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FEDERAL EXPRESS

Vogtle Electric Generating Plant Landfill #2 and #3
Solid Waste Permit No. 017-006D(L)(I)
Solid Waste Permit No. 017-007D(L)(I)

Mr. Harold C. Gillespie
Unit Coordinator - Industrial Solid Waste Unit
Georgia Environmental Protection Division
4244 International Parkway, Suite 104
Atlanta, GA 30354

Dear Mr. Gillespie:

Pursuant to EPD Solid Waste Rule 391-3-4-.14 and in accordance with the approved Plant Vogtle Landfill #2 and #3 Groundwater Monitoring Plans, Southern Nuclear is submitting the attached semi-annual groundwater monitoring report which was prepared for Southern Nuclear by the Dextra Group. This report presents the results for analysis of groundwater samples taken in December 2004. Samples from all monitoring wells at Landfill #2 and Landfill #3 were analyzed for Chapter 391-3-4 Appendix I parameters. In addition, due to a statistically significant increase over background detected during the June 2004 monitoring event, samples from Landfill #3 well GWA-7 were analyzed for Chapter 391-3-4 Appendix II parameters and due to the detection of the Appendix II parameter mercury in previous sampling events, all monitoring wells at Landfill #3 were analyzed for mercury.

As discussed in Sections 5 and 6 of the attached report, there was no statistically significant increase over background for any parameter detected in the compliance wells at Landfill #2. At Landfill #3 there was a statistically significant increase over background for barium and 1,1-dichloroethane in wells GWC-13 and GWC-14; trichlorofluoromethane in wells GWC-13 and GWA-7; and cis-1,2-dichloroethane in well GWC-14. There was also a detection of mercury in Landfill #3 wells GWA-7 and GWA-15. Statistical analysis for mercury was not performed because there are fewer than four complete data sets for mercury analysis.

A copy of this letter and the attached report will be placed in the operating record within 14 days to serve as the notice to the operating record in accordance with EPD Rules. If you have any questions regarding this matter, please contact Rachel Bauman at (205) 992-7025.

Sincerely,

J. M. Godfrey
Manager – Environmental Affairs

JMG/RGB:ahl

cc: Mr. Michael Kemp (w/o)
Mr. Earl Hinkle (w/o)
Mr. Kurt Batsel (w/o)

Attachment

bc: P. D. Rushton (w/o)
W. F. Kitchens (w/o)
N. J. Stringfellow (w/o)
N. D. Dennis (w/o)
C. L. Buck (w/o)
D. G. Goodwin (w/o) (Return Receipt)
SNC Document Management – Vogtle (Return Receipt)

GROUNDWATER MONITORING REPORT
PLANT VOGTLE LANDFILLS #2 AND #3
SOLID WASTE PERMIT NOS. 017-006D(L)(I) AND 017-007D(L)(I)
BURKE COUNTY, GEORGIA
MARCH 2005

PREPARED FOR:

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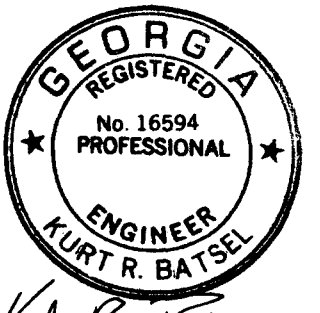

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1 – Introduction

This report presents the results of groundwater sampling conducted in December 2004 at two private solid waste landfills (Landfill #2 and Landfill #3) operated by Southern Nuclear Operating Company, Inc. (SNC) at Plant Vogtle in Waynesboro, Georgia. Groundwater monitoring was initiated in 2002 in accordance with the approved Groundwater Monitoring Plan for the landfills. The landfills are operated under Solid Waste Permit #s 017-006D(L)(I) and 017-007D(L)(I) and are 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 at Landfill #2 is used only for asbestos disposal. Landfill #3, permitted in 1987, has been utilized solely for construction and demolition debris disposal since 1992.

Sampling, analyses and data evaluation were conducted in accordance with the rules of the Georgia Department of Natural Resources Environmental Protection Division (EPD), Chapter 391-3-4, the September 1991 "Manual for Groundwater Monitoring" and the approved Groundwater Monitoring Plan for the 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 December 2004 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*), and seven permanent monitoring wells located along the perimeter of the waste management unit boundary of Landfill #3 (*Figure 2*). 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 landfills, which occur from approximately 35 to 60 feet below land surface at Landfill #2 and from approximately 30 to 50 feet below land surface at Landfill #3.

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.

The seven permanent groundwater monitoring wells at Landfill #3 were installed in September 2001 and in July 2002. The well construction details are presented in *Table 2*. Wells GWA-7/MW-7 and GWA-15/MW-15 are located at the south and southwest portions of the landfill boundary. Wells GWC-5/MW-5, GWC-13/MW-13 and GWC-14/MW-14 are located along the eastern portion of the landfill boundary, and wells GWB-6/MW-6 and GWB-16/MW-16 are located along the northern landfill boundary. Well GWA-7/MW-7 was initially treated as a compliance (downgradient) well for Landfill #3. However, due to review of water level measurements showing this well to be side gradient from the active fill area of the landfill, well GWA-7/MW-7 was evaluated as a background well in the monitoring reports from the June 2003 and December 2003 sampling events. Based on the consistent detection of trichlorofluoromethane and the June 2004 detection of trichloroethene in Well GWA-7/MW-7, it was decided to return to evaluating this well as a compliance well. This

approach was used in the June 2004 monitoring report and was continued in this monitoring report. The most appropriate designation for this well will continue to be evaluated in light of future monitoring results. For this report, well GWA-15/MW-15 is the designated background well, and the remaining wells are designated compliance wells. The wells will be referred to as GWC-5, GWB-6, GWA-7, GWC-13, GWC-14, GWA-15 and GWB-16 in this report in accordance with the EPD's well identification guidelines.

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

3 – Groundwater Flow Rate and Directional Data

3.1 Geology/Hydrogeology

The geology of the Plant Vogtle site consists of sedimentary deposits within the Coastal Plain physiographic province of Georgia. These sediments consist of unconsolidated sands, silts and clays comprised of marine and non-marine fluvial deposits. Marls and limestone were also encountered at depth in deep borings completed at the 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 landfills. 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 landfills appears in confined, semi-confined, unconfined, and perched hydrogeologic units. Groundwater is found primarily in sands, silty sands, clayey sands and marl limestone interfaces. The main difference between boring/well water production characteristics and aquifer confining characteristics appears to be the thickness of the water-producing zone, the grain size of the sand component, the sand/clay ratio and the characteristics of the marl/limestone interface.

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

3.2 Groundwater Elevations and Gradients

During well installation, the occurrence of groundwater was determined by collecting continuous split spoon samples beginning approximately five feet above the location of expected groundwater-producing zones. At both landfills, 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 x 10^{-4} cm/sec in GWB-6 to 3.064 x 10^{-2} cm/sec in GWA-2.

Landfill #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 GWB-4.

The hydraulic gradient of 0.01 (shown on *Figure 1* for December 2004) was calculated using a three-point problem from potentiometric surface elevations in monitoring wells GWA-2, GWC-3 and GWB-4. 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).

Landfill #3

Depth to water measurements and groundwater elevations for the wells at Landfill #3 are presented in *Table 2*. Groundwater elevations measured to date indicate that the groundwater elevation, or hydraulic 'head,' is greatest beneath the center area of the landfill, and decreases to the southeast, to the northeast and to the west-southwest beneath the landfill. This mounding effect is believed to be the result of natural infiltration in the sandy soils within the historic topographically high area in the center of the landfill. This topographically high area, which encompasses a broad area within the landfill, is a natural site feature that was present prior to any landfilling operations. *Figure 2* shows the topography of the landfill. The topographically high area is now centered in the north middle portion of the landfill near well GWB-6.

As discussed previously, the water-bearing stratigraphy beneath Landfill #3 is composed of individual saturated sand units within a clayey/marl matrix. These units may or may not be interconnected. As such, groundwater elevations in the monitoring wells may reflect head in multiple perched layers and may not represent groundwater 'flow' direction beneath the landfill. *Figure* 2 presents a map depicting the saturated head contours measured on December 28, 2004.

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

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

Southwest: GWB-6, GWA-7 and GWA-15;

Northeast: GWC-13, GWB-6 and GWC-5; and
Southeast: GWC-13, GWA-7 and GWC-14.

The calculated hydraulic gradients are presented on the contour map (*Figure 2*). The calculations used in determining the gradients are provided in *Appendix A*. For the December 2004 event, the southwest gradient was 0.01, the northeast gradient was 0.09, and the southeast gradient was 0.12. The southwest gradient has typically been 0.01, with a maximum of 0.02 (June 2003), reflecting the consistently flattest gradient across the landfill. The northeast trending gradient has ranged from a minimum of 0.08 (October and December 2002, June 2004) to a maximum of 0.17 (June 2003). The southeast gradient has ranged from a low of 0.06 (December 2002) to a maximum of 0.16 (June 2003). For this monitoring event, the steepest gradient was observed in the southeast flow component.

4 – Sampling Procedures and Parameter Analyses

4.1 Procedures and Field Measurements

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

Groundwater samples were collected from all monitoring wells after the wells were properly purged according to the EPA document entitled "Low-Flow Purging & Sampling of Groundwater Monitoring Wells (Bulletin QAD023)". The wells were purged and sampled using QED SamplePro pumps equipped with Teflon® bladders. Purge rates were matched to the recovery rates of the wells, verified by periodic depth to water measurements to determine draw-down during purging. Purging was conducted until at least three consecutive stable readings of pH, conductivity, and turbidity were recorded. Groundwater samples were then collected directly into pre-preserved sample containers supplied by the laboratory. Final measurements of pH, conductivity, and turbidity were performed to verify that these parameters remained stable during sampling. All field instruments were calibrated in the field daily prior to use and at the conclusion of each sampling event. The field measurements are provided in *Tables 3and 4*.

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

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

4.2 Parameter Analyses

In accordance with the approved Groundwater Monitoring Plan, the groundwater samples and field and laboratory quality assurance/quality control (QA/QC) samples were analyzed for the Chapter 391-3-4 Appendix I list of parameters, which consists of total metals and volatile organic compounds (*Table 5*). The field QA/QC samples consisted of duplicate samples, trip blanks and equipment

blanks. Metals analyses were conducted using EPA Methods 6010B/7841, and VOCs analyses were conducted using EPA Methods 6010B/8260B and 504.1 to provide sufficiently sensitive quantitation limits for comparison with maximum contaminant limits. Advanced Chemistry Labs, Inc., Atlanta, Georgia performed the laboratory analyses. The complete laboratory analytical reports, which include field and laboratory QA/QC results and chain-of-custody forms, are provided in *Appendix B.*

In addition, samples were collected for the Chapter 391-3-4 Appendix II parameter mercury in all wells due to this parameter's detection in previous assessment monitoring conducted at the landfill. The well GWA-7 was also scheduled for full Appendix II analysis during the December 2004 sampling event as this well indicated a statistically significant increase above background for the Appendix I parameter trichlorofluoromethane during the previous June 2004 sampling. The Appendix II parameter groups base neutral/acid extractables, cyanide and sulfide were inadvertently omitted from the GWA-7 sample analysis in December 2004. This was communicated to Mr. Earl Hinkle of EPD in February 2005 and it was agreed that these additional parameters would be collected during the next sampling event at the site.

5 – Groundwater Quality Evaluation

5.1 Detected Parameters

Tables 6 and *7* present a summary of all analyzed parameters detected above the laboratory method reporting limits.

Landfill #2

At Landfill #2, barium was detected at 0.021 milligrams per liter (mg/l) in the GWB-4 sample. The maximum contaminant level (MCL) for barium is 2.0 mg/l. No organic parameters were detected during this monitoring event. There was insufficient water to collect samples from well GWC-3.

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

Landfill #3

At Landfill #3, barium was detected at concentrations below the MCL in the sample from well GWC-13 (0.043 mg/l). Zinc was also detected in well GCW-13 at 0.044 mg/l; there is no MCL for zinc. The Appendix II parameter mercury was detected at 0.0017 mg/l (MCL of 0.002 mg/l) in well GWA-7, and at 0.0004 mg/l in well GWA-15. In the sample from compliance well GWC-13, volatile organic compounds (VOCs) 1,1-dichloroethane, cis-1,2-dichloroethene and trichlorofluoromethane were detected at low levels, below MCLs where applicable. Trichlorofluoromethane was also detected in the GWA-7 sample; there is no MCL for trichlorofluoromethane. There was insufficient water to collect samples from well GWC-14.

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 the Shapiro-Wilkes Test as recommended in the 1992 EPA guidance. The test indicates non-normal concentration distributions of the detected parameters in all wells at both landfills for either non-transformed or log-transformed data sets.

- For the well data sets at both landfills, 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.

5.2.1 Landfill #2

At Landfill #2, barium was detected in the sample from compliance well GWB-4. The analyses do not indicate statistically significant higher concentrations for this parameters in the compliance well samples compared to the concentrations in the background well sample. In addition, the barium concentration was below the MCL.

5.2.2 Landfill #3

Compared to background well GWA-15/MW-15, the analyses indicate statistically significant higher concentrations of the following parameters:

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

The Appendix II parameter mercury was also detected in the GWA-7 and GWA-15 well samples in the December 2004 sampling event. Mercury was detected at 0.0017 mg/l (MCL of 0.002 mg/l) in well GWA-7 and 0.0004 in GWA-15. Statistical analyses of mercury concentrations were not performed since there are fewer than four data sets for mercury analysis to date in all wells.

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

6 – Conclusions

Since a statistically significant increase over background is indicated for several analyzed parameters in wells GWA-7, GWC-13 and GWC-14 at Landfill #3, SNC will place a notice in the operating record within 14 days of submittal of this report as required by Chapter 391-3-4. The notice will indicate which constituents have shown statistically significant higher concentrations compared to the background wells.

SNC has now completed three rounds of Appendix II parameter sampling in wells GWC-13, GWC-14 and GWA-15, and found all Appendix II parameters with the exception of mercury to be below the analytical detection limit. Therefore, we will continue to perform analysis for the Appendix II parameter mercury in all wells during the regular semi-annual sampling events. To date, three rounds of analysis for mercury have been completed in wells GWC-5, GWB-6, GWA-7. After completion of four semi-annual sampling events for mercury in all wells, this parameter will be added to the routine statistical analysis that is currently performed for the Appendix I parameters.

A separate request will be submitted for approval to reduce the frequency of sampling for the other Appendix II parameters in wells GWC-13, GWC-14 and GWA-15, based on the lack of detection of these parameters in the previous assessment monitoring events and consideration of the factors listed in Rule 391-3-4-.14, paragraph 26. SNC added annual monitoring for Appendix II parameters in well GWA-7 in December 2004. The next sampling event will include the Appendix II parameters that were inadvertently missed in well GWA-7 on the most recent monitoring event. Well GWA-7 will continue to be monitored annually for all Appendix II parameters unless the data warrant a reduction at which time an additional request for reduction will be submitted.

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
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
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
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

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

Table 2
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Groundwater Elevations and Monitoring Well Construction Details

Well ID	Date	Measuring Point Elevation (feet, msl)	Ground Surface Elevation (feet, msl)	Depth to Water (feet, topvc)	Total Boring Depth (feet, bls)	Total Well Depth (feet, topvc)	Riser Height (feet)	Screened Interval (feet, msl)	Groundwater Elevation (feet, msl)
GWC-5/MW-5	9/26/2001	251.96	249.11	48.65	67	56.85	2.85	195.11 to 205.11	203.31
	7/29/2002			50.21					201.75
	9/9/2002			50.43					201.53
	10/21/2002			49.26					202.70
	12/3/2002			49.26					202.70
	6/24/2003			44.60					207.36
	12/16/2003			47.55					204.41
	6/15/2004			47.76					204.20
	12/28/2004			49.13					202.83
GWB-6/MW-6	9/26/2001	278.87	276.45	47.47	67	64.42	2.42	214.45 to 224.45	231.40
	7/29/2002			48.52					230.35
	9/9/2002			48.55					230.32
	10/21/2002			49.21					229.66
	12/3/2002			48.86					230.01
	6/24/2003			46.92					231.95
	12/16/2003			46.30					232.57
	6/15/2004			46.49					232.38
	12/28/2004			47.22					231.65
GWA-7/MW-7	9/26/2001	261.33	259.39	31.11	50	41.94	1.94	219.39 to 229.39	230.22
	7/29/2002			33.16					228.17
	9/9/2002			33.25					228.08
	10/21/2002			33.20					228.13
	12/3/2002			32.94					228.39
	6/24/2003			27.51					233.82
	12/16/2003			30.59					230.74
	6/15/2004			30.87					230.46
	12/28/2004			32.33					229.00
GWC-13/MW-13	7/29/2002	273.08	270.99	40.92	50	50.09	2.09	222.99 to 232.99	232.16
	9/9/2002			41.00					232.08
	10/21/2002			40.94					232.14
	12/3/2002			40.48					232.60
	6/24/2003			36.90					236.18
	12/16/2003			39.17					233.91
	6/15/2004			39.59					233.49
	12/28/2004			40.59					232.49

Table 2
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Groundwater Elevations and Monitoring Well Construction Details

Well ID	Date	Measuring Point Elevation (feet, msl)	Ground Surface Elevation (feet, msl)	Depth to Water (feet, topvc)	Total Boring Depth (feet, bls)	Total Well Depth (feet, topvc)	Riser Height (feet)	Screened Interval (feet, msl)	Groundwater Elevation (feet, msl)
GWC-14/MW-14	7/29/2002	262.88	260.66	40.05	55	53.22	2.22	209.66 to 229.66	222.83
	9/9/2002			42.31					220.57
	10/21/2002			42.79					220.09
	12/3/2002			42.35					220.53
	6/24/2003			44.29					218.59
	12/16/2003			51.52					211.36
	6/15/2004			52.11					210.77
	12/28/2004			52.66					210.22
GWA-15/MW-15	7/29/2002	268.15	265.34	45.94	55	55.81	2.81	212.34 to 222.34	222.21
	9/9/2002			46.05					222.10
	10/21/2002			46.19					221.96
	12/3/2002			46.23					221.92
	6/24/2003			41.76					226.39
	12/16/2003			43.29					224.86
	6/15/2004			43.24					224.91
	12/28/2004			44.68					223.47
GWB-16/MW-16	7/29/2002	256.95	254.57	DRY	65	55.38	2.38	201.57 to 211.57	DRY
	9/9/2002			DRY					DRY
	10/21/2002			DRY					DRY
	12/3/2002			DRY					DRY
	6/24/2003			DRY					DRY
	12/16/2003			DRY					DRY
	6/15/2004			DRY					DRY
	12/28/2004			DRY					DRY

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

Well ID	Date	pH	Conductivity/1	Turbidity/2	Gallons Purged	Odor	Color	Comments
GWA-2/MW-2	9/26/2001	--	--	--	--	--	--	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	
GWC-3/MW-3	9/26/2001	--	--	--	--	--	--	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	--	--	Too little water to purge and sample
	12/3/2002	5.51	488	14.0	<0.5 gal	--	--	Too little water to purge and sample
	6/24/2003	--	--	--	<0.5 gal	none	none	Too little water to purge and sample
	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	--	--	--	--	--	--	Too little water to purge and sample
GWB-4/MW-4	9/26/2001	4.73	36.0	15.5	35.0	--	--	Well development only
	7/29/2002	4.21	269	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	
GWC-11/MW-11	7/29/2002	5.30	67.5	36.6	4.0	none	pale white	
	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	

Notes:
-- = no data recorded
/1 - Conductivity in units of umhos/sec
/2 - Turbidity in units of NTU

Table 4
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Groundwater Sampling Field Measurements

Well ID	Date	pH	Conductivity[1]	Turbidity[2]	Gallons Purged	Odor	Color	Comments
GWC-5/MW-5	9/26/2001	5.11	47.5	28.6	6.0	none	cloudy	Well development only
	7/29/2002	5.41	24.4	2.83	1.75	none	none	
	9/9/2002	8.13	365	4.11	2.0	none	none	
	10/21/2002	--	--	--	--	--	--	
	12/3/2002	5.94	117	7.8	2.0	none	none	
	6/24/2003	5.18	29	3.5	6.0	none	none	
	12/16/2003	6.27	210	79.7	3.0	none	cloudy	Split with GAEPD
	6/16/2004	5.94	40.7	16.5	2.0	none	none	
	12/28/2004	4.96	30	7.33	2.3	none	none	
GWB-6/MW-6	9/26/2001	7.13	242	25.6	2.0	none	--	Well development only
	7/29/2002	6.75	1,338	0.35	1.5	none	none	
	9/9/2002	4.13	198	6.43	1.5	none	none	
	10/21/2002	6.72	573	0.44	2.5	none	none	
	12/3/2002	6.14	116	0.45	1.5	none	none	
	6/24/2003	7.09	155	9.1	1.5	none	none	
	12/17/2003	6.82	126	2.27	1.5	none	none	
	6/16/2004	6.77	178.5	1.25	2.75	none	none	
	12/28/2004	7.05	130	2.84	2.25	none	none	
GWA-7/MW-7	9/26/2001	--	--	cloudy	30.0	--	--	Well development only
	7/29/2002	6.97	251	8.33	2.5	none	none	
	9/9/2002	7.52	327	9.97	5.0	none	none	
	10/21/2002	4.39	92	3.14	2.0	none	none	
	12/3/2002	6.51	188	7.3	2.5	none	none	
	6/24/2003	7.02	163	101.3	4.0	none	dark brown	Turbidity >100 ntu for 2 hours
	12/16/2003	5.73	62.7	100	4.0	none	mod. brown	Turbidity 85-100 ntu for 1 hour
	6/15/2004	5.94	68.9	42.7	2.0	none	none	
	12/28/2004	8.16	109	9.86	3.5	none	none	
GWC-13/MW-13	7/29/2002	6.52	421	0.66	--			
	9/9/2002	5.96	77.5	6.40	1.0	none	none	
	10/21/2002	6.19	73.4	3.09	2.5	none	none	
	12/3/2002	6.54	481	1.00	2.5	none	none	
	6/24/2003	5.95	271	2.02	2.5	none	none	
	12/16/2003	5.65	294	0.75	6.0	none	none	Split with GAEPD
	6/16/2004	5.84	366	4.70	1.75	none	none	
	12/28/2004	6.09	268	0.38	1.75	none	none	

Table 4
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Groundwater Sampling Field Measurements

Well ID	Date	pH	Conductivity[1]	Turbidity[2]	Gallons Purged	Odor	Color	Comments
GWC-14/MW-14	7/29/2002	6.49	448	1.15	--	none	none	
	9/9/2002	5.57	717	5.19	--	none	none	
	10/21/2002	6.00	674	4.65	3.2	none	none	
	12/3/2002	5.54	547	2.7	4.5	none	none	
	6/24/2003	5.97	197	3.61	2.5	none	none	
	12/17/2003	--	--	--	--	--	--	Split with GAEPD-VOCs & metals
	6/15/2004	--	--	--	--	--	--	Well Dry
	12/28/2004	--	--	--	--	--	--	Too little water to purge and sample
GWA-15/MW-15	7/29/2002	5.70	95.8	1.12	4.0	none	none	
	9/9/2002	5.92	118	8.53	2.5	none	none	
	10/21/2002	5.19	81	1.88	4.5	none	none	
	12/3/2002	7.58	78.2	3.6	2.5	none	none	
	6/24/2003	7.44	48.0	5.38	2.5	none	none	
	12/17/2003	6.93	39.4	4.55	6.5	none	none	Split with GAEPD
	6/15/2004	6.47	55.7	5.59	2.25	none	none	
	12/28/2004	6.83	50.0	8.85	3.00	none	none	
GWB-16/MW-16	7/29/2002	--	--	--	--	--	--	Well Dry
	9/9/2002	--	--	--	--	--	--	Well Dry
	10/21/2002	--	--	--	--	--	--	Well Dry
	12/3/2002	--	--	--	--	--	--	Well Dry
	6/24/2003	--	--	--	--	--	--	Well Dry
	12/16/2003	--	--	--	--	--	--	Well Dry
	6/15/2004	--	--	--	--	--	--	Well Dry
	12/28/2004	--	--	--	--	--	--	Well Dry

Notes:
-- = no data recorded;

Table 5
Southern Nuclear Operating Company
Plant Vogtle Landfills #2 and #3
Appendix I to Part 40 CFR Part 258: Constituents for Detection Monitoring (1)

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

Table 5 (continued)
Southern Nuclear Operating Company, Inc.
Plant Vogtle Landfills #2 and #3
Appendix I to Part 40 CFR Part 258: Constituents for Detection Monitoring (1)

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

(1) This list contains 47 volatile organics for which possible analytical procedures provided in EPA Report SW-846 ``Test Methods for Evaluating Solid Waste,'' third edition, November 1986, as revised December 1987,includes Method 8260; and 15 metals for which SW-846 provides either Method 6010 or a method from the 7000 series of methods.
(2) Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

Table 6
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
Metals[1]					
Barium	2.00	BQL	NS	0.021	BQL
Zinc	NA	BQL	NS	BQL	BQL
Organics[2]					
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
[1]Metals concentrations in mg/L or ppm
[2]Organics concentrations in ug/l or ppb
Bold indicates detected concentration is greater than the MCL.

Table 6 (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
[1]Metals concentrations in mg/L or ppm
[2]Organics concentrations in ug/l or ppb
Bold indicates detected concentration is greater than the MCL.

Table 6 (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
[1]Metals concentrations in mg/L or ppm
[2]Organics concentrations in ug/l or ppb
Bold indicates detected concentration is greater than the MCL.

Table 6 (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
Metals[1]					
Barium	2.00	BQL	NS	BQL	BQL
Zinc	NA	BQL	NS	BQL	0.029
Organics[2]					
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
[1]Metals concentrations in mg/L or ppm
[2]Organics concentrations in ug/l or ppb
Bold indicates detected concentration is greater than the MCL.

Table 6 (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
Metals[1]						
Barium	2.00	0.015	0.020	0.021	0.020	0.018
Zinc	NA	BQL	0.047	BQL	BQL	BQL
Organics[2]						
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
[1]Metals concentrations in mg/L or ppm
[2]Organics concentrations in ug/l or ppb
Bold indicates detected concentration is greater than the MCL.

Table 6 (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
Metals[1]					
Barium	2	BQL	NS	0.021	0.025
Zinc	NA	BQL	NS	BQL	BQL
Organics[2]					
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
[1]Metals concentrations in mg/L or ppm
[2]Organics concentrations in ug/l or ppb
Bold indicates detected concentration is greater than the MCL.

Table 6 (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
Metals[1]					
Barium	2	BQL	BQL	0.021	0.020
Zinc	NA	BQL	BQL	BQL	BQL
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	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
[1]Metals concentrations in mg/L or ppm
[2]Organics concentrations in ug/l or ppb
Bold indicates detected concentration is greater than the MCL.

Table 6 (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
[1]Metals concentrations in mg/L or ppm
[2]Organics concentrations in ug/l or ppb
Bold indicates detected concentration is greater than the MCL.

Table 7
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
December 2004

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

BQL - Below quantification level
MCL - Maximum Contaminant Level per EPD Rule Chapter 391-3-5; NA - None available
NS - Not sampled; well dry or insufficient recovery to sample well
[1]Metals concentrations in mg/L
[2]Organics concentration units in ug/l or ppb
[3]Applies only to Community Water Systems serving 10,000
[4]Appendix II parameter; NA reflects that this parameter was not analyzed for those wells not included in the Assessment Monitoring Program
[5]Replicate sample of well GWA-7/MW-7 sample
[6]Action Level
Bold indicates detected concentration is greater than the MCL.

Table 7 (Continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
June 2004

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

BQL - Below quantification level
MCL - Maximum Contaminant Level per EPD Rule Chapter 391-3-5; NA - None available
NS - Not sampled; well dry or insufficient recovery to sample well
[1]Metals concentrations in mg/L
[2]Organics concentration units in ug/l or ppb
[3]Applies only to Community Water Systems serving 10,000
[4]Appendix II parameter; NA reflects that this parameter was not analyzed for those wells not included in the Assessment Monitoring Program
[5]Replicate sample of well GWC-13/MW-13 sample
[6]Action Level
Bold indicates detected concentration is greater than the MCL.

Table 7 (continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
December 2003

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

BQL - Below quantification level
MCL - Maximum Contaminant Level per EPD Rule Chapter 391-3-5; NA - None available
[1]Metals concentrations in mg/L
[2]Organics concentration units in ug/l or ppb
[3]Applies only to Community Water Systems serving 10,000
[4]Appendix II parameter
[5]Replicate sample of well GWC-13/MW-13 sample
[6]Action Level
Bold indicates detected concentration is greater than the MCL.

Table 7 (continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
June 2003

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

BQL - Below quantification level
MCL - Maximum Contaminant Level per EPD Rule Chapter 391-3-5; NA - None available
[1]Metals concentrations in mg/L
[2]Organics concentration units in ug/l or ppb
[3]Applies only to Community Water Systems serving 10,000
[4]Appendix II parameter; NS reflects that this parameter was not analyzed for those wells not included in the Assessment Monitoring Program
[5]Replicate sample of well GWC-13/MW-13 sample
Bold indicates detected concentration is greater than the MCL.

Table 7 (continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
December 2002

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

BQL - Below quantification level
MCL - Maximum Contaminant Level per EPD Rule Chapter 391-3-5; NA - None available
[1]Metals concentrations in mg/L
[2]Organics concentration units in ug/l or ppb
[3]Applies only to Community Water Systems serving 10,000
Bold indicates detected concentration is greater than the MCL.

Table 7 (continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
October 2002

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

BQL - Below quantification level
MCL - Maximum Contaminant Level per EPD Rule Chapter 391-3-5; NA - None available
[1]Metals concentrations in mg/L
[2]Organics concentration units in ug/l or ppb
[3]Replicate sample of GWA-15//MW-15 well
Bold indicates detected concentration is greater than the MCL.

Table 7 (continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
September 2002

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

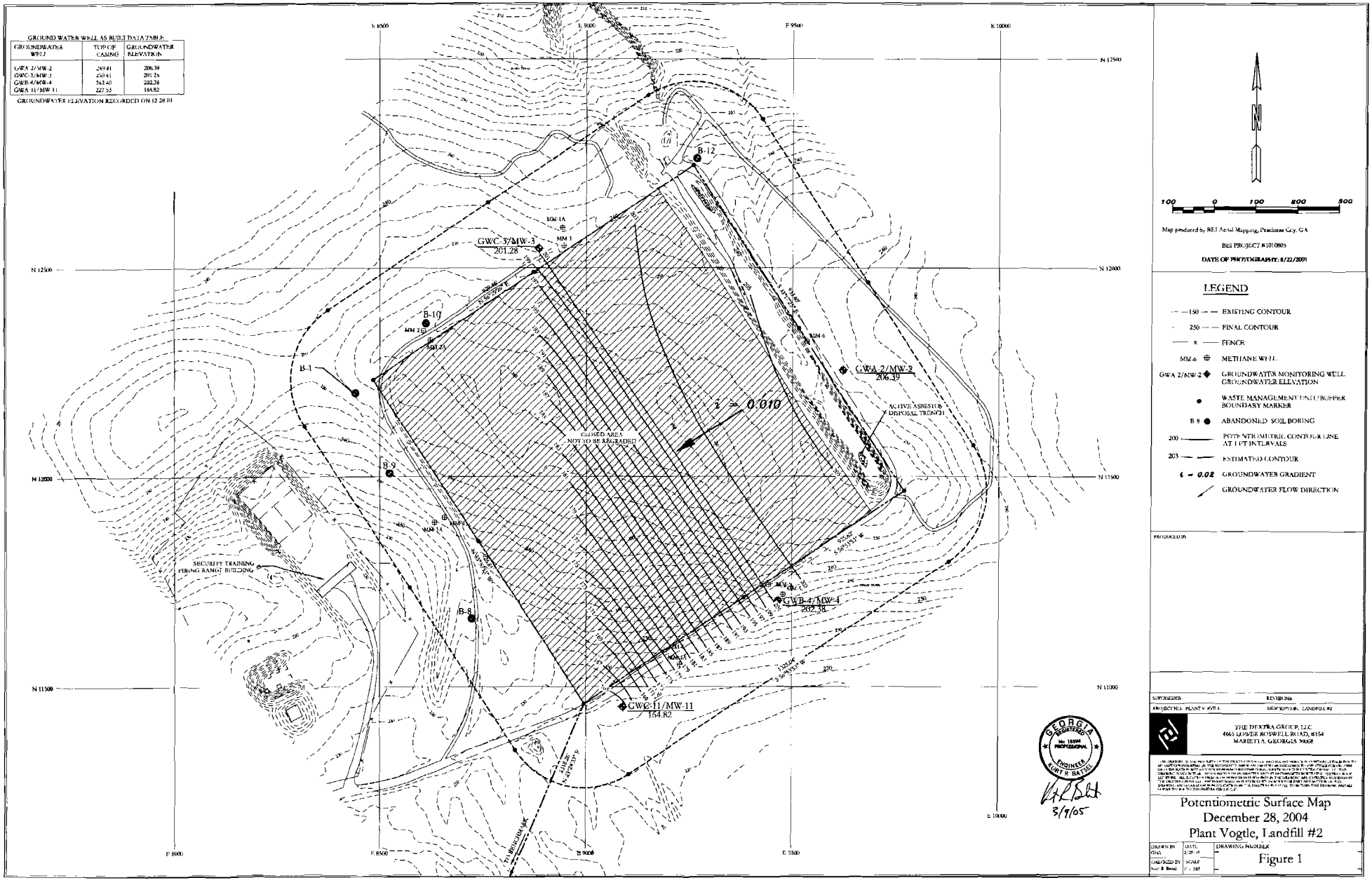
BQL - Below quantification level
MCL - Maximum Contaminant Level per Georgia EPD Rule Chapter 391-3-5; NA - None available
[1]Metals concentrations in mg/L
[2]Organics concentration units in ug/l or ppb
[3]Replicate sample of GWB-14//MW-14 well sample
Bold indicates detected concentration is greater than the MCL.

Table 7 (continued)
Southern Nuclear Operating Company Plant Vogtle Landfill #3
Summary of Detected Parameters
July 2002

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

BQL - Below quantification level
MCL - Maximum Contaminant Level per Georgia EPD Rule Chapter 391-3-5; NA - None available
[1]Metals concentrations in mg/L
[2]Organics concentration units in ug/l or ppb
[3]Replicate sample of GWA-7/MW-7 well sample
Bold indicates detected concentration is greater than the MCL.

FIGURES



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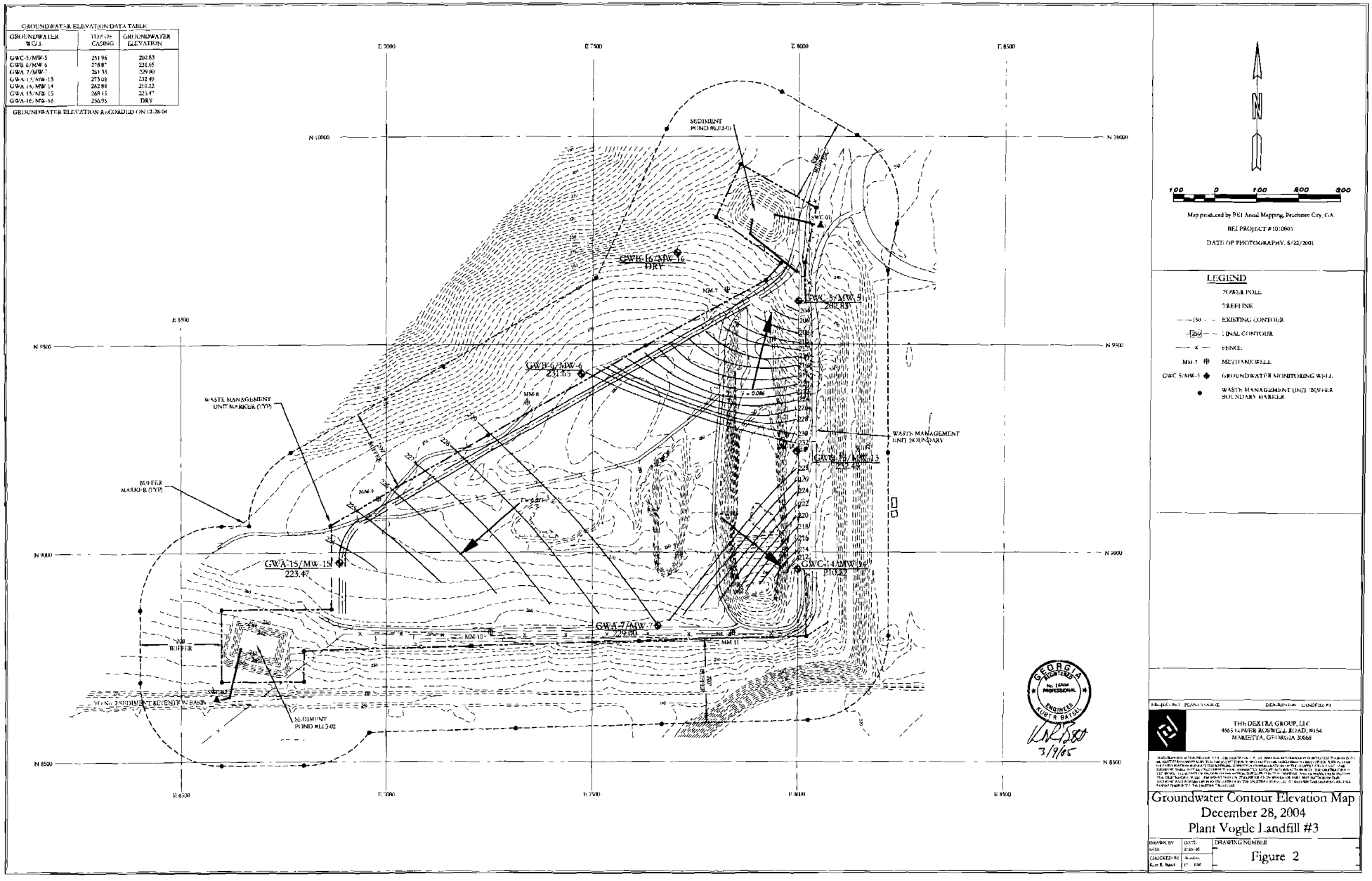
GROUNDWATER ELEVATION DATA TABLE
GROUNDWATER W.E.L.
TOP OF CASING
GROUNDWATER ELEVATION
GWC-5/MW-5 251.96 202.83
GWB-6/MW-6 278.8* 231.65
GWA-7/MW-7 261.91 229.00
GWA-13/MW-13 273.08 232.49
GWA-14/MW-14 262.88 210.22
GWA-15/MW-15 268.13 223.47
GWA-16/MW-16 256.95 DRY
GROUNDWATER ELEVATION RECORDED ON 12-28-04
SEDIMENT POND #LF3-01
GWB-16/MW-16 DRY
GWC-5/MW-5 202.83
GWB-6/MW-6 231.65
GWA-15/MW-15 223.47
GWA-7/MW-7 229.00
GWC-14/MW-14 210.22
WASTE MANAGEMENT UNIT MARKER (TYP)
WASTE MANAGEMENT UNIT BOUNDARY
BUFFER MARKER (TYP)
BUFFER
SEDIMENT POND #LF3-02
N 10000
N 9500
N 9000
N 8500
E 7000
E 7500
E 8000
E 8500
100 0 100 200 300
Map produced by PEI Aerial Mapping, Peachtree City, GA
PEI PROJECT #10.0805
DATE OF PHOTOGRAPHY: 8/22/2001
LEGEND
POWER POLE
TREELINE
EXISTING CONTOUR
FINAL CONTOUR
FENCE
METHANE WELL
GROUNDWATER MONITORING W.E.L.
WASTE MANAGEMENT UNIT BUFFER BOUNDARY MARKER
GEORGIA REGISTERED No. 19404 PROFESSIONAL ENGINEER KURT R. BATES
3/9/05
THE DEXTRA GROUP, LLC
4665 FLOWER ROSWELL ROAD, #154
MARIETTA, GEORGIA 30068
Groundwater Contour Elevation Map
December 28, 2004
Plant Vogtle Landfill #3
Figure 2

APPENDIX A – HYDRAULIC GRADIENT CALCULATION SHEETS

Plant Vogtle Landfill #2
Gradient Calculation
(based on three-point problem)
December 2004 Monitoring Event

Well Designation	Water Table Elevation	Northing	Easting
GWA-2/MW-2	206.39	11755.95	9622.59
GWC-3/MW-3	201.28	12048.48	8881.72
GWB-4/MW-4	202.38	11205.40	9466.20

Gradient Calculation from fitting a plane to three points

$$a\,x_1 + b\,y_1 + cz_1 + d = 0$$
$$a\,x_2 + b\,y_2 + cz_2 + d = 0$$
$$a\,x_3 + b\,y_3 + cz_3 + d = 0$$

where (x_i,y_i) are the coordinates of the well and zi 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	206.39
GWC-3/MW-3	12048.48	8881.72	201.28
GWB-4/MW-4	11205.40	9466.20	202.38

a =	9622.59	206.39	1	=	2171.7358	
	8881.72	201.28	1			
	9466.20	202.38	1			
b =	11755.95	206.39	1	=	-3986.356	
	12048.48	201.28	1			
	11205.40	202.38	1			
c =	11755.95	9622.59	1	=	-453634.7	
	12048.48	8881.72	1			
	11205.40	9466.20	1			
d =	11755.95	9622.59	206.39	=	-29735790	
	12048.48	8881.72	201.28			
	11205.40	9466.20	202.38			

z0 =	-65.55007182
mx =	0.004787411
my =	-0.008787589
Southwest Gradient =	0.0100

Plant Vogtle Landfill #3
Gradient Calculation
(based on three-point problem)
December 2004 Monitoring Event

Well Designation	Water Table Elevation	Northing	Easting
GWC-5/MW-5	202.83	9604.30	7999.33
GWB-6/MW-6	231.65	9432.48	7473.25
GWA-7/MW-7	229.00	8826.22	7657.89
GWC-13/MW-13	232.49	9242.72	7995.86
GWC-14/MW-14	210.22	8960.64	7999.10
GWA-15/MW-15	223.47	8975.71	6886.73

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 zi is the head, i = 1,2,3
The gradient is calculated from the square root of $(a^2 + b^2)$

Southwest Gradient

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

	x	y	z
GWB-6/MW-6	9432.48	7473.25	231.65
GWA-7/MW-7	8826.22	7657.89	229
GWA-15/MW-15	8975.71	6886.73	223.47

a =	7473.25	231.65	1	=	-3064.633	
	7657.89	229	1			
	6886.73	223.47	1			
b =	9432.48	231.65	1	=	3748.7663	
	8826.22	229	1			
	8975.71	223.47	1			
c =	9432.48	7473.25	1	=	439921.63	
	8826.22	7657.89	1			
	8975.71	6886.73	1			
d =	9432.48	7473.25	231.65	=	44985286	
	8826.22	7657.89	229			
	8975.71	6886.73	223.47			

z0 =	-102.2575003
mx =	0.006966316
my =	-0.008521441
Southwest Gradient =	0.0110

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

Northeast Gradient

Wells of Interest = (GWC-13, GWB-6 & GWC-5) (High-Mid-Low)

	x	y	z
GWC-13/MW-13	9242.72	7995.86	232.49
GWB-6/MW-6	9432.48	7473.25	231.65
GWC-5/MW-5	9604.30	7999.33	202.83

$$a = \begin{vmatrix} 7995.86 & 232.49 & 1 \\ 7473.25 & 231.65 & 1 \\ 7999.33 & 202.83 & 1 \end{vmatrix} = 15503.527$$

$$b = \begin{vmatrix} 9242.72 & 232.49 & 1 \\ 9432.48 & 231.65 & 1 \\ 9604.30 & 202.83 & 1 \end{vmatrix} = -5324.554$$

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

$$d = \begin{vmatrix} 9242.72 & 7995.86 & 232.49 \\ 9432.48 & 7473.25 & 231.65 \\ 9604.30 & 7999.33 & 202.83 \end{vmatrix} = 229954789$$

z0 =	-1212.689548
mx =	-0.0817594
my =	0.028079569
Northeast Gradient =	0.0864

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

Southeast Gradient

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

	x	y	z
GWC-13/MW-13	9242.72	7995.86	232.49
GWA-7/MW-7	8826.22	7657.89	229.00
GWC-14/MW-14	8960.64	7999.10	210.22

$$a = \begin{vmatrix} 7995.86 & 232.49 & 1 \\ 7657.89 & 229 & 1 \\ 7999.10 & 210.22 & 1 \end{vmatrix} = 7537.8995$$

$$b = \begin{vmatrix} 9242.72 & 232.49 & 1 \\ 8826.22 & 229 & 1 \\ 8960.64 & 210.22 & 1 \end{vmatrix} = 8290.9958$$

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

$$d = \begin{vmatrix} 9242.72 & 7995.86 & 232.49 \\ 8826.22 & 7657.89 & 229 \\ 8960.64 & 7999.10 & 210.22 \end{vmatrix} = -19101019$$

z0 =	-197.5612478
mx =	0.077964261
my =	0.085753512
Southeast Gradient =	0.1159

APPENDIX B – LABORATORY ANALYTICAL REPORTS
DECEMBER 2004

ACL

ADVANCED CHEMISTRY LABS, INC.

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Laboratory Report

ACL Project #: **4688601**

Client Proj #: Southern Company / Vogtle

Prepared For:

The Dextra Group, LLC
4665 Lower Roswell Road
#154
Marietta, GA 30068-0000

Attention: Mr. Kurt Batsel

Report Date: 1/17/2005

This report contains 50 pages.
(including this cover page and chain of custody)

Sheldon Stone
Quality Assurance Manager

Advanced Chemistry Labs is a woman owned small business concern.

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

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

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

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

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Data Qualifier Codes

Code	Description
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; sample received or analyzed beyond the accepted holding time; sample received at improper temperature;
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;

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

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Contact: Mr. Kurt Batsel

Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

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

Sample ID: GWA-2/MW-2

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225692 **Units:** µg/L **Analyst:** RP

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

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Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

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

Sample ID: GWB-4/MW-4

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225693 **Units:** µg/L **Analyst:** RP

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

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Contact: Mr. Kurt Batsel

Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

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

Sample ID: GWC-5/MW-5

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225694 **Units:** µg/L **Analyst:** RP

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

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Contact: Mr. Kurt Batsel

Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

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

Sample ID: GWB-6/MW-6

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225695 **Units:** µg/L **Analyst:** RP

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

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ACL Project #: 4688601
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V.O. (5030B/8260B) - Appendix I

Sample ID: GWA-7/MW-7

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225696 **Units:** µg/L **Analyst:** RP

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	Styrene	BQL	5
Acrylonitrile	BQL	50	1,1,1,2-Tetrachloroethane	BQL	5
Benzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
Bromochloromethane	BQL	5	Tetrachloroethene	BQL	5
Bromodichloromethane	BQL	5	Toluene	BQL	5
omoform	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	146	5
Chloroethane	BQL	10	1,2,3-Trichloropropane	BQL	5
Chloroform	BQL	5	Vinyl acetate	BQL	50
1,2-Dibromo-3-chloropropane	BQL	20	Vinyl chloride	BQL	2
Dibromochloromethane	BQL	5	m & p-Xylenes	BQL	10
1,2-Dibromoethane	BQL	5	o-Xylene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10			
1,2-Dichlorobenzene	BQL	5			
1,4-Dichlorobenzene	BQL	5			
1,1-Dichloroethane	BQL	5			
1,2-Dichloroethane	BQL	5			
1,1-Dichloroethene	BQL	5			
cis-1,2-Dichloroethene	BQL	5			
trans-1,2-Dichloroethene	BQL	5			
1,2-Dichloropropane	BQL	5			
cis-1,3-Dichloropropene	BQL	5			
trans-1,3-Dichloropropene	BQL	5			
Ethylbenzene	BQL	5			
2-Hexanone	BQL	50			
Methyl bromide	BQL	10			
thyl 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			

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ACL Project #: 4688601
Date Received: 12/30/2004
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V.O. (5030B/8260B) - Appendix I

Sample ID: GWA-7/MW-7 Dup

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225697 **Units:** µg/L **Analyst:** RP

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	Styrene	BQL	5
Acrylonitrile	BQL	50	1,1,1,2-Tetrachloroethane	BQL	5
Benzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
Bromochloromethane	BQL	5	Tetrachloroethene	BQL	5
Bromodichloromethane	BQL	5	Toluene	BQL	5
omoform	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	143	5
Chloroethane	BQL	10	1,2,3-Trichloropropane	BQL	5
Chloroform	BQL	5	Vinyl acetate	BQL	50
1,2-Dibromo-3-chloropropane	BQL	20	Vinyl chloride	BQL	2
Dibromochloromethane	BQL	5	m & p-Xylenes	BQL	10
1,2-Dibromoethane	BQL	5	o-Xylene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10			
1,2-Dichlorobenzene	BQL	5			
1,4-Dichlorobenzene	BQL	5			
1,1-Dichloroethane	BQL	5			
1,2-Dichloroethane	BQL	5			
1,1-Dichloroethene	BQL	5			
cis-1,2-Dichloroethene	BQL	5			
trans-1,2-Dichloroethene	BQL	5			
1,2-Dichloropropane	BQL	5			
cis-1,3-Dichloropropene	BQL	5			
trans-1,3-Dichloropropene	BQL	5			
Ethylbenzene	BQL	5			
2-Hexanone	BQL	50			
Methyl bromide	BQL	10			
ethyl 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			

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ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

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

Sample ID: GWC-11/MW-11

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225698 **Units:** µg/L **Analyst:** RP

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

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ACL Project #: 4688601
Date Received: 12/30/2004
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V.O. (5030B/8260B) - Appendix I

Sample ID: GWC-13/MW-13

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225699 **Units:** µg/L **Analyst:** RP

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	Styrene	BQL	5
Acrylonitrile	BQL	50	1,1,1,2-Tetrachloroethane	BQL	5
Benzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
Bromochloromethane	BQL	5	Tetrachloroethene	BQL	5
Bromodichloromethane	BQL	5	Toluene	BQL	5
Bromoform	BQL	5	1,1,1-Trichloroethane	BQL	5
Carbon disulfide	BQL	5	1,1,2-Trichloroethane	BQL	5
Carbon tetrachloride	BQL	5	Trichloroethene	BQL	5
Chlorobenzene	BQL	5	Trichlorofluoromethane	81	5
Chloroethane	BQL	10	1,2,3-Trichloropropane	BQL	5
Chloroform	BQL	5	Vinyl acetate	BQL	50
1,2-Dibromo-3-chloropropane	BQL	20	Vinyl chloride	BQL	2
Dibromochloromethane	BQL	5	m & p-Xylenes	BQL	10
1,2-Dibromoethane	BQL	5	o-Xylene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10			
1,2-Dichlorobenzene	BQL	5			
1,4-Dichlorobenzene	BQL	5			
1,1-Dichloroethane	16	5			
1,2-Dichloroethane	BQL	5			
1,1-Dichloroethene	BQL	5			
cis-1,2-Dichloroethene	8	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			

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Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

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

Sample ID: GWC-15/MW-15

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225700 **Units:** µg/L **Analyst:** RP

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

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ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

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

Sample ID: EQ-BLK

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225701 **Units:** µg/L **Analyst:** RP

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

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Date Reported: 01/17/2005

Pesticides/PCBs (8081A/8082) - Appendix II

Sample ID: GWA-7/MW-7

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted: 01/04/2005
Date Analyzed: 01/06/2005

ACL Sample #: 225696 **Units:** µg/L **Analyst:** SS

Analyte	Result	PQL
Aldrin	BQL	0.05
Arochlor-1016	BQL	0.50
Arochlor-1221	BQL	0.50
Arochlor-1232	BQL	0.50
rochlor-1242	BQL	0.50
ochlor-1248	BQL	0.50
Arochlor-1254	BQL	0.50
Arochlor-1260	BQL	0.50
a-BHC	BQL	0.05
b-BHC	BQL	0.05
d-BHC	BQL	0.05
g-BHC	BQL	0.05
Chlordane	BQL	0.10
4,4'-DDD	BQL	0.05
4,4'-DDE	BQL	0.05
4,4'-DDT	BQL	0.05
Dieldrin	BQL	0.05
Endosulfan I	BQL	0.05
Endosulfan II	BQL	0.05
Endosulfan sulfate	BQL	0.05
Endrin	BQL	0.05
Endrin aldehyde	BQL	0.05
Heptachlor	BQL	0.05
Heptachlor epoxide	BQL	0.05
Methoxychlor	BQL	0.05
Toxaphene	BQL	2.00

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Date Reported: 01/17/2005

Chlorinated Herbicides (8151A) - Appendix II

Sample ID: GWA-7/MW-7

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted: 01/04/2005
Date Analyzed: 01/06/2005

ACL Sample #: 225696 **Units:** µg/L **Analyst:** SS

Analyte	Result	PQL
2,4-D	BQL	1.0
Dinoseb	BQL	1.0
2,4,5-TP (Silvex)	BQL	1.0
2,4,5-T	BQL	1.0

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Miscellaneous Organics (8011) - Appendix II

Sample ID: GWA-2/MW-2

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted: 01/04/2005
Date Analyzed: 01/05/2005

ACL Sample #: 225692 **Units:** µg/L **Analyst:** SS

Analyte	Result	PQL
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05

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Date Reported: 01/17/2005

Miscellaneous Organics (8011) - Appendix II

Sample ID: GWB-4/MW-4

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted: 01/04/2005
Date Analyzed: 01/05/2005

ACL Sample #: 225693 **Units:** µg/L **Analyst:** SS

Analyte	Result	PQL
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05

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Miscellaneous Organics (8011) - Appendix II

Sample ID: GWC-5/MW-5

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted: 01/04/2005
Date Analyzed: 01/05/2005

ACL Sample #: 225694 **Units:** µg/L **Analyst:** SS

Analyte	Result	PQL
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05

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Miscellaneous Organics (8011) - Appendix II

Sample ID: GWB-6/MW-6

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted: 01/04/2005
Date Analyzed: 01/05/2005

ACL Sample #: 225695 **Units:** µg/L **Analyst:** SS

Analyte	Result	PQL
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05

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Date Reported: 01/17/2005

Miscellaneous Organics (8011) - Appendix II

Sample ID: GWA-7/MW-7

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted: 01/04/2005
Date Analyzed: 01/05/2005

ACL Sample #: 225696 **Units:** µg/L **Analyst:** SS

Analyte	Result	PQL
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05

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ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

Miscellaneous Organics (8011) - Appendix II

Sample ID: GWA-7/MW-7 Dup

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted: 01/04/2005
Date Analyzed: 01/05/2005

ACL Sample #: 225697 **Units:** µg/L **Analyst:** SS

Analyte	Result	PQL
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05

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Miscellaneous Organics (8011) - Appendix II

Sample ID: GWC-11/MW-11

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted: 01/04/2005
Date Analyzed: 01/05/2005

ACL Sample #: 225698 **Units:** µg/L **Analyst:** SS

Analyte	Result	PQL
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05

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Date Reported: 01/17/2005

Miscellaneous Organics (8011) - Appendix II

Sample ID: GWC-13/MW-13

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted: 01/04/2005
Date Analyzed: 01/05/2005

ACL Sample #: 225699 **Units:** µg/L **Analyst:** SS

Analyte	Result	PQL
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05

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Miscellaneous Organics (8011) - Appendix II

Sample ID: GWC-15/MW-15

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted: 01/04/2005
Date Analyzed: 01/05/2005

ACL Sample #: 225700 **Units:** µg/L **Analyst:** SS

Analyte	Result	PQL
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05

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Miscellaneous Organics (8011) - Appendix II

Sample ID: EQ-BLK

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted: 01/04/2005
Date Analyzed: 01/05/2005

ACL Sample #: 225701 **Units:** µg/L **Analyst:** SS

Analyte	Result	PQL
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05

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Appendix I Metals (6010B/7841)

Sample ID: GWA-2/MW-2

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225692 **Units:** mg/L **Analyst:** AD

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

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Appendix I Metals (6010B/7841)

Sample ID: GWB-4/MW-4

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225693 **Units:** mg/L **Analyst:** AD

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

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ACL Project #: 4688601
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Date Reported: 01/17/2005

Appendix I Metals (6010B/7841)

Sample ID: GWC-5/MW-5

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225694 **Units:** mg/L **Analyst:** AD

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

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Contact: Mr. Kurt Batsel

Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

Appendix I Metals (6010B/7841)

Sample ID: GWB-6/MW-6

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225695 **Units:** mg/L **Analyst:** AD

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

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ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

Appendix I Metals (6010B/7841)

Sample ID: GWA-7/MW-7 Dup

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225697 **Units:** mg/L **Analyst:** AD

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

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Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

Appendix I Metals (6010B/7841)

Sample ID: GWC-11/MW-11

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225698 **Units:** mg/L **Analyst:** AD

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

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Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

Appendix I Metals (6010B/7841)

Sample ID: GWC-13/MW-13

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225699 **Units:** mg/L **Analyst:** AD

Analyte	Result	PQL
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	0.043	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	0.044	0.020

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ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

Appendix I Metals (6010B/7841)

Sample ID: GWC-15/MW-15

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225700 **Units:** mg/L **Analyst:** AD

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

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Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

Appendix I Metals (6010B/7841)

Sample ID: EQ-BLK

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225701 **Units:** mg/L **Analyst:** AD

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

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Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

Appendix II Metals (6010B/7470A/7841)

Sample ID: GWA-7/MW-7

Matrix: Water
Date Sampled: 12/28/2004
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: 225696 **Units:** mg/L **Analyst:** AD/JR

Analyte	Result	PQL
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	BQL	0.020
Beryllium	BQL	0.004
Cadmium	BQL	0.005
Chromium	BQL	0.020
Cobalt	BQL	0.050
Copper	BQL	0.020
Lead	BQL	0.010
Mercury	BQL	0.0005
Nickel	BQL	0.020
Selenium	BQL	0.040
Silver	BQL	0.010
Thallium	BQL	0.002
Tin	BQL	0.025
Vanadium	BQL	0.050
Zinc	BQL	0.020

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QUALITY CONTROL SECTION

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Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

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

Sample ID: ----------

Matrix: Water
Date Sampled: ----------
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: Blank **Units:** µg/L

Analyst: RP

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

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Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

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 (84-112)	4-Bromofluorobenzene (77-125)
225692	99	107	100	96
225693	94	104	103	96
225694	96	106	102	97
225695	95	102	100	96
225696	98	103	100	94
225697	97	104	101	96
225698	97	105	101	94
225699	97	108	102	96
225700	97	108	100	97
225701	97	105	101	96

** Matrix Interference
DO=Diluted Out

ADVANCED CHEMISTRY LABS, INC.

GC/MS UNIT # 3

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Sequence Date : 01-05-05

Matrix Spike - Sample No.: LCS/LCSD

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	17.6	88	(54-144)
benzene	20.0	0.0	19.0	95	(82-132)
trichloroethene	20.0	0.0	20.5	103	(73-128)
toluene	20.0	0.0	19.7	99	(83-130)
chlorobenzene	20.0	0.0	20.0	100	(82-123)

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-dichloroethene	20.0	17.0	85	4	14	(54-144)
benzene	20.0	18.7	93	2	14	(82-132)
trichloroethene	20.0	20.2	101	1	14	(73-128)
toluene	20.0	19.7	98	0	13	(83-130)
chlorobenzene	20.0	20.0	100	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: _____

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Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

Pesticides/PCBs (8081A/8082) - Appendix II

Sample ID: ----------

Matrix: Water
Date Sampled: ----------
Date Extracted: 01/04/2005
Date Analyzed: 01/06/2005

ACL Sample #: Blank **Units:** µg/L **Analyst:** SS

Analyte	Result	PQL
Aldrin	BQL	0.05
Arochlor-1016	BQL	0.50
Arochlor-1221	BQL	0.50
Arochlor-1232	BQL	0.50
Arochlor-1242	BQL	0.50
ochlor-1248	BQL	0.50
Arochlor-1254	BQL	0.50
Arochlor-1260	BQL	0.50
a-BHC	BQL	0.05
b-BHC	BQL	0.05
d-BHC	BQL	0.05
g-BHC	BQL	0.05
Chlordane	BQL	0.10
4,4'-DDD	BQL	0.05
4,4'-DDE	BQL	0.05
4,4'-DDT	BQL	0.05
Dieldrin	BQL	0.05
Endosulfan I	BQL	0.05
Endosulfan II	BQL	0.05
Endosulfan sulfate	BQL	0.05
Endrin	BQL	0.05
Endrin aldehyde	BQL	0.05
Heptachlor	BQL	0.05
Heptachlor epoxide	BQL	0.05
Methoxychlor	BQL	0.05
Toxaphene	BQL	2.00

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Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

Contact: Mr. Kurt Batsel

Pesticides/PCBs (8081A/8082) - Appendix II
SURROGATE PERCENT RECOVERY SUMMARY
Water

ACL Sample #	TCMX (30-130)	DCBP (30-130)
225696	113	84

** Matrix Interference
DO=Diluted Out

Advanced Chemistry Labs

Pesticides Spike Report (SW-846 Method 8081A)

Instrument ID: *HP5890A-ECDGC#1*
Column: *STx-CLPII, 30m, 0.53mm, 0.42µm*
ACL #: LCSW010405
Matrix: Water
Extraction Date: 1/4/05
Analysis Date: 1/6/05
Initial Volume: 1000.0 *ml*
Final Volume: 1
Dilution Factor: 1
Unit: *µg/L or ppb*

Pesticide	R.T. MS	Spike Added	Sample Result	MS Conc.	MS Rec. (%)	R.T. MSD	MSD Conc.	MSD Rec. (%)	RPD (%)	QC Limits RPD	QC Limits % Recovery	
a-BHC	7.830	0.500	0.000	0.361	*72*	7.834	0.376	*75*	*4*	25	40	160
g-BHC (Lindane)	8.845	0.500	0.000	0.339	*68*	8.849	0.356	*71*	*5*	25	40	160
b-BHC	9.089	0.500	0.000	0.377	*75*	9.093	0.399	*80*	*6*	25	40	160
d-BHC	10.001	0.500	0.000	0.363	*73*	10.005	0.377	*75*	*4*	25	40	160
Heptachlor	10.188	0.500	0.000	0.376	*75*	10.192	0.393	*79*	*4*	25	40	160
Aldrin	11.229	0.500	0.000	0.409	*82*	11.233	0.425	*85*	*4*	25	40	160
Heptachlor Epoxide	13.080	0.500	0.000	0.374	*75*	13.086	0.389	*78*	*4*	25	40	160
a-Endosulfan I	14.419	0.500	0.000	0.363	*73*	14.424	0.377	*75*	*4*	25	40	160
DDE	14.754	0.500	0.000	0.395	*79*	14.760	0.411	*82*	*4*	25	40	160
Dieldrin	15.349	0.500	0.000	0.373	*75*	15.354	0.389	*78*	*4*	25	40	160
Endrin	16.389	0.500	0.000	0.368	*74*	16.395	0.385	*77*	*4*	25	40	160
DDD	16.735	0.500	0.000	0.372	*74*	16.740	0.388	*78*	*4*	25	40	160
b-Endosulfan II	17.114	0.500	0.000	0.344	*69*	17.119	0.358	*72*	*4*	25	40	160
DDT	17.793	0.500	0.000	0.384	*77*	17.798	0.401	*80*	*4*	25	40	160
Endrin Aldehyde	18.242	0.500	0.000	0.297	*59*	18.247	0.310	*62*	*4*	25	40	160
Endosulfan Sulfate	19.167	0.500	0.000	0.359	*72*	19.172	0.374	*75*	*4*	25	40	160
Methoxychlor	20.141	0.500	0.000	0.404	*81*	20.145	0.423	*85*	*5*	25	40	160
Mirex	21.038	0.500	0.000	0.355	*71*	21.042	0.378	*76*	*6*	25	40	160
Endrin Ketone	21.166	0.500	0.000	0.405	*81*	21.170	0.416	*83*	*3*	25	40	160

* *Outside QC limits*

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Contact: Mr. Kurt Batsel

Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

Chlorinated Herbicides (8151A) - Appendix II

Sample ID: ----------

Matrix: Water
Date Sampled: ----------
Date Extracted: 01/04/2005
Date Analyzed: 01/06/2005

ACL Sample #: Blank **Units:** µg/L **Analyst:** SS

Analyte	Result	PQL
2,4-D	BQL	1.0
Dinoseb	BQL	1.0
Hexachlorobenzene	BQL	1.0
Pentachlorophenol	BQL	1.0
4,5-TP (Silvex)	BQL	1.0
4,5-T	BQL	1.0

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Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

Contact: Mr. Kurt Batsel

Chlorinated Herbicides (8151A) - Appendix II
SURROGATE PERCENT RECOVERY SUMMARY
Water

ACL Sample #	DCAA (30-130)
225696	77

** Matrix Interference
DO=Diluted Out

Advanced Chemistry Labs

Herbicides Spike Report (SW-846 Method 8151A)

Instrument ID: *HP5890A-ECDGC#5*
Column: *STx-CLPII, 30m, 0.53mm, 0.42µm*

ACL #: LCSW010405
Matrix: Water
Extraction Date: 1/4/05
Analysis Date: 1/6/05
Initial Volume: 1000.0 *ml*
Final Volume: 4
Dilution Factor: 1
Unit: *µg/L or ppb*

Herbicide	R.T. MS	Spike Added	Sample Result	MS Conc.	MS Rec. (%)	R.T. MSD	MSD Conc.	MSD Rec. (%)	RPD (%)	QC Limits RPD	QC Limits % Recovery	
Dalapon			0.000							25	40	160
4-Nitrophenol			0.000							25	40	160
Dicamba			0.000							25	40	160
MCPP			0.000							25	40	160
MCPA			0.000							25	40	160
Dichlorprop			0.000							25	40	160
2,4-D	24.155	4.000	0.000	3.213	***80***	24.152	3.332	***83***	***4***	25	40	160
Pentachlorophenol			0.000							25	40	160
Silvex(2,4,5-TP)	25.433	0.400	0.000	0.436	***109***	25.429	0.451	***113***	***3***	25	40	160
2,4,5-T	26.004	0.400	0.000	0.413	***103***	26.001	0.427	***107***	***3***	25	40	160
2,4-DB			0.000							25	40	160
Dinoseb	27.042	0.400	0.000	0.603	***151***	27.039	0.617	***154***	***2***	25	40	160
Picloram			0.000							25	40	160
Acifluorfen			0.000							25	40	160

Herbicide Calculation based on curve prep. on *10/06/04*

** Outside QC limits*

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P.O. Box 88610 • Atlanta, GA 30356
www.advancedchemistrylabs.com

Client: The Dextra Group, LLC
4665 Lower Roswell Road
#154
Marietta, GA 30068-0000

Contact: Mr. Kurt Batsel

Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

Miscellaneous Organics (8011) - Appendix II

Sample ID: ----------

Matrix: Water
Date Sampled: ----------
Date Extracted: 01/04/2005
Date Analyzed: 01/04/2005

ACL Sample #: Blank **Units:** µg/L **Analyst:** SS

Analyte	Result	PQL
1,2-Dibromo-3-chloropropane	BQL	0.20
1,2-Dibromoethane	BQL	0.05

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#154
Marietta, GA 30068-0000

Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

Contact: Mr. Kurt Batsel

Miscellaneous Organics (8011) - Appendix II
SURROGATE PERCENT RECOVERY SUMMARY
Water

ACL Sample #	Bromofluorobenzene (40-140)
225692	101
225693	97
225694	109
225695	92
225696	78
225697	101
225698	100
225699	96
225700	95
225701	102

** Matrix Interference
DO=Diluted Out

Advanced Chemistry Labs

Pesticides Spike Report (SW-846 Method 8011/Method 504.1)

Instrument ID: *HP5890A-ECD/FIDGC#2*
Column: *SPB-5, 30m, 0.32mm, 0.25µm*

ACL #:	LCSW010405
Matrix:	Water
Extraction Date:	1/4/05
Analysis Date:	1/4/05
Initial Volume:	35.0 *ml*
Final Volume:	2
Dilution Factor:	1
Unit:	*µg/L or ppb*

Pesticide	R.T. MS	Spike Added	Sample Result	MS Conc.	MS Rec. (%)	R.T. MSD	MSD Conc.	MSD Rec. (%)	RPD (%)	QC Limits RPD	QC Limits % Recovery	
EDB	5.240	0.250	0.000	0.227	***91***	5.246	0.245	***98***	***8***	25	60	140
TCP	7.668	0.250	0.000	0.237	***95***	7.672	0.278	***111***	***16***	25	60	140
DBCP	11.015	0.250	0.000	0.223	***89***	11.018	0.266	***106***	***17***	25	60	140

** Outside QC limits*

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Client: The Dextra Group, LLC
4665 Lower Roswell Road
#154
Marietta, GA 30068-0000

Contact: Mr. Kurt Batsel

Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/17/2005

Appendix II Metals (6010B/7470A/7841)

Sample ID: ----------

Matrix: Water
Date Sampled: ----------
Date Extracted:
Date Analyzed: 01/05/2005

ACL Sample #: Blank **Units:** mg/L **Analyst:** AD/JR

Analyte	Result	PQL
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	BQL	0.020
Beryllium	BQL	0.004
Cadmium	BQL	0.005
Chromium	BQL	0.020
Cobalt	BQL	0.050
Copper	BQL	0.020
Lead	BQL	0.010
Mercury	BQL	0.0005
Nickel	BQL	0.020
Selenium	BQL	0.040
Silver	BQL	0.010
Thallium	BQL	0.002
Tin	BQL	0.025
Vanadium	BQL	0.050
Zinc	BQL	0.020

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Appendix II Metals

Water Matrix Laboratory Control Spike for Method (6010B/7841)

Sample ID : ----------

ACL Sample Number : LCS/LCSD 010405-1

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE RESULT (mg/L)	SAMPLE RESULT (mg/L)	LCS (% Rec)	LCSD (% Rec)	LCS RANGE (%)
Antimony	0.040	0.041	0.042	103	106	90-110
Arsenic	0.200	0.205	0.198	103	99	85-115
Barium	1.000	0.990	0.955	99	95	85-115
Beryllium	0.200	0.205	0.198	102	99	85-115
Cadmium	0.050	0.052	0.051	105	102	85-115
Chromium	0.200	0.205	0.196	103	98	85-115
Cobalt	0.200	0.205	0.205	102	103	85-115
Copper	0.200	0.203	0.196	101	98	85-115
Lead	0.200	0.207	0.202	103	101	85-115
Nickel	0.200	0.202	0.196	101	98	85-115
Mercury	0.002	0.002	0.002	98	97	85-115
Selenium	0.050	0.048	0.046	97	92	85-115
Silver	0.020	0.019	0.019	97	95	85-115
Thallium	0.040	0.042	0.040	104	99	90-110
Vanadium	0.500	0.509	0.492	102	98	85-115
Zinc	0.200	0.206	0.200	103	100	85-115

Comment : _____

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CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST

Company Name: The Dextra Group
Phone #: 770-578-9696
Fax #: 770-321-5345
Company Address: 4665 Lower Roswell Rd. Marietta GA 30068
Site Location: Burke Cty. GA
batsel@dextra-group.com
Project Manager: Kurt Batsel
Client Project: (#) Southern Company
(Name) Voglte
I attest that the proper field sampling procedures were used during the collection of these samples.
Sampler Name (Print): Josh Threadgill Genesis Project
770-319-7217
Kim Butzin

Field Sample ID	# Container	Matrix: Water	Soil	Air	Sludge	Product	Other	Method Preserved: HCl	HNO_3	H_2SO_4	Ice	None	Other	Sampling: Date	Time	ANALYSIS REQUEST: App I VOC	App I Metals	EDB/DBCP	App II Metals + Hg	App II Pest/PCB	App II Herb	Mercury (CVAA)	Remarks
GWA-2/MW-2	5	✓						✓	✓		✓			12/28/04	1735	✓	✓	✓				✓	
GWB-4/MW-4	5	✓						✓	✓		✓			12/28/04	1655	✓	✓	✓				✓	
GWC-5/MW-5	5	✓						✓	✓		✓			12/28/04	1050	✓	✓	✓				✓	
GWB-6/MW-6	5	✓						✓	✓		✓			12/28/04	1530	✓	✓	✓				✓	
GWA-7/MW-7	7	✓						✓	✓		✓			12/28/04	1320	✓	✓	✓	✓	✓	✓		
GWA-7/MW-7 Dup.	5	✓						✓	✓		✓			12/28/04	1320	✓	✓	✓				✓	
GWC-11/MW-11	5	✓						✓	✓		✓			12/28/04	1610	✓	✓	✓				✓	
GWC-13/MW-13	5	✓						✓	✓		✓			12/28/04	1040	✓	✓	✓				✓	
GWC-15/MW-15	5	✓						✓	✓		✓			12/28/04	1405	✓	✓	✓				✓	
EQ-BLK	5	✓						✓	✓		✓			12/28/04	1550	✓	✓	✓				✓	

Special Detection Limits

Remarks:

TAT
Priority (24 hr) ☐
Rush (48 hr) ☐
Rush (72 hr) ☐
Normal ☒

Special Handling
ACL Contact
Quote #
P. O.

QA/QC Level
Level 1 ☐ Level 2 ☐ Other ☐

Special Reporting Requirements
Fax ☐

Lab Use Only:
ACL Project #: 4668601

Cooler Temp.
4.0 °C

CUSTODY RECORD

	Date	Time	
Relinquished by Sampler: Kim Butzin	12/30/04	1119	Received by:
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by Laboratory: Waybill # La Bartholomew 12/30 2:19

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www.advancedchemistrylabs.com

Laboratory Report

ACL Project #: 4688601

Client Proj #: Southern Company / Vogtle

Prepared For:

The Dextra Group, LLC
4665 Lower Roswell Road
#154
Marietta, GA 30068-0000

Attention: Mr. Kurt Batsel

Report Date: 01/28/2005

This report contains 6 pages.
(including this cover page and chain of custody)

John H. Andros
Laboratory Director

Advanced Chemistry Labs is a woman owned small business concern.

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

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

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

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

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Data Qualifier Codes

Code	Description
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, LLC
4665 Lower Roswell Road
#154
Marietta, GA 30068-0000

Client Proj #: Southern Company / Vogtle
ACL Project #: 4688601
Date Received: 12/30/2004
Date Reported: 01/28/2005

Contact: Mr. Kurt Batsel

Sample ID	ACL #	Analyte	Matrix	Result	PQL	Units	Date Analyzed
GWA-2/MW-2	225692	Mercury (7470A)	Water	BQL	0.0005	mg/L	01/27/2005
GWB-4/MW-4	225693	Mercury (7470A)	Water	BQL	0.0005	mg/L	01/27/2005
GWC-5/MW-5	225694	Mercury (7470A)	Water	BQL	0.0005	mg/L	01/27/2005
GWB-6/MW-6	225695	Mercury (7470A)	Water	BQL	0.0005	mg/L	01/27/2005
GWA-7/MW-7 Dup	225697	Mercury (7470A)	Water	0.0017	0.0005	mg/L	01/27/2005
GWC-11/MW-11	225698	Mercury (7470A)	Water	BQL	0.0005	mg/L	01/27/2005
GWC-13/MW-13	225699	Mercury (7470A)	Water	BQL	0.0005	mg/L	01/27/2005
GWC-15/MW-15	225700	Mercury (7470A)	Water	0.0004J	0.0005	mg/L	01/27/2005
EQ-BLK	225701	Mercury (7470A)	Water	BQL	0.0005	mg/L	01/27/2005

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P. O. Box 88610, Atlanta, GA 30356

QUALITY CONTROL SECTION

ADVANCED CHEMISTRY LABS, INC.

Mercury (7470A) Quality Control Data

Blank:	ACL #	Matrix	Mercury (7470A) (mg/L)
	Water Blank	Water	< 0.0005

Duplicate:	ACL #	Matrix	Mercury (7470A) (mg/L)	%D
	225700	Water	0.0004J	5
	225700-D	Water	0.0004J	

Matrix Spike:	ACL #	Expected Value	Actual Value	% Recovery	RPD
	225701-S	0.0020	0.0020	102	2
	225701-SD	0.0020	0.0021	104	

CL

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CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST

Company Name: The Dextra Group
Phone #: 770-578-9696
Fax #: 770-321-5345
Company Address: 4665 Lower Roswell Rd Marietta GA 30068
Site Location: Burke Cty. GA
batsel@dextra-group.com
Project Manager: Kurt Batsel
Client Project: (#) Southern Company
(Name) Vogtle
I attest that the proper field sampling procedures were used during the collection of these samples.
Sampler Name (Print): Josh Threadgill Genesis Project
Kim Butzin 770-319-7217

ANALYSIS REQUEST

Field Sample ID	# Container	Matrix: Water	Soil	Air	Sludge	Product	Other	Method Preserved: HCl	HNO_3	H_2SO_4	Ice	None	Other	Sampling: Date	Time	App I VOC	App I Metals	EDB/DBCP	App II Metals + Hg	App II Pest/PCB	App II Herb	Mercury (245.1)	Remarks
GWA-2/MW-2	5	✓						✓	✓		✓			12/28/04	1735	✓	✓	✓				✓	
GWB-4/MW-4	5	✓						✓	✓		✓			12/28/04	1655	✓	✓	✓				✓	
GWC-5/MW-5	5	✓						✓	✓		✓			12/28/04	1050	✓	✓	✓				✓	
GWB-6/MW-6	5	✓						✓	✓		✓			12/28/04	1530	✓	✓	✓				✓	
GWA-7/MW-7	7	✓						✓	✓		✓			12/28/04	1320	✓	✓	✓	✓	✓	✓		
GWA-7/MW-7 Dup.	5	✓						✓	✓		✓			12/28/04	1320	✓	✓	✓				✓	
GWC-11/MW-11	5	✓						✓	✓		✓			12/28/04	1610	✓	✓	✓				✓	
GWC-13/MW-13	5	✓						✓	✓		✓			12/28/04	1040	✓	✓	✓				✓	
GWC-15/MW-15	5	✓						✓	✓		✓			12/28/04	1405	✓	✓	✓				✓	
EQ-BLK	5	✓						✓	✓		✓			12/28/04	1550	✓	✓	✓				✓	

Special Detection Limits

Remarks

TAT: Priority (24 hr) ☐ Rush (48 hr) ☐ Rush (72 hr) ☐ Normal ☒

Special Handling: ACL Contact ____ Quote # ____ P. O. ____

QA/QC Level: Level 1 ☐ Level 2 ☐ Other ☐ ____

Special Reporting Requirements: Fax ☐

Lab Use Only: ACL Project #: 4686601

Cooler Temp: 4.0 °C

CUSTODY RECORD

	Date	Time	
Relinquished by Sampler: Kim Butzin	12/28/04	1445	Received by:
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by Laboratory. Waybill # La Bartholomew 12/30 2:19

APPENDIX C – STATISTICAL ANALYSES

Concentrations (mg/L)

Parameter: Barium

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
Total Samples: 29
Total Non-Detect: 15
Percent Non-Detects: 51.7241%
Total Background Samples: 8
There is 1 background well

Well	Samples	ND	Date	Result	Original
GWA-2/MW-2	8	6 (75%)	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

There are 3 compliance wells

Well	Samples	ND	Date	Result	Original
GWB-4/MW-4	8	3 (37.5%)	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
GWC-11/MW-11	8	3 (37.5%)	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
GWC-3/MW-3	5	3 (60%)	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

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 = 14; Samples = 29

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	0.4291	0.0321825
2	0.01	0.027	0.017	0.3968	0.0067456
3	0.01	0.025	0.015	0.2499	0.0037485
4	0.01	0.022	0.012	0.215	0.00258
5	0.01	0.021	0.011	0.1864	0.0020504
6	0.01	0.021	0.011	0.1616	0.0017776
7	0.01	0.021	0.011	0.1395	0.0015345
8	0.01	0.021	0.011	0.1192	0.0013112
9	0.01	0.0205	0.0105	0.1002	0.0010521
10	0.01	0.02	0.01	0.0822	0.000822
11	0.01	0.02	0.01	0.065	0.00065
12	0.01	0.02	0.01	0.0483	0.000483
13	0.01	0.018	0.008	0.032	0.000256
14	0.01	0.015	0.005	0.0159	7.95e-005
15	0.01	0.01	0		
16	0.015	0.01	-0.005		
17	0.018	0.01	-0.008		
18	0.02	0.01	-0.01		
19	0.02	0.01	-0.01		
20	0.02	0.01	-0.01		
21	0.0205	0.01	-0.0105		
22	0.021	0.01	-0.011		
23	0.021	0.01	-0.011		
24	0.021	0.01	-0.011		
25	0.021	0.01	-0.011		
26	0.022	0.01	-0.012		
27	0.025	0.01	-0.015		
28	0.027	0.01	-0.017		
29	0.085	0.01	-0.075		

Sum of b values = 0.0552729
Sample Standard Deviation = 0.0142051
W Statistic = 0.540728
5% Critical value of 0.926 exceeds 0.540728
Evidence of non-normality at 95% level of significance
1% Critical value of 0.898 exceeds 0.540728
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	28
	9/24/2002	ND<0.01	8
	10/21/2002	ND<0.01	8
	12/4/2002	0.015	16
	6/25/2003	ND<0.01	8
	12/17/2003	ND<0.01	8
	6/16/2004	ND<0.01	8
	12/28/2004	ND<0.01	8

Rank Sum = 92
Rank Mean = 11.5

Background Rank Sum = 92
Background Rank Mean = 11.5

Compliance Wells

Well ID	Date	Result	Rank
GWB-4/MW-4	7/30/2002	0.021	22
	9/24/2002	0.021	23
	10/21/2002	0.021	24
	12/4/2002 ~	0.0205	21
	6/25/2003	ND<0.01	8
	12/17/2003	ND<0.01	8
	6/16/2004	ND<0.01	8
	12/28/2004	0.021	25

Rank Sum = 139
Rank Mean = 17.375

GWC-11/MW-11	7/30/2002	0.085	29
	9/24/2002	0.02	18
	10/21/2002	0.025	27
	12/4/2002	0.018	17
	6/25/2003	ND<0.01	8
	12/17/2003	0.022	26
	6/16/2004	ND<0.01	8
	12/28/2004	ND<0.01	8

Rank Sum = 141
Rank Mean = 17.625

GWC-3/MW-3	7/30/2002	ND<0.01	8
	9/24/2002	ND<0.01	8
	12/4/2002	0.02	19
	12/17/2003	ND<0.01	8
	6/16/2004	0.02	20

Rank Sum = 63

Rank Mean = 12.6

Calculation Results:

Kruskal-Wallis H Statistic = 3.13172
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 3.6328
95% Confidence comparison value is 7.81472 at 3 degrees of freedom
3.13172 < 7.81472 indicating no significant group difference at 5% significance level
3.6328 < 7.81472 indicating no significant group difference at 5% significance level when adjusted for ties

Concentrations (mg/L)

Parameter: Barium

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
Total Samples: 46
Total Non-Detect: 26
Percent Non-Detects: 56.5217%
Total Background Samples: 8
There is 1 background well

Well	Samples	ND	Date	Result	Original
GWA-15/MW-15	8	8 (100%)	7/30/2002	ND<0.01	ND<0.02
			9/24/2002	ND<0.01	ND<0.02
			10/21/2002 ~	ND<0.01	ND<0.02
			12/3/2002	ND<0.005	ND<0.01
			6/24/2003	ND<0.01	ND<0.02
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004	ND<0.01	ND<0.02

There are 5 compliance wells

Well	Samples	ND	Date	Result	Original
GWB-6/MW-6	8	8 (100%)	7/30/2002	ND<0.01	ND<0.02
			9/24/2002	ND<0.01	ND<0.02
			10/21/2002	ND<0.01	ND<0.02
			12/3/2002	ND<0.005	ND<0.01
			6/24/2003	ND<0.01	ND<0.02
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004	ND<0.01	ND<0.02
GWC-13/MW-13	8	0 (0%)	7/30/2002	0.077	0.077
			9/24/2002	0.085	0.085
			10/21/2002	0.083	0.083
			12/3/2002	0.082	0.082
			6/24/2003 ~	0.0295	0.0295
			12/17/2003 ~	0.0325	0.0325
			6/15/2004 ~	0.034	0.034
			12/28/2004	0.043	0.043
GWC-14/MW-14	6	0 (0%)	7/30/2002	0.068	0.068
			9/24/2002 ~	0.0935	0.0935
			10/21/2002	0.064	0.064
			12/3/2002	0.106	0.106
			6/24/2003	0.051	0.051
			12/17/2003	0.189	0.189
GWC-5/MW-5	8	4 (50%)	7/30/2002	ND<0.01	ND<0.02
			9/24/2002	0.02	0.02
			10/21/2002	ND<0.01	ND<0.02
			12/3/2002	0.018	0.018
			6/24/2003	ND<0.01	ND<0.02
			12/17/2003	0.142	0.142

			6/15/2004	0.04	0.04
			12/28/2004	ND<0.01	ND<0.02
GWA-7/MW-7	8	6 (75%)	7/30/2002 ~	ND<0.01	ND<0.02
			9/24/2002	ND<0.01	ND<0.02
			10/21/2002	ND<0.01	ND<0.02
			12/3/2002	0.015	0.015
			6/24/2003	0.036	0.036
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004 ~	ND<0.01	ND<0.02

There is 1 unused well

Well	Samples	ND	Date	Result	Original
EQ-Blank	4	4 (100%)	6/24/2003	ND<0.01	ND<0.02
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004	ND<0.01	ND<0.02

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 = 23; Samples = 46

i	x(i)	x(n-i+1)	x(n-1+1)-x(i)	a(n-i+1)	b(i)
1	0.005	0.189	0.184	0.383	0.070472
2	0.005	0.142	0.137	0.2635	0.0360995
3	0.01	0.106	0.096	0.2302	0.0220992
4	0.01	0.0935	0.0835	0.2058	0.0171843
5	0.01	0.085	0.075	0.1862	0.013965
6	0.01	0.083	0.073	0.1695	0.0123735
7	0.01	0.082	0.072	0.1548	0.0111456
8	0.01	0.077	0.067	0.1415	0.0094805
9	0.01	0.068	0.058	0.1293	0.0074994
10	0.01	0.064	0.054	0.118	0.006372
11	0.01	0.051	0.041	0.1073	0.0043993
12	0.01	0.043	0.033	0.0972	0.0032076
13	0.01	0.04	0.03	0.0876	0.002628
14	0.01	0.036	0.026	0.0785	0.002041
15	0.01	0.034	0.024	0.0694	0.0016666
16	0.01	0.0325	0.0225	0.0607	0.00136575
17	0.01	0.0295	0.0195	0.0522	0.0010179
18	0.01	0.02	0.01	0.0439	0.000439
19	0.01	0.018	0.008	0.0357	0.0002856
20	0.01	0.015	0.005	0.0277	0.0001385
21	0.01	0.01	0	0.0197	0
22	0.01	0.01	0	0.0118	0
23	0.01	0.01	0	0.0039	0
24	0.01	0.01	0		
25	0.01	0.01	0		
26	0.01	0.01	0		
27	0.015	0.01	-0.005		
28	0.018	0.01	-0.008		
29	0.02	0.01	-0.01		
30	0.0295	0.01	-0.0195		
31	0.0325	0.01	-0.0225		
32	0.034	0.01	-0.024		
33	0.036	0.01	-0.026		
34	0.04	0.01	-0.03		
35	0.043	0.01	-0.033		
36	0.051	0.01	-0.041		
37	0.064	0.01	-0.054		
38	0.068	0.01	-0.058		
39	0.077	0.01	-0.067		
40	0.082	0.01	-0.072		
41	0.083	0.01	-0.073		
42	0.085	0.01	-0.075		
43	0.0935	0.01	-0.0835		
44	0.106	0.01	-0.096		
45	0.142	0.005	-0.137		
46	0.189	0.005	-0.184		

Sum of b values = 0.223879
Sample Standard Deviation = 0.0401041
W Statistic = 0.69253
5% Critical value of 0.945 exceeds 0.69253
Evidence of non-normality at 95% level of significance
1% Critical value of 0.927 exceeds 0.69253
Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: Barium

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

Kruskal Wallis Ranks

Background Wells

Well ID	Date	Result	Rank
GWA-15/MW-15	7/30/2002	ND<0.01	13.5
	9/24/2002	ND<0.01	13.5
	10/21/2002 ~	ND<0.01	13.5
	12/3/2002	ND<0.005	13.5
	6/24/2003	ND<0.01	13.5
	12/17/2003	ND<0.01	13.5
	6/15/2004	ND<0.01	13.5
	12/28/2004	ND<0.01	13.5

Rank Sum = 108
Rank Mean = 13.5

Background Rank Sum = 108
Background Rank Mean = 13.5

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	ND<0.01	13.5
	9/24/2002	ND<0.01	13.5
	10/21/2002	ND<0.01	13.5
	12/3/2002	ND<0.005	13.5
	6/24/2003	ND<0.01	13.5
	12/17/2003	ND<0.01	13.5
	6/15/2004	ND<0.01	13.5
	12/28/2004	ND<0.01	13.5

Rank Sum = 108
Rank Mean = 13.5

GWC-13/MW-13	7/30/2002	0.077	39
	9/24/2002	0.085	42
	10/21/2002	0.083	41
	12/3/2002	0.082	40
	6/24/2003 ~	0.0295	30
	12/17/2003 ~	0.0325	31
	6/15/2004 ~	0.034	32
	12/28/2004	0.043	35

Rank Sum = 290
Rank Mean = 36.25

GWC-14/MW-14	7/30/2002	0.068	38
	9/24/2002 ~	0.0935	43
	10/21/2002	0.064	37
	12/3/2002	0.106	44
	6/24/2003	0.051	36
	12/17/2003	0.189	46

Rank Sum = 244
Rank Mean = 40.6667

GWC-5/MW-5	7/30/2002	ND<0.01	13.5
	9/24/2002	0.02	29
	10/21/2002	ND<0.01	13.5
	12/3/2002	0.018	28
	6/24/2003	ND<0.01	13.5
	12/17/2003	0.142	45
	6/15/2004	0.04	34
	12/28/2004	ND<0.01	13.5

Rank Sum = 190
Rank Mean = 23.75

GWA-7/MW-7	7/30/2002 ~	ND<0.01	13.5
	9/24/2002	ND<0.01	13.5
	10/21/2002	ND<0.01	13.5
	12/3/2002	0.015	27
	6/24/2003	0.036	33
	12/17/2003	ND<0.01	13.5
	6/15/2004	ND<0.01	13.5
	12/28/2004 ~	ND<0.01	13.5

Rank Sum = 141
Rank Mean = 17.625

Calculation Results:

Kruskal-Wallis H Statistic = 27.4484
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 33.4896
95% Confidence comparison value is 11.0705 at 5 degrees of freedom
27.4484 > 11.0705 indicating a significant group difference at 5% significance level
33.4896 > 11.0705 indicating a significant group difference at 5% significance level when adjusted for ties

Individual Well Comparisons at 1% Significance Level per Comparison

1% Z score is 2.32634
Mean background rank is 13.5

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	13.5	0	15.6128
GWC-13/MW-13	36.25	22.75	15.6128
GWC-14/MW-14	40.6667	27.1667	16.8638
GWC-5/MW-5	23.75	10.25	15.6128
GWA-7/MW-7	17.625	4.125	15.6128

Individual Well Comparisons at Groupwise 5% Significance Level (1% Significance Level per comparison)

1% Z score is 2.32634
Mean background rank is 13.5

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	13.5	0	15.6128
GWC-13/MW-13	36.25	22.75	15.6128
GWC-14/MW-14	40.6667	27.1667	16.8638
GWC-5/MW-5	23.75	10.25	15.6128
GWA-7/MW-7	17.625	4.125	15.6128

Concentrations (µg/L)

Parameter: cis-1,2-Dichloroethene

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
Total Samples: 46
Total Non-Detect: 36
Percent Non-Detects: 78.2609%
Total Background Samples: 8
There is 1 background well

Well	Samples	ND	Date	Result	Original
GWA-15/MW-15	8	8 (100%)	7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002 ~	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5

There are 5 compliance wells

Well	Samples	ND	Date	Result	Original
GWB-6/MW-6	8	8 (100%)	7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5
GWC-13/MW-13	8	4 (50%)	7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003 ~	6	6
			12/17/2003 ~	14	14
			6/15/2004 ~	9.5	9.5
			12/28/2004	8	8
GWC-14/MW-14	6	0 (0%)	7/30/2002	10	10
			9/24/2002 ~	18.5	18.5
			10/21/2002	16	16
			12/3/2002	19	19
			6/24/2003	10	10
			12/17/2003	17	17
GWC-5/MW-5	8	8 (100%)	7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5

			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5
GWA-7/MW-7	8	8 (100%)	7/30/2002 ~	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004 ~	ND<2.5	ND<5

There are 2 unused wells

Well	Samples	ND	Date	Result	Original
EQ-Blank	4	4 (100%)	6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5
Trip Blank	1	1 (100%)	12/17/2003	ND<2.5	ND<5

Shapiro-Wilks Test of Normality

Parameter: cis-1,2-Dichloroethene

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
K = 23; Samples = 46

i	x(i)	x(n-i+1)	x(n-1+1)-x(i)	a(n-i+1)	b(i)
1	2.5	19	16.5	0.383	6.3195
2	2.5	18.5	16	0.2635	4.216
3	2.5	17	14.5	0.2302	3.3379
4	2.5	16	13.5	0.2058	2.7783
5	2.5	14	11.5	0.1862	2.1413
6	2.5	10	7.5	0.1695	1.27125
7	2.5	10	7.5	0.1548	1.161
8	2.5	9.5	7	0.1415	0.9905
9	2.5	8	5.5	0.1293	0.71115
10	2.5	6	3.5	0.118	0.413
11	2.5	2.5	0	0.1073	0
12	2.5	2.5	0	0.0972	0
13	2.5	2.5	0	0.0876	0
14	2.5	2.5	0	0.0785	0
15	2.5	2.5	0	0.0694	0
16	2.5	2.5	0	0.0607	0
17	2.5	2.5	0	0.0522	0
18	2.5	2.5	0	0.0439	0
19	2.5	2.5	0	0.0357	0
20	2.5	2.5	0	0.0277	0
21	2.5	2.5	0	0.0197	0
22	2.5	2.5	0	0.0118	0
23	2.5	2.5	0	0.0039	0
24	2.5	2.5	0		
25	2.5	2.5	0		
26	2.5	2.5	0		
27	2.5	2.5	0		
28	2.5	2.5	0		
29	2.5	2.5	0		
30	2.5	2.5	0		
31	2.5	2.5	0		
32	2.5	2.5	0		
33	2.5	2.5	0		
34	2.5	2.5	0		
35	2.5	2.5	0		
36	2.5	2.5	0		
37	6	2.5	-3.5		
38	8	2.5	-5.5		
39	9.5	2.5	-7		
40	10	2.5	-7.5		
41	10	2.5	-7.5		
42	14	2.5	-11.5		
43	16	2.5	-13.5		
44	17	2.5	-14.5		
45	18.5	2.5	-16		
46	19	2.5	-16.5		

Sum of b values = 23.3399
Sample Standard Deviation = 4.77579
W Statistic = 0.530755
5% Critical value of 0.945 exceeds 0.530755
Evidence of non-normality at 95% level of significance
1% Critical value of 0.927 exceeds 0.530755
Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: cis-1,2-Dichloroethene

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

Kruskal Wallis Ranks

Background Wells

Well ID	Date	Result	Rank
GWA-15/MW-15	7/30/2002	ND<2.5	18.5
	9/24/2002	ND<2.5	18.5
	10/21/2002 ~	ND<2.5	18.5
	12/3/2002	ND<2.5	18.5
	6/24/2003	ND<2.5	18.5
	12/17/2003	ND<2.5	18.5
	6/15/2004	ND<2.5	18.5
	12/28/2004	ND<2.5	18.5

Rank Sum = 148
Rank Mean = 18.5

Background Rank Sum = 148
Background Rank Mean = 18.5

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	ND<2.5	18.5
	9/24/2002	ND<2.5	18.5
	10/21/2002	ND<2.5	18.5
	12/3/2002	ND<2.5	18.5
	6/24/2003	ND<2.5	18.5
	12/17/2003	ND<2.5	18.5
	6/15/2004	ND<2.5	18.5
	12/28/2004	ND<2.5	18.5

Rank Sum = 148
Rank Mean = 18.5

GWC-13/MW-13	7/30/2002	ND<2.5	18.5
	9/24/2002	ND<2.5	18.5
	10/21/2002	ND<2.5	18.5
	12/3/2002	ND<2.5	18.5
	6/24/2003 ~	6	37
	12/17/2003 ~	14	42
	6/15/2004 ~	9.5	39
	12/28/2004	8	38

Rank Sum = 230
Rank Mean = 28.75

GWC-14/MW-14	7/30/2002	10	40
	9/24/2002 ~	18.5	45
	10/21/2002	16	43
	12/3/2002	19	46
	6/24/2003	10	41
	12/17/2003	17	44

Rank Sum = 259
Rank Mean = 43.1667

GWC-5/MW-5	7/30/2002	ND<2.5	18.5
	9/24/2002	ND<2.5	18.5
	10/21/2002	ND<2.5	18.5
	12/3/2002	ND<2.5	18.5
	6/24/2003	ND<2.5	18.5
	12/17/2003	ND<2.5	18.5
	6/15/2004	ND<2.5	18.5
	12/28/2004	ND<2.5	18.5

Rank Sum = 148
Rank Mean = 18.5

GWA-7/MW-7	7/30/2002 ~	ND<2.5	18.5
	9/24/2002	ND<2.5	18.5
	10/21/2002	ND<2.5	18.5
	12/3/2002	ND<2.5	18.5
	6/24/2003	ND<2.5	18.5
	12/17/2003	ND<2.5	18.5
	6/15/2004	ND<2.5	18.5
	12/28/2004 ~	ND<2.5	18.5

Rank Sum = 148
Rank Mean = 18.5

Calculation Results:

Kruskal-Wallis H Statistic = 18.5449
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 35.6075
95% Confidence comparison value is 11.0705 at 5 degrees of freedom
18.5449 > 11.0705 indicating a significant group difference at 5% significance level
35.6075 > 11.0705 indicating a significant group difference at 5% significance level when adjusted for ties

Individual Well Comparisons at 1% Significance Level per Comparison

1% Z score is 2.32634
Mean background rank is 18.5

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	18.5	0	15.6128
GWC-13/MW-13	28.75	10.25	15.6128
GWC-14/MW-14	43.1667	24.6667	16.8638
GWC-5/MW-5	18.5	0	15.6128
GWA-7/MW-7	18.5	0	15.6128

Individual Well Comparisons at Groupwise 5% Significance Level (1% Significance Level per comparison)

1% Z score is 2.32634
Mean background rank is 18.5

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	18.5	0	15.6128
GWC-13/MW-13	28.75	10.25	15.6128
GWC-14/MW-14	43.1667	24.6667	16.8638
GWC-5/MW-5	18.5	0	15.6128
GWA-7/MW-7	18.5	0	15.6128

Concentrations (µg/L)

Parameter: 1,1-Dichloroethane

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
Total Samples: 46
Total Non-Detect: 33
Percent Non-Detects: 71.7391%
Total Background Samples: 8
There is 1 background well

Well	Samples	ND	Date	Result	Original
GWA-15/MW-15	8	8 (100%)	7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002 ~	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5

There are 5 compliance wells

Well	Samples	ND	Date	Result	Original
GWB-6/MW-6	8	8 (100%)	7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5
GWC-13/MW-13	8	1 (12.5%)	7/30/2002	ND<2.5	ND<5
			9/24/2002	6	6
			10/21/2002	6	6
			12/3/2002	7	7
			6/24/2003 ~	9	9
			12/17/2003 ~	20.5	20.5
			6/15/2004 ~	18	18
			12/28/2004	16	16
GWC-14/MW-14	6	0 (0%)	7/30/2002	13	13
			9/24/2002 ~	21	21
			10/21/2002	17	17
			12/3/2002	16	16
			6/24/2003	10	10
			12/17/2003	10	10
GWC-5/MW-5	8	8 (100%)	7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5

			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5
GWA-7/MW-7	8	8 (100%)	7/30/2002 ~	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004 ~	ND<2.5	ND<5

There are 2 unused wells

Well	Samples	ND	Date	Result	Original
EQ-Blank	4	4 (100%)	6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5
Trip Blank	1	1 (100%)	12/17/2003	ND<2.5	ND<5

Shapiro-Wilks Test of Normality

Parameter: 1,1-Dichloroethane

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
K = 23; Samples = 46

i	x(i)	x(n-i+1)	x(n-1+1)-x(i)	a(n-i+1)	b(i)
1	2.5	21	18.5	0.383	7.0855
2	2.5	20.5	18	0.2635	4.743
3	2.5	18	15.5	0.2302	3.5681
4	2.5	17	14.5	0.2058	2.9841
5	2.5	16	13.5	0.1862	2.5137
6	2.5	16	13.5	0.1695	2.28825
7	2.5	13	10.5	0.1548	1.6254
8	2.5	10	7.5	0.1415	1.06125
9	2.5	10	7.5	0.1293	0.96975
10	2.5	9	6.5	0.118	0.767
11	2.5	7	4.5	0.1073	0.48285
12	2.5	6	3.5	0.0972	0.3402
13	2.5	6	3.5	0.0876	0.3066
14	2.5	2.5	0	0.0785	0
15	2.5	2.5	0	0.0694	0
16	2.5	2.5	0	0.0607	0
17	2.5	2.5	0	0.0522	0
18	2.5	2.5	0	0.0439	0
19	2.5	2.5	0	0.0357	0
20	2.5	2.5	0	0.0277	0
21	2.5	2.5	0	0.0197	0
22	2.5	2.5	0	0.0118	0
23	2.5	2.5	0	0.0039	0
24	2.5	2.5	0		
25	2.5	2.5	0		
26	2.5	2.5	0		
27	2.5	2.5	0		
28	2.5	2.5	0		
29	2.5	2.5	0		
30	2.5	2.5	0		
31	2.5	2.5	0		
32	2.5	2.5	0		
33	2.5	2.5	0		
34	6	2.5	-3.5		
35	6	2.5	-3.5		
36	7	2.5	-4.5		
37	9	2.5	-6.5		
38	10	2.5	-7.5		
39	10	2.5	-7.5		
40	13	2.5	-10.5		
41	16	2.5	-13.5		
42	16	2.5	-13.5		
43	17	2.5	-14.5		
44	18	2.5	-15.5		
45	20.5	2.5	-18		
46	21	2.5	-18.5		

Sum of b values = 28.7357
Sample Standard Deviation = 5.54372
W Statistic = 0.597074
5% Critical value of 0.945 exceeds 0.597074
Evidence of non-normality at 95% level of significance
1% Critical value of 0.927 exceeds 0.597074
Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: 1,1-Dichloroethane

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

Kruskal Wallis Ranks

Background Wells

Well ID	Date	Result	Rank
GWA-15/MW-15	7/30/2002	ND<2.5	17
	9/24/2002	ND<2.5	17
	10/21/2002 ~	ND<2.5	17
	12/3/2002	ND<2.5	17
	6/24/2003	ND<2.5	17
	12/17/2003	ND<2.5	17
	6/15/2004	ND<2.5	17
	12/28/2004	ND<2.5	17
Rank Sum = 136			
Rank Mean = 17			

Background Rank Sum = 136
Background Rank Mean = 17

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	ND<2.5	17
	9/24/2002	ND<2.5	17
	10/21/2002	ND<2.5	17
	12/3/2002	ND<2.5	17
	6/24/2003	ND<2.5	17
	12/17/2003	ND<2.5	17
	6/15/2004	ND<2.5	17
	12/28/2004	ND<2.5	17
Rank Sum = 136			
Rank Mean = 17			
GWC-13/MW-13	7/30/2002	ND<2.5	17
	9/24/2002	6	34
	10/21/2002	6	35
	12/3/2002	7	36
	6/24/2003 ~	9	37
	12/17/2003 ~	20.5	45
	6/15/2004 ~	18	44
	12/28/2004	16	41
Rank Sum = 289			
Rank Mean = 36.125			
GWC-14/MW-14	7/30/2002	13	40
	9/24/2002 ~	21	46
	10/21/2002	17	43
	12/3/2002	16	42
	6/24/2003	10	38
	12/17/2003	10	39

Rank Sum = 248
Rank Mean = 41.3333

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

Rank Sum = 136
Rank Mean = 17

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

Rank Sum = 136
Rank Mean = 17

Calculation Results:

Kruskal-Wallis H Statistic = 25.1728
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 39.896
95% Confidence comparison value is 11.0705 at 5 degrees of freedom
25.1728 > 11.0705 indicating a significant group difference at 5% significance level
39.896 > 11.0705 indicating a significant group difference at 5% significance level when adjusted for ties

Individual Well Comparisons at 1% Significance Level per Comparison

1% Z score is 2.32634
Mean background rank is 17

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	17	0	15.6128
GWC-13/MW-13	36.125	19.125	15.6128
GWC-14/MW-14	41.3333	24.3333	16.8638
GWC-5/MW-5	17	0	15.6128
GWA-7/MW-7	17	0	15.6128

Individual Well Comparisons at Groupwise 5% Significance Level (1% Significance Level per comparison)

1% Z score is 2.32634
Mean background rank is 17

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	17	0	15.6128
GWC-13/MW-13	36.125	19.125	15.6128
GWC-14/MW-14	41.3333	24.3333	16.8638
GWC-5/MW-5	17	0	15.6128
GWA-7/MW-7	17	0	15.6128

Concentrations (µg/L)

Parameter: Trichlorofluoromethane

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
Total Samples: 46
Total Non-Detect: 25
Percent Non-Detects: 54.3478%
Total Background Samples: 8
There is 1 background well

Well	Samples	ND	Date	Result	Original
GWA-15/MW-15	8	8 (100%)	7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002 ~	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5

There are 5 compliance wells

Well	Samples	ND	Date	Result	Original
GWB-6/MW-6	8	8 (100%)	7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5
GWC-13/MW-13	8	0 (0%)	7/30/2002	300	300
			9/24/2002	381	381
			10/21/2002	348	348
			12/3/2002	391	391
			6/24/2003 ~	44	44
			12/17/2003 ~	99.5	99.5
			6/15/2004 ~	127	127
			12/28/2004	81	81
GWC-14/MW-14	6	1 (16.6667%)	7/30/2002	43	43
			9/24/2002 ~	47.5	47.5
			10/21/2002	31	31
			12/3/2002	27	27
			6/24/2003	5	5
			12/17/2003	ND<2.5	ND<5
GWC-5/MW-5	8	8 (100%)	7/30/2002	ND<2.5	ND<5
			9/24/2002	ND<2.5	ND<5
			10/21/2002	ND<2.5	ND<5
			12/3/2002	ND<2.5	ND<5
			6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5

			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5
GWA-7/MW-7	8	0 (0%)	7/30/2002 ~	184.5	184.5
			9/24/2002	32	32
			10/21/2002	221	221
			12/3/2002	210	210
			6/24/2003	23	23
			12/17/2003	34	34
			6/15/2004	46	46
			12/28/2004 ~	144.5	144.5

There are 2 unused wells

Well	Samples	ND	Date	Result	Original
EQ-Blank	4	4 (100%)	6/24/2003	ND<2.5	ND<5
			12/17/2003	ND<2.5	ND<5
			6/15/2004	ND<2.5	ND<5
			12/28/2004	ND<2.5	ND<5
Trip Blank	1	1 (100%)	12/17/2003	ND<2.5	ND<5

Shapiro-Wilks Test of Normality

Parameter: Trichlorofluoromethane

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
K = 23; Samples = 46

i	x(i)	x(n-i+1)	x(n-1+1)-x(i)	a(n-i+1)	b(i)
1	2.5	391	388.5	0.383	148.796
2	2.5	381	378.5	0.2635	99.7348
3	2.5	348	345.5	0.2302	79.5341
4	2.5	300	297.5	0.2058	61.2255
5	2.5	221	218.5	0.1862	40.6847
6	2.5	210	207.5	0.1695	35.1713
7	2.5	184.5	182	0.1548	28.1736
8	2.5	144.5	142	0.1415	20.093
9	2.5	127	124.5	0.1293	16.0979
10	2.5	99.5	97	0.118	11.446
11	2.5	81	78.5	0.1073	8.42305
12	2.5	47.5	45	0.0972	4.374
13	2.5	46	43.5	0.0876	3.8106
14	2.5	44	41.5	0.0785	3.25775
15	2.5	43	40.5	0.0694	2.8107
16	2.5	34	31.5	0.0607	1.91205
17	2.5	32	29.5	0.0522	1.5399
18	2.5	31	28.5	0.0439	1.25115
19	2.5	27	24.5	0.0357	0.87465
20	2.5	23	20.5	0.0277	0.56785
21	2.5	5	2.5	0.0197	0.04925
22	2.5	2.5	0	0.0118	0
23	2.5	2.5	0	0.0039	0
24	2.5	2.5	0		
25	2.5	2.5	0		
26	5	2.5	-2.5		
27	23	2.5	-20.5		
28	27	2.5	-24.5		
29	31	2.5	-28.5		
30	32	2.5	-29.5		
31	34	2.5	-31.5		
32	43	2.5	-40.5		
33	44	2.5	-41.5		
34	46	2.5	-43.5		
35	47.5	2.5	-45		
36	81	2.5	-78.5		
37	99.5	2.5	-97		
38	127	2.5	-124.5		
39	144.5	2.5	-142		
40	184.5	2.5	-182		
41	210	2.5	-207.5		
42	221	2.5	-218.5		
43	300	2.5	-297.5		
44	348	2.5	-345.5		
45	381	2.5	-378.5		
46	391	2.5	-388.5		

Sum of b values = 569.827
Sample Standard Deviation = 107.673
W Statistic = 0.622383
5% Critical value of 0.945 exceeds 0.622383
Evidence of non-normality at 95% level of significance
1% Critical value of 0.927 exceeds 0.622383
Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: Trichlorofluoromethane

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

Kruskal Wallis Ranks

Background Wells

Well ID	Date	Result	Rank
GWA-15/MW-15	7/30/2002	ND<2.5	13
	9/24/2002	ND<2.5	13
	10/21/2002 ~	ND<2.5	13
	12/3/2002	ND<2.5	13
	6/24/2003	ND<2.5	13
	12/17/2003	ND<2.5	13
	6/15/2004	ND<2.5	13
	12/28/2004	ND<2.5	13

Rank Sum = 104
Rank Mean = 13

Background Rank Sum = 104
Background Rank Mean = 13

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	ND<2.5	13
	9/24/2002	ND<2.5	13
	10/21/2002	ND<2.5	13
	12/3/2002	ND<2.5	13
	6/24/2003	ND<2.5	13
	12/17/2003	ND<2.5	13
	6/15/2004	ND<2.5	13
	12/28/2004	ND<2.5	13

Rank Sum = 104
Rank Mean = 13

GWC-13/MW-13	7/30/2002	300	43
	9/24/2002	381	45
	10/21/2002	348	44
	12/3/2002	391	46
	6/24/2003 ~	44	33
	12/17/2003 ~	99.5	37
	6/15/2004 ~	127	38
	12/28/2004	81	36

Rank Sum = 322
Rank Mean = 40.25

GWC-14/MW-14	7/30/2002	43	32
	9/24/2002 ~	47.5	35
	10/21/2002	31	29
	12/3/2002	27	28
	6/24/2003	5	26
	12/17/2003	ND<2.5	13

Rank Sum = 163
Rank Mean = 27.1667

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

Rank Sum = 104
Rank Mean = 13

GWA-7/MW-7	7/30/2002 ~	184.5	40
	9/24/2002	32	30
	10/21/2002	221	42
	12/3/2002	210	41
	6/24/2003	23	27
	12/17/2003	34	31
	6/15/2004	46	34
	12/28/2004 ~	144.5	39

Rank Sum = 284
Rank Mean = 35.5

Calculation Results:

Kruskal-Wallis H Statistic = 33.9861
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 40.4763
95% Confidence comparison value is 11.0705 at 5 degrees of freedom
33.9861 > 11.0705 indicating a significant group difference at 5% significance level
40.4763 > 11.0705 indicating a significant group difference at 5% significance level when adjusted for ties

Individual Well Comparisons at 1% Significance Level per Comparison

1% Z score is 2.32634
Mean background rank is 13

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	13	0	15.6128
GWC-13/MW-13	40.25	27.25	15.6128
GWC-14/MW-14	27.1667	14.1667	16.8636
GWC-5/MW-5	13	0	15.6128
GWA-7/MW-7	35.5	22.5	15.6128

Individual Well Comparisons at Groupwise 5% Significance Level (1% Significance Level per comparison)

1% Z score is 2.32634
Mean background rank is 13

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	13	0	15.6128
GWC-13/MW-13	40.25	27.25	15.6128
GWC-14/MW-14	27.1667	14.1667	16.8636
GWC-5/MW-5	13	0	15.6128
GWA-7/MW-7	35.5	22.5	15.6128

Concentrations (mg/L)

Parameter: Zinc

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
Total Samples: 46
Total Non-Detect: 38
Percent Non-Detects: 82.6087%
Total Background Samples: 8
There is 1 background well

Well	Samples	ND	Date	Result	Original
GWA-15/MW-158		8 (100%)	7/30/2002	ND<0.01	ND<0.02
			9/24/2002	ND<0.01	ND<0.02
			10/21/2002 ~	ND<0.01	ND<0.02
			12/3/2002	ND<0.01	ND<0.02
			6/24/2003	ND<0.01	ND<0.02
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004	ND<0.01	ND<0.02

There are 5 compliance wells

Well	Samples	ND	Date	Result	Original
GWB-6/MW-6	8	8 (100%)	7/30/2002	ND<0.01	ND<0.02
			9/24/2002	ND<0.01	ND<0.02
			10/21/2002	ND<0.01	ND<0.02
			12/3/2002	ND<0.01	ND<0.02
			6/24/2003	ND<0.01	ND<0.02
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004	ND<0.01	ND<0.02
GWC-13/MW-138		4 (50%)	7/30/2002	ND<0.01	ND<0.02
			9/24/2002	0.023	0.023
			10/21/2002	0.027	0.027
			12/3/2002	0.027	0.027
			6/24/2003 ~	ND<0.01	ND<0.02
			12/17/2003 ~	ND<0.01	ND<0.02
			6/15/2004 ~	ND<0.01	ND<0.02
			12/28/2004	0.044	0.044
GWC-14/MW-146		5 (83.3333%)	7/30/2002	ND<0.01	ND<0.02
			9/24/2002 ~	ND<0.01	ND<0.02
			10/21/2002	ND<0.01	ND<0.02
			12/3/2002	ND<0.01	ND<0.02
			6/24/2003	ND<0.01	ND<0.02
			12/17/2003	0.127	0.127
GWC-5/MW-5	8	7 (87.5%)	7/30/2002	ND<0.01	ND<0.02
			9/24/2002	ND<0.01	ND<0.02
			10/21/2002	ND<0.01	ND<0.02
			12/3/2002	ND<0.01	ND<0.02
			6/24/2003	ND<0.01	ND<0.02
			12/17/2003	0.032	0.032

			6/15/2004	ND<0.01	ND<0.02
			12/28/2004	ND<0.01	ND<0.02
GWA-7/MW-7	8	6 (75%)	7/30/2002 ~	ND<0.01	ND<0.02
			9/24/2002	ND<0.01	ND<0.02
			10/21/2002	ND<0.01	ND<0.02
			12/3/2002	ND<0.01	ND<0.02
			6/24/2003	0.034	0.034
			12/17/2003	0.023	0.023
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004 ~	ND<0.01	ND<0.02

There is 1 unused well

Well	Samples	ND	Date	Result	Original
EQ-Blank	4	4 (100%)	6/24/2003	ND<0.01	ND<0.02
			12/17/2003	ND<0.01	ND<0.02
			6/15/2004	ND<0.01	ND<0.02
			12/28/2004	ND<0.01	ND<0.02

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 = 23; Samples = 46

i	x(i)	x(n-i+1)	x(n-1+1)-x(i)	a(n-i+1)	b(i)
1	0.01	0.127	0.117	0.383	0.044811
2	0.01	0.044	0.034	0.2635	0.008959
3	0.01	0.034	0.024	0.2302	0.0055248
4	0.01	0.032	0.022	0.2058	0.0045276
5	0.01	0.027	0.017	0.1862	0.0031654
6	0.01	0.027	0.017	0.1695	0.0028815
7	0.01	0.023	0.013	0.1548	0.0020124
8	0.01	0.023	0.013	0.1415	0.0018395
9	0.01	0.01	0	0.1293	0
10	0.01	0.01	0	0.118	0
11	0.01	0.01	0	0.1073	0
12	0.01	0.01	0	0.0972	0
13	0.01	0.01	0	0.0876	0
14	0.01	0.01	0	0.0785	0
15	0.01	0.01	0	0.0694	0
16	0.01	0.01	0	0.0607	0
17	0.01	0.01	0	0.0522	0
18	0.01	0.01	0	0.0439	0
19	0.01	0.01	0	0.0357	0
20	0.01	0.01	0	0.0277	0
21	0.01	0.01	0	0.0197	0
22	0.01	0.01	0	0.0118	0
23	0.01	0.01	0	0.0039	0
24	0.01	0.01	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	0.023	0.01	-0.013		
40	0.023	0.01	-0.013		
41	0.027	0.01	-0.017		
42	0.027	0.01	-0.017		
43	0.032	0.01	-0.022		
44	0.034	0.01	-0.024		
45	0.044	0.01	-0.034		
46	0.127	0.01	-0.117		

Sum of b values = 0.0737212
Sample Standard Deviation = 0.0184903
W Statistic = 0.353251
5% Critical value of 0.945 exceeds 0.353251
Evidence of non-normality at 95% level of significance
1% Critical value of 0.927 exceeds 0.353251
Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: Zinc

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL

Kruskal Wallis Ranks

Background Wells

Well ID	Date	Result	Rank
GWA-15/MW-15	7/30/2002	ND<0.01	19.5
	9/24/2002	ND<0.01	19.5
	10/21/2002 ~	ND<0.01	19.5
	12/3/2002	ND<0.01	19.5
	6/24/2003	ND<0.01	19.5
	12/17/2003	ND<0.01	19.5
	6/15/2004	ND<0.01	19.5
	12/28/2004	ND<0.01	19.5

Rank Sum = 156
Rank Mean = 19.5

Background Rank Sum = 156
Background Rank Mean = 19.5

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	ND<0.01	19.5
	9/24/2002	ND<0.01	19.5
	10/21/2002	ND<0.01	19.5
	12/3/2002	ND<0.01	19.5
	6/24/2003	ND<0.01	19.5
	12/17/2003	ND<0.01	19.5
	6/15/2004	ND<0.01	19.5
	12/28/2004	ND<0.01	19.5

Rank Sum = 156
Rank Mean = 19.5

GWC-13/MW-13	7/30/2002	ND<0.01	19.5
	9/24/2002	0.023	39
	10/21/2002	0.027	41
	12/3/2002	0.027	42
	6/24/2003 ~	ND<0.01	19.5
	12/17/2003 ~	ND<0.01	19.5
	6/15/2004 ~	ND<0.01	19.5
	12/28/2004	0.044	45

Rank Sum = 245
Rank Mean = 30.625

GWC-14/MW-14	7/30/2002	ND<0.01	19.5
	9/24/2002 ~	ND<0.01	19.5
	10/21/2002	ND<0.01	19.5
	12/3/2002	ND<0.01	19.5
	6/24/2003	ND<0.01	19.5
	12/17/2003	0.127	46

Rank Sum = 143.5
Rank Mean = 23.9167

GWC-5/MW-5	7/30/2002	ND<0.01	19.5
	9/24/2002	ND<0.01	19.5
	10/21/2002	ND<0.01	19.5
	12/3/2002	ND<0.01	19.5
	6/24/2003	ND<0.01	19.5
	12/17/2003	0.032	43
	6/15/2004	ND<0.01	19.5
	12/28/2004	ND<0.01	19.5

Rank Sum = 179.5
Rank Mean = 22.4375

GWA-7/MW-7	7/30/2002 ~	ND<0.01	19.5
	9/24/2002	ND<0.01	19.5
	10/21/2002	ND<0.01	19.5
	12/3/2002	ND<0.01	19.5
	6/24/2003	0.034	44
	12/17/2003	0.023	40
	6/15/2004	ND<0.01	19.5
	12/28/2004 ~	ND<0.01	19.5

Rank Sum = 201
Rank Mean = 25.125

Calculation Results:

Kruskal-Wallis H Statistic = 3.84823
Kruskal-Wallis H Statistic (adjusted for tied non detects) = 8.81841
95% Confidence comparison value is 11.0705 at 5 degrees of freedom
3.84823 < 11.0705 indicating no significant group difference at 5% significance level
8.81841 < 11.0705 indicating no significant group difference at 5% significance level when adjusted for ties