



Energy to Serve Your WorldSM

March 9, 2007

File: E.03.41
Log: EV-07-0574

FEDERAL EXPRESS

Vogtle Electric Generating Plant Landfill #3
Solid Waste Permit No. 017-007D(L)(I)

Mr. Jeff Cown
Program Manager – Solid Waste Management Program
Georgia Environmental Protection Division
4244 International Parkway, Suite 104
Atlanta, GA 30354

Dear Mr. Cown:

Pursuant to EPD Solid Waste Rule 391-3-4-.14, and in accordance with the Plant Vogtle Landfill #3 approved landfill groundwater monitoring program, Southern Nuclear is submitting the December, 2006 semi-annual groundwater monitoring report. This report was prepared for Southern Nuclear by the Dextra Group and was completed in March, 2007. Statistically significant increases over background were indicated for several analyzed parameters in GWC-13 and GWC-14. In accordance with Rule 391-3-4, Southern Nuclear will place a notice in the landfill operating record within 14 days of submittal of this report. The notice will indicate which constituents have shown statistically higher concentrations compared to the background wells.

Based on previous detections of mercury in several wells during Appendix II sampling, Southern Nuclear will continue to perform analysis for mercury in all Landfill #3 wells during the routine groundwater sampling events.

Please find enclosed the December, 2006 landfill groundwater monitoring report for this sampling period. If you have any questions regarding this information, please contact Mickey Perry at (205) 992-6994.

Sincerely,

J. M. Godfrey
Manager – Environmental Affairs

JMG/MEP:ahl

Enclosure

EV-07-0574

Page 3

Georgia Environmental Protection Division

Mr. Jeff Cown

cc: Mr. Michael Kemp (w/o)
Mr. Earl Hinkle (w/o)
Mr. Al Frazer (East Central Division (w/o)
Mr. Kurt Batsell (Dextra) (w/o)

EV-07-0574

Page 4

Georgia Environmental Protection Division

Mr. Jeff Cown

bc: T. E. Tynan (w/o)
J. G. Aufdenkampe (w/o)
N. D. Dennis (w/o)
C. L. Buck (w/o)
S. A. Varnum (w/o)
J. A. Joyner (w/o)
D. G. Goodwin (Return Receipt)
SNC Document Management – Vogtle (Return Receipt)

**GROUNDWATER MONITORING REPORT
PLANT VOGTLE LANDFILL #3
SOLID WASTE PERMIT NO. 017-007D(L)(I)
BURKE COUNTY, GEORGIA
MARCH 2007**

PREPARED FOR:

Southern Nuclear Operating Company, Inc.
40 Inverness Center Parkway
Birmingham, Alabama 35201

PREPARED BY:



Dextra

Kurt R. Batsel, P.E.
Georgia License Number 16594
The Dextra Group, Inc.
1205 Johnson Ferry Road
Suite #136-446
Marietta, Georgia 30068

TABLE OF CONTENTS

1 – Introduction	1
2 – Monitoring Well Network	1
3 - Groundwater Flow Rate and Directional Data	2
3.1 Geology/Hydrogeology	
3.2 Groundwater Elevations and Gradients	
4 – Sampling Procedures and Parameter Analyses	3
4.1 Procedures and Field Measurements	
4.2 Parameter Analyses	
5 – Groundwater Quality Evaluation	4
5.1 Detected Parameters	
5.2 Statistical Analyses	
6 – Conclusions	5

In Order Following Page 5

Tables

- 1 – Groundwater Elevations and Monitoring Well Construction Details
- 2 – Groundwater Sampling Field Measurements
- 3 – Constituents for Detection Monitoring
- 4 – Summary of Detected Parameters

Figures

- 1 – Groundwater Contour Elevation Map, December 4-5, 2006

Appendices

- A – Hydraulic Gradient Calculation Sheets
- B – Laboratory Analytical Reports
- C – Statistical Analyses

1 – Introduction

This report presents the results of groundwater sampling conducted in December 2006 at private solid waste Landfill #3 operated by Southern Nuclear Operating Company, Inc. (SNC) at Plant Vogtle in Waynesboro, Georgia. Groundwater monitoring was initiated in 2002 in accordance with the approved Groundwater Monitoring Plan for the landfill. The landfill is operated under Solid Waste Permit #017-007D(L)(I) and used for disposal of non-putrescible, non-liquid office and solid waste as well as construction/demolition debris such as asbestos insulation, wooden pallets and concrete. Landfill #3, permitted in 1987, has been utilized solely for construction and demolition debris disposal since 1992.

Sampling, analyses and data evaluation were conducted in accordance with the rules of the Georgia Department of Natural Resources Environmental Protection Division (EPD), Chapter 391-3-4, the September 1991 “Manual for Groundwater Monitoring” and the approved Groundwater Monitoring Plan for the landfill.

The findings of the initial four sampling events, conducted from August 2002 through December 2002, and subsequent semi-annual sampling events are presented in reports previously submitted to the EPD. This report presents the results of the December 2006 semi-annual monitoring event. Subsequent reports will be prepared upon completion of semi-annual monitoring events as scheduled in the Groundwater Monitoring Plan.

2 – Monitoring Well Network

The groundwater monitoring well network consists of nine permanent monitoring wells located along the perimeter of the waste management unit boundary of Landfill #3 (*Figure 1*). As shown in the figure, the wells are located outside of, but as close as practical to, the waste disposal areas. The wells are screened within the uppermost water-producing zones underlying the landfill, which occur from approximately 30 to 80 feet below land surface at Landfill #3.

The nine permanent groundwater monitoring wells at Landfill #3 were installed in September 2001, July 2002 and June 2005. The well construction details are presented in *Table 1*. As noted in the table, well GWC-16 has been dry during each groundwater monitoring event. Wells GWA-7/MW-7 and GWA-15/MW-15 are located at the south and southwest portions of the landfill boundary. Wells GWC-5/MW-5, GWC-13/MW-13 and GWC-14/MW-14 are located along the eastern portion of the landfill boundary, and wells GWC-6/MW-6 and GWC-16/MW-16 are located along the northern landfill boundary. Wells GWC-17/MW-17 and GWC-18/MW-18 were recently installed at the southeast corner of the landfill as part of the contamination assessment program at Landfill #3. Well GWA-7/MW-7 was initially treated as a compliance (downgradient) well for Landfill #3. However, due to review of water level measurements showing this well to be side gradient from the active fill area of the landfill, well GWA-7/MW-7 was evaluated as a background well in the monitoring reports from the June 2003 and December 2003 sampling events. Based on the consistent detection of trichlorofluoromethane and the June 2004 detection of trichloroethene in Well GWA-7/MW-7, it was decided to return to evaluating this well as a compliance well. This approach was used in this monitoring report. The most appropriate designation for this well will continue to be evaluated in light of future monitoring results. For this report, well GWA-15/MW-15 is the designated background well, and the remaining wells are designated compliance wells. The wells will be referred to as GWC-5, GWC-6, GWA-7, GWC-13, GWC-14, GWA-15, GWC-16, GWC-17 and GWC-18 in this report in accordance with the EPD’s well identification guidelines.

Two stormwater sediment ponds were completed in 2004 in accordance with the approved Design and Operational Plan for the Vogtle Landfill #3. As there was no discharge from either pond at the time of the December 2006 groundwater monitoring event, no surface water samples were collected from the surface water monitoring stations located at the pond outfalls.

3 – Groundwater Flow Rate and Directional Data

3.1 Geology/Hydrogeology

The geology of the Plant Vogtle site consists of sedimentary deposits within the Coastal Plain physiographic province of Georgia. These sediments consist of unconsolidated sands, silts and clays comprised of marine and non-marine fluvial deposits. Marls and limestone were also encountered at depth in deep borings completed at the landfill. The marls encountered during drilling were components of the Irwinton Sand member. Either all or parts of the Barnwell Group members (except the Utley Limestone member) were also encountered in the other borings conducted at the landfill. Underlying the Barnwell Group is the Lisbon Formation with its uppermost unit, the Blue Bluff Marl, located immediately under the Utley Limestone. This marl layer, approximately 70 feet thick, is a near-impermeable layer that effectively confines the Tertiary and Cretaceous aquifers, the two confined aquifers beneath the Plant site.

The occurrence of groundwater underlying the landfill appears in confined, semi-confined, unconfined, and perched hydrogeologic units. Groundwater is found primarily in sands, silty sands, clayey sands and marl limestone interfaces. The main difference between boring/well water production characteristics and aquifer confining characteristics appears to be the thickness of the water-producing zone, the grain size of the sand component, the sand/clay ratio and the characteristics of the marl/limestone interface.

Groundwater may also exist in an unconfined water table aquifer in the Barnwell sands and limestone that overlie the marl. The water table aquifer at the site is on an interfluvial ridge, or a topographically high area in which the groundwater in the water table discharges along streams that surround the topographic high. The streams eventually discharge to the Savannah River.

3.2 Groundwater Elevations and Gradients

During well installation, the occurrence of groundwater was determined by collecting continuous split spoon samples beginning approximately five feet above the location of expected groundwater-producing zones. At both landfill, groundwater was generally found in water producing zones less than one foot thick and was observed to be under semi-confined or confined conditions.

Upon completion of all drilling activities, measuring points were located on the tops of the well casings and surveyed relative to mean sea level (msl). During each sampling event, depth to water measurements were recorded in the wells from the surveyed elevations using an electronic water-level indicator. The water level measurements were then subtracted from the appropriate measuring point elevations to determine groundwater elevations in the wells.

Hydraulic conductivity (K) in the wells was measured on September 26, 2001. The values ranged from 5.634×10^{-4} cm/sec in GWB-6 to 3.064×10^{-2} cm/sec in GWA-2.

Depth to water measurements and groundwater elevations for the wells at Landfill #3 are presented in *Table 1*. Groundwater elevations measured to date indicate that the groundwater elevation, or hydraulic 'head,' is greatest beneath the center area of the landfill, and decreases to the southeast, to

the northeast and to the west-southwest beneath the landfill. This mounding effect is believed to be the result of natural infiltration in the sandy soils within the historic topographically high area in the center of the landfill. This topographically high area, which encompasses a broad area within the landfill, is a natural site feature that was present prior to any landfilling operations. *Figure 1* shows the topography of the landfill.

As discussed previously, the water-bearing stratigraphy beneath Landfill #3 is composed of individual saturated sand units within a clayey/marl matrix. These units may or may not be interconnected. As such, groundwater elevations in the monitoring wells may reflect head in multiple perched layers and may not represent groundwater 'flow' direction beneath the landfill. *Figure 2* presents a map depicting the saturated head contours measured on December 4, 2006.

Monitoring well GWA-15 is the well most representative of background water quality at the site because of the distance between the well and the current landfilled area, and the location of the area of relatively higher head located between the well and the current landfilled area on the eastern portion of the site. This well is therefore used as a background well to evaluate groundwater quality at the landfill. Well GWA-7 is now evaluated as a downgradient well based on review of the groundwater elevation and chemical analysis data collected since 2002.

The hydraulic gradient was calculated using a three-point problem from groundwater elevations in the monitoring wells as follows for each main direction of head difference:

Southwest: GWA-6, GWA-7 and GWA-15;
Northeast: GWA-16, GWA-6 and GWA-5; and
Southeast: GWA-13, GWA-7 and GWA-14.

The calculated hydraulic gradients are presented on the contour map (*Figure 1*). The calculations used in determining the gradients are provided in *Appendix A*. For the December 2006 event, the southwest gradient was 0.011, the northeast gradient was 0.15, and the southeast gradient was 0.12. The southwest gradient has typically been 0.01, with a maximum of 0.02 (June 2003), reflecting the consistently flattest gradient across the landfill. The northeast trending gradient has ranged from a minimum of 0.08 (October and December 2002, June 2004) to a maximum of 0.17 (June 2003). The southeast gradient has ranged from a low of 0.06 (December 2002) to a maximum of 0.16 (June 2003). For this monitoring event, the steepest gradient was observed in the northeast flow component.

4 – Sampling Procedures and Parameter Analyses

4.1 Procedures and Field Measurements

Prior to sample collection during each sampling event, depth to water measurements are recorded in each well from the surveyed elevations using an electronic water level indicator. The water level indicator is decontaminated using a potable water and Alconox® wash and a distilled water rinse between use at each well. The water level measurements are then subtracted from the appropriate measuring point elevations to determine the groundwater elevations in the wells.

Groundwater samples were collected from all monitoring wells after the wells were properly purged according to the EPA document entitled "Low-Flow Purging & Sampling of Groundwater Monitoring Wells (Bulletin QAD023)". The wells were purged and sampled using QED SamplePro pumps equipped with Teflon® bladders. Purge rates were matched to the recovery rates of the wells, verified by periodic depth to water measurements to determine draw-down during purging. Purging was conducted until at least three consecutive stable readings of pH, conductivity, and turbidity were

recorded. Groundwater samples were then collected directly into pre-preserved sample containers supplied by the laboratory. Final measurements of pH, conductivity, and turbidity were performed to verify that these parameters remained stable during sampling. All field instruments were calibrated in the field daily prior to use and at the conclusion of each sampling event. The field measurements are provided in *Table 2*.

After each sample was collected, the SamplePro pumps and airlines were decontaminated according to the following protocol:

- The pump and air line were placed on clean plastic;
- The pump was disassembled and the bladder was removed;
- The pump was sprayed with a potable water and Alconox® solution, followed with a distilled water rinse until all soap residue was removed;
- A new pump bladder was then installed in the pump prior to reassembly; and
- The pump airline was placed in a clean plastic bag between use at each well.

4.2 Parameter Analyses

In accordance with the approved Groundwater Monitoring Plan, the groundwater samples and field and laboratory quality assurance/quality control (QA/QC) samples were analyzed for the Chapter 391-3-4 Appendix I list of parameters, which consists of total metals and volatile organic compounds (*Table 5*). The field QA/QC samples consisted of duplicate samples, trip blanks and equipment blanks. Metals analyses were conducted using EPA Methods 6010B/7841, and VOCs analyses were conducted using EPA Methods 6010B/8260B and 504.1 to provide sufficiently sensitive quantitation limits for comparison with maximum contaminant limits. Advanced Chemistry Labs, Inc., Atlanta, Georgia performed the laboratory analyses. The complete laboratory analytical reports, which include field and laboratory QA/QC results and chain-of-custody forms, are provided in *Appendix B*.

Samples were also collected for the Chapter 391-3-4 Appendix II parameter mercury in all wells due to this parameter's detection in previous assessment monitoring conducted at the landfill.

5 – Groundwater Quality Evaluation

5.1 Detected Parameters

Table 4 presents a summary of all analyzed parameters detected above the laboratory method reporting limits. Barium was detected at concentrations below the MCL in well GWC-5 (0.021 mg/l) and in well GWC-13 (0.059 mg/l). Nickel was detected in well GWA-15 (0.089 mg/l); there is no MCL for nickel. Zinc was detected in well GWC-5 at 0.062 mg/l, in well GWB-6 at 0.028 mg/l, in well GWC-13 at 0.055 mg/l and in well GWA-15 at 0.316 mg/l; there is no MCL for zinc. In the compliance well GWA-7 the VOC trichlorofluoromethane was detected at 152 ug/l, and at 159 ug/l in the replicate sample well GWA-7; there is no MCL for trichlorofluoromethane. In the compliance well GWC-13, 1,1-dichloroethane, cis-1,2-dichloroethene, and trichlorofluoromethane were detected at low levels. All VOC concentrations in GWC-13 were below applicable MCLs. The Appendix II parameter mercury was detected below the MCL in well GWA-7 at 0.0008 mg/l and in the replicate sample well GWA-7 at 0.0016 mg/l.

No parameters were detected in any of the field or laboratory QA/QC samples, and the laboratory QA/QC checks were within acceptable limits.

5.2 Statistical Analyses

In accordance with the approved Groundwater Monitoring Plan, statistical analyses were conducted for each constituent detected in the compliance well samples for this sampling event. The analyses were conducted to help identify any significant increase in constituent concentrations in downgradient, or compliance, well samples over samples representative of background water quality. The analyses were conducted consistent with U.S. EPA recommended methods as detailed in the guidance document "Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Interim Final Guidelines" (1989) and the corresponding Addendum (1992).

The following methodology was used to evaluate the data:

- The distribution of the data was first evaluated for normality using either the Shapiro-Wilkes Test (for parameters with less than 50 samples) or the Shapiro-Francia Test (for parameters with greater than 50 samples) as recommended in the 1992 EPA guidance. The tests indicate that the concentrations of all detected parameters do not follow normal distributions.
- For the well data sets, the Kruskal-Wallis non-parametric analysis of variance method was used to compare the concentrations of individual parameters in each compliance well to the concentrations of these parameters in the background well. This method is recommended by the 1992 EPA guidance for non-normal sample sets that have between 15% and 90% non-detects.

The detailed statistical analyses are provided in *Appendix C* and the results are summarized below.

At Landfill #3, statistical analysis was performed for the seven detected parameters barium, nickel, zinc, mercury, 1,1-dichloroethane, cis-1,2-dichloroethene, and trichlorofluoromethane. Compared to background well GWA-15/MW-15, the analyses indicate statistically significant higher concentrations of the following parameters:

- Barium, 1,1-dichloroethane, cis-1,2-dichloroethene and trichlorofluoromethane in the GWC-13 well samples,
- Barium, 1,1-dichloroethane, and cis-1,2-dichloroethene in the GWC-14 well samples, and
- Trichloroflouromethane in the GWA-7/MW-7 well samples.

It should be noted that the statistical analyses data sets include all sampling events to date for all wells. As a result, statistically higher concentrations of detected parameters in a well are determined based on all reported concentrations (including consideration of non-detects) from all sampling events for that well. If a concentration is lower in the current event for a well, the complete data set for the well may still indicate a statistically higher concentration over the background well data set considering all sampling events to date. For example, although there was no sample available for GWC-14 for this event, the statistical analyses indicate significantly higher concentrations of barium, 1,1-dichloroethane, and cis-1,2-dichloroethene for the GWC-14 historical sample data set.

6 – Conclusions

Since a statistically significant increase over background is indicated for several analyzed parameters in wells GWC-13 and GWC-14 at Landfill #3, SNC will place a notice in the operating record within 14 days of submittal of this report as required by Chapter 391-3-4. The notice will indicate which constituents have shown statistically significant higher concentrations compared to the background wells.

Based on prior detections of the Appendix II parameter mercury in Landfill #3 wells, SNC will continue to perform analysis for mercury in all Landfill #3 wells during the regular semi-annual sampling events.

TABLES

Table 1
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Groundwater Elevations and Monitoring Well Construction Details

Well ID	Date	Measuring Point Elevation (feet, msl)	Ground Surface Elevation (feet, msl)	Depth to Water (feet, topvc)	Total Boring Depth (feet, bls)	Total Well Depth (feet, topvc)	Riser Height (feet)	Screened Interval (feet, msl)	Groundwater Elevation (feet, msl)
GWC-5/MW-5	9/26/2001	251.96	249.11	48.65	67	56.85	2.85	195.11 to 205.11	203.31
	7/29/2002			50.21					201.75
	9/9/2002			50.43					201.53
	10/21/2002			49.26					202.70
	12/3/2002			49.26					202.70
	6/24/2003			44.60					207.36
	12/16/2003			47.55					204.41
	6/15/2004			47.76					204.20
	12/28/2004			49.13					202.83
	6/13/2005			45.94					206.02
	12/5/2005			48.05					203.91
	6/5/2006			47.85					204.11
	12/4/2006			49.85					202.11
GWB-6/MW-6	9/26/2001	278.87	276.45	47.47	67	64.42	2.42	214.45 to 224.45	231.40
	7/29/2002			48.52					230.35
	9/9/2002			48.55					230.32
	10/21/2002			49.21					229.66
	12/3/2002			48.86					230.01
	6/24/2003			46.92					231.95
	12/16/2003			46.30					232.57
	6/15/2004			46.49					232.38
	12/28/2004			47.22					231.65
	6/13/2005			47.84					231.03
	12/5/2005			47.20					231.67
	6/5/2006			47.38					231.49
	12/4/2006			47.69					231.18
GWA-7/MW-7	9/26/2001	261.33	259.39	31.11	50	41.94	1.94	219.39 to 229.39	230.22
	7/29/2002			33.16					228.17
	9/9/2002			33.25					228.08
	10/21/2002			33.20					228.13
	12/3/2002			32.94					228.39
	6/24/2003			27.51					233.82
	12/16/2003			30.59					230.74
	6/15/2004			30.87					230.46
	12/28/2004			32.33					229.00
	6/13/2005			30.64					230.69
	12/5/2005			31.60					229.73
	6/5/2006			31.74					229.59
	12/4/2006			32.84					228.49

Table 1
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Groundwater Elevations and Monitoring Well Construction Details

Well ID	Date	Measuring Point Elevation (feet, msl)	Ground Surface Elevation (feet, msl)	Depth to Water (feet, topvc)	Total Boring Depth (feet, bls)	Total Well Depth (feet, topvc)	Riser Height (feet)	Screened Interval (feet, msl)	Groundwater Elevation (feet, msl)
GWC-13/MW-13	7/29/2002	273.08	270.99	40.92	50	50.09	2.09	222.99 to 232.99	232.16
	9/9/2002			41.00					232.08
	10/21/2002			40.94					232.14
	12/3/2002			40.48					232.60
	6/24/2003			36.90					236.18
	12/16/2003			39.17					233.91
	6/15/2004			39.59					233.49
	12/28/2004			40.59					232.49
	6/13/2005			38.76					234.32
	12/5/2005			39.93					233.15
	6/5/2006			39.97					233.11
	12/4/2006			40.93					232.15
GWC-14/MW-14	7/29/2002	262.88	260.66	40.05	55	53.22	2.22	209.66 to 219.66	222.83
	9/9/2002			42.31					220.57
	10/21/2002			42.79					220.09
	12/3/2002			42.35					220.53
	6/24/2003			44.29					218.59
	12/16/2003			51.52					211.36
	6/15/2004			52.11					210.77
	12/28/2004			52.66					210.22
	6/13/2005			51.66					211.22
	12/5/2005			52.56					210.32
	6/5/2006			53.03					209.85
	12/4/2006			52.91					209.97
GWA-15/MW-15	7/29/2002	268.15	265.34	45.94	55	55.81	2.81	212.34 to 222.34	222.21
	9/9/2002			46.05					222.10
	10/21/2002			46.19					221.96
	12/3/2002			46.23					221.92
	6/24/2003			41.76					226.39
	12/16/2003			43.29					224.86
	6/15/2004			43.24					224.91
	12/28/2004			44.68					223.47
	6/13/2005			40.1					228.05
	12/5/2005			47.39					220.76
	6/5/2006			44.32					223.83
	12/4/2006			45.03					223.12

Table 1
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Groundwater Elevations and Monitoring Well Construction Details

Well ID	Date	Measuring Point Elevation (feet, msl)	Ground Surface Elevation (feet, msl)	Depth to Water (feet, topvc)	Total Boring Depth (feet, bls)	Total Well Depth (feet, topvc)	Riser Height (feet)	Screened Interval (feet, msl)	Groundwater Elevation (feet, msl)
GWB-16/MW-16	7/29/2002	256.95	254.57	DRY	65	55.38	2.38	201.57 to 211.57	DRY
	9/9/2002			DRY					DRY
	10/21/2002			DRY					DRY
	12/3/2002			DRY					DRY
	6/24/2003			DRY					DRY
	12/16/2003			DRY					DRY
	6/15/2004			DRY					DRY
	12/28/2004			DRY					DRY
	6/13/2005			DRY					DRY
	12/5/2005			DRY					DRY
	6/5/2006			DRY					DRY
	12/4/2006			Abandoned					Abandoned
GWB-16/MW-16R	12/4/2006	237.59	235.51	77.45	80.80	80.80	3.00	156.79 to 166.79	160.14
GWC-17/MW-17	6/13/2005	222.64	220.28	72.82	85	82.00	3.00	141.28 to 151.28	149.82
	12/5/2005			72.6					150.04
	6/5/2006			72.61					150.03
	12/4/2006			72.65					149.99
GWC-18/MW-18	6/13/2005	227.54	225.03	77.05	80	79.00	3.00	149.03 to 159.03	150.49
	12/5/2005			DRY					DRY
	6/5/2006			DRY					DRY
	12/4/2006			DRY					DRY

Notes:

Ground surface measured at survey bolt set in concrete pad at base of protective casing.
msl = mean sea level; topvc = measured from top of pvc riser; bls = below land surface

Table 2
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Groundwater Sampling Field Measurements

Well ID	Date	pH	Conductivity ¹	Turbidity ²	Gallons Purged	Odor	Color	Comments
GWC-5/MW-5	9/26/2001	5.11	47.5	28.6	6.0	none	cloudy	Well development only
	7/29/2002	5.41	24.4	2.83	1.75	none	none	
	9/9/2002	8.13	365	4.11	2.0	none	none	
	10/21/2002	--	--	--	--	--	--	
	12/3/2002	5.94	117	7.8	2.0	none	none	Split with GAEPD
	6/24/2003	5.18	29	3.5	6.0	none	none	
	12/16/2003	6.27	210	79.7	3.0	none	cloudy	
	6/16/2004	5.94	40.7	16.5	2.0	none	none	
	12/28/2004	4.96	30	7.33	2.3	none	none	
	6/13/2005	5.86	580	6.2	3.5	none	none	
	12/6/2005	5.48	548	6.03	2.5	none	none	
	6/5/2006	6.38	550	2.23	1.5	none	none	
	12/4/2006	4.50	396	8.6	2.5	none	none	
GWB-6/MW-6	9/26/2001	7.13	242	25.6	2.0	none	--	Well development only
	7/29/2002	6.75	1,338	0.35	1.5	none	none	
	9/9/2002	4.13	198	6.43	1.5	none	none	
	10/21/2002	6.72	573	0.44	2.5	none	none	
	12/3/2002	6.14	116	0.45	1.5	none	none	
	6/24/2003	7.09	155	9.1	1.5	none	none	
	12/17/2003	6.82	126	2.27	1.5	none	none	
	6/16/2004	6.77	178.5	1.25	2.75	none	none	
	12/28/2004	7.05	130	2.84	2.25	none	none	
	6/13/2005	6.88	125	2.67	2.50	none	none	
	12/5/2005	7.10	122	2.22	2.00	none	none	
	6/5/2006	7.20	120	2.41	1.00	none	none	
	12/5/2006	6.45	100	1.00	1.00	none	none	

Table 2
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Groundwater Sampling Field Measurements

Well ID	Date	pH	Conductivity ¹	Turbidity ²	Gallons Purged	Odor	Color	Comments
GWA-7/MW-7	9/26/2001	--	--	cloudy	30.0	--	--	Well development only
	7/29/2002	6.97	251	8.33	2.5	none	none	
	9/9/2002	7.52	327	9.97	5.0	none	none	
	10/21/2002	4.39	92	3.14	2.0	none	none	
	12/3/2002	6.51	188	7.3	2.5	none	none	
	6/24/2003	7.02	163	101.3	4.0	none	dark brown	Turbidity >100 ntu for 2 hours
	12/16/2003	5.73	62.7	100	4.0	none	mod. brown	Turbidity 85-100 ntu for 1 hour
	6/15/2004	5.94	68.9	42.7	2.0	none	none	
	12/28/2004	8.16	109	9.86	3.5	none	none	
	6/14/2005	7.25	275	8.56	3.0	none	none	
	12/6/2005	5.37	92	96	8.5	none	mod. brown	Turbidity >100 ntu for 2 hours
	6/5/2006	5.12	151	20	5.0	none	none	
	12/4/2006	6.33	180	2.18	2.0	none	none	
GWC-13/MW-13	7/29/2002	6.52	421	0.66	--			
	9/9/2002	5.96	77.5	6.40	1.0	none	none	
	10/21/2002	6.19	73.4	3.09	2.5	none	none	
	12/3/2002	6.54	481	1.00	2.5	none	none	
	6/24/2003	5.95	271	2.02	2.5	none	none	
	12/16/2003	5.65	294	0.75	6.0	none	none	Split with GAEPD
	6/16/2004	5.84	366	4.70	1.75	none	none	
	12/28/2004	6.09	268	0.38	1.75	none	none	
	6/13/2005	5.75	255	2.00	1.50	none	none	
	12/6/2005	4.03	4.24	1.07	2.50	none	none	
	6/5/2006	7.17	250	1.11	1.00	none	none	
	12/5/2006	6.35	91	0.79	1.00	none	none	

Table 2
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Groundwater Sampling Field Measurements

Well ID	Date	pH	Conductivity ¹	Turbidity ²	Gallons Purged	Odor	Color	Comments
GWC-14/MW-14	7/29/2002	6.49	448	1.15	--	none	none	
	9/9/2002	5.57	717	5.19	--	none	none	
	10/21/2002	6.00	674	4.65	3.2	none	none	
	12/3/2002	5.54	547	2.7	4.5	none	none	
	6/24/2003	5.97	197	3.61	2.5	none	none	
	12/17/2003	--	--	--	--	--	--	Split with GAEPD-VOCs & metals
	6/15/2004	--	--	--	--	--	--	Well Dry
	12/28/2004	--	--	--	--	--	--	Too little water to purge and sample
	6/14/2005	--	--	--	--	--	--	Too little water to purge and sample
	12/6/2005	--	--	--	--	--	--	Too little water to purge and sample
	6/6/2006	--	--	--	--	--	--	Too little water to purge and sample
	12/5/2006	--	--	--	--	--	--	Too little water to purge and sample
GWA-15/MW-15	7/29/2002	5.70	95.8	1.12	4.0	none	none	
	9/9/2002	5.92	118	8.53	2.5	none	none	
	10/21/2002	5.19	81	1.88	4.5	none	none	
	12/3/2002	7.58	78.2	3.6	2.5	none	none	
	6/24/2003	7.44	48.0	5.38	2.5	none	none	
	12/17/2003	6.93	39.4	4.55	6.5	none	none	Split with GAEPD
	6/15/2004	6.47	55.7	5.59	2.25	none	none	
	12/28/2004	6.83	50.0	8.85	3.00	none	none	
	6/14/2005	7.85	72.0	7.75	4.00	none	none	
	12/5/2005	6.88	56.0	2.3	2.50	none	none	
	6/5/2006	7.15	55.0	1.6	2.00	none	none	
	12/4/2006	4.86	50.0	8.8	1.00	none	none	

Table 2
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Groundwater Sampling Field Measurements

Well ID	Date	pH	Conductivity ¹	Turbidity ²	Gallons Purged	Odor	Color	Comments
GWB-16/MW-16	7/29/2002	--	--	--	--	--	--	Well Dry
	9/9/2002	--	--	--	--	--	--	Well Dry
	10/21/2002	--	--	--	--	--	--	Well Dry
	12/3/2002	--	--	--	--	--	--	Well Dry
	6/24/2003	--	--	--	--	--	--	Well Dry
	12/16/2003	--	--	--	--	--	--	Well Dry
	6/15/2004	--	--	--	--	--	--	Well Dry
	12/28/2004	--	--	--	--	--	--	Well Dry
	6/15/2005	--	--	--	--	--	--	Well Dry
	12/6/2005	--	--	--	--	--	--	Well Dry
	6/5/2006	--	--	--	--	--	--	Well Dry
Well Abandon on 10-4-2006								
GWB-16/MW-16R	10/5/2006	6.54	56	4.81	2.5	none	none	Well Development
	12/5/2006	7.36	80	5.4	1	none	none	
GWB-17/MW-17	6/15/2005	5.84	77.58	5.29	3.5	none	none	
	12/6/2005	6.33	68	10	3	none	none	
	6/5/2006	6.56	80	10	1.5	none	none	
	12/5/2006	5.41	80	8.7	1.5	none	none	
GWB-18/MW-18	6/15/2005	6.67	85.6	8.2	4.2	none	none	
	12/6/2005	--	--	--	--	--	--	
	6/5/2006	--	--	--	--	--	--	
	12/5/2006	--	--	--	--	--	--	

Notes:

-- = no data recorded;

/1 - Conductivity in units of umhos/sec

/2 - Turbidity in units of NTU

Table 3
Southern Nuclear Operating Company
Plant Vogtle Landfill #3
Appendix I to Part 40 CFR Part 258: Constituents for Detection Monitoring (1)

Common Name (2)	EPA Method
Inorganic Constituents:	
(1) Antimony.....	6010B/7041
(2) Arsenic.....	6010B/7061
(3) Barium.....	6010B/7091
(4) Beryllium.....	6010B/7091
(5) Cadmium.....	6010B/7131
(6) Chromium.....	6010B/7191
(7) Cobalt.....	6010B/7201
(8) Copper.....	6010B/7211
(9) Lead.....	6010B/7421
(10) Nickel.....	6010B/7520
(11) Selenium.....	6010B/7741
(12) Silver.....	6010B/7761
(13) Thallium.....	6010B/7841
(14) Vanadium.....	6010B/7911
(15) Zinc.....	6010B/7951
Organic Constituents:	8260
(16) Acetone.....	
(17) Acrylonitrile.....	
(18) Benzene.....	
(19) Bromochloromethane.....	
(20) Bromodichloromethane.....	
(21) Bromoform; Tribromomethane.....	
(22) Carbon disulfide.....	
(23) Carbon tetrachloride.....	
(24) Chlorobenzene.....	
(25) Chloroethane; Ethyl chloride.....	
(26) Chloroform; Trichloromethane.....	
(27) Dibromochloromethane; Chlorodibromomethane.....	
(28) 1,2-Dibromo-3-chloropropane; DBCP.....	
(29) 1,2-Dibromoethane; Ethylene dibromide; EDB.....	
(30) o-Dichlorobenzene; 1,2-Dichlorobenzene.....	
(31) p-Dichlorobenzene; 1,4-Dichlorobenzene.....	
(32) trans-1,4-Dichloro-2-butene.....	
(33) 1,1-Dichloroethane; Ethylidene chloride.....	
(34) 1,2-Dichloroethane; Ethylene dichloride.....	
(35) 1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride.....	
(36) cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene....	
(37) trans-1,2-Dichloroethylene; trans-1,2-Dichloroethene	
(38) 1,2-Dichloropropane; Propylene dichloride.....	
(39) cis-1,3-Dichloropropene.....	
(40) trans-1,3-Dichloropropene.....	
(41) Ethylbenzene.....	
(42) 2-Hexanone; Methyl butyl ketone.....	
(43) Methyl bromide; Bromomethane.....	
(44) Methyl chloride; Chloromethane.....	

Table 3 (continued)
Southern Nuclear Operating Company, Inc.
Plant Vogtle Landfill #3

Appendix I to Part 40 CFR Part 258: Constituents for Detection Monitoring (1)

Common Name (2)	EPA Method
(45) Methylene bromide; Dibromomethane.....	8260
(46) Methylene chloride; Dichloromethane.....	
(47) Methyl ethyl ketone; MEK; 2-Butanone.....	
(48) Methyl iodide; Iodomethane.....	
(49) 4-Methyl-2-pentanone; Methyl isobutyl ketone.....	
(50) Styrene.....	
(51) 1,1,1,2-Tetrachloroethane.....	
(52) 1,1,2,2-Tetrachloroethane.....	
(53) Tetrachloroethylene; Tetrachloroethene; Perchloroethylene.....	
(54) Toluene.....	
(55) 1,1,1-Trichloroethane; Methylchloroform.....	
(56) 1,1,2-Trichloroethane.....	
(57) Trichloroethylene; Trichloroethene.....	
(58) Trichlorofluoromethane; CFC-11.....	
(59) 1,2,3-Trichloropropane.....	
(60) Vinyl acetate.....	
(61) Vinyl chloride.....	
(62) Xylenes.....	

(1) This list contains 47 volatile organics for which possible analytical procedures provided in EPA Report SW-846 ``Test Methods for Evaluating Solid Waste,`` third edition, November 1986, as revised December 1987, includes Method 8260; and 15 metals for which SW-846 provides either Method 6010 or a method from the 7000 series of methods.

(2) Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

Table 4
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
December 2006

CONSTITUENT	MCL	WELL SAMPLES									
		GWC-5/MW-5	GWB-6/MW-6	GWA-7/MW-7	GWA-7/MW-7 ³	GWC-13/MW-13	GWC-14/MW-14	GWA-15/MW-15	GWB-16/MW-16R	GWC-17/MW-17	GWC-18/MW-18
<u>Metals¹</u>											
Barium	2.00	0.021	BQL	BQL	BQL	0.059	NS	BQL	BQL	BQL	NS
Nickel	NA	BQL	BQL	BQL	BQL	BQL	NS	0.089	BQL	BQL	NS
Zinc	NA	0.062	0.028	BQL	BQL	0.055	NS	0.316	BQL	BQL	NS
Mercury ⁴	0.002	BQL	BQL	0.0008	0.0016	BQL	NS	BQL	BQL	BQL	NS
<u>Organics²</u>											
1,1-Dichloroethane	NA	BQL	BQL	BQL	BQL	20	NS	BQL	BQL	BQL	NS
Chlorobenzene	100	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL	NS
cis-1,2-Dichloroethene	70	BQL	BQL	BQL	BQL	10	NS	BQL	BQL	BQL	NS
Trichlorofluoromethane	NA	BQL	BQL	152	159	104	NS	BQL	BQL	BQL	NS
Vinyl chloride	2	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL	NS
Benzene	5	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL	NS
Trichloroethene	5	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL	NS

BQL - Below quantification level; J - Estimated Value

MCL - Maximum Contaminant Level per EPD Rule Chapter 391-3-5; NA - None available

NS - Not sampled; well dry or insufficient recovery to sample well

¹Metals concentrations in mg/L

²Organics concentration units in ug/l or ppb

³Replicate sample of well GWC-7/MW-7 sample

⁴Appendix II parameter; NA reflects that this parameter was not analyzed for those wells not included in the Assessment Monitoring Program

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
June 2006

CONSTITUENT	MCL	WELL SAMPLES								
		GWC-5/MW-5	GWB-6/MW-6	GWA-7/MW-7	GWA-7/MW-7 ³	GWC-13/MW-13	GWC-14/MW-14	GWA-15/MW-15	GWC-17/MW-17	GWC-18/MW-18
Metals ¹										
Barium	2.00	0.031	BQL	BQL	BQL	0.051	NS	BQL	BQL	NS
Zinc	NA	0.100	0.083	0.484	0.266	0.213	NS	0.063	0.077	NS
Organics ²										
1,1-Dichloroethane	NA	BQL	BQL	BQL	BQL	15	NS	BQL	BQL	NS
Chlorobenzene	100	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	NS
cis-1,2-Dichloroethene	70	BQL	BQL	BQL	BQL	8	NS	BQL	BQL	NS
Trichlorofluoromethane	NA	BQL	BQL	66	94	92	NS	BQL	BQL	NS
Vinyl chloride	2	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	NS
Napthalene ⁴	NA	NA	NA	5	BQL	NA	NS	NA	NA	NA
Benzene	5	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	NS
Trichloroethene	5	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	NS

BQL - Below quantification level; J - Estimated Value

MCL - Maximum Contaminant Level per EPD Rule Chapter 391-3-5; NA - None available

NS - Not sampled; well dry or insufficient recovery to sample well

¹Metals concentrations in mg/L

²Organics concentration units in ug/l or ppb

³Replicate sample of well GWC-7/MW-7 sample

⁴Appendix II parameter; NA reflects that this parameter was not analyzed for those wells not included in the Assessment Monitoring Program

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
December 2005

CONSTITUENT	MCL	WELL SAMPLES								
		GWC-5/MW-5	GWB-6/MW-6	GWA-7/MW-7	GWA-7/MW-7 ³	GWC-13/MW-13	GWC-14/MW-14	GWA-15/MW-15	GWC-17/MW-17	GWC-18/MW-18
Metals¹										
Barium	2.00	BQL	BQL	0.024	0.022	0.044	NS	BQL	BQL	NS
Zinc	NA	0.055	0.020	0.068	0.217	0.194	NS	0.042	0.096	NS
Organics²										
1,1-Dichloroethane	NA	BQL	BQL	BQL	BQL	18	NS	BQL	BQL	NS
Chlorobenzene	100	BQL	BQL	BQL	BQL	4J	NS	BQL	BQL	NS
cis-1,2-Dichloroethene	70	BQL	BQL	BQL	BQL	9	NS	BQL	BQL	NS
Trichlorofluoromethane	NA	BQL	BQL	88	85	60	NS	BQL	BQL	NS
Vinyl chloride	2	BQL	BQL	BQL	BQL	1J	NS	BQL	BQL	NS
Napthalene ⁴	NA	NA	NA	5	BQL	NA	NS	NA	NA	NA
Benzene	5	BQL	BQL	BQL	BQL	5	NS	BQL	BQL	NS
Trichloroethene	5	BQL	BQL	BQL	BQL	5	NS	BQL	BQL	NS

BQL - Below quantification level; J - Estimated Value

MCL - Maximum Contaminant Level per EPD Rule Chapter 391-3-5; NA - None available

NS - Not sampled; well dry or insufficient recovery to sample well

¹Metals concentrations in mg/L

²Organics concentration units in ug/l or ppb

³Replicate sample of well GWC-7/MW-7 sample

⁴Appendix II parameter; NA reflects that this parameter was not analyzed for those wells not included in the Assessment Monitoring Program

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
June 2005

CONSTITUENT	MCL	WELL SAMPLES								
		GWC-5/MW-5	GWB-6/MW-6	GWA-7/MW-7	GWC-13/MW-13	GWC-13/MW-13 ⁵	GWC-14/MW-14	GWA-15/MW-15	GWC-17/MW-17	GWC-18/MW-18
Metals ¹										
Barium	2.00	BQL	BQL	BQL	0.028	0.031	NS	BQL	BQL	BQL
Zinc	NA	BQL	BQL	BQL	0.020	BQL	NS	0.029	BQL	BQL
Copper	1.3 ⁶	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL
Mercury ⁴	0.002	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL
Chromium (total)	0.1	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL
Beryllium	0.004	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL
Cadmium	0.005	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL
Nickel	NA	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL
Lead	0.015 ⁶	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL
Vanadium	NA	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL
Organics ²										
1,1-Dichloroethane	NA	BQL	BQL	BQL	15	15	NS	BQL	BQL	BQL
Carbon disulfide	NA	BQL	BQL	BQL	BQL	BQL	NS	BQL	32	BQL
Chlorobenzene	100	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL
1,4-Dichlorobenzene	75	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL
Methylene chloride	5	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL
cis-1,2-Dichloroethene	70	BQL	BQL	BQL	8	8	NS	BQL	BQL	BQL
Trichlorofluoromethane	NA	BQL	BQL	22	46	45	NS	BQL	BQL	BQL
1,1-Dichloroethene	7	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL
Xylenes (Total)	10000	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL
Vinyl chloride	2	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL
Chloroform ³	0.1	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL
Trichloroethene	5	BQL	BQL	BQL	BQL	BQL	NS	BQL	BQL	BQL

BQL - Below quantification level

MCL - Maximum Contaminant Level per EPD Rule Chapter 391-3-5; NA - None available

NS - Not sampled; well dry or insufficient recovery to sample well

¹Metals concentrations in mg/L

²Organics concentration units in ug/l or ppb

³Applies only to Community Water Systems serving 10,000

⁴Appendix II parameter; NA reflects that this parameter was not analyzed for those wells not included in the Assessment Monitoring Program

⁵Replicate sample of well GWC-13/MW-13 sample

⁶Action Level

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
December 2004

CONSTITUENT	MCL	WELL SAMPLES						
		GWC-5/MW-5	GWB-6/MW-6	GWA-7/MW-7	GWA-7/MW-7 ⁵	GWC-13/MW-13	GWC-14/MW-14	GWA-15/MW-15
Metals¹								
Barium	2.00	BQL	BQL	BQL	BQL	0.043	NS	BQL
Zinc	NA	BQL	BQL	BQL	BQL	0.044	NS	BQL
Copper	1.3 ⁶	BQL	BQL	BQL	BQL	BQL	NS	BQL
Mercury ⁴	0.002	BQL	BQL	BQL	0.0017	BQL	NS	0.0004
Chromium (total)	0.1	BQL	BQL	BQL	BQL	BQL	NS	BQL
Beryllium	0.004	BQL	BQL	BQL	BQL	BQL	NS	BQL
Cadmium	0.005	BQL	BQL	BQL	BQL	BQL	NS	BQL
Nickel	NA	BQL	BQL	BQL	BQL	BQL	NS	BQL
Lead	0.015 ⁶	BQL	BQL	BQL	BQL	BQL	NS	BQL
Vanadium	NA	BQL	BQL	BQL	BQL	BQL	NS	BQL
Organics²								
1,1-Dichloroethane	NA	BQL	BQL	BQL	BQL	16	NS	BQL
Chlorobenzene	100	BQL	BQL	BQL	BQL	BQL	NS	BQL
1,4-Dichlorobenzene	75	BQL	BQL	BQL	BQL	BQL	NS	BQL
Methylene chloride	5	BQL	BQL	BQL	BQL	BQL	NS	BQL
cis-1,2-Dichloroethene	70	BQL	BQL	BQL	BQL	8	NS	BQL
Trichlorofluoromethane	NA	BQL	BQL	146	143	81	NS	BQL
1,1-Dichloroethene	7	BQL	BQL	BQL	BQL	BQL	NS	BQL
Xylenes (Total)	10000	BQL	BQL	BQL	BQL	BQL	NS	BQL
Vinyl chloride	2	BQL	BQL	BQL	BQL	BQL	NS	BQL
Chloroform ³	0.1	BQL	BQL	BQL	BQL	BQL	NS	BQL
Trichloroethene	5	BQL	BQL	BQL	BQL	BQL	NS	BQL

BQL - Below quantification level

MCL - Maximum Contaminant Level per EPD Rule Chapter 391-3-5; NA - None available

NS - Not sampled; well dry or insufficient recovery to sample well

¹Metals concentrations in mg/L

²Organics concentration units in ug/l or ppb

³Applies only to Community Water Systems serving 10,000

⁴Appendix II parameter; NA reflects that this parameter was not analyzed for those wells not included in the Assessment Monitoring Program

⁵Replicate sample of well GWA-7/MW-7 sample

⁶Action Level

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
June 2004

CONSTITUENT	MCL	WELL SAMPLES						
		GWC-5/MW-5	GWB-6/MW-6	GWA-7/MW-7	GWC-13/MW-13	GWC-13/MW-13 ⁵	GWC-14/MW-14	GWA-15/MW-15
Metals¹								
Barium	2.00	0.040	BQL	BQL	0.034	0.034	NS	BQL
Zinc	NA	BQL	BQL	BQL	BQL	BQL	NS	BQL
Copper	1.3 ⁶	BQL	BQL	BQL	BQL	BQL	NS	BQL
Mercury ⁴	0.002	BQL	BQL	0.0006	BQL	BQL	NS	BQL
Chromium (total)	0.1	BQL	BQL	BQL	BQL	BQL	NS	BQL
Beryllium	0.004	BQL	BQL	BQL	BQL	BQL	NS	BQL
Cadmium	0.005	BQL	BQL	BQL	BQL	BQL	NS	BQL
Nickel	NA	BQL	BQL	BQL	BQL	BQL	NS	BQL
Lead	0.015 ⁶	BQL	BQL	BQL	BQL	BQL	NS	BQL
Vanadium	NA	BQL	BQL	BQL	BQL	BQL	NS	BQL
Organics²								
1,1-Dichloroethane	NA	BQL	BQL	BQL	17	19	NS	BQL
Chlorobenzene	100	BQL	BQL	BQL	BQL	BQL	NS	BQL
1,4-Dicholorbenzene	75	BQL	BQL	BQL	BQL	BQL	NS	BQL
Methylene chloride	5	BQL	BQL	BQL	BQL	BQL	NS	BQL
cis-1,2-Dichloroethene	70	BQL	BQL	BQL	9	10	NS	BQL
Trichlorofluoromethane	NA	BQL	BQL	46	121	133	NS	BQL
1,1-Dichloroethene	7	BQL	BQL	BQL	BQL	BQL	NS	BQL
Xylenes (Total)	10000	BQL	BQL	BQL	BQL	BQL	NS	BQL
Vinyl chloride	2	BQL	BQL	BQL	2	2	NS	BQL
Chloroform ³	0.1	BQL	BQL	BQL	BQL	BQL	NS	BQL
Trichloroethene	5	BQL	BQL	13	BQL	BQL	NS	BQL

BQL - Below quantification level

MCL - Maximum Contaminant Level per EPD Rule Chapter 391-3-5; NA - None available

NS - Not sampled; well dry or insufficient recovery to sample well

¹Metals concentrations in mg/L

²Organics concentration units in ug/l or ppb

³Applies only to Community Water Systems serving 10,000

⁴Appendix II parameter; NA reflects that this parameter was not analyzed for those wells not included in the Assessment Monitoring Program

⁵Replicate sample of well GWC-13/MW-13 sample

⁶Action Level

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
December 2003

CONSTITUENT	MCL	WELL SAMPLES						
		GWC-5/MW-5	GWB-6/MW-6	GWA-7/MW-7	GWC-13/MW-13	GWC-13/MW-13 ⁵	GWC-14/MW-14	GWA-15/MW-15
<u>Metals¹</u>								
Barium	2.00	0.142	BQL	BQL	0.033	0.032	0.189	BQL
Zinc	NA	0.032	BQL	0.023	BQL	BQL	0.127	BQL
Copper	1.3 ⁶	0.025	BQL	BQL	BQL	BQL	0.026	BQL
Mercury ⁴	0.002	BQL	BQL	BQL	BQL	BQL	0.01	BQL
Chromium (total)	0.1	0.028	BQL	BQL	BQL	BQL	0.091	BQL
Beryllium	0.004	BQL	BQL	BQL	BQL	BQL	0.004	BQL
Cadmium	0.005	BQL	BQL	BQL	BQL	BQL	0.011	BQL
Nickel	NA	BQL	BQL	BQL	BQL	BQL	0.034	BQL
Lead	0.015 ⁶	BQL	BQL	BQL	BQL	BQL	0.015	BQL
Vanadium	NA	BQL	BQL	BQL	BQL	BQL	0.060	BQL
<u>Organics²</u>								
1,1-Dichloroethane	NA	BQL	BQL	BQL	20	21	10	BQL
Chlorobenzene	100	BQL	BQL	BQL	BQL	BQL	19	BQL
1,4-Dicholorbenzene	75	BQL	BQL	BQL	BQL	BQL	33	BQL
Methylene chloride	5	BQL	BQL	BQL	BQL	BQL	BQL	BQL
cis-1,2-Dichloroethene	70	BQL	BQL	BQL	14	14	17	BQL
Trichlorofluoromethane	NA	BQL	BQL	34	102	97	BQL	BQL
1,1-Dichloroethene	7	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Xylenes (Total)	10000	BQL	BQL	BQL	BQL	BQL	10	BQL
Vinyl chloride	2	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Chloroform ³	0.1	BQL	BQL	BQL	BQL	BQL	BQL	BQL

BQL - Below quantification level

MCL - Maximum Contaminant Level per EPD Rule Chapter 391-3-5; NA - None available

¹Metals concentrations in mg/L

²Organics concentration units in ug/l or ppb

³Applies only to Community Water Systems serving 10,000

⁴Appendix II parameter

⁵Replicate sample of well GWC-13/MW-13 sample

⁶Action Level

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
June 2003

CONSTITUENT	MCL	WELL SAMPLES						
		GWC-5/MW-5	GWB-6/MW-6	GWA-7/MW-7	GWC-13/MW-13	GWC-13/MW-13 ⁵	GWC-14/MW-14	GWA-15/MW-15
<u>Metals¹</u>								
Barium	2.00	BQL	BQL	0.036	0.029	0.030	0.051	BQL
Zinc	NA	BQL	BQL	0.034	BQL	BQL	BQL	BQL
Copper	1.3	BQL	BQL	0.035	BQL	BQL	BQL	BQL
Mercury ⁴	0.002	NS	NS	NS	0.0005	0.0005	0.0072	BQL
<u>Organics²</u>								
1,1-Dichloroethane	NA	BQL	BQL	BQL	9	9	10	BQL
Chlorobenzene	100	BQL	BQL	BQL	BQL	BQL	7	BQL
1,4-Dicholorbenzene	75	BQL	BQL	BQL	BQL	BQL	16	BQL
Methylene chloride	5	BQL	BQL	BQL	BQL	BQL	BQL	BQL
cis-1,2-Dichloroethene	70	BQL	BQL	BQL	6	6	10	BQL
Trichlorofluoromethane	NA	BQL	BQL	23	41	47	5	BQL
1,1-Dichloroethene	7	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Xylenes (Total)	10000	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Vinyl chloride	2	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Chloroform ³	0.1	BQL	BQL	BQL	BQL	BQL	BQL	BQL

BQL - Below quantification level

MCL - Maximum Contaminant Level per EPD Rule Chapter 391-3-5; NA - None available

¹Metals concentrations in mg/L

²Organics concentration units in ug/l or ppb

³Applies only to Community Water Systems serving 10,000

⁴Appendix II parameter; NS reflects that this parameter was not analyzed for those wells not included in the Assessment Monitoring Program

⁵Replicate sample of well GWC-13/MW-13 sample

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
December 2002

CONSTITUENT	MCL	WELL SAMPLES					
		GWC-5/MW-5	GWB-6/MW-6	GWA-7/MW-7	GWC-13/MW-13	GWC-14/MW-14	GWA-15/MW-15
Metals¹							
Barium	2.00	0.018	BQL	0.015	0.082	0.106	BQL
Zinc	NA	BQL	BQL	BQL	0.027	BQL	BQL
Organics²							
1,1-Dichloroethane	NA	BQL	BQL	BQL	7	16	BQL
Chlorobenzene	100	BQL	BQL	BQL	BQL	10	BQL
1,4-Dicholorbenzene	75	BQL	BQL	BQL	BQL	39	BQL
Methylene chloride	5	BQL	BQL	BQL	BQL	BQL	BQL
cis-1,2-Dichloroethene	70	BQL	BQL	BQL	BQL	19	BQL
Trichlorofluoromethane	NA	BQL	BQL	210	391	27	BQL
1,1-Dichloroethene	7	BQL	BQL	BQL	11	24	BQL
Xylenes (Total)	10000	BQL	BQL	BQL	BQL	21	BQL
Vinyl chloride	2	BQL	BQL	BQL	BQL	4	BQL
Chloroform ³	0.1	BQL	BQL	BQL	5	BQL	BQL

BQL - Below quantification level

MCL - Maximum Contaminant Level per EPD Rule Chapter 391-3-5; NA - None available

¹Metals concentrations in mg/L

²Organics concentration units in ug/l or ppb

³Applies only to Community Water Systems serving 10,000

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
October 2002

CONSTITUENT	MCL	WELL SAMPLES						
		GWC-5/MW-5	GWB-6/MW-6	GWA-7/MW-7	GWC-13/MW-13	GWC-14/MW-14	GWA-15/MW-15	GWA-15-2/MW-15-2 ³
<u>Metals¹</u>								
Barium		BQL	BQL	BQL	0.083	0.064	BQL	BQL
Zinc		BQL	BQL	BQL	0.027	BQL	BQL	BQL
<u>Organics²</u>								
1,1-Dichloroethane	NA	BQL	BQL	BQL	6	17	BQL	BQL
Chlorobenzene	100	BQL	BQL	BQL	BQL	9	BQL	BQL
1,4-Dicholorbenzene	75	BQL	BQL	BQL	BQL	35	BQL	BQL
Methylene chloride	5	BQL	BQL	BQL	BQL	11	BQL	BQL
cis-1,2-Dichloroethene	70	BQL	BQL	BQL	BQL	16	BQL	BQL
Trichlorofluoromethane	NA	BQL	BQL	221	348	31	BQL	BQL
1,1-Dichloroethene	7	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Xylenes (Total)	10000	BQL	BQL	BQL	BQL	11	BQL	BQL
Vinyl chloride	2	BQL	BQL	BQL	BQL	BQL	BQL	BQL

BQL - Below quantification level

MCL - Maximum Contaminant Level per EPD Rule Chapter 391-3-5; NA - None available

¹Metals concentrations in mg/L

²Organics concentration units in ug/l or ppb

³Replicate sample of GWA-15/MW-15 well

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
September 2002

CONSTITUENT	MCL	WELL SAMPLES						
		GWC-5/MW-5	GWB-6/MW-6	GWA-7/MW-7	GWC-13/MW-13	GWC-14/MW-14	GWC-14-2/MW-14-2 ³	GWA-15/MW-15
Metals¹								
Barium	2	0.020	BQL	BQL	0.085	0.092	0.095	BQL
Zinc	NA	BQL	BQL	BQL	0.023	BQL	BQL	BQL
Organics²								
1,1-Dichloroethane	NA	BQL	BQL	BQL	6	21	21	BQL
Chlorobenzene	100	BQL	BQL	BQL	BQL	8	8	BQL
1,4-Dichlorobenzene	75	BQL	BQL	BQL	BQL	37	36	BQL
Methylene chloride	5	BQL	BQL	BQL	BQL	BQL	BQL	BQL
cis-1,2-Dichloroethene	70	BQL	BQL	BQL	BQL	19	18	BQL
Trichlorofluoromethane	NA	BQL	BQL	32	381	47	48	BQL
1,1-Dichloroethene	7	BQL	BQL	BQL	8	29	28	BQL
Xylenes (Total)	10000	BQL	BQL	BQL	BQL	23	23	BQL
Vinyl chloride	2	BQL	BQL	BQL	BQL	BQL	3	BQL

BQL - Below quantification level

MCL - Maximum Contaminant Level per Georgia EPD Rule Chapter 391-3-5; NA - None available

¹Metals concentrations in mg/L

²Organics concentration units in ug/l or ppb

³Replicate sample of GWB-14/MW-14 well sample

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
July 2002

CONSTITUENT	MCL	WELLS ¹						
		GWC-5/MW-5	GWB-6/MW-6	GWA-7/MW-7	GWA-7-2/MW-7-2 ³	GWC-13/MW-13	GWC-14/MW-14	GWA-15/MW-15
<u>Metals¹</u>								
Barium	2	BQL	BQL	BQL	BQL	0.077	0.068	BQL
Zinc	NA	BQL	BQL	BQL	BQL	BQL	BQL	BQL
<u>Organics²</u>								
1,1-Dichloroethane	NA	BQL	BQL	BQL	BQL	BQL	13	BQL
Chlorobenzene	100	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,4-Dichlorobenzene	75	BQL	BQL	BQL	BQL	BQL	20	BQL
Methylene chloride	5	9	6	8	7	8	8	BQL
cis-1,2-Dichloroethene	70	BQL	BQL	BQL	BQL	BQL	10	BQL
Trichlorofluoromethane	NA	BQL	BQL	177	192	300	43	BQL
1,1-Dichloroethene	7	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Xylenes (Total)	10000	BQL	BQL	BQL	BQL	BQL	8	BQL
Vinyl chloride	2	BQL	BQL	BQL	BQL	BQL	BQL	BQL

BQL - Below quantification level

MCL - Maximum Contaminant Level per Georgia EPD Rule Chapter 391-3-5; NA - None available

¹Metals concentrations in mg/L

²Organics concentration units in ug/l or ppb

³Replicate sample of GWA-7/MW-7 well sample

Bold indicates detected concentration is greater than the MCL.

FIGURES

**APPENDIX A – HYDRAULIC GRADIENT CALCULATION
SHEETS**

Plant Vogtle Landfill #3
Gradient Calculation
(based on three-point problem)
December 2006 Monitoring Event

<u>Water Table</u>			
<u>Well Designation</u>	<u>Elevation</u>	<u>Northing</u>	<u>Easting</u>
GWC-5/MW-5	202.11	9604.30	7999.33
GWB-6/MW-6	231.18	9432.48	7473.25
GWA-7/MW-7	228.49	8826.22	7657.89
GWC-13/MW-13	232.15	9242.72	7995.86
GWC-14/MW-14	209.97	8960.64	7999.10
GWA-15/MW-15	223.12	8975.71	6886.73
GWB-16/MW-16	160.14	9912.48	7948.95
GWC-17/MW-17	149.99	8553.09	8135.59
GWC-18/MW-18	DRY	8938.05	8238.63

Gradient Calculation from fitting a plane to three points

$$a x_1 + b y_1 + c z_1 + d = 0$$

$$a x_2 + b y_2 + c z_2 + d = 0$$

$$a x_3 + b y_3 + c z_3 + d = 0$$

where (x_i, y_i) are the coordinates of the well and z_i is the head, $i = 1, 2, 3$

The gradient is calculated from the square root of $(a^2 + b^2)$

Southwest Gradient

Wells of Interest = (GWB-6, GWA-7 & GWA-15) (High-Mid-Low)

	x	y	z
GWB-6/MW-6	9432.48	7473.25	231.18
GWA-7/MW-7	8826.22	7657.89	228.49
GWA-15/MW-15	8975.71	6886.73	223.12

$$a = \begin{vmatrix} 7473.25 & 231.18 & 1 \\ 7657.89 & 228.49 & 1 \\ 6886.73 & 223.12 & 1 \end{vmatrix} = -3065.937$$

$$b = \begin{vmatrix} 9432.48 & 231.18 & 1 \\ 8826.22 & 228.49 & 1 \\ 8975.71 & 223.12 & 1 \end{vmatrix} = 3657.7443$$

$$c = \begin{vmatrix} 9432.48 & 7473.25 & 1 \\ 8826.22 & 7657.89 & 1 \\ 8975.71 & 6886.73 & 1 \end{vmatrix} = 439921.63$$

$$d = \begin{vmatrix} 9432.48 & 7473.25 & 231.18 \\ 8826.22 & 7657.89 & 228.49 \\ 8975.71 & 6886.73 & 223.12 \end{vmatrix} = 45446453$$

$$z_0 = -103.3057939$$

$$mx = 0.00696928$$

$$my = -0.008314536$$

Southwest Gradient =	0.011
----------------------	-------

Plant Vogtle Landfill #3
Gradient Calculation
(based on three-point problem)

Northeast Gradient

Wells of Interest = (GWC-16, GWB-6 & GWC-5) (High-Mid-Low)

	x	y	z
GWB-16/MW-16	9242.72	7995.86	160.14
GWB-6/MW-6	9432.48	7473.25	231.18
GWC-5/MW-5	9604.30	7999.33	202.11

$$a = \begin{vmatrix} 7995.86 & 160.14 & 1 \\ 7473.25 & 231.18 & 1 \\ 7999.33 & 202.11 & 1 \end{vmatrix} = -22180.45$$

$$b = \begin{vmatrix} 9242.72 & 160.14 & 1 \\ 9432.48 & 231.18 & 1 \\ 9604.30 & 202.11 & 1 \end{vmatrix} = -17722.42$$

$$c = \begin{vmatrix} 9242.72 & 7995.86 & 1 \\ 9432.48 & 7473.25 & 1 \\ 9604.30 & 7999.33 & 1 \end{vmatrix} = 189623.79$$

$$d = \begin{vmatrix} 9242.72 & 7995.86 & 160.14 \\ 9432.48 & 7473.25 & 231.18 \\ 9604.30 & 7999.33 & 202.11 \end{vmatrix} = -32935382$$

z0 = 173.6880282
mx = 0.116970821
my = 0.093460931

Northeast Gradient = 0.15

Plant Vogtle Landfill #3
Gradient Calculation
(based on three-point problem)

Southeast Gradient

Wells of Interest = (GWC-13, GWA-7 & GWC-14) (High-Mid-Low)

	x	y	z
GWC-13/MW-13	9242.72	7995.86	232.15
GWA-7/MW-7	8826.22	7657.89	228.49
GWC-14/MW-14	8960.64	7999.10	209.97

$$a = \begin{vmatrix} 7995.86 & 232.15 & 1 \\ 7657.89 & 228.49 & 1 \\ 7999.10 & 209.97 & 1 \end{vmatrix} = 7508.033$$

$$b = \begin{vmatrix} 9242.72 & 232.15 & 1 \\ 8826.22 & 228.49 & 1 \\ 8960.64 & 209.97 & 1 \end{vmatrix} = 8205.5572$$

$$c = \begin{vmatrix} 9242.72 & 7995.86 & 1 \\ 8826.22 & 7657.89 & 1 \\ 8960.64 & 7999.10 & 1 \end{vmatrix} = -96684.04$$

$$d = \begin{vmatrix} 9242.72 & 7995.86 & 232.15 \\ 8826.22 & 7657.89 & 228.49 \\ 8960.64 & 7999.10 & 209.97 \end{vmatrix} = -18661039$$

$$z0 = -193.0105487$$

$$mx = 0.077655352$$

$$my = 0.084869823$$

Southeast Gradient =	0.12
----------------------	------

APPENDIX B – LABORATORY ANALYTICAL REPORTS
DECEMBER 2006

ACL**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Laboratory Report

ACL Project #: 52254

Client Proj #: Vogtle LF #3

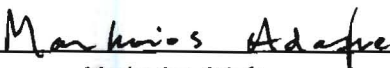
Prepared For:

The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Attention: Mr. Kurt Batsel

Report Date: 12/18/2006

This report contains 42 pages.
(including this cover page and chain of custody)



Markorios Adafre
Laboratory Manager

Advanced Chemistry Labs is a woman owned small business concern.

If you have any questions concerning this report, please do not hesitate to call us at (770) 409-1444.

This report may not be reproduced, except in full, without the written permission of ACL (Advanced Chemistry Labs, Inc).

ACL certifies that the following analytical results meet all the requirements of NELAC.

ACL is accredited by the National Environmental Laboratory Accreditation Program (NELAP).

ACL maintains the following certifications: NELAC (E87212), South Carolina (98009001), North Carolina (362), Florida (E87212), USDA Soil Import License (S-36503).

Data Qualifier Codes

<u>Code</u>	<u>Description</u>
A	Value reported is the mean of two or more determinations;
B	Indicates the analyte was detected in the sample and method blank;
BQL	Below practical quantitation limit;
DW	Results reported on a dry-weight basis (ex: mg/kg, dw),
E	Estimated value: (i) sample received or analyzed beyond the accepted holding time; (ii) sample received at improper container or temperature or with inappropriate preservative; (iii) the continuing calibration for an analyte did not meet qc criteria;
H	Estimated value; result higher than the highest calibration standard;
J	Reported value is between the method detection limit and the practical quantitation limit;
PQL	Practical quantitation limit;
TIC	Tentatively identified compound;
***	Not analyzed due to interferences;

Upon client request, a statement of the test result estimated uncertainty can be provided.

NOTE: Unless otherwise noted, all results are reported on an as received basis.



Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

ADVANCED CHEMISTRY LABS, INC.

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

V.O. (5030B/8260B) - Appendix I

Sample ID: GWC-5/MW-5

Matrix: Water

Date Sampled: 12/04/2006

Date Extracted:

Date Analyzed: 12/15/2006

ACL Sample #: 250668

Units: µg/L

Analyst: ME

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	Styrene	BQL	5
Acrylonitrile	BQL	50	1,1,1,2-Tetrachloroethane	BQL	5
Benzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
Bromochloromethane	BQL	5	Tetrachloroethene	BQL	5
Bromodichloromethane	BQL	5	Toluene	BQL	5
Bromoform	BQL	5	1,1,1-Trichloroethane	BQL	5
Carbon disulfide	BQL	5	1,1,2-Trichloroethane	BQL	5
Carbon tetrachloride	BQL	5	Trichloroethene	BQL	5
Chlorobenzene	BQL	5	Trichlorofluoromethane	BQL	5
Chloroethane	BQL	10	1,2,3-Trichloropropane	BQL	5
Chloroform	BQL	5	Vinyl acetate	BQL	50
1,2-Dibromo-3-chloropropane	BQL	20	Vinyl chloride	BQL	2
Dibromochloromethane	BQL	5	m & p-Xylenes	BQL	10
1,2-Dibromoethane	BQL	5	o-Xylene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10			
1,2-Dichlorobenzene	BQL	5			
1,4-Dichlorobenzene	BQL	5			
1,1-Dichloroethane	BQL	5			
1,2-Dichloroethane	BQL	5			
1,1-Dichloroethene	BQL	5			
cis-1,2-Dichloroethene	BQL	5			
trans-1,2-Dichloroethene	BQL	5			
1,2-Dichloropropane	BQL	5			
cis-1,3-Dichloropropene	BQL	5			
trans-1,3-Dichloropropene	BQL	5			
Ethylbenzene	BQL	5			
2-Hexanone	BQL	50			
Methyl bromide	BQL	10			
Methyl chloride	BQL	10			
Methyl ethyl ketone	BQL	100			
Methyl iodide	BQL	5			
4-Methyl-2-pentanone	BQL	50			
Methylene bromide	BQL	5			
Methylene chloride	BQL	5			

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

V.O. (5030B/8260B) - Appendix I

Sample ID: GWB-6/MW-6

Matrix: Water
Date Sampled: 12/05/2006
Date Extracted:
Date Analyzed: 12/15/2006
Analyst: ME

ACL Sample #: 250669 **Units:** µg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Acetone	BQL	100	Styrene	BQL	5
Acrylonitrile	BQL	50	1,1,1,2-Tetrachloroethane	BQL	5
Benzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
Bromochloromethane	BQL	5	Tetrachloroethene	BQL	5
Bromodichloromethane	BQL	5	Toluene	BQL	5
Bromoform	BQL	5	1,1,1-Trichloroethane	BQL	5
Carbon disulfide	BQL	5	1,1,2-Trichloroethane	BQL	5
Carbon tetrachloride	BQL	5	Trichloroethene	BQL	5
Chlorobenzene	BQL	5	Trichlorofluoromethane	BQL	5
Chloroethane	BQL	10	1,2,3-Trichloropropane	BQL	5
Chloroform	BQL	5	Vinyl acetate	BQL	50
1,2-Dibromo-3-chloropropane	BQL	20	Vinyl chloride	BQL	2
Dibromochloromethane	BQL	5	m & p-Xylenes	BQL	10
1,2-Dibromoethane	BQL	5	o-Xylene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10			
1,2-Dichlorobenzene	BQL	5			
1,4-Dichlorobenzene	BQL	5			
1,1-Dichloroethane	BQL	5			
1,2-Dichloroethane	BQL	5			
1,1-Dichloroethene	BQL	5			
cis-1,2-Dichloroethene	BQL	5			
trans-1,2-Dichloroethene	BQL	5			
1,2-Dichloropropane	BQL	5			
cis-1,3-Dichloropropene	BQL	5			
trans-1,3-Dichloropropene	BQL	5			
Ethylbenzene	BQL	5			
2-Hexanone	BQL	50			
Methyl bromide	BQL	10			
Methyl chloride	BQL	10			
Methyl ethyl ketone	BQL	100			
Methyl iodide	BQL	5			
4-Methyl-2-pentanone	BQL	50			
Methylene bromide	BQL	5			
Methylene chloride	BQL	5			

ACL**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

V.O. (5030B/8260B) - Appendix I

Sample ID: GWA-7/MW-7

Matrix: Water
Date Sampled: 12/04/2006
Date Extracted:
Date Analyzed: 12/15/2006
Analyst: ME

ACL Sample #: 250670 **Units:** µg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Acetone	BQL	100	Styrene	BQL	5
Acrylonitrile	BQL	50	1,1,1,2-Tetrachloroethane	BQL	5
Benzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
Bromochloromethane	BQL	5	Tetrachloroethene	BQL	5
Bromodichloromethane	BQL	5	Toluene	BQL	5
Bromoform	BQL	5	1,1,1-Trichloroethane	BQL	5
Carbon disulfide	BQL	5	1,1,2-Trichloroethane	BQL	5
Carbon tetrachloride	BQL	5	Trichloroethene	BQL	5
Chlorobenzene	BQL	5	Trichlorofluoromethane	152	5
Chloroethane	BQL	10	1,2,3-Trichloropropane	BQL	5
Chloroform	BQL	5	Vinyl acetate	BQL	50
1,2-Dibromo-3-chloropropane	BQL	20	Vinyl chloride	BQL	2
Dibromochloromethane	BQL	5	m & p-Xylenes	BQL	10
1,2-Dibromoethane	BQL	5	o-Xylene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10			
1,2-Dichlorobenzene	BQL	5			
1,4-Dichlorobenzene	BQL	5			
1,1-Dichloroethane	BQL	5			
1,2-Dichloroethane	BQL	5			
1,1-Dichloroethene	BQL	5			
cis-1,2-Dichloroethene	BQL	5			
trans-1,2-Dichloroethene	BQL	5			
1,2-Dichloropropane	BQL	5			
cis-1,3-Dichloropropene	BQL	5			
trans-1,3-Dichloropropene	BQL	5			
Ethylbenzene	BQL	5			
2-Hexanone	BQL	50			
Methyl bromide	BQL	10			
Methyl chloride	BQL	10			
Methyl ethyl ketone	BQL	100			
Methyl iodide	BQL	5			
4-Methyl-2-pentanone	BQL	50			
Methylene bromide	BQL	5			
Methylene chloride	BQL	5			



ADVANCED CHEMISTRY LABS, INC.

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000
Contact: Mr. Kurt Batsel

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

V.O. (5030B/8260B) - Appendix I

Sample ID: GWA-7/MW-7 Dup

Matrix: Water
Date Sampled: 12/04/2006
Date Extracted:
Date Analyzed: 12/15/2006
Analyst: ME

ACL Sample #: 250671 **Units:** µg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Acetone	BQL	100	Styrene	BQL	5
Acrylonitrile	BQL	50	1,1,1,2-Tetrachloroethane	BQL	5
Benzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
Bromochloromethane	BQL	5	Tetrachloroethene	BQL	5
Bromodichloromethane	BQL	5	Toluene	BQL	5
Bromoform	BQL	5	1,1,1-Trichloroethane	BQL	5
Carbon disulfide	BQL	5	1,1,2-Trichloroethane	BQL	5
Carbon tetrachloride	BQL	5	Trichloroethene	BQL	5
Chlorobenzene	BQL	5	Trichlorofluoromethane	159	5
Chloroethane	BQL	10	1,2,3-Trichloropropane	BQL	5
Chloroform	BQL	5	Vinyl acetate	BQL	50
1,2-Dibromo-3-chloropropane	BQL	20	Vinyl chloride	BQL	2
Dibromochloromethane	BQL	5	m & p-Xylenes	BQL	10
1,2-Dibromoethane	BQL	5	o-Xylene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10			
1,2-Dichlorobenzene	BQL	5			
1,4-Dichlorobenzene	BQL	5			
1,1-Dichloroethane	BQL	5			
1,2-Dichloroethane	BQL	5			
1,1-Dichloroethene	BQL	5			
cis-1,2-Dichloroethene	BQL	5			
trans-1,2-Dichloroethene	BQL	5			
1,2-Dichloropropane	BQL	5			
cis-1,3-Dichloropropene	BQL	5			
trans-1,3-Dichloropropene	BQL	5			
Ethylbenzene	BQL	5			
2-Hexanone	BQL	50			
Methyl bromide	BQL	10			
Methyl chloride	BQL	10			
Methyl ethyl ketone	BQL	100			
Methyl iodide	BQL	5			
4-Methyl-2-pentanone	BQL	50			
Methylene bromide	BQL	5			
Methylene chloride	BQL	5			

ACL**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

V.O. (5030B/8260B) - Appendix I

Sample ID: GWC-13/MW-13

Matrix: Water
Date Sampled: 12/04/2006
Date Extracted:
Date Analyzed: 12/15/2006
Analyst: ME

ACL Sample #: 250672 **Units:** µg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Acetone	BQL	100	Styrene	BQL	5
Acrylonitrile	BQL	50	1,1,1,2-Tetrachloroethane	BQL	5
Benzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
Bromochloromethane	BQL	5	Tetrachloroethene	BQL	5
Bromodichloromethane	BQL	5	Toluene	BQL	5
Bromoform	BQL	5	1,1,1-Trichloroethane	BQL	5
Carbon disulfide	BQL	5	1,1,2-Trichloroethane	BQL	5
Carbon tetrachloride	BQL	5	Trichloroethene	BQL	5
Chlorobenzene	BQL	5	Trichlorofluoromethane	104	5
Chloroethane	BQL	10	1,2,3-Trichloropropane	BQL	5
Chloroform	BQL	5	Vinyl acetate	BQL	50
1,2-Dibromo-3-chloropropane	BQL	20	Vinyl chloride	BQL	2
Dibromochloromethane	BQL	5	m & p-Xylenes	BQL	10
1,2-Dibromoethane	BQL	5	o-Xylene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10			
1,2-Dichlorobenzene	BQL	5			
1,4-Dichlorobenzene	BQL	5			
1,1-Dichloroethane	20	5			
1,2-Dichloroethane	BQL	5			
1,1-Dichloroethene	BQL	5			
cis-1,2-Dichloroethene	10	5			
trans-1,2-Dichloroethene	BQL	5			
1,2-Dichloropropane	BQL	5			
cis-1,3-Dichloropropene	BQL	5			
trans-1,3-Dichloropropene	BQL	5			
Ethylbenzene	BQL	5			
2-Hexanone	BQL	50			
Methyl bromide	BQL	10			
Methyl chloride	BQL	10			
Methyl ethyl ketone	BQL	100			
Methyl iodide	BQL	5			
4-Methyl-2-pentanone	BQL	50			
Methylene bromide	BQL	5			
Methylene chloride	BQL	5			

**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

V.O. (5030B/8260B) - Appendix I

Sample ID: GWA-15/MW-15

Matrix: Water
Date Sampled: 12/04/2006
Date Extracted:
Date Analyzed: 12/15/2006
Analyst: ME

ACL Sample #: 250673 **Units:** µg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Acetone	BQL	100	Styrene	BQL	5
Acrylonitrile	BQL	50	1,1,1,2-Tetrachloroethane	BQL	5
Benzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
Bromochloromethane	BQL	5	Tetrachloroethene	BQL	5
Bromodichloromethane	BQL	5	Toluene	BQL	5
Bromoform	BQL	5	1,1,1-Trichloroethane	BQL	5
Carbon disulfide	BQL	5	1,1,2-Trichloroethane	BQL	5
Carbon tetrachloride	BQL	5	Trichloroethene	BQL	5
Chlorobenzene	BQL	5	Trichlorofluoromethane	BQL	5
Chloroethane	BQL	10	1,2,3-Trichloropropane	BQL	5
Chloroform	BQL	5	Vinyl acetate	BQL	50
1,2-Dibromo-3-chloropropane	BQL	20	Vinyl chloride	BQL	2
Dibromochloromethane	BQL	5	m & p-Xylenes	BQL	10
1,2-Dibromoethane	BQL	5	o-Xylene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10			
1,2-Dichlorobenzene	BQL	5			
1,4-Dichlorobenzene	BQL	5			
1,1-Dichloroethane	BQL	5			
1,2-Dichloroethane	BQL	5			
1,1-Dichloroethene	BQL	5			
cis-1,2-Dichloroethene	BQL	5			
trans-1,2-Dichloroethene	BQL	5			
1,2-Dichloropropane	BQL	5			
cis-1,3-Dichloropropene	BQL	5			
trans-1,3-Dichloropropene	BQL	5			
Ethylbenzene	BQL	5			
2-Hexanone	BQL	50			
Methyl bromide	BQL	10			
Methyl chloride	BQL	10			
Methyl ethyl ketone	BQL	100			
Methyl iodide	BQL	5			
4-Methyl-2-pentanone	BQL	50			
Methylene bromide	BQL	5			
Methylene chloride	BQL	5			

**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Contact: Mr. Kurt Batsel

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

V.O. (5030B/8260B) - Appendix I

Sample ID: GWB-16/MW-16R

Matrix: Water
Date Sampled: 12/05/2006
Date Extracted:
Date Analyzed: 12/15/2006
Analyst: ME

ACL Sample #: 250674 **Units:** µg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Acetone	BQL	100	Styrene	BQL	5
Acrylonitrile	BQL	50	1,1,1,2-Tetrachloroethane	BQL	5
Benzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
Bromochloromethane	BQL	5	Tetrachloroethene	BQL	5
Bromodichloromethane	BQL	5	Toluene	BQL	5
Bromoform	BQL	5	1,1,1-Trichloroethane	BQL	5
Carbon disulfide	BQL	5	1,1,2-Trichloroethane	BQL	5
Carbon tetrachloride	BQL	5	Trichloroethene	BQL	5
Chlorobenzene	BQL	5	Trichlorofluoromethane	BQL	5
Chloroethane	BQL	10	1,2,3-Trichloropropane	BQL	5
Chloroform	BQL	5	Vinyl acetate	BQL	50
1,2-Dibromo-3-chloropropane	BQL	20	Vinyl chloride	BQL	2
Dibromochloromethane	BQL	5	m & p-Xylenes	BQL	10
1,2-Dibromoethane	BQL	5	o-Xylene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10			
1,2-Dichlorobenzene	BQL	5			
1,4-Dichlorobenzene	BQL	5			
1,1-Dichloroethane	BQL	5			
1,2-Dichloroethane	BQL	5			
1,1-Dichloroethene	BQL	5			
cis-1,2-Dichloroethene	BQL	5			
trans-1,2-Dichloroethene	BQL	5			
1,2-Dichloropropane	BQL	5			
cis-1,3-Dichloropropene	BQL	5			
trans-1,3-Dichloropropene	BQL	5			
Ethylbenzene	BQL	5			
2-Hexanone	BQL	50			
Methyl bromide	BQL	10			
Methyl chloride	BQL	10			
Methyl ethyl ketone	BQL	100			
Methyl iodide	BQL	5			
4-Methyl-2-pentanone	BQL	50			
Methylene bromide	BQL	5			
Methylene chloride	BQL	5			

**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

V.O. (5030B/8260B) - Appendix I

Sample ID: GWC-17/MW-17

Matrix: Water
Date Sampled: 12/05/2006
Date Extracted:
Date Analyzed: 12/15/2006
Analyst: ME

ACL Sample #: 250675 **Units:** µg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Acetone	BQL	100	Styrene	BQL	5
Acrylonitrile	BQL	50	1,1,1,2-Tetrachloroethane	BQL	5
Benzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
Bromochloromethane	BQL	5	Tetrachloroethene	BQL	5
Bromodichloromethane	BQL	5	Toluene	BQL	5
Bromoform	BQL	5	1,1,1-Trichloroethane	BQL	5
Carbon disulfide	BQL	5	1,1,2-Trichloroethane	BQL	5
Carbon tetrachloride	BQL	5	Trichloroethene	BQL	5
Chlorobenzene	BQL	5	Trichlorofluoromethane	BQL	5
Chloroethane	BQL	10	1,2,3-Trichloropropane	BQL	5
Chloroform	BQL	5	Vinyl acetate	BQL	50
1,2-Dibromo-3-chloropropane	BQL	20	Vinyl chloride	BQL	2
Dibromochloromethane	BQL	5	m & p-Xylenes	BQL	10
1,2-Dibromoethane	BQL	5	o-Xylene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10			
1,2-Dichlorobenzene	BQL	5			
1,4-Dichlorobenzene	BQL	5			
1,1-Dichloroethane	BQL	5			
1,2-Dichloroethane	BQL	5			
1,1-Dichloroethene	BQL	5			
cis-1,2-Dichloroethene	BQL	5			
trans-1,2-Dichloroethene	BQL	5			
1,2-Dichloropropane	BQL	5			
cis-1,3-Dichloropropene	BQL	5			
trans-1,3-Dichloropropene	BQL	5			
Ethylbenzene	BQL	5			
2-Hexanone	BQL	50			
Methyl bromide	BQL	10			
Methyl chloride	BQL	10			
Methyl ethyl ketone	BQL	100			
Methyl iodide	BQL	5			
4-Methyl-2-pentanone	BQL	50			
Methylene bromide	BQL	5			
Methylene chloride	BQL	5			

ACL**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

V.O. (5030B/8260B) - Appendix I

Sample ID: EQ Blank

Matrix: Water
Date Sampled: 12/05/2006
Date Extracted:
Date Analyzed: 12/15/2006
Analyst: ME

ACL Sample #: 250676 **Units:** µg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Acetone	BQL	100	Styrene	BQL	5
Acrylonitrile	BQL	50	1,1,1,2-Tetrachloroethane	BQL	5
Benzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
Bromochloromethane	BQL	5	Tetrachloroethene	BQL	5
Bromodichloromethane	BQL	5	Toluene	BQL	5
Bromoform	BQL	5	1,1,1-Trichloroethane	BQL	5
Carbon disulfide	BQL	5	1,1,2-Trichloroethane	BQL	5
Carbon tetrachloride	BQL	5	Trichloroethene	BQL	5
Chlorobenzene	BQL	5	Trichlorofluoromethane	BQL	5
Chloroethane	BQL	10	1,2,3-Trichloropropane	BQL	5
Chloroform	BQL	5	Vinyl acetate	BQL	50
1,2-Dibromo-3-chloropropane	BQL	20	Vinyl chloride	BQL	2
Dibromochloromethane	BQL	5	m & p-Xylenes	BQL	10
1,2-Dibromoethane	BQL	5	o-Xylene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10			
1,2-Dichlorobenzene	BQL	5			
1,4-Dichlorobenzene	BQL	5			
1,1-Dichloroethane	BQL	5			
1,2-Dichloroethane	BQL	5			
1,1-Dichloroethene	BQL	5			
cis-1,2-Dichloroethene	BQL	5			
trans-1,2-Dichloroethene	BQL	5			
1,2-Dichloropropane	BQL	5			
cis-1,3-Dichloropropene	BQL	5			
trans-1,3-Dichloropropene	BQL	5			
Ethylbenzene	BQL	5			
2-Hexanone	BQL	50			
Methyl bromide	BQL	10			
Methyl chloride	BQL	10			
Methyl ethyl ketone	BQL	100			
Methyl iodide	BQL	5			
4-Methyl-2-pentanone	BQL	50			
Methylene bromide	BQL	5			
Methylene chloride	BQL	5			

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

V.O. (5030B/8260B) - Appendix I

Sample ID: Trip Blank

Matrix: Water
Date Sampled: 12/04/2006
Date Extracted:
Date Analyzed: 12/15/2006
Analyst: ME

ACL Sample #: 250677 **Units:** µg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>	<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Acetone	BQL	100	Styrene	BQL	5
Acrylonitrile	BQL	50	1,1,1,2-Tetrachloroethane	BQL	5
Benzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
Bromochloromethane	BQL	5	Tetrachloroethene	BQL	5
Bromodichloromethane	BQL	5	Toluene	BQL	5
Bromoform	BQL	5	1,1,1-Trichloroethane	BQL	5
Carbon disulfide	BQL	5	1,1,2-Trichloroethane	BQL	5
Carbon tetrachloride	BQL	5	Trichloroethene	BQL	5
Chlorobenzene	BQL	5	Trichlorofluoromethane	BQL	5
Chloroethane	BQL	10	1,2,3-Trichloropropane	BQL	5
Chloroform	BQL	5	Vinyl acetate	BQL	50
1,2-Dibromo-3-chloropropane	BQL	20	Vinyl chloride	BQL	2
Dibromochloromethane	BQL	5	m & p-Xylenes	BQL	10
1,2-Dibromoethane	BQL	5	o-Xylene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10			
1,2-Dichlorobenzene	BQL	5			
1,4-Dichlorobenzene	BQL	5			
1,1-Dichloroethane	BQL	5			
1,2-Dichloroethane	BQL	5			
1,1-Dichloroethene	BQL	5			
cis-1,2-Dichloroethene	BQL	5			
trans-1,2-Dichloroethene	BQL	5			
1,2-Dichloropropane	BQL	5			
cis-1,3-Dichloropropene	BQL	5			
trans-1,3-Dichloropropene	BQL	5			
Ethylbenzene	BQL	5			
2-Hexanone	BQL	50			
Methyl bromide	BQL	10			
Methyl chloride	BQL	10			
Methyl ethyl ketone	BQL	100			
Methyl iodide	BQL	5			
4-Methyl-2-pentanone	BQL	50			
Methylene bromide	BQL	5			
Methylene chloride	BQL	5			

ACL**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Miscellaneous Organics (8011) - Appendix II

Sample ID: GWC-5/MW-5

Matrix: Water

Date Sampled: 12/04/2006

Date Extracted: 12/11/2006

Date Analyzed: 12/12/2006

ACL Sample #: 250668 **Units:** µg/L

Analyst: AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05



ADVANCED CHEMISTRY LABS, INC.

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Miscellaneous Organics (8011) - Appendix II

Sample ID: GWB-6/MW-6

Matrix: Water

Date Sampled: 12/05/2006

Date Extracted: 12/11/2006

Date Analyzed: 12/12/2006

ACL Sample #: 250669 **Units:** µg/L

Analyst: AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05

ACL**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Miscellaneous Organics (8011) - Appendix II

Sample ID: GWA-7/MW-7

Matrix: Water

Date Sampled: 12/04/2006

Date Extracted: 12/11/2006

Date Analyzed: 12/12/2006

ACL Sample #: 250670 **Units:** µg/L

Analyst: AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05



ADVANCED CHEMISTRY LABS, INC.

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Miscellaneous Organics (8011) - Appendix II

Sample ID: GWA-7/MW-7 Dup

Matrix: Water

Date Sampled: 12/04/2006

Date Extracted: 12/11/2006

Date Analyzed: 12/12/2006

ACL Sample #: 250671

Units: µg/L

Analyst: AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05



ADVANCED CHEMISTRY LABS, INC.

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Miscellaneous Organics (8011) - Appendix II

Sample ID: GWC-13/MW-13

Matrix: Water

Date Sampled: 12/04/2006

Date Extracted: 12/11/2006

Date Analyzed: 12/12/2006

ACL Sample #: 250672 **Units:** µg/L

Analyst: AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05

**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Miscellaneous Organics (8011) - Appendix II

Sample ID: GWA-15/MW-15

Matrix: Water
Date Sampled: 12/04/2006
Date Extracted: 12/11/2006
Date Analyzed: 12/12/2006
Analyst: AM

ACL Sample #: 250673 **Units:** µg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05

ACL**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Miscellaneous Organics (8011) - Appendix II

Sample ID: GWB-16/MW-16R

Matrix: Water
Date Sampled: 12/05/2006
Date Extracted: 12/11/2006
Date Analyzed: 12/12/2006
Analyst: AM

ACL Sample #: 250674 **Units:** µg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05

**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Miscellaneous Organics (8011) - Appendix II

Sample ID: GWC-17/MW-17

Matrix: Water
Date Sampled: 12/05/2006
Date Extracted: 12/11/2006
Date Analyzed: 12/12/2006
Analyst: AM

ACL Sample #: 250675 **Units:** µg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05

ACL**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Miscellaneous Organics (8011) - Appendix II

Sample ID: EQ Blank

Matrix: Water

Date Sampled: 12/05/2006

Date Extracted: 12/11/2006

Date Analyzed: 12/12/2006

ACL Sample #: 250676 **Units:** µg/L

Analyst: AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05



ADVANCED CHEMISTRY LABS, INC.

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Appendix I Metals (6010B/7841/7041)

Sample ID: GWC-5/MW-5

Matrix: Water
Date Sampled: 12/04/2006
Date Extracted:
Date Analyzed: 12/14/2006
Analyst: SW

ACL Sample #: 250668 **Units:** mg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	0.021	0.020
Beryllium	BQL	0.004
Cadmium	BQL	0.005
Chromium	BQL	0.020
Cobalt	BQL	0.050
Copper	BQL	0.020
Lead	BQL	0.010
Nickel	BQL	0.020
Selenium	BQL	0.040
Silver	BQL	0.010
Thallium	BQL	0.002
Vanadium	BQL	0.050
Zinc	0.062	0.020

**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Contact: Mr. Kurt Batsel

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Appendix I Metals (6010B/7841/7041)

Sample ID: GWB-6/MW-6

Matrix: Water
Date Sampled: 12/05/2006
Date Extracted:
Date Analyzed: 12/14/2006
Analyst: SW

ACL Sample #: 250669 **Units:** mg/L

Analyte	Result	PQL
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	BQL	0.020
Beryllium	BQL	0.004
Cadmium	BQL	0.005
Chromium	BQL	0.020
Cobalt	BQL	0.050
Copper	BQL	0.020
Lead	BQL	0.010
Nickel	BQL	0.020
Selenium	BQL	0.040
Silver	BQL	0.010
Thallium	BQL	0.002
Vanadium	BQL	0.050
Zinc	0.028	0.020

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Appendix I Metals (6010B/7841/7041)

Sample ID: GWA-7/MW-7

Matrix: Water
Date Sampled: 12/04/2006
Date Extracted:
Date Analyzed: 12/14/2006
Analyst: SW

ACL Sample #: 250670 **Units:** mg/L

Analyte	Result	PQL
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	BQL	0.020
Beryllium	BQL	0.004
Cadmium	BQL	0.005
Chromium	BQL	0.020
Cobalt	BQL	0.050
Copper	BQL	0.020
Lead	BQL	0.010
Nickel	BQL	0.020
Selenium	BQL	0.040
Silver	BQL	0.010
Thallium	BQL	0.002
Vanadium	BQL	0.050
Zinc	BQL	0.020

ACL**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Appendix I Metals (6010B/7841/7041)

Sample ID: GWA-7/MW-7 Dup

Matrix: Water
Date Sampled: 12/04/2006
Date Extracted:
Date Analyzed: 12/14/2006
Analyst: SW

ACL Sample #: 250671 **Units:** mg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	BQL	0.020
Beryllium	BQL	0.004
Cadmium	BQL	0.005
Chromium	BQL	0.020
Cobalt	BQL	0.050
Copper	BQL	0.020
Lead	BQL	0.010
Nickel	BQL	0.020
Selenium	BQL	0.040
Silver	BQL	0.010
Thallium	BQL	0.002
Vanadium	BQL	0.050
Zinc	BQL	0.020



ADVANCED CHEMISTRY LABS, INC.

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Appendix I Metals (6010B/7841/7041)

Sample ID: GWC-13/MW-13

Matrix: Water
Date Sampled: 12/04/2006
Date Extracted:
Date Analyzed: 12/14/2006
Analyst: SW

ACL Sample #: 250672 **Units:** mg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	0.059	0.020
Beryllium	BQL	0.004
Cadmium	BQL	0.005
Chromium	BQL	0.020
Cobalt	BQL	0.050
Copper	BQL	0.020
Lead	BQL	0.010
Nickel	BQL	0.020
Selenium	BQL	0.040
Silver	BQL	0.010
Thallium	BQL	0.002
Vanadium	BQL	0.050
Zinc	0.055	0.020



ADVANCED CHEMISTRY LABS, INC.

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Appendix I Metals (6010B/7841/7041)

Sample ID: GWA-15/MW-15

Matrix: Water
Date Sampled: 12/04/2006
Date Extracted:
Date Analyzed: 12/14/2006
Analyst: SW

ACL Sample #: 250673 **Units:** mg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	BQL	0.020
Beryllium	BQL	0.004
Cadmium	BQL	0.005
Chromium	BQL	0.020
Cobalt	BQL	0.050
Copper	BQL	0.020
Lead	BQL	0.010
Nickel	0.089	0.020
Selenium	BQL	0.040
Silver	BQL	0.010
Thallium	BQL	0.002
Vanadium	BQL	0.050
Zinc	0.316	0.020

ACL**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Appendix I Metals (6010B/7841/7041)

Sample ID: GWB-16/MW-16R

Matrix: Water
Date Sampled: 12/05/2006
Date Extracted:
Date Analyzed: 12/14/2006
Analyst: SW

ACL Sample #: 250674 **Units:** mg/L

Analyte	Result	PQL
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	BQL	0.020
Beryllium	BQL	0.004
Cadmium	BQL	0.005
Chromium	BQL	0.020
Cobalt	BQL	0.050
Copper	BQL	0.020
Lead	BQL	0.010
Nickel	BQL	0.020
Selenium	BQL	0.040
Silver	BQL	0.010
Thallium	BQL	0.002
Vanadium	BQL	0.050
Zinc	BQL	0.020



ADVANCED CHEMISTRY LABS, INC.

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Appendix I Metals (6010B/7841/7041)

Sample ID: GWC-17/MW-17

Matrix: Water
Date Sampled: 12/05/2006
Date Extracted:
Date Analyzed: 12/14/2006
Analyst: SW

ACL Sample #: 250675 **Units:** mg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	BQL	0.020
Beryllium	BQL	0.004
Cadmium	BQL	0.005
Chromium	BQL	0.020
Cobalt	BQL	0.050
Copper	BQL	0.020
Lead	BQL	0.010
Nickel	BQL	0.020
Selenium	BQL	0.040
Silver	BQL	0.010
Thallium	BQL	0.002
Vanadium	BQL	0.050
Zinc	BQL	0.020



ADVANCED CHEMISTRY LABS, INC.

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Appendix I Metals (6010B/7841/7041)

Sample ID: EQ Blank

Matrix: Water
Date Sampled: 12/05/2006
Date Extracted:
Date Analyzed: 12/14/2006
Analyst: SW

ACL Sample #: 250676 **Units:** mg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	BQL	0.020
Beryllium	BQL	0.004
Cadmium	BQL	0.005
Chromium	BQL	0.020
Cobalt	BQL	0.050
Copper	BQL	0.020
Lead	BQL	0.010
Nickel	BQL	0.020
Selenium	BQL	0.040
Silver	BQL	0.010
Thallium	BQL	0.002
Vanadium	BQL	0.050
Zinc	BQL	0.020

ACL**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

<u>Sample ID</u>	<u>ACL #</u>	<u>Analyte</u>	<u>Matrix</u>	<u>Result</u>	<u>PQL</u>	<u>Units</u>	<u>Date Analyzed</u>
GWC-5/MW-5	250668	Mercury (7470A)	Water	BQL	0.0005	mg/L	12/14/2006
GWB-6/MW-6	250669	Mercury (7470A)	Water	BQL	0.0005	mg/L	12/14/2006
GWA-7/MW-7	250670	Mercury (7470A)	Water	0.0008	0.0005	mg/L	12/14/2006
GWA-7/MW-7 Dup	250671	Mercury (7470A)	Water	0.0016	0.0005	mg/L	12/14/2006
GWC-13/MW-13	250672	Mercury (7470A)	Water	BQL	0.0005	mg/L	12/14/2006
GWA-15/MW-15	250673	Mercury (7470A)	Water	BQL	0.0005	mg/L	12/14/2006
GWB-16/MW-16R	250674	Mercury (7470A)	Water	BQL	0.0005	mg/L	12/14/2006
GWC-17/MW-17	250675	Mercury (7470A)	Water	BQL	0.0005	mg/L	12/14/2006
EQ Blank	250676	Mercury (7470A)	Water	BQL	0.0005	mg/L	12/14/2006

QUALITY CONTROL

ACL**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

V.O. (5030B/8260B) - Appendix I
SURROGATE PERCENT RECOVERY SUMMARY
Water

ACL Sample #	Dibromofluoromethane (77-137)	1,2-Dichloroethane-d4 (72-138)	Toluene-d8 (84-122)	4-Bromofluorobenzene (77-125)
250668	102	87	102	92
250669	103	91	103	94
250670	100	86	104	94
250671	102	89	105	94
250672	102	85	103	93
250673	104	87	103	90
250674	99	86	101	90
250675	99	90	102	92
250676	100	85	100	88
250677	100	88	101	91



ADVANCED CHEMISTRY LABS, INC.

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

V.O. (5030B/8260B) - Appendix I

Sample ID: -----

Matrix: Water

Date Sampled: -----

Date Extracted:

Date Analyzed: 12/15/2006

Analyst: ME

ACL Sample #: Blank **Units:** µg/L

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	Styrene	BQL	5
Acrylonitrile	BQL	50	1,1,1,2-Tetrachloroethane	BQL	5
Benzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
Bromochloromethane	BQL	5	Tetrachloroethene	BQL	5
Bromodichloromethane	BQL	5	Toluene	BQL	5
Bromoform	BQL	5	1,1,1-Trichloroethane	BQL	5
Carbon disulfide	BQL	5	1,1,2-Trichloroethane	BQL	5
Carbon tetrachloride	BQL	5	Trichloroethene	BQL	5
Chlorobenzene	BQL	5	Trichlorofluoromethane	BQL	5
Chloroethane	BQL	10	1,2,3-Trichloropropane	BQL	5
Chloroform	BQL	5	Vinyl acetate	BQL	50
1,2-Dibromo-3-chloropropane	BQL	20	Vinyl chloride	BQL	2
Dibromochloromethane	BQL	5	m & p-Xylenes	BQL	10
1,2-Dibromoethane	BQL	5	o-Xylene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10			
1,2-Dichlorobenzene	BQL	5			
1,4-Dichlorobenzene	BQL	5			
1,1-Dichloroethane	BQL	5			
1,2-Dichloroethane	BQL	5			
1,1-Dichloroethene	BQL	5			
cis-1,2-Dichloroethene	BQL	5			
trans-1,2-Dichloroethene	BQL	5			
1,2-Dichloropropane	BQL	5			
cis-1,3-Dichloropropene	BQL	5			
trans-1,3-Dichloropropene	BQL	5			
Ethylbenzene	BQL	5			
2-Hexanone	BQL	50			
Methyl bromide	BQL	10			
Methyl chloride	BQL	10			
Methyl ethyl ketone	BQL	100			
Methyl iodide	BQL	5			
4-Methyl-2-pentanone	BQL	50			
Methylene bromide	BQL	5			
Methylene chloride	BQL	5			

ADVANCED CHEMISTRY LABS, INC.

GC/MS UNIT # 2

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Sequence Date : 12-15-06

Matrix Spike - Sample No.: 250677

COMPOUND	ADDED (µg/l)	SAMPLE CONCENTRATION (µg/l)	MS CONCENTRATION (µg/l)	MS % REC #	QC. LIMITS REC.
1,1-dichloroethene	20.0	0.0	19.5	98	(54-144)
benzene	20.0	0.0	20.0	100	(82-132)
trichloroethene	20.0	0.0	18.8	94	(73-128)
toluene	20.0	0.0	19.5	98	(83-130)
chlorobenzene	20.0	0.0	20.6	103	(88-123)

COMPOUND	SPIKE ADDED (µg/l)	MSD CONCENTRATION (µg/l)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
1,1-dichloroethene	20.0	20.0	100	3	14	(54-144)
benzene	20.0	19.9	100	1	11	(82-132)
trichloroethene	20.0	20.0	100	6	14	(73-128)
toluene	20.0	20.3	102	4	13	(83-130)
chlorobenzene	20.0	20.4	102	1	13	(88-123)

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

Comments:



ADVANCED CHEMISTRY LABS, INC.

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Miscellaneous Organics (8011) - Appendix II

SURROGATE PERCENT RECOVERY SUMMARY

Water

Bromofluorobenzene (40-140)	
ACL Sample #	
250668	89
250669	90
250670	118
250671	96
250672	77
250673	79
250674	82
250675	77
250676	76

ACL**ADVANCED CHEMISTRY LABS, INC.**

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Miscellaneous Organics (8011) - Appendix II

Sample ID: -----

Matrix: Water

Date Sampled: -----

Date Extracted: 12/11/2006

Date Analyzed: 12/12/2006

ACL Sample #: Blank **Units:** µg/L

Analyst: AM

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05

Advanced Chemistry Labs

Pesticides Spike Report (SW-846 Method 8011)

Instrument ID: HP5890A-ECD/FIDGC#2

Column: STx-CLPII, 30m, 0.53mm, 0.5µm

ACL #: LCS1-121106

Matrix: Water

Extraction Date: 12/11/06

Analysis Date: 12/12/06

Initial Volume: 35.0 ml

Final Volume: 2

Dilution Factor: 1

Unit: µg/L or ppb

Pesticide	R.T.	Spike	Sample	MS	MS	R.T.	MSD	MSD	RPD	QC Limits		
	MS	Added	Result	Conc.	ec. (%)	MSD	Conc.	ec. (%)	(%)	RPD	recovery	
EDB	5.383	0.008	0.000	0.006	77	5.407	0.007	82	6	25	60	140
TCP	8.830	0.009	0.000	0.000			0.000			25	60	140
DBCP	10.137	0.009	0.000	0.006	72	10.141	0.008	87	19	25	60	140

* Outside QC limits



ADVANCED CHEMISTRY LABS, INC.

Phone: (770) 409-1444
Fax: (770) 409-1844
e-mail: acl@acl-labs.net

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360
P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group
1205 Johnson Ferry Rd.
Suite 136-446
Marietta, GA 30068-0000

Client Proj #: Vogtle LF #3
ACL Project #: 52254
Date Received: 12/07/2006
Date Reported: 12/18/2006

Contact: Mr. Kurt Batsel

Appendix I Metals (6010B/7841/7041)

Sample ID: -----

Matrix: Water

Date Sampled: -----

Date Extracted:

Date Analyzed: 12/14/2006

Analyst: SW

ACL Sample #: Blank **Units:** mg/L

<u>Analyte</u>	<u>Result</u>	<u>PQL</u>
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	BQL	0.020
Beryllium	BQL	0.004
Cadmium	BQL	0.005
Chromium	BQL	0.020
Cobalt	BQL	0.050
Copper	BQL	0.020
Lead	BQL	0.010
Nickel	BQL	0.020
Selenium	BQL	0.040
Silver	BQL	0.010
Thallium	BQL	0.002
Vanadium	BQL	0.050
Zinc	BQL	0.020

ADVANCED CHEMISTRY LABS, INC.

Appendix I Metals (6010B/7841/7041) Water Matrix Spike/Spike Duplicate Recoveries

Instrument : TJA 61E Trace ICAP
 Date Digested : 12-13-06
 Date Analyzed : 12-14-06
 ACL Sample No.: LCS/LCSD121306

ANALYTE	SPIKE Added (mg/L)	SAMPLE Result (mg/L)	MS Conc. (mg/L)	MS Rec. (%)	MSD Conc. (mg/L)	MSD Rec. (%)	RPD	QC Limits		
								RPD	% Recovery	
Antimony (7041)	0.200	0.000	0.201	100	0.191	95	5	20	70	130
Arsenic	0.200	0.000	0.194	97	0.184	92	5	20	75	125
Barium	1.000	0.000	1.046	105	0.980	98	7	20	75	125
Beryllium	0.200	0.000	0.222	111	0.209	105	6	20	75	125
Cadmium	0.050	0.000	0.053	105	0.050	99	6	20	75	125
Chromium	0.200	0.000	0.218	109	0.206	103	5	20	75	125
Cobalt	0.200	0.000	0.215	108	0.204	102	6	20	75	125
Copper	0.200	0.000	0.214	107	0.202	101	6	20	75	125
Lead	0.200	0.000	0.207	104	0.196	98	5	20	75	125
Nickel	0.200	0.000	0.218	109	0.204	102	7	20	75	125
Selenium	0.050	0.000	0.047	94	0.045	91	4	20	75	125
Silver	0.020	0.000	0.020	101	0.019	95	7	20	75	125
Thallium (7841)	0.200	0.000	0.197	98	0.186	93	6	20	70	130
Vanadium	0.500	0.000	0.545	109	0.513	103	6	20	75	125
Zinc	0.200	0.000	0.216	108	0.204	102	5	20	75	125

* Outside QC Limits

Comment :

ACL**ADVANCED CHEMISTRY LABS, INC.**

3039 Arnwiler Road • Suite 100 • Atlanta, GA 30360 ■ P. O. Box 88610 • Atlanta, GA 30356 ■ (770) 409-1444 • Fax (770) 409-1844

Page 1 of 2

Company Name: <i>The Oyster Group</i>		Phone #: <i>(770) 578-9696</i>		CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST																	
Company Address: <i>1205 Johnson Ferry Rd. St. 136-446, Marietta GA 30068</i>		Fax #: <i>(770) 521-5345</i>																			
Project Manager: <i>Mr. Kurt Batsel</i>		Client Project: (#) <i>(Name) Vogt LF #3</i>		ANALYSIS REQUEST																	
I attest that the proper field sampling procedures were used during the collection of these samples. <i>Josh Threadgill / Tiffany Messier</i>		Sampler Name (Print):																			
Field Sample ID	# Container	Matrix						Method Preserved						Sampling		Date	Time	Remarks			
		Water	Soil	Air	Sludge	Product	Other	HCl	HNO ₃	H ₂ SO ₄	Ice	None	Other								
GWC-5/MW-5	5	X						2	1	X	2				12/4/06	13:50	X X X X				
GWB-6/MW-6	5	X						2	1	X	2				12/5/06	10:10	X X X X				
GWA-7/MW-7	5	X						2	1	X	2				12/4/06	14:20	X X X X				
GWA-7/MW-7 DOP	5	X						2	1	X	2				12/4/06	14:30	X X X X				
GWC-13/MW-13	5	X						2	1	X	2				12/1/06	15:35	X X X X				
GWC-14/MW-14	5	X						2	1	X	2						X X X X				
GWA-15/MW-15	5	X						2	1	X	2				12/4/06	16:10	X X X X				
GWB-16/MW-16 R	5	X						2	1	X	2				12/5/06	10:45	X X X X				
GWC-17/MW-17	5	X						2	1	X	2				12/5/06	15:30	X X X X				
GWC-18/MW-18	5	X						2	1	X	2						X X X X				
Special Detection Limits								Remarks:								TAT		Special Handling			
Special Reporting Requirements								Lab Use Only:								Cooler Temp.		Priority (24 hr) <input type="checkbox"/>		ACL Contact	
Fax <input type="checkbox"/>								ACL Project #: <i>52254</i>								3.4 °C		Rush (48 hr) <input type="checkbox"/>		Quote #	
																		Rush (72 hr) <input type="checkbox"/>		P. O.	
																		Normal <input type="checkbox"/>		QA/QC Level	
																		Level 1 <input type="checkbox"/> Level 2 <input type="checkbox"/> Other <input type="checkbox"/>			
CUSTODY RECORD		Relinquished by Sampler:						Date: <i>12/7/06</i> Time: <i>14:45</i>						Received by:							
		Relinquished by:						Date: _____ Time: _____						Received by:							
		Relinquished by:						Date: <i>12/7/06</i> Time: <i>2:45</i>						Received by Laboratory: <i>G. Bartholomew</i> Waybill #							

ACL

ADVANCED CHEMISTRY LABS, INC.

3039 Amwiler Road • Suite 100 • Atlanta, GA 30360 ■ P. O. Box 88610 • Atlanta, GA 30356 ■ (770) 409-1444 • Fax (770) 409-1844

[illegible]

Concentrations (mg/L)

Parameter: Barium

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Samples: 72

Total Non-Detect: 45

Percent Non-Detects: 62.5%

Total Background Samples: 12

There is 1 background well

Well	Samples	ND	Date	Result	Original
GWA-15/MW-1512	12 (100%)		7/30/2002	ND<0.01	ND<0.02
			9/24/2002	ND<0.01	ND<0.02
			10/21/2002 ~	ND<0.01	ND<0.02
			12/3/2002	ND<0.005	ND<0.01
			6/24/2003	ND<0.01	ND<0.02
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004	ND<0.01	ND<0.02
			6/14/2005	ND<0.01	ND<0.02
			12/5/2005	ND<0.01	ND<0.02
			6/5/2006	ND<0.01	ND<0.02
			12/4/2006	ND<0.01	ND<0.02

There are 8 compliance wells

Well	Samples	ND	Date	Result	Original
GWA-7/MW-7	12	9 (75%)	7/30/2002 ~	ND<0.01	ND<0.02
			9/24/2002	ND<0.01	ND<0.02
			10/21/2002	ND<0.01	ND<0.02
			12/3/2002	0.015	0.015
			6/24/2003	0.036	0.036
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004 ~	ND<0.01	ND<0.02
			6/14/2005	ND<0.01	ND<0.02
			12/6/2005 ~	0.023	0.023
			6/5/2006 ~	ND<0.01	ND<0.02
			12/4/2006 ~	ND<0.01	ND<0.02
GWB-6/MW-6	12	12 (100%)	7/30/2002	ND<0.01	ND<0.02
			9/24/2002	ND<0.01	ND<0.02
			10/21/2002	ND<0.01	ND<0.02
			12/3/2002	ND<0.005	ND<0.01
			6/24/2003	ND<0.01	ND<0.02
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004	ND<0.01	ND<0.02
			6/13/2005	ND<0.01	ND<0.02
			12/5/2005	ND<0.01	ND<0.02
			6/5/2006	ND<0.01	ND<0.02
			12/5/2006	ND<0.01	ND<0.02
GWC-13/MW-1312		0 (0%)	7/30/2002	0.077	0.077

			9/24/2002	0.085	0.085
			10/21/2002	0.083	0.083
			12/3/2002	0.082	0.082
			6/24/2003 ~	0.0295	0.0295
			12/17/2003 ~	0.0325	0.0325
			6/15/2004 ~	0.034	0.034
			12/28/2004	0.043	0.043
			6/13/2005 ~	0.03	0.03
			12/6/2005	0.044	0.044
			6/5/2006	0.051	0.051
			12/4/2006	0.059	0.059
GWC-14/MW-146	0 (0%)		7/30/2002	0.068	0.068
			9/24/2002 ~	0.0935	0.0935
			10/21/2002	0.064	0.064
			12/3/2002	0.106	0.106
			6/24/2003	0.051	0.051
			12/17/2003	0.189	0.189
GWC-5/MW-5	12	6 (50%)	7/30/2002	ND<0.01	ND<0.02
			9/24/2002	0.02	0.02
			10/21/2002	ND<0.01	ND<0.02
			12/3/2002	0.018	0.018
			6/24/2003	ND<0.01	ND<0.02
			12/17/2003	0.142	0.142
			6/15/2004	0.04	0.04
			12/28/2004	ND<0.01	ND<0.02
			6/13/2005	ND<0.01	ND<0.02
			12/6/2005	ND<0.01	ND<0.02
			6/5/2006	0.031	0.031
			12/4/2006	0.021	0.021
GWC-17/MW-174		4 (100%)	6/15/2005	ND<0.01	ND<0.02
			12/6/2005	ND<0.01	ND<0.02
			6/5/2006	ND<0.01	ND<0.02
			12/5/2006	ND<0.01	ND<0.02
GWC-18/MW-181		1 (100%)	6/15/2005	ND<0.01	ND<0.02
GWB-16/MW-161.		1 (100%)	12/5/2006	ND<0.01	ND<0.02

There is 1 unused well

Well	Samples	ND	Date	Result	Original
EQ-Blank	8	8 (100%)	6/24/2003	ND<0.01	ND<0.02
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004 ~	ND<0.01	ND<0.02
			6/15/2005 ~	ND<0.01	ND<0.02
			12/6/2005	ND<0.01	ND<0.02
			6/6/2006	ND<0.01	ND<0.02
			12/5/2006	ND<0.01	ND<0.02

Shapiro-Francia Test of Normality

Parameter: Barium

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Sample Size = 72

i	x(i)	m(i)	sum(m^2)	sum(mx)
0	0	0	0	0
1	0.005	-2.22621	4.956	-0.011131
2	0.005	-1.92684	8.6687	-0.0207652
3	0.01	-1.7392	11.6935	-0.0381572
4	0.01	-1.60725	14.2768	-0.0542297
5	0.01	-1.49085	16.4994	-0.0691382
6	0.01	-1.39175	18.4364	-0.0830557
7	0.01	-1.31058	20.154	-0.0961615
8	0.01	-1.23187	21.6715	-0.10848
9	0.01	-1.16012	23.0173	-0.120081
10	0.01	-1.09847	24.224	-0.131066
11	0.01	-1.03643	25.2982	-0.14143
12	0.01	-0.97815	26.255	-0.151212
13	0.01	-0.923014	27.1069	-0.160442
14	0.01	-0.874218	27.8712	-0.169184
15	0.01	-0.823893	28.55	-0.177423
16	0.01	-0.775574	29.1515	-0.185179
17	0.01	-0.732275	29.6877	-0.192502
18	0.01	-0.687131	30.1599	-0.199373
19	0.01	-0.643345	30.5738	-0.205806
20	0.01	-0.603765	30.9383	-0.211844
21	0.01	-0.56217	31.2543	-0.217466
22	0.01	-0.521527	31.5263	-0.222681
23	0.01	-0.481728	31.7584	-0.227498
24	0.01	-0.445443	31.9568	-0.231953
25	0.01	-0.40701	32.1224	-0.236023
26	0.01	-0.369171	32.2587	-0.239714
27	0.01	-0.334503	32.3706	-0.24306
28	0.01	-0.297612	32.4592	-0.246036
29	0.01	-0.26112	32.5274	-0.248647
30	0.01	-0.227545	32.5792	-0.250922
31	0.01	-0.191671	32.6159	-0.252839
32	0.01	-0.156042	32.6402	-0.254399
33	0.01	-0.12061	32.6548	-0.255606
34	0.01	-0.0878447	32.6625	-0.256484
35	0.01	-0.0526632	32.6653	-0.257011
36	0.01	-0.0175476	32.6656	-0.257186
37	0.01	0.0175476	32.6659	-0.257011
38	0.01	0.0526632	32.6687	-0.256484
39	0.01	0.0878447	32.6764	-0.255606
40	0.01	0.12061	32.6909	-0.254399
41	0.01	0.156042	32.7153	-0.252839
42	0.01	0.191671	32.752	-0.250922
43	0.01	0.227545	32.8038	-0.248647
44	0.01	0.26112	32.872	-0.246036
45	0.01	0.297612	32.9606	-0.24306
46	0.015	0.334503	33.0724	-0.238042

47	0.018	0.369171	33.2087	-0.231397
48	0.02	0.40701	33.3744	-0.223257
49	0.021	0.445443	33.5728	-0.213902
50	0.023	0.481728	33.8049	-0.202823
51	0.0295	0.521527	34.0769	-0.187438
52	0.03	0.56217	34.3929	-0.170573
53	0.031	0.603765	34.7574	-0.151856
54	0.0325	0.643345	35.1713	-0.130947
55	0.034	0.687131	35.6435	-0.107585
56	0.036	0.732275	36.1797	-0.0812227
57	0.04	0.775574	36.7812	-0.0501998
58	0.043	0.823893	37.46	-0.0147724
59	0.044	0.874218	38.2243	0.0236932
60	0.051	0.923014	39.0762	0.0707669
61	0.051	0.97815	40.033	0.120653
62	0.059	1.03643	41.1072	0.181802
63	0.064	1.09847	42.3138	0.252104
64	0.068	1.16012	43.6597	0.330992
65	0.077	1.23187	45.1772	0.425846
66	0.082	1.31058	46.8948	0.533313
67	0.083	1.39175	48.8318	0.648828
68	0.085	1.49085	51.0544	0.775551
69	0.0935	1.60725	53.6377	0.925829
70	0.106	1.7392	56.6625	1.11018
71	0.142	1.92684	60.3752	1.38379

Sample Standard Deviation = 0.0339747

Numerator = 1.91489

Denominator = 4.94797 = 71 60.3752

W Statistic = 0.387005

5% Critical value of 0.968 exceeds 0.387005

Evidence of non-normality at 95% level of significance

1% Critical value of 0.956 exceeds 0.387005

Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: Barium

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Kruskal Wallis Ranks

Background Wells

Well ID	Date	Result	Rank
GWA-15/MW-157	7/30/2002	ND<0.01	23
	9/24/2002	ND<0.01	23
	10/21/2002 ~	ND<0.01	23
	12/3/2002	ND<0.005	23
	6/24/2003	ND<0.01	23
	12/17/2003	ND<0.01	23
	6/15/2004	ND<0.01	23
	12/28/2004	ND<0.01	23
	6/14/2005	ND<0.01	23
	12/5/2005	ND<0.01	23
	6/5/2006	ND<0.01	23
	12/4/2006	ND<0.01	23

Rank Sum = 276

Rank Mean = 23

Background Rank Sum = 276

Background Rank Mean = 23

Compliance Wells

Well ID	Date	Result	Rank
GWA-7/MW-7	7/30/2002 ~	ND<0.01	23
	9/24/2002	ND<0.01	23
	10/21/2002	ND<0.01	23
	12/3/2002	0.015	46
	6/24/2003	0.036	56
	12/17/2003	ND<0.01	23
	6/15/2004	ND<0.01	23
	12/28/2004 ~	ND<0.01	23
	6/14/2005	ND<0.01	23
	12/6/2005 ~	0.023	50
	6/5/2006 ~	ND<0.01	23
	12/4/2006 ~	ND<0.01	23

Rank Sum = 359

Rank Mean = 29.9167

GWB-6/MW-6	7/30/2002	ND<0.01	23
	9/24/2002	ND<0.01	23
	10/21/2002	ND<0.01	23
	12/3/2002	ND<0.005	23
	6/24/2003	ND<0.01	23
	12/17/2003	ND<0.01	23
	6/15/2004	ND<0.01	23
	12/28/2004	ND<0.01	23
	6/13/2005	ND<0.01	23

12/5/2005	ND<0.01	23
6/5/2006	ND<0.01	23
12/5/2006	ND<0.01	23

Rank Sum = 276

Rank Mean = 23

GWC-13/MW-137/30/2002	0.077	65
9/24/2002	0.085	68
10/21/2002	0.083	67
12/3/2002	0.082	66
6/24/2003 ~	0.0295	51
12/17/2003 ~	0.0325	54
6/15/2004 ~	0.034	55
12/28/2004	0.043	58
6/13/2005 ~	0.03	52
12/6/2005	0.044	59
6/5/2006	0.051	60
12/4/2006	0.059	62

Rank Sum = 717

Rank Mean = 59.75

GWC-14/MW-147/30/2002	0.068	64
9/24/2002 ~	0.0935	69
10/21/2002	0.064	63
12/3/2002	0.106	70
6/24/2003	0.051	61
12/17/2003	0.189	72

Rank Sum = 399

Rank Mean = 66.5

GWC-5/MW-5 7/30/2002	ND<0.01	23
9/24/2002	0.02	48
10/21/2002	ND<0.01	23
12/3/2002	0.018	47
6/24/2003	ND<0.01	23
12/17/2003	0.142	71
6/15/2004	0.04	57
12/28/2004	ND<0.01	23
6/13/2005	ND<0.01	23
12/6/2005	ND<0.01	23
6/5/2006	0.031	53
12/4/2006	0.021	49

Rank Sum = 463

Rank Mean = 38.5833

GWC-17/MW-176/15/2005	ND<0.01	23
12/6/2005	ND<0.01	23
6/5/2006	ND<0.01	23
12/5/2006	ND<0.01	23

Rank Sum = 92

Rank Mean = 23

GWC-18/MW-186/15/2005	ND<0.01	23
-----------------------	---------	----

Rank Sum = 23

Rank Mean = 23

GWB-16/MW-16 12/5/2006	ND<0.01	23
------------------------	---------	----

Rank Sum = 23
Rank Mean = 23

Calculation Results:

Kruskal-Wallis H Statistic = 40.9279

Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 54.1422

95% Confidence comparison value is 15.5073 at 8 degrees of freedom

40.9279 > 15.5073 indicating a significant group difference at 5% significance level

54.1422 > 15.5073 indicating a significant group difference at 5% significance level when adjusted for ties

Individual Well Comparisons at 1% Significance Level per Comparison

1% Z score is 2.32634

Mean background rank is 23

Well	Mean Rank	Dif from Bkg	Critical Value
GWA-7/MW-7	29.9167	6.91667	19.8763
GWB-6/MW-6	23	0	19.8763
GWC-13/MW-13	59.75	36.75	19.8763
GWC-14/MW-14	66.5	43.5	24.3434
GWC-5/MW-5	38.5833	15.5833	19.8763
GWC-17/MW-17	23	0	28.1093
GWC-18/MW-18	23	0	50.6748
GWB-16/MW-16	23	0	50.6748

Individual Well Comparisons at Groupwise 5% Significance Level

(0.625% Significance Level per comparison)

0.625% Z score is 2.51213

Mean background rank is 23

Well	Mean Rank	Dif from Bkg	Critical Value
GWA-7/MW-7	29.9167	6.91667	21.4637
GWB-6/MW-6	23	0	21.4637
GWC-13/MW-13	59.75	36.75	21.4637
GWC-14/MW-14	66.5	43.5	26.2875
GWC-5/MW-5	38.5833	15.5833	21.4637
GWC-17/MW-17	23	0	30.3542
GWC-18/MW-18	23	0	54.7219
GWB-16/MW-16	23	0	54.7219

Concentrations (mg/L)

Parameter: Nickel

Original Data (Not Transformed)
 Non-Detects Replaced with 1/2 DL
 Total Samples: 72
 Total Non-Detect: 70
 Percent Non-Detects: 97.2222%
 Total Background Samples: 12
 There is 1 background well

Well	Samples	ND	Date	Result	Original
GWA-15/MW-1512	11 (91.6667%)		7/30/2002	ND<0.01	ND<0.02
			9/24/2002	ND<0.01	ND<0.02
			10/21/2002 ~	ND<0.01	ND<0.02
			12/3/2002	ND<0.02	ND<0.04
			6/24/2003	ND<0.01	ND<0.02
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004	ND<0.01	ND<0.02
			6/14/2005	ND<0.01	ND<0.02
			12/5/2005	ND<0.01	ND<0.02
			6/5/2006	ND<0.01	ND<0.02
			12/4/2006	0.089	0.089

There are 8 compliance wells

Well	Samples	ND	Date	Result	Original
GWA-7/MW-7	12	12 (100%)	7/30/2002 ~	ND<0.01	ND<0.02
			9/24/2002	ND<0.01	ND<0.02
			10/21/2002	ND<0.01	ND<0.02
			12/3/2002	ND<0.02	ND<0.04
			6/24/2003	ND<0.01	ND<0.02
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004 ~	ND<0.01	ND<0.02
			6/14/2005	ND<0.01	ND<0.02
			12/6/2005 ~	ND<0.01	ND<0.02
			6/5/2006 ~	ND<0.01	ND<0.02
			12/4/2006 ~	ND<0.01	ND<0.02
GWB-6/MW-6	12	12 (100%)	7/30/2002	ND<0.01	ND<0.02
			9/24/2002	ND<0.01	ND<0.02
			10/21/2002	ND<0.01	ND<0.02
			12/3/2002	ND<0.02	ND<0.04
			6/24/2003	ND<0.01	ND<0.02
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004	ND<0.01	ND<0.02
			6/13/2005	ND<0.01	ND<0.02
			12/5/2005	ND<0.01	ND<0.02
			6/5/2006	ND<0.01	ND<0.02
			12/5/2006	ND<0.01	ND<0.02
GWC-13/MW-1312		12 (100%)	7/30/2002	ND<0.01	ND<0.02

			9/24/2002	ND<0.01	ND<0.02
			10/21/2002	ND<0.01	ND<0.02
			12/3/2002	ND<0.02	ND<0.04
			6/24/2003 ~	ND<0.01	ND<0.02
			12/17/2003 ~	ND<0.01	ND<0.02
			6/15/2004 ~	ND<0.01	ND<0.02
			12/28/2004	ND<0.01	ND<0.02
			6/13/2005 ~	ND<0.01	ND<0.02
			12/6/2005	ND<0.01	ND<0.02
			6/5/2006	ND<0.01	ND<0.02
			12/4/2006	ND<0.01	ND<0.02
GWC-14/MW-146	5 (83.3333%)	7/30/2002	ND<0.01	ND<0.02	
		9/24/2002 ~	ND<0.01	ND<0.02	
		10/21/2002	ND<0.01	ND<0.02	
		12/3/2002	ND<0.02	ND<0.04	
		6/24/2003	ND<0.01	ND<0.02	
		12/17/2003	0.034	0.034	
GWC-5/MW-5 12	12 (100%)	7/30/2002	ND<0.01	ND<0.02	
		9/24/2002	ND<0.01	ND<0.02	
		10/21/2002	ND<0.01	ND<0.02	
		12/3/2002	ND<0.02	ND<0.04	
		6/24/2003	ND<0.01	ND<0.02	
		12/17/2003	ND<0.01	ND<0.02	
		6/15/2004	ND<0.01	ND<0.02	
		12/28/2004	ND<0.01	ND<0.02	
		6/13/2005	ND<0.01	ND<0.02	
		12/6/2005	ND<0.01	ND<0.02	
		6/5/2006	ND<0.01	ND<0.02	
		12/4/2006	ND<0.01	ND<0.02	
GWC-17/MW-174	4 (100%)	6/15/2005	ND<0.01	ND<0.02	
		12/6/2005	ND<0.01	ND<0.02	
		6/5/2006	ND<0.01	ND<0.02	
		12/5/2006	ND<0.01	ND<0.02	
GWC-18/MW-181	1 (100%)	6/15/2005	ND<0.01	ND<0.02	
GWB-16/MW-16.1	1 (100%)	12/5/2006	ND<0.01	ND<0.02	

There is 1 unused well

Well	Samples	ND	Date	Result	Original
EQ-Blank	8	8 (100%)	6/24/2003	ND<0.01	ND<0.02
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004 ~	ND<0.01	ND<0.02
			6/15/2005 ~	ND<0.01	ND<0.02
			12/6/2005	ND<0.01	ND<0.02
			6/6/2006	ND<0.01	ND<0.02
			12/5/2006	ND<0.01	ND<0.02

Shapiro-Francia Test of Normality

Parameter: Nickel

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Sample Size = 72

i	x(i)	m(i)	sum(m^2)	sum(mx)
0	0	0	0	0
1	0.01	-2.22621	4.956	-0.0222621
2	0.01	-1.92684	8.6687	-0.0415304
3	0.01	-1.7392	11.6935	-0.0589224
4	0.01	-1.60725	14.2768	-0.0749949
5	0.01	-1.49085	16.4994	-0.0899035
6	0.01	-1.39175	18.4364	-0.103821
7	0.01	-1.31058	20.154	-0.116927
8	0.01	-1.23187	21.6715	-0.129245
9	0.01	-1.16012	23.0173	-0.140847
10	0.01	-1.09847	24.224	-0.151831
11	0.01	-1.03643	25.2982	-0.162196
12	0.01	-0.97815	26.255	-0.171977
13	0.01	-0.923014	27.1069	-0.181207
14	0.01	-0.874218	27.8712	-0.189949
15	0.01	-0.823893	28.55	-0.198188
16	0.01	-0.775574	29.1515	-0.205944
17	0.01	-0.732275	29.6877	-0.213267
18	0.01	-0.687131	30.1599	-0.220138
19	0.01	-0.643345	30.5738	-0.226572
20	0.01	-0.603765	30.9383	-0.232609
21	0.01	-0.56217	31.2543	-0.238231
22	0.01	-0.521527	31.5263	-0.243446
23	0.01	-0.481728	31.7584	-0.248263
24	0.01	-0.445443	31.9568	-0.252718
25	0.01	-0.40701	32.1224	-0.256788
26	0.01	-0.369171	32.2587	-0.26048
27	0.01	-0.334503	32.3706	-0.263825
28	0.01	-0.297612	32.4592	-0.266801
29	0.01	-0.26112	32.5274	-0.269412
30	0.01	-0.227545	32.5792	-0.271688
31	0.01	-0.191671	32.6159	-0.273604
32	0.01	-0.156042	32.6402	-0.275165
33	0.01	-0.12061	32.6548	-0.276371
34	0.01	-0.0878447	32.6625	-0.277249
35	0.01	-0.0526632	32.6653	-0.277776
36	0.01	-0.0175476	32.6656	-0.277951
37	0.01	0.0175476	32.6659	-0.277776
38	0.01	0.0526632	32.6687	-0.277249
39	0.01	0.0878447	32.6764	-0.276371
40	0.01	0.12061	32.6909	-0.275165
41	0.01	0.156042	32.7153	-0.273604
42	0.01	0.191671	32.752	-0.271688
43	0.01	0.227545	32.8038	-0.269412
44	0.01	0.26112	32.872	-0.266801
45	0.01	0.297612	32.9606	-0.263825
46	0.01	0.334503	33.0724	-0.26048

47	0.01	0.369171	33.2087	-0.256788
48	0.01	0.40701	33.3744	-0.252718
49	0.01	0.445443	33.5728	-0.248263
50	0.01	0.481728	33.8049	-0.243446
51	0.01	0.521527	34.0769	-0.238231
52	0.01	0.56217	34.3929	-0.232609
53	0.01	0.603765	34.7574	-0.226572
54	0.01	0.643345	35.1713	-0.220138
55	0.01	0.687131	35.6435	-0.213267
56	0.01	0.732275	36.1797	-0.205944
57	0.01	0.775574	36.7812	-0.198188
58	0.01	0.823893	37.46	-0.189949
59	0.01	0.874218	38.2243	-0.181207
60	0.01	0.923014	39.0762	-0.171977
61	0.01	0.97815	40.033	-0.162196
62	0.01	1.03643	41.1072	-0.151831
63	0.01	1.09847	42.3138	-0.140847
64	0.01	1.16012	43.6597	-0.129245
65	0.02	1.23187	45.1772	-0.104608
66	0.02	1.31058	46.8948	-0.0783965
67	0.02	1.39175	48.8318	-0.0505616
68	0.02	1.49085	51.0544	-0.0207445
69	0.02	1.60725	53.6377	0.0114005
70	0.02	1.7392	56.6625	0.0461845
71	0.034	1.92684	60.3752	0.111697

Sample Standard Deviation = 0.0099633

Numerator = 0.0124762

Denominator = 0.425523 = 71 60.3752

W Statistic = 0.0293197

5% Critical value of 0.968 exceeds 0.0293197

Evidence of non-normality at 95% level of significance

1% Critical value of 0.956 exceeds 0.0293197

Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: Nickel

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Kruskal Wallis Ranks

Background Wells

Well ID	Date	Result	Rank
GWA-15/MW-157	7/30/2002	ND<0.01	35.5
	9/24/2002	ND<0.01	35.5
	10/21/2002 ~	ND<0.01	35.5
	12/3/2002	ND<0.02	35.5
	6/24/2003	ND<0.01	35.5
	12/17/2003	ND<0.01	35.5
	6/15/2004	ND<0.01	35.5
	12/28/2004	ND<0.01	35.5
	6/14/2005	ND<0.01	35.5
	12/5/2005	ND<0.01	35.5
	6/5/2006	ND<0.01	35.5
	12/4/2006	0.089	72

Rank Sum = 462.5

Rank Mean = 38.5417

Background Rank Sum = 462.5

Background Rank Mean = 38.5417

Compliance Wells

Well ID	Date	Result	Rank
GWA-7/MW-7	7/30/2002 ~	ND<0.01	35.5
	9/24/2002	ND<0.01	35.5
	10/21/2002	ND<0.01	35.5
	12/3/2002	ND<0.02	35.5
	6/24/2003	ND<0.01	35.5
	12/17/2003	ND<0.01	35.5
	6/15/2004	ND<0.01	35.5
	12/28/2004 ~	ND<0.01	35.5
	6/14/2005	ND<0.01	35.5
	12/6/2005 ~	ND<0.01	35.5
	6/5/2006 ~	ND<0.01	35.5
	12/4/2006 ~	ND<0.01	35.5

Rank Sum = 426

Rank Mean = 35.5

GWB-6/MW-6	7/30/2002	ND<0.01	35.5
	9/24/2002	ND<0.01	35.5
	10/21/2002	ND<0.01	35.5
	12/3/2002	ND<0.02	35.5
	6/24/2003	ND<0.01	35.5
	12/17/2003	ND<0.01	35.5
	6/15/2004	ND<0.01	35.5
	12/28/2004	ND<0.01	35.5
	6/13/2005	ND<0.01	35.5

12/5/2005	ND<0.01	35.5
6/5/2006	ND<0.01	35.5
12/5/2006	ND<0.01	35.5

Rank Sum = 426
Rank Mean = 35.5

GWC-13/MW-137/30/2002	ND<0.01	35.5
9/24/2002	ND<0.01	35.5
10/21/2002	ND<0.01	35.5
12/3/2002	ND<0.02	35.5
6/24/2003 ~	ND<0.01	35.5
12/17/2003 ~	ND<0.01	35.5
6/15/2004 ~	ND<0.01	35.5
12/28/2004	ND<0.01	35.5
6/13/2005 ~	ND<0.01	35.5
12/6/2005	ND<0.01	35.5
6/5/2006	ND<0.01	35.5
12/4/2006	ND<0.01	35.5

Rank Sum = 426
Rank Mean = 35.5

GWC-14/MW-147/30/2002	ND<0.01	35.5
9/24/2002 ~	ND<0.01	35.5
10/21/2002	ND<0.01	35.5
12/3/2002	ND<0.02	35.5
6/24/2003	ND<0.01	35.5
12/17/2003	0.034	71

Rank Sum = 248.5
Rank Mean = 41.4167

GWC-5/MW-5 7/30/2002	ND<0.01	35.5
9/24/2002	ND<0.01	35.5
10/21/2002	ND<0.01	35.5
12/3/2002	ND<0.02	35.5
6/24/2003	ND<0.01	35.5
12/17/2003	ND<0.01	35.5
6/15/2004	ND<0.01	35.5
12/28/2004	ND<0.01	35.5
6/13/2005	ND<0.01	35.5
12/6/2005	ND<0.01	35.5
6/5/2006	ND<0.01	35.5
12/4/2006	ND<0.01	35.5

Rank Sum = 426
Rank Mean = 35.5

GWC-17/MW-176/15/2005	ND<0.01	35.5
12/6/2005	ND<0.01	35.5
6/5/2006	ND<0.01	35.5
12/5/2006	ND<0.01	35.5

Rank Sum = 142
Rank Mean = 35.5

GWC-18/MW-186/15/2005	ND<0.01	35.5
-----------------------	---------	------

Rank Sum = 35.5
Rank Mean = 35.5

GWB-16/MW-16 12/5/2006	ND<0.01	35.5
------------------------	---------	------

Rank Sum = 35.5
Rank Mean = 35.5

Calculation Results:

Kruskal-Wallis H Statistic = 0.568636

Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 7.01585

95% Confidence comparison value is 15.5073 at 8 degrees of freedom

0.568636 < 15.5073 indicating no significant group difference at 5% significance level

7.01585 < 15.5073 indicating no significant group difference at 5% significance level when adjusted for ties

Concentrations (mg/L)

Parameter: Zinc

Original Data (Not Transformed)
 Non-Detects Replaced with 1/2 DL
 Total Samples: 72
 Total Non-Detect: 46
 Percent Non-Detects: 63.8889%
 Total Background Samples: 12
 There is 1 background well

Well	Samples	ND	Date	Result	Original
GWA-15/MW-1512	8 (66.6667%)		7/30/2002	ND<0.01	ND<0.02
			9/24/2002	ND<0.01	ND<0.02
			10/21/2002 ~	ND<0.01	ND<0.02
			12/3/2002	ND<0.01	ND<0.02
			6/24/2003	ND<0.01	ND<0.02
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004	ND<0.01	ND<0.02
			6/14/2005	0.029	0.029
			12/5/2005	0.042	0.042
			6/5/2006	0.063	0.063
			12/4/2006	0.316	0.316

There are 8 compliance wells

Well	Samples	ND	Date	Result	Original
GWA-7/MW-7	12	8 (66.6667%)	7/30/2002 ~	ND<0.01	ND<0.02
			9/24/2002	ND<0.01	ND<0.02
			10/21/2002	ND<0.01	ND<0.02
			12/3/2002	ND<0.01	ND<0.02
			6/24/2003	0.034	0.034
			12/17/2003	0.023	0.023
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004 ~	ND<0.01	ND<0.02
			6/14/2005	ND<0.01	ND<0.02
			12/6/2005 ~	0.1425	0.1425
			6/5/2006 ~	0.375	0.375
			12/4/2006 ~	ND<0.01	ND<0.02
GWB-6/MW-6	12	9 (75%)	7/30/2002	ND<0.01	ND<0.02
			9/24/2002	ND<0.01	ND<0.02
			10/21/2002	ND<0.01	ND<0.02
			12/3/2002	ND<0.01	ND<0.02
			6/24/2003	ND<0.01	ND<0.02
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004	ND<0.01	ND<0.02
			6/13/2005	ND<0.01	ND<0.02
			12/5/2005	0.02	0.02
			6/5/2006	0.083	0.083
			12/5/2006	0.028	0.028
GWC-13/MW-1312	4 (33.3333%)		7/30/2002	ND<0.01	ND<0.02

			9/24/2002	0.023	0.023
			10/21/2002	0.027	0.027
			12/3/2002	0.027	0.027
			6/24/2003 ~	ND<0.01	ND<0.02
			12/17/2003 ~	ND<0.01	ND<0.02
			6/15/2004 ~	ND<0.01	ND<0.02
			12/28/2004	0.044	0.044
			6/13/2005 ~	0.02	0.02
			12/6/2005	0.194	0.194
			6/5/2006	0.213	0.213
			12/4/2006	0.055	0.055
GWC-14/MW-146	5 (83.3333%)	7/30/2002	ND<0.01	ND<0.02	
		9/24/2002 ~	ND<0.01	ND<0.02	
		10/21/2002	ND<0.01	ND<0.02	
		12/3/2002	ND<0.01	ND<0.02	
		6/24/2003	ND<0.01	ND<0.02	
		12/17/2003	0.127	0.127	
GWC-5/MW-5 12	8 (66.6667%)	7/30/2002	ND<0.01	ND<0.02	
		9/24/2002	ND<0.01	ND<0.02	
		10/21/2002	ND<0.01	ND<0.02	
		12/3/2002	ND<0.01	ND<0.02	
		6/24/2003	ND<0.01	ND<0.02	
		12/17/2003	0.032	0.032	
		6/15/2004	ND<0.01	ND<0.02	
		12/28/2004	ND<0.01	ND<0.02	
		6/13/2005	ND<0.01	ND<0.02	
		12/6/2005	0.055	0.055	
		6/5/2006	0.1	0.1	
		12/4/2006	0.062	0.062	
GWC-17/MW-174	2 (50%)	6/15/2005	ND<0.01	ND<0.02	
		12/6/2005	0.096	0.096	
		6/5/2006	0.077	0.077	
		12/5/2006	ND<0.01	ND<0.02	
GWC-18/MW-181	1 (100%)	6/15/2005	ND<0.01	ND<0.02	
GWB-16/MW-161.	1 (100%)	12/5/2006	ND<0.01	ND<0.02	

There is 1 unused well

Well	Samples	ND	Date	Result	Original
EQ-Blank	8	8 (100%)	6/24/2003	ND<0.01	ND<0.02
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004 ~	ND<0.01	ND<0.02
			6/15/2005 ~	ND<0.01	ND<0.02
			12/6/2005	ND<0.01	ND<0.02
			6/6/2006	ND<0.01	ND<0.02
			12/5/2006	ND<0.01	ND<0.02

Shapiro-Francia Test of Normality

Parameter: Zinc

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Sample Size = 72

i	x(i)	m(i)	sum(m^2)	sum(mx)
0	0	0	0	0
1	0.01	-2.22621	4.956	-0.0222621
2	0.01	-1.92684	8.6687	-0.0415304
3	0.01	-1.7392	11.6935	-0.0589224
4	0.01	-1.60725	14.2768	-0.0749949
5	0.01	-1.49085	16.4994	-0.0899035
6	0.01	-1.39175	18.4364	-0.103821
7	0.01	-1.31058	20.154	-0.116927
8	0.01	-1.23187	21.6715	-0.129245
9	0.01	-1.16012	23.0173	-0.140847
10	0.01	-1.09847	24.224	-0.151831
11	0.01	-1.03643	25.2982	-0.162196
12	0.01	-0.97815	26.255	-0.171977
13	0.01	-0.923014	27.1069	-0.181207
14	0.01	-0.874218	27.8712	-0.189949
15	0.01	-0.823893	28.55	-0.198188
16	0.01	-0.775574	29.1515	-0.205944
17	0.01	-0.732275	29.6877	-0.213267
18	0.01	-0.687131	30.1599	-0.220138
19	0.01	-0.643345	30.5738	-0.226572
20	0.01	-0.603765	30.9383	-0.232609
21	0.01	-0.56217	31.2543	-0.238231
22	0.01	-0.521527	31.5263	-0.243446
23	0.01	-0.481728	31.7584	-0.248263
24	0.01	-0.445443	31.9568	-0.252718
25	0.01	-0.40701	32.1224	-0.256788
26	0.01	-0.369171	32.2587	-0.26048
27	0.01	-0.334503	32.3706	-0.263825
28	0.01	-0.297612	32.4592	-0.266801
29	0.01	-0.26112	32.5274	-0.269412
30	0.01	-0.227545	32.5792	-0.271688
31	0.01	-0.191671	32.6159	-0.273604
32	0.01	-0.156042	32.6402	-0.275165
33	0.01	-0.12061	32.6548	-0.276371
34	0.01	-0.0878447	32.6625	-0.277249
35	0.01	-0.0526632	32.6653	-0.277776
36	0.01	-0.0175476	32.6656	-0.277951
37	0.01	0.0175476	32.6659	-0.277776
38	0.01	0.0526632	32.6687	-0.277249
39	0.01	0.0878447	32.6764	-0.276371
40	0.01	0.12061	32.6909	-0.275165
41	0.01	0.156042	32.7153	-0.273604
42	0.01	0.191671	32.752	-0.271688
43	0.01	0.227545	32.8038	-0.269412
44	0.01	0.26112	32.872	-0.266801
45	0.01	0.297612	32.9606	-0.263825
46	0.01	0.334503	33.0724	-0.26048

47	0.02	0.369171	33.2087	-0.253096
48	0.02	0.40701	33.3744	-0.244956
49	0.023	0.445443	33.5728	-0.234711
50	0.023	0.481728	33.8049	-0.223631
51	0.027	0.521527	34.0769	-0.20955
52	0.027	0.56217	34.3929	-0.194371
53	0.028	0.603765	34.7574	-0.177466
54	0.029	0.643345	35.1713	-0.158809
55	0.032	0.687131	35.6435	-0.136821
56	0.034	0.732275	36.1797	-0.111923
57	0.042	0.775574	36.7812	-0.0793493
58	0.044	0.823893	37.46	-0.043098
59	0.055	0.874218	38.2243	0.00498398
60	0.055	0.923014	39.0762	0.0557498
61	0.062	0.97815	40.033	0.116395
62	0.063	1.03643	41.1072	0.18169
63	0.077	1.09847	42.3138	0.266273
64	0.083	1.16012	43.6597	0.362562
65	0.096	1.23187	45.1772	0.480821
66	0.1	1.31058	46.8948	0.611879
67	0.127	1.39175	48.8318	0.788631
68	0.1425	1.49085	51.0544	1.00108
69	0.194	1.60725	53.6377	1.31288
70	0.213	1.7392	56.6625	1.68333
71	0.316	1.92684	60.3752	2.29221

Sample Standard Deviation = 0.0665935

Numerator = 5.25425

Denominator = 19.0099 = 71 60.3752

W Statistic = 0.276395

5% Critical value of 0.968 exceeds 0.276395

Evidence of non-normality at 95% level of significance

1% Critical value of 0.956 exceeds 0.276395

Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: Zinc

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Kruskal Wallis Ranks

Background Wells

Well ID	Date	Result	Rank
GWA-15/MW-157/30/2002	9/24/2002	ND<0.01	23.5
	10/21/2002 ~	ND<0.01	23.5
	12/3/2002	ND<0.01	23.5
	6/24/2003	ND<0.01	23.5
	12/17/2003	ND<0.01	23.5
	6/15/2004	ND<0.01	23.5
	12/28/2004	ND<0.01	23.5
	6/14/2005	0.029	54
	12/5/2005	0.042	57
	6/5/2006	0.063	62
	12/4/2006	0.316	71

Rank Sum = 432

Rank Mean = 36

Background Rank Sum = 432

Background Rank Mean = 36

Compliance Wells

Well ID	Date	Result	Rank
GWA-7/MW-7	7/30/2002 ~	ND<0.01	23.5
	9/24/2002	ND<0.01	23.5
	10/21/2002	ND<0.01	23.5
	12/3/2002	ND<0.01	23.5
	6/24/2003	0.034	56
	12/17/2003	0.023	49
	6/15/2004	ND<0.01	23.5
	12/28/2004 ~	ND<0.01	23.5
	6/14/2005	ND<0.01	23.5
	12/6/2005 ~	0.1425	68
	6/5/2006 ~	0.375	72
	12/4/2006 ~	ND<0.01	23.5

Rank Sum = 433

Rank Mean = 36.0833

GWB-6/MW-6	7/30/2002	ND<0.01	23.5
	9/24/2002	ND<0.01	23.5
	10/21/2002	ND<0.01	23.5
	12/3/2002	ND<0.01	23.5
	6/24/2003	ND<0.01	23.5
	12/17/2003	ND<0.01	23.5
	6/15/2004	ND<0.01	23.5
	12/28/2004	ND<0.01	23.5
	6/13/2005	ND<0.01	23.5

12/5/2005	0.02	47
6/5/2006	0.083	64
12/5/2006	0.028	53

Rank Sum = 375.5
Rank Mean = 31.2917

GWC-13/MW-137/30/2002	ND<0.01	23.5
9/24/2002	0.023	50
10/21/2002	0.027	51
12/3/2002	0.027	52
6/24/2003 ~	ND<0.01	23.5
12/17/2003 ~	ND<0.01	23.5
6/15/2004 ~	ND<0.01	23.5
12/28/2004	0.044	58
6/13/2005 ~	0.02	48
12/6/2005	0.194	69
6/5/2006	0.213	70
12/4/2006	0.055	59

Rank Sum = 551
Rank Mean = 45.9167

GWC-14/MW-147/30/2002	ND<0.01	23.5
9/24/2002 ~	ND<0.01	23.5
10/21/2002	ND<0.01	23.5
12/3/2002	ND<0.01	23.5
6/24/2003	ND<0.01	23.5
12/17/2003	0.127	67

Rank Sum = 184.5
Rank Mean = 30.75

GWC-5/MW-5 7/30/2002	ND<0.01	23.5
9/24/2002	ND<0.01	23.5
10/21/2002	ND<0.01	23.5
12/3/2002	ND<0.01	23.5
6/24/2003	ND<0.01	23.5
12/17/2003	0.032	55
6/15/2004	ND<0.01	23.5
12/28/2004	ND<0.01	23.5
6/13/2005	ND<0.01	23.5
12/6/2005	0.055	60
6/5/2006	0.1	66
12/4/2006	0.062	61

Rank Sum = 430
Rank Mean = 35.8333

GWC-17/MW-176/15/2005	ND<0.01	23.5
12/6/2005	0.096	65
6/5/2006	0.077	63
12/5/2006	ND<0.01	23.5

Rank Sum = 175
Rank Mean = 43.75

GWC-18/MW-186/15/2005	ND<0.01	23.5
-----------------------	---------	------

Rank Sum = 23.5
Rank Mean = 23.5

GWB-16/MW-16 12/5/2006	ND<0.01	23.5
------------------------	---------	------

Rank Sum = 23.5
Rank Mean = 23.5

Calculation Results:

Kruskal-Wallis H Statistic = 4.90102

Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 6.62934

95% Confidence comparison value is 15.5073 at 8 degrees of freedom

4.90102 < 15.5073 indicating no significant group difference at 5% significance level

6.62934 < 15.5073 indicating no significant group difference at 5% significance level when adjusted for ties

Concentrations (mg/L)

Parameter: Mercury

Original Data (Not Transformed)
 Non-Detects Replaced with 1/2 DL
 Total Samples: 45
 Total Non-Detect: 38
 Percent Non-Detects: 84.4444%
 Total Background Samples: 8
 There is 1 background well

Well	Samples	ND	Date	Result	Original
GWA-15/MW-158	7 (87.5%)		6/24/2003	ND<0.00025	ND<0.0005
			12/17/2003	ND<0.00025	ND<0.0005
			6/15/2004	ND<0.00025	ND<0.0005
			12/28/2004	0.0004	0.0004
			6/14/2005	ND<0.00025	ND<0.0005
			12/5/2005	ND<0.00025	ND<0.0005
			6/5/2006	ND<0.00025	ND<0.0005
			12/4/2006	ND<0.00025	ND<0.0005

There are 8 compliance wells

Well	Samples	ND	Date	Result	Original
GWC-13/MW-138	7 (87.5%)		6/24/2003 ~	0.0005	0.0005
			12/17/2003 ~	ND<0.00025	ND<0.0005
			6/15/2004 ~	ND<0.00025	ND<0.0005
			12/28/2004	ND<0.00025	ND<0.0005
			6/13/2005 ~	ND<0.00025	ND<0.0005
			12/6/2005	ND<0.00025	ND<0.0005
			6/5/2006	ND<0.00025	ND<0.0005
			12/4/2006	ND<0.00025	ND<0.0005
GWC-14/MW-142	0 (0%)		6/24/2003	0.0072	0.0072
			12/17/2003	0.01	0.01
GWA-7/MW-7	7 (57.1429%)		12/17/2003	ND<0.00025	ND<0.0005
			6/15/2004	0.0006	0.0006
			12/28/2004 ~	0.0013	0.0013
			6/14/2005	ND<0.00025	ND<0.0005
			12/6/2005 ~	ND<0.00025	ND<0.0005
			6/5/2006 ~	ND<0.00025	ND<0.0005
			12/4/2006 ~	0.0012	0.0012
GWB-6/MW-6	7 (100%)		12/17/2003	ND<0.00025	ND<0.0005
			6/15/2004	ND<0.00025	ND<0.0005
			12/28/2004	ND<0.00025	ND<0.0005
			6/13/2005	ND<0.00025	ND<0.0005
			12/5/2005	ND<0.00025	ND<0.0005
			6/5/2006	ND<0.00025	ND<0.0005
			12/5/2006	ND<0.00025	ND<0.0005
GWC-5/MW-5	7 (100%)		12/17/2003	ND<0.00025	ND<0.0005
			6/15/2004	ND<0.00025	ND<0.0005
			12/28/2004	ND<0.00025	ND<0.0005

		6/13/2005	ND<0.00025	ND<0.0005
		12/6/2005	ND<0.00025	ND<0.0005
		6/5/2006	ND<0.00025	ND<0.0005
		12/4/2006	ND<0.00025	ND<0.0005
GWC-17/MW-174	4 (100%)	6/15/2005	ND<0.00025	ND<0.0005
		12/6/2005	ND<0.00025	ND<0.0005
		6/5/2006	ND<0.00025	ND<0.0005
		12/5/2006	ND<0.00025	ND<0.0005
GWC-18/MW-181	1 (100%)	6/15/2005	ND<0.00025	ND<0.0005
GWB-16/MW-161	1 (100%)	12/5/2006	ND<0.00025	ND<0.0005

There is 1 unused well

Well	Samples	ND	Date	Result	Original
EQ-Blank	8	8 (100%)	6/24/2003	ND<0.00025	ND<0.0005
			12/17/2003	ND<0.00025	ND<0.0005
			6/15/2004	ND<0.00025	ND<0.0005
			12/28/2004 ~	ND<0.00025	ND<0.0005
			6/15/2005 ~	ND<0.00025	ND<0.0005
			12/6/2005	ND<0.00025	ND<0.0005
			6/6/2006	ND<0.00025	ND<0.0005
			12/5/2006	ND<0.00025	ND<0.0005

Shapiro-Wilks Test of Normality

Parameter: Mercury

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

K = 22; Samples = 45

i	x(i)	x(n-i+1)	x(n-1+1)-x(i)a(n-i+1)		b(i)
1	0.00025	0.01	0.00975	0.385	0.00375375
2	0.00025	0.0072	0.00695	0.2651	0.00184244
3	0.00025	0.0013	0.00105	0.2313	0.000242865
4	0.00025	0.0012	0.00095	0.2065	0.000196175
5	0.00025	0.0006	0.00035	0.1865	6.5275e-005
6	0.00025	0.0005	0.00025	0.1695	4.2375e-005
7	0.00025	0.0004	0.00015	0.1545	2.3175e-005
8	0.00025	0.00025	0	0.141	0
9	0.00025	0.00025	0	0.1286	0
10	0.00025	0.00025	0	0.1173	0
11	0.00025	0.00025	0	0.1062	0
12	0.00025	0.00025	0	0.0959	0
13	0.00025	0.00025	0	0.086	0
14	0.00025	0.00025	0	0.0775	0
15	0.00025	0.00025	0	0.0673	0
16	0.00025	0.00025	0	0.0584	0
17	0.00025	0.00025	0	0.0497	0
18	0.00025	0.00025	0	0.0412	0
19	0.00025	0.00025	0	0.0328	0
20	0.00025	0.00025	0	0.0245	0
21	0.00025	0.00025	0	0.0163	0
22	0.00025	0.00025	0	0.0081	0
23	0.00025	0.00025	0		
24	0.00025	0.00025	0		
25	0.00025	0.00025	0		
26	0.00025	0.00025	0		
27	0.00025	0.00025	0		
28	0.00025	0.00025	0		
29	0.00025	0.00025	0		
30	0.00025	0.00025	0		
31	0.00025	0.00025	0		
32	0.00025	0.00025	0		
33	0.00025	0.00025	0		
34	0.00025	0.00025	0		
35	0.00025	0.00025	0		
36	0.00025	0.00025	0		
37	0.00025	0.00025	0		
38	0.00025	0.00025	0		
39	0.0004	0.00025	-0.00015		
40	0.0005	0.00025	-0.00025		
41	0.0006	0.00025	-0.00035		
42	0.0012	0.00025	-0.00095		
43	0.0013	0.00025	-0.00105		
44	0.0072	0.00025	-0.00695		
45	0.01	0.00025	-0.00975		

Sum of b values = 0.00616606

Sample Standard Deviation = 0.00176565

W Statistic = 0.277175

5% Critical value of 0.945 exceeds 0.277175

Evidence of non-normality at 95% level of significance

1% Critical value of 0.926 exceeds 0.277175

Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: Mercury

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Kruskal Wallis Ranks

Background Wells

Well ID	Date	Result	Rank
GWA-15/MW-156	24/2003	ND<0.00025	19.5
	12/17/2003	ND<0.00025	19.5
	6/15/2004	ND<0.00025	19.5
	12/28/2004	0.0004	39
	6/14/2005	ND<0.00025	19.5
	12/5/2005	ND<0.00025	19.5
	6/5/2006	ND<0.00025	19.5
	12/4/2006	ND<0.00025	19.5

Rank Sum = 175.5

Rank Mean = 21.9375

Background Rank Sum = 175.5

Background Rank Mean = 21.9375

Compliance Wells

Well ID	Date	Result	Rank
GWC-13/MW-136	24/2003 ~	0.0005	40
	12/17/2003 ~	ND<0.00025	19.5
	6/15/2004 ~	ND<0.00025	19.5
	12/28/2004	ND<0.00025	19.5
	6/13/2005 ~	ND<0.00025	19.5
	12/6/2005	ND<0.00025	19.5
	6/5/2006	ND<0.00025	19.5
	12/4/2006	ND<0.00025	19.5

Rank Sum = 176.5

Rank Mean = 22.0625

GWC-14/MW-146	24/2003	0.0072	44
	12/17/2003	0.01	45

Rank Sum = 89

Rank Mean = 44.5

GWA-7/MW-7	12/17/2003	ND<0.00025	19.5
	6/15/2004	0.0006	41
	12/28/2004 ~	0.0013	43
	6/14/2005	ND<0.00025	19.5
	12/6/2005 ~	ND<0.00025	19.5
	6/5/2006 ~	ND<0.00025	19.5
	12/4/2006 ~	0.0012	42

Rank Sum = 204

Rank Mean = 29.1429

GWB-6/MW-6	12/17/2003	ND<0.00025	19.5
	6/15/2004	ND<0.00025	19.5

12/28/2004	ND<0.00025	19.5
6/13/2005	ND<0.00025	19.5
12/5/2005	ND<0.00025	19.5
6/5/2006	ND<0.00025	19.5
12/5/2006	ND<0.00025	19.5

Rank Sum = 136.5

Rank Mean = 19.5

GWC-5/MW-5	12/17/2003	ND<0.00025	19.5
	6/15/2004	ND<0.00025	19.5
	12/28/2004	ND<0.00025	19.5
	6/13/2005	ND<0.00025	19.5
	12/6/2005	ND<0.00025	19.5
	6/5/2006	ND<0.00025	19.5
	12/4/2006	ND<0.00025	19.5

Rank Sum = 136.5

Rank Mean = 19.5

GWC-17/MW-17	6/15/2004	ND<0.00025	19.5
	12/6/2005	ND<0.00025	19.5
	6/5/2006	ND<0.00025	19.5
	12/5/2006	ND<0.00025	19.5

Rank Sum = 78

Rank Mean = 19.5

GWC-18/MW-18	6/15/2004	ND<0.00025	19.5
--------------	-----------	------------	------

Rank Sum = 19.5

Rank Mean = 19.5

GWB-16/MW-16	12/5/2006	ND<0.00025	19.5
--------------	-----------	------------	------

Rank Sum = 19.5

Rank Mean = 19.5

Calculation Results:

Kruskal-Wallis H Statistic = 8.40409

Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 21.118

95% Confidence comparison value is 15.5073 at 8 degrees of freedom

8.40409 < 15.5073 indicating no significant group difference at 5% significance level

21.118 > 15.5073 indicating a significant group difference at 5% significance level when adjusted for ties

Individual Well Comparisons at 1% Significance Level per Comparison

1% Z score is 2.32634

Mean background rank is 21.9375

Well	Mean Rank	Dif from Bkg	Critical Value
GWC-13/MW-13	22.0625	0.125	15.277
GWC-14/MW-14	24.5	22.5625	24.1551
GWA-7/MW-7	29.1429	7.20536	15.8132
GWB-6/MW-6	19.5	-2.4375	15.8132
GWC-5/MW-5	19.5	-2.4375	15.8132
GWC-17/MW-17	19.5	-2.4375	18.7104
GWC-18/MW-18	19.5	-2.4375	32.4074
GWB-16/MW-16	19.5	-2.4375	32.4074

Individual Well Comparisons at Groupwise 5% Significance Level (0.625% Significance Level per comparison)

0.625% Z score is 2.51213

Mean background rank is 21.9375

Well	Mean Rank	Dif from Bkg	Critical Value
GWC-13/MW-13	22.0625	0.125	16.4971
GWC-14/MW-14	22.5625	0.625	26.0842
GWA-7/MW-7	29.1429	7.20536	17.0761
GWB-6/MW-6	19.5	-2.4375	17.0761
GWC-5/MW-5	19.5	-2.4375	17.0761
GWC-17/MW-17	19.5	-2.4375	20.2047
GWC-18/MW-18	19.5	-2.4375	34.9956
GWB-16/MW-16	19.5	-2.4375	34.9956

Concentrations (µg/L)

Parameter: 1,1-Dichloroethane

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Samples: 72

Total Non-Detect: 55

Percent Non-Detects: 76.3889%

Total Background Samples: 12

There is 1 background well

Well	Samples	ND	Date	Result	Original
GWA-15/MW-1512	12 (100%)		7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002 ~	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5
			6/14/2005	ND<2.5	ND<5
			12/5/2005	ND<2.5	ND<5
			6/5/2006	ND<2.5	ND<5
			12/4/2006	ND<2.5	ND<5

There are 8 compliance wells

Well	Samples	ND	Date	Result	Original
GWA-7/MW-7	12	12 (100%)	7/30/2002 ~	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004 ~	ND<2.5	ND<5
			6/14/2005	ND<2.5	ND<5
			12/6/2005 ~	ND<2.5	ND<5
			6/5/2006 ~	ND<2.5	ND<5
			12/4/2006 ~	ND<2.5	ND<5
GWB-6/MW-6	12	12 (100%)	7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5
			6/13/2005	ND<2.5	ND<5
			12/5/2005	ND<2.5	ND<5
			6/5/2006	ND<2.5	ND<5
			12/5/2006	ND<2.5	ND<5
GWC-13/MW-1312		1 (8.33333%)	7/30/2002	ND<2.5	ND<5

			9/24/2002	6	6
			10/21/2002	6	6
			12/3/2002	7	7
			6/24/2003 ~	9	9
			12/17/2003 ~	20.5	20.5
			6/15/2004 ~	18	18
			12/28/2004	16	16
			6/13/2005 ~	15	15
			12/6/2005	18	18
			6/5/2006	15	15
			12/4/2006	20	20
GWC-14/MW-146	0 (0%)		7/30/2002	13	13
			9/24/2002 ~	21	21
			10/21/2002	17	17
			12/3/2002	16	16
			6/24/2003	10	10
			12/17/2003	10	10
GWC-5/MW-5 12	12 (100%)		7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5
			6/13/2005	ND<2.5	ND<5
			12/6/2005	ND<2.5	ND<5
			6/5/2006	ND<2.5	ND<5
			12/4/2006	ND<2.5	ND<5
GWC-17/MW-174	4 (100%)		6/15/2005	ND<2.5	ND<5
			12/6/2005	ND<2.5	ND<5
			6/5/2006	ND<2.5	ND<5
			12/5/2006	ND<2.5	ND<5
GWC-18/MW-181	1 (100%)		6/15/2005	ND<2.5	ND<5
GWB-16/MW-161	1 (100%)		12/5/2006	ND<2.5	ND<5

There are 2 unused wells

Well	Samples	ND	Date	Result	Original
EQ-Blank	8	8 (100%)	6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004 ~	ND<2.5	ND<5
			6/15/2005 ~	ND<2.5	ND<5
			12/6/2005	ND<2.5	ND<5
			6/6/2006	ND<2.5	ND<5
			12/5/2006	ND<2.5	ND<5
Trip Blank	4	4 (100%)	12/17/2003	ND<2.5	ND<5
			6/13/2005	ND<2.5	ND<5
			12/5/2005	ND<2.5	ND<5

12/4/2006

ND<2.5

ND<5

Shapiro-Francia Test of Normality

Parameter: 1,1-Dichloroethane

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Sample Size = 72

i	x(i)	m(i)	sum(m^2)	sum(mx)
0	0	0	0	0
1	2.5	-2.22621	4.956	-5.56552
2	2.5	-1.92684	8.6687	-10.3826
3	2.5	-1.7392	11.6935	-14.7306
4	2.5	-1.60725	14.2768	-18.7487
5	2.5	-1.49085	16.4994	-22.4759
6	2.5	-1.39175	18.4364	-25.9552
7	2.5	-1.31058	20.154	-29.2317
8	2.5	-1.23187	21.6715	-32.3113
9	2.5	-1.16012	23.0173	-35.2116
10	2.5	-1.09847	24.224	-37.9578
11	2.5	-1.03643	25.2982	-40.5489
12	2.5	-0.97815	26.255	-42.9943
13	2.5	-0.923014	27.1069	-45.3018
14	2.5	-0.874218	27.8712	-47.4874
15	2.5	-0.823893	28.55	-49.5471
16	2.5	-0.775574	29.1515	-51.486
17	2.5	-0.732275	29.6877	-53.3167
18	2.5	-0.687131	30.1599	-55.0345
19	2.5	-0.643345	30.5738	-56.6429
20	2.5	-0.603765	30.9383	-58.1523
21	2.5	-0.56217	31.2543	-59.5577
22	2.5	-0.521527	31.5263	-60.8615
23	2.5	-0.481728	31.7584	-62.0659
24	2.5	-0.445443	31.9568	-63.1795
25	2.5	-0.40701	32.1224	-64.197
26	2.5	-0.369171	32.2587	-65.1199
27	2.5	-0.334503	32.3706	-65.9562
28	2.5	-0.297612	32.4592	-66.7002
29	2.5	-0.26112	32.5274	-67.353
30	2.5	-0.227545	32.5792	-67.9219
31	2.5	-0.191671	32.6159	-68.4011
32	2.5	-0.156042	32.6402	-68.7912
33	2.5	-0.12061	32.6548	-69.0927
34	2.5	-0.0878447	32.6625	-69.3123
35	2.5	-0.0526632	32.6653	-69.444
36	2.5	-0.0175476	32.6656	-69.4878
37	2.5	0.0175476	32.6659	-69.444
38	2.5	0.0526632	32.6687	-69.3123
39	2.5	0.0878447	32.6764	-69.0927
40	2.5	0.12061	32.6909	-68.7912
41	2.5	0.156042	32.7153	-68.4011
42	2.5	0.191671	32.752	-67.9219
43	2.5	0.227545	32.8038	-67.353
44	2.5	0.26112	32.872	-66.7002
45	2.5	0.297612	32.9606	-65.9562
46	2.5	0.334503	33.0724	-65.1199

47	2.5	0.369171	33.2087	-64.197
48	2.5	0.40701	33.3744	-63.1795
49	2.5	0.445443	33.5728	-62.0659
50	2.5	0.481728	33.8049	-60.8615
51	2.5	0.521527	34.0769	-59.5577
52	2.5	0.56217	34.3929	-58.1523
53	2.5	0.603765	34.7574	-56.6429
54	2.5	0.643345	35.1713	-55.0345
55	2.5	0.687131	35.6435	-53.3167
56	6	0.732275	36.1797	-48.9231
57	6	0.775574	36.7812	-44.2696
58	7	0.823893	37.46	-38.5024
59	9	0.874218	38.2243	-30.6344
60	10	0.923014	39.0762	-21.4043
61	10	0.97815	40.033	-11.6228
62	13	1.03643	41.1072	1.85087
63	15	1.09847	42.3138	18.3279
64	15	1.16012	43.6597	35.7297
65	16	1.23187	45.1772	55.4396
66	16	1.31058	46.8948	76.4088
67	17	1.39175	48.8318	100.068
68	18	1.49085	51.0544	126.904
69	18	1.60725	53.6377	155.834
70	20	1.7392	56.6625	190.618
71	20.5	1.92684	60.3752	230.118

Sample Standard Deviation = 5.46677

Numerator = 52954.5

Denominator = 128109 = 71 60.3752

W Statistic = 0.413356

5% Critical value of 0.968 exceeds 0.413356

Evidence of non-normality at 95% level of significance

1% Critical value of 0.956 exceeds 0.413356

Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: 1,1-Dichloroethane

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Kruskal Wallis Ranks

Background Wells

Well ID	Date	Result	Rank
GWA-15/MW-157	7/30/2002	ND<2.5	28
	9/24/2002	ND<2.5	28
	10/21/2002 ~	ND<2.5	28
	12/3/2002	ND<2.5	28
	6/24/2003	ND<2.5	28
	12/17/2003	ND<2.5	28
	6/15/2004	ND<2.5	28
	12/28/2004	ND<2.5	28
	6/14/2005	ND<2.5	28
	12/5/2005	ND<2.5	28
	6/5/2006	ND<2.5	28
	12/4/2006	ND<2.5	28

Rank Sum = 336

Rank Mean = 28

Background Rank Sum = 336

Background Rank Mean = 28

Compliance Wells

Well ID	Date	Result	Rank
GWA-7/MW-7	7/30/2002 ~	ND<2.5	28
	9/24/2002	ND<2.5	28
	10/21/2002	ND<2.5	28
	12/3/2002	ND<2.5	28
	6/24/2003	ND<2.5	28
	12/17/2003	ND<2.5	28
	6/15/2004	ND<2.5	28
	12/28/2004 ~	ND<2.5	28
	6/14/2005	ND<2.5	28
	12/6/2005 ~	ND<2.5	28
	6/5/2006 ~	ND<2.5	28
	12/4/2006 ~	ND<2.5	28

Rank Sum = 336

Rank Mean = 28

GWB-6/MW-6	7/30/2002	ND<2.5	28
	9/24/2002	ND<2.5	28
	10/21/2002	ND<2.5	28
	12/3/2002	ND<2.5	28
	6/24/2003	ND<2.5	28
	12/17/2003	ND<2.5	28
	6/15/2004	ND<2.5	28
	12/28/2004	ND<2.5	28
	6/13/2005	ND<2.5	28

12/5/2005	ND<2.5	28
6/5/2006	ND<2.5	28
12/5/2006	ND<2.5	28

Rank Sum = 336

Rank Mean = 28

GWC-13/MW-137/30/2002	ND<2.5	28
9/24/2002	6	56
10/21/2002	6	57
12/3/2002	7	58
6/24/2003 ~	9	59
12/17/2003 ~	20.5	71
6/15/2004 ~	18	68
12/28/2004	16	65
6/13/2005 ~	15	63
12/6/2005	18	69
6/5/2006	15	64
12/4/2006	20	70

Rank Sum = 728

Rank Mean = 60.6667

GWC-14/MW-147/30/2002	13	62
9/24/2002 ~	21	72
10/21/2002	17	67
12/3/2002	16	66
6/24/2003	10	60
12/17/2003	10	61

Rank Sum = 388

Rank Mean = 64.6667

GWC-5/MW-5	7/30/2002	ND<2.5	28
	9/24/2002	ND<2.5	28
	10/21/2002	ND<2.5	28
	12/3/2002	ND<2.5	28
	6/24/2003	ND<2.5	28
	12/17/2003	ND<2.5	28
	6/15/2004	ND<2.5	28
	12/28/2004	ND<2.5	28
	6/13/2005	ND<2.5	28
	12/6/2005	ND<2.5	28
	6/5/2006	ND<2.5	28
	12/4/2006	ND<2.5	28

Rank Sum = 336

Rank Mean = 28

GWC-17/MW-176/15/2005	ND<2.5	28
12/6/2005	ND<2.5	28
6/5/2006	ND<2.5	28
12/5/2006	ND<2.5	28

Rank Sum = 112

Rank Mean = 28

GWC-18/MW-186/15/2005	ND<2.5	28
-----------------------	--------	----

Rank Sum = 28

Rank Mean = 28

GWB-16/MW-1612/5/2006	ND<2.5	28
-----------------------	--------	----

Rank Sum = 28
Rank Mean = 28

Calculation Results:

Kruskal-Wallis H Statistic = 35.7763

Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 64.5417

95% Confidence comparison value is 15.5073 at 8 degrees of freedom

35.7763 > 15.5073 indicating a significant group difference at 5% significance level

64.5417 > 15.5073 indicating a significant group difference at 5% significance level when adjusted for ties

Individual Well Comparisons at 1% Significance Level per Comparison

1% Z score is 2.32634

Mean background rank is 28

Well	Mean Rank	Dif from Bkg	Critical Value
GWA-7/MW-7	28	0	19.8763
GWB-6/MW-6	28	0	19.8763
GWC-13/MW-13	60.6667	32.6667	19.8763
GWC-14/MW-14	64.6667	36.6667	24.3434
GWC-5/MW-5	28	0	19.8763
GWC-17/MW-17	28	0	28.1093
GWC-18/MW-18	28	0	50.6748
GWB-16/MW-16	28	0	50.6748

Individual Well Comparisons at Groupwise 5% Significance Level (0.625% Significance Level per comparison)

0.625% Z score is 2.51213

Mean background rank is 28

Well	Mean Rank	Dif from Bkg	Critical Value
GWA-7/MW-7	28	0	21.4637
GWB-6/MW-6	28	0	21.4637
GWC-13/MW-13	60.6667	32.6667	21.4637
GWC-14/MW-14	64.6667	36.6667	26.2875
GWC-5/MW-5	28	0	21.4637
GWC-17/MW-17	28	0	30.3542
GWC-18/MW-18	28	0	54.7219
GWB-16/MW-16	28	0	54.7219

Concentrations (µg/L)

Parameter: cis-1,2-Dichloroethene

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Samples: 72

Total Non-Detect: 58

Percent Non-Detects: 80.5556%

Total Background Samples: 12

There is 1 background well

Well	Samples	ND	Date	Result	Original
GWA-15/MW-15 12		12 (100%)	7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002 ~	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5
			6/14/2005	ND<2.5	ND<5
			12/5/2005	ND<2.5	ND<5
			6/5/2006	ND<2.5	ND<5
			12/4/2006	ND<2.5	ND<5

There are 8 compliance wells

Well	Samples	ND	Date	Result	Original
GWA-7/MW-7 12	12	12 (100%)	7/30/2002 ~	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004 ~	ND<2.5	ND<5
			6/14/2005	ND<2.5	ND<5
			12/6/2005 ~	ND<2.5	ND<5
			6/5/2006 ~	ND<2.5	ND<5
			12/4/2006 ~	ND<2.5	ND<5
GWB-6/MW-6 12	12	12 (100%)	7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5
			6/13/2005	ND<2.5	ND<5
			12/5/2005	ND<2.5	ND<5
			6/5/2006	ND<2.5	ND<5
			12/5/2006	ND<2.5	ND<5
GWC-13/MW-13 12		4 (33.3333%)	7/30/2002	ND<2.5	ND<5

			9/24/2002	ND<2.5	ND<5
			10/21/2002	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003 ~	6	6
			12/17/2003 ~	14	14
			6/15/2004 ~	9.5	9.5
			12/28/2004	8	8
			6/13/2005 ~	8	8
			12/6/2005	9	9
			6/5/2006	8	8
			12/4/2006	10	10
GWC-14/MW-146	0 (0%)		7/30/2002	10	10
			9/24/2002 ~	18.5	18.5
			10/21/2002	16	16
			12/3/2002	19	19
			6/24/2003	10	10
			12/17/2003	17	17
GWC-5/MW-5	12	12 (100%)	7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5
			6/13/2005	ND<2.5	ND<5
			12/6/2005	ND<2.5	ND<5
			6/5/2006	ND<2.5	ND<5
			12/4/2006	ND<2.5	ND<5
GWC-17/MW-174		4 (100%)	6/15/2005	ND<2.5	ND<5
			12/6/2005	ND<2.5	ND<5
			6/5/2006	ND<2.5	ND<5
			12/5/2006	ND<2.5	ND<5
GWC-18/MW-181		1 (100%)	6/15/2005	ND<2.5	ND<5
GWB-16/MW-161		1 (100%)	12/5/2006	ND<2.5	ND<5

There are 2 unused wells

Well	Samples	ND	Date	Result	Original
EQ-Blank	8	8 (100%)	6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004 ~	ND<2.5	ND<5
			6/15/2005 ~	ND<2.5	ND<5
			12/6/2005	ND<2.5	ND<5
			6/6/2006	ND<2.5	ND<5
			12/5/2006	ND<2.5	ND<5
Trip Blank	4	4 (100%)	12/17/2003	ND<2.5	ND<5
			6/13/2005	ND<2.5	ND<5
			12/5/2005	ND<2.5	ND<5

12/4/2006

ND<2.5

ND<5

Shapiro-Francia Test of Normality

Parameter: cis-1,2-Dichloroethene

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Sample Size = 72

i	x(i)	m(i)	sum(m^2)	sum(mx)
0	0	0	0	0
1	2.5	-2.22621	4.956	-5.56552
2	2.5	-1.92684	8.6687	-10.3826
3	2.5	-1.7392	11.6935	-14.7306
4	2.5	-1.60725	14.2768	-18.7487
5	2.5	-1.49085	16.4994	-22.4759
6	2.5	-1.39175	18.4364	-25.9552
7	2.5	-1.31058	20.154	-29.2317
8	2.5	-1.23187	21.6715	-32.3113
9	2.5	-1.16012	23.0173	-35.2116
10	2.5	-1.09847	24.224	-37.9578
11	2.5	-1.03643	25.2982	-40.5489
12	2.5	-0.97815	26.255	-42.9943
13	2.5	-0.923014	27.1069	-45.3018
14	2.5	-0.874218	27.8712	-47.4874
15	2.5	-0.823893	28.55	-49.5471
16	2.5	-0.775574	29.1515	-51.486
17	2.5	-0.732275	29.6877	-53.3167
18	2.5	-0.687131	30.1599	-55.0345
19	2.5	-0.643345	30.5738	-56.6429
20	2.5	-0.603765	30.9383	-58.1523
21	2.5	-0.56217	31.2543	-59.5577
22	2.5	-0.521527	31.5263	-60.8615
23	2.5	-0.481728	31.7584	-62.0659
24	2.5	-0.445443	31.9568	-63.1795
25	2.5	-0.40701	32.1224	-64.197
26	2.5	-0.369171	32.2587	-65.1199
27	2.5	-0.334503	32.3706	-65.9562
28	2.5	-0.297612	32.4592	-66.7002
29	2.5	-0.26112	32.5274	-67.353
30	2.5	-0.227545	32.5792	-67.9219
31	2.5	-0.191671	32.6159	-68.4011
32	2.5	-0.156042	32.6402	-68.7912
33	2.5	-0.12061	32.6548	-69.0927
34	2.5	-0.0878447	32.6625	-69.3123
35	2.5	-0.0526632	32.6653	-69.444
36	2.5	-0.0175476	32.6656	-69.4878
37	2.5	0.0175476	32.6659	-69.444
38	2.5	0.0526632	32.6687	-69.3123
39	2.5	0.0878447	32.6764	-69.0927
40	2.5	0.12061	32.6909	-68.7912
41	2.5	0.156042	32.7153	-68.4011
42	2.5	0.191671	32.752	-67.9219
43	2.5	0.227545	32.8038	-67.353
44	2.5	0.26112	32.872	-66.7002
45	2.5	0.297612	32.9606	-65.9562
46	2.5	0.334503	33.0724	-65.1199

47	2.5	0.369171	33.2087	-64.197
48	2.5	0.40701	33.3744	-63.1795
49	2.5	0.445443	33.5728	-62.0659
50	2.5	0.481728	33.8049	-60.8615
51	2.5	0.521527	34.0769	-59.5577
52	2.5	0.56217	34.3929	-58.1523
53	2.5	0.603765	34.7574	-56.6429
54	2.5	0.643345	35.1713	-55.0345
55	2.5	0.687131	35.6435	-53.3167
56	2.5	0.732275	36.1797	-51.486
57	2.5	0.775574	36.7812	-49.5471
58	2.5	0.823893	37.46	-47.4874
59	6	0.874218	38.2243	-42.242
60	8	0.923014	39.0762	-34.8579
61	8	0.97815	40.033	-27.0327
62	8	1.03643	41.1072	-18.7413
63	9	1.09847	42.3138	-8.85504
64	9.5	1.16012	43.6597	2.1661
65	10	1.23187	45.1772	14.4847
66	10	1.31058	46.8948	27.5905
67	10	1.39175	48.8318	41.508
68	14	1.49085	51.0544	62.3799
69	16	1.60725	53.6377	88.0959
70	17	1.7392	56.6625	117.662
71	18.5	1.92684	60.3752	153.309

Sample Standard Deviation = 4.09129

Numerator = 23503.6

Denominator = 71752.6 = 71 60.3752

W Statistic = 0.327565

5% Critical value of 0.968 exceeds 0.327565

Evidence of non-normality at 95% level of significance

1% Critical value of 0.956 exceeds 0.327565

Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: cis-1,2-Dichloroethene

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Kruskal Wallis Ranks

Background Wells

Well ID	Date	Result	Rank
GWA-15/MW-157	7/30/2002	ND<2.5	29.5
	9/24/2002	ND<2.5	29.5
	10/21/2002 ~	ND<2.5	29.5
	12/3/2002	ND<2.5	29.5
	6/24/2003	ND<2.5	29.5
	12/17/2003	ND<2.5	29.5
	6/15/2004	ND<2.5	29.5
	12/28/2004	ND<2.5	29.5
	6/14/2005	ND<2.5	29.5
	12/5/2005	ND<2.5	29.5
	6/5/2006	ND<2.5	29.5
	12/4/2006	ND<2.5	29.5

Rank Sum = 354

Rank Mean = 29.5

Background Rank Sum = 354

Background Rank Mean = 29.5

Compliance Wells

Well ID	Date	Result	Rank
GWA-7/MW-7	7/30/2002 ~	ND<2.5	29.5
	9/24/2002	ND<2.5	29.5
	10/21/2002	ND<2.5	29.5
	12/3/2002	ND<2.5	29.5
	6/24/2003	ND<2.5	29.5
	12/17/2003	ND<2.5	29.5
	6/15/2004	ND<2.5	29.5
	12/28/2004 ~	ND<2.5	29.5
	6/14/2005	ND<2.5	29.5
	12/6/2005 ~	ND<2.5	29.5
	6/5/2006 ~	ND<2.5	29.5
	12/4/2006 ~	ND<2.5	29.5

Rank Sum = 354

Rank Mean = 29.5

GWB-6/MW-6	7/30/2002	ND<2.5	29.5
	9/24/2002	ND<2.5	29.5
	10/21/2002	ND<2.5	29.5
	12/3/2002	ND<2.5	29.5
	6/24/2003	ND<2.5	29.5
	12/17/2003	ND<2.5	29.5
	6/15/2004	ND<2.5	29.5
	12/28/2004	ND<2.5	29.5
	6/13/2005	ND<2.5	29.5

12/5/2005	ND<2.5	29.5
6/5/2006	ND<2.5	29.5
12/5/2006	ND<2.5	29.5

Rank Sum = 354
Rank Mean = 29.5

GWC-13/MW-137/30/2002	ND<2.5	29.5
9/24/2002	ND<2.5	29.5
10/21/2002	ND<2.5	29.5
12/3/2002	ND<2.5	29.5
6/24/2003 ~	6	59
12/17/2003 ~	14	68
6/15/2004 ~	9.5	64
12/28/2004	8	60
6/13/2005 ~	8	61
12/6/2005	9	63
6/5/2006	8	62
12/4/2006	10	65

Rank Sum = 620
Rank Mean = 51.6667

GWC-14/MW-147/30/2002	10	66
9/24/2002 ~	18.5	71
10/21/2002	16	69
12/3/2002	19	72
6/24/2003	10	67
12/17/2003	17	70

Rank Sum = 415
Rank Mean = 69.1667

GWC-5/MW-5	7/30/2002	ND<2.5	29.5
	9/24/2002	ND<2.5	29.5
	10/21/2002	ND<2.5	29.5
	12/3/2002	ND<2.5	29.5
	6/24/2003	ND<2.5	29.5
	12/17/2003	ND<2.5	29.5
	6/15/2004	ND<2.5	29.5
	12/28/2004	ND<2.5	29.5
	6/13/2005	ND<2.5	29.5
	12/6/2005	ND<2.5	29.5
	6/5/2006	ND<2.5	29.5
	12/4/2006	ND<2.5	29.5

Rank Sum = 354
Rank Mean = 29.5

GWC-17/MW-176/15/2005	ND<2.5	29.5
12/6/2005	ND<2.5	29.5
6/5/2006	ND<2.5	29.5
12/5/2006	ND<2.5	29.5

Rank Sum = 118
Rank Mean = 29.5

GWC-18/MW-186/15/2005	ND<2.5	29.5
-----------------------	--------	------

Rank Sum = 29.5
Rank Mean = 29.5

GWB-16/MW-16	12/5/2006	ND<2.5	29.5
--------------	-----------	--------	------

Rank Sum = 29.5
Rank Mean = 29.5

Calculation Results:

Kruskal-Wallis H Statistic = 26.9612

Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 56.4853

95% Confidence comparison value is 15.5073 at 8 degrees of freedom

26.9612 > 15.5073 indicating a significant group difference at 5% significance level

56.4853 > 15.5073 indicating a significant group difference at 5% significance level when adjusted for ties

Individual Well Comparisons at 1% Significance Level per Comparison

1% Z score is 2.32634

Mean background rank is 29.5

Well	Mean Rank	Dif from Bkg	Critical Value
GWA-7/MW-7	29.5	0	19.8763
GWB-6/MW-6	29.5	0	19.8763
GWC-13/MW-13	51.6667	22.1667	19.8763
GWC-14/MW-14	69.1667	39.6667	24.3434
GWC-5/MW-5	29.5	0	19.8763
GWC-17/MW-17	29.5	0	28.1093
GWC-18/MW-18	29.5	0	50.6748
GWB-16/MW-16	29.5	0	50.6748

Individual Well Comparisons at Groupwise 5% Significance Level (0.625% Significance Level per comparison)

0.625% Z score is 2.51213

Mean background rank is 29.5

Well	Mean Rank	Dif from Bkg	Critical Value
GWA-7/MW-7	29.5	0	21.4637
GWB-6/MW-6	29.5	0	21.4637
GWC-13/MW-13	51.6667	22.1667	21.4637
GWC-14/MW-14	69.1667	39.6667	26.2875
GWC-5/MW-5	29.5	0	21.4637
GWC-17/MW-17	29.5	0	30.3542
GWC-18/MW-18	29.5	0	54.7219
GWB-16/MW-16	29.5	0	54.7219

Concentrations (µg/L)

Parameter: Trichlorofluoromethane

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Samples: 72

Total Non-Detect: 43

Percent Non-Detects: 59.7222%

Total Background Samples: 12

There is 1 background well

Well	Samples	ND	Date	Result	Original
GWA-15/MW-1512	12 (100%)		7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002 ~	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5
			6/14/2005	ND<2.5	ND<5
			12/5/2005	ND<2.5	ND<5
			6/5/2006	ND<2.5	ND<5
			12/4/2006	ND<2.5	ND<5

There are 8 compliance wells

Well	Samples	ND	Date	Result	Original
GWA-7/MW-7	12	0 (0%)	7/30/2002 ~	184.5	184.5
			9/24/2002	32	32
			10/21/2002	221	221
			12/3/2002	210	210
			6/24/2003	23	23
			12/17/2003	34	34
			6/15/2004	46	46
			12/28/2004 ~	144	144
			6/14/2005	22	22
			12/6/2005 ~	86.5	86.5
			6/5/2006 ~	80	80
			12/4/2006 ~	155.5	155.5
GWB-6/MW-6	12	12 (100%)	7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5
			6/13/2005	ND<2.5	ND<5
			12/5/2005	ND<2.5	ND<5
			6/5/2006	ND<2.5	ND<5
			12/5/2006	ND<2.5	ND<5
GWC-13/MW-1312		0 (0%)	7/30/2002	300	300

			9/24/2002	381	381
			10/21/2002	348	348
			12/3/2002	391	391
			6/24/2003 ~	44	44
			12/17/2003 ~	99.5	99.5
			6/15/2004 ~	127	127
			12/28/2004	81	81
			6/13/2005 ~	45.3333	45.3333
			12/6/2005	60	60
			6/5/2006	92	92
			12/4/2006	104	104
GWC-14/MW-146	1 (16.6667%)	7/30/2002	43	43	
		9/24/2002 ~	47.5	47.5	
		10/21/2002	31	31	
		12/3/2002	27	27	
		6/24/2003	5	5	
		12/17/2003	ND<2.5	ND<5	
GWC-5/MW-5 12	12 (100%)	7/30/2002	ND<2.5	ND<5	
		9/24/2002	ND<2.5	ND<5	
		10/21/2002	ND<2.5	ND<5	
		12/3/2002	ND<2.5	ND<5	
		6/24/2003	ND<2.5	ND<5	
		12/17/2003	ND<2.5	ND<5	
		6/15/2004	ND<2.5	ND<5	
		12/28/2004	ND<2.5	ND<5	
		6/13/2005	ND<2.5	ND<5	
		12/6/2005	ND<2.5	ND<5	
		6/5/2006	ND<2.5	ND<5	
		12/4/2006	ND<2.5	ND<5	
GWC-17/MW-174	4 (100%)	6/15/2005	ND<2.5	ND<5	
		12/6/2005	ND<2.5	ND<5	
		6/5/2006	ND<2.5	ND<5	
		12/5/2006	ND<2.5	ND<5	
GWC-18/MW-181	1 (100%)	6/15/2005	ND<2.5	ND<5	
GWB-16/MW-161	1 (100%)	12/5/2006	ND<2.5	ND<5	

There are 2 unused wells

Well	Samples	ND	Date	Result	Original
EQ-Blank	8	8 (100%)	6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004 ~	ND<2.5	ND<5
			6/15/2005 ~	ND<2.5	ND<5
			12/6/2005	ND<2.5	ND<5
			6/6/2006	ND<2.5	ND<5
			12/5/2006	ND<2.5	ND<5
Trip Blank	4	4 (100%)	12/17/2003	ND<2.5	ND<5
			6/13/2005	ND<2.5	ND<5
			12/5/2005	ND<2.5	ND<5

12/4/2006

ND<2.5

ND<5

Shapiro-Francia Test of Normality

Parameter: Trichlorofluoromethane

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Sample Size = 72

i	x(i)	m(i)	sum(m^2)	sum(mx)
0	0	0	0	0
1	2.5	-2.22621	4.956	-5.56552
2	2.5	-1.92684	8.6687	-10.3826
3	2.5	-1.7392	11.6935	-14.7306
4	2.5	-1.60725	14.2768	-18.7487
5	2.5	-1.49085	16.4994	-22.4759
6	2.5	-1.39175	18.4364	-25.9552
7	2.5	-1.31058	20.154	-29.2317
8	2.5	-1.23187	21.6715	-32.3113
9	2.5	-1.16012	23.0173	-35.2116
10	2.5	-1.09847	24.224	-37.9578
11	2.5	-1.03643	25.2982	-40.5489
12	2.5	-0.97815	26.255	-42.9943
13	2.5	-0.923014	27.1069	-45.3018
14	2.5	-0.874218	27.8712	-47.4874
15	2.5	-0.823893	28.55	-49.5471
16	2.5	-0.775574	29.1515	-51.486
17	2.5	-0.732275	29.6877	-53.3167
18	2.5	-0.687131	30.1599	-55.0345
19	2.5	-0.643345	30.5738	-56.6429
20	2.5	-0.603765	30.9383	-58.1523
21	2.5	-0.56217	31.2543	-59.5577
22	2.5	-0.521527	31.5263	-60.8615
23	2.5	-0.481728	31.7584	-62.0659
24	2.5	-0.445443	31.9568	-63.1795
25	2.5	-0.40701	32.1224	-64.197
26	2.5	-0.369171	32.2587	-65.1199
27	2.5	-0.334503	32.3706	-65.9562
28	2.5	-0.297612	32.4592	-66.7002
29	2.5	-0.26112	32.5274	-67.353
30	2.5	-0.227545	32.5792	-67.9219
31	2.5	-0.191671	32.6159	-68.4011
32	2.5	-0.156042	32.6402	-68.7912
33	2.5	-0.12061	32.6548	-69.0927
34	2.5	-0.0878447	32.6625	-69.3123
35	2.5	-0.0526632	32.6653	-69.444
36	2.5	-0.0175476	32.6656	-69.4878
37	2.5	0.0175476	32.6659	-69.444
38	2.5	0.0526632	32.6687	-69.3123
39	2.5	0.0878447	32.6764	-69.0927
40	2.5	0.12061	32.6909	-68.7912
41	2.5	0.156042	32.7153	-68.4011
42	2.5	0.191671	32.752	-67.9219
43	2.5	0.227545	32.8038	-67.353
44	5	0.26112	32.872	-66.0474
45	22	0.297612	32.9606	-59.5
46	23	0.334503	33.0724	-51.8064

47	27	0.369171	33.2087	-41.8388
48	31	0.40701	33.3744	-29.2215
49	32	0.445443	33.5728	-14.9673
50	34	0.481728	33.8049	1.41146
51	43	0.521527	34.0769	23.8371
52	44	0.56217	34.3929	48.5726
53	45.3333	0.603765	34.7574	75.9433
54	46	0.643345	35.1713	105.537
55	47.5	0.687131	35.6435	138.176
56	60	0.732275	36.1797	182.112
57	80	0.775574	36.7812	244.158
58	81	0.823893	37.46	310.894
59	86.5	0.874218	38.2243	386.513
60	92	0.923014	39.0762	471.431
61	99.5	0.97815	40.033	568.757
62	104	1.03643	41.1072	676.546
63	127	1.09847	42.3138	816.051
64	144	1.16012	43.6597	983.109
65	155.5	1.23187	45.1772	1174.66
66	184.5	1.31058	46.8948	1416.47
67	210	1.39175	48.8318	1708.73
68	221	1.49085	51.0544	2038.21
69	300	1.60725	53.6377	2520.39
70	348	1.7392	56.6625	3125.63
71	381	1.92684	60.3752	3859.75

Sample Standard Deviation = 91.0457

Numerator = 1.48977e+007

Denominator = 3.55333e+007 = 71 60.3752

W Statistic = 0.41926

5% Critical value of 0.968 exceeds 0.41926

Evidence of non-normality at 95% level of significance

1% Critical value of 0.956 exceeds 0.41926

Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: Trichlorofluoromethane

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Kruskal Wallis Ranks

Background Wells

Well ID	Date	Result	Rank
GWA-15/MW-157	7/30/2002	ND<2.5	22
	9/24/2002	ND<2.5	22
	10/21/2002 ~	ND<2.5	22
	12/3/2002	ND<2.5	22
	6/24/2003	ND<2.5	22
	12/17/2003	ND<2.5	22
	6/15/2004	ND<2.5	22
	12/28/2004	ND<2.5	22
	6/14/2005	ND<2.5	22
	12/5/2005	ND<2.5	22
	6/5/2006	ND<2.5	22
	12/4/2006	ND<2.5	22

Rank Sum = 264

Rank Mean = 22

Background Rank Sum = 264

Background Rank Mean = 22

Compliance Wells

Well ID	Date	Result	Rank
GWA-7/MW-7	7/30/2002 ~	184.5	66
	9/24/2002	32	49
	10/21/2002	221	68
	12/3/2002	210	67
	6/24/2003	23	46
	12/17/2003	34	50
	6/15/2004	46	54
	12/28/2004 ~	144	64
	6/14/2005	22	45
	12/6/2005 ~	86.5	59
	6/5/2006 ~	80	57
	12/4/2006 ~	155.5	65

Rank Sum = 690

Rank Mean = 57.5

GWB-6/MW-6	7/30/2002	ND<2.5	22
	9/24/2002	ND<2.5	22
	10/21/2002	ND<2.5	22
	12/3/2002	ND<2.5	22
	6/24/2003	ND<2.5	22
	12/17/2003	ND<2.5	22
	6/15/2004	ND<2.5	22
	12/28/2004	ND<2.5	22
	6/13/2005	ND<2.5	22

12/5/2005	ND<2.5	22
6/5/2006	ND<2.5	22
12/5/2006	ND<2.5	22

Rank Sum = 264
Rank Mean = 22

GWC-13/MW-137/30/2002	300	69
9/24/2002	381	71
10/21/2002	348	70
12/3/2002	391	72
6/24/2003 ~	44	52
12/17/2003 ~	99.5	61
6/15/2004 ~	127	63
12/28/2004	81	58
6/13/2005 ~	45.3333	53
12/6/2005	60	56
6/5/2006	92	60
12/4/2006	104	62

Rank Sum = 747
Rank Mean = 62.25

GWC-14/MW-147/30/2002	43	51
9/24/2002 ~	47.5	55
10/21/2002	31	48
12/3/2002	27	47
6/24/2003	5	44
12/17/2003	ND<2.5	22

Rank Sum = 267
Rank Mean = 44.5

GWC-5/MW-5	7/30/2002	ND<2.5	22
	9/24/2002	ND<2.5	22
	10/21/2002	ND<2.5	22
	12/3/2002	ND<2.5	22
	6/24/2003	ND<2.5	22
	12/17/2003	ND<2.5	22
	6/15/2004	ND<2.5	22
	12/28/2004	ND<2.5	22
	6/13/2005	ND<2.5	22
	12/6/2005	ND<2.5	22
	6/5/2006	ND<2.5	22
	12/4/2006	ND<2.5	22

Rank Sum = 264
Rank Mean = 22

GWC-17/MW-176/15/2005	ND<2.5	22
12/6/2005	ND<2.5	22
6/5/2006	ND<2.5	22
12/5/2006	ND<2.5	22

Rank Sum = 88
Rank Mean = 22

GWC-18/MW-186/15/2005	ND<2.5	22
-----------------------	--------	----

Rank Sum = 22
Rank Mean = 22

GWB-16/MW-1612/5/2006	ND<2.5	22
-----------------------	--------	----

Rank Sum = 22
Rank Mean = 22

Calculation Results:

Kruskal-Wallis H Statistic = 51.286

Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 65.1614

95% Confidence comparison value is 15.5073 at 8 degrees of freedom

51.286 > 15.5073 indicating a significant group difference at 5% significance level

65.1614 > 15.5073 indicating a significant group difference at 5% significance level when adjusted for ties

Individual Well Comparisons at 1% Significance Level per Comparison

1% Z score is 2.32634

Mean background rank is 22

Well	Mean Rank	Dif from Bkg	Critical Value
GWA-7/MW-7	57.5	35.5	19.8763
GWB-6/MW-6	22	0	19.8763
GWC-13/MW-1362.25		40.25	19.8763
GWC-14/MW-1444.5		22.5	24.3434
GWC-5/MW-5	22	0	19.8763
GWC-17/MW-1722		0	28.1093
GWC-18/MW-1822		0	50.6748
GWB-16/MW-1622		0	50.6748

Individual Well Comparisons at Groupwise 5% Significance Level (0.625% Significance Level per comparison)

0.625% Z score is 2.51213

Mean background rank is 22

Well	Mean Rank	Dif from Bkg	Critical Value
GWA-7/MW-7	57.5	35.5	21.4637
GWB-6/MW-6	22	0	21.4637
GWC-13/MW-1362.25		40.25	21.4637
GWC-14/MW-1444.5		22.5	26.2875
GWC-5/MW-5	22	0	21.4637
GWC-17/MW-1722		0	30.3542
GWC-18/MW-1822		0	54.7219
GWB-16/MW-1622		0	54.7219