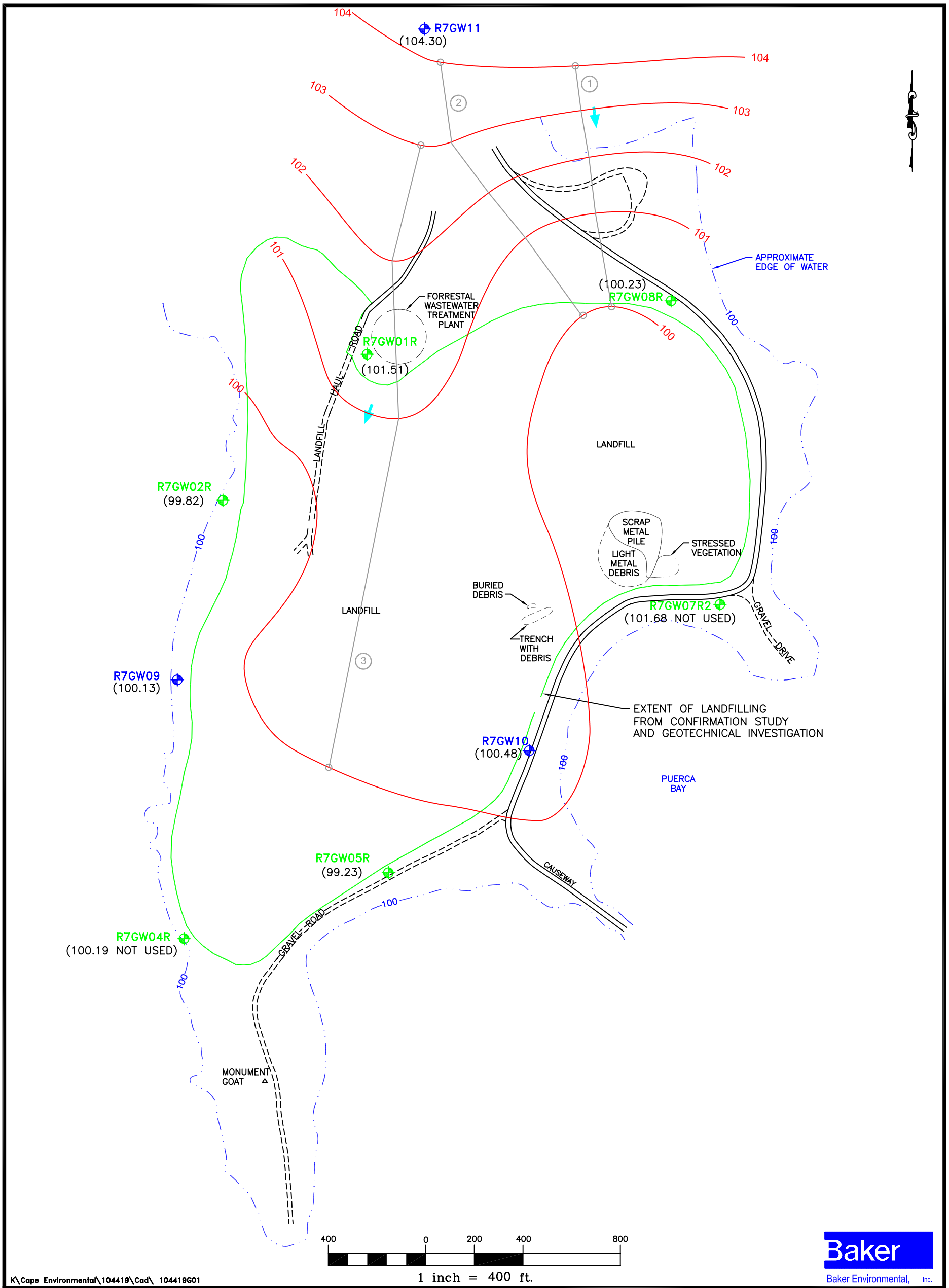
Background not absolutely quantified, too few detections

Notes:
(1) Intrawell averages determined from detections only,
maximum concentration shown if only one detection
(2) Duplicate concentrations used if higher than original sample
+ - concentrations from dissolved analyses, where higher than total
ND and U - Not Detected
NE - Not Established
J - Qualified as Estimated
Bold--indicates exceedance of Federal MCL or tap water RBC
italics - indicates exceedance of overall background upper limit of means
underline - indicates exceedance of upgradient background average/max

FIGURES

FIGURE 1-1
SITE MAP
SOLID WASTE LANDFILL FACILITY
NAVAL STATION ROOSEVELT ROADS
PUERTO RICO

SOURCE: LANTDIV, FEB. 1992



K\Cape Environmental\104419\Cad\ 104419G01

Baker Environmental, Inc.

LEGEND

- MONITOR WELL LOCATION (INSTALLED JUNE 1998, BURNS AND McDONNELL)
- MONITOR WELL LOCATION (INSTALLED DECEMBER 2000, BAKER)
- GROUNDWATER CONTOUR LINE AND ELEVATION, DATUM = MEAN SEA LEVEL + 100 FEET
- GROUNDWATER FLOW DIRECTION
- LINE USED TO CALCULATE HYDRAULIC GRADIENT
- APPROXIMATE EXTENT OF LANDFILL BOUNDARY

NOTE: CONTOURS WERE GENERATED WITH GMS® USING A NATURAL NEIGHBOR INTERPOLATION ROUTINE. ALL CONTOURS ARE APPROXIMATE AND SUBJECT TO THE INTERPOLATION METHOD USED.

SOURCE: LANTDIV, FEB. 1992

FIGURE 2-1
GROUNDWATER CONTOUR MAP, MARCH 3, 2005
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
SOLID WASTE LANDFILL FACILITY – SWMU 3

NAVAL ACTIVITY PUERTO RICO
CEIBA, PUERTO RICO

APPENDIX A
Background Groundwater Quality

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW01 Intrawell Average/Max, Upgradient
Detected Volatiles (ug/l)				
1,1-Dichloroethane	NE (798)	1	ND	ND
1,1-Dichloroethene	7	1	ND	ND
Acetone	NE (610)	7.74	2	ND
Carbon Disulfide	NE (1000)	2.2	ND	ND
Chlorobenzene	100	0.8	ND	ND
Chloromethane	NE (190)	0.7	ND	ND
cis-1,2-Dichloroethene	70	3.1	ND	ND
Dibromomethane	NE (608)	4.6	ND	ND
Ethylbenzene	700	15	ND	ND
Vinyl chloride	2	1	ND	ND
Non-Detected Volatiles (ug/l)				
Acrylonitrile	NE (0.037)	ND	ND	ND
Benzene	5	ND	ND	ND
Bromochloromethane	NE	ND	ND	ND
Bromodichloromethane	NE (1.7)	ND	ND	ND
Bromoform	NE (84)	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND
Chloroethane	NE (36)	ND	ND	ND
Chloroform	NE (1.5)	ND	ND	ND
Dibromochloromethane	NE (1.2)	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.2	ND	ND	ND
1,2-Dibromoethane (EDB)	NE (0.0075)	ND	ND	ND
1,2-Dichlorobenzene	600	ND	ND	ND
1,4-Dichlorobenzene	75	ND	ND	ND
trans-1,4-Dichloro-2-butene	NE	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND
trans-1,2-Dichloroethene	100	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND
cis-1,3-Dichloropropene	NE	ND	ND	ND
trans-1,3-Dichloropropene	NE	ND	ND	ND
2-Hexanone	NE (1460)	ND	ND	ND
Bromomethane	NE (8.52)	ND	ND	ND
Dichloromethane	5	ND	ND	ND
2-Butanone (MEK)	NE (1910)	ND	ND	ND
Iodomethane	NE	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	NE (2000)	ND	ND	ND
Styrene	100	ND	ND	ND
1,1,1,2-Tetrachloroethane	NE (4.1)	ND	ND	ND
1,1,2,2-Tetrachloroethane	NE (0.53)	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND
Toluene	1000	ND	ND	ND
1,1,1-Trichloroethane	200	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND
Trichloroethene	5	ND	ND	ND
Trichlorofluoromethane	NE (1300)	ND	ND	ND
1,2,3-Trichloropropane	NE (0.05)	ND	ND	ND
Vinyl acetate	NE (410)	ND	ND	ND
Xylenes, Total	10000	ND	ND	ND

(see notes on last page)

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW02 Intrawell Average/Max
Detected Volatiles (ug/l)				
1,1-Dichloroethane	NE (798)	1	ND	ND
1,1-Dichloroethene	7	1	ND	ND
Acetone	NE (610)	7.74	2	ND
Carbon Disulfide	NE (1000)	2.2	ND	ND
Chlorobenzene	100	0.8	ND	ND
Chloromethane	NE (190)	0.7	ND	ND
cis-1,2-Dichloroethene	70	3.1	ND	ND
Dibromomethane	NE (608)	4.6	ND	ND
Ethylbenzene	700	15	ND	ND
Vinyl chloride	2	1	ND	ND
Non-Detected Volatiles (ug/l)				
Acrylonitrile	NE (0.037)	ND	ND	ND
Benzene	5	ND	ND	ND
Bromochloromethane	NE	ND	ND	ND
Bromodichloromethane	NE (1.7)	ND	ND	ND
Bromoform	NE (84)	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND
Chloroethane	NE (36)	ND	ND	ND
Chloroform	NE (1.5)	ND	ND	ND
Dibromochloromethane	NE (1.2)	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.2	ND	ND	ND
1,2-Dibromoethane (EDB)	NE (0.0075)	ND	ND	ND
1,2-Dichlorobenzene	600	ND	ND	ND
1,4-Dichlorobenzene	75	ND	ND	ND
trans-1,4-Dichloro-2-butene	NE	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND
trans-1,2-Dichloroethene	100	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND
cis-1,3-Dichloropropene	NE	ND	ND	ND
trans-1,3-Dichloropropene	NE	ND	ND	ND
2-Hexanone	NE (1460)	ND	ND	ND
Bromomethane	NE (8.52)	ND	ND	ND
Dichloromethane	5	ND	ND	ND
2-Butanone (MEK)	NE (1910)	ND	ND	ND
Iodomethane	NE	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	NE (2000)	ND	ND	ND
Styrene	100	ND	ND	ND
1,1,1,2-Tetrachloroethane	NE (4.1)	ND	ND	ND
1,1,2,2-Tetrachloroethane	NE (0.53)	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND
Toluene	1000	ND	ND	ND
1,1,1-Trichloroethane	200	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND
Trichloroethene	5	ND	ND	ND
Trichlorofluoromethane	NE (1300)	ND	ND	ND
1,2,3-Trichloropropane	NE (0.05)	ND	ND	ND
Vinyl acetate	NE (410)	ND	ND	ND
Xylenes, Total	10000	ND	ND	ND

(see notes on last page)

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW04 Intrawell Average/Max
Detected Volatiles (ug/l)				
1,1-Dichloroethane	NE (798)	1	ND	ND
1,1-Dichloroethene	7	1	ND	ND
Acetone	NE (610)	7.74	2	5
Carbon Disulfide	NE (1000)	2.2	ND	ND
Chlorobenzene	100	0.8	ND	ND
Chloromethane	NE (190)	0.7	ND	0.7
cis-1,2-Dichloroethene	70	3.1	ND	ND
Dibromomethane	NE (608)	4.6	ND	ND
Ethylbenzene	700	15	ND	ND
Vinyl chloride	2	1	ND	ND
Non-Detected Volatiles (ug/l)				
Acrylonitrile	NE (0.037)	ND	ND	ND
Benzene	5	ND	ND	ND
Bromochloromethane	NE	ND	ND	ND
Bromodichloromethane	NE (1.7)	ND	ND	ND
Bromoform	NE (84)	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND
Chloroethane	NE (36)	ND	ND	ND
Chloroform	NE (1.5)	ND	ND	ND
Dibromochloromethane	NE (1.2)	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.2	ND	ND	ND
1,2-Dibromoethane (EDB)	NE (0.0075)	ND	ND	ND
1,2-Dichlorobenzene	600	ND	ND	ND
1,4-Dichlorobenzene	75	ND	ND	ND
trans-1,4-Dichloro-2-butene	NE	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND
trans-1,2-Dichloroethene	100	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND
cis-1,3-Dichloropropene	NE	ND	ND	ND
trans-1,3-Dichloropropene	NE	ND	ND	ND
2-Hexanone	NE (1460)	ND	ND	ND
Bromomethane	NE (8.52)	ND	ND	ND
Dichloromethane	5	ND	ND	ND
2-Butanone (MEK)	NE (1910)	ND	ND	ND
Iodomethane	NE	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	NE (2000)	ND	ND	ND
Styrene	100	ND	ND	ND
1,1,1,2-Tetrachloroethane	NE (4.1)	ND	ND	ND
1,1,2,2-Tetrachloroethane	NE (0.53)	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND
Toluene	1000	ND	ND	ND
1,1,1-Trichloroethane	200	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND
Trichloroethene	5	ND	ND	ND
Trichlorofluoromethane	NE (1300)	ND	ND	ND
1,2,3-Trichloropropane	NE (0.05)	ND	ND	ND
Vinyl acetate	NE (410)	ND	ND	ND
Xylenes, Total	10000	ND	ND	ND

(see notes on last page)

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW05 Intrawell Average/Max
Detected Volatiles (ug/l)				
1,1-Dichloroethane	NE (798)	1	ND	1
1,1-Dichloroethene	7	1	ND	1
Acetone	NE (610)	7.74	2	ND
Carbon Disulfide	NE (1000)	2.2	ND	1.9
Chlorobenzene	100	0.8	ND	0.8
Chloromethane	NE (190)	0.7	ND	ND
cis-1,2-Dichloroethene	70	3.1	ND	1.3
Dibromomethane	NE (608)	4.6	ND	4.6
Ethylbenzene	700	15	ND	ND
Vinyl chloride	2	1	ND	1
Non-Detected Volatiles (ug/l)				
Acrylonitrile	NE (0.037)	ND	ND	ND
Benzene	5	ND	ND	ND
Bromochloromethane	NE	ND	ND	ND
Bromodichloromethane	NE (1.7)	ND	ND	ND
Bromoform	NE (84)	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND
Chloroethane	NE (36)	ND	ND	ND
Chloroform	NE (1.5)	ND	ND	ND
Dibromochloromethane	NE (1.2)	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.2	ND	ND	ND
1,2-Dibromoethane (EDB)	NE (0.0075)	ND	ND	ND
1,2-Dichlorobenzene	600	ND	ND	ND
1,4-Dichlorobenzene	75	ND	ND	ND
trans-1,4-Dichloro-2-butene	NE	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND
trans-1,2-Dichloroethene	100	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND
cis-1,3-Dichloropropene	NE	ND	ND	ND
trans-1,3-Dichloropropene	NE	ND	ND	ND
2-Hexanone	NE (1460)	ND	ND	ND
Bromomethane	NE (8.52)	ND	ND	ND
Dichloromethane	5	ND	ND	ND
2-Butanone (MEK)	NE (1910)	ND	ND	ND
Iodomethane	NE	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	NE (2000)	ND	ND	ND
Styrene	100	ND	ND	ND
1,1,1,2-Tetrachloroethane	NE (4.1)	ND	ND	ND
1,1,2,2-Tetrachloroethane	NE (0.53)	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND
Toluene	1000	ND	ND	ND
1,1,1-Trichloroethane	200	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND
Trichloroethene	5	ND	ND	ND
Trichlorofluoromethane	NE (1300)	ND	ND	ND
1,2,3-Trichloropropane	NE (0.05)	ND	ND	ND
Vinyl acetate	NE (410)	ND	ND	ND
Xylenes, Total	10000	ND	ND	ND

(see notes on last page)

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW07 Intrawell Average/Max (1)
Detected Volatiles (ug/l)				
1,1-Dichloroethane	NE (798)	1	ND	ND
1,1-Dichloroethene	7	1	ND	ND
Acetone	NE (610)	7.74	2	ND
Carbon Disulfide	NE (1000)	2.2	ND	ND
Chlorobenzene	100	0.8	ND	ND
Chloromethane	NE (190)	0.7	ND	ND
cis-1,2-Dichloroethene	70	3.1	ND	ND
Dibromomethane	NE (608)	4.6	ND	ND
Ethylbenzene	700	15	ND	ND
Vinyl chloride	2	1	ND	ND
Non-Detected Volatiles (ug/l)				
Acrylonitrile	NE (0.037)	ND	ND	ND
Benzene	5	ND	ND	ND
Bromochloromethane	NE	ND	ND	ND
Bromodichloromethane	NE (1.7)	ND	ND	ND
Bromoform	NE (84)	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND
Chloroethane	NE (36)	ND	ND	ND
Chloroform	NE (1.5)	ND	ND	ND
Dibromochloromethane	NE (1.2)	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.2	ND	ND	ND
1,2-Dibromoethane (EDB)	NE (0.0075)	ND	ND	ND
1,2-Dichlorobenzene	600	ND	ND	ND
1,4-Dichlorobenzene	75	ND	ND	ND
trans-1,4-Dichloro-2-butene	NE	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND
trans-1,2-Dichloroethene	100	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND
cis-1,3-Dichloropropene	NE	ND	ND	ND
trans-1,3-Dichloropropene	NE	ND	ND	ND
2-Hexanone	NE (1460)	ND	ND	ND
Bromomethane	NE (8.52)	ND	ND	ND
Dichloromethane	5	ND	ND	ND
2-Butanone (MEK)	NE (1910)	ND	ND	ND
Iodomethane	NE	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	NE (2000)	ND	ND	ND
Styrene	100	ND	ND	ND
1,1,1,2-Tetrachloroethane	NE (4.1)	ND	ND	ND
1,1,2,2-Tetrachloroethane	NE (0.53)	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND
Toluene	1000	ND	ND	ND
1,1,1-Trichloroethane	200	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND
Trichloroethene	5	ND	ND	ND
Trichlorofluoromethane	NE (1300)	ND	ND	ND
1,2,3-Trichloropropane	NE (0.05)	ND	ND	ND
Vinyl acetate	NE (410)	ND	ND	ND
Xylenes, Total	10000	ND	ND	ND

(see notes on last page)

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW08 Intrawell Average/Max (1)
Detected Volatiles (ug/l)				
1,1-Dichloroethane	NE (798)	1	ND	ND
1,1-Dichloroethene	7	1	ND	ND
Acetone	NE (610)	7.74	2	ND
Carbon Disulfide	NE (1000)	2.2	ND	ND
Chlorobenzene	100	0.8	ND	ND
Chloromethane	NE (190)	0.7	ND	ND
cis-1,2-Dichloroethene	70	3.1	ND	ND
Dibromomethane	NE (608)	4.6	ND	ND
Ethylbenzene	700	15	ND	ND
Vinyl chloride	2	1	ND	ND
Non-Detected Volatiles (ug/l)				
Acrylonitrile	NE (0.037)	ND	ND	ND
Benzene	5	ND	ND	ND
Bromochloromethane	NE	ND	ND	ND
Bromodichloromethane	NE (1.7)	ND	ND	ND
Bromoform	NE (84)	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND
Chloroethane	NE (36)	ND	ND	ND
Chloroform	NE (1.5)	ND	ND	ND
Dibromochloromethane	NE (1.2)	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.2	ND	ND	ND
1,2-Dibromoethane (EDB)	NE (0.0075)	ND	ND	ND
1,2-Dichlorobenzene	600	ND	ND	ND
1,4-Dichlorobenzene	75	ND	ND	ND
trans-1,4-Dichloro-2-butene	NE	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND
trans-1,2-Dichloroethene	100	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND
cis-1,3-Dichloropropene	NE	ND	ND	ND
trans-1,3-Dichloropropene	NE	ND	ND	ND
2-Hexanone	NE (1460)	ND	ND	ND
Bromomethane	NE (8.52)	ND	ND	ND
Dichloromethane	5	ND	ND	ND
2-Butanone (MEK)	NE (1910)	ND	ND	ND
Iodomethane	NE	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	NE (2000)	ND	ND	ND
Styrene	100	ND	ND	ND
1,1,1,2-Tetrachloroethane	NE (4.1)	ND	ND	ND
1,1,2,2-Tetrachloroethane	NE (0.53)	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND
Toluene	1000	ND	ND	ND
1,1,1-Trichloroethane	200	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND
Trichloroethene	5	ND	ND	ND
Trichlorofluoromethane	NE (1300)	ND	ND	ND
1,2,3-Trichloropropane	NE (0.05)	ND	ND	ND
Vinyl acetate	NE (410)	ND	ND	ND
Xylenes, Total	10000	ND	ND	ND

(see notes on last page)

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW09 Intrawell Average/Max (1)
Detected Volatiles (ug/l)				
1,1-Dichloroethane	NE (798)	1	ND	ND
1,1-Dichloroethene	7	1	ND	ND
Acetone	NE (610)	7.74	2	ND
Carbon Disulfide	NE (1000)	2.2	ND	1.6
Chlorobenzene	100	0.8	ND	ND
Chloromethane	NE (190)	0.7	ND	ND
cis-1,2-Dichloroethene	70	3.1	ND	ND
Dibromomethane	NE (608)	4.6	ND	ND
Ethylbenzene	700	15	ND	ND
Vinyl chloride	2	1	ND	ND
Non-Detected Volatiles (ug/l)				
Acrylonitrile	NE (0.037)	ND	ND	ND
Benzene	5	ND	ND	ND
Bromochloromethane	NE	ND	ND	ND
Bromodichloromethane	NE (1.7)	ND	ND	ND
Bromoform	NE (84)	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND
Chloroethane	NE (36)	ND	ND	ND
Chloroform	NE (1.5)	ND	ND	ND
Dibromochloromethane	NE (1.2)	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.2	ND	ND	ND
1,2-Dibromoethane (EDB)	NE (0.0075)	ND	ND	ND
1,2-Dichlorobenzene	600	ND	ND	ND
1,4-Dichlorobenzene	75	ND	ND	ND
trans-1,4-Dichloro-2-butene	NE	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND
trans-1,2-Dichloroethene	100	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND
cis-1,3-Dichloropropene	NE	ND	ND	ND
trans-1,3-Dichloropropene	NE	ND	ND	ND
2-Hexanone	NE (1460)	ND	ND	ND
Bromomethane	NE (8.52)	ND	ND	ND
Dichloromethane	5	ND	ND	ND
2-Butanone (MEK)	NE (1910)	ND	ND	ND
Iodomethane	NE	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	NE (2000)	ND	ND	ND
Styrene	100	ND	ND	ND
1,1,1,2-Tetrachloroethane	NE (4.1)	ND	ND	ND
1,1,2,2-Tetrachloroethane	NE (0.53)	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND
Toluene	1000	ND	ND	ND
1,1,1-Trichloroethane	200	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND
Trichloroethene	5	ND	ND	ND
Trichlorofluoromethane	NE (1300)	ND	ND	ND
1,2,3-Trichloropropane	NE (0.05)	ND	ND	ND
Vinyl acetate	NE (410)	ND	ND	ND
Xylenes, Total	10000	ND	ND	ND

(see notes on last page)

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW10 Intrawell Average/Max (1)
Detected Volatiles (ug/l)				
1,1-Dichloroethane	NE (798)	1	ND	ND
1,1-Dichloroethene	7	1	ND	ND
Acetone	NE (610)	7.74	2	ND
Carbon Disulfide	NE (1000)	2.2	ND	ND
Chlorobenzene	100	0.8	ND	ND
Chloromethane	NE (190)	0.7	ND	ND
cis-1,2-Dichloroethene	70	3.1	ND	ND
Dibromomethane	NE (608)	4.6	ND	ND
Ethylbenzene	700	15	ND	15
Vinyl chloride	2	1	ND	ND
Non-Detected Volatiles (ug/l)				
Acrylonitrile	NE (0.037)	ND	ND	ND
Benzene	5	ND	ND	ND
Bromochloromethane	NE	ND	ND	ND
Bromodichloromethane	NE (1.7)	ND	ND	ND
Bromoform	NE (84)	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND
Chloroethane	NE (36)	ND	ND	ND
Chloroform	NE (1.5)	ND	ND	ND
Dibromochloromethane	NE (1.2)	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.2	ND	ND	ND
1,2-Dibromoethane (EDB)	NE (0.0075)	ND	ND	ND
1,2-Dichlorobenzene	600	ND	ND	ND
1,4-Dichlorobenzene	75	ND	ND	ND
trans-1,4-Dichloro-2-butene	NE	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND
trans-1,2-Dichloroethene	100	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND
cis-1,3-Dichloropropene	NE	ND	ND	ND
trans-1,3-Dichloropropene	NE	ND	ND	ND
2-Hexanone	NE (1460)	ND	ND	ND
Bromomethane	NE (8.52)	ND	ND	ND
Dichloromethane	5	ND	ND	ND
2-Butanone (MEK)	NE (1910)	ND	ND	ND
Iodomethane	NE	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	NE (2000)	ND	ND	ND
Styrene	100	ND	ND	ND
1,1,1,2-Tetrachloroethane	NE (4.1)	ND	ND	ND
1,1,2,2-Tetrachloroethane	NE (0.53)	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND
Toluene	1000	ND	ND	ND
1,1,1-Trichloroethane	200	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND
Trichloroethene	5	ND	ND	ND
Trichlorofluoromethane	NE (1300)	ND	ND	ND
1,2,3-Trichloropropane	NE (0.05)	ND	ND	ND
Vinyl acetate	NE (410)	ND	ND	ND
Xylenes, Total	10000	ND	ND	ND

(see notes on last page)

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW11 Intrawell Average/Max (1), Upgradient
Detected Volatiles (ug/l)				
1,1-Dichloroethane	NE (798)	1	ND	ND
1,1-Dichloroethene	7	1	ND	ND
Acetone	NE (610)	7.74	2	2
Carbon Disulfide	NE (1000)	2.2	ND	ND
Chlorobenzene	100	0.8	ND	ND
Chloromethane	NE (190)	0.7	ND	ND
cis-1,2-Dichloroethene	70	3.1	ND	ND
Dibromomethane	NE (608)	4.6	ND	ND
Ethylbenzene	700	15	ND	ND
Vinyl chloride	2	1	ND	ND
Non-Detected Volatiles (ug/l)				
Acrylonitrile	NE (0.037)	ND	ND	ND
Benzene	5	ND	ND	ND
Bromochloromethane	NE	ND	ND	ND
Bromodichloromethane	NE (1.7)	ND	ND	ND
Bromoform	NE (84)	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND
Chloroethane	NE (36)	ND	ND	ND
Chloroform	NE (1.5)	ND	ND	ND
Dibromochloromethane	NE (1.2)	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.2	ND	ND	ND
1,2-Dibromoethane (EDB)	NE (0.0075)	ND	ND	ND
1,2-Dichlorobenzene	600	ND	ND	ND
1,4-Dichlorobenzene	75	ND	ND	ND
trans-1,4-Dichloro-2-butene	NE	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND
trans-1,2-Dichloroethene	100	ND	ND	ND
1,2-Dichloropropane	5	ND	ND	ND
cis-1,3-Dichloropropene	NE	ND	ND	ND
trans-1,3-Dichloropropene	NE	ND	ND	ND
2-Hexanone	NE (1460)	ND	ND	ND
Bromomethane	NE (8.52)	ND	ND	ND
Dichloromethane	5	ND	ND	ND
2-Butanone (MEK)	NE (1910)	ND	ND	ND
Iodomethane	NE	ND	ND	ND
4-Methyl-2-pentanone (MIBK)	NE (2000)	ND	ND	ND
Styrene	100	ND	ND	ND
1,1,1,2-Tetrachloroethane	NE (4.1)	ND	ND	ND
1,1,2,2-Tetrachloroethane	NE (0.53)	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND
Toluene	1000	ND	ND	ND
1,1,1-Trichloroethane	200	ND	ND	ND
1,1,2-Trichloroethane	5	ND	ND	ND
Trichloroethene	5	ND	ND	ND
Trichlorofluoromethane	NE (1300)	ND	ND	ND
1,2,3-Trichloropropane	NE (0.05)	ND	ND	ND
Vinyl acetate	NE (410)	ND	ND	ND
Xylenes, Total	10000	ND	ND	ND

(see notes on last page)

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW01 Intrawell Average/Max, Upgradient
Detected Total Metals (mg/l)				
Antimony	0.006	0.002	ND	ND
Arsenic	0.01	**0.0219**	ND	ND
Barium	2	0.5372	0.1298	0.174
Beryllium	0.004	**0.0046**	0.003	0.00315
Cadmium	0.005	0.000602	ND	ND
Chromium	0.1	0.085	0.0259	0.028
Cobalt	NE (0.73)	0.0731	0.0188	0.02445
Copper	1.3	0.1434	0.0456	0.0447
Lead	0.015	0.011	0.0018	ND
Nickel	NE (0.73)	0.0313	0.0161	0.0022
Silver	NE (0.18)	0.01	0.01	0.01
Thallium	0.002	**0.01814**	**0.0066**	0.0066
Vanadium	NE (0.26)	0.0939	0.0402	0.0498
Zinc	NE (10.95)	4.4103	0.1494	4.066
Non-Detected Total Metals (mg/l)				
Selenium	0.05	ND	ND	ND

Notes:

(1) Average determined on detections only, unless frequency of detection is above 50%.

ND - Not Detected

NE - Not Established

Bold--indicates exceedance of Federal MCL or tap water RBC

Background not absolutely quantified, too few detections

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW02 Intrawell Average/Max
Detected Total Metals (mg/l)				
Antimony	0.006	0.002	ND	ND
Arsenic	0.01	**0.0219**	ND	**0.0169**
Barium	2	0.5372	0.1298	0.014
Beryllium	0.004	**0.0046**	0.003	0.00250
Cadmium	0.005	0.000602	ND	ND
Chromium	0.1	0.085	0.0259	0.059
Cobalt	NE (0.73)	0.0731	0.0188	0.0016
Copper	1.3	0.1434	0.0456	0.0217
Lead	0.015	0.011	0.0018	ND
Nickel	NE (0.73)	0.0313	0.0161	0.00064
Silver	NE (0.18)	0.01	0.01	ND
Thallium	0.002	**0.01814**	**0.0066**	0.00945
Vanadium	NE (0.26)	0.0939	0.0402	0.0149
Zinc	NE (10.95)	4.4103	0.1494	0.1537
Non-Detected Total Metals (mg/l)				
Selenium	0.05	ND	ND	ND

Notes:

(1) Average determined on detections only, unless frequency of detection is above 50%.

ND - Not Detected

NE - Not Established

Bold--indicates exceedance of Federal MCL or tap water RBC

Background not absolutely quantified, too few detections

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW04 Intrawell Average/Max
Detected Total Metals (mg/l)				
Antimony	0.006	0.002	ND	ND
Arsenic	0.01	**0.0219**	ND	ND
Barium	2	0.5372	0.1298	0.343
Beryllium	0.004	**0.0046**	0.003	0.00159
Cadmium	0.005	0.000602	ND	ND
Chromium	0.1	0.085	0.0259	0.039
Cobalt	NE (0.73)	0.0731	0.0188	0.0042
Copper	1.3	0.1434	0.0456	0.0494
Lead	0.015	0.011	0.0018	ND
Nickel	NE (0.73)	0.0313	0.0161	0.0011
Silver	NE (0.18)	0.01	0.01	ND
Thallium	0.002	**0.01814**	**0.0066**	0.0265
Vanadium	NE (0.26)	0.0939	0.0402	0.0239
Zinc	NE (10.95)	4.4103	0.1494	0.1864
Non-Detected Total Metals (mg/l)				
Selenium	0.05	ND	ND	ND

Notes:

(1) Average determined on detections only, unless frequency of detection is above 50%.

ND - Not Detected

NE - Not Established

Bold--indicates exceedance of Federal MCL or tap water RBC

Background not absolutely quantified, too few detections

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW05 Intrawell Average/Max
Detected Total Metals (mg/l)				
Antimony	0.006	0.002	ND	ND
Arsenic	0.01	**0.0219**	ND	0.0062
Barium	2	0.5372	0.1298	0.011
Beryllium	0.004	**0.0046**	0.003	0.0025
Cadmium	0.005	0.000602	ND	ND
Chromium	0.1	0.085	0.0259	0.04
Cobalt	NE (0.73)	0.0731	0.0188	0.0016
Copper	1.3	0.1434	0.0456	0.0194
Lead	0.015	0.011	0.0018	ND
Nickel	NE (0.73)	0.0313	0.0161	0.00083
Silver	NE (0.18)	0.01	0.01	ND
Thallium	0.002	**0.01814**	**0.0066**	0.0095
Vanadium	NE (0.26)	0.0939	0.0402	0.0215
Zinc	NE (10.95)	4.4103	0.1494	0.1432
Non-Detected Total Metals (mg/l)				
Selenium	0.05	ND	ND	ND

Notes:

(1) Average determined on detections only, unless frequency of detection is above 50%.

ND - Not Detected

NE - Not Established

Bold--indicates exceedance of Federal MCL or tap water RBC

Background not absolutely quantified, too few detections

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW07 Intrawell Average/Max (1)
Detected Total Metals (mg/l)				
Antimony	0.006	0.002	ND	ND
Arsenic	0.01	**0.0219**	ND	ND
Barium	2	0.5372	0.1298	0.01
Beryllium	0.004	**0.0046**	0.003	0.002345
Cadmium	0.005	0.000602	ND	ND
Chromium	0.1	0.085	0.0259	0.012
Cobalt	NE (0.73)	0.0731	0.0188	0.0005
Copper	1.3	0.1434	0.0456	0.0293
Lead	0.015	0.011	0.0018	0.0026
Nickel	NE (0.73)	0.0313	0.0161	ND
Silver	NE (0.18)	0.01	0.01	ND
Thallium	0.002	**0.01814**	**0.0066**	ND
Vanadium	NE (0.26)	0.0939	0.0402	0.0496
Zinc	NE (10.95)	4.4103	0.1494	0.1611
Non-Detected Total Metals (mg/l)				
Selenium	0.05	ND	ND	ND

Notes:

(1) Average determined on detections only, unless frequency of detection is above 50%.

ND - Not Detected

NE - Not Established

Bold--indicates exceedance of Federal MCL or tap water RBC

Background not absolutely quantified, too few detections

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW08 Intrawell Average/Max (1)
Detected Total Metals (mg/l)				
Antimony	0.006	0.002	ND	ND
Arsenic	0.01	**0.0219**	ND	ND
Barium	2	0.5372	0.1298	0.035
Beryllium	0.004	**0.0046**	0.003	0.0033
Cadmium	0.005	0.000602	ND	ND
Chromium	0.1	0.085	0.0259	0.048
Cobalt	NE (0.73)	0.0731	0.0188	0.001
Copper	1.3	0.1434	0.0456	0.0263
Lead	0.015	0.011	0.0018	0.008
Nickel	NE (0.73)	0.0313	0.0161	0.0006
Silver	NE (0.18)	0.01	0.01	ND
Thallium	0.002	**0.01814**	**0.0066**	0.0099
Vanadium	NE (0.26)	0.0939	0.0402	0.0337
Zinc	NE (10.95)	4.4103	0.1494	0.1948
Non-Detected Total Metals (mg/l)				
Selenium	0.05	ND	ND	ND

Notes:

(1) Average determined on detections only, unless frequency of detection is above 50%.

ND - Not Detected

NE - Not Established

Bold--indicates exceedance of Federal MCL or tap water RBC

Background not absolutely quantified, too few detections

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW09 Intrawell Average/Max (1)
Detected Total Metals (mg/l)				
Antimony	0.006	0.002	ND	ND
Arsenic	0.01	**0.0219**	ND	ND
Barium	2	0.5372	0.1298	0.146
Beryllium	0.004	**0.0046**	0.003	0.00245
Cadmium	0.005	0.000602	ND	0.00057
Chromium	0.1	0.085	0.0259	0.037
Cobalt	NE (0.73)	0.0731	0.0188	0.0518
Copper	1.3	0.1434	0.0456	0.1539
Lead	0.015	0.011	0.0018	ND
Nickel	NE (0.73)	0.0313	0.0161	0.0164
Silver	NE (0.18)	0.01	0.01	ND
Thallium	0.002	**0.01814**	**0.0066**	0.045
Vanadium	NE (0.26)	0.0939	0.0402	0.0447
Zinc	NE (10.95)	4.4103	0.1494	0.1712
Non-Detected Total Metals (mg/l)				
Selenium	0.05	ND	ND	ND

Notes:

(1) Average determined on detections only, unless frequency of detection is above 50%.

ND - Not Detected

NE - Not Established

Bold--indicates exceedance of Federal MCL or tap water RBC

Background not absolutely quantified, too few detections

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW10 Intrawell Average/Max (1)
Detected Total Metals (mg/l)				
Antimony	0.006	0.002	ND	0.002
Arsenic	0.01	**0.0219**	ND	**0.0101**
Barium	2	0.5372	0.1298	0.174
Beryllium	0.004	**0.0046**	0.003	0.003
Cadmium	0.005	0.000602	ND	0.00054
Chromium	0.1	0.085	0.0259	0.015
Cobalt	NE (0.73)	0.0731	0.0188	0.0081
Copper	1.3	0.1434	0.0456	0.0258
Lead	0.015	0.011	0.0018	0.0069
Nickel	NE (0.73)	0.0313	0.0161	0.0068
Silver	NE (0.18)	0.01	0.01	0.01
Thallium	0.002	**0.01814**	**0.0066**	0.0058
Vanadium	NE (0.26)	0.0939	0.0402	0.052
Zinc	NE (10.95)	4.4103	0.1494	0.1809
Non-Detected Total Metals (mg/l)				
Selenium	0.05	ND	ND	ND

Notes:

(1) Average determined on detections only, unless frequency of detection is above 50%.

ND - Not Detected

NE - Not Established

Bold--indicates exceedance of Federal MCL or tap water RBC

Background not absolutely quantified, too few detections

APPENDIX A

BACKGROUND GROUNDWATER QUALITY

SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Appendix I Parameters	Federal MCL (Tap Water RBC)	Overall Background Upper Limit of Means	Upgradient Background Average/ Max (1)	R7GW11 Intrawell Average/Max (1), Upgradient
Detected Total Metals (mg/l)				
Antimony	0.006	0.002	ND	ND
Arsenic	0.01	**0.0219**	ND	ND
Barium	2	0.5372	0.1298	0.044
Beryllium	0.004	**0.0046**	0.003	0.00285
Cadmium	0.005	0.000602	ND	ND
Chromium	0.1	0.085	0.0259	0.024
Cobalt	NE (0.73)	0.0731	0.0188	0.0004
Copper	1.3	0.1434	0.0456	0.0842
Lead	0.015	0.011	0.0018	0.0018
Nickel	NE (0.73)	0.0313	0.0161	0.03
Silver	NE (0.18)	0.01	0.01	ND
Thallium	0.002	**0.01814**	**0.0066**	ND
Vanadium	NE (0.26)	0.0939	0.0402	0.0406
Zinc	NE (10.95)	4.4103	0.1494	0.3318
Non-Detected Total Metals (mg/l)				
Selenium	0.05	ND	ND	ND

Notes:

(1) Average determined on detections only, unless frequency of detection is above 50%.

ND - Not Detected

NE - Not Established

Bold--indicates exceedance of Federal MCL or tap water RBC

Background not absolutely quantified, too few detections

APPENDIX B
Chain of Custody Records

Serial Number 45327

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

SEVERN TRENT **STL**

IMPS # 8437 7077 9665
8437 7077 9676

STL Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Website: www.stl-inc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

○ Alternate Laboratory Name/Location
Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Base Landfill	T.O. 19	PR
STL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Angie Weimerskirk		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Mark Kimes	412-269-2009	412-375-3995
CLIENT NAME	CLIENT E-MAIL	
Baker Environmental, Inc.	mkimes@mbakercorp.com	
CLIENT ADDRESS		
100 Airside Drive, Moon Township, PA 15108		
COMPANY CONTRACTING THIS WORK (if applicable)		
Baker Environmental, Inc.		

PAGE 1 OF 1

STANDARD REPORT DELIVERY ●
DATE DUE 28 day TAT

EXPEDITED REPORT DELIVERY (SURCHARGE) ○
DATE DUE

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT,...)	REQUIRED ANALYSIS: App.I VOCs SW-846/8260	REQUIRED ANALYSIS: App.I Metals SW-846/6010	REQUIRED ANALYSIS: App.I Diss.Metals SW-846/6010	REMARKS
								HC1	#VOA	#NO3	
		R7GW01R-11									
		R7GW02R-11									
		R7GW02R-11D									
		R7GW02R-11MS									
		R7GW02R-11MSD									
		R7GW04R-11									
3/2/05	1630	R7GW05R-11		X					1	1	
3/2/05	1750	R7GW07R2-11		X					1	1	
3/2/05	1516	R7GW08R-11		X					1	1	
		R7GW09-11									
3/2/05	1703	R7GW10-11		X					1	1	
		R7GW11-11									

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
			Jon C. Edell Jr.	3/3/05	1300			
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
Jon C. Edell Jr.	3/2/05	0700						

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	STL SAVANNAH LOG NO.	LABORATORY REMARKS
	030405	0900	YES ○ NO ○		680-1126	

STL8240-680 (12/02)

Serial Number 45323

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

SEVERN TRENT **STL**

IMAS # 8437 2077 9241
8437 2077 9235
8437 2077 9746

STL Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.stl-inc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

◯ Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Base Landfill	T.O. 19	PR
STL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Angie Weimerskirk		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Mark Kimes	412-269-2009	412-375-3995
CLIENT NAME	CLIENT E-MAIL	
Baker Environmental, Inc.	mkimes@mbakercorp.com	
CLIENT ADDRESS		
100 Airside Drive, Moon Township, PA 15108		
COMPANY CONTRACTING THIS WORK (if applicable)		
Baker Environmental, Inc.		

PAGE 1 OF 2

STANDARD REPORT DELIVERY ●
DATE DUE 28 day TAT

EXPEDITED REPORT DELIVERY (SURCHARGE) ◯
DATE DUE _____

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT,...)	REQUIRED ANALYSIS: App.I VOCs SW-846/8260 (NUMBER OF CONTAINERS SUBMITTED)	REQUIRED ANALYSIS: App.I Metals SW846/6010 (NUMBER OF CONTAINERS SUBMITTED)	REQUIRED ANALYSIS: App.I Diss.Metals SW-846/6010 (NUMBER OF CONTAINERS SUBMITTED)	REMARKS
								HCl	HNO_3	HNO_3	
3/2/05	1345	R7GW01R-11		X					1	1	
3/2/05	1000	R7GW02R-11		X					1	1	
3/2/05	1000	R7GW02R-11D		X					1	1	
		R7GW02R-11MS									
		R7GW02R-11MSD									
		R7GW04R-11									
		R7GW05R-11									
		R7GW07R2-11									
		R7GW08R-11									
3/2/05	0830	~~R7GW09-11~~ JCE R7FB01-11		X					1		
3/2/05	0835	~~R7GW10-11~~ JCE R7EB01-11		X					1		
3/2/05	1418	R7GW11-11		X					1	1	

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
			Jon C. Edel Jr.	3/2/05	1500			
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
Jon C. Edel Jr.	3/2/05	0300						

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	STL SAVANNAH LOG NO.	LABORATORY REMARKS
	030305	0900	YES ◯ NO ◯		680-1078	

STL8240-680 (12/02)

Serial Number 45320

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

SEVERN TRENT **STL**

Mostee Airwaybill # 8480 3122 5174

STL Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.stl-inc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

○ Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Base Landfill	T.O. 19	PR
STL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Angie Weimerskirk		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Mark Kimes	412-269-2009	412-375-3995
CLIENT NAME	CLIENT E-MAIL	
Baker Environmental, Inc.	mkimes@mbakercorp.com	
CLIENT ADDRESS		
100 Airside Dive, Moon Township, PA 15108		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE 1 OF 1

STANDARD REPORT DELIVERY ●
DATE DUE 28 day TAT

EXPEDITED REPORT DELIVERY (SURCHARGE) ○
DATE DUE

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT,...)	REQUIRED ANALYSIS: App.I VOCs SW-846/8260	REQUIRED ANALYSIS: App.I Metals SW-846/6010	REQUIRED ANALYSIS: App.I Diss.Metals SW-846/6010	NUMBER OF CONTAINERS SUBMITTED	REMARKS
		R7GW01R-11										
		R7GW02R-11										
		R7GW02R-11D										
		R7GW02R-11MS										
		R7GW02R-11MSD										
3/2/05	1155	R7GW04R-11		X					1	1		
		R7GW05R-11										
		R7GW07R2-11										
		R7GW08R-11										
3/2/05	1111	R7GW09-11		X					1	1		
		R7GW10-11										
		R7GW11-11										

HCl | HNO_3 | HNO_3

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
			Jon C. Edel Jr.	3/2/05	1500			
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
Jon C. Edel Jr.	3/2/05	0700						

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	STL SAVANNAH LOG NO.	LABORATORY REMARKS
	030305	0910	YES ○ NO ○		680-1072	

STL8240-680 (12/02)

Serial Number 45324

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

SEVERN TRENT **STL** IMPS # 8437 >0>> 9>13

STL Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Website: www.stl-inc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location
Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Base Landfill	T.O. 19	PR
STL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Angie Weimerskirk		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Mark Kimes	412-269-2009	412-375-3995
CLIENT NAME	CLIENT E-MAIL	
Baker Environmental, Inc.	mkimes@mbakercorp.com	
CLIENT ADDRESS		
100 Airside Drive, Moon Township, PA 15108		
COMPANY CONTRACTING THIS WORK (if applicable)		
Baker Environmental, Inc.		

PAGE 1 OF 1

STANDARD REPORT DELIVERY (X)
DATE DUE 28 day TAT
EXPEDITED REPORT DELIVERY (SURCHARGE) ( )
DATE DUE _____
NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT,..)	REQUIRED ANALYSIS: App.I VOCs SW-846/8260	REQUIRED ANALYSIS: App.I Metals SW-846/6010	REQUIRED ANALYSIS: App.I Diss. Metals SW-846/6010	NUMBER OF CONTAINERS SUBMITTED	REMARKS
		R7GW01R-11										
		R7GW02R-11										
		R7GW02R-11D										
3/2/05	1000	R7GW02R-11MS		X					1	1		
3/2/05	1000	R7GW02R-11MSD		X					1	1		
		R7GW04R-11										
		R7GW05R-11										
		R7GW07R2-11										
		R7GW08R-11										
		R7GW09-11										
		B7GW10-11										
		R7GW11-11										

HC1	HNO3	HNO3					

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
			Jon C. Edell Jr.	3/2/05	1500			
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
Jon C. Edell Jr.	3/2/05	0700						

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	STL SAVANNAH LOG NO.	LABORATORY REMARKS
	030305	0915	YES ( ) NO ( )		680 1072	

STL8240-680 (12/02)

Serial Number 45322

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

SEVERN TRENT **STL**

Master Airwaybill # 8480 3122 5163

STL Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Website: www.stl-inc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location
Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Base Landfill	T.O. 19	PR
STL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Angie Weimerskirk		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Mark Kimes	412-269-2009	412-375-3995
CLIENT NAME	CLIENT E-MAIL	
Baker Environmental, Inc.	mkimes@mbakercorp.com	
CLIENT ADDRESS		
100 Airside Drive, Moon Township, PA 15108		
COMPANY CONTRACTING THIS WORK (if applicable)		
Baker Environmental, Inc.		

PAGE 1 OF 2

STANDARD REPORT DELIVERY (X)
DATE DUE 28 day TAT
EXPEDITED REPORT DELIVERY (SURCHARGE) ( )
DATE DUE _____
NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT,...)	REQUIRED ANALYSIS: App.I VOCs SW-846/8260	REQUIRED ANALYSIS: App.I Metals SW-846/6010	REQUIRED ANALYSIS: App.I Diss.Metals SW-846/6010	NUMBER OF CONTAINERS SUBMITTED: HCl	REMARKS
3/2/05	1345	R7GW01R-11		X				4				
	1000	R7GW02R-11		X				4				
	1000	R7GW02R-11D		X				4				
	1000	R7GW02R-11MS		X				4				
	1000	R7GW02R-11MSD		X				4				
	1155	R7GW04R-11		X				4				
	1630	R7GW05R-11		X				4				
	1750	R7GW07R2-11		X				4				
	1916	R7GW08R-11		X				4				
	1111	R7GW09-11		X				4				
	1703	R7GW10-11		X				4				
↓	1916	R7GW11-11		X				4				

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
			Jon C. Edel	3/2/05	1300			
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
Jon C. Edel Jr.	JEC 3/2/05	0700						

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	STL SAVANNAH LOG NO.	LABORATORY REMARKS
	030405	0940	YES ( ) NO ( )		680-1126	

Serial Number 45326

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

SEVERN TRENT **STL**

Master Air Waybill # 84180 3122 5163

STL Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.stl-inc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Base Landfill	T.O. 19	PR
STL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Angie Weimerskirk		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Mark Kimes	412-269-2009	412-375-3995
CLIENT NAME	CLIENT E-MAIL	
Baker Environmental, Inc.	mkimes@mbakercorp.com	
CLIENT ADDRESS		
100 Airside Dive, Moon Township, PA 15108		
COMPANY CONTRACTING THIS WORK (if applicable)		
Baker Environmental, Inc.		

PAGE 2 OF 2

STANDARD REPORT DELIVERY (●)
DATE DUE 28 day TAT
EXPEDITED REPORT DELIVERY (SURCHARGE) ( )
DATE DUE

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT,...)	REQUIRED ANALYSIS: App.I VOCs SW-846/8260	REQUIRED ANALYSIS: App.I Metals SW-846/6010	REQUIRED ANALYSIS: App.I Diss.Metals SW-846/6010	REMARKS
		NUMBER OF CONTAINERS SUBMITTED						HCl			
3/2/05	0830	~~R7GW01R-11~~ R7FB01-11		X				4			
3/2/05	0835	~~R7GW02R-11~~ R7ER01-11		X				4			
3/3/05		~~R7GW02R-11D~~ R7TB01-11									
		R7GW02R-11MS									
		R7GW02R-11MSD									
		R7GW04R-11									
		R7GW05R-11									
		R7GW07R2-11									
		R7GW08R-11									
		R7GW09-11									
		R7GW10-11									
		R7GW11-11									

AB per JE

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
			Jon C. Edel Jr.	3/2/05	1300			
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
Jon C. Edel Jr.	3/2/05	0700						

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	STL SAVANNAH LOG NO.	LABORATORY REMARKS
	030405	0900	YES ( ) NO ( )		680 1126	

STL8240-680 (12/02)

APPENDIX C
Field Notebooks

Wednesday October [illegible] 6, 2004

Secure the metal casing of each well with the exception of RDGW11 which is a flushmount. The plastic zip ties were requested by Madeline Rivera of PWD. Environmental on base.

Jon C. Edell Jr.

Wednesday March 2, 2005

0715 Arrive at front gate with Mark Kines (MEK) to get vehicle pass.

0730 Arrive at PWD to speak with Pedro Ruiz (PWD-Env.). Sorting equipment ready and sample containers.

0830 Collecting DA/PE sample RDFB01-11.

0835 Collecting DA/PE sample RDER01-11.

* Collected sample using silicon and PE tubing.

0900 Arrive at marina to get ice and gatorade for sampling.

0915 Arrive at gate at Lovell. Signed in there.

0925 Arrive at RDGW02R to collect groundwater samples along with duplicate, MS, and MSD. Also am calibrating YSI meter.

pH Standard:

* Calibrated to 4.00 Standard
* Calibrated to 7.00 Standard
* Calibrated to 10.00 Standard

Conductivity:

* Calibrated to 1 ms/cm².

(17) Jon C. Edell Jr.

Wednesday March 2, 2005

RTGW02R

TD= NA (1)
Ø= 2"
SWL= 5.29' (below top PVC)

Start purge 0930
Bottom of tubing within well screen

Time	SWL	pH	Cond. (mS/cm)	Temp.	Comments
0936	5.50	6.65	28.14	28.67°C 83.61°F	Strong Sulfur odor SL. Cloudy
0942	5.71	6.56	26.14	28.49°C 83.28°F	Strong sulfur odor SL Cloudy
0948	5.72	6.54	25.60	28.50°C 83.30°F	Strong Sulfur odor SL. Cloudy
0953	5.77	6.54	25.45	28.45°C 83.21°F	Strong Sulfur odor SL. Cloudy

(18) Jon C. Edell Jr.

Wednesday March 2, 2005

* NER Sampled well.
* Sample time is 1000. Sampled for full App. I parameters as well as 1,4-Dioxane and beta-bHC.
* Sample appeared slightly cloudy with a strong Sulfur odor.
* Flow rate was to minimum capacity of pump.
* Weather is hot, humid, and sunny. No wind on this location.
* An interface probe was used to collect initial water level. No products observed. Groundwater level meter was used for each round of purging.
* Full App. I List:
  (4) 40 mL VOAs - HCl preserved
  (2) 250 mL poly - HNO_3 preserved
* Beta-bHC (2) 1-liter ambers - not preserved
* 1,4-Dioxane (2) 1-liter ambers - not preserved
* A peristaltic pump was used to purge and sample.
* The duplicate, MS, and MSD were collected from this location. All were the same analysis as the environment Sample.
* The final SWL was 5.78' below top of PVC.

(19) Jon C. Edell Jr.

Wednesday March 2, 2005

* A YSI multimeter was used for field parameters.
* The SWL is approximately 1.5' below top of PVC deeper than the SWL collected during the final round of the October 2004 Semi-annual Monitoring.

NA c) - The Total depth was not collected during this sampling round due to equipment Malfunction.

RTGW09-11

TD = NA c)
ø = 2"
SWL = 9.35' (below top PVC)

Start pump at 1048
Bottom of tubing within well screen

Time	SWL	pH	Cond. ms/cm	Temp.	Comments
1054	9.71	6.51	53.66	29.11°C 84.40°F	small black floating debris Strong sulfur odor
1059	9.79	6.48	51.70	28.51°C 83.32°F	small black floating debris Strong sulfur odor
1104	9.79	6.41	51.31	28.40°C 83.12°F	small black floating debris Strong Sulfur odor
1109	9.79	6.39	50.43	28.27°C 82.89°F	small black floating debris Strong Sulfur odor

Wednesday March 2, 2005

* MEK Sampled well.
* Sample time is 1111. Sampled for full App. I parameters as well as 1,4-Dioxane and beta-bhc.
* Sampled appeared relatively clear with some small black floating debris. Contained a strong sulfur odor.
* Flow rate was between 0.2 to 0.3 L/min.
* Weather is hot, humid, and partly sunny. Not much wind.
* An interface probe was used to collect initial SWL. No product observed. Groundwater level meter was used for each round of purging.
* Full App. I:
  (4) 40 mL VOAs - HCl preserved
  (2) 250 mL poly - HNO_3 preserved
* Beta-bHC (2) 1-liter ambers - not preserved
* 1,4-Dioxane (2) 1-liter ambers - not preserved
* A peristaltic pump was used to purge and sample.
* A YSI multimeter was used for field parameters.
* The SWL was approximately .4' deeper below top of PVC than during the final round of water levels taken in October 2004. The total depth was not collected during this sampling round due to equipment malfunction.

N/A(c)

Jon C. Edell Jr.

Wednesday March 2, 2005

Wednesday March 2, 2005

Kingwood-11

SWL = 12.2' (below top PVC) Start pump at 1129
Ø = 2" Bottom of tubing
TD = NA (') within well screen

Time	SWL	pH	mS/cm Cond.	Temp.	Comments
1136	14.05	6.46	55.95	29.64°C 85.32°F	Cloudy. No apparent odor
1141	15.85	6.21	55.87	29.10°C 89.38°F	SL. Cloudy. No apparent odor
1146	16.1	6.27	56.14	29.23°C 84.61°F	SL. Cloudy. No apparent odor
1151	16.9	6.25	56.96	29.16°C 84.49°F	SL. Cloudy No Apparent odor

(24) Jon C. Edell Gr.

Wednesday March 2, 2005

* MEK sampled well.
* Sample time is 1155. Sampled for full App. IX parameters as well as 1,4-Dioxane and beta-bhc.
* Sampled appeared slightly cloudy with no apparent odor.
* Flow rate was at minimum capacity.
* Weather is hot, humid, and partly sunny. Some wind present.
* An interface probe was used to collect initial SWL. No product observed - Groundwater water level meter was used for each round of purging.
* Full App. IX list:
  (4) 40 mL VOAs - HCl preserved
  (2) 250 mL poly - HNO_3 preserved
* Beta-bhc (2) 1-liter ambers.
* 1,4-Dioxane (2) 1-liter ambers.
* The peristaltic pump was used to purge and sample.
* A YSI multimeter was used to measure field parameters.
* The SWL was approximately less than .5' deeper than the SWL collected

(25) Jon C. Edell Gr.

Wednesday March 2 2005

during the final round of the October-2004 Monitoring.

NA(1) The total depth was not collected during this round due to equipment malfunction.

Jon C. Ellis Jr.

Wednesday March 2 2005

R7GW01R-11

SWL = 7.39' (below top PVC)
Ø = 2"
TD = NA (1)

Start pump 1305
Bottom of tubing within well screen.

Time	SWL	pH	ms/cm² Cond.	Temp.	Comments
1315	7.55	6.35	12.60	29.35°C 84.83°F	Small black floating debris Strong sulfur odor
1320	7.53	6.15	11.33	28.84°C 83.91°F	SL. Cloudy Strong sulfur odor
1325	7.54	6.13	8.99	28.85°C 83.93°F	SL. Cloudy Strong sulfur odor
1330	7.53	6.17	7.55	28.87°C 83.97°F	SL. Cloudy Strong sulfur odor

 Jon C. Ellis Jr.

Wednesday March 2, 2005

Time	SWL	pH	Cond. ms/cm	Temp. °C	Comments
1335	7.53	6.24	6.69	28.79°C 83.82°F	SL. Cloudy Strong sulfur odor
1340	7.53	6.21	5.96	28.84°C 83.91°F	SL. cloudy Strong sulfur odor

* MCR Sampled well.
* Sample time is 1345. Sampled for full App. I parameters as well as 1,4-Dioxane and beta-bhc.
* Sample appeared slightly cloudy with a strong sulfur odor.
* Flow rate was at the minimum capacity of the pump.
* Weather is warm, humid, and sunny. Wind is present.
* An interface probe was used to collect initial water level. No product observed. Groundwater level meter was used for each round of purging.

(28) Jon C. Edel Jr.

Wednesday March 2, 2005

* Full App. I List:
  (4) 40 mL VOAs - HCl preserved
  (2) 250 mL poly - HNO_3 preserved.
* Beta-bhc (2) 1-liter ambers - not preserved
* 1,4-Dioxane (2) 1-liter ambers - not preserved.
* A peristaltic pump was used to purge and sample.
* A YSI Multimeter was used for field parameters.
* The SWL is approximately 22' deeper from top pvc than the SWL measured during the October 2004 monitoring.
* NA (1) The total depth was not collected during this round due to equipment malfunction.

Jon C. Edel Jr.

(29)

Wednesday March 2, 2005

BMGWM-11

TOC NA(c)
Ø = 2"
SWL = 5.90' (below top PVC)

Starts pump 1355
Bottom of tubing within well screen

Time	SWL	pH	Cond. (ms/cm©)	Temp.	Comments
1400	6.01	6.42	1.15	30.39°C 86.70°F	SL. Cloudy No apparent odor
1405	6.00	6.07	1.14	30.00°C 86.000F	SL. Cloudy No apparent odor
1410	6.01	6.06	1.14	29.79°C 85.62°F	SL. Cloudy No apparent odor
1415	6.01	6.03	1.14	29.70°C 85.46°F	SL. cloudy No apparent odor

* MSK. sampled well.
* Sample time is 1418. Sampled for full App. I parameter including beta-bhc and 1,4'-Dioxane.
* Sample appeared slightly cloudy with no apparent odor.
* Flow rate was at the minimum capacity.
* Weather is warm, sunny, and windy.
* An interface probe was used to collect initial SWL. No product observed. Groundwater level meter was used during each round of purging.
* Full App. I list:
  (4) 40 mL VOAs - HCl preserved
  (2) 250 mL poly - HNO_3 preserved
* Beta-bhc (2) 1-liter amber - None preserved
* 1,4-Dioxane (2) 1-liter ambers - None preserved.
* Peristaltic was used to purge and sample.
* A YSI meter was used for field parameter.
* The SWL was approximately 2.5' below

Wednesday March 2, 2005

top of PVC deeper than during the final round of SWLs taken during the October 2004 monitoring.

NA(1) The total depth was not collected during this round due to equipment malfunction.

Jon C. Edell Jr

Wednesday March 2, 2005

R7GW05R-11

TD = NA(1)
Ø = 2"
SWL = 14.50' (below top PVC)

Start pumping 1557
Bottom of tubing within well screen

Time	SWL	pH	Cond. mS/cm	Temp.	Comments
1602	14.66	6.49	32.04	29.14°C 84.45°F	Relatively clear. Strong sulfur odor.
1607	14.66	6.35	28.43	28.83°C 83.89°F	Some small black debris floating. Strong sulfur odor.
1612	14.66	6.29	24.59	28.76°C 83.77°F	Same as above
1617	14.70	6.24	22.11	28.74°C 83.73°F	Same as above

 Jon C. Edell Jr

Wednesday — March 2, 2005

Time	SWL	pH	ms/cm Cond.	Temp.	Comments
1622	14.70	6.22	21.20	28.71°C 83.68°F	Same as on previous page
1627	14.70	6.22	20.87	28.64°C 83.55°F	Same as above

* MEK sampled well.
* Sample time is 1630. Sampled for full App = parameters including 1,4-Dioxane and beta-bhc.
* Sample is relatively clear with some small black floating debris. Sample also has a strong Sulfur odor.
* Flow rate was at minimum capacity of pump.
* Weather is hot, humid, and cloudy with some wind.
* An interface probe was used to collect initial SWL. No products observed.

(34) Jon C. Edell Jr.

Wednesday — March 2, 2005

Groundwater level meter was used for each round of purging.

* Full App. I List:

(4) 40 mL VOAs - HCl preserved
(2) 250 mL polys - HNO_3 preserved

* Beta-bhc (2) 1-liter ambers - not preserved
* 1,4-Dioxane (2) 1-liter amber - not preserved
* A peristaltic pump was used to purge and sample.
* A YSI multimeter was used for field parameters.
* The SWL is approximately 1' below top of PVC, deeper than during the final round of water levels collected during the October 2004 Semi-annual Monitoring.

NA(1) The total depth was not collected during this round of sampling due to equipment malfunction.

(35) Jon C. Edell Jr.

Jon C. Edell Jr.

R7GW10-11

TD = NA(1)
Ø = 2"
SWL = 13.48' (below top PVC)

Start pump 1689
Bottom of tubing within well screen

Time	SWL	pH	ms/cm Cond.	Temp.	Comments
1644	13.73	6.52	3.21	29.74°C 85.53°F	Relatively clear. No apparent odor.
1649	13.77	6.30	3.17	29.29°C 84.72°F	Same as above
1654	13.77	6.24	3.12	29.36°C 84.85°F	Same as above
1659	13.77	6.24	3.10	29.46°C 85.03°F	Sl. yellow tint. No apparent odor.

Jon C. Edell Jr.

Wednesday March 2 2005

* MSK sampled well.
* Sample time is 1203. Sampled for full App. I parameters including beta-bhc and 1,4-Dioxane.
* Sample had a slight yellowish tint with no apparent odor.
* Flow rate was at minimum capacity of the pump.
* Weather is warm, humid, and sunny. No wind at this location.
* An interface probe was used to collect initial water level. No product observed. Groundwater level meter was used for each round of purging.
* Full App. I list:

  (4) 40 mL VOAs - HCl preserved
  (2) 250 mL poly - HNO_3 preserved
* Beta-bhc (2) ~~(4)~~ 1-liter ambers - not preserved
  1ea
* 1,4'-Dioxane (2) 1-liter ambers - not preserved
* A peristaltic pump was used to purge and Sample.

(38) Jon C. Edlund.

Wednesday March 2 2005

* A YSI multimeter was used for field parameters.
* The SWL is approximately 2' below top of pvc deeper than during the final round of groundwater levels collected during the ~~September~~ October QCE 2004 Monitoring.

NA(1) The total depth was not collected during this round of sampling due to equipment malfunction.

Jon C. Edlund.

(39)

Wednesday March 2 2005

R7GW07R2-11

TD = NA (1)
Ø = 2"
SWL = 13.10' (below top pvc)

Start pump 1716
Bottom of tubing within well screen

Time	SWL	pH	Cond. (ms/cm)	Temp	Comments
1721	14.57	6.56	3.88	30.09°C 86.16°F	Relatively clear. No odor.
1726	14.70	6.42	4.25	29.74°C 85.53°F	Relatively clear. No odor.
1731	14.88	6.40	5.13	29.55°C 85.19°F	Same as above
1736	14.94	6.42	5.54	29.43°C 84.97°F	Same as above

Wednesday March 2 2005

Time	SWL	pH	Cond.	Temp	Comments
1741	14.98	6.37	6.02	29.55°C 85.19°F	Same as on previous page
1746	15.01	6.37	6.21	29.48°C 85.06°F	Same as above

* MER Sampled well.
* Sample time is 1750. Sampled for full App. I parameters including 1,4-Dioxane and beta-bhc.
* Sample is relatively clear with a no apparent odor.
* Flow rate was at the minimum capacity of the pump.
* Weather is warm, humid, and sunny with a slight wind.
* An interface probe was used to collect initial SWL. No product observed. Groundwater level ~~tape~~ JES meter was used for each round of purging.

Wednesday March 2, 2005

* Full App. I list:

(4) 40 mL VOAs - HCl preserved
(2) 250 mL polys - HNO_3 preserved

* Beta-bhc (2) 1-liter ambers - not preserved.
* 1,4-Dioxane (2) 1-liter amber - not preserved.
* A peristaltic pump was used to purge and sample.
* A YSI multimeter was used for field parameters.
* The SWL is approximately 3.5' below top of PVC deeper than during the groundwater monitoring in October 2004.

NA(1) The total depth was not collected during this round of sampling due to equipment malfunction.

Jon C. Edell Jr.

Wednesday March 2, 2005

RIGWOSR-11

TD = NA(1)
Ø = 2"
SWL = 11.10' (below top PVC)

Start pump 1758
Bottom of tubing within well screen

Time	SWL	pH	mS/cm Cond.	Temp.	Comments
1803	11.36	6.43	19.45	27.64°C 81.75°F	Relatively clear with a sl. sulfur odor.
1808	11.39	6.38	19.05	27.65°C 81.77°F	Same as above
1813	11.38	6.34	19.01	27.61°C 81.70°F	Slightly cloudy with a sl. sulfur odor

* MSK sampled well.
* Sample time is 1816. Sampled for full App. I parameters including 1,4-Dioxane

 Jon C. Edell Jr.

and beta-bhc.

* Sample is slightly cloudy with a SL. sulfur odor.
* Flow rate was at minimum capacity of pump.
* Weather is warm and humid with a slight wind.
* An interface probe was used to collect initial SWL. No product observed. Groundwater level meter was used for each round of purging.
* For App. IX list:
  (4) 40 mL VOAs - HCl preserved
  (2) 250 mL poly - HNO_3 preserved
* Beta-bhc (2) - 1-liter ambers - not preserved
* 1,4-Dioxane (2) - 1-liter ambers - not preserved.
* A peristaltic pump was used to purge and sample.
* A YSI Multimeter was used for field parameters.

* The SWL was approximately 3' below top of pvc decrease from SWL collected during the groundwater monitoring events during October 2004.

NA(1) the total depth was not collected during this round of sampling due to equipment malfunction.

Jon C. Edell Jr.

Wednesday March 2, 2005

1040 Leaving R>GW02R to go to R>GW09 to collect groundwater samples.
1045 Arrive at R>GW09.
1120 Leaving R>GW09 after collecting groundwater samples. Proceeding to R>GW04R.
1124 Arrive at R>GW04R to collect groundwater samples.
1208 Leaving Landfill to go get more ice and break for lunch.
1300 Arrive back at landfill to collect groundwater samples from R>GW01R.
1351 Leaving R>GW01R. All wells in the landfill have been sampled. Signed out at the landfill office.
1354 Arrive at R>GW11 to collect groundwater samples. Called FedEx to schedule a pickup of samples collected. FedEx pickup number was 1RRA185.
1425 JCE Leaving R>GW11 to go back to PWD to pack up samples and

Wednesday March 2, 2005

to meet FedEx.
1428 JCE MEK and I arrive at PWD.
1540 FedEx came to pick up the five coolers. The Master air waybill number was 8480 3122 5174. The relinquish time was 1500 on the COCs.
1548 MEK and I are leaving PWD to go to well R>GW05R.
1552 Arrive at well R>GW05R to collect groundwater samples.
1634 Leaving R>GW05R to go to well R>GW10.
1637 Arrive at R>GW10 to collect groundwater samples.
1708 Leaving R>GW10 to go to well R>GW07R2.
1712 Arrive at R>GW07R2 to collect groundwater samples.
1753 Leaving R>GW07R2 to go to well R>GW08R.
1756 Arrive at R>GW08R to collect

Wednesday March 2, 2005

groundwater samples.

1820 Leaving RDGWOSR to go back to PWD to drop off equipment and samples.

1830 MEK and I are leaving PWD. Finished sampling for the day. Offsite. Plastic zip ties were used at all the wells where appropriate, with the exception of RDGW11 because of being a flushmount well.

Jan C. Edel Jr.

Thursday March 3, 2005

0730 MEK and I arrived through the front gate of the base.

0741 We arrived at PWD to pack up samples and equipment.

0830 Went to Marina to get more ice for samples.

0840 Arrive back at PWD.

1140 MEK and I are leaving PWD. Semi-Annual groundwater sampling is finished. We are heading to San Juan to drop off the three remaining Coolers of samples at FedEx.

1300 Arrive at FedEx in San Juan to drop off coolers. The master air Waybill number is 8480 3122 5163. The relinquish time was 1300 on the COCs.

1330 Arrive at San Juan Airport.

+ MEK and I collected a full round of water levels at the landfill. See next page.

Jan C. Edel Jr.

Thursday March 3, 2005

(ft below top PVC)

Time	well	SWL	Comments
0900	RJGW02R	5.29	
0906	RJGW09	9.75	
0910	RJGW04R	12.20	
0917	RJGW01R	7.39	
0925	RJGW11	5.90	
0931	RJGW05R	14.50	well wobbles as noted previosly
0935	RJGW10	13.48	Root growth noted in well.
0939	RJGW07R2	13.10	
0944	RJGW08R	11.10	

* Zip ties were placed on wells where appropriate except for RJGW11.

Jon C. Edel Jr.

APPENDIX D
Laboratory Analytical Results

APPENDIX D

LABORATORY ANALYTICAL RESULTS
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Site ID	R7GW01R	R7GW02R	R7GW02R (Dup)	R7GW04R
Sample Description :	R7GW01R-11	R7GW02R-11	R7GW02R-11D	R7GW04R-11
Sample Date/Time :	3/2/2005 13:45	3/2/2005 10:00	3/2/2005 10:00	3/2/2005 11:55
Appendix I Volatile Organics (ug/L)				
1,1,1,2-Tetrachloroethane	1 U	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U	1 U
1,2,3-Trichloropropane	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U	1 U
2-Hexanone	10 U	10 U	10 U	10 U
Acetone	25 UJ	25 UJ	25 UJ	25 UJ
Acrylonitrile	20 U	20 U	20 U	20 U
Benzene	1 U	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U	1 U
Bromomethane	1 UJ	1 UJ	1 UJ	1 UJ
Carbon disulfide	1 U	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U	1 U
Chlorobromomethane	1 U	1 U	1 U	1 U
Chlorodibromomethane	1 U	1 U	1 U	1 U
Chloroethane	1 UJ	1 UJ	1 UJ	1 UJ
Chloroform	1 U	1 U	1 U	1 U
Chloromethane	1 UJ	1 UJ	1 UJ	1 UJ
cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U
Dibromomethane	1 U	1 U	1 U	1 U
Dichlorobromomethane	1 U	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U	1 U
Ethylene Dibromide	1 U	1 U	1 U	1 U
Iodomethane	5 UJ	5 UJ	5 UJ	5 UJ
Methyl Ethyl Ketone	10 U	10 U	10 U	10 U
methyl isobutyl ketone	10 U	10 U	10 U	10 U
Methylene Chloride	1 U	1 U	1 U	1 U
Styrene	1 U	1 U	1 U	1 U
Tetrachloroethene	1 U	1 U	1 U	1 U
Toluene	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U
trans-1,4-Dichloro-2-butene	2 U	2 U	2 U	2 U
Trichloroethene	1 U	1 U	1 U	1 U
Trichlorofluoromethane	1 R	1 R	1 R	1 R
Vinyl acetate	2 U	2 U	2 U	2 U
Vinyl chloride	1 U	1 U	1 U	1 U
Xylenes, Total	2 U	2 U	2 U	2 U

APPENDIX D

LABORATORY ANALYTICAL RESULTS
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Site ID	R7GW01R	R7GW02R	R7GW02R (Dup)	R7GW04R
Sample Description :	R7GW01R-11	R7GW02R-11	R7GW02R-11D	R7GW04R-11
Sample Date/Time :	3/2/2005 13:45	3/2/2005 10:00	3/2/2005 10:00	3/2/2005 11:55
Appendix I Metals (mg/L)				
Antimony	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic	0.01 U	0.01 U	0.01 U	0.0065 J
Barium	0.045	0.033 J	0.036	0.16
Beryllium	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium	0.005 U	0.005 U	0.005 U	0.0018 J
Chromium	0.01 U	0.01 U	0.01 U	0.005 J
Cobalt	0.01 U	0.01 U	0.01 U	0.018 J
Copper	0.02 U	0.02 U	0.02 U	0.02 U
Lead	0.005 UJ	0.005 UJ	0.005 U	0.005 U
Nickel	0.04 U	0.04 U	0.0021 J	0.003 J
Selenium	0.01 U	0.01 U	0.01 U	0.01 U
Silver	0.01 U	0.01 U	0.01 U	0.01 U
Thallium	0.025 U	0.025 U	0.025 U	0.025 U
Vanadium	0.014	0.011	0.0095 J	0.015 J
Zinc	0.02 U	0.02 U	0.02 U	0.031
Appendix I Metals (Dissolved) (mg/L)				
Antimony (Dissolved)	0.02 U	0.02 U	0.02 U	0.02 U
Arsenic, (Dissolved)	0.01 U	0.01 U	0.01 U	0.0051 J
Barium, (Dissolved)	0.045	0.038 J	0.037	0.16
Beryllium (Dissolved)	0.004 U	0.004 U	0.004 U	0.004 U
Cadmium (Dissolved)	0.005 U	0.005 U	0.005 U	0.005 U
Chromium, (Dissolved)	0.01 U	0.01 U	0.01 U	0.0019 J
Cobalt (Dissolved)	0.0017 J	0.01 U	0.01 U	0.021 J
Copper, Dissolved	0.02 U	0.02 U	0.02 U	0.02 U
Lead, (Dissolved)	0.005 UJ	0.005 UJ	0.005 UJ	0.005 UJ
Nickel, (Dissolved)	0.04 U	0.04 U	0.04 U	0.0027 J
Selenium (Dissolved)	0.01 U	0.01 U	0.01 U	0.01 U
Silver (Dissolved)	0.01 U	0.01 U	0.01 U	0.01 U
Thallium, (Dissolved)	0.025 U	0.025 U	0.025 U	0.025 U
Vanadium (Dissolved)	0.014	0.011	0.0093 J	0.015 J
Zinc, (Dissolved)	0.02 U	0.02 U	0.02 U	0.018 J

Notes:
U - Not Detected
ug/L - micrograms per liter
J - Qualified as Estimated
R - Rejected as invalid by Validator
mg/L - milligrams per liter

APPENDIX D

LABORATORY ANALYTICAL RESULTS
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Site ID	R7GW05R	R7GW07R2	R7GW08R
Sample Description :	R7GW05R-11	R7GW07R2-11	R7GW08R-11
Sample Date/Time :	3/2/2005 16:30	3/2/2005 17:50	3/2/2005 18:16
Appendix I Volatile Organics (ug/L)			
1,1,1,2-Tetrachloroethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U
1,2,3-Trichloropropane	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
2-Hexanone	10 U	10 U	10 U
Acetone	25 UJ	25 UJ	25 UJ
Acrylonitrile	20 U	20 U	20 U
Benzene	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U
Bromomethane	1 UJ	1 UJ	1 UJ
Carbon disulfide	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U
Chlorobenzene	0.6 J	1 U	1 U
Chlorobromomethane	1 U	1 U	1 U
Chlorodibromomethane	1 U	1 U	1 U
Chloroethane	1 UJ	1 UJ	1 UJ
Chloroform	1 U	1 U	1 U
Chloromethane	1 UJ	1 UJ	1 UJ
cis-1,2-Dichloroethene	0.99 J	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Dibromomethane	1 U	1 U	1 U
Dichlorobromomethane	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U
Ethylene Dibromide	1 U	1 U	1 U
Iodomethane	5 UJ	5 UJ	5 UJ
Methyl Ethyl Ketone	10 U	10 U	10 U
methyl isobutyl ketone	10 U	10 U	10 U
Methylene Chloride	1 U	1 U	1 U
Styrene	1 U	1 U	1 U
Tetrachloroethene	1 U	1 U	1 U
Toluene	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U
trans-1,4-Dichloro-2-butene	2 U	2 U	2 U
Trichloroethene	1 U	1 U	1 U
Trichlorofluoromethane	1 R	1 R	1 R
Vinyl acetate	2 U	2 U	2 U
Vinyl chloride	1 U	1 U	1 U
Xylenes, Total	2 U	2 U	2 U

APPENDIX D

LABORATORY ANALYTICAL RESULTS
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Site ID	R7GW05R	R7GW07R2	R7GW08R
Sample Description :	R7GW05R-11	R7GW07R2-11	R7GW08R-11
Sample Date/Time :	3/2/2005 16:30	3/2/2005 17:50	3/2/2005 18:16
Appendix I Metals (mg/L)			
Antimony	0.02 U	0.02 U	0.02 U
Arsenic	0.01 U	0.007 J	0.0071 J
Barium	0.015	0.16	0.063
Beryllium	0.004 U	0.004 U	0.004 U
Cadmium	0.005 U	0.005 U	0.005 U
Chromium	0.01 U	0.01 U	0.0009 J
Cobalt	0.01 U	0.0029 J	0.01 U
Copper	0.02 U	0.02 U	0.02 U
Lead	0.005 U	0.005 U	0.005 U
Nickel	0.04 U	0.04 U	0.002 J
Selenium	0.01 U	0.01 U	0.01 U
Silver	0.01 U	0.01 U	0.01 U
Thallium	0.025 U	0.025 U	0.025 U
Vanadium	0.0093 J	0.0021 J	0.0066 J
Zinc	0.02 U	0.02 U	0.02 U
Appendix I Metals (Dissolved) (mg/L)			
Antimony (Dissolved)	0.02 U	0.02 U	0.02 U
Arsenic, (Dissolved)	0.0077 J	0.007 J	0.01 U
Barium, (Dissolved)	0.015	0.16	0.059
Beryllium (Dissolved)	0.004 U	0.004 U	0.004 U
Cadmium (Dissolved)	0.005 U	0.005 U	0.005 U
Chromium, (Dissolved)	0.01 U	0.01 U	0.01 U
Cobalt (Dissolved)	0.0045 J	0.0035 J	0.0022 J
Copper, Dissolved	0.02 U	0.02 U	0.02 U
Lead, (Dissolved)	0.005 UJ	0.005 UJ	0.005 UJ
Nickel, (Dissolved)	0.04 U	0.04 U	0.0033 J
Selenium (Dissolved)	0.01 U	0.01 U	0.01 U
Silver (Dissolved)	0.01 U	0.01 U	0.01 U
Thallium, (Dissolved)	0.025 U	0.025 U	0.025 U
Vanadium (Dissolved)	0.0081 J	0.0021 J	0.0058 J
Zinc, (Dissolved)	0.02 U	0.02 U	0.02 U

Notes:
U - Not Detected
ug/L - micrograms per liter
J - Qualified as Estimated
R - Rejected as invalid by Validator
mg/L - milligrams per liter

APPENDIX D

LABORATORY ANALYTICAL RESULTS
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Site ID	R7GW09	R7GW10	R7GW11
Sample Description :	R7GW09-11	R7GW10-11	R7GW11-11
Sample Date/Time :	3/2/2005 11:11	3/2/2005 17:03	3/2/2005 14:18
Appendix I Volatile Organics (ug/L)			
1,1,1,2-Tetrachloroethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U
1,2,3-Trichloropropane	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
2-Hexanone	10 U	10 U	10 U
Acetone	25 UJ	25 UJ	25 UJ
Acrylonitrile	20 U	20 U	20 U
Benzene	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U
Bromomethane	1 UJ	1 UJ	1 UJ
Carbon disulfide	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U
Chlorobenzene	1 U	0.45 J	1 U
Chlorobromomethane	1 U	1 U	1 U
Chlorodibromomethane	1 U	1 U	1 U
Chloroethane	1 UJ	1 UJ	1 UJ
Chloroform	1 U	1 U	1 U
Chloromethane	1 UJ	1 UJ	1 UJ
cis-1,2-Dichloroethene	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Dibromomethane	1 U	1 U	1 U
Dichlorobromomethane	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U
Ethylene Dibromide	1 U	1 U	1 U
Iodomethane	5 UJ	5 UJ	5 UJ
Methyl Ethyl Ketone	10 U	10 U	10 U
methyl isobutyl ketone	10 U	10 U	10 U
Methylene Chloride	1 U	1 U	1 U
Styrene	1 U	1 U	1 U
Tetrachloroethene	1 U	1 U	1 U
Toluene	1 U	1 U	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U
trans-1,4-Dichloro-2-butene	2 U	2 U	2 U
Trichloroethene	1 U	1 U	1 U
Trichlorofluoromethane	1 R	1 R	1 R
Vinyl acetate	2 U	2 U	2 U
Vinyl chloride	1 U	1 U	1 U
Xylenes, Total	2 U	2 U	2 U

APPENDIX D

LABORATORY ANALYTICAL RESULTS
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

Site ID	R7GW09	R7GW10	R7GW11
Sample Description :	R7GW09-11	R7GW10-11	R7GW11-11
Sample Date/Time :	3/2/2005 11:11	3/2/2005 17:03	3/2/2005 14:18
Appendix I Metals (mg/L)			
Antimony	0.02 U	0.02 U	0.02 U
Arsenic	0.011	0.01 U	0.01 U
Barium	0.1	0.016	0.0032 J
Beryllium	0.004 U	0.004 U	0.004 U
Cadmium	0.005 U	0.005 U	0.005 U
Chromium	0.0015 J	0.0015 J	0.01 U
Cobalt	0.0092 J	0.00096 J	0.01 U
Copper	0.02 U	0.02 U	0.02 U
Lead	0.005 U	0.005 U	0.005 U
Nickel	0.04 U	0.04 U	0.04 U
Selenium	0.01 U	0.01 U	0.01 U
Silver	0.01 U	0.01 U	0.01 U
Thallium	0.025 U	0.025 U	0.025 U
Vanadium	0.018 J	0.0025 J	0.0014 J
Zinc	0.0043 J	0.02 U	0.02 U
Appendix I Metals (Dissolved) (mg/L)			
Antimony (Dissolved)	0.02 U	0.02 U	0.02 U
Arsenic, (Dissolved)	0.0065 J	0.01 U	0.01 U
Barium, (Dissolved)	0.11	0.016	0.0032 J
Beryllium (Dissolved)	0.00015 J	0.004 U	0.004 U
Cadmium (Dissolved)	0.005 U	0.005 U	0.005 U
Chromium, (Dissolved)	0.01 U	0.01 U	0.01 U
Cobalt (Dissolved)	0.011	0.0052 J	0.0051 J
Copper, Dissolved	0.02 U	0.02 U	0.02 U
Lead, (Dissolved)	0.005 UJ	0.005 UJ	0.005 UJ
Nickel, (Dissolved)	0.04 U	0.0024 J	0.04 U
Selenium (Dissolved)	0.01 U	0.01 U	0.01 U
Silver (Dissolved)	0.01 U	0.01 U	0.01 U
Thallium, (Dissolved)	0.025 U	0.025 U	0.025 U
Vanadium (Dissolved)	0.013 J	0.002 J	0.0016 J
Zinc, (Dissolved)	0.02 U	0.02 U	0.02 U

Notes:
U - Not Detected
ug/L - micrograms per liter
J - Qualified as Estimated
R - Rejected as invalid by Validator
mg/L - milligrams per liter

APPENDIX D
LABORAROTY ANALYTICAL RESULTS
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

	Equipment Rinsate	Field Blank	Trip Blank
Site ID	**R7ER01**	**R7FB01**	**R7TB01**
Sample Description :	**R7ER01-11**	**R7FB01-11**	**RTB01-11**
Sample Date/Time :	**3/2/2005 8:35**	**3/2/2005 8:30**	**3/3/2005 0:00**
Appendix 1 Volatile Organics (ug/L)			
1,1,1,2-Tetrachloroethane	1 U	1 U	1 U
1,1,1-Trichloroethane	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	1 U	1 U	1 U
1,1,2-Trichloroethane	1 U	1 U	1 U
1,1-Dichloroethane	1 U	1 U	1 U
1,1-Dichloroethene	1 U	1 U	1 U
1,2,3-Trichloropropane	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	1 U	1 U	1 U
1,2-Dichlorobenzene	1 U	1 U	1 U
1,2-Dichloroethane	1 U	1 U	1 U
1,2-Dichloropropane	1 U	1 U	1 U
1,4-Dichlorobenzene	1 U	1 U	1 U
2-Hexanone	10 U	10 U	10 U
Acetone	25 UJ	25 UJ	25 UJ
Acrylonitrile	20 U	20 U	20 U
Benzene	1 U	1 U	1 U
Bromoform	1 U	1 U	1 U
Bromomethane	1 UJ	1 UJ	1 UJ
Carbon disulfide	1 U	1 U	1 U
Carbon tetrachloride	1 U	1 U	1 U
Chlorobenzene	1 U	1 U	1 U
Chlorobromomethane	1 U	1 U	1 U
Chlorodibromomethane	1 U	1 U	1 U
Chloroethane	1 UJ	1 UJ	1 UJ
Chloroform	1 U	1 U	1 U
Chloromethane	1 UJ	1 UJ	1 UJ
cis-1,2-Dichloroethene	1 U	1 U	1 U
cis-1,3-Dichloropropene	1 U	1 U	1 U
Dibromomethane	1 U	1 U	1 U
Dichlorobromomethane	1 U	1 U	1 U
Ethylbenzene	1 U	1 U	1 U
Ethylene Dibromide	1 U	1 U	1 U
Iodomethane	5 UJ	5 UJ	5 UJ
Methyl Ethyl Ketone	10 U	10 U	10 U
methyl isobutyl ketone	10 U	10 U	10 U
Methylene Chloride	1 U	1 U	1 U
Styrene	1 U	1 U	1 U
Tetrachloroethene	1 U	1 U	1 U
Toluene	1.5	1.6	1 U
trans-1,2-Dichloroethene	1 U	1 U	1 U
trans-1,3-Dichloropropene	1 U	1 U	1 U
trans-1,4-Dichloro-2-butene	2 U	2 U	2 U
Trichloroethene	1 U	1 U	1 U
Trichlorofluoromethane	1 R	1 R	1 U
Vinyl acetate	2 U	2 U	2 U
Vinyl chloride	1 U	1 U	1 U
Xylenes, Total	2 U	2 U	2 U

APPENDIX D
LABORAROTY ANALYTICAL RESULTS
SEMI-ANNUAL GROUNDWATER MONITORING REPORT, MARCH 2005
SOLID WASTE LANDFILL FACILITY
NAVAL ACTIVITY PUERTO RICO, CEIBA, PUERTO RICO

	Equipment Rinsate	Field Blank	Trip Blank
Site ID	**R7ER01**	**R7FB01**	**R7TB01**
Sample Description :	**R7ER01-11**	**R7FB01-11**	**RTB01-11**
Sample Date/Time :	**3/2/2005 8:35**	**3/2/2005 8:30**	**3/3/2005 0:00**
Appendix I Metals (mg/L)			
Antimony	0.02 U	0.02 U	NA
Arsenic	0.01 U	0.01 U	NA
Barium	0.01 U	0.01 U	NA
Beryllium	0.004 U	0.004 U	NA
Cadmium	0.005 U	0.005 U	NA
Chromium	0.01 U	0.01 U	NA
Cobalt	0.01 U	0.01 U	NA
Copper	0.0021 J	0.0019 J	NA
Lead	0.005 U	0.005 U	NA
Nickel	0.04 U	0.04 U	NA
Selenium	0.01 U	0.01 U	NA
Silver	0.01 U	0.01 U	NA
Thallium	0.025 U	0.025 U	NA
Vanadium	0.01 U	0.01 U	NA
Zinc	0.02 U	0.0034 J	NA

Notes:
U - Not Detected
ug/L - micrograms per liter
J - Qualified as Estimated
mg/L - milligrams per liter
NA--not analyzed

APPENDIX E
Puerto Rican Chemist Certification

ANALYTICAL REPORT

Job Number: 680-1072.1

Sdg Number: PRN125

Job Description: Base Landfill/PRN125

For:

Michael Baker Jr., Inc.
Airside Business Park
100 Airside Drive
Moon Township, PA 15108

Attention: Mr. Mark Kimes

Angie Weimerskirk
Project Manager I
aweimerskirk@stl-inc.com

04/06/2005

Severn Trent Laboratories, Inc.
STL Savannah 5102 LaRoche Avenue, Savannah, GA 31404
Tel 912-3547858 Fax 912-3513673 www.stl-inc.com

ANALYTICAL REPORT

Job Number: 680-1072.1

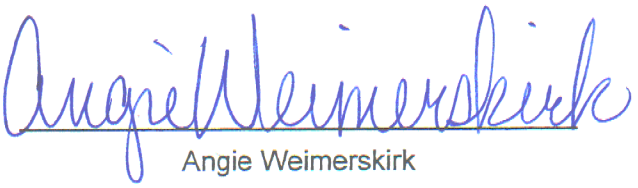
Sdg Number: PRN125

Job Description: Base Landfill/PRN125

For:

Michael Baker Jr., Inc.
Airside Business Park
100 Airside Drive
Moon Township, PA 15108

Attention: Mr. Mark Kimes



Angie Weimerskirk
Project Manager I
aweimerskirk@stl-inc.com

04/06/2005

Severn Trent Laboratories, Inc.
STL Savannah 5102 LaRoche Avenue, Savannah, GA 31404
Tel 912-3547858 Fax 912-3513673 www.stl-inc.com

STL Lab Reference No: STL Log# 680-1072/ SDG# PRN125

Project: Base Landfill

I. RECEIPT

The samples were received in good condition with cooler temperatures within acceptance criteria. No exceptions were encountered.

II. HOLDING TIMES

A. Sample Preparation: All holding times were met.

B. Sample Analysis: All holding times were met.

III. METHOD

Preparation: 3005A7470A
Cleanup: N/A
Analysis: SW-846/ 6010B/7470A

IV. PREPARATION

Sample preparation proceeded normally.

V. ANALYSIS

A. Calibration: All acceptance criteria were met.

B. Blanks: All acceptance criteria were met.

C. Spikes: Sample 680-1072-2 (R7GW02R-11) was the designated matrix spike/ matrix spike duplicate (MS/MSD) for the total and dissolved ICP metals and mercury analyses. The MS/MSD percent recoveries were outside of control limits for total mercury and dissolved mercury. All associated total and dissolved results were flagged with a "N".

D. Post-digestion spikes: The post-digestion spikes for sample 680-1072-2 were outside of control limits for total mercury and dissolved mercury. All total and dissolved sample results for mercury were below the detection limit. Therefore, the results were reported.

E. Samples: All acceptance criteria were met.

F. Other: All other acceptance criteria were met.

METHOD SUMMARY

Client: Michael Baker Jr., Inc

Job Number: 680-1072 1
Sdg Number: PRN125

Description	Method	Preparation Method
Matrix: Water		
Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846 6010B	
Acid Digestion of Waters for Total Recoverable or Dissolved Metals		SW846 3005A
Sample Filtration performed in the Field		FIELD_FLTRD
Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846 7470A	
Mercury in Liquid Waste (Manual Cold Vapor Technique)/Preparation		SW846 7470A
Sample Filtration performed in the Field		FIELD_FLTRD

REFERENCES

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates

SAMPLE SUMMARY

Client: Michael Baker Jr., Inc.

Job Number: 680-1072.1
Sdg Number: PRN125

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-1072-1	R7GW01R-11	Water	03/02/2005 1345	03/03/2005 0910
680-1072-2	R7GW02R-11	Water	03/02/2005 1000	03/03/2005 0910
680-1072-2MS	R7GW02R-11	Water	03/02/2005 1000	03/03/2005 0910
680-1072-2MSD	R7GW02R-11	Water	03/02/2005 1000	03/03/2005 0910
680-1072-3	R7GW02R-11D	Water	03/02/2005 1000	03/03/2005 0910
680-1072-4	R7FB01-11	Water	03/02/2005 0830	03/03/2005 0910
680-1072-5	R7ER01-11	Water	03/02/2005 0835	03/03/2005 0910
680-1072-6	R7GW11-11	Water	03/02/2005 1418	03/03/2005 0910
680-1072-7	R7GW04R-11	Water	03/02/2005 1155	03/03/2005 0910
680-1072-8	R7GW09-11	Water	03/02/2005 1111	03/03/2005 0910

SAMPLE RESULTS

Client: Michael Baker Jr., Inc.

Job Number: 680-1072.1
Sdg Number: PRN125

Client Sample ID: R7GW01R-11

Lab Sample ID: 680-1072-1
Client Matrix: Water

Date Sampled: 03/02/2005 1345
Date Received: 03/03/2005 0910

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B
Preparation: 6010B
Dilution: 1.0
Date Analyzed: 03/08/2005 2313
Date Prepared: 03/07/2005 1614

Analysis Batch: 680-3214
Prep Batch: 680-2740

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Antimony	0.020	U	0.0040	0.020
Arsenic	0.010	U	0.0042	0.010
Lead	0.0050	U	0.0022	0.0050
Selenium	0.010	U	0.0062	0.010
Barium	0.045		0.0012	0.010
Beryllium	0.0040	U	0.00012	0.0040
Cadmium	0.0050	U	0.0010	0.0050
Chromium	0.010	U	0.00083	0.010
Cobalt	0.010	U	0.00071	0.010
Copper	0.0027	J	0.0017	0.020
Nickel	0.040	U	0.0018	0.040
Silver	0.010	U	0.0010	0.010
Vanadium	0.014		0.0014	0.010
Zinc	0.0067	J	0.0030	0.020
Thallium	0.025	U	0.0098	0.025

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry-Dissolved

Method: 6010B
Preparation: 6010B
Dilution: 1.0
Date Analyzed: 03/08/2005 2158
Date Prepared: 03/07/2005 1454

Analysis Batch: 680-3303
Prep Batch: 680-2690

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Antimony	0.020	U	0.0040	0.020
Arsenic	0.010	U	0.0042	0.010
Lead	0.0050	U	0.0022	0.0050
Selenium	0.010	U	0.0062	0.010
Barium	0.045		0.0012	0.010
Beryllium	0.0040	U	0.00012	0.0040
Cadmium	0.0050	U	0.0010	0.0050
Chromium	0.010	U	0.00083	0.010
Cobalt	0.0017	J	0.00071	0.010
Copper	0.0025	J	0.0017	0.020
Nickel	0.040	U	0.0018	0.040
Silver	0.010	U	0.0010	0.010
Vanadium	0.014		0.0014	0.010
Zinc	0.0038	J	0.0030	0.020
Thallium	0.025	U	0.0098	0.025

Client: Michael Baker Jr , Inc

Job Number: 680-1072 1
Sdg Number: PRN125

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method:	7470A	Analysis Batch:	680-3866
Preparation:	7470A	Prep Batch:	680-2823
Dilution:	1 0		
Date Analyzed:	03/09/2005 1833		
Date Prepared:	03/08/2005 1155		

Instrument ID:	LEEMAN1		
Lab File ID:	N/A		
Initial Weight/Volume:	50 mL		
Final Weight/Volume:	50 mL		

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0 00020	U	0 000080	0 00020

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)-Dissolved

Method:	7470A	Analysis Batch:	680-3957
Preparation:	7470A	Prep Batch:	680-2826
Dilution:	1 0		
Date Analyzed:	03/09/2005 1730		
Date Prepared:	03/08/2005 1203		

Instrument ID:	LEEMAN1		
Lab File ID:	N/A		
Initial Weight/Volume:	50 mL		
Final Weight/Volume:	50 mL		

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0 00020	U	0 000080	0 00020

Client: Michael Baker Jr., Inc

Job Number: 680-1072.1
Sdg Number: PRN125

Client Sample ID: R7GW02R-11

Lab Sample ID: 680-1072-2
Client Matrix: Water

Date Sampled: 03/02/2005 1000
Date Received: 03/03/2005 0910

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B
Preparation: 6010B
Dilution: 1.0
Date Analyzed: 03/08/2005 2318
Date Prepared: 03/07/2005 1614

Analysis Batch: 680-3214
Prep Batch: 680-2740

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Antimony	0.020	U	0.0040	0.020
Arsenic	0.010	U	0.0042	0.010
Lead	0.0050	U	0.0022	0.0050
Selenium	0.010	U	0.0062	0.010
Barium	0.033		0.0012	0.010
Beryllium	0.0040	U	0.00012	0.0040
Cadmium	0.0050	U	0.0010	0.0050
Chromium	0.010	U	0.00083	0.010
Cobalt	0.010	U	0.00071	0.010
Copper	0.0031	J	0.0017	0.020
Nickel	0.040	U	0.0018	0.040
Silver	0.010	U	0.0010	0.010
Vanadium	0.011		0.0014	0.010
Zinc	0.0039	J	0.0030	0.020
Thallium	0.025	U	0.0098	0.025

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry-Dissolved

Method: 6010B
Preparation: 6010B
Dilution: 1.0
Date Analyzed: 03/08/2005 2203
Date Prepared: 03/07/2005 1454

Analysis Batch: 680-3303
Prep Batch: 680-2690

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Antimony	0.020	U	0.0040	0.020
Arsenic	0.010	U	0.0042	0.010
Lead	0.0050	U	0.0022	0.0050
Selenium	0.010	U	0.0062	0.010
Barium	0.038		0.0012	0.010
Beryllium	0.0040	U	0.00012	0.0040
Cadmium	0.0050	U	0.0010	0.0050
Chromium	0.010	U	0.00083	0.010
Cobalt	0.010	U	0.00071	0.010
Copper	0.0031	J	0.0017	0.020
Nickel	0.040	U	0.0018	0.040
Silver	0.010	U	0.0010	0.010
Vanadium	0.011		0.0014	0.010
Zinc	0.0031	J	0.0030	0.020
Thallium	0.025	U	0.0098	0.025

Client: Michael Baker Jr , Inc.

Job Number: 680-1072 1
Sdg Number: PRN125

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method:	7470A	Analysis Batch: 680-3866	Instrument ID:	LEEMAN1	
Preparation:	7470A	Prep Batch: 680-2823	Lab File ID:	N/A	
Dilution:	1 0		Initial Weight/Volume:	50 mL	
Date Analyzed:	03/09/2005 1837		Final Weight/Volume:	50 mL	
Date Prepared:	03/08/2005 1155				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0.00020	U	0 000080	0 00020

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)-Dissolved

Method:	7470A	Analysis Batch: 680-3957	Instrument ID:	LEEMAN1	
Preparation:	7470A	Prep Batch: 680-2826	Lab File ID:	N/A	
Dilution:	1 0		Initial Weight/Volume:	50 mL	
Date Analyzed:	03/09/2005 1733		Final Weight/Volume:	50 mL	
Date Prepared:	03/08/2005 1203				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0.00020	U	0.000080	0 00020

Client: Michael Baker Jr., Inc.

Job Number: 680-1072.1
Sdg Number: PRN125

Client Sample ID: R7GW02R-11D

Lab Sample ID: 680-1072-3
Client Matrix: Water

Date Sampled: 03/02/2005 1000
Date Received: 03/03/2005 0910

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B
Preparation: 6010B
Dilution: 1.0
Date Analyzed: 03/09/2005 0901
Date Prepared: 03/07/2005 1614

Analysis Batch: 680-3214
Prep Batch: 680-2740

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Antimony	0.020	U	0.0040	0.020
Arsenic	0.010	U	0.0042	0.010
Lead	0.0050	U	0.0022	0.0050
Selenium	0.010	U	0.0062	0.010
Barium	0.036		0.0012	0.010
Beryllium	0.0040	U	0.00012	0.0040
Cadmium	0.0050	U	0.0010	0.0050
Chromium	0.010	U	0.00083	0.010
Cobalt	0.010	U	0.00071	0.010
Copper	0.020	U	0.0017	0.020
Nickel	0.0021	J	0.0018	0.040
Silver	0.010	U	0.0010	0.010
Vanadium	0.0095	J	0.0014	0.010
Zinc	0.020	U	0.0030	0.020
Thallium	0.025	U	0.0098	0.025

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry-Dissolved

Method: 6010B
Preparation: 6010B
Dilution: 1.0
Date Analyzed: 03/08/2005 2235
Date Prepared: 03/07/2005 1454

Analysis Batch: 680-3303
Prep Batch: 680-2690

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Antimony	0.020	U	0.0040	0.020
Arsenic	0.010	U	0.0042	0.010
Lead	0.0050	U	0.0022	0.0050
Selenium	0.010	U	0.0062	0.010
Barium	0.037		0.0012	0.010
Beryllium	0.0040	U	0.00012	0.0040
Cadmium	0.0050	U	0.0010	0.0050
Chromium	0.010	U	0.00083	0.010
Cobalt	0.010	U	0.00071	0.010
Copper	0.0031	J	0.0017	0.020
Nickel	0.040	U	0.0018	0.040
Silver	0.010	U	0.0010	0.010
Vanadium	0.0093	J	0.0014	0.010
Zinc	0.0034	J	0.0030	0.020
Thallium	0.025	U	0.0098	0.025

Client: Michael Baker Jr , Inc

Job Number: 680-1072 1
Sdg Number: PRN125

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method:	7470A	Analysis Batch:	680-3866
Preparation:	7470A	Prep Batch:	680-2823
Dilution:	1 0		
Date Analyzed:	03/09/2005 1853		
Date Prepared:	03/08/2005 1155		

Instrument ID:	LEEMAN1
Lab File ID:	N/A
Initial Weight/Volume:	50 mL
Final Weight/Volume:	50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0 00020	U	0 000080	0 00020

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)-Dissolved

Method:	7470A	Analysis Batch:	680-3957
Preparation:	7470A	Prep Batch:	680-2826
Dilution:	1 0		
Date Analyzed:	03/09/2005 1756		
Date Prepared:	03/08/2005 1203		

Instrument ID:	LEEMAN1
Lab File ID:	N/A
Initial Weight/Volume:	50 mL
Final Weight/Volume:	50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0 00020	U	0 000080	0 00020

Client: Michael Baker Jr , Inc.

Job Number: 680-1072 1
Sdg Number: PRN125

Client Sample ID: R7FB01-11

Lab Sample ID: 680-1072-4
Client Matrix: Water

Date Sampled: 03/02/2005 0830
Date Received: 03/03/2005 0910

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B
Preparation: 6010B
Dilution: 1 0
Date Analyzed: 03/08/2005 2355
Date Prepared: 03/07/2005 1614

Analysis Batch: 680-3214
Prep Batch: 680-2740

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Antimony	0 020	U	0 0040	0 020
Arsenic	0 010	U	0 0042	0 010
Lead	0 0050	U	0 0022	0 0050
Selenium	0 010	U	0 0062	0 010
Barium	0 010	U	0 0012	0 010
Beryllium	0 0040	U	0 00012	0 0040
Cadmium	0 0050	U	0 0010	0 0050
Chromium	0 010	U	0 00083	0 010
Cobalt	0 010	U	0 00071	0 010
Copper	0 0019	J	0 0017	0 020
Nickel	0 040	U	0 0018	0 040
Silver	0 010	U	0 0010	0 010
Vanadium	0 010	U	0 0014	0 010
Zinc	0 0034	J	0 0030	0 020
Thallium	0 025	U	0 0098	0 025

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method: 7470A
Preparation: 7470A
Dilution: 1 0
Date Analyzed: 03/09/2005 1903
Date Prepared: 03/08/2005 1155

Analysis Batch: 680-3866
Prep Batch: 680-2823

Instrument ID: LEEMAN1
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0 00020	U	0 000080	0 00020

Client: Michael Baker Jr , Inc.

Job Number: 680-1072.1
Sdg Number: PRN125

Client Sample ID: R7ER01-11

Lab Sample ID: 680-1072-5
Client Matrix: Water

Date Sampled: 03/02/2005 0835
Date Received: 03/03/2005 0910

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B
Preparation: 6010B
Dilution: 1 0
Date Analyzed: 03/09/2005 0000
Date Prepared: 03/07/2005 1614

Analysis Batch: 680-3214
Prep Batch: 680-2740

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Antimony	0 020	U	0 0040	0 020
Arsenic	0 010	U	0 0042	0 010
Lead	0 0050	U	0 0022	0 0050
Selenium	0 010	U	0 0062	0 010
Barium	0 010	U	0 0012	0 010
Beryllium	0.0040	U	0 00012	0 0040
Cadmium	0.0050	U	0 0010	0 0050
Chromium	0.010	U	0.00083	0 010
Cobalt	0 010	U	0 00071	0 010
Copper	0 0021	J	0 0017	0 020
Nickel	0 040	U	0 0018	0 040
Silver	0 010	U	0 0010	0 010
Vanadium	0 010	U	0 0014	0 010
Zinc	0 020	U	0 0030	0 020
Thallium	0 025	U	0 0098	0 025

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method: 7470A
Preparation: 7470A
Dilution: 1 0
Date Analyzed: 03/09/2005 1906
Date Prepared: 03/08/2005 1155

Analysis Batch: 680-3866
Prep Batch: 680-2823

Instrument ID: LEEMAN1
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0 00020	U	0 000080	0 00020

Client: Michael Baker Jr , Inc

Job Number: 680-1072.1
Sdg Number: PRN125

Client Sample ID: R7GW11-11

Lab Sample ID: 680-1072-6
Client Matrix: Water

Date Sampled: 03/02/2005 1418
Date Received: 03/03/2005 0910

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B
Preparation: 6010B
Dilution: 1 0
Date Analyzed: 03/09/2005 0004
Date Prepared: 03/07/2005 1614

Analysis Batch: 680-3214
Prep Batch: 680-2740

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Antimony	0 020	U	0 0040	0 020
Arsenic	0 010	U	0 0042	0 010
Lead	0 0050	U	0 0022	0 0050
Selenium	0 010	U	0 0062	0 010
Barium	0 0032	J	0 0012	0 010
Beryllium	0 0040	U	0 00012	0 0040
Cadmium	0 0050	U	0 0010	0 0050
Chromium	0 010	U	0 00083	0 010
Cobalt	0 010	U	0 00071	0 010
Copper	0 0023	J	0 0017	0 020
Nickel	0 040	U	0 0018	0 040
Silver	0 010	U	0 0010	0 010
Vanadium	0 0014	J	0 0014	0 010
Zinc	0 0049	J	0 0030	0 020
Thallium	0 025	U	0 0098	0 025

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry-Dissolved

Method: 6010B
Preparation: 6010B
Dilution: 1 0
Date Analyzed: 03/08/2005 2240
Date Prepared: 03/07/2005 1454

Analysis Batch: 680-3303
Prep Batch: 680-2690

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Antimony	0 020	U	0 0040	0 020
Arsenic	0 010	U	0 0042	0 010
Lead	0 0050	U	0 0022	0 0050
Selenium	0 010	U	0 0062	0 010
Barium	0 0032	J	0 0012	0 010
Beryllium	0 0040	U	0 00012	0 0040
Cadmium	0 0050	U	0 0010	0 0050
Chromium	0 010	U	0 00083	0 010
Cobalt	0 0051	J	0 00071	0 010
Copper	0 0026	J	0 0017	0 020
Nickel	0 040	U	0 0018	0 040
Silver	0 010	U	0 0010	0 010
Vanadium	0 0016	J	0 0014	0 010
Zinc	0 0035	J	0 0030	0 020
Thallium	0 025	U	0 0098	0 025

Client: Michael Baker Jr , Inc

Job Number: 680-1072 1
Sdg Number: PRN125

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method:	7470A	Analysis Batch:	680-3866
Preparation:	7470A	Prep Batch:	680-2823
Dilution:	1 0		
Date Analyzed:	03/09/2005 1909		
Date Prepared:	03/08/2005 1155		

Instrument ID:	LEEMAN1
Lab File ID:	N/A
Initial Weight/Volume:	50 mL
Final Weight/Volume:	50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0 00020	U	0 000080	0 00020

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)-Dissolved

Method:	7470A	Analysis Batch:	680-3957
Preparation:	7470A	Prep Batch:	680-2826
Dilution:	1 0		
Date Analyzed:	03/09/2005 1759		
Date Prepared:	03/08/2005 1203		

Instrument ID:	LEEMAN1
Lab File ID:	N/A
Initial Weight/Volume:	50 mL
Final Weight/Volume:	50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0 00020	U	0 000080	0 00020

Client: Michael Baker Jr., Inc.

Job Number: 680-1072.1
Sdg Number: PRN125

Client Sample ID: R7GW04R-11

Lab Sample ID: 680-1072-7
Client Matrix: Water

Date Sampled: 03/02/2005 1155
Date Received: 03/03/2005 0910

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B
Preparation: 6010B
Dilution: 1.0
Date Analyzed: 03/09/2005 0009
Date Prepared: 03/07/2005 1614

Analysis Batch: 680-3214
Prep Batch: 680-2740

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Antimony	0.020	U	0.0040	0.020
Arsenic	0.0065	J	0.0042	0.010
Lead	0.0050	U	0.0022	0.0050
Selenium	0.010	U	0.0062	0.010
Barium	0.16		0.0012	0.010
Beryllium	0.0040	U	0.00012	0.0040
Cadmium	0.0018	J	0.0010	0.0050
Chromium	0.0050	J	0.00083	0.010
Cobalt	0.018		0.00071	0.010
Copper	0.010	J	0.0017	0.020
Nickel	0.0030	J	0.0018	0.040
Silver	0.010	U	0.0010	0.010
Vanadium	0.015	J	0.0070	0.050
Zinc	0.031		0.0030	0.020
Thallium	0.025	U	0.0098	0.025

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry-Dissolved

Method: 6010B
Preparation: 6010B
Dilution: 1.0
Date Analyzed: 03/08/2005 2245
Date Prepared: 03/07/2005 1454

Analysis Batch: 680-3303
Prep Batch: 680-2690

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Antimony	0.020	U	0.0040	0.020
Arsenic	0.0051	J	0.0042	0.010
Lead	0.0050	U	0.0022	0.0050
Selenium	0.010	U	0.0062	0.010
Barium	0.16		0.0012	0.010
Beryllium	0.0040	U	0.00012	0.0040
Cadmium	0.0050	U	0.0010	0.0050
Chromium	0.0019	J	0.00083	0.010
Cobalt	0.021		0.00071	0.010
Copper	0.0039	J	0.0017	0.020
Nickel	0.0027	J	0.0018	0.040
Silver	0.010	U	0.0010	0.010
Vanadium	0.015	J	0.0070	0.050
Zinc	0.018	J	0.0030	0.020
Thallium	0.025	U	0.0098	0.025

Client: Michael Baker Jr., Inc

Job Number: 680-1072 1
Sdg Number: PRN125

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method:	7470A	Analysis Batch:	680-3866
Preparation:	7470A	Prep Batch:	680-2823
Dilution:	1 0		
Date Analyzed:	03/09/2005 1912		
Date Prepared:	03/08/2005 1155		

Instrument ID:	LEEMAN1
Lab File ID:	N/A
Initial Weight/Volume:	50 mL
Final Weight/Volume:	50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0 00020	U	0 000080	0 00020

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)-Dissolved

Method:	7470A	Analysis Batch:	680-3957
Preparation:	7470A	Prep Batch:	680-2826
Dilution:	1.0		
Date Analyzed:	03/09/2005 1803		
Date Prepared:	03/08/2005 1203		

Instrument ID:	LEEMAN1
Lab File ID:	N/A
Initial Weight/Volume:	50 mL
Final Weight/Volume:	50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0 00020	U	0 000080	0 00020

Client: Michael Baker Jr., Inc

Job Number: 680-1072.1
Sdg Number: PRN125

Client Sample ID: R7GW09-11

Lab Sample ID: 680-1072-8
Client Matrix: Water

Date Sampled: 03/02/2005 1111
Date Received: 03/03/2005 0910

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B
Preparation: 6010B
Dilution: 1.0
Date Analyzed: 03/09/2005 0014
Date Prepared: 03/07/2005 1614
Analysis Batch: 680-3214
Prep Batch: 680-2740

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Antimony	0.020	U	0.0040	0.020
Arsenic	0.011		0.0042	0.010
Lead	0.0050	U	0.0022	0.0050
Selenium	0.010	U	0.0062	0.010
Barium	0.10		0.0012	0.010
Beryllium	0.0040	U	0.00012	0.0040
Cadmium	0.0050	U	0.0010	0.0050
Chromium	0.0015	J	0.00083	0.010
Cobalt	0.0092	J	0.00071	0.010
Copper	0.0077	J	0.0017	0.020
Nickel	0.040	U	0.0018	0.040
Silver	0.010	U	0.0010	0.010
Vanadium	0.018	J	0.0070	0.050
Zinc	0.0043	J	0.0030	0.020
Thallium	0.025	U	0.0098	0.025

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry-Dissolved

Method: 6010B
Preparation: 6010B
Dilution: 1.0
Date Analyzed: 03/10/2005 1609
Date Prepared: 03/07/2005 1454
Analysis Batch: 680-3303
Prep Batch: 680-2690

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	MDL	RL
Antimony	0.020	U	0.0040	0.020
Arsenic	0.0065	J	0.0042	0.010
Lead	0.0050	U	0.0022	0.0050
Selenium	0.010	U	0.0062	0.010
Barium	0.11		0.0012	0.010
Beryllium	0.00015	J	0.00012	0.0040
Cadmium	0.0050	U	0.0010	0.0050
Chromium	0.010	U	0.00083	0.010
Cobalt	0.011		0.00071	0.010
Copper	0.020	U	0.0017	0.020
Nickel	0.040	U	0.0018	0.040
Silver	0.010	U	0.0010	0.010
Vanadium	0.013	J	0.0070	0.050
Zinc	0.0034	J	0.0030	0.020
Thallium	0.025	U	0.0098	0.025

Client: Michael Baker Jr., Inc.

Job Number: 680-1072.1
Sdg Number: PRN125

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method:	7470A	Analysis Batch:	680-3866	Instrument ID:	LEEMAN1
Preparation:	7470A	Prep Batch:	680-2823	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	03/09/2005 1915			Final Weight/Volume:	50 mL
Date Prepared:	03/08/2005 1155				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0.00020	U	0.000080	0.00020

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)-Dissolved

Method:	7470A	Analysis Batch:	680-3957	Instrument ID:	LEEMAN1
Preparation:	7470A	Prep Batch:	680-2826	Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Date Analyzed:	03/09/2005 1806			Final Weight/Volume:	50 mL
Date Prepared:	03/08/2005 1203				

Analyte	Result (mg/L)	Qualifier	MDL	RL
Mercury	0.00020	U	0.000080	0.00020

DATA REPORTING QUALIFIERS

Client: Michael Baker Jr., Inc

Job Number: 680-1072.1
Sdg Number: PRN125

Lab Section	Qualifier	Description
Metals		
	U	Analyte was not detected at or above the reporting limit.
	*	LCS, LCSD, MS, MSD, MD, or Surrogate exceeds the control limits
	N	MS, MSD: Spike recovery exceeds upper or lower control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

QUALITY CONTROL RESULTS

Client: Michael Baker Jr , Inc

Job Number: 680-1072.1
Sdg Number: PRN125

QC Association Summary

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
Metals				
Prep Batch: 680-2690				
LCS 680-2690/12-B	Lab Control Spike	Water	6010B	
MB 680-2690/11-B	Method Blank	Water	6010B	
680-1072-F-1-B *D	R7GW01R-11	Water	6010B	
680-1072-F-2-B *D	R7GW02R-11	Water	6010B	
680-1072-A-2-D MS*D	Matrix Spike	Water	6010B	
680-1072-A-2-D	Matrix Spike Duplicate	Water	6010B	
680-1072-A-3-D *D	R7GW02R-11D	Water	6010B	
680-1072-F-6-B *D	R7GW11-11	Water	6010B	
680-1072-F-7-B *D	R7GW04R-11	Water	6010B	
680-1072-F-8-B *D	R7GW09-11	Water	6010B	
Prep Batch: 680-2740				
LCS 680-2740/22-A	Lab Control Spike	Water	6010B	
MB 680-2740/21-A	Method Blank	Water	6010B	
680-1072-A-1-C	R7GW01R-11	Water	6010B	
680-1072-A-2-C	R7GW02R-11	Water	6010B	
680-1072-B-2-A MS	Matrix Spike	Water	6010B	
680-1072-B-2-A MSD	Matrix Spike Duplicate	Water	6010B	
680-1072-F-3-A	R7GW02R-11D	Water	6010B	
680-1072-A-4-C	R7FB01-11	Water	6010B	
680-1072-A-5-C	R7ER01-11	Water	6010B	
680-1072-A-6-C	R7GW11-11	Water	6010B	
680-1072-A-7-C	R7GW04R-11	Water	6010B	
680-1072-A-8-C	R7GW09-11	Water	6010B	
Prep Batch: 680-2823				
LCS 680-2823/16-A	Lab Control Spike	Water	7470A	
MB 680-2823/15-A	Method Blank	Water	7470A	
680-1072-A-1-D	R7GW01R-11	Water	7470A	
680-1072-A-2-D	R7GW02R-11	Water	7470A	
680-1072-A-2-E MS	Matrix Spike	Water	7470A	
680-1072-A-2-E MSD	Matrix Spike Duplicate	Water	7470A	
680-1072-A-3-E	R7GW02R-11D	Water	7470A	
680-1072-A-4-D	R7FB01-11	Water	7470A	
680-1072-A-5-D	R7ER01-11	Water	7470A	
680-1072-A-6-D	R7GW11-11	Water	7470A	
680-1072-A-7-D	R7GW04R-11	Water	7470A	
680-1072-A-8-D	R7GW09-11	Water	7470A	

Client: Michael Baker Jr., Inc

Job Number: 680-1072 1
Sdg Number: PRN125

QC Association Summary

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
Metals				
Prep Batch: 680-2826				
LCS 680-2826/14-A	Lab Control Spike	Water	7470A	
MB 680-2826/13-A	Method Blank	Water	7470A	
680-1072-F-1-D *D	R7GW01R-11	Water	7470A	
680-1072-F-2-D *D	R7GW02R-11	Water	7470A	
680-1072-B-2-C MS*D	Matrix Spike	Water	7470A	
680-1072-B-2-C	Matrix Spike Duplicate	Water	7470A	
680-1072-F-3-C *D	R7GW02R-11D	Water	7470A	
680-1072-F-6-D *D	R7GW11-11	Water	7470A	
680-1072-F-7-D *D	R7GW04R-11	Water	7470A	
680-1072-F-8-D *D	R7GW09-11	Water	7470A	
Analysis Batch:680-3303				
LCS 680-2690/12-B	Lab Control Spike	Water	6010B	680-2690
MB 680-2690/11-B	Method Blank	Water	6010B	680-2690
680-1072-F-1-B *D	R7GW01R-11	Water	6010B	680-2690
680-1072-F-2-B *D	R7GW02R-11	Water	6010B	680-2690
680-1072-A-2-D MS*D	Matrix Spike	Water	6010B	680-2690
680-1072-A-2-D	Matrix Spike Duplicate	Water	6010B	680-2690
680-1072-A-3-D *D	R7GW02R-11D	Water	6010B	680-2690
680-1072-F-6-B *D	R7GW11-11	Water	6010B	680-2690
680-1072-F-7-B *D	R7GW04R-11	Water	6010B	680-2690
680-1072-F-8-B *D	R7GW09-11	Water	6010B	680-2690
Analysis Batch:680-3214				
LCS 680-2740/22-A	Lab Control Spike	Water	6010B	680-2740
MB 680-2740/21-A	Method Blank	Water	6010B	680-2740
680-1072-A-1-C	R7GW01R-11	Water	6010B	680-2740
680-1072-A-2-C	R7GW02R-11	Water	6010B	680-2740
680-1072-B-2-A MS	Matrix Spike	Water	6010B	680-2740
680-1072-B-2-A MSD	Matrix Spike Duplicate	Water	6010B	680-2740
680-1072-F-3-A	R7GW02R-11D	Water	6010B	680-2740
680-1072-A-4-C	R7FB01-11	Water	6010B	680-2740
680-1072-A-5-C	R7ER01-11	Water	6010B	680-2740
680-1072-A-6-C	R7GW11-11	Water	6010B	680-2740
680-1072-A-7-C	R7GW04R-11	Water	6010B	680-2740
680-1072-A-8-C	R7GW09-11	Water	6010B	680-2740

Client: Michael Baker Jr., Inc

Job Number: 680-1072 1
Sdg Number: PRN125

QC Association Summary

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
Metals				
Analysis Batch:680-3866				
LCS 680-2823/16-A	Lab Control Spike	Water	7470A	680-2823
MB 680-2823/15-A	Method Blank	Water	7470A	680-2823
680-1072-A-1-D	R7GW01R-11	Water	7470A	680-2823
680-1072-A-2-D	R7GW02R-11	Water	7470A	680-2823
680-1072-A-2-E MS	Matrix Spike	Water	7470A	680-2823
680-1072-A-2-E MSD	Matrix Spike Duplicate	Water	7470A	680-2823
680-1072-A-3-E	R7GW02R-11D	Water	7470A	680-2823
680-1072-A-4-D	R7FB01-11	Water	7470A	680-2823
680-1072-A-5-D	R7ER01-11	Water	7470A	680-2823
680-1072-A-6-D	R7GW11-11	Water	7470A	680-2823
680-1072-A-7-D	R7GW04R-11	Water	7470A	680-2823
680-1072-A-8-D	R7GW09-11	Water	7470A	680-2823
Analysis Batch:680-3957				
LCS 680-2826/14-A	Lab Control Spike	Water	7470A	680-2826
MB 680-2826/13-A	Method Blank	Water	7470A	680-2826
680-1072-F-1-D *D	R7GW01R-11	Water	7470A	680-2826
680-1072-F-2-D *D	R7GW02R-11	Water	7470A	680-2826
680-1072-B-2-C MS*D	Matrix Spike	Water	7470A	680-2826
680-1072-B-2-C	Matrix Spike Duplicate	Water	7470A	680-2826
680-1072-F-3-C *D	R7GW02R-11D	Water	7470A	680-2826
680-1072-F-6-D *D	R7GW11-11	Water	7470A	680-2826
680-1072-F-7-D *D	R7GW04R-11	Water	7470A	680-2826
680-1072-F-8-D *D	R7GW09-11	Water	7470A	680-2826

Client: Michael Baker Jr , Inc.

Job Number: 680-1072 1
Sdg Number: PRN125

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry-Dissolved

Method Blank - Batch: 680-2690

Lab ID: MB 680-2690/11-B
Matrix: Water
Date Analyzed: 03/08/2005 2130
Units: mg/L
Dilution: 1 0

Analyte	Result	Qualifier	MDL	RL
Antimony	0 020	U	0 0040	0 020
Arsenic	0 010	U	0 0042	0 010
Lead	0 0050	U	0 0022	0 0050
Selenium	0 010	U	0 0062	0 010
Barium	0 010	U	0 0012	0 010
Beryllium	0 0040	U	0 00012	0 0040
Cadmium	0 0050	U	0 0010	0 0050
Chromium	0 010	U	0 00083	0 010
Cobalt	0 010	U	0 00071	0 010
Copper	0 0018	J	0 0017	0 020
Nickel	0 040	U	0 0018	0 040
Silver	0 010	U	0 0010	0 010
Vanadium	0 010	U	0 0014	0 010
Zinc	0 020	U	0 0030	0 020
Thallium	0 025	U	0 0098	0 025

Laboratory Control Sample - Batch: 680-2690

Lab ID: LCS 680-2690/12-B
Matrix: Water
Date Analyzed: 03/08/2005 2135
Units: mg/L
Dilution: 1 0

Analyte	Spike Amount	Result	% Rec	Recovery Limits	Qualifier
Antimony	0 500	0 47	93	75 - 125	
Arsenic	2 00	1 9	95	75 - 125	
Lead	0 500	0 50	100	75 - 125	
Selenium	2 00	1 9	96	75 - 125	
Barium	2 00	1 9	96	75 - 125	
Beryllium	0 0500	0 048	97	75 - 125	
Cadmium	0 0500	0 047	94	75 - 125	
Chromium	0 200	0 20	98	75 - 125	
Cobalt	0 500	0 50	99	75 - 125	
Copper	0.250	0 25	101	75 - 125	
Nickel	0 500	0 47	95	75 - 125	
Silver	0 0500	0 049	97	75 - 125	
Vanadium	0 500	0 49	98	75 - 125	
Zinc	0 500	0 51	102	75 - 125	
Thallium	2 00	1 9	96	75 - 125	

Calculations are performed before rounding to avoid round-off errors in calculated results

Client: Michael Baker Jr., Inc

Job Number: 680-1072.1
Sdg Number: PRN125

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry-Dissolved

Matrix Spike/Spike Duplicate - Batch: 680-2690

MS Lab ID: 680-1072-A-2-D MS*D
MSD Lab ID: 680-1072-A-2-D MSD*D
Matrix: Water

Date Analyzed: 03/08/2005 2226
Date Analyzed: 03/08/2005 2231

Dilution: 1.0
Dilution: 1.0

Analyte	% Recovery MS	% Recovery MSD	Recovery Limits	RPD	RPD Limit	Qualifier
Antimony	104	103	75 - 125	1	20	
Arsenic	105	104	75 - 125	0	20	
Lead	103	102	75 - 125	1	20	
Selenium	103	99	75 - 125	4	20	
Barium	95	94	75 - 125	1	20	
Beryllium	94	93	75 - 125	1	20	
Cadmium	90	90	75 - 125	0	20	
Chromium	96	95	75 - 125	1	20	
Cobalt	99	98	75 - 125	0	20	
Copper	113	113	75 - 125	0	20	
Nickel	92	91	75 - 125	1	20	
Silver	113	113	75 - 125	0	20	
Vanadium	98	98	75 - 125	1	20	
Zinc	104	103	75 - 125	1	20	
Thallium	105	104	75 - 125	1	20	

Calculations are performed before rounding to avoid round-off errors in calculated results

Client: Michael Baker Jr , Inc

Job Number: 680-1072 1
Sdg Number: PRN125

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method Blank - Batch: 680-2740

Lab ID: MB 680-2740/21-A
Matrix: Water
Date Analyzed: 03/08/2005 2303
Units: mg/L
Dilution: 1 0

Analyte	Result	Qualifier	MDL	RL
Antimony	0 020	U	0 0040	0 020
Arsenic	0 010	U	0 0042	0 010
Lead	0 0050	U	0 0022	0 0050
Selenium	0 010	U	0 0062	0 010
Barium	0 010	U	0 0012	0 010
Beryllium	0 0040	U	0 00012	0 0040
Cadmium	0 0050	U	0 0010	0 0050
Chromium	0 010	U	0 00083	0 010
Cobalt	0 010	U	0 00071	0 010
Copper	0 0017	J	0 0017	0 020
Nickel	0 040	U	0 0018	0 040
Silver	0 010	U	0 0010	0 010
Vanadium	0 010	U	0 0014	0 010
Zinc	0 020	U	0 0030	0 020
Thallium	0 025	U	0 0098	0 025

Laboratory Control Sample - Batch: 680-2740

Lab ID: LCS 680-2740/22-A
Matrix: Water
Date Analyzed: 03/08/2005 2308
Units: mg/L
Dilution: 1 0

Analyte	Spike Amount	Result	% Rec	Recovery Limits	Qualifier
Antimony	0 500	0 47	93	75 - 125	
Arsenic	2 00	1 9	96	75 - 125	
Lead	0 500	0 50	100	75 - 125	
Selenium	2 00	1 9	97	75 - 125	
Barium	2 00	1 9	97	75 - 125	
Beryllium	0 0500	0 049	98	75 - 125	
Cadmium	0 0500	0 047	93	75 - 125	
Chromium	0 200	0 20	99	75 - 125	
Cobalt	0 500	0 50	100	75 - 125	
Copper	0 250	0 26	102	75 - 125	
Nickel	0 500	0 47	94	75 - 125	
Silver	0 0500	0 049	97	75 - 125	
Vanadium	0 500	0 50	100	75 - 125	
Zinc	0 500	0 52	103	75 - 125	
Thallium	2 00	1 9	95	75 - 125	

Calculations are performed before rounding to avoid round-off errors in calculated results

Client: Michael Baker Jr., Inc.

Job Number: 680-1072.1
Sdg Number: PRN125

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Matrix Spike/Spike Duplicate - Batch: 680-2740

MS Lab ID: 680-1072-B-2-A MS
MSD Lab ID: 680-1072-B-2-A MSD
Matrix: Water

Date Analyzed: 03/08/2005 2332
Date Analyzed: 03/08/2005 2336

Dilution: 1.0
Dilution: 1.0

Analyte	% Recovery MS	% Recovery MSD	Recovery Limits	RPD	RPD Limit	Qualifier
Antimony	103	103	75 - 125	0	20	
Arsenic	104	104	75 - 125	0	20	
Lead	103	103	75 - 125	0	20	
Selenium	102	101	75 - 125	0	20	
Barium	95	94	75 - 125	0	20	
Beryllium	94	93	75 - 125	1	20	
Cadmium	90	89	75 - 125	1	20	
Chromium	95	95	75 - 125	0	20	
Cobalt	99	98	75 - 125	0	20	
Copper	115	113	75 - 125	1	20	
Nickel	91	90	75 - 125	1	20	
Silver	114	114	75 - 125	0	20	
Vanadium	99	98	75 - 125	0	20	
Zinc	104	103	75 - 125	1	20	
Thallium	104	104	75 - 125	0	20	

Calculations are performed before rounding to avoid round-off errors in calculated results

Client: Michael Baker Jr., Inc

Job Number: 680-1072 1
Sdg Number: PRN125

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method Blank - Batch: 680-2823

Lab ID: MB 680-2823/15-A
Matrix: Water
Date Analyzed: 03/09/2005 1827
Units: mg/L
Dilution: 1 0

Analyte	Result	Qualifier	MDL	RL
Mercury	0 00020	U	0 000080	0 00020

Laboratory Control Sample - Batch: 680-2823

Lab ID: LCS 680-2823/16-A
Matrix: Water
Date Analyzed: 03/09/2005 1830
Units: mg/L
Dilution: 1 0

Analyte	Spike Amount	Result	% Rec	Recovery Limits	Qualifier
Mercury	0 00250	0 0024	95	80 - 120	

Matrix Spike/Spike Duplicate - Batch: 680-2823

MS Lab ID: 680-1072-A-2-E MS
MSD Lab ID: 680-1072-A-2-E MSD
Matrix: Water
Date Analyzed: 03/09/2005 1847
Date Analyzed: 03/09/2005 1850
Dilution: 1.0
Dilution: 1 0

Analyte	% Recovery MS	% Recovery MSD	Recovery Limits	RPD	RPD Limit	Qualifier	
Mercury	60	58	80 - 120	3	20	*	*

Calculations are performed before rounding to avoid round-off errors in calculated results

Client: Michael Baker Jr., Inc.

Job Number: 680-1072.1
Sdg Number: PRN125

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)-Dissolved

Method Blank - Batch: 680-2826

Lab ID: MB 680-2826/13-A
Matrix: Water
Date Analyzed: 03/09/2005 1724
Units: mg/L
Dilution: 1.0

Analyte	Result	Qualifier	MDL	RL
Mercury	0.00020	U	0.000080	0.00020

Laboratory Control Sample - Batch: 680-2826

Lab ID: LCS 680-2826/14-A
Matrix: Water
Date Analyzed: 03/09/2005 1727
Units: mg/L
Dilution: 1.0

Analyte	Spike Amount	Result	% Rec.	Recovery Limits	Qualifier
Mercury	0.00250	0.0024	98	80 - 120	

Matrix Spike/Spike Duplicate - Batch: 680-2826

MS Lab ID: 680-1072-B-2-C MS*D
MSD Lab ID: 680-1072-B-2-C MSD*D
Matrix: Water
Date Analyzed: 03/09/2005 1750
Date Analyzed: 03/09/2005 1753
Dilution: 1.0
Dilution: 1.0

Analyte	% Recovery MS	% Recovery MSD	Recovery Limits	RPD	RPD Limit	Qualifier	
Mercury	60	59	80 - 120	2	20	*	*

Calculations are performed before rounding to avoid round-off errors in calculated results

Serial Number

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

SEVERN TRENT **STL**

Emis # 8437 2027 9201
8437 2027 9315
8437 2027 9746

STL Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Website: www.stl-inc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

○ Alternate Laboratory Name/Location
Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Base Landfill	T.O. 19	PR

STL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Angie Weimerskirk		

CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Mark Kimes	412-269-2009	412-375-3995

CLIENT NAME	CLIENT E-MAIL
Baker Environmental, Inc.	mkimes@mbakercorp.com

CLIENT ADDRESS: 100 Airside Drive, Moon Township, PA 15108

COMPANY CONTRACTING THIS WORK (if applicable): Baker Environmental, Inc.

PAGE 1 OF 1

STANDARD REPORT DELIVERY ●
DATE DUE 28 day TAT
EXPEDITED REPORT DELIVERY (SURCHARGE) ○
DATE DUE

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT,...)	REQUIRED ANALYSIS: App.I VOCs SW-846/8260	REQUIRED ANALYSIS: App.I Metals SW846/6010	REQUIRED ANALYSIS: App.I Diss.Metals SW-846/6010	REMARKS
								HCl	HNO3	HNO3	
3/2/05	1345	R7GW01R-11		X					1	1	
3/2/05	1000	R7GW02R-11		X					1	1	
3/2/05	1000	R7GW02R-11D		X					1	1	
		R7GW02R-11MS									
		R7GW02R-11MSD									
		R7GW04R-11									
		R7GW05R-11									
		R7GW07R2-11									
		R7GW08R-11									
3/2/05	0830	~~R7GW09-11~~ MS R7FB01-11		X					1		
3/2/05	0835	~~R7GW10-11~~ MSD R7EB01-11		X					1		
3/2/05	1415	R7GW11-11		X					1		

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
			Jon C. Hall Jr.	3/2/05	1500			
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
Jon C. Hall Jr.	3/3/05	0900						

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	STL SAVANNAH LOG NO.	LABORATORY REMARKS
	3/3/05	0900	YES ○ NO ○		680 1078	

STL8240-68C (12/02)

Serial Number

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

SEVERN TRENT **STL**

Master Arrangement # 5130 5132 5134

STL Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.stl-inc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

○ Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Base Landfill	T.O. 19	PR
STL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Angie Weimerskirk		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Mark Kimes	412-269-2009	412-375-3995
CLIENT NAME	CLIENT E-MAIL	
Baker Environmental, Inc.	mkimes@mbakercorp.com	
CLIENT ADDRESS		
100 Airside Dive, Moon Township, PA 15108		
COMPANY CONTRACTING THIS WORK (if applicable)		

PAGE 1 OF 1

STANDARD REPORT DELIVERY ●
DATE DUE 28 day TAT

EXPEDITED REPORT DELIVERY (SURCHARGE) ○
DATE DUE _____

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT,...)	REQUIRED ANALYSIS: App.I VOCs SW-846/8260	REQUIRED ANALYSIS: App.I Metals SW-846/6010	REQUIRED ANALYSIS: App.I Diss.Metals SW-846/6010	REMARKS
								NUMBER OF CONTAINERS SUBMITTED			
								HCl	HNO3	HNO3	
		R7GW01R-11									
		R7GW02R-11									
		R7GW02R-11D									
		R7GW02R-11MS									
		R7GW02R-11MSD									
3/2/05	1155	R7GW04R-11		X					1	1	
		R7GW05R-11									
		R7GW07R2-11									
		R7GW08R-11									
3/2/05	1111	R7GW09-11		X					1	1	
		R7GW10-11									
		R7GW11-11									

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
			Jon E. Edel Jr.	3/2/05	1500			
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
Jon E. Edel Jr.	3/2/05	0900						

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	STL SAVANNAH LOG NO.	LABORATORY REMARKS
	030305	0910	YES ○ NO ○		6810-1072	

STL-8240-680 (12/02)

Serial Number

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

SEVERN TRENT **STL** LIMS # 5437 5077 9713

STL Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Website: www.stl-inc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location
Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Base Landfill	T.O. 19	PR
STL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Angie Weimerskirk		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Mark Kimes	412-269-2009	412-375-3995
CLIENT NAME	CLIENT E-MAIL	
Baker Environmental, Inc.	mkimes@mbakercorp.com	
CLIENT ADDRESS		
100 Airside Drive, Moon Township, PA 15108		
COMPANY CONTRACTING THIS WORK (if applicable)		
Baker Environmental, Inc.		

PAGE 1 OF 1

STANDARD REPORT DELIVERY (X)
DATE DUE 28 day TAT
EXPEDITED REPORT DELIVERY (SURCHARGE) ( )
DATE DUE _____
NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	COMPOSITE (C) OR GRAB (G) INDICATE	AQUEOUS (WATER)	SOLID OR SEMISOLID	AIR	NONAQUEOUS LIQUID (OIL, SOLVENT,..)	App.I VOCs SW-846/8260	App.I Metals SW-846/6010	App.I Diss. Metals SW-846/6010	REMARKS
		R7GW01R-11									
		R7GW02R-11									
		R7GW02R-11D									
3/2/05	1600	R7GW02R-11MS		X				1	1		
3/2/05	1600	R7GW02R-11MSD		X				1	1		
		R7GW04R-11									
		R7GW05R-11									
		R7GW07R2-11									
		R7GW08R-11									
		R7GW09-11									
		B7GW10-11									
		R7GW11-11									

NUMBER OF CONTAINERS SUBMITTED: HC1 = 3 | HNO3 = 3

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
			[signature]	3/2/05	1500			
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
[signature]	3/2/05	0203						

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	STL SAVANNAH LOG NO.	LABORATORY REMARKS
[signature]	030305	0915	YES ( ) NO ( )		680 1072	

ANALYTICAL REPORT

Job Number: 680-1126.1

Sdg Number: PRN127

Job Description: Base Landfill

For:

Michael Baker Jr., Inc.
Airside Business Park
100 Airside Drive
Moon Township, PA 15108

Attention: Mr. Mark Kimes

Angie Weimerskirk
Project Manager I
aweimerskirk@stl-inc.com

04/07/2005

METHOD SUMMARY

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Description	Method	Preparation Method
Matrix: Water		
Volatile Organic Compounds by GC/MS	SW846 8260B	
Purge-and-Trap		SW846 5030B
Inductively Coupled Plasma - Atomic Emission Spectrometry	SW846 6010B	
Acid Digestion of Waters for Total Recoverable or Dissolved Metals		SW846 3005A
Sample Filtration performed in the Field		NONE FIELD_FLTRD
Mercury in Liquid Waste (Manual Cold Vapor Technique)	SW846 7470A	
Mercury in Liquid Waste (Manual Cold Vapor Technique)/Preparation		SW846 7470A
Sample Filtration performed in the Field		NONE FIELD_FLTRD

REFERENCES

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986
And Its Updates.

SAMPLE SUMMARY

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-1126-1	R7GW01-R11	Water	03/02/2005 1345	03/04/2005 1035
680-1126-2	R7GW02R-11	Water	03/02/2005 1000	03/04/2005 1035
680-1126-2MS	R7GW02R-11	Water	03/02/2005 1000	03/04/2005 1035
680-1126-2MSD	R7GW02R-11	Water	03/02/2005 1000	03/04/2005 1035
680-1126-3	R7GW02R-11D	Water	03/02/2005 1000	03/04/2005 1035
680-1126-4	R7GW04R-11	Water	03/02/2005 1155	03/04/2005 1035
680-1126-5	R7GW05R-11	Water	03/02/2005 1630	03/04/2005 1035
680-1126-6	R7GW07R2-11	Water	03/02/2005 1750	03/04/2005 1035
680-1126-7	R7GW08R-11	Water	03/02/2005 1816	03/04/2005 1035
680-1126-8	R7GW09-11	Water	03/02/2005 1111	03/04/2005 1035
680-1126-9	R7GW10-11	Water	03/02/2005 1703	03/04/2005 1035
680-1126-10	R7GW11-11	Water	03/02/2005 1418	03/04/2005 1035
680-1126-11	R7FB01-11	Water	03/02/2005 0830	03/04/2005 1035
680-1126-12	R7ER01-11	Water	03/02/2005 0835	03/04/2005 1035
680-1126-13	R7TB01-11	Water	03/03/2005 0000	03/04/2005 1035

SAMPLE RESULTS

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW01-R11**

Lab Sample ID: 680-1126-1
Client Matrix: Water

Date Sampled: 03/02/2005 1345
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1318
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5223.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Acetone	25	U	25
Acrylonitrile	20	U	20
Benzene	1.0	U	1.0
Chlorobromomethane	1.0	U	1.0
Dichlorobromomethane	1.0	U	1.0
Bromoform	1.0	U	1.0
Carbon disulfide	1.0	U	1.0
Carbon tetrachloride	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
Chloroethane	1.0	U	1.0
Chloroform	1.0	U	1.0
Chlorodibromomethane	1.0	U	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	1.0
Ethylene Dibromide	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0
trans-1,4-Dichloro-2-butene	2.0	U	2.0
1,1-Dichloroethane	1.0	U	1.0
1,2-Dichloroethane	1.0	U	1.0
1,1-Dichloroethene	1.0	U	1.0
cis-1,2-Dichloroethene	1.0	U	1.0
trans-1,2-Dichloroethene	1.0	U	1.0
1,2-Dichloropropane	1.0	U	1.0
cis-1,3-Dichloropropene	1.0	U	1.0
trans-1,3-Dichloropropene	1.0	U	1.0
Ethylbenzene	1.0	U	1.0
2-Hexanone	10	U	10
Bromomethane	1.0	U	1.0
Chloromethane	1.0	U	1.0
Dibromomethane	1.0	U	1.0
Methylene Chloride	1.0	U	1.0
Methyl Ethyl Ketone	10	U	10
Iodomethane	5.0	U	5.0
methyl isobutyl ketone	10	U	10
Styrene	1.0	U	1.0
1,1,1,2-Tetrachloroethane	1.0	U	1.0
1,1,2,2-Tetrachloroethane	1.0	U	1.0

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW01-R11**

Lab Sample ID: 680-1126-1
Client Matrix: Water

Date Sampled: 03/02/2005 1345
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS (Continued)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1318
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5223.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Tetrachloroethene	1.0	U	1.0
Toluene	1.0	U	1.0
1,1,1-Trichloroethane	1.0	U	1.0
1,1,2-Trichloroethane	1.0	U	1.0
Trichloroethene	1.0	U	1.0
Trichlorofluoromethane	1.0	U	1.0
1,2,3-Trichloropropane	1.0	U	1.0
Vinyl acetate	2.0	U	2.0
Vinyl chloride	1.0	U	1.0
Xylenes, Total	2.0	U	2.0

Surrogate	%Rec	Acceptance Limits
Toluene-d8	97	79 - 122
4-Bromofluorobenzene	89	77 - 120
Dibromofluoromethane	103	75 - 123

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW02R-11**

Lab Sample ID: 680-1126-2
Client Matrix: Water

Date Sampled: 03/02/2005 1000
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1348
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5225.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Acetone	25	U	25
Acrylonitrile	20	U	20
Benzene	1.0	U	1.0
Chlorobromomethane	1.0	U	1.0
Dichlorobromomethane	1.0	U	1.0
Bromoform	1.0	U	1.0
Carbon disulfide	1.0	U	1.0
Carbon tetrachloride	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
Chloroethane	1.0	U	1.0
Chloroform	1.0	U	1.0
Chlorodibromomethane	1.0	U	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	1.0
Ethylene Dibromide	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U *	1.0
trans-1,4-Dichloro-2-butene	2.0	U	2.0
1,1-Dichloroethane	1.0	U	1.0
1,2-Dichloroethane	1.0	U	1.0
1,1-Dichloroethene	1.0	U	1.0
cis-1,2-Dichloroethene	1.0	U	1.0
trans-1,2-Dichloroethene	1.0	U	1.0
1,2-Dichloropropane	1.0	U	1.0
cis-1,3-Dichloropropene	1.0	U	1.0
trans-1,3-Dichloropropene	1.0	U	1.0
Ethylbenzene	1.0	U	1.0
2-Hexanone	10	U	10
Bromomethane	1.0	U	1.0
Chloromethane	1.0	U	1.0
Dibromomethane	1.0	U	1.0
Methylene Chloride	1.0	U	1.0
Methyl Ethyl Ketone	10	U	10
Iodomethane	5.0	U	5.0
methyl isobutyl ketone	10	U	10
Styrene	1.0	U	1.0
1,1,1,2-Tetrachloroethane	1.0	U *	1.0
1,1,2,2-Tetrachloroethane	1.0	U	1.0

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW02R-11**

Lab Sample ID: 680-1126-2
Client Matrix: Water

Date Sampled: 03/02/2005 1000
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS (Continued)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1348
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5225.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Tetrachloroethene	1.0	U	1.0
Toluene	1.0	U	1.0
1,1,1-Trichloroethane	1.0	U	1.0
1,1,2-Trichloroethane	1.0	U	1.0
Trichloroethene	1.0	U	1.0
Trichlorofluoromethane	1.0	U *	1.0
1,2,3-Trichloropropane	1.0	U	1.0
Vinyl acetate	2.0	U	2.0
Vinyl chloride	1.0	U	1.0
Xylenes, Total	2.0	U	2.0

Surrogate	%Rec	Acceptance Limits
Toluene-d8	98	79 - 122
4-Bromofluorobenzene	87	77 - 120
Dibromofluoromethane	102	75 - 123

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW02R-11D**

Lab Sample ID: 680-1126-3
Client Matrix: Water

Date Sampled: 03/02/2005 1000
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1418
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5227.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Acetone	25	U	25
Acrylonitrile	20	U	20
Benzene	1.0	U	1.0
Chlorobromomethane	1.0	U	1.0
Dichlorobromomethane	1.0	U	1.0
Bromoform	1.0	U	1.0
Carbon disulfide	1.0	U	1.0
Carbon tetrachloride	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
Chloroethane	1.0	U	1.0
Chloroform	1.0	U	1.0
Chlorodibromomethane	1.0	U	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	1.0
Ethylene Dibromide	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0
trans-1,4-Dichloro-2-butene	2.0	U	2.0
1,1-Dichloroethane	1.0	U	1.0
1,2-Dichloroethane	1.0	U	1.0
1,1-Dichloroethene	1.0	U	1.0
cis-1,2-Dichloroethene	1.0	U	1.0
trans-1,2-Dichloroethene	1.0	U	1.0
1,2-Dichloropropane	1.0	U	1.0
cis-1,3-Dichloropropene	1.0	U	1.0
trans-1,3-Dichloropropene	1.0	U	1.0
Ethylbenzene	1.0	U	1.0
2-Hexanone	10	U	10
Bromomethane	1.0	U	1.0
Chloromethane	1.0	U	1.0
Dibromomethane	1.0	U	1.0
Methylene Chloride	1.0	U	1.0
Methyl Ethyl Ketone	10	U	10
Iodomethane	5.0	U	5.0
methyl isobutyl ketone	10	U	10
Styrene	1.0	U	1.0
1,1,1,2-Tetrachloroethane	1.0	U	1.0
1,1,2,2-Tetrachloroethane	1.0	U	1.0

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW02R-11D**

Lab Sample ID: 680-1126-3
Client Matrix: Water

Date Sampled: 03/02/2005 1000
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS (Continued)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1418
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5227.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Tetrachloroethene	1.0	U	1.0
Toluene	1.0	U	1.0
1,1,1-Trichloroethane	1.0	U	1.0
1,1,2-Trichloroethane	1.0	U	1.0
Trichloroethene	1.0	U	1.0
Trichlorofluoromethane	1.0	U	1.0
1,2,3-Trichloropropane	1.0	U	1.0
Vinyl acetate	2.0	U	2.0
Vinyl chloride	1.0	U	1.0
Xylenes, Total	2.0	U	2.0

Surrogate	%Rec	Acceptance Limits
Toluene-d8	98	79 - 122
4-Bromofluorobenzene	88	77 - 120
Dibromofluoromethane	104	75 - 123

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW04R-11**

Lab Sample ID: 680-1126-4
Client Matrix: Water

Date Sampled: 03/02/2005 1155
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1449
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5229.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Acetone	25	U	25
Acrylonitrile	20	U	20
Benzene	1.0	U	1.0
Chlorobromomethane	1.0	U	1.0
Dichlorobromomethane	1.0	U	1.0
Bromoform	1.0	U	1.0
Carbon disulfide	1.0	U	1.0
Carbon tetrachloride	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
Chloroethane	1.0	U	1.0
Chloroform	1.0	U	1.0
Chlorodibromomethane	1.0	U	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	1.0
Ethylene Dibromide	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0
trans-1,4-Dichloro-2-butene	2.0	U	2.0
1,1-Dichloroethane	1.0	U	1.0
1,2-Dichloroethane	1.0	U	1.0
1,1-Dichloroethene	1.0	U	1.0
cis-1,2-Dichloroethene	1.0	U	1.0
trans-1,2-Dichloroethene	1.0	U	1.0
1,2-Dichloropropane	1.0	U	1.0
cis-1,3-Dichloropropene	1.0	U	1.0
trans-1,3-Dichloropropene	1.0	U	1.0
Ethylbenzene	1.0	U	1.0
2-Hexanone	10	U	10
Bromomethane	1.0	U	1.0
Chloromethane	1.0	U	1.0
Dibromomethane	1.0	U	1.0
Methylene Chloride	1.0	U	1.0
Methyl Ethyl Ketone	10	U	10
Iodomethane	5.0	U	5.0
methyl isobutyl ketone	10	U	10
Styrene	1.0	U	1.0
1,1,1,2-Tetrachloroethane	1.0	U	1.0
1,1,2,2-Tetrachloroethane	1.0	U	1.0

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW04R-11**

Lab Sample ID: 680-1126-4
Client Matrix: Water

Date Sampled: 03/02/2005 1155
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS (Continued)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1449
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5229.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Tetrachloroethene	1.0	U	1.0
Toluene	1.0	U	1.0
1,1,1-Trichloroethane	1.0	U	1.0
1,1,2-Trichloroethane	1.0	U	1.0
Trichloroethene	1.0	U	1.0
Trichlorofluoromethane	1.0	U	1.0
1,2,3-Trichloropropane	1.0	U	1.0
Vinyl acetate	2.0	U	2.0
Vinyl chloride	1.0	U	1.0
Xylenes, Total	2.0	U	2.0

Surrogate	%Rec	Acceptance Limits
Toluene-d8	99	79 - 122
4-Bromofluorobenzene	90	77 - 120
Dibromofluoromethane	98	75 - 123

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW05R-11**

Lab Sample ID: 680-1126-5
Client Matrix: Water

Date Sampled: 03/02/2005 1630
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1519
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5231.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Acetone	25	U	25
Acrylonitrile	20	U	20
Benzene	1.0	U	1.0
Chlorobromomethane	1.0	U	1.0
Dichlorobromomethane	1.0	U	1.0
Bromoform	1.0	U	1.0
Carbon disulfide	1.0	U	1.0
Carbon tetrachloride	1.0	U	1.0
Chlorobenzene	0.60	J	1.0
Chloroethane	1.0	U	1.0
Chloroform	1.0	U	1.0
Chlorodibromomethane	1.0	U	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	1.0
Ethylene Dibromide	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U *	1.0
trans-1,4-Dichloro-2-butene	2.0	U	2.0
1,1-Dichloroethane	1.0	U	1.0
1,2-Dichloroethane	1.0	U	1.0
1,1-Dichloroethene	1.0	U	1.0
cis-1,2-Dichloroethene	0.99	J	1.0
trans-1,2-Dichloroethene	1.0	U	1.0
1,2-Dichloropropane	1.0	U	1.0
cis-1,3-Dichloropropene	1.0	U	1.0
trans-1,3-Dichloropropene	1.0	U	1.0
Ethylbenzene	1.0	U	1.0
2-Hexanone	10	U	10
Bromomethane	1.0	U	1.0
Chloromethane	1.0	U	1.0
Dibromomethane	1.0	U	1.0
Methylene Chloride	1.0	U	1.0
Methyl Ethyl Ketone	10	U	10
Iodomethane	5.0	U	5.0
methyl isobutyl ketone	10	U	10
Styrene	1.0	U	1.0
1,1,1,2-Tetrachloroethane	1.0	U *	1.0
1,1,2,2-Tetrachloroethane	1.0	U	1.0

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW05R-11**

Lab Sample ID: 680-1126-5
Client Matrix: Water

Date Sampled: 03/02/2005 1630
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS (Continued)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1519
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5231.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Tetrachloroethene	1.0	U	1.0
Toluene	1.0	U	1.0
1,1,1-Trichloroethane	1.0	U	1.0
1,1,2-Trichloroethane	1.0	U	1.0
Trichloroethene	1.0	U	1.0
Trichlorofluoromethane	1.0	U *	1.0
1,2,3-Trichloropropane	1.0	U	1.0
Vinyl acetate	2.0	U	2.0
Vinyl chloride	1.0	U	1.0
Xylenes, Total	2.0	U	2.0

Surrogate	%Rec	Acceptance Limits
Toluene-d8	97	79 - 122
4-Bromofluorobenzene	88	77 - 120
Dibromofluoromethane	106	75 - 123

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW07R2-11**

Lab Sample ID: 680-1126-6
Client Matrix: Water

Date Sampled: 03/02/2005 1750
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1548
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5233.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Acetone	25	U	25
Acrylonitrile	20	U	20
Benzene	1.0	U	1.0
Chlorobromomethane	1.0	U	1.0
Dichlorobromomethane	1.0	U	1.0
Bromoform	1.0	U	1.0
Carbon disulfide	1.0	U	1.0
Carbon tetrachloride	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
Chloroethane	1.0	U	1.0
Chloroform	1.0	U	1.0
Chlorodibromomethane	1.0	U	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	1.0
Ethylene Dibromide	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0
trans-1,4-Dichloro-2-butene	2.0	U	2.0
1,1-Dichloroethane	1.0	U	1.0
1,2-Dichloroethane	1.0	U	1.0
1,1-Dichloroethene	1.0	U	1.0
cis-1,2-Dichloroethene	1.0	U	1.0
trans-1,2-Dichloroethene	1.0	U	1.0
1,2-Dichloropropane	1.0	U	1.0
cis-1,3-Dichloropropene	1.0	U	1.0
trans-1,3-Dichloropropene	1.0	U	1.0
Ethylbenzene	1.0	U	1.0
2-Hexanone	10	U	10
Bromomethane	1.0	U	1.0
Chloromethane	1.0	U	1.0
Dibromomethane	1.0	U	1.0
Methylene Chloride	1.0	U	1.0
Methyl Ethyl Ketone	10	U	10
Iodomethane	5.0	U	5.0
methyl isobutyl ketone	10	U	10
Styrene	1.0	U	1.0
1,1,1,2-Tetrachloroethane	1.0	U	1.0
1,1,2,2-Tetrachloroethane	1.0	U	1.0

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW07R2-11**

Lab Sample ID: 680-1126-6
Client Matrix: Water

Date Sampled: 03/02/2005 1750
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS (Continued)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1548
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5233.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Tetrachloroethene	1.0	U	1.0
Toluene	1.0	U	1.0
1,1,1-Trichloroethane	1.0	U	1.0
1,1,2-Trichloroethane	1.0	U	1.0
Trichloroethene	1.0	U	1.0
Trichlorofluoromethane	1.0	U	1.0
1,2,3-Trichloropropane	1.0	U	1.0
Vinyl acetate	2.0	U	2.0
Vinyl chloride	1.0	U	1.0
Xylenes, Total	2.0	U	2.0

Surrogate	%Rec	Acceptance Limits
Toluene-d8	98	79 - 122
4-Bromofluorobenzene	88	77 - 120
Dibromofluoromethane	104	75 - 123

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW08R-11**

Lab Sample ID: 680-1126-7
Client Matrix: Water

Date Sampled: 03/02/2005 1816
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1816
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5243.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Acetone	25	U	25
Acrylonitrile	20	U	20
Benzene	1.0	U	1.0
Chlorobromomethane	1.0	U	1.0
Dichlorobromomethane	1.0	U	1.0
Bromoform	1.0	U	1.0
Carbon disulfide	1.0	U	1.0
Carbon tetrachloride	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
Chloroethane	1.0	U	1.0
Chloroform	1.0	U	1.0
Chlorodibromomethane	1.0	U	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	1.0
Ethylene Dibromide	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0
trans-1,4-Dichloro-2-butene	2.0	U	2.0
1,1-Dichloroethane	1.0	U	1.0
1,2-Dichloroethane	1.0	U	1.0
1,1-Dichloroethene	1.0	U	1.0
cis-1,2-Dichloroethene	1.0	U	1.0
trans-1,2-Dichloroethene	1.0	U	1.0
1,2-Dichloropropane	1.0	U	1.0
cis-1,3-Dichloropropene	1.0	U	1.0
trans-1,3-Dichloropropene	1.0	U	1.0
Ethylbenzene	1.0	U	1.0
2-Hexanone	10	U	10
Bromomethane	1.0	U	1.0
Chloromethane	1.0	U	1.0
Dibromomethane	1.0	U	1.0
Methylene Chloride	1.0	U	1.0
Methyl Ethyl Ketone	10	U	10
Iodomethane	5.0	U	5.0
methyl isobutyl ketone	10	U	10
Styrene	1.0	U	1.0
1,1,1,2-Tetrachloroethane	1.0	U	1.0
1,1,2,2-Tetrachloroethane	1.0	U	1.0

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW08R-11**

Lab Sample ID: 680-1126-7
Client Matrix: Water

Date Sampled: 03/02/2005 1816
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS (Continued)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1816
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5243.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Tetrachloroethene	1.0	U	1.0
Toluene	1.0	U	1.0
1,1,1-Trichloroethane	1.0	U	1.0
1,1,2-Trichloroethane	1.0	U	1.0
Trichloroethene	1.0	U	1.0
Trichlorofluoromethane	1.0	U	1.0
1,2,3-Trichloropropane	1.0	U	1.0
Vinyl acetate	2.0	U	2.0
Vinyl chloride	1.0	U	1.0
Xylenes, Total	2.0	U	2.0

Surrogate	%Rec	Acceptance Limits
Toluene-d8	99	79 - 122
4-Bromofluorobenzene	88	77 - 120
Dibromofluoromethane	101	75 - 123

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW09-11**

Lab Sample ID: 680-1126-8
Client Matrix: Water

Date Sampled: 03/02/2005 1111
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1846
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5245.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Acetone	25	U	25
Acrylonitrile	20	U	20
Benzene	1.0	U	1.0
Chlorobromomethane	1.0	U	1.0
Dichlorobromomethane	1.0	U	1.0
Bromoform	1.0	U	1.0
Carbon disulfide	1.0	U	1.0
Carbon tetrachloride	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
Chloroethane	1.0	U	1.0
Chloroform	1.0	U	1.0
Chlorodibromomethane	1.0	U	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	1.0
Ethylene Dibromide	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0
trans-1,4-Dichloro-2-butene	2.0	U	2.0
1,1-Dichloroethane	1.0	U	1.0
1,2-Dichloroethane	1.0	U	1.0
1,1-Dichloroethene	1.0	U	1.0
cis-1,2-Dichloroethene	1.0	U	1.0
trans-1,2-Dichloroethene	1.0	U	1.0
1,2-Dichloropropane	1.0	U	1.0
cis-1,3-Dichloropropene	1.0	U	1.0
trans-1,3-Dichloropropene	1.0	U	1.0
Ethylbenzene	1.0	U	1.0
2-Hexanone	10	U	10
Bromomethane	1.0	U	1.0
Chloromethane	1.0	U	1.0
Dibromomethane	1.0	U	1.0
Methylene Chloride	1.0	U	1.0
Methyl Ethyl Ketone	10	U	10
Iodomethane	5.0	U	5.0
methyl isobutyl ketone	10	U	10
Styrene	1.0	U	1.0
1,1,1,2-Tetrachloroethane	1.0	U	1.0
1,1,2,2-Tetrachloroethane	1.0	U	1.0

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW09-11**

Lab Sample ID: 680-1126-8
Client Matrix: Water

Date Sampled: 03/02/2005 1111
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS (Continued)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1846
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5245.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Tetrachloroethene	1.0	U	1.0
Toluene	1.0	U	1.0
1,1,1-Trichloroethane	1.0	U	1.0
1,1,2-Trichloroethane	1.0	U	1.0
Trichloroethene	1.0	U	1.0
Trichlorofluoromethane	1.0	U	1.0
1,2,3-Trichloropropane	1.0	U	1.0
Vinyl acetate	2.0	U	2.0
Vinyl chloride	1.0	U	1.0
Xylenes, Total	2.0	U	2.0

Surrogate	%Rec	Acceptance Limits
Toluene-d8	98	79 - 122
4-Bromofluorobenzene	89	77 - 120
Dibromofluoromethane	102	75 - 123

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW10-11**

Lab Sample ID: 680-1126-9
Client Matrix: Water

Date Sampled: 03/02/2005 1703
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1915
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5247.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Acetone	25	U	25
Acrylonitrile	20	U	20
Benzene	1.0	U	1.0
Chlorobromomethane	1.0	U	1.0
Dichlorobromomethane	1.0	U	1.0
Bromoform	1.0	U	1.0
Carbon disulfide	1.0	U	1.0
Carbon tetrachloride	1.0	U	1.0
Chlorobenzene	0.45	J	1.0
Chloroethane	1.0	U	1.0
Chloroform	1.0	U	1.0
Chlorodibromomethane	1.0	U	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	1.0
Ethylene Dibromide	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0
trans-1,4-Dichloro-2-butene	2.0	U	2.0
1,1-Dichloroethane	1.0	U	1.0
1,2-Dichloroethane	1.0	U	1.0
1,1-Dichloroethene	1.0	U	1.0
cis-1,2-Dichloroethene	1.0	U	1.0
trans-1,2-Dichloroethene	1.0	U	1.0
1,2-Dichloropropane	1.0	U	1.0
cis-1,3-Dichloropropene	1.0	U	1.0
trans-1,3-Dichloropropene	1.0	U	1.0
Ethylbenzene	1.0	U	1.0
2-Hexanone	10	U	10
Bromomethane	1.0	U	1.0
Chloromethane	1.0	U	1.0
Dibromomethane	1.0	U	1.0
Methylene Chloride	1.0	U	1.0
Methyl Ethyl Ketone	10	U	10
Iodomethane	5.0	U	5.0
methyl isobutyl ketone	10	U	10
Styrene	1.0	U	1.0
1,1,1,2-Tetrachloroethane	1.0	U	1.0
1,1,2,2-Tetrachloroethane	1.0	U	1.0

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW10-11**

Lab Sample ID: 680-1126-9
Client Matrix: Water

Date Sampled: 03/02/2005 1703
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS (Continued)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1915
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5247.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Tetrachloroethene	1.0	U	1.0
Toluene	1.0	U	1.0
1,1,1-Trichloroethane	1.0	U	1.0
1,1,2-Trichloroethane	1.0	U	1.0
Trichloroethene	1.0	U	1.0
Trichlorofluoromethane	1.0	U	1.0
1,2,3-Trichloropropane	1.0	U	1.0
Vinyl acetate	2.0	U	2.0
Vinyl chloride	1.0	U	1.0
Xylenes, Total	2.0	U	2.0

Surrogate	%Rec	Acceptance Limits
Toluene-d8	99	79 - 122
4-Bromofluorobenzene	88	77 - 120
Dibromofluoromethane	99	75 - 123

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW11-11**

Lab Sample ID: 680-1126-10
Client Matrix: Water

Date Sampled: 03/02/2005 1418
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1945
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5249.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Acetone	25	U	25
Acrylonitrile	20	U	20
Benzene	1.0	U	1.0
Chlorobromomethane	1.0	U	1.0
Dichlorobromomethane	1.0	U	1.0
Bromoform	1.0	U	1.0
Carbon disulfide	1.0	U	1.0
Carbon tetrachloride	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
Chloroethane	1.0	U	1.0
Chloroform	1.0	U	1.0
Chlorodibromomethane	1.0	U	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	1.0
Ethylene Dibromide	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0
trans-1,4-Dichloro-2-butene	2.0	U	2.0
1,1-Dichloroethane	1.0	U	1.0
1,2-Dichloroethane	1.0	U	1.0
1,1-Dichloroethene	1.0	U	1.0
cis-1,2-Dichloroethene	1.0	U	1.0
trans-1,2-Dichloroethene	1.0	U	1.0
1,2-Dichloropropane	1.0	U	1.0
cis-1,3-Dichloropropene	1.0	U	1.0
trans-1,3-Dichloropropene	1.0	U	1.0
Ethylbenzene	1.0	U	1.0
2-Hexanone	10	U	10
Bromomethane	1.0	U	1.0
Chloromethane	1.0	U	1.0
Dibromomethane	1.0	U	1.0
Methylene Chloride	1.0	U	1.0
Methyl Ethyl Ketone	10	U	10
Iodomethane	5.0	U	5.0
methyl isobutyl ketone	10	U	10
Styrene	1.0	U	1.0
1,1,1,2-Tetrachloroethane	1.0	U	1.0
1,1,2,2-Tetrachloroethane	1.0	U	1.0

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW11-11**

Lab Sample ID: 680-1126-10
Client Matrix: Water

Date Sampled: 03/02/2005 1418
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS (Continued)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 1945
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5249.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Tetrachloroethene	1.0	U	1.0
Toluene	1.0	U	1.0
1,1,1-Trichloroethane	1.0	U	1.0
1,1,2-Trichloroethane	1.0	U	1.0
Trichloroethene	1.0	U	1.0
Trichlorofluoromethane	1.0	U	1.0
1,2,3-Trichloropropane	1.0	U	1.0
Vinyl acetate	2.0	U	2.0
Vinyl chloride	1.0	U	1.0
Xylenes, Total	2.0	U	2.0

Surrogate	%Rec	Acceptance Limits
Toluene-d8	100	79 - 122
4-Bromofluorobenzene	87	77 - 120
Dibromofluoromethane	99	75 - 123

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7FB01-11**

Lab Sample ID: 680-1126-11
Client Matrix: Water

Date Sampled: 03/02/2005 0830
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 2014
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5251.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Acetone	25	U	25
Acrylonitrile	20	U	20
Benzene	1.0	U	1.0
Chlorobromomethane	1.0	U	1.0
Dichlorobromomethane	1.0	U	1.0
Bromoform	1.0	U	1.0
Carbon disulfide	1.0	U	1.0
Carbon tetrachloride	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
Chloroethane	1.0	U	1.0
Chloroform	1.0	U	1.0
Chlorodibromomethane	1.0	U	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	1.0
Ethylene Dibromide	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0
trans-1,4-Dichloro-2-butene	2.0	U	2.0
1,1-Dichloroethane	1.0	U	1.0
1,2-Dichloroethane	1.0	U	1.0
1,1-Dichloroethene	1.0	U	1.0
cis-1,2-Dichloroethene	1.0	U	1.0
trans-1,2-Dichloroethene	1.0	U	1.0
1,2-Dichloropropane	1.0	U	1.0
cis-1,3-Dichloropropene	1.0	U	1.0
trans-1,3-Dichloropropene	1.0	U	1.0
Ethylbenzene	1.0	U	1.0
2-Hexanone	10	U	10
Bromomethane	1.0	U	1.0
Chloromethane	1.0	U	1.0
Dibromomethane	1.0	U	1.0
Methylene Chloride	1.0	U	1.0
Methyl Ethyl Ketone	10	U	10
Iodomethane	5.0	U	5.0
methyl isobutyl ketone	10	U	10
Styrene	1.0	U	1.0
1,1,1,2-Tetrachloroethane	1.0	U	1.0
1,1,2,2-Tetrachloroethane	1.0	U	1.0

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7FB01-11**

Lab Sample ID: 680-1126-11
Client Matrix: Water

Date Sampled: 03/02/2005 0830
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS (Continued)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 2014
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5251.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Tetrachloroethene	1.0	U	1.0
Toluene	1.6		1.0
1,1,1-Trichloroethane	1.0	U	1.0
1,1,2-Trichloroethane	1.0	U	1.0
Trichloroethene	1.0	U	1.0
Trichlorofluoromethane	1.0	U	1.0
1,2,3-Trichloropropane	1.0	U	1.0
Vinyl acetate	2.0	U	2.0
Vinyl chloride	1.0	U	1.0
Xylenes, Total	2.0	U	2.0

Surrogate	%Rec	Acceptance Limits
Toluene-d8	102	79 - 122
4-Bromofluorobenzene	89	77 - 120
Dibromofluoromethane	98	75 - 123

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7ER01-11**

Lab Sample ID: 680-1126-12
Client Matrix: Water

Date Sampled: 03/02/2005 0835
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 2044
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5253.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Acetone	25	U	25
Acrylonitrile	20	U	20
Benzene	1.0	U	1.0
Chlorobromomethane	1.0	U	1.0
Dichlorobromomethane	1.0	U	1.0
Bromoform	1.0	U	1.0
Carbon disulfide	1.0	U	1.0
Carbon tetrachloride	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
Chloroethane	1.0	U	1.0
Chloroform	1.0	U	1.0
Chlorodibromomethane	1.0	U	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	1.0
Ethylene Dibromide	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0
trans-1,4-Dichloro-2-butene	2.0	U	2.0
1,1-Dichloroethane	1.0	U	1.0
1,2-Dichloroethane	1.0	U	1.0
1,1-Dichloroethene	1.0	U	1.0
cis-1,2-Dichloroethene	1.0	U	1.0
trans-1,2-Dichloroethene	1.0	U	1.0
1,2-Dichloropropane	1.0	U	1.0
cis-1,3-Dichloropropene	1.0	U	1.0
trans-1,3-Dichloropropene	1.0	U	1.0
Ethylbenzene	1.0	U	1.0
2-Hexanone	10	U	10
Bromomethane	1.0	U	1.0
Chloromethane	1.0	U	1.0
Dibromomethane	1.0	U	1.0
Methylene Chloride	1.0	U	1.0
Methyl Ethyl Ketone	10	U	10
Iodomethane	5.0	U	5.0
methyl isobutyl ketone	10	U	10
Styrene	1.0	U	1.0
1,1,1,2-Tetrachloroethane	1.0	U	1.0
1,1,2,2-Tetrachloroethane	1.0	U	1.0

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7ER01-11**

Lab Sample ID: 680-1126-12
Client Matrix: Water

Date Sampled: 03/02/2005 0835
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS (Continued)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 2044
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5253.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Tetrachloroethene	1.0	U	1.0
Toluene	1.5		1.0
1,1,1-Trichloroethane	1.0	U	1.0
1,1,2-Trichloroethane	1.0	U	1.0
Trichloroethene	1.0	U	1.0
Trichlorofluoromethane	1.0	U	1.0
1,2,3-Trichloropropane	1.0	U	1.0
Vinyl acetate	2.0	U	2.0
Vinyl chloride	1.0	U	1.0
Xylenes, Total	2.0	U	2.0

Surrogate	%Rec	Acceptance Limits
Toluene-d8	99	79 - 122
4-Bromofluorobenzene	88	77 - 120
Dibromofluoromethane	101	75 - 123

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7TB01-11**

Lab Sample ID: 680-1126-13
Client Matrix: Water

Date Sampled: 03/03/2005 0000
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 2113
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5255.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Acetone	25	U	25
Acrylonitrile	20	U	20
Benzene	1.0	U	1.0
Chlorobromomethane	1.0	U	1.0
Dichlorobromomethane	1.0	U	1.0
Bromoform	1.0	U	1.0
Carbon disulfide	1.0	U	1.0
Carbon tetrachloride	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
Chloroethane	1.0	U	1.0
Chloroform	1.0	U	1.0
Chlorodibromomethane	1.0	U	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	1.0
Ethylene Dibromide	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0
trans-1,4-Dichloro-2-butene	2.0	U	2.0
1,1-Dichloroethane	1.0	U	1.0
1,2-Dichloroethane	1.0	U	1.0
1,1-Dichloroethene	1.0	U	1.0
cis-1,2-Dichloroethene	1.0	U	1.0
trans-1,2-Dichloroethene	1.0	U	1.0
1,2-Dichloropropane	1.0	U	1.0
cis-1,3-Dichloropropene	1.0	U	1.0
trans-1,3-Dichloropropene	1.0	U	1.0
Ethylbenzene	1.0	U	1.0
2-Hexanone	10	U	10
Bromomethane	1.0	U	1.0
Chloromethane	1.0	U	1.0
Dibromomethane	1.0	U	1.0
Methylene Chloride	1.0	U	1.0
Methyl Ethyl Ketone	10	U	10
Iodomethane	5.0	U	5.0
methyl isobutyl ketone	10	U	10
Styrene	1.0	U	1.0
1,1,1,2-Tetrachloroethane	1.0	U	1.0
1,1,2,2-Tetrachloroethane	1.0	U	1.0

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7TB01-11**

Lab Sample ID: 680-1126-13
Client Matrix: Water

Date Sampled: 03/03/2005 0000
Date Received: 03/04/2005 1035

8260B Volatile Organic Compounds by GC/MS (Continued)

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 03/08/2005 2113
Date Prepared: N/A

Analysis Batch: 680-3025

Instrument ID: GC/MS Volatiles - O
Lab File ID: o5255.d
Initial Weight/Volume: 5 mL
Final Weight/Volume: 5 mL

Analyte	Result (ug/L)	Qualifier	RL
Tetrachloroethene	1.0	U	1.0
Toluene	1.0	U	1.0
1,1,1-Trichloroethane	1.0	U	1.0
1,1,2-Trichloroethane	1.0	U	1.0
Trichloroethene	1.0	U	1.0
Trichlorofluoromethane	1.0	U	1.0
1,2,3-Trichloropropane	1.0	U	1.0
Vinyl acetate	2.0	U	2.0
Vinyl chloride	1.0	U	1.0
Xylenes, Total	2.0	U	2.0

Surrogate	%Rec	Acceptance Limits
Toluene-d8	101	79 - 122
4-Bromofluorobenzene	86	77 - 120
Dibromofluoromethane	99	75 - 123

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW05R-11**

Lab Sample ID: 680-1126-5
Client Matrix: Water

Date Sampled: 03/02/2005 1630
Date Received: 03/04/2005 1035

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B
Preparation: 3005A
Dilution: 1.0
Date Analyzed: 03/09/2005 0018
Date Prepared: 03/07/2005 1614

Analysis Batch: 680-3214
Prep Batch: 680-2740

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL
Antimony	0.020	U	0.020
Arsenic	0.010	U	0.010
Lead	0.0050	U	0.0050
Selenium	0.010	U	0.010
Barium	0.015		0.010
Beryllium	0.0040	U	0.0040
Cadmium	0.0050	U	0.0050
Chromium	0.010	U	0.010
Cobalt	0.010	U	0.010
Copper	0.0031	J	0.020
Nickel	0.040	U	0.040
Silver	0.010	U	0.010
Vanadium	0.0093	J	0.010
Zinc	0.020	U	0.020
Thallium	0.025	U	0.025

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW05R-11**

Lab Sample ID: 680-1126-5
Client Matrix: Water

Date Sampled: 03/02/2005 1630
Date Received: 03/04/2005 1035

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry-Dissolved

Method: 6010B
Preparation: 3005A
Dilution: 1.0
Date Analyzed: 03/08/2005 2139
Date Prepared: 03/07/2005 1454

Analysis Batch: 680-3303
Prep Batch: 680-2690

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL
Antimony	0.020	U	0.020
Arsenic	0.0077	J	0.010
Lead	0.0050	U	0.0050
Selenium	0.010	U	0.010
Barium	0.015		0.010
Beryllium	0.0040	U	0.0040
Cadmium	0.0050	U	0.0050
Chromium	0.010	U	0.010
Cobalt	0.0045	J	0.010
Copper	0.0030	J	0.020
Nickel	0.040	U	0.040
Silver	0.010	U	0.010
Vanadium	0.0081	J	0.010
Zinc	0.0044	J	0.020
Thallium	0.025	U	0.025

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW05R-11**

Lab Sample ID: 680-1126-5
Client Matrix: Water

Date Sampled: 03/02/2005 1630
Date Received: 03/04/2005 1035

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method: 7470A
Preparation: 7470A
Dilution: 1.0
Date Analyzed: 03/09/2005 1919
Date Prepared: 03/08/2005 1155

Analysis Batch: 680-3866
Prep Batch: 680-2823

Instrument ID: LEEMAN1
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL
Mercury	0.00020	U	0.00020

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)-Dissolved

Method: 7470A
Preparation: 7470A
Dilution: 1.0
Date Analyzed: 03/09/2005 1809
Date Prepared: 03/08/2005 1203

Analysis Batch: 680-3957
Prep Batch: 680-2826

Instrument ID: LEEMAN1
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL
Mercury	0.00020	U	0.00020

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW07R2-11**

Lab Sample ID: 680-1126-6
Client Matrix: Water

Date Sampled: 03/02/2005 1750
Date Received: 03/04/2005 1035

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B
Preparation: 3005A
Dilution: 1.0
Date Analyzed: 03/09/2005 0023
Date Prepared: 03/07/2005 1614

Analysis Batch: 680-3214
Prep Batch: 680-2740

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL
Antimony	0.020	U	0.020
Arsenic	0.0070	J	0.010
Lead	0.0050	U	0.0050
Selenium	0.010	U	0.010
Barium	0.16		0.010
Beryllium	0.0040	U	0.0040
Cadmium	0.0050	U	0.0050
Chromium	0.010	U	0.010
Cobalt	0.0029	J	0.010
Copper	0.0026	J	0.020
Nickel	0.040	U	0.040
Silver	0.010	U	0.010
Vanadium	0.0021	J	0.010
Zinc	0.020	U	0.020
Thallium	0.025	U	0.025

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW07R2-11**

Lab Sample ID: 680-1126-6
Client Matrix: Water

Date Sampled: 03/02/2005 1750
Date Received: 03/04/2005 1035

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry-Dissolved

Method: 6010B
Preparation: 3005A
Dilution: 1.0
Date Analyzed: 03/08/2005 2144
Date Prepared: 03/07/2005 1454

Analysis Batch: 680-3303
Prep Batch: 680-2690

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL
Antimony	0.020	U	0.020
Arsenic	0.0070	J	0.010
Lead	0.0050	U	0.0050
Selenium	0.010	U	0.010
Barium	0.16		0.010
Beryllium	0.0040	U	0.0040
Cadmium	0.0050	U	0.0050
Chromium	0.010	U	0.010
Cobalt	0.0035	J	0.010
Copper	0.0023	J	0.020
Nickel	0.040	U	0.040
Silver	0.010	U	0.010
Vanadium	0.0021	J	0.010
Zinc	0.0060	J	0.020
Thallium	0.025	U	0.025

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW07R2-11**

Lab Sample ID: 680-1126-6
Client Matrix: Water

Date Sampled: 03/02/2005 1750
Date Received: 03/04/2005 1035

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method: 7470A
Preparation: 7470A
Dilution: 1.0
Date Analyzed: 03/09/2005 1922
Date Prepared: 03/08/2005 1155

Analysis Batch: 680-3866
Prep Batch: 680-2823

Instrument ID: LEEMAN1
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL
Mercury	0.00020	U	0.00020

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)-Dissolved

Method: 7470A
Preparation: 7470A
Dilution: 1.0
Date Analyzed: 03/09/2005 1812
Date Prepared: 03/08/2005 1203

Analysis Batch: 680-3957
Prep Batch: 680-2826

Instrument ID: LEEMAN1
Lab File ID: N/A
Initial Weight/Volume:
Final Weight/Volume:

Analyte	Result (mg/L)	Qualifier	RL
Mercury	0.00020	U	0.00020

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW08R-11**

Lab Sample ID: 680-1126-7
Client Matrix: Water

Date Sampled: 03/02/2005 1816
Date Received: 03/04/2005 1035

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B
Preparation: 3005A
Dilution: 1.0
Date Analyzed: 03/09/2005 0037
Date Prepared: 03/07/2005 1614

Analysis Batch: 680-3214
Prep Batch: 680-2740

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL
Antimony	0.020	U	0.020
Arsenic	0.0071	J	0.010
Lead	0.0050	U	0.0050
Selenium	0.010	U	0.010
Barium	0.063		0.010
Beryllium	0.0040	U	0.0040
Cadmium	0.0050	U	0.0050
Chromium	0.00090	J	0.010
Cobalt	0.010	U	0.010
Copper	0.0064	J	0.020
Nickel	0.0020	J	0.040
Silver	0.010	U	0.010
Vanadium	0.0066	J	0.010
Zinc	0.0084	J	0.020
Thallium	0.025	U	0.025

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW08R-11**

Lab Sample ID: 680-1126-7
Client Matrix: Water

Date Sampled: 03/02/2005 1816
Date Received: 03/04/2005 1035

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry-Dissolved

Method: 6010B
Preparation: 3005A
Dilution: 1.0
Date Analyzed: 03/08/2005 2149
Date Prepared: 03/07/2005 1454

Analysis Batch: 680-3303
Prep Batch: 680-2690

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL
Antimony	0.020	U	0.020
Arsenic	0.010	U	0.010
Lead	0.0050	U	0.0050
Selenium	0.010	U	0.010
Barium	0.059		0.010
Beryllium	0.0040	U	0.0040
Cadmium	0.0050	U	0.0050
Chromium	0.010	U	0.010
Cobalt	0.0022	J	0.010
Copper	0.0026	J	0.020
Nickel	0.0033	J	0.040
Silver	0.010	U	0.010
Vanadium	0.0058	J	0.010
Zinc	0.0058	J	0.020
Thallium	0.025	U	0.025

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW08R-11**

Lab Sample ID: 680-1126-7
Client Matrix: Water

Date Sampled: 03/02/2005 1816
Date Received: 03/04/2005 1035

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method: 7470A
Preparation: 7470A
Dilution: 1.0
Date Analyzed: 03/09/2005 1925
Date Prepared: 03/08/2005 1155

Analysis Batch: 680-3866
Prep Batch: 680-2823

Instrument ID: LEEMAN1
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL
Mercury	0.00020	U	0.00020

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)-Dissolved

Method: 7470A
Preparation: 7470A
Dilution: 1.0
Date Analyzed: 03/09/2005 1815
Date Prepared: 03/08/2005 1203

Analysis Batch: 680-3957
Prep Batch: 680-2826

Instrument ID: LEEMAN1
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL
Mercury	0.00020	U	0.00020

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW10-11**

Lab Sample ID: 680-1126-9
Client Matrix: Water

Date Sampled: 03/02/2005 1703
Date Received: 03/04/2005 1035

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method: 6010B
Preparation: 3005A
Dilution: 1.0
Date Analyzed: 03/09/2005 0042
Date Prepared: 03/07/2005 1614

Analysis Batch: 680-3214
Prep Batch: 680-2740

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL
Antimony	0.020	U	0.020
Arsenic	0.010	U	0.010
Lead	0.0050	U	0.0050
Selenium	0.010	U	0.010
Barium	0.016		0.010
Beryllium	0.0040	U	0.0040
Cadmium	0.0050	U	0.0050
Chromium	0.0015	J	0.010
Cobalt	0.00096	J	0.010
Copper	0.0029	J	0.020
Nickel	0.040	U	0.040
Silver	0.010	U	0.010
Vanadium	0.0025	J	0.010
Zinc	0.0051	J	0.020
Thallium	0.025	U	0.025

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW10-11**

Lab Sample ID: 680-1126-9
Client Matrix: Water

Date Sampled: 03/02/2005 1703
Date Received: 03/04/2005 1035

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry-Dissolved

Method: 6010B
Preparation: 3005A
Dilution: 1.0
Date Analyzed: 03/08/2005 2153
Date Prepared: 03/07/2005 1454

Analysis Batch: 680-3303
Prep Batch: 680-2690

Instrument ID: ICP/AES
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL
Antimony	0.020	U	0.020
Arsenic	0.010	U	0.010
Lead	0.0050	U	0.0050
Selenium	0.010	U	0.010
Barium	0.016		0.010
Beryllium	0.0040	U	0.0040
Cadmium	0.0050	U	0.0050
Chromium	0.010	U	0.010
Cobalt	0.0052	J	0.010
Copper	0.0025	J	0.020
Nickel	0.0024	J	0.040
Silver	0.010	U	0.010
Vanadium	0.0020	J	0.010
Zinc	0.012	J	0.020
Thallium	0.025	U	0.025

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Client Sample ID: **R7GW10-11**

Lab Sample ID: 680-1126-9
Client Matrix: Water

Date Sampled: 03/02/2005 1703
Date Received: 03/04/2005 1035

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method: 7470A
Preparation: 7470A
Dilution: 1.0
Date Analyzed: 03/09/2005 1928
Date Prepared: 03/08/2005 1155

Analysis Batch: 680-3866
Prep Batch: 680-2823

Instrument ID: LEEMAN1
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL
Mercury	0.00020	U	0.00020

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)-Dissolved

Method: 7470A
Preparation: 7470A
Dilution: 1.0
Date Analyzed: 03/09/2005 1824
Date Prepared: 03/08/2005 1203

Analysis Batch: 680-3957
Prep Batch: 680-2826

Instrument ID: LEEMAN1
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result (mg/L)	Qualifier	RL
Mercury	0.00020	U	0.00020

DATA REPORTING QUALIFIERS

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Lab Section	Qualifier	Description
GC/MS VOA		
	U	Analyte was not detected at or above the reporting limit.
	*	LCS, LCSD, MS, MSD, MD, or Surrogate exceeds the control limits
	N	MS, MSD: Spike recovery exceeds upper or lower control limits.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Metals		
	U	Analyte was not detected at or above the reporting limit.
	*	LCS, LCSD, MS, MSD, MD, or Surrogate exceeds the control limits
	N	MS, MSD: Spike recovery exceeds upper or lower control limits.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

QUALITY CONTROL RESULTS

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

QC Association Summary

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
GC/MS VOA				
Analysis Batch:680-3025				
LCS 680-3025/2	Lab Control Spike	Water	8260B	
MB 680-3025/3	Method Blank	Water	8260B	
680-1126-B-1	R7GW01-R11	Water	8260B	
680-1126-B-2	R7GW02R-11	Water	8260B	
680-1126-A-2 MS MS	Matrix Spike	Water	8260B	
680-1126-A-2 MSD	Matrix Spike Duplicate	Water	8260B	
680-1126-C-3	R7GW02R-11D	Water	8260B	
680-1126-C-4	R7GW04R-11	Water	8260B	
680-1126-I-5	R7GW05R-11	Water	8260B	
680-1126-I-6	R7GW07R2-11	Water	8260B	
680-1126-I-7	R7GW08R-11	Water	8260B	
680-1126-C-8	R7GW09-11	Water	8260B	
680-1126-I-9	R7GW10-11	Water	8260B	
680-1126-C-10	R7GW11-11	Water	8260B	
680-1126-C-11	R7FB01-11	Water	8260B	
680-1126-C-12	R7ER01-11	Water	8260B	
680-1126-C-13	R7TB01-11	Water	8260B	

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

QC Association Summary

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
Metals				
Prep Batch: 680-2690				
LCS 680-2690/12-B	Lab Control Spike	Water	3005A	
MB 680-2690/11-B	Method Blank	Water	3005A	
680-1072-A-2-D MS*D	Matrix Spike	Water	3005A	
680-1072-A-2-D	Matrix Spike Duplicate	Water	3005A	
680-1126-E-5-B *D	R7GW05R-11	Water	3005A	
680-1126-E-6-B *D	R7GW07R2-11	Water	3005A	
680-1126-F-7-B *D	R7GW08R-11	Water	3005A	
680-1126-E-9-B *D	R7GW10-11	Water	3005A	
Prep Batch: 680-2740				
LCS 680-2740/22-A	Lab Control Spike	Water	3005A	
MB 680-2740/21-A	Method Blank	Water	3005A	
680-1072-B-2-A MS	Matrix Spike	Water	3005A	
680-1072-B-2-A MSD	Matrix Spike Duplicate	Water	3005A	
680-1126-F-5-A	R7GW05R-11	Water	3005A	
680-1126-F-6-A	R7GW07R2-11	Water	3005A	
680-1126-E-7-A	R7GW08R-11	Water	3005A	
680-1126-F-9-A	R7GW10-11	Water	3005A	
Prep Batch: 680-2823				
LCS 680-2823/16-A	Lab Control Spike	Water	7470A	
MB 680-2823/15-A	Method Blank	Water	7470A	
680-1126-E-5-C	R7GW05R-11	Water	7470A	
680-1126-E-6-C	R7GW07R2-11	Water	7470A	
680-1126-E-7-B	R7GW08R-11	Water	7470A	
680-1126-E-9-C	R7GW10-11	Water	7470A	
Prep Batch: 680-2826				
LCS 680-2826/14-A	Lab Control Spike	Water	7470A	
MB 680-2826/13-A	Method Blank	Water	7470A	
680-1072-B-2-C MS*D	Matrix Spike	Water	7470A	
680-1072-B-2-C	Matrix Spike Duplicate	Water	7470A	
680-1126-F-5-C *D	R7GW05R-11	Water	7470A	
680-1126-F-6-C *D	R7GW07R2-11	Water	7470A	
680-1126-F-7-D *D	R7GW08R-11	Water	7470A	
680-1126-F-9-C *D	R7GW10-11	Water	7470A	
Analysis Batch:680-3303				
LCS 680-2690/12-B	Lab Control Spike	Water	6010B	680-2690
MB 680-2690/11-B	Method Blank	Water	6010B	680-2690
680-1072-A-2-D MS*D	Matrix Spike	Water	6010B	680-2690
680-1072-A-2-D	Matrix Spike Duplicate	Water	6010B	680-2690
680-1126-E-5-B *D	R7GW05R-11	Water	6010B	680-2690
680-1126-E-6-B *D	R7GW07R2-11	Water	6010B	680-2690
680-1126-F-7-B *D	R7GW08R-11	Water	6010B	680-2690
680-1126-E-9-B *D	R7GW10-11	Water	6010B	680-2690

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

QC Association Summary

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
Metals				
Analysis Batch:680-3214				
LCS 680-2740/22-A	Lab Control Spike	Water	6010B	680-2740
MB 680-2740/21-A	Method Blank	Water	6010B	680-2740
680-1072-B-2-A MS	Matrix Spike	Water	6010B	680-2740
680-1072-B-2-A MSD	Matrix Spike Duplicate	Water	6010B	680-2740
680-1126-F-5-A	R7GW05R-11	Water	6010B	680-2740
680-1126-F-6-A	R7GW07R2-11	Water	6010B	680-2740
680-1126-E-7-A	R7GW08R-11	Water	6010B	680-2740
680-1126-F-9-A	R7GW10-11	Water	6010B	680-2740
Analysis Batch:680-3866				
LCS 680-2823/16-A	Lab Control Spike	Water	7470A	680-2823
MB 680-2823/15-A	Method Blank	Water	7470A	680-2823
680-1126-E-5-C	R7GW05R-11	Water	7470A	680-2823
680-1126-E-6-C	R7GW07R2-11	Water	7470A	680-2823
680-1126-E-7-B	R7GW08R-11	Water	7470A	680-2823
680-1126-E-9-C	R7GW10-11	Water	7470A	680-2823
Analysis Batch:680-3957				
LCS 680-2826/14-A	Lab Control Spike	Water	7470A	680-2826
MB 680-2826/13-A	Method Blank	Water	7470A	680-2826
680-1072-B-2-C MS*D	Matrix Spike	Water	7470A	680-2826
680-1072-B-2-C	Matrix Spike Duplicate	Water	7470A	680-2826
680-1126-F-5-C *D	R7GW05R-11	Water	7470A	680-2826
680-1126-F-6-C *D	R7GW07R2-11	Water	7470A	680-2826
680-1126-F-7-D *D	R7GW08R-11	Water	7470A	680-2826
680-1126-F-9-C *D	R7GW10-11	Water	7470A	680-2826

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

Surrogate Recovery Report

8260B Volatile Organic Compounds by GC/MS

Client Matrix: Water

Lab Sample ID	Client Sample ID	(BFB) (%Rec)	(DBFM) (%Rec)	(TOL) (%Rec)
680-1126-1	R7GW01-R11	89	103	97
680-1126-10	R7GW11-11	87	99	100
680-1126-11	R7FB01-11	89	98	102
680-1126-12	R7ER01-11	88	101	99
680-1126-13	R7TB01-11	86	99	101
680-1126-2	R7GW02R-11	87	102	98
680-1126-3	R7GW02R-11D	88	104	98
680-1126-4	R7GW04R-11	90	98	99
680-1126-5	R7GW05R-11	88	106	97
680-1126-6	R7GW07R2-11	88	104	98
680-1126-7	R7GW08R-11	88	101	99
680-1126-8	R7GW09-11	89	102	98
680-1126-9	R7GW10-11	88	99	99
680-1126-A-2 MS MSMS	MS	92	108	94
680-1126-A-2 MSD	MSD	93	107	95
LCS 680-3025/2LCS	LCS	109	105	100
MB 680-3025/3MB	MB	87	104	97

Surrogate		Acceptance Limits
(BFB)	4-Bromofluorobenzene	77 - 120
(DBFM)	Dibromofluoromethane	75 - 123
(TOL)	Toluene-d8	79 - 122

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

8260B Volatile Organic Compounds by GC/MS

Method Blank - Batch: 680-3025

Lab ID: MB 680-3025/3
Matrix: Water
Date Analyzed: 03/08/2005 1245
Units: ug/L
Dilution: 1.0

Analyte	Result	Qualifier	RL
Acetone	25	U	25
Acrylonitrile	20	U	20
Benzene	1.0	U	1.0
Chlorobromomethane	1.0	U	1.0
Dichlorobromomethane	1.0	U	1.0
Bromoform	1.0	U	1.0
Carbon disulfide	1.0	U	1.0
Carbon tetrachloride	1.0	U	1.0
Chlorobenzene	1.0	U	1.0
Chloroethane	1.0	U	1.0
Chloroform	1.0	U	1.0
Chlorodibromomethane	1.0	U	1.0
1,2-Dibromo-3-Chloropropane	1.0	U	1.0
Ethylene Dibromide	1.0	U	1.0
1,2-Dichlorobenzene	1.0	U	1.0
1,4-Dichlorobenzene	1.0	U	1.0
trans-1,4-Dichloro-2-butene	2.0	U	2.0
1,1-Dichloroethane	1.0	U	1.0
1,2-Dichloroethane	1.0	U	1.0
1,1-Dichloroethene	1.0	U	1.0
cis-1,2-Dichloroethene	1.0	U	1.0
trans-1,2-Dichloroethene	1.0	U	1.0
1,2-Dichloropropane	1.0	U	1.0
cis-1,3-Dichloropropene	1.0	U	1.0
trans-1,3-Dichloropropene	1.0	U	1.0
Ethylbenzene	1.0	U	1.0
2-Hexanone	10	U	10
Bromomethane	1.0	U	1.0
Chloromethane	1.0	U	1.0
Dibromomethane	1.0	U	1.0
Methylene Chloride	1.0	U	1.0
Methyl Ethyl Ketone	10	U	10
Iodomethane	5.0	U	5.0
methyl isobutyl ketone	10	U	10
Styrene	1.0	U	1.0
1,1,1,2-Tetrachloroethane	1.0	U	1.0
1,1,2,2-Tetrachloroethane	1.0	U	1.0
Tetrachloroethene	1.0	U	1.0
Toluene	1.0	U	1.0
1,1,1-Trichloroethane	1.0	U	1.0
1,1,2-Trichloroethane	1.0	U	1.0
Trichloroethene	1.0	U	1.0
Trichlorofluoromethane	1.0	U	1.0
1,2,3-Trichloropropane	1.0	U	1.0
Vinyl acetate	2.0	U	2.0

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

8260B Volatile Organic Compounds by GC/MS

Method Blank - Batch: 680-3025

Lab ID: MB 680-3025/3
Matrix: Water
Date Analyzed: 03/08/2005 1245
Units: ug/L
Dilution: 1.0

Analyte	Result	Qualifier	RL
Vinyl chloride	1.0	U	1.0
Xylenes, Total	2.0	U	2.0

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

8260B Volatile Organic Compounds by GC/MS

Laboratory Control Sample - Batch: 680-3025

Lab ID: LCS 680-3025/2
Matrix: Water

Date Analyzed: 03/08/2005 1134
Units: ug/L

Dilution: 1.0

Analyte	Spike Amount	Result	% Rec.	Recovery Limits	Qualifier
Acetone	100	120	122	20 - 183	
Benzene	50.0	42	85	74 - 122	
Chlorobromomethane	50.0	45	90	50 - 154	
Dichlorobromomethane	50.0	50	100	74 - 128	
Bromoform	50.0	60	121	64 - 132	
Carbon disulfide	50.0	30	60	60 - 130	
Carbon tetrachloride	50.0	41	82	64 - 137	
Chlorobenzene	50.0	56	113	75 - 123	
Chloroethane	50.0	42	83	40 - 171	
Chloroform	50.0	51	101	74 - 124	
Chlorodibromomethane	50.0	58	117	75 - 126	
1,2-Dibromo-3-Chloropropane	50.0	58	116	14 - 147	
Ethylene Dibromide	50.0	51	102	60 - 118	
1,2-Dichlorobenzene	50.0	61	123	71 - 125	
1,4-Dichlorobenzene	50.0	66	132	65 - 127	*
1,1-Dichloroethane	50.0	41	82	70 - 127	
1,2-Dichloroethane	50.0	42	83	68 - 130	
1,1-Dichloroethene	50.0	34	68	64 - 132	
cis-1,2-Dichloroethene	50.0	44	88	69 - 126	
trans-1,2-Dichloroethene	50.0	39	78	67 - 130	
1,2-Dichloropropane	50.0	48	95	74 - 123	
cis-1,3-Dichloropropene	50.0	47	93	76 - 126	
trans-1,3-Dichloropropene	50.0	48	95	75 - 126	
Ethylbenzene	50.0	56	113	77 - 123	
2-Hexanone	100	130	127	58 - 139	
Bromomethane	50.0	36	72	21 - 176	
Chloromethane	50.0	27	55	51 - 133	
Dibromomethane	50.0	48	96	70 - 130	
Methylene Chloride	50.0	38	76	67 - 128	
Methyl Ethyl Ketone	100	110	115	51 - 142	
methyl isobutyl ketone	100	100	105	62 - 130	
Styrene	50.0	58	116	75 - 125	
1,1,1,2-Tetrachloroethane	50.0	59	117	62 - 107	*
1,1,2,2-Tetrachloroethane	50.0	60	119	71 - 127	
Tetrachloroethene	50.0	53	105	70 - 133	
Toluene	50.0	50	100	75 - 122	
1,1,1-Trichloroethane	50.0	41	82	70 - 132	
1,1,2-Trichloroethane	50.0	54	108	75 - 122	
Trichloroethene	50.0	46	93	75 - 122	
Trichlorofluoromethane	50.0	34	69	74 - 165	*
1,2,3-Trichloropropane	50.0	59	118	60 - 147	
Vinyl acetate	100	84	84	47 - 150	
Vinyl chloride	50.0	34	67	59 - 136	
Xylenes, Total	150	180	117	77 - 121	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

8260B Volatile Organic Compounds by GC/MS

Matrix Spike/Spike Duplicate - Batch: 680-3025

MS Lab ID: 680-1126-A-2 MS MS
MSD Lab ID: 680-1126-A-2 MSD MSD
Matrix: Water

Date Analyzed: 03/08/2005 1648
Date Analyzed: 03/08/2005 1717

Dilution: 1.0
Dilution: 1.0

Analyte	% Recovery MS	% Recovery MSD	Recovery Limits	RPD	RPD Limit	Qualifier	
Acetone	82	81	20 - 183	2	50		
Benzene	90	89	74 - 122	1	30		
Chlorobromomethane	97	96	50 - 154	0	30		
Dichlorobromomethane	88	89	74 - 128	0	30		
Bromoform	97	100	64 - 132	2	30		
Carbon disulfide	85	84	60 - 130	0	30		
Carbon tetrachloride	88	89	64 - 137	1	30		
Chlorobenzene	102	102	75 - 123	0	30		
Chloroethane	106	109	40 - 171	3	50		
Chloroform	104	105	74 - 124	1	30		
Chlorodibromomethane	98	99	75 - 126	1	30		
1,2-Dibromo-3-Chloropropane	96	92	14 - 147	4	30		
Ethylene Dibromide	87	86	60 - 118	1	30		
1,2-Dichlorobenzene	102	100	71 - 125	2	30		
1,4-Dichlorobenzene	112	110	65 - 127	1	30		
1,1-Dichloroethane	99	100	70 - 127	1	30		
1,2-Dichloroethane	78	78	68 - 130	1	30		
1,1-Dichloroethene	91	92	64 - 132	1	30		
cis-1,2-Dichloroethene	102	104	69 - 126	1	30		
trans-1,2-Dichloroethene	101	99	67 - 130	2	30		
1,2-Dichloropropane	88	88	74 - 123	0	30		
cis-1,3-Dichloropropene	84	84	76 - 126	0	30		
trans-1,3-Dichloropropene	81	82	75 - 126	1	30		
Ethylbenzene	102	102	77 - 123	0	30		
2-Hexanone	85	84	58 - 139	1	30		
Bromomethane	83	84	21 - 176	0	50		
Chloromethane	48	48	51 - 133	0	50	N	N
Dibromomethane	84	84	70 - 130	0	30		
Methylene Chloride	96	94	67 - 128	2	30		
Methyl Ethyl Ketone	86	84	51 - 142	3	30		
methyl isobutyl ketone	84	83	62 - 130	1	30		
Styrene	100	100	75 - 125	0	30		
1,1,1,2-Tetrachloroethane	102	103	62 - 107	1	30		
1,1,2,2-Tetrachloroethane	95	94	71 - 127	1	30		
Tetrachloroethene	102	103	70 - 133	0	30		
Toluene	97	97	75 - 122	0	30		
1,1,1-Trichloroethane	89	89	70 - 132	0	30		
1,1,2-Trichloroethane	89	90	75 - 122	2	30		
Trichloroethene	93	92	75 - 122	1	30		
Trichlorofluoromethane	88	89	74 - 165	1	50		
1,2,3-Trichloropropane	94	96	60 - 147	2	30		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

8260B Volatile Organic Compounds by GC/MS

Matrix Spike/Spike Duplicate - Batch: 680-3025

MS Lab ID: 680-1126-A-2 MS MS
MSD Lab ID: 680-1126-A-2 MSD MSD
Matrix: Water

Date Analyzed: 03/08/2005 1648
Date Analyzed: 03/08/2005 1717

Dilution: 1.0
Dilution: 1.0

Analyte	% Recovery MS	% Recovery MSD	Recovery Limits	RPD	RPD Limit	Qualifier
Vinyl acetate	89	88	47 - 150	1	30	
Vinyl chloride	71	72	59 - 136	1	50	
Xylenes, Total	105	105	77 - 121	0	30	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method Blank - Batch: 680-2690

Lab ID: MB 680-2690/11-B
Matrix: Water
Date Analyzed: 03/08/2005 2130
Units: mg/L
Dilution: 1.0

Analyte	Result	Qualifier	RL
Antimony	0.020	U	0.020
Arsenic	0.010	U	0.010
Lead	0.0050	U	0.0050
Selenium	0.010	U	0.010
Barium	0.010	U	0.010
Beryllium	0.0040	U	0.0040
Cadmium	0.0050	U	0.0050
Chromium	0.010	U	0.010
Cobalt	0.010	U	0.010
Copper	0.0018	J	0.020
Nickel	0.040	U	0.040
Silver	0.010	U	0.010
Vanadium	0.010	U	0.010
Zinc	0.020	U	0.020
Thallium	0.025	U	0.025

Laboratory Control Sample - Batch: 680-2690

Lab ID: LCS 680-2690/12-B
Matrix: Water
Date Analyzed: 03/08/2005 2135
Units: mg/L
Dilution: 1.0

Analyte	Spike Amount	Result	% Rec.	Recovery Limits	Qualifier
Antimony	0.500	0.47	93	75 - 125	
Arsenic	2.00	1.9	95	75 - 125	
Lead	0.500	0.50	100	75 - 125	
Selenium	2.00	1.9	96	75 - 125	
Barium	2.00	1.9	96	75 - 125	
Beryllium	0.0500	0.048	97	75 - 125	
Cadmium	0.0500	0.047	94	75 - 125	
Chromium	0.200	0.20	98	75 - 125	
Cobalt	0.500	0.50	99	75 - 125	
Copper	0.250	0.25	101	75 - 125	
Nickel	0.500	0.47	95	75 - 125	
Silver	0.0500	0.049	97	75 - 125	
Vanadium	0.500	0.49	98	75 - 125	
Zinc	0.500	0.51	102	75 - 125	
Thallium	2.00	1.9	96	75 - 125	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Matrix Spike/Spike Duplicate - Batch: 680-2690

MS Lab ID: 680-1072-A-2-D MS*D
MSD Lab ID: 680-1072-A-2-D MSD*D
Matrix: Water

Date Analyzed: 03/08/2005 2226
Date Analyzed: 03/08/2005 2231

Dilution: 1.0
Dilution: 1.0

Analyte	% Recovery MS	% Recovery MSD	Recovery Limits	RPD	RPD Limit	Qualifier
Antimony	104	103	75 - 125	1	20	
Arsenic	105	104	75 - 125	0	20	
Lead	103	102	75 - 125	1	20	
Selenium	103	99	75 - 125	4	20	
Barium	95	94	75 - 125	1	20	
Beryllium	94	93	75 - 125	1	20	
Cadmium	90	90	75 - 125	0	20	
Chromium	96	95	75 - 125	1	20	
Cobalt	99	98	75 - 125	0	20	
Copper	113	113	75 - 125	0	20	
Nickel	92	91	75 - 125	1	20	
Silver	113	113	75 - 125	0	20	
Vanadium	98	98	75 - 125	1	20	
Zinc	104	103	75 - 125	1	20	
Thallium	105	104	75 - 125	1	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Method Blank - Batch: 680-2740

Lab ID: MB 680-2740/21-A
Matrix: Water
Date Analyzed: 03/08/2005 2303
Units: mg/L
Dilution: 1.0

Analyte	Result	Qualifier	RL
Antimony	0.020	U	0.020
Arsenic	0.010	U	0.010
Lead	0.0050	U	0.0050
Selenium	0.010	U	0.010
Barium	0.010	U	0.010
Beryllium	0.0040	U	0.0040
Cadmium	0.0050	U	0.0050
Chromium	0.010	U	0.010
Cobalt	0.010	U	0.010
Copper	0.0017	J	0.020
Nickel	0.040	U	0.040
Silver	0.010	U	0.010
Vanadium	0.010	U	0.010
Zinc	0.020	U	0.020
Thallium	0.025	U	0.025

Laboratory Control Sample - Batch: 680-2740

Lab ID: LCS 680-2740/22-A
Matrix: Water
Date Analyzed: 03/08/2005 2308
Units: mg/L
Dilution: 1.0

Analyte	Spike Amount	Result	% Rec.	Recovery Limits	Qualifier
Antimony	0.500	0.47	93	75 - 125	
Arsenic	2.00	1.9	96	75 - 125	
Lead	0.500	0.50	100	75 - 125	
Selenium	2.00	1.9	97	75 - 125	
Barium	2.00	1.9	97	75 - 125	
Beryllium	0.0500	0.049	98	75 - 125	
Cadmium	0.0500	0.047	93	75 - 125	
Chromium	0.200	0.20	99	75 - 125	
Cobalt	0.500	0.50	100	75 - 125	
Copper	0.250	0.26	102	75 - 125	
Nickel	0.500	0.47	94	75 - 125	
Silver	0.0500	0.049	97	75 - 125	
Vanadium	0.500	0.50	100	75 - 125	
Zinc	0.500	0.52	103	75 - 125	
Thallium	2.00	1.9	95	75 - 125	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

6010B Inductively Coupled Plasma - Atomic Emission Spectrometry

Matrix Spike/Spike Duplicate - Batch: 680-2740

MS Lab ID: 680-1072-B-2-A MS
MSD Lab ID: 680-1072-B-2-A MSD
Matrix: Water

Date Analyzed: 03/08/2005 2332
Date Analyzed: 03/08/2005 2336

Dilution: 1.0
Dilution: 1.0

Analyte	% Recovery MS	% Recovery MSD	Recovery Limits	RPD	RPD Limit	Qualifier
Antimony	103	103	75 - 125	0	20	
Arsenic	104	104	75 - 125	0	20	
Lead	103	103	75 - 125	0	20	
Selenium	102	101	75 - 125	0	20	
Barium	95	94	75 - 125	0	20	
Beryllium	94	93	75 - 125	1	20	
Cadmium	90	89	75 - 125	1	20	
Chromium	95	95	75 - 125	0	20	
Cobalt	99	98	75 - 125	0	20	
Copper	115	113	75 - 125	1	20	
Nickel	91	90	75 - 125	1	20	
Silver	114	114	75 - 125	0	20	
Vanadium	99	98	75 - 125	0	20	
Zinc	104	103	75 - 125	1	20	
Thallium	104	104	75 - 125	0	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method Blank - Batch: 680-2823

Lab ID: MB 680-2823/15-A
Matrix: Water
Date Analyzed: 03/09/2005 1827
Units: mg/L
Dilution: 1.0

Analyte	Result	Qualifier	RL
Mercury	0.00020	U	0.00020

Laboratory Control Sample - Batch: 680-2823

Lab ID: LCS 680-2823/16-A
Matrix: Water
Date Analyzed: 03/09/2005 1830
Units: mg/L
Dilution: 1.0

Analyte	Spike Amount	Result	% Rec.	Recovery Limits	Qualifier
Mercury	0.00250	0.0024	95	80 - 120	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Michael Baker Jr., Inc.

Job Number: 680-1126.1
Sdg Number: PRN127

7470A Mercury in Liquid Waste (Manual Cold Vapor Technique)

Method Blank - Batch: 680-2826

Lab ID: MB 680-2826/13-A
Matrix: Water
Date Analyzed: 03/09/2005 1724
Units: mg/L
Dilution: 1.0

Analyte	Result	Qualifier	RL
Mercury	0.00020	U	0.00020

Laboratory Control Sample - Batch: 680-2826

Lab ID: LCS 680-2826/14-A
Matrix: Water
Date Analyzed: 03/09/2005 1727
Units: mg/L
Dilution: 1.0

Analyte	Spike Amount	Result	% Rec.	Recovery Limits	Qualifier
Mercury	0.00250	0.0024	98	80 - 120	

Matrix Spike/Spike Duplicate - Batch: 680-2826

MS Lab ID: 680-1072-B-2-C MS*D
MSD Lab ID: 680-1072-B-2-C MSD*D
Matrix: Water
Date Analyzed: 03/09/2005 1750
Date Analyzed: 03/09/2005 1753
Dilution: 1.0
Dilution: 1.0

Analyte	% Recovery MS	% Recovery MSD	Recovery Limits	RPD	RPD Limit	Qualifier	
Mercury	60	59	80 - 120	2	20	*	*

Calculations are performed before rounding to avoid round-off errors in calculated results.

Serial Number

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

SEVERN TRENT **STL**

Master Airbill # 3480 3123 5163

STL Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.stl-inc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Base Landfill	T.O. 19	PR
STL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Angie Weimerskirk		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Mark Kimes	412-269-2009	412-375-3995
CLIENT NAME	CLIENT E-MAIL	
Baker Environmental, Inc.	mkimes@mbakercorp.com	
CLIENT ADDRESS		
100 Airside Drive, Moon Township, PA 15108		
COMPANY CONTRACTING THIS WORK (if applicable)		
Baker Environmental, Inc.		

PAGE 1 OF 2

STANDARD REPORT DELIVERY (X)
DATE DUE 28 day TAT
EXPEDITED REPORT DELIVERY (SURCHARGE) ( )
DATE DUE

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT,...)	REQUIRED ANALYSIS: App.I VOCs SW-846/8260	REQUIRED ANALYSIS: App.I Metals SW-846/6010	REQUIRED ANALYSIS: App.I Diss.Metals SW-846/6010	NUMBER OF CONTAINERS SUBMITTED	REMARKS
3/2/05	1345	R7GW01R-11		X							4	
	0900	R7GW02R-11		X							4	
	0900	R7GW02R-11D		X							4	
	0930	R7GW02R-11MS		X							4	
	0930	R7GW02R-11MSD		X							4	
	1655	R7GW04R-11		X							4	
	1630	R7GW05R-11		X							4	
	1050	R7GW07R2-11		X							4	
	1516	R7GW08R-11		X							4	
	1111	R7GW09-11		X							4	
	1703	R7GW10-11		X							4	
V	1405	R7GW11-11		X							4	

HCl

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
			Jon C. Edel	3/2/05	1300			
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
Jon C. Edel Jr.	3/2/05	0700						

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	STL SAVANNAH LOG NO.	LABORATORY REMARKS
	030405	0940	YES ( ) NO ( )		620-1126	

STL8240-580 (12/02)

Serial Number

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

SEVERN TRENT **STL**

Waybill # 5122 5123 5143

STL Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.stl-inc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Base Landfill	T.O. 19	PR
STL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Angie Weimerskirk		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Mark Kimes	412-269-2009	412-375-3995
CLIENT NAME	CLIENT E-MAIL	
Baker Environmental, Inc.	mkimes@mbakercorp.com	
CLIENT ADDRESS		
100 Airside Dive, Moon Township, PA 15108		
COMPANY CONTRACTING THIS WORK (if applicable)		
Baker Environmental, Inc.		

PAGE 2 OF 2

STANDARD REPORT DELIVERY (AD)

DATE DUE 28 day TAT

EXPEDITED REPORT DELIVERY (SURCHARGE) ( )

DATE DUE

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT,...)	REQUIRED ANALYSIS: App.I VOCs SW-846/8260	REQUIRED ANALYSIS: App.I Metals SW-846/6010	REQUIRED ANALYSIS: App.I Diss.Metals SW-846/6010	REMARKS
								HCl			
3/2/05	0830	~~R7GW01R-11~~ R7FB01-11		X				4			
3/2/05	0835	~~R7GW02R-11~~ R7ER01-11		X				4			
3/3/05		~~R7GW02R-11D~~ R7TB01-11									
		R7GW02R-11MS									
		R7GW02R-11MSD									
		R7GW04R-11									
		R7GW05R-11									
		R7GW07R2-11									
		R7GW08R-11									
		R7GW09-11									
		R7GW10-11									
		R7GW11-11									

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
				3/2/05	1300			
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
	3/2/05	1300						

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	STL SAVANNAH LOG NO.	LABORATORY REMARKS
	030405	0900	YES ( ) NO ( )		680 1126	

STL8240-680 (12/02)

Serial Number

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

SEVERN TRENT **STL**

STAS # 9137 7077 9675
9137 7077 9676

STL Savannah
5102 LaRoche Avenue
Savannah, GA 31404

Website: www.stl-inc.com
Phone: (912) 354-7858
Fax: (912) 352-0165

○ Alternate Laboratory Name/Location

Phone:
Fax:

PROJECT REFERENCE	PROJECT NO.	PROJECT LOCATION (STATE)
Base Landfill	T.O. 19	PR
STL (LAB) PROJECT MANAGER	P.O. NUMBER	CONTRACT NO.
Angie Weimerskirk		
CLIENT (SITE) PM	CLIENT PHONE	CLIENT FAX
Mark Kimes	412-269-2009	412-375-3995
CLIENT NAME	CLIENT E-MAIL	
Baker Environmental, Inc.	mkimes@mbakercorp.com	
CLIENT ADDRESS		
100 Airside Drive, Moon Township, PA 15108		
COMPANY CONTRACTING THIS WORK (if applicable)		
Baker Environmental, Inc.		

PAGE 1 OF 1

STANDARD REPORT DELIVERY ●
DATE DUE 28 day TAT

EXPEDITED REPORT DELIVERY (SURCHARGE) ○
DATE DUE

NUMBER OF COOLERS SUBMITTED PER SHIPMENT:

SAMPLE DATE	SAMPLE TIME	SAMPLE IDENTIFICATION	MATRIX: COMPOSITE (C) OR GRAB (G) INDICATE	MATRIX: AQUEOUS (WATER)	MATRIX: SOLID OR SEMISOLID	MATRIX: AIR	MATRIX: NONAQUEOUS LIQUID (OIL, SOLVENT,...)	REQUIRED ANALYSIS: App.I VOCs SW-846/8260	REQUIRED ANALYSIS: App.I Metals SW-846/6010	REQUIRED ANALYSIS: App.I Diss.Metals SW-846/6010	REMARKS
		R7GW01R-11									
		R7GW02R-11									
		R7GW02R-11D									
		R7GW02R-11MS									
		R7GW02R-11MSD									
		R7GW04R-11									
3/2/05	1230	R7GW05R-11		X					1	1	
3/2/05	1750	R7GW07R2-11		X					1	1	
3/2/05	1516	R7GW08R-11		X					1	1	
		R7GW09-11									
3/2/05	1703	R7GW10-11		X					1	1	
		R7GW11-11									

HC1 HNO3 HNO3

NUMBER OF CONTAINERS SUBMITTED

RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RELINQUISHED BY: (SIGNATURE)	DATE	TIME
			Jon C. Edell Jr.	3/3/05	1300			
RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
Jon C. Edell Jr.	3/3/05	0700						

LABORATORY USE ONLY

RECEIVED FOR LABORATORY BY: (SIGNATURE)	DATE	TIME	CUSTODY INTACT	CUSTODY SEAL NO.	STL SAVANNAH LOG NO.	LABORATORY REMARKS
	030405	0900	YES ○ NO ○		6217-1126	

STL8240-680 (12/02)

APPENDIX F
Laboratory Data Validation Summary

QUALITY ASSURANCE REPORT
PART I
APPENDIX I DATA QUALITY ASSESSMENT
FOR SAMPLES COLLECTED MARCH 2, 2005

NAVAL ACTIVITY ROOSEVELT ROADS, PUERTO RICO

Prepared for:

BAKER ENVIRONMENTAL, INC.
100 Airside Drive
Moon Township, Pennsylvania 15108

Prepared by:

CAPE ENVIRONMENTAL
2302 Parklake Drive
Atlanta, Georgia 30345

CAPE Project Number 34004.019.002
April 2005

SIGNATURE PAGE

QUALITY ASSURANCE REPORT
PART I
APPENDIX I DATA QUALITY ASSESSMENT
FOR SAMPLES COLLECTED MARCH 2, 2005

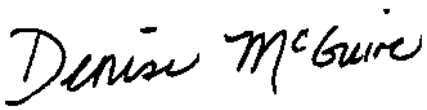
NAVAL ACTIVITY ROOSEVELT ROADS, PUERTO RICO

Prepared for:

BAKER ENVIRONMENTAL, INC.
100 Airside Drive
Moon Township, Pennsylvania 15108

Prepared by:

CAPE ENVIRONMENTAL
2302 Parklake Drive
Atlanta, Georgia 30345



Compliance Review By
Denise McGuire/Project Chemist

Navy Program Review by:
Christelle Newsome/Program Chemist

INTRODUCTION

This quality assurance (QA) report is based upon a review of the validation of analytical data generated for samples collected March 2, 2005 at the Naval Activity in Roosevelt Roads, Puerto Rico. The samples were collected as a part of the Base Landfill sampling event conducted at the site. The chains of custody in Attachment I present a summary of the client sample identification numbers, dates of collection, sample matrices, and the analyses requested.

Severn Trent Services of Savannah, Georgia, served as the laboratory for this event. Analysis included Appendix I List for volatile organic compounds (VOCs) SW-846 Method 8260B, and total and dissolved metals by SW-846 Method 6010B.

VALIDATION OVERVIEW

The analyses were reviewed for adherence to the specified analytical protocols in accordance with the U.S. Department of Defense (DOD) Quality Systems Manual, Version 1 Final (based on National Environmental Laboratory Accreditation Program [NELAP] Voted Revision 12, July 1, 1999). All analytical results have been validated or qualified according to general guidance provided U.S. Environmental Protection Agency (EPA) Region II Standard Operating Procedure (SOP) *Validating Volatile Organic Compounds by SW-846 Method 8260B*, HW-24, Revision 1, June 1999, and U.S. EPA Region II SOP *Evaluation of Metals Data for the CLP Program*, HW-2, Revision 11, January 1992.

The findings of this QA report are based upon the comprehensive review of the following results summaries reported according to the Contract Laboratory Program-like (CLP) deliverables: chain-of- custody documentation, holding times, laboratory method and field blank analyses, surrogate compound, laboratory control sample (LCS), and matrix spike compound recoveries and reproducibility, bromofluorobenzene (BFB) mass tuning results, initial and continuing calibration, internal standard area performance summaries,, target compound identification and quantitation of results, qualitative mass spectral interpretation, post-digestion spike, inductive coupled plasma (ICP) interference check sample results, ICP serial dilution results, target compound identification, quantitation of results and electronic data deliverables.

The analyses were performed acceptably, and required several qualifying statements; it is recommended that the analytical data be used only with the qualifying statements provided below. Any aspects of the data, not discussed in this report should be considered qualitatively and quantitatively valid as reported, based on the deliverables reviewed. A results summary report presenting the validated and qualified results is presented in Attachment 2.

GENERAL DATA QUALIFIERS

As required by EPA protocols, all compounds qualitatively identified at concentrations below their respective reporting limits but above the method detection limit have been qualified with "J" qualifiers on the data summary reports to indicate that they are quantitative estimates.

ORGANIC DATA QUALIFIERS

The reporting limit for trichlorofluoromethane should be considered unusable. The percent recovery for the laboratory control sample was below the acceptance criteria for this compound. This has been indicated by placing an "R" qualifier code next to the reporting limit for trichlorofluoromethane in all of the samples. This should be noted when evaluated the sample for the quantative presence of this compound at the reporting limit presented.

The reporting limits presented for volatile organic compounds acetone, bromomethane, chloroethane, chloromethane and iodomethane in all samples should be considered quantitative estimates. High percent relative standard deviations during the initial calibration and/or percent differences outside method criteria between the initial and continuing calibration standards were reported during the volatile organic analysis. Lack of precision during the initial and/or continuing calibration indicates instrument instability; therefore, a "J" qualifier was appended to the samples listed below to indicate that the reported values are quantitative estimates. The possibility of elevated reporting limits should be noted when assessing the samples for the qualitative absence of these compounds.

INORGANIC DATA QUALIFIERS

Copper and zinc were present in the field blank at similar concentrations to that of the environmental samples. Copper was also present in the equipment rinse blank. The field blank and equipment blank estimated concentrations were less than the reporting limits of 0.02 mg/l for both copper and zinc. EPA Region II requires that elemental contaminants that are detected in samples at less than five times the concentration detected in the associated field, equipment, or method blank, when the field, equipment or method blank is detected at a concentration greater than the Contract Required Detection Limit (CRDL), reporting limit, be qualified as quantitatively invalid. Although the copper and zinc field blank concentrations were less than the reporting limit it is the professional opinion of the reviewer that the contamination of these elements in the environmental samples are due to specific field blank contamination and is not indicative of the sample locations in which these elements were detected. This has been indicated by placing a "U" qualifier next to the concentrations of copper and zinc in samples listed on the data summary table. The reported results are considered qualitatively invalid and the result has been elevated to reflect the reporting limit.

ELEMENT	SAMPLES AFFECTED
Copper, dissolved	R7GW01R-11, R7GW02R-11, R7GW02R-11D, R7GW04R-11, R7GW05R-11, R7GW07R2-11, R7GW08R-11, R7GW10-11, R7GW11-11
Copper, total	R7GW01R-11, R7GW02R-11, R7GW04R-11, R7GW05R-11, R7GW07R2-11, R7GW08R-11, R7GW09-11, R7GW10-11, R7GW11-11
Zinc, dissolved	R7GW01R-11, R7GW02R-11, R7GW02R-11D, R7GW05R-11, R7GW07R2-11, R7GW08R-11, R7GW09-11, R7GW10-11, R7GW11-11
Zinc, total	R7GW01R-11, R7GW02R-11, R7GW08R-11, R7GW09-11, R7GW10-11, R7GW11-11

The reporting limits for total and dissolved lead in the samples listed below should be considered estimated, biased low. The associated CRDL recovery was below the established quality control limit for lead. The low CRDL recovery for lead indicates that the associated reporting limit may not be achievable. This has been indicated by placing "J" qualifiers next to the reporting limit for dissolved lead in the samples listed on the data summary table. The possibility of elevated reporting limit should be noted when assessing these samples for the qualitative absence of lead.

ELEMENT	SAMPLES AFFECTED
Lead, dissolved	R7GW01R-11, R7GW02R-11, R7GW02R-11D, R7GW04R-11, R7GW05R-11, R7GW07R2-11, R7GW08R-11, R7GW09-11, R7GW10-11, R7GW11-11
Lead, total	R7GW01R-11, R7GW02R-11

The reporting limit for total and dissolved mercury in the samples in the tables below should be considered biased low quantitative estimates. The associated matrix spike and matrix spike duplicate recoveries were below the established quality control limits for this element in these samples. The low recoveries for mercury indicate the possible presence of interferences in samples of similar matrix and may be due to lack of homogeneity in the sample. This has been indicated by placing "J" qualifiers next to the reporting limits for mercury in the samples listed

on the data summary table. The possibility of elevated reporting limits should be noted when assessing these samples for the qualitative absence of mercury.

ELEMENT	SAMPLES AFFECTED
Mercury, total and dissolved	R7GW01R-11, R7GW02R-11, R7GW02R-11D, R7GW04R-11, R7GW05R-11, R7GW07R2-11, R7GW08R-11, R7GW09-11, R7GW10-11, R7GW11-11

The reported results for total and dissolved barium and total and dissolved cobalt in the samples listed below should be considered quantitative estimates. The dissolved sample concentration was greater than 10% of its total concentration. This indicates the possible presence of interferences in samples of similar matrix. A "J" qualifier has been placed next to the total and dissolved barium and cobalt concentrations in the samples listed on the data summary tables.

ELEMENT	SAMPLES AFFECTED
Barium, total and dissolved	R7GW02R-11
Cobalt, total and dissolved	R7GW04R-11

SUMMARY

The organic and inorganic analyses were performed acceptably, but required qualifying statements. This analytical quality assurance report has identified all aspects of the data that required qualification. These qualifiers are noted on the attached data summary reports. A support documentation package has been prepared for this QA review and is filed with the Naval Activity Roosevelt Roads project file.