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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 analytical results for the semi-annual groundwater monitoring samples and annual Appendix II assessment monitoring samples taken in December 2003.

As discussed in Sections 5 and 6 of the attached report, there was no statistically significant increase in the concentration of any detected parameter in the compliance well samples compared to the background well samples at Landfill #2. At Landfill #3 there was a statistically significant increase over background for barium, 1,1-dichloroethane and cis-1,2-dichloroethane in wells GWC-13/MW-13 and GWC-14/MW-14; chlorobenzene and 1,4-dichlorobenzene in well GWC-14/MW-14 and trichlorofluoromethane in well GWC-13/MW-13. There was also a detection of mercury, an Appendix II parameter, in the sample from well GWC-14/MW-14. Statistical analyses of mercury concentrations were not performed since this was only the second analysis for this parameter. 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 Solid Waste Rules 391-3-4.

The next scheduled semi-annual sampling event is June 2004. In addition to the regular semi-annual monitoring for Appendix I parameters, all wells will continue to be analyzed for mercury. The next annual assessment monitoring for Appendix II parameters in wells GWC-13/MW-13, GWC-14/MW-14 and GWA-15/MW-15 will be conducted in December 2004.

If you have any questions, please contact Rachel Grimes at (205) 992-7025.

Sincerely,

W. C. Carr
Manager - Environmental Services

WCC/RLG:ahl

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

Attachment

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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 2004

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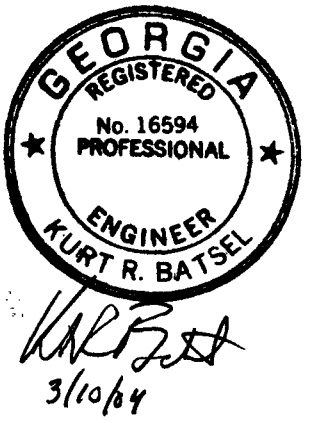

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1 – Introduction

This report presents the results of groundwater sampling conducted in December 2003 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 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 landfills are operated under Solid Waste Permit #s 017-006D(L)(I) and 017-007D(L)(I). The active trench at Landfill #2 is used only for asbestos disposal. Landfill #3, permitted in 1987, has been utilized 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, 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 were presented in reports previously submitted to the Department. This report presents the results of the December 2003 semi-annual detection monitoring sampling event and annual assessment monitoring. Subsequent reports will be prepared upon completion of semi-annual sampling 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 and GWC-11/MW-11. Well GWB-4/MW-4 is best characterized as a cross-gradient well, but is evaluated as a compliance well for this report. The well construction details are presented in *Table 1*.

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. As discussed in Section 3.2, well GWA-15/MW-15 is the designated background well, and the remaining wells are designated compliance wells.

No surface water monitoring stations were present at the landfill at the time of the December 2003 sampling event. However, two new stormwater sedimentation ponds, constructed in accordance with the approved Design and Operational Plan, were completed at Landfill #3 after the December 2003

sampling event. It is anticipated that the surface water monitoring stations associated with the new sedimentation ponds will be sampled during the next semi-annual sampling event in June 2004.

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 is frequently under semi-confined or confined conditions.

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

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

<u>Landfill #2</u>
Depth to water measurements and groundwater elevations for the wells at Landfill 2 are presented in *Table 1*. Based on groundwater elevations measured during the sampling events to date, groundwater

underneath Landfill 2 trends from a relatively higher elevation at the eastern portion of the landfill (GWA-2/MW-2) to relatively lower elevations in the west to southwest direction 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 (shown on *Figure 1* for December 2003) was calculated using a three-point problem from potentiometric surface elevations in monitoring wells GWA-2/MW-2, GWC-3/MW-3 and GWB-4/MW-4. The hydraulic gradient has ranged from a minimum of 0.01 (October 2002) 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*. Based on the measured groundwater elevations to date, it appears 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 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.

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 16, 2003.

Monitoring well GWA-15/MW-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.

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:

Southeast: GWA-7/MW-7, GWC-13/MW-13, and GWC-14/MW-14;
Northeast: GWB-6/MW-6, GWC-13/MW-13, and GWC-5/MW-5; and
West-Southwest: GWA-7/MW-7, GWB-6/MW-6, and GWA-15/MW-15.

The calculated hydraulic gradient is presented on the contour map (*Figures 2*). To date the steepest hydraulic gradient has been consistently to the north-northeast. The north-northeast trending gradient has ranged from a minimum of 0.08 (October and December 2002) to a maximum of 0.17 (June 2003).

4 – Sampling Procedures and Parameter Analyses

4.1 Procedures and Field Measurements

Prior to sample collection during each sampling event, depth to water measurements are recorded in each well from the surveyed elevations using an electronic water level indicator. The water level indicator is decontaminated using a potable water and Alconox® wash and a potable 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 A.*

In addition, assessment monitoring was conducted at Landfill #3 for the December 2003 sampling event based on the results of previous detection monitoring events in which statistically significant concentrations of barium and several organic parameters were indicated in the GWC-13 and GWC-14 well samples. Mercury was also detected previously in the GWC-13 and GWC-14 well samples. Assessment monitoring consisted of analyses of the Chapter 391-3-4 Appendix II list of parameters for the GWA-15, GWC-13 and GWC-14 well samples, and mercury for all well samples.

5 – Groundwater Quality Evaluation

5.1 Detected Parameters

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

Landfill #2

At Landfill #2, barium was detected at 0.022 milligrams per liter (mg/l) in the GWC-11 sample. The maximum contaminant level (MCL) for barium is 2.0 mg/l. The organic parameter trichlorofluoromethane was also detected at 6 micrograms per liter (ug/l) in the GWB-4 sample. There is no MCL for this parameter.

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 samples from wells GWC-5, GWC-13, and GWC-14 and zinc was also detected in background well GWA-7, and wells GWC-5 and GWC-14. As shown in *Table 7*, a number of additional metals were also detected in the samples from GWC-5 and GWC-14. All detected concentrations were below the MCLs except for Mercury at 0.01 mg/l (MCL of 0.002 mg/l) and cadmium at 0.011 mg/l (MCL of 0.005 mg/l), both of which occurred in well GWC-14.

It should be noted that the turbidity measured in wells GWC-5 (79.7 ntu's) and GWA-7 (100 ntu's) was significantly higher than in previous sampling events, and higher than the recommended maximum of 10 ntu's. In addition, well GWC-13 required 6 gallons of purging to reduce the turbidity below 10 ntu's compared to 1 to 2.5 gallons purged in previous sampling events. In GWC-14, there was insufficient water to facilitate sample collection using the low-flow pump assembly. The well was sampled using a bailer after purging the previous evening. No indicator parameters were measured during sampling of GWC-14 due to the lack of water in the well during purging. The increased detections of metals and VOCs in the wells during this sampling event is likely due to the increased turbidity in the wells, an indication that particles from the aquifer were suspended in the samples during collection.

The VOCs 1,1-dichloroethane, and cis-1,2-dichloroethene were detected in the GWC-13 and GWC-14 samples. Chlorobenzene and 1,4-dichlorobenzene were also detected in the GWC-14 sample. Trichlorofluoromethane was detected in samples from GWA-7, and GWC-13. Xylenes were also detected in the sample from GWC-14. All of the detected VOCs were reported at concentrations below the MCLs, where applicable.

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

The Department collected split samples from wells GWC-5, GWC-13, GWC-14 and GWA-15 for VOCs and metals analyses.

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 that the concentrations of the detected parameters in all wells at both landfills do not follow normal distributions.

- 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 wells. This method is recommended by the 1992 EPA guidance for sample sets that do not follow a normal distribution or that have between 15% and 90% non-detects.

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

5.2.1 Landfill #2

At Landfill #2, barium was detected in the sample from compliance well GWC-11/MW-11 and trichlorofluoromethane was detected in the GWB-4 well sample. The analyses indicate no statistically significant increase in the concentrations of these parameters in the compliance well samples as compared to the concentrations in the background well samples.

5.2.2 Landfill #3

Compared to background wells GWA-7/MW-7 and GWA-15/MW-15, the analyses indicate statistically significant higher concentrations of the following parameters:

- Barium in wells GWC-13/MW-13 and GWC-14/MW-14;
- 1,1-dichloroethane and cis-1,2-dichloroethene in wells GWC-13 and GWC-14;
- Chlorobenzene and 1,4-dichlorobenzene in well GWC-14/MW-14; and
- Trichlorofluoromethane in well GWC-13/MW-13.

The Appendix II parameter, mercury, was also detected in the GWC-14/MW-14 well sample at 0.01 mg/l. The MCL for mercury is 0.002 mg/l. Statistical analyses of mercury concentrations were not performed since this parameter was only analyzed for the second time as a component of assessment monitoring for this event.

6 – Conclusions

Since a statistically significant increase over background is indicated for several analyzed parameters in wells GWC-13/MW-13 and GWC-14/MW-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 than in the background wells. The notice will also include detection of the Appendix II parameter, mercury, in well sample GWC-14/MW-14.

SNC will continue assessment monitoring per the requirements of paragraphs (20) through (33) of Chapter 391-3-4-.14. Based on detection of the Appendix II parameter mercury during this sampling event, future semi-annual sampling will include analysis for mercury in all wells. In addition, the December 2004 sampling event will include the complete Appendix II analyses in wells GWA-15/MW-15, GWC-13/MW-13 and GWC-14/MW-14 to satisfy the assessment monitoring program requirement for annual Appendix II analysis in wells showing statistically significant increases of

baseline monitoring parameters. After completion of 4 semi-annual sampling events for mercury, this parameter will be added to the routine statistical analysis that is currently performed for the Appendix I parameters.

TABLES

Table 1
Southern Nuclear Operating Company Plant Vogtle Landfill #2
Groundwater Elevations and Monitoring Well Construction Details

Well ID	Date	Measuring Point Elevation (feet, msl)	Ground Surface Elevation (feet, msl)	Depth to Water (feet, topvc)	Total Boring Depth (feet, bls)	Total Well Depth (feet, topvc)	Riser Height (feet)	Screened Interval (feet, msl)	Groundwater Elevation (feet, msl)
GWA-2/MW-2	9/26/2001	249.41	246.76	40.02	57	47.30	2.70	191.76 to 201.76	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
GWC-3/MW-3	9/26/2001	250.41	247.81	50.45	50	52.08	2.66	187.81 to 197.81	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
GWB-4/MW-4	9/26/2001	242.40	239.83	39.84	54	48.80	2.60	183.83 to 193.83	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
GWC-11/MW-11	7/29/2002	227.53	225.09	64.80	65	68.95	2.44	158.58 to 168.58	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

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	57	57.41	2.89	185.11 to 195.11	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
GWB-6/MW-6	9/26/2001	278.87	276.45	47.47	67	64.34	2.43	202.45 to 212.45	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
GWA-7/MW-7	9/26/2001	261.33	259.39	31.11	50	40.22	1.90	211.11 to 221.11	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
GWC-13/MW-13	7/29/2002	273.08	270.99	40.92	50	50.14	2.09	222.94 to 232.94	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
GWC-14/MW-14	7/29/2002	262.88	260.66	40.05	60	53.38	2.22	209.50 to 229.50	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
GWA-15/MW-15	7/29/2002	268.15	265.34	45.94	55	56.86	2.81	211.29 to 221.29	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
GWB-16/MW-16	7/29/2002	256.95	254.57	DRY	65	67.39	2.38	189.56 to 209.56	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

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	Notes
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	
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	
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	
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	

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	Notes
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
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	
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.
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
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
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
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

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

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 Landfills # 2 and #3
Appendix II to Part 40 CFR Part 258: Constituents for Assessment Monitoring

Common Name \2\	CAS RN \3\	Chemical abstracts service index name \4\	Suggested methods \5\	PQL (µg/L) \6\
Acenaphthene	83-32-9	Acenaphthylene, 1,2-dihydro-	8100	200
			8270	10
Acenaphthylene	208-96-8	Acenaphthylene	8100	200
			8270	10
Acetone	67-64-1	2-Propanone	8260	100
Acetonitrile; Methyl cyanide	75-05-8	Acetonitrile	8015	100
Acetophenone	98-86-2	Ethanone, 1-phenyl-	8270	10
2-Acetylaminofluorene; 2-AAF	53-96-3	Acetamide, N-9H-fluoren-2-yl-	8270	20
Acrolein	107-02-8	2-Propenal	8030	5
			8260	100
Acrylonitrile	107-13-1	2-Propenenitrile	8030	5
			8260	200
Aldrin	309-00-2	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-(1α,4α,4aβ,5α,8α,8aβ)-	8080	0.05
			8270	10
Allyl chloride	107-05-1	1-Propene, 3-chloro-	8010	5
			8260	10
4-Aminobiphenyl	92-67-1	[1,1\1\-Biphenyl]-4-amine	8270	20
Anthracene	120-12-7	Anthracene	8100	200
			8270	10
Antimony	(Total)	Antimony	6010	300
			7040	2000
			7041	30
Arsenic	(Total)	Arsenic	6010	500
			7060	10
			7061	20
Barium	(Total)	Barium	6010	20
			7080	1000
Benzene	71-43-2	Benzene	8020	2
			8021	0.1
			8260	5
Benzo[a]anthracene; Benzanthracene	56-55-3	Benz[a]anthracene	8100	200
			8270	10

Table 6

Southern Nuclear Operating Company
Plant Vogtle Landfills # 2 and #3
Appendix II to Part 40 CFR Part 258: Constituents for Assessment Monitoring

Common Name \2\	CAS RN \3\	Chemical abstracts service index name \4\	Suggested methods \5\	PQL (µg/L) \6\
Benzo[b]fluoranthene	205-99-2	Benz[e]acephenanthrylene	8100	200
			8270	10
Benzo[k]fluoranthene	207-08-9	Benzo[k]fluoranthene	8100	200
			8270	10
Benzo[ghi]perylene	191-24-2	Benzo[ghi]perylene	8100	200
			8270	10
Benzo[a]pyrene	50-32-8	Benzo[a]pyrene	8100	200
			8270	10
Benzyl alcohol	100-51-6	Benzenemethanol	8270	20
Beryllium	(Total)	Beryllium	6010	3
			7090	50
			7091	2
alpha-BHC	319-84-6	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3β,4& alpha;,5β,6β)-.	8080	0.05
			8270	10
beta-BHC	319-85-7	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2β,3α,4& beta;,5α,6β)-.	8080	0.05
			8270	20
delta-BHC	319-86-8	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3α,4 β,5α,6β)-.	8080	0.1
			8270	20
gamma-BHC; Lindane	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1α,2α,3β,4& alpha;,5α,6β)-.	8080	0.05
			8270	20
Bis(2-chloroethoxy)methane	111-91-1	Ethane, 1,1\1\-[methylenebis(oxy)]bis[2-chloro-.	8110	5
			8270	10
Bis(2-chloroethyl) ether; Dichloroethyl ether.	111-44-4	Ethane, 1,1\1\-oxybis[2-chloro-.	8110	3
			8270	10

Table 6
Southern Nuclear Operating Company
Plant Vogtle Landfills # 2 and #3
Appendix II to Part 40 CFR Part 258: Constituents for Assessment Monitoring

Common Name \2\	CAS RN \3\	Chemical abstracts service index name \4\	Suggested methods \5\	PQL (µg/L) \6\
Bis-(2-chloro-1-methylethyl) ether; 2,2\1\-Dichlorodiisopropyl ether; DCIP, See note 7	108-60-1	Propane, 2,2\1\-oxybis[1-chloro-.	8110 8270	10 10
Bis(2-ethylhexyl) phthalate.....	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester.	8060	20
Bromochloromethane; Chlorobromomethane	74-97-5	Methane, bromochloro-.....	8021 8260	0.1 5
Bromodichloromethane; Dibromochloromethane.	75-27-4	Methane, bromodichloro-.....	8010 8021 8260	1 0.2 5
Bromoform; Tribromomethane.....	75-25-2	Methane, tribromo-.....	8010 8021 8260	2 15 5
4-Bromophenyl phenyl ether.....	101-55-3	Benzene, 1-bromo-4-phenoxy-...	8110 8270	25 10
Butyl benzyl phthalate; Benzyl butyl phthalate.	85-68-7	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester.	8060 8270	5 10
Cadmium.....	(Total)	Cadmium.....	6010 7130 7131	40 50 1
Carbon disulfide.....	75-15-0	Carbon disulfide.....	8260	100
Carbon tetrachloride.....	56-23-5	Methane, tetrachloro-.....	8010 8021 8260	1 0.1 10
Chlordane.....	See Note 8	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-.	8080 8270	0.1 50
p-Chloroaniline.....	106-47-8	Benzenamine, 4-chloro-.....	8270	20
Chlorobenzene.....	108-90-7	Benzene, chloro-.....	8010 8020 8021 8260	2 2 0.1 5
Chlorobenzilate.....	510-15-6	Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)-α-hydroxy-, ethyl ester.	8270	10

Table 6

Southern Nuclear Operating Company
Plant Vogtle Landfills # 2 and #3
Appendix II to Part 40 CFR Part 258: Constituents for Assessment Monitoring

Common Name \2\	CAS RN \3\	Chemical abstracts service index name \4\	Suggested methods \5\	PQL (µg/L) \6\
p-Chloro-m-cresol; 4-Chloro-3-methylphenol.	59-50-7	Phenol, 4-chloro-3-methyl-....	8040	5
			8270	20
Chloroethane; Ethyl chloride.....	75-00-3	Ethane, chloro-.....	8010	5
			8021	1
			8260	10
Chloroform; Trichloromethane.....	67-66-3	Methane, trichloro-.....	8010	0.5
			8021	0.2
			8260	5
2-Chloronaphthalene.....	91-58-7	Naphthalene, 2-chloro-.....	8120	10
			8270	10
2-Chlorophenol.....	95-57-8	Phenol, 2-chloro-.....	8040	5
			8270	10
4-Chlorophenyl phenyl ether.....	7005-72-3	Benzene, 1-chloro-4-phenoxy-..	8110	40
			8270	10
Chloroprene.....	126-99-8	1,3-Butadiene, 2-chloro-.....	8010	50
			8260	20
Chromium.....	(Total)	Chromium.....	6010	70
			7190	500
			7191	10
Chrysene.....	218-01-9	Chrysene.....	8100	200
			8270	10
Cobalt.....	(Total)	Cobalt.....	6010	70
			7200	500
			7201	10
Copper.....	(Total)	Copper.....	6010	60
			7210	200
			7211	10
m-Cresol; 3-methylphenol.....	108-39-4	Phenol, 3-methyl-.....	8270	10
o-Cresol; 2-methylphenol.....	95-48-7	Phenol, 2-methyl-.....	8270	10
p-Cresol; 4-methylphenol.....	106-44-5	Phenol, 4-methyl-.....	8270	10
Cyanide.....	57-12-5	Cyanide.....	9010	200
2,4-D; 2,4-Dichlorophenoxyacetic acid.	94-75-7	Acetic acid, (2,4-dichlorophenoxy)-.	8150	10

Table 6
Southern Nuclear Operating Company
Plant Vogtle Landfills # 2 and #3
Appendix II to Part 40 CFR Part 258: Constituents for Assessment Monitoring

Common Name \2\	CAS RN \3\	Chemical abstracts service index name \4\	Suggested methods \5\	PQL (µg/L) \6\
4,4\1\-DDD	72-54-8	Benzene 1,1\1\-(2,2-dichloroethylidene)bis[4-chloro-.	8080 8270	0.1 10
4,4\1\-DDE	72-55-9	Benzene, 1,1\1\-(dichloroethyenylidene)bis[4-chloro-.	8080 8270	0.05 10
4,4\1\-DDT	50-29-3	Benzene, 1,1\1\-(2,2,2-trichloroethylidene)bis[4-chloro-.	8080 8270	0.1 10
Diallate	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-,S-(2,3-dichloro-2-propenyl) ester.	8270	10
Dibenz[a,h]anthracene	53-70-3	Dibenz[a,h]anthracene	8100 8270	200 10
Dibenzofuran	132-64-9	Dibenzofuran	8270	10
Dibromochloromethane; Chlorodibromomethane.	124-48-1	Methane, dibromochloro-	8010 8021 8260	1 0.3 5
1,2-Dibromo-3-chloropropane; DBCP	96-12-8	Propane, 1,2-dibrome-3-chloro-	8011 8021 8260	0.1 30 25
1,2-Dibromoethane; Ethylene dribromide; EDB.	106-93-4	Ethane, 1,2-dibromo-	8011 8021 8260	0.1 10 5
Di-n-butyl phthalate	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester.	8060 8270	5 10
o-Dichlorobenzene; 1,2-Dichlorobenzene	95-50-1	Benzene, 1,2-dichloro-	8010 8020 8021 8120 8260 8270	2 5 0.5 10 5 10
m-Dichlorobenzene; 1,3-Dichlorobenzene	541-73-1	Benzene, 1,3-Dichloro-	8010 8020 8021	5 5 0.2

Table 6
Southern Nuclear Operating Company
Plant Vogtle Landfills # 2 and #3
Appendix II to Part 40 CFR Part 258: Constituents for Assessment Monitoring

Common Name \2\	CAS RN \3\	Chemical abstracts service index name \4\	Suggested methods \5\	PQL (µg/L) \6\
			8120	10
			8260	5
			8270	10
p-Dichlorobenzene; 1,4-Dichlorobenzene	106-46-7	Benzene, 1,4-dichloro-.....	8010	2
			8020	5
			8021	0.1
			8120	15
			8260	5
			8270	10
3,3\1\-Dichlorobenzidine.....	91-94-1	[1,1\1\-Biphenyl]-4,4\1\-diamine, 3,3\1\-dichloro-.	8270	20
trans-1,4-Dichloro-2-butene.....	110-57-6	2-Butene, 1,4-dichloro-, (E)-.	8260	100
Dichlorodifluoromethane; CFC 12;.....	75-71-8	Methane, dichlorodifluoro-....	8021	0.5
			8260	5
1,1-Dichloroethane; Ethyldidene chloride.	75-34-3	Ethane, 1,1-dichloro-.....	8010	1
			8021	0.5
			8260	5
1,2-Dichloroethane; Ethylene dichloride.	107-06-2	Ethane, 1,1-dichloro-.....	8010	0.5
			8021	0.3
			8260	5
1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride.	75-35-4	Ethene, 1,1-dichloro-.....	8010	1
			8021	0.5
			8260	5
cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene.	156-59-2	Ethene, 1,2-dichloro-, (Z)-...	8021	0.2
			8260	5
trans-1,2-Dichloroethylene trans-1,2-Dichloroethene.	156-60-5	Ethene, 1,2-dichloro-, (E)-...	8010	1
			8021	0.5
			8260	5
2,4-Dichlorophenol.....	120-83-2	Phenol, 2,4-dichloro-.....	8040	5
			8270	10
2,6-Dichlorophenol.....	87-65-0	Phenol, 2,6-dichloro-.....	8270	10
1,2-Dichloropropane; Propylene dichloride.	78-87-5	Propane, 1,2-dichloro-.....	8010	0.5
			8021	0.05
			8260	5

Common Name \2\	CAS RN \3\	Chemical abstracts service index name \4\	Suggested methods \5\	PQL (µg/L) \6\
1,3-Dichloropropane; Trimethylene dichloride.	142-28-9	Propane, 1,3-dichloro-.....	8021 8260	0.3 5
2,2-Dichloropropane; Isopropylidene chloride.	594-20-7	Propane, 2,2-dichloro-.....	8021 8260	0.5 15
1,1-Dichloropropene.....	563-58-6	1-Propene, 1,1-dichloro-.....	8021 8260	0.2 5
cis-1,3-Dichloropropene.....	10061-01-5	1-Propene, 1,3-dichloro-, (Z)-	8010 8260	20 10
trans-1,3-Dichloropropene.....	10061-02-6	1-Propene, 1,3-dichloro-, (E)-	8010 8260	5 10
Dieldrin.....	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aα,3β,6β,6aα,7β,7aα)-.	8080 8270	0.05 10
Diethyl phthalate.....	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester.	8060 8270	5 10
0,0-Diethyl 0-2-pyrazinyl phosphorothioate; Thionazin.	297-97-2	Phosphorothioic acid, 0,0-diethyl 0-pyrazinyl ester.	8141 8270	5 20
Dimethoate.....	60-51-5	Phosphorodithioic acid, 0,0-dimethyl S-[2-(methylamino)-2-oxoethyl] ester.	8141 8270	3 20
p-(Dimethylamino)azobenzene.....	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-.	8270	10
7,12-Dimethylbenz[a]anthracene.....	57-97-6	Benz[a]anthracene, 7,12-dimethyl-.	8270	10
3,3\1\-Dimethylbenzidine.....	119-93-7	[1,1\1\-Biphenyl]-4,4\1\-diamine, 3,3\1\-dimethyl-.	8270	10
2,4-Dimethylphenol; m-Xylenol.....	105-67-9	Phenol, 2,4-dimethyl-.....	8040 8270	5 10
Dimethyl phthalate.....	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester.	8060 8270	5 10
m-Dinitrobenzene.....	99-65-0	Benzene, 1,3-dinitro-.....	8270	20

Table 6
Southern Nuclear Operating Company
Plant Vogtle Landfills # 2 and #3
Appendix II to Part 40 CFR Part 258: Constituents for Assessment Monitoring

Common Name \2\	CAS RN \3\	Chemical abstracts service index name \4\	Suggested methods \5\	PQL (µg/L) \6\
4,6-Dinitro-o-cresol 4,6-Dinitro-2-methylphenol.	534-52-1	Phenol, 2-methyl-4,6-dinitro..	8040	150
			8270	50
2,4-Dinitrophenol;.....	51-28-5	Phenol, 2,4-dinitro-.....	8040	150
			8270	50
2,4-Dinitrotoluene.....	121-14-2	Benzene, 1-methyl-2,4-dinitro-	8090	0.2
			8270	10
2,6-Dinitrotoluene.....	606-20-2	Benzene, 2-methyl-1,3-dinitro-	8090	0.1
			8270	10
Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol.	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-.	8150	1
			8270	20
Di-n-octyl phthalate.....	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester.	8060	30
			8270	10
Diphenylamine.....	122-39-4	Benzenamine, N-phenyl-.....	8270	10
Disulfoton.....	298-04-4	Phosphorodithioic acid, 0,0-diethyl S-[2-(ethylthio)ethyl] ester.	8140	2
			8141	0.5
			8270	10
Endosulfan I.....	959-98-8	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexa- chloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide,	8080	0.1
			8270	20
Endosulfan II.....	33213-65-9	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexa- chloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3α,5aα,6β,9β,9aα)-.	8080	0.05
			8270	20
Endosulfan sulfate.....	1031-07-8	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexa- chloro-1,5,5a,6,9,9a-hexahydro-,3-3-dioxide.	8080	0.5
			8270	10

Table 6
Southern Nuclear Operating Company
Plant Vogtle Landfills # 2 and #3
Appendix II to Part 40 CFR Part 258: Constituents for Assessment Monitoring

Common Name \2\	CAS RN \3\	Chemical abstracts service index name \4\	Suggested methods \5\	PQL (µg/L) \6\
Endrin	72-20-8	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα, 2β,2aβ,3α,6α,6aβ,7β,7aα)-.	8080 8270	0.1 20
Endrin aldehyde	7421-93-4	1,2,4-Methenocyclopenta[cd]pentalene-5-carboxaldehyde, 2,2a,3,3,4,7-hexachlorodecahydro-, (1α,2β,2aβ, 4β,4aβ,5β,6aβ,6bβ,7R*)-.	8080 8270	0.2 10
Ethylbenzene	100-41-4	Benzene, ethyl-	8020 8221 8260	2 0.05 5
Ethyl methacrylate	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester.	8015 8260 8270	5 10 10
Ethyl methanesulfonate	62-50-0	Methanesulfonic acid, ethyl ester.	8270	20
Famphur	52-85-7	Phosphorothioic acid, 0-[4-[(dimethylamino)sulfonyl]phenyl] 0,0-dimethyl ester.	8270	20
Fluoranthene	206-44-0	Fluoranthene	8100 8270	200 10
Fluorene	86-73-7	9H-Fluorene	8100 8270	200 10
Heptachlor	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-.	8080 8270	0.05 10

Table 6
Southern Nuclear Operating Company
Plant Vogtle Landfills # 2 and #3
Appendix II to Part 40 CFR Part 258: Constituents for Assessment Monitoring

Common Name \2\	CAS RN \3\	Chemical abstracts service index name \4\	Suggested methods \5\	PQL (µg/L) \6\
Heptachlor epoxide.....	1024-57-3	2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro-, (1aα, 1bβ, 2α, 5α, 5aβ, 6β, 6aα).	8080 8270	1 10
Hexachlorobenzene.....	118-74-1	Benzene, hexachloro-.....	8120 8270	0.5 10
Hexachlorobutadiene.....	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-.	8021 8120 8260 8270	0.5 5 10 10
Hexachlorocyclopentadiene.....	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-.	8120 8270	5 10
Hexachloroethane.....	67-72-1	Ethane, hexachloro-.....	8120 8260 8270	0.5 10 10
Hexachloropropene.....	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-.	8270	10
2-Hexanone; Methyl butyl ketone.....	591-78-6	2-Hexanone.....	8260	50
Indeno(1,2,3-cd)pyrene.....	193-39-5	Indeno(1,2,3-cd)pyrene.....	8100 8270	200 10
Isobutyl alcohol.....	78-83-1	1-Propanol, 2-methyl-.....	8015 8240	50 100
Isodrin.....	465-73-6	1,4,5,8-Dimethanonaphthalene,1,2,3,4,10,10- hexachloro-1,4,4a,5,8,8a hexahydro-(1α,4α,4aβ,5β,8β,8aβ)-.	8270 8260	20 10
Isophorone.....	78-59-1	2-Cyclohexen-1-one, 3,5,5-trimethyl-.	8090 8270	60 10
Isosafrole.....	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-.	8270	10

Table 6
Southern Nuclear Operating Company
Plant Vogtle Landfills # 2 and #3
Appendix II to Part 40 CFR Part 258: Constituents for Assessment Monitoring

Common Name \2\	CAS RN \3\	Chemical abstracts service index name \4\	Suggested methods \5\	PQL (µg/L) \6\
Kepone	143-50-0	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-.	8270	20
Lead	(Total)	Lead	6010	400
			7420	1000
			7421	10
Mercury	(Total)	Mercury	7470	2
Methacrylonitrile	126-98-7	2-Propenenitrile, 2-methyl-	8015	5
			8260	100
Methapyrilene	91-80-5	1,2-Ethanediamine, N.N-dimethyl-N\1\-2-pyridinyl-N1/2-thienylmethyl)-.	8270	100
Methoxychlor	72-43-5	Benzene,1,1\1\-(2,2,2,trichloroethylidene)bis[4-methoxy-.	8080	2
			8270	10
Methyl bromide; Bromomethane	74-83-9	Methane, bromo-	8010	20
			8021	10
Methyl chloride; Chloromethane	74-87-3	Methane, chloro-	8010	1
			8021	0.3
3-Methylcholanthrene	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-.	8270	10
Methyl ethyl ketone; MEK; 2-Butanone	78-93-3	2-Butanone	8015	10
			8260	100
Methyl iodide; Iodomethane	74-88-4	Methane, iodo-	8010	40
			8260	10
Methyl methacrylate	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester.	8015	2
			8260	30
Methyl methanesulfonate	66-27-3	Methanesulfonic acid, methyl ester.	8270	10
2-Methylnaphthalene	91-57-6	Naphthalene, 2-methyl-	8270	10
Methyl parathion; Parathion methyl	298-00-0	Phosphorothioic acid, 0,0-dimethyl.	8140	0.5
			8141	1
			8270	10
4-Methyl-2-pentanone; Methyl isobutyl	108-10-1	2-Pentanone, 4-methyl-	8015	5

Table 6
Southern Nuclear Operating Company
Plant Vogtle Landfills # 2 and #3
Appendix II to Part 40 CFR Part 258: Constituents for Assessment Monitoring

Common Name \2\	CAS RN \3\	Chemical abstracts service index name \4\	Suggested methods \5\	PQL (µg/L) \6\
ketone.			8260	100
Methylene bromide; Dibromomethane.....	74-95-3	Methane, dibromo-.....	8010	15
			8021	20
			8260	10
Methylene chloride; Dichloromethane...	75-09-2	Methane, dichloro-.....	8010	5
			8021	0.2
			8260	10
Naphthalene.....	91-20-3	Naphthalene.....	8021	0.5
			8100	200
			8260	5
			8270	10
1,4-Naphthoquinone.....	130-15-4	1,4-Naphthalenedione.....	8270	10
1-Naphthylamine.....	134-32-7	1-Naphthalenamine.....	8270	10
2-Naphthylamine.....	91-59-8	2-Naphthalenamine.....	8270	10
Nickel.....	(Total)	Nickel.....	6010	150
			7520	400
o-Nitroaniline; 2-Nitroaniline.....	88-74-4	Benzenamine, 2-nitro-.....	8270	50
m-Nitroaniline; 3-Nitroanile.....	99-09-2	Benzenamine, 3-nitro-.....	8270	50
p-Nitroaniline; 4-Nitroaniline.....	100-01-6	Benzenamine, 4-nitro.....	8270	20
Nitrobenzene.....	98-95-3	Benzene, nitro-.....	8090	40
			8270	10
o-Nitrophenol; 2-Nitrophenol.....	88-75-5	Phenol, 2-nitro-.....	8040	5
			8270	10
p-Nitrophenol; 4-Nitrophenol.....	100-02-7	Phenol, 4-nitro-.....	8040	10
			8270	50
N-Nitrosodi-n-butylamine.....	924-16-3	1-Butanamine, N-butyl-N-nitroso-.	8270	10
N-Nitrosodiethylamine.....	55-18-5	Ethanamine, N-ethyl-N-nitroso-	8270	20
N-Nitrosodimethylamine.....	62-75-9	Methanamine, N-methyl-N-nitroso-.	8070	2
N-Nitrosodiphenylamine.....	86-30-6	Benzenamine, N-nitroso-N-phenyl-.	8070	5
N-Nitrosodipropylamine; N-Nitroso-N-dipropylamine; Di-n-propylnitrosamine.	621-64-7	1-Propanamine, N-nitroso-N-propyl-.	8070	10

Table 6
Southern Nuclear Operating Company
Plant Vogtle Landfills # 2 and #3
Appendix II to Part 40 CFR Part 258: Constituents for Assessment Monitoring

Common Name \2\	CAS RN \3\	Chemical abstracts service index name \4\	Suggested methods \5\	PQL (µg/L) \6\
N-Nitrosomethylethalamine.....	10595-95-6	Ethanamine, N-methyl-N-nitroso-	8270	10
N-Nitrosopiperidine.....	100-75-4	Piperidine, 1-nitroso-.....	8270	20
N-Nitrosopyrrolidine.....	930-55-2	Pyrrolidine, 1-nitroso-.....	8270	40
5-Nitro-o-toluidine.....	99-55-8	Benzenamine, 2-methyl-5-nitro-	8270	10
Parathion.....	56-38-2	Phosphorothioic acid, 0,0-diethyl 0-(4-nitrophenyl) ester.	8141	0.5
			8270	10
Pentachlorobenzene.....	608-93-5	Benzene, pentachloro-.....	8270	10
Pentachloronitrobenzene.....	82-68-8	Benzene, pentachloronitro-....	8270	20
Pentachlorophenol.....	87-86-5	Phenol, pentachloro-.....	8040	5
			8270	50
Phenacetin.....	62-44-2	Acetamide, N-(4-ethoxyphenl)..	8270	20
Phenanthrene.....	85-01-8	Phenanthrene.....	8100	200
			8270	10
Phenol.....	108-95-2	Phenol.....	8040	1
p-Phenylenediamine.....	106-50-3	1,4-Benzenediamine.....	8270	10
Phorate.....	298-02-2	Phosphorodithioic acid, 0,0-diethyl S-[(ethylthio)methyl] ester.	8140	2
			8141	0.5
			8270	10
Polychlorinated biphenyls; PCBs; Aroclors.	See Note 9	1,1'-Biphenyl, chloro derivatives.	8080	50
			8270	200
Pronamide.....	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-.	8270	10
Propionitrile; Ethyl cyanide.....	107-12-0	Propanenitrile.....	8015	60
			8260	150
Pyrene.....	129-00-0	Pyrene.....	8100	200
			8270	10
Safrole.....	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-.	8270	10
Selenium.....	(Total)	Selenium.....	6010	750
			7740	20
			7741	20
Silver.....	(Total)	Silver.....	6010	70
			7760	100
			7761	10

Table 6
Southern Nuclear Operating Company
Plant Vogtle Landfills # 2 and #3
Appendix II to Part 40 CFR Part 258: Constituents for Assessment Monitoring

Common Name \2\	CAS RN \3\	Chemical abstracts service index name \4\	Suggested methods \5\	PQL (µg/L) \6\
Silvex; 2,4,5-TP	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-.	8150	2
Styrene	100-42-5	Benzene, ethenyl-	8020	1
			8021	0.1
			8260	10
Sulfide	18496-25-8	Sulfide	9030	4000
2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid.	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-.	8150	2
1,2,4,5-Tetrachlorobenzene	95-94-3	Benzene, 1,2,4,5-tetrachloro-.	8270	10
1,1,1,2-Tetrachloroethane	630-20-6	Ethane, 1,1,1,2-tetrachloro-.	8010	5
			8021	0.05
			8260	5
1,1,2,2-Tetrachloroethane	79-34-5	Ethane, 1,1,2,2-tetrachloro-.	8010	0.5
			8021	0.1
			8260	5
Tetrachloroethylene; Tetrachloroethene; Perchloroethylene.	127-18-4	Ethene, tetrachloro-	8010	0.5
			8021	0.5
			8260	5
2,3,4,6-Tetrachlorophenol	58-90-2	Phenol, 2,3,4,6-tetrachloro-.	8270	10
Thallium	(Total)	Thallium	6010	400
			7840	1000
			7841	10
Tin	(Total)	Tin	6010	40
Toluene	108-88-3	Benzene, methyl-	8020	2
			8021	0.1
			8260	5
o-Toluidine	95-53-4	Benzenamine, 2-methyl-	8270	10
Toxaphene	See Note 10	Toxaphene	8080	2
1,2,4-Trichlorobenzene	120-82-1	Benzene, 1,2,4-trichloro-	8021	0.3
			8120	0.5
			8260	10
			8270	10
1,1,1-Trichloroethane; Methylchloroform.	71-55-6	Ethane, 1,1,1-trichloro-	8010	0.3
			8021	0.3
			8260	5

Table 6
Southern Nuclear Operating Company
Plant Vogtle Landfills # 2 and #3
Appendix II to Part 40 CFR Part 258: Constituents for Assessment Monitoring

Common Name \2\	CAS RN \3\	Chemical abstracts service index name \4\	Suggested methods \5\	PQL (µg/L) \6\
1,1,2-Trichloroethane	79-00-5	Ethane, 1,1,2-trichloro-	8010	0.2
			8260	5
Trichloroethylene; Trichloroethene	79-01-6	Ethene, trichloro-	8010	1
			8021	0.2
			8260	5
Trichlorofluoromethane; CFC-11	75-69-4	Methane, trichlorofluoro-	8010	10
			8021	0.3
			8260	5
2,4,5-Trichlorophenol	95-95-4	Phenol, 2,4,5-trichloro-	8270	10
2,4,6-Trichlorophenol	88-06-2	Phenol, 2,4,6-trichloro-	8040	5
			8270	10
1,2,3-Trichloropropane	96-18-4	Propane, 1,2,3-trichloro-	8010	10
			8021	5
			8260	15
0,0,0-Triethyl phosphorothioate	126-68-1	Phosphorothioic acid, 0,0,0-triethylester.	8270	10
sym-Trinitrobenzene	99-35-4	Benzene, 1,3,5-trinitro-	8270	10
Vanadium	(Total)	Vanadium	6010	80
			7910	2000
			7911	40
Vinyl acetate	108-05-4	Acetic acid, ethenyl ester	8260	50
Vinyl chloride; Chloroethene	75-01-4	Ethene, chloro-	8010	2
			8021	0.4
			8260	10
Xylene (total)	See Note 11	Benzene, dimethyl-	8020	5
			8021	0.2
			8260	5
Zinc	(Total)	Zinc	6010	20
			7950	50
			7951	0.5

Notes
\1\ The regulatory requirements pertain only to the list of substances; the right hand columns (Methods and PQL) are given for informational purposes only. See also footnotes 5 and 6.

Table 6

Southern Nuclear Operating Company
Plant Vogtle Landfills # 2 and #3
Appendix II to Part 40 CFR Part 258: Constituents for Assessment Monitoring

Common Name \2\	CAS RN \3\	Chemical abstracts service index name \4\	Suggested methods \5\	PQL (µg/L) \6\

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

\3\ Chemical Abstracts Service registry number. Where ``Total'' is entered, all species in the ground water that contain this element are included.

\4\ CAS index are those used in the 9th Collective Index.

\5\ Suggested Methods refer to analytical procedure numbers used in EPA Report SW-846 ``Test Methods for Evaluating Solid Waste'', third edition, November 1986, as revised, December 1987. Analytical details can be found in SW-846 and in documentation on file at the agency. CAUTION: The methods listed are representative SW-846 procedures and may not always be the most suitable method(s) for monitoring an analyte under the regulations.

\6\ Practical Quantitation Limits (PQLs) are the lowest concentrations of analytes in ground waters that can be realiably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating conditions. The PQLs listed are generally stated to one significant figure. PQLs are based on 5 mL samples for volatile organics and 1 L samples for semivolatile organics. CAUTION: The PQL values in many cases are based only on a general estimate for the method and not on a determination for individual compounds; PQLs are not a part of the regulation.

\7\ This substance is often called Bis(2-chloroisopropyl) ether, the name Chemical Abstracts Service applies to its noncommercial isomer, Propane, 2,2[sec]-oxybis[2-chloro- (CAS RN 39638-32-9).

\8\ Chlordane: This entry includes alpha-chlordane (CAS RN 5103-71-9), beta-chlordane (CAS RN 5103-74-2), gamma-chlordane (CAS RN 5566-34-7), and constituents of chlordane (CAS RN 57-74-9 and CAS RN 12789-03-6). PQL shown is for technical chlordane. PQLs of specific isomers are about 20 µg/L by method 8270.

\9\ Polychlorinated biphenyls (CAS RN 1336-36-3); this category contains congener chemicals, including constituents of Aroclor 1016 (CAS RN 12674-11-2), Aroclor 1221 (CAS RN 11104-28-2), Aroclor 1232 (CAS RN 11141-16-5), Aroclor 1242 (CAS RN 53469-21-9), Aroclor 1248 (CAS RN 12672-29-6), Aroclor 1254 (CAS RN 11097-69-1), and Aroclor 1260 (CAS RN 11096-82-5). The PQL shown is an average value for PCB congeners.

\10\ Toxaphene: This entry includes congener chemicals contained in technical toxaphene (CAS RN 8001-35-2), i.e., chlorinated camphene.

\11\ Xylene (total): This entry includes o-xylene (CAS RN 96-47-6), m-xylene (CAS RN 108-38-3), p-xylene (CAS RN 106-42-3), and unspecified xylenes (dimethylbenzenes) (CAS RN 1330-20-7). PQLs for method 8021 are 0.2 for o-xylene and 0.1 for m- or p-xylene. The PQL for m-xylene is 2.0 µg/L by method 8020 or 8260.

Table 7
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 Georgia EPD Rule Chapter 391-3-5; NA - None available
[1]Metals concentrations in mg/L
[2]Organics concentrations in ug/l or ppb

Indicates exceedance of MCL

Table 7 (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 Georgia EPD Rule Chapter 391-3-5; NA - None available
[1]Metals concentrations in mg/L
[2]Organics concentrations in ug/l or ppb

Indicates exceedance of MCL

Table 7 (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
[1]Metals concentrations in mg/L
[2]Organics concentrations in ug/l or ppb
[3]Dry well, not sampled (NS)

Indicates exceedance of MCL

Table 7 (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
[2]Organics concentrations in ug/l or ppb
[3]Replicate sample of GWB-4//MW-4 well

Indicates exceedance of MCL

Table 7 (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
[1]Metals concentrations in mg/L
[2]Organics concentrations in ug/l or ppb

Indicates exceedance of MCL

Table 7 (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
NS - Not sampled; well dry
[1]Metals concentrations in mg/L
[2]Organics concentrations in ug/l or ppb

Indicates exceedance of MCL

Table 8
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	8	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

Indicates exceedance of MCL

Table 8 (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

Indicates exceedance of MCL

Table 8 (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

Indicates exceedance of MCL

Table 8 (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

Indicates exceedance of MCL

Table 8 (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	NA	NA	NA	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 or Not Analyzed
[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

Indicates exceedance of MCL

Table 8 (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 or Not Analyzed
[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

Indicates exceedance of MCL

FIGURES

LEGEND

LIGHT	
FIRE HYDRANT	
MANHOLE	
SANITARY SEWER	SS
WATER	W
GAS	G
STORM SEWER	SD
GRATE INLET	
SHRUB/FENCE	
OVERHEAD POWER	OP
OVERHEAD COMMUNICATION	OC
UNDERGROUND POWER	UP
UNDERGROUND COMMUNICATION	UC
VALVE	
EXISTING CONTOUR	
SPOT GRADE	
SIGN	
POWER POLE	
UNDERGROUND TELEPHONE	UT
OVERHEAD TELEPHONE	OT
GAS METER	
WATER METER	
TELEPHONE PEDESTAL	
WOODS LINE	WDS

NOTES

1. DATUM IS PER PLANS
2. CONTOUR INTERVAL IS 2'

MW-16 ⊗ BENCHMARK
TOP BRASS CAP ON CONCRETE
PAD BESIDE WELL PEDESTAL
ELEVATION = 254.57'

PROPERTY LINES FURNISHED BY ENGINEER

SECURITY FENCE

PER PLANS PROJECT

TOP GRATE = 243.87'

INV. OUT = 236.01'

INV. IN 6" DIAMETER = 241.18'

INV. 24" RCP = 237.89'

24" RCP

INV. = 234.96'

INV. OUT = 237.97'

TOP LID = 244.07'

INV. IN = 238.00'

27" RCP

INV. OUT = 238.44'

INV. IN = 238.63'

TOP LID = 243.18'

INV. = 230.79'

TOP LID = 243.09'

WEIR INV. = 242.14'

INV. 15" CMP = 239.55'

⊠ MM-7
TOP BRASS CAP ON CONCRETE
PAD BESIDE WELL PEDESTAL
ELEVATION = 257.44'

INV. 15" HDPE = 243.71'

MW-5 ⊠
TOP BRASS CAP ON CONCRETE
PAD BESIDE WELL PEDESTAL
ELEVATION = 249.03'

AS-BUILT TOPOGRAPHIC SURVEY OF PLANT VOGTLE LANDFILL #3 POND #1 FOR:

SOUTHERN NUCLEAR OPERATING CO., INC.

LOCATION: BURKE COUNTY, GEORGIA

SURVEY COMPLETED: JANUARY 6, 2004
DRAWN: JANUARY 15, 2004

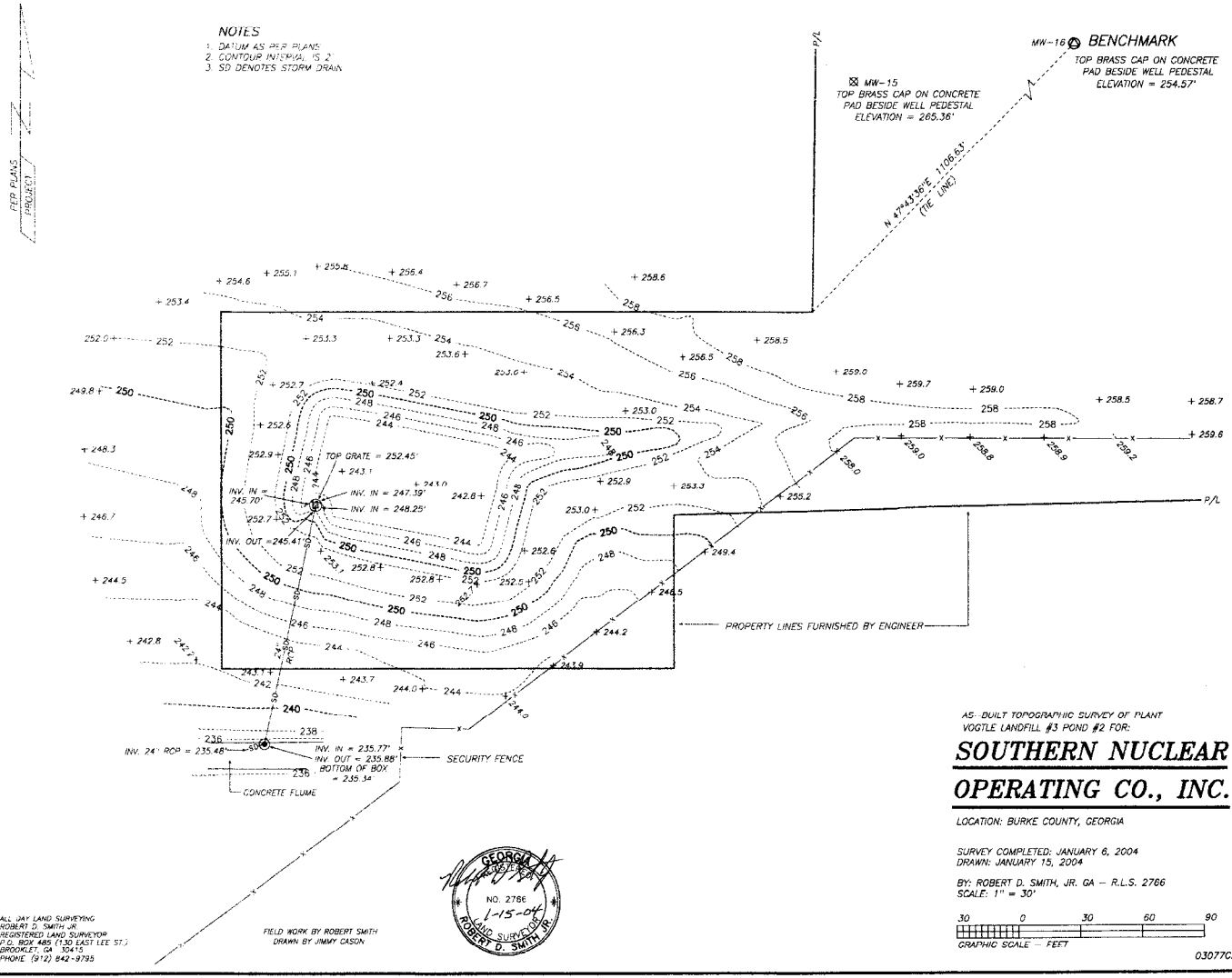
BY: ROBERT D. SMITH, JR. GA. - R.L.S. 2766
SCALE: 1" = 30'

30 0 30 60 90
GRAPHIC SCALE — FEET

GEORGIA REGISTERED NO. 2766 LAND SURVEYOR ROBERT D. SMITH JR.
1-15-04

ALL DAY LAND SURVEYING
ROBERT D. SMITH JR.
REGISTERED LAND SURVEYOR
P.O. BOX 485 (130 EAST LEE ST.)
BROOKLET, GA 30415
PHONE: (912) 842-9795

03077D.PL


NOTES
1. DATUM AS PER PLANS
2. CONTOUR INTERVAL IS 2'
3. SD DENOTES STORM DRAIN
PER PLANS PROJECT
MW-16 BENCHMARK
TOP BRASS CAP ON CONCRETE PAD BESIDE WELL PEDESTAL ELEVATION = 254.57'
MW-15
TOP BRASS CAP ON CONCRETE PAD BESIDE WELL PEDESTAL ELEVATION = 265.36'
N 47°43'36"E 1106.63'
(TIE LINE)
P/L
TOP GRATE = 252.45'
INV. IN = 247.19'
INV. IN = 248.25'
INV. IN = 245.70'
INV. OUT = 245.41'
INV. 24" RCP = 235.48'
INV. IN = 235.77'
INV. OUT = 235.88'
BOTTOM OF BOX = 235.34'
CONCRETE FLUME
SECURITY FENCE
PROPERTY LINES FURNISHED BY ENGINEER
AS-BUILT TOPOGRAPHIC SURVEY OF PLANT VOGTLE LANDFILL #3 POND #2 FOR:
SOUTHERN NUCLEAR OPERATING CO., INC.
LOCATION: BURKE COUNTY, GEORGIA
SURVEY COMPLETED: JANUARY 6, 2004
DRAWN: JANUARY 15, 2004
BY: ROBERT D. SMITH, JR. GA – R.L.S. 2766
SCALE: 1" = 30'
30 0 30 60 90
GRAPHIC SCALE – FEET
GEORGIA
NO. 2766
1-15-04
LAND SURVEYOR
ROBERT D. SMITH JR.
ALL JAY LAND SURVEYING
ROBERT D. SMITH JR.
REGISTERED LAND SURVEYOR
P.O. BOX 485 (130 EAST LEE ST.)
BROOKLET, GA 30415
PHONE: (912) 842-9795
FIELD WORK BY ROBERT SMITH
DRAWN BY JIMMY CASON
03077C.PL

APPENDIX A – LABORATORY ANALYTICAL REPORTS

ACL

ADVANCED CHEMISTRY LABS, INC.

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

Client: Genesis Project
1258 Concord Rd.
Smyrna, GA 30080-0000

Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

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

Sample ID: GWA-2/MW-2

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted:
Date Analyzed: 12/30/2003

ACL Sample #: 210466 **Units:** µg/L **Analyst:** RP

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	Methylene bromide	BQL	5
Acrylonitrile	BQL	50	Methylene chloride	BQL	5
Benzene	BQL	5	Styrene	BQL	5
Bromochloromethane	BQL	5	1,1,1,2-Tetrachloroethane	BQL	5
Bromodichloromethane	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
Bromoform	BQL	5	Tetrachloroethene	BQL	5
~~'~~rbon disulfide	BQL	5	Toluene	BQL	5
~~'~~bon tetrachloride	BQL	5	1,1,1-Trichloroethane	BQL	5
Chlorobenzene	BQL	5	1,1,2-Trichloroethane	BQL	5
Chloroethane	BQL	10	Trichloroethene	BQL	5
Chloroform	BQL	5	Trichlorofluoromethane	BQL	5
1,2-Dibromo-3-chloropropane	BQL	20	1,2,3-Trichloropropane	BQL	5
Dibromochloromethane	BQL	5	Vinyl acetate	BQL	50
1,2-Dibromoethane	BQL	5	Vinyl chloride	BQL	2
trans-1,4-Dichloro-2-butene	BQL	10	m & p-Xylenes	BQL	10
1,2-Dichlorobenzene	BQL	5	o-Xylene	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			
~~M~~ethyl-2-pentanone	BQL	50			

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

ACL

ADVANCED CHEMISTRY LABS, INC.

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www.advancedchemistrylabs.com

Client: Genesis Project
1258 Concord Rd.
Smyrna, GA 30080-0000

Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

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

Sample ID: GWC-3/MW-3

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted:
Date Analyzed: 12/30/2003

ACL Sample #: 210467 **Units:** µg/L **Analyst:** RP

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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Smyrna, GA 30080-0000

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

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

Sample ID: GWB-4/MW-4

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted:
Date Analyzed: 12/30/2003

ACL Sample #: 210468 **Units:** µg/L **Analyst:** RP

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	Methylene bromide	BQL	5
Acrylonitrile	BQL	50	Methylene chloride	BQL	5
Benzene	BQL	5	Styrene	BQL	5
Bromochloromethane	BQL	5	1,1,1,2-Tetrachloroethane	BQL	5
Bromodichloromethane	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
Bromoform	BQL	5	Tetrachloroethene	BQL	5
Carbon disulfide	BQL	5	Toluene	BQL	5
Carbon tetrachloride	BQL	5	1,1,1-Trichloroethane	BQL	5
Chlorobenzene	BQL	5	1,1,2-Trichloroethane	BQL	5
Chloroethane	BQL	10	Trichloroethene	BQL	5
Chloroform	BQL	5	Trichlorofluoromethane	6	5
1,2-Dibromo-3-chloropropane	BQL	20	1,2,3-Trichloropropane	BQL	5
Dibromochloromethane	BQL	5	Vinyl acetate	BQL	50
1,2-Dibromoethane	BQL	5	Vinyl chloride	BQL	2
trans-1,4-Dichloro-2-butene	BQL	10	m & p-Xylenes	BQL	10
1,2-Dichlorobenzene	BQL	5	o-Xylene	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			
Methyl-2-pentanone	BQL	50			

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

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

Sample ID: GWC-11/MW-11

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted:
Date Analyzed: 12/30/2003

ACL Sample #: 210472 **Units:** µg/L **Analyst:** RP

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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Miscellaneous Organics (504.1) - Appendix II

Sample ID: GWA-2/MW-2

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/23/2003
Date Analyzed: 12/30/2003

ACL Sample #: 210466 **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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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Miscellaneous Organics (504.1) - Appendix II

Sample ID: GWC-3/MW-3

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/23/2003
Date Analyzed: 12/30/2003

ACL Sample #: 210467 **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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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Miscellaneous Organics (504.1) - Appendix II

Sample ID: GWB-4/MW-4

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/23/2003
Date Analyzed: 01/02/2004

ACL Sample #: 210468 **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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J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Miscellaneous Organics (504.1) - Appendix II

Sample ID: GWC-11/MW-11

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/23/2003
Date Analyzed: 01/02/2004

ACL Sample #: 210472 **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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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Appendix I Metals (6010B/7841)

Sample ID: GWA-2/MW-2

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted:
Date Analyzed: 12/30/2003
Analyst: SW/AD

ACL Sample #: 210466 **Units:** mg/L

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

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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Appendix I Metals (6010B/7841)

Sample ID: GWC-3/MW-3

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted:
Date Analyzed: 12/30/2003

ACL Sample #: 210467 **Units:** mg/L **Analyst:** SW/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

BQL = Below Quantitation Limit
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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Appendix I Metals (6010B/7841)

Sample ID: GWB-4/MW-4

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted:
Date Analyzed: 12/30/2003
Analyst: SW/AD

ACL Sample #: 210468 **Units:** mg/L

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

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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Appendix I Metals (6010B/7841)

Sample ID: GWC-11/MW-11

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted:
Date Analyzed: 12/30/2003
Analyst: SW/AD

ACL Sample #: 210472 **Units:** mg/L

Analyte	Result	PQL
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	0.022	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. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

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

Sample ID: GWC-5/MW-5

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted:
Date Analyzed: 12/30/2003

ACL Sample #: 210469 **Units:** µg/L **Analyst:** RP

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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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ACL Project #: 44014
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Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

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

Sample ID: GWB-6/MW-6

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted:
Date Analyzed: 12/30/2003

ACL Sample #: 210470 **Units:** µg/L **Analyst:** RP

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

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ACL Project #: 44014
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Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

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

Sample ID: GWA-7/MW-7

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted:
Date Analyzed: 12/30/2003

ACL Sample #: 210471 **Units:** µg/L **Analyst:** RP

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	Methylene bromide	BQL	5
Acrylonitrile	BQL	50	Methylene chloride	BQL	5
Benzene	BQL	5	Styrene	BQL	5
Bromochloromethane	BQL	5	1,1,1,2-Tetrachloroethane	BQL	5
Bromodichloromethane	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
Bromoform	BQL	5	Tetrachloroethene	BQL	5
arbon disulfide	BQL	5	Toluene	BQL	5
arbon tetrachloride	BQL	5	1,1,1-Trichloroethane	BQL	5
Chlorobenzene	BQL	5	1,1,2-Trichloroethane	BQL	5
Chloroethane	BQL	10	Trichloroethene	BQL	5
Chloroform	BQL	5	Trichlorofluoromethane	34	5
1,2-Dibromo-3-chloropropane	BQL	20	1,2,3-Trichloropropane	BQL	5
Dibromochloromethane	BQL	5	Vinyl acetate	BQL	50
1,2-Dibromoethane	BQL	5	Vinyl chloride	BQL	2
trans-1,4-Dichloro-2-butene	BQL	10	m & p-Xylenes	BQL	10
1,2-Dichlorobenzene	BQL	5	o-Xylene	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			
Methyl-2-pentanone	BQL	50			

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Client: Genesis Project
1258 Concord Rd.
Smyrna, GA 30080-0000

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

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

Sample ID: GWC-13/MW-13

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted:
Date Analyzed: 12/29/2003

ACL Sample #: 210461 **Units:** µg/L **Analyst:** RP

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	cis-1,3-Dichloropropene	BQL	5
Acetonitrile	BQL	100	trans-1,3-Dichloropropene	BQL	5
Acrolein	BQL	100	Ethyl methacrylate	BQL	10
Acrylonitrile	BQL	50	Ethylbenzene	BQL	5
Allyl chloride	BQL	10	2-Hexanone	BQL	50
Benzene	BQL	5	Isobutyl alcohol	BQL	50
romochloromethane	BQL	5	Methacrylonitrile	BQL	100
romodichloromethane	BQL	5	Methyl bromide	BQL	10
Bromoform	BQL	5	Methyl chloride	BQL	10
Carbon disulfide	BQL	5	Methyl ethyl ketone	BQL	100
Carbon tetrachloride	BQL	5	Methyl iodide	BQL	5
Chlorobenzene	BQL	5	Methyl methacrylate	BQL	30
Chloroethane	BQL	10	4-Methyl-2-pentanone	BQL	50
Chloroform	BQL	5	Methylene bromide	BQL	5
Chloroprene	BQL	20	Methylene chloride	BQL	5
1,2-Dibromo-3-chloropropane	BQL	20	Naphthalene	BQL	5
Dibromochloromethane	BQL	5	Propionitrile	BQL	150
1,2-Dibromoethane	BQL	5	Styrene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10	1,1,1,2-Tetrachloroethane	BQL	5
1,2-Dichlorobenzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
1,3-Dichlorobenzene	BQL	5	Tetrachloroethene	BQL	5
1,4-Dichlorobenzene	BQL	5	Toluene	BQL	5
Dichlorodifluoromethane	BQL	5	1,1,1-Trichloroethane	BQL	5
1,1-Dichloroethane	20	5	1,1,2-Trichloroethane	BQL	5
1,2-Dichloroethane	BQL	5	Trichloroethene	BQL	5
1,1-Dichloroethene	BQL	5	Trichlorofluoromethane	102	5
cis-1,2-Dichloroethene	14	5	1,2,3-Trichloropropane	BQL	5
trans-1,2-Dichloroethene	BQL	5	Vinyl acetate	BQL	50
1,2-Dichloropropane	BQL	5	Vinyl chloride	BQL	2
1,3-Dichloropropane	BQL	5	m & p-Xylenes	BQL	10
2,2-Dichloropropane	BQL	15	o-Xylene	BQL	5
,1-Dichloropropene	BQL	5			

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

Markorios Adafre

Digitally signed by Markorios Adafre
DN: CN = Markorios Adafre, C = US, O = Advanced Chemistry Labs, Inc.
Date: 2004.03.04 16:46:36 -05'00'

Markorios Adafre, QA/QC Manager

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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

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

Sample ID: GWC-13/MW-13-(Dupe)

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted:
Date Analyzed: 12/29/2003

ACL Sample #: 210462 **Units:** µg/L **Analyst:** RP

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	cis-1,3-Dichloropropene	BQL	5
Acetonitrile	BQL	100	trans-1,3-Dichloropropene	BQL	5
Acrolein	BQL	100	Ethyl methacrylate	BQL	10
Acrylonitrile	BQL	50	Ethylbenzene	BQL	5
Allyl chloride	BQL	10	2-Hexanone	BQL	50
Benzene	BQL	5	Isobutyl alcohol	BQL	50
romochloromethane	BQL	5	Methacrylonitrile	BQL	100
Bromodichloromethane	BQL	5	Methyl bromide	BQL	10
Bromoform	BQL	5	Methyl chloride	BQL	10
Carbon disulfide	BQL	5	Methyl ethyl ketone	BQL	100
Carbon tetrachloride	BQL	5	Methyl iodide	BQL	5
Chlorobenzene	BQL	5	Methyl methacrylate	BQL	30
Chloroethane	BQL	10	4-Methyl-2-pentanone	BQL	50
Chloroform	BQL	5	Methylene bromide	BQL	5
Chloroprene	BQL	20	Methylene chloride	BQL	5
1,2-Dibromo-3-chloropropane	BQL	20	Naphthalene	BQL	5
Dibromochloromethane	BQL	5	Propionitrile	BQL	150
1,2-Dibromoethane	BQL	5	Styrene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10	1,1,1,2-Tetrachloroethane	BQL	5
1,2-Dichlorobenzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
1,3-Dichlorobenzene	BQL	5	Tetrachloroethene	BQL	5
1,4-Dichlorobenzene	BQL	5	Toluene	BQL	5
Dichlorodifluoromethane	BQL	5	1,1,1-Trichloroethane	BQL	5
1,1-Dichloroethane	21	5	1,1,2-Trichloroethane	BQL	5
1,2-Dichloroethane	BQL	5	Trichloroethene	BQL	5
1,1-Dichloroethene	BQL	5	Trichlorofluoromethane	97	5
cis-1,2-Dichloroethene	14	5	1,2,3-Trichloropropane	BQL	5
trans-1,2-Dichloroethene	BQL	5	Vinyl acetate	BQL	50
1,2-Dichloropropane	BQL	5	Vinyl chloride	BQL	2
1,3-Dichloropropane	BQL	5	m & p-Xylenes	BQL	10
2,2-Dichloropropane	BQL	15	o-Xylene	BQL	5
,1-Dichloropropene	BQL	5			

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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

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

Sample ID: GWC-15/MW-15

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted:
Date Analyzed: 12/29/2003

ACL Sample #: 210463 **Units:** µg/L **Analyst:** RP

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	cis-1,3-Dichloropropene	BQL	5
Acetonitrile	BQL	100	trans-1,3-Dichloropropene	BQL	5
Acrolein	BQL	100	Ethyl methacrylate	BQL	10
Acrylonitrile	BQL	50	Ethylbenzene	BQL	5
Allyl chloride	BQL	10	2-Hexanone	BQL	50
Benzene	BQL	5	Isobutyl alcohol	BQL	50
omochloromethane	BQL	5	Methacrylonitrile	BQL	100
omodichloromethane	BQL	5	Methyl bromide	BQL	10
Bromoform	BQL	5	Methyl chloride	BQL	10
Carbon disulfide	BQL	5	Methyl ethyl ketone	BQL	100
Carbon tetrachloride	BQL	5	Methyl iodide	BQL	5
Chlorobenzene	BQL	5	Methyl methacrylate	BQL	30
Chloroethane	BQL	10	4-Methyl-2-pentanone	BQL	50
Chloroform	BQL	5	Methylene bromide	BQL	5
Chloroprene	BQL	20	Methylene chloride	BQL	5
1,2-Dibromo-3-chloropropane	BQL	20	Naphthalene	BQL	5
Dibromochloromethane	BQL	5	Propionitrile	BQL	150
1,2-Dibromoethane	BQL	5	Styrene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10	1,1,1,2-Tetrachloroethane	BQL	5
1,2-Dichlorobenzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
1,3-Dichlorobenzene	BQL	5	Tetrachloroethene	BQL	5
1,4-Dichlorobenzene	BQL	5	Toluene	BQL	5
Dichlorodifluoromethane	BQL	5	1,1,1-Trichloroethane	BQL	5
1,1-Dichloroethane	BQL	5	1,1,2-Trichloroethane	BQL	5
1,2-Dichloroethane	BQL	5	Trichloroethene	BQL	5
1,1-Dichloroethene	BQL	5	Trichlorofluoromethane	BQL	5
cis-1,2-Dichloroethene	BQL	5	1,2,3-Trichloropropane	BQL	5
trans-1,2-Dichloroethene	BQL	5	Vinyl acetate	BQL	50
1,2-Dichloropropane	BQL	5	Vinyl chloride	BQL	2
1,3-Dichloropropane	BQL	5	m & p-Xylenes	BQL	10
2,2-Dichloropropane	BQL	15	o-Xylene	BQL	5
1-Dichloropropene	BQL	5			

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1258 Concord Rd.
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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

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

Sample ID: GWC-14/MW-14

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted:
Date Analyzed: 12/30/2003

ACL Sample #: 210473 **Units:** µg/L **Analyst:** RP

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	cis-1,3-Dichloropropene	BQL	5
Acetonitrile	BQL	100	trans-1,3-Dichloropropene	BQL	5
Acrolein	BQL	100	Ethyl methacrylate	BQL	10
Acrylonitrile	BQL	50	Ethylbenzene	BQL	5
Allyl chloride	BQL	10	2-Hexanone	BQL	50
Benzene	BQL	5	Isobutyl alcohol	BQL	50
›mochloromethane	BQL	5	Methacrylonitrile	BQL	100
›omodichloromethane	BQL	5	Methyl bromide	BQL	10
Bromoform	BQL	5	Methyl chloride	BQL	10
Carbon disulfide	BQL	5	Methyl ethyl ketone	BQL	100
Carbon tetrachloride	BQL	5	Methyl iodide	BQL	5
Chlorobenzene	19	5	Methyl methacrylate	BQL	30
Chloroethane	BQL	10	4-Methyl-2-pentanone	BQL	50
Chloroform	BQL	5	Methylene bromide	BQL	5
Chloroprene	BQL	20	Methylene chloride	BQL	5
1,2-Dibromo-3-chloropropane	BQL	20	Naphthalene	BQL	5
Dibromochloromethane	BQL	5	Propionitrile	BQL	150
1,2-Dibromoethane	BQL	5	Styrene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10	1,1,1,2-Tetrachloroethane	BQL	5
1,2-Dichlorobenzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
1,3-Dichlorobenzene	BQL	5	Tetrachloroethene	BQL	5
1,4-Dichlorobenzene	33	5	Toluene	BQL	5
Dichlorodifluoromethane	BQL	5	1,1,1-Trichloroethane	BQL	5
1,1-Dichloroethane	10	5	1,1,2-Trichloroethane	BQL	5
1,2-Dichloroethane	BQL	5	Trichloroethene	BQL	5
1,1-Dichloroethene	BQL	5	Trichlorofluoromethane	BQL	5
cis-1,2-Dichloroethene	17	5	1,2,3-Trichloropropane	BQL	5
trans-1,2-Dichloroethene	BQL	5	Vinyl acetate	BQL	50
1,2-Dichloropropane	BQL	5	Vinyl chloride	BQL	2
1,3-Dichloropropane	BQL	5	m & p-Xylenes	BQL	10
2,2-Dichloropropane	BQL	15	o-Xylene	10	5
1-Dichloropropene	BQL	5			

BQL = Below Quantitation Limit
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PQL = Practical Quantitation Limit

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Client: Genesis Project
1258 Concord Rd.
Smyrna, GA 30080-0000

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Acid Extractables (8270C) - Appendix II

Sample ID: GWC-13/MW-13

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted: 12/22/2003
Date Analyzed: 12/23/2003

ACL Sample #: 210461 **Units:** µg/L **Analyst:** RB

Analyte	Result	PQL
4-Chloro-3-methylphenol	BQL	20
2-Chlorophenol	BQL	10
m & p-Cresol	BQL	10
o-Cresol	BQL	10
2,4-Dichlorophenol	BQL	10
2,6-Dichlorophenol	BQL	10
4-Dimethylphenol	BQL	10
,ô-Dinitro-2-methylphenol	BQL	50
2,4-Dinitrophenol	BQL	50
2-Nitrophenol	BQL	10
4-Nitrophenol	BQL	50
Pentachlorophenol	BQL	50
Phenol	BQL	10
2,3,4,6-Tetrachlorophenol	BQL	10
2,4,5-Trichlorophenol	BQL	10
2,4,6-Trichlorophenol	BQL	10

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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Base Neutral Extractables (8270C) - Appendix II

Sample ID: GWC-13/MW-13

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted: 12/22/2003
Date Analyzed: 12/23/2003

ACL Sample #: 210461 **Units:** µg/L **Analyst:** RB

Analyte	Result	PQL	Analyte	Result	PQL
Acenaphthene	BQL	10	Diethyl phthalate	BQL	10
Acenaphthylene	BQL	10	Dimethoate	BQL	10
Acetophenone	BQL	10	Dimethyl phthalate	BQL	10
2-Acetylaminofluorene	BQL	20	p-(Dimethylamino)azobenzene	BQL	10
4-Aminobiphenyl	BQL	20	7,12-Dimethylbenz(a)anthracene	BQL	10
Anthracene	BQL	10	3,3'-Dimethylbenzidine	BQL	10
nzo(a)anthracene	BQL	10	m-Dinitrobenzene	BQL	20
enzo(a)pyrene	BQL	10	2,4-Dinitrotoluene	BQL	10
Benzo(b)fluoranthene	BQL	10	2,6-Dinitrotoluene	BQL	10
Benzo(g,h,i)perylene	BQL	10	Diphenylamine	BQL	10
Benzo(k)fluoranthene	BQL	10	Disulfoton	BQL	10
Benzyl alcohol	BQL	20	Ethyl methanesulfonate	BQL	20
Bis(2-chloroethoxy)methane	BQL	10	Famphur	BQL	20
Bis(2-chloroethyl)ether	BQL	10	Fluoranthene	BQL	10
Bis(2-chloroisopropyl)ether	BQL	10	Fluorene	BQL	10
Bis(2-ethylhexyl)phthalate	BQL	10	Hexachlorobenzene	BQL	10
4-Bromophenyl phenyl ether	BQL	10	Hexachlorobutadiene	BQL	10
Butyl benzyl phthalate	BQL	10	Hexachlorocyclopentadiene	BQL	10
p-Chloroaniline	BQL	20	Hexachloroethane	BQL	10
Chlorobenzilate	BQL	10	Hexachloropropene	BQL	10
2-Chloronaphthalene	BQL	10	Indeno(1,2,3-cd)pyrene	BQL	10
4-Chlorophenyl phenyl ether	BQL	10	Isodrin	BQL	20
Chrysene	BQL	10	Isophorone	BQL	10
Di-n-butyl phthalate	BQL	10	Isosafrole	BQL	10
Di-n-octyl phthalate	BQL	10	Kepone	BQL	20
Diallate	BQL	10	Malathion	BQL	50
Dibenz(a,h)anthracene	BQL	10	Methapyrilene	BQL	100
Dibenzofuran	BQL	10	Methyl methanesulfonate	BQL	10
1,2-Dichlorobenzene	BQL	10	Methyl parathion	BQL	10
1,3-Dichlorobenzene	BQL	10	3-Methylcholanthrene	BQL	10
1,4-Dichlorobenzene	BQL	10	2-Methylnaphthalene	BQL	10
3'-Dichlorobenzidine	BQL	20	Naphthalene	BQL	10

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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Base Neutral Extractables (8270C) - Appendix II

Sample ID: GWC-13/MW-13

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted: 12/22/2003
Date Analyzed: 12/23/2003

ACL Sample #: 210461 **Units:** µg/L **Analyst:** RB

Analyte	Result	PQL
1,4-Naphthoquinone	BQL	10
1-Naphthylamine	BQL	10
2-Naphthylamine	BQL	10
5-Nitro-o-toluidine	BQL	10
2-Nitroaniline	BQL	50
3-Nitroaniline	BQL	50
Nitroaniline	BQL	20
robenzene	BQL	10
N-Nitroso-di-n-butylamine	BQL	10
N-Nitrosodiethylamine	BQL	20
N-Nitrosodimethylamine	BQL	10
N-Nitrosodiphenylamine	BQL	10
N-Nitrosodipropylamine	BQL	10
N-Nitrosomethylethylamine	BQL	10
N-Nitrosopiperidine	BQL	20
N-Nitrosopyrrolidine	BQL	40
Parathion	BQL	20
Pentachlorobenzene	BQL	10
Pentachloronitrobenzene	BQL	20
Phenacetin	BQL	20
Phenanthrene	BQL	10
p-Phenylenediamine	BQL	10
Phorate	BQL	10
Pronamide	BQL	10
Pyrene	BQL	10
Safrole	BQL	10
1,2,4,5-Tetrachlorobenzene	BQL	10
Thionazin	BQL	20
o-Toluidine	BQL	10
1,2,4-Trichlorobenzene	BQL	10
o,o,o-Triethyl phosphorothioate	BQL	50
3,5-Trinitrobenzene	BQL	10

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Contact: Mr. Mark Mitchell

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ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Acid Extractables (8270C) - Appendix II

Sample ID: GWC-13/MW-13-(Dupe)

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted: 12/22/2003
Date Analyzed: 12/23/2003

ACL Sample #: 210462 **Units:** µg/L **Analyst:** RB

Analyte	Result	PQL
4-Chloro-3-methylphenol	BQL	20
2-Chlorophenol	BQL	10
m & p-Cresol	BQL	10
o-Cresol	BQL	10
2,4-Dichlorophenol	BQL	10
2,6-Dichlorophenol	BQL	10
4-Dimethylphenol	BQL	10
3-Dinitro-2-methylphenol	BQL	50
2,4-Dinitrophenol	BQL	50
2-Nitrophenol	BQL	10
4-Nitrophenol	BQL	50
Pentachlorophenol	BQL	50
Phenol	BQL	10
2,3,4,6-Tetrachlorophenol	BQL	10
2,4,5-Trichlorophenol	BQL	10
2,4,6-Trichlorophenol	BQL	10

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Client: Genesis Project
1258 Concord Rd.
Smyrna, GA 30080-0000

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Base Neutral Extractables (8270C) - Appendix II

Sample ID: GWC-13/MW-13-(Dupe)

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted: 12/22/2003
Date Analyzed: 12/23/2003

ACL Sample #: 210462 **Units:** µg/L **Analyst:** RB

Analyte	Result	PQL	Analyte	Result	PQL
Acenaphthene	BQL	10	Diethyl phthalate	BQL	10
Acenaphthylene	BQL	10	Dimethoate	BQL	10
Acetophenone	BQL	10	Dimethyl phthalate	BQL	10
2-Acetylaminofluorene	BQL	20	p-(Dimethylamino)azobenzene	BQL	10
4-Aminobiphenyl	BQL	20	7,12-Dimethylbenz(a)anthracene	BQL	10
Anthracene	BQL	10	3,3'-Dimethylbenzidine	BQL	10
[illegible]nzo(a)anthracene	BQL	10	m-Dinitrobenzene	BQL	20
[illegible]nzo(a)pyrene	BQL	10	2,4-Dinitrotoluene	BQL	10
Benzo(b)fluoranthene	BQL	10	2,6-Dinitrotoluene	BQL	10
Benzo(g,h,i)perylene	BQL	10	Diphenylamine	BQL	10
Benzo(k)fluoranthene	BQL	10	Disulfoton	BQL	10
Benzyl alcohol	BQL	20	Ethyl methanesulfonate	BQL	20
Bis(2-chloroethoxy)methane	BQL	10	Famphur	BQL	20
Bis(2-chloroethyl)ether	BQL	10	Fluoranthene	BQL	10
Bis(2-chloroisopropyl)ether	BQL	10	Fluorene	BQL	10
Bis(2-ethylhexyl)phthalate	BQL	10	Hexachlorobenzene	BQL	10
4-Bromophenyl phenyl ether	BQL	10	Hexachlorobutadiene	BQL	10
Butyl benzyl phthalate	BQL	10	Hexachlorocyclopentadiene	BQL	10
p-Chloroaniline	BQL	20	Hexachloroethane	BQL	10
Chlorobenzilate	BQL	10	Hexachloropropene	BQL	10
2-Chloronaphthalene	BQL	10	Indeno(1,2,3-cd)pyrene	BQL	10
4-Chlorophenyl phenyl ether	BQL	10	Isodrin	BQL	20
Chrysene	BQL	10	Isophorone	BQL	10
Di-n-butyl phthalate	BQL	10	Isosafrole	BQL	10
Di-n-octyl phthalate	BQL	10	Kepone	BQL	20
Diallate	BQL	10	Malathion	BQL	50
Dibenz(a,h)anthracene	BQL	10	Methapyrilene	BQL	100
Dibenzofuran	BQL	10	Methyl methanesulfonate	BQL	10
1,2-Dichlorobenzene	BQL	10	Methyl parathion	BQL	10
1,3-Dichlorobenzene	BQL	10	3-Methylcholanthrene	BQL	10
1,4-Dichlorobenzene	BQL	10	2-Methylnaphthalene	BQL	10
[illegible]'-Dichlorobenzidine	BQL	20	Naphthalene	BQL	10

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Contact: Mr. Mark Mitchell

Base Neutral Extractables (8270C) - Appendix II

Sample ID: GWC-13/MW-13-(Dupe)

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted: 12/22/2003
Date Analyzed: 12/23/2003

ACL Sample #: 210462 **Units:** µg/L **Analyst:** RB

Analyte	Result	PQL
1,4-Naphthoquinone	BQL	10
1-Naphthylamine	BQL	10
2-Naphthylamine	BQL	10
5-Nitro-o-toluidine	BQL	10
2-Nitroaniline	BQL	50
3-Nitroaniline	BQL	50
Nitroaniline	BQL	20
robenzene	BQL	10
N-Nitroso-di-n-butylamine	BQL	10
N-Nitrosodiethylamine	BQL	20
N-Nitrosodimethylamine	BQL	10
N-Nitrosodiphenylamine	BQL	10
N-Nitrosodipropylamine	BQL	10
N-Nitrosomethylethylamine	BQL	10
N-Nitrosopiperidine	BQL	20
N-Nitrosopyrrolidine	BQL	40
Parathion	BQL	20
Pentachlorobenzene	BQL	10
Pentachloronitrobenzene	BQL	20
Phenacetin	BQL	20
Phenanthrene	BQL	10
p-Phenylenediamine	BQL	10
Phorate	BQL	10
Pronamide	BQL	10
Pyrene	BQL	10
Safrole	BQL	10
1,2,4,5-Tetrachlorobenzene	BQL	10
Thionazin	BQL	20
o-Toluidine	BQL	10
1,2,4-Trichlorobenzene	BQL	10
o,o,o-Triethyl phosphorothioate	BQL	50
3,5-Trinitrobenzene	BQL	10

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J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Acid Extractables (8270C) - Appendix II

Sample ID: GWC-15/MW-15

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/22/2003
Date Analyzed: 12/23/2003

ACL Sample #: 210463 **Units:** µg/L **Analyst:** RB

Analyte	Result	PQL
4-Chloro-3-methylphenol	BQL	20
2-Chlorophenol	BQL	10
m & p-Cresol	BQL	10
o-Cresol	BQL	10
2,4-Dichlorophenol	BQL	10
2,6-Dichlorophenol	BQL	10
4-Dimethylphenol	BQL	10
4,6-Dinitro-2-methylphenol	BQL	50
2,4-Dinitrophenol	BQL	50
2-Nitrophenol	BQL	10
4-Nitrophenol	BQL	50
Pentachlorophenol	BQL	50
Phenol	BQL	10
2,3,4,6-Tetrachlorophenol	BQL	10
2,4,5-Trichlorophenol	BQL	10
2,4,6-Trichlorophenol	BQL	10

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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Base Neutral Extractables (8270C) - Appendix II

Sample ID: GWC-15/MW-15

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/22/2003
Date Analyzed: 12/23/2003

ACL Sample #: 210463 **Units:** µg/L **Analyst:** RB

Analyte	Result	PQL	Analyte	Result	PQL
Acenaphthene	BQL	10	Diethyl phthalate	BQL	10
Acenaphthylene	BQL	10	Dimethoate	BQL	10
Acetophenone	BQL	10	Dimethyl phthalate	BQL	10
2-Acetylaminofluorene	BQL	20	p-(Dimethylamino)azobenzene	BQL	10
4-Aminobiphenyl	BQL	20	7,12-Dimethylbenz(a)anthracene	BQL	10
Anthracene	BQL	10	3,3'-Dimethylbenzidine	BQL	10
ɜnzo(a)anthracene	BQL	10	m-Dinitrobenzene	BQL	20
ɜnzo(a)pyrene	BQL	10	2,4-Dinitrotoluene	BQL	10
Benzo(b)fluoranthene	BQL	10	2,6-Dinitrotoluene	BQL	10
Benzo(g,h,i)perylene	BQL	10	Diphenylamine	BQL	10
Benzo(k)fluoranthene	BQL	10	Disulfoton	BQL	10
Benzyl alcohol	BQL	20	Ethyl methanesulfonate	BQL	20
Bis(2-chloroethoxy)methane	BQL	10	Famphur	BQL	20
Bis(2-chloroethyl)ether	BQL	10	Fluoranthene	BQL	10
Bis(2-chloroisopropyl)ether	BQL	10	Fluorene	BQL	10
Bis(2-ethylhexyl)phthalate	BQL	10	Hexachlorobenzene	BQL	10
4-Bromophenyl phenyl ether	BQL	10	Hexachlorobutadiene	BQL	10
Butyl benzyl phthalate	BQL	10	Hexachlorocyclopentadiene	BQL	10
p-Chloroaniline	BQL	20	Hexachloroethane	BQL	10
Chlorobenzilate	BQL	10	Hexachloropropene	BQL	10
2-Chloronaphthalene	BQL	10	Indeno(1,2,3-cd)pyrene	BQL	10
4-Chlorophenyl phenyl ether	BQL	10	Isodrin	BQL	20
Chrysene	BQL	10	Isophorone	BQL	10
Di-n-butyl phthalate	BQL	10	Isosafrole	BQL	10
Di-n-octyl phthalate	BQL	10	Kepone	BQL	20
Diallate	BQL	10	Malathion	BQL	50
Dibenz(a,h)anthracene	BQL	10	Methapyrilene	BQL	100
Dibenzofuran	BQL	10	Methyl methanesulfonate	BQL	10
1,2-Dichlorobenzene	BQL	10	Methyl parathion	BQL	10
1,3-Dichlorobenzene	BQL	10	3-Methylcholanthrene	BQL	10
1,4-Dichlorobenzene	BQL	10	2-Methylnaphthalene	BQL	10
3'-Dichlorobenzidine	BQL	20	Naphthalene	BQL	10

BQL = Below Quantitation Limit
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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Base Neutral Extractables (8270C) - Appendix II

Sample ID: GWC-15/MW-15

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/22/2003
Date Analyzed: 12/23/2003

ACL Sample #: 210463 **Units:** µg/L **Analyst:** RB

Analyte	Result	PQL
1,4-Naphthoquinone	BQL	10
1-Naphthylamine	BQL	10
2-Naphthylamine	BQL	10
5-Nitro-o-toluidine	BQL	10
2-Nitroaniline	BQL	50
3-Nitroaniline	BQL	50
Nitroaniline	BQL	20
trobenzene	BQL	10
N-Nitroso-di-n-butylamine	BQL	10
N-Nitrosodiethylamine	BQL	20
N-Nitrosodimethylamine	BQL	10
N-Nitrosodiphenylamine	BQL	10
N-Nitrosodipropylamine	BQL	10
N-Nitrosomethylethylamine	BQL	10
N-Nitrosopiperidine	BQL	20
N-Nitrosopyrrolidine	BQL	40
Parathion	BQL	20
Pentachlorobenzene	BQL	10
Pentachloronitrobenzene	BQL	20
Phenacetin	BQL	20
Phenanthrene	BQL	10
p-Phenylenediamine	BQL	10
Phorate	BQL	10
Pronamide	BQL	10
Pyrene	BQL	10
Safrole	BQL	10
1,2,4,5-Tetrachlorobenzene	BQL	10
Thionazin	BQL	20
o-Toluidine	BQL	10
1,2,4-Trichlorobenzene	BQL	10
o,o,o-Triethyl phosphorothioate	BQL	50
3,5-Trinitrobenzene	BQL	10

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Smyrna, GA 30080-0000

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

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

Sample ID: GWC-13/MW-13

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted: 12/22/2003
Date Analyzed: 12/29/2003

ACL Sample #: 210461 **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
Arochlor-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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

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

Sample ID: GWC-13/MW-13-(Dupe)

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted: 12/22/2003
Date Analyzed: 12/29/2003

ACL Sample #: 210462 **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
Arochlor-1248	BQL	0.50
·ochlor-1254	BQL	0.50
.ochlor-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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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

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

Sample ID: GWC-15/MW-15

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/22/2003
Date Analyzed: 12/29/2003

ACL Sample #: 210463 **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
Arochlor-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 #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Chlorinated Herbicides (8151A) - Appendix II

Sample ID: GWC-13/MW-13

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted: 12/23/2003
Date Analyzed: 12/29/2003

ACL Sample #: 210461 **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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Chlorinated Herbicides (8151A) - Appendix II

Sample ID: GWC-13/MW-13-(Dupe)

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted: 12/23/2003
Date Analyzed: 12/29/2003

ACL Sample #: 210462 **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

BQL = Below Quantitation Limit
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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Chlorinated Herbicides (8151A) - Appendix II

Sample ID: GWC-15/MW-15

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/23/2003
Date Analyzed: 12/29/2003

ACL Sample #: 210463 **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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J = Less than Quantitation Limit, Approximate Value
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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Miscellaneous Organics (504.1) - Appendix II

Sample ID: GWC-13/MW-13

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted: 12/23/2003
Date Analyzed: 12/30/2003

ACL Sample #: 210461 **Units:** µg/L

Analyst: SS

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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Miscellaneous Organics (504.1) - Appendix II

Sample ID: GWC-13/MW-13-(Dupe)

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted: 12/23/2003
Date Analyzed: 12/30/2003

ACL Sample #: 210462 **Units:** µg/L

Analyst: SS

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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Miscellaneous Organics (504.1) - Appendix II

Sample ID: GWC-15/MW-15

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/23/2003
Date Analyzed: 12/30/2003

ACL Sample #: 210463 **Units:** µg/L **Analyst:** SS

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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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ACL Project #: 44014
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Miscellaneous Organics (504.1) - Appendix II

Sample ID: GWC-5/MW-5

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted: 12/23/2003
Date Analyzed: 01/02/2004

ACL Sample #: 210469 **Units:** µg/L

Analyst: SS

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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Miscellaneous Organics (504.1) - Appendix II

Sample ID: GWB-6/MW-6

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/23/2003
Date Analyzed: 01/02/2004

ACL Sample #: 210470 **Units:** µg/L **Analyst:** SS

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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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ACL Project #: 44014
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Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Miscellaneous Organics (504.1) - Appendix II

Sample ID: GWA-7/MW-7

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted: 12/23/2003
Date Analyzed: 01/02/2004

ACL Sample #: 210471 **Units:** µg/L

Analyst: SS

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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Miscellaneous Organics (504.1) - Appendix II

Sample ID: GWC-14/MW-14

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/23/2003
Date Analyzed: 01/02/2004

ACL Sample #: 210473 **Units:** µg/L **Analyst:** SS

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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
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Client Proj #: Plant Vogtle
ACL Project #: 44014
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Contact: Mr. Mark Mitchell

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

Sample ID: GWC-13/MW-13

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted:
Date Analyzed: 12/30/2003

ACL Sample #: 210461 **Units:** mg/L **Analyst:** SW/AD/JR

Analyte	Result	PQL
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	0.033	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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PQL = Practical Quantitation Limit

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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

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

Sample ID: GWC-13/MW-13-(Dupe)

ACL Sample #: 210462 **Units:** mg/L

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted:
Date Analyzed: 12/30/2003
Analyst: SW/AD/JR

Analyte	Result	PQL
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	0.032	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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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ACL Project #: 44014
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Date Reported: 01/06/2004

Appendix I Metals (6010B/7841)

Sample ID: GWC-5/MW-5

ACL Sample #: 210469 **Units:** mg/L

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted:
Date Analyzed: 12/30/2003
Analyst: SW/AD

Analyte	Result	PQL
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	0.142	0.020
Beryllium	BQL	0.004
Cadmium	BQL	0.005
Chromium	0.028	0.020
Cobalt	BQL	0.050
Copper	0.025	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	0.032	0.020

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PQL = Practical Quantitation Limit

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Contact: Mr. Mark Mitchell

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ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Appendix I Metals (6010B/7841)

Sample ID: GWB-6/MW-6

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted:
Date Analyzed: 12/30/2003

ACL Sample #: 210470 **Units:** mg/L **Analyst:** SW/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: GWA-7/MW-7

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted:
Date Analyzed: 12/30/2003
Analyst: SW/AD

ACL Sample #: 210471 **Units:** mg/L

Analyte	Result	PQL
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	BQL	0.020
Beryllium	BQL	0.004
Cadmium	BQL	0.005
Chromium	BQL	0.020
Cobalt	BQL	0.050
Copper	BQL	0.020
Lead	BQL	0.010
Nickel	BQL	0.020
Selenium	BQL	0.040
Silver	BQL	0.010
Thallium	BQL	0.002
Vanadium	BQL	0.050
Zinc	0.023	0.020

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PQL = Practical Quantitation Limit

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ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

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

Sample ID: GWC-14/MW-14

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted:
Date Analyzed: 12/30/2003

ACL Sample #: 210473 **Units:** mg/L **Analyst:** SW/AD/JR

Analyte	Result	PQL
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	0.189	0.020
Beryllium	0.004	0.004
Cadmium	0.011	0.005
Chromium	0.091	0.020
Cobalt	BQL	0.050
Copper	0.026	0.020
Lead	0.015	0.010
Mercury	0.0100	0.0005
Nickel	0.034	0.020
Selenium	BQL	0.040
Silver	BQL	0.010
Thallium	BQL	0.002
Tin	BQL	0.025
Vanadium	0.060	0.050
Zinc	0.127	0.020

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PQL = Practical Quantitation Limit

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ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

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

Sample ID: GWC-15/MW-15

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted:
Date Analyzed: 12/30/2003

ACL Sample #: 210463 **Units:** mg/L **Analyst:** SW/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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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Sample ID	ACL #	Analyte	Matrix	Result	PQL	Units	Date Analyzed
GWC-13/MW-13	210461	Cyanide (9012A)	Water	BQL	0.020	mg/L	12/23/2003
GWC-13/MW-13	210461	Sulfide (9034)	Water	BQL	1.0	mg/L	12/23/2003

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J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Sample ID	ACL #	Analyte	Matrix	Result	PQL	Units	Date Analyzed
GWC-13/MW-13-(D@	10462	Cyanide (9012A)	Water	BQL	0.020	mg/L	12/23/2003
GWC-13/MW-13-(D@	10462	Sulfide (9034)	Water	BQL	1.0	mg/L	12/23/2003

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Sample ID	ACL #	Analyte	Matrix	Result	PQL	Units	Date Analyzed
GWC-15/MW-15	210463	Cyanide (9012A)	Water	BQL	0.020	mg/L	12/23/2003
GWC-15/MW-15	210463	Sulfide (9034)	Water	BQL	1.0	mg/L	12/23/2003

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Sample ID	ACL #	Analyte	Matrix	Result	PQL	Units	Date Analyzed
EQ-Blank	210464	Cyanide (9012A)	Water	BQL	0.020	mg/L	12/23/2003
EQ-Blank	210464	Sulfide (9034)	Water	BQL	1.0	mg/L	12/23/2003

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Sample ID	ACL #	Analyte	Matrix	Result	PQL	Units	Date Analyzed
GWC-5/MW-5	210469	Mercury (7470A)	Water	BQL	0.0005	mg/L	12/24/2003

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Sample ID	ACL #	Analyte	Matrix	Result	PQL	Units	Date Analyzed
GWB-6/MW-6	210470	Mercury (7470A)	Water	BQL	0.0005	mg/L	12/24/2003

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Sample ID	ACL #	Analyte	Matrix	Result	PQL	Units	Date Analyzed
GWA-7/MW-7	210471	Mercury (7470A)	Water	BQL	0.0005	mg/L	12/24/2003

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

LABORATORY QA/QC RESULTS

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

Sample ID: EQ-Blank

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted:
Date Analyzed: 12/30/2003

ACL Sample #: 210464 **Units:** µg/L **Analyst:** RP

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	cis-1,3-Dichloropropene	BQL	5
Acetonitrile	BQL	100	trans-1,3-Dichloropropene	BQL	5
Acrolein	BQL	100	Ethyl methacrylate	BQL	10
Acrylonitrile	BQL	50	Ethylbenzene	BQL	5
Allyl chloride	BQL	10	2-Hexanone	BQL	50
Benzene	BQL	5	Isobutyl alcohol	BQL	50
romochloromethane	BQL	5	Methacrylonitrile	BQL	100
romodichloromethane	BQL	5	Methyl bromide	BQL	10
Bromoform	BQL	5	Methyl chloride	BQL	10
Carbon disulfide	BQL	5	Methyl ethyl ketone	BQL	100
Carbon tetrachloride	BQL	5	Methyl iodide	BQL	5
Chlorobenzene	BQL	5	Methyl methacrylate	BQL	30
Chloroethane	BQL	10	4-Methyl-2-pentanone	BQL	50
Chloroform	BQL	5	Methylene bromide	BQL	5
Chloroprene	BQL	20	Methylene chloride	BQL	5
1,2-Dibromo-3-chloropropane	BQL	20	Naphthalene	BQL	5
Dibromochloromethane	BQL	5	Propionitrile	BQL	150
1,2-Dibromoethane	BQL	5	Styrene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10	1,1,1,2-Tetrachloroethane	BQL	5
1,2-Dichlorobenzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
1,3-Dichlorobenzene	BQL	5	Tetrachloroethene	BQL	5
1,4-Dichlorobenzene	BQL	5	Toluene	BQL	5
Dichlorodifluoromethane	BQL	5	1,1,1-Trichloroethane	BQL	5
1,1-Dichloroethane	BQL	5	1,1,2-Trichloroethane	BQL	5
1,2-Dichloroethane	BQL	5	Trichloroethene	BQL	5
1,1-Dichloroethene	BQL	5	Trichlorofluoromethane	BQL	5
cis-1,2-Dichloroethene	BQL	5	1,2,3-Trichloropropane	BQL	5
trans-1,2-Dichloroethene	BQL	5	Vinyl acetate	BQL	50
1,2-Dichloropropane	BQL	5	Vinyl chloride	BQL	2
1,3-Dichloropropane	BQL	5	m & p-Xylenes	BQL	10
2,2-Dichloropropane	BQL	15	o-Xylene	BQL	5
1-Dichloropropene	BQL	5			

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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1258 Concord Rd.
Smyrna, GA 30080-0000

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

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

Sample ID: Trip Blank

Matrix: Water
Date Sampled: 12/16/2003
Date Extracted:
Date Analyzed: 12/29/2003

ACL Sample #: 210465 **Units:** µg/L **Analyst:** RP

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	cis-1,3-Dichloropropene	BQL	5
Acetonitrile	BQL	100	trans-1,3-Dichloropropene	BQL	5
Acrolein	BQL	100	Ethyl methacrylate	BQL	10
Acrylonitrile	BQL	50	Ethylbenzene	BQL	5
Allyl chloride	BQL	10	2-Hexanone	BQL	50
Benzene	BQL	5	Isobutyl alcohol	BQL	50
romochloromethane	BQL	5	Methacrylonitrile	BQL	100
dromodichloromethane	BQL	5	Methyl bromide	BQL	10
Bromoform	BQL	5	Methyl chloride	BQL	10
Carbon disulfide	BQL	5	Methyl ethyl ketone	BQL	100
Carbon tetrachloride	BQL	5	Methyl iodide	BQL	5
Chlorobenzene	BQL	5	Methyl methacrylate	BQL	30
Chloroethane	BQL	10	4-Methyl-2-pentanone	BQL	50
Chloroform	BQL	5	Methylene bromide	BQL	5
Chloroprene	BQL	20	Methylene chloride	BQL	5
1,2-Dibromo-3-chloropropane	BQL	20	Naphthalene	BQL	5
Dibromochloromethane	BQL	5	Propionitrile	BQL	150
1,2-Dibromoethane	BQL	5	Styrene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10	1,1,1,2-Tetrachloroethane	BQL	5
1,2-Dichlorobenzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
1,3-Dichlorobenzene	BQL	5	Tetrachloroethene	BQL	5
1,4-Dichlorobenzene	BQL	5	Toluene	BQL	5
Dichlorodifluoromethane	BQL	5	1,1,1-Trichloroethane	BQL	5
1,1-Dichloroethane	BQL	5	1,1,2-Trichloroethane	BQL	5
1,2-Dichloroethane	BQL	5	Trichloroethene	BQL	5
1,1-Dichloroethene	BQL	5	Trichlorofluoromethane	BQL	5
cis-1,2-Dichloroethene	BQL	5	1,2,3-Trichloropropane	BQL	5
trans-1,2-Dichloroethene	BQL	5	Vinyl acetate	BQL	50
1,2-Dichloropropane	BQL	5	Vinyl chloride	BQL	2
1,3-Dichloropropane	BQL	5	m & p-Xylenes	BQL	10
2,2-Dichloropropane	BQL	15	o-Xylene	BQL	5
,1-Dichloropropene	BQL	5			

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Acid Extractables (8270C) - Appendix II

Sample ID: EQ-Blank

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/22/2003
Date Analyzed: 12/23/2003

ACL Sample #: 210464 **Units:** µg/L **Analyst:** RB

Analyte	Result	PQL
4-Chloro-3-methylphenol	BQL	20
2-Chlorophenol	BQL	10
m & p-Cresol	BQL	10
o-Cresol	BQL	10
2,4-Dichlorophenol	BQL	10
2,6-Dichlorophenol	BQL	10
4-Dimethylphenol	BQL	10
,6-Dinitro-2-methylphenol	BQL	50
2,4-Dinitrophenol	BQL	50
2-Nitrophenol	BQL	10
4-Nitrophenol	BQL	50
Pentachlorophenol	BQL	50
Phenol	BQL	10
2,3,4,6-Tetrachlorophenol	BQL	10
2,4,5-Trichlorophenol	BQL	10
2,4,6-Trichlorophenol	BQL	10

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Smyrna, GA 30080-0000

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Base Neutral Extractables (8270C) - Appendix II

Sample ID: EQ-Blank

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/22/2003
Date Analyzed: 12/23/2003

ACL Sample #: 210464 **Units:** µg/L **Analyst:** RB

Analyte	Result	PQL	Analyte	Result	PQL
Acenaphthene	BQL	10	Diethyl phthalate	BQL	10
Acenaphthylene	BQL	10	Dimethoate	BQL	10
Acetophenone	BQL	10	Dimethyl phthalate	BQL	10
2-Acetylaminofluorene	BQL	20	p-(Dimethylamino)azobenzene	BQL	10
4-Aminobiphenyl	BQL	20	7,12-Dimethylbenz(a)anthracene	BQL	10
Anthracene	BQL	10	3,3'-Dimethylbenzidine	BQL	10
`enzo(a)anthracene	BQL	10	m-Dinitrobenzene	BQL	20
,enzo(a)pyrene	BQL	10	2,4-Dinitrotoluene	BQL	10
Benzo(b)fluoranthene	BQL	10	2,6-Dinitrotoluene	BQL	10
Benzo(g,h,i)perylene	BQL	10	Diphenylamine	BQL	10
Benzo(k)fluoranthene	BQL	10	Disulfoton	BQL	10
Benzyl alcohol	BQL	20	Ethyl methanesulfonate	BQL	20
Bis(2-chloroethoxy)methane	BQL	10	Famphur	BQL	20
Bis(2-chloroethyl)ether	BQL	10	Fluoranthene	BQL	10
Bis(2-chloroisopropyl)ether	BQL	10	Fluorene	BQL	10
Bis(2-ethylhexyl)phthalate	BQL	10	Hexachlorobenzene	BQL	10
4-Bromophenyl phenyl ether	BQL	10	Hexachlorobutadiene	BQL	10
Butyl benzyl phthalate	BQL	10	Hexachlorocyclopentadiene	BQL	10
p-Chloroaniline	BQL	20	Hexachloroethane	BQL	10
Chlorobenzilate	BQL	10	Hexachloropropene	BQL	10
2-Chloronaphthalene	BQL	10	Indeno(1,2,3-cd)pyrene	BQL	10
4-Chlorophenyl phenyl ether	BQL	10	Isodrin	BQL	20
Chrysene	BQL	10	Isophorone	BQL	10
Di-n-butyl phthalate	BQL	10	Isosafrole	BQL	10
Di-n-octyl phthalate	BQL	10	Kepone	BQL	20
Diallate	BQL	10	Malathion	BQL	50
Dibenz(a,h)anthracene	BQL	10	Methapyrilene	BQL	100
Dibenzofuran	BQL	10	Methyl methanesulfonate	BQL	10
1,2-Dichlorobenzene	BQL	10	Methyl parathion	BQL	10
1,3-Dichlorobenzene	BQL	10	3-Methylcholanthrene	BQL	10
1,4-Dichlorobenzene	BQL	10	2-Methylnaphthalene	BQL	10
,3'-Dichlorobenzidine	BQL	20	Naphthalene	BQL	10

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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Base Neutral Extractables (8270C) - Appendix II

Sample ID: EQ-Blank

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/22/2003
Date Analyzed: 12/23/2003

ACL Sample #: 210464 **Units:** µg/L **Analyst:** RB

Analyte	Result	PQL
1,4-Naphthoquinone	BQL	10
1-Naphthylamine	BQL	10
2-Naphthylamine	BQL	10
5-Nitro-o-toluidine	BQL	10
2-Nitroaniline	BQL	50
3-Nitroaniline	BQL	50
'-Nitroaniline	BQL	20
Nitrobenzene	BQL	10
N-Nitroso-di-n-butylamine	BQL	10
N-Nitrosodiethylamine	BQL	20
N-Nitrosodimethylamine	BQL	10
N-Nitrosodiphenylamine	BQL	10
N-Nitrosodipropylamine	BQL	10
N-Nitrosomethylethylamine	BQL	10
N-Nitrosopiperidine	BQL	20
N-Nitrosopyrrolidine	BQL	40
Parathion	BQL	20
Pentachlorobenzene	BQL	10
Pentachloronitrobenzene	BQL	20
Phenacetin	BQL	20
Phenanthrene	BQL	10
p-Phenylenediamine	BQL	10
Phorate	BQL	10
Pronamide	BQL	10
Pyrene	BQL	10
Safrole	BQL	10
1,2,4,5-Tetrachlorobenzene	BQL	10
Thionazin	BQL	20
o-Toluidine	BQL	10
1,2,4-Trichlorobenzene	BQL	10
o,o,o-Triethyl phosphorothioate	BQL	50
1,3,5-Trinitrobenzene	BQL	10

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ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

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

Sample ID: EQ-Blank

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/22/2003
Date Analyzed: 12/29/2003

ACL Sample #: 210464 **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
Arochlor-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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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Chlorinated Herbicides (8151A) - Appendix II

Sample ID: EQ-Blank

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/23/2003
Date Analyzed: 12/29/2003

ACL Sample #: 210464 **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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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Miscellaneous Organics (504.1) - Appendix II

Sample ID: EQ-Blank

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted: 12/23/2003
Date Analyzed: 12/30/2003

ACL Sample #: 210464 **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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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

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

Sample ID: EQ-Blank

Matrix: Water
Date Sampled: 12/17/2003
Date Extracted:
Date Analyzed: 12/30/2003

ACL Sample #: 210464 **Units:** mg/L **Analyst:** SW/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 #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

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

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

Matrix: Water
Date Sampled: ----------
Date Extracted:
Date Analyzed: 12/29/2003

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

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	cis-1,3-Dichloropropene	BQL	5
Acetonitrile	BQL	100	trans-1,3-Dichloropropene	BQL	5
Acrolein	BQL	100	Ethyl methacrylate	BQL	10
Acrylonitrile	BQL	50	Ethylbenzene	BQL	5
Allyl chloride	BQL	10	2-Hexanone	BQL	50
Benzene	BQL	5	Isobutyl alcohol	BQL	50
Bromochloromethane	BQL	5	Methacrylonitrile	BQL	100
Bromodichloromethane	BQL	5	Methyl bromide	BQL	10
Bromoform	BQL	5	Methyl chloride	BQL	10
Carbon disulfide	BQL	5	Methyl ethyl ketone	BQL	100
Carbon tetrachloride	BQL	5	Methyl iodide	BQL	5
Chlorobenzene	BQL	5	Methyl methacrylate	BQL	30
Chloroethane	BQL	10	4-Methyl-2-pentanone	BQL	50
Chloroform	BQL	5	Methylene bromide	BQL	5
Chloroprene	BQL	20	Methylene chloride	BQL	5
1,2-Dibromo-3-chloropropane	BQL	20	Naphthalene	BQL	5
Dibromochloromethane	BQL	5	Propionitrile	BQL	150
1,2-Dibromoethane	BQL	5	Styrene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10	1,1,1,2-Tetrachloroethane	BQL	5
1,2-Dichlorobenzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
1,3-Dichlorobenzene	BQL	5	Tetrachloroethene	BQL	5
1,4-Dichlorobenzene	BQL	5	Toluene	BQL	5
Dichlorodifluoromethane	BQL	5	1,1,1-Trichloroethane	BQL	5
1,1-Dichloroethane	BQL	5	1,1,2-Trichloroethane	BQL	5
1,2-Dichloroethane	BQL	5	Trichloroethene	BQL	5
1,1-Dichloroethene	BQL	5	Trichlorofluoromethane	BQL	5
cis-1,2-Dichloroethene	BQL	5	1,2,3-Trichloropropane	BQL	5
trans-1,2-Dichloroethene	BQL	5	Vinyl acetate	BQL	50
1,2-Dichloropropane	BQL	5	Vinyl chloride	BQL	2
1,3-Dichloropropane	BQL	5	m & p-Xylenes	BQL	10
2,2-Dichloropropane	BQL	15	o-Xylene	BQL	5
1,1-Dichloropropene	BQL	5			

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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

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

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

Matrix: Water
Date Sampled: ----------
Date Extracted:
Date Analyzed: 12/30/2003
Analyst: RP

ACL Sample #: Blank **Units:** µg/L

Analyte	Result	PQL	Analyte	Result	PQL
Acetone	BQL	100	cis-1,3-Dichloropropene	BQL	5
Acetonitrile	BQL	100	trans-1,3-Dichloropropene	BQL	5
Acrolein	BQL	100	Ethyl methacrylate	BQL	10
Acrylonitrile	BQL	50	Ethylbenzene	BQL	5
Allyl chloride	BQL	10	2-Hexanone	BQL	50
Benzene	BQL	5	Isobutyl alcohol	BQL	50
romochloromethane	BQL	5	Methacrylonitrile	BQL	100
Bromodichloromethane	BQL	5	Methyl bromide	BQL	10
Bromoform	BQL	5	Methyl chloride	BQL	10
Carbon disulfide	BQL	5	Methyl ethyl ketone	BQL	100
Carbon tetrachloride	BQL	5	Methyl iodide	BQL	5
Chlorobenzene	BQL	5	Methyl methacrylate	BQL	30
Chloroethane	BQL	10	4-Methyl-2-pentanone	BQL	50
Chloroform	BQL	5	Methylene bromide	BQL	5
Chloroprene	BQL	20	Methylene chloride	BQL	5
1,2-Dibromo-3-chloropropane	BQL	20	Naphthalene	BQL	5
Dibromochloromethane	BQL	5	Propionitrile	BQL	150
1,2-Dibromoethane	BQL	5	Styrene	BQL	5
trans-1,4-Dichloro-2-butene	BQL	10	1,1,1,2-Tetrachloroethane	BQL	5
1,2-Dichlorobenzene	BQL	5	1,1,2,2-Tetrachloroethane	BQL	5
1,3-Dichlorobenzene	BQL	5	Tetrachloroethene	BQL	5
1,4-Dichlorobenzene	BQL	5	Toluene	BQL	5
Dichlorodifluoromethane	BQL	5	1,1,1-Trichloroethane	BQL	5
1,1-Dichloroethane	BQL	5	1,1,2-Trichloroethane	BQL	5
1,2-Dichloroethane	BQL	5	Trichloroethene	BQL	5
1,1-Dichloroethene	BQL	5	Trichlorofluoromethane	BQL	5
cis-1,2-Dichloroethene	BQL	5	1,2,3-Trichloropropane	BQL	5
trans-1,2-Dichloroethene	BQL	5	Vinyl acetate	BQL	50
1,2-Dichloropropane	BQL	5	Vinyl chloride	BQL	2
1,3-Dichloropropane	BQL	5	m & p-Xylenes	BQL	10
2,2-Dichloropropane	BQL	15	o-Xylene	BQL	5
1,1-Dichloropropene	BQL	5			

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Client: Genesis Project
1258 Concord Rd.
Smyrna, GA 30080-0000

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

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

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

Matrix: Water
Date Sampled: ----------
Date Extracted:
Date Analyzed: 12/30/2003
Analyst: RP

ACL Sample #: Blank **Units:** µg/L

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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

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

ACL Sample #	Dibromofluoromethane (77-137)	1,2-Dichloroethane-d4 (72-138)	Toluene-d8 (84-112)	4-Bromofluorobenzene (77-125)
210461	107	115	94	103
210462	106	116	96	104
210463	108	116	95	103
210464	108	114	95	102
210465	105	116	95	104
210473	106	114	95	105

** Matrix Interference
DO=Diluted Out

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ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

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)
210466	107	115	95	102
210467	107	115	94	103
210468	109	114	95	102
210469	107	115	96	104
210470	107	115	97	105
210471	106	115	95	103
210472	108	113	94	103

** Matrix Interference
DO=Diluted Out

toluene						
chlorobenzene	20.00		0.00	19.82	99.1	(88-123)

COMPOUND	SPIKE ADDED (µg/l)	MSD CONCENTRATION (µg/l)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-dichloroethene	20.00	21.79	109.0	3.2	14	(54-144)
benzene	20.00	21.35	106.8	2.3	11	(82-132)
trichloroethene	20.00	21.16	105.8	2.6	14	(73-128)
toluene	20.00	22.43	112.2	0.5	13	(83-130)
chlorobenzene	20.00	19.93	99.7	0.6	13	(88-123)

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Comments: _____

ADVANCED CHEMISTRY LABS, INC.

GC/MS UNIT # 2

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Sequence Date : 12-30-03

Matrix Spike - Sample No.: 210538

50.61

COMPOUND	ADDED (µg/l)	SAMPLE CONCENTRATION (µg/l)	MS CONCENTRATION (µg/l)	MS % REC #	QC. LIMITS REC.
1,1-dichloroethene	5.00	0.00	5.34	106.8	(54-144)
benzene	5.00	0.00	5.30	106.0	(82-132)
trichloroethene	5.00	0.00	5.19	103.8	(73-128)
toluene	5.00	0.00	5.56	111.2	(83-130)
chlorobenzene	5.00	0.00	4.90	98.0	(88-123)

COMPOUND	SPIKE ADDED (µg/l)	MSD CONCENTRATION (µg/l)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-dichloroethene	5.00	5.18	103.6	3.0	14	(54-144)
benzene	5.00	5.19	103.8	2.1	11	(82-132)
trichloroethene	5.00	5.10	102.0	1.7	14	(73-128)
toluene	5.00	5.35	107.0	3.8	13	(83-130)
chlorobenzene	5.00	4.62	92.4	5.9	13	(88-123)

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

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Comments: _____

COMPOUND	SPIKE ADDED (µg/l)	MSD CONCENTRATION (µg/l)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-dichloroethene	20.00	21.95	109.8	1.3	14	(54-144)
benzene	20.00	21.36	106.8	0.0	11	(82-132)
trichloroethene	20.00	21.07	105.4	2.6	14	(73-128)
toluene	20.00	22.20	111.0	0.2	13	(83-130)
chlorobenzene	20.00	19.27	96.4	0.1	13	(88-123)

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

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Comments: _____
_____

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1258 Concord Rd.
Smyrna, GA 30080-0000

Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Acid Extractables (8270C) - Appendix II

Sample ID: ----------
ACL Sample #: Blank **Units:** µg/L

Matrix: Water
Date Sampled: ----------
Date Extracted: 12/22/2003
Date Analyzed: 12/23/2003
Analyst: RB

Analyte	Result	PQL
4-Chloro-3-methylphenol	BQL	20
2-Chlorophenol	BQL	10
m & p-Cresol	BQL	10
o-Cresol	BQL	10
2,4-Dichlorophenol	BQL	10
2,6-Dichlorophenol	BQL	10
4-Dimethylphenol	BQL	10
4,6-Dinitro-2-methylphenol	BQL	50
2,4-Dinitrophenol	BQL	50
2-Nitrophenol	BQL	10
4-Nitrophenol	BQL	50
Pentachlorophenol	BQL	50
Phenol	BQL	10
2,3,4,6-Tetrachlorophenol	BQL	10
2,4,5-Trichlorophenol	BQL	10
2,4,6-Trichlorophenol	BQL	10

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Base Neutral Extractables (8270C) - Appendix II

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

Matrix: Water
Date Sampled: ----------
Date Extracted: 12/22/2003
Date Analyzed: 12/23/2003

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

Analyte	Result	PQL	Analyte	Result	PQL
Acenaphthene	BQL	10	Diethyl phthalate	BQL	10
Acenaphthylene	BQL	10	Dimethoate	BQL	10
Acetophenone	BQL	10	Dimethyl phthalate	BQL	10
2-Acetylaminofluorene	BQL	20	p-(Dimethylamino)azobenzene	BQL	10
4-Aminobiphenyl	BQL	20	7,12-Dimethylbenz(a)anthracene	BQL	10
Anthracene	BQL	10	3,3'-Dimethylbenzidine	BQL	10
Benzo(a)anthracene	BQL	10	m-Dinitrobenzene	BQL	20
Benzo(a)pyrene	BQL	10	2,4-Dinitrotoluene	BQL	10
Benzo(b)fluoranthene	BQL	10	2,6-Dinitrotoluene	BQL	10
Benzo(g,h,i)perylene	BQL	10	Diphenylamine	BQL	10
Benzo(k)fluoranthene	BQL	10	Disulfoton	BQL	10
Benzyl alcohol	BQL	20	Ethyl methanesulfonate	BQL	20
Bis(2-chloroethoxy)methane	BQL	10	Famphur	BQL	20
Bis(2-chloroethyl)ether	BQL	10	Fluoranthene	BQL	10
Bis(2-chloroisopropyl)ether	BQL	10	Fluorene	BQL	10
Bis(2-ethylhexyl)phthalate	BQL	10	Hexachlorobenzene	BQL	10
4-Bromophenyl phenyl ether	BQL	10	Hexachlorobutadiene	BQL	10
Butyl benzyl phthalate	BQL	10	Hexachlorocyclopentadiene	BQL	10
p-Chloroaniline	BQL	20	Hexachloroethane	BQL	10
Chlorobenzilate	BQL	10	Hexachloropropene	BQL	10
2-Chloronaphthalene	BQL	10	Indeno(1,2,3-cd)pyrene	BQL	10
4-Chlorophenyl phenyl ether	BQL	10	Isodrin	BQL	20
Chrysene	BQL	10	Isophorone	BQL	10
Di-n-butyl phthalate	BQL	10	Isosafrole	BQL	10
Di-n-octyl phthalate	BQL	10	Kepone	BQL	20
Diallate	BQL	10	Malathion	BQL	50
Dibenz(a,h)anthracene	BQL	10	Methapyrilene	BQL	100
Dibenzofuran	BQL	10	Methyl methanesulfonate	BQL	10
1,2-Dichlorobenzene	BQL	10	Methyl parathion	BQL	10
1,3-Dichlorobenzene	BQL	10	3-Methylcholanthrene	BQL	10
1,4-Dichlorobenzene	BQL	10	2-Methylnaphthalene	BQL	10
3,3'-Dichlorobenzidine	BQL	20	Naphthalene	BQL	10

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Client: Genesis Project
1258 Concord Rd.
Smyrna, GA 30080-0000

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Base Neutral Extractables (8270C) - Appendix II

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

Matrix: Water
Date Sampled: ----------
Date Extracted: 12/22/2003
Date Analyzed: 12/23/2003

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

Analyte	Result	PQL
1,4-Naphthoquinone	BQL	10
1-Naphthylamine	BQL	10
2-Naphthylamine	BQL	10
5-Nitro-o-toluidine	BQL	10
2-Nitroaniline	BQL	50
3-Nitroaniline	BQL	50
4-Nitroaniline	BQL	20
Nitrobenzene	BQL	10
N-Nitroso-di-n-butylamine	BQL	10
N-Nitrosodiethylamine	BQL	20
N-Nitrosodimethylamine	BQL	10
N-Nitrosodiphenylamine	BQL	10
N-Nitrosodipropylamine	BQL	10
N-Nitrosomethylethylamine	BQL	10
N-Nitrosopiperidine	BQL	20
N-Nitrosopyrrolidine	BQL	40
Parathion	BQL	20
Pentachlorobenzene	BQL	10
Pentachloronitrobenzene	BQL	20
Phenacetin	BQL	20
Phenanthrene	BQL	10
p-Phenylenediamine	BQL	10
Phorate	BQL	10
Pronamide	BQL	10
Pyrene	BQL	10
Safrole	BQL	10
1,2,4,5-Tetrachlorobenzene	BQL	10
Thionazin	BQL	20
o-Toluidine	BQL	10
1,2,4-Trichlorobenzene	BQL	10
o,o,o-Triethyl phosphorothioate	BQL	50
1,3,5-Trinitrobenzene	BQL	10

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ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Acid Extractables (8270C) - Appendix II
SURROGATE PERCENT RECOVERY SUMMARY
Water

ACL Sample #	Phenol-d6 (10-94)	2-Fluorophenol (21-100)	2,4,6-Tribromophenol (10-123)
210461	14	24	35
210462	17	28	49
210463	17	27	49
210464	16	24	56

** Matrix Interference
DO=Diluted Out

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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Base Neutral Extractables (8270C) - Appendix II
SURROGATE PERCENT RECOVERY SUMMARY
Water

ACL Sample #	Nitrobenzene-d5 (35-114)	2-Fluorobiphenyl (43-116)	Terphenyl-d14 (33-141)
210461	41	51	62
210462	54	64	64
210463	53	68	73
210464	53	69	65

** Matrix Interference
DO=Diluted Out

ADVANCED CHEMISTRY LABS, INC.

SEMI-VOL GC/MS UNIT # 4

ACID EXTRACTABLES (8270C)

WATER SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Sequence Date : 12-23-03

Matrix Spike - Sample No.: LCS122203

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC #	QC. LIMITS REC.
Pentachlorophenol	200	0	77	38.5	(9-103)
Phenol	200	0	39	19.5	(12-89)
2-Chlorophenol	200	0	98	49.0	(27-123)
4-Chloro-3-methylphenol	200	0	134	67.0	(23-97)
4-Nitrophenol	200	0	42	21.0	(10-80)

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
Pentachlorophenol	200	74	37.0	4.0	50	(9-103)
Phenol	200	35	17.5	10.8	42	(12-89)
2-Chlorophenol	200	88	44.0	10.8	40	(27-123)
4-Chloro-3-methylphenol	200	133	66.5	0.7	42	(23-97)
4-Nitrophenol	200	45	22.5	6.9	50	(10-80)

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

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Comments: _____

ADVANCED CHEMISTRY LABS, INC.

SEMI-VOL GC/MS UNIT # 4

BASE/NEUTRAL EXTRACTABLES (8270C)

WATER SEMI-VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Sequence Date : 12-23-03

Matrix Spike - Sample No.: LCS122203

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC #	QC. LIMITS REC.
1,2,4-Trichlorobenzene	100	0	75	75.0	(39-98)
Acenaphthene	100	0	63	63.0	(46-118)
2,4-Dinitrotoluene	100	0	73	73.0	(24-96)
Di-n-butyl phthalate	100	0	76	76.0	(11-117)
Pyrene	100	0	68	68.0	(26-127)
N-Nitrosodi-n-propylamine	100	0	67	67.0	(41-116)
1,4-Dichlorobenzene	100	0	59	59.0	(36-97)

COMPOUND	SPIKE ADDED µg/L	MSD CONCENTRATION µg/L	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,2,4-Trichlorobenzene	100	74	74.0	1.3	28	(39-98)
Acenaphthene	100	62	62.0	1.6	31	(46-118)
2,4-Dinitrotoluene	100	72	72.0	1.4	38	(24-96)
Di-n-butyl phthalate	100	76	76.0	0.0	40	(11-117)
Pyrene	100	70	70.0	2.9	31	(26-127)
N-Nitrosodi-n-propylamine	100	62	62.0	7.8	38	(41-116)
1,4-Dichlorobenzene	100	57	57.0	3.4	28	(36-97)

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

* Values outside of QC limits

RPD: 0 out of 7 outside limits
Spike Recovery: 0 out of 14 outside limits

Comments: _____

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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

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

Sample ID: ----------
ACL Sample #: Blank **Units:** µg/L

Matrix: Water
Date Sampled: ----------
Date Extracted: 12/22/2003
Date Analyzed: 12/29/2003
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
Arochlor-1248	BQL	0.50
\rochlor-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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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Client: Genesis Project
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Smyrna, GA 30080-0000

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

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

ACL Sample #	TCMX (30-130)	DCBP (30-130)
210461	217**	95
210462	232**	89
210463	67	90
210464	63	93

** Matrix Interference
DO=Diluted Out

Advanced Chemistry Labs

Pesticides Spike/Spike Dup. Report(EPA Method 608 / SW-846 Method 8081A)

Instrument ID: *HP5890A-ECD*
Column: *RTx-CLPII, 30m, 0.42µm, 0.53mm*

ACL #: LCSW122203
Matrix: Water
Extraction Date: 12/22/03
Analysis Date: 12/29/03
Initial Volume: 1000.0 *ml*
Final Volume: 1 *ml*
Dilution Factor: 1
Unit: *µg/L or ppb*

Pesticide	R.T. MS	Area MS	Actual MS	% Rec. MS	Conc.	R.T. MSD	Area MSD	Actual MSD	% Rec. MSD	Sample Conc.	% D (RPD)
TCMX(SS#1)	7.354	640086	0.314	***62.79%***	0.500	7.365	714419	0.350	***70.08%***	0.000	10.98%
a-BHC	8.968	1739790	0.640	***127.96%***	0.500	8.977	1948650	0.717	***143.32%***	0.000	11.33%
g-BHC (Lindane)	10.016	1592170	0.633	***126.60%***	0.500	10.025	1737480	0.691	***138.16%***	0.000	8.73%
b-BHC	10.269	624078	0.505	***101.00%***	0.500	10.278	653153	0.529	***105.70%***	0.000	4.55%
d-BHC	11.215	1482970	0.741	***148.27%***	0.500	11.224	1513520	0.757	***151.33%***	0.000	2.04%
Heptachlor	11.379	1653580	0.531	***106.19%***	0.500	11.387	1839150	0.591	***118.10%***	0.000	10.63%
Aldrin	12.489	1731550	0.687	***137.31%***	0.500	12.497	1888460	0.749	***149.75%***	0.000	8.67%
Heptachlor Epoxide	14.479	1576570	0.658	***131.55%***	0.500	14.486	1627330	0.679	***135.79%***	0.000	3.17%
a-Endosulfan I	15.936	1460990	0.653	***130.60%***	0.500	15.942	1492260	0.667	***133.39%***	0.000	2.12%
DDE	16.258	1540210	0.663	***132.57%***	0.500	16.264	1540140	0.663	***132.57%***	0.000	0.00%
Dieldrin	16.945	1439470	0.632	***126.49%***	0.500	16.951	1456500	0.640	***127.99%***	0.000	1.18%
Endrin	18.104	1181450	0.650	***130.09%***	0.500	18.109	1193420	0.657	***131.41%***	0.000	1.01%
DDD	18.455	1293590	0.806	***161.11%***	0.500	18.461	1280260	0.797	***159.45%***	0.000	1.04%
b-Endosulfan II	18.914	1323020	0.645	***129.07%***	0.500	18.919	1314610	0.641	***128.25%***	0.000	0.64%
DDT	19.630	1025390	0.605	***121.06%***	0.500	19.635	1039340	0.614	***122.70%***	0.000	1.35%
Endrin Aldehyde	20.183	1031110	0.722	***144.34%***	0.500	20.187	1045050	0.731	***146.29%***	0.000	1.34%
Endosulfan Sulfate	21.279	1176900	0.684	***136.75%***	0.500	21.283	1179280	0.685	***137.03%***	0.000	0.20%
Methoxychlor	22.411	534387	0.548	***109.65%***	0.500	22.415	541706	0.556	***111.15%***	0.000	1.36%
Mirex	23.581	562785	0.258	***51.62%***	0.500	23.583	562319	0.258	***51.58%***	0.000	0.08%
Endrin Ketone	23.751	1257840	0.596	***119.23%***	0.500	23.752	1261190	0.598	***119.54%***	0.000	0.27%
DCBP(SS#2)	31.585	955235	0.390	***78.05%***	0.500	31.586	954099	0.390	***77.96%***	0.000	0.12%

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

Client: Genesis Project
1258 Concord Rd.
Smyrna, GA 30080-0000

Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Chlorinated Herbicides (8151A) - Appendix II

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

ACL Sample #: Blank **Units:** µg/L

Matrix: Water
Date Sampled: ----------
Date Extracted: 12/23/2003
Date Analyzed: 12/29/2003
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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

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1258 Concord Rd.
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Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Contact: Mr. Mark Mitchell

Chlorinated Herbicides (8151A) - Appendix II

SURROGATE PERCENT RECOVERY SUMMARY

Water

ACL Sample #	DCAA (30-130)
210461	69
210462	68
210463	67
210464	66

** Matrix Interference
DO=Diluted Out

Advanced Chemistry Labs

Herbicides Spike/Spike Dup. Report
SW-846 Method 8151A

Instrument ID: HP5890A-ECD/FID
Column: RTx-1, 30m, 0.25µm, 0.25mm ID

ACL #:	LCSW122303	
Matrix:	Water	
Extraction Date:	12/23/03	
Analysis Date:	12/29/03	
Initial Volume:	1000	ml
Final Volume:	4	ml
Dilution Factor:	1	
Unit:	µg/L or ppb	

Herbicide Spike	R.T.	Area	Spike Conc.	Actual	% Recovery	RPD
DCAA(SS)	18.993	1183812	16.000	9.865	61.66%	3.96%
2,4-D	21.438	632680	4.000	3.197	79.94%	8.25%
Silvex	23.593	747029	0.800	0.683	85.40%	5.00%
2,4,5-T	23.923	627427	0.800	0.620	77.52%	5.05%
Dinoseb	25.000	422722	0.800	0.139	17.35%	18.91%

Herbicide Spike Dup.	R.T.	Area	Spike Conc.	Actual	% Recovery	Conc.
DCAA(SS)	18.994	1137886	16.000	9.483	59.27%	0.000
2,4-D	21.438	582581	4.000	2.944	73.61%	0.000
Silvex	23.594	710621	0.800	0.650	81.24%	0.000
2,4,5-T	23.924	596503	0.800	0.590	73.70%	0.000
Dinoseb	25.001	349677	0.800	0.115	14.35%	0.000

**Herb. Calculation based on curve prep. on* 12/16/03

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Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 12/30/2003

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

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

Matrix: Water
Date Sampled: ----------
Date Extracted:
Date Analyzed: 12/30/2003
Analyst: SW/AD/JR

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

Analyte	Result	PQL
Antimony	BQL	0.006
Arsenic	BQL	0.010
Barium	BQL	0.020
Beryllium	BQL	0.004
Cadmium	BQL	0.005
Chromium	BQL	0.020
Cobalt	BQL	0.050
Copper	BQL	0.020
Lead	BQL	0.010
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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

ADVANCED CHEMISTRY LABS, INC.

Appendix II Metals

Water Matrix Spike for Method (6010B/7470A)

Sample ID ---------

ACL Sample Number LCS

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE RESULT (mg/L)	MATRIX SPIKE RESULT (mg/L)	MS REC (%)	MS RANGE (%)
Antimony	0.040	0.000	0.038	94	75--125
Arsenic	0.100	0.000	0.108	108	75--125
Barium	1.000	0.000	0.753	75	75--125
Beryllium	0.100	0.000	0.105	105	75--125
Cadmium	0.025	0.000	0.025	101	75--125
Chromium	0.100	0.000	0.102	102	75--125
Cobalt	0.100	0.000	0.099	99	75--125
Copper	0.100	0.000	0.107	107	75--125
Lead	0.100	0.000	0.097	97	75--125
Mercury	0.0020	0.000	0.0022	109	75--125
Nickel	0.100	0.000	0.100	100	75--125
Selenium	0.025	0.000	0.022	87	75--125
Silver	0.020	0.000	0.019	94	75--125
Thallium	0.040	0.000	0.040	100	75--125
Tin	0.200	0.000	0.192	96	75--125
Vanadium	0.250	0.000	0.249	100	75--125
Zinc	0.100	0.000	0.107	107	75--125

Comment : _____

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Smyrna, GA 30080-0000

Contact: Mr. Mark Mitchell

Client Proj #: Plant Vogtle
ACL Project #: 44014
Date Received: 12/19/2003
Date Reported: 01/06/2004

Appendix I Metals (6010B/7841)

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

Matrix: Water
Date Sampled: ----------
Date Extracted:
Date Analyzed: 12/30/2003
Analyst: SW/AD

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

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

BQL = Below Quantitation Limit
J = Less than Quantitation Limit, Approximate Value
PQL = Practical Quantitation Limit

ADVANCED CHEMISTRY LABS, INC.

Appendix I Metals

Water Matrix Spike for Method (6010B/7841)

Sample ID : GWC-11/MW-11

ACL Sample Number : 210472

COMPOUND	SPIKE ADDED (mg/L)	SAMPLE RESULT (mg/L)	MATRIX SPIKE RESULT (mg/L)	MS REC (%)	MS RANGE (%)
Antimony	0.040	0.000	0.041	103	75--125
Arsenic	0.100	0.000	0.100	100	75--125
Barium	1.000	0.022	0.786	76	75--125
Beryllium	0.100	0.000	0.104	104	75--125
Cadmium	0.025	0.000	0.025	101	75--125
Chromium	0.100	0.000	0.106	106	75--125
Cobalt	0.100	0.000	0.101	101	75--125
Copper	0.100	0.000	0.100	100	75--125
Lead	0.100	0.000	0.099	99	75--125
Nickel	0.100	0.000	0.103	103	75--125
Selenium	0.025	0.000	0.024	94	75--125
Silver	0.020	0.000	0.019	97	75--125
Thallium	0.040	0.000	0.038	96	75--125
Vanadium	0.250	0.000	0.255	102	75--125
Zinc	0.100	0.000	0.114	114	75--125

Comment : _____

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CHAIN-OF CUSTODY RECORD AND ANALYSIS REQUEST

Company Name: Genesis Project, Inc.
Phone #: 770-319-7217
Fax #: 770-319-7219
Company Address: 1258 Concord Rd, Smyrna, GA
Site Location: GA, Burke County
Project Manager: Mark Mitchell
Client Project: (#) Plant Vogtle
(Name)
I attest that the proper field sampling procedures were used during the collection of these samples.
Sampler Name (Print): Josh Threadgill

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	EDB/DBCP	Sulfide	Cyanide	App II Metals	App II VOC's	App I Metals + Hg	App I VOC's	App II Pesticides/PCB	App II BNA	App II Herbicide	App I Metals	Remarks
GWA-2/MW-2		✓									✓			12/17	1348	✓						✓				✓	
GWC-3/MW-3		✓									✓			12/17		✓						✓				✓	
GWB-4/MW-4		✓									✓			12/17	1145	✓						✓				✓	
GWC-5/MW-5		✓									✓			12/16	1430	✓					✓	✓					
GWB-6/MW-6		✓									✓			12/17	1025	✓					✓	✓					
GWA-7/MW-7		✓									✓			12/16	1730	✓					✓	✓					
GWC-11/MW-11		✓									✓			12/17	1240	✓						✓				✓	
GWC-13/MW-13		✓									✓			12/16	1422	✓	✓	✓	✓	✓	MX		✓	✓	✓		
GWC-14/MW-14		✓									✓			12/17	1010	✓			✓	✓	MX						
GWC-15/MW-15		✓									✓			12/17	0920	✓	✓	✓	✓	✓	MX		✓	✓	✓		
Special Detection Limits: GWC-13/MW-13-(Dupe)		✓									✓			12/16	1422	✓	✓	✓	✓	✓	MX		✓	✓	✓		
EQ-Blank		✓									✓			12/17	12.05	✓	✓	✓	✓	✓			✓	✓	✓		
Trip Blank		✓									✓			12/16	—					✓			MX	MX	MX		

Remarks

TAT	Special Handling
Priority (24 hr) ☐	ACL Contact
Rush (48 hr) ☐	Quote #
Rush (72 hr) ☐	P. O.
Normal ☑	

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

Special Reporting Requirements: Fax ☑

Lab Use Only: ACL Project #: 44014

Cooler Temp.: <4.0 °C

CUSTODY RECORD

	Date	Time	
Relinquished by Sampler: Josh Threadgill	12/19/03	1010	Received by:
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by Laboratory: Waybill # N. Williams 12/19/03 10:10 am

APPENDIX B – STATISTICAL ANALYSES

LANDFILL #2

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 = 11; Samples = 22

i	x(i)	x(n-i+1)	x(n-1+1)-x(i)	a(n-i+1)	b(i)
1	2.5	6	3.5	0.459	1.6065
2	2.5	5	2.5	0.3156	0.789
3	2.5	2.5	0	0.2571	0
4	2.5	2.5	0	0.2131	0
5	2.5	2.5	0	0.1764	0
6	2.5	2.5	0	0.1443	0
7	2.5	2.5	0	0.115	0
8	2.5	2.5	0	0.0878	0
9	2.5	2.5	0	0.0618	0
10	2.5	2.5	0	0.0368	0
11	2.5	2.5	0	0.0122	0
12	2.5	2.5	0		
13	2.5	2.5	0		
14	2.5	2.5	0		
15	2.5	2.5	0		
16	2.5	2.5	0		
17	2.5	2.5	0		
18	2.5	2.5	0		
19	2.5	2.5	0		
20	2.5	2.5	0		
21	5	2.5	-2.5		
22	6	2.5	-3.5		

Sum of b values = 2.3955
Sample Standard Deviation = 0.89612
W Statistic = 0.340284
5% Critical value of 0.911 exceeds 0.340284
Evidence of non-normality at 95% level of significance
1% Critical value of 0.878 exceeds 0.340284
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-2/MW-2	7/30/2002	BQL2.5	10.5
	9/24/2002	BQL2.5	10.5
	10/21/2002	BQL2.5	10.5
	12/4/2002	BQL2.5	10.5
	6/25/2003	BQL2.5	10.5
	12/17/2003	BQL2.5	10.5

Rank Sum = 63
Rank Mean = 10.5

Background Rank Sum = 63
Background Rank Mean = 10.5

Compliance Wells

Well ID	Date	Result	Rank
GWB-4/MW-4	7/30/2002	5	21
	9/24/2002	BQL2.5	10.5
	10/21/2002	BQL2.5	10.5
	12/4/2002 ~	BQL2.5	10.5
	6/25/2003	BQL2.5	10.5
	12/17/2003	6	22

Rank Sum = 85
Rank Mean = 14.1667

GWC-11/MW-11	7/30/2002	BQL2.5	10.5
	9/24/2002	BQL2.5	10.5
	10/21/2002	BQL2.5	10.5
	12/4/2002	BQL2.5	10.5
	6/25/2003	BQL2.5	10.5
	12/17/2003	BQL2.5	10.5

Rank Sum = 63
Rank Mean = 10.5

GWC-3/MW-3	7/30/2002	BQL2.5	10.5
	9/24/2002	BQL2.5	10.5
	12/4/2002	BQL2.5	10.5
	12/17/2003	BQL2.5	10.5

Rank Sum = 42
Rank Mean = 10.5

Calculation Results:

Kruskal-Wallis H Statistic = 1.3913
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 5.5873

95% Confidence comparison value is 7.81472 at 3 degrees of freedom
1.3913 < 7.81472 indicating no significant group difference at 5% significance level
5.5873 < 7.81472 indicating no significant group difference at 5% significance level when adjusted for ties

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 = 11; Samples = 22

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	0.459	0.034425
2	0.01	0.027	0.017	0.3156	0.0053652
3	0.01	0.025	0.015	0.2571	0.0038565
4	0.01	0.022	0.012	0.2131	0.0025572
5	0.01	0.021	0.011	0.1764	0.0019404
6	0.01	0.021	0.011	0.1443	0.0015873
7	0.01	0.021	0.011	0.115	0.001265
8	0.01	0.0205	0.0105	0.0878	0.0009219
9	0.01	0.02	0.01	0.0618	0.000618
10	0.01	0.02	0.01	0.0368	0.000368
11	0.015	0.018	0.003	0.0122	3.66e-005
12	0.018	0.015	-0.003		
13	0.02	0.01	-0.01		
14	0.02	0.01	-0.01		
15	0.0205	0.01	-0.0105		
16	0.021	0.01	-0.011		
17	0.021	0.01	-0.011		
18	0.021	0.01	-0.011		
19	0.022	0.01	-0.012		
20	0.025	0.01	-0.015		
21	0.027	0.01	-0.017		
22	0.085	0.01	-0.075		

Sum of b values = 0.0529411
Sample Standard Deviation = 0.0158984
W Statistic = 0.528029
5% Critical value of 0.911 exceeds 0.528029
Evidence of non-normality at 95% level of significance
1% Critical value of 0.878 exceeds 0.528029
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	21
	9/24/2002	BQL0.01	5.5
	10/21/2002	BQL0.01	5.5
	12/4/2002	0.015	11
	6/25/2003	BQL0.01	5.5
	12/17/2003	BQL0.01	5.5

Rank Sum = 54
Rank Mean = 9

Background Rank Sum = 54
Background Rank Mean = 9

Compliance Wells

Well ID	Date	Result	Rank
GWB-4/MW-4	7/30/2002	0.021	16
	9/24/2002	0.021	17
	10/21/2002	0.021	18
	12/4/2002 ~	0.0205	15
	6/25/2003	BQL0.01	5.5
	12/17/2003	BQL0.01	5.5

Rank Sum = 77
Rank Mean = 12.8333

GWC-11/MW-11	7/30/2002	0.085	22
	9/24/2002	0.02	13
	10/21/2002	0.025	20
	12/4/2002	0.018	12
	6/25/2003	BQL0.01	5.5
	12/17/2003	0.022	19

Rank Sum = 91.5
Rank Mean = 15.25

GWC-3/MW-3	7/30/2002	BQL0.01	5.5
	9/24/2002	BQL0.01	5.5
	12/4/2002	0.02	14
	12/17/2003	BQL0.01	5.5

Rank Sum = 30.5
Rank Mean = 7.625

Calculation Results:

Kruskal-Wallis H Statistic = 4.56769
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 5.03697

95% Confidence comparison value is 7.81472 at 3 degrees of freedom
4.56769 < 7.81472 indicating no significant group difference at 5% significance level
5.03697 < 7.81472 indicating no significant group difference at 5% significance level when adjusted for ties

LANDFILL #3

Shapiro-Wilks Test of Normality

Parameter: Chlorobenzene

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
K = 18; Samples = 36

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	0.4068	6.7122
2	2.5	10	7.5	0.2813	2.10975
3	2.5	9	6.5	0.2415	1.56975
4	2.5	8	5.5	0.2121	1.16655
5	2.5	7	4.5	0.1883	0.84735
6	2.5	2.5	0	0.1678	0
7	2.5	2.5	0	0.1496	0
8	2.5	2.5	0	0.1331	0
9	2.5	2.5	0	0.1179	0
10	2.5	2.5	0	0.1036	0
11	2.5	2.5	0	0.09	0
12	2.5	2.5	0	0.077	0
13	2.5	2.5	0	0.0645	0
14	2.5	2.5	0	0.0523	0
15	2.5	2.5	0	0.0404	0
16	2.5	2.5	0	0.0287	0
17	2.5	2.5	0	0.0172	0
18	2.5	2.5	0	0.0057	0
19	2.5	2.5	0		
20	2.5	2.5	0		
21	2.5	2.5	0		
22	2.5	2.5	0		
23	2.5	2.5	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	7	2.5	-4.5		
33	8	2.5	-5.5		
34	9	2.5	-6.5		
35	10	2.5	-7.5		
36	19	2.5	-16.5		

Sum of b values = 12.4056
Sample Standard Deviation = 3.27627
W Statistic = 0.409646
5% Critical value of 0.935 exceeds 0.409646
Evidence of non-normality at 95% level of significance
1% Critical value of 0.912 exceeds 0.409646
Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: Chlorobenzene

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	BQL2.5	16
	9/24/2002	BQL2.5	16
	10/21/2002 ~	BQL2.5	16
	12/3/2002	BQL2.5	16
	6/24/2003	BQL2.5	16
	12/17/2003	BQL2.5	16
Rank Sum = 96			
Rank Mean = 16			
GWA-7/MW-7	7/30/2002 ~	BQL2.5	16
	9/24/2002	BQL2.5	16
	10/21/2002	BQL2.5	16
	12/3/2002	BQL2.5	16
	6/24/2003	BQL2.5	16
	12/17/2003	BQL2.5	16
Rank Sum = 96			
Rank Mean = 16			

Background Rank Sum = 192
Background Rank Mean = 16

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	BQL2.5	16
	9/24/2002	BQL2.5	16
	10/21/2002	BQL2.5	16
	12/3/2002	BQL2.5	16
	6/24/2003	BQL2.5	16
	12/17/2003	BQL2.5	16
Rank Sum = 96			
Rank Mean = 16			
GWC-13/MW-13	7/30/2002	BQL2.5	16
	9/24/2002	BQL2.5	16
	10/21/2002	BQL2.5	16
	12/3/2002	BQL2.5	16
	6/24/2003 ~	BQL2.5	16
	12/17/2003 ~	BQL2.5	16
Rank Sum = 96			
Rank Mean = 16			
GWC-14/MW-14	7/30/2002	BQL2.5	16
	9/24/2002 ~	8	33
	10/21/2002	9	34
	12/3/2002	10	35

	6/24/2003	7	32
	12/17/2003	19	36

Rank Sum = 186
Rank Mean = 31

GWC-5/MW-5	7/30/2002	BQL2.5	16
	9/24/2002	BQL2.5	16
	10/21/2002	BQL2.5	16
	12/3/2002	BQL2.5	16
	6/24/2003	BQL2.5	16
	12/17/2003	BQL2.5	16

Rank Sum = 96
Rank Mean = 16

Calculation Results:

Kruskal-Wallis H Statistic = 10.1351
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 28.0249
95% Confidence comparison value is 9.48773 at 4 degrees of freedom
10.1351 > 9.48773 indicating a significant group difference at 5% significance level
28.0249 > 9.48773 indicating a significant group difference at 5% significance level when adjusted for ties

Individual Well Comparisons at 1.25% Significance Level per Comparison

1.25% Z score is 2.25713
Mean background rank is 16

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	16	0	11.8902
GWC-13/MW-13	16	0	11.8902
GWC-14/MW-14	31	15	11.8902
GWC-5/MW-5	16	0	11.8902

Individual Well Comparisons at Groupwise 5% Significance Level (1.25% Significance Level per comparison)

1.25% Z score is 2.25713
Mean background rank is 16

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	16	0	11.8902
GWC-13/MW-13	16	0	11.8902
GWC-14/MW-14	31	15	11.8902
GWC-5/MW-5	16	0	11.8902

Shapiro-Wilks Test of Normality

Parameter: 1,4-Dichlorobenzene

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
K = 18; Samples = 36

i	x(i)	x(n-i+1)	x(n-1+1)-x(i)	a(n-i+1)	b(i)
1	2.5	39	36.5	0.4068	14.8482
2	2.5	36.5	34	0.2813	9.5642
3	2.5	35	32.5	0.2415	7.84875
4	2.5	33	30.5	0.2121	6.46905
5	2.5	20	17.5	0.1883	3.29525
6	2.5	5	2.5	0.1678	0.4195
7	2.5	5	2.5	0.1496	0.374
8	2.5	5	2.5	0.1331	0.33275
9	2.5	5	2.5	0.1179	0.29475
10	2.5	5	2.5	0.1036	0.259
11	2.5	2.5	0	0.09	0
12	2.5	2.5	0	0.077	0
13	2.5	2.5	0	0.0645	0
14	2.5	2.5	0	0.0523	0
15	2.5	2.5	0	0.0404	0
16	2.5	2.5	0	0.0287	0
17	2.5	2.5	0	0.0172	0
18	2.5	2.5	0	0.0057	0
19	2.5	2.5	0		
20	2.5	2.5	0		
21	2.5	2.5	0		
22	2.5	2.5	0		
23	2.5	2.5	0		
24	2.5	2.5	0		
25	2.5	2.5	0		
26	2.5	2.5	0		
27	5	2.5	-2.5		
28	5	2.5	-2.5		
29	5	2.5	-2.5		
30	5	2.5	-2.5		
31	5	2.5	-2.5		
32	20	2.5	-17.5		
33	33	2.5	-30.5		
34	35	2.5	-32.5		
35	36.5	2.5	-34		
36	39	2.5	-36.5		

Sum of b values = 43.7055
Sample Standard Deviation = 10.7832
W Statistic = 0.469364
5% Critical value of 0.935 exceeds 0.469364
Evidence of non-normality at 95% level of significance
1% Critical value of 0.912 exceeds 0.469364
Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: 1,4-Dichlorobenzene

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	BQL2.5	16
	9/24/2002	BQL2.5	16
	10/21/2002 ~	BQL2.5	16
	12/3/2002	BQL2.5	16
	6/24/2003	BQL5	16
	12/17/2003	BQL5	16
Rank Sum = 96			
Rank Mean = 16			
GWA-7/MW-7	7/30/2002 ~	BQL2.5	16
	9/24/2002	BQL2.5	16
	10/21/2002	BQL2.5	16
	12/3/2002	BQL2.5	16
	6/24/2003	BQL2.5	16
	12/17/2003	BQL2.5	16
Rank Sum = 96			
Rank Mean = 16			

Background Rank Sum = 192
Background Rank Mean = 16

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	BQL2.5	16
	9/24/2002	BQL2.5	16
	10/21/2002	BQL2.5	16
	12/3/2002	BQL2.5	16
	6/24/2003	BQL2.5	16
	12/17/2003	BQL2.5	16
Rank Sum = 96			
Rank Mean = 16			
GWC-13/MW-13	7/30/2002	BQL2.5	16
	9/24/2002	BQL2.5	16
	10/21/2002	BQL2.5	16
	12/3/2002	BQL2.5	16
	6/24/2003 ~	BQL5	16
	12/17/2003 ~	BQL5	16
Rank Sum = 96			
Rank Mean = 16			
GWC-14/MW-14	7/30/2002	20	32
	9/24/2002 ~	36.5	35
	10/21/2002	35	34
	12/3/2002	39	36

	6/24/2003	BQL5	16
	12/17/2003	33	33

Rank Sum = 186
Rank Mean = 31

GWC-5/MW-5	7/30/2002	BQL2.5	16
	9/24/2002	BQL2.5	16
	10/21/2002	BQL2.5	16
	12/3/2002	BQL2.5	16
	6/24/2003	BQL2.5	16
	12/17/2003	BQL2.5	16

Rank Sum = 96
Rank Mean = 16

Calculation Results:

Kruskal-Wallis H Statistic = 10.1351
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 28.0249
95% Confidence comparison value is 9.48773 at 4 degrees of freedom
10.1351 > 9.48773 indicating a significant group difference at 5% significance level
28.0249 > 9.48773 indicating a significant group difference at 5% significance level when adjusted for ties

Individual Well Comparisons at 1.25% Significance Level per Comparison

1.25% Z score is 2.25713
Mean background rank is 16

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	16	0	11.8902
GWC-13/MW-13	16	0	11.8902
GWC-14/MW-14	31	15	11.8902
GWC-5/MW-5	16	0	11.8902

Individual Well Comparisons at Groupwise 5% Significance Level (1.25% Significance Level per comparison)

1.25% Z score is 2.25713
Mean background rank is 16

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	16	0	11.8902
GWC-13/MW-13	16	0	11.8902
GWC-14/MW-14	31	15	11.8902
GWC-5/MW-5	16	0	11.8902

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 = 18; Samples = 36

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	0.4068	7.5258
2	2.5	20.5	18	0.2813	5.0634
3	2.5	17	14.5	0.2415	3.50175
4	2.5	16	13.5	0.2121	2.86335
5	2.5	13	10.5	0.1883	1.97715
6	2.5	10	7.5	0.1678	1.2585
7	2.5	10	7.5	0.1496	1.122
8	2.5	9	6.5	0.1331	0.86515
9	2.5	7	4.5	0.1179	0.53055
10	2.5	6	3.5	0.1036	0.3626
11	2.5	6	3.5	0.09	0.315
12	2.5	2.5	0	0.077	0
13	2.5	2.5	0	0.0645	0
14	2.5	2.5	0	0.0523	0
15	2.5	2.5	0	0.0404	0
16	2.5	2.5	0	0.0287	0
17	2.5	2.5	0	0.0172	0
18	2.5	2.5	0	0.0057	0
19	2.5	2.5	0		
20	2.5	2.5	0		
21	2.5	2.5	0		
22	2.5	2.5	0		
23	2.5	2.5	0		
24	2.5	2.5	0		
25	2.5	2.5	0		
26	6	2.5	-3.5		
27	6	2.5	-3.5		
28	7	2.5	-4.5		
29	9	2.5	-6.5		
30	10	2.5	-7.5		
31	10	2.5	-7.5		
32	13	2.5	-10.5		
33	16	2.5	-13.5		
34	17	2.5	-14.5		
35	20.5	2.5	-18		
36	21	2.5	-18.5		

Sum of b values = 25.3853
Sample Standard Deviation = 5.46286
W Statistic = 0.616956
5% Critical value of 0.935 exceeds 0.616956
Evidence of non-normality at 95% level of significance
1% Critical value of 0.912 exceeds 0.616956
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	BQL2.5	13
	9/24/2002	BQL2.5	13
	10/21/2002 ~	BQL2.5	13
	12/3/2002	BQL2.5	13
	6/24/2003	BQL2.5	13
	12/17/2003	BQL2.5	13
Rank Sum = 78			
Rank Mean = 13			
GWA-7/MW-7	7/30/2002 ~	BQL2.5	13
	9/24/2002	BQL2.5	13
	10/21/2002	BQL2.5	13
	12/3/2002	BQL2.5	13
	6/24/2003	BQL2.5	13
	12/17/2003	BQL2.5	13
Rank Sum = 78			
Rank Mean = 13			

Background Rank Sum = 156
Background Rank Mean = 13

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	BQL2.5	13
	9/24/2002	BQL2.5	13
	10/21/2002	BQL2.5	13
	12/3/2002	BQL2.5	13
	6/24/2003	BQL2.5	13
	12/17/2003	BQL2.5	13
Rank Sum = 78			
Rank Mean = 13			
GWC-13/MW-13	7/30/2002	BQL2.5	13
	9/24/2002	6	26
	10/21/2002	6	27
	12/3/2002	7	28
	6/24/2003 ~	9	29
	12/17/2003 ~	20.5	35
Rank Sum = 158			
Rank Mean = 26.3333			
GWC-14/MW-14	7/30/2002	13	32
	9/24/2002 ~	21	36
	10/21/2002	17	34
	12/3/2002	16	33

	6/24/2003	10	30
	12/17/2003	10	31

Rank Sum = 196
Rank Mean = 32.6667

GWC-5/MW-5	7/30/2002	BQL2.5	13
	9/24/2002	BQL2.5	13
	10/21/2002	BQL2.5	13
	12/3/2002	BQL2.5	13
	6/24/2003	BQL2.5	13
	12/17/2003	BQL2.5	13

Rank Sum = 78
Rank Mean = 13

Calculation Results:

Kruskal-Wallis H Statistic = 20.7057
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 31.1186
95% Confidence comparison value is 9.48773 at 4 degrees of freedom
20.7057 > 9.48773 indicating a significant group difference at 5% significance level
31.1186 > 9.48773 indicating a significant group difference at 5% significance level when adjusted for ties

Individual Well Comparisons at 1.25% Significance Level per Comparison

1.25% Z score is 2.25713
Mean background rank is 13

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	13	0	11.8902
GWC-13/MW-1	26.3333	13.3333	11.8902
GWC-14/MW-1	32.6667	19.6667	11.8902
GWC-5/MW-5	13	0	11.8902

Individual Well Comparisons at Groupwise 5% Significance Level (1.25% Significance Level per comparison)

1.25% Z score is 2.25713
Mean background rank is 13

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	13	0	11.8902
GWC-13/MW-1	26.3333	13.3333	11.8902
GWC-14/MW-1	32.6667	19.6667	11.8902
GWC-5/MW-5	13	0	11.8902

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 = 18; Samples = 36

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	0.4068	6.7122
2	2.5	18.5	16	0.2813	4.5008
3	2.5	17	14.5	0.2415	3.50175
4	2.5	16	13.5	0.2121	2.86335
5	2.5	14	11.5	0.1883	2.16545
6	2.5	10	7.5	0.1678	1.2585
7	2.5	10	7.5	0.1496	1.122
8	2.5	6	3.5	0.1331	0.46585
9	2.5	2.5	0	0.1179	0
10	2.5	2.5	0	0.1036	0
11	2.5	2.5	0	0.09	0
12	2.5	2.5	0	0.077	0
13	2.5	2.5	0	0.0645	0
14	2.5	2.5	0	0.0523	0
15	2.5	2.5	0	0.0404	0
16	2.5	2.5	0	0.0287	0
17	2.5	2.5	0	0.0172	0
18	2.5	2.5	0	0.0057	0
19	2.5	2.5	0		
20	2.5	2.5	0		
21	2.5	2.5	0		
22	2.5	2.5	0		
23	2.5	2.5	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	6	2.5	-3.5		
30	10	2.5	-7.5		
31	10	2.5	-7.5		
32	14	2.5	-11.5		
33	16	2.5	-13.5		
34	17	2.5	-14.5		
35	18.5	2.5	-16		
36	19	2.5	-16.5		

Sum of b values = 22.5899
Sample Standard Deviation = 5.21055
W Statistic = 0.537024
5% Critical value of 0.935 exceeds 0.537024
Evidence of non-normality at 95% level of significance
1% Critical value of 0.912 exceeds 0.537024
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	BQL2.5	14.5
	9/24/2002	BQL2.5	14.5
	10/21/2002 ~	BQL2.5	14.5
	12/3/2002	BQL2.5	14.5
	6/24/2003	BQL2.5	14.5
	12/17/2003	BQL2.5	14.5
Rank Sum = 87			
Rank Mean = 14.5			
GWA-7/MW-7	7/30/2002 ~	BQL2.5	14.5
	9/24/2002	BQL2.5	14.5
	10/21/2002	BQL2.5	14.5
	12/3/2002	BQL2.5	14.5
	6/24/2003	BQL2.5	14.5
	12/17/2003	BQL2.5	14.5
Rank Sum = 87			
Rank Mean = 14.5			

Background Rank Sum = 174
Background Rank Mean = 14.5

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	BQL2.5	14.5
	9/24/2002	BQL2.5	14.5
	10/21/2002	BQL2.5	14.5
	12/3/2002	BQL2.5	14.5
	6/24/2003	BQL2.5	14.5
	12/17/2003	BQL2.5	14.5
Rank Sum = 87			
Rank Mean = 14.5			
GWC-13/MW-13	7/30/2002	BQL2.5	14.5
	9/24/2002	BQL2.5	14.5
	10/21/2002	BQL2.5	14.5
	12/3/2002	BQL2.5	14.5
	6/24/2003 ~	6	29
	12/17/2003 ~	14	32
Rank Sum = 119			
Rank Mean = 19.8333			
GWC-14/MW-14	7/30/2002	10	30
	9/24/2002 ~	18.5	35
	10/21/2002	16	33
	12/3/2002	19	36

	6/24/2003	10	31
	12/17/2003	17	34

Rank Sum = 199
Rank Mean = 33.1667

GWC-5/MW-5	7/30/2002	BQL2.5	14.5
	9/24/2002	BQL2.5	14.5
	10/21/2002	BQL2.5	14.5
	12/3/2002	BQL2.5	14.5
	6/24/2003	BQL2.5	14.5
	12/17/2003	BQL2.5	14.5

Rank Sum = 87
Rank Mean = 14.5

Calculation Results:

Kruskal-Wallis H Statistic = 15.1832
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 28.6621
95% Confidence comparison value is 9.48773 at 4 degrees of freedom
15.1832 > 9.48773 indicating a significant group difference at 5% significance level
28.6621 > 9.48773 indicating a significant group difference at 5% significance level when adjusted for ties

Individual Well Comparisons at 1.25% Significance Level per Comparison

1.25% Z score is 2.25713
Mean background rank is 14.5

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	14.5	0	11.8902
GWC-13/MW-13	19.8333	5.33333	11.8902
GWC-14/MW-14	33.1667	18.6667	11.8902
GWC-5/MW-5	14.5	0	11.8902

Individual Well Comparisons at Groupwise 5% Significance Level (1.25% Significance Level per comparison)

1.25% Z score is 2.25713
Mean background rank is 14.5

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	14.5	0	11.8902
GWC-13/MW-13	19.8333	5.33333	11.8902
GWC-14/MW-14	33.1667	18.6667	11.8902
GWC-5/MW-5	14.5	0	11.8902

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 = 18; Samples = 36

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	0.4068	158.042
2	2.5	381	378.5	0.2813	106.472
3	2.5	348	345.5	0.2415	83.4382
4	2.5	300	297.5	0.2121	63.0998
5	2.5	221	218.5	0.1883	41.1435
6	2.5	210	207.5	0.1678	34.8185
7	2.5	184.5	182	0.1496	27.2272
8	2.5	99.5	97	0.1331	12.9107
9	2.5	47.5	45	0.1179	5.3055
10	2.5	44	41.5	0.1036	4.2994
11	2.5	43	40.5	0.09	3.645
12	2.5	34	31.5	0.077	2.4255
13	2.5	32	29.5	0.0645	1.90275
14	2.5	31	28.5	0.0523	1.49055
15	2.5	27	24.5	0.0404	0.9898
16	2.5	23	20.5	0.0287	0.58835
17	2.5	5	2.5	0.0172	0.043
18	2.5	2.5	0	0.0057	0
19	2.5	2.5	0		
20	5	2.5	-2.5		
21	23	2.5	-20.5		
22	27	2.5	-24.5		
23	31	2.5	-28.5		
24	32	2.5	-29.5		
25	34	2.5	-31.5		
26	43	2.5	-40.5		
27	44	2.5	-41.5		
28	47.5	2.5	-45		
29	99.5	2.5	-97		
30	184.5	2.5	-182		
31	210	2.5	-207.5		
32	221	2.5	-218.5		
33	300	2.5	-297.5		
34	348	2.5	-345.5		
35	381	2.5	-378.5		
36	391	2.5	-388.5		

Sum of b values = 547.842
Sample Standard Deviation = 117.993
W Statistic = 0.615931
5% Critical value of 0.935 exceeds 0.615931
Evidence of non-normality at 95% level of significance
1% Critical value of 0.912 exceeds 0.615931
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	BQL2.5	10
	9/24/2002	BQL2.5	10
	10/21/2002 ~	BQL2.5	10
	12/3/2002	BQL2.5	10
	6/24/2003	BQL2.5	10
	12/17/2003	BQL2.5	10
Rank Sum = 60			
Rank Mean = 10			
GWA-7/MW-7	7/30/2002 ~	184.5	30
	9/24/2002	32	24
	10/21/2002	221	32
	12/3/2002	210	31
	6/24/2003	23	21
	12/17/2003	34	25
Rank Sum = 163			
Rank Mean = 27.1667			

Background Rank Sum = 223
Background Rank Mean = 18.5833

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	BQL2.5	10
	9/24/2002	BQL2.5	10
	10/21/2002	BQL2.5	10
	12/3/2002	BQL2.5	10
	6/24/2003	BQL2.5	10
	12/17/2003	BQL2.5	10
Rank Sum = 60			
Rank Mean = 10			
GWC-13/MW-13	7/30/2002	300	33
	9/24/2002	381	35
	10/21/2002	348	34
	12/3/2002	391	36
	6/24/2003 ~	44	27
	12/17/2003 ~	99.5	29
Rank Sum = 194			
Rank Mean = 32.3333			
GWC-14/MW-14	7/30/2002	43	26
	9/24/2002 ~	47.5	28
	10/21/2002	31	23
	12/3/2002	27	22

	6/24/2003	5	20
	12/17/2003	BQL2.5	10

Rank Sum = 129
Rank Mean = 21.5

GWC-5/MW-5	7/30/2002	BQL2.5	10
	9/24/2002	BQL2.5	10
	10/21/2002	BQL2.5	10
	12/3/2002	BQL2.5	10
	6/24/2003	BQL2.5	10
	12/17/2003	BQL2.5	10

Rank Sum = 60
Rank Mean = 10

Calculation Results:

Kruskal-Wallis H Statistic = 18.6419
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 21.8473
95% Confidence comparison value is 9.48773 at 4 degrees of freedom
18.6419 > 9.48773 indicating a significant group difference at 5% significance level
21.8473 > 9.48773 indicating a significant group difference at 5% significance level when adjusted for ties

Individual Well Comparisons at 1.25% Significance Level per Comparison

1.25% Z score is 2.25713
Mean background rank is 18.5833

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	10	-8.58333	11.8902
GWC-13/MW-13	32.3333	13.75	11.8902
GWC-14/MW-14	21.5	2.91667	11.8902
GWC-5/MW-5	10	-8.58333	11.8902

Individual Well Comparisons at Groupwise 5% Significance Level (1.25% Significance Level per comparison)

1.25% Z score is 2.25713
Mean background rank is 18.5833

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	10	-8.58333	11.8902
GWC-13/MW-13	32.3333	13.75	11.8902
GWC-14/MW-14	21.5	2.91667	11.8902
GWC-5/MW-5	10	-8.58333	11.8902

Shapiro-Wilks Test of Normality

Parameter: Xylenes (total)

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
K = 17; Samples = 35

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	0.4096	7.5776
2	2.5	10	7.5	0.2834	2.1255
3	2.5	10	7.5	0.2427	1.82025
4	2.5	5	2.5	0.2127	0.53175
5	2.5	5	2.5	0.1883	0.47075
6	2.5	5	2.5	0.1673	0.41825
7	3.75	5	1.25	0.1487	0.185875
8	3.75	5	1.25	0.1317	0.164625
9	3.75	5	1.25	0.116	0.145
10	3.75	5	1.25	0.1013	0.126625
11	3.75	5	1.25	0.0873	0.109125
12	3.75	5	1.25	0.0739	0.092375
13	3.75	5	1.25	0.061	0.07625
14	3.75	5	1.25	0.0484	0.0605
15	3.75	5	1.25	0.0361	0.045125
16	3.75	5	1.25	0.0239	0.029875
17	3.75	5	1.25	0.0119	0.014875
18	5	5	0		
19	5	3.75	-1.25		
20	5	3.75	-1.25		
21	5	3.75	-1.25		
22	5	3.75	-1.25		
23	5	3.75	-1.25		
24	5	3.75	-1.25		
25	5	3.75	-1.25		
26	5	3.75	-1.25		
27	5	3.75	-1.25		
28	5	3.75	-1.25		
29	5	3.75	-1.25		
30	5	2.5	-2.5		
31	5	2.5	-2.5		
32	5	2.5	-2.5		
33	10	2.5	-7.5		
34	10	2.5	-7.5		
35	21	2.5	-18.5		

Sum of b values = 13.9944
Sample Standard Deviation = 3.25609
W Statistic = 0.543294
5% Critical value of 0.934 exceeds 0.543294
Evidence of non-normality at 95% level of significance
1% Critical value of 0.91 exceeds 0.543294
Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: Xylenes (total)

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	BQL5	16.5
	9/24/2002	BQL5	16.5
	10/21/2002 a	BQL5	16.5
	12/3/2002	BQL2.5	16.5
	6/24/2003 ~	BQL3.75	16.5
	12/17/2003 ~	BQL3.75	16.5
Rank Sum = 99			
Rank Mean = 16.5			
GWA-7/MW-7	7/30/2002 ~	BQL5	16.5
	9/24/2002	BQL5	16.5
	10/21/2002	BQL5	16.5
	12/3/2002	BQL2.5	16.5
	6/24/2003 ~	BQL3.75	16.5
	12/17/2003 ~	BQL3.75	16.5
Rank Sum = 99			
Rank Mean = 16.5			

Background Rank Sum = 198
Background Rank Mean = 16.5

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	BQL5	16.5
	9/24/2002	BQL5	16.5
	10/21/2002	BQL5	16.5
	12/3/2002	BQL2.5	16.5
	6/24/2003 ~	BQL3.75	16.5
	12/17/2003 ~	BQL3.75	16.5
Rank Sum = 99			
Rank Mean = 16.5			
GWC-13/MW-13	7/30/2002	BQL5	16.5
	9/24/2002	BQL2.5	16.5
	10/21/2002	BQL5	16.5
	6/24/2003 ~	BQL3.75	16.5
	12/17/2003 ~	BQL3.75	16.5
Rank Sum = 82.5			
Rank Mean = 16.5			
GWC-14/MW-14	7/30/2002	BQL5	16.5
	9/24/2002 ~	10	33
	10/21/2002	BQL5	16.5
	12/3/2002	21	35
	6/24/2003 ~	BQL3.75	16.5

	12/17/2003 ~	10	34

Rank Sum = 151.5
Rank Mean = 25.25

GWC-5/MW-5	7/30/2002	BQL5	16.5
	9/24/2002	BQL2.5	16.5
	10/21/2002	BQL5	16.5
	12/3/2002	BQL2.5	16.5
	6/24/2003 ~	BQL3.75	16.5
	12/17/2003 ~	BQL3.75	16.5

Rank Sum = 99
Rank Mean = 16.5

Calculation Results:

Kruskal-Wallis H Statistic = 3.625
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 15.3697
95% Confidence comparison value is 9.48773 at 4 degrees of freedom
3.625 < 9.48773 indicating no significant group difference at 5% significance level
15.3697 > 9.48773 indicating a significant group difference at 5% significance level when adjusted for ties

Individual Well Comparisons at 1.25% Significance Level per Comparison

1.25% Z score is 2.25713
Mean background rank is 16.5

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	16.5	0	11.5643
GWC-13/MW-1	316.5	0	12.3112
GWC-14/MW-1	425.25	8.75	11.5643
GWC-5/MW-5	16.5	0	11.5643

Individual Well Comparisons at Groupwise 5% Significance Level (1.25% Significance Level per comparison)

1.25% Z score is 2.25713
Mean background rank is 16.5

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	16.5	0	11.5643
GWC-13/MW-1	316.5	0	12.3112
GWC-14/MW-1	425.25	8.75	11.5643
GWC-5/MW-5	16.5	0	11.5643

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 = 18; Samples = 36

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	0.4068	0.0748512
2	0.005	0.142	0.137	0.2813	0.0385381
3	0.01	0.106	0.096	0.2415	0.023184
4	0.01	0.0935	0.0835	0.2121	0.0177104
5	0.01	0.085	0.075	0.1883	0.0141225
6	0.01	0.083	0.073	0.1678	0.0122494
7	0.01	0.082	0.072	0.1496	0.0107712
8	0.01	0.077	0.067	0.1331	0.0089177
9	0.01	0.068	0.058	0.1179	0.0068382
10	0.01	0.064	0.054	0.1036	0.0055944
11	0.01	0.051	0.041	0.09	0.00369
12	0.01	0.036	0.026	0.077	0.002002
13	0.01	0.0325	0.0225	0.0645	0.00145125
14	0.01	0.0295	0.0195	0.0523	0.00101985
15	0.01	0.02	0.01	0.0404	0.000404
16	0.01	0.018	0.008	0.0287	0.0002296
17	0.01	0.015	0.005	0.0172	8.6e-005
18	0.01	0.01	0	0.0057	0
19	0.01	0.01	0		
20	0.015	0.01	-0.005		
21	0.018	0.01	-0.008		
22	0.02	0.01	-0.01		
23	0.0295	0.01	-0.0195		
24	0.0325	0.01	-0.0225		
25	0.036	0.01	-0.026		
26	0.051	0.01	-0.041		
27	0.064	0.01	-0.054		
28	0.068	0.01	-0.058		
29	0.077	0.01	-0.067		
30	0.082	0.01	-0.072		
31	0.083	0.01	-0.073		
32	0.085	0.01	-0.075		
33	0.0935	0.01	-0.0835		
34	0.106	0.01	-0.096		
35	0.142	0.005	-0.137		
36	0.189	0.005	-0.184		

Sum of b values = 0.22166
Sample Standard Deviation = 0.0439553
W Statistic = 0.726579
5% Critical value of 0.935 exceeds 0.726579
Evidence of non-normality at 95% level of significance
1% Critical value of 0.912 exceeds 0.726579
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	BQL0.01	10
	9/24/2002	BQL0.01	10
	10/21/2002 ~	BQL0.01	10
	12/3/2002	BQL0.005	10
	6/24/2003	BQL0.01	10
	12/17/2003	BQL0.01	10
Rank Sum = 60			
Rank Mean = 10			
GWA-7/MW-7	7/30/2002 ~	BQL0.01	10
	9/24/2002	BQL0.01	10
	10/21/2002	BQL0.01	10
	12/3/2002	0.015	20
	6/24/2003	0.036	25
	12/17/2003	BQL0.01	10
Rank Sum = 85			
Rank Mean = 14.1667			

Background Rank Sum = 145
Background Rank Mean = 12.0833

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	BQL0.01	10
	9/24/2002	BQL0.01	10
	10/21/2002	BQL0.01	10
	12/3/2002	BQL0.005	10
	6/24/2003	BQL0.01	10
	12/17/2003	BQL0.01	10
Rank Sum = 60			
Rank Mean = 10			
GWC-13/MW-13	7/30/2002	0.077	29
	9/24/2002	0.085	32
	10/21/2002	0.083	31
	12/3/2002	0.082	30
	6/24/2003 ~	0.0295	23
	12/17/2003 ~	0.0325	24
Rank Sum = 169			
Rank Mean = 28.1667			
GWC-14/MW-14	7/30/2002	0.068	28
	9/24/2002 ~	0.0935	33
	10/21/2002	0.064	27
	12/3/2002	0.106	34

	6/24/2003	0.051	26
	12/17/2003	0.189	36

Rank Sum = 184
Rank Mean = 30.6667

GWC-5/MW-5	7/30/2002	BQL0.01	10
	9/24/2002	0.02	22
	10/21/2002	BQL0.01	10
	12/3/2002	0.018	21
	6/24/2003	BQL0.01	10
	12/17/2003	0.142	35

Rank Sum = 108
Rank Mean = 18

Calculation Results:

Kruskal-Wallis H Statistic = 21.4227
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 25.1062
95% Confidence comparison value is 9.48773 at 4 degrees of freedom
21.4227 > 9.48773 indicating a significant group difference at 5% significance level
25.1062 > 9.48773 indicating a significant group difference at 5% significance level when adjusted for ties

Individual Well Comparisons at 1.25% Significance Level per Comparison

1.25% Z score is 2.25713
Mean background rank is 12.0833

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	10	-2.08333	11.8902
GWC-13/MW-1	328.1667	16.0833	11.8902
GWC-14/MW-1	430.6667	18.5833	11.8902
GWC-5/MW-5	18	5.91667	11.8902

Individual Well Comparisons at Groupwise 5% Significance Level (1.25% Significance Level per comparison)

1.25% Z score is 2.25713
Mean background rank is 12.0833

Well	Mean Rank	Dif from Bkg	Critical Value
GWB-6/MW-6	10	-2.08333	11.8902
GWC-13/MW-1	328.1667	16.0833	11.8902
GWC-14/MW-1	430.6667	18.5833	11.8902
GWC-5/MW-5	18	5.91667	11.8902

Shapiro-Wilks Test of Normality

Parameter: Beryllium

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
K = 18; Samples = 36

i	x(i)	x(n-i+1)	x(n-1+1)-x(i)	a(n-i+1)	b(i)
1	0.0015	0.004	0.0025	0.4068	0.001017
2	0.0015	0.002	0.0005	0.2813	0.00014065
3	0.0015	0.002	0.0005	0.2415	0.00012075
4	0.0015	0.002	0.0005	0.2121	0.00010605
5	0.0015	0.002	0.0005	0.1883	9.415e-005
6	0.0015	0.002	0.0005	0.1678	8.39e-005
7	0.002	0.002	0	0.1496	0
8	0.002	0.002	0	0.1331	0
9	0.002	0.002	0	0.1179	0
10	0.002	0.002	0	0.1036	0
11	0.002	0.002	0	0.09	0
12	0.002	0.002	0	0.077	0
13	0.002	0.002	0	0.0645	0
14	0.002	0.002	0	0.0523	0
15	0.002	0.002	0	0.0404	0
16	0.002	0.002	0	0.0287	0
17	0.002	0.002	0	0.0172	0
18	0.002	0.002	0	0.0057	0
19	0.002	0.002	0		
20	0.002	0.002	0		
21	0.002	0.002	0		
22	0.002	0.002	0		
23	0.002	0.002	0		
24	0.002	0.002	0		
25	0.002	0.002	0		
26	0.002	0.002	0		
27	0.002	0.002	0		
28	0.002	0.002	0		
29	0.002	0.002	0		
30	0.002	0.002	0		
31	0.002	0.0015	-0.0005		
32	0.002	0.0015	-0.0005		
33	0.002	0.0015	-0.0005		
34	0.002	0.0015	-0.0005		
35	0.002	0.0015	-0.0005		
36	0.004	0.0015	-0.0025		

Sum of b values = 0.0015625
Sample Standard Deviation = 0.00039541
W Statistic = 0.446145
5% Critical value of 0.935 exceeds 0.446145
Evidence of non-normality at 95% level of significance
1% Critical value of 0.912 exceeds 0.446145
Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: Beryllium

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	BQL0.002	18
	9/24/2002	BQL0.002	18
	10/21/2002 ~	BQL0.002	18
	12/3/2002	BQL0.0015	18
	6/24/2003	BQL0.002	18
	12/17/2003	BQL0.002	18
Rank Sum = 108			
Rank Mean = 18			
GWA-7/MW-7	7/30/2002 ~	BQL0.002	18
	9/24/2002	BQL0.002	18
	10/21/2002	BQL0.002	18
	12/3/2002	BQL0.0015	18
	6/24/2003	BQL0.002	18
	12/17/2003	BQL0.002	18
Rank Sum = 108			
Rank Mean = 18			

Background Rank Sum = 216
Background Rank Mean = 18

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	BQL0.002	18
	9/24/2002	BQL0.002	18
	10/21/2002	BQL0.002	18
	12/3/2002	BQL0.0015	18
	6/24/2003	BQL0.002	18
	12/17/2003	BQL0.002	18
Rank Sum = 108			
Rank Mean = 18			
GWC-13/MW-13	7/30/2002	BQL0.002	18
	9/24/2002	BQL0.002	18
	10/21/2002	BQL0.002	18
	12/3/2002	BQL0.0015	18
	6/24/2003 ~	BQL0.002	18
	12/17/2003 ~	BQL0.002	18
Rank Sum = 108			
Rank Mean = 18			
GWC-14/MW-14	7/30/2002	BQL0.002	18
	9/24/2002 ~	BQL0.002	18
	10/21/2002	BQL0.002	18
	12/3/2002	BQL0.0015	18

	6/24/2003	BQL0.002	18
	12/17/2003	0.004	36

Rank Sum = 126
Rank Mean = 21

GWC-5/MW-5	7/30/2002	BQL0.002	18
	9/24/2002	BQL0.002	18
	10/21/2002	BQL0.002	18
	12/3/2002	BQL0.0015	18
	6/24/2003	BQL0.002	18
	12/17/2003	BQL0.002	18

Rank Sum = 108
Rank Mean = 18

Calculation Results:

Kruskal-Wallis H Statistic = 0.405405
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 5
95% Confidence comparison value is 9.48773 at 4 degrees of freedom
0.405405 < 9.48773 indicating no significant group difference at 5% significance level
5 < 9.48773 indicating no significant group difference at 5% significance level when adjusted for ties

Shapiro-Wilks Test of Normality
Parameter: Cadmium
All Wells
Normality Test of Parameter Concentrations

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
K = 18; Samples = 36

i	x(i)	x(n-i+1)	x(n-1+1)-x(i)	a(n-i+1)	b(i)
1	0.0025	0.011	0.0085	0.4068	0.0034578
2	0.0025	0.0025	0	0.2813	0
3	0.0025	0.0025	0	0.2415	0
4	0.0025	0.0025	0	0.2121	0
5	0.0025	0.0025	0	0.1883	0
6	0.0025	0.0025	0	0.1678	0
7	0.0025	0.0025	0	0.1496	0
8	0.0025	0.0025	0	0.1331	0
9	0.0025	0.0025	0	0.1179	0
10	0.0025	0.0025	0	0.1036	0
11	0.0025	0.0025	0	0.09	0
12	0.0025	0.0025	0	0.077	0
13	0.0025	0.0025	0	0.0645	0
14	0.0025	0.0025	0	0.0523	0
15	0.0025	0.0025	0	0.0404	0
16	0.0025	0.0025	0	0.0287	0
17	0.0025	0.0025	0	0.0172	0
18	0.0025	0.0025	0	0.0057	0
19	0.0025	0.0025	0		
20	0.0025	0.0025	0		
21	0.0025	0.0025	0		
22	0.0025	0.0025	0		
23	0.0025	0.0025	0		
24	0.0025	0.0025	0		
25	0.0025	0.0025	0		
26	0.0025	0.0025	0		
27	0.0025	0.0025	0		
28	0.0025	0.0025	0		
29	0.0025	0.0025	0		
30	0.0025	0.0025	0		
31	0.0025	0.0025	0		
32	0.0025	0.0025	0		
33	0.0025	0.0025	0		
34	0.0025	0.0025	0		
35	0.0025	0.0025	0		
36	0.011	0.0025	-0.0085		

Sum of b values = 0.0034578
Sample Standard Deviation = 0.00141667
W Statistic = 0.170214
5% Critical value of 0.935 exceeds 0.170214
Evidence of non-normality at 95% level of significance
1% Critical value of 0.912 exceeds 0.170214
Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: Cadmium

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	BQL0.0025	18
	9/24/2002	BQL0.0025	18
	10/21/2002 ~	BQL0.0025	18
	12/3/2002	BQL0.0025	18
	6/24/2003	BQL0.0025	18
	12/17/2003	BQL0.0025	18
Rank Sum = 108			
Rank Mean = 18			
GWA-7/MW-7	7/30/2002 ~	BQL0.0025	18
	9/24/2002	BQL0.0025	18
	10/21/2002	BQL0.0025	18
	12/3/2002	BQL0.0025	18
	6/24/2003	BQL0.0025	18
	12/17/2003	BQL0.0025	18
Rank Sum = 108			
Rank Mean = 18			

Background Rank Sum = 216
Background Rank Mean = 18

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	BQL0.0025	18
	9/24/2002	BQL0.0025	18
	10/21/2002	BQL0.0025	18
	12/3/2002	BQL0.0025	18
	6/24/2003	BQL0.0025	18
	12/17/2003	BQL0.0025	18
Rank Sum = 108			
Rank Mean = 18			
GWC-13/MW-13	7/30/2002	BQL0.0025	18
	9/24/2002	BQL0.0025	18
	10/21/2002	BQL0.0025	18
	12/3/2002	BQL0.0025	18
	6/24/2003 ~	BQL0.0025	18
	12/17/2003 ~	BQL0.0025	18
Rank Sum = 108			
Rank Mean = 18			
GWC-14/MW-14	7/30/2002	BQL0.0025	18
	9/24/2002 ~	BQL0.0025	18
	10/21/2002	BQL0.0025	18
	12/3/2002	BQL0.0025	18

	6/24/2003	BQL0.0025	18
	12/17/2003	0.011	36

Rank Sum = 126
Rank Mean = 21

GWC-5/MW-5	7/30/2002	BQL0.0025	18
	9/24/2002	BQL0.0025	18
	10/21/2002	BQL0.0025	18
	12/3/2002	BQL0.0025	18
	6/24/2003	BQL0.0025	18
	12/17/2003	BQL0.0025	18

Rank Sum = 108
Rank Mean = 18

Calculation Results:

Kruskal-Wallis H Statistic = 0.405405
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 5
95% Confidence comparison value is 9.48773 at 4 degrees of freedom
0.405405 < 9.48773 indicating no significant group difference at 5% significance level
5 < 9.48773 indicating no significant group difference at 5% significance level when adjusted for ties

Shapiro-Wilks Test of Normality

Parameter: Chromium

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
K = 18; Samples = 36

i	x(i)	x(n-i+1)	x(n-1+1)-x(i)	a(n-i+1)	b(i)
1	0.005	0.091	0.086	0.4068	0.0349848
2	0.005	0.028	0.023	0.2813	0.0064699
3	0.005	0.01	0.005	0.2415	0.0012075
4	0.005	0.01	0.005	0.2121	0.0010605
5	0.005	0.01	0.005	0.1883	0.0009415
6	0.005	0.01	0.005	0.1678	0.000839
7	0.01	0.01	0	0.1496	0
8	0.01	0.01	0	0.1331	0
9	0.01	0.01	0	0.1179	0
10	0.01	0.01	0	0.1036	0
11	0.01	0.01	0	0.09	0
12	0.01	0.01	0	0.077	0
13	0.01	0.01	0	0.0645	0
14	0.01	0.01	0	0.0523	0
15	0.01	0.01	0	0.0404	0
16	0.01	0.01	0	0.0287	0
17	0.01	0.01	0	0.0172	0
18	0.01	0.01	0	0.0057	0
19	0.01	0.01	0		
20	0.01	0.01	0		
21	0.01	0.01	0		
22	0.01	0.01	0		
23	0.01	0.01	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	0.005	-0.005		
32	0.01	0.005	-0.005		
33	0.01	0.005	-0.005		
34	0.01	0.005	-0.005		
35	0.028	0.005	-0.023		
36	0.091	0.005	-0.086		

Sum of b values = 0.0455032
Sample Standard Deviation = 0.0140436
W Statistic = 0.299959
5% Critical value of 0.935 exceeds 0.299959
Evidence of non-normality at 95% level of significance
1% Critical value of 0.912 exceeds 0.299959
Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: Chromium

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	BQL0.01	17.5
	9/24/2002	BQL0.01	17.5
	10/21/2002 ~	BQL0.01	17.5
	12/3/2002	BQL0.005	17.5
	6/24/2003	BQL0.01	17.5
	12/17/2003	BQL0.01	17.5
Rank Sum = 105			
Rank Mean = 17.5			
GWA-7/MW-7	7/30/2002 ~	BQL0.01	17.5
	9/24/2002	BQL0.01	17.5
	10/21/2002	BQL0.01	17.5
	12/3/2002	BQL0.005	17.5
	6/24/2003	BQL0.01	17.5
	12/17/2003	BQL0.01	17.5
Rank Sum = 105			
Rank Mean = 17.5			

Background Rank Sum = 210
Background Rank Mean = 17.5

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	BQL0.01	17.5
	9/24/2002	BQL0.01	17.5
	10/21/2002	BQL0.01	17.5
	12/3/2002	BQL0.005	17.5
	6/24/2003	BQL0.01	17.5
	12/17/2003	BQL0.01	17.5
Rank Sum = 105			
Rank Mean = 17.5			
GWC-13/MW-13	7/30/2002	BQL0.01	17.5
	9/24/2002	BQL0.01	17.5
	10/21/2002	BQL0.01	17.5
	12/3/2002	BQL0.005	17.5
	6/24/2003 ~	BQL0.01	17.5
	12/17/2003 ~	BQL0.01	17.5
Rank Sum = 105			
Rank Mean = 17.5			
GWC-14/MW-14	7/30/2002	BQL0.01	17.5
	9/24/2002 ~	BQL0.01	17.5
	10/21/2002	BQL0.01	17.5
	12/3/2002	BQL0.005	17.5

	6/24/2003	BQL0.01	17.5
	12/17/2003	0.091	36

Rank Sum = 123.5
Rank Mean = 20.5833

GWC-5/MW-5	7/30/2002	BQL0.01	17.5
	9/24/2002	BQL0.01	17.5
	10/21/2002	BQL0.01	17.5
	12/3/2002	BQL0.005	17.5
	6/24/2003	BQL0.01	17.5
	12/17/2003	0.028	35

Rank Sum = 122.5
Rank Mean = 20.4167

Calculation Results:

Kruskal-Wallis H Statistic = 0.649399
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 4.11905
95% Confidence comparison value is 9.48773 at 4 degrees of freedom
0.649399 < 9.48773 indicating no significant group difference at 5% significance level
4.11905 < 9.48773 indicating no significant group difference at 5% significance level when adjusted for ties

Shapiro-Wilks Test of Normality

Parameter: Copper

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
K = 18; Samples = 36

i	x(i)	x(n-i+1)	x(n-1+1)-x(i)	a(n-i+1)	b(i)
1	0.01	0.035	0.025	0.4068	0.01017
2	0.01	0.026	0.016	0.2813	0.0045008
3	0.01	0.025	0.015	0.2415	0.0036225
4	0.01	0.0125	0.0025	0.2121	0.00053025
5	0.01	0.0125	0.0025	0.1883	0.00047075
6	0.01	0.0125	0.0025	0.1678	0.0004195
7	0.01	0.0125	0.0025	0.1496	0.000374
8	0.01	0.0125	0.0025	0.1331	0.00033275
9	0.01	0.0125	0.0025	0.1179	0.00029475
10	0.01	0.01	0	0.1036	0
11	0.01	0.01	0	0.09	0
12	0.01	0.01	0	0.077	0
13	0.01	0.01	0	0.0645	0
14	0.01	0.01	0	0.0523	0
15	0.01	0.01	0	0.0404	0
16	0.01	0.01	0	0.0287	0
17	0.01	0.01	0	0.0172	0
18	0.01	0.01	0	0.0057	0
19	0.01	0.01	0		
20	0.01	0.01	0		
21	0.01	0.01	0		
22	0.01	0.01	0		
23	0.01	0.01	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	0.0125	0.01	-0.0025		
29	0.0125	0.01	-0.0025		
30	0.0125	0.01	-0.0025		
31	0.0125	0.01	-0.0025		
32	0.0125	0.01	-0.0025		
33	0.0125	0.01	-0.0025		
34	0.025	0.01	-0.015		
35	0.026	0.01	-0.016		
36	0.035	0.01	-0.025		

Sum of b values = 0.0207153
Sample Standard Deviation = 0.0053545
W Statistic = 0.427639
5% Critical value of 0.935 exceeds 0.427639
Evidence of non-normality at 95% level of significance
1% Critical value of 0.912 exceeds 0.427639
Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: Copper

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	BQL0.01	17
	9/24/2002	BQL0.01	17
	10/21/2002 ~	BQL0.01	17
	12/3/2002	BQL0.0125	17
	6/24/2003	BQL0.01	17
	12/17/2003	BQL0.01	17
Rank Sum = 102			
Rank Mean = 17			
GWA-7/MW-7	7/30/2002 ~	BQL0.01	17
	9/24/2002	BQL0.01	17
	10/21/2002	BQL0.01	17
	12/3/2002	BQL0.0125	17
	6/24/2003	0.035	36
	12/17/2003	BQL0.01	17
Rank Sum = 121			
Rank Mean = 20.1667			

Background Rank Sum = 223
Background Rank Mean = 18.5833

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	BQL0.01	17
	9/24/2002	BQL0.01	17
	10/21/2002	BQL0.01	17
	12/3/2002	BQL0.0125	17
	6/24/2003	BQL0.01	17
	12/17/2003	BQL0.01	17
Rank Sum = 102			
Rank Mean = 17			
GWC-13/MW-13	7/30/2002	BQL0.01	17
	9/24/2002	BQL0.01	17
	10/21/2002	BQL0.01	17
	12/3/2002	BQL0.0125	17
	6/24/2003 ~	BQL0.01	17
	12/17/2003 ~	BQL0.01	17
Rank Sum = 102			
Rank Mean = 17			
GWC-14/MW-14	7/30/2002	BQL0.01	17
	9/24/2002 ~	BQL0.01	17
	10/21/2002	BQL0.01	17
	12/3/2002	BQL0.0125	17

	6/24/2003	BQL0.01	17
	12/17/2003	0.026	35

Rank Sum = 120
Rank Mean = 20

GWC-5/MW-5	7/30/2002	BQL0.01	17
	9/24/2002	BQL0.01	17
	10/21/2002	BQL0.01	17
	12/3/2002	BQL0.0125	17
	6/24/2003	BQL0.01	17
	12/17/2003	0.025	34

Rank Sum = 119
Rank Mean = 19.8333

Calculation Results:

Kruskal-Wallis H Statistic = 0.461712
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 2.00868
95% Confidence comparison value is 9.48773 at 4 degrees of freedom
0.461712 < 9.48773 indicating no significant group difference at 5% significance level
2.00868 < 9.48773 indicating no significant group difference at 5% significance level when adjusted for ties

Shapiro-Wilks Test of Normality

Parameter: Lead

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
K = 18; Samples = 36

i	x(i)	x(n-i+1)	x(n-1+1)-x(i)	a(n-i+1)	b(i)
1	0.005	0.015	0.01	0.4068	0.004068
2	0.005	0.0075	0.0025	0.2813	0.00070325
3	0.005	0.0075	0.0025	0.2415	0.00060375
4	0.005	0.0075	0.0025	0.2121	0.00053025
5	0.005	0.0075	0.0025	0.1883	0.00047075
6	0.005	0.0075	0.0025	0.1678	0.0004195
7	0.005	0.0075	0.0025	0.1496	0.000374
8	0.005	0.005	0	0.1331	0
9	0.005	0.005	0	0.1179	0
10	0.005	0.005	0	0.1036	0
11	0.005	0.005	0	0.09	0
12	0.005	0.005	0	0.077	0
13	0.005	0.005	0	0.0645	0
14	0.005	0.005	0	0.0523	0
15	0.005	0.005	0	0.0404	0
16	0.005	0.005	0	0.0287	0
17	0.005	0.005	0	0.0172	0
18	0.005	0.005	0	0.0057	0
19	0.005	0.005	0		
20	0.005	0.005	0		
21	0.005	0.005	0		
22	0.005	0.005	0		
23	0.005	0.005	0		
24	0.005	0.005	0		
25	0.005	0.005	0		
26	0.005	0.005	0		
27	0.005	0.005	0		
28	0.005	0.005	0		
29	0.005	0.005	0		
30	0.0075	0.005	-0.0025		
31	0.0075	0.005	-0.0025		
32	0.0075	0.005	-0.0025		
33	0.0075	0.005	-0.0025		
34	0.0075	0.005	-0.0025		
35	0.0075	0.005	-0.0025		
36	0.015	0.005	-0.01		

Sum of b values = 0.0071695
Sample Standard Deviation = 0.00185271
W Statistic = 0.427853
5% Critical value of 0.935 exceeds 0.427853
Evidence of non-normality at 95% level of significance
1% Critical value of 0.912 exceeds 0.427853
Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: Lead

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	BQL0.005	18
	9/24/2002	BQL0.005	18
	10/21/2002 ~	BQL0.005	18
	12/3/2002	BQL0.0075	18
	6/24/2003	BQL0.005	18
	12/17/2003	BQL0.005	18
Rank Sum = 108			
Rank Mean = 18			
GWA-7/MW-7	7/30/2002 ~	BQL0.005	18
	9/24/2002	BQL0.005	18
	10/21/2002	BQL0.005	18
	12/3/2002	BQL0.0075	18
	6/24/2003	BQL0.005	18
	12/17/2003	BQL0.005	18
Rank Sum = 108			
Rank Mean = 18			

Background Rank Sum = 216
Background Rank Mean = 18

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	BQL0.005	18
	9/24/2002	BQL0.005	18
	10/21/2002	BQL0.005	18
	12/3/2002	BQL0.0075	18
	6/24/2003	BQL0.005	18
	12/17/2003	BQL0.005	18
Rank Sum = 108			
Rank Mean = 18			
GWC-13/MW-13	7/30/2002	BQL0.005	18
	9/24/2002	BQL0.005	18
	10/21/2002	BQL0.005	18
	12/3/2002	BQL0.0075	18
	6/24/2003 ~	BQL0.005	18
	12/17/2003 ~	BQL0.005	18
Rank Sum = 108			
Rank Mean = 18			
GWC-14/MW-14	7/30/2002	BQL0.005	18
	9/24/2002 ~	BQL0.005	18
	10/21/2002	BQL0.005	18
	12/3/2002	BQL0.0075	18

	6/24/2003	BQL0.005	18
	12/17/2003	0.015	36

Rank Sum = 126
Rank Mean = 21

GWC-5/MW-5	7/30/2002	BQL0.005	18
	9/24/2002	BQL0.005	18
	10/21/2002	BQL0.005	18
	12/3/2002	BQL0.0075	18
	6/24/2003	BQL0.005	18
	12/17/2003	BQL0.005	18

Rank Sum = 108
Rank Mean = 18

Calculation Results:

Kruskal-Wallis H Statistic = 0.405405
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 5
95% Confidence comparison value is 9.48773 at 4 degrees of freedom
0.405405 < 9.48773 indicating no significant group difference at 5% significance level
5 < 9.48773 indicating no significant group difference at 5% significance level when adjusted for ties

Shapiro-Wilks Test of Normality

Parameter: Nickel

All Wells

Normality Test of Parameter Concentrations

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
K = 18; Samples = 36

i	x(i)	x(n-i+1)	x(n-1+1)-x(i)	a(n-i+1)	b(i)
1	0.01	0.034	0.024	0.4068	0.0097632
2	0.01	0.02	0.01	0.2813	0.002813
3	0.01	0.02	0.01	0.2415	0.002415
4	0.01	0.02	0.01	0.2121	0.002121
5	0.01	0.02	0.01	0.1883	0.001883
6	0.01	0.02	0.01	0.1678	0.001678
7	0.01	0.02	0.01	0.1496	0.001496
8	0.01	0.01	0	0.1331	0
9	0.01	0.01	0	0.1179	0
10	0.01	0.01	0	0.1036	0
11	0.01	0.01	0	0.09	0
12	0.01	0.01	0	0.077	0
13	0.01	0.01	0	0.0645	0
14	0.01	0.01	0	0.0523	0
15	0.01	0.01	0	0.0404	0
16	0.01	0.01	0	0.0287	0
17	0.01	0.01	0	0.0172	0
18	0.01	0.01	0	0.0057	0
19	0.01	0.01	0		
20	0.01	0.01	0		
21	0.01	0.01	0		
22	0.01	0.01	0		
23	0.01	0.01	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	0.02	0.01	-0.01		
31	0.02	0.01	-0.01		
32	0.02	0.01	-0.01		
33	0.02	0.01	-0.01		
34	0.02	0.01	-0.01		
35	0.02	0.01	-0.01		
36	0.034	0.01	-0.024		

Sum of b values = 0.0221692
Sample Standard Deviation = 0.0052915
W Statistic = 0.501503
5% Critical value of 0.935 exceeds 0.501503
Evidence of non-normality at 95% level of significance
1% Critical value of 0.912 exceeds 0.501503
Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: Nickel

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

Kruskal Wallis Ranks

Background Wells

Well ID	Date	Result	Rank
GWA-15/MW-15	7/30/2002	BQL0.01	18
	9/24/2002	BQL0.01	18
	10/21/2002 ~	BQL0.01	18
	12/3/2002	BQL0.02	18
	6/24/2003	BQL0.01	18
	12/17/2003	BQL0.01	18
Rank Sum = 108			
Rank Mean = 18			
GWA-7/MW-7	7/30/2002 ~	BQL0.01	18
	9/24/2002	BQL0.01	18
	10/21/2002	BQL0.01	18
	12/3/2002	BQL0.02	18
	6/24/2003	BQL0.01	18
	12/17/2003	BQL0.01	18
Rank Sum = 108			
Rank Mean = 18			

Background Rank Sum = 216
Background Rank Mean = 18

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	BQL0.01	18
	9/24/2002	BQL0.01	18
	10/21/2002	BQL0.01	18
	12/3/2002	BQL0.02	18
	6/24/2003	BQL0.01	18
	12/17/2003	BQL0.01	18
Rank Sum = 108			
Rank Mean = 18			
GWC-13/MW-13	7/30/2002	BQL0.01	18
	9/24/2002	BQL0.01	18
	10/21/2002	BQL0.01	18
	12/3/2002	BQL0.02	18
	6/24/2003 ~	BQL0.01	18
	12/17/2003 ~	BQL0.01	18
Rank Sum = 108			
Rank Mean = 18			
GWC-14/MW-14	7/30/2002	BQL0.01	18
	9/24/2002 ~	BQL0.01	18
	10/21/2002	BQL0.01	18
	12/3/2002	BQL0.02	18

	6/24/2003	BQL0.01	18
	12/17/2003	0.034	36

Rank Sum = 126
Rank Mean = 21

GWC-5/MW-5	7/30/2002	BQL0.01	18
	9/24/2002	BQL0.01	18
	10/21/2002	BQL0.01	18
	12/3/2002	BQL0.02	18
	6/24/2003	BQL0.01	18
	12/17/2003	BQL0.01	18

Rank Sum = 108
Rank Mean = 18

Calculation Results:

Kruskal-Wallis H Statistic = 0.405405
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 5
95% Confidence comparison value is 9.48773 at 4 degrees of freedom
0.405405 < 9.48773 indicating no significant group difference at 5% significance level
5 < 9.48773 indicating no significant group difference at 5% significance level when adjusted for ties

Shapiro-Wilks Test of Normality
Parameter: Vanadium
All Wells
Normality Test of Parameter Concentrations

Original Data (Not Transformed)
Non-Detects Replaced with 1/2 DL
K = 18; Samples = 36

i	x(i)	x(n-i+1)	x(n-1+1)-x(i)	a(n-i+1)	b(i)
1	0.005	0.06	0.055	0.4068	0.022374
2	0.005	0.025	0.02	0.2813	0.005626
3	0.005	0.025	0.02	0.2415	0.00483
4	0.005	0.025	0.02	0.2121	0.004242
5	0.005	0.025	0.02	0.1883	0.003766
6	0.005	0.025	0.02	0.1678	0.003356
7	0.025	0.025	0	0.1496	0
8	0.025	0.025	0	0.1331	0
9	0.025	0.025	0	0.1179	0
10	0.025	0.025	0	0.1036	0
11	0.025	0.025	0	0.09	0
12	0.025	0.025	0	0.077	0
13	0.025	0.025	0	0.0645	0
14	0.025	0.025	0	0.0523	0
15	0.025	0.025	0	0.0404	0
16	0.025	0.025	0	0.0287	0
17	0.025	0.025	0	0.0172	0
18	0.025	0.025	0	0.0057	0
19	0.025	0.025	0		
20	0.025	0.025	0		
21	0.025	0.025	0		
22	0.025	0.025	0		
23	0.025	0.025	0		
24	0.025	0.025	0		
25	0.025	0.025	0		
26	0.025	0.025	0		
27	0.025	0.025	0		
28	0.025	0.025	0		
29	0.025	0.025	0		
30	0.025	0.025	0		
31	0.025	0.005	-0.02		
32	0.025	0.005	-0.02		
33	0.025	0.005	-0.02		
34	0.025	0.005	-0.02		
35	0.025	0.005	-0.02		
36	0.06	0.005	-0.055		

Sum of b values = 0.044194
Sample Standard Deviation = 0.00989127
W Statistic = 0.570367
5% Critical value of 0.935 exceeds 0.570367
Evidence of non-normality at 95% level of significance
1% Critical value of 0.912 exceeds 0.570367
Evidence of non-normality at 99% level of significance

Kruskal-Wallis Non-Parametric Test

Parameter: Vanadium

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	BQL0.025	18
	9/24/2002	BQL0.025	18
	10/21/2002 ~	BQL0.025	18
	12/3/2002	BQL0.005	18
	6/24/2003	BQL0.025	18
	12/17/2003	BQL0.025	18
Rank Sum = 108			
Rank Mean = 18			
GWA-7/MW-7	7/30/2002 ~	BQL0.025	18
	9/24/2002	BQL0.025	18
	10/21/2002	BQL0.025	18
	12/3/2002	BQL0.005	18
	6/24/2003	BQL0.025	18
	12/17/2003	BQL0.025	18
Rank Sum = 108			
Rank Mean = 18			

Background Rank Sum = 216
Background Rank Mean = 18

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	BQL0.025	18
	9/24/2002	BQL0.025	18
	10/21/2002	BQL0.025	18
	12/3/2002	BQL0.005	18
	6/24/2003	BQL0.025	18
	12/17/2003	BQL0.025	18
Rank Sum = 108			
Rank Mean = 18			
GWC-13/MW-13	7/30/2002	BQL0.025	18
	9/24/2002	BQL0.025	18
	10/21/2002	BQL0.025	18
	12/3/2002	BQL0.005	18
	6/24/2003 ~	BQL0.025	18
	12/17/2003 ~	BQL0.025	18
Rank Sum = 108			
Rank Mean = 18			
GWC-14/MW-14	7/30/2002	BQL0.025	18
	9/24/2002 ~	BQL0.025	18
	10/21/2002	BQL0.025	18
	12/3/2002	BQL0.005	18

	6/24/2003	BQL0.025	18
	12/17/2003	0.06	36

Rank Sum = 126
Rank Mean = 21

GWC-5/MW-5	7/30/2002	BQL0.025	18
	9/24/2002	BQL0.025	18
	10/21/2002	BQL0.025	18
	12/3/2002	BQL0.005	18
	6/24/2003	BQL0.025	18
	12/17/2003	BQL0.025	18

Rank Sum = 108
Rank Mean = 18

Calculation Results:

Kruskal-Wallis H Statistic = 0.405405
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 5
95% Confidence comparison value is 9.48773 at 4 degrees of freedom
0.405405 < 9.48773 indicating no significant group difference at 5% significance level
5 < 9.48773 indicating no significant group difference at 5% significance level when adjusted for ties

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 = 18; Samples = 36

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	0.4068	0.0475956
2	0.01	0.034	0.024	0.2813	0.0067512
3	0.01	0.032	0.022	0.2415	0.005313
4	0.01	0.027	0.017	0.2121	0.0036057
5	0.01	0.027	0.017	0.1883	0.0032011
6	0.01	0.023	0.013	0.1678	0.0021814
7	0.01	0.023	0.013	0.1496	0.0019448
8	0.01	0.01	0	0.1331	0
9	0.01	0.01	0	0.1179	0
10	0.01	0.01	0	0.1036	0
11	0.01	0.01	0	0.09	0
12	0.01	0.01	0	0.077	0
13	0.01	0.01	0	0.0645	0
14	0.01	0.01	0	0.0523	0
15	0.01	0.01	0	0.0404	0
16	0.01	0.01	0	0.0287	0
17	0.01	0.01	0	0.0172	0
18	0.01	0.01	0	0.0057	0
19	0.01	0.01	0		
20	0.01	0.01	0		
21	0.01	0.01	0		
22	0.01	0.01	0		
23	0.01	0.01	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	0.023	0.01	-0.013		
31	0.023	0.01	-0.013		
32	0.027	0.01	-0.017		
33	0.027	0.01	-0.017		
34	0.032	0.01	-0.022		
35	0.034	0.01	-0.024		
36	0.127	0.01	-0.117		

Sum of b values = 0.0705928
Sample Standard Deviation = 0.0202016
W Statistic = 0.348885
5% Critical value of 0.935 exceeds 0.348885
Evidence of non-normality at 95% level of significance
1% Critical value of 0.912 exceeds 0.348885
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	BQL0.01	15
	9/24/2002	BQL0.01	15
	10/21/2002 ~	BQL0.01	15
	12/3/2002	BQL0.01	15
	6/24/2003	BQL0.01	15
	12/17/2003	BQL0.01	15
Rank Sum = 90			
Rank Mean = 15			
GWA-7/MW-7	7/30/2002 ~	BQL0.01	15
	9/24/2002	BQL0.01	15
	10/21/2002	BQL0.01	15
	12/3/2002	BQL0.01	15
	6/24/2003	0.034	35
	12/17/2003	0.023	30
Rank Sum = 125			
Rank Mean = 20.8333			

Background Rank Sum = 215
Background Rank Mean = 17.9167

Compliance Wells

Well ID	Date	Result	Rank
GWB-6/MW-6	7/30/2002	BQL0.01	15
	9/24/2002	BQL0.01	15
	10/21/2002	BQL0.01	15
	12/3/2002	BQL0.01	15
	6/24/2003	BQL0.01	15
	12/17/2003	BQL0.01	15
Rank Sum = 90			
Rank Mean = 15			
GWC-13/MW-13	7/30/2002	BQL0.01	15
	9/24/2002	0.023	31
	10/21/2002	0.027	32
	12/3/2002	0.027	33
	6/24/2003 ~	BQL0.01	15
	12/17/2003 ~	BQL0.01	15
Rank Sum = 141			
Rank Mean = 23.5			
GWC-14/MW-14	7/30/2002	BQL0.01	15
	9/24/2002 ~	BQL0.01	15
	10/21/2002	BQL0.01	15
	12/3/2002	BQL0.01	15

	6/24/2003	BQL0.01	15
	12/17/2003	0.127	36

Rank Sum = 111
Rank Mean = 18.5

GWC-5/MW-5	7/30/2002	BQL0.01	15
	9/24/2002	BQL0.01	15
	10/21/2002	BQL0.01	15
	12/3/2002	BQL0.01	15
	6/24/2003	BQL0.01	15
	12/17/2003	0.032	34

Rank Sum = 109
Rank Mean = 18.1667

Calculation Results:

Kruskal-Wallis H Statistic = 2.05631
Kruskal-Wallis H Statistic (adjusted for tied non-detects) = 4.3066
95% Confidence comparison value is 9.48773 at 4 degrees of freedom
2.05631 < 9.48773 indicating no significant group difference at 5% significance level
4.3066 < 9.48773 indicating no significant group difference at 5% significance level when adjusted for ties