

Southern Nuclear
Operating Company, Inc.
42 Inverness Center Parkway
Birmingham, Alabama 35242

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September 14, 2007

FEDERAL EXPRESS

Vogtle Electric Generating Plant Landfill #2
Solid Waste Permit No. 017-006D(L)(I)

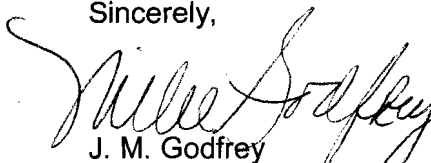
Mr. Steve McManus
Solid Waste Management Program
Georgia Environmental Protection Division
4244 International Parkway, Suite 104
Atlanta, GA 30354

Dear Mr. McManus:

Pursuant to EPD Solid Waste Rule 391-3-4-.14, and in accordance with the Plant Vogtle Landfill #2 approved landfill groundwater monitoring program, Southern Nuclear is submitting the June, 2007 semi-annual groundwater monitoring report. This report was prepared for Southern Nuclear by the Dextra Group and was completed in September, 2007. There were no statistically significant detections found during this sampling event.

Please find enclosed the June, 2007 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-07-1702

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Georgia Environmental Protection Division

Mr. Steve McManus

cc: Mr. Jeff Cown (w/o)
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-07-1702

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Georgia Environmental Protection Division
Mr. Steve McManus

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) (w/o)
SNC Document Management – Vogtle (Return Receipt)



Dextra

September 12, 2007

Mr. Mickey Perry
Southern Nuclear Operating Company, Inc.
40 Inverness Center Parkway
P.O. Box 1295
Birmingham, Alabama 35201-1295

Subject: Georgia Power Plant Vogtle Private Landfill #2
Permit Numbers 017-006D(L)(I)
Burke County, Georgia
Groundwater Monitoring Report – June 2007

Dear Mr. Perry:

Please find the enclosed Groundwater Monitoring Report for the referenced facility. This report is submitted in accordance with the approved Groundwater Monitoring Plan and presents the results of routine semi-annual monitoring conducted at the landfill in June 2007.

If you have any questions, please contact me at 770-578-9696. We appreciate the opportunity to assist SNC with this project.

Very truly yours,

THE DEXTRA GROUP, INC.

Kurt R. Batsel, PE
Principal

Cc: Mr. Don Goodwin, Plant Vogtle

**GROUNDWATER MONITORING REPORT
PLANT VOGTLE LANDFILL #2
SOLID WASTE PERMIT NOS. 017-006D(L)(I)
BURKE COUNTY, GEORGIA
SEPTEMBER 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

Plant Vogtle Landfill #2 Groundwater Monitoring Report, September 2007
Solid Waste Permit No. 017-006D(L)(I)

Certification of Compliance or Non-Compliance

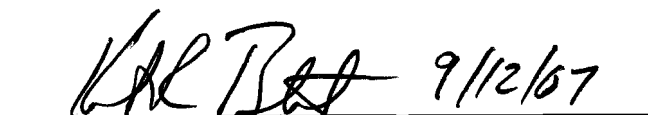
Sampling and analysis has been conducted in accordance with the Georgia Environmental Protection Division's "Manual for Groundwater Monitoring" dated September 1991 and the Plant Vogtle Ground Water Monitoring Plan. Based on the results of this report, I, Mike Godfrey, certify that Plant Hatch is in compliance with the applicable rules regarding groundwater quality at a solid waste facility.



Mike Godfrey
Manager – Environmental Affairs
Southern Nuclear Operating Company, Inc.

Groundwater Scientist Certification

I, Kurt R. Batsel, certify that I am a qualified groundwater scientist demonstrated by a Georgia state registered professional engineer certification. I have sufficient training and experience in groundwater hydrology and related fields to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport. I further certify that the data in this report has been prepared by myself or a subordinate working under my direction.



Kurt R. Batsel, PE
The Dextra Group, Inc.

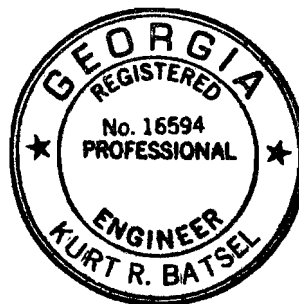


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1 – Introduction

This report presents the results of groundwater sampling conducted in June 2007 at private solid waste Landfill #2 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 landfills. The landfill is operated under Solid Waste Permit # 017-006D(L)(I) and is 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. The active trench is used only for asbestos disposal.

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 landfills.

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 June 2007 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 four permanent monitoring wells located along the north, east and south waste unit management boundaries of Landfill #2 (*Figure 1*). As shown in the figures, 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 35 to 60 feet below land surface.

The four permanent groundwater monitoring wells at Landfill #2 were installed in September 2001 after advancing a total of eight deep soil borings around the landfill boundary. The upgradient well is GWA-2/MW-2 and the downgradient, or compliance, wells are GWC-3/MW-3, GWB-4/MW-4 and GWC-11/MW-11. The well construction details are presented in *Table 1*. The wells will be referred to as GWA-2, GWC-3, GWB-4 and GWC-11 in this report consistent with the EPD's well identification guidelines.

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 landfills. A boring completed to approximately 126 feet below land surface at the northwest boundary of Landfill #2 appears to have been completed just into or immediately on top of the Utley Limestone member. 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 the 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 GWA-6 to 3.064×10^{-2} cm/sec in GWA-2.

Depth to water measurements and groundwater elevations for the wells at Landfill 2 are presented in *Table 1*. Groundwater elevations measured during the sampling events to date indicate groundwater underneath Landfill 2 trends from a relatively higher elevation at the eastern/northeastern portion of the landfill (GWA-2) to relatively lower elevations to the west/southwest beneath the landfill (*Figure 1*). Well GWC-11 is not used to construct the potentiometric surface map because the uppermost water-bearing unit at this location appears to be within a different hydrologic zone based on the significantly lower groundwater elevation measured in well GWC-11 compared to wells GWA-2, GWC-3 and GWA-4.

The eastern/northeastern portion of the landfill hydraulic gradient of 0.013 (shown on *Figure 1* for June 2007) was calculated using a three-point problem from potentiometric surface elevations in monitoring wells GWA-2, GWC-3 and GWA-4. The west/southwestern portion of the landfill hydraulic gradient of 0.050 (shown on *Figure 1* for June 2007) was calculated using the three-point problem from potentiometric surface elevations in monitoring wells GWA-2, GWC-3 and GWC-11. The calculations used in determining the gradient are provided in *Appendix A*. The hydraulic gradient has ranged from a minimum of 0.01 (October 2002 and December 2004) to a maximum of 0.08 (June 2003).

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. The well water temperature was added as a field parameter monitored during the purging of the wells as of the June 2007 groundwater monitoring event. 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 air lines 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 air line 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 4*). 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*.

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 0.029 milligrams per liter (mg/l) in well GWA-2 and 0.020

mg/l in well GWC-3. The maximum contaminant level (MCL) for barium is 2.0 mg/l. Nickel was detected at 0.022 mg/l in well GWA-2 and 0.023 mg/l in well GWB-4. The MCL for nickel is 0.10 mg/l. Zinc was detected at 0.084 mg/l in well GWA-2, 0.248 mg/l in well GWC-3, and 0.259 mg/l in well GWB-4. No organic parameters were detected during this monitoring event.

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 at the landfill, 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 #2, statistical analysis was performed for the three detected parameters barium, nickel and zinc. The analyses do not indicate statistically significant higher concentrations for these parameters in the compliance well samples compared to the concentrations in the background well sample.

6 – Conclusions

As no statistically significant detections were found during this monitoring event, no modifications to the monitoring program or additional notices in the operating record are required at this time.

TABLES

Table 1
Southern Nuclear Operating Company Plant Vogtle Landfill #2
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) |
|--------------|------------|--|---|---------------------------------|--------------------------------------|--------------------------------------|---------------------------|-------------------------------------|---|
| GWA-2/MW-2 | 9/26/2001 | 249.41 | 246.76 | 40.02 | 57 | 47.70 | 2.65 | 201.76 to 211.76 | 209.39 |
| | 7/29/2002 | | | 41.69 | | | | | 207.72 |
| | 9/9/2002 | | | 41.64 | | | | | 207.77 |
| | 10/21/2002 | | | 42.72 | | | | | 206.69 |
| | 12/3/2002 | | | 40.69 | | | | | 208.72 |
| | 6/24/2003 | | | 37.58 | | | | | 211.83 |
| | 12/17/2003 | | | 39.98 | | | | | 209.43 |
| | 6/15/2004 | | | 39.59 | | | | | 209.82 |
| | 12/28/2004 | | | 43.02 | | | | | 206.39 |
| | 6/13/2005 | | | 39.41 | | | | | 210.00 |
| | 12/5/2005 | | | 40.40 | | | | | 209.01 |
| | 6/6/2006 | | | 40.35 | | | | | 209.06 |
| | 12/4/2006 | | | 41.49 | | | | | 207.92 |
| | 6/5/2007 | | | 40.30 | | | | | 209.11 |
| GWC-3/MW-3 | 9/26/2001 | 250.41 | 247.81 | 50.45 | 62 | 52.60 | 2.60 | 197.81 to 207.81 | 199.96 |
| | 7/29/2002 | | | 50.05 | | | | | 200.36 |
| | 9/9/2002 | | | 50.79 | | | | | 199.62 |
| | 10/21/2002 | | | 49.30 | | | | | 201.11 |
| | 12/3/2002 | | | 50.26 | | | | | 200.15 |
| | 6/24/2003 | | | 51.58 | | | | | 198.83 |
| | 12/17/2003 | | | 47.89 | | | | | 202.52 |
| | 6/15/2004 | | | 47.44 | | | | | 202.97 |
| | 12/28/2004 | | | 49.13 | | | | | 201.28 |
| | 6/13/2005 | | | 46.77 | | | | | 203.64 |
| | 12/5/2005 | | | 47.34 | | | | | 203.07 |
| | 6/6/2006 | | | 46.96 | | | | | 203.45 |
| | 12/4/2006 | | | 47.60 | | | | | 202.81 |
| | 6/5/2007 | | | 46.80 | | | | | 203.61 |
| GWB-4/MW-4 | 9/26/2001 | 242.40 | 239.83 | 39.84 | 57 | 48.57 | 2.57 | 193.83 to 203.83 | 202.56 |
| | 7/29/2002 | | | 40.06 | | | | | 202.34 |
| | 9/9/2002 | | | 41.27 | | | | | 201.13 |
| | 10/21/2002 | | | 40.50 | | | | | 201.90 |
| | 12/4/2002 | | | 39.65 | | | | | 202.75 |
| | 6/24/2003 | | | 38.10 | | | | | 204.30 |
| | 12/17/2003 | | | 39.53 | | | | | 202.87 |
| | 6/15/2004 | | | 39.46 | | | | | 202.94 |
| | 12/28/2004 | | | 40.02 | | | | | 202.38 |
| | 6/13/2005 | | | 38.96 | | | | | 203.44 |
| | 12/5/2005 | | | 39.70 | | | | | 202.70 |
| | 6/6/2006 | | | 39.46 | | | | | 202.94 |
| | 12/4/2006 | | | 40.30 | | | | | 202.10 |
| | 6/5/2007 | | | 39.33 | | | | | 203.07 |
| GWC-11/MW-11 | 7/29/2002 | 227.53 | 225.09 | 64.80 | 65 | 67.44 | 2.44 | 160.09 to 170.09 | 162.73 |
| | 9/9/2002 | | | 59.99 | | | | | 167.54 |
| | 10/21/2002 | | | 65.27 | | | | | 162.26 |
| | 12/4/2002 | | | 65.49 | | | | | 162.04 |
| | 6/24/2003 | | | 59.72 | | | | | 167.81 |
| | 12/17/2003 | | | 59.33 | | | | | 168.20 |
| | 6/15/2004 | | | 60.69 | | | | | 166.84 |
| | 12/28/2004 | | | 62.71 | | | | | 164.82 |
| | 6/13/2005 | | | 62.96 | | | | | 164.57 |
| | 12/5/2005 | | | 62.73 | | | | | 164.80 |
| | 6/6/2006 | | | 68.10 | | | | | 159.43 |
| | 12/4/2006 | | | 63.89 | | | | | 163.64 |
| | 6/5/2007 | | | 66.36 | | | | | 161.17 |

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 #2
Groundwater Sampling Field Measurements

| Well ID | Date | pH | Conductivity ¹ | Temperature | Turbidity ² | Gallons Purged | Odor | Color | Comments |
|--------------|------------|------|---------------------------|-------------|------------------------|----------------|------|------------|--------------------------------------|
| GWA-2/MW-2 | 9/28/2001 | — | — | — | — | — | — | — | Well development only |
| | 7/29/2002 | 4.69 | 19 | — | 13.8 | 2.5 | none | none | |
| | 9/9/2002 | 4.51 | 24.9 | — | 7.53 | — | none | none | |
| | 10/21/2002 | 5.17 | 18 | — | 1.31 | 3.1 | none | none | |
| | 12/3/2002 | 5.30 | 13 | — | 9.1 | 3.5 | none | none | |
| | 6/24/2003 | 6.28 | 26.9 | — | 5.76 | 1.0 | none | none | |
| | 12/17/2003 | 4.93 | 22.7 | — | 4.5 | 3.5 | none | none | |
| | 6/16/2004 | 6.97 | 15.32 | — | 5.9 | 1.5 | none | none | |
| | 12/28/2004 | 4.80 | 10.3 | — | 9.67 | 2.0 | none | none | |
| | 6/14/2005 | 5.28 | 17.8 | — | 8.65 | 2.5 | none | none | |
| | 12/6/2005 | 6.82 | 17 | — | 6.36 | 2.0 | none | none | |
| | 6/6/2006 | 6.58 | 18 | — | 6.36 | 2.0 | none | none | |
| | 12/4/2006 | 4.66 | 24 | — | 8.6 | 1.5 | none | none | |
| | 6/5/2007 | 4.78 | 26 | 71.6 | 6.1 | 2.5 | none | none | |
| GWC-3/MW-3 | 9/28/2001 | — | — | — | — | — | — | — | Well development only |
| | 7/29/2002 | 4.08 | 27.9 | — | 22.2 | 1.3 | none | none | |
| | 9/9/2002 | 6.03 | 36.5 | — | 4.08 | 0.5 | none | none | |
| | 10/21/2002 | — | 176 | — | 35.6 | <0.5 gal | — | — | |
| | 12/3/2002 | 5.51 | 488 | — | 14.0 | <0.5 gal | — | — | |
| | 6/24/2003 | — | — | — | — | <0.5 gal | none | none | |
| | 12/17/2003 | 6.59 | 22.7 | — | 2.79 | 2.0 | none | none | |
| | 6/16/2004 | 4.91 | 40.8 | — | 5.78 | 1.25 | none | none | |
| | 12/28/2004 | — | — | — | — | — | — | — | |
| | 6/14/2005 | 5.83 | 29.5 | — | 4.25 | 1.25 | none | none | |
| | 12/6/2005 | 5.88 | 35 | — | 5.89 | 1.50 | none | none | |
| | 6/6/2006 | 5.28 | 38 | — | 1.23 | 1.00 | none | none | |
| | 12/4/2006 | 4.7 | 40 | — | 1.4 | 0.50 | none | none | |
| | 6/5/2007 | 4.93 | 50 | 72.4 | 4.93 | 1.00 | none | none | |
| GWB-4/MW-4 | 9/28/2001 | 4.73 | 36.0 | — | 15.5 | 35.0 | — | — | Well development only |
| | 7/29/2002 | 4.21 | 289 | — | 3.63 | 2.0 | none | none | |
| | 9/9/2002 | 4.35 | 34.8 | — | 0.55 | 2.0 | none | none | |
| | 10/21/2002 | 5.01 | 25 | — | 6.44 | 3.0 | none | none | |
| | 12/4/2002 | 5.51 | 98.7 | — | 2.60 | 4.0 | none | none | |
| | 6/24/2003 | 5.33 | 36.0 | — | 5.27 | 2.0 | none | none | |
| | 12/17/2003 | 4.62 | 3.55 | — | 0.00 | 1.5 | none | none | |
| | 6/16/2004 | 4.63 | 33.80 | — | 1.40 | 3.3 | none | none | |
| | 12/28/2004 | 4.43 | 20.70 | — | 0.00 | 2.0 | none | none | |
| | 6/14/2005 | 4.66 | 38.25 | — | 2.50 | 2.5 | none | none | |
| | 12/7/2005 | 4.80 | 43.00 | — | 2.08 | 1.5 | none | none | |
| | 6/6/2006 | 4.55 | 48.00 | — | 2.22 | 1.5 | none | none | |
| | 12/4/2006 | 4.63 | 41.00 | — | 1.02 | 0.5 | none | none | |
| | 6/5/2007 | 4.69 | 40.00 | 70.70 | 0.83 | 0.5 | none | none | |
| GWC-11/MW-11 | 7/29/2002 | 5.30 | 67.5 | — | 36.6 | 4.0 | none | pale white | Too little water to purge and sample |
| | 9/9/2002 | 6.24 | 97.0 | — | 6.51 | 2.0 | none | none | |
| | 10/21/2002 | 5.05 | 75.0 | — | 8.05 | 1.8 | none | none | |
| | 12/4/2002 | 5.72 | 57.1 | — | 8.10 | 2.0 | none | none | |
| | 6/24/2003 | 6.93 | 70.0 | — | 2.70 | 2.5 | none | none | |
| | 12/17/2003 | 7.04 | 69.2 | — | 11.2 | 4.5 | none | none | |
| | 6/16/2004 | 6.10 | 58.9 | — | 6.1 | 3.5 | none | none | |
| | 12/28/2004 | 5.85 | 30.5 | — | 9.3 | 2.0 | none | none | |
| | 6/14/2005 | 5.98 | 33.2 | — | 8.6 | 2.5 | none | none | |
| | 12/7/2005 | 5.95 | 32.0 | — | 3.0 | 2.0 | none | none | |
| | 6/6/2006 | 6.58 | 48.0 | — | 10.0 | 4.0 | none | none | |
| | 12/4/2006 | 6.02 | 10.0 | — | 29.0 | 4.0 | none | none | |
| | 6/5/2007 | — | — | — | — | — | — | — | |

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 #2
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: | |
| (16) Acetone..... | 8260 |
| (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 #2
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 #2
Summary of Detected Parameters
June 2007

| CONSTITUENT | MCL | WELL SAMPLES | | | |
|-----------------------------|-------|--------------|------------|------------|--------------|
| | | GWA-2/MW-2 | GWC-3/MW-3 | GWB-4/MW-4 | GWC-11/MW-11 |
| Metals¹ | | | | | |
| Barium | 2.00 | 0.029 | 0.020 | BQL | NS |
| Nickel | 0.10 | 0.022 | BQL | 0.023 | NS |
| Zinc | NA | 0.084 | 0.248 | 0.259 | NS |
| Organics² | | | | | |
| 1,1-Dichloroethane | NA | BQL | BQL | BQL | NS |
| Chlorobenzene | 100 | BQL | BQL | BQL | NS |
| 1,4-Dicholorbenzene | 75 | BQL | BQL | BQL | NS |
| Methylene chloride | 5 | BQL | BQL | BQL | NS |
| cis-1,2-Dichloroethene | 70 | BQL | BQL | BQL | NS |
| Trichlorofluoromethane | NA | BQL | BQL | BQL | NS |
| 1,1-Dichloroethene | 7 | BQL | BQL | BQL | NS |
| Xylenes (Total) | 10000 | BQL | BQL | BQL | NS |
| Vinyl chloride | 2 | BQL | BQL | BQL | NS |

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 recharge to sample well

¹Metals concentrations in mg/L or ppm

²Organics concentrations in ug/l or ppb

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #2
Summary of Detected Parameters
December 2006

| CONSTITUENT | MCL | WELL SAMPLES | | | |
|-----------------------------|-------|--------------|------------|------------|--------------|
| | | GWA-2/MW-2 | GWC-3/MW-3 | GWB-4/MW-4 | GWC-11/MW-11 |
| Metals¹ | | | | | |
| Barium | 2.00 | 0.054 | 0.020 | 0.023 | 0.065 |
| Nickel | 0.10 | 0.022 | BQL | 0.029 | 0.023 |
| Zinc | NA | 0.109 | 0.174 | 0.073 | 0.056 |
| Mercury ³ | 0.002 | BQL | BQL | BQL | BQL |
| Organics² | | | | | |
| 1,1-Dichloroethane | NA | BQL | BQL | BQL | BQL |
| Chlorobenzene | 100 | BQL | BQL | BQL | BQL |
| 1,4-Dicholorbenzene | 75 | BQL | BQL | BQL | BQL |
| Methylene chloride | 5 | BQL | BQL | BQL | BQL |
| cis-1,2-Dichloroethene | 70 | BQL | BQL | BQL | BQL |
| Trichlorofluoromethane | NA | BQL | BQL | BQL | BQL |
| 1,1-Dichloroethene | 7 | BQL | BQL | BQL | BQL |
| Xylenes (Total) | 10000 | BQL | BQL | BQL | BQL |
| Vinyl chloride | 2 | BQL | 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 recharge to sample well

¹Metals concentrations in mg/L or ppm

²Organics concentrations in ug/l or ppb

³Appendix II parameter

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #2
Summary of Detected Parameters
June 2006

| CONSTITUENT | MCL | WELL SAMPLES | | | |
|-----------------------------|-------|--------------|------------|------------|--------------|
| | | GWA-2/MW-2 | GWC-3/MW-3 | GWB-4/MW-4 | GWC-11/MW-11 |
| Metals¹ | | | | | |
| Barium | 2.00 | BQL | BQL | BQL | 0.032 |
| Zinc | NA | 0.122 | 0.077 | 0.128 | 0.034 |
| Organics² | | | | | |
| 1,1-Dichloroethane | NA | BQL | BQL | BQL | BQL |
| Chlorobenzene | 100 | BQL | BQL | BQL | BQL |
| 1,4-Dicholorbenzene | 75 | BQL | BQL | BQL | BQL |
| Methylene chloride | 5 | BQL | BQL | BQL | BQL |
| cis-1,2-Dichloroethene | 70 | BQL | BQL | BQL | BQL |
| Trichlorofluoromethane | NA | BQL | BQL | BQL | BQL |
| 1,1-Dichloroethene | 7 | BQL | BQL | BQL | BQL |
| Xylenes (Total) | 10000 | BQL | BQL | BQL | BQL |
| Vinyl chloride | 2 | BQL | 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 recharge to sample well

¹Metals concentrations in mg/L or ppm

²Organics concentrations in ug/l or ppb

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #2
Summary of Detected Parameters
December 2005

| CONSTITUENT | MCL | WELL SAMPLES | | | |
|-----------------------------|-------|--------------|------------|------------|--------------|
| | | GWA-2/MW-2 | GWC-3/MW-3 | GWB-4/MW-4 | GWC-11/MW-11 |
| Metals¹ | | | | | |
| Barium | 2.00 | BQL | 0.025 | 0.021 | BQL |
| Zinc | NA | 0.08 | 0.137 | 0.082 | 0.181 |
| Organics² | | | | | |
| 1,1-Dichloroethane | NA | BQL | BQL | BQL | BQL |
| Chlorobenzene | 100 | BQL | BQL | BQL | BQL |
| 1,4-Dicholorbenzene | 75 | BQL | BQL | BQL | BQL |
| Methylene chloride | 5 | BQL | BQL | BQL | BQL |
| cis-1,2-Dichloroethene | 70 | BQL | BQL | BQL | BQL |
| Trichlorofluoromethane | NA | BQL | BQL | BQL | BQL |
| 1,1-Dichloroethene | 7 | BQL | BQL | BQL | BQL |
| Xylenes (Total) | 10000 | BQL | BQL | BQL | BQL |
| Vinyl chloride | 2 | BQL | 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 recharge to sample well

¹Metals concentrations in mg/L or ppm

²Organics concentrations in ug/l or ppb

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #2
Summary of Detected Parameters
June 2005

| CONSTITUENT | MCL | WELL SAMPLES | | | |
|-----------------------------|-------|--------------|------------|------------|--------------|
| | | GWA-2/MW-2 | GWC-3/MW-3 | GWB-4/MW-4 | GWC-11/MW-11 |
| Metals¹ | | | | | |
| Barium | 2.00 | 0.021 | BQL | 0.042 | 0.034 |
| Zinc | NA | BQL | BQL | 0.029 | 0.025 |
| Organics² | | | | | |
| 1,1-Dichloroethane | NA | BQL | BQL | BQL | BQL |
| Chlorobenzene | 100 | BQL | BQL | BQL | BQL |
| 1,4-Dicholorbenzene | 75 | BQL | BQL | BQL | BQL |
| Methylene chloride | 5 | BQL | BQL | BQL | BQL |
| cis-1,2-Dichloroethene | 70 | BQL | BQL | BQL | BQL |
| Trichlorofluoromethane | NA | BQL | BQL | BQL | BQL |
| 1,1-Dichloroethene | 7 | BQL | BQL | BQL | BQL |
| Xylenes (Total) | 10000 | BQL | BQL | BQL | BQL |
| Vinyl chloride | 2 | BQL | 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 recharge to sample well

¹Metals concentrations in mg/L or ppm

²Organics concentrations in ug/l or ppb

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #2
Summary of Detected Parameters
December 2004

| CONSTITUENT | MCL | WELL SAMPLES | | | |
|-----------------------------|-------|--------------|------------|------------|--------------|
| | | GWA-2/MW-2 | GWC-3/MW-3 | GWB-4/MW-4 | GWC-11/MW-11 |
| Metals¹ | | | | | |
| Barium | 2.00 | BQL | NS | 0.021 | BQL |
| Zinc | NA | BQL | NS | BQL | BQL |
| Organics² | | | | | |
| 1,1-Dichloroethane | NA | BQL | NS | BQL | BQL |
| Chlorobenzene | 100 | BQL | NS | BQL | BQL |
| 1,4-Dicholorbenzene | 75 | BQL | NS | BQL | BQL |
| Methylene chloride | 5 | BQL | NS | BQL | BQL |
| cis-1,2-Dichloroethene | 70 | BQL | NS | BQL | BQL |
| Trichlorofluoromethane | NA | BQL | NS | BQL | BQL |
| 1,1-Dichloroethene | 7 | BQL | NS | BQL | BQL |
| Xylenes (Total) | 10000 | BQL | NS | BQL | BQL |
| Vinyl chloride | 2 | BQL | NS | 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 recharge to sample well

¹Metals concentrations in mg/L or ppm

²Organics concentrations in ug/l or ppb

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #2
Summary of Detected Parameters
June 2004

| CONSTITUENT | MCL | WELL SAMPLES | | | |
|------------------------|-------|--------------|------------|------------|--------------|
| | | GWA-2/MW-2 | GWC-3/MW-3 | GWB-4/MW-4 | GWC-11/MW-11 |
| Metals ¹ | | | | | |
| Barium | 2.00 | BQL | 0.020 | BQL | BQL |
| Zinc | NA | BQL | BQL | BQL | BQL |
| Organics ² | | | | | |
| 1,1-Dichloroethane | NA | BQL | BQL | BQL | BQL |
| Chlorobenzene | 100 | BQL | BQL | BQL | BQL |
| 1,4-Dicholorbenzene | 75 | BQL | BQL | BQL | BQL |
| Methylene chloride | 5 | BQL | BQL | BQL | BQL |
| cis-1,2-Dichloroethene | 70 | BQL | BQL | BQL | BQL |
| Trichlorofluoromethane | NA | BQL | BQL | 7 | BQL |
| 1,1-Dichloroethene | 7 | BQL | BQL | BQL | BQL |
| Xylenes (Total) | 10000 | BQL | BQL | BQL | BQL |
| Vinyl chloride | 2 | 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 or ppm

²Organics concentrations in ug/l or ppb

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #2
Summary of Detected Parameters
December 2003

| CONSTITUENT | MCL | WELL SAMPLES | | | |
|------------------------|-------|--------------|------------|------------|--------------|
| | | GWA-2/MW-2 | GWC-3/MW-3 | GWB-4/MW-4 | GWC-11/MW-11 |
| Metals ¹ | | | | | |
| Barium | 2.00 | BQL | BQL | BQL | 0.022 |
| Zinc | NA | BQL | BQL | BQL | BQL |
| Organics ² | | | | | |
| 1,1-Dichloroethane | NA | BQL | BQL | BQL | BQL |
| Chlorobenzene | 100 | BQL | BQL | BQL | BQL |
| 1,4-Dicholorbenzene | 75 | BQL | BQL | BQL | BQL |
| Methylene chloride | 5 | BQL | BQL | BQL | BQL |
| cis-1,2-Dichloroethene | 70 | BQL | BQL | BQL | BQL |
| Trichlorofluoromethane | NA | BQL | BQL | 6 | BQL |
| 1,1-Dichloroethene | 7 | BQL | BQL | BQL | BQL |
| Xylenes (Total) | 10000 | BQL | BQL | BQL | BQL |
| Vinyl chloride | 2 | 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 or ppm

²Organics concentrations in ug/l or ppb

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #2
Summary of Detected Parameters
June 2003

| CONSTITUENT | MCL | WELL SAMPLES | | | |
|-----------------------------|-------|--------------|------------|------------|--------------|
| | | GWA-2/MW-2 | GWC-3/MW-3 | GWB-4/MW-4 | GWC-11/MW-11 |
| Metals¹ | | | | | |
| Barium | 2.00 | BQL | NS | BQL | BQL |
| Zinc | NA | BQL | NS | BQL | 0.029 |
| Organics² | | | | | |
| 1,1-Dichloroethane | NA | BQL | NS | BQL | BQL |
| Chlorobenzene | 100 | BQL | NS | BQL | BQL |
| 1,4-Dicholorbenzene | 75 | BQL | NS | BQL | BQL |
| Methylene chloride | 5 | BQL | NS | BQL | BQL |
| cis-1,2-Dichloroethene | 70 | BQL | NS | BQL | BQL |
| Trichlorofluoromethane | NA | BQL | NS | BQL | BQL |
| 1,1-Dichloroethene | 7 | BQL | NS | BQL | BQL |
| Xylenes (Total) | 10000 | BQL | NS | BQL | BQL |
| Vinyl chloride | 2 | BQL | NS | 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 recharge to sample well

¹Metals concentrations in mg/L or ppm

²Organics concentrations in ug/l or ppb

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #2
Summary of Detected Parameters
December 2002

| CONSTITUENT | MCL | WELL SAMPLES | | | | |
|-----------------------------|-------|--------------|------------|------------|-------------------------|--------------|
| | | GWA-2/MW-2 | GWC-3/MW-3 | GWB-4/MW-4 | GWB-4/MW-4 ³ | GWC-11/MW-11 |
| Metals¹ | | | | | | |
| Barium | 2.00 | 0.015 | 0.020 | 0.021 | 0.020 | 0.018 |
| Zinc | NA | BQL | 0.047 | BQL | BQL | BQL |
| Organics² | | | | | | |
| 1,1-Dichloroethane | NA | BQL | BQL | BQL | BQL | BQL |
| Chlorobenzene | 100 | BQL | BQL | BQL | BQL | BQL |
| 1,4-Dicholorbenzene | 75 | BQL | BQL | BQL | BQL | BQL |
| Methylene chloride | 5 | BQL | BQL | BQL | BQL | BQL |
| cis-1,2-Dichloroethene | 70 | BQL | BQL | BQL | BQL | BQL |
| Trichlorofluoromethane | NA | BQL | BQL | BQL | BQL | BQL |
| 1,1-Dichloroethene | 7 | BQL | BQL | BQL | BQL | BQL |
| Xylenes (Total) | 10000 | BQL | BQL | BQL | BQL | BQL |
| Vinyl chloride | 2 | 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 or ppm

²Organics concentrations in ug/l or ppb

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #2
Summary of Detected Parameters
October 2002

| CONSTITUENT | MCL | WELL SAMPLES | | | |
|-----------------------------|-------|--------------|-------------------------|------------|--------------|
| | | GWA-2/MW-2 | GWC-3/MW-3 ³ | GWB-4/MW-4 | GWC-11/MW-11 |
| Metals¹ | | | | | |
| Barium | 2 | BQL | NS | 0.021 | 0.025 |
| Zinc | NA | BQL | NS | BQL | BQL |
| Organics² | | | | | |
| 1,1-Dichloroethane | NA | BQL | NS | BQL | BQL |
| Chlorobenzene | 100 | BQL | NS | BQL | BQL |
| 1,4-Dichlorobenzene | 75 | BQL | NS | BQL | BQL |
| Methylene chloride | 5 | BQL | NS | BQL | BQL |
| cis-1,2-Dichloroethene | 70 | BQL | NS | BQL | BQL |
| Trichlorofluoromethane | NA | BQL | NS | BQL | BQL |
| 1,1-Dichloroethene | 7 | BQL | NS | BQL | BQL |
| Xylenes (Total) | 10000 | BQL | NS | BQL | BQL |
| Vinyl chloride | 2 | BQL | NS | 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 recharge to sample well

¹Metals concentrations in mg/L or ppm

²Organics concentrations in ug/l or ppb

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #2
Summary of Detected Parameters
September 2002

| CONSTITUENT | MCL | WELL SAMPLES | | | |
|-----------------------------|-------|--------------|------------|------------|--------------|
| | | GWA-2/MW-2 | GWC-3/MW-3 | GWB-4/MW-4 | GWC-11/MW-11 |
| Metals¹ | | | | | |
| Barium | 2 | BQL | BQL | 0.021 | 0.020 |
| Zinc | NA | BQL | BQL | BQL | BQL |
| Organics² | | | | | |
| 1,1-Dichloroethane | NA | BQL | BQL | BQL | BQL |
| Chlorobenzene | 100 | BQL | BQL | BQL | BQL |
| 1,4-Dichlorobenzene | 75 | BQL | BQL | BQL | BQL |
| Methylene chloride | 5 | BQL | BQL | BQL | BQL |
| cis-1,2-Dichloroethene | 70 | BQL | BQL | BQL | BQL |
| Trichlorofluoromethane | NA | BQL | BQL | BQL | BQL |
| 1,1-Dichloroethene | 7 | BQL | BQL | BQL | BQL |
| Xylenes (Total) | 10000 | BQL | BQL | BQL | BQL |
| Vinyl chloride | 2 | 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 or ppm

²Organics concentrations in ug/l or ppb

Bold indicates detected concentration is greater than the MCL.

Table 4 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #2
Summary of Detected Parameters
July 2002

| CONSTITUENT | MCL | WELL SAMPLES | | | |
|------------------------|-------|--------------|------------|------------|--------------|
| | | GWA-2/MW-2 | GWC-3/MW-3 | GWB-4/MW-4 | GWC-11/MW-11 |
| Metals ¹ | | | | | |
| Barium | 2 | 0.027 | BQL | 0.021 | 0.085 |
| Zinc | NA | BQL | BQL | BQL | 0.034 |
| Organics ² | | | | | |
| 1,1-Dichloroethane | NA | BQL | BQL | BQL | BQL |
| Chlorobenzene | 100 | BQL | BQL | BQL | BQL |
| 1,4-Dichlorobenzene | 75 | BQL | BQL | BQL | BQL |
| Methylene chloride | 5 | BQL | 6 | 6 | BQL |
| cis-1,2-Dichloroethene | 70 | BQL | BQL | BQL | BQL |
| Trichlorofluoromethane | NA | BQL | BQL | 5 | BQL |
| 1,1-Dichloroethene | 7 | BQL | BQL | BQL | BQL |
| Xylenes (Total) | 10000 | BQL | BQL | BQL | BQL |
| Vinyl chloride | 2 | BQL | BQL | BQL | BQL |

BQL - Below quantification level

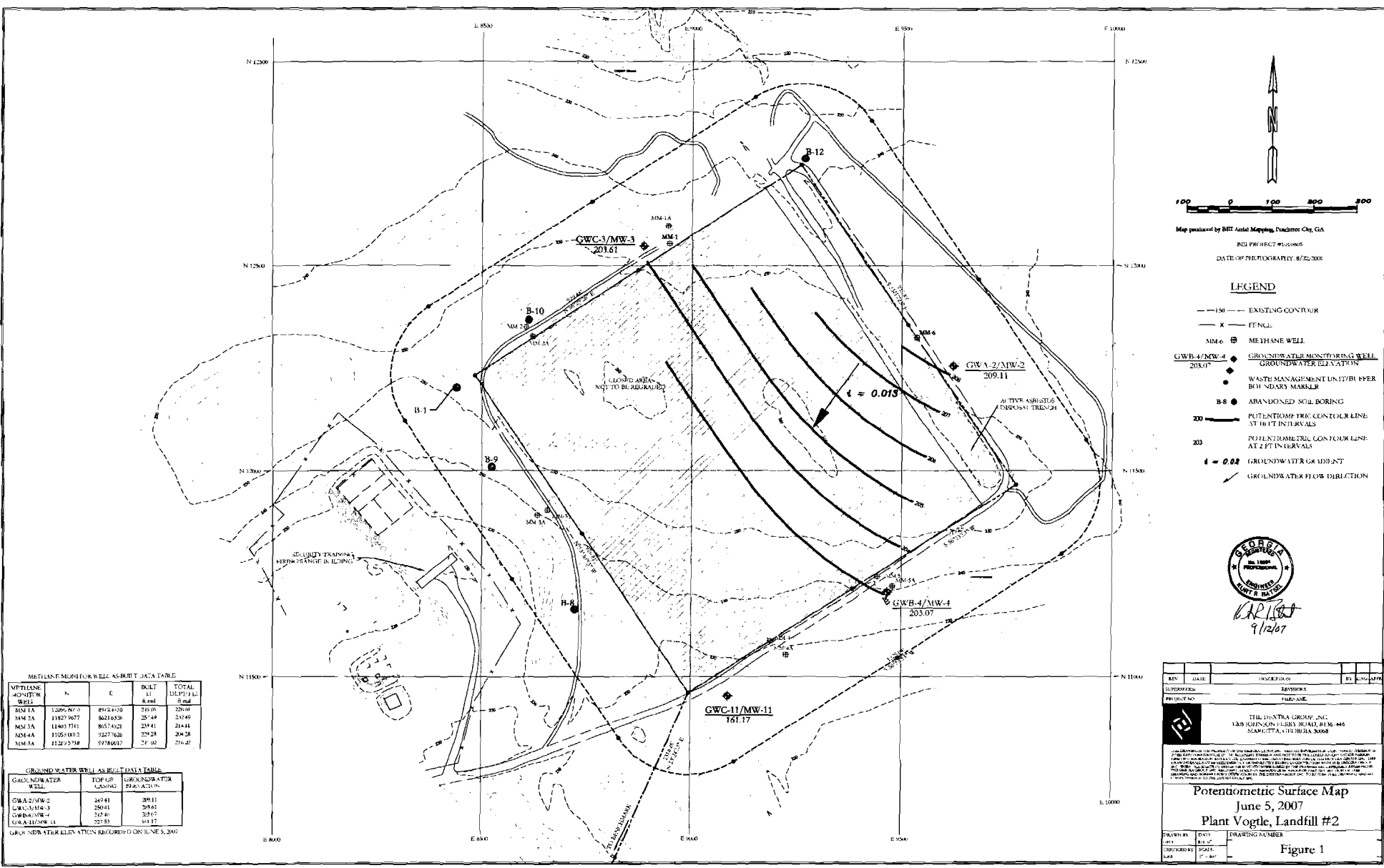
MCL - Maximum Contaminant Level per EPD Rule Chapter 391-3-5; NA - None available

¹Metals concentrations in mg/L or ppm

²Organics concentrations in ug/l or ppb

Bold indicates detected concentration is greater than the MCL.

FIGURES



Map produced by BRT Aerial Mapping, Peachtree City, GA
 BRT PROJECT #010905
 DATE OF PHOTOGRAPHY: 8/22/2008

LEGEND

- EXISTING CONTOUR
- X- FENCE
- MM-6 METHANE WELL
- GWC-4/MW-4 GROUNDWATER MONITORING WELL
203.07 GROUNDWATER ELEVATION
- WASTE MANAGEMENT UNIT/BUFFER
BOUNDARY MARKER
- B-8 ABANDONED SOIL BORING
- 200 POTENTIOMETRIC CONTOUR LINE
AT 10 FT INTERVALS
- 203 POTENTIOMETRIC CONTOUR LINE
AT 2 FT INTERVALS
- $\Delta = 0.02$ GROUNDWATER GRADIENT
- GROUNDWATER FLOW DIRECTION



MUTUANT MOUND FOR WELL AS-BUILT DATA TABLE

| WELL | N | E | BUILT L1 R 600 | TOTAL DISTANCE L1 R 600 |
|-------|------------|-----------|----------------------|----------------------------------|
| MM-1A | 11827.9677 | 8621.6536 | 25.49 | 212.49 |
| MM-2A | 11827.9677 | 8621.6536 | 25.49 | 212.49 |
| MM-3A | 11405.7711 | 8657.6521 | 23.41 | 214.41 |
| MM-4A | 11055.1015 | 9227.7626 | 22.28 | 206.28 |
| MM-5A | 11215.5738 | 9778.6617 | 21.02 | 216.02 |

GROUNDWATER WELL AS-BUILT DATA TABLE

| WELL | TOP OF LANDFILL | GROUNDWATER ELEVATION |
|--------------|--------------------|--------------------------|
| GWC-2/MW-2 | 247.41 | 209.11 |
| GWC-3/MW-3 | 250.41 | 201.61 |
| GWC-4/MW-4 | 217.40 | 203.07 |
| GWC-11/MW-11 | 227.55 | 161.17 |

GROUNDWATER ELEVATION RECORDED ON JUNE 5, 2007

| | | | | |
|---|--------|----------------|----|------|
| REV | DATE | DESCRIPTION | BY | CHKD |
| SUPERVISOR | | | | |
| PROJECT NO. | | | | |
| FILE NAME | | | | |
| THE DEXTRA GROUP, INC. 135 JOHNSON FERRY ROAD, #136-446 NANTUCKET, VIRGINIA 22088 | | | | |
| Potentiometric Surface Map June 5, 2007 Plant Vogtle, Landfill #2 | | | | |
| DRAWN BY | DATE | DRAWING NUMBER | | |
| CHECKED BY | SCALE | FIGURE | | |
| DATE | FIGURE | FIGURE | | |

**APPENDIX A – HYDRAULIC GRADIENT CALCULATION
SHEETS**

Plant Vogtle Landfill #2
Gradient Calculation
(based on three-point problem)
June 2007 Monitoring Event

| <u>Water Table</u> | | | |
|-------------------------|------------------|-----------------|----------------|
| <u>Well Designation</u> | <u>Elevation</u> | <u>Northing</u> | <u>Easting</u> |
| GWA-2/MW-2 | 209.11 | 11755.95 | 9622.59 |
| GWC-3/MW-3 | 203.61 | 12048.48 | 8881.72 |
| GWB-4/MW-4 | 203.07 | 11205.40 | 9466.20 |

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 = (GWA-2, GWC-3 & GWB-4) (High-Mid-Low)

| | x | y | z |
|------------|----------|---------|--------|
| GWA-2/MW-2 | 11755.95 | 9622.59 | 209.11 |
| GWC-3/MW-3 | 12048.48 | 8881.72 | 203.61 |
| GWB-4/MW-4 | 11205.40 | 9466.20 | 203.07 |

$$a = \begin{vmatrix} 9622.59 & 209.11 & 1 \\ 8881.72 & 203.61 & 1 \\ 9466.20 & 203.07 & 1 \end{vmatrix} = 3614.7098$$

$$b = \begin{vmatrix} 11755.95 & 209.11 & 1 \\ 12048.48 & 203.61 & 1 \\ 11205.40 & 203.07 & 1 \end{vmatrix} = -4794.906$$

$$c = \begin{vmatrix} 11755.95 & 9622.59 & 1 \\ 12048.48 & 8881.72 & 1 \\ 11205.40 & 9466.20 & 1 \end{vmatrix} = -453634.7$$

$$d = \begin{vmatrix} 11755.95 & 9622.59 & 209.11 \\ 12048.48 & 8881.72 & 203.61 \\ 11205.40 & 9466.20 & 203.07 \end{vmatrix} = -6225797$$

$$z_0 = -13.72425175$$

$$m_x = 0.007968327$$

$$m_y = -0.010569971$$

| | |
|----------------------|-------|
| Southwest Gradient = | 0.013 |
|----------------------|-------|

APPENDIX B – LABORATORY ANALYTICAL REPORT
JUNE 2007

ACL**ADVANCED CHEMISTRY LABS, INC.**

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P.O. Box 88610 • Atlanta, GA 30356
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Laboratory Report

ACL Project #: 53573

Client Proj #: Vogtle LF #2

Prepared For:

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

Attention: Mr. Kurt Batsel

Report Date: 07/09/2007

This report contains 18 pages.
(including this cover page and chain of custody)


John Andros
Technical Director

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

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

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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 temperature; (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.

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

Client Proj #: Vogtle LF #2
ACL Project #: 53573
Date Received: 06/08/2007
Date Reported: 07/09/2007

Contact: Mr. Kurt Batsel

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

Sample ID: GWA-2/MW-2

Matrix: Water

Date Sampled: 06/05/2007

Date Extracted:

Date Analyzed: 06/14/2007

ACL Sample #: 255925 **Units:** µg/L

Analyst: ME

| <u>Analyte</u> | <u>Result</u> | <u>PQL</u> | <u>Analyte</u> | <u>Result</u> | <u>PQL</u> |
|-----------------------------|---------------|------------|---------------------------|---------------|------------|
| m & p-Xylenes | BQL | 10 | Methylene chloride | BQL | 5 |
| 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 | o-Xylene | BQL | 5 |
| 1,2-Dibromoethane | 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 | | | |

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Client Proj #: Vogtle LF #2
ACL Project #: 53573
Date Received: 06/08/2007
Date Reported: 07/09/2007

Contact: Mr. Kurt Batsel

Miscellaneous Organics (8011) - Appendix II

Sample ID: GWA-2/MW-2

Matrix: Water

Date Sampled: 06/05/2007

Date Extracted: 06/11/2007

Date Analyzed: 06/28/2007

ACL Sample #: 255925 **Units:** µg/L

Analyst: MA

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

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Client Proj #: Vogtle LF #2
ACL Project #: 53573
Date Received: 06/08/2007
Date Reported: 07/09/2007

Contact: Mr. Kurt Batsel

Appendix I Metals (6010B/7841/7041)

Sample ID: GWA-2/MW-2

Matrix: Water

Date Sampled: 06/05/2007

Date Extracted:

Date Analyzed: 06/12/2007

Analyst: SW

ACL Sample #: 255925 **Units:** mg/L

| <u>Analyte</u> | <u>Result</u> | <u>PQL</u> |
|----------------|---------------|------------|
| Antimony | BQL | 0.006 |
| Arsenic | BQL | 0.010 |
| Barium | 0.029 | 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 | 0.022 | 0.020 |
| Selenium | BQL | 0.040 |
| Silver | BQL | 0.010 |
| Thallium | BQL | 0.002 |
| Vanadium | BQL | 0.050 |
| Zinc | 0.084 | 0.020 |

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Client Proj #: Vogtle LF #2
ACL Project #: 53573
Date Received: 06/08/2007
Date Reported: 07/09/2007

Contact: Mr. Kurt Batsel

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

Sample ID: GWC-3/MW-3

Matrix: Water
Date Sampled: 06/05/2007
Date Extracted:
Date Analyzed: 06/14/2007
Analyst: ME

ACL Sample #: 255926 **Units:** µg/L

| <u>Analyte</u> | <u>Result</u> | <u>PQL</u> | <u>Analyte</u> | <u>Result</u> | <u>PQL</u> |
|-----------------------------|---------------|------------|---------------------------|---------------|------------|
| m & p-Xylenes | BQL | 10 | Methylene chloride | BQL | 5 |
| 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 | o-Xylene | BQL | 5 |
| 1,2-Dibromoethane | 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 | | | |

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Client Proj #: Vogtle LF #2
ACL Project #: 53573
Date Received: 06/08/2007
Date Reported: 07/09/2007

Contact: Mr. Kurt Batsel

Miscellaneous Organics (8011) - Appendix II

Sample ID: GWC-3/MW-3

Matrix: Water
Date Sampled: 06/05/2007
Date Extracted: 06/11/2007
Date Analyzed: 06/28/2007
Analyst: MA

ACL Sample #: 255926 **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 |

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Client Proj #: Vogtle LF #2
ACL Project #: 53573
Date Received: 06/08/2007
Date Reported: 07/09/2007

Contact: Mr. Kurt Batsel

Appendix I Metals (6010B/7841/7041)

Sample ID: GWC-3/MW-3

Matrix: Water
Date Sampled: 06/05/2007
Date Extracted:
Date Analyzed: 06/12/2007
Analyst: SW

ACL Sample #: 255926 **Units:** mg/L

| <u>Analyte</u> | <u>Result</u> | <u>PQL</u> |
|----------------|---------------|------------|
| Antimony | BQL | 0.006 |
| Arsenic | BQL | 0.010 |
| Barium | 0.020 | 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 | 0.248 | 0.020 |

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Client Proj #: Vogtle LF #2
ACL Project #: 53573
Date Received: 06/08/2007
Date Reported: 07/09/2007

Contact: Mr. Kurt Batsel

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

Sample ID: GWB-4/MW-4

Matrix: Water

Date Sampled: 06/05/2007

Date Extracted:

Date Analyzed: 06/14/2007

ACL Sample #: 255927 **Units:** µg/L

Analyst: ME

| <u>Analyte</u> | <u>Result</u> | <u>PQL</u> | <u>Analyte</u> | <u>Result</u> | <u>PQL</u> |
|-----------------------------|---------------|------------|---------------------------|---------------|------------|
| m & p-Xylenes | BQL | 10 | Methylene chloride | BQL | 5 |
| 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 | o-Xylene | BQL | 5 |
| 1,2-Dibromoethane | 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 | | | |

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Client: The Dextra Group
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Marietta, GA 30068-0000

Client Proj #: Vogtle LF #2
ACL Project #: 53573
Date Received: 06/08/2007
Date Reported: 07/09/2007

Contact: Mr. Kurt Batsel

Miscellaneous Organics (8011) - Appendix II

Sample ID: GWB-4/MW-4

Matrix: Water
Date Sampled: 06/05/2007
Date Extracted: 06/11/2007
Date Analyzed: 06/28/2007
Analyst: MA

ACL Sample #: 255927 **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 |

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Client Proj #: Vogtle LF #2
ACL Project #: 53573
Date Received: 06/08/2007
Date Reported: 07/09/2007

Contact: Mr. Kurt Batsel

Appendix I Metals (6010B/7841/7041)

Sample ID: GWB-4/MW-4

Matrix: Water
Date Sampled: 06/05/2007
Date Extracted:
Date Analyzed: 06/12/2007
Analyst: SW

ACL Sample #: 255927 **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 | 0.023 | 0.020 |
| Selenium | BQL | 0.040 |
| Silver | BQL | 0.010 |
| Thallium | BQL | 0.002 |
| Vanadium | BQL | 0.050 |
| Zinc | 0.259 | 0.020 |

ACL

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QUALITY CONTROL SECTION

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Client Proj #: Vogtle LF #2
ACL Project #: 53573
Date Received: 06/08/2007
Date Reported: 07/09/2007

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) |
|--------------|----------------------------------|-----------------------------------|------------------------|----------------------------------|
| 255925 | 86 | 94 | 99 | 83 |
| 255926 | 87 | 95 | 96 | 83 |
| 255927 | 89 | 94 | 99 | 82 |

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www.advancedchemistrylabs.com

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

Client Proj #: Vogtle LF #2
ACL Project #: 53573
Date Received: 06/08/2007
Date Reported: 07/09/2007

Contact: Mr. Kurt Batsel

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

Sample ID: -----

Matrix: Water

Date Sampled: -----

Date Extracted:

Date Analyzed: 06/14/2007

Analyst: ME

ACL Sample #: **Blank** **Units:** $\mu\text{g/L}$

| <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-Xylene | 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 # 3

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Analysis Date : 06-14-07

Sample ID: 255916-1

| COMPOUND | SPIKE ADDED (µg/L) | SAMPLE CONCENTRATION (µg/L) | MS CONCENTRATION (µg/L) | MS % REC # | QC. LIMITS REC. |
|--------------------|--------------------------|-----------------------------------|-------------------------------|------------------|-----------------------|
| 1,1-dichloroethene | 20.0 | 0.0 | 22.5 | 113 | (54-144) |
| benzene | 20.0 | 0.0 | 21.2 | 106 | (82-132) |
| trichloroethene | 20.0 | 0.0 | 20.4 | 102 | (73-128) |
| toluene | 20.0 | 0.0 | 20.9 | 105 | (83-130) |
| chlorobenzene | 20.0 | 0.0 | 22.4 | 112 | (82-123) |

| COMPOUND | SPIKE ADDED (µg/L) | MSD CONCENTRATION (µg/L) | MSD % REC # | % RPD # | QC LIMITS | |
|--------------------|--------------------------|--------------------------------|-------------------|------------|-----------|----------|
| | | | | | RPD | REC. |
| 1,1-dichloroethene | 20.0 | 21.3 | 107 | 5 | 14 | (54-144) |
| benzene | 20.0 | 21.1 | 105 | 1 | 14 | (82-132) |
| trichloroethene | 20.0 | 20.9 | 105 | 3 | 14 | (73-128) |
| toluene | 20.0 | 20.9 | 105 | 0 | 13 | (83-130) |
| chlorobenzene | 20.0 | 22.3 | 112 | 0 | 13 | (82-123) |

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:

ACL**ADVANCED CHEMISTRY LABS, INC.**

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Marietta, GA 30068-0000

Client Proj #: Vogtle LF #2
ACL Project #: 53573
Date Received: 06/08/2007
Date Reported: 07/09/2007

Contact: Mr. Kurt Batsel

Appendix I Metals (6010B/7841/7041)

Sample ID: -----

Matrix: Water

Date Sampled: -----

Date Extracted:

Date Analyzed: 06/12/2007

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

ACL Sample No. : 255927
Date Analyzed : 06-12-07
Analyst : SW

| 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 | 0.200 | 0.000 | 0.206 | 103 | 0.197 | 99 | 4 | 20 | 70 | 130 |
| Arsenic | 0.200 | 0.000 | 0.206 | 103 | 0.200 | 100 | 3 | 20 | 75 | 125 |
| Barium | 1.000 | 0.000 | 1.060 | 106 | 1.023 | 102 | 4 | 20 | 75 | 125 |
| Beryllium | 0.200 | 0.000 | 0.227 | 114 | 0.220 | 110 | 3 | 20 | 75 | 125 |
| Cadmium | 0.050 | 0.000 | 0.053 | 107 | 0.052 | 103 | 3 | 20 | 75 | 125 |
| Chromium | 0.200 | 0.000 | 0.222 | 111 | 0.215 | 107 | 3 | 20 | 75 | 125 |
| Cobalt | 0.200 | 0.000 | 0.222 | 111 | 0.215 | 107 | 3 | 20 | 75 | 125 |
| Copper | 0.200 | 0.000 | 0.217 | 108 | 0.210 | 105 | 3 | 20 | 75 | 125 |
| Lead | 0.200 | 0.000 | 0.217 | 108 | 0.210 | 105 | 3 | 20 | 75 | 125 |
| Nickel | 0.200 | 0.023 | 0.241 | 109 | 0.233 | 105 | 4 | 20 | 75 | 125 |
| Selenium | 0.050 | 0.000 | 0.048 | 95 | 0.047 | 94 | 1 | 20 | 75 | 125 |
| Silver | 0.020 | 0.000 | 0.020 | 102 | 0.019 | 97 | 6 | 20 | 75 | 125 |
| Thallium | 0.200 | 0.000 | 0.204 | 102 | 0.201 | 100 | 2 | 20 | 70 | 130 |
| Vanadium | 0.500 | 0.000 | 0.541 | 108 | 0.522 | 104 | 4 | 20 | 75 | 125 |
| Zinc | 0.200 | 0.259 | 0.464 | 102 | 0.460 | 101 | 2 | 20 | 75 | 125 |

* Outside QC Limits

Comment : _____

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| | | | | | | | | | | | | | | | | | | | |
|---|--|--|------|---|--------|---------|-------|-------------------------|--------------------------------------|--------------------------------|-----|---------------------|--|-----------------|------|---|--|----------------------------------|-----------------------|
| Company Name: THE DEXTRA Group | | Phone #: 7) 578-9696 | | CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST | | | | | | | | | | | | | | | |
| Company Address: 1205 Johnson Ferry Rd SE 136446 Marietta, GA 30068 | | Fax #: 7) 321-5345 | | | | | | | | | | | | | | | | | |
| Company Address: 1205 Johnson Ferry Rd SE 136446 Marietta, GA 30068 | | Site Location: Burke Co. GA. | | ANALYSIS REQUEST | | | | | | | | | | | | | | | |
| Project Manager: MR. Kurt Batzel | | Client Project: (#) (Name) Vogtle LF#2 | | | | | | | | | | | | | | | | | |
| I attest that the proper field sampling procedures were used during the collection of these samples. <u>Tiffany Messier, Kyle Rommel</u> | | | | | | | | | | | | | | | | | | | |
| Sampler Name (Print): | | | | | | | | | | | | | | | | | | | |
| Field Sample ID | # Container | Matrix | | | | | | Method Preserved | | | | | | Sampling | | Remarks | | | |
| | | Water | Soil | Air | Sludge | Product | Other | HCl | HNO ₃ | H ₂ SO ₄ | Ice | None | Other | Date | Time | | | | |
| GWA-2/MW-2 | 5 | X | | | | | | 2 | 1 | | X | 2 | | | | | | | |
| GWC-3/MW-3 | 5 | X | | | | | | 2 | 1 | | X | 2 | | | | | | | |
| GWB-4/MW-4 | 5 | X | | | | | | 2 | 1 | | X | 2 | | | | | | | |
| GWE-11/MW-11 | 5 | X | | | | | | 2 | 1 | | X | 2 | | | | | | | DRY WELL, NOT SAMPLED |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | |
| Special Detection Limits | | | | | | | | Remarks: | | | | | | | | TAT | | Special Handling | |
| Special Reporting Requirements | | | | | | | | Lab Use Only: | | | | Cooler Temp. | | | | Priority (24 hr) <input type="checkbox"/> | | ACL Contact _____ | |
| | | | | | | | | | | | | | | | | Rush (48 hr) <input type="checkbox"/> | | Quote # _____ | |
| | | | | | | | | | | | | | | | | Rush (72 hr) <input type="checkbox"/> | | P. O. _____ | |
| Fax <input type="checkbox"/> | | | | | | | | ACL Project #: 53573 | | | | 3 °C | | | | QA/QC Level | | | |
| | | | | | | | | | | | | | | | | Level 1 <input type="checkbox"/> | | Level 2 <input type="checkbox"/> | |
| CUSTODY RECORD | Relinquished by Sampler: <u>WHL</u> | | | | | | | | Date 6/8/07 Time 11:06 | | | | Received by: _____ | | | | | | |
| | Relinquished by: _____ | | | | | | | | Date _____ Time _____ | | | | Received by: _____ | | | | | | |
| | Relinquished by: _____ | | | | | | | | Date 6/8/07 Time 11:06 | | | | Received by Laboratory: <u>B. Bartholomew</u> Waybill # _____ | | | | | | |

APPENDIX C – STATISTICAL ANALYSES

Concentrations (mg/L)

Parameter: Barium

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Samples: 48

Total Non-Detect: 22

Percent Non-Detects: 45.8333%

Total Background Samples: 13

There is 1 background well

| Well | Samples | ND | Date | Result | Original |
|------------|---------|--------------|------------|---------|----------|
| GWA-2/MW-2 | 13 | 8 (61.5385%) | 7/30/2002 | 0.027 | 0.027 |
| | | | 9/24/2002 | ND<0.01 | ND<0.02 |
| | | | 10/21/2002 | ND<0.01 | ND<0.02 |
| | | | 12/4/2002 | 0.015 | 0.015 |
| | | | 6/25/2003 | ND<0.01 | ND<0.02 |
| | | | 12/17/2003 | ND<0.01 | ND<0.02 |
| | | | 6/16/2004 | ND<0.01 | ND<0.02 |
| | | | 12/28/2004 | ND<0.01 | ND<0.02 |
| | | | 6/14/2005 | 0.021 | 0.021 |
| | | | 12/6/2005 | ND<0.01 | ND<0.02 |
| | | | 6/6/2006 | ND<0.01 | ND<0.02 |
| | | | 12/5/2006 | 0.054 | 0.054 |
| | | | 6/5/2007 | 0.029 | 0.029 |

There are 3 compliance wells

| Well | Samples | ND | Date | Result | Original |
|----------------|---------|--------------|-------------|---------|----------|
| GWB-4/MW-4 | 13 | 5 (38.4615%) | 7/30/2002 | 0.021 | 0.021 |
| | | | 9/24/2002 | 0.021 | 0.021 |
| | | | 10/21/2002 | 0.021 | 0.021 |
| | | | 12/4/2002 ~ | 0.0205 | 0.0205 |
| | | | 6/25/2003 | ND<0.01 | ND<0.02 |
| | | | 12/17/2003 | ND<0.01 | ND<0.02 |
| | | | 6/16/2004 | ND<0.01 | ND<0.02 |
| | | | 12/28/2004 | 0.021 | 0.021 |
| | | | 6/14/2005 | 0.042 | 0.042 |
| | | | 12/6/2005 | 0.021 | 0.021 |
| | | | 6/6/2006 | ND<0.01 | ND<0.02 |
| | | | 12/5/2006 | 0.023 | 0.023 |
| | | | 6/5/2007 | ND<0.01 | ND<0.02 |
| GWC-11/MW-1112 | | 4 (33.3333%) | 7/30/2002 | 0.085 | 0.085 |
| | | | 9/24/2002 | 0.02 | 0.02 |
| | | | 10/21/2002 | 0.025 | 0.025 |
| | | | 12/4/2002 | 0.018 | 0.018 |
| | | | 6/25/2003 | ND<0.01 | ND<0.02 |
| | | | 12/17/2003 | 0.022 | 0.022 |
| | | | 6/16/2004 | ND<0.01 | ND<0.02 |
| | | | 12/28/2004 | ND<0.01 | ND<0.02 |
| | | | 6/14/2005 | 0.034 | 0.034 |
| | | | 12/6/2005 | ND<0.01 | ND<0.02 |
| | | | 6/6/2006 | 0.032 | 0.032 |
| | | | 12/5/2006 | 0.065 | 0.065 |

| | | | | | |
|------------|----|---------|------------|---------|---------|
| GWC-3/MW-3 | 10 | 5 (50%) | 7/30/2002 | ND<0.01 | ND<0.02 |
| | | | 9/24/2002 | ND<0.01 | ND<0.02 |
| | | | 12/4/2002 | 0.02 | 0.02 |
| | | | 12/17/2003 | ND<0.01 | ND<0.02 |
| | | | 6/16/2004 | 0.02 | 0.02 |
| | | | 6/14/2005 | ND<0.01 | ND<0.02 |
| | | | 12/6/2005 | 0.025 | 0.025 |
| | | | 6/6/2006 | ND<0.01 | ND<0.02 |
| | | | 12/5/2006 | 0.02 | 0.02 |
| | | | 6/5/2007 | 0.02 | 0.02 |

There is 1 unused well

| Well | Samples | ND | Date | Result | Original |
|----------|---------|----------|------------|---------|----------|
| EQ-Blank | 4 | 4 (100%) | 6/25/2003 | ND<0.01 | ND<0.02 |
| | | | 12/17/2003 | ND<0.01 | ND<0.02 |
| | | | 6/16/2004 | ND<0.01 | ND<0.02 |
| | | | 12/28/2004 | ND<0.01 | ND<0.02 |

Shapiro-Wilks Test of Normality

Parameter: Barium

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

K = 24; Samples = 48

| i | x(i) | x(n-i+1) | x(n-1+1)-x(i) | a(n-i+1) | b(i) |
|----|--------|----------|---------------|----------|------------|
| 1 | 0.01 | 0.085 | 0.075 | 0.3789 | 0.0284175 |
| 2 | 0.01 | 0.065 | 0.055 | 0.2604 | 0.014322 |
| 3 | 0.01 | 0.054 | 0.044 | 0.2281 | 0.0100364 |
| 4 | 0.01 | 0.042 | 0.032 | 0.2045 | 0.006544 |
| 5 | 0.01 | 0.034 | 0.024 | 0.1855 | 0.004452 |
| 6 | 0.01 | 0.032 | 0.022 | 0.1693 | 0.0037246 |
| 7 | 0.01 | 0.029 | 0.019 | 0.1551 | 0.0029469 |
| 8 | 0.01 | 0.027 | 0.017 | 0.1423 | 0.0024191 |
| 9 | 0.01 | 0.025 | 0.015 | 0.1306 | 0.001959 |
| 10 | 0.01 | 0.025 | 0.015 | 0.1197 | 0.0017955 |
| 11 | 0.01 | 0.023 | 0.013 | 0.1095 | 0.0014235 |
| 12 | 0.01 | 0.022 | 0.012 | 0.0998 | 0.0011976 |
| 13 | 0.01 | 0.021 | 0.011 | 0.0906 | 0.0009966 |
| 14 | 0.01 | 0.021 | 0.011 | 0.0817 | 0.0008987 |
| 15 | 0.01 | 0.021 | 0.011 | 0.0731 | 0.0008041 |
| 16 | 0.01 | 0.021 | 0.011 | 0.0648 | 0.0007128 |
| 17 | 0.01 | 0.021 | 0.011 | 0.0568 | 0.0006248 |
| 18 | 0.01 | 0.021 | 0.011 | 0.0489 | 0.0005379 |
| 19 | 0.01 | 0.0205 | 0.0105 | 0.0411 | 0.00043155 |
| 20 | 0.01 | 0.02 | 0.01 | 0.0335 | 0.000335 |
| 21 | 0.01 | 0.02 | 0.01 | 0.0259 | 0.000259 |
| 22 | 0.01 | 0.02 | 0.01 | 0.0185 | 0.000185 |
| 23 | 0.015 | 0.02 | 0.005 | 0.0111 | 5.55e-005 |
| 24 | 0.018 | 0.02 | 0.002 | 0.0037 | 7.4e-006 |
| 25 | 0.02 | 0.018 | -0.002 | | |
| 26 | 0.02 | 0.015 | -0.005 | | |
| 27 | 0.02 | 0.01 | -0.01 | | |
| 28 | 0.02 | 0.01 | -0.01 | | |
| 29 | 0.02 | 0.01 | -0.01 | | |
| 30 | 0.0205 | 0.01 | -0.0105 | | |
| 31 | 0.021 | 0.01 | -0.011 | | |
| 32 | 0.021 | 0.01 | -0.011 | | |
| 33 | 0.021 | 0.01 | -0.011 | | |
| 34 | 0.021 | 0.01 | -0.011 | | |
| 35 | 0.021 | 0.01 | -0.011 | | |
| 36 | 0.021 | 0.01 | -0.011 | | |
| 37 | 0.022 | 0.01 | -0.012 | | |
| 38 | 0.023 | 0.01 | -0.013 | | |
| 39 | 0.025 | 0.01 | -0.015 | | |
| 40 | 0.025 | 0.01 | -0.015 | | |
| 41 | 0.027 | 0.01 | -0.017 | | |
| 42 | 0.029 | 0.01 | -0.019 | | |
| 43 | 0.032 | 0.01 | -0.022 | | |
| 44 | 0.034 | 0.01 | -0.024 | | |
| 45 | 0.042 | 0.01 | -0.032 | | |
| 46 | 0.054 | 0.01 | -0.044 | | |

| | | | |
|----|-------|------|--------|
| 47 | 0.065 | 0.01 | -0.055 |
| 48 | 0.085 | 0.01 | -0.075 |

Sum of b values = 0.0850864

Sample Standard Deviation = 0.0150588

W Statistic = 0.679267

5% Critical value of 0.947 exceeds 0.679267

Evidence of non-normality at 95% level of significance

1% Critical value of 0.929 exceeds 0.679267

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-2/MW-2 | 7/30/2002 | 0.027 | 41 |
| | 9/24/2002 | ND<0.01 | 11.5 |
| | 10/21/2002 | ND<0.01 | 11.5 |
| | 12/4/2002 | 0.015 | 23 |
| | 6/25/2003 | ND<0.01 | 11.5 |
| | 12/17/2003 | ND<0.01 | 11.5 |
| | 6/16/2004 | ND<0.01 | 11.5 |
| | 12/28/2004 | ND<0.01 | 11.5 |
| | 6/14/2005 | 0.021 | 31 |
| | 12/6/2005 | ND<0.01 | 11.5 |
| | 6/6/2006 | ND<0.01 | 11.5 |
| | 12/5/2006 | 0.054 | 46 |
| | 6/5/2007 | 0.029 | 42 |

Rank Sum = 275

Rank Mean = 21.1538

Background Rank Sum = 275

Background Rank Mean = 21.1538

Compliance Wells

| Well ID | Date | Result | Rank |
|------------|-------------|---------|------|
| GWB-4/MW-4 | 7/30/2002 | 0.021 | 32 |
| | 9/24/2002 | 0.021 | 33 |
| | 10/21/2002 | 0.021 | 34 |
| | 12/4/2002 ~ | 0.0205 | 30 |
| | 6/25/2003 | ND<0.01 | 11.5 |
| | 12/17/2003 | ND<0.01 | 11.5 |
| | 6/16/2004 | ND<0.01 | 11.5 |
| | 12/28/2004 | 0.021 | 35 |
| | 6/14/2005 | 0.042 | 45 |
| | 12/6/2005 | 0.021 | 36 |
| | 6/6/2006 | ND<0.01 | 11.5 |
| | 12/5/2006 | 0.023 | 38 |
| | 6/5/2007 | ND<0.01 | 11.5 |

Rank Sum = 340.5

Rank Mean = 26.1923

| | | | |
|---------------|------------|---------|------|
| GWC-11/MW-117 | 7/30/2002 | 0.085 | 48 |
| | 9/24/2002 | 0.02 | 25 |
| | 10/21/2002 | 0.025 | 39 |
| | 12/4/2002 | 0.018 | 24 |
| | 6/25/2003 | ND<0.01 | 11.5 |
| | 12/17/2003 | 0.022 | 37 |
| | 6/16/2004 | ND<0.01 | 11.5 |

| | | |
|------------|---------|------|
| 12/28/2004 | ND<0.01 | 11.5 |
| 6/14/2005 | 0.034 | 44 |
| 12/6/2005 | ND<0.01 | 11.5 |
| 6/6/2006 | 0.032 | 43 |
| 12/5/2006 | 0.065 | 47 |

Rank Sum = 353

Rank Mean = 29.4167

| | | | |
|------------|------------|---------|------|
| GWC-3/MW-3 | 7/30/2002 | ND<0.01 | 11.5 |
| | 9/24/2002 | ND<0.01 | 11.5 |
| | 12/4/2002 | 0.02 | 26 |
| | 12/17/2003 | ND<0.01 | 11.5 |
| | 6/16/2004 | 0.02 | 27 |
| | 6/14/2005 | ND<0.01 | 11.5 |
| | 12/6/2005 | 0.025 | 40 |
| | 6/6/2006 | ND<0.01 | 11.5 |
| | 12/5/2006 | 0.02 | 28 |
| | 6/5/2007 | 0.02 | 29 |

Rank Sum = 207.5

Rank Mean = 20.75

Calculation Results:

Kruskal-Wallis H Statistic = 3.13009

Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 3.46296

95% Confidence comparison value is 7.81472 at 3 degrees of freedom

3.13009 < 7.81472 indicating no significant group difference at 5% significance level

3.46296 < 7.81472 indicating no significant group difference at 5% significance level when adjusted for ties

Concentrations (mg/L)

Parameter: Nickel

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

Total Samples: 48

Total Non-Detect: 43

Percent Non-Detects: 89.5833%

Total Background Samples: 13

There is 1 background well

| Well | Samples | ND | Date | Result | Original |
|------------|---------|---------------|------------|---------|----------|
| GWA-2/MW-2 | 13 | 11 (84.6154%) | 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 |
| | | | 12/4/2002 | ND<0.02 | ND<0.04 |
| | | | 6/25/2003 | ND<0.01 | ND<0.02 |
| | | | 12/17/2003 | ND<0.01 | ND<0.02 |
| | | | 6/16/2004 | 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 |
| | | | 6/6/2006 | ND<0.01 | ND<0.02 |
| | | | 12/5/2006 | 0.022 | 0.022 |
| | | | 6/5/2007 | 0.022 | 0.022 |

There are 3 compliance wells

| Well | Samples | ND | Date | Result | Original |
|----------------|---------|---------------|-------------|---------|----------|
| GWB-4/MW-4 | 13 | 11 (84.6154%) | 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 |
| | | | 12/4/2002 ~ | ND<0.02 | ND<0.04 |
| | | | 6/25/2003 | ND<0.01 | ND<0.02 |
| | | | 12/17/2003 | ND<0.01 | ND<0.02 |
| | | | 6/16/2004 | 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 |
| | | | 6/6/2006 | ND<0.01 | ND<0.02 |
| | | | 12/5/2006 | 0.029 | 0.029 |
| | | | 6/5/2007 | 0.023 | 0.023 |
| GWC-11/MW-1112 | | 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 |
| | | | 12/4/2002 | ND<0.02 | ND<0.04 |
| | | | 6/25/2003 | ND<0.01 | ND<0.02 |
| | | | 12/17/2003 | ND<0.01 | ND<0.02 |
| | | | 6/16/2004 | 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 |
| | | | 6/6/2006 | ND<0.01 | ND<0.02 |
| | | | 12/5/2006 | 0.023 | 0.023 |

| | | | | | |
|------------|----|-----------|------------|---------|---------|
| GWC-3/MW-3 | 10 | 10 (100%) | 7/30/2002 | ND<0.01 | ND<0.02 |
| | | | 9/24/2002 | ND<0.01 | ND<0.02 |
| | | | 12/4/2002 | ND<0.02 | ND<0.04 |
| | | | 12/17/2003 | ND<0.01 | ND<0.02 |
| | | | 6/16/2004 | ND<0.01 | ND<0.02 |
| | | | 6/14/2005 | ND<0.01 | ND<0.02 |
| | | | 12/6/2005 | ND<0.01 | ND<0.02 |
| | | | 6/6/2006 | ND<0.01 | ND<0.02 |
| | | | 12/5/2006 | ND<0.01 | ND<0.02 |
| | | | 6/5/2007 | ND<0.01 | ND<0.02 |

There is 1 unused well

| Well | Samples | ND | Date | Result | Original |
|----------|---------|----------|------------|---------|----------|
| EQ-Blank | 4 | 4 (100%) | 6/25/2003 | ND<0.01 | ND<0.02 |
| | | | 12/17/2003 | ND<0.01 | ND<0.02 |
| | | | 6/16/2004 | ND<0.01 | ND<0.02 |
| | | | 12/28/2004 | ND<0.01 | ND<0.02 |

Shapiro-Wilks Test of Normality

Parameter: Nickel

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

K = 24; Samples = 48

| i | x(i) | x(n-i+1) | x(n-1+1)-x(i) | a(n-i+1) | b(i) |
|----|-------|----------|---------------|----------|-----------|
| 1 | 0.01 | 0.029 | 0.019 | 0.3789 | 0.0071991 |
| 2 | 0.01 | 0.023 | 0.013 | 0.2604 | 0.0033852 |
| 3 | 0.01 | 0.023 | 0.013 | 0.2281 | 0.0029653 |
| 4 | 0.01 | 0.022 | 0.012 | 0.2045 | 0.002454 |
| 5 | 0.01 | 0.022 | 0.012 | 0.1855 | 0.002226 |
| 6 | 0.01 | 0.02 | 0.01 | 0.1693 | 0.001693 |
| 7 | 0.01 | 0.02 | 0.01 | 0.1551 | 0.001551 |
| 8 | 0.01 | 0.02 | 0.01 | 0.1423 | 0.001423 |
| 9 | 0.01 | 0.02 | 0.01 | 0.1306 | 0.001306 |
| 10 | 0.01 | 0.01 | 0 | 0.1197 | 0 |
| 11 | 0.01 | 0.01 | 0 | 0.1095 | 0 |
| 12 | 0.01 | 0.01 | 0 | 0.0998 | 0 |
| 13 | 0.01 | 0.01 | 0 | 0.0906 | 0 |
| 14 | 0.01 | 0.01 | 0 | 0.0817 | 0 |
| 15 | 0.01 | 0.01 | 0 | 0.0731 | 0 |
| 16 | 0.01 | 0.01 | 0 | 0.0648 | 0 |
| 17 | 0.01 | 0.01 | 0 | 0.0568 | 0 |
| 18 | 0.01 | 0.01 | 0 | 0.0489 | 0 |
| 19 | 0.01 | 0.01 | 0 | 0.0411 | 0 |
| 20 | 0.01 | 0.01 | 0 | 0.0335 | 0 |
| 21 | 0.01 | 0.01 | 0 | 0.0259 | 0 |
| 22 | 0.01 | 0.01 | 0 | 0.0185 | 0 |
| 23 | 0.01 | 0.01 | 0 | 0.0111 | 0 |
| 24 | 0.01 | 0.01 | 0 | 0.0037 | 0 |
| 25 | 0.01 | 0.01 | 0 | | |
| 26 | 0.01 | 0.01 | 0 | | |
| 27 | 0.01 | 0.01 | 0 | | |
| 28 | 0.01 | 0.01 | 0 | | |
| 29 | 0.01 | 0.01 | 0 | | |
| 30 | 0.01 | 0.01 | 0 | | |
| 31 | 0.01 | 0.01 | 0 | | |
| 32 | 0.01 | 0.01 | 0 | | |
| 33 | 0.01 | 0.01 | 0 | | |
| 34 | 0.01 | 0.01 | 0 | | |
| 35 | 0.01 | 0.01 | 0 | | |
| 36 | 0.01 | 0.01 | 0 | | |
| 37 | 0.01 | 0.01 | 0 | | |
| 38 | 0.01 | 0.01 | 0 | | |
| 39 | 0.01 | 0.01 | 0 | | |
| 40 | 0.02 | 0.01 | -0.01 | | |
| 41 | 0.02 | 0.01 | -0.01 | | |
| 42 | 0.02 | 0.01 | -0.01 | | |
| 43 | 0.02 | 0.01 | -0.01 | | |
| 44 | 0.022 | 0.01 | -0.012 | | |
| 45 | 0.022 | 0.01 | -0.012 | | |
| 46 | 0.023 | 0.01 | -0.013 | | |

| | | | |
|----|-------|------|--------|
| 47 | 0.023 | 0.01 | -0.013 |
| 48 | 0.029 | 0.01 | -0.019 |

Sum of b values = 0.0242026

Sample Standard Deviation = 0.00492384

W Statistic = 0.514065

5% Critical value of 0.947 exceeds 0.514065

Evidence of non-normality at 95% level of significance

1% Critical value of 0.929 exceeds 0.514065

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-2/MW-2 | 7/30/2002 | ND<0.01 | 22 |
| | 9/24/2002 | ND<0.01 | 22 |
| | 10/21/2002 | ND<0.01 | 22 |
| | 12/4/2002 | ND<0.02 | 22 |
| | 6/25/2003 | ND<0.01 | 22 |
| | 12/17/2003 | ND<0.01 | 22 |
| | 6/16/2004 | ND<0.01 | 22 |
| | 12/28/2004 | ND<0.01 | 22 |
| | 6/14/2005 | ND<0.01 | 22 |
| | 12/6/2005 | ND<0.01 | 22 |
| | 6/6/2006 | ND<0.01 | 22 |
| | 12/5/2006 | 0.022 | 44 |
| | 6/5/2007 | 0.022 | 45 |

Rank Sum = 331

Rank Mean = 25.4615

Background Rank Sum = 331

Background Rank Mean = 25.4615

Compliance Wells

| Well ID | Date | Result | Rank |
|------------|-------------|---------|------|
| GWB-4/MW-4 | 7/30/2002 | ND<0.01 | 22 |
| | 9/24/2002 | ND<0.01 | 22 |
| | 10/21/2002 | ND<0.01 | 22 |
| | 12/4/2002 ~ | ND<0.02 | 22 |
| | 6/25/2003 | ND<0.01 | 22 |
| | 12/17/2003 | ND<0.01 | 22 |
| | 6/16/2004 | ND<0.01 | 22 |
| | 12/28/2004 | ND<0.01 | 22 |
| | 6/14/2005 | ND<0.01 | 22 |
| | 12/6/2005 | ND<0.01 | 22 |
| | 6/6/2006 | ND<0.01 | 22 |
| | 12/5/2006 | 0.029 | 48 |
| | 6/5/2007 | 0.023 | 46 |

Rank Sum = 336

Rank Mean = 25.8462

| | | | |
|--------------|------------|---------|----|
| GWC-11/MW-11 | 7/30/2002 | ND<0.01 | 22 |
| | 9/24/2002 | ND<0.01 | 22 |
| | 10/21/2002 | ND<0.01 | 22 |
| | 12/4/2002 | ND<0.02 | 22 |
| | 6/25/2003 | ND<0.01 | 22 |
| | 12/17/2003 | ND<0.01 | 22 |
| | 6/16/2004 | ND<0.01 | 22 |

| | | |
|------------|---------|----|
| 12/28/2004 | ND<0.01 | 22 |
| 6/14/2005 | ND<0.01 | 22 |
| 12/6/2005 | ND<0.01 | 22 |
| 6/6/2006 | ND<0.01 | 22 |
| 12/5/2006 | 0.023 | 47 |

Rank Sum = 289

Rank Mean = 24.0833

| | | | |
|------------|------------|---------|----|
| GWC-3/MW-3 | 7/30/2002 | ND<0.01 | 22 |
| | 9/24/2002 | ND<0.01 | 22 |
| | 12/4/2002 | ND<0.02 | 22 |
| | 12/17/2003 | ND<0.01 | 22 |
| | 6/16/2004 | ND<0.01 | 22 |
| | 6/14/2005 | ND<0.01 | 22 |
| | 12/6/2005 | ND<0.01 | 22 |
| | 6/6/2006 | ND<0.01 | 22 |
| | 12/5/2006 | ND<0.01 | 22 |
| | 6/5/2007 | ND<0.01 | 22 |

Rank Sum = 220

Rank Mean = 22

Calculation Results:

Kruskal-Wallis H Statistic = 0.511022

Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 1.81758

95% Confidence comparison value is 7.81472 at 3 degrees of freedom

0.511022 < 7.81472 indicating no significant group difference at 5% significance level

1.81758 < 7.81472 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: 48

Total Non-Detect: 28

Percent Non-Detects: 58.3333%

Total Background Samples: 13

There is 1 background well

| Well | Samples | ND | Date | Result | Original |
|------------|---------|--------------|------------|---------|----------|
| GWA-2/MW-2 | 13 | 9 (69.2308%) | 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 |
| | | | 12/4/2002 | ND<0.01 | ND<0.02 |
| | | | 6/25/2003 | ND<0.01 | ND<0.02 |
| | | | 12/17/2003 | ND<0.01 | ND<0.02 |
| | | | 6/16/2004 | 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 | 0.08 | 0.08 |
| | | | 6/6/2006 | 0.122 | 0.122 |
| | | | 12/5/2006 | 0.109 | 0.109 |
| | | | 6/5/2007 | 0.084 | 0.084 |

There are 3 compliance wells

| Well | Samples | ND | Date | Result | Original |
|----------------|---------|--------------|-------------|---------|----------|
| GWB-4/MW-4 | 13 | 8 (61.5385%) | 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 |
| | | | 12/4/2002 ~ | ND<0.01 | ND<0.02 |
| | | | 6/25/2003 | ND<0.01 | ND<0.02 |
| | | | 12/17/2003 | ND<0.01 | ND<0.02 |
| | | | 6/16/2004 | ND<0.01 | ND<0.02 |
| | | | 12/28/2004 | ND<0.01 | ND<0.02 |
| | | | 6/14/2005 | 0.029 | 0.029 |
| | | | 12/6/2005 | 0.082 | 0.082 |
| | | | 6/6/2006 | 0.128 | 0.128 |
| | | | 12/5/2006 | 0.073 | 0.073 |
| GWC-11/MW-1112 | | 6 (50%) | 6/5/2007 | 0.259 | 0.259 |
| | | | 7/30/2002 | 0.034 | 0.034 |
| | | | 9/24/2002 | ND<0.01 | ND<0.02 |
| | | | 10/21/2002 | ND<0.01 | ND<0.02 |
| | | | 12/4/2002 | ND<0.01 | ND<0.02 |
| | | | 6/25/2003 | 0.029 | 0.029 |
| | | | 12/17/2003 | ND<0.01 | ND<0.02 |
| | | | 6/16/2004 | ND<0.01 | ND<0.02 |
| | | | 12/28/2004 | ND<0.01 | ND<0.02 |
| | | | 6/14/2005 | 0.025 | 0.025 |
| | | | 12/6/2005 | 0.181 | 0.181 |
| | | | 6/6/2006 | 0.034 | 0.034 |
| | | | 12/5/2006 | 0.056 | 0.056 |

| | | | | | |
|------------|----|---------|------------|---------|---------|
| GWC-3/MW-3 | 10 | 5 (50%) | 7/30/2002 | ND<0.01 | ND<0.02 |
| | | | 9/24/2002 | ND<0.01 | ND<0.02 |
| | | | 12/4/2002 | 0.047 | 0.047 |
| | | | 12/17/2003 | ND<0.01 | ND<0.02 |
| | | | 6/16/2004 | ND<0.01 | ND<0.02 |
| | | | 6/14/2005 | ND<0.01 | ND<0.02 |
| | | | 12/6/2005 | 0.137 | 0.137 |
| | | | 6/6/2006 | 0.077 | 0.077 |
| | | | 12/5/2006 | 0.174 | 0.174 |
| | | | 6/5/2007 | 0.248 | 0.248 |

There is 1 unused well

| Well | Samples | ND | Date | Result | Original |
|----------|---------|----------|------------|---------|----------|
| EQ-Blank | 4 | 4 (100%) | 6/25/2003 | ND<0.01 | ND<0.02 |
| | | | 12/17/2003 | ND<0.01 | ND<0.02 |
| | | | 6/16/2004 | ND<0.01 | ND<0.02 |
| | | | 12/28/2004 | ND<0.01 | ND<0.02 |

Shapiro-Wilks Test of Normality

Parameter: Zinc

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)

Non-Detects Replaced with 1/2 DL

K = 24; Samples = 48

| i | x(i) | x(n-i+1) | x(n-1+1)-x(i)a(n-i+1) | | b(i) |
|----|-------|----------|-----------------------|--------|-----------|
| 1 | 0.01 | 0.259 | 0.249 | 0.3789 | 0.0943461 |
| 2 | 0.01 | 0.248 | 0.238 | 0.2604 | 0.0619752 |
| 3 | 0.01 | 0.181 | 0.171 | 0.2281 | 0.0390051 |
| 4 | 0.01 | 0.174 | 0.164 | 0.2045 | 0.033538 |
| 5 | 0.01 | 0.137 | 0.127 | 0.1855 | 0.0235585 |
| 6 | 0.01 | 0.128 | 0.118 | 0.1693 | 0.0199774 |
| 7 | 0.01 | 0.122 | 0.112 | 0.1551 | 0.0173712 |
| 8 | 0.01 | 0.109 | 0.099 | 0.1423 | 0.0140877 |
| 9 | 0.01 | 0.084 | 0.074 | 0.1306 | 0.0096644 |
| 10 | 0.01 | 0.082 | 0.072 | 0.1197 | 0.0086184 |
| 11 | 0.01 | 0.08 | 0.07 | 0.1095 | 0.007665 |
| 12 | 0.01 | 0.077 | 0.067 | 0.0998 | 0.0066866 |
| 13 | 0.01 | 0.073 | 0.063 | 0.0906 | 0.0057078 |
| 14 | 0.01 | 0.056 | 0.046 | 0.0817 | 0.0037582 |
| 15 | 0.01 | 0.047 | 0.037 | 0.0731 | 0.0027047 |
| 16 | 0.01 | 0.034 | 0.024 | 0.0648 | 0.0015552 |
| 17 | 0.01 | 0.034 | 0.024 | 0.0568 | 0.0013632 |
| 18 | 0.01 | 0.029 | 0.019 | 0.0489 | 0.0009291 |
| 19 | 0.01 | 0.029 | 0.019 | 0.0411 | 0.0007809 |
| 20 | 0.01 | 0.025 | 0.015 | 0.0335 | 0.0005025 |
| 21 | 0.01 | 0.01 | 0 | 0.0259 | 0 |
| 22 | 0.01 | 0.01 | 0 | 0.0185 | 0 |
| 23 | 0.01 | 0.01 | 0 | 0.0111 | 0 |
| 24 | 0.01 | 0.01 | 0 | 0.0037 | 0 |
| 25 | 0.01 | 0.01 | 0 | | |
| 26 | 0.01 | 0.01 | 0 | | |
| 27 | 0.01 | 0.01 | 0 | | |
| 28 | 0.01 | 0.01 | 0 | | |
| 29 | 0.025 | 0.01 | -0.015 | | |
| 30 | 0.029 | 0.01 | -0.019 | | |
| 31 | 0.029 | 0.01 | -0.019 | | |
| 32 | 0.034 | 0.01 | -0.024 | | |
| 33 | 0.034 | 0.01 | -0.024 | | |
| 34 | 0.047 | 0.01 | -0.037 | | |
| 35 | 0.056 | 0.01 | -0.046 | | |
| 36 | 0.073 | 0.01 | -0.063 | | |
| 37 | 0.077 | 0.01 | -0.067 | | |
| 38 | 0.08 | 0.01 | -0.07 | | |
| 39 | 0.082 | 0.01 | -0.072 | | |
| 40 | 0.084 | 0.01 | -0.074 | | |
| 41 | 0.109 | 0.01 | -0.099 | | |
| 42 | 0.122 | 0.01 | -0.112 | | |
| 43 | 0.128 | 0.01 | -0.118 | | |
| 44 | 0.137 | 0.01 | -0.127 | | |
| 45 | 0.174 | 0.01 | -0.164 | | |
| 46 | 0.181 | 0.01 | -0.171 | | |

| | | | |
|----|-------|------|--------|
| 47 | 0.248 | 0.01 | -0.238 |
| 48 | 0.259 | 0.01 | -0.249 |

Sum of b values = 0.353795

Sample Standard Deviation = 0.0633599

W Statistic = 0.663402

5% Critical value of 0.947 exceeds 0.663402

Evidence of non-normality at 95% level of significance

1% Critical value of 0.929 exceeds 0.663402

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-2/MW-2 | 7/30/2002 | ND<0.01 | 14.5 |
| | 9/24/2002 | ND<0.01 | 14.5 |
| | 10/21/2002 | ND<0.01 | 14.5 |
| | 12/4/2002 | ND<0.01 | 14.5 |
| | 6/25/2003 | ND<0.01 | 14.5 |
| | 12/17/2003 | ND<0.01 | 14.5 |
| | 6/16/2004 | ND<0.01 | 14.5 |
| | 12/28/2004 | ND<0.01 | 14.5 |
| | 6/14/2005 | ND<0.01 | 14.5 |
| | 12/6/2005 | 0.08 | 38 |
| | 6/6/2006 | 0.122 | 42 |
| | 12/5/2006 | 0.109 | 41 |
| | 6/5/2007 | 0.084 | 40 |

Rank Sum = 291.5

Rank Mean = 22.4231

Background Rank Sum = 291.5

Background Rank Mean = 22.4231

Compliance Wells

| Well ID | Date | Result | Rank |
|------------|-------------|---------|------|
| GWB-4/MW-4 | 7/30/2002 | ND<0.01 | 14.5 |
| | 9/24/2002 | ND<0.01 | 14.5 |
| | 10/21/2002 | ND<0.01 | 14.5 |
| | 12/4/2002 ~ | ND<0.01 | 14.5 |
| | 6/25/2003 | ND<0.01 | 14.5 |
| | 12/17/2003 | ND<0.01 | 14.5 |
| | 6/16/2004 | ND<0.01 | 14.5 |
| | 12/28/2004 | ND<0.01 | 14.5 |
| | 6/14/2005 | 0.029 | 30 |
| | 12/6/2005 | 0.082 | 39 |
| | 6/6/2006 | 0.128 | 43 |
| | 12/5/2006 | 0.073 | 36 |
| | 6/5/2007 | 0.259 | 48 |

Rank Sum = 312

Rank Mean = 24

| | | | |
|--------------|------------|---------|------|
| GWC-11/MW-11 | 7/30/2002 | 0.034 | 32 |
| | 9/24/2002 | ND<0.01 | 14.5 |
| | 10/21/2002 | ND<0.01 | 14.5 |
| | 12/4/2002 | ND<0.01 | 14.5 |
| | 6/25/2003 | 0.029 | 31 |
| | 12/17/2003 | ND<0.01 | 14.5 |
| | 6/16/2004 | ND<0.01 | 14.5 |

| | | |
|------------|---------|------|
| 12/28/2004 | ND<0.01 | 14.5 |
| 6/14/2005 | 0.025 | 29 |
| 12/6/2005 | 0.181 | 46 |
| 6/6/2006 | 0.034 | 33 |
| 12/5/2006 | 0.056 | 35 |

Rank Sum = 293

Rank Mean = 24.4167

| | | | |
|------------|------------|---------|------|
| GWC-3/MW-3 | 7/30/2002 | ND<0.01 | 14.5 |
| | 9/24/2002 | ND<0.01 | 14.5 |
| | 12/4/2002 | 0.047 | 34 |
| | 12/17/2003 | ND<0.01 | 14.5 |
| | 6/16/2004 | ND<0.01 | 14.5 |
| | 6/14/2005 | ND<0.01 | 14.5 |
| | 12/6/2005 | 0.137 | 44 |
| | 6/6/2006 | 0.077 | 37 |
| | 12/5/2006 | 0.174 | 45 |
| | 6/5/2007 | 0.248 | 47 |

Rank Sum = 279.5

Rank Mean = 27.95

Calculation Results:

Kruskal-Wallis H Statistic = 0.910384

Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 1.13561

95% Confidence comparison value is 7.81472 at 3 degrees of freedom

0.910384 < 7.81472 indicating no significant group difference at 5% significance level

1.13561 < 7.81472 indicating no significant group difference at 5% significance level when adjusted for ties