Data Summary Report D-Area Burning/Rubble Pits

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MASTER

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DATA SUMMARY REPORT

D-AREA BURNING/RUBBLE PITS

FINAL

Prepared For:

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OCTOBER 1994

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LIST OF ACRONYMS

ASTM	American Society of Testing and Materials
bgs	Below Ground Surface
BRPs	Burning/Rubble Pits
CEC	Cation Exchange Capacity
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CLP	Contract Laboratory Program
CRDL	Contract Required Detection Limit
DOE	U.S. Department of Energy
EMS	Environmental Monitoring Section
EPA	U.S. Environmental Protection Agency
EPD	Environmental Protection Division
FFA	Federal Facility Agreement
GC	Gas Chromatograph
HNu	Trace gas analyzer
NPL	National Priorities List
OVA	Organic Vapor Analyzer
PAH	Polyaromatic Hydrocarbon
PARCC	Precision, Accuracy, Representativeness, Completeness, and Comparability
PCB	Polychlorinated Biphenyl
PCDD	Polychlorinated Dibenzodioxine
PCDF	Polychlorinated Dibenzofuran
QA	Quality Assurance
QC	Quality Control
QCSR	Quality Control Summary Report
RCRA	Resource Conservation and Recovery Act
RFI/RI	RCRA Facility Investigation/Remedial Investigation
RPD	Relative Percent Difference
RUST E&I	RUST Environment & Infrastructure
SCDHEC	South Carolina Department of Health and Environmental Control
SCS	U.S. Soil Conservation Service
SRS	Savannah River Site
SVOC	Semivolatile Organic Compound
TAL	Target Analyte List
TDS	Total Dissolved Solids
TCLP	Toxicity Characteristic Leaching Procedure
TOC	Total Organic Carbon
VOC	Volatile Organic Compound
WSRC	Westinghouse Savannah River Company

1.0 INTRODUCTION

The purpose of this report is to verify that all analytical data collected at the D-Area Burning/Rubble Pits (BRPs) (431-D and 431-1D) at the Savannah River Site (SRS) for use in developing risk assessment and potential remediation procedures have been validated at the appropriate level. Any discrepancies or reasons why the data should be rejected for this purpose will be addressed. This report documents the data validation procedures used by Environmental Monitoring Section (EMS), Exploration Resources, and RUST Environment & Infrastructure (RUST E&I) for assigning qualifiers.

2.0 PROJECT DESCRIPTION

The data collected in this investigation are intended to further characterize the nature and extent of chemical residue in groundwater, surface water, soil, and sediment. In addition, the data supplement existing geochemical data for the purpose of developing risk evaluation and appropriate remedial activities at the D-Area BRPs, if necessary.

2.1 Site History

SRS is located principally in Barnwell and Aiken Counties near the city of Aiken, South Carolina (Figure 2-1). SRS is owned by the U.S. Department of Energy (DOE). Management and operating services are provided by Westinghouse Savannah River Company (WSRC). SRS has historically produced tritium, plutonium, and other special nuclear materials for national defense. SRS also has provided nuclear materials for the space program and for medical, industrial, and research efforts. Chemical and radioactive wastes are by-products of nuclear material production processes. Hazardous substances, as defined by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and hazardous waste as defined by Resource Conservation and Recovery Act (RCRA), are currently present in the environment at SRS.

SRS manages waste materials that are regulated under RCRA. Certain SRS activities have required operating or post-closure permits under RCRA. SRS received a RCRA hazardous waste permit from the South Carolina Department of Health and Environmental Control (SCDHEC) on September 30, 1987. On December 21, 1989, SRS was placed on the National Priorities List (NPL). In accordance with Section 120 of CERCLA, DOE has entered into a Federal Facility Agreement (FFA) with the U.S. Environmental Protection Agency (EPA) - Region IV and SCDHEC to coordinate cleanup activities at SRS into one comprehensive strategy that fulfills RCRA Section 3004(u) and CERCLA assessment, investigation, and response action requirements. Appendix C of the FFA lists the D-Area BRPs as a RCRA/CERCLA unit.

The D-Area BRPs 431-D and 431-1D are located approximately 0.8 kilometer (0.5 mile) west of D Area (Figures 2-2 and 2-3). D-Area BRPs 431-D and 431-1D are contiguous pits separated by a clay berm. A shallow run-off ditch is located within 15.2 meters (50 feet) west of the pits. The

Savannah River and the associated swamps are approximately 0.8 kilometer (0.5 mile) from the BRPs.

Burning/rubble pits at SRS were constructed in 1951 for disposal of burnable waste such as paper, plastics, rubber, wood, waste oil, degreasers, and drummed organic solvents. The waste was burned periodically, typically once a month. The chemical composition and volume of waste disposed of are unknown.

In 1973, SRS burning/rubble pits were covered with a soil layer and continued to be used for rubble only. During this time until 1983, these pits were used as rubble pits to dispose of paper, wood, concrete, empty galvanized-steel barrels and drums, and cans. When the pits were filled in 1983, they were covered with a clay layer, compacted, mounded, and closed.

2.2 Project Objectives

The purpose of assessment sampling was to further delineate the extent and magnitude of hazardous substance release to surrounding environmental media.

3.0 SAMPLE COLLECTION

Field activities conducted between May and December, 1993 included the calibration of field screening equipment [(i.e., pH/conductivity meters, HNu and Organic Vapor Analyzers (OVA)], sample equipment decontamination, monitoring well installation, the collection of soil, groundwater, and surface water samples, and waste management. Field activities conducted during May 1994 included the collection of surface water and sediment samples that could not be collected during the 1993 investigation due to lack of surface water.

Bound field logs were maintained for each sampling date. The field logs provide information including date, weather conditions, work performed, sampling performed, field analyses completed, problems, corrective actions, Quality Control (QC) activities, and signature of the sampler. No unusual or problematic situations occurred during these activities.

3.1 Sampling Procedures

3.1.1 Soil

Soil sampling involved continuous sampling at eight locations within the pit confines and through the bottom of the pit boundary (four random sample locations in the quartered sections of each pit). Four additional sample locations were also selected adjacent to pit confines, including one background location, with regard to groundwater gradients. Soil sampling locations were chosen to adequately characterize and define the lateral and vertical extent of constituent impact on soils from the RCRA Facility Investigation/Remedial Investigation (RFI/RI) units.

Soil sampling locations are shown on Figure 3-1. Sampling locations 07, 08, 09, and 10 were completed within BRP 431-1D. Locations 11, 12, 13, and 14 were located within BRP 431-D. Four locations outside the pit boundaries were selected. Soil sampling location 15 was completed upgradient from the BRPs, location 16 was completed side-gradient of BRP 431-1D, and locations 17 and 18 were completed downgradient of BRP 431-D. All sample points are shown on Figure 3-1.

Soil sampling followed requirements and procedures specified by the RFI Program Plan (WSRC, 1989). Surface soil samples [0 to 0.6 m bgs (0 to 2.0 ft)] were collected using a properly decontaminated stainless steel hand auger, as specified in the RFI/RI Plan. Subsurface soil samples were collected continuously [in 0.6-m (2-ft) intervals] starting at 0.6 m (2.0 ft) by driving a split spoon sampling apparatus into the undisturbed soil below the hollow stem augers.

Sampling and handling procedures and associated decontamination and QC procedures were adhered to as specified in Chapter 4.6 of the RFI Program Plan. Soil cuttings from the augered boreholes were not removed from the waste unit area but were either placed back into the borehole or dispersed about the unit area.

3.1.2 Groundwater

Groundwater assessment included the collection of groundwater samples from temporary locations using Direct Push Technology (Hydropunch™ or piezocone methods). At soil sample locations 15, 16, and 17 (Figure 3-1), groundwater samples were collected via Hydropunch™ at the current water table and just above the confining unit. In addition, four existing wells and one newly installed well were sampled (Figure 3-1).

3.1.3 Surface Water/Sediment

Eleven surface water were originally proposed at locations 19, 20, 21, 22, 23, 24, 25, 26, and 27 and seven sediment samples were originally proposed at locations 21, 22, 23, 24, 25, 26 and 27 as shown on Figure 3-1. However, stations 22, 23, 24, 25, and 27 were dry. For this reason, surface water samples and the corresponding QC samples could not be collected. Locations 19 and 20 required collection of surface water both upstream and downstream of the sample point. The remaining sample locations 21 and 26 consisted of one sediment and one surface water sample collected downstream of the sample point. All sediment samples were collected as proposed. These samples were intended to address the potential for surface water/sediment contamination in the wetland area to the west of the BRPs.

The revised Addendum Surface Water/Sediment Sampling Plan dated April 22, 1994 (included in Appendix C) called for an additional ten surface water/sediment sample locations. These locations are 28, 29, 30, 31, 32, 33, 34, 35, 36, and 37 and are depicted on Figure 3-1. The

surface water sample was collected prior to the sediment sample so that no interference from the sediment would be detected in the surface water sample.

3.1.4 Additional Sampling

Two water tanks located upstream of the BRPs were also sampled (Figure 3-1). The tank at location 38 is approximately 134 meters (440 feet) upstream of the confluence of the tributary and the drainage way. The second tank at location 39 is approximately 268 meters (880 feet) upstream of the confluence on the drainage way. The results and discussion of validation for the water tank samples is presented along with the surface water data due to the proximity to the stream.

3.2 Sample Identification

Sample identification nomenclature includes the specific unit designation, the location number, and a number corresponding to the depth at which the sample was collected. For example, sample D43111504 was collected from outside the boundaries of D-Area Rubble Pit 431-1D at sample location 15 designated on Figure 3-1 at a depth of 3.1 to 3.7 meters bgs (10.0 to 12.0 feet). Information regarding depth of each sample is found on Table 4-1 of the Phase II RFI/RI Plan (WSRC, 1992). Similar nomenclature was used for groundwater, surface water, and sediment samples.

3.3 Sampling Packing and Transportation

Each sample container submitted to the laboratory was labeled with the sample identification, date and time of sample collection, and analyses required. The samples were then immediately placed on ice [approximately 4°C (39°F)] in a cooler for transport to the laboratory. Chain-of-custody forms were maintained and included in each sample cooler. A copy of each chain-of custody was retained by the field crew.

3.4 Decontamination Procedures

Equipment used for sampling was decontaminated prior to each use. Equipment used for the collection of water or soil samples for analytical analysis were steam cleaned or thoroughly scrubbed with a tap water/phosphate laboratory detergent solution. All equipment was

subsequently rinsed with de-ionized water. Clean, disposable gloves were worn while handling sampling equipment during the final stages of decontamination.

Prior to arrival on site, all paint and excessive rust were removed from the downhole equipment (split-spoon samplers, augers, drill rods, drill bits, etc.). All downhole equipment and working areas of the drill rig were thoroughly steam cleaned before drilling at each location. In addition, all well screen and riser pipe were steam cleaned prior to installation. Decontaminated well materials were wrapped in plastic sheeting for storage and transportation to the well site.

4.0 ANALYTICAL METHODS

The analytical program for groundwater samples contains both non-radionuclide and radionuclide parameters. Non-radionuclide parameters included volatile organic compounds (VOCs; EPA Method 8240); semivolatile organic compounds (SVOCs; EPA Method 8270); polynuclear aromatic hydrocarbons (PAHs; EPA Method 8100 or 8310); RCRA and other target metals [arsenic (EPA Method 7060), barium, cadmium, chromium, copper, manganese, nickel, silver (EPA Method 6010), lead (EPA Method 7421), mercury (EPA Method 7470), and selenium (EPA Method 7740)]; Toxicity Characteristic Leaching Potential (TCLP) for the above metals (excluding copper, manganese, and nickel); pesticides/polychlorinated biphenyls (PCBs) (EPA Method 8080); polychlorinated dibenzodioxine (PCDD); polychlorinated dibenzo-furans (PCDF; EPA Methods 8280 or 8290); 2,3,7,8-TCDD and PCB 1254; inorganic compounds including chloride, fluoride, nitrate, sulfate (EPA Method 300.0), iron and sodium (EPA Method 6010 or 200.7); baseline physical properties of soil [e.g., soil pH (SW 846 Method 9045); cation exchange capacity (CEC); and total organic carbon (TOC; U.S. Soil Conservation Service (SCS) or American Society of Testing and Materials (ASTM) procedures)].

Radionuclide parameters analyzed included radionuclide indicators (gross alpha, and non-volatile beta (EPA Method 900.0 for water and soil), total alpha-emitting radium (EPA Method 903.0), tritium (EPA Method 906.0).

All analyses were performed by Roy F. Weston, Inc. located in Lionville, Pennsylvania; Weston-Gulf Coast Laboratories, Inc. located in University Park, Illinois; Roy F. Weston, Inc. located in Stockton, California; TMA/Eberline located in Oak Ridge, Tennessee; and General Engineering Laboratories, Inc. located in Charleston, South Carolina.

5.0 DATA VALIDATION

All data released by this program are considered to be of Quality Assurance (QA) Level 3 (EPA, 1987, 1990). The groundwater verification and validation program, evaluated and approved by DOE, EPA, SCDHEC, and Environmental Protection Department (EPD), surpasses QA Level 3 requirements. Qualification policy is based on the Contract Laboratory Program Statement of Work for Organic Analysis (EPA, 1988a), the Functional Guidelines for Organics Analyses (EPA, 1988b), Functional Guidelines for Inorganics Analyses (EPA, 1991), Test Methods for Evaluating Solid Waste, SW-846 (EPA, 1986), and Westinghouse Hanford Company Data Validation Procedures for Radiochemical Analyses. The groundwater QA/QC program is nationally recognized and has been used as a model for quality in the new ANSI N42.2 standard.

The purpose of this section is to provide a data validation summary of the analytical procedures performed by the contract laboratories. The QC procedures performed at the laboratory included but were not limited to method blanks, laboratory control samples, matrix spikes, matrix spike duplicates, and surrogate recoveries. Data validation were conducted by Exploration Resources located in Athens, Georgia for soil, surface water, and sediment matrices (Appendix A), by EPD/EMS Groundwater Program at SRS for all groundwater analyses (Appendix B), and by RUST E & I for surface water and sediment from the May 1994 Addendum sampling event (Appendix C).

Three types of qualifier codes are used in the validation process. For example, the result for benzo(a)pyrene in soil sample D43111501 has been flagged J/LH/L. The first flag, "J", is the result flag. By definition (Table 5.1), this flag indicates the analytical result is an estimated quantity. The second set of flags, "LH", are both analysis qualifiers. In this case, "L" refers to failed calibration criteria and "H" refers to failed internal standards performance criteria. Both "L" and "H" have a different meaning when found in the third set of flags, the bias codes. In the third set of flags, "L" indicates the associated result may underestimate the true value. Refer to Table 5.1 for additional data qualifier codes.

5.1 Data Quality Categories

Different data uses require different levels of data quality. Data quality is defined as the degree of certainty of a data set with respect to PARCC. EPA has defined five levels of qualitative and

quantitative statements specifying the required quality of data necessary to support the investigative activities and evaluation of remedial activities (EPA, 1987). Data quality Levels 1, 2, and 3 were used for the investigation and evaluation of the D-Area BRPs. These three levels of data quality are as follows:

Level 1 Screening: Screening provides the lowest data quality by the most rapid results through the use of OVA and other field screening equipment. It is used for health and safety monitoring in the field, preliminary site characterization, and engineering screening (bench-scale tests). Results are often not compound specific and not quantitative, but rapid or instantaneous results are available. Screening sample results are not applicable to this data summary report.

Level 2 Field Analysis: This level is designed to provide rapidly-generated data for ongoing field activities or to provide the basis for seeking laboratory analytical support. Level 2 analysis is also used for field screening, baseline data development, extent of contamination determination, and onsite remedial activities. Field analysis involves the use of portable or transportable instruments (e.g., portable Gas Chromatograph (GC)). Samples analyzed by field analyses are not applicable to this data summary report.

Level 3 Confirmational: Level 3 analytical support provides data for site characterizations, environmental monitoring, engineering studies (e. g., design, modeling), and risk assessment. This level utilizes EPA-approved procedures, such as those in SW-846 Test Methods for Evaluating Solid Waste. Some Level 3 procedures may be equivalent to the EPA Contract Laboratory Program Routine Analytical Service with the exception of the extensive Contract Laboratory Program (CLP) required documentation.

Level 3 analytical support included the analysis of groundwater, sediment, and soil samples by EPA-approved procedures. Data validation for the D-Area BRP analytical data set was based on Quality Assurance/Quality Control Guidance for Removal Activities and Data Quality Objectives for Remedial Response Activities for achieving Quality Assurance Objective 3 (Quality Level 3). This Data Quality Summary Report addresses the Level 3 analytical data.

Ten technical issues were addressed in this CERCLA data validation program:

- Sample documentation
- Chain of custody
- Sample holding times

- Analytical instrument calibration
- Analyte identification
- Analyte quantitation
- Analytical error
- Blanks
- Performance evaluation samples
- Detection limit

Qualification criteria and policies are based on the Function Guidelines (EPA, 1988b, 1991) and are described in the Quality Control Summary Reports (QCSRs) (Appendices A and C). Samples not conforming to these criteria have been flagged according to the qualifier codes found on Table 5.1.

5.2 Evaluation of Data Quality Indicators

The assessment of the data quality indicators determines the data usability. The assessment of data quality indicators for either sampling or analysis involves the evaluation of five indicators: precision, accuracy, representativeness, completeness, and comparability. The indicators are commonly referred to as the PARCC parameters. The major activity in determining the usability of data based on sampling is assessing the effectiveness of the sampling operations performed. Determining the usability of analytical results begins with the review of QC samples and qualifiers.

The review is used to determine an overall assessment of analytical performance as determined by the laboratory and method performance. A summary of the precision and accuracy validation by each of the validating agencies can be found in Table 5.2. A description of the validation processes may be found in the appropriate documents located in Appendices A, B, and C.

5.2.1 Precision

Precision measures the reproducibility of measurements under a given set of conditions. Specifically, it is quantitative measure of the variability of a group of measurements compared to the average value. The overall precision of a measurement data is a mixture of sampling and analytical factors. Analytical precision may be determined by collecting and analyzing replicate

field samples. The analytical results from laboratory replicates provide data on analytical precision.

Precision is a measure of the repeatability of a single measurement and is evaluated from the results of duplicate samples and splits. Low precision can be caused by poor instrument performance, inconsistent application of method protocols, or by a difficult, heterogeneous sample matrix. The analytical laboratory performed the analysis of duplicate laboratory control samples to evaluate the precision of the analytical method.

The precision of each analytical method is evaluated by reviewing the results of the analysis of laboratory blanks, laboratory control samples, matrix spikes, and matrix spikes duplicates. The magnitude of the standard deviation in relation to the magnitude of the mean reflects the precision of the results. Five percent of the total wells to be sampled each quarter were selected as blind duplicate samples. A blind blank is sent to the laboratory with each sample and blind sample. Site-specific "critical" samples are used as QA duplicates or blinds. According to the EMS contract, every 20 samples must be accompanied by a laboratory blank, a laboratory control sample, and a sample replicate.

Duplicate samples were collected in the field to provide precision information for the entire measurement system including samples acquisition, homogeneity, handling, shipping, storage, preparation, and analysis. EPA Data Quality Objectives for Remedial Response Activities (1987) dictates that duplicate samples be collected at a rate of approximately 1 per 20 samples, or five percent. The comparison is performed by computing a relative percent difference (RPD). The RPD is a measure of precision and is determined by the following formula:

$$RPD = [(A-B)/((A+B)/2)]*100$$

Where: A = Result of Primary Sample
B = Result of Duplicate Sample

EMS determined the RPD for each duplicate and determined that the RPD of several groundwater QC samples exceeded historical results by more than 10 times. The laboratory, Weston Analytics, was asked to review all results in question. As noted in the correspondence in Appendix B, Weston responded by verifying the results against the original chromatographs.

Field duplicate RPDs for soil and sediment samples were not calculated by Exploration Resources. The primary samples (i.e., not a QC sample) will be used in evaluating risk.

A split sample is a replicate of a primary site sample that is submitted to a QA laboratory and subjected to the same environmental conditions and steps in the measurement process. This sample serves as an oversight function in assessing the analytical portion of the measurement system. Methods of sample collection, handling, preservation, and transportation were the same as those followed for the primary site samples. The RPD control limit established by the EPA is ± 20 percent (±35 percent for soil) for sample values >5 times the contract required detection limit (CRDL) and ±CRDL (± 2 times CRDL for soil) for sample values <5 times CRDL.

A comparison of inter- and intralaboratory QA samples, such as replicates, duplicates, and blind blanks has been made. EMS determined the RPD for each split sample (analyzed by General Engineering) and determined that the RPD of several groundwater QC samples exceeded 10 percent. The primary laboratory, Weston Analytics, was asked to verify all results in question. As noted in the correspondence in Appendix B, Weston responded by verifying the results. However, EMS did not flag any of the data as questionable, despite the calculated RPD. Soil split samples were not sent to an outside QC laboratory, but to the primary laboratory, Weston Analytics, and are thus considered duplicate samples. RPDs for split soil and sediment samples were not calculated by Exploration Resources.

5.2.2 Accuracy

Accuracy measures the closeness of a reported concentration to the true value, and is usually expressed as bias. Accuracy is difficult to measure for the entire data collection activity. Sources of error are the sampling process, cross contamination, preservation, sample handling, sample matrix, sample preparation, and analysis techniques. Analytical accuracy is assessed through use of standard and blind QC samples and spike samples. Accuracy determinations by standard samples include single control and duplicate control samples, commonly referred to as laboratory control samples. These are samples made up of reagent grade water that is spiked with standard amounts of target compounds. Percent recovery and percent difference parameters are determined from these samples. Analytical accuracy determinations by blind samples include the evaluation of matrix interferences in the environmental samples. These samples also provide percent recovery and percent difference parameters through the use of surrogate and matrix spikes in the environmental samples.

Accuracy may be affected by contamination introduced in the field, during shipping, or at the laboratory. Field and trip blanks are used to monitor accuracy during sample collection and shipment. Field blanks are filled with deionized water the morning samples are collected, and left open in the field during sampling. The field blanks are shipped with the other samples. Positive results from field blanks can result from analytical bias, contaminated sample bottles, contaminated deionized water, vapors in the air during sampling, or contamination during shipping. Rinsate blanks are generated prior to sample collection by pouring deionized water over the sampling equipment, and provide data for potential contamination from the sampling equipment. Trip blanks are used to detect contamination caused during shipping, and are only used for VOCs. Data qualifiers (Table 5-1) are utilized to annotate bias determined from field, trip, and rinsate blanks.

EMS did not utilized trip, field, or rinsate blank data in validating groundwater data. Likewise, Explorations did not consider field or rinsate blanks in the validation of soil and sediment data. However, the Addendum surface water and sediment data were validated in accordance with field accuracy QC data.

Laboratory control samples are water samples that are spiked with the target analyte, digested, and analyzed along with the regular samples for inorganic analyses. They monitor the overall performance of all steps in the analysis, including sample preparation. Blank spikes are sodium powder spiked with selected target analytes, extracted, and analyzed along with the regular samples for organic analyses. Laboratory blanks are portions of the water used for dilutions that are analyzed along with the samples. Laboratory blanks are used to determine the existence and magnitude of contamination problems.

The matrix of a sample can interfere with the accuracy of the analysis. All samples for organic analyses are spiked prior to sample preparation to examine the laboratory's performance. Selected samples are spiked to provide information about the effect of each sample matrix on the digestion and measurement methodology. Matrix spikes are rejected if the concentration of the analyte in the sample is more than four times the concentration of the spike.

5.2.3 Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, or an environmental condition. Representativeness is a qualitative parameter which is most concerned with the proper design of the sampling program. The representativeness criterion is best satisfied by making certain that sampling locations are selected properly and a sufficient number of samples are collected. Samples must be collected to reflect the site characteristics and sample analyses must represent the properties of the field sample. The homogeneity of the sample, use of appropriate handling, storage, preservation procedures, and the detection of any laboratory blank artifacts are critical to sample representativeness.

The QCSR in Appendix A details the handling of all soil and sediment samples during the 1993 unit assessment. Samples collected during the 1994 Addendum surface water/sediment sampling event are said to be representative (Appendix C). The representativeness of groundwater sample could not be determined from the information supplied by EPD/EMS. Field QC measures include the evaluation of trip, field, and equipment rinsate blanks, laboratory QC measures include the evaluation of method blanks.

5.2.4 Completeness

Completeness is defined as the percentage of measurements made which are judged to be valid measurements. The completeness goal is essentially the same for all data uses: that a sufficient amount of valid data be generated. It is important that critical samples are collected and valid data achieved for them.

The measure of completeness is useful for data collection and analysis management. Any decrease in the number of samples from that specified in the work plan may affect the final results. The completeness of the field screening and confirmatory samples for this sampling event was determined to be greater than 99 percent. The completeness of critical sample is 100 percent.

The completeness for analytical data is defined as the percentage of chemical-specific data results that are determined acceptable after data review. All analytical data have been compared against the sampling schedule to verify that all analyses in the schedule have been reported.

With the exception of surface water samples D431 2201, 2301, 2401, 2501, and 2701 and soil sample D431 1103, all samples were collected and analyzed as proposed. The 1994 addendum surface water/sediment sampling event was performed to compensate for the dry surface water locations in 1993. Insufficient volume precluded collection of sample for Target Analyte List/Target Compound List (TAL/TCL) VOCs; however, TCLP analyses was performed.

5.2.5 Comparability

Comparability is a very important qualitative data indicator for analytical assessment and is a critical parameter when considering the combination of data sets from different analyses for the same chemicals of potential concern. The analytical methods used had common analytical parameters, the same units of measure, and similar detection limits.

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared with another. Sample data should be comparable with other measurement data for similar samples and sample conditions. This goal is achieved through using standard techniques to collect and analyze representative samples and reporting analytical results in appropriate units. Comparability is limited to the other PARCC parameters because only when precision and accuracy are known can data sets be compared with confidence.

Comparability issues have little impact on performance measures associated with sampling provided that the sample design is unbiased and the sample design or analytical methods have not changed over time. Sample design within the pits was random within each quartered section of the pits. Sample locations outside the pits were selected according to gradient (i.e., downgradient, upgradient, or sidegradient. Comparability was achieved by conforming to the sample design in the Scope of Work and documenting all sample locations. All primary samples proposed in the Phase II RFI/RI were conducted as specified.

In general, results from the 1993 Unit Assessment were comparable with soil data obtained during the 1992 Unit Screening (WSRC, 1992). Analytical data for SVOCs indicated slightly higher results in 1992 than indicate in the more recent event.

6.0 DATA SUMMARY

Summaries of chemical data are provided in Tables 6.1 through 6.23. Summary tables report detected values down to 10 percent of the reporting limits. Estimated values less that the reporting limit are flagged "J". The "J" flag is also used in conjunction with the "V" flag (indicating the analyte was also detected in the method blank) when the concentration in the sample is less than five times the concentration detected in the associated laboratory blank, or less than ten times for common laboratory artifacts acetone, methylene chloride, 2-butanone, and phthalate esters.

6.1 Soil Data Summary

Five soil samples were received at the laboratory at a temperature exceeding four degrees required for proper preservation. Subsequently, all results associated with these samples have been flagged "Y". Analytical results indicating the presence of an analyte below the method quantitation limit have been flagged "J" to indicate the concentration is estimated.

Volatile Organic Compounds

Volatile organic compounds (VOCs) in soil were analyzed by EPA Method 8240. Samples D431 1701 and D431 1703 were held beyond the normal holding time; all results have been flagged "Q" to indicate exceeded holding times and "J" to indicate the results are estimated.

Common laboratory artifacts acetone and methylene chloride were detected in the method blanks associated with several samples. In addition, benzene and chloroform were also detected in the blanks associated with some of the soil samples. All results for these compounds have been flagged "V" to indicate possible laboratory contamination.

Calibration criteria (initial or continuing) were not met for vinyl chloride in samples D43110807 and D431 1401 and the results have been bias flagged "L". The "L" flag is also used in conjunction with analysis qualifier "O" on all results associated with samples D431 1305 and D431 1702 due to surrogate spike recoveries out of specification. Internal standards performance criteria were not met for sample D431 1401. Subsequently, all results have been flagged "H" to indicate failed performance criteria and "J" to indicate the results are considered estimated. The "J/H/" flags are also used for certain compounds associated with sample D43111501.

Analytical data are presented in Table 6.1.

Semi-Volatile Organic Compounds

Semi-volatile organic compounds (SVOCs) in soil were analyzed by EPA Method 8270. Samples D431 1204 and D431 1204 were held beyond the normal holding time; all results have been flagged "Q" to indicate exceeded holding times and "J" to indicate the results are estimated.

Common laboratory artifacts di-n-butyl phthalate and bis(2-ethylhexyl) phthalate were detected in the method blanks associated with several samples. In addition, 2,4-dinitrophenol was also detected in the blanks associated with soil sample D431 1204. All results for these compounds have been flagged "V" to indicate possible laboratory contamination.

The laboratory control sample criteria were not met for certain SVOC analytes. For these reason, results for N-nitrosodipropylamine, pentachlorophenol, phenol, and 1,2,4-trichlorobenzene in some samples have been flagged "C" and "J" to indicate the results are estimated.

Calibration criteria (initial or continuing) were not met for di-n-octyl phthalate and pentachlorophenol in samples D43110806 and D43110906; therefore, the results have been bias flagged "L". The "L" flag is also used in conjunction with analysis qualifier "O" on all results associated with samples D431 1205, D431 1304, D431 1305, and D431 1306 due to surrogate spike recoveries out of specification. When "L" is used as an analysis qualifier, as for samples D43111501, D43111502, D43111504, D43111504, D431 1704, and D431 1705, calibration criteria were not met for the analysis. Subsequently, all results flagged with analysis qualifier "L" have also been flagged "J" to indicate the results are estimated.

Matrix spike recoveries were not within control limits on results flagged "I". Internal standards performance criteria were not met for several samples. Subsequently, all results have been flagged with the analysis qualifier "H" to indicate failed performance criteria and "J" to indicate the results are considered estimated. In some cases, the bias code "H" is used to qualify the data, indicating an analytical factor has caused bias and the associated result may overestimate the true value.

Analytical data are presented in Table 6.2.

Pesticides and PCBs

Soil samples were analyzed for pesticides and PCBs using EPA Method 8080. Surrogate spike recoveries were out of specification on samples D43110706, D43110804, D43110902, D431 1107, D431 1206, D431 1207, D431 1301, D431 1401, D431 1402, D431 1406, D43111501, and D431 1803. Subsequently, all pesticide and PCB data associated with these samples has been flagged with analysis qualifier "O". In addition, bias qualifier "L" has been used on all results to indicate the associated result may underestimate the true value.

The results for alpha-chlordane, gamma-chlordane, p,p-DDE, and p,p-DDT in sample D43111501 and p,p-DDE, and p,p-DDT in sample D43111503 have been flagged "A" to indicate the values reported are the mean of two or more determinations. The results for endrin in sample D43110806 and p,p-DDT in D43110906 have been flagged "G" to indicate the values reported are the maximum of two or more determinations.

Analytical data are presented in Table 6.3.

PCDD/PCDF Compounds

Polychlorinated dibenzo-dioxins (PCDD) and polychlorinated dibenzo-furans (PCDF) in soil have been analyzed using EPA Method 8280. Internal standards performance criteria were not met for several analytes in samples D43111504 and D431 1705. The results associated with failed performance criteria have been flagged "H". In addition, these results have also been flagged "J" to indicate the results are estimated.

Matrix spike recoveries were not within control limits for octachlorodibenzo-p-dioxin in sample D43111504 and hexachlorodibenzo-p-furan in sample D431 1705. These results have been flagged "I". The bias flag "L" was also used on the D43111504 result to indicate the result may underestimate the true value. "L" was not used on the D431 1705 sample. Result qualifier "L" was used for octachlorodibenzo-p-dioxin furan in sample D431 1207 to indicate the result was off-scale high. The actual value for this analyte is not known, but is greater than the value shown.

The peak height, instead of peak area, was used to quantitate heptachlorodibenzo-p-dioxin and octachlorodibenzo-p-dioxin furan in several samples. For this reason, the associated results have been flagged "T".

Analytical data are presented in Table 6.4.

Inorganics and Organic Indicators

Inorganics, including RCRA metals, were analyzed as proposed. Matrix spike recoveries were not within control limits for several soil samples. The results associated with failed matrix spike recoveries are denoted with the "I" analysis qualifier. In addition, some of these samples also have the bias flag "H", which indicates the result may overestimate the true value, or the bias flag "L", which indicates the result may underestimate the true value. The "X" flag is used to indicate when the duplicate analysis relative percent difference (RPD) was not within control limits.

The analysis qualifier "L" is used to indicate calibration criteria, initial or continuing, are not met. This flag is used with the "J" flag to indicate the results are estimated.

Analytical data are presented in Table 6.5.

Radionuclide Parameters

Radionuclide parameters were analyzed as proposed. Non-volatile beta and total alpha-emitting radium were detected in the method blanks associated with many of the soil samples collected. For this reason, the results have been flagged "V". However, the five times rule did not come into effect for any of the results.

Radium results in all samples collected from pit D4311 location 16 have been flagged "C" to indicate the control sample criteria were not met.

Non-volatile beta in sample D431 1401 and tritium in sample D43111503 have been flagged "X" to indicate the duplicate analysis RPD was not within control limits.

Analytical data are presented in Table 6.6.

TCLP Data

Soil samples D43110705, D43110706, D43110905, and D431 1205 were analyzed for TCLP parameters as proposed. Sample D43110705 arrived at the laboratory at a temperature exceeding four degrees required for proper preservation. All results associated with this sample have been flagged "Y".

Surrogate spike recoveries for SVOCs in samples D43110705 and D43110905 and for pesticides and PCBs in sample D431 1205 were out of specification. For this reason, all associated data have been flagged "O". In addition, the results have been flagged "J" to indicate the results are estimated and "L" to indicate the result may underestimate the true value.

Matrix spike recovery for TCLP mercury in sample D431 1205 was not within control limits. The result has been flagged "I". Subsequently, the result has also been flagged "J" and bias "L". The continuing calibration criteria were not met for TCLP cadmium and chromium in sample D43110905. These results have been flagged with the analysis qualifier "L", plus "J" to indicate the results are estimated.

Analytical data are presented in Table 6.7.

6.1.1 Rejected Data

No analytical data were rejected by Exploration Resources. Due to re-extraction and re-analysis by the laboratory, multiple analyses were reported. Since no data were rejected during validation, two or more sets of data were presented. The data set representing the most accurate results based on the data qualifiers are used in the development of the risk assessment.

Data omitted from the data set for development of risk included duplicate analysis for common laboratory artifacts. In the event that two equally defensible results were produced, the higher of the two results was used and the lower results were rejected. Surrogate spike recoveries were out of specification on the original analysis of samples D431 1701 and D431 1703. Subsequently, these results were flagged "O" to indicate out of control surrogate recover, "H" to indicate the results were biased high, and "J" to indicate the results were estimated. Both of these samples were re-analyzed out of holding time. However, acceptable surrogate recoveries were achieved. For this reason, the re-analysis results have been used and the original results have been rejected.

All data with a result qualifier "L" indicate that results were off-scale high were rejected over data not off-scale. Surrogate spike recoveries were out of specification on sample D431 1305 in both the original and re-analysis. The higher of the two results was used for the purpose of developing risk. All remaining results for this sample were rejected.

6.1.2 Additional Data Qualifiers

No additional data qualifiers are necessary.

6.2 Groundwater Data Summary

All groundwater samples were collected and analyzed in accordance with the work plan. An explanation of the data qualifiers assigned to groundwater analytical results during the validation process is given below.

Volatile Organic Compounds

VOCs in groundwater monitoring wells were analyzed by EPA Method 8240. All samples were collected and analyzed as proposed. Only one result required data qualification. The result for 1,1-dichloroethane in sample DBP 2 was flagged "J" to indicate that this compound was detected at a concentration below the quantitation limit for that sample. Results for monitoring well samples may be found in Table 6.8.

Groundwater samples collected by Hydropunch™ were also analyzed for VOCs by EPA Method 8240. Sample D43111506 was held beyond the normal holding time. For these reason, all results associated with this sample have been flagged "Y". Common laboratory artifact methylene chloride was detected in three of the four Hydropunch™ samples; results for methylene chloride have been flagged "V". The results have also been flagged "J" to indicate the results are estimated due to the presence of this analyte in the associated method blank.

Laboratory control sample exceeded control limits for benzene in sample D43111505. For this reason, this result has been flagged "C", and subsequently flagged "J" to indicate the result is estimated.

Analytical data for Hydropunch™ samples can be found in Table 6.9.

Semi-Volatile Organic Compounds

SVOC in groundwater were analyzed by EPA Method 8270. Result qualifier "J1" was used on all results for samples DBP 3 collected 3/18/93 and DBP 4 collected 6/5/93. This flag indicates an analytical factor causing bias. The associated results may underestimate the true values. None of the analytes, however, were reported at concentrations above the method quantitation limits and the data are not affected.

Analytical data are presented in Table 6.10.

Pesticides and PCBs

Pesticides and PCBs in groundwater were analyzed by EPA Method 8080. In addition, 2,4,5-T, Silvex, and 2,4-Dichlorophenoxyacetic acid were analyzed by EPA Method 8150. All samples collected in March 1993 were held beyond normal holding time and have been qualified with the result qualifier "JQ".

Analytical data are presented in Table 6.11.

PCDD/PCDF Compounds

PCDD and PCDF compounds were analyzed by EPA Method 8280. No data qualifiers were necessary for groundwater samples collected during this effort.

Analytical data are presented in Table 6.12.

Inorganics and Organic Indicators

RCRA metals and target inorganic compounds were analyzed as proposed. Several data qualifiers were necessary throughout the metals data.

Samples DBP 1, DBP 2, DBP 4, and DBP 5 collected March 19, 1993 for chloride and sulfate were held beyond normal holding times. Subsequently, the results associated with these

parameters have been flagged "Q" to indicate analysis out of holding time and "J" to indicate the results obtained from these analyses are estimated. The "JQ" flags have also been used to qualify the total organic halogens result in sample DBP 5 collected December 11, 1993 and the total dissolved solids (TDS) result in sample DBP 5 collected December 26, 1993. The March 1993 results for TDS in samples DBP 1, DBP 2, DBP 3, and DBP 4 have been flagged "V" due to the presence of this analyte in the associated method blank. However, the concentrations found in the samples were greater that five times the concentration detected in the method blank. For this reason, the results were not flagged "J" and the TDS concentrations are considered to be site related.

Analytical data are presented in Table 6.13.

Radionuclide Parameters

Radionuclide parameters were analyzed as proposed. No data qualifiers were necessary for groundwater samples collected during this effort.

Analytical data are presented in Table 6.14.

6.2.1 Rejected Data

None of the groundwater analytical data was rejected by EMS, who performed the data validation. However, two sets of data were available for acetone in sample D43111608. Acetone was originally analyzed at a detection limit of 10 µg/L. The result of this analysis was off-scale high. For this reason, the result was flagged "L" and the analysis was repeated. The second analysis was within the range of the instrument and therefore the result to be used in development of risk. The original result has been utlized for the development of risk.

6.2.2 Additional Data Qualifiers

No additional data requirements were necessary.

6.3 Surface Water Data Summary

All surface water samples were collected and analyzed in accordance with the work plan. An explanation of the data qualifiers assigned to surface water analytical results during the validation process is given below.

Volatile Organic Compounds

VOC analyses were performed using EPA Methods 8240 or 8260. Common laboratory artifacts acetone and methylene chloride were detected in the method blanks associated with most of the samples. For this reason, the results have been flagged "V". However, since this artifact was not detected in any of the corresponding samples, the data are not affected.

Toluene was detected in two samples, D431-35-01 and D431-39-01. The concentration at which toluene was detected is below the contract required detection limit (CRDL) and the results have been flagged "B" to indicate this occurrence. In addition to the "B" qualifier, the results have also been flagged "J" to indicate that the results are estimated values.

Analytical data for EPA Method 8240 are presented in Table 6.15. Analytical data for EPA Method 8260 are presented in Table 6.16.

Semi-Volatile Organic Compounds

SVOC analyses were performed by EPA Method 8270. Common laboratory artifact di-n-butyl phthalate was detected in the method blank associated with samples D431-37-01 and D431-38-01. Although both results were below the detection limit, the "V" flag has been used to indicate the occurrence of this artifact in the associated method blank.

P-Cresol in sample D431-28-01 and anthracene and butylbenzyl phthalate in sample D431-37-01 were detected at concentrations below the CRDL for these compounds. For this reason, the results for these compounds have been flagged "B". Subsequently, the results have also been flagged "J" to indicate that the results are estimated quantities.

Analytical data are presented in Table 6.17.

Inorganics and Organic Indicators

RCRA metals and target analytes iron, manganese, nickel, and sodium were analyzed as proposed. Only one result for sample D431-37-01 required qualification. The iron result has been flagged "I" due to spike recovery outside of control limits. In addition, the result has been flagged "P" due to post-digestion spike recovery outside of control limits, but sample absorbance was greater than 50 percent of post-digestion spike absorbance. Due to the necessity of the "I" and "P" qualifiers, the result for iron in this sample has subsequently been flagged "J" to indicate the result is an estimated quantity.

Several samples for organic indicators were held beyond the normal holding time. For this reason, the results affected have been flagged "J/Q/". Calibration criteria for cadmium and copper were not met for the samples collected in June 1993; samples have been flagged "J/L/" accordingly.

Analytical data are presented in Table 6.18.

Radionuclide Parameters

Radionuclide parameters were analyzed as proposed. The results for gross alpha in sample D431-37-01, for nonvolatile beta in sample D431-33-01, and for tritium in samples D431-32-01 and D431-36-01 have been flagged "J" to indicate that the result is an estimated quantity below the quantitation limits. Non-volatile beta was detected in the method blank associated with several samples. All corresponding results for non-volatile beta have been flagged "V".

Analytical data are presented in Table 6.18.

6.3.1 Rejected Data

Rejected data would have been denoted with the "R" flag. Although some problems were associated with the surface water analytical data, none were serious enough to require rejection of the data.

6.3.2 Additional Data Qualifiers

No additional data qualifiers are necessary.

6.4 Sediment Data Summary

All sediment samples were collected and analyzed in accordance with the work plan. An explanation of the data qualifiers assigned to sediment analytical results during the validation process is given below.

Volatile Organic Compounds

VOCs in sediment were analyzed by EPA Method 8240. Samples D431 2302, D431 2402, D431 2502, and D431 2702 were held beyond normal holding time. All results associated with these samples have been flagged "Y". Common laboratory artifacts acetone and methylene chloride were detected in the method blanks associated with all of the sediment samples collected during this effort. The associated results have been flagged "V". Only acetone was detected in one sample, D431 2402. The concentration detected in the blank could not be determined from the data; however, the ten times rule for common laboratory contaminants has not been applied.

Analytical data are presented in Table 6.19.

Semi-Volatile Organic Compounds

SVOCs in sediment were analyzed by EPA Method 8270. Samples D431 2302, D431 2402, D431 2502, and D431 2702 were held beyond normal holding time. All results associated with these samples have been flagged "Y". Common laboratory artifacts bis(2-ethylhexyl)phthalate and di-n-butyl phthalate were detected in the method blank associated with several samples; corresponding results have been flagged "V".

The laboratory control sample was outside control limits; therefore, the results for n-nitrosodipropylamine in several sediment samples have been flagged "C", and subsequently flagged "J" to indicate the results are estimated.

Analytical data are presented in Table 6.20.

Inorganic Compounds

Inorganic compounds, including RCRA metals, were analyzed as proposed. Samples D431 2302, 2402, 2502, and 2702 were held beyond normal holding time. All results associated with these samples have been flagged "Y".

Analytical data are presented in Table 6.21.

Radionuclide Parameters

Radionuclide parameters were analyzed as proposed. Samples D431 2302, 2402, 2502, and 2702 were held beyond normal holding time. All results associated with these samples have been flagged "Y". Radium was detected in the method blank associated with all sediment samples; corresponding results have been flagged "V".

Analytical data are presented in Table 6.22.

6.4.1 Rejected Data

No analytical data for sediment samples have been rejected.

6.4.2 Additional Data Qualifiers

No additional qualifiers are necessary.

7.0 SUMMARY

This Data Summary Report consolidates the chemical data that was analyzed and validated for the risk assessment. Data validation was performed by Exploration Resources, Inc., the Environmental Monitoring Section of SRS, and RUST E&I. The results of the entire validation program demonstrate that the data quality objectives have been met and the data are appropriate for a risk assessment with the exceptions noted.

Data validation for the D-Area Burning/Rubble Pits analytical data set was based on Quality Assurance/Quality Control Guidance for Removal Activities (1990) and Data Quality Objectives for Remedial Response Activities (1987) for achieving Quality Assurance Objective 3 (Quality Level 3). The QA/QC Control Guidance specifies ten technical issues which were addressed in the data validation program: sample documentation, chain of custody, sample holding times, analytical instrument calibration, analyte identification, analyte quantitation, analyte error, blanks, performance evaluation samples, and detection limits. The data for the D-Area Burning/Rubble Pits meet Quality Assurance Objective 3 (Quality Level 3) with the exceptions noted in this report.

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FIGURES

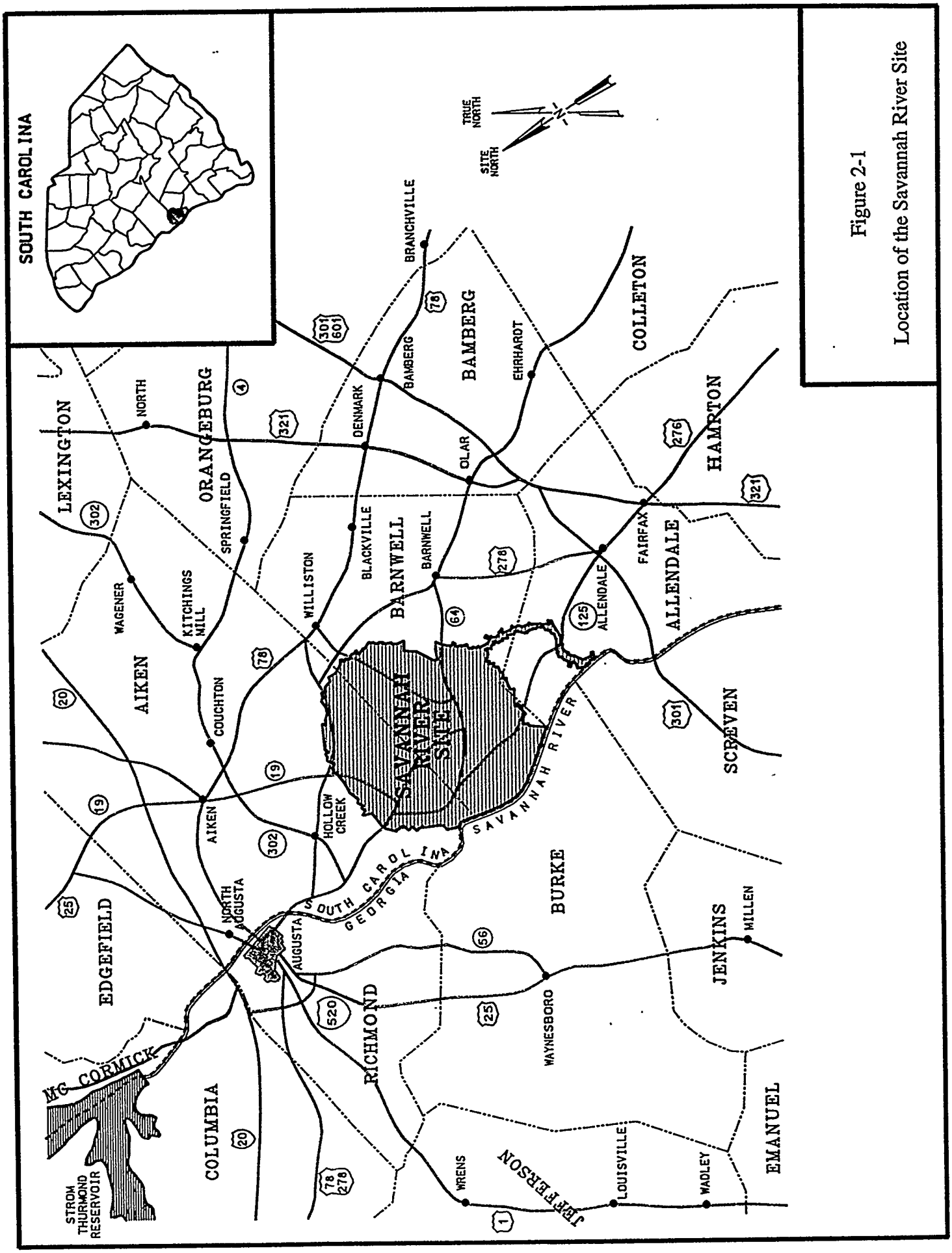


Figure 2-1

Location of the Savannah River Site

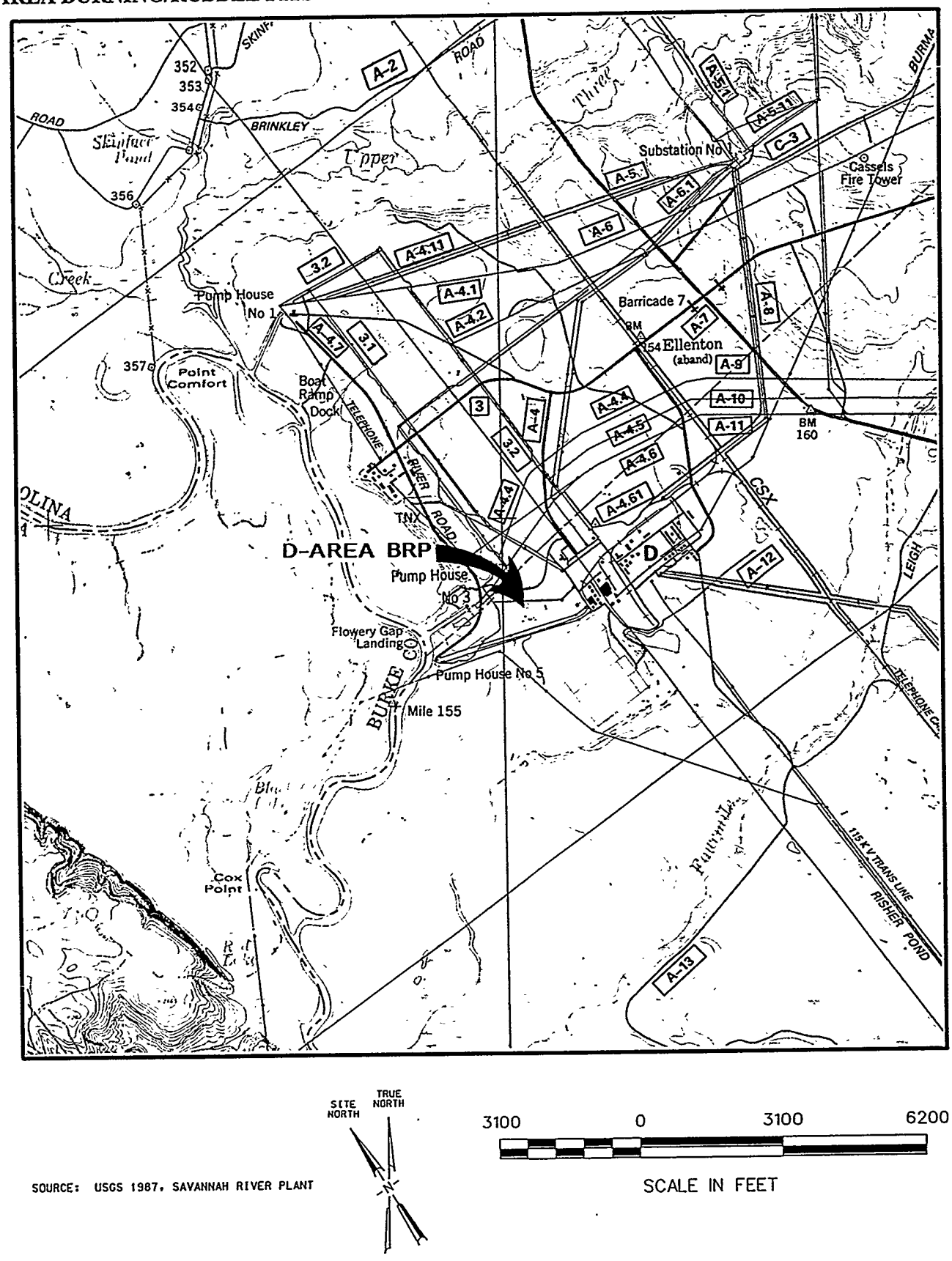


Figure 2-2 Location of D-Area Burning/Rubble Pits at the Savannah River Site

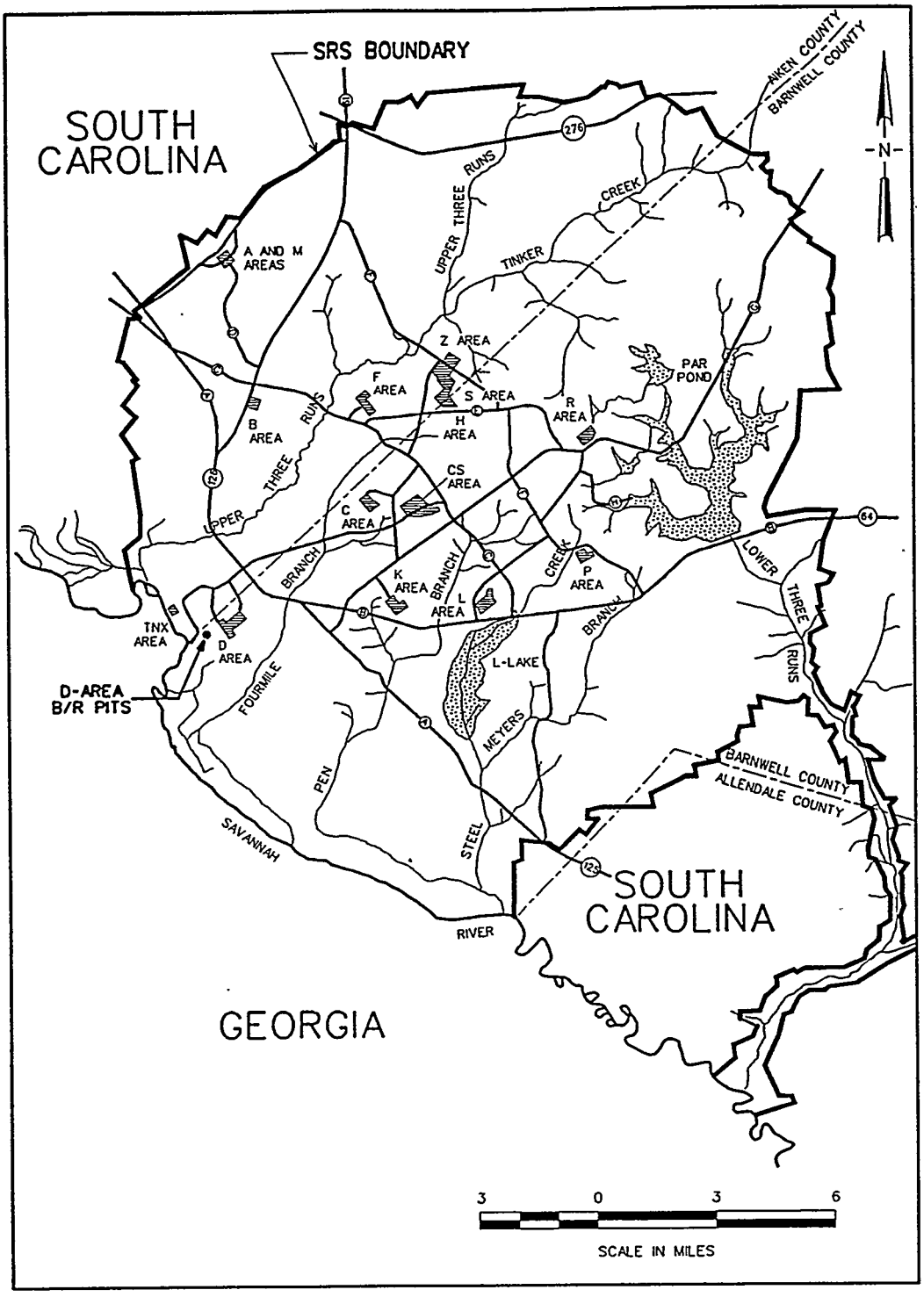


Figure 2-3 Location of D-Area Burning/Rubble Pits in Relation to Other Savannah River Site Facilities

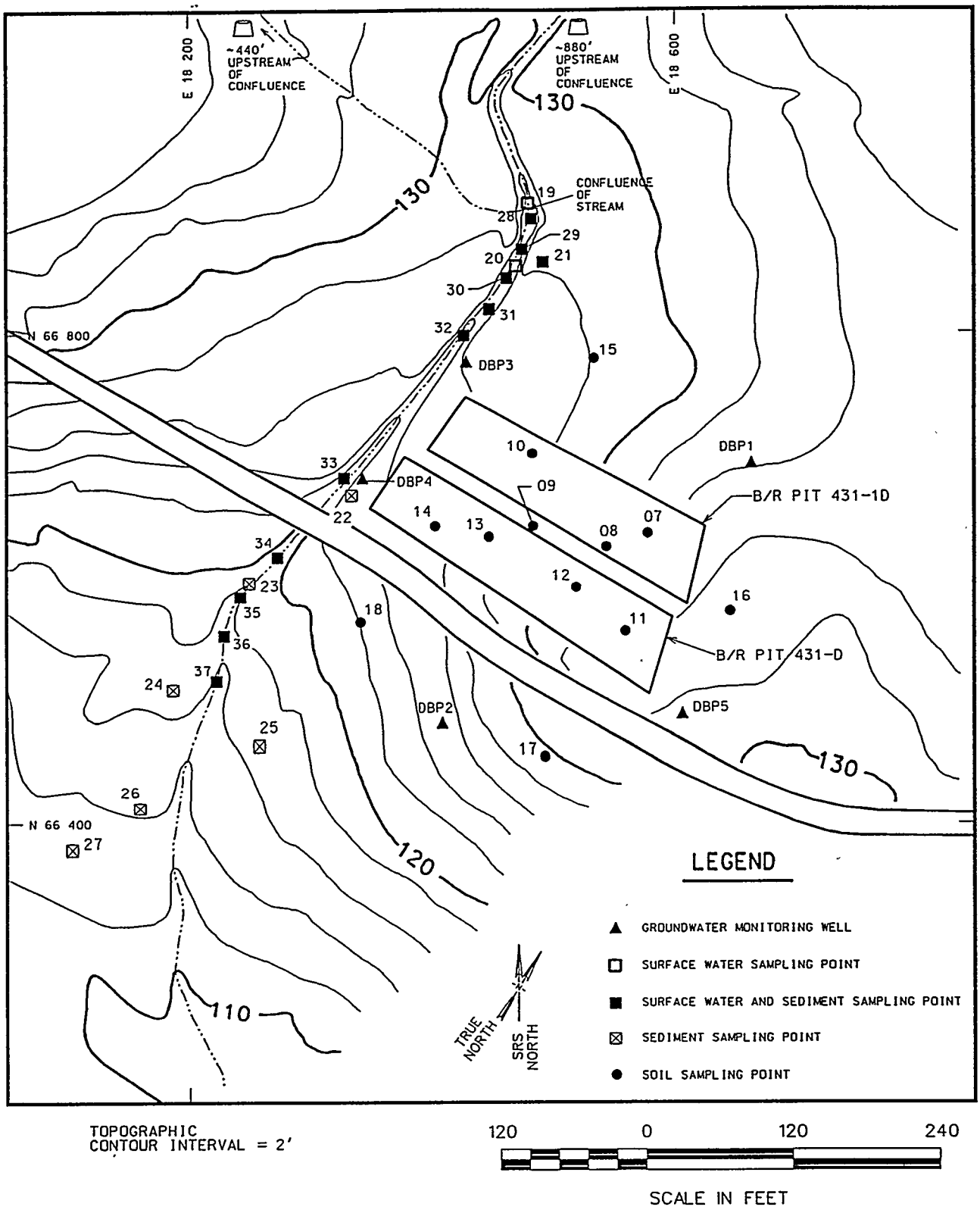


Figure 3-1 D-Area Burning/Rubble Pits Unit Assessment Sampling Locations

TABLES

Table 5.1
Qualifier Codes

A	*Analysis Qualifier:* Relative Retention Time (RRT) or mass spectra criteria not met for organics compound identification. Used with "U" or "UJ" or "N" for all anomalies in pesticides compound identification. *Bias Codes:* Value reported is the mean of two or more determinations.
B	The result is below the contract required detection limit and above or equal to the instrument detection limit. Used with "J".
C	Laboratory Control sample exceeded control limits.
G	*Bias Codes:* Value reported is the maximum of two or more determinations.
H	*Analysis Qualifier:* Internal standards performance criteria not met. *Bias Code:* Analytical factor causing bias. The associated result may overestimate the true value (i.e., is bias high).
I	*Analysis Qualifier:* Matrix spike recovery is not within control limits.
J	*Result Qualifier:* The analytical result is an estimated quantity.
L	*Result Qualifier:* Off-scale high. The actual value is not known but is known to be greater than the value shown. *Analysis Qualifier:* Calibration criteria (initial or continuing) were not met. Used with "J" or "R". *Bias Codes:* Analytical factor causing bias. The associated result may underestimate the true value (i.e., is biased low).
M	Presence of material is verified but not quantified. The analytical result field should be blank. For analyses yielding a presence/absence result, the analyte is present.
NA	Analyte not analyzed.
O	*Analysis qualifier:* Surrogate spike recoveries are out of specification
Q	*Analysis qualifier:* Sample held beyond normal holding time.
R	*Result Qualifier:* Rejected because performance requirements in the sample or associated quality control analysis were not met. The analyte may or may not be present. *Analysis Qualifier:* ICP interference check sample criteria are not met. Used with "J", "UJ", or "R".
S	*Analysis Qualifier:* The reported value was determined by the method of standard additions.
T	*Analysis Qualifier:* Peak height (instead of peak area) was used to quantitate the analyte, and all other identification criteria were met; OR, signal to noise ratio of the confirmation ion is below 2.5, but the GC/MS analyst determined that the peak was positive.
U	*Result Qualifier:* The analyte was not detected. Value reported is the sample quantification limit.

Table 5.1 (Continued)
Qualifier Codes

V	*Analysis Qualifier:* The analyte was detected in an associated method blank. Used with "J" for non radionuclide analyses when the result is less than five times the amount in the associated blank (less than ten times for the common laboratory contaminants acetone, methylene chloride, 2-butanone, and phthalates). For radionuclide analyses, used with "J" when the result is less than five times the amount in the associated blank or "UJ" when the result is less than the detection limit.
X	Duplicate analysis relative percent difference (RPD) was not within control limits.
Y	*Analysis Qualifier:* Sample was unpreserved or improperly preserved.
1	Analytical factor causing bias-the associated result may underestimate the true value.
2	Analytical factor causing bias-the associated result may overestimate the true value.
3	Analytical factor causing bias-the associated result may be of poor precision (high variability).
<	Less than the detection limit specified in the results field.
//	Separation fields for the three types of data flags: result qualifiers, analysis qualifiers, and bias codes. In the event no data qualifiers are assigned to validated data, "//" will be displayed in the data qualifier field. Data which have not been validated will not display "//".

Table 5.2
Precision and Accuracy Validation

	Environmental Monitoring Section	**Exploration Resources**	**RUST Environment & Infrastructure**
	Groundwater	*Soils and Sediments*	*Surface Water and Sediments*
Accuracy			
Single control samples	YES	YES	YES
Surrogate recovery	YES	YES	YES
Matrix spike recovery	YES	YES	YES
Method blank	YES	YES	YES
Trip blank	NO	YES	YES
Field blank	NO	NO	YES
Rinsate blank	NO	NO	YES
Precision			
Duplicate control sample	YES	YES	YES
Matrix spike duplicate	YES	YES	YES
Laboratory duplicate	YES	YES	YES
Split duplicate	YES	NO	YES
Field duplicate	YES	NO	YES

YES = Validation regarding this issue was conducted.
NO = Validation regarding this issue was not conducted.

TABLE 6.1
VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110701		D43110702		D43110703		D43110704		D43110705		D43110706		D43110707		D43110801		D43110802	
Sample Date	60893		60893		60893		60893		60893		60993		60993		60993		60993	
Method 8240 (UG/KG)																		
1,1,1-Trichloroethane	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
1,1,2,2-Tetrachloroethane	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
1,1,2-Trichloroethane	< 5.35	/Y/	5.3	J/Y/	8.77	/Y/	5.68	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
1,1-Dichloroethane	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
1,1-Dichloroethylene	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
1,2-Dichloroethane	< 5.35	/Y/	3.4	J/Y/	9.67	/Y/	8.11	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
1,2-Dichloroethylene	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
1,2-Dichloropropane	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
2-Chloroethyl vinyl ether	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2-Hexanone	< 10.7	/Y/	< 11	/Y/	< 12.3	/Y/	< 13	/Y/	< 11.9	/Y/	< 12.3	//	< 11.6	//	< 10.5	//	< 11	//
Acetone	< 12.4	/YV/	< 11	/YV/	5800	/YV/	769	/YV/	< 56.8	/YV/	< 10.4	J/V/	< 11.6	/V/	< 6.6	J/V/	< 11	/V/
Benzene	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
Bromodichloromethane	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
Bromoform	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
Bromomethane (Methyl bromide)	< 10.7	/Y/	< 11	/Y/	< 12.3	/Y/	< 13	/Y/	< 11.9	/Y/	< 12.3	//	< 11.6	//	< 10.5	//	< 11	//
Carbon disulfide	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
Carbon tetrachloride	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
Chlorobenzene	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
Chloroethane	< 10.7	/Y/	< 11	/Y/	< 12.3	/Y/	< 13	/Y/	< 11.9	/Y/	< 12.3	//	< 11.6	//	< 10.5	//	< 11	//
Chloroethene (Vinyl chloride)	< 10.7	/Y/	< 11	/Y/	< 12.3	/Y/	< 13	/Y/	< 11.9	/Y/	< 12.3	//	< 11.6	//	< 10.5	//	< 11	//
Chloroform	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
Chloromethane (Methyl chloride)	< 10.7	/Y/	< 11	/Y/	< 12.3	/Y/	< 13	/Y/	< 11.9	/Y/	< 12.3	//	< 11.6	//	< 10.5	//	< 11	//
cis-1,3-Dichloropropene	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
Dibromochloromethane	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
Dichloromethane (Methylene chloride)	< 5.35	/Y/	< 39.6	/YV/	< 6.15	/YV/	60.1	/YV/	< 5.95	/YV/	< 27	/V/	< 20.6	/V/	< 16.2	/V/	< 15.8	/V/
Ethylbenzene	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
Methyl ethyl ketone	< 10.7	/Y/	< 11	/Y/	< 12.3	/Y/	12.9	/Y/	< 11.9	/Y/	< 12.3	//	< 11.6	//	< 10.5	//	< 11	//
Methyl isobutyl ketone	< 10.7	/Y/	< 11	/Y/	< 12.3	/Y/	< 13	/Y/	< 11.9	/Y/	< 12.3	//	< 11.6	//	< 10.5	//	< 11	//
Styrene	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
Tetrachloroethylene	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
Toluene	< 5.35	/Y/	3.64	J/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
trans-1,3-Dichloropropene	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
Trichloroethylene	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//
Vinyl acetate	< 10.7	/Y/	< 11	/Y/	< 12.3	/Y/	< 13	/Y/	< 11.9	/Y/	< 12.3	//	< 11.6	//	< 10.5	//	< 11	//
Xylenes	< 5.35	/Y/	< 5.5	/Y/	< 6.15	/Y/	< 6.5	/Y/	< 5.95	/Y/	< 6.15	//	< 5.8	//	< 5.25	//	< 5.5	//

TABLE 6.1
VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110803		D43110804		D43110805		D43110806		D43110807		D43110901		D43110902		D43110903		D43110904	
Sample Date	60993		60993		60993		60993		60993		60993		60993		60993		60993	
Method 8240 (UG/KG)																		
1,1,1-Trichloroethane	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
1,1,2,2-Tetrachloroethane	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
1,1,2-Trichloroethane	< 5.8	//	< 6.1	//	< 6.15	//	5.09	J//	7.12	//	< 5.2	//	3.23	J//	< 5.65	//	3.82	J//
1,1-Dichloroethane	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
1,1-Dichloroethylene	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
1,2-Dichloroethane	< 5.8	//	4.04	J//	< 6.15	//	6.14	//	8.79	//	< 5.2	//	< 5.4	//	< 5.65	//	3.83	J//
1,2-Dichloroethylene	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
1,2-Dichloropropane	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
2-Chloroethyl vinyl ether	NA		NA		NA		NA		NA		NA		NA		NA		NA	
2-Hexanone	< 11.6	//	< 12.2	//	< 12.3	//	< 12.2	//	< 12.8	//	< 10.4	//	< 10.8	//	< 11.3	//	< 11.5	//
Acetone	< 11.1	J/V/	652	/V/	427	/V/	768	/V/	< 179	/V/	< 9.55	J/V/	< 10.8	/V/	< 11.3	/V/	2580	/V/
Benzene	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
Bromodichloromethane	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
Bromoform	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
Bromomethane (Methyl bromide)	< 11.6	//	< 12.2	//	< 12.3	//	< 12.2	//	< 12.8	//	< 10.4	//	< 10.8	//	< 11.3	//	< 11.5	//
Carbon disulfide	< 5.8	//	3.73	J//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
Carbon tetrachloride	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
Chlorobenzene	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
Chloroethane	< 11.6	//	< 12.2	//	< 12.3	//	< 12.2	//	< 12.8	//	< 10.4	//	< 10.8	//	< 11.3	//	< 11.5	//
Chloroethene (Vinyl chloride)	< 11.6	//	< 12.2	//	< 12.3	//	< 12.2	J/L/	< 12.8	//	< 10.4	//	< 10.8	//	< 11.3	//	< 11.5	//
Chloroform	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
Chloromethane (Methyl chloride)	< 11.6	//	< 12.2	//	< 12.3	//	< 12.2	//	< 12.8	//	< 10.4	//	< 10.8	//	< 11.3	//	< 11.5	//
cis-1,3-Dichloropropene	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
Dibromochloromethane	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
Dichloromethane (Methylene chloride)	< 22.1	/V/	< 22.9	/V/	< 12.1	/V/	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
Ethylbenzene	< 5.8	//	15.6	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
Methyl ethyl ketone	< 11.6	//	21.1	//	< 12.3	//	< 12.2	//	< 12.8	//	< 10.4	//	< 10.8	//	< 11.3	//	< 11.5	//
Methyl isobutyl ketone	< 11.6	//	< 12.2	//	< 12.3	//	< 12.2	//	< 12.8	//	< 10.4	//	< 10.8	//	< 11.3	//	< 11.5	//
Styrene	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
Tetrachloroethylene	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
Toluene	< 5.8	//	6.61	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
trans-1,3-Dichloropropene	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
Trichloroethylene	< 5.8	//	< 6.1	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//
Vinyl acetate	< 11.6	//	< 12.2	//	< 12.3	//	< 12.2	//	< 12.8	//	< 10.4	//	< 10.8	//	< 11.3	//	< 11.5	//
Xylenes	< 5.8	//	7.93	//	< 6.15	//	< 6.1	//	< 6.4	//	< 5.2	//	< 5.4	//	< 5.65	//	< 5.75	//

TABLE 6.1
VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110906	D43110907	D43111001	D43111002	D43111003	D43111004	D43111005	D43111006	D43111007
Sample Date	61093	61093	61093	61093	61093	61093	61093	61093	61093
Method 8240 (UG/KG)									
1,1,1-Trichloroethane	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
1,1,2,2-Tetrachloroethane	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
1,1,2-Trichloroethane	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	7.76 //
1,1-Dichloroethane	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
1,1-Dichloroethylene	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
1,2-Dichloroethane	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	8.83 //
1,2-Dichloroethylene	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
1,2-Dichloropropane	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
2-Chloroethyl vinyl ether	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	< 11.6 //	< 12.4 //	< 10.9 //	< 11.1 //	< 11.2 //	< 11.5 //	< 13.2 //	< 12.7 //	< 12.8 //
Acetone	< 25.4 /V/	< 12.4 /V/	< 10.9 /V/	< 11.1 /V/	< 11.2 /V/	< 11.5 /V/	< 13.2 /V/	< 12.7 //	< 28.6 /V/
Benzene	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 /V/	< 6.4 /V/
Bromodichloromethane	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
Bromoform	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
Bromomethane (Methyl bromide)	< 11.6 //	< 12.4 //	< 10.9 //	< 11.1 //	< 11.2 //	< 11.5 //	< 13.2 //	< 12.7 //	< 12.8 //
Carbon disulfide	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
Carbon tetrachloride	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
Chlorobenzene	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
Chloroethane	< 11.6 //	< 12.4 //	< 10.9 //	< 11.1 //	< 11.2 //	< 11.5 //	< 13.2 //	< 12.7 //	< 12.8 //
Chloroethene (Vinyl chloride)	< 11.6 //	< 12.4 //	< 10.9 //	< 11.1 //	< 11.2 //	< 11.5 //	< 13.2 //	< 12.7 //	< 12.8 //
Chloroform	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
Chloromethane (Methyl chloride)	< 11.6 //	< 12.4 //	< 10.9 //	< 11.1 //	< 11.2 //	< 11.5 //	< 13.2 //	< 12.7 //	< 12.8 //
cis-1,3-Dichloropropene	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
Dibromochloromethane	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
Dichloromethane (Methylene chloride)	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	5.54 //	< 20.3 /V/
Ethylbenzene	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
Methyl ethyl ketone	< 11.6 //	< 12.4 //	< 10.9 //	< 11.1 //	< 11.2 //	< 11.5 //	< 13.2 //	< 12.7 //	< 12.8 //
Methyl isobutyl ketone	< 11.6 //	< 12.4 //	< 10.9 //	< 11.1 //	< 11.2 //	< 11.5 //	< 13.2 //	< 12.7 //	< 12.8 //
Styrene	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
Tetrachloroethylene	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
Toluene	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
trans-1,3-Dichloropropene	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
Trichloroethylene	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //
Vinyl acetate	< 11.6 //	< 12.4 //	< 10.9 //	< 11.1 //	< 11.2 //	< 11.5 //	< 13.2 //	< 12.7 //	< 12.8 //
Xylenes	< 5.8 //	< 6.2 //	< 5.45 //	< 5.55 //	< 5.6 //	< 5.75 //	< 6.6 //	< 6.35 //	< 6.4 //

TABLE 6.1
VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1101		D431 1102		D431 1103		D431 1104		D431 1105		D431 1106		D431 1107		D431 1201		D431 1202	
Sample Date	61093		61093		61093		61093		61193		61193		61193		61493		61493	
Method 8240 (UG/KG)																		
1,1,1-Trichloroethane	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
1,1,2,2-Tetrachloroethane	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
1,1,2-Trichloroethane	< 5.2	//	< 5.35	//	6.21	//	5.88	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
1,1-Dichloroethane	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
1,1-Dichloroethylene	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
1,2-Dichloroethane	< 5.2	//	< 5.35	//	7.07	//	6.65	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
1,2-Dichloroethylene	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
1,2-Dichloropropane	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
2-Chloroethyl vinyl ether	NA		NA		NA		NA		< 12	//	< 11	//	< 13	//	< 11	//	< 11	//
2-Hexanone	< 10.4	//	< 10.7	//	< 10.9	//	< 11.4	//	< 12	//	< 11	//	< 13	//	< 11	//	< 11	//
Acetone	< 18.2	/V/	< 14.3	/V/	< 54.4	/V/	< 31.7	/V/	3450	//	118	//	125	//	< 11	//	< 11	//
Benzene	< 5.58	/V/	< 5.35	/V/	< 4.65	J/V/	< 5.7	/V/	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
Bromodichloromethane	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
Bromoform	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
Bromomethane (Methyl bromide)	< 10.4	//	< 10.7	//	< 10.9	//	< 11.4	//	< 12	//	< 11	//	< 13	//	< 11	//	< 11	//
Carbon disulfide	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
Carbon tetrachloride	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
Chlorobenzene	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
Chloroethane	< 10.4	//	< 10.7	//	< 10.9	//	< 11.4	//	< 12	//	< 11	//	< 13	//	< 11	//	< 11	//
Chloroethene (Vinyl chloride)	< 10.4	//	< 10.7	//	< 10.9	//	< 11.4	//	< 12	//	< 11	//	< 13	//	< 11	//	< 11	//
Chloroform	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
Chloromethane (Methyl chloride)	< 10.4	//	< 10.7	//	< 10.9	//	< 11.4	//	< 12	//	< 11	//	< 13	//	< 11	//	< 11	//
cis-1,3-Dichloropropene	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
Dibromochloromethane	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
Dichloromethane (Methylene chloride)	< 15.6	/V/	< 12.5	/V/	< 14	/V/	< 13.7	/V/	< 10.8	/V/	< 14.4	/V/	< 15.1	/V/	< 8.48	/V/	< 12.2	/V/
Ethylbenzene	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
Methyl ethyl ketone	< 10.4	//	< 10.7	//	< 10.9	//	< 11.4	//	< 12	//	< 11	//	< 13	//	< 11	//	< 11	//
Methyl isobutyl ketone	< 10.4	//	< 10.7	//	< 10.9	//	< 11.4	//	< 12	//	< 11	//	< 13	//	< 11	//	< 11	//
Styrene	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
Tetrachloroethylene	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
Toluene	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	1.86	J//
trans-1,3-Dichloropropene	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
Trichloroethylene	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//
Vinyl acetate	< 10.4	//	< 10.7	//	< 10.9	//	< 11.4	//	< 12	//	< 11	//	< 13	//	< 11	//	< 11	//
Xylenes	< 5.2	//	< 5.35	//	< 5.45	//	< 5.7	//	< 6	//	< 5.5	//	< 6.5	//	< 5.5	//	< 5.5	//

TABLE 6.1
VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1203		D431 1204		D431 1205		D431 1206		D431 1207		D431 1301		D431 1302		D431 1303		D431 1304	
Sample Date	61493		61493		61493		61493		61493		61493		61493		61493		61493	
Method 8240 (UG/KG)																		
1,1,1-Trichloroethane	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	2.01	J//
1,1,2,2-Tetrachloroethane	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	< 5.5	//
1,1,2-Trichloroethane	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	< 5.5	//
1,1-Dichloroethane	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	< 5.5	//
1,1-Dichloroethylene	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	< 5.5	//
1,2-Dichloroethane	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	< 5.5	//
1,2-Dichloroethylene	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	2.43	J//
1,2-Dichloropropane	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	< 5.5	//
2-Chloroethyl vinyl ether	< 11	//	< 12	//	< 12	//	< 12	//	< 12	//	< 11	//	< 12	//	< 11	//	< 11	//
2-Hexanone	< 11	//	< 12	//	< 12	//	< 12	//	< 12	//	< 11	//	< 12	//	< 11	//	< 11	//
Acetone	17.2	//	76.8	/V/	31.3	J//	166	/V/	7.57	J//	< 11	//	< 12	//	< 11	/V/	< 36.1	/V/
Benzene	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	1.87	J//
Bromodichloromethane	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	< 5.5	//
Bromoform	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	< 5.5	//
Bromomethane (Methyl bromide)	< 11	//	< 12	//	< 12	//	< 12	//	< 12	//	< 11	//	< 12	//	< 11	//	< 11	//
Carbon disulfide	< 5.5	//	4.32	J//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	3.8	J//
Carbon tetrachloride	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	< 5.5	//
Chlorobenzene	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	< 5.5	//
Chloroethane	< 11	//	< 12	//	< 12	//	< 12	//	< 12	//	< 11	//	< 12	//	< 11	//	< 11	//
Chloroethene (Vinyl chloride)	< 11	//	< 12	//	< 12	//	< 12	//	< 12	//	< 11	//	< 12	//	< 11	//	< 11	//
Chloroform	< 5.5	//	< 6	//	< 6	/V/	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	< 5.5	//
Chloromethane (Methyl chloride)	< 11	//	< 12	//	< 12	//	< 12	//	< 12	//	< 11	//	< 12	//	< 11	//	< 11	//
cis-1,3-Dichloropropene	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	< 5.5	//
Dibromochloromethane	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	< 5.5	//
Dichloromethane (Methylene chloride)	< 13.7	/V/	7.32	//	11.7	J/V/	< 12.4	/V/	< 13.3	/V/	< 9.03	/V/	< 9.91	/V/	< 8.25	/V/	< 33	/V/
Ethylbenzene	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	13.7	//
Methyl ethyl ketone	< 11	//	< 12	//	< 12	//	< 12	//	< 12	//	< 11	//	< 12	//	< 11	//	< 11	//
Methyl isobutyl ketone	< 11	//	< 12	//	< 12	//	< 12	//	< 12	//	< 11	//	< 12	//	< 11	//	< 11	//
Styrene	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	< 5.5	//
Tetrachloroethylene	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	13.3	//
Toluene	4.25	J//	2.29	J//	1.88	J//	1.81	J//	1.31	J//	< 5.5	//	< 6	//	1.73	J//	26.7	//
trans-1,3-Dichloropropene	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	< 5.5	//
Trichloroethylene	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	1.1	J//
Vinyl acetate	< 11	//	< 12	//	< 12	//	< 12	//	< 12	//	< 11	//	< 12	//	< 11	//	< 11	//
Xylenes	< 5.5	//	< 6	//	< 6	//	< 6	//	< 6	//	< 5.5	//	< 6	//	< 5.5	//	57.1	//

TABLE 6.1
VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1305		D431 1306		D431 1307		D431 1401		D431 1402		D431 1403		D431 1404		D431 1405		D431 1406	
Sample Date	61493		61493		61493		61593		61593		61593		61593		61593		61593	
Method 8240 (UG/KG)																		
1,1,1-Trichloroethane	1.9	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
1,1,2,2-Tetrachloroethane	< 5.5	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
1,1,2-Trichloroethane	< 5.5	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
1,1-Dichloroethane	< 5.5	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
1,1-Dichloroethylene	< 5.5	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
1,2-Dichloroethane	< 5.5	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
1,2-Dichloroethylene	7.19	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	6.05	//	4.95	//	6.69	//	< 6.5	//
1,2-Dichloropropane	< 5.5	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
2-Chloroethyl vinyl ether	< 11	J/O/L	< 11	//	< 12	//	NA		NA		NA		NA		NA		NA	
2-Hexanone	< 11	J/O/L	< 11	//	< 12	//	< 11.4	J/H/	< 11.3	//	< 11.4	//	< 10.9	//	< 11.4	//	< 13	//
Acetone	156	J/VO/L	< 49	/V/	< 16.2	/V/	< 11.4	J/H/	< 11.3	/V/	14.6	//	< 10.9	/V/	< 37.8	/V/	740	//
Benzene	5.21	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
Bromodichloromethane	< 5.5	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
Bromoform	< 5.5	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
Bromomethane (Methyl bromide)	< 11	J/O/L	< 11	//	< 12	//	< 11.4	J/H/	< 11.3	//	< 11.4	//	< 10.9	//	< 11.4	//	< 13	//
Carbon disulfide	11.5	J/O/L	1.53	J//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
Carbon tetrachloride	< 5.5	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
Chlorobenzene	< 5.5	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
Chloroethane	< 11	J/O/L	< 11	//	< 12	//	< 11.4	J/H/	< 11.3	//	< 11.4	//	< 10.9	//	< 11.4	//	< 13	//
Chloroethene (Vinyl chloride)	< 11	J/O/L	< 11	//	< 12	//	< 11.4	J/HL/	< 11.3	//	< 11.4	//	< 10.9	//	< 11.4	//	< 13	//
Chloroform	< 5.5	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
Chloromethane (Methyl chloride)	< 11	J/O/L	< 11	//	< 12	//	< 11.4	J/H/	< 11.3	//	< 11.4	//	< 10.9	//	< 11.4	//	< 13	//
cis-1,3-Dichloropropene	< 5.5	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
Dibromochloromethane	< 5.5	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
Dichloromethane (Methylene chloride)	< 27.1	J/VO/L	< 26	/V/	< 18.6	/V/	< 5.7	J/H/	< 5.65	//	< 7.32	/V/	< 5.45	//	< 5.7	//	< 9.67	/V/
Ethylbenzene	15.3	J/O/L	1.14	J//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
Methyl ethyl ketone	28.9	J/O/L	7.18	J//	< 12	//	< 11.4	J/H/	< 11.3	//	< 11.4	//	< 10.9	//	< 11.4	//	< 13	//
Methyl isobutyl ketone	< 11	J/O/L	< 11	//	< 12	//	< 11.4	J/H/	< 11.3	//	< 11.4	//	< 10.9	//	< 11.4	//	< 13	//
Styrene	< 5.5	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
Tetrachloroethylene	12.5	J/O/L	2.51	J//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
Toluene	22.9	J/O/L	8.8	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
trans-1,3-Dichloropropene	< 5.5	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
Trichloroethylene	1.58	J/O/L	< 5.5	//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//
Vinyl acetate	< 11	J/O/L	< 11	//	< 12	//	< 11.4	J/H/	< 11.3	//	< 11.4	//	< 10.9	//	< 11.4	//	< 13	//
Xylenes	39	J/O/L	5.19	J//	< 6	//	< 5.7	J/H/	< 5.65	//	< 5.7	//	< 5.45	//	< 5.7	//	< 6.5	//

TABLE 6.1
VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1407		D43111501		D43111502		D43111503		D43111504		D43111601		D43111602		D43111603		D43111604	
Sample Date	61593		61693		61693		61693		61693		62193		62193		62293		62293	
Method 8240 (UG/KG)																		
1,1,1-Trichloroethane	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
1,1,2,2-Tetrachloroethane	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
1,1,2-Trichloroethane	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
1,1-Dichloroethane	< 6.45	//	< 5.7	//	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
1,1-Dichloroethylene	< 6.45	//	< 5.7	//	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
1,2-Dichloroethane	< 6.45	//	< 5.7	//	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
1,2-Dichloroethylene	< 6.45	//	< 5.7	//	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
1,2-Dichloropropane	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
2-Chloroethyl vinyl ether	NA		NA		NA		NA		NA		< 10	//	< 11	//	< 12	//	< 11	//
2-Hexanone	< 12.9	//	< 11.4	J/H/	< 11.1	//	< 11.6	//	< 12.3	//	< 10	//	< 11	//	< 12	//	< 11	//
Acetone	53.9	//	< 11.4	//	< 11.1	//	< 11.6	//	41	//	< 6.21	J/V/	< 10.1	J/V/	< 11.2	J/V/	< 12.8	/V/
Benzene	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
Bromodichloromethane	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
Bromoform	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
Bromomethane (Methyl bromide)	< 12.9	//	< 11.4	//	< 11.1	//	< 11.6	//	< 12.3	//	< 10	//	< 11	//	< 12	//	< 11	//
Carbon disulfide	< 6.45	//	< 5.7	//	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	3.48	J//	< 5.5	//.
Carbon tetrachloride	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
Chlorobenzene	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
Chloroethane	< 12.9	//	< 11.4	//	< 11.1	//	< 11.6	//	< 12.3	//	< 10	//	< 11	//	< 12	//	< 11	//
Chloroethene (Vinyl chloride)	< 12.9	//	< 11.4	//	< 11.1	//	< 11.6	//	< 12.3	//	< 10	//	< 11	//	< 12	//	< 11	//
Chloroform	< 6.45	//	< 5.7	//	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
Chloromethane (Methyl chloride)	< 12.9	//	< 11.4	//	< 11.1	//	< 11.6	//	< 12.3	//	< 10	//	< 11	//	< 12	//	< 11	//
cis-1,3-Dichloropropene	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
Dibromochloromethane	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
Dichloromethane (Methylene chloride)	< 15.2	/V/	< 5.7	//	< 5.55	//	< 5.8	//	< 6.15	//	< 13	/V/	< 14.2	/V/	< 17.4	/V/	< 11.9	/V/
Ethylbenzene	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
Methyl ethyl ketone	< 12.9	//	< 11.4	//	< 11.1	//	< 11.6	//	< 12.3	//	< 10	//	< 11	//	< 12	//	< 11	//
Methyl isobutyl ketone	< 12.9	//	< 11.4	J/H/	< 11.1	//	< 11.6	//	< 12.3	//	< 10	//	< 11	//	< 12	//	< 11	//
Styrene	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
Tetrachloroethylene	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
Toluene	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	1.64	J//	< 5.5	//	< 6	//	< 5.5	//
trans-1,3-Dichloropropene	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
Trichloroethylene	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//
Vinyl acetate	< 12.9	//	< 11.4	J/H/	< 11.1	//	< 11.6	//	< 12.3	//	< 10	//	< 11	//	< 12	//	< 11	//
Xylenes	< 6.45	//	< 5.7	J/H/	< 5.55	//	< 5.8	//	< 6.15	//	< 5	//	< 5.5	//	< 6	//	< 5.5	//

TABLE 6.1
VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43111605		D43111606		D431 1701		D431 1702		D431 1703		D431 1704		D431 1705		D431 1706		D431 1801	
Sample Date	62293		62293		62393		62393		62393		62393		62393		62393		61693	
Method 8240 (UG/KG)																		
1,1,1-Trichloroethane	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
1,1,2,2-Tetrachloroethane	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
1,1,2-Trichloroethane	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	5.75	J//	< 6.35	//	< 6.25	//	3.32	J//
1,1-Dichloroethane	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
1,1-Dichloroethylene	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
1,2-Dichloroethane	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	6.15	//	< 6.35	//	< 6.25	//	4.3	J//
1,2-Dichloroethylene	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
1,2-Dichloropropane	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
2-Chloroethyl vinyl ether	< 11	//	< 12	//	NA		NA		NA		NA		NA		NA		NA	
2-Hexanone	< 11	//	< 12	//	< 10.3	J/Q/	< 11	J/O/L	< 12.9	J/Q/	< 12.5	//	< 12.7	//	< 12.5	//	< 11.1	//
Acetone	< 34.2	/V/	< 25.3	/V/	< 10	J/QV/	< 10.4	J/VO/L	< 26.7	/QV/	< 12.8	/V/	< 13.5	/V/	< 13.2	/V/	< 11.1	//
Benzene	< 5.5	//	< 6	//	< 5.15	J/Q/	< 7.45	J/VO/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	5.64	J//	< 5.55	//
Bromodichloromethane	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
Bromoform	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
Bromomethane (Methyl bromide)	< 11	//	< 12	//	< 10.3	J/Q/	< 11	J/O/L	< 12.9	J/Q/	< 12.5	//	< 12.7	//	< 12.5	//	< 11.1	//
Carbon disulfide	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
Carbon tetrachloride	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
Chlorobenzene	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
Chloroethane	< 11	//	< 12	//	< 10.3	J/Q/	< 11	J/O/L	< 12.9	J/Q/	< 12.5	//	< 12.7	//	< 12.5	//	< 11.1	//
Chloroethene (Vinyl chloride)	< 11	//	< 12	//	< 10.3	J/Q/	< 11	J/O/L	< 12.9	J/Q/	< 12.5	//	< 12.7	//	< 12.5	//	< 11.1	//
Chloroform	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
Chloromethane (Methyl chloride)	< 11	//	< 12	//	< 10.3	J/Q/	< 11	J/O/L	< 12.9	J/Q/	< 12.5	//	< 12.7	//	< 12.5	//	< 11.1	//
cis-1,3-Dichloropropene	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
Dibromochloromethane	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
Dichloromethane (Methylene chloride)	< 12.1	/V/	< 13.8	/V/	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 10.8	/V/
Ethylbenzene	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
Methyl ethyl ketone	< 11	//	< 12	//	< 10.3	J/Q/	< 11	J/O/L	< 12.9	J/Q/	< 12.5	//	< 12.7	//	< 12.5	//	< 11.1	//
Methyl isobutyl ketone	< 11	//	< 12	//	< 10.3	J/Q/	< 11	J/O/L	< 12.9	J/Q/	< 12.5	//	< 12.7	//	< 12.5	//	< 11.1	//
Styrene	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
Tetrachloroethylene	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
Toluene	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
trans-1,3-Dichloropropene	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
Trichloroethylene	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//
Vinyl acetate	< 11	//	< 12	//	< 10.3	J/Q/	< 11	J/O/L	< 12.9	J/Q/	< 12.5	//	< 12.7	//	< 12.5	//	< 11.1	//
Xylenes	< 5.5	//	< 6	//	< 5.15	J/Q/	< 5.5	J/O/L	< 6.45	J/Q/	< 6.25	//	< 6.35	//	< 6.25	//	< 5.55	//

TABLE 6.1
VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1802		D431 1803		D431 1804	
Sample Date	61693		61693		61693	
Method 8240 (UG/KG)						
1,1,1-Trichloroethane	< 5.55	//	< 6.8	//	< 5.85	//
1,1,2,2-Tetrachloroethane	< 5.55	//	< 6.8	//	< 5.85	//
1,1,2-Trichloroethane	< 5.55	//	< 6.8	//	< 5.85	//
1,1-Dichloroethane	< 5.55	//	< 6.8	//	< 5.85	//
1,1-Dichloroethylene	< 5.55	//	< 6.8	//	6.11	//
1,2-Dichloroethane	< 5.55	//	4.2	J//	< 5.85	//
1,2-Dichloroethylene	< 5.55	//	< 6.8	//	< 5.85	//
1,2-Dichloropropane	< 5.55	//	< 6.8	//	< 5.85	//
2-Chloroethyl vinyl ether	NA		NA		NA	
2-Hexanone	< 11.1	//	< 13.6	//	< 11.7	//
Acetone	< 11.1	//	12.2	J//	398	//
Benzene	< 5.55	//	< 6.8	//	4.31	J//
Bromodichloromethane	< 5.55	//	< 6.8	//	< 5.85	//
Bromoform	< 5.55	//	< 6.8	//	< 5.85	//
Bromomethane (Methyl bromide)	< 11.1	//	< 13.6	//	< 11.7	//
Carbon disulfide	< 5.55	//	< 6.8	//	< 5.85	//
Carbon tetrachloride	< 5.55	//	< 6.8	//	< 5.85	//
Chlorobenzene	< 5.55	//	< 6.8	//	3.54	J//
Chloroethane	< 11.1	//	< 13.6	//	< 11.7	//
Chloroethene (Vinyl chloride)	< 11.1	//	< 13.6	//	< 11.7	//
Chloroform	< 5.55	//	< 6.8	//	< 5.85	//
Chloromethane (Methyl chloride)	< 11.1	//	< 13.6	//	< 11.7	//
cis-1,3-Dichloropropene	< 5.55	//	< 6.8	//	< 5.85	//
Dibromochloromethane	< 5.55	//	< 6.8	//	< 5.85	//
Dichloromethane (Methylene chloride)	< 13.1	/V/	< 6.8	//	< 5.85	//
Ethylbenzene	< 5.55	//	< 6.8	//	< 5.85	//
Methyl ethyl ketone	< 11.1	//	< 13.6	//	< 11.7	//
Methyl isobutyl ketone	< 11.1	//	< 13.6	//	< 11.7	//
Styrene	< 5.55	//	< 6.8	//	< 5.85	//
Tetrachloroethylene	< 5.55	//	< 6.8	//	< 5.85	//
Toluene	< 5.55	//	< 6.8	//	4.94	J//
trans-1,3-Dichloropropene	< 5.55	//	< 6.8	//	< 5.85	//
Trichloroethylene	< 5.55	//	< 6.8	//	4.73	J//
Vinyl acetate	< 11.1	//	< 13.6	//	< 11.7	//
Xylenes	< 5.55	//	< 6.8	//	< 5.85	//

TABLE 6.2
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110701		D43110702		D43110704		D43110705		D43110706		D43110707		D43110801		D43110802		D43110804	
Sample Date	60893		60893		60893		60893		60993		60993		60993		60993		60993	
Method 8270 (UG/KG)																		
1,2,4-Trichlorobenzene	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
1,2-Dichlorobenzene	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
1,3-Dichlorobenzene	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
1,4-Dichlorobenzene	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
2,4,5-Trichlorophenol	< 1740	/Y/	< 1790	/Y/	< 2120	/Y/	< 1950	/Y/	< 2040	//	< 1920	//	< 1740	//	< 1800	//	< 20400	//
2,4,6-Trichlorophenol	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
2,4-Dichlorophenol	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
2,4-Dimethyl phenol	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
2,4-Dinitrophenol	< 1740	/Y/	< 1790	/Y/	< 2120	/Y/	< 1950	/Y/	< 2040	//	< 1920	//	< 1740	//	< 1800	//	< 20400	//
2,4-Dinitrotoluene	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
2,6-Dinitrotoluene	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
2-Chloronaphthalene	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
2-Chlorophenol	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
2-Methyl-4,6-dinitrophenol	< 1740	/Y/	< 1790	/Y/	< 2120	/Y/	< 1950	/Y/	< 2040	//	< 1920	//	< 1740	//	< 1800	//	< 20400	//
2-Methylnaphthalene	< 347	/Y/	< 358	/Y/	184	J/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
2-Nitrophenol	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
3,3'-Dichlorobenzidine	< 694	/Y/	< 716	/Y/	< 846	/Y/	< 780	/Y/	< 814	//	< 770	//	< 698	//	< 720	//	< 8140	//
4-Bromophenyl phenyl ether	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
4-Chloro-m-cresol	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
4-Chloroaniline	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
4-Chlorophenyl phenyl ether	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
4-Nitrophenol	< 1740	/Y/	< 1790	/Y/	< 2120	/Y/	< 1950	/Y/	< 2040	//	< 1920	//	< 1740	//	< 1800	//	< 20400	//
Acenaphthene	< 347	/Y/	< 358	/Y/	71.9	J/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Acenaphthylene	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Anthracene	< 347	/Y/	< 358	/Y/	127	J/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Benzo(a)anthracene	< 347	/Y/	< 358	/Y/	311	J/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Benzo(a)pyrene	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Benzo(b)fluoranthene	< 347	/Y/	< 358	/Y/	367	J/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Benzo(g,h,i)perylene	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Benzo(k)fluoranthene	< 347	/Y/	< 358	/Y/	138	J/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Benzoic acid	< 1740	/Y/	< 1790	/Y/	< 2120	/Y/	< 1950	/Y/	< 2040	//	< 1920	//	< 1740	//	< 1800	//	< 20400	//
Benzyl alcohol	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Bis(2-chloroethoxy) methane	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Bis(2-chloroethyl) ether	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Bis(2-chloroisopropyl) ether	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Bis(2-ethylhexyl) phthalate	< 347	/Y/	184	J/Y/	966	/Y/	466	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	14300	//
Butylbenzyl phthalate	< 347	/Y/	< 358	/Y/	306	J/Y/	101	J/Y/	< 407	//	< 385	//	< 349	//	< 360	//	27600	//
Chrysene	< 347	/Y/	< 358	/Y/	330	J/Y/	43.3	J/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//

TABLE 6.2
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110701		D43110702		D43110704		D43110705		D43110706		D43110707		D43110801		D43110802		D43110804	
Sample Date	60893		60893		60893		60893		60993		60993		60993		60993		60993	
Method 8270 (UG/KG)																		
Di-n-butyl phthalate	< 46.8	J/YV/	< 84.5	J/YV/	< 58.4	J/YV/	118	J/YV/	< 109	J/V/	< 107	J/V/	< 93.5	J/V/	< 90.4	J/V/	< 456	J/V/
Di-n-octyl phthalate	< 347	/Y/	< 358	/Y/	117	J/Y/	< 390	/Y/	< 407	//	43.9	J//	< 349	//	< 360	//	431	J//
Dibenz(a,h)anthracene	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Dibenzofuran	< 347	/Y/	< 358	/Y/	69.8	J/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Diethyl phthalate	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Dimethyl phthalate	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Fluoranthene	< 347	/Y/	< 358	/Y/	628	/Y/	83.1	J/Y/	< 407	//	< 385	//	< 349	//	< 360	//	582	J//
Fluorene	< 347	/Y/	< 358	/Y/	66.4	J/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Hexachlorobenzene	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Hexachlorobutadiene	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Hexachlorocyclopentadiene	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Hexachloroethane	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Indeno(1,2,3-c,d)pyrene	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Isophorone	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
m-Nitroaniline	< 1740	/Y/	< 1790	/Y/	< 2120	/Y/	< 1950	/Y/	< 2040	//	< 1920	//	< 1740	//	< 1800	//	< 20400	//
N-Nitrosodiphenylamine	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
N-Nitrosodipropylamine	< 347	J/CY/	< 358	J/CY/	< 423	J/CY/	< 390	J/CY/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Naphthalene	< 347	/Y/	< 358	/Y/	112	J/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Nitrobenzene	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
o-Cresol (2-Methylphenol)	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
o-Nitroaniline	< 1740	/Y/	< 1790	/Y/	< 2120	/Y/	< 1950	/Y/	< 2040	//	< 1920	//	< 1740	//	< 1800	//	< 20400	//
p-Cresol (4-Methylphenol)	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
p-Nitroaniline	< 1740	/Y/	< 1790	/Y/	< 2120	/Y/	< 1950	/Y/	< 2040	//	< 1920	//	< 1740	//	< 1800	//	< 20400	//
Pentachlorophenol	< 1740	/Y/	< 1790	/Y/	< 2120	/Y/	< 1950	/Y/	< 2040	//	< 1920	//	< 1740	//	< 1800	//	< 20400	//
Phenanthrene	< 347	/Y/	< 358	/Y/	514	/Y/	78	J/Y/	< 407	//	< 385	//	< 349	//	< 360	//	15700	//
Phenol	< 347	/Y/	< 358	/Y/	< 423	/Y/	< 390	/Y/	< 407	//	< 385	//	< 349	//	< 360	//	< 4070	//
Pyrene	< 347	/Y/	< 358	/Y/	1040	/Y/	88.5	J/Y/	< 407	//	< 385	//	< 349	//	< 360	//	2710	J//

TABLE 6.2
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110805		D43110806		D43110807		D43110901		D43110902		D43110905		D43110906		D43110907		D43111001	
Sample Date	60993		60993		60993		60993		60993		61093		61093		61093		61093	
Method 8270 (UG/KG)																		
1,2,4-Trichlorobenzene	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
1,2-Dichlorobenzene	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
1,3-Dichlorobenzene	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
1,4-Dichlorobenzene	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
2,4,5-Trichlorophenol	< 4070	//	< 2030	//	< 2120	//	< 1740	//	< 1790	//	< 1800	//	< 1930	//	< 2050	//	< 1820	//
2,4,6-Trichlorophenol	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
2,4-Dichlorophenol	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
2,4-Dimethyl phenol	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
2,4-Dinitrophenol	< 4070	//	< 2030	//	< 2120	//	< 1740	//	< 1790	//	< 1800	//	< 1930	//	< 2050	//	< 1820	//
2,4-Dinitrotoluene	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
2,6-Dinitrotoluene	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
2-Chloronaphthalene	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
2-Chlorophenol	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
2-Methyl-4,6-dinitrophenol	< 4070	//	< 2030	//	< 2120	//	< 1740	//	< 1790	//	< 1800	//	< 1930	//	< 2050	//	< 1820	//
2-Methylnaphthalene	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
2-Nitrophenol	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
3,3'-Dichlorobenzidine	< 1630	//	< 812	//	< 850	//	< 694	//	< 716	//	< 720	//	< 772	//	< 820	//	< 726	//
4-Bromophenyl phenyl ether	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
4-Chloro-m-cresol	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
4-Chloroaniline	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
4-Chlorophenyl phenyl ether	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
4-Nitrophenol	< 4070	//	< 2030	//	< 2120	//	< 1740	//	< 1790	//	< 1800	//	< 1930	//	< 2050	//	< 1820	//
Acenaphthene	96.9	J//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Acenaphthylene	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Anthracene	234	J//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Benzo(a)anthracene	300	J//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Benzo(a)pyrene	255	J//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Benzo(b)fluoranthene	330	J//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Benzo(g,h,i)perylene	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Benzo(k)fluoranthene	128	J//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Benzoic acid	< 4070	//	< 2030	//	< 2120	//	< 1740	//	< 1790	//	< 1800	//	< 1930	//	< 2050	//	< 1820	//
Benzyl alcohol	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Bis(2-chloroethoxy) methane	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Bis(2-chloroethyl) ether	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Bis(2-chloroisopropyl) ether	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Bis(2-ethylhexyl) phthalate	1010	//	40.6	J//	51.4	J//	< 347	//	< 358	//	82.4	J//	< 386	//	< 410	//	< 363	//
Butylbenzyl phthalate	3050	//	66.6	J//	125	J//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Chrysene	313	J//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//

TABLE 6.2
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110805		D43110806		D43110807		D43110901		D43110902		D43110905		D43110906		D43110907		D43111001	
Sample Date	60993		60993		60993		60993		60993		61093		61093		61093		61093	
Method 8270 (UG/KG)																		
Di-n-butyl phthalate	< 138	J/V/	< 78.8	J/V/	< 130	J/V/	< 48.9	J/V/	< 61.9	J/V/	< 233	J/V/	< 288	J/V/	< 206	J/V/	< 248	J/V/
Di-n-octyl phthalate	< 814	//	< 406	/L/	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Dibenz(a,h)anthracene	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Dibenzofuran	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Diethyl phthalate	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Dimethyl phthalate	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Fluoranthene	882	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Fluorene	103	J//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Hexachlorobenzene	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Hexachlorobutadiene	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Hexachlorocyclopentadiene	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Hexachloroethane	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Indeno(1,2,3-c,d)pyrene	83	J//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Isophorone	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
m-Nitroaniline	< 4070	//	< 2030	//	< 2120	//	< 1740	//	< 1790	//	< 1800	//	< 1930	//	< 2050	//	< 1820	//
N-Nitrosodiphenylamine	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
N-Nitrosodipropylamine	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Naphthalene	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Nitrobenzene	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
o-Cresol (2-Methylphenol)	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
o-Nitroaniline	< 4070	//	< 2030	//	< 2120	//	< 1740	//	< 1790	//	< 1800	//	< 1930	//	< 2050	//	< 1820	//
p-Cresol (4-Methylphenol)	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
p-Nitroaniline	< 4070	//	< 2030	//	< 2120	//	< 1740	//	< 1790	//	< 1800	//	< 1930	//	< 2050	//	< 1820	//
Pentachlorophenol	< 4070	//	< 2030	//	< 2120	//	< 1740	//	< 1790	//	< 1800	J/C/	< 1930	J/CL/	< 2050	J/C/	< 1820	J/IC/H
Phenanthrene	1630	//	95	J//	58.2	J//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//
Phenol	< 814	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	J/C/	< 386	J/C/	< 410	J/C/	< 363	J/C/
Pyrene	825	//	< 406	//	< 425	//	< 347	//	< 358	//	< 360	//	< 386	//	< 410	//	< 363	//

TABLE 6.2
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43111002	D43111004	D43111005	D43111006	D43111007	D431 1101	D431 1102	D431 1104	D431 1105
Sample Date	61093	61093	61093	61093	61093	61093	61093	61093	61193
Method 8270 (UG/KG)									
1,2,4-Trichlorobenzene	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
1,2-Dichlorobenzene	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
1,3-Dichlorobenzene	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
1,4-Dichlorobenzene	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
2,4,5-Trichlorophenol	< 1820 //	< 1870 //	< 2200 //	< 2100 //	< 2120 //	< 1730 //	< 1750 //	< 1870 //	< 1860 //
2,4,6-Trichlorophenol	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
2,4-Dichlorophenol	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
2,4-Dimethyl phenol	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
2,4-Dinitrophenol	< 1820 //	< 1870 //	< 2200 //	< 2100 //	< 2120 //	< 1730 //	< 1750 //	< 1870 //	< 1860 //
2,4-Dinitrotoluene	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
2,6-Dinitrotoluene	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
2-Chloronaphthalene	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
2-Chlorophenol	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
2-Methyl-4,6-dinitrophenol	< 1820 //	< 1870 //	< 2200 //	< 2100 //	< 2120 //	< 1730 //	< 1750 //	< 1870 //	< 1860 //
2-Methylnaphthalene	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
2-Nitrophenol	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
3,3'-Dichlorobenzidine	< 726 //	< 748 //	< 878 //	< 838 //	< 850 //	< 692 //	< 700 //	< 748 //	< 746 //
4-Bromophenyl phenyl ether	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
4-Chloro-m-cresol	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
4-Chloroaniline	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
4-Chlorophenyl phenyl ether	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
4-Nitrophenol	< 1820 //	< 1870 //	< 2200 //	< 2100 //	< 2120 //	< 1730 //	< 1750 //	< 1870 //	< 1860 //
Acenaphthene	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
Acenaphthylene	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
Anthracene	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
Benzo(a)anthracene	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
Benzo(a)pyrene	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
Benzo(b)fluoranthene	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
Benzo(g,h,i)perylene	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
Benzo(k)fluoranthene	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
Benzoic acid	< 1820 //	< 1870 //	< 2200 //	< 2100 //	< 2120 //	< 1730 //	< 1750 //	< 1870 //	< 1860 //
Benzyl alcohol	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
Bis(2-chloroethoxy) methane	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
Bis(2-chloroethyl) ether	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
Bis(2-chloroisopropyl) ether	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //
Bis(2-ethylhexyl) phthalate	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	47.5 J//	< 671 JVI
Butylbenzyl phthalate	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	286 J//
Chrysene	< 363 //	< 374 //	< 439 //	< 419 //	< 425 //	< 346 //	< 350 //	< 374 //	< 373 //

TABLE 6.2
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43111002		D43111004		D43111005		D43111006		D43111007		D431 1101		D431 1102		D431 1104		D431 1105	
Sample Date	61093		61093		61093		61093		61093		61093		61093		61093		61193	
Method 8270 (UG/KG)																		
Di-n-butyl phthalate	< 185	J/V/	< 197	J/V/	< 196	J/V/	< 194	J/V/	< 198	J/V/	< 98.3	J/V/	< 124	J/V/	< 148	J/V/	61.6	J//
Di-n-octyl phthalate	< 363	//	< 374	//	< 439	//	522	//	< 425	//	< 346	//	< 350	//	< 374	//	115	J//
Dibenz(a,h)anthracene	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
Dibenzofuran	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
Diethyl phthalate	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
Dimethyl phthalate	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
Fluoranthene	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
Fluorene	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
Hexachlorobenzene	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
Hexachlorobutadiene	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
Hexachlorocyclopentadiene	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
Hexachloroethane	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
Indeno(1,2,3-c,d)pyrene	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
Isophorone	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
m-Nitroaniline	< 1820	//	< 1870	//	< 2200	//	< 2100	//	< 2120	//	< 1730	//	< 1750	//	< 1870	//	< 1860	//
N-Nitrosodiphenylamine	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
N-Nitrosodipropylamine	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
Naphthalene	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
Nitrobenzene	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
o-Cresol (2-Methylphenol)	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
o-Nitroaniline	< 1820	//	< 1870	//	< 2200	//	< 2100	//	< 2120	//	< 1730	//	< 1750	//	< 1870	//	< 1860	//
p-Cresol (4-Methylphenol)	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//
p-Nitroaniline	< 1820	//	< 1870	//	< 2200	//	< 2100	//	< 2120	//	< 1730	//	< 1750	//	< 1870	//	< 1860	//
Pentachlorophenol	< 1820	J/C/	< 1870	J/C/	< 2200	J/C/	< 2100	J/C/	< 2120	J/C/	< 1730	J/C/	< 1750	J/C/	< 1870	J/C/	< 1860	//
Phenanthrene	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	40.4	J//	< 373	//
Phenol	< 363	J/C/	< 374	J/C/	< 439	J/C/	< 419	J/C/	< 425	J/C/	< 346	J/C/	< 350	J/C/	< 374	J/C/	< 373	//
Pyrene	< 363	//	< 374	//	< 439	//	< 419	//	< 425	//	< 346	//	< 350	//	< 374	//	< 373	//

TABLE 6.2
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1106		D431 1107		D431 1201		D431 1202		D431 1204		D431 1205		D431 1206		D431 1207		D431 1301	
Sample Date	61193		61193		61493		61493		61493		61493		61493		61493		61493	
Method 8270 (UG/KG)																		
1,2,4-Trichlorobenzene	< 381	//	< 424	//	< 361	J/C/	< 368	J/C/	< 390	J/QC/	< 389	J/CO/L	< 391	J/C/	< 408	J/C/	< 350	J/C/
1,2-Dichlorobenzene	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
1,3-Dichlorobenzene	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
1,4-Dichlorobenzene	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
2,4,5-Trichlorophenol	< 1900	//	< 2120	//	< 1800	//	< 1840	//	< 1950	J/Q/	< 1940	J/O/L	< 1960	//	< 2040	//	< 1750	//
2,4,6-Trichlorophenol	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
2,4-Dichlorophenol	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
2,4-Dimethyl phenol	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
2,4-Dinitrophenol	< 1900	//	< 2120	//	< 1800	//	< 1840	//	< 1950	J/QV/	< 1940	J/O/L	< 1960	//	< 2040	//	< 1750	//
2,4-Dinitrotoluene	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/QC/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
2,6-Dinitrotoluene	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
2-Chloronaphthalene	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
2-Chlorophenol	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
2-Methyl-4,6-dinitrophenol	< 1900	//	< 2120	//	< 1800	//	< 1840	//	< 1950	J/Q/	< 1940	J/O/L	< 1960	//	< 2040	//	< 1750	//
2-Methylnaphthalene	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
2-Nitrophenol	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
3,3'-Dichlorobenzidine	< 762	//	< 848	//	< 722	//	< 736	//	< 780	J/Q/	< 778	J/O/L	< 782	//	< 816	//	< 700	//
4-Bromophenyl phenyl ether	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
4-Chloro-m-cresol	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
4-Chloroaniline	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
4-Chlorophenyl phenyl ether	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
4-Nitrophenol	< 1900	//	< 2120	//	< 1800	//	< 1840	//	< 1950	J/Q/	< 1940	J/O/L	< 1960	//	< 2040	//	< 1750	//
Acenaphthene	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
Acenaphthylene	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
Anthracene	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
Benzo(a)anthracene	< 381	//	< 424	//	< 361	//	70.7	J//	< 390	J/Q/	< 389	J/O/L	52.4	J//	< 408	//	< 350	//
Benzo(a)pyrene	< 381	//	< 424	//	< 361	//	84.6	J//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
Benzo(b)fluoranthene	< 381	//	< 424	//	< 361	//	108	J//	< 390	J/Q/	< 389	J/O/L	56.3	J//	< 408	//	< 350	//
Benzo(g,h,i)perylene	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
Benzo(k)fluoranthene	< 381	//	< 424	//	< 361	//	43.1	J//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
Benzoic acid	< 1900	//	< 2120	//	< 1800	//	< 1840	//	< 1950	J/Q/	< 1940	J/O/L	< 1960	//	< 2040	//	< 1750	//
Benzyl alcohol	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
Bis(2-chloroethoxy) methane	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
Bis(2-chloroethyl) ether	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
Bis(2-chloroisopropyl) ether	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
Bis(2-ethylhexyl) phthalate	< 142	J/V/	< 175	J/V/	79.1	J//	66.2	J//	101	J/Q/	< 389	J/O/L	82.1	J//	89.8	J//	35.4	J//
Butylbenzyl phthalate	< 381	//	< 424	//	< 361	//	< 368	//	< 390	J/Q/	< 389	J/O/L	< 391	//	< 408	//	< 350	//
Chrysene	< 381	//	< 424	//	< 361	//	53.7	J//	< 390	J/Q/	< 389	J/O/L	40.3	J//	< 408	//	< 350	//

TABLE 6.2
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1106	D431 1107	D431 1201	D431 1202	D431 1204	D431 1205	D431 1206	D431 1207	D431 1301
Sample Date	61193	61193	61493	61493	61493	61493	61493	61493	61493
Method 8270 (UG/KG)									
Di-n-butyl phthalate	44.8 J//	47.7 J//	< 361 //	< 368 //	118 J/QV/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
Di-n-octyl phthalate	45.3 J//	63.4 J//	< 361 //	< 368 //	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
Dibenz(a,h)anthracene	< 381 //	< 424 //	< 361 //	< 368 //	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
Dibenzofuran	< 381 //	< 424 //	< 361 //	< 368 //	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
Diethyl phthalate	< 381 //	< 424 //	< 361 //	< 368 //	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
Dimethyl phthalate	< 381 //	< 424 //	< 361 //	< 368 //	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
Fluoranthene	< 381 //	< 424 //	< 361 //	109 J//	< 390 J/Q/	< 389 J/O/L	112 J//	< 408 //	< 350 //
Fluorene	< 381 //	< 424 //	< 361 //	< 368 //	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
Hexachlorobenzene	< 381 //	< 424 //	< 361 //	< 368 //	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
Hexachlorobutadiene	< 381 //	< 424 //	< 361 //	< 368 //	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
Hexachlorocyclopentadiene	< 381 //	< 424 //	< 361 //	< 368 //	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
Hexachloroethane	< 381 //	< 424 //	< 361 //	< 368 //	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
Indeno(1,2,3-c,d)pyrene	< 381 //	< 424 //	< 361 //	58.1 J//	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
Isophorone	< 381 //	< 424 //	< 361 //	< 368 //	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
m-Nitroaniline	< 1900 //	< 2120 //	< 1800 //	< 1840 //	< 1950 J/Q/	< 1940 J/O/L	< 1960 //	< 2040 //	< 1750 //
N-Nitrosodiphenylamine	< 381 //	< 424 //	< 361 //	< 368 //	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
N-Nitrosodipropylamine	< 381 //	< 424 //	< 361 J/IC/L	< 368 J/C/	< 390 J/QC/	< 389 J/CO/L	< 391 J/C/	< 408 J/C/	< 350 J/C/
Naphthalene	< 381 //	< 424 //	< 361 //	< 368 //	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
Nitrobenzene	< 381 //	< 424 //	< 361 //	< 368 //	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
o-Cresol (2-Methylphenol)	< 381 //	< 424 //	< 361 //	< 368 //	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
o-Nitroaniline	< 1900 //	< 2120 //	< 1800 //	< 1840 //	< 1950 J/Q/	< 1940 J/O/L	< 1960 //	< 2040 //	< 1750 //
p-Cresol (4-Methylphenol)	< 381 //	< 424 //	< 361 //	< 368 //	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
p-Nitroaniline	< 1900 //	< 2120 //	< 1800 //	< 1840 //	< 1950 J/Q/	< 1940 J/O/L	< 1960 //	< 2040 //	< 1750 //
Pentachlorophenol	< 1900 //	< 2120 //	< 1800 //	< 1840 //	< 1950 J/Q/	< 1940 J/O/L	< 1960 //	< 2040 //	< 1750 //
Phenanthrene	< 381 //	< 424 //	< 361 //	54.5 J//	< 390 J/Q/	< 389 J/O/L	49.3 J//	< 408 //	< 350 //
Phenol	< 381 //	< 424 //	< 361 //	< 368 //	< 390 J/Q/	< 389 J/O/L	< 391 //	< 408 //	< 350 //
Pyrene	< 381 //	< 424 //	< 361 //	94.9 J//	< 390 J/Q/	< 389 J/O/L	77.4 J//	< 408 //	< 350 //

TABLE 6.2
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1302		D431 1304		D431 1305		D431 1306		D431 1307		D431 1401		D431 1402		D431 1405		D431 1406	
Sample Date	61493		61493		61493		61493		61493		61593		61593		61593		61593	
Method 8270 (UG/KG)																		
1,2,4-Trichlorobenzene	< 369	J/C/	< 3700	J/CO/L	< 3760	J/CO/L	< 368	J/CO/L	< 408	J/C/	< 369	//	< 374	//	< 374	//	< 421	//
1,2-Dichlorobenzene	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
1,3-Dichlorobenzene	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
1,4-Dichlorobenzene	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
2,4,5-Trichlorophenol	< 1840	//	< 18500	J/O/L	< 18800	J/O/L	< 1840	J/O/L	< 2040	//	< 1840	//	< 1870	//	< 1870	//	< 2100	//
2,4,6-Trichlorophenol	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
2,4-Dichlorophenol	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
2,4-Dimethyl phenol	< 369	//	696	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
2,4-Dinitrophenol	< 1840	//	< 18500	J/O/L	< 18800	J/O/L	< 1840	J/O/L	< 2040	//	< 1840	//	< 1870	//	< 1870	//	< 2100	//
2,4-Dinitrotoluene	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
2,6-Dinitrotoluene	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
2-Chloronaphthalene	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
2-Chlorophenol	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
2-Methyl-4,6-dinitrophenol	< 1840	//	< 18500	J/O/L	< 18800	J/O/L	< 1840	J/O/L	< 2040	//	< 1840	//	< 1870	//	< 1870	//	< 2100	//
2-Methylnaphthalene	< 369	//	19700	J/O/L	9300	J/O/L	1400	J/O/L	< 408	//	< 369	//	< 374	//	52	J//	116	J//
2-Nitrophenol	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
3,3'-Dichlorobenzidine	< 738	//	< 7400	J/O/L	< 7520	J/O/L	< 736	J/O/L	< 816	//	< 738	//	< 748	//	< 748	//	< 842	//
4-Bromophenyl phenyl ether	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
4-Chloro-m-cresol	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
4-Chloroaniline	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
4-Chlorophenyl phenyl ether	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
4-Nitrophenol	< 1840	//	< 18500	J/O/L	< 18800	J/O/L	< 1840	J/O/L	< 2040	//	< 1840	//	< 1870	//	< 1870	//	< 2100	//
Acenaphthene	< 369	//	50800	J/O/L	28200	J/O/L	4260	J/O/L	60.4	J//	< 369	//	< 374	//	165	J//	77.5	J//
Acenaphthylene	< 369	//	6570	J/O/L	2590	J/O/L	436	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
Anthracene	< 369	//	140000	J/O/L	53200	J/O/L	9410	J/O/L	126	J//	< 369	//	< 374	//	323	J//	83.8	J//
Benzo(a)anthracene	< 369	//	290000	J/O/L	116000	J/O/L	16300	J/O/L	267	J//	< 369	//	< 374	//	821	//	180	J//
Benzo(a)pyrene	< 369	//	203000	J/O/L	91200	J/O/L	14300	J/O/L	215	J//	< 369	J/H/	< 374	//	757	//	189	J//
Benzo(b)fluoranthene	< 369	//	293000	J/O/L	121000	J/O/L	19800	J/O/L	287	J//	< 369	J/H/	< 374	//	1350	//	249	J//
Benzo(g,h,i)perylene	< 369	//	98000	J/O/L	32600	J/O/L	4890	J/O/L	117	J//	< 369	J/H/	< 374	//	554	//	< 421	//
Benzo(k)fluoranthene	< 369	//	83100	J/O/L	26900	J/O/L	4470	J/O/L	114	J//	< 369	J/H/	< 374	//	241	J//	86.3	J//
Benzoic acid	< 1840	//	< 18500	J/O/L	< 18800	J/O/L	< 1840	J/O/L	< 2040	//	< 1840	//	< 1870	//	< 1870	//	< 2100	//
Benzyl alcohol	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
Bis(2-chloroethoxy) methane	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
Bis(2-chloroethyl) ether	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
Bis(2-chloroisopropyl) ether	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
Bis(2-ethylhexyl) phthalate	47.6	J//	< 3700	J/O/L	1340	J/O/L	< 368	J/O/L	92.6	J//	48.7	J//	< 374	//	50.9	J//	64	J//
Butylbenzyl phthalate	< 369	//	< 3700	J/O/L	< 3760	J/O/L	245	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
Chrysene	< 369	//	186000	J/O/L	94200	J/O/L	12900	J/O/L	201	J//	< 369	//	< 374	//	834	//	223	J//

TABLE 6.2
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1302		D431 1304		D431 1305		D431 1306		D431 1307		D431 1401		D431 1402		D431 1405		D431 1406	
Sample Date	61493		61493		61493		61493		61493		61593		61593		61593		61593	
Method 8270 (UG/KG)																		
Di-n-butyl phthalate	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	/V/	< 81.9	J/V/	< 101	J/V/	< 95.1	J/V/
Di-n-octyl phthalate	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	J/H/	< 374	//	< 374	//	< 421	//
Dibenz(a,h)anthracene	< 369	//	18200	J/O/L	9230	J/O/L	1320	J/O/L	< 408	//	< 369	J/H/	< 374	//	< 374	//	< 421	//
Dibenzofuran	< 369	//	41500	J/O/L	20400	J/O/L	3090	J/O/L	44.5	J//	< 369	//	< 374	//	69.6	J//	58.1	J//
Diethyl phthalate	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
Dimethyl phthalate	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
Fluoranthene	< 369	//	569000	J/O/L	229000	J/O/L	37400	J/O/L	609	//	< 369	//	< 374	//	1780	//	444	//
Fluorene	< 369	//	91100	J/O/L	33200	J/O/L	4930	J/O/L	78.7	J//	< 369	//	< 374	//	156	J//	88	J//
Hexachlorobenzene	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
Hexachlorobutadiene	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
Hexachlorocyclopentadiene	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
Hexachloroethane	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
Indeno(1,2,3-c,d)pyrene	< 369	//	109000	J/O/L	39500	J/O/L	5800	J/O/L	137	J//	< 369	J/H/	< 374	//	374	//	< 421	//
Isophorone	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
m-Nitroaniline	< 1840	//	< 18500	J/O/L	< 18800	J/O/L	< 1840	J/O/L	< 2040	//	< 1840	//	< 1870	//	< 1870	//	< 2100	//
N-Nitrosodiphenylamine	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
N-Nitrosodipropylamine	< 369	J/C/	< 3700	J/CO/L	< 3760	J/CO/L	< 368	J/CO/L	< 408	J/C/	< 369	//	< 374	//	< 374	//	< 421	//
Naphthalene	< 369	//	51900	J/O/L	28300	J/O/L	3820	J/O/L	44.5	J//	< 369	//	< 374	//	92.4	J//	85.5	J//
Nitrobenzene	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	199	J//
o-Cresol (2-Methylphenol)	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
o-Nitroaniline	< 1840	//	< 18500	J/O/L	< 18800	J/O/L	< 1840	J/O/L	< 2040	//	< 1840	//	< 1870	//	< 1870	//	< 2100	//
p-Cresol (4-Methylphenol)	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	//	< 374	//	< 374	//	< 421	//
p-Nitroaniline	< 1840	//	< 18500	J/O/L	< 18800	J/O/L	< 1840	J/O/L	< 2040	//	< 1840	//	< 1870	//	< 1870	//	< 2100	//
Pentachlorophenol	< 1840	//	< 18500	J/O/L	< 18800	J/O/L	< 1840	J/O/L	< 2040	//	< 1840	//	< 1870	//	< 1870	//	< 2100	//
Phenanthrene	< 369	//	509000	J/O/L	205000	J/O/L	28400	J/O/L	531	//	< 369	//	< 374	//	1200	//	447	//
Phenol	< 369	//	< 3700	J/O/L	< 3760	J/O/L	< 368	J/O/L	< 408	//	< 369	J/C/	< 374	J/C/	< 374	J/C/	< 421	J/C/
Pyrene	< 369	//	422000	J/O/L	172000	J/O/L	25100	J/O/L	447	//	< 369	//	< 374	//	1580	//	412	J//

TABLE 6.2
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1407		D43111501		D43111502		D43111503		D43111504		D43111601		D43111602		D43111604		D43111605	
Sample Date	61593		61693		61693		61693		61693		62193		62193		62293		62293	
Method 8270 (UG/KG)																		
1,2,4-Trichlorobenzene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
1,2-Dichlorobenzene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
1,3-Dichlorobenzene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
1,4-Dichlorobenzene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
2,4,5-Trichlorophenol	< 2100	//	< 9450	J/L/	< 1840	J/L/	< 1900	J/L/	< 2050	J/L/	< 1750	//	< 1820	//	< 1900	//	< 1860	//
2,4,6-Trichlorophenol	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
2,4-Dichlorophenol	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
2,4-Dimethyl phenol	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
2,4-Dinitrophenol	< 2100	//	< 9450	J/L/	< 1840	J/L/	< 1900	J/L/	< 2050	J/L/	< 1750	//	< 1820	//	< 1900	//	< 1860	//
2,4-Dinitrotoluene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
2,6-Dinitrotoluene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
2-Chloronaphthalene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
2-Chlorophenol	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
2-Methyl-4,6-dinitrophenol	< 2100	//	< 9450	J/L/	< 1840	J/L/	< 1900	J/L/	< 2050	J/L/	< 1750	//	< 1820	//	< 1900	//	< 1860	//
2-Methylnaphthalene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
2-Nitrophenol	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
3,3'-Dichlorobenzidine	< 842	//	< 3780	J/L/	< 736	J/L/	< 762	J/L/	< 820	J/L/	< 700	//	< 726	//	< 762	//	< 744	//
4-Bromophenyl phenyl ether	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
4-Chloro-m-cresol	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
4-Chloroaniline	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
4-Chlorophenyl phenyl ether	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
4-Nitrophenol	< 2100	//	< 9450	J/L/	< 1840	J/L/	< 1900	J/L/	< 2050	J/L/	< 1750	//	< 1820	//	< 1900	//	< 1860	//
Acenaphthene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Acenaphthylene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Anthracene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Benzo(a)anthracene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Benzo(a)pyrene	< 421	//	< 1890	J/LH/L	< 368	J/L/	< 381	J/LH/L	< 410	J/LH/L	< 350	//	< 363	//	< 381	//	< 372	//
Benzo(b)fluoranthene	< 421	//	< 1890	J/LH/L	< 368	J/L/	< 381	J/LH/L	< 410	J/LH/L	< 350	//	< 363	//	< 381	//	< 372	//
Benzo(g,h,i)perylene	< 421	//	< 1890	J/LH/L	< 368	J/L/	< 381	J/LH/L	< 410	J/LH/L	< 350	//	< 363	//	< 381	//	< 372	//
Benzo(k)fluoranthene	< 421	//	< 1890	J/LH/L	< 368	J/L/	< 381	J/LH/L	< 410	J/LH/L	< 350	//	< 363	//	< 381	//	< 372	//
Benzoic acid	< 2100	//	< 9450	J/L/	< 1840	J/L/	< 1900	J/L/	< 2050	J/L/	< 1750	//	< 1820	//	< 1900	//	< 1860	//
Benzyl alcohol	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Bis(2-chloroethoxy) methane	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Bis(2-chloroethyl) ether	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Bis(2-chloroisopropyl) ether	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Bis(2-ethylhexyl) phthalate	< 421	//	26300	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 140	J/V/	< 164	J/V/	< 149	J/V/	< 165	J/V/
Butylbenzyl phthalate	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Chrysene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//

TABLE 6.2
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1407		D43111501		D43111502		D43111503		D43111504		D43111601		D43111602		D43111604		D43111605	
Sample Date	61593		61693		61693		61693		61693		62193		62193		62293		62293	
Method 8270 (UG/KG)																		
Di-n-butyl phthalate	< 99.8	J/V/	< 1890	J/L/	< 40.5	J/VL/	< 59.4	J/VL/	< 72.2	J/VL/	< 88.2	J/V/	< 93.3	J/V/	< 96.4	J/V/	< 104	J/V/
Di-n-octyl phthalate	< 421	//	< 1890	J/LH/L	< 368	J/L/	< 381	J/LH/L	< 410	J/LH/L	< 350	//	< 363	//	< 381	//	< 372	//
Dibenz(a,h)anthracene	< 421	//	< 1890	J/LH/L	< 368	J/L/	< 381	J/LH/L	< 410	J/LH/L	< 350	//	< 363	//	< 381	//	< 372	//
Dibenzofuran	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Diethyl phthalate	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Dimethyl phthalate	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Fluoranthene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Fluorene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Hexachlorobenzene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Hexachlorobutadiene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Hexachlorocyclopentadiene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Hexachloroethane	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Indeno(1,2,3-c,d)pyrene	< 421	//	< 1890	J/LH/L	< 368	J/L/	< 381	J/LH/L	< 410	J/LH/L	< 350	//	< 363	//	< 381	//	< 372	//
Isophorone	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
m-Nitroaniline	< 2100	//	< 9450	J/L/	< 1840	J/L/	< 1900	J/L/	< 2050	J/L/	< 1750	//	< 1820	//	< 1900	//	< 1860	//
N-Nitrosodiphenylamine	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
N-Nitrosodipropylamine	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Naphthalene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Nitrobenzene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
o-Cresol (2-Methylphenol)	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
o-Nitroaniline	< 2100	//	< 9450	J/L/	< 1840	J/L/	< 1900	J/L/	< 2050	J/L/	< 1750	//	< 1820	//	< 1900	//	< 1860	//
p-Cresol (4-Methylphenol)	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
p-Nitroaniline	< 2100	//	< 9450	J/L/	< 1840	J/L/	< 1900	J/L/	< 2050	J/L/	< 1750	//	< 1820	//	< 1900	//	< 1860	//
Pentachlorophenol	< 2100	//	< 9450	J/L/	< 1840	J/L/	< 1900	J/L/	< 2050	J/L/	< 1750	//	< 1820	//	< 1900	//	< 1860	//
Phenanthrene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Phenol	< 421	J/C/	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//
Pyrene	< 421	//	< 1890	J/L/	< 368	J/L/	< 381	J/L/	< 410	J/L/	< 350	//	< 363	//	< 381	//	< 372	//

TABLE 6.2
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43111606		D431 1701		D431 1702		D431 1704		D431 1705		D431 1706		D431 1801		D431 1802		D431 1803	
Sample Date	62293		62393		62393		62393		62393		62393		61693		61693		61693	
Method 8270 (UG/KG)																		
1,2,4-Trichlorobenzene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
1,2-Dichlorobenzene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
1,3-Dichlorobenzene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
1,4-Dichlorobenzene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
2,4,5-Trichlorophenol	< 1940	//	< 1720	//	< 1820	//	< 2020	J/L/	< 2100	J/L/	< 2070	//	< 1820	//	< 1840	//	< 2200	//
2,4,6-Trichlorophenol	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
2,4-Dichlorophenol	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
2,4-Dimethyl phenol	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
2,4-Dinitrophenol	< 1940	//	< 1720	//	< 1820	//	< 2020	J/L/	< 2100	J/L/	< 2070	//	< 1820	//	< 1840	//	< 2200	//
2,4-Dinitrotoluene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
2,6-Dinitrotoluene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
2-Chloronaphthalene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
2-Chlorophenol	< 389	J/L/H	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
2-Methyl-4,6-dinitrophenol	< 1940	//	< 1720	//	< 1820	//	< 2020	J/L/	< 2100	J/L/	< 2070	//	< 1820	//	< 1840	//	< 2200	//
2-Methylnaphthalene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
2-Nitrophenol	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
3,3'-Dichlorobenzidine	< 778	//	< 688	//	< 728	//	< 806	J/L/	< 838	J/L/	< 828	//	< 730	//	< 736	//	< 882	//
4-Bromophenyl phenyl ether	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
4-Chloro-m-cresol	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
4-Chloroaniline	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
4-Chlorophenyl phenyl ether	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
4-Nitrophenol	< 1940	//	< 1720	//	< 1820	//	< 2020	J/L/	< 2100	J/L/	< 2070	//	< 1820	//	< 1840	//	< 2200	//
Acenaphthene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Acenaphthylene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Anthracene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Benzo(a)anthracene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Benzo(a)pyrene	< 389	//	< 344	//	< 364	//	< 403	J/L/H/	< 419	J/L/H/	< 414	//	< 365	//	< 368	//	< 441	//
Benzo(b)fluoranthene	< 389	//	< 344	//	< 364	//	< 403	J/L/H/	< 419	J/L/H/	< 414	//	< 365	//	< 368	//	< 441	//
Benzo(g,h,i)perylene	< 389	//	< 344	//	< 364	//	< 403	J/L/H/	< 419	J/L/H/	< 414	//	< 365	//	< 368	//	< 441	//
Benzo(k)fluoranthene	< 389	//	< 344	//	< 364	//	< 403	J/L/H/	< 419	J/L/H/	< 414	//	< 365	//	< 368	//	< 441	//
Benzoic acid	< 1940	//	< 1720	//	< 1820	//	< 2020	J/L/	< 2100	J/L/	< 2070	//	247	J//	< 1840	//	< 2200	//
Benzyl alcohol	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Bis(2-chloroethoxy) methane	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Bis(2-chloroethyl) ether	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Bis(2-chloroisopropyl) ether	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Bis(2-ethylhexyl) phthalate	< 135	J/V/	< 344	/V/	< 364	J/V/	< 403	J/V/L/	< 419	J/V/L/	< 414	/V/	< 365	//	< 368	//	< 441	//
Butylbenzyl phthalate	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Chrysene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//

TABLE 6.2
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43111606		D431 1701		D431 1702		D431 1704		D431 1705		D431 1706		D431 1801		D431 1802		D431 1803	
Sample Date	62293		62393		62393		62393		62393		62393		61693		61693		61693	
Method 8270 (UG/KG)																		
Di-n-butyl phthalate	< 103	J/V/	< 145	J/V/	< 136	J/V/	< 201	J/VL/	< 118	J/VL/	< 105	J/V/	< 136	J/V/	< 368	/V/	< 58.2	J/V/
Di-n-octyl phthalate	< 389	//	< 344	//	< 364	//	< 403	J/LH/H	< 419	J/LH/H	< 414	//	< 365	//	< 368	//	< 441	//
Dibenz(a,h)anthracene	< 389	//	< 344	//	< 364	//	< 403	J/LH/H	< 419	J/LH/H	< 414	//	< 365	//	< 368	//	< 441	//
Dibenzofuran	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Diethyl phthalate	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Dimethyl phthalate	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Fluoranthene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Fluorene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Hexachlorobenzene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Hexachlorobutadiene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Hexachlorocyclopentadiene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Hexachloroethane	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Indeno(1,2,3-c,d)pyrene	< 389	//	< 344	//	< 364	//	< 403	J/LH/H	< 419	J/LH/H	< 414	//	< 365	//	< 368	//	< 441	//
Isophorone	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
m-Nitroaniline	< 1940	//	< 1720	//	< 1820	//	< 2020	J/L/	< 2100	J/L/	< 2070	//	< 1820	//	< 1840	//	< 2200	//
N-Nitrosodiphenylamine	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
N-Nitrosodipropylamine	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Naphthalene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Nitrobenzene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
o-Cresol (2-Methylphenol)	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
o-Nitroaniline	< 1940	//	< 1720	//	< 1820	//	< 2020	J/L/	< 2100	J/L/	< 2070	//	< 1820	//	< 1840	//	< 2200	//
p-Cresol (4-Methylphenol)	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
p-Nitroaniline	< 1940	//	< 1720	//	< 1820	//	< 2020	J/L/	< 2100	J/L/	< 2070	//	< 1820	//	< 1840	//	< 2200	//
Pentachlorophenol	< 1940	//	< 1720	//	< 1820	//	< 2020	J/L/	< 2100	J/L/	< 2070	//	< 1820	J/L/H	< 1840	//	< 2200	//
Phenanthrene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Phenol	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//
Pyrene	< 389	//	< 344	//	< 364	//	< 403	J/L/	< 419	J/L/	< 414	//	< 365	//	< 368	//	< 441	//

TABLE 6.2
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1804	
Sample Date	61693	
Method 8270 (UG/KG)		
1,2,4-Trichlorobenzene	< 383	//
1,2-Dichlorobenzene	< 383	//
1,3-Dichlorobenzene	< 383	//
1,4-Dichlorobenzene	< 383	//
2,4,5-Trichlorophenol	< 1920	//
2,4,6-Trichlorophenol	< 383	//
2,4-Dichlorophenol	< 383	//
2,4-Dimethyl phenol	< 383	//
2,4-Dinitrophenol	< 1920	//
2,4-Dinitrotoluene	< 383	//
2,6-Dinitrotoluene	< 383	//
2-Chloronaphthalene	< 383	//
2-Chlorophenol	< 383	//
2-Methyl-4,6-dinitrophenol	< 1920	//
2-Methylnaphthalene	< 383	//
2-Nitrophenol	< 383	//
3,3'-Dichlorobenzidine	< 766	//
4-Bromophenyl phenyl ether	< 383	//
4-Chloro-m-cresol	< 383	//
4-Chloroaniline	< 383	//
4-Chlorophenyl phenyl ether	< 383	//
4-Nitrophenol	< 1920	//
Acenaphthene	< 383	//
Acenaphthylene	< 383	//
Anthracene	< 383	//
Benzo(a)anthracene	< 383	//
Benzo(a)pyrene	< 383	//
Benzo(b)fluoranthene	< 383	//
Benzo(g,h,i)perylene	< 383	//
Benzo(k)fluoranthene	< 383	//
Benzoic acid	< 1920	//
Benzyl alcohol	< 383	//
Bis(2-chloroethoxy) methane	< 383	//
Bis(2-chloroethyl) ether	< 383	//
Bis(2-chloroisopropyl) ether	< 383	//
Bis(2-ethylhexyl) phthalate	< 383	//
Butylbenzyl phthalate	< 383	//
Chrysene	< 383	//

TABLE 6.2
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1804	
Sample Date	61693	
Method 8270 (UG/KG)		
Di-n-butyl phthalate	< 49	J/V/
Di-n-octyl phthalate	< 383	//
Dibenz(a,h)anthracene	< 383	//
Dibenzofuran	< 383	//
Diethyl phthalate	< 383	//
Dimethyl phthalate	< 383	//
Fluoranthene	< 383	//
Fluorene	< 383	//
Hexachlorobenzene	< 383	//
Hexachlorobutadiene	< 383	//
Hexachlorocyclopentadiene	< 383	//
Hexachloroethane	< 383	//
Indeno(1,2,3-c,d)pyrene	< 383	//
Isophorone	< 383	//
m-Nitroaniline	< 1920	//
N-Nitrosodiphenylamine	< 383	//
N-Nitrosodipropylamine	< 383	//
Naphthalene	< 383	//
Nitrobenzene	< 383	//
o-Cresol (2-Methylphenol)	< 383	//
o-Nitroaniline	< 1920	//
p-Cresol (4-Methylphenol)	< 383	//
p-Nitroaniline	< 1920	//
Pentachlorophenol	< 1920	//
Phenanthrene	< 383	//
Phenol	< 383	//
Pyrene	< 383	//

TABLE 6.3
PESTICIDES AND PCBS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110701	D43110702	D43110704	D43110705	D43110706	D43110707	D43110801	D43110802	D43110804
Sample Date	60893	60893	60893	60893	60993	60993	60993	60993	60993
Method 8080 (UG/KG)									
Aldrin	< 1.74 /Y/	< 1.79 /Y/	< 21.3 /Y/	< 1.95 /Y/	< 2.02 J/O/L	< 1.81 //	< 1.73 //	< 1.83 //	< 100 J/O/L
alpha-Benzene hexachloride	< 1.74 /Y/	< 1.79 /Y/	< 21.3 /Y/	< 1.95 /Y/	< 2.02 J/O/L	< 1.81 //	< 1.73 //	< 1.83 //	< 100 J/O/L
alpha-Chlordane	< 1.74 /Y/	< 1.79 /Y/	< 21.3 /Y/	< 1.95 /Y/	< 2.02 J/O/L	< 1.81 //	< 1.73 //	< 1.83 //	< 100 J/O/L
beta-Benzene hexachloride	< 1.74 /Y/	< 1.79 /Y/	< 21.3 /Y/	< 1.95 /Y/	< 2.02 J/O/L	< 1.81 //	< 1.73 //	< 1.83 //	< 100 J/O/L
delta-Benzene hexachloride	< 1.74 /Y/	< 1.79 /Y/	< 21.3 /Y/	< 1.95 /Y/	< 2.02 J/O/L	< 1.81 //	< 1.73 //	< 1.83 //	< 100 J/O/L
Endosulfan I	< 1.74 /Y/	< 1.79 /Y/	< 21.3 /Y/	< 1.95 /Y/	< 2.02 J/O/L	< 1.81 //	1.04 J//	< 1.83 //	< 100 J/O/L
gamma-Chlordane	< 1.74 /Y/	< 1.79 /Y/	< 21.3 /Y/	< 1.95 /Y/	< 2.02 J/O/L	< 1.81 //	< 1.73 //	< 1.83 //	< 100 J/O/L
Heptachlor	< 1.74 /Y/	< 1.79 /Y/	< 21.3 /Y/	< 1.95 /Y/	< 2.02 J/O/L	< 1.81 //	< 1.73 //	< 1.83 //	< 100 J/O/L
Heptachlor epoxide	< 1.74 /Y/	< 1.79 /Y/	< 21.3 /Y/	< 1.95 /Y/	< 2.02 J/O/L	< 1.81 //	< 1.73 //	< 1.83 //	< 100 J/O/L
Lindane	< 1.74 /Y/	< 1.79 /Y/	< 21.3 /Y/	< 1.95 /Y/	< 2.02 J/O/L	< 1.81 //	< 1.73 //	< 1.83 //	< 100 J/O/L
Dieldrin	< 3.48 /Y/	< 3.58 /Y/	< 42.6 /Y/	< 3.9 /Y/	< 4.04 J/O/L	< 3.62 //	< 3.46 //	< 3.66 //	< 201 J/O/L
Endosulfan II	< 3.48 /Y/	< 3.58 /Y/	< 42.6 /Y/	< 3.9 /Y/	< 4.04 J/O/L	< 3.62 //	< 3.46 //	< 3.66 //	< 201 J/O/L
Endosulfan sulfate	< 3.48 /Y/	< 3.58 /Y/	< 42.6 /Y/	< 3.9 /Y/	< 4.04 J/O/L	< 3.62 //	4.15 //	1.1 J//	< 201 J/O/L
Endrin	< 3.48 /Y/	< 3.58 /Y/	< 42.6 /Y/	< 3.9 /Y/	< 4.04 J/O/L	< 3.62 //	< 3.46 //	< 3.66 //	< 201 J/O/L
Endrin ketone	< 3.48 /Y/	< 3.58 /Y/	< 42.6 /Y/	< 3.9 /Y/	< 4.04 J/O/L	< 3.62 //	< 3.46 //	< 3.66 //	< 201 J/O/L
p,p'-DDD	< 3.48 /Y/	< 3.58 /Y/	< 42.6 /Y/	< 3.9 /Y/	< 4.04 J/O/L	< 3.62 //	< 3.46 //	< 3.66 //	< 201 J/O/L
p,p'-DDE	< 3.48 /Y/	< 3.58 /Y/	< 42.6 /Y/	< 3.9 /Y/	< 4.04 J/O/L	< 3.62 //	0.691 J//	< 3.66 //	< 201 J/O/L
p,p'-DDT	< 3.48 /Y/	< 3.58 /Y/	< 42.6 /Y/	< 3.9 /Y/	< 4.04 J/O/L	< 3.62 //	< 3.46 //	< 3.66 //	< 201 J/O/L
Methoxychlor	< 17.4 /Y/	< 17.9 /Y/	< 213 /Y/	< 19.5 /Y/	< 20.2 J/O/L	< 18.1 //	< 17.3 //	< 18.3 //	< 1000 J/O/L
PCB 1254	< 34.8 /Y/	< 35.8 /Y/	< 426 /Y/	24.2 J/Y/	< 40.4 J/O/L	< 36.2 //	< 34.6 //	< 36.6 //	< 2010 J/O/L
PCB 1016	< 34.8 /Y/	< 35.8 /Y/	< 426 /Y/	< 39 /Y/	< 40.4 J/O/L	< 36.2 //	< 34.6 //	< 36.6 //	< 2010 J/O/L
PCB 1232	< 34.8 /Y/	< 35.8 /Y/	< 426 /Y/	< 39 /Y/	< 40.4 J/O/L	< 36.2 //	< 34.6 //	< 36.6 //	< 2010 J/O/L
PCB 1242	< 34.8 /Y/	< 35.8 /Y/	< 426 /Y/	< 39 /Y/	< 40.4 J/O/L	< 36.2 //	< 34.6 //	< 36.6 //	< 2010 J/O/L
PCB 1248	< 34.8 /Y/	< 35.8 /Y/	< 426 /Y/	< 39 /Y/	< 40.4 J/O/L	< 36.2 //	< 34.6 //	< 36.6 //	< 2010 J/O/L
PCB 1260	< 34.8 /Y/	< 35.8 /Y/	< 426 /Y/	< 39 /Y/	< 40.4 J/O/L	< 36.2 //	< 34.6 //	< 36.6 //	< 2010 J/O/L
PCB 1221	< 69.7 /Y/	< 71.6 /Y/	< 851 /Y/	< 78.1 /Y/	< 80.9 J/O/L	< 72.5 //	< 69.1 //	< 73.2 //	< 4010 J/O/L
Toxaphene	< 174 /Y/	< 179 /Y/	< 2130 /Y/	< 195 /Y/	< 202 J/O/L	< 181 //	< 173 //	< 183 //	< 10000 J/O/L

TABLE 6.3
PESTICIDES AND PCBS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110805	D43110806	D43110807	D43110901	D43110902	D43110905	D43110906	D43110907	D43111001
Sample Date	60993	60993	60993	60993	60993	61093	61093	61093	61093
Method 8080 (UG/KG)									
Aldrin	< 19.9 //	< 2.02 //	< 2.12 //	< 1.73 //	< 1.77 J/O/L	< 1.83 //	< 1.92 //	< 2.05 //	< 1.81 //
alpha-Benzene hexachloride	< 19.9 //	< 2.02 //	< 2.12 //	< 1.73 //	< 1.77 J/O/L	< 1.83 //	< 1.92 //	< 2.05 //	< 1.81 //
alpha-Chlordane	< 19.9 //	< 2.02 //	< 2.12 //	< 1.73 //	< 1.77 J/O/L	< 1.83 //	< 1.92 //	< 2.05 //	< 1.81 //
beta-Benzene hexachloride	< 19.9 //	< 2.02 //	< 2.12 //	< 1.73 //	< 1.77 J/O/L	1.1 J//	< 1.92 //	< 2.05 //	< 1.81 //
delta-Benzene hexachloride	< 19.9 //	< 2.02 //	< 2.12 //	< 1.73 //	< 1.77 J/O/L	< 1.83 //	< 1.92 //	< 2.05 //	< 1.81 //
Endosulfan I	< 19.9 //	< 2.02 //	< 2.12 //	< 1.73 //	< 1.77 J/O/L	< 1.83 //	< 1.92 //	< 2.05 //	< 1.81 //
gamma-Chlordane	< 19.9 //	< 2.02 //	< 2.12 //	< 1.73 //	< 1.77 J/O/L	< 1.83 //	< 1.92 //	< 2.05 //	< 1.81 //
Heptachlor	< 19.9 //	< 2.02 //	< 2.12 //	< 1.73 //	< 1.77 J/O/L	1.46 J//	< 1.92 //	< 2.05 //	< 1.81 //
Heptachlor epoxide	< 19.9 //	< 2.02 //	< 2.12 //	< 1.73 //	< 1.77 J/O/L	< 1.83 //	< 1.92 //	< 2.05 //	< 1.81 //
Lindane	< 19.9 //	< 2.02 //	< 2.12 //	< 1.73 //	< 1.77 J/O/L	< 1.83 //	< 1.92 //	< 2.05 //	< 1.81 //
Dieldrin	< 39.8 //	< 4.03 //	< 4.24 //	< 3.46 //	< 3.54 J/O/L	< 1.83 //	< 1.92 //	< 2.05 //	< 1.81 //
Endosulfan II	< 39.8 //	< 4.03 //	< 4.24 //	< 3.46 //	< 3.54 J/O/L	0.733 J//	< 3.84 //	< 4.1 //	< 3.62 //
Endosulfan sulfate	< 39.8 //	< 4.03 //	< 4.24 //	< 3.46 //	< 3.54 J/O/L	< 3.66 //	< 3.84 //	< 4.1 //	< 3.62 //
Endrin	< 39.8 //	< 4.03 J/G/	< 4.24 //	< 3.46 //	< 3.54 J/O/L	< 3.66 //	< 3.84 //	< 4.1 //	< 3.62 //
Endrin ketone	< 39.8 //	< 4.03 //	< 4.24 //	< 3.46 //	< 3.54 J/O/L	< 3.66 //	< 3.84 //	< 4.1 //	< 3.62 //
p,p'-DDD	< 39.8 //	< 4.03 //	< 4.24 //	< 3.46 //	< 3.54 J/O/L	< 3.66 //	< 3.84 //	< 4.1 //	< 3.62 //
p,p'-DDE	< 39.8 //	< 4.03 //	< 4.24 //	< 3.46 //	< 3.54 J/O/L	< 3.66 //	< 3.84 //	< 4.1 //	< 3.62 //
p,p'-DDT	< 39.8 //	< 4.03 //	< 4.24 //	0.691 J//	< 3.54 J/O/L	1.1 J//	< 3.84 //	< 4.1 //	< 3.62 //
Methoxychlor	< 199 //	< 20.2 //	< 21.2 //	< 17.3 //	< 17.7 J/O/L	< 18.3 //	< 19.2 //	< 20.5 //	< 18.1 //
PCB 1254	< 398 //	< 40.3 //	< 42.4 //	< 34.6 //	< 35.4 J/O/L	< 36.6 //	< 38.4 //	< 41 //	< 36.2 //
PCB 1016	< 398 //	< 40.3 //	< 42.4 //	< 34.6 //	< 35.4 J/O/L	< 36.6 //	< 38.4 //	< 41 //	< 36.2 //
PCB 1232	< 398 //	< 40.3 //	< 42.4 //	< 34.6 //	< 35.4 J/O/L	< 36.6 //	< 38.4 //	< 41 //	< 36.2 //
PCB 1242	< 398 //	< 40.3 //	< 42.4 //	< 34.6 //	< 35.4 J/O/L	< 36.6 //	< 38.4 //	< 41 //	< 36.2 //
PCB 1248	< 398 //	< 40.3 //	< 42.4 //	< 34.6 //	< 35.4 J/O/L	< 36.6 //	< 38.4 //	< 41 //	< 36.2 //
PCB 1260	< 398 //	< 40.3 //	< 42.4 //	< 34.6 //	< 35.4 J/O/L	< 36.6 //	< 38.4 //	< 41 //	< 36.2 //
PCB 1221	< 796 //	< 80.7 //	< 84.7 //	< 69.1 //	< 70.8 J/O/L	< 73.3 //	< 76.8 //	< 82 //	< 72.5 //
Toxaphene	< 1990 //	< 202 //	< 212 //	< 173 //	< 177 J/O/L	< 183 //	< 192 //	< 205 //	< 181 //

TABLE 6.3
PESTICIDES AND PCBS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name / Sample Date	D43111002 61093	D43111005 61093	D43111006 61093	D43111007 61093	D431 1101 61093	D431 1102 61093	D431 1104 61093	D431 1105 61193	D431 1106 61193
Method 8080 (UG/KG)									
Aldrin	< 1.81 //	< 2.18 //	< 2.1 //	< 2.13 //	< 1.71 //	< 1.77 //	< 18.8 //	< 1.91 //	< 1.93 //
alpha-Benzene hexachloride	< 1.81 //	< 2.18 //	< 2.1 //	< 2.13 //	< 1.71 //	< 1.77 //	< 18.8 //	< 1.91 //	< 1.93 //
alpha-Chlordane	< 1.81 //	< 2.18 //	< 2.1 //	< 2.13 //	< 1.71 //	0.353 J//	131 //	6.88 //	1.16 J//
beta-Benzene hexachloride	< 1.81 //	< 2.18 //	< 2.1 //	< 2.13 //	< 1.71 //	< 1.77 //	< 18.8 //	< 1.91 //	< 1.93 //
delta-Benzene hexachloride	< 1.81 //	< 2.18 //	< 2.1 //	< 2.13 //	< 1.71 //	< 1.77 //	< 18.8 //	4.59 //	< 1.93 //
Endosulfan I	< 1.81 //	< 2.18 //	< 2.1 //	< 2.13 //	< 1.71 //	< 1.77 //	< 18.8 //	< 1.91 //	< 1.93 //
gamma-Chlordane	< 1.81 //	< 2.18 //	< 2.1 //	< 2.13 //	< 1.71 //	0.707 J//	234 //	13.8 //	2.7 //
Heptachlor	< 1.81 //	< 2.18 //	< 2.1 //	< 2.13 //	< 1.71 //	< 1.77 //	< 18.8 //	< 1.91 //	< 1.93 //
Heptachlor epoxide	< 1.81 //	< 2.18 //	< 2.1 //	< 2.13 //	< 1.71 //	< 1.77 //	< 18.8 //	< 1.91 //	< 1.93 //
Lindane	< 1.81 //	< 2.18 //	< 2.1 //	< 2.13 //	< 1.71 //	< 1.77 //	< 18.8 //	< 1.91 //	< 1.93 //
Dieldrin	< 3.62 //	< 4.36 //	< 4.2 //	< 4.26 //	< 3.43 //	< 3.53 //	16.5 J//	< 3.82 //	< 3.86 //
Endosulfan II	< 3.62 //	< 4.36 //	< 4.2 //	< 4.26 //	< 3.43 //	1.77 J//	< 37.5 //	< 3.82 //	< 3.86 //
Endosulfan sulfate	< 3.62 //	< 4.36 //	< 4.2 //	< 4.26 //	< 3.43 //	< 3.53 //	4.5 J//	< 3.82 //	< 3.86 //
Endrin	< 3.62 //	< 4.36 //	< 4.2 //	< 4.26 //	< 3.43 //	4.95 //	6.38 J//	< 3.82 //	< 3.86 //
Endrin ketone	< 3.62 //	< 4.36 //	< 4.2 //	< 4.26 //	< 3.43 //	1.41 J//	< 37.5 //	< 3.82 //	< 3.86 //
p,p'-DDD	< 3.62 //	< 4.36 //	< 4.2 //	< 4.26 //	< 3.43 //	1.41 J//	15 J//	< 3.82 //	3.08 J//
p,p'-DDE	< 3.62 //	< 4.36 //	< 4.2 //	< 4.26 //	0.685 J//	2.83 J//	15.4 J//	2.29 J//	3.47 J//
p,p'-DDT	< 3.62 //	< 4.36 //	< 4.2 //	< 4.26 //	< 3.43 //	4.95 //	< 37.5 //	< 3.82 //	2.7 J//
Methoxychlor	< 18.1 //	< 21.8 //	< 21 //	< 21.3 //	< 17.1 //	< 17.7 //	< 188 //	< 19.1 //	< 19.3 //
PCB 1254	< 36.2 //	< 43.6 //	< 42 //	< 42.6 //	< 34.3 //	< 35.3 //	< 375 //	< 38.2 //	< 38.6 //
PCB 1016	< 36.2 //	< 43.6 //	< 42 //	< 42.6 //	< 34.3 //	< 35.3 //	< 375 //	< 38.2 //	< 38.6 //
PCB 1232	< 36.2 //	< 43.6 //	< 42 //	< 42.6 //	< 34.3 //	< 35.3 //	< 375 //	< 38.2 //	< 38.6 //
PCB 1242	< 36.2 //	< 43.6 //	< 42 //	< 42.6 //	< 34.3 //	< 35.3 //	< 375 //	< 38.2 //	< 38.6 //
PCB 1248	< 36.2 //	< 43.6 //	< 42 //	< 42.6 //	< 34.3 //	< 35.3 //	< 375 //	< 38.2 //	< 38.6 //
PCB 1260	< 36.2 //	< 43.6 //	< 42 //	< 42.6 //	< 34.3 //	< 35.3 //	< 375 //	< 38.2 //	< 38.6 //
PCB 1221	< 72.3 //	< 87.2 //	< 84 //	< 85.3 //	< 68.5 //	< 70.7 //	< 750 //	< 76.4 //	< 77.1 //
Toxaphene	< 181 //	< 218 //	< 210 //	< 213 //	< 171 //	< 177 //	< 1880 //	< 191 //	< 193 //

TABLE 6.3
PESTICIDES AND PCBS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1107		D431 1201		D431 1202		D431 1204		D431 1205		D431 1206		D431 1207		D431 1301		D431 1302	
Sample Date	61193		61493		61493		61493		61493		61493		61493		61493		61493	
Method 8080 (UG/KG)																		
Aldrin	< 2.13	J/O/L	< 9.17	//	< 18.5	//	< 9.76	//	< 1.96	//	< 1.96	J/O/L	< 2.04	J/O/L	< 1.83	J/O/L	< 1.89	//
alpha-Benzene hexachloride	< 2.13	J/O/L	< 9.17	//	< 18.5	//	< 9.76	//	< 1.96	//	< 1.96	J/O/L	< 2.04	J/O/L	< 1.83	J/O/L	< 1.89	//
alpha-Chlordane	< 2.13	J/O/L	< 9.17	//	< 18.5	//	< 9.76	//	< 1.96	//	< 1.96	J/O/L	< 2.04	J/O/L	< 1.83	J/O/L	< 1.89	//
beta-Benzene hexachloride	< 2.13	J/O/L	< 9.17	//	< 18.5	//	< 9.76	//	< 1.96	//	< 1.96	J/O/L	< 2.04	J/O/L	< 1.83	J/O/L	< 1.89	//
delta-Benzene hexachloride	< 2.13	J/O/L	< 9.17	//	< 18.5	//	< 9.76	//	< 1.96	//	< 1.96	J/O/L	< 2.04	J/O/L	< 1.83	J/O/L	< 1.89	//
Endosulfan I	< 2.13	J/O/L	< 9.17	//	< 18.5	//	< 9.76	//	< 1.96	//	< 1.96	J/O/L	< 2.04	J/O/L	< 1.83	J/O/L	< 1.89	//
gamma-Chlordane	1.28	J/O/L	< 9.17	//	< 18.5	//	< 9.76	//	< 1.96	//	< 1.96	J/O/L	< 2.04	J/O/L	< 1.83	J/O/L	< 1.89	//
Heptachlor	< 2.13	J/O/L	< 9.17	//	< 18.5	//	< 9.76	//	< 1.96	//	< 1.96	J/O/L	< 2.04	J/O/L	< 1.83	J/O/L	< 1.89	//
Heptachlor epoxide	< 2.13	J/O/L	< 9.17	//	< 18.5	//	< 9.76	//	< 1.96	//	< 1.96	J/O/L	< 2.04	J/O/L	< 1.83	J/O/L	< 1.89	//
Lindane	< 2.13	J/O/L	< 9.17	//	< 18.5	//	< 9.76	//	< 1.96	//	< 1.96	J/O/L	< 2.04	J/O/L	< 1.83	J/O/L	< 1.89	//
Dieldrin	< 4.27	J/O/L	< 18.3	//	< 37.1	//	< 19.5	//	< 3.92	//	< 3.92	J/O/L	< 4.09	J/O/L	< 3.66	J/O/L	< 3.78	//
Endosulfan II	< 4.27	J/O/L	< 18.3	//	< 37.1	//	< 19.5	//	< 3.92	//	< 3.92	J/O/L	< 4.09	J/O/L	< 3.66	J/O/L	< 3.78	//
Endosulfan sulfate	< 4.27	J/O/L	< 18.3	//	< 37.1	//	< 19.5	//	< 3.92	//	< 3.92	J/O/L	< 4.09	J/O/L	< 3.66	J/O/L	< 3.78	//
Endrin	< 4.27	J/O/L	< 18.3	//	< 37.1	//	< 19.5	//	< 3.92	//	< 3.92	J/O/L	< 4.09	J/O/L	< 3.66	J/O/L	< 3.78	//
Endrin ketone	< 4.27	J/O/L	< 18.3	//	< 37.1	//	< 19.5	//	< 3.92	//	< 3.92	J/O/L	< 4.09	J/O/L	< 3.66	J/O/L	< 3.78	//
p,p'-DDD	< 4.27	J/O/L	16.5	J//	< 37.1	//	8.98	J//	< 3.92	//	< 3.92	J/O/L	< 4.09	J/O/L	< 3.66	J/O/L	< 3.78	//
p,p'-DDE	< 4.27	J/O/L	22.4	//	14.1	J//	10.2	J//	< 3.92	//	< 3.92	J/O/L	< 4.09	J/O/L	< 3.66	J/O/L	< 3.78	//
p,p'-DDT	< 4.27	J/O/L	41.1	//	50.4	//	11.7	J//	< 3.92	//	< 3.92	J/O/L	< 4.09	J/O/L	< 3.66	J/O/L	< 3.78	//
Methoxychlor	< 21.3	J/O/L	< 91.7	//	< 185	//	< 97.6	//	< 19.6	//	< 19.6	J/O/L	< 20.4	J/O/L	< 18.3	J/O/L	< 18.9	//
PCB 1254	< 42.7	J/O/L	< 183	//	< 371	//	< 195	//	< 39.2	//	< 39.2	J/O/L	< 40.9	J/O/L	< 36.6	J/O/L	< 37.8	//
PCB 1016	< 42.7	J/O/L	< 183	//	< 371	//	< 195	//	< 39.2	//	< 39.2	J/O/L	< 40.9	J/O/L	< 36.6	J/O/L	< 37.8	//
PCB 1232	< 42.7	J/O/L	< 183	//	< 371	//	< 195	//	< 39.2	//	< 39.2	J/O/L	< 40.9	J/O/L	< 36.6	J/O/L	< 37.8	//
PCB 1242	< 42.7	J/O/L	< 183	//	< 371	//	< 195	//	< 39.2	//	< 39.2	J/O/L	< 40.9	J/O/L	< 36.6	J/O/L	< 37.8	//
PCB 1248	< 42.7	J/O/L	< 183	//	< 371	//	< 195	//	< 39.2	//	< 39.2	J/O/L	< 40.9	J/O/L	< 36.6	J/O/L	< 37.8	//
PCB 1260	< 42.7	J/O/L	1320	//	3390	//	525	//	116	//	< 39.2	J/O/L	< 40.9	J/O/L	< 36.6	J/O/L	< 37.8	//
PCB 1221	< 85.3	J/O/L	< 367	//	< 742	//	< 390	//	< 78.3	//	< 78.5	J/O/L	< 81.8	J/O/L	< 73.1	J/O/L	< 75.6	//
Toxaphene	< 213	J/O/L	< 917	//	< 1850	//	< 976	//	< 196	//	< 196	J/O/L	< 204	J/O/L	< 183	J/O/L	< 189	//

TABLE 6.3
PESTICIDES AND PCBS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1304	D431 1305	D431 1306	D431 1307	D431 1401	D431 1402	D431 1405	D431 1406	D431 1407
Sample Date	61493	61493	61493	61493	61593	61593	61593	61593	61593
Method 8080 (UG/KG)									
Aldrin	< 18.6 //	< 18.8 //	< 18.6 //	< 2.04 //	< 1.9 J/O/L	< 1.87 J/O/L	< 18.5 //	< 2.1 J/O/L	< 2.14 //
alpha-Benzene hexachloride	< 18.6 //	< 18.8 //	< 18.6 //	< 2.04 //	< 1.9 J/O/L	< 1.87 J/O/L	< 18.5 //	< 2.1 J/O/L	< 2.14 //
alpha-Chlordane	< 18.6 //	< 18.8 //	< 18.6 //	< 2.04 //	< 1.9 J/O/L	< 1.87 J/O/L	< 18.5 //	< 2.1 J/O/L	< 2.14 //
beta-Benzene hexachloride	< 18.6 //	< 18.8 //	< 18.6 //	< 2.04 //	< 1.9 J/O/L	< 1.87 J/O/L	< 18.5 //	< 2.1 J/O/L	< 2.14 //
delta-Benzene hexachloride	< 18.6 //	< 18.8 //	< 18.6 //	< 2.04 //	< 1.9 J/O/L	< 1.87 J/O/L	< 18.5 //	< 2.1 J/O/L	< 2.14 //
Endosulfan I	< 18.6 //	< 18.8 //	< 18.6 //	< 2.04 //	< 1.9 J/O/L	< 1.87 J/O/L	< 18.5 //	< 2.1 J/O/L	< 2.14 //
gamma-Chlordane	< 18.6 //	< 18.8 //	< 18.6 //	< 2.04 //	< 1.9 J/O/L	< 1.87 J/O/L	< 18.5 //	< 2.1 J/O/L	< 2.14 //
Heptachlor	< 18.6 //	< 18.8 //	< 18.6 //	< 2.04 //	< 1.9 J/O/L	< 1.87 J/O/L	< 18.5 //	< 2.1 J/O/L	< 2.14 //
Heptachlor epoxide	< 18.6 //	< 18.8 //	< 18.6 //	< 2.04 //	< 1.9 J/O/L	< 1.87 J/O/L	< 18.5 //	< 2.1 J/O/L	< 2.14 //
Lindane	< 18.6 //	< 18.8 //	< 18.6 //	< 2.04 //	< 1.9 J/O/L	< 1.87 J/O/L	< 18.5 //	< 2.1 J/O/L	< 2.14 //
Dieldrin	< 37.1 //	< 37.6 //	< 37.3 //	< 4.08 //	< 3.79 J/O/L	< 3.74 J/O/L	< 37.1 //	< 4.2 J/O/L	< 4.28 //
Endosulfan II	< 37.1 //	< 37.6 //	< 37.3 //	< 4.08 //	< 3.79 J/O/L	< 3.74 J/O/L	< 37.1 //	< 4.2 J/O/L	< 4.28 //
Endosulfan sulfate	< 37.1 //	< 37.6 //	< 37.3 //	< 4.08 //	< 3.79 J/O/L	< 3.74 J/O/L	< 37.1 //	< 4.2 J/O/L	< 4.28 //
Endrin	< 37.1 //	< 37.6 //	< 37.3 //	< 4.08 //	< 3.79 J/O/L	< 3.74 J/O/L	< 37.1 //	< 4.2 J/O/L	< 4.28 //
Endrin ketone	< 37.1 //	< 37.6 //	222 //	6.12 //	< 3.79 J/O/L	< 3.74 J/O/L	< 37.1 //	< 4.2 J/O/L	< 4.28 //
p,p'-DDD	< 37.1 //	< 37.6 //	< 37.3 //	< 4.08 //	< 3.79 J/O/L	< 3.74 J/O/L	38.5 J//	2.1 J/O/L	< 4.28 //
p,p'-DDE	< 37.1 //	< 37.6 //	< 37.3 //	< 4.08 //	< 3.79 J/O/L	< 3.74 J/O/L	44.5 J//	2.52 J/O/L	< 4.28 //
p,p'-DDT	< 37.1 //	< 37.6 //	< 37.3 //	< 4.08 //	< 3.79 J/O/L	< 3.74 J/O/L	20.8 J//	10.1 J/O/L	< 4.28 //
Methoxychlor	< 186 //	< 188 //	< 186 //	< 20.4 //	< 19 J/O/L	< 18.7 J/O/L	< 185 //	< 21 J/O/L	< 21.4 //
PCB 1254	< 371 //	< 376 //	< 373 //	< 40.8 //	< 37.9 J/O/L	< 37.4 J/O/L	< 371 //	< 42 J/O/L	< 42.8 //
PCB 1016	< 371 //	< 376 //	< 373 //	< 40.8 //	< 37.9 J/O/L	< 37.4 J/O/L	< 371 //	< 42 J/O/L	< 42.8 //
PCB 1232	< 371 //	< 376 //	< 373 //	< 40.8 //	< 37.9 J/O/L	< 37.4 J/O/L	< 371 //	< 42 J/O/L	< 42.8 //
PCB 1242	< 371 //	< 376 //	< 373 //	< 40.8 //	< 37.9 J/O/L	< 37.4 J/O/L	< 371 //	< 42 J/O/L	< 42.8 //
PCB 1248	< 371 //	< 376 //	< 373 //	< 40.8 //	< 37.9 J/O/L	< 37.4 J/O/L	< 371 //	< 42 J/O/L	< 42.8 //
PCB 1260	< 371 //	< 376 //	< 373 //	< 40.8 //	< 37.9 J/O/L	< 37.4 J/O/L	< 371 //	< 42 J/O/L	< 42.8 //
PCB 1221	< 742 //	< 752 //	< 745 //	< 81.7 //	< 75.9 J/O/L	< 74.8 J/O/L	< 741 //	< 83.9 J/O/L	< 85.6 //
Toxaphene	< 1860 //	< 1880 //	< 1860 //	< 204 //	< 190 J/O/L	< 187 J/O/L	< 1850 //	< 210 J/O/L	< 214 //

TABLE 6.3
PESTICIDES AND PCBS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43111501		D43111503		D43111504		D43111601		D43111605		D43111606		D431 1701		D431 1705		D431 1706	
Sample Date	61693		61693		61693		62193		62293		62293		62393		62393		62393	
Method 8080 (UG/KG)																		
Aldrin	< 92.4	J/O/L	< 1.9	//	< 2.02	//	< 1.75	//	< 1.85	//	< 1.93	//	< 1.7	//	< 2.09	//	< 2.05	//
alpha-Benzene hexachloride	< 92.4	J/O/L	< 1.9	//	< 2.02	//	< 1.75	//	< 1.85	//	< 1.93	//	< 1.7	//	< 2.09	//	< 2.05	//
alpha-Chlordane	< 27.3	/A/	< 1.9	//	< 2.02	//	< 1.75	//	< 1.85	//	< 1.93	//	< 1.7	//	< 2.09	//	< 2.05	//
beta-Benzene hexachloride	< 92.4	J/O/L	< 1.9	//	< 2.02	//	< 1.75	//	< 1.85	//	< 1.93	//	< 1.7	//	< 2.09	//	< 2.05	//
delta-Benzene hexachloride	< 92.4	J/O/L	< 1.9	//	< 2.02	//	< 1.75	//	< 1.85	//	< 1.93	//	1.02	J//	< 2.09	//	< 2.05	//
Endosulfan I	< 92.4	J/O/L	< 1.9	//	< 2.02	//	< 1.75	//	< 1.85	//	< 1.93	//	< 1.7	//	< 2.09	//	< 2.05	//
gamma-Chlordane	< 24.8	/A/	< 1.9	//	< 2.02	//	< 1.75	//	< 1.85	//	< 1.93	//	< 1.7	//	< 2.09	//	< 2.05	//
Heptachlor	< 92.4	J/O/L	< 1.9	//	< 2.02	//	< 1.75	//	< 1.85	//	< 1.93	//	< 1.7	//	< 2.09	//	< 2.05	//
Heptachlor epoxide	< 92.4	J/O/L	< 1.9	//	< 2.02	//	< 1.75	//	< 1.85	//	< 1.93	//	< 1.7	//	< 2.09	//	< 2.05	//
Lindane	< 92.4	J/O/L	< 1.9	//	< 2.02	//	< 1.75	//	< 1.85	//	< 1.93	//	< 1.7	//	< 2.09	//	< 2.05	//
Dieldrin	< 185	J/O/L	< 3.8	//	< 4.04	//	< 3.5	//	< 3.71	//	< 3.85	//	< 3.41	//	< 4.19	//	< 4.1	//
Endosulfan II	< 185	J/O/L	< 3.8	//	< 4.04	//	< 3.5	//	< 3.71	//	< 3.85	//	< 3.41	//	< 4.19	//	< 4.1	//
Endosulfan sulfate	< 185	J/O/L	< 3.8	//	< 4.04	//	< 3.5	//	< 3.71	//	< 3.85	//	< 3.41	//	< 4.19	//	< 4.1	//
Endrin	< 185	J/O/L	< 3.8	//	< 4.04	//	< 3.5	//	< 3.71	//	< 3.85	//	< 3.41	//	< 4.19	//	< 4.1	//
Endrin ketone	< 185	J/O/L	< 3.8	//	< 4.04	//	< 3.5	//	< 3.71	//	< 3.85	//	< 3.41	//	< 4.19	//	< 4.1	//
p,p'-DDD	< 185	J/O/L	< 3.8	//	< 4.04	//	< 3.5	//	< 3.71	//	< 3.85	//	< 3.41	//	< 4.19	//	< 4.1	//
p,p'-DDE	< 175	/A/	< 1.14	/A/	< 4.04	//	< 3.5	//	< 3.71	//	< 3.85	//	< 3.41	//	< 4.19	//	< 4.1	//
p,p'-DDT	< 273	/A/	< 1.9	/A/	< 4.04	//	< 3.5	//	< 3.71	//	< 3.85	//	< 3.41	//	< 4.19	//	< 4.1	//
Methoxychlor	< 924	J/O/L	< 19	//	< 20.2	//	< 17.5	//	< 18.5	//	< 19.3	//	< 17	//	< 20.9	//	< 20.5	//
PCB 1254	< 1850	J/O/L	< 38	//	< 40.4	//	< 35	//	< 37.1	//	< 38.5	//	< 34.1	//	< 41.9	//	< 41	//
PCB 1016	< 1850	J/O/L	< 38	//	< 40.4	//	< 35	//	< 37.1	//	< 38.5	//	< 34.1	//	< 41.9	//	< 41	//
PCB 1232	< 1850	J/O/L	< 38	//	< 40.4	//	< 35	//	< 37.1	//	< 38.5	//	< 34.1	//	< 41.9	//	< 41	//
PCB 1242	< 1850	J/O/L	< 38	//	< 40.4	//	< 35	//	< 37.1	//	< 38.5	//	< 34.1	//	< 41.9	//	< 41	//
PCB 1248	< 1850	J/O/L	< 38	//	< 40.4	//	< 35	//	< 37.1	//	< 38.5	//	< 34.1	//	< 41.9	//	< 41	//
PCB 1260	< 1850	J/O/L	< 38	//	< 40.4	//	< 35	//	< 37.1	//	< 38.5	//	< 34.1	//	< 41.9	//	< 41	//
PCB 1221	< 3690	J/O/L	< 75.9	//	< 80.9	//	< 70	//	< 74.2	//	< 77	//	< 68.1	//	< 83.8	//	< 81.9	//
Toxaphene	< 9240	J/O/L	< 190	//	< 202	//	< 175	//	< 185	//	< 193	//	< 170	//	< 209	//	< 205	//

TABLE 6.3
PESTICIDES AND PCBS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1801		D431 1803		D431 1804	
Sample Date	61693		61693		61693	
Method 8080 (UG/KG)						
Aldrin	< 1.79	//	< 2.25	J/O/L	< 1.93	//
alpha-Benzene hexachloride	< 1.79	//	< 2.25	J/O/L	< 1.93	//
alpha-Chlordane	< 1.79	//	< 2.25	J/O/L	< 1.93	//
beta-Benzene hexachloride	< 1.79	//	< 2.25	J/O/L	< 1.93	//
delta-Benzene hexachloride	< 1.79	//	< 2.25	J/O/L	< 1.93	//
Endosulfan I	< 1.79	//	< 2.25	J/O/L	< 1.93	//
gamma-Chlordane	< 1.79	//	< 2.25	J/O/L	< 1.93	//
Heptachlor	< 1.79	//	< 2.25	J/O/L	< 1.93	//
Heptachlor epoxide	< 1.79	//	< 2.25	J/O/L	< 1.93	//
Lindane	< 1.79	//	< 2.25	J/O/L	< 1.93	//
Dieldrin	< 3.59	//	< 4.5	J/O/L	< 3.85	//
Endosulfan II	< 3.59	//	< 4.5	J/O/L	< 3.85	//
Endosulfan sulfate	< 3.59	//	< 4.5	J/O/L	< 3.85	//
Endrin	< 3.59	//	< 4.5	J/O/L	< 3.85	//
Endrin ketone	< 3.59	//	< 4.5	J/O/L	< 3.85	//
p,p'-DDD	< 3.59	//	< 4.5	J/O/L	< 3.85	//
p,p'-DDE	1.08	J//	< 4.5	J/O/L	< 3.85	//
p,p'-DDT	1.08	J//	< 4.5	J/O/L	< 3.85	//
Methoxychlor	< 17.9	//	< 22.5	J/O/L	< 19.3	//
PCB 1254	< 35.9	//	< 45	J/O/L	< 38.5	//
PCB 1016	< 35.9	//	< 45	J/O/L	< 38.5	//
PCB 1232	< 35.9	//	< 45	J/O/L	< 38.5	//
PCB 1242	< 35.9	//	< 45	J/O/L	< 38.5	//
PCB 1248	< 35.9	//	< 45	J/O/L	< 38.5	//
PCB 1260	< 35.9	//	< 45	J/O/L	< 38.5	//
PCB 1221	< 71.8	//	< 90	J/O/L	< 77	//
Toxaphene	< 179	//	< 225	J/O/L	< 193	//

TABLE 6.4
PCDD AND PCDF COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110701	D43110702	D43110704	D43110705	D43110706	D43110707	D43110801	D43110802	D43110804
Sample Date	60893	60893	60893	60893	60993	60993	60993	60993	60993
Method 8280 (NG/G)									
2,3,7,8-TCDD	< 0.1 /Y/	< 0.1 /Y/	< 0.1 /Y/	< 0.1 /Y/	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //
2,3,7,8-TCDF	< 0.1 /Y/	< 0.1 /Y/	< 0.1 /Y/	< 0.1 /Y/	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //
Heptachlorodibenzo-p-dioxin isomers	< 0.1 /Y/	< 0.1 /Y/	0.8 J/Y/	< 0.3 /Y/	0.3 J//	0.1 J//	< 0.1 //	< 0.2 //	0.3 J//
Heptachlorodibenzo-p-furan isomers	< 0.1 /Y/	< 0.1 /Y/	0.3 J/Y/	< 0.1 /Y/	< 0.1 //	< 0.1 //	< 0.2 //	< 0.1 //	< 0.1 //
Hexachlorodibenzo-p-dioxin isomers	< 0.1 /Y/	< 0.1 /Y/	< 0.3 /Y/	< 0.4 /Y/	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.1 //
Hexachlorodibenzo-p-furan isomers	< 0.1 /Y/	< 0.1 /Y/	< 0.1 /Y/	< 0.1 /Y/	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //
Octachlorodibenzo-p-furan isomers	< 0.1 /Y/	< 0.1 /Y/	0.2 J/Y/	< 0.2 /Y/	< 0.1 //	< 0.6 //	< 0.1 //	< 0.1 //	< 0.2 //
Pentachlorodibenzo-p-dioxin isomers	< 0.1 /Y/	< 0.2 /Y/	< 0.1 /Y/	< 0.1 /Y/	< 0.1 //	< 0.1 //	< 0.1 //	< 0.3 //	< 0.2 //
Pentachlorodibenzo-p-furan isomers	< 0.1 /Y/	< 0.1 /Y/	< 0.1 /Y/	< 0.1 /Y/	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.1 //
Tetrachlorodibenzo-p-dioxin isomers	< 0.1 /Y/	< 0.1 /Y/	< 0.1 /Y/	< 0.1 /Y/	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.1 //
Tetrachlorodibenzo-p-furan isomers	< 0.1 /Y/	< 0.1 /Y/	< 0.1 /Y/	< 0.1 /Y/	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //
Octachlorodibenzo-p-dioxin isomers	1.6 J/Y/	0.7 J/Y/	3.9 /Y/	10.5 /Y/	26 //	22 //	0.7 J//	2.3 //	2.1 //

TABLE 6.4
PCDD AND PCDF COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110805	D43110806	D43110807	D43110901	D43110902	D431 1104	D43110906	D43110907	D43111001
Sample Date	60993	60993	60993	60993	60993	61093	61093	61093	61093
Method 8280 (NG/G)									
2,3,7,8-TCDD	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //
2,3,7,8-TCDF	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //
Heptachlorodibenzo-p-dioxin isomers	0.1 J//	0.2 J//	0.1 J//	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	0.1 J//	< 0.1 //
Heptachlorodibenzo-p-furan isomers	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //
Hexachlorodibenzo-p-dioxin isomers	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.1 //	< 0.1 //	< 0.1 //
Hexachlorodibenzo-p-furan isomers	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //
Octachlorodibenzo-p-furan isomers	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.1 //	< 0.1 //	< 0.1 //
Pentachlorodibenzo-p-dioxin isomers	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 1.5 //	< 0.2 //	< 0.2 //	< 0.2 //
Pentachlorodibenzo-p-furan isomers	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.2 //	< 0.1 //	< 0.1 //	< 0.1 //
Tetrachlorodibenzo-p-dioxin isomers	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.1 //	< 0.1 //	< 0.1 //
Tetrachlorodibenzo-p-furan isomers	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.1 //	< 0.1 //	< 0.1 //
Octachlorodibenzo-p-dioxin isomers	2.4 //	12 //	10 //	0.6 J//	3.2 //	2.9 //	1.2 J//	3.8 //	6.3 //

TABLE 6.4
PCDD AND PCDF COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43111002	D43111006	D431 1101	D43111005	D431 1102	D43111007	D431 1107	D431 1106	D431 1105
Sample Date	61093	61093	61093	61093	61093	61093	61193	61193	61193
Method 8280 (NG/G)									
2,3,7,8-TCDD	< 0.1 //	< 0.1 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.3 //	< 0.1 //	< 0.3 //	< 0.2 //
2,3,7,8-TCDF	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.1 //	< 0.2 //
Heptachlorodibenzo-p-dioxin isomers	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.3 //	< 0.3 //	< 0.3 //	< 0.2 //	2.8 //
Heptachlorodibenzo-p-furan isomers	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.1 //
Hexachlorodibenzo-p-dioxin isomers	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.3 //	< 0.2 //
Hexachlorodibenzo-p-furan isomers	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.1 //	< 0.3 //	< 0.2 //
Octachlorodibenzo-p-furan isomers	< 0.1 //	< 0.1 //	< 0.2 //	< 0.1 //	< 0.2 //	< 0.2 //	< 0.3 //	< 0.2 //	< 0.3 //
Pentachlorodibenzo-p-dioxin isomers	< 0.1 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.3 //	< 0.3 //	< 0.3 //	< 0.2 //
Pentachlorodibenzo-p-furan isomers	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.3 //	< 0.2 //	< 0.3 //	< 0.2 //
Tetrachlorodibenzo-p-dioxin isomers	< 0.1 //	< 0.1 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.3 //	< 0.2 //	< 0.3 //	< 0.2 //
Tetrachlorodibenzo-p-furan isomers	< 0.1 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.3 //	< 0.2 //
Octachlorodibenzo-p-dioxin isomers	4.3 //	< 0.2 //	0.4 J/T/	2.5 //	2.2 //	21 //	5.3 //	2 //	< 0.2 //

TABLE 6.4
PCDD AND PCDF COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1205	D431 1307	D431 1202	D431 1204	D431 1201	D431 1207	D431 1306	D431 1206	D431 1301
Sample Date	61493	61493	61493	61493	61493	61493	61493	61493	61493
Method 8280 (NG/G)									
2,3,7,8-TCDD	< 0.1 //	< 0.1 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.4 //
2,3,7,8-TCDF	< 0.2 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.5 //
Heptachlorodibenzo-p-dioxin isomers	< 0.3 //	< 0.2 //	< 0.1 //	< 0.3 //	< 0.4 //	0.6 J/T/	< 0.3 //	< 0.3 //	< 0.3 //
Heptachlorodibenzo-p-furan isomers	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.2 //	< 0.2 //
Hexachlorodibenzo-p-dioxin isomers	< 0.2 //	< 0.2 //	< 0.3 //	< 0.2 //	< 0.3 //	< 0.2 //	< 0.3 //	< 0.3 //	< 0.4 //
Hexachlorodibenzo-p-furan isomers	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.1 //	< 0.1 //	< 0.1 //	< 0.2 //	< 0.2 //
Octachlorodibenzo-p-furan isomers	< 0.2 //	< 0.1 //	< 0.2 //	< 0.4 //	< 0.3 //	< 0.2 //	< 0.1 //	< 0.2 //	< 0.4 //
Pentachlorodibenzo-p-dioxin isomers	< 0.2 //	< 0.3 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.3 //	< 0.2 //	< 0.7 //
Pentachlorodibenzo-p-furan isomers	< 0.1 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.4 //
Tetrachlorodibenzo-p-dioxin isomers	< 0.1 //	< 0.1 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.5 //
Tetrachlorodibenzo-p-furan isomers	< 0.2 //	< 0.1 //	< 0.2 //	< 0.1 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.2 //	< 0.5 //
Octachlorodibenzo-p-dioxin isomers	9.5 //	1.6 J//	4.3 //	2.4 /T/	3.6 //	38 L//	8 //	27 //	0.7 J//

TABLE 6.4
PCDD AND PCDF COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1302		D431 1304		D431 1305		D431 1401		D431 1402		D431 1407		D431 1406		D431 1801		D43111501	
Sample Date	61493		61493		61493		61593		61593		61593		61593		61693		61693	
Method 8280 (NG/G)																		
2,3,7,8-TCDD	< 0.5	//	< 0.3	//	< 0.8	//	< 0.1	//	< 0.1	//	< 0.1	//	< 0.2	//	< 0.1	//	< 0.1	//
2,3,7,8-TCDF	< 0.3	//	< 0.3	//	< 0.6	//	< 0.1	//	< 0.1	//	< 0.2	//	< 0.1	//	< 0.2	//	< 0.2	//
Heptachlorodibenzo-p-dioxin isomers	< 0.4	//	< 1.5	//	< 1.7	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.4	//	< 0.2	//	0.7	J//
Heptachlorodibenzo-p-furan isomers	< 0.2	//	< 0.7	//	< 1.8	//	< 0.1	//	< 0.1	//	< 0.1	//	< 0.2	//	< 0.2	//	< 0.1	//
Hexachlorodibenzo-p-dioxin isomers	< 0.3	//	< 1.3	//	< 1.8	//	< 0.2	//	< 0.1	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//
Hexachlorodibenzo-p-furan isomers	< 0.2	//	< 0.6	//	< 1.6	//	< 0.1	//	< 0.1	//	< 0.1	//	< 0.2	//	< 0.1	//	< 0.2	//
Octachlorodibenzo-p-furan isomers	< 0.2	//	< 2.2	//	< 2.7	//	< 0.2	//	< 0.1	//	< 0.4	//	< 0.2	//	< 0.1	//	< 0.3	//
Pentachlorodibenzo-p-dioxin isomers	< 0.5	//	< 0.7	//	< 1.3	//	< 0.2	//	< 0.2	//	< 0.3	//	< 0.2	//	< 0.2	//	< 0.2	//
Pentachlorodibenzo-p-furan isomers	< 0.3	//	< 0.3	//	< 0.7	//	< 0.1	//	< 0.1	//	< 0.2	//	< 0.1	//	< 0.2	//	< 0.2	//
Tetrachlorodibenzo-p-dioxin isomers	< 0.5	//	< 0.3	//	< 0.8	//	< 0.2	//	< 0.1	//	< 0.2	//	< 0.2	//	< 0.1	//	< 0.2	//
Tetrachlorodibenzo-p-furan isomers	< 0.5	//	< 0.5	//	< 0.7	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.1	//	< 0.2	//	< 0.2	//
Octachlorodibenzo-p-dioxin isomers	6.5	//	6.1	J/T/	5.4	//	3.2	//	6.1	//	1.4	//	2.4	//	0.1	J//	1.8	J//

TABLE 6.4
PCDD AND PCDF COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43111503		D43111504		D431 1803		D431 1804		D43111601		D43111605		D43111606		D431 1701		D431 1705	
Sample Date	61693		61693		61693		61693		62193		62293		62293		62393		62393	
Method 8280 (NG/G)																		
2,3,7,8-TCDD	< 0.1	//	< 0.1	J/H/	< 0.2	//	< 0.2	//	< 0.1	//	< 0.1	//	< 0.1	//	< 0.1	//	< 0.1	//
2,3,7,8-TCDF	< 0.1	//	< 0.1	J/H/	< 0.2	//	< 0.2	//	< 0.1	//	< 0.1	//	< 0.1	//	< 0.1	//	< 0.1	//
Heptachlorodibenzo-p-dioxin isomers	< 0.3	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.1	//	< 0.2	//	0.2	J//	< 0.2	//	< 0.1	//
Heptachlorodibenzo-p-furan isomers	< 0.2	//	< 0.1	//	< 0.1	//	< 0.1	//	< 0.2	//	< 0.5	//	< 0.2	//	< 0.2	//	< 0.1	//
Hexachlorodibenzo-p-dioxin isomers	< 0.3	//	< 0.2	//	< 0.1	//	< 0.1	//	< 0.2	//	< 0.1	//	< 0.2	//	< 0.2	//	< 0.2	//
Hexachlorodibenzo-p-furan isomers	< 0.2	//	< 0.1	//	< 0.1	//	< 0.1	//	< 0.1	//	< 0.1	//	< 0.1	//	< 0.1	//	< 0.1	J/I/H
Octachlorodibenzo-p-furan isomers	< 0.1	//	< 0.3	//	< 0.2	//	< 0.3	//	< 0.3	//	< 0.1	//	< 0.2	//	< 0.1	//	< 0.2	//
Pentachlorodibenzo-p-dioxin isomers	< 0.3	//	< 0.3	//	< 0.3	//	< 0.2	//	< 0.1	//	< 0.1	//	< 0.2	//	< 0.3	//	< 0.2	//
Pentachlorodibenzo-p-furan isomers	< 0.3	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.1	//	< 0.1	//	< 0.2	//	< 0.2	//	< 0.1	//
Tetrachlorodibenzo-p-dioxin isomers	< 0.1	//	< 0.2	J/H/	< 0.2	//	< 0.2	//	< 0.1	//	< 0.1	//	< 0.1	//	< 0.1	//	< 0.1	//
Tetrachlorodibenzo-p-furan isomers	< 0.2	//	< 0.1	J/H/	< 0.2	//	< 0.2	//	< 0.1	//	< 0.1	//	< 0.3	//	< 0.1	//	< 0.1	//
Octachlorodibenzo-p-dioxin isomers	1.6	J//	40	J/I/L	23	//	< 5.7	//	< 0.5	//	13	//	16	//	0.3	J//	0.3	J//

TABLE 6.4
PCDD AND PCDF COMPOUNDS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1706		
Sample Date	62393		
Method 8280 (NG/G)			
2,3,7,8-TCDD	<	0.1	//
2,3,7,8-TCDF	<	0.1	//
Heptachlorodibenzo-p-dioxin isomers	<	0.2	//
Heptachlorodibenzo-p-furan isomers	<	0.1	//
Hexachlorodibenzo-p-dioxin isomers	<	0.2	//
Hexachlorodibenzo-p-furan isomers	<	0.1	//
Octachlorodibenzo-p-furan isomers	<	0.1	//
Pentachlorodibenzo-p-dioxin isomers	<	0.2	//
Pentachlorodibenzo-p-furan isomers	<	0.1	//
Tetrachlorodibenzo-p-dioxin isomers	<	0.1	//
Tetrachlorodibenzo-p-furan isomers	<	0.1	//
Octachlorodibenzo-p-dioxin isomers		1.4	//

TABLE 6.5
INORGANICS AND ORGANIC INDICATORS
: IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110701		D43110702		D43110703		D43110704		D43110705		D43110706		D43110707		D43110801		D43110802	
Sample Date	60893		60893		60893		60893		60893		60993		60993		60993		60993	
RCRA and Target Metals (MG/KG)																		
Arsenic	7.6	/Y/	< 1	/Y/	2.3	/Y/	25.5	/Y/	< 1	/Y/	1	//	2.7	//	1.2	//	1.3	J/I/L
Barium	28.7	/Y/	< 21	/Y/	122	/Y/	57.7	/Y/	< 20.7	/Y/	25.7	//	< 19.7	//	< 20.4	//	< 19.8	//
Cadmium	< 0.48	/Y/	< 0.53	/Y/	< 0.6	/Y/	0.83	/Y/	< 0.52	/Y/	< 0.63	//	< 0.49	//	< 0.51	//	< 0.5	//
Chromium	15.4	/Y/	10	/Y/	94.1	/Y/	263	/Y/	24.2	/Y/	11.9	//	18.9	//	5.2	//	8.8	J/I/X/H
Copper	< 2.4	/Y/	< 2.6	/Y/	326	/Y/	309	/Y/	6	/Y/	34.7	//	67.3	//	< 2.6	//	< 2.5	//
Lead	129	/Y/	3.1	/Y/	4.8	/Y/	140	/Y/	3.8	/Y/	2.1	//	1.3	//	2.5	//	4	//
Manganese	220	/Y/	83.5	/Y/	32.9	/Y/	46.9	/Y/	493	/Y/	85.6	//	58.6	//	62.7	//	43.6	//
Mercury	< 0.11	/Y/	< 0.106	/Y/	7.4	/Y/	0.816	/Y/	< 0.118	/Y/	< 0.129	//	< 0.116	//	< 0.106	//	< 0.112	//
Nickel	< 3.9	/Y/	< 4.2	/Y/	9.9	/Y/	41	/Y/	< 4.1	/Y/	< 5	//	< 3.9	//	< 4.1	//	< 4	//
Selenium	1.1	/Y/	< 0.52	/Y/	< 0.53	/Y/	3.8	/Y/	< 0.5	/Y/	< 0.52	//	< 0.56	//	< 0.52	//	< 0.56	J/I/L
Silver	< 0.97	/Y/	< 1.1	/Y/	3	/Y/	< 1.1	/Y/	< 1	/Y/	< 1.3	//	< 0.98	//	< 1	//	< 0.99	//
Aluminum	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Antimony	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Beryllium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Calcium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Cobalt	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Iron	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Magnesium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Potassium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Sodium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Thallium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Vanadium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Zinc	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Other Inorganics (MG/KG)																		
Cyanide	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Organic Indicator (MG/KG)																		
Total organic carbon	3630	/Y/	NA		NA		NA		NA		1410	//	NA		5490	//	NA	

TABLE 6.5
INORGANICS AND ORGANIC INDICATORS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110803	D43110804	D43110805	D43110806	D43110807	D43110901	D43110902	D43110903	D43110904
Sample Date	60993	60993	60993	60993	60993	60993	60993	60993	60993
RCRA and Target Metals (MG/KG)									
Arsenic	3.9 //	7.6 //	< 0.82 //	1.1 //	1.1 //	< 0.99 //	< 0.97 //	< 1.1 //	4.1 //
Barium	42.2 //	31.7 //	< 22.4 //	< 20.9 //	< 24.3 //	< 19.3 //	< 19.9 //	< 20.4 //	< 21.7 //
Cadmium	< 0.54 //	< 0.53 //	< 0.56 //	< 0.52 //	< 0.61 //	< 0.48 //	< 0.5 //	< 0.51 //	< 0.54 //
Chromium	55.5 //	75.4 //	10.2 //	11.1 //	22 //	6.2 //	12.4 //	12 //	46.5 //
Copper	17.2 //	37.9 //	5.3 //	5.8 //	< 3 //	< 2.4 //	< 2.5 //	2.8 //	30.1 //
Lead	9.5 //	18.6 //	4.2 //	5.2 //	3.3 //	1.6 //	2.6 //	3.8 //	37.1 //
Manganese	67.4 //	63.3 //	19 //	17.8 //	42.5 //	138 //	31.5 //	29.1 //	34.7 //
Mercury	0.185 //	0.281 //	< 0.118 //	0.21 //	< 0.123 //	< 0.105 //	< 0.109 //	< 0.111 //	0.64 //
Nickel	6.2 //	15.1 //	4.9 //	4.8 //	< 4.9 //	< 3.9 //	< 4 //	< 4.1 //	37.9 //
Selenium	1.6 //	0.97 //	< 0.41 //	< 0.53 //	< 0.56 //	< 0.49 //	< 0.48 //	< 0.55 //	< 0.46 //
Silver	< 1.1 //	< 1.1 //	< 1.1 //	< 1 //	< 1.2 //	< 0.96 //	< 0.99 //	< 1 //	< 1.1 //
Aluminum	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other Inorganics (MG/KG)									
Cyanide	NA	NA	NA	NA	NA	NA	NA	NA	NA
Organic Indicator (MG/KG)									
Total organic carbon	NA	NA	NA	3780 //	NA	9260 //	NA	NA	NA

TABLE 6.5
INORGANICS AND ORGANIC INDICATORS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110905		D43110906		D43110907		D43111001		D43111002		D43111003		D43111004		D43111005		D43111006	
Sample Date	61093		61093		61093		61093		61093		61093		61093		61093		61093	
RCRA and Target Metals (MG/KG)																		
Arsenic	3.2	//	1.1	//	< 1.1	//	< 0.95	//	< 1	//	1.1	//	< 1	//	< 1.1	J/I/L	1.3	//
Barium	< 17.9	//	68.5	//	22.1	//	< 20.9	//	< 19.1	//	< 21.4	//	29.6	//	26	J/I/H	25.5	//
Cadmium	< 0.45	J/L/	< 0.61	J/L/	< 0.41	J/L/	< 0.52	J/L/	< 1.8	J/L/	< 0.54	J/L/	< 0.51	J/L/	< 0.61	I/LIX/H	< 0.57	J/L/
Chromium	< 8.9	J/L/	44	J/L/	< 7.8	J/L/	12.4	J/L/	12.2	J/L/	11.6	J/L/	26.7	J/L/	24.2	J/LI/H	18.7	J/L/
Copper	3.9	//	< 3	//	< 2.1	//	< 2.6	//	< 2.4	//	5.6	//	5	//	< 3	//	< 2.9	//
Lead	22	//	5.4	//	1.7	//	3.5	//	3.7	//	4.1	//	2.3	//	6.5	J/IX/	2.9	//
Manganese	13	//	20.7	//	32.3	//	92.3	//	41.6	//	45	//	252	//	266	J/X/	405	//
Mercury	< 0.113	//	< 0.122	//	< 0.12	//	< 0.11	//	< 0.111	//	< 0.111	//	0.131	//	0.164	//	< 0.125	//
Nickel	< 3.6	//	< 4.9	//	< 3.3	//	< 4.2	//	< 3.8	//	< 4.3	//	< 4.1	//	< 4.9	//	5.8	//
Selenium	< 0.52	//	< 0.56	//	< 0.57	//	< 0.48	//	< 0.5	//	< 0.5	//	< 0.52	//	< 0.56	J/I/L	< 0.62	//
Silver	< 0.9	//	< 1.2	//	< 0.83	//	< 1	//	< 0.96	//	< 1.1	//	< 1	//	< 1.2	J/X/	< 1.1	//
Aluminum	1320	//	NA		NA		NA		NA		NA		NA		NA		NA	
Antimony	< 5.4	//	NA		NA		NA		NA		NA		NA		NA		NA	
Beryllium	< 0.45	//	NA		NA		NA		NA		NA		NA		NA		NA	
Calcium	< 448	//	NA		NA		NA		NA		NA		NA		NA		NA	
Cobalt	< 4.5	//	NA		NA		NA		NA		NA		NA		NA		NA	
Iron	5850	//	NA		NA		NA		NA		NA		NA		NA		NA	
Magnesium	< 448	//	NA		NA		NA		NA		NA		NA		NA		NA	
Potassium	< 448	//	NA		NA		NA		NA		NA		NA		NA		NA	
Sodium	< 448	//	NA		NA		NA		NA		NA		NA		NA		NA	
Thallium	< 1	//	NA		NA		NA		NA		NA		NA		NA		NA	
Vanadium	13.9	//	NA		NA		NA		NA		NA		NA		NA		NA	
Zinc	7.7	//	NA		NA		NA		NA		NA		NA		NA		NA	
Other Inorganics (MG/KG)																		
Cyanide	< 1.13	//	NA		NA		NA		NA		NA		NA		NA		NA	
Organic Indicator (MG/KG)																		
Total organic carbon	4890	//	NA		NA		14100	//	NA		NA		NA		NA		1620	//

TABLE 6.5
INORGANICS AND ORGANIC INDICATORS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43111007		D431 1101		D431 1102		D431 1103		D431 1104		D431 1105		D431 1106		D431 1107		D431 1201	
Sample Date	61093		61093		61093		61093		61093		61193		61193		61193		61493	
RCRA and Target Metals (MG/KG)																		
Arsenic	< 1.1	//	< 0.9	//	0.99	//	< 0.87	//	0.99	//	1.8	//	1.8	//	3.1	//	1.4	//
Barium	< 24.3	//	< 17.9	//	< 20.3	//	< 20.9	//	< 16.5	//	< 22.9	//	< 23.1	//	< 25.4	//	< 20.6	//
Cadmium	< 0.61	J/L/	< 0.45	J/L/	< 0.51	J/L/	< 0.52	J/L/	< 0.41	J/L/	< 0.57	//	< 0.58	//	< 0.64	//	< 0.51	//
Chromium	< 8.4	J/L/	< 5.2	J/L/	34	J/L/	10.7	J/L/	14.2	J/L/	95.6	//	49.4	//	17.4	//	339	//
Copper	< 3	//	< 2.2	//	< 2.5	//	< 2.6	//	< 2.1	//	7	//	4.6	//	< 3.2	//	15.9	//
Lead	1.8	//	2	//	8	//	2.7	//	2.8	//	13.7	//	7.1	//	1.4	//	34.5	//
Manganese	193	//	260	//	111	//	87.9	//	67.7	//	53	//	306	//	164	//	64.5	//
Mercury	< 0.127	//	< 0.104	//	< 0.108	//	< 0.111	//	< 0.111	//	0.135	//	< 0.116	//	< 0.128	//	0.27	//
Nickel	< 4.9	//	< 3.6	//	< 4.1	//	< 4.2	//	< 3.3	//	9.5	//	6.4	//	< 5.1	//	11.3	//
Selenium	< 0.57	//	< 0.45	//	< 0.49	//	< 0.43	//	< 0.46	//	< 0.57	//	< 0.58	//	0.67	//	< 0.52	//
Silver	< 1.2	//	< 0.9	//	1	//	< 1	//	< 0.82	//	< 1.1	//	< 1.2	//	< 1.3	//	< 1	//
Aluminum	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Antimony	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Beryllium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Calcium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Cobalt	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Iron	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Magnesium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Potassium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Sodium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Thallium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Vanadium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Zinc	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Other Inorganics (MG/KG)																		
Cyanide	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Organic Indicator (MG/KG)																		
Total organic carbon	NA		3980	//	NA		NA		NA		NA		1130	//	NA		8190	//

TABLE 6.5
INORGANICS AND ORGANIC INDICATORS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1202	D431 1203	D431 1204	D431 1205	D431 1206	D431 1207	D431 1301	D431 1302	D431 1303
Sample Date	61493	61493	61493	61493	61493	61493	61493	61493	61493
RCRA and Target Metals (MG/KG)									
Arsenic	1.3 //	2.2 //	2.1 //	1.2 //	1.5 //	4.4 J/I/H	1.2 //	< 1 //	1.8 //
Barium	< 21.1 //	24.5 //	< 23 //	27.6 //	31.8 //	30.7 J/I/H	< 21.4 //	< 22.6 //	< 21 //
Cadmium	< 0.53 //	< 0.52 //	< 0.58 //	< 0.54 //	< 0.58 //	< 0.59 J/X/	< 0.53 //	< 0.57 //	< 0.53 //
Chromium	262 //	903 //	265 //	15.6 //	44 //	22.2 J/I/H	3.1 //	14.4 //	31.9 //
Copper	10.1 //	31.3 //	15 //	4.9 //	6.6 //	< 2.9 //	< 2.7 //	< 2.8 //	10 //
Lead	24.3 //	70 //	30.5 //	8.3 //	5.6 //	2.5 J/I/L	2.2 //	4.1 //	27.6 //
Manganese	44.6 //	51.4 //	55.7 //	17 //	42.8 //	137 J/I/H	82.7 //	22.6 //	39.8 //
Mercury	0.299 //	0.595 //	0.468 //	< 0.118 //	< 0.118 //	< 0.123 //	< 0.11 //	0.119 //	0.273 //
Nickel	8.4 //	18.1 //	12 //	< 4.3 //	< 4.6 //	< 4.7 //	< 4.3 //	< 4.5 //	6.9 //
Selenium	< 0.52 //	< 0.51 //	< 0.54 //	< 0.56 //	< 0.56 //	< 0.58 J/I/L	< 0.52 //	< 0.52 //	0.69 //
Silver	< 1.1 //	< 1 //	< 1.2 //	< 1.1 //	< 1.2 //	< 1.2 J/I/X/	< 1.1 //	< 1.1 //	< 1.1 //
Aluminum	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other Inorganics (MG/KG)									
Cyanide	NA	NA	NA	NA	NA	NA	NA	NA	NA
Organic Indicator (MG/KG)									
Total organic carbon	NA	NA	NA	NA	3210 //	NA	4060 //	NA	NA

TABLE 6.5
INORGANICS AND ORGANIC INDICATORS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1304		D431 1305		D431 1306		D431 1307		D431 1401		D431 1402		D431 1403		D431 1404		D431 1405	
Sample Date	61493		61493		61493		61493		61593		61593		61593		61593		61593	
RCRA and Target Metals (MG/KG)																		
Arsenic	12.6	//	23.7	//	2.4	//	< 1.2	//	1.3	//	< 1.1	//	2.5	//	1.6	//	2.9	//
Barium	41.2	//	133	//	< 21.3	//	< 24.4	//	< 20	//	< 22.4	//	< 22.8	//	< 21.8	//	20.6	//
Cadmium	< 0.56	//	1.1	//	< 0.53	//	< 0.61	//	< 0.5	//	< 0.56	//	< 0.57	//	< 0.55	//	1.1	//
Chromium	28.4	//	30.8	//	18.5	//	23.6	//	13	//	11.1	//	64	//	41.6	//	124	//
Copper	21.7	//	73.3	//	14	//	4.2	//	< 2.5	//	< 2.8	//	12.8	//	8	//	38.5	//
Lead	16.4	//	63.6	//	7.1	//	2.9	//	4.3	//	3.8	//	18.5	//	10.2	//	55.1	//
Manganese	158	//	128	//	46.6	//	14.3	//	29.2	//	18.7	//	70.3	//	74.2	//	165	//
Mercury	0.961	//	1.76	//	0.191	//	< 0.123	//	< 0.106	//	< 0.112	//	0.254	//	< 0.111	//	0.29	//
Nickel	9.8	//	15.1	//	5.9	//	< 4.9	//	< 4	//	< 4.5	//	12.4	//	6.2	//	33	//
Selenium	105	//	67.6	//	9.5	//	0.72	//	< 0.41	//	< 0.55	//	< 0.57	//	< 0.5	//	< 0.39	//
Silver	< 1.1	//	< 1.1	//	< 1.1	//	< 1.2	//	< 1	//	< 1.1	//	< 1.1	//	< 1.1	//	1.6	//
Aluminum	NA		NA		NA		NA		NA		NA		NA		NA		2220	//
Antimony	NA		NA		NA		NA		NA		NA		NA		NA		35.1	//
Beryllium	NA		NA		NA		NA		NA		NA		NA		NA		< 0.41	//
Calcium	NA		NA		NA		NA		NA		NA		NA		NA		2230	//
Cobalt	NA		NA		NA		NA		NA		NA		NA		NA		< 4.1	//
Iron	NA		NA		NA		NA		NA		NA		NA		NA		29100	//
Magnesium	NA		NA		NA		NA		NA		NA		NA		NA		1580	//
Potassium	NA		NA		NA		NA		NA		NA		NA		NA		< 412	//
Sodium	NA		NA		NA		NA		NA		NA		NA		NA		< 412	//
Thallium	NA		NA		NA		NA		NA		NA		NA		NA		< 1.1	//
Vanadium	NA		NA		NA		NA		NA		NA		NA		NA		11.6	//
Zinc	NA		NA		NA		NA		NA		NA		NA		NA		134	//
Other Inorganics (MG/KG)																		
Cyanide	NA		NA		NA		NA		NA		NA		NA		NA		< 1.09	//
Organic Indicator (MG/KG)																		
Total organic carbon	NA		NA		15100	//	NA		4110	//	NA		NA		NA		9290	//

TABLE 6.5
INORGANICS AND ORGANIC INDICATORS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1406	D431 1407	D43111501	D43111502	D43111503	D43111504	D43111601	D43111602	D43111603
Sample Date	61593	61593	61693	61693	61693	61693	62193	62193	62293
RCRA and Target Metals (MG/KG)									
Arsenic	1.8 //	1.3 //	6.8 //	2.3 //	1.9 //	3.3 //	< 1 //	1.1 //	1.2 //
Barium	25.1 //	< 24.6 //	41.9 //	28.2 //	< 22.1 //	< 21.8 //	< 19 //	29.5 //	33.6 //
Cadmium	< 0.55 //	< 0.61 //	9.7 //	< 0.48 //	< 0.55 //	< 0.55 //	< 0.48 //	< 0.44 //	< 0.56 //
Chromium	35.2 //	18.8 //	179 //	38.6 //	15.4 //	25.1 //	9 J/IX/L	6 //	33.8 //
Copper	7.6 //	< 3.1 //	66.3 //	8.4 //	< 2.8 //	< 2.7 //	< 2.4 //	< 2.2 //	< 2.8 //
Lead	5.6 //	4 //	147 //	27.9 //	8.4 //	4.2 //	2.4 //	3.1 //	5 //
Manganese	37.8 //	39.3 //	413 //	326 //	37.7 //	6.3 //	79.2 J/I/L	53.1 //	22.2 //
Mercury	0.203 //	< 0.126 //	1.11 //	< 0.11 //	< 0.115 //	< 0.125 //	< 0.107 //	< 0.109 //	< 0.116 //
Nickel	9.7 //	6.7 //	78.5 //	10.2 //	< 4.4 //	< 4.4 //	< 3.8 //	< 3.5 //	< 4.4 //
Selenium	< 0.47 //	< 0.6 //	< 0.56 //	< 0.49 //	< 0.5 //	< 0.61 //	< 0.5 J/I/L	< 0.48 //	< 0.57 //
Silver	2.5 //	1.5 //	1.5 //	< 0.96 //	< 1.1 //	1.4 //	< 0.95 //	< 0.89 //	< 1.1 //
Aluminum	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sodium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other Inorganics (MG/KG)									
Cyanide	NA	NA	NA	NA	NA	NA	NA	NA	NA
Organic Indicator (MG/KG)									
Total organic carbon	NA	NA	13900 //	NA	1360 //	1170 //	4220 //	NA	NA

TABLE 6.5
INORGANICS AND ORGANIC INDICATORS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43111604		D43111605		D43111606		D431 1701		D431 1702		D431 1703		D431 1704		D431 1705		D431 1706	
Sample Date	62293		62293		62293		62393		62393		62393		62393		62393		62393	
RCRA and Target Metals (MG/KG)																		
Arsenic	1.2	//	4.2	//	3.3	//	6.2	//	2.2	//	2.1	//	2.4	//	1.9	//	1.7	//
Barium	< 22.4	//	22.1	//	47.3	//	< 18.8	//	< 23.4	//	< 26.6	//	20.4	//	< 23.5	//	< 23.4	//
Cadmium	< 0.56	//	< 0.55	//	< 0.58	//	< 0.47	//	< 0.59	//	< 6.6	//	< 0.5	//	< 0.59	//	< 0.58	//
Chromium	16.3	//	14.3	//	10.8	//	6	//	17.6	//	31.8	//	5.4	//	4.8	//	5.2	//
Copper	< 2.8	//	< 2.7	//	< 2.9	//	< 2.4	//	< 2.9	//	< 3.3	//	< 2.5	//	< 2.9	//	< 2.9	//
Lead	3	//	3.1	//	2.1	//	1.4	//	2.5	//	1.1	//	1.8	//	1.1	//	1	//
Manganese	30.6	//	24	//	5.5	//	18	//	13.2	//	2200	//	43.5	//	24.8	//	40.8	J/X/
Mercury	< 0.114	//	< 0.112	//	< 0.117	//	< 0.103	//	< 0.117	//	< 0.142	//	< 0.122	//	< 0.129	//	< 0.125	//
Nickel	< 4.5	//	< 4.4	//	< 4.7	//	< 3.8	//	< 4.7	//	12.5	//	< 4	//	< 4.7	//	< 4.7	//
Selenium	< 0.56	//	< 0.5	//	< 0.44	//	< 0.48	//	< 0.55	//	< 0.67	//	< 0.6	//	< 0.58	//	< 0.61	//
Silver	< 1.1	//	< 1.1	//	< 1.2	//	< 0.94	//	< 1.2	//	< 13.3	//	< 1	//	< 1.2	//	< 1.2	//
Aluminum	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Antimony	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Beryllium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Calcium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Cobalt	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Iron	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Magnesium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Potassium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Sodium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Thallium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Vanadium	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Zinc	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Other Inorganics (MG/KG)																		
Cyanide	NA		NA		NA		NA		NA		NA		NA		NA		NA	
Organic Indicator (MG/KG)																		
Total organic carbon	NA		1100	//	758	//	5200	//	NA		NA		NA		675	//	405	//

TABLE 6.5
INORGANICS AND ORGANIC INDICATORS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1801		D431 1802		D431 1803		D431 1804	
Sample Date	61693		61693		61693		61693	
RCRA and Target Metals (MG/KG)								
Arsenic	3.2	//	3.3	J/I/L	3.3	//	3	//
Barium	< 18.5	//	< 18.3	//	< 19.2	//	< 23.1	//
Cadmium	< 0.46	//	< 0.46	//	< 0.48	//	< 0.58	//
Chromium	3.9	//	12.5	//	30.5	//	10.3	//
Copper	< 2.3	//	< 2.3	//	< 2.4	//	< 2.9	//
Lead	3.4	//	2	//	2.4	//	1	//
Manganese	55.8	//	171	J/IX/L	66.1	//	12.6	//
Mercury	< 0.11	//	< 0.11	//	< 0.131	//	< 0.124	//
Nickel	< 3.7	//	< 3.7	//	< 3.8	//	< 4.6	//
Selenium	< 0.48	//	< 0.52	J/I/L	1.8	//	< 0.61	//
Silver	< 0.93	//	< 0.91	//	1.3	//	< 1.2	//
Aluminum	NA		NA		NA		NA	
Antimony	NA		NA		NA		NA	
Beryllium	NA		NA		NA		NA	
Calcium	NA		NA		NA		NA	
Cobalt	NA		NA		NA		NA	
Iron	NA		NA		NA		NA	
Magnesium	NA		NA		NA		NA	
Potassium	NA		NA		NA		NA	
Sodium	NA		NA		NA		NA	
Thallium	NA		NA		NA		NA	
Vanadium	NA		NA		NA		NA	
Zinc	NA		NA		NA		NA	
Other Inorganics (MG/KG)								
Cyanide	NA		NA		NA		NA	
Organic Indicator (MG/KG)								
Total organic carbon	4260	//	NA		2100	//	1770	//

TABLE 6.6
RADIONUCLIDE PARAMETERS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110701		D43110702		D43110703		D43110704		D43110705		D43110706		D43110801		D43110802		D43110803	
Sample Date	60893		60893		60893		60893		60893		60993		60993		60993		60993	
Radionuclide Parameters (PC/G)																		
Gross alpha	< 8.6	/Y/	< 8.4	/Y/	10.9	/Y/	18.7	/Y/	12.2	/Y/	14.1	//	11.8	//	14	//	9.1	//
Nonvolatile beta	25.7	/Y/	17.6	/Y/	12.4	/Y/	19.5	/Y/	21.8	/Y/	23.6	//	8.4	//	16.1	//	21.4	//
Radium, total alpha-emitting	0.86	/YV/	1.2	/YV/	0.64	/YV/	1.2	/YV/	< 1.1	/YV/	< 1.4	/V/	< 0.56	/V/	< 1	/V/	< 1.2	/V/
Tritium	3.6	/Y/	4.3	/Y/	3	/Y/	3.5	/Y/	3.4	/Y/	12.9	//	9.6	//	10.8	//	13.5	//

TABLE 6.6
RADIONUCLIDE PARAMETERS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110804	D43110805	D43110806	D43110806	D43110901	D43110902	D43110903	D43110904	D43110905
Sample Date	60993	60993	60993	60993	60993	60993	60993	60993	61093
Radionuclide Parameters (PC/G)									
Gross alpha	11.2 //	25.6 //	11.2 //	NA	< 9.6 //	< 8.9 //	< 8.5 //	11.5 //	< 8.4 //
Nonvolatile beta	37.6 //	19.9 //	35.9 //	NA	18.26 //	21.95 //	16.47 //	20.23 //	32.06 /V/
Radium, total alpha-emitting	< 1.1 /V/	< 0.9 /V/	< 1 /V/	NA	< 1.4 /V/	< 1.2 /V/	< 1.4 /V/	< 1.1 /V/	< 1.62 /V/
Tritium	10 //	7.5 //	11.3 //	NA	1.69 //	2.94 //	4.95 //	3.07 //	< 1.41 //

TABLE 6.6
RADIONUCLIDE PARAMETERS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110906	D43111001	D43111002	D43111003	D43111004	D43111005	D43111006	D431 1101	D431 1102
Sample Date	61093	61093	61093	61093	61093	61093	61093	61093	61093
Radionuclide Parameters (PC/G)									
Gross alpha	< 7.6 //	9.4 //	13 //	< 6.8 //	< 6.5 //	< 6.7 //	16.2 //	7.9 //	16.3 //
Nonvolatile beta	32.98 /V/	78.11 /V/	34.4 /V/	29.7 /V/	9.9 /V/	24.9 /V/	42.5 //	24.8 //	16.4 //
Radium, total alpha-emitting	< 1.69 /V/	< 1.24 /V/	< 1.27 /V/	< 1.21 /V/	< 1.87 /V/	< 2.73 /V/	< 1.1 /V/	< 0.76 /V/	< 1.1 /V/
Tritium	< 1.46 //	< 1.45 //	< 1.43 //	< 1.39 //	< 1.37 //	< 1.44 //	< 1.4 //	< 2 //	< 2 //

TABLE 6.6
RADIONUCLIDE PARAMETERS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name / Sample Date	D431 1103 61093	D431 1104 61093	D431 1105 61193	D431 1106 61193	D431 1201 61493	D431 1202 61493	D431 1203 61493	D431 1204 61493	D431 1205 61493
Radionuclide Parameters (PC/G)									
Gross alpha	< 6.9 //	< 7.5 //	10.9 //	< 4.3 //	8.7 //	7.3 //	< 6.7 //	11.7 //	13.1 //
Nonvolatile beta	31.6 //	< 13.7 //	66.2 /V/	29.3 /V/	27.1 //	97 //	25.4 //	26.8 //	39.6 //
Radium, total alpha-emitting	< 1.1 /V/	< 1 /V/	< 1.8 /V/	< 2.1 /V/	< 1.2 /V/	< 1.1 /V/	< 1.1 /V/	< 1.2 /V/	< 0.9 /V/
Tritium	2 //	1.9 //	< 1.2 //	< 1.8 //	< 1.3 //	1.6 //	< 2.1 //	2.6 //	< 1.4 //

TABLE 6.6
RADIONUCLIDE PARAMETERS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name Sample Date	D431 1206 61493		D431 1301 61493		D431 1302 61493		D431 1303 61493		D431 1304 61493		D431 1305 61493		D431 1306 61493		D431 1401 61593		D431 1402 61593	
Radionuclide Parameters (PC/G)																		
Gross alpha	15.2	//	10.9	//	< 10.8	//	< 7.7	//	< 7.5	//	< 8	//	< 7.6	//	9.9	//	< 8.9	//
Nonvolatile beta	35.6	//	25.2	//	31.1	//	23.3	//	22.3	//	18.8	//	7.7	//	46.3	/X/	32.6	//
Radium, total alpha-emitting	< 1.4	/V/	< 0.9	/V/	< 1.8	/V/	< 0.8	/V/	< 1.5	/V/	< 2.5	/V/	< 0.84	/V/	< 2.1	/V/	< 1.4	/V/
Tritium	< 1.3	//	< 1.4	//	< 1.7	//	< 1.4	//	< 1.1	//	2	//	1.8	//	< 1.3	//	< 1.3	//

TABLE 6.6
RADIONUCLIDE PARAMETERS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D431 1403		D431 1404		D431 1405		D431 1406		D43111501		D43111502		D43111503		D43111504		D43111601	
Sample Date	61593		61593		61593		61593		61693		61693		61693		61693		62193	
Radionuclide Parameters (PC/G)																		
Gross alpha	7.8	//	< 8.5	//	< 7.5	//	< 9	//	7.9	//	13.2	//	5.2	//	1.57	//	6.4	//
Nonvolatile beta	34.9	//	26.3	//	43.9	//	23.7	//	9.5	//	24.7	//	37.5	/V/	22.4	//	21.8	/V/
Radium, total alpha-emitting	< 2.5	/V/	< 1.5	/V/	< 1.7	/V/	< 2	/V/	< 0.92	/V/	1.98	//	< 2	/V/	2.05	//	0.75	J/C/
Tritium	< 1.3	//	< 1.2	//	2.6	//	1.8	//	4.7	//	3.1	//	< 1.3	/X/	5.1	//	< 1.1	//

TABLE 6.6
RADIONUCLIDE PARAMETERS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name / Sample Date	D43111602 62193	D43111603 62293	D43111604 62293	D43111605 62293	D43111606 62293	D431 1701 62393	D431 1702 62393	D431 1703 62393	D431 1704 62393
Radionuclide Parameters (PC/G)									
Gross alpha	8.6 //	5.3 //	8.4 //	8.6 //	6.9 //	29.1 //	4.6 //	4.2 //	6 //
Nonvolatile beta	23 /V/	17.8 /V/	19.3 /V/	15.5 /V/	< 6.6 /V/	40.7 //	16.7 //	18.7 //	17.1 //
Radium, total alpha-emitting	1.1 J/C/	1.8 J/C/	0.83 J/C/	0.73 J/C/	0.25 J/C/	0.43 //	0.47 //	0.93 //	0.39 //
Tritium	< 1.3 //	2.9 //	2.9 //	3.1 //	2 //	2.5 //	3.5 //	5.2 //	7.5 //

TABLE 6.6
RADIONUCLIDE PARAMETERS
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name / Sample Date	D431 1705 62393		D431 1706 62393		D431 1801 61693		D431 1802 61693		D431 1803 61693		D431 1804 61693	
Radionuclide Parameters (PC/G)												
Gross alpha	3.4	//	6.8	//	10.8	//	6	//	10.8	//	7.5	//
Nonvolatile beta	12	//	11.1	//	17.2	//	11.2	//	17.2	//	13	//
Radium, total alpha-emitting	0.66	//	0.5	//	< 1.01	/V/	< 0.86	/V/	1.47	//	< 0.8	/V/
Tritium	1.2	//	3.5	//	< 2.73	//	< 1.3	//	< 1.34	//	3.5	//

TABLE 6.7
TCLP ANALYSES
IN SOIL
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43110705		D43110706		D43110905		D431 1205	
Sample Date	61793		61793		62393		62393	
TCLP Method 8240 (UG/L)								
1,1-Dichloroethylene	< 50	/Y/	< 50	//	< 50	//	< 50	//
1,2-Dichloroethane	< 50	/Y/	< 50	//	< 50	//	< 50	//
Benzene	< 50	/Y/	< 50	//	< 50	//	< 50	//
Carbon tetrachloride	< 50	/Y/	< 50	//	< 50	//	< 50	//
Chlorobenzene	< 50	/Y/	< 50	//	< 50	//	< 50	//
Chloroethene (Vinyl chloride)	< 100	/Y/	< 100	//	< 100	//	< 100	//
Chloroform	< 50	/Y/	< 50	//	< 50	/V/	17.3	J//
Methyl ethyl ketone	< 100	/Y/	< 100	//	< 100	//	< 100	//
Tetrachloroethylene	< 50	/Y/	< 50	//	< 50	//	< 50	//
Trichloroethylene	< 50	/Y/	< 50	//	< 50	//	< 50	//
TCLP Method 8270 (UG/L)								
1,4-Dichlorobenzene	100	J/YO/L	100	//	100	J/O/L	100	//
2,4,6-Trichlorophenol	100	J/YO/L	100	//	100	J/O/L	100	//
2,4-Dinitrotoluene	100	J/YO/L	100	//	100	J/O/L	100	//
Hexachlorobenzene	100	J/YO/L	100	//	100	J/O/L	100	//
Hexachlorobutadiene	100	J/YO/L	100	//	100	J/O/L	100	//
Hexachloroethane	100	J/YO/L	100	//	100	J/O/L	100	//
Nitrobenzene	100	J/YO/L	100	//	100	J/O/L	100	//
o-Cresol (2-Methylphenol)	100	J/YO/L	100	//	100	J/O/L	100	//
2,4,5-Trichlorophenol	500	J/YO/L	500	//	500	J/O/L	500	//
Pentachlorophenol	500	J/YO/L	500	//	500	J/O/L	500	//
Pyridine	100	J/YO/L	100	//	100	J/O/L	100	//
TCLP Method 8080 (UG/L)								
alpha-Chlordane	< 0.112	/Y/	< 0.106	//	< 1.08	//	< 1.39	J/O/L
gamma-Chlordane	< 0.112	/Y/	< 0.106	//	< 1.08	//	< 1.39	J/O/L
Heptachlor	< 0.112	/Y/	< 0.106	//	< 0.108	//	< 0.139	J/O/L
Heptachlor epoxide	< 0.112	/Y/	< 0.106	//	< 0.108	//	< 0.139	J/O/L
Lindane	< 0.112	/Y/	< 0.106	//	< 0.108	//	< 0.139	J/O/L
Endrin	< 0.225	/Y/	< 0.211	//	< 0.217	//	< 0.278	J/O/L
Methoxychlor	< 1.12	/Y/	< 1.06	//	< 1.08	//	< 1.39	J/O/L
Toxaphene	< 11.2	/Y/	< 10.6	//	< 2.17	//	< 2.78	J/O/L
TCLP Method 8150 (UG/L)								
2,4,5-TP (Silvex)	< 5	/Y/	< 5	//	< 5	//	< 5	//
2,4,5-Trichlorophenoxy acetic acid	< 5	/Y/	< 5	//	< 5	//	< 5	//
2,4-Dichlorophenoxyacetic acid	< 10	/Y/	< 10	//	< 10	//	< 10	//
TCLP Metals (UG/L)								
Mercury, TCLP	< 0.2	/Y/	< 0.2	//	< 0.2	//	< 0.2	J/J/L
Cadmium, TCLP	< 5	/Y/	< 5	//	< 5	J/L/	< 5	//
Chromium, TCLP	< 10	/Y/	< 10	//	< 10	J/L/	< 10	//
Silver, TCLP	< 10	/Y/	< 10	//	< 10	//	< 10	//
Lead, TCLP	< 90	/Y/	< 90	//	< 90	//	< 90	//
Arsenic, TCLP	< 100	/Y/	< 100	//	< 100	//	< 100	//
Selenium, TCLP	< 100	/Y/	< 100	//	< 100	//	< 100	//
Barium, TCLP	< 200	/Y/	< 200	//	237	//	< 200	//

TABLE 6.8
VOLATILE ORGANIC COMPOUNDS
IN GROUNDWATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	DBP 1	DBP 1	DBP 1	DBP 2	DBP 2	DBP 2	DBP 3	DBP 3	DBP 3
Sample Date	31993	60593	121193	31993	60593	121193	31893	60593	121193
Method 8240 (UG/L)									
1,1,1,2-Tetrachloroethane	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA
1,1,1-Trichloroethane	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
1,1,2,2-Tetrachloroethane	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
1,1,2-Trichloroethane	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
1,1-Dichloroethane	< 1 //	< 1 //	< 5 //	1.3 //	1.2 //	1.37 J//	< 1 //	< 1 //	< 5 //
1,1-Dichloroethylene	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
1,2,3-Trichloropropane	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA
1,2-Dibromo-3-chloropropane	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA
1,2-Dibromoethane	< 20 //	< 20 //	NA	< 20 //	< 20 //	NA	< 20 //	< 20 //	NA
1,2-Dichloroethane	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
1,2-Dichloroethylene	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
2-Chloroethyl vinyl ether	NA	NA	< 10 //	NA	NA	< 10 //	NA	NA	< 10 //
2-Hexanone	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA
Acetone	< 100 //	< 100 //	NA	< 100 //	< 100 //	NA	< 100 //	< 100 //	NA
Acetonitrile (Methyl cyanide)	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA
Acrolein	< 20 //	< 20 //	NA	< 20 //	< 20 //	NA	< 20 //	< 20 //	NA
Acrylonitrile	< 20 //	< 20 //	NA	< 20 //	< 20 //	NA	< 20 //	< 20 //	NA
Allyl chloride	< 50 //	< 50 //	NA	< 50 //	< 50 //	NA	< 50 //	< 50 //	NA
Benzene	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
Bis(2-chloroisopropyl) ether	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA
Bromochloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
Bromoform	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
Bromomethane (Methyl bromide)	< 1 //	< 1 //	< 10 //	< 1 //	< 1 //	< 10 //	< 1 //	< 1 //	< 10 //
Carbon disulfide	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA
Carbon tetrachloride	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
Chlorobenzene	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
Chloroethane	< 1 //	< 1 //	< 10 //	< 1 //	< 1 //	< 10 //	< 1 //	< 1 //	< 10 //
Chloroethene (Vinyl chloride)	< 1 //	< 1 //	< 10 //	< 1 //	< 1 //	< 10 //	< 1 //	< 1 //	< 10 //
Chloroform	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
Chloromethane (Methyl chloride)	< 1 //	< 1 //	< 10 //	< 1 //	< 1 //	< 10 //	< 1 //	< 1 //	< 10 //
Chloroprene	< 200 //	< 200 //	NA	< 200 //	< 200 //	NA	< 200 //	< 200 //	NA
cis-1,3-Dichloropropene	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
Dibromochloromethane	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
Dibromomethane (Methylene bromide)	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA
Dichlorodifluoromethane	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA
Dichloromethane (Methylene chloride)	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	1.1 //	< 5 //
Ethylbenzene	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
Iodomethane (Methyl iodide)	< 15 //	< 15 //	NA	< 15 //	< 15 //	NA	< 15 //	< 15 //	NA
Isobutyl alcohol	< 100 //	< 100 //	NA	< 100 //	< 100 //	NA	< 100 //	< 100 //	NA

TABLE 6.8
VOLATILE ORGANIC COMPOUNDS
IN GROUNDWATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	DBP 1	DBP 1	DBP 1	DBP 2	DBP 2	DBP 2	DBP 3	DBP 3	DBP 3
Sample Date	31993	60593	121193	31993	60593	121193	31893	60593	121193
Method 8240 (UG/L)									
Methacrylonitrile	< 50 //	< 50 //	NA	< 50 //	< 50 //	NA	< 50 //	< 50 //	NA
Methyl ethyl ketone	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA
Methyl isobutyl ketone	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA
Propionitrile	< 200 //	< 200 //	NA	< 200 //	< 200 //	NA	< 200 //	< 200 //	NA
Styrene	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA
Tetrachloroethylene	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
TFT	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
trans-1,2-Dichloroethylene	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
trans-1,3-Dichloropropene	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
trans-1,4-Dichloro-2-butene	< 30 //	< 30 //	NA	< 30 //	< 30 //	NA	< 30 //	< 30 //	NA
Trichloroethylene	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
Trichlorofluoromethane	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //	< 1 //	< 1 //	< 5 //
Vinyl acetate	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA	< 1 //	< 1 //	NA
Xylenes	< 2 //	< 2 //	NA	7 //	5.68 //	NA	< 2 //	< 2 //	NA

TABLE 6.8
VOLATILE ORGANIC COMPOUNDS
IN GROUNDWATER;
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	DBP 4			DBP 4			DBP 4			DBP 5			DBP 5		
Sample Date	31993			60593			121193			121193			122693		
Method 8240 (UG/L)															
1,1,1,2-Tetrachloroethane	<	1	//	<	1	//		NA			NA			NA	
1,1,1-Trichloroethane	<	1	//	<	1	//	<	5	//	<	5	//	<	0.3	//
1,1,2,2-Tetrachloroethane	<	1	//	<	1	//	<	5	//	<	5	//	<	0.1	//
1,1,2-Trichloroethane	<	1	//	<	1	//	<	5	//	<	5	//	<	0.2	//
1,1-Dichloroethane	<	1	//	<	1	//	<	5	//	<	5	//	<	0.1	//
1,1-Dichloroethylene	<	1	//	<	1	//	<	5	//	<	5	//	<	0.5	//
1,2,3-Trichloropropane	<	1	//	<	1	//		NA			NA			NA	
1,2-Dibromo-3-chloropropane	<	1	//	<	1	//		NA			NA			NA	
1,2-Dibromoethane	<	20	//	<	20	//		NA			NA			NA	
1,2-Dichloroethane	<	1	//	<	1	//	<	5	//	<	5	//	<	0.2	//
1,2-Dichloroethylene		NA			NA			NA			NA		<	2	//
1,2-Dichloropropane	<	1	//	<	1	//	<	5	//	<	5	//	<	0.06	//
2-Chloroethyl vinyl ether		NA			NA		<	10	//	<	10	//	<	10	//
2-Hexanone	<	1	//	<	1	//		NA			NA		<	10	//
Acetone	<	100	//	<	100	//		NA			NA		<	10	//
Acetonitrile (Methyl cyanide)	<	1	//	<	1	//		NA			NA			NA	
Acrolein	<	20	//	<	20	//		NA			NA			NA	
Acrylonitrile	<	20	//	<	20	//		NA			NA			NA	
Allyl chloride	<	50	//	<	50	//		NA			NA			NA	
Benzene	<	1	//	<	1	//	<	5	//	<	5	//	<	0.09	//
Bis(2-chloroisopropyl) ether	<	10	//	<	10	//		NA			NA			NA	
Bromochloromethane		NA			NA			NA			NA			11.8	//
Bromodichloromethane	<	1	//	<	1	//	<	5	//	<	5	//	<	0.2	//
Bromoform	<	1	//	<	1	//	<	5	//	<	5	//	<	2	//
Bromomethane (Methyl bromide)	<	1	//	<	1	//	<	10	//	<	10	//	<	0.6	//
Carbon disulfide	<	1	//	<	1	//		NA			NA		<	2	//
Carbon tetrachloride	<	1	//	<	1	//	<	5	//	<	5	//	<	0.1	//
Chlorobenzene	<	1	//	<	1	//	<	5	//	<	5	//	<	0.3	//
Chloroethane	<	1	//	<	1	//	<	10	//	<	10	//	<	0.2	//
Chloroethene (Vinyl chloride)	<	1	//	<	1	//	<	10	//	<	10	//	<	0.2	//
Chloroform	<	1	//	<	1	//	<	5	//	<	5	//	<	0.2	//
Chloromethane (Methyl chloride)	<	1	//	<	1	//	<	10	//	<	10	//		0.19	J
Chloroprene	<	200	//	<	200	//		NA			NA			NA	
cis-1,3-Dichloropropene	<	1	//	<	1	//	<	5	//	<	5	//	<	5	//
Dibromochloromethane	<	1	//	<	1	//	<	5	//	<	5	//	<	0.7	//
Dibromomethane (Methylene bromide)	<	1	//	<	1	//		NA			NA			NA	
Dichlorodifluoromethane	<	1	//	<	1	//		NA			NA			NA	
Dichloromethane (Methylene chloride)	<	1	//		1	//	<	5	//	<	5	//	<	0.2	//
Ethylbenzene	<	1	//	<	1	//	<	5	//	<	5	//	<	0.05	//
Iodomethane (Methyl iodide)	<	15	//	<	15	//		NA			NA			NA	
Isobutyl alcohol	<	100	//	<	100	//		NA			NA			NA	

TABLE 6.8
VOLATILE ORGANIC COMPOUNDS
IN GROUNDWATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	DBP 4	DBP 4	DBP 4	DBP 5	DBP 5
Sample Date	31993	60593	121193	121193	122693
Method 8240 (UG/L)					
Methacrylonitrile	< 50 //	< 50 //	NA	NA	NA
Methyl ethyl ketone	< 1 //	< 1 //	NA	NA	< 10 //
Methyl isobutyl ketone	< 1 //	< 1 //	NA	NA	< 10 //
Propionitrile	< 200 //	< 200 //	NA	NA	NA
Styrene	< 1 //	< 1 //	NA	NA	< 0.1
Tetrachloroethylene	< 1 //	< 1 //	< 5 //	< 5 //	< 5 //
TFT	NA	NA	NA	NA	10.8 //
Toluene	< 1 //	< 1 //	< 5 //	< 5 //	6.79 //
trans-1,2-Dichloroethylene	< 1 //	< 1 //	< 5 //	< 5 //	< 5 //
trans-1,3-Dichloropropene	< 1 //	< 1 //	< 5 //	< 5 //	< 5 //
trans-1,4-Dichloro-2-butene	< 30 //	< 30 //	NA	NA	NA
Trichloroethylene	< 1 //	< 1 //	< 5 //	< 5 //	< 0.1 //
Trichlorofluoromethane	< 1 //	< 1 //	< 5 //	< 5 //	< 5 //
Vinyl acetate	< 1 //	< 1 //	NA	NA	< 10 //
Xylenes	< 2 //	< 2 //	NA	NA	< 0.4 //

TABLE 6.9
VOLATILE ORGANIC COMPOUNDS
IN GROUND WATER HYDROPUNCH SAMPLES
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43111505			D43111506			D43111607			D43111608			D431 1707			D431 1708		
Sample Date	61693			61893			62293			62293			62393			62393		
Method 8240 (UG/L)																		
1,1,1-Trichloroethane	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
1,1,2,2-Tetrachloroethane	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
1,1,2-Trichloroethane	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
1,1-Dichloroethane	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
1,1-Dichloroethylene	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
1,2-Dichloroethane	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
1,2-Dichloroethylene	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
1,2-Dichloropropane	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
2-Chloroethyl vinyl ether		NA		<	10	/Y/	<	10	//	<	10	//	<	10	//	<	10	//
2-Hexanone	<	10	//	<	10	/Y/	<	10	//	<	10	//	<	10	//	<	10	//
2-Propanol		NA			NA			NA			NA			NA		<	10	J/N/
Acetone	<	10	//	<	10	/Y/		36.9	//		490	//	<	10	/V/		16	/V/
Benzene	<	5	J/C/	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
Bromodichloromethane	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
Bromoform	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
Bromomethane (Methyl bromide)	<	10	//	<	10	/Y/	<	10	//	<	10	//	<	10	//	<	10	//
Carbon disulfide	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
Carbon tetrachloride	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
Chlorobenzene	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
Chloroethane	<	10	//	<	10	/Y/	<	10	//	<	10	//	<	10	//	<	10	//
Chloroethene (Vinyl chloride)	<	10	//	<	10	/Y/	<	10	//	<	10	//	<	10	//	<	10	//
Chloroform	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
Chloromethane (Methyl chloride)	<	10	//	<	10	/Y/	<	10	//	<	10	//	<	10	//	<	10	//
cis-1,3-Dichloropropene	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
Dibromochloromethane	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
Dichloromethane (Methylene chloride)	<	5	//	<	4.13	J/Y/V/	<	1.78	J/V/	<	1.78	J/V/	<	5	/V/	<	19	/V/
Ethylbenzene	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
Methyl ethyl ketone	<	10	//	<	10	/Y/	<	10	//	<	10	//	<	10	//	<	10	//
Methyl isobutyl ketone	<	10	//	<	10	/Y/	<	10	//	<	10	//	<	10	//	<	10	//
Styrene	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
Tetrachloroethylene	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
Toluene	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
trans-1,3-Dichloropropene	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
Trichloroethylene	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//
Vinyl acetate	<	10	//	<	10	/Y/	<	10	//	<	10	//	<	10	//	<	10	//
Xylenes	<	5	//	<	5	/Y/	<	5	//	<	5	//	<	5	//	<	5	//

TABLE 6.10
SEMI-VOLATILE ORGANIC COMPOUNDS
IN GROUNDWATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	DBP 1	DBP 1	DBP 1	DBP 2	DBP 2	DBP 2	DBP 3	DBP 3	DBP 3
Sample Date	31993	60593	121193	31993	60593	121193	31893	60593	121193
Method 8270 (UG/L)									
1,2,4,5-Tetrachlorobenzene	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
1,2,4-Trichlorobenzene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
1,2-Dichlorobenzene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
1,3,5-Trinitrobenzene	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
1,3-Dichlorobenzene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
1,3-Dinitrobenzene	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
1,4-Dichlorobenzene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
1,4-Dioxane	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
1,4-Naphthoquinone	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
1-Naphthylamine	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
2,3,4,6-Tetrachlorophenol	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA
2,4,5-Trichlorophenol	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA
2,4,6-Trichlorophenol	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //
2,4-Dichlorophenol	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //
2,4-Dimethyl phenol	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //
2,4-Dinitrophenol	< 45 //	< 45 //	< 55 //	< 45 //	< 45 //	< 55 //	< 45 //	< 45 //	< 55 //
2,4-Dinitrotoluene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
2,6-Dichlorophenol	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA
2,6-Dinitrotoluene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
2-Acetylaminofluorene	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
2-Chloroethyl vinyl ether	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
2-Chloronaphthalene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
2-Chlorophenol	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //
2-Methyl-4,6-dinitrophenol	< 10 //	< 10 //	< 55 //	< 10 //	< 10 //	< 55 //	< 10 //	< 10 //	< 55 //
2-Methylnaphthalene	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
2-Naphthylamine	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
2-Nitrophenol	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //
2-Picoline	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
2-sec-Butyl-4,6-dinitrophenol	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA
3,3'-Dichlorobenzidine	< 10 //	< 10 //	< 22 //	< 10 //	< 10 //	< 22 //	< 10 J1//	< 10 //	< 22 //
3,3'-Dimethylbenzidine	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
3-Methylcholanthrene	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
4-Aminobiphenyl	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
4-Bromophenyl phenyl ether	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
4-Chloro-m-cresol	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //
4-Chloroaniline	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
4-Chlorophenyl phenyl ether	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
4-Nitrophenol	< 10 //	< 10 //	< 55 //	< 10 //	< 10 //	< 55 //	< 10 //	< 10 //	< 55 //

TABLE 6.10
SEMI-VOLATILE ORGANIC COMPOUNDS
IN GROUNDWATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	DBP 1	DBP 1	DBP 1	DBP 2	DBP 2	DBP 2	DBP 3	DBP 3	DBP 3
Sample Date	31993	60593	121193	31993	60593	121193	31893	60593	121193
Method 8270 (UG/L)									
4-Nitroquinoline-1-oxide	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
5-Nitro-o-toluidine	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
7,12-Dimethylbenz(a)anthracene	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
a,a-Dimethylphenethylamine	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Acenaphthene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Acenaphthylene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Acetophenone	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Aniline	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Anthracene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Aramite	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Benzo(a)anthracene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Benzo(a)pyrene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Benzo(b)fluoranthene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Benzo(g,h,i)perylene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Benzo(k)fluoranthene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Benzoic acid	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA
Benzyl alcohol	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Bis(2-chloroethoxy) methane	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Bis(2-chloroethyl) ether	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Bis(2-ethylhexyl) phthalate	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Butylbenzyl phthalate	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Chlorobenzilate	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Chrysene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Di-n-butyl phthalate	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Di-n-octyl phthalate	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Diallate	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Dibenz(a,h)anthracene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Dibenzofuran	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Diethyl phthalate	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Dimethoate	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Dimethyl phthalate	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Diphenylamine	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Disulfoton	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Ethyl methacrylate	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Ethyl methanesulfonate	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Famphur	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Fluoranthene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Fluorene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //

TABLE 6.10
SEMI-VOLATILE ORGANIC COMPOUNDS
IN GROUNDWATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	DBP 1	DBP 1	DBP 1	DBP 2	DBP 2	DBP 2	DBP 3	DBP 3	DBP 3
Sample Date	31993	60593	121193	31993	60593	121193	31893	60593	121193
Method 8270 (UG/L)									
Hexachlorobenzene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Hexachlorobutadiene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Hexachlorocyclopentadiene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Hexachloroethane	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Hexachlorophene	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA
Hexachloropropene	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Indeno(1,2,3-c,d)pyrene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Isodrin	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Isophorone	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Isosafrole	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Kepone	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
m-Cresol (3-Methylphenol)	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA
m-Nitroaniline	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Methapyrilene	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Methyl methacrylate	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Methyl methanesulfonate	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
N-Nitrosodi-n-butylamine	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
N-Nitrosodiethylamine	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
N-Nitrosodimethylamine	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
N-Nitrosodiphenylamine	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
N-Nitrosodipropylamine	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
N-Nitrosomethylethylamine	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
N-Nitrosomorpholine	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
N-Nitrosopiperidine	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
N-Nitrosopyrrolidine	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Naphthalene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Nitrobenzene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
O,O,O-Triethyl phosphorothioate	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
o-Cresol (2-Methylphenol)	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA
o-Nitroaniline	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
o-Toluidine	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
p-Cresol (4-Methylphenol)	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA
p-Dimethylaminoazobenzene	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
p-Nitroaniline	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
p-Phenylenediamine	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Pentachlorobenzene	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Pentachloroethane	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Pentachloronitrobenzene	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA

TABLE 6.10
SEMI-VOLATILE ORGANIC COMPOUNDS
IN GROUNDWATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	DBP 1	DBP 1	DBP 1	DBP 2	DBP 2	DBP 2	DBP 3	DBP 3	DBP 3
Sample Date	31993	60593	121193	31993	60593	121193	31893	60593	121193
Method 8270 (UG/L)									
Pentachlorophenol	< 10 //	< 10 //	< 55 //	< 10 //	< 10 //	< 55 //	< 10 //	< 10 //	< 55 //
Phenacetin	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Phenanthrene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Phenol	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //
Pronamid	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Pyrene	< 10 //	< 10 //	< 11 //	< 10 //	< 10 //	< 11 //	< 10 J1//	< 10 //	< 11 //
Pyridine	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Safrole	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Sulfotepp	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Thionazin	< 10 //	< 10 //	NA	< 10 //	< 10 //	NA	< 10 J1//	< 10 //	NA
Benzidine	NA	NA	< 55 //	NA	NA	< 55 //	NA	NA	< 55 //
Bis(2-chloroisopropyl) ether	NA	NA	< 11 //	NA	NA	< 11 //	NA	NA	< 11 //

TABLE 6.10
SEMI-VOLATILE ORGANIC COMPOUNDS
IN GROUNDWATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	DBP 4			DBP 4			DBP 4			DBP 5		
Sample Date	31993			60593			121193			122693		
Method 8270 (UG/L)												
1,2,4,5-Tetrachlorobenzene	<	10	//	<	10	J1//		NA			NA	
1,2,4-Trichlorobenzene	<	10	//	<	10	J1//	<	11	//		5.5	//
1,2-Dichlorobenzene	<	10	//	<	10	J1//	<	11	//	<	5.6	//
1,3,5-Trinitrobenzene	<	10	//	<	10	J1//		NA			NA	
1,3-Dichlorobenzene	<	10	//	<	10	J1//	<	11	//	<	5.6	//
1,3-Dinitrobenzene	<	10	//	<	10	J1//		NA			NA	
1,4-Dichlorobenzene	<	10	//	<	10	J1//	<	11	//		5.5	//
1,4-Dioxane	<	10	//	<	10	J1//		NA			NA	
1,4-Naphthoquinone	<	10	//	<	10	J1//		NA			NA	
1-Naphthylamine	<	10	//	<	10	J1//		NA			NA	
2,3,4,6-Tetrachlorophenol	<	10	//	<	10	//		NA			NA	
2,4,5-Trichlorophenol	<	10	//	<	10	//		NA		<	28	//
2,4,6-Trichlorophenol	<	10	//	<	10	//	<	11	//	<	5.6	//
2,4-Dichlorophenol	<	10	//	<	10	//	<	11	//	<	5.6	//
2,4-Dimethyl phenol	<	10	//	<	10	//	<	11	//	<	5.6	//
2,4-Dinitrophenol	<	45	//	<	45	//	<	55	//	<	28	//
2,4-Dinitrotoluene	<	10	//	<	10	J1//	<	11	//		5.5	//
2,6-Dichlorophenol	<	10	//	<	10	//		NA			NA	
2,6-Dinitrotoluene	<	10	//	<	10	J1//	<	11	//	<	5.6	//
2-Acetylaminofluorene	<	10	//	<	10	J1//		NA			NA	
2-Chloroethyl vinyl ether	<	10	//	<	10	J1//		NA			NA	
2-Chloronaphthalene	<	10	//	<	10	J1//	<	11	//	<	5.6	//
2-Chlorophenol	<	10	//	<	10	//	<	11	//		5.5	//
2-Methyl-4,6-dinitrophenol	<	10	//	<	10	//	<	55	//	<	28	//
2-Methylnaphthalene	<	10	//	<	10	J1//		NA		<	5.6	//
2-Naphthylamine	<	10	//	<	10	J1//		NA			NA	
2-Nitrophenol	<	10	//	<	10	//	<	11	//	<	5.6	//
2-Picoline	<	10	//	<	10	J1//		NA			NA	
2-sec-Butyl-4,6-dinitrophenol	<	10	//	<	10	//		NA			NA	
3,3'-Dichlorobenzidine	<	10	//	<	10	J1//	<	22	//	<	11.2	//
3,3'-Dimethylbenzidine	<	10	//	<	10	J1//		NA			NA	
3-Methylcholanthrene	<	10	//	<	10	J1//		NA			NA	
4-Aminobiphenyl	<	10	//	<	10	J1//		NA			NA	
4-Bromophenyl phenyl ether	<	10	//	<	10	J1//	<	11	//	<	5.6	//
4-Chloro-m-cresol	<	10	//	<	10	//	<	11	//		5.5	//
4-Chloroaniline	<	10	//	<	10	J1//		NA		<	5.6	//
4-Chlorophenyl phenyl ether	<	10	//	<	10	J1//	<	11	//	<	5.6	//
4-Nitrophenol	<	10	//	<	10	//	<	55	//		27.5	//

TABLE 6.10
SEMI-VOLATILE ORGANIC COMPOUNDS
IN GROUNDWATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	DBP 4			DBP 4			DBP 4			DBP 5		
Sample Date	31993			60593			121193			122693		
Method 8270 (UG/L)												
4-Nitroquinoline-1-oxide	<	10	//	<	10	J1//		NA			NA	
5-Nitro-o-toluidine	<	10	//	<	10	J1//		NA			NA	
7,12-Dimethylbenz(a)anthracene	<	10	//	<	10	J1//		NA			NA	
a,a-Dimethylphenethylamine	<	10	//	<	10	J1//		NA			NA	
Acenaphthene	<	10	//	<	10	J1//	<	11	//		5.5	//
Acenaphthylene	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Acetophenone	<	10	//	<	10	J1//		NA			NA	
Aniline	<	10	//	<	10	J1//		NA			NA	
Anthracene	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Aramite	<	10	//	<	10	J1//		NA			NA	
Benzo(a)anthracene	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Benzo(a)pyrene	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Benzo(b)fluoranthene	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Benzo(g,h,i)perylene	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Benzo(k)fluoranthene	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Benzoic acid	<	10	//	<	10	//		NA		<	28	//
Benzyl alcohol	<	10	//	<	10	J1//		NA		<	5.6	//
Bis(2-chloroethoxy) methane	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Bis(2-chloroethyl) ether	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Bis(2-ethylhexyl) phthalate	<	10	//	<	10	J1//	<	11	//	<	40	V//
Butylbenzyl phthalate	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Chlorobenzilate	<	10	//	<	10	J1//		NA			NA	
Chrysene	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Di-n-butyl phthalate	<	10	//	<	10	J1//	<	11	//	<	5.5	//
Di-n-octyl phthalate	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Diallate	<	10	//	<	10	J1//		NA			NA	
Dibenz(a,h)anthracene	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Dibenzofuran	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Diethyl phthalate	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Dimethoate	<	10	//	<	10	J1//		NA			NA	
Dimethyl phthalate	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Diphenylamine	<	10	//	<	10	J1//		NA			NA	
Disulfoton	<	10	//	<	10	J1//		NA			NA	
Ethyl methacrylate	<	10	//	<	10	J1//		NA			NA	
Ethyl methanesulfonate	<	10	//	<	10	J1//		NA			NA	
Famphur	<	10	//	<	10	J1//		NA			NA	
Fluoranthene	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Fluorene	<	10	//	<	10	J1//	<	11	//	<	5.6	//

TABLE 6.10
SEMI-VOLATILE ORGANIC COMPOUNDS
IN GROUNDWATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	DBP 4		DBP 4		DBP 4		DBP 5	
Sample Date	31993		60593		121193		122693	
Method 8270 (UG/L)								
Hexachlorobenzene	< 10	//	< 10	J1//	< 11	//	< 5.6	//
Hexachlorobutadiene	< 10	//	< 10	J1//	< 11	//	< 5.6	//
Hexachlorocyclopentadiene	< 10	//	< 10	J1//	< 11	//	< 5.6	//
Hexachloroethane	< 10	//	< 10	J1//	< 11	//	< 5.6	//
Hexachlorophene	< 10	//	< 10	//	NA		NA	
Hexachloropropene	< 10	//	< 10	J1//	NA		NA	
Indeno(1,2,3-c,d)pyrene	< 10	//	< 10	J1//	< 11	//	< 5.6	//
Isodrin	< 10	//	< 10	J1//	NA		NA	
Isophorone	< 10	//	< 10	J1//	< 11	//	< 5.6	//
Isosafrole	< 10	//	< 10	J1//	NA		NA	
Kepone	< 10	//	< 10	J1//	NA		NA	
m-Cresol (3-Methylphenol)	< 10	//	< 10	//	NA		NA	
m-Nitroaniline	< 10	//	< 10	J1//	NA		< 28	//
Methapyrilene	< 10	//	< 10	J1//	NA		NA	
Methyl methacrylate	< 10	//	< 10	J1//	NA		NA	
Methyl methanesulfonate	< 10	//	< 10	J1//	NA		NA	
N-Nitrosodi-n-butylamine	< 10	//	< 10	J1//	NA		NA	
N-Nitrosodiethylamine	< 10	//	< 10	J1//	NA		NA	
N-Nitrosodimethylamine	< 10	//	< 10	J1//	< 11	//	NA	
N-Nitrosodiphenylamine	< 10	//	< 10	J1//	< 11	//	< 5.6	//
N-Nitrosodipropylamine	< 10	//	< 10	J1//	< 11	//	5.5	//
N-Nitrosomethylethylamine	< 10	//	< 10	J1//	NA		NA	
N-Nitrosomorpholine	< 10	//	< 10	J1//	NA		NA	
N-Nitrosopiperidine	< 10	//	< 10	J1//	NA		NA	
N-Nitrosopyrrolidine	< 10	//	< 10	J1//	NA		NA	
Naphthalene	< 10	//	< 10	J1//	< 11	//	< 5.6	//
Nitrobenzene	< 10	//	< 10	J1//	< 11	//	< 5.6	//
O,O,O-Triethyl phosphorothioate	< 10	//	< 10	J1//	NA		NA	
o-Cresol (2-Methylphenol)	< 10	//	< 10	//	NA		< 5.6	//
o-Nitroaniline	< 10	//	< 10	J1//	NA		< 28	//
o-Toluidine	< 10	//	< 10	J1//	NA		NA	
p-Cresol (4-Methylphenol)	< 10	//	< 10	//	NA		< 5.6	//
p-Dimethylaminoazobenzene	< 10	//	< 10	J1//	NA		NA	
p-Nitroaniline	< 10	//	< 10	J1//	NA		< 28	//
p-Phenylenediamine	< 10	//	< 10	J1//	NA		NA	
Pentachlorobenzene	< 10	//	< 10	J1//	NA		NA	
Pentachloroethane	< 10	//	< 10	J1//	NA		NA	
Pentachloronitrobenzene	< 10	//	< 10	J1//	NA		NA	

TABLE 6.10
SEMI-VOLATILE ORGANIC COMPOUNDS
IN GROUNDWATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	DBP 4			DBP 4			DBP 4			DBP 5		
Sample Date	31993			60593			121193			122693		
Method 8270 (UG/L)												
Pentachlorophenol	<	10	//	<	10	//	<	55	//		27.5	//
Phenacetin	<	10	//	<	10	J1//		NA			NA	
Phenanthrene	<	10	//	<	10	J1//	<	11	//	<	5.6	//
Phenol	<	10	//	<	10	//	<	11	//		5.5	//
Pronamid	<	10	//	<	10	J1//		NA			NA	
Pyrene	<	10	//	<	10	J1//	<	11	//		5.5	//
Pyridine	<	10	//	<	10	J1//		NA			NA	
Safrole	<	10	//	<	10	J1//		NA			NA	
Sulfotepp	<	10	//	<	10	J1//		NA			NA	
Thionazin	<	10	//	<	10	J1//		NA			NA	
Benzidine		NA			NA		<	55	//		NA	
Bis(2-chloroisopropyl) ether		NA			NA		<	11	//	<	5.6	//

TABLE 6.11
PESTICIDES AND PCBS
IN GROUNDWATER
F-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	DBP 1	DBP 1	DBP 2	DBP 2	DBP 3	DBP 3	DBP 4	DBP 4	DBP 5
Sample Date	31993	60593	31993	60593	31893	60593	31993	60593	121193
Method 8080 (UG/L)									
Aldrin	< 0.25 JQ//	< 0.05 //	< 0.05 JQ//	< 0.25 //	< 0.05 JQ//	< 0.05 //	< 0.05 JQ//	< 0.05 //	NA
alpha-Benzene hexachloride	< 0.25 JQ//	< 0.05 //	< 0.05 JQ//	< 0.25 //	< 0.05 JQ//	< 0.05 //	< 0.05 JQ//	< 0.05 //	NA
beta-Benzene hexachloride	< 0.25 JQ//	< 0.05 //	< 0.05 JQ//	< 0.25 //	< 0.05 JQ//	< 0.05 //	< 0.05 JQ//	< 0.05 //	NA
Chlordane	< 2.5 JQ//	< 0.5 //	< 0.5 JQ//	< 2.5 //	< 0.5 JQ//	< 0.5 //	< 0.5 JQ//	< 0.5 //	NA
Decachlorobiphenyl	NA	NA	NA	NA	NA	NA	NA	NA	NA
delta-Benzene hexachloride	< 0.25 JQ//	< 0.05 //	< 0.05 JQ//	< 0.25 //	< 0.05 JQ//	< 0.05 //	< 0.05 JQ//	< 0.05 //	NA
Dieldrin	< 2.5 JQ//	< 0.5 //	< 0.5 JQ//	< 2.5 //	< 0.5 JQ//	< 0.5 //	< 0.5 JQ//	< 0.5 //	NA
Endosulfan I	< 0.5 JQ//	< 0.1 //	< 0.1 JQ//	< 0.5 //	< 0.1 JQ//	< 0.1 //	< 0.1 JQ//	< 0.1 //	NA
Endosulfan II	< 0.5 JQ//	< 0.1 //	< 0.1 JQ//	< 0.5 //	< 0.1 JQ//	< 0.1 //	< 0.1 JQ//	< 0.1 //	NA
Endosulfan sulfate	< 0.5 JQ//	< 0.1 //	< 0.1 JQ//	< 0.5 //	< 0.1 JQ//	< 0.1 //	< 0.1 JQ//	< 0.1 //	NA
Endrin	< 0.03 JQ//	< 0.01 //	< 0.01 JQ//	< 0.03 //	< 0.01 JQ//	< 0.01 //	< 0.01 JQ//	< 0.01 //	< 0.11 //
Endrin aldehyde	< 0.5 JQ//	< 0.1 //	< 0.1 JQ//	< 0.5 //	< 0.1 JQ//	< 0.1 //	< 0.1 JQ//	< 0.1 //	NA
Endrin ketone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Heptachlor	< 0.25 JQ//	< 0.05 //	< 0.05 JQ//	< 0.25 //	< 0.05 JQ//	< 0.05 //	< 0.05 JQ//	< 0.05 //	NA
Heptachlor epoxide	< 0.25 JQ//	< 0.05 //	< 0.05 JQ//	< 0.25 //	< 0.05 JQ//	< 0.05 //	< 0.05 JQ//	< 0.05 //	NA
Isodrin	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kepone	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lindane	< 0.03 JQ//	< 0.01 //	< 0.01 JQ//	< 0.03 //	< 0.01 JQ//	< 0.01 //	< 0.01 JQ//	< 0.01 //	< 0.05 //
Methoxychlor	< 2.5 JQ//	< 0.5 //	< 0.5 JQ//	< 2.5 //	< 0.5 JQ//	< 0.5 //	< 0.5 JQ//	< 0.5 //	< 0.55 //
p,p'-DDD	< 0.5 JQ//	< 0.1 //	< 0.1 JQ//	< 0.5 //	< 0.1 JQ//	< 0.1 //	< 0.1 JQ//	< 0.1 //	NA
p,p'-DDE	< 0.5 JQ//	< 0.1 //	< 0.1 JQ//	< 0.5 //	< 0.1 JQ//	< 0.1 //	< 0.1 JQ//	< 0.1 //	NA
p,p'-DDT	< 0.5 JQ//	< 0.1 //	< 0.1 JQ//	< 0.5 //	< 0.1 JQ//	< 0.1 //	< 0.1 JQ//	< 0.1 //	NA
Parathion	< 0.25 JQ//	< 0.05 //	< 0.05 JQ//	< 0.25 //	< 0.05 JQ//	< 0.05 //	< 0.05 JQ//	< 0.05 //	NA
Parathion methyl	< 0.25 JQ//	< 0.05 //	< 0.05 JQ//	< 0.25 //	< 0.05 JQ//	< 0.05 //	< 0.05 JQ//	< 0.05 //	NA
PCB 1016	< 2.5 JQ//	< 0.5 //	< 0.5 JQ//	< 2.5 //	< 0.5 JQ//	< 0.5 //	< 0.5 JQ//	< 0.5 //	NA
PCB 1221	< 2.5 JQ//	< 0.5 //	< 0.5 JQ//	< 2.5 //	< 0.5 JQ//	< 0.5 //	< 0.5 JQ//	< 0.5 //	NA
PCB 1232	< 2.5 JQ//	< 0.5 //	< 0.5 JQ//	< 2.5 //	< 0.5 JQ//	< 0.5 //	< 0.5 JQ//	< 0.5 //	NA
PCB 1242	< 2.5 JQ//	< 0.5 //	< 0.5 JQ//	< 2.5 //	< 0.5 JQ//	< 0.5 //	< 0.5 JQ//	< 0.5 //	NA
PCB 1248	< 2.5 JQ//	< 0.5 //	< 0.5 JQ//	< 2.5 //	< 0.5 JQ//	< 0.5 //	< 0.5 JQ//	< 0.5 //	NA
PCB 1254	< 2.5 JQ//	< 0.5 //	< 0.5 JQ//	< 2.5 //	< 0.5 JQ//	< 0.5 //	< 0.5 JQ//	< 0.5 //	NA
PCB 1260	< 2.5 JQ//	< 0.5 //	< 0.5 JQ//	< 2.5 //	< 0.5 JQ//	< 0.5 //	< 0.5 JQ//	< 0.5 //	NA
Phorate	< 0.5 JQ//	< 0.1 //	< 0.1 JQ//	< 0.5 //	< 0.1 JQ//	< 0.1 //	< 0.1 JQ//	< 0.1 //	NA
Tetrachloroxylene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toxaphene	< 1.2 JQ//	< 0.24 //	< 0.24 JQ//	< 1.2 //	< 0.24 JQ//	< 0.24 //	< 0.24 JQ//	< 0.24 //	< 1.09 //
Method 8150 (UG/L)									
2,4,5-T	< 0.09 //	< 0.09 //	< 0.09 //	< 0.09 //	< 0.09 //	< 0.09 //	< 0.09 //	< 0.09 //	NA
2,4,5-TP (Silvex)	< 0.09 //	< 0.09 //	< 0.09 //	< 0.09 //	< 0.09 //	< 0.09 //	< 0.09 //	< 0.09 //	< 0.53 //
2,4-Dichlorophenoxyacetic acid	< 0.3 //	< 0.3 //	< 0.3 //	< 0.3 //	< 0.3 //	< 0.3 //	< 0.3 //	< 0.3 //	< 1.05 //

TABLE 6.11
PESTICIDES AND PCBS
IN GROUNDWATER
F-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name		DBP 5	
Sample Date		122693	
Method 8080 (UG/L)			
Aldrin		0.05	//
alpha-Benzene hexachloride	<	0.05	//
beta-Benzene hexachloride	<	0.05	//
Chlordane	<	0.05	//
Decachlorobiphenyl		0.07	
delta-Benzene hexachloride	<	0.05	//
Dieldrin		0.1	//
Endosulfan I	<	0.05	//
Endosulfan II	<	0.04	//
Endosulfan sulfate	<	0.1	//
Endrin		0.1	//
Endrin aldehyde	<	0.1	//
Endrin ketone	<	0.1	//
Heptachlor		0.05	//
Heptachlor epoxide	<	0.05	//
Isodrin		NA	
Kepone		NA	
Lindane		0.05	//
Methoxychlor	<	0.51	//
p,p'-DDD	<	0.1	//
p,p'-DDE	<	0.1	//
p,p'-DDT		0.1	//
Parathion		NA	
Parathion methyl		NA	
PCB 1016	<	1.02	//
PCB 1221	<	2.05	//
PCB 1232	<	1.02	//
PCB 1242	<	1.02	//
PCB 1248	<	1.02	//
PCB 1254	<	1.02	//
PCB 1260	<	1.02	//
Phorate		NA	
Tetrachloroxylene		0.06	//
Toxaphene	<	5.12	//
Method 8150 (UG/L)			
2,4,5-T		NA	
2,4,5-TP (Silvex)		NA	
2,4-Dichlorophenoxyacetic acid		NA	

TABLE 6.12
PCDD AND PCDF COMPOUNDS
IN GROUNDWATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	DBP 1	DBP 1	DBP 2	DBP 2	DBP 3	DBP 3	DBP 4	DBP 4
Sample Date	31993	60593	31993	60593	31893	60593	31993	60593
Method 8280 (NG/L)								
1,2,3,4,6,7,8-HPCDD	< 0.65 //	< 0.65 //	< 0.65 //	< 0.65 //	< 0.65 //	< 0.65 //	< 0.65 //	< 0.65 //
1,2,3,4,6,7,8-HPCDF	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //
1,2,3,4,7,8-HXCDD	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //
1,2,3,4,7,8-HXCDF	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //
1,2,3,7,8-PCDD	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //
1,2,3,7,8-PCDF	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //
2,3,7,8-TCDD	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //
2,3,7,8-TCDF	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //
Heptachlorodibenzo-p-dioxin isomers	< 0.65 //	< 0.65 //	< 0.65 //	< 0.65 //	< 0.65 //	< 0.65 //	< 0.65 //	< 0.65 //
Heptachlorodibenzo-p-furan isomers	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //
Hexachlorodibenzo-p-dioxin isomers	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //
Hexachlorodibenzo-p-furan isomers	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //
Octachlorodibenzo-p-dioxin isomers	< 1 //	< 1 //	< 1 //	< 1 //	< 1 //	< 1 //	< 1 //	< 1 //
Octachlorodibenzo-p-furan isomers	< 1 //	< 1 //	< 1 //	< 1 //	< 1 //	< 1 //	< 1 //	< 1 //
Pentachlorodibenzo-p-dioxin isomers	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //
Pentachlorodibenzo-p-furan isomers	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //	< 0.55 //
Tetrachlorodibenzo-p-dioxin isomers	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //	< 0.45 //
Tetrachlorodibenzo-p-furan isomers	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //	< 0.4 //

TABLE 6.13
INORGANICS AND ORGANIC INDICATORS
IN GROUNDWATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	DBP 1	DBP 1	DBP 1	DBP 2	DBP 2	DBP 2	DBP 2	DBP 3	DBP 3
Sample Date	31993	60593	121193	31993	60593	60593	121193	31893	31893
RCRA and Target Metals (UG/L)									
Aluminum	136 //	147 //	86 //	655 //	1440 //	556 //	10400 //	27.5 //	< 20 //
Antimony	< 2 //	< 2 //	NA	< 2 //	< 2 //	< 3 //	NA	< 2 //	< 3 //
Arsenic	< 2 //	< 2 //	NA	< 2 //	< 2 //	< 2 //	NA	< 2 //	< 2 //
Barium	20.9 //	25.4 //	NA	45.7 //	45.5 //	47.5 //	NA	36.6 //	34.5 //
Beryllium	< 3 //	< 3 //	NA	< 3 //	< 3 //	< 3 //	NA	< 3 //	< 3 //
Cadmium	< 2 //	< 2 //	NA	< 2 //	< 2 //	< 2 //	NA	< 2 //	< 2 //
Calcium	2200 J2//	1480 //	NA	4780 J2//	4240 //	4530 V//	NA	2110 //	2090 //
Chromium	< 4 //	< 4 //	NA	< 4 //	< 4 //	< 4 //	NA	< 4 //	< 4 //
Cobalt	< 4 //	< 4 //	NA	5.33 //	4.79 //	5.8 J3//	NA	< 4 //	< 4 //
Copper	6.1 //	10.1 //	NA	< 4 //	< 4 //	< 4 //	NA	< 4 //	< 4 //
Cyanide									
Iron	60.7 //	178 //	285 V//	50.2 //	2580 //	113 //	79.6 V//	51.1 //	60.5 //
Lead	< 3 //	10.8 //	11.3 //	< 3 //	13.1 //	4 J3//	< 3 //	4.46 //	4.1 J3//
Lithium, total recoverable	NA	NA	NA	NA	NA	NA	NA	NA	NA
Magnesium	2240 //	2340 //	NA	4990 //	4370 //	4730 //	NA	628 //	604 //
Manganese	14.4 //	27 //	16.8 //	184 //	156 //	165 //	1440 //	22 //	20.7 //
Mercury	< 0.2 JQ//	< 0.2 //	NA	0.56 JQ//	0.75 //	0.57 //	NA	< 0.2 //	< 0.2 //
Nickel	8.05 //	17.8 //	NA	15.2 //	14.7 //	14.7 J3//	NA	4.3 //	8.6 J3//
Potassium	979 //	712 //	NA	940 //	1100 //	1240 //	NA	781 //	1090 //
Selenium	< 2 //	< 2 J1//	NA	< 2 //	2.2 J2//	< 2 //	NA	< 2 J1//	< 2 //
Silica	6780 //	NA	NA	9820 //	NA	NA	NA	5730 //	5600 //
Silver	< 2 //	< 2 //	NA	< 2 //	< 2 //	< 2 //	NA	< 2 //	< 2 //
Sodium	3490 //	5290 V//	6780 V//	7150 //	7240 //	7890 V//	10800 V//	11800 //	11700 V//
Thallium	< 2 //	< 2 //	NA	< 2 //	< 2 //	< 2 //	NA	< 2 //	< 2 //
Tin	3.18 //	3.36 //	NA	6.01 //	5.38 //	< 9.5 //	NA	2.84 //	< 8.6 //
Vanadium	< 8 //	< 8 //	NA	< 8 //	< 8 //	< 3 //	NA	< 8 //	< 3 //
Zinc	10.4 //	10.2 //	NA	17 //	14.9 //	18.5 //	NA	13.1 //	17.2 //
Inorganics (UG/L)									
Chloride	3310 JQ//	3550 //	5520 //	11100 JQ//	9430 //	9430 //	6380 //	3780 //	4170 //
Cyanide	< 5 //	< 5 //	NA	< 5 //	< 5 //	< 5 //	NA	< 5 //	< 5 //
Fluoride	< 100 //	< 100 //	< 100 //	101 //	< 100 //	< 100 //	396 //	< 100 //	< 100 //
Nitrate as nitrogen	NA	NA	3360 //	NA	NA	3660 //	948 //	NA	11200 //
Nitrate-nitrite as nitrogen	5100 //	5900 //	NA	1670 //	1660 //	NA	NA	5900 //	NA
Phenols	< 5 //	NA	NA	< 5 //	NA	NA	NA	< 5 //	< 5 //
Sulfate	< 1000 JQ//	< 1000 //	< 1000 //	30600 JQ//	29100 //	33000 //	291000 //	3880 //	3850 //
Sulfide	< 1000 //	< 1000 //	NA	< 1000 //	< 1000 //	< 1000 //	NA	< 1000 //	< 1000 //
Total dissolved solids	42000 V//	NA	40000 //	77000 V//	NA	NA	393000 //	62000 V//	53000 //
Total phosphates (as P)	80 //	NA	NA	< 50 //	NA	NA	NA	< 50 //	< 50 //
Organic Indicators (UG/L)									
Total organic carbon	< 1000 //	NA	NA	< 1000 //	NA	NA	NA	< 1000 //	< 1000 //
Total organic halogens	< 5 //	NA	NA	20 //	NA	NA	NA	< 5 //	< 5 //

TABLE 6.13
INORGANICS AND ORGANIC INDICATORS
IN GROUNDWATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	DBP 3		DBP 3		DBP 4		DBP 4		DBP 4		DBP 5		DBP 5	
Sample Date	60593		121193		31993		60593		121193		121193		122693	
RCRA and Target Metals (UG/L)														
Aluminum	35.1	//	36.2	J3//	694	//	597	//	505	//	96.5	//	86.4	//
Antimony	< 2	//	NA		< 2	//	< 2	//	NA		NA		< 3	//
Arsenic	< 2	//	NA		< 2	//	< 2	//	NA		43.6	//	< 2	//
Barium	15.1	//	NA		42.4	//	42.6	//	NA		26.5	//	30.8	//
Beryllium	< 3	//	NA		< 3	//	< 3	//	NA		NA		< 3	//
Cadmium	< 2	//	NA		< 2	//	< 2	//	NA		< 2	//	< 2	//
Calcium	727	//	NA		3740	J2//	3190	//	NA		877	//	940	V//
Chromium	< 4	//	NA		< 4	//	< 4	//	NA		4	//	< 4	//
Cobalt	< 4	//	NA		< 4	//	< 4	//	NA		NA		< 4	//
Copper	< 4	//	NA		< 4	//	< 4	//	NA		NA		< 4	//
Cyanide													< 5	//
Iron	289	//	674	V//	122	//	178	//	502	V//	54.7	//	16.5	//
Lead	3.29	//	< 3	//	< 3	//	< 3	//	< 3	//	< 3	//	3.7	//
Lithium, total recoverable	NA		NA		NA		NA		NA		5.3	//	< 3	//
Magnesium	240	//	NA		1430	//	1200	//	NA		1370	//	1450	//
Manganese	25.8	//	189	//	734	//	625	//	588	//	7.7	//	7.2	//
Mercury	< 0.2	//	NA		< 0.2	JQ//	< 0.2	//	NA		< 0.2	JQ//	0.97	//
Nickel	< 4	//	NA		4.67	//	5.98	//	NA		NA		< 4	//
Potassium	582	//	NA		1160	//	1320	//	NA		667	J3//	717	//
Selenium	< 2	J1//	NA		< 2	//	< 2	J1//	NA		9	//	< 2	//
Silica	NA		NA		8770	//	NA		NA		8390	//	NA	
Silver	< 2	//	NA		< 2	//	< 2	//	NA		< 2	//	< 2	//
Sodium	8700	//	9380	V//	7910	//	7840	//	7650	V//	5690	//	5920	//
Thallium	< 2	//	NA		< 2	//	< 2	//	NA		NA		< 2	//
Tin	3.8	//	NA		6.3	//	6.18	//	NA		NA		NA	
Vanadium	< 8	//	NA		< 8	//	< 8	//	NA		NA		< 3	//
Zinc	14.8	//	NA		21.3	//	21.5	//	NA		NA		7.4	V//
Inorganics (UG/L)														
Chloride	4740	//	10900	//	5890	JQ//	5860	//	8490	//	5660	//	5730	JQ//
Cyanide	< 5	//	NA		< 5	//	< 5	//	NA		NA		NA	
Fluoride	< 100	//	< 100	//	104	//	< 100	//	105	//	< 100	//	105	//
Nitrate as nitrogen	NA		116	//	NA		NA		262	//	3480	//	3760	//
Nitrate-nitrite as nitrogen	1010	//	NA		170	//	60	//	NA		NA		NA	
Phenols	NA		NA		< 5	//	NA		NA		NA		NA	
Sulfate	7030	//	5910	//	29800	JQ//	29300	//	25600	//	< 1000	//	< 1000	//
Sulfide	< 1000	//	NA		< 1000	//	< 1000	//	NA		NA		NA	
Total dissolved solids	NA		36000	//	66000	V//	NA		55000	//	86000	//	46000	JQ//
Total phosphates (as P)	NA		NA		< 50	//	NA		NA		< 50	//	NA	
Organic Indicators (UG/L)														
Total organic carbon	NA		NA		< 1000	//	NA		NA		6000	//	NA	
Total organic halogens	NA		NA		< 5	//	NA		NA		< 5	JQ//	NA	

TABLE 6.14
RADIONUCLIDE PARAMETERS
IN GROUNDWATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	DBP 1	DBP 1	DBP 2	DBP 2	DBP 3	DBP 3	DBP 4	DBP 4	DBP 5
Sample Date	31993	121193	31993	121193	31893	121193	31993	121193	121193
Radionuclide Parameters (PC/L)									
Gross alpha	< 2 //	1.5 //	< 2 //	15.2 //	< 2 //	< 0.5 //	2.43 //	2.7 //	4.5 //
Nonvolatile beta	< 2 //	4.4 //	< 2 //	23.6 //	3.87 //	2 //	3.86 //	7.4 //	5.6 //
Radium, total alpha-emitting	< 1 //	NA	3.4 //	NA	< 1 //	NA	1.6 //	NA	NA
Radium-226	NA	1.8 //	NA	4.8 //	NA	1.3 //	NA	1.2 //	0.71 //
Radium-228	NA	2.2 //	NA	3.5 //	NA	1.2 //	NA	2.7 //	1.9 //
Tritium (PC/ML)	0.85 //	1.2 //	1.31 //	2.1 //	< 0.7 //	0.89 //	< 0.7 //	0.66 //	3.4 //

TABLE 6.15
VOLATILE ORGANIC COMPOUNDS
IN SURFACE WATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43111901		D43111902		D43112001		D43112002		D43112101		D431 2601	
Sample Date	60793		60793		60793		60793		60793		60793	
Method 8240 (UG/L)												
1,1,1-Trichloroethane	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
1,1,2,2-Tetrachloroethane	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
1,1,2-Trichloroethane	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
1,1-Dichloroethane	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
1,1-Dichloroethylene	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
1,2-Dichloroethane	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
1,2-Dichloroethylene	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
1,2-Dichloropropane	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
2-Chloroethyl vinyl ether	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//
2-Hexanone	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//
Acetone	< 10	/V/	< 10	/V/	< 10	/V/	< 10	/V/	< 10	/V/	21.1	//
Benzene	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
Bromodichloromethane	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
Bromoform	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
Bromomethane (Methyl bromide)	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//
Carbon disulfide	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	1.73	J//
Carbon tetrachloride	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
Chlorobenzene	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
Chloroethane	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//
Chloroethene (Vinyl chloride)	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//
Chloroform	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
Chloromethane (Methyl chloride)	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//
cis-1,3-Dichloropropene	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
Dibromochloromethane	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
Dichloromethane (Methylene chloride)	< 2.38	J/V/	< 3.08	J/V/	< 30.9	/V/	< 26	/V/	< 26.9	/V/	< 5	//
Ethylbenzene	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
Methyl ethyl ketone	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//
Methyl isobutyl ketone	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//
Styrene	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
Tetrachloroethylene	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
Toluene	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
trans-1,3-Dichloropropene	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
Trichloroethylene	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//
Vinyl acetate	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//
Xylenes	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//

TABLE 6.16
VOLATILE ORGANIC COMPOUNDS
IN SURFACE WATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D4312801		D4312901		D4313001		D4313101		D4313201		D4313301		D4313401		D4313501		D4313601	
Sample Date	50594		50594		50594		50594		50594		50594		50594		50594		50594	
Method 8260 (UG/L)																		
1,1,1,2-Tetrachloroethane	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//
1,1,1-Trichloroethane	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//
1,1,2-Trichloroethane	< 0.8	//	< 0.8	//	< 0.8	//	< 0.8	//	< 0.8	//	< 0.8	//	< 0.8	//	< 0.8	//	< 0.8	//
1,1-Dichloroethane	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//
1,1-Dichloroethylene	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//
1,2-Dichloroethane	< 0.07	//	< 0.07	//	< 0.07	//	< 0.07	//	< 0.07	//	< 0.07	//	< 0.07	//	< 0.07	//	< 0.07	//
1,2-Dichloroethylene	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//
1,2-Dichloropropane	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//
2-Chloroethyl vinyl ether	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//
Benzene	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//
Bromoform	< 2	//	< 2	//	< 2	//	< 2	//	< 2	//	< 2	//	< 2	//	< 2	//	< 2	//
Bromomethane (Methyl bromide)	< 0.6	//	< 0.6	//	< 0.6	//	< 0.6	//	< 0.6	//	< 0.6	//	< 0.6	//	< 0.6	//	< 0.6	//
Carbon tetrachloride	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//
Chlorobenzene	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//
Chloroethane	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//
Chloroethene (Vinyl chloride)	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//	< 0.4	//
Chloroform	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//
Chloromethane (Methyl chloride)	< 0.5	//	< 0.3	/V/	< 0.3	/V/	< 0.3	/V/	< 0.3	/V/	< 0.3	/V/	< 0.3	/V/	< 0.3	/V/	< 0.3	/V/
cis-1,3-Dichloropropene	< 2	//	< 2	//	< 2	//	< 2	//	< 2	//	< 2	//	< 2	//	< 2	//	< 2	//
Dibromochloromethane	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//
Ethylbenzene	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//	< 0.3	//
Tetrachloroethylene	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//
Toluene	< 0.8	//	< 0.8	//	< 0.8	//	< 0.8	//	< 0.8	//	< 0.8	//	< 0.8	//	0.15	J/B/	< 0.8	//
trans-1,3-Dichloropropene	< 2	//	< 2	//	< 2	//	< 2	//	< 2	//	< 2	//	< 2	//	< 2	//	< 2	//
Trichloroethylene	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//
Trichlorofluoromethane	< 0.7	//	< 0.7	//	< 0.7	//	< 0.7	//	< 0.7	//	< 0.7	//	< 0.7	//	< 0.7	//	< 0.7	//

TABLE 6.16
VOLATILE ORGANIC COMPOUNDS
IN SURFACE WATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D4313701		D4313801		D4313901	
Sample Date	50594		50594		50594	
Method 8260 (UG/L)						
1,1,1,2-Tetrachloroethane	< 0.4	//	< 0.4	//	< 0.4	//
1,1,1-Trichloroethane	< 0.4	//	< 0.4	//	< 0.4	//
1,1,2-Trichloroethane	< 0.8	//	< 0.8	//	< 0.8	//
1,1-Dichloroethane	< 0.3	//	< 0.3	//	< 0.3	//
1,1-Dichloroethylene	< 0.5	//	< 0.5	//	< 0.5	//
1,2-Dichloroethane	< 0.07	//	< 0.07	//	< 0.07	//
1,2-Dichloroethylene	< 0.3	//	< 0.3	//	< 0.3	//
1,2-Dichloropropane	< 0.2	//	< 0.2	//	< 0.2	//
2-Chloroethyl vinyl ether	< 10	//	< 10	//	< 10	//
Benzene	< 0.3	//	< 0.3	//	< 0.3	//
Bromoform	< 2	//	< 2	//	< 2	//
Bromomethane (Methyl bromide)	< 0.6	//	< 0.6	//	< 0.6	//
Carbon tetrachloride	< 0.2	//	< 0.2	//	< 0.2	//
Chlorobenzene	< 0.2	//	< 0.2	//	< 0.2	//
Chloroethane	< 0.2	//	< 0.2	//	< 0.2	//
Chloroethene (Vinyl chloride)	< 0.4	//	< 0.4	//	< 0.4	//
Chloroform	< 0.3	//	< 0.3	//	< 0.3	//
Chloromethane (Methyl chloride)	< 0.3	/V/	< 0.3	/V/	< 0.3	/V/
cis-1,3-Dichloropropene	< 2	//	< 2	//	< 2	//
Dibromochloromethane	< 0.5	//	< 0.5	//	< 0.5	//
Ethylbenzene	< 0.3	//	< 0.3	//	< 0.3	//
Tetrachloroethylene	< 0.5	//	< 0.5	//	< 0.5	//
Toluene	< 0.8	//	< 0.8	//	0.11	J/B/
trans-1,3-Dichloropropene	< 2	//	< 2	//	< 2	//
Trichloroethylene	< 0.2	//	< 0.2	//	< 0.2	//
Trichlorofluoromethane	< 0.7	//	< 0.7	//	< 0.7	//

TABLE 6.17
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SURFACE WATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

	D43111901 60793		D43111902 60793		D43112001 60793		D43112002 60793		D43112101 60793		D431 2601 60793		D4312801 50594		D4312901 50594		D4313001 50594	
Method 8270 (UG/L)																		
1,2,4-Trichlorobenzene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
1,2-Dichlorobenzene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
1,3-Dichlorobenzene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
1,4-Dichlorobenzene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
2,4,5-Trichlorophenol	< 60	//	< 60	//	< 60	//	< 49	//	< 70	//	< 55	J/O/L	< 55	//	< 50	//	< 50	//
2,4,6-Trichlorophenol	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
2,4-Dichlorophenol	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
2,4-Dimethyl phenol	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
2,4-Dinitrophenol	< 60	//	< 60	//	< 60	//	< 49	//	< 70	//	< 55	J/O/L	< 55	//	< 50	//	< 50	//
2,4-Dinitrotoluene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
2,6-Dinitrotoluene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
2-Chloronaphthalene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
2-Chlorophenol	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
2-Methyl-4,6-dinitrophenol	< 60	//	< 60	//	< 60	//	< 49	//	< 70	//	< 55	J/O/L	< 55	//	< 50	//	< 50	//
2-Methylnaphthalene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
2-Nitrophenol	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
3,3'-Dichlorobenzidine	< 24	//	< 24	//	< 24	//	< 19.6	//	< 28	//	< 22	J/O/L	< 22	//	< 20	//	< 20	//
4-Bromophenyl phenyl ether	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
4-Chloro-m-cresol	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
4-Chloroaniline	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
4-Chlorophenyl phenyl ether	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
4-Nitrophenol	< 60	//	< 60	//	< 60	//	< 49	//	< 70	//	< 55	J/O/L	< 55	//	< 50	//	< 50	//
Acenaphthene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
Acenaphthylene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
Anthracene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
Benzo(a)anthracene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
Benzo(a)pyrene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
Benzo(b)fluoranthene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
Benzo(g,h,i)perylene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
Benzo(k)fluoranthene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
Benzoic acid	< 60	//	< 60	//	< 60	//	< 49	//	< 70	//	< 55	J/O/L	< 55	//	< 50	//	< 50	//
Benzyl alcohol	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
Bis(2-chloroethoxy) methane	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
Bis(2-chloroethyl) ether	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
Bis(2-chloroisopropyl) ether	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
Bis(2-ethylhexyl) phthalate	< 2.54	J/V/	< 2.54	J/V/	< 2.69	J/V/	< 2.38	J/V/	< 3.23	J/V/	< 2.77	J/VO/L	< 11	//	< 10	//	< 10	//
Butylbenzyl phthalate	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
Chrysene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
Di-n-butyl phthalate	< 3.45	J/V/	< 3.39	J/V/	< 3.98	J/V/	< 2.75	J/V/	< 5.24	J/V/	< 11	J/O/L	< 11	//	< 10	//	< 10	//
Di-n-octyl phthalate	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//
Dibenz(a,h)anthracene	< 12	//	< 12	//	< 12	//	< 9.8	//	< 14	//	< 11	J/O/L	< 11	//	< 10	//	< 10	//

TABLE 6.17
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SURFACE WATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

	D43111901 60793	D43111902 60793	D43112001 60793	D43112002 60793	D43112101 60793	D431 2601 60793	D4312801 50594	D4312901 50594	D4313001 50594
Method 8270 (UG/L)									
Dibenzofuran	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
Diethyl phthalate	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
Dimethyl phthalate	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
Fluoranthene	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
Fluorene	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
Hexachlorobenzene	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
Hexachlorobutadiene	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
Hexachlorocyclopentadiene	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
Hexachloroethane	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
Indeno(1,2,3-c,d)pyrene	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
Isophorone	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
m-Nitroaniline	< 60 //	< 60 //	< 60 //	< 49 //	< 70 //	< 55 J/O/L	< 55 //	< 50 //	< 50 //
N-Nitrosodiphenylamine	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
N-Nitrosodipropylamine	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
Naphthalene	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
Nitrobenzene	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
o-Cresol (2-Methylphenol)	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
o-Nitroaniline	< 60 //	< 60 //	< 60 //	< 49 //	< 70 //	< 55 J/O/L	< 55 //	< 50 //	< 50 //
p-Cresol (4-Methylphenol)	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	3.84 J/B/	< 10 //	< 10 //
p-Nitroaniline	< 60 //	< 60 //	< 60 //	< 49 //	< 70 //	< 55 J/O/L	< 55 //	< 50 //	< 50 //
Pentachlorophenol	< 60 //	< 60 //	< 60 //	< 49 //	< 70 //	< 55 J/O/L	< 55 //	< 50 //	< 50 //
Phenanthrene	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
Phenol	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //
Pyrene	< 12 //	< 12 //	< 12 //	< 9.8 //	< 14 //	< 11 J/O/L	< 11 //	< 10 //	< 10 //

TABLE 6.17
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SURFACE WATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

	D4313101 50594	D4313201 50594	D4313301 50594	D4313401 50594	D4313501 50594	D4313601 50594	D4313701 50594	D4313801 50594	D4313901 50594
Method 8270 (UG/L)									
1,2,4-Trichlorobenzene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
1,2-Dichlorobenzene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
1,3-Dichlorobenzene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
1,4-Dichlorobenzene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
2,4,5-Trichlorophenol	< 50 //	< 55 //	< 55 //	< 55 //	< 55 //	< 50 //	< 50 //	< 50 //	< 55 //
2,4,6-Trichlorophenol	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
2,4-Dichlorophenol	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
2,4-Dimethyl phenol	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
2,4-Dinitrophenol	< 50 //	< 55 //	< 55 //	< 55 //	< 55 //	< 50 //	< 50 //	< 50 //	< 55 //
2,4-Dinitrotoluene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
2,6-Dinitrotoluene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
2-Chloronaphthalene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
2-Chlorophenol	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
2-Methyl-4,6-dinitrophenol	< 50 //	< 55 //	< 55 //	< 55 //	< 55 //	< 50 //	< 50 //	< 50 //	< 55 //
2-Methylnaphthalene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
2-Nitrophenol	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
3,3'-Dichlorobenzidine	< 20 //	< 22 //	< 22 //	< 22 //	< 22 //	< 20 //	< 20 //	< 20 //	< 22 //
4-Bromophenyl phenyl ether	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
4-Chloro-m-cresol	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
4-Chloroaniline	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
4-Chlorophenyl phenyl ether	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
4-Nitrophenol	< 50 //	< 55 //	< 55 //	< 55 //	< 55 //	< 50 //	< 50 //	< 50 //	< 55 //
Acenaphthene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Acenaphthylene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Anthracene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	1.19 J/B/	< 10 //	< 11 //
Benzo(a)anthracene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Benzo(a)pyrene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Benzo(b)fluoranthene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Benzo(g,h,i)perylene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Benzo(k)fluoranthene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Benzoic acid	< 50 //	< 55 //	< 55 //	< 55 //	< 55 //	< 50 //	< 50 //	< 50 //	< 55 //
Benzyl alcohol	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Bis(2-chloroethoxy) methane	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Bis(2-chloroethyl) ether	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Bis(2-chloroisopropyl) ether	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Bis(2-ethylhexyl) phthalate	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	10 //	< 11 //
Butylbenzyl phthalate	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	1.42 J/B/	< 10 //	< 11 //
Chrysene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Di-n-butyl phthalate	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 /V/	< 10 /V/	< 11 //
Di-n-octyl phthalate	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Dibenz(a,h)anthracene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //

TABLE 6.17
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SURFACE WATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

	D4313101 50594	D4313201 50594	D4313301 50594	D4313401 50594	D4313501 50594	D4313601 50594	D4313701 50594	D4313801 50594	D4313901 50594
Method 8270 (UG/L)									
Dibenzofuran	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Diethyl phthalate	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Dimethyl phthalate	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Fluoranthene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Fluorene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Hexachlorobenzene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Hexachlorobutadiene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Hexachlorocyclopentadiene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Hexachloroethane	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Indeno(1,2,3-c,d)pyrene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Isophorone	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
m-Nitroaniline	< 50 //	< 55 //	< 55 //	< 55 //	< 55 //	< 50 //	< 50 //	< 50 //	< 55 //
N-Nitrosodiphenylamine	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
N-Nitrosodipropylamine	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Naphthalene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Nitrobenzene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
o-Cresol (2-Methylphenol)	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
o-Nitroaniline	< 50 //	< 55 //	< 55 //	< 55 //	< 55 //	< 50 //	< 50 //	< 50 //	< 55 //
p-Cresol (4-Methylphenol)	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
p-Nitroaniline	< 50 //	< 55 //	< 55 //	< 55 //	< 55 //	< 50 //	< 50 //	< 50 //	< 55 //
Pentachlorophenol	< 50 //	< 55 //	< 55 //	< 55 //	< 55 //	< 50 //	< 50 //	< 50 //	< 55 //
Phenanthrene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Phenol	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //
Pyrene	< 10 //	< 11 //	< 11 //	< 11 //	< 11 //	< 10 //	< 10 //	< 10 //	< 11 //

TABLE 6.18
INORGANICS, ORGANIC INDICATORS, AND RADIONUCLIDE PARAMETERS
IN SURFACE WATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43111901		D43111902		D43112001		D43112002		D43112101		D431 2601		D4312801		D4312901		D4313001	
Sample Date	60793		60793		60793		60793		60793		60793		50594		50594		50594	
RCRA and Target Metals (UG/L)																		
Arsenic, total recoverable	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//	144	//	< 1.7	//	< 1.7	//	< 1.7	//
Barium, total recoverable	< 200	//	< 200	//	< 200	//	< 200	//	< 200	//	< 200	//	9.8	//	14.3	//	15.1	//
Cadmium, total recoverable	< 5	J/L/	< 5	J/L/	< 5	J/L/	< 5	J/L/	< 5	J/L/	< 5	J/L/	< 3.3	//	< 3.3	//	< 3.3	//
Chromium, total recoverable	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//	14.2	//	< 3.3	//	< 3.3	//	< 3.3	//
Copper, total recoverable	< 25	J/L/	< 25	J/L/	< 25	J/L/	< 25	J/L/	< 25	J/L/	< 25	J/L/	< 3.3	//	< 3.3	//	< 3.3	//
Iron, total recoverable	531	//	292	//	292	//	617	//	398	//	269000	//	116	//	137	//	184	//
Lead, total recoverable	< 3	//	< 3	//	< 3	//	< 3	//	5.3	//	17	//	< 0.5	//	< 0.5	//	< 0.5	//
Manganese, total recoverable	1380	//	533	//	317	//	760	//	254	//	1160	//	56	//	72.7	//	67	//
Mercury, total	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	< 0.2	//	0.823	//	< 0.067	//	< 0.067	//	< 0.067	//
Nickel, total recoverable	< 40	//	< 40	//	< 40	//	< 40	//	< 40	//	< 40	//	< 11.7	//	< 11.7	//	< 11.7	//
Selenium, total recoverable	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 5	//	< 1.7	//	< 1.7	//	< 1.7	//
Silver, total recoverable	11	//	< 10	//	< 10	//	< 10	//	< 10	//	< 10	//	< 0.7	//	< 0.7	//	< 0.7	//
Inorganic Parameters (UG/L)																		
Chloride	5.12	//	NA		5.11	//	NA		5.09	//	10.1	//	10800	//	10600	//	10600	//
Fluoride	< 0.1	//	NA		< 0.1	//	NA		< 0.1	//	0.137	//	< 72.7	//	< 72.7	//	< 72.7	//
Nitrate as nitrogen	0.209	//	NA		0.21	//	NA		1.05	//	< 0.02	/V/	< 83.3	//	< 83.3	//	212	//
Sodium, total recoverable	7990	//	7950	//	7860	//	7870	//	7690	//	8430	//	6930	//	9930	//	10300	//
Sulfate	6.42	//	NA		6.99	//	NA		7.04	//	177	//	9740	//	9650	//	9450	//
Organic Indicators (UG/L)																		
Total dissolved solids	56	//	65	J/Q/	54	//	53	//	68	//	638	//	47000	//	47000	//	57000	//
Total organic carbon	1.94	//	1.55	//	2.03	//	2.33	//	2.23	//	166	//	2030	//	1840	//	2220	//
Total organic halogens	7.17	J/Q/	NA		10.9	J/Q/	NA		29.2	J/Q/	365	J/Q/	< 3330	//	< 3330	//	< 3330	//
Total suspended solids	10	//	< 5	J/Q/	8	//	9	//	9	//	2810	//	< 1670	//	< 1670	//	< 1670	//
Radionuclide Parameters (PC/L)																		
Gross alpha	< 0.8	//	< 0.7	//	< 0.8	//	4	//	2.4	//	30.4	//	< 0.33	//	< 0.33	//	< 0.4	//
Nonvolatile beta	< 1	/V/	< 0.8	/V/	3.6	/V/	5.5	/V/	< 1.1	/V/	54	/V/	1.7	//	1.8	//	< 1.3	//
Radium, total alpha-emitting	< 0.1	//	< 0.1	//	< 0.1	//	< 0.1	//	0.5	//	0.6	//	< 0.09	//	< 0.13	//	< 0.2	//
Tritium (PC/ML)	680.2	//	1105	//	467.1	//	806	//	832.5	//	1488	//	0.62	//	0.4	//	0.54	//

TABLE 6.18
INORGANICS, ORGANIC INDICATORS, AND RADIONUCLIDE PARAMETERS
IN SURFACE WATER
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D4313101		D4313201		D4313301		D4313401		D4313501		D4313601		D4313701		D4313801		D4313901	
Sample Date	50594		50594		50594		50594		50594		50594		50594		50594		50594	
RCRA and Target Metals (UG/L)																		
Arsenic, total recoverable	< 1.7	//	< 1.7	//	< 1.7	//	< 1.7	//	< 1.7	//	3.6	//	8.4	//	< 1.7	//	< 1.7	//
Barium, total recoverable	13.9	//	14.1	//	13.5	//	13.8	//	12.5	//	19.3	//	22.6	//	15.5	//	13.2	//
Cadmium, total recoverable	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//
Chromium, total recoverable	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//
Copper, total recoverable	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//	< 3.3	//
Iron, total recoverable	103	//	101	//	241	//	200	//	150	//	2360	//	4230	J/I/P	566	//	239	//
Lead, total recoverable	0.6	//	2.5	//	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//	< 0.5	//	0.9	//	1.4	//
Manganese, total recoverable	35.8	//	27.6	//	31.1	//	37.1	//	13.8	//	177	//	248	//	81.4	//	20.4	//
Mercury, total	< 0.067	//	< 0.067	//	< 0.067	//	< 0.067	//	< 0.067	//	< 0.067	//	< 0.067	//	< 0.067	//	< 0.067	//
Nickel, total recoverable	< 11.7	//	< 11.7	//	< 11.7	//	< 11.7	//	< 11.7	//	< 11.7	//	< 11.7	//	< 11.7	//	< 11.7	//
Selenium, total recoverable	< 1.7	//	< 1.7	//	< 1.7	//	< 1.7	//	< 1.7	//	< 1.7	//	< 1.7	//	< 1.7	//	< 1.7	//
Silver, total recoverable	< 0.7	//	< 0.7	//	< 0.7	//	< 0.7	//	< 0.7	//	< 0.7	//	< 0.7	//	< 0.7	//	< 0.7	//
Inorganic Parameters (UG/L)																		
Chloride	10700	//	10900	//	10500	//	11000	//	10600	//	10400	//	10300	//	10200	//	9920	//
Fluoride	< 72.7	//	254	//	291	//	295	//	269	//	258	//	312	//	< 72.7	//	< 72.7	//
Nitrate as nitrogen	129	//	106	//	< 83.3	//	< 83.3	//	91	//	92	//	< 83.3	//	351	//	287	//
Sodium, total recoverable	9840	//	10200	//	9580	//	10300	//	10000	//	10000	//	9870	//	10100	//	9400	//
Sulfate	9600	//	9300	//	9530	//	9360	//	9410	//	9370	//	8910	//	8570	//	8090	//
Organic Indicators (UG/L)																		
Total dissolved solids	48000	//	54000	//	50000	//	52000	//	55000	//	56000	//	57000	//	61000	//	66000	//
Total organic carbon	1660	//	1660	//	1660	//	1660	//	1840	//	1940	//	2980	//	2690	//	2410	//
Total organic halogens	< 3330	//	< 3330	//	< 3330	//	< 3330	//	< 3330	//	< 3330	//	< 3330	//	< 3330	//	< 3330	//
Total suspended solids	< 1670	//	< 1670	//	< 1670	//	< 1670	//	< 1670	//	25000	//	11000	//	< 1700	//	< 1670	//
Radionuclide Parameters (PC/L)																		
Gross alpha	< 0.33	//	< 0.5	//	< 0.32	//	< 0.62	//	< 0.34	//	2.3	//	0.8	J//	1	//	< 0.4	//
Nonvolatile beta	< 1.1	//	< 0.8	//	1.4	J//	< 1.4	//	1.8	//	3.2	//	1.9	//	2.4	//	1.9	//
Radium, total alpha-emitting	< 0.1	//	< 0.12	//	< 0.2	//	< 0.09	//	< 0.12	//	< 0.3	//	0.2	//	< 0.13	//	< 0.2	//
Tritium (PC/ML)	0.53	//	0.38	J//	0.75	//	0.87	//	< 0.35	//	0.28	J//	0.58	//	< 0.18	//	< 0.19	//

TABLE 6.19
VOLATILE ORGANIC COMPOUNDS
IN SEDIMENT
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43112102/WA		D431 2202/WA		D431 2302/WA		D431 2402/WA		D431 2502/WA		D431 2602/WA		D431 2702/WA	
Sample Date	60793		60793		60893		60893		60893		60793		60893	
Method 8240 (UG/KG)														
1,1,1-Trichloroethane	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
1,1,2,2-Tetrachloroethane	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
1,1,2-Trichloroethane	< 6.5	//	< 6.5	//	< 6.2	/Y/	9.05	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
1,1-Dichloroethane	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
1,1-Dichloroethylene	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
1,2-Dichloroethane	< 6.5	//	< 6.5	//	6.45	/Y/	6.5	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
1,2-Dichloroethylene	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
1,2-Dichloropropane	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
2-Chloroethyl vinyl ether	< 13	//	< 13	//	NA		NA		NA		< 14	//	NA	
2-Hexanone	< 13	//	< 13	//	< 12.4	/Y/	< 12.2	/Y/	< 11.9	/Y/	< 14	//	< 12.8	/Y/
Acetone	< 8.21	J/V/	< 15.2	/V/	< 12.6	/YV/	25.6	/YV/	< 11.9	/YV/	< 14	/V/	< 12.8	/YV/
Benzene	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
Bromodichloromethane	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
Bromoform	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
Bromomethane (Methyl bromide)	< 13	//	< 13	//	< 12.4	/Y/	< 12.2	/Y/	< 11.9	/Y/	< 14	//	< 12.8	/Y/
Carbon disulfide	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
Carbon tetrachloride	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
Chlorobenzene	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
Chloroethane	< 13	//	< 13	//	< 12.4	/Y/	< 12.2	/Y/	< 11.9	/Y/	< 14	//	< 12.8	/Y/
Chloroethene (Vinyl chloride)	< 13	//	< 13	//	< 12.4	/Y/	< 12.2	/Y/	< 11.9	/Y/	< 14	//	< 12.8	/Y/
Chloroform	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
Chloromethane (Methyl chloride)	< 13	//	< 13	//	< 12.4	/Y/	< 12.2	/Y/	< 11.9	/Y/	< 14	//	< 12.8	/Y/
cis-1,3-Dichloropropene	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
Dibromochloromethane	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
Dichloromethane (Methylene chloride)	< 48.5	/V/	< 39.2	/V/	< 8.42	/YV/	< 6.1	/Y/	< 5.95	/YV/	< 39.7	/V/	< 6.55	/YV/
Ethylbenzene	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
Methyl ethyl ketone	< 13	//	< 13	//	< 12.4	/Y/	< 12.2	/Y/	< 11.9	/Y/	< 14	//	< 12.8	/Y/
Methyl isobutyl ketone	< 13	//	< 13	//	< 12.4	/Y/	< 12.2	/Y/	< 11.9	/Y/	< 14	//	< 12.8	/Y/
Styrene	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
Tetrachloroethylene	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
Toluene	2.55	J//	12.2	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
trans-1,3-Dichloropropene	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
Trichloroethylene	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/
Vinyl acetate	< 13	//	< 13	//	< 12.4	/Y/	< 12.2	/Y/	< 11.9	/Y/	< 14	//	< 12.8	/Y/
Xylenes	< 6.5	//	< 6.5	//	< 6.2	/Y/	< 6.1	/Y/	< 5.95	/Y/	< 7	//	< 6.4	/Y/

TABLE 6.20
VOLATILE ORGANIC COMPOUNDS
IN SEDIMENT
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

	D431-28-02 50594		D431-29-02 50594		D431-30-02 50594		D431-31-02 50594		D431-32-02 50594		D431-33-02 50594		D431-34-02 50594		D431-35-02 50594		D431-36-02 50594	
Method 8260 (UG/KG)																		
1,1,1,2-Tetrachloroethane	< 0.48	//	< 0.6	//	< 0.56	//	< 0.72	//	< 0.56	//	< 0.64	//	< 0.52	//	< 0.56	//	< 0.64	//
1,1,1-Trichloroethane	< 0.48	//	< 0.6	//	< 0.56	//	< 0.72	//	< 0.56	//	< 0.64	//	< 0.52	//	< 0.56	//	0.304	J/B/
1,1,2-Trichloroethane	< 0.96	//	< 1.2	//	< 1.12	//	< 1.44	//	< 1.12	//	< 1.28	//	< 1.04	//	< 1.12	//	< 1.28	//
1,1-Dichloroethane	< 0.36	//	< 0.45	//	< 0.42	//	< 0.85	//	< 0.42	//	< 0.48	//	< 0.39	//	< 0.42	//	< 0.48	//
1,1-Dichloroethylene	< 0.6	//	< 0.75	//	< 0.7	//	< 0.9	//	< 0.7	//	< 0.8	//	< 0.65	//	< 0.7	//	< 0.8	//
1,2-Dichloroethane	< 0.084	//	< 0.105	//	< 0.098	//	< 0.126	//	< 0.098	//	< 0.112	//	< 0.091	//	< 0.098	//	< 0.112	//
1,2-Dichloroethylene	< 0.36	//	< 0.9	/V/	< 0.84	/V/	< 0.85	//	< 0.84	/V/	< 0.96	/V/	< 0.78	/V/	< 0.42	//	< 0.48	//
1,2-Dichloropropane	< 0.24	//	< 0.3	//	< 0.28	//	< 0.36	//	< 0.28	//	< 0.32	//	< 0.26	//	< 0.28	//	< 0.32	//
2-Chloroethyl vinyl ether	< 12	//	< 15	//	< 14	//	< 18	//	< 14	//	< 16	//	< 13	//	< 14	//	< 16	//
Benzene	< 0.36	//	< 0.45	//	< 0.42	//	< 0.85	//	< 0.42	//	< 0.48	//	< 0.39	//	< 0.42	//	< 0.48	//
Bromoform	< 2.4	//	< 3	//	< 2.8	//	< 3.6	//	< 2.8	//	< 3.2	//	< 2.6	//	< 2.8	//	< 3.2	//
Bromomethane (Methyl bromide)	< 0.72	//	< 0.9	//	< 0.84	//	< 1.08	//	< 0.84	//	< 0.96	//	< 0.78	//	< 0.84	//	< 0.96	//
Carbon tetrachloride	< 0.24	//	< 0.3	//	< 0.28	//	< 0.36	//	< 0.28	//	< 0.32	//	< 0.26	//	< 0.28	//	< 0.32	//
Chlorobenzene	< 0.24	//	< 0.3	//	< 0.28	//	< 0.36	//	< 0.28	//	< 0.32	//	< 0.26	//	< 0.28	//	< 0.32	//
Chloroethane	< 0.24	//	< 0.3	//	< 0.28	//	< 0.36	//	< 0.28	//	< 0.32	//	< 0.26	//	< 0.28	//	< 0.32	//
Chloroethene (Vinyl chloride)	< 0.48	//	< 0.6	//	< 0.56	//	< 0.72	//	< 0.56	//	< 0.64	//	< 0.52	//	< 0.56	//	< 0.64	//
Chloroform	< 0.36	//	< 0.45	//	< 0.42	//	< 0.85	//	< 0.42	//	< 0.48	//	< 0.39	//	< 0.42	//	< 0.48	//
Chloromethane (Methyl chloride)	< 0.6	//	< 0.75	//	< 0.7	//	< 0.9	//	< 0.7	//	< 0.8	//	< 0.65	//	< 0.7	//	< 0.8	//
cis-1,3-Dichloropropene	< 2.4	//	< 3	//	< 2.8	//	< 3.6	//	< 2.8	//	< 3.2	//	< 2.6	//	< 2.8	//	< 3.2	//
Dibromochloromethane	< 0.6	//	< 0.75	//	< 0.7	//	< 0.9	//	< 0.7	//	< 0.8	//	< 0.65	//	< 0.7	//	< 0.8	//
Dichloromethane (Methylene chloride)	< 1.9	J/V/	< 0.9	/V/	< 1.9	J/V/	< 1.9	J/V/	< 1.9	J/V/	< 0.96	/V/	< 1.9	J/V/	< 1.9	J/V/	< 1.9	J/V/
Ethylbenzene	< 0.36	//	< 0.45	//	< 0.42	//	< 0.85	//	< 0.42	//	< 0.48	//	< 0.39	//	< 0.42	//	0.368	J/B/
Tetrachloroethylene	< 0.6	//	< 0.75	//	< 0.7	//	< 0.9	//	< 0.7	//	< 0.8	//	< 0.65	//	< 0.7	//	< 0.8	//
Toluene	0.228	J/B/	37.5	//	0.77	J/B/	0.828	J/B/	0.854	J/B/	1.34	//	< 1.04	//	1.2	//	2.59	//
trans-1,3-Dichloropropene	< 2.4	//	< 3	//	< 2.8	//	< 3.6	//	< 2.8	//	< 3.2	//	< 2.6	//	< 2.8	//	< 3.2	//
Trichloroethylene	< 0.24	//	< 0.3	//	< 0.28	//	< 0.36	//	< 0.28	//	< 0.32	//	< 0.26	//	< 0.28	//	< 0.32	//
Trichlorofluoromethane	< 0.72	/V/	< 0.9	/V/	< 0.84	/V/	< 0.72	/V/	< 0.84	/V/	< 0.96	/V/	< 0.78	/V/	< 0.84	/V/	< 0.96	/V/

TABLE 6.20
VOLATILE ORGANIC COMPOUNDS -
IN SEDIMENT
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

	D431-37-02 50594		
Method 8260 (UG/KG)			
1,1,1,2-Tetrachloroethane	<	0.56	//
1,1,1-Trichloroethane	<	0.56	//
1,1,2-Trichloroethane	<	1.12	//
1,1-Dichloroethane	<	0.42	//
1,1-Dichloroethylene	<	0.7	//
1,2-Dichloroethane	<	0.098	//
1,2-Dichloroethylene	<	0.84	/V/
1,2-Dichloropropane	<	0.28	//
2-Chloroethyl vinyl ether	<	14	//
Benzene	<	0.42	//
Bromoform	<	2.8	//
Bromomethane (Methyl bromide)	<	0.84	//
Carbon tetrachloride	<	0.28	//
Chlorobenzene	<	0.28	//
Chloroethane	<	0.28	//
Chloroethene (Vinyl chloride)	<	0.56	//
Chloroform	<	0.42	//
Chloromethane (Methyl chloride)	<	0.7	//
cis-1,3-Dichloropropene	<	2.8	//
Dibromochloromethane	<	0.7	//
Dichloromethane (Methylene chloride)	<	1.9	J/V/
Ethylbenzene		0.364	//
Tetrachloroethylene	<	0.7	//
Toluene		0.588	J/B/
trans-1,3-Dichloropropene	<	2.8	//
Trichloroethylene	<	0.28	//
Trichlorofluoromethane	<	0.84	/V/

TABLE 6.21
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SEDIMENT
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43112102/WA		D431 2202/WA		D431 2302/WA		D431 2402/WA		D431 2502/WA		D431 2602/WA		D431 2702/WA		D4312802		D4312902	
Sample Date	60793		60793		60893		60893		60893		60793		60893		50594		50594	
Method 8270 (UG/KG)																		
1,2,4-Trichlorobenzene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
1,2-Dichlorobenzene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
1,3-Dichlorobenzene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
1,4-Dichlorobenzene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
2,4,5-Trichlorophenol	< 2130	//	< 2060	//	< 2040	/Y/	< 2000	/Y/	< 1960	/Y/	< 2300	//	< 2120	/Y/	< 2100	//	< 2480	//
2,4,6-Trichlorophenol	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
2,4-Dichlorophenol	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
2,4-Dimethyl phenol	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
2,4-Dinitrophenol	< 2130	//	< 2060	//	< 2040	/Y/	< 2000	/Y/	< 1960	/Y/	< 2300	//	< 2120	/Y/	< 2100	//	< 2480	//
2,4-Dinitrotoluene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
2,6-Dinitrotoluene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
2-Chloronaphthalene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
2-Chlorophenol	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
2-Methyl-4,6-dinitrophenol	< 2130	//	< 2060	//	< 2040	/Y/	< 2000	/Y/	< 1960	/Y/	< 2300	//	< 2120	/Y/	< 2100	//	< 2480	//
2-Methylnaphthalene	< 426	//	127	J//	1490	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
2-Nitrophenol	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
3,3'-Dichlorobenzidine	< 852	//	< 824	//	< 816	/Y/	< 800	/Y/	< 784	/Y/	< 922	//	< 848	/Y/	< 838	//	< 990	//
4-Bromophenyl phenyl ether	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
4-Chloro-m-cresol	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
4-Chloroaniline	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
4-Chlorophenyl phenyl ether	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
4-Nitrophenol	< 2130	//	< 2060	//	< 2040	/Y/	< 2000	/Y/	< 1960	/Y/	< 2300	//	< 2120	/Y/	< 2100	//	< 2480	//
Acenaphthene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Acenaphthylene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Anthracene	< 426	//	< 412	//	53.4	J/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Benzo(a)anthracene	< 426	//	< 412	//	153	J/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Benzo(a)pyrene	< 426	//	< 412	//	213	J/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Benzo(b)fluoranthene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Benzo(g,h,i)perylene	< 426	//	< 412	//	103	J/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Benzo(k)fluoranthene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Benzoic acid	< 2130	//	< 2060	//	2350	/Y/	< 2000	/Y/	< 1960	/Y/	< 2300	//	< 2120	/Y/	< 2100	//	< 2480	//
Benzyl alcohol	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Bis(2-chloroethoxy) methane	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Bis(2-chloroethyl) ether	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Bis(2-chloroisopropyl) ether	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Bis(2-ethylhexyl) phthalate	< 126	J/V/	< 117	J/V/	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 111	J/V/	< 424	/Y/	< 419	//	< 495	//
Butylbenzyl phthalate	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Chrysene	< 426	//	< 412	//	207	J/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//

TABLE 6.21
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SEDIMENT
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43112102/WA		D431 2202/WA		D431 2302/WA		D431 2402/WA		D431 2502/WA		D431 2602/WA		D431 2702/WA		D4312802		D4312902	
Sample Date	60793		60793		60893		60893		60893		60793		60893		50594		50594	
Method 8270 (UG/KG)																		
Di-n-butyl phthalate	49.6	J//	41.3	J//	< 408	/YV/	< 70.4	J/YV/	< 71.7	J/YV/	< 461	//	< 61.9	J/YV/	< 419	/V/	< 495	/V/
Di-n-octyl phthalate	< 426	//	< 412	//	45.7	J/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Dibenz(a,h)anthracene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Dibenzofuran	< 426	//	46.7	J//	448	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Diethyl phthalate	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Dimethyl phthalate	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Fluoranthene	< 426	//	< 412	//	183	J/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Fluorene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Hexachlorobenzene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Hexachlorobutadiene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Hexachlorocyclopentadiene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Hexachloroethane	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Indeno(1,2,3-c,d)pyrene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Isophorone	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
m-Nitroaniline	< 2130	//	< 2060	//	< 2040	/Y/	< 2000	/Y/	< 1960	/Y/	< 2300	//	< 2120	/Y/	< 2100	//	< 2480	//
N-Nitrosodiphenylamine	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
N-Nitrosodipropylamine	< 426	//	< 412	//	< 408	J/CY/	< 400	J/CY/	< 392	J/CY/	< 461	//	< 424	J/CY/	< 419	//	< 495	//
Naphthalene	< 426	//	78.2	J//	990	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Nitrobenzene	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
o-Cresol (2-Methylphenol)	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
o-Nitroaniline	< 2130	//	< 2060	//	< 2040	/Y/	< 2000	/Y/	< 1960	/Y/	< 2300	//	< 2120	/Y/	< 2100	//	< 2480	//
p-Cresol (4-Methylphenol)	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	177	J/B/
p-Nitroaniline	< 2130	//	< 2060	//	< 2040	/Y/	< 2000	/Y/	< 1960	/Y/	< 2300	//	< 2120	/Y/	< 2100	//	< 2480	//
Pentachlorophenol	< 2130	//	< 2060	//	< 2040	/Y/	< 2000	/Y/	< 1960	/Y/	< 2300	//	< 2120	/Y/	< 2100	//	< 2480	//
Phenanthrene	< 426	//	160	J//	1070	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Phenol	< 426	//	< 412	//	< 408	/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//
Pyrene	< 426	//	< 412	//	214	J/Y/	< 400	/Y/	< 392	/Y/	< 461	//	< 424	/Y/	< 419	//	< 495	//

TABLE 6.21
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SEDIMENT
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D4313002		D4313102		D4313202		D4313302		D4313402		D4313502		D4313602		D4313702	
Sample Date	50594		50594		50594		50594		50594		50594		50594		50594	
Method 8270 (UG/KG)																
1,2,4-Trichlorobenzene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
1,2-Dichlorobenzene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
1,3-Dichlorobenzene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
1,4-Dichlorobenzene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
2,4,5-Trichlorophenol	< 2280	//	< 3130	//	< 2420	//	< 2680	//	< 2080	//	< 2380	//	< 2680	//	< 2330	//
2,4,6-Trichlorophenol	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
2,4-Dichlorophenol	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
2,4-Dimethyl phenol	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
2,4-Dinitrophenol	< 2280	//	< 3130	//	< 2420	//	< 2680	//	< 2080	//	< 2380	//	< 2680	//	< 2330	//
2,4-Dinitrotoluene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
2,6-Dinitrotoluene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
2-Chloronaphthalene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
2-Chlorophenol	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
2-Methyl-4,6-dinitrophenol	< 2280	//	< 3130	//	< 2420	//	< 2680	//	< 2080	//	< 2380	//	< 2680	//	< 2330	//
2-Methylnaphthalene	< 457	//	< 626	//	< 483	//	452	J/B/	153	J/B/	1330	//	324	J/B/	< 466	//
2-Nitrophenol	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
3,3'-Dichlorobenzidine	< 914	//	< 1250	//	< 966	//	< 1070	//	< 832	//	< 954	//	< 1070	//	< 932	//
4-Bromophenyl phenyl ether	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
4-Chloro-m-cresol	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
4-Chloroaniline	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
4-Chlorophenyl phenyl ether	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
4-Nitrophenol	< 2280	//	< 3130	//	< 2420	//	< 2680	//	< 2080	//	< 2380	//	< 2680	//	< 2330	//
Acenaphthene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Acenaphthylene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Anthracene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	53.4	J/B/	< 537	//	< 466	//
Benzo(a)anthracene	< 457	//	< 626	//	< 483	//	75.2	J/B/	< 416	//	224	J/B/	65.4	J/B/	< 466	//
Benzo(a)pyrene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	90.1	J/B/	< 537	//	< 466	//
Benzo(b)fluoranthene	< 457	//	< 626	//	< 483	//	49.2	J/B/	< 416	//	137	J/B/	68	J/B/	< 466	//
Benzo(g,h,i)perylene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	129	J/B/	< 537	//	< 466	//
Benzo(k)fluoranthene	< 457	//	< 626	//	< 483	//	54.1	J/B/	< 416	//	93.3	J/B/	43.4	J/B/	< 466	//
Benzoic acid	< 2280	//	< 3130	//	< 2420	//	< 2680	//	< 2080	//	300	J/B/	817	J/B/	< 2330	//
Benzyl alcohol	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Bis(2-chloroethoxy) methane	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Bis(2-chloroethyl) ether	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Bis(2-chloroisopropyl) ether	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Bis(2-ethylhexyl) phthalate	< 457	//	< 626	//	< 483	//	< 536	//	< 416	/V/	< 477	//	< 537	//	< 466	//
Butylbenzyl phthalate	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Chrysene	< 457	//	< 626	//	< 483	//	175	J/B/	< 416	//	256	J/B/	234	J/B/	< 466	//

TABLE 6.21
SEMI-VOLATILE ORGANIC COMPOUNDS
IN SEDIMENT
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D4313002		D4313102		D4313202		D4313302		D4313402		D4313502		D4313602		D4313702	
Sample Date	50594		50594		50594		50594		50594		50594		50594		50594	
Method 8270 (UG/KG)																
Di-n-butyl phthalate	< 457	/V/	< 626	/V/	< 483	/V/	< 536	/V/	< 416	/V/	< 477	/V/	< 537	/V/	< 466	/V/
Di-n-octyl phthalate	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Dibenz(a,h)anthracene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Dibenzofuran	< 457	//	< 626	//	< 483	//	137	J/B/	49.8	J/B/	407	J/B/	113	J/B/	< 466	//
Diethyl phthalate	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Dimethyl phthalate	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Fluoranthene	< 457	//	< 626	//	< 483	//	82.2	J/B/	< 416	//	142	J/B/	75	J/B/	< 466	//
Fluorene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Hexachlorobenzene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Hexachlorobutadiene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Hexachlorocyclopentadiene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Hexachloroethane	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Indeno(1,2,3-c,d)pyrene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Isophorone	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
m-Nitroaniline	< 2280	//	< 3130	//	< 2420	//	< 2680	//	< 2080	//	< 2380	//	< 2680	//	< 2330	//
N-Nitrosodiphenylamine	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
N-Nitrosodipropylamine	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Naphthalene	< 457	//	< 626	//	< 483	//	259	J/B/	98.2	J/B/	735	//	174	J/B/	< 466	//
Nitrobenzene	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
o-Cresol (2-Methylphenol)	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
o-Nitroaniline	< 2280	//	< 3130	//	< 2420	//	< 2680	//	< 2080	//	< 2380	//	< 2680	//	< 2330	//
p-Cresol (4-Methylphenol)	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
p-Nitroaniline	< 2280	//	< 3130	//	< 2420	//	< 2680	//	< 2080	//	< 2380	//	< 2680	//	< 2330	//
Pentachlorophenol	< 2280	//	< 3130	//	< 2420	//	< 2680	//	< 2080	//	< 2380	//	< 2680	//	< 2330	//
Phenanthrene	< 457	//	< 626	//	< 483	//	416	J/B/	117	J/B/	1050	//	362	J/B/	< 466	//
Phenol	< 457	//	< 626	//	< 483	//	< 536	//	< 416	//	< 477	//	< 537	//	< 466	//
Pyrene	< 457	//	< 626	//	< 483	//	128	J/B/	< 416	//	234	J/B/	172	J/B/	< 466	//

TABLE 6.22
INORGANIC AND ORGANIC INDICATORS
IN SEDIMENT
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D43112102	D431 2202	D431 2302	D431 2402	D431 2502	D431 2602	D431 2702	D4312802	D4312902
Sample Date	60793	60793	60893	60893	60893	60793	60893	50594	50594
RCRA and Target Metals (MG/KG)									
Arsenic	< 1.3 //	42.3 //	26.8 /Y/	3.1 /Y/	< 1.1 /Y/	11.1 //	1.7 /Y/	< 0.86 //	1.8 //
Barium	23.8 //	67.5 //	32.7 /Y/	47.9 /Y/	52 /Y/	82.9 //	65.2 /Y/	< 16.7 //	< 19.4 //
Cadmium	< 0.56 //	< 0.62 //	< 0.6 /Y/	< 0.57 /Y/	< 0.55 /Y/	0.76 //	< 0.58 /Y/	< 1 //	< 1.2 //
Chromium	34.2 //	42 //	4 /Y/	5.1 /Y/	4.8 /Y/	6.8 //	9.9 /Y/	2.5 //	3.5 //
Copper	3.1 //	9.3 //	3.6 /Y/	3.2 /Y/	< 2.7 /Y/	7.1 //	3.4 /Y/	< 2.14 //	< 2.48 //
Lead	2 //	19 //	6.1 /Y/	11.3 /Y/	5.2 /Y/	9.1 //	11.5 /Y/	3.2 //	5.3 //
Manganese	293 //	168 //	63.8 /Y/	118 /Y/	13.3 /Y/	24.6 //	143 /Y/	21.8 //	138 //
Mercury	< 0.131 //	1.82 //	0.813 /Y/	< 0.118 /Y/	< 0.119 /Y/	< 0.139 //	< 0.133 /Y/	< 0.0765 //	< 0.0533 //
Nickel	< 4.5 //	< 4.9 //	< 4.8 /Y/	< 4.5 /Y/	< 4.4 /Y/	< 5.1 //	< 4.7 /Y/	< 3.4 //	< 3.9 //
Selenium	< 0.65 //	2.2 //	1.3 /Y/	< 0.59 /Y/	< 0.57 /Y/	1.2 //	< 0.51 /Y/	< 0.37 //	< 0.44 //
Silver	< 1.1 //	< 1.2 //	< 1.2 /Y/	< 1.1 /Y/	< 1.1 /Y/	< 1.3 //	< 1.2 /Y/	< 0.88 //	< 1 //
Organic Indicator (MG/KG)									
Total organic carbon	3300 //	37000 //	147000 /Y/	6180 /Y/	8950 /Y/	9470 //	45900 /Y/	NA	NA

TABLE 6.22
INORGANIC AND ORGANIC INDICATORS
IN SEDIMENT
D-AREA BURNING/RUBBLE PITS
SAVANNAH RIVER SITE

Sample Name	D4313002		D4313102		D4313202		D4313302		D4313402		D4313502		D4313602		D4313702	
Sample Date	50594		50594		50594		50594		50594		50594		50594		50594	
RCRA and Target Metals (MG/KG)																
Arsenic	1.3	//	2.1	//	1.4	//	35.8	//	18	//	35.5	//	28.7	//	10.1	J/I/P
Barium	31.5	//	49.3	//	22.3	//	34.7	//	< 16.6	//	23.1	//	35.6	//	35.6	//
Cadmium	< 1.1	//	< 1.5	//	< 1.1	//	< 1.3	//	< 1	//	< 1.1	//	< 1.3	//	< 1.1	//
Chromium	6	//	11.3	//	14.9	//	45.9	//	1.9	//	5	//	8.6	//	5.8	//
Copper	3.5	//	5.2	//	5.3	//	8.1	//	4.5	//	3.9	//	8	//	4.8	//
Lead	6.4	//	8.4	//	6.8	//	11.2	//	2.1	//	6.7	//	13.8	//	8.2	J/I/P
Manganese	117	//	322	//	105	//	152	//	167	//	55.7	//	122	//	145	//
Mercury	< 0.0836	//	< 0.102	//	< 0.0852	//	1.15	//	< 0.0739	//	0.228	//	0.349	//	< 0.11	J/X/P
Nickel	< 3.7	//	< 5	//	< 3.8	//	< 4.3	//	< 3.4	//	< 3.8	//	< 4.3	//	< 3.8	//
Selenium	< 0.41	//	< 0.56	//	< 0.43	//	1.8	//	0.66	//	1.9	//	1.9	//	0.57	J/I/P
Silver	< 0.95	//	< 1.3	//	< 0.99	//	1.3	//	< 0.87	//	< 0.98	//	< 1.1	//	0.98	J/I/P
Organic Indicator (MG/KG)																
Total organic carbon																

TABLE 6.23
RADIONUCLIDEPARAMETERS IN SEDIMENT MEDIA:

Sample ID Sample Date	D43112102 60793	D431 2202 60793	D431 2302 60893	D431 2402 60893	D431 2502 60893	D431 2602 60793	D431 2702 60893	D4312802 50594	D4312902 50594	D4313002 50594
Radionuclide Parameters(PC/G)										
Gross alpha	10.7 //	7.5 //	11.4 /Y/	11.3 /Y/	12.8 /Y/	11.5 //	14.9 /Y/	11.8 //	5.1 //	9.2 //
Nonvolatile beta	70.9 //	< 8.3 //	15.8 /Y/	22.7 /Y/	19 /Y/	24.2 //	17.2 /Y/	16.3 //	10.3 //	18.5 //
Radium, total alpha-emitting	0.79 /V/	< 1.3 /V/	0.65 /YV/	< 1.1 /YV/	< 1.3 /YV/	1.1 /V/	0.9 /YV/	2.9 //	3.1 //	1.9 //
Tritium	2 //	1.8 //	9.2 /Y/	4 /Y/	4.3 /Y/	10.8 //	5 /Y/	3.07 //	< 0.59 U//	< 0.65 U//

Sample ID Sample Date	D4313102 50594	D4313202 50594	D4313302 50594	D4313402 50594	D4313502 50594	D4313602 50594	D4313702 50594
Radionuclide Parameters(PC/G)							
Gross alpha	3.3 J//	5.3 //	9.4 //	27.8 //	17.9 //	10.6 //	7.5 //
Nonvolatile beta	12.7 //	9.6 //	12.3 //	83.2 //	57.6 //	14.3 //	15.1 //
Radium, total alpha-emitting	2.4 //	2.6 //	4.5 //	7.7 //	3.4 //	2.6 //	4.6 //
Tritium	< 1.27 U//	< 0.42 U//	< 0.38 U//	0.79 J//	0.88 J//	< 0.49 U//	< 0.61 U//

DATA SUMMARY REPORT

FOR THE

D-AREA BURNING/RUBBLE PITS

APPENDICES

FINAL

Prepared For:

Westinghouse Savannah River Company
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OCTOBER 1994

APPENDIX A

QUALITY CONTROL SUMMARY REPORT FOR THE D-AREA BURNING/RUBBLE PITS RFI/RI UNIT ASSESSMENT

(Exploration Resources Validation)

THE ENVIRONMENTAL PROTECTION DEPARTMENT
ENVIRONMENTAL MONITORING SECTION

ESH-EMS-940076

Quality Control Summary Report for the D-Area Burning/Rubble Pits RFI/RI Unit Assessment

May 1994

Prepared for the U.S. Department of Energy under control contract No. AA89128P

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Introduction

Overview

This report presents a summary of activities performed at the D-Area Burning/Rubble Pits, 431-D and 431-1D, under the direction of the Environmental Monitoring Section of the Environmental Protection Department (EPD/EMS) at the Savannah River Site (SRS) in support of the Resource Conservation and Recovery Act (RCRA) Facility Investigation/ Remedial Investigation (RFI/RI) Unit Assessment.

The D-Area Burning/Rubble Pits (DBRP) are located approximately 1/2 mile west of D Area and 1-1/2 miles west of State Highway 125. The topography of the area is flat, with a shallow run-off ditch within 50 feet west of the pits. The two pits are contiguous, separated by a center dividing berm. The Savannah River and associated swamps are approximately 1/2 mile from the rubble pits.

The burning/rubble pits were constructed in 1951 for disposal of spent organic solvents, waste oils, paper, plastics, rubber, wood, rags, cardboard, and degreasers. The waste was burned periodically, usually monthly. The chemical composition and volume of waste disposed of in the burning/rubble pits are unknown. In 1973, the pits were covered with a layer of soil, and afterward used only as rubble pits. During this time, they were filled with waste which included concrete, metal, lumber, bricks, tile, asphalt, plastic, empty drums, rubber, telephone poles and other wood products. When the pits were full, a layer of clay was put over the rubble and the pits were compacted, mounded, and closed. Records indicate that all use of the burning/rubble pits was discontinued by 1983.[1]

SRS has received a RCRA permit from the South Carolina Department of Health and Environmental Control (SCDHEC). Part V of the permit mandates that SRS establish and implement a RCRA RFI program in order to fulfill requirements of RCRA Section 3004(u). The D-Area Burning/Rubble Pits are two of the solid waste management units identified for further investigation.

As part of the RFI process, a Preliminary Unit Evaluation was done. In 1989, a Unit Screening Program was conducted. Hazardous substances were detected in the soil profile and also in the groundwater during unit screening. In earlier groundwater monitoring, iron, lead, and manganese have exceeded the EPA Maximum Contaminant Levels at least once in at least one well. Soil gas data indicate the presence of benzene, 1,1,1-trichloroethane, and tetrachloroethylene. Because of these results, a Unit Assessment was required. This report describes the sampling, analysis, and data validation done as part of the Unit Assessment.

Sampling took place in June 1993 and consisted of hand-augered soil samples, split-spoon samples, groundwater samples from up- and downgradient wells, surface water samples from up- and downstream locations, and sediment samples. Samples were collected by Rust Environmental and Infrastructure and analyzed by Roy F. Weston, Inc., laboratories and TMA/Eberline.

[1]WSRC-RP-90-485, Rev. 2. See the References section for full citation.

Sample Set and Analyses

List of Analytical Suites

Soil samples were analyzed for one or more of the following groups of constituents: semi-volatile organic compounds, including polycyclic aromatic hydrocarbons (PAHs); volatile organic compounds; total metals; radionuclide indicators; physical parameters; pesticides, PCBs, and dioxins and furans (PCDD/PCDF); and Toxicity Characteristic Leaching Procedures (TCLP) constituents.

Sediment samples were analyzed for one or more of the following groups of constituents: metals; semi-volatile organic constituents, including polycyclic aromatic hydrocarbons (PAHs); volatile organic constituents; radionuclide indicators; and TOC.

Water samples, including all sampling blanks, were analyzed for one or more of the following groups of constituents: total organic halogens; metals; semi-volatile organic constituents, including polycyclic aromatic hydrocarbons PAHs; volatile organic constituents; radionuclide indicators; TOC, TSS and TDS; and inorganics.

Field measurements of surface water temperature, pH, conductivity, and dissolved oxygen were taken by the samplers as scheduled for four surface water samples. Water depth and flow rate were not recorded, although they were scheduled in the work plan.

Numbers of Records

Included in the data for this project are 138 sample logbook records and 138 chain-of-custody records.

There are 22 station records, one for each of the planned stations in the work plan, including the one new well required by the work plan.

Excluding tentatively identified compounds (TICs), there are 28,960 analytical records. Of these, 28,260 are non-radionuclide analytical records, of which 19,941 are sample records. The remainder are laboratory blanks, blank spikes, and other laboratory-generated QA/QC samples. Of the sample records, 16,621 are for soil samples and 3,320 are for water samples, including blanks generated in the field.

There are 700 radionuclide analytical records, of which 154 are laboratory blank records and 546 are sample records. Of the sample records, 409 are soil sample records and 137 are water sample records.

Total metals analyses were requested for 127 samples; additional target analyte list (TAL) metals were scheduled for two samples as part of a TAL/TCL (target compound list) with TIC request. Semivolatiles (BNA, including polynuclear aromatic hydrocarbons) were scheduled for 101 samples, and volatile organic analyses (VOA) for 148. The pesticides/ PCBs/dioxins/ furans suite was requested for 68 samples. The Toxicity Characteristic Leaching Procedure (TCLP) was requested for 5 samples. The numbers of scheduled

analyses for semivolatiles, volatiles, and pesticides/PCBs/dioxins/furans include two samples requesting TICs.

Physical parameters were requested for 35 soil samples. Inorganics were requested for 12 water samples, total organic halogens for 13 water samples, and total organic carbon for eight water samples. For 129 samples, radionuclide indicators were scheduled. See Appendix A of this report for full constituent lists for each of the analytical suites.

Discrepancies from the Work Plan

Of the 151 samples scheduled in the work plan, thirteen samples were not collected. One sample, D43110905, could not receive TCLP analyses as part of a TAL/TCL request because there was insufficient soil to fill all sample bottles. See the "Sample Collection" section of this report for further information on scheduled analyses that were not performed.

Samples referred to as splits in Table 4-1 and Table 4-2 of the work plan are in fact duplicates because all the validated samples were sent to one laboratory.

A number of changes were made to the constituent groups scheduled for particular samples. See the "Work Plan Assessment" section of this report for details.

Although TICs were scheduled for only two samples, the laboratory provided TIC data for a number of samples. These data are included in the data files and in the data tables of this report. TIC data, by definition, does not meet the same data quality objective as the rest of the data for this project.

D-Area Burning/Rubble Pits Data Quality Objectives

The purpose of the soil sampling program is to confirm the presence or absence of hazardous substances in the soil within the pits and/or the area surrounding the pits to identify the extent of possible chemical contamination. No hazardous substances were found in the soil outside the pits during the unit screening. Therefore, if hazardous substances are not found significantly above background levels in the soil downgradient of the pits, it will be concluded that hazardous substances are not present. The soil pathway will then be eliminated as a possible route of exposure.

The surface water/sediment sampling plan is designed to confirm the presence or absence of hazardous substances in the surface water/sediment surrounding the unit. If hazardous substances are not found in the surface water/sediment downgradient of the unit significantly above background levels, it will be concluded that hazardous substances are not present. The surface water/sediment pathway will then be eliminated as a possible route of exposure.

The key decisions associated with the data quality objectives relate to the ongoing data collection. Therefore, objectives are continually being refined as more information becomes available. This includes investigating the magnitude and extent of hazardous substance release, risk assessment, and evaluation of remediation alternatives. The tolerance for

uncertainty was not predetermined in the work plan. Based on the purposes of the soil and surface water/sediment sampling plans, data quality level three (confirmational) is required.

Validation Status of the Data

Scope

Data collection, analysis, and reporting for the project were validated and/or verified. The process began with project mobilization, and continued to the delivery of electronic data deliverables (EDDs) and this Quality Control Summary Report to the group responsible for risk assessment. Data validation was based on achieving Quality Assurance Objective 3 (QA3) (as defined in *Quality Assurance/Quality Control (QA/QC) Guidance for Removal Activities*) with analytical quality level 3 data (as defined in *Data Quality Objectives for Remedial Response Activities*).

Achievement of Objective

In general, sample collection was adequately documented. Some surface water samples were not collected because of dry weather. See the "Sample Collection" and "Work Plan Assessment" sections of this report for more information. Chain-of-custody forms were reviewed. In some cases, the analytical laboratory did not sign the chain-of-custody form as received. In another instance, a few hours elapsed between the time the samples were relinquished by one party and received by the other. See the "Chain of Custody Review" section of this report for more information.

Sample holding times were usually met; exceptions have been qualified. Some criteria for QA3, such as analytical instrument calibration, analyte identification, and analyte quantitation, were verified during the laboratory data record review; records not meeting criteria have been qualified. Method blanks were performed in ratios of more than one for every twenty samples. Percent recoveries for QA/QC samples have been reviewed, and recoveries outside limits and the associated sample record have been qualified as described in the "Qualification Policy" section of this report. Relative percent differences between duplicate sample analyses and between matrix spike and matrix spike duplicate analyses have not been calculated, the sample results have not been adjusted for bias, and the calculations for determination of precision have not been done. Only one sample analytical data record was rejected.

Contamination of field-generated blanks was reviewed; see Table 11 in the "Discussion" section of this report. Of the positive field blank results, roughly two-thirds were common laboratory contaminants, and one-third were radionuclide indicators. Associated samples were evaulated and qualified on the basis of trip blank results if necessary.

Anticipated Additions

The data provided with this report are final and complete. Any resampling of surface water samples that were dry during initial (1993) sampling is not included within the scope of this data validation project.

Summary of Data Quality

The data for this project meet the data quality objective requirements for the project with the exceptions noted in this report and in the qualification of the data per se. Tentatively identified compounds, qualified with the result qualifier *J* and the analysis qualifier *N*, by definition do not meet the data quality objective.

During data verification of radiological analyses, many data entry errors were observed and resolved. The analytical laboratory, TMA, employs manual data entry to report results, so many errors can be expected. The vast majority of identified errors have been resolved satisfactorily.

Work Plan Assessment

Modifications were made to the work plan for a number of reasons as the investigation progressed. The Project Technical Manager provided the Project Manager a work plan assessment (a preliminary presentation of expected discrepancies from the work plan) in an attachment to the EPD/EMS Soil-Investigation Work Request Form dated 5/28/93. The work plan assessment was based on information from the work plan and the laboratory; some information available at that time was proven incorrect as data were received and validation proceeded. Discrepancies from the work plan are discussed in detail throughout this report; see especially "Sample Collection" and "Constituent Lists and Methods."

Changes Made to Sampling Instructions

The following table lists changes made from the sample list in Table 4-1 of the work plan, based on the work plan assessment.

Table 1. Changes to Sample List (Table 4-1 of Work Plan)

WSRC Identifier	Constituents for Analysis Changed From	Constituents for Analysis Changed To
D4311 07 05E	134	234
D4311 10 07C	1236	234
D431 11 06A	234	123456
D431 12 05A	12346	123467
D431 14 07A	1234	1236
D4311 08 07D	1234	1236
D4311 16 05	24	123456

Reviewers changed the instrument listed for sample D431 11 02D from split spoon to hand auger and changed the sample numbers D431 18 02A to D431 18 02D and D431 18 02B to D431 18 02C. An inconsistency for sampling points 17 and 18 mentioned in the work plan assessment between the facility identifier (D431, which indicates Pit 431-D) and the sample location (outside pit 431-1D) was never addressed. The site map, which follows the table of contents in this report, shows the actual sampling location as being south of the pits.

The following table lists changes made from the sample list in Table 4-2 of the work plan.

Table 2. Changes to Sample List (Table 4-2 of Work Plan)

WSRC Identifier	Constituents for Analysis Changed From	Constituents for Analysis Changed To
D431 22 01A	12346	1234679
D431 22 02A	236	23468
D431 23 01D	12346	1234679
D431 25 01A	12346	1234679
D4311 19 02	23468	23467
D4311 20 02	23468	23467

The work plan's Table 4-2 indicates that samples 100306 and 100307 (D43112001 and D43112002) were to be upstream and downstream surface water samples, respectively. However, the work plan's figure 4-1, Proposed Unit Assessment Sampling Locations, shows only one location. The samplers took the two samples approximately 3 ft apart. The same is true for samples 100308 and 100309 (D43111901 and D43111902). Both of these stations (D4311 19 and D4311 20) actually are upstream of the pits.

Constituent Lists and Methods

The work plan constituent lists and stipulated methods could not be followed exactly because of the limitations of the analytical laboratory contract used for this project.

Polynuclear aromatic hydrocarbons (PAHs) were analyzed as semivolatile organics by method 8270 as described in the work plan. All of the PAHs in the target compound list (TCL) are analyzed by method 8270, which already was being used to analyze semivolatile organic compounds.

Volatiles were analyzed as described; however, when the work plan assessment was written, Weston had said that it would not test for 2-chloroethyl vinyl ether in water samples preserved to pH<2. When the data was received, however, 2-chloroethyl vinyl ether was reported in the electronic data deliverables (EDDs) for some samples and not for others; this is true for both soil and water. Instead of trans-1,2-dichloroethylene, which is requested in the TCL list of the work plan, Weston reported total 1,2-dichloroethylene. Ethylbenzene was reported as part of this analytical suite even though it was not requested.

Semivolatiles (BNA): Di-n-butyl phthalate, 1,3-dichlorobenzene, 4-chloro-3-methylphenol, dimethyl phthalate, and hexachloroethane were reported as part of this analytical suite even though they were not requested in the TCL list.

Metals were analyzed as described in the work plan. When TAL/TCL with TIC (library scan) was requested for soil samples, an additional 12 metals were reported: aluminum, antimony, beryllium, calcium, cobalt, iron, magnesium, potassium, sodium, thallium, vanadium and zinc. Analyses for tin, requested as part of TAL/TCL, were not performed. In water, the following 13 metals were tested for: arsenic, barium, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, selenium, silver, and sodium as requested in Table 4-2 of the work plan (as constituents 2 and 9).

Herbicides: Two constituents on the TAL/TCL list in the work plan, 2,4,5-T and 2-4-dichlorophenoxyacetic acid, were analyzed only as part of TCLP analyses. An additional herbicide, silvex, also was analyzed as part of TCLP analyses.

Pesticides: Chlordane, requested as part of TAL/TCL, was reported as the isomers alpha- and gamma-chlordane.

Dioxins and furans were analyzed according to the work plan assessment.

Physical properties/inorganic parameters: When the work plan assessment was written, the method to be used for total organic carbon was not known. Weston used EPA415.1. Instead of using EPA Method 9081 for cation exchange capacity as stated in the work plan assessment, Weston used EPA Method 9080. Cyanide was analyzed by EPA Method 335.3 when the TAL/TCL list of analytes was requested.

In water, total dissolved solids and total suspended solids were analyzed by EPA Method 160.2, total organic halogens by EPA Method 9020, and chloride, fluoride, and nitrate as nitrogen by EPA Method 300.0. Dissolved oxygen and water temperature were measured in the field; see the "Sample Collection" section of this report for reported results. Water depth and flow measurements were not recorded.

Radionuclide indicators: Radionuclide indicators were analyzed as indicated in the work plan assessment.

Production of Chain-of-Custody Forms

Chain-of-custody forms containing the list of requested analyses for each planned sample were printed on waterproof paper during mobilization. A printed tear-off stub to the chain-of-custody form stipulated the sample location. Information to be filled in on the chain-of-custody form included the following: the sample identification number from the sample logbook page for that sample, the laboratory sample ID (to be completed by the analytical laboratory), the sample collection date, shipping information including dates and signatures of each person handling the sample, and cooler number and temperature upon arrival at the analytical laboratory. In addition, a peel-off section of each bottle label printed with the bottle number was affixed to the line requesting the analysis.

Chains Created in the Field

No additional chains were created in the field for this project.

Sample Collection

Field activities for this project were guided by the work plan and by WSRC procedures as contained in manual 3Q5. Sampling was conducted by Rust Environmental and Infrastructure personnel.

Notations of Insufficient Sample

Several of the scheduled surface water samples and their associated QA/QC samples were not taken because the stations were dry. No field log entries were made. They are listed below:

D431 2201	D431 2301	D431 2501A
D431 2201A	D431 2301D	D431 2701
D431 2201C	D431 2401	D431 2701D
D431 2201E	D431 2501	D431 2701E

There was insufficient sample from 100346 (D43110905) to fill all bottles. The sampler noted that "due to the large amount of gravel in the sample, two VOA bottles could not be filled. Followed procedure on chain-of-custody for the filling of bottles when not enough sample is present." This sample requested TCLP VOA, which was filled, and TAL/TCL VOA, which was not.

For sample 100364 (D431 1103), the sampler noted, "Rad sample not filled before bulk of sample was disposed of." There is no bottle number on the chain-of-custody form. However, there is a chain-of-custody form from Weston to TMA for this sample, and TMA reported results for the scheduled radionuclide indicators, tritium. .

Field QC Samples

For this project, as is general practice, trip blanks (deionized [DI] water) were prepared by EMS-Weston. The trip blanks were filled in the morning, taken to the field, and placed in the appropriate coolers in the field. The work plan's sampling tables associate trip blanks with a specific associated sample, rather than specifying one trip blank per cooler. Because the samplers followed the work plan's instructions, not every cooler had a trip blank.

Field blanks (also DI water) were prepared by Rust personnel. They were filled in the morning and opened in the field.

A number of the field-generated blanks were coded by the samplers as "other" rather than "blank." This error has been corrected. A sample time was not logged for trip blanks 100303 (D43112102B) and 100316 (D431 2302B).

Sample bottle 10001079, used for field blank 100327 (D43110706C), had HCl preservative present on outside labels. The laboratories did not report any resulting analytical problem.

The table below lists field-generated blanks, the number of the cooler in which trip blanks were shipped, and the analyses performed on each of the blanks.

Table 3. Field-Generated Blanks

Scheduled	Type	Sample Number	Cooler Number	Analyses
D431 1204C	Field blank	100374	NA[1]	Volatiles, metals, radionuclide indicators, tritium
D431 1301B	Trip blank	100380	511	Volatiles, radionuclide indicators, tritium
D431 1304E	Rinsate	100384	NA	Volatiles, metals, radionuclide indicators, tritium
D431 1406C	Field blank	100397	NA	Volatiles, metals, radionuclide indicators, tritium
D431 1708C	Field blank	100437	NA	Volatiles
D431 1802C	Field blank	100403	NA	Volatiles, metals, radionuclide indicators, tritium
D431 2201C	Field blank	NT[2]	NA	NA
D431 2201E	Rinsate	NT	NA	NA
D431 2302B	Trip blank	100316	NR[3]	Volatiles, radionuclide indicators, tritium
D431 2302E	Rinsate	100315	NA	Metals, volatiles, radionuclide indicators, tritium
D431 2601B	Trip blank	NT	NA	NA
D431 2602C	Field blank	100302	NA	Volatiles, radionuclide indicators, tritium
D431 2701E	Rinsate	NT	NA	NA
D43110705E	Rinsate	100325	NA	Volatiles, metals, radionuclide indicators, tritium
D43110706C	Field blank	100327	NA	Volatiles, metals, radionuclide indicators, tritium
D43110804C	Field blank	100333	NA	Volatiles, metals, radionuclide indicators, tritium
D43110807B	Trip blank	100339	563	Volatiles, radionuclide indicators, tritium
D43110901E	Rinsate	100342	NA	Volatiles, metals, radionuclide indicators, tritium
D43110906C	Field blank	100348	NA	Volatiles, metals, radionuclide indicators, tritium
D43111001B	Trip blank	100351	NR	Volatiles, radionuclide indicators, tritium
D43111004E	Rinsate	100355	NA	Volatiles, metals, radionuclide indicators, tritium
D43111007C	Field blank	100360	NA	Volatiles, metals, radionuclide indicators, tritium

[1] NA - Not applicable.
[2] NT - Not taken. No reason that D431 2601B was not taken was given in the field logs. All the others were scheduled to be associated with surface water samples precluded by dry weather conditions.
[3] NR - Not recorded.

Table 3. Field-Generated Blanks, Continued

Scheduled	Type	Sample Number	Cooler Number	Analyses
D43111502B	Trip blank	100409	413	Volatiles, radionuclide indicators, tritium
D43111603C	Field blank	100420	NA	Volatiles, metals, radionuclide indicators, tritium
D43111505B	Trip blank	100413	NR	Volatiles
D43111506E	Rinsate	100416	NA	Volatiles
D43112102B	Trip blank	100303	NR	Volatiles, radionuclide indicators, tritium

The analyses listed are those scheduled in the work plan or its modification (see the "Mobilization" section of this report). All the analyses in the table were performed, and the results are reported in the data and in the data tables of this report. See the "Discussion" section of this report for a table of field-generated blanks having constituents above detection limit.

Missing or Incorrect Field Data

Samples 100301 (D431 2601), 100305 (D43112101), 100310 (D431 2202), 100322 (D43110705), 100326 (D43110706), 100332 (D43110804), and 100334 (D43110805) specify an associated sample ID despite the fact that they were coded as "Normal" sample types.

Sample 100305 (D43112101) was coded by the samplers as "Sediment" with a soil moisture of "Liquid." No Munsell Color or Unified Soil Classification was specified. Because it was scheduled as a surface water sample, and field data scheduled only for surface water samples were taken, the sample type was changed to "Water."

Sample 100319 (D43110703) and its duplicate, 100320 (D43110703D), do not specify a Unified Soil Classification, probably because of much rubble. See the table of rubble descriptions below.

Samples 100335 (D43110805A), 100388 (D431 1307), 100389 (D431 1307A), 100406 (D43111501), 100407 (D43111502), 100408 (D43111502A), and 100424 (D43111606) were not coded for soil moisture.

Sample 100385 (D431 1305) does not specify a soil moisture, Munsell Color, or Unified Soil Classification. See below for field observations of this sample.

Samples 100386 (D431 1306), 100387 (D431 1306D), 100388 (D431 1307), and 100389 (D431 1307A) do not specify Munsell Color; the sampler noted that the mottled color of the samples prevented identification of a predominant color. Sample 100411 (D43111504) also does not specify a Munsell Color

Delays in Sampling

The sampler checked the "unusual delay" box in the log for sample 100375 (D431 1205) and its duplicate; 100376 (D431 1205A), and noted, "Had split-spoon refusal. Had to move rig and burn down to attempt taking sample again. Sample taken at 12:04; because of large amount of sample needed, three split spoons were taken at this interval. Each spoon was 50% full."

Sample 100434 (D431 1707) and its duplicate, 100435 (D431 1707A), were delayed because the hydropunch was dry on the first attempt in borehole SB-17. The sampler drilled deeper and took samples an hour later.

Field Observations

The samplers recorded field measurements for pH, conductivity, water temperature, and dissolved oxygen for four surface water samples. The other surface water samples scheduled for these data were not taken due to dry conditions at the sampling stations. The results follow.

Table 4. Surface Water Field Data

Sample ID	pH	Conductivity	Water Temperature	Dissolved Oxygen
100301 (D431 2601)	5.8	370 µS/cm	30.6°C	<1.0 mg/L
100305 (D43112101)	8.1	64 µS/cm	30.2°C	7.8 mg/L
100306 (D43112001)	8.1	64 µS/cm	27.9°C	7.4 mg/L
100308 (D43111901)	8.0	64 µS/cm	27.0°C	6.0 mg/L

The following table lists field volatiles readings recorded in the sample logbook.

Table 5. Field Volatiles Readings

Sample ID	Instrument/ method	Reading
100322 (D43110705)	OVA	5–10 ppm
100326 (D43110706)	OVA	5–10 ppm
100330 (D43110802)	OVA	2 ppm
100331 (D43110803)	HNu	0.5-1.0 ppm
100385 (D431 1305)	OVA	>1,000 ppm
100395 (D431 1405)	OVA	40 ppm
100396 (D431 1406)	OVA	7 ppm
100398 (D431 1407)	OVA	3 ppm
100399 (D431 1407A)	OVA	3 ppm

For sediment sample 100310 (D431 2202) and its duplicate, 100311 (D431 2202A), the sampler noted, "Sample taken approx. 10' west of monitor well DBP4. No surface water present."

For sediment sample 100312 (D431 2702), the sampler noted, "Sample collected from south end of small wetland located approx. 100 yds south of the BRP's. No surface water at this location."

For sediment sample 100313 (D431 2302), the sampler noted, "Sample taken in middle of drainage swale approximately 60 ft south of road."

For sample 100319 (D43110703) and its split, sample 100320 (D43110703D), the actual borehole sampled was 3 ft east of the original borehole.

Sample 100334 (D43110805) and its duplicate, 100335 (D43110805A), were noted as saturated with hydrocarbon from 6.0-6.5' and having a strong hydrocarbon odor. Samples 100396 (D431 1406) and 100398 (D431 1407) and its duplicate, 100399 (D431 1407A), had a hydrocarbon odor and stain.

For sample 100344 (D43110903), the sampler noted, "Material appears to be backfill into the trench excavated during initial phase of the investigation."

The sampler noted that sample 100400 (D431 1801) is located in a disturbed area due to grading of the land surface and runoff from the adjacent dirt road. Also, it was noted that the land surface in the vicinity of sample 100406 (D43111501) had been reworked by a grader.

The samplers recorded the following descriptions of rubble.

Table 6. Rubble Descriptions

Sample ID	Rubble	Further observations
100319 (D43110703) and its split, 100320 (D43110703D)	Wood, glass, plastic, and rubber hose	Silty sand matrix
100321 (D43110704)	Wood, glass, plastic, and concrete	Slight fuel oil smell; silty-clayey sand matrix. Alcohol mist from decon area detected during sample container filling.
100331 (D43110803)	Wood and plastic	"Abundant" rubble from 3.0-3.5 ft
100332 (D43110804)	Wood and plastic, heavy fuel oil stains	Fine-medium grain sand; fuel oil odor
100364 (D431 1103)	Traces of charred wood and fabric	
100365 (D431 1104)	Traces of charred roofing tile	

Table 6. Rubble Descriptions, Continued

Sample ID	Rubble	Further observations
100367 (D431 1106), its duplicate, 100368 (D431 1106A), and 100369 (D431 1107)	Plastic sheeting	
100375 (D431 1205) and its duplicate, 100376 (D431 1205A)	Pebbles, ash, and wood	
100377 (D431 1206)	Ash, wood, and plastic	
The lower half of sample 100382 (D431 1303)	Fill (wood, asphalt, and ash)	Very coarse soil matrix
The top half of 100386 (D431 1306) and its split, 100387 (D431 1306D)	Fill (wood, ash, and plastic)	
The bottom half of sample 100393 (D431 1403)	Plastic and ash	Markedly different in Munsell color (5YR3/4) from the top (10R4/6).
100394 (D431 1404)	Concrete, glass, plastic, and insulated wire	
100366 (D431 1105)	Plastic sheeting, wood, and slate roofing tile	Because of heavy rain the night before sampling, the sample was "slush," with no remaining structure.
100383 (D431 1304)	Wood and plastic	Creosote smell
100385 (D431 1305)	Wood, ash, and plastic	Coarse-grained, moist soil matrix; strong odor
100395 (D431 1405)	Concrete and plastic	Slight H_2S odor

The following sample IDs were specifically noted as hydropunch samples: 100412 (D43111505) (water table), 100414 (D43111506), 100415 (D43111506D), 100426 (D43111608), 100434 (D431 1707), 100435 (D431 1707A), and 100436 (D431 1708).

Chain-of-Custody Review

The chain-of-custody forms were reviewed for comments by the samplers or laboratory personnel and were audited for completeness and an unbroken chain of custody. Notations

made by the samplers or the laboratory on the forms and discrepancies noted from the audit are recorded below.

Table 7. Chain-of-Custody Anomalies and Notations

Sample number	Work Plan Number	Comments
100301	D431 2601	Cooler number missing Cooler temperature missing
100303	D43112102B	Cooler number missing Cooler temperature missing Sample time blank
100304	D43112102	Cooler number missing Cooler temperature missing
100309	D43111902	Cooler number missing Cooler temperature missing
100310	D431 2202	Cooler number missing Cooler temperature missing
100311	D431 2202A	Cooler number missing Cooler temperature missing
100312	D431 2702	Cooler temperature = 14.6°C Lab left time blank in custody transfer record
100313	D431 2302	Cooler temperature = 14.6°C
100314	D431 2302D	Cooler temperature = 14.6°C
100315	D431 2302E	Cooler number missing Cooler temperature = 14.5°C
100316	D431 2302B	Cooler number missing Cooler temperature = 14.5°C Sample time blank
100317	D43110701	Cooler temperature = 14.6°C
100318	D43110702	Cooler temperature = 14.6°C
100319	D43110703	Cooler temperature = 14.6°C Lab did not sign COC
100320	D43110703D	Cooler temperature = 14.6°C Lab did not sign COC Only one VOA vial filled
100321	D43110704	Cooler temperature = 14.6°C Lab did not sign COC Sample time blank
100322	D43110705	Cooler temperature = 14.6°C Lab did not sign COC
100323	D431 2402	Cooler temperature = 14.6°C Lab did not sign COC
100324	D431 2502	Cooler temperature = 14.6°C Lab did not sign COC
100325	D43110705E	Cooler number missing Cooler temperature = 14.5°C Lab did not sign COC
100326	D43110706	Cooler number missing Cooler temperature missing Bottle #10002198 was a 500mL (instead of a 250mL) amber bottle.

Table 7. Chain-of-Custody Anomalies and Notations, Continued

Sample number	Work Plan Number	Comments
100327	D43110706C	Cooler number missing Cooler temperature missing
100328	D43110707	Cooler number missing Cooler temperature missing
100329	D43110801	Cooler number missing Cooler temperature missing
100330	D43110802	Cooler number missing Cooler temperature missing
100331	D43110803	Cooler number missing Cooler temperature missing
100332	D43110804	Cooler number missing Cooler temperature missing Missing one VOA sample
100333	D43110804C	Cooler number missing Cooler temperature missing
100334	D43110805	Cooler number missing Cooler temperature missing Missing one VOA sample
100335	D43110805A	Cooler number missing Cooler temperature missing Missing one VOA sample
100336	D43110806	Cooler number missing Cooler temperature missing
100338	D43110807D	Cooler number missing Cooler temperature missing
100340	D43110901	Cooler number missing Cooler temperature missing Bottle #10002139 was a 125 mL (instead of a 250 mL) amber bottle.
100341	D43110901A	Cooler number missing Cooler temperature missing
100342	D43110901E	Cooler number missing Cooler temperature missing
100343	D43110902	Cooler number missing Cooler temperature missing
100344	D43110903	Cooler number missing Cooler temperature missing
100345	D43110904	Cooler number missing Cooler temperature missing
100346	D43110905	Cooler number missing Cooler temperature missing No bottle numbers on target compound list (TCL) VOA samples
100347	D43110906	Cooler number missing Cooler temperature missing
100348	D43110906C	Cooler number missing Cooler temperature missing
100349	D43110907	Cooler number missing Cooler temperature missing

Table 7. Chain-of-Custody Anomalies and Notations, Continued

Sample number	Comments
100351	Cooler number missing
	Cooler temperature missing
100352	Cooler number missing
	Cooler temperature missing
100353	Cooler number missing
	Cooler temperature missing
100354	Cooler number missing
	Cooler temperature missing
100355	Cooler number missing
	Cooler temperature missing
100356	Cooler number missing
	Cooler temperature missing
100357	Cooler number missing
	Cooler temperature missing
100358	Cooler number missing
	Cooler temperature missing
100359	Cooler number missing
	Cooler temperature missing
100360	Cooler number missing
	Cooler temperature missing
100361	Cooler number missing
	Cooler temperature missing
100362	Cooler number missing
	Cooler temperature missing
100363	Cooler number missing
	Cooler temperature missing
100364	Cooler number missing
	Cooler temperature missing
	The metals bottle was broken when received by the laboratory. They did however perform the metals analyses.
	No bottle number for 40mL VOA vial
100365	Cooler number missing
	Cooler temperature missing
100366	Cooler number missing
	Relinquished by N.E.U.P. 6/14/93 at 8:45; received by J.E. Williams 6/14/93 at 11:00
100367	Cooler number missing
	Relinquished by N.E.U.P. 6/14/93 at 8:45; received by J.E. Williams 6/14/93 at 11:00
100368	Cooler number missing
	Relinquished by N.E.U.P. 6/14/93 at 8:45; received by J.E. Williams 6/14/93 at 11:00
100369	Cooler number missing
	Relinquished by N.E.U.P. 6/14/93 at 8:45; received by J.E. Williams 6/14/93 at 11:00
100377	Cooler number missing
100379	Cooler number missing
100381	Cooler number missing

Table 7. Chain-of-Custody Anomalies and Notations, Continued

Sample number	Comments
100384	Cooler number missing "No ID# on bottle" in comments; however, all bottles have numbers on the chain. The meaning of the comment is unclear.
100387	Cooler number missing
100397	Cooler number missing
100402	Bottle #10002601 was a 250 mL (instead of 125 mL) amber bottle.
100412	Cooler number missing Cooler temperature missing
100413	Cooler number missing Cooler temperature missing
100414	Cooler number missing Cooler temperature = 8.2°C
100415	Cooler number missing Cooler temperature = 8.2°C
100416	Cooler number missing Cooler temperature = 8.2°C
100422	Lab did not sign COC.

Analysis qualifiers of *Y* were applied to all data where the cooler temperature was above 6°C when received by the laboratory.

Sample Preservation

Preservation Requirements

Sample preservation requirements are determined by regulatory guidance, method specifications, and laboratory protocols prior to field sampling events. General requirements follow.

Soil:
Inorganics: Inorganic analyses for metals require that soil samples be kept at 4°C.

Organics: Organic analyses for benzidines, chlorinated hydrocarbons, haloethers, PCBs, pesticides, phenols, phthalate esters, purgeable aromatic hydrocarbons, purgeable halocarbons, tetrachlorodibenzo-p-dioxin isomers, and total organic carbon also require that soil samples be kept at 4°C. Soil samples to be analyzed for nitroaromatics and isophorone, nitrosamines, or polynuclear aromatic hydrocarbons must be kept at 4°C and stored in the dark.

TCLP:
Inorganics: TCLP samples for inorganic analyses must be kept at 4°C and have nitric acid added so that the pH is less than 2.

Organics: TCLP samples for semivolatile or pesticide/herbicide analyses must be kept at 4°C. TCLP samples for volatile analyses must be kept at 4°C and have hydrochloric acid added so that the pH is less than 2.

Water:

Inorganics: Water samples to be tested for nitrate must be kept at 4°C. Water samples collected for metals analyses should have nitric acid added so that the pH is less than 2.

Organics: Water samples for all organic analyses should be kept at 4°C. Samples for benzidines should have the pH adjusted to 2-7. Purgeable aromatic hydrocarbons analyses require that hydrochloric acid be added so that the pH is less than 2, and total organic carbon analysis requires that hydrochloric acid or sulfuric acid be added so that the pH is less than 2. Samples for nitroaromatics and isophorone, nitrosamines, or polynuclear aromatic hydrocarbons must be stored in the dark. Samples for total organic halogens analysis must have 1 mL of 0.1 M sodium sulfite added. Samples for pesticide analyses should have the pH adjusted to 5–9.

Adherence to Requirements

The laboratory recorded the temperature of the samples as they were received. All temperatures above 6°C are noted in Table 7.

All base/neutral/acid extractables, including polynuclear aromatic hydrocarbons, for both soil and water samples are shipped in amber bottles.

The pH of samples received by the laboratory, any adjustment of pH done by the laboratory, and any other preservatives added by the laboratory after sample receipt are not reported.

Sample Analysis

The Laboratories

Analyses were performed by Roy F. Weston, Inc.-Lionville (PA); Weston-Gulf Coast Laboratories, Inc., of University Park, IL; Roy F. Weston, Inc.-Stockton (CA); and TMA/Eberline of Oak Ridge, TN. All of the laboratories performing analyses for this project have been certified, or have applied for certification, by SCDHEC.

TMA/Eberline, Inc., (TMA), Performance Evaluations

TMA participated in two types of national performance evaluation programs during 1993. One study, sponsored by EPA's Environmental Monitoring Systems Laboratory (EMSL) of Las Vegas, NV, was conducted from January through August 1993. EMSL provided samples spiked with known concentrations of constituents to laboratories seeking certification to analyze those constituents. TMA submitted results to EPA for certification. One TMA result for gross alpha in water was outside the normalized deviation range of +3.0 to –3.0; however, TMA stated that thorium-230, which was used by EPA, has a 50% lower counting efficiency than americium-241, the EPA-recommended isotope for alpha-absorption efficiency curves. According to TMA, correction for the 50% difference gives a value within range. TMA's result for nonvolatile beta in air filters also was outside of range. Table B-1 in Appendix B contains EPA/EMSL Intercomparison Studies Program data for TMA.

The other program was conducted by the Department of Energy (DOE) and used water, soil, air, and vegetation matrices. Results were reported for March and September 1993. The DOE program does not include a range of acceptable values; instead, the value obtained by the lab is divided by the DOE's known value to give a ratio. Tables B-2 and -3 in Appendix B contain results for March 1993 and September 1993, respectively. For the water and soil samples, one analysis for strontium-90 (Table B-2) was outside the ratio range of 0.5 to 1.5. Results for one sample each of americium-241, cesium-137, potassium-40, strontium-90, and uranium mass concentration, although acceptable, fell within the low advisory range of 0.5–0.8. Results for one sample each of americium-241, cesium-137, and plutonium-239, although acceptable, fell within the high advisory range of 1.2–1.5.

Roy F. Weston, Inc. (WA), Performance Evaluations

Roy F. Weston, Inc.-Lionville participated in the EPA Water Pollution Laboratory Performance Evaluation Study (WP030), for which results were reported in June 1993. EPA conducts the water pollution study biannually to certify laboratories for specific analyses. EPA's Environmental Monitoring Systems Laboratory (EMSL) of Cincinnati, OH, prepares water samples spiked with known concentrations of constituents found in polluted waters and submits them to all laboratories seeking certification to analyze wastewater. EMSL evaluates the results, using limits statistically based on the performance of approximately 100 top-rated laboratories that analyze each constituent by the same procedure as the laboratory being evaluated. Table B-4 in Appendix B contains the results of the June study. Results for two samples of mercury and one sample each of

beryllium, orthophosphate, total phosphorous, and non-filterable residue were outside the acceptable range. Results for two samples of selenium and one sample each of chloride, non-filterable residue, orthophosphate, total phosphorous, and silver, although within the acceptable range, were near the limits; the laboratory was instructed to check them for error.

Weston Laboratories also participated in two EPA Water Supply Laboratory Performance Evaluation Studies, WS031 and WS032, for which results were reported in February and August of 1993. Tables B-5 and -6 in Appendix B contain results for WS031 and WS032, respectively. In the former study, results for one sample each of bromodichloromethane, cadmium, chlorodibromomethane, fluorotrichloroethane, styrene, and zinc were outside the acceptable range. In the latter study, results for one sample each of beryllium, hexachlorobenzene, 1,1,1-trichloroethane, and trifluralin were outside the acceptable range.

Quality Control Standards

During April and June 1993, EPD/EMS conducted a quality assessment of Weston laboratory by sending them a set of certified environmental quality control standards from Environmental Resource Associates (ERA) of Arvada, CO (Lot Numbers 418, 549, 3205, 3405, 8910, and 9950). The results are listed in Table B-7.

Weston's results were compared with the ERA-certified values and advisory ranges. Weston did not analyze alachlor, alkalinity (as $CaCO_3$), ammonia nitrogen, atrazine, biological oxygen demand, boron, chemical oxygen demand, dalapon, dinoseb, molybdenum, nitrate-nitrite as nitrogen, nitrogen by Kjeldahl method, pentachlorophenol (by method 8150), pichloram, simazine, or strontium because they are not in the current contract.

Of 96 analyses reported by Weston, 92, or 95.8%, fell within the advisory range.

Analytical Methods and Detection Limits

Generally, the analytical methods used for this project were those specified in the work plan. See the "Work Plan Assessment" section of this report for a discussion of some differences between methods specified in the work plan and methods actually used.

Initially, Weston used EPA 200-series methods for metals analyses. These methods do not meet the data quality requirements of this project because there are no matrix spikes in the 200-series methods. (There are, however, lab blank spikes.) When the subcontract technical representative (STR) was told of this problem, he arranged for the lab to run the additional QC samples required by the equivalent SW-846 methods and to resubmit the data using the SW-846 method codes. Holding time for the samples had not been exceeded. Thereafter, under that STR's contract, the lab used SW-846 methods.

Several radionuclide methods specified in the work plan were not used. The most important difference is that instead of using Standard Method 706 to analyze total radium, the radionuclide laboratory (TMA/Eberline) used EPA903.0, which analyzes only alpha emitters, and thus does not measure the presence of radium-228.

A table of methods and detection limits follows. The column headed *Lab DL* contains the detection limit the laboratories expected to be able to achieve. The column headed *Reference DL* contains the detection limit given in the method description, the source for which is in the column headed *Reference.* The method reference is provided even if it does not include a detection limit for a particular constituent. See the "References" section of this report for further information on the sources.

Contract-required detection limits generally were met throughout the project. The detection limits reported in the data tables are the sample quantitation limits. Dilution factor, aliquot size, soil moisture, and method detection limit are used to calculate the sample quantitation limits. In addition, there are recommended dilutions in the method, such as those for medium level analyses, which are not reported as dilution factors in the electronic data deliverable. Because the sample aliquot size was not reported, it was not possible to reproduce the calculation of the sample quantitation limit; however, the sample quantitation limits were checked for reasonableness.

Table 8. Analytical Methods and Detection Limits

Analyte	Method	Units	Lab DL	Nominal DL	Reference
Soil					
Percent solids	ASTM2216	%	0.1	NA	ASTM
Cyanide	EPA335.3	mg/kg	1	NA	EPA-600/4-79-020
Total organic carbon	EPA415.1	mg/kg	20	NA	EPA-600/4-79-020
Gross alpha	EPA900.0	pCi/g	10	NA	EPA-600/4-80-032
Nonvolatile beta	EPA900.0	pCi/g	1.0	NA	EPA-600/4-80-032
Total alpha-emitting radium	EPA903.0	pCi/g	1.0	NA	EPA-600/4-80-032
Tritium	EPA906.0M	pCi/g	5	NA	EPA-600/4-80-032
Copper	EPA6010	mg/kg	5.0	NA	SW-846
Iron	EPA6010	mg/kg	10	NA	SW-846
Magnesium	EPA6010	mg/kg	500.00	NA	SW-846
Manganese	EPA6010	mg/kg	3.0	NA	SW-846
Nickel	EPA6010	mg/kg	8.0	NA	SW-846
Potassium	EPA6010	mg/kg	500.0	NA	SW-846
Silver	EPA6010	mg/kg	2.0	NA	SW-846
Sodium	EPA6010	mg/kg	500.0	NA	SW-846
Vanadium	EPA6010	mg/kg	5.0	NA	SW-846
Zinc	EPA6010	mg/kg	2.0	NA	SW-846
Arsenic	EPA7060	mg/kg	2.0	NA	SW-846
Lead	EPA7421	mg/kg	0.60	NA	SW-846
Mercury	EPA7470	mg/kg	0.10	NA	SW-846
Selenium	EPA7740	mg/kg	1.0	NA	SW-846
Thallium	EPA7841	mg/kg	1.0	NA	SW-846
Aldrin	EPA8080	µg/kg	1.7	2.68	SW-846
alpha-BHC	EPA8080	µg/kg	1.7	2.01	SW-846
beta-BHC	EPA8080	µg/kg	1.7	4.02	SW-846

NA - Not available.
M - The method was modified by the laboratory.

Table 8. Analytical Methods and Detection Limits, Continued

Analyte	Method	Units	Lab DL	Nominal DL	Reference
delta-BHC	EPA8080	µg/kg	1.7	6.03	SW-846
gamma-BHC	EPA8080	µg/kg	1.7	2.68	SW-846
alpha-Chlordane	EPA8080	µg/kg	1.7		
gamma-Chlordane	EPA8080	µg/kg	1.7		
p,p'-DDD	EPA8080	µg/kg	3.3	7.37	SW-846
p,p'-DDE	EPA8080	µg/kg	3.3	2.68	SW-846
p,p'-DDT	EPA8080	µg/kg	3.3	8.04	SW-846
Dieldrin	EPA8080	µg/kg	3.3	1.34	SW-846
Endosulfan I	EPA8080	µg/kg	1.7	9.38	SW-846
Endosulfan II	EPA8080	µg/kg	3.3	2.68	SW-846
Endosulfan sulfate	EPA8080	µg/kg	3.3	44.22	SW-846
Endrin	EPA8080	µg/kg	3.3	4.02	SW-846
Endrin ketone	EPA8080	µg/kg	3.3		
Heptachlor	EPA8080	µg/kg	1.7	2.01	SW-846
Heptachlor epoxide	EPA8080	µg/kg	1.7	55.61	SW-846
Methoxychlor	EPA8080	µg/kg	17	117.92	SW-846
PCB 1016	EPA8080	µg/kg	33	NA	SW-846
PCB 1221	EPA8080	µg/kg	67	NA	SW-846
PCB 1232	EPA8080	µg/kg	33	NA	SW-846
PCB 1242	EPA8080	µg/kg	33	43.55	SW-846
PCB 1248	EPA8080	µg/kg	33	NA	SW-846
PCB 1254	EPA8080	µg/kg	33	NA	SW-846
PCB 1260	EPA8080	µg/kg	33	NA	SW-846
Toxaphene	EPA8080	µg/kg	170	160.80	SW-846
Acetone	EPA8240	µg/kg	10	100	SW-846
Benzene	EPA8240	µg/kg	5	5	SW-846
Bromodichloromethane	EPA8240	µg/kg	5	5	SW-846
Bromoform	EPA8240	µg/kg	5	5	SW-846
Bromomethane	EPA8240	µg/kg	10	10	SW-846
2-Butanone	EPA8240	µg/kg	10	100	SW-846
Carbon disulfide	EPA8240	µg/kg	5	5	SW-846
Carbon tetrachloride	EPA8240	µg/kg	5	5	SW-846
Chlorobenzene	EPA8240	µg/kg	5	5	SW-846
Chloroethane	EPA8240	µg/kg	10	10	SW-846
2-Chloroethyl vinyl ether	EPA8240	µg/kg	10	10	SW-846
Chloroform	EPA8240	µg/kg	5	5	SW-846
Chloromethane	EPA8240	µg/kg	10	10	SW-846
Dibromochloromethane	EPA8240	µg/kg	5	5	SW-846
1,1-Dichloroethane	EPA8240	µg/kg	5	5	SW-846
1,2-Dichloroethane	EPA8240	µg/kg	5	5	SW-846
1,1-Dichloroethene	EPA8240	µg/kg	5	5	SW-846
1,2-Dichloroethylene (total)	EPA8240	µg/kg	5		
trans-1,2-Dichloroethylene	EPA8240	µg/kg	5	5	SW-846
1,2-Dichloropropane	EPA8240	µg/kg	5	5	SW-846
cis-1,3-Dichloropropene	EPA8240	µg/kg	5	5	SW-846
trans-1,3-Dichloropropene	EPA8240	µg/kg	5	5	SW-846
Ethyl benzene	EPA8240	µg/kg	5	5	SW-846
2-Hexanone	EPA8240	µg/kg	10	50	SW-846
Methylene chloride	EPA8240	µg/kg	5	5	SW-846

Table 8. Analytical Methods and Detection Limits, Continued

Analyte	Method	Units	Lab DL	Nominal DL	Reference
4-Methyl-2-pentanone	EPA8240	µg/kg	10	50	SW-846
Styrene	EPA8240	µg/kg	5	5	SW-846
1,1,2,2-Tetrachloroethane	EPA8240	µg/kg	5	5	SW-846
Tetrachloroethene	EPA8240	µg/kg	5	5	SW-846
Toluene	EPA8240	µg/kg	5	5	SW-846
1,1,1-Trichloroethane	EPA8240	µg/kg	5	5	SW-846
1,1,2-Trichloroethane	EPA8240	µg/kg	5	5	SW-846
Trichloroethene	EPA8240	µg/kg	5	5	SW-846
Vinyl acetate	EPA8240	µg/kg	10	50	SW-846
Vinyl chloride	EPA8240	µg/kg	10	10	SW-846
Xylenes (total)	EPA8240	µg/kg	5	5	SW-846
Acenaphthene	EPA8270	µg/kg	330	660	SW-846
Acenaphthylene	EPA8270	µg/kg	330	660	SW-846
Anthracene	EPA8270	µg/kg	330	660	SW-846
Benzo(a)anthracene	EPA8270	µg/kg	330	660	SW-846
Benzo(a)pyrene	EPA8270	µg/kg	330	660	SW-846
Benzo(b)fluoranthene	EPA8270	µg/kg	330	660	SW-846
Benzo(g,h,i)perylene	EPA8270	µg/kg	330	660	SW-846
Benzoic acid	EPA8270	µg/kg	1600	3300	SW-846
Benzo(k)fluoranthene	EPA8270	µg/kg	330	660	SW-846
Benzyl alcohol	EPA8270	µg/kg	330	1300	SW-846
bis(2-Chloroethoxy)methane	EPA8270	µg/kg	330	660	SW-846
bis(2-Chloroethyl) ether	EPA8270	µg/kg	330	660	SW-846
bis(2-Chloroisopropyl) ether	EPA8270	µg/kg	330	660	SW-846
bis(2-Ethylhexyl) phthalate	EPA8270	µg/kg	330	660	SW-846
4-Bromophenyl phenyl ether	EPA8270	µg/kg	330	660	SW-846
Butyl benzyl phthalate	EPA8270	µg/kg	330	660	SW-846
4-Chloroaniline	EPA8270	µg/kg	330	1300	SW-846
4-Chloro-3-methylphenol (para-Chloro-meta-cresol)	EPA8270	µg/kg	330	1300	SW-846
2-Chloronaphthalene	EPA8270	µg/kg	330	660	SW-846
2-Chlorophenol	EPA8270	µg/kg	330	660	SW-846
4-Chlorophenyl phenyl ether	EPA8270	µg/kg	330	660	SW-846
Chrysene	EPA8270	µg/kg	330	660	SW-846
Dibenz(a,h)anthracene	EPA8270	µg/kg	330	660	SW-846
Dibenzofuran	EPA8270	µg/kg	330	660	SW-846
1,2-Dichlorobenzene	EPA8270	µg/kg	330	660	SW-846
1,3-Dichlorobenzene	EPA8270	µg/kg	330	660	SW-846
1,4-Dichlorobenzene	EPA8270	µg/kg	330	660	SW-846
3,3'-Dichlorobenzidine	EPA8270	µg/kg	660	1300	SW-846
2,4-Dichlorophenol	EPA8270	µg/kg	330	660	SW-846
Diethylphthalate	EPA8270	µg/kg	330	660	SW-846
2,4-Dimethylphenol	EPA8270	µg/kg	330	660	SW-846
Dimethyl phthalate	EPA8270	µg/kg	330	660	SW-846
Di-n-butyl phthalate	EPA8270	µg/kg	330	660	SW-846
4,6-Dinitro-2-methylphenol (4,6-Dinitro-ortho-cresol)	EPA8270	µg/kg	1600	3300	SW-846
2,4-Dinitrophenol	EPA8270	µg/kg	1600	3300	SW-846
2,4-Dinitrotoluene	EPA8270	µg/kg	330	660	SW-846

Table 8. Analytical Methods and Detection Limits, Continued

Analyte	Method	Units	Lab DL	Nominal DL	Reference
2,6-Dinitrotoluene	EPA8270	µg/kg	330	660	SW-846
Di-n-octyl phthalate	EPA8270	µg/kg	330	660	SW-846
Fluoranthene	EPA8270	µg/kg	330	660	SW-846
Fluorene	EPA8270	µg/kg	330	660	SW-846
Hexachlorobenzene	EPA8270	µg/kg	330	660	SW-846
Hexachlorobutadiene	EPA8270	µg/kg	330	660	SW-846
Hexachlorocyclopentadiene	EPA8270	µg/kg	330	660	SW-846
Hexachloroethane	EPA8270	µg/kg	330	660	SW-846
Indeno(1,2,3-cd)pyrene	EPA8270	µg/kg	330	660	SW-846
Isophorone	EPA8270	µg/kg	330	660	SW-846
2-Methylnaphthalene	EPA8270	µg/kg	330	660	SW-846
2-Methylphenol (o-Cresol)	EPA8270	µg/kg	330	660	SW-846
4-Methylphenol (p-Cresol)	EPA8270	µg/kg	330	660	SW-846
Naphthalene	EPA8270	µg/kg	330	660	SW-846
2-Nitroaniline	EPA8270	µg/kg	1600	3300	SW-846
3-Nitroaniline	EPA8270	µg/kg	1600	3300	SW-846
4-Nitroaniline	EPA8270	µg/kg	1600	3300	SW-846
Nitrobenzene	EPA8270	µg/kg	330	660	SW-846
2-Nitrophenol	EPA8270	µg/kg	330	660	SW-846
4-Nitrophenol	EPA8270	µg/kg	1600	3300	SW-846
N-Nitroso-di-n-propylamine	EPA8270	µg/kg	330	660	SW-846
N-Nitrosodiphenylamine	EPA8270	µg/kg	330	660	SW-846
Pentachlorophenol	EPA8270	µg/kg	1600	3300	SW-846
Phenanthrene	EPA8270	µg/kg	330	660	SW-846
Phenol	EPA8270	µg/kg	330	660	SW-846
Pyrene	EPA8270	µg/kg	330	660	SW-846
1,2,4-Trichlorobenzene	EPA8270	µg/kg	330	660	SW-846
2,4,5-Trichlorophenol	EPA8270	µg/kg	1600	660	SW-846
2,4,6-Trichlorophenol	EPA8270	µg/kg	330	660	SW-846
OCDD	EPA8280	ng/g	2	2.35	SW-846
OCDF	EPA8280	ng/g	2		SW-846
2,3,7,8-TCDD	EPA8280	ng/g	1	0.17	SW-846
2,3,7,8-TCDF	EPA8280	ng/g	1	0.11	SW-846
Total HPCDD	EPA8280	ng/g	1		SW-846
Total HPCDF	EPA8280	ng/g	1		SW-846
Total HXCDD	EPA8280	ng/g	1		SW-846
Total HXCDF	EPA8280	ng/g	1		SW-846
Total PECDD	EPA8280	ng/g	1		SW-846
Total PECDF	EPA8280	ng/g	1		SW-846
Total TCDD	EPA8280	ng/g	1		SW-846
Total TCDF	EPA8280	ng/g	1		SW-846
pH	EPA9045	pH		NA	SW-846
Specific conductance	EPA9050M	µS/cm		NA	SW-846
Cation exchange capacity	EPA9080	meq/L	0.01	NA	SW-846

Table 8. Analytical Methods and Detection Limits, Continued

Analyte	Method	Units	Lab DL	Nominal DL	Reference
Water					
Total dissolved solids	EPA160.1	mg/L		NA	EPA-600/4-79-020
Total suspended solids	EPA160.2	mg/L		NA	Keith
Chloride	EPA300.0	mg/L	5	0.015	Keith
Fluoride	EPA300.0	mg/L			
Nitrate as nitrogen	EPA300.0	mg/L	0.1	0.002	Pfaff
Sulfate	EPA300.0	mg/L	5	0.206	Keith
Cyanide	EPA335.3	µg/L	5	NA	EPA-600/4-79-020
Total organic carbon	EPA415.1	mg/L		1	EPA-600/4-79-020
Total organic halogens	EPA450.1	µg/L		NA	Keith
Gross alpha	EPA900.0	pCi/L	2.0	3.00	EPA-600/4-80-032
Nonvolatile beta	EPA900.0	pCi/L	1.0	4.00	EPA-600/4-80-032
Total alpha-emitting radium	EPA903.0	pCi/L	1.0	1.00	EPA-600/4-80-032
Tritium	EPA906.0M	pCi/mL	1.0	NA	EPA-600/4-80-032
Aluminum	EPA6010	µg/L	200.0	45.00	SW-846
Antimony	EPA6010	µg/L	60.0	32.00	SW-846
Barium	EPA6010	µg/L	200	2.00	SW-846
Beryllium	EPA6010	µg/L	5	0.30	SW-846
Cadmium	EPA6010	µg/L	5.0	4.00	SW-846
Calcium	EPA6010	µg/L	5000.0	10.00	SW-846
Chromium	EPA6010	µg/L	10	7.00	SW-846
Cobalt	EPA6010	µg/L	50	7.00	SW-846
Copper	EPA6010	µg/L	25	6.00	SW-846
Iron	EPA6010	mg/L	20	0.007	SW-846
Magnesium	EPA6010	µg/L	5000.0	30.00	SW-846
Manganese	EPA6010	µg/L	15	2.00	SW-846
Nickel	EPA6010	µg/L	40	15.00	SW-846
Potassium	EPA6010	µg/L	5000	NA	SW-846
Silver	EPA6010	µg/L	10	7.00	SW-846
Sodium	EPA6010	µg/L	5000.0	29.00	SW-846
Vanadium	EPA6010	µg/L	50.0	8.00	SW-846
Zinc	EPA6010	µg/L	20.0	2.00	SW-846
Arsenic	EPA7060	µg/L	10	1.00	SW-846
Lead	EPA7421	µg/L	3.0	1.00	SW-846
Mercury	EPA7470	µg/L	0.20	0.20	SW-846
Selenium	EPA7740	µg/L	5.0	2.00	SW-846
Thallium	EPA7841	µg/L	10.0	1.00	SW-846
Aldrin	EPA8080	µg/L	0.05	0.04	SW-846
alpha-BHC	EPA8080	µg/L	0.05	0.03	SW-846
beta-BHC	EPA8080	µg/L	0.05	0.06	SW-846
delta-BHC	EPA8080	µg/L	0.05	0.09	SW-846
gamma-BHC	EPA8080	µg/L	0.05	0.04	SW-846
alpha-Chlordane	EPA8080	µg/L	0.05		
gamma-Chlordane	EPA8080	µg/L	0.05		
p,p'-DDD	EPA8080	µg/L	0.10	0.11	SW-846
p,p'-DDE	EPA8080	µg/L	0.10	0.04	SW-846
p,p'-DDT	EPA8080	µg/L	0.10	0.12	SW-846
Dieldrin	EPA8080	µg/L	0.10	0.02	SW-846

Table 8. Analytical Methods and Detection Limits, Continued

Analyte	Method	Units	Lab DL	Nominal DL	Reference
Endosulfan I	EPA8080	µg/L	0.05	0.14	SW-846
Endosulfan II	EPA8080	µg/L	0.10	0.04	SW-846
Endosulfan sulfate	EPA8080	µg/L	0.10	0.66	SW-846
Endrin	EPA8080	µg/L	0.10	0.06	SW-846
Endrin ketone	EPA8080	µg/L	0.10		
Heptachlor	EPA8080	µg/L	0.05	0.03	SW-846
Heptachlor epoxide	EPA8080	µg/L	0.05	0.83	SW-846
Methoxychlor	EPA8080	µg/L	0.50	1.76	SW-846
PCB 1016	EPA8080	µg/L	1.0	NA	SW-846
PCB 1221	EPA8080	µg/L	2.0	NA	SW-846
PCB 1232	EPA8080	µg/L	1.0	NA	SW-846
PCB 1242	EPA8080	µg/L	1.0	0.65	SW-846
PCB 1248	EPA8080	µg/L	1.0	NA	SW-846
PCB 1254	EPA8080	µg/L	1.0	NA	SW-846
PCB 1260	EPA8080	µg/L	1.0	NA	SW-846
Toxaphene	EPA8080	µg/L	5.0	2.40	SW-846
Acetone	EPA8240	µg/L	10	100	SW-846
Benzene	EPA8240	µg/L	5	5	SW-846
Bromodichloromethane	EPA8240	µg/L	5	5	SW-846
Bromoform	EPA8240	µg/L	5	5	SW-846
Bromomethane	EPA8240	µg/L	10	10	SW-846
2-Butanone	EPA8240	µg/L	10	100	SW-846
Carbon disulfide	EPA8240	µg/L	5	5	SW-846
Carbon tetrachloride	EPA8240	µg/L	5	5	SW-846
Chlorobenzene	EPA8240	µg/L	5	5	SW-846
Chloroethane	EPA8240	µg/L	10	10	SW-846
2-Chloroethyl vinyl ether	EPA8240	µg/L	10	10	SW-846
Chloroform	EPA8240	µg/L	5	5	SW-846
Chloromethane	EPA8240	µg/L	10	10	SW-846
Dibromochloromethane	EPA8240	µg/L	5	5	SW-846
1,1-Dichloroethane	EPA8240	µg/L	5	5	SW-846
1,2-Dichloroethane	EPA8240	µg/L	5	5	SW-846
1,1-Dichloroethene	EPA8240	µg/L	5	5	SW-846
1,2-Dichloroethene (total)	EPA8240	µg/L	5		
trans-1,2-Dichloroethene	EPA8240	µg/L	5	5	SW-846
1,2-Dichloropropane	EPA8240	µg/L	5	5	SW-846
cis-1,3-Dichloropropene	EPA8240	µg/L	5	5	SW-846
trans-1,3-Dichloropropene	EPA8240	µg/L	5	5	SW-846
Ethyl benzene	EPA8240	µg/L	5	5	SW-846
2-Hexanone	EPA8240	µg/L	10	50	SW-846
Methylene chloride	EPA8240	µg/L	5	5	SW-846
4-Methyl-2-pentanone	EPA8240	µg/L	10	50	SW-846
Styrene	EPA8240	µg/L	5	5	SW-846
1,1,2,2-Tetrachloroethane	EPA8240	µg/L	5	5	SW-846
Tetrachloroethene	EPA8240	µg/L	5	5	SW-846
Toluene	EPA8240	µg/L	5	5	SW-846
1,1,1-Trichloroethane	EPA8240	µg/L	5	5	SW-846
1,1,2-Trichloroethane	EPA8240	µg/L	5	5	SW-846
Trichloroethene	EPA8240	µg/L	5	5	SW-846

Table 8. Analytical Methods and Detection Limits, Continued

Analyte	Method	Units	Lab DL	Nominal DL	Reference
Vinyl acetate	EPA8240	µg/L	10	50	SW-846
Vinyl chloride	EPA8240	µg/L	10	10	SW-846
Xylenes (total)	EPA8240	µg/L	5	5	SW-846
Acenaphthene	EPA8270	µg/L	10	10	SW-846
Acenaphthylene	EPA8270	µg/L	10	10	SW-846
Anthracene	EPA8270	µg/L	10	10	SW-846
Benzo(a)anthracene	EPA8270	µg/L	10	10	SW-846
Benzo(a)pyrene	EPA8270	µg/L	10	10	SW-846
Benzo(b)fluoranthene	EPA8270	µg/L	10	10	SW-846
Benzo(g,h,i)perylene	EPA8270	µg/L	10	10	SW-846
Benzoic acid	EPA8270	µg/L	50	50	SW-846
Benzo(k)fluoranthene	EPA8270	µg/L	10	10	SW-846
Benzyl alcohol	EPA8270	µg/L	10	20	SW-846
bis(2-Chloroethoxy) methane	EPA8270	µg/L	10	10	SW-846
bis(2-Chloroethyl) ether	EPA8270	µg/L	10	10	SW-846
bis(2-Chloroisopropyl) ether	EPA8270	µg/L	10	10	SW-846
bis(2-Ethylhexyl) phthalate	EPA8270	µg/L	10	10	SW-846
4-Bromophenyl phenyl ether	EPA8270	µg/L	10	10	SW-846
Butyl benzyl phthalate	EPA8270	µg/L	10	10	SW-846
4-Chloroaniline	EPA8270	µg/L	10	20	SW-846
4-Chloro-3-methylphenol (para-Chloro-meta-cresol)	EPA8270	µg/L	10	20	SW-846
2-Chloronaphthalene	EPA8270	µg/L	10	10	SW-846
2-Chlorophenol	EPA8270	µg/L	10	10	SW-846
4-Chlorophenyl phenyl ether	EPA8270	µg/L	10	10	SW-846
Chrysene	EPA8270	µg/L	10	10	SW-846
Dibenz(a,h)anthracene	EPA8270	µg/L	10	10	SW-846
Dibenzofuran	EPA8270	µg/L	10	10	SW-846
1,2-Dichlorobenzene	EPA8270	µg/L	10	10	SW-846
1,3-Dichlorobenzene	EPA8270	µg/L	10	10	SW-846
1,4-Dichlorobenzene	EPA8270	µg/L	10	10	SW-846
3,3'-Dichlorobenzidine	EPA8270	µg/L	20	20	SW-846
2,4-Dichlorophenol	EPA8270	µg/L	10	10	SW-846
Diethylphthalate	EPA8270	µg/L	10	10	SW-846
2,4-Dimethylphenol	EPA8270	µg/L	10	10	SW-846
Dimethyl phthalate	EPA8270	µg/L	10	10	SW-846
Di-n-butylphthalate	EPA8270	µg/L	10	10	SW-846
4,6-Dinitro-2-methylphenol (4,6-Dinitro-ortho-cresol)	EPA8270	µg/L	50	50	SW-846
2,4-Dinitrophenol	EPA8270	µg/L	50	50	SW-846
2,4-Dinitrotoluene	EPA8270	µg/L	10	10	SW-846
2,6-Dinitrotoluene	EPA8270	µg/L	10	10	SW-846
Di-n-octyl phthalate	EPA8270	µg/L	10	10	SW-846
Fluoranthene	EPA8270	µg/L	10	10	SW-846
Fluorene	EPA8270	µg/L	10	10	SW-846
Hexachlorobenzene	EPA8270	µg/L	10	10	SW-846
Hexachlorobutadiene	EPA8270	µg/L	10	10	SW-846
Hexachlorocyclo-pentadiene	EPA8270	µg/L	10	10	SW-846

Table 8. Analytical Methods and Detection Limits, Continued

Analyte	Method	Units	Lab DL	Nominal DL	Reference
Hexachloroethane	EPA8270	µg/L	10	10	SW-846
Indeno(1,2,3-cd)pyrene	EPA8270	µg/L	10	10	SW-846
Isophorone	EPA8270	µg/L	10	10	SW-846
2-Methylnaphthalene	EPA8270	µg/L	10	10	SW-846
2-Methylphenol (o-Cresol)	EPA8270	µg/L	10	10	SW-846
4-Methylphenol (p-Cresol)	EPA8270	µg/L	10	10	SW-846
Naphthalene	EPA8270	µg/L	10	10	SW-846
2-Nitroaniline	EPA8270	µg/L	50	50	SW-846
3-Nitroaniline	EPA8270	µg/L	50	50	SW-846
4-Nitroaniline	EPA8270	µg/L	50	50	SW-846
Nitrobenzene	EPA8270	µg/L	10	10	SW-846
2-Nitrophenol	EPA8270	µg/L	10	10	SW-846
4-Nitrophenol	EPA8270	µg/L	50	50	SW-846
N-Nitroso-di-n-propylamine	EPA8270	µg/L	10	10	SW-846
N-Nitrosodiphenylamine	EPA8270	µg/L	10	10	SW-846
Pentachlorophenol	EPA8270	µg/L	50	50	SW-846
Phenanthrene	EPA8270	µg/L	10	10	SW-846
Phenol	EPA8270	µg/L	10	10	SW-846
Pyrene	EPA8270	µg/L	10	10	SW-846
1,2,4-Trichlorobenzene	EPA8270	µg/L	10	10	SW-846
2,4,5-Trichlorophenol	EPA8270	µg/L	50	10	SW-846
2,4,6-Trichlorophenol	EPA8270	µg/L	10	10	SW-846
OCDD	EPA8280	ng/L	10	3.93	SW-846
OCDF	EPA8280	ng/L	10		
2,3,7,8-TCDD	EPA8280	ng/L	5.0	0.44	SW-846
2,3,7,8-TCDF	EPA8280	ng/L	5.0	0.63	SW-846
Total HPCDD	EPA8280	ng/L	5		SW-846
Total HPCDF	EPA8280	ng/L	5		SW-846
Total HXCDD	EPA8280	ng/L	5		SW-846
Total HXCDF	EPA8280	ng/L	5		SW-846
Total PECDD	EPA8280	ng/L	5		SW-846
Total PECDF	EPA8280	ng/L	5		SW-846
Total TCDD	EPA8280	ng/L	5		SW-846
Total TCDF	EPA8280	ng/L	5		SW-846
pH	EPA9045	pH		NA	SW-846
Specific conductance	EPA9050M	µS/cm		NA	SW-846
TCLP					
Arsenic, TCLP	EPA6010	µg/L	10	53.00	SW-846
Barium, TCLP	EPA6010	µg/L	200	2.00	SW-846
Cadmium, TCLP	EPA6010	µg/L	5	4.00	SW-846
Chromium, TCLP	EPA6010	µg/L	10	7.00	SW-846
Lead, TCLP	EPA6010	µg/L	3	42.00	SW-846
Selenium, TCLP	EPA6010	µg/L	5	75.00	SW-846
Mercury, TCLP	EPA7470	µg/L	0.2	0.20	SW-846
gamma-BHC	EPA8080	µg/L	0.05	0.04	SW-846
alpha-Chlordane	EPA8080	µg/L	0.05		
gamma-Chlordane	EPA8080	µg/L	0.05		

Table 8. Analytical Methods and Detection Limits, Continued

Analyte	Method	Units	Lab DL	Nominal DL	Reference
Endrin	EPA8080	µg/L	0.1	0.06	SW-846
Heptachlor (and its hydroxide)	EPA8080	µg/L	0.05	0.03	SW-846
Heptachlor epoxide	EPA8080	µg/L		0.83	SW-846
Methoxychlor	EPA8080	µg/L	0.5	1.76	SW-846
Toxaphene	EPA8080	µg/L	5	2.40	SW-846
2,4-D	EPA8150	µg/L	10	12.0	SW-846
2,4,5-T	EPA8150	µg/L	5	2.0	SW-846
2,4,5-TP (Silvex)	EPA8150	µg/L	5	1.70	SW-846
Benzene	EPA8240	µg/L	5	5.00	SW-846
Carbon tetrachloride	EPA8240	µg/L	5	5.00	SW-846
Chlorobenzene	EPA8240	µg/L	5	5.00	SW-846
Chloroform	EPA8240	µg/L	5	5.00	SW-846
m-Cresol (3-Methylphenol)	EPA8270	µg/L	10		
o-Cresol (2-Methylphenol)	EPA8270	µg/L	10	10.00	SW-846
p-Cresol (4-Methylphenol)	EPA8270	µg/L	10	10.00	SW-846
1,2-Dichloroethane	EPA8240	µg/L	5		
1,1-Dichloroethylene	EPA8240	µg/L	5	5.00	SW-846
Methyl ethyl ketone	EPA8240	µg/L	10	100.00	SW-846
Tetrachloroethylene	EPA8240	µg/L	5	5.00	SW-846
Trichloroethylene	EPA8240	µg/L	5	5.00	SW-846
Vinyl chloride	EPA8240	µg/L	10	10.00	SW-846
1,4-Dichlorobenzene	EPA8270	µg/L	10	10.00	SW-846
2,4-Dinitrotoluene	EPA8270	µg/L	10	10.00	SW-846
Hexachlorobenzene	EPA8270	µg/L		10.00	SW-846
Hexachlorobutadiene	EPA8270	µg/L	10	10.00	SW-846
Hexachloroethane	EPA8270	µg/L	10	10.00	SW-846
Nitrobenzene	EPA8270	µg/L	10	10.00	SW-846
Pentachlorophenol	EPA8270	µg/L	50	50.00	SW-846
Pyridine	EPA8270	µg/L	10		
2,4,5-Trichlorophenol	EPA8270	µg/L	50	10.00	SW-846
2,4,6-Trichlorophenol	EPA8270	µg/L	10	10.00	SW-846

Laboratory Quality Assurance/Quality Control (QA/QC)

The laboratories follow their own Quality Assurance plans, which are designed to measure and document the accuracy and precision of the laboratory for the various analytical methods it performs. The laboratories also are guided by published method-specific QA/QC requirements as well as other regulatory and contract-required quality assurance procedures. Their adherence to QA/QC practices is evaluated in a number of ways noted in this report. One general measure is examination of the laboratory's achievement in analyses of performance evaluation samples and quality control standards, as discussed above. The performance evaluations discussed below are another.

The sections on validation and verification in this report provide information on evaluation of the laboratories with respect to the specific analyses performed for this project.

Performance Reviews

The laboratories providing analytical services to EMS are periodically evaluated for adherence to their Quality Assurance plans and to ensure that the analytical work is being performed in the contract-prescribed manner with respect to proper laboratory procedure, method execution, documentation, record-keeping, and data reporting. The performance reviews, or annual evaluations, are undertaken to identify potential problems at the laboratory or with the contract, as part of continuing efforts to maintain high-quality defensible data for environmental monitoring and assessment at SRS.

Roy F. Weston Analytical Laboratories

Roy F. Weston, the contracted laboratory, was visited by EMS personnel on June 14–15, 1993. The performance review produced no findings of nonconformance to written requirements. The review team made several observations of conditions or practices which could, in its opinion, affect safety, productivity, or reliability. The team made a recommendation corresponding to each observation, as follows.

Housekeeping.
The air-circulating vent above the metals preparation bench was very dusty. This could result in contamination of samples during preparation, which in turn could affect the level of metals detected in blanks and WSRC samples.

Recommendation.
Improve housekeeping in this area by cleaning the vent and beginning a routine of cleaning and inspecting air vents.

Pipette calibration.
There is no evidence of an adjustable pipette calibration program. Inaccurate pipette calibrations could drastically affect the accuracy and precision of the data produced.

Recommendation.
Weston should establish an adjustable pipette calibration program and document the program. It should include a control chart program based on the weight of the volume used during pipetting.

Documentation.
Original entries, and some corrections to the original entries, in the maintenance log for the mercury analyzer are inconsistent. Analyst initials are not routinely written next to each entry in the log. Overall documentation does not adhere to the guidelines established by EPA quality assurance standards or to Weston QA/QC protocol.

Recommendation.
Analysts should routinely place initials next to each entry in all logs. Additional training for Weston personnel on basic documentation is essential if the lab is to adhere to its QA/QC protocol.

Analyzer maintenance.
Maintenance of the mercury analyzer does not adhere to EPA QC protocol. Specifically, the wash receptacle of the mercury analyzer is never cleaned out. The analyst simply adds water as needed, which could result in contamination during the analysis of mercury in WSRC samples.

Recommendation.
The wash receptacle should be cleaned out once a week to prevent build-up of contaminants. All maintenance operations should be performed according to EPA procedures to eliminate any imprecision in the mercury determinations.

ICP instrument maintenance.
A deficiency was encountered in the maintenance of ICP instruments used for metal determination: The required monthly change-out of the air filter was not performed in May 1993.

Recommendation.
Perform all maintenance operations as required by procedure and according to EPA recommendations to eliminate any imprecision during metal determinations by ICP.

Data entry.
As with any lab new to the EPD/EMS monitoring program, there were the usual problems with data entry and format.

Recommendation.
If there are any questions about the EDD or invoice formats, or about the way an item should be entered into the EDD, then the analyst or project manager should contact EPD/EMS personnel for clarification.

Alpha source decay.
The alpha source (Polonium-210) used for daily source checks for the monitors that perform the initial radiological screen of samples showed significant decay from month to month in the log books. However, there was no clear policy for when the source should be replaced.

Recommendation.
There should be an activity-based policy for replacing a daily source check standard.

Chain-of-custody (COC) data entry.
The manual re-entry of information from the WSRC COC to the Weston COC allows for transcription errors. This is especially a problem for samples sent to Weston's subcontractors.

Recommendation.
A copy of the original WSRC COC should be forwarded to Weston's subcontractors with the Weston COC for an independent review of the information.

A noteworthy practice remarked by the reviewers is Weston's use of EPA contract laboratory program (CLP) standards for WSRC samples. This is not required by the contract, but is an added QA practice performed by Weston to improve the quality of WSRC results.

During the visit, evaluation checklists were filled out covering many specific QA/QC criteria. Comments made on the basis of those checklists include these issues: The organics laboratory solvent storage cabinets are not properly vented for the prevention of possible laboratory contamination; data handling and review computer programs are not validated before use; and the pH of samples is not checked and recorded on the COC upon receipt.

TMA/Eberline

TMA/Eberline, the radiological subcontractor to Roy F. Weston, Inc., the contracted laboratory, was visited by Weston and EMS personnel on September 21-22, 1993. The evalutation report contained both findings and observations. As defined by Weston, findings are items that can, if not corrected, negatively affect the quality of data provided to clients, and observations are items considered not in compliance with best management or good laboratory practices.

Findings

Several findings that could affect data quality were noted.

Expired Standards.
Several expired standards were found throughout the laboratory. Timely removal of expired standards from storage is necessary to prevent inadvertent use of such solutions.

Corrective Actions Not Implemented.
As a result of comments from previous reviews of TMA, Standard Operating Procedures on water quality checks and documentation were to be written and implemented. These operating procedures were still in draft form after the deadline provided by TMA.

Records Retention.
TMA's policy for long-term record storage is not clear. This presents a problem regarding regulatory compliance with record retention requirements.

Observations

Observations that could affect data quality also were noted.

Variable Strontium-90 Results.
Performance evaluation results reviewed during the evaluation demonstrated a greater degree of variability than is expected due to method, matrix, or analyst variabilities. The source of the variability needs to be investigated and a corrective action taken to ensure the method does not drift out of control.

National Institute of Standards and Technology (NIST) Traceability of Standards.
Some standard certificates do not contain NIST standard traceability. Traceability of standards is a major concern for Department of Energy contracts. TMA must provide evidence of NIST traceability or the equivalent for standard solutions.

Performance Evaluation (PE) Trend Analysis.
TMA currently does not perform trend analysis of PE results. Charting PE results can be a valuable tool to identify nonconforming situations before they become systemic errors.

Accuracy of pH Readings.
The pH readings recorded as a result of preservation verification have more accuracy than can be provided with pH paper. The best possible reading with a pH paper is whole number pH units.

Data Management/Administrative Files

This section discusses the generation, processing, and storage of paper and computer records produced as part of this project. The processing of the materials follows methodology prescribed by the Environmental Geochemistry Group (EGG) of EPD/EMS.

EGG establishes administrative files for each project that are maintained as permanent SRS records. The following materials are placed in the administrative files:

- The bound sample collection logbooks
- The original copies of the chain-of-custody records
- The case narratives from the laboratories
- The data validation logbooks
- Copies of all correspondence between the data validation personnel and the laboratories
- Data entry cover sheets for data files created by EGG

EGG generates computer data files from paper records using double-entry methods to ensure a very low transcription error rate. Computer data files are also received from the laboratories for analytical data. Proposed changes to the data are recorded in the data validation logbook, made to a copy of the data, approved by the Project Technical Manager, then confirmed by running a computer comparison of the modified and original data files. EGG stores the final computer data files, the original source files, and computer listings of all changes made to the original files in the administrative files.

Access to this material is available through the manager of EGG. The administrative files will be maintained within EGG control until June 30, 1995. The material will then be transferred to long-term box storage for permanent storage. EGG plans to have the final data files available for SRS computer users indefinitely. Please contact the manager of EGG to obtain access to this data.

Policy

Data of Quality Objective 3 (as defined in *Quality Assurance/Quality Control Guidance for Removal Activities*) and analytical quality level 3 (as defined in *Data Quality Objectives for Remedial Response Activities*) have been determined most appropriate to meet the data quality objectives of this investigation. Validation and verification activities were undertaken to assess the data against these standards, especially with regard to the following issues:

Sample documentation
Maintenance of chain of custody
Adherence to sample holding time requirements
Achievement of contract-required detection limit
Analytical instrument calibration
Analyte identification
Analyte quantitation

Evaluation of the laboratories' performance in analyte identification and quantitation included examinations of the following:

Analytical error
Contamination of blanks
Laboratory performance in the analysis of independent standards

Definitions of Qualifier Codes

Each analytical record in the computer data files contains three qualifier fields: the result qualifier, the analysis qualifier, and the bias code. The result qualifier describes the analytical result. The analysis qualifier describes why result qualifiers are present, and the bias code describes whether the result is biased high or low or has poor precision. The laboratory uses these fields in reporting the data. During validation and verification of analytical data, additional qualifiers may be applied to provide information about data quality.

Definitions of the qualifiers used in the data files follow. See the "Qualificiation Policy" subsection of this report for details on application of these qualifiers during validation and verification.

Result Qualifier J. The *J* qualifier indicates that the result is an estimated value.

A specific example of the use of the *J* qualifier is its application (with the analysis qualifier *Q*) when the required holding time from sample date to analysis date was exceeded.

Result Qualifier L. The result qualifier *L* is assigned to indicate that the reported result is off-scale high. The actual value is not known, but is greater than the value reported. When the laboratory uses this qualifier, it generally also re-analyzes the sample after dilution to provide a quantitative result. See, e.g., acetone for D43111608 (sample 100426).

Result Qualifier P. The result qualifier *P*, indicating that precision cannot be determined, is applied to sample results in batches for which the laboratory did not perform matrix spike analyses.

Result Qualifier R. The result qualifier *R* indicates that the result has been rejected. It is applied during validation and verification when the result has exceeded the recommended quality control limits for level 3 acceptability criteria. These results may meet the less rigorous requirements of level 1 or 2.

Result Qualifier U. The result qualifier *U* is assigned by the laboratory to an analytical result below the sample quantification limit.

Analysis Qualifier A. Relative retention times or mass spectra criteria were not met. (Assigned based on the laboratory data records review [LDRR].)

Analysis Qualifier C. A Laboratory Control Sample (LCS) was outside the specified recovery limits.

Analysis Qualifier G. Instrument performance for pesticides was outside criteria for any condition. (Assigned based on LDRR.)

Anavsis Qualifier H. Internal standards criteria were not met. (Assigned based on the LDRR.)

Analysis Qualifier I. Matrix spike results did not meet criteria.

Analysis Qualifier L. Initial or continuing calibration checks were unacceptable. (Assigned based on the LDRR.)

Analysis Qualifier O. Surrogate criteria were not met.

Analysis Qualifier Q. Holding time was exceeded.

Analysis Qualifier T. The *T* analysis qualifier is specific for dioxin/furan analyses and was used to replace *H*, *S*, and *X* qualifiers assigned by the laboratories that are invalid in the current data format. The analytical laboratory assigned an *H* qualifier if peak height instead of peak area was used to quantitate the analyte. An *S* qualifier was assigned when the signal-to-noise ratio of the confirmation ion did not meet requirements, but the peak was determined to be positive by the analyst. An *X* qualifier was used by the laboratory when isotope ratio criteria were not met using either peak height or peak area, but the peak was thought to be positive by the analyst. The result qualifier *J* is now applied with the *T* analysis qualifier to replace *H*, *S*, or *X*.

Analysis Qualifier V. Method blank criteria were not met.

Analysis Qualifier X. The relative percent difference (RPD) calculated from duplicate analyses or matrix spike/matrix spike duplicates was not within control limits.

Analysis Qualifier Y. Samples were unpreserved or improperly preserved.

Bias Code H. The result is believed to be biased high.

Bias Code L. The result is believed to be biased low.

Qualification Policy

This section describes the EMS data validation policy for assigning qualifiers to RFI/RI analytical data. Qualification policy is based on EPA's *Contract Laboratory Program Statement of Work* (CLP SOW), *Functional Guidelines for Organics Analyses, Functional Guidelines for Inorganics Analyses* (Functional Guidelines 7/88), SW-846, and Westinghouse Hanford Company's *Data Validation Procedures for Radiochemical Analyses.*

Qualification criteria for instrument calibration, analyte identification, and analyte quantitation are given in the EMS informal "Procedures for Qualifying Data Based on LDRRs."

RQ = result qualifier AQ = analysis qualifier BQ = bias qualifier

Holding Times

Criteria: EPA holding times for extraction and analysis

Action: Assign RQ = *J*, AQ = *Q* to all analyses for which holding time has been exceeded.

Sample Preservation

Criteria: Temperature <6° C for organics and inorganics; pH ≤ 2 for water samples

Action: Assign AQ = *Y* for all exceedances.

Instrument Calibration, Analyte Identification, Analyte Quantitation

Criteria: See LDRR checklists for each analytical method.

Action: See "Procedures for Qualifying Data Based on LDRRs."

Trip Blanks

Criteria: CLP 5×/10× rule

Action: Add RQ = *J* to the failed analyte(s) in every sample shipped in the same cooler as the trip blank.

Field Blanks

No qualification is done on the basis of field blank results.

Rinsate Blanks

No qualification is done on the basis of rinsate blank results.

Method Blanks

Criteria: CLP 5×/10× rule

Action: If an analyte is detected in a method blank, assign AQ = *V* to that analyte in the blank and in every sample of the preparation batch. If the analyte concentration in a sample is <5× that in the blank (<10× for common lab contaminants), assign RQ = *U* and AQ = *V* to the analyte in the sample.

Field Duplicates

No qualification is done based on field duplicate results.

Lab Duplicates

Criteria:
Organics: No qualification is done on this basis.
Inorganics: *Functional Guidelines* 7/88, page 10
Rads: Hanford *Data Validation Procedures for Radiochemical Analyses*

Action: For soil samples, if duplicate analysis results for a particular analyte fall outside the control limits for the Relative Percent Difference (RPD), assign AQ = *X* to that analyte in the parent and duplicate samples.

For water samples, if the RPD for a particular analyte is outside the appropriate control windows, assign RQ = *J* and AQ = *X* to that analyte in the parent and duplicate samples, and AQ = *X* to the failed analyte in every sample in the same preparation batch.

Matrix Spikes

Criteria:
Volatiles: CLP SOW, Table 7, page D-55 VOA
Semivolatiles: CLP SOW, Table 7, page D-59 SV
Pesticides: CLP SOW, page D-61 PEST
Dioxins: acceptable recovery = 50 - 110%
Inorganics: *Functional Guidelines* 7/88, page 11

Action: If a matrix spike fails criteria, qualifiers are added only to (1) the failed analyte in the matrix spike, and (2) the failed analyte in the parent sample of the matrix spike. For organics, assign RQ = *J*, AQ = *I*, BQ = *L* or *H*. For inorganics, assign RQ according to criteria, AQ = *I*, BQ = *L* or *H*.

For non-radiological analyses, if the laboratory fails to supply matrix spike data, flag all analytes in all samples in the appropriate preparation batch. Assign RQ = *P*, AQ = *I*.

Laboratory Control Samples & Blank Spikes (LCS/BS)

Criteria:
Organics: same as matrix spike criteria
Inorganics: 80-120% recovery
Rads: 80-120% recovery (following Hanford)

Action: Assign AQ = *C* to the failed analyte(s) in the LCS/BS. Assign RQ = *J*, AQ = *C* to the failed analyte(s) in every sample in the same preparation batch as the LCS/BS.

Surrogate Recovery

Criteria:
Volatiles by Method 8240: SW-846, Table 8, page 8240-38
Volatiles by Method 8260: SW-846, Table 9, page 8260-44
Pesticides by Method 8080: 60-150% (from CLP SOW, page D-56 PEST)[1]
Semivolatiles by Method 8270: SW-846, Table 8, page 8270-31
Dioxins: not applicable

Action:
Volatiles & Pesticides: If one or more surrogates fail acceptance criteria, assign RQ = *J* or *UJ*, AQ = *O* to all analytes in the sample. If all the failed surrogates have low recoveries, assign BQ = *L*. If all the failed surrogates have high recoveries, assign BQ = *H*. If one surrogate is high and another is low, do not assign a bias qualifier. Also, assign AQ = *O* to the failed surrogate(s).

Semivolatiles: If only one surrogate is bad, and its recovery is >10%, take no action. If more than one fails, assign RQ = *J* or *UJ*, AQ = *O* to all analytes in the sample. If a recovery is negative, assign *R*. If all the failed surrogates have low (high) recoveries, assign BQ = *L* (*H*). If one surrogate is high and another is low, do not assign a bias qualifier. Also, assign AQ = *O* to the failed surrogate(s).

Scope

The validation and verification process conducted by EGG consists of several independent operations. The changes and data qualification identified by these operations are incorporated into the data validation logbook and are made to the electronic data files. The project technical manager is responsible for overseeing and controlling this process.

The operations conducted include examining the electronic data files and paper records and conducting on-site reviews of the laboratory records. The validation and verification operations are summarized in this section.

[1]During this investigation, the laboratory was still using a surrogate (DBC) that is not included in the current SOW, but is listed in the February 1988 organics SOW as having limits of 20-150%. Those limits were used in evaluating results with that surrogate.

Review of the Electronic Data Files

Data reviewers used computer programs and lookup tables to review the computer data files of sample collection, shipping, and analytical data. The computer programs performed the following types of examinations of the data:

The following fields were checked to ensure they were not blank: analyte code, sample identification number, sample collection date, lab receipt date, analysis date, analysis batch, laboratory code, laboratory sample identification number, analytical method, instrument, analyst's initials, and EPD/EMS receipt date.

The following fields were checked to ensure the data was within a range of values: sample identification number (between 100,000 and 999,999); sample collection date (after January 1, 1993 and before the date the program was run); lab receipt date (between sample collection date and the program run date except for laboratory blanks and TCLP samples; for TCLP samples, identified by a *T* in the sample fraction field, the lab receipt date must be equal to or before the sample collection date); analysis date (same as or later than lab receipt date and before the date the program was run); analysis time (an integer between 1 and 2,400 or blank); detection limit (greater than 0); analytical result (a real number if result qualifier is not *M* or *T;* blank if result qualifier contains *M* or *T*); accuracy (a real number or blank); residual weight (a positive number for radionuclide analyses; blank for others); number of dilutions (0 or a positive integer); dilution factor, number of dilutions (if dilution factor is 1, then number of dilutions must be 0; if number of dilutions is greater than 0, dilution factor cannot equal 1); nominal concentration (a positive number or blank; cannot equal 0 if result units indicate a percent recovery); percent solids (less than or equal to 100 or blank); bottle number (an integer equal to or between 10,000,000 and 99,999,999); material (if percent solid greater than 0, material must equal *S* [soil]; if less than 0, material must equal *W* [water]).

The following fields were checked against a lookup table or a list of valid codes: laboratory code, laboratory duplicate code, analyte code (testname), analytical method, result qualifier, analysis qualifier, bias of analysis, result units, and sample fraction.

Specific Examinations.
The computer review of the analytical data also included the following examinations:

Sample holding times were checked from the electronic data deliverable sent by the analytical laboratory. The sample collection date was subtracted from the date the analysis was performed and the result was checked against a lookup table of holding times. Any analyses performed after the holding time was exceeded were qualified with a *Q* in the analysis qualifier field and a *J* in the result qualifier field. Holding times to extraction were not checked because the extraction date was not reported by the analytical laboratory.

Reported detection limits were checked against the method detection limits to determine if they were correctly adjusted to reflect dilution factors, including soil moisture. For soils, sample aliquot size varied, but the sample weight was not reported; therefore, fluctuations due to sample size could not be checked. Fluctuations of two to three times the detection

limit were considered acceptable for soils. Greater fluctuations were queried in laboratory letters.

Relationships between analytical, sample, and station records were checked to ensure that the station field in the station data records was identical to the first 8 characters of the planned sample name in the planned analyses data records. The planned sample name is a concatenation of facility identifier, sampling point, and sample number.

Additionally, the computer program checked for duplicate records, and for matching records as follows:

There must be a station record for each sample record. The station and sample records must have the same entry in the station field.

There must be at least one planned analyses record for each sample record. The planned analyses record and the sample record must have the same entries in the planned station, planned top of interval, and planned bottom of interval fields.

There must be a bottle receipt record for each sample bottle record. The bottle receipt and sample bottle records must have the same bottle label number.

There must be a sample record for each sample bottle record. The sample and sample bottle records must have the same sample identification number.

The number of sample bottle records for each sample identification number must match the number of bottles field on the matching sample record.

There must be a sample record for each chain-of-custody record. The sample and chain-of-custody records must have the same sample identification number and sample collection date.

There must be a sample record for each analytical record except for laboratory standards and blanks. The sample and analytical records must have the same sample identification number and sample collection date.

There must be a chain-of-custody record for each analytical record except for laboratory blanks and laboratory-generated QA/QC samples. The chain-of-custody and analytical records must have the same sample identification number, sample collection date, and laboratory sample ID.

There must be a planned analyses record for each analysis record except laboratory standards and blanks. Each analytical record should match a sample record by sample identification number. The analyte from the analysis record and the planned sample name, planned top of interval, and planned bottom of interval fields from the sample record should match a planned analyses record.

There must be a chain-of-custody record for each sample record and for each analytical record except for laboratory standards and blanks. The sample, chain-of-custody, and

analytical records must have the same sample identification number and sample collection date.

There must be a sample record for each planned analyses record. The planned analyses record and the sample record must have the same entries in the planned station, planned top of interval, and planned bottom of interval fields.

There must be at least one analytical record for each planned analyses record. The analytical record and the planned analyses record combined with the sample record must have the same entries in the analyte and sample identification number fields.

The data validation team resolved anomalies wherever possible. An anomaly might also result in qualification of the data, or a determination and recording of it as unresolvable (e.g., missing Munsell colors from field data).

Checking of QA/QC Samples

QA/QC samples include field-generated blanks and duplicates and laboratory-generated blanks, matrix spikes, surrogates, internal standards, and others. Both field- and laboratory-generated blanks are checked for contamination which may affect sample results, and environmental samples are qualified when contamination is above established levels.

The recoveries obtained by the laboratory for matrix spikes and surrogates are examined, and the number of matrix spikes is checked for adherence to QA 3 requirements. Internal standards and calibration samples for a portion of the samples are examined during the laboratory data records review. Qualification of environmental samples is done when any of these QA/QC samples exceed criteria.

Review of the Analytical Narratives

The cover letters and analysis summaries, or analytical narratives, that accompany the EDDs from the laboratories contain information about the data that does not appear elsewhere. The narratives are reviewed and used as a reference during computerized checking of the EDDs.

Laboratory Data Records Reviews

On September 21-22, 1993, a laboratory data records review (LDRR) was conducted at TMA/Eberline in Oak Ridge, TN, for tritium, total alpha-emitting radium, gross alpha, and nonvolatile beta analyses associated with the D-Area Burning/Rubble Pits RFI/RI waste unit. The review was conducted by C.R. Williamson, T.P. Killeen, W. Frazier, K.J. Kuelske, B.S. Crandall, and S.T. Nichols.

On December 6-10, 1993, data records were reviewed at Weston-Lionville (PA) for organics and inorganics analyses associated with the D-Area Burning/Rubble Pits RFI/RI waste unit. The review was conducted by W. Kubilius, K. Ward, J. Hammock, D. Mohon, L. DeWitt, S. Stinson, and R. Hunter.

Because an unusually large number of errors were detected during validation and verification of TMA data, Science Applications International Corporation (SAIC) and Walt Kubilius of EMS conducted a second LDRR at TMA on March 24-25, 1994, to check the laboratory's EDDs against the laboratory's analytical data and records. Only five fields were checked: sample results, minimum detectable activity (MDA or detection limit), accuracy, units, and sample identification.

The purpose of the reviews was to investigate technical validation issues discussed in *Quality Assurance/Quality Control Guidance for Removal Activities* that are not adequately addressed by computer checking of the EDD, review of analytical narratives, or review of COC forms. These technical issues include instrument calibration, analyte identification, and analyte quantitation. Validation checklists were used to assess the instrument printouts associated with particular analyses. Each checklist consists of 12 to 20 questions. For nonradionuclide analyses, the checklists were prepared from five sources: *QA/QC Guidance for Removal Activities*, SW-846, *Functional Guidelines for Organics Analyses*, *Functional Guidelines for Inorganics Analyses*, and discussions with laboratory personnel. For radiological analyses, the checklists were prepared from two sources: Westinghouse-Hanford's *Data Validation Procedures for Radiochemical Analysis* (WHC-SD-EN-SPP-001, Rev. 1) and discussions with laboratory personnel.

For the findings from the reviews, see the "Laboratory Data Records Reviews" subsections in the "Data Validation and Verification: Findings" section of this report.

The data provided with this report are final and complete.

Many of the problems detected during validation and verification were resolved during the process, as a result of communication with the samplers and laboratories. There was one issue which could not be verified:

Sample Preservation

Sample pH was not recorded by the laboratories, so conformance to the requirement was not verifiable.

Qualifiers Applied as a Result of EDD Review

Discrepancies found in the data following computer checking of the EDDs were qualified as follows:

Rejected Results

Only one result for this project was rejected: the pentachlorophenol spike associated with sample 100400.

Holding Time

The holding times for all analyses were validated based on EPA guidance. When EPA-recommended holding times were exceeded, these samples were given the *J* result qualifier and the *Q* analysis qualifier.

All laboratory pH analyses are qualified with J and Q because pH holding time is exceeded before the samples leave the field.

Detection Limit

Dioxin and furan results between method detection limit and sample quantitation limit were qualified with the *J* result qualifier.

Matrix Spikes

The analysis qualifier *I* and a bias qualifier of *L* or *H* were added to individual matrix spike results and results for the parent sample when the matrix spike results were outside the control limits listed in the "Qualification Policy" section of this report. Associated sample results (from the same batch) were not qualified.

Method Blanks

Detected concentrations of target analytes in method blanks caused the assignment of *V* qualifiers to associated data. For water samples, results for the analyte for all samples in the same preparation batch were qualified with *V* if the sample result was less than 5 times the result in the associated blank, except that for common laboratory contaminants, the *V* analysis qualifier was assigned if the sample result was less than 10 times the result in the associated blank

Laboratory Control Samples

Samples associated with Laboratory Control Samples outside recovery limits were qualified with *J* as well as *C*.

Surrogate Recoveries

The analysis qualifier *O* and a bias qualifier of *L* or *H* was added to surrogate results with recoveries outside the control limits listed in the "Qualification Policy" section of this report. Associated samples were qualified as described in that section.

Sample Preservation

The analysis qualifier *Y* was assigned if the temperature of the cooler in which the sample was shipped was above 6°C upon receipt at the laboratory.

Bias

The laboratory used the qualifier *1* from an older data format along with the *R* result qualifier to indicate recovery for matrix spikes and surrogates below control limits. This was replaced with the bias qualifier *L*. The laboratory used the qualifier *2* from an older data format along with the *R* result qualifier to indicate recovery for matrix spikes and surrogates above control limits. This was replaced with the bias qualifier *H*. The laboratory used two other qualifiers, *3* and *4*, to indicate recovery of poor precision and recovery outside control limits because of matrix interference, respectively. These qualifiers were removed from the data and not replaced.

Further Information

The "Discussion" section of this report contains a table showing the total number of samples having various types of qualifiers.

Results of Checking QA/QC Samples

EPA-published methods, used for most of the analyses for this project, require specific types and numbers of quality control analyses. The number of each type of analysis performed for this project is presented in Table 9.

Table 9. Number of Analytical Records, by Method and Type of Record

	Sample Records		Laboratory Duplicates		Blank Spikes or Laboratory Control Samples (Metals)		Laboratory Blanks		Surrogates		Matrix Spikes/ Matrix Spike Duplicates	
Method	Soil	Water	Soil	Water	Soil	Water	Soil	Water	Soil	Water	Soil	Water
ASTM2216	170	0	14	0			1	8				
EPA160.2	0	12	0	3			0	6				
EPA300.0	0	16	0	1	0	16	0	10			0	3
EPA335.3	2	0			4	0	2	0				
EPA353.1					0	3	0	2				
EPA415.1	43	6	4	0	38	17	29	12				
EPA6010	729	180	42	14	324	310	162	163			84	56
EPA7060	101	19	6	2	40	38	20	19			12	4
EPA7421	101	19	6	2	40	40	20	19			12	4
EPA7470	101	24	6	1	40	40	30	30			7	5
EPA7740	101	19	6	2	40	38	20	19			12	4
EPA7841	2	0			4	0	2	0				
EPA8080	1,894	40	223	4	154	52	726	36	103	16	47	30
EPA8150	0	15			0	23	0	12			0	21
EPA8240	3,511	1,395	468	236	253	146	1,646	768	387	168	80	60
EPA8270	5,891	450	432	108	372	177	1,684	340	624	114	88	94
EPA8280	820	0	90	0	132	0	168	0	234	0	42	0
EPA900.0	180	55	26	14	0	37	23	15				
EPA9020	0	4			0	10	0	7				
EPA903.0	90	27	13	7	0	20	13	7				
EPA9045	43	6	4	1								
EPA9050	35	0	3	0	18	9	12	6				
EPA906.0	89	27	11	7	0	20	11	7				
EPA9080	35	0	6	0								

Numbers of Matrix Spikes

Analysis of eight matrix spikes is required for QA 3 validation. As shown in table 10, this requirement was generally met. With the exceptions of chloride and fluoride (which are not QA 3 constituents), dioxins and furans, compounds spiked only for TCLP analyses, and p,p′-DDT for method EPA8080, this requirement was met for all methods used.

Table 10. Matrix Spikes Performed

Method	Analyte	Spikes in Water	Spikes in Soil	TCLP Spikes	Total Spikes
EPA 300.0	fluoride	1			1
	sulfate	1			1
EPA 6010	silver	2	6	4	12
	arsenic			4	4
	barium	2	6	4	12
	cadmium	2	6	4	12
	chromium	2	6	4	12
	copper	2	6		8
	manganese	2	6		8
	nickel	2	6		8
	lead			4	4
	selenium			4	4
EPA 7060	arsenic	2	6		8
EPA 7421	lead	2	6		8
EPA 7470	mercury	1	6	4	11
EPA 7740	selenium	2	6		8
EPA 8080	alpha-chlordane			4	4
	aldrin		8		8
	dieldrin		8		8
	endrin		8	4	12
	decafluorobiphenyl			3	3
	gamma-chlordane			4	4
	heptachlor		8	4	12
	heptachlor epoxide			4	4
	lindane		8	4	12
	methoxychlor			4	4
	p,p-DDT		7		7
EPA 8150	2,4-dichlorophenylacetic acid			8	8
	silvex			4	4
	2,4,5-T			4	4
	2,4-dichlorophenoxyacetic acid			4	4
EPA 8240	vinyl chloride			2	2
	benzene	8	16	2	26
	carbon tetrachloride			2	2
	chloroform			2	2
	chlorobenzene	8	16	2	26
	toluene	8	16		24
	methyl ethyl ketone			2	2
	tetrachloroethylene			2	2
	trichloroethylene	8	16	2	26
	1,1-dichloroethylene	8	16	2	26

Table 10. Matrix Spikes Performed, Continued

Method	Analyte	Spikes in Water	Spikes in Soil	TCLP Spikes	Total Spikes
EPA 8240, cont.	1,2-dichloroethane			2	2
EPA 8270	acenaphthene	2	8		10
	hexachlorobenzene			6	6
	hexachloroethane			6	6
	hexachlorobutadiene			6	6
	nitrobenzene			6	6
	n-nitrosodipropylamine	2	8		10
	pentachlorophenol	2	8	6	16
	phenol	2	8		10
	pyrene	2	8		10
	pyridine			6	6
	1,2,4-trichlorobenzene	2	8		10
	1,4-dichlorobenzene	2	8	6	16
	2,4,5-trichlorophenol			6	6
	2,4,6-trichlorophenol			6	6
	2,4-dinitrotoluene	2	8	6	16
	2-chlorophenol	2	8		10
	o-cresol			6	6
	m-cresol			6	6
	4-chloro-m-cresol	2	8		10
	4-nitrophenol	2	8		10
EPA 8280	hexachlorodibenzo-p-dioxin isomers		6		6
	hexachlorodibenzo-p-furan isomers		6		6
	octachlorodibenzo-p-dioxin isomers		6		6
	octachlorodibenzo-p-furan isomers		6		6
	tetrachlorodibenzo-p-dioxin isomers		3		3
	tetrachlorodibenzo-p-furan isomers		3		3
	2,3,7,8-TCDD		6		6
	2,3,7,8-TCDF		6		6

Contamination in QC Samples

Table 11 presents the field-generated blanks that had analytical results above detection limit. The greatest amount of contamination in field-generated blanks was with the common laboratory contaminant acetone, reported above detection limit in 22 of these blanks; only six of these samples were qualified with *V*, indicating that contamination also was found in associated method blanks. Other constituents with positive results in field-generated blanks included methyl ethyl ketone, 2-hexanone, dichloromethane (methylene chloride), and copper. Positive results also were reported for radionuclides: nonvolatile beta in eight, tritium, and total alpha-emitting radium. A pair of duplicate tritium

analyses was additionally qualified with X, indicating poor correspondence between the duplicate results.

Table 11. Field-Generated Blanks Having Positive Results

Sample ID	Sample Type	Analyte	Detection Limit	Results	Units	Result Qual.	Analysis Qualifier
100302	Field blank	Acetone	10	190	µg/L		V
100315	Rinsate	Acetone	10	64	µg/L	J	Y
100315	Rinsate*	Acetone	10	60	µg/L	J	Y
100315	Rinsate*	Acetone	10	63	µg/L	J	Y
100316	Trip blank	Acetone	10	20	µg/L		Y
100325	Rinsate	Acetone	10	122	µg/L	J	Y
100333	Field blank	Acetone	10	28	µg/L	J	O
100333	Field blank*	Acetone	10	28	µg/L	J	O
100339	Trip blank	Acetone	10	11	µg/L	J	O
100342	Rinsate	Acetone	10	42	µg/L		
100348	Trip blank	Acetone	10	50	µg/L		
100355	Rinsate	Acetone	10	54	µg/L		
100374	Field blank	Acetone	10	54	µg/L	U	V
100384	Rinsate	Acetone	10	39	µg/L		V
100403	Field blank	Acetone	10	110	µg/L		
100403	Field blank*	Acetone	10	110	µg/L		
100403	Field blank*	Acetone	10	130	µg/L		
100413	Trip blank	Acetone	10	15	µg/L		
100416	Rinsate	Acetone	10	6,840	µg/L	L	YV
100416	Rinsate	Acetone	5,000	44,700	µg/L		YV
100420	Field blank	Acetone	10	135	µg/L		
100437	Field blank	Acetone	10	134	µg/L		V
100348	Field blank	Copper	25	32	µg/L		
100355	Rinsate	Copper	25.0	33.1	µg/L		
100416	Rinsate	Dichloromethane	5.0	7	µg/L	U	YV
100437	Field blank	Dichloromethane	5.0	15	µg/L	U	V
100302	Field blank	Dichloromethane	5.0	32	µg/L	U	V
100302	Field blank	2-Hexanone	10	24	µg/L		
100403	Field blank	2-Hexanone	10	8.1	µg/L	J	
100403	Field blank*	2-Hexanone	10	8.7	µg/L	J	
100403	Field blank*	2-Hexanone	10	9.7	µg/L		
100437	Field blank	2-Hexanone	10.0	13.9	µg/L		
100302	Field blank	Methyl ethyl ketone	10	99	µg/L		
100348	Field blank	Methyl ethyl ketone	10	21	µg/L		
100355	Rinsate	Methyl ethyl ketone	10	27	µg/L		
100360	Field blank	Methyl ethyl ketone	10	12	µg/L		
100384	Rinsate	Methyl ethyl ketone	10	22	µg/L		

* - Lab duplicate.

Table 11. Field-Generated Blanks Having Positive Results, Continued

Sample ID	Sample Type	Analyte	Detection Limit	Results	Units	Result Qual.	Analysis Qualifier
100397	Field blank	Methyl ethyl ketone	10	27	µg/L		
100403	Field blank	Methyl ethyl ketone	10	36	µg/L		
100403	Field blank	Methyl ethyl ketone	10	35	µg/L		
100403	Field blank	Methyl ethyl ketone	10	42	µg/L		
100420	Field blank	Methyl ethyl ketone	10	35	µg/L		
100437	Field blank	Methyl ethyl ketone	10	55	µg/L		
100302	Field blank	Nonvolatile beta	0.8	1.4	pCi/L	U	V
100315	Rinsate	Nonvolatile beta	0.5	1.0	pCi/L		Y
100315	Rinsate*	Nonvolatile beta	0.5	4.2	pCi/L		Y
100327	Field blank	Nonvolatile beta	1.0	4.9	pCi/L		
100333	Field blank	Nonvolatile beta	1.0	2.3	pCi/L		
100374	Field blank	Nonvolatile beta	0.7	2.3	pCi/L	J	X
100374	Field blank*	Nonvolatile beta	0.7	2.3	pCi/L	J	X
100384	Rinsate	Nonvolatile beta	0.7	0.8	pCi/L		
100355	Rinsate	Radium, total alpha-emitting	0.2	0.3	pCi/L	U	V
100420	Field blank	Radium, total alpha-emitting	0.1	0.2	pCi/L		
100333	Field blank	Tritium	150	270	pCi/L		
100351	Trip blank	Tritium	154	260	pCi/L		
100355	Rinsate	Tritium	151	163	pCi/L		
100409	Trip blank	Tritium	160	130	pCi/L		
100420	Field blank	Tritium	139	195	pCi/L	J	X
100420	Field blank*	Tritium	139	255	pCi/L	J	X

Review of the Analytical Narratives

The cover letters and analysis summaries that accompanied the EDDs from the laboratories were reviewed. This section is organized according to analytical batch; the numbered headings are the first digits of the laboratory sample identification numbers.

The following comment was made by Weston regarding all of the project's dioxin data packages:

Dioxins/Furans

- The traces of heptachlorodibenzofuran found in the blank spikes and spiked sample were due to a known impurity in the spiking solution.

The following comments made by Weston concern specific batches of data:

9306L043

Inorganics

- The replicate result for cation exchange capacity was outside the 20% Relative Percent Differences (RPD) guidance limit.

Metals

- A post-digestion matrix spike and serial dilution were performed for analytes where the matrix spike was out of control.
- Manganese in sample 100433 was outside the 20% RPD control limits for sample values greater than five times reporting limit, or ± the reporting limits for sample values less than five times reporting limit.

Semivolatiles

- Samples 100428, 100430, 100431, and 100432 exhibited areas for the last internal standard (perylene-d12) below the 50% acceptance criteria. The samples were not reanalyzed because there were no target compounds detected in the samples that used the internal standard perylene-d12 to quantitate.

GC/MS Volatiles

- Two of the laboratory control standard (LCS) samples were analyzed beyond the 12-hour tune limit.
- The matrix spike duplicate for sample 100428 was analyzed just beyond the 12-hour tune limit.
- The surrogate recoveries for samples 100427 and 100429 were outside USEPA QC limits during their volatile analyses. They were reanalyzed, and the surrogates were good. Both sets of data were included.

Dioxins

- The internal standard C13-OCDD recovery for the laboratory blank 93LS0085-MB1 (37%) was outside SW 846 limits (40–120%). Internal standard recovery criteria were not met for this blank. Re-extraction requirements were satisfied by the blank spike 93LS0085-MB1, which met all criteria. None of the samples associated with this blank were affected. Internal standard signal to noise ratio is greater than 10:1 and the quantitation is valid. (EPA CLP QC allows recoveries as low as 25%. All samples met EPA QC requirements.) These criteria were used to assess method performance. However, when properly applied, results obtained by isotope dilution techniques are independent of internal standard recovery.
- One of six matrix spike recoveries was outside EPA QC limits (50–150%).
- One of 12 blank spike recoveries was outside EPA QC limits (50–150%).
- The soil laboratory blank 93LS0085-MB1 contained significant contamination in the HxCDD range; however, none of the associated samples contained these peaks and the data is not affected.

9306L817

Inorganics

- All sample holding times were met with the exception of pH (received past hold); total organic halides (analyzed past hold); and total suspended solids and total dissolved solids for sample 100309 (analyzed past hold).
- The preparation blank result for nitrate exceeded the required detection limits.

Metals

- The mercury soil LCS had control limits of 67–134%, exceeding the 80–120% control limits.
- Mercury exceeded the 20% RPD control limits (at 20.1%) in duplicate LCS 93C0170.
- A post-digestion matrix spike and serial dilution were performed for analytes where the matrix spike was out of control.

Semivolatiles

- Non-target compounds were detected.
- One of 120 surrogate recoveries was outside EPA QC limits; however, EPA CLP surrogate recovery criteria were met (i.e., no more than one outlier per fraction [acid and base neutral] and no recoveries less than 10%).
- One of 33 water blank spike recoveries was outside EPA QC limits.
- The laboratory blank 93LE0916-MB1 contained the common contaminants di-n-butylphthalate and bis(2-ethylhexyl)phthalate at levels less than the CRQL. The laboratory blanks 93LE0934-MB1 and 93LE1002-MB1 contained the common contaminant bis(2-ethylhexyl)phthalate at levels less than the CRQL.
- The level of bis(2-ethylhexyl)phthalate detected in the matrix spike duplicate for sample 100306 exceeded the calibration range due to probable lab contamination. Levels less than the CRQL were reported for sample 100306 and its matrix spike.

GC/MS Volatiles

- Non-target compounds were detected in these samples.
- The laboratory blanks contained the common contaminants methylene chloride and/or acetone at levels less than three times the CRQL.

Radiological indicators

- Results for gross alpha/beta analysis for samples 100310 and 100311 were subjective due to low sample aliquots and high self-absorption factors.

9306L825

Metals

- Mercury exceeded the 20% RPD control limits (at 20.1%) for duplicate LCS 93C0170-LC1. However, it was within in-house control limits (30%).
- The leachate matrix spike recovery for silver for sample 100322 fell below the 75–125% control limits (exception allowed when sample concentration exceeds the spike-added concentration by a factor of four or more).
- A post-digestion matrix spike and serial dilution were performed for analytes where the matrix spike was out of control.

Semivolatiles

- The spike recovery was below QC limits for N-nitroso-di-n-propylamine in blank spike 93GB0299-MB1.

GC/MS Volatiles

- Three LCS were analyzed beyond the 12-hour tune limit.
- Sample 100324, its matrix spike, and its matrix spike duplicate were analyzed just beyond the 12-hour tune limit.
- The secondary dilution of sample 100320 had a slightly high recovery in the volatile analyses.

Pesticides

- These samples received a sulfur cleanup.

- Confirmation was not required because target compounds were not detected in any of the samples.
- Due to matrix interferences, sample 100321 was analyzed at a 1/10 dilution. Reporting limits were adjusted to reflect the necessary dilution.

Herbicides
- Confirmation was not required because target compounds were not detected in any of the samples.

TCLP Semivolatiles
- One of 36 surrogate recoveries was outside EPA QC limits. However, EPA CLP surrogate recovery criteria were met (i.e., no more than one outlier per fraction [acid and base neutral] and no recoveries less than 10%).
- One of 24 matrix spike recoveries was outside EPA QC limits.
- One of 12 blank spike recoveries was outside EPA QC limits.

Radiological indicators
- Results for gross alpha/beta analysis for samples 100312, 100313, 100314, 100317, 100318, 100319, 100320, 100321, 100322, 100323, and 100324 were subjective due to low sample aliquots and high self-absorption factors.

9306LS49

Metals
- Arsenic, chromium, and selenium were outside the 75–125% control limits in the matrix spike for sample 100330.
- A post-digestion matrix spike and serial dilution were performed for analytes where the matrix spike was out of control.
- Arsenic, chromium, and manganese were outside the 20% RPD control limits for sample values greater than five times reporting limit, or ± the reporting limits for sample values less than five times reporting limit, in the duplicate sample 100330.
- The silver matrix spike was below 50% recovery at 25.1%. Silver recovery in the TCLP leachate was less than 80–100% of the threshold limit so standard addition was not performed per Federal Register Vol. 57, No. 227, Nov. 24, 1992, page 55117 (57FR:55117).

Semivolatiles
- The method blank spike duplicate sample 93GB0307-MB1 was analyzed outside the 12-hour tune limit.
- Matrix spike analyses were not conducted on a sample in this batch.

GC/MS Volatiles
- LCS GVE162 was analyzed past the 12-hour tune limit.
- Surrogate recoveries in the volatile analyses were outside limits for samples 100333 and 100339 and for the matrix spike for 100345. Samples 100333 and 100339 were reanalyzed; surrogates were outside limits both times.
- Samples 100332, 100341, and 100345 were slightly lower than limits for internal standard areas and retention times.
- Samples 100332, 100334, 100335, 100336, and 100345 were re-analyzed at dilutions to accurately quantitate acetone and dichloromethane.

Pesticides
- These samples received a sulfur cleanup.

- Confirmation was not required because target compounds were not detected in any of the samples.
- Samples which had the surrogate diluted out were outside control limits for surrogate recoveries. Samples 100326 and 100343 were outside control limits; they had recoveries of 15% and 12%, respectively.
- Due to matrix interferences, sample 100332, its matrix spike, and its matrix spike duplicate were analyzed at 1/50 dilutions. Reporting limits were adjusted to reflect these necessary dilutions. All spike recoveries were diluted out.

Herbicides

- Confirmation was not required because target compounds were not detected in any of the samples.

TCLP Semivolatiles

- One of 24 surrogate recoveries was outside EPA QC limits. However, EPA CLP surrogate recovery criteria were met (i.e., no more than one outlier per fraction [acid and base neutral] and no recoveries less than 10%).
- One of 12 blank spike recoveries was outside EPA QC limits.

Radiological indicators

- Gross alpha/beta results for samples 100326, 100329, 100330, 100331, 100332, 100334, 100335, 100336, 100340, 100341, 100343, 100344, and 100345 were subjective due to small sample aliquots and large self-absorption factors.

9306L874

Inorganics

- The cation exchange capacity replicate result was outside the 20% RPD guidance limit.

Metals

- The matrix spike recovery for sample 100356 was outside the 75–125% control limit for silver, arsenic, barium, cadmium, chromium, lead, and selenium.
- A post-digestion matrix spike and serial dilution were performed for analytes where the matrix spike was out of control.
- The matrix spike duplicate for sample 100356 was outside the 20% RPD control limits for arsenic, barium, and lead.
- Barium, manganese, and lead were outside the 20% RPD control limits for sample values greater than five times the reporting limit, or ± the reporting limits for sample values less than five times the reporting limit, for the duplicate sample 100346.
- The matrix spike, matrix spike duplicate, and duplicate for sample 100356 for silver and cadmium were reported with a tenfold dilution due to high iron levels. Iron is used as an interelement correction factor for these analytes.

Semivolatiles

- The spike recovery was above the QC limit for phenol in the blank spike for LCS 93GB0311-MB1. The spike recoveries also were above the QC limit for pentachlorophenol in the blank spike and its duplicate. The blank spike duplicate was analyzed outside the 12-hour tune limit.
- The spike recoveries were above the QC limit for pentachlorophenol in the matrix spike and matrix spike duplicate for sample 100350.

GC/MS Volatiles

- Two of the LCS were analyzed beyond the 12-hour tune limit.

Pesticides

- For continuing calibration standards analyzed prior to the sample extracts, the 15% criteria for calibration factors were exceeded for methoxychlor. The data reflected an increase in instrument response for these parameters so the ability to identify target compounds was not impaired. Since quantitation was not required, the data should not be affected.

TCLP Semivolatiles

- One of 24 matrix spike recoveries was outside EPA QC limits.

Radiological indicators

- Results for gross alpha/beta for samples 100346, 100347, 100350, 100352, 100353, 100354, and 100356 were subjective due to small aliquots and high self-absorption factors.

9306L888

Metals

- A post-digestion matrix spike and serial dilution were performed for analytes where the matrix spike was out of control.

Semivolatiles

- Non-target compounds were detected in these samples.
- The laboratory blank 93LE1002-MB1 contained the common contaminant bis(2-ethylhexyl)phthalate at levels less than the CRQL.

GC/MS Volatiles

- Non-target compounds were detected in these samples.
- Sample 100366 required a medium level analysis because it contained a high level of target compound acetone.
- The laboratory blanks 93LVX131-MB1 and 93LVX132-MB1 contained the common contaminant methylene chloride at levels less than three times the CRQL.

Pesticides/PCBs

- These samples received a sulfur cleanup.
- None of the samples contained target compounds in sufficient concentration to be confirmed by GC/MS.

Radiological indicators

- Gross alpha/beta results for samples 100366, 100367, 100368, 100410, and 100411 were subjective due to small aliquots and large self-absorption factors. The replicate results for tritium for the same samples were slightly outside limits; however, there was no additional sample for a reanalysis.

9306L915

Metals

- Matrix spike recoveries for sample 100378 were outside the 75–125% control limits for silver, arsenic, barium, chromium, manganese, lead, and selenium.
- A post-digestion matrix spike and serial dilution were performed for analytes where the matrix spike was out of control.
- Matrix spike duplicates were outside the 20% RPD control limits for selenium in sample 100374 and for barium, cadmium, chromium, manganese, and lead in sample 100378.

- Duplicate analyses for sample 100378 were outside the 20% RPD control limits for sample values greater than five times the reporting limit, or ± the reporting limits for sample values less than five times the reporting limit, for arsenic, barium, and chromium.
- The matrix spike for mercury was below 50% recovery at 46.3%. The mercury recovery in the TCLP leachate was below 80–100% of the action level, so standard addition was not required per 57FR:55117.

Semivolatiles

- Spike recoveries for N-nitroso-di-n-propylamine and 1,2,4-trichlorobenzene were below QC limits in the blank spike for LCS 93LE1003-MB1. This sample was analyzed outside the 12-hour tune limit.
- Spike recoveries for N-nitroso-di-n-propylamine were below QC limits in the blank spike and its duplicate for LCS 93LE1043-MB1. Spike recoveries for 1,2,4-trichlorobenzene and 2,4-dinitrotoluene were below QC limits in the blank spike duplicate. The percentage RPD value was above the QC limit for acenaphthene. The blank spike and blank spike duplicate were analyzed outside the 12-hour tune limit.
- Spike recovery for N-nitroso-di-n-propylamine was below the QC limit in the matrix spike duplicate for sample 100370.
- Sample 100375 exhibited four low surrogate recoveries. The sample was reanalyzed for low internal standard areas and exhibited five low surrogate recoveries. The surrogate recoveries were not reported, due to the dilutions performed, for the following: sample 100383 and its secondary dilution; 100385 and its secondary dilution; two secondary dilutions of 100386; and one secondary dilution of 100387.
- Samples 100373 and 100375 had internal standard areas below the 50% acceptance criteria. The reanalysis samples also had low internal standard areas, indicating a matrix interference. Samples 100383 and 100386 had perylene-d12 below the 50% acceptance limit. Both samples required secondary dilutions to quantitate target compounds accurately. These samples were not reanalyzed.

GC/MS Volatiles

- Non-target compounds were detected in these samples.
- Two of 93 surrogate recoveries were outside EPA QC limits. Sample 100385 was reanalyzed on 6/24/93 and reported.
- The laboratory blanks contained the common contaminants methylene chloride and/or acetone at levels less than three times the CRQL.

Pesticides/PCBs

- These samples received a GPC and a sulfur cleanup.
- The matrix spike recovery for 4,4'-DDT was outside acceptance criteria.
- The following samples required dilutions due to matrix interference and high concentrations of analytes: sample 100370, its replicate and matrix spike, and sample 100373 required dilution factors of five; samples 100371, 100383, 100385, 100386, and 100387 required dilution factors of ten.
- Toxaphene exceeded the 15% criteria for calibration factors. The data reflected an increase in instrument response for this parameter, so the ability to identify the target compound was not impaired. Since quantitation was not required, the data should not be affected.
- The 4,4'-DDT series in sample 100370, its replicate and matrix spike, and samples 100371, 100373, and 100376 were reported without confirmation due to interferences with AR1260; therefore, their actual existence is suspect. Endrin ketone results in samples 100386, 100387, and 100388 were reported without confirmation due to matrix interference, and their existence is also suspect.

- None of the samples contained target compounds in sufficient concentration to be confirmed by GC/MS.

Pesticides
- These samples received a sulfur cleanup.

Dioxins
- Five of 63 internal standard recoveries were outside the SW-846 QC limits of 40–120%. Internal standard recovery criteria were not satisfied for samples 100383 and 100385. These samples were re-extracted with similar (slightly worse) results, which are available on request. All re-extraction criteria were satisfied.
- Internal standard signal to noise ratio was greater than 10:1 and the quantitation was valid. (EPA CLP QC allows recoveries as low as 25%.) These criteria were used to assess method performance. However, when properly applied, results obtained by isotope dilution techniques are independent of internal standard recovery. The only impact on the data is to raise the detection limits of analytes quantitated using the effected internal standards.
- One of six matrix spike recoveries was outside the EPA QC limit of 50–150%. The out-of-limit recovery was due to the concentration of OCDD native to the sample and the usual non-homogenous nature of soil samples. This was confirmed by the good blank spike recoveries.

TCLP Semivolatiles
- Two of 24 matrix spike recoveries were outside EPA QC limits.
- One of 12 blank spike recoveries was outside EPA QC limits.

<u>9306L938</u>
Semivolatiles
- The spike recovery for phenol exceeded the QC limits for the blank spike duplicate of LCS 93GB0316-MB1.
- Samples 100390 and 100392, and the blank spike and blank spike duplicate of LCS 93GB0316-MB1, exhibited areas for perylene-d12 below the 50% acceptance criteria. The samples were not reanalyzed because there were no target compounds detected in the samples that used the internal standard perylene-d12 to quantitate.

GC/MS Volatiles
- The method blank spike recovery for benzene exceeded the recommended QC limits. One of the LCS was analyzed beyond the 12-hour tune limit.

Pesticides
- The surrogate recoveries for di-n-butyl-chlorendate for samples 100390, 100391, 100392, 100396, and 100399 were outside control limits. The low surrogate recoveries may be attributed to the sample matrix.

Dioxins
- The internal standard C13-OCDD recovery for the laboratory blank spike 93LS0069-MB1 was outside SW 846 QC limits of 40–120%. Re-extraction requirements were satisfied by its associated unspiked blank 93LS0069-MB1. The samples were not affected.

<u>9306L957</u>
Inorganics
- The replicate results for cation exchange capacity and total organic carbon were outside the 20% RPD guidance limit.

Metals

- The matrix spike recoveries for arsenic, manganese, and selenium were outside the 75-125% control limits for sample 100401.
- A post-digestion matrix spike and serial dilution were performed for analytes with matrix spikes out of control.
- The matrix spike duplicates for arsenic and manganese were outside the 20% RPD control limits for sample 100400.
- The duplicate analyses for chromium, manganese, and lead for sample 100401 were outside the 20% RPD control limits for sample values greater than five times the reporting limit, or ± the reporting limits for sample values less than five times the reporting limit.

Semivolatiles

- The blank spike and blank spike duplicate of LCS 93GB0323-MB1 were analyzed outside the 12-hour tune limit.
- The matrix spike recovery for the matrix spike duplicate of sample 100400 was above the QC limits for pentachlorophenol.
- The following samples exhibited areas for the last internal standard (perylene-d12) below the 50% acceptance criteria: samples 100406, 100408, 100410, and 100411; the matrix spike duplicate of sample 100400; and the blank spike and blank spike duplicate of LCS 93GB0323-MB1. The samples were not reanalyzed because there were no target compounds detected in the samples that used the internal standard perylene-d12 to quantitate.
- Sample 100406, extracted as low-level soil, had a 5.0 mL final extract volume and was analyzed without further dilution. The results and detection limits have been adjusted to reflect the final extract volume in this sample.

GC/MS Volatiles

- The method blank spike recovery for benzene was outside recommended QC limits. One of the LCS was analyzed beyond the 12-hour tune limit.
- The matrix spike and matrix spike duplicate of sample 100403 had two recoveries that exceeded QC limits for benzene.
- Sample 100405 required a secondary dilution in order to quantitate acetone accurately.

Pesticides

- Surrogate recoveries for di-n-butyl-chlorendate were outside control limits for samples 100404, which had a low recovery, and 100406, which had the surrogate diluted out.

Dioxins

- The internal standard C13-TCDD recovery for sample 100411 was outside the 40–120% QC limits. The ion ratio for this peak was also outside QC limits, indicating an interference. As there were no "hits" to be quantified from this internal standard, the data was not affected. Re-extraction requirements were satisfied by the analysis of the matrix spike of sample 100411.
- The internal standard of C13-OCDD recovery for the laboratory blank spike 93LS0069-MB1. was outside the 40–120% QC limits. Re-extraction requirements were satisfied by its associated unspiked blank 93LS0069-MB1. The samples were not affected.
- One of six matrix spike recoveries was outside QC limits. This was due to the large amount of the spike compound (OCDD) native to the sample (approximately two times the spike level) and normal sample non-homogeneity. The good blank spike recoveries confirm the matrix effect.

Radiological indicators

- The results for gross alpha/beta for samples 100410 and 100411 were subjective due to small aliquots and large self-absorption factors. The replicate results for tritium for these samples were slightly outside limits; however, there was no additional sample for a reanalysis.

9306L966

GC/MS Volatiles

- Non-target compounds were detected in these samples.
- Two of 27 surrogate recoveries were outside EPA QC limits. The analyses of sample 100415 and its matrix spike duplicate fulfilled the reanalysis requirement for the matrix spike of sample 100415. Sample 100416 was diluted and reanalyzed for acetone on 7/01/93; both values are reported.
- The laboratory blank 93LVB152-MB1 contained the common contaminant methylene chloride at a level less than three times the CRQL. The laboratory blank 93LVR113-MB1 contained the common contaminant acetone at a level less than the CRQL.

9306L997

Inorganics

- The replicate result for cation exchange capacity was outside the 20% RPD guidance limit.

Metals

- The matrix spike recoveries for chromium, manganese, and selenium in sample 100417 were outside the 75–125% control limits.
- A post-digestion matrix spike and serial dilution were performed for analytes where the matrix spike was out of control.
- The matrix spike duplicate for manganese in sample 100417 was outside the 20% RPD control limits.
- The duplicate analysis for chromium in sample 100417 was outside the 20% RPD control limits for sample values greater than five times the reporting limit, or ± the reporting limits for sample values less than five times the reporting limit.

Semivolatiles

- Non-target compounds were detected in these samples.
- One of 22 matrix spike recoveries was outside EPA QC limits.
- The laboratory blank contained the common contaminants di-n-butylphthalate and bis(2-ethylhexyl)phthalate at levels less than the CRQL.

GC/MS Volatiles

- Non-target compounds were detected in these samples.
- Sample 100426 required a five-fold dilution because it contained a high level of the target compound acetone.
- The laboratory blanks contained the common contaminants methylene chloride and/or acetone at levels less than three times the CRQL.

Pesticides/PCBs

- These samples received GPC and sulfur cleanups.

Laboratory Data Records Reviews

TMA/Eberline, September 21-22, 1993

During the data records review at TMA/Eberline on September 21-22, 1993, 97 worksheets were filled out for the D-Area Burning Rubble Pit (DBP) RFI/RI waste unit. Each worksheet represents one sample reviewed for one analysis.

There were 24 worksheets each for gross alpha, nonvolatile beta, and total alpha-emitting radium, using methods 900.0, 900.0 and 903.0, respectively. For tritium, analyzed by a minor modification of method 906.0, 25 worksheets were completed.

Major Issues

Several laboratory practices potentially of concern to validators were identified:

Method blank QC for 903.0:
Method blanks of low activity levels near the minimum detectable activity (MDA) are important for the QC process. However, 13 of 24 samples reviewed had method blank results greater than the sample-specific MDA. Two of the method blank results exceeded 1.0 picocurie per gram (pCi/g).

Analytical results:
For 1 of the 96 samples reviewed, the analytical result on the instrument printout did not match the analytical result in the WSRC database. See also the results of the March 24-25, 1994, review below.

Initial calibration QC for 900.0 and 903.0:
All of the worksheets for methods 900.0 and 903.0 indicated failure of initial calibration in that the counting system efficiency was not calibrated within one year before analysis. However, discussions with several radiochemists and instrument specialists determined that counting system efficiency is adequately verified with proper continuing calibration techniques. Three questions on the methods checklist verify continuing calibration and thus verify the counting system efficiency. Thus none of the samples reviewed were tallied as failing because of initial calibration criteria.

Scoring

Note: Failure of an analysis for one question in the LDRR means only that it does not meet one criterion, not that the result need be rejected.

900.0 Gross Alpha
Sample 93-06-096-06 (100429) failed because the relative percent difference (RPD) was greater than 35% (68.2%) for duplicates. The result was not qualified.

900.0 Nonvolatile Beta
Sample 93-06-082-04 (100410) failed in that the analytical result did not match the WSRC database (32.5 vs. 37.5). See also the results of the March 24-25, 1994, review below.

For 2 of 24 samples reviewed (93-06-065-05 [100323] and 93-06-082-04 [100410]), the analysis date/time did not match the WSRC database.

Samples 93-06-061-09 (100307) and 93-06-082-04 (100410), both qualified with *V* only, failed because the method blank was greater than the sample-specific MDA.

Water sample 93-06-060-05 (100316) failed because the RPD was 100% (greater than 35%) for duplicates in the same preparation batch; the sample was qualified with *X*.

903.0 Total Radium

Because the method blank was greater than the sample-specific MDA, 12 of 24 samples reviewed were qualified with the result qualifier *U* and the analysis qualifier *V*. The samples are:

93-06-067-09 (100364)	93-06-065-05 (100323)	93-06-082-04 (100410)
93-06-068-04 (100346)	93-06-080-07 (100373)	93-06-082-03 (100410)
93-06-066-06 (100330)	93-06-078-09 (100406)	93-06-079-06 (100392)
93-06-064-05 (100304)	93-06-069-04 (100340)	93-06-081-08 (100386)

Because the lab control spike recovery was not in the range of 80%-120%, 3 of 24 samples reviewed failed the record review:

- 93-06-079-06 (100392), 76.5% (Because the value in the narrative and EDD is within range, this sample was not qualified.)
- 93-06-081-08 (100386), 34% (Because the value in the narrative and EDD is within range, this sample was not qualified.)
- 93-06-098-05 (100418), 76.2% (qualified with *J*, *C*)

906.0 Tritium

Because the RPD was greater than 35% for duplicates, one pair of the 25 samples reviewed failed:

- 93-06-082-03 and 93-06-082-04 (100410), with an RPD of 119% (qualified with *X* because the result were greater than twice the contract-required detection limit)

TMA/Eberline, March 24-25, 1994

A number of errors, apparently created during hand transcription of the data, were found in this review. These and other errors of this type usually cannot be detected during off-site data validation and verification. The errors found in DBP data during this review were: 4 cases in which the sample results in the EDDs did not match the TMA raw data; 8 cases in which the accuracy results in the EDDs did not match the TMA raw data; raw data for one sample (4 analytes) for which no data had been delivered; and an inconsistent application of TMA's policy to report no accuracy for results below MDA.

Weston, December 6-10, 1993

During the data records review at Weston-Lionville on December 6-10, 1993, 204 worksheets were filled out for the D-Area Burning/Rubble Pits RFI/RI waste unit. Each worksheet represents one sample reviewed for one analytical method. There were 26 worksheets each for the following methods: 6010, ICP metals; 7060, arsenic by atomic absorption (AA); 7421, lead by AA; 7470, mercury by AA; 7740, and selenium by AA. The review team also filled out 25 worksheets for volatiles by method 8240, 19 for semivolatiles by 8270, 14 for pesticides by 8080, 13 for dioxins/furans by 8280, and one each for chlorine by method 325.2, nitrate as nitrogen by 353.2, and herbicides by 8150.

Major Issue

A laboratory practice potentially of concern to validators was identified:

Failure of Electronic Data Deliverable (EDD) to match laboratory instrument printout:
For two of the samples reviewed (both alpha-benzene hexachloride by method 8080), the analytical result on the instrument printout did not match the analytical result in the WSRC data.

Failures by Method

Note: Failure of an analysis for one question in the LDRR means only that it does not meet that criterion, not that the result need be rejected.

325.2/Chloride
The sample reviewed failed because the analysis date/time in the instrument printout differed by more than five minutes from the analysis date/time in the WSRC database.

353.2
No failures were observed in the sample reviewed.

6010/ICP metals
For two samples, metals concentrations in the initial calibration blank (ICB) failed criteria: cadmium and copper in sample 100301 and chromium in sample 100346. The analyses were qualified with the result qualifiers *U* and *J* and the analysis qualifier *L*.

Sample 100321 failed because a continuing calibration blank (CCB) was not performed at the end of a 10-sample run.

The CCB concentrations failed to meet the criteria of CCB ± CRDL (contract-required detection limit) for cadmium in sample 100346. The analysis was qualified with the result qualifiers *U* and *J* and the analysis qualifier *L*.

Samples 100314 and 100321 failed because the required interference check sample (ICS) was not performed at the end of the day.

7060/Arsenic
Samples 100301, 100310, and 100314 failed because the analysis date/time in the instrument printout differed by more than five minutes from the analysis date/time in the WSRC database.

The rerun with dilution of sample 100321 failed because no laboratory control sample (LCS) was performed for the analysis batch. However, the preparation batch for these samples contained an LCS; no qualification of the analysis was required.

7421/Lead
Sample 100373 failed because the analysis date/time in the instrument printout differed by more than five minutes from the analysis date/time in the WSRC database.

Rerun samples 100310, 100314, and 100321 failed because no LCS was performed for the analysis batch. However, the preparation batch for these samples contained an LCS; no qualification of the analysis was required.

7470/Mercury
All 26 DBP samples failed because the analysis date/time in the instrument printout differed by more than five minutes from the analysis date/time in the WSRC database; all have analysis times of 1200 in the WSRC database.

The following eight samples failed because LCS samples were performed less often than every 20th sample: 100314 and 100321 (one pair in 30 samples); 100360 (one pair in more than samples); 100406, 100407, 100410, and 100411 (one pair in 32 samples); and 100431 (no LCS performed for the analysis batch. However, the preparation batch for these samples contained an LCS; no qualification of the analysis was required).

Sample 100310 failed because the LCS recovery was outside the 80-120% limits at 124%. The analysis was qualified with the result qualifier *J* and the analysis qualifier *C*.

7740/Selenium
Four samples failed because LCS samples were performed less often than once every 20th sample: 100346 (one pair in 25 samples) and 100370, 100371, and 100373 (no LCS performed for the analysis batch. However, the preparation batch for these samples contained an LCS; no qualification of the analysis was required).

8080/Pesticide
Samples 100390 and 100411 failed because the analytical results in the printout did not match the results in the WSRC database for alpha-benzene hexachloride.

Samples 100336 and 100347 failed because breakdown of endrin or DDT, respectively, exceeded 20%. Those analyses were qualified with the result qualifiers *U* and *J* and the analysis qualifier *G*.

Sample 100347 failed because the percent difference (%D) of the continuing calibration standards was greater than15% for one or more analytes. Continuing calibration documentation was not provided for sample 100431.

Two samples failed because a detected compound fell outside rtention time windows during analysis: 100406 (DDE, DDT, alpha-chlordane, and gamma-chlordane) and 100410 (DDE and DDT). The analyses were qualified with the result qualifier *U* and the analysis qualifier *A*.

Sample 100390 failed because the recovery for surrogate dibutyl chlorendate (15%) was outside limits. All pesticides for this sample were qualified with the result qualifiers *U* and *J*, the analysis qualifier *O*, and the bias qualifier *L*.

8150/Herbicides
No failures were observed in the sample reviewed.

8240/Volatiles
Samples 100336 (as originally analyzed and as diluted) and 100390 failed because %D of the continuing calibration check standard (CCC) was greater than 25% for vinyl chloride. These analyses were qualified with the result qualifiers *U* and *J* and analysis qualifier *L*.

Internal standard (IS) peak areas failed criteria in samples 100390 (all three IS were greater than 50%, but surrogates were acceptable) and 100406 (chlorobenzene-d_5 and 1,4-difluorobenzene were lss than 50%). All compounds for sample 100390, and the compounds quantitated by the two out-of-control standards for sample 100406, were qualified with the result qualifiers *J* or *UJ* and the analysis qualifier *H*.

8270/Semivolatiles
Sample 100370 failed because the analysis date/time in the instrument printout differed by more than five minutes from the analysis date/time in the WSRC database.

The system performance check compound (SPCC) 2,4-dinitrophenol exceeded limits during continuing calibration for samples 100406, 100407, 100410, 100411, 100430, and 100431. All the compounds in the suite were qualified with the result qualifiers *J* or *UJ* and the analysis qualifier *L*.

Four samples failed because %D was greater than 25% for one or more CCCs: 100314 (di-n-octyl phthalate=33.2%), 100336 (di-n-octyl phthalate=36.0%), 100347 (pentachlorophenol= 61.2%), and 100407 (di-n-octyl phthalate=177%). The named analysis was qualified in each case with the result qualifiers *J*, *U*, or *UJ* and the analysis qualifier *L*.

Six samples failed because the peak area for IS perylene-d_{12} failed criteria: 100390, 100406, 100410, 100411, 100430, and 100431. The compounds quantitated by that standard were qualified with the result qualifiers *J* or *UJ*, the analysis qualifier *H*, and the bias qualifiers *L* for samples 100406, 100410, and 100411, and *H* for samples 100430 and 100431.

Surrogate 2-fluorobiphenyl failed for sample 100301.

8280/Dioxins/furans

Samples 100411, 100424, and 100431 failed because the analysis date/time in the instrument printout differed by more than five minutes from the analysis date/time in the WSRC database.

Sample 100411 failed because the IS recovery of 126% for 2,3,7,8-TCDD was outside limits of 40-120%. The dioxins and furans quantitated by that standard were qualified with the result qualifiers *U* and *J* and the analysis qualifier *H*.

Presentation of qualified data

Table 12 presents the numbers of project samples for which each analyte was requested, and for which analytical results were received. It also presents the total number of analytical results reported and rejected and the numbers of results for which holding times were missed or problems were encountered with associated quality assurance samples, preservation, and instrument calibration. Surrogates required by the method are listed like target analytes.

The numbers in the "Analyses Requested" column are the total number of each analyte listed on chain-of-custody forms for environmental samples, field-generated replicates, field blanks, and trip blanks. The numbers in the "Received" column are the total number of samples for which at least one analytical record was reported. Missing analyses are discussed in the "Sample Collection" and "Data Validation and Verification" sections of this report. Percent solids was analyzed routinely for all soil samples, but was not requested on the chain-of-custody forms.

The column labeled "Analyses Reported" includes laboratory-initiated replicate analyses and reanalysis results. These values do not include analyses of associated laboratory control samples such as blanks or spikes.

The remaining columns in the table list the number of analyses that meet specified conditions.

The column labeled "Rejected" contains the number of records for which the result qualifier was *R*. Because these samples may have an acceptable reanalysis result and appear again in another column in the table, the count in this column is not the number of samples for which only rejected results were reported.

The number of analyses shown in the column labeled "Out of Holding" are those that exceeded the maximum time between sample collection and analysis allowed by the analytical method and have an analysis qualifier of *Q*. All laboratory pH measurements exceed holding time, regardless of the laboratory's efficiency.

The analyses listed in the column labeled "QA Problems" are those whose records contained an analysis qualifier of *V*, *O*, *I*, or *T* because at least one associated laboratory quality control sample did not meet the required standards.

The analyses listed in the "Preservation" column are those with an analysis qualifier of *Y* because of preservation problems. In most of these cases, the samples were not maintained cold enough.

The number of analyses with calibration problems is listed in the column labeled "Calibration." The records for these analyses contain an analysis qualifier of *L*. The numbers represent samples from analytical batches that did not meet all the calibration criteria.

Table 12. Numbers of Qualified Samples

Physical Parameters

Analyte	Samples Requested	Received	Analyses Reported	Rejected	Holding	QA Samples	Preservation	Calibration
Cation exchange capacity	35	35	41	0	0	0	2	0
Chloride	12	4	4	0	0	0	0	0
Specific conductance	35	35	38	0	0	0	1	0
Cyanide	0	2	2	0	0	0	0	0
Fluoride	12	4	5	0	0	0	0	0
Nitrate as nitrogen	12	4	4	0	0	1	0	0
pH	58	49	54	0	53	0	5	0
Sulfate	12	4	7	0	0	0	0	0
Percent solids	.	101	184	0	0	0	24	0
Total dissolved solids	14	6	7	0	1	0	0	0
Total organic carbon	57	49	53	0	0	0	6	0
Total organic halogens	13	4	4	0	4	0	0	0
Total suspended solids	14	6	8	0	1	0	0	0
Total Metals								
Silver	129	120	144	0	0	6	13	0
Aluminum	2	2	2	0	0	0	0	0
Arsenic	129	120	144	0	0	14	13	0
Barium	129	120	144	0	0	6	13	0
Beryllium	2	2	2	0	0	0	0	0
Calcium	2	2	2	0	0	0	0	0
Cadmium	129	120	144	0	0	6	13	25
Cobalt	2	2	2	0	0	0	0	0
Chromium	129	120	144	0	0	14	13	19
Copper	129	120	144	0	0	0	13	6
Iron	14	8	8	0	0	0	0	0
Mercury	129	120	135	0	10	0	13	0
Potassium	2	2	2	0	0	0	0	0
Magnesium	2	2	2	0	0	0	0	0
Manganese	129	120	144	0	0	17	13	0
Sodium	14	8	8	0	0	0	0	0

Table 12. Numbers of Qualified Samples, Continued

Analyte	Samples Requested	Received	Analyses Reported	Rejected	Holding	QA Samples	Preservation	Calibration
Nickel	129	120	144	0	0	0	13	0
Lead	129	120	144	0	0	9	13	0
Antimony	2	2	2	0	0	0	0	0
Selenium	129	120	144	0	0	20	13	0
Thallium	2	2	2	0	0	0	0	0
Vanadium	2	2	2	0	0	0	0	0
Zinc	2	2	2	0	0	0	0	0
B/N/A Extractables (including PAH and Phenols)								
Acenaphthene	103	94	106	0	2	7	9	6
Acenaphthylene	103	94	106	0	2	7	9	6
Anthracene	103	94	109	0	2	10	9	6
Bis(2-chloroethoxy) methane	103	94	106	0	2	7	9	6
Bis(2-chloroisopropyl) ether	103	94	106	0	2	7	9	6
Bis(2-chloroethyl) ether	103	94	106	0	2	7	9	6
Bis(2-ethylhexyl) phthalate	103	94	106	0	2	36	9	6
Benzo(a)anthracene	103	94	111	0	2	12	9	6
Benzo(a)pyrene	103	94	110	0	2	17	9	6
Benzo(b)fluoranthene	103	94	111	0	2	18	9	6
Butylbenzyl phthalate	103	94	106	0	2	7	9	6
Benzoic acid	103	94	106	0	2	7	9	6
Benzo(g,h,i)perylene	103	94	107	0	2	14	9	6
Benzo(k)fluoranthene	103	94	107	0	2	14	9	6
Benzyl alcohol	103	94	106	0	2	7	9	6
Chrysene	103	94	110	0	2	11	9	6
Hexachlorobenzene	103	94	106	0	2	7	9	6
Hexachlorocyclopentadiene	103	94	106	0	2	7	9	6
Hexachloroethane	103	94	106	0	2	7	9	6
Dibenz(a,h)anthracene	103	94	106	0	2	13	9	6
Diethyl phthalate	103	94	106	0	2	7	9	6
Dibenzofuran	103	94	106	0	2	7	9	6
Dimethyl phthalate	103	94	106	0	2	7	9	6

Table 12. Numbers of Qualified Samples, Continued

Analyte	Samples Requested	Received	Analyses Reported	Rejected	Holding	QA Samples	Preservation	Calibration
Di-n-butyl phthalate	103	94	106	0	2	86	9	6
Di-n-octyl phthalate	103	94	106	0	2	13	9	8
Fluoranthene	103	94	112	0	2	13	9	6
Fluorene	103	94	107	0	2	8	9	6
Hexachlorobutadiene	103	94	106	0	2	7	9	6
Indeno(1,2,3-c,d)pyrene	103	94	107	0	2	14	9	6
Isophorone	103	94	106	0	2	7	9	6
Naphthalene	103	94	106	0	2	7	9	6
Nitrobenzene	103	94	106	0	2	7	9	6
Nitrobenzene-d5	103	94	112	0	2	1	9	6
N-Nitrosodipropylamine	103	94	106	0	2	29	9	6
N-Nitrosodiphenylamine	103	94	106	0	2	7	9	6
Pentachlorophenol	103	94	106	1	2	25	9	7
Phenanthrene	103	94	111	0	2	12	9	6
Phenol-d5	103	94	112	0	2	1	9	6
Phenol	103	94	106	0	2	30	9	6
p-Terphenyl-d14	103	94	112	0	2	2	9	6
Pyrene	103	94	111	0	2	12	9	6
1,2,4-Trichlorobenzene	103	94	106	0	2	20	9	6
1,2-Dichlorobenzene	103	94	106	0	2	7	9	6
1,3-Dichlorobenzene	103	94	106	0	2	7	9	6
1,4-Dichlorobenzene	103	94	106	0	2	7	9	6
2,4,5-Trichlorophenol	103	94	106	0	2	7	9	6
2,4,6-Tribromophenol (surr)	103	94	112	0	2	1	9	6
2,4,6-Trichlorophenol	103	94	106	0	2	7	9	6
2,4-Dichlorophenol	103	94	106	0	2	7	9	6
2,4-Dimethyl phenol	103	94	106	0	2	7	9	6
2,4-Dinitrophenol	103	94	106	0	2	9	9	6
2,4-Dinitrotoluene	103	94	106	0	2	9	9	6
2,6-Dinitrotoluene	103	94	106	0	2	7	9	6
2-Chlorophenol	103	94	106	0	2	9	9	6
2-Chloronaphthalene	103	94	106	0	2	7	9	6
2-Fluorobiphenyl	103	94	112	0	2	2	9	6
2-Fluorophenol	103	94	112	0	2	1	9	6

Table 12. Numbers of Qualified Samples, Continued

Analyte	Samples Requested	Received	Analyses Reported	Rejected	Holding	QA Samples	Preservation	Calibration
2-Methylnaphthalene	103	94	106	0	2	7	9	6
o-Cresol (2-Methylphenol)	103	94	106	0	2	7	9	6
o-Nitroaniline	103	94	106	0	2	7	9	6
2-Nitrophenol	103	94	106	0	2	7	9	6
3,3'-Dichlorobenzidine	103	94	106	0	2	7	9	6
m-Nitroaniline	103	94	106	0	2	7	9	6
2-Methyl-4,6-dinitrophenol	103	94	106	0	2	7	9	6
4-Bromophenyl phenyl ether	103	94	106	0	2	7	9	6
4-Chloroaniline	103	94	106	0	2	7	9	6
4-Chloro-m-cresol	103	94	106	0	2	7	9	6
4-Chlorophenyl phenyl ether	103	94	106	0	2	7	9	6
p-Cresol (4-Methylphenol)	103	94	106	0	2	7	9	6
p-Nitroaniline	103	94	106	0	2	7	9	6
4-Nitrophenol	103	94	106	0	2	7	9	6
Volatile Organic Compounds								
Acetone	150	136	178	0	2	121	26	0
Bromodichloromethane	150	136	165	0	2	17	22	0
Chloroethene (Vinyl chloride)	150	136	165	0	2	16	22	2
Chloroethane	150	136	165	0	2	16	22	0
Benzene	150	136	165	0	2	29	22	0
Carbon tetrachloride	150	136	165	0	2	17	22	0
Dichloromethane (Methylene chloride)	150	136	165	0	2	101	22	0
Bromomethane (Methyl bromide)	150	136	165	0	2	16	22	0
Chloromethane (Methyl chloride)	150	136	165	0	2	16	22	0
Bromoform	150	136	165	0	2	17	22	0
Chloroform	150	136	165	0	2	18	22	0
Chlorobenzene	150	136	165	0	2	15	22	0
Carbon disulfide	150	136	165	0	2	16	22	0

Table 12. Numbers of Qualified Samples, Continued

Analyte	Samples Requested	Received	Analyses Reported	Rejected	Holding	QA Samples	Preservation	Calibration
Dibromochloromethane	150	136	165	0	2	17	22	0
Ethylbenzene	150	136	165	0	2	17	22	0
Toluene-d8	150	136	178	0	2	2	26	0
Toluene	150	136	165	0	2	15	22	0
Methyl ethyl ketone	150	136	165	0	2	16	22	0
p-Bromofluorobenzene	150	136	178	0	2	2	26	0
Styrene	150	136	165	0	2	17	22	0
1,1,2,2-Tetrachloroethane	150	136	165	0	2	17	22	0
Tetrachloroethylene	150	136	165	0	2	17	22	0
Trichloroethylene	150	136	165	0	2	15	22	0
Vinyl acetate	150	136	165	0	2	17	22	0
1,1,1-Trichloroethane	150	136	165	0	2	17	22	0
1,1,2-Trichloroethane	150	136	165	0	2	17	22	0
1,1-Dichloroethylene	150	136	165	0	2	14	22	0
1,1-Dichloroethane	150	136	165	0	2	16	22	0
1,2-Dichloroethane-d4	150	136	178	0	2	2	26	0
1,2-Dichloroethylene	.	136	165	0	2	16	22	0
1,2-Dichloroethane	150	136	165	0	2	16	22	0
1,2-Dichloropropane	150	136	165	0	2	17	22	0
cis-1,3-Dichloropropene	150	136	165	0	2	17	22	0
trans-1,3-Dichloropropene	150	136	165	0	2	17	22	0
2-Chloroethyl vinyl ether	100	49	58	0	0	5	5	0
2-Hexanone	150	136	165	0	2	17	22	0
Methyl isobutyl ketone	150	136	165	0	2	17	22	0
Xylenes	150	135	164	0	2	17	22	0
Pesticides/PCBs and Dioxins/Furans								
alpha-Benzene hexachloride	70	70	80	0	0	16	4	0
alpha-Chlordane	70	70	80	0	0	15	4	0
Aldrin	70	70	80	0	0	14	4	0
beta-Benzene hexachloride	70	70	80	0	0	16	4	0
Carbon 13-labeled	70	68	79	0	0	0	4	0

Table 12. Numbers of Qualified Samples, Continued

Analyte	Samples Requested	Received	Analyses Reported	Rejected	Holding	QA Samples	Preservation	Calibration
1,2,3,6,7,8-HXCDD								
Carbon 13-labeled OCDD	70	68	79	0	0	0	4	0
Carbon 13-labeled 2,3,7,8-TCDD	70	68	79	0	0	1	4	0
Restricide surrogate	.	43	49	0	0	1	0	0
delta-Benzene hexachloride	70	70	80	0	0	16	4	0
Decachlorobiphenyl	68	23	27	0	0	0	0	0
Dieldrin	70	70	80	0	0	14	4	0
Endrin ketone	70	70	80	0	0	16	4	0
Endrin	70	70	80	0	0	14	4	0
Endosulfan I	70	70	80	0	0	16	4	0
Endosulfan II	70	70	80	0	0	16	4	0
Endosulfan sulfate	70	70	80	0	0	16	4	0
gamma-Chlordane	70	70	80	0	0	15	4	0
Heptachlorodibenzo-p-dioxin isomers	70	68	79	0	0	0	4	0
Heptachlorodibenzo-p-furan isomers	70	68	79	0	0	4	4	0
Heptachlor	70	70	80	0	0	14	4	0
Heptachlor epoxide	70	70	80	0	0	16	4	0
Hexachlorodibenzo-p-dioxin isomers	70	68	79	0	0	0	4	0
Hexachlorodibenzo-p-furan isomers	70	68	79	0	0	2	4	0
Lindane	70	70	80	0	0	14	4	0
Methoxychlor	70	70	80	0	0	16	4	0
Octachlorodibenzo-p-dioxin isomers	70	68	79	0	0	4	4	0
Octachlorodibenzo-p-furan isomers	70	68	79	0	0	0	4	0
PCB 1016	70	70	80	0	0	16	4	0
PCB 1221	70	70	80	0	0	16	4	0
PCB 1232	70	70	80	0	0	16	4	0
PCB 1242	70	70	80	0	0	16	4	0

Table 12. Numbers of Qualified Samples, Continued

Analyte	Samples Requested	Received	Analyses Reported	Rejected	Holding	QA Samples	Preservation	Calibration
PCB 1248	70	70	80	0	0	16	4	0
PCB 1254	70	70	80	0	0	16	4	0
PCB 1260	70	70	80	0	0	16	4	0
Pentachlorodibenzo-p-dioxin isomers	70	68	79	0	0	0	4	0
Pentachlorodibenzo-p-furan isomers	70	68	79	0	0	0	4	0
p,p'-DDD	70	70	80	0	0	16	4	0
p,p'-DDE	70	70	80	0	0	15	4	0
p,p'-DDT	70	70	80	0	0	14	4	0
Tetrachlorodibenzo-p-dioxin isomers	70	68	79	0	0	1	4	0
Tetrachlorodibenzo-p-furan isomers	70	68	79	0	0	1	4	0
Tetrachloroxylene	68	27	31	0	0	0	4	0
Toxaphene	70	70	80	0	0	16	4	0
2,3,7,8-TCDD	70	68	79	0	0	1	4	0
2,3,7,8-TCDF	70	68	79	0	0	1	4	0
Xylenes	150	1	1	0	0	0	0	0
TCLP Compounds (Metals and Organics)								
alpha-Chlordane	5	5	9	0	0	2	2	0
Silver, TCLP	5	5	9	0	0	0	2	0
Arsenic, TCLP	5	5	9	0	0	0	2	0
Barium, TCLP	5	5	9	0	0	0	2	0
Chloroethene (Vinyl chloride)	5	5	7	0	0	0	3	0
Benzene	5	5	7	0	0	0	3	0
Carbon tetrachloride	5	5	7	0	0	0	3	0
Cadmium, TCLP	5	5	9	0	0	0	2	1
Chloroform	5	5	7	0	0	1	3	0
Hexachlorobenzene	5	5	11	0	0	2	3	0
Hexachloroethane	5	5	11	0	0	2	3	0

Table 12. Numbers of Qualified Samples, Continued

Analyte	Samples Requested	Received	Analyses Reported	Rejected	Holding	QA Samples	Preservation	Calibration
Chlorobenzene	5	5	7	0	0	0	3	0
Chromium, TCLP	5	5	9	0	0	0	2	1
2,4-Dichlorophenylacetic acid	5	5	9	0	0	0	2	0
Decachlorobiphenyl	5	4	7	0	0	0	2	0
Endrin	5	5	9	0	0	2	2	0
Decafluorobiphenyl	5	1	2	0	0	0	0	0
gamma-Chlordane	5	5	9	0	0	2	2	0
Hexachlorobutadiene	5	5	11	0	0	2	3	0
Mercury, TCLP	5	5	9	0	0	2	2	0
Heptachlor	5	5	9	0	0	2	2	0
Heptachlor epoxide	5	5	9	0	0	2	2	0
Lindane	5	5	9	0	0	2	2	0
Toluene-d8	5	5	7	0	0	0	3	0
Methyl ethyl ketone	5	5	7	0	0	0	3	0
Methoxychlor	5	5	9	0	0	2	2	0
Nitrobenzene	5	5	11	0	0	2	3	0
Nitrobenzene-d5	5	5	11	0	0	0	3	0
p-Bromofluorobenzene	5	5	7	0	0	0	3	0
Lead, TCLP	5	5	9	0	0	0	2	0
Pentachlorophenol	5	5	11	0	0	2	3	0
Phenol-d5	5	5	11	0	0	0	3	0
p-Terphenyl-d14	5	5	11	0	0	0	3	0
Pyridine	5	5	11	0	0	2	3	0
Selenium, TCLP	5	5	9	0	0	0	2	0
2,4,5-TP (Silvex)	5	5	9	0	0	0	2	0
Tetrachloroethylene	5	5	7	0	0	0	3	0
Tetrachloroxylene	5	5	9	0	0	0	2	0
Trichloroethylene	5	5	7	0	0	0	3	0
Toxaphene	5	5	9	0	0	3	2	0
1,1-Dichloroethylene	5	5	7	0	0	0	3	0
1,2-Dichloroethane-d4	5	5	7	0	0	0	3	0
1,2-Dichloroethane	5	5	7	0	0	0	3	0
1,4-Dichlorobenzene	5	5	11	0	0	2	3	0
2,4,5-T	5	5	9	0	0	0	2	0

Table 12. Numbers of Qualified Samples, Continued

Analyte	Samples Requested	Received	Analyses Reported	Rejected	Holding	QA Samples	Preservation	Calibration
2,4,5-Trichlorophenol	5	5	11	0	0	2	3	0
2,4,6-Tribromophenol (surr)	5	5	11	0	0	0	3	0
2,4,6-Trichlorophenol	5	5	11	0	0	2	3	0
2,4-Dichlorophenoxyacetic acid	5	5	9	0	0	0	2	0
2,4-Dinitrotoluene	5	5	11	0	0	2	3	0
2-Fluorobiphenyl	5	5	11	0	0	0	3	0
2-Fluorophenol	5	5	11	0	0	0	3	0
o-Cresol (2-Methylphenol)	5	5	11	0	0	2	3	0
X34MP	5	5	11	0	0	2	3	0
Radionuclide Indicators and Radionuclides								
Gross alpha	129	116	137	0	0	0	16	0
Nonvolatile beta	129	116	138	0	0	43	16	0
Radium, total alpha-emitting	129	116	137	0	0	106	16	0
Tritium	129	115	134	0	0	4	16	0

Data Table Generation

The printed tables in Appendix D of this report are an adjunct to the electronic data files, providing a convenient hard-copy compilation of the data collected for this project. They include, for all samples, selected fields of sampling, station, and analytical data. The tables are ordered by station number as specified in Tables 4-1 and 4-2 of the work plan, with all of the soil samples presented first, followed by the environmental water samples, and finally, the blanks specified in those tables. Results for laboratory blanks, surrogates, matrix spikes, and other laboratory QA/QC samples are not presented in the printed data tables.

Table generation does not in any way alter the data as it exists in the data files.

The printed tables were generated from the validated data files by a SAS program that combines and processes the data into a form suitable for word processing software. The SAS program's output is a combination of station, sampling, and analytical data, which are otherwise maintained as separate data files. For presentation in the tables, analytical data was rounded to two significant figures.

For each sample analyzed, a header provides the sample name and sample identification number. If the sample is a normal environmental sample, the header further provides the sampling location in Savannah River Site coordinates, the ground elevation in feet above mean sea level, the depth to the top and bottom of the sampled core interval in feet below ground level, the sample type, matrix, moisture, Munsell color, and Unified Soil Classification, as well as percentage of solids in the sample used for analysis. If the sample is other than a normal sample (duplicate, blank, etc.), the header specifies the sample type and identifies the normal or primary sample with which this sample is associated.

The table includes columns for analyte names, result qualifiers, analytical qualifiers, bias, results, units of measurement, detection limits, and analytical method codes. The constituents are sorted first by analytical suite, and then within each suite according to accepted chemical nomenclature as specified by the American Chemical Society. Analytical suites are set off by identifying headers.

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Appendix A: Constituent Lists

Table A-1: Soil Constituent List

Base/neutral/acid extractables, including polycyclic aromatic hydrocarbons (PAHs):

Acenaphthene
Acenaphthylene
Anthracene
Benzo(*a*)anthracene
Benzo(*b*)fluoranthene
Benzo(*k*)fluoranthene
Benzoic acid
Benzo(*g,h,i*)perylene
Benzo(*a*)pyrene
Benzyl alcohol
Bis(2-chloroethoxy) methane
Bis(2-chloroethyl) ether
Bis(2-chloroisopropyl) ether
Bis(2-ethylhexyl) phthalate
4-Bromophenyl phenyl ether
Butylbenzyl phthalate
4-Chloroaniline
4-Chloro-m-cresol
2-Chloronaphthalene
2-Chlorophenol
4-Chlorophenyl-phenyl ether
Chrysene
o-Cresol (2-Methylphenol)
p-Cresol (4-Methylphenol)
Dibenz(*a,h*)anthracene
Dibenzofuran
Di-n-butyl phthalate
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
3,3'-Dichlorobenzidine
2,4-Dichlorophenol
Diethyl phthalate
2,4-Dimethyl phenol
Dimethyl phthalate
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-*c,d*)pyrene
Isophorone
2-Methyl-4,6-dinitrophenol
2-Methylnaphthalene
Naphthalene
o-Nitroaniline
m-Nitroaniline
p-Nitroaniline
Nitrobenzene
2-Nitrophenol
4-Nitrophenol
N-Nitrosodiphenylamine
N-Nitrosodipropylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
1,2,4-Trichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol

Volatile organic compounds

Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane (Methyl bromide)
Carbon disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane
Chloroethene (Vinyl chloride)
2-Chloroethyl vinyl ether
Chloroform
Chloromethane (Methyl chloride)
Dibromochloromethane
1,1-Dichloroethane
1,2-Dichloroethane
1,2-Dichloroethylene (Total)
1,1-Dichloroethylene
Methylene chloride
1,2-Dichloropropane
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Ethylbenzene
2-Hexanone
Methyl ethyl ketone
Methyl isobutyl ketone
Styrene
1,1,2,2-Tetrachloroethane
Tetrachloroethylene
Toluene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethylene
Vinyl acetate
Xylenes (Total)

Total metals

Arsenic
Barium
Cadmium
Chromium
Copper
Lead
Manganese
Mercury
Nickel
Selenium
Silver

Physical parameters

Cation exchange capacity (CEC)
Soil pH
Specific conductance
Total organic carbon

Pesticides/PCBs and Dioxins/Furans

Aldrin	Heptachlor	PCB 1221
alpha-Benzene hexachloride	Heptachlor epoxide	PCB 1232
beta-Benzene hexachloride	Heptachlorodibenzo-p-dioxin isomers	PCB 1242
delta-Benzene hexachloride	Heptachlorodibenzo-p-furan isomers	PCB 1248
gamma-Benzene hexachloride	Hexachlorodibenzo-p-dioxin isomers	PCB 1254
alpha-Chlordane	Hexachlorodibenzo-p-furan isomers	PCB 1260
gamma-Chlordane	Methoxychlor	Pentachlorodibenzo-p-dioxin isomers
p,p'-DDD	Octachlorodibenzo-p-dioxin isomers	Pentachlorodibenzo-p-furan isomers
p,p'-DDE	Octachlorodibenzo-p-furan isomers	2,3,7,8-TCDD
p,p'-DDT	PCB 1016	2,3,7,8-TCDF
Dieldrin		Tetrachlorodibenzo-p-dioxin isomers
Endosulfan I		Tetrachlorodibenzo-p-furan isomers
Endosulfan II		Toxaphene
Endosulfan sulfate		
Endrin		
Endrin ketone		

Radionuclide indicators	Gross alpha	Total radium
	Nonvolatile beta	Tritium

TCLP	1,4-Dichlorobenzene	Nitrobenzene
	1,2-Dichloroethane	Pentachlorophenol
Arsenic	1,1-Dichloroethylene	Pyridine
Barium	2,4-Dinitrotoluene	Selenium
Benzene	Endrin	Silver
Cadmium	Heptachlor	Tetrachloroethylene
Carbon tetrachloride	Heptachlor epoxide	Toxaphene
Chlordane (alpha and gamma)	Hexachlorobenzene	Trichloroethylene
Chlorobenzene	Hexachlorobutadiene	2,4,5-Trichlorophenol
Chloroform	Hexachloroethane	2,4,6-Trichlorophenol
Chromium	Lead	2,4,5-TP (Silvex)
o-Cresol	Lindane	2,4,5-T
m,p-Cresol	Mercury	Vinyl chloride
2,4-D	Methoxychlor	
	Methyl ethyl ketone	

TCL/TAL with TIC	Magnesium	Lindane; does not include dioxins/furans
	Potassium	
TAL/TCL Inorganic:	Sodium	
Same as total metals with the addition of:	Thallium	***TAL/TCL Semivolatiles:***
Aluminum	Vanadium	Same as semivolatile organic compounds
Antimony	Zinc	
Beryllium		***TAL/TCL Volatiles***
Calcium	***TAL/TCL Pesticides/PCBs:***	Same as volatile organic compounds
Cobalt	Same as Pesticides/PCB, with the addition of	
Cyanide		
Iron		

Table A-2: Water Constituent List

Base/neutral/acid extractables, including polycyclic aromatic hydrocarbons (PAHs):
Same as soil semivolatile organic compounds

Volatile organic compounds
Same as soil volatile organic compounds

Total metals
Same as soil total metals

Radionuclide indicators
Same as soil radionuclide indicators

Inorganics
Chloride
Fluoride
Iron
Nitrate as nitrogen
pH
Sulfate
Total dissolved solids
Total organic carbon
Total organic halogens
Total suspended solids

Appendix B. Laboratory Performance Evaluation Results

Table B-1. EPA/EMSL Intercomparison Studies Program Data for TMA/Eberline

Analyte	Matrix	Known Value (pCi/L)	TMA Result (pCi/L)	Norm. Deviation
Cesium-137	Air filter	9.0 ± 5.0	10.0 ± 1.0	+0.4
Gross alpha	Air filter	19.0 ± 5.0	24.7 ± 1.2	+2.0
Nonvolatile beta	Air filter	47.0 ± 5.0	58.0 ± 1.7[1]	+3.81
Strontium-90	Air filter	19.0 ± 5.0	22.7 ± 1.5	+1.3
Gross alpha	P.E. "A"	96.0 ± 24.0	115.3 ± 3.8	+1.5
Radium-226	P.E. "A"	24.9 ± 3.7	22.5 ± 0.7	-1.1
Radium-228	P.E. "A"	19.0 ± 4.8	21.2 ± 0.7	+0.8
Uranium (natural)	P.E. "A"	28.9 ± 3.0	30.9 ± 2.4	+1.2
Cesium-134	P.E. "B"	27.0 ± 5.0	26.7 ± 0.6	-0.1
Cesium-137	P.E. "B"	32.0 ± 5.0	27.0 ± 1.0	-1.7
Cobalt-60	P.E. "B"	39.0 ± 5.0	39.0 ± 0.0	0.0
Nonvolatile beta	P.E. "B"	117.0 ± 27.0	172.7 ± 4.9	-0.3
Strontium-89	P.E. "B"	41.0 ± 5.0	39.7 ± 1.5	-0.5
Strontium-90	P.E. "B"	29.0 ± 5.0	23.7 ± 1.1	-1.9
Gross alpha	Water	34.0 ± 9.0	14.3 ± 1.5[2]	-3.82
Gross alpha	Water	15.0 ± 5.0	9.3 ± 1.5	-2.0
Nonvolatile beta	Water	44.0 ± 5.0	44.7 ± 5.1	+0.2
Nonvolatile beta	Water	43.0 ± 6.9	50.3 ± 3.1	+1.8
Plutonium-239	Water	20.0 ± 2.0	18.8 ± 0.5	-0.1
Radium-226	Water	9.8 ± 0.5	9.6 ± 0.5	-0.2
Radium-228	Water	18.5 ± 4.6	19.7 ± 0.8	+0.5
Strontium-89	Water	34.0 ± 5.0	33.7 ± 1.2	-0.5
Strontium-89	Water	15.0 ± 5.0	16.7 ± 2.5	+0.1
Strontium-90	Water	10.0 ± 5.0	10.3 ± 1.2	+0.1
Strontium-90	Water	25.0 ± 5.0	25.0 ± 1.7	0.0
Tritium	Water	9,844 ± 984	10,427 ± 211	+1.0
Uranium (natural)	Water	7.6 ± 3.0	8.7 ± 0.2	-0.5
Uranium (natural)	Water	25.3 ± 3.0	23.9 ± 0.3	-0.8
Barium-133	Water (γ)	99.0 ± 10.0	87.0 ± 7.6	-2.1
Cesium-134	Water (γ)	5.0 ± 5.0	4.7 ± 0.6	-0.1
Cesium-137	Water (γ)	5.0 ± 5.0	5.3 ± 0.6	+0.1
Cobalt-60	Water (γ)	15.0 ± 5.0	14.0 ± 1.0	-0.4
Ruthenium-106	Water (γ)	119.0 ± 12.0	96.3 ± 8.1	-2.9
Zinc-65	Water (γ)	103.0 ± 10.0	106.0 ± 3.5	+0.5

[1]A Corrective Action Report was issued.

[2]TMA stated that thorium-230, which was used by EPA, has a 50% lower counting efficiency than americium-241, the EPA-recommended isotope for alpha-absorption efficiency curves. According to TMA, correction for the 50% difference gives an acceptable value.

Table B-2. TMA Performance Evaluation, DOE Study 93-03

Analyte	Matrix	Known Value	TMA Result	Ratio TMA/Known
Americium-241	Air	0.414E-01	0.218E-01	0.53
Beryllium-7	Air	0.274E+02	0.368E+02	1.34
Cerium-144	Air	0.193E+02	0.433E+02	2.24
Cesium-134	Air	0.196E+01	0.213E+01	1.09
Cesium-137	Air	0.307E+01	0.363E+01	1.18
Cobalt-57	Air	0.271E+01	0.533E+01	1.97
Cobalt-60	Air	0.170E+01	0.213E+01	1.25
Manganese-54	Air	0.117E+02	0.134E+02	1.15
Plutonium-238	Air	0.363E-01	0.252E-01	0.69
Plutonium-239	Air	0.234E-01	0.198E-01	0.85
Strontium-90	Air	0.152E+00	0.229E+00	1.51
Uranium-Bq	Air	0.460E-01	0.560E-01	1.22
Americium-241	Soil	0.650E+01	0.420E+01	0.65
Cesium-137	Soil	0.923E+03	0.722E+03	0.78
Plutonium-239	Soil	0.116E+02	0.107E+02	0.92
Potassium-40	Soil	0.321E+03	0.253E+03	0.79
Strontium-90	Soil	0.417E+02	0.266E+02	0.64
Uranium-Bq	Soil	0.769E+02	0.733E+02	0.95
Americium-241	Vegetation	0.231E+00	0.395E+00	1.71
Cesium-137	Vegetation	0.246E+02	0.197E+02	0.80
Plutonium-238	Vegetation	0.114E+01	0.130E+01	1.14
Plutonium-239	Vegetation	0.323E+00	0.340E+00	1.05
Potassium-40	Vegetation	0.383E+03	0.330E+03	0.86
Strontium-90	Vegetation	0.237E+3	0.140E+03	0.59
Americium-241	Water	0.440E+00	0.520E+00	1.18
Cerium-144	Water	0.836E+02	0.929E+02	1.11
Cesium-134	Water	0.424E+02	0.490E+02	1.16
Cesium-137	Water	0.508E+02	0.598E+02	1.18
Cobalt-60	Water	0.453E+02	0.509E+02	1.12
Manganese-54	Water	0.105E+03	0.118E+03	1.12
Plutonium-238	Water	0.494E+00	0.480E+00	0.97
Plutonium-239	Water	0.828E+00	0.810E+00	0.98
Strontium-90	Water	0.103E+01	0.170E+01	1.65
Tritium	Water	0.970E+02	0.109E+03	1.12
Uranium-Bq	Water	0.289E+00	0.260E+00	0.90

Table B-3. TMA Performance Evaluation, DOE Study 93-09

Analyte	Matrix	Known Value	TMA Result	Ratio TMA/Known
Americium-241	Air	0.654E-01	0.650E-01	0.99
Antimony-125	Air	0.174E+02	0.219E+02	1.26
Cesium-134	Air	0.122E+02	0.132E+02	1.08
Cesium-137	Air	0.188E+02	0.224E+02	1.19
Cerium-144	Air	0.403E+02	Not Reported	NA
Cobalt-57	Air	0.173E+02	0.330E+02	1.91
Cobalt-60	Air	0.205E+02	0.251E+02	1.22
Manganese-54	Air	0.154E+02	0.183E+02	1.19
Plutonium-238	Air	0.129E+00	0.110E+00	0.85
Plutonium-239	Air	0.800E-01	0.740E-01	0.93
Strontium-90	Air	0.762E+00	0.740E+00	0.97
Uranium-234	Air	0.650E-01	Not Reported	NA
Uranium-238	Air	0.650E-01	Not Reported	NA
Uranium-Bq	Air	0.137E+00	Not Reported	NA
Uranium-µg	Air	0.541E+01	0.520E+01	0.96
Americium-241	Soil	0.248E+00	0.360E+00	1.45
Cesium-137	Soil	0.114E+02	0.139E+02	1.22
Potassium-40	Soil	0.286E+02	0.337E+02	1.18
Plutonium-239	Soil	0.152E+01	0.222E+01	1.46
Strontium-90	Soil	0.540E+01	0.519E+01	0.96
Uranium-234	Soil	0.248E+02	Not Reported	NA
Uranium-238	Soil	0.255E+02	Not Reported	NA
Uranium-Bq	Soil	0.503E+02	Not Reported	NA
Uranium-µg	Soil	0.197E+1	0.153E+01	0.78
Americium-241	Vegetation	0.465E+00	Not Reported	NA
Cesium-137	Vegetation	0.892E+02	0.845E+02	0.95
Cobalt-60	Vegetation	0.645E+01	0.780E+01	1.21
Potassium-40	Vegetation	0.842E+03	0.862E+03	1.02
Plutonium-238	Vegetation	0.463E+00	0.870E+00	1.88
Plutonium-239	Vegetation	0.965E+00	0.149E+01	1.54
Strontium-90	Vegetation	0.221E+03	0.275E+03	1.24
Americium-241	Water	0.139E+01	0.142E+01	1.02
Cesium-134	Water	0.561E+02	0.519E+02	0.93
Cesium-137	Water	0.755E+02	0.723E+02	0.96
Cerium-144	Water	0.173E+03	0.155E+03	0.90
Cobalt-60	Water	0.996E+02	0.950E+02	0.95
Iron-55	Water	0.388E+02	Not Reported	NA
Manganese-54	Water	0.109E+03	0.104.E+03	0.95
Plutonium-238	Water	0.144E+01	0.110E+01	0.96
Plutonium-239	Water	0.338E+00	0.300E+00	0.89
Strontium-90	Water	0.252E+01	0.221E+01	0.88
Tritium	Water	0.270E+03	0.272E+03	1.01
Uranium-234	Water	0.106E+01	Not Reported	NA
Uranium-238	Water	0.108E+01	Not Reported	NA
Uranium-Bq	Water	0.214E+01	Not Reported	NA
Uranium-µg	Water	0.842E-01	0.910E-01	1.08

NA Not applicable

Table B-4. Weston Performance Evaluation, Water Pollution Study WP030

Analyte	Reported Value	True Value	Acceptance Limit
Trace Metals (µg/L)			
Aluminum	1,168	1,100	898-1,300
	4,208	4,000	3,370-4,570
Antimony	107	116	79.4-140
	16.6	14.0	7.01-20.4
Arsenic	259	280	225-334
Beryllium	91.5*	63.0	51.1-74.5
Cadmium	9.35	8.12	6.30-10.3
	103	93.9	78.3-110
Chromium	68.5	62.0	49.2-73.7
	485	460	378-533
Cobalt	507	480	416-536
	254	240	206-275
Copper	64.6	62.0	53.5-69.8
	429	410	365-462
Iron	3,974	3,800	3,350-4,230
	910	860	755-963
Lead	79.2	79.2	62.7-97.1
	422	450	393-513
Manganese	2,294	2,200	1,950-2,450
	231	221	196-244
Mercury	1.70*	0.983	0.620-1.42
	3.00*	2.10	1.57-2.75
Molybdenum	6.19	6.48	3.34-8.82
	42.5	39.0	30.3-47.9
Nickel	142	130	111-150
	1,390	1,300	1,160-1,450
Selenium	15.0**	23.0	14.3-29.1
	53.5**	78.1	52.8-94.6
Silver	2.90**	2.39	1.80-2.96
	10.5	9.75	7.80-11.5
Strontium	3.91	4.01	3.01-4.99
	53.2	51.0	41.4-60.1
Thallium	81.6	90.2	70.7-108
	8.2	9.00	6.71-11.3
Titanium	65.8	66.0	51.5-76.5
	183	182	149-205
Vanadium	8,468	8,000	7,110-8,830
	16,045	15,000	12,700-17,400
Zinc	1,179	1,100	961-1,220
	263	240	209-271

* Not acceptable.

** Acceptable, but near limits. The laboratory was warned to check for error.

Table B-4. Weston Performance Evaluation, Water Pollution Study WP030, Continued

Analyte	Reported Value	True Value	Acceptance Limit
Minerals (mg/L, except as noted)			
Calcium	4.09	3.69	3.00-4.47
	87.6	80.9	73.4-90.2
Chloride	52.4	54.3	48.2-59.1
	169**	178	166-191
Fluoride	2.38	2.40	2.09-2.65
	0.224	0.230	0.175-0.286
Magnesium	17.4	16.1	14.0-18.1
	6.00	5.64	4.84-6.32
pH (pH units)	8.64	8.70	8.31-9.05
	6.17	6.10	5.96-6.22
Potassium	2.71	2.60	2.05-3.22
	19.9	19.0	16.2-21.9
Sodium	17.1	15.9	14.0-17.9
	70.1	65.6	59.6-72.0
Specific conductance (µS/cm)	263	253	226-274
	889	868	819-916
Sulfate	9.52	9.10	6.48-11.4
	44.2	42.0	35.2-48.1
Total alkalinity (as $CaCO_3$)	24.0	21.1	17.2-26.1
	96.0	97.0	85.0-109
Total dissolved solids	131	116	76.2-166
	514	480	385-617
Total hardness (as $CaCO_3$)	73.5	75.6	66.7-84.1
	224	225	209-242
Nutrients (mg/L)			
Ammonia-nitrogen	5.55	5.50	4.35-6.65
	9.83	9.80	7.80-11.6
Kjeldahl-nitrogen	9.71	9.30	6.67-11.5
	19.2	19.0	13.9-23.1
Nitrate-nitrogen	35.3	34.0	27.5-40.2
	7.61	7.10	5.70-8.43
Orthophosphate	0.941**	0.830	0.692-0.961
	0.125*	0.090	.0617-0.122
Total phosphorus	3.55**	3.20	2.35-3.57
	2.01*	1.60	1.25-1.94
Demands (mg/L)			
5-day BOD	11.0	14.0	7.36-20.7
	18.0	21.8	11.8-31.9
COD	21.5	21.8	12.6-30.5
	34.0	35.4	23.6-43.0

Table B-4. Weston Performance Evaluation, Water Pollution Study WP030, Continued

Analyte	Reported Value	True Value	Acceptance Limit
Total organic carbon	8.16	8.61	7.22-10.2
	13.5	14.0	11.9-16.3
PCBs (µg/L)			
PCB-Aroclor 1016/1242	0.64*		D.L.–D.L.
	3.11	4.29	1.86-5.71
PCBs in Oil (mg/kg)			
PCB in oil 1016/1242	16.0	21.5	5.04-27.6
PCB in oil 1260	31.4	36.6	7.82-57.8
Pesticides (µg/L)			
Aldrin	0.14	0.159	0.0344-0.214
	0.38	0.444	0.0957-0.577
Chlordane	0.88	0.964	0.469-1.32
	8.44	9.48	5.38-12.4
DDD	0.22	0.216	0.0863-0.317
	0.55	0.626	0.334-0.865
DDE	0.15	0.131	0.0562-0.171
	0.45	0.495	0.228-0.699
DDT	0.18	0.186	0.0628-0.284
	0.57	0.576	0.252-0.844
Dieldrin	0.12	0.121	0.0572-0.163
	0.48	0.553	0.270-0.750
Heptachlor	0.15	0.157	0.0488-0.221
	0.48	0.514	0.180-0.715
Heptachlor epoxide	0.09	0.087	0.0427-0.120
	0.33	0.375	0.189-0.513
Volatile Halocarbons (µg/L)			
Bromodichloromethane	51.0	49.5	34.2-64.3
	7.08	7.75	4.88-10.6
Bromoform	53.6	53.7	33.5-73.7
	10.0	11.9	6.48-17.1
Carbon tetrachloride	53.8	46.3	29.8-63.7
	13.6	13.5	8.93-18.2
Chlorobenzene	40.5	43.2	30.8-55.0
	11.7	12.9	8.99-16.7
Chloroform	46.6	45.7	31.6-59.5
	11.6	13.8	9.42-18.0
Dibromodichloromethane	38.2	42.2	30.0-54.4
	14.3	16.4	10.9-21.5
1,2-Dichloroethane	52.3	48.6	34.5-62.8
	9.87	10.2	7.28-13.8

Table B-4. Weston Performance Evaluation, Water Pollution Study WP030, Continued

Analyte	Reported Value	True Value	Acceptance Limit
Methylene chloride	41.9	37.3	24.1-53.2
	8.50	8.77	4.21-13.5
Tetrachloroethylene	53.5	57.2	39.7-71.9
	14.2	16.2	10.9-21.1
1,1,1-Trichloroethane	53.2	52.0	32.3-67.9
	7.12	9.34	5.56-12.6
Trichloroethylene	35.2	38.8	26.8-49.1
	8.53	9.91	6.52-13.0
Volatile Aromatics (µg/L)			
Benzene	9.45	10.3	7.34-13.4
	46.6	54.1	37.7-70.8
Ethylbenzene	11.2	11.3	7.71-14.7
	49.9	52.4	36.2-68.5
1,2-Dichlorobenzene	10.2	12.1	8.47-15.4
	45.2	52.0	36.1-66.4
1,3-Dichlorobenzene	8.39	9.43	6.17-12.1
	43.5	47.8	33.6-61.2
1,4-Dichlorobenzene	10.4	11.7	7.95-15.2
	53.2	58.1	39.1-76.5
Toluene	12.3	13.9	9.86-17.7
	30.5	33.9	24.0-43.1
Miscellaneous Parameters (mg/L)			
Cyanide, total	0.249	0.250	0.138-0.341
	0.123	0.130	0.0821-0.169
Non-filterable residue	44.3**	43.2	34.7-45.2
	35.3*	33.0	24.0-34.6
Oil and grease	16.0	15.0	8.13-19.4
	23.1	23.0	14.1-28.1
Total phenolics	0.031	.0271	0.0093-.0449
	0.364	0.291	0.125-0.457
Total residual chlorine	0.675	0.729	0.469-0.912
	0.175	0.240	0.0866-0.280

Table B-5. Weston Performance Evaluation, Water Supply Study WS031

Analyte	Reported Value	True Value	Acceptance Limits
Trace Metals (µg/L)			
Aluminum	74.2	76.3	62.6-93.2
Antimony	5.0	4.69	3.28-6.10
Arsenic	71.4	70.2	58.2-80.2
Barium	676	681	579-783
Beryllium	3.40	3.27	2.78-3.76
Boron	723	720	652-814
Cadmium	9.29*	12.8	10.2-15.4
Chromium	83.8	81.6	69.4-93.8
Copper	117	110	99.0-121
Lead	12.6	12.4	8.68-16.1
Manganese	18.2**	17.0	13.8-18.7
Mercury	0.82	0.908	0.636-1.18
Molybdenum	35.9	42.3	29.2-54.3
Nickel	67.1	68.0	57.8-78.2
Selenium	22.1	22.9	18.3-27.5
Silver	114	109	92.4-123
Thallium	<2.0†	1.48	0.822-2.26
Vanadium	21.5	24.2	20.2-27.5
Zinc	191*	179	161-190
Nitrate/Nitrite/Fluoride (mg/L)			
Fluoride	5.51	5.70	5.13-6.27
Nitrate as nitrogen	6.76	6.50	5.85-7.15
Nitrite as nitrogen	0.409	0.430	0.366-0.494
Insecticides (µg/L)			
Alachlor	2.12	2.50	1.38-3.62
Atrazine	7.73	9.39	5.16-13.6
Bromacil	19.4**	22.4	D.L.-36.1
Chlordane	4.49	5.16	2.84-7.48
Endrin	0.64	0.699	0.489-0.909
Heptachlor	1.17	1.44	0.792-2.09
Heptachlor epoxide	1.63	1.92	1.06-2.78
Hexachlorobenzene	2.32**	2.40	0.518-2.95
Hexachlorocyclopentadiene	0.95**	1.11	0.517-1.67
Lindane	0.87	0.971	0.534-1.41
Metribuzin	5.45**	6.30	0.819-9.25
Prometon	11.5	12.7	1.12-20.6
Simazine	12.9	12.5	0.540-22.5

* Not acceptable.
** Significant general method bias is expected for this result.
† Unuseable data.
D.L. Detection limit.

Table B-5. Weston Performance Evaluation, Water Supply Study WS031, Continued

Analyte	Reported Value	True Value	Acceptance Limits
Toxaphene	3.14	3.31	1.82-4.80
Trifluralin	0.67**	0.857	0.176-1.01
Herbicides (µg/L)			
2,4-D	17.5	20.3	10.2-30.4
2,4,5-TP (Silvex)	7.60	8.66	4.33-13.0
Bentazon	13.1	12.7	D.L.-21.4
Dalapon	18.0**	22.3	D.L.-31.5
Dicamba	8.80**	9.43	0.778-14.2
Dinoseb	15.0**	18.3	D.L.-26.1
Pentachlorophenol	9.60	11.4	5.70-17.1
Picloram	30.9**	26.7	D.L.-42.5
Total DCPA	9.90**	11.3	D.L.-17.9
Polychlorinated Biphenyls (µg/L)			
Decachlorobiphenyl	0.84	0.445	D.L.-0.890
Trihalomethanes (µg/L)			
Bromodichloromethane	28.2*	36.9	29.5-44.3
Bromoform	39.6	43.7	35.0-52.4
Chlorodibromomethane	25.2*	31.8	25.4-38.2
Chloroform	40.3	48.4	38.7-58.1
Total trihalomethane	133.3	160.8	129-193
Volatile Organic Compounds (µg/L)			
Benzene	14.1	12.6	10.1-15.1
Carbon tetrachloride	7.30	8.69	5.21-12.2
Chlorobenzene	6.50	7.68	4.61-10.8
1,2-Dibromochloropropane	2.28	2.65	1.59-3.71
1,2-Dichlorobenzene	13.4	16.3	13.0-19.6
1,4-Dichlorobenzene	8.51	9.40	5.64-13.2
1,2-Dichloroethane	9.77	9.25	5.55-12.9
1,1-Dichloroethylene	9.69	7.02	4.21-9.83
cis-1,2-Dichloroethylene	15.1	14.5	11.6-17.4
trans-1,2-Dichloroethylene	8.38	10.1	8.08-12.1
1,2-Dichloropropane	10.3	12.7	10.2-15.2
2,2-Dichloropropane	12.7	15.7	12.6-18.8
1,1-Dichloropropene	6.16	7.31	4.39-10.2
Ethylbenzene	8.62	9.27	5.56-13.0
Ethylene dibromide	0.577	0.637	0.382-0.892
Fluorotrichloromethane	9.81*	12.6	10.1-15.1
n-Propylbenzene	11.5	11.7	9.36-14.0
Styrene	7.73*	13.4	9.12-13.7
Tetrachloroethylene	10.1	11.6	9.28-13.9

Table B-5. Weston Performance Evaluation, Water Supply Study WS031, Continued

Analyte	Reported Value	True Value	Acceptance Limits
Toluene	14.5	15.3	12.2-18.4
Total xylenes	11.0	13.2	10.6-15.8
1,1,1-Trichloroethane	12.4	13.0	10.4-15.6
Trichloroethylene	6.98	7.46	4.48-10.4
1,3,5-Trimethylbenzene	7.46	8.60	5.16-12.0
Vinyl chloride	14.9	11.9	7.14-16.7
Miscellaneous Analytes			
Alkalinity (as mg $CaCO_3$/L)	49.7**	46.0	43.1-52.0
Calcium (as mg $CaCO_3$/L)	229	230	214-244
Corrosivity (Langelier ind. at 20°C)	1.12	1.19	0.794-1.49
Cyanide, total (mg/L)	0.287	0.270	0.202-0.337
pH (pH)	9.02	9.13	8.84-9.34
Residual free chlorine (mg/L)	0.275**	0.360	0.160-0.451
Sodium (mg/L)	21.1	21.1	19.2-23.0
Sulfate (mg/L)	7.82	8.60	6.44-10.6
Total filterable residue (mg/L)	569**	406	283-618
Turbidity (NTU)	2.99	3.00	2.55-3.57

Table B-6. Weston Performance Evaluation, Water Supply Study WS032

Analyte	Reported Value	True Value	Acceptance Limits
Trace Metals (µg/L)			
Aluminum	328	309	274-335
Antimony	4.6	5.58	3.34-7.41
Arsenic	86.0	91.4	76.5-103
Barium	515	511	434-588
Beryllium	1.89*	0.933	0.699-1.17
Boron	874**	864	810-1,010
Cadmium	4.97	4.80	3.84-5.76
Chromium	67.6	68.1	57.9-78.3
Copper	835	820	738-902
Lead	5.50	5.16	3.61-6.71
Manganese	231	221	203-234
Mercury	6.37	6.23	4.36-8.10
Molybdenum	6.05	6.58	4.80-8.58
Nickel	98.1	95.2	80.9-109
Selenium	64.5	65.9	52.7-79.1
Silver	27.4	25.1	21.2-29.4
Thallium	2.00	2.56	1.79-3.33
Vanadium	163	160	143-174
Zinc	86.8	83.8	73.7-91.1
Nitrate/Nitrite/Fluoride (mg/L)			
Fluoride	2.01	2.00	1.80-2.20
Nitrate as nitrogen	3.38	3.60	3.24-3.96
Nitrite as nitrogen	2.15	2.30	1.95-2.64
Insecticides (µg/L)			
Alachlor	2.460	2.33	1.28-3.38
Atrazine	4.30	7.20	3.96-10.4
Bromacil	13.0	13.6	0.741-23.0
Chlordane (total)	4.42	5.33	2.93-7.73
Heptachlor	0.30	0.443	0.244-0.642
Heptachlor epoxide	0.35	0.346	0.130-0.502
Hexachlorobenzene	1.19*	0.857	0.392-1.17
Hexachlorocyclopentadiene	0.84**	0.823	.0847-1.18
Lindane	0.19	0.214	0.118-0.310
Methoxychlor	16.5	17.4	9.57-25.2
Metolachlor	11.70	11.8	5.83-17.0
Metribuzin	5.32	4.73	0.938-7.42
Prometon	9.480**	8.53	1.30-12.9
Simazine	4.680	4.43	0.682-8.54

* Not acceptable.
** Considerable bias is expected for this result.
D.L. Detection limit.

Table B-6. Weston Performance Evaluation, Water Supply Study WS032, Continued

Analyte	Reported Value	True Value	Acceptance Limits
Toxaphene	3.01	3.71	2.04-5.38
Trifluralin	1.08* **	0.771	0.300-1.02
Herbicides (µg/L)			
2,4-D	17.0	18.6	9.30-27.9
2,4,5-TP (Silvex)	7.85	9.81	4.16-12.5
Dalapon	4.62**	12.5	D.L.-20.8
Dicamba	4.53	4.73	2.28-7.05
Dinoseb	5.38**	6.52	D.L.-9.19
Pentachlorophenol	6.92	10.7	5.35-16.0
Picloram	10.6	10.6	D.L.-20.0
Polychlorinated Biphenyls (µg/L)			
Decachlorobiphenyl	0.888	0.959	D.L.-1.92
Trihalomethanes (µg/L)			
Bromodichloromethane	22.9	22.4	17.9-26.9
Bromoform	23.0	26.4	21.1-31.7
Chlorodibromomethane	15.4	17.9	14.3-21.5
Chloroform	17.2	17.1	13.7-20.5
Total trihalomethane	78.50	83.8	67.0-101
Volatile Organic Compounds (µg/L)			
1,2-Dichlorobenzene	12.5	13.5	10.8-16.2
1,4-Dichlorobenzene	12.4	13.6	10.9-16.3
1,2-Dichloroethane	12.1	13.3	10.6-16.0
1,1-Dichloroethylene	8.74	9.13	5.48-12.8
1,2-Dichloropropane	6.50	6.46	3.88-9.04
1,1,1-Trichloroethane	7.60*	10.1	8.08-12.1
1,2-Dibromochloropropane	1.08	1.78	1.07-2.49
1,2,4-Trichlorobenzene	12.1	14.1	9.80-17.1
1,1,2-Trichloroethane	11.5	13.2	9.54-15.7
1,2,3-Trichloropropane	7.45	9.85	5.96-12.4
Benzene	16.1	16.5	13.2-19.8
Bromomethane	12.9	16.0	7.98-22.3
Carbon tetrachloride	13.9	14.5	11.6-17.4
Chlorobenzene	12.5	13.5	10.8-16.2
cis-1,2-Dichloroethylene	12.8	12.3	9.84-14.8
Dichloromethane	6.94	7.77	5.45-10.2
Ethylbenzene	10.7	11.8	9.44-14.2
Ethylene	10.7	11.8	4.44-14.2
Ethylene dibromide (EDB)	2.03	2.29	1.37-3.21
Hexachlorobutadiene	17.6	19.3	14.1-23.8

Table B-6. Weston Performance Evaluation, Water Supply Study WS032, Continued

Analyte	Reported Value	True Value	Acceptance Limits
Styrene	7.98	8.66	5.20-12.1
Tetrachloroethylene	6.32	7.43	4.46-10.4
Toluene	6.21	6.54	3.92-9.16
trans-1,2-Dichloroethylene	16.0	16.9	13.5-20.3
Trichloroethylene	9.34	11.2	8.96-13.4
Vinyl chloride	2.45	2.57	1.54-3.60
Xylenes, total	8.14	7.54	4.52-10.6
Miscellaneous Analytes			
Alkalinity (as mg $CaCO_3$/L)	29.3**	29.0	27.0-33.6
Calcium (as mg $CaCO_3$/L)	157	160	149-172
Corrosivity (Langelier ind. at 20°C)	0.52	0.846	0.465-1.13
pH (pH)	9.00	9.12	8.85-9.34
Residual free chlorine (mg/L)	1.03**	1.09	0.805-1.21
Sodium (mg/L)	14.0	13.3	11.9-14.8
Sulfate (mg/L)	28.2	27.0	24.7-29.4
Total cyanide (mg/L)	0.434	0.400	0.300-0.500
Total filterable residue (mg/L)	455**	275	201-463
Turbidity (NTU)	4.12**	4.13	3.76-4.93

Table B-7. Quality Control Standards for Selected Analyses

Analyte	Certified Value	Advisory Range	Weston Result
Cyanide & Phenol (Lot 9950)			
Cyanide (µg/L)	342	250–430	321
Phenol (µg/L)	335	250–420	334
Minerals (Lot 9950)			
Alkalinity (as $CaCO_3$) (µg/L)	223,000	198,000–248,000	–
Chloride (µg/L)	258,000	240,000–276,000	251,000
Fluoride (µg/L)	12,100	9,800–15,000	12,600
pH	9.10	8.90–9.30	9.05
Potassium (µg/L)	216,000	184,000–248,000	222,000
Specific conductance (µS/cm)	1,800	1,530–2,070	1,960
Sodium (µg/L)	270,000	208,000–311,000	272,000
Sulfate (µg/L)	235,000	202,000–268,000	239,000
Total dissolved solids (µg/L)	1,420,000	1,240,000–1,600,000	1,380,000
Grease and Oil (Lot 9950)			
Grease and oil (mg/bottle)	73.5	44.0–91.0	60.6
Base/Neutrals (Lot 549)			
Anthracene (µg/L)	40.2	11.0–53.0	27.7
Bis(2-ethylhexyl) phthalate (µg/L)	80.2	13.0–127	69.0
4-Bromophenyl phenyl ether (µg/L)	31.2	17.0–40.0	21.5
Chrysene (µg/L)	89.5	15.0–150	63.7
Dibenzofuran (µg/L)	56.5	32.0–64.0	38.4
1,2-Dichlorobenzene (µg/L)	169	54.0–218	83.9
1,4-Dichlorobenzene (µg/L)	58.1	25.0–72.0	29.6
2,4-Dinitrotoluene (µg/L)	90.0	35.0–125	63.3
2,6-Dinitrotoluene (µg/L)	118	59.0–186	79.4
Fluorene (µg/L)	77.7	46.0–94.0	52.4
Indeno[1,2,3-*cd*] pyrene (µg/L)	67.2	10.0–115	47.2
2-Methylnaphthalene (µg/L)	87.1	44.0–98.0	44.3
Naphthalene (µg/L)	50.7	19.0–67.0	29.0
Pyrene (µg/L)	115	60.0–132	76.3
1,2,4-Trichlorobenzene (µg/L)	29.2	12.0–41.0	17.5

– Not reported.

* Out of range.

Table B-7. Quality Control Standards for Selected Analyses, Continued

Analyte	Certified Value	Advisory Range	Weston Result
Acids (Lot 549)			
2,4-Dimethylphenol (µg/L)	98.3	31.0–117	55.7
2-Methylphenol (µg/L)	59.5	21.0–68.0	32.7
4-Methylphenol (µg/L)	49.6	22.0–54.0	29.2
Pentachlorophenol (µg/L)	79.3	12.0–140	55.3
2,4,6-Trichlorophenol (µg/L)	166	61.0–239	104
Nutrients (Lot 9950)			
Ammonia nitrogen (µg/L)	13,200	11,000–15,000	–
Nitrate-nitrite as nitrogen (µg/L)	8,800	7,200–10,000	–
Nitrate as nitrogen (µg/L)	8,800	7,200–10,000	9,740
Total phosphates (as P) (µg/L)	7,180	6,100–8,300	7,240
Trace Metals (Lot 9950)			
Aluminum (µg/L)	232	165–278	236
Antimony (µg/L)	117	88.0–157	111
Arsenic (µg/L)	207	155–244	213
Barium (µg/L)	341	280–402	355
Beryllium (µg/L)	211	173–249	211
Boron (µg/L)	505	414–596	–
Cadmium (µg/L)	95.5	78.0–113	101
Chromium (µg/L)	610	500–720	636
Cobalt (µg/L)	317	260–374	336
Copper (µg/L)	209	178–240	228
Iron (µg/L)	330	271–389	350
Lead (µg/L)	246	202–290	238
Manganese (µg/L)	203	166–240	203
Mercury (µg/L)	18.7	10.0–23.0	16.7
Molybdenum (µg/L)	149	122–176	–
Nickel (µg/L)	178	146–210	183
Selenium (µg/L)	192	144–227	196
Silver (µg/L)	56.8	47.0–67.0	58.4
Strontium (µg/L)	141	110–166	–
Thallium (µg/L)	170	127–201	167
Vanadium (µg/L)	203	166–240	207
Zinc (µg/L)	307	252–362	316
Total Petroleum Hydrocarbons (Lot 8910)			
Sample 1, no fatty acids (mg/bottle)	118	71.0–147	108
Sample 2, containing fatty acids (mg/bottle)	98.3	59.0–123	<1.0*

Table B-7. Quality Control Standards for Selected Analyses, Continued

Analyte	Certified Value	Advisory Range	Weston Result
PCBs (Lot 549)			
PCB 1254 (µg/L)	6.18	1.80–8.10	5.98
Volatiles (Lot 549)			
Benzene (µg/L)	44.3	16.0–67.0	40.3
Bromodichloromethane (µg/L)	29.3	10.0–45.0	28.2
Bromoform (µg/L)	103	46.0–174	91.3
Carbon tetrachloride (µg/L)	69.8	49.0–98.0	66.2
Chlorobenzene (µg/L)	50.5	19.0–81.0	47.7
1,2-Dichlorobenzene (µg/L)	139	78.0–217	126
1,4-Dichlorobenzene (µg/L)	51.3	30.0–80.0	42.6
1,1-Dichloroethane (µg/L)	84.8	50.0–131	76.8
1,2-Dichloroethane (µg/L)	111	54.0–172	106
Dichloromethane (Methylene chloride) (µg/L)	44.4	16.0–91.0	47.1
Ethyl benzene (µg/L)	64.8	24.0–105	60.9
2-Hexanone (µg/L)	37.5	5.60–68.0	33.1
4-Methyl-2-pentanone (µg/L)	170	51.0–272	–
Tetrachloroethylene (µg/L)	88.1	56.0–130	82.4
Toluene (µg/L)	20.6	9.70–31.0	19.6
1,1,1-Trichloroethane (µg/L)	55.3	29.0–90.0	50.8
1,1,2-Trichloroethane (µg/L)	90.4	47.0–136	86.5
Trichloroethylene (µg/L)	73.8	52.0–116	67.4
Xylenes, total (µg/L)	60.3	23.0–86.0	53.6
Cations (Lot 418)			
Calcium (µg/L)	28,600	24,000–34,000	29,900
Magnesium (µg/L)	83,300	71,000–96,000	88,700
Potassium (µg/L)	46,000	39,000–53,000	46,700
Sodium (µg/L)	157,000	133,000–180,000	155,000
Toxaphene (Lot 3205)			
Toxaphene (µg/L)	4.30	3.50–5.90	1.90*
Turbidity (Lot 3405)			
Turbidity (NTU)	3.50	3.0–4.0	3.36
Pesticides/Herbicides (Lot 3205)			
Alachlor (µg/L)	8.15	5.10–10.0	–
Aldrin (µg/L)	1.05	0.44–1.30	<0.25*

Table B-7. Quality Control Standards for Selected Analyses, Continued

Analyte	Certified Value	Advisory Range	Weston Result
Atrazine (µg/L)	1.54	1.0–1.80	–
2,4-D (µg/L)	0.327	0.16–0.43	0.40
Endrin (µg/L)	5.75	3.60–6.60	4.75
Heptachlor (µg/L)	4.98	3.10–6.60	3.10
Heptachlor epoxide (µg/L)	1.38	0.84–1.60	1.10
Lindane (gamma-Benzene hexachloride) (µg/L)	3.68	2.20–4.30	2.61
Methoxychlor (µg/L)	7.41	4.70–11.0	7.85
2,4,5-TP (Silvex) (µg/L)	9.13	3.80–12.0	9.93
Inorganics (Lot 3405)			
Alkalinity as $CaCO_3$ (µg/L)	78,900	70,000–88,000	–
Chloride (µg/L)	249,000	227,000–291,000	251,000
Fluoride (µg/L)	8,960	7,600–10,000	8,840
Nitrate-nitrite as nitrogen (µg/L)	6,980	6,200–7,700	–
Nitrate as nitrogen (µg/L)	6,980	6,200–7,700	7,900*
pH	9.0	8.80–9.20	8.94
Potassium (µg/L)	37,900	32,000–44,000	38,100
Sodium (µg/L)	278,000	236,000–320,000	274,000
Sulfate (µg/L)	167,000	142,000–192,000	168,000
Total dissolved solids (µg/L)	922,000	784,000–1,060,000	915,000
Demand (Lot 9950)			
Biological oxygen demand (µg/L)	135,000	75,000–160,000	–
Chemical oxygen demand (µg/L)	226,000	192,000–260,000	–
Total organic carbon (µg/L)	86,800	74,000–100,000	–
Total phosphates (as P) (µg/L)	8,840	7,200-10,000	7,240
Nitrogen by Kjeldahl method (µg/L)	6,030	4,900–7,100	–

Appendix C: Formats of the Data Files

Sample Data Format SAM93

This is the description of the SAM93 format for coding and transmitting sampling data records.

Name	Columns	Type	Description
Record format	1–8	Alphanumeric	SAM93 (the format of the data record).
Sample identification number	9–14	Integer	The number of the sample printed on the page of the sample logbook.
Sample collection date	15–20	Numeric	Sample collection date recorded using the MMDDYY format.
Sample collection time	21–24	Integer	Sample collection time recorded as military time.
Sample type	25	Alphanumeric	Sample type coded as: 1 = normal 2 = blank or standard 3 = split 4 = rinsate 5 = duplicate 6 = other.
Sample matrix	26	Alphanumeric	Sample matrix coded as: 1 = soil 2 = rock 3 = sludge 4 = water 5 = sediment 6 = other.
Delay check	27	Alphanumeric	Enter a "Y" if there was an unusual delay in bottling samples.
Sampler's initials	28–30	Alpha	Sampler's initials.
Associated sample	31–36	Integer	Sample identification of associated sample if this sample is a duplicate, split, rinsate, etc.
Planned sample name	37–46	Alphanumeric	Identification of the sample as it appears in the site work plan.
Sample name	47–56	Alphanumeric	Identification of the actual sample (includes any modifications made in the field).

Alpha and alphanumeric entries must be left justified in the records; numeric entries must be right justified in the records. There will be **no** leading zeros except for dates and times.

Sample Data Format SAM93, Continued

Name	Columns	Type	Description
Planned top of interval	57–62	Numeric	Depth from the ground to the top of the planned sampling interval to the nearest 0.01 ft.
Top of interval	63–68	Numeric	Depth from the ground to the top of the actual sampling interval to the nearest 0.01 ft.
Planned bottom of interval	69–74	Numeric	Depth from the ground to the bottom of the planned sampling interval to the nearest 0.01 ft.
Bottom of interval	75–80	Numeric	Depth from the ground to the bottom of the actual sampling interval to the nearest 0.01 ft.
Soil moisture	81	Alphanumeric	Soil moisture coded as: 1 = dry 2 = damp 3 = wet 4 = sludge 5 = liquid.
Munsell color	82–91	Alphanumeric	Munsell Color.
Soil classification	92–93	Alphanumeric	Unified Soil Classification.
Number of bottles	94–96	Integer	The number of bottle label numbers used during collection.
Insufficient recovery check	97	Alpha	Enter an "R" if insufficient material was recovered to perform all analyses.
Improper procedure check	98	Alpha	Enter a "P" if an improper sampling procedure was followed.

Sample Bottle Data Format SAM93A

This is the description of the SAM93A format for coding and transmitting sample bottle data records.

Name	Columns	Type	Description
Record format	1–8	Alphanumeric	SAM93A (the format of the data record).
Sample identification number	9–14	Integer	The number of the sample printed on the page of the sample logbook.
Bottle label number	15–22	Integer	The number of the bottle label attached to the bottle.

Alpha and alphanumeric entries must be left justified in the records; numeric entries must be right justified in the records. There will be no leading zeros except for dates and times.

Station Data Format STA93

This is the description of the STA93 format for coding and transmitting station data records.

Name	Columns	Type	Description
Record format	1-8	Alphanumeric	STA93 (The format of the data record).
Station	10-16	Alphanumeric	The identification of the station (the facility identification and sampling point).
SRS north coordinate	21-30	Numeric	The SRS Grid north coordinate of the station reported in feet.
SRS east coordinate	32-41	Numeric	The SRS Grid east coordinate of the station reported in feet.
Ground elevation	44-49	Numeric	Ground elevation reported in feet above median sea level (MSL).

There will be no leading zeros.

Bottle Receipt Data Format BOT93

This is the description of the BOT93 format for coding and transmitting bottle receipt data records. This format has been established by the Environmental Monitoring Section of the Environmental Protection Department of the Westinghouse Savannah River Company.

Name	Columns	Type	Description
Record format	1–8	Alphanumeric	BOT93 (the format of the data record).
Bottle label number	9–16	Integer	The number of the bottle label attached to the bottle.
Bottle receipt date	17–22	Numeric	Date that the bottle receipt is recorded in the bottle receipt logbook. Use the MMDDYY format.
Bottle batch number	23–33	Alphanumeric	The identification number of the box the bottles are shipped in.

Alpha and alphanumeric entries must be left justified in the records; numeric entries must be right justified in the records. There will be no leading zeros except for dates and times.

Chain Of Custody Data Format COC93

This is the description of the COC93 format for coding and transmitting chain-of-custody data records. This format has been established by the Environmental Monitoring Section of the Environmental Protection Department of the Westinghouse Savannah River Company.

Name	Columns	Type	Description
Record format	1-8	Alphanumeric	COC93 (the format of the data record).
Sample identification number	9-18	Integer	The number of the sample printed on the page of the sample logbook.
Laboratory sample ID	19-33	Alphanumeric	Identifier used for the sample by the analytical laboratory.
Sample collection date	34-39	Numeric	Sample collection date recorded using the MMDDYY format.
Shipping date	40-45	Numeric	Sample shipping date recorded using the MMDDYY format.
Cooler identification	46-53	Alphanumeric	The number assigned to the cooler in which the samples are shipped to the analytical laboratory.
Sample temperature on receipt	54-57	Numeric	The temperature of the samples upon receipt at the analytical laboratory in degrees Centigrade.

Analytical Data Format AN92

This is the description of the AN92 format for coding and transmitting analytical data records. This format has been established by the Environmental Monitoring Section of the Environmental Protection Department of the Westinghouse Savannah River Company.

Name	Columns	Type	Description
WSRC identifier**	1–12	Alphanumeric	WSRC identifier for the sample
COC number	13–17	Alphanumeric	Identifier of the sample's chain-of-custody form. Required field for groundwater samples; not used for soil samples.
Sample collection date**	18–23	Numeric	Date that the sample was collected.
Lab receipt date**	24–29	Numeric	Date that the sample was received by the laboratory.
Extraction date	30–35	Numeric	Date that the sample was extracted; leave blank unless the holding time is dependent upon the extraction time.
Extraction time	36–39	Numeric	Time that the sample was extracted; leave blank unless the holding time is dependent upon the extraction time.
Analysis date**	40–45	Numeric	Date that the analysis was performed.
Analysis time**	46–49	Numeric	Time that the analyte concentration was determined.
Analysis batch**	50–55	Alphanumeric	The number assigned by the analytical laboratory to the analysis batch (group of samples analyzed together in a single instrument run along with the associated QC samples).
Laboratory**	56–57	Alphanumeric	Laboratory code assigned by EPD/EMS to identify the laboratory performing the analysis.
Laboratory sample ID**	58–72	Alphanumeric	Identifier used for the sample by the analytical laboratory.

Alpha and alphanumeric entries must be left justified in the records; numeric entries must be right justified in the records. There will be no leading zeros except for dates and times. Dates should be in MMDDYY format, times in HHMM format.

** This field must have an entry for every record.

Analytical Data Format AN92, Continued

Name	Columns	Type	Description
Analyte**	74–83	Alphanumeric	The coded identifier (provided by EPD/EMS) for the analyte.
Extraction/digestion method	84-96	Alphanumeric	The coded identifier for the method used to perform the extraction or digestion (e.g., EPA###.#).
Analytical method**	97–109	Alphanumeric	The coded identifier for the method used to perform the analysis (e.g., EPA###.#).
Detection limit	110–117	Numeric	The nominal method detection limit used for the analysis and reported in the same units as the analytical result. This field MUST have an entry for every record EXCEPT leave blank for spiked samples reported as percent recovery.
Result qualifier	118–120	Alphanumeric	The coded field used to qualify the analytical result (reason codes attached to this document).
Analysis qualifier	121–123	Alphanumeric	The coded field used to qualify the analysis (reason codes attached to this document).
Bias of analysis	124	Alphanumeric	The coded field for data having result qualifiers of "J" or "R" specifying the expected bias (reason codes attached to this document).
Analytical result**	125–134	Numeric	The concentration of the analyte or, for spiked samples, the percent recovery (3 significant digits).
Result units**	135–138	Alpha	The coded identifier (provided by EPD/EMS) of the units in which the analytical result is expressed.
Accuracy	139–146	Numeric	The statistically determined value representing a plus or minus value for the result (3 significant digits) and reported in the same units as the analytical result.
Residual weight	147–150	Numeric	The weight of material on the planchet after evaporation; used for radionuclide determinations.
Number of dilutions**	151	Numeric	The number of steps required to reach the final dilution factor; 0 if the sample was not diluted.
Dilution factor**	152–157	Numeric	The dilution used in the analysis; a value of 1 indicates the sample was not diluted.

Analytical Data Format AN92, Continued

Name	Columns	Type	Description
Instrument**	158–159	Alphanumeric	The coded identifier for the instrument used to perform the analysis; each laboratory develops its own codes.
Analyst's initials**	160–162	Alpha	The initials of the analyst.
Nominal concentration**	163–170	Numeric	The concentration of analyte added to the sample prior to analysis; reported in the same units as the normal reporting units for that analyte; the value of zero must be entered if the sample was not spiked.
EPD/EMS receipt date	171–176	Numeric	The laboratory will leave this blank; date that the analytical data is received by EPD/EMS from the laboratory, in MMDDYY format.
EPA quality level	177–178	Alphanumeric	The first character is 1, 2, or 3, and states the quality objective of the data (**Quality Assurance/Quality Control Guidance for Removal Activities**, EPA/540/G-90/004).
Sample fraction	179–182	Alphanumeric	The coded identifier (provided by EPD/EMS) for the fraction of the sample analyzed.
Percent solids	183–187	Numeric	The percentage of the sample that is dry solids.
Bottle label number	188-197	Integer	The number on the bottle label. Required field if bottle label is numbered.

Analytical Data Format AN92, Continued

WSRC Identifier for Groundwater Samples

Name	Columns	Type	Description
Well name			
Series name	1–3	Alpha	Name of the well series (except 241-H) from which the sample was collected; QA/QC laboratory deionized water samples will have LB (the first character is blank) as well series designation.
Cluster number	4–6	Numeric	Number of the cluster (except 241-H).
Well within cluster	7–8	Alphanumeric	Can be blank.
	9–10	Blank	Unused.
Duplicate ID	11	Alphanumeric	Assigned by field personnel to identify different sampling events occurring in one day.
Secondary identifier	12	Alphanumeric	Used as an alternate identifier by the Groundwater Monitoring (GM) group.

WSRC Identifier for Sediment, Core, and Surface Water Samples

Sample identification number	1-6	Numeric	The sample logbook page number

Appendix D: Data Tables

Abbreviations Used in the Tables

RQ	Result qualifier
AQ	Analysis qualifier
B	Bias code
D. Limit	Detection limit (sample quantitation limit)
B/N/A Extractables	Base/neutral/acid extractable semivolatile organic compounds
PAH	Polycyclic aromatic hydrocarbon
arom.	aromatic
polyarom.	polyaromatic
sub., subst.	substituted

Qualifier Codes

Result Qualifiers

J	The analytical result is an estimated quantity.
L	Off-scale high. The actual value is not known but is known to be greater than the value shown.
P	Precision cannot be determined because matrix spikes were not performed.
R	Rejected because performance requirements in the sample or associated quality control analysis were not met. The analyte may or may not be present.
U	The analyte was not detected. Value reported is the sample quantification limit.

Analysis Qualifiers

A	Relative Retention Time (RRT) or mass spectra criteria were not met for organics compound identification. Used with *U, UJ,* or *N* for all anomalies in pesticides compound identification.
C	Laboratory control sample (LCS) or blank spike criteria were not met.
G	Pesticides instrument performance was outside criteria.
H	Internal standards performance criteria were not met.
I	Matrix spike recovery is not within control limits.
K	A tentatively identified compound is a suspected aldol-condensation product.
L	Calibration criteria (initial or continuing) were not met. Used with *J* or *R.*
M	GC/MS tuning is out of specification.
N	Tentatively identified compound; does not meet Quality Objective 3 criteria.
O	Surrogate spike recoveries are out of specification.
Q	Sample held beyond normal holding time. Used with result qualifier *J.*
R	ICP interference check sample criteria were not met. Used with *J, UJ,* or *R.*
S	The reported value was determined by the method of standard additions.
T	Peak height (instead of peak area) was used to quantitate the analyte, and all other identification criteria were met; OR, signal-to-noise ratio of the confirmation ion is below 2.5, but the GC/MS analyst determined that the peak was positive.

V	The analyte was detected in an associated method blank. Used with *J* for nonradiological analyses when the result is less than 5 times the amount in the associated blank (less than 10 times for the common laboratory contaminants acetone, dichloromethane, 2-butanone, and phthalates). Used with *J* or *UJ* for radiological analyses: *J* when result is less than 5 times the amount in the associated blank; *UJ* when the result is less than the detection limit.
X	The relative percent difference (RPD) calculated from duplicate analyses or matrix spike/matrix spike duplicates was not within control limits.
Y	Sample was unpreserved or improperly preserved.

Bias Codes

H	QA/QC sample results indicate a high bias. The associated result may overestimate the true value.
L	QA/QC sample results indicate a low bias. The associated result may underestimate the true value.

Color Notation

Munsell notation describes three distinct components of color: hue, value, and chroma in an abbreviated unified color designation.

Hue is designated by a letter abbreviation (R for red, YR for yellow-red, Y for yellow) preceded by a number between 1 and 10 that signifies the position of the hue between red and yellow. Lower numbers are closer to red and higher numbers are closer to yellow. The hues overlap at 0 and 10 with 0YR being 10 R.

The notation for value ranges from 0 to 10, with 0 being absolute black and 10, absolute white.

The notation for chroma begins at 0 for neutral grays and increases in standard intervals to 20. Twenty is never approached in soils; the highest working number is 8. For colors with no hue and 0 chroma (pure grays, white, and black), the letter N (neutral) is used in place of a number.

An example of Munsell notation is: 10YR 5/6,which indicates a yellow-red hue of 10, a value of 5, and a chroma of 6. This corresponds to a yellowish-brown color.

Any of these numbers can be a decimal, indicating a color between two defined points, although for practical field purposes only a .5 for a color halfway between two defined color points would be used.

Unified Soil Classification System

Major Divisions			Group Symbols	Typical Names
COARSE-GRAINED SOILS More than half of material is larger than no. 200 sieve size.	GRAVELS More than half of coarse fraction is larger than no. 4 sieve size.	Clean gravels	GW	Well-graded gravels, gravel-sand mixtures, little or no fines.
			GP	Poorly graded gravels, gravel-sand mixtures, little or no fines.
		Gravels with fines	GM	Silty gravels, gravel-sand-silt mixtures.
			GC	Clayey gravels, gravel-sand-clay mixtures.
	SANDS More than half of coarse fraction is smaller than no. 4 sieve size.	Clean sands	SW	Well-graded sands, gravelly sands, little or no fines.
			SP	Poorly graded sands, gravelly sands, little or no fines.
		Sands with fines	SM	Silty sands, sand-silt mixtures.
			SC	Clayey sands, sand-clay mixtures.
FINE-GRAINED SOILS More than half of material is smaller than no. 200 sieve size.	SILTS AND CLAYS	Low liquid limit	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts, of slight plasticity.
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sand clays, silty clays, lean clays.
			OL	Organic silts and organic silty clays of low plasticity.
		High liquid limit	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
			CH	Inorganic clays of high plasticity, fat clays.
			OH	Organic clays of medium to high plasticity, organic silts.
Highly Organic Soils			Pt	Peat and other highly organic silts.

Notes:

1. Boundary Classification: Soils possessing characteristics of two groups are designated by combinations of group symbols. For example, GW-GC means well-graded gravel-sand mixture with clay binder.
2. All sieve sizes on this chart are U.S. Standard.
3. The terms "silt" and "clay" are used respectively to distinguish materials exhibiting lower plasticity from those with higher plasticity.
4. For a complete description of the Unified Soil Classification System, see "Technical Memorandum No. 3-357," prepared for Office, Chief of Engineers, by Waterways Equipment Station, Vicksburg, Mississippi, March 1953.

SAMPLE NAME: D431 1101 Sample ID: 100361

Location (SRS Coordinates): 18558.54E 66554.39N
Ground Elevation Above MSL: 134.6 ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 5YR 4/4 USC Soil Classification: SM Percent Solids: 96.10

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				6.7	meq/100g	2.0	EPA9080
pH	J	Q		4.6	pH	0.010	EPA9045
Specific conductance				30	µS/cm	1.0	EPA9050
Total organic carbon				4,000	mg/kg	180	EPA415.1
Total organic carbon				4,200	mg/kg	220	EPA415.1
Total Metals							
Arsenic	U			0.90	mg/kg	0.90	EPA7060
Barium	U			18	mg/kg	18	EPA6010
Cadmium	UJ	L		0.45	mg/kg	0.45	EPA6010
Chromium	UJ	L		5.2	mg/kg	0.90	EPA6010
Copper	U			2.2	mg/kg	2.2	EPA6010
Lead				2.0	mg/kg	0.27	EPA7421
Manganese				260	mg/kg	1.3	EPA6010
Mercury	U			0.10	mg/kg	0.10	EPA7470
Nickel	U			3.6	mg/kg	3.6	EPA6010
Selenium	U			0.45	mg/kg	0.45	EPA7740
Silver	U			0.90	mg/kg	0.90	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			350	µg/kg	350	EPA8270
Acenaphthylene	U			350	µg/kg	350	EPA8270
Anthracene	U			350	µg/kg	350	EPA8270
Benzo(a)anthracene	U			350	µg/kg	350	EPA8270
Benzo(b)fluoranthene	U			350	µg/kg	350	EPA8270
Benzo(k)fluoranthene	U			350	µg/kg	350	EPA8270
Benzoic acid	U			1,700	µg/kg	1,700	EPA8270
Benzo(g,h,i)perylene	U			350	µg/kg	350	EPA8270
Benzo(a)pyrene	U			350	µg/kg	350	EPA8270
Benzyl alcohol	U			350	µg/kg	350	EPA8270
Bis(2-chloroethoxy) methane	U			350	µg/kg	350	EPA8270
Bis(2-chloroethyl) ether	U			350	µg/kg	350	EPA8270
Bis(2-chloroisopropyl) ether	U			350	µg/kg	350	EPA8270
Bis(2-ethylhexyl) phthalate	U			350	µg/kg	350	EPA8270
4-Bromophenyl phenyl ether	U			350	µg/kg	350	EPA8270
Butylbenzyl phthalate	U			350	µg/kg	350	EPA8270
4-Chloroaniline	U			350	µg/kg	350	EPA8270
4-Chloro-m-cresol	U			350	µg/kg	350	EPA8270
2-Chloronaphthalene	U			350	µg/kg	350	EPA8270
2-Chlorophenol	U			350	µg/kg	350	EPA8270
4-Chlorophenyl phenyl ether	U			350	µg/kg	350	EPA8270
Chrysene	U			350	µg/kg	350	EPA8270

SAMPLE NAME: D431 1101 (Continued) Sample ID: 100361

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
o-Cresol (2-Methylphenol)	U			350	µg/kg	350	EPA8270
p-Cresol (4-Methylphenol)	U			350	µg/kg	350	EPA8270
Dibenz(a,h)anthracene	U			350	µg/kg	350	EPA8270
Dibenzofuran	U			350	µg/kg	350	EPA8270
Di-n-butyl phthalate	UJ	V		98	µg/kg	350	EPA8270
1,2-Dichlorobenzene	U			350	µg/kg	350	EPA8270
1,3-Dichlorobenzene	U			350	µg/kg	350	EPA8270
1,4-Dichlorobenzene	U			350	µg/kg	350	EPA8270
3,3'-Dichlorobenzidine	U			690	µg/kg	690	EPA8270
2,4-Dichlorophenol	U			350	µg/kg	350	EPA8270
Diethyl phthalate	U			350	µg/kg	350	EPA8270
2,4-Dimethyl phenol	U			350	µg/kg	350	EPA8270
Dimethyl phthalate	U			350	µg/kg	350	EPA8270
2,4-Dinitrophenol	U			1,700	µg/kg	1,700	EPA8270
2,4-Dinitrotoluene	U			350	µg/kg	350	EPA8270
2,6-Dinitrotoluene	U			350	µg/kg	350	EPA8270
Di-n-octyl phthalate	U			350	µg/kg	350	EPA8270
Fluoranthene	U			350	µg/kg	350	EPA8270
Fluorene	U			350	µg/kg	350	EPA8270
Hexachlorobenzene	U			350	µg/kg	350	EPA8270
Hexachlorobutadiene	U			350	µg/kg	350	EPA8270
Hexachlorocyclopentadiene	U			350	µg/kg	350	EPA8270
Hexachloroethane	U			350	µg/kg	350	EPA8270
Indeno(1,2,3-c,d)pyrene	U			350	µg/kg	350	EPA8270
Isophorone	U			350	µg/kg	350	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,700	µg/kg	1,700	EPA8270
2-Methylnaphthalene	U			350	µg/kg	350	EPA8270
Naphthalene	U			350	µg/kg	350	EPA8270
o-Nitroaniline	U			1,700	µg/kg	1,700	EPA8270
m-Nitroaniline	U			1,700	µg/kg	1,700	EPA8270
p-Nitroaniline	U			1,700	µg/kg	1,700	EPA8270
Nitrobenzene	U			350	µg/kg	350	EPA8270
2-Nitrophenol	U			350	µg/kg	350	EPA8270
4-Nitrophenol	U			1,700	µg/kg	1,700	EPA8270
N-Nitrosodiphenylamine	U			350	µg/kg	350	EPA8270
N-Nitrosodipropylamine	U			350	µg/kg	350	EPA8270
Pentachlorophenol	UJ	C		1,700	µg/kg	1,700	EPA8270
Phenanthrene	U			350	µg/kg	350	EPA8270
Phenol	UJ	C		350	µg/kg	350	EPA8270
Pyrene	U			350	µg/kg	350	EPA8270
1,2,4-Trichlorobenzene	U			350	µg/kg	350	EPA8270
2,4,5-Trichlorophenol	U			1,700	µg/kg	1,700	EPA8270
2,4,6-Trichlorophenol	U			350	µg/kg	350	EPA8270
Unknown hydrocarbon	J	N		100	µg/kg		EPA8270
Unknown ketone	J	NV		6,000	µg/kg		EPA8270

SAMPLE NAME: D431-1101 (Continued) Sample ID: 100361

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	U	V		18	µg/kg	10	EPA8240
Benzene	U	V		5.6	µg/kg	5.2	EPA8240
Bromodichloromethane	U			5.2	µg/kg	5.2	EPA8240
Bromoform	U			5.2	µg/kg	5.2	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/kg	10	EPA8240
Carbon disulfide	U			5.2	µg/kg	5.2	EPA8240
Carbon tetrachloride	U			5.2	µg/kg	5.2	EPA8240
Chlorobenzene	U			5.2	µg/kg	5.2	EPA8240
Chloroethane	U			10	µg/kg	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/kg	10	EPA8240
Chloroform	U			5.2	µg/kg	5.2	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/kg	10	EPA8240
Dibromochloromethane	U			5.2	µg/kg	5.2	EPA8240
1,1-Dichloroethane	U			5.2	µg/kg	5.2	EPA8240
1,2-Dichloroethane	U			5.2	µg/kg	5.2	EPA8240
1,1-Dichloroethylene	U			5.2	µg/kg	5.2	EPA8240
1,2-Dichloroethylene	U			5.2	µg/kg	5.2	EPA8240
Dichloromethane (Methylene chloride)	U	V		16	µg/kg	5.2	EPA8240
1,2-Dichloropropane	U			5.2	µg/kg	5.2	EPA8240
cis-1,3-Dichloropropene	U			5.2	µg/kg	5.2	EPA8240
trans-1,3-Dichloropropene	U			5.2	µg/kg	5.2	EPA8240
Ethylbenzene	U			5.2	µg/kg	5.2	EPA8240
2-Hexanone	U			10	µg/kg	10	EPA8240
Methyl ethyl ketone	U			10	µg/kg	10	EPA8240
Methyl isobutyl ketone	U			10	µg/kg	10	EPA8240
Styrene	U			5.2	µg/kg	5.2	EPA8240
1,1,2,2-Tetrachloroethane	U			5.2	µg/kg	5.2	EPA8240
Tetrachloroethylene	U			5.2	µg/kg	5.2	EPA8240
Toluene	U			5.2	µg/kg	5.2	EPA8240
1,1,1-Trichloroethane	U			5.2	µg/kg	5.2	EPA8240
1,1,2-Trichloroethane	U			5.2	µg/kg	5.2	EPA8240
Trichloroethylene	U			5.2	µg/kg	5.2	EPA8240
Vinyl acetate	U			10	µg/kg	10	EPA8240
Xylenes	U			5.2	µg/kg	5.2	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.7	µg/kg	1.7	EPA8080
alpha-Benzene hexachloride	U			1.7	µg/kg	1.7	EPA8080
beta-Benzene hexachloride	U			1.7	µg/kg	1.7	EPA8080
delta-Benzene hexachloride	U			1.7	µg/kg	1.7	EPA8080
alpha-Chlordane	U			1.7	µg/kg	1.7	EPA8080
gamma-Chlordane	U			1.7	µg/kg	1.7	EPA8080
p,p'-DDD	U			3.4	µg/kg	3.4	EPA8080
p,p'-DDE	J			0.69	µg/kg	3.4	EPA8080
p,p'-DDT	U			3.4	µg/kg	3.4	EPA8080
Dieldrin	U			3.4	µg/kg	3.4	EPA8080
Endosulfan I	U			1.7	µg/kg	1.7	EPA8080
Endosulfan II	U			3.4	µg/kg	3.4	EPA8080
Endosulfan sulfate	U			3.4	µg/kg	3.4	EPA8080

SAMPLE NAME: D431 1101 (Continued) Sample ID: 100361

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Endrin	U			3.4	µg/kg	3.4	EPA8080
Endrin ketone	U			3.4	µg/kg	3.4	EPA8080
Heptachlor	U			1.7	µg/kg	1.7	EPA8080
Heptachlor epoxide	U			1.7	µg/kg	1.7	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			1.7	µg/kg	1.7	EPA8080
Methoxychlor	U			17	µg/kg	17	EPA8080
Octachlorodibenzo-p-dioxin	J	T		0.40	ng/g	0.30	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	U			34	µg/kg	34	EPA8080
PCB 1221	U			69	µg/kg	69	EPA8080
PCB 1232	U			34	µg/kg	34	EPA8080
PCB 1242	U			34	µg/kg	34	EPA8080
PCB 1248	U			34	µg/kg	34	EPA8080
PCB 1254	U			34	µg/kg	34	EPA8080
PCB 1260	U			34	µg/kg	34	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			170	µg/kg	170	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				7.9±11	pCi/g	6.5	EPA900.0
Nonvolatile beta				25±18	pCi/g	12	EPA900.0
Radium, total alpha-emitting	U	V		0.76±0.50	pCi/g	0.12	EPA903.0
Tritium	U			2.0	pCi/g	2.0	EPA906.0

SAMPLE NAME: D431 1102 Sample ID: 100362

Location (SRS Coordinates): 18558.54E 66554.39N
Ground Elevation Above MSL: 134.6 ft
Depth of Core Interval: 0.50 to 2.00 ft
Sample Type: Normal
Sample Color: 5YR 4/4
Sample Matrix: Soil
USC Soil Classification: SM
Sample Moisture: Dry
Percent Solids: 92.50

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				0.99	mg/kg	0.98	EPA7060
Barium	U			20	mg/kg	20	EPA6010
Cadmium	UJ	L		0.51	mg/kg	0.51	EPA6010

SAMPLE NAME: D431-1102 (Continued) Sample ID: 100362

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Chromium	J	L		34	mg/kg	1.0	EPA6010
Copper	U			2.5	mg/kg	2.5	EPA6010
Lead				8.0	mg/kg	0.59	EPA7421
Manganese				110	mg/kg	1.5	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			4.1	mg/kg	4.1	EPA6010
Selenium	U			0.49	mg/kg	0.49	EPA7740
Silver				1.0	mg/kg	1.0	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			350	µg/kg	350	EPA8270
Acenaphthylene	U			350	µg/kg	350	EPA8270
Anthracene	U			350	µg/kg	350	EPA8270
Benzo(a)anthracene	U			350	µg/kg	350	EPA8270
Benzo(b)fluoranthene	U			350	µg/kg	350	EPA8270
Benzo(k)fluoranthene	U			350	µg/kg	350	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			350	µg/kg	350	EPA8270
Benzo(a)pyrene	U			350	µg/kg	350	EPA8270
Benzyl alcohol	U			350	µg/kg	350	EPA8270
Bis(2-chloroethoxy) methane	U			350	µg/kg	350	EPA8270
Bis(2-chloroethyl) ether	U			350	µg/kg	350	EPA8270
Bis(2-chloroisopropyl) ether	U			350	µg/kg	350	EPA8270
Bis(2-ethylhexyl) phthalate	U			350	µg/kg	350	EPA8270
4-Bromophenyl phenyl ether	U			350	µg/kg	350	EPA8270
Butylbenzyl phthalate	U			350	µg/kg	350	EPA8270
4-Chloroaniline	U			350	µg/kg	350	EPA8270
4-Chloro-m-cresol	U			350	µg/kg	350	EPA8270
2-Chloronaphthalene	U			350	µg/kg	350	EPA8270
2-Chlorophenol	U			350	µg/kg	350	EPA8270
4-Chlorophenyl phenyl ether	U			350	µg/kg	350	EPA8270
Chrysene	U			350	µg/kg	350	EPA8270
o-Cresol (2-Methylphenol)	U			350	µg/kg	350	EPA8270
p-Cresol (4-Methylphenol)	U			350	µg/kg	350	EPA8270
Dibenz(a,h)anthracene	U			350	µg/kg	350	EPA8270
Dibenzofuran	U			350	µg/kg	350	EPA8270
Di-n-butyl phthalate	UJ	V		120	µg/kg	350	EPA8270
1,2-Dichlorobenzene	U			350	µg/kg	350	EPA8270
1,3-Dichlorobenzene	U			350	µg/kg	350	EPA8270
1,4-Dichlorobenzene	U			350	µg/kg	350	EPA8270
3,3'-Dichlorobenzidine	U			700	µg/kg	700	EPA8270
2,4-Dichlorophenol	U			350	µg/kg	350	EPA8270
Diethyl phthalate	U			350	µg/kg	350	EPA8270
2,4-Dimethyl phenol	U			350	µg/kg	350	EPA8270
Dimethyl phthalate	U			350	µg/kg	350	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			350	µg/kg	350	EPA8270
2,6-Dinitrotoluene	U			350	µg/kg	350	EPA8270
Di-n-octyl phthalate	U			350	µg/kg	350	EPA8270

SAMPLE NAME: D431 1102 (Continued) Sample ID: 100362

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Fluoranthene	U			350	µg/kg	350	EPA8270
Fluorene	U			350	µg/kg	350	EPA8270
Hexachlorobenzene	U			350	µg/kg	350	EPA8270
Hexachlorobutadiene	U			350	µg/kg	350	EPA8270
Hexachlorocyclopentadiene	U			350	µg/kg	350	EPA8270
Hexachloroethane	U			350	µg/kg	350	EPA8270
Indeno(1,2,3-c,d)pyrene	U			350	µg/kg	350	EPA8270
Isophorone	U			350	µg/kg	350	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			350	µg/kg	350	EPA8270
Naphthalene	U			350	µg/kg	350	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			350	µg/kg	350	EPA8270
2-Nitrophenol	U			350	µg/kg	350	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			350	µg/kg	350	EPA8270
N-Nitrosodipropylamine	U			350	µg/kg	350	EPA8270
Pentachlorophenol	UJ	C		1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			350	µg/kg	350	EPA8270
Phenol	UJ	C		350	µg/kg	350	EPA8270
Pyrene	U			350	µg/kg	350	EPA8270
1,2,4-Trichlorobenzene	U			350	µg/kg	350	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			350	µg/kg	350	EPA8270
Unknown arom. hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown ketone	J	NV		7,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		14	µg/kg	11	EPA8240
Benzene	U	V		5.4	µg/kg	5.4	EPA8240
Bromodichloromethane	U			5.4	µg/kg	5.4	EPA8240
Bromoform	U			5.4	µg/kg	5.4	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.4	µg/kg	5.4	EPA8240
Carbon tetrachloride	U			5.4	µg/kg	5.4	EPA8240
Chlorobenzene	U			5.4	µg/kg	5.4	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.4	µg/kg	5.4	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.4	µg/kg	5.4	EPA8240
1,1-Dichloroethane	U			5.4	µg/kg	5.4	EPA8240
1,2-Dichloroethane	U			5.4	µg/kg	5.4	EPA8240
1,1-Dichloroethylene	U			5.4	µg/kg	5.4	EPA8240
1,2-Dichloroethylene	U			5.4	µg/kg	5.4	EPA8240
Dichloromethane (Methylene chloride)	U	V		13	µg/kg	5.4	EPA8240
1,2-Dichloropropane	U			5.4	µg/kg	5.4	EPA8240

SAMPLE NAME: D431-1102 (Continued) Sample ID: 100362

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
cis-1,3-Dichloropropene	U			5.4	µg/kg	5.4	EPA8240
trans-1,3-Dichloropropene	U			5.4	µg/kg	5.4	EPA8240
Ethylbenzene	U			5.4	µg/kg	5.4	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.4	µg/kg	5.4	EPA8240
1,1,2,2-Tetrachloroethane	U			5.4	µg/kg	5.4	EPA8240
Tetrachloroethylene	U			5.4	µg/kg	5.4	EPA8240
Toluene	U			5.4	µg/kg	5.4	EPA8240
1,1,1-Trichloroethane	U			5.4	µg/kg	5.4	EPA8240
1,1,2-Trichloroethane	U			5.4	µg/kg	5.4	EPA8240
Trichloroethylene	U			5.4	µg/kg	5.4	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.4	µg/kg	5.4	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.8	µg/kg	1.8	EPA8080
alpha-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
beta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
delta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
alpha-Chlordane	J			0.35	µg/kg	1.8	EPA8080
gamma-Chlordane	J			0.71	µg/kg	1.8	EPA8080
p,p'-DDD	J			1.4	µg/kg	3.5	EPA8080
p,p'-DDE	J			2.8	µg/kg	3.5	EPA8080
p,p'-DDT				5.0	µg/kg	3.5	EPA8080
Dieldrin	U			3.5	µg/kg	3.5	EPA8080
Endosulfan I	U			1.8	µg/kg	1.8	EPA8080
Endosulfan II	J			1.8	µg/kg	3.5	EPA8080
Endosulfan sulfate	U			3.5	µg/kg	3.5	EPA8080
Endrin				5.0	µg/kg	3.5	EPA8080
Endrin ketone	J			1.4	µg/kg	3.5	EPA8080
Heptachlor	U			1.8	µg/kg	1.8	EPA8080
Heptachlor epoxide	U			1.8	µg/kg	1.8	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			1.8	µg/kg	1.8	EPA8080
Methoxychlor	U			18	µg/kg	18	EPA8080
Octachlorodibenzo-p-dioxin				2.2	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	U			35	µg/kg	35	EPA8080
PCB 1221	U			71	µg/kg	71	EPA8080
PCB 1232	U			35	µg/kg	35	EPA8080
PCB 1242	U			35	µg/kg	35	EPA8080
PCB 1248	U			35	µg/kg	35	EPA8080
PCB 1254	U			35	µg/kg	35	EPA8080
PCB 1260	U			35	µg/kg	35	EPA8080

SAMPLE NAME: D431 1102 (Continued) Sample ID: 100362

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	U			180	µg/kg	180	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				16±14	pCi/g	7.3	EPA900.0
Nonvolatile beta				16±19	pCi/g	13	EPA900.0
Radium, total alpha-emitting	U	V		1.1±0.62	pCi/g	0.13	EPA903.0
Tritium	U			2.0	pCi/g	2.0	EPA906.0

SAMPLE NAME: D431 1102D Sample ID: 100363

Sample Type: Duplicate Associated Sample: 100362

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			0.81	mg/kg	0.81	EPA7060
Barium	U			21	mg/kg	21	EPA6010
Cadmium	UJ	L		0.51	mg/kg	0.51	EPA6010
Chromium	J	L		39	mg/kg	1.0	EPA6010
Copper	U			2.6	mg/kg	2.6	EPA6010
Lead				2.5	mg/kg	0.24	EPA7421
Manganese				130	mg/kg	1.5	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			4.1	mg/kg	4.1	EPA6010
Selenium	U			0.41	mg/kg	0.41	EPA7740
Silver	U			1.0	mg/kg	1.0	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			360	µg/kg	360	EPA8270
Acenaphthylene	U			360	µg/kg	360	EPA8270
Anthracene	U			360	µg/kg	360	EPA8270
Benzo(a)anthracene	U			360	µg/kg	360	EPA8270
Benzo(b)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(k)fluoranthene	U			360	µg/kg	360	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			360	µg/kg	360	EPA8270
Benzo(a)pyrene	U			360	µg/kg	360	EPA8270
Benzyl alcohol	U			360	µg/kg	360	EPA8270
Bis(2-chloroethoxy) methane	U			360	µg/kg	360	EPA8270
Bis(2-chloroethyl) ether	U			360	µg/kg	360	EPA8270

SAMPLE NAME: D431 1102D (Continued) Sample ID: 100363

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Bis(2-chloroisopropyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-ethylhexyl) phthalate	U			360	µg/kg	360	EPA8270
4-Bromophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Butylbenzyl phthalate	U			360	µg/kg	360	EPA8270
4-Chloroaniline	U			360	µg/kg	360	EPA8270
4-Chloro-m-cresol	U			360	µg/kg	360	EPA8270
2-Chloronaphthalene	U			360	µg/kg	360	EPA8270
2-Chlorophenol	U			360	µg/kg	360	EPA8270
4-Chlorophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Chrysene	U			360	µg/kg	360	EPA8270
o-Cresol (2-Methylphenol)	U			360	µg/kg	360	EPA8270
p-Cresol (4-Methylphenol)	U			360	µg/kg	360	EPA8270
Dibenz(a,h)anthracene	U			360	µg/kg	360	EPA8270
Dibenzofuran	U			360	µg/kg	360	EPA8270
Di-n-butyl phthalate	UJ	V		120	µg/kg	360	EPA8270
1,2-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,3-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,4-Dichlorobenzene	U			360	µg/kg	360	EPA8270
3,3'-Dichlorobenzidine	U			710	µg/kg	710	EPA8270
2,4-Dichlorophenol	U			360	µg/kg	360	EPA8270
Diethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dimethyl phenol	U			360	µg/kg	360	EPA8270
Dimethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			360	µg/kg	360	EPA8270
2,6-Dinitrotoluene	U			360	µg/kg	360	EPA8270
Di-n-octyl phthalate	U			360	µg/kg	360	EPA8270
Fluoranthene	U			360	µg/kg	360	EPA8270
Fluorene	U			360	µg/kg	360	EPA8270
Hexachlorobenzene	U			360	µg/kg	360	EPA8270
Hexachlorobutadiene	U			360	µg/kg	360	EPA8270
Hexachlorocyclopentadiene	U			360	µg/kg	360	EPA8270
Hexachloroethane	U			360	µg/kg	360	EPA8270
Indeno(1,2,3-c,d)pyrene	U			360	µg/kg	360	EPA8270
Isophorone	U			360	µg/kg	360	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			360	µg/kg	360	EPA8270
Naphthalene	U			360	µg/kg	360	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			360	µg/kg	360	EPA8270
2-Nitrophenol	U			360	µg/kg	360	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			360	µg/kg	360	EPA8270
N-Nitrosodipropylamine	U			360	µg/kg	360	EPA8270
Pentachlorophenol	UJ	C		1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			360	µg/kg	360	EPA8270
Phenol	UJ	C		360	µg/kg	360	EPA8270
Pyrene	U			360	µg/kg	360	EPA8270

SAMPLE NAME: D431 1102D (Continued) Sample ID: 100363

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
1,2,4-Trichlorobenzene	U			360	µg/kg	360	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			360	µg/kg	360	EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown ketone	J	NV		2,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		13	µg/kg	11	EPA8240
Benzene	U	V		5.4	µg/kg	5.4	EPA8240
Bromodichloromethane	U			5.4	µg/kg	5.4	EPA8240
Bromoform	U			5.4	µg/kg	5.4	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.4	µg/kg	5.4	EPA8240
Carbon tetrachloride	U			5.4	µg/kg	5.4	EPA8240
Chlorobenzene	U			5.4	µg/kg	5.4	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.4	µg/kg	5.4	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.4	µg/kg	5.4	EPA8240
1,1-Dichloroethane	U			5.4	µg/kg	5.4	EPA8240
1,2-Dichloroethane	U			5.4	µg/kg	5.4	EPA8240
1,1-Dichloroethylene	U			5.4	µg/kg	5.4	EPA8240
1,2-Dichloroethylene	U			5.4	µg/kg	5.4	EPA8240
Dichloromethane (Methylene chloride)	U	V		12	µg/kg	5.4	EPA8240
1,2-Dichloropropane	U			5.4	µg/kg	5.4	EPA8240
cis-1,3-Dichloropropene	U			5.4	µg/kg	5.4	EPA8240
trans-1,3-Dichloropropene	U			5.4	µg/kg	5.4	EPA8240
Ethylbenzene	U			5.4	µg/kg	5.4	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.4	µg/kg	5.4	EPA8240
1,1,2,2-Tetrachloroethane	U			5.4	µg/kg	5.4	EPA8240
Tetrachloroethylene	U			5.4	µg/kg	5.4	EPA8240
Toluene	U			5.4	µg/kg	5.4	EPA8240
1,1,1-Trichloroethane	U			5.4	µg/kg	5.4	EPA8240
1,1,2-Trichloroethane				5.5	µg/kg	5.4	EPA8240
Trichloroethylene	U			5.4	µg/kg	5.4	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.4	µg/kg	5.4	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.8	µg/kg	1.8	EPA8080
alpha-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
beta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
delta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
alpha-Chlordane	J			0.35	µg/kg	1.8	EPA8080

SAMPLE NAME: D431 1102D (Continued) Sample ID: 100363

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
gamma-Chlordane	J			0.70	µg/kg	1.8	EPA8080
p,p'-DDD	J			2.1	µg/kg	3.5	EPA8080
p,p'-DDE	J			2.5	µg/kg	3.5	EPA8080
p,p'-DDT				4.9	µg/kg	3.5	EPA8080
Dieldrin	U			3.5	µg/kg	3.5	EPA8080
Endosulfan I	U			1.8	µg/kg	1.8	EPA8080
Endosulfan II	U			3.5	µg/kg	3.5	EPA8080
Endosulfan sulfate	U			3.5	µg/kg	3.5	EPA8080
Endrin				4.2	µg/kg	3.5	EPA8080
Endrin ketone	J			1.8	µg/kg	3.5	EPA8080
Heptachlor	U			1.8	µg/kg	1.8	EPA8080
Heptachlor epoxide	U			1.8	µg/kg	1.8	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			1.8	µg/kg	1.8	EPA8080
Methoxychlor	U			18	µg/kg	18	EPA8080
Octachlorodibenzo-p-dioxin	J			0.70	ng/g	0.10	EPA8280
Octachlorodibenzo-p-dioxin	J			0.60	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			35	µg/kg	35	EPA8080
PCB 1221	U			70	µg/kg	70	EPA8080
PCB 1232	U			35	µg/kg	35	EPA8080
PCB 1242	U			35	µg/kg	35	EPA8080
PCB 1248	U			35	µg/kg	35	EPA8080
PCB 1254	U			35	µg/kg	35	EPA8080
PCB 1260	U			35	µg/kg	35	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			180	µg/kg	180	EPA8080

SAMPLE NAME: D431 1102D (Continued) Sample ID: 100363

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Radionuclide Indicators and Radionuclides							
Gross alpha				27±17	pCi/g	7.6	EPA900.0
Nonvolatile beta				54±24	pCi/g	14	EPA900.0
Radium, total alpha-emitting	U	V		1.2±0.70	pCi/g	0.15	EPA903.0
Tritium	U			1.0	pCi/g	1.0	EPA906.0

SAMPLE NAME: D431 1103 Sample ID: 100364

Location (SRS Coordinates): 18558.54E 66554.39N
Ground Elevation Above MSL: 134.6 ft
Depth of Core Interval: 2.00 to 4.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10YR 6/2 USC Soil Classification: SM Percent Solids: 90.40

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			0.87	mg/kg	0.87	EPA7060
Barium	U			21	mg/kg	21	EPA6010
Cadmium	UJ	L		0.52	mg/kg	0.52	EPA6010
Chromium	J	L		11	mg/kg	1.0	EPA6010
Copper	U			2.6	mg/kg	2.6	EPA6010
Lead				2.7	mg/kg	0.26	EPA7421
Manganese				88	mg/kg	1.6	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			4.2	mg/kg	4.2	EPA6010
Selenium	U			0.43	mg/kg	0.43	EPA7740
Silver	U			1.0	mg/kg	1.0	EPA6010
Volatile Organic Compounds							
Acetone	U	V		54	µg/kg	11	EPA8240
Benzene	UJ	V		4.7	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane				7.1	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		14	µg/kg	5.5	EPA8240

SAMPLE NAME: D431-1103 (Continued) Sample ID: 100364

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	U			5.5	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	U			5.5	µg/kg	5.5	EPA8240
Toluene	U			5.5	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane				6.2	µg/kg	5.5	EPA8240
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.5	µg/kg	5.5	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			6.9	pCi/g	6.9	EPA900.0
Nonvolatile beta				32±19	pCi/g	13	EPA900.0
Radium, total alpha-emitting	U	V		1.1±0.65	pCi/g	0.13	EPA903.0
Tritium				2.0±2.5	pCi/g	1.4	EPA906.0

SAMPLE NAME: D431 1104 Sample ID: 100365

Location (SRS Coordinates): 18558.54E 66554.39N
Ground Elevation Above MSL: 134.6 ft
Depth of Core Interval: 4.00 to 6.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10YR 6/2 USC Soil Classification: SM Percent Solids: 90.00

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				0.99	mg/kg	0.92	EPA7060
Barium	U			17	mg/kg	17	EPA6010
Cadmium	UJ	L		0.41	mg/kg	0.41	EPA6010
Chromium	J	L		14	mg/kg	0.82	EPA6010
Copper	U			2.1	mg/kg	2.1	EPA6010
Lead				2.8	mg/kg	0.28	EPA7421
Manganese				68	mg/kg	1.2	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			3.3	mg/kg	3.3	EPA6010
Selenium	U			0.46	mg/kg	0.46	EPA7740
Silver	U			0.82	mg/kg	0.82	EPA6010

SAMPLE NAME: D431 1104 (Continued) Sample ID: 100365

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			370	µg/kg	370	EPA8270
Acenaphthylene	U			370	µg/kg	370	EPA8270
Anthracene	U			370	µg/kg	370	EPA8270
Benzo(a)anthracene	U			370	µg/kg	370	EPA8270
Benzo(b)fluoranthene	U			370	µg/kg	370	EPA8270
Benzo(k)fluoranthene	U			370	µg/kg	370	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	U			370	µg/kg	370	EPA8270
Benzo(a)pyrene	U			370	µg/kg	370	EPA8270
Benzyl alcohol	U			370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	U			370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	J			48	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Butylbenzyl phthalate	U			370	µg/kg	370	EPA8270
Alkylbenzene C10H14	J	N		200	µg/kg		EPA8270
Alkylbenzene C10H14	J	N		200	µg/kg		EPA8270
Hydrocarbon C13H28	J	N		300	µg/kg		EPA8270
Hydrocarbon C16H34	J	N		100	µg/kg		EPA8270
Hydrocarbon C20H42	J	N		200	µg/kg		EPA8270
4-Chloroaniline	U			370	µg/kg	370	EPA8270
4-Chloro-m-cresol	U			370	µg/kg	370	EPA8270
2-Chloronaphthalene	U			370	µg/kg	370	EPA8270
2-Chlorophenol	U			370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Chrysene	U			370	µg/kg	370	EPA8270
o-Cresol (2-Methylphenol)	U			370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	U			370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	U			370	µg/kg	370	EPA8270
Dibenzofuran	U			370	µg/kg	370	EPA8270
Di-n-butyl phthalate	UJ	V		150	µg/kg	370	EPA8270
1,2-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,4-Dichlorobenzene	U			370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	U			750	µg/kg	750	EPA8270
2,4-Dichlorophenol	U			370	µg/kg	370	EPA8270
Diethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	U			370	µg/kg	370	EPA8270
Dimethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	U			370	µg/kg	370	EPA8270
Di-n-octyl phthalate	U			370	µg/kg	370	EPA8270
Fluoranthene	U			370	µg/kg	370	EPA8270
Fluorene	U			370	µg/kg	370	EPA8270
Hexachlorobenzene	U			370	µg/kg	370	EPA8270
Hexachlorobutadiene	U			370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	U			370	µg/kg	370	EPA8270
Hexachloroethane	U			370	µg/kg	370	EPA8270

SAMPLE NAME: D431 1104 (Continued) Sample ID: 100365

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Indeno(1,2,3-c,d)pyrene	U			370	µg/kg	370	EPA8270
Isophorone	U			370	µg/kg	370	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	U			370	µg/kg	370	EPA8270
Naphthalene	U			370	µg/kg	370	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U			370	µg/kg	370	EPA8270
2-Nitrophenol	U			370	µg/kg	370	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			370	µg/kg	370	EPA8270
N-Nitrosodipropylamine	U			370	µg/kg	370	EPA8270
Pentachlorophenol	UJ	C		1,900	µg/kg	1,900	EPA8270
Phenanthrene	J			40	µg/kg	370	EPA8270
Phenol	UJ	C		370	µg/kg	370	EPA8270
Pyrene	U			370	µg/kg	370	EPA8270
1,2,4-Trichlorobenzene	U			370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			370	µg/kg	370	EPA8270
Unknown arom. ketone	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		400	µg/kg		EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		600	µg/kg		EPA8270
Unknown	J	N		100	µg/kg		EPA8270
Unknown	J	N		400	µg/kg		EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Unknown	J	N		500	µg/kg		EPA8270
Unknown	J	N		600	µg/kg		EPA8270
Unknown ketone	J	NV		8,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		32	µg/kg	11	EPA8240
Subst. alkylbenzene	J	N		20	µg/kg		EPA8240
Subst. alkylbenzene	J	N		10	µg/kg		EPA8240
Subst. alkylbenzene	J	N		7.0	µg/kg		EPA8240
Subst. alkylbenzene	J	N		8.0	µg/kg		EPA8240
Subst. alkylbenzene	J	N		10	µg/kg		EPA8240
Benzene	U	V		5.7	µg/kg	5.7	EPA8240
Bromodichloromethane	U			5.7	µg/kg	5.7	EPA8240
Bromoform	U			5.7	µg/kg	5.7	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.7	µg/kg	5.7	EPA8240
Carbon tetrachloride	U			5.7	µg/kg	5.7	EPA8240
Chlorobenzene	U			5.7	µg/kg	5.7	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240

SAMPLE NAME: D431 1104 (Continued) Sample ID: 100365

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Chloroform	U			5.7	µg/kg	5.7	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.7	µg/kg	5.7	EPA8240
1,1-Dichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethane				6.7	µg/kg	5.7	EPA8240
1,1-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
Dichloromethane (Methylene chloride)	U	V		14	µg/kg	5.7	EPA8240
1,2-Dichloropropane	U			5.7	µg/kg	5.7	EPA8240
cis-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
trans-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
Diethylbenzene	J	N		20	µg/kg		EPA8240
Diethylbenzene	J	N		20	µg/kg		EPA8240
Ethylbenzene	U			5.7	µg/kg	5.7	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Trimethylbenzene	J	N		20	µg/kg		EPA8240
Trimethylbenzene	J	N		10	µg/kg		EPA8240
Methylpropylbenzene	J	N		10	µg/kg		EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.7	µg/kg	5.7	EPA8240
1,1,2,2-Tetrachloroethane	U			5.7	µg/kg	5.7	EPA8240
Tetrachloroethylene	U			5.7	µg/kg	5.7	EPA8240
Toluene	U			5.7	µg/kg	5.7	EPA8240
1,1,1-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1,2-Trichloroethane				5.9	µg/kg	5.7	EPA8240
Trichloroethylene	U			5.7	µg/kg	5.7	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.7	µg/kg	5.7	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			19	µg/kg	19	EPA8080
alpha-Benzene hexachloride	U			19	µg/kg	19	EPA8080
beta-Benzene hexachloride	U			19	µg/kg	19	EPA8080
delta-Benzene hexachloride	U			19	µg/kg	19	EPA8080
alpha-Chlordane				130	µg/kg	19	EPA8080
gamma-Chlordane				230	µg/kg	19	EPA8080
p,p'-DDD	J			15	µg/kg	38	EPA8080
p,p'-DDE	J			15	µg/kg	38	EPA8080
p,p'-DDT	U			38	µg/kg	38	EPA8080
Dieldrin	J			17	µg/kg	38	EPA8080
Endosulfan I	U			19	µg/kg	19	EPA8080
Endosulfan II	U			38	µg/kg	38	EPA8080
Endosulfan sulfate	J			4.5	µg/kg	38	EPA8080
Endrin	J			6.4	µg/kg	38	EPA8080
Endrin ketone	U			38	µg/kg	38	EPA8080
Heptachlor	U			19	µg/kg	19	EPA8080
Heptachlor epoxide	U			19	µg/kg	19	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280

SAMPLE NAME: D431-1104 (Continued) Sample ID: 100365

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	J			0.60	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			19	µg/kg	19	EPA8080
Methoxychlor	U			190	µg/kg	190	EPA8080
Octachlorodibenzo-p-dioxin				2.9	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	U			380	µg/kg	380	EPA8080
PCB 1221	U			750	µg/kg	750	EPA8080
PCB 1232	U			380	µg/kg	380	EPA8080
PCB 1242	U			380	µg/kg	380	EPA8080
PCB 1248	U			380	µg/kg	380	EPA8080
PCB 1254	U			380	µg/kg	380	EPA8080
PCB 1260	U			380	µg/kg	380	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			1.5	ng/g	1.5	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-dioxin isomers	U			0.60	ng/g	0.60	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	U			1,900	µg/kg	1,900	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			7.5	pCi/g	7.5	EPA900.0
Nonvolatile beta	U			14	pCi/g	14	EPA900.0
Radium, total alpha-emitting	U	V		1.0±0.62	pCi/g	0.14	EPA903.0
Tritium				1.9±2.4	pCi/g	1.3	EPA906.0

SAMPLE NAME: D431 1105 Sample ID: 100366

Location (SRS Coordinates): 18558.54E 66554.39N
Ground Elevation Above MSL: 134.6 ft
Depth of Core Interval: 6.00 to 8.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Wet
Sample Color: 10YR 4/2 USC Soil Classification: SM Percent Solids: 87.20

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				1.8	mg/kg	1.1	EPA7060
Barium	U			23	mg/kg	23	EPA6010
Cadmium	U			0.57	mg/kg	0.57	EPA6010
Chromium				96	mg/kg	1.1	EPA6010

SAMPLE NAME: D431-1105 (Continued) Sample ID: 100366

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Copper				7.0	mg/kg	2.9	EPA6010
Lead				14	mg/kg	1.7	EPA7421
Manganese				53	mg/kg	1.7	EPA6010
Mercury				0.14	mg/kg	0.12	EPA7470
Nickel				9.5	mg/kg	4.6	EPA6010
Selenium	U			0.57	mg/kg	0.57	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			370	µg/kg	370	EPA8270
Acenaphthylene	U			370	µg/kg	370	EPA8270
Adipate	J	N		2,000	µg/kg		EPA8270
Aldol condensate	J	NVK		2,000	µg/kg		EPA8270
Anthracene	U			370	µg/kg	370	EPA8270
Aromatic	J	N		200	µg/kg		EPA8270
Benzo(a)anthracene	U			370	µg/kg	370	EPA8270
Benzo(b)fluoranthene	U			370	µg/kg	370	EPA8270
Benzo(k)fluoranthene	U			370	µg/kg	370	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	U			370	µg/kg	370	EPA8270
Benzo(a)pyrene	U			370	µg/kg	370	EPA8270
Benzyl alcohol	U			370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	U			370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	U	V		670	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Butylbenzyl phthalate	J			290	µg/kg	370	EPA8270
4-Chloroaniline	U			370	µg/kg	370	EPA8270
4-Chloro-m-cresol	U			370	µg/kg	370	EPA8270
2-Chloronaphthalene	U			370	µg/kg	370	EPA8270
2-Chlorophenol	U			370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Chrysene	U			370	µg/kg	370	EPA8270
o-Cresol (2-Methylphenol)	U			370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	U			370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	U			370	µg/kg	370	EPA8270
Dibenzofuran	U			370	µg/kg	370	EPA8270
Di-n-butyl phthalate	J			62	µg/kg	370	EPA8270
1,2-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,4-Dichlorobenzene	U			370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	U			750	µg/kg	750	EPA8270
2,4-Dichlorophenol	U			370	µg/kg	370	EPA8270
Diethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	U			370	µg/kg	370	EPA8270
Dimethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			370	µg/kg	370	EPA8270

SAMPLE NAME: D431 1105 (Continued) Sample ID: 100366

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2,6-Dinitrotoluene	U			370	µg/kg	370	EPA8270
Di-n-octyl phthalate	J			120	µg/kg	370	EPA8270
Fluoranthene	U			370	µg/kg	370	EPA8270
Fluorene	U			370	µg/kg	370	EPA8270
Hexachlorobenzene	U			370	µg/kg	370	EPA8270
Hexachlorobutadiene	U			370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	U			370	µg/kg	370	EPA8270
Hexachloroethane	U			370	µg/kg	370	EPA8270
Indeno(1,2,3-c,d)pyrene	U			370	µg/kg	370	EPA8270
Isophorone	U			370	µg/kg	370	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	U			370	µg/kg	370	EPA8270
Naphthalene	U			370	µg/kg	370	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U			370	µg/kg	370	EPA8270
2-Nitrophenol	U			370	µg/kg	370	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			370	µg/kg	370	EPA8270
N-Nitrosodipropylamine	U			370	µg/kg	370	EPA8270
Organic acid	J	N		200	µg/kg		EPA8270
Pentachlorophenol	U			1,900	µg/kg	1,900	EPA8270
Phenanthrene	U			370	µg/kg	370	EPA8270
Phenol	U			370	µg/kg	370	EPA8270
Pyrene	U			370	µg/kg	370	EPA8270
Sulfur	J	N		3,000	µg/kg		EPA8270
1,2,4-Trichlorobenzene	U			370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			370	µg/kg	370	EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	L			400	µg/kg	12	EPA8240
Acetone				3,500	µg/kg	1,400	EPA8240
Benzene	U			6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U			6.0	µg/kg	6.0	EPA8240
Bromoform	U			6.0	µg/kg	6.0	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			6.0	µg/kg	6.0	EPA8240
Carbon tetrachloride	U			6.0	µg/kg	6.0	EPA8240
Chlorobenzene	U			6.0	µg/kg	6.0	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
2-Chloroethyl vinyl ether	U			12	µg/kg	12	EPA8240
Chloroform	U			6.0	µg/kg	6.0	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240

SAMPLE NAME: D431 1105 (Continued) Sample ID: 100366

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Dibromochloromethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		11	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U			6.0	µg/kg	6.0	EPA8240
cis-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
Ethylbenzene	U			6.0	µg/kg	6.0	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U			6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U			6.0	µg/kg	6.0	EPA8240
Toluene	U			6.0	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
Trichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Unknown	J	N		100	µg/kg		EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			6.0	µg/kg	6.0	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.9	µg/kg	1.9	EPA8080
alpha-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
beta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
delta-Benzene hexachloride				4.6	µg/kg	1.9	EPA8080
alpha-Chlordane				6.9	µg/kg	1.9	EPA8080
gamma-Chlordane				14	µg/kg	1.9	EPA8080
p,p'-DDD	U			3.8	µg/kg	3.8	EPA8080
p,p'-DDE	J			2.3	µg/kg	3.8	EPA8080
p,p'-DDT	U			3.8	µg/kg	3.8	EPA8080
Dieldrin	U			3.8	µg/kg	3.8	EPA8080
Endosulfan I	U			1.9	µg/kg	1.9	EPA8080
Endosulfan II	U			3.8	µg/kg	3.8	EPA8080
Endosulfan sulfate	U			3.8	µg/kg	3.8	EPA8080
Endrin	U			3.8	µg/kg	3.8	EPA8080
Endrin ketone	U			3.8	µg/kg	3.8	EPA8080
Heptachlor	U			1.9	µg/kg	1.9	EPA8080
Heptachlor epoxide	U			1.9	µg/kg	1.9	EPA8080
Heptachlorodibenzo-p-dioxin isomers				2.8	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Lindane	U			1.9	µg/kg	1.9	EPA8080
Methoxychlor	U			19	µg/kg	19	EPA8080
Octachlorodibenzo-p-dioxin	U			0.20	ng/g	0.20	EPA8280

SAMPLE NAME: D431 1105 (Continued) Sample ID: 100366

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Octachlorodibenzo-p-furan	U			0.30	ng/g	0.30	EPA8280
PCB 1016	U			38	µg/kg	38	EPA8080
PCB 1221	U			76	µg/kg	76	EPA8080
PCB 1232	U			38	µg/kg	38	EPA8080
PCB 1242	U			38	µg/kg	38	EPA8080
PCB 1248	U			38	µg/kg	38	EPA8080
PCB 1254	U			38	µg/kg	38	EPA8080
PCB 1260	U			38	µg/kg	38	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	U			190	µg/kg	190	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				11±13	pCi/g	4.2	EPA900.0
Nonvolatile beta		V		66±20	pCi/g	7.4	EPA900.0
Radium, total alpha-emitting	U	V		1.8±0.87	pCi/g	0.080	EPA903.0
Tritium	U			1.2	pCi/g	1.2	EPA906.0

SAMPLE NAME: D431 1106 Sample ID: 100367

Location (SRS Coordinates): 18558.54E 66554.39N
Ground Elevation Above MSL: 134.6 ft
Depth of Core Interval: 8.00 to 10.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10YR 3/4 USC Soil Classification: SC Percent Solids: 86.40

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				12	meq/100g	2.0	EPA9080
pH	J	Q		3.8	pH	0.010	EPA9045
Specific conductance				150	µS/cm	1.0	EPA9050
Total organic carbon				1,100	mg/kg	230	EPA415.1
Total Metals							
Arsenic				1.8	mg/kg	1.2	EPA7060
Barium	U			23	mg/kg	23	EPA6010
Cadmium	U			0.58	mg/kg	0.58	EPA6010
Chromium				49	mg/kg	1.2	EPA6010
Copper				4.6	mg/kg	2.9	EPA6010
Lead				7.1	mg/kg	0.35	EPA7421
Manganese				310	mg/kg	1.7	EPA6010

SAMPLE NAME: D431 1106 (Continued) Sample ID: 100367

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel				6.4	mg/kg	4.6	EPA6010
Selenium	U			0.58	mg/kg	0.58	EPA7740
Silver	U			1.2	mg/kg	1.2	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			380	µg/kg	380	EPA8270
Acenaphthylene	U			380	µg/kg	380	EPA8270
Adipate	J	N		20,000	µg/kg		EPA8270
Aldol condensate	J	NVK		2,000	µg/kg		EPA8270
Aldol condensate	J	NK		300	µg/kg		EPA8270
Anthracene	U			380	µg/kg	380	EPA8270
Benzo(a)anthracene	U			380	µg/kg	380	EPA8270
Benzo(b)fluoranthene	U			380	µg/kg	380	EPA8270
Benzo(k)fluoranthene	U			380	µg/kg	380	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	U			380	µg/kg	380	EPA8270
Benzo(a)pyrene	U			380	µg/kg	380	EPA8270
Benzyl alcohol	U			380	µg/kg	380	EPA8270
Bis(2-chloroethoxy) methane	U			380	µg/kg	380	EPA8270
Bis(2-chloroethyl) ether	U			380	µg/kg	380	EPA8270
Bis(2-chloroisopropyl) ether	U			380	µg/kg	380	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		140	µg/kg	380	EPA8270
4-Bromophenyl phenyl ether	U			380	µg/kg	380	EPA8270
Butylbenzyl phthalate	U			380	µg/kg	380	EPA8270
4-Chloroaniline	U			380	µg/kg	380	EPA8270
4-Chloro-m-cresol	U			380	µg/kg	380	EPA8270
2-Chloronaphthalene	U			380	µg/kg	380	EPA8270
2-Chlorophenol	U			380	µg/kg	380	EPA8270
4-Chlorophenyl phenyl ether	U			380	µg/kg	380	EPA8270
Chrysene	U			380	µg/kg	380	EPA8270
o-Cresol (2-Methylphenol)	U			380	µg/kg	380	EPA8270
p-Cresol (4-Methylphenol)	U			380	µg/kg	380	EPA8270
Dibenz(a,h)anthracene	U			380	µg/kg	380	EPA8270
Dibenzofuran	U			380	µg/kg	380	EPA8270
Di-n-butyl phthalate	J			45	µg/kg	380	EPA8270
1,2-Dichlorobenzene	U			380	µg/kg	380	EPA8270
1,3-Dichlorobenzene	U			380	µg/kg	380	EPA8270
1,4-Dichlorobenzene	U			380	µg/kg	380	EPA8270
3,3'-Dichlorobenzidine	U			760	µg/kg	760	EPA8270
2,4-Dichlorophenol	U			380	µg/kg	380	EPA8270
Diethyl phthalate	U			380	µg/kg	380	EPA8270
2,4-Dimethyl phenol	U			380	µg/kg	380	EPA8270
Dimethyl phthalate	U			380	µg/kg	380	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			380	µg/kg	380	EPA8270
2,6-Dinitrotoluene	U			380	µg/kg	380	EPA8270
Di-n-octyl phthalate	J			45	µg/kg	380	EPA8270
Fluoranthene	U			380	µg/kg	380	EPA8270

SAMPLE NAME: D431-1106 (Continued) Sample ID: 100367

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Fluorene	U			380	µg/kg	380	EPA8270
Hexachlorobenzene	U			380	µg/kg	380	EPA8270
Hexachlorobutadiene	U			380	µg/kg	380	EPA8270
Hexachlorocyclopentadiene	U			380	µg/kg	380	EPA8270
Hexachloroethane	U			380	µg/kg	380	EPA8270
Indeno(1,2,3-c,d)pyrene	U			380	µg/kg	380	EPA8270
Isophorone	U			380	µg/kg	380	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	U			380	µg/kg	380	EPA8270
Naphthalene	U			380	µg/kg	380	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U			380	µg/kg	380	EPA8270
2-Nitrophenol	U			380	µg/kg	380	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			380	µg/kg	380	EPA8270
N-Nitrosodipropylamine	U			380	µg/kg	380	EPA8270
Pentachlorophenol	U			1,900	µg/kg	1,900	EPA8270
Phenanthrene	U			380	µg/kg	380	EPA8270
Phenol	U			380	µg/kg	380	EPA8270
Pyrene	U			380	µg/kg	380	EPA8270
1,2,4-Trichlorobenzene	U			380	µg/kg	380	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			380	µg/kg	380	EPA8270
Unknown	J	N		900	µg/kg		EPA8270
Unknown	J	N		500	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone				120	µg/kg	11	EPA8240
Benzene	U			5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
2-Chloroethyl vinyl ether	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		14	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240

SAMPLE NAME: D431 1106 (Continued) Sample ID: 100367

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	U			5.5	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	U			5.5	µg/kg	5.5	EPA8240
Toluene	U			5.5	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Unknown	J	N		10	µg/kg		EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.5	µg/kg	5.5	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.9	µg/kg	1.9	EPA8080
alpha-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
beta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
delta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
alpha-Chlordane	J			1.2	µg/kg	1.9	EPA8080
gamma-Chlordane				2.7	µg/kg	1.9	EPA8080
p,p'-DDD	J			3.1	µg/kg	3.9	EPA8080
p,p'-DDE	J			3.5	µg/kg	3.9	EPA8080
p,p'-DDT	J			2.7	µg/kg	3.9	EPA8080
Dieldrin	U			3.9	µg/kg	3.9	EPA8080
Endosulfan I	U			1.9	µg/kg	1.9	EPA8080
Endosulfan II	U			3.9	µg/kg	3.9	EPA8080
Endosulfan sulfate	U			3.9	µg/kg	3.9	EPA8080
Endrin	U			3.9	µg/kg	3.9	EPA8080
Endrin ketone	U			3.9	µg/kg	3.9	EPA8080
Heptachlor	U			1.9	µg/kg	1.9	EPA8080
Heptachlor epoxide	U			1.9	µg/kg	1.9	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.30	ng/g	0.30	EPA8280
Lindane	U			1.9	µg/kg	1.9	EPA8080
Methoxychlor	U			19	µg/kg	19	EPA8080
Octachlorodibenzo-p-dioxin				2.0	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	U			39	µg/kg	39	EPA8080
PCB 1221	U			77	µg/kg	77	EPA8080
PCB 1232	U			39	µg/kg	39	EPA8080
PCB 1242	U			39	µg/kg	39	EPA8080
PCB 1248	U			39	µg/kg	39	EPA8080
PCB 1254	U			39	µg/kg	39	EPA8080

SAMPLE NAME: D431 1106 (Continued) Sample ID: 100367

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
PCB 1260	U			39	µg/kg	39	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.30	ng/g	0.30	EPA8280
2,3,7,8-TCDD	U			0.30	ng/g	0.30	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.30	ng/g	0.30	EPA8280
Toxaphene	U			190	µg/kg	190	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			4.3	pCi/g	4.3	EPA900.0
Nonvolatile beta		V		29±17	pCi/g	7.8	EPA900.0
Radium, total alpha-emitting	U	V		2.1±0.96	pCi/g	0.090	EPA903.0
Tritium	U			1.8	pCi/g	1.8	EPA906.0

SAMPLE NAME: D431 1106A Sample ID: 100368

Sample Type: Duplicate Associated Sample: 100367

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				11	meq/100g	2.0	EPA9080
pH	J	Q		3.9	pH	0.010	EPA9045
Specific conductance				150	µS/cm	1.0	EPA9050
Total organic carbon				1,400	mg/kg	100	EPA415.1
Total organic carbon				1,700	mg/kg	130	EPA415.1
Total Metals							
Arsenic				2.8	mg/kg	1.1	EPA7060
Barium	U			23	mg/kg	23	EPA6010
Cadmium	U			0.57	mg/kg	0.57	EPA6010
Chromium				59	mg/kg	1.1	EPA6010
Copper				4.6	mg/kg	2.9	EPA6010
Lead				9.1	mg/kg	0.69	EPA7421
Manganese				330	mg/kg	1.7	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel				7.3	mg/kg	4.6	EPA6010
Selenium	U			0.57	mg/kg	0.57	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			380	µg/kg	380	EPA8270
Acenaphthylene	U			380	µg/kg	380	EPA8270
Adipate	J	N		40,000	µg/kg		EPA8270

SAMPLE NAME: D431 1106A (Continued) Sample ID: 100368

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Aldol condensate	J	NVK		2,000	µg/kg		EPA8270
Aldol condensate	J	NK		300	µg/kg		EPA8270
Anthracene	U			380	µg/kg	380	EPA8270
Benzo(a)anthracene	U			380	µg/kg	380	EPA8270
Benzo(b)fluoranthene	U			380	µg/kg	380	EPA8270
Benzo(k)fluoranthene	U			380	µg/kg	380	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	U			380	µg/kg	380	EPA8270
Benzo(a)pyrene	U			380	µg/kg	380	EPA8270
Benzyl alcohol	U			380	µg/kg	380	EPA8270
Bis(2-chloroethoxy) methane	U			380	µg/kg	380	EPA8270
Bis(2-chloroethyl) ether	U			380	µg/kg	380	EPA8270
Bis(2-chloroisopropyl) ether	U			380	µg/kg	380	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		140	µg/kg	380	EPA8270
4-Bromophenyl phenyl ether	U			380	µg/kg	380	EPA8270
Butylbenzyl phthalate	U			380	µg/kg	380	EPA8270
4-Chloroaniline	U			380	µg/kg	380	EPA8270
4-Chloro-m-cresol	U			380	µg/kg	380	EPA8270
2-Chloronaphthalene	U			380	µg/kg	380	EPA8270
2-Chlorophenol	U			380	µg/kg	380	EPA8270
4-Chlorophenyl phenyl ether	U			380	µg/kg	380	EPA8270
Chrysene	U			380	µg/kg	380	EPA8270
o-Cresol (2-Methylphenol)	U			380	µg/kg	380	EPA8270
p-Cresol (4-Methylphenol)	U			380	µg/kg	380	EPA8270
Dibenz(a,h)anthracene	U			380	µg/kg	380	EPA8270
Dibenzofuran	U			380	µg/kg	380	EPA8270
Di-n-butyl phthalate	J			40	µg/kg	380	EPA8270
1,2-Dichlorobenzene	U			380	µg/kg	380	EPA8270
1,3-Dichlorobenzene	U			380	µg/kg	380	EPA8270
1,4-Dichlorobenzene	U			380	µg/kg	380	EPA8270
3,3'-Dichlorobenzidine	U			760	µg/kg	760	EPA8270
2,4-Dichlorophenol	U			380	µg/kg	380	EPA8270
Diethyl phthalate	U			380	µg/kg	380	EPA8270
2,4-Dimethyl phenol	U			380	µg/kg	380	EPA8270
Dimethyl phthalate	U			380	µg/kg	380	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			380	µg/kg	380	EPA8270
2,6-Dinitrotoluene	U			380	µg/kg	380	EPA8270
Di-n-octyl phthalate	U			380	µg/kg	380	EPA8270
Fluoranthene	U			380	µg/kg	380	EPA8270
Fluorene	U			380	µg/kg	380	EPA8270
Hexachlorobenzene	U			380	µg/kg	380	EPA8270
Hexachlorobutadiene	U			380	µg/kg	380	EPA8270
Hexachlorocyclopentadiene	U			380	µg/kg	380	EPA8270
Hexachloroethane	U			380	µg/kg	380	EPA8270
Indeno(1,2,3-c,d)pyrene	U			380	µg/kg	380	EPA8270
Isophorone	U			380	µg/kg	380	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	U			380	µg/kg	380	EPA8270
Naphthalene	U			380	µg/kg	380	EPA8270

SAMPLE NAME: D431-1106A (Continued) Sample ID: 100368

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U			380	µg/kg	380	EPA8270
2-Nitrophenol	U			380	µg/kg	380	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			380	µg/kg	380	EPA8270
N-Nitrosodipropylamine	U			380	µg/kg	380	EPA8270
Pentachlorophenol	U			1,900	µg/kg	1,900	EPA8270
Phenanthrene	U			380	µg/kg	380	EPA8270
Phenol	U			380	µg/kg	380	EPA8270
Pyrene	U			380	µg/kg	380	EPA8270
1,2,4-Trichlorobenzene	U			380	µg/kg	380	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			380	µg/kg	380	EPA8270
Unknown	J	N		400	µg/kg		EPA8270
Unknown	J	N		400	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone				220	µg/kg	11	EPA8240
Benzene	U			5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
2-Chloroethyl vinyl ether	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		15	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	U			5.5	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	U			5.5	µg/kg	5.5	EPA8240
Toluene	U			5.5	µg/kg	5.5	EPA8240

SAMPLE NAME: D431 1106A (Continued) Sample ID: 100368

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1,1-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Unknown	J	N		20	µg/kg		EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.5	µg/kg	5.5	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.9	µg/kg	1.9	EPA8080
alpha-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
beta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
delta-Benzene hexachloride	J			1.2	µg/kg	1.9	EPA8080
alpha-Chlordane	J			1.5	µg/kg	1.9	EPA8080
gamma-Chlordane				3.1	µg/kg	1.9	EPA8080
p,p'-DDD	J			3.1	µg/kg	3.8	EPA8080
p,p'-DDE	J			3.1	µg/kg	3.8	EPA8080
p,p'-DDT	J			2.7	µg/kg	3.8	EPA8080
Dieldrin	U			3.8	µg/kg	3.8	EPA8080
Endosulfan I	U			1.9	µg/kg	1.9	EPA8080
Endosulfan II	U			3.8	µg/kg	3.8	EPA8080
Endosulfan sulfate	U			3.8	µg/kg	3.8	EPA8080
Endrin	U			3.8	µg/kg	3.8	EPA8080
Endrin ketone	U			3.8	µg/kg	3.8	EPA8080
Heptachlor	U			1.9	µg/kg	1.9	EPA8080
Heptachlor epoxide	U			1.9	µg/kg	1.9	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.40	ng/g	0.40	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Lindane	U			1.9	µg/kg	1.9	EPA8080
Methoxychlor	U			19	µg/kg	19	EPA8080
Octachlorodibenzo-p-dioxin				4.3	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	U			38	µg/kg	38	EPA8080
PCB 1221	U			77	µg/kg	77	EPA8080
PCB 1232	U			38	µg/kg	38	EPA8080
PCB 1242	U			38	µg/kg	38	EPA8080
PCB 1248	U			38	µg/kg	38	EPA8080
PCB 1254	U			38	µg/kg	38	EPA8080
PCB 1260	U			38	µg/kg	38	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.30	ng/g	0.30	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.30	ng/g	0.30	EPA8280
Toxaphene	U			190	µg/kg	190	EPA8080

SAMPLE NAME: D431 1106A (Continued) Sample ID: 100368

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Radionuclide Indicators and Radionuclides							
Gross alpha				5.0±13	pCi/g	4.6	EPA900.0
Nonvolatile beta		V		48±20	pCi/g	8.4	EPA900.0
Radium, total alpha-emitting	U	V		1.8±0.91	pCi/g	0.090	EPA903.0
Tritium	U			1.8	pCi/g	1.8	EPA906.0

SAMPLE NAME: D431 1107 Sample ID: 100369

Location (SRS Coordinates): 18558.54E 66554.39N
Ground Elevation Above MSL: 134.6 ft
Depth of Core Interval: 10.00 to 12.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10YR 4/2 USC Soil Classification: SC Percent Solids: 78.10

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				3.1	mg/kg	1.3	EPA7060
Barium	U			25	mg/kg	25	EPA6010
Cadmium	U			0.64	mg/kg	0.64	EPA6010
Chromium				17	mg/kg	1.3	EPA6010
Copper	U			3.2	mg/kg	3.2	EPA6010
Lead				1.4	mg/kg	0.38	EPA7421
Manganese				160	mg/kg	1.9	EPA6010
Mercury	U			0.13	mg/kg	0.13	EPA7470
Nickel	U			5.1	mg/kg	5.1	EPA6010
Selenium				0.67	mg/kg	0.64	EPA7740
Silver	U			1.3	mg/kg	1.3	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			420	µg/kg	420	EPA8270
Acenaphthylene	U			420	µg/kg	420	EPA8270
Adipate	J	N		60,000	µg/kg		EPA8270
Aldol condensate	J	NVK		2,000	µg/kg		EPA8270
Aldol condensate	J	NK		300	µg/kg		EPA8270
Anthracene	U			420	µg/kg	420	EPA8270
Benzo(a)anthracene	U			420	µg/kg	420	EPA8270
Benzo(b)fluoranthene	U			420	µg/kg	420	EPA8270
Benzo(k)fluoranthene	U			420	µg/kg	420	EPA8270
Benzoic acid	U			2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	U			420	µg/kg	420	EPA8270
Benzo(a)pyrene	U			420	µg/kg	420	EPA8270
Benzyl alcohol	U			420	µg/kg	420	EPA8270
Bis(2-chloroethoxy) methane	U			420	µg/kg	420	EPA8270
Bis(2-chloroethyl) ether	U			420	µg/kg	420	EPA8270
Bis(2-chloroisopropyl) ether	U			420	µg/kg	420	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		180	µg/kg	420	EPA8270
4-Bromophenyl phenyl ether	U			420	µg/kg	420	EPA8270

SAMPLE NAME: D431 1107 (Continued) Sample ID: 100369

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Butylbenzyl phthalate	U			420	µg/kg	420	EPA8270
4-Chloroaniline	U			420	µg/kg	420	EPA8270
4-Chloro-m-cresol	U			420	µg/kg	420	EPA8270
2-Chloronaphthalene	U			420	µg/kg	420	EPA8270
2-Chlorophenol	U			420	µg/kg	420	EPA8270
4-Chlorophenyl phenyl ether	U			420	µg/kg	420	EPA8270
Chrysene	U			420	µg/kg	420	EPA8270
o-Cresol (2-Methylphenol)	U			420	µg/kg	420	EPA8270
p-Cresol (4-Methylphenol)	U			420	µg/kg	420	EPA8270
Dibenz(a,h)anthracene	U			420	µg/kg	420	EPA8270
Dibenzofuran	U			420	µg/kg	420	EPA8270
Di-n-butyl phthalate	J			48	µg/kg	420	EPA8270
1,2-Dichlorobenzene	U			420	µg/kg	420	EPA8270
1,3-Dichlorobenzene	U			420	µg/kg	420	EPA8270
1,4-Dichlorobenzene	U			420	µg/kg	420	EPA8270
3,3'-Dichlorobenzidine	U			850	µg/kg	850	EPA8270
2,4-Dichlorophenol	U			420	µg/kg	420	EPA8270
Diethyl phthalate	U			420	µg/kg	420	EPA8270
2,4-Dimethyl phenol	U			420	µg/kg	420	EPA8270
Dimethyl phthalate	U			420	µg/kg	420	EPA8270
2,4-Dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2,4-Dinitrotoluene	U			420	µg/kg	420	EPA8270
2,6-Dinitrotoluene	U			420	µg/kg	420	EPA8270
Di-n-octyl phthalate	J			63	µg/kg	420	EPA8270
Fluoranthene	U			420	µg/kg	420	EPA8270
Fluorene	U			420	µg/kg	420	EPA8270
Hexachlorobenzene	U			420	µg/kg	420	EPA8270
Hexachlorobutadiene	U			420	µg/kg	420	EPA8270
Hexachlorocyclopentadiene	U			420	µg/kg	420	EPA8270
Hexachloroethane	U			420	µg/kg	420	EPA8270
Indeno(1,2,3-c,d)pyrene	U			420	µg/kg	420	EPA8270
Isophorone	U			420	µg/kg	420	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	U			420	µg/kg	420	EPA8270
Naphthalene	U			420	µg/kg	420	EPA8270
o-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
Nitrobenzene	U			420	µg/kg	420	EPA8270
2-Nitrophenol	U			420	µg/kg	420	EPA8270
4-Nitrophenol	U			2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	U			420	µg/kg	420	EPA8270
N-Nitrosodipropylamine	U			420	µg/kg	420	EPA8270
Pentachlorophenol	U			2,100	µg/kg	2,100	EPA8270
Phenanthrene	U			420	µg/kg	420	EPA8270
Phenol	U			420	µg/kg	420	EPA8270
Pyrene	U			420	µg/kg	420	EPA8270
1,2,4-Trichlorobenzene	U			420	µg/kg	420	EPA8270
2,4,5-Trichlorophenol	U			2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	U			420	µg/kg	420	EPA8270

SAMPLE NAME: D431 1107 (Continued) Sample ID: 100369

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		600	µg/kg		EPA8270
Unknown	J	N		400	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone				130	µg/kg	13	EPA8240
Benzene	U			6.5	µg/kg	6.5	EPA8240
Bromodichloromethane	U			6.5	µg/kg	6.5	EPA8240
Bromoform	U			6.5	µg/kg	6.5	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Carbon disulfide	U			6.5	µg/kg	6.5	EPA8240
Carbon tetrachloride	U			6.5	µg/kg	6.5	EPA8240
Chlorobenzene	U			6.5	µg/kg	6.5	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
2-Chloroethyl vinyl ether	U			13	µg/kg	13	EPA8240
Chloroform	U			6.5	µg/kg	6.5	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Dibromochloromethane	U			6.5	µg/kg	6.5	EPA8240
1,1-Dichloroethane	U			6.5	µg/kg	6.5	EPA8240
1,2-Dichloroethane	U			6.5	µg/kg	6.5	EPA8240
1,1-Dichloroethylene	U			6.5	µg/kg	6.5	EPA8240
1,2-Dichloroethylene	U			6.5	µg/kg	6.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		15	µg/kg	6.5	EPA8240
1,2-Dichloropropane	U			6.5	µg/kg	6.5	EPA8240
cis-1,3-Dichloropropene	U			6.5	µg/kg	6.5	EPA8240
trans-1,3-Dichloropropene	U			6.5	µg/kg	6.5	EPA8240
Ethylbenzene	U			6.5	µg/kg	6.5	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Styrene	U			6.5	µg/kg	6.5	EPA8240
1,1,2,2-Tetrachloroethane	U			6.5	µg/kg	6.5	EPA8240
Tetrachloroethylene	U			6.5	µg/kg	6.5	EPA8240
Toluene	U			6.5	µg/kg	6.5	EPA8240
1,1,1-Trichloroethane	U			6.5	µg/kg	6.5	EPA8240
1,1,2-Trichloroethane	U			6.5	µg/kg	6.5	EPA8240
Trichloroethylene	U			6.5	µg/kg	6.5	EPA8240
Unknown	J	N		60	µg/kg		EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
Xylenes	U			6.5	µg/kg	6.5	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	UJ	O	L	2.1	µg/kg	2.1	EPA8080
alpha-Benzene hexachloride	UJ	O	L	2.1	µg/kg	2.1	EPA8080
beta-Benzene hexachloride	UJ	O	L	2.1	µg/kg	2.1	EPA8080
delta-Benzene hexachloride	UJ	O	L	2.1	µg/kg	2.1	EPA8080
alpha-Chlordane	UJ	O	L	2.1	µg/kg	2.1	EPA8080

SAMPLE NAME: D431 1107 (Continued) Sample ID: 100369

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
gamma-Chlordane	J	O	L	1.3	µg/kg	2.1	EPA8080
p,p'-DDD	UJ	O	L	4.3	µg/kg	4.3	EPA8080
p,p'-DDE	UJ	O	L	4.3	µg/kg	4.3	EPA8080
p,p'-DDT	UJ	O	L	4.3	µg/kg	4.3	EPA8080
Dieldrin	UJ	O	L	4.3	µg/kg	4.3	EPA8080
Endosulfan I	UJ	O	L	2.1	µg/kg	2.1	EPA8080
Endosulfan II	UJ	O	L	4.3	µg/kg	4.3	EPA8080
Endosulfan sulfate	UJ	O	L	4.3	µg/kg	4.3	EPA8080
Endrin	UJ	O	L	4.3	µg/kg	4.3	EPA8080
Endrin ketone	UJ	O	L	4.3	µg/kg	4.3	EPA8080
Heptachlor	UJ	O	L	2.1	µg/kg	2.1	EPA8080
Heptachlor epoxide	UJ	O	L	2.1	µg/kg	2.1	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	UJ	O	L	2.1	µg/kg	2.1	EPA8080
Methoxychlor	UJ	O	L	21	µg/kg	21	EPA8080
Octachlorodibenzo-p-dioxin				5.3	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.30	ng/g	0.30	EPA8280
PCB 1016	UJ	O	L	43	µg/kg	43	EPA8080
PCB 1221	UJ	O	L	85	µg/kg	85	EPA8080
PCB 1232	UJ	O	L	43	µg/kg	43	EPA8080
PCB 1242	UJ	O	L	43	µg/kg	43	EPA8080
PCB 1248	UJ	O	L	43	µg/kg	43	EPA8080
PCB 1254	UJ	O	L	43	µg/kg	43	EPA8080
PCB 1260	UJ	O	L	43	µg/kg	43	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	UJ	O	L	210	µg/kg	210	EPA8080

SAMPLE NAME: D431 1201 Sample ID: 100370

Location (SRS Coordinates): 18518.11E 66590.27N
Ground Elevation Above MSL: 127.7 ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 3/4 USC Soil Classification: SM Percent Solids: 90.90

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				11	meq/100g	2.0	EPA9080
pH	J	Q		4.7	pH	0.010	EPA9045
Specific conductance				55	µS/cm	1.0	EPA9050
Total organic carbon				8,200	mg/kg	400	EPA415.1

SAMPLE NAME: D431 1201 (Continued) Sample ID: 100370

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				1.4	mg/kg	1.0	EPA7060
Barium	U			21	mg/kg	21EPA6010	
Cadmium	U			0.51	mg/kg	0.51	EPA6010
Chromium				340	mg/kg	1.0	EPA6010
Copper				16	mg/kg	2.6	EPA6010
Lead				35	mg/kg	6.2	EPA7421
Manganese				65	mg/kg	1.5	EPA6010
Mercury				0.27	mg/kg	0.11	EPA7470
Nickel				11	mg/kg	4.1	EPA6010
Selenium	U			0.52	mg/kg	0.52	EPA7740
Silver	U			1.0	mg/kg	1.0	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			360	µg/kg	360	EPA8270
Acenaphthylene	U			360	µg/kg	360	EPA8270
Acenaphthylene	U			370	µg/kg	370	EPA8270
Acenaphthylene	U			360	µg/kg	360	EPA8270
Anthracene	U			360	µg/kg	360	EPA8270
Anthracene	U			370	µg/kg	370	EPA8270
Anthracene	U			360	µg/kg	360	EPA8270
Benzo(a)anthracene	U			360	µg/kg	360	EPA8270
Benzo(a)anthracene	U			370	µg/kg	370	EPA8270
Benzo(a)anthracene	U			360	µg/kg	360	EPA8270
Benzo(b)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(b)fluoranthene	U			370	µg/kg	370	EPA8270
Benzo(b)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(k)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(k)fluoranthene	U			370	µg/kg	370	EPA8270
Benzo(k)fluoranthene	U			360	µg/kg	360	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			360	µg/kg	360	EPA8270
Benzo(g,h,i)perylene	U			370	µg/kg	370	EPA8270
Benzo(g,h,i)perylene	U			360	µg/kg	360	EPA8270
Benzo(a)pyrene	U			360	µg/kg	360	EPA8270
Benzo(a)pyrene	U			370	µg/kg	370	EPA8270
Benzo(a)pyrene	U			360	µg/kg	360	EPA8270
Benzyl alcohol	U			360	µg/kg	360	EPA8270
Benzyl alcohol	U			370	µg/kg	370	EPA8270
Benzyl alcohol	U			360	µg/kg	360	EPA8270
Bis(2-chloroethoxy) methane	U			360	µg/kg	360	EPA8270
Bis(2-chloroethoxy) methane	U			370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	U			360	µg/kg	360	EPA8270
Bis(2-chloroethyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-chloroisopropyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-chloroethyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-chloroisopropyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-ethylhexyl) phthalate	J			79	µg/kg	360	EPA8270
Bis(2-ethylhexyl) phthalate	J			81	µg/kg	370	EPA8270

SAMPLE NAME: D431 1201 (Continued) Sample ID: 100370

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Bis(2-ethylhexyl) phthalate	J			65	µg/kg	360	EPA8270
4-Bromophenyl phenyl ether	U			360	µg/kg	360	EPA8270
4-Bromophenyl phenyl ether	U			370	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Butylbenzyl phthalate	U			360	µg/kg	360	EPA8270
Butylbenzyl phthalate	U			370	µg/kg	370	EPA8270
Butylbenzyl phthalate	U			360	µg/kg	360	EPA8270
4-Chloroaniline	U			360	µg/kg	360	EPA8270
4-Chloroaniline	U			370	µg/kg	370	EPA8270
4-Chloroaniline	U			360	µg/kg	360	EPA8270
4-Chloro-m-cresol	U			360	µg/kg	360	EPA8270
2-Chloronaphthalene	U			360	µg/kg	360	EPA8270
2-Chloronaphthalene	U			370	µg/kg	370	EPA8270
2-Chloronaphthalene	U			360	µg/kg	360	EPA8270
2-Chlorophenol	U			360	µg/kg	360	EPA8270
4-Chlorophenyl phenyl ether	U			360	µg/kg	360	EPA8270
4-Chlorophenyl phenyl ether	U			370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Chrysene	U			360	µg/kg	360	EPA8270
Chrysene	U			370	µg/kg	370	EPA8270
Chrysene	U			360	µg/kg	360	EPA8270
o-Cresol (2-Methylphenol)	U			360	µg/kg	360	EPA8270
o-Cresol (2-Methylphenol)	U			370	µg/kg	370	EPA8270
o-Cresol (2-Methylphenol)	U			360	µg/kg	360	EPA8270
p-Cresol (4-Methylphenol)	U			360	µg/kg	360	EPA8270
p-Cresol (4-Methylphenol)	U			370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	U			360	µg/kg	360	EPA8270
Hexadecanoic acid	J	N		200	µg/kg		EPA8270
Dibenz(a,h)anthracene	U			360	µg/kg	360	EPA8270
Dibenz(a,h)anthracene	U			370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	U			360	µg/kg	360	EPA8270
Dibenzofuran	U			360	µg/kg	360	EPA8270
Dibenzofuran	U			370	µg/kg	370	EPA8270
Dibenzofuran	U			360	µg/kg	360	EPA8270
Di-n-butyl phthalate	U			360	µg/kg	360	EPA8270
Di-n-butyl phthalate	U			370	µg/kg	370	EPA8270
Di-n-butyl phthalate	U			360	µg/kg	360	EPA8270
1,2-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,2-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,2-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,3-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,3-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,4-Dichlorobenzene	U			360	µg/kg	360	EPA8270
3,3'-Dichlorobenzidine	U			720	µg/kg	720	EPA8270
3,3'-Dichlorobenzidine	U			730	µg/kg	730	EPA8270
3,3'-Dichlorobenzidine	U			710	µg/kg	710	EPA8270
2,4-Dichlorophenol	U			360	µg/kg	360	EPA8270
2,4-Dichlorophenol	U			370	µg/kg	370	EPA8270
2,4-Dichlorophenol	U			360	µg/kg	360	EPA8270

SAMPLE NAME: D431 1201 (Continued) Sample ID: 100370

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Diethyl phthalate	U			360	µg/kg	360	EPA8270
Diethyl phthalate	U			370	µg/kg	370	EPA8270
Diethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dimethyl phenol	U			360	µg/kg	360	EPA8270
2,4-Dimethyl phenol	U			370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	U			360	µg/kg	360	EPA8270
Dimethyl phthalate	U			360	µg/kg	360	EPA8270
Dimethyl phthalate	U			370	µg/kg	370	EPA8270
Dimethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			360	µg/kg	360	EPA8270
2,6-Dinitrotoluene	U			360	µg/kg	360	EPA8270
2,6-Dinitrotoluene	U			370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	U			360	µg/kg	360	EPA8270
Di-n-octyl phthalate	U			360	µg/kg	360	EPA8270
Di-n-octyl phthalate	U			370	µg/kg	370	EPA8270
Di-n-octyl phthalate	U			360	µg/kg	360	EPA8270
Fluoranthene	U			360	µg/kg	360	EPA8270
Fluoranthene	U			370	µg/kg	370	EPA8270
Fluoranthene	U			360	µg/kg	360	EPA8270
Fluorene	U			360	µg/kg	360	EPA8270
Fluorene	U			370	µg/kg	370	EPA8270
Fluorene	U			360	µg/kg	360	EPA8270
Hexachlorobenzene	U			360	µg/kg	360	EPA8270
Hexachlorobenzene	U			370	µg/kg	370	EPA8270
Hexachlorobenzene	U			360	µg/kg	360	EPA8270
Hexachlorobutadiene	U			360	µg/kg	360	EPA8270
Hexachlorobutadiene	U			370	µg/kg	370	EPA8270
Hexachlorobutadiene	U			360	µg/kg	360	EPA8270
Hexachlorocyclopentadiene	U			360	µg/kg	360	EPA8270
Hexachlorocyclopentadiene	U			370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	U			360	µg/kg	360	EPA8270
Hexachloroethane	U			360	µg/kg	360	EPA8270
Hexachloroethane	U			370	µg/kg	370	EPA8270
Hexachloroethane	U			360	µg/kg	360	EPA8270
Sub. hexanedioic acid	J	N		20,000	µg/kg		EPA8270
Indeno(1,2,3-c,d)pyrene	U			360	µg/kg	360	EPA8270
Indeno(1,2,3-c,d)pyrene	U			370	µg/kg	370	EPA8270
Indeno(1,2,3-c,d)pyrene	U			360	µg/kg	360	EPA8270
Isophorone	U			360	µg/kg	360	EPA8270
Isophorone	U			370	µg/kg	370	EPA8270
Isophorone	U			360	µg/kg	360	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			360	µg/kg	360	EPA8270
2-Methylnaphthalene	U			370	µg/kg	370	EPA8270
2-Methylnaphthalene	U			360	µg/kg	360	EPA8270

SAMPLE NAME: D431 1201 (Continued) Sample ID: 100370

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Naphthalene	U			360	µg/kg	360	EPA8270
Naphthalene	U			370	µg/kg	370	EPA8270
Naphthalene	U			360	µg/kg	360	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			360	µg/kg	360	EPA8270
Nitrobenzene	U			370	µg/kg	370	EPA8270
Nitrobenzene	U			360	µg/kg	360	EPA8270
2-Nitrophenol	U			360	µg/kg	360	EPA8270
2-Nitrophenol	U			370	µg/kg	370	EPA8270
2-Nitrophenol	U			360	µg/kg	360	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			360	µg/kg	360	EPA8270
N-Nitrosodiphenylamine	U			370	µg/kg	370	EPA8270
N-Nitrosodiphenylamine	U			360	µg/kg	360	EPA8270
N-Nitrosodipropylamine	UJ	IC	L	360	µg/kg	360	EPA8270
Pentachlorophenol	U			1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			360	µg/kg	360	EPA8270
Phenanthrene	U			370	µg/kg	370	EPA8270
Phenanthrene	U			360	µg/kg	360	EPA8270
Phenol	U			360	µg/kg	360	EPA8270
Pyrene	U			360	µg/kg	360	EPA8270
1,2,4-Trichlorobenzene	UJ	C		360	µg/kg	360	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			360	µg/kg	360	EPA8270
2,4,6-Trichlorophenol	U			370	µg/kg	370	EPA8270
2,4,6-Trichlorophenol	U			360	µg/kg	360	EPA8270
Unknown	J	NV		3,000	µg/kg		EPA8270
Unknown	J	NV		700	µg/kg		EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown ketone	J	NV		40,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U			11	µg/kg	11	EPA8240
Benzene	U			5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240

SAMPLE NAME: D431 1201 (Continued) Sample ID: 100370

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Carbon disulfide	U			5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
2-Chloroethyl vinyl ether	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		8.5	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	U			5.5	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	U			5.5	µg/kg	5.5	EPA8240
Toluene	U			5.5	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.5	µg/kg	5.5	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			9.2	µg/kg	9.2	EPA8080
Aldrin	U			9.2	µg/kg	9.2	EPA8080
alpha-Benzene hexachloride	U			9.2	µg/kg	9.2	EPA8080
alpha-Benzene hexachloride	U			9.2	µg/kg	9.2	EPA8080
alpha-Benzene hexachloride	U			9.2	µg/kg	9.2	EPA8080
beta-Benzene hexachloride	U			9.2	µg/kg	9.2	EPA8080
beta-Benzene hexachloride	U			9.2	µg/kg	9.2	EPA8080
beta-Benzene hexachloride	U			9.2	µg/kg	9.2	EPA8080
delta-Benzene hexachloride	U			9.2	µg/kg	9.2	EPA8080
delta-Benzene hexachloride	U			9.2	µg/kg	9.2	EPA8080
delta-Benzene hexachloride	U			9.2	µg/kg	9.2	EPA8080
alpha-Chlordane	U			9.2	µg/kg	9.2	EPA8080
alpha-Chlordane	U			9.2	µg/kg	9.2	EPA8080
alpha-Chlordane	U			9.2	µg/kg	9.2	EPA8080
gamma-Chlordane	U			9.2	µg/kg	9.2	EPA8080
gamma-Chlordane	U			9.2	µg/kg	9.2	EPA8080
gamma-Chlordane	U			9.2	µg/kg	9.2	EPA8080

SAMPLE NAME: D431 1201 (Continued). Sample ID: 100370

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
p,p'-DDD	J			17	µg/kg	18	EPA8080
p,p'-DDD				25	µg/kg	18	EPA8080
p,p'-DDD	J			8.8	µg/kg	18	EPA8080
p,p'-DDE				22	µg/kg	18	EPA8080
p,p'-DDE				29	µg/kg	18	EPA8080
p,p'-DDE	J			13	µg/kg	18	EPA8080
p,p'-DDT				41	µg/kg	18	EPA8080
p,p'-DDT				61	µg/kg	18	EPA8080
Dieldrin	U			18	µg/kg	18	EPA8080
Dieldrin	U			18	µg/kg	18	EPA8080
Endosulfan I	U			9.2	µg/kg	9.2	EPA8080
Endosulfan I	U			9.2	µg/kg	9.2	EPA8080
Endosulfan I	U			9.2	µg/kg	9.2	EPA8080
Endosulfan II	U			18	µg/kg	18	EPA8080
Endosulfan II	U			18	µg/kg	18	EPA8080
Endosulfan II	U			18	µg/kg	18	EPA8080
Endosulfan sulfate	U			18	µg/kg	18	EPA8080
Endosulfan sulfate	U			18	µg/kg	18	EPA8080
Endosulfan sulfate	U			18	µg/kg	18	EPA8080
Endrin	U			18	µg/kg	18	EPA8080
Endrin	U			18	µg/kg	18	EPA8080
Endrin ketone	U			18	µg/kg	18	EPA8080
Endrin ketone	U			18	µg/kg	18	EPA8080
Endrin ketone	U			18	µg/kg	18	EPA8080
Heptachlor	U			9.2	µg/kg	9.2	EPA8080
Heptachlor	U			9.2	µg/kg	9.2	EPA8080
Heptachlor epoxide	U			9.2	µg/kg	9.2	EPA8080
Heptachlor epoxide	U			9.2	µg/kg	9.2	EPA8080
Heptachlor epoxide	U			9.2	µg/kg	9.2	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.40	ng/g	0.40	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			9.2	µg/kg	9.2	EPA8080
Lindane	U			9.2	µg/kg	9.2	EPA8080
Methoxychlor	U			92	µg/kg	92	EPA8080
Methoxychlor	U			92	µg/kg	92	EPA8080
Methoxychlor	U			92	µg/kg	92	EPA8080
Octachlorodibenzo-p-dioxin				3.6	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.30	ng/g	0.30	EPA8280
PCB 1016	U			180	µg/kg	180	EPA8080
PCB 1016	U			180	µg/kg	180	EPA8080
PCB 1016	U			180	µg/kg	180	EPA8080
PCB 1221	U			370	µg/kg	370	EPA8080
PCB 1221	U			370	µg/kg	370	EPA8080
PCB 1221	U			370	µg/kg	370	EPA8080
PCB 1232	U			180	µg/kg	180	EPA8080
PCB 1232	U			180	µg/kg	180	EPA8080
PCB 1232	U			180	µg/kg	180	EPA8080
PCB 1242	U			180	µg/kg	180	EPA8080

SAMPLE NAME: D431 1201 (Continued) Sample ID: 100370

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
PCB 1242	U			180	µg/kg	180	EPA8080
PCB 1242	U			180	µg/kg	180	EPA8080
PCB 1248	U			180	µg/kg	180	EPA8080
PCB 1248	U			180	µg/kg	180	EPA8080
PCB 1248	U			180	µg/kg	180	EPA8080
PCB 1254	U			180	µg/kg	180	EPA8080
PCB 1254	U			180	µg/kg	180	EPA8080
PCB 1254	U			180	µg/kg	180	EPA8080
PCB 1260				1,300	µg/kg	180	EPA8080
PCB 1260				1,300	µg/kg	180	EPA8080
PCB 1260				1,200	µg/kg	180	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	U			920	µg/kg	920	EPA8080
Toxaphene	U			920	µg/kg	920	EPA8080
Toxaphene	U			920	µg/kg	920	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				8.7±12	pCi/g	6.7	EPA900.0
Gross alpha				11±12	pCi/g	5.9	EPA900.0
Nonvolatile beta				27±21	pCi/g	9.3	EPA900.0
Nonvolatile beta				33±19	pCi/g	8.2	EPA900.0
Radium, total alpha-emitting	U	V		1.2±0.86	pCi/g	0.16	EPA903.0
Radium, total alpha-emitting	U	V		1.1±0.78	pCi/g	0.15	EPA903.0
Tritium	U			1.3	pCi/g	1.3	EPA906.0
Tritium	U			1.4	pCi/g	1.4	EPA906.0

SAMPLE NAME: D431 1202 Sample ID: 100371

Location (SRS Coordinates): 18518.11E 66590.27N
Ground Elevation Above MSL: 127.7 ft
Depth of Core Interval: 0.50 to 2.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 3/4 USC Soil Classification: SM Percent Solids: 89.90

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				1.3	mg/kg	1.0	EPA7060
Barium	U			21	mg/kg	21	EPA6010
Cadmium	U			0.53	mg/kg	0.53	EPA6010
Chromium				260	mg/kg	1.1	EPA6010
Copper				10	mg/kg	2.6	EPA6010

SAMPLE NAME: D431 1202 (Continued) Sample ID: 100371

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Lead				24	mg/kg	6.2	EPA7421
Manganese				45	mg/kg	1.6	EPA6010
Mercury				0.30	mg/kg	0.11	EPA7470
Nickel				8.4	mg/kg	4.2	EPA6010
Selenium	U			0.52	mg/kg	0.52	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			370	µg/kg	370	EPA8270
Acenaphthylene	U			370	µg/kg	370	EPA8270
Anthracene	U			370	µg/kg	370	EPA8270
Benzo(a)anthracene	J			71	µg/kg	370	EPA8270
Benzo(b)fluoranthene	J			110	µg/kg	370	EPA8270
Benzo(k)fluoranthene	J			43	µg/kg	370	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			370	µg/kg	370	EPA8270
Benzo(a)pyrene	J			85	µg/kg	370	EPA8270
Benzyl alcohol	U			370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	U			370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	J			66	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Butylbenzyl phthalate	U			370	µg/kg	370	EPA8270
4-Chloroaniline	U			370	µg/kg	370	EPA8270
4-Chloro-m-cresol	U			370	µg/kg	370	EPA8270
2-Chloronaphthalene	U			370	µg/kg	370	EPA8270
2-Chlorophenol	U			370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Chrysene	J			54	µg/kg	370	EPA8270
o-Cresol (2-Methylphenol)	U			370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	U			370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	U			370	µg/kg	370	EPA8270
Dibenzofuran	U			370	µg/kg	370	EPA8270
Di-n-butyl phthalate	U			370	µg/kg	370	EPA8270
1,2-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,4-Dichlorobenzene	U			370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	U			740	µg/kg	740	EPA8270
2,4-Dichlorophenol	U			370	µg/kg	370	EPA8270
Diethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	U			370	µg/kg	370	EPA8270
Dimethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	U			370	µg/kg	370	EPA8270
Di-n-octyl phthalate	U			370	µg/kg	370	EPA8270
Fluoranthene	J			110	µg/kg	370	EPA8270
Fluorene	U			370	µg/kg	370	EPA8270

SAMPLE NAME: D431 1202 (Continued) Sample ID: 100371

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Hexachlorobenzene	U			370	µg/kg	370	EPA8270
Hexachlorobutadiene	U			370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	U			370	µg/kg	370	EPA8270
Hexachloroethane	U			370	µg/kg	370	EPA8270
Sub. hexanedioic acid	J	N		20,000	µg/kg		EPA8270
Indeno(1,2,3-c,d)pyrene	J			58	µg/kg	370	EPA8270
Isophorone	U			370	µg/kg	370	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			370	µg/kg	370	EPA8270
Naphthalene	U			370	µg/kg	370	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			370	µg/kg	370	EPA8270
2-Nitrophenol	U			370	µg/kg	370	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			370	µg/kg	370	EPA8270
N-Nitrosodipropylamine	UJ	C		370	µg/kg	370	EPA8270
Pentachlorophenol	U			1,800	µg/kg	1,800	EPA8270
Phenanthrene	J			55	µg/kg	370	EPA8270
Phenol	U			370	µg/kg	370	EPA8270
Pyrene	J			95	µg/kg	370	EPA8270
1,2,4-Trichlorobenzene	UJ	C		370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			370	µg/kg	370	EPA8270
Unknown	J	NV		3,000	µg/kg		EPA8270
Unknown	J	NV		900	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		100	µg/kg		EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Unknown ketone	J	NV		50,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U			11	µg/kg	11	EPA8240
Benzene	U			5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
2-Chloroethyl vinyl ether	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240

SAMPLE NAME: D431 1202 (Continued) Sample ID: 100371

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,2-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		12	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	U			5.5	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	U			5.5	µg/kg	5.5	EPA8240
Toluene	J			1.9	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.5	µg/kg	5.5	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			19	µg/kg	19	EPA8080
alpha-Benzene hexachloride	U			19	µg/kg	19	EPA8080
beta-Benzene hexachloride	U			19	µg/kg	19	EPA8080
delta-Benzene hexachloride	U			19	µg/kg	19	EPA8080
alpha-Chlordane	U			19	µg/kg	19	EPA8080
gamma-Chlordane	U			19	µg/kg	19	EPA8080
p,p'-DDD	U			37	µg/kg	37	EPA8080
p,p'-DDE	J			14	µg/kg	37	EPA8080
p,p'-DDT				50	µg/kg	37	EPA8080
Dieldrin	U			37	µg/kg	37	EPA8080
Endosulfan I	U			19	µg/kg	19	EPA8080
Endosulfan II	U			37	µg/kg	37	EPA8080
Endosulfan sulfate	U			37	µg/kg	37	EPA8080
Endrin	U			37	µg/kg	37	EPA8080
Endrin ketone	U			37	µg/kg	37	EPA8080
Heptachlor	U			19	µg/kg	19	EPA8080
Heptachlor epoxide	U			19	µg/kg	19	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0:10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			19	µg/kg	19	EPA8080
Methoxychlor	U			190	µg/kg	190	EPA8080
Octachlorodibenzo-p-dioxin				4.3	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	U			370	µg/kg	370	EPA8080
PCB 1221	U			740	µg/kg	740	EPA8080

SAMPLE NAME: D431 1202 (Continued) Sample ID: 100371

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
PCB 1232	U			370	µg/kg	370	EPA8080
PCB 1242	U			370	µg/kg	370	EPA8080
PCB 1248	U			370	µg/kg	370	EPA8080
PCB 1254	U			370	µg/kg	370	EPA8080
PCB 1260				3,400	µg/kg	370	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	U			1,900	µg/kg	1,900	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				7.3±12	pCi/g	7.2	EPA900.0
Nonvolatile beta				97±29	pCi/g	10	EPA900.0
Radium, total alpha-emitting	U	V		1.1±0.81	pCi/g	0.14	EPA903.0
Tritium				1.6±0.32	pCi/g	1.4	EPA906.0

SAMPLE NAME: D431 1203 Sample ID: 100372

Location (SRS Coordinates): 18518.11E 66590.27N
Ground Elevation Above MSL: 127.7 ft
Depth of Core Interval: 2.00 to 4.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 5YR 3/4 USC Soil Classification: SC Percent Solids: 90.40

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				2.2	mg/kg	1.0	EPA7060
Barium				25	mg/kg	21	EPA6010
Cadmium	U			0.52	mg/kg	0.52	EPA6010
Chromium				900	mg/kg	1.0	EPA6010
Copper				31	mg/kg	2.6	EPA6010
Lead				70	mg/kg	12	EPA7421
Manganese				51	mg/kg	1.6	EPA6010
Mercury				0.60	mg/kg	0:11	EPA7470
Nickel				18	mg/kg	4.2	EPA6010
Selenium	U			0.51	mg/kg	0.51	EPA7740
Silver	U			1.0	mg/kg	1.0	EPA6010
Volatile Organic Compounds							
Acetone				17	µg/kg	11	EPA8240
Benzene	U			5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240

SAMPLE NAME: D431 1203 (Continued) Sample ID: 100372

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
2-Chloroethyl vinyl ether	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		14	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	U			5.5	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	U			5.5	µg/kg	5.5	EPA8240
Toluene	J			4.3	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.5	µg/kg	5.5	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			6.7	pCi/g	6.7	EPA900.0
Nonvolatile beta				25±21	pCi/g	9.5	EPA900.0
Radium, total alpha-emitting	U	V		1.1±0.78	pCi/g	0.14	EPA903.0
Tritium	U			2.1	pCi/g	2.1	EPA906.0

SAMPLE NAME: D431 1204 Sample ID: 100373

Location (SRS Coordinates): 18518.11E 66590.27N
Ground Elevation Above MSL: 127.7 ft
Depth of Core Interval: 4.00 to 6.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 5YR 2/2 USC Soil Classification: SC Percent Solids: 85.40

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				2.1	mg/kg	1.1	EPA7060
Barium	U			23	mg/kg	23	EPA6010
Cadmium	U			0.58	mg/kg	0.58	EPA6010
Chromium				270	mg/kg	1.2	EPA6010
Copper				15	mg/kg	2.9	EPA6010
Lead				31	mg/kg	6.5	EPA7421
Manganese				56	mg/kg	1.7	EPA6010
Mercury				0.47	mg/kg	0.12	EPA7470
Nickel				12	mg/kg	4.6	EPA6010
Selenium	U			0.54	mg/kg	0.54	EPA7740
Silver	U			1.2	mg/kg	1.2	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	UJ	Q		390	µg/kg	390	EPA8270
Acenaphthene	UJ	Q		390	µg/kg	390	EPA8270
Acenaphthylene	UJ	Q		390	µg/kg	390	EPA8270
Acenaphthylene	UJ	Q		390	µg/kg	390	EPA8270
Anthracene	UJ	Q		390	µg/kg	390	EPA8270
Anthracene	UJ	Q		390	µg/kg	390	EPA8270
Benzo(a)anthracene	UJ	Q		390	µg/kg	390	EPA8270
Benzo(a)anthracene	UJ	Q		390	µg/kg	390	EPA8270
Benzo(b)fluoranthene	UJ	Q		390	µg/kg	390	EPA8270
Benzo(b)fluoranthene	UJ	Q		390	µg/kg	390	EPA8270
Benzo(k)fluoranthene	UJ	Q		390	µg/kg	390	EPA8270
Benzo(k)fluoranthene	UJ	Q		390	µg/kg	390	EPA8270
Benzoic acid	UJ	Q		2,000	µg/kg	2,000	EPA8270
Benzoic acid	UJ	Q		2,000	µg/kg	2,000	EPA8270
Benzo(g,h,i)perylene	UJ	Q		390	µg/kg	390	EPA8270
Benzo(g,h,i)perylene	UJ	Q		390	µg/kg	390	EPA8270
Benzo(a)pyrene	UJ	Q		390	µg/kg	390	EPA8270
Benzo(a)pyrene	UJ	Q		390	µg/kg	390	EPA8270
Benzyl alcohol	UJ	Q		390	µg/kg	390	EPA8270
Benzyl alcohol	UJ	Q		390	µg/kg	390	EPA8270
Bis(2-chloroethoxy) methane	UJ	Q		390	µg/kg	390	EPA8270
Bis(2-chloroethoxy) methane	UJ	Q		390	µg/kg	390	EPA8270
Bis(2-chloroethyl) ether	UJ	Q		390	µg/kg	390	EPA8270
Bis(2-chloroisopropyl) ether	UJ	Q		390	µg/kg	390	EPA8270
Bis(2-chloroethyl) ether	UJ	Q		390	µg/kg	390	EPA8270
Bis(2-chloroisopropyl) ether	UJ	Q		390	µg/kg	390	EPA8270
Bis(2-ethylhexyl) phthalate	J	Q		100	µg/kg	390	EPA8270
Bis(2-ethylhexyl) phthalate	J	Q		68	µg/kg	390	EPA8270
4-Bromophenyl phenyl ether	UJ	Q		390	µg/kg	390	EPA8270
4-Bromophenyl phenyl ether	UJ	Q		390	µg/kg	390	EPA8270

SAMPLE NAME: D431 1204 (Continued) Sample ID: 100373

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Butylbenzyl phthalate	UJ	Q		390	µg/kg	390	EPA8270
Butylbenzyl phthalate	UJ	Q		390	µg/kg	390	EPA8270
4-Chloroaniline	UJ	Q		390	µg/kg	390	EPA8270
4-Chloroaniline	UJ	Q		390	µg/kg	390	EPA8270
4-Chloro-m-cresol	UJ	Q		390	µg/kg	390	EPA8270
4-Chloro-m-cresol	UJ	Q		390	µg/kg	390	EPA8270
2-Chloronaphthalene	UJ	Q		390	µg/kg	390	EPA8270
2-Chloronaphthalene	UJ	Q		390	µg/kg	390	EPA8270
2-Chlorophenol	UJ	Q		390	µg/kg	390	EPA8270
2-Chlorophenol	UJ	Q		390	µg/kg	390	EPA8270
4-Chlorophenyl phenyl ether	UJ	Q		390	µg/kg	390	EPA8270
4-Chlorophenyl phenyl ether	UJ	Q		390	µg/kg	390	EPA8270
Chrysene	UJ	Q		390	µg/kg	390	EPA8270
Chrysene	UJ	Q		390	µg/kg	390	EPA8270
o-Cresol (2-Methylphenol)	UJ	Q		390	µg/kg	390	EPA8270
o-Cresol (2-Methylphenol)	UJ	Q		390	µg/kg	390	EPA8270
p-Cresol (4-Methylphenol)	UJ	Q		390	µg/kg	390	EPA8270
p-Cresol (4-Methylphenol)	UJ	Q		390	µg/kg	390	EPA8270
Dibenz(a,h)anthracene	UJ	Q		390	µg/kg	390	EPA8270
Dibenz(a,h)anthracene	UJ	Q		390	µg/kg	390	EPA8270
Dibenzofuran	UJ	Q		390	µg/kg	390	EPA8270
Dibenzofuran	UJ	Q		390	µg/kg	390	EPA8270
Di-n-butyl phthalate	J	QV		120	µg/kg	390	EPA8270
Di-n-butyl phthalate	J	QV		100	µg/kg	390	EPA8270
1,2-Dichlorobenzene	UJ	Q		390	µg/kg	390	EPA8270
1,2-Dichlorobenzene	UJ	Q		390	µg/kg	390	EPA8270
1,3-Dichlorobenzene	UJ	Q		390	µg/kg	390	EPA8270
1.3-Dichlorobenzene	UJ	Q		390	µg/kg	390	EPA8270
1,4-Dichlorobenzene	UJ	Q		390	µg/kg	390	EPA8270
1,4-Dichlorobenzene	UJ	Q		390	µg/kg	390	EPA8270
3,3'-Dichlorobenzidine	UJ	Q		780	µg/kg	780	EPA8270
3,3'-Dichlorobenzidine	UJ	Q		780	µg/kg	780	EPA8270
2,4-Dichlorophenol	UJ	Q		390	µg/kg	390	EPA8270
2,4-Dichlorophenol	UJ	Q		390	µg/kg	390	EPA8270
Diethyl phthalate	UJ	Q		390	µg/kg	390	EPA8270
Diethyl phthalate	UJ	Q		390	µg/kg	390	EPA8270
2,4-Dimethyl phenol	UJ	Q		390	µg/kg	390	EPA8270
2,4-Dimethyl phenol	UJ	Q		390	µg/kg	390	EPA8270
Dimethyl phthalate	UJ	Q		390	µg/kg	390	EPA8270
Dimethyl phthalate	UJ	Q		390	µg/kg	390	EPA8270
2,4-Dinitrophenol	UJ	QV		2,000	µg/kg	2,000	EPA8270
2,4-Dinitrophenol	UJ	QV		2,000	µg/kg	2,000	EPA8270
2,4-Dinitrotoluene	UJ	QC		390	µg/kg	390	EPA8270
2,4-Dinitrotoluene	UJ	QC		390	µg/kg	390	EPA8270
2,6-Dinitrotoluene	UJ	Q		390	µg/kg	390	EPA8270
2,6-Dinitrotoluene	UJ	Q		390	µg/kg	390	EPA8270
Di-n-octyl phthalate	UJ	Q		390	µg/kg	390	EPA8270
Di-n-octyl phthalate	UJ	Q		390	µg/kg	390	EPA8270
Fluoranthene	UJ	Q		390	µg/kg	390	EPA8270
Fluoranthene	UJ	Q		390	µg/kg	390	EPA8270

SAMPLE NAME: D431 1204 (Continued) Sample ID: 100373

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Fluorene	UJ	Q		390	µg/kg	390	EPA8270
Fluorene	UJ	Q		390	µg/kg	390	EPA8270
Hexachlorobenzene	UJ	Q		390	µg/kg	390	EPA8270
Hexachlorobenzene	UJ	Q		390	µg/kg	390	EPA8270
Hexachlorobutadiene	UJ	Q		390	µg/kg	390	EPA8270
Hexachlorobutadiene	UJ	Q		390	µg/kg	390	EPA8270
Hexachlorocyclopentadiene	UJ	Q		390	µg/kg	390	EPA8270
Hexachlorocyclopentadiene	UJ	Q		390	µg/kg	390	EPA8270
Hexachloroethane	UJ	Q		390	µg/kg	390	EPA8270
Hexachloroethane	UJ	Q		390	µg/kg	390	EPA8270
Sub. hexanedioic acid	J	N		30,000	µg/kg		EPA8270
Indeno(1,2,3-c,d)pyrene	UJ	Q		390	µg/kg	390	EPA8270
Indeno(1,2,3-c,d)pyrene	UJ	Q		390	µg/kg	390	EPA8270
Isophorone	UJ	Q		390	µg/kg	390	EPA8270
Isophorone	UJ	Q		390	µg/kg	390	EPA8270
2-Methyl-4,6-dinitrophenol	UJ	Q		2,000	µg/kg	2,000	EPA8270
2-Methyl-4,6-dinitrophenol	UJ	Q		2,000	µg/kg	2,000	EPA8270
2-Methylnaphthalene	UJ	Q		390	µg/kg	390	EPA8270
2-Methylnaphthalene	UJ	Q		390	µg/kg	390	EPA8270
Naphthalene	UJ	Q		390	µg/kg	390	EPA8270
Naphthalene	UJ	Q		390	µg/kg	390	EPA8270
o-Nitroaniline	UJ	Q		2,000	µg/kg	2,000	EPA8270
o-Nitroaniline	UJ	Q		2,000	µg/kg	2,000	EPA8270
m-Nitroaniline	UJ	Q		2,000	µg/kg	2,000	EPA8270
m-Nitroaniline	UJ	Q		2,000	µg/kg	2,000	EPA8270
p-Nitroaniline	UJ	Q		2,000	µg/kg	2,000	EPA8270
p-Nitroaniline	UJ	Q		2,000	µg/kg	2,000	EPA8270
Nitrobenzene	UJ	Q		390	µg/kg	390	EPA8270
Nitrobenzene	UJ	Q		390	µg/kg	390	EPA8270
2-Nitrophenol	UJ	Q		390	µg/kg	390	EPA8270
2-Nitrophenol	UJ	Q		390	µg/kg	390	EPA8270
4-Nitrophenol	UJ	Q		2,000	µg/kg	2,000	EPA8270
4-Nitrophenol	UJ	Q		2,000	µg/kg	2,000	EPA8270
N-Nitrosodiphenylamine	UJ	Q		390	µg/kg	390	EPA8270
N-Nitrosodiphenylamine	UJ	Q		390	µg/kg	390	EPA8270
N-Nitrosodipropylamine	UJ	QC		390	µg/kg	390	EPA8270
N-Nitrosodipropylamine	UJ	QC		390	µg/kg	390	EPA8270
Pentachlorophenol	UJ	Q		2,000	µg/kg	2,000	EPA8270
Pentachlorophenol	UJ	Q		2,000	µg/kg	2,000	EPA8270
Phenanthrene	UJ	Q		390	µg/kg	390	EPA8270
Phenanthrene	UJ	Q		390	µg/kg	390	EPA8270
Phenol	UJ	Q		390	µg/kg	390	EPA8270
Phenol	UJ	Q		390	µg/kg	390	EPA8270
Pyrene	UJ	Q		390	µg/kg	390	EPA8270
Pyrene	UJ	Q		390	µg/kg	390	EPA8270
1,2,4-Trichlorobenzene	UJ	QC		390	µg/kg	390	EPA8270
1,2,4-Trichlorobenzene	UJ	QC		390	µg/kg	390	EPA8270
2,4,5-Trichlorophenol	UJ	Q		2,000	µg/kg	2,000	EPA8270
2,4,5-Trichlorophenol	UJ	Q		2,000	µg/kg	2,000	EPA8270
2,4,6-Trichlorophenol	UJ	Q		390	µg/kg	390	EPA8270

SAMPLE NAME: D431 1204 (Continued) Sample ID: 100373

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2,4,6-Trichlorophenol	UJ	Q		390	µg/kg	390	EPA8270
Unknown	J	NV		300	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown ketone	J	NV		3,000	µg/kg		EPA8270
Unknown alcohol	J	N		400	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone		V		77	µg/kg	12	EPA8240
Benzene	U			6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U			6.0	µg/kg	6.0	EPA8240
Bromoform	U			6.0	µg/kg	6.0	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	J			4.3	µg/kg	6.0	EPA8240
Carbon tetrachloride	U			6.0	µg/kg	6.0	EPA8240
Chlorobenzene	U			6.0	µg/kg	6.0	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
2-Chloroethyl vinyl ether	U			12	µg/kg	12	EPA8240
Chloroform	U			6.0	µg/kg	6.0	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)				7.3	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U			6.0	µg/kg	6.0	EPA8240
cis-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
Ethylbenzene	U			6.0	µg/kg	6.0	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U			6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U			6.0	µg/kg	6.0	EPA8240
Toluene	J			2.3	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
Trichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			6.0	µg/kg	6.0	EPA8240

SAMPLE NAME: D431-1204 (Continued) Sample ID: 100373

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			9.8	µg/kg	9.8	EPA8080
alpha-Benzene hexachloride	U			9.8	µg/kg	9.8	EPA8080
beta-Benzene hexachloride	U			9.8	µg/kg	9.8	EPA8080
delta-Benzene hexachloride	U			9.8	µg/kg	9.8	EPA8080
alpha-Chlordane	U			9.8	µg/kg	9.8	EPA8080
gamma-Chlordane	U			9.8	µg/kg	9.8	EPA8080
p,p'-DDD	J			9.0	µg/kg	20	EPA8080
p,p'-DDE	J			10	µg/kg	20	EPA8080
p,p'-DDT	J			12	µg/kg	20	EPA8080
Dieldrin	U			20	µg/kg	20	EPA8080
Endosulfan I	U			9.8	µg/kg	9.8	EPA8080
Endosulfan II	U			20	µg/kg	20	EPA8080
Endosulfan sulfate	U			20	µg/kg	20	EPA8080
Endrin	U			20	µg/kg	20	EPA8080
Endrin ketone	U			20	µg/kg	20	EPA8080
Heptachlor	U			9.8	µg/kg	9.8	EPA8080
Heptachlor epoxide	U			9.8	µg/kg	9.8	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Lindane	U			9.8	µg/kg	9.8	EPA8080
Methoxychlor	U			98	µg/kg	98	EPA8080
Octachlorodibenzo-p-dioxin		T		2.4	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.40	ng/g	0.40	EPA8280
PCB 1016	U			200	µg/kg	200	EPA8080
PCB 1221	U			390	µg/kg	390	EPA8080
PCB 1232	U			200	µg/kg	200	EPA8080
PCB 1242	U			200	µg/kg	200	EPA8080
PCB 1248	U			200	µg/kg	200	EPA8080
PCB 1254	U			200	µg/kg	200	EPA8080
PCB 1260				530	µg/kg	200	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			980	µg/kg	980	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				12±12	pCi/g	6.2	EPA900.0
Nonvolatile beta				27±20	pCi/g	8.7	EPA900.0
Radium, total alpha-emitting	U	V		1.2±0.83	pCi/g	0.14	EPA903.0
Tritium				2.6±0.50	pCi/g	1.9	EPA906.0

SAMPLE NAME: D431 1205 Sample ID: 100375

Location (SRS Coordinates): 18518.11E 66590.27N
Ground Elevation Above MSL: 127.7 ft
Depth of Core Interval: 6.00 to 8.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 5YR 2/2 USC Soil Classification: SW Percent Solids: 85.10

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				1.2	mg/kg	1.1	EPA7060
Barium				28	mg/kg	22	EPA6010
Cadmium	U			0.54	mg/kg	0.54	EPA6010
Chromium				16	mg/kg	1.1	EPA6010
Copper				4.9	mg/kg	2.7	EPA6010
Lead				8.3	mg/kg	0.67	EPA7421
Manganese				17	mg/kg	1.6	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel	U			4.3	mg/kg	4.3	EPA6010
Selenium	U			0.56	mg/kg	0.56	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	UJ	O	L	390	µg/kg	390	EPA8270
Acenaphthene	UJ	O	L	390	µg/kg	390	EPA8270
Acenaphthylene	UJ	O	L	390	µg/kg	390	EPA8270
Acenaphthylene	UJ	O	L	390	µg/kg	390	EPA8270
Anthracene	UJ	O	L	390	µg/kg	390	EPA8270
Anthracene	UJ	O	L	390	µg/kg	390	EPA8270
Benzo(a)anthracene	UJ	O	L	390	µg/kg	390	EPA8270
Benzo(a)anthracene	UJ	O	L	390	µg/kg	390	EPA8270
Benzo(b)fluoranthene	UJ	O	L	390	µg/kg	390	EPA8270
Benzo(b)fluoranthene	UJ	O	L	390	µg/kg	390	EPA8270
Benzo(k)fluoranthene	UJ	O	L	390	µg/kg	390	EPA8270
Benzo(k)fluoranthene	UJ	O	L	390	µg/kg	390	EPA8270
Benzoic acid	UJ	O	L	1,900	µg/kg	1,900	EPA8270
Benzoic acid	UJ	O	L	1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	UJ	O	L	390	µg/kg	390	EPA8270
Benzo(g,h,i)perylene	UJ	O	L	390	µg/kg	390	EPA8270
Benzo(a)pyrene	UJ	O	L	390	µg/kg	390	EPA8270
Benzo(a)pyrene	UJ	O	L	390	µg/kg	390	EPA8270
Benzyl alcohol	UJ	O	L	390	µg/kg	390	EPA8270
Benzyl alcohol	UJ	O	L	390	µg/kg	390	EPA8270
Bis(2-chloroethoxy) methane	UJ	O	L	390	µg/kg	390	EPA8270
Bis(2-chloroethoxy) methane	UJ	O	L	390	µg/kg	390	EPA8270
Bis(2-chloroethyl) ether	UJ	O	L	390	µg/kg	390	EPA8270
Bis(2-chloroisopropyl) ether	UJ	O	L	390	µg/kg	390	EPA8270
Bis(2-chloroethyl) ether	UJ	O	L	390	µg/kg	390	EPA8270
Bis(2-chloroisopropyl) ether	UJ	O	L	390	µg/kg	390	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	O	L	390	µg/kg	390	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	O	L	390	µg/kg	390	EPA8270
4-Bromophenyl phenyl ether	UJ	O	L	390	µg/kg	390	EPA8270
4-Bromophenyl phenyl ether	UJ	O	L	390	µg/kg	390	EPA8270

SAMPLE NAME: D431 1205 (Continued) Sample ID: 100375

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Butylbenzyl phthalate	UJ	O	L	390	µg/kg	390	EPA8270
Butylbenzyl phthalate	UJ	O	L	390	µg/kg	390	EPA8270
4-Chloroaniline	UJ	O	L	390	µg/kg	390	EPA8270
4-Chloroaniline	UJ	O	L	390	µg/kg	390	EPA8270
4-Chloro-m-cresol	UJ	O	L	390	µg/kg	390	EPA8270
4-Chloro-m-cresol	UJ	O	L	390	µg/kg	390	EPA8270
2-Chloronaphthalene	UJ	O	L	390	µg/kg	390	EPA8270
2-Chloronaphthalene	UJ	O	L	390	µg/kg	390	EPA8270
2-Chlorophenol	UJ	O	L	390	µg/kg	390	EPA8270
2-Chlorophenol	UJ	O	L	390	µg/kg	390	EPA8270
4-Chlorophenyl phenyl ether	UJ	O	L	390	µg/kg	390	EPA8270
4-Chlorophenyl phenyl ether	UJ	O	L	390	µg/kg	390	EPA8270
Chrysene	UJ	O	L	390	µg/kg	390	EPA8270
Chrysene	UJ	O	L	390	µg/kg	390	EPA8270
o-Cresol (2-Methylphenol)	UJ	O	L	390	µg/kg	390	EPA8270
o-Cresol (2-Methylphenol)	UJ	O	L	390	µg/kg	390	EPA8270
p-Cresol (4-Methylphenol)	UJ	O	L	390	µg/kg	390	EPA8270
p-Cresol (4-Methylphenol)	UJ	O	L	390	µg/kg	390	EPA8270
Dibenz(a,h)anthracene	UJ	O	L	390	µg/kg	390	EPA8270
Dibenz(a,h)anthracene	UJ	O	L	390	µg/kg	390	EPA8270
Dibenzofuran	UJ	O	L	390	µg/kg	390	EPA8270
Dibenzofuran	UJ	O	L	390	µg/kg	390	EPA8270
Di-n-butyl phthalate	UJ	O	L	390	µg/kg	390	EPA8270
Di-n-butyl phthalate	UJ	O	L	390	µg/kg	390	EPA8270
1,2-Dichlorobenzene	UJ	O	L	390	µg/kg	390	EPA8270
1,2-Dichlorobenzene	UJ	O	L	390	µg/kg	390	EPA8270
1,3-Dichlorobenzene	UJ	O	L	390	µg/kg	390	EPA8270
1,3-Dichlorobenzene	UJ	O	L	390	µg/kg	390	EPA8270
1,4-Dichlorobenzene	UJ	O	L	390	µg/kg	390	EPA8270
1,4-Dichlorobenzene	UJ	O	L	390	µg/kg	390	EPA8270
3,3'-Dichlorobenzidine	UJ	O	L	780	µg/kg	780	EPA8270
3,3'-Dichlorobenzidine	UJ	O	L	780	µg/kg	780	EPA8270
2,4-Dichlorophenol	UJ	O	L	390	µg/kg	390	EPA8270
2,4-Dichlorophenol	UJ	O	L	390	µg/kg	390	EPA8270
Diethyl phthalate	UJ	O	L	390	µg/kg	390	EPA8270
Diethyl phthalate	UJ	O	L	390	µg/kg	390	EPA8270
2,4-Dimethyl phenol	UJ	O	L	390	µg/kg	390	EPA8270
2,4-Dimethyl phenol	UJ	O	L	390	µg/kg	390	EPA8270
Dimethyl phthalate	UJ	O	L	390	µg/kg	390	EPA8270
Dimethyl phthalate	UJ	O	L	390	µg/kg	390	EPA8270
2,4-Dinitrophenol	UJ	O	L	1,900	µg/kg	1,900	EPA8270
2,4-Dinitrophenol	UJ	O	L	1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	UJ	O	L	390	µg/kg	390	EPA8270
2,4-Dinitrotoluene	UJ	O	L	390	µg/kg	390	EPA8270
2,6-Dinitrotoluene	UJ	O	L	390	µg/kg	390	EPA8270
2,6-Dinitrotoluene	UJ	O	L	390	µg/kg	390	EPA8270
Di-n-octyl phthalate	UJ	O	L	390	µg/kg	390	EPA8270
Di-n-octyl phthalate	UJ	O	L	390	µg/kg	390	EPA8270
Fluoranthene	UJ	O	L	390	µg/kg	390	EPA8270
Fluoranthene	UJ	O	L	390	µg/kg	390	EPA8270

SAMPLE NAME: D431-1205 (Continued) Sample ID: 100375

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Fluorene	UJ	O	L	390	µg/kg	390	EPA8270
Fluorene	UJ	O	L	390	µg/kg	390	EPA8270
Hexachlorobenzene	UJ	O	L	390	µg/kg	390	EPA8270
Hexachlorobenzene	UJ	O	L	390	µg/kg	390	EPA8270
Hexachlorobutadiene	UJ	O	L	390	µg/kg	390	EPA8270
Hexachlorobutadiene	UJ	O	L	390	µg/kg	390	EPA8270
Hexachlorocyclopentadiene	UJ	O	L	390	µg/kg	390	EPA8270
Hexachlorocyclopentadiene	UJ	O	L	390	µg/kg	390	EPA8270
Hexachloroethane	UJ	O	L	390	µg/kg	390	EPA8270
Hexachloroethane	UJ	O	L	390	µg/kg	390	EPA8270
Sub. hexanedioic acid	J	N		30,000	µg/kg		EPA8270
Indeno(1,2,3-c,d)pyrene	UJ	O	L	390	µg/kg	390	EPA8270
Indeno(1,2,3-c,d)pyrene	UJ	O	L	390	µg/kg	390	EPA8270
Isophorone	UJ	O	L	390	µg/kg	390	EPA8270
Isophorone	UJ	O	L	390	µg/kg	390	EPA8270
2-Methyl-4,6-dinitrophenol	UJ	O	L	1,900	µg/kg	1,900	EPA8270
2-Methyl-4,6-dinitrophenol	UJ	O	L	1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	UJ	O	L	390	µg/kg	390	EPA8270
2-Methylnaphthalene	UJ	O	L	390	µg/kg	390	EPA8270
Naphthalene	UJ	O	L	390	µg/kg	390	EPA8270
Naphthalene	UJ	O	L	390	µg/kg	390	EPA8270
o-Nitroaniline	UJ	O	L	1,900	µg/kg	1,900	EPA8270
o-Nitroaniline	UJ	O	L	1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	UJ	O	L	1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	UJ	O	L	1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	UJ	O	L	1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	UJ	O	L	1,900	µg/kg	1,900	EPA8270
Nitrobenzene	UJ	O	L	390	µg/kg	390	EPA8270
Nitrobenzene	UJ	O	L	390	µg/kg	390	EPA8270
2-Nitrophenol	UJ	O	L	390	µg/kg	390	EPA8270
2-Nitrophenol	UJ	O	L	390	µg/kg	390	EPA8270
4-Nitrophenol	UJ	O	L	1,900	µg/kg	1,900	EPA8270
4-Nitrophenol	UJ	O	L	1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	UJ	O	L	390	µg/kg	390	EPA8270
N-Nitrosodiphenylamine	UJ	O	L	390	µg/kg	390	EPA8270
N-Nitrosodipropylamine	UJ	CO	L	390	µg/kg	390	EPA8270
N-Nitrosodipropylamine	UJ	CO	L	390	µg/kg	390	EPA8270
Pentachlorophenol	UJ	O	L	1,900	µg/kg	1,900	EPA8270
Pentachlorophenol	UJ	O	L	1,900	µg/kg	1,900	EPA8270
Phenanthrene	UJ	O	L	390	µg/kg	390	EPA8270
Phenanthrene	UJ	O	L	390	µg/kg	390	EPA8270
Phenol	UJ	O	L	390	µg/kg	390	EPA8270
Phenol	UJ	O	L	390	µg/kg	390	EPA8270
Pyrene	UJ	O	L	390	µg/kg	390	EPA8270
Pyrene	UJ	O	L	390	µg/kg	390	EPA8270
1,2,4-Trichlorobenzene	UJ	CO	L	390	µg/kg	390	EPA8270
1,2,4-Trichlorobenzene	UJ	CO	L	390	µg/kg	390	EPA8270
2,4,5-Trichlorophenol	UJ	O	L	1,900	µg/kg	1,900	EPA8270
2,4,5-Trichlorophenol	UJ	O	L	1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	UJ	O	L	390	µg/kg	390	EPA8270

SAMPLE NAME: D431 1205 (Continued) Sample ID: 100375

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2,4,6-Trichlorophenol	UJ	O	L	390	µg/kg	390	EPA8270
Unknown	J	NV		1,000	µg/kg		EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		400	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown ketone	J	NV		200,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	J			31	µg/kg	12	EPA8240
Benzene	U			6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U			6.0	µg/kg	6.0	EPA8240
Bromoform	U			6.0	µg/kg	6.0	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			6.0	µg/kg	6.0	EPA8240
Carbon tetrachloride	U			6.0	µg/kg	6.0	EPA8240
Chlorobenzene	U			6.0	µg/kg	6.0	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
2-Chloroethyl vinyl ether	U			12	µg/kg	12	EPA8240
Chloroform	U	V		6.0	µg/kg	6.0	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		12	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U			6.0	µg/kg	6.0	EPA8240
cis-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
Ethylbenzene	U			6.0	µg/kg	6.0	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U			6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U			6.0	µg/kg	6.0	EPA8240
Toluene	J			1.9	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
Trichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			6.0	µg/kg	6.0	EPA8240

SAMPLE NAME: D431 1205 (Continued) Sample ID: 100375

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			2.0	µg/kg	2.0	EPA8080
alpha-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
beta-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
delta-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
alpha-Chlordane	U			2.0	µg/kg	2.0	EPA8080
gamma-Chlordane	U			2.0	µg/kg	2.0	EPA8080
p,p'-DDD	U			3.9	µg/kg	3.9	EPA8080
p,p'-DDE	U			3.9	µg/kg	3.9	EPA8080
p,p'-DDT	U			3.9	µg/kg	3.9	EPA8080
Dieldrin	U			3.9	µg/kg	3.9	EPA8080
Endosulfan I	U			2.0	µg/kg	2.0	EPA8080
Endosulfan II	U			3.9	µg/kg	3.9	EPA8080
Endosulfan sulfate	U			3.9	µg/kg	3.9	EPA8080
Endrin	U			3.9	µg/kg	3.9	EPA8080
Endrin ketone	U			3.9	µg/kg	3.9	EPA8080
Heptachlor	U			2.0	µg/kg	2.0	EPA8080
Heptachlor epoxide	U			2.0	µg/kg	2.0	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			2.0	µg/kg	2.0	EPA8080
Methoxychlor	U			20	µg/kg	20	EPA8080
Octachlorodibenzo-p-dioxin				9.5	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	U			39	µg/kg	39	EPA8080
PCB 1221	U			78	µg/kg	78	EPA8080
PCB 1232	U			39	µg/kg	39	EPA8080
PCB 1242	U			39	µg/kg	39	EPA8080
PCB 1248	U			39	µg/kg	39	EPA8080
PCB 1254	U			39	µg/kg	39	EPA8080
PCB 1260				120	µg/kg	39	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	U			200	µg/kg	200	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				13±14	pCi/g	7.1	EPA900.0
Nonvolatile beta				40±24	pCi/g	10	EPA900.0
Radium, total alpha-emitting	U	V		0.90±0.72	pCi/g	0.15	EPA903.0
Tritium	U			1.4	pCi/g	1.4	EPA906.0

SAMPLE NAME: D431 1205 (Continued) Sample ID: 100375

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
TCLP Compounds (Metals and Organics)							
Arsenic, TCLP	U			100	µg/L	100	EPA6010
Barium, TCLP	U			200	µg/L	200	EPA6010
Benzene	U			50	µg/L	50	EPA8240
Cadmium, TCLP	U			5.0	µg/L	5.0	EPA6010
Carbon tetrachloride	U			50	µg/L	50	EPA8240
alpha-Chlordane	UJ	O	L	1.4	µg/L	1.4	EPA8080
gamma-Chlordane	UJ	O	L	1.4	µg/L	1.4	EPA8080
Chlorobenzene	U			50	µg/L	50	EPA8240
Chloroethene (Vinyl chloride)	U			100	µg/L	100	EPA8240
Chloroform	J			17	µg/L	50	EPA8240
Chromium, TCLP	U			10	µg/L	10	EPA6010
o-Cresol (2-Methylphenol)	U			100	µg/L	100	EPA8270
1,4-Dichlorobenzene	U			100	µg/L	100	EPA8270
1,2-Dichloroethane	U			50	µg/L	50	EPA8240
1,1-Dichloroethylene	U			50	µg/L	50	EPA8240
2,4-Dichlorophenoxyacetic acid	U			10	µg/L	10	EPA8150
2,4-Dinitrotoluene	U			100	µg/L	100	EPA8270
Endrin	UJ	O	L	0.28	µg/L	0.28	EPA8080
Heptachlor	UJ	O	L	0.14	µg/L	0.14	EPA8080
Heptachlor epoxide	UJ	O	L	0.14	µg/L	0.14	EPA8080
Hexachlorobenzene	U			100	µg/L	100	EPA8270
Hexachlorobutadiene	U			100	µg/L	100	EPA8270
Hexachloroethane	U			100	µg/L	100	EPA8270
Lead, TCLP	U			90	µg/L	90	EPA6010
Lindane	UJ	O	L	0.14	µg/L	0.14	EPA8080
Mercury, TCLP	UJ	I	L	0.20	µg/L	0.20	EPA7470
Methoxychlor	UJ	O	L	1.4	µg/L	1.4	EPA8080
Methyl ethyl ketone	U			100	µg/L	100	EPA8240
Nitrobenzene	U			100	µg/L	100	EPA8270
Pentachlorophenol	U			500	µg/L	500	EPA8270
Pyridine	U			100	µg/L	100	EPA8270
Selenium, TCLP	U			100	µg/L	100	EPA6010
Silver, TCLP	U			10	µg/L	10	EPA6010
Tetrachloroethylene	U			50	µg/L	50	EPA8240
Toxaphene	UJ	O	L	2.8	µg/L	2.8	EPA8080
Toxaphene	UJ	O	L	2.6	µg/L	2.6	EPA8080
2,4,5-TP (Silvex)	U			5.0	µg/L	5.0	EPA8150
Trichloroethylene	U			50	µg/L	50	EPA8240
2,4,5-Trichlorophenol	U			500	µg/L	500	EPA8270
2,4,6-Trichlorophenol	U			100	µg/L	100	EPA8270
2,4,5-T	U			5.0	µg/L	5.0	EPA8150
m,p-Cresol	U			100	µg/L	100	EPA8270

SAMPLE NAME: D431 1205A Sample ID: 100376

Sample Type: Duplicate Associated Sample: 100375

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			1.1	mg/kg	1.1	EPA7060
Barium				39	mg/kg	23	EPA6010
Cadmium	U			0.57	mg/kg	0.57	EPA6010
Chromium				20	mg/kg	1.1	EPA6010
Copper				5.3	mg/kg	2.9	EPA6010
Lead				4.5	mg/kg	0.33	EPA7421
Manganese				35	mg/kg	1.7	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel	U			4.6	mg/kg	4.6	EPA6010
Selenium	U			0.56	mg/kg	0.56	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			390	µg/kg	390	EPA8270
Acenaphthylene	U			390	µg/kg	390	EPA8270
Anthracene	U			390	µg/kg	390	EPA8270
Benzo(a)anthracene	U			390	µg/kg	390	EPA8270
Benzo(b)fluoranthene	U			390	µg/kg	390	EPA8270
Benzo(k)fluoranthene	U			390	µg/kg	390	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	U			390	µg/kg	390	EPA8270
Benzo(a)pyrene	U			390	µg/kg	390	EPA8270
Benzyl alcohol	U			390	µg/kg	390	EPA8270
Bis(2-chloroethoxy) methane	U			390	µg/kg	390	EPA8270
Bis(2-chloroethyl) ether	U			390	µg/kg	390	EPA8270
Bis(2-chloroisopropyl) ether	U			390	µg/kg	390	EPA8270
Bis(2-ethylhexyl) phthalate	J			60	µg/kg	390	EPA8270
4-Bromophenyl phenyl ether	U			390	µg/kg	390	EPA8270
Butylbenzyl phthalate	U			390	µg/kg	390	EPA8270
4-Chloroaniline	U			390	µg/kg	390	EPA8270
4-Chloro-m-cresol	U			390	µg/kg	390	EPA8270
2-Chloronaphthalene	U			390	µg/kg	390	EPA8270
2-Chlorophenol	U			390	µg/kg	390	EPA8270
4-Chlorophenyl phenyl ether	U			390	µg/kg	390	EPA8270
Chrysene	U			390	µg/kg	390	EPA8270
o-Cresol (2-Methylphenol)	U			390	µg/kg	390	EPA8270
p-Cresol (4-Methylphenol)	U			390	µg/kg	390	EPA8270
Dibenz(a,h)anthracene	U			390	µg/kg	390	EPA8270
Dibenzofuran	U			390	µg/kg	390	EPA8270
Di-n-butyl phthalate	U			390	µg/kg	390	EPA8270
1,2-Dichlorobenzene	U			390	µg/kg	390	EPA8270
1,3-Dichlorobenzene	U			390	µg/kg	390	EPA8270
1,4-Dichlorobenzene	U			390	µg/kg	390	EPA8270
3,3'-Dichlorobenzidine	U			770	µg/kg	770	EPA8270
2,4-Dichlorophenol	U			390	µg/kg	390	EPA8270
Diethyl phthalate	U			390	µg/kg	390	EPA8270
2,4-Dimethyl phenol	U			390	µg/kg	390	EPA8270

SAMPLE NAME: D431-1205A (Continued) Sample ID: 100376

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Dimethyl phthalate	U			390	µg/kg	390	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			390	µg/kg	390	EPA8270
2,6-Dinitrotoluene	U			390	µg/kg	390	EPA8270
Di-n-octyl phthalate	U			390	µg/kg	390	EPA8270
Fluoranthene	U			390	µg/kg	390	EPA8270
Fluorene	U			390	µg/kg	390	EPA8270
Hexachlorobenzene	U			390	µg/kg	390	EPA8270
Hexachlorobutadiene	U			390	µg/kg	390	EPA8270
Hexachlorocyclopentadiene	U			390	µg/kg	390	EPA8270
Hexachloroethane	U			390	µg/kg	390	EPA8270
Sub. hexanedioic acid	J	N		10,000	µg/kg		EPA8270
Indeno(1,2,3-c,d)pyrene	U			390	µg/kg	390	EPA8270
Isophorone	U			390	µg/kg	390	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	U			390	µg/kg	390	EPA8270
Naphthalene	U			390	µg/kg	390	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U			390	µg/kg	390	EPA8270
2-Nitrophenol	U			390	µg/kg	390	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			390	µg/kg	390	EPA8270
N-Nitrosodipropylamine	UJ	C		390	µg/kg	390	EPA8270
Pentachlorophenol	U			1,900	µg/kg	1,900	EPA8270
Phenanthrene	U			390	µg/kg	390	EPA8270
Phenol	U			390	µg/kg	390	EPA8270
Pyrene	U			390	µg/kg	390	EPA8270
1,2,4-Trichlorobenzene	UJ	C		390	µg/kg	390	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			390	µg/kg	390	EPA8270
Unknown	J	NV		2,000	µg/kg		EPA8270
Unknown	J	NV		500	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown ketone	J	NV		30,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone				200	µg/kg	12	EPA8240
Benzene	U			6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U			6.0	µg/kg	6.0	EPA8240
Bromoform	U			6.0	µg/kg	6.0	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			6.0	µg/kg	6.0	EPA8240
Carbon tetrachloride	U			6.0	µg/kg	6.0	EPA8240
Chlorobenzene	U			6.0	µg/kg	6.0	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240

SAMPLE NAME: D431 1205A (Continued) Sample ID: 100376

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
2-Chloroethyl vinyl ether	U			12	µg/kg	12	EPA8240
Chloroform	U	V		6.0	µg/kg	6.0	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		13	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U			6.0	µg/kg	6.0	EPA8240
cis-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
Ethylbenzene	U			6.0	µg/kg	6.0	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U			6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U			6.0	µg/kg	6.0	EPA8240
Toluene	U			6.0	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
Trichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			6.0	µg/kg	6.0	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			2.0	µg/kg	2.0	EPA8080
alpha-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
beta-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
delta-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
alpha-Chlordane	U			2.0	µg/kg	2.0	EPA8080
gamma-Chlordane	U			2.0	µg/kg	2.0	EPA8080
p,p'-DDD	U			3.9	µg/kg	3.9	EPA8080
p,p'-DDE	J			2.0	µg/kg	3.9	EPA8080
p,p'-DDT	J			2.7	µg/kg	3.9	EPA8080
Dieldrin	U			3.9	µg/kg	3.9	EPA8080
Endosulfan I	U			2.0	µg/kg	2.0	EPA8080
Endosulfan II	U			3.9	µg/kg	3.9	EPA8080
Endosulfan sulfate	U			3.9	µg/kg	3.9	EPA8080
Endrin	U			3.9	µg/kg	3.9	EPA8080
Endrin ketone	U			3.9	µg/kg	3.9	EPA8080
Heptachlor	U			2.0	µg/kg	2.0	EPA8080
Heptachlor epoxide	U			2.0	µg/kg	2.0	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			2.0	µg/kg	2.0	EPA8080

SAMPLE NAME: D431 1205A (Continued) Sample ID: 100376

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Methoxychlor	U			20	µg/kg	20	EPA8080
Octachlorodibenzo-p-dioxin				10	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	U			39	µg/kg	39	EPA8080
PCB 1221	U			78	µg/kg	78	EPA8080
PCB 1232	U			39	µg/kg	39	EPA8080
PCB 1242	U			39	µg/kg	39	EPA8080
PCB 1248	U			39	µg/kg	39	EPA8080
PCB 1254	U			39	µg/kg	39	EPA8080
PCB 1260				170	µg/kg	39	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	U			200	µg/kg	200	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			7.3	pCi/g	7.3	EPA900.0
Nonvolatile beta	U			10	pCi/g	10	EPA900.0
Radium, total alpha-emitting	U	V		0.79±0.69	pCi/g	0.15	EPA903.0
Tritium	U			1.4	pCi/g	1.4	EPA906.0
TCLP Compounds (Metals and Organics)							
Arsenic, TCLP	U			100	µg/L	100	EPA6010
Barium, TCLP				520	µg/L	200	EPA6010
Benzene	U			50	µg/L	50	EPA8240
Cadmium, TCLP	U			5.0	µg/L	5.0	EPA6010
Carbon tetrachloride	U			50	µg/L	50	EPA8240
alpha-Chlordane	UJ	O	L	1.2	µg/L	1.2	EPA8080
gamma-Chlordane	UJ	O	L	1.2	µg/L	1.2	EPA8080
Chlorobenzene	U			50	µg/L	50	EPA8240
Chloroethene (Vinyl chloride)	U			100	µg/L	100	EPA8240
Chloroform	J			26	µg/L	50	EPA8240
Chromium, TCLP	U			10	µg/L	10	EPA6010
o-Cresol (2-Methylphenol)	U			100	µg/L	100	EPA8270
1,4-Dichlorobenzene	U			100	µg/L	100	EPA8270
1,2-Dichloroethane	U			50	µg/L	50	EPA8240
1,1-Dichloroethylene	U			50	µg/L	50	EPA8240
2,4-Dichlorophenoxyacetic acid	U			10	µg/L	10	EPA8150
2,4-Dinitrotoluene	U			100	µg/L	100	EPA8270
Endrin	UJ	O	L	0.24	µg/L	0.24	EPA8080
Heptachlor	UJ	O	L	0.12	µg/L	0.12	EPA8080
Heptachlor epoxide	UJ	O	L	0.12	µg/L	0.12	EPA8080
Hexachlorobenzene	U			100	µg/L	100	EPA8270
Hexachlorobutadiene	U			100	µg/L	100	EPA8270
Hexachloroethane	U			100	µg/L	100	EPA8270

SAMPLE NAME: D431 1205A (Continued) Sample ID: 100376

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
TCLP Compounds (Metals and Organics)							
Lead, TCLP	U			90	µg/L	90	EPA6010
Lindane	UJ	O	L	0.12	µg/L	0.12	EPA8080
Mercury, TCLP	U			0.20	µg/L	0.20	EPA7470
Methoxychlor	UJ	O	L	1.2	µg/L	1.2	EPA8080
Methyl ethyl ketone	U			100	µg/L	100	EPA8240
Nitrobenzene	U			100	µg/L	100	EPA8270
Pentachlorophenol	U			500	µg/L	500	EPA8270
Pyridine	U			100	µg/L	100	EPA8270
Selenium, TCLP	U			100	µg/L	100	EPA6010
Silver, TCLP	U			10	µg/L	10	EPA6010
Tetrachloroethylene	U			50	µg/L	50	EPA8240
Toxaphene	UJ	O	L	2.4	µg/L	2.4	EPA8080
2,4,5-TP (Silvex)	U			5.0	µg/L	5.0	EPA8150
Trichloroethylene	U			50	µg/L	50	EPA8240
2,4,5-Trichlorophenol	U			500	µg/L	500	EPA8270
2,4,6-Trichlorophenol	U			100	µg/L	100	EPA8270
2,4,5-T	U			5.0	µg/L	5.0	EPA8150
m,p-Cresol	U			100	µg/L	100	EPA8270

SAMPLE NAME: D431 1206 Sample ID: 100377

Location (SRS Coordinates): 18518.11E 66590.27N
Ground Elevation Above MSL: 127.7 ft
Depth of Core Interval: 8.00 to 10.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 5YR 3/2 USC Soil Classification: SC Percent Solids: 84.90

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				10	meq/100g	2.0	EPA9080
Cation exchange capacity				12	meq/100g	2.0	EPA9080
pH				5.6	pH	0.010	EPA9045
Specific conductance				230	µS/cm	1.0	EPA9050
Total organic carbon				3,200	mg/kg	400	EPA415.1
Total Metals							
Arsenic				1.5	mg/kg	1.1	EPA7060
Barium				32	mg/kg	23	EPA6010
Cadmium	U			0.58	mg/kg	0.58	EPA6010
Chromium				44	mg/kg	1.2	EPA6010
Copper				6.6	mg/kg	2.9	EPA6010
Lead				5.6	mg/kg	0.34	EPA7421
Manganese				43	mg/kg	1.7	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel	U			4.6	mg/kg	4.6	EPA6010
Selenium	U			0.56	mg/kg	0.56	EPA7740

SAMPLE NAME: D431 1206 (Continued) Sample ID: 100377

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Silver	U			1.2	mg/kg	1.2	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			390	µg/kg	390	EPA8270
Acenaphthylene	U			390	µg/kg	390	EPA8270
Anthracene	U			390	µg/kg	390	EPA8270
Benzo(a)anthracene	J			52	µg/kg	390	EPA8270
Benzo(b)fluoranthene	J			56	µg/kg	390	EPA8270
Benzo(k)fluoranthene	U			390	µg/kg	390	EPA8270
Benzoic acid	U			2,000	µg/kg	2,000	EPA8270
Benzo(g,h,i)perylene	U			390	µg/kg	390	EPA8270
Benzo(a)pyrene	U			390	µg/kg	390	EPA8270
Benzyl alcohol	U			390	µg/kg	390	EPA8270
Bis(2-chloroethoxy) methane	U			390	µg/kg	390	EPA8270
Bis(2-chloroethyl) ether	U			390	µg/kg	390	EPA8270
Bis(2-chloroisopropyl) ether	U			390	µg/kg	390	EPA8270
Bis(2-ethylhexyl) phthalate	J			82	µg/kg	390	EPA8270
4-Bromophenyl phenyl ether	U			390	µg/kg	390	EPA8270
Butylbenzyl phthalate	U			390	µg/kg	390	EPA8270
4-Chloroaniline	U			390	µg/kg	390	EPA8270
4-Chloro-m-cresol	U			390	µg/kg	390	EPA8270
2-Chloronaphthalene	U			390	µg/kg	390	EPA8270
2-Chlorophenol	U			390	µg/kg	390	EPA8270
4-Chlorophenyl phenyl ether	U			390	µg/kg	390	EPA8270
Chrysene	J			40	µg/kg	390	EPA8270
o-Cresol (2-Methylphenol)	U			390	µg/kg	390	EPA8270
p-Cresol (4-Methylphenol)	U			390	µg/kg	390	EPA8270
Dibenz(a,h)anthracene	U			390	µg/kg	390	EPA8270
Dibenzofuran	U			390	µg/kg	390	EPA8270
Di-n-butyl phthalate	U			390	µg/kg	390	EPA8270
1,2-Dichlorobenzene	U			390	µg/kg	390	EPA8270
1,3-Dichlorobenzene	U			390	µg/kg	390	EPA8270
1,4-Dichlorobenzene	U			390	µg/kg	390	EPA8270
3,3'-Dichlorobenzidine	U			780	µg/kg	780	EPA8270
2,4-Dichlorophenol	U			390	µg/kg	390	EPA8270
Diethyl phthalate	U			390	µg/kg	390	EPA8270
2,4-Dimethyl phenol	U			390	µg/kg	390	EPA8270
Dimethyl phthalate	U			390	µg/kg	390	EPA8270
2,4-Dinitrophenol	U			2,000	µg/kg	2,000	EPA8270
2,4-Dinitrotoluene	U			390	µg/kg	390	EPA8270
2,6-Dinitrotoluene	U			390	µg/kg	390	EPA8270
Di-n-octyl phthalate	U			390	µg/kg	390	EPA8270
Fluoranthene	J			110	µg/kg	390	EPA8270
Fluorene	U			390	µg/kg	390	EPA8270
Hexachlorobenzene	U			390	µg/kg	390	EPA8270
Hexachlorobutadiene	U			390	µg/kg	390	EPA8270
Hexachlorocyclopentadiene	U			390	µg/kg	390	EPA8270
Hexachloroethane	U			390	µg/kg	390	EPA8270
Sub. hexanedioic acid	J	N		20,000	µg/kg		EPA8270

SAMPLE NAME: D431 1206 (Continued) Sample ID: 100377

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Indeno(1,2,3-c,d)pyrene	U			390	µg/kg	390	EPA8270
Isophorone	U			390	µg/kg	390	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,000	µg/kg	2,000	EPA8270
2-Methylnaphthalene	U			390	µg/kg	390	EPA8270
Naphthalene	U			390	µg/kg	390	EPA8270
o-Nitroaniline	U			2,000	µg/kg	2,000	EPA8270
m-Nitroaniline	U			2,000	µg/kg	2,000	EPA8270
p-Nitroaniline	U			2,000	µg/kg	2,000	EPA8270
Nitrobenzene	U			390	µg/kg	390	EPA8270
2-Nitrophenol	U			390	µg/kg	390	EPA8270
4-Nitrophenol	U			2,000	µg/kg	2,000	EPA8270
N-Nitrosodiphenylamine	U			390	µg/kg	390	EPA8270
N-Nitrosodipropylamine	UJ	C		390	µg/kg	390	EPA8270
Pentachlorophenol	U			2,000	µg/kg	2,000	EPA8270
Phenanthrene	J			49	µg/kg	390	EPA8270
Phenol	U			390	µg/kg	390	EPA8270
Pyrene	J			77	µg/kg	390	EPA8270
1,2,4-Trichlorobenzene	UJ	C		390	µg/kg	390	EPA8270
2,4,5-Trichlorophenol	U			2,000	µg/kg	2,000	EPA8270
2,4,6-Trichlorophenol	U			390	µg/kg	390	EPA8270
Unknown	J	NV		4,000	µg/kg		EPA8270
Unknown	J	NV		1,000	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		500	µg/kg		EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Unknown ketone	J	NV		50,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone		V		170	µg/kg	12	EPA8240
Benzene	U			6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U			6.0	µg/kg	6.0	EPA8240
Bromoform	U			6.0	µg/kg	6.0	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			6.0	µg/kg	6.0	EPA8240
Carbon tetrachloride	U			6.0	µg/kg	6.0	EPA8240
Chlorobenzene	U			6.0	µg/kg	6.0	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
2-Chloroethyl vinyl ether	U			12	µg/kg	12	EPA8240
Chloroform	U			6.0	µg/kg	6.0	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		12	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U			6.0	µg/kg	6.0	EPA8240

SAMPLE NAME: D431 1206 (Continued) Sample ID: 100377

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
cis-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
Ethylbenzene	U			6.0	µg/kg	6.0	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U			6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U			6.0	µg/kg	6.0	EPA8240
Toluene	J			1.8	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
Trichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Unknown	J	N		10	µg/kg		EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			6.0	µg/kg	6.0	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	UJ	O	L	2.0	µg/kg	2.0	EPA8080
alpha-Benzene hexachloride	UJ	O	L	2.0	µg/kg	2.0	EPA8080
beta-Benzene hexachloride	UJ	O	L	2.0	µg/kg	2.0	EPA8080
delta-Benzene hexachloride	UJ	O	L	2.0	µg/kg	2.0	EPA8080
alpha-Chlordane	UJ	O	L	2.0	µg/kg	2.0	EPA8080
gamma-Chlordane	UJ	O	L	2.0	µg/kg	2.0	EPA8080
p,p'-DDD	UJ	O	L	3.9	µg/kg	3.9	EPA8080
p,p'-DDE	UJ	O	L	3.9	µg/kg	3.9	EPA8080
p,p'-DDT	UJ	O	L	3.9	µg/kg	3.9	EPA8080
Dieldrin	UJ	O	L	3.9	µg/kg	3.9	EPA8080
Endosulfan I	UJ	O	L	2.0	µg/kg	2.0	EPA8080
Endosulfan II	UJ	O	L	3.9	µg/kg	3.9	EPA8080
Endosulfan sulfate	UJ	O	L	3.9	µg/kg	3.9	EPA8080
Endrin	UJ	O	L	3.9	µg/kg	3.9	EPA8080
Endrin ketone	UJ	O	L	3.9	µg/kg	3.9	EPA8080
Heptachlor	UJ	O	L	2.0	µg/kg	2.0	EPA8080
Heptachlor epoxide	UJ	O	L	2.0	µg/kg	2.0	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Lindane	UJ	O	L	2.0	µg/kg	2.0	EPA8080
Methoxychlor	UJ	O	L	20	µg/kg	20	EPA8080
Octachlorodibenzo-p-dioxin				27	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	UJ	O	L	39	µg/kg	39	EPA8080
PCB 1221	UJ	O	L	79	µg/kg	79	EPA8080
PCB 1232	UJ	O	L	39	µg/kg	39	EPA8080
PCB 1242	UJ	O	L	39	µg/kg	39	EPA8080
PCB 1248	UJ	O	L	39	µg/kg	39	EPA8080
PCB 1254	UJ	O	L	39	µg/kg	39	EPA8080

SAMPLE NAME: D431 1206 (Continued) Sample ID: 100377

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
PCB 1260	UJ	O	L	39	µg/kg	39	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	UJ	O	L	200	µg/kg	200	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				15±13	pCi/g	6.2	EPA900.0
Nonvolatile beta				36±21	pCi/g	8.9	EPA900.0
Radium, total alpha-emitting	U	V		1.4±1.2	pCi/g	0.23	EPA903.0
Tritium	U			1.3	pCi/g	1.3	EPA906.0

SAMPLE NAME: D431 1207 Sample ID: 100378

Location (SRS Coordinates): 18518.11E 66590.27N
Ground Elevation Above MSL: 127.7 ft
Depth of Core Interval: 10.00 to 12.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 8YR 4/4 USC Soil Classification: SC Percent Solids: 81.50

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	J	I	H	4.4	mg/kg	1.2	EPA7060
Arsenic	J	I	H	7.8	mg/kg	2.4	EPA7060
Barium	J	I	H	31	mg/kg	24	EPA6010
Barium	J	I	H	80	mg/kg	22	EPA6010
Cadmium	UJ	X		0.59	mg/kg	0.59	EPA6010
Cadmium	UJ	X		2.7	mg/kg	2.7	EPA6010
Chromium	J	I	H	22	mg/kg	1.2	EPA6010
Chromium	J	I	H	28	mg/kg	1.1	EPA6010
Copper	U			2.9	mg/kg	2.9	EPA6010
Copper	U			2.7	mg/kg	2.7	EPA6010
Lead	J	I	L	2.5	mg/kg	0.35	EPA7421
Lead	J	I	L	3.0	mg/kg	0.36	EPA7421
Manganese	J	I	H	140	mg/kg	1.8	EPA6010
Manganese	J	I	H	140	mg/kg	1.6	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Mercury	UJ	Q		0.12	mg/kg	0.12	EPA7470
Nickel	U			4.7	mg/kg	4.7	EPA6010
Nickel	U			4.3	mg/kg	4.3	EPA6010
Selenium	UJ	I	L	0.58	mg/kg	0.58	EPA7740
Selenium	UJ	I	L	0.61	mg/kg	0.61	EPA7740
Silver	UJ	IX		1.2	mg/kg	1.2	EPA6010

SAMPLE NAME: D431-1207 (Continued) Sample ID: 100378

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Silver	UJ	IX		5.4	mg/kg	5.4	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			410	µg/kg	410	EPA8270
Acenaphthylene	U			410	µg/kg	410	EPA8270
Anthracene	U			410	µg/kg	410	EPA8270
Benzo(a)anthracene	U			410	µg/kg	410	EPA8270
Benzo(b)fluoranthene	U			410	µg/kg	410	EPA8270
Benzo(k)fluoranthene	U			410	µg/kg	410	EPA8270
Benzoic acid	U			2,000	µg/kg	2,000	EPA8270
Benzo(g,h,i)perylene	U			410	µg/kg	410	EPA8270
Benzo(a)pyrene	U			410	µg/kg	410	EPA8270
Benzyl alcohol	U			410	µg/kg	410	EPA8270
Bis(2-chloroethoxy) methane	U			410	µg/kg	410	EPA8270
Bis(2-chloroethyl) ether	U			410	µg/kg	410	EPA8270
Bis(2-chloroisopropyl) ether	U			410	µg/kg	410	EPA8270
Bis(2-ethylhexyl) phthalate	J			90	µg/kg	410	EPA8270
4-Bromophenyl phenyl ether	U			410	µg/kg	410	EPA8270
Butylbenzyl phthalate	U			410	µg/kg	410	EPA8270
4-Chloroaniline	U			410	µg/kg	410	EPA8270
4-Chloro-m-cresol	U			410	µg/kg	410	EPA8270
2-Chloronaphthalene	U			410	µg/kg	410	EPA8270
2-Chlorophenol	U			410	µg/kg	410	EPA8270
4-Chlorophenyl phenyl ether	U			410	µg/kg	410	EPA8270
Chrysene	U			410	µg/kg	410	EPA8270
o-Cresol (2-Methylphenol)	U			410	µg/kg	410	EPA8270
p-Cresol (4-Methylphenol)	U			410	µg/kg	410	EPA8270
Dibenz(a,h)anthracene	U			410	µg/kg	410	EPA8270
Dibenzofuran	U			410	µg/kg	410	EPA8270
Di-n-butyl phthalate	U			410	µg/kg	410	EPA8270
1,2-Dichlorobenzene	U			410	µg/kg	410	EPA8270
1,3-Dichlorobenzene	U			410	µg/kg	410	EPA8270
1,4-Dichlorobenzene	U			410	µg/kg	410	EPA8270
3,3'-Dichlorobenzidine	U			820	µg/kg	820	EPA8270
2,4-Dichlorophenol	U			410	µg/kg	410	EPA8270
Diethyl phthalate	U			410	µg/kg	410	EPA8270
2,4-Dimethyl phenol	U			410	µg/kg	410	EPA8270
Dimethyl phthalate	U			410	µg/kg	410	EPA8270
2,4-Dinitrophenol	U			2,000	µg/kg	2,000	EPA8270
2,4-Dinitrotoluene	U			410	µg/kg	410	EPA8270
2,6-Dinitrotoluene	U			410	µg/kg	410	EPA8270
Di-n-octyl phthalate	U			410	µg/kg	410	EPA8270
Fluoranthene	U			410	µg/kg	410	EPA8270
Fluorene	U			410	µg/kg	410	EPA8270
Hexachlorobenzene	U			410	µg/kg	410	EPA8270
Hexachlorobutadiene	U			410	µg/kg	410	EPA8270
Hexachlorocyclopentadiene	U			410	µg/kg	410	EPA8270
Hexachloroethane	U			410	µg/kg	410	EPA8270
Sub. hexanedioic acid	J	N		10,000	µg/kg		EPA8270

SAMPLE NAME: D431 1207 (Continued) Sample ID: 100378

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Indeno(1,2,3-c,d)pyrene	U			410	µg/kg	410	EPA8270
Isophorone	U			410	µg/kg	410	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,000	µg/kg	2,000	EPA8270
2-Methylnaphthalene	U			410	µg/kg	410	EPA8270
Naphthalene	U			410	µg/kg	410	EPA8270
o-Nitroaniline	U			2,000	µg/kg	2,000	EPA8270
m-Nitroaniline	U			2,000	µg/kg	2,000	EPA8270
p-Nitroaniline	U			2,000	µg/kg	2,000	EPA8270
Nitrobenzene	U			410	µg/kg	410	EPA8270
2-Nitrophenol	U			410	µg/kg	410	EPA8270
4-Nitrophenol	U			2,000	µg/kg	2,000	EPA8270
N-Nitrosodiphenylamine	U			410	µg/kg	410	EPA8270
N-Nitrosodipropylamine	UJ	C		410	µg/kg	410	EPA8270
Pentachlorophenol	U			2,000	µg/kg	2,000	EPA8270
Phenanthrene	U			410	µg/kg	410	EPA8270
Phenol	U			410	µg/kg	410	EPA8270
Pyrene	U			410	µg/kg	410	EPA8270
1,2,4-Trichlorobenzene	UJ	C		410	µg/kg	410	EPA8270
2,4,5-Trichlorophenol	U			2,000	µg/kg	2,000	EPA8270
2,4,6-Trichlorophenol	U			410	µg/kg	410	EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	NV		4,000	µg/kg		EPA8270
Unknown	J	NV		900	µg/kg		EPA8270
Unknown	J	N		700	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		600	µg/kg		EPA8270
Unknown ketone	J	NV		50,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	J			7.6	µg/kg	12	EPA8240
Benzene	U			6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U			6.0	µg/kg	6.0	EPA8240
Bromoform	U			6.0	µg/kg	6.0	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			6.0	µg/kg	6.0	EPA8240
Carbon tetrachloride	U			6.0	µg/kg	6.0	EPA8240
Chlorobenzene	U			6.0	µg/kg	6.0	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
2-Chloroethyl vinyl ether	U			12	µg/kg	12	EPA8240
Chloroform	U			6.0	µg/kg	6.0	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		13	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U			6.0	µg/kg	6.0	EPA8240

SAMPLE NAME: D431 1207 (Continued) Sample ID: 100378

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
cis-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
Ethylbenzene	U			6.0	µg/kg	6.0	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U			6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U			6.0	µg/kg	6.0	EPA8240
Toluene	J			1.3	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
Trichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			6.0	µg/kg	6.0	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	UJ	O	L	2.0	µg/kg	2.0	EPA8080
alpha-Benzene hexachloride	UJ	O	L	2.0	µg/kg	2.0	EPA8080
beta-Benzene hexachloride	UJ	O	L	2.0	µg/kg	2.0	EPA8080
delta-Benzene hexachloride	UJ	O	L	2.0	µg/kg	2.0	EPA8080
alpha-Chlordane	UJ	O	L	2.0	µg/kg	2.0	EPA8080
gamma-Chlordane	UJ	O	L	2.0	µg/kg	2.0	EPA8080
p,p'-DDD	UJ	O	L	4.1	µg/kg	4.1	EPA8080
p,p'-DDE	UJ	O	L	4.1	µg/kg	4.1	EPA8080
p,p'-DDT	UJ	O	L	4.1	µg/kg	4.1	EPA8080
Dieldrin	UJ	O	L	4.1	µg/kg	4.1	EPA8080
Endosulfan I	UJ	O	L	2.0	µg/kg	2.0	EPA8080
Endosulfan II	UJ	O	L	4.1	µg/kg	4.1	EPA8080
Endosulfan sulfate	UJ	O	L	4.1	µg/kg	4.1	EPA8080
Endrin	UJ	O	L	4.1	µg/kg	4.1	EPA8080
Endrin ketone	UJ	O	L	4.1	µg/kg	4.1	EPA8080
Heptachlor	UJ	O	L	2.0	µg/kg	2.0	EPA8080
Heptachlor epoxide	UJ	O	L	2.0	µg/kg	2.0	EPA8080
Heptachlorodibenzo-p-dioxin isomers	J	T		0.60	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	UJ	O	L	2.0	µg/kg	2.0	EPA8080
Methoxychlor	UJ	O	L	20	µg/kg	20	EPA8080
Octachlorodibenzo-p-dioxin	L			38	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	UJ	O	L	41	µg/kg	41	EPA8080
PCB 1221	UJ	O	L	82	µg/kg	82	EPA8080
PCB 1232	UJ	O	L	41	µg/kg	41	EPA8080
PCB 1242	UJ	O	L	41	µg/kg	41	EPA8080
PCB 1248	UJ	O	L	41	µg/kg	41	EPA8080
PCB 1254	UJ	O	L	41	µg/kg	41	EPA8080
PCB 1260	UJ	O	L	41	µg/kg	41	EPA8080

SAMPLE NAME: D431 1207 (Continued) Sample ID: 100378

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	UJ	O	L	200	µg/kg	200	EPA8080

SAMPLE NAME: D431 1301 Sample ID: 100379

Location (SRS Coordinates): 18446.1E 66631.93N
Ground Elevation Above MSL: 131.4 ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 3/4 USC Soil Classification: SP Percent Solids: 91.20

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				10	meq/100g	2.0	EPA9080
pH	J	Q		5.0	pH	0.010	EPA9045
Specific conductance				23	µS/cm	1.0	EPA9050
Total organic carbon				4,100	mg/kg	440	EPA415.1
Total Metals							
Arsenic				1.2	mg/kg	1.0	EPA7060
Barium	U			21	mg/kg	21	EPA6010
Cadmium	U			0.53	mg/kg	0.53	EPA6010
Chromium				3.1	mg/kg	1.1	EPA6010
Copper	U			2.7	mg/kg	2.7	EPA6010
Lead				2.2	mg/kg	0.31	EPA7421
Manganese				83	mg/kg	1.6	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			4.3	mg/kg	4.3	EPA6010
Selenium	U			0.52	mg/kg	0.52	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			350	µg/kg	350	EPA8270
Acenaphthylene	U			350	µg/kg	350	EPA8270
Anthracene	U			350	µg/kg	350	EPA8270
Benzo(a)anthracene	U			350	µg/kg	350	EPA8270
Benzo(b)fluoranthene	U			350	µg/kg	350	EPA8270
Benzo(k)fluoranthene	U			350	µg/kg	350	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			350	µg/kg	350	EPA8270

SAMPLE NAME: D431-1301 (Continued) Sample ID: 100379

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Benzo(a)pyrene	U			350	µg/kg	350	EPA8270
Benzyl alcohol	U			350	µg/kg	350	EPA8270
Bis(2-chloroethoxy) methane	U			350	µg/kg	350	EPA8270
Bis(2-chloroethyl) ether	U			350	µg/kg	350	EPA8270
Bis(2-chloroisopropyl) ether	U			350	µg/kg	350	EPA8270
Bis(2-ethylhexyl) phthalate	J			35	µg/kg	350	EPA8270
4-Bromophenyl phenyl ether	U			350	µg/kg	350	EPA8270
Butylbenzyl phthalate	U			350	µg/kg	350	EPA8270
4-Chloroaniline	U			350	µg/kg	350	EPA8270
4-Chloro-m-cresol	U			350	µg/kg	350	EPA8270
2-Chloronaphthalene	U			350	µg/kg	350	EPA8270
2-Chlorophenol	U			350	µg/kg	350	EPA8270
4-Chlorophenyl phenyl ether	U			350	µg/kg	350	EPA8270
Chrysene	U			350	µg/kg	350	EPA8270
o-Cresol (2-Methylphenol)	U			350	µg/kg	350	EPA8270
p-Cresol (4-Methylphenol)	U			350	µg/kg	350	EPA8270
Dibenz(a,h)anthracene	U			350	µg/kg	350	EPA8270
Dibenzofuran	U			350	µg/kg	350	EPA8270
Di-n-butyl phthalate	U			350	µg/kg	350	EPA8270
1,2-Dichlorobenzene	U			350	µg/kg	350	EPA8270
1,3-Dichlorobenzene	U			350	µg/kg	350	EPA8270
1,4-Dichlorobenzene	U			350	µg/kg	350	EPA8270
3,3'-Dichlorobenzidine	U			700	µg/kg	700	EPA8270
2,4-Dichlorophenol	U			350	µg/kg	350	EPA8270
Diethyl phthalate	U			350	µg/kg	350	EPA8270
2,4-Dimethyl phenol	U			350	µg/kg	350	EPA8270
Dimethyl phthalate	U			350	µg/kg	350	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			350	µg/kg	350	EPA8270
2,6-Dinitrotoluene	U			350	µg/kg	350	EPA8270
Di-n-octyl phthalate	U			350	µg/kg	350	EPA8270
Fluoranthene	U			350	µg/kg	350	EPA8270
Fluorene	U			350	µg/kg	350	EPA8270
Hexachlorobenzene	U			350	µg/kg	350	EPA8270
Hexachlorobutadiene	U			350	µg/kg	350	EPA8270
Hexachlorocyclopentadiene	U			350	µg/kg	350	EPA8270
Hexachloroethane	U			350	µg/kg	350	EPA8270
Sub. hexanedioic acid	J	N		4,000	µg/kg		EPA8270
Indeno(1,2,3-c,d)pyrene	U			350	µg/kg	350	EPA8270
Isophorone	U			350	µg/kg	350	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			350	µg/kg	350	EPA8270
Naphthalene	U			350	µg/kg	350	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			350	µg/kg	350	EPA8270
2-Nitrophenol	U			350	µg/kg	350	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			350	µg/kg	350	EPA8270

SAMPLE NAME: D431 1301 (Continued) Sample ID: 100379

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
N-Nitrosodipropylamine	UJ	C		350	µg/kg	350	EPA8270
Pentachlorophenol	U			1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			350	µg/kg	350	EPA8270
Phenol	U			350	µg/kg	350	EPA8270
Pyrene	U			350	µg/kg	350	EPA8270
1,2,4-Trichlorobenzene	UJ	C		350	µg/kg	350	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			350	µg/kg	350	EPA8270
Unknown	J	NV		400	µg/kg		EPA8270
Unknown	J	NV		1,000	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown ketone	J	NV		60,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U			11	µg/kg	11	EPA8240
Benzene	U			5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
2-Chloroethyl vinyl ether	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		9.0	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	U			5.5	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	U			5.5	µg/kg	5.5	EPA8240
Toluene	U			5.5	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240

SAMPLE NAME: D431 1301 (Continued) Sample ID: 100379

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.5	µg/kg	5.5	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	UJ	O	L	1.8	µg/kg	1.8	EPA8080
alpha-Benzene hexachloride	UJ	O	L	1.8	µg/kg	1.8	EPA8080
beta-Benzene hexachloride	UJ	O	L	1.8	µg/kg	1.8	EPA8080
delta-Benzene hexachloride	UJ	O	L	1.8	µg/kg	1.8	EPA8080
alpha-Chlordane	UJ	O	L	1.8	µg/kg	1.8	EPA8080
gamma-Chlordane	UJ	O	L	1.8	µg/kg	1.8	EPA8080
p,p'-DDD	UJ	O	L	3.7	µg/kg	3.7	EPA8080
p,p'-DDE	UJ	O	L	3.7	µg/kg	3.7	EPA8080
p,p'-DDT	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Dieldrin	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Endosulfan I	UJ	O	L	1.8	µg/kg	1.8	EPA8080
Endosulfan II	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Endosulfan sulfate	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Endrin	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Endrin ketone	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Heptachlor	UJ	O	L	1.8	µg/kg	1.8	EPA8080
Heptachlor epoxide	UJ	O	L	1.8	µg/kg	1.8	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.40	ng/g	0.40	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Lindane	UJ	O	L	1.8	µg/kg	1.8	EPA8080
Methoxychlor	UJ	O	L	18	µg/kg	18	EPA8080
Octachlorodibenzo-p-dioxin	J			0.70	ng/g	0.50	EPA8280
Octachlorodibenzo-p-furan	U			0.40	ng/g	0.40	EPA8280
PCB 1016	UJ	O	L	37	µg/kg	37	EPA8080
PCB 1221	UJ	O	L	73	µg/kg	73	EPA8080
PCB 1232	UJ	O	L	37	µg/kg	37	EPA8080
PCB 1242	UJ	O	L	37	µg/kg	37	EPA8080
PCB 1248	UJ	O	L	37	µg/kg	37	EPA8080
PCB 1254	UJ	O	L	37	µg/kg	37	EPA8080
PCB 1260	UJ	O	L	37	µg/kg	37	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.70	ng/g	0.70	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.40	ng/g	0.40	EPA8280
2,3,7,8-TCDD	U			0.40	ng/g	0.40	EPA8280
2,3,7,8-TCDF	U			0.50	ng/g	0.50	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.50	ng/g	0.50	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.50	ng/g	0.50	EPA8280
Toxaphene	UJ	O	L	180	µg/kg	180	EPA8080

SAMPLE NAME: D431 1301 (Continued) Sample ID: 100379

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Radionuclide Indicators and Radionuclides							
Gross alpha				11±11	pCi/g	5.8	EPA900.0
Nonvolatile beta				25±18	pCi/g	8.0	EPA900.0
Radium, total alpha-emitting	U	V		0.90±0.69	pCi/g	0.14	EPA903.0
Tritium	U			1.4	pCi/g	1.4	EPA906.0

SAMPLE NAME: D431 1302 Sample ID: 100381

Location (SRS Coordinates): 18446.1E 66631.93N
Ground Elevation Above MSL: 131.4 ft
Depth of Core Interval: 0.50 to 2.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 3/4 USC Soil Classification: SW Percent Solids: 88.20

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			1.0	mg/kg	1.0	EPA7060
Barium	U			23	mg/kg	23	EPA6010
Cadmium	U			0.57	mg/kg	0.57	EPA6010
Chromium				14	mg/kg	1.1	EPA6010
Copper	U			2.8	mg/kg	2.8	EPA6010
Lead				4.1	mg/kg	0.31	EPA7421
Manganese				23	mg/kg	1.7	EPA6010
Mercury				0.12	mg/kg	0.11	EPA7470
Nickel	U			4.5	mg/kg	4.5	EPA6010
Selenium	U			0.52	mg/kg	0.52	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			370	µg/kg	370	EPA8270
Acenaphthylene	U			370	µg/kg	370	EPA8270
Anthracene	U			370	µg/kg	370	EPA8270
Benzo(a)anthracene	U			370	µg/kg	370	EPA8270
Benzo(b)fluoranthene	U			370	µg/kg	370	EPA8270
Benzo(k)fluoranthene	U			370	µg/kg	370	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			370	µg/kg	370	EPA8270
Benzo(a)pyrene	U			370	µg/kg	370	EPA8270
Benzyl alcohol	U			370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	U			370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	J			48	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Butylbenzyl phthalate	U			370	µg/kg	370	EPA8270
4-Chloroaniline	U			370	µg/kg	370	EPA8270
4-Chloro-m-cresol	U			370	µg/kg	370	EPA8270

SAMPLE NAME: D431 1302 (Continued) Sample ID: 100381

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2-Chloronaphthalene	U			370	µg/kg	370	EPA8270
2-Chlorophenol	U			370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Chrysene	U			370	µg/kg	370	EPA8270
o-Cresol (2-Methylphenol)	U			370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	U			370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	U			370	µg/kg	370	EPA8270
Dibenzofuran	U			370	µg/kg	370	EPA8270
Di-n-butyl phthalate	U			370	µg/kg	370	EPA8270
1,2-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,4-Dichlorobenzene	U			370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	U			740	µg/kg	740	EPA8270
2,4-Dichlorophenol	U			370	µg/kg	370	EPA8270
Diethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	U			370	µg/kg	370	EPA8270
Dimethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	U			370	µg/kg	370	EPA8270
Di-n-octyl phthalate	U			370	µg/kg	370	EPA8270
Fluoranthene	U			370	µg/kg	370	EPA8270
Fluorene	U			370	µg/kg	370	EPA8270
Hexachlorobenzene	U			370	µg/kg	370	EPA8270
Hexachlorobutadiene	U			370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	U			370	µg/kg	370	EPA8270
Hexachloroethane	U			370	µg/kg	370	EPA8270
Sub. hexanedioic acid	J	N		1,000	µg/kg		EPA8270
Indeno(1,2,3-c,d)pyrene	U			370	µg/kg	370	EPA8270
Isophorone	U			370	µg/kg	370	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			370	µg/kg	370	EPA8270
Naphthalene	U			370	µg/kg	370	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			370	µg/kg	370	EPA8270
2-Nitrophenol	U			370	µg/kg	370	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			370	µg/kg	370	EPA8270
N-Nitrosodipropylamine	UJ	C		370	µg/kg	370	EPA8270
Pentachlorophenol	U			1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			370	µg/kg	370	EPA8270
Phenol	U			370	µg/kg	370	EPA8270
Pyrene	U			370	µg/kg	370	EPA8270
1,2,4-Trichlorobenzene	UJ	C		370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			370	µg/kg	370	EPA8270
Unknown	J	NV		4,000	µg/kg		EPA8270
Unknown	J	NV		1,000	µg/kg		EPA8270

SAMPLE NAME: D431302 (Continued) Sample ID: 100381

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Unknown ketone	J	NV		50,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U			12	µg/kg	12	EPA8240
Benzene	U			6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U			6.0	µg/kg	6.0	EPA8240
Bromoform	U			6.0	µg/kg	6.0	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			6.0	µg/kg	6.0	EPA8240
Carbon tetrachloride	U			6.0	µg/kg	6.0	EPA8240
Chlorobenzene	U			6.0	µg/kg	6.0	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
2-Chloroethyl vinyl ether	U			12	µg/kg	12	EPA8240
Chloroform	U			6.0	µg/kg	6.0	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		10	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U			6.0	µg/kg	6.0	EPA8240
cis-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
Ethylbenzene	U			6.0	µg/kg	6.0	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U			6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U			6.0	µg/kg	6.0	EPA8240
Toluene	U			6.0	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
Trichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			6.0	µg/kg	6.0	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.9	µg/kg	1.9	EPA8080
alpha-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
beta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
delta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
alpha-Chlordane	U			1.9	µg/kg	1.9	EPA8080

SAMPLE NAME: D431 1302 (Continued) Sample ID: 100381

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
gamma-Chlordane	U			1.9	µg/kg	1.9	EPA8080
p,p'-DDD	U			3.8	µg/kg	3.8	EPA8080
p,p'-DDE	U			3.8	µg/kg	3.8	EPA8080
p,p'-DDT	U			3.8	µg/kg	3.8	EPA8080
Dieldrin	U			3.8	µg/kg	3.8	EPA8080
Endosulfan I	U			1.9	µg/kg	1.9	EPA8080
Endosulfan II	U			3.8	µg/kg	3.8	EPA8080
Endosulfan sulfate	U			3.8	µg/kg	3.8	EPA8080
Endrin	U			3.8	µg/kg	3.8	EPA8080
Endrin ketone	U			3.8	µg/kg	3.8	EPA8080
Heptachlor	U			1.9	µg/kg	1.9	EPA8080
Heptachlor epoxide	U			1.9	µg/kg	1.9	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.40	ng/g	0.40	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Lindane	U			1.9	µg/kg	1.9	EPA8080
Methoxychlor	U			19	µg/kg	19	EPA8080
Octachlorodibenzo-p-dioxin				6.5	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	U			38	µg/kg	38	EPA8080
PCB 1221	U			76	µg/kg	76	EPA8080
PCB 1232	U			38	µg/kg	38	EPA8080
PCB 1242	U			38	µg/kg	38	EPA8080
PCB 1248	U			38	µg/kg	38	EPA8080
PCB 1254	U			38	µg/kg	38	EPA8080
PCB 1260	U			38	µg/kg	38	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.50	ng/g	0.50	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.30	ng/g	0.30	EPA8280
2,3,7,8-TCDD	U			0.50	ng/g	0.50	EPA8280
2,3,7,8-TCDF	U			0.30	ng/g	0.30	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.50	ng/g	0.50	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.50	ng/g	0.50	EPA8280
Toxaphene	U			190	µg/kg	190	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			11	pCi/g	11	EPA900.0
Gross alpha	U			11	pCi/g	11	EPA900.0
Nonvolatile beta				31±24	pCi/g	11	EPA900.0
Nonvolatile beta				28±24	pCi/g	11	EPA900.0
Radium, total alpha-emitting	U	V		1.8±1.1	pCi/g	0.20	EPA903.0
Radium, total alpha-emitting	U	V		1.6±0.98	pCi/g	0.18	EPA903.0
Tritium	U			1.7	pCi/g	1.7	EPA906.0
Tritium	U			1.3	pCi/g	1.3	EPA906.0

SAMPLE NAME: D431 1303 Sample ID: 100382

Location (SRS Coordinates): 18446.1E 66631.93N
Ground Elevation Above MSL: 131.4 ft
Depth of Core Interval: 2.00 to 4.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 3/4 USC Soil Classification: SW Percent Solids: 91.40

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				1.8	mg/kg	1.0	EPA7060
Barium	U			21	mg/kg	21	EPA6010
Cadmium	U			0.53	mg/kg	0.53	EPA6010
Chromium				32	mg/kg	1.1	EPA6010
Copper				10	mg/kg	2.6	EPA6010
Lead				28	mg/kg	6.2	EPA7421
Manganese				40	mg/kg	1.6	EPA6010
Mercury				0.27	mg/kg	0.11	EPA7470
Nickel				6.9	mg/kg	4.2	EPA6010
Selenium				0.69	mg/kg	0.51	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
Volatile Organic Compounds							
Acetone	U	V		11	µg/kg	11	EPA8240
Benzene	U			5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
2-Chloroethyl vinyl ether	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		8.3	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	U			5.5	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	U			5.5	µg/kg	5.5	EPA8240
Toluene	J			1.7	µg/kg	5.5	EPA8240

SAMPLE NAME: D431 1303 (Continued) Sample ID: 100382

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1,1-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.5	µg/kg	5.5	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			7.7	pCi/g	7.7	EPA900.0
Nonvolatile beta				23±17	pCi/g	7.3	EPA900.0
Radium, total alpha-emitting	U	V		0.80±0.72	pCi/g	0.19	EPA903.0
Tritium	U			1.4	pCi/g	1.4	EPA906.0

SAMPLE NAME: D431 1304 Sample ID: 100383

Location (SRS Coordinates): 18446.1E 66631.93N
Ground Elevation Above MSL: 131.4 ft
Depth of Core Interval: 4.00 to 6.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 4/6 USC Soil Classification: SW Percent Solids: 89.80

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				13	mg/kg	5.5	EPA7060
Barium				41	mg/kg	22	EPA6010
Cadmium	U			0.56	mg/kg	0.56	EPA6010
Chromium				28	mg/kg	1.1	EPA6010
Copper				22	mg/kg	2.8	EPA6010
Lead				16	mg/kg	3.3	EPA7421
Manganese				160	mg/kg	1.7	EPA6010
Mercury				0.96	mg/kg	0.11	EPA7470
Nickel				9.8	mg/kg	4.4	EPA6010
Selenium				110	mg/kg	22	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	J	O	L	51,000	µg/kg	3,700	EPA8270
Acenaphthylene	J	O	L	6,600	µg/kg	3,700	EPA8270
Anthracene	LJ	O	L	110,000	µg/kg	3,700	EPA8270
Anthracene	J	O	L	140,000	µg/kg	15,000	EPA8270
Benzo(a)anthracene	LJ	O	L	240,000	µg/kg	3,700	EPA8270
Benzo(a)anthracene	LJ	O	L	260,000	µg/kg	15,000	EPA8270
Benzo(a)anthracene	J	O	L	290,000	µg/kg	37,000	EPA8270
Benzo(b)fluoranthene	LJ	O	L	250,000	µg/kg	3,700	EPA8270
Benzo(b)fluoranthene	LJ	O	L	280,000	µg/kg	15,000	EPA8270
Benzo(b)fluoranthene	J	O	L	290,000	µg/kg	37,000	EPA8270

SAMPLE NAME: D431 1304 (Continued) Sample ID: 100383

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Benzo(k)fluoranthene	LJ	O	L	66,000	µg/kg	3,700	EPA8270
Benzo(k)fluoranthene	J	O	L	83,000	µg/kg	15,000	EPA8270
Benzoic acid	UJ	O	L	19,000	µg/kg	19,000	EPA8270
Benzo(g,h,i)perylene	LJ	O	L	67,000	µg/kg	3,700	EPA8270
Benzo(g,h,i)perylene	J	O	L	98,000	µg/kg	15,000	EPA8270
Benzo(a)pyrene	LJ	O	L	170,000	µg/kg	3,700	EPA8270
Benzo(a)pyrene	J	O	L	200,000	µg/kg	15,000	EPA8270
Benzyl alcohol	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Bis(2-chloroethoxy) methane	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Bis(2-chloroethyl) ether	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Bis(2-chloroisopropyl) ether	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	O	L	3,700	µg/kg	3,700	EPA8270
4-Bromophenyl phenyl ether	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Butylbenzyl phthalate	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Benzonapthothiophene	J	N		200,000	µg/kg		EPA8270
Benzofluorene isomer	J	N		500,000	µg/kg		EPA8270
Benzofluorene isomer	J	N		300,000	µg/kg		EPA8270
Benzonapthofuran isomer	J	N		200,000	µg/kg		EPA8270
Benzo-pyrene isomer	J	N		100,000	µg/kg		EPA8270
Benzo-pyrene isomer	J	N		300,000	µg/kg		EPA8270
Carbazole	J	N		50,000	µg/kg		EPA8270
4-Chloroaniline	UJ	O	L	3,700	µg/kg	3,700	EPA8270
4-Chloro-m-cresol	UJ	O	L	3,700	µg/kg	3,700	EPA8270
2-Chloronaphthalene	UJ	O	L	3,700	µg/kg	3,700	EPA8270
2-Chlorophenol	UJ	O	L	3,700	µg/kg	3,700	EPA8270
4-Chlorophenyl phenyl ether	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Chrysene	LJ	O	L	130,000	µg/kg	3,700	EPA8270
Chrysene	J	O	L	190,000	µg/kg	15,000	EPA8270
o-Cresol (2-Methylphenol)	UJ	O	L	3,700	µg/kg	3,700	EPA8270
p-Cresol (4-Methylphenol)	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Dibenz(a,h)anthracene	J	O	L	18,000	µg/kg	3,700	EPA8270
Dibenzofuran	J	O	L	42,000	µg/kg	3,700	EPA8270
Di-n-butyl phthalate	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Dibenzothiophene	J	N		30,000	µg/kg		EPA8270
1,2-Dichlorobenzene	UJ	O	L	3,700	µg/kg	3,700	EPA8270
1,3-Dichlorobenzene	UJ	O	L	3,700	µg/kg	3,700	EPA8270
1,4-Dichlorobenzene	UJ	O	L	3,700	µg/kg	3,700	EPA8270
3,3'-Dichlorobenzidine	UJ	O	L	7,400	µg/kg	7,400	EPA8270
2,4-Dichlorophenol	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Diethyl phthalate	UJ	O	L	3,700	µg/kg	3,700	EPA8270
2,4-Dimethyl phenol	J	O	L	700	µg/kg	3,700	EPA8270
Dimethyl phthalate	UJ	O	L	3,700	µg/kg	3,700	EPA8270
2,4-Dinitrophenol	UJ	O	L	19,000	µg/kg	19,000	EPA8270
2,4-Dinitrotoluene	UJ	O	L	3,700	µg/kg	3,700	EPA8270
2,6-Dinitrotoluene	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Di-n-octyl phthalate	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Fluoranthene	LJ	O	L	310,000	µg/kg	3,700	EPA8270
Fluoranthene	LJ	O	L	450,000	µg/kg	15,000	EPA8270
Fluoranthene	J	O	L	570,000	µg/kg	37,000	EPA8270
Fluorene	LJ	O	L	64,000	µg/kg	3,700	EPA8270

SAMPLE NAME: D431 1304 (Continued) Sample ID: 100383

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Fluorene	J	O	L	91,000	µg/kg	15,000	EPA8270
Hexachlorobenzene	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Hexachlorobutadiene	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Hexachlorocyclopentadiene	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Hexachloroethane	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Indeno(1,2,3-c,d)pyrene	LJ	O	L	79,000	µg/kg	3,700	EPA8270
Indeno(1,2,3-c,d)pyrene	J	O	L	110,000	µg/kg	15,000	EPA8270
Isophorone	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Methylanthracene isomer	J	N		30,000	µg/kg		EPA8270
Methyl-benz-anthracene isomer	J	N		200,000	µg/kg		EPA8270
Methylphenanthrene isomer	J	N		30,000	µg/kg		EPA8270
Methylpyrene isomer	J	N		300,000	µg/kg		EPA8270
2-Methyl-4,6-dinitrophenol	UJ	O	L	19,000	µg/kg	19,000	EPA8270
2-Methylnaphthalene	J	O	L	20,000	µg/kg	3,700	EPA8270
Naphthalene	J	O	L	52,000	µg/kg	3,700	EPA8270
o-Nitroaniline	UJ	O	L	19,000	µg/kg	19,000	EPA8270
m-Nitroaniline	UJ	O	L	19,000	µg/kg	19,000	EPA8270
p-Nitroaniline	UJ	O	L	19,000	µg/kg	19,000	EPA8270
Nitrobenzene	UJ	O	L	3,700	µg/kg	3,700	EPA8270
2-Nitrophenol	UJ	O	L	3,700	µg/kg	3,700	EPA8270
4-Nitrophenol	UJ	O	L	19,000	µg/kg	19,000	EPA8270
N-Nitrosodiphenylamine	UJ	O	L	3,700	µg/kg	3,700	EPA8270
N-Nitrosodipropylamine	UJ	CO	L	3,700	µg/kg	3,700	EPA8270
Pentachlorophenol	UJ	O	L	19,000	µg/kg	19,000	EPA8270
Phenanthrene	LJ	O	L	310,000	µg/kg	3,700	EPA8270
Phenanthrene	LJ	O	L	400,000	µg/kg	15,000	EPA8270
Phenanthrene	J	O	L	510,000	µg/kg	37,000	EPA8270
Phenol	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Phenyl-napthalene isomer	J	N		20,000	µg/kg		EPA8270
Pyrene	LJ	O	L	310,000	µg/kg	3,700	EPA8270
Pyrene	LJ	O	L	350,000	µg/kg	15,000	EPA8270
Pyrene	J	O	L	420,000	µg/kg	37,000	EPA8270
1,2,4-Trichlorobenzene	UJ	CO	L	3,700	µg/kg	3,700	EPA8270
2,4,5-Trichlorophenol	UJ	O	L	19,000	µg/kg	19,000	EPA8270
2,4,6-Trichlorophenol	UJ	O	L	3,700	µg/kg	3,700	EPA8270
Unknown arom. hydrocarbon	J	N		70,000	µg/kg		EPA8270
Unknown arom. hydrocarbon	J	N		200,000	µg/kg		EPA8270
Unknown	J	N		200,000	µg/kg		EPA8270
Unknown	J	N		200,000	µg/kg		EPA8270
Unknown ketone	J	NV		90,000	µg/kg		EPA8270
Unknown polyarom. hydrocarbon	J	N		200,000	µg/kg		EPA8270
Unknown polyarom. hydrocarbon	J	N		200,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		36	µg/kg	11	EPA8240
Aromatic	J	N		100	µg/kg		EPA8240
Aromatic	J	N		70	µg/kg		EPA8240
Benzene	J			1.9	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240

SAMPLE NAME: D431 1304 (Continued) Sample ID: 100383

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
C3-benzene	J	N		30	µg/kg		EPA8240
C3-benzene	J	N		40	µg/kg		EPA8240
Carbon disulfide	J			3.8	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
2-Chloroethyl vinyl ether	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	J			2.4	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		33	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene				14	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene				13	µg/kg	5.5	EPA8240
Toluene				27	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	J			2.0	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
Trichloroethylene	J			1.1	µg/kg	5.5	EPA8240
Unknown	J	N		40	µg/kg		EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes				57	µg/kg	5.5	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			19	µg/kg	19	EPA8080
alpha-Benzene hexachloride	U			19	µg/kg	19	EPA8080
beta-Benzene hexachloride	U			19	µg/kg	19	EPA8080
delta-Benzene hexachloride	U			19	µg/kg	19	EPA8080
alpha-Chlordane	U			19	µg/kg	19	EPA8080
gamma-Chlordane	U			19	µg/kg	19	EPA8080
p,p'-DDD	U			37	µg/kg	37	EPA8080
p,p'-DDE	U			37	µg/kg	37	EPA8080
p,p'-DDT	U			37	µg/kg	37	EPA8080
Dieldrin	U			37	µg/kg	37	EPA8080
Endosulfan I	U			19	µg/kg	19	EPA8080
Endosulfan II	U			37	µg/kg	37	EPA8080

SAMPLE NAME: D431 1304 (Continued) Sample ID: 100383

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Endosulfan sulfate	U			37	µg/kg	37	EPA8080
Endrin	U			37	µg/kg	37	EPA8080
Endrin ketone	U			37	µg/kg	37	EPA8080
Heptachlor	U			19	µg/kg	19	EPA8080
Heptachlor epoxide	U			19	µg/kg	19	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			1.5	ng/g	1.5	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.70	ng/g	0.70	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			1.3	ng/g	1.3	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.60	ng/g	0.60	EPA8280
Lindane	U			19	µg/kg	19	EPA8080
Methoxychlor	U			190	µg/kg	190	EPA8080
Octachlorodibenzo-p-dioxin	J	T		6.1	ng/g	1.7	EPA8280
Octachlorodibenzo-p-furan	U			2.2	ng/g	2.2	EPA8280
PCB 1016	U			370	µg/kg	370	EPA8080
PCB 1221	U			740	µg/kg	740	EPA8080
PCB 1232	U			370	µg/kg	370	EPA8080
PCB 1242	U			370	µg/kg	370	EPA8080
PCB 1248	U			370	µg/kg	370	EPA8080
PCB 1254	U			370	µg/kg	370	EPA8080
PCB 1260	U			370	µg/kg	370	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.70	ng/g	0.70	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.30	ng/g	0.30	EPA8280
2,3,7,8-TCDD	U			0.30	ng/g	0.30	EPA8280
2,3,7,8-TCDF	U			0.30	ng/g	0.30	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.50	ng/g	0.50	EPA8280
Toxaphene	U			1,900	µg/kg	1,900	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			7.5	pCi/g	7.5	EPA900.0
Nonvolatile beta				22±16	pCi/g	7.2	EPA900.0
Radium, total alpha-emitting	U	V		1.5±1.0	pCi/g	0.20	EPA903.0
Tritium	U			1.1	pCi/g	1.1	EPA906.0

SAMPLE NAME: D431 1305 Sample ID: 100385

Location (SRS Coordinates): 18446.1E 66631.93N
Ground Elevation Above MSL: 131.4 ft
Depth of Core Interval:-6.00 to 8.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture:
Sample Color: USC Soil Classification: Percent Solids: 88.60

Total Metals				
Arsenic	24	mg/kg	11	EPA7060
Barium	130	mg/kg	22	EPA6010
Cadmium	1.1	mg/kg	0.56	EPA6010
Chromium	31	mg/kg	1.1	EPA6010

SAMPLE NAME: D431 1305 (Continued) Sample ID: 100385

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Copper				73	mg/kg	2.8	EPA6010
Lead				64	mg/kg	6.6	EPA7421
Manganese				130	mg/kg	1.7	EPA6010
Mercury				1.8	mg/kg	0.11	EPA7470
Nickel				15	mg/kg	4.4	EPA6010
Selenium				68	mg/kg	22	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	J	O	L	28,000	µg/kg	3,800	EPA8270
Acenaphthylene	J	O	L	2,600	µg/kg	3,800	EPA8270
Anthracene	J	O	L	53,000	µg/kg	3,800	EPA8270
Benzo(a)anthracene	LJ	O	L	100,000	µg/kg	3,800	EPA8270
Benzo(a)anthracene	J	O	L	120,000	µg/kg	15,000	EPA8270
Benzo(b)fluoranthene	LJ	O	L	110,000	µg/kg	3,800	EPA8270
Benzo(b)fluoranthene	J	O	L	120,000	µg/kg	15,000	EPA8270
Benzo(k)fluoranthene	J	O	L	27,000	µg/kg	3,800	EPA8270
Benzoic acid	UJ	O	L	19,000	µg/kg	19,000	EPA8270
Benzo(g,h,i)perylene	J	O	L	33,000	µg/kg	3,800	EPA8270
Benzo(a)pyrene	LJ	O	L	80,000	µg/kg	3,800	EPA8270
Benzo(a)pyrene	J	O	L	91,000	µg/kg	15,000	EPA8270
Benzyl alcohol	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Bis(2-chloroethoxy) methane	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Bis(2-chloroethyl) ether	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Bis(2-chloroisopropyl) ether	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Bis(2-ethylhexyl) phthalate	J	O	L	1,300	µg/kg	3,800	EPA8270
4-Bromophenyl phenyl ether	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Butylbenzyl phthalate	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Benzo-anthracene isomer	J	N		30,000	µg/kg		EPA8270
Benz-anthracenone isomer	J	N		40,000	µg/kg		EPA8270
Benzonapthothiophene	J	N		50,000	µg/kg		EPA8270
Benzofluorene isomer	J	N		100,000	µg/kg		EPA8270
Benzofluorene isomer	J	N		70,000	µg/kg		EPA8270
Benzonapthofuran isomer	J	N		30,000	µg/kg		EPA8270
Benzo-pyrene isomer	J	N		60,000	µg/kg		EPA8270
Benzophenanthrene isomer	J	N		40,000	µg/kg		EPA8270
Carbazole	J	N		20,000	µg/kg		EPA8270
4-Chloroaniline	UJ	O	L	3,800	µg/kg	3,800	EPA8270
4-Chloro-m-cresol	UJ	O	L	3,800	µg/kg	3,800	EPA8270
2-Chloronaphthalene	UJ	O	L	3,800	µg/kg	3,800	EPA8270
2-Chlorophenol	UJ	O	L	3,800	µg/kg	3,800	EPA8270
4-Chlorophenyl phenyl ether	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Chrysene	LJ	O	L	65,000	µg/kg	3,800	EPA8270
Chrysene	J	O	L	94,000	µg/kg	15,000	EPA8270
o-Cresol (2-Methylphenol)	UJ	O	L	3,800	µg/kg	3,800	EPA8270
p-Cresol (4-Methylphenol)	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Dibenz(a,h)anthracene	J	O	L	9,200	µg/kg	3,800	EPA8270
Dibenzofuran	J	O	L	20,000	µg/kg	3,800	EPA8270
Di-n-butyl phthalate	UJ	O	L	3,800	µg/kg	3,800	EPA8270

SAMPLE NAME: D431 1305 (Continued) Sample ID: 100385

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
1,2-Dichlorobenzene	UJ	O	L	3,800	µg/kg	3,800	EPA8270
1,3-Dichlorobenzene	UJ	O	L	3,800	µg/kg	3,800	EPA8270
1,4-Dichlorobenzene	UJ	O	L	3,800	µg/kg	3,800	EPA8270
3,3'-Dichlorobenzidine	UJ	O	L	7,500	µg/kg	7,500	EPA8270
2,4-Dichlorophenol	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Diethyl phthalate	UJ	O	L	3,800	µg/kg	3,800	EPA8270
2,4-Dimethyl phenol	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Dimethyl phthalate	UJ	O	L	3,800	µg/kg	3,800	EPA8270
2,4-Dinitrophenol	UJ	O	L	19,000	µg/kg	19,000	EPA8270
2,4-Dinitrotoluene	UJ	O	L	3,800	µg/kg	3,800	EPA8270
2,6-Dinitrotoluene	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Di-n-octyl phthalate	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Fluoranthene	LJ	O	L	160,000	µg/kg	3,800	EPA8270
Fluoranthene	J	O	L	230,000	µg/kg	15,000	EPA8270
Fluorene	J	O	L	33,000	µg/kg	3,800	EPA8270
Hexachlorobenzene	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Hexachlorobutadiene	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Hexachlorocyclopentadiene	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Hexachloroethane	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Indeno(1,2,3-c,d)pyrene	J	O	L	40,000	µg/kg	3,800	EPA8270
Isophorone	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Methylanthracene isomer	J	N		20,000	µg/kg		EPA8270
Methylphenanthrene isomer	J	N		10,000	µg/kg		EPA8270
2-Methyl-4,6-dinitrophenol	UJ	O	L	19,000	µg/kg	19,000	EPA8270
2-Methylnaphthalene	J	O	L	9,300	µg/kg	3,800	EPA8270
Naphthalene	J	O	L	28,000	µg/kg	3,800	EPA8270
o-Nitroaniline	UJ	O	L	19,000	µg/kg	19,000	EPA8270
m-Nitroaniline	UJ	O	L	19,000	µg/kg	19,000	EPA8270
p-Nitroaniline	UJ	O	L	19,000	µg/kg	19,000	EPA8270
Nitrobenzene	UJ	O	L	3,800	µg/kg	3,800	EPA8270
2-Nitrophenol	UJ	O	L	3,800	µg/kg	3,800	EPA8270
4-Nitrophenol	UJ	O	L	19,000	µg/kg	19,000	EPA8270
N-Nitrosodiphenylamine	UJ	O	L	3,800	µg/kg	3,800	EPA8270
N-Nitrosodipropylamine	UJ	CO	L	3,800	µg/kg	3,800	EPA8270
Pentachlorophenol	UJ	O	L	19,000	µg/kg	19,000	EPA8270
Phenanthrene	LJ	O	L	160,000	µg/kg	3,800	EPA8270
Phenanthrene	J	O	L	210,000	µg/kg	15,000	EPA8270
Phenol	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Phenyl-napthalene isomer	J	N		20,000	µg/kg		EPA8270
Pyrene	LJ	O	L	160,000	µg/kg	3,800	EPA8270
Pyrene	J	O	L	170,000	µg/kg	15,000	EPA8270
1,2,4-Trichlorobenzene	UJ	CO	L	3,800	µg/kg	3,800	EPA8270
2,4,5-Trichlorophenol	UJ	O	L	19,000	µg/kg	19,000	EPA8270
2,4,6-Trichlorophenol	UJ	O	L	3,800	µg/kg	3,800	EPA8270
Unknown	J	N		30,000	µg/kg		EPA8270
Unknown	J	N		30,000	µg/kg		EPA8270
Unknown ketone	J	NV		90,000	µg/kg		EPA8270
Unknown polyarom. hydrocarbon	J	N		30,000	µg/kg		EPA8270
Unknown polyarom. hydrocarbon	J	N		50,000	µg/kg		EPA8270
Unknown polyarom. hydrocarbon	J	N		60,000	µg/kg		EPA8270

SAMPLE NAME: D431 1305 (Continued) Sample ID: 100385

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Dimethylpyrene isomer	J	N		30,000	µg/kg		EPA8270
Di-n-benzothiophene	J	N		20,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	J	VO	L	160	µg/kg	11	EPA8240
Acetone	UJ	VO	L	100	µg/kg	11	EPA8240
Benzene	J	O	L	1.7	µg/kg	5.5	EPA8240
Benzene	J	O	L	5.2	µg/kg	5.5	EPA8240
Bromodichloromethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Bromoform	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Bromoform	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	UJ	O	L	11	µg/kg	11	EPA8240
Bromomethane (Methyl bromide)	UJ	O	L	11	µg/kg	11	EPA8240
Carbon disulfide	J	O	L	5.1	µg/kg	5.5	EPA8240
Carbon disulfide	J	O	L	12	µg/kg	5.5	EPA8240
Carbon tetrachloride	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Chlorobenzene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Chlorobenzene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Chloroethane	UJ	O	L	11	µg/kg	11	EPA8240
Chloroethane	UJ	O	L	11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	UJ	O	L	11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	UJ	O	L	11	µg/kg	11	EPA8240
2-Chloroethyl vinyl ether	UJ	O	L	11	µg/kg	11	EPA8240
2-Chloroethyl vinyl ether	UJ	O	L	11	µg/kg	11	EPA8240
Chloroform	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Chloroform	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	UJ	O	L	11	µg/kg	11	EPA8240
Chloromethane (Methyl chloride)	UJ	O	L	11	µg/kg	11	EPA8240
Dibromochloromethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Dibromochloromethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	J	O	L	3.7	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	J	O	L	7.2	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	UJ	VO	L	21	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	UJ	VO	L	27	µg/kg	5.5	EPA8240
1,2-Dichloropropane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,2-Dichloropropane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Ethylbenzene	J	O	L	6.5	µg/kg	5.5	EPA8240

SAMPLE NAME: D431305 (Continued) Sample ID: 100385

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Ethylbenzene	J	O	L	15	µg/kg	5.5	EPA8240
2-Hexanone	UJ	O	L	11	µg/kg	11	EPA8240
2-Hexanone	UJ	O	L	11	µg/kg	11	EPA8240
Methyl ethyl ketone	J	O	L	29	µg/kg	11	EPA8240
Methyl ethyl ketone	J	O	L	27	µg/kg	11	EPA8240
Methyl isobutyl ketone	UJ	O	L	11	µg/kg	11	EPA8240
Methyl isobutyl ketone	UJ	O	L	11	µg/kg	11	EPA8240
Styrene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Styrene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	J	O	L	5.2	µg/kg	5.5	EPA8240
Tetrachloroethylene	J	O	L	13	µg/kg	5.5	EPA8240
Toluene	J	O	L	14	µg/kg	5.5	EPA8240
Toluene	J	O	L	23	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	J	O	L	1.9	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Trichloroethylene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Trichloroethylene	J	O	L	1.6	µg/kg	5.5	EPA8240
Unknown	J	N		10	µg/kg		EPA8240
Unknown	J	N		10	µg/kg		EPA8240
Unknown	J	N		40	µg/kg		EPA8240
Vinyl acetate	UJ	O	L	11	µg/kg	11	EPA8240
Vinyl acetate	UJ	O	L	11	µg/kg	11	EPA8240
Xylenes	J	O	L	20	µg/kg	5.5	EPA8240
Xylenes	J	O	L	39	µg/kg	5.5	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			19	µg/kg	19	EPA8080
alpha-Benzene hexachloride	U			19	µg/kg	19	EPA8080
beta-Benzene hexachloride	U			19	µg/kg	19	EPA8080
delta-Benzene hexachloride	U			19	µg/kg	19	EPA8080
alpha-Chlordane	U			19	µg/kg	19	EPA8080
gamma-Chlordane	U			19	µg/kg	19	EPA8080
p,p'-DDD	U			38	µg/kg	38	EPA8080
p,p'-DDE	U			38	µg/kg	38	EPA8080
p,p'-DDT	U			38	µg/kg	38	EPA8080
Dieldrin	U			38	µg/kg	38	EPA8080
Endosulfan I	U			19	µg/kg	19	EPA8080
Endosulfan II	U			38	µg/kg	38	EPA8080
Endosulfan sulfate	U			38	µg/kg	38	EPA8080
Endrin	U			38	µg/kg	38	EPA8080
Endrin ketone	U			38	µg/kg	38	EPA8080
Heptachlor	U			19	µg/kg	19	EPA8080
Heptachlor epoxide	U			19	µg/kg	19	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			1.7	ng/g	1.7	EPA8280
Heptachlorodibenzo-p-furan isomers	U			1.8	ng/g	1.8	EPA8280

SAMPLE NAME: D431 1305 (Continued) Sample ID: 100385

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Hexachlorodibenzo-p-dioxin isomers	U			1.8	ng/g	1.8	EPA8280
Hexachlorodibenzo-p-furan isomers	U			1.6	ng/g	1.6	EPA8280
Lindane	U			19	µg/kg	19	EPA8080
Methoxychlor	U			190	µg/kg	190	EPA8080
Octachlorodibenzo-p-dioxin				5.4	ng/g	2.2	EPA8280
Octachlorodibenzo-p-furan	U			2.7	ng/g	2.7	EPA8280
PCB 1016	U			380	µg/kg	380	EPA8080
PCB 1221	U			750	µg/kg	750	EPA8080
PCB 1232	U			380	µg/kg	380	EPA8080
PCB 1242	U			380	µg/kg	380	EPA8080
PCB 1248	U			380	µg/kg	380	EPA8080
PCB 1254	U			380	µg/kg	380	EPA8080
PCB 1260	U			380	µg/kg	380	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			1.3	ng/g	1.3	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.70	ng/g	0.70	EPA8280
2,3,7,8-TCDD	U			0.80	ng/g	0.80	EPA8280
2,3,7,8-TCDF	U			0.60	ng/g	0.60	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.80	ng/g	0.80	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.70	ng/g	0.70	EPA8280
Toxaphene	U			1,900	µg/kg	1,900	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			8.0	pCi/g	8.0	EPA900.0
Nonvolatile beta				19±17	pCi/g	7.7	EPA900.0
Radium, total alpha-emitting	U	V		2.5±1.4	pCi/g	0.22	EPA903.0
Tritium				2.0±0.48	pCi/g	1.1	EPA906.0

SAMPLE NAME: D431 1306 Sample ID: 100386

Location (SRS Coordinates): 18446.1E 66631.93N
Ground Elevation Above MSL: 131.4 ft
Depth of Core Interval: 8.00 to 10.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: USC Soil Classification: SW Percent Solids: 89.50

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				6.5	meq/100g	2.0	EPA9080
pH	J	Q		7.0	pH	0.010	EPA9045
Specific conductance				140	µS/cm	1.0	EPA9050
Total organic carbon				15,000	mg/kg	390	EPA415.1

SAMPLE NAME: D431 1306 (Continued) Sample ID: 100386

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				2.4	mg/kg	1.0	EPA7060
Barium	U			21	mg/kg	21	EPA6010
Cadmium	U			0.53	mg/kg	0.53	EPA6010
Chromium				19	mg/kg	1.1	EPA6010
Copper				14	mg/kg	2.7	EPA6010
Lead				7.1	mg/kg	0.62	EPA7421
Manganese				47	mg/kg	1.6	EPA6010
Mercury				0.19	mg/kg	0.11	EPA7470
Nickel				5.9	mg/kg	4.3	EPA6010
Selenium				9.5	mg/kg	1.0	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	J	O	L	4,300	µg/kg	370	EPA8270
Acenaphthylene	J	O	L	440	µg/kg	370	EPA8270
Anthracene	LJ	O	L	7,700	µg/kg	370	EPA8270
Anthracene	J	O	L	9,400	µg/kg	1,800	EPA8270
Benzo(a)anthracene	LJ	O	L	18,000	µg/kg	370	EPA8270
Benzo(a)anthracene	J	O	L	16,000	µg/kg	1,800	EPA8270
Benzo(b)fluoranthene	LJ	O	L	20,000	µg/kg	370	EPA8270
Benzo(b)fluoranthene	J	O	L	20,000	µg/kg	1,800	EPA8270
Benzo(k)fluoranthene	J	O	L	4,500	µg/kg	370	EPA8270
Benzoic acid	UJ	O	L	1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	J	O	L	4,900	µg/kg	370	EPA8270
Benzo(a)pyrene	LJ	O	L	13,000	µg/kg	370	EPA8270
Benzo(a)pyrene	J	O	L	14,000	µg/kg	1,800	EPA8270
Benzyl alcohol	UJ	O	L	370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	UJ	O	L	370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	UJ	O	L	370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	UJ	O	L	370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	O	L	370	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	UJ	O	L	370	µg/kg	370	EPA8270
Butylbenzyl phthalate	J	O	L	250	µg/kg	370	EPA8270
Benz-anthracenone isomer	J	N		10,000	µg/kg		EPA8270
Benzonapthothiophene	J	N		10,000	µg/kg		EPA8270
Benzofluorene isomer	J	N		30,000	µg/kg		EPA8270
Benzofluorene isomer	J	N		20,000	µg/kg		EPA8270
Benzonapthofuran isomer	J	N		9,000	µg/kg		EPA8270
Benzo-pyrene isomer	J	N		10,000	µg/kg		EPA8270
Benzophenanthrene isomer	J	N		10,000	µg/kg		EPA8270
Carbazole	J	N		3,000	µg/kg		EPA8270
4-Chloroaniline	UJ	O	L	370	µg/kg	370	EPA8270
4-Chloro-m-cresol	UJ	O	L	370	µg/kg	370	EPA8270
2-Chloronaphthalene	UJ	O	L	370	µg/kg	370	EPA8270
2-Chlorophenol	UJ	O	L	370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	UJ	O	L	370	µg/kg	370	EPA8270
Chrysene	LJ	O	L	10,000	µg/kg	370	EPA8270
Chrysene	J	O	L	13,000	µg/kg	1,800	EPA8270
o-Cresol (2-Methylphenol)	UJ	O	L	370	µg/kg	370	EPA8270

SAMPLE NAME: D431 1306 (Continued) Sample ID: 100386

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
p-Cresol (4-Methylphenol)	UJ	O	L	370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	J	O	L	1,300	µg/kg	370	EPA8270
Dibenzofuran	J	O	L	3,100	µg/kg	370	EPA8270
Di-n-butyl phthalate	UJ	O	L	370	µg/kg	370	EPA8270
Dibenzothiophene	J	N		2,000	µg/kg		EPA8270
1,2-Dichlorobenzene	UJ	O	L	370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	UJ	O	L	370	µg/kg	370	EPA8270
1,4-Dichlorobenzene	UJ	O	L	370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	UJ	O	L	740	µg/kg	740	EPA8270
2,4-Dichlorophenol	UJ	O	L	370	µg/kg	370	EPA8270
Diethyl phthalate	UJ	O	L	370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	UJ	O	L	370	µg/kg	370	EPA8270
Dimethyl phthalate	UJ	O	L	370	µg/kg	370	EPA8270
2,4-Dinitrophenol	UJ	O	L	1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	UJ	O	L	370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	UJ	O	L	370	µg/kg	370	EPA8270
Di-n-octyl phthalate	UJ	O	L	370	µg/kg	370	EPA8270
Fluoranthene	LJ	O	L	23,000	µg/kg	370	EPA8270
Fluoranthene	LJ	O	L	31,000	µg/kg	1,800	EPA8270
Fluoranthene	J	O	L	37,000	µg/kg	3,700	EPA8270
Fluorene	J	O	L	4,900	µg/kg	370	EPA8270
Hexachlorobenzene	UJ	O	L	370	µg/kg	370	EPA8270
Hexachlorobutadiene	UJ	O	L	370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	UJ	O	L	370	µg/kg	370	EPA8270
Hexachloroethane	UJ	O	L	370	µg/kg	370	EPA8270
Indeno(1,2,3-c,d)pyrene	J	O	L	5,800	µg/kg	370	EPA8270
Isophorone	UJ	O	L	370	µg/kg	370	EPA8270
Methylanthracene isomer	J	N		2,000	µg/kg		EPA8270
Methyl-benz-anthracene isomer	J	N		8,000	µg/kg		EPA8270
Methylphenanthrene isomer	J	N		2,000	µg/kg		EPA8270
2-Methyl-4,6-dinitrophenol	UJ	O	L	1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	J	O	L	1,400	µg/kg	370	EPA8270
Naphthalene	J	O	L	3,800	µg/kg	370	EPA8270
o-Nitroaniline	UJ	O	L	1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	UJ	O	L	1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	UJ	O	L	1,800	µg/kg	1,800	EPA8270
Nitrobenzene	UJ	O	L	370	µg/kg	370	EPA8270
2-Nitrophenol	UJ	O	L	370	µg/kg	370	EPA8270
4-Nitrophenol	UJ	O	L	1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	UJ	O	L	370	µg/kg	370	EPA8270
N-Nitrosodipropylamine	UJ	CO	L	370	µg/kg	370	EPA8270
Pentachlorophenol	UJ	O	L	1,800	µg/kg	1,800	EPA8270
Phenanthrene	LJ	O	L	24,000	µg/kg	370	EPA8270
Phenanthrene	J	O	L	28,000	µg/kg	1,800	EPA8270
Phenol	UJ	O	L	370	µg/kg	370	EPA8270
Phenyl-napthalene isomer	J	N		1,000	µg/kg		EPA8270
Pyrene	LJ	O	L	24,000	µg/kg	370	EPA8270
Pyrene	J	O	L	25,000	µg/kg	1,800	EPA8270
1,2,4-Trichlorobenzene	UJ	CO	L	370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	UJ	O	L	1,800	µg/kg	1,800	EPA8270

SAMPLE NAME: D431 1306 (Continued) Sample ID: 100386

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2,4,6-Trichlorophenol	UJ	O	L	370	µg/kg	370	EPA8270
Unknown	J	NV		3,000	µg/kg		EPA8270
Unknown	J	N		8,000	µg/kg		EPA8270
Unknown	J	N		9,000	µg/kg		EPA8270
Unknown ketone	J	NV		50,000	µg/kg		EPA8270
Unknown polyarom. hydrocarbon	J	N		3,000	µg/kg		EPA8270
Unknown polyarom. hydrocarbon	J	N		10,000	µg/kg		EPA8270
Unknown polyarom. hydrocarbon	J	N		10,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		49	µg/kg	11	EPA8240
Aromatic	J	N		20	µg/kg		EPA8240
Aromatic	J	N		10	µg/kg		EPA8240
Benzene	U			5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	J			1.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
2-Chloroethyl vinyl ether	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		26	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	J			1.1	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	J			7.2	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	J			2.5	µg/kg	5.5	EPA8240
Toluene				8.8	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Unknown	J	N		10	µg/kg		EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	J			5.2	µg/kg	5.5	EPA8240

SAMPLE NAME: D431 1306 (Continued) Sample ID: 100386

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			19	µg/kg	19	EPA8080
alpha-Benzene hexachloride	U			19	µg/kg	19	EPA8080
beta-Benzene hexachloride	U			19	µg/kg	19	EPA8080
delta-Benzene hexachloride	U			19	µg/kg	19	EPA8080
alpha-Chlordane	U			19	µg/kg	19	EPA8080
gamma-Chlordane	U			19	µg/kg	19	EPA8080
p,p'-DDD	U			37	µg/kg	37	EPA8080
p,p'-DDE	U			37	µg/kg	37	EPA8080
p,p'-DDT	U			37	µg/kg	37	EPA8080
Dieldrin	U			37	µg/kg	37	EPA8080
Endosulfan I	U			19	µg/kg	19	EPA8080
Endosulfan II	U			37	µg/kg	37	EPA8080
Endosulfan sulfate	U			37	µg/kg	37	EPA8080
Endrin	U			37	µg/kg	37	EPA8080
Endrin ketone				220	µg/kg	37	EPA8080
Heptachlor	U			19	µg/kg	19	EPA8080
Heptachlor epoxide	U			19	µg/kg	19	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			19	µg/kg	19	EPA8080
Methoxychlor	U			190	µg/kg	190	EPA8080
Octachlorodibenzo-p-dioxin				8.0	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			370	µg/kg	370	EPA8080
PCB 1221	U			750	µg/kg	750	EPA8080
PCB 1232	U			370	µg/kg	370	EPA8080
PCB 1242	U			370	µg/kg	370	EPA8080
PCB 1248	U			370	µg/kg	370	EPA8080
PCB 1254	U			370	µg/kg	370	EPA8080
PCB 1260	U			370	µg/kg	370	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	U			1,900	µg/kg	1,900	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			7.6	pCi/g	7.6	EPA900.0
Nonvolatile beta				7.7±15	pCi/g	7.4	EPA900.0
Radium, total alpha-emitting	U	V		0.84±1.1	pCi/g	0.38	EPA903.0
Tritium				1.8±0.43	pCi/g	1.2	EPA906.0

SAMPLE NAME: D431-1306D Sample ID: 100387

Sample Type: Split Associated Sample: 100386

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				6.7	meq/100g	2.0	EPA9080
pH	J	Q		7.3	pH	0.010	EPA9045
Specific conductance				160	µS/cm	1.0	EPA9050
Total organic carbon				10,000	mg/kg	230	EPA415.1
Total Metals							
Arsenic				4.5	mg/kg	1.1	EPA7060
Barium	U			22	mg/kg	22	EPA6010
Cadmium	U			0.55	mg/kg	0.55	EPA6010
Chromium				17	mg/kg	1.1	EPA6010
Copper				17	mg/kg	2.7	EPA6010
Lead				10	mg/kg	0.64	EPA7421
Manganese				57	mg/kg	1.6	EPA6010
Mercury				0.36	mg/kg	0.11	EPA7470
Nickel				6.3	mg/kg	4.4	EPA6010
Selenium				26	mg/kg	5.3	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	J	O	L	3,400	µg/kg	370	EPA8270
Acenaphthylene	J	O	L	370	µg/kg	370	EPA8270
Anthracene	LJ	O	L	6,100	µg/kg	370	EPA8270
Anthracene	J	O	L	6,500	µg/kg	1,500	EPA8270
Benzo(a)anthracene	LJ	O	L	14,000	µg/kg	370	EPA8270
Benzo(a)anthracene	J	O	L	11,000	µg/kg	1,500	EPA8270
Benzo(b)fluoranthene	LJ	O	L	15,000	µg/kg	370	EPA8270
Benzo(b)fluoranthene	J	O	L	13,000	µg/kg	1,500	EPA8270
Benzo(k)fluoranthene	J	O	L	4,900	µg/kg	370	EPA8270
Benzoic acid	UJ	O	L	1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	J	O	L	3,900	µg/kg	370	EPA8270
Benzo(a)pyrene	LJ	O	L	10,000	µg/kg	370	EPA8270
Benzo(a)pyrene	J	O	L	9,200	µg/kg	1,500	EPA8270
Benzyl alcohol	UJ	O	L	370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	UJ	O	L	370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	UJ	O	L	370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	UJ	O	L	370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	J	O	L	120	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	UJ	O	L	370	µg/kg	370	EPA8270
Butylbenzyl phthalate	UJ	O	L	370	µg/kg	370	EPA8270
Benzonapthothiophene	J	N		300	µg/kg		EPA8270
Benzofluorene isomer	J	N		600	µg/kg		EPA8270
Benzofluorene isomer	J	N		400	µg/kg		EPA8270
Benzo-pyrene isomer	J	N		9,000	µg/kg		EPA8270
Benzophenanthrene isomer	J	N		300	µg/kg		EPA8270
Benzophenanthrene isomer	J	N		300	µg/kg		EPA8270
Carbazole	J	N		3,000	µg/kg		EPA8270

SAMPLE NAME: D431 1306D (Continued) Sample ID: 100387

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
4-Chloroaniline	UJ	O	L	370	µg/kg	370	EPA8270
4-Chloro-m-cresol	UJ	O	L	370	µg/kg	370	EPA8270
2-Chloronaphthalene	UJ	O	L	370	µg/kg	370	EPA8270
2-Chlorophenol	UJ	O	L	370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	UJ	O	L	370	µg/kg	370	EPA8270
Chrysene	LJ	O	L	9,300	µg/kg	370	EPA8270
Chrysene	J	O	L	8,600	µg/kg	1,500	EPA8270
o-Cresol (2-Methylphenol)	UJ	O	L	370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	UJ	O	L	370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	J	O	L	1,100	µg/kg	370	EPA8270
Dibenzofuran	J	O	L	2,500	µg/kg	370	EPA8270
Di-n-butyl phthalate	UJ	O	L	370	µg/kg	370	EPA8270
Dibenzothiophene	J	N		2,000	µg/kg		EPA8270
1,2-Dichlorobenzene	UJ	O	L	370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	UJ	O	L	370	µg/kg	370	EPA8270
1,4-Dichlorobenzene	UJ	O	L	370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	UJ	O	L	750	µg/kg	750	EPA8270
2,4-Dichlorophenol	UJ	O	L	370	µg/kg	370	EPA8270
Diethyl phthalate	UJ	O	L	370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	UJ	O	L	370	µg/kg	370	EPA8270
Dimethyl phthalate	UJ	O	L	370	µg/kg	370	EPA8270
2,4-Dinitrophenol	UJ	O	L	1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	UJ	O	L	370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	UJ	O	L	370	µg/kg	370	EPA8270
Di-n-octyl phthalate	UJ	O	L	370	µg/kg	370	EPA8270
Fluoranthene	LJ	O	L	19,000	µg/kg	370	EPA8270
Fluoranthene	J	O	L	23,000	µg/kg	1,500	EPA8270
Fluorene	J	O	L	4,100	µg/kg	370	EPA8270
Hexachlorobenzene	UJ	O	L	370	µg/kg	370	EPA8270
Hexachlorobutadiene	UJ	O	L	370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	UJ	O	L	370	µg/kg	370	EPA8270
Hexachloroethane	UJ	O	L	370	µg/kg	370	EPA8270
Indeno(1,2,3-c,d)pyrene	J	O	L	4,600	µg/kg	370	EPA8270
Isophorone	UJ	O	L	370	µg/kg	370	EPA8270
Methylanthracene isomer	J	N		2,000	µg/kg		EPA8270
Methyl-benz-anthracene isomer	J	N		300	µg/kg		EPA8270
Methylphenanthrene isomer	J	N		2,000	µg/kg		EPA8270
Methylpyrene isomer	J	N		200	µg/kg		EPA8270
2-Methyl-4,6-dinitrophenol	UJ	O	L	1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	J	O	L	1,000	µg/kg	370	EPA8270
Naphthalene	J	O	L	2,800	µg/kg	370	EPA8270
o-Nitroaniline	UJ	O	L	1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	UJ	O	L	1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	UJ	O	L	1,900	µg/kg	1,900	EPA8270
Nitrobenzene	UJ	O	L	370	µg/kg	370	EPA8270
2-Nitrophenol	UJ	O	L	370	µg/kg	370	EPA8270
4-Nitrophenol	UJ	O	L	1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	UJ	O	L	370	µg/kg	370	EPA8270
N-Nitrosodipropylamine	UJ	CO	L	370	µg/kg	370	EPA8270
Pentachlorophenol	UJ	O	L	1,900	µg/kg	1,900	EPA8270

SAMPLE NAME: D431 1306D (Continued) Sample ID: 100387

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Phenanthrene	LJ	O	L	19,000	µg/kg	370	EPA8270
Phenanthrene	J	O	L	20,000	µg/kg	1,500	EPA8270
Phenol	UJ	O	L	370	µg/kg	370	EPA8270
Phenyl-napthalene isomer	J	N		200	µg/kg		EPA8270
Pyrene	LJ	O	L	20,000	µg/kg	370	EPA8270
Pyrene	J	O	L	17,000	µg/kg	1,500	EPA8270
1,2,4-Trichlorobenzene	UJ	CO	L	370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	UJ	O	L	1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	UJ	O	L	370	µg/kg	370	EPA8270
Unknown	J	NV		4,000	µg/kg		EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown ketone	J	NV		50,000	µg/kg		EPA8270
Unknown polyarom. hydrocarbon	J	N		600	µg/kg		EPA8270
Unknown polyarom. hydrocarbon	J	N		300	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone		V		100	µg/kg	11	EPA8240
Aromatic	J	N		30	µg/kg		EPA8240
Aromatic	J	N		10	µg/kg		EPA8240
Benzene	U			5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	J			1.2	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
2-Chloroethyl vinyl ether	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		30	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	J			2.0	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	J			2.9	µg/kg	5.5	EPA8240

SAMPLE NAME: D431 1306D (Continued) Sample ID: 100387

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Toluene	J			3.1	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	J			1.4	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			19	µg/kg	19	EPA8080
alpha-Benzene hexachloride	U			19	µg/kg	19	EPA8080
beta-Benzene hexachloride	U			19	µg/kg	19	EPA8080
delta-Benzene hexachloride	U			19	µg/kg	19	EPA8080
alpha-Chlordane	U			19	µg/kg	19	EPA8080
gamma-Chlordane	U			19	µg/kg	19	EPA8080
p,p'-DDD	U			38	µg/kg	38	EPA8080
p,p'-DDE	U			38	µg/kg	38	EPA8080
p,p'-DDT	U			38	µg/kg	38	EPA8080
Dieldrin	U			38	µg/kg	38	EPA8080
Endosulfan I	U			19	µg/kg	19	EPA8080
Endosulfan II	U			38	µg/kg	38	EPA8080
Endosulfan sulfate	U			38	µg/kg	38	EPA8080
Endrin	U			38	µg/kg	38	EPA8080
Endrin ketone				190	µg/kg	38	EPA8080
Heptachlor	U			19	µg/kg	19	EPA8080
Heptachlor epoxide	U			19	µg/kg	19	EPA8080
Heptachlorodibenzo-p-dioxin isomers	J			0.20	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			19	µg/kg	19	EPA8080
Methoxychlor	U			190	µg/kg	190	EPA8080
Octachlorodibenzo-p-dioxin				6.2	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			380	µg/kg	380	EPA8080
PCB 1221	U			760	µg/kg	760	EPA8080
PCB 1232	U			380	µg/kg	380	EPA8080
PCB 1242	U			380	µg/kg	380	EPA8080
PCB 1248	U			380	µg/kg	380	EPA8080
PCB 1254	U			380	µg/kg	380	EPA8080
PCB 1260	U			380	µg/kg	380	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			1,900	µg/kg	1,900	EPA8080
Xylenes				6.5	µg/kg	5.5	EPA8280

SAMPLE NAME: D431 1306D (Continued) Sample ID: 100387

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Radionuclide Indicators and Radionuclides							
Gross alpha				10±11	pCi/g	7.4	EPA900.0
Nonvolatile beta				37±17	pCi/g	7.1	EPA900.0
Radium, total alpha-emitting	U	V		2.3±1.2	pCi/g	0.20	EPA903.0
Tritium				2.2±0.52	pCi/g	1.1	EPA906.0

SAMPLE NAME: D431 1307 Sample ID: 100388

Location (SRS Coordinates): 18446.1E 66631.93N
Ground Elevation Above MSL: 131.4 ft
Depth of Core Interval: 10.00 to 12.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: USC Soil Classification: SC Percent Solids: 81.60

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			1.2	mg/kg	1.2	EPA7060
Barium	U			24	mg/kg	24	EPA6010
Cadmium	U			0.61	mg/kg	0.61	EPA6010
Chromium				24	mg/kg	1.2	EPA6010
Copper				4.2	mg/kg	3.0	EPA6010
Lead				2.9	mg/kg	0.35	EPA7421
Manganese				14	mg/kg	1.8	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel	U			4.9	mg/kg	4.9	EPA6010
Selenium				0.72	mg/kg	0.59	EPA7740
Silver	U			1.2	mg/kg	1.2	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	J			60	µg/kg	410	EPA8270
Acenaphthylene	U			410	µg/kg	410	EPA8270
Anthracene	J			130	µg/kg	410	EPA8270
Benzo(a)anthracene	J			270	µg/kg	410	EPA8270
Benzo(b)fluoranthene	J			290	µg/kg	410	EPA8270
Benzo(k)fluoranthene	J			110	µg/kg	410	EPA8270
Benzoic acid	U			2,000	µg/kg	2,000	EPA8270
Benzo(g,h,i)perylene	J			120	µg/kg	410	EPA8270
Benzo(a)pyrene	J			220	µg/kg	410	EPA8270
Benzyl alcohol	U			410	µg/kg	410	EPA8270
Bis(2-chloroethoxy) methane	U			410	µg/kg	410	EPA8270
Bis(2-chloroethyl) ether	U			410	µg/kg	410	EPA8270
Bis(2-chloroisopropyl) ether	U			410	µg/kg	410	EPA8270
Bis(2-ethylhexyl) phthalate	J			93	µg/kg	410	EPA8270
4-Bromophenyl phenyl ether	U			410	µg/kg	410	EPA8270
Butylbenzyl phthalate	U			410	µg/kg	410	EPA8270
4-Chloroaniline	U			410	µg/kg	410	EPA8270
4-Chloro-m-cresol	U			410	µg/kg	410	EPA8270

SAMPLE NAME: D431-1307 (Continued) Sample ID: 100388

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2-Chloronaphthalene	U			410	µg/kg	410	EPA8270
2-Chlorophenol	U			410	µg/kg	410	EPA8270
4-Chlorophenyl phenyl ether	U			410	µg/kg	410	EPA8270
Chrysene	J			200	µg/kg	410	EPA8270
o-Cresol (2-Methylphenol)	U			410	µg/kg	410	EPA8270
p-Cresol (4-Methylphenol)	U			410	µg/kg	410	EPA8270
Dibenz(a,h)anthracene	U			410	µg/kg	410	EPA8270
Dibenzofuran	J			45	µg/kg	410	EPA8270
Di-n-butyl phthalate	U			410	µg/kg	410	EPA8270
1,2-Dichlorobenzene	U			410	µg/kg	410	EPA8270
1,3-Dichlorobenzene	U			410	µg/kg	410	EPA8270
1,4-Dichlorobenzene	U			410	µg/kg	410	EPA8270
3,3'-Dichlorobenzidine	U			820	µg/kg	820	EPA8270
2,4-Dichlorophenol	U			410	µg/kg	410	EPA8270
Diethyl phthalate	U			410	µg/kg	410	EPA8270
2,4-Dimethyl phenol	U			410	µg/kg	410	EPA8270
Dimethyl phthalate	U			410	µg/kg	410	EPA8270
2,4-Dinitrophenol	U			2,000	µg/kg	2,000	EPA8270
2,4-Dinitrotoluene	U			410	µg/kg	410	EPA8270
2,6-Dinitrotoluene	U			410	µg/kg	410	EPA8270
Di-n-octyl phthalate	U			410	µg/kg	410	EPA8270
Fluoranthene				610	µg/kg	410	EPA8270
Fluorene	J			79	µg/kg	410	EPA8270
Hexachlorobenzene	U			410	µg/kg	410	EPA8270
Hexachlorobutadiene	U			410	µg/kg	410	EPA8270
Hexachlorocyclopentadiene	U			410	µg/kg	410	EPA8270
Hexachloroethane	U			410	µg/kg	410	EPA8270
Indeno(1,2,3-c,d)pyrene	J			140	µg/kg	410	EPA8270
Isophorone	U			410	µg/kg	410	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,000	µg/kg	2,000	EPA8270
2-Methylnaphthalene	U			410	µg/kg	410	EPA8270
Naphthalene	J			45	µg/kg	410	EPA8270
o-Nitroaniline	U			2,000	µg/kg	2,000	EPA8270
m-Nitroaniline	U			2,000	µg/kg	2,000	EPA8270
p-Nitroaniline	U			2,000	µg/kg	2,000	EPA8270
Nitrobenzene	U			410	µg/kg	410	EPA8270
2-Nitrophenol	U			410	µg/kg	410	EPA8270
4-Nitrophenol	U			2,000	µg/kg	2,000	EPA8270
N-Nitrosodiphenylamine	U			410	µg/kg	410	EPA8270
N-Nitrosodipropylamine	UJ	C		410	µg/kg	410	EPA8270
Pentachlorophenol	U			2,000	µg/kg	2,000	EPA8270
Phenanthrene				530	µg/kg	410	EPA8270
Phenol	U			410	µg/kg	410	EPA8270
Pyrene				450	µg/kg	410	EPA8270
1,2,4-Trichlorobenzene	UJ	C		410	µg/kg	410	EPA8270
2,4,5-Trichlorophenol	U			2,000	µg/kg	2,000	EPA8270
2,4,6-Trichlorophenol	U			410	µg/kg	410	EPA8270
Unknown	J	NV		3,000	µg/kg		EPA8270
Unknown	J	NV		900	µg/kg		EPA8270
Unknown	J	N		600	µg/kg		EPA8270

SAMPLE NAME: D431 1307 (Continued) Sample ID: 100388

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Unknown ketone	J	NV		50,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		16	µg/kg	12	EPA8240
Benzene	U			6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U			6.0	µg/kg	6.0	EPA8240
Bromoform	U			6.0	µg/kg	6.0	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			6.0	µg/kg	6.0	EPA8240
Carbon tetrachloride	U			6.0	µg/kg	6.0	EPA8240
Chlorobenzene	U			6.0	µg/kg	6.0	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
2-Chloroethyl vinyl ether	U			12	µg/kg	12	EPA8240
Chloroform	U			6.0	µg/kg	6.0	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		19	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U			6.0	µg/kg	6.0	EPA8240
cis-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
Ethylbenzene	U			6.0	µg/kg	6.0	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U			6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U			6.0	µg/kg	6.0	EPA8240
Toluene	U			6.0	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
Trichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			6.0	µg/kg	6.0	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			2.0	µg/kg	2.0	EPA8080
alpha-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
beta-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
delta-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
alpha-Chlordane	U			2.0	µg/kg	2.0	EPA8080
gamma-Chlordane	U			2.0	µg/kg	2.0	EPA8080
p,p'-DDD	U			4.1	µg/kg	4.1	EPA8080
p,p'-DDE	U			4.1	µg/kg	4.1	EPA8080

SAMPLE NAME: D431 1307 (Continued) Sample ID: 100388

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
p,p'-DDT	U			4.1	µg/kg	4.1	EPA8080
Dieldrin	U			4.1	µg/kg	4.1	EPA8080
Endosulfan I	U			2.0	µg/kg	2.0	EPA8080
Endosulfan II	U			4.1	µg/kg	4.1	EPA8080
Endosulfan sulfate	U			4.1	µg/kg	4.1	EPA8080
Endrin	U			4.1	µg/kg	4.1	EPA8080
Endrin ketone				6.1	µg/kg	4.1	EPA8080
Heptachlor	U			2.0	µg/kg	2.0	EPA8080
Heptachlor epoxide	U			2.0	µg/kg	2.0	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			2.0	µg/kg	2.0	EPA8080
Methoxychlor	U			20	µg/kg	20	EPA8080
Octachlorodibenzo-p-dioxin	J			1.6	ng/g	0.30	EPA8280
Octachlorodibenzo-p-dioxin				10	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			41	µg/kg	41	EPA8080
PCB 1221	U			82	µg/kg	82	EPA8080
PCB 1232	U			41	µg/kg	41	EPA8080
PCB 1242	U			41	µg/kg	41	EPA8080
PCB 1248	U			41	µg/kg	41	EPA8080
PCB 1254	U			41	µg/kg	41	EPA8080
PCB 1260	U			41	µg/kg	41	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			200	µg/kg	200	EPA8080

SAMPLE NAME: D431 1307A Sample ID: 100389

Sample Type: Duplicate Associated Sample: 100388

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			1.1	mg/kg	1.1	EPA7060
Barium	U			23	mg/kg	23	EPA6010
Cadmium	U			0.57	mg/kg	0.57	EPA6010
Chromium				21	mg/kg	1.1	EPA6010
Copper				3.7	mg/kg	2.8	EPA6010
Lead				2.3	mg/kg	0.32	EPA7421
Manganese				12	mg/kg	1.7	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel	U			4.5	mg/kg	4.5	EPA6010
Selenium	U			0.54	mg/kg	0.54	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			380	µg/kg	380	EPA8270
Acenaphthylene	U			380	µg/kg	380	EPA8270
Anthracene	J			64	µg/kg	380	EPA8270
Benzo(a)anthracene	J			130	µg/kg	380	EPA8270
Benzo(b)fluoranthene	J			170	µg/kg	380	EPA8270
Benzo(k)fluoranthene	J			38	µg/kg	380	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	U			380	µg/kg	380	EPA8270
Benzo(a)pyrene	J			110	µg/kg	380	EPA8270
Benzyl alcohol	U			380	µg/kg	380	EPA8270
Bis(2-chloroethoxy) methane	U			380	µg/kg	380	EPA8270
Bis(2-chloroethyl) ether	U			380	µg/kg	380	EPA8270
Bis(2-chloroisopropyl) ether	U			380	µg/kg	380	EPA8270
Bis(2-ethylhexyl) phthalate	J			65	µg/kg	380	EPA8270
4-Bromophenyl phenyl ether	U			380	µg/kg	380	EPA8270
Butylbenzyl phthalate	U			380	µg/kg	380	EPA8270
4-Chloroaniline	U			380	µg/kg	380	EPA8270
4-Chloro-m-cresol	U			380	µg/kg	380	EPA8270
2-Chloronaphthalene	U			380	µg/kg	380	EPA8270
2-Chlorophenol	U			380	µg/kg	380	EPA8270
4-Chlorophenyl phenyl ether	U			380	µg/kg	380	EPA8270
Chrysene	J			110	µg/kg	380	EPA8270
o-Cresol (2-Methylphenol)	U			380	µg/kg	380	EPA8270
p-Cresol (4-Methylphenol)	U			380	µg/kg	380	EPA8270
Dibenz(a,h)anthracene	U			380	µg/kg	380	EPA8270
Dibenzofuran	U			380	µg/kg	380	EPA8270
Di-n-butyl phthalate	U			380	µg/kg	380	EPA8270
1,2-Dichlorobenzene	U			380	µg/kg	380	EPA8270
1,3-Dichlorobenzene	U			380	µg/kg	380	EPA8270
1,4-Dichlorobenzene	U			380	µg/kg	380	EPA8270
3,3'-Dichlorobenzidine	U			770	µg/kg	770	EPA8270
2,4-Dichlorophenol	U			380	µg/kg	380	EPA8270
Diethyl phthalate	U			380	µg/kg	380	EPA8270
2,4-Dimethyl phenol	U			380	µg/kg	380	EPA8270

SAMPLE NAME: D431 1307A (Continued) Sample ID: 100389

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Dimethyl phthalate	U			380	µg/kg	380	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			380	µg/kg	380	EPA8270
2,6-Dinitrotoluene	U			380	µg/kg	380	EPA8270
Di-n-octyl phthalate	U			380	µg/kg	380	EPA8270
Fluoranthene	J			310	µg/kg	380	EPA8270
Fluorene	J			38	µg/kg	380	EPA8270
Hexachlorobenzene	U			380	µg/kg	380	EPA8270
Hexachlorobutadiene	U			380	µg/kg	380	EPA8270
Hexachlorocyclopentadiene	U			380	µg/kg	380	EPA8270
Hexachloroethane	U			380	µg/kg	380	EPA8270
Indeno(1,2,3-c,d)pyrene	J			64	µg/kg	380	EPA8270
Isophorone	U			380	µg/kg	380	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	U			380	µg/kg	380	EPA8270
Naphthalene	U			380	µg/kg	380	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U			380	µg/kg	380	EPA8270
2-Nitrophenol	U			380	µg/kg	380	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			380	µg/kg	380	EPA8270
N-Nitrosodipropylamine	UJ	C		380	µg/kg	380	EPA8270
Pentachlorophenol	U			1,900	µg/kg	1,900	EPA8270
Phenanthrene	J			270	µg/kg	380	EPA8270
Phenol	U			380	µg/kg	380	EPA8270
Pyrene	J			240	µg/kg	380	EPA8270
1,2,4-Trichlorobenzene	UJ	C		380	µg/kg	380	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			380	µg/kg	380	EPA8270
Unknown	J	NV		3,000	µg/kg		EPA8270
Unknown	J	NV		800	µg/kg		EPA8270
Unknown	J	N		500	µg/kg		EPA8270
Unknown ketone	J	NV		50,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		19	µg/kg	12	EPA8240
Acetone	U	V		29	µg/kg	12	EPA8240
Acetone	U	V		28	µg/kg	12	EPA8240
Benzene	U			6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U			6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U			6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U			6.0	µg/kg	6.0	EPA8240
Bromoform	U			6.0	µg/kg	6.0	EPA8240
Bromoform	U			6.0	µg/kg	6.0	EPA8240
Bromoform	U			6.0	µg/kg	6.0	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240

SAMPLE NAME: D431 1307A (Continued) Sample ID: 100389

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			6.0	µg/kg	6.0	EPA8240
Carbon disulfide	U			6.0	µg/kg	6.0	EPA8240
Carbon disulfide	U			6.0	µg/kg	6.0	EPA8240
Carbon tetrachloride	U			6.0	µg/kg	6.0	EPA8240
Carbon tetrachloride	U			6.0	µg/kg	6.0	EPA8240
Carbon tetrachloride	U			6.0	µg/kg	6.0	EPA8240
Chlorobenzene	U			6.0	µg/kg	6.0	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
2-Chloroethyl vinyl ether	U			12	µg/kg	12	EPA8240
2-Chloroethyl vinyl ether	U			12	µg/kg	12	EPA8240
2-Chloroethyl vinyl ether	U			12	µg/kg	12	EPA8240
Chloroform	U			6.0	µg/kg	6.0	EPA8240
Chloroform	U			6.0	µg/kg	6.0	EPA8240
Chloroform	U			6.0	µg/kg	6.0	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			6.0	µg/kg	6.0	EPA8240
Dibromochloromethane	U			6.0	µg/kg	6.0	EPA8240
Dibromochloromethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		19	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		22	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		19	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U			6.0	µg/kg	6.0	EPA8240
cis-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
cis-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
cis-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
Ethylbenzene	U			6.0	µg/kg	6.0	EPA8240
Ethylbenzene	U			6.0	µg/kg	6.0	EPA8240

SAMPLE NAME: D431 1307A (Continued) Sample ID: 100389

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Ethylbenzene	U			6.0	µg/kg	6.0	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.0	µg/kg	6.0	EPA8240
Styrene	U			6.0	µg/kg	6.0	EPA8240
Styrene	U			6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U			6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U			6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U			6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U			6.0	µg/kg	6.0	EPA8240
Toluene	U			6.0	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
Trichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			6.0	µg/kg	6.0	EPA8240
Xylenes	U			6.0	µg/kg	6.0	EPA8240
Xylenes	U			6.0	µg/kg	6.0	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.9	µg/kg	1.9	EPA8080
alpha-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
beta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
delta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
alpha-Chlordane	U			1.9	µg/kg	1.9	EPA8080
gamma-Chlordane	U			1.9	µg/kg	1.9	EPA8080
p,p'-DDD	U			3.9	µg/kg	3.9	EPA8080
p,p'-DDE	U			3.9	µg/kg	3.9	EPA8080
p,p'-DDT	U			3.9	µg/kg	3.9	EPA8080
Dieldrin	U			3.9	µg/kg	3.9	EPA8080
Endosulfan I	U			1.9	µg/kg	1.9	EPA8080
Endosulfan II	U			3.9	µg/kg	3.9	EPA8080
Endosulfan sulfate	U			3.9	µg/kg	3.9	EPA8080
Endrin	U			3.9	µg/kg	3.9	EPA8080

SAMPLE NAME: D431 1307A (Continued) Sample ID: 100389

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Endrin ketone	U			3.9	µg/kg	3.9	EPA8080
Heptachlor	U			1.9	µg/kg	1.9	EPA8080
Heptachlor epoxide	U			1.9	µg/kg	1.9	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.50	ng/g	0.50	EPA8280
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	UJ	V		0.70	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.30	ng/g	0.30	EPA8280
Lindane	U			1.9	µg/kg	1.9	EPA8080
Methoxychlor	U			19	µg/kg	19	EPA8080
Octachlorodibenzo-p-dioxin	J	I	H	9.7	ng/g	0.40	EPA8280
Octachlorodibenzo-p-furan	U			0.60	ng/g	0.60	EPA8280
PCB 1016	U			39	µg/kg	39	EPA8080
PCB 1221	U			77	µg/kg	77	EPA8080
PCB 1232	U			39	µg/kg	39	EPA8080
PCB 1242	U			39	µg/kg	39	EPA8080
PCB 1248	U			39	µg/kg	39	EPA8080
PCB 1254	U			39	µg/kg	39	EPA8080
PCB 1260	U			39	µg/kg	39	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.50	ng/g	0.50	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.30	ng/g	0.30	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	U			190	µg/kg	190	EPA8080

SAMPLE NAME: D431 1401 Sample ID: 100390

Location (SRS Coordinates): 18401.83E 66640.68N
Ground Elevation Above MSL: 129.4 ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 3/4 USC Soil Classification: SP Percent Solids: 94.10

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				9.4	meq/100g	2.0	EPA9080
pH	J	Q		4.9	pH	0.010	EPA9045
Specific conductance				32	µS/cm	1.0	EPA9050
Total organic carbon				4,100	mg/kg	250	EPA415.1

SAMPLE NAME: D431 1401 (Continued) Sample ID: 100390

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				1.3	mg/kg	0.82	EPA7060
Barium	U			20	mg/kg	20	EPA6010
Cadmium	U			0.50	mg/kg	0.50	EPA6010
Chromium				13	mg/kg	1.0	EPA6010
Copper	U			2.5	mg/kg	2.5	EPA6010
Lead				4.3	mg/kg	0.25	EPA7421
Manganese				29	mg/kg	1.5	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			4.0	mg/kg	4.0	EPA6010
Selenium	U			0.41	mg/kg	0.41	EPA7740
Silver	U			1.0	mg/kg	1.0	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			370	µg/kg	370	EPA8270
Acenaphthylene	U			370	µg/kg	370	EPA8270
Anthracene	U			370	µg/kg	370	EPA8270
Benzo(a)anthracene	U			370	µg/kg	370	EPA8270
Benzo(b)fluoranthene	UJ	H		370	µg/kg	370	EPA8270
Benzo(k)fluoranthene	UJ	H		370	µg/kg	370	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	UJ	H		370	µg/kg	370	EPA8270
Benzo(a)pyrene	UJ	H		370	µg/kg	370	EPA8270
Benzyl alcohol	U			370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	U			370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	J			49	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Butylbenzyl phthalate	U			370	µg/kg	370	EPA8270
4-Chloroaniline	U			370	µg/kg	370	EPA8270
4-Chloro-m-cresol	U			370	µg/kg	370	EPA8270
2-Chloronaphthalene	U			370	µg/kg	370	EPA8270
2-Chlorophenol	U			370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Chrysene	U			370	µg/kg	370	EPA8270
o-Cresol (2-Methylphenol)	U			370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	U			370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	UJ	H		370	µg/kg	370	EPA8270
Dibenzofuran	U			370	µg/kg	370	EPA8270
Di-n-butyl phthalate	U	V		370	µg/kg	370	EPA8270
1,2-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,4-Dichlorobenzene	U			370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	U			740	µg/kg	740	EPA8270
2,4-Dichlorophenol	U			370	µg/kg	370	EPA8270
Diethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	U			370	µg/kg	370	EPA8270
Dimethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270

SAMPLE NAME: D431 1401 (Continued) Sample ID: 100390

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2,4-Dinitrotoluene	U			370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	U			370	µg/kg	370	EPA8270
Di-n-octyl phthalate	UJ	H		370	µg/kg	370	EPA8270
Fluoranthene	U			370	µg/kg	370	EPA8270
Fluorene	U			370	µg/kg	370	EPA8270
Hexachlorobenzene	U			370	µg/kg	370	EPA8270
Hexachlorobutadiene	U			370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	U			370	µg/kg	370	EPA8270
Hexachloroethane	U			370	µg/kg	370	EPA8270
Hexanedioic acid ester	J	N		20,000	µg/kg		EPA8270
Indeno(1,2,3-c,d)pyrene	UJ	H		370	µg/kg	370	EPA8270
Isophorone	U			370	µg/kg	370	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			370	µg/kg	370	EPA8270
Naphthalene	U			370	µg/kg	370	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			370	µg/kg	370	EPA8270
2-Nitrophenol	U			370	µg/kg	370	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			370	µg/kg	370	EPA8270
N-Nitrosodipropylamine	U			370	µg/kg	370	EPA8270
Pentachlorophenol	U			1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			370	µg/kg	370	EPA8270
Phenol	UJ	C		370	µg/kg	370	EPA8270
Pyrene	U			370	µg/kg	370	EPA8270
1,2,4-Trichlorobenzene	U			370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			370	µg/kg	370	EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		2,000	µg/kg		EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown	J	N		600	µg/kg		EPA8270
Unknown ketone	J	N		6,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	UJ	H		11	µg/kg	11	EPA8240
Benzene	UJ	H		5.7	µg/kg	5.7	EPA8240
Bromodichloromethane	UJ	H		5.7	µg/kg	5.7	EPA8240
Bromoform	UJ	H		5.7	µg/kg	5.7	EPA8240
Bromomethane (Methyl bromide)	UJ	H		11	µg/kg	11	EPA8240
Carbon disulfide	UJ	H		5.7	µg/kg	5.7	EPA8240
Carbon tetrachloride	UJ	H		5.7	µg/kg	5.7	EPA8240
Chlorobenzene	UJ	H		5.7	µg/kg	5.7	EPA8240
Chloroethane	UJ	H		11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	UJ	HL		11	µg/kg	11	EPA8240

SAMPLE NAME: D431 1401 (Continued) Sample ID: 100390

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Chloroform	UJ	H		5.7	µg/kg	5.7	EPA8240
Chloromethane (Methyl chloride)	UJ	H		11	µg/kg	11	EPA8240
Dibromochloromethane	UJ	H		5.7	µg/kg	5.7	EPA8240
1,1-Dichloroethane	UJ	H		5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethane	UJ	H		5.7	µg/kg	5.7	EPA8240
1,1-Dichloroethylene	UJ	H		5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethylene	UJ	H		5.7	µg/kg	5.7	EPA8240
Dichloromethane (Methylene chloride)	UJ	H		5.7	µg/kg	5.7	EPA8240
1,2-Dichloropropane	UJ	H		5.7	µg/kg	5.7	EPA8240
cis-1,3-Dichloropropene	UJ	H		5.7	µg/kg	5.7	EPA8240
trans-1,3-Dichloropropene	UJ	H		5.7	µg/kg	5.7	EPA8240
Ethylbenzene	UJ	H		5.7	µg/kg	5.7	EPA8240
2-Hexanone	UJ	H		11	µg/kg	11	EPA8240
Methyl ethyl ketone	UJ	H		11	µg/kg	11	EPA8240
Methyl isobutyl ketone	UJ	H		11	µg/kg	11	EPA8240
Styrene	UJ	H		5.7	µg/kg	5.7	EPA8240
1,1,2,2-Tetrachloroethane	UJ	H		5.7	µg/kg	5.7	EPA8240
Tetrachloroethylene	UJ	H		5.7	µg/kg	5.7	EPA8240
Toluene	UJ	H		5.7	µg/kg	5.7	EPA8240
1,1,1-Trichloroethane	UJ	H		5.7	µg/kg	5.7	EPA8240
1,1,2-Trichloroethane	UJ	H		5.7	µg/kg	5.7	EPA8240
Trichloroethylene	UJ	H		5.7	µg/kg	5.7	EPA8240
Vinyl acetate	UJ	H		11	µg/kg	11	EPA8240
Xylenes	UJ	H		5.7	µg/kg	5.7	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	UJ	O	L	1.9	µg/kg	1.9	EPA8080
alpha-Benzene hexachloride	UJ	O	L	1.9	µg/kg	1.9	EPA8080
beta-Benzene hexachloride	UJ	O	L	1.9	µg/kg	1.9	EPA8080
delta-Benzene hexachloride	UJ	O	L	1.9	µg/kg	1.9	EPA8080
alpha-Chlordane	UJ	O	L	1.9	µg/kg	1.9	EPA8080
gamma-Chlordane	UJ	O	L	1.9	µg/kg	1.9	EPA8080
p,p'-DDD	UJ	O	L	3.8	µg/kg	3.8	EPA8080
p,p'-DDE	UJ	O	L	3.8	µg/kg	3.8	EPA8080
p,p'-DDT	UJ	O	L	3.8	µg/kg	3.8	EPA8080
Dieldrin	UJ	O	L	3.8	µg/kg	3.8	EPA8080
Endosulfan I	UJ	O	L	1.9	µg/kg	1.9	EPA8080
Endosulfan II	UJ	O	L	3.8	µg/kg	3.8	EPA8080
Endosulfan sulfate	UJ	O	L	3.8	µg/kg	3.8	EPA8080
Endrin	UJ	O	L	3.8	µg/kg	3.8	EPA8080
Endrin ketone	UJ	O	L	3.8	µg/kg	3.8	EPA8080
Heptachlor	UJ	O	L	1.9	µg/kg	1.9	EPA8080
Heptachlor epoxide	UJ	O	L	1.9	µg/kg	1.9	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	UJ	O	L	1.9	µg/kg	1.9	EPA8080
Methoxychlor	UJ	O	L	19	µg/kg	19	EPA8080

SAMPLE NAME: D431 1401 (Continued) Sample ID: 100390

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Octachlorodibenzo-p-dioxin				3.2	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	UJ	O	L	38	µg/kg	38	EPA8080
PCB 1221	UJ	O	L	76	µg/kg	76	EPA8080
PCB 1232	UJ	O	L	38	µg/kg	38	EPA8080
PCB 1242	UJ	O	L	38	µg/kg	38	EPA8080
PCB 1248	UJ	O	L	38	µg/kg	38	EPA8080
PCB 1254	UJ	O	L	38	µg/kg	38	EPA8080
PCB 1260	UJ	O	L	38	µg/kg	38	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	UJ	O	L	190	µg/kg	190	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				12±19	pCi/g	9.7	EPA900.0
Gross alpha				9.9±17	pCi/g	9.3	EPA900.0
Nonvolatile beta		X		74±29	pCi/g	17	EPA900.0
Nonvolatile beta		X		46±25	pCi/g	16	EPA900.0
Radium, total alpha-emitting	U	V		1.4±1.1	pCi/g	0.20	EPA903.0
Radium, total alpha-emitting	U	V		2.1±1.2	pCi/g	0.17	EPA903.0
Tritium	U			1.2	pCi/g	1.2	EPA906.0
Tritium	U			1.3	pCi/g	1.3	EPA906.0

SAMPLE NAME: D431 1401D Sample ID: 100391

Sample Type: Split Associated Sample: 100390

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				12	meq/100g	2.0	EPA9080
pH	J	Q		4.8	pH	0.010	EPA9045
pH	J	Q		4.7	pH	0.010	EPA9045
Specific conductance				35	µS/cm	1.0	EPA9050
Specific conductance				35	µS/cm	1.0	EPA9050
Total organic carbon				5,700	mg/kg	280	EPA415.1
Total Metals							
Arsenic				2.4	mg/kg	2.0	EPA7060
Barium	U			33	mg/kg	33	EPA6010
Cadmium	U			0.83	mg/kg	0.83	EPA6010
Chromium				25	mg/kg	1.7	EPA6010

SAMPLE NAME: D431 1401D (Continued) Sample ID: 100391

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Copper	U			4.2	mg/kg	4.2	EPA6010
Lead				7.9	mg/kg	0.59	EPA7421
Manganese				54	mg/kg	2.5	EPA6010
Mercury	U			0.21	mg/kg	0.21	EPA7470
Nickel	U			6.7	mg/kg	6.7	EPA6010
Selenium	U			0.98	mg/kg	0.98	EPA7740
Silver				1.8	mg/kg	1.7	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			370	µg/kg	370	EPA8270
Acenaphthylene	U			370	µg/kg	370	EPA8270
Anthracene	U			370	µg/kg	370	EPA8270
Benzo(a)anthracene	U			370	µg/kg	370	EPA8270
Benzo(b)fluoranthene	U			370	µg/kg	370	EPA8270
Benzo(k)fluoranthene	U			370	µg/kg	370	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	U			370	µg/kg	370	EPA8270
Benzo(a)pyrene	U			370	µg/kg	370	EPA8270
Benzyl alcohol	U			370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	U			370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	U			370	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Butanoic acid ester	J	NV		200	µg/kg		EPA8270
Butylbenzyl phthalate	U			370	µg/kg	370	EPA8270
4-Chloroaniline	U			370	µg/kg	370	EPA8270
4-Chloro-m-cresol	U			370	µg/kg	370	EPA8270
2-Chloronaphthalene	U			370	µg/kg	370	EPA8270
2-Chlorophenol	U			370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Chrysene	U			370	µg/kg	370	EPA8270
o-Cresol (2-Methylphenol)	U			370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	U			370	µg/kg	370	EPA8270
Hexadecanoic acid ester	J	N		200	µg/kg		EPA8270
Dibenz(a,h)anthracene	U			370	µg/kg	370	EPA8270
Dibenzofuran	U			370	µg/kg	370	EPA8270
Di-n-butyl phthalate	UJ	V		94	µg/kg	370	EPA8270
1,2-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,4-Dichlorobenzene	U			370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	U			750	µg/kg	750	EPA8270
2,4-Dichlorophenol	U			370	µg/kg	370	EPA8270
Diethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	U			370	µg/kg	370	EPA8270
Dimethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	U			370	µg/kg	370	EPA8270

SAMPLE NAME: D431-1401D (Continued) Sample ID: 100391

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Di-n-octyl phthalate	U			370	µg/kg	370	EPA8270
Fluoranthene	U			370	µg/kg	370	EPA8270
Fluorene	U			370	µg/kg	370	EPA8270
Hexachlorobenzene	U			370	µg/kg	370	EPA8270
Hexachlorobutadiene	U			370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	U			370	µg/kg	370	EPA8270
Hexachloroethane	U			370	µg/kg	370	EPA8270
Hexanedioic acid ester	J	N		2,000	µg/kg		EPA8270
Indeno(1,2,3-c,d)pyrene	U			370	µg/kg	370	EPA8270
Isophorone	U			370	µg/kg	370	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	U			370	µg/kg	370	EPA8270
Naphthalene	J			40	µg/kg	370	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U			370	µg/kg	370	EPA8270
2-Nitrophenol	U			370	µg/kg	370	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			370	µg/kg	370	EPA8270
N-Nitrosodipropylamine	U			370	µg/kg	370	EPA8270
Pentachlorophenol	U			1,900	µg/kg	1,900	EPA8270
Phenanthrene	J			40	µg/kg	370	EPA8270
Phenol	UJ	C		370	µg/kg	370	EPA8270
Pyrene	U			370	µg/kg	370	EPA8270
1,2,4-Trichlorobenzene	U			370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			370	µg/kg	370	EPA8270
Unknown hydrocarbon	J	N		300	µg/kg		EPA8270
Unknown hydrocarbon	J	N		400	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown ketone	J	N		5,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		11	µg/kg	11	EPA8240
Benzene	U			5.6	µg/kg	5.6	EPA8240
Bromodichloromethane	U			5.6	µg/kg	5.6	EPA8240
Bromoform	U			5.6	µg/kg	5.6	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.6	µg/kg	5.6	EPA8240
Carbon tetrachloride	U			5.6	µg/kg	5.6	EPA8240
Chlorobenzene	U			5.6	µg/kg	5.6	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.6	µg/kg	5.6	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.6	µg/kg	5.6	EPA8240
1,1-Dichloroethane	U			5.6	µg/kg	5.6	EPA8240
1,2-Dichloroethane	U			5.6	µg/kg	5.6	EPA8240

SAMPLE NAME: D431 1401D (Continued) Sample ID: 100391

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1-Dichloroethylene	U			5.6	µg/kg	5.6	EPA8240
1,2-Dichloroethylene	U			5.6	µg/kg	5.6	EPA8240
Dichloromethane (Methylene chloride)	U			5.6	µg/kg	5.6	EPA8240
1,2-Dichloropropane	U			5.6	µg/kg	5.6	EPA8240
cis-1,3-Dichloropropene	U			5.6	µg/kg	5.6	EPA8240
trans-1,3-Dichloropropene	U			5.6	µg/kg	5.6	EPA8240
Ethylbenzene	U			5.6	µg/kg	5.6	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.6	µg/kg	5.6	EPA8240
1,1,2,2-Tetrachloroethane	U			5.6	µg/kg	5.6	EPA8240
Tetrachloroethylene	U			5.6	µg/kg	5.6	EPA8240
Toluene	U			5.6	µg/kg	5.6	EPA8240
1,1,1-Trichloroethane	U			5.6	µg/kg	5.6	EPA8240
1,1,2-Trichloroethane	U			5.6	µg/kg	5.6	EPA8240
Trichloroethylene	U			5.6	µg/kg	5.6	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.6	µg/kg	5.6	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	UJ	O	L	1.9	µg/kg	1.9	EPA8080
alpha-Benzene hexachloride	UJ	O	L	1.9	µg/kg	1.9	EPA8080
beta-Benzene hexachloride	UJ	O	L	1.9	µg/kg	1.9	EPA8080
delta-Benzene hexachloride	UJ	O	L	1.9	µg/kg	1.9	EPA8080
alpha-Chlordane	UJ	O	L	1.9	µg/kg	1.9	EPA8080
gamma-Chlordane	UJ	O	L	1.9	µg/kg	1.9	EPA8080
p,p'-DDD	UJ	O	L	3.7	µg/kg	3.7	EPA8080
p,p'-DDE	UJ	O	L	3.7	µg/kg	3.7	EPA8080
p,p'-DDT	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Dieldrin	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Endosulfan I	UJ	O	L	1.9	µg/kg	1.9	EPA8080
Endosulfan II	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Endosulfan sulfate	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Endrin	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Endrin ketone	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Heptachlor	UJ	O	L	1.9	µg/kg	1.9	EPA8080
Heptachlor epoxide	UJ	O	L	1.9	µg/kg	1.9	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	UJ	O	L	1.9	µg/kg	1.9	EPA8080
Methoxychlor	UJ	O	L	19	µg/kg	19	EPA8080
Octachlorodibenzo-p-dioxin				4,7	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.30	ng/g	0.30	EPA8280
PCB 1016	UJ	O	L	37	µg/kg	37	EPA8080
PCB 1221	UJ	O	L	75	µg/kg	75	EPA8080
PCB 1232	UJ	O	L	37	µg/kg	37	EPA8080

SAMPLE NAME: D431-1401D (Continued) Sample ID: 100391

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
PCB 1242	UJ	O	L	37	µg/kg	37	EPA8080
PCB 1248	UJ	O	L	37	µg/kg	37	EPA8080
PCB 1254	UJ	O	L	37	µg/kg	37	EPA8080
PCB 1260	UJ	O	L	37	µg/kg	37	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	UJ	O	L	190	µg/kg	190	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			9.6	pCi/g	9.6	EPA900.0
Nonvolatile beta				29±23	pCi/g	16	EPA900.0
Radium, total alpha-emitting	U	V		1.2±0.96	pCi/g	0.19	EPA903.0
Tritium				1.6±0.39	pCi/g	1.4	EPA906.0

SAMPLE NAME: D431 1402 Sample ID: 100392

Location (SRS Coordinates): 18401.83E 66640.68N
Ground Elevation Above MSL: 129.4 ft
Depth of Core Interval: 0.50 to 2.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 3/4 USC Soil Classification: SC Percent Solids: 89.10

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			1.1	mg/kg	1.1	EPA7060
Barium	U			22	mg/kg	22	EPA6010
Cadmium	U			0.56	mg/kg	0.56	EPA6010
Chromium				11	mg/kg	1.1	EPA6010
Copper	U			2.8	mg/kg	2.8	EPA6010
Lead				3.8	mg/kg	0.33	EPA7421
Manganese				19	mg/kg	1.7	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			4.5	mg/kg	4.5	EPA6010
Selenium	U			0.55	mg/kg	0.55	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			370	µg/kg	370	EPA8270
Acenaphthylene	U			370	µg/kg	370	EPA8270
Anthracene	U			370	µg/kg	370	EPA8270
Benzo(a)anthracene	U			370	µg/kg	370	EPA8270

SAMPLE NAME: D431 1402 (Continued) Sample ID: 100392

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Benzo(b)fluoranthene	U			370	µg/kg	370	EPA8270
Benzo(k)fluoranthene	U			370	µg/kg	370	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	U			370	µg/kg	370	EPA8270
Benzo(a)pyrene	U			370	µg/kg	370	EPA8270
Benzyl alcohol	U			370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	U			370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	U			370	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Butanoic acid ester	J	NV		300	µg/kg		EPA8270
Butylbenzyl phthalate	U			370	µg/kg	370	EPA8270
4-Chloroaniline	U			370	µg/kg	370	EPA8270
4-Chloro-m-cresol	U			370	µg/kg	370	EPA8270
2-Chloronaphthalene	U			370	µg/kg	370	EPA8270
2-Chlorophenol	U			370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Chrysene	U			370	µg/kg	370	EPA8270
o-Cresol (2-Methylphenol)	U			370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	U			370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	U			370	µg/kg	370	EPA8270
Dibenzofuran	U			370	µg/kg	370	EPA8270
Di-n-butyl phthalate	UJ	V		82	µg/kg	370	EPA8270
1,2-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,4-Dichlorobenzene	U			370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	U			750	µg/kg	750	EPA8270
2,4-Dichlorophenol	U			370	µg/kg	370	EPA8270
Diethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	U			370	µg/kg	370	EPA8270
Dimethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	U			370	µg/kg	370	EPA8270
Di-n-octyl phthalate	U			370	µg/kg	370	EPA8270
Fluoranthene	U			370	µg/kg	370	EPA8270
Fluorene	U			370	µg/kg	370	EPA8270
Hexachlorobenzene	U			370	µg/kg	370	EPA8270
Hexachlorobutadiene	U			370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	U			370	µg/kg	370	EPA8270
Hexachloroethane	U			370	µg/kg	370	EPA8270
Indeno(1,2,3-c,d)pyrene	U			370	µg/kg	370	EPA8270
Isophorone	U			370	µg/kg	370	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	U			370	µg/kg	370	EPA8270
Naphthalene	U			370	µg/kg	370	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270

SAMPLE NAME: D431 1402 (Continued) Sample ID: 100392

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Nitrobenzene	U			370	µg/kg	370	EPA8270
2-Nitrophenol	U			370	µg/kg	370	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			370	µg/kg	370	EPA8270
N-Nitrosodipropylamine	U			370	µg/kg	370	EPA8270
Pentachlorophenol	U			1,900	µg/kg	1,900	EPA8270
Phenanthrene	U			370	µg/kg	370	EPA8270
Phenol	UJ	C		370	µg/kg	370	EPA8270
Pyrene	U			370	µg/kg	370	EPA8270
1,2,4-Trichlorobenzene	U			370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			370	µg/kg	370	EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Unknown	J	N		1,000	µg/kg		EPA8270
Unknown	J	N		700	µg/kg		EPA8270
Unknown ketone	J	N		5,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		11	µg/kg	11	EPA8240
Benzene	U			5.7	µg/kg	5.7	EPA8240
Bromodichloromethane	U			5.7	µg/kg	5.7	EPA8240
Bromoform	U			5.7	µg/kg	5.7	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.7	µg/kg	5.7	EPA8240
Carbon tetrachloride	U			5.7	µg/kg	5.7	EPA8240
Chlorobenzene	U			5.7	µg/kg	5.7	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.7	µg/kg	5.7	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.7	µg/kg	5.7	EPA8240
1,1-Dichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
Dichloromethane (Methylene chloride)	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloropropane	U			5.7	µg/kg	5.7	EPA8240
cis-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
trans-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
Ethylbenzene	U			5.7	µg/kg	5.7	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.7	µg/kg	5.7	EPA8240
1,1,2,2-Tetrachloroethane	U			5.7	µg/kg	5.7	EPA8240
Tetrachloroethylene	U			5.7	µg/kg	5.7	EPA8240
Toluene	U			5.7	µg/kg	5.7	EPA8240
1,1,1-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1,2-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240

SAMPLE NAME: D431 1402 (Continued) Sample ID: 100392

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Trichloroethylene	U			5.7	µg/kg	5.7	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.7	µg/kg	5.7	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	UJ	O	L	1.9	µg/kg	1.9	EPA8080
alpha-Benzene hexachloride	UJ	O	L	1.9	µg/kg	1.9	EPA8080
beta-Benzene hexachloride	UJ	O	L	1.9	µg/kg	1.9	EPA8080
delta-Benzene hexachloride	UJ	O	L	1.9	µg/kg	1.9	EPA8080
alpha-Chlordane	UJ	O	L	1.9	µg/kg	1.9	EPA8080
gamma-Chlordane	UJ	O	L	1.9	µg/kg	1.9	EPA8080
p,p'-DDD	UJ	O	L	3.7	µg/kg	3.7	EPA8080
p,p'-DDE	UJ	O	L	3.7	µg/kg	3.7	EPA8080
p,p'-DDT	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Dieldrin	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Endosulfan I	UJ	O	L	1.9	µg/kg	1.9	EPA8080
Endosulfan II	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Endosulfan sulfate	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Endrin	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Endrin ketone	UJ	O	L	3.7	µg/kg	3.7	EPA8080
Heptachlor	UJ	O	L	1.9	µg/kg	1.9	EPA8080
Heptachlor epoxide	UJ	O	L	1.9	µg/kg	1.9	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	UJ	O	L	1.9	µg/kg	1.9	EPA8080
Methoxychlor	UJ	O	L	19	µg/kg	19	EPA8080
Octachlorodibenzo-p-dioxin				6.1	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	UJ	O	L	37	µg/kg	37	EPA8080
PCB 1221	UJ	O	L	75	µg/kg	75	EPA8080
PCB 1232	UJ	O	L	37	µg/kg	37	EPA8080
PCB 1242	UJ	O	L	37	µg/kg	37	EPA8080
PCB 1248	UJ	O	L	37	µg/kg	37	EPA8080
PCB 1254	UJ	O	L	37	µg/kg	37	EPA8080
PCB 1260	UJ	O	L	37	µg/kg	37	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	UJ	O	L	190	µg/kg	190	EPA8080

SAMPLE NAME: D431 1402 (Continued) Sample ID: 100392

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Radionuclide Indicators and Radionuclides							
Gross alpha	U			8.9	pCi/g	8.9	EPA900.0
Nonvolatile beta				33±22	pCi/g	15	EPA900.0
Radium, total alpha-emitting	U	V		1.4±0.99	pCi/g	0.18	EPA903.0
Tritium	U			1.3	pCi/g	1.3	EPA906.0

SAMPLE NAME: D431 1403 Sample ID: 100393

Location (SRS Coordinates): 18401.83E 66640.68N
Ground Elevation Above MSL: 129.4 ft
Depth of Core Interval: 2.00 to 4.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 4/6 USC Soil Classification: SW Percent Solids: 87.40

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				2.5	mg/kg	1.1	EPA7060
Barium	U			23	mg/kg	23	EPA6010
Cadmium	U			0.57	mg/kg	0.57	EPA6010
Chromium				64	mg/kg	1.1	EPA6010
Copper				13	mg/kg	2.9	EPA6010
Lead				19	mg/kg	3.4	EPA7421
Manganese				70	mg/kg	1.7	EPA6010
Mercury				0.25	mg/kg	0.11	EPA7470
Nickel				12	mg/kg	4.6	EPA6010
Selenium	U			0.57	mg/kg	0.57	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
Volatile Organic Compounds							
Acetone				15	µg/kg	11	EPA8240
Benzene	U			5.7	µg/kg	5.7	EPA8240
Bromodichloromethane	U			5.7	µg/kg	5.7	EPA8240
Bromoform	U			5.7	µg/kg	5.7	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.7	µg/kg	5.7	EPA8240
Carbon tetrachloride	U			5.7	µg/kg	5.7	EPA8240
Chlorobenzene	U			5.7	µg/kg	5.7	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.7	µg/kg	5.7	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.7	µg/kg	5.7	EPA8240
1,1-Dichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethane				6.1	µg/kg	5.7	EPA8240
1,1-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
Dichloromethane (Methylene chloride)	U	V		7.3	µg/kg	5.7	EPA8240

SAMPLE NAME: D431 1403 (Continued) Sample ID: 100393

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,2-Dichloropropane	U			5.7	µg/kg	5.7	EPA8240
cis-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
trans-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
Ethylbenzene	U			5.7	µg/kg	5.7	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.7	µg/kg	5.7	EPA8240
1,1,2,2-Tetrachloroethane	U			5.7	µg/kg	5.7	EPA8240
Tetrachloroethylene	U			5.7	µg/kg	5.7	EPA8240
Toluene	U			5.7	µg/kg	5.7	EPA8240
1,1,1-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1,2-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240
Trichloroethylene	U			5.7	µg/kg	5.7	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.7	µg/kg	5.7	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha				7.8±13	pCi/g	6.8	EPA900.0
Nonvolatile beta				35±17	pCi/g	11	EPA900.0
Radium, total alpha-emitting	U	V		2.5±1.4	pCi/g	0.20	EPA903.0
Tritium	U			1.3	pCi/g	1.3	EPA906.0

SAMPLE NAME: D431 1404 Sample ID: 100394

Location (SRS Coordinates): 18401.83E 66640.68N
Ground Elevation Above MSL: 129.4 ft
Depth of Core Interval: 4.00 to 6.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 4/6 USC Soil Classification: SW Percent Solids: 89.90

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				1.6	mg/kg	1.0	EPA7060
Barium	U			22	mg/kg	22	EPA6010
Cadmium	U			0.55	mg/kg	0.55	EPA6010
Chromium				42	mg/kg	1.1	EPA6010
Copper				8.0	mg/kg	2.7	EPA6010
Lead				10	mg/kg	1.5	EPA7421
Manganese				74	mg/kg	1.6	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel				6.2	mg/kg	4.4	EPA6010
Selenium	U			0.50	mg/kg	0.50	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010

SAMPLE NAME: D431-1404 (Continued) Sample ID: 100394

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	U	V		11	µg/kg	11	EPA8240
Benzene	U			5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane				5.0	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	U			5.5	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	U			5.5	µg/kg	5.5	EPA8240
Toluene	U			5.5	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.5	µg/kg	5.5	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			8.5	pCi/g	8.5	EPA900.0
Nonvolatile beta				26±20	pCi/g	14	EPA900.0
Radium, total alpha-emitting	U	V		1.5±1.0	pCi/g	0.17	EPA903.0
Tritium	U			1.2	pCi/g	1.2	EPA906.0

SAMPLE NAME: D431 1405 Sample ID: 100395

Location (SRS Coordinates): 18401.83E 66640.68N
Ground Elevation Above MSL: 129.4 ft
Depth of Core Interval: 6.00 to 8.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 3/4 USC Soil Classification: SW Percent Solids: 91.50

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				12	meq/100g	2.0	EPA9080
Cyanide	U			1.1	mg/kg	1.1	EPA335.3
pH	J	Q		8.8	pH	0.010	EPA9045
Specific conductance				220	µS/cm	1.0	EPA9050
Total organic carbon				9,300	mg/kg	350	EPA415.1
Total Metals							
Aluminum				2,200	mg/kg	17	EPA6010
Antimony				35	mg/kg	4.9	EPA6010
Arsenic				2.9	mg/kg	0.79	EPA7060
Barium				21	mg/kg	17	EPA6010
Beryllium	U			0.41	mg/kg	0.41	EPA6010
Cadmium				1.1	mg/kg	0.41	EPA6010
Calcium				2,200	mg/kg	410	EPA6010
Chromium				120	mg/kg	0.82	EPA6010
Cobalt	U			4.1	mg/kg	4.1	EPA6010
Copper				39	mg/kg	2.1	EPA6010
Iron				29,000	mg/kg	8.2	EPA6010
Lead				55	mg/kg	4.7	EPA7421
Magnesium				1,600	mg/kg	410	EPA6010
Manganese				170	mg/kg	1.2	EPA6010
Mercury				0.29	mg/kg	0.11	EPA7470
Nickel				33	mg/kg	3.3	EPA6010
Potassium	U			410	mg/kg	410	EPA6010
Selenium	U			0.39	mg/kg	0.39	EPA7740
Silver				1.6	mg/kg	0.82	EPA6010
Sodium	U			410	mg/kg	410	EPA6010
Thallium	U			1.1	mg/kg	1.1	EPA7841
Vanadium				12	mg/kg	4.1	EPA6010
Zinc				130	mg/kg	1.6	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	J			170	µg/kg	370	EPA8270
Acenaphthylene	U			370	µg/kg	370	EPA8270
Anthracene	J			320	µg/kg	370	EPA8270
Benzo(a)anthracene				820	µg/kg	370	EPA8270
Benzo(b)fluoranthene				1,400	µg/kg	370	EPA8270
Benzo(k)fluoranthene	J			240	µg/kg	370	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene				550	µg/kg	370	EPA8270
Benzo(a)pyrene				760	µg/kg	370	EPA8270
Benzyl alcohol	U			370	µg/kg	370	EPA8270

SAMPLE NAME: D431 1405 (Continued) Sample ID: 100395

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Bis(2-chloroethoxy) methane	U			370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	J			51	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Butanoic acid ester	J	NV		5,000	µg/kg		EPA8270
Butylbenzyl phthalate	U			370	µg/kg	370	EPA8270
4-Chloroaniline	U			370	µg/kg	370	EPA8270
4-Chloro-m-cresol	U			370	µg/kg	370	EPA8270
2-Chloronaphthalene	U			370	µg/kg	370	EPA8270
2-Chlorophenol	U			370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Chrysene				830	µg/kg	370	EPA8270
o-Cresol (2-Methylphenol)	U			370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	U			370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	U			370	µg/kg	370	EPA8270
Dibenzofuran	J			70	µg/kg	370	EPA8270
Di-n-butyl phthalate	UJ	V		100	µg/kg	370	EPA8270
1,2-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,4-Dichlorobenzene	U			370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	U			750	µg/kg	750	EPA8270
2,4-Dichlorophenol	U			370	µg/kg	370	EPA8270
Diethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	U			370	µg/kg	370	EPA8270
Dimethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	U			370	µg/kg	370	EPA8270
Di-n-octyl phthalate	U			370	µg/kg	370	EPA8270
Fluoranthene				1,800	µg/kg	370	EPA8270
Fluorene	J			160	µg/kg	370	EPA8270
Hexachlorobenzene	U			370	µg/kg	370	EPA8270
Hexachlorobutadiene	U			370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	U			370	µg/kg	370	EPA8270
Hexachloroethane	U			370	µg/kg	370	EPA8270
Indeno(1,2,3-c,d)pyrene				370	µg/kg	370	EPA8270
Isophorone	U			370	µg/kg	370	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	J			52	µg/kg	370	EPA8270
Naphthalene	J			92	µg/kg	370	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U			370	µg/kg	370	EPA8270
2-Nitrophenol	U			370	µg/kg	370	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			370	µg/kg	370	EPA8270
N-Nitrosodipropylamine	U			370	µg/kg	370	EPA8270
Pentachlorophenol	U			1,900	µg/kg	1,900	EPA8270

SAMPLE NAME: D431 1405 (Continued) Sample ID: 100395

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Phenanthrene				1,200	µg/kg	370	EPA8270
Phenol	UJ	C		370	µg/kg	370	EPA8270
Pyrene				1,600	µg/kg	370	EPA8270
1,2,4-Trichlorobenzene	U			370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			370	µg/kg	370	EPA8270
Unknown hydrocarbon	J	N		300	µg/kg		EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Unknown acid	J	N		500	µg/kg		EPA8270
Unknown acid	J	N		200	µg/kg		EPA8270
Unknown ketone	J	N		6,000	µg/kg		EPA8270
Unknown phthalate	J	N		200	µg/kg		EPA8270
Unknown phthalate	J	N		500	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		38	µg/kg	11	EPA8240
Acetone	U	V		45	µg/kg	11	EPA8240
Acetone				14	µg/kg	11	EPA8240
Benzene	U			5.7	µg/kg	5.7	EPA8240
Bromodichloromethane	U			5.7	µg/kg	5.7	EPA8240
Bromodichloromethane	U			5.7	µg/kg	5.7	EPA8240
Bromodichloromethane	U			5.7	µg/kg	5.7	EPA8240
Bromoform	U			5.7	µg/kg	5.7	EPA8240
Bromoform	U			5.7	µg/kg	5.7	EPA8240
Bromoform	U			5.7	µg/kg	5.7	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.7	µg/kg	5.7	EPA8240
Carbon disulfide	U			5.7	µg/kg	5.7	EPA8240
Carbon disulfide	U			5.7	µg/kg	5.7	EPA8240
Carbon tetrachloride	U			5.7	µg/kg	5.7	EPA8240
Carbon tetrachloride	U			5.7	µg/kg	5.7	EPA8240
Carbon tetrachloride	U			5.7	µg/kg	5.7	EPA8240
Chlorobenzene	U			5.7	µg/kg	5.7	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.7	µg/kg	5.7	EPA8240
Chloroform	U			5.7	µg/kg	5.7	EPA8240
Chloroform	U			5.7	µg/kg	5.7	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.7	µg/kg	5.7	EPA8240

SAMPLE NAME: D431-1405 (Continued) Sample ID: 100395

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Dibromochloromethane	U			5.7	µg/kg	5.7	EPA8240
Dibromochloromethane	U			5.7	µg/kg	5.7	EPA8240
1,1-Dichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1-Dichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1-Dichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethane				6.7	µg/kg	5.7	EPA8240
1,2-Dichloroethane				9.0	µg/kg	5.7	EPA8240
1,2-Dichloroethane				5.9	µg/kg	5.7	EPA8240
1,1-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
Dichloromethane (Methylene chloride)	U			5.7	µg/kg	5.7	EPA8240
Dichloromethane (Methylene chloride)	U			5.7	µg/kg	5.7	EPA8240
Dichloromethane (Methylene chloride)	U	V		10	µg/kg	5.7	EPA8240
1,2-Dichloropropane	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloropropane	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloropropane	U			5.7	µg/kg	5.7	EPA8240
cis-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
cis-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
cis-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
trans-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
trans-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
trans-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
Ethylbenzene	U			5.7	µg/kg	5.7	EPA8240
Ethylbenzene	U			5.7	µg/kg	5.7	EPA8240
Ethylbenzene	U			5.7	µg/kg	5.7	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.7	µg/kg	5.7	EPA8240
Styrene	U			5.7	µg/kg	5.7	EPA8240
Styrene	U			5.7	µg/kg	5.7	EPA8240
1,1,2,2-Tetrachloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1,2,2-Tetrachloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1,2,2-Tetrachloroethane	U			5.7	µg/kg	5.7	EPA8240
Tetrachloroethylene	U			5.7	µg/kg	5.7	EPA8240
Tetrachloroethylene	U			5.7	µg/kg	5.7	EPA8240
Tetrachloroethylene	U			5.7	µg/kg	5.7	EPA8240
Toluene	U			5.7	µg/kg	5.7	EPA8240
1,1,1-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1,1-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1,1-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1,2-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240

SAMPLE NAME: D431-1405 (Continued) Sample ID: 100395

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1,2-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1,2-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240
Trichloroethylene	U			5.7	µg/kg	5.7	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.7	µg/kg	5.7	EPA8240
Xylenes	U			5.7	µg/kg	5.7	EPA8240
Xylenes	U			5.7	µg/kg	5.7	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			19	µg/kg	19	EPA8080
alpha-Benzene hexachloride	U			19	µg/kg	19	EPA8080
beta-Benzene hexachloride	U			19	µg/kg	19	EPA8080
delta-Benzene hexachloride	U			19	µg/kg	19	EPA8080
alpha-Chlordane	U			19	µg/kg	19	EPA8080
gamma-Chlordane	U			19	µg/kg	19	EPA8080
p,p'-DDD	J			39	µg/kg	37	EPA8080
p,p'-DDE	J			45	µg/kg	37	EPA8080
p,p'-DDT	J			21	µg/kg	37	EPA8080
Dieldrin	U			37	µg/kg	37	EPA8080
Endosulfan I	U			19	µg/kg	19	EPA8080
Endosulfan II	U			37	µg/kg	37	EPA8080
Endosulfan sulfate	U			37	µg/kg	37	EPA8080
Endrin	U			37	µg/kg	37	EPA8080
Endrin ketone	U			37	µg/kg	37	EPA8080
Heptachlor	U			19	µg/kg	19	EPA8080
Heptachlor epoxide	U			19	µg/kg	19	EPA8080
Lindane	U			19	µg/kg	19	EPA8080
Methoxychlor	U			190	µg/kg	190	EPA8080
PCB 1016	U			370	µg/kg	370	EPA8080
PCB 1221	U			740	µg/kg	740	EPA8080
PCB 1232	U			370	µg/kg	370	EPA8080
PCB 1242	U			370	µg/kg	370	EPA8080
PCB 1248	U			370	µg/kg	370	EPA8080
PCB 1254	U			370	µg/kg	370	EPA8080
PCB 1260	U			370	µg/kg	370	EPA8080
Toxaphene	U			1,900	µg/kg	1,900	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			7.5	pCi/g	7.5	EPA900.0
Nonvolatile beta				44±20	pCi/g	13	EPA900.0
Radium, total alpha-emitting	U	V		1.7±1.1	pCi/g	0.20	EPA903.0
Tritium				2.6±0.60	pCi/g	1.3	EPA906.0

SAMPLE NAME: D431 1406 Sample ID: 100396

Location (SRS Coordinates): 18401.83E 66640.68N
Ground Elevation Above MSL: 129.4 ft
Depth of Core Interval: 8.00 to 9.75 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 4/6 USC Soil Classification: SC Percent Solids: 89.60

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				1.8	mg/kg	0.95	EPA7060
Barium				25	mg/kg	22	EPA6010
Cadmium	U			0.55	mg/kg	0.55	EPA6010
Chromium				35	mg/kg	1.1	EPA6010
Copper				7.6	mg/kg	2.8	EPA6010
Lead				5.6	mg/kg	0.28	EPA7421
Manganese				38	mg/kg	1.7	EPA6010
Mercury				0.20	mg/kg	0.11	EPA7470
Nickel				9.7	mg/kg	4.4	EPA6010
Selenium	U			0.47	mg/kg	0.47	EPA7740
Silver				2.5	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	J			78	µg/kg	420	EPA8270
Acenaphthylene	U			420	µg/kg	420	EPA8270
Anthracene	J			84	µg/kg	420	EPA8270
Benzo(a)anthracene	J			180	µg/kg	420	EPA8270
Benzo(b)fluoranthene	J			250	µg/kg	420	EPA8270
Benzo(k)fluoranthene	J			86	µg/kg	420	EPA8270
Benzoic acid	U			2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	U			420	µg/kg	420	EPA8270
Benzo(a)pyrene	J			190	µg/kg	420	EPA8270
Benzyl alcohol	U			420	µg/kg	420	EPA8270
Bis(2-chloroethoxy) methane	U			420	µg/kg	420	EPA8270
Bis(2-chloroethyl) ether	U			420	µg/kg	420	EPA8270
Bis(2-chloroisopropyl) ether	U			420	µg/kg	420	EPA8270
Bis(2-ethylhexyl) phthalate	J			64	µg/kg	420	EPA8270
4-Bromophenyl phenyl ether	U			420	µg/kg	420	EPA8270
Butylbenzyl phthalate	U			420	µg/kg	420	EPA8270
4-Chloroaniline	U			420	µg/kg	420	EPA8270
4-Chloro-m-cresol	U			420	µg/kg	420	EPA8270
2-Chloronaphthalene	U			420	µg/kg	420	EPA8270
2-Chlorophenol	U			420	µg/kg	420	EPA8270
4-Chlorophenyl phenyl ether	U			420	µg/kg	420	EPA8270
Chrysene	J			220	µg/kg	420	EPA8270
o-Cresol (2-Methylphenol)	U			420	µg/kg	420	EPA8270
p-Cresol (4-Methylphenol)	U			420	µg/kg	420	EPA8270
Dibenz(a,h)anthracene	U			420	µg/kg	420	EPA8270
Dibenzofuran	J			58	µg/kg	420	EPA8270
Di-n-butyl phthalate	UJ	V		95	µg/kg	420	EPA8270
1,2-Dichlorobenzene	U			420	µg/kg	420	EPA8270
1,3-Dichlorobenzene	U			420	µg/kg	420	EPA8270
1,4-Dichlorobenzene	U			420	µg/kg	420	EPA8270

SAMPLE NAME: D431 1406 (Continued) Sample ID: 100396

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
3,3'-Dichlorobenzidine	U			840	µg/kg	840	EPA8270
2,4-Dichlorophenol	U			420	µg/kg	420	EPA8270
Diethyl phthalate	U			420	µg/kg	420	EPA8270
2,4-Dimethyl phenol	U			420	µg/kg	420	EPA8270
Dimethyl phthalate	U			420	µg/kg	420	EPA8270
2,4-Dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2,4-Dinitrotoluene	U			420	µg/kg	420	EPA8270
2,6-Dinitrotoluene	U			420	µg/kg	420	EPA8270
Di-n-octyl phthalate	U			420	µg/kg	420	EPA8270
Fluoranthene				440	µg/kg	420	EPA8270
Fluorene	J			88	µg/kg	420	EPA8270
Hexachlorobenzene	U			420	µg/kg	420	EPA8270
Hexachlorobutadiene	U			420	µg/kg	420	EPA8270
Hexachlorocyclopentadiene	U			420	µg/kg	420	EPA8270
Hexachloroethane	U			420	µg/kg	420	EPA8270
Indeno(1,2,3-c,d)pyrene	U			420	µg/kg	420	EPA8270
Isophorone	U			420	µg/kg	420	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	J			120	µg/kg	420	EPA8270
Naphthalene	J			86	µg/kg	420	EPA8270
o-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
Nitrobenzene	J			200	µg/kg	420	EPA8270
2-Nitrophenol	U			420	µg/kg	420	EPA8270
4-Nitrophenol	U			2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	U			420	µg/kg	420	EPA8270
N-Nitrosodipropylamine	U			420	µg/kg	420	EPA8270
Pentachlorophenol	U			2,100	µg/kg	2,100	EPA8270
Phenanthrene				450	µg/kg	420	EPA8270
Phenol	UJ	C		420	µg/kg	420	EPA8270
Propanoic acid ester	J	N		500	µg/kg		EPA8270
Pyrene	J			410	µg/kg	420	EPA8270
1,2,4-Trichlorobenzene	U			420	µg/kg	420	EPA8270
2,4,5-Trichlorophenol	U			2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	U			420	µg/kg	420	EPA8270
Unknown hydrocarbon	J	N		500	µg/kg		EPA8270
Unknown hydrocarbon	J	N		300	µg/kg		EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Unknown ketone	J	N		500	µg/kg		EPA8270
Unknown PAH	J	N		600	µg/kg		EPA8270
Unknown PAH	J	N		500	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	L			510	µg/kg	13	EPA8240
Acetone				740	µg/kg	65	EPA8240
Benzene	U			6.5	µg/kg	6.5	EPA8240

SAMPLE NAME: D431 1406 (Continued) Sample ID: 100396

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Bromodichloromethane	U			6.5	µg/kg	6.5	EPA8240
Bromoform	U			6.5	µg/kg	6.5	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Carbon disulfide	U			6.5	µg/kg	6.5	EPA8240
Carbon tetrachloride	U			6.5	µg/kg	6.5	EPA8240
Chlorobenzene	U			6.5	µg/kg	6.5	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
Chloroform	U			6.5	µg/kg	6.5	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Dibromochloromethane	U			6.5	µg/kg	6.5	EPA8240
1,1-Dichloroethane	U			6.5	µg/kg	6.5	EPA8240
1,2-Dichloroethane	U			6.5	µg/kg	6.5	EPA8240
1,1-Dichloroethylene	U			6.5	µg/kg	6.5	EPA8240
1,2-Dichloroethylene	U			6.5	µg/kg	6.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		9.7	µg/kg	6.5	EPA8240
1,2-Dichloropropane	U			6.5	µg/kg	6.5	EPA8240
cis-1,3-Dichloropropene	U			6.5	µg/kg	6.5	EPA8240
trans-1,3-Dichloropropene	U			6.5	µg/kg	6.5	EPA8240
Ethylbenzene	U			6.5	µg/kg	6.5	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Styrene	U			6.5	µg/kg	6.5	EPA8240
1,1,2,2-Tetrachloroethane	U			6.5	µg/kg	6.5	EPA8240
Tetrachloroethylene	U			6.5	µg/kg	6.5	EPA8240
Toluene	U			6.5	µg/kg	6.5	EPA8240
1,1,1-Trichloroethane	U			6.5	µg/kg	6.5	EPA8240
1,1,2-Trichloroethane	U			6.5	µg/kg	6.5	EPA8240
Trichloroethylene	U			6.5	µg/kg	6.5	EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
Xylenes	U			6.5	µg/kg	6.5	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	UJ	O	L	2.1	µg/kg	2.1	EPA8080
alpha-Benzene hexachloride	UJ	O	L	2.1	µg/kg	2.1	EPA8080
beta-Benzene hexachloride	UJ	O	L	2.1	µg/kg	2.1	EPA8080
delta-Benzene hexachloride	UJ	O	L	2.1	µg/kg	2.1	EPA8080
alpha-Chlordane	UJ	O	L	2.1	µg/kg	2.1	EPA8080
gamma-Chlordane	UJ	O	L	2.1	µg/kg	2.1	EPA8080
p,p'-DDD	J	O	L	2.1	µg/kg	4.2	EPA8080
p,p'-DDE	J	O	L	2.5	µg/kg	4.2	EPA8080
p,p'-DDT	J	O	L	10	µg/kg	4.2	EPA8080
Dieldrin	UJ	O	L	4.2	µg/kg	4.2	EPA8080
Endosulfan I	UJ	O	L	2.1	µg/kg	2.1	EPA8080
Endosulfan II	UJ	O	L	4.2	µg/kg	4.2	EPA8080
Endosulfan sulfate	UJ	O	L	4.2	µg/kg	4.2	EPA8080
Endrin	UJ	O	L	4.2	µg/kg	4.2	EPA8080
Endrin ketone	UJ	O	L	4.2	µg/kg	4.2	EPA8080

SAMPLE NAME: D431 1406 (Continued) Sample ID: 100396

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Heptachlor	UJ	O	L	2.1	µg/kg	2.1	EPA8080
Heptachlor epoxide	UJ	O	L	2.1	µg/kg	2.1	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.40	ng/g	0.40	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Lindane	UJ	O	L	2.1	µg/kg	2.1	EPA8080
Methoxychlor	UJ	O	L	21	µg/kg	21	EPA8080
Octachlorodibenzo-p-dioxin				2.4	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	UJ	O	L	42	µg/kg	42	EPA8080
PCB 1221	UJ	O	L	84	µg/kg	84	EPA8080
PCB 1232	UJ	O	L	42	µg/kg	42	EPA8080
PCB 1242	UJ	O	L	42	µg/kg	42	EPA8080
PCB 1248	UJ	O	L	42	µg/kg	42	EPA8080
PCB 1254	UJ	O	L	42	µg/kg	42	EPA8080
PCB 1260	UJ	O	L	42	µg/kg	42	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	UJ	O	L	210	µg/kg	210	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			9.0	pCi/g	9.0	EPA900.0
Nonvolatile beta				24±21	pCi/g	15	EPA900.0
Radium, total alpha-emitting	U	V		2.0±1.4	pCi/g	0.25	EPA903.0
Tritium				1.8±0.43	pCi/g	1.3	EPA906.0

SAMPLE NAME: D431 1407 Sample ID: 100398

Location (SRS Coordinates): 18401.83E 66640.68N
Ground Elevation Above MSL: 129.4 ft
Depth of Core Interval: 10.00 to 11.75 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Wet
Sample Color: 10R 4/6 USC Soil Classification: CL Percent Solids: 79.20

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				1.3	mg/kg	1.2	EPA7060
Barium	U			25	mg/kg	25	EPA6010
Cadmium	U			0.61	mg/kg	0.61	EPA6010
Chromium				19	mg/kg	1.2	EPA6010
Copper	U			3.1	mg/kg	3.1	EPA6010

SAMPLE NAME: D431-1407 (Continued) Sample ID: 100398

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Lead				4.0	mg/kg	0.36	EPA7421
Manganese				39	mg/kg	1.8	EPA6010
Mercury	U			0.13	mg/kg	0.13	EPA7470
Nickel				6.7	mg/kg	4.9	EPA6010
Selenium	U			0.60	mg/kg	0.60	EPA7740
Silver				1.5	mg/kg	1.2	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			420	µg/kg	420	EPA8270
Acenaphthylene	U			420	µg/kg	420	EPA8270
Anthracene	U			420	µg/kg	420	EPA8270
Benzo(a)anthracene	U			420	µg/kg	420	EPA8270
Benzo(b)fluoranthene	U			420	µg/kg	420	EPA8270
Benzo(k)fluoranthene	U			420	µg/kg	420	EPA8270
Benzoic acid	U			2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	U			420	µg/kg	420	EPA8270
Benzo(a)pyrene	U			420	µg/kg	420	EPA8270
Benzyl alcohol	U			420	µg/kg	420	EPA8270
Bis(2-chloroethoxy) methane	U			420	µg/kg	420	EPA8270
Bis(2-chloroethyl) ether	U			420	µg/kg	420	EPA8270
Bis(2-chloroisopropyl) ether	U			420	µg/kg	420	EPA8270
Bis(2-ethylhexyl) phthalate	U			420	µg/kg	420	EPA8270
4-Bromophenyl phenyl ether	U			420	µg/kg	420	EPA8270
Butylbenzyl phthalate	U			420	µg/kg	420	EPA8270
4-Chloroaniline	U			420	µg/kg	420	EPA8270
4-Chloro-m-cresol	U			420	µg/kg	420	EPA8270
2-Chloronaphthalene	U			420	µg/kg	420	EPA8270
2-Chlorophenol	U			420	µg/kg	420	EPA8270
4-Chlorophenyl phenyl ether	U			420	µg/kg	420	EPA8270
Chrysene	U			420	µg/kg	420	EPA8270
o-Cresol (2-Methylphenol)	U			420	µg/kg	420	EPA8270
p-Cresol (4-Methylphenol)	U			420	µg/kg	420	EPA8270
Dibenz(a,h)anthracene	U			420	µg/kg	420	EPA8270
Dibenzofuran	U			420	µg/kg	420	EPA8270
Di-n-butyl phthalate	UJ	V		100	µg/kg	420	EPA8270
1,2-Dichlorobenzene	U			420	µg/kg	420	EPA8270
1,3-Dichlorobenzene	U			420	µg/kg	420	EPA8270
1,4-Dichlorobenzene	U			420	µg/kg	420	EPA8270
3,3'-Dichlorobenzidine	U			840	µg/kg	840	EPA8270
2,4-Dichlorophenol	U			420	µg/kg	420	EPA8270
Diethyl phthalate	U			420	µg/kg	420	EPA8270
2,4-Dimethyl phenol	U			420	µg/kg	420	EPA8270
Dimethyl phthalate	U			420	µg/kg	420	EPA8270
2,4-Dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2,4-Dinitrotoluene	U			420	µg/kg	420	EPA8270
2,6-Dinitrotoluene	U			420	µg/kg	420	EPA8270
Di-n-octyl phthalate	U			420	µg/kg	420	EPA8270
Fluoranthene	U			420	µg/kg	420	EPA8270
Fluorene	U			420	µg/kg	420	EPA8270

SAMPLE NAME: D431 1407 (Continued) Sample ID: 100398

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Hexachlorobenzene	U			420	µg/kg	420	EPA8270
Hexachlorobutadiene	U			420	µg/kg	420	EPA8270
Hexachlorocyclopentadiene	U			420	µg/kg	420	EPA8270
Hexachloroethane	U			420	µg/kg	420	EPA8270
Hexanedioic acid ester	J	N		10,000	µg/kg		EPA8270
Indeno(1,2,3-c,d)pyrene	U			420	µg/kg	420	EPA8270
Isophorone	U			420	µg/kg	420	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	U			420	µg/kg	420	EPA8270
Naphthalene	U			420	µg/kg	420	EPA8270
o-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
Nitrobenzene	U			420	µg/kg	420	EPA8270
2-Nitrophenol	U			420	µg/kg	420	EPA8270
4-Nitrophenol	U			2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	U			420	µg/kg	420	EPA8270
N-Nitrosodipropylamine	U			420	µg/kg	420	EPA8270
Pentachlorophenol	U			2,100	µg/kg	2,100	EPA8270
Phenanthrene	U			420	µg/kg	420	EPA8270
Phenol	UJ	C		420	µg/kg	420	EPA8270
Pyrene	U			420	µg/kg	420	EPA8270
1,2,4-Trichlorobenzene	U			420	µg/kg	420	EPA8270
2,4,5-Trichlorophenol	U			2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	U			420	µg/kg	420	EPA8270
Unknown ketone	J	N		6,000	µg/kg		EPA8270
Unknown PAH	J	N		200	µg/kg		EPA8270
Unknown PAH	J	N		200	µg/kg		EPA8270
Unknown phthalate	J	N		200	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone				54	µg/kg	13	EPA8240
Benzene	U			6.5	µg/kg	6.5	EPA8240
Bromodichloromethane	U			6.5	µg/kg	6.5	EPA8240
Bromoform	U			6.5	µg/kg	6.5	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Carbon disulfide	U			6.5	µg/kg	6.5	EPA8240
Carbon tetrachloride	U			6.5	µg/kg	6.5	EPA8240
Chlorobenzene	U			6.5	µg/kg	6.5	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
Chloroform	U			6.5	µg/kg	6.5	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Dibromochloromethane	U			6.5	µg/kg	6.5	EPA8240
1,1-Dichloroethane	U			6.5	µg/kg	6.5	EPA8240
1,2-Dichloroethane	U			6.5	µg/kg	6.5	EPA8240
1,1-Dichloroethylene	U			6.5	µg/kg	6.5	EPA8240
1,2-Dichloroethylene	U			6.5	µg/kg	6.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		15	µg/kg	6.5	EPA8240

SAMPLE NAME: D431 1407 (Continued) Sample ID: 100398

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,2-Dichloropropane	U			6.5	µg/kg	6.5	EPA8240
cis-1,3-Dichloropropene	U			6.5	µg/kg	6.5	EPA8240
trans-1,3-Dichloropropene	U			6.5	µg/kg	6.5	EPA8240
Ethylbenzene	U			6.5	µg/kg	6.5	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Styrene	U			6.5	µg/kg	6.5	EPA8240
1,1,2,2-Tetrachloroethane	U			6.5	µg/kg	6.5	EPA8240
Tetrachloroethylene	U			6.5	µg/kg	6.5	EPA8240
Toluene	U			6.5	µg/kg	6.5	EPA8240
1,1,1-Trichloroethane	U			6.5	µg/kg	6.5	EPA8240
1,1,2-Trichloroethane	U			6.5	µg/kg	6.5	EPA8240
Trichloroethylene	U			6.5	µg/kg	6.5	EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
Xylenes	U			6.5	µg/kg	6.5	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			2.1	µg/kg	2.1	EPA8080
alpha-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
beta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
delta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
alpha-Chlordane	U			2.1	µg/kg	2.1	EPA8080
gamma-Chlordane	U			2.1	µg/kg	2.1	EPA8080
p,p'-DDD	U			4.3	µg/kg	4.3	EPA8080
p,p'-DDE	U			4.3	µg/kg	4.3	EPA8080
p,p'-DDT	U			4.3	µg/kg	4.3	EPA8080
Dieldrin	U			4.3	µg/kg	4.3	EPA8080
Endosulfan I	U			2.1	µg/kg	2.1	EPA8080
Endosulfan II	U			4.3	µg/kg	4.3	EPA8080
Endosulfan sulfate	U			4.3	µg/kg	4.3	EPA8080
Endrin	U			4.3	µg/kg	4.3	EPA8080
Endrin ketone	U			4.3	µg/kg	4.3	EPA8080
Heptachlor	U			2.1	µg/kg	2.1	EPA8080
Heptachlor epoxide	U			2.1	µg/kg	2.1	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			2.1	µg/kg	2.1	EPA8080
Methoxychlor	U			21	µg/kg	21	EPA8080
Octachlorodibenzo-p-dioxin				1.4	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.40	ng/g	0.40	EPA8280
PCB 1016	U			43	µg/kg	43	EPA8080
PCB 1221	U			86	µg/kg	86	EPA8080
PCB 1232	U			43	µg/kg	43	EPA8080
PCB 1242	U			43	µg/kg	43	EPA8080
PCB 1248	U			43	µg/kg	43	EPA8080
PCB 1254	U			43	µg/kg	43	EPA8080

SAMPLE NAME: D431 1407 (Continued) Sample ID: 100398

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
PCB 1260	U			43	µg/kg	43	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	U			210	µg/kg	210	EPA8080

SAMPLE NAME: D431 1407A Sample ID: 100399

Sample Type: Duplicate Associated Sample: 100398

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			1.2	mg/kg	1.2	EPA7060
Barium	U			18	mg/kg	18	EPA6010
Cadmium	U			0.46	mg/kg	0.46	EPA6010
Chromium				29	mg/kg	0.92	EPA6010
Copper				5.6	mg/kg	2.3	EPA6010
Lead				5.1	mg/kg	0.36	EPA7421
Manganese				130	mg/kg	1.4	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel				9.0	mg/kg	3.7	EPA6010
Selenium	U			0.59	mg/kg	0.59	EPA7740
Silver				1.1	mg/kg	0.92	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			440	µg/kg	440	EPA8270
Acenaphthylene	U			440	µg/kg	440	EPA8270
Anthracene	U			440	µg/kg	440	EPA8270
Benzo(a)anthracene	U			440	µg/kg	440	EPA8270
Benzo(b)fluoranthene	U			440	µg/kg	440	EPA8270
Benzo(k)fluoranthene	U			440	µg/kg	440	EPA8270
Benzoic acid	U			2,200	µg/kg	2,200	EPA8270
Benzo(g,h,i)perylene	U			440	µg/kg	440	EPA8270
Benzo(a)pyrene	U			440	µg/kg	440	EPA8270
Benzyl alcohol	U			440	µg/kg	440	EPA8270
Bis(2-chloroethoxy) methane	U			440	µg/kg	440	EPA8270
Bis(2-chloroethyl) ether	U			440	µg/kg	440	EPA8270
Bis(2-chloroisopropyl) ether	U			440	µg/kg	440	EPA8270
Bis(2-ethylhexyl) phthalate	U			440	µg/kg	440	EPA8270
4-Bromophenyl phenyl ether	U			440	µg/kg	440	EPA8270
Butylbenzyl phthalate	U			440	µg/kg	440	EPA8270
4-Chloroaniline	U			440	µg/kg	440	EPA8270
4-Chloro-m-cresol	U			440	µg/kg	440	EPA8270

SAMPLE NAME: D431 1407A (Continued) Sample ID: 100399

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2-Chloronaphthalene	U			440	µg/kg	440	EPA8270
2-Chlorophenol	U			440	µg/kg	440	EPA8270
4-Chlorophenyl phenyl ether	U			440	µg/kg	440	EPA8270
Chrysene	U			440	µg/kg	440	EPA8270
o-Cresol (2-Methylphenol)	U			440	µg/kg	440	EPA8270
p-Cresol (4-Methylphenol)	U			440	µg/kg	440	EPA8270
Dibenz(a,h)anthracene	U			440	µg/kg	440	EPA8270
Dibenzofuran	U			440	µg/kg	440	EPA8270
Di-n-butyl phthalate	UJ	V		100	µg/kg	440	EPA8270
1,2-Dichlorobenzene	U			440	µg/kg	440	EPA8270
1,3-Dichlorobenzene	U			440	µg/kg	440	EPA8270
1,4-Dichlorobenzene	U			440	µg/kg	440	EPA8270
3,3'-Dichlorobenzidine	U			870	µg/kg	870	EPA8270
2,4-Dichlorophenol	U			440	µg/kg	440	EPA8270
Diethyl phthalate	U			440	µg/kg	440	EPA8270
2,4-Dimethyl phenol	U			440	µg/kg	440	EPA8270
Dimethyl phthalate	U			440	µg/kg	440	EPA8270
2,4-Dinitrophenol	U			2,200	µg/kg	2,200	EPA8270
2,4-Dinitrotoluene	U			440	µg/kg	440	EPA8270
2,6-Dinitrotoluene	U			440	µg/kg	440	EPA8270
Di-n-octyl phthalate	U			440	µg/kg	440	EPA8270
Fluoranthene	J			66	µg/kg	440	EPA8270
Fluorene	U			440	µg/kg	440	EPA8270
Hexachlorobenzene	U			440	µg/kg	440	EPA8270
Hexachlorobutadiene	U			440	µg/kg	440	EPA8270
Hexachlorocyclopentadiene	U			440	µg/kg	440	EPA8270
Hexachloroethane	U			440	µg/kg	440	EPA8270
Indeno(1,2,3-c,d)pyrene	U			440	µg/kg	440	EPA8270
Isophorone	U			440	µg/kg	440	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,200	µg/kg	2,200	EPA8270
2-Methylnaphthalene	U			440	µg/kg	440	EPA8270
Naphthalene	U			440	µg/kg	440	EPA8270
o-Nitroaniline	U			2,200	µg/kg	2,200	EPA8270
m-Nitroaniline	U			2,200	µg/kg	2,200	EPA8270
p-Nitroaniline	U			2,200	µg/kg	2,200	EPA8270
Nitrobenzene	U			440	µg/kg	440	EPA8270
2-Nitrophenol	U			440	µg/kg	440	EPA8270
4-Nitrophenol	U			2,200	µg/kg	2,200	EPA8270
N-Nitrosodiphenylamine	U			440	µg/kg	440	EPA8270
N-Nitrosodipropylamine	U			440	µg/kg	440	EPA8270
Pentachlorophenol	U			2,200	µg/kg	2,200	EPA8270
Phenanthrene	U			440	µg/kg	440	EPA8270
Phenol	UJ	C		440	µg/kg	440	EPA8270
Pyrene	J			61	µg/kg	440	EPA8270
1,2,4-Trichlorobenzene	U			440	µg/kg	440	EPA8270
2,4,5-Trichlorophenol	U			2,200	µg/kg	2,200	EPA8270
2,4,6-Trichlorophenol	U			440	µg/kg	440	EPA8270
Unknown acid ester	J	N		400	µg/kg		EPA8270
Unknown ketone	J	N		6,000	µg/kg		EPA8270
Unknown PAH	J	N		200	µg/kg		EPA8270

SAMPLE NAME: D431 1407A (Continued) Sample ID: 100399

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Unknown PAH	J	N		400	µg/kg		EPA8270
Unknown PAH	J	N		300	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone				75	µg/kg	13	EPA8240
Benzene	U			6.6	µg/kg	6.6	EPA8240
Bromodichloromethane	U			6.6	µg/kg	6.6	EPA8240
Bromoform	U			6.6	µg/kg	6.6	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Carbon disulfide	U			6.6	µg/kg	6.6	EPA8240
Carbon tetrachloride	U			6.6	µg/kg	6.6	EPA8240
Chlorobenzene	U			6.6	µg/kg	6.6	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
Chloroform	U			6.6	µg/kg	6.6	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Dibromochloromethane	U			6.6	µg/kg	6.6	EPA8240
1,1-Dichloroethane	U			6.6	µg/kg	6.6	EPA8240
1,2-Dichloroethane	U			6.6	µg/kg	6.6	EPA8240
1,1-Dichloroethylene	U			6.6	µg/kg	6.6	EPA8240
1,2-Dichloroethylene	U			6.6	µg/kg	6.6	EPA8240
Dichloromethane (Methylene chloride)	U	V		15	µg/kg	6.6	EPA8240
1,2-Dichloropropane	U			6.6	µg/kg	6.6	EPA8240
cis-1,3-Dichloropropene	U			6.6	µg/kg	6.6	EPA8240
trans-1,3-Dichloropropene	U			6.6	µg/kg	6.6	EPA8240
Ethylbenzene	U			6.6	µg/kg	6.6	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Styrene	U			6.6	µg/kg	6.6	EPA8240
1,1,2,2-Tetrachloroethane	U			6.6	µg/kg	6.6	EPA8240
Tetrachloroethylene	U			6.6	µg/kg	6.6	EPA8240
Toluene	U			6.6	µg/kg	6.6	EPA8240
1,1,1-Trichloroethane	U			6.6	µg/kg	6.6	EPA8240
1,1,2-Trichloroethane	U			6.6	µg/kg	6.6	EPA8240
Trichloroethylene	U			6.6	µg/kg	6.6	EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
Xylenes	U			6.6	µg/kg	6.6	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	UJ	O	L	2.1	µg/kg	2.1	EPA8080
alpha-Benzene hexachloride	UJ	O	L	2.1	µg/kg	2.1	EPA8080
beta-Benzene hexachloride	UJ	O	L	2.1	µg/kg	2.1	EPA8080
delta-Benzene hexachloride	UJ	O	L	2.1	µg/kg	2.1	EPA8080
alpha-Chlordane	UJ	O	L	2.1	µg/kg	2.1	EPA8080
gamma-Chlordane	UJ	O	L	2.1	µg/kg	2.1	EPA8080
p,p'-DDD	UJ	O	L	4.3	µg/kg	4.3	EPA8080
p,p'-DDE	UJ	O	L	4.3	µg/kg	4.3	EPA8080

SAMPLE NAME: D431 1407A (Continued) Sample ID: 100399

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
p,p'-DDT	UJ	O	L	4.3	µg/kg	4.3	EPA8080
Dieldrin	UJ	O	L	4.3	µg/kg	4.3	EPA8080
Endosulfan I	UJ	O	L	2.1	µg/kg	2.1	EPA8080
Endosulfan II	UJ	O	L	4.3	µg/kg	4.3	EPA8080
Endosulfan sulfate	UJ	O	L	4.3	µg/kg	4.3	EPA8080
Endrin	UJ	O	L	4.3	µg/kg	4.3	EPA8080
Endrin ketone	UJ	O	L	4.3	µg/kg	4.3	EPA8080
Heptachlor	UJ	O	L	2.1	µg/kg	2.1	EPA8080
Heptachlor epoxide	UJ	O	L	2.1	µg/kg	2.1	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Lindane	UJ	O	L	2.1	µg/kg	2.1	EPA8080
Methoxychlor	UJ	O	L	21	µg/kg	21	EPA8080
Octachlorodibenzo-p-dioxin				3.6	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	UJ	O	L	43	µg/kg	43	EPA8080
PCB 1221	UJ	O	L	85	µg/kg	85	EPA8080
PCB 1232	UJ	O	L	43	µg/kg	43	EPA8080
PCB 1242	UJ	O	L	43	µg/kg	43	EPA8080
PCB 1248	UJ	O	L	43	µg/kg	43	EPA8080
PCB 1254	UJ	O	L	43	µg/kg	43	EPA8080
PCB 1260	UJ	O	L	43	µg/kg	43	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	UJ	O	L	210	µg/kg	210	EPA8080

SAMPLE NAME: D431 1701 Sample ID: 100427

Location (SRS Coordinates): 18492.14E 66454.17N
Ground Elevation Above MSL: 124.9 ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 5YR 4/4 USC Soil Classification: SW Percent Solids: 96.70

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				6.8	meq/100g	2.1	EPA9080
Cation exchange capacity				4.7	meq/100g	2.1	EPA9080
pH	J	Q		4.0	pH	0.010	EPA9045
Specific conductance				48	µS/cm	1.0	EPA9050
Total organic carbon				5,200	mg/kg	260	EPA415.1

SAMPLE NAME: D431 1701 (Continued) Sample ID: 100427

Total Metals

Arsenic			6.2	mg/kg	1.9	EPA7060
Barium	U		19	mg/kg	19	EPA6010
Cadmium	U		0.47	mg/kg	0.47	EPA6010
Chromium			6.0	mg/kg	0.94	EPA6010
Copper	U		2.4	mg/kg	2.4	EPA6010
Lead			1.4	mg/kg	0.29	EPA7421
Manganese			18	mg/kg	1.4	EPA6010
Mercury	U		0.10	mg/kg	0.10	EPA7470
Mercury	U		0.10	mg/kg	0.10	EPA7470
Nickel	U		3.8	mg/kg	3.8	EPA6010
Selenium	U		0.48	mg/kg	0.48	EPA7740
Silver	U		0.94	mg/kg	0.94	EPA6010

B/N/A Extractables (including PAH and phenols)

Acenaphthene	U		340	µg/kg	340	EPA8270
Acenaphthylene	U		340	µg/kg	340	EPA8270
Anthracene	U		340	µg/kg	340	EPA8270
Benzo(a)anthracene	U		340	µg/kg	340	EPA8270
Benzo(b)fluoranthene	U		340	µg/kg	340	EPA8270
Benzo(k)fluoranthene	U		340	µg/kg	340	EPA8270
Benzoic acid	U		1,700	µg/kg	1,700	EPA8270
Benzo(g,h,i)perylene	U		340	µg/kg	340	EPA8270
Benzo(a)pyrene	U		340	µg/kg	340	EPA8270
Benzyl alcohol	U		340	µg/kg	340	EPA8270
Bis(2-chloroethoxy) methane	U		340	µg/kg	340	EPA8270
Bis(2-chloroethyl) ether	U		340	µg/kg	340	EPA8270
Bis(2-chloroisopropyl) ether	U		340	µg/kg	340	EPA8270
Bis(2-ethylhexyl) phthalate	U	V	340	µg/kg	340	EPA8270
4-Bromophenyl phenyl ether	U		340	µg/kg	340	EPA8270
Butylbenzyl phthalate	U		340	µg/kg	340	EPA8270
4-Chloroaniline	U		340	µg/kg	340	EPA8270
4-Chloro-m-cresol	U		340	µg/kg	340	EPA8270
2-Chloronaphthalene	U		340	µg/kg	340	EPA8270
2-Chlorophenol	U		340	µg/kg	340	EPA8270
4-Chlorophenyl phenyl ether	U		340	µg/kg	340	EPA8270
Chrysene	U		340	µg/kg	340	EPA8270
o-Cresol (2-Methylphenol)	U		340	µg/kg	340	EPA8270
p-Cresol (4-Methylphenol)	U		340	µg/kg	340	EPA8270
Dibenz(a,h)anthracene	U		340	µg/kg	340	EPA8270
Dibenzofuran	U		340	µg/kg	340	EPA8270
Di-n-butyl phthalate	UJ	V	150	µg/kg	340	EPA8270
1,2-Dichlorobenzene	U		340	µg/kg	340	EPA8270
1,3-Dichlorobenzene	U		340	µg/kg	340	EPA8270
1,4-Dichlorobenzene	U		340	µg/kg	340	EPA8270
3,3'-Dichlorobenzidine	U		690	µg/kg	690	EPA8270
2,4-Dichlorophenol	U		340	µg/kg	340	EPA8270
Diethyl phthalate	U		340	µg/kg	340	EPA8270
2,4-Dimethyl phenol	U		340	µg/kg	340	EPA8270
Dimethyl phthalate	U		340	µg/kg	340	EPA8270
2,4-Dinitrophenol	U		1,700	µg/kg	1,700	EPA8270
2,4-Dinitrotoluene	U		340	µg/kg	340	EPA8270
2,6-Dinitrotoluene	U		340	µg/kg	340	EPA8270

SAMPLE NAME: D431 1701 (Continued) Sample ID: 100427

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Di-n-octyl phthalate	U			340	µg/kg	340	EPA8270
Fluoranthene	U			340	µg/kg	340	EPA8270
Fluorene	U			340	µg/kg	340	EPA8270
Hexachlorobenzene	U			340	µg/kg	340	EPA8270
Hexachlorobutadiene	U			340	µg/kg	340	EPA8270
Hexachlorocyclopentadiene	U			340	µg/kg	340	EPA8270
Hexachloroethane	U			340	µg/kg	340	EPA8270
Indeno(1,2,3-c,d)pyrene	U			340	µg/kg	340	EPA8270
Isophorone	U			340	µg/kg	340	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,700	µg/kg	1,700	EPA8270
2-Methylnaphthalene	U			340	µg/kg	340	EPA8270
Naphthalene	U			340	µg/kg	340	EPA8270
o-Nitroaniline	U			1,700	µg/kg	1,700	EPA8270
m-Nitroaniline	U			1,700	µg/kg	1,700	EPA8270
p-Nitroaniline	U			1,700	µg/kg	1,700	EPA8270
Nitrobenzene	U			340	µg/kg	340	EPA8270
2-Nitrophenol	U			340	µg/kg	340	EPA8270
4-Nitrophenol	U			1,700	µg/kg	1,700	EPA8270
N-Nitrosodiphenylamine	U			340	µg/kg	340	EPA8270
N-Nitrosodipropylamine	U			340	µg/kg	340	EPA8270
Pentachlorophenol	U			1,700	µg/kg	1,700	EPA8270
Phenanthrene	U			340	µg/kg	340	EPA8270
Phenol	U			340	µg/kg	340	EPA8270
Pyrene	U			340	µg/kg	340	EPA8270
1,2,4-Trichlorobenzene	U			340	µg/kg	340	EPA8270
2,4,5-Trichlorophenol	U			1,700	µg/kg	1,700	EPA8270
2,4,6-Trichlorophenol	U			340	µg/kg	340	EPA8270
Unknown	J	N		1,000	µg/kg		EPA8270
Unknown ketone	J	N		8,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	VO	H	13	µg/kg	10	EPA8240
Acetone	UJ	QV		10	µg/kg	10	EPA8240
Benzene	UJ	O	H	5.2	µg/kg	5.2	EPA8240
Benzene	UJ	Q		5.2	µg/kg	5.2	EPA8240
Bromodichloromethane	UJ	O	H	5.2	µg/kg	5.2	EPA8240
Bromodichloromethane	UJ	Q		5.2	µg/kg	5.2	EPA8240
Bromoform	UJ	O	H	5.2	µg/kg	5.2	EPA8240
Bromoform	UJ	Q		5.2	µg/kg	5.2	EPA8240
Bromomethane (Methyl bromide)	UJ	O	H	10	µg/kg	10	EPA8240
Bromomethane (Methyl bromide)	UJ	Q		10	µg/kg	10	EPA8240
Carbon disulfide	UJ	O	H	5.2	µg/kg	5.2	EPA8240
Carbon disulfide	UJ	Q		5.2	µg/kg	5.2	EPA8240
Carbon tetrachloride	UJ	O	H	5.2	µg/kg	5.2	EPA8240
Carbon tetrachloride	UJ	Q		5.2	µg/kg	5.2	EPA8240
Chlorobenzene	UJ	O	H	5.2	µg/kg	5.2	EPA8240
Chlorobenzene	UJ	Q		5.2	µg/kg	5.2	EPA8240
Chloroethane	UJ	O	H	10	µg/kg	10	EPA8240
Chloroethane	UJ	Q		10	µg/kg	10	EPA8240

SAMPLE NAME: D431 1701 (Continued) Sample ID: 100427

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Chloroethene (Vinyl chloride)	UJ	O	H	10	µg/kg	10	EPA8240
Chloroethene (Vinyl chloride)	UJ	Q		10	µg/kg	10	EPA8240
Chloroform	UJ	O	H	5.2	µg/kg	5.2	EPA8240
Chloroform	UJ	Q		5.2	µg/kg	5.2	EPA8240
Chloromethane (Methyl chloride)	UJ	O	H	10	µg/kg	10	EPA8240
Chloromethane (Methyl chloride)	UJ	Q		10	µg/kg	10	EPA8240
Dibromochloromethane	UJ	O	H	5.2	µg/kg	5.2	EPA8240
Dibromochloromethane	UJ	Q		5.2	µg/kg	5.2	EPA8240
1,1-Dichloroethane	UJ	O	H	5.2	µg/kg	5.2	EPA8240
1,1-Dichloroethane	UJ	Q		5.2	µg/kg	5.2	EPA8240
1,2-Dichloroethane	UJ	O	H	5.2	µg/kg	5.2	EPA8240
1,2-Dichloroethane	UJ	Q		5.2	µg/kg	5.2	EPA8240
1,1-Dichloroethylene	UJ	O	H	5.2	µg/kg	5.2	EPA8240
1,1-Dichloroethylene	UJ	Q		5.2	µg/kg	5.2	EPA8240
1,2-Dichloroethylene	UJ	O	H	5.2	µg/kg	5.2	EPA8240
1,2-Dichloroethylene	UJ	Q		5.2	µg/kg	5.2	EPA8240
Dichloromethane (Methylene chloride)	J	O	H	7.0	µg/kg	5.2	EPA8240
Dichloromethane (Methylene chloride)	UJ	Q		5.2	µg/kg	5.2	EPA8240
1,2-Dichloropropane	UJ	O	H	5.2	µg/kg	5.2	EPA8240
1,2-Dichloropropane	UJ	Q		5.2	µg/kg	5.2	EPA8240
cis-1,3-Dichloropropene	UJ	O	H	5.2	µg/kg	5.2	EPA8240
cis-1,3-Dichloropropene	UJ	Q		5.2	µg/kg	5.2	EPA8240
trans-1,3-Dichloropropene	UJ	O	H	5.2	µg/kg	5.2	EPA8240
trans-1,3-Dichloropropene	UJ	Q		5.2	µg/kg	5.2	EPA8240
Ethylbenzene	UJ	O	H	5.2	µg/kg	5.2	EPA8240
Ethylbenzene	UJ	Q		5.2	µg/kg	5.2	EPA8240
2-Hexanone	UJ	O	H	10	µg/kg	10	EPA8240
2-Hexanone	UJ	Q		10	µg/kg	10	EPA8240
Methyl ethyl ketone	UJ	O	H	10	µg/kg	10	EPA8240
Methyl ethyl ketone	UJ	Q		10	µg/kg	10	EPA8240
Methyl isobutyl ketone	UJ	O	H	10	µg/kg	10	EPA8240
Methyl isobutyl ketone	UJ	Q		10	µg/kg	10	EPA8240
Styrene	UJ	O	H	5.2	µg/kg	5.2	EPA8240
Styrene	UJ	Q		5.2	µg/kg	5.2	EPA8240
1,1,2,2-Tetrachloroethane	UJ	O	H	5.2	µg/kg	5.2	EPA8240
1,1,2,2-Tetrachloroethane	UJ	Q		5.2	µg/kg	5.2	EPA8240
Tetrachloroethylene	UJ	O	H	5.2	µg/kg	5.2	EPA8240
Tetrachloroethylene	UJ	Q		5.2	µg/kg	5.2	EPA8240
Toluene	UJ	O	H	5.2	µg/kg	5.2	EPA8240
Toluene	UJ	Q		5.2	µg/kg	5.2	EPA8240
1,1,1-Trichloroethane	UJ	O	H	5.2	µg/kg	5.2	EPA8240
1,1,1-Trichloroethane	UJ	Q		5.2	µg/kg	5.2	EPA8240
1,1,2-Trichloroethane	UJ	O	H	5.2	µg/kg	5.2	EPA8240
1,1,2-Trichloroethane	UJ	Q		5.2	µg/kg	5.2	EPA8240
Trichloroethylene	UJ	O	H	5.2	µg/kg	5.2	EPA8240
Trichloroethylene	UJ	Q		5.2	µg/kg	5.2	EPA8240
Vinyl acetate	UJ	O	H	10	µg/kg	10	EPA8240
Vinyl acetate	UJ	Q		10	µg/kg	10	EPA8240
Xylenes	UJ	O	H	5.2	µg/kg	5.2	EPA8240
Xylenes	UJ	Q		5.2	µg/kg	5.2	EPA8240

SAMPLE NAME: D431 1701 (Continued) Sample ID: 100427

Pesticides/PCBs and Dioxins/Furans

Aldrin	U	1.7	µg/kg	1.7	EPA8080
alpha-Benzene hexachloride	U	1.7	µg/kg	1.7	EPA8080
beta-Benzene hexachloride	U	1.7	µg/kg	1.7	EPA8080
delta-Benzene hexachloride	J	1.0	µg/kg	1.7	EPA8080
alpha-Chlordane	U	1.7	µg/kg	1.7	EPA8080
gamma-Chlordane	U	1.7	µg/kg	1.7	EPA8080
p,p'-DDD	U	3.4	µg/kg	3.4	EPA8080
p,p'-DDE	U	3.4	µg/kg	3.4	EPA8080
p,p'-DDT	U	3.4	µg/kg	3.4	EPA8080
Dieldrin	U	3.4	µg/kg	3.4	EPA8080
Endosulfan I	U	1.7	µg/kg	1.7	EPA8080
Endosulfan II	U	3.4	µg/kg	3.4	EPA8080
Endosulfan sulfate	U	3.4	µg/kg	3.4	EPA8080
Endrin	U	3.4	µg/kg	3.4	EPA8080
Endrin ketone	U	3.4	µg/kg	3.4	EPA8080
Heptachlor	U	1.7	µg/kg	1.7	EPA8080
Heptachlor epoxide	U	1.7	µg/kg	1.7	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U	0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U	0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U	0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U	0.10	ng/g	0.10	EPA8280
Lindane	U	1.7	µg/kg	1.7	EPA8080
Methoxychlor	U	17	µg/kg	17	EPA8080
Octachlorodibenzo-p-dioxin	J	0.30	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U	0.10	ng/g	0.10	EPA8280
PCB 1016	U	34	µg/kg	34	EPA8080
PCB 1221	U	68	µg/kg	68	EPA8080
PCB 1232	U	34	µg/kg	34	EPA8080
PCB 1242	U	34	µg/kg	34	EPA8080
PCB 1248	U	34	µg/kg	34	EPA8080
PCB 1254	U	34	µg/kg	34	EPA8080
PCB 1260	U	34	µg/kg	34	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U	0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U	0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U	0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U	0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U	0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U	0.10	ng/g	0.10	EPA8280
Toxaphene	U	170	µg/kg	170	EPA8080

Radionuclide Indicators and Radionuclides

Gross alpha	29±12	pCi/g	4.6	EPA900.0
Gross alpha	14±9.1	pCi/g	4.8	EPA900.0
Nonvolatile beta	41±14	pCi/g	5.1	EPA900.0
Nonvolatile beta	34±14	pCi/g	5.3	EPA900.0
Radium, total alpha-emitting	0.43±0.41	pCi/g	0.12	EPA903.0
Radium, total alpha-emitting	0.55±0.46	pCi/g	0.12	EPA903.0
Tritium	2.5±0.69	pCi/g	0.92	EPA906.0
Tritium	2.6±0.73	pCi/g	1.0	EPA906.0

SAMPLE NAME: D431 1702 Sample ID: 100428

Location (SRS Coordinates): 18492.14E 66454.17N
Ground Elevation Above MSL: 124.9 ft
Depth of Core Interval: 0.50 to 2.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10YR 4/6 USC Soil Classification: SW Percent Solids: 85.40

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				2.2	mg/kg	1.1	EPA7060
Barium	U			23	mg/kg	23	EPA6010
Cadmium	U			0.59	mg/kg	0.59	EPA6010
Chromium				18	mg/kg	1.2	EPA6010
Copper	U			2.9	mg/kg	2.9	EPA6010
Lead				2.5	mg/kg	0.33	EPA7421
Manganese				13	mg/kg	1.8	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel	U			4.7	mg/kg	4.7	EPA6010
Selenium	U			0.55	mg/kg	0.55	EPA7740
Silver	U			1.2	mg/kg	1.2	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			360	µg/kg	360	EPA8270
Acenaphthylene	U			360	µg/kg	360	EPA8270
Anthracene	U			360	µg/kg	360	EPA8270
Benzo(a)anthracene	U			360	µg/kg	360	EPA8270
Benzo(b)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(k)fluoranthene	U			360	µg/kg	360	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			360	µg/kg	360	EPA8270
Benzo(a)pyrene	U			360	µg/kg	360	EPA8270
Benzyl alcohol	U			360	µg/kg	360	EPA8270
Bis(2-chloroethoxy) methane	U			360	µg/kg	360	EPA8270
Bis(2-chloroethyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-chloroisopropyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		360	µg/kg	360	EPA8270
4-Bromophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Butylbenzyl phthalate	U			360	µg/kg	360	EPA8270
4-Chloroaniline	U			360	µg/kg	360	EPA8270
4-Chloro-m-cresol	U			360	µg/kg	360	EPA8270
2-Chloronaphthalene	U			360	µg/kg	360	EPA8270
2-Chlorophenol	U			360	µg/kg	360	EPA8270
4-Chlorophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Chrysene	U			360	µg/kg	360	EPA8270
o-Cresol (2-Methylphenol)	U			360	µg/kg	360	EPA8270
p-Cresol (4-Methylphenol)	U			360	µg/kg	360	EPA8270
Dibenz(a,h)anthracene	U			360	µg/kg	360	EPA8270
Dibenzofuran	U			360	µg/kg	360	EPA8270
Di-n-butyl phthalate	UJ	V		140	µg/kg	360	EPA8270
1,2-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,3-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,4-Dichlorobenzene	U			360	µg/kg	360	EPA8270

SAMPLE NAME: D431 1702 (Continued) Sample ID: 100428

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
3,3'-Dichlorobenzidine	U			730	µg/kg	730	EPA8270
2,4-Dichlorophenol	U			360	µg/kg	360	EPA8270
Diethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dimethyl phenol	U			360	µg/kg	360	EPA8270
Dimethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			360	µg/kg	360	EPA8270
2,6-Dinitrotoluene	U			360	µg/kg	360	EPA8270
Di-n-octyl phthalate	U			360	µg/kg	360	EPA8270
Fluoranthene	U			360	µg/kg	360	EPA8270
Fluorene	U			360	µg/kg	360	EPA8270
Hexachlorobenzene	U			360	µg/kg	360	EPA8270
Hexachlorobutadiene	U			360	µg/kg	360	EPA8270
Hexachlorocyclopentadiene	U			360	µg/kg	360	EPA8270
Hexachloroethane	U			360	µg/kg	360	EPA8270
Indeno(1,2,3-c,d)pyrene	U			360	µg/kg	360	EPA8270
Isophorone	U			360	µg/kg	360	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			360	µg/kg	360	EPA8270
Naphthalene	U			360	µg/kg	360	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			360	µg/kg	360	EPA8270
2-Nitrophenol	U			360	µg/kg	360	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			360	µg/kg	360	EPA8270
N-Nitrosodipropylamine	U			360	µg/kg	360	EPA8270
Pentachlorophenol	U			1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			360	µg/kg	360	EPA8270
Phenol	U			360	µg/kg	360	EPA8270
Pyrene	U			360	µg/kg	360	EPA8270
1,2,4-Trichlorobenzene	U			360	µg/kg	360	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			360	µg/kg	360	EPA8270
Unknown ketone	J	N		6,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	UJ	VO	L	10	µg/kg	11	EPA8240
Acetone	UJ	VO	L	11	µg/kg	11	EPA8240
Acetone	U	VO	L	12	µg/kg	11	EPA8240
Benzene	UJ	VO	L	7.5	µg/kg	5.5	EPA8240
Bromodichloromethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Bromoform	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Bromoform	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Bromoform	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	UJ	O	L	11	µg/kg	11	EPA8240

SAMPLE NAME: D431 1702 (Continued) Sample ID: 100428

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Bromomethane (Methyl bromide)	UJ	O	L	11	µg/kg	11	EPA8240
Bromomethane (Methyl bromide)	UJ	O	L	11	µg/kg	11	EPA8240
Carbon disulfide	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Carbon disulfide	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Carbon disulfide	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Chlorobenzene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Chloroethane	UJ	O	L	11	µg/kg	11	EPA8240
Chloroethane	UJ	O	L	11	µg/kg	11	EPA8240
Chloroethane	UJ	O	L	11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	UJ	O	L	11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	UJ	O	L	11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	UJ	O	L	11	µg/kg	11	EPA8240
Chloroform	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Chloroform	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Chloroform	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	UJ	O	L	11	µg/kg	11	EPA8240
Chloromethane (Methyl chloride)	UJ	O	L	11	µg/kg	11	EPA8240
Chloromethane (Methyl chloride)	UJ	O	L	11	µg/kg	11	EPA8240
Dibromochloromethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Dibromochloromethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Dibromochloromethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,2-Dichloropropane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,2-Dichloropropane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,2-Dichloropropane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Ethylbenzene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Ethylbenzene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Ethylbenzene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
2-Hexanone	UJ	O	L	11	µg/kg	11	EPA8240

SAMPLE NAME: D431 1702 (Continued) Sample ID: 100428

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
2-Hexanone	UJ	O	L	11	µg/kg	11	EPA8240
2-Hexanone	UJ	O	L	11	µg/kg	11	EPA8240
Methyl ethyl ketone	UJ	O	L	11	µg/kg	11	EPA8240
Methyl ethyl ketone	UJ	O	L	11	µg/kg	11	EPA8240
Methyl ethyl ketone	UJ	O	L	11	µg/kg	11	EPA8240
Methyl isobutyl ketone	UJ	O	L	11	µg/kg	11	EPA8240
Methyl isobutyl ketone	UJ	O	L	11	µg/kg	11	EPA8240
Methyl isobutyl ketone	UJ	O	L	11	µg/kg	11	EPA8240
Styrene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Styrene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Styrene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Toluene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Trichloroethylene	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Vinyl acetate	UJ	O	L	11	µg/kg	11	EPA8240
Vinyl acetate	UJ	O	L	11	µg/kg	11	EPA8240
Vinyl acetate	UJ	O	L	11	µg/kg	11	EPA8240
Xylenes	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Xylenes	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Xylenes	UJ	O	L	5.5	µg/kg	5.5	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha				4.6±5.8	pCi/g	4.3	EPA900.0
Nonvolatile beta				17±11	pCi/g	4.6	EPA900.0
Radium, total alpha-emitting				0.47±0.44	pCi/g	0.12	EPA903.0
Tritium				3.5±0.91	pCi/g	0.99	EPA906.0

SAMPLE NAME: D431 1703 Sample ID: 100429

Location (SRS Coordinates): 18492.14E 66454.17N
Ground Elevation Above MSL: 124.9 ft
Depth of Core Interval: 5.00 to 7.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 5YR 4/4 USC Soil Classification: SW Percent Solids: 70.50

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				2.1	mg/kg	1.3	EPA7060
Barium	U			27	mg/kg	27	EPA6010
Cadmium	U			6.6	mg/kg	6.6	EPA6010
Chromium				32	mg/kg	1.3	EPA6010
Copper	U			3.3	mg/kg	3.3	EPA6010
Lead				1.1	mg/kg	0.40	EPA7421
Manganese				2,200	mg/kg	2.0	EPA6010
Mercury	U			0.14	mg/kg	0.14	EPA7470
Nickel				13	mg/kg	5.3	EPA6010
Selenium	U			0.67	mg/kg	0.67	EPA7740
Silver	U			13	mg/kg	13	EPA6010
Volatile Organic Compounds							
Acetone	U	VO	H	59	µg/kg	13	EPA8240
Acetone	U	QV		27	µg/kg	13	EPA8240
Benzene	UJ	O	H	6.5	µg/kg	6.5	EPA8240
Benzene	UJ	Q		6.5	µg/kg	6.5	EPA8240
Bromodichloromethane	UJ	O	H	6.5	µg/kg	6.5	EPA8240
Bromodichloromethane	UJ	Q		6.5	µg/kg	6.5	EPA8240
Bromoform	UJ	O	H	6.5	µg/kg	6.5	EPA8240
Bromoform	UJ	Q		6.5	µg/kg	6.5	EPA8240
Bromomethane (Methyl bromide)	UJ	O	H	13	µg/kg	13	EPA8240
Bromomethane (Methyl bromide)	UJ	Q		13	µg/kg	13	EPA8240
Carbon disulfide	UJ	O	H	6.5	µg/kg	6.5	EPA8240
Carbon disulfide	UJ	Q		6.5	µg/kg	6.5	EPA8240
Carbon tetrachloride	UJ	O	H	6.5	µg/kg	6.5	EPA8240
Carbon tetrachloride	UJ	Q		6.5	µg/kg	6.5	EPA8240
Chlorobenzene	UJ	O	H	6.5	µg/kg	6.5	EPA8240
Chlorobenzene	UJ	Q		6.5	µg/kg	6.5	EPA8240
Chloroethane	UJ	O	H	13	µg/kg	13	EPA8240
Chloroethane	UJ	Q		13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	UJ	O	H	13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	UJ	Q		13	µg/kg	13	EPA8240
Chloroform	UJ	O	H	6.5	µg/kg	6.5	EPA8240
Chloroform	UJ	Q		6.5	µg/kg	6.5	EPA8240
Chloromethane (Methyl chloride)	UJ	O	H	13	µg/kg	13	EPA8240
Chloromethane (Methyl chloride)	UJ	Q		13	µg/kg	13	EPA8240
Dibromochloromethane	UJ	O	H	6.5	µg/kg	6.5	EPA8240
Dibromochloromethane	UJ	Q		6.5	µg/kg	6.5	EPA8240
1,1-Dichloroethane	UJ	O	H	6.5	µg/kg	6.5	EPA8240
1,1-Dichloroethane	UJ	Q		6.5	µg/kg	6.5	EPA8240
1,2-Dichloroethane	UJ	O	H	6.5	µg/kg	6.5	EPA8240
1,2-Dichloroethane	UJ	Q		6.5	µg/kg	6.5	EPA8240

SAMPLE NAME: D431 1703 (Continued) Sample ID: 100429

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1-Dichloroethylene	UJ	O	H	6.5	µg/kg	6.5	EPA8240
1,1-Dichloroethylene	UJ	Q		6.5	µg/kg	6.5	EPA8240
1,2-Dichloroethylene	UJ	O	H	6.5	µg/kg	6.5	EPA8240
1,2-Dichloroethylene	UJ	Q		6.5	µg/kg	6.5	EPA8240
Dichloromethane (Methylene chloride)	J	O	H	16	µg/kg	6.5	EPA8240
Dichloromethane (Methylene chloride)	UJ	Q		6.5	µg/kg	6.5	EPA8240
1,2-Dichloropropane	UJ	O	H	6.5	µg/kg	6.5	EPA8240
1,2-Dichloropropane	UJ	Q		6.5	µg/kg	6.5	EPA8240
cis-1,3-Dichloropropene	UJ	O	H	6.5	µg/kg	6.5	EPA8240
cis-1,3-Dichloropropene	UJ	Q		6.5	µg/kg	6.5	EPA8240
trans-1,3-Dichloropropene	UJ	O	H	6.5	µg/kg	6.5	EPA8240
trans-1,3-Dichloropropene	UJ	Q		6.5	µg/kg	6.5	EPA8240
Ethylbenzene	UJ	O	H	6.5	µg/kg	6.5	EPA8240
Ethylbenzene	UJ	Q		6.5	µg/kg	6.5	EPA8240
2-Hexanone	UJ	O	H	13	µg/kg	13	EPA8240
2-Hexanone	UJ	Q		13	µg/kg	13	EPA8240
Methyl ethyl ketone	UJ	O	H	13	µg/kg	13	EPA8240
Methyl ethyl ketone	UJ	Q		13	µg/kg	13	EPA8240
Methyl isobutyl ketone	UJ	O	H	13	µg/kg	13	EPA8240
Methyl isobutyl ketone	UJ	Q		13	µg/kg	13	EPA8240
Styrene	UJ	O	H	6.5	µg/kg	6.5	EPA8240
Styrene	UJ	Q		6.5	µg/kg	6.5	EPA8240
1,1,2,2-Tetrachloroethane	UJ	O	H	6.5	µg/kg	6.5	EPA8240
1,1,2,2-Tetrachloroethane	UJ	Q		6.5	µg/kg	6.5	EPA8240
Tetrachloroethylene	UJ	O	H	6.5	µg/kg	6.5	EPA8240
Tetrachloroethylene	UJ	Q		6.5	µg/kg	6.5	EPA8240
Toluene	UJ	O	H	6.5	µg/kg	6.5	EPA8240
Toluene	UJ	Q		6.5	µg/kg	6.5	EPA8240
1,1,1-Trichloroethane	UJ	O	H	6.5	µg/kg	6.5	EPA8240
1,1,1-Trichloroethane	UJ	Q		6.5	µg/kg	6.5	EPA8240
1,1,2-Trichloroethane	UJ	O	H	6.5	µg/kg	6.5	EPA8240
1,1,2-Trichloroethane	UJ	Q		6.5	µg/kg	6.5	EPA8240
Trichloroethylene	UJ	O	H	6.5	µg/kg	6.5	EPA8240
Trichloroethylene	UJ	Q		6.5	µg/kg	6.5	EPA8240
Vinyl acetate	UJ	O	H	13	µg/kg	13	EPA8240
Vinyl acetate	UJ	Q		13	µg/kg	13	EPA8240
Xylenes	UJ	O	H	6.5	µg/kg	6.5	EPA8240
Xylenes	UJ	Q		6.5	µg/kg	6.5	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha				4.2±5.2	pCi/g	3.8	EPA900.0
Nonvolatile beta				19±10	pCi/g	4.1	EPA900.0
Radium, total alpha-emitting				0.93±0.59	pCi/g	0.12	EPA903.0
Tritium				5.2±1.2	pCi/g	1.1	EPA906.0

SAMPLE NAME: D431 1704 Sample ID: 100430

Location (SRS Coordinates): 18492.14E 66454.17N
Ground Elevation Above MSL: 124.9 ft
Depth of Core Interval: 10.00 to 12.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Wet
Sample Color: 5YR 5/6 USC Soil Classification: SW Percent Solids: 82.20

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				2.4	mg/kg	1.2	EPA7060
Barium				20	mg/kg	20	EPA6010
Cadmium	U			0.50	mg/kg	0.50	EPA6010
Chromium				5.4	mg/kg	1.0	EPA6010
Copper	U			2.5	mg/kg	2.5	EPA6010
Lead				1.8	mg/kg	0.36	EPA7421
Manganese				44	mg/kg	1.5	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel	U			4.0	mg/kg	4.0	EPA6010
Selenium	U			0.60	mg/kg	0.60	EPA7740
Silver	U			1.0	mg/kg	1.0	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	UJ	L		400	µg/kg	400	EPA8270
Acenaphthylene	UJ	L		400	µg/kg	400	EPA8270
Anthracene	UJ	L		400	µg/kg	400	EPA8270
Benzo(a)anthracene	UJ	L		400	µg/kg	400	EPA8270
Benzo(b)fluoranthene	UJ	LH	H	400	µg/kg	400	EPA8270
Benzo(k)fluoranthene	UJ	LH	H	400	µg/kg	400	EPA8270
Benzoic acid	UJ	L		2,000	µg/kg	2,000	EPA8270
Benzo(g,h,i)perylene	UJ	LH	H	400	µg/kg	400	EPA8270
Benzo(a)pyrene	UJ	LH	H	400	µg/kg	400	EPA8270
Benzyl alcohol	UJ	L		400	µg/kg	400	EPA8270
Bis(2-chloroethoxy) methane	UJ	L		400	µg/kg	400	EPA8270
Bis(2-chloroethyl) ether	UJ	L		400	µg/kg	400	EPA8270
Bis(2-chloroisopropyl) ether	UJ	L		400	µg/kg	400	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	VL		400	µg/kg	400	EPA8270
4-Bromophenyl phenyl ether	UJ	L		400	µg/kg	400	EPA8270
Butanoic acid ester	J	N		200	µg/kg		EPA8270
Butylbenzyl phthalate	UJ	L		400	µg/kg	400	EPA8270
4-Chloroaniline	UJ	L		400	µg/kg	400	EPA8270
4-Chloro-m-cresol	UJ	L		400	µg/kg	400	EPA8270
2-Chloronaphthalene	UJ	L		400	µg/kg	400	EPA8270
2-Chlorophenol	UJ	L		400	µg/kg	400	EPA8270
4-Chlorophenyl phenyl ether	UJ	L		400	µg/kg	400	EPA8270
Chrysene	UJ	L		400	µg/kg	400	EPA8270
o-Cresol (2-Methylphenol)	UJ	L		400	µg/kg	400	EPA8270
p-Cresol (4-Methylphenol)	UJ	L		400	µg/kg	400	EPA8270
Dibenz(a,h)anthracene	UJ	LH	H	400	µg/kg	400	EPA8270
Dibenzofuran	UJ	L		400	µg/kg	400	EPA8270
Di-n-butyl phthalate	UJ	VL		200	µg/kg	400	EPA8270
1,2-Dichlorobenzene	UJ	L		400	µg/kg	400	EPA8270
1,3-Dichlorobenzene	UJ	L		400	µg/kg	400	EPA8270

SAMPLE NAME: D431 1704 (Continued) Sample ID: 100430

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
1,4-Dichlorobenzene	UJ	L		400	µg/kg	400	EPA8270
3,3'-Dichlorobenzidine	UJ	L		810	µg/kg	810	EPA8270
2,4-Dichlorophenol	UJ	L		400	µg/kg	400	EPA8270
Diethyl phthalate	UJ	L		400	µg/kg	400	EPA8270
2,4-Dimethyl phenol	UJ	L		400	µg/kg	400	EPA8270
Dimethyl phthalate	UJ	L		400	µg/kg	400	EPA8270
2,4-Dinitrophenol	UJ	L		2,000	µg/kg	2,000	EPA8270
2,4-Dinitrotoluene	UJ	L		400	µg/kg	400	EPA8270
2,6-Dinitrotoluene	UJ	L		400	µg/kg	400	EPA8270
Di-n-octyl phthalate	UJ	LH	H	400	µg/kg	400	EPA8270
Fluoranthene	UJ	L		400	µg/kg	400	EPA8270
Fluorene	UJ	L		400	µg/kg	400	EPA8270
Hexachlorobenzene	UJ	L		400	µg/kg	400	EPA8270
Hexachlorobutadiene	UJ	L		400	µg/kg	400	EPA8270
Hexachlorocyclopentadiene	UJ	L		400	µg/kg	400	EPA8270
Hexachloroethane	UJ	L		400	µg/kg	400	EPA8270
Indeno(1,2,3-c,d)pyrene	UJ	LH	H	400	µg/kg	400	EPA8270
Isophorone	UJ	L		400	µg/kg	400	EPA8270
2-Methyl-4,6-dinitrophenol	UJ	L		2,000	µg/kg	2,000	EPA8270
2-Methylnaphthalene	UJ	L		400	µg/kg	400	EPA8270
Naphthalene	UJ	L		400	µg/kg	400	EPA8270
o-Nitroaniline	UJ	L		2,000	µg/kg	2,000	EPA8270
m-Nitroaniline	UJ	L		2,000	µg/kg	2,000	EPA8270
p-Nitroaniline	UJ	L		2,000	µg/kg	2,000	EPA8270
Nitrobenzene	UJ	L		400	µg/kg	400	EPA8270
2-Nitrophenol	UJ	L		400	µg/kg	400	EPA8270
4-Nitrophenol	UJ	L		2,000	µg/kg	2,000	EPA8270
N-Nitrosodiphenylamine	UJ	L		400	µg/kg	400	EPA8270
N-Nitrosodipropylamine	UJ	L		400	µg/kg	400	EPA8270
Pentachlorophenol	UJ	L		2,000	µg/kg	2,000	EPA8270
Phenanthrene	UJ	L		400	µg/kg	400	EPA8270
Phenol	UJ	L		400	µg/kg	400	EPA8270
Pyrene	UJ	L		400	µg/kg	400	EPA8270
1,2,4-Trichlorobenzene	UJ	L		400	µg/kg	400	EPA8270
2,4,5-Trichlorophenol	UJ	L		2,000	µg/kg	2,000	EPA8270
2,4,6-Trichlorophenol	UJ	L		400	µg/kg	400	EPA8270
Unknown ketone	J	N		7,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		13	µg/kg	13	EPA8240
Benzene	U			6.3	µg/kg	6.3	EPA8240
Bromodichloromethane	U			6.3	µg/kg	6.3	EPA8240
Bromoform	U			6.3	µg/kg	6.3	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Carbon disulfide	U			6.3	µg/kg	6.3	EPA8240
Carbon tetrachloride	U			6.3	µg/kg	6.3	EPA8240
Chlorobenzene	U			6.3	µg/kg	6.3	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240

SAMPLE NAME: D431 1704 (Continued) Sample ID: 100430

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Chloroform	U			6.3	µg/kg	6.3	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Dibromochloromethane	U			6.3	µg/kg	6.3	EPA8240
1,1-Dichloroethane	U			6.3	µg/kg	6.3	EPA8240
1,2-Dichloroethane				6.2	µg/kg	6.3	EPA8240
1,1-Dichloroethylene	U			6.3	µg/kg	6.3	EPA8240
1,2-Dichloroethylene	U			6.3	µg/kg	6.3	EPA8240
Dichloromethane (Methylene chloride)	U			6.3	µg/kg	6.3	EPA8240
1,2-Dichloropropane	U			6.3	µg/kg	6.3	EPA8240
cis-1,3-Dichloropropene	U			6.3	µg/kg	6.3	EPA8240
trans-1,3-Dichloropropene	U			6.3	µg/kg	6.3	EPA8240
Ethylbenzene	U			6.3	µg/kg	6.3	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Styrene	U			6.3	µg/kg	6.3	EPA8240
1,1,2,2-Tetrachloroethane	U			6.3	µg/kg	6.3	EPA8240
Tetrachloroethylene	U			6.3	µg/kg	6.3	EPA8240
Toluene	U			6.3	µg/kg	6.3	EPA8240
1,1,1-Trichloroethane	U			6.3	µg/kg	6.3	EPA8240
1,1,2-Trichloroethane	J			5.8	µg/kg	6.3	EPA8240
Trichloroethylene	U			6.3	µg/kg	6.3	EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
Xylenes	U			6.3	µg/kg	6.3	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha				6.0±5.8	pCi/g	3.8	EPA900.0
Nonvolatile beta				17±10	pCi/g	4.1	EPA900.0
Radium, total alpha-emitting				0.39±0.39	pCi/g	0.11	EPA903.0
Tritium				7.5±1.5	pCi/g	1.0	EPA906.0

SAMPLE NAME: D431 1705 Sample ID: 100431

Location (SRS Coordinates): 18492.14E 66454.17N
Ground Elevation Above MSL: 124.9 ft
Depth of Core Interval: 15.00 to 17.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Wet
Sample Color: 5YR 5/6 USC Soil Classification: SW Percent Solids: 77.30

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				11	meq/100g	2.6	EPA9080
pH	J	Q		4.5	pH	0.010	EPA9045
pH	J	Q		4.5	pH	0.010	EPA9045
Specific conductance				43	µS/cm	1.0	EPA9050
Total organic carbon				680	mg/kg	170	EPA415.1

SAMPLE NAME: D431 1705 (Continued) Sample ID: 100431

Total Metals

Arsenic			1.9	mg/kg	1.2	EPA7060
Barium	U		24	mg/kg	24	EPA6010
Cadmium	U		0.59	mg/kg	0.59	EPA6010
Chromium			4.8	mg/kg	1.2	EPA6010
Copper	U		2.9	mg/kg	2.9	EPA6010
Lead			1.1	mg/kg	0.35	EPA7421
Manganese			25	mg/kg	1.8	EPA6010
Mercury	U		0.13	mg/kg	0.13	EPA7470
Nickel	U		4.7	mg/kg	4.7	EPA6010
Selenium	U		0.58	mg/kg	0.58	EPA7740
Silver	U		1.2	mg/kg	1.2	EPA6010

B/N/A Extractables (including PAH and phenols)

Acenaphthene	UJ	L		420	µg/kg	420	EPA8270
Acenaphthylene	UJ	L		420	µg/kg	420	EPA8270
Anthracene	UJ	L		420	µg/kg	420	EPA8270
Benzo(a)anthracene	UJ	L		420	µg/kg	420	EPA8270
Benzo(b)fluoranthene	UJ	LH	H	420	µg/kg	420	EPA8270
Benzo(k)fluoranthene	UJ	LH	H	420	µg/kg	420	EPA8270
Benzoic acid	UJ	L		2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	UJ	LH	H	420	µg/kg	420	EPA8270
Benzo(a)pyrene	UJ	LH	H	420	µg/kg	420	EPA8270
Benzyl alcohol	UJ	L		420	µg/kg	420	EPA8270
Bis(2-chloroethoxy) methane	UJ	L		420	µg/kg	420	EPA8270
Bis(2-chloroethyl) ether	UJ	L		420	µg/kg	420	EPA8270
Bis(2-chloroisopropyl) ether	UJ	L		420	µg/kg	420	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	VL		420	µg/kg	420	EPA8270
4-Bromophenyl phenyl ether	UJ	L		420	µg/kg	420	EPA8270
Butylbenzyl phthalate	UJ	L		420	µg/kg	420	EPA8270
4-Chloroaniline	UJ	L		420	µg/kg	420	EPA8270
4-Chloro-m-cresol	UJ	L		420	µg/kg	420	EPA8270
2-Chloronaphthalene	UJ	L		420	µg/kg	420	EPA8270
2-Chlorophenol	UJ	L		420	µg/kg	420	EPA8270
4-Chlorophenyl phenyl ether	UJ	L		420	µg/kg	420	EPA8270
Chrysene	UJ	L		420	µg/kg	420	EPA8270
o-Cresol (2-Methylphenol)	UJ	L		420	µg/kg	420	EPA8270
p-Cresol (4-Methylphenol)	UJ	L		420	µg/kg	420	EPA8270
Dibenz(a,h)anthracene	UJ	LH	H	420	µg/kg	420	EPA8270
Dibenzofuran	UJ	L		420	µg/kg	420	EPA8270
Di-n-butyl phthalate	UJ	VL		120	µg/kg	420	EPA8270
1,2-Dichlorobenzene	UJ	L		420	µg/kg	420	EPA8270
1,3-Dichlorobenzene	UJ	L		420	µg/kg	420	EPA8270
1,4-Dichlorobenzene	UJ	L		420	µg/kg	420	EPA8270
3,3'-Dichlorobenzidine	UJ	L		840	µg/kg	840	EPA8270
2,4-Dichlorophenol	UJ	L		420	µg/kg	420	EPA8270
Diethyl phthalate	UJ	L		420	µg/kg	420	EPA8270
2,4-Dimethyl phenol	UJ	L		420	µg/kg	420	EPA8270
Dimethyl phthalate	UJ	L		420	µg/kg	420	EPA8270
2,4-Dinitrophenol	UJ	L		2,100	µg/kg	2,100	EPA8270
2,4-Dinitrotoluene	UJ	L		420	µg/kg	420	EPA8270
2,6-Dinitrotoluene	UJ	L		420	µg/kg	420	EPA8270
Di-n-octyl phthalate	UJ	LH	H	420	µg/kg	420	EPA8270

SAMPLE NAME: D431 1705 (Continued) Sample ID: 100431

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Fluoranthene	UJ	L		420	µg/kg	420	EPA8270
Fluorene	UJ	L		420	µg/kg	420	EPA8270
Hexachlorobenzene	UJ	L		420	µg/kg	420	EPA8270
Hexachlorobutadiene	UJ	L		420	µg/kg	420	EPA8270
Hexachlorocyclopentadiene	UJ	L		420	µg/kg	420	EPA8270
Hexachloroethane	UJ	L		420	µg/kg	420	EPA8270
Indeno(1,2,3-c,d)pyrene	UJ	LH	H	420	µg/kg	420	EPA8270
Isophorone	UJ	L		420	µg/kg	420	EPA8270
2-Methyl-4,6-dinitrophenol	UJ	L		2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	UJ	L		420	µg/kg	420	EPA8270
Naphthalene	UJ	L		420	µg/kg	420	EPA8270
o-Nitroaniline	UJ	L		2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	UJ	L		2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	UJ	L		2,100	µg/kg	2,100	EPA8270
Nitrobenzene	UJ	L		420	µg/kg	420	EPA8270
2-Nitrophenol	UJ	L		420	µg/kg	420	EPA8270
4-Nitrophenol	UJ	L		2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	UJ	L		420	µg/kg	420	EPA8270
N-Nitrosodipropylamine	UJ	L		420	µg/kg	420	EPA8270
Pentachlorophenol	UJ	L		2,100	µg/kg	2,100	EPA8270
Phenanthrene	UJ	L		420	µg/kg	420	EPA8270
Phenol	UJ	L		420	µg/kg	420	EPA8270
Pyrene	UJ	L		420	µg/kg	420	EPA8270
1,2,4-Trichlorobenzene	UJ	L		420	µg/kg	420	EPA8270
2,4,5-Trichlorophenol	UJ	L		2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	UJ	L		420	µg/kg	420	EPA8270
Unknown acid ester	J	N		300	µg/kg		EPA8270
Unknown ketone	J	N		9,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		14	µg/kg	13	EPA8240
Benzene	U			6.4	µg/kg	6.4	EPA8240
Bromodichloromethane	U			6.4	µg/kg	6.4	EPA8240
Bromoform	U			6.4	µg/kg	6.4	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Carbon disulfide	U			6.4	µg/kg	6.4	EPA8240
Carbon tetrachloride	U			6.4	µg/kg	6.4	EPA8240
Chlorobenzene	U			6.4	µg/kg	6.4	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
Chloroform	U			6.4	µg/kg	6.4	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Dibromochloromethane	U			6.4	µg/kg	6.4	EPA8240
1,1-Dichloroethane	U			6.4	µg/kg	6.4	EPA8240
1,2-Dichloroethane	U			6.4	µg/kg	6.4	EPA8240
1,1-Dichloroethylene	U			6.4	µg/kg	6.4	EPA8240
1,2-Dichloroethylene	U			6.4	µg/kg	6.4	EPA8240
Dichloromethane (Methylene chloride)	U			6.4	µg/kg	6.4	EPA8240
1,2-Dichloropropane	U			6.4	µg/kg	6.4	EPA8240

SAMPLE NAME: D431 1705 (Continued) Sample ID: 100431

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
cis-1,3-Dichloropropene	U			6.4	µg/kg	6.4	EPA8240
trans-1,3-Dichloropropene	U			6.4	µg/kg	6.4	EPA8240
Ethylbenzene	U			6.4	µg/kg	6.4	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Styrene	U			6.4	µg/kg	6.4	EPA8240
1,1,2,2-Tetrachloroethane	U			6.4	µg/kg	6.4	EPA8240
Tetrachloroethylene	U			6.4	µg/kg	6.4	EPA8240
Toluene	U			6.4	µg/kg	6.4	EPA8240
1,1,1-Trichloroethane	U			6.4	µg/kg	6.4	EPA8240
1,1,2-Trichloroethane	U			6.4	µg/kg	6.4	EPA8240
Trichloroethylene	U			6.4	µg/kg	6.4	EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
Xylenes	U			6.4	µg/kg	6.4	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			2.1	µg/kg	2.1	EPA8080
alpha-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
beta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
delta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
alpha-Chlordane	U			2.1	µg/kg	2.1	EPA8080
gamma-Chlordane	U			2.1	µg/kg	2.1	EPA8080
p,p'-DDD	U			4.2	µg/kg	4.2	EPA8080
p,p'-DDE	U			4.2	µg/kg	4.2	EPA8080
p,p'-DDT	U			4.2	µg/kg	4.2	EPA8080
Dieldrin	U			4.2	µg/kg	4.2	EPA8080
Endosulfan I	U			2.1	µg/kg	2.1	EPA8080
Endosulfan II	U			4.2	µg/kg	4.2	EPA8080
Endosulfan sulfate	U			4.2	µg/kg	4.2	EPA8080
Endrin	U			4.2	µg/kg	4.2	EPA8080
Endrin ketone	U			4.2	µg/kg	4.2	EPA8080
Heptachlor	U			2.1	µg/kg	2.1	EPA8080
Heptachlor epoxide	U			2.1	µg/kg	2.1	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	J	V		0.60	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	UJ	I	H	0.10	ng/g	0.10	EPA8280
Lindane	U			2.1	µg/kg	2.1	EPA8080
Methoxychlor	U			21	µg/kg	21	EPA8080
Octachlorodibenzo-p-dioxin	J			0.30	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	U			42	µg/kg	42	EPA8080
PCB 1221	U			84	µg/kg	84	EPA8080
PCB 1232	U			42	µg/kg	42	EPA8080
PCB 1242	U			42	µg/kg	42	EPA8080
PCB 1248	U			42	µg/kg	42	EPA8080

SAMPLE NAME: D431 1705 (Continued) Sample ID: 100431

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
PCB 1254	U			42	µg/kg	42	EPA8080
PCB 1260	U			42	µg/kg	42	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			210	µg/kg	210	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				3.4±5.1	pCi/g	4.0	EPA900.0
Nonvolatile beta				12±10	pCi/g	4.2	EPA900.0
Radium, total alpha-emitting				0.66±0.50	pCi/g	0.12	EPA903.0
Tritium				1.2±0.40	pCi/g	0.95	EPA906.0

SAMPLE NAME: D431 1705A Sample ID: 100432

Sample Type: Duplicate Associated Sample: 100431

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				11	meq/100g	2.5	EPA9080
pH	J	Q		4.5	pH	0.010	EPA9045
Specific conductance				44	µS/cm	1.0	EPA9050
Total organic carbon				690	mg/kg	150	EPA415.1
Total Metals							
Arsenic				1.9	mg/kg	1.0	EPA7060
Barium				27	mg/kg	20	EPA6010
Cadmium	U			0.50	mg/kg	0.50	EPA6010
Chromium				4.9	mg/kg	1.0	EPA6010
Copper	U			2.5	mg/kg	2.5	EPA6010
Lead				2.4	mg/kg	0.31	EPA7421
Manganese				56	mg/kg	1.5	EPA6010
Mercury	U			0.13	mg/kg	0.13	EPA7470
Nickel	U			4.0	mg/kg	4.0	EPA6010
Selenium	U			0.52	mg/kg	0.52	EPA7740
Silver	U			1.0	mg/kg	1.0	EPA6010

SAMPLE NAME: D431 1705A (Continued) Sample ID: 100432

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			410	µg/kg	410	EPA8270
Acenaphthylene	U			410	µg/kg	410	EPA8270
Anthracene	U			410	µg/kg	410	EPA8270
Benzo(a)anthracene	U			410	µg/kg	410	EPA8270
Benzo(b)fluoranthene	U			410	µg/kg	410	EPA8270
Benzo(k)fluoranthene	U			410	µg/kg	410	EPA8270
Benzoic acid	U			2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	U			410	µg/kg	410	EPA8270
Benzo(a)pyrene	U			410	µg/kg	410	EPA8270
Benzyl alcohol	U			410	µg/kg	410	EPA8270
Bis(2-chloroethoxy) methane	U			410	µg/kg	410	EPA8270
Bis(2-chloroethyl) ether	U			410	µg/kg	410	EPA8270
Bis(2-chloroisopropyl) ether	U			410	µg/kg	410	EPA8270
Bis(2-ethylhexyl) phthalate	U	V		410	µg/kg	410	EPA8270
4-Bromophenyl phenyl ether	U			410	µg/kg	410	EPA8270
Butanoic acid ester	J	N		300	µg/kg		EPA8270
Butylbenzyl phthalate	U			410	µg/kg	410	EPA8270
4-Chloroaniline	U			410	µg/kg	410	EPA8270
4-Chloro-m-cresol	U			410	µg/kg	410	EPA8270
2-Chloronaphthalene	U			410	µg/kg	410	EPA8270
2-Chlorophenol	U			410	µg/kg	410	EPA8270
4-Chlorophenyl phenyl ether	U			410	µg/kg	410	EPA8270
Chrysene	U			410	µg/kg	410	EPA8270
o-Cresol (2-Methylphenol)	U			410	µg/kg	410	EPA8270
p-Cresol (4-Methylphenol)	U			410	µg/kg	410	EPA8270
Dibenz(a,h)anthracene	U			410	µg/kg	410	EPA8270
Dibenzofuran	U			410	µg/kg	410	EPA8270
Di-n-butyl phthalate	UJ	V		120	µg/kg	410	EPA8270
1,2-Dichlorobenzene	U			410	µg/kg	410	EPA8270
1,3-Dichlorobenzene	U			410	µg/kg	410	EPA8270
1,4-Dichlorobenzene	U			410	µg/kg	410	EPA8270
3,3'-Dichlorobenzidine	U			820	µg/kg	820	EPA8270
2,4-Dichlorophenol	U			410	µg/kg	410	EPA8270
Diethyl phthalate	U			410	µg/kg	410	EPA8270
2,4-Dimethyl phenol	U			410	µg/kg	410	EPA8270
Dimethyl phthalate	U			410	µg/kg	410	EPA8270
2,4-Dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2,4-Dinitrotoluene	U			410	µg/kg	410	EPA8270
2,6-Dinitrotoluene	U			410	µg/kg	410	EPA8270
Di-n-octyl phthalate	U			410	µg/kg	410	EPA8270
Fluoranthene	U			410	µg/kg	410	EPA8270
Fluorene	U			410	µg/kg	410	EPA8270
Hexachlorobenzene	U			410	µg/kg	410	EPA8270
Hexachlorobutadiene	U			410	µg/kg	410	EPA8270
Hexachlorocyclopentadiene	U			410	µg/kg	410	EPA8270
Hexachloroethane	U			410	µg/kg	410	EPA8270
Indeno(1,2,3-c,d)pyrene	U			410	µg/kg	410	EPA8270
Isophorone	U			410	µg/kg	410	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	U			410	µg/kg	410	EPA8270

SAMPLE NAME: D431 1705A (Continued) Sample ID: 100432

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Naphthalene	U			410	µg/kg	410	EPA8270
o-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
Nitrobenzene	U			410	µg/kg	410	EPA8270
2-Nitrophenol	U			410	µg/kg	410	EPA8270
4-Nitrophenol	U			2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	U			410	µg/kg	410	EPA8270
N-Nitrosodipropylamine	U			410	µg/kg	410	EPA8270
Pentachlorophenol	U			2,100	µg/kg	2,100	EPA8270
Phenanthrene	U			410	µg/kg	410	EPA8270
Phenol	U			410	µg/kg	410	EPA8270
Pyrene	U			410	µg/kg	410	EPA8270
1,2,4-Trichlorobenzene	U			410	µg/kg	410	EPA8270
2,4,5-Trichlorophenol	U			2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	U			410	µg/kg	410	EPA8270
Unknown ketone	J	N		8,000	µg/kg		EPA8270
Unknown phthalate	J	N		900	µg/kg		EPA8270
Unknown phthalate	J	N		600	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		16	µg/kg	13	EPA8240
Benzene	U			6.3	µg/kg	6.3	EPA8240
Bromodichloromethane	U			6.3	µg/kg	6.3	EPA8240
Bromoform	U			6.3	µg/kg	6.3	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Carbon disulfide	U			6.3	µg/kg	6.3	EPA8240
Carbon tetrachloride	U			6.3	µg/kg	6.3	EPA8240
Chlorobenzene	U			6.3	µg/kg	6.3	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
Chloroform	U			6.3	µg/kg	6.3	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Dibromochloromethane	U			6.3	µg/kg	6.3	EPA8240
1,1-Dichloroethane	U			6.3	µg/kg	6.3	EPA8240
1,2-Dichloroethane				8.7	µg/kg	6.3	EPA8240
1,1-Dichloroethylene	U			6.3	µg/kg	6.3	EPA8240
1,2-Dichloroethylene	U			6.3	µg/kg	6.3	EPA8240
Dichloromethane (Methylene chloride)	U			6.3	µg/kg	6.3	EPA8240
1,2-Dichloropropane	U			6.3	µg/kg	6.3	EPA8240
cis-1,3-Dichloropropene	U			6.3	µg/kg	6.3	EPA8240
trans-1,3-Dichloropropene	U			6.3	µg/kg	6.3	EPA8240
Ethylbenzene	U			6.3	µg/kg	6.3	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Styrene	U			6.3	µg/kg	6.3	EPA8240
1,1,2,2-Tetrachloroethane	U			6.3	µg/kg	6.3	EPA8240
Tetrachloroethylene	U			6.3	µg/kg	6.3	EPA8240

SAMPLE NAME: D431 1705A (Continued) Sample ID: 100432

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Toluene	U			6.3	µg/kg	6.3	EPA8240
1,1,1-Trichloroethane	U			6.3	µg/kg	6.3	EPA8240
1,1,2-Trichloroethane				9.4	µg/kg	6.3	EPA8240
Trichloroethylene	U			6.3	µg/kg	6.3	EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
Xylenes	U			6.3	µg/kg	6.3	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			2.1	µg/kg	2.1	EPA8080
alpha-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
alpha-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
alpha-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
beta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
beta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
beta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
delta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
delta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
delta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
alpha-Chlordane	U			2.1	µg/kg	2.1	EPA8080
alpha-Chlordane	U			2.1	µg/kg	2.1	EPA8080
alpha-Chlordane	U			2.1	µg/kg	2.1	EPA8080
gamma-Chlordane	U			2.1	µg/kg	2.1	EPA8080
gamma-Chlordane	U			2.1	µg/kg	2.1	EPA8080
gamma-Chlordane	U			2.1	µg/kg	2.1	EPA8080
p,p'-DDD	U			4.1	µg/kg	4.1	EPA8080
p,p'-DDD	U			4.1	µg/kg	4.1	EPA8080
p,p'-DDD	U			4.1	µg/kg	4.1	EPA8080
p,p'-DDE	U			4.1	µg/kg	4.1	EPA8080
p,p'-DDE	U			4.1	µg/kg	4.1	EPA8080
p,p'-DDE	U			4.1	µg/kg	4.1	EPA8080
p,p'-DDT	U			4.1	µg/kg	4.1	EPA8080
Dieldrin	U			4.1	µg/kg	4.1	EPA8080
Endosulfan I	U			2.1	µg/kg	2.1	EPA8080
Endosulfan I	U			2.1	µg/kg	2.1	EPA8080
Endosulfan I	U			2.1	µg/kg	2.1	EPA8080
Endosulfan II	U			4.1	µg/kg	4.1	EPA8080
Endosulfan II	U			4.1	µg/kg	4.1	EPA8080
Endosulfan II	U			4.1	µg/kg	4.1	EPA8080
Endosulfan sulfate	U			4.1	µg/kg	4.1	EPA8080
Endosulfan sulfate	U			4.1	µg/kg	4.1	EPA8080
Endosulfan sulfate	U			4.1	µg/kg	4.1	EPA8080
Endrin	U			4.1	µg/kg	4.1	EPA8080
Endrin ketone	U			4.1	µg/kg	4.1	EPA8080
Endrin ketone	U			4.1	µg/kg	4.1	EPA8080
Endrin ketone	U			4.1	µg/kg	4.1	EPA8080
Heptachlor	U			2.1	µg/kg	2.1	EPA8080
Heptachlor epoxide	U			2.1	µg/kg	2.1	EPA8080
Heptachlor epoxide	U			2.1	µg/kg	2.1	EPA8080
Heptachlor epoxide	U			2.1	µg/kg	2.1	EPA8080

SAMPLE NAME: D431 1705A (Continued) Sample ID: 100432

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			2.1	µg/kg	2.1	EPA8080
Methoxychlor	U			21	µg/kg	21	EPA8080
Methoxychlor	U			21	µg/kg	21	EPA8080
Methoxychlor	U			21	µg/kg	21	EPA8080
Octachlorodibenzo-p-dioxin				2.9	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.30	ng/g	0.30	EPA8280
PCB 1016	U			41	µg/kg	41	EPA8080
PCB 1016	U			41	µg/kg	41	EPA8080
PCB 1016	U			41	µg/kg	41	EPA8080
PCB 1221	U			82	µg/kg	82	EPA8080
PCB 1221	U			82	µg/kg	82	EPA8080
PCB 1221	U			82	µg/kg	82	EPA8080
PCB 1232	U			41	µg/kg	41	EPA8080
PCB 1232	U			41	µg/kg	41	EPA8080
PCB 1232	U			41	µg/kg	41	EPA8080
PCB 1242	U			41	µg/kg	41	EPA8080
PCB 1242	U			41	µg/kg	41	EPA8080
PCB 1242	U			41	µg/kg	41	EPA8080
PCB 1248	U			41	µg/kg	41	EPA8080
PCB 1248	U			41	µg/kg	41	EPA8080
PCB 1248	U			41	µg/kg	41	EPA8080
PCB 1254	U			41	µg/kg	41	EPA8080
PCB 1254	U			41	µg/kg	41	EPA8080
PCB 1254	U			41	µg/kg	41	EPA8080
PCB 1260	U			41	µg/kg	41	EPA8080
PCB 1260	U			41	µg/kg	41	EPA8080
PCB 1260	U			41	µg/kg	41	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			210	µg/kg	210	EPA8080
Toxaphene	U			210	µg/kg	210	EPA8080
Toxaphene	U			210	µg/kg	210	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				6.8±6.0	pCi/g	3.8	EPA900.0
Nonvolatile beta				12±9.5	pCi/g	4.0	EPA900.0
Radium, total alpha-emitting				0.46±0.42	pCi/g	0.12	EPA903.0
Tritium				5.6±1.2	pCi/g	0.91	EPA906.0

SAMPLE NAME: D431 1706 Sample ID: 100433

Location (SRS Coordinates): 18492.14E 66454.17N
Ground Elevation Above MSL: 124.9 ft
Depth of Core Interval: 20.00 to 22.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Wet
Sample Color: 5YR 5/6 USC Soil Classification: SW Percent Solids: 80.00

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				9.5	meq/100g	2.5	EPA9080
pH	J	Q		4.4	pH	0.010	EPA9045
Specific conductance				44	µS/cm	1.0	EPA9050
Total organic carbon				410	mg/kg	120	EPA415.1
Total Metals							
Arsenic				1.7	mg/kg	1.2	EPA7060
Arsenic				1.4	mg/kg	1.2	EPA7060
Barium	U			23	mg/kg	23	EPA6010
Barium	U			23	mg/kg	23	EPA6010
Cadmium	U			0.58	mg/kg	0.58	EPA6010
Cadmium	U			0.58	mg/kg	0.58	EPA6010
Chromium				5.2	mg/kg	1.2	EPA6010
Chromium				4.6	mg/kg	1.2	EPA6010
Copper	U			2.9	mg/kg	2.9	EPA6010
Copper	U			2.9	mg/kg	2.9	EPA6010
Lead				1.0	mg/kg	0.36	EPA7421
Lead				1.1	mg/kg	0.36	EPA7421
Manganese	J	X		41	mg/kg	1.8	EPA6010
Manganese	J	X		21	mg/kg	1.8	EPA6010
Mercury	U			0.13	mg/kg	0.13	EPA7470
Nickel	U			4.7	mg/kg	4.7	EPA6010
Nickel	U			4.7	mg/kg	4.7	EPA6010
Selenium	U			0.61	mg/kg	0.61	EPA7740
Selenium	U			0.61	mg/kg	0.61	EPA7740
Silver	U			1.2	mg/kg	1.2	EPA6010
Silver	U			1.2	mg/kg	1.2	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			410	µg/kg	410	EPA8270
Acenaphthylene	U			410	µg/kg	410	EPA8270
Anthracene	U			410	µg/kg	410	EPA8270
Benzo(a)anthracene	U			410	µg/kg	410	EPA8270
Benzo(b)fluoranthene	U			410	µg/kg	410	EPA8270
Benzo(k)fluoranthene	U			410	µg/kg	410	EPA8270
Benzoic acid	U			2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	U			410	µg/kg	410	EPA8270
Benzo(a)pyrene	U			410	µg/kg	410	EPA8270
Benzyl alcohol	U			410	µg/kg	410	EPA8270
Bis(2-chloroethoxy) methane	U			410	µg/kg	410	EPA8270
Bis(2-chloroethyl) ether	U			410	µg/kg	410	EPA8270
Bis(2-chloroisopropyl) ether	U			410	µg/kg	410	EPA8270

SAMPLE NAME: D431 1706 (Continued) Sample ID: 100433

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Bis(2-ethylhexyl) phthalate	U	V		410	µg/kg	410	EPA8270
4-Bromophenyl phenyl ether	U			410	µg/kg	410	EPA8270
Butylbenzyl phthalate	U			410	µg/kg	410	EPA8270
4-Chloroaniline	U			410	µg/kg	410	EPA8270
4-Chloro-m-cresol	U			410	µg/kg	410	EPA8270
2-Chloronaphthalene	U			410	µg/kg	410	EPA8270
2-Chlorophenol	U			410	µg/kg	410	EPA8270
4-Chlorophenyl phenyl ether	U			410	µg/kg	410	EPA8270
Chrysene	U			410	µg/kg	410	EPA8270
o-Cresol (2-Methylphenol)	U			410	µg/kg	410	EPA8270
p-Cresol (4-Methylphenol)	U			410	µg/kg	410	EPA8270
Dibenz(a,h)anthracene	U			410	µg/kg	410	EPA8270
Dibenzofuran	U			410	µg/kg	410	EPA8270
Di-n-butyl phthalate	UJ	V		110	µg/kg	410	EPA8270
1,2-Dichlorobenzene	U			410	µg/kg	410	EPA8270
1,3-Dichlorobenzene	U			410	µg/kg	410	EPA8270
1,4-Dichlorobenzene	U			410	µg/kg	410	EPA8270
3,3'-Dichlorobenzidine	U			830	µg/kg	830	EPA8270
2,4-Dichlorophenol	U			410	µg/kg	410	EPA8270
Diethyl phthalate	U			410	µg/kg	410	EPA8270
2,4-Dimethyl phenol	U			410	µg/kg	410	EPA8270
Dimethyl phthalate	U			410	µg/kg	410	EPA8270
2,4-Dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2,4-Dinitrotoluene	U			410	µg/kg	410	EPA8270
2,6-Dinitrotoluene	U			410	µg/kg	410	EPA8270
Di-n-octyl phthalate	U			410	µg/kg	410	EPA8270
Fluoranthene	U			410	µg/kg	410	EPA8270
Fluorene	U			410	µg/kg	410	EPA8270
Hexachlorobenzene	U			410	µg/kg	410	EPA8270
Hexachlorobutadiene	U			410	µg/kg	410	EPA8270
Hexachlorocyclopentadiene	U			410	µg/kg	410	EPA8270
Hexachloroethane	U			410	µg/kg	410	EPA8270
Indeno(1,2,3-c,d)pyrene	U			410	µg/kg	410	EPA8270
Isophorone	U			410	µg/kg	410	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	U			410	µg/kg	410	EPA8270
Naphthalene	U			410	µg/kg	410	EPA8270
o-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
Nitrobenzene	U			410	µg/kg	410	EPA8270
2-Nitrophenol	U			410	µg/kg	410	EPA8270
4-Nitrophenol	U			2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	U			410	µg/kg	410	EPA8270
N-Nitrosodipropylamine	U			410	µg/kg	410	EPA8270
Pentachlorophenol	U			2,100	µg/kg	2,100	EPA8270
Phenanthrene	U			410	µg/kg	410	EPA8270
Phenol	U			410	µg/kg	410	EPA8270
Pyrene	U			410	µg/kg	410	EPA8270
1,2,4-Trichlorobenzene	U			410	µg/kg	410	EPA8270

SAMPLE NAME: D431 1706 (Continued) Sample ID: 100433

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2,4,5-Trichlorophenol	U			2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	U			410	µg/kg	410	EPA8270
Unknown ketone	J	NV		8,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		13	µg/kg	13	EPA8240
Benzene	J			5.6	µg/kg	6.3	EPA8240
Bromodichloromethane	U			6.3	µg/kg	6.3	EPA8240
Bromoform	U			6.3	µg/kg	6.3	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Carbon disulfide	U			6.3	µg/kg	6.3	EPA8240
Carbon tetrachloride	U			6.3	µg/kg	6.3	EPA8240
Chlorobenzene	U			6.3	µg/kg	6.3	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
Chloroform	U			6.3	µg/kg	6.3	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Dibromochloromethane	U			6.3	µg/kg	6.3	EPA8240
1,1-Dichloroethane	U			6.3	µg/kg	6.3	EPA8240
1,2-Dichloroethane	U			6.3	µg/kg	6.3	EPA8240
1,1-Dichloroethylene	U			6.3	µg/kg	6.3	EPA8240
1,2-Dichloroethylene	U			6.3	µg/kg	6.3	EPA8240
Dichloromethane (Methylene chloride)	U			6.3	µg/kg	6.3	EPA8240
1,2-Dichloropropane	U			6.3	µg/kg	6.3	EPA8240
cis-1,3-Dichloropropene	U			6.3	µg/kg	6.3	EPA8240
trans-1,3-Dichloropropene	U			6.3	µg/kg	6.3	EPA8240
Ethylbenzene	U			6.3	µg/kg	6.3	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Styrene	U			6.3	µg/kg	6.3	EPA8240
1,1,2,2-Tetrachloroethane	U			6.3	µg/kg	6.3	EPA8240
Tetrachloroethylene	U			6.3	µg/kg	6.3	EPA8240
Toluene	U			6.3	µg/kg	6.3	EPA8240
1,1,1-Trichloroethane	U			6.3	µg/kg	6.3	EPA8240
1,1,2-Trichloroethane	U			6.3	µg/kg	6.3	EPA8240
Trichloroethylene	U			6.3	µg/kg	6.3	EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
Xylenes	U			6.3	µg/kg	6.3	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			2.1	µg/kg	2.1	EPA8080
alpha-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
beta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
delta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
alpha-Chlordane	U			2.1	µg/kg	2.1	EPA8080
gamma-Chlordane	U			2.1	µg/kg	2.1	EPA8080
p,p'-DDD	U			4.1	µg/kg	4.1	EPA8080

SAMPLE NAME: D431 1706 (Continued) Sample ID: 100433

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
p,p'-DDE	U			4.1	µg/kg	4.1	EPA8080
p,p'-DDT	U			4.1	µg/kg	4.1	EPA8080
Dieldrin	U			4.1	µg/kg	4.1	EPA8080
Endosulfan I	U			2.1	µg/kg	2.1	EPA8080
Endosulfan II	U			4.1	µg/kg	4.1	EPA8080
Endosulfan sulfate	U			4.1	µg/kg	4.1	EPA8080
Endrin	U			4.1	µg/kg	4.1	EPA8080
Endrin ketone	U			4.1	µg/kg	4.1	EPA8080
Heptachlor	U			2.1	µg/kg	2.1	EPA8080
Heptachlor epoxide	U			2.1	µg/kg	2.1	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			2.1	µg/kg	2.1	EPA8080
Methoxychlor	U			21	µg/kg	21	EPA8080
Octachlorodibenzo-p-dioxin				1.4	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			41	µg/kg	41	EPA8080
PCB 1221	U			82	µg/kg	82	EPA8080
PCB 1232	U			41	µg/kg	41	EPA8080
PCB 1242	U			41	µg/kg	41	EPA8080
PCB 1248	U			41	µg/kg	41	EPA8080
PCB 1254	U			41	µg/kg	41	EPA8080
PCB 1260	U			41	µg/kg	41	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			210	µg/kg	210	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				6.8±5.9	pCi/g	3.7	EPA900.0
Nonvolatile beta				11±9.3	pCi/g	4.0	EPA900.0
Radium, total alpha-emitting				0.50±0.44	pCi/g	0.12	EPA903.0
Tritium				3.5±0.90	pCi/g	0.94	EPA906.0

SAMPLE NAME: D431 1801 Sample ID: 100400

Location (SRS Coordinates): 18340.39E 66562.05N
Ground Elevation Above MSL: 122.4 ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 5YR 4/4 USC Soil Classification: SP Percent Solids: 91.20

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				3.0	meq/100g	2.0	EPA9080
pH	J	Q		4.0	pH	0.010	EPA9045
Specific conductance				40	µS/cm	1.0	EPA9050
Total organic carbon				4,300	mg/kg	150	EPA415.1
Total Metals							
Arsenic				3.2	mg/kg	0.97	EPA7060
Barium	U			19	mg/kg	19	EPA6010
Cadmium	U			0.46	mg/kg	0.46	EPA6010
Chromium				3.9	mg/kg	0.93	EPA6010
Copper	U			2.3	mg/kg	2.3	EPA6010
Lead				3.4	mg/kg	0.29	EPA7421
Manganese				56	mg/kg	1.4	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			3.7	mg/kg	3.7	EPA6010
Selenium	U			0.48	mg/kg	0.48	EPA7740
Silver	U			0.93	mg/kg	0.93	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			370	µg/kg	370	EPA8270
Acenaphthylene	U			370	µg/kg	370	EPA8270
Acenaphthylene	U			360	µg/kg	360	EPA8270
Acenaphthylene	U			360	µg/kg	360	EPA8270
Anthracene	U			370	µg/kg	370	EPA8270
Anthracene	U			360	µg/kg	360	EPA8270
Anthracene	U			360	µg/kg	360	EPA8270
Benzo(a)anthracene	U			370	µg/kg	370	EPA8270
Benzo(a)anthracene	U			360	µg/kg	360	EPA8270
Benzo(a)anthracene	U			360	µg/kg	360	EPA8270
Benzo(b)fluoranthene	U			370	µg/kg	370	EPA8270
Benzo(b)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(b)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(k)fluoranthene	U			370	µg/kg	370	EPA8270
Benzo(k)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(k)fluoranthene	U			360	µg/kg	360	EPA8270
Benzoic acid	J			250	µg/kg	1,800	EPA8270
Benzoic acid	J			280	µg/kg	1,800	EPA8270
Benzoic acid	J			370	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			370	µg/kg	370	EPA8270
Benzo(g,h,i)perylene	U			360	µg/kg	360	EPA8270
Benzo(g,h,i)perylene	U			360	µg/kg	360	EPA8270
Benzo(a)pyrene	U			370	µg/kg	370	EPA8270

SAMPLE NAME: D431 1801 (Continued) Sample ID: 100400

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Benzo(a)pyrene	U			360	µg/kg	360	EPA8270
Benzo(a)pyrene	U			360	µg/kg	360	EPA8270
Benzyl alcohol	U			370	µg/kg	370	EPA8270
Benzyl alcohol	U			360	µg/kg	360	EPA8270
Benzyl alcohol	U			360	µg/kg	360	EPA8270
Bis(2-chloroethoxy) methane	U			370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	U			360	µg/kg	360	EPA8270
Bis(2-chloroethoxy) methane	U			360	µg/kg	360	EPA8270
Bis(2-chloroethyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-chloroisopropyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-chloroethyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-chloroisopropyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-ethylhexyl) phthalate	U			370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	U			360	µg/kg	360	EPA8270
Bis(2-ethylhexyl) phthalate	U			360	µg/kg	360	EPA8270
4-Bromophenyl phenyl ether	U			370	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	U			360	µg/kg	360	EPA8270
4-Bromophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Butylbenzyl phthalate	U			370	µg/kg	370	EPA8270
Butylbenzyl phthalate	U			360	µg/kg	360	EPA8270
Butylbenzyl phthalate	U			360	µg/kg	360	EPA8270
4-Chloroaniline	U			370	µg/kg	370	EPA8270
4-Chloroaniline	U			360	µg/kg	360	EPA8270
4-Chloroaniline	U			360	µg/kg	360	EPA8270
4-Chloro-m-cresol	U			370	µg/kg	370	EPA8270
2-Chloronaphthalene	U			370	µg/kg	370	EPA8270
2-Chloronaphthalene	U			360	µg/kg	360	EPA8270
2-Chloronaphthalene	U			360	µg/kg	360	EPA8270
2-Chlorophenol	U			370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	U			370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	U			360	µg/kg	360	EPA8270
4-Chlorophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Chrysene	U			370	µg/kg	370	EPA8270
Chrysene	U			360	µg/kg	360	EPA8270
Chrysene	U			360	µg/kg	360	EPA8270
o-Cresol (2-Methylphenol)	U			370	µg/kg	370	EPA8270
o-Cresol (2-Methylphenol)	U			360	µg/kg	360	EPA8270
o-Cresol (2-Methylphenol)	U			360	µg/kg	360	EPA8270
p-Cresol (4-Methylphenol)	U			370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	U			360	µg/kg	360	EPA8270
p-Cresol (4-Methylphenol)	U			360	µg/kg	360	EPA8270
Dibenz(a,h)anthracene	U			370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	U			360	µg/kg	360	EPA8270
Dibenz(a,h)anthracene	U			360	µg/kg	360	EPA8270
Dibenzofuran	U			370	µg/kg	370	EPA8270
Dibenzofuran	U			360	µg/kg	360	EPA8270
Dibenzofuran	U			360	µg/kg	360	EPA8270
Di-n-butyl phthalate	UJ	V		140	µg/kg	370	EPA8270

SAMPLE NAME: D431 1801 (Continued) Sample ID: 100400

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Di-n-butyl phthalate	U	V		360	µg/kg	360	EPA8270
Di-n-butyl phthalate	UJ	V		54	µg/kg	360	EPA8270
1,2-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,2-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,2-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,3-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,3-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,4-Dichlorobenzene	U			370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	U			730	µg/kg	730	EPA8270
3,3'-Dichlorobenzidine	U			720	µg/kg	720	EPA8270
3,3'-Dichlorobenzidine	U			720	µg/kg	720	EPA8270
2,4-Dichlorophenol	U			370	µg/kg	370	EPA8270
2,4-Dichlorophenol	U			360	µg/kg	360	EPA8270
2,4-Dichlorophenol	U			360	µg/kg	360	EPA8270
Diethyl phthalate	U			370	µg/kg	370	EPA8270
Diethyl phthalate	U			360	µg/kg	360	EPA8270
Diethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dimethyl phenol	U			370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	U			360	µg/kg	360	EPA8270
2,4-Dimethyl phenol	U			360	µg/kg	360	EPA8270
Dimethyl phthalate	U			370	µg/kg	370	EPA8270
Dimethyl phthalate	U			360	µg/kg	360	EPA8270
Dimethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	U			370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	U			360	µg/kg	360	EPA8270
2,6-Dinitrotoluene	U			360	µg/kg	360	EPA8270
Di-n-octyl phthalate	U			370	µg/kg	370	EPA8270
Di-n-octyl phthalate	U			360	µg/kg	360	EPA8270
Di-n-octyl phthalate	U			360	µg/kg	360	EPA8270
Fluoranthene	U			370	µg/kg	370	EPA8270
Fluoranthene	U			360	µg/kg	360	EPA8270
Fluoranthene	U			360	µg/kg	360	EPA8270
Fluorene	U			370	µg/kg	370	EPA8270
Fluorene	U			360	µg/kg	360	EPA8270
Fluorene	U			360	µg/kg	360	EPA8270
Hexachlorobenzene	U			370	µg/kg	370	EPA8270
Hexachlorobenzene	U			360	µg/kg	360	EPA8270
Hexachlorobenzene	U			360	µg/kg	360	EPA8270
Hexachlorobutadiene	U			370	µg/kg	370	EPA8270
Hexachlorobutadiene	U			360	µg/kg	360	EPA8270
Hexachlorobutadiene	U			360	µg/kg	360	EPA8270
Hexachlorocyclopentadiene	U			370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	U			360	µg/kg	360	EPA8270
Hexachlorocyclopentadiene	U			360	µg/kg	360	EPA8270
Hexachloroethane	U			370	µg/kg	370	EPA8270

SAMPLE NAME: D431 1801 (Continued) Sample ID: 100400

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Hexachloroethane	U			360	µg/kg	360	EPA8270
Hexachloroethane	U			360	µg/kg	360	EPA8270
Indeno(1,2,3-c,d)pyrene	U			370	µg/kg	370	EPA8270
Indeno(1,2,3-c,d)pyrene	U			360	µg/kg	360	EPA8270
Indeno(1,2,3-c,d)pyrene	U			360	µg/kg	360	EPA8270
Isophorone	U			370	µg/kg	370	EPA8270
Isophorone	U			360	µg/kg	360	EPA8270
Isophorone	U			360	µg/kg	360	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			370	µg/kg	370	EPA8270
2-Methylnaphthalene	U			360	µg/kg	360	EPA8270
2-Methylnaphthalene	U			360	µg/kg	360	EPA8270
Naphthalene	U			370	µg/kg	370	EPA8270
Naphthalene	U			360	µg/kg	360	EPA8270
Naphthalene	U			360	µg/kg	360	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			370	µg/kg	370	EPA8270
Nitrobenzene	U			360	µg/kg	360	EPA8270
Nitrobenzene	U			360	µg/kg	360	EPA8270
2-Nitrophenol	U			370	µg/kg	370	EPA8270
2-Nitrophenol	U			360	µg/kg	360	EPA8270
2-Nitrophenol	U			360	µg/kg	360	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			370	µg/kg	370	EPA8270
N-Nitrosodiphenylamine	U			360	µg/kg	360	EPA8270
N-Nitrosodiphenylamine	U			360	µg/kg	360	EPA8270
N-Nitrosodipropylamine	U			370	µg/kg	370	EPA8270
Pentachlorophenol	UJ	I	H	1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			370	µg/kg	370	EPA8270
Phenanthrene	U			360	µg/kg	360	EPA8270
Phenanthrene	U			360	µg/kg	360	EPA8270
Phenol	U			370	µg/kg	370	EPA8270
Pyrene	U			370	µg/kg	370	EPA8270
1,2,4-Trichlorobenzene	U			370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			370	µg/kg	370	EPA8270
2,4,6-Trichlorophenol	U			360	µg/kg	360	EPA8270
2,4,6-Trichlorophenol	U			360	µg/kg	360	EPA8270

SAMPLE NAME: D431 1801 (Continued) Sample ID: 100400

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Unknown adipate	J	N		300	µg/kg		EPA8270
Unknown hydrocarbon	J	N		400	µg/kg		EPA8270
Unknown hydrocarbon	J	N		1,000	µg/kg		EPA8270
Unknown hydrocarbon	J	N		2,000	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown ester	J	NV		300	µg/kg		EPA8270
Unknown ketone	J	NV		6,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U			11	µg/kg	11	EPA8240
Benzene	U			5.6	µg/kg	5.6	EPA8240
Bromodichloromethane	U			5.6	µg/kg	5.6	EPA8240
Bromoform	U			5.6	µg/kg	5.6	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.6	µg/kg	5.6	EPA8240
Carbon tetrachloride	U			5.6	µg/kg	5.6	EPA8240
Chlorobenzene	U			5.6	µg/kg	5.6	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.6	µg/kg	5.6	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.6	µg/kg	5.6	EPA8240
1,1-Dichloroethane	U			5.6	µg/kg	5.6	EPA8240
1,2-Dichloroethane	J			4.3	µg/kg	5.6	EPA8240
1,1-Dichloroethylene	U			5.6	µg/kg	5.6	EPA8240
1,2-Dichloroethylene	U			5.6	µg/kg	5.6	EPA8240
Dichloromethane (Methylene chloride)	U	V		11	µg/kg	5.6	EPA8240
1,2-Dichloropropane	U			5.6	µg/kg	5.6	EPA8240
cis-1,3-Dichloropropene	U			5.6	µg/kg	5.6	EPA8240
trans-1,3-Dichloropropene	U			5.6	µg/kg	5.6	EPA8240
Ethylbenzene	U			5.6	µg/kg	5.6	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.6	µg/kg	5.6	EPA8240
1,1,2,2-Tetrachloroethane	U			5.6	µg/kg	5.6	EPA8240
Tetrachloroethylene	U			5.6	µg/kg	5.6	EPA8240
Toluene	U			5.6	µg/kg	5.6	EPA8240
1,1,1-Trichloroethane	U			5.6	µg/kg	5.6	EPA8240
1,1,2-Trichloroethane	J			3.3	µg/kg	5.6	EPA8240
Trichloroethylene	U			5.6	µg/kg	5.6	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.6	µg/kg	5.6	EPA8240

SAMPLE NAME: D431 1801 (Continued) Sample ID: 100400

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.8	µg/kg	1.8	EPA8080
alpha-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
beta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
delta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
alpha-Chlordane	U			1.8	µg/kg	1.8	EPA8080
gamma-Chlordane	U			1.8	µg/kg	1.8	EPA8080
p,p'-DDD	U			3.6	µg/kg	3.6	EPA8080
p,p'-DDE	J			1.1	µg/kg	3.6	EPA8080
p,p'-DDT	J			1.1	µg/kg	3.6	EPA8080
Dieldrin	U			3.6	µg/kg	3.6	EPA8080
Endosulfan I	U			1.8	µg/kg	1.8	EPA8080
Endosulfan II	U			3.6	µg/kg	3.6	EPA8080
Endosulfan sulfate	U			3.6	µg/kg	3.6	EPA8080
Endrin	U			3.6	µg/kg	3.6	EPA8080
Endrin ketone	U			3.6	µg/kg	3.6	EPA8080
Heptachlor	U			1.8	µg/kg	1.8	EPA8080
Heptachlor epoxide	U			1.8	µg/kg	1.8	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			1.8	µg/kg	1.8	EPA8080
Methoxychlor	U			18	µg/kg	18	EPA8080
Octachlorodibenzo-p-dioxin	J			0.10	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			36	µg/kg	36	EPA8080
PCB 1221	U			72	µg/kg	72	EPA8080
PCB 1232	U			36	µg/kg	36	EPA8080
PCB 1242	U			36	µg/kg	36	EPA8080
PCB 1248	U			36	µg/kg	36	EPA8080
PCB 1254	U			36	µg/kg	36	EPA8080
PCB 1260	U			36	µg/kg	36	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	U			180	µg/kg	180	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				7.8±6.9	pCi/g	4.0	EPA900.0
Gross alpha				11±7.6	pCi/g	3.9	EPA900.0
Nonvolatile beta				17±11	pCi/g	4.0	EPA900.0
Nonvolatile beta				17±12	pCi/g	4.1	EPA900.0
Radium, total alpha-emitting	U	V		1.3±1.2	pCi/g	0.24	EPA903.0
Radium, total alpha-emitting	U	V		1.0±0.91	pCi/g	0.17	EPA903.0
Tritium	U			1.7	pCi/g	1.7	EPA906.0
Tritium	U			2.7	pCi/g	2.7	EPA906.0

SAMPLE NAME: D431 1802 Sample ID: 100401

Location (SRS Coordinates): 18340.39E 66562.05N
Ground Elevation Above MSL: 122.4 ft
Depth of Core Interval: 0.50 to 2.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 5YR 4/4 USC Soil Classification: SP Percent Solids: 90.90

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	J	I	L	3.3	mg/kg	1.0	EPA7060
Arsenic	UJ	I	L	1.1	mg/kg	1.1	EPA7060
Barium	U			18	mg/kg	18	EPA6010
Barium	U			22	mg/kg	22	EPA6010
Cadmium	U			0.46	mg/kg	0.46	EPA6010
Cadmium	U			0.53	mg/kg	0.53	EPA6010
Chromium				13	mg/kg	0.91	EPA6010
Chromium				8.9	mg/kg	1.1	EPA6010
Copper	U			2.3	mg/kg	2.3	EPA6010
Copper	U			2.7	mg/kg	2.7	EPA6010
Lead				2.0	mg/kg	0.31	EPA7421
Lead				1.5	mg/kg	0.32	EPA7421
Manganese	J	IX	L	170	mg/kg	1.4	EPA6010
Manganese	J	IX	L	84	mg/kg	1.6	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Mercury	UJ	Q		0.11	mg/kg	0.11	EPA7470
Nickel	U			3.7	mg/kg	3.7	EPA6010
Nickel	U			4.3	mg/kg	4.3	EPA6010
Selenium	UJ	I	L	0.52	mg/kg	0.52	EPA7740
Selenium	UJ	I	L	0.54	mg/kg	0.54	EPA7740
Silver	U			0.91	mg/kg	0.91	EPA6010
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			370	µg/kg	370	EPA8270
Acenaphthylene	U			370	µg/kg	370	EPA8270
Anthracene	U			370	µg/kg	370	EPA8270
Benzo(a)anthracene	U			370	µg/kg	370	EPA8270
Benzo(b)fluoranthene	U			370	µg/kg	370	EPA8270
Benzo(k)fluoranthene	U			370	µg/kg	370	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			370	µg/kg	370	EPA8270
Benzo(a)pyrene	U			370	µg/kg	370	EPA8270
Benzyl alcohol	U			370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	U			370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	U			370	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Butylbenzyl phthalate	U			370	µg/kg	370	EPA8270
4-Chloroaniline	U			370	µg/kg	370	EPA8270
4-Chloro-m-cresol	U			370	µg/kg	370	EPA8270
2-Chloronaphthalene	U			370	µg/kg	370	EPA8270

SAMPLE NAME: D431 1802 (Continued) Sample ID: 100401

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2-Chlorophenol	U			370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Chrysene	U			370	µg/kg	370	EPA8270
o-Cresol (2-Methylphenol)	U			370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	U			370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	U			370	µg/kg	370	EPA8270
Dibenzofuran	U			370	µg/kg	370	EPA8270
Di-n-butyl phthalate	U	V		370	µg/kg	370	EPA8270
1,2-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,4-Dichlorobenzene	U			370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	U			740	µg/kg	740	EPA8270
2,4-Dichlorophenol	U			370	µg/kg	370	EPA8270
Diethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	U			370	µg/kg	370	EPA8270
Dimethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	U			370	µg/kg	370	EPA8270
Di-n-octyl phthalate	U			370	µg/kg	370	EPA8270
Fluoranthene	U			370	µg/kg	370	EPA8270
Fluorene	U			370	µg/kg	370	EPA8270
Hexachlorobenzene	U			370	µg/kg	370	EPA8270
Hexachlorobutadiene	U			370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	U			370	µg/kg	370	EPA8270
Hexachloroethane	U			370	µg/kg	370	EPA8270
Indeno(1,2,3-c,d)pyrene	U			370	µg/kg	370	EPA8270
Isophorone	U			370	µg/kg	370	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			370	µg/kg	370	EPA8270
Naphthalene	U			370	µg/kg	370	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			370	µg/kg	370	EPA8270
2-Nitrophenol	U			370	µg/kg	370	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			370	µg/kg	370	EPA8270
N-Nitrosodipropylamine	U			370	µg/kg	370	EPA8270
Pentachlorophenol	U			1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			370	µg/kg	370	EPA8270
Phenol	U			370	µg/kg	370	EPA8270
Pyrene	U			370	µg/kg	370	EPA8270
1,2,4-Trichlorobenzene	U			370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			370	µg/kg	370	EPA8270
Unknown adipate	J	N		10,000	µg/kg		EPA8270
Unknown adipate	J	N		200	µg/kg		EPA8270
Unknown ketone	J	NV		5,000	µg/kg		EPA8270
Unknown ketone	J	N		300	µg/kg		EPA8270

SAMPLE NAME: D431 1802 (Continued) Sample ID: 100401

Volatile Organic Compounds

Acetone	U		11	µg/kg	11	EPA8240
Benzene	U		5.6	µg/kg	5.6	EPA8240
Bromodichloromethane	U		5.6	µg/kg	5.6	EPA8240
Bromoform	U		5.6	µg/kg	5.6	EPA8240
Bromomethane (Methyl bromide)	U		11	µg/kg	11	EPA8240
Carbon disulfide	U		5.6	µg/kg	5.6	EPA8240
Carbon tetrachloride	U		5.6	µg/kg	5.6	EPA8240
Chlorobenzene	U		5.6	µg/kg	5.6	EPA8240
Chloroethane	U		11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U		11	µg/kg	11	EPA8240
Chloroform	U		5.6	µg/kg	5.6	EPA8240
Chloromethane (Methyl chloride)	U		11	µg/kg	11	EPA8240
Dibromochloromethane	U		5.6	µg/kg	5.6	EPA8240
1,1-Dichloroethane	U		5.6	µg/kg	5.6	EPA8240
1,2-Dichloroethane	U		5.6	µg/kg	5.6	EPA8240
1,1-Dichloroethylene	U		5.6	µg/kg	5.6	EPA8240
1,2-Dichloroethylene	U		5.6	µg/kg	5.6	EPA8240
Dichloromethane (Methylene chloride)	U	V	13	µg/kg	5.6	EPA8240
1,2-Dichloropropane	U		5.6	µg/kg	5.6	EPA8240
cis-1,3-Dichloropropene	U		5.6	µg/kg	5.6	EPA8240
trans-1,3-Dichloropropene	U		5.6	µg/kg	5.6	EPA8240
Ethylbenzene	U		5.6	µg/kg	5.6	EPA8240
2-Hexanone	U		11	µg/kg	11	EPA8240
Methyl ethyl ketone	U		11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U		11	µg/kg	11	EPA8240
Styrene	U		5.6	µg/kg	5.6	EPA8240
1,1,2,2-Tetrachloroethane	U		5.6	µg/kg	5.6	EPA8240
Tetrachloroethylene	U		5.6	µg/kg	5.6	EPA8240
Toluene	U		5.6	µg/kg	5.6	EPA8240
1,1,1-Trichloroethane	U		5.6	µg/kg	5.6	EPA8240
1,1,2-Trichloroethane	U		5.6	µg/kg	5.6	EPA8240
Trichloroethylene	U		5.6	µg/kg	5.6	EPA8240
Vinyl acetate	U		11	µg/kg	11	EPA8240
Xylenes	U		5.6	µg/kg	5.6	EPA8240

Radionuclide Indicators and Radionuclides

Gross alpha			6.0±5.8	pCi/g	3.5	EPA900.0
Nonvolatile beta			11±9.6	pCi/g	3.5	EPA900.0
Radium, total alpha-emitting	U	V	0.86±0.82	pCi/g	0.16	EPA903.0
Tritium	U		1.3	pCi/g	1.3	EPA906.0

SAMPLE NAME: D431 1802A Sample ID: 100402

Sample Type: Duplicate Associated Sample: 100401

Total Metals

Arsenic	U		0.79	mg/kg	0.79	EPA7060
Barium	U		22	mg/kg	22	EPA6010
Cadmium	U		0.54	mg/kg	0.54	EPA6010
Chromium			6.1	mg/kg	1.1	EPA6010

SAMPLE NAME: D431 1802A (Continued) Sample ID: 100402

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Copper	U			2.7	mg/kg	2.7	EPA6010
Lead				1.9	mg/kg	0.24	EPA7421
Manganese				160	mg/kg	1.6	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			4.3	mg/kg	4.3	EPA6010
Selenium	U			0.39	mg/kg	0.39	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			370	µg/kg	370	EPA8270
Acenaphthylene	U			370	µg/kg	370	EPA8270
Anthracene	U			370	µg/kg	370	EPA8270
Benzo(a)anthracene	U			370	µg/kg	370	EPA8270
Benzo(b)fluoranthene	U			370	µg/kg	370	EPA8270
Benzo(k)fluoranthene	U			370	µg/kg	370	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	U			370	µg/kg	370	EPA8270
Benzo(a)pyrene	U			370	µg/kg	370	EPA8270
Benzyl alcohol	U			370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	U			370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	U			370	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Butylbenzyl phthalate	U			370	µg/kg	370	EPA8270
4-Chloroaniline	U			370	µg/kg	370	EPA8270
4-Chloro-m-cresol	U			370	µg/kg	370	EPA8270
2-Chloronaphthalene	U			370	µg/kg	370	EPA8270
2-Chlorophenol	U			370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Chrysene	U			370	µg/kg	370	EPA8270
o-Cresol (2-Methylphenol)	U			370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	U			370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	U			370	µg/kg	370	EPA8270
Dibenzofuran	U			370	µg/kg	370	EPA8270
Di-n-butyl phthalate	U	V		370	µg/kg	370	EPA8270
1,2-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,4-Dichlorobenzene	U			370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	U			740	µg/kg	740	EPA8270
2,4-Dichlorophenol	U			370	µg/kg	370	EPA8270
Diethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	U			370	µg/kg	370	EPA8270
Dimethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	U			370	µg/kg	370	EPA8270
Di-n-octyl phthalate	U			370	µg/kg	370	EPA8270
Fluoranthene	U			370	µg/kg	370	EPA8270

SAMPLE NAME: D431 1802A (Continued) Sample ID: 100402

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Fluorene	U			370	µg/kg	370	EPA8270
Hexachlorobenzene	U			370	µg/kg	370	EPA8270
Hexachlorobutadiene	U			370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	U			370	µg/kg	370	EPA8270
Hexachloroethane	U			370	µg/kg	370	EPA8270
Indeno(1,2,3-c,d)pyrene	U			370	µg/kg	370	EPA8270
Isophorone	U			370	µg/kg	370	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	U			370	µg/kg	370	EPA8270
Naphthalene	U			370	µg/kg	370	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U			370	µg/kg	370	EPA8270
2-Nitrophenol	U			370	µg/kg	370	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			370	µg/kg	370	EPA8270
N-Nitrosodipropylamine	U			370	µg/kg	370	EPA8270
Pentachlorophenol	U			1,900	µg/kg	1,900	EPA8270
Phenanthrene	U			370	µg/kg	370	EPA8270
Phenol	U			370	µg/kg	370	EPA8270
Pyrene	U			370	µg/kg	370	EPA8270
1,2,4-Trichlorobenzene	U			370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			370	µg/kg	370	EPA8270
Unknown adipate	J	N		20,000	µg/kg		EPA8270
Unknown adipate	J	N		300	µg/kg		EPA8270
Unknown hydrocarbon	J	N		500	µg/kg		EPA8270
Unknown hydrocarbon	J	N		500	µg/kg		EPA8270
Unknown ketone	J	NV		7,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone				41	µg/kg	11	EPA8240
Acetone				41	µg/kg	11	EPA8240
Acetone				41	µg/kg	11	EPA8240
Benzene	U			5.7	µg/kg	5.7	EPA8240
Bromodichloromethane	U			5.7	µg/kg	5.7	EPA8240
Bromodichloromethane	U			5.7	µg/kg	5.7	EPA8240
Bromodichloromethane	U			5.7	µg/kg	5.7	EPA8240
Bromoform	U			5.7	µg/kg	5.7	EPA8240
Bromoform	U			5.7	µg/kg	5.7	EPA8240
Bromoform	U			5.7	µg/kg	5.7	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.7	µg/kg	5.7	EPA8240
Carbon disulfide	U			5.7	µg/kg	5.7	EPA8240
Carbon disulfide	U			5.7	µg/kg	5.7	EPA8240
Carbon tetrachloride	U			5.7	µg/kg	5.7	EPA8240

SAMPLE NAME: D431 1802A (Continued) Sample ID: 100402

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Carbon tetrachloride	U			5.7	µg/kg	5.7	EPA8240
Carbon tetrachloride	U			5.7	µg/kg	5.7	EPA8240
Chlorobenzene	U			5.7	µg/kg	5.7	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.7	µg/kg	5.7	EPA8240
Chloroform	U			5.7	µg/kg	5.7	EPA8240
Chloroform	U			5.7	µg/kg	5.7	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.7	µg/kg	5.7	EPA8240
Dibromochloromethane	U			5.7	µg/kg	5.7	EPA8240
Dibromochloromethane	U			5.7	µg/kg	5.7	EPA8240
1,1-Dichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1-Dichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1-Dichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethane	J			3.5	µg/kg	5.7	EPA8240
1,2-Dichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
Dichloromethane (Methylene chloride)	U	V		16	µg/kg	5.7	EPA8240
Dichloromethane (Methylene chloride)	U	V		15	µg/kg	5.7	EPA8240
Dichloromethane (Methylene chloride)	U	V		14	µg/kg	5.7	EPA8240
1,2-Dichloropropane	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloropropane	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloropropane	U			5.7	µg/kg	5.7	EPA8240
cis-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
cis-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
cis-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
trans-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
trans-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
trans-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
Ethylbenzene	U			5.7	µg/kg	5.7	EPA8240
Ethylbenzene	U			5.7	µg/kg	5.7	EPA8240
Ethylbenzene	U			5.7	µg/kg	5.7	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240

SAMPLE NAME: D431 1802A (Continued) Sample ID: 100402

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.7	µg/kg	5.7	EPA8240
Styrene	U			5.7	µg/kg	5.7	EPA8240
Styrene	U			5.7	µg/kg	5.7	EPA8240
1,1,2,2-Tetrachloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1,2,2-Tetrachloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1,2,2-Tetrachloroethane	U			5.7	µg/kg	5.7	EPA8240
Tetrachloroethylene	U			5.7	µg/kg	5.7	EPA8240
Tetrachloroethylene	U			5.7	µg/kg	5.7	EPA8240
Tetrachloroethylene	U			5.7	µg/kg	5.7	EPA8240
Toluene	U			5.7	µg/kg	5.7	EPA8240
1,1,1-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1,1-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1,1-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1,2-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1,2-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1,2-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240
Trichloroethylene	U			5.7	µg/kg	5.7	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.7	µg/kg	5.7	EPA8240
Xylenes	U			5.7	µg/kg	5.7	EPA8240
Xylenes	U			5.7	µg/kg	5.7	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha				23±10	pCi/g	3.9	EPA900.0
Nonvolatile beta				39±13	pCi/g	3.9	EPA900.0
Radium, total alpha-emitting	U	V		0.84±1.2	pCi/g	0.32	EPA903.0
Tritium	U			1.9	pCi/g	1.9	EPA906.0

SAMPLE NAME: D431 1803 Sample ID: 100404

Location (SRS Coordinates): 18340.39E 66562.05N
Ground Elevation Above MSL: 122.4 ft
Depth of Core Interval: 5.00 to 7.00 ft
Sample Type: Normal
Sample Color: 10R 6/6
Sample Matrix: Soil
USC Soil Classification: CL
Sample Moisture: Wet
Percent Solids: 76.50

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				10	meq/100g	2.0	EPA9080
pH	J	Q		3.4	pH	0.010	EPA9045
Specific conductance				170	µS/cm	1.0	EPA9050
Total organic carbon				2,100	mg/kg	170	EPA415.1

SAMPLE NAME: D431 1803 (Continued) Sample ID: 100404

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Total organic carbon				1,700	mg/kg	130	EPA415.1
Total Metals							
Arsenic				3.3	mg/kg	1.2	EPA7060
Barium	U			19	mg/kg	19	EPA6010
Cadmium	U			0.48	mg/kg	0.48	EPA6010
Chromium				31	mg/kg	0.96	EPA6010
Copper	U			2.4	mg/kg	2.4	EPA6010
Lead				2.4	mg/kg	0.37	EPA7421
Manganese				66	mg/kg	1.4	EPA6010
Mercury	U			0.13	mg/kg	0.13	EPA7470
Nickel	U			3.8	mg/kg	3.8	EPA6010
Selenium				1.8	mg/kg	0.61	EPA7740
Silver				1.3	mg/kg	0.96	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			440	µg/kg	440	EPA8270
Acenaphthylene	U			440	µg/kg	440	EPA8270
Anthracene	U			440	µg/kg	440	EPA8270
Benzo(a)anthracene	U			440	µg/kg	440	EPA8270
Benzo(b)fluoranthene	U			440	µg/kg	440	EPA8270
Benzo(k)fluoranthene	U			440	µg/kg	440	EPA8270
Benzoic acid	U			2,200	µg/kg	2,200	EPA8270
Benzo(g,h,i)perylene	U			440	µg/kg	440	EPA8270
Benzo(a)pyrene	U			440	µg/kg	440	EPA8270
Benzyl alcohol	U			440	µg/kg	440	EPA8270
Bis(2-chloroethoxy) methane	U			440	µg/kg	440	EPA8270
Bis(2-chloroethyl) ether	U			440	µg/kg	440	EPA8270
Bis(2-chloroisopropyl) ether	U			440	µg/kg	440	EPA8270
Bis(2-ethylhexyl) phthalate	U			440	µg/kg	440	EPA8270
4-Bromophenyl phenyl ether	U			440	µg/kg	440	EPA8270
Butylbenzyl phthalate	U			440	µg/kg	440	EPA8270
4-Chloroaniline	U			440	µg/kg	440	EPA8270
4-Chloro-m-cresol	U			440	µg/kg	440	EPA8270
2-Chloronaphthalene	U			440	µg/kg	440	EPA8270
2-Chlorophenol	U			440	µg/kg	440	EPA8270
4-Chlorophenyl phenyl ether	U			440	µg/kg	440	EPA8270
Chrysene	U			440	µg/kg	440	EPA8270
o-Cresol (2-Methylphenol)	U			440	µg/kg	440	EPA8270
p-Cresol (4-Methylphenol)	U			440	µg/kg	440	EPA8270
Dibenz(a,h)anthracene	U			440	µg/kg	440	EPA8270
Dibenzofuran	U			440	µg/kg	440	EPA8270
Di-n-butyl phthalate	UJ	V		58	µg/kg	440	EPA8270
1,2-Dichlorobenzene	U			440	µg/kg	440	EPA8270
1,3-Dichlorobenzene	U			440	µg/kg	440	EPA8270
1,4-Dichlorobenzene	U			440	µg/kg	440	EPA8270
3,3'-Dichlorobenzidine	U			880	µg/kg	880	EPA8270
2,4-Dichlorophenol	U			440	µg/kg	440	EPA8270

SAMPLE NAME: D431 1803 (Continued) Sample ID: 100404

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Diethyl phthalate	U			440	µg/kg	440	EPA8270
2,4-Dimethyl phenol	U			440	µg/kg	440	EPA8270
Dimethyl phthalate	U			440	µg/kg	440	EPA8270
2,4-Dinitrophenol	U			2,200	µg/kg	2,200	EPA8270
2,4-Dinitrotoluene	U			440	µg/kg	440	EPA8270
2,6-Dinitrotoluene	U			440	µg/kg	440	EPA8270
Di-n-octyl phthalate	U			440	µg/kg	440	EPA8270
Fluoranthene	U			440	µg/kg	440	EPA8270
Fluorene	U			440	µg/kg	440	EPA8270
Hexachlorobenzene	U			440	µg/kg	440	EPA8270
Hexachlorobutadiene	U			440	µg/kg	440	EPA8270
Hexachlorocyclopentadiene	U			440	µg/kg	440	EPA8270
Hexachloroethane	U			440	µg/kg	440	EPA8270
Indeno(1,2,3-c,d)pyrene	U			440	µg/kg	440	EPA8270
Isophorone	U			440	µg/kg	440	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,200	µg/kg	2,200	EPA8270
2-Methylnaphthalene	U			440	µg/kg	440	EPA8270
Naphthalene	U			440	µg/kg	440	EPA8270
o-Nitroaniline	U			2,200	µg/kg	2,200	EPA8270
m-Nitroaniline	U			2,200	µg/kg	2,200	EPA8270
p-Nitroaniline	U			2,200	µg/kg	2,200	EPA8270
Nitrobenzene	U			440	µg/kg	440	EPA8270
2-Nitrophenol	U			440	µg/kg	440	EPA8270
4-Nitrophenol	U			2,200	µg/kg	2,200	EPA8270
N-Nitrosodiphenylamine	U			440	µg/kg	440	EPA8270
N-Nitrosodipropylamine	U			440	µg/kg	440	EPA8270
Pentachlorophenol	U			2,200	µg/kg	2,200	EPA8270
Phenanthrene	U			440	µg/kg	440	EPA8270
Phenol	U			440	µg/kg	440	EPA8270
Pyrene	U			440	µg/kg	440	EPA8270
1,2,4-Trichlorobenzene	U			440	µg/kg	440	EPA8270
2,4,5-Trichlorophenol	U			2,200	µg/kg	2,200	EPA8270
2,4,6-Trichlorophenol	U			440	µg/kg	440	EPA8270
Unknown ester	J	NV		400	µg/kg		EPA8270
Unknown ketone	J	NV		8,000	µg/kg		EPA8270
Unknown phthalate	J	N		300	µg/kg		EPA8270
Unknown phthalate	J	N		300	µg/kg		EPA8270
Unknown phthalate	J	N		400	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	J			12	µg/kg	14	EPA8240
Benzene	U			6.8	µg/kg	6.8	EPA8240
Bromodichloromethane	U			6.8	µg/kg	6.8	EPA8240
Bromoform	U			6.8	µg/kg	6.8	EPA8240
Bromomethane (Methyl bromide)	U			14	µg/kg	14	EPA8240
Carbon disulfide	U			6.8	µg/kg	6.8	EPA8240
Carbon tetrachloride	U			6.8	µg/kg	6.8	EPA8240
Chlorobenzene	U			6.8	µg/kg	6.8	EPA8240
Chloroethane	U			14	µg/kg	14	EPA8240

SAMPLE NAME: D431 1803 (Continued) Sample ID: 100404

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Chloroethene (Vinyl chloride)	.U			14	µg/kg	14	EPA8240
Chloroform	U			6.8	µg/kg	6.8	EPA8240
Chloromethane (Methyl chloride)	U			14	µg/kg	14	EPA8240
Dibromochloromethane	U			6.8	µg/kg	6.8	EPA8240
1,1-Dichloroethane	U			6.8	µg/kg	6.8	EPA8240
1,2-Dichloroethane	J			4.2	µg/kg	6.8	EPA8240
1,1-Dichloroethylene	U			6.8	µg/kg	6.8	EPA8240
1,2-Dichloroethylene	U			6.8	µg/kg	6.8	EPA8240
Dichloromethane (Methylene chloride)	U			6.8	µg/kg	6.8	EPA8240
1,2-Dichloropropane	U			6.8	µg/kg	6.8	EPA8240
cis-1,3-Dichloropropene	U			6.8	µg/kg	6.8	EPA8240
trans-1,3-Dichloropropene	U			6.8	µg/kg	6.8	EPA8240
Ethylbenzene	U			6.8	µg/kg	6.8	EPA8240
2-Hexanone	U			14	µg/kg	14	EPA8240
Methyl ethyl ketone	U			14	µg/kg	14	EPA8240
Methyl isobutyl ketone	U			14	µg/kg	14	EPA8240
Styrene	U			6.8	µg/kg	6.8	EPA8240
1,1,2,2-Tetrachloroethane	U			6.8	µg/kg	6.8	EPA8240
Tetrachloroethylene	U			6.8	µg/kg	6.8	EPA8240
Toluene	U			6.8	µg/kg	6.8	EPA8240
1,1,1-Trichloroethane	U			6.8	µg/kg	6.8	EPA8240
1,1,2-Trichloroethane	U			6.8	µg/kg	6.8	EPA8240
Trichloroethylene	U			6.8	µg/kg	6.8	EPA8240
Vinyl acetate	U			14	µg/kg	14	EPA8240
Xylenes	U			6.8	µg/kg	6.8	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	UJ	O	L	2.3	µg/kg	2.3	EPA8080
alpha-Benzene hexachloride	UJ	O	L	2.3	µg/kg	2.3	EPA8080
beta-Benzene hexachloride	UJ	O	L	2.3	µg/kg	2.3	EPA8080
delta-Benzene hexachloride	UJ	O	L	2.3	µg/kg	2.3	EPA8080
alpha-Chlordane	UJ	O	L	2.3	µg/kg	2.3	EPA8080
gamma-Chlordane	UJ	O	L	2.3	µg/kg	2.3	EPA8080
p,p'-DDD	UJ	O	L	4.5	µg/kg	4.5	EPA8080
p,p'-DDE	UJ	O	L	4.5	µg/kg	4.5	EPA8080
p,p'-DDT	UJ	O	L	4.5	µg/kg	4.5	EPA8080
Dieldrin	UJ	O	L	4.5	µg/kg	4.5	EPA8080
Endosulfan I	UJ	O	L	2.3	µg/kg	2.3	EPA8080
Endosulfan II	UJ	O	L	4.5	µg/kg	4.5	EPA8080
Endosulfan sulfate	UJ	O	L	4.5	µg/kg	4.5	EPA8080
Endrin	UJ	O	L	4.5	µg/kg	4.5	EPA8080
Endrin ketone	UJ	O	L	4.5	µg/kg	4.5	EPA8080
Heptachlor	UJ	O	L	2.3	µg/kg	2.3	EPA8080
Heptachlor epoxide	UJ	O	L	2.3	µg/kg	2.3	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	UJ	O	L	2.3	µg/kg	2.3	EPA8080

SAMPLE NAME: D431 1803 (Continued) Sample ID: 100404

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Methoxychlor	UJ	O	L	23	µg/kg	23	EPA8080
Octachlorodibenzo-p-dioxin				23	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	UJ	O	L	45	µg/kg	45	EPA8080
PCB 1221	UJ	O	L	90	µg/kg	90	EPA8080
PCB 1232	UJ	O	L	45	µg/kg	45	EPA8080
PCB 1242	UJ	O	L	45	µg/kg	45	EPA8080
PCB 1248	UJ	O	L	45	µg/kg	45	EPA8080
PCB 1254	UJ	O	L	45	µg/kg	45	EPA8080
PCB 1260	UJ	O	L	45	µg/kg	45	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	UJ	O	L	230	µg/kg	230	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				11±8.2	pCi/g	4.4	EPA900.0
Nonvolatile beta				17±13	pCi/g	4.5	EPA900.0
Radium, total alpha-emitting				1.5±1.4	pCi/g	0.25	EPA903.0
Tritium	U			1.3	pCi/g	1.3	EPA906.0

SAMPLE NAME: D431 1804 Sample ID: 100405

Location (SRS Coordinates): 18340.39E 66562.05N
Ground Elevation Above MSL: 122.4 ft
Depth of Core Interval: 10.00 to 12.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Wet
Sample Color: 10R 6/6 USC Soil Classification: CL Percent Solids: 80.40

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				12	meq/100g	2.0	EPA9080
pH	J	Q		3.3	pH	0.010	EPA9045
Specific conductance				150	µS/cm	1.0	EPA9050
Total organic carbon				1,800	mg/kg	240	EPA415.1
Total Metals							
Arsenic				3.0	mg/kg	1.2	EPA7060
Barium	U			23	mg/kg	23	EPA6010
Cadmium	U			0.58	mg/kg	0.58	EPA6010
Chromium				10	mg/kg	1.2	EPA6010
Copper	U			2.9	mg/kg	2.9	EPA6010

SAMPLE NAME: D431 1804 (Continued) Sample ID: 100405

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Lead				1.0	mg/kg	0.37	EPA7421
Manganese				13	mg/kg	1.7	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel	U			4.6	mg/kg	4.6	EPA6010
Selenium	U			0.61	mg/kg	0.61	EPA7740
Silver	U			1.2	mg/kg	1.2	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			380	µg/kg	380	EPA8270
Acenaphthylene	U			380	µg/kg	380	EPA8270
Anthracene	U			380	µg/kg	380	EPA8270
Benzo(a)anthracene	U			380	µg/kg	380	EPA8270
Benzo(b)fluoranthene	U			380	µg/kg	380	EPA8270
Benzo(k)fluoranthene	U			380	µg/kg	380	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	U			380	µg/kg	380	EPA8270
Benzo(a)pyrene	U			380	µg/kg	380	EPA8270
Benzyl alcohol	U			380	µg/kg	380	EPA8270
Bis(2-chloroethoxy) methane	U			380	µg/kg	380	EPA8270
Bis(2-chloroethyl) ether	U			380	µg/kg	380	EPA8270
Bis(2-chloroisopropyl) ether	U			380	µg/kg	380	EPA8270
Bis(2-ethylhexyl) phthalate	U			380	µg/kg	380	EPA8270
4-Bromophenyl phenyl ether	U			380	µg/kg	380	EPA8270
Butylbenzyl phthalate	U			380	µg/kg	380	EPA8270
4-Chloroaniline	U			380	µg/kg	380	EPA8270
4-Chloro-m-cresol	U			380	µg/kg	380	EPA8270
2-Chloronaphthalene	U			380	µg/kg	380	EPA8270
2-Chlorophenol	U			380	µg/kg	380	EPA8270
4-Chlorophenyl phenyl ether	U			380	µg/kg	380	EPA8270
Chrysene	U			380	µg/kg	380	EPA8270
o-Cresol (2-Methylphenol)	U			380	µg/kg	380	EPA8270
p-Cresol (4-Methylphenol)	U			380	µg/kg	380	EPA8270
Dibenz(a,h)anthracene	U			380	µg/kg	380	EPA8270
Dibenzofuran	U			380	µg/kg	380	EPA8270
Di-n-butyl phthalate	UJ	V		49	µg/kg	380	EPA8270
1,2-Dichlorobenzene	U			380	µg/kg	380	EPA8270
1,3-Dichlorobenzene	U			380	µg/kg	380	EPA8270
1,4-Dichlorobenzene	U			380	µg/kg	380	EPA8270
3,3'-Dichlorobenzidine	U			770	µg/kg	770	EPA8270
2,4-Dichlorophenol	U			380	µg/kg	380	EPA8270
Diethyl phthalate	U			380	µg/kg	380	EPA8270
2,4-Dimethyl phenol	U			380	µg/kg	380	EPA8270
Dimethyl phthalate	U			380	µg/kg	380	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			380	µg/kg	380	EPA8270
2,6-Dinitrotoluene	U			380	µg/kg	380	EPA8270
Di-n-octyl phthalate	U			380	µg/kg	380	EPA8270
Fluoranthene	U			380	µg/kg	380	EPA8270
Fluorene	U			380	µg/kg	380	EPA8270

SAMPLE NAME: D431 1804 (Continued) Sample ID: 100405

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Hexachlorobenzene	U			380	µg/kg	380	EPA8270
Hexachlorobutadiene	U			380	µg/kg	380	EPA8270
Hexachlorocyclopentadiene	U			380	µg/kg	380	EPA8270
Hexachloroethane	U			380	µg/kg	380	EPA8270
Indeno(1,2,3-c,d)pyrene	U			380	µg/kg	380	EPA8270
Isophorone	U			380	µg/kg	380	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	U			380	µg/kg	380	EPA8270
Naphthalene	U			380	µg/kg	380	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U			380	µg/kg	380	EPA8270
2-Nitrophenol	U			380	µg/kg	380	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			380	µg/kg	380	EPA8270
N-Nitrosodipropylamine	U			380	µg/kg	380	EPA8270
Pentachlorophenol	U			1,900	µg/kg	1,900	EPA8270
Phenanthrene	U			380	µg/kg	380	EPA8270
Phenol	U			380	µg/kg	380	EPA8270
Pyrene	U			380	µg/kg	380	EPA8270
1,2,4-Trichlorobenzene	U			380	µg/kg	380	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			380	µg/kg	380	EPA8270
Unknown ester	J	NV		200	µg/kg		EPA8270
Unknown ketone	J	NV		6,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone				260	µg/kg	12	EPA8240
Acetone				400	µg/kg	23	EPA8240
Benzene	J			4.3	µg/kg	5.9	EPA8240
Bromodichloromethane	U			5.9	µg/kg	5.9	EPA8240
Bromoform	U			5.9	µg/kg	5.9	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			5.9	µg/kg	5.9	EPA8240
Carbon tetrachloride	U			5.9	µg/kg	5.9	EPA8240
Chlorobenzene	J			3.5	µg/kg	5.9	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
Chloroform	U			5.9	µg/kg	5.9	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			5.9	µg/kg	5.9	EPA8240
1,1-Dichloroethane	U			5.9	µg/kg	5.9	EPA8240
1,2-Dichloroethane	U			5.9	µg/kg	5.9	EPA8240
1,1-Dichloroethylene				6.1	µg/kg	5.9	EPA8240
1,2-Dichloroethylene	U			5.9	µg/kg	5.9	EPA8240
Dichloromethane (Methylene chloride)	U			5.9	µg/kg	5.9	EPA8240
1,2-Dichloropropane	U			5.9	µg/kg	5.9	EPA8240
cis-1,3-Dichloropropene	U			5.9	µg/kg	5.9	EPA8240

SAMPLE NAME: D431 1804 (Continued) Sample ID: 100405

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
trans-1,3-Dichloropropene	U			5.9	µg/kg	5.9	EPA8240
Ethylbenzene	U			5.9	µg/kg	5.9	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			5.9	µg/kg	5.9	EPA8240
1,1,2,2-Tetrachloroethane	U			5.9	µg/kg	5.9	EPA8240
Tetrachloroethylene	U			5.9	µg/kg	5.9	EPA8240
Toluene	J			4.9	µg/kg	5.9	EPA8240
1,1,1-Trichloroethane	U			5.9	µg/kg	5.9	EPA8240
1,1,2-Trichloroethane	U			5.9	µg/kg	5.9	EPA8240
Trichloroethylene	J			4.7	µg/kg	5.9	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			5.9	µg/kg	5.9	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.9	µg/kg	1.9	EPA8080
alpha-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
beta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
delta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
alpha-Chlordane	U			1.9	µg/kg	1.9	EPA8080
gamma-Chlordane	U			1.9	µg/kg	1.9	EPA8080
p,p'-DDD	U			3.9	µg/kg	3.9	EPA8080
p,p'-DDE	U			3.9	µg/kg	3.9	EPA8080
p,p'-DDT	U			3.9	µg/kg	3.9	EPA8080
Dieldrin	U			3.9	µg/kg	3.9	EPA8080
Endosulfan I	U			1.9	µg/kg	1.9	EPA8080
Endosulfan II	U			3.9	µg/kg	3.9	EPA8080
Endosulfan sulfate	U			3.9	µg/kg	3.9	EPA8080
Endrin	U			3.9	µg/kg	3.9	EPA8080
Endrin ketone	U			3.9	µg/kg	3.9	EPA8080
Heptachlor	U			1.9	µg/kg	1.9	EPA8080
Heptachlor epoxide	U			1.9	µg/kg	1.9	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			1.9	µg/kg	1.9	EPA8080
Methoxychlor	U			19	µg/kg	19	EPA8080
Octachlorodibenzo-p-dioxin	U			5.7	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.30	ng/g	0.30	EPA8280
PCB 1016	U			39	µg/kg	39	EPA8080
PCB 1221	U			77	µg/kg	77	EPA8080
PCB 1232	U			39	µg/kg	39	EPA8080
PCB 1242	U			39	µg/kg	39	EPA8080
PCB 1248	U			39	µg/kg	39	EPA8080
PCB 1254	U			39	µg/kg	39	EPA8080
PCB 1260	U			39	µg/kg	39	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280

SAMPLE NAME: D431 1804 (Continued) Sample ID: 100405

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	U			190	µg/kg	190	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				7.5±6.1	pCi/g	3.4	EPA900.0
Nonvolatile beta				13±9.5	pCi/g	3.4	EPA900.0
Radium, total alpha-emitting	U	V		0.80±0.85	pCi/g	0.18	EPA903.0
Tritium				3.5±0.68	pCi/g	1.7	EPA906.0

SAMPLE NAME: D431 2202 Sample ID: 100310

Location (SRS Coordinates): 18333E 66666N
Ground Elevation Above MSL: . ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal
Sample Color: 5YR 3/2
Sample Matrix: Sediment
USC Soil Classification: OH
Sample Moisture: Damp
Percent Solids: 78.60

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
pH	J	Q		4.7	pH	0.010	EPA9045
Total organic carbon				37,000	mg/kg	1,200	EPA415.1
Total Metals							
Arsenic				42	mg/kg	23	EPA7060
Barium				68	mg/kg	25	EPA6010
Cadmium	U			0.62	mg/kg	0.62	EPA6010
Chromium				42	mg/kg	1.2	EPA6010
Copper				9.3	mg/kg	3.1	EPA6010
Lead				19	mg/kg	1.7	EPA7421
Manganese				170	mg/kg	1.9	EPA6010
Mercury				1.8	mg/kg	0.13	EPA7470
Nickel	U			4.9	mg/kg	4.9	EPA6010
Selenium				2.2	mg/kg	0.58	EPA7740
Silver	U			1.2	mg/kg	1.2	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			410	µg/kg	410	EPA8270
Acenaphthylene	U			410	µg/kg	410	EPA8270
Adipate	J	N		700	µg/kg		EPA8270
Aldol condensate	J	NVK		1,000	µg/kg		EPA8270

SAMPLE NAME: D431 2202 (Continued) Sample ID: 100310

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Alkane	J	N		300	µg/kg		EPA8270
Alkane	J	N		900	µg/kg		EPA8270
Alkane	J	N		300	µg/kg		EPA8270
Alkane	J	N		400	µg/kg		EPA8270
Alkane	J	N		500	µg/kg		EPA8270
Anthracene	U			410	µg/kg	410	EPA8270
Benzo(a)anthracene	U			410	µg/kg	410	EPA8270
Benzo(b)fluoranthene	U			410	µg/kg	410	EPA8270
Benzo(k)fluoranthene	U			410	µg/kg	410	EPA8270
Benzoic acid	U			2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	U			410	µg/kg	410	EPA8270
Benzo(a)pyrene	U			410	µg/kg	410	EPA8270
Benzyl alcohol	U			410	µg/kg	410	EPA8270
Bis(2-chloroethoxy) methane	U			410	µg/kg	410	EPA8270
Bis(2-chloroethyl) ether	U			410	µg/kg	410	EPA8270
Bis(2-chloroisopropyl) ether	U			410	µg/kg	410	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		120	µg/kg	410	EPA8270
4-Bromophenyl phenyl ether	U			410	µg/kg	410	EPA8270
Butylbenzyl phthalate	U			410	µg/kg	410	EPA8270
4-Chloroaniline	U			410	µg/kg	410	EPA8270
4-Chloro-m-cresol	U			410	µg/kg	410	EPA8270
2-Chloronaphthalene	U			410	µg/kg	410	EPA8270
2-Chlorophenol	U			410	µg/kg	410	EPA8270
4-Chlorophenyl phenyl ether	U			410	µg/kg	410	EPA8270
Chrysene	U			410	µg/kg	410	EPA8270
o-Cresol (2-Methylphenol)	U			410	µg/kg	410	EPA8270
p-Cresol (4-Methylphenol)	U			410	µg/kg	410	EPA8270
Dibenz(a,h)anthracene	U			410	µg/kg	410	EPA8270
Dibenzofuran	J			47	µg/kg	410	EPA8270
Di-n-butyl phthalate	J			41	µg/kg	410	EPA8270
1,2-Dichlorobenzene	U			410	µg/kg	410	EPA8270
1,3-Dichlorobenzene	U			410	µg/kg	410	EPA8270
1,4-Dichlorobenzene	U			410	µg/kg	410	EPA8270
3,3'-Dichlorobenzidine	U			820	µg/kg	820	EPA8270
2,4-Dichlorophenol	U			410	µg/kg	410	EPA8270
Diethyl phthalate	U			410	µg/kg	410	EPA8270
2,4-Dimethyl phenol	U			410	µg/kg	410	EPA8270
Dimethyl phthalate	U			410	µg/kg	410	EPA8270
2,4-Dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2,4-Dinitrotoluene	U			410	µg/kg	410	EPA8270
2,6-Dinitrotoluene	U			410	µg/kg	410	EPA8270
Di-n-octyl phthalate	U			410	µg/kg	410	EPA8270
Fluoranthene	U			410	µg/kg	410	EPA8270
Fluorene	U			410	µg/kg	410	EPA8270
Hexachlorobenzene	U			410	µg/kg	410	EPA8270
Hexachlorobutadiene	U			410	µg/kg	410	EPA8270
Hexachlorocyclopentadiene	U			410	µg/kg	410	EPA8270
Hexachloroethane	U			410	µg/kg	410	EPA8270
Indeno(1,2,3-c,d)pyrene	U			410	µg/kg	410	EPA8270
Isophorone	U			410	µg/kg	410	EPA8270

SAMPLE NAME: D431 2202 (Continued) Sample ID: 100310

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2-Methyl-4,6-dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	J			130	µg/kg	410	EPA8270
Naphthalene	J			78	µg/kg	410	EPA8270
o-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
Nitrobenzene	U			410	µg/kg	410	EPA8270
2-Nitrophenol	U			410	µg/kg	410	EPA8270
4-Nitrophenol	U			2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	U			410	µg/kg	410	EPA8270
N-Nitrosodipropylamine	U			410	µg/kg	410	EPA8270
Pentachlorophenol	U			2,100	µg/kg	2,100	EPA8270
Phenanthrene	J			160	µg/kg	410	EPA8270
Phenol	U			410	µg/kg	410	EPA8270
Pyrene	U			410	µg/kg	410	EPA8270
Terpene	J	N		400	µg/kg		EPA8270
1,2,4-Trichlorobenzene	U			410	µg/kg	410	EPA8270
2,4,5-Trichlorophenol	U			2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	U			410	µg/kg	410	EPA8270
Unknown	J	N		400	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		15	µg/kg	13	EPA8240
Benzene	U			6.5	µg/kg	6.5	EPA8240
Bromodichloromethane	U			6.5	µg/kg	6.5	EPA8240
Bromoform	U			6.5	µg/kg	6.5	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Carbon disulfide	U			6.5	µg/kg	6.5	EPA8240
Carbon tetrachloride	U			6.5	µg/kg	6.5	EPA8240
Chlorobenzene	U			6.5	µg/kg	6.5	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
2-Chloroethyl vinyl ether	U			13	µg/kg	13	EPA8240
Chloroform	U			6.5	µg/kg	6.5	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Dibromochloromethane	U			6.5	µg/kg	6.5	EPA8240
1,1-Dichloroethane	U			6.5	µg/kg	6.5	EPA8240
1,2-Dichloroethane	U			6.5	µg/kg	6.5	EPA8240
1,1-Dichloroethylene	U			6.5	µg/kg	6.5	EPA8240
1,2-Dichloroethylene	U			6.5	µg/kg	6.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		39	µg/kg	6.5	EPA8240
1,2-Dichloropropane	U			6.5	µg/kg	6.5	EPA8240
cis-1,3-Dichloropropene	U			6.5	µg/kg	6.5	EPA8240
trans-1,3-Dichloropropene	U			6.5	µg/kg	6.5	EPA8240
Ethylbenzene	U			6.5	µg/kg	6.5	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Styrene	U			6.5	µg/kg	6.5	EPA8240

SAMPLE NAME: D431 2202 (Continued) Sample ID: 100310

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1,2,2-Tetrachloroethane	U			6.5	µg/kg	6.5	EPA8240
Tetrachloroethylene	U			6.5	µg/kg	6.5	EPA8240
Toluene				12	µg/kg	6.5	EPA8240
1,1,1-Trichloroethane	U			6.5	µg/kg	6.5	EPA8240
1,1,2-Trichloroethane	U			6.5	µg/kg	6.5	EPA8240
Trichloroethylene	U			6.5	µg/kg	6.5	EPA8240
Unknown	J	N		30	µg/kg		EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
Xylenes	U			6.5	µg/kg	6.5	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha				7.5±13	pCi/g	7.4	EPA900.0
Nonvolatile beta	U			8.3	pCi/g	8.3	EPA900.0
Radium, total alpha-emitting	U	V		1.3±0.80	pCi/g	0.10	EPA903.0
Tritium				1.8±0.50	pCi/g	1.8	EPA906.0

SAMPLE NAME: D431 2202A Sample ID: 100311

Sample Type: Duplicate Associated Sample: 100310

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
pH	J	Q		4.7	pH	0.010	EPA9045
pH	J	Q		4.8	pH	0.010	EPA9045
Total organic carbon				7,900	mg/kg	230	EPA415.1
Total Metals							
Arsenic				11	mg/kg	2.3	EPA7060
Barium				22	mg/kg	21	EPA6010
Cadmium	U			0.51	mg/kg	0.51	EPA6010
Chromium				44	mg/kg	1.0	EPA6010
Copper				5.2	mg/kg	2.6	EPA6010
Lead				12	mg/kg	0.70	EPA7421
Manganese				94	mg/kg	1.5	EPA6010
Mercury				0.25	mg/kg	0.12	EPA7470
Nickel	U			4.1	mg/kg	4.1	EPA6010
Selenium				0.74	mg/kg	0.58	EPA7740
Silver	U			1.0	mg/kg	1.0	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			380	µg/kg	380	EPA8270
Acenaphthylene	U			380	µg/kg	380	EPA8270
Adipate	J	N		900	µg/kg		EPA8270
Aldol condensate	J	NVK		1,000	µg/kg		EPA8270

SAMPLE NAME: D431 2202A (Continued) Sample ID: 100311

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Aldol condensate	J	NK		300	µg/kg		EPA8270
Alkane	J	N		300	µg/kg		EPA8270
Alkane	J	N		200	µg/kg		EPA8270
Alkane	J	N		200	µg/kg		EPA8270
Anthracene	U			380	µg/kg	380	EPA8270
Benzo(a)anthracene	U			380	µg/kg	380	EPA8270
Benzo(b)fluoranthene	U			380	µg/kg	380	EPA8270
Benzo(k)fluoranthene	U			380	µg/kg	380	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	U			380	µg/kg	380	EPA8270
Benzo(a)pyrene	U			380	µg/kg	380	EPA8270
Benzyl alcohol	U			380	µg/kg	380	EPA8270
Bis(2-chloroethoxy) methane	U			380	µg/kg	380	EPA8270
Bis(2-chloroethyl) ether	U			380	µg/kg	380	EPA8270
Bis(2-chloroisopropyl) ether	U			380	µg/kg	380	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		130	µg/kg	380	EPA8270
4-Bromophenyl phenyl ether	U			380	µg/kg	380	EPA8270
Butylbenzyl phthalate	U			380	µg/kg	380	EPA8270
4-Chloroaniline	U			380	µg/kg	380	EPA8270
4-Chloro-m-cresol	U			380	µg/kg	380	EPA8270
2-Chloronaphthalene	U			380	µg/kg	380	EPA8270
2-Chlorophenol	U			380	µg/kg	380	EPA8270
4-Chlorophenyl phenyl ether	U			380	µg/kg	380	EPA8270
Chrysene	U			380	µg/kg	380	EPA8270
o-Cresol (2-Methylphenol)	U			380	µg/kg	380	EPA8270
p-Cresol (4-Methylphenol)	U			380	µg/kg	380	EPA8270
Dibenz(a,h)anthracene	U			380	µg/kg	380	EPA8270
Dibenzofuran	U			380	µg/kg	380	EPA8270
Di-n-butyl phthalate	U			380	µg/kg	380	EPA8270
1,2-Dichlorobenzene	U			380	µg/kg	380	EPA8270
1,3-Dichlorobenzene	U			380	µg/kg	380	EPA8270
1,4-Dichlorobenzene	U			380	µg/kg	380	EPA8270
3,3'-Dichlorobenzidine	U			760	µg/kg	760	EPA8270
2,4-Dichlorophenol	U			380	µg/kg	380	EPA8270
Diethyl phthalate	U			380	µg/kg	380	EPA8270
2,4-Dimethyl phenol	U			380	µg/kg	380	EPA8270
Dimethyl phthalate	U			380	µg/kg	380	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			380	µg/kg	380	EPA8270
2,6-Dinitrotoluene	U			380	µg/kg	380	EPA8270
Di-n-octyl phthalate	J			100	µg/kg	380	EPA8270
Fluoranthene	U			380	µg/kg	380	EPA8270
Fluorene	U			380	µg/kg	380	EPA8270
Hexachlorobenzene	U			380	µg/kg	380	EPA8270
Hexachlorobutadiene	U			380	µg/kg	380	EPA8270
Hexachlorocyclopentadiene	U			380	µg/kg	380	EPA8270
Hexachloroethane	U			380	µg/kg	380	EPA8270
Indeno(1,2,3-c,d)pyrene	U			380	µg/kg	380	EPA8270
Isophorone	U			380	µg/kg	380	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270

SAMPLE NAME: D431 2202A (Continued) Sample ID: 100311

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2-Methylnaphthalene	U			380	µg/kg	380	EPA8270
Naphthalene	U			380	µg/kg	380	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U			380	µg/kg	380	EPA8270
2-Nitrophenol	U			380	µg/kg	380	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			380	µg/kg	380	EPA8270
N-Nitrosodipropylamine	U			380	µg/kg	380	EPA8270
Pentachlorophenol	U			1,900	µg/kg	1,900	EPA8270
Phenanthrene	J			71	µg/kg	380	EPA8270
Phenol	U			380	µg/kg	380	EPA8270
Pyrene	U			380	µg/kg	380	EPA8270
1,2,4-Trichlorobenzene	U			380	µg/kg	380	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			380	µg/kg	380	EPA8270
Unknown	J	NV		200	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		12	µg/kg	12	EPA8240
Benzene	U			6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U			6.0	µg/kg	6.0	EPA8240
Bromoform	U			6.0	µg/kg	6.0	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			6.0	µg/kg	6.0	EPA8240
Carbon tetrachloride	U			6.0	µg/kg	6.0	EPA8240
Chlorobenzene	U			6.0	µg/kg	6.0	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
2-Chloroethyl vinyl ether	U			12	µg/kg	12	EPA8240
Chloroform	U			6.0	µg/kg	6.0	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		14	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U			6.0	µg/kg	6.0	EPA8240
cis-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
Ethylbenzene	U			6.0	µg/kg	6.0	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U			6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U			6.0	µg/kg	6.0	EPA8240

SAMPLE NAME: D431 2202A (Continued) Sample ID: 100311

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Toluene	U			6.0	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
Trichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Unknown	J	N		10	µg/kg		EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			6.0	µg/kg	6.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha				8.7±12	pCi/g	6.7	EPA900.0
Nonvolatile beta				16±19	pCi/g	7.4	EPA900.0
Radium, total alpha-emitting	U	V		1.2±0.80	pCi/g	0.10	EPA903.0
Tritium				1.7±0.45	pCi/g	1.2	EPA906.0

SAMPLE NAME: D431 2302 Sample ID: 100313

Location (SRS Coordinates): 18249E 66594N
Ground Elevation Above MSL: . ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal
Sample Color: 10R 3/4
Sample Matrix: Sediment
USC Soil Classification: SM
Sample Moisture: Damp
Percent Solids: 81.10

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
pH	J	YQ		4.8	pH	0.010	EPA9045
Total organic carbon		Y		150,000	mg/kg	3,600	EPA415.1
Total Metals							
Arsenic		Y		27	mg/kg	6.0	EPA7060
Barium		Y		33	mg/kg	24	EPA6010
Cadmium	U	Y		0.60	mg/kg	0.60	EPA6010
Chromium		Y		4.0	mg/kg	1.2	EPA6010
Copper		Y		3.6	mg/kg	3.0	EPA6010
Lead		Y		6.1	mg/kg	0.36	EPA7421
Manganese		Y		64	mg/kg	1.8	EPA6010
Mercury		Y		0.81	mg/kg	0.12	EPA7470
Nickel	U	Y		4.8	mg/kg	4.8	EPA6010
Selenium		Y		1.3	mg/kg	0.60	EPA7740
Silver	U	Y		1.2	mg/kg	1.2	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U	Y		410	µg/kg	410	EPA8270
Acenaphthylene	U	Y		410	µg/kg	410	EPA8270
Anthracene	J	Y		53	µg/kg	410	EPA8270

SAMPLE NAME: D431 2302 (Continued) Sample ID: 100313

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Benzo(a)anthracene	J	Y		150	µg/kg	410	EPA8270
Benzo(b)fluoranthene	U	Y		410	µg/kg	410	EPA8270
Benzo(k)fluoranthene	U	Y		410	µg/kg	410	EPA8270
Benzoic acid		Y		2,400	µg/kg	2,000	EPA8270
Benzo(g,h,i)perylene	J	Y		100	µg/kg	410	EPA8270
Benzo(a)pyrene	J	Y		210	µg/kg	410	EPA8270
Benzyl alcohol	U	Y		410	µg/kg	410	EPA8270
Bis(2-chloroethoxy) methane	U	Y		410	µg/kg	410	EPA8270
Bis(2-chloroethyl) ether	U	Y		410	µg/kg	410	EPA8270
Bis(2-chloroisopropyl) ether	U	Y		410	µg/kg	410	EPA8270
Bis(2-ethylhexyl) phthalate	U	Y		410	µg/kg	410	EPA8270
4-Bromophenyl phenyl ether	U	Y		410	µg/kg	410	EPA8270
Butylbenzyl phthalate	U	Y		410	µg/kg	410	EPA8270
Hydrocarbon C14H30	J	YN		1,000	µg/kg		EPA8270
Hydrocarbon C16H34	J	YN		4,000	µg/kg		EPA8270
Hydrocarbon C19H40	J	YN		1,000	µg/kg		EPA8270
4-Chloroaniline	U	Y		410	µg/kg	410	EPA8270
4-Chloro-m-cresol	U	Y		410	µg/kg	410	EPA8270
2-Chloronaphthalene	U	Y		410	µg/kg	410	EPA8270
2-Chlorophenol	U	Y		410	µg/kg	410	EPA8270
4-Chlorophenyl phenyl ether	U	Y		410	µg/kg	410	EPA8270
Chrysene	J	Y		210	µg/kg	410	EPA8270
o-Cresol (2-Methylphenol)	U	Y		410	µg/kg	410	EPA8270
p-Cresol (4-Methylphenol)	U	Y		410	µg/kg	410	EPA8270
Dibenz(a,h)anthracene	U	Y		410	µg/kg	410	EPA8270
Dibenzofuran		Y		450	µg/kg	410	EPA8270
Di-n-butyl phthalate	U	YV		410	µg/kg	410	EPA8270
1,2-Dichlorobenzene	U	Y		410	µg/kg	410	EPA8270
1,3-Dichlorobenzene	U	Y		410	µg/kg	410	EPA8270
1,4-Dichlorobenzene	U	Y		410	µg/kg	410	EPA8270
3,3'-Dichlorobenzidine	U	Y		820	µg/kg	820	EPA8270
2,4-Dichlorophenol	U	Y		410	µg/kg	410	EPA8270
Diethyl phthalate	U	Y		410	µg/kg	410	EPA8270
2,4-Dimethyl phenol	U	Y		410	µg/kg	410	EPA8270
Dimethyl phthalate	U	Y		410	µg/kg	410	EPA8270
2,4-Dinitrophenol	U	Y		2,000	µg/kg	2,000	EPA8270
2,4-Dinitrotoluene	U	Y		410	µg/kg	410	EPA8270
2,6-Dinitrotoluene	U	Y		410	µg/kg	410	EPA8270
Di-n-octyl phthalate	J	Y		46	µg/kg	410	EPA8270
Fluoranthene	J	Y		180	µg/kg	410	EPA8270
Fluorene	U	Y		410	µg/kg	410	EPA8270
Hexachlorobenzene	U	Y		410	µg/kg	410	EPA8270
Hexachlorobutadiene	U	Y		410	µg/kg	410	EPA8270
Hexachlorocyclopentadiene	U	Y		410	µg/kg	410	EPA8270
Hexachloroethane	U	Y		410	µg/kg	410	EPA8270
Sub. hexanedioic acid	J	YN		10,000	µg/kg		EPA8270
Indeno(1,2,3-c,d)pyrene	U	Y		410	µg/kg	410	EPA8270
Isophorone	U	Y		410	µg/kg	410	EPA8270
Dimethylnaphthalene + unknown	J	YN		4,000	µg/kg		EPA8270
Trimethylnaphthlene	J	YN		2,000	µg/kg		EPA8270

SAMPLE NAME: D431 2302 (Continued) Sample ID: 100313

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2-Methyl-4,6-dinitrophenol	U	Y		2,000	µg/kg	2,000	EPA8270
2-Methylnaphthalene		Y		1,500	µg/kg	410	EPA8270
Naphthalene		Y		990	µg/kg	410	EPA8270
o-Nitroaniline	U	Y		2,000	µg/kg	2,000	EPA8270
m-Nitroaniline	U	Y		2,000	µg/kg	2,000	EPA8270
p-Nitroaniline	U	Y		2,000	µg/kg	2,000	EPA8270
Nitrobenzene	U	Y		410	µg/kg	410	EPA8270
2-Nitrophenol	U	Y		410	µg/kg	410	EPA8270
4-Nitrophenol	U	Y		2,000	µg/kg	2,000	EPA8270
N-Nitrosodiphenylamine	U	Y		410	µg/kg	410	EPA8270
N-Nitrosodipropylamine	UJ	CY		410	µg/kg	410	EPA8270
Pentachlorophenol	U	Y		2,000	µg/kg	2,000	EPA8270
Phenanthrene		Y		1,100	µg/kg	410	EPA8270
Phenol	U	Y		410	µg/kg	410	EPA8270
Pyrene	J	Y		210	µg/kg	410	EPA8270
1,2,4-Trichlorobenzene	U	Y		410	µg/kg	410	EPA8270
2,4,5-Trichlorophenol	U	Y		2,000	µg/kg	2,000	EPA8270
2,4,6-Trichlorophenol	U	Y		410	µg/kg	410	EPA8270
Unknown hydrocarbon	J	YN		2,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		1,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		2,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		2,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		2,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		2,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		2,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		3,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		3,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		4,000	µg/kg		EPA8270
Unknown	J	YN		2,000	µg/kg		EPA8270
Unknown	J	YN		5,000	µg/kg		EPA8270
Unknown ketone	J	YNV		5,000	µg/kg		EPA8270
1-Methylnapthalene	J	YN		1,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	YV		13	µg/kg	12	EPA8240
Benzene	U	Y		6.2	µg/kg	6.2	EPA8240
Bromodichloromethane	U	Y		6.2	µg/kg	6.2	EPA8240
Bromoform	U	Y		6.2	µg/kg	6.2	EPA8240
Bromomethane (Methyl bromide)	U	Y		12	µg/kg	12	EPA8240
Carbon disulfide	U	Y		6.2	µg/kg	6.2	EPA8240
Carbon tetrachloride	U	Y		6.2	µg/kg	6.2	EPA8240
Chlorobenzene	U	Y		6.2	µg/kg	6.2	EPA8240
Chloroethane	U	Y		12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U	Y		12	µg/kg	12	EPA8240
Chloroform	U	Y		6.2	µg/kg	6.2	EPA8240
Chloromethane (Methyl chloride)	U	Y		12	µg/kg	12	EPA8240
Dibromochloromethane	U	Y		6.2	µg/kg	6.2	EPA8240
1,1-Dichloroethane	U	Y		6.2	µg/kg	6.2	EPA8240
1,2-Dichloroethane		Y		6.5	µg/kg	6.2	EPA8240

SAMPLE NAME: D431 2302 (Continued) Sample ID: 100313

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1-Dichloroethylene	U	Y		6.2	µg/kg	6.2	EPA8240
1,2-Dichloroethylene	U	Y		6.2	µg/kg	6.2	EPA8240
Dichloromethane (Methylene chloride)	U	YV		8.4	µg/kg	6.2	EPA8240
1,2-Dichloropropane	U	Y		6.2	µg/kg	6.2	EPA8240
cis-1,3-Dichloropropene	U	Y		6.2	µg/kg	6.2	EPA8240
trans-1,3-Dichloropropene	U	Y		6.2	µg/kg	6.2	EPA8240
Ethylbenzene	U	Y		6.2	µg/kg	6.2	EPA8240
2-Hexanone	U	Y		12	µg/kg	12	EPA8240
Methyl ethyl ketone	U	Y		12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U	Y		12	µg/kg	12	EPA8240
Styrene	U	Y		6.2	µg/kg	6.2	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		6.2	µg/kg	6.2	EPA8240
Tetrachloroethylene	U	Y		6.2	µg/kg	6.2	EPA8240
Toluene	U	Y		6.2	µg/kg	6.2	EPA8240
1,1,1-Trichloroethane	U	Y		6.2	µg/kg	6.2	EPA8240
1,1,2-Trichloroethane	U	Y		6.2	µg/kg	6.2	EPA8240
Trichloroethylene	U	Y		6.2	µg/kg	6.2	EPA8240
Vinyl acetate	U	Y		12	µg/kg	12	EPA8240
Xylenes	U	Y		6.2	µg/kg	6.2	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha		Y		11±14	pCi/g	8.1	EPA900.0
Nonvolatile beta		Y		16±21	pCi/g	9.9	EPA900.0
Radium, total alpha-emitting		YV		0.65±0.65	pCi/g	0.070	EPA903.0
Tritium		Y		9.2±1.6	pCi/g	1.9	EPA906.0

SAMPLE NAME: D431 2302D Sample ID: 100314

Sample Type: Split Associated Sample: 100313

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic		Y		110	mg/kg	62	EPA7060
Barium		Y		84	mg/kg	24	EPA6010
Cadmium	U	Y		0.60	mg/kg	0.60	EPA6010
Chromium		Y		32	mg/kg	1.2	EPA6010
Copper		Y		13	mg/kg	3.0	EPA6010
Lead		Y		23	mg/kg	1.9	EPA7421
Manganese		Y		160	mg/kg	1.8	EPA6010
Mercury		Y		1.2	mg/kg	0.12	EPA7470
Nickel	U	Y		4.8	mg/kg	4.8	EPA6010
Selenium		Y		3.5	mg/kg	0.62	EPA7740
Silver	U	Y		1.2	mg/kg	1.2	EPA6010

SAMPLE NAME: D431 2302D (Continued) Sample ID: 100314

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U	Y		380	µg/kg	380	EPA8270
Acenaphthylene	U	Y		380	µg/kg	380	EPA8270
Anthracene	U	Y		380	µg/kg	380	EPA8270
Benzo(a)anthracene	J	Y		370	µg/kg	380	EPA8270
Benzo(b)fluoranthene	J	Y		300	µg/kg	380	EPA8270
Benzo(k)fluoranthene	U	Y		380	µg/kg	380	EPA8270
Benzoic acid	J	Y		1,200	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	J	Y		190	µg/kg	380	EPA8270
Benzo(a)pyrene	J	Y		350	µg/kg	380	EPA8270
Benzyl alcohol	U	Y		380	µg/kg	380	EPA8270
Bis(2-chloroethoxy) methane	U	Y		380	µg/kg	380	EPA8270
Bis(2-chloroethyl) ether	U	Y		380	µg/kg	380	EPA8270
Bis(2-chloroisopropyl) ether	U	Y		380	µg/kg	380	EPA8270
Bis(2-ethylhexyl) phthalate	J	Y		200	µg/kg	380	EPA8270
4-Bromophenyl phenyl ether	U	Y		380	µg/kg	380	EPA8270
Butylbenzyl phthalate	U	Y		380	µg/kg	380	EPA8270
Hydrocarbon C14H30 + arom.	J	YN		3,000	µg/kg		EPA8270
Hydrocarbon C16H34	J	YN		3,000	µg/kg		EPA8270
Hydrocarbon C17H36	J	YN		10,000	µg/kg		EPA8270
Hydrocarbon C19H40	J	YN		3,000	µg/kg		EPA8270
4-Chloroaniline	U	Y		380	µg/kg	380	EPA8270
4-Chloro-m-cresol	U	Y		380	µg/kg	380	EPA8270
2-Chloronaphthalene	U	Y		380	µg/kg	380	EPA8270
2-Chlorophenol	U	Y		380	µg/kg	380	EPA8270
4-Chlorophenyl phenyl ether	U	Y		380	µg/kg	380	EPA8270
Chrysene		Y		460	µg/kg	380	EPA8270
o-Cresol (2-Methylphenol)	U	Y		380	µg/kg	380	EPA8270
p-Cresol (4-Methylphenol)	U	Y		380	µg/kg	380	EPA8270
Dibenz(a,h)anthracene	U	Y		380	µg/kg	380	EPA8270
Dibenzofuran		Y		1,300	µg/kg	380	EPA8270
Di-n-butyl phthalate	U	YV		380	µg/kg	380	EPA8270
1,2-Dichlorobenzene	U	Y		380	µg/kg	380	EPA8270
1,3-Dichlorobenzene	U	Y		380	µg/kg	380	EPA8270
1,4-Dichlorobenzene	U	Y		380	µg/kg	380	EPA8270
3,3'-Dichlorobenzidine	U	Y		770	µg/kg	770	EPA8270
2,4-Dichlorophenol	U	Y		380	µg/kg	380	EPA8270
Diethyl phthalate	U	Y		380	µg/kg	380	EPA8270
2,4-Dimethyl phenol	U	Y		380	µg/kg	380	EPA8270
Dimethyl phthalate	U	Y		380	µg/kg	380	EPA8270
2,4-Dinitrophenol	U	Y		1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U	Y		380	µg/kg	380	EPA8270
2,6-Dinitrotoluene	U	Y		380	µg/kg	380	EPA8270
Di-n-octyl phthalate	J	YL		90	µg/kg	380	EPA8270
Fluoranthene		Y		450	µg/kg	380	EPA8270
Fluorene	U	Y		380	µg/kg	380	EPA8270
Hexachlorobenzene	U	Y		380	µg/kg	380	EPA8270
Hexachlorobutadiene	U	Y		380	µg/kg	380	EPA8270
Hexachlorocyclopentadiene	U	Y		380	µg/kg	380	EPA8270
Hexachloroethane	U	Y		380	µg/kg	380	EPA8270
Sub. hexanedioic acid	J	YN		10,000	µg/kg		EPA8270

SAMPLE NAME: D431 2302D (Continued) Sample ID: 100314

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Indeno(1,2,3-c,d)pyrene	U	Y		380	µg/kg	380	EPA8270
Isophorone	U	Y		380	µg/kg	380	EPA8270
Dimethylnaphthalene	J	YN		3,000	µg/kg		EPA8270
Dimethylnaphthalene	J	YN		3,000	µg/kg		EPA8270
Trimethylnaphthlene	J	YN		2,000	µg/kg		EPA8270
2-Methyl-4,6-dinitrophenol	U	Y		1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene		Y		3,600	µg/kg	380	EPA8270
Naphthalene		Y		2,700	µg/kg	380	EPA8270
o-Nitroaniline	U	Y		1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U	Y		1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U	Y		1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U	Y		380	µg/kg	380	EPA8270
2-Nitrophenol	U	Y		380	µg/kg	380	EPA8270
4-Nitrophenol	U	Y		1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	J	Y		210	µg/kg	380	EPA8270
N-Nitrosodipropylamine	UJ	CY		380	µg/kg	380	EPA8270
Pentachlorophenol	U	Y		1,900	µg/kg	1,900	EPA8270
Phenanthrene		Y		2,700	µg/kg	380	EPA8270
Phenol	U	Y		380	µg/kg	380	EPA8270
Pyrene		Y		540	µg/kg	380	EPA8270
1,2,4-Trichlorobenzene	U	Y		380	µg/kg	380	EPA8270
2,4,5-Trichlorophenol	U	Y		1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U	Y		380	µg/kg	380	EPA8270
Unknown hydrocarbon	J	YN		3,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		3,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		4,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		3,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		3,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		3,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		3,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		7,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		6,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		5,000	µg/kg		EPA8270
Unknown ketone	J	YNV		7,000	µg/kg		EPA8270
1-Methylnapthalene	J	YN		3,000	µg/kg		EPA8270
Radionuclide Indicators and Radionuclides							
Gross alpha	U	Y		7.0	pCi/g	7.0	EPA900.0
Nonvolatile beta		Y		32±20	pCi/g	8.3	EPA900.0
Radium, total alpha-emitting		YV		0.99±0.82	pCi/g	0.070	EPA903.0
Tritium		Y		5.9±1.2	pCi/g	1.9	EPA906.0

SAMPLE NAME: D431 2402 Sample ID: 100323

Location (SRS Coordinates): 18187E 66506N
Ground Elevation Above MSL: . ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal
Sample Color: 5YR 3/2
Sample Matrix: Sediment
USC Soil Classification: SM
Sample Moisture: Dry
Percent Solids: 84.50

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
pH	J	YQ		4.6	pH	0.010	EPA9045
Total organic carbon		Y		6,200	mg/kg	490	EPA415.1
Total Metals							
Arsenic		Y		3.1	mg/kg	1.2	EPA7060
Barium		Y		48	mg/kg	23	EPA6010
Cadmium	U	Y		0.57	mg/kg	0.57	EPA6010
Chromium		Y		5.1	mg/kg	1.1	EPA6010
Copper		Y		3.2	mg/kg	2.8	EPA6010
Lead		Y		11	mg/kg	0.71	EPA7421
Manganese		Y		120	mg/kg	1.7	EPA6010
Mercury	U	Y		0.12	mg/kg	0.12	EPA7470
Nickel	U	Y		4.5	mg/kg	4.5	EPA6010
Selenium	U	Y		0.59	mg/kg	0.59	EPA7740
Silver	U	Y		1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U	Y		400	µg/kg	400	EPA8270
Acenaphthylene	U	Y		400	µg/kg	400	EPA8270
Anthracene	U	Y		400	µg/kg	400	EPA8270
Benzo(a)anthracene	U	Y		400	µg/kg	400	EPA8270
Benzo(b)fluoranthene	U	Y		400	µg/kg	400	EPA8270
Benzo(k)fluoranthene	U	Y		400	µg/kg	400	EPA8270
Benzoic acid	U	Y		2,000	µg/kg	2,000	EPA8270
Benzo(g,h,i)perylene	U	Y		400	µg/kg	400	EPA8270
Benzo(a)pyrene	U	Y		400	µg/kg	400	EPA8270
Benzyl alcohol	U	Y		400	µg/kg	400	EPA8270
Bis(2-chloroethoxy) methane	U	Y		400	µg/kg	400	EPA8270
Bis(2-chloroethyl) ether	U	Y		400	µg/kg	400	EPA8270
Bis(2-chloroisopropyl) ether	U	Y		400	µg/kg	400	EPA8270
Bis(2-ethylhexyl) phthalate	U	Y		400	µg/kg	400	EPA8270
4-Bromophenyl phenyl ether	U	Y		400	µg/kg	400	EPA8270
Butylbenzyl phthalate	U	Y		400	µg/kg	400	EPA8270
Sub. carboxylic acid	J	YN		200	µg/kg		EPA8270
4-Chloroaniline	U	Y		400	µg/kg	400	EPA8270
4-Chloro-m-cresol	U	Y		400	µg/kg	400	EPA8270
2-Chloronaphthalene	U	Y		400	µg/kg	400	EPA8270
2-Chlorophenol	U	Y		400	µg/kg	400	EPA8270
4-Chlorophenyl phenyl ether	U	Y		400	µg/kg	400	EPA8270
Chrysene	U	Y		400	µg/kg	400	EPA8270
o-Cresol (2-Methylphenol)	U	Y		400	µg/kg	400	EPA8270
p-Cresol (4-Methylphenol)	U	Y		400	µg/kg	400	EPA8270

SAMPLE NAME: D431 2402 (Continued) Sample ID: 100323

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Hexadecanoic acid	J	YN		300	µg/kg		EPA8270
Dibenz(a,h)anthracene	U	Y		400	µg/kg	400	EPA8270
Dibenzofuran	U	Y		400	µg/kg	400	EPA8270
Di-n-butyl phthalate	UJ	YV		70	µg/kg	400	EPA8270
1,2-Dichlorobenzene	U	Y		400	µg/kg	400	EPA8270
1,3-Dichlorobenzene	U	Y		400	µg/kg	400	EPA8270
1,4-Dichlorobenzene	U	Y		400	µg/kg	400	EPA8270
3,3'-Dichlorobenzidine	U	Y		800	µg/kg	800	EPA8270
2,4-Dichlorophenol	U	Y		400	µg/kg	400	EPA8270
Diethyl phthalate	U	Y		400	µg/kg	400	EPA8270
2,4-Dimethyl phenol	U	Y		400	µg/kg	400	EPA8270
Dimethyl phthalate	U	Y		400	µg/kg	400	EPA8270
2,4-Dinitrophenol	U	Y		2,000	µg/kg	2,000	EPA8270
2,4-Dinitrotoluene	U	Y		400	µg/kg	400	EPA8270
2,6-Dinitrotoluene	U	Y		400	µg/kg	400	EPA8270
Di-n-octyl phthalate	U	Y		400	µg/kg	400	EPA8270
Fluoranthene	U	Y		400	µg/kg	400	EPA8270
Fluorene	U	Y		400	µg/kg	400	EPA8270
Hexachlorobenzene	U	Y		400	µg/kg	400	EPA8270
Hexachlorobutadiene	U	Y		400	µg/kg	400	EPA8270
Hexachlorocyclopentadiene	U	Y		400	µg/kg	400	EPA8270
Hexachloroethane	U	Y		400	µg/kg	400	EPA8270
Indeno(1,2,3-c,d)pyrene	U	Y		400	µg/kg	400	EPA8270
Isophorone	U	Y		400	µg/kg	400	EPA8270
2-Methyl-4,6-dinitrophenol	U	Y		2,000	µg/kg	2,000	EPA8270
2-Methylnaphthalene	U	Y		400	µg/kg	400	EPA8270
Naphthalene	U	Y		400	µg/kg	400	EPA8270
o-Nitroaniline	U	Y		2,000	µg/kg	2,000	EPA8270
m-Nitroaniline	U	Y		2,000	µg/kg	2,000	EPA8270
p-Nitroaniline	U	Y		2,000	µg/kg	2,000	EPA8270
Nitrobenzene	U	Y		400	µg/kg	400	EPA8270
2-Nitrophenol	U	Y		400	µg/kg	400	EPA8270
4-Nitrophenol	U	Y		2,000	µg/kg	2,000	EPA8270
N-Nitrosodiphenylamine	U	Y		400	µg/kg	400	EPA8270
N-Nitrosodipropylamine	UJ	CY		400	µg/kg	400	EPA8270
Pentachlorophenol	U	Y		2,000	µg/kg	2,000	EPA8270
Phenanthrene	U	Y		400	µg/kg	400	EPA8270
Phenol	U	Y		400	µg/kg	400	EPA8270
Sub. propanoic acid	J	YN		200	µg/kg		EPA8270
Pyrene	U	Y		400	µg/kg	400	EPA8270
1,2,4-Trichlorobenzene	U	Y		400	µg/kg	400	EPA8270
2,4,5-Trichlorophenol	U	Y		2,000	µg/kg	2,000	EPA8270
2,4,6-Trichlorophenol	U	Y		400	µg/kg	400	EPA8270
Unknown hydrocarbon	J	YN		800	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		1,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		600	µg/kg		EPA8270
Unknown	J	YN		200	µg/kg		EPA8270
Unknown	J	YN		200	µg/kg		EPA8270
Unknown	J	YN		200	µg/kg		EPA8270
Unknown	J	YN		1,000	µg/kg		EPA8270

SAMPLE NAME: D431 2402 (Continued) Sample ID: 100323

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Unknown	J	YN		400	µg/kg		EPA8270
Unknown	J	YN		800	µg/kg		EPA8270
Unknown	J	YN		1,000	µg/kg		EPA8270
Unknown	J	YN		400	µg/kg		EPA8270
Unknown	J	YN		500	µg/kg		EPA8270
Unknown	J	YN		400	µg/kg		EPA8270
Unknown	J	YN		600	µg/kg		EPA8270
Unknown	J	YN		200	µg/kg		EPA8270
Unknown	J	YN		1,000	µg/kg		EPA8270
Unknown ketone	J	YNV		5,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone		YV		26	µg/kg	12	EPA8240
Benzene	U	Y		6.1	µg/kg	6.1	EPA8240
Bromodichloromethane	U	Y		6.1	µg/kg	6.1	EPA8240
Bromoform	U	Y		6.1	µg/kg	6.1	EPA8240
Bromomethane (Methyl bromide)	U	Y		12	µg/kg	12	EPA8240
Carbon disulfide	U	Y		6.1	µg/kg	6.1	EPA8240
Carbon tetrachloride	U	Y		6.1	µg/kg	6.1	EPA8240
Chlorobenzene	U	Y		6.1	µg/kg	6.1	EPA8240
Chloroethane	U	Y		12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U	Y		12	µg/kg	12	EPA8240
Chloroform	U	Y		6.1	µg/kg	6.1	EPA8240
Chloromethane (Methyl chloride)	U	Y		12	µg/kg	12	EPA8240
Dibromochloromethane	U	Y		6.1	µg/kg	6.1	EPA8240
1,1-Dichloroethane	U	Y		6.1	µg/kg	6.1	EPA8240
1,2-Dichloroethane		Y		6.5	µg/kg	6.1	EPA8240
1,1-Dichloroethylene	U	Y		6.1	µg/kg	6.1	EPA8240
1,2-Dichloroethylene	U	Y		6.1	µg/kg	6.1	EPA8240
Dichloromethane (Methylene chloride)	U	Y		6.1	µg/kg	6.1	EPA8240
1,2-Dichloropropane	U	Y		6.1	µg/kg	6.1	EPA8240
cis-1,3-Dichloropropene	U	Y		6.1	µg/kg	6.1	EPA8240
trans-1,3-Dichloropropene	U	Y		6.1	µg/kg	6.1	EPA8240
Ethylbenzene	U	Y		6.1	µg/kg	6.1	EPA8240
2-Hexanone	U	Y		12	µg/kg	12	EPA8240
Methyl ethyl ketone	U	Y		12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U	Y		12	µg/kg	12	EPA8240
Styrene	U	Y		6.1	µg/kg	6.1	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		6.1	µg/kg	6.1	EPA8240
Tetrachloroethylene	U	Y		6.1	µg/kg	6.1	EPA8240
Toluene	U	Y		6.1	µg/kg	6.1	EPA8240
1,1,1-Trichloroethane	U	Y		6.1	µg/kg	6.1	EPA8240
1,1,2-Trichloroethane		Y		9.1	µg/kg	6.1	EPA8240
Trichloroethylene	U	Y		6.1	µg/kg	6.1	EPA8240
Vinyl acetate	U	Y		12	µg/kg	12	EPA8240
Xylenes	U	Y		6.1	µg/kg	6.1	EPA8240

SAMPLE NAME: D431 2402 (Continued) Sample ID: 100323

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Radionuclide Indicators and Radionuclides							
Gross alpha		Y		11±14	pCi/g	7.4	EPA900.0
Nonvolatile beta		Y		23±22	pCi/g	8.3	EPA900.0
Radium, total alpha-emitting	U	YV		1.1±0.70	pCi/g	0.10	EPA903.0
Tritium		Y		4.0±1.0	pCi/g	1.9	EPA906.0

SAMPLE NAME: D431 2502 Sample ID: 100324

Location (SRS Coordinates): 18257E 66462N
Ground Elevation Above MSL: . ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal
Sample Color: 5YR 3/2
Sample Matrix: Sediment
USC Soil Classification: SM
Sample Moisture: Damp
Percent Solids: 84.20

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
pH	J	YQ		3.9	pH	0.010	EPA9045
Total organic carbon		Y		9,000	mg/kg	440	EPA415.1
Total Metals							
Arsenic	U	Y		1.1	mg/kg	1.1	EPA7060
Barium		Y		52	mg/kg	22	EPA6010
Cadmium	U	Y		0.55	mg/kg	0.55	EPA6010
Chromium		Y		4.8	mg/kg	1.1	EPA6010
Copper	U	Y		2.7	mg/kg	2.7	EPA6010
Lead		Y		5.2	mg/kg	0.34	EPA7421
Manganese		Y		13	mg/kg	1.6	EPA6010
Mercury	U	Y		0.12	mg/kg	0.12	EPA7470
Nickel	U	Y		4.4	mg/kg	4.4	EPA6010
Selenium	U	Y		0.57	mg/kg	0.57	EPA7740
Silver	U	Y		1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U	Y		390	µg/kg	390	EPA8270
Acenaphthylene	U	Y		390	µg/kg	390	EPA8270
Anthracene	U	Y		390	µg/kg	390	EPA8270
Benzo(a)anthracene	U	Y		390	µg/kg	390	EPA8270
Benzo(b)fluoranthene	U	Y		390	µg/kg	390	EPA8270
Benzo(k)fluoranthene	U	Y		390	µg/kg	390	EPA8270
Benzoic acid	U	Y		2,000	µg/kg	2,000	EPA8270
Benzo(g,h,i)perylene	U	Y		390	µg/kg	390	EPA8270
Benzo(a)pyrene	U	Y		390	µg/kg	390	EPA8270
Benzyl alcohol	U	Y		390	µg/kg	390	EPA8270
Bis(2-chloroethoxy) methane	U	Y		390	µg/kg	390	EPA8270
Bis(2-chloroethyl) ether	U	Y		390	µg/kg	390	EPA8270
Bis(2-chloroisopropyl) ether	U	Y		390	µg/kg	390	EPA8270

SAMPLE NAME: D431 2502 (Continued) Sample ID: 100324

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Bis(2-ethylhexyl) phthalate	U	Y		390	µg/kg	390	EPA8270
4-Bromophenyl phenyl ether	U	Y		390	µg/kg	390	EPA8270
Butylbenzyl phthalate	U	Y		390	µg/kg	390	EPA8270
Hydrocarbon C12H18 + arom.	J	YN		200	µg/kg		EPA8270
Sub. carboxylic acid	J	YN		400	µg/kg		EPA8270
Sub. carboxylic acid	J	YN		300	µg/kg		EPA8270
4-Chloroaniline	U	Y		390	µg/kg	390	EPA8270
4-Chloro-m-cresol	U	Y		390	µg/kg	390	EPA8270
2-Chloronaphthalene	U	Y		390	µg/kg	390	EPA8270
2-Chlorophenol	U	Y		390	µg/kg	390	EPA8270
4-Chlorophenyl phenyl ether	U	Y		390	µg/kg	390	EPA8270
Chrysene	U	Y		390	µg/kg	390	EPA8270
o-Cresol (2-Methylphenol)	U	Y		390	µg/kg	390	EPA8270
p-Cresol (4-Methylphenol)	U	Y		390	µg/kg	390	EPA8270
Hexadecanoic acid ester	J	YN		200	µg/kg		EPA8270
Dibenz(a,h)anthracene	U	Y		390	µg/kg	390	EPA8270
Dibenzofuran	U	Y		390	µg/kg	390	EPA8270
Di-n-butyl phthalate	UJ	YV		72	µg/kg	390	EPA8270
1,2-Dichlorobenzene	U	Y		390	µg/kg	390	EPA8270
1,3-Dichlorobenzene	U	Y		390	µg/kg	390	EPA8270
1,4-Dichlorobenzene	U	Y		390	µg/kg	390	EPA8270
3,3'-Dichlorobenzidine	U	Y		780	µg/kg	780	EPA8270
2,4-Dichlorophenol	U	Y		390	µg/kg	390	EPA8270
Diethyl phthalate	U	Y		390	µg/kg	390	EPA8270
2,4-Dimethyl phenol	U	Y		390	µg/kg	390	EPA8270
Dimethyl phthalate	U	Y		390	µg/kg	390	EPA8270
2,4-Dinitrophenol	U	Y		2,000	µg/kg	2,000	EPA8270
2,4-Dinitrotoluene	U	Y		390	µg/kg	390	EPA8270
2,6-Dinitrotoluene	U	Y		390	µg/kg	390	EPA8270
Di-n-octyl phthalate	U	Y		390	µg/kg	390	EPA8270
Fluoranthene	U	Y		390	µg/kg	390	EPA8270
Fluorene	U	Y		390	µg/kg	390	EPA8270
Hexachlorobenzene	U	Y		390	µg/kg	390	EPA8270
Hexachlorobutadiene	U	Y		390	µg/kg	390	EPA8270
Hexachlorocyclopentadiene	U	Y		390	µg/kg	390	EPA8270
Hexachloroethane	U	Y		390	µg/kg	390	EPA8270
Indeno(1,2,3-c,d)pyrene	U	Y		390	µg/kg	390	EPA8270
Isophorone	U	Y		390	µg/kg	390	EPA8270
2-Methyl-4,6-dinitrophenol	U	Y		2,000	µg/kg	2,000	EPA8270
2-Methylnaphthalene	U	Y		390	µg/kg	390	EPA8270
Naphthalene	U	Y		390	µg/kg	390	EPA8270
o-Nitroaniline	U	Y		2,000	µg/kg	2,000	EPA8270
m-Nitroaniline	U	Y		2,000	µg/kg	2,000	EPA8270
p-Nitroaniline	U	Y		2,000	µg/kg	2,000	EPA8270
Nitrobenzene	U	Y		390	µg/kg	390	EPA8270
2-Nitrophenol	U	Y		390	µg/kg	390	EPA8270
4-Nitrophenol	U	Y		2,000	µg/kg	2,000	EPA8270
N-Nitrosodiphenylamine	U	Y		390	µg/kg	390	EPA8270
N-Nitrosodipropylamine	UJ	CY		390	µg/kg	390	EPA8270
Pentachlorophenol	U	Y		2,000	µg/kg	2,000	EPA8270

SAMPLE NAME: D431-2502 (Continued) Sample ID: 100324

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Phenanthrene	U	Y		390	µg/kg	390	EPA8270
Phenol	U	Y		390	µg/kg	390	EPA8270
Sub. propanoic acid	J	YN		200	µg/kg		EPA8270
Pyrene	U	Y		390	µg/kg	390	EPA8270
1,2,4-Trichlorobenzene	U	Y		390	µg/kg	390	EPA8270
2,4,5-Trichlorophenol	U	Y		2,000	µg/kg	2,000	EPA8270
2,4,6-Trichlorophenol	U	Y		390	µg/kg	390	EPA8270
Unknown hydrocarbon	J	YN		500	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		700	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		400	µg/kg		EPA8270
Unknown hydrocarbon + acid	J	YN		200	µg/kg		EPA8270
Unknown	J	YN		200	µg/kg		EPA8270
Unknown	J	YN		400	µg/kg		EPA8270
Unknown	J	YN		500	µg/kg		EPA8270
Unknown	J	YN		200	µg/kg		EPA8270
Unknown	J	YN		200	µg/kg		EPA8270
Unknown	J	YN		300	µg/kg		EPA8270
Unknown	J	YN		2,000	µg/kg		EPA8270
Unknown ketone	J	YNV		50,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	YV		12	µg/kg	12	EPA8240
Acetone	U	YV		12	µg/kg	12	EPA8240
Acetone	U	YV		24	µg/kg	12	EPA8240
Benzene	U	Y		6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U	Y		6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U	Y		6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U	Y		6.0	µg/kg	6.0	EPA8240
Bromoform	U	Y		6.0	µg/kg	6.0	EPA8240
Bromoform	U	Y		6.0	µg/kg	6.0	EPA8240
Bromoform	U	Y		6.0	µg/kg	6.0	EPA8240
Bromomethane (Methyl bromide)	U	Y		12	µg/kg	12	EPA8240
Bromomethane (Methyl bromide)	U	Y		12	µg/kg	12	EPA8240
Bromomethane (Methyl bromide)	U	Y		12	µg/kg	12	EPA8240
Carbon disulfide	U	Y		6.0	µg/kg	6.0	EPA8240
Carbon disulfide	U	Y		6.0	µg/kg	6.0	EPA8240
Carbon disulfide	U	Y		6.0	µg/kg	6.0	EPA8240
Carbon tetrachloride	U	Y		6.0	µg/kg	6.0	EPA8240
Carbon tetrachloride	U	Y		6.0	µg/kg	6.0	EPA8240
Carbon tetrachloride	U	Y		6.0	µg/kg	6.0	EPA8240
Chlorobenzene	U	Y		6.0	µg/kg	6.0	EPA8240
Chloroethane	U	Y		12	µg/kg	12	EPA8240
Chloroethane	U	Y		12	µg/kg	12	EPA8240
Chloroethane	U	Y		12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U	Y		12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U	Y		12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U	Y		12	µg/kg	12	EPA8240
Chloroform	U	Y		6.0	µg/kg	6.0	EPA8240
Chloroform	U	Y		6.0	µg/kg	6.0	EPA8240

SAMPLE NAME: D431 2502 (Continued) Sample ID: 100324

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Chloroform	U	Y		6.0	µg/kg	6.0	EPA8240
Chloromethane (Methyl chloride)	U	Y		12	µg/kg	12	EPA8240
Chloromethane (Methyl chloride)	U	Y		12	µg/kg	12	EPA8240
Chloromethane (Methyl chloride)	U	Y		12	µg/kg	12	EPA8240
Dibromochloromethane	U	Y		6.0	µg/kg	6.0	EPA8240
Dibromochloromethane	U	Y		6.0	µg/kg	6.0	EPA8240
Dibromochloromethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethylene	U	Y		6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U	Y		6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U	Y		6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U	Y		6.0	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)	U	YV		6.0	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)	U	YV		6.0	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)	U	YV		6.0	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U	Y		6.0	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U	Y		6.0	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U	Y		6.0	µg/kg	6.0	EPA8240
cis-1,3-Dichloropropene	U	Y		6.0	µg/kg	6.0	EPA8240
cis-1,3-Dichloropropene	U	Y		6.0	µg/kg	6.0	EPA8240
cis-1,3-Dichloropropene	U	Y		6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U	Y		6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U	Y		6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U	Y		6.0	µg/kg	6.0	EPA8240
Ethylbenzene	U	Y		6.0	µg/kg	6.0	EPA8240
Ethylbenzene	U	Y		6.0	µg/kg	6.0	EPA8240
Ethylbenzene	U	Y		6.0	µg/kg	6.0	EPA8240
2-Hexanone	U	Y		12	µg/kg	12	EPA8240
2-Hexanone	U	Y		12	µg/kg	12	EPA8240
2-Hexanone	U	Y		12	µg/kg	12	EPA8240
Methyl ethyl ketone	U	Y		12	µg/kg	12	EPA8240
Methyl ethyl ketone	U	Y		12	µg/kg	12	EPA8240
Methyl ethyl ketone	U	Y		12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U	Y		12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U	Y		12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U	Y		12	µg/kg	12	EPA8240
Styrene	U	Y		6.0	µg/kg	6.0	EPA8240
Styrene	U	Y		6.0	µg/kg	6.0	EPA8240
Styrene	U	Y		6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U	Y		6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U	Y		6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U	Y		6.0	µg/kg	6.0	EPA8240

SAMPLE NAME: D431 2502 (Continued) Sample ID: 100324

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Toluene	U	Y		6.0	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
Trichloroethylene	U	Y		6.0	µg/kg	6.0	EPA8240
Vinyl acetate	U	Y		12	µg/kg	12	EPA8240
Vinyl acetate	U	Y		12	µg/kg	12	EPA8240
Vinyl acetate	U	Y		12	µg/kg	12	EPA8240
Xylenes	U	Y		6.0	µg/kg	6.0	EPA8240
Xylenes	U	Y		6.0	µg/kg	6.0	EPA8240
Xylenes	U	Y		6.0	µg/kg	6.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha		Y		13±12	pCi/g	6.1	EPA900.0
Nonvolatile beta		Y		19±17	pCi/g	6.7	EPA900.0
Radium, total alpha-emitting	U	YV		1.3±0.80	pCi/g	0.10	EPA903.0
Tritium		Y		4.3±1.0	pCi/g	1.8	EPA906.0

SAMPLE NAME: D431 2602 Sample ID: 100300

Location (SRS Coordinates): 18160E 66410N
Ground Elevation Above MSL: . ft
Depth of Core Interval: 0.50 to 0.50 ft
Sample Type: Normal
Sample Color: 5YR 3/2
Sample Matrix: Sediment
USC Soil Classification: SM
Sample Moisture: Wet
Percent Solids: 71.80

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
pH	J	Q		4.7	pH	0.010	EPA9045
Total organic carbon				9,500	mg/kg	240	EPA415.1
Total Metals							
Arsenic				11	mg/kg	2.5	EPA7060
Barium				83	mg/kg	26	EPA6010
Cadmium				0.76	mg/kg	0.64	EPA6010
Chromium				6.8	mg/kg	1.3	EPA6010
Copper				7.1	mg/kg	3.2	EPA6010
Lead				9.1	mg/kg	0.74	EPA7421
Manganese				25	mg/kg	1.9	EPA6010
Mercury	U			0.14	mg/kg	0.14	EPA7470
Nickel	U			5.1	mg/kg	5.1	EPA6010
Selenium				1.2	mg/kg	0.62	EPA7740

SAMPLE NAME: D431 2602 (Continued) Sample ID: 100300

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Silver	U			1.3	mg/kg	1.3	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			460	µg/kg	460	EPA8270
Acenaphthylene	U			460	µg/kg	460	EPA8270
Aldol condensate	J	NVK		300	µg/kg		EPA8270
Anthracene	U			460	µg/kg	460	EPA8270
Benzo(a)anthracene	U			460	µg/kg	460	EPA8270
Benzo(b)fluoranthene	U			460	µg/kg	460	EPA8270
Benzo(k)fluoranthene	U			460	µg/kg	460	EPA8270
Benzoic acid	U			2,300	µg/kg	2,300	EPA8270
Benzo(g,h,i)perylene	U			460	µg/kg	460	EPA8270
Benzo(a)pyrene	U			460	µg/kg	460	EPA8270
Benzyl alcohol	U			460	µg/kg	460	EPA8270
Bis(2-chloroethoxy) methane	U			460	µg/kg	460	EPA8270
Bis(2-chloroethyl) ether	U			460	µg/kg	460	EPA8270
Bis(2-chloroisopropyl) ether	U			460	µg/kg	460	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		110	µg/kg	460	EPA8270
4-Bromophenyl phenyl ether	U			460	µg/kg	460	EPA8270
Butylbenzyl phthalate	U			460	µg/kg	460	EPA8270
4-Chloroaniline	U			460	µg/kg	460	EPA8270
4-Chloro-m-cresol	U			460	µg/kg	460	EPA8270
2-Chloronaphthalene	U			460	µg/kg	460	EPA8270
2-Chlorophenol	U			460	µg/kg	460	EPA8270
4-Chlorophenyl phenyl ether	U			460	µg/kg	460	EPA8270
Chrysene	U			460	µg/kg	460	EPA8270
o-Cresol (2-Methylphenol)	U			460	µg/kg	460	EPA8270
p-Cresol (4-Methylphenol)	U			460	µg/kg	460	EPA8270
Dibenz(a,h)anthracene	U			460	µg/kg	460	EPA8270
Dibenzofuran	U			460	µg/kg	460	EPA8270
Di-n-butyl phthalate	U			460	µg/kg	460	EPA8270
1,2-Dichlorobenzene	U			460	µg/kg	460	EPA8270
1,3-Dichlorobenzene	U			460	µg/kg	460	EPA8270
1,4-Dichlorobenzene	U			460	µg/kg	460	EPA8270
3,3'-Dichlorobenzidine	U			920	µg/kg	920	EPA8270
2,4-Dichlorophenol	U			460	µg/kg	460	EPA8270
Diethyl phthalate	U			460	µg/kg	460	EPA8270
2,4-Dimethyl phenol	U			460	µg/kg	460	EPA8270
Dimethyl phthalate	U			460	µg/kg	460	EPA8270
2,4-Dinitrophenol	U			2,300	µg/kg	2,300	EPA8270
2,4-Dinitrotoluene	U			460	µg/kg	460	EPA8270
2,6-Dinitrotoluene	U			460	µg/kg	460	EPA8270
Di-n-octyl phthalate	U			460	µg/kg	460	EPA8270
Fluoranthene	U			460	µg/kg	460	EPA8270
Fluorene	U			460	µg/kg	460	EPA8270
Hexachlorobenzene	U			460	µg/kg	460	EPA8270
Hexachlorobutadiene	U			460	µg/kg	460	EPA8270
Hexachlorocyclopentadiene	U			460	µg/kg	460	EPA8270
Hexachloroethane	U			460	µg/kg	460	EPA8270

SAMPLE NAME: D431 2602 (Continued) Sample ID: 100300

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Indeno(1,2,3-c,d)pyrene	U			460	µg/kg	460	EPA8270
Isophorone	U			460	µg/kg	460	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,300	µg/kg	2,300	EPA8270
2-Methylnaphthalene	U			460	µg/kg	460	EPA8270
Naphthalene	U			460	µg/kg	460	EPA8270
o-Nitroaniline	U			2,300	µg/kg	2,300	EPA8270
m-Nitroaniline	U			2,300	µg/kg	2,300	EPA8270
p-Nitroaniline	U			2,300	µg/kg	2,300	EPA8270
Nitrobenzene	U			460	µg/kg	460	EPA8270
2-Nitrophenol	U			460	µg/kg	460	EPA8270
4-Nitrophenol	U			2,300	µg/kg	2,300	EPA8270
N-Nitrosodiphenylamine	U			460	µg/kg	460	EPA8270
N-Nitrosodipropylamine	U			460	µg/kg	460	EPA8270
Pentachlorophenol	U			2,300	µg/kg	2,300	EPA8270
Phenanthrene	U			460	µg/kg	460	EPA8270
Phenol	U			460	µg/kg	460	EPA8270
Pyrene	U			460	µg/kg	460	EPA8270
1,2,4-Trichlorobenzene	U			460	µg/kg	460	EPA8270
2,4,5-Trichlorophenol	U			2,300	µg/kg	2,300	EPA8270
2,4,6-Trichlorophenol	U			460	µg/kg	460	EPA8270
Volatile Organic Compounds							
Acetone	U	V		14	µg/kg	14	EPA8240
Acetone	U	V		14	µg/kg	14	EPA8240
Acetone	U	V		14	µg/kg	14	EPA8240
Benzene	U			7.0	µg/kg	7.0	EPA8240
Bromodichloromethane	U			7.0	µg/kg	7.0	EPA8240
Bromodichloromethane	U			7.0	µg/kg	7.0	EPA8240
Bromodichloromethane	U			7.0	µg/kg	7.0	EPA8240
Bromoform	U			7.0	µg/kg	7.0	EPA8240
Bromoform	U			7.0	µg/kg	7.0	EPA8240
Bromoform	U			7.0	µg/kg	7.0	EPA8240
Bromomethane (Methyl bromide)	U			14	µg/kg	14	EPA8240
Bromomethane (Methyl bromide)	U			14	µg/kg	14	EPA8240
Bromomethane (Methyl bromide)	U			14	µg/kg	14	EPA8240
Carbon disulfide	U			7.0	µg/kg	7.0	EPA8240
Carbon disulfide	U			7.0	µg/kg	7.0	EPA8240
Carbon disulfide	U			7.0	µg/kg	7.0	EPA8240
Carbon tetrachloride	U			7.0	µg/kg	7.0	EPA8240
Carbon tetrachloride	U			7.0	µg/kg	7.0	EPA8240
Carbon tetrachloride	U			7.0	µg/kg	7.0	EPA8240
Chlorobenzene	U			7.0	µg/kg	7.0	EPA8240
Chloroethane	U			14	µg/kg	14	EPA8240
Chloroethane	U			14	µg/kg	14	EPA8240
Chloroethane	U			14	µg/kg	14	EPA8240
Chloroethene (Vinyl chloride)	U			14	µg/kg	14	EPA8240
Chloroethene (Vinyl chloride)	U			14	µg/kg	14	EPA8240
Chloroethene (Vinyl chloride)	U			14	µg/kg	14	EPA8240
2-Chloroethyl vinyl ether	U			14	µg/kg	14	EPA8240

SAMPLE NAME: D431 2602 (Continued) Sample ID: 100300

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
2-Chloroethyl vinyl ether	U			14	µg/kg	14	EPA8240
2-Chloroethyl vinyl ether	U			14	µg/kg	14	EPA8240
Chloroform	U			7.0	µg/kg	7.0	EPA8240
Chloroform	U			7.0	µg/kg	7.0	EPA8240
Chloroform	U			7.0	µg/kg	7.0	EPA8240
Chloromethane (Methyl chloride)	U			14	µg/kg	14	EPA8240
Chloromethane (Methyl chloride)	U			14	µg/kg	14	EPA8240
Chloromethane (Methyl chloride)	U			14	µg/kg	14	EPA8240
Dibromochloromethane	U			7.0	µg/kg	7.0	EPA8240
Dibromochloromethane	U			7.0	µg/kg	7.0	EPA8240
Dibromochloromethane	U			7.0	µg/kg	7.0	EPA8240
1,1-Dichloroethane	U			7.0	µg/kg	7.0	EPA8240
1,1-Dichloroethane	U			7.0	µg/kg	7.0	EPA8240
1,1-Dichloroethane	U			7.0	µg/kg	7.0	EPA8240
1,2-Dichloroethane	U			7.0	µg/kg	7.0	EPA8240
1,2-Dichloroethane	U			7.0	µg/kg	7.0	EPA8240
1,2-Dichloroethane	U			7.0	µg/kg	7.0	EPA8240
1,1-Dichloroethylene	U			7.0	µg/kg	7.0	EPA8240
1,2-Dichloroethylene	U			7.0	µg/kg	7.0	EPA8240
1,2-Dichloroethylene	U			7.0	µg/kg	7.0	EPA8240
1,2-Dichloroethylene	U			7.0	µg/kg	7.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		40	µg/kg	7.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		23	µg/kg	7.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		24	µg/kg	7.0	EPA8240
1,2-Dichloropropane	U			7.0	µg/kg	7.0	EPA8240
1,2-Dichloropropane	U			7.0	µg/kg	7.0	EPA8240
1,2-Dichloropropane	U			7.0	µg/kg	7.0	EPA8240
cis-1,3-Dichloropropene	U			7.0	µg/kg	7.0	EPA8240
cis-1,3-Dichloropropene	U			7.0	µg/kg	7.0	EPA8240
cis-1,3-Dichloropropene	U			7.0	µg/kg	7.0	EPA8240
trans-1,3-Dichloropropene	U			7.0	µg/kg	7.0	EPA8240
trans-1,3-Dichloropropene	U			7.0	µg/kg	7.0	EPA8240
trans-1,3-Dichloropropene	U			7.0	µg/kg	7.0	EPA8240
Ethylbenzene	U			7.0	µg/kg	7.0	EPA8240
Ethylbenzene	U			7.0	µg/kg	7.0	EPA8240
Ethylbenzene	U			7.0	µg/kg	7.0	EPA8240
2-Hexanone	U			14	µg/kg	14	EPA8240
2-Hexanone	U			14	µg/kg	14	EPA8240
2-Hexanone	U			14	µg/kg	14	EPA8240
Methyl ethyl ketone	U			14	µg/kg	14	EPA8240
Methyl ethyl ketone	U			14	µg/kg	14	EPA8240
Methyl ethyl ketone	U			14	µg/kg	14	EPA8240
Methyl isobutyl ketone	U			14	µg/kg	14	EPA8240
Methyl isobutyl ketone	U			14	µg/kg	14	EPA8240
Methyl isobutyl ketone	U			14	µg/kg	14	EPA8240
Styrene	U			7.0	µg/kg	7.0	EPA8240
Styrene	U			7.0	µg/kg	7.0	EPA8240
Styrene	U			7.0	µg/kg	7.0	EPA8240
1,1,2,2-Tetrachloroethane	U			7.0	µg/kg	7.0	EPA8240
1,1,2,2-Tetrachloroethane	U			7.0	µg/kg	7.0	EPA8240

SAMPLE NAME: D431 2602 (Continued) Sample ID: 100300

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1,2,2-Tetrachloroethane	U			7.0	µg/kg	7.0	EPA8240
Tetrachloroethylene	U			7.0	µg/kg	7.0	EPA8240
Tetrachloroethylene	U			7.0	µg/kg	7.0	EPA8240
Tetrachloroethylene	U			7.0	µg/kg	7.0	EPA8240
Toluene	U			7.0	µg/kg	7.0	EPA8240
1,1,1-Trichloroethane	U			7.0	µg/kg	7.0	EPA8240
1,1,1-Trichloroethane	U			7.0	µg/kg	7.0	EPA8240
1,1,1-Trichloroethane	U			7.0	µg/kg	7.0	EPA8240
1,1,2-Trichloroethane	U			7.0	µg/kg	7.0	EPA8240
1,1,2-Trichloroethane	U			7.0	µg/kg	7.0	EPA8240
1,1,2-Trichloroethane	U			7.0	µg/kg	7.0	EPA8240
Trichloroethylene	U			7.0	µg/kg	7.0	EPA8240
Vinyl acetate	U			14	µg/kg	14	EPA8240
Vinyl acetate	U			14	µg/kg	14	EPA8240
Vinyl acetate	U			14	µg/kg	14	EPA8240
Xylenes	U			7.0	µg/kg	7.0	EPA8240
Xylenes	U			7.0	µg/kg	7.0	EPA8240
Xylenes	U			7.0	µg/kg	7.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			8.1	pCi/g	8.1	EPA900.0
Gross alpha				12±14	pCi/g	8.2	EPA900.0
Nonvolatile beta				9.9±20	pCi/g	9.8	EPA900.0
Nonvolatile beta				24±22	pCi/g	9.9	EPA900.0
Radium, total alpha-emitting		V		0.64±0.67	pCi/g	0.070	EPA903.0
Radium, total alpha-emitting		V		1.1±0.85	pCi/g	0.070	EPA903.0
Tritium				11±1.9	pCi/g	2.0	EPA906.0

SAMPLE NAME: D431 2702 Sample ID: 100312

Location (SRS Coordinates): 18105E 66376N
Ground Elevation Above MSL: . ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal
Sample Color: 5YR 3/2
Sample Matrix: Sediment
USC Soil Classification: OH
Sample Moisture: Wet
Percent Solids: 74.90

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
pH	J	YQ		4.7	pH	0.010	EPA9045
Total organic carbon		Y		46,000	mg/kg	1,900	EPA415.1
Total Metals							
Arsenic		Y		1.7	mg/kg	1.0	EPA7060
Barium		Y		65	mg/kg	23	EPA6010
Cadmium	U	Y		0.58	mg/kg	0.58	EPA6010

SAMPLE NAME: D431 2702 (Continued) Sample ID: 100312

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Chromium		Y		9.9	mg/kg	1.2	EPA6010
Copper		Y		3.4	mg/kg	2.9	EPA6010
Lead		Y		12	mg/kg	0.61	EPA7421
Manganese		Y		140	mg/kg	1.8	EPA6010
Mercury	U	Y		0.13	mg/kg	0.13	EPA7470
Nickel	U	Y		4.7	mg/kg	4.7	EPA6010
Selenium	U	Y		0.51	mg/kg	0.51	EPA7740
Silver	U	Y		1.2	mg/kg	1.2	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U	Y		420	µg/kg	420	EPA8270
Acenaphthylene	U	Y		420	µg/kg	420	EPA8270
Anthracene	U	Y		420	µg/kg	420	EPA8270
Benzo(a)anthracene	U	Y		420	µg/kg	420	EPA8270
Benzo(b)fluoranthene	U	Y		420	µg/kg	420	EPA8270
Benzo(k)fluoranthene	U	Y		420	µg/kg	420	EPA8270
Benzoic acid	U	Y		2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	U	Y		420	µg/kg	420	EPA8270
Benzo(a)pyrene	U	Y		420	µg/kg	420	EPA8270
Benzyl alcohol	U	Y		420	µg/kg	420	EPA8270
Bis(2-chloroethoxy) methane	U	Y		420	µg/kg	420	EPA8270
Bis(2-chloroethyl) ether	U	Y		420	µg/kg	420	EPA8270
Bis(2-chloroisopropyl) ether	U	Y		420	µg/kg	420	EPA8270
Bis(2-ethylhexyl) phthalate	U	Y		420	µg/kg	420	EPA8270
4-Bromophenyl phenyl ether	U	Y		420	µg/kg	420	EPA8270
Butylbenzyl phthalate	U	Y		420	µg/kg	420	EPA8270
Arom. hydrocarbon C18H18	J	YN		200	µg/kg		EPA8270
Sub. carboxylic acid	J	YN		400	µg/kg		EPA8270
Sub. carboxylic acid	J	YN		300	µg/kg		EPA8270
4-Chloroaniline	U	Y		420	µg/kg	420	EPA8270
4-Chloro-m-cresol	U	Y		420	µg/kg	420	EPA8270
2-Chloronaphthalene	U	Y		420	µg/kg	420	EPA8270
2-Chlorophenol	U	Y		420	µg/kg	420	EPA8270
4-Chlorophenyl phenyl ether	U	Y		420	µg/kg	420	EPA8270
Chrysene	U	Y		420	µg/kg	420	EPA8270
o-Cresol (2-Methylphenol)	U	Y		420	µg/kg	420	EPA8270
p-Cresol (4-Methylphenol)	U	Y		420	µg/kg	420	EPA8270
Dibenz(a,h)anthracene	U	Y		420	µg/kg	420	EPA8270
Dibenzofuran	U	Y		420	µg/kg	420	EPA8270
Di-n-butyl phthalate	UJ	YV		62	µg/kg	420	EPA8270
1,2-Dichlorobenzene	U	Y		420	µg/kg	420	EPA8270
1,3-Dichlorobenzene	U	Y		420	µg/kg	420	EPA8270
1,4-Dichlorobenzene	U	Y		420	µg/kg	420	EPA8270
3,3'-Dichlorobenzidine	U	Y		850	µg/kg	850	EPA8270
2,4-Dichlorophenol	U	Y		420	µg/kg	420	EPA8270
Diethyl phthalate	U	Y		420	µg/kg	420	EPA8270
2,4-Dimethyl phenol	U	Y		420	µg/kg	420	EPA8270
Dimethyl phthalate	U	Y		420	µg/kg	420	EPA8270
2,4-Dinitrophenol	U	Y		2,100	µg/kg	2,100	EPA8270

SAMPLE NAME: D431 2702 (Continued) Sample ID: 100312

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2,4-Dinitrotoluene	U	Y		420	µg/kg	420	EPA8270
2,6-Dinitrotoluene	U	Y		420	µg/kg	420	EPA8270
Di-n-octyl phthalate	U	Y		420	µg/kg	420	EPA8270
Fluoranthene	U	Y		420	µg/kg	420	EPA8270
Fluorene	U	Y		420	µg/kg	420	EPA8270
Hexachlorobenzene	U	Y		420	µg/kg	420	EPA8270
Hexachlorobutadiene	U	Y		420	µg/kg	420	EPA8270
Hexachlorocyclopentadiene	U	Y		420	µg/kg	420	EPA8270
Hexachloroethane	U	Y		420	µg/kg	420	EPA8270
Indeno(1,2,3-c,d)pyrene	U	Y		420	µg/kg	420	EPA8270
Isophorone	U	Y		420	µg/kg	420	EPA8270
2-Methyl-4,6-dinitrophenol	U	Y		2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	U	Y		420	µg/kg	420	EPA8270
Naphthalene	U	Y		420	µg/kg	420	EPA8270
o-Nitroaniline	U	Y		2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	U	Y		2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	U	Y		2,100	µg/kg	2,100	EPA8270
Nitrobenzene	U	Y		420	µg/kg	420	EPA8270
2-Nitrophenol	U	Y		420	µg/kg	420	EPA8270
4-Nitrophenol	U	Y		2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	U	Y		420	µg/kg	420	EPA8270
N-Nitrosodipropylamine	UJ	CY		420	µg/kg	420	EPA8270
Pentachlorophenol	U	Y		2,100	µg/kg	2,100	EPA8270
Phenanthrene	U	Y		420	µg/kg	420	EPA8270
Phenol	U	Y		420	µg/kg	420	EPA8270
Pyrene	U	Y		420	µg/kg	420	EPA8270
1,2,4-Trichlorobenzene	U	Y		420	µg/kg	420	EPA8270
2,4,5-Trichlorophenol	U	Y		2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	U	Y		420	µg/kg	420	EPA8270
Unknown hydrocarbon	J	YN		200	µg/kg		EPA8270
Unknown	J	YN		300	µg/kg		EPA8270
Unknown	J	YN		500	µg/kg		EPA8270
Unknown ketone	J	YNV		6,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	YV		13	µg/kg	13	EPA8240
Benzene	U	Y		6.4	µg/kg	6.4	EPA8240
Bromodichloromethane	U	Y		6.4	µg/kg	6.4	EPA8240
Bromoform	U	Y		6.4	µg/kg	6.4	EPA8240
Bromomethane (Methyl bromide)	U	Y		13	µg/kg	13	EPA8240
Carbon disulfide	U	Y		6.4	µg/kg	6.4	EPA8240
Carbon tetrachloride	U	Y		6.4	µg/kg	6.4	EPA8240
Chlorobenzene	U	Y		6.4	µg/kg	6.4	EPA8240
Chloroethane	U	Y		13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U	Y		13	µg/kg	13	EPA8240
Chloroform	U	Y		6.4	µg/kg	6.4	EPA8240
Chloromethane (Methyl chloride)	U	Y		13	µg/kg	13	EPA8240
Dibromochloromethane	U	Y		6.4	µg/kg	6.4	EPA8240
1,1-Dichloroethane	U	Y		6.4	µg/kg	6.4	EPA8240

SAMPLE NAME: D431 2702 (Continued) Sample ID: 100312

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,2-Dichloroethane	U	Y		6.4	µg/kg	6.4	EPA8240
1,1-Dichloroethylene	U	Y		6.4	µg/kg	6.4	EPA8240
1,2-Dichloroethylene	U	Y		6.4	µg/kg	6.4	EPA8240
Dichloromethane (Methylene chloride)	U	YV		6.6	µg/kg	6.4	EPA8240
1,2-Dichloropropane	U	Y		6.4	µg/kg	6.4	EPA8240
cis-1,3-Dichloropropene	U	Y		6.4	µg/kg	6.4	EPA8240
trans-1,3-Dichloropropene	U	Y		6.4	µg/kg	6.4	EPA8240
Ethylbenzene	U	Y		6.4	µg/kg	6.4	EPA8240
2-Hexanone	U	Y		13	µg/kg	13	EPA8240
Methyl ethyl ketone	U	Y		13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U	Y		13	µg/kg	13	EPA8240
Styrene	U	Y		6.4	µg/kg	6.4	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		6.4	µg/kg	6.4	EPA8240
Tetrachloroethylene	U	Y		6.4	µg/kg	6.4	EPA8240
Toluene	U	Y		6.4	µg/kg	6.4	EPA8240
1,1,1-Trichloroethane	U	Y		6.4	µg/kg	6.4	EPA8240
1,1,2-Trichloroethane	U	Y		6.4	µg/kg	6.4	EPA8240
Trichloroethylene	U	Y		6.4	µg/kg	6.4	EPA8240
Vinyl acetate	U	Y		13	µg/kg	13	EPA8240
Xylenes	U	Y		6.4	µg/kg	6.4	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha		Y		15±13	pCi/g	6.9	EPA900.0
Nonvolatile beta		Y		17±18	pCi/g	8.4	EPA900.0
Radium, total alpha-emitting		YV		0.90±0.79	pCi/g	0.070	EPA903.0
Tritium		Y		5.0±0.95	pCi/g	1.4	EPA906.0

SAMPLE NAME: D43110701 Sample ID: 100317

Location (SRS Coordinates): 18576.98E 66634.66N
Ground Elevation Above MSL: 132.8 ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 3/4 USC Soil Classification: SM Percent Solids: 91.20

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity		Y		14	meq/100g	2.0	EPA9080
Cation exchange capacity		Y		12	meq/100g	2.0	EPA9080
pH	J	YQ		4.8	pH	0.010	EPA9045
Specific conductance		Y		32	µS/cm	1.0	EPA9050
Total organic carbon		Y		3,600	mg/kg	390	EPA415.1
Total organic carbon		Y		4,200	mg/kg	320	EPA415.1

SAMPLE NAME: D43110701 (Continued) Sample ID: 100317

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic		Y		7.6	mg/kg	2.2	EPA7060
Barium		Y		29	mg/kg	19	EPA6010
Cadmium	U	Y		0.48	mg/kg	0.48	EPA6010
Chromium		Y		15	mg/kg	0.97	EPA6010
Copper	U	Y		2.4	mg/kg	2.4	EPA6010
Lead		Y		130	mg/kg	13	EPA7421
Manganese		Y		220	mg/kg	1.5	EPA6010
Mercury	U	Y		0.11	mg/kg	0.11	EPA7470
Nickel	U	Y		3.9	mg/kg	3.9	EPA6010
Selenium		Y		1.1	mg/kg	0.55	EPA7740
Silver	U	Y		0.97	mg/kg	0.97	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U	Y		350	µg/kg	350	EPA8270
Acenaphthylene	U	Y		350	µg/kg	350	EPA8270
Anthracene	U	Y		350	µg/kg	350	EPA8270
Benzo(a)anthracene	U	Y		350	µg/kg	350	EPA8270
Benzo(b)fluoranthene	U	Y		350	µg/kg	350	EPA8270
Benzo(k)fluoranthene	U	Y		350	µg/kg	350	EPA8270
Benzoic acid	U	Y		1,700	µg/kg	1,700	EPA8270
Benzo(g,h,i)perylene	U	Y		350	µg/kg	350	EPA8270
Benzo(a)pyrene	U	Y		350	µg/kg	350	EPA8270
Benzyl alcohol	U	Y		350	µg/kg	350	EPA8270
Bis(2-chloroethoxy) methane	U	Y		350	µg/kg	350	EPA8270
Bis(2-chloroethyl) ether	U	Y		350	µg/kg	350	EPA8270
Bis(2-chloroisopropyl) ether	U	Y		350	µg/kg	350	EPA8270
Bis(2-ethylhexyl) phthalate	U	Y		350	µg/kg	350	EPA8270
4-Bromophenyl phenyl ether	U	Y		350	µg/kg	350	EPA8270
Butylbenzyl phthalate	U	Y		350	µg/kg	350	EPA8270
4-Chloroaniline	U	Y		350	µg/kg	350	EPA8270
4-Chloro-m-cresol	U	Y		350	µg/kg	350	EPA8270
2-Chloronaphthalene	U	Y		350	µg/kg	350	EPA8270
2-Chlorophenol	U	Y		350	µg/kg	350	EPA8270
4-Chlorophenyl phenyl ether	U	Y		350	µg/kg	350	EPA8270
Chrysene	U	Y		350	µg/kg	350	EPA8270
o-Cresol (2-Methylphenol)	U	Y		350	µg/kg	350	EPA8270
p-Cresol (4-Methylphenol)	U	Y		350	µg/kg	350	EPA8270
Hexadecanoic acid ester	J	YN		1,000	µg/kg		EPA8270
Octadecanoic acid	J	YN		2,000	µg/kg		EPA8270
Octadecanoic acid	J	YN		300	µg/kg		EPA8270
Dibenz(a,h)anthracene	U	Y		350	µg/kg	350	EPA8270
Dibenzofuran	U	Y		350	µg/kg	350	EPA8270
Di-n-butyl phthalate	UJ	YV		47	µg/kg	350	EPA8270
1,2-Dichlorobenzene	U	Y		350	µg/kg	350	EPA8270
1,3-Dichlorobenzene	U	Y		350	µg/kg	350	EPA8270
1,4-Dichlorobenzene	U	Y		350	µg/kg	350	EPA8270
3,3'-Dichlorobenzidine	U	Y		690	µg/kg	690	EPA8270
2,4-Dichlorophenol	U	Y		350	µg/kg	350	EPA8270
Diethyl phthalate	U	Y		350	µg/kg	350	EPA8270

SAMPLE NAME: D43110701 (Continued) Sample ID: 100317

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2,4-Dimethyl phenol	U	Y		350	µg/kg	350	EPA8270
Dimethyl phthalate	U	Y		350	µg/kg	350	EPA8270
2,4-Dinitrophenol	U	Y		1,700	µg/kg	1,700	EPA8270
2,4-Dinitrotoluene	U	Y		350	µg/kg	350	EPA8270
2,6-Dinitrotoluene	U	Y		350	µg/kg	350	EPA8270
Di-n-octyl phthalate	U	Y		350	µg/kg	350	EPA8270
Fluoranthene	U	Y		350	µg/kg	350	EPA8270
Fluorene	U	Y		350	µg/kg	350	EPA8270
Hexachlorobenzene	U	Y		350	µg/kg	350	EPA8270
Hexachlorobutadiene	U	Y		350	µg/kg	350	EPA8270
Hexachlorocyclopentadiene	U	Y		350	µg/kg	350	EPA8270
Hexachloroethane	U	Y		350	µg/kg	350	EPA8270
Indeno(1,2,3-c,d)pyrene	U	Y		350	µg/kg	350	EPA8270
Isophorone	U	Y		350	µg/kg	350	EPA8270
Cholesterol	J	YN		2,000	µg/kg		EPA8270
2-Methyl-4,6-dinitrophenol	U	Y		1,700	µg/kg	1,700	EPA8270
2-Methylnaphthalene	U	Y		350	µg/kg	350	EPA8270
Naphthalene	U	Y		350	µg/kg	350	EPA8270
o-Nitroaniline	U	Y		1,700	µg/kg	1,700	EPA8270
m-Nitroaniline	U	Y		1,700	µg/kg	1,700	EPA8270
p-Nitroaniline	U	Y		1,700	µg/kg	1,700	EPA8270
Nitrobenzene	U	Y		350	µg/kg	350	EPA8270
2-Nitrophenol	U	Y		350	µg/kg	350	EPA8270
4-Nitrophenol	U	Y		1,700	µg/kg	1,700	EPA8270
N-Nitrosodiphenylamine	U	Y		350	µg/kg	350	EPA8270
N-Nitrosodipropylamine	UJ	CY		350	µg/kg	350	EPA8270
Pentachlorophenol	U	Y		1,700	µg/kg	1,700	EPA8270
Phenanthrene	U	Y		350	µg/kg	350	EPA8270
Phenol	U	Y		350	µg/kg	350	EPA8270
Sub. propanoic acid	J	YN		300	µg/kg		EPA8270
Pyrene	U	Y		350	µg/kg	350	EPA8270
1,2,4-Trichlorobenzene	U	Y		350	µg/kg	350	EPA8270
2,4,5-Trichlorophenol	U	Y		1,700	µg/kg	1,700	EPA8270
2,4,6-Trichlorophenol	U	Y		350	µg/kg	350	EPA8270
Unknown hydrocarbon	J	YN		400	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		100	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		300	µg/kg		EPA8270
Unknown	J	YN		300	µg/kg		EPA8270
Unknown	J	YN		200	µg/kg		EPA8270
Unknown	J	YN		100	µg/kg		EPA8270
Unknown	J	YN		200	µg/kg		EPA8270
Unknown	J	YN		200	µg/kg		EPA8270
Unknown ketone	J	YNV		6,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	YV		12	µg/kg	11	EPA8240
Benzene	U	Y		5.4	µg/kg	5.4	EPA8240
Bromodichloromethane	U	Y		5.4	µg/kg	5.4	EPA8240
Bromoform	U	Y		5.4	µg/kg	5.4	EPA8240

SAMPLE NAME: D43110701 (Continued) Sample ID: 100317

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Bromomethane (Methyl bromide)	U	Y		11	µg/kg	11	EPA8240
Carbon disulfide	U	Y		5.4	µg/kg	5.4	EPA8240
Carbon tetrachloride	U	Y		5.4	µg/kg	5.4	EPA8240
Chlorobenzene	U	Y		5.4	µg/kg	5.4	EPA8240
Chloroethane	U	Y		11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U	Y		11	µg/kg	11	EPA8240
Chloroform	U	Y		5.4	µg/kg	5.4	EPA8240
Chloromethane (Methyl chloride)	U	Y		11	µg/kg	11	EPA8240
Dibromochloromethane	U	Y		5.4	µg/kg	5.4	EPA8240
1,1-Dichloroethane	U	Y		5.4	µg/kg	5.4	EPA8240
1,2-Dichloroethane	U	Y		5.4	µg/kg	5.4	EPA8240
1,1-Dichloroethylene	U	Y		5.4	µg/kg	5.4	EPA8240
1,2-Dichloroethylene	U	Y		5.4	µg/kg	5.4	EPA8240
Dichloromethane (Methylene chloride)	U	Y		5.4	µg/kg	5.4	EPA8240
1,2-Dichloropropane	U	Y		5.4	µg/kg	5.4	EPA8240
cis-1,3-Dichloropropene	U	Y		5.4	µg/kg	5.4	EPA8240
trans-1,3-Dichloropropene	U	Y		5.4	µg/kg	5.4	EPA8240
Ethylbenzene	U	Y		5.4	µg/kg	5.4	EPA8240
2-Hexanone	U	Y		11	µg/kg	11	EPA8240
Methyl ethyl ketone	U	Y		11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U	Y		11	µg/kg	11	EPA8240
Styrene	U	Y		5.4	µg/kg	5.4	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		5.4	µg/kg	5.4	EPA8240
Tetrachloroethylene	U	Y		5.4	µg/kg	5.4	EPA8240
Toluene	U	Y		5.4	µg/kg	5.4	EPA8240
1,1,1-Trichloroethane	U	Y		5.4	µg/kg	5.4	EPA8240
1,1,2-Trichloroethane	U	Y		5.4	µg/kg	5.4	EPA8240
Trichloroethylene	U	Y		5.4	µg/kg	5.4	EPA8240
Vinyl acetate	U	Y		11	µg/kg	11	EPA8240
Xylenes	U	Y		5.4	µg/kg	5.4	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U	Y		1.7	µg/kg	1.7	EPA8080
alpha-Benzene hexachloride	U	Y		1.7	µg/kg	1.7	EPA8080
beta-Benzene hexachloride	U	Y		1.7	µg/kg	1.7	EPA8080
delta-Benzene hexachloride	U	Y		1.7	µg/kg	1.7	EPA8080
alpha-Chlordane	U	Y		1.7	µg/kg	1.7	EPA8080
gamma-Chlordane	U	Y		1.7	µg/kg	1.7	EPA8080
p,p'-DDD	U	Y		3.5	µg/kg	3.5	EPA8080
p,p'-DDE	U	Y		3.5	µg/kg	3.5	EPA8080
p,p'-DDT	U	Y		3.5	µg/kg	3.5	EPA8080
Dieldrin	U	Y		3.5	µg/kg	3.5	EPA8080
Endosulfan I	U	Y		1.7	µg/kg	1.7	EPA8080
Endosulfan II	U	Y		3.5	µg/kg	3.5	EPA8080
Endosulfan sulfate	U	Y		3.5	µg/kg	3.5	EPA8080
Endrin	U	Y		3.5	µg/kg	3.5	EPA8080
Endrin ketone	U	Y		3.5	µg/kg	3.5	EPA8080
Heptachlor	U	Y		1.7	µg/kg	1.7	EPA8080
Heptachlor epoxide	U	Y		1.7	µg/kg	1.7	EPA8080

SAMPLE NAME: D43110701 (Continued) Sample ID: 100317

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Heptachlorodibenzo-p-dioxin isomers	U	Y		0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U	Y		0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U	Y		0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U	Y		0.10	ng/g	0.10	EPA8280
Lindane	U	Y		1.7	µg/kg	1.7	EPA8080
Methoxychlor	U	Y		17	µg/kg	17	EPA8080
Octachlorodibenzo-p-dioxin	J	Y		1.6	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U	Y		0.10	ng/g	0.10	EPA8280
PCB 1016	U	Y		35	µg/kg	35	EPA8080
PCB 1221	U	Y		70	µg/kg	70	EPA8080
PCB 1232	U	Y		35	µg/kg	35	EPA8080
PCB 1242	U	Y		35	µg/kg	35	EPA8080
PCB 1248	U	Y		35	µg/kg	35	EPA8080
PCB 1254	U	Y		35	µg/kg	35	EPA8080
PCB 1260	U	Y		35	µg/kg	35	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U	Y		0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U	Y		0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U	Y		0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U	Y		0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U	Y		0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U	Y		0.10	ng/g	0.10	EPA8280
Toxaphene	U	Y		170	µg/kg	170	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U	Y		8.6	pCi/g	8.6	EPA900.0
Nonvolatile beta		Y		26±23	pCi/g	11	EPA900.0
Radium, total alpha-emitting		YV		0.86±0.74	pCi/g	0.070	EPA903.0
Tritium		Y		3.6±0.74	pCi/g	1.5	EPA906.0

SAMPLE NAME: D43110702 Sample ID: 100318

Location (SRS Coordinates): 18576.98E 66634.66N
Ground Elevation Above MSL: 132.8 ft
Depth of Core Interval: 0.50 to 2.00 ft
Sample Type: Normal
Sample Color: 10R 3/4
Sample Matrix: Soil
USC Soil Classification: SM
Sample Moisture: Dry
Percent Solids: 94.10

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U	Y		1.0	mg/kg	1.0	EPA7060
Barium	U	Y		21	mg/kg	21	EPA6010
Cadmium	U	Y		0.53	mg/kg	0.53	EPA6010
Chromium		Y		10	mg/kg	1.1	EPA6010
Copper	U	Y		2.6	mg/kg	2.6	EPA6010
Lead		Y		3.1	mg/kg	0.31	EPA7421
Manganese		Y		84	mg/kg	1.6	EPA6010

SAMPLE NAME: D43110702 (Continued) Sample ID: 100318

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Mercury	U	Y		0.11	mg/kg	0.11	EPA7470
Nickel	U	Y		4.2	mg/kg	4.2	EPA6010
Selenium	U	Y		0.52	mg/kg	0.52	EPA7740
Silver	U	Y		1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U	Y		360	µg/kg	360	EPA8270
Acenaphthylene	U	Y		360	µg/kg	360	EPA8270
Anthracene	U	Y		360	µg/kg	360	EPA8270
Benzo(a)anthracene	U	Y		360	µg/kg	360	EPA8270
Benzo(b)fluoranthene	U	Y		360	µg/kg	360	EPA8270
Benzo(k)fluoranthene	U	Y		360	µg/kg	360	EPA8270
Benzoic acid	U	Y		1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U	Y		360	µg/kg	360	EPA8270
Benzo(a)pyrene	U	Y		360	µg/kg	360	EPA8270
Benzyl alcohol	U	Y		360	µg/kg	360	EPA8270
Bis(2-chloroethoxy) methane	U	Y		360	µg/kg	360	EPA8270
Bis(2-chloroethyl) ether	U	Y		360	µg/kg	360	EPA8270
Bis(2-chloroisopropyl) ether	U	Y		360	µg/kg	360	EPA8270
Bis(2-ethylhexyl) phthalate	J	Y		180	µg/kg	360	EPA8270
4-Bromophenyl phenyl ether	U	Y		360	µg/kg	360	EPA8270
Butylbenzyl phthalate	U	Y		360	µg/kg	360	EPA8270
4-Chloroaniline	U	Y		360	µg/kg	360	EPA8270
4-Chloro-m-cresol	U	Y		360	µg/kg	360	EPA8270
2-Chloronaphthalene	U	Y		360	µg/kg	360	EPA8270
2-Chlorophenol	U	Y		360	µg/kg	360	EPA8270
4-Chlorophenyl phenyl ether	U	Y		360	µg/kg	360	EPA8270
Chrysene	U	Y		360	µg/kg	360	EPA8270
o-Cresol (2-Methylphenol)	U	Y		360	µg/kg	360	EPA8270
p-Cresol (4-Methylphenol)	U	Y		360	µg/kg	360	EPA8270
Tetradecanoic acid	J	YN		200	µg/kg		EPA8270
Hexadecanoic acid ester	J	YN		700	µg/kg		EPA8270
Octadecanoic acid	J	YN		500	µg/kg		EPA8270
Dibenz(a,h)anthracene	U	Y		360	µg/kg	360	EPA8270
Dibenzofuran	U	Y		360	µg/kg	360	EPA8270
Di-n-butyl phthalate	UJ	YV		85	µg/kg	360	EPA8270
1,2-Dichlorobenzene	U	Y		360	µg/kg	360	EPA8270
1,3-Dichlorobenzene	U	Y		360	µg/kg	360	EPA8270
1,4-Dichlorobenzene	U	Y		360	µg/kg	360	EPA8270
3,3'-Dichlorobenzidine	U	Y		720	µg/kg	720	EPA8270
2,4-Dichlorophenol	U	Y		360	µg/kg	360	EPA8270
Diethyl phthalate	U	Y		360	µg/kg	360	EPA8270
2,4-Dimethyl phenol	U	Y		360	µg/kg	360	EPA8270
Dimethyl phthalate	U	Y		360	µg/kg	360	EPA8270
2,4-Dinitrophenol	U	Y		1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U	Y		360	µg/kg	360	EPA8270
2,6-Dinitrotoluene	U	Y		360	µg/kg	360	EPA8270
Di-n-octyl phthalate	U	Y		360	µg/kg	360	EPA8270
Fluoranthene	U	Y		360	µg/kg	360	EPA8270

SAMPLE NAME: D43110702 (Continued) Sample ID: 100318

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Fluorene	U	Y		360	µg/kg	360	EPA8270
Hexachlorobenzene	U	Y		360	µg/kg	360	EPA8270
Hexachlorobutadiene	U	Y		360	µg/kg	360	EPA8270
Hexachlorocyclopentadiene	U	Y		360	µg/kg	360	EPA8270
Hexachloroethane	U	Y		360	µg/kg	360	EPA8270
Indeno(1,2,3-c,d)pyrene	U	Y		360	µg/kg	360	EPA8270
Isophorone	U	Y		360	µg/kg	360	EPA8270
2-Methyl-4,6-dinitrophenol	U	Y		1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U	Y		360	µg/kg	360	EPA8270
Naphthalene	U	Y		360	µg/kg	360	EPA8270
o-Nitroaniline	U	Y		1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U	Y		1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U	Y		1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U	Y		360	µg/kg	360	EPA8270
2-Nitrophenol	U	Y		360	µg/kg	360	EPA8270
4-Nitrophenol	U	Y		1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U	Y		360	µg/kg	360	EPA8270
N-Nitrosodipropylamine	UJ	CY		360	µg/kg	360	EPA8270
Pentachlorophenol	U	Y		1,800	µg/kg	1,800	EPA8270
Phenanthrene	U	Y		360	µg/kg	360	EPA8270
Phenol	U	Y		360	µg/kg	360	EPA8270
Sub. propanoic acid	J	YN		500	µg/kg		EPA8270
Pyrene	U	Y		360	µg/kg	360	EPA8270
1,2,4-Trichlorobenzene	U	Y		360	µg/kg	360	EPA8270
2,4,5-Trichlorophenol	U	Y		1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U	Y		360	µg/kg	360	EPA8270
Unknown hydrocarbon	J	YN		300	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		200	µg/kg		EPA8270
Unknown	J	YN		500	µg/kg		EPA8270
Unknown	J	YN		200	µg/kg		EPA8270
Unknown	J	YN		100	µg/kg		EPA8270
Unknown ketone	J	YNV		5,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	YV		11	µg/kg	11	EPA8240
Benzene	U	Y		5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U	Y		5.5	µg/kg	5.5	EPA8240
Bromoform	U	Y		5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U	Y		11	µg/kg	11	EPA8240
Carbon disulfide	U	Y		5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	U	Y		5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U	Y		5.5	µg/kg	5.5	EPA8240
Chloroethane	U	Y		11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U	Y		11	µg/kg	11	EPA8240
Chloroform	U	Y		5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U	Y		11	µg/kg	11	EPA8240
Dibromochloromethane	U	Y		5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U	Y		5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	J	Y		3.4	µg/kg	5.5	EPA8240

SAMPLE NAME: D43110702 (Continued) Sample ID: 100318

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1-Dichloroethylene	U	Y		5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U	Y		5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U	YV		40	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U	Y		5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U	Y		5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U	Y		5.5	µg/kg	5.5	EPA8240
Ethylbenzene	U	Y		5.5	µg/kg	5.5	EPA8240
2-Hexanone	U	Y		11	µg/kg	11	EPA8240
Methyl ethyl ketone	U	Y		11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U	Y		11	µg/kg	11	EPA8240
Styrene	U	Y		5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	U	Y		5.5	µg/kg	5.5	EPA8240
Toluene	J	Y		3.6	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	U	Y		5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	J	Y		5.3	µg/kg	5.5	EPA8240
Trichloroethylene	U	Y		5.5	µg/kg	5.5	EPA8240
Vinyl acetate	U	Y		11	µg/kg	11	EPA8240
Xylenes	U	Y		5.5	µg/kg	5.5	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U	Y		1.8	µg/kg	1.8	EPA8080
alpha-Benzene hexachloride	U	Y		1.8	µg/kg	1.8	EPA8080
beta-Benzene hexachloride	U	Y		1.8	µg/kg	1.8	EPA8080
delta-Benzene hexachloride	U	Y		1.8	µg/kg	1.8	EPA8080
alpha-Chlordane	U	Y		1.8	µg/kg	1.8	EPA8080
gamma-Chlordane	U	Y		1.8	µg/kg	1.8	EPA8080
p,p'-DDD	U	Y		3.6	µg/kg	3.6	EPA8080
p,p'-DDE	U	Y		3.6	µg/kg	3.6	EPA8080
p,p'-DDT	U	Y		3.6	µg/kg	3.6	EPA8080
Dieldrin	U	Y		3.6	µg/kg	3.6	EPA8080
Endosulfan I	U	Y		1.8	µg/kg	1.8	EPA8080
Endosulfan II	U	Y		3.6	µg/kg	3.6	EPA8080
Endosulfan sulfate	U	Y		3.6	µg/kg	3.6	EPA8080
Endrin	U	Y		3.6	µg/kg	3.6	EPA8080
Endrin ketone	U	Y		3.6	µg/kg	3.6	EPA8080
Heptachlor	U	Y		1.8	µg/kg	1.8	EPA8080
Heptachlor epoxide	U	Y		1.8	µg/kg	1.8	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U	Y		0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U	Y		0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U	Y		0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U	Y		0.10	ng/g	0.10	EPA8280
Lindane	U	Y		1.8	µg/kg	1.8	EPA8080
Methoxychlor	U	Y		18	µg/kg	18	EPA8080
Octachlorodibenzo-p-dioxin	J	Y		0.70	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U	Y		0.10	ng/g	0.10	EPA8280
PCB 1016	U	Y		36	µg/kg	36	EPA8080
PCB 1221	U	Y		72	µg/kg	72	EPA8080
PCB 1232	U	Y		36	µg/kg	36	EPA8080

SAMPLE NAME: D43110702 (Continued) Sample ID: 100318

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
PCB 1242	U	Y		36	µg/kg	36	EPA8080
PCB 1248	U	Y		36	µg/kg	36	EPA8080
PCB 1254	U	Y		36	µg/kg	36	EPA8080
PCB 1260	U	Y		36	µg/kg	36	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U	Y		0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U	Y		0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U	Y		0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U	Y		0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U	Y		0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U	Y		0.10	ng/g	0.10	EPA8280
Toxaphene	U	Y		180	µg/kg	180	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U	Y		8.4	pCi/g	8.4	EPA900.0
Nonvolatile beta		Y		18±22	pCi/g	10	EPA900.0
Radium, total alpha-emitting		YV		1.2±0.88	pCi/g	0.070	EPA903.0
Tritium		Y		4.3±0.85	pCi/g	1.4	EPA906.0

SAMPLE NAME: D43110703 Sample ID: 100319

Location (SRS Coordinates): 18576.98E 66634.66N
Ground Elevation Above MSL: 132.8 ft
Depth of Core Interval: 2.00 to 4.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 2N2 USC Soil Classification: Percent Solids: 83.10

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic		Y		2.3	mg/kg	1.1	EPA7060
Barium		Y		120	mg/kg	24	EPA6010
Cadmium	U	Y		0.60	mg/kg	0.60	EPA6010
Chromium		Y		94	mg/kg	1.2	EPA6010
Copper		Y		330	mg/kg	3.0	EPA6010
Lead		Y		4.8	mg/kg	0.32	EPA7421
Manganese		Y		33	mg/kg	1.8	EPA6010
Mercury		Y		7.4	mg/kg	0.24	EPA7470
Nickel		Y		9.9	mg/kg	4.8	EPA6010
Selenium	U	Y		0.53	mg/kg	0.53	EPA7740
Silver		Y		3.0	mg/kg	1.2	EPA6010
Volatile Organic Compounds							
Acetone	L	YV		6,600	µg/kg	12	EPA8240
Acetone		YV		5,800	µg/kg	1,200	EPA8240
Benzene	U	Y		6.2	µg/kg	6.2	EPA8240
Bromodichloromethane	U	Y		6.2	µg/kg	6.2	EPA8240

SAMPLE NAME: D43110703 (Continued) Sample ID: 100319

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Bromoform	U	Y		6.2	µg/kg	6.2	EPA8240
Bromomethane (Methyl bromide)	U	Y		12	µg/kg	12	EPA8240
Carbon disulfide	U	Y		6.2	µg/kg	6.2	EPA8240
Carbon tetrachloride	U	Y		6.2	µg/kg	6.2	EPA8240
Chlorobenzene	U	Y		6.2	µg/kg	6.2	EPA8240
Chloroethane	U	Y		12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U	Y		12	µg/kg	12	EPA8240
Chloroform	U	Y		6.2	µg/kg	6.2	EPA8240
Chloromethane (Methyl chloride)	U	Y		12	µg/kg	12	EPA8240
Dibromochloromethane	U	Y		6.2	µg/kg	6.2	EPA8240
1,1-Dichloroethane	U	Y		6.2	µg/kg	6.2	EPA8240
1,2-Dichloroethane		Y		9.7	µg/kg	6.2	EPA8240
1,1-Dichloroethylene	U	Y		6.2	µg/kg	6.2	EPA8240
1,2-Dichloroethylene	U	Y		6.2	µg/kg	6.2	EPA8240
Dichloromethane (Methylene chloride)	U	YV		6.2	µg/kg	6.2	EPA8240
1,2-Dichloropropane	U	Y		6.2	µg/kg	6.2	EPA8240
cis-1,3-Dichloropropene	U	Y		6.2	µg/kg	6.2	EPA8240
trans-1,3-Dichloropropene	U	Y		6.2	µg/kg	6.2	EPA8240
Ethylbenzene	U	Y		6.2	µg/kg	6.2	EPA8240
2-Hexanone	U	Y		12	µg/kg	12	EPA8240
Methyl ethyl ketone	U	Y		12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U	Y		12	µg/kg	12	EPA8240
Styrene	U	Y		6.2	µg/kg	6.2	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		6.2	µg/kg	6.2	EPA8240
Tetrachloroethylene	U	Y		6.2	µg/kg	6.2	EPA8240
Toluene	U	Y		6.2	µg/kg	6.2	EPA8240
1,1,1-Trichloroethane	U	Y		6.2	µg/kg	6.2	EPA8240
1,1,2-Trichloroethane		Y		8.8	µg/kg	6.2	EPA8240
Trichloroethylene	U	Y		6.2	µg/kg	6.2	EPA8240
Vinyl acetate	U	Y		12	µg/kg	12	EPA8240
Xylenes	U	Y		6.2	µg/kg	6.2	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha		Y		11±13	pCi/g	7.7	EPA900.0
Nonvolatile beta		Y		12±20	pCi/g	9.4	EPA900.0
Radium, total alpha-emitting		YV		0.64±0.64	pCi/g	0.070	EPA903.0
Tritium		Y		3.0±0.63	pCi/g	1.3	EPA906.0

SAMPLE NAME: D43110703D Sample ID: 100320

Sample Type: Split Associated Sample: 100319

Total Metals							
Arsenic		Y		9.0	mg/kg	5.4	EPA7060
Barium		Y		71	mg/kg	22	EPA6010
Cadmium	U	Y		0.56	mg/kg	0.56	EPA6010
Chromium		Y		120	mg/kg	1.1	EPA6010

SAMPLE NAME: D431I0703D (Continued) Sample ID: 100320

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Copper		Y		190	mg/kg	2.8	EPA6010
Lead		Y		87	mg/kg	6.5	EPA7421
Manganese		Y		57	mg/kg	1.7	EPA6010
Mercury		Y		2.4	mg/kg	0.12	EPA7470
Nickel		Y		8.6	mg/kg	4.5	EPA6010
Selenium		Y		1.0	mg/kg	0.54	EPA7740
Silver		Y		1.2	mg/kg	1.1	EPA6010
Volatile Organic Compounds							
Acetone	J	YVO	H	4,200	µg/kg	13	EPA8240
Acetone		YV		8,000	µg/kg	630	EPA8240
Benzene	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
Bromodichloromethane	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
Bromoform	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
Bromomethane (Methyl bromide)	UJ	YO	H	13	µg/kg	13	EPA8240
Carbon disulfide	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
Carbon tetrachloride	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
Chlorobenzene	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
Chloroethane	UJ	YO	H	13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	UJ	YO	H	13	µg/kg	13	EPA8240
Chloroform	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
Chloromethane (Methyl chloride)	UJ	YO	H	13	µg/kg	13	EPA8240
Dibromochloromethane	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
1,1-Dichloroethane	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
1,2-Dichloroethane	J	YO	H	9.6	µg/kg	6.3	EPA8240
1,1-Dichloroethylene	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
1,2-Dichloroethylene	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
Dichloromethane (Methylene chloride)	UJ	YVO	H	6.6	µg/kg	6.3	EPA8240
1,2-Dichloropropane	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
cis-1,3-Dichloropropene	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
trans-1,3-Dichloropropene	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
Ethylbenzene	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
2-Hexanone	UJ	YO	H	13	µg/kg	13	EPA8240
Methyl ethyl ketone	UJ	YO	H	13	µg/kg	13	EPA8240
Methyl isobutyl ketone	UJ	YO	H	13	µg/kg	13	EPA8240
Styrene	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
1,1,2,2-Tetrachloroethane	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
Tetrachloroethylene	J	YO	H	4.8	µg/kg	6.3	EPA8240
Toluene	J	YO	H	9.6	µg/kg	6.3	EPA8240
1,1,1-Trichloroethane	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
1,1,2-Trichloroethane	J	YO	H	6.6	µg/kg	6.3	EPA8240
Trichloroethylene	UJ	YO	H	6.3	µg/kg	6.3	EPA8240
Vinyl acetate	UJ	YO	H	13	µg/kg	13	EPA8240
Xylenes	J	YO	H	7.8	µg/kg	6.3	EPA8240

SAMPLE NAME: D43110703D (Continued) Sample ID: 100320

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Radionuclide Indicators and Radionuclides							
Gross alpha	U	Y		6.7	pCi/g	6.7	EPA900.0
Nonvolatile beta		Y		29±19	pCi/g	7.9	EPA900.0
Radium, total alpha-emitting		YV		0.78±0.71	pCi/g	0.070	EPA903.0
Tritium		Y		11±1.8	pCi/g	1.9	EPA906.0

SAMPLE NAME: D43110704 Sample ID: 100321

Location (SRS Coordinates): 18576.98E 66634.66N
Ground Elevation Above MSL: 132.8 ft
Depth of Core Interval: 4.00 to 5.50 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 4/6 USC Soil Classification: SM Percent Solids: 84.70

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic		Y		26	mg/kg	5.7	EPA7060
Barium		Y		58	mg/kg	23	EPA6010
Cadmium		Y		0.83	mg/kg	0.56	EPA6010
Chromium		Y		260	mg/kg	1.1	EPA6010
Copper		Y		310	mg/kg	2.8	EPA6010
Lead		Y		140	mg/kg	17	EPA7421
Manganese		Y		47	mg/kg	1.7	EPA6010
Mercury		Y		0.82	mg/kg	0.12	EPA7470
Nickel		Y		41	mg/kg	4.5	EPA6010
Selenium		Y		3.8	mg/kg	0.57	EPA7740
Silver	U	Y		1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	J	Y		72	µg/kg	420	EPA8270
Acenaphthylene	U	Y		420	µg/kg	420	EPA8270
Anthracene	J	Y		130	µg/kg	420	EPA8270
Benzo(a)anthracene	J	Y		310	µg/kg	420	EPA8270
Benzo(b)fluoranthene	J	Y		370	µg/kg	420	EPA8270
Benzo(k)fluoranthene	J	Y		140	µg/kg	420	EPA8270
Benzoic acid	U	Y		2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	U	Y		420	µg/kg	420	EPA8270
Benzo(a)pyrene	U	Y		420	µg/kg	420	EPA8270
Benzyl alcohol	U	Y		420	µg/kg	420	EPA8270
Bis(2-chloroethoxy) methane	U	Y		420	µg/kg	420	EPA8270
Bis(2-chloroethyl) ether	U	Y		420	µg/kg	420	EPA8270
Bis(2-chloroisopropyl) ether	U	Y		420	µg/kg	420	EPA8270
Bis(2-ethylhexyl) phthalate		Y		970	µg/kg	420	EPA8270
4-Bromophenyl phenyl ether	U	Y		420	µg/kg	420	EPA8270
Butylbenzyl phthalate	J	Y		310	µg/kg	420	EPA8270
Hydrocarbon C14H30	J	YN		200	µg/kg		EPA8270
Hydrocarbon C16H34	J	YN		800	µg/kg		EPA8270

SAMPLE NAME: D43110704 (Continued) Sample ID: 100321

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Hydrocarbon C16H34 + arom.	J	YN		300	µg/kg		EPA8270
Hydrocarbon C17H36	J	YN		300	µg/kg		EPA8270
Hydrocarbon C19H40	J	YN		300	µg/kg		EPA8270
4-Chloroaniline	U	Y		420	µg/kg	420	EPA8270
4-Chloro-m-cresol	U	Y		420	µg/kg	420	EPA8270
2-Chloronaphthalene	U	Y		420	µg/kg	420	EPA8270
2-Chlorophenol	U	Y		420	µg/kg	420	EPA8270
4-Chlorophenyl phenyl ether	U	Y		420	µg/kg	420	EPA8270
Chrysene	J	Y		330	µg/kg	420	EPA8270
o-Cresol (2-Methylphenol)	U	Y		420	µg/kg	420	EPA8270
p-Cresol (4-Methylphenol)	U	Y		420	µg/kg	420	EPA8270
Hexadecanoic acid ester	J	YN		400	µg/kg		EPA8270
Dibenz(a,h)anthracene	U	Y		420	µg/kg	420	EPA8270
Dibenzofuran	J	Y		70	µg/kg	420	EPA8270
Di-n-butyl phthalate	UJ	YV		58	µg/kg	420	EPA8270
1,2-Dichlorobenzene	U	Y		420	µg/kg	420	EPA8270
1,3-Dichlorobenzene	U	Y		420	µg/kg	420	EPA8270
1,4-Dichlorobenzene	U	Y		420	µg/kg	420	EPA8270
3,3'-Dichlorobenzidine	U	Y		850	µg/kg	850	EPA8270
2,4-Dichlorophenol	U	Y		420	µg/kg	420	EPA8270
Diethyl phthalate	U	Y		420	µg/kg	420	EPA8270
2,4-Dimethyl phenol	U	Y		420	µg/kg	420	EPA8270
Dimethyl phthalate	U	Y		420	µg/kg	420	EPA8270
2,4-Dinitrophenol	U	Y		2,100	µg/kg	2,100	EPA8270
2,4-Dinitrotoluene	U	Y		420	µg/kg	420	EPA8270
2,6-Dinitrotoluene	U	Y		420	µg/kg	420	EPA8270
Di-n-octyl phthalate	J	Y		120	µg/kg	420	EPA8270
Fluoranthene		Y		630	µg/kg	420	EPA8270
Fluorene	J	Y		66	µg/kg	420	EPA8270
Hexachlorobenzene	U	Y		420	µg/kg	420	EPA8270
Hexachlorobutadiene	U	Y		420	µg/kg	420	EPA8270
Hexachlorocyclopentadiene	U	Y		420	µg/kg	420	EPA8270
Hexachloroethane	U	Y		420	µg/kg	420	EPA8270
Indeno(1,2,3-c,d)pyrene	U	Y		420	µg/kg	420	EPA8270
Isophorone	U	Y		420	µg/kg	420	EPA8270
2-Methyl-4,6-dinitrophenol	U	Y		2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	J	Y		180	µg/kg	420	EPA8270
Naphthalene	J	Y		110	µg/kg	420	EPA8270
o-Nitroaniline	U	Y		2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	U	Y		2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	U	Y		2,100	µg/kg	2,100	EPA8270
Nitrobenzene	U	Y		420	µg/kg	420	EPA8270
2-Nitrophenol	U	Y		420	µg/kg	420	EPA8270
4-Nitrophenol	U	Y		2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	U	Y		420	µg/kg	420	EPA8270
N-Nitrosodipropylamine	UJ	CY		420	µg/kg	420	EPA8270
Pentachlorophenol	U	Y		2,100	µg/kg	2,100	EPA8270
Phenanthrene		Y		510	µg/kg	420	EPA8270
Phenol	U	Y		420	µg/kg	420	EPA8270
Sub. propanoic acid	J	YN		400	µg/kg		EPA8270

SAMPLE NAME: D43110704 (Continued) Sample ID: 100321

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Pyrene		Y		1,000	µg/kg	420	EPA8270
1,2,4-Trichlorobenzene	U	Y		420	µg/kg	420	EPA8270
2,4,5-Trichlorophenol	U	Y		2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	U	Y		420	µg/kg	420	EPA8270
Unknown hydrocarbon	J	YN		300	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		300	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		400	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		500	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		400	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		400	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		1,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		1,000	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		1,000	µg/kg		EPA8270
Unknown	J	YN		1,000	µg/kg		EPA8270
Unknown	J	YN		1,000	µg/kg		EPA8270
Unknown ketone	J	YNV		5,000	µg/kg		EPA8270
1-Methylnapthalene	J	YN		200	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	L	YV		790	µg/kg	13	EPA8240
Acetone		YV		770	µg/kg	130	EPA8240
Benzene	U	Y		6.5	µg/kg	6.5	EPA8240
Bromodichloromethane	U	Y		6.5	µg/kg	6.5	EPA8240
Bromoform	U	Y		6.5	µg/kg	6.5	EPA8240
Bromomethane (Methyl bromide)	U	Y		13	µg/kg	13	EPA8240
Carbon disulfide	U	Y		6.5	µg/kg	6.5	EPA8240
Carbon tetrachloride	U	Y		6.5	µg/kg	6.5	EPA8240
Chlorobenzene	U	Y		6.5	µg/kg	6.5	EPA8240
Chloroethane	U	Y		13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U	Y		13	µg/kg	13	EPA8240
Chloroform	U	Y		6.5	µg/kg	6.5	EPA8240
Chloromethane (Methyl chloride)	U	Y		13	µg/kg	13	EPA8240
Dibromochloromethane	U	Y		6.5	µg/kg	6.5	EPA8240
1,1-Dichloroethane	U	Y		6.5	µg/kg	6.5	EPA8240
1,2-Dichloroethane		Y		8.1	µg/kg	6.5	EPA8240
1,1-Dichloroethylene	U	Y		6.5	µg/kg	6.5	EPA8240
1,2-Dichloroethylene	U	Y		6.5	µg/kg	6.5	EPA8240
Dichloromethane (Methylene chloride)		YV		60	µg/kg	6.5	EPA8240
1,2-Dichloropropane	U	Y		6.5	µg/kg	6.5	EPA8240
cis-1,3-Dichloropropene	U	Y		6.5	µg/kg	6.5	EPA8240
trans-1,3-Dichloropropene	U	Y		6.5	µg/kg	6.5	EPA8240
Ethylbenzene	U	Y		6.5	µg/kg	6.5	EPA8240
2-Hexanone	U	Y		13	µg/kg	13	EPA8240
Methyl ethyl ketone		Y		13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U	Y		13	µg/kg	13	EPA8240
Styrene	U	Y		6.5	µg/kg	6.5	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		6.5	µg/kg	6.5	EPA8240
Tetrachloroethylene	U	Y		6.5	µg/kg	6.5	EPA8240
Toluene	U	Y		6.5	µg/kg	6.5	EPA8240

SAMPLE NAME: D431-10704 (Continued) Sample ID: 100321

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1,1-Trichloroethane	U	Y		6.5	µg/kg	6.5	EPA8240
1,1,2-Trichloroethane		Y		5.7	µg/kg	6.5	EPA8240
Trichloroethylene	U	Y		6.5	µg/kg	6.5	EPA8240
Vinyl acetate	U	Y		13	µg/kg	13	EPA8240
Xylenes	U	Y		6.5	µg/kg	6.5	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U	Y		21	µg/kg	21	EPA8080
alpha-Benzene hexachloride	U	Y		21	µg/kg	21	EPA8080
beta-Benzene hexachloride	U	Y		21	µg/kg	21	EPA8080
delta-Benzene hexachloride	U	Y		21	µg/kg	21	EPA8080
alpha-Chlordane	U	Y		21	µg/kg	21	EPA8080
gamma-Chlordane	U	Y		21	µg/kg	21	EPA8080
p,p'-DDD	U	Y		43	µg/kg	43	EPA8080
p,p'-DDE	U	Y		43	µg/kg	43	EPA8080
p,p'-DDT	U	Y		43	µg/kg	43	EPA8080
Dieldrin	U	Y		43	µg/kg	43	EPA8080
Endosulfan I	U	Y		21	µg/kg	21	EPA8080
Endosulfan II	U	Y		43	µg/kg	43	EPA8080
Endosulfan sulfate	U	Y		43	µg/kg	43	EPA8080
Endrin	U	Y		43	µg/kg	43	EPA8080
Endrin ketone	U	Y		43	µg/kg	43	EPA8080
Heptachlor	U	Y		21	µg/kg	21	EPA8080
Heptachlor epoxide	U	Y		21	µg/kg	21	EPA8080
Heptachlorodibenzo-p-dioxin isomers	J	Y		0.80	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	J	Y		0.30	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U	Y		0.30	ng/g	0.30	EPA8280
Hexachlorodibenzo-p-furan isomers	U	Y		0.10	ng/g	0.10	EPA8280
Lindane	U	Y		21	µg/kg	21	EPA8080
Methoxychlor	U	Y		210	µg/kg	210	EPA8080
Octachlorodibenzo-p-dioxin		Y		3.9	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	J	Y		0.20	ng/g	0.10	EPA8280
PCB 1016	U	Y		430	µg/kg	430	EPA8080
PCB 1221	U	Y		850	µg/kg	850	EPA8080
PCB 1232	U	Y		430	µg/kg	430	EPA8080
PCB 1242	U	Y		430	µg/kg	430	EPA8080
PCB 1248	U	Y		430	µg/kg	430	EPA8080
PCB 1254	U	Y		430	µg/kg	430	EPA8080
PCB 1260	U	Y		430	µg/kg	430	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U	Y		0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U	Y		0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U	Y		0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U	Y		0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U	Y		0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U	Y		0.10	ng/g	0.10	EPA8280
Toxaphene	U	Y		2,100	µg/kg	2,100	EPA8080

SAMPLE NAME: D43110704 (Continued) Sample ID: 100321

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Radionuclide Indicators and Radionuclides							
Gross alpha		Y		19±16	pCi/g	8.0	EPA900.0
Nonvolatile beta		Y		20±22	pCi/g	9.9	EPA900.0
Radium, total alpha-emitting		YV		1.2±0.86	pCi/g	0.060	EPA903.0
Tritium		Y		3.5±0.71	pCi/g	1.3	EPA906.0

SAMPLE NAME: D43110705 Sample ID: 100322

Location (SRS Coordinates): 18576.98E 66634.66N
Ground Elevation Above MSL: 132.8 ft
Depth of Core Interval: 6.00 to 8.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 3/4 USC Soil Classification: SM Percent Solids: 85.00

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U	Y		1.0	mg/kg	1.0	EPA7060
Barium	U	Y		21	mg/kg	21	EPA6010
Cadmium	U	Y		0.52	mg/kg	0.52	EPA6010
Chromium		Y		24	mg/kg	1.0	EPA6010
Copper		Y		6.0	mg/kg	2.6	EPA6010
Lead		Y		3.8	mg/kg	0.30	EPA7421
Manganese		Y		490	mg/kg	1.6	EPA6010
Mercury	U	Y		0.12	mg/kg	0.12	EPA7470
Nickel	U	Y		4.1	mg/kg	4.1	EPA6010
Selenium	U	Y		0.50	mg/kg	0.50	EPA7740
Silver	U	Y		1.0	mg/kg	1.0	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U	Y		390	µg/kg	390	EPA8270
Acenaphthylene	U	Y		390	µg/kg	390	EPA8270
Anthracene	U	Y		390	µg/kg	390	EPA8270
Benzo(a)anthracene	U	Y		390	µg/kg	390	EPA8270
Benzo(b)fluoranthene	U	Y		390	µg/kg	390	EPA8270
Benzo(k)fluoranthene	U	Y		390	µg/kg	390	EPA8270
Benzoic acid	U	Y		2,000	µg/kg	2,000	EPA8270
Benzo(g,h,i)perylene	U	Y		390	µg/kg	390	EPA8270
Benzo(a)pyrene	U	Y		390	µg/kg	390	EPA8270
Benzyl alcohol	U	Y		390	µg/kg	390	EPA8270
Bis(2-chloroethoxy) methane	U	Y		390	µg/kg	390	EPA8270
Bis(2-chloroethyl) ether	U	Y		390	µg/kg	390	EPA8270
Bis(2-chloroisopropyl) ether	U	Y		390	µg/kg	390	EPA8270
Bis(2-ethylhexyl) phthalate		Y		470	µg/kg	390	EPA8270
4-Bromophenyl phenyl ether	U	Y		390	µg/kg	390	EPA8270
Butylbenzyl phthalate	J	Y		100	µg/kg	390	EPA8270
Sub. carboxylic acid	J	YN		200	µg/kg		EPA8270
4-Chloroaniline	U	Y		390	µg/kg	390	EPA8270

SAMPLE NAME: D43110705 (Continued) Sample ID: 100322

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
4-Chloro-m-cresol	U	Y		390	µg/kg	390	EPA8270
2-Chloronaphthalene	U	Y		390	µg/kg	390	EPA8270
2-Chlorophenol	U	Y		390	µg/kg	390	EPA8270
4-Chlorophenyl phenyl ether	U	Y		390	µg/kg	390	EPA8270
Chrysene	J	Y		43	µg/kg	390	EPA8270
o-Cresol (2-Methylphenol)	U	Y		390	µg/kg	390	EPA8270
p-Cresol (4-Methylphenol)	U	Y		390	µg/kg	390	EPA8270
Dibenz(a,h)anthracene	U	Y		390	µg/kg	390	EPA8270
Dibenzofuran	U	Y		390	µg/kg	390	EPA8270
Di-n-butyl phthalate	J	YV		120	µg/kg	390	EPA8270
1,2-Dichlorobenzene	U	Y		390	µg/kg	390	EPA8270
1,3-Dichlorobenzene	U	Y		390	µg/kg	390	EPA8270
1,4-Dichlorobenzene	U	Y		390	µg/kg	390	EPA8270
3,3'-Dichlorobenzidine	U	Y		780	µg/kg	780	EPA8270
2,4-Dichlorophenol	U	Y		390	µg/kg	390	EPA8270
Diethyl phthalate	U	Y		390	µg/kg	390	EPA8270
2,4-Dimethyl phenol	U	Y		390	µg/kg	390	EPA8270
Dimethyl phthalate	U	Y		390	µg/kg	390	EPA8270
2,4-Dinitrophenol	U	Y		2,000	µg/kg	2,000	EPA8270
2,4-Dinitrotoluene	U	Y		390	µg/kg	390	EPA8270
2,6-Dinitrotoluene	U	Y		390	µg/kg	390	EPA8270
Di-n-octyl phthalate	U	Y		390	µg/kg	390	EPA8270
Fluoranthene	J	Y		83	µg/kg	390	EPA8270
Fluorene	U	Y		390	µg/kg	390	EPA8270
Hexachlorobenzene	U	Y		390	µg/kg	390	EPA8270
Hexachlorobutadiene	U	Y		390	µg/kg	390	EPA8270
Hexachlorocyclopentadiene	U	Y		390	µg/kg	390	EPA8270
Hexachloroethane	U	Y		390	µg/kg	390	EPA8270
Indeno(1,2,3-c,d)pyrene	U	Y		390	µg/kg	390	EPA8270
Isophorone	U	Y		390	µg/kg	390	EPA8270
2-Methyl-4,6-dinitrophenol	U	Y		2,000	µg/kg	2,000	EPA8270
2-Methylnaphthalene	U	Y		390	µg/kg	390	EPA8270
Naphthalene	U	Y		390	µg/kg	390	EPA8270
o-Nitroaniline	U	Y		2,000	µg/kg	2,000	EPA8270
m-Nitroaniline	U	Y		2,000	µg/kg	2,000	EPA8270
p-Nitroaniline	U	Y		2,000	µg/kg	2,000	EPA8270
Nitrobenzene	U	Y		390	µg/kg	390	EPA8270
2-Nitrophenol	U	Y		390	µg/kg	390	EPA8270
4-Nitrophenol	U	Y		2,000	µg/kg	2,000	EPA8270
N-Nitrosodiphenylamine	U	Y		390	µg/kg	390	EPA8270
N-Nitrosodipropylamine	UJ	CY		390	µg/kg	390	EPA8270
Pentachlorophenol	U	Y		2,000	µg/kg	2,000	EPA8270
Phenanthrene	J	Y		78	µg/kg	390	EPA8270
Phenol	U	Y		390	µg/kg	390	EPA8270
Sub. propanoic acid	J	YN		600	µg/kg		EPA8270
Pyrene	J	Y		89	µg/kg	390	EPA8270
1,2,4-Trichlorobenzene	U	Y		390	µg/kg	390	EPA8270
2,4,5-Trichlorophenol	U	Y		2,000	µg/kg	2,000	EPA8270
2,4,6-Trichlorophenol	U	Y		390	µg/kg	390	EPA8270
Unknown hydrocarbon	J	YN		200	µg/kg		EPA8270

SAMPLE NAME: D43110705 (Continued) Sample ID: 100322

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Unknown hydrocarbon	J	YN		200	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		400	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		200	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		300	µg/kg		EPA8270
Unknown hydrocarbon	J	YN		200	µg/kg		EPA8270
Unknown	J	YN		400	µg/kg		EPA8270
Unknown	J	YN		200	µg/kg		EPA8270
Unknown ketone	J	YNV		4,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	YV		57	µg/kg	12	EPA8240
Benzene	U	Y		6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U	Y		6.0	µg/kg	6.0	EPA8240
Bromoform	U	Y		6.0	µg/kg	6.0	EPA8240
Bromomethane (Methyl bromide)	U	Y		12	µg/kg	12	EPA8240
Carbon disulfide	U	Y		6.0	µg/kg	6.0	EPA8240
Carbon tetrachloride	U	Y		6.0	µg/kg	6.0	EPA8240
Chlorobenzene	U	Y		6.0	µg/kg	6.0	EPA8240
Chloroethane	U	Y		12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U	Y		12	µg/kg	12	EPA8240
Chloroform	U	Y		6.0	µg/kg	6.0	EPA8240
Chloromethane (Methyl chloride)	U	Y		12	µg/kg	12	EPA8240
Dibromochloromethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethylene	U	Y		6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U	Y		6.0	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)	U	YV		6.0	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U	Y		6.0	µg/kg	6.0	EPA8240
cis-1,3-Dichloropropene	U	Y		6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U	Y		6.0	µg/kg	6.0	EPA8240
Ethylbenzene	U	Y		6.0	µg/kg	6.0	EPA8240
2-Hexanone	U	Y		12	µg/kg	12	EPA8240
Methyl ethyl ketone	U	Y		12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U	Y		12	µg/kg	12	EPA8240
Styrene	U	Y		6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U	Y		6.0	µg/kg	6.0	EPA8240
Toluene	U	Y		6.0	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U	Y		6.0	µg/kg	6.0	EPA8240
Trichloroethylene	U	Y		6.0	µg/kg	6.0	EPA8240
Vinyl acetate	U	Y		12	µg/kg	12	EPA8240
Xylenes	U	Y		6.0	µg/kg	6.0	EPA8240

SAMPLE NAME: D43110705 (Continued) Sample ID: 100322

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U	Y		2.0	µg/kg	2.0	EPA8080
alpha-Benzene hexachloride	U	Y		2.0	µg/kg	2.0	EPA8080
beta-Benzene hexachloride	U	Y		2.0	µg/kg	2.0	EPA8080
delta-Benzene hexachloride	U	Y		2.0	µg/kg	2.0	EPA8080
alpha-Chlordane	U	Y		2.0	µg/kg	2.0	EPA8080
gamma-Chlordane	U	Y		2.0	µg/kg	2.0	EPA8080
p,p'-DDD	U	Y		3.9	µg/kg	3.9	EPA8080
p,p'-DDE	U	Y		3.9	µg/kg	3.9	EPA8080
p,p'-DDT	U	Y		3.9	µg/kg	3.9	EPA8080
Dieldrin	U	Y		3.9	µg/kg	3.9	EPA8080
Endosulfan I	U	Y		2.0	µg/kg	2.0	EPA8080
Endosulfan II	U	Y		3.9	µg/kg	3.9	EPA8080
Endosulfan sulfate	U	Y		3.9	µg/kg	3.9	EPA8080
Endrin	U	Y		3.9	µg/kg	3.9	EPA8080
Endrin ketone	U	Y		3.9	µg/kg	3.9	EPA8080
Heptachlor	U	Y		2.0	µg/kg	2.0	EPA8080
Heptachlor epoxide	U	Y		2.0	µg/kg	2.0	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U	Y		0.30	ng/g	0.30	EPA8280
Heptachlorodibenzo-p-furan isomers	U	Y		0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U	Y		0.40	ng/g	0.40	EPA8280
Hexachlorodibenzo-p-furan isomers	U	Y		0.10	ng/g	0.10	EPA8280
Lindane	U	Y		2.0	µg/kg	2.0	EPA8080
Methoxychlor	U	Y		20	µg/kg	20	EPA8080
Octachlorodibenzo-p-dioxin		Y		11	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U	Y		0.20	ng/g	0.20	EPA8280
PCB 1016	U	Y		39	µg/kg	39	EPA8080
PCB 1221	U	Y		78	µg/kg	78	EPA8080
PCB 1232	U	Y		39	µg/kg	39	EPA8080
PCB 1242	U	Y		39	µg/kg	39	EPA8080
PCB 1248	U	Y		39	µg/kg	39	EPA8080
PCB 1254	J	Y		24	µg/kg	39	EPA8080
PCB 1260	U	Y		39	µg/kg	39	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U	Y		0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U	Y		0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U	Y		0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U	Y		0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U	Y		0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U	Y		0.10	ng/g	0.10	EPA8280
Toxaphene	U	Y		200	µg/kg	200	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha		Y		12±15	pCi/g	8.0	EPA900.0
Gross alpha	U	Y		7.1	pCi/g	7.1	EPA900.0
Nonvolatile beta		Y		22±23	pCi/g	9.0	EPA900.0
Nonvolatile beta		Y		8.2±19	pCi/g	7.8	EPA900.0
Radium, total alpha-emitting	U	YV		1.1±0.70	pCi/g	0.10	EPA903.0
Radium, total alpha-emitting	U	YV		1.8±1.0	pCi/g	0.10	EPA903.0
Tritium		Y		3.4±0.79	pCi/g	1.2	EPA906.0
Tritium		Y		5.3±1.3	pCi/g	2.0	EPA906.0

SAMPLE NAME: D43I10705 (Continued) Sample ID: 100322

TCLP Compounds (Metals and Organics)

Arsenic, TCLP	U	Y		100	µg/L	100	EPA6010
Barium, TCLP	U	Y		200	µg/L	200	EPA6010
Benzene	U	Y		50	µg/L	50	EPA8240
Cadmium, TCLP	U	Y		5.0	µg/L	5.0	EPA6010
Carbon tetrachloride	U	Y		50	µg/L	50	EPA8240
alpha-Chlordane	U	Y		0.11	µg/L	0.11	EPA8080
gamma-Chlordane	U	Y		0.11	µg/L	0.11	EPA8080
Chlorobenzene	U	Y		50	µg/L	50	EPA8240
Chloroethene (Vinyl chloride)	U	Y		100	µg/L	100	EPA8240
Chloroform	U	Y		50	µg/L	50	EPA8240
Chromium, TCLP	U	Y		10	µg/L	10	EPA6010
o-Cresol (2-Methylphenol)	UJ	YO	L	100	µg/L	100	EPA8270
1,4-Dichlorobenzene	UJ	YO	L	100	µg/L	100	EPA8270
1,2-Dichloroethane	U	Y		50	µg/L	50	EPA8240
1,1-Dichloroethylene	U	Y		50	µg/L	50	EPA8240
2,4-Dichlorophenoxyacetic acid	U	Y		10	µg/L	10	EPA8150
2,4-Dinitrotoluene	UJ	YO	L	100	µg/L	100	EPA8270
Endrin	U	Y		0.23	µg/L	0.23	EPA8080
Heptachlor	U	Y		0.11	µg/L	0.11	EPA8080
Heptachlor epoxide	U	Y		0.11	µg/L	0.11	EPA8080
Hexachlorobenzene	UJ	YO	L	100	µg/L	100	EPA8270
Hexachlorobutadiene	UJ	YO	L	100	µg/L	100	EPA8270
Hexachloroethane	UJ	YO	L	100	µg/L	100	EPA8270
Lead, TCLP	U	Y		90	µg/L	90	EPA6010
Lindane	U	Y		0.11	µg/L	0.11	EPA8080
Mercury, TCLP	U	Y		0.20	µg/L	0.20	EPA7470
Methoxychlor	U	Y		1.1	µg/L	1.1	EPA8080
Methyl ethyl ketone	U	Y		100	µg/L	100	EPA8240
Nitrobenzene	UJ	YO	L	100	µg/L	100	EPA8270
Pentachlorophenol	UJ	YO	L	500	µg/L	500	EPA8270
Pyridine	UJ	YO	L	100	µg/L	100	EPA8270
Selenium, TCLP	U	Y		100	µg/L	100	EPA6010
Silver, TCLP	U	Y		10	µg/L	10	EPA6010
Tetrachloroethylene	U	Y		50	µg/L	50	EPA8240
Toxaphene	U	Y		11	µg/L	11	EPA8080
Toxaphene	U	Y		11	µg/L	11	EPA8080
2,4,5-TP (Silvex)	U	Y		5.0	µg/L	5.0	EPA8150
Trichloroethylene	U	Y		50	µg/L	50	EPA8240
2,4,5-Trichlorophenol	UJ	YO	L	500	µg/L	500	EPA8270
2,4,6-Trichlorophenol	UJ	YO	L	100	µg/L	100	EPA8270
2,4,5-T	U	Y		5.0	µg/L	5.0	EPA8150
m,p-Cresol	UJ	YO	L	100	µg/L	100	EPA8270

SAMPLE NAME: D431-10706 Sample ID: 100326

Location (SRS Coordinates): 18576.98E 66634.66N
Ground Elevation Above MSL: 132.8 ft
Depth of Core Interval: 8.00 to 10.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 4/6 USC Soil Classification: SC Percent Solids: 77.60

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				12	meq/100g	2.0	EPA9080
pH	J	Q		3.5	pH	0.010	EPA9045
Specific conductance				210	µS/cm	1.0	EPA9050
Total organic carbon				1,400	mg/kg	150	EPA415.1
Total Metals							
Arsenic				1.0	mg/kg	1.0	EPA7060
Barium				26	mg/kg	25	EPA6010
Cadmium	U			0.63	mg/kg	0.63	EPA6010
Chromium				12	mg/kg	1.3	EPA6010
Copper				35	mg/kg	3.2	EPA6010
Lead				2.1	mg/kg	0.31	EPA7421
Manganese				86	mg/kg	1.9	EPA6010
Mercury	U			0.13	mg/kg	0.13	EPA7470
Nickel	U			5.0	mg/kg	5.0	EPA6010
Selenium	U			0.52	mg/kg	0.52	EPA7740
Silver	U			1.3	mg/kg	1.3	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			410	µg/kg	410	EPA8270
Acenaphthylene	U			410	µg/kg	410	EPA8270
Anthracene	U			410	µg/kg	410	EPA8270
Benzo(a)anthracene	U			410	µg/kg	410	EPA8270
Benzo(b)fluoranthene	U			410	µg/kg	410	EPA8270
Benzo(k)fluoranthene	U			410	µg/kg	410	EPA8270
Benzoic acid	U			2,000	µg/kg	2,000	EPA8270
Benzo(g,h,i)perylene	U			410	µg/kg	410	EPA8270
Benzo(a)pyrene	U			410	µg/kg	410	EPA8270
Benzyl alcohol	U			410	µg/kg	410	EPA8270
Bis(2-chloroethoxy) methane	U			410	µg/kg	410	EPA8270
Bis(2-chloroethyl) ether	U			410	µg/kg	410	EPA8270
Bis(2-chloroisopropyl) ether	U			410	µg/kg	410	EPA8270
Bis(2-ethylhexyl) phthalate	U			410	µg/kg	410	EPA8270
4-Bromophenyl phenyl ether	U			410	µg/kg	410	EPA8270
Butylbenzyl phthalate	U			410	µg/kg	410	EPA8270
4-Chloroaniline	U			410	µg/kg	410	EPA8270
4-Chloro-m-cresol	U			410	µg/kg	410	EPA8270
2-Chloronaphthalene	U			410	µg/kg	410	EPA8270
2-Chlorophenol	U			410	µg/kg	410	EPA8270
4-Chlorophenyl phenyl ether	U			410	µg/kg	410	EPA8270
Chrysene	U			410	µg/kg	410	EPA8270
o-Cresol (2-Methylphenol)	U			410	µg/kg	410	EPA8270

SAMPLE NAME: D43110706 (Continued) Sample ID: 100326

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
p-Cresol (4-Methylphenol)	U			410	µg/kg	410	EPA8270
Dibenz(a,h)anthracene	U			410	µg/kg	410	EPA8270
Dibenzofuran	U			410	µg/kg	410	EPA8270
Di-n-butyl phthalate	UJ	V		110	µg/kg	410	EPA8270
1,2-Dichlorobenzene	U			410	µg/kg	410	EPA8270
1,3-Dichlorobenzene	U			410	µg/kg	410	EPA8270
1,4-Dichlorobenzene	U			410	µg/kg	410	EPA8270
3,3'-Dichlorobenzidine	U			810	µg/kg	810	EPA8270
2,4-Dichlorophenol	U			410	µg/kg	410	EPA8270
Diethyl phthalate	U			410	µg/kg	410	EPA8270
2,4-Dimethyl phenol	U			410	µg/kg	410	EPA8270
Dimethyl phthalate	U			410	µg/kg	410	EPA8270
2,4-Dinitrophenol	U			2,000	µg/kg	2,000	EPA8270
2,4-Dinitrotoluene	U			410	µg/kg	410	EPA8270
2,6-Dinitrotoluene	U			410	µg/kg	410	EPA8270
Di-n-octyl phthalate	U			410	µg/kg	410	EPA8270
Fluoranthene	U			410	µg/kg	410	EPA8270
Fluorene	U			410	µg/kg	410	EPA8270
Hexachlorobenzene	U			410	µg/kg	410	EPA8270
Hexachlorobutadiene	U			410	µg/kg	410	EPA8270
Hexachlorocyclopentadiene	U			410	µg/kg	410	EPA8270
Hexachloroethane	U			410	µg/kg	410	EPA8270
Indeno(1,2,3-c,d)pyrene	U			410	µg/kg	410	EPA8270
Isophorone	U			410	µg/kg	410	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,000	µg/kg	2,000	EPA8270
2-Methylnaphthalene	U			410	µg/kg	410	EPA8270
Naphthalene	U			410	µg/kg	410	EPA8270
o-Nitroaniline	U			2,000	µg/kg	2,000	EPA8270
m-Nitroaniline	U			2,000	µg/kg	2,000	EPA8270
p-Nitroaniline	U			2,000	µg/kg	2,000	EPA8270
Nitrobenzene	U			410	µg/kg	410	EPA8270
2-Nitrophenol	U			410	µg/kg	410	EPA8270
4-Nitrophenol	U			2,000	µg/kg	2,000	EPA8270
N-Nitrosodiphenylamine	U			410	µg/kg	410	EPA8270
N-Nitrosodipropylamine	U			410	µg/kg	410	EPA8270
Pentachlorophenol	U			2,000	µg/kg	2,000	EPA8270
Phenanthrene	U			410	µg/kg	410	EPA8270
Phenol	U			410	µg/kg	410	EPA8270
Pyrene	U			410	µg/kg	410	EPA8270
1,2,4-Trichlorobenzene	U			410	µg/kg	410	EPA8270
2,4,5-Trichlorophenol	U			2,000	µg/kg	2,000	EPA8270
2,4,6-Trichlorophenol	U			410	µg/kg	410	EPA8270
Unknown hydrocarbon	J	N		500	µg/kg		EPA8270
Unknown	J	N		900	µg/kg		EPA8270
Unknown	J	N		400	µg/kg		EPA8270
Unknown ketone	J	NV		7,000	µg/kg		EPA8270

SAMPLE NAME: D43110706 (Continued) Sample ID: 100326

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	UJ	V		10	µg/kg	12	EPA8240
Benzene	U			6.2	µg/kg	6.2	EPA8240
Bromodichloromethane	U			6.2	µg/kg	6.2	EPA8240
Bromoform	U			6.2	µg/kg	6.2	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			6.2	µg/kg	6.2	EPA8240
Carbon tetrachloride	U			6.2	µg/kg	6.2	EPA8240
Chlorobenzene	U			6.2	µg/kg	6.2	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
Chloroform	U			6.2	µg/kg	6.2	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			6.2	µg/kg	6.2	EPA8240
1,1-Dichloroethane	U			6.2	µg/kg	6.2	EPA8240
1,2-Dichloroethane	U			6.2	µg/kg	6.2	EPA8240
1,1-Dichloroethylene	U			6.2	µg/kg	6.2	EPA8240
1,2-Dichloroethylene	U			6.2	µg/kg	6.2	EPA8240
Dichloromethane (Methylene chloride)	U	V		27	µg/kg	6.2	EPA8240
1,2-Dichloropropane	U			6.2	µg/kg	6.2	EPA8240
cis-1,3-Dichloropropene	U			6.2	µg/kg	6.2	EPA8240
trans-1,3-Dichloropropene	U			6.2	µg/kg	6.2	EPA8240
Ethylbenzene	U			6.2	µg/kg	6.2	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.2	µg/kg	6.2	EPA8240
1,1,2,2-Tetrachloroethane	U			6.2	µg/kg	6.2	EPA8240
Tetrachloroethylene	U			6.2	µg/kg	6.2	EPA8240
Toluene	U			6.2	µg/kg	6.2	EPA8240
1,1,1-Trichloroethane	U			6.2	µg/kg	6.2	EPA8240
1,1,2-Trichloroethane	U			6.2	µg/kg	6.2	EPA8240
Trichloroethylene	U			6.2	µg/kg	6.2	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			6.2	µg/kg	6.2	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	UJ	O	L	2.0	µg/kg	2.0	EPA8080
alpha-Benzene hexachloride	UJ	O	L	2.0	µg/kg	2.0	EPA8080
beta-Benzene hexachloride	UJ	O	L	2.0	µg/kg	2.0	EPA8080
delta-Benzene hexachloride	UJ	O	L	2.0	µg/kg	2.0	EPA8080
alpha-Chlordane	UJ	O	L	2.0	µg/kg	2.0	EPA8080
gamma-Chlordane	UJ	O	L	2.0	µg/kg	2.0	EPA8080
p,p'-DDD	UJ	O	L	4.0	µg/kg	4.0	EPA8080
p,p'-DDE	UJ	O	L	4.0	µg/kg	4.0	EPA8080
p,p'-DDT	UJ	O	L	4.0	µg/kg	4.0	EPA8080
Dieldrin	UJ	O	L	4.0	µg/kg	4.0	EPA8080
Endosulfan I	UJ	O	L	2.0	µg/kg	2.0	EPA8080
Endosulfan II	UJ	O	L	4.0	µg/kg	4.0	EPA8080
Endosulfan sulfate	UJ	O	L	4.0	µg/kg	4.0	EPA8080

SAMPLE NAME: D43110706 (Continued) Sample ID: 100326

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Endrin	UJ	O	L	4.0	µg/kg	4.0	EPA8080
Endrin ketone	UJ	O	L	4.0	µg/kg	4.0	EPA8080
Heptachlor	UJ	O	L	2.0	µg/kg	2.0	EPA8080
Heptachlor epoxide	UJ	O	L	2.0	µg/kg	2.0	EPA8080
Heptachlorodibenzo-p-dioxin isomers	J			0.30	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	UJ	O	L	2.0	µg/kg	2.0	EPA8080
Methoxychlor	UJ	O	L	20	µg/kg	20	EPA8080
Octachlorodibenzo-p-dioxin				26	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	UJ	O	L	40	µg/kg	40	EPA8080
PCB 1221	UJ	O	L	81	µg/kg	81	EPA8080
PCB 1232	UJ	O	L	40	µg/kg	40	EPA8080
PCB 1242	UJ	O	L	40	µg/kg	40	EPA8080
PCB 1248	UJ	O	L	40	µg/kg	40	EPA8080
PCB 1254	UJ	O	L	40	µg/kg	40	EPA8080
PCB 1260	UJ	O	L	40	µg/kg	40	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	UJ	O	L	200	µg/kg	200	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				14±14	pCi/g	6.9	EPA900.0
Gross alpha				25±16	pCi/g	6.7	EPA900.0
Nonvolatile beta				24±20	pCi/g	8.4	EPA900.0
Nonvolatile beta				22±19	pCi/g	8.1	EPA900.0
Radium, total alpha-emitting	U	V		1.4±1.1	pCi/g	0.090	EPA903.0
Radium, total alpha-emitting	U	V		1.5±1.2	pCi/g	0.10	EPA903.0
Tritium				13±2.3	pCi/g	1.8	EPA906.0
Tritium				11±2.0	pCi/g	1.7	EPA906.0
TCLP Compounds (Metals and Organics)							
Arsenic, TCLP	U			100	µg/L	100	EPA6010
Barium, TCLP	U			200	µg/L	200	EPA6010
Benzene	U			50	µg/L	50	EPA8240
Cadmium, TCLP	U			5.0	µg/L	5.0	EPA6010
Carbon tetrachloride	U			50	µg/L	50	EPA8240
alpha-Chlordane	U			0.11	µg/L	0.11	EPA8080
gamma-Chlordane	U			0.11	µg/L	0.11	EPA8080
Chlorobenzene	U			50	µg/L	50	EPA8240
Chloroethene (Vinyl chloride)	U			100	µg/L	100	EPA8240
Chloroform	U			50	µg/L	50	EPA8240

SAMPLE NAME: D43110706 (Continued) Sample ID: 100326

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
TCLP Compounds (Metals and Organics)							
Chromium, TCLP	U			10	µg/L	10	EPA6010
o-Cresol (2-Methylphenol)	U			100	µg/L	100	EPA8270
1,4-Dichlorobenzene	U			100	µg/L	100	EPA8270
1,2-Dichloroethane	U			50	µg/L	50	EPA8240
1,1-Dichloroethylene	U			50	µg/L	50	EPA8240
2,4-Dichlorophenoxyacetic acid	U			10	µg/L	10	EPA8150
2,4-Dinitrotoluene	U			100	µg/L	100	EPA8270
Endrin	U			0.21	µg/L	0.21	EPA8080
Heptachlor	U			0.11	µg/L	0.11	EPA8080
Heptachlor epoxide	U			0.11	µg/L	0.11	EPA8080
Hexachlorobenzene	U			100	µg/L	100	EPA8270
Hexachlorobutadiene	U			100	µg/L	100	EPA8270
Hexachloroethane	U			100	µg/L	100	EPA8270
Lead, TCLP	U			90	µg/L	90	EPA6010
Lindane	U			0.11	µg/L	0.11	EPA8080
Mercury, TCLP	U			0.20	µg/L	0.20	EPA7470
Methoxychlor	U			1.1	µg/L	1.1	EPA8080
Methyl ethyl ketone	U			100	µg/L	100	EPA8240
Nitrobenzene	U			100	µg/L	100	EPA8270
Pentachlorophenol	U			500	µg/L	500	EPA8270
Pyridine	U			100	µg/L	100	EPA8270
Selenium, TCLP	U			100	µg/L	100	EPA6010
Silver, TCLP	U			10	µg/L	10	EPA6010
Tetrachloroethylene	U			50	µg/L	50	EPA8240
Toxaphene	U			11	µg/L	11	EPA8080
Toxaphene	U			11	µg/L	11	EPA8080
2,4,5-TP (Silvex)	U			5.0	µg/L	5.0	EPA8150
Trichloroethylene	U			50	µg/L	50	EPA8240
2,4,5-Trichlorophenol	U			500	µg/L	500	EPA8270
2,4,6-Trichlorophenol	U			100	µg/L	100	EPA8270
2,4,5-T	U			5.0	µg/L	5.0	EPA8150
m,p-Cresol	U			100	µg/L	100	EPA8270

SAMPLE NAME: D43110707 Sample ID: 100328

Location (SRS Coordinates): 18576.98E 66634.66N
Ground Elevation Above MSL: 132.8 ft
Depth of Core Interval: 10.00 to 12.00 ft
Sample Type: Normal
Sample Color: 10R 4/6
Sample Matrix: Soil
USC Soil Classification: CL
Sample Moisture: Damp
Percent Solids: 86.50

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				2.7	mg/kg	1.1	EPA7060
Barium	U			20	mg/kg	20	EPA6010
Cadmium	U			0.49	mg/kg	0.49	EPA6010
Chromium				19	mg/kg	0.98	EPA6010

SAMPLE NAME: D43110707 (Continued) Sample ID: 100328

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Copper				67	mg/kg	2.5	EPA6010
Lead				1.3	mg/kg	0.34	EPA7421
Manganese				59	mg/kg	1.5	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel	U			3.9	mg/kg	3.9	EPA6010
Selenium	U			0.56	mg/kg	0.56	EPA7740
Silver	U			0.98	mg/kg	0.98	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			390	µg/kg	390	EPA8270
Acenaphthylene	U			390	µg/kg	390	EPA8270
Anthracene	U			390	µg/kg	390	EPA8270
Benzo(a)anthracene	U			390	µg/kg	390	EPA8270
Benzo(b)fluoranthene	U			390	µg/kg	390	EPA8270
Benzo(k)fluoranthene	U			390	µg/kg	390	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	U			390	µg/kg	390	EPA8270
Benzo(a)pyrene	U			390	µg/kg	390	EPA8270
Benzyl alcohol	U			390	µg/kg	390	EPA8270
Bis(2-chloroethoxy) methane	U			390	µg/kg	390	EPA8270
Bis(2-chloroethyl) ether	U			390	µg/kg	390	EPA8270
Bis(2-chloroisopropyl) ether	U			390	µg/kg	390	EPA8270
Bis(2-ethylhexyl) phthalate	U			390	µg/kg	390	EPA8270
4-Bromophenyl phenyl ether	U			390	µg/kg	390	EPA8270
Butylbenzyl phthalate	U			390	µg/kg	390	EPA8270
4-Chloroaniline	U			390	µg/kg	390	EPA8270
4-Chloro-m-cresol	U			390	µg/kg	390	EPA8270
2-Chloronaphthalene	U			390	µg/kg	390	EPA8270
2-Chlorophenol	U			390	µg/kg	390	EPA8270
4-Chlorophenyl phenyl ether	U			390	µg/kg	390	EPA8270
Chrysene	U			390	µg/kg	390	EPA8270
o-Cresol (2-Methylphenol)	U			390	µg/kg	390	EPA8270
p-Cresol (4-Methylphenol)	U			390	µg/kg	390	EPA8270
Dibenz(a,h)anthracene	U			390	µg/kg	390	EPA8270
Dibenzofuran	U			390	µg/kg	390	EPA8270
Di-n-butyl phthalate	UJ	V		110	µg/kg	390	EPA8270
1,2-Dichlorobenzene	U			390	µg/kg	390	EPA8270
1,3-Dichlorobenzene	U			390	µg/kg	390	EPA8270
1,4-Dichlorobenzene	U			390	µg/kg	390	EPA8270
3,3'-Dichlorobenzidine	U			770	µg/kg	770	EPA8270
2,4-Dichlorophenol	U			390	µg/kg	390	EPA8270
Diethyl phthalate	U			390	µg/kg	390	EPA8270
2,4-Dimethyl phenol	U			390	µg/kg	390	EPA8270
Dimethyl phthalate	U			390	µg/kg	390	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			390	µg/kg	390	EPA8270
2,6-Dinitrotoluene	U			390	µg/kg	390	EPA8270
Di-n-octyl phthalate	J			44	µg/kg	390	EPA8270
Fluoranthene	U			390	µg/kg	390	EPA8270

SAMPLE NAME: D43110707 (Continued) Sample ID: 100328

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Fluorene	U			390	µg/kg	390	EPA8270
Hexachlorobenzene	U			390	µg/kg	390	EPA8270
Hexachlorobutadiene	U			390	µg/kg	390	EPA8270
Hexachlorocyclopentadiene	U			390	µg/kg	390	EPA8270
Hexachloroethane	U			390	µg/kg	390	EPA8270
Indeno(1,2,3-c,d)pyrene	U			390	µg/kg	390	EPA8270
Isophorone	U			390	µg/kg	390	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	U			390	µg/kg	390	EPA8270
Naphthalene	U			390	µg/kg	390	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U			390	µg/kg	390	EPA8270
2-Nitrophenol	U			390	µg/kg	390	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			390	µg/kg	390	EPA8270
N-Nitrosodipropylamine	U			390	µg/kg	390	EPA8270
Pentachlorophenol	U			1,900	µg/kg	1,900	EPA8270
Phenanthrene	U			390	µg/kg	390	EPA8270
Phenol	U			390	µg/kg	390	EPA8270
Pyrene	U			390	µg/kg	390	EPA8270
1,2,4-Trichlorobenzene	U			390	µg/kg	390	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			390	µg/kg	390	EPA8270
Unknown ketone	J	NV		5,000	µg/kg		EPA8270
Unknown phthalate	J	N		300	µg/kg		EPA8270
Unknown phthalate	J	N		700	µg/kg		EPA8270
Unknown phthalate	J	N		300	µg/kg		EPA8270
Unknown phthalate	J	N		300	µg/kg		EPA8270
Unknown phthalate	J	N		200	µg/kg		EPA8270
Unknown phthalate	J	N		300	µg/kg		EPA8270
Unknown phthalate	J	N		500	µg/kg		EPA8270
Unknown phthalate	J	N		200	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		12	µg/kg	12	EPA8240
Benzene	U			5.8	µg/kg	5.8	EPA8240
Bromodichloromethane	U			5.8	µg/kg	5.8	EPA8240
Bromoform	U			5.8	µg/kg	5.8	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			5.8	µg/kg	5.8	EPA8240
Carbon tetrachloride	U			5.8	µg/kg	5.8	EPA8240
Chlorobenzene	U			5.8	µg/kg	5.8	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
Chloroform	U			5.8	µg/kg	5.8	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			5.8	µg/kg	5.8	EPA8240

SAMPLE NAME: D43110707 (Continued) Sample ID: 100328

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1-Dichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1-Dichloroethylene	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloroethylene	U			5.8	µg/kg	5.8	EPA8240
Dichloromethane (Methylene chloride)	U	V		21	µg/kg	5.8	EPA8240
1,2-Dichloropropane	U			5.8	µg/kg	5.8	EPA8240
cis-1,3-Dichloropropene	U			5.8	µg/kg	5.8	EPA8240
trans-1,3-Dichloropropene	U			5.8	µg/kg	5.8	EPA8240
Ethylbenzene	U			5.8	µg/kg	5.8	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			5.8	µg/kg	5.8	EPA8240
1,1,2,2-Tetrachloroethane	U			5.8	µg/kg	5.8	EPA8240
Tetrachloroethylene	U			5.8	µg/kg	5.8	EPA8240
Toluene	U			5.8	µg/kg	5.8	EPA8240
1,1,1-Trichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1,2-Trichloroethane	U			5.8	µg/kg	5.8	EPA8240
Trichloroethylene	U			5.8	µg/kg	5.8	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			5.8	µg/kg	5.8	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.8	µg/kg	1.8	EPA8080
alpha-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
beta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
delta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
alpha-Chlordane	U			1.8	µg/kg	1.8	EPA8080
gamma-Chlordane	U			1.8	µg/kg	1.8	EPA8080
p,p'-DDD	U			3.6	µg/kg	3.6	EPA8080
p,p'-DDE	U			3.6	µg/kg	3.6	EPA8080
p,p'-DDT	U			3.6	µg/kg	3.6	EPA8080
Dieldrin	U			3.6	µg/kg	3.6	EPA8080
Endosulfan I	U			1.8	µg/kg	1.8	EPA8080
Endosulfan II	U			3.6	µg/kg	3.6	EPA8080
Endosulfan sulfate	U			3.6	µg/kg	3.6	EPA8080
Endrin	U			3.6	µg/kg	3.6	EPA8080
Endrin ketone	U			3.6	µg/kg	3.6	EPA8080
Heptachlor	U			1.8	µg/kg	1.8	EPA8080
Heptachlor epoxide	U			1.8	µg/kg	1.8	EPA8080
Heptachlorodibenzo-p-dioxin isomers	J			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			1.8	µg/kg	1.8	EPA8080
Methoxychlor	U			18	µg/kg	18	EPA8080
Octachlorodibenzo-p-dioxin				22	ng/g	0.90	EPA8280
Octachlorodibenzo-p-furan	U			0.60	ng/g	0.60	EPA8280
PCB 1016	U			36	µg/kg	36	EPA8080

SAMPLE NAME: D43110707 (Continued) Sample ID: 100328

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
PCB 1221	U			73	µg/kg	73	EPA8080
PCB 1232	U			36	µg/kg	36	EPA8080
PCB 1242	U			36	µg/kg	36	EPA8080
PCB 1248	U			36	µg/kg	36	EPA8080
PCB 1254	U			36	µg/kg	36	EPA8080
PCB 1260	U			36	µg/kg	36	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			180	µg/kg	180	EPA8080

SAMPLE NAME: D43110801 Sample ID: 100329

Location (SRS Coordinates): 18542.87E 66623.81N
Ground Elevation Above MSL: 132.8 ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 3/4 USC Soil Classification: SC Percent Solids: 94.30

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				7.9	meq/100g	2.0	EPA9080
pH	J	Q		4.6	pH	0.010	EPA9045
Specific conductance				33	µS/cm	1.0	EPA9050
Total organic carbon				5,500	mg/kg	200	EPA415.1
Total Metals							
Arsenic				1.2	mg/kg	1.0	EPA7060
Barium	U			20	mg/kg	20	EPA6010
Cadmium	U			0.51	mg/kg	0.51	EPA6010
Chromium				5.2	mg/kg	1.0	EPA6010
Copper	U			2.6	mg/kg	2.6	EPA6010
Lead				2.5	mg/kg	0.31	EPA7421
Manganese				63	mg/kg	1.5	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			4.1	mg/kg	4.1	EPA6010
Selenium	U			0.52	mg/kg	0.52	EPA7740
Silver	U			1.0	mg/kg	1.0	EPA6010

SAMPLE NAME: D43110801 (Continued) Sample ID: 100329

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			350	µg/kg	350	EPA8270
Acenaphthylene	U			350	µg/kg	350	EPA8270
Anthracene	U			350	µg/kg	350	EPA8270
Benzo(a)anthracene	U			350	µg/kg	350	EPA8270
Benzo(b)fluoranthene	U			350	µg/kg	350	EPA8270
Benzo(k)fluoranthene	U			350	µg/kg	350	EPA8270
Benzoic acid	U			1,700	µg/kg	1,700	EPA8270
Benzo(g,h,i)perylene	U			350	µg/kg	350	EPA8270
Benzo(a)pyrene	U			350	µg/kg	350	EPA8270
Benzyl alcohol	U			350	µg/kg	350	EPA8270
Bis(2-chloroethoxy) methane	U			350	µg/kg	350	EPA8270
Bis(2-chloroethyl) ether	U			350	µg/kg	350	EPA8270
Bis(2-chloroisopropyl) ether	U			350	µg/kg	350	EPA8270
Bis(2-ethylhexyl) phthalate	U			350	µg/kg	350	EPA8270
4-Bromophenyl phenyl ether	U			350	µg/kg	350	EPA8270
Butylbenzyl phthalate	U			350	µg/kg	350	EPA8270
4-Chloroaniline	U			350	µg/kg	350	EPA8270
4-Chloro-m-cresol	U			350	µg/kg	350	EPA8270
2-Chloronaphthalene	U			350	µg/kg	350	EPA8270
2-Chlorophenol	U			350	µg/kg	350	EPA8270
4-Chlorophenyl phenyl ether	U			350	µg/kg	350	EPA8270
Chrysene	U			350	µg/kg	350	EPA8270
o-Cresol (2-Methylphenol)	U			350	µg/kg	350	EPA8270
p-Cresol (4-Methylphenol)	U			350	µg/kg	350	EPA8270
Dibenz(a,h)anthracene	U			350	µg/kg	350	EPA8270
Dibenzofuran	U			350	µg/kg	350	EPA8270
Di-n-butyl phthalate	UJ	V		94	µg/kg	350	EPA8270
1,2-Dichlorobenzene	U			350	µg/kg	350	EPA8270
1,3-Dichlorobenzene	U			350	µg/kg	350	EPA8270
1,4-Dichlorobenzene	U			350	µg/kg	350	EPA8270
3,3'-Dichlorobenzidine	U			700	µg/kg	700	EPA8270
2,4-Dichlorophenol	U			350	µg/kg	350	EPA8270
Diethyl phthalate	U			350	µg/kg	350	EPA8270
2,4-Dimethyl phenol	U			350	µg/kg	350	EPA8270
Dimethyl phthalate	U			350	µg/kg	350	EPA8270
2,4-Dinitrophenol	U			1,700	µg/kg	1,700	EPA8270
2,4-Dinitrotoluene	U			350	µg/kg	350	EPA8270
2,6-Dinitrotoluene	U			350	µg/kg	350	EPA8270
Di-n-octyl phthalate	U			350	µg/kg	350	EPA8270
Fluoranthene	U			350	µg/kg	350	EPA8270
Fluorene	U			350	µg/kg	350	EPA8270
Hexachlorobenzene	U			350	µg/kg	350	EPA8270
Hexachlorobutadiene	U			350	µg/kg	350	EPA8270
Hexachlorocyclopentadiene	U			350	µg/kg	350	EPA8270
Hexachloroethane	U			350	µg/kg	350	EPA8270
Indeno(1,2,3-c,d)pyrene	U			350	µg/kg	350	EPA8270
Isophorone	U			350	µg/kg	350	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,700	µg/kg	1,700	EPA8270
2-Methylnaphthalene	U			350	µg/kg	350	EPA8270
Naphthalene	U			350	µg/kg	350	EPA8270

SAMPLE NAME: D431-10801 (Continued) Sample ID: 100329

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
o-Nitroaniline	U			1,700	µg/kg	1,700	EPA8270
m-Nitroaniline	U			1,700	µg/kg	1,700	EPA8270
p-Nitroaniline	U			1,700	µg/kg	1,700	EPA8270
Nitrobenzene	U			350	µg/kg	350	EPA8270
2-Nitrophenol	U			350	µg/kg	350	EPA8270
4-Nitrophenol	U			1,700	µg/kg	1,700	EPA8270
N-Nitrosodiphenylamine	U			350	µg/kg	350	EPA8270
N-Nitrosodipropylamine	U			350	µg/kg	350	EPA8270
Pentachlorophenol	U			1,700	µg/kg	1,700	EPA8270
Phenanthrene	U			350	µg/kg	350	EPA8270
Phenol	U			350	µg/kg	350	EPA8270
Pyrene	U			350	µg/kg	350	EPA8270
1,2,4-Trichlorobenzene	U			350	µg/kg	350	EPA8270
2,4,5-Trichlorophenol	U			1,700	µg/kg	1,700	EPA8270
2,4,6-Trichlorophenol	U			350	µg/kg	350	EPA8270
Unknown arom. hydrocarbon	J	N		100	µg/kg		EPA8270
Unknown hydrocarbon	J	N		300	µg/kg		EPA8270
Unknown	J	N		400	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		600	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Unknown acid	J	N		200	µg/kg		EPA8270
Unknown ketone	J	NV		5,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	UJ	V		6.6	µg/kg	11	EPA8240
Benzene	U			5.3	µg/kg	5.3	EPA8240
Bromodichloromethane	U			5.3	µg/kg	5.3	EPA8240
Bromoform	U			5.3	µg/kg	5.3	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.3	µg/kg	5.3	EPA8240
Carbon tetrachloride	U			5.3	µg/kg	5.3	EPA8240
Chlorobenzene	U			5.3	µg/kg	5.3	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.3	µg/kg	5.3	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.3	µg/kg	5.3	EPA8240
1,1-Dichloroethane	U			5.3	µg/kg	5.3	EPA8240
1,2-Dichloroethane	U			5.3	µg/kg	5.3	EPA8240
1,1-Dichloroethylene	U			5.3	µg/kg	5.3	EPA8240
1,2-Dichloroethylene	U			5.3	µg/kg	5.3	EPA8240
Dichloromethane (Methylene chloride)	U	V		16	µg/kg	5.3	EPA8240
1,2-Dichloropropane	U			5.3	µg/kg	5.3	EPA8240
cis-1,3-Dichloropropene	U			5.3	µg/kg	5.3	EPA8240
trans-1,3-Dichloropropene	U			5.3	µg/kg	5.3	EPA8240
Ethylbenzene	U			5.3	µg/kg	5.3	EPA8240

SAMPLE NAME: D43110801 (Continued) Sample ID: 100329

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.3	µg/kg	5.3	EPA8240
1,1,2,2-Tetrachloroethane	U			5.3	µg/kg	5.3	EPA8240
Tetrachloroethylene	U			5.3	µg/kg	5.3	EPA8240
Toluene	U			5.3	µg/kg	5.3	EPA8240
1,1,1-Trichloroethane	U			5.3	µg/kg	5.3	EPA8240
1,1,2-Trichloroethane	U			5.3	µg/kg	5.3	EPA8240
Trichloroethylene	U			5.3	µg/kg	5.3	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.3	µg/kg	5.3	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.7	µg/kg	1.7	EPA8080
alpha-Benzene hexachloride	U			1.7	µg/kg	1.7	EPA8080
beta-Benzene hexachloride	U			1.7	µg/kg	1.7	EPA8080
delta-Benzene hexachloride	U			1.7	µg/kg	1.7	EPA8080
alpha-Chlordane	U			1.7	µg/kg	1.7	EPA8080
gamma-Chlordane	U			1.7	µg/kg	1.7	EPA8080
p,p'-DDD	U			3.5	µg/kg	3.5	EPA8080
p,p'-DDE	J			0.69	µg/kg	3.5	EPA8080
p,p'-DDT	U			3.5	µg/kg	3.5	EPA8080
Dieldrin	U			3.5	µg/kg	3.5	EPA8080
Endosulfan I	J			1.0	µg/kg	1.7	EPA8080
Endosulfan II	U			3.5	µg/kg	3.5	EPA8080
Endosulfan sulfate				4.2	µg/kg	3.5	EPA8080
Endrin	U			3.5	µg/kg	3.5	EPA8080
Endrin ketone	U			3.5	µg/kg	3.5	EPA8080
Heptachlor	U			1.7	µg/kg	1.7	EPA8080
Heptachlor epoxide	U			1.7	µg/kg	1.7	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			1.7	µg/kg	1.7	EPA8080
Methoxychlor	U			17	µg/kg	17	EPA8080
Octachlorodibenzo-p-dioxin	J			0.70	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			35	µg/kg	35	EPA8080
PCB 1221	U			69	µg/kg	69	EPA8080
PCB 1232	U			35	µg/kg	35	EPA8080
PCB 1242	U			35	µg/kg	35	EPA8080
PCB 1248	U			35	µg/kg	35	EPA8080
PCB 1254	U			35	µg/kg	35	EPA8080
PCB 1260	U			35	µg/kg	35	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280

SAMPLE NAME: D43110801 (Continued) Sample ID: 100329

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			170	µg/kg	170	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				12±13	pCi/g	6.5	EPA900.0
Nonvolatile beta				8.4±18	pCi/g	7.9	EPA900.0
Radium, total alpha-emitting	U	V		0.56±0.62	pCi/g	0.070	EPA903.0
Tritium				9.6±1.9	pCi/g	1.7	EPA906.0

SAMPLE NAME: D43110802 Sample ID: 100330

Location (SRS Coordinates): 18542.87E 66623.81N
Ground Elevation Above MSL: 132.8 ft
Depth of Core Interval: 0.50 to 1.50 ft
Sample Type: Normal
Sample Color: 10R 3/4
Sample Matrix: Soil
USC Soil Classification: SC
Sample Moisture: Dry
Percent Solids: 89.40

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	J	I	L	1.3	mg/kg	1.1	EPA7060
Arsenic	J	I	L	1.9	mg/kg	1.1	EPA7060
Barium	U			20	mg/kg	20	EPA6010
Barium	U			22	mg/kg	22	EPA6010
Cadmium	U			0.50	mg/kg	0.50	EPA6010
Cadmium	U			0.54	mg/kg	0.54	EPA6010
Chromium	J	IX	H	8.8	mg/kg	0.99	EPA6010
Chromium	J	IX	H	17	mg/kg	1.1	EPA6010
Copper	U			2.5	mg/kg	2.5	EPA6010
Copper	U			2.7	mg/kg	2.7	EPA6010
Lead				4.0	mg/kg	0.33	EPA7421
Lead				4.5	mg/kg	0.33	EPA7421
Manganese				44	mg/kg	1.5	EPA6010
Manganese				60	mg/kg	1.6	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Mercury	UJ	Q		0.11	mg/kg	0.11	EPA7470
Nickel	U			4.0	mg/kg	4.0	EPA6010
Nickel	U			4.3	mg/kg	4.3	EPA6010
Selenium	UJ	I	L	0.56	mg/kg	0.56	EPA7740
Selenium	UJ	I	L	0.56	mg/kg	0.56	EPA7740
Silver	U			0.99	mg/kg	0.99	EPA6010
Silver	U			1.1	mg/kg	1.1	EPA6010

SAMPLE NAME: D43110802 (Continued) Sample ID: 100330

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			360	µg/kg	360	EPA8270
Acenaphthylene	U			360	µg/kg	360	EPA8270
Anthracene	U			360	µg/kg	360	EPA8270
Benzo(a)anthracene	U			360	µg/kg	360	EPA8270
Benzo(b)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(k)fluoranthene	U			360	µg/kg	360	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			360	µg/kg	360	EPA8270
Benzo(a)pyrene	U			360	µg/kg	360	EPA8270
Benzyl alcohol	U			360	µg/kg	360	EPA8270
Bis(2-chloroethoxy) methane	U			360	µg/kg	360	EPA8270
Bis(2-chloroethyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-chloroisopropyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-ethylhexyl) phthalate	U			360	µg/kg	360	EPA8270
4-Bromophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Butylbenzyl phthalate	U			360	µg/kg	360	EPA8270
4-Chloroaniline	U			360	µg/kg	360	EPA8270
4-Chloro-m-cresol	U			360	µg/kg	360	EPA8270
2-Chloronaphthalene	U			360	µg/kg	360	EPA8270
2-Chlorophenol	U			360	µg/kg	360	EPA8270
4-Chlorophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Chrysene	U			360	µg/kg	360	EPA8270
o-Cresol (2-Methylphenol)	U			360	µg/kg	360	EPA8270
p-Cresol (4-Methylphenol)	U			360	µg/kg	360	EPA8270
Dibenz(a,h)anthracene	U			360	µg/kg	360	EPA8270
Dibenzofuran	U			360	µg/kg	360	EPA8270
Di-n-butyl phthalate	UJ	V		90	µg/kg	360	EPA8270
1,2-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,3-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,4-Dichlorobenzene	U			360	µg/kg	360	EPA8270
3,3'-Dichlorobenzidine	U			720	µg/kg	720	EPA8270
2,4-Dichlorophenol	U			360	µg/kg	360	EPA8270
Diethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dimethyl phenol	U			360	µg/kg	360	EPA8270
Dimethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			360	µg/kg	360	EPA8270
2,6-Dinitrotoluene	U			360	µg/kg	360	EPA8270
Di-n-octyl phthalate	U			360	µg/kg	360	EPA8270
Fluoranthene	U			360	µg/kg	360	EPA8270
Fluorene	U			360	µg/kg	360	EPA8270
Hexachlorobenzene	U			360	µg/kg	360	EPA8270
Hexachlorobutadiene	U			360	µg/kg	360	EPA8270
Hexachlorocyclopentadiene	U			360	µg/kg	360	EPA8270
Hexachloroethane	U			360	µg/kg	360	EPA8270
Indeno(1,2,3-c,d)pyrene	U			360	µg/kg	360	EPA8270
Isophorone	U			360	µg/kg	360	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			360	µg/kg	360	EPA8270
Naphthalene	U			360	µg/kg	360	EPA8270

SAMPLE NAME: D43110802 (Continued) Sample ID: 100330

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			360	µg/kg	360	EPA8270
2-Nitrophenol	U			360	µg/kg	360	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			360	µg/kg	360	EPA8270
N-Nitrosodipropylamine	U			360	µg/kg	360	EPA8270
Pentachlorophenol	U			1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			360	µg/kg	360	EPA8270
Phenol	U			360	µg/kg	360	EPA8270
Pyrene	U			360	µg/kg	360	EPA8270
1,2,4-Trichlorobenzene	U			360	µg/kg	360	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			360	µg/kg	360	EPA8270
Unknown arom. hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown ketone	J	NV		7,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		11	µg/kg	11	EPA8240
Benzene	U			5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		16	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	U			5.5	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	U			5.5	µg/kg	5.5	EPA8240
Toluene	U			5.5	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240

SAMPLE NAME: D43110802 (Continued) Sample ID: 100330

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.5	µg/kg	5.5	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.8	µg/kg	1.8	EPA8080
alpha-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
beta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
delta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
alpha-Chlordane	U			1.8	µg/kg	1.8	EPA8080
gamma-Chlordane	U			1.8	µg/kg	1.8	EPA8080
p,p'-DDD	U			3.7	µg/kg	3.7	EPA8080
p,p'-DDE	U			3.7	µg/kg	3.7	EPA8080
p,p'-DDT	U			3.7	µg/kg	3.7	EPA8080
Dieldrin	U			3.7	µg/kg	3.7	EPA8080
Endosulfan I	U			1.8	µg/kg	1.8	EPA8080
Endosulfan II	U			3.7	µg/kg	3.7	EPA8080
Endosulfan sulfate	J			1.1	µg/kg	3.7	EPA8080
Endrin	U			3.7	µg/kg	3.7	EPA8080
Endrin ketone	U			3.7	µg/kg	3.7	EPA8080
Heptachlor	U			1.8	µg/kg	1.8	EPA8080
Heptachlor epoxide	U			1.8	µg/kg	1.8	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			1.8	µg/kg	1.8	EPA8080
Methoxychlor	U			18	µg/kg	18	EPA8080
Octachlorodibenzo-p-dioxin				2.3	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			37	µg/kg	37	EPA8080
PCB 1221	U			73	µg/kg	73	EPA8080
PCB 1232	U			37	µg/kg	37	EPA8080
PCB 1242	U			37	µg/kg	37	EPA8080
PCB 1248	U			37	µg/kg	37	EPA8080
PCB 1254	U			37	µg/kg	37	EPA8080
PCB 1260	U			37	µg/kg	37	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			180	µg/kg	180	EPA8080

SAMPLE NAME: D43110802 (Continued) Sample ID: 100330

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Radionuclide Indicators and Radionuclides							
Gross alpha				14±15	pCi/g	7.9	EPA900.0
Nonvolatile beta				16±23	pCi/g	9.9	EPA900.0
Radium, total alpha-emitting	U	V		1.0±0.86	pCi/g	0.070	EPA903.0
Tritium				11±2.0	pCi/g	1.7	EPA906.0

SAMPLE NAME: D43110803 Sample ID: 100331

Location (SRS Coordinates): 18542.87E 66623.81N
Ground Elevation Above MSL: 132.8 ft
Depth of Core Interval: 2.00 to 3.50 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 3/4 USC Soil Classification: SC Percent Solids: 86.30

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				3.9	mg/kg	1.0	EPA7060
Barium				42	mg/kg	22	EPA6010
Cadmium	U			0.54	mg/kg	0.54	EPA6010
Chromium				56	mg/kg	1.1	EPA6010
Copper				17	mg/kg	2.7	EPA6010
Lead				9.5	mg/kg	0.62	EPA7421
Manganese				67	mg/kg	1.6	EPA6010
Mercury				0.19	mg/kg	0.12	EPA7470
Nickel				6.2	mg/kg	4.3	EPA6010
Selenium				1.6	mg/kg	0.52	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
Volatile Organic Compounds							
Acetone	UJ	V		11	µg/kg	12	EPA8240
Benzene	U			5.8	µg/kg	5.8	EPA8240
Bromodichloromethane	U			5.8	µg/kg	5.8	EPA8240
Bromoform	U			5.8	µg/kg	5.8	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			5.8	µg/kg	5.8	EPA8240
Carbon tetrachloride	U			5.8	µg/kg	5.8	EPA8240
Chlorobenzene	U			5.8	µg/kg	5.8	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
Chloroform	U			5.8	µg/kg	5.8	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			5.8	µg/kg	5.8	EPA8240
1,1-Dichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1-Dichloroethylene	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloroethylene	U			5.8	µg/kg	5.8	EPA8240
Dichloromethane (Methylene chloride)	U	V		22	µg/kg	5.8	EPA8240

SAMPLE NAME: D43110803 (Continued) Sample ID: 100331

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,2-Dichloropropane	U			5.8	µg/kg	5.8	EPA8240
cis-1,3-Dichloropropene	U			5.8	µg/kg	5.8	EPA8240
trans-1,3-Dichloropropene	U			5.8	µg/kg	5.8	EPA8240
Ethylbenzene	U			5.8	µg/kg	5.8	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			5.8	µg/kg	5.8	EPA8240
1,1,2,2-Tetrachloroethane	U			5.8	µg/kg	5.8	EPA8240
Tetrachloroethylene	U			5.8	µg/kg	5.8	EPA8240
Toluene	U			5.8	µg/kg	5.8	EPA8240
1,1,1-Trichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1,2-Trichloroethane	U			5.8	µg/kg	5.8	EPA8240
Trichloroethylene	U			5.8	µg/kg	5.8	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			5.8	µg/kg	5.8	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha				9.1±13	pCi/g	7.1	EPA900.0
Nonvolatile beta				21±21	pCi/g	8.8	EPA900.0
Radium, total alpha-emitting	U	V		1.2±1.0	pCi/g	0.090	EPA903.0
Tritium				14±2.3	pCi/g	1.6	EPA906.0

SAMPLE NAME: D43110804 Sample ID: 100332

Location (SRS Coordinates): 18542.87E 66623.81N
Ground Elevation Above MSL: 132.8 ft
Depth of Core Interval: 4.00 to 5.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 2N2 USC Soil Classification: SM Percent Solids: 80.00

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				7.6	mg/kg	1.9	EPA7060
Barium				32	mg/kg	21	EPA6010
Cadmium	U			0.53	mg/kg	0.53	EPA6010
Chromium				75	mg/kg	1.1	EPA6010
Copper				38	mg/kg	2.7	EPA6010
Lead				19	mg/kg	1.5	EPA7421
Manganese				63	mg/kg	1.6	EPA6010
Mercury				0.28	mg/kg	0.13	EPA7470
Nickel				15	mg/kg	4.2	EPA6010
Selenium				0.97	mg/kg	0.49	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010

SAMPLE NAME: D43110804 (Continued) Sample ID: 100332

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			4,100	µg/kg	4,100	EPA8270
Acenaphthylene	U			4,100	µg/kg	4,100	EPA8270
Anthracene	U			4,100	µg/kg	4,100	EPA8270
Benzo(a)anthracene	U			4,100	µg/kg	4,100	EPA8270
Benzo(b)fluoranthene	U			4,100	µg/kg	4,100	EPA8270
Benzo(k)fluoranthene	U			4,100	µg/kg	4,100	EPA8270
Benzoic acid	U			20,000	µg/kg	20,000	EPA8270
Benzo(g,h,i)perylene	U			4,100	µg/kg	4,100	EPA8270
Benzo(a)pyrene	U			4,100	µg/kg	4,100	EPA8270
Benzyl alcohol	U			4,100	µg/kg	4,100	EPA8270
Bis(2-chloroethoxy) methane	U			4,100	µg/kg	4,100	EPA8270
Bis(2-chloroethyl) ether	U			4,100	µg/kg	4,100	EPA8270
Bis(2-chloroisopropyl) ether	U			4,100	µg/kg	4,100	EPA8270
Bis(2-ethylhexyl) phthalate				14,000	µg/kg	4,100	EPA8270
4-Bromophenyl phenyl ether	U			4,100	µg/kg	4,100	EPA8270
Butylbenzyl phthalate				28,000	µg/kg	4,100	EPA8270
Alkylbenzene C15H16	J	N		6,000	µg/kg		EPA8270
4-Chloroaniline	U			4,100	µg/kg	4,100	EPA8270
4-Chloro-m-cresol	U			4,100	µg/kg	4,100	EPA8270
2-Chloronaphthalene	U			4,100	µg/kg	4,100	EPA8270
2-Chlorophenol	U			4,100	µg/kg	4,100	EPA8270
4-Chlorophenyl phenyl ether	U			4,100	µg/kg	4,100	EPA8270
Chrysene	U			4,100	µg/kg	4,100	EPA8270
o-Cresol (2-Methylphenol)	U			4,100	µg/kg	4,100	EPA8270
p-Cresol (4-Methylphenol)	U			4,100	µg/kg	4,100	EPA8270
Dibenz(a,h)anthracene	U			4,100	µg/kg	4,100	EPA8270
Dibenzofuran	U			4,100	µg/kg	4,100	EPA8270
Di-n-butyl phthalate	UJ	V		460	µg/kg	4,100	EPA8270
1,2-Dichlorobenzene	U			4,100	µg/kg	4,100	EPA8270
1,3-Dichlorobenzene	U			4,100	µg/kg	4,100	EPA8270
1,4-Dichlorobenzene	U			4,100	µg/kg	4,100	EPA8270
3,3'-Dichlorobenzidine	U			8,100	µg/kg	8,100	EPA8270
2,4-Dichlorophenol	U			4,100	µg/kg	4,100	EPA8270
Diethyl phthalate	U			4,100	µg/kg	4,100	EPA8270
2,4-Dimethyl phenol	U			4,100	µg/kg	4,100	EPA8270
Dimethyl phthalate	U			4,100	µg/kg	4,100	EPA8270
2,4-Dinitrophenol	U			20,000	µg/kg	20,000	EPA8270
2,4-Dinitrotoluene	U			4,100	µg/kg	4,100	EPA8270
2,6-Dinitrotoluene	U			4,100	µg/kg	4,100	EPA8270
Di-n-octyl phthalate	J			430	µg/kg	4,100	EPA8270
Fluoranthene	J			580	µg/kg	4,100	EPA8270
Fluorene	U			4,100	µg/kg	4,100	EPA8270
Hexachlorobenzene	U			4,100	µg/kg	4,100	EPA8270
Hexachlorobutadiene	U			4,100	µg/kg	4,100	EPA8270
Hexachlorocyclopentadiene	U			4,100	µg/kg	4,100	EPA8270
Hexachloroethane	U			4,100	µg/kg	4,100	EPA8270
Indeno(1,2,3-c,d)pyrene	U			4,100	µg/kg	4,100	EPA8270
Isophorone	U			4,100	µg/kg	4,100	EPA8270
Methyldibenzothiophene isomer	J	N		10,000	µg/kg		EPA8270
Methyldibenzothiophene isomer	J	N		5,000	µg/kg		EPA8270

SAMPLE NAME: D43110804 (Continued) Sample ID: 100332

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Dimethylnaphthothiophene isomer	J	N		7,000	µg/kg		EPA8270
Dimethylphenanthrene isomer	J	N		9,000	µg/kg		EPA8270
Dimethylphenanthrene isomer	J	N		10,000	µg/kg		EPA8270
Dimethylphenanthrene isomer	J	N		5,000	µg/kg		EPA8270
Dimethylphenanthrene isomer	J	N		20,000	µg/kg		EPA8270
Dimethylphenanthrene isomer	J	N		9,000	µg/kg		EPA8270
Dimethylphenanthrene isomer	J	N		8,000	µg/kg		EPA8270
Trimethylphenanthrene isomer	J	N		10,000	µg/kg		EPA8270
Trimethylphenanthrene isomer	J	N		10,000	µg/kg		EPA8270
Methylanthracene isomer	J	N		20,000	µg/kg		EPA8270
Methylanthracene isomer	J	N		10,000	µg/kg		EPA8270
Methylanthracene isomer	J	N		9,000	µg/kg		EPA8270
Methylphenanthrene isomer	J	N		20,000	µg/kg		EPA8270
2-Methyl-4,6-dinitrophenol	U			20,000	µg/kg	20,000	EPA8270
2-Methylnaphthalene	U			4,100	µg/kg	4,100	EPA8270
Naphthalene	U			4,100	µg/kg	4,100	EPA8270
o-Nitroaniline	U			20,000	µg/kg	20,000	EPA8270
m-Nitroaniline	U			20,000	µg/kg	20,000	EPA8270
p-Nitroaniline	U			20,000	µg/kg	20,000	EPA8270
Nitrobenzene	U			4,100	µg/kg	4,100	EPA8270
2-Nitrophenol	U			4,100	µg/kg	4,100	EPA8270
4-Nitrophenol	U			20,000	µg/kg	20,000	EPA8270
N-Nitrosodiphenylamine	U			4,100	µg/kg	4,100	EPA8270
N-Nitrosodipropylamine	U			4,100	µg/kg	4,100	EPA8270
Pentachlorophenol	U			20,000	µg/kg	20,000	EPA8270
Phenanthrene				16,000	µg/kg	4,100	EPA8270
Phenol	U			4,100	µg/kg	4,100	EPA8270
Pyrene	J			2,700	µg/kg	4,100	EPA8270
1,2,4-Trichlorobenzene	U			4,100	µg/kg	4,100	EPA8270
2,4,5-Trichlorophenol	U			20,000	µg/kg	20,000	EPA8270
2,4,6-Trichlorophenol	U			4,100	µg/kg	4,100	EPA8270
Unknown arom. hydrocarbon	J	N		9,000	µg/kg		EPA8270
Unknown arom. hydrocarbon	J	N		9,000	µg/kg		EPA8270
Unknown arom. hydrocarbon	J	N		7,000	µg/kg		EPA8270
Unknown ketone	J	NV		7,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	L	V		560	µg/kg	12	EPA8240
Acetone		V		650	µg/kg	61	EPA8240
Benzene	U			6.1	µg/kg	6.1	EPA8240
Bromodichloromethane	U			6.1	µg/kg	6.1	EPA8240
Bromoform	U			6.1	µg/kg	6.1	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Hydrocarbon C10H16	J	N		50	µg/kg		EPA8240
Subst. benzene C9H12	J	N		10	µg/kg		EPA8240
Carbon disulfide	J			3.7	µg/kg	6.1	EPA8240
Carbon tetrachloride	U			6.1	µg/kg	6.1	EPA8240
Chlorobenzene	U			6.1	µg/kg	6.1	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240

SAMPLE NAME: D43110804 (Continued) Sample ID: 100332

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
Chloroform	U			6.1	µg/kg	6.1	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			6.1	µg/kg	6.1	EPA8240
1,1-Dichloroethane	U			6.1	µg/kg	6.1	EPA8240
1,2-Dichloroethane	J			4.0	µg/kg	6.1	EPA8240
1,1-Dichloroethylene	U			6.1	µg/kg	6.1	EPA8240
1,2-Dichloroethylene	U			6.1	µg/kg	6.1	EPA8240
Dichloromethane (Methylene chloride)	U	V		23	µg/kg	6.1	EPA8240
1,2-Dichloropropane	U			6.1	µg/kg	6.1	EPA8240
cis-1,3-Dichloropropene	U			6.1	µg/kg	6.1	EPA8240
trans-1,3-Dichloropropene	U			6.1	µg/kg	6.1	EPA8240
Ethylbenzene				16	µg/kg	6.1	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone				21	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.1	µg/kg	6.1	EPA8240
1,1,2,2-Tetrachloroethane	U			6.1	µg/kg	6.1	EPA8240
Tetrachloroethylene	U			6.1	µg/kg	6.1	EPA8240
Toluene				6.6	µg/kg	6.1	EPA8240
1,1,1-Trichloroethane	U			6.1	µg/kg	6.1	EPA8240
1,1,2-Trichloroethane	U			6.1	µg/kg	6.1	EPA8240
Trichloroethylene	U			6.1	µg/kg	6.1	EPA8240
Unknown	J	N		6.0	µg/kg		EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes				7.9	µg/kg	6.1	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	UJ	O	L	100	µg/kg	100	EPA8080
alpha-Benzene hexachloride	UJ	O	L	100	µg/kg	100	EPA8080
alpha-Benzene hexachloride	UJ	O	L	100	µg/kg	100	EPA8080
alpha-Benzene hexachloride	UJ	O	L	100	µg/kg	100	EPA8080
beta-Benzene hexachloride	UJ	O	L	100	µg/kg	100	EPA8080
beta-Benzene hexachloride	UJ	O	L	100	µg/kg	100	EPA8080
beta-Benzene hexachloride	UJ	O	L	100	µg/kg	100	EPA8080
delta-Benzene hexachloride	UJ	O	L	100	µg/kg	100	EPA8080
delta-Benzene hexachloride	UJ	O	L	100	µg/kg	100	EPA8080
delta-Benzene hexachloride	UJ	O	L	100	µg/kg	100	EPA8080
alpha-Chlordane	UJ	O	L	100	µg/kg	100	EPA8080
alpha-Chlordane	UJ	O	L	100	µg/kg	100	EPA8080
alpha-Chlordane	UJ	O	L	100	µg/kg	100	EPA8080
gamma-Chlordane	UJ	O	L	100	µg/kg	100	EPA8080
gamma-Chlordane	UJ	O	L	100	µg/kg	100	EPA8080
gamma-Chlordane	UJ	O	L	100	µg/kg	100	EPA8080
p,p'-DDD	UJ	O	L	200	µg/kg	200	EPA8080
p,p'-DDD	UJ	O	L	200	µg/kg	200	EPA8080
p,p'-DDD	UJ	O	L	200	µg/kg	200	EPA8080
p,p'-DDE	UJ	O	L	200	µg/kg	200	EPA8080
p,p'-DDE	UJ	O	L	200	µg/kg	200	EPA8080

SAMPLE NAME: D43110804 (Continued) Sample ID: 100332

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
p,p'-DDE	UJ	O	L	200	µg/kg	200	EPA8080
p,p'-DDT	UJ	O	L	200	µg/kg	200	EPA8080
p,p'-DDT	UJ	O	L	200	µg/kg	200	EPA8080
Dieldrin	UJ	O	L	200	µg/kg	200	EPA8080
Endosulfan I	UJ	O	L	100	µg/kg	100	EPA8080
Endosulfan I	UJ	O	L	100	µg/kg	100	EPA8080
Endosulfan I	UJ	O	L	100	µg/kg	100	EPA8080
Endosulfan II	UJ	O	L	200	µg/kg	200	EPA8080
Endosulfan II	UJ	O	L	200	µg/kg	200	EPA8080
Endosulfan II	UJ	O	L	200	µg/kg	200	EPA8080
Endosulfan sulfate	UJ	O	L	200	µg/kg	200	EPA8080
Endosulfan sulfate	UJ	O	L	200	µg/kg	200	EPA8080
Endosulfan sulfate	UJ	O	L	200	µg/kg	200	EPA8080
Endrin	UJ	O	L	200	µg/kg	200	EPA8080
Endrin ketone	UJ	O	L	200	µg/kg	200	EPA8080
Endrin ketone	UJ	O	L	200	µg/kg	200	EPA8080
Endrin ketone	UJ	O	L	200	µg/kg	200	EPA8080
Heptachlor	UJ	O	L	100	µg/kg	100	EPA8080
Heptachlor epoxide	UJ	O	L	100	µg/kg	100	EPA8080
Heptachlor epoxide	UJ	O	L	100	µg/kg	100	EPA8080
Heptachlor epoxide	UJ	O	L	100	µg/kg	100	EPA8080
Heptachlorodibenzo-p-dioxin isomers	J			0.30	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	UJ	O	L	100	µg/kg	100	EPA8080
Methoxychlor	UJ	O	L	1,000	µg/kg	1,000	EPA8080
Methoxychlor	UJ	O	L	1,000	µg/kg	1,000	EPA8080
Methoxychlor	UJ	O	L	1,000	µg/kg	1,000	EPA8080
Octachlorodibenzo-p-dioxin				2.1	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	UJ	O	L	2,000	µg/kg	2,000	EPA8080
PCB 1016	UJ	O	L	2,000	µg/kg	2,000	EPA8080
PCB 1016	UJ	O	L	2,000	µg/kg	2,000	EPA8080
PCB 1221	UJ	O	L	4,000	µg/kg	4,000	EPA8080
PCB 1221	UJ	O	L	4,000	µg/kg	4,000	EPA8080
PCB 1221	UJ	O	L	4,000	µg/kg	4,000	EPA8080
PCB 1232	UJ	O	L	2,000	µg/kg	2,000	EPA8080
PCB 1232	UJ	O	L	2,000	µg/kg	2,000	EPA8080
PCB 1232	UJ	O	L	2,000	µg/kg	2,000	EPA8080
PCB 1242	UJ	O	L	2,000	µg/kg	2,000	EPA8080
PCB 1242	UJ	O	L	2,000	µg/kg	2,000	EPA8080
PCB 1242	UJ	O	L	2,000	µg/kg	2,000	EPA8080
PCB 1248	UJ	O	L	2,000	µg/kg	2,000	EPA8080
PCB 1248	UJ	O	L	2,000	µg/kg	2,000	EPA8080
PCB 1248	UJ	O	L	2,000	µg/kg	2,000	EPA8080
PCB 1254	UJ	O	L	2,000	µg/kg	2,000	EPA8080
PCB 1254	UJ	O	L	2,000	µg/kg	2,000	EPA8080
PCB 1254	UJ	O	L	2,000	µg/kg	2,000	EPA8080
PCB 1260	UJ	O	L	2,000	µg/kg	2,000	EPA8080

SAMPLE NAME: D43110804 (Continued) Sample ID: 100332

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
PCB 1260	UJ	O	L	2,000	µg/kg	2,000	EPA8080
PCB 1260	UJ	O	L	2,000	µg/kg	2,000	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	UJ	O	L	10,000	µg/kg	10,000	EPA8080
Toxaphene	UJ	O	L	10,000	µg/kg	10,000	EPA8080
Toxaphene	UJ	O	L	10,000	µg/kg	10,000	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				11±14	pCi/g	7.5	EPA900.0
Nonvolatile beta				38±24	pCi/g	9.4	EPA900.0
Radium, total alpha-emitting	U	V		1.1±1.1	pCi/g	0.10	EPA903.0
Tritium				10±1.9	pCi/g	1.5	EPA906.0

SAMPLE NAME: D43110805 Sample ID: 100334

Location (SRS Coordinates): 18542.87E 66623.81N
Ground Elevation Above MSL: 132.8 ft
Depth of Core Interval: 6.00 to 7.75 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 4.2 USC Soil Classification: SM Percent Solids: 84.50

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			0.82	mg/kg	0.82	EPA7060
Barium	U			22	mg/kg	22	EPA6010
Cadmium	U			0.56	mg/kg	0.56	EPA6010
Chromium				10	mg/kg	1.1	EPA6010
Copper				5.3	mg/kg	2.8	EPA6010
Lead				4.2	mg/kg	0.25	EPA7421
Manganese				19	mg/kg	1.7	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel				4.9	mg/kg	4.5	EPA6010
Selenium	U			0.41	mg/kg	0.41	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	J			97	µg/kg	810	EPA8270
Acenaphthylene	U			810	µg/kg	810	EPA8270
Anthracene	J			230	µg/kg	810	EPA8270
Benzo(a)anthracene	J			300	µg/kg	810	EPA8270

SAMPLE NAME: D43110805 (Continued) Sample ID: 100334

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Benzo(b)fluoranthene	J			330	µg/kg	810	EPA8270
Benzo(k)fluoranthene	J			130	µg/kg	810	EPA8270
Benzoic acid	U			4,100	µg/kg	4,100	EPA8270
Benzo(g,h,i)perylene	U			810	µg/kg	810	EPA8270
Benzo(a)pyrene	J			260	µg/kg	810	EPA8270
Benzyl alcohol	U			810	µg/kg	810	EPA8270
Bis(2-chloroethoxy) methane	U			810	µg/kg	810	EPA8270
Bis(2-chloroethyl) ether	U			810	µg/kg	810	EPA8270
Bis(2-chloroisopropyl) ether	U			810	µg/kg	810	EPA8270
Bis(2-ethylhexyl) phthalate				1,000	µg/kg	810	EPA8270
4-Bromophenyl phenyl ether	U			810	µg/kg	810	EPA8270
Butylbenzyl phthalate				3,100	µg/kg	810	EPA8270
Alkylbenzene C15H16	J	N		400	µg/kg		EPA8270
Arom. hydrocarbon C24H18	J	N		400	µg/kg		EPA8270
4-Chloroaniline	U			810	µg/kg	810	EPA8270
4-Chloro-m-cresol	U			810	µg/kg	810	EPA8270
2-Chloronaphthalene	U			810	µg/kg	810	EPA8270
2-Chlorophenol	U			810	µg/kg	810	EPA8270
4-Chlorophenyl phenyl ether	U			810	µg/kg	810	EPA8270
Chrysene	J			310	µg/kg	810	EPA8270
o-Cresol (2-Methylphenol)	U			810	µg/kg	810	EPA8270
p-Cresol (4-Methylphenol)	U			810	µg/kg	810	EPA8270
Dibenz(a,h)anthracene	U			810	µg/kg	810	EPA8270
Dibenzofuran	U			810	µg/kg	810	EPA8270
Di-n-butyl phthalate	UJ	V		140	µg/kg	810	EPA8270
1,2-Dichlorobenzene	U			810	µg/kg	810	EPA8270
1,3-Dichlorobenzene	U			810	µg/kg	810	EPA8270
1,4-Dichlorobenzene	U			810	µg/kg	810	EPA8270
3,3'-Dichlorobenzidine	U			1,600	µg/kg	1,600	EPA8270
2,4-Dichlorophenol	U			810	µg/kg	810	EPA8270
Diethyl phthalate	U			810	µg/kg	810	EPA8270
2,4-Dimethyl phenol	U			810	µg/kg	810	EPA8270
Dimethyl phthalate	U			810	µg/kg	810	EPA8270
2,4-Dinitrophenol	U			4,100	µg/kg	4,100	EPA8270
2,4-Dinitrotoluene	U			810	µg/kg	810	EPA8270
2,6-Dinitrotoluene	U			810	µg/kg	810	EPA8270
Di-n-octyl phthalate	U			810	µg/kg	810	EPA8270
Fluoranthene				880	µg/kg	810	EPA8270
Fluorene	J			100	µg/kg	810	EPA8270
Hexachlorobenzene	U			810	µg/kg	810	EPA8270
Hexachlorobutadiene	U			810	µg/kg	810	EPA8270
Hexachlorocyclopentadiene	U			810	µg/kg	810	EPA8270
Hexachloroethane	U			810	µg/kg	810	EPA8270
Indeno(1,2,3-c,d)pyrene	J			83	µg/kg	810	EPA8270
Isophorone	U			810	µg/kg	810	EPA8270
Dimethylanthracene isomer	J	N		600	µg/kg		EPA8270
Methyldibenzothiophene isomer	J	N		700	µg/kg		EPA8270
Methyldibenzothiophene isomer	J	N		500	µg/kg		EPA8270
Dimethylphenanthrene isomer	J	N		600	µg/kg		EPA8270
Dimethylphenanthrene isomer	J	N		1,000	µg/kg		EPA8270

SAMPLE NAME: D43I10805 (Continued) Sample ID: 100334

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Dimethylphenanthrene isomer	J	N		500	µg/kg		EPA8270
Trimethylphenanthrene isomer	J	N		500	µg/kg		EPA8270
Trimethylphenanthrene isomer	J	N		600	µg/kg		EPA8270
Methylanthracene isomer	J	N		1,000	µg/kg		EPA8270
Methylanthracene isomer	J	N		900	µg/kg		EPA8270
Methylanthracene isomer	J	N		400	µg/kg		EPA8270
Methylphenanthrene isomer	J	N		1,000	µg/kg		EPA8270
2-Methyl-4,6-dinitrophenol	U			4,100	µg/kg	4,100	EPA8270
2-Methylnaphthalene	U			810	µg/kg	810	EPA8270
Naphthalene	U			810	µg/kg	810	EPA8270
o-Nitroaniline	U			4,100	µg/kg	4,100	EPA8270
m-Nitroaniline	U			4,100	µg/kg	4,100	EPA8270
p-Nitroaniline	U			4,100	µg/kg	4,100	EPA8270
Nitrobenzene	U			810	µg/kg	810	EPA8270
2-Nitrophenol	U			810	µg/kg	810	EPA8270
4-Nitrophenol	U			4,100	µg/kg	4,100	EPA8270
N-Nitrosodiphenylamine	U			810	µg/kg	810	EPA8270
N-Nitrosodipropylamine	U			810	µg/kg	810	EPA8270
Pentachlorophenol	U			4,100	µg/kg	4,100	EPA8270
Phenanthrene				1,600	µg/kg	810	EPA8270
Phenol	U			810	µg/kg	810	EPA8270
Pyrene				830	µg/kg	810	EPA8270
1,2,4-Trichlorobenzene	U			810	µg/kg	810	EPA8270
2,4,5-Trichlorophenol	U			4,100	µg/kg	4,100	EPA8270
2,4,6-Trichlorophenol	U			810	µg/kg	810	EPA8270
Unknown arom. hydrocarbon	J	N		500	µg/kg		EPA8270
Unknown arom. hydrocarbon	J	N		600	µg/kg		EPA8270
Unknown hydrocarbon	J	N		600	µg/kg		EPA8270
Unknown hydrocarbon	J	N		400	µg/kg		EPA8270
Unknown ketone	J	NV		6,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	L	V		320	µg/kg	12	EPA8240
Acetone		V		430	µg/kg	25	EPA8240
Benzene	U			6.2	µg/kg	6.2	EPA8240
Bromodichloromethane	U			6.2	µg/kg	6.2	EPA8240
Bromoform	U			6.2	µg/kg	6.2	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			6.2	µg/kg	6.2	EPA8240
Carbon tetrachloride	U			6.2	µg/kg	6.2	EPA8240
Chlorobenzene	U			6.2	µg/kg	6.2	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
Chloroform	U			6.2	µg/kg	6.2	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			6.2	µg/kg	6.2	EPA8240
1,1-Dichloroethane	U			6.2	µg/kg	6.2	EPA8240
1,2-Dichloroethane	U			6.2	µg/kg	6.2	EPA8240
1,1-Dichloroethylene	U			6.2	µg/kg	6.2	EPA8240

SAMPLE NAME: D43110805 (Continued) Sample ID: 100334

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,2-Dichloroethylene	U			6.2	µg/kg	6.2	EPA8240
Dichloromethane (Methylene chloride)	U	V		12	µg/kg	6.2	EPA8240
1,2-Dichloropropane	U			6.2	µg/kg	6.2	EPA8240
cis-1,3-Dichloropropene	U			6.2	µg/kg	6.2	EPA8240
trans-1,3-Dichloropropene	U			6.2	µg/kg	6.2	EPA8240
Ethylbenzene	U			6.2	µg/kg	6.2	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.2	µg/kg	6.2	EPA8240
1,1,2,2-Tetrachloroethane	U			6.2	µg/kg	6.2	EPA8240
Tetrachloroethylene	U			6.2	µg/kg	6.2	EPA8240
Toluene	U			6.2	µg/kg	6.2	EPA8240
1,1,1-Trichloroethane	U			6.2	µg/kg	6.2	EPA8240
1,1,2-Trichloroethane	U			6.2	µg/kg	6.2	EPA8240
Trichloroethylene	U			6.2	µg/kg	6.2	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
2-Propanol	J	N		10	µg/kg		EPA8240
Xylenes	U			6.2	µg/kg	6.2	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			20	µg/kg	20	EPA8080
alpha-Benzene hexachloride	U			20	µg/kg	20	EPA8080
beta-Benzene hexachloride	U			20	µg/kg	20	EPA8080
delta-Benzene hexachloride	U			20	µg/kg	20	EPA8080
alpha-Chlordane	U			20	µg/kg	20	EPA8080
gamma-Chlordane	U			20	µg/kg	20	EPA8080
p,p'-DDD	U			40	µg/kg	40	EPA8080
p,p'-DDE	U			40	µg/kg	40	EPA8080
p,p'-DDT	U			40	µg/kg	40	EPA8080
Dieldrin	U			40	µg/kg	40	EPA8080
Endosulfan I	U			20	µg/kg	20	EPA8080
Endosulfan II	U			40	µg/kg	40	EPA8080
Endosulfan sulfate	U			40	µg/kg	40	EPA8080
Endrin	U			40	µg/kg	40	EPA8080
Endrin ketone	U			40	µg/kg	40	EPA8080
Heptachlor	U			20	µg/kg	20	EPA8080
Heptachlor epoxide	U			20	µg/kg	20	EPA8080
Heptachlorodibenzo-p-dioxin isomers	J			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			20	µg/kg	20	EPA8080
Methoxychlor	U			200	µg/kg	200	EPA8080
Octachlorodibenzo-p-dioxin				2.4	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			400	µg/kg	400	EPA8080
PCB 1221	U			800	µg/kg	800	EPA8080
PCB 1232	U			400	µg/kg	400	EPA8080

SAMPLE NAME: D43110805 (Continued) Sample ID: 100334

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
PCB 1242	U			400	µg/kg	400	EPA8080
PCB 1248	U			400	µg/kg	400	EPA8080
PCB 1254	U			400	µg/kg	400	EPA8080
PCB 1260	U			400	µg/kg	400	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			2,000	µg/kg	2,000	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				26±18	pCi/g	7.7	EPA900.0
Nonvolatile beta				20±22	pCi/g	9.6	EPA900.0
Radium, total alpha-emitting	U	V		0.90±0.86	pCi/g	0.080	EPA903.0
Tritium				7.5±1.4	pCi/g	1.1	EPA906.0

SAMPLE NAME: D43110805A Sample ID: 100335

Sample Type: Duplicate Associated Sample: 100334

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				1.1	mg/kg	1.1	EPA7060
Barium	U			22	mg/kg	22	EPA6010
Cadmium				0.79	mg/kg	0.54	EPA6010
Chromium				21	mg/kg	1.1	EPA6010
Copper				5.9	mg/kg	2.7	EPA6010
Lead				6.5	mg/kg	0.32	EPA7421
Manganese				17	mg/kg	1.6	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel				4.8	mg/kg	4.3	EPA6010
Selenium	U			0.54	mg/kg	0.54	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			420	µg/kg	420	EPA8270
Acenaphthylene	U			420	µg/kg	420	EPA8270
Anthracene	U			420	µg/kg	420	EPA8270
Benzo(a)anthracene	U			420	µg/kg	420	EPA8270
Benzo(b)fluoranthene	U			420	µg/kg	420	EPA8270
Benzo(k)fluoranthene	U			420	µg/kg	420	EPA8270
Benzoic acid	U			2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	U			420	µg/kg	420	EPA8270

SAMPLE NAME: D43110805A (Continued) Sample ID: 100335

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Benzo(a)pyrene	U			420	µg/kg	420	EPA8270
Benzyl alcohol	U			420	µg/kg	420	EPA8270
Bis(2-chloroethoxy) methane	U			420	µg/kg	420	EPA8270
Bis(2-chloroethyl) ether	U			420	µg/kg	420	EPA8270
Bis(2-chloroisopropyl) ether	U			420	µg/kg	420	EPA8270
Bis(2-ethylhexyl) phthalate	J			190	µg/kg	420	EPA8270
4-Bromophenyl phenyl ether	U			420	µg/kg	420	EPA8270
Butylbenzyl phthalate	J			180	µg/kg	420	EPA8270
4-Chloroaniline	U			420	µg/kg	420	EPA8270
4-Chloro-m-cresol	U			420	µg/kg	420	EPA8270
2-Chloronaphthalene	U			420	µg/kg	420	EPA8270
2-Chlorophenol	U			420	µg/kg	420	EPA8270
4-Chlorophenyl phenyl ether	U			420	µg/kg	420	EPA8270
Chrysene	U			420	µg/kg	420	EPA8270
o-Cresol (2-Methylphenol)	U			420	µg/kg	420	EPA8270
p-Cresol (4-Methylphenol)	U			420	µg/kg	420	EPA8270
Dibenz(a,h)anthracene	U			420	µg/kg	420	EPA8270
Dibenzofuran	U			420	µg/kg	420	EPA8270
Di-n-butyl phthalate	UJ	V		93	µg/kg	420	EPA8270
1,2-Dichlorobenzene	U			420	µg/kg	420	EPA8270
1,3-Dichlorobenzene	U			420	µg/kg	420	EPA8270
1,4-Dichlorobenzene	U			420	µg/kg	420	EPA8270
3,3'-Dichlorobenzidine	U			840	µg/kg	840	EPA8270
2,4-Dichlorophenol	U			420	µg/kg	420	EPA8270
Diethyl phthalate	U			420	µg/kg	420	EPA8270
2,4-Dimethyl phenol	U			420	µg/kg	420	EPA8270
Dimethyl phthalate	U			420	µg/kg	420	EPA8270
2,4-Dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2,4-Dinitrotoluene	U			420	µg/kg	420	EPA8270
2,6-Dinitrotoluene	U			420	µg/kg	420	EPA8270
Di-n-octyl phthalate	U			420	µg/kg	420	EPA8270
Fluoranthene	J			110	µg/kg	420	EPA8270
Fluorene	U			420	µg/kg	420	EPA8270
Hexachlorobenzene	U			420	µg/kg	420	EPA8270
Hexachlorobutadiene	U			420	µg/kg	420	EPA8270
Hexachlorocyclopentadiene	U			420	µg/kg	420	EPA8270
Hexachloroethane	U			420	µg/kg	420	EPA8270
Indeno(1,2,3-c,d)pyrene	U			420	µg/kg	420	EPA8270
Isophorone	U			420	µg/kg	420	EPA8270
Dimethylphenanthrene isomer	J	N		400	µg/kg		EPA8270
Trimethylanthracene isomer	J	N		200	µg/kg		EPA8270
Trimethylphenanthrene isomer	J	N		200	µg/kg		EPA8270
Methylanthracene isomer	J	N		300	µg/kg		EPA8270
Methylphenanthrene isomer	J	N		300	µg/kg		EPA8270
2-Methyl-4,6-dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	U			420	µg/kg	420	EPA8270
Naphthalene	U			420	µg/kg	420	EPA8270
o-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270

SAMPLE NAME: D43110805A (Continued) Sample ID: 100335

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Nitrobenzene	U			420	µg/kg	420	EPA8270
2-Nitrophenol	U			420	µg/kg	420	EPA8270
4-Nitrophenol	U			2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	U			420	µg/kg	420	EPA8270
N-Nitrosodipropylamine	U			420	µg/kg	420	EPA8270
Pentachlorophenol	U			2,100	µg/kg	2,100	EPA8270
Phenanthrene	J			260	µg/kg	420	EPA8270
Phenol	U			420	µg/kg	420	EPA8270
Pyrene	J			120	µg/kg	420	EPA8270
1,2,4-Trichlorobenzene	U			420	µg/kg	420	EPA8270
2,4,5-Trichlorophenol	U			2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	U			420	µg/kg	420	EPA8270
Unknown arom. hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown ketone	J	NV		4,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	L	V		480	µg/kg	13	EPA8240
Acetone		V		1,700	µg/kg	130	EPA8240
Benzene	U			6.4	µg/kg	6.4	EPA8240
Bromodichloromethane	U			6.4	µg/kg	6.4	EPA8240
Bromoform	U			6.4	µg/kg	6.4	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Carbon disulfide	U			6.4	µg/kg	6.4	EPA8240
Carbon tetrachloride	U			6.4	µg/kg	6.4	EPA8240
Chlorobenzene	U			6.4	µg/kg	6.4	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
Chloroform	U			6.4	µg/kg	6.4	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Dibromochloromethane	U			6.4	µg/kg	6.4	EPA8240
1,1-Dichloroethane	U			6.4	µg/kg	6.4	EPA8240
1,2-Dichloroethane	U			6.4	µg/kg	6.4	EPA8240
1,1-Dichloroethylene	U			6.4	µg/kg	6.4	EPA8240
1,2-Dichloroethylene	U			6.4	µg/kg	6.4	EPA8240
Dichloromethane (Methylene chloride)	U			6.4	µg/kg	6.4	EPA8240
1,2-Dichloropropane	U			6.4	µg/kg	6.4	EPA8240
cis-1,3-Dichloropropene	U			6.4	µg/kg	6.4	EPA8240
trans-1,3-Dichloropropene	U			6.4	µg/kg	6.4	EPA8240
Ethylbenzene	U			6.4	µg/kg	6.4	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Styrene	U			6.4	µg/kg	6.4	EPA8240
1,1,2,2-Tetrachloroethane	U			6.4	µg/kg	6.4	EPA8240
Tetrachloroethylene	U			6.4	µg/kg	6.4	EPA8240
Toluene	U			6.4	µg/kg	6.4	EPA8240
1,1,1-Trichloroethane	U			6.4	µg/kg	6.4	EPA8240
1,1,2-Trichloroethane	U			6.4	µg/kg	6.4	EPA8240

SAMPLE NAME: D43110805A (Continued) Sample ID: 100335

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Trichloroethylene	U			6.4	µg/kg	6.4	EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
2-Propanol	J	N		40	µg/kg		EPA8240
Xylenes	U			6.4	µg/kg	6.4	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			2.1	µg/kg	2.1	EPA8080
alpha-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
beta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
delta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
alpha-Chlordane	U			2.1	µg/kg	2.1	EPA8080
gamma-Chlordane	U			2.1	µg/kg	2.1	EPA8080
p,p'-DDD	U			4.2	µg/kg	4.2	EPA8080
p,p'-DDE	J			0.84	µg/kg	4.2	EPA8080
p,p'-DDT	U			4.2	µg/kg	4.2	EPA8080
Dieldrin	U			4.2	µg/kg	4.2	EPA8080
Endosulfan I	U			2.1	µg/kg	2.1	EPA8080
Endosulfan II	U			4.2	µg/kg	4.2	EPA8080
Endosulfan sulfate	U			4.2	µg/kg	4.2	EPA8080
Endrin	U			4.2	µg/kg	4.2	EPA8080
Endrin ketone	U			4.2	µg/kg	4.2	EPA8080
Heptachlor	U			2.1	µg/kg	2.1	EPA8080
Heptachlor epoxide	U			2.1	µg/kg	2.1	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			2.1	µg/kg	2.1	EPA8080
Methoxychlor	U			21	µg/kg	21	EPA8080
Octachlorodibenzo-p-dioxin				2.6	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			42	µg/kg	42	EPA8080
PCB 1221	U			84	µg/kg	84	EPA8080
PCB 1232	U			42	µg/kg	42	EPA8080
PCB 1242	U			42	µg/kg	42	EPA8080
PCB 1248	U			42	µg/kg	42	EPA8080
PCB 1254	U			42	µg/kg	42	EPA8080
PCB 1260	U			42	µg/kg	42	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	U			210	µg/kg	210	EPA8080

SAMPLE NAME: D43110805A (Continued) Sample ID: 100335

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Radionuclide Indicators and Radionuclides							
Gross alpha	U			8.3	pCi/g	8.3	EPA900.0
Nonvolatile beta				36±26	pCi/g	10	EPA900.0
Radium, total alpha-emitting	U	V		0.86±0.90	pCi/g	0.090	EPA903.0
Tritium				5.4±1.1	pCi/g	1.1	EPA906.0

SAMPLE NAME: D43110806 Sample ID: 100336

Location (SRS Coordinates): 18542.87E 66623.81N
Ground Elevation Above MSL: 132.8 ft
Depth of Core Interval: 8.00 to 10.00 ft
Sample Type: Normal
Sample Color: 10YR 6/6
Sample Matrix: Soil
USC Soil Classification: SM
Sample Moisture: Damp
Percent Solids: 84.10

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				9.3	meq/100g	2.0	EPA9080
pH	J	Q		3.9	pH	0.010	EPA9045
Specific conductance				190	µS/cm	1.0	EPA9050
Total organic carbon				3,800	mg/kg	180	EPA415.1
Total Metals							
Arsenic				1.1	mg/kg	1.1	EPA7060
Barium	U			21	mg/kg	21	EPA6010
Cadmium	U			0.52	mg/kg	0.52	EPA6010
Chromium				11	mg/kg	1.0	EPA6010
Copper				5.8	mg/kg	2.6	EPA6010
Lead				5.2	mg/kg	0.32	EPA7421
Manganese				18	mg/kg	1.6	EPA6010
Mercury				0.21	mg/kg	0.12	EPA7470
Nickel				4.8	mg/kg	4.2	EPA6010
Selenium	U			0.53	mg/kg	0.53	EPA7740
Silver	U			1.0	mg/kg	1.0	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			410	µg/kg	410	EPA8270
Acenaphthylene	U			410	µg/kg	410	EPA8270
Anthracene	U			410	µg/kg	410	EPA8270
Benzo(a)anthracene	U			410	µg/kg	410	EPA8270
Benzo(b)fluoranthene	U			410	µg/kg	410	EPA8270
Benzo(k)fluoranthene	U			410	µg/kg	410	EPA8270
Benzoic acid	U			2,000	µg/kg	2,000	EPA8270
Benzo(g,h,i)perylene	U			410	µg/kg	410	EPA8270
Benzo(a)pyrene	U			410	µg/kg	410	EPA8270
Benzyl alcohol	U			410	µg/kg	410	EPA8270
Bis(2-chloroethoxy) methane	U			410	µg/kg	410	EPA8270

SAMPLE NAME: D43110806 (Continued) Sample ID: 100336

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Bis(2-chloroethyl) ether	U			410	µg/kg	410	EPA8270
Bis(2-chloroisopropyl) ether	U			410	µg/kg	410	EPA8270
Bis(2-ethylhexyl) phthalate	J			41	µg/kg	410	EPA8270
4-Bromophenyl phenyl ether	U			410	µg/kg	410	EPA8270
Butylbenzyl phthalate	J			67	µg/kg	410	EPA8270
4-Chloroaniline	U			410	µg/kg	410	EPA8270
4-Chloro-m-cresol	U			410	µg/kg	410	EPA8270
2-Chloronaphthalene	U			410	µg/kg	410	EPA8270
2-Chlorophenol	U			410	µg/kg	410	EPA8270
4-Chlorophenyl phenyl ether	U			410	µg/kg	410	EPA8270
Chrysene	U			410	µg/kg	410	EPA8270
o-Cresol (2-Methylphenol)	U			410	µg/kg	410	EPA8270
p-Cresol (4-Methylphenol)	U			410	µg/kg	410	EPA8270
Dibenz(a,h)anthracene	U			410	µg/kg	410	EPA8270
Dibenzofuran	U			410	µg/kg	410	EPA8270
Di-n-butyl phthalate	UJ	V		79	µg/kg	410	EPA8270
1,2-Dichlorobenzene	U			410	µg/kg	410	EPA8270
1,3-Dichlorobenzene	U			410	µg/kg	410	EPA8270
1,4-Dichlorobenzene	U			410	µg/kg	410	EPA8270
3,3'-Dichlorobenzidine	U			810	µg/kg	810	EPA8270
2,4-Dichlorophenol	U			410	µg/kg	410	EPA8270
Diethyl phthalate	U			410	µg/kg	410	EPA8270
2,4-Dimethyl phenol	U			410	µg/kg	410	EPA8270
Dimethyl phthalate	U			410	µg/kg	410	EPA8270
2,4-Dinitrophenol	U			2,000	µg/kg	2,000	EPA8270
2,4-Dinitrotoluene	U			410	µg/kg	410	EPA8270
2,6-Dinitrotoluene	U			410	µg/kg	410	EPA8270
Di-n-octyl phthalate	U	L		410	µg/kg	410	EPA8270
Fluoranthene	U			410	µg/kg	410	EPA8270
Fluorene	U			410	µg/kg	410	EPA8270
Hexachlorobenzene	U			410	µg/kg	410	EPA8270
Hexachlorobutadiene	U			410	µg/kg	410	EPA8270
Hexachlorocyclopentadiene	U			410	µg/kg	410	EPA8270
Hexachloroethane	U			410	µg/kg	410	EPA8270
Indeno(1,2,3-c,d)pyrene	U			410	µg/kg	410	EPA8270
Isophorone	U			410	µg/kg	410	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,000	µg/kg	2,000	EPA8270
2-Methylnaphthalene	U			410	µg/kg	410	EPA8270
Naphthalene	U			410	µg/kg	410	EPA8270
o-Nitroaniline	U			2,000	µg/kg	2,000	EPA8270
m-Nitroaniline	U			2,000	µg/kg	2,000	EPA8270
p-Nitroaniline	U			2,000	µg/kg	2,000	EPA8270
Nitrobenzene	U			410	µg/kg	410	EPA8270
2-Nitrophenol	U			410	µg/kg	410	EPA8270
4-Nitrophenol	U			2,000	µg/kg	2,000	EPA8270
N-Nitrosodiphenylamine	U			410	µg/kg	410	EPA8270
N-Nitrosodipropylamine	U			410	µg/kg	410	EPA8270
Pentachlorophenol	U			2,000	µg/kg	2,000	EPA8270
Phenanthrene	J			95	µg/kg	410	EPA8270
Phenol	U			410	µg/kg	410	EPA8270

SAMPLE NAME: D43110806 (Continued) Sample ID: 100336

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Pyrene	U			410	µg/kg	410	EPA8270
1,2,4-Trichlorobenzene	U			410	µg/kg	410	EPA8270
2,4,5-Trichlorophenol	U			2,000	µg/kg	2,000	EPA8270
2,4,6-Trichlorophenol	U			410	µg/kg	410	EPA8270
Unknown ketone	J	NV		6,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	L	V		790	µg/kg	12	EPA8240
Acetone		V		770	µg/kg	61	EPA8240
Benzene	U			6.1	µg/kg	6.1	EPA8240
Bromodichloromethane	U			6.1	µg/kg	6.1	EPA8240
Bromoform	U			6.1	µg/kg	6.1	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			6.1	µg/kg	6.1	EPA8240
Carbon tetrachloride	U			6.1	µg/kg	6.1	EPA8240
Chlorobenzene	U			6.1	µg/kg	6.1	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	UJ	L		12	µg/kg	12	EPA8240
Chloroform	U			6.1	µg/kg	6.1	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			6.1	µg/kg	6.1	EPA8240
1,1-Dichloroethane	U			6.1	µg/kg	6.1	EPA8240
1,2-Dichloroethane				6.1	µg/kg	6.1	EPA8240
1,1-Dichloroethylene	U			6.1	µg/kg	6.1	EPA8240
1,2-Dichloroethylene	U			6.1	µg/kg	6.1	EPA8240
Dichloromethane (Methylene chloride)	U			6.1	µg/kg	6.1	EPA8240
1,2-Dichloropropane	U			6.1	µg/kg	6.1	EPA8240
cis-1,3-Dichloropropene	U			6.1	µg/kg	6.1	EPA8240
trans-1,3-Dichloropropene	U			6.1	µg/kg	6.1	EPA8240
Ethylbenzene	U			6.1	µg/kg	6.1	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.1	µg/kg	6.1	EPA8240
1,1,2,2-Tetrachloroethane	U			6.1	µg/kg	6.1	EPA8240
Tetrachloroethylene	U			6.1	µg/kg	6.1	EPA8240
Toluene	U			6.1	µg/kg	6.1	EPA8240
1,1,1-Trichloroethane	U			6.1	µg/kg	6.1	EPA8240
1,1,2-Trichloroethane	J			5.1	µg/kg	6.1	EPA8240
Trichloroethylene	U			6.1	µg/kg	6.1	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
2-Propanol	J	N		300	µg/kg		EPA8240
Xylenes	U			6.1	µg/kg	6.1	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			2.0	µg/kg	2.0	EPA8080
alpha-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
beta-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080

SAMPLE NAME: D431I0806 (Continued) Sample ID: 100336

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
delta-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
alpha-Chlordane	U			2.0	µg/kg	2.0	EPA8080
gamma-Chlordane	U			2.0	µg/kg	2.0	EPA8080
p,p'-DDD	U			4.0	µg/kg	4.0	EPA8080
p,p'-DDE	U			4.0	µg/kg	4.0	EPA8080
p,p'-DDT	U			4.0	µg/kg	4.0	EPA8080
Dieldrin	U			4.0	µg/kg	4.0	EPA8080
Endosulfan I	U			2.0	µg/kg	2.0	EPA8080
Endosulfan II	U			4.0	µg/kg	4.0	EPA8080
Endosulfan sulfate	U			4.0	µg/kg	4.0	EPA8080
Endrin	UJ	G		4.0	µg/kg	4.0	EPA8080
Endrin ketone	U			4.0	µg/kg	4.0	EPA8080
Heptachlor	U			2.0	µg/kg	2.0	EPA8080
Heptachlor epoxide	U			2.0	µg/kg	2.0	EPA8080
Heptachlorodibenzo-p-dioxin isomers	J			0.20	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			2.0	µg/kg	2.0	EPA8080
Methoxychlor	U			20	µg/kg	20	EPA8080
Octachlorodibenzo-p-dioxin				12	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			40	µg/kg	40	EPA8080
PCB 1221	U			81	µg/kg	81	EPA8080
PCB 1232	U			40	µg/kg	40	EPA8080
PCB 1242	U			40	µg/kg	40	EPA8080
PCB 1248	U			40	µg/kg	40	EPA8080
PCB 1254	U			40	µg/kg	40	EPA8080
PCB 1260	U			40	µg/kg	40	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			200	µg/kg	200	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				11±14	pCi/g	7.4	EPA900.0
Nonvolatile beta				36±23	pCi/g	9.1	EPA900.0
Radium, total alpha-emitting	U	V		1.0±1.0	pCi/g	0.090	EPA903.0
Tritium				11±1.9	pCi/g	1.4	EPA906.0

SAMPLE NAME: D43110807 Sample ID: 100337

Location (SRS Coordinates): 18542.87E 66623.81N
Ground Elevation Above MSL: 132.8 ft
Depth of Core Interval: 10.00 to 12.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 3/4 USC Soil Classification: SM Percent Solids: 81.20

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				1.1	mg/kg	1.1	EPA7060
Barium	U			24	mg/kg	24	EPA6010
Cadmium	U			0.61	mg/kg	0.61	EPA6010
Chromium				22	mg/kg	1.2	EPA6010
Copper	U			3.0	mg/kg	3.0	EPA6010
Lead				3.3	mg/kg	0.34	EPA7421
Manganese				43	mg/kg	1.8	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel	U			4.9	mg/kg	4.9	EPA6010
Selenium	U			0.56	mg/kg	0.56	EPA7740
Silver	U			1.2	mg/kg	1.2	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			430	µg/kg	430	EPA8270
Acenaphthylene	U			430	µg/kg	430	EPA8270
Anthracene	U			430	µg/kg	430	EPA8270
Benzo(a)anthracene	U			430	µg/kg	430	EPA8270
Benzo(b)fluoranthene	U			430	µg/kg	430	EPA8270
Benzo(k)fluoranthene	U			430	µg/kg	430	EPA8270
Benzoic acid	U			2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	U			430	µg/kg	430	EPA8270
Benzo(a)pyrene	U			430	µg/kg	430	EPA8270
Benzyl alcohol	U			430	µg/kg	430	EPA8270
Bis(2-chloroethoxy) methane	U			430	µg/kg	430	EPA8270
Bis(2-chloroethyl) ether	U			430	µg/kg	430	EPA8270
Bis(2-chloroisopropyl) ether	U			430	µg/kg	430	EPA8270
Bis(2-ethylhexyl) phthalate	J			51	µg/kg	430	EPA8270
4-Bromophenyl phenyl ether	U			430	µg/kg	430	EPA8270
Butylbenzyl phthalate	J			130	µg/kg	430	EPA8270
4-Chloroaniline	U			430	µg/kg	430	EPA8270
4-Chloro-m-cresol	U			430	µg/kg	430	EPA8270
2-Chloronaphthalene	U			430	µg/kg	430	EPA8270
2-Chlorophenol	U			430	µg/kg	430	EPA8270
4-Chlorophenyl phenyl ether	U			430	µg/kg	430	EPA8270
Chrysene	U			430	µg/kg	430	EPA8270
o-Cresol (2-Methylphenol)	U			430	µg/kg	430	EPA8270
p-Cresol (4-Methylphenol)	U			430	µg/kg	430	EPA8270
Dibenz(a,h)anthracene	U			430	µg/kg	430	EPA8270
Dibenzofuran	U			430	µg/kg	430	EPA8270
Di-n-butyl phthalate	UJ	V		130	µg/kg	430	EPA8270
1,2-Dichlorobenzene	U			430	µg/kg	430	EPA8270
1,3-Dichlorobenzene	U			430	µg/kg	430	EPA8270
1,4-Dichlorobenzene	U			430	µg/kg	430	EPA8270

SAMPLE NAME: D43110807 (Continued) Sample ID: 100337

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
3,3'-Dichlorobenzidine	U			850	µg/kg	850	EPA8270
2,4-Dichlorophenol	U			430	µg/kg	430	EPA8270
Diethyl phthalate	U			430	µg/kg	430	EPA8270
2,4-Dimethyl phenol	U			430	µg/kg	430	EPA8270
Dimethyl phthalate	U			430	µg/kg	430	EPA8270
2,4-Dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2,4-Dinitrotoluene	U			430	µg/kg	430	EPA8270
2,6-Dinitrotoluene	U			430	µg/kg	430	EPA8270
Di-n-octyl phthalate	U			430	µg/kg	430	EPA8270
Fluoranthene	U			430	µg/kg	430	EPA8270
Fluorene	U			430	µg/kg	430	EPA8270
Hexachlorobenzene	U			430	µg/kg	430	EPA8270
Hexachlorobutadiene	U			430	µg/kg	430	EPA8270
Hexachlorocyclopentadiene	U			430	µg/kg	430	EPA8270
Hexachloroethane	U			430	µg/kg	430	EPA8270
Indeno(1,2,3-c,d)pyrene	U			430	µg/kg	430	EPA8270
Isophorone	U			430	µg/kg	430	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	U			430	µg/kg	430	EPA8270
Naphthalene	U			430	µg/kg	430	EPA8270
o-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
Nitrobenzene	U			430	µg/kg	430	EPA8270
2-Nitrophenol	U			430	µg/kg	430	EPA8270
4-Nitrophenol	U			2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	U			430	µg/kg	430	EPA8270
N-Nitrosodipropylamine	U			430	µg/kg	430	EPA8270
Pentachlorophenol	U			2,100	µg/kg	2,100	EPA8270
Phenanthrene	J			58	µg/kg	430	EPA8270
Phenol	U			430	µg/kg	430	EPA8270
Pyrene	U			430	µg/kg	430	EPA8270
1,2,4-Trichlorobenzene	U			430	µg/kg	430	EPA8270
2,4,5-Trichlorophenol	U			2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	U			430	µg/kg	430	EPA8270
Unknown ketone	J	NV		6,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		180	µg/kg	13	EPA8240
Benzene	U			6.4	µg/kg	6.4	EPA8240
Bromodichloromethane	U			6.4	µg/kg	6.4	EPA8240
Bromoform	U			6.4	µg/kg	6.4	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Carbon disulfide	U			6.4	µg/kg	6.4	EPA8240
Carbon tetrachloride	U			6.4	µg/kg	6.4	EPA8240
Chlorobenzene	U			6.4	µg/kg	6.4	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
Chloroform	U			6.4	µg/kg	6.4	EPA8240

SAMPLE NAME: D43110807 (Continued) Sample ID: 100337

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Dibromochloromethane	U			6.4	µg/kg	6.4	EPA8240
1,1-Dichloroethane	U			6.4	µg/kg	6.4	EPA8240
1,2-Dichloroethane				8.8	µg/kg	6.4	EPA8240
1,1-Dichloroethylene	U			6.4	µg/kg	6.4	EPA8240
1,2-Dichloroethylene	U			6.4	µg/kg	6.4	EPA8240
Dichloromethane (Methylene chloride)	U			6.4	µg/kg	6.4	EPA8240
1,2-Dichloropropane	U			6.4	µg/kg	6.4	EPA8240
cis-1,3-Dichloropropene	U			6.4	µg/kg	6.4	EPA8240
trans-1,3-Dichloropropene	U			6.4	µg/kg	6.4	EPA8240
Ethylbenzene	U			6.4	µg/kg	6.4	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Styrene	U			6.4	µg/kg	6.4	EPA8240
1,1,2,2-Tetrachloroethane	U			6.4	µg/kg	6.4	EPA8240
Tetrachloroethylene	U			6.4	µg/kg	6.4	EPA8240
Toluene	U			6.4	µg/kg	6.4	EPA8240
1,1,1-Trichloroethane	U			6.4	µg/kg	6.4	EPA8240
1,1,2-Trichloroethane				7.1	µg/kg	6.4	EPA8240
Trichloroethylene	U			6.4	µg/kg	6.4	EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
2-Propanol	J	N		20	µg/kg		EPA8240
Xylenes	U			6.4	µg/kg	6.4	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			2.1	µg/kg	2.1	EPA8080
alpha-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
beta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
delta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
alpha-Chlordane	U			2.1	µg/kg	2.1	EPA8080
gamma-Chlordane	U			2.1	µg/kg	2.1	EPA8080
p,p'-DDD	U			4.2	µg/kg	4.2	EPA8080
p,p'-DDE	U			4.2	µg/kg	4.2	EPA8080
p,p'-DDT	U			4.2	µg/kg	4.2	EPA8080
Dieldrin	U			4.2	µg/kg	4.2	EPA8080
Endosulfan I	U			2.1	µg/kg	2.1	EPA8080
Endosulfan II	U			4.2	µg/kg	4.2	EPA8080
Endosulfan sulfate	U			4.2	µg/kg	4.2	EPA8080
Endrin	U			4.2	µg/kg	4.2	EPA8080
Endrin ketone	U			4.2	µg/kg	4.2	EPA8080
Heptachlor	U			2.1	µg/kg	2.1	EPA8080
Heptachlor epoxide	U			2.1	µg/kg	2.1	EPA8080
Heptachlorodibenzo-p-dioxin isomers	J			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			2.1	µg/kg	2.1	EPA8080
Methoxychlor	U			21	µg/kg	21	EPA8080

SAMPLE NAME: D43110807 (Continued) Sample ID: 100337

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Octachlorodibenzo-p-dioxin				10	ng/g	0.30	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			42	µg/kg	42	EPA8080
PCB 1221	U			85	µg/kg	85	EPA8080
PCB 1232	U			42	µg/kg	42	EPA8080
PCB 1242	U			42	µg/kg	42	EPA8080
PCB 1248	U			42	µg/kg	42	EPA8080
PCB 1254	U			42	µg/kg	42	EPA8080
PCB 1260	U			42	µg/kg	42	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			210	µg/kg	210	EPA8080

SAMPLE NAME: D43110807D Sample ID: 100338

Sample Type: Split Associated Sample: 100337

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				3.1	mg/kg	1.3	EPA7060
Barium	U			23	mg/kg	23	EPA6010
Cadmium	U			0.58	mg/kg	0.58	EPA6010
Chromium				24	mg/kg	1.2	EPA6010
Copper				3.7	mg/kg	2.9	EPA6010
Lead				4.3	mg/kg	0.40	EPA7421
Manganese				170	mg/kg	1.7	EPA6010
Mercury	U			0.13	mg/kg	0.13	EPA7470
Nickel				6.1	mg/kg	4.7	EPA6010
Selenium	U			0.66	mg/kg	0.66	EPA7740
Silver	U			1.2	mg/kg	1.2	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			420	µg/kg	420	EPA8270
Acenaphthylene	U			420	µg/kg	420	EPA8270
Anthracene	U			420	µg/kg	420	EPA8270
Benzo(a)anthracene	U			420	µg/kg	420	EPA8270
Benzo(b)fluoranthene	U			420	µg/kg	420	EPA8270
Benzo(k)fluoranthene	U			420	µg/kg	420	EPA8270
Benzoic acid	U			2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	U			420	µg/kg	420	EPA8270
Benzo(a)pyrene	U			420	µg/kg	420	EPA8270
Benzyl alcohol	U			420	µg/kg	420	EPA8270

SAMPLE NAME: D43110807D (Continued) Sample ID: 100338

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Bis(2-chloroethoxy) methane	U			420	µg/kg	420	EPA8270
Bis(2-chloroethyl) ether	U			420	µg/kg	420	EPA8270
Bis(2-chloroisopropyl) ether	U			420	µg/kg	420	EPA8270
Bis(2-ethylhexyl) phthalate	U			420	µg/kg	420	EPA8270
4-Bromophenyl phenyl ether	U			420	µg/kg	420	EPA8270
Butylbenzyl phthalate	J			49	µg/kg	420	EPA8270
4-Chloroaniline	U			420	µg/kg	420	EPA8270
4-Chloro-m-cresol	U			420	µg/kg	420	EPA8270
2-Chloronaphthalene	U			420	µg/kg	420	EPA8270
2-Chlorophenol	U			420	µg/kg	420	EPA8270
4-Chlorophenyl phenyl ether	U			420	µg/kg	420	EPA8270
Chrysene	U			420	µg/kg	420	EPA8270
o-Cresol (2-Methylphenol)	U			420	µg/kg	420	EPA8270
p-Cresol (4-Methylphenol)	U			420	µg/kg	420	EPA8270
Dibenz(a,h)anthracene	U			420	µg/kg	420	EPA8270
Dibenzofuran	U			420	µg/kg	420	EPA8270
Di-n-butyl phthalate	UJ	V		110	µg/kg	420	EPA8270
1,2-Dichlorobenzene	U			420	µg/kg	420	EPA8270
1,3-Dichlorobenzene	U			420	µg/kg	420	EPA8270
1,4-Dichlorobenzene	U			420	µg/kg	420	EPA8270
3,3'-Dichlorobenzidine	U			840	µg/kg	840	EPA8270
2,4-Dichlorophenol	U			420	µg/kg	420	EPA8270
Diethyl phthalate	U			420	µg/kg	420	EPA8270
2,4-Dimethyl phenol	U			420	µg/kg	420	EPA8270
Dimethyl phthalate	U			420	µg/kg	420	EPA8270
2,4-Dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2,4-Dinitrotoluene	U			420	µg/kg	420	EPA8270
2,6-Dinitrotoluene	U			420	µg/kg	420	EPA8270
Di-n-octyl phthalate	U			420	µg/kg	420	EPA8270
Fluoranthene	J			42	µg/kg	420	EPA8270
Fluorene	U			420	µg/kg	420	EPA8270
Hexachlorobenzene	U			420	µg/kg	420	EPA8270
Hexachlorobutadiene	U			420	µg/kg	420	EPA8270
Hexachlorocyclopentadiene	U			420	µg/kg	420	EPA8270
Hexachloroethane	U			420	µg/kg	420	EPA8270
Indeno(1,2,3-c,d)pyrene	U			420	µg/kg	420	EPA8270
Isophorone	U			420	µg/kg	420	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	U			420	µg/kg	420	EPA8270
Naphthalene	U			420	µg/kg	420	EPA8270
o-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
Nitrobenzene	U			420	µg/kg	420	EPA8270
2-Nitrophenol	U			420	µg/kg	420	EPA8270
4-Nitrophenol	U			2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	U			420	µg/kg	420	EPA8270
N-Nitrosodipropylamine	U			420	µg/kg	420	EPA8270
Pentachlorophenol	U			2,100	µg/kg	2,100	EPA8270
Phenanthrene	J			56	µg/kg	420	EPA8270

SAMPLE NAME: D43110807D (Continued) Sample ID: 100338

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Phenol	U			420	µg/kg	420	EPA8270
Pyrene	J			43	µg/kg	420	EPA8270
1,2,4-Trichlorobenzene	U			420	µg/kg	420	EPA8270
2,4,5-Trichlorophenol	U			2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	U			420	µg/kg	420	EPA8270
Unknown ketone	J	NV		8,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		140	µg/kg	13	EPA8240
Benzene	U			6.3	µg/kg	6.3	EPA8240
Bromodichloromethane	U			6.3	µg/kg	6.3	EPA8240
Bromoform	U			6.3	µg/kg	6.3	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Carbon disulfide	U			6.3	µg/kg	6.3	EPA8240
Carbon tetrachloride	U			6.3	µg/kg	6.3	EPA8240
Chlorobenzene	U			6.3	µg/kg	6.3	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
Chloroform	U			6.3	µg/kg	6.3	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Dibromochloromethane	U			6.3	µg/kg	6.3	EPA8240
1,1-Dichloroethane	U			6.3	µg/kg	6.3	EPA8240
1,2-Dichloroethane	J			4.1	µg/kg	6.3	EPA8240
1,1-Dichloroethylene	U			6.3	µg/kg	6.3	EPA8240
1,2-Dichloroethylene	U			6.3	µg/kg	6.3	EPA8240
Dichloromethane (Methylene chloride)	U			6.3	µg/kg	6.3	EPA8240
1,2-Dichloropropane	U			6.3	µg/kg	6.3	EPA8240
cis-1,3-Dichloropropene	U			6.3	µg/kg	6.3	EPA8240
trans-1,3-Dichloropropene	U			6.3	µg/kg	6.3	EPA8240
Ethylbenzene	U			6.3	µg/kg	6.3	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Styrene	U			6.3	µg/kg	6.3	EPA8240
1,1,2,2-Tetrachloroethane	U			6.3	µg/kg	6.3	EPA8240
Tetrachloroethylene	U			6.3	µg/kg	6.3	EPA8240
Toluene	U			6.3	µg/kg	6.3	EPA8240
1,1,1-Trichloroethane	U			6.3	µg/kg	6.3	EPA8240
1,1,2-Trichloroethane	U			6.3	µg/kg	6.3	EPA8240
Trichloroethylene	U			6.3	µg/kg	6.3	EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
2-Propanol	J	N		10	µg/kg		EPA8240
Xylenes	U			6.3	µg/kg	6.3	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			2.1	µg/kg	2.1	EPA8080
alpha-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
beta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080

SAMPLE NAME: D43110807D (Continued) Sample ID: 100338

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
delta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
alpha-Chlordane	U			2.1	µg/kg	2.1	EPA8080
gamma-Chlordane	U			2.1	µg/kg	2.1	EPA8080
p,p'-DDD	U			4.1	µg/kg	4.1	EPA8080
p,p'-DDE	U			4.1	µg/kg	4.1	EPA8080
p,p'-DDT	U			4.1	µg/kg	4.1	EPA8080
Dieldrin	U			4.1	µg/kg	4.1	EPA8080
Endosulfan I	U			2.1	µg/kg	2.1	EPA8080
Endosulfan II	U			4.1	µg/kg	4.1	EPA8080
Endosulfan sulfate	U			4.1	µg/kg	4.1	EPA8080
Endrin	U			4.1	µg/kg	4.1	EPA8080
Endrin ketone	U			4.1	µg/kg	4.1	EPA8080
Heptachlor	U			2.1	µg/kg	2.1	EPA8080
Heptachlor epoxide	U			2.1	µg/kg	2.1	EPA8080
Heptachlorodibenzo-p-dioxin isomers	J			0.20	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			2.1	µg/kg	2.1	EPA8080
Methoxychlor	U			21	µg/kg	21	EPA8080
Octachlorodibenzo-p-dioxin				14	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			41	µg/kg	41	EPA8080
PCB 1221	U			83	µg/kg	83	EPA8080
PCB 1232	U			41	µg/kg	41	EPA8080
PCB 1242	U			41	µg/kg	41	EPA8080
PCB 1248	U			41	µg/kg	41	EPA8080
PCB 1254	U			41	µg/kg	41	EPA8080
PCB 1260	U			41	µg/kg	41	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			210	µg/kg	210	EPA8080

SAMPLE NAME: D43110901 Sample ID: 100340

Location (SRS Coordinates): 18482.49E 66640.62N
Ground Elevation Above MSL: 132 ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal
Sample Color: 10R 3/4

Sample Matrix: Soil
USC Soil Classification: SM

Sample Moisture: Dry
Percent Solids: 95.30

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				11	meq/100g	2.0	EPA9080
pH	J	Q		4.7	pH	0.010	EPA9045
pH	J	Q		4.7	pH	0.010	EPA9045
Specific conductance				42	µS/cm	1.0	EPA9050
Total organic carbon				9,300	mg/kg	530	EPA415.1
Total Metals							
Arsenic	U			0.99	mg/kg	0.99	EPA7060
Barium	U			19	mg/kg	19	EPA6010
Cadmium	U			0.48	mg/kg	0.48	EPA6010
Chromium				6.2	mg/kg	0.96	EPA6010
Copper	U			2.4	mg/kg	2.4	EPA6010
Lead				1.6	mg/kg	0.30	EPA7421
Manganese				140	mg/kg	1.4	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			3.9	mg/kg	3.9	EPA6010
Selenium	U			0.49	mg/kg	0.49	EPA7740
Silver	U			0.96	mg/kg	0.96	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			350	µg/kg	350	EPA8270
Acenaphthylene	U			350	µg/kg	350	EPA8270
Anthracene	U			350	µg/kg	350	EPA8270
Benzo(a)anthracene	U			350	µg/kg	350	EPA8270
Benzo(b)fluoranthene	U			350	µg/kg	350	EPA8270
Benzo(k)fluoranthene	U			350	µg/kg	350	EPA8270
Benzoic acid	U			1,700	µg/kg	1,700	EPA8270
Benzo(g,h,i)perylene	U			350	µg/kg	350	EPA8270
Benzo(a)pyrene	U			350	µg/kg	350	EPA8270
Benzyl alcohol	U			350	µg/kg	350	EPA8270
Bis(2-chloroethoxy) methane	U			350	µg/kg	350	EPA8270
Bis(2-chloroethyl) ether	U			350	µg/kg	350	EPA8270
Bis(2-chloroisopropyl) ether	U			350	µg/kg	350	EPA8270
Bis(2-ethylhexyl) phthalate	U			350	µg/kg	350	EPA8270
4-Bromophenyl phenyl ether	U			350	µg/kg	350	EPA8270
Butanoic acid ester	J	N		200	µg/kg		EPA8270
Butylbenzyl phthalate	U			350	µg/kg	350	EPA8270
4-Chloroaniline	U			350	µg/kg	350	EPA8270
4-Chloro-m-cresol	U			350	µg/kg	350	EPA8270
2-Chloronaphthalene	U			350	µg/kg	350	EPA8270
2-Chlorophenol	U			350	µg/kg	350	EPA8270
4-Chlorophenyl phenyl ether	U			350	µg/kg	350	EPA8270

SAMPLE NAME: D43110901 (Continued) Sample ID: 100340

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Chrysene	U			350	µg/kg	350	EPA8270
o-Cresol (2-Methylphenol)	U			350	µg/kg	350	EPA8270
p-Cresol (4-Methylphenol)	U			350	µg/kg	350	EPA8270
Dibenz(a,h)anthracene	U			350	µg/kg	350	EPA8270
Dibenzofuran	U			350	µg/kg	350	EPA8270
Di-n-butyl phthalate	UJ	V		49	µg/kg	350	EPA8270
1,2-Dichlorobenzene	U			350	µg/kg	350	EPA8270
1,3-Dichlorobenzene	U			350	µg/kg	350	EPA8270
1,4-Dichlorobenzene	U			350	µg/kg	350	EPA8270
3,3'-Dichlorobenzidine	U			690	µg/kg	690	EPA8270
2,4-Dichlorophenol	U			350	µg/kg	350	EPA8270
Diethyl phthalate	U			350	µg/kg	350	EPA8270
2,4-Dimethyl phenol	U			350	µg/kg	350	EPA8270
Dimethyl phthalate	U			350	µg/kg	350	EPA8270
2,4-Dinitrophenol	U			1,700	µg/kg	1,700	EPA8270
2,4-Dinitrotoluene	U			350	µg/kg	350	EPA8270
2,6-Dinitrotoluene	U			350	µg/kg	350	EPA8270
Di-n-octyl phthalate	U			350	µg/kg	350	EPA8270
Fluoranthene	U			350	µg/kg	350	EPA8270
Fluorene	U			350	µg/kg	350	EPA8270
Hexachlorobenzene	U			350	µg/kg	350	EPA8270
Hexachlorobutadiene	U			350	µg/kg	350	EPA8270
Hexachlorocyclopentadiene	U			350	µg/kg	350	EPA8270
Hexachloroethane	U			350	µg/kg	350	EPA8270
Indeno(1,2,3-c,d)pyrene	U			350	µg/kg	350	EPA8270
Isophorone	U			350	µg/kg	350	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,700	µg/kg	1,700	EPA8270
2-Methylnaphthalene	U			350	µg/kg	350	EPA8270
Naphthalene	U			350	µg/kg	350	EPA8270
o-Nitroaniline	U			1,700	µg/kg	1,700	EPA8270
m-Nitroaniline	U			1,700	µg/kg	1,700	EPA8270
p-Nitroaniline	U			1,700	µg/kg	1,700	EPA8270
Nitrobenzene	U			350	µg/kg	350	EPA8270
2-Nitrophenol	U			350	µg/kg	350	EPA8270
4-Nitrophenol	U			1,700	µg/kg	1,700	EPA8270
N-Nitrosodiphenylamine	U			350	µg/kg	350	EPA8270
N-Nitrosodipropylamine	U			350	µg/kg	350	EPA8270
Pentachlorophenol	U			1,700	µg/kg	1,700	EPA8270
Phenanthrene	U			350	µg/kg	350	EPA8270
Phenol	U			350	µg/kg	350	EPA8270
Pyrene	U			350	µg/kg	350	EPA8270
1,2,4-Trichlorobenzene	U			350	µg/kg	350	EPA8270
2,4,5-Trichlorophenol	U			1,700	µg/kg	1,700	EPA8270
2,4,6-Trichlorophenol	U			350	µg/kg	350	EPA8270
Unknown ketone	J	NV		6,000	µg/kg		EPA8270

SAMPLE NAME: D43110901 (Continued) Sample ID: 100340

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	UJ	V		9.6	µg/kg	10	EPA8240
Benzene	U			5.2	µg/kg	5.2	EPA8240
Bromodichloromethane	U			5.2	µg/kg	5.2	EPA8240
Bromoform	U			5.2	µg/kg	5.2	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/kg	10	EPA8240
Carbon disulfide	U			5.2	µg/kg	5.2	EPA8240
Carbon tetrachloride	U			5.2	µg/kg	5.2	EPA8240
Chlorobenzene	U			5.2	µg/kg	5.2	EPA8240
Chloroethane	U			10	µg/kg	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/kg	10	EPA8240
Chloroform	U			5.2	µg/kg	5.2	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/kg	10	EPA8240
Dibromochloromethane	U			5.2	µg/kg	5.2	EPA8240
1,1-Dichloroethane	U			5.2	µg/kg	5.2	EPA8240
1,2-Dichloroethane	U			5.2	µg/kg	5.2	EPA8240
1,1-Dichloroethylene	U			5.2	µg/kg	5.2	EPA8240
1,2-Dichloroethylene	U			5.2	µg/kg	5.2	EPA8240
Dichloromethane (Methylene chloride)	U			5.2	µg/kg	5.2	EPA8240
1,2-Dichloropropane	U			5.2	µg/kg	5.2	EPA8240
cis-1,3-Dichloropropene	U			5.2	µg/kg	5.2	EPA8240
trans-1,3-Dichloropropene	U			5.2	µg/kg	5.2	EPA8240
Ethylbenzene	U			5.2	µg/kg	5.2	EPA8240
2-Hexanone	U			10	µg/kg	10	EPA8240
Methyl ethyl ketone	U			10	µg/kg	10	EPA8240
Methyl isobutyl ketone	U			10	µg/kg	10	EPA8240
Styrene	U			5.2	µg/kg	5.2	EPA8240
1,1,2,2-Tetrachloroethane	U			5.2	µg/kg	5.2	EPA8240
Tetrachloroethylene	U			5.2	µg/kg	5.2	EPA8240
Toluene	U			5.2	µg/kg	5.2	EPA8240
1,1,1-Trichloroethane	U			5.2	µg/kg	5.2	EPA8240
1,1,2-Trichloroethane	U			5.2	µg/kg	5.2	EPA8240
Trichloroethylene	U			5.2	µg/kg	5.2	EPA8240
Vinyl acetate	U			10	µg/kg	10	EPA8240
Xylenes	U			5.2	µg/kg	5.2	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.7	µg/kg	1.7	EPA8080
alpha-Benzene hexachloride	U			1.7	µg/kg	1.7	EPA8080
beta-Benzene hexachloride	U			1.7	µg/kg	1.7	EPA8080
delta-Benzene hexachloride	U			1.7	µg/kg	1.7	EPA8080
alpha-Chlordane	U			1.7	µg/kg	1.7	EPA8080
gamma-Chlordane	U			1.7	µg/kg	1.7	EPA8080
p,p'-DDD	U			3.5	µg/kg	3.5	EPA8080
p,p'-DDE	J			0.69	µg/kg	3.5	EPA8080
p,p'-DDT	U			3.5	µg/kg	3.5	EPA8080
Dieldrin	U			3.5	µg/kg	3.5	EPA8080
Endosulfan I	U			1.7	µg/kg	1.7	EPA8080
Endosulfan II	U			3.5	µg/kg	3.5	EPA8080
Endosulfan sulfate	U			3.5	µg/kg	3.5	EPA8080

SAMPLE NAME: D431-10901 (Continued) Sample ID: 100340

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Endrin	U			3.5	µg/kg	3.5	EPA8080
Endrin ketone	U			3.5	µg/kg	3.5	EPA8080
Heptachlor	U			1.7	µg/kg	1.7	EPA8080
Heptachlor epoxide	U			1.7	µg/kg	1.7	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			1.7	µg/kg	1.7	EPA8080
Methoxychlor	U			17	µg/kg	17	EPA8080
Octachlorodibenzo-p-dioxin	J			0.60	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			35	µg/kg	35	EPA8080
PCB 1221	U			69	µg/kg	69	EPA8080
PCB 1232	U			35	µg/kg	35	EPA8080
PCB 1242	U			35	µg/kg	35	EPA8080
PCB 1248	U			35	µg/kg	35	EPA8080
PCB 1254	U			35	µg/kg	35	EPA8080
PCB 1260	U			35	µg/kg	35	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			170	µg/kg	170	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			9.6	pCi/g	9.6	EPA900.0
Gross alpha	U			9.1	pCi/g	9.1	EPA900.0
Nonvolatile beta				18±21	pCi/g	9.7	EPA900.0
Nonvolatile beta				16±20	pCi/g	9.1	EPA900.0
Radium, total alpha-emitting	U	V		1.4±0.80	pCi/g	0.20	EPA903.0
Radium, total alpha-emitting	U	V		1.2±0.71	pCi/g	0.20	EPA903.0
Tritium				1.7±0.38	pCi/g	1.2	EPA906.0

SAMPLE NAME: D43110901A Sample ID: 100341

Sample Type: Split Associated Sample: 100340

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				13	meq/100g	2.0	EPA9080
pH	J	Q		4.4	pH	0.010	EPA9045
Specific conductance				44	µS/cm	1.0	EPA9050
Total organic carbon				7,800	mg/kg	440	EPA415.1

SAMPLE NAME: D43I10901A (Continued) Sample ID: 100341

Total Metals

Arsenic	U	0.86	mg/kg	0.86	EPA7060
Barium	U	21	mg/kg	21	EPA6010
Cadmium	U	0.51	mg/kg	0.51	EPA6010
Chromium		6.7	mg/kg	1.0	EPA6010
Copper	U	2.6	mg/kg	2.6	EPA6010
Lead		2.1	mg/kg	0.26	EPA7421
Manganese		62	mg/kg	1.5	EPA6010
Mercury	U	0.11	mg/kg	0.11	EPA7470
Nickel	U	4.1	mg/kg	4.1	EPA6010
Selenium	U	0.43	mg/kg	0.43	EPA7740
Silver	U	1.0	mg/kg	1.0	EPA6010

B/N/A Extractables (including PAH and phenols)

Acenaphthene	U	350	µg/kg	350	EPA8270
Acenaphthylene	U	350	µg/kg	350	EPA8270
Anthracene	U	350	µg/kg	350	EPA8270
Benzo(a)anthracene	U	350	µg/kg	350	EPA8270
Benzo(b)fluoranthene	U	350	µg/kg	350	EPA8270
Benzo(k)fluoranthene	U	350	µg/kg	350	EPA8270
Benzoic acid	U	1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U	350	µg/kg	350	EPA8270
Benzo(a)pyrene	U	350	µg/kg	350	EPA8270
Benzyl alcohol	U	350	µg/kg	350	EPA8270
Bis(2-chloroethoxy) methane	U	350	µg/kg	350	EPA8270
Bis(2-chloroethyl) ether	U	350	µg/kg	350	EPA8270
Bis(2-chloroisopropyl) ether	U	350	µg/kg	350	EPA8270
Bis(2-ethylhexyl) phthalate	U	350	µg/kg	350	EPA8270
4-Bromophenyl phenyl ether	U	350	µg/kg	350	EPA8270
Butylbenzyl phthalate	U	350	µg/kg	350	EPA8270
4-Chloroaniline	U	350	µg/kg	350	EPA8270
4-Chloro-m-cresol	U	350	µg/kg	350	EPA8270
2-Chloronaphthalene	U	350	µg/kg	350	EPA8270
2-Chlorophenol	U	350	µg/kg	350	EPA8270
4-Chlorophenyl phenyl ether	U	350	µg/kg	350	EPA8270
Chrysene	U	350	µg/kg	350	EPA8270
o-Cresol (2-Methylphenol)	U	350	µg/kg	350	EPA8270
p-Cresol (4-Methylphenol)	U	350	µg/kg	350	EPA8270
Dibenz(a,h)anthracene	U	350	µg/kg	350	EPA8270
Dibenzofuran	U	350	µg/kg	350	EPA8270
Di-n-butyl phthalate	UJ V	53	µg/kg	350	EPA8270
1,2-Dichlorobenzene	U	350	µg/kg	350	EPA8270
1,3-Dichlorobenzene	U	350	µg/kg	350	EPA8270
1,4-Dichlorobenzene	U	350	µg/kg	350	EPA8270
3,3'-Dichlorobenzidine	U	700	µg/kg	700	EPA8270
2,4-Dichlorophenol	U	350	µg/kg	350	EPA8270
Diethyl phthalate	U	350	µg/kg	350	EPA8270
2,4-Dimethyl phenol	U	350	µg/kg	350	EPA8270
Dimethyl phthalate	U	350	µg/kg	350	EPA8270
2,4-Dinitrophenol	U	1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U	350	µg/kg	350	EPA8270
2,6-Dinitrotoluene	U	350	µg/kg	350	EPA8270
Di-n-octyl phthalate	U	350	µg/kg	350	EPA8270

SAMPLE NAME: D43I10901A (Continued) Sample ID: 100341

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Fluoranthene	U			350	µg/kg	350	EPA8270
Fluorene	U			350	µg/kg	350	EPA8270
Hexachlorobenzene	U			350	µg/kg	350	EPA8270
Hexachlorobutadiene	U			350	µg/kg	350	EPA8270
Hexachlorocyclopentadiene	U			350	µg/kg	350	EPA8270
Hexachloroethane	U			350	µg/kg	350	EPA8270
Indeno(1,2,3-c,d)pyrene	U			350	µg/kg	350	EPA8270
Isophorone	U			350	µg/kg	350	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			350	µg/kg	350	EPA8270
Naphthalene	U			350	µg/kg	350	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			350	µg/kg	350	EPA8270
2-Nitrophenol	U			350	µg/kg	350	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			350	µg/kg	350	EPA8270
N-Nitrosodipropylamine	U			350	µg/kg	350	EPA8270
Pentachlorophenol	U			1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			350	µg/kg	350	EPA8270
Phenol	U			350	µg/kg	350	EPA8270
Pyrene	U			350	µg/kg	350	EPA8270
1,2,4-Trichlorobenzene	U			350	µg/kg	350	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			350	µg/kg	350	EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		400	µg/kg		EPA8270
Unknown hydrocarbon	J	N		400	µg/kg		EPA8270
Unknown ketone	J	NV		6,000	µg/kg		EPA8270
Unknown alcohol	J	N		100	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		11	µg/kg	11	EPA8240
Benzene	U			5.3	µg/kg	5.3	EPA8240
Bromodichloromethane	U			5.3	µg/kg	5.3	EPA8240
Bromoform	U			5.3	µg/kg	5.3	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.3	µg/kg	5.3	EPA8240
Carbon tetrachloride	U			5.3	µg/kg	5.3	EPA8240
Chlorobenzene	U			5.3	µg/kg	5.3	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.3	µg/kg	5.3	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.3	µg/kg	5.3	EPA8240
1,1-Dichloroethane	U			5.3	µg/kg	5.3	EPA8240
1,2-Dichloroethane	J			2.3	µg/kg	5.3	EPA8240

SAMPLE NAME: D43110901A (Continued) Sample ID: 100341

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1-Dichloroethylene	U			5.3	µg/kg	5.3	EPA8240
1,2-Dichloroethylene	U			5.3	µg/kg	5.3	EPA8240
Dichloromethane (Methylene chloride)	U			5.3	µg/kg	5.3	EPA8240
1,2-Dichloropropane	U			5.3	µg/kg	5.3	EPA8240
cis-1,3-Dichloropropene	U			5.3	µg/kg	5.3	EPA8240
trans-1,3-Dichloropropene	U			5.3	µg/kg	5.3	EPA8240
Ethylbenzene	U			5.3	µg/kg	5.3	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.3	µg/kg	5.3	EPA8240
1,1,2,2-Tetrachloroethane	U			5.3	µg/kg	5.3	EPA8240
Tetrachloroethylene	U			5.3	µg/kg	5.3	EPA8240
Toluene	U			5.3	µg/kg	5.3	EPA8240
1,1,1-Trichloroethane	U			5.3	µg/kg	5.3	EPA8240
1,1,2-Trichloroethane	J			4.0	µg/kg	5.3	EPA8240
Trichloroethylene	U			5.3	µg/kg	5.3	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.3	µg/kg	5.3	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.7	µg/kg	1.7	EPA8080
alpha-Benzene hexachloride	U			1.7	µg/kg	1.7	EPA8080
beta-Benzene hexachloride	U			1.7	µg/kg	1.7	EPA8080
delta-Benzene hexachloride	U			1.7	µg/kg	1.7	EPA8080
alpha-Chlordane	U			1.7	µg/kg	1.7	EPA8080
gamma-Chlordane	U			1.7	µg/kg	1.7	EPA8080
p,p'-DDD	U			3.5	µg/kg	3.5	EPA8080
p,p'-DDE	U			3.5	µg/kg	3.5	EPA8080
p,p'-DDT	U			3.5	µg/kg	3.5	EPA8080
Dieldrin	U			3.5	µg/kg	3.5	EPA8080
Endosulfan I	U			1.7	µg/kg	1.7	EPA8080
Endosulfan II	U			3.5	µg/kg	3.5	EPA8080
Endosulfan sulfate	U			3.5	µg/kg	3.5	EPA8080
Endrin	U			3.5	µg/kg	3.5	EPA8080
Endrin ketone	U			3.5	µg/kg	3.5	EPA8080
Heptachlor	U			1.7	µg/kg	1.7	EPA8080
Heptachlor epoxide	U			1.7	µg/kg	1.7	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	J			0.50	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			1.7	µg/kg	1.7	EPA8080
Methoxychlor	U			17	µg/kg	17	EPA8080
Octachlorodibenzo-p-dioxin	J			1.6	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			35	µg/kg	35	EPA8080

SAMPLE NAME: D43110901A (Continued) Sample ID: 100341

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
PCB 1221	U			69	µg/kg	69	EPA8080
PCB 1232	U			35	µg/kg	35	EPA8080
PCB 1242	U			35	µg/kg	35	EPA8080
PCB 1248	U			35	µg/kg	35	EPA8080
PCB 1254	U			35	µg/kg	35	EPA8080
PCB 1260	U			35	µg/kg	35	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers				87	ng/g	0.10	EPA8280
Toxaphene	U			170	µg/kg	170	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			9.5	pCi/g	9.5	EPA900.0
Nonvolatile beta				32±23	pCi/g	9.6	EPA900.0
Radium, total alpha-emitting	U	V		1.3±0.80	pCi/g	0.20	EPA903.0
Tritium				3.2±0.65	pCi/g	1.2	EPA906.0

SAMPLE NAME: D43110902 Sample ID: 100343

Location (SRS Coordinates): 18482.49E 66640.62N
Ground Elevation Above MSL: 132 ft
Depth of Core Interval: 0.50 to 2.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 3/4 USC Soil Classification: SM Percent Solids: 92.00

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			0.97	mg/kg	0.97	EPA7060
Barium	U			20	mg/kg	20	EPA6010
Cadmium	U			0.50	mg/kg	0.50	EPA6010
Chromium				12	mg/kg	0.99	EPA6010
Copper	U			2.5	mg/kg	2.5	EPA6010
Lead				2.6	mg/kg	0.29	EPA7421
Manganese				32	mg/kg	1.5	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			4.0	mg/kg	4.0	EPA6010
Selenium	U			0.48	mg/kg	0.48	EPA7740
Silver	U			0.99	mg/kg	0.99	EPA6010

SAMPLE NAME: D43110902 (Continued) Sample ID: 100343

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			360	µg/kg	360	EPA8270
Acenaphthylene	U			360	µg/kg	360	EPA8270
Anthracene	U			360	µg/kg	360	EPA8270
Benzo(a)anthracene	U			360	µg/kg	360	EPA8270
Benzo(b)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(k)fluoranthene	U			360	µg/kg	360	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			360	µg/kg	360	EPA8270
Benzo(a)pyrene	U			360	µg/kg	360	EPA8270
Benzyl alcohol	U			360	µg/kg	360	EPA8270
Bis(2-chloroethoxy) methane	U			360	µg/kg	360	EPA8270
Bis(2-chloroethyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-chloroisopropyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-ethylhexyl) phthalate	U			360	µg/kg	360	EPA8270
4-Bromophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Butylbenzyl phthalate	U			360	µg/kg	360	EPA8270
4-Chloroaniline	U			360	µg/kg	360	EPA8270
4-Chloro-m-cresol	U			360	µg/kg	360	EPA8270
2-Chloronaphthalene	U			360	µg/kg	360	EPA8270
2-Chlorophenol	U			360	µg/kg	360	EPA8270
4-Chlorophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Chrysene	U			360	µg/kg	360	EPA8270
o-Cresol (2-Methylphenol)	U			360	µg/kg	360	EPA8270
p-Cresol (4-Methylphenol)	U			360	µg/kg	360	EPA8270
Dibenz(a,h)anthracene	U			360	µg/kg	360	EPA8270
Dibenzofuran	U			360	µg/kg	360	EPA8270
Di-n-butyl phthalate	UJ	V		62	µg/kg	360	EPA8270
1,2-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,3-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,4-Dichlorobenzene	U			360	µg/kg	360	EPA8270
3,3'-Dichlorobenzidine	U			720	µg/kg	720	EPA8270
2,4-Dichlorophenol	U			360	µg/kg	360	EPA8270
Diethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dimethyl phenol	U			360	µg/kg	360	EPA8270
Dimethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			360	µg/kg	360	EPA8270
2,6-Dinitrotoluene	U			360	µg/kg	360	EPA8270
Di-n-octyl phthalate	U			360	µg/kg	360	EPA8270
Fluoranthene	U			360	µg/kg	360	EPA8270
Fluorene	U			360	µg/kg	360	EPA8270
Hexachlorobenzene	U			360	µg/kg	360	EPA8270
Hexachlorobutadiene	U			360	µg/kg	360	EPA8270
Hexachlorocyclopentadiene	U			360	µg/kg	360	EPA8270
Hexachloroethane	U			360	µg/kg	360	EPA8270
Indeno(1,2,3-c,d)pyrene	U			360	µg/kg	360	EPA8270
Isophorone	U			360	µg/kg	360	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			360	µg/kg	360	EPA8270
Naphthalene	U			360	µg/kg	360	EPA8270

SAMPLE NAME: D43110902 (Continued) Sample ID: 100343

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			360	µg/kg	360	EPA8270
2-Nitrophenol	U			360	µg/kg	360	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			360	µg/kg	360	EPA8270
N-Nitrosodipropylamine	U			360	µg/kg	360	EPA8270
Pentachlorophenol	U			1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			360	µg/kg	360	EPA8270
Phenol	U			360	µg/kg	360	EPA8270
Pyrene	U			360	µg/kg	360	EPA8270
1,2,4-Trichlorobenzene	U			360	µg/kg	360	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			360	µg/kg	360	EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown ketone	J	NV		7,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		11	µg/kg	11	EPA8240
Benzene	U			5.4	µg/kg	5.4	EPA8240
Bromodichloromethane	U			5.4	µg/kg	5.4	EPA8240
Bromoform	U			5.4	µg/kg	5.4	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.4	µg/kg	5.4	EPA8240
Carbon tetrachloride	U			5.4	µg/kg	5.4	EPA8240
Chlorobenzene	U			5.4	µg/kg	5.4	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.4	µg/kg	5.4	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.4	µg/kg	5.4	EPA8240
1,1-Dichloroethane	U			5.4	µg/kg	5.4	EPA8240
1,2-Dichloroethane	U			5.4	µg/kg	5.4	EPA8240
1,1-Dichloroethylene	U			5.4	µg/kg	5.4	EPA8240
1,2-Dichloroethylene	U			5.4	µg/kg	5.4	EPA8240
Dichloromethane (Methylene chloride)	U			5.4	µg/kg	5.4	EPA8240
1,2-Dichloropropane	U			5.4	µg/kg	5.4	EPA8240
cis-1,3-Dichloropropene	U			5.4	µg/kg	5.4	EPA8240
trans-1,3-Dichloropropene	U			5.4	µg/kg	5.4	EPA8240
Ethylbenzene	U			5.4	µg/kg	5.4	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.4	µg/kg	5.4	EPA8240
1,1,2,2-Tetrachloroethane	U			5.4	µg/kg	5.4	EPA8240
Tetrachloroethylene	U			5.4	µg/kg	5.4	EPA8240
Toluene	U			5.4	µg/kg	5.4	EPA8240
1,1,1-Trichloroethane	U			5.4	µg/kg	5.4	EPA8240

SAMPLE NAME: D43110902 (Continued) Sample ID: 100343

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1,2-Trichloroethane	J			3.2	µg/kg	5.4	EPA8240
Trichloroethylene	U			5.4	µg/kg	5.4	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.4	µg/kg	5.4	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	UJ	O	L	1.8	µg/kg	1.8	EPA8080
alpha-Benzene hexachloride	UJ	O	L	1.8	µg/kg	1.8	EPA8080
beta-Benzene hexachloride	UJ	O	L	1.8	µg/kg	1.8	EPA8080
delta-Benzene hexachloride	UJ	O	L	1.8	µg/kg	1.8	EPA8080
alpha-Chlordane	UJ	O	L	1.8	µg/kg	1.8	EPA8080
gamma-Chlordane	UJ	O	L	1.8	µg/kg	1.8	EPA8080
p,p'-DDD	UJ	O	L	3.5	µg/kg	3.5	EPA8080
p,p'-DDE	UJ	O	L	3.5	µg/kg	3.5	EPA8080
p,p'-DDT	UJ	O	L	3.5	µg/kg	3.5	EPA8080
Dieldrin	UJ	O	L	3.5	µg/kg	3.5	EPA8080
Endosulfan I	UJ	O	L	1.8	µg/kg	1.8	EPA8080
Endosulfan II	UJ	O	L	3.5	µg/kg	3.5	EPA8080
Endosulfan sulfate	UJ	O	L	3.5	µg/kg	3.5	EPA8080
Endrin	UJ	O	L	3.5	µg/kg	3.5	EPA8080
Endrin ketone	UJ	O	L	3.5	µg/kg	3.5	EPA8080
Heptachlor	UJ	O	L	1.8	µg/kg	1.8	EPA8080
Heptachlor epoxide	UJ	O	L	1.8	µg/kg	1.8	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	UJ	O	L	1.8	µg/kg	1.8	EPA8080
Methoxychlor	UJ	O	L	18	µg/kg	18	EPA8080
Octachlorodibenzo-p-dioxin				3.2	ng/g	0.30	EPA8280
Octachlorodibenzo-p-dioxin				2.1	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	UJ	O	L	35	µg/kg	35	EPA8080
PCB 1221	UJ	O	L	71	µg/kg	71	EPA8080
PCB 1232	UJ	O	L	35	µg/kg	35	EPA8080
PCB 1242	UJ	O	L	35	µg/kg	35	EPA8080
PCB 1248	UJ	O	L	35	µg/kg	35	EPA8080
PCB 1254	UJ	O	L	35	µg/kg	35	EPA8080
PCB 1260	UJ	O	L	35	µg/kg	35	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280

SAMPLE NAME: D43110902 (Continued) Sample ID: 100343

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	UJ	O	L	180	µg/kg	180	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			8.9	pCi/g	8.9	EPA900.0
Nonvolatile beta				22±20	pCi/g	9.0	EPA900.0
Radium, total alpha-emitting	U	V		1.2±0.70	pCi/g	0.20	EPA903.0
Tritium				2.9±0.61	pCi/g	1.2	EPA906.0

SAMPLE NAME: D43110903 Sample ID: 100344

Location (SRS Coordinates): 18482.49E 66640.62N
Ground Elevation Above MSL: 132 ft
Depth of Core Interval: 2.00 to 4.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 4/6 USC Soil Classification: SM Percent Solids: 90.20

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			1.1	mg/kg	1.1	EPA7060
Barium	U			20	mg/kg	20	EPA6010
Cadmium	U			0.51	mg/kg	0.51	EPA6010
Chromium				12	mg/kg	1.0	EPA6010
Copper				2.8	mg/kg	2.5	EPA6010
Lead				3.8	mg/kg	0.33	EPA7421
Manganese				29	mg/kg	1.5	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			4.1	mg/kg	4.1	EPA6010
Selenium	U			0.55	mg/kg	0.55	EPA7740
Silver	U			1.0	mg/kg	1.0	EPA6010
Volatile Organic Compounds							
Acetone	U	V		11	µg/kg	11	EPA8240
Benzene	U			5.7	µg/kg	5.7	EPA8240
Bromodichloromethane	U			5.7	µg/kg	5.7	EPA8240
Bromoform	U			5.7	µg/kg	5.7	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.7	µg/kg	5.7	EPA8240
Carbon tetrachloride	U			5.7	µg/kg	5.7	EPA8240

SAMPLE NAME: D43110903 (Continued) Sample ID: 100344

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Chlorobenzene	U			5.7	µg/kg	5.7	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.7	µg/kg	5.7	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.7	µg/kg	5.7	EPA8240
1,1-Dichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
Dichloromethane (Methylene chloride)	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloropropane	U			5.7	µg/kg	5.7	EPA8240
cis-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
trans-1,3-Dichloropropene	U			5.7	µg/kg	5.7	EPA8240
Ethylbenzene	U			5.7	µg/kg	5.7	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.7	µg/kg	5.7	EPA8240
1,1,2,2-Tetrachloroethane	U			5.7	µg/kg	5.7	EPA8240
Tetrachloroethylene	U			5.7	µg/kg	5.7	EPA8240
Toluene	U			5.7	µg/kg	5.7	EPA8240
1,1,1-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,1,2-Trichloroethane	U			5.7	µg/kg	5.7	EPA8240
Trichloroethylene	U			5.7	µg/kg	5.7	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.7	µg/kg	5.7	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			8.5	pCi/g	8.5	EPA900.0
Nonvolatile beta				16±19	pCi/g	8.5	EPA900.0
Radium, total alpha-emitting	U	V		1.4±0.70	pCi/g	0.14	EPA903.0
Tritium				5.0±0.97	pCi/g	1.5	EPA906.0

SAMPLE NAME: D43110904 Sample ID: 100345

Location (SRS Coordinates): 18482.49E 66640.62N
Ground Elevation Above MSL: 132 ft
Depth of Core Interval: 4.00 to 6.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 4/6 USC Soil Classification: SM Percent Solids: 88.90

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				4.1	mg/kg	0.91	EPA7060
Barium	U			22	mg/kg	22	EPA6010
Cadmium	U			0.54	mg/kg	0.54	EPA6010
Chromium				47	mg/kg	1.1	EPA6010

SAMPLE NAME: D43110904 (Continued) Sample ID: 100345

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Copper				30	mg/kg	2.7	EPA6010
Lead				37	mg/kg	5.5	EPA7421
Manganese				35	mg/kg	1.6	EPA6010
Mercury				0.64	mg/kg	0.11	EPA7470
Nickel				38	mg/kg	4.3	EPA6010
Selenium	U			0.46	mg/kg	0.46	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
Volatile Organic Compounds							
Acetone	L	V		2,400	µg/kg	12	EPA8240
Acetone		V		2,600	µg/kg	120	EPA8240
Acetone	L	V		2,000	µg/kg	12	EPA8240
Acetone	L	V		2,000	µg/kg	12	EPA8240
Benzene	U			5.8	µg/kg	5.8	EPA8240
Bromodichloromethane	U			5.8	µg/kg	5.8	EPA8240
Bromodichloromethane	U			5.8	µg/kg	5.8	EPA8240
Bromodichloromethane	U			5.8	µg/kg	5.8	EPA8240
Bromoform	U			5.8	µg/kg	5.8	EPA8240
Bromoform	U			5.8	µg/kg	5.8	EPA8240
Bromoform	U			5.8	µg/kg	5.8	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			5.8	µg/kg	5.8	EPA8240
Carbon disulfide	U			5.8	µg/kg	5.8	EPA8240
Carbon disulfide	U			5.8	µg/kg	5.8	EPA8240
Carbon tetrachloride	U			5.8	µg/kg	5.8	EPA8240
Carbon tetrachloride	U			5.8	µg/kg	5.8	EPA8240
Carbon tetrachloride	U			5.8	µg/kg	5.8	EPA8240
Chlorobenzene	U			5.8	µg/kg	5.8	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
Chloroform	U			5.8	µg/kg	5.8	EPA8240
Chloroform	U			5.8	µg/kg	5.8	EPA8240
Chloroform	U			5.8	µg/kg	5.8	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			5.8	µg/kg	5.8	EPA8240
Dibromochloromethane	U			5.8	µg/kg	5.8	EPA8240
Dibromochloromethane	U			5.8	µg/kg	5.8	EPA8240
1,1-Dichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1-Dichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1-Dichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloroethane	J			3.8	µg/kg	5.8	EPA8240

SAMPLE NAME: D43110904 (Continued) Sample ID: 100345

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,2-Dichloroethane	J			4.0	µg/kg	5.8	EPA8240
1,2-Dichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1-Dichloroethylene	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloroethylene	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloroethylene	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloroethylene	U			5.8	µg/kg	5.8	EPA8240
Dichloromethane (Methylene chloride)	U			5.8	µg/kg	5.8	EPA8240
Dichloromethane (Methylene chloride)	U			5.8	µg/kg	5.8	EPA8240
Dichloromethane (Methylene chloride)	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloropropane	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloropropane	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloropropane	U			5.8	µg/kg	5.8	EPA8240
cis-1,3-Dichloropropene	U			5.8	µg/kg	5.8	EPA8240
cis-1,3-Dichloropropene	U			5.8	µg/kg	5.8	EPA8240
cis-1,3-Dichloropropene	U			5.8	µg/kg	5.8	EPA8240
trans-1,3-Dichloropropene	U			5.8	µg/kg	5.8	EPA8240
trans-1,3-Dichloropropene	U			5.8	µg/kg	5.8	EPA8240
trans-1,3-Dichloropropene	U			5.8	µg/kg	5.8	EPA8240
Ethylbenzene	U			5.8	µg/kg	5.8	EPA8240
Ethylbenzene	U			5.8	µg/kg	5.8	EPA8240
Ethylbenzene	U			5.8	µg/kg	5.8	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			5.8	µg/kg	5.8	EPA8240
Styrene	U			5.8	µg/kg	5.8	EPA8240
Styrene	U			5.8	µg/kg	5.8	EPA8240
1,1,2,2-Tetrachloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1,2,2-Tetrachloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1,2,2-Tetrachloroethane	U			5.8	µg/kg	5.8	EPA8240
Tetrachloroethylene	U			5.8	µg/kg	5.8	EPA8240
Tetrachloroethylene	U			5.8	µg/kg	5.8	EPA8240
Tetrachloroethylene	U			5.8	µg/kg	5.8	EPA8240
Toluene	U			5.8	µg/kg	5.8	EPA8240
1,1,1-Trichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1,1-Trichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1,1-Trichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1,2-Trichloroethane	J			3.8	µg/kg	5.8	EPA8240
1,1,2-Trichloroethane	J			3.0	µg/kg	5.8	EPA8240
1,1,2-Trichloroethane	U			5.8	µg/kg	5.8	EPA8240
Trichloroethylene	U			5.8	µg/kg	5.8	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240

SAMPLE NAME: D43110904 (Continued) Sample ID: 100345

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Xylenes	U			5.8	µg/kg	5.8	EPA8240
Xylenes	U			5.8	µg/kg	5.8	EPA8240
Xylenes	U			5.8	µg/kg	5.8	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha				12±14	pCi/g	9.5	EPA900.0
Nonvolatile beta				20±21	pCi/g	9.5	EPA900.0
Radium, total alpha-emitting	U	V		1.1±0.70	pCi/g	0.20	EPA903.0
Tritium				3.1±0.63	pCi/g	1.2	EPA906.0

SAMPLE NAME: D43110905 Sample ID: 100346

Location (SRS Coordinates): 18482.49E 66640.62N
Ground Elevation Above MSL: 132 ft
Depth of Core Interval: 6.00 to 8.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 4/6 USC Soil Classification: SW Percent Solids: 88.40

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				8.0	meq/100g	2.0	EPA9080
Cyanide	U			1.1	mg/kg	1.1	EPA335.3
pH	J	Q		6.0	pH	0.010	EPA9045
Specific conductance				50	µS/cm	1.0	EPA9050
Total organic carbon				4,900	mg/kg	500	EPA415.1
Total Metals							
Aluminum				1,300	mg/kg	18	EPA6010
Antimony	U			5.4	mg/kg	5.4	EPA6010
Arsenic				3.2	mg/kg	1.0	EPA7060
Barium	U			18	mg/kg	18	EPA6010
Beryllium	U			0.45	mg/kg	0.45	EPA6010
Cadmium	UJ	L		0.45	mg/kg	0.45	EPA6010
Calcium	U			450	mg/kg	450	EPA6010
Chromium	UJ	L		8.9	mg/kg	0.90	EPA6010
Cobalt	U			4.5	mg/kg	4.5	EPA6010
Copper				3.9	mg/kg	2.2	EPA6010
Iron				5,900	mg/kg	9.0	EPA6010
Lead				22	mg/kg	3.1	EPA7421
Magnesium	U			450	mg/kg	450	EPA6010
Manganese				13	mg/kg	1.3	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			3.6	mg/kg	3.6	EPA6010
Potassium	U			450	mg/kg	450	EPA6010
Selenium	U			0.52	mg/kg	0.52	EPA7740

SAMPLE NAME: D43110905 (Continued) Sample ID: 100346

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Silver	U			0.90	mg/kg	0.90	EPA6010
Sodium	U			450	mg/kg	450	EPA6010
Thallium	U			1.0	mg/kg	1.0	EPA7841
Vanadium				14	mg/kg	4.5	EPA6010
Zinc				7.7	mg/kg	1.8	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			360	µg/kg	360	EPA8270
Acenaphthylene	U			360	µg/kg	360	EPA8270
Anthracene	U			360	µg/kg	360	EPA8270
Benzo(a)anthracene	U			360	µg/kg	360	EPA8270
Benzo(b)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(k)fluoranthene	U			360	µg/kg	360	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			360	µg/kg	360	EPA8270
Benzo(a)pyrene	U			360	µg/kg	360	EPA8270
Benzyl alcohol	U			360	µg/kg	360	EPA8270
Bis(2-chloroethoxy) methane	U			360	µg/kg	360	EPA8270
Bis(2-chloroethyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-chloroisopropyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-ethylhexyl) phthalate	J			82	µg/kg	360	EPA8270
4-Bromophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Butylbenzyl phthalate	U			360	µg/kg	360	EPA8270
4-Chloroaniline	U			360	µg/kg	360	EPA8270
4-Chloro-m-cresol	U			360	µg/kg	360	EPA8270
2-Chloronaphthalene	U			360	µg/kg	360	EPA8270
2-Chlorophenol	U			360	µg/kg	360	EPA8270
4-Chlorophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Chrysene	U			360	µg/kg	360	EPA8270
o-Cresol (2-Methylphenol)	U			360	µg/kg	360	EPA8270
p-Cresol (4-Methylphenol)	U			360	µg/kg	360	EPA8270
Dibenz(a,h)anthracene	U			360	µg/kg	360	EPA8270
Dibenzofuran	U			360	µg/kg	360	EPA8270
Di-n-butyl phthalate	UJ	V		230	µg/kg	360	EPA8270
1,2-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,3-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,4-Dichlorobenzene	U			360	µg/kg	360	EPA8270
3,3'-Dichlorobenzidine	U			720	µg/kg	720	EPA8270
2,4-Dichlorophenol	U			360	µg/kg	360	EPA8270
Diethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dimethyl phenol	U			360	µg/kg	360	EPA8270
Dimethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			360	µg/kg	360	EPA8270
2,6-Dinitrotoluene	U			360	µg/kg	360	EPA8270
Di-n-octyl phthalate	U			360	µg/kg	360	EPA8270
Fluoranthene	U			360	µg/kg	360	EPA8270
Fluorene	U			360	µg/kg	360	EPA8270
Hexachlorobenzene	U			360	µg/kg	360	EPA8270

SAMPLE NAME: D43I10905 (Continued) Sample ID: 100346

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Hexachlorobutadiene	U			360	µg/kg	360	EPA8270
Hexachlorocyclopentadiene	U			360	µg/kg	360	EPA8270
Hexachloroethane	U			360	µg/kg	360	EPA8270
Indeno(1,2,3-c,d)pyrene	U			360	µg/kg	360	EPA8270
Isophorone	U			360	µg/kg	360	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			360	µg/kg	360	EPA8270
Naphthalene	U			360	µg/kg	360	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			360	µg/kg	360	EPA8270
2-Nitrophenol	U			360	µg/kg	360	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			360	µg/kg	360	EPA8270
N-Nitrosodipropylamine	U			360	µg/kg	360	EPA8270
Pentachlorophenol	UJ	C		1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			360	µg/kg	360	EPA8270
Phenol	UJ	C		360	µg/kg	360	EPA8270
Pyrene	U			360	µg/kg	360	EPA8270
1,2,4-Trichlorobenzene	U			360	µg/kg	360	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			360	µg/kg	360	EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown	J	N		400	µg/kg		EPA8270
Unknown	J	N		500	µg/kg		EPA8270
Unknown ketone	J	NV		10,000	µg/kg		EPA8270
Unknown phthalate	J	N		300	µg/kg		EPA8270
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.8	µg/kg	1.8	EPA8080
alpha-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
beta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
delta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
alpha-Chlordane	J			1.1	µg/kg	1.8	EPA8080
gamma-Chlordane	J			1.5	µg/kg	1.8	EPA8080
p,p'-DDD	U			3.7	µg/kg	3.7	EPA8080
p,p'-DDE	J			1.1	µg/kg	3.7	EPA8080
p,p'-DDT	U			3.7	µg/kg	3.7	EPA8080
Dieldrin	J			0.73	µg/kg	3.7	EPA8080
Endosulfan I	U			1.8	µg/kg	1.8	EPA8080
Endosulfan II	U			3.7	µg/kg	3.7	EPA8080
Endosulfan sulfate	U			3.7	µg/kg	3.7	EPA8080
Endrin	U			3.7	µg/kg	3.7	EPA8080
Endrin ketone	U			3.7	µg/kg	3.7	EPA8080
Heptachlor	U			1.8	µg/kg	1.8	EPA8080
Heptachlor epoxide	U			1.8	µg/kg	1.8	EPA8080
Lindane	U			1.8	µg/kg	1.8	EPA8080
Methoxychlor	U			18	µg/kg	18	EPA8080

SAMPLE NAME: D43110905 (Continued) Sample ID: 100346

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
PCB 1016	U			37	µg/kg	37	EPA8080
PCB 1221	U			73	µg/kg	73	EPA8080
PCB 1232	U			37	µg/kg	37	EPA8080
PCB 1242	U			37	µg/kg	37	EPA8080
PCB 1248	U			37	µg/kg	37	EPA8080
PCB 1254	U			37	µg/kg	37	EPA8080
PCB 1260	U			37	µg/kg	37	EPA8080
Toxaphene	U			180	µg/kg	180	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			8.4	pCi/g	8.4	EPA900.0
Gross alpha				18±16	pCi/g	8.1	EPA900.0
Nonvolatile beta		V		32±24	pCi/g	11	EPA900.0
Nonvolatile beta		V		46±24	pCi/g	11	EPA900.0
Radium, total alpha-emitting	U	V		1.6±0.77	pCi/g	0.20	EPA903.0
Radium, total alpha-emitting	U	V		1.5±0.74	pCi/g	0.21	EPA903.0
Tritium	U			1.4	pCi/g	1.4	EPA906.0
Tritium	U			1.4	pCi/g	1.4	EPA906.0
TCLP Compounds (Metals and Organics)							
Arsenic, TCLP	U			100	µg/L	100	EPA6010
Barium, TCLP				240	µg/L	200	EPA6010
Benzene	U			50	µg/L	50	EPA8240
Cadmium, TCLP	UJ	L		5.0	µg/L	5.0	EPA6010
Carbon tetrachloride	U			50	µg/L	50	EPA8240
alpha-Chlordane	U			1.1	µg/L	1.1	EPA8080
gamma-Chlordane	U			1.1	µg/L	1.1	EPA8080
Chlorobenzene	U			50	µg/L	50	EPA8240
Chloroethene (Vinyl chloride)	U			100	µg/L	100	EPA8240
Chloroform	U	V		50	µg/L	50	EPA8240
Chromium, TCLP	UJ	L		10	µg/L	10	EPA6010
o-Cresol (2-Methylphenol)	UJ	O	L	100	µg/L	100	EPA8270
1,4-Dichlorobenzene	UJ	O	L	100	µg/L	100	EPA8270
1,2-Dichloroethane	U			50	µg/L	50	EPA8240
1,1-Dichloroethylene	U			50	µg/L	50	EPA8240
2,4-Dichlorophenoxyacetic acid	U			10	µg/L	10	EPA8150
2,4-Dinitrotoluene	UJ	O	L	100	µg/L	100	EPA8270
Endrin	U			0.22	µg/L	0.22	EPA8080
Heptachlor	U			0.11	µg/L	0.11	EPA8080
Heptachlor epoxide	U			0.11	µg/L	0.11	EPA8080
Hexachlorobenzene	UJ	O	L	100	µg/L	100	EPA8270
Hexachlorobutadiene	UJ	O	L	100	µg/L	100	EPA8270
Hexachloroethane	UJ	O	L	100	µg/L	100	EPA8270
Lead, TCLP	U			90	µg/L	90	EPA6010
Lindane	U			0.11	µg/L	0.11	EPA8080
Mercury, TCLP	U			0.20	µg/L	0.20	EPA7470
Methoxychlor	U			1.1	µg/L	1.1	EPA8080
Methyl ethyl ketone	U			100	µg/L	100	EPA8240

SAMPLE NAME: D43110905 (Continued) Sample ID: 100346

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
TCLP Compounds (Metals and Organics)							
Nitrobenzene	UJ	O	L	100	µg/L	100	EPA8270
Pentachlorophenol	UJ	O	L	500	µg/L	500	EPA8270
Pyridine	UJ	O	L	100	µg/L	100	EPA8270
Selenium, TCLP	U			100	µg/L	100	EPA6010
Silver, TCLP	U			10	µg/L	10	EPA6010
Tetrachloroethylene	U			50	µg/L	50	EPA8240
Toxaphene	U			2.2	µg/L	2.2	EPA8080
Toxaphene	U			2.3	µg/L	2.3	EPA8080
2,4,5-TP (Silvex)	U			5.0	µg/L	5.0	EPA8150
Trichloroethylene	U			50	µg/L	50	EPA8240
2,4,5-Trichlorophenol	UJ	O	L	500	µg/L	500	EPA8270
2,4,6-Trichlorophenol	UJ	O	L	100	µg/L	100	EPA8270
2,4,5-T	U			5.0	µg/L	5.0	EPA8150
m,p-Cresol	UJ	O	L	100	µg/L	100	EPA8270

SAMPLE NAME: D43110906 Sample ID: 100347

Location (SRS Coordinates): 18482.49E 66640.62N
Ground Elevation Above MSL: 132 ft
Depth of Core Interval: 8.00 to 10.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 4/6 USC Soil Classification: SW Percent Solids: 82.00

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				1.1	mg/kg	1.1	EPA7060
Barium				69	mg/kg	24	EPA6010
Cadmium	UJ	L		0.61	mg/kg	0.61	EPA6010
Chromium	J	L		44	mg/kg	1.2	EPA6010
Copper	U			3.0	mg/kg	3.0	EPA6010
Lead				5.4	mg/kg	0.33	EPA7421
Manganese				21	mg/kg	1.8	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel	U			4.9	mg/kg	4.9	EPA6010
Selenium	U			0.56	mg/kg	0.56	EPA7740
Silver	U			1.2	mg/kg	1.2	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			390	µg/kg	390	EPA8270
Acenaphthylene	U			390	µg/kg	390	EPA8270
Anthracene	U			390	µg/kg	390	EPA8270
Benzo(a)anthracene	U			390	µg/kg	390	EPA8270
Benzo(b)fluoranthene	U			390	µg/kg	390	EPA8270
Benzo(k)fluoranthene	U			390	µg/kg	390	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	U			390	µg/kg	390	EPA8270

SAMPLE NAME: D43110906 (Continued) Sample ID: 100347

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Benzo(a)pyrene	U			390	µg/kg	390	EPA8270
Benzyl alcohol	U			390	µg/kg	390	EPA8270
Bis(2-chloroethoxy) methane	U			390	µg/kg	390	EPA8270
Bis(2-chloroethyl) ether	U			390	µg/kg	390	EPA8270
Bis(2-chloroisopropyl) ether	U			390	µg/kg	390	EPA8270
Bis(2-ethylhexyl) phthalate	U			390	µg/kg	390	EPA8270
4-Bromophenyl phenyl ether	U			390	µg/kg	390	EPA8270
Butylbenzyl phthalate	U			390	µg/kg	390	EPA8270
4-Chloroaniline	U			390	µg/kg	390	EPA8270
4-Chloro-m-cresol	U			390	µg/kg	390	EPA8270
2-Chloronaphthalene	U			390	µg/kg	390	EPA8270
2-Chlorophenol	U			390	µg/kg	390	EPA8270
4-Chlorophenyl phenyl ether	U			390	µg/kg	390	EPA8270
Chrysene	U			390	µg/kg	390	EPA8270
o-Cresol (2-Methylphenol)	U			390	µg/kg	390	EPA8270
p-Cresol (4-Methylphenol)	U			390	µg/kg	390	EPA8270
Dibenz(a,h)anthracene	U			390	µg/kg	390	EPA8270
Dibenzofuran	U			390	µg/kg	390	EPA8270
Di-n-butyl phthalate	UJ	V		290	µg/kg	390	EPA8270
1,2-Dichlorobenzene	U			390	µg/kg	390	EPA8270
1,3-Dichlorobenzene	U			390	µg/kg	390	EPA8270
1,4-Dichlorobenzene	U			390	µg/kg	390	EPA8270
3,3'-Dichlorobenzidine	U			770	µg/kg	770	EPA8270
2,4-Dichlorophenol	U			390	µg/kg	390	EPA8270
Diethyl phthalate	U			390	µg/kg	390	EPA8270
2,4-Dimethyl phenol	U			390	µg/kg	390	EPA8270
Dimethyl phthalate	U			390	µg/kg	390	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			390	µg/kg	390	EPA8270
2,6-Dinitrotoluene	U			390	µg/kg	390	EPA8270
Di-n-octyl phthalate	U			390	µg/kg	390	EPA8270
Fluoranthene	U			390	µg/kg	390	EPA8270
Fluorene	U			390	µg/kg	390	EPA8270
Hexachlorobenzene	U			390	µg/kg	390	EPA8270
Hexachlorobutadiene	U			390	µg/kg	390	EPA8270
Hexachlorocyclopentadiene	U			390	µg/kg	390	EPA8270
Hexachloroethane	U			390	µg/kg	390	EPA8270
Indeno(1,2,3-c,d)pyrene	U			390	µg/kg	390	EPA8270
Isophorone	U			390	µg/kg	390	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	U			390	µg/kg	390	EPA8270
Naphthalene	U			390	µg/kg	390	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U			390	µg/kg	390	EPA8270
2-Nitrophenol	U			390	µg/kg	390	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			390	µg/kg	390	EPA8270
N-Nitrosodipropylamine	U			390	µg/kg	390	EPA8270

SAMPLE NAME: D43110906 (Continued) Sample ID: 100347

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Pentachlorophenol	UJ	CL		1,900	µg/kg	1,900	EPA8270
Phenanthrene	U			390	µg/kg	390	EPA8270
Phenol	UJ	C		390	µg/kg	390	EPA8270
Pyrene	U			390	µg/kg	390	EPA8270
1,2,4-Trichlorobenzene	U			390	µg/kg	390	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			390	µg/kg	390	EPA8270
Unknown	J	N		700	µg/kg		EPA8270
Unknown ketone	J	NV		20,000	µg/kg		EPA8270
Unknown phthalate	J	N		300	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		25	µg/kg	12	EPA8240
Benzene	U			5.8	µg/kg	5.8	EPA8240
Bromodichloromethane	U			5.8	µg/kg	5.8	EPA8240
Bromoform	U			5.8	µg/kg	5.8	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			5.8	µg/kg	5.8	EPA8240
Carbon tetrachloride	U			5.8	µg/kg	5.8	EPA8240
Chlorobenzene	U			5.8	µg/kg	5.8	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
Chloroform	U			5.8	µg/kg	5.8	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			5.8	µg/kg	5.8	EPA8240
1,1-Dichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1-Dichloroethylene	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloroethylene	U			5.8	µg/kg	5.8	EPA8240
Dichloromethane (Methylene chloride)	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloropropane	U			5.8	µg/kg	5.8	EPA8240
cis-1,3-Dichloropropene	U			5.8	µg/kg	5.8	EPA8240
trans-1,3-Dichloropropene	U			5.8	µg/kg	5.8	EPA8240
Ethylbenzene	U			5.8	µg/kg	5.8	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			5.8	µg/kg	5.8	EPA8240
1,1,2,2-Tetrachloroethane	U			5.8	µg/kg	5.8	EPA8240
Tetrachloroethylene	U			5.8	µg/kg	5.8	EPA8240
Toluene	U			5.8	µg/kg	5.8	EPA8240
1,1,1-Trichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1,2-Trichloroethane	U			5.8	µg/kg	5.8	EPA8240
Trichloroethylene	U			5.8	µg/kg	5.8	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Tetradecane	J	N		10	µg/kg		EPA8240
Xylenes	U			5.8	µg/kg	5.8	EPA8240

SAMPLE NAME: D43110906 (Continued) Sample ID: 100347

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.9	µg/kg	1.9	EPA8080
alpha-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
beta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
delta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
alpha-Chlordane	U			1.9	µg/kg	1.9	EPA8080
gamma-Chlordane	U			1.9	µg/kg	1.9	EPA8080
p,p'-DDD	U			3.8	µg/kg	3.8	EPA8080
p,p'-DDE	U			3.8	µg/kg	3.8	EPA8080
p,p'-DDT	UJ	G		3.8	µg/kg	3.8	EPA8080
Dieldrin	U			3.8	µg/kg	3.8	EPA8080
Endosulfan I	U			1.9	µg/kg	1.9	EPA8080
Endosulfan II	U			3.8	µg/kg	3.8	EPA8080
Endosulfan sulfate	U			3.8	µg/kg	3.8	EPA8080
Endrin	U			3.8	µg/kg	3.8	EPA8080
Endrin ketone	U			3.8	µg/kg	3.8	EPA8080
Heptachlor	U			1.9	µg/kg	1.9	EPA8080
Heptachlor epoxide	U			1.9	µg/kg	1.9	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			1.9	µg/kg	1.9	EPA8080
Methoxychlor	U			19	µg/kg	19	EPA8080
Octachlorodibenzo-p-dioxin	J			1.2	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			38	µg/kg	38	EPA8080
PCB 1221	U			77	µg/kg	77	EPA8080
PCB 1232	U			38	µg/kg	38	EPA8080
PCB 1242	U			38	µg/kg	38	EPA8080
PCB 1248	U			38	µg/kg	38	EPA8080
PCB 1254	U			38	µg/kg	38	EPA8080
PCB 1260	U			38	µg/kg	38	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			190	µg/kg	190	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			7.6	pCi/g	7.6	EPA900.0
Nonvolatile beta		V		33±21	pCi/g	9.7	EPA900.0
Radium, total alpha-emitting	U	V		1.7±0.78	pCi/g	0.20	EPA903.0
Tritium	U			1.5	pCi/g	1.5	EPA906.0

SAMPLE NAME: D43110907 Sample ID: 100349

Location (SRS Coordinates): 18482.49E 66640.62N
Ground Elevation Above MSL: 132 ft
Depth of Core Interval: 10.00 to 12.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 4/6 USC Soil Classification: SP Percent Solids: 83.20

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			1.1	mg/kg	1.1	EPA7060
Barium				22	mg/kg	17	EPA6010
Cadmium	UJ	L		0.41	mg/kg	0.41	EPA6010
Chromium	UJ	L		7.8	mg/kg	0.83	EPA6010
Copper	U			2.1	mg/kg	2.1	EPA6010
Lead				1.7	mg/kg	0.34	EPA7421
Manganese				32	mg/kg	1.2	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel	U			3.3	mg/kg	3.3	EPA6010
Selenium	U			0.57	mg/kg	0.57	EPA7740
Silver	U			0.83	mg/kg	0.83	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			410	µg/kg	410	EPA8270
Acenaphthylene	U			410	µg/kg	410	EPA8270
Anthracene	U			410	µg/kg	410	EPA8270
Benzo(a)anthracene	U			410	µg/kg	410	EPA8270
Benzo(b)fluoranthene	U			410	µg/kg	410	EPA8270
Benzo(k)fluoranthene	U			410	µg/kg	410	EPA8270
Benzoic acid	U			2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	U			410	µg/kg	410	EPA8270
Benzo(a)pyrene	U			410	µg/kg	410	EPA8270
Benzyl alcohol	U			410	µg/kg	410	EPA8270
Bis(2-chloroethoxy) methane	U			410	µg/kg	410	EPA8270
Bis(2-chloroethyl) ether	U			410	µg/kg	410	EPA8270
Bis(2-chloroisopropyl) ether	U			410	µg/kg	410	EPA8270
Bis(2-ethylhexyl) phthalate	U			410	µg/kg	410	EPA8270
4-Bromophenyl phenyl ether	U			410	µg/kg	410	EPA8270
Butylbenzyl phthalate	U			410	µg/kg	410	EPA8270
4-Chloroaniline	U			410	µg/kg	410	EPA8270
4-Chloro-m-cresol	U			410	µg/kg	410	EPA8270
2-Chloronaphthalene	U			410	µg/kg	410	EPA8270
2-Chlorophenol	U			410	µg/kg	410	EPA8270
4-Chlorophenyl phenyl ether	U			410	µg/kg	410	EPA8270
Chrysene	U			410	µg/kg	410	EPA8270
o-Cresol (2-Methylphenol)	U			410	µg/kg	410	EPA8270
p-Cresol (4-Methylphenol)	U			410	µg/kg	410	EPA8270
Dibenz(a,h)anthracene	U			410	µg/kg	410	EPA8270
Dibenzofuran	U			410	µg/kg	410	EPA8270
Di-n-butyl phthalate	UJ	V		210	µg/kg	410	EPA8270
1,2-Dichlorobenzene	U			410	µg/kg	410	EPA8270
1,3-Dichlorobenzene	U			410	µg/kg	410	EPA8270
1,4-Dichlorobenzene	U			410	µg/kg	410	EPA8270

SAMPLE NAME: D43110907 (Continued) Sample ID: 100349

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
3,3'-Dichlorobenzidine	U			820	µg/kg	820	EPA8270
2,4-Dichlorophenol	U			410	µg/kg	410	EPA8270
Diethyl phthalate	U			410	µg/kg	410	EPA8270
2,4-Dimethyl phenol	U			410	µg/kg	410	EPA8270
Dimethyl phthalate	U			410	µg/kg	410	EPA8270
2,4-Dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2,4-Dinitrotoluene	U			410	µg/kg	410	EPA8270
2,6-Dinitrotoluene	U			410	µg/kg	410	EPA8270
Di-n-octyl phthalate	U			410	µg/kg	410	EPA8270
Fluoranthene	U			410	µg/kg	410	EPA8270
Fluorene	U			410	µg/kg	410	EPA8270
Hexachlorobenzene	U			410	µg/kg	410	EPA8270
Hexachlorobutadiene	U			410	µg/kg	410	EPA8270
Hexachlorocyclopentadiene	U			410	µg/kg	410	EPA8270
Hexachloroethane	U			410	µg/kg	410	EPA8270
Indeno(1,2,3-c,d)pyrene	U			410	µg/kg	410	EPA8270
Isophorone	U			410	µg/kg	410	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	U			410	µg/kg	410	EPA8270
Naphthalene	U			410	µg/kg	410	EPA8270
o-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
Nitrobenzene	U			410	µg/kg	410	EPA8270
2-Nitrophenol	U			410	µg/kg	410	EPA8270
4-Nitrophenol	U			2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	U			410	µg/kg	410	EPA8270
N-Nitrosodipropylamine	U			410	µg/kg	410	EPA8270
Pentachlorophenol	UJ	C		2,100	µg/kg	2,100	EPA8270
Phenanthrene	U			410	µg/kg	410	EPA8270
Phenol	UJ	C		410	µg/kg	410	EPA8270
Unknown phosphonic ester	J	N		300	µg/kg		EPA8270
Pyrene	U			410	µg/kg	410	EPA8270
1,2,4-Trichlorobenzene	U			410	µg/kg	410	EPA8270
2,4,5-Trichlorophenol	U			2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	U			410	µg/kg	410	EPA8270
Unknown ketone	J	NV		20,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		12	µg/kg	12	EPA8240
Benzene	U			6.2	µg/kg	6.2	EPA8240
Bromodichloromethane	U			6.2	µg/kg	6.2	EPA8240
Bromoform	U			6.2	µg/kg	6.2	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			6.2	µg/kg	6.2	EPA8240
Carbon tetrachloride	U			6.2	µg/kg	6.2	EPA8240
Chlorobenzene	U			6.2	µg/kg	6.2	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240

SAMPLE NAME: D43110907 (Continued) Sample ID: 100349

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Chloroform	U			6.2	µg/kg	6.2	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			6.2	µg/kg	6.2	EPA8240
1,1-Dichloroethane	U			6.2	µg/kg	6.2	EPA8240
1,2-Dichloroethane	U			6.2	µg/kg	6.2	EPA8240
1,1-Dichloroethylene	U			6.2	µg/kg	6.2	EPA8240
1,2-Dichloroethylene	U			6.2	µg/kg	6.2	EPA8240
Dichloromethane (Methylene chloride)	U			6.2	µg/kg	6.2	EPA8240
1,2-Dichloropropane	U			6.2	µg/kg	6.2	EPA8240
cis-1,3-Dichloropropene	U			6.2	µg/kg	6.2	EPA8240
trans-1,3-Dichloropropene	U			6.2	µg/kg	6.2	EPA8240
Ethylbenzene	U			6.2	µg/kg	6.2	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.2	µg/kg	6.2	EPA8240
1,1,2,2-Tetrachloroethane	U			6.2	µg/kg	6.2	EPA8240
Tetrachloroethylene	U			6.2	µg/kg	6.2	EPA8240
Toluene	U			6.2	µg/kg	6.2	EPA8240
1,1,1-Trichloroethane	U			6.2	µg/kg	6.2	EPA8240
1,1,2-Trichloroethane	U			6.2	µg/kg	6.2	EPA8240
Trichloroethylene	U			6.2	µg/kg	6.2	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			6.2	µg/kg	6.2	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			2.1	µg/kg	2.1	EPA8080
alpha-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
alpha-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
alpha-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
beta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
beta-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
beta-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
delta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
delta-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
delta-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
alpha-Chlordane	U			2.1	µg/kg	2.1	EPA8080
alpha-Chlordane	U			2.0	µg/kg	2.0	EPA8080
alpha-Chlordane	U			2.0	µg/kg	2.0	EPA8080
gamma-Chlordane	U			2.1	µg/kg	2:1	EPA8080
gamma-Chlordane	U			2.0	µg/kg	2.0	EPA8080
gamma-Chlordane	U			2.0	µg/kg	2.0	EPA8080
p,p'-DDD	U			4.1	µg/kg	4.1	EPA8080
p,p'-DDD	U			4.1	µg/kg	4.1	EPA8080
p,p'-DDD	U			4.1	µg/kg	4.1	EPA8080
p,p'-DDE	U			4.1	µg/kg	4.1	EPA8080
p,p'-DDE	U			4.1	µg/kg	4.1	EPA8080
p,p'-DDE	U			4.1	µg/kg	4.1	EPA8080
p,p'-DDT	U			4.1	µg/kg	4.1	EPA8080

SAMPLE NAME: D43110907 (Continued) Sample ID: 100349

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Dieldrin	U			4.1	µg/kg	4.1	EPA8080
Endosulfan I	U			2.1	µg/kg	2.1	EPA8080
Endosulfan I	U			2.0	µg/kg	2.0	EPA8080
Endosulfan I	U			2.0	µg/kg	2.0	EPA8080
Endosulfan II	U			4.1	µg/kg	4.1	EPA8080
Endosulfan II	U			4.1	µg/kg	4.1	EPA8080
Endosulfan II	U			4.1	µg/kg	4.1	EPA8080
Endosulfan sulfate	U			4.1	µg/kg	4.1	EPA8080
Endosulfan sulfate	U			4.1	µg/kg	4.1	EPA8080
Endosulfan sulfate	U			4.1	µg/kg	4.1	EPA8080
Endrin	U			4.1	µg/kg	4.1	EPA8080
Endrin ketone	U			4.1	µg/kg	4.1	EPA8080
Endrin ketone	U			4.1	µg/kg	4.1	EPA8080
Endrin ketone	U			4.1	µg/kg	4.1	EPA8080
Heptachlor	U			2.1	µg/kg	2.1	EPA8080
Heptachlor epoxide	U			2.1	µg/kg	2.1	EPA8080
Heptachlor epoxide	U			2.0	µg/kg	2.0	EPA8080
Heptachlor epoxide	U			2.0	µg/kg	2.0	EPA8080
Heptachlorodibenzo-p-dioxin isomers	J			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			2.1	µg/kg	2.1	EPA8080
Methoxychlor	U			21	µg/kg	21	EPA8080
Methoxychlor	U			20	µg/kg	20	EPA8080
Methoxychlor	U			20	µg/kg	20	EPA8080
Octachlorodibenzo-p-dioxin				3.8	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			41	µg/kg	41	EPA8080
PCB 1016	U			41	µg/kg	41	EPA8080
PCB 1016	U			41	µg/kg	41	EPA8080
PCB 1221	U			82	µg/kg	82	EPA8080
PCB 1221	U			81	µg/kg	81	EPA8080
PCB 1221	U			81	µg/kg	81	EPA8080
PCB 1232	U			41	µg/kg	41	EPA8080
PCB 1232	U			41	µg/kg	41	EPA8080
PCB 1232	U			41	µg/kg	41	EPA8080
PCB 1242	U			41	µg/kg	41	EPA8080
PCB 1242	U			41	µg/kg	41	EPA8080
PCB 1242	U			41	µg/kg	41	EPA8080
PCB 1248	U			41	µg/kg	41	EPA8080
PCB 1248	U			41	µg/kg	41	EPA8080
PCB 1248	U			41	µg/kg	41	EPA8080
PCB 1254	U			41	µg/kg	41	EPA8080
PCB 1254	U			41	µg/kg	41	EPA8080
PCB 1254	U			41	µg/kg	41	EPA8080
PCB 1260	U			41	µg/kg	41	EPA8080
PCB 1260	U			41	µg/kg	41	EPA8080
PCB 1260	U			41	µg/kg	41	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280

SAMPLE NAME: D43110907 (Continued) Sample ID: 100349

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			210	µg/kg	210	EPA8080
Toxaphene	U			200	µg/kg	200	EPA8080
Toxaphene	U			200	µg/kg	200	EPA8080

SAMPLE NAME: D43111001 Sample ID: 100350

Location (SRS Coordinates): 18482.04E 66700.55N
Ground Elevation Above MSL: 129.5 ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 4/6 USC Soil Classification: SC Percent Solids: 90.60

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				11	meq/100g	2.0	EPA9080
Cation exchange capacity				8.6	meq/100g	2.0	EPA9080
pH	J	Q		4.3	pH	0.010	EPA9045
Specific conductance				58	µS/cm	1.0	EPA9050
Total organic carbon				14,000	mg/kg	390	EPA415.1
Total Metals							
Arsenic	U			0.95	mg/kg	0.95	EPA7060
Barium	U			21	mg/kg	21	EPA6010
Cadmium	UJ	L		0.52	mg/kg	0.52	EPA6010
Chromium	J	L		12	mg/kg	1.0	EPA6010
Copper	U			2.6	mg/kg	2.6	EPA6010
Lead				3.5	mg/kg	0.29	EPA7421
Manganese				92	mg/kg	1.6	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			4.2	mg/kg	4.2	EPA6010
Selenium	U			0.48	mg/kg	0.48	EPA7740
Silver	U			1.0	mg/kg	1.0	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			360	µg/kg	360	EPA8270
Acenaphthylene	U			360	µg/kg	360	EPA8270
Acenaphthylene	U			360	µg/kg	360	EPA8270
Acenaphthylene	U			360	µg/kg	360	EPA8270
Anthracene	U			360	µg/kg	360	EPA8270
Anthracene	U			360	µg/kg	360	EPA8270

SAMPLE NAME: D43111001 (Continued) Sample ID: 100350

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Anthracene	U			360	µg/kg	360	EPA8270
Benzo(a)anthracene	U			360	µg/kg	360	EPA8270
Benzo(a)anthracene	U			360	µg/kg	360	EPA8270
Benzo(a)anthracene	U			360	µg/kg	360	EPA8270
Benzo(b)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(b)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(b)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(k)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(k)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(k)fluoranthene	U			360	µg/kg	360	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			360	µg/kg	360	EPA8270
Benzo(g,h,i)perylene	U			360	µg/kg	360	EPA8270
Benzo(g,h,i)perylene	U			360	µg/kg	360	EPA8270
Benzo(a)pyrene	U			360	µg/kg	360	EPA8270
Benzo(a)pyrene	U			360	µg/kg	360	EPA8270
Benzo(a)pyrene	U			360	µg/kg	360	EPA8270
Benzyl alcohol	U			360	µg/kg	360	EPA8270
Benzyl alcohol	U			360	µg/kg	360	EPA8270
Benzyl alcohol	U			360	µg/kg	360	EPA8270
Bis(2-chloroethoxy) methane	U			360	µg/kg	360	EPA8270
Bis(2-chloroethoxy) methane	U			360	µg/kg	360	EPA8270
Bis(2-chloroethoxy) methane	U			360	µg/kg	360	EPA8270
Bis(2-chloroethyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-chloroisopropyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-chloroethyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-chloroisopropyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-chloroethyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-chloroisopropyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-ethylhexyl) phthalate	U			360	µg/kg	360	EPA8270
Bis(2-ethylhexyl) phthalate	U			360	µg/kg	360	EPA8270
Bis(2-ethylhexyl) phthalate	U			360	µg/kg	360	EPA8270
4-Bromophenyl phenyl ether	U			360	µg/kg	360	EPA8270
4-Bromophenyl phenyl ether	U			360	µg/kg	360	EPA8270
4-Bromophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Butylbenzyl phthalate	U			360	µg/kg	360	EPA8270
Butylbenzyl phthalate	U			360	µg/kg	360	EPA8270
Butylbenzyl phthalate	U			360	µg/kg	360	EPA8270
4-Chloroaniline	U			360	µg/kg	360	EPA8270
4-Chloroaniline	U			360	µg/kg	360	EPA8270
4-Chloroaniline	U			360	µg/kg	360	EPA8270
4-Chloro-m-cresol	U			360	µg/kg	360	EPA8270
2-Chloronaphthalene	U			360	µg/kg	360	EPA8270
2-Chloronaphthalene	U			360	µg/kg	360	EPA8270
2-Chloronaphthalene	U			360	µg/kg	360	EPA8270
2-Chlorophenol	U			360	µg/kg	360	EPA8270
4-Chlorophenyl phenyl ether	U			360	µg/kg	360	EPA8270
4-Chlorophenyl phenyl ether	U			360	µg/kg	360	EPA8270

SAMPLE NAME: D43111001 (Continued) Sample ID: 100350

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
4-Chlorophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Chrysene	U			360	µg/kg	360	EPA8270
Chrysene	U			360	µg/kg	360	EPA8270
Chrysene	U			360	µg/kg	360	EPA8270
o-Cresol (2-Methylphenol)	U			360	µg/kg	360	EPA8270
o-Cresol (2-Methylphenol)	U			360	µg/kg	360	EPA8270
o-Cresol (2-Methylphenol)	U			360	µg/kg	360	EPA8270
p-Cresol (4-Methylphenol)	U			360	µg/kg	360	EPA8270
p-Cresol (4-Methylphenol)	U			360	µg/kg	360	EPA8270
p-Cresol (4-Methylphenol)	U			360	µg/kg	360	EPA8270
Dibenz(a,h)anthracene	U			360	µg/kg	360	EPA8270
Dibenz(a,h)anthracene	U			360	µg/kg	360	EPA8270
Dibenz(a,h)anthracene	U			360	µg/kg	360	EPA8270
Dibenzofuran	U			360	µg/kg	360	EPA8270
Dibenzofuran	U			360	µg/kg	360	EPA8270
Dibenzofuran	U			360	µg/kg	360	EPA8270
Di-n-butyl phthalate	UJ	V		250	µg/kg	360	EPA8270
Di-n-butyl phthalate	J	V		230	µg/kg	360	EPA8270
Di-n-butyl phthalate	UJ	V		170	µg/kg	360	EPA8270
1,2-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,2-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,2-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,3-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,3-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,3-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,4-Dichlorobenzene	U			360	µg/kg	360	EPA8270
3,3'-Dichlorobenzidine	U			730	µg/kg	730	EPA8270
3,3'-Dichlorobenzidine	U			720	µg/kg	720	EPA8270
3,3'-Dichlorobenzidine	U			720	µg/kg	720	EPA8270
2,4-Dichlorophenol	U			360	µg/kg	360	EPA8270
2,4-Dichlorophenol	U			360	µg/kg	360	EPA8270
2,4-Dichlorophenol	U			360	µg/kg	360	EPA8270
Diethyl phthalate	U			360	µg/kg	360	EPA8270
Diethyl phthalate	U			360	µg/kg	360	EPA8270
Diethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dimethyl phenol	U			360	µg/kg	360	EPA8270
2,4-Dimethyl phenol	U			360	µg/kg	360	EPA8270
2,4-Dimethyl phenol	U			360	µg/kg	360	EPA8270
Dimethyl phthalate	U			360	µg/kg	360	EPA8270
Dimethyl phthalate	U			360	µg/kg	360	EPA8270
Dimethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			360	µg/kg	360	EPA8270
2,6-Dinitrotoluene	U			360	µg/kg	360	EPA8270
2,6-Dinitrotoluene	U			360	µg/kg	360	EPA8270
2,6-Dinitrotoluene	U			360	µg/kg	360	EPA8270
Di-n-octyl phthalate	U			360	µg/kg	360	EPA8270
Di-n-octyl phthalate	U			360	µg/kg	360	EPA8270

SAMPLE NAME: D43111001 (Continued) Sample ID: 100350

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Di-n-octyl phthalate	U			360	µg/kg	360	EPA8270
Fluoranthene	U			360	µg/kg	360	EPA8270
Fluoranthene	U			360	µg/kg	360	EPA8270
Fluoranthene	U			360	µg/kg	360	EPA8270
Fluorene	U			360	µg/kg	360	EPA8270
Fluorene	U			360	µg/kg	360	EPA8270
Fluorene	U			360	µg/kg	360	EPA8270
Hexachlorobenzene	U			360	µg/kg	360	EPA8270
Hexachlorobenzene	U			360	µg/kg	360	EPA8270
Hexachlorobenzene	U			360	µg/kg	360	EPA8270
Hexachlorobutadiene	U			360	µg/kg	360	EPA8270
Hexachlorobutadiene	U			360	µg/kg	360	EPA8270
Hexachlorobutadiene	U			360	µg/kg	360	EPA8270
Hexachlorocyclopentadiene	U			360	µg/kg	360	EPA8270
Hexachlorocyclopentadiene	U			360	µg/kg	360	EPA8270
Hexachlorocyclopentadiene	U			360	µg/kg	360	EPA8270
Hexachloroethane	U			360	µg/kg	360	EPA8270
Hexachloroethane	U			360	µg/kg	360	EPA8270
Hexachloroethane	U			360	µg/kg	360	EPA8270
Indeno(1,2,3-c,d)pyrene	U			360	µg/kg	360	EPA8270
Indeno(1,2,3-c,d)pyrene	U			360	µg/kg	360	EPA8270
Indeno(1,2,3-c,d)pyrene	U			360	µg/kg	360	EPA8270
Isophorone	U			360	µg/kg	360	EPA8270
Isophorone	U			360	µg/kg	360	EPA8270
Isophorone	U			360	µg/kg	360	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			360	µg/kg	360	EPA8270
2-Methylnaphthalene	U			360	µg/kg	360	EPA8270
2-Methylnaphthalene	U			360	µg/kg	360	EPA8270
Naphthalene	U			360	µg/kg	360	EPA8270
Naphthalene	U			360	µg/kg	360	EPA8270
Naphthalene	U			360	µg/kg	360	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			360	µg/kg	360	EPA8270
Nitrobenzene	U			360	µg/kg	360	EPA8270
Nitrobenzene	U			360	µg/kg	360	EPA8270
2-Nitrophenol	U			360	µg/kg	360	EPA8270
2-Nitrophenol	U			360	µg/kg	360	EPA8270
2-Nitrophenol	U			360	µg/kg	360	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270

SAMPLE NAME: D43111001 (Continued) Sample ID: 100350

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
N-Nitrosodiphenylamine	U			360	µg/kg	360	EPA8270
N-Nitrosodiphenylamine	U			360	µg/kg	360	EPA8270
N-Nitrosodiphenylamine	U			360	µg/kg	360	EPA8270
N-Nitrosodipropylamine	U			360	µg/kg	360	EPA8270
Pentachlorophenol	UJ	IC	H	1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			360	µg/kg	360	EPA8270
Phenanthrene	U			360	µg/kg	360	EPA8270
Phenanthrene	U			360	µg/kg	360	EPA8270
Phenol	UJ	C		360	µg/kg	360	EPA8270
Pyrene	U			360	µg/kg	360	EPA8270
1,2,4-Trichlorobenzene	U			360	µg/kg	360	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			360	µg/kg	360	EPA8270
2,4,6-Trichlorophenol	U			360	µg/kg	360	EPA8270
2,4,6-Trichlorophenol	U			360	µg/kg	360	EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		300	µg/kg		EPA8270
Unknown hydrocarbon	J	N		300	µg/kg		EPA8270
Unknown hydrocarbon	J	N		300	µg/kg		EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	N		400	µg/kg		EPA8270
Unknown ketone	J	NV		20,000	µg/kg		EPA8270
Unknown phthalate	J	N		200	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		11	µg/kg	11	EPA8240
Benzene	U			5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	U			5.5	µg/kg	5.5	EPA8240

SAMPLE NAME: D43111001 (Continued) Sample ID: 100350

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	U			5.5	µg/kg	5.5	EPA8240
Toluene	U			5.5	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.5	µg/kg	5.5	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.8	µg/kg	1.8	EPA8080
alpha-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
beta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
delta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
alpha-Chlordane	U			1.8	µg/kg	1.8	EPA8080
gamma-Chlordane	U			1.8	µg/kg	1.8	EPA8080
p,p'-DDD	U			3.6	µg/kg	3.6	EPA8080
p,p'-DDE	U			3.6	µg/kg	3.6	EPA8080
p,p'-DDT	U			3.6	µg/kg	3.6	EPA8080
Dieldrin	U			3.6	µg/kg	3.6	EPA8080
Endosulfan I	U			1.8	µg/kg	1.8	EPA8080
Endosulfan II	U			3.6	µg/kg	3.6	EPA8080
Endosulfan sulfate	U			3.6	µg/kg	3.6	EPA8080
Endrin	U			3.6	µg/kg	3.6	EPA8080
Endrin ketone	U			3.6	µg/kg	3.6	EPA8080
Heptachlor	U			1.8	µg/kg	1.8	EPA8080
Heptachlor epoxide	U			1.8	µg/kg	1.8	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			1.8	µg/kg	1.8	EPA8080
Methoxychlor	U			18	µg/kg	18	EPA8080
Octachlorodibenzo-p-dioxin				6.3	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			36	µg/kg	36	EPA8080
PCB 1221	U			73	µg/kg	73	EPA8080
PCB 1232	U			36	µg/kg	36	EPA8080
PCB 1242	U			36	µg/kg	36	EPA8080
PCB 1248	U			36	µg/kg	36	EPA8080
PCB 1254	U			36	µg/kg	36	EPA8080
PCB 1260	U			36	µg/kg	36	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280

SAMPLE NAME: D43111001 (Continued) Sample ID: 100350

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			180	µg/kg	180	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				9.4±11	pCi/g	6.4	EPA900.0
Nonvolatile beta		V		78±22	pCi/g	8.0	EPA900.0
Radium, total alpha-emitting	U	V		1.2±0.66	pCi/g	0.20	EPA903.0
Tritium	U			1.5	pCi/g	1.5	EPA906.0

SAMPLE NAME: D43111002 Sample ID: 100352

Location (SRS Coordinates): 18482.04E 66700.55N
Ground Elevation Above MSL: 129.5 ft
Depth of Core Interval: 0.50 to 2.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 3/4 USC Soil Classification: SC Percent Solids: 90.10

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			1.0	mg/kg	1.0	EPA7060
Barium	U			19	mg/kg	19	EPA6010
Cadmium	UJ	L		1.8	mg/kg	0.48	EPA6010
Chromium	J	L		12	mg/kg	0.96	EPA6010
Copper	U			2.4	mg/kg	2.4	EPA6010
Lead				3.7	mg/kg	0.30	EPA7421
Manganese				42	mg/kg	1.4	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			3.8	mg/kg	3.8	EPA6010
Selenium	U			0.50	mg/kg	0.50	EPA7740
Silver	U			0.96	mg/kg	0.96	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			360	µg/kg	360	EPA8270
Acenaphthylene	U			360	µg/kg	360	EPA8270
Anthracene	U			360	µg/kg	360	EPA8270
Benzo(a)anthracene	U			360	µg/kg	360	EPA8270
Benzo(b)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(k)fluoranthene	U			360	µg/kg	360	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			360	µg/kg	360	EPA8270
Benzo(a)pyrene	U			360	µg/kg	360	EPA8270
Benzyl alcohol	U			360	µg/kg	360	EPA8270
Bis(2-chloroethoxy) methane	U			360	µg/kg	360	EPA8270

SAMPLE NAME: D43111002 (Continued) Sample ID: 100352

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Bis(2-chloroethyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-chloroisopropyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-ethylhexyl) phthalate	U			360	µg/kg	360	EPA8270
4-Bromophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Butylbenzyl phthalate	U			360	µg/kg	360	EPA8270
4-Chloroaniline	U			360	µg/kg	360	EPA8270
4-Chloro-m-cresol	U			360	µg/kg	360	EPA8270
2-Chloronaphthalene	U			360	µg/kg	360	EPA8270
2-Chlorophenol	U			360	µg/kg	360	EPA8270
4-Chlorophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Chrysene	U			360	µg/kg	360	EPA8270
o-Cresol (2-Methylphenol)	U			360	µg/kg	360	EPA8270
p-Cresol (4-Methylphenol)	U			360	µg/kg	360	EPA8270
Dibenz(a,h)anthracene	U			360	µg/kg	360	EPA8270
Dibenzofuran	U			360	µg/kg	360	EPA8270
Di-n-butyl phthalate	UJ	V		190	µg/kg	360	EPA8270
1,2-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,3-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,4-Dichlorobenzene	U			360	µg/kg	360	EPA8270
3,3'-Dichlorobenzidine	U			730	µg/kg	730	EPA8270
2,4-Dichlorophenol	U			360	µg/kg	360	EPA8270
Diethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dimethyl phenol	U			360	µg/kg	360	EPA8270
Dimethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			360	µg/kg	360	EPA8270
2,6-Dinitrotoluene	U			360	µg/kg	360	EPA8270
Di-n-octyl phthalate	U			360	µg/kg	360	EPA8270
Fluoranthene	U			360	µg/kg	360	EPA8270
Fluorene	U			360	µg/kg	360	EPA8270
Hexachlorobenzene	U			360	µg/kg	360	EPA8270
Hexachlorobutadiene	U			360	µg/kg	360	EPA8270
Hexachlorocyclopentadiene	U			360	µg/kg	360	EPA8270
Hexachloroethane	U			360	µg/kg	360	EPA8270
Indeno(1,2,3-c,d)pyrene	U			360	µg/kg	360	EPA8270
Isophorone	U			360	µg/kg	360	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			360	µg/kg	360	EPA8270
Naphthalene	U			360	µg/kg	360	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			360	µg/kg	360	EPA8270
2-Nitrophenol	U			360	µg/kg	360	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			360	µg/kg	360	EPA8270
N-Nitrosodipropylamine	U			360	µg/kg	360	EPA8270
Pentachlorophenol	UJ	C		1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			360	µg/kg	360	EPA8270
Phenol	UJ	C		360	µg/kg	360	EPA8270

SAMPLE NAME: D43111002 (Continued) Sample ID: 100352

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Pyrene	U			360	µg/kg	360	EPA8270
1,2,4-Trichlorobenzene	U			360	µg/kg	360	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			360	µg/kg	360	EPA8270
Unknown ketone	J	NV		10,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		11	µg/kg	11	EPA8240
Benzene	U			5.6	µg/kg	5.6	EPA8240
Bromodichloromethane	U			5.6	µg/kg	5.6	EPA8240
Bromoform	U			5.6	µg/kg	5.6	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.6	µg/kg	5.6	EPA8240
Carbon tetrachloride	U			5.6	µg/kg	5.6	EPA8240
Chlorobenzene	U			5.6	µg/kg	5.6	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.6	µg/kg	5.6	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.6	µg/kg	5.6	EPA8240
1,1-Dichloroethane	U			5.6	µg/kg	5.6	EPA8240
1,2-Dichloroethane	U			5.6	µg/kg	5.6	EPA8240
1,1-Dichloroethylene	U			5.6	µg/kg	5.6	EPA8240
1,2-Dichloroethylene	U			5.6	µg/kg	5.6	EPA8240
Dichloromethane (Methylene chloride)	U			5.6	µg/kg	5.6	EPA8240
1,2-Dichloropropane	U			5.6	µg/kg	5.6	EPA8240
cis-1,3-Dichloropropene	U			5.6	µg/kg	5.6	EPA8240
trans-1,3-Dichloropropene	U			5.6	µg/kg	5.6	EPA8240
Ethylbenzene	U			5.6	µg/kg	5.6	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.6	µg/kg	5.6	EPA8240
1,1,2,2-Tetrachloroethane	U			5.6	µg/kg	5.6	EPA8240
Tetrachloroethylene	U			5.6	µg/kg	5.6	EPA8240
Toluene	U			5.6	µg/kg	5.6	EPA8240
1,1,1-Trichloroethane	U			5.6	µg/kg	5.6	EPA8240
1,1,2-Trichloroethane	U			5.6	µg/kg	5.6	EPA8240
Trichloroethylene	U			5.6	µg/kg	5.6	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.6	µg/kg	5.6	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.8	µg/kg	1.8	EPA8080
alpha-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
beta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
delta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
alpha-Chlordane	U			1.8	µg/kg	1.8	EPA8080

SAMPLE NAME: D43111002 (Continued) Sample ID: 100352

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
gamma-Chlordane	U			1.8	µg/kg	1.8	EPA8080
p,p'-DDD	U			3.6	µg/kg	3.6	EPA8080
p,p'-DDE	U			3.6	µg/kg	3.6	EPA8080
p,p'-DDT	U			3.6	µg/kg	3.6	EPA8080
Dieldrin	U			3.6	µg/kg	3.6	EPA8080
Endosulfan I	U			1.8	µg/kg	1.8	EPA8080
Endosulfan II	U			3.6	µg/kg	3.6	EPA8080
Endosulfan sulfate	U			3.6	µg/kg	3.6	EPA8080
Endrin	U			3.6	µg/kg	3.6	EPA8080
Endrin ketone	U			3.6	µg/kg	3.6	EPA8080
Heptachlor	U			1.8	µg/kg	1.8	EPA8080
Heptachlor epoxide	U			1.8	µg/kg	1.8	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			1.8	µg/kg	1.8	EPA8080
Methoxychlor	U			18	µg/kg	18	EPA8080
Octachlorodibenzo-p-dioxin				4.3	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			36	µg/kg	36	EPA8080
PCB 1221	U			72	µg/kg	72	EPA8080
PCB 1232	U			36	µg/kg	36	EPA8080
PCB 1242	U			36	µg/kg	36	EPA8080
PCB 1248	U			36	µg/kg	36	EPA8080
PCB 1254	U			36	µg/kg	36	EPA8080
PCB 1260	U			36	µg/kg	36	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			180	µg/kg	180	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				13±14	pCi/g	7.6	EPA900.0
Nonvolatile beta		V		34±22	pCi/g	9.8	EPA900.0
Radium, total alpha-emitting	U	V		1.3±0.71	pCi/g	0.23	EPA903.0
Tritium	U			1.4	pCi/g	1.4	EPA906.0

SAMPLE NAME: D43I11003 Sample ID: 100353

Location (SRS Coordinates): 18482.04E 66700.55N
Ground Elevation Above MSL: 129.5 ft
Depth of Core Interval: 2.00 to 4.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 3/4 USC Soil Classification: SC Percent Solids: 90.30

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				1.1	mg/kg	1.0	EPA7060
Barium	U			21	mg/kg	21	EPA6010
Cadmium	UJ	L		0.54	mg/kg	0.54	EPA6010
Chromium	J	L		12	mg/kg	1.1	EPA6010
Copper				5.6	mg/kg	2.7	EPA6010
Lead				4.1	mg/kg	0.30	EPA7421
Manganese				45	mg/kg	1.6	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			4.3	mg/kg	4.3	EPA6010
Selenium	U			0.50	mg/kg	0.50	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
Volatile Organic Compounds							
Acetone	U	V		11	µg/kg	11	EPA8240
Benzene	U			5.6	µg/kg	5.6	EPA8240
Bromodichloromethane	U			5.6	µg/kg	5.6	EPA8240
Bromoform	U			5.6	µg/kg	5.6	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.6	µg/kg	5.6	EPA8240
Carbon tetrachloride	U			5.6	µg/kg	5.6	EPA8240
Chlorobenzene	U			5.6	µg/kg	5.6	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.6	µg/kg	5.6	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.6	µg/kg	5.6	EPA8240
1,1-Dichloroethane	U			5.6	µg/kg	5.6	EPA8240
1,2-Dichloroethane	U			5.6	µg/kg	5.6	EPA8240
1,1-Dichloroethylene	U			5.6	µg/kg	5.6	EPA8240
1,2-Dichloroethylene	U			5.6	µg/kg	5.6	EPA8240
Dichloromethane (Methylene chloride)	U			5.6	µg/kg	5.6	EPA8240
1,2-Dichloropropane	U			5.6	µg/kg	5.6	EPA8240
cis-1,3-Dichloropropene	U			5.6	µg/kg	5.6	EPA8240
trans-1,3-Dichloropropene	U			5.6	µg/kg	5.6	EPA8240
Ethylbenzene	U			5.6	µg/kg	5.6	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.6	µg/kg	5.6	EPA8240
1,1,2,2-Tetrachloroethane	U			5.6	µg/kg	5.6	EPA8240
Tetrachloroethylene	U			5.6	µg/kg	5.6	EPA8240
Toluene	U			5.6	µg/kg	5.6	EPA8240
1,1,1-Trichloroethane	U			5.6	µg/kg	5.6	EPA8240

SAMPLE NAME: D43111003 (Continued) Sample ID: 100353

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1,2-Trichloroethane	U			5.6	µg/kg	5.6	EPA8240
Trichloroethylene	U			5.6	µg/kg	5.6	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.6	µg/kg	5.6	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			6.8	pCi/g	6.8	EPA900.0
Nonvolatile beta		V		30±19	pCi/g	8.6	EPA900.0
Radium, total alpha-emitting	U	V		1.2±0.66	pCi/g	0.20	EPA903.0
Tritium	U			1.4	pCi/g	1.4	EPA906.0

SAMPLE NAME: D43111004 Sample ID: 100354

Location (SRS Coordinates): 18482.04E 66700.55N
Ground Elevation Above MSL: 129.5 ft
Depth of Core Interval: 4.00 to 6.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 3/4 USC Soil Classification: SC Percent Solids: 88.30

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			1.0	mg/kg	1.0	EPA7060
Barium				30	mg/kg	20	EPA6010
Cadmium	UJ	L		0.51	mg/kg	0.51	EPA6010
Chromium	J	L		27	mg/kg	1.0	EPA6010
Copper				5.0	mg/kg	2.6	EPA6010
Lead				2.3	mg/kg	0.31	EPA7421
Manganese				250	mg/kg	1.5	EPA6010
Mercury				0.13	mg/kg	0.11	EPA7470
Nickel	U			4.1	mg/kg	4.1	EPA6010
Selenium	U			0.52	mg/kg	0.52	EPA7740
Silver	U			1.0	mg/kg	1.0	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			370	µg/kg	370	EPA8270
Acenaphthylene	U			370	µg/kg	370	EPA8270
Anthracene	U			370	µg/kg	370	EPA8270
Benzo(a)anthracene	U			370	µg/kg	370	EPA8270
Benzo(b)fluoranthene	U			370	µg/kg	370	EPA8270
Benzo(k)fluoranthene	U			370	µg/kg	370	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	U			370	µg/kg	370	EPA8270
Benzo(a)pyrene	U			370	µg/kg	370	EPA8270
Benzyl alcohol	U			370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	U			370	µg/kg	370	EPA8270

SAMPLE NAME: D43I11004 (Continued) Sample ID: 100354

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Bis(2-chloroethyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	U			370	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Butylbenzyl phthalate	U			370	µg/kg	370	EPA8270
4-Chloroaniline	U			370	µg/kg	370	EPA8270
4-Chloro-m-cresol	U			370	µg/kg	370	EPA8270
2-Chloronaphthalene	U			370	µg/kg	370	EPA8270
2-Chlorophenol	U			370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Chrysene	U			370	µg/kg	370	EPA8270
o-Cresol (2-Methylphenol)	U			370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	U			370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	U			370	µg/kg	370	EPA8270
Dibenzofuran	U			370	µg/kg	370	EPA8270
Di-n-butyl phthalate	UJ	V		200	µg/kg	370	EPA8270
1,2-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,4-Dichlorobenzene	U			370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	U			750	µg/kg	750	EPA8270
2,4-Dichlorophenol	U			370	µg/kg	370	EPA8270
Diethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	U			370	µg/kg	370	EPA8270
Dimethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	U			370	µg/kg	370	EPA8270
Di-n-octyl phthalate	U			370	µg/kg	370	EPA8270
Fluoranthene	U			370	µg/kg	370	EPA8270
Fluorene	U			370	µg/kg	370	EPA8270
Hexachlorobenzene	U			370	µg/kg	370	EPA8270
Hexachlorobutadiene	U			370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	U			370	µg/kg	370	EPA8270
Hexachloroethane	U			370	µg/kg	370	EPA8270
Indeno(1,2,3-c,d)pyrene	U			370	µg/kg	370	EPA8270
Isophorone	U			370	µg/kg	370	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	U			370	µg/kg	370	EPA8270
Naphthalene	U			370	µg/kg	370	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U			370	µg/kg	370	EPA8270
2-Nitrophenol	U			370	µg/kg	370	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			370	µg/kg	370	EPA8270
N-Nitrosodipropylamine	U			370	µg/kg	370	EPA8270
Pentachlorophenol	UJ	C		1,900	µg/kg	1,900	EPA8270
Phenanthrene	U			370	µg/kg	370	EPA8270
Phenol	UJ	C		370	µg/kg	370	EPA8270

SAMPLE NAME: D43111004 (Continued) Sample ID: 100354

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Pyrene	U			370	µg/kg	370	EPA8270
1,2,4-Trichlorobenzene	U			370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			370	µg/kg	370	EPA8270
Unknown ketone	J	NV		10,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		12	µg/kg	12	EPA8240
Benzene	U			5.8	µg/kg	5.8	EPA8240
Bromodichloromethane	U			5.8	µg/kg	5.8	EPA8240
Bromoform	U			5.8	µg/kg	5.8	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			5.8	µg/kg	5.8	EPA8240
Carbon tetrachloride	U			5.8	µg/kg	5.8	EPA8240
Chlorobenzene	U			5.8	µg/kg	5.8	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
Chloroform	U			5.8	µg/kg	5.8	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			5.8	µg/kg	5.8	EPA8240
1,1-Dichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1-Dichloroethylene	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloroethylene	U			5.8	µg/kg	5.8	EPA8240
Dichloromethane (Methylene chloride)	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloropropane	U			5.8	µg/kg	5.8	EPA8240
cis-1,3-Dichloropropene	U			5.8	µg/kg	5.8	EPA8240
trans-1,3-Dichloropropene	U			5.8	µg/kg	5.8	EPA8240
Ethylbenzene	U			5.8	µg/kg	5.8	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			5.8	µg/kg	5.8	EPA8240
1,1,2,2-Tetrachloroethane	U			5.8	µg/kg	5.8	EPA8240
Tetrachloroethylene	U			5.8	µg/kg	5.8	EPA8240
Toluene	U			5.8	µg/kg	5.8	EPA8240
1,1,1-Trichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1,2-Trichloroethane	U			5.8	µg/kg	5.8	EPA8240
Trichloroethylene	U			5.8	µg/kg	5.8	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			5.8	µg/kg	5.8	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			6.5	pCi/g	6.5	EPA900.0
Nonvolatile beta		V		9.9±16	pCi/g	8.3	EPA900.0
Radium, total alpha-emitting	U	V		1.9±0.83	pCi/g	0.21	EPA903.0
Tritium	U			1.4	pCi/g	1.4	EPA906.0

SAMPLE NAME: D43I11005 Sample ID: 100356

Location (SRS Coordinates): 18482.04E 66700.55N
Ground Elevation Above MSL: 129.5 ft
Depth of Core Interval: 6.00 to 8.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 3/4 USC Soil Classification: SC Percent Solids: 78.50

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	UJ	I	L	1.1	mg/kg	1.1	EPA7060
Arsenic	J	I	L	2.7	mg/kg	1.3	EPA7060
Barium	J	I	H	26	mg/kg	24	EPA6010
Barium	J	I	H	35	mg/kg	25	EPA6010
Cadmium	UJ	LIX	H	0.61	mg/kg	0.61	EPA6010
Cadmium	UJ	IX	H	3.1	mg/kg	3.1	EPA6010
Chromium	J	LI	H	24	mg/kg	1.2	EPA6010
Chromium		I	H	24	mg/kg	1.2	EPA6010
Copper	U			3.0	mg/kg	3.0	EPA6010
Copper	U			3.1	mg/kg	3.1	EPA6010
Lead	J	IX		6.5	mg/kg	0.33	EPA7421
Lead	J	IX		16	mg/kg	3.8	EPA7421
Manganese	J	X		270	mg/kg	1.8	EPA6010
Manganese	J	X		520	mg/kg	1.8	EPA6010
Mercury				0.16	mg/kg	0.13	EPA7470
Mercury	UJ	Q		0.13	mg/kg	0.13	EPA7470
Nickel	U			4.9	mg/kg	4.9	EPA6010
Nickel				5.3	mg/kg	4.9	EPA6010
Selenium	UJ	I	L	0.56	mg/kg	0.56	EPA7740
Selenium	UJ	I	L	0.63	mg/kg	0.63	EPA7740
Silver	UJ	X		1.2	mg/kg	1.2	EPA6010
Silver	UJ	X		6.1	mg/kg	6.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			440	µg/kg	440	EPA8270
Acenaphthylene	U			440	µg/kg	440	EPA8270
Anthracene	U			440	µg/kg	440	EPA8270
Benzo(a)anthracene	U			440	µg/kg	440	EPA8270
Benzo(b)fluoranthene	U			440	µg/kg	440	EPA8270
Benzo(k)fluoranthene	U			440	µg/kg	440	EPA8270
Benzoic acid	U			2,200	µg/kg	2,200	EPA8270
Benzo(g,h,i)perylene	U			440	µg/kg	440	EPA8270
Benzo(a)pyrene	U			440	µg/kg	440	EPA8270
Benzyl alcohol	U			440	µg/kg	440	EPA8270
Bis(2-chloroethoxy) methane	U			440	µg/kg	440	EPA8270
Bis(2-chloroethyl) ether	U			440	µg/kg	440	EPA8270
Bis(2-chloroisopropyl) ether	U			440	µg/kg	440	EPA8270
Bis(2-ethylhexyl) phthalate	U			440	µg/kg	440	EPA8270
4-Bromophenyl phenyl ether	U			440	µg/kg	440	EPA8270
Butylbenzyl phthalate	U			440	µg/kg	440	EPA8270
4-Chloroaniline	U			440	µg/kg	440	EPA8270
4-Chloro-m-cresol	U			440	µg/kg	440	EPA8270
2-Chloronaphthalene	U			440	µg/kg	440	EPA8270

SAMPLE NAME: D43111005 (Continued) Sample ID: 100356

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2-Chlorophenol	U			440	µg/kg	440	EPA8270
4-Chlorophenyl phenyl ether	U			440	µg/kg	440	EPA8270
Chrysene	U			440	µg/kg	440	EPA8270
o-Cresol (2-Methylphenol)	U			440	µg/kg	440	EPA8270
p-Cresol (4-Methylphenol)	U			440	µg/kg	440	EPA8270
Dibenz(a,h)anthracene	U			440	µg/kg	440	EPA8270
Dibenzofuran	U			440	µg/kg	440	EPA8270
Di-n-butyl phthalate	UJ	V		200	µg/kg	440	EPA8270
1,2-Dichlorobenzene	U			440	µg/kg	440	EPA8270
1,3-Dichlorobenzene	U			440	µg/kg	440	EPA8270
1,4-Dichlorobenzene	U			440	µg/kg	440	EPA8270
3,3'-Dichlorobenzidine	U			880	µg/kg	880	EPA8270
2,4-Dichlorophenol	U			440	µg/kg	440	EPA8270
Diethyl phthalate	U			440	µg/kg	440	EPA8270
2,4-Dimethyl phenol	U			440	µg/kg	440	EPA8270
Dimethyl phthalate	U			440	µg/kg	440	EPA8270
2,4-Dinitrophenol	U			2,200	µg/kg	2,200	EPA8270
2,4-Dinitrotoluene	U			440	µg/kg	440	EPA8270
2,6-Dinitrotoluene	U			440	µg/kg	440	EPA8270
Di-n-octyl phthalate	U			440	µg/kg	440	EPA8270
Fluoranthene	U			440	µg/kg	440	EPA8270
Fluorene	U			440	µg/kg	440	EPA8270
Hexachlorobenzene	U			440	µg/kg	440	EPA8270
Hexachlorobutadiene	U			440	µg/kg	440	EPA8270
Hexachlorocyclopentadiene	U			440	µg/kg	440	EPA8270
Hexachloroethane	U			440	µg/kg	440	EPA8270
Indeno(1,2,3-c,d)pyrene	U			440	µg/kg	440	EPA8270
Isophorone	U			440	µg/kg	440	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,200	µg/kg	2,200	EPA8270
2-Methylnaphthalene	U			440	µg/kg	440	EPA8270
Naphthalene	U			440	µg/kg	440	EPA8270
o-Nitroaniline	U			2,200	µg/kg	2,200	EPA8270
m-Nitroaniline	U			2,200	µg/kg	2,200	EPA8270
p-Nitroaniline	U			2,200	µg/kg	2,200	EPA8270
Nitrobenzene	U			440	µg/kg	440	EPA8270
2-Nitrophenol	U			440	µg/kg	440	EPA8270
4-Nitrophenol	U			2,200	µg/kg	2,200	EPA8270
N-Nitrosodiphenylamine	U			440	µg/kg	440	EPA8270
N-Nitrosodipropylamine	U			440	µg/kg	440	EPA8270
Pentachlorophenol	UJ	C		2,200	µg/kg	2,200	EPA8270
Phenanthrene	U			440	µg/kg	440	EPA8270
Phenol	UJ	C		440	µg/kg	440	EPA8270
Pyrene	U			440	µg/kg	440	EPA8270
1,2,4-Trichlorobenzene	U			440	µg/kg	440	EPA8270
2,4,5-Trichlorophenol	U			2,200	µg/kg	2,200	EPA8270
2,4,6-Trichlorophenol	U			440	µg/kg	440	EPA8270
Unknown ketone	J	NV		10,000	µg/kg		EPA8270

SAMPLE NAME: D43111005 (Continued) Sample ID: 100356

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	U	V		13	µg/kg	13	EPA8240
Acetone	U	V		13	µg/kg	13	EPA8240
Acetone	U	V		13	µg/kg	13	EPA8240
Benzene	U			6.6	µg/kg	6.6	EPA8240
Bromodichloromethane	U			6.6	µg/kg	6.6	EPA8240
Bromodichloromethane	U			6.6	µg/kg	6.6	EPA8240
Bromodichloromethane	U			6.6	µg/kg	6.6	EPA8240
Bromoform	U			6.6	µg/kg	6.6	EPA8240
Bromoform	U			6.6	µg/kg	6.6	EPA8240
Bromoform	U			6.6	µg/kg	6.6	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Carbon disulfide	U			6.6	µg/kg	6.6	EPA8240
Carbon disulfide	U			6.6	µg/kg	6.6	EPA8240
Carbon disulfide	U			6.6	µg/kg	6.6	EPA8240
Carbon tetrachloride	U			6.6	µg/kg	6.6	EPA8240
Carbon tetrachloride	U			6.6	µg/kg	6.6	EPA8240
Carbon tetrachloride	U			6.6	µg/kg	6.6	EPA8240
Chlorobenzene	U			6.6	µg/kg	6.6	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
Chloroform	U			6.6	µg/kg	6.6	EPA8240
Chloroform	U			6.6	µg/kg	6.6	EPA8240
Chloroform	U			6.6	µg/kg	6.6	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Dibromochloromethane	U			6.6	µg/kg	6.6	EPA8240
Dibromochloromethane	U			6.6	µg/kg	6.6	EPA8240
Dibromochloromethane	U			6.6	µg/kg	6.6	EPA8240
1,1-Dichloroethane	U			6.6	µg/kg	6.6	EPA8240
1,1-Dichloroethane	U			6.6	µg/kg	6.6	EPA8240
1,1-Dichloroethane	U			6.6	µg/kg	6.6	EPA8240
1,2-Dichloroethane	U			6.6	µg/kg	6.6	EPA8240
1,2-Dichloroethane	U			6.6	µg/kg	6.6	EPA8240
1,2-Dichloroethane	U			6.6	µg/kg	6.6	EPA8240
1,1-Dichloroethylene	U			6.6	µg/kg	6.6	EPA8240
1,2-Dichloroethylene	U			6.6	µg/kg	6.6	EPA8240
1,2-Dichloroethylene	U			6.6	µg/kg	6.6	EPA8240
1,2-Dichloroethylene	U			6.6	µg/kg	6.6	EPA8240
Dichloromethane (Methylene chloride)	U			6.6	µg/kg	6.6	EPA8240
Dichloromethane (Methylene chloride)	U			6.6	µg/kg	6.6	EPA8240
Dichloromethane (Methylene chloride)	U			6.6	µg/kg	6.6	EPA8240
1,2-Dichloropropane	U			6.6	µg/kg	6.6	EPA8240
1,2-Dichloropropane	U			6.6	µg/kg	6.6	EPA8240

SAMPLE NAME: D43111005 (Continued) Sample ID: 100356

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,2-Dichloropropane	U			6.6	µg/kg	6.6	EPA8240
cis-1,3-Dichloropropene	U			6.6	µg/kg	6.6	EPA8240
cis-1,3-Dichloropropene	U			6.6	µg/kg	6.6	EPA8240
cis-1,3-Dichloropropene	U			6.6	µg/kg	6.6	EPA8240
trans-1,3-Dichloropropene	U			6.6	µg/kg	6.6	EPA8240
trans-1,3-Dichloropropene	U			6.6	µg/kg	6.6	EPA8240
trans-1,3-Dichloropropene	U			6.6	µg/kg	6.6	EPA8240
Ethylbenzene	U			6.6	µg/kg	6.6	EPA8240
Ethylbenzene	U			6.6	µg/kg	6.6	EPA8240
Ethylbenzene	U			6.6	µg/kg	6.6	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Styrene	U			6.6	µg/kg	6.6	EPA8240
Styrene	U			6.6	µg/kg	6.6	EPA8240
Styrene	U			6.6	µg/kg	6.6	EPA8240
1,1,2,2-Tetrachloroethane	U			6.6	µg/kg	6.6	EPA8240
1,1,2,2-Tetrachloroethane	U			6.6	µg/kg	6.6	EPA8240
1,1,2,2-Tetrachloroethane	U			6.6	µg/kg	6.6	EPA8240
Tetrachloroethylene	U			6.6	µg/kg	6.6	EPA8240
Tetrachloroethylene	U			6.6	µg/kg	6.6	EPA8240
Tetrachloroethylene	U			6.6	µg/kg	6.6	EPA8240
Toluene	U			6.6	µg/kg	6.6	EPA8240
1,1,1-Trichloroethane	U			6.6	µg/kg	6.6	EPA8240
1,1,1-Trichloroethane	U			6.6	µg/kg	6.6	EPA8240
1,1,1-Trichloroethane	U			6.6	µg/kg	6.6	EPA8240
1,1,2-Trichloroethane	U			6.6	µg/kg	6.6	EPA8240
1,1,2-Trichloroethane	U			6.6	µg/kg	6.6	EPA8240
1,1,2-Trichloroethane	U			6.6	µg/kg	6.6	EPA8240
Trichloroethylene	U			6.6	µg/kg	6.6	EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
Xylenes	U			6.6	µg/kg	6.6	EPA8240
Xylenes	U			6.6	µg/kg	6.6	EPA8240
Xylenes	U			6.6	µg/kg	6.6	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			2.2	µg/kg	2.2	EPA8080
alpha-Benzene hexachloride	U			2.2	µg/kg	2.2	EPA8080
beta-Benzene hexachloride	U			2.2	µg/kg	2.2	EPA8080
delta-Benzene hexachloride	U			2.2	µg/kg	2.2	EPA8080
alpha-Chlordane	U			2.2	µg/kg	2.2	EPA8080

SAMPLE NAME: D4311005 (Continued) Sample ID: 100356

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
gamma-Chlordane	U			2.2	µg/kg	2.2	EPA8080
p,p'-DDD	U			4.4	µg/kg	4.4	EPA8080
p,p'-DDE	U			4.4	µg/kg	4.4	EPA8080
p,p'-DDT	U			4.4	µg/kg	4.4	EPA8080
Dieldrin	U			4.4	µg/kg	4.4	EPA8080
Endosulfan I	U			2.2	µg/kg	2.2	EPA8080
Endosulfan II	U			4.4	µg/kg	4.4	EPA8080
Endosulfan sulfate	U			4.4	µg/kg	4.4	EPA8080
Endrin	U			4.4	µg/kg	4.4	EPA8080
Endrin ketone	U			4.4	µg/kg	4.4	EPA8080
Heptachlor	U			2.2	µg/kg	2.2	EPA8080
Heptachlor epoxide	U			2.2	µg/kg	2.2	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			2.2	µg/kg	2.2	EPA8080
Methoxychlor	U			22	µg/kg	22	EPA8080
Octachlorodibenzo-p-dioxin				2.5	ng/g	0.30	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			44	µg/kg	44	EPA8080
PCB 1221	U			87	µg/kg	87	EPA8080
PCB 1232	U			44	µg/kg	44	EPA8080
PCB 1242	U			44	µg/kg	44	EPA8080
PCB 1248	U			44	µg/kg	44	EPA8080
PCB 1254	U			44	µg/kg	44	EPA8080
PCB 1260	U			44	µg/kg	44	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			220	µg/kg	220	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			6.7	pCi/g	6.7	EPA900.0
Nonvolatile beta		V		25±18	pCi/g	8.4	EPA900.0
Radium, total alpha-emitting	U	V		2.7±0.99	pCi/g	0.21	EPA903.0
Tritium	U			1.4	pCi/g	1.4	EPA906.0

SAMPLE NAME: D43111006 Sample ID: 100357

Location (SRS Coordinates): 18482.04E 66700.55N
Ground Elevation Above MSL: 129.5 ft
Depth of Core Interval: 8.00 to 10.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 3/4 USC Soil Classification: SM Percent Solids: 80.00

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				8.6	meq/100g	2.0	EPA9080
pH	J	Q		4.7	pH	0.010	EPA9045
Specific conductance				28	µS/cm	1.0	EPA9050
Specific conductance				28	µS/cm	1.0	EPA9050
Total organic carbon				1,600	mg/kg	220	EPA415.1
Total Metals							
Arsenic				1.3	mg/kg	1.2	EPA7060
Barium				26	mg/kg	23	EPA6010
Cadmium	UJ	L		0.57	mg/kg	0.57	EPA6010
Chromium	J	L		19	mg/kg	1.1	EPA6010
Copper	U			2.9	mg/kg	2.9	EPA6010
Lead				2.9	mg/kg	0.37	EPA7421
Manganese				410	mg/kg	1.7	EPA6010
Mercury	U			0.13	mg/kg	0.13	EPA7470
Nickel				5.8	mg/kg	4.6	EPA6010
Selenium	U			0.62	mg/kg	0.62	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			420	µg/kg	420	EPA8270
Acenaphthylene	U			420	µg/kg	420	EPA8270
Anthracene	U			420	µg/kg	420	EPA8270
Benzo(a)anthracene	U			420	µg/kg	420	EPA8270
Benzo(b)fluoranthene	U			420	µg/kg	420	EPA8270
Benzo(k)fluoranthene	U			420	µg/kg	420	EPA8270
Benzoic acid	U			2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	U			420	µg/kg	420	EPA8270
Benzo(a)pyrene	U			420	µg/kg	420	EPA8270
Benzyl alcohol	U			420	µg/kg	420	EPA8270
Bis(2-chloroethoxy) methane	U			420	µg/kg	420	EPA8270
Bis(2-chloroethyl) ether	U			420	µg/kg	420	EPA8270
Bis(2-chloroisopropyl) ether	U			420	µg/kg	420	EPA8270
Bis(2-ethylhexyl) phthalate	U			420	µg/kg	420	EPA8270
4-Bromophenyl phenyl ether	U			420	µg/kg	420	EPA8270
Butylbenzyl phthalate	U			420	µg/kg	420	EPA8270
4-Chloroaniline	U			420	µg/kg	420	EPA8270
4-Chloro-m-cresol	U			420	µg/kg	420	EPA8270
2-Chloronaphthalene	U			420	µg/kg	420	EPA8270
2-Chlorophenol	U			420	µg/kg	420	EPA8270
4-Chlorophenyl phenyl ether	U			420	µg/kg	420	EPA8270
Chrysene	U			420	µg/kg	420	EPA8270

SAMPLE NAME: D4311'1006 (Continued) Sample ID: 100357

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
o-Cresol (2-Methylphenol)	U			420	µg/kg	420	EPA8270
p-Cresol (4-Methylphenol)	U			420	µg/kg	420	EPA8270
Dibenz(a,h)anthracene	U			420	µg/kg	420	EPA8270
Dibenzofuran	U			420	µg/kg	420	EPA8270
Di-n-butyl phthalate	UJ	V		190	µg/kg	420	EPA8270
1,2-Dichlorobenzene	U			420	µg/kg	420	EPA8270
1,3-Dichlorobenzene	U			420	µg/kg	420	EPA8270
1,4-Dichlorobenzene	U			420	µg/kg	420	EPA8270
3,3'-Dichlorobenzidine	U			840	µg/kg	840	EPA8270
2,4-Dichlorophenol	U			420	µg/kg	420	EPA8270
Diethyl phthalate	U			420	µg/kg	420	EPA8270
2,4-Dimethyl phenol	U			420	µg/kg	420	EPA8270
Dimethyl phthalate	U			420	µg/kg	420	EPA8270
2,4-Dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2,4-Dinitrotoluene	U			420	µg/kg	420	EPA8270
2,6-Dinitrotoluene	U			420	µg/kg	420	EPA8270
Di-n-octyl phthalate				520	µg/kg	420	EPA8270
Fluoranthene	U			420	µg/kg	420	EPA8270
Fluorene	U			420	µg/kg	420	EPA8270
Hexachlorobenzene	U			420	µg/kg	420	EPA8270
Hexachlorobutadiene	U			420	µg/kg	420	EPA8270
Hexachlorocyclopentadiene	U			420	µg/kg	420	EPA8270
Hexachloroethane	U			420	µg/kg	420	EPA8270
Indeno(1,2,3-c,d)pyrene	U			420	µg/kg	420	EPA8270
Isophorone	U			420	µg/kg	420	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	U			420	µg/kg	420	EPA8270
Naphthalene	U			420	µg/kg	420	EPA8270
o-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
Nitrobenzene	U			420	µg/kg	420	EPA8270
2-Nitrophenol	U			420	µg/kg	420	EPA8270
4-Nitrophenol	U			2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	U			420	µg/kg	420	EPA8270
N-Nitrosodipropylamine	U			420	µg/kg	420	EPA8270
Pentachlorophenol	UJ	C		2,100	µg/kg	2,100	EPA8270
Phenanthrene	U			420	µg/kg	420	EPA8270
Phenol	UJ	C		420	µg/kg	420	EPA8270
Pyrene	U			420	µg/kg	420	EPA8270
1,2,4-Trichlorobenzene	U			420	µg/kg	420	EPA8270
2,4,5-Trichlorophenol	U			2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	U			420	µg/kg	420	EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown ketone	J	NV		10,000	µg/kg		EPA8270
Unknown phthalate	J	N		200	µg/kg		EPA8270
Unknown phthalate	J	N		300	µg/kg		EPA8270
Unknown phthalate	J	N		500	µg/kg		EPA8270

SAMPLE NAME: D43111006 (Continued) Sample ID: 100357

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Unknown phthalate	J	N		700	µg/kg		EPA8270
Unknown phthalate	J	N		500	µg/kg		EPA8270
Unknown phthalate	J	N		200	µg/kg		EPA8270
Unknown phthalate	J	N		500	µg/kg		EPA8270
Unknown phthalate	J	N		800	µg/kg		EPA8270
Unknown phthalate	J	N		300	µg/kg		EPA8270
Unknown phthalate	J	N		300	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U			13	µg/kg	13	EPA8240
Benzene	U	V		6.4	µg/kg	6.4	EPA8240
Bromodichloromethane	U			6.4	µg/kg	6.4	EPA8240
Bromoform	U			6.4	µg/kg	6.4	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Carbon disulfide	U			6.4	µg/kg	6.4	EPA8240
Carbon tetrachloride	U			6.4	µg/kg	6.4	EPA8240
Chlorobenzene	U			6.4	µg/kg	6.4	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
Chloroform	U			6.4	µg/kg	6.4	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Dibromochloromethane	U			6.4	µg/kg	6.4	EPA8240
1,1-Dichloroethane	U			6.4	µg/kg	6.4	EPA8240
1,2-Dichloroethane	U			6.4	µg/kg	6.4	EPA8240
1,1-Dichloroethylene	U			6.4	µg/kg	6.4	EPA8240
1,2-Dichloroethylene	U			6.4	µg/kg	6.4	EPA8240
Dichloromethane (Methylene chloride)				5.5	µg/kg	6.4	EPA8240
1,2-Dichloropropane	U			6.4	µg/kg	6.4	EPA8240
cis-1,3-Dichloropropene	U			6.4	µg/kg	6.4	EPA8240
trans-1,3-Dichloropropene	U			6.4	µg/kg	6.4	EPA8240
Ethylbenzene	U			6.4	µg/kg	6.4	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Styrene	U			6.4	µg/kg	6.4	EPA8240
1,1,2,2-Tetrachloroethane	U			6.4	µg/kg	6.4	EPA8240
Tetrachloroethylene	U			6.4	µg/kg	6.4	EPA8240
Toluene	U			6.4	µg/kg	6.4	EPA8240
1,1,1-Trichloroethane	U			6.4	µg/kg	6.4	EPA8240
1,1,2-Trichloroethane	U			6.4	µg/kg	6.4	EPA8240
Trichloroethylene	U			6.4	µg/kg	6.4	EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
Xylenes	U			6.4	µg/kg	6.4	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			2.1	µg/kg	2.1	EPA8080
alpha-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
beta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080

SAMPLE NAME: D43I11006 (Continued) Sample ID: 100357

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
delta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
alpha-Chlordane	U			2.1	µg/kg	2.1	EPA8080
gamma-Chlordane	U			2.1	µg/kg	2.1	EPA8080
p,p'-DDD	U			4.2	µg/kg	4.2	EPA8080
p,p'-DDE	U			4.2	µg/kg	4.2	EPA8080
p,p'-DDT	U			4.2	µg/kg	4.2	EPA8080
Dieldrin	U			4.2	µg/kg	4.2	EPA8080
Endosulfan I	U			2.1	µg/kg	2.1	EPA8080
Endosulfan II	U			4.2	µg/kg	4.2	EPA8080
Endosulfan sulfate	U			4.2	µg/kg	4.2	EPA8080
Endrin	U			4.2	µg/kg	4.2	EPA8080
Endrin ketone	U			4.2	µg/kg	4.2	EPA8080
Heptachlor	U			2.1	µg/kg	2.1	EPA8080
Heptachlor epoxide	U			2.1	µg/kg	2.1	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			2.1	µg/kg	2.1	EPA8080
Methoxychlor	U			21	µg/kg	21	EPA8080
Octachlorodibenzo-p-dioxin	U			0.20	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			42	µg/kg	42	EPA8080
PCB 1221	U			84	µg/kg	84	EPA8080
PCB 1232	U			42	µg/kg	42	EPA8080
PCB 1242	U			42	µg/kg	42	EPA8080
PCB 1248	U			42	µg/kg	42	EPA8080
PCB 1254	U			42	µg/kg	42	EPA8080
PCB 1260	U			42	µg/kg	42	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			210	µg/kg	210	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				16±14	pCi/g	7.3	EPA900.0
Gross alpha	U			8.5	pCi/g	8.5	EPA900.0
Nonvolatile beta				43±21	pCi/g	13	EPA900.0
Nonvolatile beta				60±27	pCi/g	16	EPA900.0
Radium, total alpha-emitting	U	V		1.1±0.81	pCi/g	0.21	EPA903.0
Radium, total alpha-emitting	U	V		0.53±0.52	pCi/g	0.18	EPA903.0
Tritium	U			1.4	pCi/g	1.4	EPA906.0
Tritium				3.1±2.7	pCi/g	1.4	EPA906.0

SAMPLE NAME: D43111006D Sample ID: 100358

Sample Type: Duplicate Associated Sample: 100357

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				8.4	meq/100g	2.0	EPA9080
pH	J	Q		4.9	pH	0.010	EPA9045
Specific conductance				33	µS/cm	1.0	EPA9050
Total organic carbon				1,300	mg/kg	250	EPA415.1
Total Metals							
Arsenic	U			1.0	mg/kg	1.0	EPA7060
Barium				36	mg/kg	23	EPA6010
Cadmium	UJ	L		0.57	mg/kg	0.57	EPA6010
Chromium	J	L		22	mg/kg	1.1	EPA6010
Copper	U			2.9	mg/kg	2.9	EPA6010
Lead				3.2	mg/kg	0.31	EPA7421
Manganese				460	mg/kg	1.7	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel	U			4.6	mg/kg	4.6	EPA6010
Selenium	U			0.51	mg/kg	0.51	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			420	µg/kg	420	EPA8270
Acenaphthylene	U			420	µg/kg	420	EPA8270
Anthracene	U			420	µg/kg	420	EPA8270
Benzo(a)anthracene	U			420	µg/kg	420	EPA8270
Benzo(b)fluoranthene	U			420	µg/kg	420	EPA8270
Benzo(k)fluoranthene	U			420	µg/kg	420	EPA8270
Benzoic acid	U			2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	U			420	µg/kg	420	EPA8270
Benzo(a)pyrene	U			420	µg/kg	420	EPA8270
Benzyl alcohol	U			420	µg/kg	420	EPA8270
Bis(2-chloroethoxy) methane	U			420	µg/kg	420	EPA8270
Bis(2-chloroethyl) ether	U			420	µg/kg	420	EPA8270
Bis(2-chloroisopropyl) ether	U			420	µg/kg	420	EPA8270
Bis(2-ethylhexyl) phthalate	U			420	µg/kg	420	EPA8270
4-Bromophenyl phenyl ether	U			420	µg/kg	420	EPA8270
Butylbenzyl phthalate	U			420	µg/kg	420	EPA8270
4-Chloroaniline	U			420	µg/kg	420	EPA8270
4-Chloro-m-cresol	U			420	µg/kg	420	EPA8270
2-Chloronaphthalene	U			420	µg/kg	420	EPA8270
2-Chlorophenol	U			420	µg/kg	420	EPA8270
4-Chlorophenyl phenyl ether	U			420	µg/kg	420	EPA8270
Chrysene	U			420	µg/kg	420	EPA8270
o-Cresol (2-Methylphenol)	U			420	µg/kg	420	EPA8270
p-Cresol (4-Methylphenol)	U			420	µg/kg	420	EPA8270
Dibenz(a,h)anthracene	U			420	µg/kg	420	EPA8270
Dibenzofuran	U			420	µg/kg	420	EPA8270
Di-n-butyl phthalate	UJ	V		170	µg/kg	420	EPA8270

SAMPLE NAME: D43I1006D (Continued) Sample ID: 100358

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
1,2-Dichlorobenzene	U			420	µg/kg	420	EPA8270
1,3-Dichlorobenzene	U			420	µg/kg	420	EPA8270
1,4-Dichlorobenzene	U			420	µg/kg	420	EPA8270
3,3'-Dichlorobenzidine	U			830	µg/kg	830	EPA8270
2,4-Dichlorophenol	U			420	µg/kg	420	EPA8270
Diethyl phthalate	U			420	µg/kg	420	EPA8270
2,4-Dimethyl phenol	U			420	µg/kg	420	EPA8270
Dimethyl phthalate	U			420	µg/kg	420	EPA8270
2,4-Dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2,4-Dinitrotoluene	U			420	µg/kg	420	EPA8270
2,6-Dinitrotoluene	U			420	µg/kg	420	EPA8270
Di-n-octyl phthalate	J			46	µg/kg	420	EPA8270
Fluoranthene	U			420	µg/kg	420	EPA8270
Fluorene	U			420	µg/kg	420	EPA8270
Hexachlorobenzene	U			420	µg/kg	420	EPA8270
Hexachlorobutadiene	U			420	µg/kg	420	EPA8270
Hexachlorocyclopentadiene	U			420	µg/kg	420	EPA8270
Hexachloroethane	U			420	µg/kg	420	EPA8270
Indeno(1,2,3-c,d)pyrene	U			420	µg/kg	420	EPA8270
Isophorone	U			420	µg/kg	420	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	U			420	µg/kg	420	EPA8270
Naphthalene	U			420	µg/kg	420	EPA8270
o-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
Nitrobenzene	U			420	µg/kg	420	EPA8270
2-Nitrophenol	U			420	µg/kg	420	EPA8270
4-Nitrophenol	U			2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	U			420	µg/kg	420	EPA8270
N-Nitrosodipropylamine	U			420	µg/kg	420	EPA8270
Pentachlorophenol	UJ	C		2,100	µg/kg	2,100	EPA8270
Phenanthrene	U			420	µg/kg	420	EPA8270
Phenol	UJ	C		420	µg/kg	420	EPA8270
Pyrene	U			420	µg/kg	420	EPA8270
1,2,4-Trichlorobenzene	U			420	µg/kg	420	EPA8270
2,4,5-Trichlorophenol	U			2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	U			420	µg/kg	420	EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		400	µg/kg		EPA8270
Unknown hydrocarbon	J	N		300	µg/kg		EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown ketone	J	NV		10,000	µg/kg		EPA8270
Unknown phthalate	J	N		400	µg/kg		EPA8270
Unknown phthalate	J	N		500	µg/kg		EPA8270
Unknown phthalate	J	N		200	µg/kg		EPA8270
Unknown phthalate	J	N		400	µg/kg		EPA8270
Unknown phthalate	J	N		300	µg/kg		EPA8270

SAMPLE NAME: D43111006D (Continued) Sample ID: 100358

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Unknown phthalate	J	N		200	µg/kg		EPA8270
Unknown phthalate	J	N		300	µg/kg		EPA8270
Unknown phthalate	J	N		600	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		65	µg/kg	13	EPA8240
Benzene	U	V		6.3	µg/kg	6.3	EPA8240
Bromodichloromethane	U			6.3	µg/kg	6.3	EPA8240
Bromoform	U			6.3	µg/kg	6.3	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Carbon disulfide	U			6.3	µg/kg	6.3	EPA8240
Carbon tetrachloride	U			6.3	µg/kg	6.3	EPA8240
Chlorobenzene	U			6.3	µg/kg	6.3	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
Chloroform	U			6.3	µg/kg	6.3	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Dibromochloromethane	U			6.3	µg/kg	6.3	EPA8240
1,1-Dichloroethane	U			6.3	µg/kg	6.3	EPA8240
1,2-Dichloroethane				5.7	µg/kg	6.3	EPA8240
1,1-Dichloroethylene	U			6.3	µg/kg	6.3	EPA8240
1,2-Dichloroethylene	U			6.3	µg/kg	6.3	EPA8240
Dichloromethane (Methylene chloride)	U	V		18	µg/kg	6.3	EPA8240
1,2-Dichloropropane	U			6.3	µg/kg	6.3	EPA8240
cis-1,3-Dichloropropene	U			6.3	µg/kg	6.3	EPA8240
trans-1,3-Dichloropropene	U			6.3	µg/kg	6.3	EPA8240
Ethylbenzene	U			6.3	µg/kg	6.3	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Styrene	U			6.3	µg/kg	6.3	EPA8240
1,1,2,2-Tetrachloroethane	U			6.3	µg/kg	6.3	EPA8240
Tetrachloroethylene	U			6.3	µg/kg	6.3	EPA8240
Toluene	U			6.3	µg/kg	6.3	EPA8240
1,1,1-Trichloroethane	U			6.3	µg/kg	6.3	EPA8240
1,1,2-Trichloroethane	U			6.3	µg/kg	6.3	EPA8240
Trichloroethylene	U			6.3	µg/kg	6.3	EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
Xylenes	U			6.3	µg/kg	6.3	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			2.1	µg/kg	2.1	EPA8080
alpha-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
beta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
delta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
alpha-Chlordane	U			2.1	µg/kg	2.1	EPA8080
gamma-Chlordane	U			2.1	µg/kg	2.1	EPA8080
p,p'-DDD	U			4.2	µg/kg	4.2	EPA8080

SAMPLE NAME: D43111006D (Continued) Sample ID: 100358

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
p,p'-DDE	U			4.2	µg/kg	4.2	EPA8080
p,p'-DDT	U			4.2	µg/kg	4.2	EPA8080
Dieldrin	U			4.2	µg/kg	4.2	EPA8080
Endosulfan I	U			2.1	µg/kg	2.1	EPA8080
Endosulfan II	U			4.2	µg/kg	4.2	EPA8080
Endosulfan sulfate	U			4.2	µg/kg	4.2	EPA8080
Endrin	U			4.2	µg/kg	4.2	EPA8080
Endrin ketone	U			4.2	µg/kg	4.2	EPA8080
Heptachlor	U			2.1	µg/kg	2.1	EPA8080
Heptachlor epoxide	U			2.1	µg/kg	2.1	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			2.1	µg/kg	2.1	EPA8080
Methoxychlor	U			21	µg/kg	21	EPA8080
Octachlorodibenzo-p-dioxin				6.2	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	U			42	µg/kg	42	EPA8080
PCB 1221	U			84	µg/kg	84	EPA8080
PCB 1232	U			42	µg/kg	42	EPA8080
PCB 1242	U			42	µg/kg	42	EPA8080
PCB 1248	U			42	µg/kg	42	EPA8080
PCB 1254	U			42	µg/kg	42	EPA8080
PCB 1260	U			42	µg/kg	42	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	U			210	µg/kg	210	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			7.4	pCi/g	7.4	EPA900.0
Nonvolatile beta				30±20	pCi/g	13	EPA900.0
Radium, total alpha-emitting	U	V		1.0±0.65	pCi/g	0.15	EPA903.0
Tritium	U			1.4	pCi/g	1.4	EPA906.0

SAMPLE NAME: D43111007 Sample ID: 100359

Location (SRS Coordinates): 18482.04E 66700.55N
Ground Elevation Above MSL: 129.5 ft
Depth of Core Interval: 10.00 to 12.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 3/4 USC Soil Classification: SM Percent Solids: 78.60

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			1.1	mg/kg	1.1	EPA7060
Barium	U			24	mg/kg	24	EPA6010
Cadmium	UJ	L		0.61	mg/kg	0.61	EPA6010
Chromium	UJ	L		8.4	mg/kg	1.2	EPA6010
Copper	U			3.0	mg/kg	3.0	EPA6010
Lead				1.8	mg/kg	0.34	EPA7421
Manganese				190	mg/kg	1.8	EPA6010
Mercury	U			0.13	mg/kg	0.13	EPA7470
Nickel	U			4.9	mg/kg	4.9	EPA6010
Selenium	U			0.57	mg/kg	0.57	EPA7740
Silver	U			1.2	mg/kg	1.2	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			430	µg/kg	430	EPA8270
Acenaphthylene	U			430	µg/kg	430	EPA8270
Anthracene	U			430	µg/kg	430	EPA8270
Benzo(a)anthracene	U			430	µg/kg	430	EPA8270
Benzo(b)fluoranthene	U			430	µg/kg	430	EPA8270
Benzo(k)fluoranthene	U			430	µg/kg	430	EPA8270
Benzoic acid	U			2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	U			430	µg/kg	430	EPA8270
Benzo(a)pyrene	U			430	µg/kg	430	EPA8270
Benzyl alcohol	U			430	µg/kg	430	EPA8270
Bis(2-chloroethoxy) methane	U			430	µg/kg	430	EPA8270
Bis(2-chloroethyl) ether	U			430	µg/kg	430	EPA8270
Bis(2-chloroisopropyl) ether	U			430	µg/kg	430	EPA8270
Bis(2-ethylhexyl) phthalate	U			430	µg/kg	430	EPA8270
4-Bromophenyl phenyl ether	U			430	µg/kg	430	EPA8270
Butylbenzyl phthalate	U			430	µg/kg	430	EPA8270
4-Chloroaniline	U			430	µg/kg	430	EPA8270
4-Chloro-m-cresol	U			430	µg/kg	430	EPA8270
2-Chloronaphthalene	U			430	µg/kg	430	EPA8270
2-Chlorophenol	U			430	µg/kg	430	EPA8270
4-Chlorophenyl phenyl ether	U			430	µg/kg	430	EPA8270
Chrysene	U			430	µg/kg	430	EPA8270
o-Cresol (2-Methylphenol)	U			430	µg/kg	430	EPA8270
p-Cresol (4-Methylphenol)	U			430	µg/kg	430	EPA8270
Dibenz(a,h)anthracene	U			430	µg/kg	430	EPA8270
Dibenzofuran	U			430	µg/kg	430	EPA8270
Di-n-butyl phthalate	UJ	V		200	µg/kg	430	EPA8270
1,2-Dichlorobenzene	U			430	µg/kg	430	EPA8270
1,3-Dichlorobenzene	U			430	µg/kg	430	EPA8270
1,4-Dichlorobenzene	U			430	µg/kg	430	EPA8270

SAMPLE NAME: D43I1007 (Continued) Sample ID: 100359

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
3,3'-Dichlorobenzidine	U			850	µg/kg	850	EPA8270
2,4-Dichlorophenol	U			430	µg/kg	430	EPA8270
Diethyl phthalate	U			430	µg/kg	430	EPA8270
2,4-Dimethyl phenol	U			430	µg/kg	430	EPA8270
Dimethyl phthalate	U			430	µg/kg	430	EPA8270
2,4-Dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2,4-Dinitrotoluene	U			430	µg/kg	430	EPA8270
2,6-Dinitrotoluene	U			430	µg/kg	430	EPA8270
Di-n-octyl phthalate	U			430	µg/kg	430	EPA8270
Fluoranthene	U			430	µg/kg	430	EPA8270
Fluorene	U			430	µg/kg	430	EPA8270
Hexachlorobenzene	U			430	µg/kg	430	EPA8270
Hexachlorobutadiene	U			430	µg/kg	430	EPA8270
Hexachlorocyclopentadiene	U			430	µg/kg	430	EPA8270
Hexachloroethane	U			430	µg/kg	430	EPA8270
Indeno(1,2,3-c,d)pyrene	U			430	µg/kg	430	EPA8270
Isophorone	U			430	µg/kg	430	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	U			430	µg/kg	430	EPA8270
Naphthalene	U			430	µg/kg	430	EPA8270
o-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
Nitrobenzene	U			430	µg/kg	430	EPA8270
2-Nitrophenol	U			430	µg/kg	430	EPA8270
4-Nitrophenol	U			2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	U			430	µg/kg	430	EPA8270
N-Nitrosodipropylamine	U			430	µg/kg	430	EPA8270
Pentachlorophenol	UJ	C		2,100	µg/kg	2,100	EPA8270
Phenanthrene	U			430	µg/kg	430	EPA8270
Phenol	UJ	C		430	µg/kg	430	EPA8270
Pyrene	U			430	µg/kg	430	EPA8270
1,2,4-Trichlorobenzene	U			430	µg/kg	430	EPA8270
2,4,5-Trichlorophenol	U			2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	U			430	µg/kg	430	EPA8270
Unknown ketone	J	NV		10,000	µg/kg		EPA8270
Unknown phthalate	J	N		200	µg/kg		EPA8270
Unknown phthalate	J	N		400	µg/kg		EPA8270
Unknown phthalate	J	N		300	µg/kg		EPA8270
Unknown phthalate	J	N		200	µg/kg		EPA8270
Unknown phthalate	J	N		200	µg/kg		EPA8270
Unknown phthalate	J	N		300	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		29	µg/kg	13	EPA8240
Benzene	U	V		6.4	µg/kg	6.4	EPA8240
Bromodichloromethane	U			6.4	µg/kg	6.4	EPA8240
Bromoform	U			6.4	µg/kg	6.4	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240

SAMPLE NAME: D43111007 (Continued) Sample ID: 100359

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Carbon disulfide	U			6.4	µg/kg	6.4	EPA8240
Carbon tetrachloride	U			6.4	µg/kg	6.4	EPA8240
Chlorobenzene	U			6.4	µg/kg	6.4	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
Chloroform	U			6.4	µg/kg	6.4	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Dibromochloromethane	U			6.4	µg/kg	6.4	EPA8240
1,1-Dichloroethane	U			6.4	µg/kg	6.4	EPA8240
1,2-Dichloroethane				8.8	µg/kg	6.4	EPA8240
1,1-Dichloroethylene	U			6.4	µg/kg	6.4	EPA8240
1,2-Dichloroethylene	U			6.4	µg/kg	6.4	EPA8240
Dichloromethane (Methylene chloride)	U	V		20	µg/kg	6.4	EPA8240
1,2-Dichloropropane	U			6.4	µg/kg	6.4	EPA8240
cis-1,3-Dichloropropene	U			6.4	µg/kg	6.4	EPA8240
trans-1,3-Dichloropropene	U			6.4	µg/kg	6.4	EPA8240
Ethylbenzene	U			6.4	µg/kg	6.4	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Styrene	U			6.4	µg/kg	6.4	EPA8240
1,1,2,2-Tetrachloroethane	U			6.4	µg/kg	6.4	EPA8240
Tetrachloroethylene	U			6.4	µg/kg	6.4	EPA8240
Toluene	U			6.4	µg/kg	6.4	EPA8240
1,1,1-Trichloroethane	U			6.4	µg/kg	6.4	EPA8240
1,1,2-Trichloroethane				7.8	µg/kg	6.4	EPA8240
Trichloroethylene	U			6.4	µg/kg	6.4	EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
Xylenes	U			6.4	µg/kg	6.4	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			2.1	µg/kg	2.1	EPA8080
alpha-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
beta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
delta-Benzene hexachloride	U			2.1	µg/kg	2.1	EPA8080
alpha-Chlordane	U			2.1	µg/kg	2.1	EPA8080
gamma-Chlordane	U			2.1	µg/kg	2.1	EPA8080
p,p'-DDD	U			4.3	µg/kg	4.3	EPA8080
p,p'-DDE	U			4.3	µg/kg	4.3	EPA8080
p,p'-DDT	U			4.3	µg/kg	4.3	EPA8080
Dieldrin	U			4.3	µg/kg	4.3	EPA8080
Endosulfan I	U			2.1	µg/kg	2.1	EPA8080
Endosulfan II	U			4.3	µg/kg	4.3	EPA8080
Endosulfan sulfate	U			4.3	µg/kg	4.3	EPA8080
Endrin	U			4.3	µg/kg	4.3	EPA8080
Endrin ketone	U			4.3	µg/kg	4.3	EPA8080
Heptachlor	U			2.1	µg/kg	2.1	EPA8080
Heptachlor epoxide	U			2.1	µg/kg	2.1	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280

SAMPLE NAME: D43111007 (Continued) Sample ID: 100359

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Lindane	U			2.1	µg/kg	2.1	EPA8080
Methoxychlor	U			21	µg/kg	21	EPA8080
Octachlorodibenzo-p-dioxin				21	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	U			43	µg/kg	43	EPA8080
PCB 1221	U			85	µg/kg	85	EPA8080
PCB 1232	U			43	µg/kg	43	EPA8080
PCB 1242	U			43	µg/kg	43	EPA8080
PCB 1248	U			43	µg/kg	43	EPA8080
PCB 1254	U			43	µg/kg	43	EPA8080
PCB 1260	U			43	µg/kg	43	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.30	ng/g	0.30	EPA8280
2,3,7,8-TCDD	U			0.30	ng/g	0.30	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	U			210	µg/kg	210	EPA8080

SAMPLE NAME: D43111501 Sample ID: 100406

Location (SRS Coordinates): 18533.07E 66779.25N
Ground Elevation Above MSL: 128.5 ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 5YR 4/4 USC Soil Classification: SP Percent Solids: 87.40

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				10	meq/100g	2.3	EPA9080
Cation exchange capacity				13	meq/100g	2.3	EPA9080
pH	J	Q		7.7	pH	0.010	EPA9045
Specific conductance				100	µS/cm	1.0	EPA9050
Total organic carbon				14,000	mg/kg	670	EPA415.1
Total Metals							
Arsenic				6.8	mg/kg	1.1	EPA7060
Barium				42	mg/kg	21	EPA6010
Cadmium				9.7	mg/kg	0.53	EPA6010
Chromium				180	mg/kg	1.1	EPA6010
Copper				66	mg/kg	2.7	EPA6010
Lead				150	mg/kg	13	EPA7421
Manganese				410	mg/kg	1.6	EPA6010

SAMPLE NAME: D43111501 (Continued) Sample ID: 100406

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Mercury				1.1	mg/kg	0.11	EPA7470
Nickel				79	mg/kg	4.3	EPA6010
Selenium	U			0.56	mg/kg	0.56	EPA7740
Silver				1.5	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	UJ	L		1,900	µg/kg	1,900	EPA8270
Acenaphthylene	UJ	L		1,900	µg/kg	1,900	EPA8270
Anthracene	UJ	L		1,900	µg/kg	1,900	EPA8270
Benzo(a)anthracene	UJ	L		1,900	µg/kg	1,900	EPA8270
Benzo(b)fluoranthene	UJ	LH	L	1,900	µg/kg	1,900	EPA8270
Benzo(k)fluoranthene	UJ	LH	L	1,900	µg/kg	1,900	EPA8270
Benzoic acid	UJ	L		9,500	µg/kg	9,500	EPA8270
Benzo(g,h,i)perylene	UJ	LH	L	1,900	µg/kg	1,900	EPA8270
Benzo(a)pyrene	UJ	LH	L	1,900	µg/kg	1,900	EPA8270
Benzyl alcohol	UJ	L		1,900	µg/kg	1,900	EPA8270
Bis(2-chloroethoxy) methane	UJ	L		1,900	µg/kg	1,900	EPA8270
Bis(2-chloroethyl) ether	UJ	L		1,900	µg/kg	1,900	EPA8270
Bis(2-chloroisopropyl) ether	UJ	L		1,900	µg/kg	1,900	EPA8270
Bis(2-ethylhexyl) phthalate	J	L		26,000	µg/kg	1,900	EPA8270
4-Bromophenyl phenyl ether	UJ	L		1,900	µg/kg	1,900	EPA8270
Butylbenzyl phthalate	UJ	L		1,900	µg/kg	1,900	EPA8270
4-Chloroaniline	UJ	L		1,900	µg/kg	1,900	EPA8270
4-Chloro-m-cresol	UJ	L		1,900	µg/kg	1,900	EPA8270
2-Chloronaphthalene	UJ	L		1,900	µg/kg	1,900	EPA8270
2-Chlorophenol	UJ	L		1,900	µg/kg	1,900	EPA8270
4-Chlorophenyl phenyl ether	UJ	L		1,900	µg/kg	1,900	EPA8270
Chrysene	UJ	L		1,900	µg/kg	1,900	EPA8270
o-Cresol (2-Methylphenol)	UJ	L		1,900	µg/kg	1,900	EPA8270
p-Cresol (4-Methylphenol)	UJ	L		1,900	µg/kg	1,900	EPA8270
Dibenz(a,h)anthracene	UJ	LH	L	1,900	µg/kg	1,900	EPA8270
Dibenzofuran	UJ	L		1,900	µg/kg	1,900	EPA8270
Di-n-butyl phthalate	UJ	VL		1,900	µg/kg	1,900	EPA8270
1,2-Dichlorobenzene	UJ	L		1,900	µg/kg	1,900	EPA8270
1,3-Dichlorobenzene	UJ	L		1,900	µg/kg	1,900	EPA8270
1,4-Dichlorobenzene	UJ	L		1,900	µg/kg	1,900	EPA8270
3,3'-Dichlorobenzidine	UJ	L		3,800	µg/kg	3,800	EPA8270
2,4-Dichlorophenol	UJ	L		1,900	µg/kg	1,900	EPA8270
Diethyl phthalate	UJ	L		1,900	µg/kg	1,900	EPA8270
2,4-Dimethyl phenol	UJ	L		1,900	µg/kg	1,900	EPA8270
Dimethyl phthalate	UJ	L		1,900	µg/kg	1,900	EPA8270
2,4-Dinitrophenol	UJ	L		9,500	µg/kg	9,500	EPA8270
2,4-Dinitrotoluene	UJ	L		1,900	µg/kg	1,900	EPA8270
2,6-Dinitrotoluene	UJ	L		1,900	µg/kg	1,900	EPA8270
Di-n-octyl phthalate	UJ	LH	L	1,900	µg/kg	1,900	EPA8270
Fluoranthene	UJ	L		1,900	µg/kg	1,900	EPA8270
Fluorene	UJ	L		1,900	µg/kg	1,900	EPA8270
Hexachlorobenzene	UJ	L		1,900	µg/kg	1,900	EPA8270
Hexachlorobutadiene	UJ	L		1,900	µg/kg	1,900	EPA8270

SAMPLE NAME: D43111501 (Continued) Sample ID: 100406

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Hexachlorocyclopentadiene	UJ	L		1,900	µg/kg	1,900	EPA8270
Hexachloroethane	UJ	L		1,900	µg/kg	1,900	EPA8270
Indeno(1,2,3-c,d)pyrene	UJ	LH	L	1,900	µg/kg	1,900	EPA8270
Isophorone	UJ	L		1,900	µg/kg	1,900	EPA8270
2-Methyl-4,6-dinitrophenol	UJ	L		9,500	µg/kg	9,500	EPA8270
2-Methylnaphthalene	UJ	L		1,900	µg/kg	1,900	EPA8270
Naphthalene	UJ	L		1,900	µg/kg	1,900	EPA8270
o-Nitroaniline	UJ	L		9,500	µg/kg	9,500	EPA8270
m-Nitroaniline	UJ	L		9,500	µg/kg	9,500	EPA8270
p-Nitroaniline	UJ	L		9,500	µg/kg	9,500	EPA8270
Nitrobenzene	UJ	L		1,900	µg/kg	1,900	EPA8270
2-Nitrophenol	UJ	L		1,900	µg/kg	1,900	EPA8270
4-Nitrophenol	UJ	L		9,500	µg/kg	9,500	EPA8270
N-Nitrosodiphenylamine	UJ	L		1,900	µg/kg	1,900	EPA8270
N-Nitrosodipropylamine	UJ	L		1,900	µg/kg	1,900	EPA8270
Pentachlorophenol	UJ	L		9,500	µg/kg	9,500	EPA8270
Phenanthrene	UJ	L		1,900	µg/kg	1,900	EPA8270
Phenol	UJ	L		1,900	µg/kg	1,900	EPA8270
Pyrene	UJ	L		1,900	µg/kg	1,900	EPA8270
1,2,4-Trichlorobenzene	UJ	L		1,900	µg/kg	1,900	EPA8270
2,4,5-Trichlorophenol	UJ	L		9,500	µg/kg	9,500	EPA8270
2,4,6-Trichlorophenol	UJ	L		1,900	µg/kg	1,900	EPA8270
Unknown ketone	J	NV		7,000	µg/kg		EPA8270
Unknown phthalate	J	N		1,000	µg/kg		EPA8270
Unknown phthalate	J	N		2,000	µg/kg		EPA8270
Unknown phthalate	J	N		1,000	µg/kg		EPA8270
Unknown phthalate	J	N		2,000	µg/kg		EPA8270
Unknown phthalate	J	N		2,000	µg/kg		EPA8270
Unknown phthalate	J	N		3,000	µg/kg		EPA8270
Unknown phthalate	J	N		3,000	µg/kg		EPA8270
Unknown phthalate	J	N		2,000	µg/kg		EPA8270
Unknown phthalate	J	N		2,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U			11	µg/kg	11	EPA8240
Benzene	UJ	H		5.7	µg/kg	5.7	EPA8240
Bromodichloromethane	UJ	H		5.7	µg/kg	5.7	EPA8240
Bromoform	UJ	H		5.7	µg/kg	5.7	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.7	µg/kg	5.7	EPA8240
Carbon tetrachloride	UJ	H		5.7	µg/kg	5.7	EPA8240
Chlorobenzene	UJ	H		5.7	µg/kg	5.7	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.7	µg/kg	5.7	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	UJ	H		5.7	µg/kg	5.7	EPA8240
1,1-Dichloroethane	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethane	U			5.7	µg/kg	5.7	EPA8240

SAMPLE NAME: D43111501 (Continued) Sample ID: 100406

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloroethylene	U			5.7	µg/kg	5.7	EPA8240
Dichloromethane (Methylene chloride)	U			5.7	µg/kg	5.7	EPA8240
1,2-Dichloropropane	UJ	H		5.7	µg/kg	5.7	EPA8240
cis-1,3-Dichloropropene	UJ	H		5.7	µg/kg	5.7	EPA8240
trans-1,3-Dichloropropene	UJ	H		5.7	µg/kg	5.7	EPA8240
Ethylbenzene	UJ	H		5.7	µg/kg	5.7	EPA8240
2-Hexanone	UJ	H		11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	UJ	H		11	µg/kg	11	EPA8240
Styrene	UJ	H		5.7	µg/kg	5.7	EPA8240
1,1,2,2-Tetrachloroethane	UJ	H		5.7	µg/kg	5.7	EPA8240
Tetrachloroethylene	UJ	H		5.7	µg/kg	5.7	EPA8240
Toluene	UJ	H		5.7	µg/kg	5.7	EPA8240
1,1,1-Trichloroethane	UJ	H		5.7	µg/kg	5.7	EPA8240
1,1,2-Trichloroethane	UJ	H		5.7	µg/kg	5.7	EPA8240
Trichloroethylene	UJ	H		5.7	µg/kg	5.7	EPA8240
Vinyl acetate	UJ	H		11	µg/kg	11	EPA8240
Xylenes	UJ	H		5.7	µg/kg	5.7	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	UJ	O	L	92	µg/kg	92	EPA8080
alpha-Benzene hexachloride	UJ	O	L	92	µg/kg	92	EPA8080
beta-Benzene hexachloride	UJ	O	L	92	µg/kg	92	EPA8080
delta-Benzene hexachloride	UJ	O	L	92	µg/kg	92	EPA8080
alpha-Chlordane	U	A		27	µg/kg	92	EPA8080
gamma-Chlordane	U	A		25	µg/kg	92	EPA8080
p,p'-DDD	UJ	O	L	190	µg/kg	190	EPA8080
p,p'-DDE	U	A		180	µg/kg	190	EPA8080
p,p'-DDT	U	A		270	µg/kg	190	EPA8080
Dieldrin	UJ	O	L	190	µg/kg	190	EPA8080
Endosulfan I	UJ	O	L	92	µg/kg	92	EPA8080
Endosulfan II	UJ	O	L	190	µg/kg	190	EPA8080
Endosulfan sulfate	UJ	O	L	190	µg/kg	190	EPA8080
Endrin	UJ	O	L	190	µg/kg	190	EPA8080
Endrin ketone	UJ	O	L	190	µg/kg	190	EPA8080
Heptachlor	UJ	O	L	92	µg/kg	92	EPA8080
Heptachlor epoxide	UJ	O	L	92	µg/kg	92	EPA8080
Heptachlorodibenzo-p-dioxin isomers	J			0.70	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Lindane	UJ	O	L	92	µg/kg	92	EPA8080
Methoxychlor	UJ	O	L	920	µg/kg	920	EPA8080
Octachlorodibenzo-p-dioxin	J			1.8	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.30	ng/g	0.30	EPA8280
PCB 1016	UJ	O	L	1,900	µg/kg	1,900	EPA8080
PCB 1221	UJ	O	L	3,700	µg/kg	3,700	EPA8080
PCB 1232	UJ	O	L	1,900	µg/kg	1,900	EPA8080

SAMPLE NAME: D43111501 (Continued) Sample ID: 100406

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
PCB 1242	UJ	O	L	1,900	µg/kg	1,900	EPA8080
PCB 1248	UJ	O	L	1,900	µg/kg	1,900	EPA8080
PCB 1254	UJ	O	L	1,900	µg/kg	1,900	EPA8080
PCB 1260	UJ	O	L	1,900	µg/kg	1,900	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	UJ	O	L	9,200	µg/kg	9,200	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				7.9±7.0	pCi/g	4.0	EPA900.0
Nonvolatile beta				9.5±11	pCi/g	4.2	EPA900.0
Radium, total alpha-emitting	U	V		0.92±0.96	pCi/g	0.20	EPA903.0
Tritium				4.7±0.89	pCi/g	1.9	EPA906.0

SAMPLE NAME: D43111502 Sample ID: 100407

Location (SRS Coordinates): 18533.07E 66779.25N
Ground Elevation Above MSL: 128.5 ft
Depth of Core Interval: 0.50 to 2.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 5YR 4/4 USC Soil Classification: SP Percent Solids: 91.20

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				2.3	mg/kg	0.98	EPA7060
Barium				28	mg/kg	19	EPA6010
Cadmium	U			0.48	mg/kg	0.48	EPA6010
Chromium				39	mg/kg	0.96	EPA6010
Copper				8.4	mg/kg	2.4	EPA6010
Lead				28	mg/kg	5.9	EPA7421
Manganese				330	mg/kg	1.4	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel				10	mg/kg	3.8	EPA6010
Selenium	U			0.49	mg/kg	0.49	EPA7740
Silver	U			0.96	mg/kg	0.96	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	UJ	L		370	µg/kg	370	EPA8270
Acenaphthylene	UJ	L		370	µg/kg	370	EPA8270
Anthracene	UJ	L		370	µg/kg	370	EPA8270
Benzo(a)anthracene	UJ	L		370	µg/kg	370	EPA8270

SAMPLE NAME: D43111502 (Continued) Sample ID: 100407

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Benzo(b)fluoranthene	UJ	L		370	µg/kg	370	EPA8270
Benzo(k)fluoranthene	UJ	L		370	µg/kg	370	EPA8270
Benzoic acid	UJ	L		1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	UJ	L		370	µg/kg	370	EPA8270
Benzo(a)pyrene	UJ	L		370	µg/kg	370	EPA8270
Benzyl alcohol	UJ	L		370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	UJ	L		370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	UJ	L		370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	UJ	L		370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	L		370	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	UJ	L		370	µg/kg	370	EPA8270
Butylbenzyl phthalate	UJ	L		370	µg/kg	370	EPA8270
4-Chloroaniline	UJ	L		370	µg/kg	370	EPA8270
4-Chloro-m-cresol	UJ	L		370	µg/kg	370	EPA8270
2-Chloronaphthalene	UJ	L		370	µg/kg	370	EPA8270
2-Chlorophenol	UJ	L		370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	UJ	L		370	µg/kg	370	EPA8270
Chrysene	UJ	L		370	µg/kg	370	EPA8270
o-Cresol (2-Methylphenol)	UJ	L		370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	UJ	L		370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	UJ	L		370	µg/kg	370	EPA8270
Dibenzofuran	UJ	L		370	µg/kg	370	EPA8270
Di-n-butyl phthalate	UJ	VL		41	µg/kg	370	EPA8270
1,2-Dichlorobenzene	UJ	L		370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	UJ	L		370	µg/kg	370	EPA8270
1,4-Dichlorobenzene	UJ	L		370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	UJ	L		740	µg/kg	740	EPA8270
2,4-Dichlorophenol	UJ	L		370	µg/kg	370	EPA8270
Diethyl phthalate	UJ	L		370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	UJ	L		370	µg/kg	370	EPA8270
Dimethyl phthalate	UJ	L		370	µg/kg	370	EPA8270
2,4-Dinitrophenol	UJ	L		1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	UJ	L		370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	UJ	L		370	µg/kg	370	EPA8270
Di-n-octyl phthalate	UJ	L		370	µg/kg	370	EPA8270
Fluoranthene	UJ	L		370	µg/kg	370	EPA8270
Fluorene	UJ	L		370	µg/kg	370	EPA8270
Hexachlorobenzene	UJ	L		370	µg/kg	370	EPA8270
Hexachlorobutadiene	UJ	L		370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	UJ	L		370	µg/kg	370	EPA8270
Hexachloroethane	UJ	L		370	µg/kg	370	EPA8270
Indeno(1,2,3-c,d)pyrene	UJ	L		370	µg/kg	370	EPA8270
Isophorone	UJ	L		370	µg/kg	370	EPA8270
2-Methyl-4,6-dinitrophenol	UJ	L		1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	UJ	L		370	µg/kg	370	EPA8270
Naphthalene	UJ	L		370	µg/kg	370	EPA8270
o-Nitroaniline	UJ	L		1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	UJ	L		1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	UJ	L		1,800	µg/kg	1,800	EPA8270
Nitrobenzene	UJ	L		370	µg/kg	370	EPA8270

SAMPLE NAME: D43111502 (Continued) Sample ID: 100407

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2-Nitrophenol	UJ	L		370	µg/kg	370	EPA8270
4-Nitrophenol	UJ	L		1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	UJ	L		370	µg/kg	370	EPA8270
N-Nitrosodipropylamine	UJ	L		370	µg/kg	370	EPA8270
Pentachlorophenol	UJ	L		1,800	µg/kg	1,800	EPA8270
Phenanthrene	UJ	L		370	µg/kg	370	EPA8270
Phenol	UJ	L		370	µg/kg	370	EPA8270
Pyrene	UJ	L		370	µg/kg	370	EPA8270
1,2,4-Trichlorobenzene	UJ	L		370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	UJ	L		1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	UJ	L		370	µg/kg	370	EPA8270
Unknown ester	J	N		300	µg/kg		EPA8270
Unknown ketone	J	N		6,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U			11	µg/kg	11	EPA8240
Benzene	U			5.6	µg/kg	5.6	EPA8240
Bromodichloromethane	U			5.6	µg/kg	5.6	EPA8240
Bromoform	U			5.6	µg/kg	5.6	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.6	µg/kg	5.6	EPA8240
Carbon tetrachloride	U			5.6	µg/kg	5.6	EPA8240
Chlorobenzene	U			5.6	µg/kg	5.6	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.6	µg/kg	5.6	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.6	µg/kg	5.6	EPA8240
1,1-Dichloroethane	U			5.6	µg/kg	5.6	EPA8240
1,2-Dichloroethane	U			5.6	µg/kg	5.6	EPA8240
1,1-Dichloroethylene	U			5.6	µg/kg	5.6	EPA8240
1,2-Dichloroethylene	U			5.6	µg/kg	5.6	EPA8240
Dichloromethane (Methylene chloride)	U			5.6	µg/kg	5.6	EPA8240
1,2-Dichloropropane	U			5.6	µg/kg	5.6	EPA8240
cis-1,3-Dichloropropene	U			5.6	µg/kg	5.6	EPA8240
trans-1,3-Dichloropropene	U			5.6	µg/kg	5.6	EPA8240
Ethylbenzene	U			5.6	µg/kg	5.6	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.6	µg/kg	5.6	EPA8240
1,1,2,2-Tetrachloroethane	U			5.6	µg/kg	5.6	EPA8240
Tetrachloroethylene	U			5.6	µg/kg	5.6	EPA8240
Toluene	U			5.6	µg/kg	5.6	EPA8240
1,1,1-Trichloroethane	U			5.6	µg/kg	5.6	EPA8240
1,1,2-Trichloroethane	U			5.6	µg/kg	5.6	EPA8240
Trichloroethylene	U			5.6	µg/kg	5.6	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.6	µg/kg	5.6	EPA8240

SAMPLE NAME: D43111502 (Continued) Sample ID: 100407

Radionuclide Indicators and Radionuclides

Gross alpha	13±8.0	pCi/g	3.8	EPA900.0
Nonvolatile beta	25±12	pCi/g	3.8	EPA900.0
Radium, total alpha-emitting	2.0±1.5	pCi/g	0.22	EPA903.0
Tritium	3.1±0.61	pCi/g	1.8	EPA906.0

SAMPLE NAME: D43111502A Sample ID: 100408

Sample Type: Duplicate Associated Sample: 100407

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				2.4	mg/kg	1.0	EPA7060
Barium				34	mg/kg	22	EPA6010
Cadmium				0.82	mg/kg	0.54	EPA6010
Chromium				33	mg/kg	1.1	EPA6010
Copper				11	mg/kg	2.7	EPA6010
Lead				24	mg/kg	3.1	EPA7421
Manganese				340	mg/kg	1.6	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel				11	mg/kg	4.3	EPA6010
Selenium	U			0.51	mg/kg	0.51	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			370	µg/kg	370	EPA8270
Acenaphthylene	U			370	µg/kg	370	EPA8270
Anthracene	U			370	µg/kg	370	EPA8270
Benzo(a)anthracene	U			370	µg/kg	370	EPA8270
Benzo(b)fluoranthene	U			370	µg/kg	370	EPA8270
Benzo(k)fluoranthene	U			370	µg/kg	370	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			370	µg/kg	370	EPA8270
Benzo(a)pyrene	U			370	µg/kg	370	EPA8270
Benzyl alcohol	U			370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	U			370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	U			370	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Butylbenzyl phthalate	U			370	µg/kg	370	EPA8270
4-Chloroaniline	U			370	µg/kg	370	EPA8270
4-Chloro-m-cresol	U			370	µg/kg	370	EPA8270
2-Chloronaphthalene	U			370	µg/kg	370	EPA8270
2-Chlorophenol	U			370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Chrysene	U			370	µg/kg	370	EPA8270
o-Cresol (2-Methylphenol)	U			370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	U			370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	U			370	µg/kg	370	EPA8270

SAMPLE NAME: D43111502A (Continued) Sample ID: 100408

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Dibenzofuran	U			370	µg/kg	370	EPA8270
Di-n-butyl phthalate	UJ	V		55	µg/kg	370	EPA8270
1,2-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,4-Dichlorobenzene	U			370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	U			730	µg/kg	730	EPA8270
2,4-Dichlorophenol	U			370	µg/kg	370	EPA8270
Diethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	U			370	µg/kg	370	EPA8270
Dimethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	U			370	µg/kg	370	EPA8270
Di-n-octyl phthalate	U			370	µg/kg	370	EPA8270
Fluoranthene	U			370	µg/kg	370	EPA8270
Fluorene	U			370	µg/kg	370	EPA8270
Hexachlorobenzene	U			370	µg/kg	370	EPA8270
Hexachlorobutadiene	U			370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	U			370	µg/kg	370	EPA8270
Hexachloroethane	U			370	µg/kg	370	EPA8270
Indeno(1,2,3-c,d)pyrene	U			370	µg/kg	370	EPA8270
Isophorone	U			370	µg/kg	370	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			370	µg/kg	370	EPA8270
Naphthalene	U			370	µg/kg	370	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			370	µg/kg	370	EPA8270
2-Nitrophenol	U			370	µg/kg	370	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			370	µg/kg	370	EPA8270
N-Nitrosodipropylamine	U			370	µg/kg	370	EPA8270
Pentachlorophenol	U			1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			370	µg/kg	370	EPA8270
Phenol	U			370	µg/kg	370	EPA8270
Pyrene	U			370	µg/kg	370	EPA8270
1,2,4-Trichlorobenzene	U			370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			370	µg/kg	370	EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown hydrocarbon	J	N		200	µg/kg		EPA8270
Unknown ester	J	NV		400	µg/kg		EPA8270
Unknown ketone	J	NV		6,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U			11	µg/kg	11	EPA8240
Benzene	U			5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240

SAMPLE NAME: D43111502A (Continued) Sample ID: 100408

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	U			5.5	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	U			5.5	µg/kg	5.5	EPA8240
Toluene	U			5.5	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.5	µg/kg	5.5	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha				14±8.3	pCi/g	3.8	EPA900.0
Nonvolatile beta				11±10	pCi/g	3.8	EPA900.0
Radium, total alpha-emitting	U	V		1.0±0.80	pCi/g	0.13	EPA903.0
Tritium				5.4±0.97	pCi/g	1.7	EPA906.0

SAMPLE NAME: D43111503 Sample ID: 100410

Location (SRS Coordinates): 18533.07E 66779.25N
Ground Elevation Above MSL: 128.5 ft
Depth of Core Interval: 5.00 to 7.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 5YR 5/6 USC Soil Classification: SC Percent Solids: 87.10

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				8.2	meq/100g	2.0	EPA9080
pH	J	Q		5.6	pH	0.010	EPA9045
Specific conductance				28	µS/cm	1.0	EPA9050
Total organic carbon				1,400	mg/kg	210	EPA415.1
Total Metals							
Arsenic				1.9	mg/kg	1.0	EPA7060
Barium	U			22	mg/kg	22	EPA6010
Cadmium	U			0.55	mg/kg	0.55	EPA6010
Chromium				15	mg/kg	1.1	EPA6010
Copper	U			2.8	mg/kg	2.8	EPA6010
Lead				8.4	mg/kg	1.2	EPA7421
Manganese				38	mg/kg	1.7	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel	U			4.4	mg/kg	4.4	EPA6010
Selenium	U			0.50	mg/kg	0.50	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	UJ	L		380	µg/kg	380	EPA8270
Acenaphthylene	UJ	L		380	µg/kg	380	EPA8270
Anthracene	UJ	L		380	µg/kg	380	EPA8270
Benzo(a)anthracene	UJ	L		380	µg/kg	380	EPA8270
Benzo(b)fluoranthene	UJ	LH	L	380	µg/kg	380	EPA8270
Benzo(k)fluoranthene	UJ	LH	L	380	µg/kg	380	EPA8270
Benzoic acid	UJ	L		1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	UJ	LH	L	380	µg/kg	380	EPA8270
Benzo(a)pyrene	UJ	LH	L	380	µg/kg	380	EPA8270
Benzyl alcohol	UJ	L		380	µg/kg	380	EPA8270
Bis(2-chloroethoxy) methane	UJ	L		380	µg/kg	380	EPA8270
Bis(2-chloroethyl) ether	UJ	L		380	µg/kg	380	EPA8270
Bis(2-chloroisopropyl) ether	UJ	L		380	µg/kg	380	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	L		380	µg/kg	380	EPA8270
4-Bromophenyl phenyl ether	UJ	L		380	µg/kg	380	EPA8270
Butylbenzyl phthalate	UJ	L		380	µg/kg	380	EPA8270
4-Chloroaniline	UJ	L		380	µg/kg	380	EPA8270
4-Chloro-m-cresol	UJ	L		380	µg/kg	380	EPA8270
2-Chloronaphthalene	UJ	L		380	µg/kg	380	EPA8270
2-Chlorophenol	UJ	L		380	µg/kg	380	EPA8270
4-Chlorophenyl phenyl ether	UJ	L		380	µg/kg	380	EPA8270
Chrysene	UJ	L		380	µg/kg	380	EPA8270
o-Cresol (2-Methylphenol)	UJ	L		380	µg/kg	380	EPA8270

SAMPLE NAME: D43111503 (Continued) Sample ID: 100410

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
p-Cresol (4-Methylphenol)	UJ	L		380	µg/kg	380	EPA8270
Dibenz(a,h)anthracene	UJ	LH	L	380	µg/kg	380	EPA8270
Dibenzofuran	UJ	L		380	µg/kg	380	EPA8270
Di-n-butyl phthalate	UJ	VL		59	µg/kg	380	EPA8270
1,2-Dichlorobenzene	UJ	L		380	µg/kg	380	EPA8270
1,3-Dichlorobenzene	UJ	L		380	µg/kg	380	EPA8270
1,4-Dichlorobenzene	UJ	L		380	µg/kg	380	EPA8270
3,3'-Dichlorobenzidine	UJ	L		760	µg/kg	760	EPA8270
2,4-Dichlorophenol	UJ	L		380	µg/kg	380	EPA8270
Diethyl phthalate	UJ	L		380	µg/kg	380	EPA8270
2,4-Dimethyl phenol	UJ	L		380	µg/kg	380	EPA8270
Dimethyl phthalate	UJ	L		380	µg/kg	380	EPA8270
2,4-Dinitrophenol	UJ	L		1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	UJ	L		380	µg/kg	380	EPA8270
2,6-Dinitrotoluene	UJ	L		380	µg/kg	380	EPA8270
Di-n-octyl phthalate	UJ	LH	L	380	µg/kg	380	EPA8270
Fluoranthene	UJ	L		380	µg/kg	380	EPA8270
Fluorene	UJ	L		380	µg/kg	380	EPA8270
Hexachlorobenzene	UJ	L		380	µg/kg	380	EPA8270
Hexachlorobutadiene	UJ	L		380	µg/kg	380	EPA8270
Hexachlorocyclopentadiene	UJ	L		380	µg/kg	380	EPA8270
Hexachloroethane	UJ	L		380	µg/kg	380	EPA8270
Indeno(1,2,3-c,d)pyrene	UJ	LH	L	380	µg/kg	380	EPA8270
Isophorone	UJ	L		380	µg/kg	380	EPA8270
2-Methyl-4,6-dinitrophenol	UJ	L		1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	UJ	L		380	µg/kg	380	EPA8270
Naphthalene	UJ	L		380	µg/kg	380	EPA8270
o-Nitroaniline	UJ	L		1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	UJ	L		1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	UJ	L		1,900	µg/kg	1,900	EPA8270
Nitrobenzene	UJ	L		380	µg/kg	380	EPA8270
2-Nitrophenol	UJ	L		380	µg/kg	380	EPA8270
4-Nitrophenol	UJ	L		1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	UJ	L		380	µg/kg	380	EPA8270
N-Nitrosodipropylamine	UJ	L		380	µg/kg	380	EPA8270
Pentachlorophenol	UJ	L		1,900	µg/kg	1,900	EPA8270
Phenanthrene	UJ	L		380	µg/kg	380	EPA8270
Phenol	UJ	L		380	µg/kg	380	EPA8270
Pyrene	UJ	L		380	µg/kg	380	EPA8270
1,2,4-Trichlorobenzene	UJ	L		380	µg/kg	380	EPA8270
2,4,5-Trichlorophenol	UJ	L		1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	UJ	L		380	µg/kg	380	EPA8270
Unknown arom. hydrocarbon	J	N		400	µg/kg		EPA8270
Unknown ester.	J	NV		400	µg/kg		EPA8270
Unknown ketone	J	NV		7,000	µg/kg		EPA8270

SAMPLE NAME: D43111503 (Continued) Sample ID: 100410

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	U			12	µg/kg	12	EPA8240
Benzene	U			5.8	µg/kg	5.8	EPA8240
Bromodichloromethane	U			5.8	µg/kg	5.8	EPA8240
Bromoform	U			5.8	µg/kg	5.8	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			5.8	µg/kg	5.8	EPA8240
Carbon tetrachloride	U			5.8	µg/kg	5.8	EPA8240
Chlorobenzene	U			5.8	µg/kg	5.8	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
Chloroform	U			5.8	µg/kg	5.8	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			5.8	µg/kg	5.8	EPA8240
1,1-Dichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1-Dichloroethylene	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloroethylene	U			5.8	µg/kg	5.8	EPA8240
Dichloromethane (Methylene chloride)	U			5.8	µg/kg	5.8	EPA8240
1,2-Dichloropropane	U			5.8	µg/kg	5.8	EPA8240
cis-1,3-Dichloropropene	U			5.8	µg/kg	5.8	EPA8240
trans-1,3-Dichloropropene	U			5.8	µg/kg	5.8	EPA8240
Ethylbenzene	U			5.8	µg/kg	5.8	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			5.8	µg/kg	5.8	EPA8240
1,1,2,2-Tetrachloroethane	U			5.8	µg/kg	5.8	EPA8240
Tetrachloroethylene	U			5.8	µg/kg	5.8	EPA8240
Toluene	U			5.8	µg/kg	5.8	EPA8240
1,1,1-Trichloroethane	U			5.8	µg/kg	5.8	EPA8240
1,1,2-Trichloroethane	U			5.8	µg/kg	5.8	EPA8240
Trichloroethylene	U			5.8	µg/kg	5.8	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			5.8	µg/kg	5.8	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.9	µg/kg	1.9	EPA8080
alpha-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
beta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
delta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
alpha-Chlordane	U			1.9	µg/kg	1.9	EPA8080
gamma-Chlordane	U			1.9	µg/kg	1.9	EPA8080
p,p'-DDD	U			3.8	µg/kg	3.8	EPA8080
p,p'-DDE	U	A		1.1	µg/kg	3.8	EPA8080
p,p'-DDT	U	A		1.9	µg/kg	3.8	EPA8080
Dieldrin	U			3.8	µg/kg	3.8	EPA8080
Endosulfan I	U			1.9	µg/kg	1.9	EPA8080
Endosulfan II	U			3.8	µg/kg	3.8	EPA8080
Endosulfan sulfate	U			3.8	µg/kg	3.8	EPA8080

SAMPLE NAME: D43111503 (Continued) Sample ID: 100410

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Endrin	U			3.8	µg/kg	3.8	EPA8080
Endrin ketone	U			3.8	µg/kg	3.8	EPA8080
Heptachlor	U			1.9	µg/kg	1.9	EPA8080
Heptachlor epoxide	U			1.9	µg/kg	1.9	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Lindane	U			1.9	µg/kg	1.9	EPA8080
Methoxychlor	U			19	µg/kg	19	EPA8080
Octachlorodibenzo-p-dioxin	J			1.6	ng/g	0.20	EPA8280
Octachlorodibenzo-p-dioxin	J			0.90	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	U			38	µg/kg	38	EPA8080
PCB 1221	U			76	µg/kg	76	EPA8080
PCB 1232	U			38	µg/kg	38	EPA8080
PCB 1242	U			38	µg/kg	38	EPA8080
PCB 1248	U			38	µg/kg	38	EPA8080
PCB 1254	U			38	µg/kg	38	EPA8080
PCB 1260	U			38	µg/kg	38	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			190	µg/kg	190	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			5.2	pCi/g	5.2	EPA900.0
Gross alpha				5.2±14	pCi/g	5.0	EPA900.0
Nonvolatile beta		V		38±21	pCi/g	9.1	EPA900.0
Nonvolatile beta		V		33±21	pCi/g	9.7	EPA900.0
Radium, total alpha-emitting	U	V		2.0±0.92	pCi/g	0.080	EPA903.0
Radium, total alpha-emitting		V		2.1±1.0	pCi/g	0.10	EPA903.0
Tritium	U	X		1.3	pCi/g	1.3	EPA906.0
Tritium		X		3.8±0.88	pCi/g	1.8	EPA906.0

SAMPLE NAME: D43111504 Sample ID: 100411

Location (SRS Coordinates): 18533.07E 66779.25N
Ground Elevation Above MSL: 128.5 ft
Depth of Core Interval: 10.00 to 12.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: USC Soil Classification: SW Percent Solids: 80.30

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				12	meq/100g	2.0	EPA9080
pH	J	Q		5.0	pH	0.010	EPA9045
Specific conductance				22	µS/cm	1.0	EPA9050
Total organic carbon				1,200	mg/kg	190	EPA415.1
Total Metals							
Arsenic				3.3	mg/kg	1.2	EPA7060
Barium	U			22	mg/kg	22	EPA6010
Cadmium	U			0.55	mg/kg	0.55	EPA6010
Chromium				25	mg/kg	1.1	EPA6010
Copper	U			2.7	mg/kg	2.7	EPA6010
Lead				4.2	mg/kg	0.37	EPA7421
Manganese				6.3	mg/kg	1.6	EPA6010
Mercury	U			0.13	mg/kg	0.13	EPA7470
Nickel	U			4.4	mg/kg	4.4	EPA6010
Selenium	U			0.61	mg/kg	0.61	EPA7740
Silver				1.4	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	UJ	L		410	µg/kg	410	EPA8270
Acenaphthylene	UJ	L		410	µg/kg	410	EPA8270
Anthracene	UJ	L		410	µg/kg	410	EPA8270
Benzo(a)anthracene	UJ	L		410	µg/kg	410	EPA8270
Benzo(b)fluoranthene	UJ	LH	L	410	µg/kg	410	EPA8270
Benzo(k)fluoranthene	UJ	LH	L	410	µg/kg	410	EPA8270
Benzoic acid	UJ	L		2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	UJ	LH	L	410	µg/kg	410	EPA8270
Benzo(a)pyrene	UJ	LH	L	410	µg/kg	410	EPA8270
Benzyl alcohol	UJ	L		410	µg/kg	410	EPA8270
Bis(2-chloroethoxy) methane	UJ	L		410	µg/kg	410	EPA8270
Bis(2-chloroethyl) ether	UJ	L		410	µg/kg	410	EPA8270
Bis(2-chloroisopropyl) ether	UJ	L		410	µg/kg	410	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	L		410	µg/kg	410	EPA8270
4-Bromophenyl phenyl ether	UJ	L		410	µg/kg	410	EPA8270
Butylbenzyl phthalate	UJ	L		410	µg/kg	410	EPA8270
4-Chloroaniline	UJ	L		410	µg/kg	410	EPA8270
4-Chloro-m-cresol	UJ	L		410	µg/kg	410	EPA8270
2-Chloronaphthalene	UJ	L		410	µg/kg	410	EPA8270
2-Chlorophenol	UJ	L		410	µg/kg	410	EPA8270
4-Chlorophenyl phenyl ether	UJ	L		410	µg/kg	410	EPA8270
Chrysene	UJ	L		410	µg/kg	410	EPA8270
o-Cresol (2-Methylphenol)	UJ	L		410	µg/kg	410	EPA8270

SAMPLE NAME: D43111504 (Continued) Sample ID: 100411

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
p-Cresol (4-Methylphenol)	UJ	L		410	µg/kg	410	EPA8270
Dibenz(a,h)anthracene	UJ	LH	L	410	µg/kg	410	EPA8270
Dibenzofuran	UJ	L		410	µg/kg	410	EPA8270
Di-n-butyl phthalate	UJ	VL		72	µg/kg	410	EPA8270
1,2-Dichlorobenzene	UJ	L		410	µg/kg	410	EPA8270
1,3-Dichlorobenzene	UJ	L		410	µg/kg	410	EPA8270
1,4-Dichlorobenzene	UJ	L		410	µg/kg	410	EPA8270
3,3'-Dichlorobenzidine	UJ	L		820	µg/kg	820	EPA8270
2,4-Dichlorophenol	UJ	L		410	µg/kg	410	EPA8270
Diethyl phthalate	UJ	L		410	µg/kg	410	EPA8270
2,4-Dimethyl phenol	UJ	L		410	µg/kg	410	EPA8270
Dimethyl phthalate	UJ	L		410	µg/kg	410	EPA8270
2,4-Dinitrophenol	UJ	L		2,100	µg/kg	2,100	EPA8270
2,4-Dinitrotoluene	UJ	L		410	µg/kg	410	EPA8270
2,6-Dinitrotoluene	UJ	L		410	µg/kg	410	EPA8270
Di-n-octyl phthalate	UJ	LH	L	410	µg/kg	410	EPA8270
Fluoranthene	UJ	L		410	µg/kg	410	EPA8270
Fluorene	UJ	L		410	µg/kg	410	EPA8270
Hexachlorobenzene	UJ	L		410	µg/kg	410	EPA8270
Hexachlorobutadiene	UJ	L		410	µg/kg	410	EPA8270
Hexachlorocyclopentadiene	UJ	L		410	µg/kg	410	EPA8270
Hexachloroethane	UJ	L		410	µg/kg	410	EPA8270
Indeno(1,2,3-c,d)pyrene	UJ	LH	L	410	µg/kg	410	EPA8270
Isophorone	UJ	L		410	µg/kg	410	EPA8270
2-Methyl-4,6-dinitrophenol	UJ	L		2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	UJ	L		410	µg/kg	410	EPA8270
Naphthalene	UJ	L		410	µg/kg	410	EPA8270
o-Nitroaniline	UJ	L		2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	UJ	L		2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	UJ	L		2,100	µg/kg	2,100	EPA8270
Nitrobenzene	UJ	L		410	µg/kg	410	EPA8270
2-Nitrophenol	UJ	L		410	µg/kg	410	EPA8270
4-Nitrophenol	UJ	L		2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	UJ	L		410	µg/kg	410	EPA8270
N-Nitrosodipropylamine	UJ	L		410	µg/kg	410	EPA8270
Pentachlorophenol	UJ	L		2,100	µg/kg	2,100	EPA8270
Phenanthrene	UJ	L		410	µg/kg	410	EPA8270
Phenol	UJ	L		410	µg/kg	410	EPA8270
Pyrene	UJ	L		410	µg/kg	410	EPA8270
1,2,4-Trichlorobenzene	UJ	L		410	µg/kg	410	EPA8270
2,4,5-Trichlorophenol	UJ	L		2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	UJ	L		410	µg/kg	410	EPA8270
Unknown ester	J	NV		500	µg/kg		EPA8270
Unknown ketone	J	NV		9,000	µg/kg		EPA8270
Unknown phthalate	J	N		500	µg/kg		EPA8270
Unknown phthalate	J	N		1,000	µg/kg		EPA8270
Unknown phthalate	J	N		800	µg/kg		EPA8270
Unknown phthalate	J	N		300	µg/kg		EPA8270
Unknown phthalate	J	N		500	µg/kg		EPA8270
Unknown phthalate	J	N		600	µg/kg		EPA8270

SAMPLE NAME: D43111504 (Continued) Sample ID: 100411

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Unknown phthalate	J	N		300	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone				41	µg/kg	12	EPA8240
Benzene	U			6.2	µg/kg	6.2	EPA8240
Bromodichloromethane	U			6.2	µg/kg	6.2	EPA8240
Bromoform	U			6.2	µg/kg	6.2	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			6.2	µg/kg	6.2	EPA8240
Carbon tetrachloride	U			6.2	µg/kg	6.2	EPA8240
Chlorobenzene	U			6.2	µg/kg	6.2	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
Chloroform	U			6.2	µg/kg	6.2	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			6.2	µg/kg	6.2	EPA8240
1,1-Dichloroethane	U			6.2	µg/kg	6.2	EPA8240
1,2-Dichloroethane	U			6.2	µg/kg	6.2	EPA8240
1,1-Dichloroethylene	U			6.2	µg/kg	6.2	EPA8240
1,2-Dichloroethylene	U			6.2	µg/kg	6.2	EPA8240
Dichloromethane (Methylene chloride)	U			6.2	µg/kg	6.2	EPA8240
1,2-Dichloropropane	U			6.2	µg/kg	6.2	EPA8240
cis-1,3-Dichloropropene	U			6.2	µg/kg	6.2	EPA8240
trans-1,3-Dichloropropene	U			6.2	µg/kg	6.2	EPA8240
Ethylbenzene	U			6.2	µg/kg	6.2	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.2	µg/kg	6.2	EPA8240
1,1,2,2-Tetrachloroethane	U			6.2	µg/kg	6.2	EPA8240
Tetrachloroethylene	U			6.2	µg/kg	6.2	EPA8240
Toluene	U			6.2	µg/kg	6.2	EPA8240
1,1,1-Trichloroethane	U			6.2	µg/kg	6.2	EPA8240
1,1,2-Trichloroethane	U			6.2	µg/kg	6.2	EPA8240
Trichloroethylene	U			6.2	µg/kg	6.2	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			6.2	µg/kg	6.2	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			2.0	µg/kg	2.0	EPA8080
alpha-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
beta-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
delta-Benzene hexachloride	U			2.0	µg/kg	2.0	EPA8080
alpha-Chlordane	U			2.0	µg/kg	2.0	EPA8080
gamma-Chlordane	U			2.0	µg/kg	2.0	EPA8080
p,p'-DDD	U			4.0	µg/kg	4.0	EPA8080
p,p'-DDE	U			4.0	µg/kg	4.0	EPA8080
p,p'-DDT	U			4.0	µg/kg	4.0	EPA8080

SAMPLE NAME: D43111504 (Continued) Sample ID: 100411

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Dieldrin	U			4.0	µg/kg	4.0	EPA8080
Endosulfan I	U			2.0	µg/kg	2.0	EPA8080
Endosulfan II	U			4.0	µg/kg	4.0	EPA8080
Endosulfan sulfate	U			4.0	µg/kg	4.0	EPA8080
Endrin	U			4.0	µg/kg	4.0	EPA8080
Endrin ketone	U			4.0	µg/kg	4.0	EPA8080
Heptachlor	U			2.0	µg/kg	2.0	EPA8080
Heptachlor epoxide	U			2.0	µg/kg	2.0	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	J	V		0.70	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			2.0	µg/kg	2.0	EPA8080
Methoxychlor	U			20	µg/kg	20	EPA8080
Octachlorodibenzo-p-dioxin	J	I	L	40	ng/g	0.20	EPA8280
Octachlorodibenzo-p-furan	U			0.30	ng/g	0.30	EPA8280
PCB 1016	U			40	µg/kg	40	EPA8080
PCB 1221	U			81	µg/kg	81	EPA8080
PCB 1232	U			40	µg/kg	40	EPA8080
PCB 1242	U			40	µg/kg	40	EPA8080
PCB 1248	U			40	µg/kg	40	EPA8080
PCB 1254	U			40	µg/kg	40	EPA8080
PCB 1260	U			40	µg/kg	40	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	UJ	H		0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	UJ	H		0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	UJ	H		0.20	ng/g	0.20	EPA8280
Tetrachlorodibenzo-p-furan isomers	UJ	H		0.10	ng/g	0.10	EPA8280
Toxaphene	U			200	µg/kg	200	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				1.6±12	pCi/g	4.6	EPA900.0
Nonvolatile beta				22±18	pCi/g	8.4	EPA900.0
Radium, total alpha-emitting				2.1±0.90	pCi/g	0.080	EPA903.0
Tritium				5.1±1.1	pCi/g	1.9	EPA906.0

SAMPLE NAME: D43I11601 Sample ID: 100417

Location (SRS Coordinates): 18644.34E 66570.29N
Ground Elevation Above MSL: 134.1 ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 5YR 4/4 USC Soil Classification: SW Percent Solids: 93.40

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				5.8	meq/100g	2.1	EPA9080
Cation exchange capacity				9.2	meq/100g	2.1	EPA9080
pH	J	Q		5.2	pH	0.010	EPA9045
Specific conductance				16	µS/cm	1.0	EPA9050
Total organic carbon				4,200	mg/kg	320	EPA415.1
Total Metals							
Arsenic	U			1.0	mg/kg	1.0	EPA7060
Arsenic	U			1.0	mg/kg	1.0	EPA7060
Barium	U			19	mg/kg	19	EPA6010
Barium	U			19	mg/kg	19	EPA6010
Cadmium	U			0.48	mg/kg	0.48	EPA6010
Cadmium	U			0.48	mg/kg	0.48	EPA6010
Chromium	J	IX	L	9.0	mg/kg	0.95	EPA6010
Chromium	J	IX	L	4.6	mg/kg	0.95	EPA6010
Copper	U			2.4	mg/kg	2.4	EPA6010
Copper	U			2.4	mg/kg	2.4	EPA6010
Lead				2.4	mg/kg	0.30	EPA7421
Lead				2.6	mg/kg	0.30	EPA7421
Manganese	J	I	L	79	mg/kg	1.4	EPA6010
Manganese	J	I	L	68	mg/kg	1.4	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			3.8	mg/kg	3.8	EPA6010
Nickel	U			3.8	mg/kg	3.8	EPA6010
Selenium	UJ	I	L	0.50	mg/kg	0.50	EPA7740
Selenium	UJ	I	L	0.50	mg/kg	0.50	EPA7740
Silver	U			0.95	mg/kg	0.95	EPA6010
Silver	U			0.95	mg/kg	0.95	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			350	µg/kg	350	EPA8270
Acenaphthylene	U			350	µg/kg	350	EPA8270
Aldol condensate	J	NVK		400	µg/kg		EPA8270
Aldol condensate	J	NK		300	µg/kg		EPA8270
Aldol condensate	J	NK		100	µg/kg		EPA8270
Anthracene	U			350	µg/kg	350	EPA8270
Benzo(a)anthracene	U			350	µg/kg	350	EPA8270
Benzo(b)fluoranthene	U			350	µg/kg	350	EPA8270
Benzo(k)fluoranthene	U			350	µg/kg	350	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			350	µg/kg	350	EPA8270

SAMPLE NAME: D43111601 (Continued) Sample ID: 100417

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Benzo(a)pyrene	U			350	µg/kg	350	EPA8270
Benzyl alcohol	U			350	µg/kg	350	EPA8270
Bis(2-chloroethoxy) methane	U			350	µg/kg	350	EPA8270
Bis(2-chloroethyl) ether	U			350	µg/kg	350	EPA8270
Bis(2-chloroisopropyl) ether	U			350	µg/kg	350	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		140	µg/kg	350	EPA8270
4-Bromophenyl phenyl ether	U			350	µg/kg	350	EPA8270
Butylbenzyl phthalate	U			350	µg/kg	350	EPA8270
4-Chloroaniline	U			350	µg/kg	350	EPA8270
4-Chloro-m-cresol	U			350	µg/kg	350	EPA8270
2-Chloronaphthalene	U			350	µg/kg	350	EPA8270
2-Chlorophenol	U			350	µg/kg	350	EPA8270
4-Chlorophenyl phenyl ether	U			350	µg/kg	350	EPA8270
Chrysene	U			350	µg/kg	350	EPA8270
o-Cresol (2-Methylphenol)	U			350	µg/kg	350	EPA8270
p-Cresol (4-Methylphenol)	U			350	µg/kg	350	EPA8270
Dibenz(a,h)anthracene	U			350	µg/kg	350	EPA8270
Dibenzofuran	U			350	µg/kg	350	EPA8270
Di-n-butyl phthalate	UJ	V		88	µg/kg	350	EPA8270
1,2-Dichlorobenzene	U			350	µg/kg	350	EPA8270
1,3-Dichlorobenzene	U			350	µg/kg	350	EPA8270
1,4-Dichlorobenzene	U			350	µg/kg	350	EPA8270
3,3'-Dichlorobenzidine	U			700	µg/kg	700	EPA8270
2,4-Dichlorophenol	U			350	µg/kg	350	EPA8270
Diethyl phthalate	U			350	µg/kg	350	EPA8270
2,4-Dimethyl phenol	U			350	µg/kg	350	EPA8270
Dimethyl phthalate	U			350	µg/kg	350	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			350	µg/kg	350	EPA8270
2,6-Dinitrotoluene	U			350	µg/kg	350	EPA8270
Di-n-octyl phthalate	U			350	µg/kg	350	EPA8270
Fluoranthene	U			350	µg/kg	350	EPA8270
Fluorene	U			350	µg/kg	350	EPA8270
Hexachlorobenzene	U			350	µg/kg	350	EPA8270
Hexachlorobutadiene	U			350	µg/kg	350	EPA8270
Hexachlorocyclopentadiene	U			350	µg/kg	350	EPA8270
Hexachloroethane	U			350	µg/kg	350	EPA8270
Indeno(1,2,3-c,d)pyrene	U			350	µg/kg	350	EPA8270
Isophorone	U			350	µg/kg	350	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			350	µg/kg	350	EPA8270
Naphthalene	U			350	µg/kg	350	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			350	µg/kg	350	EPA8270
2-Nitrophenol	U			350	µg/kg	350	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			350	µg/kg	350	EPA8270
N-Nitrosodipropylamine	U			350	µg/kg	350	EPA8270

SAMPLE NAME: D43111601 (Continued) Sample ID: 100417

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Pentachlorophenol	U			1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			350	µg/kg	350	EPA8270
Phenol	U			350	µg/kg	350	EPA8270
Pyrene	U			350	µg/kg	350	EPA8270
1,2,4-Trichlorobenzene	U			350	µg/kg	350	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			350	µg/kg	350	EPA8270
Unknown	J	NV		200	µg/kg		EPA8270
Unknown	J	N		700	µg/kg		EPA8270
Unknown	J	NV		1,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	UJ	V		6.2	µg/kg	10	EPA8240
Benzene	U			5.0	µg/kg	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/kg	5.0	EPA8240
Bromoform	U			5.0	µg/kg	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/kg	10	EPA8240
Carbon disulfide	U			5.0	µg/kg	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/kg	5.0	EPA8240
Chlorobenzene	U			5.0	µg/kg	5.0	EPA8240
Chloroethane	U			10	µg/kg	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/kg	10	EPA8240
2-Chloroethyl vinyl ether	U			10	µg/kg	10	EPA8240
Chloroform	U			5.0	µg/kg	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/kg	10	EPA8240
Dibromochloromethane	U			5.0	µg/kg	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/kg	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/kg	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/kg	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/kg	5.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		13	µg/kg	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/kg	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/kg	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/kg	5.0	EPA8240
Ethylbenzene	U			5.0	µg/kg	5.0	EPA8240
2-Hexanone	U			10	µg/kg	10	EPA8240
Methyl ethyl ketone	U			10	µg/kg	10	EPA8240
Methyl isobutyl ketone	U			10	µg/kg	10	EPA8240
Styrene	U			5.0	µg/kg	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/kg	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/kg	5.0	EPA8240
Toluene	J			1.6	µg/kg	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/kg	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/kg	5.0	EPA8240
Trichloroethylene	U			5.0	µg/kg	5.0	EPA8240
Vinyl acetate	U			10	µg/kg	10	EPA8240
Xylenes	U			5.0	µg/kg	5.0	EPA8240

SAMPLE NAME: D43111601 (Continued) Sample ID: 100417

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.8	µg/kg	1.8	EPA8080
alpha-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
beta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
delta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
alpha-Chlordane	U			1.8	µg/kg	1.8	EPA8080
gamma-Chlordane	U			1.8	µg/kg	1.8	EPA8080
p,p'-DDD	U			3.5	µg/kg	3.5	EPA8080
p,p'-DDE	U			3.5	µg/kg	3.5	EPA8080
p,p'-DDT	U			3.5	µg/kg	3.5	EPA8080
Dieldrin	U			3.5	µg/kg	3.5	EPA8080
Endosulfan I	U			1.8	µg/kg	1.8	EPA8080
Endosulfan II	U			3.5	µg/kg	3.5	EPA8080
Endosulfan sulfate	U			3.5	µg/kg	3.5	EPA8080
Endrin	U			3.5	µg/kg	3.5	EPA8080
Endrin ketone	U			3.5	µg/kg	3.5	EPA8080
Heptachlor	U			1.8	µg/kg	1.8	EPA8080
Heptachlor epoxide	U			1.8	µg/kg	1.8	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			1.8	µg/kg	1.8	EPA8080
Methoxychlor	U			18	µg/kg	18	EPA8080
Octachlorodibenzo-p-dioxin	U			0.50	ng/g	0.50	EPA8280
Octachlorodibenzo-p-furan	U			0.30	ng/g	0.30	EPA8280
PCB 1016	U			35	µg/kg	35	EPA8080
PCB 1221	U			70	µg/kg	70	EPA8080
PCB 1232	U			35	µg/kg	35	EPA8080
PCB 1242	U			35	µg/kg	35	EPA8080
PCB 1248	U			35	µg/kg	35	EPA8080
PCB 1254	U			35	µg/kg	35	EPA8080
PCB 1260	U			35	µg/kg	35	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			180	µg/kg	180	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				6.4±6.8	pCi/g	4.0	EPA900.0
Gross alpha				8.3±6.7	pCi/g	3.6	EPA900.0
Nonvolatile beta		V		22±10	pCi/g	5.9	EPA900.0
Nonvolatile beta		V		37±11	pCi/g	5.2	EPA900.0
Radium, total alpha-emitting	J	C		0.75±0.53	pCi/g	0.070	EPA903.0
Radium, total alpha-emitting	J	C		1.0±0.61	pCi/g	0.070	EPA903.0
Tritium	U			1.1	pCi/g	1.1	EPA906.0
Tritium				1.6±0.33	pCi/g	1.2	EPA906.0

SAMPLE NAME: D43111602 Sample ID: 100418

Location (SRS Coordinates): 18644.34E 66570.29N
Ground Elevation Above MSL: 134.1 ft
Depth of Core Interval: 0.50 to 2.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Damp
Sample Color: 10R 4/6 USC Soil Classification: SW Percent Solids: 91.80

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				1.1	mg/kg	0.96	EPA7060
Barium				30	mg/kg	18	EPA6010
Cadmium	U			0.44	mg/kg	0.44	EPA6010
Chromium				6.0	mg/kg	0.89	EPA6010
Copper	U			2.2	mg/kg	2.2	EPA6010
Lead				3.1	mg/kg	0.29	EPA7421
Manganese				53	mg/kg	1.3	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			3.5	mg/kg	3.5	EPA6010
Selenium	U			0.48	mg/kg	0.48	EPA7740
Silver	U			0.89	mg/kg	0.89	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			360	µg/kg	360	EPA8270
Acenaphthylene	U			360	µg/kg	360	EPA8270
Aldol condensate	J	NK		300	µg/kg		EPA8270
Aldol condensate	J	NVK		200	µg/kg		EPA8270
Anthracene	U			360	µg/kg	360	EPA8270
Benzo(a)anthracene	U			360	µg/kg	360	EPA8270
Benzo(b)fluoranthene	U			360	µg/kg	360	EPA8270
Benzo(k)fluoranthene	U			360	µg/kg	360	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			360	µg/kg	360	EPA8270
Benzo(a)pyrene	U			360	µg/kg	360	EPA8270
Benzyl alcohol	U			360	µg/kg	360	EPA8270
Bis(2-chloroethoxy) methane	U			360	µg/kg	360	EPA8270
Bis(2-chloroethyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-chloroisopropyl) ether	U			360	µg/kg	360	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		160	µg/kg	360	EPA8270
4-Bromophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Butylbenzyl phthalate	U			360	µg/kg	360	EPA8270
4-Chloroaniline	U			360	µg/kg	360	EPA8270
4-Chloro-m-cresol	U			360	µg/kg	360	EPA8270
2-Chloronaphthalene	U			360	µg/kg	360	EPA8270
2-Chlorophenol	U			360	µg/kg	360	EPA8270
4-Chlorophenyl phenyl ether	U			360	µg/kg	360	EPA8270
Chrysene	U			360	µg/kg	360	EPA8270
o-Cresol (2-Methylphenol)	U			360	µg/kg	360	EPA8270
p-Cresol (4-Methylphenol)	U			360	µg/kg	360	EPA8270
Dibenz(a,h)anthracene	U			360	µg/kg	360	EPA8270
Dibenzofuran	U			360	µg/kg	360	EPA8270
Di-n-butyl phthalate	UJ	V		93	µg/kg	360	EPA8270
1,2-Dichlorobenzene	U			360	µg/kg	360	EPA8270

SAMPLE NAME: D43111602 (Continued) Sample ID: 100418

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
1,3-Dichlorobenzene	U			360	µg/kg	360	EPA8270
1,4-Dichlorobenzene	U			360	µg/kg	360	EPA8270
3,3'-Dichlorobenzidine	U			730	µg/kg	730	EPA8270
2,4-Dichlorophenol	U			360	µg/kg	360	EPA8270
Diethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dimethyl phenol	U			360	µg/kg	360	EPA8270
Dimethyl phthalate	U			360	µg/kg	360	EPA8270
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			360	µg/kg	360	EPA8270
2,6-Dinitrotoluene	U			360	µg/kg	360	EPA8270
Di-n-octyl phthalate	U			360	µg/kg	360	EPA8270
Fluoranthene	U			360	µg/kg	360	EPA8270
Fluorene	U			360	µg/kg	360	EPA8270
Hexachlorobenzene	U			360	µg/kg	360	EPA8270
Hexachlorobutadiene	U			360	µg/kg	360	EPA8270
Hexachlorocyclopentadiene	U			360	µg/kg	360	EPA8270
Hexachloroethane	U			360	µg/kg	360	EPA8270
Indeno(1,2,3-c,d)pyrene	U			360	µg/kg	360	EPA8270
Isophorone	U			360	µg/kg	360	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			360	µg/kg	360	EPA8270
Naphthalene	U			360	µg/kg	360	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			360	µg/kg	360	EPA8270
2-Nitrophenol	U			360	µg/kg	360	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			360	µg/kg	360	EPA8270
N-Nitrosodipropylamine	U			360	µg/kg	360	EPA8270
Pentachlorophenol	U			1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			360	µg/kg	360	EPA8270
Phenol	U			360	µg/kg	360	EPA8270
Pyrene	U			360	µg/kg	360	EPA8270
1,2,4-Trichlorobenzene	U			360	µg/kg	360	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			360	µg/kg	360	EPA8270
Unknown	J	NV		1,000	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	UJ	V		10	µg/kg	11	EPA8240
Benzene	U			5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240

SAMPLE NAME: D43111602 (Continued) Sample ID: 100418

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
2-Chloroethyl vinyl ether	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		14	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	U			5.5	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	U			5.5	µg/kg	5.5	EPA8240
Toluene	U			5.5	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.5	µg/kg	5.5	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha				8.6±6.9	pCi/g	3.7	EPA900.0
Nonvolatile beta		V		23±9.6	pCi/g	5.4	EPA900.0
Radium, total alpha-emitting	J	C		1.1±0.64	pCi/g	0.070	EPA903.0
Tritium	U			1.3	pCi/g	1.3	EPA906.0

SAMPLE NAME: D43111603 Sample ID: 100419

Location (SRS Coordinates): 18644.34E 66570.29N
Ground Elevation Above MSL: 134.1 ft
Depth of Core Interval: 5.00 to 7.00 ft
Sample Type: Normal
Sample Color: 10R 4/6
Sample Matrix: Soil
USC Soil Classification: SC
Sample Moisture: Dry
Percent Solids: 86.40

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				1.2	mg/kg	1.1	EPA7060
Barium				34	mg/kg	22	EPA6010
Cadmium	U			0.56	mg/kg	0.56	EPA6010

SAMPLE NAME: D43111603 (Continued) Sample ID: 100419

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Chromium				34	mg/kg	1.1	EPA6010
Copper	U			2.8	mg/kg	2.8	EPA6010
Lead				5.0	mg/kg	0.34	EPA7421
Manganese				22	mg/kg	1.7	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel	U			4.4	mg/kg	4.4	EPA6010
Selenium	U			0.57	mg/kg	0.57	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
Volatile Organic Compounds							
Acetone	UJ	V		11	µg/kg	12	EPA8240
Benzene	U			6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U			6.0	µg/kg	6.0	EPA8240
Bromoform	U			6.0	µg/kg	6.0	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	J			3.5	µg/kg	6.0	EPA8240
Carbon tetrachloride	U			6.0	µg/kg	6.0	EPA8240
Chlorobenzene	U			6.0	µg/kg	6.0	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
2-Chloroethyl vinyl ether	U			12	µg/kg	12	EPA8240
Chloroform	U			6.0	µg/kg	6.0	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		17	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U			6.0	µg/kg	6.0	EPA8240
cis-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
Ethylbenzene	U			6.0	µg/kg	6.0	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U			6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U			6.0	µg/kg	6.0	EPA8240
Toluene	U			6.0	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
Trichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			6.0	µg/kg	6.0	EPA8240

SAMPLE NAME: D43111603 (Continued) Sample ID: 100419

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Radionuclide Indicators and Radionuclides							
Gross alpha				5.3±6.3	pCi/g	3.9	EPA900.0
Nonvolatile beta		V		18±9.7	pCi/g	5.8	EPA900.0
Radium, total alpha-emitting	J	C		1.8±0.84	pCi/g	0.070	EPA903.0
Tritium				2.9±0.57	pCi/g	1.2	EPA906.0

SAMPLE NAME: D43111604 Sample ID: 100421

Location (SRS Coordinates): 18644.34E 66570.29N
Ground Elevation Above MSL: 134.1 ft
Depth of Core Interval: 10.00 to 12.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 4/6 USC Soil Classification: SW Percent Solids: 87.40

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				1.2	mg/kg	1.1	EPA7060
Barium	U			22	mg/kg	22	EPA6010
Cadmium	U			0.56	mg/kg	0.56	EPA6010
Chromium				16	mg/kg	1.1	EPA6010
Copper	U			2.8	mg/kg	2.8	EPA6010
Lead				3.0	mg/kg	0.33	EPA7421
Manganese				31	mg/kg	1.7	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			4.5	mg/kg	4.5	EPA6010
Selenium	U			0.56	mg/kg	0.56	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			380	µg/kg	380	EPA8270
Acenaphthylene	U			380	µg/kg	380	EPA8270
Aldol condensate	J	NKV		200	µg/kg		EPA8270
Anthracene	U			380	µg/kg	380	EPA8270
Benzo(a)anthracene	U			380	µg/kg	380	EPA8270
Benzo(b)fluoranthene	U			380	µg/kg	380	EPA8270
Benzo(k)fluoranthene	U			380	µg/kg	380	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	U			380	µg/kg	380	EPA8270
Benzo(a)pyrene	U			380	µg/kg	380	EPA8270
Benzyl alcohol	U			380	µg/kg	380	EPA8270
Bis(2-chloroethoxy) methane	U			380	µg/kg	380	EPA8270
Bis(2-chloroethyl) ether	U			380	µg/kg	380	EPA8270
Bis(2-chloroisopropyl) ether	U			380	µg/kg	380	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		150	µg/kg	380	EPA8270
4-Bromophenyl phenyl ether	U			380	µg/kg	380	EPA8270
Butylbenzyl phthalate	U			380	µg/kg	380	EPA8270
4-Chloroaniline	U			380	µg/kg	380	EPA8270

SAMPLE NAME: D43111604 (Continued) Sample ID: 100421

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
4-Chloro-m-cresol	U			380	µg/kg	380	EPA8270
2-Chloronaphthalene	U			380	µg/kg	380	EPA8270
2-Chlorophenol	U			380	µg/kg	380	EPA8270
4-Chlorophenyl phenyl ether	U			380	µg/kg	380	EPA8270
Chrysene	U			380	µg/kg	380	EPA8270
o-Cresol (2-Methylphenol)	U			380	µg/kg	380	EPA8270
p-Cresol (4-Methylphenol)	U			380	µg/kg	380	EPA8270
Dibenz(a,h)anthracene	U			380	µg/kg	380	EPA8270
Dibenzofuran	U			380	µg/kg	380	EPA8270
Di-n-butyl phthalate	UJ	V		96	µg/kg	380	EPA8270
1,2-Dichlorobenzene	U			380	µg/kg	380	EPA8270
1,3-Dichlorobenzene	U			380	µg/kg	380	EPA8270
1,4-Dichlorobenzene	U			380	µg/kg	380	EPA8270
3,3'-Dichlorobenzidine	U			760	µg/kg	760	EPA8270
2,4-Dichlorophenol	U			380	µg/kg	380	EPA8270
Diethyl phthalate	U			380	µg/kg	380	EPA8270
2,4-Dimethyl phenol	U			380	µg/kg	380	EPA8270
Dimethyl phthalate	U			380	µg/kg	380	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			380	µg/kg	380	EPA8270
2,6-Dinitrotoluene	U			380	µg/kg	380	EPA8270
Di-n-octyl phthalate	U			380	µg/kg	380	EPA8270
Fluoranthene	U			380	µg/kg	380	EPA8270
Fluorene	U			380	µg/kg	380	EPA8270
Hexachlorobenzene	U			380	µg/kg	380	EPA8270
Hexachlorobutadiene	U			380	µg/kg	380	EPA8270
Hexachlorocyclopentadiene	U			380	µg/kg	380	EPA8270
Hexachloroethane	U			380	µg/kg	380	EPA8270
Indeno(1,2,3-c,d)pyrene	U			380	µg/kg	380	EPA8270
Isophorone	U			380	µg/kg	380	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	U			380	µg/kg	380	EPA8270
Naphthalene	U			380	µg/kg	380	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U			380	µg/kg	380	EPA8270
2-Nitrophenol	U			380	µg/kg	380	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			380	µg/kg	380	EPA8270
N-Nitrosodipropylamine	U			380	µg/kg	380	EPA8270
Pentachlorophenol	U			1,900	µg/kg	1,900	EPA8270
Phenanthrene	U			380	µg/kg	380	EPA8270
Phenol	U			380	µg/kg	380	EPA8270
Pyrene	U			380	µg/kg	380	EPA8270
1,2,4-Trichlorobenzene	U			380	µg/kg	380	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			380	µg/kg	380	EPA8270
Unknown	J	NV		600	µg/kg		EPA8270

SAMPLE NAME: D43111604 (Continued) Sample ID: 100421

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	U	V		13	µg/kg	11	EPA8240
Benzene	U			5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
2-Chloroethyl vinyl ether	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		12	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	U			5.5	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	U			5.5	µg/kg	5.5	EPA8240
Toluene	U			5.5	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.5	µg/kg	5.5	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha				8.4±6.8	pCi/g	3.6	EPA900.0
Nonvolatile beta		V		19±9.2	pCi/g	5.3	EPA900.0
Radium, total alpha-emitting	J	C		0.83±0.55	pCi/g	0.070	EPA903.0
Tritium				2.9±0.57	pCi/g	1.2	EPA906.0

SAMPLE NAME: D43111605 Sample ID: 100422

Location (SRS Coordinates): 18644.34E 66570.29N
Ground Elevation Above MSL: 134.1 ft
Depth of Core Interval: 15.00 to 17.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Dry
Sample Color: 10R 4/6 USC Soil Classification: SW Percent Solids: 89.00

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				17	meq/100g	2.3	EPA9080
pH	J	Q		5.1	pH	0.010	EPA9045
Specific conductance				16	µS/cm	1.0	EPA9050
Specific conductance				16	µS/cm	1.0	EPA9050
Total organic carbon				1,100	mg/kg	180	EPA415.1
Total Metals							
Arsenic				4.2	mg/kg	1.0	EPA7060
Barium				22	mg/kg	22	EPA6010
Cadmium	U			0.55	mg/kg	0.55	EPA6010
Chromium				14	mg/kg	1.1	EPA6010
Copper	U			2.7	mg/kg	2.7	EPA6010
Lead				3.1	mg/kg	0.30	EPA7421
Manganese				24	mg/kg	1.6	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			4.4	mg/kg	4.4	EPA6010
Selenium	U			0.50	mg/kg	0.50	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			370	µg/kg	370	EPA8270
Acenaphthylene	U			370	µg/kg	370	EPA8270
Aldol condensate	J	NK		300	µg/kg		EPA8270
Aldol condensate	J	NVK		200	µg/kg		EPA8270
Anthracene	U			370	µg/kg	370	EPA8270
Benzo(a)anthracene	U			370	µg/kg	370	EPA8270
Benzo(b)fluoranthene	U			370	µg/kg	370	EPA8270
Benzo(k)fluoranthene	U			370	µg/kg	370	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	U			370	µg/kg	370	EPA8270
Benzo(a)pyrene	U			370	µg/kg	370	EPA8270
Benzyl alcohol	U			370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	U			370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		170	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Butylbenzyl phthalate	U			370	µg/kg	370	EPA8270
4-Chloroaniline	U			370	µg/kg	370	EPA8270
4-Chloro-m-cresol	U			370	µg/kg	370	EPA8270
2-Chloronaphthalene	U			370	µg/kg	370	EPA8270
2-Chlorophenol	U			370	µg/kg	370	EPA8270

SAMPLE NAME: D43111605 (Continued) Sample ID: 100422

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
4-Chlorophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Chrysene	U			370	µg/kg	370	EPA8270
o-Cresol (2-Methylphenol)	U			370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	U			370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	U			370	µg/kg	370	EPA8270
Dibenzofuran	U			370	µg/kg	370	EPA8270
Di-n-butyl phthalate	UJ	V		100	µg/kg	370	EPA8270
1,2-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,4-Dichlorobenzene	U			370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	U			740	µg/kg	740	EPA8270
2,4-Dichlorophenol	U			370	µg/kg	370	EPA8270
Diethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	U			370	µg/kg	370	EPA8270
Dimethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	U			370	µg/kg	370	EPA8270
Di-n-octyl phthalate	U			370	µg/kg	370	EPA8270
Fluoranthene	U			370	µg/kg	370	EPA8270
Fluorene	U			370	µg/kg	370	EPA8270
Hexachlorobenzene	U			370	µg/kg	370	EPA8270
Hexachlorobutadiene	U			370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	U			370	µg/kg	370	EPA8270
Hexachloroethane	U			370	µg/kg	370	EPA8270
Indeno(1,2,3-c,d)pyrene	U			370	µg/kg	370	EPA8270
Isophorone	U			370	µg/kg	370	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	U			370	µg/kg	370	EPA8270
Naphthalene	U			370	µg/kg	370	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U			370	µg/kg	370	EPA8270
2-Nitrophenol	U			370	µg/kg	370	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			370	µg/kg	370	EPA8270
N-Nitrosodipropylamine	U			370	µg/kg	370	EPA8270
Pentachlorophenol	U			1,900	µg/kg	1,900	EPA8270
Phenanthrene	U			370	µg/kg	370	EPA8270
Phenol	U			370	µg/kg	370	EPA8270
Pyrene	U			370	µg/kg	370	EPA8270
1,2,4-Trichlorobenzene	U			370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			370	µg/kg	370	EPA8270
Unknown	J	NV		900	µg/kg		EPA8270

SAMPLE NAME: D43111605 (Continued) Sample ID: 100422

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	U	V		34	µg/kg	11	EPA8240
Benzene	U			5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	U			5.5	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
2-Chloroethyl vinyl ether	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		12	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	U			5.5	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	U			5.5	µg/kg	5.5	EPA8240
Toluene	U			5.5	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.5	µg/kg	5.5	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.9	µg/kg	1.9	EPA8080
alpha-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
beta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
delta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
alpha-Chlordane	U			1.9	µg/kg	1.9	EPA8080
gamma-Chlordane	U			1.9	µg/kg	1.9	EPA8080
p,p'-DDD	U			3.7	µg/kg	3.7	EPA8080
p,p'-DDE	U			3.7	µg/kg	3.7	EPA8080
p,p'-DDT	U			3.7	µg/kg	3.7	EPA8080
Dieldrin	U			3.7	µg/kg	3.7	EPA8080
Endosulfan I	U			1.9	µg/kg	1.9	EPA8080
Endosulfan II	U			3.7	µg/kg	3.7	EPA8080

SAMPLE NAME: D43111605 (Continued) Sample ID: 100422

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Endosulfan sulfate	U			3.7	µg/kg	3.7	EPA8080
Endrin	U			3.7	µg/kg	3.7	EPA8080
Endrin ketone	U			3.7	µg/kg	3.7	EPA8080
Heptachlor	U			1.9	µg/kg	1.9	EPA8080
Heptachlor epoxide	U			1.9	µg/kg	1.9	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.50	ng/g	0.50	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			1.9	µg/kg	1.9	EPA8080
Methoxychlor	U			19	µg/kg	19	EPA8080
Octachlorodibenzo-p-dioxin				13	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
PCB 1016	U			37	µg/kg	37	EPA8080
PCB 1221	U			74	µg/kg	74	EPA8080
PCB 1232	U			37	µg/kg	37	EPA8080
PCB 1242	U			37	µg/kg	37	EPA8080
PCB 1248	U			37	µg/kg	37	EPA8080
PCB 1254	U			37	µg/kg	37	EPA8080
PCB 1260	U			37	µg/kg	37	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Toxaphene	U			190	µg/kg	190	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				8.6±8.3	pCi/g	4.7	EPA900.0
Nonvolatile beta		V		16±11	pCi/g	7.2	EPA900.0
Radium, total alpha-emitting	J	C		0.73±0.52	pCi/g	0.070	EPA903.0
Tritium				3.1±0.58	pCi/g	1.2	EPA906.0

SAMPLE NAME: D43111605D Sample ID: 100423

Sample Type: Split Associated Sample: 100422

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				14	meq/100g	2.2	EPA9080
pH	J	Q		5.1	pH	0.010	EPA9045
Specific conductance				17	µS/cm	1.0	EPA9050
Total organic carbon				1,500	mg/kg	240	EPA415.1

SAMPLE NAME: D43111605D (Continued) Sample ID: 100423

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				4.3	mg/kg	1.1	EPA7060
Barium				20	mg/kg	18	EPA6010
Cadmium	U			0.44	mg/kg	0.44	EPA6010
Chromium				13	mg/kg	0.88	EPA6010
Copper				2.5	mg/kg	2.2	EPA6010
Lead				2.8	mg/kg	0.33	EPA7421
Manganese				30	mg/kg	1.3	EPA6010
Mercury	U			0.11	mg/kg	0.11	EPA7470
Nickel	U			3.5	mg/kg	3.5	EPA6010
Selenium	U			0.55	mg/kg	0.55	EPA7740
Silver	U			0.88	mg/kg	0.88	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			370	µg/kg	370	EPA8270
Acenaphthylene	U			370	µg/kg	370	EPA8270
Aldol condensate	J	NVK		200	µg/kg		EPA8270
Anthracene	U			370	µg/kg	370	EPA8270
Benzo(a)anthracene	U			370	µg/kg	370	EPA8270
Benzo(b)fluoranthene	U			370	µg/kg	370	EPA8270
Benzo(k)fluoranthene	U			370	µg/kg	370	EPA8270
Benzoic acid	U			1,800	µg/kg	1,800	EPA8270
Benzo(g,h,i)perylene	U			370	µg/kg	370	EPA8270
Benzo(a)pyrene	U			370	µg/kg	370	EPA8270
Benzyl alcohol	U			370	µg/kg	370	EPA8270
Bis(2-chloroethoxy) methane	U			370	µg/kg	370	EPA8270
Bis(2-chloroethyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-chloroisopropyl) ether	U			370	µg/kg	370	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		210	µg/kg	370	EPA8270
4-Bromophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Butylbenzyl phthalate	U			370	µg/kg	370	EPA8270
4-Chloroaniline	U			370	µg/kg	370	EPA8270
4-Chloro-m-cresol	U			370	µg/kg	370	EPA8270
2-Chloronaphthalene	U			370	µg/kg	370	EPA8270
2-Chlorophenol	U			370	µg/kg	370	EPA8270
4-Chlorophenyl phenyl ether	U			370	µg/kg	370	EPA8270
Chrysene	U			370	µg/kg	370	EPA8270
o-Cresol (2-Methylphenol)	U			370	µg/kg	370	EPA8270
p-Cresol (4-Methylphenol)	U			370	µg/kg	370	EPA8270
Dibenz(a,h)anthracene	U			370	µg/kg	370	EPA8270
Dibenzofuran	U			370	µg/kg	370	EPA8270
Di-n-butyl phthalate	UJ	V		110	µg/kg	370	EPA8270
1,2-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,3-Dichlorobenzene	U			370	µg/kg	370	EPA8270
1,4-Dichlorobenzene	U			370	µg/kg	370	EPA8270
3,3'-Dichlorobenzidine	U			740	µg/kg	740	EPA8270
2,4-Dichlorophenol	U			370	µg/kg	370	EPA8270
Diethyl phthalate	U			370	µg/kg	370	EPA8270
2,4-Dimethyl phenol	U			370	µg/kg	370	EPA8270
Dimethyl phthalate	U			370	µg/kg	370	EPA8270

SAMPLE NAME: D4311605D (Continued) Sample ID: 100423

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2,4-Dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2,4-Dinitrotoluene	U			370	µg/kg	370	EPA8270
2,6-Dinitrotoluene	U			370	µg/kg	370	EPA8270
Di-n-octyl phthalate	U			370	µg/kg	370	EPA8270
Fluoranthene	U			370	µg/kg	370	EPA8270
Fluorene	U			370	µg/kg	370	EPA8270
Hexachlorobenzene	U			370	µg/kg	370	EPA8270
Hexachlorobutadiene	U			370	µg/kg	370	EPA8270
Hexachlorocyclopentadiene	U			370	µg/kg	370	EPA8270
Hexachloroethane	U			370	µg/kg	370	EPA8270
Indeno(1,2,3-c,d)pyrene	U			370	µg/kg	370	EPA8270
Isophorone	U			370	µg/kg	370	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,800	µg/kg	1,800	EPA8270
2-Methylnaphthalene	U			370	µg/kg	370	EPA8270
Naphthalene	U			370	µg/kg	370	EPA8270
o-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
m-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
p-Nitroaniline	U			1,800	µg/kg	1,800	EPA8270
Nitrobenzene	U			370	µg/kg	370	EPA8270
2-Nitrophenol	U			370	µg/kg	370	EPA8270
4-Nitrophenol	U			1,800	µg/kg	1,800	EPA8270
N-Nitrosodiphenylamine	U			370	µg/kg	370	EPA8270
N-Nitrosodipropylamine	U			370	µg/kg	370	EPA8270
Pentachlorophenol	U			1,800	µg/kg	1,800	EPA8270
Phenanthrene	U			370	µg/kg	370	EPA8270
Phenol	U			370	µg/kg	370	EPA8270
Pyrene	U			370	µg/kg	370	EPA8270
1,2,4-Trichlorobenzene	U			370	µg/kg	370	EPA8270
2,4,5-Trichlorophenol	U			1,800	µg/kg	1,800	EPA8270
2,4,6-Trichlorophenol	U			370	µg/kg	370	EPA8270
Unknown	J	N		200	µg/kg		EPA8270
Unknown	J	NV		700	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		48	µg/kg	11	EPA8240
Benzene	U			5.5	µg/kg	5.5	EPA8240
Bromodichloromethane	U			5.5	µg/kg	5.5	EPA8240
Bromoform	U			5.5	µg/kg	5.5	EPA8240
Bromomethane (Methyl bromide)	U			11	µg/kg	11	EPA8240
Carbon disulfide	J			3.3	µg/kg	5.5	EPA8240
Carbon tetrachloride	U			5.5	µg/kg	5.5	EPA8240
Chlorobenzene	U			5.5	µg/kg	5.5	EPA8240
Chloroethane	U			11	µg/kg	11	EPA8240
Chloroethene (Vinyl chloride)	U			11	µg/kg	11	EPA8240
2-Chloroethyl vinyl ether	U			11	µg/kg	11	EPA8240
Chloroform	U			5.5	µg/kg	5.5	EPA8240
Chloromethane (Methyl chloride)	U			11	µg/kg	11	EPA8240
Dibromochloromethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240

SAMPLE NAME: D43111605D (Continued) Sample ID: 100423

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,2-Dichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
1,2-Dichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Dichloromethane (Methylene chloride)	U	V		13	µg/kg	5.5	EPA8240
1,2-Dichloropropane	U			5.5	µg/kg	5.5	EPA8240
cis-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
trans-1,3-Dichloropropene	U			5.5	µg/kg	5.5	EPA8240
Ethylbenzene	U			5.5	µg/kg	5.5	EPA8240
2-Hexanone	U			11	µg/kg	11	EPA8240
Methyl ethyl ketone	U			11	µg/kg	11	EPA8240
Methyl isobutyl ketone	U			11	µg/kg	11	EPA8240
Styrene	U			5.5	µg/kg	5.5	EPA8240
1,1,2,2-Tetrachloroethane	U			5.5	µg/kg	5.5	EPA8240
Tetrachloroethylene	U			5.5	µg/kg	5.5	EPA8240
Toluene	U			5.5	µg/kg	5.5	EPA8240
1,1,1-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
1,1,2-Trichloroethane	U			5.5	µg/kg	5.5	EPA8240
Trichloroethylene	U			5.5	µg/kg	5.5	EPA8240
Vinyl acetate	U			11	µg/kg	11	EPA8240
Xylenes	U			5.5	µg/kg	5.5	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.8	µg/kg	1.8	EPA8080
alpha-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
beta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
delta-Benzene hexachloride	U			1.8	µg/kg	1.8	EPA8080
alpha-Chlordane	U			1.8	µg/kg	1.8	EPA8080
gamma-Chlordane	U			1.8	µg/kg	1.8	EPA8080
p,p'-DDD	U			3.7	µg/kg	3.7	EPA8080
p,p'-DDE	U			3.7	µg/kg	3.7	EPA8080
p,p'-DDT	U			3.7	µg/kg	3.7	EPA8080
Dieldrin	U			3.7	µg/kg	3.7	EPA8080
Endosulfan I	U			1.8	µg/kg	1.8	EPA8080
Endosulfan II	U			3.7	µg/kg	3.7	EPA8080
Endosulfan sulfate	U			3.7	µg/kg	3.7	EPA8080
Endrin	U			3.7	µg/kg	3.7	EPA8080
Endrin ketone	U			3.7	µg/kg	3.7	EPA8080
Heptachlor	U			1.8	µg/kg	1.8	EPA8080
Heptachlor epoxide	U			1.8	µg/kg	1.8	EPA8080
Heptachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-dioxin isomers	U			0.40	ng/g	0.40	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.50	ng/g	0.50	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.30	ng/g	0.30	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.30	ng/g	0.30	EPA8280
Lindane	U			1.8	µg/kg	1.8	EPA8080
Methoxychlor	U			18	µg/kg	18	EPA8080

SAMPLE NAME: D43111605D (Continued) Sample ID: 100423

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
Octachlorodibenzo-p-dioxin				15	ng/g	0.10	EPA8280
Octachlorodibenzo-p-dioxin				17	ng/g	0.30	EPA8280
Octachlorodibenzo-p-furan	U			0.10	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.40	ng/g	0.40	EPA8280
PCB 1016	U			37	µg/kg	37	EPA8080
PCB 1221	U			74	µg/kg	74	EPA8080
PCB 1232	U			37	µg/kg	37	EPA8080
PCB 1242	U			37	µg/kg	37	EPA8080
PCB 1248	U			37	µg/kg	37	EPA8080
PCB 1254	U			37	µg/kg	37	EPA8080
PCB 1260	U			37	µg/kg	37	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Pentachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Toxaphene	U			180	µg/kg	180	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha	U			4.8	pCi/g	4.8	EPA900.0
Nonvolatile beta		V		15±11	pCi/g	7.3	EPA900.0
Radium, total alpha-emitting	J	C		0.75±0.57	pCi/g	0.080	EPA903.0

SAMPLE NAME: D43111606 Sample ID: 100424

Location (SRS Coordinates): 18644.34E 66570.29N
Ground Elevation Above MSL: 134.1 ft
Depth of Core Interval: 20.00 to 22.00 ft
Sample Type: Normal Sample Matrix: Soil Sample Moisture: Wet
Sample Color: 10R 4/6 USC Soil Classification: SW Percent Solids: 85.40

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Cation exchange capacity				10	meq/100g	2.3	EPA9080
pH	J	Q		5.2	pH	0.010	EPA9045
Specific conductance				15	µS/cm	1.0	EPA9050
Total organic carbon				760	mg/kg	190	EPA415.1

SAMPLE NAME: D43H11606 (Continued) Sample ID: 100424

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic				3.3	mg/kg	0.89	EPA7060
Barium				47	mg/kg	23	EPA6010
Cadmium	U			0.58	mg/kg	0.58	EPA6010
Chromium				11	mg/kg	1.2	EPA6010
Copper	U			2.9	mg/kg	2.9	EPA6010
Lead				2.1	mg/kg	0.27	EPA7421
Manganese				5.5	mg/kg	1.8	EPA6010
Mercury	U			0.12	mg/kg	0.12	EPA7470
Nickel	U			4.7	mg/kg	4.7	EPA6010
Selenium	U			0.44	mg/kg	0.44	EPA7740
Silver	U			1.2	mg/kg	1.2	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			390	µg/kg	390	EPA8270
Acenaphthylene	U			390	µg/kg	390	EPA8270
Acenaphthylene	U			390	µg/kg	390	EPA8270
Acenaphthylene	U			380	µg/kg	380	EPA8270
Anthracene	U			390	µg/kg	390	EPA8270
Anthracene	U			390	µg/kg	390	EPA8270
Anthracene	U			380	µg/kg	380	EPA8270
Benzo(a)anthracene	U			390	µg/kg	390	EPA8270
Benzo(a)anthracene	U			390	µg/kg	390	EPA8270
Benzo(a)anthracene	U			380	µg/kg	380	EPA8270
Benzo(b)fluoranthene	U			390	µg/kg	390	EPA8270
Benzo(b)fluoranthene	U			390	µg/kg	390	EPA8270
Benzo(b)fluoranthene	U			380	µg/kg	380	EPA8270
Benzo(k)fluoranthene	U			390	µg/kg	390	EPA8270
Benzo(k)fluoranthene	U			390	µg/kg	390	EPA8270
Benzo(k)fluoranthene	U			380	µg/kg	380	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzoic acid	U			1,900	µg/kg	1,900	EPA8270
Benzo(g,h,i)perylene	U			390	µg/kg	390	EPA8270
Benzo(g,h,i)perylene	U			390	µg/kg	390	EPA8270
Benzo(g,h,i)perylene	U			380	µg/kg	380	EPA8270
Benzo(a)pyrene	U			390	µg/kg	390	EPA8270
Benzo(a)pyrene	U			390	µg/kg	390	EPA8270
Benzo(a)pyrene	U			380	µg/kg	380	EPA8270
Benzyl alcohol	U			390	µg/kg	390	EPA8270
Benzyl alcohol	U			390	µg/kg	390	EPA8270
Benzyl alcohol	U			380	µg/kg	380	EPA8270
Bis(2-chloroethoxy) methane	U			390	µg/kg	390	EPA8270
Bis(2-chloroethoxy) methane	U			390	µg/kg	390	EPA8270
Bis(2-chloroethoxy) methane	U			380	µg/kg	380	EPA8270
Bis(2-chloroethyl) ether	U			390	µg/kg	390	EPA8270
Bis(2-chloroisopropyl) ether	U			390	µg/kg	390	EPA8270
Bis(2-chloroethyl) ether	U			390	µg/kg	390	EPA8270
Bis(2-chloroisopropyl) ether	U			390	µg/kg	390	EPA8270
Bis(2-chloroethyl) ether	U			380	µg/kg	380	EPA8270

SAMPLE NAME: D4311-1606 (Continued) Sample ID: 100424

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Bis(2-chloroisopropyl) ether	U			380	µg/kg	380	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		140	µg/kg	390	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		220	µg/kg	390	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		190	µg/kg	380	EPA8270
4-Bromophenyl phenyl ether	U			390	µg/kg	390	EPA8270
4-Bromophenyl phenyl ether	U			390	µg/kg	390	EPA8270
4-Bromophenyl phenyl ether	U			380	µg/kg	380	EPA8270
Butylbenzyl phthalate	U			390	µg/kg	390	EPA8270
Butylbenzyl phthalate	U			390	µg/kg	390	EPA8270
Butylbenzyl phthalate	U			380	µg/kg	380	EPA8270
4-Chloroaniline	U			390	µg/kg	390	EPA8270
4-Chloroaniline	U			390	µg/kg	390	EPA8270
4-Chloroaniline	U			380	µg/kg	380	EPA8270
4-Chloro-m-cresol	U			390	µg/kg	390	EPA8270
2-Chloronaphthalene	U			390	µg/kg	390	EPA8270
2-Chloronaphthalene	U			390	µg/kg	390	EPA8270
2-Chloronaphthalene	U			380	µg/kg	380	EPA8270
2-Chlorophenol	UJ	I	H	390	µg/kg	390	EPA8270
4-Chlorophenyl phenyl ether	U			390	µg/kg	390	EPA8270
4-Chlorophenyl phenyl ether	U			390	µg/kg	390	EPA8270
4-Chlorophenyl phenyl ether	U			380	µg/kg	380	EPA8270
Chrysene	U			390	µg/kg	390	EPA8270
Chrysene	U			390	µg/kg	390	EPA8270
Chrysene	U			380	µg/kg	380	EPA8270
o-Cresol (2-Methylphenol)	U			390	µg/kg	390	EPA8270
o-Cresol (2-Methylphenol)	U			390	µg/kg	390	EPA8270
o-Cresol (2-Methylphenol)	U			380	µg/kg	380	EPA8270
p-Cresol (4-Methylphenol)	U			390	µg/kg	390	EPA8270
p-Cresol (4-Methylphenol)	U			390	µg/kg	390	EPA8270
p-Cresol (4-Methylphenol)	U			380	µg/kg	380	EPA8270
Dibenz(a,h)anthracene	U			390	µg/kg	390	EPA8270
Dibenz(a,h)anthracene	U			390	µg/kg	390	EPA8270
Dibenz(a,h)anthracene	U			380	µg/kg	380	EPA8270
Dibenzofuran	U			390	µg/kg	390	EPA8270
Dibenzofuran	U			390	µg/kg	390	EPA8270
Dibenzofuran	U			380	µg/kg	380	EPA8270
Di-n-butyl phthalate	UJ	V		100	µg/kg	390	EPA8270
Di-n-butyl phthalate	UJ	V		150	µg/kg	390	EPA8270
Di-n-butyl phthalate	UJ	V		110	µg/kg	380	EPA8270
1,2-Dichlorobenzene	U			390	µg/kg	390	EPA8270
1,2-Dichlorobenzene	U			390	µg/kg	390	EPA8270
1,2-Dichlorobenzene	U			380	µg/kg	380	EPA8270
1,3-Dichlorobenzene	U			390	µg/kg	390	EPA8270
1,3-Dichlorobenzene	U			390	µg/kg	390	EPA8270
1,3-Dichlorobenzene	U			380	µg/kg	380	EPA8270
1,4-Dichlorobenzene	U			390	µg/kg	390	EPA8270
3,3'-Dichlorobenzidine	U			780	µg/kg	780	EPA8270
3,3'-Dichlorobenzidine	U			780	µg/kg	780	EPA8270
3,3'-Dichlorobenzidine	U			770	µg/kg	770	EPA8270
2,4-Dichlorophenol	U			390	µg/kg	390	EPA8270

SAMPLE NAME: D43111606 (Continued) Sample ID: 100424

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2,4-Dichlorophenol	U			390	µg/kg	390	EPA8270
2,4-Dichlorophenol	U			380	µg/kg	380	EPA8270
Diethyl phthalate	U			390	µg/kg	390	EPA8270
Diethyl phthalate	U			390	µg/kg	390	EPA8270
Diethyl phthalate	U			380	µg/kg	380	EPA8270
2,4-Dimethyl phenol	U			390	µg/kg	390	EPA8270
2,4-Dimethyl phenol	U			390	µg/kg	390	EPA8270
2,4-Dimethyl phenol	U			380	µg/kg	380	EPA8270
Dimethyl phthalate	U			390	µg/kg	390	EPA8270
Dimethyl phthalate	U			390	µg/kg	390	EPA8270
Dimethyl phthalate	U			380	µg/kg	380	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2,4-Dinitrotoluene	U			390	µg/kg	390	EPA8270
2,6-Dinitrotoluene	U			390	µg/kg	390	EPA8270
2,6-Dinitrotoluene	U			390	µg/kg	390	EPA8270
2,6-Dinitrotoluene	U			380	µg/kg	380	EPA8270
Di-n-octyl phthalate	U			390	µg/kg	390	EPA8270
Di-n-octyl phthalate	U			390	µg/kg	390	EPA8270
Di-n-octyl phthalate	U			380	µg/kg	380	EPA8270
Fluoranthene	U			390	µg/kg	390	EPA8270
Fluoranthene	U			390	µg/kg	390	EPA8270
Fluoranthene	U			380	µg/kg	380	EPA8270
Fluorene	U			390	µg/kg	390	EPA8270
Fluorene	U			390	µg/kg	390	EPA8270
Fluorene	U			380	µg/kg	380	EPA8270
Hexachlorobenzene	U			390	µg/kg	390	EPA8270
Hexachlorobenzene	U			390	µg/kg	390	EPA8270
Hexachlorobenzene	U			380	µg/kg	380	EPA8270
Hexachlorobutadiene	U			390	µg/kg	390	EPA8270
Hexachlorobutadiene	U			390	µg/kg	390	EPA8270
Hexachlorobutadiene	U			380	µg/kg	380	EPA8270
Hexachlorocyclopentadiene	U			390	µg/kg	390	EPA8270
Hexachlorocyclopentadiene	U			390	µg/kg	390	EPA8270
Hexachlorocyclopentadiene	U			380	µg/kg	380	EPA8270
Hexachloroethane	U			390	µg/kg	390	EPA8270
Hexachloroethane	U			390	µg/kg	390	EPA8270
Hexachloroethane	U			380	µg/kg	380	EPA8270
Indeno(1,2,3-c,d)pyrene	U			390	µg/kg	390	EPA8270
Indeno(1,2,3-c,d)pyrene	U			390	µg/kg	390	EPA8270
Indeno(1,2,3-c,d)pyrene	U			380	µg/kg	380	EPA8270
Isophorone	U			390	µg/kg	390	EPA8270
Isophorone	U			390	µg/kg	390	EPA8270
Isophorone	U			380	µg/kg	380	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methyl-4,6-dinitrophenol	U			1,900	µg/kg	1,900	EPA8270
2-Methylnaphthalene	U			390	µg/kg	390	EPA8270
2-Methylnaphthalene	U			390	µg/kg	390	EPA8270

SAMPLE NAME: D43111606 (Continued) Sample ID: 100424

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2-Methylnaphthalene	U			380	µg/kg	380	EPA8270
Naphthalene	U			390	µg/kg	390	EPA8270
Naphthalene	U			390	µg/kg	390	EPA8270
Naphthalene	U			380	µg/kg	380	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
o-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
m-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
p-Nitroaniline	U			1,900	µg/kg	1,900	EPA8270
Nitrobenzene	U			390	µg/kg	390	EPA8270
Nitrobenzene	U			390	µg/kg	390	EPA8270
Nitrobenzene	U			380	µg/kg	380	EPA8270
2-Nitrophenol	U			390	µg/kg	390	EPA8270
2-Nitrophenol	U			390	µg/kg	390	EPA8270
2-Nitrophenol	U			380	µg/kg	380	EPA8270
4-Nitrophenol	U			1,900	µg/kg	1,900	EPA8270
N-Nitrosodiphenylamine	U			390	µg/kg	390	EPA8270
N-Nitrosodiphenylamine	U			390	µg/kg	390	EPA8270
N-Nitrosodiphenylamine	U			380	µg/kg	380	EPA8270
N-Nitrosodipropylamine	U			390	µg/kg	390	EPA8270
Pentachlorophenol	U			1,900	µg/kg	1,900	EPA8270
Phenanthrene	U			390	µg/kg	390	EPA8270
Phenanthrene	U			390	µg/kg	390	EPA8270
Phenanthrene	U			380	µg/kg	380	EPA8270
Phenol	U			390	µg/kg	390	EPA8270
Pyrene	U			390	µg/kg	390	EPA8270
1,2,4-Trichlorobenzene	U			390	µg/kg	390	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,5-Trichlorophenol	U			1,900	µg/kg	1,900	EPA8270
2,4,6-Trichlorophenol	U			390	µg/kg	390	EPA8270
2,4,6-Trichlorophenol	U			390	µg/kg	390	EPA8270
2,4,6-Trichlorophenol	U			380	µg/kg	380	EPA8270
Unknown	J	NV		900	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	U	V		25	µg/kg	12	EPA8240
Benzene	U			6.0	µg/kg	6.0	EPA8240
Bromodichloromethane	U			6.0	µg/kg	6.0	EPA8240
Bromoform	U			6.0	µg/kg	6.0	EPA8240
Bromomethane (Methyl bromide)	U			12	µg/kg	12	EPA8240
Carbon disulfide	U			6.0	µg/kg	6.0	EPA8240
Carbon tetrachloride	U			6.0	µg/kg	6.0	EPA8240
Chlorobenzene	U			6.0	µg/kg	6.0	EPA8240
Chloroethane	U			12	µg/kg	12	EPA8240

SAMPLE NAME: D43111606 (Continued) Sample ID: 100424

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Chloroethene (Vinyl chloride)	U			12	µg/kg	12	EPA8240
2-Chloroethyl vinyl ether	U			12	µg/kg	12	EPA8240
Chloroform	U			6.0	µg/kg	6.0	EPA8240
Chloromethane (Methyl chloride)	U			12	µg/kg	12	EPA8240
Dibromochloromethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
1,2-Dichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		14	µg/kg	6.0	EPA8240
1,2-Dichloropropane	U			6.0	µg/kg	6.0	EPA8240
cis-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
trans-1,3-Dichloropropene	U			6.0	µg/kg	6.0	EPA8240
Ethylbenzene	U			6.0	µg/kg	6.0	EPA8240
2-Hexanone	U			12	µg/kg	12	EPA8240
Methyl ethyl ketone	U			12	µg/kg	12	EPA8240
Methyl isobutyl ketone	U			12	µg/kg	12	EPA8240
Styrene	U			6.0	µg/kg	6.0	EPA8240
1,1,2,2-Tetrachloroethane	U			6.0	µg/kg	6.0	EPA8240
Tetrachloroethylene	U			6.0	µg/kg	6.0	EPA8240
Toluene	U			6.0	µg/kg	6.0	EPA8240
1,1,1-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
1,1,2-Trichloroethane	U			6.0	µg/kg	6.0	EPA8240
Trichloroethylene	U			6.0	µg/kg	6.0	EPA8240
Vinyl acetate	U			12	µg/kg	12	EPA8240
Xylenes	U			6.0	µg/kg	6.0	EPA8240
Pesticides/PCBs and Dioxins/Furans							
Aldrin	U			1.9	µg/kg	1.9	EPA8080
Aldrin	U			1.9	µg/kg	1.9	EPA8080
alpha-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
alpha-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
alpha-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
beta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
beta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
beta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
delta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
delta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
delta-Benzene hexachloride	U			1.9	µg/kg	1.9	EPA8080
alpha-Chlordane	U			1.9	µg/kg	1.9	EPA8080
alpha-Chlordane	U			1.9	µg/kg	1.9	EPA8080
alpha-Chlordane	U			1.9	µg/kg	1.9	EPA8080
gamma-Chlordane	U			1.9	µg/kg	1.9	EPA8080
gamma-Chlordane	U			1.9	µg/kg	1.9	EPA8080
gamma-Chlordane	U			1.9	µg/kg	1.9	EPA8080
p,p'-DDD	U			3.9	µg/kg	3.9	EPA8080
p,p'-DDD	U			3.9	µg/kg	3.9	EPA8080
p,p'-DDD	U			3.9	µg/kg	3.9	EPA8080
p,p'-DDE	U			3.9	µg/kg	3.9	EPA8080

SAMPLE NAME: D431H606 (Continued) Sample ID: 100424

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
p,p'-DDE	U			3.9	µg/kg	3.9	EPA8080
p,p'-DDE	U			3.9	µg/kg	3.9	EPA8080
p,p'-DDT	U			3.9	µg/kg	3.9	EPA8080
p,p'-DDT	U			3.9	µg/kg	3.9	EPA8080
Dieldrin	U			3.9	µg/kg	3.9	EPA8080
Dieldrin	U			3.9	µg/kg	3.9	EPA8080
Endosulfan I	U			1.9	µg/kg	1.9	EPA8080
Endosulfan I	U			1.9	µg/kg	1.9	EPA8080
Endosulfan I	U			1.9	µg/kg	1.9	EPA8080
Endosulfan II	U			3.9	µg/kg	3.9	EPA8080
Endosulfan II	U			3.9	µg/kg	3.9	EPA8080
Endosulfan II	U			3.9	µg/kg	3.9	EPA8080
Endosulfan sulfate	U			3.9	µg/kg	3.9	EPA8080
Endosulfan sulfate	U			3.9	µg/kg	3.9	EPA8080
Endosulfan sulfate	U			3.9	µg/kg	3.9	EPA8080
Endrin	U			3.9	µg/kg	3.9	EPA8080
Endrin	U			3.9	µg/kg	3.9	EPA8080
Endrin ketone	U			3.9	µg/kg	3.9	EPA8080
Endrin ketone	U			3.9	µg/kg	3.9	EPA8080
Endrin ketone	U			3.9	µg/kg	3.9	EPA8080
Heptachlor	U			1.9	µg/kg	1.9	EPA8080
Heptachlor	U			1.9	µg/kg	1.9	EPA8080
Heptachlor epoxide	U			1.9	µg/kg	1.9	EPA8080
Heptachlor epoxide	U			1.9	µg/kg	1.9	EPA8080
Heptachlor epoxide	U			1.9	µg/kg	1.9	EPA8080
Heptachlorodibenzo-p-dioxin isomers	J			0.20	ng/g	0.10	EPA8280
Heptachlorodibenzo-p-dioxin isomers	U			0.30	ng/g	0.30	EPA8280
Heptachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Heptachlorodibenzo-p-furan isomers		V		0.60	ng/g	0.10	EPA8280
Hexachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Hexachlorodibenzo-p-furan isomers	U			0.10	ng/g	0.10	EPA8280
Lindane	U			1.9	µg/kg	1.9	EPA8080
Lindane	U			1.9	µg/kg	1.9	EPA8080
Methoxychlor	U			19	µg/kg	19	EPA8080
Methoxychlor	U			19	µg/kg	19	EPA8080
Methoxychlor	U			19	µg/kg	19	EPA8080
Octachlorodibenzo-p-dioxin				16	ng/g	0.10	EPA8280
Octachlorodibenzo-p-furan	U			0.20	ng/g	0.20	EPA8280
PCB 1016	U			39	µg/kg	39	EPA8080
PCB 1016	U			39	µg/kg	39	EPA8080
PCB 1016	U			39	µg/kg	39	EPA8080
PCB 1221	U			77	µg/kg	77	EPA8080
PCB 1221	U			77	µg/kg	77	EPA8080
PCB 1221	U			78	µg/kg	78	EPA8080
PCB 1232	U			39	µg/kg	39	EPA8080
PCB 1232	U			39	µg/kg	39	EPA8080
PCB 1232	U			39	µg/kg	39	EPA8080
PCB 1242	U			39	µg/kg	39	EPA8080
PCB 1242	U			39	µg/kg	39	EPA8080
PCB 1242	U			39	µg/kg	39	EPA8080

SAMPLE NAME: D43111606 (Continued) Sample ID: 100424

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Pesticides/PCBs and Dioxins/Furans							
PCB 1248	U			39	µg/kg	39	EPA8080
PCB 1248	U			39	µg/kg	39	EPA8080
PCB 1248	U			39	µg/kg	39	EPA8080
PCB 1254	U			39	µg/kg	39	EPA8080
PCB 1254	U			39	µg/kg	39	EPA8080
PCB 1254	U			39	µg/kg	39	EPA8080
PCB 1260	U			39	µg/kg	39	EPA8080
PCB 1260	U			39	µg/kg	39	EPA8080
PCB 1260	U			39	µg/kg	39	EPA8080
Pentachlorodibenzo-p-dioxin isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.20	ng/g	0.20	EPA8280
Pentachlorodibenzo-p-dioxin isomers	U			0.40	ng/g	0.40	EPA8280
Pentachlorodibenzo-p-furan isomers	U			0.30	ng/g	0.30	EPA8280
2,3,7,8-TCDD	U			0.10	ng/g	0.10	EPA8280
2,3,7,8-TCDF	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-dioxin isomers	U			0.10	ng/g	0.10	EPA8280
Tetrachlorodibenzo-p-furan isomers	U			0.30	ng/g	0.30	EPA8280
Toxaphene	U			190	µg/kg	190	EPA8080
Toxaphene	U			190	µg/kg	190	EPA8080
Toxaphene	U			190	µg/kg	190	EPA8080
Radionuclide Indicators and Radionuclides							
Gross alpha				6.9±7.4	pCi/g	4.4	EPA900.0
Nonvolatile beta	U	V		6.6	pCi/g	6.6	EPA900.0
Radium, total alpha-emitting	J	C		0.25±0.33	pCi/g	0.070	EPA903.0
Tritium				2.0±0.40	pCi/g	1.0	EPA906.0

SAMPLE NAME: D43112102 Sample ID: 100304

Location (SRS Coordinates): .E .N
Ground Elevation Above MSL: . ft
Depth of Core Interval: 0.00 to 0.50 ft
Sample Type: Normal Sample Matrix: Sediment Sample Moisture: Wet
Sample Color: 5YR 4/1 USC Soil Classification: SM Percent Solids: 76.50

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
pH	J	Q		5.2	pH	0.010	EPA9045
Total organic carbon				3,300	mg/kg	250	EPA415.1
Total Metals							
Arsenic	U			1.3	mg/kg	1.3	EPA7060
Barium				24	mg/kg	23	EPA6010
Cadmium	U			0.56	mg/kg	0.56	EPA6010
Chromium				34	mg/kg	1.1	EPA6010

SAMPLE NAME: D43112102 (Continued) Sample ID: 100304

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Copper				3.1	mg/kg	2.8	EPA6010
Lead				2.0	mg/kg	0.39	EPA7421
Manganese				290	mg/kg	1.7	EPA6010
Mercury	U			0.13	mg/kg	0.13	EPA7470
Nickel	U			4.5	mg/kg	4.5	EPA6010
Selenium	U			0.65	mg/kg	0.65	EPA7740
Silver	U			1.1	mg/kg	1.1	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			430	µg/kg	430	EPA8270
Acenaphthylene	U			430	µg/kg	430	EPA8270
Aldol condensate	J	NVK		500	µg/kg		EPA8270
Alkane	J	N		600	µg/kg		EPA8270
Alkane	J	N		600	µg/kg		EPA8270
Anthracene	U			430	µg/kg	430	EPA8270
Benzo(a)anthracene	U			430	µg/kg	430	EPA8270
Benzo(b)fluoranthene	U			430	µg/kg	430	EPA8270
Benzo(k)fluoranthene	U			430	µg/kg	430	EPA8270
Benzoic acid	U			2,100	µg/kg	2,100	EPA8270
Benzo(g,h,i)perylene	U			430	µg/kg	430	EPA8270
Benzo(a)pyrene	U			430	µg/kg	430	EPA8270
Benzyl alcohol	U			430	µg/kg	430	EPA8270
Bis(2-chloroethoxy) methane	U			430	µg/kg	430	EPA8270
Bis(2-chloroethyl) ether	U			430	µg/kg	430	EPA8270
Bis(2-chloroisopropyl) ether	U			430	µg/kg	430	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		130	µg/kg	430	EPA8270
4-Bromophenyl phenyl ether	U			430	µg/kg	430	EPA8270
Butylbenzyl phthalate	U			430	µg/kg	430	EPA8270
4-Chloroaniline	U			430	µg/kg	430	EPA8270
4-Chloro-m-cresol	U			430	µg/kg	430	EPA8270
2-Chloronaphthalene	U			430	µg/kg	430	EPA8270
2-Chlorophenol	U			430	µg/kg	430	EPA8270
4-Chlorophenyl phenyl ether	U			430	µg/kg	430	EPA8270
Chrysene	U			430	µg/kg	430	EPA8270
o-Cresol (2-Methylphenol)	U			430	µg/kg	430	EPA8270
p-Cresol (4-Methylphenol)	U			430	µg/kg	430	EPA8270
Dibenz(a,h)anthracene	U			430	µg/kg	430	EPA8270
Dibenzofuran	U			430	µg/kg	430	EPA8270
Di-n-butyl phthalate	J			50	µg/kg	430	EPA8270
1,2-Dichlorobenzene	U			430	µg/kg	430	EPA8270
1,3-Dichlorobenzene	U			430	µg/kg	430	EPA8270
1,4-Dichlorobenzene	U			430	µg/kg	430	EPA8270
3,3'-Dichlorobenzidine	U			850	µg/kg	850	EPA8270
2,4-Dichlorophenol	U			430	µg/kg	430	EPA8270
Diethyl phthalate	U			430	µg/kg	430	EPA8270
2,4-Dimethyl phenol	U			430	µg/kg	430	EPA8270
Dimethyl phthalate	U			430	µg/kg	430	EPA8270
2,4-Dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2,4-Dinitrotoluene	U			430	µg/kg	430	EPA8270

SAMPLE NAME: D43112102 (Continued) Sample ID: 100304

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2,6-Dinitrotoluene	U			430	µg/kg	430	EPA8270
Di-n-octyl phthalate	U			430	µg/kg	430	EPA8270
Fluoranthene	U			430	µg/kg	430	EPA8270
Fluorene	U			430	µg/kg	430	EPA8270
Hexachlorobenzene	U			430	µg/kg	430	EPA8270
Hexachlorobutadiene	U			430	µg/kg	430	EPA8270
Hexachlorocyclopentadiene	U			430	µg/kg	430	EPA8270
Hexachloroethane	U			430	µg/kg	430	EPA8270
Indeno(1,2,3-c,d)pyrene	U			430	µg/kg	430	EPA8270
Isophorone	U			430	µg/kg	430	EPA8270
2-Methyl-4,6-dinitrophenol	U			2,100	µg/kg	2,100	EPA8270
2-Methylnaphthalene	U			430	µg/kg	430	EPA8270
Naphthalene	U			430	µg/kg	430	EPA8270
o-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
m-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
p-Nitroaniline	U			2,100	µg/kg	2,100	EPA8270
Nitrobenzene	U			430	µg/kg	430	EPA8270
2-Nitrophenol	U			430	µg/kg	430	EPA8270
4-Nitrophenol	U			2,100	µg/kg	2,100	EPA8270
N-Nitrosodiphenylamine	U			430	µg/kg	430	EPA8270
N-Nitrosodipropylamine	U			430	µg/kg	430	EPA8270
Pentachlorophenol	U			2,100	µg/kg	2,100	EPA8270
Phenanthrene	U			430	µg/kg	430	EPA8270
Phenol	U			430	µg/kg	430	EPA8270
Pyrene	U			430	µg/kg	430	EPA8270
1,2,4-Trichlorobenzene	U			430	µg/kg	430	EPA8270
2,4,5-Trichlorophenol	U			2,100	µg/kg	2,100	EPA8270
2,4,6-Trichlorophenol	U			430	µg/kg	430	EPA8270
Unknown	J	N		300	µg/kg		EPA8270
Volatile Organic Compounds							
Acetone	UJ	V		8.2	µg/kg	13	EPA8240
Benzene	U			6.5	µg/kg	6.5	EPA8240
Bromodichloromethane	U			6.5	µg/kg	6.5	EPA8240
Bromoform	U			6.5	µg/kg	6.5	EPA8240
Bromomethane (Methyl bromide)	U			13	µg/kg	13	EPA8240
Carbon disulfide	U			6.5	µg/kg	6.5	EPA8240
Carbon tetrachloride	U			6.5	µg/kg	6.5	EPA8240
Chlorobenzene	U			6.5	µg/kg	6.5	EPA8240
Chloroethane	U			13	µg/kg	13	EPA8240
Chloroethene (Vinyl chloride)	U			13	µg/kg	13	EPA8240
2-Chloroethyl vinyl ether	U			13	µg/kg	13	EPA8240
Chloroform	U			6.5	µg/kg	6.5	EPA8240
Chloromethane (Methyl chloride)	U			13	µg/kg	13	EPA8240
Dibromochloromethane	U			6.5	µg/kg	6.5	EPA8240
1,1-Dichloroethane	U			6.5	µg/kg	6.5	EPA8240
1,2-Dichloroethane	U			6.5	µg/kg	6.5	EPA8240
1,1-Dichloroethylene	U			6.5	µg/kg	6.5	EPA8240
1,2-Dichloroethylene	U			6.5	µg/kg	6.5	EPA8240

SAMPLE NAME: D431-12102 (Continued) Sample ID: 100304

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Dichloromethane (Methylene chloride)	U	V		49	µg/kg	6.5	EPA8240
1,2-Dichloropropane	U			6.5	µg/kg	6.5	EPA8240
cis-1,3-Dichloropropene	U			6.5	µg/kg	6.5	EPA8240
trans-1,3-Dichloropropene	U			6.5	µg/kg	6.5	EPA8240
Ethylbenzene	U			6.5	µg/kg	6.5	EPA8240
2-Hexanone	U			13	µg/kg	13	EPA8240
Methyl ethyl ketone	U			13	µg/kg	13	EPA8240
Methyl isobutyl ketone	U			13	µg/kg	13	EPA8240
Styrene	U			6.5	µg/kg	6.5	EPA8240
1,1,2,2-Tetrachloroethane	U			6.5	µg/kg	6.5	EPA8240
Tetrachloroethylene	U			6.5	µg/kg	6.5	EPA8240
Toluene	J			2.6	µg/kg	6.5	EPA8240
1,1,1-Trichloroethane	U			6.5	µg/kg	6.5	EPA8240
1,1,2-Trichloroethane	U			6.5	µg/kg	6.5	EPA8240
Trichloroethylene	U			6.5	µg/kg	6.5	EPA8240
Vinyl acetate	U			13	µg/kg	13	EPA8240
Xylenes	U			6.5	µg/kg	6.5	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha				11±13	pCi/g	7.5	EPA900.0
Nonvolatile beta				71±25	pCi/g	9.0	EPA900.0
Radium, total alpha-emitting		V		0.79±0.71	pCi/g	0.060	EPA903.0
Tritium				2.0±0.44	pCi/g	1.2	EPA906.0

SAMPLE NAME: D431 1707 Sample ID: 100434

Location (SRS Coordinates): 18492.14E 66454.17N
Ground Elevation Above MSL: 124.9 ft
Depth of Core Interval: 13.00 to 14.00 ft
Sample Type: Normal Sample Matrix: Water Sample Moisture: Liquid

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	U	V		10	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D431-1707A Sample ID: 100435

Sample Type: Duplicate Associated Sample: 100434

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	U	V		20	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		16	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D431 1708 Sample ID: 100436

Location (SRS Coordinates): 18492.14E 66454.17N
Ground Elevation Above MSL: 124.9 ft
Depth of Core Interval: 33.00 to 34.00 ft
Sample Type: Normal Sample Matrix: Water Sample Moisture: Liquid

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	U	V		16	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		19	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
2-Propanol	J	N		10	µg/L		EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D431 2601 Sample ID: 100301

Location (SRS Coordinates): 18160E 66410N
Ground Elevation Above MSL: . ft
Depth of Core Interval: . to . ft
Sample Type: Normal Sample Matrix: Water Sample Moisture: Liquid

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Chloride				10	mg/L	0.50	EPA300.0
Fluoride				0.14	mg/L	0.10	EPA300.0
Nitrate as nitrogen	U	V		0.020	mg/L	0.020	EPA300.0
pH	J	Q		5.5	pH	0.010	EPA9045
Sulfate				180	mg/L	20	EPA300.0
Total dissolved solids				640	mg/L	10	EPA160.2
Total organic carbon				170	mg/L	5.0	EPA415.1
Total organic halogens	J	Q		370	µg/L	25	EPA9020
Total suspended solids				2,800	mg/L	20	EPA160.2
Total suspended solids				2,800	mg/L	20	EPA160.2
Total Metals							
Arsenic				140	µg/L	50	EPA7060
Barium	U			200	µg/L	200	EPA6010
Cadmium	UJ	L		5.0	µg/L	5.0	EPA6010
Chromium				14	µg/L	10	EPA6010
Copper	UJ	L		25	µg/L	25	EPA6010
Iron				270,000	µg/L	100	EPA6010
Lead				17	µg/L	3.0	EPA7421
Manganese				1,200	µg/L	1.5	EPA6010
Mercury				0.82	µg/L	0.20	EPA7470
Nickel	U			40	µg/L	40	EPA6010
Selenium	U			5.0	µg/L	5.0	EPA7740
Silver	U			10	µg/L	10	EPA6010
Sodium				8,400	µg/L	5,000	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	UJ	O	L	11	µg/L	11	EPA8270
Acenaphthylene	UJ	O	L	11	µg/L	11	EPA8270
Anthracene	UJ	O	L	11	µg/L	11	EPA8270
Benzo(a)anthracene	UJ	O	L	11	µg/L	11	EPA8270
Benzo(b)fluoranthene	UJ	O	L	11	µg/L	11	EPA8270
Benzo(k)fluoranthene	UJ	O	L	11	µg/L	11	EPA8270
Benzoic acid	UJ	O	L	55	µg/L	55	EPA8270
Benzo(g,h,i)perylene	UJ	O	L	11	µg/L	11	EPA8270
Benzo(a)pyrene	UJ	O	L	11	µg/L	11	EPA8270
Benzyl alcohol	UJ	O	L	11	µg/L	11	EPA8270
Bis(2-chloroethoxy) methane	UJ	O	L	11	µg/L	11	EPA8270
Bis(2-chloroethyl) ether	UJ	O	L	11	µg/L	11	EPA8270
Bis(2-chloroisopropyl) ether	UJ	O	L	11	µg/L	11	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	VO	L	2.8	µg/L	11	EPA8270
4-Bromophenyl phenyl ether	UJ	O	L	11	µg/L	11	EPA8270
Butylbenzyl phthalate	UJ	O	L	11	µg/L	11	EPA8270

SAMPLE NAME: D431 2601 (Continued) Sample ID: 100301

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
4-Chloroaniline	UJ	O	L	11	µg/L	11	EPA8270
4-Chloro-m-cresol	UJ	O	L	11	µg/L	11	EPA8270
2-Chloronaphthalene	UJ	O	L	11	µg/L	11	EPA8270
2-Chlorophenol	UJ	O	L	11	µg/L	11	EPA8270
4-Chlorophenyl phenyl ether	UJ	O	L	11	µg/L	11	EPA8270
Chrysene	UJ	O	L	11	µg/L	11	EPA8270
o-Cresol (2-Methylphenol)	UJ	O	L	11	µg/L	11	EPA8270
p-Cresol (4-Methylphenol)	UJ	O	L	11	µg/L	11	EPA8270
Dibenz(a,h)anthracene	UJ	O	L	11	µg/L	11	EPA8270
Dibenzofuran	UJ	O	L	11	µg/L	11	EPA8270
Di-n-butyl phthalate	UJ	O	L	11	µg/L	11	EPA8270
1,2-Dichlorobenzene	UJ	O	L	11	µg/L	11	EPA8270
1,3-Dichlorobenzene	UJ	O	L	11	µg/L	11	EPA8270
1,4-Dichlorobenzene	UJ	O	L	11	µg/L	11	EPA8270
3,3'-Dichlorobenzidine	UJ	O	L	22	µg/L	22	EPA8270
2,4-Dichlorophenol	UJ	O	L	11	µg/L	11	EPA8270
Diethyl phthalate	UJ	O	L	11	µg/L	11	EPA8270
2,4-Dimethyl phenol	UJ	O	L	11	µg/L	11	EPA8270
Dimethyl phthalate	UJ	O	L	11	µg/L	11	EPA8270
2,4-Dinitrophenol	UJ	O	L	55	µg/L	55	EPA8270
2,4-Dinitrotoluene	UJ	O	L	11	µg/L	11	EPA8270
2,6-Dinitrotoluene	UJ	O	L	11	µg/L	11	EPA8270
Di-n-octyl phthalate	UJ	O	L	11	µg/L	11	EPA8270
Fluoranthene	UJ	O	L	11	µg/L	11	EPA8270
Fluorene	UJ	O	L	11	µg/L	11	EPA8270
Hexachlorobenzene	UJ	O	L	11	µg/L	11	EPA8270
Hexachlorobutadiene	UJ	O	L	11	µg/L	11	EPA8270
Hexachlorocyclopentadiene	UJ	O	L	11	µg/L	11	EPA8270
Hexachloroethane	UJ	O	L	11	µg/L	11	EPA8270
Indeno(1,2,3-c,d)pyrene	UJ	O	L	11	µg/L	11	EPA8270
Isophorone	UJ	O	L	11	µg/L	11	EPA8270
2-Methyl-4,6-dinitrophenol	UJ	O	L	55	µg/L	55	EPA8270
2-Methylnaphthalene	UJ	O	L	11	µg/L	11	EPA8270
Methyl pyrrolidinone	J	N		6.0	µg/L		EPA8270
Naphthalene	UJ	O	L	11	µg/L	11	EPA8270
o-Nitroaniline	UJ	O	L	55	µg/L	55	EPA8270
m-Nitroaniline	UJ	O	L	55	µg/L	55	EPA8270
p-Nitroaniline	UJ	O	L	55	µg/L	55	EPA8270
Nitrobenzene	UJ	O	L	11	µg/L	11	EPA8270
2-Nitrophenol	UJ	O	L	11	µg/L	11	EPA8270
4-Nitrophenol	UJ	O	L	55	µg/L	55	EPA8270
N-Nitrosodiphenylamine	UJ	O	L	11	µg/L	11	EPA8270
N-Nitrosodipropylamine	UJ	O	L	11	µg/L	11	EPA8270
Organic acid	J	N		50	µg/L		EPA8270
Organic acid	J	N		50	µg/L		EPA8270
Pentachlorophenol	UJ	O	L	55	µg/L	55	EPA8270
Phenanthrene	UJ	O	L	11	µg/L	11	EPA8270
Phenol	UJ	O	L	11	µg/L	11	EPA8270
Pyrene	UJ	O	L	11	µg/L	11	EPA8270
1,2,4-Trichlorobenzene	UJ	O	L	11	µg/L	11	EPA8270

SAMPLE NAME: D431 2601 (Continued) Sample ID: 100301

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2,4,5-Trichlorophenol	UJ	O	L	55	µg/L	55	EPA8270
2,4,6-Trichlorophenol	UJ	O	L	11	µg/L	11	EPA8270
Unknown	J	N		10	µg/L		EPA8270
Unknown	J	N		20	µg/L		EPA8270
Unknown	J	N		5.0	µg/L		EPA8270
Volatile Organic Compounds							
Acetone				21	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	J			1.7	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha				30±7.8	pCi/L	1.2	EPA900.0
Nonvolatile beta		V		54±12	pCi/L	1.1	EPA900.0
Radium, total alpha-emitting				0.60±0.50	pCi/L	0.40	EPA903.0
Tritium				1,500±690	pCi/L	420	EPA906.0

SAMPLE NAME: D43I11505 Sample ID: 100412

Location (SRS Coordinates): 18533.07E 66779.25N
Ground Elevation Above MSL: 128.5 ft
Depth of Core Interval: 16.00 to 17.00 ft
Sample Type: Normal Sample Matrix: Water Sample Moisture: Liquid

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	U			10	µg/L	10	EPA8240
Benzene	UJ	C		5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D43111506 Sample ID: 100414

Location (SRS Coordinates): 18533.07E 66779.25N
Ground Elevation Above MSL: 128.5 ft
Depth of Core Interval: 36.00 to 37.00 ft
Sample Type: Normal Sample Matrix: Water Sample Moisture: Liquid

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	U	Y		10	µg/L	10	EPA8240
Benzene	U	Y		5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U	Y		5.0	µg/L	5.0	EPA8240
Bromoform	U	Y		5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U	Y		10	µg/L	10	EPA8240
Carbon disulfide	U	Y		5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U	Y		5.0	µg/L	5.0	EPA8240
Chlorobenzene	U	Y		5.0	µg/L	5.0	EPA8240
Chloroethane	U	Y		10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U	Y		10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U	Y		10	µg/L	10	EPA8240
Chloroform	U	Y		5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U	Y		10	µg/L	10	EPA8240
Dibromochloromethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	UJ	YV		4.1	µg/L	5.0	EPA8240
1,2-Dichloropropane	U	Y		5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U	Y		5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U	Y		5.0	µg/L	5.0	EPA8240
Ethylbenzene	U	Y		5.0	µg/L	5.0	EPA8240
2-Hexanone	U	Y		10	µg/L	10	EPA8240
Methyl ethyl ketone	U	Y		10	µg/L	10	EPA8240
Methyl isobutyl ketone	U	Y		10	µg/L	10	EPA8240
Styrene	U	Y		5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
Toluene	U	Y		5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
Trichloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
Unknown	J	N		10	µg/L		EPA8240
Vinyl acetate	U	Y		10	µg/L	10	EPA8240
Xylenes	U	Y		5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D43I11506D Sample ID: 100415

Sample Type: Duplicate Associated Sample: 100414

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	J	YO	L	4.3	µg/L	10	EPA8240
Acetone	J	YO	L	4.7	µg/L	10	EPA8240
Acetone	J	YO	L	4.6	µg/L	10	EPA8240
Benzene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Bromodichloromethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Bromodichloromethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Bromodichloromethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Bromoform	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Bromoform	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Bromoform	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	UJ	YO	L	10	µg/L	10	EPA8240
Bromomethane (Methyl bromide)	UJ	YO	L	10	µg/L	10	EPA8240
Bromomethane (Methyl bromide)	UJ	YO	L	10	µg/L	10	EPA8240
Carbon disulfide	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Carbon disulfide	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Carbon disulfide	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Chlorobenzene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Chloroethane	UJ	YO	L	10	µg/L	10	EPA8240
Chloroethane	UJ	YO	L	10	µg/L	10	EPA8240
Chloroethane	UJ	YO	L	10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	UJ	YO	L	10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	UJ	YO	L	10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	UJ	YO	L	10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	UJ	YO	L	10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	UJ	YO	L	10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	UJ	YO	L	10	µg/L	10	EPA8240
Chloroform	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Chloroform	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Chloroform	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	UJ	YO	L	10	µg/L	10	EPA8240
Chloromethane (Methyl chloride)	J	YO	L	1.0	µg/L	10	EPA8240
Chloromethane (Methyl chloride)	J	YO	L	1.0	µg/L	10	EPA8240
Dibromochloromethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Dibromochloromethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Dibromochloromethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	UJ	YO	L	5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D43111506D (Continued) Sample ID: 100415

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Dichloromethane (Methylene chloride)	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Ethylbenzene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Ethylbenzene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Ethylbenzene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
2-Hexanone	UJ	YO	L	10	µg/L	10	EPA8240
2-Hexanone	UJ	YO	L	10	µg/L	10	EPA8240
2-Hexanone	UJ	YO	L	10	µg/L	10	EPA8240
Methyl ethyl ketone	UJ	YO	L	10	µg/L	10	EPA8240
Methyl ethyl ketone	UJ	YO	L	10	µg/L	10	EPA8240
Methyl ethyl ketone	UJ	YO	L	10	µg/L	10	EPA8240
Methyl isobutyl ketone	UJ	YO	L	10	µg/L	10	EPA8240
Methyl isobutyl ketone	UJ	YO	L	10	µg/L	10	EPA8240
Methyl isobutyl ketone	UJ	YO	L	10	µg/L	10	EPA8240
Styrene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Styrene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Styrene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Toluene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Trichloroethylene	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Vinyl acetate	UJ	YO	L	10	µg/L	10	EPA8240
Vinyl acetate	UJ	YO	L	10	µg/L	10	EPA8240
Vinyl acetate	UJ	YO	L	10	µg/L	10	EPA8240
Xylenes	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Xylenes	UJ	YO	L	5.0	µg/L	5.0	EPA8240
Xylenes	UJ	YO	L	5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D43111607 Sample ID: 100425

Location (SRS Coordinates): 18644.34E 66570.29N
Ground Elevation Above MSL: 134.1 ft
Depth of Core Interval: 23.00 to 24.00 ft
Sample Type: Normal Sample Matrix: Water Sample Moisture: Liquid

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone				37	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	UJ	V		1.8	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D43H1608 Sample ID: 100426

Location (SRS Coordinates): 18644.34E 66570.29N
Ground Elevation Above MSL: 134.1 ft
Depth of Core Interval: 39.00 to 40.00 ft
Sample Type: Normal Sample Matrix: Water Sample Moisture: Liquid

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	L			1,200	µg/L	10	EPA8240
Acetone				490	µg/L	50	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	UJ	V		1.8	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Unknown	J	N		90	µg/L		EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D43111901 Sample ID: 100308

Location (SRS Coordinates): .E .N
Ground Elevation Above MSL: . ft
Depth of Core Interval: . to . ft
Sample Type: Normal Sample Matrix: Water Sample Moisture: Liquid

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Chloride				5.1	mg/L	0.25	EPA300.0
Fluoride	U			0.10	mg/L	0.10	EPA300.0
Nitrate as nitrogen				0.21	mg/L	0.10	EPA300.0
pH	J	Q		5.9	pH	0.010	EPA9045
Sulfate				6.4	mg/L	5.0	EPA300.0
Sulfate				6.5	mg/L	5.0	EPA300.0
Total dissolved solids				56	mg/L	5.0	EPA160.2
Total dissolved solids				63	mg/L	5.0	EPA160.2
Total organic carbon				1.9	mg/L	0.50	EPA415.1
Total organic halogens	J	Q		7.2	µg/L	5.0	EPA9020
Total suspended solids				10	mg/L	5.0	EPA160.2
Total suspended solids				11	mg/L	5.0	EPA160.2
Total Metals							
Arsenic	U			10	µg/L	10	EPA7060
Barium	U			200	µg/L	200	EPA6010
Cadmium	UJ	L		5.0	µg/L	5.0	EPA6010
Chromium	U			10	µg/L	10	EPA6010
Copper	UJ	L		25	µg/L	25	EPA6010
Iron				530	µg/L	100	EPA6010
Lead	U			3.0	µg/L	3.0	EPA7421
Manganese				1,400	µg/L	15	EPA6010
Mercury	U			0.20	µg/L	0.20	EPA7470
Nickel	U			40	µg/L	40	EPA6010
Selenium	U			5.0	µg/L	5.0	EPA7740
Silver				11	µg/L	10	EPA6010
Sodium				8,000	µg/L	5,000	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			12	µg/L	12	EPA8270
Acenaphthylene	U			12	µg/L	12	EPA8270
Anthracene	U			12	µg/L	12	EPA8270
Benzo(a)anthracene	U			12	µg/L	12	EPA8270
Benzo(b)fluoranthene	U			12	µg/L	12	EPA8270
Benzo(k)fluoranthene	U			12	µg/L	12	EPA8270
Benzoic acid	U			60	µg/L	60	EPA8270
Benzo(g,h,i)perylene	U			12	µg/L	12	EPA8270
Benzo(a)pyrene	U			12	µg/L	12	EPA8270
Benzyl alcohol	U			12	µg/L	12	EPA8270
Bis(2-chloroethoxy) methane	U			12	µg/L	12	EPA8270
Bis(2-chloroethyl) ether	U			12	µg/L	12	EPA8270
Bis(2-chloroisopropyl) ether	U			12	µg/L	12	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		2.5	µg/L	12	EPA8270

SAMPLE NAME: D43111901 (Continued) Sample ID: 100308

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
4-Bromophenyl phenyl ether	U			12	µg/L	12	EPA8270
Butylbenzyl phthalate	U			12	µg/L	12	EPA8270
4-Chloroaniline	U			12	µg/L	12	EPA8270
4-Chloro-m-cresol	U			12	µg/L	12	EPA8270
2-Chloronaphthalene	U			12	µg/L	12	EPA8270
2-Chlorophenol	U			12	µg/L	12	EPA8270
4-Chlorophenyl phenyl ether	U			12	µg/L	12	EPA8270
Chrysene	U			12	µg/L	12	EPA8270
o-Cresol (2-Methylphenol)	U			12	µg/L	12	EPA8270
p-Cresol (4-Methylphenol)	U			12	µg/L	12	EPA8270
Dibenz(a,h)anthracene	U			12	µg/L	12	EPA8270
Dibenzofuran	U			12	µg/L	12	EPA8270
Di-n-butyl phthalate	UJ	V		3.5	µg/L	12	EPA8270
1,2-Dichlorobenzene	U			12	µg/L	12	EPA8270
1,3-Dichlorobenzene	U			12	µg/L	12	EPA8270
1,4-Dichlorobenzene	U			12	µg/L	12	EPA8270
3,3'-Dichlorobenzidine	U			24	µg/L	24	EPA8270
2,4-Dichlorophenol	U			12	µg/L	12	EPA8270
Diethyl phthalate	U			12	µg/L	12	EPA8270
2,4-Dimethyl phenol	U			12	µg/L	12	EPA8270
Dimethyl phthalate	U			12	µg/L	12	EPA8270
2,4-Dinitrophenol	U			60	µg/L	60	EPA8270
2,4-Dinitrotoluene	U			12	µg/L	12	EPA8270
2,6-Dinitrotoluene	U			12	µg/L	12	EPA8270
Di-n-octyl phthalate	U			12	µg/L	12	EPA8270
Fluoranthene	U			12	µg/L	12	EPA8270
Fluorene	U			12	µg/L	12	EPA8270
Hexachlorobenzene	U			12	µg/L	12	EPA8270
Hexachlorobutadiene	U			12	µg/L	12	EPA8270
Hexachlorocyclopentadiene	U			12	µg/L	12	EPA8270
Hexachloroethane	U			12	µg/L	12	EPA8270
Indeno(1,2,3-c,d)pyrene	U			12	µg/L	12	EPA8270
Isophorone	U			12	µg/L	12	EPA8270
2-Methyl-4,6-dinitrophenol	U			60	µg/L	60	EPA8270
2-Methylnaphthalene	U			12	µg/L	12	EPA8270
Naphthalene	U			12	µg/L	12	EPA8270
o-Nitroaniline	U			60	µg/L	60	EPA8270
m-Nitroaniline	U			60	µg/L	60	EPA8270
p-Nitroaniline	U			60	µg/L	60	EPA8270
Nitrobenzene	U			12	µg/L	12	EPA8270
2-Nitrophenol	U			12	µg/L	12	EPA8270
4-Nitrophenol	U			60	µg/L	60	EPA8270
N-Nitrosodiphenylamine	U			12	µg/L	12	EPA8270
N-Nitrosodipropylamine	U			12	µg/L	12	EPA8270
Pentachlorophenol	U			60	µg/L	60	EPA8270
Phenanthrene	U			12	µg/L	12	EPA8270
Phenol	U			12	µg/L	12	EPA8270
Pyrene	U			12	µg/L	12	EPA8270
1,2,4-Trichlorobenzene	U			12	µg/L	12	EPA8270
2,4,5-Trichlorophenol	U			60	µg/L	60	EPA8270

SAMPLE NAME: D43111901 (Continued) Sample ID: 100308

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
2,4,6-Trichlorophenol	U			12	µg/L	12	EPA8270
Unknown	J	NV		20	µg/L		EPA8270
Volatile Organic Compounds							
Acetone	U	V		10	µg/L	10	EPA8240
Acetone	U	V		10	µg/L	10	EPA8240
Acetone	U	V		10	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U			10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U			10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D431-11901 (Continued) Sample ID: 100308

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	UJ	V		2.4	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	UJ	V		3.5	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	UJ	V		3.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240

Radionuclide Indicators and Radionuclides

Gross alpha	U		0.80	pCi/L	0.80	EPA900.0
Nonvolatile beta	U	V	1.0±1.7	pCi/L	0.80	EPA900.0
Radium, total alpha-emitting	U		0.10	pCi/L	0.10	EPA903.0
Tritium			680±290	pCi/L	170	EPA906.0

SAMPLE NAME: D43111902 Sample ID: 100309

Location (SRS Coordinates): .E .N .
Ground Elevation Above MSL: . ft
Depth of Core Interval: . to . ft
Sample Type: Normal Sample Matrix: Water Sample Moisture: Liquid

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
pH	J	Q		6.0	pH	0.010	EPA9045
pH	J	Q		6.0	pH	0.010	EPA9045
Total dissolved solids	J	Q		65	mg/L	5.0	EPA160.2
Total organic carbon				1.6	mg/L	0.50	EPA415.1
Total suspended solids	UJ	Q		5.0	mg/L	5.0	EPA160.2
Total Metals							
Arsenic.	U			10	µg/L	10	EPA7060
Barium	U			200	µg/L	200	EPA6010
Cadmium	UJ	L		5.0	µg/L	5.0	EPA6010
Chromium	U			10	µg/L	10	EPA6010
Copper	UJ	L		25	µg/L	25	EPA6010
Iron				290	µg/L	100	EPA6010
Lead	U			3.0	µg/L	3.0	EPA7421
Manganese				530	µg/L	15	EPA6010
Mercury	U			0.20	µg/L	0.20	EPA7470
Nickel	U			40	µg/L	40	EPA6010
Selenium	U			5.0	µg/L	5.0	EPA7740
Silver	U			10	µg/L	10	EPA6010
Sodium				8,000	µg/L	5,000	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			12	µg/L	12	EPA8270
Acenaphthylene	U			12	µg/L	12	EPA8270
Anthracene	U			12	µg/L	12	EPA8270
Benzo(a)anthracene	U			12	µg/L	12	EPA8270
Benzo(b)fluoranthene	U			12	µg/L	12	EPA8270
Benzo(k)fluoranthene	U			12	µg/L	12	EPA8270
Benzoic acid	U			60	µg/L	60	EPA8270
Benzo(g,h,i)perylene	U			12	µg/L	12	EPA8270
Benzo(a)pyrene	U			12	µg/L	12	EPA8270
Benzyl alcohol	U			12	µg/L	12	EPA8270
Bis(2-chloroethoxy) methane	U			12	µg/L	12	EPA8270
Bis(2-chloroethyl) ether	U			12	µg/L	12	EPA8270

SAMPLE NAME: D43111902 (Continued) Sample ID: 100309

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Bis(2-chloroisopropyl) ether	U			12	µg/L	12	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		2.5	µg/L	12	EPA8270
4-Bromophenyl phenyl ether	U			12	µg/L	12	EPA8270
Butylbenzyl phthalate	U			12	µg/L	12	EPA8270
4-Chloroaniline	U			12	µg/L	12	EPA8270
4-Chloro-m-cresol	U			12	µg/L	12	EPA8270
2-Chloronaphthalene	U			12	µg/L	12	EPA8270
2-Chlorophenol	U			12	µg/L	12	EPA8270
4-Chlorophenyl phenyl ether	U			12	µg/L	12	EPA8270
Chrysene	U			12	µg/L	12	EPA8270
o-Cresol (2-Methylphenol)	U			12	µg/L	12	EPA8270
p-Cresol (4-Methylphenol)	U			12	µg/L	12	EPA8270
Dibenz(a,h)anthracene	U			12	µg/L	12	EPA8270
Dibenzofuran	U			12	µg/L	12	EPA8270
Di-n-butyl phthalate	UJ	V		3.4	µg/L	12	EPA8270
1,2-Dichlorobenzene	U			12	µg/L	12	EPA8270
1,3-Dichlorobenzene	U			12	µg/L	12	EPA8270
1,4-Dichlorobenzene	U			12	µg/L	12	EPA8270
3,3'-Dichlorobenzidine	U			24	µg/L	24	EPA8270
2,4-Dichlorophenol	U			12	µg/L	12	EPA8270
Diethyl phthalate	U			12	µg/L	12	EPA8270
2,4-Dimethyl phenol	U			12	µg/L	12	EPA8270
Dimethyl phthalate	U			12	µg/L	12	EPA8270
2,4-Dinitrophenol	U			60	µg/L	60	EPA8270
2,4-Dinitrotoluene	U			12	µg/L	12	EPA8270
2,6-Dinitrotoluene	U			12	µg/L	12	EPA8270
Di-n-octyl phthalate	U			12	µg/L	12	EPA8270
Fluoranthene	U			12	µg/L	12	EPA8270
Fluorene	U			12	µg/L	12	EPA8270
Hexachlorobenzene	U			12	µg/L	12	EPA8270
Hexachlorobutadiene	U			12	µg/L	12	EPA8270
Hexachlorocyclopentadiene	U			12	µg/L	12	EPA8270
Hexachloroethane	U			12	µg/L	12	EPA8270
Indeno(1,2,3-c,d)pyrene	U			12	µg/L	12	EPA8270
Isophorone	U			12	µg/L	12	EPA8270
2-Methyl-4,6-dinitrophenol	U			60	µg/L	60	EPA8270
2-Methylnaphthalene	U			12	µg/L	12	EPA8270
Naphthalene	U			12	µg/L	12	EPA8270
o-Nitroaniline	U			60	µg/L	60	EPA8270
m-Nitroaniline	U			60	µg/L	60	EPA8270
p-Nitroaniline	U			60	µg/L	60	EPA8270
Nitrobenzene	U			12	µg/L	12	EPA8270
2-Nitrophenol	U			12	µg/L	12	EPA8270
4-Nitrophenol	U			60	µg/L	60	EPA8270
N-Nitrosodiphenylamine	U			12	µg/L	12	EPA8270
N-Nitrosodipropylamine	U			12	µg/L	12	EPA8270
Pentachlorophenol	U			60	µg/L	60	EPA8270
Phenanthrene	U			12	µg/L	12	EPA8270
Phenol	U			12	µg/L	12	EPA8270
Pyrene	U			12	µg/L	12	EPA8270

SAMPLE NAME: D43111902 (Continued) Sample ID: 100309

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
1,2,4-Trichlorobenzene	U			12	µg/L	12	EPA8270
2,4,5-Trichlorophenol	U			60	µg/L	60	EPA8270
2,4,6-Trichlorophenol	U			12	µg/L	12	EPA8270
Unknown	J	NV		6.0	µg/L		EPA8270
Unknown	J	NV		9.0	µg/L		EPA8270
Unknown	J	NV		10	µg/L		EPA8270
Volatile Organic Compounds							
Acetone	U	V		10	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	UJ	V		3.1	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			0.70	pCi/L	0.70	EPA900.0
Nonvolatile beta	U	V		0.80	pCi/L	0.80	EPA900.0
Radium, total alpha-emitting	U			0.10	pCi/L	0.10	EPA903.0

SAMPLE NAME: D43111902 (Continued) Sample ID: 100309

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Radionuclide Indicators and Radionuclides							
Tritium				1,100±320	pCi/L	170	EPA906.0

SAMPLE NAME: D43112001 Sample ID: 100306

Location (SRS Coordinates): .E .N
Ground Elevation Above MSL: . ft
Depth of Core Interval: . to . ft
Sample Type: Normal Sample Matrix: Water Sample Moisture: Liquid

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Chloride				5.1	mg/L	0.25	EPA300.0
Fluoride	U			0.10	mg/L	0.10	EPA300.0
Nitrate as nitrogen				0.21	mg/L	0.10	EPA300.0
pH	J	Q		6.0	pH	0.010	EPA9045
Sulfate				7.0	mg/L	5.0	EPA300.0
Total dissolved solids				54	mg/L	5.0	EPA160.2
Total organic carbon				2.0	mg/L	0.50	EPA415.1
Total organic halogens	J	Q		11	µg/L	5.0	EPA9020
Total suspended solids				8.0	mg/L	5.0	EPA160.2
Total Metals							
Arsenic	U			10	µg/L	10	EPA7060
Barium	U			200	µg/L	200	EPA6010
Cadmium	UJ	L		5.0	µg/L	5.0	EPA6010
Chromium	U			10	µg/L	10	EPA6010
Copper	UJ	L		25	µg/L	25	EPA6010
Iron				290	µg/L	100	EPA6010
Lead	U			3.0	µg/L	3.0	EPA7421
Manganese				320	µg/L	15	EPA6010
Mercury	U			0.20	µg/L	0.20	EPA7470
Nickel	U			40	µg/L	40	EPA6010
Selenium	U			5.0	µg/L	5.0	EPA7740
Silver	U			10	µg/L	10	EPA6010
Sodium				7,900	µg/L	5,000	EPA6010
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			12	µg/L	12	EPA8270
Acenaphthylene	U			12	µg/L	12	EPA8270
Acenaphthylene	U			23	µg/L	23	EPA8270
Acenaphthylene	U			26	µg/L	26	EPA8270
Anthracene	U			12	µg/L	12	EPA8270
Anthracene	U			23	µg/L	23	EPA8270
Anthracene	U			26	µg/L	26	EPA8270
Benzo(a)anthracene	U			12	µg/L	12	EPA8270

SAMPLE NAME: D43112001 (Continued) Sample ID: 100306

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Benzo(a)anthracene	U			23	µg/L	23	EPA8270
Benzo(a)anthracene	U			26	µg/L	26	EPA8270
Benzo(b)fluoranthene	U			12	µg/L	12	EPA8270
Benzo(b)fluoranthene	U			23	µg/L	23	EPA8270
Benzo(b)fluoranthene	U			26	µg/L	26	EPA8270
Benzo(k)fluoranthene	U			12	µg/L	12	EPA8270
Benzo(k)fluoranthene	U			23	µg/L	23	EPA8270
Benzo(k)fluoranthene	U			26	µg/L	26	EPA8270
Benzoic acid	U			60	µg/L	60	EPA8270
Benzoic acid	U			120	µg/L	120	EPA8270
Benzoic acid	U			130	µg/L	130	EPA8270
Benzo(g,h,i)perylene	U			12	µg/L	12	EPA8270
Benzo(g,h,i)perylene	U			23	µg/L	23	EPA8270
Benzo(g,h,i)perylene	U			26	µg/L	26	EPA8270
Benzo(a)pyrene	U			12	µg/L	12	EPA8270
Benzo(a)pyrene	U			23	µg/L	23	EPA8270
Benzo(a)pyrene	U			26	µg/L	26	EPA8270
Benzyl alcohol	U			12	µg/L	12	EPA8270
Benzyl alcohol	U			23	µg/L	23	EPA8270
Benzyl alcohol	U			26	µg/L	26	EPA8270
Bis(2-chloroethoxy) methane	U			12	µg/L	12	EPA8270
Bis(2-chloroethoxy) methane	U			23	µg/L	23	EPA8270
Bis(2-chloroethoxy) methane	U			26	µg/L	26	EPA8270
Bis(2-chloroethyl) ether	U			12	µg/L	12	EPA8270
Bis(2-chloroisopropyl) ether	U			12	µg/L	12	EPA8270
Bis(2-chloroethyl) ether	U			23	µg/L	23	EPA8270
Bis(2-chloroisopropyl) ether	U			23	µg/L	23	EPA8270
Bis(2-chloroethyl) ether	U			26	µg/L	26	EPA8270
Bis(2-chloroisopropyl) ether	U			26	µg/L	26	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		2.7	µg/L	12	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		3.5	µg/L	23	EPA8270
Bis(2-ethylhexyl) phthalate		V		1,100	µg/L	26	EPA8270
4-Bromophenyl phenyl ether	U			12	µg/L	12	EPA8270
4-Bromophenyl phenyl ether	U			23	µg/L	23	EPA8270
4-Bromophenyl phenyl ether	U			26	µg/L	26	EPA8270
Butylbenzyl phthalate	U			12	µg/L	12	EPA8270
Butylbenzyl phthalate	U			23	µg/L	23	EPA8270
Butylbenzyl phthalate	U			26	µg/L	26	EPA8270
4-Chloroaniline	U			12	µg/L	12	EPA8270
4-Chloroaniline	U			23	µg/L	23	EPA8270
4-Chloroaniline	U			26	µg/L	26	EPA8270
4-Chloro-m-cresol	U			12	µg/L	12	EPA8270
2-Chloronaphthalene	U			12	µg/L	12	EPA8270
2-Chloronaphthalene	U			23	µg/L	23	EPA8270
2-Chloronaphthalene	U			26	µg/L	26	EPA8270
2-Chlorophenol	U			12	µg/L	12	EPA8270
4-Chlorophenyl phenyl ether	U			12	µg/L	12	EPA8270
4-Chlorophenyl phenyl ether	U			23	µg/L	23	EPA8270
4-Chlorophenyl phenyl ether	U			26	µg/L	26	EPA8270
Chrysene	U			12	µg/L	12	EPA8270

SAMPLE NAME: D43112001 (Continued) Sample ID: 100306

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Chrysene	U			23	µg/L	23	EPA8270
Chrysene	U			26	µg/L	26	EPA8270
o-Cresol (2-Methylphenol)	U			12	µg/L	12	EPA8270
o-Cresol (2-Methylphenol)	U			23	µg/L	23	EPA8270
o-Cresol (2-Methylphenol)	U			26	µg/L	26	EPA8270
p-Cresol (4-Methylphenol)	U			12	µg/L	12	EPA8270
p-Cresol (4-Methylphenol)	U			23	µg/L	23	EPA8270
p-Cresol (4-Methylphenol)	U			26	µg/L	26	EPA8270
Dibenz(a,h)anthracene	U			12	µg/L	12	EPA8270
Dibenz(a,h)anthracene	U			23	µg/L	23	EPA8270
Dibenz(a,h)anthracene	U			26	µg/L	26	EPA8270
Dibenzofuran	U			12	µg/L	12	EPA8270
Dibenzofuran	U			23	µg/L	23	EPA8270
Dibenzofuran	U			26	µg/L	26	EPA8270
Di-n-butyl phthalate	UJ	V		4.0	µg/L	12	EPA8270
Di-n-butyl phthalate	UJ	V		6.6	µg/L	23	EPA8270
Di-n-butyl phthalate	UJ	V		6.9	µg/L	26	EPA8270
1,2-Dichlorobenzene	U			12	µg/L	12	EPA8270
1,2-Dichlorobenzene	U			23	µg/L	23	EPA8270
1,2-Dichlorobenzene	U			26	µg/L	26	EPA8270
1,3-Dichlorobenzene	U			12	µg/L	12	EPA8270
1,3-Dichlorobenzene	U			23	µg/L	23	EPA8270
1,3-Dichlorobenzene	U			26	µg/L	26	EPA8270
1,4-Dichlorobenzene	U			12	µg/L	12	EPA8270
3,3'-Dichlorobenzidine	U			24	µg/L	24	EPA8270
3,3'-Dichlorobenzidine	U			46	µg/L	46	EPA8270
3,3'-Dichlorobenzidine	U			52	µg/L	52	EPA8270
2,4-Dichlorophenol	U			12	µg/L	12	EPA8270
2,4-Dichlorophenol	U			23	µg/L	23	EPA8270
2,4-Dichlorophenol	U			26	µg/L	26	EPA8270
Diethyl phthalate	U			12	µg/L	12	EPA8270
Diethyl phthalate	U			23	µg/L	23	EPA8270
Diethyl phthalate	U			26	µg/L	26	EPA8270
2,4-Dimethyl phenol	U			12	µg/L	12	EPA8270
2,4-Dimethyl phenol	U			23	µg/L	23	EPA8270
2,4-Dimethyl phenol	U			26	µg/L	26	EPA8270
Dimethyl phthalate	U			12	µg/L	12	EPA8270
Dimethyl phthalate	U			23	µg/L	23	EPA8270
Dimethyl phthalate	U			26	µg/L	26	EPA8270
2,4-Dinitrophenol	U			60	µg/L	60	EPA8270
2,4-Dinitrophenol	U			120	µg/L	120	EPA8270
2,4-Dinitrophenol	U			130	µg/L	130	EPA8270
2,4-Dinitrotoluene	U			12	µg/L	12	EPA8270
2,6-Dinitrotoluene	U			12	µg/L	12	EPA8270
2,6-Dinitrotoluene	U			23	µg/L	23	EPA8270
2,6-Dinitrotoluene	U			26	µg/L	26	EPA8270
Di-n-octyl phthalate	U			12	µg/L	12	EPA8270
Di-n-octyl phthalate	U			23	µg/L	23	EPA8270
Di-n-octyl phthalate	U			26	µg/L	26	EPA8270
Fluoranthene	U			12	µg/L	12	EPA8270

SAMPLE NAME: D43112001 (Continued) Sample ID: 100306

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Fluoranthene	U			23	µg/L	23	EPA8270
Fluoranthene	U			26	µg/L	26	EPA8270
Fluorene	U			12	µg/L	12	EPA8270
Fluorene	U			23	µg/L	23	EPA8270
Fluorene	U			26	µg/L	26	EPA8270
Hexachlorobenzene	U			12	µg/L	12	EPA8270
Hexachlorobenzene	U			23	µg/L	23	EPA8270
Hexachlorobenzene	U			26	µg/L	26	EPA8270
Hexachlorobutadiene	U			12	µg/L	12	EPA8270
Hexachlorobutadiene	U			23	µg/L	23	EPA8270
Hexachlorobutadiene	U			26	µg/L	26	EPA8270
Hexachlorocyclopentadiene	U			12	µg/L	12	EPA8270
Hexachlorocyclopentadiene	U			23	µg/L	23	EPA8270
Hexachlorocyclopentadiene	U			26	µg/L	26	EPA8270
Hexachloroethane	U			12	µg/L	12	EPA8270
Hexachloroethane	U			23	µg/L	23	EPA8270
Hexachloroethane	U			26	µg/L	26	EPA8270
Indeno(1,2,3-c,d)pyrene	U			12	µg/L	12	EPA8270
Indeno(1,2,3-c,d)pyrene	U			23	µg/L	23	EPA8270
Indeno(1,2,3-c,d)pyrene	U			26	µg/L	26	EPA8270
Isophorone	U			12	µg/L	12	EPA8270
Isophorone	U			23	µg/L	23	EPA8270
Isophorone	U			26	µg/L	26	EPA8270
2-Methyl-4,6-dinitrophenol	U			60	µg/L	60	EPA8270
2-Methyl-4,6-dinitrophenol	U			120	µg/L	120	EPA8270
2-Methyl-4,6-dinitrophenol	U			130	µg/L	130	EPA8270
2-Methylnaphthalene	U			12	µg/L	12	EPA8270
2-Methylnaphthalene	U			23	µg/L	23	EPA8270
2-Methylnaphthalene	U			26	µg/L	26	EPA8270
Naphthalene	U			12	µg/L	12	EPA8270
Naphthalene	U			23	µg/L	23	EPA8270
Naphthalene	U			26	µg/L	26	EPA8270
o-Nitroaniline	U			60	µg/L	60	EPA8270
o-Nitroaniline	U			120	µg/L	120	EPA8270
o-Nitroaniline	U			130	µg/L	130	EPA8270
m-Nitroaniline	U			60	µg/L	60	EPA8270
m-Nitroaniline	U			120	µg/L	120	EPA8270
m-Nitroaniline	U			130	µg/L	130	EPA8270
p-Nitroaniline	U			60	µg/L	60	EPA8270
p-Nitroaniline	U			120	µg/L	120	EPA8270
p-Nitroaniline	U			130	µg/L	130	EPA8270
Nitrobenzene	U			12	µg/L	12	EPA8270
Nitrobenzene	U			23	µg/L	23	EPA8270
Nitrobenzene	U			26	µg/L	26	EPA8270
2-Nitrophenol	U			12	µg/L	12	EPA8270
2-Nitrophenol	U			23	µg/L	23	EPA8270
2-Nitrophenol	U			26	µg/L	26	EPA8270
4-Nitrophenol	U			60	µg/L	60	EPA8270
N-Nitrosodiphenylamine	U			12	µg/L	12	EPA8270
N-Nitrosodiphenylamine	U			23	µg/L	23	EPA8270

SAMPLE NAME: D43112001 (Continued) Sample ID: 100306

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
N-Nitrosodiphenylamine	U			26	µg/L	26	EPA8270
N-Nitrosodipropylamine	U			12	µg/L	12	EPA8270
Pentachlorophenol	U			60	µg/L	60	EPA8270
Phenanthrene	U			12	µg/L	12	EPA8270
Phenanthrene	U			23	µg/L	23	EPA8270
Phenanthrene	U			26	µg/L	26	EPA8270
Phenol	U			12	µg/L	12	EPA8270
Pyrene	U			12	µg/L	12	EPA8270
1,2,4-Trichlorobenzene	U			12	µg/L	12	EPA8270
2,4,5-Trichlorophenol	U			60	µg/L	60	EPA8270
2,4,5-Trichlorophenol	U			120	µg/L	120	EPA8270
2,4,5-Trichlorophenol	U			130	µg/L	130	EPA8270
2,4,6-Trichlorophenol	U			12	µg/L	12	EPA8270
2,4,6-Trichlorophenol	U			23	µg/L	23	EPA8270
2,4,6-Trichlorophenol	U			26	µg/L	26	EPA8270
Unknown	J	NV		10	µg/L		EPA8270
Unknown	J	NV		10	µg/L		EPA8270
Volatile Organic Compounds							
Acetone	U	V		10	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		31	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D43112001 (Continued) Sample ID: 100306

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			0.80	pCi/L	0.80	EPA900.0
Nonvolatile beta		V		3.6±1.9	pCi/L	0.80	EPA900.0
Radium, total alpha-emitting	U			0.10	pCi/L	0.10	EPA903.0
Tritium				470±270	pCi/L	170	EPA906.0

SAMPLE NAME: D43112002 Sample ID: 100307

Location (SRS Coordinates): .E .N
Ground Elevation Above MSL: . ft
Depth of Core Interval: . to . ft
Sample Type: Normal Sample Matrix: Water Sample Moisture: Liquid

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
pH	J	Q		6.0	pH	0.010	EPA9045
Total dissolved solids				53	mg/L	5.0	EPA160.2
Total organic carbon				2.3	mg/L	0.50	EPA415.1
Total suspended solids				9.0	mg/L	5.0	EPA160.2
Total Metals							
Arsenic	U			10	µg/L	10	EPA7060
Barium	U			200	µg/L	200	EPA6010
Cadmium	UJ	L		5.0	µg/L	5.0	EPA6010
Chromium	U			10	µg/L	10	EPA6010
Copper	UJ	L		25	µg/L	25	EPA6010
Iron				620	µg/L	100	EPA6010
Lead	U			3.0	µg/L	3.0	EPA7421
Manganese				760	µg/L	15	EPA6010
Mercury	U			0.20	µg/L	0.20	EPA7470
Nickel	U			40	µg/L	40	EPA6010
Selenium	U			5.0	µg/L	5.0	EPA7740
Silver	U			10	µg/L	10	EPA6010
Sodium				7,900	µg/L	5,000	EPA6010

SAMPLE NAME: D43112002 (Continued) Sample ID: 100307

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Acenaphthene	U			9.8	µg/L	9.8	EPA8270
Acenaphthylene	U			9.8	µg/L	9.8	EPA8270
Anthracene	U			9.8	µg/L	9.8	EPA8270
Benzo(a)anthracene	U			9.8	µg/L	9.8	EPA8270
Benzo(b)fluoranthene	U			9.8	µg/L	9.8	EPA8270
Benzo(k)fluoranthene	U			9.8	µg/L	9.8	EPA8270
Benzoic acid	U			49	µg/L	49	EPA8270
Benzo(g,h.i)perylene	U			9.8	µg/L	9.8	EPA8270
Benzo(a)pyrene	U			9.8	µg/L	9.8	EPA8270
Benzyl alcohol	U			9.8	µg/L	9.8	EPA8270
Bis(2-chloroethoxy) methane	U			9.8	µg/L	9.8	EPA8270
Bis(2-chloroethyl) ether	U			9.8	µg/L	9.8	EPA8270
Bis(2-chloroisopropyl) ether	U			9.8	µg/L	9.8	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V		2.4	µg/L	9.8	EPA8270
4-Bromophenyl phenyl ether	U			9.8	µg/L	9.8	EPA8270
Butylbenzyl phthalate	U			9.8	µg/L	9.8	EPA8270
4-Chloroaniline	U			9.8	µg/L	9.8	EPA8270
4-Chloro-m-cresol	U			9.8	µg/L	9.8	EPA8270
2-Chloronaphthalene	U			9.8	µg/L	9.8	EPA8270
2-Chlorophenol	U			9.8	µg/L	9.8	EPA8270
4-Chlorophenyl phenyl ether	U			9.8	µg/L	9.8	EPA8270
Chrysene	U			9.8	µg/L	9.8	EPA8270
o-Cresol (2-Methylphenol)	U			9.8	µg/L	9.8	EPA8270
p-Cresol (4-Methylphenol)	U			9.8	µg/L	9.8	EPA8270
Dibenz(a,h)anthracene	U			9.8	µg/L	9.8	EPA8270
Dibenzofuran	U			9.8	µg/L	9.8	EPA8270
Di-n-butyl phthalate	UJ	V		2.8	µg/L	9.8	EPA8270
1,2-Dichlorobenzene	U			9.8	µg/L	9.8	EPA8270
1,3-Dichlorobenzene	U			9.8	µg/L	9.8	EPA8270
1,4-Dichlorobenzene	U			9.8	µg/L	9.8	EPA8270
3,3'-Dichlorobenzidine	U			20	µg/L	20	EPA8270
2,4-Dichlorophenol	U			9.8	µg/L	9.8	EPA8270
Diethyl phthalate	U			9.8	µg/L	9.8	EPA8270
2,4-Dimethyl phenol	U			9.8	µg/L	9.8	EPA8270
Dimethyl phthalate	U			9.8	µg/L	9.8	EPA8270
2,4-Dinitrophenol	U			49	µg/L	49	EPA8270
2,4-Dinitrotoluene	U			9.8	µg/L	9.8	EPA8270
2,6-Dinitrotoluene	U			9.8	µg/L	9.8	EPA8270
Di-n-octyl phthalate	U			9.8	µg/L	9.8	EPA8270
Fluoranthene	U			9.8	µg/L	9.8	EPA8270
Fluorene	U			9.8	µg/L	9.8	EPA8270
Hexachlorobenzene	U			9.8	µg/L	9.8	EPA8270
Hexachlorobutadiene	U			9.8	µg/L	9.8	EPA8270
Hexachlorocyclopentadiene	U			9.8	µg/L	9.8	EPA8270
Hexachloroethane	U			9.8	µg/L	9.8	EPA8270
Indeno(1,2,3-c,d)pyrene	U			9.8	µg/L	9.8	EPA8270
Isophorone	U			9.8	µg/L	9.8	EPA8270
2-Methyl-4,6-dinitrophenol	U			49	µg/L	49	EPA8270
2-Methylnaphthalene	U			9.8	µg/L	9.8	EPA8270
Naphthalene	U			9.8	µg/L	9.8	EPA8270

SAMPLE NAME: D43112002 (Continued) Sample ID: 100307

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
o-Nitroaniline	U			49	µg/L	49	EPA8270
m-Nitroaniline	U			49	µg/L	49	EPA8270
p-Nitroaniline	U			49	µg/L	49	EPA8270
Nitrobenzene	U			9.8	µg/L	9.8	EPA8270
2-Nitrophenol	U			9.8	µg/L	9.8	EPA8270
4-Nitrophenol	U			49	µg/L	49	EPA8270
N-Nitrosodiphenylamine	U			9.8	µg/L	9.8	EPA8270
N-Nitrosodipropylamine	U			9.8	µg/L	9.8	EPA8270
Pentachlorophenol	U			49	µg/L	49	EPA8270
Phenanthrene	U			9.8	µg/L	9.8	EPA8270
Phenol	U			9.8	µg/L	9.8	EPA8270
Pyrene	U			9.8	µg/L	9.8	EPA8270
1,2,4-Trichlorobenzene	U			9.8	µg/L	9.8	EPA8270
2,4,5-Trichlorophenol	U			49	µg/L	49	EPA8270
2,4,6-Trichlorophenol	U			9.8	µg/L	9.8	EPA8270
Unknown	J	NV		4.0	µg/L		EPA8270
Unknown	J	NV		9.0	µg/L		EPA8270
Volatile Organic Compounds							
Acetone	U	V		10	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		26	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D43112002 (Continued) Sample ID: 100307

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha				4.0±1.8	pCi/L	0.90	EPA900.0
Nonvolatile beta		V		5.5±2.2	pCi/L	0.90	EPA900.0
Radium, total alpha-emitting	U			0.10	pCi/L	0.10	EPA903.0
Tritium				810±300	pCi/L	180	EPA906.0

SAMPLE NAME: D43112101 Sample ID: 100305

Location (SRS Coordinates): .E .N
Ground Elevation Above MSL: . ft
Depth of Core Interval: . to . ft
Sample Type: Normal Sample Matrix: Water Sample Moisture: Liquid

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Physical Parameters							
Chloride				5.1	mg/L	0.25	EPA300.0
Fluoride	U			0.10	mg/L	0.10	EPA300.0
Nitrate as nitrogen				1.1	mg/L	0.50	EPA300.0
pH	J	Q		6.1	pH	0.010	EPA9045
Sulfate				7.0	mg/L	5.0	EPA300.0
Total dissolved solids				68	mg/L	5.0	EPA160.2
Total organic carbon				2.2	mg/L	0.50	EPA415.1
Total organic halogens	J	Q		29	µg/L	8.3	EPA9020
Total suspended solids				9.0	mg/L	5.0	EPA160.2
Total Metals							
Arsenic	U			10	µg/L	10	EPA7060
Barium	U			200	µg/L	200	EPA6010
Cadmium	UJ	L		5.0	µg/L	5.0	EPA6010
Chromium	U			10	µg/L	-10	EPA6010
Copper	UJ	L		25	µg/L	25	EPA6010
Iron				400	µg/L	100	EPA6010
Lead				5.3	µg/L	3.0	EPA7421
Manganese				250	µg/L	15	EPA6010
Mercury	U			0.20	µg/L	0.20	EPA7470
Nickel	U			40	µg/L	40	EPA6010
Selenium	U			5.0	µg/L	5.0	EPA7740
Silver	U			10	µg/L	10	EPA6010
Sodium				7,700	µg/L	5,000	EPA6010

B/N/A Extractables (including PAH and phenols)

Acenaphthene	U		14	µg/L	14	EPA8270
Acenaphthylene	U		14	µg/L	14	EPA8270
Anthracene	U		14	µg/L	14	EPA8270
Benzo(a)anthracene	U		14	µg/L	14	EPA8270
Benzo(b)fluoranthene	U		14	µg/L	14	EPA8270
Benzo(k)fluoranthene	U		14	µg/L	14	EPA8270
Benzoic acid	U		70	µg/L	70	EPA8270
Benzo(g,h,i)perylene	U		14	µg/L	14	EPA8270
Benzo(a)pyrene	U		14	µg/L	14	EPA8270
Benzyl alcohol	U		14	µg/L	14	EPA8270
Bis(2-chloroethoxy) methane	U		14	µg/L	14	EPA8270
Bis(2-chloroethyl) ether	U		14	µg/L	14	EPA8270
Bis(2-chloroisopropyl) ether	U		14	µg/L	14	EPA8270
Bis(2-ethylhexyl) phthalate	UJ	V	3.2	µg/L	14	EPA8270
4-Bromophenyl phenyl ether	U		14	µg/L	14	EPA8270
Butylbenzyl phthalate	U		14	µg/L	14	EPA8270
4-Chloroaniline	U		14	µg/L	14	EPA8270
4-Chloro-m-cresol	U		14	µg/L	14	EPA8270
2-Chloronaphthalene	U		14	µg/L	14	EPA8270
2-Chlorophenol	U		14	µg/L	14	EPA8270
4-Chlorophenyl phenyl ether	U		14	µg/L	14	EPA8270
Chrysene	U		14	µg/L	14	EPA8270
o-Cresol (2-Methylphenol)	U		14	µg/L	14	EPA8270
p-Cresol (4-Methylphenol)	U		14	µg/L	14	EPA8270
Dibenz(a,h)anthracene	U		14	µg/L	14	EPA8270
Dibenzofuran	U		14	µg/L	14	EPA8270
Di-n-butyl phthalate	UJ	V	5.2	µg/L	14	EPA8270
1,2-Dichlorobenzene	U		14	µg/L	14	EPA8270
1,3-Dichlorobenzene	U		14	µg/L	14	EPA8270
1,4-Dichlorobenzene	U		14	µg/L	14	EPA8270
3,3'-Dichlorobenzidine	U		28	µg/L	28	EPA8270
2,4-Dichlorophenol	U		14	µg/L	14	EPA8270
Diethyl phthalate	U		14	µg/L	14	EPA8270
2,4-Dimethyl phenol	U		14	µg/L	14	EPA8270
Dimethyl phthalate	U		14	µg/L	14	EPA8270
2,4-Dinitrophenol	U		70	µg/L	70	EPA8270
2,4-Dinitrotoluene	U		14	µg/L	14	EPA8270
2,6-Dinitrotoluene	U		14	µg/L	14	EPA8270
Di-n-octyl phthalate	U		14	µg/L	14	EPA8270
Fluoranthene	U		14	µg/L	14	EPA8270
Fluorene	U		14	µg/L	14	EPA8270
Hexachlorobenzene	U		14	µg/L	14	EPA8270
Hexachlorobutadiene	U		14	µg/L	14	EPA8270
Hexachlorocyclopentadiene	U		14	µg/L	14	EPA8270
Hexachloroethane	U		14	µg/L	14	EPA8270
Indeno(1,2,3-c,d)pyrene	U		14	µg/L	14	EPA8270
Isophorone	U		14	µg/L	14	EPA8270
2-Methyl-4,6-dinitrophenol	U		70	µg/L	70	EPA8270
2-Methylnaphthalene	U		14	µg/L	14	EPA8270
Naphthalene	U		14	µg/L	14	EPA8270
o-Nitroaniline	U		70	µg/L	70	EPA8270
m-Nitroaniline	U		70	µg/L	70	EPA8270
p-Nitroaniline	U		70	µg/L	70	EPA8270

SAMPLE NAME: D43112101 (Continued) Sample ID: 100305

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
B/N/A Extractables (including PAH and phenols)							
Nitrobenzene	U			14	µg/L	14	EPA8270
2-Nitrophenol	U			14	µg/L	14	EPA8270
4-Nitrophenol	U			70	µg/L	70	EPA8270
N-Nitrosodiphenylamine	U			14	µg/L	14	EPA8270
N-Nitrosodipropylamine	U			14	µg/L	14	EPA8270
Pentachlorophenol	U			70	µg/L	70	EPA8270
Phenanthrene	U			14	µg/L	14	EPA8270
Phenol	U			14	µg/L	14	EPA8270
Pyrene	U			14	µg/L	14	EPA8270
1,2,4-Trichlorobenzene	U			14	µg/L	14	EPA8270
2,4,5-Trichlorophenol	U			70	µg/L	70	EPA8270
2,4,6-Trichlorophenol	U			14	µg/L	14	EPA8270
Unknown	J	NV		10	µg/L		EPA8270
Unknown	J	NV		10	µg/L		EPA8270
Volatile Organic Compounds							
Acetone	U	V		10	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		27	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D43112101 (Continued) Sample ID: 100305

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha				2.4±1.4	pCi/L	0.90	EPA900.0
Nonvolatile beta	U	V		1.1±1.7	pCi/L	0.90	EPA900.0
Radium, total alpha-emitting				0.40±0.20	pCi/L	0.20	EPA903.0
Radium, total alpha-emitting				0.50±0.30	pCi/L	0.20	EPA903.0
Tritium				830±310	pCi/L	180	EPA906.0

SAMPLE NAME: D431_1204C Sample ID: 100374

Sample Type: Blank Associated Sample: 100373

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			10	µg/L	10	EPA7060
Arsenic	U			10	µg/L	10	EPA7060
Barium	U			200	µg/L	200	EPA6010
Barium	U			200	µg/L	200	EPA6010
Cadmium	U			5.0	µg/L	5.0	EPA6010
Cadmium	U			5.0	µg/L	5.0	EPA6010
Chromium	U			10	µg/L	10	EPA6010
Chromium	U			10	µg/L	10	EPA6010
Copper	U			25	µg/L	25	EPA6010
Copper	U			25	µg/L	25	EPA6010
Lead	U			3.0	µg/L	3.0	EPA7421
Lead	U			3.0	µg/L	3.0	EPA7421
Manganese	U			15	µg/L	15	EPA6010
Manganese	U			15	µg/L	15	EPA6010
Mercury	U			0.20	µg/L	0.20	EPA7470
Mercury	UJ	Q		0.20	µg/L	0.20	EPA7470
Nickel	U			40	µg/L	40	EPA6010
Nickel	U			40	µg/L	40	EPA6010
Selenium	U			5.0	µg/L	5.0	EPA7740
Selenium	U			5.0	µg/L	5.0	EPA7740
Silver	U			10	µg/L	10	EPA6010
Silver	U			10	µg/L	10	EPA6010
Volatile Organic Compounds							
Acetone	U	V		54	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	J			1.8	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	J			1.5	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	J			2.1	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D431 1204C (Continued) Sample ID: 100374

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			0.50	pCi/L	0.50	EPA900.0
Gross alpha	U			0.50	pCi/L	0.50	EPA900.0
Gross alpha	U			0.50	pCi/L	0.50	EPA900.0
Gross alpha	U			0.50	pCi/L	0.50	EPA900.0
Nonvolatile beta	J	X		2.3±1.7	pCi/L	0.70	EPA900.0
Nonvolatile beta	UJ	X		0.70	pCi/L	0.70	EPA900.0
Nonvolatile beta	U			0.70	pCi/L	0.70	EPA900.0
Nonvolatile beta				2.3±1.7	pCi/L	0.70	EPA900.0
Radium, total alpha-emitting	U	V		0.10	pCi/L	0.10	EPA903.0
Radium, total alpha-emitting	U	V		0.20±0.20	pCi/L	0.20	EPA903.0
Radium, total alpha-emitting	U	V		0.20	pCi/L	0.20	EPA903.0
Radium, total alpha-emitting	U	V		0.10	pCi/L	0.10	EPA903.0
Tritium	U			140	pCi/L	140	EPA906.0
Tritium	U			130	pCi/L	130	EPA906.0
Tritium	U			130	pCi/L	130	EPA906.0
Tritium	U			140	pCi/L	140	EPA906.0

SAMPLE NAME: D431 1301B Sample ID: 100380

Sample Type: Blank Associated Sample: 100379

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	U	V		9.1	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240

SAMPLE NAME: D431_1301B (Continued) Sample ID: 100380

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	J			4.4	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			0.50	pCi/L	0.50	EPA900.0
Nonvolatile beta	U	X		0.70	pCi/L	0.70	EPA900.0
Radium, total alpha-emitting	U	V		0.10	pCi/L	0.10	EPA903.0
Tritium	U			130	pCi/L	130	EPA906.0

SAMPLE NAME: D431 1304E Sample ID: 100384

Sample Type: Rinsate Associated Sample: 100383

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			10	µg/L	10	EPA7060
Barium	U			200	µg/L	200	EPA6010
Cadmium	U			5.0	µg/L	5.0	EPA6010
Chromium	U			10	µg/L	10	EPA6010
Copper	U			25	µg/L	25	EPA6010
Lead	U			3.0	µg/L	3.0	EPA7421
Manganese	U			15	µg/L	15	EPA6010

SAMPLE NAME: D431 1304E (Continued) Sample ID: 100384

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Mercury	U			0.20	µg/L	0.20	EPA7470
Nickel	U			40	µg/L	40	EPA6010
Selenium	U			5.0	µg/L	5.0	EPA7740
Silver	U			10	µg/L	10	EPA6010
Volatile Organic Compounds							
Acetone		V		39	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	J			3.1	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone				22	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			0.50	pCi/L	0.50	EPA900.0
Nonvolatile beta		X		0.80±1.6	pCi/L	0.70	EPA900.0
Radium, total alpha-emitting	U	V		0.10	pCi/L	0.10	EPA903.0
Tritium	U			140	pCi/L	140	EPA906.0

SAMPLE NAME: D431-1406C Sample ID: 100397

Sample Type: Blank Associated Sample: 100396

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			10	µg/L	10	EPA7060
Barium	U			200	µg/L	200	EPA6010
Cadmium	U			5.0	µg/L	5.0	EPA6010
Chromium	U			10	µg/L	10	EPA6010
Copper	U			25	µg/L	25	EPA6010
Lead	U			3.0	µg/L	3.0	EPA7421
Manganese	U			15	µg/L	15	EPA6010
Mercury	U			0.20	µg/L	0.20	EPA7470
Nickel	U			40	µg/L	40	EPA6010
Selenium	U			5.0	µg/L	5.0	EPA7740
Silver	U			10	µg/L	10	EPA6010
Volatile Organic Compounds							
Acetone				34	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone				27	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240

Radionuclide Indicators and Radionuclides

Gross alpha	U		0.50	pCi/L	0.50	EPA900.0
Nonvolatile beta	U	X	0.70	pCi/L	0.70	EPA900.0
Radium, total alpha-emitting	U	V	0.10	pCi/L	0.10	EPA903.0
Tritium	U		130	pCi/L	130	EPA906.0

SAMPLE NAME: D431 1708C Sample ID: 100437

Sample Type: Blank Associated Sample: 100436

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone		V		130	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon-disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		15	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone				14	µg/L	10	EPA8240
Methyl ethyl ketone				55	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D431 1802C Sample ID: 100403

Sample Type: Blank Associated Sample: 100401

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			10	µg/L	10	EPA7060
Barium	U			200	µg/L	200	EPA6010
Cadmium	U			5.0	µg/L	5.0	EPA6010
Chromium	U			10	µg/L	10	EPA6010
Copper	U			25	µg/L	25	EPA6010
Lead	U			3.0	µg/L	3.0	EPA7421
Manganese	U			15	µg/L	15	EPA6010
Mercury	U			0.20	µg/L	0.20	EPA7470
Nickel	U			40	µg/L	40	EPA6010
Selenium	U			5.0	µg/L	5.0	EPA7740
Silver	U			10	µg/L	10	EPA6010
Volatile Organic Compounds							
Acetone				110	µg/L	10	EPA8240
Acetone				110	µg/L	10	EPA8240
Acetone				130	µg/L	10	EPA8240
Benzene	UJ	CI	H	5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D431 1802C (Continued) Sample ID: 100403

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	J			8.1	µg/L	10	EPA8240
2-Hexanone	J			8.7	µg/L	10	EPA8240
2-Hexanone				9.7	µg/L	10	EPA8240
Methyl ethyl ketone				36	µg/L	10	EPA8240
Methyl ethyl ketone				35	µg/L	10	EPA8240
Methyl ethyl ketone				42	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D431 1802C (Continued) Sample ID: 100403

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			0.50	pCi/L	0.50	EPA900.0
Nonvolatile beta	U	X		0.70	pCi/L	0.70	EPA900.0
Radium, total alpha-emitting	U	V		1.1	pCi/L	1.1	EPA903.0
Tritium	U			130	pCi/L	130	EPA906.0

SAMPLE NAME: D431 2302B Sample ID: 100316

Sample Type: Blank Associated Sample: 100313

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone		Y		20	µg/L	10	EPA8240
Benzene	U	Y		5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U	Y		5.0	µg/L	5.0	EPA8240
Bromoform	U	Y		5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U	Y		10	µg/L	10	EPA8240
Carbon disulfide	U	Y		5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U	Y		5.0	µg/L	5.0	EPA8240
Chlorobenzene	U	Y		5.0	µg/L	5.0	EPA8240
Chloroethane	U	Y		10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U	Y		10	µg/L	10	EPA8240
Chloroform	U	Y		5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U	Y		10	µg/L	10	EPA8240
Dibromochloromethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U	Y		5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U	Y		5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U	Y		5.0	µg/L	5.0	EPA8240
Ethylbenzene	U	Y		5.0	µg/L	5.0	EPA8240
2-Hexanone	U	Y		10	µg/L	10	EPA8240
Methyl ethyl ketone	U	Y		10	µg/L	10	EPA8240
Methyl isobutyl ketone	U	Y		10	µg/L	10	EPA8240

SAMPLE NAME: D431 2302B (Continued) Sample ID: 100316

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Styrene	U	Y		5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
Toluene	U	Y		5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
Trichloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
Vinyl acetate	U	Y		10	µg/L	10	EPA8240
Xylenes	U	Y		5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U	Y		0.50	pCi/L	0.50	EPA900.0
Nonvolatile beta	U	YX		0.50	pCi/L	0.50	EPA900.0
Radium, total alpha-emitting	U	Y		0.10	pCi/L	0.10	EPA903.0
Tritium	U	Y		160	pCi/L	160	EPA906.0

SAMPLE NAME: D431 2302E Sample ID: 100315

Sample Type: Rinsate Associated Sample: 100313

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U	Y		10	µg/L	10	EPA7060
Barium	U	Y		200	µg/L	200	EPA6010
Cadmium	U	Y		5.0	µg/L	5.0	EPA6010
Chromium	U	Y		10	µg/L	10	EPA6010
Copper	U	Y		25	µg/L	25	EPA6010
Lead	U	YV		3.0	µg/L	3.0	EPA7421
Manganese	U	Y		15	µg/L	15	EPA6010
Mercury	U	Y		0.20	µg/L	0.20	EPA7470
Nickel	U	Y		40	µg/L	40	EPA6010
Selenium	U	Y		5.0	µg/L	5.0	EPA7740
Silver	U	Y		10	µg/L	10	EPA6010
Volatile Organic Compounds							
Acetone	J	Y		64	µg/L	10	EPA8240
Acetone	J	Y		60	µg/L	10	EPA8240
Acetone	J	Y		63	µg/L	10	EPA8240
Benzene	U	Y		5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U	Y		5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U	Y		5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U	Y		5.0	µg/L	5.0	EPA8240
Bromoform	U	Y		5.0	µg/L	5.0	EPA8240
Bromoform	U	Y		5.0	µg/L	5.0	EPA8240
Bromoform	U	Y		5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D431 2302E (Continued) Sample ID: 100315

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Bromomethane (Methyl bromide)	U	Y		10	µg/L	10	EPA8240
Bromomethane (Methyl bromide)	U	Y		10	µg/L	10	EPA8240
Bromomethane (Methyl bromide)	U	Y		10	µg/L	10	EPA8240
Carbon disulfide	U	Y		5.0	µg/L	5.0	EPA8240
Carbon disulfide	U	Y		5.0	µg/L	5.0	EPA8240
Carbon disulfide	U	Y		5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U	Y		5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U	Y		5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U	Y		5.0	µg/L	5.0	EPA8240
Chlorobenzene	U	Y		5.0	µg/L	5.0	EPA8240
Chloroethane	U	Y		10	µg/L	10	EPA8240
Chloroethane	U	Y		10	µg/L	10	EPA8240
Chloroethane	U	Y		10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U	Y		10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U	Y		10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U	Y		10	µg/L	10	EPA8240
Chloroform	U	Y		5.0	µg/L	5.0	EPA8240
Chloroform	U	Y		5.0	µg/L	5.0	EPA8240
Chloroform	U	Y		5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U	Y		10	µg/L	10	EPA8240
Chloromethane (Methyl chloride)	U	Y		10	µg/L	10	EPA8240
Chloromethane (Methyl chloride)	U	Y		10	µg/L	10	EPA8240
Dibromochloromethane	U	Y		5.0	µg/L	5.0	EPA8240
Dibromochloromethane	U	Y		5.0	µg/L	5.0	EPA8240
Dibromochloromethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U	Y		5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U	Y		5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U	Y		5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U	Y		5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U	Y		5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U	Y		5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U	Y		5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U	Y		5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U	Y		5.0	µg/L	5.0	EPA8240
Ethylbenzene	U	Y		5.0	µg/L	5.0	EPA8240
Ethylbenzene	U	Y		5.0	µg/L	5.0	EPA8240
Ethylbenzene	U	Y		5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D431 2302E (Continued) Sample ID: 100315

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
2-Hexanone	U	Y		10	µg/L	10	EPA8240
2-Hexanone	U	Y		10	µg/L	10	EPA8240
2-Hexanone	U	Y		10	µg/L	10	EPA8240
Methyl ethyl ketone	U	Y		10	µg/L	10	EPA8240
Methyl ethyl ketone	U	Y		10	µg/L	10	EPA8240
Methyl ethyl ketone	U	Y		10	µg/L	10	EPA8240
Methyl isobutyl ketone	U	Y		10	µg/L	10	EPA8240
Methyl isobutyl ketone	U	Y		10	µg/L	10	EPA8240
Methyl isobutyl ketone	U	Y		10	µg/L	10	EPA8240
Styrene	U	Y		5.0	µg/L	5.0	EPA8240
Styrene	U	Y		5.0	µg/L	5.0	EPA8240
Styrene	U	Y		5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
Toluene	U	Y		5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
Trichloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
Vinyl acetate	U	Y		10	µg/L	10	EPA8240
Vinyl acetate	U	Y		10	µg/L	10	EPA8240
Vinyl acetate	U	Y		10	µg/L	10	EPA8240
2-Propanol	J	YN		100	µg/L		EPA8240
Xylenes	U	Y		5.0	µg/L	5.0	EPA8240
Xylenes	U	Y		5.0	µg/L	5.0	EPA8240
Xylenes	U	Y		5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U	Y		0.50	pCi/L	0.50	EPA900.0
Gross alpha	U	Y		0.50	pCi/L	0.50	EPA900.0
Nonvolatile beta	J	YX		1.0±1.6	pCi/L	0.50	EPA900.0
Nonvolatile beta	J	YX		4.2±2.0	pCi/L	0.50	EPA900.0
Radium, total alpha-emitting	U	Y		0.10	pCi/L	0.10	EPA903.0
Radium, total alpha-emitting	U	Y		0.10	pCi/L	0.10	EPA903.0
Tritium	U	Y		160	pCi/L	160	EPA906.0
Tritium	U	Y		170	pCi/L	170	EPA906.0

SAMPLE NAME: D431 2602C Sample ID: 100302

Sample Type: Blank Associated Sample: 100301

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone		V		190	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		32	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone				24	µg/L	10	EPA8240
Methyl ethyl ketone				99	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			0.60	pCi/L	0.60	EPA900.0
Gross alpha	U			0.70	pCi/L	0.70	EPA900.0
Nonvolatile beta	U	V		1.4±1.6	pCi/L	0.80	EPA900.0
Nonvolatile beta	U	V		0.80	pCi/L	0.80	EPA900.0
Radium, total alpha-emitting	U			0.10	pCi/L	0.10	EPA903.0
Tritium	U			160	pCi/L	160	EPA906.0

SAMPLE NAME: D43110705E Sample ID: 100325

Sample Type: Rinsate Associated Sample: 100322

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U	Y		10	µg/L	10	EPA7060
Barium	U	Y		200	µg/L	200	EPA6010
Cadmium	U	Y		5.0	µg/L	5.0	EPA6010
Chromium	U	Y		10	µg/L	10	EPA6010
Copper	U	Y		25	µg/L	25	EPA6010
Lead	U	YV		3.0	µg/L	3.0	EPA7421
Manganese	U	Y		15	µg/L	15	EPA6010
Mercury	U	Y		0.20	µg/L	0.20	EPA7470
Nickel	U	Y		40	µg/L	40	EPA6010
Selenium	U	Y		5.0	µg/L	5.0	EPA7740
Silver	U	Y		10	µg/L	10	EPA6010
Volatile Organic Compounds							
Acetone	J	Y		120	µg/L	10	EPA8240
Benzene	U	Y		5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U	Y		5.0	µg/L	5.0	EPA8240
Bromoform	U	Y		5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U	Y		10	µg/L	10	EPA8240
Carbon disulfide	U	Y		5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U	Y		5.0	µg/L	5.0	EPA8240
Chlorobenzene	U	Y		5.0	µg/L	5.0	EPA8240
Chloroethane	U	Y		10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U	Y		10	µg/L	10	EPA8240
Chloroform	U	Y		5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U	Y		10	µg/L	10	EPA8240
Dibromochloromethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U	Y		5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U	Y		5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U	Y		5.0	µg/L	5.0	EPA8240
Ethylbenzene	U	Y		5.0	µg/L	5.0	EPA8240
2-Hexanone	U	Y		10	µg/L	10	EPA8240
Methyl ethyl ketone	U	Y		10	µg/L	10	EPA8240
Methyl isobutyl ketone	U	Y		10	µg/L	10	EPA8240
Styrene	U	Y		5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
Toluene	U	Y		5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
Trichloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
Vinyl acetate	U	Y		10	µg/L	10	EPA8240
2-Propanol	J	YN		300	µg/L		EPA8240

SAMPLE NAME: D43110705E (Continued) Sample ID: 100325

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Xylenes	U	Y		5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U	Y		0.50	pCi/L	0.50	EPA900.0
Nonvolatile beta	U	YX		0.50	pCi/L	0.50	EPA900.0
Radium, total alpha-emitting	U	Y		0.10	pCi/L	0.10	EPA903.0
Tritium	U	Y		170	pCi/L	170	EPA906.0

SAMPLE NAME: D43110706C Sample ID: 100327

Sample Type: Blank Associated Sample: 100326

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			10	µg/L	10	EPA7060
Barium	U			200	µg/L	200	EPA6010
Cadmium	U			5.0	µg/L	5.0	EPA6010
Chromium	U			10	µg/L	10	EPA6010
Copper	U			25	µg/L	25	EPA6010
Lead	U			3.0	µg/L	3.0	EPA7421
Manganese	U			15	µg/L	15	EPA6010
Mercury	U			0.20	µg/L	0.20	EPA7470
Nickel	U			40	µg/L	40	EPA6010
Selenium	U			5.0	µg/L	5.0	EPA7740
Silver	U			10	µg/L	10	EPA6010
Volatile Organic Compounds							
Acetone				26	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D431-10706C (Continued) Sample ID: 100327

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			0.60	pCi/L	0.60	EPA900.0
Gross alpha	U			0.60	pCi/L	0.60	EPA900.0
Nonvolatile beta				4.9±2.0	pCi/L	1.0	EPA900.0
Radium, total alpha-emitting	U			0.10	pCi/L	0.10	EPA903.0
Radium, total alpha-emitting	U			0.20	pCi/L	0.20	EPA903.0
Tritium	U			140	pCi/L	140	EPA906.0
Tritium	U			140	pCi/L	140	EPA906.0

SAMPLE NAME: D43110804C Sample ID: 100333

Sample Type: Blank Associated Sample: 100332

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			10	µg/L	10	EPA7060
Barium	U			200	µg/L	200	EPA6010
Cadmium	U			5.0	µg/L	5.0	EPA6010
Chromium	U			10	µg/L	10	EPA6010
Copper	U			25	µg/L	25	EPA6010
Lead	U			3.0	µg/L	3.0	EPA7421
Manganese	U			15	µg/L	15	EPA6010
Mercury	U			0.20	µg/L	0.20	EPA7470
Nickel	U			40	µg/L	40	EPA6010
Selenium	U			5.0	µg/L	5.0	EPA7740
Silver	U			10	µg/L	10	EPA6010

SAMPLE NAME: D43110804C (Continued) Sample ID: 100333

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	J	O	L	28	µg/L	10	EPA8240
Acetone	J	O	L	28	µg/L	10	EPA8240
Benzene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Benzene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Bromodichloromethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
Bromodichloromethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
Bromoform	UJ	O	L	5.0	µg/L	5.0	EPA8240
Bromoform	UJ	O	L	5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	UJ	O	L	10	µg/L	10	EPA8240
Bromomethane (Methyl bromide)	UJ	O	L	10	µg/L	10	EPA8240
Carbon disulfide	UJ	O	L	5.0	µg/L	5.0	EPA8240
Carbon disulfide	UJ	O	L	5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	UJ	O	L	5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	UJ	O	L	5.0	µg/L	5.0	EPA8240
Chlorobenzene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Chlorobenzene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Chloroethane	UJ	O	L	10	µg/L	10	EPA8240
Chloroethane	UJ	O	L	10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	UJ	O	L	10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	UJ	O	L	10	µg/L	10	EPA8240
Chloroform	UJ	O	L	5.0	µg/L	5.0	EPA8240
Chloroform	UJ	O	L	5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	UJ	O	L	10	µg/L	10	EPA8240
Chloromethane (Methyl chloride)	UJ	O	L	10	µg/L	10	EPA8240
Dibromochloromethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
Dibromochloromethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	UJ	O	L	5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	UJ	O	L	5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	UJ	O	L	5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	UJ	O	L	5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	UJ	O	L	5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Ethylbenzene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Ethylbenzene	UJ	O	L	5.0	µg/L	5.0	EPA8240
2-Hexanone	UJ	O	L	10	µg/L	10	EPA8240
2-Hexanone	UJ	O	L	10	µg/L	10	EPA8240
Methyl ethyl ketone	UJ	O	L	10	µg/L	10	EPA8240
Methyl ethyl ketone	UJ	O	L	10	µg/L	10	EPA8240
Methyl isobutyl ketone	UJ	O	L	10	µg/L	10	EPA8240
Methyl isobutyl ketone	UJ	O	L	10	µg/L	10	EPA8240

SAMPLE NAME: D43110804C (Continued) Sample ID: 100333

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Styrene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Styrene	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Toluene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Toluene	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
Trichloroethylene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Trichloroethylene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Vinyl acetate	UJ	O	L	10	µg/L	10	EPA8240
Vinyl acetate	UJ	O	L	10	µg/L	10	EPA8240
Xylenes	UJ	O	L	5.0	µg/L	5.0	EPA8240
Xylenes	UJ	O	L	5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			0.60	pCi/L	0.60	EPA900.0
Nonvolatile beta				2.3±1.7	pCi/L	1.0	EPA900.0
Radium, total alpha-emitting	U			0.10	pCi/L	0.10	EPA903.0
Tritium				270±220	pCi/L	150	EPA906.0

SAMPLE NAME: D43110807B Sample ID: 100339

Sample Type: Blank Associated Sample: 100337

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	J	O	L	11	µg/L	10	EPA8240
Acetone	UJ	O	L	10	µg/L	10	EPA8240
Benzene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Benzene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Bromodichloromethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
Bromodichloromethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
Bromoform	UJ	O	L	5.0	µg/L	5.0	EPA8240
Bromoform	UJ	O	L	5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	UJ	O	L	10	µg/L	10	EPA8240
Bromomethane (Methyl bromide)	UJ	O	L	10	µg/L	10	EPA8240
Carbon disulfide	UJ	O	L	5.0	µg/L	5.0	EPA8240
Carbon disulfide	UJ	O	L	5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	UJ	O	L	5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	UJ	O	L	5.0	µg/L	5.0	EPA8240
Chlorobenzene	UJ	O	L	5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D43110807B (Continued) Sample ID: 100339

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Chlorobenzene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Chloroethane	UJ	O	L	10	µg/L	10	EPA8240
Chloroethane	UJ	O	L	10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	UJ	O	L	10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	UJ	O	L	10	µg/L	10	EPA8240
Chloroform	UJ	O	L	5.0	µg/L	5.0	EPA8240
Chloroform	UJ	O	L	5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	UJ	O	L	10	µg/L	10	EPA8240
Chloromethane (Methyl chloride)	UJ	O	L	10	µg/L	10	EPA8240
Dibromochloromethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
Dibromochloromethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	UJ	O	L	5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	UJ	O	L	5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	UJ	O	L	5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	UJ	O	L	5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	UJ	O	L	5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Ethylbenzene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Ethylbenzene	UJ	O	L	5.0	µg/L	5.0	EPA8240
2-Hexanone	UJ	O	L	10	µg/L	10	EPA8240
2-Hexanone	UJ	O	L	10	µg/L	10	EPA8240
Methyl ethyl ketone	UJ	O	L	10	µg/L	10	EPA8240
Methyl ethyl ketone	UJ	O	L	10	µg/L	10	EPA8240
Methyl isobutyl ketone	UJ	O	L	10	µg/L	10	EPA8240
Methyl isobutyl ketone	UJ	O	L	10	µg/L	10	EPA8240
Styrene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Styrene	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Toluene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Toluene	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	UJ	O	L	5.0	µg/L	5.0	EPA8240
Trichloroethylene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Trichloroethylene	UJ	O	L	5.0	µg/L	5.0	EPA8240
Vinyl acetate	UJ	O	L	10	µg/L	10	EPA8240

SAMPLE NAME: D43110807B (Continued) Sample ID: 100339

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Vinyl acetate	UJ	O	L	10	µg/L	10	EPA8240
Xylenes	UJ	O	L	5.0	µg/L	5.0	EPA8240
Xylenes	UJ	O	L	5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			0.60	pCi/L	0.60	EPA900.0
Nonvolatile beta	U			1.0	pCi/L	1.0	EPA900.0
Radium, total alpha-emitting				0.10±0.10	pCi/L	0.10	EPA903.0
Tritium	U			140	pCi/L	140	EPA906.0

SAMPLE NAME: D43110901E Sample ID: 100342

Sample Type: Rinsate Associated Sample: 100340

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			10	µg/L	10	EPA7060
Barium	U			200	µg/L	200	EPA6010
Cadmium	U			5.0	µg/L	5.0	EPA6010
Chromium	U			10	µg/L	10	EPA6010
Copper	U			25	µg/L	25	EPA6010
Lead	U			3.0	µg/L	3.0	EPA7421
Manganese	U			15	µg/L	15	EPA6010
Mercury	U			0.20	µg/L	0.20	EPA7470
Nickel	U			40	µg/L	40	EPA6010
Selenium	U			5.0	µg/L	5.0	EPA7740
Silver	U			10	µg/L	10	EPA6010
Volatile Organic Compounds							
Acetone				42	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D43110901E (Continued) Sample ID: 100342

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
2-Propanol	J	N		40	µg/L		EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			0.60	pCi/L	0.60	EPA900.0
Nonvolatile beta	U			1.1	pCi/L	1.1	EPA900.0
Radium, total alpha-emitting	U			0.10	pCi/L	0.10	EPA903.0
Tritium	U			140	pCi/L	140	EPA906.0

SAMPLE NAME: D43110906C Sample ID: 100348

Sample Type: Blank Associated Sample: 100347

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			10	µg/L	10	EPA7060
Barium	U			200	µg/L	200	EPA6010
Cadmium	UJ	L		5.0	µg/L	5.0	EPA6010
Chromium	UJ	L		10	µg/L	10	EPA6010
Copper				32	µg/L	25	EPA6010
Lead	U			3.0	µg/L	3.0	EPA7421
Manganese	U			15	µg/L	15	EPA6010
Mercury	U			0.20	µg/L	0.20	EPA7470
Nickel	U			40	µg/L	40	EPA6010
Selenium	U			5.0	µg/L	5.0	EPA7740
Silver	U			10	µg/L	10	EPA6010

SAMPLE NAME: D43110906C (Continued) Sample ID: 100348

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone				50	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone				21	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			0.50	pCi/L	0.50	EPA900.0
Gross alpha	U			0.50	pCi/L	0.50	EPA900.0
Nonvolatile beta	U			0.60	pCi/L	0.60	EPA900.0
Nonvolatile beta	U			0.60	pCi/L	0.60	EPA900.0
Radium, total alpha-emitting	U	V		0.20	pCi/L	0.20	EPA903.0
Radium, total alpha-emitting	U	V		0.40±0.20	pCi/L	0.20	EPA903.0
Tritium	U			150	pCi/L	150	EPA906.0
Tritium	U			150	pCi/L	150	EPA906.0

SAMPLE NAME: D43111001B Sample ID: 100351

Sample Type: Blank Associated Sample: 100350

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	U			10	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10.	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			0.50	pCi/L	0.50	EPA900.0
Nonvolatile beta	U			0.60	pCi/L	0.60	EPA900.0
Radium, total alpha-emitting	U	V		0.20	pCi/L	0.20	EPA903.0
Tritium				260±220	pCi/L	150	EPA906.0

SAMPLE NAME: D431I1004E Sample ID: 100355

Sample Type: Rinsate Associated Sample: 100354

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			10	µg/L	10	EPA7060
Barium	U			200	µg/L	200	EPA6010
Cadmium	UJ	L		5.0	µg/L	5.0	EPA6010
Chromium	UJ	L		10	µg/L	10	EPA6010
Copper				33	µg/L	25	EPA6010
Lead	U			3.0	µg/L	3.0	EPA7421
Manganese	U			15	µg/L	15	EPA6010
Mercury	U			0.20	µg/L	0.20	EPA7470
Nickel	U			40	µg/L	40	EPA6010
Selenium	U			5.0	µg/L	5.0	EPA7740
Silver	U			10	µg/L	10	EPA6010
Volatile Organic Compounds							
Acetone				54	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone				27	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D43111004E (Continued) Sample ID: 100355

Radionuclide Indicators and Radionuclides

Gross alpha	U		0.50	pCi/L	0.50	EPA900.0
Nonvolatile beta	U		0.60	pCi/L	0.60	EPA900.0
Radium, total alpha-emitting	U	V	0.30±0.20	pCi/L	0.20	EPA903.0
Tritium			160±210	pCi/L	150	EPA906.0

SAMPLE NAME: D43111007C Sample ID: 100360

Sample Type: Blank Associated Sample: 100359

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			10	µg/L	10	EPA7060
Barium	U			200	µg/L	200	EPA6010
Cadmium	UJ	L		5.0	µg/L	5.0	EPA6010
Chromium	UJ	L		10	µg/L	10	EPA6010
Copper	U			25	µg/L	25	EPA6010
Lead	U			3.0	µg/L	3.0	EPA7421
Manganese	U			15	µg/L	15	EPA6010
Mercury	U			0.20	µg/L	0.20	EPA7470
Nickel	U			40	µg/L	40	EPA6010
Selenium	U			5.0	µg/L	5.0	EPA7740
Silver	U			10	µg/L	10	EPA6010
Volatile Organic Compounds							
Acetone				23	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone				12	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240

SAMPLE NAME: D43111007C (Continued) Sample ID: 100360

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			0.50	pCi/L	0.50	EPA900.0
Nonvolatile beta	U			0.60	pCi/L	0.60	EPA900.0
Radium, total alpha-emitting	U	V		0.20	pCi/L	0.20	EPA903.0
Tritium	U			150	pCi/L	150	EPA906.0

SAMPLE NAME: D43111502B Sample ID: 100409

Sample Type: Blank Associated Sample: 100[illegible]

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	U			10	µg/L	10	EPA8240
Benzene	UJ	C		5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240

SAMPLE NAME: D43111502B (Continued) Sample ID: 100409

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			0.50	pCi/L	0.50	EPA900.0
Nonvolatile beta	U	X		0.70	pCi/L	0.70	EPA900.0
Radium, total alpha-emitting	U	V		0.10	pCi/L	0.10	EPA903.0
Tritium				160±190	pCi/L	130	EPA906.0

SAMPLE NAME: D43111505B Sample ID: 100413

Sample Type: Blank Associated Sample: 100412

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone				15	µg/L	10	EPA8240
Benzene	UJ	C		5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240

SAMPLE NAME: D43111505B (Continued) Sample ID: 100413

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D43111506E Sample ID: 100416

Sample Type: Rinsate Associated Sample: 100414

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	L	YV		6,800	µg/L	10	EPA8240
Acetone		YV		45,000	µg/L	5,000	EPA8240
Benzene	U	Y		5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U	Y		5.0	µg/L	5.0	EPA8240
Bromoform	U	Y		5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U	Y		10	µg/L	10	EPA8240
Carbon disulfide	U	Y		5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U	Y		5.0	µg/L	5.0	EPA8240
Chlorobenzene	U	Y		5.0	µg/L	5.0	EPA8240
Chloroethane	U	Y		10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U	Y		10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U	Y		10	µg/L	10	EPA8240
Chloroform	U	Y		5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U	Y		10	µg/L	10	EPA8240
Dibromochloromethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U	YV		7.0	µg/L	5.0	EPA8240
1,2-Dichloropropane	U	Y		5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U	Y		5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U	Y		5.0	µg/L	5.0	EPA8240
Ethylbenzene	U	Y		5.0	µg/L	5.0	EPA8240
2-Hexanone	U	Y		10	µg/L	10	EPA8240
Methyl ethyl ketone	J	Y		9.8	µg/L	10	EPA8240
Methyl isobutyl ketone	U	Y		10	µg/L	10	EPA8240
Styrene	U	Y		5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U	Y		5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D43111506E (Continued) Sample ID: 100416

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Tetrachloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
Toluene	U	Y		5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U	Y		5.0	µg/L	5.0	EPA8240
Trichloroethylene	U	Y		5.0	µg/L	5.0	EPA8240
Unknown	J	N		9,000	µg/L		EPA8240
Vinyl acetate	U	Y		10	µg/L	10	EPA8240
Xylenes	U	Y		5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D43111603C Sample ID: 100420

Sample Type: Blank Associated Sample: 100419

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Total Metals							
Arsenic	U			10	µg/L	10	EPA7060
Arsenic	U			10	µg/L	10	EPA7060
Barium	U			200	µg/L	200	EPA6010
Barium	U			200	µg/L	200	EPA6010
Cadmium	U			5.0	µg/L	5.0	EPA6010
Cadmium	U			5.0	µg/L	5.0	EPA6010
Chromium	U			10	µg/L	10	EPA6010
Chromium	U			10	µg/L	10	EPA6010
Copper	U			25	µg/L	25	EPA6010
Copper	U			25	µg/L	25	EPA6010
Lead	U			3.0	µg/L	3.0	EPA7421
Lead	U			3.0	µg/L	3.0	EPA7421
Manganese	U			15	µg/L	15	EPA6010
Manganese	U			15	µg/L	15	EPA6010
Mercury	U			0.20	µg/L	0.20	EPA7470
Nickel	U			40	µg/L	40	EPA6010
Nickel	U			40	µg/L	40	EPA6010
Selenium	U			5.0	µg/L	5.0	EPA7740
Selenium	U			5.0	µg/L	5.0	EPA7740
Silver	U			10	µg/L	10	EPA6010
Silver	U			10	µg/L	10	EPA6010
Volatile Organic Compounds							
Acetone				140	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	J			1.9	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240

SAMPLE NAME: D43111603C (Continued) Sample ID: 100420

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	UJ	V		2.3	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone				35	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha	U			0.50	pCi/L	0.50	EPA900.0
Gross alpha	U			0.50	pCi/L	0.50	EPA900.0
Nonvolatile beta	U			0.70	pCi/L	0.70	EPA900.0
Nonvolatile beta	U			0.70	pCi/L	0.70	EPA900.0
Nonvolatile beta	U			0.70	pCi/L	0.70	EPA900.0
Nonvolatile beta	U			0.70	pCi/L	0.70	EPA900.0
Radium, total alpha-emitting				0.20±0.20	pCi/L	0.10	EPA903.0
Radium, total alpha-emitting	U			0.10	pCi/L	0.10	EPA903.0
Tritium	J	X		200±200	pCi/L	140	EPA906.0
Tritium	J	X		250±200	pCi/L	140	EPA906.0

SAMPLE NAME: D43112102B Sample ID: 100303

Sample Type: Blank Associated Sample: 100305

Constituent	RQ	AQ	B	Result	Unit	D. Limit	Method
Volatile Organic Compounds							
Acetone	U	V		11	µg/L	10	EPA8240
Benzene	U			5.0	µg/L	5.0	EPA8240
Bromodichloromethane	U			5.0	µg/L	5.0	EPA8240
Bromoform	U			5.0	µg/L	5.0	EPA8240
Bromomethane (Methyl bromide)	U			10	µg/L	10	EPA8240
Carbon disulfide	U			5.0	µg/L	5.0	EPA8240
Carbon tetrachloride	U			5.0	µg/L	5.0	EPA8240
Chlorobenzene	U			5.0	µg/L	5.0	EPA8240
Chloroethane	U			10	µg/L	10	EPA8240
Chloroethene (Vinyl chloride)	U			10	µg/L	10	EPA8240
2-Chloroethyl vinyl ether	U			10	µg/L	10	EPA8240
Chloroform	U			5.0	µg/L	5.0	EPA8240
Chloromethane (Methyl chloride)	U			10	µg/L	10	EPA8240
Dibromochloromethane	U			5.0	µg/L	5.0	EPA8240
1,1-Dichloroethane	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethane	J			1.1	µg/L	5.0	EPA8240
1,1-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
1,2-Dichloroethylene	U			5.0	µg/L	5.0	EPA8240
Dichloromethane (Methylene chloride)	U	V		30	µg/L	5.0	EPA8240
1,2-Dichloropropane	U			5.0	µg/L	5.0	EPA8240
cis-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
trans-1,3-Dichloropropene	U			5.0	µg/L	5.0	EPA8240
Ethylbenzene	U			5.0	µg/L	5.0	EPA8240
2-Hexanone	U			10	µg/L	10	EPA8240
Methyl ethyl ketone	U			10	µg/L	10	EPA8240
Methyl isobutyl ketone	U			10	µg/L	10	EPA8240
Styrene	U			5.0	µg/L	5.0	EPA8240
1,1,2,2-Tetrachloroethane	U			5.0	µg/L	5.0	EPA8240
Tetrachloroethylene	U			5.0	µg/L	5.0	EPA8240
Toluene	U			5.0	µg/L	5.0	EPA8240
1,1,1-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
1,1,2-Trichloroethane	U			5.0	µg/L	5.0	EPA8240
Trichloroethylene	U			5.0	µg/L	5.0	EPA8240
Vinyl acetate	U			10	µg/L	10	EPA8240
Xylenes	U			5.0	µg/L	5.0	EPA8240
Radionuclide Indicators and Radionuclides							
Gross alpha				1.2±1.0	pCi/L	0.60	EPA900.0
Nonvolatile beta	U	V		2.1±1.7	pCi/L	0.80	EPA900.0
Radium, total alpha-emitting	U			0.10	pCi/L	0.10	EPA903.0
Tritium	U			170	pCi/L	170	EPA906.0
Tritium	U			160	pCi/L	160	EPA906.0

APPENDIX C

QUALITY CONTROL SUMMARY REPORT FOR SURFACE WATER AND SEDIMENTS COLLECTED DURING 1994 FOR THE D-AREA BURNING/RUBBLE PITS RFI/RI UNIT ASSESSMENT

(RUST E & I Validation)

QUALITY CONTROL SUMMARY REPORT

FOR SURFACE WATER AND SEDIMENT SAMPLES

COLLECTED DURING MAY 1994

FOR THE

D-AREA BURNING/RUBBLE PITS

RFI/RI UNIT ASSESSMENT

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October 1994

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List of Acronyms

AQ	Analysis Qualifier
BS	Blank Spike
BQ	Bias Qualifier
CLP	Contract Laboratory Program
DOE	Department of Energy
DQOs	Data Quality Objectives
EMSL	Environmental Monitoring Systems Laboratory
EPA	Environmental Protection Agency
EPD/EMS	Environmental Monitoring Section of the Environmental Protection Department
LCS	Laboratory Control Sample
LDDR	Laboratory Data Record Review
PARCC	Precision, Accuracy, Representativeness, Completeness, and Comparability
QA	Quality Assurance
QC	Quality Control
RPD	Relative Percent Difference
RFI/RI	RCRA Facility Investigation / Remedial Investigation
RQ	Result Qualifier
RUST E&I	RUST Environment & Infrastructure
TAL	Target Analyte List
TCL	Target Compound List
TMA	TMA/Eberline, Inc.
VOCs	Volatile Organic Compounds

1.0 Introduction

This report presents a summary of the data validation performed for the surface water and sediment samples collected during May 1994, at the D-Area Burning/Rubble Pits. This work was performed in accordance to the Addendum Surface Water/Sediment Sampling Plan, as presented in Appendix A. The purpose of this report is to verify that all analytical data collected at the D-Area Burning/Rubble Pits for use in developing risk assessment and potential remediation procedures have been validated at the appropriate level. This report documents the data validation procedures performed by RUST Environment & Infrastructure.

2.0 Project Description

During unit characterization sampling conducted in 1993, dry conditions precluded sampling of six of the planned nine surface water locations. During 1994, it was noted that ephemeral stream flow in the planned surface water drainage areas was dominated by high flows traced back to overflow of two cooling water surge tanks connected to river water intake pump houses. Because of surface water and sediment as a result of river water inflow versus water seepage, runoff, or discharge from the unit, surface water and sediment sampling was conducted during May 1994. This new surface water and sediment sampling was conducted in the drainage channel upstream of the power line right-of-way.

The data collected in this investigation are intended to further characterize the nature and extent of chemical residue in the surface water and sediment. In addition, the data supplement existing geochemical data for the purpose of developing risk evaluation and appropriate remedial activities at the D-Area Burning/Rubble Pits (431-D and 431-1D), if necessary.

2.1 Site History

The D-Area Burning/Rubble Pits 431-D and 431-1D are contiguous pits separated by a clay berm. A shallow run-off ditch is located within 50 feet west of the pits. The Savannah River and the associated swamps are approximately 0.5 miles from the rubble pits.

The Burning/Rubble Pits were constructed in 1951 for disposal of spent organic solvents, waste oils, paper, plastics, rubber, wood, rags, cardboard, and degreasers. The waste was burned periodically, typically once a month. The chemical composition and volume of waste disposed of are unknown.

In 1973, the pits were covered with a soil layer and continued to be used for rubble only. During this time until 1983, these pits were filled with concrete, metal lumber, bricks, tile, asphalt, plastic, empty drums, rubber, telephone poles, and other wood products. When the pits were full, they were covered with a clay layer, compacted, mounded, and closed.

2.2 Project Objectives

The purpose of assessment sampling was to further delineate the extent and magnitude of hazardous substance released to surrounding environmental media.

3.0 Analytical Laboratories

Analyses were performed by Roy F. Weston, Inc.-Lionville (PA), TMA/Eberline of Oak Ridge, TN; and General Engineering of Charleston, SC. All the laboratories performing analyses for this project have been certified, or have applied for certification, by SCDHEC.

3.1 Roy F. Weston, Inc.

Roy F. Weston, Inc., Laboratories participated in the EPA Water Pollution Laboratory Performance Evaluation Study (WP030), for which results were reported in June 1993. EPA conducts the water pollution study biannually to certify laboratories for specific analyses. EPA's Environmental Monitoring Systems Laboratory (EMSL) of Cincinnati, Ohio, prepares water samples spiked with known concentrations of constituents found in polluted waters and submits them to all laboratories seeking certification to analyze waste water. EMSL evaluates the results, using limits statistically based on the performance of approximately 100 top-rated laboratories that analyze each constituent by the same procedure as the laboratory being evaluated. Results for two samples of mercury and one sample each of beryllium, orthophosphate, total phosphorous, and non-filterable residue were outside the acceptable range. Results for two samples of selenium and one sample each of silver, chloride, orthophosphate, total phosphorous, and non-filterable residue, although within the acceptable range, were near the acceptable limits. The laboratory was instructed to check for error in the latter two cases.

Weston Laboratories also participated in two EPA Water Supply Laboratory Performance Evaluation Studies, WS031 and WS032, for which results were reported in February and August of 1993. In the former study, results for one sample each of cadmium, zinc, bromodichloromethane, chlorodibromomethane, fluorotrichloroethane, and styrene were outside the acceptable range.

Quality Control Standards

During April and June 1993, the Environmental Monitoring Section of the Environmental Protection Department (EPD/EMS) at the Savannah River Site (SRS) conducted a quality assessment of Weston laboratory by sending them a set of certified environmental quality control (QC) standards from Environmental Resource Associates (ERA) of Arvada, CO (Lot Numbers 418, 549, 3205, 3405, 8910, and 9950).

Weston's results were compared with the ERA-certified values and advisor ranges. Weston did not analyze alachlor, alkalinity (as $CaCO_3$), ammonia nitrogen, atrazine, biological oxygen demand, boron, chemical oxygen demand, dalapon, dinoseb, molybdenum, nitrate-nitrite as nitrogen, nitrogen by Kjeldahl method, pentachlorophenol (by method 8150), pichloram, simarine, or strontium because they are not in the current contract.

Of 96 analyses reported by Weston, 92, or 95.8%, fell within the advisory range.

3.2 TMA/Eberline, Inc.

TMA/Eberline, Inc. (TMA) participated in two types of national performance evaluation programs during 1993. One study, sponsored by EPA's Environmental Monitoring Systems Laboratory (EMSL) of Las Vegas, NV, was conducted from January through August 1993. EMSL provided samples spiked with known concentrations of constituents to laboratories seeking certification to analyze those constituents. TMA submitted results to EPA for certification. One TMA result for gross alpha in water was outside the normalized deviation range of +3.0 to -3.0; however, TMA stated that thorium-230, which was used by EPA, has a 50% lower counting efficiency than americium-241, the EPA-recommended isotope for alpha-absorption efficiency curves. According to TMA, correction for the 50% difference gives a value within range. TMA's result for nonvolatile beta in air filters also was outside of range.

The other program was conducted by the Department of Energy (DOE) and used water, soil, air, and vegetation matrices. Results were reported for March and September 1993. The DOE program does not include a range of acceptable values; instead, the value obtained by the lab is divided by the DOE's known value to give a ratio. For the water and soil samples, one analysis for strontium-90 was outside the ratio range of 0.5 to 1.5. Results for one sample each of americium-241, cesium-137, potassium-40, strontium-90, and uranium mass concentration, although acceptable, fell within the low advisory range of 0.5-0.8. Results for one sample each of americium-241, cesium-137, and plutonium-239, although acceptable, fell within the high advisory range of 1.2-1.5.

4.0 Data Quality

RUST E&I has performed independent QC checks of the field and laboratory procedures that were used in collecting and analyzing the data. The QC checks verify that the data collected are of appropriate quality for the intended data use and that the Data Quality Objectives were met. The analytical procedures, where appropriate, were validated with respect to the EPA Contract Laboratory Program (CLP) "National Functional Guidelines for Organic Data Review" (EPA, June, 1991) and "Functional Guidelines for Evaluating Inorganic Analyses" (EPA, July, 1988). The policy for data qualification is provided in Section 5.0. The field activities and laboratory procedures are discussed in the following sections.

4.1 Assessment of Data Quality Indicators

The assessment of the data quality indicators determines the data usability. The assessment of data quality indicators for either sampling or analysis involves the evaluation of five indicators: precision, accuracy, representativeness, completeness, and comparability. The indicators are commonly referred to as the PARCC parameters.

Precision measures the reproducibility of measurements under a given set of conditions. Specifically, it is the quantitative measure of the variability of a group of measurements compared to the average value. The overall precision of a measurement data is a mixture of sampling and analytical factors. Analytical precision is much easier to control and quantify than sampling precision. Sampling precision may be determined by collecting and analyzing replicate field samples. The analytical results from laboratory replicates provide data on analytical precision. Subtracting the analytical precision from the measurement precision defines the sampling precision.

Accuracy measures the bias in a measurement system. Accuracy is difficult to measure for the entire data collection activity. Sources of error are the sampling process, field contamination preservation, sample handling, sample matrix, sample preparation, and analysis techniques. Analytical accuracy is assessed through use of known and unknown QC samples and spike samples. Accuracy determinations by known samples include single control and duplicate control samples, commonly referred to as laboratory control samples. These are samples that consist of reagent grade water that is spiked with known amounts of target compounds. Percent recovery and percent difference parameters are determined from these samples. Analytical accuracy determinations by unknown samples include the evaluation of matrix interferences in the

environmental samples. These samples also provide percent recovery and percent difference parameters through the use of surrogate and matrix spikes in the environmental samples.

Representativeness expresses the degree to which sample data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, or an environmental condition. Representativeness is a qualitative parameter which is a function of sampling program design. The representativeness criterion is best satisfied by making certain that sampling locations are selected properly and a sufficient number of samples are collected.

Completeness is defined as the percentage of measurements made which are judged to be valid measurements. The completeness goal is essentially the same for all data uses: that a sufficient amount of valid data be generated. It is important that critical samples are collected and valid data achieved for them.

Comparability is a qualitative parameter expressing the confidence with which one data set can be compared with another. Sample data should be comparable with other measurement data for similar samples and sample conditions. This goal is achieved through using standard techniques to collect and analyze representative samples and reporting analytical results in appropriate units. Comparability is limited to the other PARCC parameters because only when precision and accuracy are known can data sets be compared with confidence.

4.1.1 Sampling

The major activity in determining the usability of data based on sampling is assessing the effectiveness of the sampling operations performed.

The measure of completeness is useful for data collection and analysis management. Any decrease in the number of samples from that specified in the Work Plan may affect the final results. The completeness of the field screening and confirmatory samples for this sampling event was determined to be 100%. A sufficient number of samples were completed to meet the project-specific performance measures.

Comparability issues have little impact on performance measures associated with sampling provided that the sample design is unbiased, and the sample design or analytical methods have not

changed over time. Comparability was achieved by following the sample design in the Work Plan and documenting all sample locations.

Representativeness is primarily a planning concern. The solution is in the design of a sampling plan that is representative.

4.1.2 Analytical

Determining the usability of analytical results begins with the review of QC samples and qualifiers. The review is used to determine an overall assessment of analytical performance as determined by the laboratory and method performance.

The completeness for analytical data is defined as the number of chemical-specific data results that are determined acceptable after data review. The off-site laboratories obtained an analytical completeness of 100%.

Comparability is a very important qualitative data indicator for analytical assessment and is a critical parameter when considering the combination of data sets from different analyses for the same chemicals of potential concern. The analytical methods used had common analytical parameters, the same units of measure, and similar detection limits.

The representativeness of the data is determined by the degree to which the data meet the performance standards of the method and to which analysis represents the sample submitted to the laboratory. Holding times, sample preservation, and results from analyses of blanks all affect the representativeness of analytical data. Analytical data from off-site laboratories are considered representative of the sample since all performance criteria were met during the analyses.

Precision is a measure of the repeatability of a single measurement and is evaluated from the results of duplicate samples and splits. Low precision can be caused by poor instrument performance, inconsistent application of method protocols, or by a difficult, heterogeneous sample matrix. The off-site laboratory performed the analysis of duplicate laboratory control samples to evaluate the precision of the laboratory. The precision indicator from the duplicate analyses met the performance standards in all cases.

Accuracy is a measure of overestimation or underestimation of reported concentrations and is evaluated from the results of spiked samples. Split samples are particularly useful in the analysis of complex sample types to help determine the extent of bias on the sample measurement. Split samples were analyzed by General Engineering.

4.2 Field Activities

Sampling activities were conducted in May 1994. Sampling Logs were maintained describing the activities and conditions during the sampling event. Sampling personnel wore gloves, safety glasses, hard-hats, steel-toed boots, and tyvek coveralls. No unusual or problematic situations occurred during the activities.

4.3 Laboratory Procedures

Analytical procedures were performed by Roy F. Weston, TMA, and General Engineering. The QC procedures included but were not limited to method blanks, laboratory control samples, matrix spikes, matrix spike duplicates, and surrogate recoveries. Where applicable, data validation procedures were performed in accordance with the EPA "National Functional Guidelines for Organic Data Review" and "Functional Guidelines for Evaluating Inorganic Analyses."

As discussed in the CLP Statement of Work (SOW) for Organics Analysis (EPA, August, 1991) and the National Functional Guidelines for Organic Data Review (EPA, June, 1991), acetone, 2-butanone (methyl ethyl ketone), methylene chloride, toluene, and the phthalate esters are considered by EPA to be common laboratory contaminants. In accordance with the EPA "National Functional Guidelines for Organic Data Review" (EPA, June, 1991) and the "Functional Guidelines for Evaluating Inorganic Analyses" (EPA, July, 1988), if the blank contains detectable levels of common laboratory contaminants, then the sample results should be considered as positive results (i.e., site-related) only if the concentrations in the sample exceed ten times the maximum amount detected in any blank. If the blank contains detectable levels of one or more organic or inorganic chemicals that are not considered by EPA to be common laboratory contaminants, then consider site sample results as positive only if the concentration of the chemical in the site sample exceeds five times the maximum amount detected in any blank. Treat samples containing less than five times the amount in any blank as not site-related.

5.0 Data Qualification Policy

This section describes the EPD/EMS data validation policy for assigning qualifiers to RCRA Facility Investigation / Remedial Investigation (RFI/RI) analytical data. Qualification policy is based on the Contract Laboratory Program Statement of Work (CLP SOW), the Functional Guidelines for Organics Analyses, the Functional Guidelines for Inorganics Analyses (Functional Guidelines 7/88), SW-846, and Westinghouse Hanford Company's Data Validation Procedures for Radiochemical Analyses.

Qualification criteria for instrument calibration, analyte identification, and analyte quantitation are given in the EPD/EMS informal "Procedures for Qualifying Data Based on Laboratory Data Record Reviews (LDRRs)."

RQ = result qualifier AQ = analysis qualifier BQ = bias qualifier

Holding Times

Criteria: EPA holding times for extraction and analysis

Action: Assign RQ = J, AQ = Q to all analyses for which holding time has been exceeded.

Sample Preservation

Criteria: Temperature <8°C for organics and inorganics; pH ≤2 for water samples.
Note: pH was not recorded by the laboratory, so samples preservation for pH could not be evaluated.

Action: Assign AQ = Y for all exceedances.

Instrument Calibration, Analyte Identification, Analyte Quantitation

Criteria: see EPD/EMS Laboratory Data Record Review (LDRR) checklists for each analytical method.

Action: see "Procedures for Qualifying Data Based on LDRRs."

Trip Blanks

Criteria: CLP 5x/10x rule

Action: Add RQ = J to the failed analyte(s) in every sample shipped in the same cooler as the trip blank.

Field Blanks

No qualification is done on the basis of field blank results.

Rinsate Blanks

No qualification is done on the basis of rinsate blank results.

Method Blanks

Criteria: CLP 5x/10x rule

Action: If an analyte is detected in a method blank, assign AQ = V to that analyte in the blank in and in every sample of the preparation batch. For radiological samples, if the analyte concentration in a sample is <5x that in the blank, assign RQ = U and AQ = V to the analyte in the sample. For non radiological samples, if the analyte concentration in a sample is <5x that in the blank (<10x for common lab contaminants), assign RQ = J and AQ = V to the analyte in the sample.

Field Duplicates

No qualification is done based on field duplicate results.

Lab Duplicates

No qualification is done based on lab duplicate results.

Matrix Spikes

Criteria:

Volatiles: CLP SOW Table 7, p. D-55VOA

	% Recovery	
	Water	Soil
Benzene	76-127	66-142
Chlorobenzene	75-130	60-133
1,1-Dichloroethene	61-145	59-172
Toluene	76-125	59-139
Trichloroethene	71-120	62-137

Semivolatiles: CLP SOW Table 7, p. D-59SV

	% Recovery	
	Water	Soil
Phenol	12-110	26-90
2-Chlorophenol	27-123	25-102
1,4-Dichlorobenzene	36-97	28-104
N-Nitroso-di-n-propylamine	41-116	41-126
1,2,4-Trichlorobenzene	39-98	38-107
4-Chloro-3-methylphenol	23-97	26-103
Acenaphthene	46-118	31-137
4-Nitrophenol	10-80	11-114
2,4-Dinitrotoluene	24-96	28-89
Pentachlorophenol	9-103	17-109
Pyrene	26-127	35-142

Pesticides: CLP SOW page D-61PEST

	% Recovery	
	Water	Soil
gamma-BHC (Lindane)	56-123	46-127
Heptachlor	40-131	35-130
Aldrin	40-120	34-132
Dieldrin	52-126	31-134
Endrin	56-121	42-139
4,4'-DDT	38-127	23-134

Dioxins: 50-100%

Inorganics: Functional Guidelines

	% Recovery	
	Water	Soil
All Parameters	75-125	75-125

Action:

For organics, if an analyte within a matrix spike fails criteria, assign qualifiers only to the failed analyte in the matrix spike itself. For organics, assign RQ = J, AQ = I, and BQ = L or H.

For inorganics, qualify the sample result and the matrix spike itself; assign RQ according to criteria, AQ = I, and BQ = L or H.

For non-radiological analyses, if the laboratory fails to supply matrix spike data, flag all analytes in all samples in the appropriate preparation batch. Assign RQ = P, AQ = I.

Laboratory Control Samples & Blank Spikes (LCS/BS)

Criteria:

Organics: same as matrix spike criteria

Inorganics: 80-120% recovery

Rads: (80-120% recovery)

Action: Assign AQ = C to the failed analyte(s) in the LCS/BS. Assign RQ = J, AQ = C to the failed analyte(s) in every samples in the same preparation batch as the LCS/BS.

Surrogate Recovery

Criteria:

Volatiles by 8240: SW-846, Table 8, page 8240-38.

Volatiles by 8260: SW-846, Table 9, page 8260-44.

Pesticides by 8080: 60-150% (from CLP SOW, page D-56PEST).

Semivolatiles by 8270: SW-846, Table 8, page 8270-31.

Dioxins: not applicable

Action:

Volatiles & Pesticides: Assign AQ = O to the failed surrogate(s). If one or more surrogates fail acceptance criteria, assign RQ = J or UJ, AQ = O to all analytes in the sample. If all the failed surrogates have low recoveries, assign BQ = L. If all the failed surrogates have high recoveries, assign BQ = H. If one surrogate is high and another is low, do not assign a bias qualifier.

For pesticides, do not qualify analytes when two surrogates fail if the average of the two surrogate recoveries is within 60-150%. Also, do not qualify when the average recovery is >150%, but all analytes are non detects.

Action

Semivolatiles: Assign AQ = O to the failed surrogate(s). If only one surrogate is bad, and its recovery is >10%, take no action. If more than one fails, assign RQ = J or UJ, AQ = O to all analytes in the sample. If all the failed surrogates have low (or high) recoveries, assign BQ = L or (or H). If one surrogate is high and another is low, do not assign a bias qualifier.

6.0 Qualifier Codes

Each analytical record in the computer data files may contain qualifiers in three fields: result qualifiers, analysis qualifiers, and bias qualifiers. The result qualifier describes the analytical result; the analysis qualifier describes why result qualifiers are present; and the bias qualifier describes whether the result is biased high, low, or has poor precision. The qualifiers in the data files may have been added by the laboratory or during data validation. All the qualifiers are described briefly here.

Codes for Result Qualifiers

Remark	Definition
J	The analytical result value is an estimated quantity.
R	Rejected because performance requirements in the sample or associated quality control analyses were not met. The analyte may or may not be present.
U	Material analyzed for but not detected. Value reported is the sample quantification limit.

Codes for Analysis Qualifiers

Code	Definition
B	The result is below the contract required detection limit and above or equal to the instrument detection limit. Use with "J".
I	**Matrix Spike/Matrix Spike Duplicate** (VI, Organics FG; VI, Pesticides) **Matrix Spike Sample Analysis** (VI, Inorganics FG) Spike recovery not within control limits. Used alone, or with "J" or "R."
O	**Surrogate recovery** (V, Organics FG; V, Pesticides FG) Surrogate spike recoveries are out of specification. Use with "J," "UJ," or "R."
Q	**Holding Time** (I, Organics FG; I, Pesticides FG; I, Inorganics FG) Sample held beyond normal holding time. In addition, if the holding time is exceeded by less than 30 days, use a "J"; if the holding time is exceeded by 30 days or more, use a "R."
V	**Blanks contaminated** (IV, Organics FG; IV, Pesticides FG; III, Inorganics FG) Indicates the analyte was detected in both the sample and associated method blank. Use with "R" or "U" for organics, and with "U" for pesticides. This will follow the 5x and 10x rule for organics, and the 5x rule for pesticides and inorganics.

X **Matrix Spike/Matrix Spike Duplicates**(VI, Organics FG; VI, Pesticides FG)
Duplicate Sample analysis(VI, Inorganics FG)
Duplicate analysis relative percent difference (RPD) was not within control limits.

Bias Codes:

L Analytical factor causing bias. The associated result may underestimate the true value.

H Analytical factor causing bias. The associated result may overestimate the true value.

P Analytical factor causing poor precision. The associated result may be of high variability.

7.0 Data Validation Results

RUST E&I has performed independent QC checks of the field and laboratory procedures that were used in collecting and analyzing the data. The QC checks verify that the data collected are of appropriate quality for the intended data use and that the Data Quality Objectives were met. A summary of all combinations of data qualifiers needed for the surface water and sediment samples are provided below.

Result Qualifier	Analysis Qualifier	Bias Qualifier
	O	H
	O	L
	V	
	X	P
J		
J	B	
J	I	P
J	Q	L
J	V	H
J	VI	P
R		
R		P
R		P
U		
U	V	
UJ	I	P
UJ	Q	L
UJ	V	
UJ	V	H
UJ	VB	
UJ	X	P

The assignment of data qualifiers (presented above) is supported by the following data summaries of quality control information. The definitions of the flags are provided in Section 6.0. The following components of data validation are provided in this section.

- Analytical Program of Primary Samples
- Analytical Program of Laboratory Control Samples
- Association of Primary and Quality Control Samples
- Holding Times

- Detections in Laboratory Blanks
- Recoveries of Laboratory Control Samples
- Recoveries of Matrix Spike and Surrogate Samples
- Detection Summary of Rinsate Blanks
- Detection Summary of Trip Blanks
- Detection Summary of Field Blanks
- Evaluation of Surface Water Field Duplicates
- Evaluation of Sediment Field Duplicates
- Evaluation of Surface Water Split Samples
- Evaluation of Sediment Split Samples

Analytical Program

The analytical program excluding the quality control samples is presented in Table 1. The sample identifier, sample name, laboratory, sample type, sample date, extraction / digestion method, analytical method, analytical parameters, preparation batch, and instrument batch are included in Table 1. This table was used to verify that all requested samples were collected and analyzed appropriately. This verification check concluded that all sample and analytical requirements were met.

Analytical Program of Laboratory Quality Control Samples

The analytical program of laboratory quality control samples is presented in Table 2. The laboratory, sample type, analytical method, analytical parameters, preparation batch, and instrument batch are included in Table 2. Quality control samples include laboratory blanks, spike samples, continuing calibration blanks, continuing calibration verification samples, initial calibration blanks, and initial calibration verification sample blanks. This table was used to verify that the appropriate laboratory quality control samples were analyzed at the appropriate frequency. This verification check concluded that appropriate steps were taken in the quality assurance programs of the primary and quality assurance laboratories.

Association of Primary and Quality Control Samples

The association of primary and quality control samples is presented in Table 3. This table provides a matrix-type format demonstrating the correlation of primary and quality control samples. Quality control samples include field blanks, splits, rinsates, field duplicates, and trip blanks. This table was used to verify that the appropriate field quality control samples were collected.

Holding Times

An evaluation of holding times is presented in Table 4. This table includes the extraction/digestion methods, analytical methods, units, sample identifiers, collection dates, extraction/digestion dates, and analysis dates. Calculation fields are included for the days from collection to extraction and the days from extraction to analysis. This verification check demonstrated that all holding times were met.

Detections in Laboratory Blanks

A detection summary of laboratory blanks (i.e., method and calibration blanks) is presented in Table 5. The table includes the laboratory, analytical method, analyte, preparation batch, instrument batch, sample type, result, result qualifier, analysis qualifier, bias qualifier, unit, and dilution factor. Detects in method blanks at Weston included total suspended solids; 1,2-dichloroethylene; methylene chloride; trichlorofluoromethane; methyl chloride; bis(2-ethylhexyl)phthalate, and di-n-butyl phthalate. At Weston, calibration blanks included detects of arsenic, mercury, and selenium. The detects in the method blanks required the "V" and "B" analytical qualifiers and "U" and "J" result qualifiers.

Spike Recoveries of Laboratory Control Samples

The percent recoveries of laboratory control samples (i.e., blank spikes) are presented in Table 6. The table includes the laboratory, sample identifier, sample date, analyte, analytical method, percent recovery, and instrument batch. All recoveries fell within the QC window as prescribed in Section 5.0. No data qualifiers were needed per this evaluation.

Recoveries of Matrix Spike and Surrogate Samples

The percent recoveries of matrix spike and surrogate samples are presented in Table 7. The table includes the laboratory, sample identifier, analyte, analytical method, and percent recovery. All recoveries fell within the QC window as prescribed in Section 5.0. No data qualifiers were needed per this evaluation.

Detection Summary of Rinsate Blank

The detects of rinsate blank "100452" included lead (0.7 ug/l); 1,1,1-trichloroethane (0.34 ug/l); methyl chloride (0.37 ug/l); and bis(2-ethylhexyl)phthalate (2.7 ug/l) as presented in Table 8. Per Section 5.0, no qualification is done on the basis of rinsate blank results.

Detection Summary of Trip Blanks

A detection summary of the trip blanks is presented in Table 9. The table includes the sample identifier, sample date, analytical method, analyte, result, result qualifier, analysis qualifier, bias qualifier, and unit. Detects include toluene, methylene chloride, chloroform, trichlorofluoromethane, 1,1-dichloroethylene, benzene, trichloroethylene, toluene, and chlorobenzene. Toluene and methylene chloride were detected in the associated method blanks. With the exception of the toluene and methylene chloride, all detects of the compounds listed above were assigned a "J" result qualifier for every sample shipped in the same cooler as the trip blank.

Detection Summary of Field Blank

A detection summary of the field blank is presented in Table 10. The table includes the sample identifier, sample date, analytical method, analyte, result, result qualifier, analysis qualifier, bias qualifier, and unit. Detects include 1,1,1-trichloroethane and methyl chloride. Per Section 5.0, no qualification is done on the basis of field blank results.

Evaluation of Surface Water Field Duplicates

Table 11 provides a comparison of the primary surface water sample (100454) and its associated field duplicate (100455). Percent differences were calculated for data sets containing at least one detect. Percent differences ranged from 0.0 to 43.1 percent. The 43.1 percent was associated with nitrate. The next highest percent difference was with tritium at 28 percent. The evaluation of the field duplicate concludes that the sample collection was representative of the actual population and that the field and laboratory procedures were in control. Per Section 5.0, no qualification is done on the basis of field duplicate results.

Evaluation of Sediment Field Duplicates

Table 12 provides a comparison of the primary sediment sample (100462) and its associated field duplicate (100463). Percent differences were calculated for data sets containing at least one detect. Percent differences ranged from 0.0 to 28.0 percent. The 28.0 percent was associated with manganese. The next highest percent difference was with total organic carbon at 24 percent. The evaluation of field duplicates concludes that the sample collection was representative of the actual population and that the field and laboratory procedures were in control. Per Section 5.0, no qualification is done on the basis of field duplicate results.

Evaluation of Surface Water Split Samples

Table 13 provides a comparison of the primary surface water sample (100450) and its associated split (100451). The primary laboratories were Weston and TMA while the quality assurance laboratory was General Engineering. Percent differences were calculated for data sets containing at least one detect. Percent differences ranged from 0.0 to 22.0 percent. The 22.0 percent was associated with lead. The next highest percent difference was with gross alpha at 15.0 percent. The evaluation of the split sample concludes that the laboratory procedures of the primary laboratories were in control. Per Section 5.0, no qualification is done on the basis of split results.

Evaluation of Sediment Split Samples

Table 14 provides a comparison of the primary sediment sample (100458) and its associated split (100459). The primary laboratories were Weston and TMA while the quality assurance laboratory was General Engineering. Percent differences were calculated for data sets containing at least one detect. Percent differences ranged from 1.0 to 24.0 percent. The 24.0 percent was associated with chromium. The next highest percent difference was with gross alpha at 13.0 percent. The evaluation of the split sample concludes that the laboratory procedures of the primary laboratories were in control. Per Section 5.0, no qualification is done on the basis of split results.

Laboratory Data Records Review

The purpose of this laboratory review was to assess the accuracy, precision, and completeness of the analytical procedures conducted by Roy F. Weston Laboratories Inc. which could not be addressed through review of the electronic data deliverables or report certificates. As part of this review, copies of analytical logbooks and instrument calibration records were requested for organic and radiological analyses. Review of these records were conducted according to the appropriate validation guidelines discussed in the Quality Assurance / Quality Control Guidance for Removal Activities (EPA/540/G-90/004), USEPA CLP National Functional Guidelines for Organic Review, USEPA CLP National Functional Guidelines for Inorganic Review, Data Validation Procedures for Radiochemical Analyses (WHC-SD-EN-SPP-001, Rev. 1), SW-846 Methods, and in accordance with Savannah River Site Procedures. The report of the laboratory data records review is provided in Appendix B.

8.0 Data Presentation and Conclusions

The surface water and sediment sample results are presented in matrix-type summary tables in the Data Summary Report which this Quality Control Summary Report is an Appendix of. Summary tables are presented separately for surface water and sediment by each analytical fraction. The result, analysis, and bias qualifiers are all maintained in the matrix-type summary tables.

Where applicable, the analytical information was validated with respect to the Quality Assurance / Quality Control Guidance for Removal Activities (EPA/540/G-90/004), USEPA CLP National Functional Guidelines for Organic Review, USEPA CLP National Functional Guidelines for Inorganic Review, Data Validation Procedures for Radiochemical Analyses (WHC-SD-EN-SPP-001, Rev. 1), SW-846 Methods, and in accordance with Savannah River Site Procedures. All field activities and analytical procedures were performed in accordance with the Sampling Plan (Appendix A).

No non-conformance situations occurred during the field or laboratory activities that prevented the environmental data from meeting the project-specific DQOs.

References

U.S. Environmental Protection Agency (EPA), 1991. Test Method for Evaluating Solid Wastes, 3rd Edition, Office of Solid Waste, Washington, D.C.

U.S. Environmental Protection Agency (EPA), 1988. Functional Guidelines for Evaluating Inorganic Analyses. Hazardous Site Evaluation Division. Contract Laboratory Program. July 1988.

U.S. Environmental Protection Agency (EPA), 1989. Data Evaluation. Risk Assessment Guidance for Superfund: Human Health Evaluation Manual Part A. Interim Final. Office of Solid Waste and Emergency and Remedial Response. EPA/540/1-89/002. (OSWER Directive 9285.701A),

U.S. Environmental Protection Agency (EPA), 1991. EPA Region IV Standard Operating Procedures and Quality Assurance Manual, February 1991.

U.S. Environmental Protection Agency (EPA), 1991. National Functional Guidelines for Organic Data Review. Hazardous Site Evaluation Division. Contract Laboratory Program. June 1991.

U.S. Environmental Protection Agency (EPA), 1991. Statement of Work for Organic Analysis. Hazardous Site Evaluation Division. Contract Laboratory Program. Document Number OLM01.0. August 1991.

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Tables

Table 1
Analytical Program of Surface Water and Sediment Samples
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext/Dig Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100438	D431-37-01	Weston		50594		EPA160.1	TDS	94LSSA85	94LSSA85
100438	D431-37-01	Weston		50594		EPA160.2	TSS	94LSSA85	94LSSA85
100438	D431-37-01	Weston		50594		EPA300	CL/F/SO4	94LCC066	94LCC066
100438	D431-37-01	Weston	Lab Replicate	50594		EPA300	CL/F/SO4	94LCC066	94LCC066
100438	D431-37-01	Weston	Spike Sample	50594		EPA300	CL/F/SO4	94LCC066	94LCC066
100438	D431-37-01	Weston		50594		EPA300	CL/F/SO4	94LFC066	94LFC066
100438	D431-37-01	Weston	Lab Replicate	50594		EPA300	CL/F/SO4	94LFC066	94LFC066
100438	D431-37-01	Weston	Spike Sample	50594		EPA300	CL/F/SO4	94LFC066	94LFC066
100438	D431-37-01	Weston		50594		EPA300	CL/F/SO4	94LSC066	94LSC066
100438	D431-37-01	Weston	Lab Replicate	50594		EPA300	CL/F/SO4	94LSC066	94LSC066
100438	D431-37-01	Weston	Spike Sample	50594		EPA300	CL/F/SO4	94LSC066	94LSC066
100438	D431-37-01	Weston		50594		EPA353.2	NO3	94LN3072	94LN3072
100438	D431-37-01	Weston	Lab Replicate	50594		EPA353.2	NO3	94LN3072	94LN3072
100438	D431-37-01	Weston	Spike Sample	50594		EPA353.2	NO3	94LN3072	94LN3072
100438	D431-37-01	Weston		50594		EPA415.1	TOC	94LTC080	94LTC080
100438	D431-37-01	Thermo Analytical		50594		EPA900.0	GROSS ALPHA/BETA	9405022	5099402
100438	D431-37-01	Thermo Analytical		50594		EPA900.1 MOD.	TOTAL RAD	9405022	5109402
100438	D431-37-01	Thermo Analytical		50594		EPA906.0	TRITIUM	9405022	5099404
100438	D431-37-01	Weston		50594		SW9020A	TOX	94LX124X	94LX124X
100438	D431-37-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511F
100438	D431-37-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511Z
100438	D431-37-01	Weston	Lab Replicate	50594	EPA3050	EPA6010	METALS	94L5708	PS0511F
100438	D431-37-01	Weston	Lab Replicate	50594	EPA3050	EPA6010	METALS	94L5708	PS0511Z
100438	D431-37-01	Weston	Spike Sample	50594	EPA3050	EPA6010	METALS	94L5708	PS0511F
100438	D431-37-01	Weston	Spike Sample	50594	EPA3050	EPA6010	METALS	94L5708	PS0511Z
100438	D431-37-01	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5707	AS051151
100438	D431-37-01	Weston	Lab Replicate	50594	EPA3050	EPA7060	ARSENIC	94L5707	AS051151
100438	D431-37-01	Weston	Spike Sample	50594	EPA3050	EPA7060	ARSENIC	94L5707	AS051151
100438	D431-37-01	Weston		50594	EPA3050	EPA7421	LEAD	94L5707	PB051202
100438	D431-37-01	Weston	Lab Replicate	50594	EPA3050	EPA7421	LEAD	94L5707	PB051202
100438	D431-37-01	Weston	Spike Sample	50594	EPA3050	EPA7421	LEAD	94L5707	PB051202
100438	D431-37-01	Weston		50594	EPA3050	EPA7471	HG	94C0185	HG051004
100438	D431-37-01	Weston	Lab Replicate	50594	EPA3050	EPA7471	HG	94C0185	HG051004
100438	D431-37-01	Weston	Spike Sample	50594	EPA3050	EPA7471	HG	94C0185	HG051004
100438	D431-37-01	Weston	Spike Sample	50594	EPA3050	EPA7471	HG	94C0190	HG051103
100438	D431-37-01	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5707	SE051104

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D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext/Dig Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100438	D431-37-01	Weston	Lab Replicate	50594	EPA3050	EPA7740	SELENIUM	94L5707	SE051104
100438	D431-37-01	Weston	Spike Sample	50594	EPA3050	EPA7740	SELENIUM	94L5707	SE051104
100438	D431-37-01	Weston		50594	EPA3510/20	EPA8270	SEMIVOLATILES	94LE0899	J051001
100438	D431-37-01	Weston	Lab Replicate	50594	EPA3510/20	EPA8270	SEMIVOLATILES	94LE0899	J051001
100438	D431-37-01	Weston	Spike Sample	50594	EPA3510/20	EPA8270	SEMIVOLATILES	94LE0899	J051001
100438	D431-37-01	Weston		50594	EPA3510/20	EPA8270M	SEMIVOLATILES	94LE0899	J051001
100438	D431-37-01	Weston	Lab Replicate	50594	EPA3510/20	EPA8270M	SEMIVOLATILES	94LE0899	J051001
100438	D431-37-01	Weston	Spike Sample	50594	EPA3510/20	EPA8270M	SEMIVOLATILES	94LE0899	J051001
100438	D431-37-01	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0899	J051001
100438	D431-37-01	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100438	D431-37-01	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100439	D431-37-02	Weston		50594		ASTMD497.2	pH	94LPH040	94LPH040
100439	D431-37-02	Weston		50594		EPA415.8	TOC/TOH	94LTZ23A	94LTZ23A
100439	D431-37-02	Weston	Lab Replicate	50594		EPA415.8	TOC/TOH	94LTZ23A	94LTZ23A
100439	D431-37-02	Weston	Spike Sample	50594		EPA415.8	TOC/TOH	94LTZ23A	94LTZ23A
100439	D431-37-02	Weston		50594		EPA7471	HG	94C0187	HG051005
100439	D431-37-02	Weston	Lab Replicate	50594		EPA7471	HG	94C0187	HG051005
100439	D431-37-02	Weston	Spike Sample	50594		EPA7471	HG	94C0187	HG051005
100439	D431-37-02	Thermo Analytical		50594		LANLER210 MOD	TRITIUM	9405023	5109404
100439	D431-37-02	Thermo Analytical		50594		LANLMLR-100	GROSS ALPHA/BETA	9405023	5109402
100439	D431-37-02	Thermo Analytical		50594		SW8469315 MOD	TOTAL RAD	9405023	5109402
100439	D431-37-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511A
100439	D431-37-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511B
100439	D431-37-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511E
100439	D431-37-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511X
100439	D431-37-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511Y
100439	D431-37-02	Weston	Lab Replicate	50594	EPA3050	EPA6010	METALS	94L5706	PS0511A
100439	D431-37-02	Weston	Lab Replicate	50594	EPA3050	EPA6010	METALS	94L5706	PS0511B
100439	D431-37-02	Weston	Lab Replicate	50594	EPA3050	EPA6010	METALS	94L5706	PS0511E
100439	D431-37-02	Weston	Lab Replicate	50594	EPA3050	EPA6010	METALS	94L5706	PS0511X
100439	D431-37-02	Weston	Lab Replicate	50594	EPA3050	EPA6010	METALS	94L5706	PS0511Y
100439	D431-37-02	Weston	Spike Sample	50594	EPA3050	EPA6010	METALS	94L5706	PS0511A
100439	D431-37-02	Weston	Spike Sample	50594	EPA3050	EPA6010	METALS	94L5706	PS0511B
100439	D431-37-02	Weston	Spike Sample	50594	EPA3050	EPA6010	METALS	94L5706	PS0511E
100439	D431-37-02	Weston	Spike Sample	50594	EPA3050	EPA6010	METALS	94L5706	PS0511X
100439	D431-37-02	Weston	Spike Sample	50594	EPA3050	EPA6010	METALS	94L5706	PS0511Y

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Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext/Dig Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100439	D431-37-02	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5705	AS051061
100439	D431-37-02	Weston	Lab Replicate	50594	EPA3050	EPA7060	ARSENIC	94L5705	AS051061
100439	D431-37-02	Weston	Spike Sample	50594	EPA3050	EPA7060	ARSENIC	94L5705	AS051061
100439	D431-37-02	Weston		50594	EPA3050	EPA7421	LEAD	94L5705	PB051153
100439	D431-37-02	Weston	Lab Replicate	50594	EPA3050	EPA7421	LEAD	94L5705	PB051153
100439	D431-37-02	Weston	Spike Sample	50594	EPA3050	EPA7421	LEAD	94L5705	PB051153
100439	D431-37-02	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5705	SE051161
100439	D431-37-02	Weston	Lab Replicate	50594	EPA3050	EPA7740	SELENIUM	94L5705	SE051161
100439	D431-37-02	Weston	Spike Sample	50594	EPA3050	EPA7740	SELENIUM	94L5705	SE051161
100439	D431-37-02	Weston		50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051001
100439	D431-37-02	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051001
100439	D431-37-02	Weston		50594	EPA3540/50	EPA8270M	SEMIVOLATILES	94LE0897	S051001
100439	D431-37-02	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100439	D431-37-02	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100440	D431-38-01	Weston		50594		EPA160.1	TDS	94LSSA85	94LSSA85
100440	D431-38-01	Weston		50594		EPA160.2	TSS	94LSSA85	94LSSA85
100440	D431-38-01	Weston		50594		EPA300	CL/F/SO4	94LCC066	94LCC066
100440	D431-38-01	Weston		50594		EPA300	CL/F/SO4	94LFC066	94LFC066
100440	D431-38-01	Weston		50594		EPA300	CL/F/SO4	94LSC066	94LSC066
100440	D431-38-01	Weston		50594		EPA353.2	NO3	94LN3072	94LN3072
100440	D431-38-01	Weston		50594		EPA415.1	TOC	94LTC080	94LTC080
100440	D431-38-01	Thermo Analytical		50594		EPA900.0	GROSS ALPHA/BETA	9405022	5099402
100440	D431-38-01	Thermo Analytical		50594		EPA900.1 MOD.	TOTAL RAD	9405022	5109402
100440	D431-38-01	Thermo Analytical		50594		EPA906.0	TRITIUM	9405022	5099404
100440	D431-38-01	Weston		50594		SW9020A	TOX	94LX124X	94LX124X
100440	D431-38-01	Weston	Lab Replicate	50594		SW9020A	TOX	94LX124X	94LX124X
100440	D431-38-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511F
100440	D431-38-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511Z
100440	D431-38-01	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5707	AS051151
100440	D431-38-01	Weston		50594	EPA3050	EPA7421	LEAD	94L5707	PB051202
100440	D431-38-01	Weston		50594	EPA3050	EPA7471	HG	94C0185	HG051004
100440	D431-38-01	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5707	SE051104
100440	D431-38-01	Weston		50594	EPA3510/20	EPA8270	SEMIVOLATILES	94LE0899	J051001
100440	D431-38-01	Weston		50594	EPA3510/20	EPA8270M	SEMIVOLATILES	94LE0899	J051001
100440	D431-38-01	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0899	J051001
100440	D431-38-01	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101

Table 1
Analytical Program of Surface Water and Sediment Samples
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext/Dig Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100440	D431-38-01	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100441	D431-36-01	Weston		50594		EPA160.1	TDS	94LSSA85	94LSSA85
100441	D431-36-01	Weston		50594		EPA160.2	TSS	94LSSA85	94LSSA85
100441	D431-36-01	Weston		50594		EPA300	CL/F/SO4	94LCC066	94LCC066
100441	D431-36-01	Weston		50594		EPA300	CL/F/SO4	94LFC066	94LFC066
100441	D431-36-01	Weston		50594		EPA300	CL/F/SO4	94LSC066	94LSC066
100441	D431-36-01	Weston		50594		EPA353.2	NO3	94LN3072	94LN3072
100441	D431-36-01	Weston		50594		EPA415.1	TOC	94LTC080	94LTC080
100441	D431-36-01	Weston	Lab Replicate	50594		EPA415.1	TOC	94LTC080	94LTC080
100441	D431-36-01	Weston	Spike Sample	50594		EPA415.1	TOC	94LTC080	94LTC080
100441	D431-36-01	Thermo Analytical		50594		EPA900.0	GROSS ALPHA/BETA	9405022	5099402
100441	D431-36-01	Thermo Analytical		50594		EPA900.1 MOD.	TOTAL RAD	9405022	5109402
100441	D431-36-01	Thermo Analytical		50594		EPA906.0	TRITIUM	9405022	5099404
100441	D431-36-01	Thermo Analytical	Lab Replicate	50594		EPA906.0	TRITIUM	9405022	5099404
100441	D431-36-01	Weston		50594		SW9020A	TOX	94LX124W	94LX124W
100441	D431-36-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511F
100441	D431-36-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511Z
100441	D431-36-01	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5707	AS051151
100441	D431-36-01	Weston		50594	EPA3050	EPA7421	LEAD	94L5707	PB051202
100441	D431-36-01	Weston		50594	EPA3050	EPA7471	HG	94C0185	HG051004
100441	D431-36-01	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5707	SE051104
100441	D431-36-01	Weston		50594	EPA3510/20	EPA8270	SEMIVOLATILES	94LE0899	J051001
100441	D431-36-01	Weston		50594	EPA3510/20	EPA8270M	SEMIVOLATILES	94LE0899	J051001
100441	D431-36-01	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0899	J051001
100441	D431-36-01	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100441	D431-36-01	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100442	D431-36-02	Weston		50594		ASTMD497.2	pH	94LPH040	94LPH040
100442	D431-36-02	Weston		50594		EPA415.8	TOC/TOH	94LTZ23A	94LTZ23A
100442	D431-36-02	Weston		50594		EPA7471	HG	94C0187	HG051005
100442	D431-36-02	Thermo Analytical		50594		LANLER210 MOD	TRITIUM	9405023	5109404
100442	D431-36-02	Thermo Analytical	Lab Replicate	50594		LANLER210 MOD	TRITIUM	9405023	5109404
100442	D431-36-02	Thermo Analytical		50594		LANLMLR-100	GROSS ALPHA/BETA	9405023	5099402
100442	D431-36-02	Thermo Analytical	Lab Replicate	50594		LANLMLR-100	GROSS ALPHA/BETA	9405023	5099402
100442	D431-36-02	Thermo Analytical		50594		SW8469315 MOD	TOTAL RAD	9405023	5109402
100442	D431-36-02	Thermo Analytical	Lab Replicate	50594		SW8469315 MOD	TOTAL RAD	9405023	5109402
100442	D431-36-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511A

Table 1
Analytical Program of Surface Water and Sediment Samples
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext/Dig Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100442	D431-36-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511B
100442	D431-36-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511E
100442	D431-36-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511X
100442	D431-36-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511Y
100442	D431-36-02	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5705	AS051061
100442	D431-36-02	Weston		50594	EPA3050	EPA7421	LEAD	94L5705	PB051153
100442	D431-36-02	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5705	SE051161
100442	D431-36-02	Weston		50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051001
100442	D431-36-02	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051001
100442	D431-36-02	Weston		50594	EPA3540/50	EPA8270M	SEMIVOLATILES	94LE0897	S051001
100442	D431-36-02	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100442	D431-36-02	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100443	D431-39-01	Weston		50594		EPA160.1	TDS	94LSSA85	94LSSA85
100443	D431-39-01	Weston		50594		EPA160.2	TSS	94LSSA85	94LSSA85
100443	D431-39-01	Weston		50594		EPA300	CL/F/SO4	94LCC066	94LCC066
100443	D431-39-01	Weston		50594		EPA300	CL/F/SO4	94LFC066	94LFC066
100443	D431-39-01	Weston		50594		EPA300	CL/F/SO4	94LSC066	94LSC066
100443	D431-39-01	Weston		50594		EPA353.2	NO3	94LN3072	94LN3072
100443	D431-39-01	Weston		50594		EPA415.1	TOC	94LTC080	94LTC080
100443	D431-39-01	Thermo Analytical		50594		EPA900.0	GROSS ALPHA/BETA	9405022	5099402
100443	D431-39-01	Thermo Analytical		50594		EPA900.1 MOD.	TOTAL RAD	9405022	5109402
100443	D431-39-01	Thermo Analytical		50594		EPA906.0	TRITIUM	9405022	5099404
100443	D431-39-01	Weston		50594		SW9020A	TOX	94LX124W	94LX124W
100443	D431-39-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511F
100443	D431-39-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511Z
100443	D431-39-01	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5707	AS051151
100443	D431-39-01	Weston		50594	EPA3050	EPA7421	LEAD	94L5707	PB051202
100443	D431-39-01	Weston		50594	EPA3050	EPA7471	HG	94C0185	HG051004
100443	D431-39-01	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5707	SE051104
100443	D431-39-01	Weston		50594	EPA3510/20	EPA8270	SEMIVOLATILES	94LE0899	A051007
100443	D431-39-01	Weston		50594	EPA3510/20	EPA8270M	SEMIVOLATILES	94LE0899	A051007
100443	D431-39-01	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0899	A051007
100443	D431-39-01	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100443	D431-39-01	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100444	D431-35-01	Weston		50594		EPA160.1	TDS	94LSSA85	94LSSA85
100444	D431-35-01	Weston		50594		EPA160.2	TSS	94LSSA85	94LSSA85

Table 1
Analytical Program of Surface Water and Sediment Samples
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext/Dig Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100444	D431-35-01	Weston		50594		EPA300	CL/F/SO4	94LCC066	94LCC066
100444	D431-35-01	Weston		50594		EPA300	CL/F/SO4	94LFC066	94LFC066
100444	D431-35-01	Weston		50594		EPA300	CL/F/SO4	94LSC066	94LSC066
100444	D431-35-01	Weston		50594		EPA353.2	NO3	94LN3072	94LN3072
100444	D431-35-01	Weston		50594		EPA415.1	TOC	94LTC080	94LTC080
100444	D431-35-01	Thermo Analytical		50594		EPA900.0	GROSS ALPHA/BETA	9405022	5109402
100444	D431-35-01	Thermo Analytical		50594		EPA900.1 MOD.	TOTAL RAD	9405022	5109402
100444	D431-35-01	Thermo Analytical		50594		EPA906.0	TRITIUM	9405022	5099404
100444	D431-35-01	Weston		50594		SW9020A	TOX	94LX125B	94LX125B
100444	D431-35-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511F
100444	D431-35-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511Z
100444	D431-35-01	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5707	AS051151
100444	D431-35-01	Weston		50594	EPA3050	EPA7421	LEAD	94L5707	PB051202
100444	D431-35-01	Weston		50594	EPA3050	EPA7471	HG	94C0185	HG051004
100444	D431-35-01	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5707	SE051104
100444	D431-35-01	Weston		50594	EPA3510/20	EPA8270	SEMIVOLATILES	94LE0899	A051007
100444	D431-35-01	Weston		50594	EPA3510/20	EPA8270M	SEMIVOLATILES	94LE0899	A051007
100444	D431-35-01	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0899	A051007
100444	D431-35-01	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100444	D431-35-01	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100445	D431-35-02C	Thermo Analytical		50594		EPA900.0	GROSS ALPHA/BETA	9405022	5109402
100445	D431-35-02C	Thermo Analytical		50594		EPA900.1 MOD.	TOTAL RAD	9405022	5109402
100445	D431-35-02C	Thermo Analytical		50594		EPA906.0	TRITIUM	9405022	5099404
100445	D431-35-02C	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100445	D431-35-02C	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100446	D431-35-02	Weston		50594		ASTMD497.2	pH	94LPH040	94LPH040
100446	D431-35-02	Weston		50594		EPA415.8	TOC/TOH	94LTZ23A	94LTZ23A
100446	D431-35-02	Weston		50594		EPA7471	HG	94C0187	HG051005
100446	D431-35-02	Thermo Analytical		50594		LANLER210 MOD	TRITIUM	9405023	5109404
100446	D431-35-02	Thermo Analytical		50594		LANLMLR-100	GROSS ALPHA/BETA	9405023	5109402
100446	D431-35-02	Thermo Analytical		50594		SW8469315 MOD	TOTAL RAD	9405023	5109402
100446	D431-35-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511A
100446	D431-35-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511B
100446	D431-35-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511E
100446	D431-35-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511X
100446	D431-35-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511Y

Table 1
Analytical Program of Surface Water and Sediment Samples
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext/Dig Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100446	D431-35-02	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5705	AS051061
100446	D431-35-02	Weston		50594	EPA3050	EPA7421	LEAD	94L5705	PB051153
100446	D431-35-02	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5705	SE051161
100446	D431-35-02	Weston		50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051001
100446	D431-35-02	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051001
100446	D431-35-02	Weston		50594	EPA3540/50	EPA8270M	SEMIVOLATILES	94LE0897	S051001
100446	D431-35-02	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100446	D431-35-02	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100447	D431-34-01	Weston		50594		EPA160.1	TDS	94LSSA85	94LSSA85
100447	D431-34-01	Weston		50594		EPA160.2	TSS	94LSSA85	94LSSA85
100447	D431-34-01	Weston		50594		EPA300	CL/F/SO4	94LCC066	94LCC066
100447	D431-34-01	Weston		50594		EPA300	CL/F/SO4	94LFC066	94LFC066
100447	D431-34-01	Weston		50594		EPA300	CL/F/SO4	94LSC066	94LSC066
100447	D431-34-01	Weston		50594		EPA353.2	NO3	94LN3072	94LN3072
100447	D431-34-01	Weston		50594		EPA415.1	TOC	94LTC080	94LTC080
100447	D431-34-01	Thermo Analytical		50594		EPA900.0	GROSS ALPHA/BETA	9405022	5109402
100447	D431-34-01	Thermo Analytical		50594		EPA900.1 MOD.	TOTAL RAD	9405022	5109402
100447	D431-34-01	Thermo Analytical		50594		EPA906.0	TRITIUM	9405022	5099404
100447	D431-34-01	Weston		50594		SW9020A	TOX	94LX126W	94LX126W
100447	D431-34-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511F
100447	D431-34-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511Z
100447	D431-34-01	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5707	AS051151
100447	D431-34-01	Weston		50594	EPA3050	EPA7421	LEAD	94L5707	PB051202
100447	D431-34-01	Weston		50594	EPA3050	EPA7471	HG	94C0185	HG051004
100447	D431-34-01	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5707	SE051104
100447	D431-34-01	Weston		50594	EPA3510/20	EPA8270	SEMIVOLATILES	94LE0899	A051007
100447	D431-34-01	Weston		50594	EPA3510/20	EPA8270M	SEMIVOLATILES	94LE0899	A051007
100447	D431-34-01	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0899	A051007
100447	D431-34-01	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100447	D431-34-01	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100448	D431-33-01	Weston		50594		EPA160.1	TDS	94LSSA85	94LSSA85
100448	D431-33-01	Weston		50594		EPA160.2	TSS	94LSSA85	94LSSA85
100448	D431-33-01	Weston		50594		EPA300	CL/F/SO4	94LCC066	94LCC066
100448	D431-33-01	Weston		50594		EPA300	CL/F/SO4	94LFC066	94LFC066
100448	D431-33-01	Weston		50594		EPA300	CL/F/SO4	94LSC066	94LSC066
100448	D431-33-01	Weston		50594		EPA353.2	NO3	94LN3072	94LN3072

Table 1
Analytical Program of Surface Water and Sediment Samples
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext/Dig Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100448	D431-33-01	Weston		50594		EPA415.1	TOC	94LTC080	94LTC080
100448	D431-33-01	Thermo Analytical		50594		EPA900.0	GROSS ALPHA/BETA	9405022	5099402
100448	D431-33-01	Thermo Analytical	Lab Replicate	50594		EPA900.0	GROSS ALPHA/BETA	9405022	5099402
100448	D431-33-01	Thermo Analytical		50594		EPA900.1 MOD.	TOTAL RAD	9405022	5109402
100448	D431-33-01	Thermo Analytical	Lab Replicate	50594		EPA900.1 MOD.	TOTAL RAD	9405022	5109402
100448	D431-33-01	Thermo Analytical		50594		EPA906.0	TRITIUM	9405022	5099404
100448	D431-33-01	Weston		50594		SW9020A	TOX	94LX124W	94LX124W
100448	D431-33-01	Weston	Lab Replicate	50594		SW9020A	TOX	94LX124W	94LX124W
100448	D431-33-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511F
100448	D431-33-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511Z
100448	D431-33-01	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5707	AS051151
100448	D431-33-01	Weston		50594	EPA3050	EPA7421	LEAD	94L5707	PB051202
100448	D431-33-01	Weston		50594	EPA3050	EPA7471	HG	94C0185	HG051004
100448	D431-33-01	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5707	SE051104
100448	D431-33-01	Weston		50594	EPA3510/20	EPA8270	SEMIVOLATILES	94LE0899	A051007
100448	D431-33-01	Weston		50594	EPA3510/20	EPA8270M	SEMIVOLATILES	94LE0899	A051007
100448	D431-33-01	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0899	A051007
100448	D431-33-01	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100448	D431-33-01	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100449	D431-34-02	Weston		50594		ASTMD497.2	pH	94LPH040	94LPH040
100449	D431-34-02	Weston		50594		EPA415.8	TOC/TOH	94LTZ23A	94LTZ23A
100449	D431-34-02	Weston		50594		EPA7471	HG	94C0187	HG051005
100449	D431-34-02	Thermo Analytical		50594		LANLER210 MOD	TRITIUM	9405023	5109404
100449	D431-34-02	Thermo Analytical		50594		LANLMLR-100	GROSS ALPHA/BETA	9405023	5109402
100449	D431-34-02	Thermo Analytical		50594		SW8469315 MOD	TOTAL RAD	9405023	5109402
100449	D431-34-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511A
100449	D431-34-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511B
100449	D431-34-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511E
100449	D431-34-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511X
100449	D431-34-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511Y
100449	D431-34-02	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5705	AS051061
100449	D431-34-02	Weston		50594	EPA3050	EPA7421	LEAD	94L5705	PB051153
100449	D431-34-02	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5705	SE051161
100449	D431-34-02	Weston		50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051001
100449	D431-34-02	Weston	Lab Replicate	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051001
100449	D431-34-02	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051001

Table 1
Analytical Program of Surface Water and Sediment Samples
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext/Dig Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100449	D431-34-02	Weston		50594	EPA3540/50	EPA8270M	SEMIVOLATILES	94LE0897	S051001
100449	D431-34-02	Weston	Lab Replicate	50594	EPA3540/50	EPA8270M	SEMIVOLATILES	94LE0897	S051001
100449	D431-34-02	Weston	Spike Sample	50594	EPA3540/50	EPA8270M	SEMIVOLATILES	94LE0897	S051001
100449	D431-34-02	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100449	D431-34-02	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100450	D431-32-01	Weston		50594		EPA160.1	TDS	94LSSA85	94LSSA85
100450	D431-32-01	Weston		50594		EPA160.2	TSS	94LSSA85	94LSSA85
100450	D431-32-01	Weston		50594		EPA300	CL/F/SO4	94LCC066	94LCC066
100450	D431-32-01	Weston		50594		EPA300	CL/F/SO4	94LFC066	94LFC066
100450	D431-32-01	Weston		50594		EPA300	CL/F/SO4	94LSC066	94LSC066
100450	D431-32-01	Weston		50594		EPA353.2	NO3	94LN3072	94LN3072
100450	D431-32-01	Weston		50594		EPA415.1	TOC	94LTC080	94LTC080
100450	D431-32-01	Thermo Analytical		50594		EPA900.0	GROSS ALPHA/BETA	9405022	5109402
100450	D431-32-01	Thermo Analytical		50594		EPA900.1 MOD.	TOTAL RAD	9405022	5109402
100450	D431-32-01	Thermo Analytical		50594		EPA906.0	TRITIUM	9405022	5099404
100450	D431-32-01	Weston		50594		SW9020A	TOX	94LX125B	94LX125B
100450	D431-32-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511F
100450	D431-32-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511Z
100450	D431-32-01	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5707	AS051151
100450	D431-32-01	Weston		50594	EPA3050	EPA7421	LEAD	94L5707	PB051202
100450	D431-32-01	Weston		50594	EPA3050	EPA7471	HG	94C0185	HG051004
100450	D431-32-01	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5707	SE051104
100450	D431-32-01	Weston		50594	EPA3510/20	EPA8270	SEMIVOLATILES	94LE0899	A051007
100450	D431-32-01	Weston		50594	EPA3510/20	EPA8270M	SEMIVOLATILES	94LE0899	A051007
100450	D431-32-01	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0899	A051007
100450	D431-32-01	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100450	D431-32-01	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100451	D431-32-01D	General Engineering		50594		EPA160.1	TDS	47704	47704
100451	D431-32-01D	General Engineering	Lab Replicate	50594		EPA160.1	TDS	47704	47704
100451	D431-32-01D	General Engineering		50594		EPA160.2	TSS	47705	47705
100451	D431-32-01D	General Engineering	Lab Replicate	50594		EPA160.2	TSS	47705	47705
100451	D431-32-01D	General Engineering		50594		EPA300.0	CL/F/SO4/NO3	47690	47690
100451	D431-32-01D	General Engineering	Lab Replicate	50594		EPA300.0	CL/F/SO4/NO3	47690	47690
100451	D431-32-01D	General Engineering	Spike Sample	50594		EPA300.0	CL/F/SO4/NO3	47690	47690
100451	D431-32-01D	General Engineering		50594		EPA300.0	CL/F/SO4/NO3	47807	47807
100451	D431-32-01D	General Engineering	Lab Replicate	50594		EPA300.0	CL/F/SO4/NO3	47807	47807

Table 1
Analytical Program of Surface Water and Sediment Samples
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext./Dig. Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100451	D431-32-01D	General Engineering	Spike Sample	50594		EPA300.0	CL/F/SO4/NO3	47807	47807
100451	D431-32-01D	General Engineering		50594		EPA415.1	TOC	47767	47767
100451	D431-32-01D	General Engineering	Lab Replicate	50594		EPA415.1	TOC	47767	47767
100451	D431-32-01D	General Engineering	Spike Sample	50594		EPA415.1	TOC	47767	47767
100451	D431-32-01D	General Engineering		50594		EPA8260	VOLATILES	47729	47729
100451	D431-32-01D	General Engineering		50594		EPA9020	TOX	47737	47737
100451	D431-32-01D	GP		50594		EPIA-001	GROSS ALPHA/BETA	47823	47823
100451	D431-32-01D	GP		50594		EPIA-002	TRITIUM	47845	47845
100451	D431-32-01D	GP	Lab Replicate	50594		EPIA-002	TRITIUM	47845	47845
100451	D431-32-01D	GP	Spike Sample	50594		EPIA-002	TRITIUM	47845	47845
100451	D431-32-01D	GP		50594		EPIA-010	TOTAL RAD	47708	47708
100451	D431-32-01D	General Engineering		50594	EPA3005	EPA6010	METALS	47711	47711
100451	D431-32-01D	General Engineering		50594	EPA3020	EPA7060	ARSENIC	47710	47710
100451	D431-32-01D	General Engineering	Lab Replicate	50594	EPA3020	EPA7060	ARSENIC	47710	47710
100451	D431-32-01D	General Engineering	Spike Sample	50594	EPA3020	EPA7060	ARSENIC	47710	47710
100451	D431-32-01D	General Engineering		50594	EPA3020	EPA7421	LEAD	47710	47710
100451	D431-32-01D	General Engineering	Lab Replicate	50594	EPA3020	EPA7421	LEAD	47710	47710
100451	D431-32-01D	General Engineering	Spike Sample	50594	EPA3020	EPA7421	LEAD	47710	47710
100451	D431-32-01D	General Engineering		50594	EPA3020	EPA7740	SELENIUM	47710	47710
100451	D431-32-01D	General Engineering	Lab Replicate	50594	EPA3020	EPA7740	SELENIUM	47710	47710
100451	D431-32-01D	General Engineering	Spike Sample	50594	EPA3020	EPA7740	SELENIUM	47710	47710
100451	D431-32-01D	General Engineering		50594	EPA3510	EPA8270	SEMIVOLATILES	47675	47675
100451	D431-32-01D	General Engineering	Lab Replicate	50594	EPA3510	EPA8270	SEMIVOLATILES	47675	47675
100451	D431-32-01D	General Engineering	Spike Sample	50594	EPA3510	EPA8270	SEMIVOLATILES	47675	47675
100451	D431-32-01D	General Engineering		50594	EPA7470	EPA7470	MERCURY	47748	47748
100451	D431-32-01D	General Engineering	Lab Replicate	50594	EPA7470	EPA7470	MERCURY	47748	47748
100451	D431-32-01D	General Engineering	Spike Sample	50594	EPA7470	EPA7470	MERCURY	47748	47748
100452	D431-32-02E	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511F
100452	D431-32-02E	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511Z
100452	D431-32-02E	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5707	AS051151
100452	D431-32-02E	Weston		50594	EPA3050	EPA7421	LEAD	94L5707	PB051202
100452	D431-32-02E	Weston		50594	EPA3050	EPA7471	HG	94C0185	HG051004
100452	D431-32-02E	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5707	SE051104
100452	D431-32-02E	Weston		50594	EPA3510/20	EPA8270	SEMIVOLATILES	94LE0899	A051007
100452	D431-32-02E	Weston		50594	EPA3510/20	EPA8270M	SEMIVOLATILES	94LE0899	A051007
100452	D431-32-02E	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0899	A051007

Table 1
Analytical Program of Surface Water and Sediment Samples
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext/Dig Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100452	D431-32-02E	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100452	D431-32-02E	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100453	D431-33-02	Weston		50594		ASTMD497.2	pH	94LPH040	94LPH040
100453	D431-33-02	Weston		50594		EPA415.8	TOC/TOH	94LTZ23A	94LTZ23A
100453	D431-33-02	Weston		50594		EPA7471	HG	94C0187	HG051005
100453	D431-33-02	Thermo Analytical		50594		LANLER210 MOD	TRITIUM	9405023	5109404
100453	D431-33-02	Thermo Analytical		50594		LANLMLR-100	GROSS ALPHA/BETA	9405023	5099402
100453	D431-33-02	Thermo Analytical		50594		SW8469315 MOD	TOTAL RAD	9405023	5109402
100453	D431-33-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511A
100453	D431-33-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511B
100453	D431-33-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511E
100453	D431-33-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511X
100453	D431-33-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511Y
100453	D431-33-02	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5705	AS051061
100453	D431-33-02	Weston		50594	EPA3050	EPA7421	LEAD	94L5705	PB051153
100453	D431-33-02	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5705	SE051161
100453	D431-33-02	Weston		50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051001
100453	D431-33-02	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051001
100453	D431-33-02	Weston		50594	EPA3540/50	EPA8270M	SEMIVOLATILES	94LE0897	S051001
100453	D431-33-02	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100453	D431-33-02	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100454	D431-31-01	Weston		50594		EPA160.1	TDS	94LSSA85	94LSSA85
100454	D431-31-01	Weston		50594		EPA160.2	TSS	94LSSA85	94LSSA85
100454	D431-31-01	Weston		50594		EPA300	CL/F/SO4	94LCC066	94LCC066
100454	D431-31-01	Weston		50594		EPA300	CL/F/SO4	94LFC066	94LFC066
100454	D431-31-01	Weston		50594		EPA300	CL/F/SO4	94LSC066	94LSC066
100454	D431-31-01	Weston		50594		EPA353.2	NO3	94LN3072	94LN3072
100454	D431-31-01	Weston		50594		EPA415.1	TOC	94LTC080	94LTC080
100454	D431-31-01	Thermo Analytical		50594		EPA900.0	GROSS ALPHA/BETA	9405022	5099402
100454	D431-31-01	Thermo Analytical		50594		EPA900.1 MOD.	TOTAL RAD	9405022	5109402
100454	D431-31-01	Thermo Analytical		50594		EPA906.0	TRITIUM	9405022	5099404
100454	D431-31-01	Weston		50594		SW9020A	TOX	94LX125B	94LX125B
100454	D431-31-01	Weston	Lab Replicate	50594		SW9020A	TOX	94LX125B	94LX125B
100454	D431-31-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511F
100454	D431-31-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511Z
100454	D431-31-01	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5707	AS051151

Table 1
Analytical Program of Surface Water and Sediment Samples
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext/Dig Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100454	D431-31-01	Weston		50594	EPA3050	EPA7421	LEAD	94L5707	PB051202
100454	D431-31-01	Weston		50594	EPA3050	EPA7471	HG	94C0185	HG051004
100454	D431-31-01	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5707	SE051104
100454	D431-31-01	Weston		50594	EPA3510/20	EPA8270	SEMIVOLATILES	94LE0899	J051101
100454	D431-31-01	Weston		50594	EPA3510/20	EPA8270M	SEMIVOLATILES	94LE0899	J051101
100454	D431-31-01	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0899	J051101
100454	D431-31-01	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100454	D431-31-01	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100455	D431-31-01A	Weston		50594		EPA160.1	TDS	94LSSA85	94LSSA85
100455	D431-31-01A	Weston		50594		EPA160.2	TSS	94LSSA85	94LSSA85
100455	D431-31-01A	Weston		50594		EPA300	CL/F/SO4	94LCC066	94LCC066
100455	D431-31-01A	Weston	Lab Replicate	50594		EPA300	CL/F/SO4	94LCC066	94LCC066
100455	D431-31-01A	Weston	Spike Sample	50594		EPA300	CL/F/SO4	94LCC066	94LCC066
100455	D431-31-01A	Weston		50594		EPA300	CL/F/SO4	94LFC066	94LFC066
100455	D431-31-01A	Weston	Lab Replicate	50594		EPA300	CL/F/SO4	94LFC066	94LFC066
100455	D431-31-01A	Weston	Spike Sample	50594		EPA300	CL/F/SO4	94LFC066	94LFC066
100455	D431-31-01A	Weston		50594		EPA300	CL/F/SO4	94LSC066	94LSC066
100455	D431-31-01A	Weston	Lab Replicate	50594		EPA300	CL/F/SO4	94LSC066	94LSC066
100455	D431-31-01A	Weston	Spike Sample	50594		EPA300	CL/F/SO4	94LSC066	94LSC066
100455	D431-31-01A	Weston		50594		EPA353.2	NO3	94LN3072	94LN3072
100455	D431-31-01A	Weston		50594		EPA415.1	TOC	94LTC080	94LTC080
100455	D431-31-01A	Thermo Analytical		50594		EPA900.0	GROSS ALPHA/BETA	9405022	5109402
100455	D431-31-01A	Thermo Analytical		50594		EPA900.1 MOD.	TOTAL RAD	9405022	5109402
100455	D431-31-01A	Thermo Analytical		50594		EPA906.0	TRITIUM	9405022	5099404
100455	D431-31-01A	Weston		50594		SW9020A	TOX	94LX125B	94LX125B
100455	D431-31-01A	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511F
100455	D431-31-01A	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511Z
100455	D431-31-01A	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5707	AS051151
100455	D431-31-01A	Weston		50594	EPA3050	EPA7421	LEAD	94L5707	PB051202
100455	D431-31-01A	Weston		50594	EPA3050	EPA7471	HG	94C0194	HG051004
100455	D431-31-01A	Weston	Lab Replicate	50594	EPA3050	EPA7471	HG	94C0194	HG051004
100455	D431-31-01A	Weston	Spike Sample	50594	EPA3050	EPA7471	HG	94C0194	HG051004
100455	D431-31-01A	Weston	Spike Sample	50594	EPA3050	EPA7471	HG	94C0194	HG051103
100455	D431-31-01A	Weston		50594	EPA3050	EPA7471	HG	94L5708	PS0511Z
100455	D431-31-01A	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5707	SE051104
100455	D431-31-01A	Weston		50594	EPA3510/20	EPA8270	SEMIVOLATILES	94LE0899	J051101

Table 1
Analytical Program of Surface Water and Sediment Samples
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext/Dig Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100455	D431-31-01A	Weston		50594	EPA3510/20	EPA8270M	SEMIVOLATILES	94LE0899	J051101
100455	D431-31-01A	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0899	J051101
100455	D431-31-01A	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100455	D431-31-01A	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100456	D431-31-01C	Thermo Analytical		50594		EPA900.0	GROSS ALPHA/BETA	9405022	5109402
100456	D431-31-01C	Thermo Analytical		50594		EPA900.1 MOD.	TOTAL RAD	9405022	5109402
100456	D431-31-01C	Thermo Analytical		50594		EPA906.0	TRITIUM	9405022	5099404
100456	D431-31-01C	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100456	D431-31-01C	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100457	D431-30-01	Weston		50594		EPA160.1	TDS	94LSSA85	94LSSA85
100457	D431-30-01	Weston		50594		EPA160.2	TSS	94LSSA85	94LSSA85
100457	D431-30-01	Weston		50594		EPA300	CL/F/SO4	94LCC066	94LCC066
100457	D431-30-01	Weston		50594		EPA300	CL/F/SO4	94LFC066	94LFC066
100457	D431-30-01	Weston		50594		EPA300	CL/F/SO4	94LSC066	94LSC066
100457	D431-30-01	Weston		50594		EPA353.2	NO3	94LN3072	94LN3072
100457	D431-30-01	Weston		50594		EPA415.1	TOC	94LTC080	94LTC080
100457	D431-30-01	Thermo Analytical		50594		EPA900.0	GROSS ALPHA/BETA	9405022	5109402
100457	D431-30-01	Thermo Analytical		50594		EPA900.1 MOD.	TOTAL RAD	9405022	5109402
100457	D431-30-01	Thermo Analytical		50594		EPA906.0	TRITIUM	9405022	5099404
100457	D431-30-01	Weston		50594		SW9020A	TOX	94LX126W	94LX126W
100457	D431-30-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511F
100457	D431-30-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511Z
100457	D431-30-01	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5707	AS051151
100457	D431-30-01	Weston		50594	EPA3050	EPA7421	LEAD	94L5707	PB051202
100457	D431-30-01	Weston		50594	EPA3050	EPA7471	HG	94C0185	HG051004
100457	D431-30-01	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5707	SE051104
100457	D431-30-01	Weston		50594	EPA3510/20	EPA8270	SEMIVOLATILES	94LE0899	J051101
100457	D431-30-01	Weston		50594	EPA3510/20	EPA8270M	SEMIVOLATILES	94LE0899	J051101
100457	D431-30-01	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0899	J051101
100457	D431-30-01	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100457	D431-30-01	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100458	D431-32-02	Weston		50594		ASTMD497.2	pH	94LPH040	94LPH040
100458	D431-32-02	Weston		50594		EPA415.8	TOC/TOH	94LTZ23A	94LTZ23A
100458	D431-32-02	Weston		50594		EPA7471	HG	94C0187	HG051005
100458	D431-32-02	Thermo Analytical		50594		LANLER210 MOD	TRITIUM	9405023	5109404
100458	D431-32-02	Thermo Analytical		50594		LANLMLR-100	GROSS ALPHA/BETA	9405023	5109402

Table 1
Analytical Program of Surface Water and Sediment Samples
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext/Dig Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100458	D431-32-02	Thermo Analytical		50594		SW8469315 MOD	TOTAL RAD	9405023	5109402
100458	D431-32-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511A
100458	D431-32-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511B
100458	D431-32-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511E
100458	D431-32-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511X
100458	D431-32-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511Y
100458	D431-32-02	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5705	AS051051
100458	D431-32-02	Weston		50594	EPA3050	EPA7421	LEAD	94L5705	PB051153
100458	D431-32-02	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5705	SE051161
100458	D431-32-02	Weston		50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051001
100458	D431-32-02	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051001
100458	D431-32-02	Weston		50594	EPA3540/50	EPA8270M	SEMIVOLATILES	94LE0897	S051001
100458	D431-32-02	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100458	D431-32-02	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100459	D431-32-02D	General Engineering		50594		EPA8260	VOLATILES	47771	47771
100459	D431-32-02D	General Engineering	Lab Replicate	50594		EPA8260	VOLATILES	47771	47771
100459	D431-32-02D	General Engineering	Spike Sample	50594		EPA8260	VOLATILES	47771	47771
100459	D431-32-02D	General Engineering		50594		EPA9045	pH	47680	47680
100459	D431-32-02D	General Engineering	Lab Replicate	50594		EPA9045	pH	47680	47680
100459	D431-32-02D	General Engineering		50594		EPA9060	TOC	47742	47742
100459	D431-32-02D	General Engineering	Lab Replicate	50594		EPA9060	TOC	47742	47742
100459	D431-32-02D	General Engineering	Spike Sample	50594		EPA9060	TOC	47742	47742
100459	D431-32-02D	GP		50594		EPIA-001B	GROSS ALPHA/BETA	47824	47824
100459	D431-32-02D	GP	Lab Replicate	50594		EPIA-001B	GROSS ALPHA/BETA	47824	47824
100459	D431-32-02D	GP	Spike Sample	50594		EPIA-001B	GROSS ALPHA/BETA	47824	47824
100459	D431-32-02D	GP		50594		EPIA-002B	TRITIUM	47851	47851
100459	D431-32-02D	GP	Lab Replicate	50594		EPIA-002B	TRITIUM	47851	47851
100459	D431-32-02D	GP	Spike Sample	50594		EPIA-002B	TRITIUM	47851	47851
100459	D431-32-02D	GP		50594		EPIA-010B	TOTAL RAD	48013	48013
100459	D431-32-02D	GP	Lab Replicate	50594		EPIA-010B	TOTAL RAD	48013	48013
100459	D431-32-02D	GP	Spike Sample	50594		EPIA-010B	TOTAL RAD	48013	48013
100459	D431-32-02D	General Engineering		50594	EPA3050	EPA6010	METALS	47751	47751
100459	D431-32-02D	General Engineering	Lab Replicate	50594	EPA3050	EPA6010	METALS	47751	47751
100459	D431-32-02D	General Engineering	Spike Sample	50594	EPA3050	EPA6010	METALS	47751	47751
100459	D431-32-02D	General Engineering		50594	EPA3550	EPA8270	SEMIVOLATILES	47676	47676
100459	D431-32-02D	General Engineering	Lab Replicate	50594	EPA3550	EPA8270	SEMIVOLATILES	47676	47676

Table 1
Analytical Program of Surface Water and Sediment Samples
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext/Dig Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100459	D431-32-02D	General Engineering	Spike Sample	50594	EPA3550	EPA8270	SEMIVOLATILES	47676	47676
100459	D431-32-02D	General Engineering		50594	EPA7471	EPA7471	HG	47749	47749
100459	D431-32-02D	General Engineering	Lab Replicate	50594	EPA7471	EPA7471	HG	47749	47749
100459	D431-32-02D	General Engineering	Spike Sample	50594	EPA7471	EPA7471	HG	47749	47749
100460	D431-29-01	Weston		50594		EPA160.1	TDS	94LSSA85	94LSSA85
100460	D431-29-01	Weston		50594		EPA160.2	TSS	94LSSA85	94LSSA85
100460	D431-29-01	Weston		50594		EPA300	CL/F/SO4	94LCC066	94LCC066
100460	D431-29-01	Weston		50594		EPA300	CL/F/SO4	94LFC066	94LFC066
100460	D431-29-01	Weston		50594		EPA300	CL/F/SO4	94LSC066	94LSC066
100460	D431-29-01	Weston		50594		EPA353.2	NO3	94LN3072	94LN3072
100460	D431-29-01	Weston		50594		EPA415.1	TOC	94LTC080	94LTC080
100460	D431-29-01	Thermo Analytical		50594		EPA900.0	GROSS ALPHA/BETA	9405022	5109402
100460	D431-29-01	Thermo Analytical		50594		EPA900.1 MOD.	TOTAL RAD	9405022	5109402
100460	D431-29-01	Thermo Analytical		50594		EPA906.0	TRITIUM	9405022	5099404
100460	D431-29-01	Weston		50594		SW9020A	TOX	94LX125B	94LX125B
100460	D431-29-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511F
100460	D431-29-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511Z
100460	D431-29-01	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5707	AS051151
100460	D431-29-01	Weston		50594	EPA3050	EPA7421	LEAD	94L5707	PB051202
100460	D431-29-01	Weston		50594	EPA3050	EPA7471	HG	94C0185	HG051004
100460	D431-29-01	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5707	SE051104
100460	D431-29-01	Weston		50594	EPA3510/20	EPA8270	SEMIVOLATILES	94LE0899	J051101
100460	D431-29-01	Weston		50594	EPA3510/20	EPA8270M	SEMIVOLATILES	94LE0899	J051101
100460	D431-29-01	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0899	J051101
100460	D431-29-01	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100460	D431-29-01	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100461	D431-28-01	Weston		50594		EPA160.1	TDS	94LSSA85	94LSSA85
100461	D431-28-01	Weston	Lab Replicate	50594		EPA160.1	TDS	94LSSA85	94LSSA85
100461	D431-28-01	Weston		50594		EPA160.2	TSS	94LSSA85	94LSSA85
100461	D431-28-01	Weston	Lab Replicate	50594		EPA160.2	TSS	94LSSA85	94LSSA85
100461	D431-28-01	Weston		50594		EPA300	CL/F/SO4	94LCC066	94LCC066
100461	D431-28-01	Weston		50594		EPA300	CL/F/SO4	94LFC066	94LFC066
100461	D431-28-01	Weston		50594		EPA300	CL/F/SO4	94LSC066	94LSC066
100461	D431-28-01	Weston		50594		EPA353.2	NO3	94LN3072	94LN3072
100461	D431-28-01	Weston		50594		EPA415.1	TOC	94LTC080	94LTC080
100461	D431-28-01	Thermo Analytical		50594		EPA900.0	GROSS ALPHA/BETA	9405022	5099402

Table 1
Analytical Program of Surface Water and Sediment Samples
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext./Dig. Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100461	D431-28-01	Thermo Analytical		50594		EPA900.1 MOD.	TOTAL RAD	9405022	5109402
100461	D431-28-01	Thermo Analytical		50594		EPA906.0	TRITIUM	9405022	5099404
100461	D431-28-01	Weston		50594		SW9020A	TOX	94LX125X	94LX125X
100461	D431-28-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511F
100461	D431-28-01	Weston		50594	EPA3050	EPA6010	METALS	94L5708	PS0511Z
100461	D431-28-01	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5707	AS051151
100461	D431-28-01	Weston		50594	EPA3050	EPA7421	LEAD	94L5707	PB051202
100461	D431-28-01	Weston		50594	EPA3050	EPA7471	HG	94C0185	HG051004
100461	D431-28-01	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5707	SE051104
100461	D431-28-01	Weston		50594	EPA3510/20	EPA8270	SEMIVOLATILES	94LE0899	J051101
100461	D431-28-01	Weston		50594	EPA3510/20	EPA8270M	SEMIVOLATILES	94LE0899	J051101
100461	D431-28-01	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0899	J051101
100461	D431-28-01	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100461	D431-28-01	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100462	D431-31-02	Weston		50594		ASTMD497.2	pH	94LPH040	94LPH040
100462	D431-31-02	Weston		50594		EPA415.8	TOC/TOH	94LTZ23A	94LTZ23A
100462	D431-31-02	Weston		50594		EPA7471	HG	94C0187	HG051005
100462	D431-31-02	Thermo Analytical		50594		LANLER210 MOD	TRITIUM	9405023	5109404
100462	D431-31-02	Thermo Analytical		50594		LANLMLR-100	GROSS ALPHA/BETA	9405023	5099402
100462	D431-31-02	Thermo Analytical		50594		SW8469315 MOD	TOTAL RAD	9405023	5109402
100462	D431-31-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511A
100462	D431-31-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511B
100462	D431-31-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511E
100462	D431-31-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511X
100462	D431-31-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511Y
100462	D431-31-02	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5705	AS051051
100462	D431-31-02	Weston		50594	EPA3050	EPA7421	LEAD	94L5705	PB051153
100462	D431-31-02	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5705	SE051161
100462	D431-31-02	Weston		50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051001
100462	D431-31-02	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051001
100462	D431-31-02	Weston		50594	EPA3540/50	EPA8270M	SEMIVOLATILES	94LE0897	S051001
100462	D431-31-02	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100462	D431-31-02	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100463	D431-31-02A	Weston		50594		ASTMD497.2	pH	94LPH040	94LPH040
100463	D431-31-02A	Weston		50594		EPA415.8	TOC/TOH	94LTZ23A	94LTZ23A
100463	D431-31-02A	Weston		50594		EPA7471	HG	94C0187	HG051005

Table 1
Analytical Program of Surface Water and Sediment Samples
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext/Dig Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100463	D431-31-02A	Thermo Analytical		50594		LANLER210 MOD	TRITIUM	9405023	5109404
100463	D431-31-02A	Thermo Analytical		50594		LANLMLR-100	GROSS ALPHA/BETA	9405023	5099402
100463	D431-31-02A	Thermo Analytical		50594		SW8469315 MOD	TOTAL RAD	9405023	5109402
100463	D431-31-02A	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511A
100463	D431-31-02A	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511B
100463	D431-31-02A	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511E
100463	D431-31-02A	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511X
100463	D431-31-02A	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511Y
100463	D431-31-02A	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5705	AS051051
100463	D431-31-02A	Weston		50594	EPA3050	EPA7421	LEAD	94L5705	PB051153
100463	D431-31-02A	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5705	SE051161
100463	D431-31-02A	Weston		50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051001
100463	D431-31-02A	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051001
100463	D431-31-02A	Weston		50594	EPA3540/50	EPA8270M	SEMIVOLATILES	94LE0897	S051001
100463	D431-31-02A	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100463	D431-31-02A	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100464	D431-30-02	Weston		50594		ASTMD497.2	pH	94LPH040	94LPH040
100464	D431-30-02	Weston	Lab Replicate	50594		ASTMD497.2	pH	94LPH040	94LPH040
100464	D431-30-02	Weston		50594		EPA415.8	TOC/TOH	94LTZ23A	94LTZ23A
100464	D431-30-02	Weston		50594		EPA7471	HG	94C0187	HG051005
100464	D431-30-02	Thermo Analytical		50594		LANLER210 MOD	TRITIUM	9405023	5109404
100464	D431-30-02	Thermo Analytical		50594		LANLMLR-100	GROSS ALPHA/BETA	9405023	5099402
100464	D431-30-02	Thermo Analytical		50594		SW8469315 MOD	TOTAL RAD	9405023	5109402
100464	D431-30-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511A
100464	D431-30-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511B
100464	D431-30-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511E
100464	D431-30-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511X
100464	D431-30-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511Y
100464	D431-30-02	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5705	AS051051
100464	D431-30-02	Weston		50594	EPA3050	EPA7421	LEAD	94L5705	PB051153
100464	D431-30-02	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5705	SE051161
100464	D431-30-02	Weston		50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051101
100464	D431-30-02	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051101
100464	D431-30-02	Weston		50594	EPA3540/50	EPA8270M	SEMIVOLATILES	94LE0897	S051101
100464	D431-30-02	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100464	D431-30-02	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001

Table 1
Analytical Program of Surface Water and Sediment Samples
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext./Dig. Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100465	D431-29-02	Weston		50594		ASTMD497.2	pH	94LPH040	94LPH040
100465	D431-29-02	Weston		50594		EPA415.8	TOC/TOH	94LTZ23A	94LTZ23A
100465	D431-29-02	Weston		50594		EPA7471	HG	94C0187	HG051005
100465	D431-29-02	Thermo Analytical		50594		LANLER210 MOD	TRITIUM	9405023	5109404
100465	D431-29-02	Thermo Analytical		50594		LANLMLR-100	GROSS ALPHA/BETA	9405023	5099402
100465	D431-29-02	Thermo Analytical		50594		SW8469315 MOD	TOTAL RAD	9405023	5109402
100465	D431-29-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511A
100465	D431-29-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511B
100465	D431-29-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511E
100465	D431-29-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511X
100465	D431-29-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511Y
100465	D431-29-02	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5705	AS051051
100465	D431-29-02	Weston		50594	EPA3050	EPA7421	LEAD	94L5705	PB051153
100465	D431-29-02	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5705	SE051161
100465	D431-29-02	Weston		50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051101
100465	D431-29-02	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051101
100465	D431-29-02	Weston		50594	EPA3540/50	EPA8270M	SEMIVOLATILES	94LE0897	S051101
100465	D431-29-02	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100465	D431-29-02	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100466	D431-28-02	Weston		50594		ASTMD497.2	pH	94LPH040	94LPH040
100466	D431-28-02	Weston		50594		EPA415.8	TOC/TOH	94LTZ23A	94LTZ23A
100466	D431-28-02	Weston		50594		EPA7471	HG	94C0187	HG051005
100466	D431-28-02	Thermo Analytical		50594		LANLER210 MOD	TRITIUM	9405023	5109404
100466	D431-28-02	Thermo Analytical		50594		LANLMLR-100	GROSS ALPHA/BETA	9405023	5099402
100466	D431-28-02	Thermo Analytical		50594		SW8469315 MOD	TOTAL RAD	9405023	5109402
100466	D431-28-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511A
100466	D431-28-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511B
100466	D431-28-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511E
100466	D431-28-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511X
100466	D431-28-02	Weston		50594	EPA3050	EPA6010	METALS	94L5706	PS0511Y
100466	D431-28-02	Weston		50594	EPA3050	EPA7060	ARSENIC	94L5705	AS051051
100466	D431-28-02	Weston		50594	EPA3050	EPA7421	LEAD	94L5705	PB051153
100466	D431-28-02	Weston		50594	EPA3050	EPA7740	SELENIUM	94L5705	SE051161
100466	D431-28-02	Weston		50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051101
100466	D431-28-02	Weston	Spike Sample	50594	EPA3540/50	EPA8270	SEMIVOLATILES	94LE0897	S051101
100466	D431-28-02	Weston		50594	EPA3540/50	EPA8270M	SEMIVOLATILES	94LE0897	S051101

Table 1
Analytical Program of Surface Water and Sediment Samples
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Name	Laboratory	Sample Type	Sample Date	Ext/Dig Method	Analytical Method	Analytical Parameters	Prep Batch	Instrument Batch
100466	D431-28-02	Weston		50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100466	D431-28-02	Weston	Lab Replicate	50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100466	D431-28-02	Weston	Spike Sample	50594	EPA5030	EPA8260	VOLATILES	94LVC056	C051001
100467	DBRP-TB-01	General Engineering		50694		EPA8260	VOLATILES	47729	47729
100468	TRIP BLANK	Weston		50694	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100468	TRIP BLANK	Weston	Spike Sample	50694	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100469	TRIP BLANK	Weston		50694	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100469	TRIP BLANK	Weston	Spike Sample	50694	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100470	TRIP BLANK	Weston		50694	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100470	TRIP BLANK	Weston	Spike Sample	50694	EPA5030	EPA8260	VOLATILES	94LVC057	C051101
100471	TRIP BLANK	Weston		50694	EPA5030	EPA8260	VOLATILES	94LVC058	C051124
100471	TRIP BLANK	Weston	Spike Sample	50694	EPA5030	EPA8260	VOLATILES	94LVC058	C051124
100472	TRIP BLANK	Weston		50694	EPA5030	EPA8260	VOLATILES	94LVC058	C051124
100472	TRIP BLANK	Weston	Lab Replicate	50694	EPA5030	EPA8260	VOLATILES	94LVC058	C051124
100472	TRIP BLANK	Weston	Spike Sample	50694	EPA5030	EPA8260	VOLATILES	94LVC058	C051124

Table 2
Analytical Program of Laboratory Quality Control Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Type	Analytical Method	Analytical Parameters	Preparation Batch	Instrument Batch
General Engineering	Lab Blank	EPA160.1	TDS	47704	47704
General Engineering	Lab Blank	EPA160.2	TSS	47705	47705
General Engineering	Lab Blank	EPA300.0	CL/F/SO4/NO3	47690	47690
General Engineering	Lab Blank	EPA300.0	CL/F/SO4/NO3	47807	47807
General Engineering	Lab Blank	EPA415.1	TOC	47767	47767
General Engineering	Lab Blank	EPA6010	METALS	47711	47711
General Engineering	Lab Blank	EPA6010	METALS	47751	47751
General Engineering	Lab Blank	EPA7060	ARSENIC	47710	47710
General Engineering	Lab Blank	EPA7421	LEAD	47710	47710
General Engineering	Lab Blank	EPA7470	MERCURY	47748	47748
General Engineering	Lab Blank	EPA7471	HG	47749	47749
General Engineering	Lab Blank	EPA7740	SELENIUM	47710	47710
General Engineering	Lab Blank	EPA8260	VOLATILES	47729	47729
General Engineering	Lab Blank	EPA8260	VOLATILES	47771	47771
General Engineering	Lab Blank	EPA8270	SEMIVOLATILES	47675	47675
General Engineering	Lab Blank	EPA8270	SEMIVOLATILES	47676	47676
General Engineering	Lab Blank	EPA9020	TOX	47737	47737
General Engineering	Lab Blank	EPA9060	TOC	47742	47742
General Engineering	Lab Blank	EPIA-001	GROSS ALPHA/BETA	47823	47823
General Engineering	Lab Blank	EPIA-001B	GROSS ALPHA/BETA	47824	47824
General Engineering	Lab Blank	EPIA-002	TRITIUM	47845	47845
General Engineering	Lab Blank	EPIA-002B	TRITIUM	47851	47851
General Engineering	Lab Blank	EPIA-010	TOTAL RAD	47708	47708
General Engineering	Lab Blank	EPIA-010B	TOTAL RAD	48013	48013
Thermo Analytical	Lab Blank	EPA900.0	GROSS ALPHA/BETA	9405022	5099402
Thermo Analytical	Lab Blank	EPA900.1 MOD.	TOTAL RAD	9405022	5109402
Thermo Analytical	Lab Blank	EPA906.0	TRITIUM	9405022	5099404
Thermo Analytical	Lab Blank	LANLER210 MOD	TRITIUM	9405023	5109404
Thermo Analytical	Lab Blank	LANLMLR-100	GROSS ALPHA/BETA	9405023	5099402
Thermo Analytical	Lab Blank	SW8469315 MOD	TOTAL RAD	9405023	5109402
Thermo Analytical	Spike Sample	EPA900.0	GROSS ALPHA/BETA	9405022	5099402
Thermo Analytical	Spike Sample	EPA900.1 MOD.	TOTAL RAD	9405022	5109402
Thermo Analytical	Spike Sample	EPA906.0	TRITIUM	9405022	5099404
Thermo Analytical	Spike Sample	LANLER210 MOD	TRITIUM	9405023	5109404
Thermo Analytical	Spike Sample	LANLMLR-100	GROSS ALPHA/BETA	9405023	5099402
Thermo Analytical	Spike Sample	SW8469315 MOD	TOTAL RAD	9405023	5109402
Weston	Continuing Calibration Blank	EPA6010	METALS		AS051061
Weston	Continuing Calibration Blank	EPA6010	METALS		PB051151
Weston	Continuing Calibration Blank	EPA6010	METALS		PB051153
Weston	Continuing Calibration Blank	EPA6010	METALS	94C0187	HG051005
Weston	Continuing Calibration Blank	EPA6010	METALS	94L5705	AS051061
Weston	Continuing Calibration Blank	EPA6010	METALS	94L5705	PB051151
Weston	Continuing Calibration Blank	EPA6010	METALS	CRA	AS051061
Weston	Continuing Calibration Blank	EPA6010	METALS	CRA	PB051151
Weston	Continuing Calibration Blank	EPA6010	METALS	CRA	PB051153
Weston	Continuing Calibration Blank	EPA7060	ARSENIC		AS051151
Weston	Continuing Calibration Blank	EPA7060	ARSENIC	94L5707	AS051151
Weston	Continuing Calibration Blank	EPA7060	ARSENIC	CRA	AS051151
Weston	Continuing Calibration Blank	EPA7421	LEAD		PB051202
Weston	Continuing Calibration Blank	EPA7421	LEAD	94L5707	PB051202
Weston	Continuing Calibration Blank	EPA7421	LEAD	CRA	PB051202
Weston	Continuing Calibration Blank	EPA7471	HG	94C0185	HG051004
Weston	Continuing Calibration Blank	EPA7471	HG	94C0190	HG051004
Weston	Continuing Calibration Blank	EPA7740	SELENIUM		SE051104
Weston	Continuing Calibration Blank	EPA7740	SELENIUM	94L5707	SE051104
Weston	Continuing Calibration Blank	EPA7740	SELENIUM	CRA	SE051104
Weston	Continuing Calibration Verification Sample	EPA6010	METALS		AS051061
Weston	Continuing Calibration Verification Sample	EPA6010	METALS		PB051151
Weston	Continuing Calibration Verification Sample	EPA6010	METALS		PB051153
Weston	Continuing Calibration Verification Sample	EPA6010	METALS	94C0187	HG051005

Table 2
Analytical Program of Laboratory Quality Control Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Type	Analytical Method	Analytical Parameters	Preparation Batch	Instrument Batch
Weston	Continuing Calibration Verification Sample	EPA6010	METALS	94L5705	AS051061
Weston	Continuing Calibration Verification Sample	EPA6010	METALS	94L5705	PB051151
Weston	Continuing Calibration Verification Sample	EPA6010	METALS	CRA	AS051061
Weston	Continuing Calibration Verification Sample	EPA6010	METALS	CRA	PB051151
Weston	Continuing Calibration Verification Sample	EPA6010	METALS	CRA	PB051153
Weston	Continuing Calibration Verification Sample	EPA7060	ARSENIC		AS051151
Weston	Continuing Calibration Verification Sample	EPA7060	ARSENIC	94L5707	AS051151
Weston	Continuing Calibration Verification Sample	EPA7060	ARSENIC	CRA	AS051151
Weston	Continuing Calibration Verification Sample	EPA7421	LEAD		PB051202
Weston	Continuing Calibration Verification Sample	EPA7421	LEAD	94L5707	PB051202
Weston	Continuing Calibration Verification Sample	EPA7421	LEAD	CRA	PB051202
Weston	Continuing Calibration Verification Sample	EPA7471	HG	94C0185	HG051004
Weston	Continuing Calibration Verification Sample	EPA7471	HG	94C0190	HG051004
Weston	Continuing Calibration Verification Sample	EPA7740	SELENIUM		SE051104
Weston	Continuing Calibration Verification Sample	EPA7740	SELENIUM	94L5707	SE051104
Weston	Continuing Calibration Verification Sample	EPA7740	SELENIUM	CRA	SE051104
Weston	Continuing Calibration Verification Sample	EPA6010	METALS	CRA	AS051061
Weston	CRA	EPA6010	METALS	CRA	PB051151
Weston	CRA	EPA6010	METALS	CRA	PB051153
Weston	CRA	EPA7060	ARSENIC	CRA	AS051151
Weston	CRA	EPA7421	LEAD	CRA	PB051202
Weston	CRA	EPA7740	SELENIUM	CRA	SE051104
Weston	CRA	EPA6010	METALS		AS051061
Weston	Initial Calibration Blank	EPA6010	METALS		PB051151
Weston	Initial Calibration Blank	EPA6010	METALS		PB051153
Weston	Initial Calibration Blank	EPA6010	METALS	94C0187	HG051005
Weston	Initial Calibration Blank	EPA7060	ARSENIC		AS051151
Weston	Initial Calibration Blank	EPA7421	LEAD		PB051202
Weston	Initial Calibration Blank	EPA7471	HG	94C0185	HG051004
Weston	Initial Calibration Blank	EPA7471	HG	94C0190	HG051004
Weston	Initial Calibration Blank	EPA7740	SELENIUM		SE051104
Weston	Initial Calibration Verification Sample Blank	EPA6010	METALS		AS051061
Weston	Initial Calibration Verification Sample Blank	EPA6010	METALS		PB051151
Weston	Initial Calibration Verification Sample Blank	EPA6010	METALS		PB051153
Weston	Initial Calibration Verification Sample Blank	EPA6010	METALS	94C0187	HG051005
Weston	Initial Calibration Verification Sample Blank	EPA7060	ARSENIC		AS051151
Weston	Initial Calibration Verification Sample Blank	EPA7421	LEAD		PB051202
Weston	Initial Calibration Verification Sample Blank	EPA7471	HG	94C0185	HG051004
Weston	Initial Calibration Verification Sample Blank	EPA7471	HG	94C0190	HG051004
Weston	Initial Calibration Verification Sample Blank	EPA7740	SELENIUM		SE051104
Weston	Lab Blank	EPA160.1	TDS	94LSSA85	94LSSA85
Weston	Lab Blank	EPA160.2	TSS	94LSSA85	94LSSA85
Weston	Lab Blank	EPA300	CL/F/SO4	94LCC066	94LCC066
Weston	Lab Blank	EPA300	CL/F/SO4	94LFC066	94LFC066
Weston	Lab Blank	EPA300	CL/F/SO4	94LSC066	94LSC066
Weston	Lab Blank	EPA353.2	NO3	94LN3072	94LN3072
Weston	Lab Blank	EPA415.1	TOC	94LTC080	94LTC080
Weston	Lab Blank	EPA415.8	TOC/TOH	94LTZ23A	94LTZ23A
Weston	Lab Blank	EPA6010	METALS	94L5706	PS0511A
Weston	Lab Blank	EPA6010	METALS	94L5706	PS0511B
Weston	Lab Blank	EPA6010	METALS	94L5706	PS0511E
Weston	Lab Blank	EPA6010	METALS	94L5706	PS0511X
Weston	Lab Blank	EPA6010	METALS	94L5706	PS0511Y
Weston	Lab Blank	EPA6010	METALS	94L5708	PS0511F
Weston	Lab Blank	EPA6010	METALS	94L5708	PS0511Z
Weston	Lab Blank	EPA7060	ARSENIC	94L5705	AS051051
Weston	Lab Blank	EPA7060	ARSENIC	94L5707	AS051151
Weston	Lab Blank	EPA7421	LEAD	94L5705	PB051151
Weston	Lab Blank	EPA7421	LEAD	94L5707	PB051202
Weston	Lab Blank	EPA7471	HG	94C0185	HG051004
Weston	Lab Blank				

Table 2
Analytical Program of Laboratory Quality Control Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Type	Analytical Method	Analytical Parameter	Preparation Batch	Instrument Batch
Weston	Lab Blank	EPA7471	HG	94C0187	HG051005
Weston	Lab Blank	EPA7471	HG	94C0190	HG051103
Weston	Lab Blank	EPA7471	HG	94C0190	HG051103
Weston	Lab Blank	EPA7740	SELENIUM	94L5705	SE051161
Weston	Lab Blank	EPA7740	SELENIUM	94L5707	SE051104
Weston	Lab Blank	EPA8260	VOLATILES	94LVC056	C051001
Weston	Lab Blank	EPA8260	VOLATILES	94LVC057	C051101
Weston	Lab Blank	EPA8260	VOLATILES	94LVC058	C051124
Weston	Lab Blank	EPA8270	SEMIVOLATILES	94LE0899	J051101
Weston	Lab Blank	EPA8270	SEMIVOLATILES	94LE0897	S051001
Weston	Lab Blank	EPA8270M	SEMIVOLATILES	94LE0899	J051101
Weston	Lab Blank	EPA8270M	SEMIVOLATILES	94LE0897	S051001
Weston	Lab Blank	SW9020A	TOX	94LX124W	94LX124W
Weston	Lab Blank	SW9020A	TOX	94LX124X	94LX124X
Weston	Lab Blank	SW9020A	TOX	94LX125B	94LX125B
Weston	Lab Blank	SW9020A	TOX	94LX125X	94LX125X
Weston	Lab Blank	SW9020A	TOX	94LX126W	94LX126W
Weston	Spike Sample	EPA160.1	TDS	94LSSA85	94LSSA85
Weston	Spike Sample	EPA160.2	TSS	94LSSA85	94LSSA85
Weston	Spike Sample	EPA300	CL/F/SO4	94LCC066	94LCC066
Weston	Spike Sample	EPA300	CL/F/SO4	94LFC066	94LFC066
Weston	Spike Sample	EPA300	CL/F/SO4	94LSC066	94LSC066
Weston	Spike Sample	EPA353.2	NO3	94LN3072	94LN3072
Weston	Spike Sample	EPA415.1	TOC	94LTC080	94LTC080
Weston	Spike Sample	EPA415.8	TOC/TOH	94LTZ23A	94LTZ23A
Weston	Spike Sample	EPA6010	METALS	94L5706	PS0511A
Weston	Spike Sample	EPA6010	METALS	94L5706	PS0511B
Weston	Spike Sample	EPA6010	METALS	94L5706	PS0511E
Weston	Spike Sample	EPA6010	METALS	94L5706	PS0511X
Weston	Spike Sample	EPA6010	METALS	94L5706	PS0511Y
Weston	Spike Sample	EPA6010	METALS	94L5708	PS0511F
Weston	Spike Sample	EPA6010	METALS	94L5708	PS0511Z
Weston	Spike Sample	EPA7060	ARSENIC	94L5705	AS051051
Weston	Spike Sample	EPA7060	ARSENIC	94L5707	AS051151
Weston	Spike Sample	EPA7421	LEAD	94L5705	PB051151
Weston	Spike Sample	EPA7421	LEAD	94L5707	PB051202
Weston	Spike Sample	EPA7471	HG	94C0185	HG051004
Weston	Spike Sample	EPA7471	HG	94C0187	HG051005
Weston	Spike Sample	EPA7471	HG	94C0190	HG051103
Weston	Spike Sample	EPA7471	HG	94C0190	HG051103
Weston	Spike Sample	EPA7740	SELENIUM	94L5705	SE051161
Weston	Spike Sample	EPA7740	SELENIUM	94L5707	SE051104
Weston	Spike Sample	EPA8260	VOLATILES	94LVC056	C051001
Weston	Spike Sample	EPA8260	VOLATILES	94LVC057	C051101
Weston	Spike Sample	EPA8260	VOLATILES	94LVC058	C051124
Weston	Spike Sample	EPA8270	SEMIVOLATILES	94LE0899	J051101
Weston	Spike Sample	EPA8270	SEMIVOLATILES	94LE0897	S051001
Weston	Spike Sample	EPA8270	SEMIVOLATILES	94LE0899	J051101
Weston	Spike Sample	EPA8270M	SEMIVOLATILES	94LE0899	J051101
Weston	Spike Sample	EPA8270M	SEMIVOLATILES	94LE0897	S051001
Weston	Spike Sample	SW9020A	TOX	94LX124W	94LX124W
Weston	Spike Sample	SW9020A	TOX	94LX124X	94LX124X
Weston	Spike Sample	SW9020A	TOX	94LX125B	94LX125B
Weston	Spike Sample	SW9020A	TOX	94LX125X	94LX125X
Weston	Spike Sample	SW9020A	TOX	94LX126W	94LX126W

Table 3
Association of Primary and Quality Control Samples
D-Area Burning/Rubble Pits
Savannah River Site

		Quality Control Samples												
Sample Name >		D431-35-02C	D431-32-01D	D431-32-02E	D431-31-01A	D431-31-01C	D431-32-02D	D431-31-02A	DBRP-TB-01	DAILYTRIPBLANK	DAILYTRIPBLANK	DAILYTRIPBLANK	DAILYTRIPBLANK	DAILYTRIPBLANK
Sample Type >		Field Blank	Split	Rinsate	Field Duplicate	Field Blank	Split	Field Duplicate	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank
Sample Identification >		100445	100451	100452	100455	100456	100459	100463	100467	100468	100469	100470	100471	100472
Sample ID	Sample Name													
100438	D431-37-01												*	
100439	D431-37-02											*		
100440	D431-38-01									*				
100441	D431-36-01											*		
100442	D431-36-02										*			
100443	D431-39-01									*				
100444	D431-35-01	*												
100445	D431-35-02C													
100446	D431-35-02	*												
100447	D431-34-01									*				
100448	D431-33-01													*
100449	D431-34-02									*				
100450	D431-32-01		*											
100451	D431-32-01D								*					
100452	D431-32-02E									*				
100453	D431-33-02										*			
100454	D431-31-01				*	*						*		
100455	D431-31-01A													*
100456	D431-31-01C													*
100457	D431-30-01												*	
100458	D431-32-02			*			*							
100459	D431-32-02D								*					
100460	D431-29-01													*
100461	D431-28-01												*	
100462	D431-31-02					*		*			*			
100463	D431-31-02A										*			
100464	D431-30-02										*			
100465	D431-29-02										*			
100466	D431-28-02										*			
100467	DBRP-TB-01													
100468	DAILYTRIPBLANK													
100469	DAILYTRIPBLANK													
100470	DAILYTRIPBLANK													
100471	DAILYTRIPBLANK													
100472	DAILYTRIPBLANK													

Table 4
Holding Times
D-Area Burning/Rubble Pits
Savannah River Site

Ext/Dig Method	Analytical Method	Unit	Sample Identifier	Collection Date	Ext/Dig Date	Analysis Date	Days to Ext	Days to Analysis
EPA3050	EPA6010	MGKG	100439	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100442	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100446	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100449	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100453	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100458	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100462	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100463	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100464	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100465	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100466	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100439	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100442	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100446	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100449	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100453	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100458	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100462	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100463	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100464	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100465	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100466	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100439	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100442	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100446	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100449	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100453	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100458	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100462	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100463	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100464	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100465	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100466	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100439	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100442	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100446	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100449	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100453	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100458	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100462	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100463	5/5/94		5/11/94		6

Table 4
Holding Times
D-Area Burning/Rubble Pits
Savannah River Site

Ext/Dig Method	Analytical Method	Unit	Sample Identifier	Collection Date	Ext/Dig Date	Analysis Date	Days to Ext	Days to Analysis
EPA3050	EPA6010	MGKG	100464	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100465	5/5/94		5/11/94		6
EPA3050	EPA6010	MGKG	100466	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100438	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100440	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100441	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100443	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100444	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100447	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100448	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100450	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100452	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100454	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100455	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100457	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100460	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100461	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100438	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100440	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100441	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100443	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100444	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100447	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100448	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100450	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100452	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100454	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100455	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100457	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100460	5/5/94		5/11/94		6
EPA3050	EPA6010	UGL	100461	5/5/94		5/11/94		6
EPA3050	EPA7060	MGKG	100458	5/5/94		5/10/94		5
EPA3050	EPA7060	MGKG	100462	5/5/94		5/10/94		5
EPA3050	EPA7060	MGKG	100463	5/5/94		5/10/94		5
EPA3050	EPA7060	MGKG	100464	5/5/94		5/10/94		5
EPA3050	EPA7060	MGKG	100465	5/5/94		5/10/94		5
EPA3050	EPA7060	MGKG	100466	5/5/94		5/10/94		5
EPA3050	EPA7060	MGKG	100439	5/5/94		5/10/94		5
EPA3050	EPA7060	MGKG	100442	5/5/94		5/10/94		5
EPA3050	EPA7060	MGKG	100446	5/5/94		5/10/94		5
EPA3050	EPA7060	MGKG	100449	5/5/94		5/10/94		5
EPA3050	EPA7060	MGKG	100453	5/5/94		5/10/94		5
EPA3050	EPA7060	UGL	100438	5/5/94		5/11/94		6
EPA3050	EPA7060	UGL	100440	5/5/94		5/11/94		6
EPA3050	EPA7060	UGL	100441	5/5/94		5/11/94		6
EPA3050	EPA7060	UGL	100443	5/5/94		5/11/94		6
EPA3050	EPA7060	UGL	100444	5/5/94		5/11/94		6
EPA3050	EPA7060	UGL	100447	5/5/94		5/11/94		6
EPA3050	EPA7060	UGL	100448	5/5/94		5/11/94		6
EPA3050	EPA7060	UGL	100450	5/5/94		5/11/94		6
EPA3050	EPA7060	UGL	100452	5/5/94		5/11/94		6
EPA3050	EPA7060	UGL	100454	5/5/94		5/11/94		6

Table 4
Holding Times
D-Area Burning/Rubble Pits
Savannah River Site

Ext/Dig Method	Analytical Method	Unit	Sample Identifier	Collection Date	Ext/Dig Date	Analysis Date	Days to Ext	Days to Analysis
EPA3050	EPA7060	UGL	100455	5/5/94		5/11/94		6
EPA3050	EPA7060	UGL	100457	5/5/94		5/11/94		6
EPA3050	EPA7060	UGL	100460	5/5/94		5/11/94		6
EPA3050	EPA7060	UGL	100461	5/5/94		5/11/94		6
EPA3050	EPA7421	MGKG	100439	5/5/94		5/11/94		6
EPA3050	EPA7421	MGKG	100442	5/5/94		5/11/94		6
EPA3050	EPA7421	MGKG	100446	5/5/94		5/11/94		6
EPA3050	EPA7421	MGKG	100449	5/5/94		5/11/94		6
EPA3050	EPA7421	MGKG	100453	5/5/94		5/11/94		6
EPA3050	EPA7421	MGKG	100458	5/5/94		5/11/94		6
EPA3050	EPA7421	MGKG	100462	5/5/94		5/11/94		6
EPA3050	EPA7421	MGKG	100463	5/5/94		5/11/94		6
EPA3050	EPA7421	MGKG	100464	5/5/94		5/11/94		6
EPA3050	EPA7421	MGKG	100465	5/5/94		5/11/94		6
EPA3050	EPA7421	MGKG	100466	5/5/94		5/11/94		6
EPA3050	EPA7421	UGL	100438	5/5/94		5/12/94		7
EPA3050	EPA7421	UGL	100440	5/5/94		5/12/94		7
EPA3050	EPA7421	UGL	100441	5/5/94		5/12/94		7
EPA3050	EPA7421	UGL	100443	5/5/94		5/12/94		7
EPA3050	EPA7421	UGL	100444	5/5/94		5/12/94		7
EPA3050	EPA7421	UGL	100447	5/5/94		5/12/94		7
EPA3050	EPA7421	UGL	100448	5/5/94		5/12/94		7
EPA3050	EPA7421	UGL	100450	5/5/94		5/12/94		7
EPA3050	EPA7421	UGL	100452	5/5/94		5/12/94		7
EPA3050	EPA7421	UGL	100454	5/5/94		5/12/94		7
EPA3050	EPA7421	UGL	100455	5/5/94		5/12/94		7
EPA3050	EPA7421	UGL	100457	5/5/94		5/12/94		7
EPA3050	EPA7421	UGL	100460	5/5/94		5/12/94		7
EPA3050	EPA7421	UGL	100461	5/5/94		5/12/94		7
EPA3050	EPA7471	UGL	100438	5/5/94		5/10/94		5
EPA3050	EPA7471	UGL	100440	5/5/94		5/10/94		5
EPA3050	EPA7471	UGL	100441	5/5/94		5/10/94		5
EPA3050	EPA7471	UGL	100443	5/5/94		5/10/94		5
EPA3050	EPA7471	UGL	100444	5/5/94		5/10/94		5
EPA3050	EPA7471	UGL	100447	5/5/94		5/10/94		5
EPA3050	EPA7471	UGL	100448	5/5/94		5/10/94		5
EPA3050	EPA7471	UGL	100450	5/5/94		5/10/94		5
EPA3050	EPA7471	UGL	100452	5/5/94		5/10/94		5
EPA3050	EPA7471	UGL	100454	5/5/94		5/10/94		5
EPA3050	EPA7471	UGL	100455	5/5/94		5/13/94		8
EPA3050	EPA7471	UGL	100457	5/5/94		5/10/94		5
EPA3050	EPA7471	UGL	100460	5/5/94		5/10/94		5
EPA3050	EPA7471	UGL	100461	5/5/94		5/10/94		5
EPA3050	EPA7471	UGL	100455	5/5/94		5/11/94		6
EPA3050	EPA7740	MGKG	100439	5/5/94		5/11/94		6
EPA3050	EPA7740	MGKG	100442	5/5/94		5/11/94		6
EPA3050	EPA7740	MGKG	100446	5/5/94		5/11/94		6
EPA3050	EPA7740	MGKG	100449	5/5/94		5/11/94		6
EPA3050	EPA7740	MGKG	100453	5/5/94		5/11/94		6
EPA3050	EPA7740	MGKG	100458	5/5/94		5/11/94		6
EPA3050	EPA7740	MGKG	100462	5/5/94		5/11/94		6
EPA3050	EPA7740	MGKG	100463	5/5/94		5/11/94		6

Table 4
Holding Times
D-Area Burning/Rubble Pits
Savannah River Site

Ext/Dig Method	Analytical Method	Unit	Sample Identifier	Collection Date	Ext/Dig Date	Analysis Date	Days to Ext	Days to Analysis
EPA3050	EPA7740	MGKG	100464	5/5/94		5/11/94		6
EPA3050	EPA7740	MGKG	100465	5/5/94		5/11/94		6
EPA3050	EPA7740	MGKG	100466	5/5/94		5/11/94		6
EPA3050	EPA7740	UGL	100438	5/5/94		5/11/94		6
EPA3050	EPA7740	UGL	100440	5/5/94		5/11/94		6
EPA3050	EPA7740	UGL	100441	5/5/94		5/11/94		6
EPA3050	EPA7740	UGL	100443	5/5/94		5/11/94		6
EPA3050	EPA7740	UGL	100444	5/5/94		5/11/94		6
EPA3050	EPA7740	UGL	100447	5/5/94		5/11/94		6
EPA3050	EPA7740	UGL	100448	5/5/94		5/11/94		6
EPA3050	EPA7740	UGL	100450	5/5/94		5/11/94		6
EPA3050	EPA7740	UGL	100452	5/5/94		5/11/94		6
EPA3050	EPA7740	UGL	100454	5/5/94		5/11/94		6
EPA3050	EPA7740	UGL	100455	5/5/94		5/11/94		6
EPA3050	EPA7740	UGL	100457	5/5/94		5/11/94		6
EPA3050	EPA7740	UGL	100460	5/5/94		5/11/94		6
EPA3050	EPA7740	UGL	100461	5/5/94		5/11/94		6
EPA3510/20	EPA8270	UGL	100443	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270	UGL	100444	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270	UGL	100447	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270	UGL	100448	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270	UGL	100450	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270	UGL	100452	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270	UGL	100438	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270	UGL	100440	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270	UGL	100441	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270	UGL	100454	5/5/94	5/9/94	5/11/94	4	2
EPA3510/20	EPA8270	UGL	100455	5/5/94	5/9/94	5/11/94	4	2
EPA3510/20	EPA8270	UGL	100457	5/5/94	5/9/94	5/11/94	4	2
EPA3510/20	EPA8270	UGL	100460	5/5/94	5/9/94	5/11/94	4	2
EPA3510/20	EPA8270	UGL	100461	5/5/94	5/9/94	5/11/94	4	2
EPA3510/20	EPA8270M	UGL	100443	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270M	UGL	100444	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270M	UGL	100447	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270M	UGL	100448	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270M	UGL	100450	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270M	UGL	100452	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270M	UGL	100438	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270M	UGL	100440	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270M	UGL	100441	5/5/94	5/9/94	5/10/94	4	1
EPA3510/20	EPA8270M	UGL	100454	5/5/94	5/9/94	5/11/94	4	2
EPA3510/20	EPA8270M	UGL	100455	5/5/94	5/9/94	5/11/94	4	2
EPA3510/20	EPA8270M	UGL	100457	5/5/94	5/9/94	5/11/94	4	2
EPA3510/20	EPA8270M	UGL	100460	5/5/94	5/9/94	5/11/94	4	2
EPA3510/20	EPA8270M	UGL	100461	5/5/94	5/9/94	5/11/94	4	2
EPA3540/50	EPA8270	UGKG	100439	5/5/94	5/9/94	5/10/94	4	1
EPA3540/50	EPA8270	UGKG	100442	5/5/94	5/9/94	5/10/94	4	1
EPA3540/50	EPA8270	UGKG	100446	5/5/94	5/9/94	5/10/94	4	1
EPA3540/50	EPA8270	UGKG	100449	5/5/94	5/9/94	5/10/94	4	1
EPA3540/50	EPA8270	UGKG	100453	5/5/94	5/9/94	5/10/94	4	1
EPA3540/50	EPA8270	UGKG	100458	5/5/94	5/9/94	5/10/94	4	1
EPA3540/50	EPA8270	UGKG	100462	5/5/94	5/9/94	5/10/94	4	1

Table 4
Holding Times
D-Area Burning/Rubble Pits
Savannah River Site

Ext/Dig Method	Analytical Method	Unit	Sample Identifier	Collection Date	Ext/Dig Date	Analysis Date	Days to Ext	Days to Analysis
EPA3540/50	EPA8270	UGKG	100463	5/5/94	5/9/94	5/10/94	4	1
EPA3540/50	EPA8270	UGKG	100464	5/5/94	5/9/94	5/11/94	4	2
EPA3540/50	EPA8270	UGKG	100465	5/5/94	5/9/94	5/11/94	4	2
EPA3540/50	EPA8270	UGKG	100466	5/5/94	5/9/94	5/11/94	4	2
EPA3540/50	EPA8270M	UGKG	100439	5/5/94	5/9/94	5/10/94	4	1
EPA3540/50	EPA8270M	UGKG	100442	5/5/94	5/9/94	5/10/94	4	1
EPA3540/50	EPA8270M	UGKG	100446	5/5/94	5/9/94	5/10/94	4	1
EPA3540/50	EPA8270M	UGKG	100449	5/5/94	5/9/94	5/10/94	4	1
EPA3540/50	EPA8270M	UGKG	100453	5/5/94	5/9/94	5/10/94	4	1
EPA3540/50	EPA8270M	UGKG	100458	5/5/94	5/9/94	5/10/94	4	1
EPA3540/50	EPA8270M	UGKG	100462	5/5/94	5/9/94	5/10/94	4	1
EPA3540/50	EPA8270M	UGKG	100463	5/5/94	5/9/94	5/10/94	4	1
EPA3540/50	EPA8270M	UGKG	100464	5/5/94	5/9/94	5/11/94	4	2
EPA3540/50	EPA8270M	UGKG	100465	5/5/94	5/9/94	5/11/94	4	2
EPA3540/50	EPA8270M	UGKG	100466	5/5/94	5/9/94	5/11/94	4	2
EPA5030	EPA8260	UGKG	100439	5/5/94		5/10/94		5
EPA5030	EPA8260	UGKG	100442	5/5/94		5/10/94		5
EPA5030	EPA8260	UGKG	100446	5/5/94		5/10/94		5
EPA5030	EPA8260	UGKG	100449	5/5/94		5/10/94		5
EPA5030	EPA8260	UGKG	100453	5/5/94		5/10/94		5
EPA5030	EPA8260	UGKG	100458	5/5/94		5/10/94		5
EPA5030	EPA8260	UGKG	100462	5/5/94		5/10/94		5
EPA5030	EPA8260	UGKG	100463	5/5/94		5/10/94		5
EPA5030	EPA8260	UGKG	100464	5/5/94		5/10/94		5
EPA5030	EPA8260	UGKG	100465	5/5/94		5/10/94		5
EPA5030	EPA8260	UGKG	100466	5/5/94		5/10/94		5
EPA5030	EPA8260	UGL	100438	5/5/94		5/11/94		6
EPA5030	EPA8260	UGL	100440	5/5/94		5/11/94		6
EPA5030	EPA8260	UGL	100441	5/5/94		5/11/94		6
EPA5030	EPA8260	UGL	100443	5/5/94		5/11/94		6
EPA5030	EPA8260	UGL	100444	5/5/94		5/11/94		6
EPA5030	EPA8260	UGL	100445	5/5/94		5/11/94		6
EPA5030	EPA8260	UGL	100447	5/5/94		5/11/94		6
EPA5030	EPA8260	UGL	100448	5/5/94		5/11/94		6
EPA5030	EPA8260	UGL	100450	5/5/94		5/11/94		6
EPA5030	EPA8260	UGL	100452	5/5/94		5/11/94		6
EPA5030	EPA8260	UGL	100454	5/5/94		5/11/94		6
EPA5030	EPA8260	UGL	100455	5/5/94		5/11/94		6
EPA5030	EPA8260	UGL	100456	5/5/94		5/11/94		6
EPA5030	EPA8260	UGL	100457	5/5/94		5/11/94		6
EPA5030	EPA8260	UGL	100460	5/5/94		5/11/94		6
EPA5030	EPA8260	UGL	100461	5/5/94		5/11/94		6
EPA5030	EPA8260	UGL	100468	5/6/94		5/11/94		5
EPA5030	EPA8260	UGL	100469	5/6/94		5/11/94		5
EPA5030	EPA8260	UGL	100470	5/6/94		5/11/94		5
EPA5030	EPA8260	UGL	100471	5/6/94		5/11/94		5
EPA5030	EPA8260	UGL	100472	5/6/94		5/11/94		5
	ASTMD497.2	PH	100439	5/5/94		5/12/94		7
	ASTMD497.2	PH	100442	5/5/94		5/12/94		7
	ASTMD497.2	PH	100446	5/5/94		5/12/94		7
	ASTMD497.2	PH	100449	5/5/94		5/12/94		7
	ASTMD497.2	PH	100453	5/5/94		5/12/94		7

Table 4
Holding Times
D-Area Burning/Rubble Pits
Savannah River Site

Ext/Dig Method	Analytical Method	Unit	Sample Identifier	Collection Date	Ext/Dig Date	Analysis Date	Days to Ext.	Days to Analysis
	ASTMD497.2	PH	100458	5/5/94		5/12/94		7
	ASTMD497.2	PH	100462	5/5/94		5/12/94		7
	ASTMD497.2	PH	100463	5/5/94		5/12/94		7
	ASTMD497.2	PH	100464	5/5/94		5/12/94		7
	ASTMD497.2	PH	100465	5/5/94		5/12/94		7
	ASTMD497.2	PH	100466	5/5/94		5/12/94		7
	EPA160.1	UGL	100438	5/5/94		5/11/94		6
	EPA160.1	UGL	100440	5/5/94		5/11/94		6
	EPA160.1	UGL	100441	5/5/94		5/11/94		6
	EPA160.1	UGL	100443	5/5/94		5/11/94		6
	EPA160.1	UGL	100444	5/5/94		5/11/94		6
	EPA160.1	UGL	100447	5/5/94		5/11/94		6
	EPA160.1	UGL	100448	5/5/94		5/11/94		6
	EPA160.1	UGL	100450	5/5/94		5/11/94		6
	EPA160.1	UGL	100454	5/5/94		5/11/94		6
	EPA160.1	UGL	100455	5/5/94		5/11/94		6
	EPA160.1	UGL	100457	5/5/94		5/11/94		6
	EPA160.1	UGL	100460	5/5/94		5/11/94		6
	EPA160.1	UGL	100461	5/5/94		5/11/94		6
	EPA160.2	UGL	100438	5/5/94		5/11/94		6
	EPA160.2	UGL	100440	5/5/94		5/11/94		6
	EPA160.2	UGL	100441	5/5/94		5/11/94		6
	EPA160.2	UGL	100443	5/5/94		5/11/94		6
	EPA160.2	UGL	100444	5/5/94		5/11/94		6
	EPA160.2	UGL	100447	5/5/94		5/11/94		6
	EPA160.2	UGL	100448	5/5/94		5/11/94		6
	EPA160.2	UGL	100450	5/5/94		5/11/94		6
	EPA160.2	UGL	100454	5/5/94		5/11/94		6
	EPA160.2	UGL	100455	5/5/94		5/11/94		6
	EPA160.2	UGL	100457	5/5/94		5/11/94		6
	EPA160.2	UGL	100460	5/5/94		5/11/94		6
	EPA160.2	UGL	100461	5/5/94		5/11/94		6
	EPA300	UGL	100438	5/5/94		5/10/94		5
	EPA300	UGL	100440	5/5/94		5/10/94		5
	EPA300	UGL	100441	5/5/94		5/10/94		5
	EPA300	UGL	100443	5/5/94		5/10/94		5
	EPA300	UGL	100444	5/5/94		5/10/94		5
	EPA300	UGL	100447	5/5/94		5/10/94		5
	EPA300	UGL	100448	5/5/94		5/10/94		5
	EPA300	UGL	100450	5/5/94		5/10/94		5
	EPA300	UGL	100454	5/5/94		5/10/94		5
	EPA300	UGL	100455	5/5/94		5/10/94		5
	EPA300	UGL	100457	5/5/94		5/10/94		5
	EPA300	UGL	100460	5/5/94		5/10/94		5
	EPA300	UGL	100461	5/5/94		5/10/94		5
	EPA300	UGL	100438	5/5/94		5/10/94		5
	EPA300	UGL	100440	5/5/94		5/10/94		5
	EPA300	UGL	100441	5/5/94		5/10/94		5
	EPA300	UGL	100443	5/5/94		5/10/94		5
	EPA300	UGL	100444	5/5/94		5/10/94		5
	EPA300	UGL	100447	5/5/94		5/10/94		5
	EPA300	UGL	100448	5/5/94		5/10/94		5

Table 4
Holding Times
D-Area Burning/Rubble Pits
Savannah River Site

Ext/Dig Method	Analytical Method	Unit	Sample Identifier	Collection Date	Ext/Dig Date	Analysis Date	Days to Ext	Days to Analysis
	EPA300	UGL	100450	5/5/94		5/10/94		5
	EPA300	UGL	100454	5/5/94		5/10/94		5
	EPA300	UGL	100455	5/5/94		5/10/94		5
	EPA300	UGL	100457	5/5/94		5/10/94		5
	EPA300	UGL	100460	5/5/94		5/10/94		5
	EPA300	UGL	100461	5/5/94		5/10/94		5
	EPA300	UGL	100438	5/5/94		5/10/94		5
	EPA300	UGL	100440	5/5/94		5/10/94		5
	EPA300	UGL	100441	5/5/94		5/10/94		5
	EPA300	UGL	100443	5/5/94		5/10/94		5
	EPA300	UGL	100444	5/5/94		5/10/94		5
	EPA300	UGL	100447	5/5/94		5/10/94		5
	EPA300	UGL	100448	5/5/94		5/10/94		5
	EPA300	UGL	100450	5/5/94		5/10/94		5
	EPA300	UGL	100454	5/5/94		5/10/94		5
	EPA300	UGL	100455	5/5/94		5/10/94		5
	EPA300	UGL	100457	5/5/94		5/10/94		5
	EPA300	UGL	100460	5/5/94		5/10/94		5
	EPA300	UGL	100461	5/5/94		5/10/94		5
	EPA353.2	UGL	100438	5/5/94		5/9/94		4
	EPA353.2	UGL	100440	5/5/94		5/9/94		4
	EPA353.2	UGL	100441	5/5/94		5/9/94		4
	EPA353.2	UGL	100443	5/5/94		5/9/94		4
	EPA353.2	UGL	100444	5/5/94		5/9/94		4
	EPA353.2	UGL	100447	5/5/94		5/9/94		4
	EPA353.2	UGL	100448	5/5/94		5/9/94		4
	EPA353.2	UGL	100450	5/5/94		5/9/94		4
	EPA353.2	UGL	100454	5/5/94		5/9/94		4
	EPA353.2	UGL	100455	5/5/94		5/9/94		4
	EPA353.2	UGL	100457	5/5/94		5/9/94		4
	EPA353.2	UGL	100460	5/5/94		5/9/94		4
	EPA353.2	UGL	100461	5/5/94		5/9/94		4
	EPA415.1	UGL	100438	5/5/94		5/11/94		6
	EPA415.1	UGL	100440	5/5/94		5/11/94		6
	EPA415.1	UGL	100441	5/5/94		5/11/94		6
	EPA415.1	UGL	100443	5/5/94		5/11/94		6
	EPA415.1	UGL	100444	5/5/94		5/11/94		6
	EPA415.1	UGL	100447	5/5/94		5/11/94		6
	EPA415.1	UGL	100448	5/5/94		5/11/94		6
	EPA415.1	UGL	100450	5/5/94		5/11/94		6
	EPA415.1	UGL	100454	5/5/94		5/11/94		6
	EPA415.1	UGL	100455	5/5/94		5/11/94		6
	EPA415.1	UGL	100457	5/5/94		5/11/94		6
	EPA415.1	UGL	100460	5/5/94		5/11/94		6
	EPA415.1	UGL	100461	5/5/94		5/11/94		6
	EPA415.8	%	100439	5/5/94		5/11/94		6
	EPA415.8	%	100442	5/5/94		5/11/94		6
	EPA415.8	%	100446	5/5/94		5/11/94		6
	EPA415.8	%	100449	5/5/94		5/11/94		6
	EPA415.8	%	100453	5/5/94		5/11/94		6
	EPA415.8	%	100458	5/5/94		5/11/94		6
	EPA415.8	%	100462	5/5/94		5/11/94		6

Table 4
Holding Times
D-Area Burning/Rubble Pits
Savannah River Site

Ext/Dig Method	Analytical Method	Unit	Sample Identifier	Collection Date	Ext/Dig Date	Analysis Date	Days to Ext	Days to Analysis
	EPA415.8	%	100463	5/5/94		5/11/94		6
	EPA415.8	%	100464	5/5/94		5/11/94		6
	EPA415.8	%	100465	5/5/94		5/11/94		6
	EPA415.8	%	100466	5/5/94		5/11/94		6
	EPA7471	MGKG	100439	5/5/94		5/10/94		5
	EPA7471	MGKG	100442	5/5/94		5/10/94		5
	EPA7471	MGKG	100446	5/5/94		5/10/94		5
	EPA7471	MGKG	100449	5/5/94		5/10/94		5
	EPA7471	MGKG	100453	5/5/94		5/10/94		5
	EPA7471	MGKG	100458	5/5/94		5/10/94		5
	EPA7471	MGKG	100462	5/5/94		5/10/94		5
	EPA7471	MGKG	100463	5/5/94		5/10/94		5
	EPA7471	MGKG	100464	5/5/94		5/10/94		5
	EPA7471	MGKG	100465	5/5/94		5/10/94		5
	EPA7471	MGKG	100466	5/5/94		5/10/94		5
	EPA900.0	PCL	100438	5/5/94		5/9/94		4
	EPA900.0	PCL	100440	5/5/94		5/9/94		4
	EPA900.0	PCL	100441	5/5/94		5/9/94		4
	EPA900.0	PCL	100443	5/5/94		5/9/94		4
	EPA900.0	PCL	100448	5/5/94		5/9/94		4
	EPA900.0	PCL	100454	5/5/94		5/9/94		4
	EPA900.0	PCL	100461	5/5/94		5/9/94		4
	EPA900.0	PCL	100444	5/5/94		5/10/94		5
	EPA900.0	PCL	100445	5/5/94		5/10/94		5
	EPA900.0	PCL	100447	5/5/94		5/10/94		5
	EPA900.0	PCL	100450	5/5/94		5/10/94		5
	EPA900.0	PCL	100455	5/5/94		5/10/94		5
	EPA900.0	PCL	100456	5/5/94		5/10/94		5
	EPA900.0	PCL	100457	5/5/94		5/10/94		5
	EPA900.0	PCL	100460	5/5/94		5/10/94		5
	EPA900.1 MOD.	PCL	100438	5/5/94		5/10/94		5
	EPA900.1 MOD.	PCL	100440	5/5/94		5/10/94		5
	EPA900.1 MOD.	PCL	100441	5/5/94		5/10/94		5
	EPA900.1 MOD.	PCL	100443	5/5/94		5/10/94		5
	EPA900.1 MOD.	PCL	100444	5/5/94		5/10/94		5
	EPA900.1 MOD.	PCL	100445	5/5/94		5/10/94		5
	EPA900.1 MOD.	PCL	100447	5/5/94		5/10/94		5
	EPA900.1 MOD.	PCL	100448	5/5/94		5/10/94		5
	EPA900.1 MOD.	PCL	100450	5/5/94		5/10/94		5
	EPA900.1 MOD.	PCL	100454	5/5/94		5/10/94		5
	EPA900.1 MOD.	PCL	100455	5/5/94		5/10/94		5
	EPA900.1 MOD.	PCL	100456	5/5/94		5/10/94		5
	EPA900.1 MOD.	PCL	100457	5/5/94		5/10/94		5
	EPA900.1 MOD.	PCL	100460	5/5/94		5/10/94		5
	EPA900.1 MOD.	PCL	100461	5/5/94		5/10/94		5
	EPA906.0	PCML	100438	5/5/94		5/9/94		4
	EPA906.0	PCML	100440	5/5/94		5/9/94		4
	EPA906.0	PCML	100441	5/5/94		5/9/94		4
	EPA906.0	PCML	100443	5/5/94		5/9/94		4
	EPA906.0	PCML	100444	5/5/94		5/9/94		4
	EPA906.0	PCML	100445	5/5/94		5/9/94		4
	EPA906.0	PCML	100447	5/5/94		5/9/94		4

Table 4
Holding Times
D-Area Burning/Rubble Pits
Savannah River Site

Ext/Dig. Method	Analytical Method	Units	Sample Identifier	Collection Date	Ext/Dig. Date	Analysis Date	Days to Ext.	Days to Analysis
	EPA906.0	PCML	100448	5/5/94		5/9/94		4
	EPA906.0	PCML	100450	5/5/94		5/9/94		4
	EPA906.0	PCML	100454	5/5/94		5/9/94		4
	EPA906.0	PCML	100455	5/5/94		5/9/94		4
	EPA906.0	PCML	100456	5/5/94		5/9/94		4
	EPA906.0	PCML	100457	5/5/94		5/9/94		4
	EPA906.0	PCML	100460	5/5/94		5/9/94		4
	EPA906.0	PCML	100461	5/5/94		5/9/94		4
	LANLER210 MOD	PCG	100439	5/5/94		5/10/94		5
	LANLER210 MOD	PCG	100442	5/5/94		5/10/94		5
	LANLER210 MOD	PCG	100446	5/5/94		5/10/94		5
	LANLER210 MOD	PCG	100449	5/5/94		5/10/94		5
	LANLER210 MOD	PCG	100453	5/5/94		5/10/94		5
	LANLER210 MOD	PCG	100458	5/5/94		5/10/94		5
	LANLER210 MOD	PCG	100462	5/5/94		5/10/94		5
	LANLER210 MOD	PCG	100463	5/5/94		5/10/94		5
	LANLER210 MOD	PCG	100464	5/5/94		5/10/94		5
	LANLER210 MOD	PCG	100465	5/5/94		5/10/94		5
	LANLER210 MOD	PCG	100466	5/5/94		5/10/94		5
	LANLMLR-100	PCG	100442	5/5/94		5/9/94		4
	LANLMLR-100	PCG	100453	5/5/94		5/9/94		4
	LANLMLR-100	PCG	100462	5/5/94		5/9/94		4
	LANLMLR-100	PCG	100463	5/5/94		5/9/94		4
	LANLMLR-100	PCG	100464	5/5/94		5/9/94		4
	LANLMLR-100	PCG	100465	5/5/94		5/9/94		4
	LANLMLR-100	PCG	100466	5/5/94		5/9/94		4
	LANLMLR-100	PCG	100439	5/5/94		5/10/94		5
	LANLMLR-100	PCG	100446	5/5/94		5/10/94		5
	LANLMLR-100	PCG	100449	5/5/94		5/10/94		5
	LANLMLR-100	PCG	100458	5/5/94		5/10/94		5
	SW8469315 MOD	PCG	100439	5/5/94		5/10/94		5
	SW8469315 MOD	PCG	100442	5/5/94		5/10/94		5
	SW8469315 MOD	PCG	100446	5/5/94		5/10/94		5
	SW8469315 MOD	PCG	100449	5/5/94		5/10/94		5
	SW8469315 MOD	PCG	100453	5/5/94		5/10/94		5
	SW8469315 MOD	PCG	100458	5/5/94		5/10/94		5
	SW8469315 MOD	PCG	100462	5/5/94		5/10/94		5
	SW8469315 MOD	PCG	100463	5/5/94		5/10/94		5
	SW8469315 MOD	PCG	100464	5/5/94		5/10/94		5
	SW8469315 MOD	PCG	100465	5/5/94		5/10/94		5
	SW8469315 MOD	PCG	100466	5/5/94		5/10/94		5
	SW9020A	UGL	100441	5/5/94		5/9/94		4
	SW9020A	UGL	100443	5/5/94		5/9/94		4
	SW9020A	UGL	100448	5/5/94		5/9/94		4
	SW9020A	UGL	100438	5/5/94		5/9/94		4
	SW9020A	UGL	100440	5/5/94		5/9/94		4
	SW9020A	UGL	100444	5/5/94		5/10/94		5
	SW9020A	UGL	100450	5/5/94		5/10/94		5
	SW9020A	UGL	100454	5/5/94		5/10/94		5
	SW9020A	UGL	100455	5/5/94		5/10/94		5
	SW9020A	UGL	100460	5/5/94		5/10/94		5
	SW9020A	UGL	100461	5/5/94		5/10/94		5

Table 4
Holding Times
D-Area Burning/Rubble Pits
Savannah River Site

Ext/Dig Analytical Method	Method	Unit	Sample Identifier	Collection Date	Ext/Dig Date	Analysis Date	Days to Ext	Days to Analysis
	SW9020A	UGL	100447	5/5/94		5/11/94		6
	SW9020A	UGL	100457	5/5/94		5/11/94		6

Table 5
Detections in Laboratory Blanks
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Analytical Method	Analyte	Preparation Batch	Instrument Batch	Sample Type	Analytical Result	Result Qual	Analytical Qual	Bias Qual	Unit	Dilution Factor
General Eng.	EPA300.0	Nitrate as nitrogen	47690	47690	Laboratory Blank	0.02	UJ	Q	L	MGL	1
General Eng.	EPA6010	Manganese, total recoverable	47711	47711	Laboratory Blank	0.309	J			UGL	1
General Eng.	EPA6010	Manganese, total recoverable	47751	47751	Laboratory Blank	0.00127	J			MGKG	1
General Eng.	EPA6010	Barium, total recoverable	47751	47751	Laboratory Blank	0.00154	J			MGKG	1
General Eng.	EPA7421	Lead, total recoverable	47710	47710	Laboratory Blank	1.21	J			UGL	1
General Eng.	EPA7470	Mercury, total	47748	47748	Laboratory Blank	0.065	J			UGL	1
General Eng.	EPA8260	Dichloromethane (Methylene chloride)	47729	47729	Laboratory Blank	0.67				UGL	1
General Eng.	EPA8260	Toluene	47729	47729	Laboratory Blank	0.07	J			UGL	1
General Eng.	EPA8260	Toluene	47771	47771	Laboratory Blank	0.1	J			UGKG	1
General Eng.	EPA8270	Bis(2-ethylhexyl) phthalate	47675	47675	Laboratory Blank	0.45	J			UGL	1
General Eng.	EPA8270	Bis(2-ethylhexyl) phthalate	47676	47676	Laboratory Blank	6.96	J			UGKG	1
General Eng.	EPA8270	Di-n-butyl phthalate	47676	47676	Laboratory Blank	9.28	J			UGKG	1
General Eng.	EPIA-001B	Gross alpha	47824	47824	Laboratory Blank	0.87	J			PCG	1
General Eng.	EPIA-002	Tritium	47845	47845	Laboratory Blank	930	J			PCL	1
General Eng.	EPIA-002B	Tritium	47851	47851	Laboratory Blank	2.89	J			PCG	1
Weston	EPA160.2	Total suspended solids	94LSSA85	94LSSA85	Laboratory Blank	2000				UGL	1
Weston	EPA6010	Arsenic, total recoverable		AS051061	Initial Calibration Blank	0.7				MGKG	1
Weston	EPA6010	Arsenic, total recoverable	94L5705	AS051061	Continuing Calibration Blank	0.3				MGKG	1
Weston	EPA6010	Arsenic, total recoverable	94L5705	AS051061	Continuing Calibration Blank	0.5				MGKG	1
Weston	EPA6010	Arsenic, total recoverable	CRA	AS051061	Continuing Calibration Blank	0.6				MGKG	1
Weston	EPA7471	Mercury, total	94C0185	HG051004	Continuing Calibration Blank	0.01				UGL	1
Weston	EPA7471	Mercury, total	94C0190	HG051004	Continuing Calibration Blank	0.02				UGL	1
Weston	EPA7471	Mercury, total	94C0190	HG051004	Continuing Calibration Blank	0.03				UGL	1
Weston	EPA7471	Mercury, total	94C0190	HG051004	Initial Calibration Blank	0.01				UGL	1
Weston	EPA7740	Selenium, total recoverable		SE051104	Continuing Calibration Blank	0.2				UGL	1
Weston	EPA7740	Selenium, total recoverable		SE051104	Initial Calibration Blank	0.1				UGL	1
Weston	EPA7740	Selenium, total recoverable	94L5707	SE051104	Continuing Calibration Blank	0.4				UGL	1
Weston	EPA7740	Selenium, total recoverable	94L5707	SE051104	Continuing Calibration Blank	0.5				UGL	1
Weston	EPA7740	Selenium, total recoverable	CRA	SE051104	Continuing Calibration Blank	0.6				UGL	1
Weston	EPA8260	1,2-Dichloroethylene	94LVC056	C051001	Laboratory Blank	0.16	UJ	VB		UGKG	1
Weston	EPA8260	Dichloromethane (Methylene chloride)	94LVC056	C051001	Laboratory Blank	0.38	UJ	VB		UGKG	1
Weston	EPA8260	Trichlorofluoromethane	94LVC056	C051001	Laboratory Blank	0.42	UJ	VB		UGKG	1
Weston	EPA8260	Chloromethane (Methyl chloride)	94LVC057	C051101	Laboratory Blank	0.2	UJ	VB		UGL	1
Weston	EPA8260	Chloromethane (Methyl chloride)	94LVC058	C051124	Laboratory Blank	0.2	UJ	VB		UGL	1
Weston	EPA8270	Bis(2-ethylhexyl) phthalate	94LE0897	S051001	Laboratory Blank	333	UJ	VB		UGKG	1
Weston	EPA8270M	Di-n-butyl phthalate	94LE0897	S051001	Laboratory Blank	1010		V		UGKG	1
Weston	EPA8270M	Di-n-butyl phthalate	94LE0897	S051001	Laboratory Blank	5050	UJ	V		UGKG	1
Weston	EPA8270M	Di-n-butyl phthalate	94LE0899	J051101	Laboratory Blank	0.638	UJ	VB		UGL	1

Table 6
Recoveries of Laboratory Control Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Identifier	Sample Date	Analyte	Analytical Method	Percent Recovery	Instrument Batch
Thermo Analytical	Laboratory Blank	50794	Gross alpha	EPA900.0	82.8	5099402
Thermo Analytical	Laboratory Blank	50794	Gross alpha	LANLMLR-100	85.0	5099402
Thermo Analytical	Laboratory Blank	50794	Nonvolatile beta	EPA900.0	101.3	5099402
Thermo Analytical	Laboratory Blank	50794	Nonvolatile beta	LANLMLR-100	106.5	5099402
Thermo Analytical	Laboratory Blank	50794	Radium, total alpha-emitting	EPA900.1 MOD.	96.6	5109402
Thermo Analytical	Laboratory Blank	50794	Radium, total alpha-emitting	SW8469315 MOD	98.9	5109402
Thermo Analytical	Laboratory Blank	50794	Tritium	EPA906.0	98.9	5099404
Thermo Analytical	Laboratory Blank	50794	Tritium	LANLER210 MOD	110.5	5109404
Weston	Laboratory Blank	50994	1,2,4-Trichlorobenzene	EPA8270M	59.5	J051101
Weston	Laboratory Blank	50994	1,2,4-Trichlorobenzene	EPA8270M	76.0	S051001
Weston	Laboratory Blank	50994	1,4-Dichlorobenzene	EPA8270	55.8	J051101
Weston	Laboratory Blank	50994	1,4-Dichlorobenzene	EPA8270	74.4	S051001
Weston	Laboratory Blank	50994	2,4,6-Tribromophenol (surr)	EPA8270	70.8	J051101
Weston	Laboratory Blank	50994	2,4,6-Tribromophenol (surr)	EPA8270	79.2	J051101
Weston	Laboratory Blank	50994	2,4,6-Tribromophenol (surr)	EPA8270	76.8	S051001
Weston	Laboratory Blank	50994	2,4,6-Tribromophenol (surr)	EPA8270	80.8	S051001
Weston	Laboratory Blank	50994	2,4-Dinitrotoluene	EPA8270	72.6	J051101
Weston	Laboratory Blank	50994	2,4-Dinitrotoluene	EPA8270	80.3	S051001
Weston	Laboratory Blank	50994	2-Chlorophenol	EPA8270M	66.9	J051101
Weston	Laboratory Blank	50994	2-Chlorophenol	EPA8270M	74.3	S051001
Weston	Laboratory Blank	50994	2-Fluorobiphenyl	EPA8270	72.7	J051101
Weston	Laboratory Blank	50994	2-Fluorobiphenyl	EPA8270	75.6	J051101
Weston	Laboratory Blank	50994	2-Fluorobiphenyl	EPA8270	81.9	S051001
Weston	Laboratory Blank	50994	2-Fluorobiphenyl	EPA8270	82.6	S051001
Weston	Laboratory Blank	50994	2-Fluorophenol	EPA8270	49.4	J051101
Weston	Laboratory Blank	50994	2-Fluorophenol	EPA8270	51.2	J051101
Weston	Laboratory Blank	50994	2-Fluorophenol	EPA8270	78.1	S051001
Weston	Laboratory Blank	50994	2-Fluorophenol	EPA8270	79.4	S051001
Weston	Laboratory Blank	50994	4-Chloro-m-cresol	EPA8270M	70.8	J051101
Weston	Laboratory Blank	50994	4-Chloro-m-cresol	EPA8270M	76.2	S051001

Table 6
Recoveries of Laboratory Control Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Identifier	Sample Date	Analyte	Analytical Method	Percent Recovery	Instrument Batch
Weston	Laboratory Blank	50994	4-Nitrophenol	EPA8270M	26.8	J051101
Weston	Laboratory Blank	50994	4-Nitrophenol	EPA8270M	72.8	S051001
Weston	Laboratory Blank	50994	Acenaphthene	EPA8270	74.2	J051101
Weston	Laboratory Blank	50994	Acenaphthene	EPA8270	80.4	S051001
Weston	Laboratory Blank	50994	Mercury, total	EPA7471	103.0	HG051004
Weston	Laboratory Blank	50994	Mercury, total	EPA7471	106.0	HG051004
Weston	Laboratory Blank	50994	N-Nitrosodipropylamine	EPA8270	67.2	J051101
Weston	Laboratory Blank	50994	N-Nitrosodipropylamine	EPA8270	72.0	S051001
Weston	Laboratory Blank	50994	Nitrate as nitrogen	EPA353.2	102.0	94LN3072
Weston	Laboratory Blank	50994	Nitrate as nitrogen	EPA353.2	103.0	94LN3072
Weston	Laboratory Blank	50994	Nitrate as nitrogen	EPA353.2	105.0	94LN3072
Weston	Laboratory Blank	50994	Nitrobenzene-d5	EPA8270	74.0	J051101
Weston	Laboratory Blank	50994	Nitrobenzene-d5	EPA8270	78.1	J051101
Weston	Laboratory Blank	50994	Nitrobenzene-d5	EPA8270	78.4	S051001
Weston	Laboratory Blank	50994	Nitrobenzene-d5	EPA8270	86.6	S051001
Weston	Laboratory Blank	50994	p-Terphenyl-d14	EPA8270	78.3	J051101
Weston	Laboratory Blank	50994	p-Terphenyl-d14	EPA8270	82.1	J051101
Weston	Laboratory Blank	50994	p-Terphenyl-d14	EPA8270	99.7	S051001
Weston	Laboratory Blank	50994	p-Terphenyl-d14	EPA8270	112.0	S051001
Weston	Laboratory Blank	50994	Pentachlorophenol	EPA8270	76.2	J051101
Weston	Laboratory Blank	50994	Pentachlorophenol	EPA8270M	85.5	S051001
Weston	Laboratory Blank	50994	Phenol	EPA8270M	30.6	J051101
Weston	Laboratory Blank	50994	Phenol	EPA8270M	76.9	S051001
Weston	Laboratory Blank	50994	Phenol-d5	EPA8270	28.8	J051101
Weston	Laboratory Blank	50994	Phenol-d5	EPA8270	30.8	J051101
Weston	Laboratory Blank	50994	Phenol-d5	EPA8270	73.6	S051001
Weston	Laboratory Blank	50994	Phenol-d5	EPA8270	74.1	S051001
Weston	Laboratory Blank	50994	Pyrene	EPA8270	72.4	J051101
Weston	Laboratory Blank	50994	Pyrene	EPA8270	100.0	S051001
Weston	Laboratory Blank	50994	Total organic halogens	SW9020A	96.2	94LX124X

Table 6
Recoveries of Laboratory Control Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Identifier	Sample Date	Analyte	Analytical Method	Percent Recovery	Instrument Batch
Weston	Laboratory Blank	50994	Total organic halogens	SW9020A	96.5	94LX124W
Weston	Laboratory Blank	50994	Total organic halogens	SW9020A	97.8	94LX124X
Weston	Laboratory Blank	50994	Total organic halogens	SW9020A	98.1	94LX124X
Weston	Laboratory Blank	50994	Total organic halogens	SW9020A	101.0	94LX124W
Weston	Laboratory Blank	50994	Total organic halogens	SW9020A	102.0	94LX124W
Weston	Laboratory Blank	51094	1,1-Dichloroethylene	EPA8260	86.0	C051001
Weston	Laboratory Blank	51094	1,2-Dichloroethane-d4	EPA8260	99.2	C051001
Weston	Laboratory Blank	51094	1,2-Dichloroethane-d4	EPA8260	105.0	C051001
Weston	Laboratory Blank	51094	Arsenic, total recoverable	EPA7060	103.0	AS051051
Weston	Laboratory Blank	51094	Arsenic, total recoverable	EPA7060	107.0	AS051051
Weston	Laboratory Blank	51094	Arsenic, total recoverable	EPA7060	102.0	AS051151
Weston	Laboratory Blank	51094	Arsenic, total recoverable	EPA7060	103.0	AS051151
Weston	Laboratory Blank	51094	Barium, total recoverable	EPA6010	102.0	PS0511A
Weston	Laboratory Blank	51094	Barium, total recoverable	EPA6010	102.0	PS0511A
Weston	Laboratory Blank	51094	Barium, total recoverable	EPA6010	93.5	PS0511F
Weston	Laboratory Blank	51094	Barium, total recoverable	EPA6010	95.9	PS0511F
Weston	Laboratory Blank	51094	Benzene	EPA8260	101.0	C051001
Weston	Laboratory Blank	51094	Cadmium, total recoverable	EPA6010	94.0	PS0511B
Weston	Laboratory Blank	51094	Cadmium, total recoverable	EPA6010	95.2	PS0511B
Weston	Laboratory Blank	51094	Cadmium, total recoverable	EPA6010	97.0	PS0511F
Weston	Laboratory Blank	51094	Cadmium, total recoverable	EPA6010	98.2	PS0511F
Weston	Laboratory Blank	51094	Chloride	EPA300	97.9	94LCC066
Weston	Laboratory Blank	51094	Chloride	EPA300	99.8	94LCC066
Weston	Laboratory Blank	51094	Chloride	EPA300	102.0	94LCC066
Weston	Laboratory Blank	51094	Chlorobenzene	EPA8260	104.0	C051001
Weston	Laboratory Blank	51094	Chromium, total recoverable	EPA6010	99.6	PS0511A
Weston	Laboratory Blank	51094	Chromium, total recoverable	EPA6010	99.8	PS0511A
Weston	Laboratory Blank	51094	Chromium, total recoverable	EPA6010	93.4	PS0511F
Weston	Laboratory Blank	51094	Chromium, total recoverable	EPA6010	95.4	PS0511F
Weston	Laboratory Blank	51094	Copper, total recoverable	EPA6010	99.9	PS0511X

Table 6
Recoveries of Laboratory Control Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Identifier	Sample Date	Analyte	Analytical Method	Percent Recovery	Instrument Batch
Weston	Laboratory Blank	51094	Copper, total recoverable	EPA6010	100.0	PS0511X
Weston	Laboratory Blank	51094	Copper, total recoverable	EPA6010	93.3	PS0511Z
Weston	Laboratory Blank	51094	Copper, total recoverable	EPA6010	95.1	PS0511Z
Weston	Laboratory Blank	51094	Fluoride	EPA300	101.0	94LFC066
Weston	Laboratory Blank	51094	Fluoride	EPA300	103.0	94LFC066
Weston	Laboratory Blank	51094	Fluoride	EPA300	106.0	94LFC066
Weston	Laboratory Blank	51094	Iron, total recoverable	EPA6010	95.4	PS0511Z
Weston	Laboratory Blank	51094	Iron, total recoverable	EPA6010	97.5	PS0511Z
Weston	Laboratory Blank	51094	Lead, total recoverable	EPA7421	107.0	PB051151
Weston	Laboratory Blank	51094	Lead, total recoverable	EPA7421	113.0	PB051151
Weston	Laboratory Blank	51094	Lead, total recoverable	EPA7421	96.3	PB051202
Weston	Laboratory Blank	51094	Lead, total recoverable	EPA7421	98.3	PB051202
Weston	Laboratory Blank	51094	Manganese, total recoverable	EPA6010	99.6	PS0511X
Weston	Laboratory Blank	51094	Manganese, total recoverable	EPA6010	101.0	PS0511X
Weston	Laboratory Blank	51094	Manganese, total recoverable	EPA6010	93.9	PS0511Z
Weston	Laboratory Blank	51094	Manganese, total recoverable	EPA6010	96.0	PS0511Z
Weston	Laboratory Blank	51094	Mercury, total	EPA7471	95.1	HG051005
Weston	Laboratory Blank	51094	Mercury, total	EPA7471	109.0	HG051005
Weston	Laboratory Blank	51094	Nickel, total recoverable	EPA6010	90.7	PS0511Y
Weston	Laboratory Blank	51094	Nickel, total recoverable	EPA6010	90.8	PS0511Y
Weston	Laboratory Blank	51094	Nickel, total recoverable	EPA6010	94.5	PS0511Z
Weston	Laboratory Blank	51094	Nickel, total recoverable	EPA6010	96.5	PS0511Z
Weston	Laboratory Blank	51094	p-Bromofluorobenzene	EPA8260	91.6	C051001
Weston	Laboratory Blank	51094	p-Bromofluorobenzene	EPA8260	93.4	C051001
Weston	Laboratory Blank	51094	Selenium, total recoverable	EPA7740	107.0	SE051161
Weston	Laboratory Blank	51094	Selenium, total recoverable	EPA7740	110.0	SE051161
Weston	Laboratory Blank	51094	Selenium, total recoverable	EPA7740	95.3	SE051104
Weston	Laboratory Blank	51094	Selenium, total recoverable	EPA7740	97.7	SE051104
Weston	Laboratory Blank	51094	Silver, total recoverable	EPA6010	96.0	PS0511E
Weston	Laboratory Blank	51094	Silver, total recoverable	EPA6010	97.6	PS0511E

Table 6
Recoveries of Laboratory Control Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Identifier	Sample Date	Analyte	Analytical Method	Percent Recovery	Instrument Batch
Weston	Laboratory Blank	51094	Silver, total recoverable	EPA6010	93.4	PS0511F
Weston	Laboratory Blank	51094	Sodium, total recoverable	EPA6010	93.1	PS0511Z
Weston	Laboratory Blank	51094	Sodium, total recoverable	EPA6010	95.3	PS0511Z
Weston	Laboratory Blank	51094	Sulfate	EPA300	100.0	94LSC066
Weston	Laboratory Blank	51094	Sulfate	EPA300	102.0	94LSC066
Weston	Laboratory Blank	51094	Toluene	EPA8260	100.0	C051001
Weston	Laboratory Blank	51094	Toluene-d8	EPA8260	94.4	C051001
Weston	Laboratory Blank	51094	Toluene-d8	EPA8260	97.4	C051001
Weston	Laboratory Blank	51094	Total dissolved solids	EPA160.1	96.0	94LSSA85
Weston	Laboratory Blank	51094	Total dissolved solids	EPA160.1	103.0	94LSSA85
Weston	Laboratory Blank	51094	Total organic halogens	SW9020A	95.3	94LX125B
Weston	Laboratory Blank	51094	Total organic halogens	SW9020A	98.4	94LX125B
Weston	Laboratory Blank	51094	Total organic halogens	SW9020A	102.0	94LX125B
Weston	Laboratory Blank	51094	Total organic halogens	SW9020A	102.0	94LX125X
Weston	Laboratory Blank	51094	Total organic halogens	SW9020A	105.0	94LX125X
Weston	Laboratory Blank	51094	Total organic halogens	SW9020A	106.0	94LX125X
Weston	Laboratory Blank	51094	Total suspended solids	EPA160.2	102.0	94LSSA85
Weston	Laboratory Blank	51094	Trichloroethylene	EPA8260	98.8	C051001
Weston	Laboratory Blank	51194	1,2-Dichloroethane-d4	EPA8260	98.2	C051124
Weston	Laboratory Blank	51194	1,2-Dichloroethane-d4	EPA8260	108.0	C051101
Weston	Laboratory Blank	51194	Mercury, total	EPA7471	97.6	HG051103
Weston	Laboratory Blank	51194	Mercury, total	EPA7471	101.0	HG051103
Weston	Laboratory Blank	51194	p-Bromofluorobenzene	EPA8260	93.6	C051124
Weston	Laboratory Blank	51194	p-Bromofluorobenzene	EPA8260	96.2	C051101
Weston	Laboratory Blank	51194	Toluene-d8	EPA8260	94.2	C051124
Weston	Laboratory Blank	51194	Toluene-d8	EPA8260	99.8	C051101
Weston	Laboratory Blank	51194	Total organic carbon	EPA415.1	101.0	94LTC080
Weston	Laboratory Blank	51194	Total organic carbon	EPA415.1	103.0	94LTC080
Weston	Laboratory Blank	51194	Total organic halogens	SW9020A	96.1	94LX126W
Weston	Laboratory Blank	51194	Total organic halogens	SW9020A	97.8	94LX126W

Table 6
Recoveries of Laboratory Control Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Identifier	Sample Date	Analyte	Analytical Method	Percent Recovery	Instrument Batch
Weston	Laboratory Blank	51194	Total organic halogens	SW9020A	99.1	94LX126W
Weston	Laboratory Blank	51294	Mercury, total	EPA7471	103.0	HG051103
Weston	Laboratory Blank	51294	Mercury, total	EPA7471	104.0	HG051103

Table 7
Recoveries of Matrix Spike and Surrogate Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Identification	Analyte	Analytical Method	Percent Recovery
General Engineering	100451	2,4-Dinitrotoluene	EPA8270	80
General Engineering	100451	2-Chlorophenol	EPA8270	74
General Engineering	100451	4-Chloro-m-cresol	EPA8270	86
General Engineering	100451	4-Nitrophenol	EPA8270	19
General Engineering	100451	Acenaphthene	EPA8270	57
General Engineering	100451	Arsenic, total recoverable	EPA7060	101
General Engineering	100451	Arsenic, total recoverable	EPA7060	101
General Engineering	100451	Fluoride	EPA300.0	112
General Engineering	100451	Lead, total recoverable	EPA7421	97
General Engineering	100451	Lead, total recoverable	EPA7421	100
General Engineering	100451	Mercury, total	EPA7470	105
General Engineering	100451	Mercury, total	EPA7470	108
General Engineering	100451	N-Nitrosodipropylamine	EPA8270	83
General Engineering	100451	Nitrate as nitrogen	EPA300.0	107
General Engineering	100451	Pentachlorophenol	EPA8270	75
General Engineering	100451	Phenol	EPA8270	47
General Engineering	100451	Pyrene	EPA8270	81
General Engineering	100451	Selenium, total recoverable	EPA7740	96
General Engineering	100451	Selenium, total recoverable	EPA7740	98
General Engineering	100451	Total organic carbon	EPA415.1	100
General Engineering	100451	Tritium	EPIA-002	105
General Engineering	100459	1,1-Dichloroethylene	EPA8260	118
General Engineering	100459	1,1-Dichloroethylene	EPA8260	175
General Engineering	100459	2,4-Dinitrotoluene	EPA8270	95
General Engineering	100459	2-Chlorophenol	EPA8270	84
General Engineering	100459	4-Chloro-m-cresol	EPA8270	96
General Engineering	100459	4-Nitrophenol	EPA8270	38
General Engineering	100459	Acenaphthene	EPA8270	64
General Engineering	100459	Arsenic, total recoverable	EPA6010	111
General Engineering	100459	Arsenic, total recoverable	EPA6010	110
General Engineering	100459	Barium, total recoverable	EPA6010	99
General Engineering	100459	Barium, total recoverable	EPA6010	100
General Engineering	100459	Benzene	EPA8260	97
General Engineering	100459	Benzene	EPA8260	135
General Engineering	100459	Cadmium, total recoverable	EPA6010	91
General Engineering	100459	Cadmium, total recoverable	EPA6010	90
General Engineering	100459	Chlorobenzene	EPA8260	92
General Engineering	100459	Chlorobenzene	EPA8260	97
General Engineering	100459	Chromium, total recoverable	EPA6010	78
General Engineering	100459	Chromium, total recoverable	EPA6010	79
General Engineering	100459	Copper, total recoverable	EPA6010	92
General Engineering	100459	Copper, total recoverable	EPA6010	94
General Engineering	100459	Gross alpha	EPIA-001B	100
General Engineering	100459	Lead, total recoverable	EPA6010	92
General Engineering	100459	Lead, total recoverable	EPA6010	90
General Engineering	100459	Manganese, total recoverable	EPA6010	107

Table 7
Recoveries of Matrix Spike and Surrogate Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Identification	Analyte	Analytical Method	Percent Recovery
General Engineering	100459	Manganese, total recoverable	EPA6010	127
General Engineering	100459	Mercury, total	EPA7471	112
General Engineering	100459	Mercury, total	EPA7471	114
General Engineering	100459	N-Nitrosodipropylamine	EPA8270	90
General Engineering	100459	Nickel, total recoverable	EPA6010	93
General Engineering	100459	Nickel, total recoverable	EPA6010	91
General Engineering	100459	Nonvolatile beta	EPIA-001B	99
General Engineering	100459	Pentachlorophenol	EPA8270	94
General Engineering	100459	Phenol	EPA8270	78
General Engineering	100459	Pyrene	EPA8270	86
General Engineering	100459	Radium, total alpha-emitting	EPIA-010B	81
General Engineering	100459	Selenium, total recoverable	EPA6010	86
General Engineering	100459	Selenium, total recoverable	EPA6010	89
General Engineering	100459	Silver, total recoverable	EPA6010	93
General Engineering	100459	Silver, total recoverable	EPA6010	92
General Engineering	100459	Toluene	EPA8260	120
General Engineering	100459	Toluene	EPA8260	132
General Engineering	100459	Total organic carbon	EPA9060	90
General Engineering	100459	Trichloroethylene	EPA8260	91
General Engineering	100459	Trichloroethylene	EPA8260	137
General Engineering	100459	Tritium	EPIA-002B	91
Weston	100438	1,2,4-Trichlorobenzene	EPA8270M	69
Weston	100438	1,2,4-Trichlorobenzene	EPA8270M	70
Weston	100438	1,2-Dichloroethane-d4	EPA8260	103
Weston	100438	1,4-Dichlorobenzene	EPA8270	67
Weston	100438	1,4-Dichlorobenzene	EPA8270	67
Weston	100438	2,4,6-Tribromophenol (surr)	EPA8270	66
Weston	100438	2,4,6-Tribromophenol (surr)	EPA8270	69
Weston	100438	2,4,6-Tribromophenol (surr)	EPA8270	74
Weston	100438	2,4-Dinitrotoluene	EPA8270	77
Weston	100438	2,4-Dinitrotoluene	EPA8270	81
Weston	100438	2-Chlorophenol	EPA8270M	66
Weston	100438	2-Chlorophenol	EPA8270M	71
Weston	100438	2-Fluorobiphenyl	EPA8270	71
Weston	100438	2-Fluorobiphenyl	EPA8270	75
Weston	100438	2-Fluorobiphenyl	EPA8270	75
Weston	100438	2-Fluorophenol	EPA8270	44
Weston	100438	2-Fluorophenol	EPA8270	45
Weston	100438	2-Fluorophenol	EPA8270	47
Weston	100438	4-Chloro-m-cresol	EPA8270M	72
Weston	100438	4-Chloro-m-cresol	EPA8270M	77
Weston	100438	4-Nitrophenol	EPA8270M	26
Weston	100438	4-Nitrophenol	EPA8270M	31
Weston	100438	Acenaphthene	EPA8270	77
Weston	100438	Acenaphthene	EPA8270	82
Weston	100438	Arsenic, total recoverable	EPA7060	116

Table 7
Recoveries of Matrix Spike and Surrogate Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Identification	Analyte	Analytical Method	Percent Recovery
Weston	100438	Arsenic, total recoverable	EPA7060	118
Weston	100438	Barium, total recoverable	EPA6010	95
Weston	100438	Barium, total recoverable	EPA6010	97
Weston	100438	Cadmium, total recoverable	EPA6010	84
Weston	100438	Cadmium, total recoverable	EPA6010	90
Weston	100438	Chloride	EPA300	92
Weston	100438	Chloride	EPA300	95
Weston	100438	Chromium, total recoverable	EPA6010	99
Weston	100438	Chromium, total recoverable	EPA6010	99
Weston	100438	Copper, total recoverable	EPA6010	97
Weston	100438	Copper, total recoverable	EPA6010	98
Weston	100438	Fluoride	EPA300	102
Weston	100438	Fluoride	EPA300	103
Weston	100438	Lead, total recoverable	EPA7421	95
Weston	100438	Lead, total recoverable	EPA7421	103
Weston	100438	Manganese, total recoverable	EPA6010	91
Weston	100438	Manganese, total recoverable	EPA6010	104
Weston	100438	Mercury, total	EPA7471	99
Weston	100438	Mercury, total	EPA7471	113
Weston	100438	N-Nitrosodipropylamine	EPA8270	74
Weston	100438	N-Nitrosodipropylamine	EPA8270	79
Weston	100438	Nickel, total recoverable	EPA6010	98
Weston	100438	Nickel, total recoverable	EPA6010	98
Weston	100438	Nitrate as nitrogen	EPA353.2	107
Weston	100438	Nitrate as nitrogen	EPA353.2	107
Weston	100438	Nitrobenzene-d5	EPA8270	78
Weston	100438	Nitrobenzene-d5	EPA8270	78
Weston	100438	Nitrobenzene-d5	EPA8270	82
Weston	100438	p-Bromofluorobenzene	EPA8260	95
Weston	100438	p-Terphenyl-d14	EPA8270	81
Weston	100438	p-Terphenyl-d14	EPA8270	83
Weston	100438	p-Terphenyl-d14	EPA8270	84
Weston	100438	Pentachlorophenol	EPA8270	77
Weston	100438	Pentachlorophenol	EPA8270	81
Weston	100438	Phenol	EPA8270M	29
Weston	100438	Phenol	EPA8270M	33
Weston	100438	Phenol-d5	EPA8270	27
Weston	100438	Phenol-d5	EPA8270	29
Weston	100438	Phenol-d5	EPA8270	30
Weston	100438	Pyrene	EPA8270	79
Weston	100438	Pyrene	EPA8270	87
Weston	100438	Selenium, total recoverable	EPA7740	109
Weston	100438	Selenium, total recoverable	EPA7740	114
Weston	100438	Silver, total recoverable	EPA6010	84
Weston	100438	Silver, total recoverable	EPA6010	90
Weston	100438	Sodium, total recoverable	EPA6010	89

Table 7
Recoveries of Matrix Spike and Surrogate Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Identification	Analyte	Analytical Method	Percent Recovery
Weston	100438	Sodium, total recoverable	EPA6010	96
Weston	100438	Sulfate	EPA300	98
Weston	100438	Sulfate	EPA300	99
Weston	100438	Toluene-d8	EPA8260	101
Weston	100439	1,2-Dichloroethane-d4	EPA8260	108
Weston	100439	2,4,6-Tribromophenol (surr)	EPA8270	74
Weston	100439	2-Fluorobiphenyl	EPA8270	66
Weston	100439	2-Fluorophenol	EPA8270	64
Weston	100439	Barium, total recoverable	EPA6010	96
Weston	100439	Barium, total recoverable	EPA6010	102
Weston	100439	Cadmium, total recoverable	EPA6010	93
Weston	100439	Cadmium, total recoverable	EPA6010	96
Weston	100439	Chromium, total recoverable	EPA6010	99
Weston	100439	Chromium, total recoverable	EPA6010	104
Weston	100439	Copper, total recoverable	EPA6010	96
Weston	100439	Copper, total recoverable	EPA6010	99
Weston	100439	Lead, total recoverable	EPA7421	75
Weston	100439	Manganese, total recoverable	EPA6010	100
Weston	100439	Manganese, total recoverable	EPA6010	106
Weston	100439	Mercury, total	EPA7471	111
Weston	100439	Mercury, total	EPA7471	112
Weston	100439	Nickel, total recoverable	EPA6010	89
Weston	100439	Nickel, total recoverable	EPA6010	92
Weston	100439	Nitrobenzene-d5	EPA8270	62
Weston	100439	p-Bromofluorobenzene	EPA8260	80
Weston	100439	p-Terphenyl-d14	EPA8270	104
Weston	100439	Phenol-d5	EPA8270	62
Weston	100439	Selenium, total recoverable	EPA7740	81
Weston	100439	Silver, total recoverable	EPA6010	77
Weston	100439	Toluene-d8	EPA8260	102
Weston	100439	Total organic carbon	EPA415.8	101
Weston	100440	1,2-Dichloroethane-d4	EPA8260	96
Weston	100440	2,4,6-Tribromophenol (surr)	EPA8270	73
Weston	100440	2-Fluorobiphenyl	EPA8270	69
Weston	100440	2-Fluorophenol	EPA8270	43
Weston	100440	Nitrobenzene-d5	EPA8270	72
Weston	100440	p-Bromofluorobenzene	EPA8260	86
Weston	100440	p-Terphenyl-d14	EPA8270	84
Weston	100440	Phenol-d5	EPA8270	28
Weston	100440	Toluene-d8	EPA8260	96
Weston	100441	1,2-Dichloroethane-d4	EPA8260	103
Weston	100441	2,4,6-Tribromophenol (surr)	EPA8270	68
Weston	100441	2-Fluorobiphenyl	EPA8270	76
Weston	100441	2-Fluorophenol	EPA8270	49
Weston	100441	Nitrobenzene-d5	EPA8270	82
Weston	100441	p-Bromofluorobenzene	EPA8260	92

Table 7
Recoveries of Matrix Spike and Surrogate Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Identification	Analyte	Analytical Method	Percent Recovery
Weston	100441	p-Terphenyl-d14	EPA8270	87
Weston	100441	Phenol-d5	EPA8270	30
Weston	100441	Toluene-d8	EPA8260	98
Weston	100441	Total organic carbon	EPA415.1	94
Weston	100442	1,2-Dichloroethane-d4	EPA8260	112
Weston	100442	2,4,6-Tribromophenol (surr)	EPA8270	73
Weston	100442	2-Fluorobiphenyl	EPA8270	63
Weston	100442	2-Fluorophenol	EPA8270	52
Weston	100442	Nitrobenzene-d5	EPA8270	53
Weston	100442	p-Bromofluorobenzene	EPA8260	79
Weston	100442	p-Terphenyl-d14	EPA8270	103
Weston	100442	Phenol-d5	EPA8270	56
Weston	100442	Toluene-d8	EPA8260	100
Weston	100443	1,2-Dichloroethane-d4	EPA8260	103
Weston	100443	2,4,6-Tribromophenol (surr)	EPA8270	73
Weston	100443	2-Fluorobiphenyl	EPA8270	71
Weston	100443	2-Fluorophenol	EPA8270	47
Weston	100443	Nitrobenzene-d5	EPA8270	79
Weston	100443	p-Bromofluorobenzene	EPA8260	94
Weston	100443	p-Terphenyl-d14	EPA8270	79
Weston	100443	Phenol-d5	EPA8270	31
Weston	100443	Toluene-d8	EPA8260	104
Weston	100444	1,2-Dichloroethane-d4	EPA8260	105
Weston	100444	2,4,6-Tribromophenol (surr)	EPA8270	77
Weston	100444	2-Fluorobiphenyl	EPA8270	72
Weston	100444	2-Fluorophenol	EPA8270	47
Weston	100444	Nitrobenzene-d5	EPA8270	78
Weston	100444	p-Bromofluorobenzene	EPA8260	96
Weston	100444	p-Terphenyl-d14	EPA8270	80
Weston	100444	Phenol-d5	EPA8270	30
Weston	100444	Toluene-d8	EPA8260	107
Weston	100445	1,2-Dichloroethane-d4	EPA8260	97
Weston	100445	p-Bromofluorobenzene	EPA8260	96
Weston	100445	Toluene-d8	EPA8260	102
Weston	100446	1,2-Dichloroethane-d4	EPA8260	125
Weston	100446	1,2-Dichloroethane-d4	EPA8260	132
Weston	100446	2,4,6-Tribromophenol (surr)	EPA8270	84
Weston	100446	2-Fluorobiphenyl	EPA8270	76
Weston	100446	2-Fluorophenol	EPA8270	67
Weston	100446	Nitrobenzene-d5	EPA8270	66
Weston	100446	p-Bromofluorobenzene	EPA8260	60
Weston	100446	p-Bromofluorobenzene	EPA8260	66
Weston	100446	p-Terphenyl-d14	EPA8270	112
Weston	100446	Phenol-d5	EPA8270	69
Weston	100446	Toluene-d8	EPA8260	130
Weston	100446	Toluene-d8	EPA8260	134

Table 7
Recoveries of Matrix Spike and Surrogate Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Identification	Analyte	Analytical Method	Percent Recovery
Weston	100447	1,2-Dichloroethane-d4	EPA8260	99
Weston	100447	2,4,6-Tribromophenol (surr)	EPA8270	74
Weston	100447	2-Fluorobiphenyl	EPA8270	72
Weston	100447	2-Fluorophenol	EPA8270	48
Weston	100447	Nitrobenzene-d5	EPA8270	78
Weston	100447	p-Bromofluorobenzene	EPA8260	93
Weston	100447	p-Terphenyl-d14	EPA8270	80
Weston	100447	Phenol-d5	EPA8270	31
Weston	100447	Toluene-d8	EPA8260	100
Weston	100448	1,2-Dichloroethane-d4	EPA8260	103
Weston	100448	2,4,6-Tribromophenol (surr)	EPA8270	80
Weston	100448	2-Fluorobiphenyl	EPA8270	77
Weston	100448	2-Fluorophenol	EPA8270	52
Weston	100448	Nitrobenzene-d5	EPA8270	87
Weston	100448	p-Bromofluorobenzene	EPA8260	93
Weston	100448	p-Terphenyl-d14	EPA8270	86
Weston	100448	Phenol-d5	EPA8270	34
Weston	100448	Toluene-d8	EPA8260	102
Weston	100449	1,2,4-Trichlorobenzene	EPA8270M	69
Weston	100449	1,2-Dichloroethane-d4	EPA8260	116
Weston	100449	1,4-Dichlorobenzene	EPA8270	63
Weston	100449	2,4,6-Tribromophenol (surr)	EPA8270	75
Weston	100449	2,4,6-Tribromophenol (surr)	EPA8270	81
Weston	100449	2,4,6-Tribromophenol (surr)	EPA8270	83
Weston	100449	2,4-Dinitrotoluene	EPA8270	73
Weston	100449	2-Chlorophenol	EPA8270M	65
Weston	100449	2-Fluorobiphenyl	EPA8270	73
Weston	100449	2-Fluorobiphenyl	EPA8270	76
Weston	100449	2-Fluorobiphenyl	EPA8270	78
Weston	100449	2-Fluorophenol	EPA8270	68
Weston	100449	2-Fluorophenol	EPA8270	68
Weston	100449	2-Fluorophenol	EPA8270	72
Weston	100449	4-Chloro-m-cresol	EPA8270M	69
Weston	100449	4-Nitrophenol	EPA8270M	63
Weston	100449	Acenaphthene	EPA8270	72
Weston	100449	N-Nitrosodipropylamine	EPA8270	62
Weston	100449	Nitrobenzene-d5	EPA8270	69
Weston	100449	Nitrobenzene-d5	EPA8270	70
Weston	100449	Nitrobenzene-d5	EPA8270	75
Weston	100449	p-Bromofluorobenzene	EPA8260	91
Weston	100449	p-Terphenyl-d14	EPA8270	93
Weston	100449	p-Terphenyl-d14	EPA8270	102
Weston	100449	Pentachlorophenol	EPA8270M	79
Weston	100449	Phenol	EPA8270M	66
Weston	100449	Phenol-d5	EPA8270	67
Weston	100449	Phenol-d5	EPA8270	69

Table 7
Recoveries of Matrix Spike and Surrogate Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Identification	Analyte	Analytical Method	Percent Recovery
Weston	100449	Phenol-d5	EPA8270	70
Weston	100449	Pyrene	EPA8270	89
Weston	100449	Toluene-d8	EPA8260	105
Weston	100450	1,2-Dichloroethane-d4	EPA8260	100
Weston	100450	2,4,6-Tribromophenol (surr)	EPA8270	73
Weston	100450	2-Fluorobiphenyl	EPA8270	71
Weston	100450	2-Fluorophenol	EPA8270	48
Weston	100450	Nitrobenzene-d5	EPA8270	78
Weston	100450	p-Bromofluorobenzene	EPA8260	91
Weston	100450	p-Terphenyl-d14	EPA8270	85
Weston	100450	Phenol-d5	EPA8270	31
Weston	100450	Toluene-d8	EPA8260	98
Weston	100452	1,2-Dichloroethane-d4	EPA8260	98
Weston	100452	2,4,6-Tribromophenol (surr)	EPA8270	77
Weston	100452	2-Fluorobiphenyl	EPA8270	67
Weston	100452	2-Fluorophenol	EPA8270	45
Weston	100452	Nitrobenzene-d5	EPA8270	75
Weston	100452	p-Bromofluorobenzene	EPA8260	95
Weston	100452	p-Terphenyl-d14	EPA8270	80
Weston	100452	Phenol-d5	EPA8270	29
Weston	100452	Toluene-d8	EPA8260	97
Weston	100453	1,2-Dichloroethane-d4	EPA8260	120
Weston	100453	1,2-Dichloroethane-d4	EPA8260	122
Weston	100453	2,4,6-Tribromophenol (surr)	EPA8270	71
Weston	100453	2-Fluorobiphenyl	EPA8270	63
Weston	100453	2-Fluorophenol	EPA8270	59
Weston	100453	Nitrobenzene-d5	EPA8270	46
Weston	100453	p-Bromofluorobenzene	EPA8260	62
Weston	100453	p-Bromofluorobenzene	EPA8260	68
Weston	100453	p-Terphenyl-d14	EPA8270	95
Weston	100453	Phenol-d5	EPA8270	59
Weston	100453	Toluene-d8	EPA8260	118
Weston	100453	Toluene-d8	EPA8260	123
Weston	100454	1,2-Dichloroethane-d4	EPA8260	105
Weston	100454	2,4,6-Tribromophenol (surr)	EPA8270	75
Weston	100454	2-Fluorobiphenyl	EPA8270	74
Weston	100454	2-Fluorophenol	EPA8270	50
Weston	100454	Nitrobenzene-d5	EPA8270	74
Weston	100454	p-Bromofluorobenzene	EPA8260	95
Weston	100454	p-Terphenyl-d14	EPA8270	84
Weston	100454	Phenol-d5	EPA8270	30
Weston	100454	Toluene-d8	EPA8260	99
Weston	100455	1,2-Dichloroethane-d4	EPA8260	112
Weston	100455	2,4,6-Tribromophenol (surr)	EPA8270	77
Weston	100455	2-Fluorobiphenyl	EPA8270	73
Weston	100455	2-Fluorophenol	EPA8270	50

Table 7
Recoveries of Matrix Spike and Surrogate Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Identification	Analyte	Analytical Method	Percent Recovery
Weston	100455	Chloride	EPA300	94
Weston	100455	Chloride	EPA300	94
Weston	100455	Fluoride	EPA300	105
Weston	100455	Fluoride	EPA300	106
Weston	100455	Mercury, total	EPA7471	50
Weston	100455	Mercury, total	EPA7471	83
Weston	100455	Nitrobenzene-d5	EPA8270	74
Weston	100455	p-Bromofluorobenzene	EPA8260	99
Weston	100455	p-Terphenyl-d14	EPA8270	80
Weston	100455	Phenol-d5	EPA8270	30
Weston	100455	Sulfate	EPA300	101
Weston	100455	Toluene-d8	EPA8260	104
Weston	100456	1,2-Dichloroethane-d4	EPA8260	105
Weston	100456	p-Bromofluorobenzene	EPA8260	93
Weston	100456	Toluene-d8	EPA8260	97
Weston	100457	1,2-Dichloroethane-d4	EPA8260	102
Weston	100457	2,4,6-Tribromophenol (surr)	EPA8270	74
Weston	100457	2-Fluorobiphenyl	EPA8270	69
Weston	100457	2-Fluorophenol	EPA8270	47
Weston	100457	Nitrobenzene-d5	EPA8270	70
Weston	100457	p-Bromofluorobenzene	EPA8260	92
Weston	100457	p-Terphenyl-d14	EPA8270	84
Weston	100457	Phenol-d5	EPA8270	28
Weston	100457	Toluene-d8	EPA8260	98
Weston	100458	1,2-Dichloroethane-d4	EPA8260	112
Weston	100458	2,4,6-Tribromophenol (surr)	EPA8270	74
Weston	100458	2-Fluorobiphenyl	EPA8270	73
Weston	100458	2-Fluorophenol	EPA8270	62
Weston	100458	Nitrobenzene-d5	EPA8270	63
Weston	100458	p-Bromofluorobenzene	EPA8260	89
Weston	100458	p-Terphenyl-d14	EPA8270	115
Weston	100458	Phenol-d5	EPA8270	67
Weston	100458	Toluene-d8	EPA8260	102
Weston	100460	1,2-Dichloroethane-d4	EPA8260	107
Weston	100460	2,4,6-Tribromophenol (surr)	EPA8270	71
Weston	100460	2-Fluorobiphenyl	EPA8270	75
Weston	100460	2-Fluorophenol	EPA8270	51
Weston	100460	Nitrobenzene-d5	EPA8270	76
Weston	100460	p-Bromofluorobenzene	EPA8260	95
Weston	100460	p-Terphenyl-d14	EPA8270	81
Weston	100460	Phenol-d5	EPA8270	31
Weston	100460	Toluene-d8	EPA8260	101
Weston	100461	1,2-Dichloroethane-d4	EPA8260	97
Weston	100461	2,4,6-Tribromophenol (surr)	EPA8270	76
Weston	100461	2-Fluorobiphenyl	EPA8270	77
Weston	100461	2-Fluorophenol	EPA8270	51

Table 7
Recoveries of Matrix Spike and Surrogate Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Identification	Analyte	Analytical Method	Percent Recovery
Weston	100461	Nitrobenzene-d5	EPA8270	77
Weston	100461	p-Bromofluorobenzene	EPA8260	92
Weston	100461	p-Terphenyl-d14	EPA8270	83
Weston	100461	Phenol-d5	EPA8270	31
Weston	100461	Toluene-d8	EPA8260	103
Weston	100462	1,2-Dichloroethane-d4	EPA8260	111
Weston	100462	2,4,6-Tribromophenol (surr)	EPA8270	78
Weston	100462	2-Fluorobiphenyl	EPA8270	72
Weston	100462	2-Fluorophenol	EPA8270	66
Weston	100462	Nitrobenzene-d5	EPA8270	64
Weston	100462	p-Bromofluorobenzene	EPA8260	78
Weston	100462	p-Terphenyl-d14	EPA8270	105
Weston	100462	Phenol-d5	EPA8270	66
Weston	100462	Toluene-d8	EPA8260	101
Weston	100463	1,2-Dichloroethane-d4	EPA8260	109
Weston	100463	2,4,6-Tribromophenol (surr)	EPA8270	78
Weston	100463	2-Fluorobiphenyl	EPA8270	71
Weston	100463	2-Fluorophenol	EPA8270	63
Weston	100463	Nitrobenzene-d5	EPA8270	62
Weston	100463	p-Bromofluorobenzene	EPA8260	79
Weston	100463	p-Terphenyl-d14	EPA8270	105
Weston	100463	Phenol-d5	EPA8270	63
Weston	100463	Toluene-d8	EPA8260	95
Weston	100464	1,2-Dichloroethane-d4	EPA8260	108
Weston	100464	2,4,6-Tribromophenol (surr)	EPA8270	64
Weston	100464	2-Fluorobiphenyl	EPA8270	58
Weston	100464	2-Fluorophenol	EPA8270	78
Weston	100464	Nitrobenzene-d5	EPA8270	67
Weston	100464	p-Bromofluorobenzene	EPA8260	80
Weston	100464	p-Terphenyl-d14	EPA8270	114
Weston	100464	Phenol-d5	EPA8270	78
Weston	100464	Toluene-d8	EPA8260	100
Weston	100465	1,2-Dichloroethane-d4	EPA8260	110
Weston	100465	2,4,6-Tribromophenol (surr)	EPA8270	89
Weston	100465	2-Fluorobiphenyl	EPA8270	70
Weston	100465	2-Fluorophenol	EPA8270	88
Weston	100465	Nitrobenzene-d5	EPA8270	76
Weston	100465	p-Bromofluorobenzene	EPA8260	94
Weston	100465	p-Terphenyl-d14	EPA8270	119
Weston	100465	Phenol-d5	EPA8270	86
Weston	100465	Toluene-d8	EPA8260	92
Weston	100466	1,1-Dichloroethylene	EPA8260	88
Weston	100466	1,2-Dichloroethane-d4	EPA8260	112
Weston	100466	1,2-Dichloroethane-d4	EPA8260	112
Weston	100466	1,2-Dichloroethane-d4	EPA8260	114
Weston	100466	2,4,6-Tribromophenol (surr)	EPA8270	30

Table 7
Recoveries of Matrix Spike and Surrogate Samples
D-Area Burning/Rubble Pits
Savannah River Site

Laboratory	Sample Identification	Analyte	Analytical Method	Percent Recovery
Weston	100466	2-Fluorobiphenyl	EPA8270	59
Weston	100466	2-Fluorophenol	EPA8270	85
Weston	100466	Benzene	EPA8260	115
Weston	100466	Chlorobenzene	EPA8260	111
Weston	100466	Nitrobenzene-d5	EPA8270	74
Weston	100466	p-Bromofluorobenzene	EPA8260	77
Weston	100466	p-Bromofluorobenzene	EPA8260	85
Weston	100466	p-Terphenyl-d14	EPA8270	94
Weston	100466	Phenol-d5	EPA8270	81
Weston	100466	Toluene	EPA8260	118
Weston	100466	Toluene-d8	EPA8260	98
Weston	100466	Toluene-d8	EPA8260	99
Weston	100466	Toluene-d8	EPA8260	103
Weston	100466	Trichloroethylene	EPA8260	106
Weston	100468	1,2-Dichloroethane-d4	EPA8260	113
Weston	100468	p-Bromofluorobenzene	EPA8260	102
Weston	100468	Toluene-d8	EPA8260	109
Weston	100469	1,2-Dichloroethane-d4	EPA8260	114
Weston	100469	p-Bromofluorobenzene	EPA8260	103
Weston	100469	Toluene-d8	EPA8260	110
Weston	100470	1,2-Dichloroethane-d4	EPA8260	112
Weston	100470	p-Bromofluorobenzene	EPA8260	96
Weston	100470	Toluene-d8	EPA8260	104
Weston	100471	1,2-Dichloroethane-d4	EPA8260	98
Weston	100471	p-Bromofluorobenzene	EPA8260	90
Weston	100471	Toluene-d8	EPA8260	89
Weston	100472	1,1-Dichloroethylene	EPA8260	91
Weston	100472	1,2-Dichloroethane-d4	EPA8260	100
Weston	100472	1,2-Dichloroethane-d4	EPA8260	101
Weston	100472	1,2-Dichloroethane-d4	EPA8260	103
Weston	100472	Benzene	EPA8260	104
Weston	100472	Chlorobenzene	EPA8260	111
Weston	100472	p-Bromofluorobenzene	EPA8260	92
Weston	100472	p-Bromofluorobenzene	EPA8260	94
Weston	100472	p-Bromofluorobenzene	EPA8260	96
Weston	100472	Toluene	EPA8260	106
Weston	100472	Toluene-d8	EPA8260	92
Weston	100472	Toluene-d8	EPA8260	96
Weston	100472	Toluene-d8	EPA8260	97
Weston	100472	Trichloroethylene	EPA8260	105

Table 8
Detection Summary of Rinsate Blank
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Date	Analytical Method	Analyte	Result	Result Qual	Analysis Qual	Bias Qual	Unit
100452	50594	EPA7421	Lead, total recoverable	0.7				UGL
100452	50594	EPA8260	1,1,1-Trichloroethane	0.34	J	B		UGL
100452	50594	EPA8260	Chloromethane (Methyl chloride)	0.37	J	B		UGL
100452	50594	EPA8270	Bis(2-ethylhexyl) phthalate	2.7	J	B		UGL

Table 9
Detection Summary of Trip Blanks
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identifier	Sample Date	Analytical Method	Analyte	Result	Result Qual	Analysis Qual	Bias Qual	Unit
100467	50694	EPA8260	Toluene	0.45	J	V	H	UGL
100467	50694	EPA8260	Dichloromethane (Methylene chloride)	0.50	J	V	H	UGL
100468	50694	EPA8260	Chloroform	0.39				UGL
100468	50694	EPA8260	Trichlorofluoromethane	0.13	J	B		UGL
100469	50694	EPA8260	Chloroform	0.40				UGL
100469	50694	EPA8260	Trichlorofluoromethane	0.13	J	B		UGL
100470	50694	EPA8260	Chloroform	0.40				UGL
100470	50694	EPA8260	Trichlorofluoromethane	0.13	J	B		UGL
100471	50694	EPA8260	Chloroform	0.34				UGL
100471	50694	EPA8260	Trichlorofluoromethane	0.10	J	B		UGL
100472	50694	EPA8260	Chloroform	0.34				UGL
100472	50694	EPA8260	1,1-Dichloroethylene	4.57				UGL
100472	50694	EPA8260	Benzene	5.21				UGL
100472	50694	EPA8260	Trichloroethylene	5.26				UGL
100472	50694	EPA8260	Toluene	5.31				UGL
100472	50694	EPA8260	Chlorobenzene	5.53				UGL

Table 10
Detection Summary of Field Blanks
D-Area Burning/Rubble Pits
Savannah River Site

Sample Identification	Sample Date	Analytical Method	Analyte	Result	Result Qual	Analysis Qual	Bias Qual	Unit
100445	50594	EPA8260	1,1,1-Trichloroethane	0.41				UGL
100445	50594	EPA8260	Chloromethane (Methyl chloride)	0.5				UGL

Table 11
Evaluation of Surface Water Field Duplicates
D-Area Burning/Rubble Pits
Savannah River Site

Analyte	Unit	D431-31-01 100454 50594	D431-31-01A 100455 50594	Relative Percent Difference
1,1,1,2-Tetrachloroethane	UGL	0.4 U//	0.4 U//	
1,1,1-Trichloroethane	UGL	0.4 U//	0.4 U//	
1,1,2-Trichloroethane	UGL	0.8 U//	0.8 U//	
1,1-Dichloroethane	UGL	0.3 U//	0.3 U//	
1,1-Dichloroethylene	UGL	0.5 U//	0.5 U//	
1,2,4-Trichlorobenzene	UGL	10 U//	10 U//	
1,2-Dichlorobenzene	UGL	10 U//	10 U//	
1,2-Dichloroethane	UGL	0.07 U//	0.07 U//	
1,2-Dichloroethylene	UGL	0.3 U//	0.3 U//	
1,2-Dichloropropane	UGL	0.2 U//	0.2 U//	
1,3-Dichlorobenzene	UGL	10 U//	10 U//	
1,4-Dichlorobenzene	UGL	10 U//	10 U//	
2,4,5-Trichlorophenol	UGL	50 U//	50 U//	
2,4,6-Trichlorophenol	UGL	10 U//	10 U//	
2,4-Dichlorophenol	UGL	10 U//	10 U//	
2,4-Dimethyl phenol	UGL	10 U//	10 U//	
2,4-Dinitrophenol	UGL	50 U//	50 U//	
2,4-Dinitrotoluene	UGL	10 U//	10 U//	
2,6-Dinitrotoluene	UGL	10 U//	10 U//	
2-Chloroethyl vinyl ether	UGL	10 U//	10 U//	
2-Chloronaphthalene	UGL	10 U//	10 U//	
2-Chlorophenol	UGL	10 U//	10 U//	
2-Methyl-4,6-dinitrophenol	UGL	50 U//	50 U//	
2-Methylnaphthalene	UGL	10 U//	10 U//	
2-Nitrophenol	UGL	10 U//	10 U//	
3,3'-Dichlorobenzidine	UGL	20 U//	20 U//	
4-Bromophenyl phenyl ether	UGL	10 U//	10 U//	
4-Chloro-m-cresol	UGL	10 U//	10 U//	
4-Chloroaniline	UGL	10 U//	10 U//	
4-Chlorophenyl phenyl ether	UGL	10 U//	10 U//	
4-Nitrophenol	UGL	50 U//	50 U//	
Acenaphthene	UGL	10 U//	10 U//	
Acenaphthylene	UGL	10 U//	10 U//	
Anthracene	UGL	10 U//	10 U//	
Arsenic, total recoverable	UGL	1.7 U//	1.7 U//	
Barium, total recoverable	UGL	13.9 //	14 //	0.7
Benzene	UGL	0.3 U//	0.3 U//	
Benzo(a)anthracene	UGL	10 U//	10 U//	
Benzo(a)pyrene	UGL	10 U//	10 U//	
Benzo(b)fluoranthene	UGL	10 U//	10 U//	

Table 11
Evaluation of Surface Water Field Duplicates
D-Area Burning/Rubble Pits
Savannah River Site

Analyte	Unit	D431-31-01 100454 50594	D431-31-01A 100455 50594	Relative Percent Difference
Benzo(g,h,i)perylene	UGL	10 U//	10 U//	
Benzo(k)fluoranthene	UGL	10 U//	10 U//	
Benzoic acid	UGL	50 U//	50 U//	
Benzyl alcohol	UGL	10 U//	10 U//	
Bis(2-chloroethoxy) methane	UGL	10 U//	10 U//	
Bis(2-chloroethyl) ether	UGL	10 U//	10 U//	
Bis(2-chloroisopropyl) ether	UGL	10 U//	10 U//	
Bis(2-ethylhexyl) phthalate	UGL	10 U//	10 U//	
Bromoform	UGL	2 U//	2 U//	
Bromomethane (Methyl bromide)	UGL	0.6 U//	0.6 U//	
Butylbenzyl phthalate	UGL	10 U//	10 U//	
Cadmium, total recoverable	UGL	3.3 U//	3.3 U//	
Carbon tetrachloride	UGL	0.2 U//	0.2 U//	
Chloride	UGL	10700 //	9970 //	7.1
Chlorobenzene	UGL	0.2 U//	0.2 U//	
Chloroethane	UGL	0.2 U//	0.2 U//	
Chloroethene (Vinyl chloride)	UGL	0.4 U//	0.4 U//	
Chloroform	UGL	0.3 U//	0.3 U//	
Chloromethane (Methyl chloride)	UGL	0.3 U/V/	0.3 U/V/	
Chromium, total recoverable	UGL	3.3 U//	3.3 U//	
Chrysene	UGL	10 U//	10 U//	
cis-1,3-Dichloropropene	UGL	2 U//	2 U//	
Copper, total recoverable	UGL	3.3 U//	3.3 U//	
Di-n-butyl phthalate	UGL	10 U//	10 U//	
Di-n-octyl phthalate	UGL	10 U//	10 U//	
Dibenz(a,h)anthracene	UGL	10 U//	10 U//	
Dibenzofuran	UGL	10 U//	10 U//	
Dibromochloromethane	UGL	0.5 U//	0.5 U//	
Diethyl phthalate	UGL	10 U//	10 U//	
Dimethyl phthalate	UGL	10 U//	10 U//	
Ethylbenzene	UGL	0.3 U//	0.3 U//	
Fluoranthene	UGL	10 U//	10 U//	
Fluorene	UGL	10 U//	10 U//	
Fluoride	UGL	72.7 U//	72.7 U//	
Gross alpha	PCL	0.33 U//	0.32 U//	
Hexachlorobenzene	UGL	10 U//	10 U//	
Hexachlorobutadiene	UGL	10 U//	10 U//	
Hexachlorocyclopentadiene	UGL	10 U//	10 U//	
Hexachloroethane	UGL	10 U//	10 U//	
Indeno(1,2,3-c,d)pyrene	UGL	10 U//	10 U//	

Table 11
Evaluation of Surface Water Field Duplicates
D-Area Burning/Rubble Pits
Savannah River Site

Analyte	Unit	D431-31-01 100454 50594	D431-31-01A 100455 50594	Relative Percent Difference
Iron, total recoverable	UGL	103 //	93.1 //	-10.1
Isophorone	UGL	10 U//	10 U//	
Lead, total recoverable	UGL	0.6 //	0.5 U//	18.2
m-Nitroaniline	UGL	50 U//	50 U//	
Manganese, total recoverable	UGL	35.8 //	35.5 //	0.8
Mercury, total	UGL	0.067 U//	0.067 J/I/P	0.0
N-Nitrosodiphenylamine	UGL	10 U//	10 U//	
N-Nitrosodipropylamine	UGL	10 U//	10 U//	
Naphthalene	UGL	10 U//	10 U//	
Nickel, total recoverable	UGL	11.7 U//	11.7 U//	
Nitrate as nitrogen	UGL	129 //	83.3 U//	43.1
Nitrobenzene	UGL	10 U//	10 U//	
Nonvolatile beta	PCL	1.1 U//	1.4 J//	24.0
o-Cresol (2-Methylphenol)	UGL	10 U//	10 U//	
o-Nitroaniline	UGL	50 U//	50 U//	
p-Cresol (4-Methylphenol)	UGL	10 U//	10 U//	
p-Nitroaniline	UGL	50 U//	50 U//	
Pentachlorophenol	UGL	50 U//	50 U//	
Phenanthrene	UGL	10 U//	10 U//	
Phenol	UGL	10 U//	10 U//	
Pyrene	UGL	10 U//	10 U//	
Radium, total alpha-emitting	PCL	0.1 U//	0.12 U//	
Selenium, total recoverable	UGL	1.7 U//	1.7 U//	
Silver, total recoverable	UGL	0.7 U//	0.7 U//	
Sodium, total recoverable	UGL	9840 //	9950 //	1.1
Sulfate	UGL	9600 //	9090 //	5.5
Tetrachloroethylene	UGL	0.5 U//	0.5 U//	
Toluene	UGL	0.8 U//	0.8 U//	
Total dissolved solids	UGL	48000 //	59000 //	20.6
Total organic carbon	UGL	1660 //	1660 //	0.0
Total organic halogens	UGL	3330 U//	3330 U//	
Total suspended solids	UGL	1670 U//	1670 U//	
trans-1,3-Dichloropropene	UGL	2 U//	2 U//	
Trichloroethylene	UGL	0.2 U//	0.2 U//	
Trichlorofluoromethane	UGL	0.7 U//	0.7 U//	
Tritium	PCML	0.53 //	0.4 J//	28.0

Table 12
Evaluation of Sediment Field Duplicates
D-Area Burning/Rubble Pits
Savannah River Site

Analyte	Units	D431-31-02 100462 50594	D431-31-02A 100463 50594	Relative Percent Difference
1,1,1,2-Tetrachloroethane	UGKG	0.72 U//	0.6 U//	
1,1,1-Trichloroethane	UGKG	0.72 U//	0.6 U//	
1,1,2-Trichloroethane	UGKG	1.44 U//	1.2 U//	
1,1-Dichloroethane	UGKG	0.85 U//	0.45 U//	
1,1-Dichloroethylene	UGKG	0.9 U//	0.75 U//	
1,2,4-Trichlorobenzene	UGKG	626 U//	489 U//	
1,2-Dichlorobenzene	UGKG	626 U//	489 U//	
1,2-Dichloroethane	UGKG	0.126 U//	0.105 U//	
1,2-Dichloroethylene	UGKG	0.85 U//	0.45 U//	
1,2-Dichloropropane	UGKG	0.36 U//	0.3 U//	
1,3-Dichlorobenzene	UGKG	626 U//	489 U//	
1,4-Dichlorobenzene	UGKG	626 U//	489 U//	
2,4,5-Trichlorophenol	UGKG	3130 U//	2440 U//	
2,4,6-Trichlorophenol	UGKG	626 U//	489 U//	
2,4-Dichlorophenol	UGKG	626 U//	489 U//	
2,4-Dimethyl phenol	UGKG	626 U//	489 U//	
2,4-Dinitrophenol	UGKG	3130 U//	2440 U//	
2,4-Dinitrotoluene	UGKG	626 U//	489 U//	
2,6-Dinitrotoluene	UGKG	626 U//	489 U//	
2-Chloroethyl vinyl ether	UGKG	18 U//	15 U//	
2-Chloronaphthalene	UGKG	626 U//	489 U//	
2-Chlorophenol	UGKG	626 U//	489 U//	
2-Methyl-4,6-dinitrophenol	UGKG	3130 U//	2440 U//	
2-Methylnaphthalene	UGKG	626 U//	489 U//	
2-Nitrophenol	UGKG	626 U//	489 U//	
3,3'-Dichlorobenzidine	UGKG	1250 U//	978 U//	
4-Bromophenyl phenyl ether	UGKG	626 U//	489 U//	
4-Chloro-m-cresol	UGKG	626 U//	489 U//	
4-Chloroaniline	UGKG	626 U//	489 U//	
4-Chlorophenyl phenyl ether	UGKG	626 U//	489 U//	
4-Nitrophenol	UGKG	3130 U//	2440 U//	
Acenaphthene	UGKG	626 U//	489 U//	
Acenaphthylene	UGKG	626 U//	489 U//	
Anthracene	UGKG	626 U//	489 U//	
Arsenic, total recoverable	MGKG	2.1 //	1.5 //	8
Barium, total recoverable	MGKG	49.3 //	60.4 //	5
Benzene	UGKG	0.85 U//	0.45 U//	
Benzo(a)anthracene	UGKG	626 U//	489 U//	
Benzo(a)pyrene	UGKG	626 U//	489 U//	
Benzo(b)fluoranthene	UGKG	626 U//	489 U//	
Benzo(g,h,i)perylene	UGKG	626 U//	489 U//	
Benzo(k)fluoranthene	UGKG	626 U//	489 U//	
Benzoic acid	UGKG	3130 U//	2440 U//	
Benzyl alcohol	UGKG	626 U//	489 U//	

Table 12
Evaluation of Sediment Field Duplicates
D-Area Burning/Rubble Pits
Savannah River Site

Analyte	Units	D431-31-02 100462 50594	D431-31-02A 100463 50594	Relative Percent Difference
Bis(2-chloroethoxy) methane	UGKG	626 U//	489 U//	
Bis(2-chloroethyl) ether	UGKG	626 U//	489 U//	
Bis(2-chloroisopropyl) ether	UGKG	626 U//	489 U//	
Bis(2-ethylhexyl) phthalate	UGKG	626 U//	489 U//	
Bromoform	UGKG	3.6 U//	3 U//	
Bromomethane (Methyl bromide)	UGKG	1.08 U//	0.9 U//	
Butylbenzyl phthalate	UGKG	626 U//	489 U//	
Cadmium, total recoverable	MGKG	1.5 U//	1.2 U//	
Carbon tetrachloride	UGKG	0.36 U//	0.3 U//	
Chlorobenzene	UGKG	0.36 U//	0.3 U//	
Chloroethane	UGKG	0.36 U//	0.3 U//	
Chloroethene (Vinyl chloride)	UGKG	0.72 U//	0.6 U//	
Chloroform	UGKG	0.85 U//	0.45 U//	
Chloromethane (Methyl chloride)	UGKG	0.9 U//	0.75 U//	
Chromium, total recoverable	MGKG	11.3 //	8.8 //	6
Chrysene	UGKG	626 U//	489 U//	
cis-1,3-Dichloropropene	UGKG	3.6 U//	3 U//	
Copper, total recoverable	MGKG	5.2 //	4.1 //	6
Di-n-butyl phthalate	UGKG	626 U/V/	489 U/V/	
Di-n-octyl phthalate	UGKG	626 U//	489 U//	
Dibenz(a,h)anthracene	UGKG	626 U//	489 U//	
Dibenzofuran	UGKG	626 U//	489 U//	
Dibromochloromethane	UGKG	0.9 U//	0.75 U//	
Dichloromethane (Methylene chloride	UGKG	1.9 UJ/V/	1.9 UJ/V/	
Diethyl phthalate	UGKG	626 U//	489 U//	
Dimethyl phthalate	UGKG	626 U//	489 U//	
Ethylbenzene	UGKG	0.85 U//	0.45 U//	
Fluoranthene	UGKG	626 U//	489 U//	
Fluorene	UGKG	626 U//	489 U//	
Gross alpha	PCG	3.3 J//	3.5 J//	1
Hexachlorobenzene	UGKG	626 U//	489 U//	
Hexachlorobutadiene	UGKG	626 U//	489 U//	
Hexachlorocyclopentadiene	UGKG	626 U//	489 U//	
Hexachloroethane	UGKG	626 U//	489 U//	
Indeno(1,2,3-c,d)pyrene	UGKG	626 U//	489 U//	
Isophorone	UGKG	626 U//	489 U//	
Lead, total recoverable	MGKG	8.4 //	5.3 //	11
m-Nitroaniline	UGKG	3130 U//	2440 U//	
Manganese, total recoverable	MGKG	322 //	1140 //	28
Mercury, total	MGKG	0.102 U//	0.0903 U//	
N-Nitrosodiphenylamine	UGKG	626 U//	489 U//	
N-Nitrosodipropylamine	UGKG	626 U//	489 U//	
Naphthalene	UGKG	626 U//	489 U//	
Nickel, total recoverable	MGKG	5 U//	4 U//	

Table 12
Evaluation of Sediment Field Duplicates
D-Area Burning/Rubble Pits
Savannah River Site

Analyte	Units	D431-31-02 100462 50594	D431-31-02A 100463 50594	Relative Percent Difference
Nitrobenzene	UGKG	626 U//	489 U//	
Nonvolatile beta	PCG	12.7 //	9.1 //	8
o-Cresol (2-Methylphenol)	UGKG	626 U//	489 U//	
o-Nitroaniline	UGKG	3130 U//	2440 U//	
p-Cresol (4-Methylphenol)	UGKG	626 U//	489 U//	
p-Nitroaniline	UGKG	3130 U//	2440 U//	
Pentachlorophenol	UGKG	3130 U//	2440 U//	
pH	PH	5.37 //	5.47 //	0
Phenanthrene	UGKG	626 U//	489 U//	
Phenol	UGKG	626 U//	489 U//	
Pyrene	UGKG	626 U//	489 U//	
Radium, total alpha-emitting	PCG	2.4 //	2.2 //	2
Selenium, total recoverable	MGKG	0.56 U//	0.43 U//	
Silver, total recoverable	MGKG	1.3 U//	1 U//	
Tetrachloroethylene	UGKG	0.9 U//	0.75 U//	
Toluene	UGKG	0.828 J/B/	0.78 J/B/	1
Total organic carbon	%	2.61 //	0.938 //	24
trans-1,3-Dichloropropene	UGKG	3.6 U//	3 U//	
Trichloroethylene	UGKG	0.36 U//	0.3 U//	
Trichlorofluoromethane	UGKG	0.72 U/V/	0.9 U/V/	
Tritium	PCG	1.27 U//	0.75 U//	

Table 13
Evaluation of Surface Water Split Samples
D-Area Burning/Rubble Pits
Savannah River Site

Analyte	Units	D431-32-01 100450 50594	D431-32-01D 100451 50594	Relative Percent Difference
1,1,1-Trichloroethane	UGL	0.4 U//	0.022 U//	
1,1,2-Trichloroethane	UGL	0.8 U//	0.017 U//	
1,1-Dichloroethane	UGL	0.3 U//	0.017 U//	
1,1-Dichloroethylene	UGL	0.5 U//	0.018 U//	
1,2,4-Trichlorobenzene	UGL	11 U//	0.075 UJ/I/P	
1,2-Dichlorobenzene	UGL	11 U//	0.017 UJ/I/P	
1,2-Dichloroethane	UGL	0.07 U//	0.015 U//	
1,2-Dichloropropane	UGL	0.2 U//	0.015 U//	
1,3-Dichlorobenzene	UGL	11 U//	0.117 UJ/I/P	
1,4-Dichlorobenzene	UGL	11 U//	0.024 UJ/I/P	
2,4,5-Trichlorophenol	UGL	55 U//	0.051 UJ/I/P	
2,4,6-Trichlorophenol	UGL	11 U//	0.012 UJ/I/P	
2,4-Dichlorophenol	UGL	11 U//	0.022 UJ/I/P	
2,4-Dimethyl phenol	UGL	11 U//	0.104 UJ/I/P	
2,4-Dinitrophenol	UGL	55 U//	0.332 UJ/I/P	
2,4-Dinitrotoluene	UGL	11 U//	0.092 UJ/I/P	
2,6-Dinitrotoluene	UGL	11 U//	0.11 UJ/I/P	
2-Chloroethyl vinyl ether	UGL	10 U//	0.179 U//	
2-Chloronaphthalene	UGL	11 U//	0.117 UJ/I/P	
2-Chlorophenol	UGL	11 U//	0.031 UJ/I/P	
2-Methyl-4,6-dinitrophenol	UGL	55 U//	0.28 UJ/I/P	
2-Methylnaphthalene	UGL	11 U//	0.017 UJ/I/P	
2-Nitrophenol	UGL	11 U//	0.012 UJ/I/P	
3,3'-Dichlorobenzidine	UGL	22 U//	0.113 UJ/I/P	
4-Bromophenyl phenyl ether	UGL	11 U//	0.057 UJ/I/P	
4-Chloro-m-cresol	UGL	11 U//	0.026 UJ/I/P	
4-Chloroaniline	UGL	11 U//	0.015 UJ/I/P	
4-Chlorophenyl phenyl ether	UGL	11 U//	0.015 UJ/I/P	
4-Nitrophenol	UGL	55 U//	0.191 UJ/I/P	
Acenaphthene	UGL	11 U//	0.0168 UJ/I/P	
Acenaphthylene	UGL	11 U//	0.017 UJ/I/P	
Anthracene	UGL	11 U//	0.017 UJ/I/P	
Arsenic, total recoverable	UGL	1.7 U//	1.5 U//	
Barium, total recoverable	UGL	14.1 //	14.1 //	0
Benzene	UGL	0.3 U//	0.017 U//	
Benzo(a)anthracene	UGL	11 U//	0.151 UJ/I/P	
Benzo(a)pyrene	UGL	11 U//	0.076 UJ/I/P	
Benzo(b)fluoranthene	UGL	11 U//	0.133 UJ/I/P	
Benzo(g,h,i)perylene	UGL	11 U//	0.309 UJ/I/P	
Benzo(k)fluoranthene	UGL	11 U//	0.079 UJ/I/P	
Benzoic acid	UGL	55 U//	0.081 UJ/I/P	
Benzyl alcohol	UGL	11 U//	0.025 UJ/I/P	
Bis(2-chloroethoxy) methane	UGL	11 U//	0.018 UJ/I/P	
Bis(2-chloroethyl) ether	UGL	11 U//	0.017 UJ/I/P	

Table 13
Evaluation of Surface Water Split Samples
D-Area Burning/Rubble Pits
Savannah River Site

Analyte	Units	D431-32-01 100450 50594	D431-32-01D 100451 50594	Relative Percent Difference
Bis(2-chloroisopropyl) ether	UGL	11 U//	0.042 UJ/I/P	
Bis(2-ethylhexyl) phthalate	UGL	11 U//	0.59 J/VI/P	
Bromoform	UGL	2 U//	0.012 U//	
Bromomethane (Methyl bromide)	UGL	0.6 U//	0.026 U//	
Butylbenzyl phthalate	UGL	11 U//	0.036 UJ/I/P	
Cadmium, total recoverable	UGL	3.3 U//	0.48 U//	
Carbon tetrachloride	UGL	0.2 U//	0.012 U//	
Chlorobenzene	UGL	0.2 U//	0.012 U//	
Chloroethane	UGL	0.2 U//	0.025 U//	
Chloroethene (Vinyl chloride)	UGL	0.4 U//	0.015 U//	
Chloroform	UGL	0.3 U//	0.017 U//	
Chloromethane (Methyl chloride)	UGL	0.3 U/V/	0.024 U//	
Chromium, total recoverable	UGL	3.3 U//	2.28 U//	
Chrysene	UGL	11 U//	0.012 UJ/I/P	
cis-1,3-Dichloropropene	UGL	2 U//	0.012 U//	
Copper, total recoverable	UGL	3.3 U//	0.925 J//	
Di-n-butyl phthalate	UGL	11 U//	0.443 UJ/I/P	
Di-n-octyl phthalate	UGL	11 U//	0.07 UJ/I/P	
Dibenz(a,h)anthracene	UGL	11 U//	0.09 UJ/I/P	
Dibenzofuran	UGL	11 U//	0.017 UJ/I/P	
Dibromochloromethane	UGL	0.5 U//	0.017 U//	
Diethyl phthalate	UGL	11 U//	0.015 UJ/I/P	
Dimethyl phthalate	UGL	11 U//	0.017 UJ/I/P	
Ethylbenzene	UGL	0.3 U//	0.015 U//	
Fluoranthene	UGL	11 U//	0.024 UJ/I/P	
Fluorene	UGL	11 U//	0.012 UJ/I/P	
Gross alpha	PCL	0.5 U//	0.919 J//	15
Hexachlorobenzene	UGL	11 U//	0.028 UJ/I/P	
Hexachlorobutadiene	UGL	11 U//	0.067 UJ/I/P	
Hexachlorocyclopentadiene	UGL	11 U//	0.042 UJ/I/P	
Hexachloroethane	UGL	11 U//	0.022 UJ/I/P	
Indeno(1,2,3-c,d)pyrene	UGL	11 U//	0.035 UJ/I/P	
Iron, total recoverable	UGL	101 //	112 //	3
Isophorone	UGL	11 U//	0.099 UJ/I/P	
Lead, total recoverable	UGL	2.5 //	0.95 J/V/H	22
m-Nitroaniline	UGL	55 U//	0.142 UJ/I/P	
Manganese, total recoverable	UGL	27.6 //	27.8 J/V/H	0
Mercury, total	UGL	0.067 U//	0.04 UJ/V/H	
N-Nitrosodiphenylamine	UGL	11 U//	0.018 UJ/I/P	
N-Nitrosodipropylamine	UGL	11 U//	0.036 UJ/I/P	
Naphthalene	UGL	11 U//	0.017 UJ/I/P	
Nickel, total recoverable	UGL	11.7 U//	1.84 U//	
Nitrobenzene	UGL	11 U//	0.031 UJ/I/P	
Nonvolatile beta	PCL	0.8 U//	0.643 U//	

Table 13
Evaluation of Surface Water Split Samples
D-Area Burning/Rubble Pits
Savannah River Site

Analyte	Units	D431-32-01 100450 50594	D431-32-01D 100451 50594	Relative Percent Difference
o-Cresol (2-Methylphenol)	UGL	11 U//	0.048 UJ/I/P	
o-Nitroaniline	UGL	55 U//	0.031 UJ/I/P	
p-Nitroaniline	UGL	55 U//	0.102 UJ/I/P	
Pentachlorophenol	UGL	55 U//	0.192 UJ/I/P	
Phenanthrene	UGL	11 U//	0.017 UJ/I/P	
Phenol	UGL	11 U//	0.043 UJ/I/P	
Pyrene	UGL	11 U//	0.022 UJ/I/P	
Radium, total alpha-emitting	PCL	0.12 U//	-0.2 U//	
Selenium, total recoverable	UGL	1.7 U//	1.25 U//	
Silver, total recoverable	UGL	0.7 U//	0.512 U//	
Sodium, total recoverable	UGL	10200 //	9740 //	1
Tetrachloroethylene	UGL	0.5 U//	0.026 U//	
Toluene	UGL	0.8 U//	0.06 J/V/H	
Total dissolved solids	UGL	54000 //	53000 //	0
Total organic carbon	UGL	1660 //	1580 //	1
Total organic halogens	UGL	3330 U//	7.35 U//	
Total suspended solids	UGL	1670 U//	6300 U//	
trans-1,3-Dichloropropene	UGL	2 U//	0.015 U//	
Trichloroethylene	UGL	0.2 U//	0.017 U//	
Trichlorofluoromethane	UGL	0.7 U//	0.036 U//	

Table 14
Evaluation of Sediment Split Samples
D-Area Burning/Rubble Pits
Savannah River Site

Analyte	Units	D431-32-02 100458 50594	D431-32-02D 100459 50594S	Relative Percent Difference
1,1,1-Trichloroethane	UGKG	0.56 U//	0.022 UJ/I/P	
1,1,2-Trichloroethane	UGKG	1.12 U//	0.017 UJ/I/P	
1,1-Dichloroethane	UGKG	0.42 U//	0.017 UJ/I/P	
1,1-Dichloroethylene	UGKG	0.7 U//	0.018 UJ/I/P	
1,2,4-Trichlorobenzene	UGKG	483 U//	1.43 UJ/I/P	
1,2-Dichlorobenzene	UGKG	483 U//	0.815 UJ/I/P	
1,2-Dichloroethane	UGKG	0.098 U//	0.015 UJ/I/P	
1,2-Dichloropropane	UGKG	0.28 U//	0.015 UJ/I/P	
1,3-Dichlorobenzene	UGKG	483 U//	0.932 UJ/I/P	
1,4-Dichlorobenzene	UGKG	483 U//	5.07 UJ/I/P	
2,4,5-Trichlorophenol	UGKG	2420 U//	1.39 UJ/I/P	
2,4,6-Trichlorophenol	UGKG	483 U//	1.32 UJ/I/P	
2,4-Dichlorophenol	UGKG	483 U//	1.17 UJ/I/P	
2,4-Dimethyl phenol	UGKG	483 U//	1.2 UJ/I/P	
2,4-Dinitrophenol	UGKG	2420 U//	3.67 UJ/I/P	
2,4-Dinitrotoluene	UGKG	483 U//	0.554 UJ/I/P	
2,6-Dinitrotoluene	UGKG	483 U//	0.554 UJ/I/P	
2-Chloroethyl vinyl ether	UGKG	14 U//	0.179 UJ/I/P	
2-Chloronaphthalene	UGKG	483 U//	1.01 UJ/I/P	
2-Chlorophenol	UGKG	483 U//	2.42 UJ/I/P	
2-Methyl-4,6-dinitrophenol	UGKG	2420 U//	3.69 UJ/I/P	
2-Methylnaphthalene	UGKG	483 U//	1.39 UJ/I/P	
2-Nitrophenol	UGKG	483 U//	0.815 UJ/I/P	
3,3'-Dichlorobenzidine	UGKG	966 U//	122 UJ/I/P	
4-Bromophenyl phenyl ether	UGKG	483 U//	0.815 UJ/I/P	
4-Chloro-m-cresol	UGKG	483 U//	1.15 UJ/I/P	
4-Chloroaniline	UGKG	483 U//	4.5 UJ/I/P	
4-Chlorophenyl phenyl ether	UGKG	483 U//	1.04 UJ/I/P	
4-Nitrophenol	UGKG	2420 U//	6.52 UJ/I/P	
Acenaphthene	UGKG	483 U//	1.47 UJ/I/P	
Acenaphthylene	UGKG	483 U//	0.783 UJ/I/P	
Anthracene	UGKG	483 U//	0.392 UJ/I/P	
Arsenic, total recoverable	MGKG	1.4 //	1.36 U//	1
Barium, total recoverable	MGKG	22.3 //	17.8 J/V/H	6
Benzene	UGKG	0.42 U//	0.017 UJ/I/P	
Benzo(a)anthracene	UGKG	483 U//	1.17 UJ/I/P	
Benzo(a)pyrene	UGKG	483 U//	0.986 UJ/I/P	
Benzo(b)fluoranthene	UGKG	483 U//	0.932 UJ/I/P	
Benzo(g,h,i)perylene	UGKG	483 U//	0.392 UJ/I/P	
Benzo(k)fluoranthene	UGKG	483 U//	0.986 UJ/I/P	
Benzoic acid	UGKG	2420 U//	4.22 UJ/I/P	
Benzyl alcohol	UGKG	483 U//	3.03 UJ/I/P	
Bis(2-chloroethoxy) methane	UGKG	483 U//	0.783 UJ/I/P	
Bis(2-chloroethyl) ether	UGKG	483 U//	2.59 UJ/I/P	
Bis(2-chloroisopropyl) ether	UGKG	483 U//	1.04 UJ/I/P	
Bis(2-ethylhexyl) phthalate	UGKG	483 U//	18.1 J/VI/P	
Bromoform	UGKG	2.8 U//	0.012 UJ/I/P	

Table 14
Evaluation of Sediment Split Samples
D-Area Burning/Rubble Pits
Savannah River Site

Analyte	Units	D431-32-02 100458 50594	D431-32-02D 100459 50594	Relative Percent Difference
Bromomethane (Methyl bromide)	UGKG	0.84 U//	0.026 UJ/I/P	
Butylbenzyl phthalate	UGKG	483 U//	1.2 UJ/I/P	
Cadmium, total recoverable	MGKG	1.1 U//	0.178 U//	
Carbon tetrachloride	UGKG	0.28 U//	0.012 UJ/I/P	
Chlorobenzene	UGKG	0.28 U//	0.012 UJ/I/P	
Chloroethane	UGKG	0.28 U//	0.025 UJ/I/P	
Chloroethene (Vinyl chloride)	UGKG	0.56 U//	0.015 UJ/I/P	
Chloroform	UGKG	0.42 U//	0.017 UJ/I/P	
Chloromethane (Methyl chloride)	UGKG	0.7 U//	0.024 UJ/I/P	
Chromium, total recoverable	MGKG	14.9 //	5.22 //	24
Chrysene	UGKG	483 U//	0.715 UJ/I/P	
cis-1,3-Dichloropropene	UGKG	2.8 U//	0.012 UJ/I/P	
Copper, total recoverable	MGKG	5.3 //	4.22 //	6
Di-n-butyl phthalate	UGKG	483 U/V/	8.9 J/VI/P	
Di-n-octyl phthalate	UGKG	483 U//	2.07 UJ/I/P	
Dibenz(a,h)anthracene	UGKG	483 U//	0.505 UJ/I/P	
Dibenzofuran	UGKG	483 U//	1.32 UJ/I/P	
Dibromochloromethane	UGKG	0.7 U//	0.017 UJ/I/P	
Dichloromethane (Methylene chloride)	UGKG	1.9 UJ/V/	0.53 J/I/P	
Diethyl phthalate	UGKG	483 U//	1.01 UJ/I/P	
Dimethyl phthalate	UGKG	483 U//	0.505 UJ/I/P	
Ethylbenzene	UGKG	0.42 U//	0.015 UJ/I/P	
Fluoranthene	UGKG	483 U//	0.554 UJ/I/P	
Fluorene	UGKG	483 U//	1.26 UJ/I/P	
Gross alpha	PCG	5.3 //	9.13 //	13
Hexachlorobenzene	UGKG	483 U//	0.815 UJ/I/P	
Hexachlorobutadiene	UGKG	483 U//	1.88 UJ/I/P	
Hexachlorocyclopentadiene	UGKG	483 U//	3.26 UJ/I/P	
Hexachloroethane	UGKG	483 U//	1.04 UJ/I/P	
Indeno(1,2,3-c,d)pyrene	UGKG	483 U//	0.815 UJ/I/P	
Isophorone	UGKG	483 U//	1.11 UJ/I/P	
Lead, total recoverable	MGKG	6.8 //	10.5 //	11
m-Nitroaniline	UGKG	2420 U//	0.845 UJ/I/P	
Manganese, total recoverable	MGKG	105 //	65.1 J/VI/P	12
N-Nitrosodiphenylamine	UGKG	483 U//	0.932 UJ/I/P	
N-Nitrosodipropylamine	UGKG	483 U//	0.815 UJ/I/P	
Naphthalene	UGKG	483 U//	1.39 UJ/I/P	
Nickel, total recoverable	MGKG	3.8 U//	1.49 J//	
Nitrobenzene	UGKG	483 U//	3.72 UJ/I/P	
Nonvolatile beta	PCG	9.6 //	7.77 J//	5
o-Cresol (2-Methylphenol)	UGKG	483 U//	1.74 UJ/I/P	
o-Nitroaniline	UGKG	2420 U//	2.8 UJ/I/P	
p-Nitroaniline	UGKG	2420 U//	3.17 UJ/I/P	
Pentachlorophenol	UGKG	2420 U//	11.3 UJ/I/P	
pH	PH	5.24 //	6.3 J/Q/L	5
Phenanthrene	UGKG	483 U//	0.554 UJ/I/P	
Phenol	UGKG	483 U//	1.15 UJ/I/P	

Appendix A

Addendum Surface Water/Sediment Sampling Plan

Table 14
Evaluation of Sediment Split Samples
D-Area Burning/Rubble Pits
Savannah River Site

Analyte	Units	D431-32-02 100458 50594	D431-32-02D 100459 50594	Relative Percent Difference
Pyrene	UGKG	483 U//	0.598 UJ/I/P	
Radium, total alpha-emitting	PCG	2.6 //	2.3 J//	3
Selenium, total recoverable	MGKG	0.43 U//	2.8 U//	
Silver, total recoverable	MGKG	0.99 U//	0.25 U//	
Tetrachloroethylene	UGKG	0.7 U//	0.026 UJ/I/P	
Toluene	UGKG	0.854 J/B/	1.2 J/VI/P	8
trans-1,3-Dichloropropene	UGKG	2.8 U//	0.015 UJ/I/P	
Trichloroethylene	UGKG	0.28 U//	0.017 UJ/I/P	
Trichlorofluoromethane	UGKG	0.84 U/V/	0.036 UJ/I/P	
Tritium	PCG	0.42 U//	6.45 J//	

RUST ENVIRONMENT & INFRASTRUCTURE

Formerly SEC Donohue

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April 22, 1994

Mr. Jon Hammock
Environmental Restoration Department
Westinghouse Savannah River Company
1995 South Centennial Avenue
Aiken, South Carolina 29803

Subject: Subcontract AA46326P - Task Order 26
RCRA/CERCLA Services for the D-Area Burning/Rubble Pits
Revised Addendum Surface Water/Sediment Sampling Plan

Dear Mr. Hammock:

Enclosed is the revised addendum sampling plan for sampling of surface water and sediments at the D-Area Burning/Rubble Pits RCRA/CERCLA unit. The plan was developed to account for sampling that was not possible during the 1993 unit characterization due to dry conditions and lack of surface water flow in the ephemeral stream and other wetland areas. The revised plan incorporates Westinghouse Savannah River Company comments received from you on April 20, 1994.

If you have any questions or comments regarding this plan, please call me at 649-5175.

Sincerely,

RUST Environment & Infrastructure Inc.

William R. Weiss
Project Manager

cc: C. Perkins, WSRC-Procurement
R. M. Humphrey, WSRC-ERD
J. Beckner, RUST E&I
L. W. Neal, RUST E&I
M. T. Scott, RUST E&I
R. C. Smalley, RUST E&I
File: 81749/3.3
File: A.1.1.1
940100

PROPOSED SURFACE WATER AND SEDIMENT SAMPLING
D-AREA BURNING/RUBBLE PITS
APRIL 1994

Additional RFI/RI unit characterization sampling is proposed for the D-Area Burning/Rubble Pits to more fully characterize potential contamination of surface water and sediment in the area of the unit. During unit characterization sampling conducted in 1993, dry conditions precluded sampling of six of the planned nine surface water locations. During 1994, it was noted that ephemeral stream flow in the planned surface water drainage sampling areas was dominated by high flows traced back to overflow of two cooling water surge tanks connected to river water intake pump houses. Because of the potential difficulties in differentiating chemical constituent concentrations present in surface water and sediment as a result of river water inflow versus water seepage, runoff, or discharge from the unit, SRS proposes to conduct surface water and sediment sampling during April-May 1994 within the surface water drainage depicted in Figure 4-1 (Addendum). A field reconnaissance conducted on April 15, 1994, revealed that vegetation maintenance has recently occurred in the powerline right-of-way south of the unit. The RFI/RI Work Plan had originally included sampling in the low-lying wetland area within this right-of-way. Because of the probability of extensive chemical contamination (e.g., pesticides, hydrocarbons, etc.) as a result of the recent maintenance activities, it is proposed that all new surface water and sediment sampling be conducted in the drainage channel upstream of the powerline right-of-way.

SRS proposes sampling at five locations upgradient and five locations downgradient of the unit. This approach is proposed to allow statistical differentiation of potential contamination to stream surface water and sediment from the unit vs. background environmental concentrations within these media (including contamination resulting from overflow from the two cooling water surge tanks). The upgradient surface water/sediment samples are considered unit background samples [containing naturally-occurring plus anthropogenic (non-unit) background levels of chemicals: see EPA/540/1-89/002, Risk Assessment Guidance for Superfund, Vol. I, Human Health Evaluation Manual (Part A), Interim Final, p. 4-5]. Additionally, SRS will sample the water contained in each of the surge tanks to specifically identify chemical constituent concentrations within the cooling water that is discharged to the ephemeral stream. The total number of samples to be collected at each of the surface water/sediment sampling locations is listed in Table 4-2 (Addendum), including an additional 10 percent to be collected for quality assurance/quality control purposes. The proposed analyte list, identical to the analytical program used during 1993 unit characterization sampling, is also detailed in Table 4-2 (Addendum). All sampling and analytical activities will follow the approach outlined in the RFI/RI Work Plan, Revision 2.

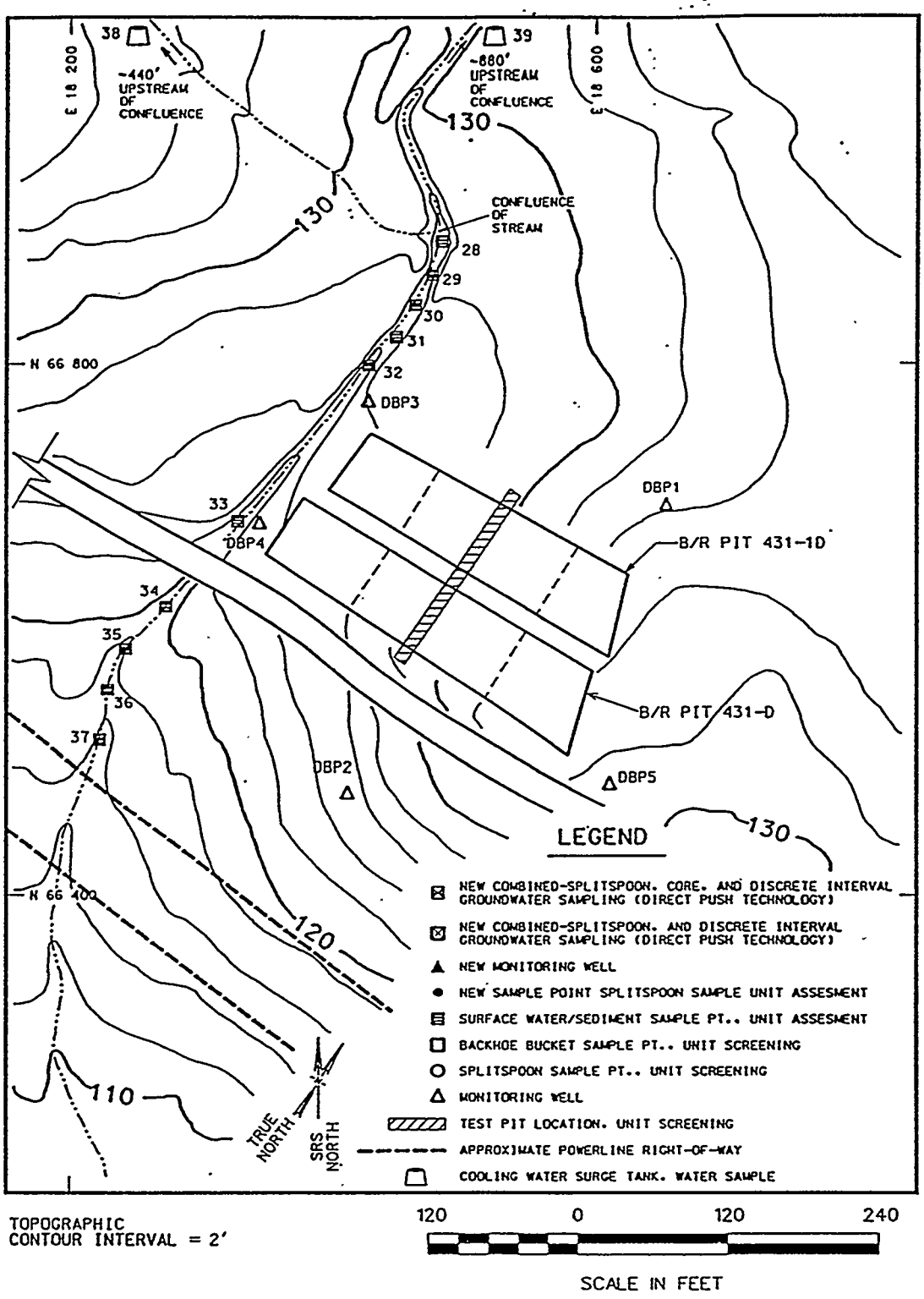


Figure 4-1 (Addendum) Proposed Surface Water/Sediment Sampling Locations

TABLE 4-2 (Addendum)
GROUNDWATER AND SURFACE WATER/SEDIMENT CONSTITUENTS TO BE ANALYZED

Facility Identifier	Sampling Point Number	Sample Number	Location or Type	Constituents for Analysis*
D4311	28	01	Surface Water	1,2,3,4,6,7,9,10
D4311	28	02	Sediment	2,3,4,6,8
D4311	29	01	Surface Water	1,2,3,4,6,7,9,10
D4311	29	02	Sediment	2,3,4,6,8
D4311	30	01	Surface Water	1,2,3,4,6,7,9,10
D4311	30	02	Sediment	2,3,4,6,8
D4311	30	02B	Trip Blank - Water	4,6
D431	31	01	Surface Water	1,2,3,4,6,7,9,10
D431	31	01A	Surface Water-Duplicate	1,2,3,4,6
D431	31	01C	Surface Water - Field Blank	4,6
D431	31	01E	Surface Water Equipment Rinsate	4,6
D431	31	02	Sediment	2,3,4,6,8
D431	31	02A	Sediment - Duplicate	2,3,6
D431	32	01	Surface Water	1,2,3,4,6,7,9,10
D431	32	01D	Surface Water - Split	1,2,3,4,6
D431	32	02	Sediment	2,3,4,6,8
D431	32	02D	Sediment - Split	2,3,6
D431	32	02E	Sediment Sampling Equipment - Rinsate	2,4,6
D431	32	02B	Trip Blank - Water	4,6
D431	33	01	Surface Water	1,2,3,4,6,7,9,10
D431	33	02	Sediment	2,3,4,6,8
D431	34	01	Surface Water	1,2,3,4,6,7,9,10
D431	34	02	Sediment	2,3,4,6,8
D431	35	01	Surface Water	1,2,3,4,6,7,9,10
D431	35	01B	Surface Water-Trip	4,6
D431	35	02	Sediment	2,3,4,6,8
D431	35	02C	Sediment-Field Blank	4,6
D431	36	01	Surface Water-	1,2,3,4,6,7,9,10
D431	36	02	Sediment	2,3,4,6,8
D431	37	01	Surface Water	1,2,3,4,6,7,9,10
D431	37	02	Sediment	2,3,4,6,8
D431	38	01	Water (Tank)	1,2,3,4,6,7,9,10
D431	39	01	Water (Tank)	1,2,3,4,6,7,9,10

* Constituent analytical codes are as follows:

(1) Total organic halogens
(2) Metals (Ag, As, Ba, Cd, Cr, Cu, Pb, Mn, Hg, Ni, Se)
(3) Semi-volatile organic constituents, including polycyclic aromatic hydrocarbons (PAHs)
(4) Volatile organic constituents (VOA GC/MS)
(6) Radionuclide Indicators (gross alpha, non-volatile beta, total radium) and tritium
(7) Surface water temperature, dissolved oxygen, pH, depth, flow
(8) Sediment pH, TOC
(9) Inorganics (Cl, F, SO_4, NO_3, Na, Fe)
(10) TOC, TSS, TDS

A indicates a field blank
B indicates a trip blank
C indicates a field blank
D indicates a split sample
E indicates a rinsate blank

Appendix B

Laboratory Data Records Review

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Appendix
B

LABORATORY DATA RECORDS REVIEW
D AREA BURNING / RUBBLE PIT
ROY F. WESTON LABORATORY INC.

The purpose of this laboratory review was to investigate the analytical procedures conducted by the Roy F. Weston Laboratories Inc. (RFW) which can not be addressed through review of Electronic Data Deliverables (EDD) or report certificates. As part of this review, copies of RFW analytical logbooks and instrument calibration records were requested for organic and radiological analyses. Review of these records were conducted according to the appropriate validation guidelines discussed in the Quality Assurance / Quality Control Guidance for Removal Activities (EPA/540/G-90/004), USEPA CLP National Functional Guidelines for Organic Review, USEPA CLP National Functional Guidelines for Inorganic Review, Data Validation Procedures for Radiochemical Analyses (WHC-SD-EN-SPP-001, Rev. 1), SW-846 Methods, and in accordance with Savannah River Site Procedures. The review was completed using Laboratory Data Records Review (LDRR) checklists, prepared by Dr. Kubilius of Westinghouse Savannah River Company (WSRC), for each of the samples identified in the attached List of Samples per Method. Dr. Kubilius of WSRC and Mr. Beckert of RUST Environment and Infrastructure (RUST E&I) conducted the LDRR.

Samples chosen for the review were selected based on the criteria provided in the WSRC Procedures Manual 3Q1-7 section 6305 and on recommendations from WSRC. These criteria require that 10 % of the samples analyzed for each method be chosen for review. These samples included results with high detects and non-detects. A total of 30 LDRR checklists were completed for the methods listed in the Table of Checklists per Method.

Table of Checklists per Method for
D Area Burning / Rubble Pits

METHOD	ANALYSIS	CHECKLISTS
6010	ICP Metals	2
7000	AA Metals	12
8260	Volatiles	3
8270	Semivolatiles	3
SW846-9315/ EPA 900.1mod	Total Radium-226	3
LANL-MLR-100/ EPA 900.0	Gross Alpha	2
EPA 900.0	Nonvolatile Beta	1
LANL-ER-210/ EPA 906.0	Tritium	4

SCORING / QUALIFICATION

The scoring indicates analytical performances which did not meet criteria recommended in the guidance documents for data validation mentioned above. The score for each method is listed by the sample ID and includes the data qualifier assigned due to the indicated Method Checklist failure. Result / analysis / bias (R/A/B) qualifiers are assigned based on the guidance documents referenced above, professional judgment, and WSRC procedures.

6010 ICP Metals

1 of 2 samples reviewed did not meet the Method Checklist criterion for Question #6 of the Method 6010 Checklist because the elements silver and cadmium were below the lower limits of the reporting level for the Instrument Calibration Blank (ICB) and the Continuing Calibration Blanks

(CCB). All sample results for cadmium and silver analyzed on that instrument on that day will be qualified with J/L/ if the sample results are 5 times the contract required detection limit (CRDL). Otherwise, the results will receive UJ/L/ for cadmium and silver.

SAMPLE #	ANALYTES	CRITERIA FAILED	QUALIFIERS (R/A/B)
9405L513-001	Cadmium	Avg. -3.876 limits (-0.8 to 0.8)	J or UJ/L/
	Silver	Avg. -4.733 limits (-2.7 to 2.7)	J or UJ/L/

7471 Lead by AA

All Method 7000 Checklists were met for lead in the 3 samples reviewed.

7470/7471 Mercury by AA

1 of 3 samples for mercury failed Question #1 of the Method 7000 Checklist because the time of analysis did not match the time given in the EDD.

SAMPLE #	ANALYTES	CRITERIA FAILED	QUALIFIERS (R/A/B)
9405L513-012	Mercury	5/13/94 @ 1:07 LAB 5/13/94 @ 15:20 EDD	none

1 of 3 samples reviewed failed Question #14 of the Method 7000 Checklist. This sample did not meet the Method Checklist criteria for matrix spike recovery. The matrix spike recovery was below the required limits of 75% to 125%. The qualifiers assigned will only be applied to the matrix spike sample and its parent.

SAMPLE #	ANALYTES	CRITERIA FAILED	QUALIFIERS (R/A/B)
9405L513-012	Mercury	Recovery was 73%	J/I/L

7060 Arsenic by AA

2 of 3 samples reviewed failed Question #14 of the Method 7000 Checklist. This sample did not meet the Method Checklist criteria for matrix spike recovery. The matrix spike recovery was below the required limits of 75% to 125%. The qualifiers assigned will only be applied to the matrix spike sample and its parent.

SAMPLE #	ANALYTES	CRITERIA FAILED	QUALIFIERS (R/A/B)
9405L514-011	Arsenic	Recovery was 61.5%	J/I/L
9405L514-001	Arsenic	Recovery was 61.5%	J/I/L

7740 Selenium by AA

3 of 3 samples reviewed failed Question #14 of the Method 7000 Checklist. This sample did not meet the Method Checklist criteria for matrix spike recovery. The matrix spike recovery was below the required limits of 75% to 125%. The qualifiers assigned will only be applied to the matrix spike sample and its parent.

SAMPLE #	ANALYTES	CRITERIA FAILED	QUALIFIERS (R/A/B)
9405L514-001	Selenium	Recovery was 69%	J/I/L
9405L514-002	Selenium	Recovery was 69%	J/I/L
9405L514-004	Selenium	Recovery was 69%	J/I/L

8270 Semivolatiles

All Method Checklists were met in the 3 samples reviewed.

8260 Volatiles

3 of 3 samples failed Question #6 of the Method 8260 Checklist because the response factor (RF)= 0 for 2-chloroethylvinyl ether at the lowest level standard. The RF values should be greater than 0 for each element. The other RF values for this compound, however, were greater than zero. No qualifier for this compound is needed unless its result is less than 2 parts per billion (ppb).

SAMPLE #	ANALYTES	CRITERIA FAILED	QUALIFIERS (R/A/B)
9405L514-011	2-Chloroethylvinyl ether	RF = 0	U/ / if < 2 ppb
9405L513-021	2-Chloroethylvinyl ether	RF = 0	U/ / if < 2 ppb
9405L514-002	2-Chloroethylvinyl ether	RF = 0	U/ / if < 2 ppb

1 of 3 samples failed Question #11 because the RFs for the system performance check compounds (SPCCs) for bromoform and 1,1',2,2'-tetrachloroethane were below recommended limits of 0.3 (0.25 for bromoform). A laboratory note was included in the case narrative indicating that the RFs were lowered to 0.1 for Bromoform due to the 25 ml volume purged.

SAMPLE #	ANALYTES	CRITERIA FAILED	QUALIFIERS (R/A/B)
9405L513-021	Bromoform	0.127	none
9405L513-021	1,1',2,2'-tetrachloroethane	0.159	none

1 of 3 samples failed Question #12 because the percent difference (%D) for one of the Continuing Calibration Compounds (CCCs) was greater than the limits of +/- 20%.

SAMPLE #	ANALYTES	CRITERIA FAILED	QUALIFIERS (R/A/B)
9405L513-021	All detects	-23.8%	J/L/

EPIA-008 Total Radium-226

2 of 3 samples failed Question #9 of the Radium Checklist because the chemical recovery for the tracer was not between 80 and 105%.

SAMPLE #	ANALYTES	CRITERIA FAILED	QUALIFIERS (R/A/B)
94-05-022-011	Total Radium	115.4%	J/O/H
94-05-022-08	Total Radium	113.1%	J/O/H

1 of 3 samples also failed Question #10 because the chemical recovery for the tracer was not between 60 and 115%.

SAMPLE #	ANALYTES	CRITERIA FAILED	QUALIFIERS (R/A/B)
94-05-022-011	Total Radium	115.4%	J/O/H

EPA 900.0 Gross Alpha

1 of 2 samples also failed Question #18 because the relative percent difference between the replicate analyses was greater than 35%.

SAMPLE #	ANALYTES	CRITERIA FAILED	QUALIFIERS (R/A/B)
94-023-03	Gross Alpha	67%	/X/

EPA 900.0 Nonvolatile Beta

1 of 1 samples met all criteria for the Nonvolatile Beta Checklists, including self absorption curves.

EPA 906.0 Tritium

2 of 4 samples failed Question #15 because the laboratory control samples (LCS) percent recovery was outside the 90-110% range.

SAMPLE #	ANALYTES	CRITERIA FAILED	QUALIFIERS (R/A/B)
94-05-023-12	Tritium	110.5%	none
94-05-023-07	Tritium	110.5%	none

LIST OF SAMPLES PER METHOD
D AREA BURNING / RUBBLE PITS

Weston Sample ID	Method Number	Parameter Requested
9405L513-001	EPA 300	Sulfate
9405L513-002	EPA 353.2	Nitrate as N2
9405L513-001	EPA 6010	Manganese, total recoverable
9405L514-002	EPA 6010	Chromium
9405L513-001	EPA 6010	Cadmium
9405L514-001	EPA 7060	Arsenic
9405L513-003	EPA 7060	Arsenic
9405L514-011	EPA 7060	Arsenic
9405L513-009	EPA 7421	Lead
9405L513-004	EPA 7421	Lead
9405L513-001	EPA 7421	Lead
9405L513-001	EPA 7471	Mercury
9405L514-003	EPA 7471	Mercury
9405L513-012	EPA 7471	Mercury
9405L514-001	EPA 7740	Selenium
9405L514-002	EPA 7740	Selenium
9405L514-004	EPA 7740	Selenium
9405L514-002	EPA 8260	(1,1,1-Trichloroethane)
9405L514-011	EPA 8260	(1,1-Dichloroethane)
9405L513-021	EPA 8260	Benzene
9405L514-011	EPA 8260	Trichloroethene
9405L514-004	EPA 8270	(1,4-Dichlorobenzene)
9405L513-001	EPA 8270	Pentachlorophenol
9405L514-002	EPA 8270	Phenanthrene
9405L513-001	EPA 8270M	(1,2,4-trichlorobenzene)
9405L513-001	EPA 8270M	(4-nitrophenol)
9405L514-004	EPA 8270M	(1,2,4-Trichlorobenzene)

TMA Sample ID	Method Number	Parameter requested
94-05-022-08	EPA 900.0	Gross alpha
94-05-022-04	EPA 900.0	Nonvolatile Beta
94-05-022-08	EPA 900.1MOD	Radium, total alpha
94-05-022-011	EPA 900.1MOD	Radium, total alpha
94-05-022-05	EPA 906.0	Tritium
94-05-022-09	EPA 906.0	Tritium
94-05-023-12	LANLER 210 MOD	Tritium
94-05-023-07	LANLER 210 MOD	Tritium
94-05-023-03	LANLMLR-100	Gross alpha
94-05-023-11	SW846 9315	Radium, total emitting alpha