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SAUGET AREA 1 SITE
Support Sampling Project
Data Validation Report
Volume 1 of 8

DATA VALIDATION REPORT

Sauget Area 1 Site Support Sampling Project

Solutia, Inc.
St. Louis, Missouri

August 2000

O'BRIEN & GERE ENGINEERS, INC.

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Robert J. Januska, P.E.
Vice President

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O'BRIEN & GERE ENGINEERS, INC.

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Executive summary

This report addresses data quality for waste, ground water, soil, sediment (including industry specific and full scan sediments), surface water, air, and biota environmental samples, field duplicates, matrix spikes, matrix spike duplicates, trip blanks, and field/equipment blanks which were submitted for data validation for the Sauget investigation. These samples were collected at the Sauget Area 1 Site (the Site) located along Dead Creek in the Villages of Sauget and Cahokia, Illinois, as part of the Support Sampling Plan. Sample collection activities were conducted by O'Brien & Gere Engineers, Inc. (O'Brien & Gere) from September 1999 through May 2000.

The environmental samples, field duplicates, matrix spikes, matrix spike duplicates, trip blanks, and field/equipment blanks collected for this investigation and submitted for data validation were analyzed by STL-Savannah Laboratories (STL-Savannah Labs) (formerly known as Savannah Labs & Environmental Services, Inc.) of Savannah, Georgia and by Triangle Laboratories, Inc. (Triangle Labs) of Durham, North Carolina. Analyses performed by STL-Savannah Labs included volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), herbicides, metals, cyanide, mercury, fluoride, ortho-phosphate, pH, total dissolved solids (TDS), total suspended solids (TSS), total phosphorus, and total organic carbon (TOC) using United States Environmental Protection Agency (USEPA) Methods. Analyses performed by Triangle Labs included dioxins and dibenzofurans using USEPA Methods. The analytical data generated for VOCs, SVOCs, pesticides, PCBs, herbicides, metals, cyanide, mercury, fluoride, ortho-phosphate, TDS, TSS, total phosphorus, TOC, dioxin, dibenzofurans in this investigation were evaluated by O'Brien & Gere using the quality assurance/quality control (QA/QC) criteria established in the USEPA Methods and the Quality Assurance Project Plan for the Sauget Area 1 Support Sampling Plan, Sauget and Cahokia, Illinois, (O'Brien & Gere 1999) as guidance.

Data affected by excursions from the quality assurance/quality control (QA/QC) criteria were qualified based on the Data Validation Plan for the Sauget Area 1 Support Sampling Project (the Data Validation Plan) (O'Brien & Gere 2000). The Data Validation Plan provides guidance for data validation based on the following documents:

- U.S. Environmental Protection Agency (USEPA). 1985. *Determination of Pesticides and PCBs in Water and Soil/Sediment by GC/MS*, Physical and Chemical Methods Branch, Environmental Monitoring and Support Laboratory, Office of Research and Development, Cincinnati, Ohio.

- U.S. Environmental Protection Agency (USEPA). 1988. *USEPA Compendium of Methods for the Determination of Toxic Organic Compounds in Air, Second Supplement,*. Atmospheric Research and Exposure Assessment Laboratory, Office of Research and Development, Research Triangle Park, NC.

- U.S. Environmental Protection Agency (USEPA), Region V. 1993. *Standard Operating Procedure for Validation of CLP Inorganic Data*, Chicago, Illinois.

- U.S. Environmental Protection Agency (USEPA). 1994a. *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*, EPA-540/R-94/012. Washington D.C.

- U.S. Environmental Protection Agency (USEPA). 1994b. *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, EPA-540/R-94/013. Washington D.C.

- U.S. Environmental Protection Agency (USEPA). 1994c. *USEPA Region II Data Validation SOP For SW-846 Method 8290 Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) By High Resolution Gas Chromatography/High Resolution Mass Spectrometry (HRGC/HRMS)*. New York.

- U.S. Environmental Protection Agency (USEPA). 1996. *Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW-846)*, 3rd Edition. Washington, D.C.

- U.S. Environmental Protection Agency (USEPA), Region V. 1997. *Standard Operating Procedure for Validation of CLP Organic Data*, Chicago, Illinois.

- U.S. Environmental Protection Agency (USEPA). 1999. *USEPA Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition*. Center for Environmental Research Information, Office of Research and Development, Cincinnati, Ohio.

Overall data usability with respect to completeness is 100% for VOC, PCB, herbicide, metals/mercury/cyanide, dioxin/dibenzofuran waste data, VOC, pesticide, PCB, and metal/mercury/cyanide ground water data, VOC, SVOC, pesticide, mercury/cyanide, and dioxin/dibenzofuran soil data, VOC, pesticide, PCB, mercury/cyanide, TOC, and dioxin/dibenzofuran sediment data, VOC, pesticide, herbicide, PCB, metal/mercury/cyanide, TDS, TSS, fluoride, ortho-phosphate, total phosphate, and dioxin/dibenzofuran surface water data, VOC, SVOC, PCB, metal air data, SVOC, pesticide, herbicide, PCB, metal/mercury/cyanide, and dioxin/dibenzofuran biota data.

Approximately 99.9 percent of the SVOC waste data and 95.7 percent of the pesticide waste data were determined to be usable for qualitative and quantitative purposes.

Greater than 99.9 percent of the SVOC ground water data, 99.9 percent of the herbicide ground water data, and 98.9 percent of the dioxin/dibenzofuran ground water data were determined to be usable for qualitative and quantitative purposes.

Approximately 99.3 percent of the herbicide soil data, 99.3 percent of the PCB soil data and 99.9 percent of the metals soil data were determined to be usable for qualitative and quantitative purposes.

Greater than 99.9 percent of the SVOC sediment data, 99.7 percent of the herbicide sediment data, and 99.7 percent of the metals sediment data were determined to be usable for qualitative and quantitative purposes.

Greater than 99.9 percent of the SVOC surface water data were determined to be usable for qualitative and quantitative purposes.

Approximately 97.3 percent of the dioxin/dibenzofuran air data were determined to be usable for qualitative and quantitative purposes.

Therefore, the completeness objective of 95%, as stated in the QAPP was met.

Rejected data included the following:

- The non-detected result for SVOC analyte 2,4-dinitrophenol in waste sample WASTE-H-B4-0-0.5FT was rejected (R) since the recovery for 2,4-dinitrophenol in the MS/MSD sample was less than 10%.

- The pesticide target analytes in waste sample WASTE-I-B1-0-0.5FT were rejected (R) since the native sample was spiked by MS/MSD spiking solution during preparation due to a laboratory error.

- The results for SVOC analytes hexachlorocyclopentadiene in ground water sample BR-G and 2,4-dinitrophenol in ground water sample UGGW-EE-20 were rejected (R) due to recoveries of less than 10% in the MS/MSD analyses.

- The result for SVOC analyte 3,3'-dichlorobenzidine in ground water sample UGGW-EEG-108-100FT was rejected (R) due to an LCS recovery of less than 10%.

- The result for herbicide analyte 2,4-DB in ground water sample DW-SCHM-1 was rejected (R) due to MS/MSD recoveries of less than 10%.

- The result for herbicide analyte dinoseb in ground water sample AA-I-S1-27-31FT was rejected (R) due to MS/MSD recoveries of less than 10%.

- The non-detected dioxin/dibenzofuran results for 2378-TCDF and 2378-TCDD in ground water sample AA-SW-S1-101-104FT were rejected (R) since the recoveries for the internal standards associated with the target analytes were less than 25%.

- Seventeen non-detected dioxin/dibenzofuran results for the target analytes in ground water sample AA-GHL-S2-62-66FT were rejected (R) since the recoveries for the recovery standards were less than 25%, to indicate a major accuracy excursion.

- The herbicide target analytes in soil sample UAS-T3-S3-0-0.5FT were rejected (R) since the surrogate recoveries on both columns were less than 10%.

- The PCB target analytes in soil sample BS-EEG-108-3-6FT were rejected (R) due to a surrogate recovery of less than 10%.

- The results for antimony in soil samples BS-EEG-108-3-6FT, BS-EEG-108-0-0.5FT, BS-EE-20-0-0.5FT, BS-EE-04-0-0.5FTFD were rejected (R) in samples due to MS/MSD recoveries of less than 30%.

- The SVOC result for hexachlorocyclopentadiene in full-scan sediment sample SED-CSE-S3 was rejected (R) due to an MS/MSD recovery of less than 10%.

- The undetected herbicide result for dinoseb in sediment sample SED-CSE-S3 was rejected (R) due to a MS/MSD recovery of less than 10%.

- The results for antimony in sediment samples SED-CSF-S1 and SED-RA2-S2-0.2FT were rejected due to MS/MSD recoveries of less than 30%.

- The SVOC result for 3,3'-dichlorobenzidine in surface water sample SW-RA1-S2 was rejected (R) due to a recovery in the MS/MSD analysis of less than 10%.

- The non-detected results for 123789-HxCDF, 123478-HxCDD, 123678-HxCDD, 123789-HxCDD, 1234678-HpCDF, and 1234789-HpCDF in sample AIR-D-13 were rejected (R) since the recoveries for the internal standards associate with the target analytes were less than 25%, to indicate major accuracy excursions.

As noted previously, the majority of the environmental data met requirements that are standard for qualification purposes. Additional perspective on the data set is provided as follows:

- A total of 72.1 percent of the entire data set were reported as "non-detects", including both qualified and unqualified results. The remaining 27.9 percent of the data set consisted of estimated and quantitated data (with numeric values).

- Both the analytical laboratory and the data validator assigned data qualifiers to certain data. As a result, a total of 21.0 percent of the entire data set were qualified. Furthermore, 15.6 percent of the total data set was qualified by the data validator with the remaining qualifiers provided by the laboratory (5.4 percent).

- For sample concentrations reported as "non-detect" (72.1 percent of the total data), 1.2 percent of those results were qualified and 98.8 percent were not qualified.

- For the sample concentrations that were estimated or quantitated (27.9 percent of the total data set), 72.8 percent of the data were qualified and 27.2 percent were not qualified.

- Of the entire data set, 1.0 percent of the waste data were qualified, 5.9 percent of the ground water data were qualified, 4.8 percent of the soil data were qualified, 6.4 percent of the sediment data were qualified, 0.8 percent of the surface water data were qualified, 1.7 percent of the air data were qualified, and 0.4 percent of the biota data were qualified.

1. Introduction

1.1. Program summary

This report addresses data quality for waste, ground water, soil, sediment (including full-scan and industry specific sediment), surface water, air, and biota environmental samples, field duplicates, matrix spikes, matrix spike duplicates, trip blanks, and field/equipment blanks which were submitted for data validation. These samples were collected at the Sauget Area 1 Site (the Site) located along Dead Creek in the villages of Sauget and Cahokia, Illinois, as part of the Support Sampling Plan. Sample collection activities were conducted by O'Brien & Gere Engineers, Inc. (O'Brien & Gere) from September 1999 through May 2000.

The quantity and types of samples that were collected are presented in Table A-1 (by collection date) and in Table A-2 (by sample ID) in Appendix A.

1.2. Data validation protocols

1.2.1. Definition

Validation is a process of determining the suitability of a measurement system for providing useful analytical data. Data validation is essentially a three-step process in which the analytical data's QA/QC information is first compared to a series of QA/QC criteria. Based on the results of this comparison, the analytical data are then assigned qualifiers, which provide an indication of the data's usability. Finally, an overall evaluation of the data's usability is performed. These three steps as applied to this program are described in the following sections.

1.2.2. Comparison to QA/QC criteria

In this validation, the analytical data's QA/QC information was compared to the applicable QA/QC criteria provided in the following documents:

- O'Brien & Gere Engineers, Inc. 1999. *Quality Assurance Project Plan for the Sauget Area 1 Support Sampling Plan, Sauget and Cahokia, Illinois.* St. Louis, MO.
- APHA, AWWA, WPCF, 1992. *Standard Methods for Examination of Water and Wastewater,* 18th Edition, Washington D.C.
- U.S. Environmental Protection Agency (USEPA). 1983. *Method for Chemical Analysis of Water and Wastes.* Center for Environmental Research Information, Office of Research and Development, Cincinnati, Ohio.
- U.S. Environmental Protection Agency (USEPA). 1985. *Determination of Pesticides and PCBs in Water and Soil/Sediment by GC/MS.* Physical and Chemical Methods Branch, Environmental Monitoring and Support Laboratory, Office of Research and Development, Cincinnati, Ohio.
- U.S. Environmental Protection Agency (USEPA). 1988. *USEPA Compendium of Methods for the Determination of Toxic Organic Compounds in Air, Second Supplement.* Atmospheric Research and Exposure Assessment Laboratory, Office of Research and Development, Research Triangle Park, NC.
- U.S. Environmental Protection Agency (USEPA). 1993. *Method for Determination of Inorganic Substances in Environmental Samples.* Office of Research and Development, Washington, D.C.
- U.S. Environmental Protection Agency (USEPA). 1996. *Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW-846),* 3rd Edition. Washington, D.C.
- U.S. Environmental Protection Agency (USEPA). 1999. *USEPA Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition.* Center for Environmental Research Information, Office of Research and Development, Cincinnati, Ohio.

Full QA/QC information review was performed for 10% of the environmental samples for each type of matrix (waste, ground water, soil, sediment, surface water, air and biota). Full review consisted of a review of data summary forms and raw analytical data that were provided in the deliverables data packages. Partial QA/QC information review was performed for the remaining environmental samples. Partial review consisted of a review of the data summary forms presented in the data packages as described below. The following QA/QC information

was included in the review for organic and inorganic analyses for full and partial validation (where applicable):

Analyses for volatile organics and semivolatile organics (where applicable):

1. Holding times, sample preservation, and percentage solids (full and partial validation)
2. Gas chromatography/mass spectrometry (GC/MS) tuning criteria (full validation)
3. Initial and continuing calibration (full validation)
4. Blank analysis (full and partial validation)
5. Surrogate recovery (full and partial validation)
6. MS/MSD analysis (full and partial validation)
7. Field duplicate analysis (full and partial validation)
8. Laboratory Control Sample (LCS) analysis (full and partial validation)
9. Internal standards performance (full and partial validation)
10. Target analyte identification, quantitation, reported detection limits, and system performance (full validation)
11. Sample re-analysis (full and partial validation)
12. Data completeness (full validation)
13. Documentation completeness (full validation)

Analyses for pesticides and herbicides (where applicable):

1. Holding times, sample preservation, and percentage solids (full and partial validation)
2. GC performance (full validation)
3. Analytical sequence (full validation)
4. Initial calibration and calibration verification (full validation)
5. Blank analysis (full and partial validation)
6. Surrogate recovery (full and partial validation)
7. MS/MSD analysis (full and partial validation)
8. Field duplicate analysis (full and partial validation)
9. LCS analysis (full and partial validation)
10. Retention time windows (full validation)
11. Target analyte identification, quantitation, reported detection limits, and system performance (full validation)
12. Cleanup verification (full validation)
13. Confirmation analysis (full validation)
14. Sample re-analysis (full and partial validation)
15. Data completeness (full validation)
16. Documentation completeness (full validation)

Analysis for polychlorinated biphenyl (PCB) analyses (where applicable):

1. Holding times, sample preservation, and percentage solids (full and partial validation)
2. GC/MS tuning and window-defining criteria (full validation)
3. Initial and continuing calibration (full validation)

4. Blank analysis (full and partial validation)
5. Internal standard criteria (full and partial validation)
6. Surrogate recovery (full and partial validation)
7. MS/MSD analysis (full and partial validation)
8. LCS analysis (full and partial validation)
9. Field duplicate analysis (full and partial validation)
10. Sample data (identification, quantitation, reported detection limits and system performance) (full validation)
11. Sample re-analysis (full and partial validation)
12. Data completeness (full and partial validation.
13. Documentation completeness (full and partial validation)

Analysis for metals, mercury, cyanide, fluoride, ortho-phosphate, pH, total dissolved solids (TDS), total suspended solids (TSS), total phosphorus, and total organic carbon (where applicable):

1. Holding times, sample preservation, and percentage solids (full and partial validation)
2. Calibration analysis (full validation)
3. Blank analysis (full and partial validation)
4. Inductively Coupled Plasma (ICP) interference check sample analysis (full validation)
5. MS/MSD analysis (full and partial validation)
6. Field duplicate analysis (full and partial validation)
7. LCS analysis (full and partial validation)
8. Laboratory duplicate analysis (full and partial validation)
9. ICP serial dilution analysis (full and partial validation)
10. Furnace atomic absorption analysis (full validation)
11. Verification of instrument parameters (full and partial validation)
12. Analyte quantitation, and reported detection limits (full validation)
13. Method of standard additions (full validation)
14. Data completeness (full validation)
15. Documentation completeness (full validation)

Analysis for dioxin/dibenzofurans analyses (where applicable):

1. Holding times, sample preservation, and percentage solids (full and partial validation)
2. Instrument performance (mass resolution, GC column performance check) (full validation)
3. Initial and continuing calibration (full validation)
4. Blank analysis (full and partial validation)
5. Internal standard criteria (full and partial validation)
6. Surrogate/alternative/cleanup standard recovery (full and partial validation)
7. Recovery standard criteria (full and partial validation)
8. Duplicate analysis (full and partial validation)
9. MS/MSD analysis (full and partial validation)
10. LCS/LCSD analysis (full and partial validation)
11. Field duplicate analysis (full and partial validation)
12. Sample data (identification and quantitation) (full validation)
13. Estimated detection limits (full validation)

14. Estimated maximum possible concentration (EMPC) (full validation)
15. Second column confirmation (full validation)
16. Sample re-analysis (full and partial validation)
17. Toxicity equivalency factor (TEF) (full validation)
18. Data completeness (full and partial validation)
19. Documentation completeness (full and partial validation)

1.2.3. Assignment of qualifier

Data affected by excursions from the QA/QC criteria were qualified based on guidance provided in the following documents:

- U.S. Environmental Protection Agency (USEPA). Region V. 1993. *Standard Operating Procedure for Validation of CLP Inorganic Data*. Chicago, Illinois.

- U.S. Environmental Protection Agency (USEPA). 1994a. *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*, EPA-540/R-94/012. Washington D.C.

- U.S. Environmental Protection Agency (USEPA). 1994b. *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, EPA-540/R-94/013. Washington D.C.

- U.S. Environmental Protection Agency (USEPA). 1994c. *USEPA Region II Data Validation SOP For SW-846 Method 8290 Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) By High Resolution Gas Chromatography/High Resolution Mass Spectrometry (HRGC/HRMS)*. New York.

- U.S. Environmental Protection Agency (USEPA). Region V. 1997. *Standard Operating Procedure for Validation of CLP Organic Data*. Chicago, Illinois.

In many cases, the USEPA guidance for data validation refers to the use of professional judgement to determine the appropriate validation technique to apply to excursions. In these situations, the validation approach taken by O'Brien & Gere has been a conservative one; qualifiers have been applied to sample data to indicate both major and minor excursions. In this way, data associated with any type of excursion is identified to the data user. Major excursions resulted in data being rejected, indicating that the data is considered unusable for either quantitative or qualitative purposes. Minor excursions resulted in sample data being qualified as approximate. The quantitative use of approximated analytical data is consistent with the guidance presented in the USEPA Risk Assessment Guidance for Superfund (USEPA 1992).

Minor excursions are subdivided into excursions that are within the laboratory's control and those that are out of the laboratory's control. Minor excursions involving laboratory control sample recovery, calibration response, method blank contamination, low or high spike recovery due to inaccurate spiking solutions or poor instrument response, holding times, interpretation errors, and quantitation errors are within the control of the laboratory. If the laboratory has followed proper method control procedures, including performing appropriate cleanup techniques, minor excursions resulting from field/equipment and trip blank contamination and matrix spike, serial dilution, surrogate, and internal standard recovery due to matrix affects from the samples are examples of those which may not be within the laboratory's control.

In accordance with the USEPA guidance, and utilizing professional judgement, the following qualifiers are used in this data validation to qualify environmental samples and field duplicate samples:

"R" Indicates that the reporting limit or sample result has been determined to be unusable due to a major deficiency in the data generation process. The data should not be used for any qualitative or quantitative purposes.

"U" Indicates that the analyte was analyzed for, but was not detected. The sample quantitation limit is presented. This qualifier is also used in the validation process to signify that the detection limit of an analyte was raised due to blank contamination.

"J" Indicates that concentration of the result should be considered approximate. This qualifier is used when the data validation process identifies a deficiency in the data generation process. This qualifier is also applied by the laboratory when the analyte concentration was greater than the method detection limit (MDL) but less than the reported detection limit.

"JN" Indicates that the result is tentatively identified and should be considered approximate.

"UJ" Indicates that the analyte was analyzed for, but was not detected. The sample quantitation limit is presented, and should be considered approximate. This qualifier is used when the data validation process identifies a deficiency in the data generation process.

"D" Indicates that a dilution analysis was performed to generate the analyte concentration. This qualifier was utilized only in the VOCs, SVOCs, pesticide, PCB, and herbicide analyses.

"M" An estimated maximum possible concentration (EMPC) is calculated for 2,3,7,8-substituted isomers that are characterized by a response with a S/N of at least 2.5 for both the quantitation ions, but that do not meet all the identification criteria specified in the method.

The following guidelines are used regarding the assignment of qualifiers and the use of qualified data:

- The data quality evaluation results in only one qualifier for each analyte; in a case when several qualifiers are applicable to the same analyte, the cumulative effect of the various QA/QC excursions is employed in assigning the final data qualifiers.

- QA/QC excursions that do not result in the qualification of an analyte are not discussed, unless the situation observed through the validation process warrants noting.

- Qualifiers are applied to environmental samples and field duplicate samples. Field/equipment blanks, trip blanks, and matrix spike/matrix spike duplicate samples are utilized to evaluate environmental samples and field duplicate samples only and are not qualified due to detected excursions.

Appendix B presents the validated laboratory sample result forms and Appendix C presents summary tables of validated analytical data.

1.2.4. Data usability evaluation

Based on the QA/QC information review and the qualifiers assigned to the analytical data, an overall evaluation of the data's usability is performed. Data usability is defined as the data that remains unqualified or is qualified as approximate, or is qualified as nondetected (due to blank contamination), divided by the data reported by the laboratory times 100. The percent usability excludes the data qualified as rejected due to major QA/QC excursions. The non-usable data is defined as the data qualified as rejected divided by the data reported by the laboratory times 100. The data usability is provided for each type of analysis performed for waste, ground water, soil, sediment, surface water, air and biota samples analyzed for this investigation.

The data usability evaluation considers the data parameters of precision, sensitivity, accuracy, representativeness, comparability, and completeness (known as PSARCC parameters), which are described as follows:

- Precision is evaluated through the review of field duplicate samples, laboratory duplicates, LCS/LCSDs, and MS/MSD samples.

- Sensitivity is evaluated through the review of reported detection limits.

- Accuracy is evaluated through the review of MS/MSD samples, internal standards, surrogate recoveries, recovery standard recoveries, LCS recoveries, calibration, instruction performance check, ICP interference check analysis, and ICP serial dilutions.

- Representativeness is evaluated through the review of holding times, sample preservation and preparation, blank analysis and target compound identification and quantification.

- Comparability is evaluated through the review of the analytical methods and reporting procedures for consistency.

- Completeness is defined as the overall percent of sample results that are determined to be usable.

1.2.5. Analytical methods

The waste, ground water, soil, sediment, surface water, air and biota samples, field duplicates, matrix spikes, matrix spike duplicates, trip blanks, and field/equipment blanks collected for this investigation were analyzed by STL-Savannah Laboratories (STL-Savannah Labs) (formerly known as Savannah Labs & Environmental Services, Inc.) of Savannah, Georgia and by Triangle Laboratories, Inc. (Triangle Labs) of Durham, North Carolina. Analyses performed by STL-Savannah Labs included volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), herbicides, metals, cyanide, mercury, fluoride, ortho-phosphate, pH, total dissolved solids (TDS), total suspended solids (TSS), total phosphorus, and total organic carbon (TOC) using United States Environmental Protection Agency (USEPA) Methods. Analyses performed by Triangle Labs included dioxins and dibenzofurans using USEPA Methods. The USEPA methods utilized by the laboratories during this investigation are presented in Table 1-1.

The following chapters of this document address distinctive aspects of the validation process. Specific QA/QC excursions and qualifications performed on the sample data are discussed in Section 2. Data completeness and usability are discussed in Section 10.

The cross-reference tables for samples submitted for data validation are presented in Appendix A. The validated laboratory sample result forms generated by this validation are presented in Appendix B. Appendix C presents summary tables of the validated data. Appendix D presents the chain-of-custody forms.

Table 1. *Analytical method references*

Parameter	Method	Reference
VOCs	USEPA Methods 5030B/5035/8260B	1
VOCs	USEPA Method TO-1	2
SVOCs	USEPA Method 3520C/3550B/8270C	1
SVOCs	USEPA Method TO-13	2
Pesticides	USEPA Method 3520C/3550B/8081A	1
PCBs	USEPA Method 608	3
PCBs	USEPA Method TO-4	2
Herbicides	USEPA Method 3520C/3550B/8151A	1
Dioxin/dibenzofuran	USEPA Methods 8280A, 8290	1
Dioxin/dibenzofuran	USEPA Method TO-9	2
Metals	USEPA Method 3015/3051/6010B	1
Antimony	USEPA Method 7041	1
Arsenic	USEPA Method 7060A	1
Silver	USEPA Method 7761	1
Mercury	USEPA Method 7470A/7471A	1
Cyanide	USEPA Method 9010B	1
TOC	USEPA Method 9060	1
Fluoride	USEPA Method 300.0	4
Ortho-phosphate	USEPA Method 365.2	5
PH	USEPA Method 150.1	5
TDS	USEPA Method 160.1	5
TSS	USEPA Method 160.2	5
Total phosphorus	USEPA Method 365.4	5
Percentage solids	SM 2540G	6

Note:

1 USEPA. 1996a. *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, SW-846*, 3rd Edition. Washington D.C.

2 USEPA. 1999. *USEPA Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition*. Center for Environmental Research Information, Office of Research and Development, Cincinnati, Ohio.

3 USEPA. 1985. *Determination of Pesticides and PCBs in Water and Soil/Sediment by Gas Chromatography/Mass Spectrometry, Physical and Chemical Methods Branch*. Environmental Monitoring and Support Laboratory, Office of Research and Development, Cincinnati, Ohio.

4 USEPA. 1983. *Method for Chemical Analysis of Water and Wastes*. Center for Environmental Research Information, Office of Research and Development, Cincinnati, Ohio.

5 USEPA. 1993. *Method for Determination of Inorganic Substances in Environmental Samples*. Office of Research and Development, Washington, D.C.

6 APHA, AWWA, WPCF *Standard Methods for the Examination of Water and Wastewater*, 18th Edition. Washington, D.C., 1992.

VOC indicates volatile organic compounds
SVOC indicates semivolatile organic compounds.
PCBs indicates polychlorinated biphenyls.
TOC indicates total organic carbon.
TDS indicates total dissolved solids.
TSS indicates total suspended solids.

The following chapters of this document address distinctive aspects of the validation process. Specific QA/QC excursions and qualifications performed on the sample data are discussed in Sections 2 through 9. Data completeness and usability are discussed in Section 10.

The cross-reference tables for samples submitted for data validation are presented in Appendix A. The validated laboratory sample result forms generated by this validation are presented in Appendix B. Appendix C presents summary tables of the validated data. Appendix D presents the chain-of-custody forms.

1.2.6. Parameter descriptions and observations

The following section contains a description of the parameters evaluated during the validation process for each type of analysis. Also included are general observations concerning deviations and adherence to Quality Assurance Project Plan (QAPP) (O'Brien & Gere 1999) corrective action requirements.

VOC analysis by USEPA Methods 8260B and TO17 and SVOC analysis by USEPA Methods 8270C and TO13

Holding times, sample preservation, and percentage solids

Holding times are evaluated from the time of sample collection to sample extraction and sample analysis. Sample preservation is compared to the QAPP requirements. Cooler temperatures were evaluated based on the documentation provided by the laboratory. The results for samples submitted as solid samples with percentage solids that were less than 50% were qualified as approximate (UJ, J).

In the case that analysis holding times for SVOCs, twice the analysis holding time for VOCs, or twice the extraction holding times for SVOCs are exceeded, detected results are qualified as approximate (J) and nondetected results are rejected (R).

Dilutions

In the case that analytical results exceeded the instrument calibration range, dilutions were performed by the laboratory. During the data validation process, the values for target analytes reported with concentrations above the upper calibration limit were replaced with the values generated from dilution analyses.

GC/MS tuning criteria

Tuning and performance criteria are established to verify GC/MS performance, to ensure mass resolution, identification, and sensitivity. Conformance is determined using standard materials (bromofluorobenzene (BFB) for VOCs and decafluorotriphenylphosphine (DFTPP) for SVOCs). The samples, standards, and associated quality control samples must be analyzed using the same tune conditions, within the 12-hour clock that is started at the time of the injection of the tuning solution.

Initial and continuing calibration
The initial calibration is performed prior to sample analysis to demonstrate that the instrument is capable of acceptable performance at the beginning of the analysis, to establish the response factors and to evaluate the linearity of each target analyte. The continuing calibration is performed to evaluate the linearity of the calibration curve established by the initial calibration. The initial and continuing calibration measurements permits the relative response factor to be measured as a function of concentration. The continuing calibration is performed at the beginning of the 12-hour period after successful GC/MS tuning analysis.

Blank analysis
Blanks measure contamination that is introduced during sample collection (field/equipment blank), and preparation and analysis (method blank). The method blank is prepared in the same manner as the samples.

Analytes detected in method blanks associated with samples analyzed for VOCs or SVOCs indicated contamination associated with the instrumentation utilized during sample analysis. Samples which contained common laboratory contaminants at less than ten times the blank concentration, and remaining compounds at less than five times the blank concentration were qualified as undetected (U) due to blank contamination. The blank with the highest concentration of the target analyte in question was used to compare to sample results to evaluate blank contamination.

Field/equipment blanks were collected at a frequency of one for every ten samples unless dedicated sampling equipment was used.

Considerable field blank contamination was detected during the evaluation of air samples for blank contamination. In addition, the concentrations of target analytes in the back-up tubes (TUBE-2) were not consistently less than 20% of the concentrations in the first tube (TUBE-1).

In accordance with USEPA Region V guidance, the results for the field/equipment blanks were not utilized to qualify the associated sample results. The results for the field/equipment blanks are presented in Appendix C.

Surrogate recovery
Surrogates are non-target compounds that are added to sample aliquots at known concentrations before the extraction process to measure extraction efficiency by measuring recovery of the surrogate compound. Low recoveries for isolated standards may indicate selective loss occurring during the extraction process possibly as a result of matrix effect. This loss will affect the detection and quantification of the target analytes. If dilutions were utilized in the analysis of target analytes, surrogate recoveries were not evaluated since the surrogate concentration was reduced by the dilution.

Surrogate compounds were not utilized in the analysis of air samples analyzed for VOCs. However, internal standards were added to samples prior to sample analysis to measure the recovery of target analytes during the analysis of the air samples.

MS/MSD analysis

MS/MSD samples are aliquots of the sample fortified with known concentrations of target analytes and analyzed in the same manner as the sample to indicate appropriateness and bias of the method for the specific matrix by measuring recovery of the target analytes.

With the exception of the air samples, matrix spikes were collected at a frequency of every 20 samples of similar matrix. Although listed in the QAPP, an MS/MSD analysis was not performed for the air samples analyzed for VOCs and SVOCs. Therefore, matrix effects were not evaluated for air samples analyzed for VOCs and SVOCs.

MS/MSDs were performed by STL-Savannah Labs, and their recoveries and relative percent differences were evaluated during the validation process.

In the case of a few MS/MSD analyses performed by the laboratory, the method suggested target analytes were utilized for the MS/MSD spiking solution and the complete list of target analytes was not included. During the validation process, the recoveries for the spiked analytes included in the MS/MSD solution were evaluated for matrix influence. Sample results were not qualified due to this minor method deviation.

In the case that the concentration of the target analyte in the unspiked sample approached four times the concentration of the spike solution added to the sample, or dilutions were performed for the MS/MSD analysis, the MS/MSD recoveries were not evaluated.

Field duplicate analysis

The field duplicate measures sampling and analytical precision.

With the exception of the air samples, environmental samples were collected in duplicate (field duplicates) at a frequency of one for every 10 environmental samples of similar matrix.

In accordance with USEPA Region V guidance, the relative percent differences (RPDs) for field duplicates were not utilized to qualify the associated environmental samples. The results for the field duplicates are presented in Appendix E. The results for the field duplicates typically are evaluated based on the following: for target analyte results that are greater than five times the reported detection limit, the control limit of 50 %RPD are used for aqueous samples and the control limit of 100 %RPD are used for solid samples. For target analyte results that are less than or equal to five times the reported detection limit, the control limit of ± two times the reported detection limit are used.

LCS analysis
The LCS is a standard solution consisting of known concentrations of target analytes spiked into a clean matrix, which is used for independent verification of the calibration and to evaluate the efficiency of the sample preparation and analysis method independent of the sample matrix.

LCSs were performed by STL-Savannah Labs for each batch of samples analyzed for this project, and their recoveries were evaluated during the validation process.

The LCS analyses performed for the air samples analyzed for VOCs and SVOCs, and for biota samples analyzed for SVOCs utilized spiking solutions that included only representative target analytes. The LCS results provided for the air samples were evaluated during the validation process.

In the case of a few LCS analyses performed by the laboratory, the complete list of target analytes was not included in the spiking solution. During the validation process, the recoveries for the spiked analytes included in the LCS solution were evaluated for recovery and system monitoring. Sample results were not qualified due to this minor method deviation.

Internal standards performance
Internal standards are compounds not found in environmental samples that are added to sample aliquots at known concentrations at the time of sample analysis. The internal standard measures analytical efficiency and matrix bias for the target analytes by measuring recovery of the internal standard compound.

Target analyte identification, quantitation, and system performance
Sample identification is based on evaluation of retention times and comparison of the sample mass spectrum to a reference mass spectrum generated by the laboratory using the same analytical conditions. Sample quantitation is based on the response of internal standards and response factors.

STL-Savannah Labs utilized a five milliliter purge volume for analysis of aqueous samples.

The reported detection limit reported by STL-Savannah Labs was greater than the calibration standard with the lowest concentration.

For the biota samples, the target analyte concentrations were not corrected for percentage lipids since sufficient sample volume was not available to determine the lipid content.

Reported detection limits
For target analytes that were detected by the laboratory but were at concentrations that were less than the reported detection limit, the laboratory applied a "J" flag to the analyte result. During the validation process, the "J" flag was retained since the concentration is considered to be approximate.

During the validation process, the detection limits reported by the laboratory were compared to the detection limits listed in the QAPP. The majority of the detection limits met the QAPP limits. Exceptions were:

- For shallow residential ground water samples, carbazole listed as 3.4 µg/L in the QAPP was reported as 10 µg/L by the laboratory.
- For soil samples, 2,4,6-trichlorophenol listed as 70 µg/Kg in the QAPP was reported as 170 µg/Kg by the laboratory.

For SVOC analysis of soil samples, gel permeation cleanup (GPC) was not performed by the laboratory.

Data completeness
Tentatively identified compounds (TICs) for organic analyses were not evaluated as part of the validation process since this information was not required for this investigation by the Project Manager.

Documentation completeness
STL-Savannah Labs did not include documentation of cooler temperatures in the data packages. The laboratory's policy involves only noting cooler temperature excursions in the case narrative for each affected data package if the cooler temperatures exceeds the acceptable criteria of ± 4°C. Cooler temperature excursions were not indicated in the case narratives for this project.

Additional sample collection and preservation observations made during the data validation process are noted in this section.

Overall data assessment
A general summary of the types of excursions and approximate number of analytes or samples affected are presented in this section. For purposes of categorizing excursion types for usability determination, excursions involving both precision and accuracy are considered to be precision excursions.

Adherence to QAPP requirements
For the VOC and SVOC analyses, overall the laboratory followed appropriate corrective action procedures through re-extraction and re-analysis, when excursions were detected.

Analytes detected in the method blanks were within the concentration requirements listed in the QAPP (less than three times the reported detection limit for common laboratory contaminants and less than the reported detection limits for the remaining analytes); therefore, corrective action was not required by the laboratory.

Pesticide analysis by USEPA Methods 8081A and TO4 and herbicides by USEPA Method 8151A

Holding times, sample preservation, and percentage solids
Holding times are evaluated from the time of sample collection to sample extraction and sample analysis. Sample preservation is compared to the QAPP requirements. Cooler temperatures were evaluated based on the documentation provided by the laboratory. The results for samples submitted as solid samples with percentage solids that were less than 50% were qualified as approximate (UJ, J).

In the case that anlaysis holding times or twice the extraction holding times are exceeded, detected results are qualified as approximate (J) and non-detected results are rejected (R).

Dilutions
In the case that analytical results exceeded the instrument calibration range, dilutions were performed by the laboratory. During the data validation process, the values for target analytes reported with concentrations above the upper calibration limit were replaced with the values generated from dilution analyses.

GC performance
Performance checks on the gas chromatograph are performed to ensure adequate resolution and instrument sensitivity. Conformance is determined using standard materials. DDT and endrin are easily degraded in the injection port, and breakdown occurs when the injection port is contaminated with residue or from metal fittings. The percent breakdown is the amount of decomposition that 4,4'-DDT and endrin undergo when analyzed on the GC column with the initial calibration analysis and at the beginning of each 12-hour shift.

For the pesticide analyses performed by STL-Savannah Labs, alpha chlordane and endosulfan I exhibited co-elution on the GC chromatograms. The laboratory indicated that if two separate peaks were observed for these analytes they were reported as being detected. Therefore, qualification of sample results due to this coelution issue was not required.

Analytical sequence
The analytical sequence utilized by the laboratory for pesticide analyses was in accordance with method requirements. For the herbicide analyses, the calibration verification analyses were performed every 12-hour period and at the end of every 12 hours.

Initial calibration and calibration verification
The initial calibration is performed prior to sample analysis to demonstrate that the instrument is capable of acceptable performance at the beginning of the analysis, to establish the response factors and to evaluate the linearity of each target analyte. The continuing calibration is performed to evaluate the linearity of the calibration curve established by the initial calibration. The continuing calibration is performed at the beginning of the 12-hour period.

For the calibration verification analyses, affected sample results were qualified if the results for the analyte on both columns exceeded the percent difference (%D) criteria.

The laboratory utilized the grand mean exception option for analyte quantitation only for analyses performed on 10/27/99.

Blank analysis
Blanks measure contamination that is introduced during sample collection (field/equipment blank), and preparation and analysis (method blank). The method blank is prepared in the same manner as the samples. Field/equipment blanks were collected at a frequency of one for every ten samples unless dedicated sampling equipment was used.

In accordance with USEPA Region V guidance, the results for the field/equipment blanks were not utilized to qualify the associated sample results. The results for the field/equipment blanks are presented in Appendix C.

Surrogate recovery
Surrogate are non-target compounds that are added to sample aliquots at known concentrations before the extraction process to measure extraction efficiency by measuring recovery of the surrogate compound. Low recoveries for isolated standards may indicate selective loss occurring during the extraction process possibly as a result of matrix effect. This loss will affect the detection and quantification of the target analytes.

In the case that dilutions were performed for sample analyses, surrogate recoveries were not evaluated since the concentrations of the surrogates were decreased.

For the pesticide analyses, the sample results were qualified during the validation process if at least three surrogate recoveries from the dual column analyses were outside of the laboratory control limits or if one surrogate recovery was less than 10%. In the case that one surrogate recovery was less than 10% and the other required surrogate recovery was greater than 10%, and other supportive quality control results met criteria, the affected sample result was qualified as approximate (UJ, J).

For the herbicide analyses, the sample results were qualified during the validation process if both column recoveries for the surrogate from the dual column analyses were outside of the laboratory control limits or if

one surrogate recovery was less than 10%. In the case that one surrogate recovery was less than 10% and the other required surrogate recovery was greater than 10%, and other supportive quality control results met criteria, the affected sample result was qualified as approximate (UJ, J).

MS/MSD analysis
The matrix spike is a standard solution consisting of known concentrations of target analytes spiked into an environmental sample, which is used to evaluate the efficiency of the sample preparation and effect of the sample matrix.

With the exception of the air samples, matrix spikes were collected at a frequency of every 20 samples of similar matrix.

MS/MSDs were performed by STL-Savannah Labs, and their recoveries and relative percent differences were evaluated during the validation process.

For the pesticide analyses, the laboratory did not consistently report the lower concentration from the dual column analyses for the MS/MSD results. The laboratory indicated the column from which the target analyte result was reported on the raw data forms. During the validation process, the concentrations reported by the laboratory for each MS/MSD result were evaluated.

Field duplicate analysis
The field duplicate measures sampling and analytical precision.

With the exception of the air samples, environmental samples were collected in duplicate (field duplicates) at a frequency of one for every 10 environmental samples of similar matrix.

In accordance with USEPA Region V, the RPDs for field duplicates were not utilized to qualify the associated environmental samples. The results for the field duplicates are presented in Appendix E. The results for the field duplicates typically are evaluated based on the following: for target analyte results that are greater than five times the reported detection limit, the control limit of 50 %RPD is used for aqueous samples and the control limit of 100 %RPD is used for solid samples. For target analyte results that are less than or equal to five times the reported detection limit, the control limit of ± two times the reported detection limit is used.

LCS analysis
The LCS is a standard solution consisting of known concentrations of target analytes spiked into a clean matrix, which is used for independent verification of the calibration and to evaluate the efficiency of the sample preparation and analysis method independent of the sample matrix.

LCSs were performed by STL-Savannah Labs for each batch of samples analyzed for this project, and their recoveries were evaluated during the validation process.

For the pesticide analyses, the laboratory did not consistently report the lower concentration from the dual column analyses for the LCS results. The laboratory indicated the column from which the target analyte result was reported on the raw data forms. During the validation process, the concentrations reported by the laboratory for each LCS result were evaluated.

Retention time windows

Retention time windows are established for compound identification, using three injections of single and multi-component standards injected over a 72-hour period. The width of the retention time window is ± 3 times the standard deviation of the mean absolute retention time established during the 72-hour period. The absolute retention time for each analyte and surrogate from the calibration verification standard or the mid-point initial calibration standard establishes the center of the retention time window. Each analyte in each standard must fall within its retention time window.

Target analyte identification, quantitation, and reported detection limits

Sample identification is based on evaluation of retention times on two different columns. Sample quantitation is based on calibration curves.

For the biota samples, the target analyte concentrations were not corrected for percentage lipids since sufficient sample volume was not available to determine the lipid content.

For target analytes that were detected by the laboratory but were at concentrations that were less than the reported detection limit, the laboratory applied a "J" flag to the analyte result. During the validation process, the "J" flag was retained since the concentration is considered to be approximate.

During the validation process, the detection limits reported by the laboratory was compared to the detection limits listed in the QAPP. Overall, the reported detection limits met the QAPP limits.

Cleanup verification

Cleanups were performed when necessary as determined by the laboratory.

Confirmation analysis

Target analytes were confirmed by the laboratory using dual column analysis (DB-5 and DB-608) for each sample matrix. Prior to March 1, 2000, the laboratory consistently reported the lower of the two column results for each confirmed analyte in the environmental samples. This policy was not consistently followed when reporting data for MS/MSD and LCS analyses. The laboratory resolved this inconsistency by adopting a policy of reporting the higher concentration if the RPD was found to be less than 40 and reporting the lower concentration if the RPD is 40 or greater. This policy was implemented after the majority of the samples were analyzed for this investigation. Sample and quality control

sample results reported by the laboratory for each target analyte were used in the validation process.

For target analytes that were detected by the laboratory but were at concentrations that were less than the reported detection limit, the laboratory applied a "J" flag to the analyte result. During the validation process, the "J" flag was retained since the concentration is considered to be approximate. Due to the numerous values reported by the laboratory below the reported detection limits, if the RPD values were greater than 40% for the confirmation analysis and the target analyte concentration was flagged "J", additional validation qualifiers were not applied to the sample data.

For the herbicide analyses, the resolution exhibited for 2,4-D and dinoseb on the DB-5 column made it necessary for the laboratory to perform manual integration for proper analyte identification and quantitation. These manual integrations were evaluated during the validation process.

During the validation process, target analytes that were reported above the detection limit with confirmation RPDs that were greater than 40% were qualified as approximate (J) to indicate a confirmation excursion.

Data completeness
Incomplete data packages are noted in this section.

Documentation completeness
STL-Savannah Labs did not include documentation of cooler temperatures in the data packages. The laboratory's policy involves only noting cooler temperature excursions in the case narrative for each affected data package if the cooler temperature exceeds the acceptable criterion of ± 4°C. Cooler temperature excursions were not indicated in the case narratives for this project.

Overall data assessment
A general summary of the types of excursions and approximate number of analytes or samples affected is presented in this section. For purposes of categorizing excursion types for usability determination, excursions involving both precision and accuracy are considered precision excursions.

Adherence to QAPP requirements
For the pesticide and herbicide analyses, overall the laboratory attempted to follow the appropriate corrective action procedures through re-extraction and re-analysis, when excursions were detected. In most cases, the corrective actions were performed outside of the acceptable holding times; therefore, these data were not utilized.

Analytes detected in the method blanks were within the concentration requirements listed in the QAPP (less than the reported detection limit); therefore, corrective action was not required by the laboratory.

In most cases of surrogate recovery excursions, the surrogates met the QAPP recovery requirements (one surrogate must have a recovery of greater than 10%); therefore, corrective action was not required by the laboratory.

In the case of MS/MSD recovery excursions, the laboratory was not required to perform corrective action if the LCS analysis associated with the affected analyte met criteria.

For calibration verification excursions detected in the herbicide analyses, appropriate corrective actions through re-analyses were not performed by the laboratory.

PCB analysis by USEPA Method 680

Holding times, sample preservation, and percentage solids
Holding times are evaluated from the time of sample collection to sample preparation and sample analysis. Sample preservation is compared to the QAPP requirements. Cooler temperatures were evaluated based on the documentation provided by the laboratory. The results for samples submitted as solid samples with percentage solids that were less than 50% were qualified as approximate (UJ, J).

GC/MS tuning and window-defining criteria
The GC/MS tuning check DFTPP is analyzed at the beginning of each 12-hour clock sequence to check the tune of the instrument. The analysis is performed using the Selected Ion Monitoring (SIM) technique that is used to analyze calibrations, samples, and QC samples.

The window-defining solution is analyzed to determine the retention times of the first and last eluting congeners at each level of chlorination.

Initial and continuing calibration
The initial calibration is performed prior to sample analysis to demonstrate that the instrument is capable of acceptable performance at the beginning of the analysis to establish the response factors. A single congener of each chlorination level is used for calibration and quantitation. Decachlorobiphenyl is used to quantify non-achlorobiphenyls. The continuing calibration is performed to evaluate the linearity of the calibration curve established by the initial calibration. The initial and continuing calibration measurements permit the relative response factor to be measured as a function of concentration. The continuing calibration is performed at the beginning and at the end of the 12-hour period after a successful GC/MS tuning check.

The laboratory utilized the QAPP criteria of ≤30% for soils and ≤20% for aqueous samples for the initial and continuing calibration evaluation.

Blank analysis
Blanks measure contamination that is introduced during sample collection (field/equipment blank), and preparation and analysis (method blank). The method blank is prepared in the same manner as the samples with the exception of the matrix that is replaced by sodium sulfate for solid matrices and distilled water for aqueous matrices.

Field/equipment blanks were collected at a frequency of one for every ten samples unless dedicated sampling equipment was used.

In accordance with USEPA Region V guidance, the results for the field/equipment blanks were not utilized to qualify the associated sample results. The results for the field/equipment blanks are presented in Appendix C.

Internal standard criteria
Internal standards are added to sample aliquots at known concentrations to measure analytical efficiency and matrix bias for the target analytes by measuring recovery of the internal standard compound. The matrix, which is the predominant material of which the sample is composed, may prevent extraction of the target and non-target analytes and may affect internal standard recoveries due to chemical reactions. The internal standards are used to quantify the indigenous analyte present in the samples, and to correct for variability of sample preparation, cleanup, and analysis.

During the validation process, internal standards areas that exceeded either 30% of the previous continuing calibration or 50% of the initial calibration areas were qualified as approximate (UJ, J). STL-Savannah did not reanalyze samples if either of the two conditions was met.

STL-Savannah Labs utilized chrysene-d12 to quantitate target analyte concentrations. The laboratory utilizes phenanthrene-d10 as an internal standard if matrix interferences prevents the use of chrysene-d12.

Surrogate recovery
Surrogates are non-target compounds that are added to sample aliquots at known concentrations before the extraction process to measure extraction efficiency by measuring recovery of the surrogate. Low recoveries for isolated surrogates may indicate selective loss occurring during the extraction process possibly as a result of matrix effect. This loss will affect the detection and quantification of the target analytes associated with the standards.

Since air samples analyzed for PCBs were prepared using method TO4 and analyzed using method 680, surrogate concentrations were diluted and recoveries were not evaluated.

MS/MSD analysis
The matrix spike is a standard solution consisting of known concentrations of target analytes spiked into an environmental sample, which is used to evaluate the efficiency of the sample preparation and effect of the sample matrix.

With the exception of the air samples, matrix spikes were collected at a frequency of every 20 samples of similar matrix. Although listed in the QAPP, an MS/MSD analysis was not performed for the air samples. Therefore, matrix effects were not evaluated for air samples analyzed for PCBs.

MS/MSDs were performed by STL-Savannah Labs, and their recoveries and relative percent differences were evaluated during the validation process.

LCS analysis
The LCS is a standard solution consisting of known concentrations of target analytes spiked into a clean matrix, which is used for independent verification of the calibration and to evaluate the efficiency of the sample preparation and analysis method independent of the sample matrix.

Since air samples analyzed for PCBs were prepared using method TO4 and analyzed using method 680, LCS results were diluted and recoveries were not evaluated.

Field duplicate analysis
The field duplicate measures sampling and analytical precision.

With the exception of the air samples, environmental samples were collected in duplicate (field duplicates) at a frequency of one for every 10 environmental samples of similar matrix.

In accordance with USEPA Region V, the RPDs for field duplicates were not utilized to qualify the associated environmental samples. The results for the field duplicates are presented in Appendix E. The results for the field duplicates typically are evaluated based on the following: for target analyte results that are greater than five times the reported detection limit, the control limit of 50 %RPD is used for aqueous samples and the control limit of 100 %RPD is used for solid samples. For target analyte results that are less than or equal to five times the reported detection limit, the control limit of ± two times the reported detection limit is used.

Sample data (identification, quantitation, reported detection limits and system performance
Sample identification is based on evaluation of retention times, ion abundance ratios, signal-to-noise ratio and interferences. Sample quantitation is based on the response of internal standards, response factors, interferences, and confirmation analyses.

For the biota samples, the target analyte concentrations were not corrected for percentage lipids since sufficient sample volume was not available to determine the lipid content.

For target analytes that were detected by the laboratory but were at concentrations that were less than the reported detection limit, the laboratory applied a "J" flag to the analyte result. During the validation process, the "J" flag was retained since the concentration is considered to be approximate.

During the validation process, the detection limits reported by the laboratory was compared to the detection limits listed in the QAPP. Overall, the reported detection limits met the QAPP limits.

Data completeness
Incomplete data packages are noted in this section.

Documentation completeness
STL-Savannah labs did not include documentation of cooler temperatures in the data packages. The laboratory's policy involves only noting cooler temperature excursions in the case narrative for each affected data package if the cooler temperatures exceeds the acceptable criterion of ± 4°C. Cooler temperature excursions were not indicated in the case narratives for this project.

The expected ion ratios listed on the STL-Savannah Labs raw data were inverted when compared to the ion ratios listed in the method. This method deviation was considered during the validation process.

Additional sample collection and preservation observations made during the data validation process are noted in this section.

Overall data assessment
A general summary of the types of excursions and approximate number of analytes or samples affected are presented in this section. For purposes of categorizing excursion types for usability determination, excursions involving both precision and accuracy are considered to be precision excursions.

Adherence to QAPP requirements
For the PCB analyses, overall the laboratory followed appropriate corrective action procedures through re-extraction and re-analysis, when excursions were detected. Reanalyses were not performed by the laboratory when internal standard areas were outside of the +/-30% criteria if the areas were within +/-50% of the initial calibration standard areas.

Metal analysis by USEPA Method 6010B, mercury analysis by USEPA Methods 7470A/7471A, cyanide analysis by USEPA Method 9010, fluoride by USEPA Method 300.0, ortho-phosphate by USEPA Method 365.2, TDS by USEPA Method 160.1, TSS by USEPA Method 160.2,

total phosphorus by USEPA Method 365.2, and TOC by USEPA Method 9060.

Data validation was not performed for the results for pH analyzed by USEPA Method 150.1.

Holding times, sample preservation, and percentage solids
Holding times are evaluated from the time of sample collection to sample analysis. Sample preservation is compared to the QAPP requirements. Cooler temperatures were evaluated based on the documentation provided by the laboratory. The results for samples submitted as solid samples with percentage solids that were less than 50% were qualified as approximate (UJ, J).

Calibration analysis
Initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of the analytical run. Continuing calibration verification establishes that the initial calibration is still valid by checking the performance of the instrument on a continual basis. Standards near the reported detection limit (CRA, CRI) may be analyzed at the beginning of the analytical sequence to check the sensitively of the instrument near the detection limit.

Sample results associated with CRI/CRA recovery excursions were qualified as approximate (UJ, J) if the concentration of the analyte was less than three times the reported detection limit.

Blank analysis
Blanks measure contamination that is introduced during sample collection (field/equipment blank), and preparation and analysis (method blank). The method blank is prepared in the same manner as the samples.

Field/equipment blanks were collected at a frequency of one for every ten samples unless dedicated sampling equipment was used.

During the validation process, field/equipment blanks that were collected on dates that were close to the collection dates of the samples for the same matrix were used to evaluate sample results for contamination. Two or more equipment blanks that bracket the collection dates of the samples to be evaluated are utilized for blank evaluation.

Field/equipment blanks were not required for the following types of sample matrices since dedicated sampling equipment was used: fill area ground water, shallow residential ground water, time series ground water, domestic well ground water, developed area subsurface soil, sediment, and surface water.

ICP interference check sample analysis
The interference check solution contains known concentrations of interfering elements to test the correction factors. The elements of interest are spiked at 0.5 to 1 mg/L. In the absence of a measurable

analyte, overcorrection could go undetected because a negative value could be reported as zero. The check solution must agree within 20% of the expected value.

MS/MSD analysis
The matrix spike is a standard solution consisting of known concentrations of target analytes spiked into an environmental sample, which is used to evaluate the efficiency of the sample preparation and effect of the sample matrix.

With the exception of the air samples, matrix spikes were collected at a frequency of every 20 samples of similar matrix.

MS/MSDs were performed by STL-Savannah Labs, and their recoveries and relative percent differences were evaluated during the validation process.

Field duplicate analysis
The field duplicate measures sampling and analytical precision.

With the exception of the air samples, environmental samples were collected in duplicate (field duplicates) at a frequency of one for every 10 environmental samples of similar matrix.

For field duplicates, a control limit of 20% applies to metals; otherwise laboratory control limits are used. If any result is less than 5 times the reporting limit, a control limit of ± the reporting limit is used to evaluate the result.

If the case that more than one field duplicate was collected on a sampling day and one field duplicate met criteria but the other did not meet criteria, only the unspiked sample is qualified. If only one field duplicate is collected and an excursion is detected, the samples associated with the field duplicate are qualified.

LCS analysis
The LCS is a standard solution consisting of known concentrations of target analytes spiked into a clean matrix, which is used for independent verification of the calibration and to evaluate the efficiency of the sample preparation and analysis method independent of the sample matrix.

LCSs were performed by STL-Savannah Labs for each batch of samples analyzed for this project, and their recoveries were evaluated during the validation process.

Laboratory duplicate analysis
Duplicate sample determinations are used to demonstrate acceptable method precision by the laboratory at the time of analysis. Precision is then evaluated by calculating the RPD between the two results.

ICP serial dilution analysis
The serial dilution analysis (five-fold dilution) is performed to evaluate whether significant chemical and physical interferences are present due to sample matrix. The serial dilution analysis must agree within a 10% difference of the original determination after correction for dilution.

Serial dilutions are only required for initial concentrations ≥10 times the instrument detection limit (IDL) for ICP analysis.

Furnace atomic adsorption analysis
If utilized for analysis of metal analytes, the graphite furnace atomic absorption (GFAA) analyses, which require special analytical techniques, are checked. Although not required by the method, duplicate injections and multiple level furnace post digestion spikes may be used to establish precision and accuracy of the individual analytical determinations. If the post-digestion spike recovery exceeds criteria, the method of standard additions is performed.

Verification of instrument parameters
The instrument detection limits, ICP linear ranges, and ICP interelement correction factors used during the analyses are checked.

Analyte quantitation and reported detection limits
During the validation process, the detection limits reported by the laboratory was compared to the detection limits listed in the QAPP. Overall the reported detection limits met the QAPP limits.

Method of standard additions
If utilized for analysis of metal analytes, the method of standard additions are checked.

Data completeness
Incomplete data packages are noted in this section.

Although not requested by the QAPP, results for molybdenum and tin were included in the data packages provided by STL-Savannah Labs. These results were evaluated during the validation process.

Documentation completeness
STL-Savannah Labs did not include documentation of cooler temperatures in the data packages. The laboratory's policy involves only noting cooler temperature excursions in the case narrative for each affected data package if the cooler temperatures exceeds the acceptable criterion of ± 4°C. Cooler temperature excursions were not indicated in the case narratives for this project.

Additional sample collection and preservation observations made during the data validation process are noted in this section.

Overall data assessment
A general summary of the types of excursions and approximate number of analytes or samples affected are presented in this section. For purposes of categorizing excursion types for usability determination, excursions involving both precision and accuracy are considered precision excursions.

Adherence to QAPP requirements
For the metals, mercury, cyanide, fluoride, ortho-phosphate, TDS, TSS, total phosphorus and TOC analyses, overall the laboratory followed appropriate corrective action procedures through re-digestion and re-analysis, when excursions were detected.

Analytes detected in the method blanks were within the concentration requirements listed in the QAPP (less than the reported detection limit), therefore corrective action was not required by the laboratory.

Dioxin/dibenzofuran analysis by USEPA Methods 8082A, 8290 and TO-9/8290

Holding times, sample preservation, and percentage solids
Holding times are evaluated from the time of sample collection to sample preparation and sample analysis. Sample preservation is compared to the QAPP requirements. Cooler temperatures were evaluated based on the temperatures documented by the laboratory. The results for samples submitted as solid samples with percentage solids that were less than 50% were qualified as approximate (UJ, J).

Although the QAPP holding times were used to evaluate sample results, USEPA Methods 8280A and 8290 indicate that holding times from sample collection to preparation and analysis of less than one year are recommendations only since PCDDs/PCDFs may be very stable if stored properly.

Instrument performance - mass resolution
The analysis time may exceed the long-term mass stability of the mass spectrometer and drifts of a few parts per million (ppm) can have serious adverse effects on instrument performance. Mass resolution checks are performed to demonstrate that the instrument resolving power is greater than or equal to 10,000 and the mass-drift correction is properly implemented. The mass resolution check is performed prior to analyzing calibration standards, blanks, samples, and quality control samples.

For USEPA Method 8290, Triangle Labs utilized ions 292.9825, 330.9792, and 416.9760 instead of ions 304.9824 and 380.9760 as recommended in the method, to demonstrate the mass resolution power of 10,000 for each instrument used in the analysis of PCDD and PCDFs. The laboratory indicated that they chose ions 292.9825, 330.9792, and 416.9760 to reflect the ions of the most toxic 2378-tetrachlorodibenzo-p-dioxin congener. Sample results were not qualified due to this method deviation. Triangle Labs performed mass resolutions prior to and during the initial calibration, prior to each continuing calibration standard, and

at the beginning of each automatic analytical batch run so that a mass resolution was met before each sample analysis was performed.

During the validation process, the hard copy of the mass resolution was reviewed to determine visually if the mass resolution criterion was met. The mass resolution is evaluated by the laboratory analyst through the use of a display of the mass resolution plot, which is adjusted to achieve the 10,000 resolution then printed. Based on Triangle Lab's evaluation, as demonstrated by the mass resolution reports presented in the data packages, the mass resolution of 10,000 criterion was met for each analysis performed by the laboratory.

For USEPA Method 8280A, Triangle Labs did not utilize the recommended criterion of a 30 to 50% relationship of peaks mass-to-charge 414 and 502 relative to mass-to-charge 264. Triangle Labs indicated that, for analysis performed using 8280A by the laboratory, the relationship of mass-to-charges 502 and 414 relative to 264 is typically consistent for several months period of time, thus demonstrating stability. During the validation process, samples associated with the mass resolution checks were not qualified for this method deviation.

Instrument performance – GC column performance check
The GC column performance check is performed to establish the beginning and ending retention times for the dioxin and dibenzofuran isomers and to demonstrate isomer specificity of the GC columns.

Triangle Labs utilized a 12-hour analytical sequence that began with the analysis of the initial continuing calibration (CCi) and ended with the analysis of the final continuing calibration (CCf). Although the method requires that the GC performance check be analyzed at the start of the 12-hour sequence, the laboratory performed the GC column performance check either before or after the CCi. In addition, the laboratory used a continuous sequence and utilized the CCf from the previous 12-hour clock as the next CCi. According to the Methods Information Communication Exchange operated by the Science Applications International Corporation under contract to the USEPA Office of Solid Waste, Triangle Lab's approach to the application of the analytical sequence is within the intent of the guidance presented by Method 8290, since the GC performance check is analyzed before sample analyses. Therefore, analytical data were not qualified due to analytical sequence deviations.

Initial and continuing calibration
The initial calibration is performed prior to sample analysis to demonstrate that the instrument is capable of acceptable performance at the beginning of the analysis, to establish the response factors and to evaluate the linearity of each target analyte. The continuing calibration is performed to evaluate the linearity of the calibration curve established by the initial calibration. The initial and continuing calibration measurements permits the relative response factor to be measured as a function of concentration. The continuing calibration is performed at the beginning of the 12-hour period after successful mass resolution checks.

According to guidance in USEPA Method 8290, the final continuing calibration is evaluated by the initial continuing calibration criteria. However, if the final continuing calibration meets the criteria of 25 % difference (%D) for the unlabeled analytes and 35 %D for the labeled standard analytes, the mean response factor from the two calibrations are used to quantitate sample results instead of the initial calibration response factor. In several cases, this guidance was applied to sample results. During the validation process, the continuing calibrations were evaluated using the initial or final continuing calibration criteria as appropriate. Target analytes in samples affected by the continuing calibration excursions were qualified as approximate (UJ, J) to indicate minor accuracy excursions.

Blank analysis

Blanks measure contamination that is introduced during sample collection (field/equipment blank), and preparation and analysis (method blank). The method blank is prepared in the same manner as the samples with the exception of the matrix that is replaced by sodium sulfate for solid matrices and distilled water for aqueous matrices.

Field/equipment blanks were collected at a frequency of one for every ten samples unless dedicated sampling equipment was used.

In accordance with USEPA Region V guidance, the results for the field/equipment blanks were not utilized to qualify the associated sample results. The results for the field/equipment blanks are presented in the summary tables in Appendix C.

During the data validation process, the EMPC values were used to evaluate blank contamination in the associated samples.

Internal standard criteria

Internal standards are labeled PCDD/PCDF congeners representing the tetrachlorinated through octachlorinated PCDD/PCDFs that are added to sample aliquots at known concentrations to measure analytical efficiency and matrix bias for the target analytes by measuring recovery of the internal standard compound. The matrix, which is the predominant material of which the sample is composed, may prevent extraction of the target and non-target analytes and may affect internal standard recoveries due to chemical reactions. The internal standards are used to quantify the indigenous analyte present in the samples, and to correct for variability of sample preparation, cleanup, and analysis, utilizing the isotope-dilution mass spectrometry technique.

Triangle Labs utilizes 1,2,3,6,7,8-HxCDF as an internal standard in place of 1,2,3,4,7,8-HxCDF since the former is used by Triangle Labs as a surrogate.

According to Triangle Labs, in the case of native analytes approaching saturation concentrations, a natural contribution to the amount of carbon 13 labeled internal standards occurs, which is demonstrated by the

internal standard recoveries and ion abundance ratios exceeding the control limits.

Triangle Labs' policy in the case of a low internal standard recovery but a GC signal with a signal to noise ratio of equal to or greater than 10:1, is to flag the internal standard result "V" and to accept the associated sample results. Triangle Labs indicates that a GC signal with a signal to noise ratio of equal to or greater than 10:1 is a quantifiable signal since the variance of the measurement is expected to be approximately 25% of the signal. Therefore, utilizing the isotopic dilution technique, an internal standard with a recovery that is less than 40% may not have a significant impact upon the analytical results, and corrective action is not required.

Triangle Labs indicated that, in the case of many sample analyses, the concentration of the solutions used to spike the environmental samples, blanks, and quality control samples were not at the nominal concentration. This "changed spike file" concentration was utilized to calculate the sample concentrations for each affected sample.

During the validation process, the results affected by the internal standard recoveries of less than 25% or greater than 135% and ion abundance ratio excursions were qualified as approximate (UJ, J). Nondetected results affected by an internal standard recovery of less than 25%, were rejected (R).

Surrogate/alternative/cleanup standard recovery

Surrogates and alternative standards are non-target compounds that are added to sample aliquots at known concentrations after the extraction process but before the cleanup process to measure cleanup efficiency separately from the extraction efficiency by measuring recovery of the surrogate/alternative compound. Low recoveries for isolated surrogate or alternative standards may indicate selective loss occurring during the cleanup process possibly as a result of matrix effect. This loss will affect the detection and quantification of the unlabeled target analytes associated with the standards.

Triangle Labs utilizes the recovery results of the cleanup standard, which is also added to sample aliquots after the extraction process, to determine the cleanup efficiency. The results for the surrogate and alternative standards are reported by Triangle Labs, but action is not taken based on these results.

During the validation process, the recoveries of the surrogate, alternative, and cleanup standards were evaluated for each sample result using the control limits of 45% to 135% recovery. If high surrogate/alternative recoveries were reported, the detected target analytes were qualified as approximate (J) to indicate biased high results. If low recoveries were reported, the undetected target analytes were qualified as approximate (J, UJ) to indicate biased low results.

Recovery standard criteria
The recovery standard is added to each calibration standard before analysis, and to each sample, blank, and quality control sample prior to the final concentration step and before analysis. The recovery standard is used to quantitate the recovery of the internal standards in each analysis. Although the laboratory is not required to monitor the recovery standard areas in each sample, blank, and quality control sample, these parameters were evaluated during the data validation process. The retention time criteria for the recovery standards were met in each sample analysis.

The limits used to evaluate the recovery standard for each sample analysis were -50% to +100% (50% to 200%) of the area of the recovery standard in the associated continuing calibration. During the data validation, the area of the initial continuing calibration standard was utilized to evaluate the recovery standard areas in the associated samples, blank, and quality control samples. If a trend for increased or decreased sensitivity in the recovery standard area was observed, the sensitivity of the final continuing calibration was included in generating control limits to determine if qualification of sample data was warranted based on the instrument sensitivity.

As a result of recovery standard excursions, analytes in the affected samples were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The nondetected results for target analytes in a sample with a recovery standard area that was less than 25% were rejected in accordance with USEPA Region II guidance.

Triangle Labs utilized $^{13}C_{12}$ 1234-TCDD as a recovery standard instead of the recovery standard listed in the method, $^{13}C_{12}$ 2378-TCDD.

Triangle Labs indicated that, in the case of many sample analyses, the concentration of the solutions used to spike the environmental samples, blanks, and quality control samples were not at the nominal concentration. This "changed spike file" concentration was utilized to calculate the recovery of the recovery standards for each affected sample.

Duplicate analysis
Analyses of two aliquots of one environmental sample (duplicates) collected for the investigation are performed to measure the analytical precision with respect to sample matrices.

For this investigation, Triangle Labs analyzed matrix spikes and matrix spike duplicates (MS/MSDs) and laboratory control sample and laboratory control sample duplicates (LCS/LCSDs) to demonstrate precision. In addition, field duplicates were collected and analyzed. However, according to USEPA Region V guidance, the results for field duplicates were not utilized to qualify the associated environmental samples. Therefore, during the data validation process, the results from the MS/MSDs and LCS/LCSDs were utilized to evaluate analytical precision.

MS/MSD analysis
The matrix spike is a standard solution consisting of known concentrations of target analytes spiked into an environmental sample, which is used to evaluate the efficiency of the sample preparation and effect of the sample matrix.

With the exception of the air samples, matrix spikes were collected at a frequency of at least every 20 samples of similar matrix.

MS/MSDs were performed by Triangle Labs, and their recoveries and relative percent differences were evaluated during the validation process.

In the case of several MS/MSDs analyzed for solid and aqueous matrices, the concentration of the target analytes in the native samples were more than one-fourth the concentration of the spike solution added to the sample. According to the laboratory, when concentrations approach this high level, the analyte recoveries and RPDs may be outside of the control limits and the statistical analysis cannot be assessed properly. In the case of these situations, the results from the MS/MSDs were not used to qualify the associated sample results. Since LCS/LCSDs were associated with the environmental samples analyzed for this investigation, the method precision and accuracy were evaluated based on the LCS/LCSD results.

LCS/LCSD analysis
The LCS is a standard solution consisting of known concentrations of target analytes spiked into a clean matrix, which is used for independent verification of the calibration and to evaluate the efficiency of the sample preparation and analysis method independent of the sample matrix.

Although not required by the QAPP, LCS/LCSDs were performed by Triangle Labs for each batch of samples analyzed for this project and their recoveries and relative percent differences were evaluated during the validation process.

For some sample extraction batches, the concentration of the target analytes in the LCS/LCSD solutions were not at nominal levels. The laboratory utilized the actual concentrations of the LCS/LCSD spikes to calculate the recoveries and RPDs for the quality control results.

In the case of sample re-analysis using dilutions, additional LCS/LCSDs were not analyzed. The LCS/LCSDs analyzed along with the undiluted samples were utilized to evaluate the associated samples.

Field duplicate analysis
The field duplicate measures sampling and analytical precision.

With the exception of the air samples, environmental samples were collected in duplicate (field duplicates) at a frequency of one for every 10 environmental samples of similar matrix.

In accordance with USEPA Region V, the RPDs for field duplicates were not utilized to qualify the associated environmental samples. The results for the field duplicates are presented in the summary tables in Appendix E. The results for the field duplicates were evaluated based on the following: for target analyte results that were greater than five times the reported detection limit, the control limit of 50% RPD was used for aqueous samples and the control limit of 100% RPD was used for solid samples. For target analyte results that were less than or equal to five times the reported detection limit, the control limit of ± two times the reported detection limit was used.

Sample data (identification and quantitation)
Sample identification is based on evaluation of retention times, ion abundance ratios, signal-to-noise ratio, interferences, and the detection of polychlorinated diphenyl ethers. Sample quantitation is based on the response of internal standards, response factors, interferences, and confirmation analyses.

Triangle Labs monitors the M-[COCL]+ ions, as required by USEPA Method 8290 and Method 8280A, but did not provide evidence of this in the data packages. Sample results were not qualified as a result of this deliverable deviation during the data validation process.

Target analytes failing relative ion abundance criteria but within the retention time windows and a signal to noise ratio of a minimum of 2.5:1 were quantitated as EMPC results.

For the biota samples, the target analyte concentrations were not corrected for percentage lipids since sufficient sample volume was not available to determine the lipid content.

In the case of several samples, an interference was detected in the quantitation ion signal, which indicates a matrix effect. According to the laboratory, a negative effect visible in the lockmass channel indicates an excess amount of contaminants originating from the sample are being ionized, which interferes with the ionization of the internal standards and target analytes. If the recovery standard signal is affected, the internal standards that utilize the recovery standard are influenced by this interference. Therefore, the laboratory denotes this with a "Q" flag on affected internal standards. Since interference of this nature is an isolated event, the quantitation of analytes at retention times without lockmass interference is not affected. In addition, diphenyl ethers (DPEs) were detected at the same retention time as polychorodibenzofurans (PCDFs) at minimally ten percent of the PCDF intensity. The laboratory denoted the interference on the sample report by flagging the affected target analytes with an "X" flag. As a result of the interferences, the affected target analytes were qualified as approximate (J). If interferences were detected in the analysis of the internal standards, the target analytes associated with the internal standards were qualified as approximate (J).

The results for target analytes as having poor resolution between peaks were denoted by the laboratory by the addition of a "PR" flag. The target analytes affected by this resolution excursion were qualified as approximate (J).

Overall, the majority of the reported detection limits provided by the laboratory met the detection limits listed in the QAPP. Detection limits reported for the bedrock ground water samples were elevated. High concentrations of target analytes were detected in the environmental samples.

Estimated detection limits
The estimated detection limit (EDLs) is the concentration of a target analyte required to produce a signal with a peak height of at least 2.5 times the background signal.

Estimated maximum possible concentration (EMPC)
The estimated maximum possible concentration (EMPC) was calculated by Triangle Labs for target analytes that met identification criteria for the signal-to-noise ratio and the retention times.

Second column confirmation
The quantitation results for 2378-TCDF analyzed using the DB-225 column are reported for this investigation. The results for 2378-TCDF from the DB-5 column were used for qualification only, since peak resolution is acceptable only on the DB-225 column for this analyte.

Triangle Labs confirmed positive concentrations of 2378-TCDF detected above the target detection limit.

Sample re-analysis
In most cases that analytical excursions or high concentrations of target analytes were detected by the laboratory, sample re-analyses were performed.

The data packages associated with sample re-analysis were labeled "R" to denote that the re-analysis was due to excursions detected in the individual samples and labeled "N" to denote that the re-analysis were due to sample batch issues.

In the case that target analyte concentrations exceeded the calibration range of the instrument, the laboratory denoted the high concentration by the addition of a "E" flag to the target analytes. If, in addition, the signal of the target analyte saturated the detector, the laboratory denoted the saturation by the addition of a "S" flag to the target analyte. The majority of the results for samples with elevated concentrations were reanalyzed at a dilution. During the data validation process, the values for target analytes reported with concentrations above the upper calibration limit were replaced with the values generated from dilution analyses. In the case that dilutions were indicated but not performed, the affected target analytes were qualified as approximate (J).

Toxicity equivalency factor (TEF)
The toxicity equivalency factor (TEF) is used to calculate the toxicity equivalence (TEQ) for each target analyte. For this investigation, the TEQ values are being calculated separately based on the individual analyte concentrations provided by the laboratory. Therefore, the TEQ values provided by the laboratory were not evaluated during the validation process.

Data completeness
Total dioxin and total dibenzofurans were not evaluated as part of the validation process since this information was not required for this investigation by the Project Manager.

Although not required by the QAPP, LCS/LCSDs were performed by Triangle Labs for this project. Although Triangle Labs had intended to include the results for each LCS/LCSD analysis in each data package, these results were not included in the majority of the data packages. Since the recoveries and RPDs of the LCS/LCSDs provide additional quality control monitoring of the PCDD/PCDF sample results, these results were requested by the validation team during the validation process. Triangle Labs provided the LCS/LCSD results separately during the validation process.

An LSC/LCSD analysis was associated with each environmental sample analyzed for this investigation. The LCS/LCSD batches included, in some cases, samples from several data packages. However, the documentation of the LCS/LCSD batching was not provided in each data package and an example of the batching sequence was requested and provided during the validation process.

For the majority of the data packages, Triangle Labs did not include the raw data and results for the final continuing calibrations. Since this information was needed in some instances to evaluate recovery standard recoveries, these results were requested by the validation team during the validation process. Triangle Labs provided the final continuing calibration results separately during the validation process.

Triangle Labs indicated that, in the case of many sample batches, the concentration of the solutions used to spike the environmental samples, blanks, and quality control samples were not at the nominal concentration. This "changed spike file" was used as a result of laboratory preparation excursions and was accounted for in the sample result calculations. The concentrations of the changed spike files were not included in the data packages. Triangle Labs provided the changed spike file concentrations separately during the validation process.

The control limits listed for the recovery of internal standards on the sample result sheets did not match the control limits used to evaluate the results in accordance with the method. According to Triangle Labs, although incorrect control limits are listed on the forms, the laboratory reviewed the data using the control limits from the method.

In the case of several data packages, the dates listed on raw data provided in the data packages were hand-corrected to reflect the correct year. This "year 2000" discrepancy occurred as a result of noncompliant software utilized by the laboratory on instruments used in the analyses of samples. According to Triangle Labs, the vendor responsible for the software was contacted before the end of 1999, but was unable to correct the software. Sample results associated with this deviation were not qualified during the validation process.

Documentation completeness
Sample collection and preservation observations made during the data validation process are noted in this section.

Overall data assessment
A general summary of the types of excursions and approximate number of analytes or samples affected are presented in this section. For purposes of categorizing excursion types for the usability determination for this program, excursions involving both precision and accuracy are considered precision excursions.

Adherence to QAPP requirements
For the dioxin/dibenzofuran analyses, overall the laboratory attempted to follow appropriate corrective action procedures through re-extraction and re-analysis, when excursions were detected.

Analytes detected in the method blanks were within the concentration requirements listed in the QAPP (less than the reported detection limit), therefore corrective action was not required by the laboratory.

Based on Triangle Labs' policy for low internal standard recoveries, samples with internal standards that met the signal to noise ratio of equal to or greater than 10:1 were not re-analyzed.

Since LCS/LCSDs were not required by the QAPP, corrective actions were not listed in the QAPP for these analyses.

In some cases, MS/MSDs that exhibited excursions were not reanalyzed by the laboratory. However, the LCS/LCSD analyses met criteria in most cases, indicating a matrix influence contributed to the MS/MSD excursion.

1.3. Data quality evaluation

Sections two through nine presents the results of the comparison of the analytical data to the QA/QC criteria specified in Section 1.2.2, and the qualifiers assigned to the data when the QA/QC criteria were not met. Samples that required qualifiers are described in the following sections, and the qualified laboratory sample results forms are included as Appendix B. Summary tables with qualified sample results and field/equipment blank results are included in Appendix C.

2. Waste samples – discrete surface

2.1. Document completeness

The chain-of-custody associated with samples collected 11/30/99 and submitted for dioxin/dibenzofuran analysis did not include a record of the courier airbill number. The field sampling crew provided that information in a separate memo that was included in the project file.

In the case of samples collected 10/7/99 and submitted for dioxin/dibenzofuran analysis, the sample custodian for Triangle Labs did not sign the chain-of-custody receipt block to indicate that the laboratory received the samples. The laboratory indicated that samples associated with the affected chain-of-custodies were received on 10/8/99 and were logged in by an employee who was unaware that each block required a signature by the sample custodian. The Triangle chain-of-custody, which was created at the time of sample receipt, provides the date received for each sample (10/8/99), which can be traced back to the unsigned external chain-of-custody. Sample data associated with this excursion were not qualified during the data validation process.

2.2. VOC analysis of waste samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for VOCs analyzed by USEPA Method 8260B were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times, sample preservation, and percentage solids
- GC/MS tuning criteria
- Initial and continuing calibration
- Blank analysis
- Surrogate recovery
- LCS analysis
- Target analyte identification, quantitation, reported detection limits, and system performance
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2 and any additional observations are summarized below.

MS/MSD analysis

As a result of an MS/MSD RPD excursion, the result for 2-hexanone in sample WASTE-N-B2-0-0.5FT was qualified as approximate (UJ) to indicate a minor precision excursion. The following table presents the target analyte qualified as a result of the MS/MSD excursion:

Table 2. *MS/MSD excursion for VOC analyses in waste samples*

MS/MSD ID	Analyte	Excursion	Affected Sample	Action
WASTE-N-B2-0-0.5FT	2-hexanone	38 RPD	WASTE-N-B2-0-0.5FT	UJ

Note: RPD indicates relative percent difference

Internal standards performance

Recoveries for internal standards in samples were outside of the laboratory control limits. As a result of the internal standard excursions, affected target analytes were qualified as approximate (UJ) to indicate minor accuracy excursions. The internal standard excursions are summarized in the following table:

Table 3. *Internal standard area excursions for VOC analyses in waste samples*

Sample ID	Internal standard	Excursion	Affected Analytes	Action
WASTE-L-B3-0-0.5FT	Chlorobenzene-d5	41 %R	For affected target analytes see below	UJ
WASTE-H-B1-0-0.5FT	Chlorobenzene-d5	47 %R	For affected target analytes see below	UJ

Note:
%R indicates percentage recovery.

The analytes affected by internal standard chlorobenzene-d5 include the following: dibromochloromethane, bromoform, 2-hexanone, tetrachloroethene, 1,1,2,2-tetrachloroethane, chlorobenzene, ethylbenzene, styrene, xylenes.

Sample re-analysis

Samples were reanalyzed due to analysis excursions detected by the laboratory. The following table summarizes the samples reanalyzed.

Table 4. *Waste samples reanalyzed for VOCs*

Sample ID	Reason for re-analysis
WASTE-L-B3-0-0.5FT WASTE-H-B1-0-0.5FT	Internal standard excursions were detected in the initial analysis; additional excursions were detected in the re-analysis results; therefore, the initial analysis was reported.
WASTE-H-B3-0-0.5FT	Internal standard excursions were detected in the initial analysis; excursions were not detected in the re-analysis results; therefore, the re-analysis was reported.

Overall data assessment

- The result for 2-hexanone in sample WASTE-N-B2-0-0.5FT was qualified as approximate (UJ) due to a precision excursion detected in the MS/MSD analysis.
- The results for affected target analytes in samples WASTE-L-B3-0-0.5FT and WASTE-H-B1-0-0.5FT were qualified as approximate (UJ) due to internal standard excursions.
- Samples WASTE-L-B3-0-0.5FT, WASTE-H-B1-0-0.5FT, and WASTE-H-B3-0-0.5FT were reanalyzed due to analysis excursions.

2.3. SVOC analyses of waste samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for SVOCs analyzed by USEPA Method 8270C were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times, sample preservation, and percentage solids
- GC/MS tuning criteria
- Initial and continuing calibration
- Surrogate recovery
- LCS analysis
- Internal standards performance
- Target analyte identification, quantitation, and system performance
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Blank analysis
Samples which contained benzo(g,h,i)perylene at less than five times the blank concentration were qualified as undetected (U) due to the blank contamination. The blank excursions are summarized in the following table:

Table 5. *Blank excursions for SVOC analyses in waste samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
1206B MB	Benzo(g,h,i)perylene	37 µg/Kg	WASTE-N-B2-0-0.5FT WASTE-N-B3-0-0.5FT WASTE-N-B4-0-0.5FT WASTE-N-B4-0-0.5FTFD	U

Note:
MB indicates method blank.

MS/MSD analysis
Target analytes in samples utilized for MS/MSD samples were qualified as approximate (UJ, J) to indicate minor accuracy or precision excursions. In addition, the nondetected result for 2,4-dinitrophenol in sample WASTE-H-B4-0-0.5FT was rejected (R) since the recovery for 2,4-dinitrophenol in the MS/MSD sample was less than 10%. The laboratory control sample associated with the sample met criteria, and the sample was reanalyzed with similar results. Therefore, matrix interference is suspected to have been the cause of the major accuracy excursion. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 6. *MS/MSD excursions for SVOC analyses in waste samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
WASTE-H-B4-0-0.5FT	2,4-dinitrophenol	4 %R, 3 %R	WASTE-H-B4-0-0.5FT	R
WASTE-H-B4-0-0.5FT	dimethylphthalate	38 %R, 47 %R	WASTE-H-B4-0-0.5FT	UJ
	n-nitrosodiphenylamine	44 %R, 50 %R		UJ
	butylbenzylphthalate	44 %R, 53 %R		UJ
	benzo(a)anthracene	49 %R, 49 %R		J
	chrysene	47 %R, 50 %R		J
WASTE-N-B2-0-0.5FT	1,2,4-trichlorobenzene	27 RPD	WASTE-N-B2-0-0.5FT	UJ
	2,4,6-trichlorophenol	32 RPD		UJ
	3-nitroaniline	30 RPD		UJ
	4-bromophenyl phenylether	30 RPD		UJ
	phenanthrene	43 RPD		J
	anthracene	34 RPD		J
	fluoranthene	56 RPD		J
	pyrene	45 RPD		J
	butyl benzylphthalate	29 RPD		UJ
	bis(2-ethylhexyl)phthalate	36 RPD		J
	benzo(k)fluoranthene	62 RPD		J
	indeno(1,2,3-cd)pyrene	37 RPD		J
	dibenzo(a,h)anthracene	29 RPD		J
WASTE-I-B1-0-0.5FT	dimethyl phthalate	48 %R, 43 %R	WASTE-I-B1-0-0.5FT	UJ
	butylbenzyl phthalate	54 %R, 51 %R		UJ
	chrysene	54 %R, 51 %R		J

Note: %R indicates percentage recovery.
RPD indicates relative percent difference.

Target analyte reported detection limits

Samples were analyzed at a dilution as a result of the presence of target analytes at concentrations that exceeded the calibration range. The dilutions utilized in the analysis of waste samples for SVOCs are summarized in the following table:

Table 7. *SVOCs in waste samples analyzed by dilution*

Sample ID	Dilution Used	Reason
WASTE-L-B2-0-0.5FT	1:2	High concentration of target analytes
WASTE-I-B2-0-0.5FT	Undiluted/1:4*	High concentration of 4-chloroaniline

Note:

* indicates that results from the two analyses were combined in the report; the detection limits and sample results were taken from the undiluted analysis and the results for sample results that exceeded the calibration range were taken from the dilution analysis and identified with a "D" qualifier.

Sample re-analysis

The following samples were reanalyzed due to sample analysis excursions.

Table 8. *Waste samples reanalyzed for SVOCs*

Sample ID	Reason for re-analysis
WASTE-H-B4-0-0.5FT	Re-analysis performed due to low MS/MSD recoveries; initial analysis reported since repeat analysis confirmed the initial analysis.

Overall data assessment

- The results for benzo(g,h,i) perylene in samples WASTE-N-B2-0-0.5FT, WASTE-N-B3-0-0.5FT, WASTE-N-B4-0-0.5FT, WASTE-N-B4-0-0.5FTFD were qualified for blank contamination.
- Eight results for target analytes in waste samples were qualified as approximate (UJ, J) due to MS/MSD accuracy excursions.
- Thirteen results for target analytes in waste samples were qualified as approximate (UJ, J) due to MS/MSD precision excursions.
- The nondetected result for 2,4-dinitrophenol in sample WASTE-H-B4-0-0.5FT was rejected (R) since the recovery for 2,4-dinitrophenol in the MS/MSD sample was less than 10%.
- Samples WASTE-L-B2-0-0.5FT and WASTE-I-B2-0-0.5FT were analyzed using dilutions.
- Sample WASTE-H-B4-0-0.5FT was reanalyzed due to analysis excursions.

2.4. Pesticide analysis of waste samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for pesticides analyzed by USEPA Method 8081A were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times, sample preservation, and percentage solids
- GC performance
- Analytical sequence
- Intial calibration
- Blank analysis
- LCS analysis
- Retention time window
- System performance
- Cleanup verification
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Calibration verification

The calibration vertification for endrin in the calibration of 11/3/99 on the DB-5 column was not met. The result for endrin in sample WASTE-I-B1-0-0.5FT was qualified as approximate (J) as a result of the calibration excursion to indicate a minor accuracy excursion.

The sample qualified due to the minor calibration excursion is summarized in the following table.

Table 9. *Calibration verficiation excursion for pesticides in waste samples*

Calibration ID	Standard analytes	Excursion	Affected samples	Affected analytes	Action
2105/2127 11/3/99	Endrin	18.5 %RSD (DB-5)	WASTE-I-B1-0-0.5FT	Endrin	J

Note:
%RSD indicates relative standard deviation.

Surrogate recovery

Recoveries for surrogates in waste sample WASTE-N-B3-0-0.5FT were outside of the laboratory control limits. As a result of the surrogate recovery excursions, target analytes were qualified as approximate (UJ) to indicate minor accuracy excursions. The surrogate recovery excursions are summarized in the following table:

Table 10. *Surrogate excursion for pesticide analysis in waste samples*

Sample ID	Surrogate	Excursion	Affected analytes	Action
WASTE-N-B3-0-0.5FT	DCB	27 %R (DB-608)	Target analytes	UJ
	TCMX	23 %R (DB-5), 23 %R (DB-608)		

Note: %R indicates percentage recovery.
DCB indicates decachlorobiphenyl.
TCMX indicates 2,4,5,6-tetrachloro-m-xylene.

MS/MSD analysis

The result for 4,4'-DDT in MS/MSD sample WASTE-N-B2-0-0.5FT was qualified as approximate (J) to indicate a minor precision excursion. The following table presents the target analyte qualified as a result of the MS/MSD excursion:

Table 11. *MS/MSD excursion for pesticide analyses in waste samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
WASTE-N-B2-0-0.5FT	4,4'-DDT	35 RPD	WASTE-N-B2-0-0.5FT	J

Note: RPD indicates relative percent difference.

Target analyte identification and quantitation

The target analyte results for sample WASTE-I-B1-0-0.5FT were rejected since the native sample was spiked by MS/MSD spiking solution during preparation due to a laboratory error. The results for this sample are not usable. The following table presents the identification and quantitation excursion:

Table 12. *Identification and quantitation excursion for pesticide analyses in waste samples*

Sample ID	Excursion	Affected Samples	Action
WASTE-I-B1-0-0.5FT	Sample spiked with MS/MSD solution during preparation due to laboratory error.	WASTE-I-B1-0-0.5FT	R

Confirmation analysis

For target analytes that were detected by the laboratory but were at concentrations that were less than the reported detection limit, the laboratory applied a "J" flag to the analyte result. During the validation process, the "J" flag was retained since the concentration is considered to be approximate. Due to the numerous values reported by the laboratory below the reported detection limits, if the RPD values were greater than 40% for the confirmation analysis and the target analyte concentration was flagged "J", additional validation qualifiers were not applied to the sample data.

The %RPD values calculated for positive results from the two chromatographic columns (DB608, DB5) in waste sample analyses were greater than 40% indicating confirmation excursions. Target analytes with a %RPD greater than 40% were qualified as approximate (J) to indicate minor representativeness excursions. The analyte identification excursions are summarized in the following table:

Table 13. *Analyte identification excursions for pesticide analyses in waste samples*

Sample ID	Analyte	Excursion	Action
WASTE-I-B2-0-0.5FT	Endrin aldehyde	46 RPD	J
WASTE-I-B3-0-0.5FT	Endrin ketone	117 RPD	J
	Endrin aldehyde	46 RPD	
WASTE-L-B1-0-0.5FT	Endrin ketone	91 RPD	J
WASTE-L-B2-0-0.5FT	Beta-BHC	55 RPD	J
	Heptachlor epoxide	89 RPD	
	Gamma chlordane	60 RPD	
WASTE-L-B4-0-0.5FT	Gamma chlordane	46 RPD	J
WASTE-H-B1-0-0.5FT	4,4'-DDT	67 RPD	J
WASTE-H-B2-0-0.5FT	4,4'-DDT	53 RPD	J
WASTE-H-B4-0-0.5FT	Heptachlor epoxide	109 RPD	J
	4,4'-DDT	98 RPD	
	Methoxychlor	47 RPD	
	Endrin ketone	88 RPD	
	Gamma chlordane	54 RPD	
WASTE-N-B2-0-0.5FT	Methoxychlor	57 RPD	J

Note:
RPD indicates relative percent difference.

Target analyte reported detection limits

Samples were analyzed at a dilution as a result of the presence of matrix interference or due to concentrations of target analytes that exceeded the calibration limit. The dilutions utilized in the analysis of waste samples for pesticides are summarized in the following table:

Table 14. *Pesticides in waste samples analyzed by dilution*

Sample ID	Dilution Used	Reason
WASTE-I-B2-0-0.5FT	1:200	Matrix interference
WASTE-I-B3-0-0.5FT	1:5	Matrix interference
WASTE-I-B4-0-0.5FT	1:5	Matrix interference or elevated target concentrations
WASTE-I-B4-0-0.5FTFD	1:5	Matrix interference or elevated target concentrations
WASTE-L-B1-0-0.5FT	1:5	Matrix interference or elevated target concentrations
WASTE-L-B2-0-0.5FT	1:5	Matrix interference or elevated target concentrations
WASTE-L-B4-0-0.5FT	1:5	Matrix interference or elevated target concentrations
WASTE-H-B1-0-0.5FT	1:5	Matrix interference or elevated target concentrations
WASTE-H-B4-0-0.5FT	1:5	Matrix interference or elevated target concentrations
WASTE-N-B2-0-0.5FT	1:2	Matrix interference or elevated target concentrations

Overall data assessment

- The result for endrin in sample WASTE-I-B1-0-0.5FT was qualified as approximate (J) due to a calibration excursion.
- Target analytes in sample WASTE-N-B3-0-0.5FT were qualified as approximate (UJ) due to surrogate recovery excursions.
- The result for 4,4'-DDT in sample WASTE-N-B2-0-0.5FT was qualified as approximate (J) due to an MS/MSD precision excursion.
- The target analytes in sample WASTE-I-B1-0-0.5FT were rejected (R) since the native sample was spiked by MS/MSD spiking solution during preparation due to a laboratory error.
- Sixteen results for target analytes in waste samples were qualified as approximate (J) due to confirmation excursions.
- Dilution analyses were performed for the following samples: WASTE-I-B2-0-0.5FT, WASTE-I-B3-0-0.5FT, WASTE-I-B4-0-0.5FT, WASTE-I-B4-0-0.5FTFD, WASTE-L-B1-0-0.5FT, WASTE-L-B2-0-0.5FT, WASTE-L-B4-0-0.5FT, WASTE-H-B1-0-0.5FT, WASTE-H-B4-0-0.5FT, WASTE-N-B2-0-0.5FT.

2.5. Herbicide analysis of waste samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for herbicides analyzed by USEPA Method 8151A were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Sample preservation and percentage solids
- GC performance

- Analytical sequence
- Initial calibration
- Blank analysis
- Retention time window
- Target analyte identification, quantitation, and system performance
- Cleanup verification
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below:

Holding times
Holding times were evaluated based on sample collection, extraction, and analysis dates. The result for the target analytes in waste sample WASTE-N-B2-0-0.5FT which was extracted outside of the holding time were qualified as approximate (UJ, J) to indicate a minor representativeness excursion. The following table summarizes the holding time excursion.

Table 15. *Holding time excursion for herbicides in waste samples*

Sample ID	Target analyte	Excursion	Action
WASTE-N-B2-0-0.5FT	Target analytes	25 days outside of extraction holding time	UJ, J

Calibration verification
The calibration verification criterion for MCPA in the calibration verification analysis for 11/14/99 on both the DB-608 and DB-5 columns was not met. The results for MCPA in samples WASTE-I-B2-0-0.5FT and WASTE-I-B3-0-0.5FT were qualified as approximate (UJ) to indicate minor accuracy excursions. The samples qualified due to the minor calibration excursions are summarized in the following table.

Table 16. *Calibration verification excursions for herbicides in waste samples*

Calibration verification ID	Standard analytes	Excursion	Affected samples	Action
11/14/99	MCPA	30.4 %D (DB-608)	WASTE-I-B2-0-0.5FT	UJ
1821CCV		26.1 %D (DB-5)	WASTE-I-B3-0-0.5FT	UJ

Note:
%D indicates percent difference.

Surrogate recovery
Recoveries for surrogates in waste samples were outside of the laboratory control limits. As a result of the surrogate recovery excursions, target analytes were qualified as approximate (UJ) to indicate minor accuracy excursions. The surrogate recovery excursions are summarized in the following table:

Table 17. *Surrogate excursion for herbicide analysis in waste samples*

Sample ID	Surrogate	Excursion	Affected analytes	Action
WASTE-G-B3-0-0.5FT	DCAA	22 %R (DB-608) 19 %R (DB-5)	Target analytes	UJ
WASTE-G-B4-0-0.5FT	DCAA	21 %R (DB-608) 17 %R (DB-5)	Target analytes	UJ

Note: %R indicates percentage recovery.
DCAA indicates 2,4-dichlorophenylacetic acid

MS/MSD analysis

The results for target analytes in MS/MSD samples WASTE-H-B4-0-0.5FT and WASTE-I-B1-0-0.5FT were qualified as approximate (UJ, J) to indicate minor precision excursions. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 18. *MS/MSD excursions for herbicide analyses in waste samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
WASTE-H-B4-0-0.5FT	Dalapon	76 RPD	WASTE-H-B4-0-0.5FT	UJ
	Dicamba	52 RPD		UJ
	2,4,5-TP	52 RPD		UJ
	Dinoseb	41 RPD		UJ
	2,4-DB	70 RPD		J
WASTE-I-B1-0-0.5FT	MCPP	99 RPD	WASTE-I-B1-0-0.5FT	UJ
	Dicamba	79 RPD		UJ
	MCPA	78 RPD		UJ
	Dichloroprop	82 RPD		UJ
	2,4-D	66 RPD		UJ
	Pentachlorophenol	91 RPD		J
	2,4,5-TP	140 RPD		UJ
	2,4,5-T	73 RPD		UJ
	Dinoseb	81 RPD		UJ
	2,4-DB	70 RPD		UJ

Note: RPD indicates relative percent difference.

LCS analysis

Recoveries for target analytes in one LCS analysis were outside of the laboratory control limits. The target analytes in the samples associated with the LCS were qualified as approximate (UJ) to indicate minor accuracy excursions. The LCS excursions are summarized in the following table:

Table 19. *LCS excursions for herbicide analyses in waste samples*

LCS ID	Analyte	Excursion	Affected Samples	Action
1021P	MCPP	14 %R	WASTE-I-B1-0-0.5FT	UJ
	MCPA	27 %R	WASTE-I-B2-0-0.5FT	
	2,4-DB	19 %R	WASTE-I-B3-0-0.5FT	
			WASTE-I-B4-0-0.5FT	
			WASTE-I-B4-0-0.5FTFD	

Note:
%R indicates percentage recovery.

Confirmation analysis

For target analytes that were detected by the laboratory but were at concentrations that were less than the reported detection limit, the laboratory applied a "J" flag to the analyte result. During the validation process, the "J" flag was retained since the concentration is considered to be approximate.

One RPD value calculated for positive results from the two chromatographic columns (DB608, DB5) in waste sample WASTE-I-B4-0-0.5FTFD was greater than 40% indicating a confirmation excursion. The target analyte with an RPD greater than 40% was qualified as approximate (J) to indicate a minor representativeness excursion. The analyte identification excursion is summarized in the following table:

Table 20. *Analyte confirmation excursion for herbicide analyses in waste samples*

Sample ID	Analyte	Excursion	Action
WASTE-I-B4-0-0.5FTFD	2,4-DB	121 RPD	J

Note:
RPD indicates relative percent difference.

Target analyte reported detection limits

Samples were analyzed at a dilution due to concentrations of target analytes that exceeded the calibration limit. The dilutions utilized in the analysis of waste samples for herbicides are summarized in the following table:

Table 21. *Herbicides in waste samples analyzed by dilution*

Sample ID	Dilution Used	Reason
WASTE-N-B1-0-0.5FT	Undiluted/1:5*	High concentration of pentachlorophenol
WASTE-I-B2-0-0.5FT	1:20	High concentration of target analytes

Note:
* indicates that results from the two analyses were combined in the report; the detection limits and sample results were taken from the undiluted analysis and the results for sample results that exceeded the calibration range were taken from the larger dilution analysis and identified with a "D" qualifier.

Sample re-analysis

The following samples were reanalyzed due to sample analysis excursions.

Table 22. *Waste samples reanalyzed for herbicides*

Sample ID	Reason for re-analysis
WASTE-N-B2-0-0.5FT	Sample was re-extracted to confirm suspicion that the sample was mislabeled during the sample preparation process since the results were not similar to the MS/MSD results. The re-extraction analysis was reported.
Waste samples in SDG SIL013	Samples were re-extracted due to LCS excursions. The initial analyses were reported since the re-extraction analysis did not provide improved LCS recovery results.
WASTE-G-B3-0-0.5FT WASTE-G-B4-0-0.5FT	Samples were re-extracted due to surrogate excursions. Initial analyses were reported since the re-extraction analysis did not provide improved surrogate recovery results.

Overall data assessment

- The result for the target analytes in waste sample WASTE-N-B2-0-0.5FT were qualified as approximate (UJ, J) due to a holding time excursion.
- The results for MCPA in samples WASTE-I-B2-0-0.5FT and WASTE-I-B3-0-0.5FT were qualified as approximate (UJ) due to a calibration verification excursion.
- Target analytes in samples WASTE-G-B3-0-0.5FT and WASTE-G-B4-0-0.5FT were qualified as approximate (UJ) due to surrogate recovery excursions.
- Fifteen results for target analytes in waste samples were qualified as approximate (UJ, J) due to MS/MSD precision excursions.
- Fifteen results for target analytes in waste samples were qualified as approximate (UJ) due to an LCS excursion.
- The result for 2,4-DB in WASTE-I-B4-0-0.5FTFD was qualified as approximate (J) due to a confirmation excursion.
- Samples WASTE-N-B1-0-0.5FT and WASTE-I-B2-0-0.5FT were analyzed at a dilution.
- Samples WASTE-N-B2-0-0.5FT, WASTE-G-B3-0-0.5FT, WASTE-G-B4-0-0.5FT, and the samples in SDG SIL013 were reanalyzed due to analysis excursions.

2.6. PCB analysis of waste samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for PCBs analyzed by USEPA Method 680 were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times, sample preservation, and percentage solids
- GC/MS tuning and window-defining criteria
- Initial and continuing calibration
- Blank analysis
- Surrogate recovery
- LCS analysis
- Sample data identification, quantitation, and system performance
- Sample re-analysis

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

MS/MSD analysis

Target analytes MS/MSD samples were qualified as approximate (UJ) to indicate minor accuracy excursions. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 23. *MS/MSD excursions for PCB analyses in waste samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
WASTE-N-B2-0-0.5FT	HXCB	36 %R, 38 %R	WASTE-N-B2-0-0.5FT	UJ
	OCB	38 %R, 39 %R	WASTE-N-B2-0-0.5FT	UJ

Note: %R indicates percentage recovery.
HXCB indicates hexachlorobiphenyl
OCB indicates octachlorobiphenyl

Internal standards criteria

Target analytes associated with internal standards recoveries that were outside of the laboratory control limits were qualified as approximate (J) to indicate minor accuracy excursions. The following table summarizes the internal standard excursions.

Table 24. *Internal standard excursions for PCBs in waste samples*

Sample ID	Internal standard	Excursion	Affected analytes	Action
WASTE-L-B2-0-0.5FT	Chrysene-d12	146 %R	TRCB PTCB HXCB HPCB	J
WASTE-I-B3-0-0.5FT	Chrysene-d12	132 %R	TCB TRCB PTCB HXCB HPCB OCB	J

Note:
%R indicates percentage recovery.
TCB indicates trichlorobiphenyl
TRCB indicates tetrachlorobiphenyl
PTCB indicates pentachlorobiphenyl
HXCB indicates hexachlorobiphenyl
HPCB indicates heptachlorobiphenyl
OCB indicates octachlorobiphenyl

Target analyte reported detection limits

The following table presents the samples analyzed by dilution due to matrix interferences or concentrations of target analytes that exceeded the calibration limit.

Table 25. *PCBs in waste samples analyzed by dilution*

Sample ID	Target analytes	Dilution	Reason
WASTE-L-B1-0-0.5FT	Target analytes	1:50	Matrix interference
WASTE-L-B2-0-0.5FT	Target analytes	1:5	Matrix interference or elevated target concentrations
WASTE-L-B4-0-0.5FT	Target analytes	1:10	Matrix interference or elevated target concentrations
WASTE-H-B4-0-0.5FT	Target analytes	1:10	Matrix interference or elevated target concentrations
WASTE-I-B1-0-0.5FT	Target analytes	1:50	Matrix interference or elevated target concentrations
WASTE-I-B2-0-0.5FT	Target analytes	1:50	Matrix interference or elevated target concentrations
WASTE-I-B3-0-0.5FT	Target analytes	1:10	Matrix interference or elevated target concentrations
WASTE-I-B4-0-0.5FT	Target analytes	1:10	Matrix interference or elevated target concentrations
WASTE-I-B4-0-0.5FTFD	Target analytes	1:10	Matrix interference or elevated target concentrations

Data completeness

The results for trichlorobiphenyl in sample WASTE-I-B2-0-0.5FT was revised due to a laboratory reporting error. The revision for PCBs is summarized in the following table:

Table 26. *Revised detection limit for PCBs in waste sample*

Sample ID	Revision
WASTE-I-B2-0-0.5FT	Result for trichlorobiphenyl revised to 5900 µg/Kg.

Overall data assessment

- Two results for target analytes in waste samples were qualified as approximate (UJ) due to MS/MSD accuracy excursions.
- Ten results for target analytes in waste samples were qualified as approximate (J) due to internal standard excursions.
- The following samples were analyzed by dilution: WASTE-L-B1-0-0.5FT, WASTE-L-B2-0-0.5FT, WASTE-L-B4-0-0.5FT, WASTE-H-B4-0-0.5FT, WASTE-I-B1-0-0.5FT, WASTE-I-B2-0-0.5FT, WASTE-I-B3-0-0.5FT, WASTE-I-B4-0-0.5FT, WASTE-I-B4-0-0.5FTFD.
- The result for trichlorobiphenyl in sample WASTE-I-B2-0-0.5FT was revised due to a laboratory reporting error.

2.7. Metals, mercury, and cyanide analysis of waste samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for metals analyzed by USEPA Method 6010B, mercury by USEPA Method 7471A, and cyanide by USEPA Method 9010B were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Sample preservation, and percentage solids
- Calibration analysis
- LCS analysis
- ICP interference check sample analysis
- Verification of instrument parameters
- Analyte quantitation and reported detection limits
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2 and any additional observations are summarized below.

Holding times

The result for antimony in sample WASTE-N-B2-0-0.5FT was qualified as approximate (J) due to a holding time excursion. The sample was re-digested used an alternative digestion procedure since the result for antimony was rejected in the initial analysis due to a low MS recovery. The following table summarizes the holding time excursion.

Table 27. *Holding time excursions for metals in waste samples*

Sample ID	Target analyte	Excursion	Action
WASTE-N-B2-0-0.5FT	antimony	33 days outside of extraction holding time	J

Blank analysis

Target analytes were detected in preparation, calibration, and field/equipment blanks which were analyzed for metals. The samples which contained target analytes at less than five times the associated blank concentration were qualified as not detected (U), and samples which contained target analytes at greater than five times the associated blank concentration were qualified as approximate (J) due to the blank contamination. The blank excursions are summarized in the following table:

Table 28. *Blank excursions for metal analyses in waste samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
PBS-2 10/13/99	Aluminum	6.0 mg/Kg	WASTE-L-B1-0-0.5FT WASTE-L-B2-0-0.5FT WASTE-L-B3-0-0.5FT WASTE-L-B4-0-0.5FT WASTE-H-B1-0-0.5FT WASTE-H-B2-0-0.5FT WASTE-H-B3-0-0.5FT WASTE-H-B4-0-0.5FT	J
CCB6/CCB8 1/8/00	Thallium	7.27 µg/L	WASTE-N-B3-0-0.5FT WASTE-N-B4-0-0.5FTFD	U
WASTE-N-B4-0-0.5FTEB	Beryllium Sodium	0.0011 mg/L 0.47 mg/L	WASTE-N-B1-0-0.5FT WASTE-N-B2-0-0.5FT WASTE-N-B3-0-0.5FT WASTE-N-B4-0-0.5FT WASTE-N-B4-0-0.5FTFD	U
	Calcium Copper Iron Zinc	0.39 mg/L 0.0017 mg/L 0.031 mg/L 0.0063 mg/L	WASTE-N-B1-0-0.5FT WASTE-N-B2-0-0.5FT WASTE-N-B3-0-0.5FT WASTE-N-B4-0-0.5FT WASTE-N-B4-0-0.5FTFD	J
PB 10/21/99	Aluminum	13.1 mg/Kg	WASTE-I-B1-0-0.5FT WASTE-I-B2-0-0.5FT WASTE-I-B3-0-0.5FT WASTE-I-B4-0-0.5FT WASTE-I-B4-0-0.5FTFD	J
	Tin	1.73 mg/Kg	WASTE-I-B1-0-0.5FT WASTE-I-B2-0-0.5FT WASTE-I-B3-0-0.5FT WASTE-I-B4-0-0.5FT WASTE-I-B4-0-0.5FTFD	J

Table 28. *Blank excursions for metal analyses in waste samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
CCB4/CCB6 10/14/99	Aluminum Barium Chromium Manganese vanadium	91.5 µg/L 2.28 µg/L 2.25 µg/L 2.96 µg/L 2.61 µg/L	WASTE-G-B1-0-0.5FT WASTE-G-B2-0-0.5FT WASTE-G-B3-0-0.5FT WASTE-G-B4-0-0.5FT WASTE-G-B1-0-0.5FTFD	J
WASTE-G-B-0-0.5FTEB	Calcium Iron	25 mg/Kg 2.7 mg/Kg	WASTE-G-B1-0-0.5FT WASTE-G-B2-0-0.5FT WASTE-G-B3-0-0.5FT WASTE-G-B4-0-0.5FT WASTE-G-B1-0-0.5FTFD	J
	Sodium	50 mg/Kg	WASTE-I-B1-0-0.5FT WASTE-I-B2-0-0.5FT WASTE-I-B3-0-0.5FT WASTE-I-B4-0-0.5FT WASTE-I-B4-0-0.5FTFD	U
WASTE-I-B4-0-0.5FTEB	Calcium Sodium	20 mg/Kg 41 mg/Kg	WASTE-G-B1-0-0.5FT WASTE-G-B2-0-0.5FT WASTE-G-B3-0-0.5FT WASTE-G-B4-0-0.5FT WASTE-G-B1-0-0.5FTFD	J

Note:
CCB indicates continuing calibration blank.
PB indicates method (preparation) blank.
EB indicates field/equipment blank.

MS/MSD analysis

Target analytes in MS samples analyzed for metals were outside of the laboratory control limits. Post-digestion spikes analyses met method criteria, which confirmed the matrix interference for these samples. When the sample concentrations were less than four times the spike concentrations, target analytes with MS recoveries that were outside of control limits, but are greater than 30% were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The non-detected result for antimony in sample WASTE-N-B2-0-0.5FT was rejected (R) due to MS/MSD recoveries of less than 30%. The laboratory re-digested the sample using an alternative digestion procedure. Analysis of the re-digested samples provided MS recoveries that met the laboratory criteria. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 29. *MS/MSD excursions for metal in waste samples*

MS/MSD ID	Analyte	Excursion	Affected Sample	Action
WASTE-L-B4-0-0.5FT	Antimony	29 %R, 32 %R	WASTE-L-B1-0-0.5FT WASTE-L-B2-0-0.5FT WASTE-L-B3-0-0.5FT WASTE-L-B4-0-0.5FT WASTE-H-B1-0-0.5FT WASTE-H-B2-0-0.5FT WASTE-H-B3-0-0.5FT	J
	Cadmium	150 %R, 196 %R	WASTE-L-B1-0-0.5FT WASTE-L-B2-0-0.5FT WASTE-L-B3-0-0.5FT WASTE-L-B4-0-0.5FT WASTE-H-B1-0-0.5FT WASTE-H-B2-0-0.5FT WASTE-H-B3-0-0.5FT WASTE-H-B4-0-0.5FT	J
	Chromium	250 %R, 187 %R	WASTE-L-B1-0-0.5FT WASTE-L-B2-0-0.5FT WASTE-L-B3-0-0.5FT WASTE-L-B4-0-0.5FT WASTE-H-B1-0-0.5FT WASTE-H-B2-0-0.5FT WASTE-H-B3-0-0.5FT WASTE-H-B4-0-0.5FT	J
WASTE-N-B1-0-0.5FT	Antimony	49 %R, 40 %R	WASTE-N-B1-0-0.5FT WASTE-N-B3-0-0.5FT WASTE-N-B4-0-0.5FT WASTE-N-B4-0-0.5FTFD	UJ
WASTE-N-B2-0-0.5FT	Antimony	26 %R; 26 %R	WASTE-N-B2-0-0.5FT	R*
	Lead	291 %R, 400 %R	WASTE-N-B2-0-0.5FT	J
	Molybdenum	71 %R, 74 %R	WASTE-N-B2-0-0.5FT	J
WASTE-I-B1-0-0.5FT	Antimony	57 %R, 52 %R	WASTE-I-B1-0-0.5FT WASTE-I-B2-0-0.5FT WASTE-I-B3-0-0.5FT WASTE-I-B4-0-0.5FT WASTE-I-B4-0-0.5FTFD	J
Batch 16797-1	Antimony	24 %R, 38 %R	WASTE-G-B1-0-0.5FT WASTE-G-B2-0-0.5FT WASTE-G-B3-0-0.5FT WASTE-G-B4-0-0.5FT WASTE-G-B1-0-0.5FTFD	UJ, J

Note: %R indicates percentage recovery.
* indicates that the laboratory re-digested the affected sample using an alternative digestion procedure. Analysis of the re-digested sample provided data that met the laboratory criteria. These data were reported for antimony.

Laboratory duplicate analysis

Laboratory duplicate results were outside of the control limits of 20 RPD for target analytes greater than five times the reported detection limit and ± the reporting limit for target analytes less than five times the reported detection limit. The MS/MSD RPD results were utilized to evaluate precision. The results for the analytes in the associated samples were qualified as approximate (J) to indicate minor precision excursions. The laboratory duplicate excursions are summarized in the following table:

Table 30. *Laboratory duplicate excursions for metal analyses in waste samples*

Laboratory duplicate ID	Analyte	Excursion	Affected samples	Action
WASTE-L-B4-0-0.5FT	Lead Molybdenum	30 RPD 32 RPD	WASTE-L-B1-0-0.5FT WASTE-L-B2-0-0.5FT WASTE-L-B3-0-0.5FT WASTE-L-B4-0-0.5FT WASTE-H-B1-0-0.5FT WASTE-H-B2-0-0.5FT WASTE-H-B3-0-0.5FT WASTE-H-B4-0-0.5FT	J
	Silver	26 RPD	WASTE-L-B1-0-0.5FT WASTE-L-B2-0-0.5FT WASTE-L-B3-0-0.5FT WASTE-L-B4-0-0.5FT WASTE-H-B1-0-0.5FT WASTE-H-B2-0-0.5FT WASTE-H-B3-0-0.5FT WASTE-H-B4-0-0.5FT	J UJ UJ J J UJ J J
WASTE-N-B1-0-0.5FT	Barium Calcium Lead Magnesium Manganese Sodium	26 RPD 23 RPD 124 RPD 28 RPD 38 RPD 23 RPD	WASTE-N-B1-0-0.5FT WASTE-N-B3-0-0.5FT WASTE-N-B4-0-0.5FT WASTE-N-B4-0-0.5FTFD	J
WASTE-N-B2-0-0.5FT	Copper Lead Manganese Zinc	30 RPD 42 RPD 25 RPD 71 RPD	WASTE-N-B2-0-0.5FT	J
WATE-I-B1-0.5FT	Copper	63 RPD	WASTE-I-B1-0-0.5FT WASTE-I-B2-0-0.5FT WASTE-I-B3-0-0.5FT WASTE-I-B4-0-0.5FT WASTE-I-B4-0-0.5FTFD	J
Batch 16797-1	Antimony	45 RPD	WASTE-G-B1-0-0.5FT WASTE-G-B2-0-0.5FT WASTE-G-B1-0-0.5FTFD WASTE-G-B3-0-0.5FT WASTE-G-B4-0-0.5FT	J

Note:
RPD indicates relative percent difference.

ICP serial dilution analysis

The serial dilution recoveries for analytes in samples were greater than the 10%D criterion for analytes with concentrations greater than 50 times the IDL. The results for the affected analytes in the associated samples were qualified as approximate (J) to indicate minor accuracy excursions. The ICP serial dilution excursions are summarized in the following table:

Table 31. *ICP serial dilution excursions for metal analyses in waste samples*

Serial dilution ID	Analyte	Excursion	Affected samples	Action
WASTE-L-B4-0-0.5FT	Zinc	11.7 %D	WASTE-L-B1-0-0.5FT WASTE-L-B2-0-0.5FT WASTE-L-B3-0-0.5FT WASTE-L-B4-0-0.5FT WASTE-H-B1-0-0.5FT WASTE-H-B2-0-0.5FT WASTE-H-B3-0-0.5FT WASTE-H-B4-0-0.5FT	J
WASTE-N-B2-0-0.5FT	Zinc	13.0 %D	WASTE-N-B1-0-0.5FT WASTE-N-B2-0-0.5FT WASTE-N-B3-0-0.5FT WASTE-N-B4-0-0.5FT WASTE-N-B4-0-0.5FTFD	J
Batch 16791-1	Zinc	15.4 %D	WASTE-G-B1-0-0.5FT WASTE-G-B2-0-0.5FT WASTE-G-B1-0-0.5FTFD WASTE-G-B3-0-0.5FT WASTE-G-B4-0-0.5FT	J
Note: %D indicates percent difference.				

Field duplicate analysis

Field duplicate results were outside of the laboratory control limits of 20 RPD for target analytes greater than five times the reported detection limit and ± the reporting limit for target analytes less than five times the reported detection limit. The results for the analytes in the associated samples were qualified as approximate (J) to indicate minor precision excursions. The field duplicate excursions are summarized in the following table:

Table 32. *Field duplicate excursions for metal analyses in waste samples*

Field duplicate ID	Analyte	Excursion	Affected samples	Action
WASTE-N-B4-0-0.5FTFD	Arsenic Barium Calcium Chromium Iron	25 RPD 43 RPD 38 RPD 22 RPD 29 RPD	WASTE-N-B1-0-0.5FT WASTE-N-B2-0-0.5FT WASTE-N-B3-0-0.5FT WASTE-N-B4-0-0.5FT WASTE-N-B4-0-0.5FTFD	J
WASTE-G-B1-0-0.5FTFD	Copper	69 RPD	WASTE-G-B1-0-0.5FT WASTE-G-B2-0-0.5FT WASTE-G-B1-0-0.5FTFD WASTE-G-B3-0-0.5FT WASTE-G-B4-0-0.5FT	J

Table 32. *Field duplicate excursions for metal analyses in waste samples*

Field duplicate ID	Analyte	Excursion	Affected samples	Action
WASTE-I-B4-0-0.5FTFD	Aluminum	24 RPD	WASTE-I-B1-0-0.5FT	J
	Antimony	33 RPD	WASTE-I-B2-0-0.5FT	
	Arsenic	29 RPD	WASTE-I-B3-0-0.5FT	
	Beryllium	36 RPD	WASTE-I-B4-0-0.5FT	
	Cadmium	25 RPD	WASTE-I-B4-0-0.5FTFD	
	Chromium	31 RPD		
	Copper	55 RPD		
	Iron	28 RPD		
	Lead	35 RPD		
	Magnesium	32 RPD		
	Molybdenum	57 RPD		
	Nickel	21 RPD		
	Potassium	29 RPD		
	Silver	51 RPD		
	Tin	26 RPD		
	Vanadium	24 RPD		
	Zinc	47 RPD		

Note:
RPD indicates relative percent difference.

Overall data assessment

- The result for antimony in sample WASTE-N-B2-0-0.5FT was qualified as approximate (J) due to a holding time excursion.
- One hundred results for target analytes in waste samples were qualified as non-detected (U) or as approximate (J) due to blank contamination:
- Forty results for target analytes in waste samples were qualified as approximate (UJ, J) due to MS/MSD recovery excursions:
- Sixty-two results for target analytes were qualified as approximate (UJ, J) due to laboratory duplicate precision excursions.
- The results for zinc in 18 waste samples were qualified as approximate (J) due to serial dilution accuracy excursions.
- One hundred fifteen results for target analytes were qualified as approximate (J) due to field duplicate excursions.

2.8. PCDD and PCDF analysis of waste samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for PCDD and PCDFs analyzed by USEPA Method 8280A were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Sample preservation and percentage solids
- Instrument performance (mass resolution, GC column performance check)
- Initial and continuing calibration
- Blank analysis
- Internal standard criteria

- Surrogate/alternative/cleanup standard recovery
- Duplicate analysis
- MS/MSD analysis
- Sample data (identification)
- Estimated detection limits
- Estimated maximum possible concentration (EMPC)
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Holding times

Holding times were evaluated based on sample collection, extraction, and analysis dates. The result for OCDD in sample WASTE-N-B1-0-0.5FT, which was extracted outside of the holding time, was qualified as approximate (J) to indicate a minor representativeness excursion. The following table summarizes the holding time excursion.

Table 33. *Holding time excursion for PCDDs and PCDFs in waste samples*

Sample ID	Target analyte	Excursion	Action
WASTE-N-B1-0-0.5FT	OCDD	126 days outside of extraction holding time	J

Note:
OCDD indicates octachlorodibenzo-p-dioxin

Recovery standard criteria

The recovery standard areas for several samples were outside of the criteria of 50% to 200% of the associated continuing calibration. As a result of recovery standard excursions, analytes in the affected samples were qualified as approximate (UJ, J) to indicate minor accuracy excursions.

The sample results qualified as a result of the recovery standard excursions are summarized in the following table.

Table 34. *Recovery standard area excursions for PCDDs and PCDFs in waste samples*

Sample ID	Recovery standard	Excursion	Affected analytes	Action
WASTE-G-B2-0-0.5FT	$^{13C}_{12}$1234- TCDD	35 %R	For target analytes see below	UJ
WASTE-G-B1-0-0.5FT	$^{13C}_{12}$1234- TCDD	32 %R	For target analytes see below	UJ
	$^{13C}_{12}$123789- HxCDD	30 %R	For target analytes see below	UJ, J
WASTE-G-B1-0-0.5FTFD	$^{13C}_{12}$1234- TCDD	36 %R	For target analytes see below	UJ
WASTE-G-B3-0-0.5FT	$^{13C}_{12}$1234- TCDD	35 %R	For target analytes see below	UJ
	$^{13C}_{12}$123789- HxCDD	32 %R	For target analytes see below	UJ, J
WASTE-G-B4-0-0.5FT	$^{13C}_{12}$1234- TCDD	33 %R	For target analytes see below	UJ
	$^{13C}_{12}$123789- HxCDD	31 %R	For target analytes see below	UJ, J

Table 34. *Recovery standard area excursions for PCDDs and PCDFs in waste samples*

Note:

The associated target analytes for recovery standard $^{13C}{}_{12}$1234- TCDD include 2378-TCDD, 2378-TCDF, 12378-PeCDD, 12378-PeCDF, and 23478-PeCDF.

The associated target analytes for recovery standard $^{13C}{}_{12}$123789- HxCDD include 123678-HxCDD, 123478-HxCDD, 123789-HxCDD, 1234678-HpCDD, OCDD, 123678-HxCDF, 123789-HxCDF, 123478-HxCDF, 234678-HxCDF, 1234678-HpCDF, 1234789-HpCDF, and OCDF.

%R indicates percentage recovery.
TCDD indicates tetrachlorodibenzo-p-dioxin
TCDF indicates tetrachlorodibenzofuran
PeCDD indicates pentachlorodibenzo-p-dioxin
PeCDF indicates pentachlorodibenzofuran
HxCDD indicates hexachlorodibenzo-p-dioxin
HxCDF indicates hexachlorodibenzofuran
HpCDD indicates heptachlorodibenzo-p-dioxin
HpCDF indicates heptachlorodibenzofuran
OCDD indicates octachlorodibenzo-p-dioxin
OCDF indicates octachlorodibenzofuran

LCS/LCSD analysis

The recoveries for analytes in LCS/LCSDs were outside the laboratory recovery control limits. As a result of the LCS/LCSD excursions, analytes in the associated samples were qualified as approximate (J) to indicate minor accuracy excursions. The following table summarizes the LCS/LCSD excursions.

Table 35. *LCS/LCSD excursions for PCDDs and PCDFs in waste samples*

LCS/LCSD ID	Target analyte	Excursion	Affected samples	Action
49540	23478-PeCDF	152 %R	WASTE-H-B4-0-0.5FT WASTE-L-B1-0-0.5FT WASTE-L-B3-0-0.5FT WASTE-L-B2-0-0.5FT WASTE-H-B2-0-0.5FT WASTE-H-B1-0-0.5FT	J
50022A	123789-HxCDD	159 %R, 153 %R	WASTE-N-B1-0-0.5FT	J

Note:
%R indicates percentage recovery.
PeCDF indicates pentachlorodibenzofuran
HxCDD indicates hexachlorodibenzo-p-dioxin

Second column confirmation

Although the results for 2378-TCDF in samples WASTE-L-B1-0-0.5FT and WASTE-I-B2-0-0.5FT were reported at concentrations that were above the detection limits, these results were not confirmed by Triangle Labs on the DB-225 column due to a laboratory oversight. Therefore, the results for 2378-TCDF were qualified as approximate (J) in samples WASTE-L-B1-0-0.5FT and WASTE-I-B2-0-0.5FT since the concentrations are considered to be approximate without confirmation on the appropriate column. The following table summarizes the samples qualified due to confirmation excursions.

Table 36. *PCDDs and PCDFs in waste samples qualified due to confirmation excursions*

Sample ID	Affected target analyte	Action
WASTE-L-B1-0-0.5FT	2378-TCDF	J
WASTE-I-B2-0-0.5FT		

Note:
TCDF indicates tetrachlorodibenzofuran

Sample re-analysis

In some cases, although the re-analysis of samples was indicated since high concentrations of target analytes were detected, the re-analysis was not performed by the laboratory as a result of laboratory error.

The result for OCDD in sample WASTE-H-B4-0-0.5FT was reported by Triangle Labs with a concentration that was above the calibration limit. Although sample WASTE-I-B2-0-0.5FT was originally reported using a dilution of 1:5, the results for several target analytes in sample WASTE-I-B2-0-0.5FT were reported by Triangle Labs with concentrations that were above the calibration limits. The laboratory indicated that the reanalyses were not performed due to laboratory oversight and that insufficient sample was left for re-analysis. As a result of the re-analysis excursions, the results for the affected target analytes were qualified as approximate (J), since the high concentrations should be considered approximate only. The following table summarizes the samples qualified due to the re-analysis excursions.

Table 37. *PCDDs and PCDFs in waste samples qualified due to re-analysis excursions*

Sample ID	Target analytes	Excursion	Action
WASTE-H-B4-0-0.5FT	OCDD	Target analyte concentration above calibration level	J
WASTE-I-B2-0-0.5FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	Target analyte concentration above calibration level	J

Note:
HpCDD indicates heptachlorodibenzo-p-dioxin
HpCDF indicates heptachlorodibenzofuran
OCDD indicates octachlorodibenzo-p-dioxin
OCDF indicates octachlorodibenzofuran

The following table presents the sample analyzed by dilution due to high concentration of target analytes.

Table 38. *PCDDs and PCDFs in waste sample analyzed by dilution*

Sample ID	Target analytes	Dilution	Reason
WASTE-N-B1-0-0.5FT	OCDD	1:10	High concentrations of target analytes

Note:
OCDD indicates octachlorodibenzo-p-dioxin

Overall data assessment

- The results for WASTE-N-B1-0-0.5FT were qualified as approximate (J) since the sample was extracted outside of the holding time.
- Sixty-one target analytes in waste samples were qualified as approximate (UJ, J) due to recovery standard excursions.
- The results for 23478-PeCDF in samples WASTE-H-B4-0-0.5FT, WASTE-L-B1-0-0.5FT, WASTE-L-B3-0-0.5FT, WASTE-L-B2-0-0.5FT, WASTE-H-B2-0-0.5FT, WASTE-H-B1-0-0.5FT, and the result for 123789-HxCDD in sample WASTE-N-B1-0-0.5FT were qualified as approximate (J) due to LCS/LCSD accuracy excursions.
- The results for 2378-TCDF in samples WASTE-L-B1-0-0.5FT and WASTE-I-B2-0-0.5FT were qualified as approximate (J) due to confirmation excursions.
- The result for OCDD in sample WASTE-H-B4-0-0.5FT and the results for four target analytes in sample WASTE-I-B2-0-0.5FT were qualified as approximate (J) since the concentrations reported were above the calibration limit.
- A dilution analysis was performed for sample WASTE-N-B1-0-0.5FT.

3. Ground water samples (fill area, alluvial aquifer, downgradient alluvial aquifer, bedrock, shallow residential, time series, domestic well, upgradient)

3.1. Document completeness

As a result of severe weather, the delivery of sample coolers containing samples collected for dioxin/dibenzofuran analysis on 1/24/00 (received by Triangle Labs 1/29/00), samples collected for dioxin/dibenzofuran analysis on 1/25/00 (received by Triangle Labs 1/28/00) and samples collected for dioxin/dibenzofuran analysis on 1/27/00 (received by Triangle Labs 2/1/00) were received beyond the generally accepted criterion of 48 hours from collection. Samples associated with these deviations were not qualified since cooler temperatures met criteria.

In the cases of samples collected 10/7/99 and submitted for dioxin/dibenzofuran analysis, the sample custodian for Triangle Labs did not sign the chain-of-custody receipt block to indicate that the laboratory received the samples. The laboratory indicated that samples associated with the affected chain-of-custody documents were received on 10/8/99 and were logged in by an employee who was unaware that each block required a signature by the sample custodian. The Triangle chain-of-custody, which is created at the time of sample receipt, provides the date received for each sample, which can be traced back to the unsigned external chain-of-custody. Sample data associated with this excursion were not qualified during the data validation process.

3.2. VOC analysis of ground water samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for VOCs analyzed by USEPA Method 8260B were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- GC/MS tuning criteria
- Initial and continuing calibration
- Surrogate recovery
- Internal standards performance
- Target analyte identification, quantitation and system performance
- Sample re-analysis

Excursions from QA/QC criteria presented in Section 1.2.2 and any additional observations are summarized below.

Blank analysis

Samples that contained methylene chloride or acetone at less than ten times the blank concentration and remaining analytes at less than five times the blank concentration were qualified as undetected (U) due to the blank contamination. The blank excursions are summarized in the following table:

Table 39. *Blank excursions for VOC analyses in ground water samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
101112 MB	2-Hexanone	5.1 µg/L	AA-SW-S1-14-16FT	U
2B1216 MB	1,1-Dichloroethene	0.54 µg/L	AA-I-S2-26-30FT	U
TB 12/4/99	Chlorobenzene	0.81 µg/L	AA-I-S3-24-28FT	U
TB 12/8/99	Tetrachloroethene	3.0 µg/L	AA-I-S3-54-58FT	U
1B0208 MB	Methylene chloride	3.7 µg/L	UGGW-EE-04-100FTFD	U
1B12228 MB	Methylene chloride	4.4 µg/L	AA-GHL-S3-50-54FT AA-GHL-S3-60-64FT AA-GHL-S3-80-84FT AA-I-S1-67-71FT	U
1B1230 MB	Methylene chloride	1.7 µg/L	AA-GHL-S3-90-94FT	U
1L0313 MB	2-Hexanone	9.5 µg/L	AA-I-S4-56-60FT AA-I-S4-56-60FTFD	U
TB 2/1/00	Methylene chloride	2.3 µg/L	UGGW-EEG-108-100FT	U
TB 3/16/00	Acetone	14 µg/L	AA-H-S1-93-97FT	U
TB 5/2/00	Methylene chloride	0.85 µg/L	BR-H BR-G BR-GFD BR-I	U
TB 10/22/99	Methylene chloride	0.41 µg/L	DW-MCDO-1	U
2B1216 MB	1,1-Dichloroethene	0.54 µg/L	AA-I-S2-66-70FT	U
	1,2-Dichloroethene (total)	0.92 µg/L	AA-I-S3-74-78FT AA-I-S2-66-70FT AA-I-S3-84-88FT AA-I-S3-84-88FTFD	U
TB 11/16/99	Methylene chloride	1.2 µg/L	AA-SW-S3-72-76FT AA-SW-S3-82-86FT AA-SW-S3-102-106FT	U
TB1 11/17/99	Methylene chloride	0.57 µg/L	AA-SW-S3-92-96FT AA-GHL-S1-12-16FT	U
TB2 11/18/99	Methylene chloride	0.63 µg/L	AA-GHL-S1-22-26FT AA-GHL-S1-22-26FTFD AA-SW-S3-96-99FT AA-SW-S3-96-99FTFD	U
1B1126 MB	Methylene chloride	3.0 µg/L	AA-GHL-S1-32-36FT AA-GHL-S2-12-16FT AA-GHL-S1-42-46FT AA-GHL-S2-22-26FT	U

Table 39. *Blank excursions for VOC analyses in ground water samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
1L1223 MB	Trichloroethene	0.86 µg/L	AA-GHL-S3-40-44FT AA-I-S1-17-21FT	U
TB 12/16/99	Benzene	1.1 µg/L	AA-I-S1-37-41FT	U

Note:
TB indicates trip blank.
MB indicates method blank.

MS/MSD analysis

The result for ethylbenzene in MS/MSD sample EEG-110 was qualified as approximate (UJ
to indicate a minor accuracy excursion. The following table presents the target analyte qualified as a result of the MS/MSD excursion:

Table 40. *MS/MSD excursion for VOC analyses in ground water samples*

MS/MSD ID	Analyte	Excursion	Affected Sample	Action
EEG-110	Ethylbenzene	19 RPD	EEG-110	UJ

Note:
RPD indicates relative percent difference.

LCS analysis

Recoveries for two LCS analyses were outside of the laboratory control limits. As a result of the LCS recovery excursions, affected target analytes were qualified as approximate (UJ) to indicate minor accuracy excursions. The LCS excursions are summarized in the following table:

Table 41. *LCS excursions for VOC analyses in ground water samples*

LCS ID	Analyte	Excursion	Affected Samples	Action
1B0207	Chloroethane	44 %R	UGGW-EE-20-60FT	UJ
1A1029	Bromomethane	34 %R	UGGW-EE-20 DW-MCDO-1 DW-MCDD-1FD DW-SETT-1 DW-WRIG-1	UJ

Note:
%R indicates percentage recovery.

Target analyte reported detection limits

Samples were analyzed at a dilution as a result of the presence of target analytes at concentrations that exceeded the calibration range. The dilutions utilized in the analysis of ground water samples for VOCs are summarized in the following table:

Table 42. *VOCs in ground water samples analyzed by dilution*

Sample ID	Dilution Used	Reason
AA-I-S3-44-48FT	1:2	High concentration of target analytes
AA-I-S2-36-40FT	1:100	High concentration of target analytes
AA-I-S2-16-20FT	1:5	High concentration of target analytes

Table 42. *VOCs in ground water samples analyzed by dilution*

Sample ID	Dilution Used	Reason
AA-I-S3-64-68FT	1:10	High concentration of target analytes
AA-I-S3-54-58FT	1:10	High concentration of target analytes
AA-I-S2-26-30FT	1:20	High concentration of target analytes
AA-I-S2-46-50FT	1:100	High concentration of target analytes
EEG-107	1:5/1:100*	High concentration of target analytes/High concentration of benzene, toluene, chlorobenzene
AA-I-S1-57-61FT	1:100	High concentration of target analytes
AA-I-S1-47-51FT	1:10/1:50*	High concentration of target analytes/High concentration of chlorobenzene
AA-I-S1-67-71FT	1:5./1:50*	High concentration of target analytes/High concentration of chlorobenzene
AA-I-S1-77-81FT	1:200	High concentration of target analytes
AA-I-S1-87-91FTFD	Undiluted/1:2*	High concentration of chlorobenzene
AA-I-S1-87-91FT	Undiluted/1:2*	High concentration of chlorobenzene
AA-I-S1-97-101FT	Undiluted/1:2*	High concentration of chlorobenzene
AA-H-S1-83-87FT	Undiluted/1:2*	High concentration of chlorobenzene
AA-H-S1-93-97FT	Undiluted/1:5*	High concentration of chlorobenzene
EE-01	1:20	High concentration of target analytes
EE-05	1:10	High concentration of target analytes
AA-I-S3-74-78FT	1:10/1:20*	High concentration of target analytes/High concentration of chlorobenzene
AA-I-S2-56-60FT	1:20/1:100*	High concentration of target analytes/High concentration of chlorobenzene
AA-I-S2-66-70FT	1:20/1:100*	High concentration of target analytes/High concentration of chlorobenzene
AA-I-S3-84-88FT	1:10/1:50*	High concentration of target analytes/High concentration of chlorobenzene
AA-I-S3-84-88FTFD	1:10/1:50*	High concentration of target analytes/High concentration of chlorobenzene
AA-I-S3-94-98FT	1:50	High concentration of target analytes
AA-I-S2-76-80FTFD	1:20/1:100*	High concentration of target analytes/High concentration of chlorobenzene
AA-I-S2-76-80FT	1:20/1:100*	High concentration of target analytes/High concentration of chlorobenzene
AA-GHL-S1-62-66FT	Undiluted/1:2*	High concentration of chlorobenzene
EE-12-GP	1:5/1:10*	High concentration of target analytes/High concentration of chlorobenzene
AA-I-S2-86-90FT	1:25/1:50*	High concentration of target analytes/High concentration of chlorobenzene
AA-I-S3-104-108FT	1:25/1:50*	High concentration of target analytes/High concentration of chlorobenzene
EE-02-GP	1:50	High concentration of target analytes
EE-02-GPFD	1:100	High concentration of target analytes
EE-14-GP	1:25	High concentration of target analytes

Table 42. *VOCs in ground water samples analyzed by dilution*

Sample ID	Dilution Used	Reason
EE-15-GPFD	1:2	High concentration of target analytes
EE-15-GP	1:2	High concentration of target analytes
AA-I-S2-96-100FT	1:25	High concentration of target analytes
AA-I-S1-17-21FT	1:10	High concentration of target analytes
AA-I-S3-110-114FT	1:5	High concentration of target analytes
AA-I-S1-27-31FT	1:100	High concentration of target analytes
AA-I-S1-37-41FT	1:100	High concentration of target analytes

Note:
* indicates that results from the two analyses were combined in the report; the detection limits and sample results were taken from the smaller dilution or undiluted analysis and the results for sample results that exceeded the calibration range were taken from the larger dilution analysis and identified with a "D" qualifier.

Data completeness

The results for samples AA-SW-S2-63-66FT and AA-SW-S2-62-66FTFD were corrected during the validation process since the laboratory had incorrectly labeled the results.

The results for MS/MSD sample UGGW-EE-20 were not included in the data package that STL-Savannah Labs provided. These results were requested and provided during the validation process.

Overall data assessment

- Forty results for target analytes in ground water samples were qualified for blank contamination since the following analytes were detected in method blanks and trip blanks: 2-hexanone, 1,1-dichloroethene, chlorobenzene, tetrachloroethene, methylene chloride, acetone, 1,2-dichloroethene (total), trichloroethene, benzene.
- The result for ethylbenzene in MS/MSD sample EEG-110 was qualified as approximate (UJ) due to a MS/MSD precision excursion.
- Chloroethane was qualified as approximate (UJ) in sample UGGW-EE-20-60FT and bromomethane was qualified as approximate (UJ) in samples UGGW-EE-20, DW-MCDO-1, DW-MCDD-1FD, DW-SETT-1, and DW-WRIG-1 due to LCS recovery excursions.
- Forty results for ground water samples were analyzed at a dilution due to high concentrations of target analytes.
- The results for samples AA-SW-S2-63-66FT and AA-SW-S2-62-66FTFD were corrected during the validation process since the laboratory had incorrectly labeled the results.
- The results for MS/MSD sample UGGW-EE-20 were not included in the data package that STL-Savannah Labs provided. These results were requested and provided during the validation process.

3.3. SVOC analyses of ground water

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for SVOCs analyzed by USEPA Method 8270C were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Sample preservation
- GC/MS tuning criteria
- Initial calibration
- Target analyte identification, quantitation, and system performance

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Holding times
The results for the target analytes in ground water samples AA-I-S2-96-100FT, AA-I-S2-86-90FT, and AA-I-S3-104-108FT which were extracted outside of the holding times were qualified as approximate (UJ, J) to indicate minor representativeness excursions. The following table summarizes the holding time excursions.

Table 43. *Holding time excursions for SVOCs in ground water samples*

Sample ID	Target analyte	Excursion	Action
AA-I-S2-96-100FT	Target analytes	1 day outside of extraction holding time	UJ, J
AA-I-S2-86-90FT	Target analytes	1 day outside of extraction holding time	UJ, J
AA-I-S3-104-108FT	Target analytes	1 day outside of extraction holding time	UJ, J

Continuing calibration
The result for 2,4-dinitrophenol in the continuing calibration analyzed 10/23/99 exceeded the %D criteria. As a result of the continuing calibration excursion, 2,4-dinitrophenol in sample SGW-S2-20ft was qualified as approximate (UJ) to indicate a minor accuracy excursion. The sample qualified due to a minor continuing calibration excursion is summarized in the following table.

Table 44. *Continuing calibration excursion for SVOCs in ground water samples*

Calibration ID	Standard analytes	Excursion	Affected samples	Affected analytes	Action
10/23/99 1108	2,4-dinitrophenol	55.0 %D	SGW-S2-20FT	2,4-dinitrophenol	UJ

Note:
% D indicates percent difference.

Blank analysis
Samples which contained phthalate compounds at less than ten times the blank concentration and remaining compounds at less than five times the blank concentration were qualified as undetected (U) due to the blank contamination. The blank excursions are summarized in the following table:

Table 45. *Blank excursions for SVOC analyses in ground water samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
0403A MB	acenaphthalene	0.4 µg/L	TS-S2-24HR TS-S1-24HR TS-S1-12HR	U
	dibenzofuran	0.32 µg/L	TS-S1-24HR TS-S2-24HR	U
	phenanthrene	2.3 µg/L	TS-S1-24HR TS-S2-24HR	U
	anthracene	0.42 µg/L	TS-S1-24HR TS-S2-24HR	U
	fluoranthene	1.6 µg/L	TS-S1-24HR TS-S2-24HR	U
	pyrene	1.2 µg/L	TS-S1-24HR TS-S2-24HR	U
1223A MB	benzo(g,h,i)perylene	4.6 µg/L	AA-GHL-S3-110-114FT	U
0503A MB	benzo(a)anthracene	0.33 µg/L	BR-H BR-G BR-GFD	U
	bis(2-ethyl hexyl) phthalate	16 µg/L	BR-H BR-G	U
	di-n-octyl phthalate	0.47 µg/L	BR-G	U
	benzo(b) fluoranthene	0.45 µg/L	BR-H BR-G BR-GFD	U
	benzo(b)pyrene	0.44 µg/L	BR-H BR-GFD BR-G	U
	indeno(1,2,3-cd)pyrene	0.67 µg/L	BR-G BR-GFD	U
	benzo(g,h,i)perylene	0.76 µg/L	BR-G BR-GFD	U
1105C MB	phenanthrene	0.70 µg/L	AA-SW-S1-42-46FT EEG-103-GP EEG-111-GP	U
1208C MB	indeno(1,2,3-cd)pyrene	0.57 µg/L	AA-I-S2-16-20FT AA-I-S3-24-28FT AA-I-S2-26-30FT AA-I-S3-34-38FT	U
	benzo(g,h,i)perylene	0.78 µg/L	AA-S2-16-20FT AA-S3-24-28FT AA-S3-44-48FT AA-S3-34-38FT	U
1209F MB	dibenzo(a,h)anthracene	0.87 µg/L	AA-I-S3-64-68FT	U
	benzo(g,h,i)perylene	1.2 µg/L	AA-I-S3-64-68FT	U
1221C MB	indeno(1,2,3-cd)pyrene	0.88 µg/L	AA-I-S2-96-100FT AA-I-S2-86-90FT AA-I-S3-104-108FT	U
	dibenzo(a,h)anthracene	0.91 µg/L	AA-I-S2-96-100FT AA-I-S2-86-90FT	U
	benzo(g,h,i)perylene	0.99 µg/L	AA-I-S2-96-100FT AA-I-S2-86-90FT AA-I-S3-104-108FT	U

Note:
MB indicates method blank.

Surrogate recovery

Recoveries for surrogates in sample AA-I-S2-26-30FT were outside of the laboratory control limits. As a result of the surrogate recovery excursions, affected target analytes were qualified as approximate (J) to indicate minor accuracy excursions. The following table presents the target analytes qualified as a result of the minor surrogate recovery excursions:

Table 46. *Surrogate excursions for SVOC analysis in ground water samples*

Sample ID	Surrogate	Excursion	Affected analytes	Action
AA-I-S2-26-30FT	2-fluorophenol phenol-d5	130 %R 140 %R	2-chlorophenol 2,4-dichlorophenol	J

Note: %R indicates percentage recovery.

MS/MSD analysis

An MS/MSD analysis was not performed for sample EEG-105-GP by the laboratory due to insufficient sample volume.

Target analytes in MS/MSD samples were qualified as approximate (UJ, J) to indicate minor accuracy and precision excursions. The non-detected result for hexachlorocyclopentadiene in sample BR-G and for 2,4-dinitrophenol in sample UGGW-EE-20 were rejected (R) due to recoveries of less than 10% in the MS/MSD analyses. The laboratory control sample associated with the samples met criteria. Therefore, matrix interference is suspected to have been the cause of the major accuracy excursion. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 47. *MS/MSD excursions for SVOC analyses in ground water samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
UGGW-EEG-108-60FT	n-nitrosodiphenylamine	32 RPD	UGGW-EEG-108-60FT	UJ
AA-GHL-S3-110-114FT	pentachlorophenol	38 RPD	AA-GHL-S3-110-114FT	UJ
BR-G	bis(2-chlorethoxy) methane 2,4,6-trichlorophenol 2-chloronapthalene nitrobenzene 2-nitrophenol acenaphthylene 2,6-dinitrotoluene dibenzofuran 2,4-dinitrotoluene fluorene dimethylphthalate 3,3'-dichlorobenzidine	50RPD 40 RPD 10 %R, 4 %R, 86 RPD 32 RPD 33 RPD 31 RPD 27 RPD 163 RPD 63 RPD 35 RPD 32 RPD 92 RPD	BR-G	UJ
BR-G	hexachlorocyclopentadiene	8 %R, 0 %R	BR-G	R
BR-G	1,2-dichlorobenzene 2,4-dichlorophenol	54 RPD 49 RPD	BR-G	J
UGGW-EE-20	2,4-dinitrophenol	0 %R, 0 %R	UGGW-EE-20	R
AA-SW-S3-62-66FT	dibenzofuran	22 RPD	AA-SW-S3-62-66FT	UJ

Note: %R indicates percentage recovery.
RPD indicates relative percent difference.

LCS analysis

The recovery for 3,3'-dichlorobenzine in one LCS analysis was outside of the laboratory control limits. The non-detected result for 3,3'-dichlorobenzidine in sample UGGW-EEG-108-100FT was rejected (R) due to an LCS recovery of less than 10%. The re-extractions of the sample and LCS were performed, but were not utilized since the re-extractions were performed outside twice the holding time requirement. The LCS excursion is summarized in the following table:

Table 48. *LCS excursion for SVOC analyses in ground water samples*

LCS ID	Analyte	Excursion	Affected Samples	Action
0203D	3,3'-dichlorobenzidine	6 %R	UGGW-EEG-108-100FT	R

Note:
%R indicates percentage recovery.

Internal standards performance

Twice the nominal volume of internal standard solution was added to sample UGGW-EEG-60FT. The corrected concentration of internal standard was used in the calculation of the internal standard recoveries; therefore correction of sample results was not required during the validation process.

Recoveries for internal standards in ground water samples were outside of the laboratory control limits. As a result of the internal standard excursions, affected target analytes were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The internal standard area excursions are summarized in the following table:

Table 49. *Internal standards area excursions for SVOC analyses in ground water samples*

Sample ID	Internal standard	Excursion	Analyte	Action
AA-H-S1-53-57FT	1,4-Dichlorobenzene-d4	201 %R	2-chlorophenol 1,3-dichorobenzene	J
	Naphthalane-d8	217 %R	4-chloroaniline 2,4-dichlorophenol naphthalene	J
UGGW-EE-04FD	Perylene-d12	46 %R	For affected target analytes see below	UJ
AA-I-S2-66-70FT	Acenaphthene-d10	211 %R	Fluorene	J
AA-I-S1-17-21FT	1,4-Dichlorobenzene-d4	45 %R	For affected target analytes see below	UJ, J
	Naphthalene-d8	48 %R	For undiluted affected target analytes see below	
	Acenaphthene-d10	44 %R	For affected target analytes see below	
	Phenanthrene-d10	46 %R	For affected target analytes see below	
	Chyrsene-d12	40 %R	For affected target analytes see below	
	Perylene-d12	45 %R	For affected target analytes see below	
AA-I-S1-17-21FTDL	Naphthalene-d8	209 %R	4-chloroanline (reported from dilution analysis)	J
AA-GHL-S3-40-44FT	Chyrsene-d12	44 %R	For affected target analytes see below	UJ

Table 49. *Internal standards area excursions for SVOC analyses in ground water samples*

Note:
%R indicates percentage recovery.
DL indicates dilution analysis performed for sample AA-I-S1-17-21FT.

The analytes affected by internal standard 1,4-dichlorobenzne-d4 applies to :Bis(2-chloroethyl) ether, bis(2-chloroisopropyl) ether, 2-chlorophenol, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichlorobenzene, Hexachloroethane, 2-methylphenol, 4-methylpenol, n-nitroso-di-n-propylamine, phenol

The analytes affected by internal standard naphthalene-d8 applies to: 2-Bis(2-chloroethoxy) methane, 4-chloroaniline, 4-chloro-3-methylphenol, 2,4-dichlorophenol, Hexachlorobutadiene, isophorone, 2-methylnaphthalene, naphthalene, nitrobenzene, 2-nitrophenol, 1,2,4-trichlorobenzene

The analytes affected by internal standard acenaphthene-d10 applies to: acenaphthene, acenaphthylene, 2-chloronaphthalene, 4-chlorophenyl phenyl ether, dibenzofuran, diethyl phthalate, dimethyl phthalate, 2,4-dinitrophenol, 2,4-dinitrotoluene, 2,6-dinitrotoluene, fluorene, hexachlorocyclopentadiene, 2-nitroaniline, 3-nitroaniline, 4-nitroaniline, 4-nitrophenol, 2,4,6-trichlorophenol, 2,4,5-trichlorophenol

The analytes affected by internal standard phenanthrene-d10 applies to: anthracene, 4-bromophenyl phenyl ether, di-n-butyl phthalate, 4,6-dinitro-2-methyl-phenol, fluoranthene, hexachlorobenzene, n-nitrosodiphenylamine, pentachlorophenol, phenanthrene, carbazole

The analytes affected by internal standard chrysene-d12 applies to: benzo(a)anthracene, bis(2-ethylhexyl) phthalate, butyl benzyl phthalate, chrysene, 3,3'-dichlorobenzidine, pyrene, di-n-octyl phthalate, Indeno(1,2,3-cd)pyrene

The analytes affected by internal standard perylene-d12 (P) applies to: benzo(b)fluoroanthene, benzo(k)fluoroanthene, Benzo(g,h,i)perylene, benzo(a)pyrene, dibenz(a,h)anthracene

Target analyte reported detection limits

The reported detection limits for the ground water samples were lower than the lowest concentration used in the initial calibration performed for 2,4,6-trichlorophenol, 4,6-dinitro-2-methyl phenol, 4-bromophenyl phenyl ether, bis(2-ethyl hexyl) phthalate, fluorene, hexachloroethane, 2,4-dinitrophenol, nitrobenzene, pentachlorophenol, and n-nitroso-diphenyl amine. Sample results were not qualified due to this method deviation.

Samples were analyzed at a dilution as a result of the presence of target analytes at concentrations that exceeded the calibration range. The dilutions utilized in the analysis of ground water samples for SVOCs are summarized in the following table:

Table 50. *SVOCs in ground water samples analyzed by dilution*

Sample ID	Dilution Used	Reason
EEG-107	1:40/1:80*	High concentration of target analytes/ High concentration of phenol and 4-chloroaniline
AA-I-S1-57-61FT	1:50	High concentration of target analytes
AA-I-S1-47-51FT	undiluted/1:40*	High concentration of 1,3-dchlorobenzene, 1,4-dichlorobenzene, and 4-chloroaniline
AA-I-S1-67-71FT	undiluted/1:40*	High concentration of 1,4-dichlorobenzene
AA-I-S1-77-81FT	undiluted/1:10*	High concentration of 1,4-dichlorobenzene
AA-I-S1-87-91FTFD	undiluted/1:20*	High concentration of 1,3-dchlorobenzene, 1,4-dichlorobenzene, 1,2-dichlorobenzene, and 1,2,4-trichlorobenzene

Table 50. *SVOCs in ground water samples analyzed by dilution*

Sample ID	Dilution Used	Reason
AA-I-S1-87-91FT	1:40	High concentration of target analytes
AA-I-S1-97-101FT	1:40	High concentration of target analytes
AA-I-S4-96-100FT	undiluted/1:20*	High concentration of naphthalene
AA-H-S1-53-57FT	undiluted/1:10*	High concentration of 1,4-dichlorobenzene, 1,2-dichlorobenzene, and 1,2,4-trichlorobenzene
AA-H-S1-63-67FT	1:50	High concentration of target analytes
AA-H-S1-83-87FT	undiluted/1:10*	High concentration of 1,4-dichlorobenzene
AA-H-S1-73-77FT	undiluted/1:5*	High concentration of 1,4-dichlorobenzene and 1,2,4-trichlorobenzene
AA-H-S1-73-77FTFD	undiluted/1:5*	High concentration of 1,4-dichlorobenzene and 1,2,4-trichlorobenzene
AA-H-S1-93-97FT	undiluted/1:5*	High concentration of 1,4-dichlorobenzene and pentachlorophenol
BR-I	1:10/1:500*	High concentration of target analytes/ High concentration of 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, and hexachlorobenzene
BR-H	Undiluted/1:2*	High concentration of 1,2,4-trichlorobenzene
BR-G	Undiluted/1:40*	High concentration of 1,2,4-trichlorobenzene, and hexachlorobenzene
BR-GFD	1:20/1:400*	High concentration of target analytes/ High concentration of 1,2,4-trichlorobenzene, and hexachlorobenzene
AA-I-S2-26-30FT	Undiluted/1:20*	High concentration of 1,4-dichlorobenzene, and 4-chloroaniline
AA-I-S3-64-68FT	Undiluted/1:5*	High concentration of 1,4-dichlorobenzene
AA-I-S2-36-40FT	Undiluted/1:20*	High concentration of 1,4-dichlorobenzene
AA-I-S2-46-50FT	Undiluted/1:10*	High concentration of 1,4-dichlorobenzene
EE-05	Undiluted/1:5**	High concentration of phenol, 4-chloroanline, naphthalene
EE-01	Undiluted/1:20*	High concentration of 1,4-dichlorobenzene, 1,2-dichorobenzene, naphthalene, 4-chloroaniline, pentachlorophenol
AA-I-S3-74-78FT	Undiluted/1:20*	High concentration of 1,4-dichlorobenzene
AA-I-S2-56-60FT	Undiluted/1:20*	High concentration of 1,4-dichlorobenzene
AA-I-S2-66-70FT	Undiluted/1:20*	High concentration of 1,4-dichlorobenzene
AA-I-S3-84-88FT	Undiluted/1:5*	High concentration of 1,4-dichlorobenzene
AA-I-S3-84-88FTFD	Undiluted/1:5*	High concentration of 1,4-dichlorobenzene
AA-I-S3-94-98FT	Undiluted/1:4*	High concentration of 1,4-dichlorobenzene
AA-I-S2-76-80FTFD	Undiluted/1:2*	High concentration of 1,4-dichlorobenzene
AA-I-S2-76-80FT	Undiluted/1:2*	High concentration of 1,4-dichlorobenzene
AA-I-S2-96-100FT	Undiluted/1:25*	High concentration of 1,4-dichlorobenzene
AA-I-S2-86-90FT	Undiluted/1:2*	High concentration of 1,4-dichlorobenzene
AA-I-S3-104-108FT	Undiluted/1:5*	High concentration of 1,4-dichlorobenzene

Table 50. *SVOCs in ground water samples analyzed by dilution*

Sample ID	Dilution Used	Reason
AA-I-S1-17-21FT	Undiluted/1:25*	High concentration of 4-chloroanline
AA-I-S3-110-114FT	Undiluted/1:5*	High concentration of 1,4-dichlorobenzene
AA-I-S1-27-31FT	Undiluted/1:20*	High concentration of 1,4-dichlorobenzene, 4-chloroanline
AA-I-S1-37-41FT	Undiluted/1:100*	High concentration of 1,4-dichlorobenzene, 1,2-dichlorobenzene, 4-chloroanline
EE-02-GP	Undiluted/1:4*	High concentration of 1,4-dichlorobenzene, 4-chloroanline, 2,4,6-trichlorophenol, pentachlorophenol
EE-02-GPFD	Undiluted/1:4*	High concentration of 1,4-dichlorobenzene, 2,4-dichlorophenol, 4-chloroanline, 2,4,6-trichlorophenol, pentachlorophenol
EE-12-GP	Undiluted/1:10*	High concentration of 4-chloroanline
EE-14-GP	Undiluted/1:50*	High concentration of 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,2,4-trichlorobenzene, pentachlorophenol
EE-15-GP	Undiluted/1:2*	High concentration of 1,4-dichlorobenzene
EE-15-GPFD	Undiluted/1:2*	High concentration of 1,4-dichlorobenzene

Note:
* indicates that results from the two analyses were combined in the report; the detection limits and sample results were taken from the smaller dilution or undiluted analysis and the results for sample results that exceeded the calibration range were taken from the larger dilution analysis and identified with a "D" qualifier.
** indicates that the correlation between the undiluted and diluted analyses for naphthalene, phenol, and 4-chloroanline were unacceptable. Naphthalene was detected at a concentration that was greater than the calibration limit in the undiluted analysis and was not detected in the dilution analysis. Therefore, the result for naphthalene was reported from the undiluted analysis and the results for naphthalene, phenol, and 4-chloroaniline were qualified as approximate (J).

Sample re-analysis

The following samples were reanalyzed due to sample analysis excursions.

Table 51. *Ground water samples reanalyzed for SVOCs*

Sample ID	Reason for re-analysis
BR-H, BR-G, BR-GFD	The samples were re-extracted since bis(2-ethyl hexyl) phthalate was present in the method blank 0530A. Since the re-extracted analyses provided improved results, these results were reported.
UGGW-EEG-108-100FT	Due to a LCS recovery of less than 10% for 3,3'-dichlorobenzidine, the sample was re-extracted. The re-extraction was performed outside of holding times by more than 14 days. Therefore, the initial result was reported.
AA-H-S1-53-57FT	Internal standard excursions were detected in the initial analysis; fewer internal standard excursions were detected in the re-analysis results. Therefore, the re-analysis analysis was reported.
UGGW-EE-04FD AA-I-S1-17-21FT AA-I-S2-66-70FT	The re-analyses of these samples was performed to confirm the internal standard excursions.

Data completeness

The results reported for method blank 1019D-EMB were corrected during the validation process since the laboratory had incorrectly reported the results.

The results for LCS analysis 1027E were not included in the data package provided by STL-Savannah Labs. This information was requested and provided during the validation process.

Overall data assessment

- The result for 2,4-dinitrophenol in sample SGW-S2-20FT was qualified as approximate (UJ) due to a continuing calibration excursion.
- Target analytes in samples AA-I-S2-96-100FT, AA-I-S2-86-90FT, and AA-I-S3-104-108FT were qualified as approximate (UJ, J) due to holding time excursions.
- Fifty-one results for target analytes in ground water samples were qualified for blank contamination.
- The results for 2-chlorophenol and 2,4-dichlorophenol in sample AA-S2-26-30FT were qualified as approximate (J) due to surrogate recovery excursions.
- Seventeen results for target analytes were qualified as approximate (UJ, J) due to MS/MSD precision excursions.
- The non-detected results for hexachlorocyclopentadiene in sample BR-G and for 2,4-dinitrophenol in sample UGGW-EE-20 were rejected (R) due to recoveries of less than 10% in the MS/MSD analyses.
- The non-detected result for 3,3'-dichlorobenzidine in sample UGGW-EEG-108-100FT was rejected (R) due to an LCS recovery of less than 10%.
- Eighty-two results for target analytes in ground water samples were qualified as approximate (UJ, J) due to internal standard excursions.
- Forty-six results for ground water samples were analyzed at a dilution due to high concentrations of target analytes.
- Samples BR-H, BR-G, BR-GFD, UGGW-EEG-108-100FT, AA-H-S1-53-57FT, UGGW-EE-04FD, AA-I-S1-17-21FT, AA-I-S2-66-70FT were re-analyzed due to analysis excursions.
- The results reported for method blank 1019D-EMB were corrected during the validation process since the laboratory had incorrectly reported the results.
- The results for LCS analysis 1027E was not included in the data package provided by STL-Savannah Labs. This information was requested and provided during the validation process.

3.4. Pesticide analysis of ground water samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for pesticides analyzed by USEPA Method 8081A were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Sample preservation
- GC performance

- Analytical sequence
- Initial calibration and calibration verification
- Retention time window
- Target analyte identification, quantitation, and system performance
- Cleanup verification

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Holding times

Holding times were evaluated based on sample collection, extraction, and analysis dates. Target analytes in ground water samples, which were extracted outside of the holding time, were qualified as approximate (UJ, J) to indicate minor representativeness excursions. The following table summarizes the holding time excursions.

Table 52. *Holding time excursions for pesticides in ground water samples*

Sample ID	Target analyte	Excursion	Action
AA-GHL-S2-72-76FT	Target analytes	14 days outside of extraction holding time	UJ, J
AA-GHL-S1-92-96FTFD	Target analytes	13 days outside of extraction holding time	UJ
AA-GHL-S1-102-106FT	Target analytes	13 days outside of extraction holding time	UJ

Blank analysis

Samples which contained common laboratory contaminants at less than five times the blank concentration were qualified as undetected (U) due to the blank contamination. The blank excursions are summarized in the following table:

Table 53. *Blank excursion for pesticide analyses in ground water samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
10210-MB	Delta-BHC	0.0015 µg/L (DB-608) 0.006 µg/L (DB-5)	SGW-S1-20FT SGW-S1-40FTFD SGW-S2-40FT SGW-S2-15FT	U

Note:
MB indicates method blank.

Surrogate recovery

Recoveries for surrogates were outside of the laboratory control limits. In the case that surrogate recovery excursions were detected in at least three surrogate recoveries in the dual-column results, affected target analytes were qualified as approximate (UJ, J) to indicate minor accuracy excursions. In the case that one surrogate recovery was less than 10%, sample results were qualified as approximate (UJ, J) since the other required surrogate and supportive quality control results met criteria. The following table presents the target analytes qualified as a result of the minor surrogate recovery excursion:

Table 54. *Surrogate excursion for pesticide analysis in ground water samples*

Sample ID	Surrogate	Excursion	Affected analytes	Action
AA-SW-S1-52-56FT	TCMX DCB	28 %R (DB-5) 12 %R (DB-608), 11 %R (DB-5)	Target analytes	UJ
AA-I-S3-64-68FT	DCB	10 %R (DB-608), 9 %R (DB-5)*	Target analytes	UJ, J
AA-I-S2-46-50FT	TCMX DCB	28 %R (DB-5) 7 %R (DB-608), 7 %R (DB-5)*	Target analytes	UJ, J
AA-I-S2-36-40FT	DCB	8 %R (DB-608), 7 %R (DB-5)*	Target analytes	UJ, J
AA-I-S3-54-58FT	TCMX DCB	28 %R (DB-5) 10 %R (DB-608), 10 %R (DB-5)	Target analytes	UJ
EEG-106	TCMX DCB	24 %R (DB-5) 17 %R (DB-608), 18 %R (DB-5)	Target analytes	UJ, J
UGGW-EE-04-100FT	TCMX DCB	28 %R (DB-5) 22 %R (DB-608), 20 %R (DB-5)	Target analytes	UJ
UGGW-EE-04-100FTFD	TCMX DCB	24 %R (DB-5) 26 %R (DB-608), 24 %R (DB-5)	Target analytes	UJ
AA-GHL-S3-50-54FT	TCMX DCB	16 %R (DB-608), 15 %R (DB-5) 15 %R (DB-608), 14 %R (DB-5)	Target analytes	UJ, J
AA-GHL-S3-60-64FT	TCMX DCB	20 %R (DB-608), 20 %R (DB-5) 10 %R (DB-608), 9 %R (DB-5)	Target analytes	UJ, J
AA-I-S1-47-51FT	DCB	5 %R (DB-608), 6 %R (DB-5)***	Target analytes	UJ, J
AA-I-S1-67-71FT	TCMX DCB	24 %R (DB-608), 22 %R (DB-5) 9 %R (DB-608), 9 %R (DB-5)	Target analytes	UJ, J
AA-I-S1-77-81FT	TCMX DCB	20 %R (DB-5) 9 %R (DB-608), 10 %R (DB-5)	Target analytes	UJ, J
AA-GHL-S3-100-104FT	DCB	6 %R (DB-608), 6 %R (DB-5)***	Target analytes	UJ
UGGW-108-100FT	TCMX DCB	28 %R (DB-608), 28 %R (DB-5) 16 %R (DB-608), 17 %R (DB-5)	Target analytes	UJ
AA-H-S1-83-87FT	TCMX DCB	0 %R (DB-608)** 26 %R (DB-608), 24 %R (DB-5)	Target analytes	UJ, J
AA-H-S1-73-77FT	TCMX DCB	0 %R (DB-608)** 26 %R (DB-608), 24 %R (DB-5)	Target analytes	UJ, J
AA-H-S1-72-77FTFD	TCMX DCB	0 %R (DB-608)** 158 %R (DB-5) 28 %R (DB-5)	Target analytes	UJ, J
AA-H-S1-93-97FT	TCMX DCB	0 %R (DB-608)**, 28 %R (DB-5) 19 %R (DB-608), 18 %R (DB-5)	Target analytes	UJ, J
AA-I-S2-56-60FT	TCMX DCB	28 %R (DB-608) 8 %R (DB-608), 8 %R (DB-5)*	Target analytes	UJ, J
AA-I-S2-66-70FT	TCMX DCB	26 %R (DB-5) 7 %R (DB-608), 7 %R (DB-5)*	Target analytes	UJ, J
AA-I-S3-84-88FT	TCMX DCB	24 %R (DB-5) 10 %R (DB-608), 10 %R (DB-5)	Target analytes	UJ
AA-I-S3-84-88FTFD	TCMX DCB	26 %R (DB-5) 10 %R (DB-608), 10 %R (DB-5)	Target analytes	UJ
AA-GHL-S1-32-36FT	TCMX DCB	26 %R (DB-5) 16 %R (DB-608), 16 %R (DB-5)	Target analytes	UJ, J
AA-GHL-S1-42-46FT	TCMX DCB	24 %R (DB-5) 12 %R (DB-608), 12 %R (DB-5)	Target analytes	UJ, J
AA-GHL-S2-22-26FT	TCMX DCB	24 %R (DB-608), 26 %R (DB-5) 18 %R (DB-608), 17 %R (DB-5)	Target analytes	UJ
AA-GHL-S1-52-56FT	TCMX DCB	28 %R (DB-5) 10 %R (DB-608), 10 %R (DB-5)	Target analytes	UJ, J
AA-GHL-S2-42-46FT	TCMX DCB	28 %R (DB-5) 14 %R (DB-608), 14 %R (DB-5)	Target analytes	UJ, J
EE-05	DCB	9 %R (DB-608), 9 %R (DB-5)***	Target analytes	UJ, J
AA-GHL-S1-62-66FT	TCMX DCB	26 %R (DB-608), 24 %R (DB-5) 18 %R (DB-608), 16 %R (DB-5)	Target analytes	UJ, J
AA-GHL-S2-52-56FT	TCMX DCB	26 %R (DB-608), 26 %R (DB-5) 11 %R (DB-608), 10 %R (DB-5)	Target analytes	UJ, J

Table 54. *Surrogate excursion for pesticide analysis in ground water samples*

Sample ID	Surrogate	Excursion	Affected analytes	Action
AA-GHL-S2-62-66FT	TCMX	26 %R (DB-608)	Target analytes	UJ, J
	DCB	5 %R (DB-608), 5 %R (DB-5)*		
AA-GHL-S2-62-66FTFD	TCMX	28 %R (DB-608)	Target analytes	UJ, J
	DCB	9 %R (DB-608), 8 %R (DB-5)*		
AA-GHL-S1-82-86FT	TCMX	28 %R (DB-5)	Target analytes	UJ, J
	DCB	9 %R (DB-608), 8 %R (DB-5)*		
AA-GHL-S1-72-76FT	TCMX	24 %R (DB-5)	Target analytes	UJ, J
	DCB	13 %R (DB-608), 13 %R (DB-5)		
AA-GHL-S2-82-86FT	TCMX	26 %R (DB-5)	Target analytes	UJ, J
	DCB	10 %R (DB-608), 9 %R (DB-5)		
AA-GHL-S1-92-96FT	TCMX	24 %R (DB-608), 24 %R (DB-5)	Target analytes	UJ
	DCB	14 %R (DB-608), 13 %R (DB-5)		
AA-I-S3-110-114FT	TCMX	28 %R (DB-608), 24 %R (DB-5)	Target analytes	UJ
	DCB	11 %R (DB-608), 10 %R (DB-5)		
AA-GHL-S3-30-34FT	TCMX	22 %R (DB-608), 26 %R (DB-5)	Target analytes	UJ, J
	DCB	20 %R (DB-608), 19 %R (DB-5)		
AA-I-S1-27-31FT	DCB	5 %R (DB-608), 7 %R (DB-5)***	Target analytes	UJ, J
AA-I-S1-37-41FT	DCB	4 %R (DB-608), 6 %R (DB-5)***	Target analytes	UJ, J

Note:
* indicates that target analytes were approximated since the TCMX recovery was greater than 10% and the other associated quality control results were within criteria.
** indicates that matrix interference was detected in association with the surrogate peak.
*** indicates that target analytes were approximated since TCMX met surrogate recoveries.
%R indicates percentage recovery.
DCB indicates decachlorobiphenyl.
TCMX indicates 2,4,5,6-tetrachloro-m-xylene.

MS/MSD analysis

Target analytes MS/MSD samples were qualified as approximate (UJ, J) to indicate minor accuracy and precision excursions. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 55. *MS/MSD excursions for pesticide analyses in ground water samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
AA-I-S2-26-30FT	Alpha-BHC	37 %R (MSD)*	AA-I-S2-26-30FT	J
	Delta-BHC	22 %R (MSD)*		J
UGGW-E20-60FT	Alpha-BHC	41 RPD	UGGW-E20-60FT	UJ
	Gamma-BHC	31 RPD		UJ
	Heptachlor	28 RPD		UJ
	Aldrin	30 RPD		UJ
	Alpha chlordane	22 RPD		UJ
	Gamma chlordane	20 RPD		UJ
UGGW-EEG-108-60FT	Delta-BHC	37 %R, 43 %R	UGGW-EEG-108-60FT	UJ
AA-H-S1-101-105FT	Beta-BHC	64 RPD	AA-H-S1-101-105FT	UJ
	Alpha-BHC	49 RPD		UJ
	Heptachlor	38 RPD		UJ
	4,4'-DDE	47 RPD		UJ
	Endosulfan II	121 RPD		UJ
DW-SCHM-1	Endosulfan sulfate	33 RPD	DW-SCHM-1	UJ
AA-GHL-S2-42-46FT	Delta-BHC	30 %R, 30 %R	AA-GHL-S2-42-46FT	UJ
EEG-110	Gamma-BHC	68 RPD	EEG-110	UJ
	Endosulfan I	180 RPD		UJ

Table 55. *MS/MSD excursions for pesticide analyses in ground water samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
EE-05	Delta-BHC	200 RPD	EE-05	J
	Gamma chlordane	24 RPD		J
	Beta-BHC	69 RPD		UJ
	Aldrin	30 RPD		UJ
	Endosulfan I	42 RPD		UJ
	Alpha chlordane	59 RPD		UJ

Note: %R indicates percentage recovery.
RPD indicates relative percent difference.
* indicates that the MS recovery was not evaluated since the MS spike solution was not added to the spike sample due to laboratory error.

LCS analysis

The peaks for target analyte pairs endosulfan sulfate and 4,4'-DDT and endosulfan I and alpha chlordane on the DB-5 column, and for endosulfan I and alpha chlordane on the DB-608 column, coeluted. This analysis excursion was considered during the evaluation of the LCS results during the validation process.

Recoveries for target analytes in LCS analyses were outside of the laboratory control limits. The results for the target analytes in the samples associated with the LCSs were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The LCS excursions are summarized in the following table:

Table 56. *LCS excursions for pesticide analyses in ground water samples*

LCS ID	Analyte	Excursion	Affected Samples	Action
0201R	Delta-BHC	46 %R	UGGW-EEG-108-60FT	UJ
			UGGW-EE-04-100FT	UJ
			UGGW-EE-04-100FTFD	UJ
1025O	Endrin	O %R*	UGGW-EE-20	UJ
			DW-MCDO-1	UJ
			DW-MCDO-1FD	UJ
			DW-SETT-1	UJ
			DW-WRIG-1	UJ
1126R	Delta-BHC	28 %R	AA-GHL-S2-32-36FT	UJ
			AA-GHL-S1-52-56FT	J
			AA-GHL-S2-42-46FT	UJ
1018R	Alpha chlordane	180 %R	EE-109	J

Note:
%R indicates percentage recovery.
* indicates that the results for endrin in the associated samples were approximated since the MS/MSD recovery was met for endrin.

Confirmation analysis

As a result of coeluting peaks due to matrix interference on one GC column used for sample analysis, the results for gamma-BHC and beta-BHC were not confirmed through analysis on the second GC column, which was identified by the laboratory by the addition of a "Y" flag. GC/MS analysis was not possible due to low concentrations of the gamma-BHC detected in the samples. As a result of the minor confirmation excursions, the results for gamma-BHC and beta-BHC

were qualified as approximate (JN) since the concentrations are approximate without confirmation.

For target analytes that were detected by the laboratory but were at concentrations that were less than the reported detection limit, the laboratory applied a "J" flag to the analyte result. During the validation process, the "J" flag was retained since the concentration is considered to be approximate. Due to the numerous values reported by the laboratory below the reported detection limits, if the RPD values were greater than 40% for the confirmation analysis and the target analyte concentration was flagged "J," additional validation qualifiers were not applied to the sample data.

The RPD values calculated for positive results from the two chromatographic columns (DB608, DB5) in ground water sample analyses were greater than 40% indicating confirmation excursions. Target analytes with a RPD greater than 40% were qualified as approximate (J) to indicate minor representativeness excursions. The analyte identification excursions are summarized in the following table:

Table 57. *Analyte confirmation excursions for pesticide analyses in ground water samples*

Sample ID	Analyte	Excursion	Action
SGW-S1-15FT	Gamma-BHC	Confirmation not performed	JN
SGW-S1-20FT	Gamma-BHC	Confirmation not performed	JN
SGW-S1-40FTFD	Beta-BHC	Confirmation not performed	JN
EEG-105-GP	Delta-BHC	45 RPD	J
AA-I-S3-64-68FT	Delta-BHC	123 RPD	J
AA-I-S2-36-40FT	Beta-BHC	102 RPD	J
AA-I-S2-46-50FT	Beta-BHC	87 RPD	J
	Delta-BHC	67 RPD	J
EEG-106	Delta-BHC	42 RPD	J
EEG-107	Alpha-BHC	120 RPD	J
AA-I-S1-57-61FT	Beta-BHC	148 RPD	J
AA-I-S1-47-51FT	Beta-BHC	159 RPD	J
	Gamma-BHC	145 RPD	J
	Heptachlor	44 RPD	J
AA-I-S1-87-91FT	Gamma-BHC	112 RPD	J
	Delta-BHC	72 RPD	J
AA-H-S1-53-57FT	Delta-BHC	186 RPD	J
	Gamma-BHC	180 RPD	J
	Heptachlor epoxide	44 RPD	J
	4,4'-DDT	44 RPD	J
	4,4'-DDE	59 RPD	J
	Gamma chlordane	76 RPD	J
AA-H-S1-63-67FT	Delta-BHC	154 RPD	J
AA-H-S1-83-87FT	Delta-BHC	197 RPD	J
AA-H-S1-73-77FT	Delta-BHC	199 RPD	J
AA-H-S1-73-77FTFD	Delta-BHC	187 RPD	J
	Alpha-BHC	86 RPD	J
AA-H-S1-93-97FT	Aldrin	157 RPD	J
	4,4'-DDE	178 RPD	J
	4,4'-DDT	138 RPD	J

Table 57. *Analyte confirmation excursions for pesticide analyses in ground water samples*

Sample ID	Analyte	Excursion	Action
AA-H-S1-101-105FT	Endrin aldehyde	62 RPD	J
	4,4'-DDT	59 RPD	J
	Methoxychlor	80 RPD	J
BR-H	Beta-BHC	94 RPD	J
BR-GFD	Beta-BHC	129 RPD	J
AA-GHL-S1-52-56FT	Delta-BHC	130 RPD	J
EE-05	Delta-BHC	94 RPD	J
EE-12-GP	Heptachlor	78 RPD	J
	Heptachlor epoxide	142 RPD	J
	Endosulfan II	139 RPD	J
EE-14-GP	Beta-BHC	100 RPD	J
	Heptachlor epoxide	115 RPD	J
AA-I-S2-96-100FT	Delta-BHC	48 RPD	J
AA-I-S1-17-21FT	Beta-BHC	114 RPD	J
	Gamma-BHC	131 RPD	J
AA-I-S1-27-31FT	Alpha-BHC	53 RPD	J
AA-I-S1-37-41FT	Beta-BHC	160 RPD	J
	Delta-BHC	121 RPD	J
EE-02-GP	Heptachlor epoxide	149 RPD	J
EE-02-GPFD	Heptachlor epoxide	152 RPD	J
	Alpha chlordane	42 RPD	J
AA-GHL-S1-22-26FT	Delta-BHC	136 RPD	J
	Gamma-BHC	184 RPD	J
AA-GHL-S1-22-26FTFD	Delta-BHC	137 RPD	J
	Gamma-BHC	Confirmation not performed	JN
AA-GHL-S2-52-56FT	Gamma-BHC	146 RPD	J
AA-GHL-S2-62-66FT	Delta-BHC	53 RPD	J
	Gamma-BHC	164 RPD	J
AA-GHL-S2-62-66FTFD	Delta-BHC	64 RPD	J

Note:
RPD indicates relative percent difference.

Target analyte reported detection limits

The results in samples SGW-S1-20FT and SGW-S2-15FT were revised during the validation process since the laboratory reported concentrations for target analytes were less than the method detection limit (MDL). The revisions for pesticides are summarized in the following table:

Table 58. *Revised detection limits for pesticides in ground water samples*

Sample ID	Revision
SGW-S1-20FT	Beta BHC revised to 0.014 µg/L
	Aldrin revised to 0.50 µg/L
SGW-S2-15FT	Endosulfan I revised to 0.05 µg/L

Dilutions

Samples were analyzed at a dilution as a result of the presence of matrix interference or due to concentrations of target analytes that exceeded the calibration limit. The dilutions utilized in the analysis of ground water samples for pesticides are summarized in the following table:

Table 59. *Pesticides in ground water samples analyzed by dilution*

Sample ID	Dilution Used	Reason
EEG-106	Undiluted/ 1:50*	High concentration of alpha-BHC
EEG-107	1:50	Matrix interference
AA-I-S1-87-91FTFD	1:10/1:200*	High concentration of target analytes/ High concentration of alpha-BHC, beta-BHC
AA-I-S1-87-91FT	1:10/1:200*	High concentration of target analytes/ High concentration of alpha-BHC, beta-BHC
AA-I-S1-97-101FT	1:10/1:200*	High concentration of target analytes/ High concentration of alpha-BHC, beta-BHC
AA-H-SI-53-57FT	Undiluted/1:10*	High concentration of 4,4'-DDD, 4,4'-DDT
AA-H-S1-83-87FT	Undiluted/1:50*	Matrix interference for beta-BHC, gamma-BHC
AA-H-S1-73-77FT	Undiluted/1:10*	Matrix interference for beta-BHC, gamma-BHC
AA-H-S1-73-77FTFD	Undiluted/1:10*	Matrix interference for beta-BHC
AA-H-S1-93-97FT	Undiluted/1:200*	Matrix interference for beta-BHC, gamma-BHC
AA-H-S1-101-105FT	Undiluted/1:2*	High concentration of 4,4'-DDT, methoxychlor
BR-I	1:500/1:2000*	High concentration of target analytes/ High concentration of alpha-BHC
BR-G	1:200/1:1000*	High concentration of target analytes/ High concentration of alpha-BHC
BR-GFD	1:200/1:10000*	High concentration of target analytes/ High concentration of alpha-BHC, beta-BHC
EE-01	1:100	High concentration of target analytes
EE-02-GP	1:50/1:250**	Matrix interference/ High concentration of alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, heptachlor
EE-02-GPFD	1:50/1:250**	Matrix interference/ High concentration of alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, heptachlor
EE-12-GP	1:20	High concentration of target analytes
EE-14-GP	1:10	High concentration of target analytes

Note:
* indicates that results from the two analyses were combined in the report; the detection limits and sample results were taken from the smaller dilution or undiluted analysis and the results for sample results that exceeded the calibration range were taken from the larger dilution analysis and identified with a "D" qualifier.
** indicates that the results for alpha-BHC, beta-BHC, delta-BHC, gamma-BHC, and heptachlor were reported from the 1:250 dilution analysis due to matrix interference present in the 1:50 dilution analysis.

Sample re-analysis

The following samples were reanalyzed due to sample analysis excursions.

Table 60. *Ground water samples reanalyzed for pesticides*

Sample ID	Reason for re-analysis
EEG-102, EEG-106, EEG-107, EEG-101, EEG-104, AND EEG-112	Samples were re-extracted to confirm the surrogate spiking solution concentration. The initial results were reported since the concentration in the initial analysis was performed using the correct surrogate concentration.
Samples included in SDG SIL034 and SIL049	Samples were re-extracted since incorrect LCS or MS/MSD spiking solutions were used in the extraction process. The initial analyses were reported since the re-extractions were performed outside of the holding times.
Samples included in SDG SIL039	Samples were re-extracted due to an LCS recovery excursion. The initial analyses were reported since the re-extractions were performed outside of the holding times.
Samples included in SDG SIL042	Samples were re-extracted due to surrogate excursions. The initial analyses were reported since the re-extractions were performed outside of the holding times.
AA-H-S1-93-97FT	Sample was re-extracted due to surrogate excursions. The initial analyses were reported since the re-extractions did not provide improved surrogate recovery results.
AA-GHL-S2-22-26FT AA-GHL-S1-62-66FT AA-GHL-S2-52-56FT AA-GHL-S1-92-96FT AA-I-S3-110-114FT AA-GHL-S3-30-34FT	Samples were re-extracted due to surrogate excursions. The initial analyses were reported since the re-extractions were performed outside of the holding times.
AA-GHL-S1-92-96FTFD AA-GHL-S1-102-106FT AA-GHL-S2-72-76FT	Samples were re-extracted due to surrogate excursions. The re-extraction analyses were reported since the re-extraction provided improved surrogate recovery results.

Data completeness

The detection limit reported for beta-BHC in sample EEG-107 was revised due to a laboratory reporting error. The revision for pesticides is summarized in the following table:

Table 61. *Revised detection limit for pesticides in ground water sample*

Sample ID	Revision
EEG-107	Beta-BHC revised to 0.70 µg/L

Overall data assessment

- Target analytes in samples AA-GHL-S2-72-76FT, AA-GHL-S1-92-96FTFD, and AA-GHL-S1-102-106FT were qualified as approximate (UJ, J) due to extraction holding time excursions.
- Four results for target analytes in ground water samples were qualified for blank contamination.
- Target analytes in forty-one ground water samples were qualified as approximate (UJ, J) due to surrogate recovery excursions.
- Four results for target analytes in ground water samples were qualified as approximate (UJ, J) due to MS/MSD recovery excursions.
- Twenty results for target analytes in ground water samples were qualified as approximate (UJ, J) due to MS/MSD precision excursions.
- Twelve results for target analytes in ground water samples were qualified as approximate (UJ, J) due to LCS recovery excursions.

- Fifty-nine results for target analytes in ground water samples were qualified as approximate (J) due to confirmation excursions.
- The results for beta-BHC and aldrin in sample SGW-S1-20ft and endosulfan I in sample SGW-S2-15FT were revised during the validation process since the laboratory reported concentrations for these target analytes that were less than the MDL.
- Nineteen samples were analyzed at a dilution.
- The following samples were re-analyzed due to analysis excursions:
- EEG-102, EEG-106, EEG-107, EEG-101, EEG-104, EEG-112, samples included in SDG SIL034 and SIL049, samples included in SDG SIL039, samples included in SDG SIL042, AA-H-S1-93-97FT, AA-GHL-S2-22-26FT, AA-GHL-S1-62-66FT, AA-GHL-S2-52-56FT, AA-GHL-S1-92-96FT, AA-I-S3-110-114FT, AA-GHL-S3-30-34FT, AA-GHL-S1-92-96FTFD, AA-GHL-S1-102-106FT, AA-GHL-S2-72-76FT.
- The detection limit reported for beta-BHC in sample EEG-107 was revised due to a laboratory reporting error.

3.5. Herbicide analysis of ground water samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for herbicides analyzed by USEPA Method 8151A were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- GC performance
- Analytical sequence
- Initial calibration
- Blank analysis
- Retention time window
- Target analyte identification, quantitation, and system performance
- Cleanup verification

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Calibration verification

The calibration verification criteria for target analytes in the calibration verification analysis on both the DB-608 and DB-5 columns were not met for the analysis performed 10/23/99. Affected sample results were qualified if the results for the analyte on both columns exceeded the %D criteria. Target analytes in samples affected by the excursion were qualified as approximate (UJ) to indicate a minor accuracy excursion. The samples qualified due to the minor calibration excursion are summarized in the following table.

Table 62. *Calibration verification excursion for herbicides in ground water samples*

Calibration verification ID	Standard analytes	Excursion	Affected samples	Action
2328 10/23/99	Pentachlorophenol	16 %D (DB-608), 19 %R (DB-5)	SGW-S1-15FT	UJ
	Dinoseb	22 %D (DB-608), 28 %R (DB-5)	SGW-S1-20FT	
	MCPA	22 %D (DB-608), 22 %R (DB-5)	SGW-S1-40FT	
			SGW-S1-40FTFD	
			SGW-S2-40FT	
			SGW-S2-20FT	
			SGW-S2-15FT	

Note:
%D indicates percent difference.

Surrogate recovery

Recoveries for surrogates in ground water samples were outside of the laboratory control limits. As a result of the surrogate recovery excursions, target analytes were qualified as approximate (UJ) to indicate minor accuracy excursions. The surrogate recovery excursions are summarized in the following table:

Table 63. *Surrogate excursion for herbicide analysis in ground water samples*

Sample ID	Surrogate	Excursion	Affected analytes	Action
DW-SETT-1	DCAA	25 %R (DB-608), 11 %R (DB-5)	Target analytes	UJ
EE-15-GPFD	DCAA	18 %R (DB-608), 11 %R (DB-5)	Target analytes	UJ

Note: %R indicates percentage recovery.
DCAA indicates 2,4-dichlorophenylacetic acid

MS/MSD analysis

An MS/MSD analysis was not performed on sample EEG-105-GP due to insufficient sample volume.

The results for target analytes in MS/MSD samples were qualified as approximate (UJ) to indicate minor precision excursions. The result for 2,4-DB in sample DW-SCHM-1 was rejected (R) due to MS/MSD recoveries of less than 10%. The result for dinoseb in sample AA-I-S1-27-31FT was rejected (R) due to MS/MSD recoveries of less than 10%. The laboratory control sample associated with the sample met criteria. Therefore, matrix interference is suspected to have been the cause of the major accuracy excursion. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 64. *MS/MSD excursions for herbicide analyses in ground water samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
UGGW-EEG-108-60FT	MCPA	48 RPD	UGGW-EEG-108-60FT	UJ
AA-GHL-S3-110-114FT	MCPA	73 RPD	AA-GHL-S3-110-114FT	UJ
	Dichloroprop	140 RPD		UJ
	2,4-D	125 RPD		UJ
	2,4,5-TP	115 RPD		UJ
	2,4,5-T	141 RPD		UJ
	2,4-DB	98 RPD		UJ

Table 64. *MS/MSD excursions for herbicide analyses in ground water samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
UGGW-EEG-108-100FT	MCPA	42 RPD	UGGW-EEG-108-100FT	UJ
DW-SCHM-1	Dichloroprop	12 %R, 18 %R	DW-SCHM-1	UJ
	2,4,5-TP	76 RPD		UJ
	2,4,5-T	12 %R, 15 %R		UJ
	2,4-DB	0 %R, 0%R		R
AA-I-S3-84-88FT	Pentachlorophenol	47 RPD	AA-I-S3-84-88FT	UJ
AA-GHL-S1-22-26FT	Dalapon	80 RPD	AA-GHL-S1-22-26FT	UJ
	MCPA	29 RPD		UJ
	Pentachlorophenol	43 RPD		J
AA-SW-S1-101-104FT	Pentachlorophenol	48 RPD	AA-SW-S1-101-104FT	UJ
AA-I-S1-27-31FT	Dinoseb	0 %R, 0%R	AA-I-S1-27-31FT	R

Note: RPD indicates relative percent difference.
%R indicates percentage recovery.

LCS analysis

Recoveries for target analytes in LCS analyses were outside of the laboratory control limits. The target analytes in the samples associated with the LCSs were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The LCS excursions are summarized in the following table:

Table 65. *LCS excursions for herbicide analyses in waste samples*

LCS ID	Analyte	Excursion	Affected Samples	Action
1014N	2,4,5-TP	142 %R	EEG-101	J
0201N	2,4,5-T	16 %R	UGGW-EEG-108-60FT	UJ
	Dinoseb	8 %R*	UGGW-EE-04-100FT	UJ
	2,4-DB	10 %R	UGWW-EE-04-100FTFD	UJ
1021Q-RMB	2,4,5-TP	108 %R	SGW-S1-40FT	J
			SGW-S1-40FTFD	J
1025P	2,4,5-T	14 %R	UGGW-EE-20	J
			DW-MCDO-1	UJ
			DW-MCDO-1FD	UJ
			DW-SETT-1	UJ
			DW-WRIG-1	UJ
1025P	MCPA	7 %R*	UGGW-EE-20	UJ
	Dichloroprop	25 %R	DW-MCDO-1	UJ
	2,4-DB	18 %R	DW-MCDO-1FD	UJ
			DW-SETT-1	UJ
			DW-WRIG-1	UJ
1215N	2,4-DB	48 %R	AA-I-S3-74-78FT	UJ
			AA-I-S2-56-60FT	
			AA-I-S2-66-70FT	
			AA-I-S3-84-88FT	
			AA-I-S3-84-88FTFD	
			AA-I-S3-94-98FT	
			AA-I-S2-76-80FTFD	
			AA-I-S2-76-80FT	

Table 65. *LCS excursions for herbicide analyses in waste samples*

LCS ID	Analyte	Excursion	Affected Samples	Action
1111O	2,4-D	35 %R	AA-SW-S1-62-66FT	UJ
			AA-SW-S1-72-76FT	
			EE-13-GP	
			EE-02-GP	
			EE-02-GPFD	
			AA-SW-S1-82-86FT	
			AA-SW-S1-101-104FT	
			AA-SW-S1-101-104FTFD	
			EE-15-GP	
			EE-15-GPFD	
			EE-12-GP	
			EE-14-GP	
1111O	2,4-D	35 %R	AA-SW-S1-91-95FT	J

Note:
%R indicates percentage recovery.
* indicates that although the recovery was less than 10%, the target analyte was not rejected in the associated samples since the MS/MSD extracted in the same sample batch met recovery criteria.

Confirmation analysis

For target analytes that were detected by the laboratory but were at concentrations that were less than the reported detection limit, the laboratory applied a "J" flag to the analyte result. During the validation process, the "J" flag was retained since the concentration is considered to be approximate.

RPD values calculated for positive results from the two chromatographic columns (DB608, DB5) in ground water samples were greater than 40% indicating confirmation excursions. The target analytes with RPDs greater than 40% were qualified as approximate (J) to indicate minor representativeness excursions. The analyte identification excursions are summarized in the following table:

Table 66. *Analyte confirmation excursion for herbicide analyses in ground water samples*

Sample ID	Analyte	Excursion	Action
AA-I-SI-87-91FTFD	MCPP	178 RPD	J
	2,4,5-T	43 RPD	J
AA-I-SI-87-91FT	MCPP	166 RPD	J
	2,4,5-T	49 RPD	J
AA-I-SI-97-101FT	2,4,5-T	49 RPD	J
AA-I-SI-97-101FTDL	MCPP	185 RPD	J
AA-H-S1-53-57FT	MCPP	139 RPD	J
AA-H-S1-63-67FT	MCPP	117 RPD	J
AA-H-S1-73-77FT	MCPP	104 RPD	J
AA-H-S1-73-77FTFD	MCPP	99 RPD	J
AA-H-S1-93-97FT	MCPP	194 RPD	J
AA-H-S1-101-105FT	MCPP	195 RPD	J
BR-I	MCPP	172 RPD	J
BR-G	2,4,5-T	177 RPD	J
BR-GFD	2,4,5-T	180 RPD	J
SGW-S2-15FT	2,4-DB	195 RPD	J
AA-I-S2-66-70FT	MCPP	91 RPD	J
	2,4-D	155 RPD	J

Note:
RPD indicates relative percent difference.
DL indicates that a dilution analysis was performed for this sample.

Target analyte reported detection limits

Samples were analyzed at a dilution as a result of the presence of matrix interference or due to concentrations of target analytes that exceeded the calibration limit. The dilutions utilized in the analysis of waste samples for herbicides are summarized in the following table:

Table 67. *Herbicides in ground water samples analyzed by dilution*

Sample ID	Dilution Used	Reason
EEG-107	1:50	High concentration of target analytes
AA-I-S1-87-91FTFD	Undiluted/1:5*	High concentration of 2,4-D
AA-I-S7-87-91FT	Undiluted/1:5*	High concentration of 2,4-D
AA-I-S1-97-101FT	Undiluted/1:5*	High concentration of MCPP
AA-H-S1-53-57FT	1:5	High concentration of target analytes and matrix interference
AA-H-S1-63-67FT	1:2	High concentration of target analytes
AA-H-S1-83-87FT	1:50	High concentration of target analytes
AA-H-S1-73-77FT	1:5/1:10*	High concentration of target analytes/ High concentration of MCPP
AA-H-S1-73-77FTFD	1:5/1:10*	High concentration of target analytes/ High concentration of MCPP
AA-H-S1-93-97FT	1:5/1:100 *	High concentration of target analytes/ High concentration of pentachlorophenol
BR-I	1:5/1:200*	High concentration of target analytes/ High concentration of pentachlorophenol, MCPP
BR-G	1:10/1:100*	High concentration of target analytes/ High concentration of 2,4-D
BR-GFD	1:10/1:50*	High concentration of target analytes/ High concentration of 2,4-D
EE-01	1:500	High concentration of target analytes
EE-05	1:100	High concentration of target analytes
EE-02-GP	1:250	High concentration of target analytes
EE-02-GPFD	1:250	High concentration of target analytes
EE-14-GP	1:50	High concentration of target analytes

Note:
* indicates that results from the two analyses were combined in the report; the detection limits and sample results were taken from the undiluted analysis and the results for sample results that exceeded the calibration range were taken from the larger dilution analysis and identified with a "D" qualifier.

Sample re-analysis

The following samples were reanalyzed due to sample analysis excursions.

Table 68. *Ground water samples reanalyzed for herbicides*

Sample ID	Reason for re-analysis
DW-SETT-1, EE-15-GPFD	Reanalyzed due to surrogate excursions; re-analysis performed outside of holding time. Therefore, initial analysis reported.
Samples in SDG SIL026	Reanalyzed due to surrogate excursions in the blank associated with the samples; re-analysis performed outside of holding time. Therefore, initial analysis reported.
Samples in SDG SIL023	Reanalyzed due to surrogate excursions in the blank associated with the samples; re-analysis performed outside of holding time. Therefore, initial analysis reported.

Data completeness

The result for 2,4,5-T in sample BR-G was revised due to laboratory transcription error. The revision for herbicides is summarized in the following table:

Table 69. *Revised detection limit for herbicides in ground water sample*

Sample ID	Revision
BR-G	2,4,5-T revised to 18 µg/L

Overall data assessment

- Twenty-one results for target analytes in ground water samples were qualified as approximate (UJ) due to calibration verification excursions.
- Target analytes in samples DW-SETT-1 and EE-15-GPFD were qualified as approximate (UJ) due to surrogate recovery excursions.
- Fourteen results for target analytes in ground water were qualified as approximate (UJ, J) due to MS/MSD precision excursions.
- Two results for target analytes in ground water were qualified as approximate (UJ) due to MS/MSD accuracy excursions.
- The result for 2,4-DB in sample DW-SCHM-1 was rejected (R) due to MS/MSD recoveries of less than 10%.
- The result for dinoseb in sample AA-I-S1-27-31FT was rejected (R) due to MS/MSD recoveries of less than 10%.
- Fifty-three results for target analytes in ground water samples were qualified as approximate (UJ, J) due to LCS recovery excursions.
- Eighteen results for target analytes in ground water samples were qualified as approximate (J) due to confirmation excursions.
- The following ground water samples were analyzed at a dilution: EEG-107, AA-I-S1-87-91FTFD, AA-I-S7-87-91FT, AA-I-S1-97-101FT, AA-H-S1-53-57FT, AA-H-S1-63-67FT, AA-H-S1-83-87FT, AA-H-S1-73-77FT, AA-H-S1-73-77FTFD, AA-H-S1-93-97FT, BR-I, BR-G, BR-GFD, EE-01, EE-05, EE-02-GP, EE-02-GPFD, EE-14-GP.
- Samples DW-SETT-1, EE-15-GPFD, samples in SDG SIL026, and samples in SDG SIL023 were re-analyzed due to analysis excursions.
- The result for 2,4,5-T in sample BR-G was revised due to laboratory transcription error

3.6. PCB analysis of ground water samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for PCBs analyzed by USEPA Method 680 were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- GC/MS tuning and window-defining criteria
- Initial and continuing calibration
- Blank analysis
- Sample data identification, quantitation, and system performance
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Surrogate recovery
Recoveries for surrogates in ground water samples were outside of the laboratory control limits. Target analytes in sample BR-H were qualified as approximate (UJ, J) due to a surrogate recovery excursion to indicate a minor accuracy excursion. The sample qualified due to a minor surrogate excursion is summarized in the following table.

Table 70. *Surrogate excursion for PCBs in ground water samples*

Sample ID	Surrogate ID	Excursion	Affected target analytes	Action
BR-H	$^{13}C_{12}$decachlorobiphenyl	24 %R, 21 %R	AA-I-S4-96-100FT	UJ

Note: %R indicates percentage recovery.
MCB indicates monochlorobiphenyl

MS/MSD analysis
An MS/MSD analysis for sample AA-I-S1-27-31FT was not performed due to insufficient sample volume.

Target analytes in the MS/MSD samples were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 71. *MS/MSD excursions for PCB analyses in ground water samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
AA-I-S4-96-100FT	MCB	24 %R, 21 %R	AA-I-S4-96-100FT	UJ
AA-H-S1-101-105FT	MCB	26 %R, 24 %R	AA-H-S1-101-105FT	J

Note: %R indicates percentage recovery.
MCB indicates monochlorobiphenyl

LCS analysis

The recoveries for analytes in LCSs were outside the laboratory control limits. As a result of the LCS excursions, analytes in the associated samples were qualified as approximate (J) to indicate minor accuracy excursions. The following table summarizes the LCS excursions.

Table 72. *LCS excursions for PCBs in ground water samples*

LCS ID	Target analyte	Excursion	Affected samples	Action
0504C	MCB	26 %R	BR-H BR-G BR-GFD	J

Note:
%R indicates percentage recovery
MCB indicates monochlorobiphenyl

Internal standards criteria

The recoveries for internal standards were outside the laboratory control limits. Target analytes associated with internal standards recoveries that were outside of the laboratory control limits were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The following table summarizes the internal standard excursions.

Table 73. *Internal standard excursions for PCBs in ground water samples*

Sample ID	Internal standard	Excursion	Affected analytes	Action
SGW-S1-15FT	Chrysene-d12	69 %R	For affected target analytes see below	UJ
SGW-S1-40FT	Chrysene-d12	69 %R	For affected target analytes see below	UJ, J
SGW-S2-40FT	Chrysene-d12 Phenanthrene-d10	62 %R 65 %R	For affected target analytes see below	UJ
SWG-S2-20FT	Chrysene-d12 Phenanthrene-d10	67 %R 64 %R	For affected target analytes see below	UJ
SWG-S2-15FT	Chrysene-d12	62 %R	For affected target analytes see below	UJ
AA-I-S1-57-61FT	Chrysene-d12	67 %R	For affected target analytes see below	UJ
AA-GHL-S3-50-54FT	Chrysene-d12	55 %R	For affected target analytes see below	UJ
AA-GHL-S3-60-64FT	Chrysene-d12	60 %R	For affected target analytes see below	UJ
AA-I-S1-47-51FT	Chrysene-d12	64 %R	For affected target analytes see below	UJ
AA-H-S1-96-97FT	Chrysene-d12	132 %R	TRCB PTCB HXCB HPCB OCB	J
AA-H-S1-101-105FT	Chrysene-d12	137 %R	MCB DCB TCB TRCB PTCB HXCB HPCB OCB NCB	J

Table 73. *Internal standard excursions for PCBs in ground water samples*

Sample ID	Internal standard	Excursion	Affected analytes	Action
AA-H-S1-53-57FT	Chrysene-d12	149 %R	MCB DCB TCB TRCB PTCB HXCB HPCB OCB	J
AA-H-S1-63-67FT	Chrysene-d12	164 %R	MCB DCB TCB PTCB HXCB HPCB	J
AA-H-S1-83-87FT	Chrysene-d12	150 %R	PTCB HXCB HPCB	J
AA-H-S1-73-77FT	Chrysene-d12	155 %R	MCB DCB	J
AA-H-S1-73-77FTFD	Chrysene-d12	149 %R	MCB DCB TCB PTCB HXCB HPCB	J
BR-I	Chrysene-d12	42 %R	For affected target analytes see below	UJ, J
BR-H	Chrysene-d12	186 %R	MCB	J
BR-G	Chrysene-d12	46 %R	For affected target analytes see below	UJ, J
BR-GFD	Chrysene-d12	51 %R	For affected target analytes see below	UJ, J
AA-GHL-S2-32-36FT	Chrysene-d12	62 %R	For affected target analytes see below	UJ, J
AA-GHL-S1-52-56FT	Chrysene-d12	69 %R	For affected target analytes see below	UJ
AA-GHL-S2-62-66FT	Chrysene-d12	59 %R	For affected target analytes see below	UJ
AA-GHL-S2-72-76FT	Chrysene-d12	67 %R	For affected target analytes see below	UJ
AA-GHL-S2-62-66FTFD	Chrysene-d12	69 %R	For affected target analytes see below	UJ
AA-GHL-S1-82-86FT	Chrysene-d12	63 %R	For affected target analytes see below	UJ
AA-GHL-S2-82-86FT	Chrysene-d12	66 %R	For affected target analytes see below	UJ
AA-GHL-S1-92-96FT	Chrysene-d12	68 %R	For affected target analytes see below	UJ
AA-SW-S1-62-66FT	Chrysene-d12	65 %R	For affected target analytes see below	UJ
AA-SW-S1-72-76FT	Chrysene-d12	66 %R	For affected target analytes see below	UJ

Table 73. *Internal standard excursions for PCBs in ground water samples*

Sample ID	Internal standard	Excursion	Affected analytes	Action

Note:
%R indicates percentage recovery.

The analytes affected by internal standard chrysene-d12 include the following : MCB, DCB, TCB, TRCB, PTCB, HXCB, HPCB, OCB, NCB, DCCB

MCB indicates monochlorobiphenyl
DCB indicates dichlorobiphenyl
TCB indicates trichlorobiphenyl
TRCB indicates tetrachlorobiphenyl
PTCB indicates pentachlorobiphenyl
HXCB indicates hexachlorobiphenyl
HPCB indicates heptachlorobiphenyl
OCB indicates octachlorobiphenyl
NCB indicates nonachlorobiphenyl
DCCB indicates decachlorobiphenyl

Sample re-analysis

The following samples were re-extracted and reanalyzed due to sample analysis excursions.

Table 74. *Ground water samples reanalyzed for PCBs*

Sample ID	Reason for re-analysis
BR-H BR-G BR-GFD	Reanalyzed due to internal standard and surrogate excursions; re-analysis performed outside of holding time. Therefore, initial analysis reported.

Target analyte reported detection limits

The following table presents the samples analyzed by dilution due to matrix interferences or concentrations of target analytes that exceeded the calibration limit.

Table 75. *PCBs in ground water samples analyzed by dilution*

Sample ID	Target analytes	Dilution	Reason
EEG-107	Target analytes	1:10	Matrix interference or elevated target analyte concentrations
BR-I	Target analytes	1:200	Matrix interference or elevated target analyte concentrations
BR-G	Target analytes	1:20	Matrix interference or elevated target analyte concentrations
BR-GFD	Target analytes	1:50	Matrix interference or elevated target analyte concentrations
EE-01	Target analytes	1:20	Matrix interference or elevated target analyte concentrations
EE-05	Target analytes	1:2	Matrix interference or elevated target analyte concentrations
EE-02-GP	Target analytes	1:10	Matrix interference or elevated target analyte concentrations
EE-02-GPFD	Target analytes	1:10	Matrix interference or elevated target analyte concentrations
EE-12-GP	Target analytes	1:10	Matrix interference or elevated target analyte concentrations
EE-14-GP	Target analytes	1:5	Matrix interference or elevated target analyte concentrations

Overall data assessment

- Target analytes in sample BR-H were qualified as approximate (UJ, J) due to a surrogate recovery excursion.
- Two results for target analytes in ground water samples were qualified as approximate (UJ, J) due to MS/MSD recovery excursions.

- Three results for target analytes in ground water samples were qualified as approximate (J) due to an LCS recovery excursion.
- Two hundred sixty results for target analytes in ground water samples were qualified as approximate (UJ, J) due to internal standard recovery excursions.
- Samples BR-H, BR-G and BR-GFD were reanalyzed due to analysis excursions.
- The following samples were analyzed at a dilution: EEG-107, BR-I, BR-G, BR-GFD, EE-01, EE-05, EE-02-GP, EE-02-GPFD, EE-12-GP, EE-14-GP.

3.7. Metals, mercury, and cyanide analysis of ground water samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for metals analyzed by USEPA Method 6010B, mercury by USEPA Method 7470A, and cyanide by USEPA Method 9010B were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- ICP interference check sample analysis
- LCS analysis
- Verification of instrument parameters
- Analyte quantitation and reported detection limits
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2 and any additional observations are summarized below.

Blank analysis

Target analytes were detected in preparation, calibration, and field/equipment blanks which were analyzed for metals. The samples which contained target analytes at less than five times the associated blank concentration were qualified as not detected (U), and samples which contained target analytes at greater than five times the associated blank concentration were qualified as approximate (J) due to the blank contamination. The blank excursions are summarized in the following table:

Table 76. *Blank excursions for metal analyses in ground water samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
AA-SW-S272-75FTEB	Aluminum	0.1 mg/L	AA-SW-S1-14-16FT AA-SW-S1-34-36FT AA-SW-S1-42-46FT	U
	Aluminum	0.1 mg/L	AA-SW-S1-24-26FT AA-SW-S1-52-56FT	J
	Barium Calcium Iron Manganese Sodium	0.00232 mg/L 0.63 mg/L 0.063 mg/L 0.0028 mg/L 0.76 mg/L	AA-SW-S1-24-26FT AA-SW-S1-34-36FT AA-SW-S1-52-56FT AA-SW-S1-42-46FT AA-SW-S1-14-16FT	J
	Chromium	0.0026 mg/L	AA-SW-S1-24-26FT AA-SW-S1-52-56FT	U
	Zinc	0.0062 mg/L	AA-SW-S1-24-26FT	J
	Zinc	0.080 mg/L	AA-SW-S1-52-56FT	U
AA-I-S3-84-88FTEB	Aluminum	0.080 mg/L	AA-I-S2-16-20FT AA-I-S3-24-28FT AA-I-S3-44-48FT AA-I-S3-54-58FT AA-I-S2-46-50FT	U
	Aluminum	0.080 mg/L	AA-I-S3-34-38FT AA-I-S3-64-68FT	J
	Barium Calcium Manganese Sodium	0.0036 mg/L 0.67 mg/L 0.018 mg/L 0.47 mg/L	AA-I-S2-16-20FT AA-I-S3-24-28FT AA-I-S3-44-48FT AA-I-S3-54-58FT AA-I-S2-46-50FT AA-I-S3-34-38FT AA-I-S3-64-68FT AA-I-S2-26-30FT AA-I-S2-36-40FT	J
	Iron	0.40 mg/L	AA-I-S2-16-20FT	U
	Iron	0.40 mg/L	AA-I-S3-24-28FT AA-I-S3-44-48FT AA-I-S2-26-30FT AA-I-S3-34-38FT AA-I-S3-64-68FT AA-I-S3-54-58FT AA-I-S2-36-40FT	J
	Zinc	0.015 mg/L	AA-I-S2-16-20FT AA-I-S2-26-30FT AA-I-S2-36-40FT AA-I-S2-46-50FT	J
	Zinc	0.015 mg/L	AA-I-S3-24-28FT AA-I-S3-44-48FT AA-I-S3-34-38FT AA-I-S3-64-68FT AA-I-S3-54-58FT	U
AA-I-S2-76-80FTEB	Chromium	0.0029 mg/L	AA-I-S3-34-38FT AA-I-S3-64-68FT AA-I-S3-54-58FT AA-I-S2-46-50FT	U
	Copper	0.0027 mg/L	AA-I-S2-16-20FT AA-I-S3-24-28FT AA-I-S3-44-48FT AA-I-S3-34-38FT AA-I-S3-64-68FT AA-I-S3-54-58FT AA-I-S2-36-40FT	U
	Copper	0.0027 mg/L	AA-I-S2-46-50FT	J
CCB5 11/10/99	Lead	0.00189 mg/L	EEG-105-GP	U
CCB2/CCB3 12/8/99	Aluminum	0.0388	EEG-105-GP	U

Table 76. *Blank excursions for metal analyses in ground water samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
CCB5/CCCB7 12/20/99	Beryllium	0.00137 mg/L	AA-I-S2-16-20FT AA-I-S3-24-28FT AA-I-S3-44-48FT AA-I-S2-26-30FT AA-I-S3-34-38FT AA-I-S3-64-68FT AA-I-S3-54-58FT AA-I-S2-36-40FT AA-I-S2-46-50FT	U
	Lead	0.00163 mg/L	AA-I-S2-16-20FT AA-I-S3-24-28FT AA-I-S2-26-30FT AA-I-S3-34-38FT AA-I-S3-64-68FT AA-I-S3-54-58FT AA-I-S2-46-50FT	U
CCB5/CCB6 10/14/99	Barium	0.0013 mg/L	EEG-101 EEG-104 EEG-112	J
	Arsenic	0.00127 mg/L	EEG-101 EEG-112	J
CCB3/CCB5 2/23/00	Aluminum Barium	0.0434 mg/L 0.00123 mg/L	UGGW-EEG-108-60FT UGGW-EE-04-100FT UGGW-EE-04-100FTFD UGGW-EE-20-60FT UGGW-EE-20-100FT	J
UGGW-EEG-108-60FTEB	Calcium Iron Sodium	0.18 mg/L 0.021 mg/L 0.55 mg/L	UGGW-EEG-108-60FT UGGW-EE-04-100FT UGGW-EE-04-100FTFD UGGW-EE-20-60FT UGGW-EE-20-100FT UGGW-EEG-108-100FT	J
PBW 12/28/99	Arsenic	0.0036 mg/L	AA-I-S1-57-61FT AA-GHL-S3-50-54FT AA-GHL-S3-60-64FT AA-I-S1-47-51FT A-I-S1-67-71FT AA-GHL-S3-80-84FT AA-I-S1-77-81FT AA-I-S1-87-91FTFD AA-I-S1-97-101FT	U
	Arsenic	0.0036 mg/L	AA-GHL-S3-90-94FT A-GHL-S3-100-104FT	J
CCB6 1/18/00	Lead	0.0017 mg/L	AA-I-S1-57-61FT	U

Table 76. *Blank excursions for metal analyses in ground water samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
AA-I-S1-67-71FTEB	Barium Calcium Iron Sodium Manganese	0.0033 mg/L 0.41 mg/L 0.073 mg/L 0.72 mg/L 0.0024 mg/L	AA-I-S1-57-61FT AA-GHL-S3-50-54FT AA-I-S1-47-51FT AA-I-S1-67-71FT AA-GHL-S3-70-74FT AA-GHL-S3-80-84FT AA-I-S1-77-81FT AA-GHL-S3-90-94FT AA-I-S1-87-91FTFD AA-GHL-S3-110-114FT AA-I-S1-87-91FT AA-I-S1-97-101FT AA-GHL-S3-100-104FT	J
	Mercury	0.00015 mg/L	AA-I-S1-57-61FT AA-GHL-S3-50-54FT AA-GHL-S3-60-64FT AA-I-S1-47-51FT AA-I-S1-67-71FT AA-GHL-S3-70-74FT AA-GHL-S3-80-84FT AA-I-S1-77-81FT AA-GHL-S3-90-94FT AA-I-S1-87-91FTFD AA-GHL-S3-110-114FT AA-I-S1-97-101FT AA-GHL-S3-100-104FT	U
	Copper	0.0053 mg/L	AA-I-S1-57-61FT AA-GHL-S3-50-54FT AA-GHL-S3-60-64FT AA-I-S1-47-51FT AA-I-S1-67-71FT AA-GHL-S3-70-74FT AA-GHL-S3-80-84FT AA-I-S1-87-91FTFD AA-GHL-S3-110-114FT AA-I-S1-97-101FT	U
	Coper	0.0053 mg/L	AA-I-S1-77-81FT AA-I-S3-90-94FT AA-GHL-S3-100-104FT	J
	Zinc	0.011 mg/L	AA-I-S1-57-61FT AA-GHL-S3-50-54FT AA-I-S1-47-51FT AA-I-S1-67-71FT AA-GHL-S3-80-84FT AA-I-S1-87-91FTFD AA-GHL-S3-110-114FT AA-I-S1-87-91FT	U
	Zinc	0.011 mg/L	AA-I-S1-77-81FT AA-GHL-S3-90-94FT AA-GHL-S3-100-104FT AA-GHL-S1-97-101FT	J

Table 76. *Blank excursions for metal analyses in ground water samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
AA-H-S1-83-87FTEB	Barium Calcium Iron Manganese Sodium	0.0037 mg/L 0.60 mg/L 0.15 mg/L 0.0024 mg/L 0.81 mg/L	AA-I-S4-56-60FTFD AA-I-S4-56-60FT AA-I-S4-66-70FT AA-I-S4-86-90FT AA-I-S4-76-80FT AA-I-S4-96-100FT	J
	Chromium	0.0027 mg/L	AA-I-S4-56-60FT AA-I-S4-56-60FTFD AA-I-S4-66-70FT	J
	Chromium	0.0027 mg/L	AA-I-S4-86-90FT AA-I-S4-76-80FT AA-I-S4-96-100FT	U
	Copper	0.0028 mg/L	AA-I-S4-56-60FT AA-I-S4-56-60FTFD AA-I-S4-66-70FT AA-I-S4-76-80FT AA-I-S4-96-100FT	U
	Copper	0.0018 mg/L	AA- I-S4-86-90FT	J
	Nickel	0.012 mg/L	AA-I-S4-56-60FT AA-I-S4-56-60FTFD AA-I-S4-66-70FT AA-I-S4-86-90FT AA-I-S4-76-80FT	U
	Zinc	0.031 mg/L	AA-I-S4-56-60FT AA-I-S4-56-60FTFD AA-I-S4-66-70FT AA-I-S4-86-90FT	J
	Zinc	0.031 mg/L	AA-I-S4-76-80FT AA-I-S4-96-100FT	U
AA-H-S1-83-87FTEB	Barium Calcium Iron Manganese Sodium	0.0037 mg/L 0.6 mg/L 0.75 mg/L 0.012 mg/L 0.81 mg/L	AA-H-S1-53-57FT AA-H-S1-63-67FT AA-H-S1-83-87FT AA-H-S1-73-77FT AA-H-S1-73-77FTFD AA-H-S1-93-97FT AA-H-S1-101-105FT	J
	Chromium	0.0027 mg/L	AA-H-S1-53-57FT AA-H-S1-83-87FT	U
	Chromium	0.0027 mg/L	AA-H-S1-93-97FT AA-H-S1-101-105FT	J
	Copper	0.0018 mg/L	AA-H-S1-53-57FT AA-H-S1-93-97FT AA-H-S1-101-105FT	J
	Copper	0.012 mg/L	AA-H-S1-63-67FT AA-H-S1-83-87FT AA-H-S1-73-77FT AA-H-S1-73-77FTFD	U
	Nickel	0.012 mg/L	AA-H-S1-53-57FT AA-H-S1-83-87FT AA-H-S1-73-77FT AA-H-S1-73-77FTFD AA-H-S1-93-97FT AA-H-S1-101-105FT	J
AA-H-S1-101-105FTEB	Zinc	0.089 mg/L	AA-H-S1-53-57FT AA-H-S1-63-67FT AA-H-S1-83-87FT AA-H-S1-73-77FT AA-H-S1-73-77FTFD AA-H-S1-101-105FT	U
	Zinc	0.089 mg/L	AA-H-S1-93-97FT	J
PBW 4/4/00	Aluminum	0.0608 mg/L	TS-S2-12HR TS-S1-12HRFD	U
	Aluminum	0.0608 mg/L	TS-S1-0HR TS-S2-0HR	J

Table 76. *Blank excursions for metal analyses in ground water samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
CCB6 4/19/00	Barium	0.0014 mg/L	TS-S1-12HR TS-S1-12HRFD TS-S1-0HR TS-S2-0HR TS-S1-24HR TS-S2-24HR TS-S2-12HR	J
	Copper	0.0017 mg/L	TS-S1-0HR TS-S2-0HR	U
	Manganese	0.0018 mg/L	TS-S1-12HR TS-S1-12HRFD TS-S1-0HR TS-S2-0HR TS-S1-24HR TS-S2-24HR TS-S2-12HR	J
PBW1 5/1/00	Sodium	0.488 mg/L	BR-1	J
CCB3/CCB4 5/9/00	Beryllium	0.0006 mg/L	BR-G BR-GFD	U
BR-GEB	Calcium Iron Sodium	0.11 mg/L 0.031 mg/L 0.42 mg/L	BR-H BR-G BR-GFD BR-1	J
PBW 10/29/99	Iron	0.0823 mg/L	DW-SCHM-1	J
CCB5 11/24/99	Aluminum	0.068 mg/L	UGGW-EE-20 DW-MCDO-1 DW-MCDO-1FD DW-SETT-1 DW-WRIG-1	U
PBW 11/12/99	Calcium	0.0506 mg/L	UGGW-EE-20 DW-MCDO-1 DW-MCDO-1FD DW-SETT-1 DW-WRIG-1	J
CCB5 1/12/00	Beryllium	0.00088 mg/L	AA-GHL-S2-32-36FT AA-GHL-S1-52-56FT AA-GHL-S2-42-46FT	U
AA-GHL-S2-32-36FTEB	Calcium Sodium	0.34 mg/L 0.47 mg/L	AA-GHL-S2-32-36FT AA-GHL-S1-52-56FT AA-GHL-S2-42-46FT	J

Table 76. *Blank excursions for metal analyses in ground water samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
AA-SW-S2-72-76FTEB	Aluminum	0.1 mg/L	AA-SW-S2-32-36FT AA-SW-S2-22-26FT AA-SW-S3-14-16FT AA-SW-S3-22-26FT AA-SW-S2-62-66FT AA-SW-S2-62-66FTFD AA-SW-S3-32-36FT AA-SW-S2-72-76FT AA-SW-S3-42-46FT AA-SW-S2-82-86FT AA-SW-S2-52-56FT AA-SW-S3-52-56FT AA-SW-S2-92-96FT AA-SW-S3-62-66FT	J
	Aluminum	0.1 mg/L	AA-SW-S2-14-16FT AA-SW-S2-42-46FT	U
	Barium Calcium Iron Manganese Sodium	0.0023 mg/L 0.63 mg/L 0.063 mg/L 0.0028 mg/L 0.76 mg/L	AA-SW-S2-32-36FT AA-SW-S2-14-16FT AA-SW-S2-22-26FT AA-SW-S3-14-16FT AA-SW-S3-22-26FT AA-SW-S2-42-46FT AA-SW-S2-62-66FT AA-SW-S2-62-66FTFD AA-SW-S3-32-36FT AA-SW-S2-72-76FT AA-SW-S3-42-46FT AA-SW-S2-82-86FT AA-SW-S2-52-56FT AA-SW-S3-52-56FT AA-SW-S2-92-96FT AA-SW-S2-62-66FT	J
	Zinc	0.0062 mg/L	AA-SW-S2-32-36FT AA-SW-S2-22-26FT AA-SW-S3-14-16FT AA-SW-S3-22-26FT AA-SW-S2-62-66FTFD AA-SW-S3-32-36FT AA-SW-S3-42-46FT AA-SW-S2-52-56FT AA-SW-S3-52-56FT AA-SW-S3-62-66FT	U
	Zinc	0.0062 mg/L	AA-SW-S2-62-66FT AA-SW-S2-72-76FT AA-SW-S2-82-86FT AA-SW-S2-92-96FT	J
	Chromium	0.0026 mg/L	AA-SW-S2-32-36FT AA-SW-S2-22-26FT AA-SW-S3-14-16FT AA-SW-S3-32-36FT AA-SW-S2-52-56FT AA-SW-S3-52-56FT AA-SW-S2-42-46FT	U
	Chromium	0.0026 mg/L	AA-SW-S2-62-66FT AA-SW-S2-62-66FTFD AA-SW-S2-72-76FT AA-SW-S2-82-86FT AA-SW-S2-92-96FT AA-SW-S3-62-66FT	J

Table 76. *Blank excursions for metal analyses in ground water samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
CCB3/CCB4/CCB5 10/22/99	Barium	0.0027 mg/L	UGGW-EEG-108 UGGW-EEG-108FD EEG-109 EEG-110 EE-01 EE-03	J
	Copper	0.0018 mg/L	EEG-109 EE-01	J
	Manganese	0.0027 mg/L	UGGW-EEG-108 UGGW-EEG-108FD EEG-109 EEG-110 EE-01 EE-03	J
CCB5 10/22/99	Aluminum	0.0275 mg/L	EE-01 EEG-109	J
	Aluminum	0.0275 mg/L	UGGW-EEG-108 EE-03 UGGW-EEG-108FD EEG-110	U
	Vanadium	0.0029 mg/L	EEG-109 EE-01	U
CCB4 10/22/99	Thallium	0.0051 mg/L	EE-109 EE-01	U
PBW 11/12/99	Calcium	0.0477 mg/L	UGGW-EE-04 UGGW-EE-04FD EE-05 UGGW-EE-04-60FT	J
	Copper	0.0012 mg/L	UGGW-EE-04 UGGW-EE-04FD EE-05	U
	Copper	0.0012 mg/L	UGGW-EE-04-60FT	J
PBW 12/15/99	Aluminum	0.0844 mg/L	AA-I-S3-74-78FT AA-I-S2-66-70FT AA-I-S2-94-98FT AA-I-S2-76-80TFTD AA-I-S2-76-80FT	J
	Aluminum	0.0844 mg/L	AA-I-S2-56-60FT AA-I-S3-84-88FT AA-I-S3-84-88FTFD	U
	Lead	0.0024 mg/L	AA-I-S3-74-78FT AA-I-S3-84-88FT AA-I-S3-94-98FT	U
	Lead	0.0024 mg/L	AA-I-S2-66-70FT AA-I-S2-76-80FTFD AA-I-S2-76-80FT	J
CCB5 12/23/99	Molybdenum	0.0027 mg/L	AA-I-S3-84-88FT AA-I-S3-84-88FTFD AA-I-S3-74-78FT	U
AA-I-S3-84-88FTEB	Zinc	0.015 mg/L	AA-I-S3-74-78TF AA-I-S2-56-60FT AA-I-S3-84-88FT AA-I-S3-84-88FTFD AA-I-S3-94-98FT	U
	Zinc	0.015 mg/l	AA-I-S2-66-70FT AA-I-S2-76-80FTFD AA-I-S2-76-80FT	J
	Barium Calcium Iron Manganese Sodium	0.0036 mg/L 0.67 mg/L 0.40 mg/L 0.018 mg/L 0.47 mg/L	AA-I-S3-74-78FT AA-I—S2-56-60FT AA-I-S2-66-70FT AA-I-S3-84-88FT AA-I-S3-84-88FTFD AA-I-S3-94-98FT AA-I-S2-76-80FTFD AA-I-S2-76-80FT	J

Table 76. *Blank excursions for metal analyses in ground water samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
AA-I-S2-76-80FTEB	Beryllium	0.0025 mg/L	AA-I-S3-74-78FT AA-I---S2-56-60FT AA-I-S2-66-70FT AA-I-S3-84-88FT AA-I-S3-84-88FTFD AA-I-S3-94-98FT AA-I-S2-76-80FTFD AA-I-S2-76-80FT	U
	Copper	0.0027 mg/L	AA-I-S3-74-78FT AA-I-S2-56-60FT AA-I-S3-84-88FT AA-I-S3-84-88FTFD AA-I-S3-94-98FT	U
	Copper	0.0027 mg/L	AA-I-S2-66-70FT AA-I-S2-76-80FTFD AA-I-S2-76-80FT	J
	Chromium	0.0029 mg/L	AA-I-S3-74-76FT AA-I-S3-84-88FT AA-I-S3-84-88FTFD	U
	Chromium	0.0029 mg/L	AA-I-S2-66-70FT AA-I-S3-94-98FT AA-I-S2-76-80FT AA-I-S2-76-80FTFD	J
PBW 11/30/99	Lead	0.00243 mg/L	AA-GHL-S2-12-16FT AA-GHL-S1-42-46FT AA-GHL-S2-22-26FT	U
CCB5/CCB6 12/20/99	Beryllium	0.00071 mg/L	AA-GHL-S1-32-36FT AA-GHL-S2-12-16FT AA-GHL-S1-42-46FT AA-GHL-S2-22-26FT AA-SW-S3-72-76FT	U
	Chromium	0.00197 mg/L	AA-GHL-S1-32-36FT AA-GHL-S2-12-16FT AA-GHL-S1-42-46FT	U
	Copper	0.00095 mg/L	AA-GHL-S2-12-16FT AA-GHL-S1-42-46FT	U
CCB4-CCB7 12/9/99	Aluminum	0.0345 mg/L	AA-SW-S3-72-76FT AA-SW-S3-82-86FT AA-SW-S3-102-106FT AA-SW-S3-92-96FT AA-GHL-S1-22-26FT AA-SW-S3-96-99FT AA-SW-S3-96-99FTFD	J
	Aluminum	0.0345 mg/L	AA-GHL-S1-12-16FT AA-GHL-S1-22-26FTFD	U
AA-GHL-S2-32-36FTEB	Calcium Sodium	0.34 mg/L 0.47 mg/L	AA-SW-S3-72-76FT AA-SW-S3-82-26FT AA-SW-S3-102-106FT AA-SW-S3-92-96FT AA-GHL-S1-12-16FT AA-GHL-S1-22-26FT AA-GHL-S1-22-26FTFD AA-SW-S3-96-99FT AA-SW-S3-96-99FTFD AA-GHL-S1-32-36FT AA-GHL-S2-12-16FT AA-GHL-S2-42-46FT AA-GHL-S2-22-26FT	J
CCB5-CCB7 12/20/99	Beryllium	0.00126 mg/L	AA-GHL-S2-82-86FT AA-GHL-S1-92-96FT AA-GHL-S1-92-96FTFD AA-GHL-S1-102-106FT AA-GHL-S1-62-66FT AA-GHL-S2-52-56FT AA-GHL-S2-62-66FT AA-GHL-S2-72-76FT AA-GHL-S2-62-66FTFD AA-GHL-S1-82-86FT AA-GHL-S1-72-76FT	U

Table 76. *Blank excursions for metal analyses in ground water samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
CCB4/CCB5 1/12/00	Beryllium	0.00116 mg/L	AA-GHL-S2-99-103FT AA-GHL-S1-107-111FT AA-GHL-S2-92-96FT	U
AA-GHL-S2-92-96FTEB	Calcium Iron Manganese Sodium	0.28 mg/L 0.040 mg/L 0.0024 mg/L 0.36 mg/L	AA-GHL-S1-62-66FT AA-GHL-S2-52-56FT AA-GHL-S2-62-66FT AA-GHL-S2-72-76FT AA-GHL-S2-66-66FTFD AA-GHL-S1-82-86FT AA-GHL-S1-72-76FT AA-GHL-S2-82-86FT AA-GHL-S1-92-96FT AA-GHL-S1-92-96FTFD AA-GHL-S1-102-106FT AA-GHL-S2-99-103FT AA-GHL-S1-107-111FT AA-GHL-S2-92-96FT	J
	Copper	0.0048 mg/L	AA-GHL-S1-62-66FT AA-GHL-S1-92-96FT AA-GHL-S1-92-96FTFD AA-GHL-S1-102-106FT AA-GHL-S2-99-103FT AA-GHL-S1-107-111FT	U
	Copper	0.0048 mg/L	AA-GHL-S2-52-56FT AA-GHL-S2-72-76FT AA-GHL-S1-82-86FT	J
	Zinc	0.027 mg/L	AA-GHL-S1-62-66FT AA-GHL-S2-52-56FT AA-GHL-S2-62-66FT AA-GHL-S2-82-86FT AA-GHL-S1-92-96FT AA-GHL-S1-92-96FTFD AA-GHL-S1-102-106FT AA-GHL-S2-99-103FT AA-GHL-S1-107-111FT AA-GHL-S2-92-96FT	U
	Zinc	0.027 mg/L	AA-GHL-S2-72-76FT AA-GHL-S1-82-86FT	J
PBW 11/12/99	Aluminum	0.0621 mg/L	EE-02-GP EE-02-GPFD EE-14-GP	U
	Aluminum	0.0621 mg/L	EE-13-GP EE-12-GP RE-15-GP EE-15-GPFD	J
AA-SW-S2-72-76FTEB	Aluminum	0.1 mg/L	AA-SW-S1-62-66FT AA-SW-S1-72-76FT AA-SW-S1-82-86FT AA-SW-S1-91-95FT AA-SW-S1-101-104FT AA-SW-S1-101-104FTFD	J
CCB7 11/24/99	Lead	0.00207 mg/L	EE-13-GP EE-02-GP EE-02-GPFD EE-12-GP EE-15-GP AA-SW-S1-91-95FT	U
	Lead	0.00207 mg/L	EE-14-GP AA-SW-S1-82-86FT	J

Table 76. *Blank excursions for metal analyses in ground water samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
AA-SW-S2-72-76FTEB	Barium Calcium Iron Manganese Sodium	0.0023 mg/L 0.63 mg/L 0.063 mg/L 0.0028 mg/L 0.76 mg/L	AA-SW-S1-62-66FT AA-SW-S1-72-76FT AA-SW-S1-82-86FT AA-SW-S1-91-95FT AA-SW-S1-101-104FT AA-SW-S1-101-104FTFD	J
	Chromium	0.0026 mg/L	AA-SW-S1-62-66FT AA-SW-S1-72-76FT	U
	Chromium	0.0026 mg/L	AA-SW-S1-82-86FT AA-SW-S1-91-95FT AA-SW-S1-101-104FT AA-SW-S1-101-104FTFD	J
	Zinc	0.0062 mg/L	AA-SW-S1-72-76FT	U
	Zinc	0.0062 mg/L	AA-SW-S1-82-86FT AA-SW-S1-91-95FT AA-SW-S1-101-104FT AA-SW-S1-101-104FTFD	J
CCB4-CCB6 1/8/00	Thallium	0.00678 mg/L	AA-GHL-S3-30-34FT	u
AA-GHL-S3-60-64FTEB	Calcium Iron Sodium	0.28 mg/L 0.031 mg/L 0.45 mg/L	AA-I-S2-96-100FT AA-I-S2-86-90FT AA-I-S3-104-108FT AA-GHL-S3-20-24FT AA-I-S1-17-21FT AA-I-S3-110-114FT AA-GHL-S3-40-44FT AA-S1-27-31FT AA-S1-37-41FT AA-GHL-S3-30-34FT AA-GHL-S3-30-34FTFD	J
	Copper	0.00099 mg/L	AA-GHL-S3-20-24FT AA-I-S1-17-21FT AA-GHL-S3-40-44FT AA-S1-27-31FT AA-S1-37-41FT AA-GHL-S3-30-34FT AA-GHL-S3-30-34FTFD	U
	Copper	0.00099 mg/L	AA-I-S2-96-100FT AA-I-S2-86-90FT AA-I-S3-104-108FT AA-I-S3-110-114FT	J
	Mercury	0.00012 mg/L	AA-I-S3-104-108FT AA-I-S3-110-114FT	U
	Zinc	0.011 mg/L	AA-GHL-S3-20-24FT AA-I-S1-17-21FT AA-GHL-S3-40-44FT AA-S1-27-31FT AA-S1-37-41FT	U
	Zinc	0.011 mg/L	AA-I-S2-96-100FT AA-I-S2-86-90FT AA-I-S3-104-108FT AA-I-S3-110-114FT	J

Note:
CCB indicates continuing calibration blank.
PB indicates method (preparation) blank.
EB indicates field/equipment blank.

Calibration analysis

The recovery for calibration standards near the reported detection limit (CRI) was evaluated based on the control limits of 75%R to 125%R. Target analytes with concentrations that were less than three times the reported detection limit in samples associated with the CRI analyses were qualified as approximate (UJ,J) due to CRI recovery excursions to indicate minor accuracy exursions. The CRI excursions are summarized in the following table:

Table 77. *CRI excursions for metal analyses in ground water samples*

CRI ID	Analyte	Excursion	Affected Sample Results	Action
1903 12/20/99	Thallium	66 %R	AA-I-S2-16-20FT AA-I-S3-24-28FT AA-I-S3-44-48FT AA-I-S2-26-30FT AA-I-S3-34-38FT AA-I-S3-64-68FT AA-I-S3-54-58FT AA-I-S2-36-40FT AA-I-S2-46-50FT	UJ
0928 1/13/00	Zinc	140 %R	AA-I-S3-24-28FT AA-I-S3-44-48FT AA-I-S3-34-38FT AA-I-S3-64-68FT AA-I-S3-54-58FT	J
1536 11/10/99	Lead	136 %R	SGW-S2-15FT SGW-S1-15FT SGW-S1-20FT SGW-S1-40FT SGW-S1-40FTFD SGW-S2-40FT SGW-S2-20FT	J
	Tin	56 %R	SGW-S2-15FT SGW-S1-15FT SGW-S1-20FT SGW-S1-40FT SGW-S1-40FTFD SGW-S2-40FT SGW-S2-20FT	UJ
Note: %R indicates percentage recovery.				

MS/MSD analysis
An MS/MSD analysis for cyanide was not performed due to insufficient sample volume.

Target analytes in MS samples analyzed for metals were outside of the laboratory control limits. Post-digestion spikes analyses met method criteria, which confirmed the matrix interference for these samples. When the sample concentrations were less than four times the spike concentrations, target analytes with MS recoveries that were outside of control limits, but are greater than 30% were qualified as approximate (UJ,J) to indicate minor accuracy excursions. Detected results with MS recoveries that were less than 10% were qualified as approximate (J). The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 78. *MS/MSD excursions for metals in ground water samples*

MS/MSD ID	Analyte	Excursion	Affected Sample	Action
SGW-S2-20FT	Aluminum Manganese	0 %R, 0 %R 64 %R, 66 %R	SGW-S1-15FT SGW-S1-20FT SGW-S!-40FT SGW-S1-40FTFD SGW-S2-40FT SGW-S2-20FT SGW-S2-15F	J
16797A-1 batch	Manganese	127 %R, 148 %R	EEG-102 EEG-106 EG-107 EEG-101 EEG-104 EEG-112	J
UGGW-EEG-108-60FT	Mercury	37 %R, 37 %R	UGGW-EE-20-60FT UGGW-EE-20-100FT UGGW-EEG-108-60FT UGGW-EE-04-100FT UGGW-EE-04-100FTFD	UJ
	Aluminum	40 %R, 0 %R	UGGW-EE-20-60FT UGGW-EE-20-100FT UGGW-EEG-108-60FT UGGW-EE-04-100FT UGGW-EE-04-100FTFD	J
AA-H-S1-101-105FT	Aluminum	130 %R, 150 %R	AA-H-S1-53-57FT AA-H-S1-83-87FT AA-H-S1-93-97FT AA-H-S1-101-105FT	J
TS-S2-12HR	Mercury	77 %R, 79 %R	AA-H-S1-101-105FT TS-S2-12HR TS-S1-12HR TS-S1-12HRFD TS-S1-0HR TS-S2-0HR TS-S1-24HR TS-S2-24HR	UJ, J
EEG-110	Iron Manganese	130 %R, 422 %R 141 %R, 226 %R	UGGW-EEG-108 UGGW-EEG-108FD EEG-109 EEG-110 EE-01 EE-03	J

Table 78. *MS/MSD excursions for metals in ground water samples*

MS/MSD ID	Analyte	Excursion	Affected Sample	Action
AA-GHL-S1-22-26FT	Iron	61 %R, 12 %R	AA-GHL-S1-32-36FT AA-GHL-S2-12-16FT AA-GHL-S1-42-46FT AA-GHL-S2-22-26FT AA-SW-S3-72-76FT AA-SW-S3-82-86FT AA-SW-S3-102-106FT AA-SW-S3-92-96FT AA-GHL-S1-12-16FT AA-GHL-S1-22-26FT AA-GHL-S1-22-26FTFD AA-SW-S3-96-99FT AA-SW-S3-96-99FTFD	J
Note: %R indicates percentage recovery.				

Laboratory duplicate analysis

Laboratory duplicate results were outside of the QAPP control limits of 20 RPD for target analytes greater than five times the reported detection limit and ± the reporting limit for target analytes less than five times the reported detection limit. The MS/MSD RPD results were utilized to evaluate precision. The results for the analytes in the associated samples were qualified as approximate (J) to indicate minor precision excursions. The laboratory duplicate excursions are summarized in the following table:

Table 79. *Laboratory duplicate excursions for metal analyses in ground water samples*

Laboratory duplicate ID	Analyte	Excursion	Affected samples	Action
SGW-S2-20FT	Aluminum Iron	33 RPD 40 RPD	SGW-S1-15FT SGW-S1-20FT SGW-S1-40FT SGW-S1-40FTFD SGW-S2-40FT SGW-S2-20FT SGW-S2-15FT	J
UGGW-EEG-108-60FT	Aluminum	41 RPD	UGGW-EE-20-60FT UGGW-EE-20-100FT UGGW-EEG-108-60FT UGGW-EE-04-100FT UGGW-EE-04-100FTFD	J
S000819 batch	Aluminum Iron	34 RPD 30 RPD	UGGW-EEG-108-100FT	J
AA-SW-S2-62-66FT	Aluminum	28 RPD	AA-SW-S2-32-36FT AA-SW-S2-14-16FT AA-SW-S2-22-26FT AA-SW-S3-14-16FT AA-SW-S3-22-26FT AA-SW-S2-42-46FT AA-SW-S2-62-66FT AA-SW-S2-62-66FTFD AA-SW-S3-32-36FT AA-SW-S2-72-76FT AA-SW-S3-42-46FT AA-SW-S2-82-86FT AA-SW-S2-52-56FT AA-SW-S3-52-56FT AA-SW-S2-92-96FT AA-SW-S2-62-66FT	J
AA-SW-S1-101-104FT	Aluminum Chromium Iron Manganese	59 RPD 32 RPD 60 RPD 37 RPD	AA-SW-S1-62-66FT AA-SW-S1-72-76FT EE-13-GP EE-02-GP	J

Table 79. *Laboratory duplicate excursions for metal analyses in ground water samples*

Laboratory duplicate ID	Analyte	Excursion	Affected samples	Action
	Zinc	25 RPD	EE-02-GPFD AA-SW-S1-82-86FT AA-SW-S1-91-95FT EE-12-GP EE-14-GP AA-SW-S1-101-104FT AA-SW-S1-101-104FTFD EE-15-GP EE-15-GPFD	

Note:
RPD indicates relative percent difference.

ICP serial dilution analysis

The serial dilution recoveries for analytes in samples were greater than the 10%D criterion for analytes with concentrations greater than 50 times the IDL. The results for the affected analytes in the associated samples were qualified as approximate (J) to indicate minor accuracy excursions. The ICP serial dilution excursions are summarized in the following table:

Table 80. *ICP serial dilution excursions for metal analyses in ground water samples*

Serial dilution ID	Analyte	Excursion	Affected samples	Action
BR-I	Potassium	15.8 %D	BR-I	J
AA-I-S3-94-98FT	Aluminum	22.5 %D	AA-I-S3-94-98FT	J
AA-SW-S1-101-104FT	Zinc	14 %D	AA-SW-S1-62-66FT AA-SW-S1-72-76FT EE-13-GP EE-02-GP EE-02-GPFD AA-SW-S1-82-86FT AA-SW-S1-91-95FT EE-12-GP EE-14-GP AA-SW-S1-101-104FT AA-SW-S1-101-104FTFD EE-15-GP EE-15-GPFD	J
AA-I-S1-27-31FT	Potassium	10.8 %D	AA-I-S2-96-100FT AA-I-S2-86-90FT AA-I-S3-104-108FT AA-GHL-S3-20-24FT AA-I-S1-17-21FT AA-I-S3-110-114FT AA-GHL-S3-40-44FT AA-S1-27-31FT AA-S1-37-41FT AA-GHL-S3-30-34FT AA-GHL-S3-30-34FTFD	J

Note:
%D indicates percent difference.

Field duplicate analysis

Field duplicate results were outside of the QAPP control limits of 20 RPD for target analytes greater than five times the reported detection limit and ± the reporting limit for target analytes less than five times the reported detection limit. The results for the analytes in the associated samples were qualified as approximate (J) to indicate minor precision excursions. The field duplicate excursions are summarized in the following table:

Table 81. *Field duplicate excursions for metal analyses in ground water samples*

Field duplicate ID	Analyte	Excursion	Affected samples	Action
UGGW-EEG-108FD	Chromium	Difference greater than ± the reporting limit	EEG-103-GP EEG-105-GP EEG-111-GP	UJ, J
AA-SW-S2-62-66FTFD	Aluminum	24 RPD	AA-SW-S1-14-16FT AA-SW-S1-24-26FT AA-SW-S1-34-36FT AA-SW-S1-52-56FT AA-SW-S1-42-46FT	J
SGW-S1-40FTFD	Aluminum Barium Chromium Copper Iron Lead Manganese Magnesium Potassium Vanadium Zinc Calcium	80 RPD 44 RPD 93 RPD 60 RPD 80 RPD 82 RPD 33 RPD 24 RPD 38 RPD 85 RPD 94 RPD 26 RPD	SGW-S2-15FT SGW-S2-20FT SGW-S2-40FT SGW-S1-40FTFD SGW-S1-40FT SGW-S1-20FT SGW-S1-15FT	J
SGW-S1-40FTFD	Arsenic	Difference greater than ± the reporting limit	SGW-S2-15FT SGW-S2-20FT SGW-S2-40FT SGW-S1-40FTFD SGW-S1-40FT SGW-S1-20FT SGW-S1-15FT	UJ, J
SGW-S1-40FTFD	Cobalt	Difference greater than ± the reporting limit	SGW-S2-15FT SGW-S2-20FT SGW-S2-40FT SGW-S1-40FTFD SGW-S1-40FT SGW-S1-20FT SGW-S1-15FT	J
UGGW-EE-04-100FTFD	Aluminum Zinc	75 RPD 66 RPD	UGGW-EE-20-60FT UGGW-EE-20-100FT UGGW-EEG-108-60FT UGGW-EE-04-100FT UGGW-EE-04-100FTFD UGGW-EEG-108-100FT	J
AA-I-S4-56-60FTFD	Aluminum Chromium Zinc	37 RPD 41 RPD 39 RPD	AA-I-S4-56-60FT AA-I-S4-56-60FTFD AA-I-S4-66-70FT AA-I-S4-86-90FT AA-I-S4-76-80FT AA-I-S4-96-100FT	J
BR-GFD	Aluminum Calcium Chromium Iron Manganese Zinc	76 RPD 48 RPD 125 RPD 84 RPD 78 RPD 81 RPD	BR-G BR-GFD BR-H BR-I	UJ, J

Table 81. *Field duplicate excursions for metal analyses in ground water samples*

Field duplicate ID	Analyte	Excursion	Affected samples	Action
UGGW-EEG-108FD	Chromium	Difference greater than ± the reporting limit	EEG-102 EEG-106 EG-107 EEG-101 EEG-104 EEG-112	UJ, J
DW-MCDO-1FD	Lead Zinc	80 RPD 86 RPD	DW-MCDO-1 DW-MCDO-IFD DW-SETT-1 DW-WRIG-1 DW-SCHM-1	UJ, J
AA-SW-S2-62-66FTFD	Aluminum	24 RPD	AA-SW-S2-32-36FT AA-SW-S2-14-16FT AA-SW-S2-22-26FT AA-SW-S3-14-16FT AA-SW-S3-22-26FT AA-SW-S2-42-46FT AA-SW-S2-62-66FT AA-SW-S2-62-66FTFD AA-SW-S3-32-36FT AA-SW-S2-72-76FT AA-SW-S3-42-46FT AA-SW-S2-82-86FT AA-SW-S2-52-56FT AA-SW-S3-52-56FT AA-SW-S2-92-96FT AA-SW-S3-62-66FT	J
UGGW-EEG-108FD	Chromium	Difference greater than ± the reporting limit	UGGW-EEG-108 UGGW-EEG-108FD EEG-109 EEG-110	UJ, J
EE-04FD	Chromium Iron	24 RPD 22 RPD	EE-04 EE-04FD EE-05 UGGW-EE-04-60FT UGGW-EE-20 EE-01 EE-03	UJ, J
AA-GHL-S1-22-26FTFD	Iron	93 RPD	AA-GHL-S1-22-26FT AA-GHL-S1-22-26FTFD AA-GHL-S1-32-36FT AA-GHL-S2-12-16FT AA-GHL-S1-42-46FT AA-GHL-S2-22-26FT AA-GHL-S1-12-16FT AA-GHL-S2-32-36FT AA-GHL-S1-52-56FT AA-GHL-S2-42-46FT	J
AA-SW-S3-96-99FTFD	Aluminum Iron Manganese Zinc	141 RPD 59 RPD 45 RPD 137 RPD	AA-SW-S3-72-76FT AA-SW-S3-82-86FT AA-SW-S3-102-106FT AA-SW-S3-92-96FT AA-SW-S3-96-99FTFD AA-SW-S3-96-99FT	J
	Chromium	Difference greater than ± the reporting limit	AA-SW-S3-72-76FT AA-SW-S3-82-86FT AA-SW-S3-102-106FT AA-SW-S3-92-96FT AA-SW-S3-96-99FTFD AA-SW-S3-96-99FT	J
EE-15-GPFD	Aluminum Barium Iron Potassium	134 RPD 35 RPD 40 RPD 28 RPD	EE-15-GP EE-15-GPFD	J
	Vanadium Zinc	Difference greater than ± the reporting limit	EE-15-GP EE-15-GPFD	J

Table 81. *Field duplicate excursions for metal analyses in ground water samples*

Field duplicate ID	Analyte	Excursion	Affected samples	Action
EE-02-GPFD	Barium	24 RPD	EE-02-GP EE-02-GPFD EE-12-GP EE-13-GP EE-14-GP	J
AA-GHL-S1-92-96FTFD	Aluminum	26 RPD	AA-GHL-S1-92-96FT AA-GHL-S1-92-96FTFD AA-GHL-S1-102-106FT AA-GHL-S2-99-103FT AA-GHL-S1-107-111FT AA-GHL-S2-82-86FT AA-GHL-S2-92-96FT	UJ, J

Note:
RPD indicates relative percent difference.

Overall data assessment

- Nine hundred thirty-two results for target analytes in ground water samples were qualified as undetected (U) or approximate (J) due to blank contamination.
- Twenty-eight results for target analytes in ground water samples were qualified as approximate (UJ, J) due to CRI recovery excursions.
- Sixty-seven results for target analytes in ground water samples were qualified as approximate (UJ, J) due to MS/MSD recovery excursions.
- One hundred two results for target analytes in ground water samples were qualified as approximate (J) due to laboratory duplicate excursions.
- Twenty-six results for target analytes in ground water samples were qualified as approximate (J) due to ICP serial dilution excursions.
- Two hundred sixty-nine results for target analytes in ground water samples were qualified as approximate (UJ, J) due to field duplicate excursions.

3.8. PCDD and PCDF analysis of ground water samples

Criteria Compliance

The QA/QC parameters presented in Section 1.2.2 for PCDD and PCDFs analyzed by USEPA Method 8290 were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Instrument performance (mass resolution, GC column performance check)
- Initial calibration
- Duplicate analysis
- Estimated detection limits
- Estimated maximum possible concentration (EMPC)
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Holding times

Holding times were evaluated based on sample collection, extraction, and analysis dates. The result for target analytes in ground water samples which were extracted outside of the holding time were qualified as approximate (UJ, J) to indicate minor representativeness excursions. The following table summarizes the holding time excursions.

Table 82. *Holding time excursions for PCDDs and PCDFs in ground water samples*

Sample ID	Target analyte	Excursion	Action
EE-05	OCDD	3 days outside of extraction holding time	J
AA-I-S3-24-28FT	Target analytes	11 days outside of extraction holding time	UJ, J
AA-I-S2-16-20FT	Target analytes	11 days outside of extraction holding time	UJ, J
AA-I-S3-64-68FT	Target analytes	27 days outside of extraction holding time	UJ
EEG-107	1234678-HpCDD OCDD 1234678-HpCDF OCDF	11 days outside of extraction holding time	J

Note:
HpCDF indicates heptachlorodibenzofuran
HpCDD indicates heptachlorodibenzo-p-dioxin
OCDD indicates octachlorodibenzo-p-dioxin
OCDF indicates octachlorodibenzofuran

Sample preservation

The temperatures of the coolers that were used to ship samples to the laboratory was documented by the laboratory. The following table summarizes cooler temperatures that were above 10 °C. Sample results were not qualified due to elevated cooler temperatures.

Table 83. *Elevated cooler temperatures for PCDDs and PCDFs in ground water samples*

Sample ID	Excursion
DW-SCHM-1	Cooler temperature 14 °C
EE-15-GP EE-15-GPFD AA-SW-S1-101-104FT AA-SW-S1-101-104FTFD	Cooler temperature 16 °C
AA-SWS2-102-106FT	Cooler temperature 12 °C

Continuing calibration

The criteria of 25 %D for the unlabeled analytes and 35 %D for the labeled standard analytes were used to evaluate the final continuing calibration if the initial continuing calibration criteria were not met. Target analytes in samples affected by the continuing calibration excursions were qualified as approximate (UJ, J) to indicate minor accuracy excursions.

Samples qualified due to minor continuing calibration excursions are summarized in the following table.

Table 84. *Continuing calibration excursions for PCDDs and PCDFs in ground water samples*

Calibration ID	Standard analytes	Excursion	Affected samples	Affected analytes	Action
CCf 10/22/99	$^{13C}_{12}$ OCDD	44 %D	SGW-S1-20FT SGW-S1-15FT SGW-S1-40FT SGW-S1-40FTFD	OCDD OCDF	UJ, J
CCf 10/27/99	$^{13C}_{12}$ 12378-PeCDD	36 %D	DW-SETT-1 DW-MCDO-1FD DW-MCDO-1 DW-WRIG-1	12378-PeCDD	UJ, J

Note:
CCf indicates final continuing calibration.
% D indicates percent difference.
OCDD indicates octachlorodibenzo-p-dioxin
OCDF indicates octachlorodibenzofuran
PeCDD indicates pentachlorodibenzo-p-dioxin

Blank analysis

Target analytes were detected in the method blank analyzed for PCDDs and PCDFs. Samples with target analytes at concentrations less than or equal to five times the concentrations in the associated method blank were flagged as EMPCs. The samples flagged as EMPCs due to method blank contamination are summarized in the following table.

Table 85. *Blank contamination for PCDDS and PCDFs in ground water samples*

Blank ID	Target analyte	Concentration	Affected samples	Action
MB 49608B	OCDD	36.5 ppq	EE-106	EMPC
MB 49614A	1234678-HpCDD	12.4 ppq	EEG-112	EMPC
MB 49614A	OCDD	53.5 ppq	EEG-112	EMPC
MB 49614A	123478-HxCDF	3.0 ppq	EEG-101 EEG-112	EMPC
MB 49614A	234678-HxCDF	2.8 ppq	EEG-112 EEG-104	EMPC
MB 49614A	OCDF	15.3 ppq	EEG-112	EMPC
MB 49642B	123478-HxCDF	1.9 ppq	EE-03	EMPC
MB 49653B	123478-HxCDF	1.9 ppq	UGGW-EE-04-60FT	EMPC
MB 49653B	1234678-HpCDF	3.5 ppq	UGGW-EE-04	EMPC
MB 49661B	12378-PeCDF	3.0 ppq	SGW-S1-40FTFD	EMPC
	123678-HxCDD	2.9 ppq	SGW-S1-40FTFD	EMPC
	123478-HxCDF	4.1 ppq	SGW-S1-15FT	EMPC
	1234678-HpCDD	2.7 ppq	SGW-S1-15FT	EMPC
	OCDD	10.2 ppq	SGW-S1-20FT SGW-S1-15FT	EMPC
MB 49716	OCDD	10 ppq	DW-SCHM-1	EMPC
MB 49781	OCDD	5.8 ppq	AA-SW-S1-14-16FT	EMPC
MB 49792	OCDD	5.8 ppq	EEG-105-GP	EMPC
MB 49799	OCDD	6.8 ppq	EEG-111-GP	EMPC

Table 85. *Blank contamination for PCDDS and PCDFs in ground water samples*

Blank ID	Target analyte	Concentration	Affected samples	Action
MB 49914A	OCDD	6.4 ppq	AA-SWS2-102-104FT	EMPC
MB 49945A	OCDD	6.4 ppq	AA-GHL-S1-22-26FT AA-SW-S3-96-99FT AA-GHL-S1-22-26FTFD AA-SW-SW-96-99FTFD	EMPC
MB 50714	OCDD	13.5 ppq	TS-S1-24HR TS-S2-0HR TS-S1-0HR TS-S1-12HR TS-S1-12HRFD	EMPC
	123478-HxCDF	5.6 ppq	TS-S1-0HR TS-S1-24HR	EMPC
	OCDF	16.4 ppq	TS-S2-0HR TS-S1-0HR TS-S1-12HRFD	EMPC

Note:
MB indicates method blank.
ppq indicates parts per quadrillion.
PeCDF indicates pentachlorodibenzofuran
HxCDF indicates hexachlorodibenzofuran
HxCDD indicates hexachlorodibenzo-p-dioxin
HpCDD indicates hepachlorodibenzo-p-dioxin
HpCDF indicates hepachlorodibenzofuran
OCDD indicates octachlorodibenzo-p-dioxin

Internal standard criteria

Target analytes associated with internal standards that exhibited recoveries of less than 25% or greater than 135%R were qualified as approximate (J, UJ) to indicate minor accuracy excursions. The non-detected results for 2378-TCDF and 2378-TCDD in sample AA-SW-S1-101-104FT were rejected (R) since the recoveries for the internal standards associated with the target analytes were less than 25%. In accordance with laboratory policy, samples with internal standard recoveries that are outside criteria are acceptable if the signal-to-noise ratios are equal to or greater than 10:1. Therefore, corrective action was not performed by the laboratory. The following table summarizes the internal standard excursions.

Table 86. *Internal standard excursions for PCDDs and PCDFs in ground water samples*

Sample ID	Internal standard	Excursion	Affected analytes	Action
AA-SW-S1-101-104FT	$^{13C}_{12}$ 2378-TCDF $^{13C}_{12}$ 2378-TCDD	17 %R 21 %R	2378-TCDF 2378-TCDD	R R
EE-13-GP	$^{13C}_{12}$ OCDD	147 %R	OCDF	J
AA-H-S1-83-87FT	$^{13C}_{12}$ OCDD	146%R	OCDF OCDD	J

Note:
%R indicates percentage recovery.
TCDF indicates tetrachlorodibenzofuran
TCDD indicates tetrachlorodibenzo-p-dioxin
OCDD indicates octachlorodibenzo-p-dioxin
OCDF indicates octachlorodibenzofuran

Surrogate/alternative/cleanup standard recovery

During the validation process, the recoveries of the surrogate, alternative, and cleanup standards were evaluated for each sample result using the control limits of 45% to 135% recovery. Target analytes in samples with surrogate or cleanup standard excursions were qualified as approximate (UJ, J) to indicate minor accuracy excursions. Samples qualified due to minor surrogate/cleanup excursions are summarized in the following table.

Table 87. *Surrogate/alternative/cleanup standard excursions for PCDDs and PCDFs in ground water samples*

Sample ID	Surrogate/alternative/cleanup standard	Excursion	Affected target analytes	Action
UGGW-EE-04	$^{13C}_{12}$ 1234789-HpCDF (surrogate)	149 %R	12346-HpCDD OCDD 1234678-HpCDF OCDF	J
AA-SW-S1-101-104FT	$^{37Cl}_{4}$2378-TCDD (cleanup standard)	22 %R	Target analytes	UJ, J

Note:
%R indicates percentage recovery.
TCDD indicates tetrachlorodibenzo-p-dioxin
HpCDF indicates heptachlorodibenzofuran
HpCDD indicates hepachlorodibenzo-p-dioxin
OCDD indicates octachlorodibenzo-p-dioxin
OCDF indicates octachlorodibenzofuran

Recovery standard criteria

The recovery standard areas for several samples were outside of the criteria of 50% to 200% of the associated continuing calibration. As a result of recovery standard excursions, analytes in the affected samples were qualified as approximate (UJ, J) to indicate minor accuracy excursions. Seventeen nondetected results for the target analytes in sample AA-GHL-S2-62-66FT were rejected (R) since the recoveries for the recovery standards were less than 25%, to indicate a major accuracy excursion. The laboratory was not required to monitor the recovery standard areas, therefore corrective action was not performed. The sample results qualified as a result of the recovery standard excursions are summarized in the following table.

Table 88. *Recovery standard area excursions for PCDDs and PCDFs in ground water samples*

Sample ID	Recovery standard	Excursion	Affected analytes	Action
AA-GHL-S1-102-106FT	$^{13C}_{12}$1234- TCDD	206 %R	For target analytes see below	UJ
	$^{13C}_{12}$123789- HxCDD	225 %R	For target analytes see below	UJ, J
AA-GHL-S2-62-66FT	$^{13C}_{12}$1234- TCDD	23 %R	For target analytes see below	R
	$^{13C}_{12}$123789- HxCDD	14 %R	For target analytes see below	R
AA-GHL-S2-99-103FT	$^{13C}_{12}$1234- TCDD	27 %R	For target analytes see below	UJ
	$^{13C}_{12}$123789- HxCDD	30 %R	For target analytes see below	UJ
AA-SW-S2-62-66FTFD	$^{13C}_{12}$123789- HxCDD	332 %R	For target analytes see below	UJ, J
AA-SW-S2-62-66FT	$^{13C}_{12}$1234- TCDD	276 %R	For target analytes see below	UJ
	$^{13C}_{12}$123789- HxCDD	318 %R	For target analytes see below	UJ, J
AA-SW-S3-22-26FT	$^{13C}_{12}$123789- HxCDD	246 %R	For target analytes see below	UJ, J
AA-SW-SW-96-99FTFD	$^{13C}_{12}$123789- HxCDD	232 %R	For target analytes see below	UJ, J
AA-GHL-S1-62-66FT	$^{13C}_{12}$1234- TCDD	374 %R	For target analytes see below	UJ
	$^{13C}_{12}$123789- HxCDD	452 %R	For target analytes see below	UJ, J

Table 88. *Recovery standard area excursions for PCDDs and PCDFs in ground water samples*

Sample ID	Recovery standard	Excursion	Affected analytes	Action
EEG-101	$^{13C}_{12}$1234- TCDD	34 %R	For target analytes see below	UJ
	$^{13C}_{12}$123789- HxCDD	31 %R	For target analytes see below	UJ, J
EEG-112	$^{13C}_{12}$1234- TCDD	25 %R	For target analytes see below	UJ
	$^{13C}_{12}$123789- HxCDD	36 %R	For target analytes see below	UJ, J
EEG-104	$^{13C}_{12}$1234- TCDD	36 %R	For target analytes see below	UJ
	$^{13C}_{12}$123789- HxCDD	48 %R	For target analytes see below	UJ, J

Note:

The associated target analytes for recovery standard $^{13C}_{12}$1234- TCDD include 2378-TCDD, 2378-TCDF, 12378-PeCDD, 12378-PeCDF, and 23478-PeCDF.

The associated target analytes for recovery standard $^{13C}_{12}$123789- HxCDD include 123678-HxCDD, 123478-HxCDD, 123789-HxCDD, 1234678-HpCDD, OCDD, 123678-HxCDF, 123789-HxCDF, 123478-HxCDF, 234678-HxCDF, 1234678-HpCDF, 1234789-HpCDF, and OCDF.

%R indicates percentage recovery.
TCDD indicates tetrachlorodibenzo-p-dioxin
TCDF indicates tetrachlorodibenzofuran
PeCDD indicates pentachlorodibenzo-p-dioxin
PeCDF indicates pentachlorodibenzofuran
HxCDD indicates hexachlorodibenzo-p-dioxin
HxCDF indicates hexachlorodibenzofuran
HpCDD indicates heptachlorodibenzo-p-dioxin
HpCDF indicates heptachlorodibenzofuran
OCDD indicates octachlorodibenzo-p-dioxin
OCDF indicates octachlorodibenzofuran

MS/MSD analysis

The results for analytes in one MS/MSD sample were outside the laboratory control limits. As a result of the MS/MSD analysis excursions, analytes in the unspiked sample were qualified as approximate (J) to indicate minor accuracy excursions. The following table summarizes the MS/MSD excursions.

Table 89. *MS/MSD excursions for PCDDs and PCDFs in ground water samples*

MS/MSD ID	Target analyte	Excursion	Action
AA-H-S1-101-105FT	12378-PeCDD	137 %R	J
	123678-HxCDD	134 %R	
	23478-PeCDF	137 %R, 20 RPD	
	123478-HxCDF	152 %R, 30 RPD	
	234678-HxCDF	142 %R	
	1234789-HpCDF	151 %R, 214 %R, 34 RPD	

Note:
%R indicates percentage recovery.
RPD indicates relative percent difference
PeCDD indicates pentachlorodibenzo-p-dioxin
PeCDF indicates pentachlorodibenzofuran
HxCDD indicates hexachlorodibenzo-p-dioxin
HxCDF indicates hexachlorodibenzofuran
HpCDF indicates heptachlorodibenzofuran

LCS/LCSD analysis

The recoveries and RPDs for analytes in LCS/LCSDs were outside the laboratory control limits. As a result of the LCS/LCSD excursions, analytes in the associated samples were qualified as approximate (J) to indicate minor accuracy and precision excursions. The following table summarizes the LCS/LCSD excursions.

Table 90. *LCS/LCSD excursions for PCDDs and PCDFs in ground water samples*

LCS/LCSD ID	Target analyte	Excursion	Affected samples	Action
49642B	123789-HxCDD	138 %R 31 RPD	EE-01	J
49653B	123789-HxCDD	138 %R	EE-05	J
50657	234678-HxCDF	149 %R, 143 %R	AA-H-S1-101-105FT AA-H-S1-93-97FT AA-H-S1-73-77FTFD AA-H-S1-83-87FT AA-H-S1-73-77FT	J
50657	123789-HxCDF	133 %R	AA-H-S1-101-105FT AA-H-S1-73-77FT	J
50714	OCDF	35 RPD	TS-S2-OHR TS-S1-0HR TS-S1-12HR TS-S1-12HRFD	J

Note:
%R indicates percentage recovery.
RPD indicates relative percent difference.
HxCDD indicates hexachlorodibenzo-p-dioxin
HxCDF indicates hexachlorodibenzofuran
OCDF indicates octachlorodibenzofuran

Sample data (identification and quantitation)

Due to interferences, target analytes were qualified as approximate (J) to indicate minor representativeness excursions. The following table summarizes the samples qualified due to interferences.

Table 91. *PCDDs and PCDFs in ground water samples qualified due to interferences*

Sample ID	Affected target analytes or internal standards	Qualified target analytes	Action
EE-12-GP EE-14-GP	12378-PeCDF	12378-PeCDF	J
AA-I-S4-96-100FT	$^{13C}_{12}$ 2378-TCDF $^{13C}_{12}$ 2378-TCDD $^{13C}_{12}$ 12378-PeCDF $^{13C}_{12}$ 12378-PeCDD	2378-TCDF 2378-TCDD 12378-PeCDF 23478-PeCDF 12378-PeCDD	UJ, J
EEG-107	12378-PeCDF	12378-PeCDF	J

Note:
TCDD indicates tetrachlorodibenzo-p-dioxin
TCDF indicates tetrachlorodibenzofuran
PeCDD indicates pentachlorodibenzo-p-dioxin
PeCDF indicates pentachlorodibenzofuran

Due to poorly resolved peaks, 123789-HxCDD in sample EEG-107 was qualified as approximate (J) to indicate a minor representativeness excursion. The following table summarizes the sample qualified due to poorly resolved peaks.

Table 92. *PCDDs and PCDFs in ground water sample qualified due to resolution excursion*

Sample ID	Affected target analytes or internal standards	Qualified target analytes	Action
EEG-107	123789-HxCDD	123789-HxCDD	J
Note: HxCDD indicates hexachlorodibenzo-p-dioxin			

Second column confirmation

In the following sample, the 2378-TCDF concentration was confirmed by analysis on the DB-225 column.

Table 93. *2378-TCDF result confirmed on column DB-225 in ground water samples*

Sample ID	Reason for confirmation
SGW-S1-40FT	Concentration of 2378-TCDF in sample above the detection limit
EE-01	
EE-12-GP	
EE-14-GP	
AA-H-S1-53-57FT	
AA-H-S1-83-87FT	
AA-H-S1-73-77FT	
AA-H-S1-73-77FTFD	
AA-H-S1-101-105FT	
AA-H-S1-93-97FT	
EEG-104	
EEG-107	
BR-G	
BR-GFD	

Sample re-analysis

The following samples were re-extracted and reanalyzed due to sample analysis excursions.

Table 94. *PCDDs and PCDFs in ground water samples analyzed by dilution*

Sample ID	Reason for re-analysis
AA-SW-S1-62-66FT	Low internal standard recoveries; re-analysis provided improved recoveries and was reported
AA-I-S2-16-20FT AA-I-S3-24-28FT	Low internal standard recoveries; reanalyses provided improved recoveries and were reported
AA-I-S4-96-100FT	Low internal standard recoveries for associated quality control samples; re-analysis did not improve results. Therefore, the initial analysis was reported
AA-H-S1-63-67FT	Low internal standard recoveries for associated quality control samples; re-analysis did not improve results. Therefore, the initial analysis was reported
BR-G BR-GFD BR-I	Internal standard failures in the original analysis; reanalyses improved results and were reported.

In some cases, although re-analysis of samples was indicated since high concentrations of target analytes were detected, the re-analysis was not performed by the laboratory through laboratory error.

Samples EE-12-GP and EE-14-GP were reported by Triangle Labs with target analyte concentrations that were above the calibration limit or saturated. The laboratory was requested to reanalyze these samples at a dilution to be able to report the concentration of the target analytes

within the calibration curve. However, the laboratory indicated that the analyst responsible for data review had overlooked the high concentrations and the samples had been disposed of; therefore, re-analysis was not possible. As a result of the laboratory excursion, the results for the affected target analytes were qualified as approximate (J), since the high concentrations should be considered estimated only. The following table summarizes the samples qualified due to re-analysis excursions.

Table 95. *Re-analysis excursions for PCDDs and PCDFs in ground water samples*

Sample ID	Target analytes	Excursion	Action
EE-12-GP	1234678-HpCDD OCDD 1234678-HpCDF OCDF	Target analytes saturated	J
EE-14-GP	1234678-HpCDD OCDD OCDF	Target analytes exceeded calibration range	J
Note: HpCDD indicates heptachlorodibenzo-p-dioxin HpCDF indicates heptachlorodibenzofuran OCDD indicates octachlorodibenzo-p-dioxin OCDF indicates octachlorodibenzofuran			

In the case of data packages 49816D and 50956/N1/N2, although dilutions were utilized in the re-analysis of samples, the dilution factor was not included in the sample calculations due to laboratory error. The corrected concentrations and sample result forms were requested and received during the validation process.

The following table presents the samples analyzed by dilution due to high concentration of target analytes or saturation.

Table 96. *PCDDs and PCDFs in ground water samples analyzed dilution*

Sample ID	Target analytes	Dilution	Reason
EE-05	OCDD	1:10	Saturation of target analyte
EE-13-GP	OCDD	1:10	Saturation of target analyte
AA-H-S1-53-57FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	1:1000	Saturation and high concentration of target analytes
AA-H-S1-93-97FT	OCDD	1:20	High concentrations of target analytes
AA-H-S1-101-105FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	1:20	High concentrations of target analytes
EEG-107	1234678-HpCDD OCDD 1234678-HpCDF OCDF	1:500	High concentrations of target analytes
BR-G BR-1 BR-GFD	Target analytes	1:1000	High concentrations of target analytes
Note: HpCDD indicates heptachlorodibenzo-p-dioxin HPCDF indicates heptachlorodibenzofuran OCDD indicates octachlorodibenzo-p-dioxin OCDF indicates octachlorodibenzofuran			

Overall data assessment

- Fifty-six results for target analytes in ground water samples were qualified as approximate (UJ, J) due to extraction holding time excursions.
- The temperatures of coolers that were used to ship samples DW-SCHM-1, EE-15-GP, EE-15-GPFD, AA-SW-S1-101-104FT, AA-SW-S1-101-104FTFD, and AA-SWS2-102-106FT were elevated.
- Twelve target analyte results in ground water samples were qualified as approximate (UJ, J) due to final continuing calibration %D excursions.
- Thirty-six target analyte results in ground water samples were qualified as EMPC values as a result of blank contamination detected in method blanks.
- The non-detected results for 2378-TCDF and 2378-TCDD in sample AA-SW-S1-101-104FT were rejected (R) since the recoveries for the internal standards associated with the target analytes were less than 25%.
- Three target analyte results in ground water samples qualified as approximate (J) due to internal standard recoveries that exceeded the upper control limit.
- The results for four target analytes in samples UGGW-EE-04 and seventeen target analytes in sample AA-SW-S1-101-104FT were qualified as approximate (UJ, J) due to surrogate or cleanup recovery excursions.
- Seventeen nondetected results for the target analytes in sample AA-GHL-S2-62-55FT were rejected (R) since the recoveries for the recovery standards were less than 25%.
- One hundred fifty-five results for target analytes in ground water samples were qualified as approximate (UJ, J) due to recovery standard areas that were outside of the control limits.
- The non-detected results for 2378-TCDF and 2378-TCDD in sample AA-SW-S1-101-104FT were rejected (R) since the recoveries for the internal standards associated with the target analytes were less than 25%.
- Three results for target analytes in sample AA-H-S1-101-105FT were qualified as approximate (J) due to MS/MSD recovery excursions.
- Three results for target analytes in sample AA-H-S1-101-105FT were qualified as approximate (J) due to MS/MSD precision excursions.
- Eight results for target analytes in ground water samples were qualified as approximate (J) due to LCS/LCSD accuracy excursions.
- Five results for target analytes in ground water samples were qualified as approximate (J) due to LCS/LCSD precision excursions.
- Eight results for target analytes in ground water samples were qualified as approximate due to analysis interferences.
- The result for 123789-HxCDD in sample EEG-107 was qualified as approximate (J) due to a resolution excursion.

- The results for 2378-TCDF in samples SGW-S1-40FT, EE-01, EE-12-GP, EE-14-GP, AA-H-S1-53-57FT, AA-H-S1-83-87FT, AA-H-S1-73-77FT, AA-H-S1-73-77FTFD, AA-H-S1-101-105FT, AA-H-S1-93-97FT, EEG-104, EEG-107, BR-G, and BR-GFD were confirmed by analysis on the DB-225 column.
- The following samples were reanalyzed due to internal standard excursions: AA-SW-S1-62-66FT, AA-I-S2-16-20FT, AA-I-S3-24-28FT, AA-I-S4-96-100FT, AA-H-S1-63-67FT, BR-G, BR-GFD, BR-I.
- Seven results for target analytes in ground water samples were qualified as approximate (J) since the target analyte concentrations reported by the laboratory were above the calibration limit or saturated.
- The following samples were analyzed by dilution due to high concentration of target analytes or saturated concentrations: EE-05, EE-13-GP, AA-H-53-57FT, AA-H-S1-93-97FT, AA-H-S1-101-105FT, EEG-107, BR-G, BR-I, BR-GFD.

4. Soil samples (undeveloped area surface and subsurface soil, developed area surface and subsurface soil, background)

4.1. Document completeness

In the case of samples collected 11/16/99 and submitted for dioxin/dibenzofuran analysis, the sample custodian for Triangle Labs did not sign the chain-of-custody receipt block to indicate that the laboratory received the samples. The laboratory indicated that samples associated with the affected chain-of-custodies were received on 11/17/99 and were logged in by an employee who was unaware that each block required a signature by the sample custodian. The Triangle chain-of-custody, which is created at the time of sample receipt, provides the date received for each sample (11/17/99), which can be traced back to the unsigned external chain-of-custody. Sample data associated with this excursion were not qualified during the data validation process.

As a result of severe weather, the delivery of sample coolers containing samples collected for dioxin/dibenzofuran analysis on 1/24/00 (received by the laboratory 1/20/00), samples collected for dioxin/dibenzofuran analysis on 1/26/00 (received by Triangle Labs 1/31/00), and samples collected for dioxin/dibenzofuran analysis on 1/27/00 (received by Triangle Labs 2/1/00) were received beyond the generally accepted criterion of 48 hours from collection. Samples associated with these deviations were not qualified since cooler temperatures met criteria.

4.2. VOC analysis of soil samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for VOCs analyzed by USEPA Method 8260B were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times, sample preservation, and percentage solids
- GC/MS tuning criteria
- Initial and continuing calibration
- LCS analysis
- Target analyte identification, quantitation, reported detection limits, and system performance
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2 and any additional observations are summarized below.

Surrogate recovery
Recovery for 4-bromofluorobenzene in sample UAS-T7-S7-0.5FT was outside of the laboratory control limits. As a result of the surrogate recovery excursion, target analytes were qualified as approximate (UJ, J) to indicate a minor accuracy excursion. The following table presents the target analytes qualified as a result of the minor surrogate recovery excursion:

Table 97. *Surrogate excursion for VOC analysis in soil sample*

Sample ID	Surrogate	Excursion	Affected analytes	Action
UAS-T7-S7-0.5FT	4-bromofluorobenzene	61 %R	target analytes	UJ, J

Note: %R indicates percentage recovery.

Blank analysis
The results for trip blanks collected 11/11/99, 1/13/99, 11/18/99, and 3/10/00 were not provided by the laboratory for review.

Samples which contained acetone at less than ten times the blank concentration and 2-butanone at less than five times the blank concentration were qualified as undetected (U) due to the blank contamination. The blank excursions are summarized in the following table:

Table 98. *Blank excursions for VOC analyses in soil samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
2M1123MB	acetone	19 µg/L	UAS-T1-S4-0.5FT	U
			UAS-T1-S5-0.5FT	U
2M1123MB	2-butanone	6.9 µg/L	UAS-T1-S1-0-0.5FT	U
			UAS-T1-S2-0.5FT	U
TB 11/19/99	acetone	5.7 µg/L	UAS-T6-S5-3-6FT	U
			UAS-T6-S4-0.5FT	U
TB 11/20/99	acetone	7.8 µg/L	UAS-T7-S7-3-6FT	U
TB 4/21/00	2-butanone	5.3 µg/L	DAS-T6-S2-0-0.5FT	U
			DAS-T6-S1-0-0.5FT	
			DAS-T7-S2-3-6FT	
			DAS-T7-S1-3-6FT	
			DAS-T7-S1-0-0.5FT	
			DAS-T7-S2-0-0.5FT	
			DAS-T4-S2-3-6FT	
			DAS-T4-S3-3-6FT	
			DAS-T6-S2-3-6FT	
			DAS-T6-S3-3-6FT	
			DAS-T4-S3-0-0.5FT	
			DAS-T6-S3-0-0.5FT	

Note:
MB indicates method blank.
TB indicates trip blank.

MS/MSD analysis

Target results in MS/MSD samples were qualified as approximate (UJ, J) due to MS/MSD excursions to indicate minor accuracy and precision excursions. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 99. *MS/MSD excursions for VOC analyses in soil samples*

MS/MSD ID	Analyte	Excursion	Affected Sample	Action
UAS-T2-S4-0-0.5FT	acetone	0 %R, 0 %R	UAS-T2-S4-0-0.5FT	J
UAS-T2-S4-3-6FT	acetone	32 RPD	UAS-T2-S4-3-6FT	UJ
UAS-T7-S5-0-0.5FT	acetone	307 %R, 448 %R 37 RPD	UAS-T7-S5-0-0.5FT	J
	2-butanone	247 %R, 310 %R	UAS-T7-S5-0-0.5FT	J
DAS-T1-S3-3-6FT	acetone	9 %R, 18 %R, 67 RPD	DAS-T1-S3-3-6FT	J
DAS-T3-S1-0-0.5FT	acetone	31 RPD	DAS-T3-S1-0-0.5FT	UJ
DAS-T4-S3-0-0.5FT	1,2-dichloroethane	27 RPD	DAS-T4-S3-0-0.5FT	UJ
	1,2-dichloropropane	32 RPD		UJ
	toluene	47 RPD		J
	1,1,2-trichloroethane	35 RPD		UJ
	dibromochloromethane	37 RPD		UJ
	bromoform	33 RPD		UJ
	1,1,2,2-	31 RPD		UJ
	tetrachloroethane	93 RPD		J
	acetone	93 RPD		J

Note: %R indicates percentage recovery.
RPD indicates relative percent difference.

Internal standards performance

Recoveries for internal standards in samples were outside of the laboratory control limits. As a result of the internal standard excursions, affected target analytes were qualified as approximate (UJ) to indicate minor accuracy excursions. The internal standard area excursions are summarized in the following table:

Table 100, *Internal standard area excursions for VOC analyses in ground water samples*

Sample ID	Internal standard	Excursion	Affected Analytes	Action
DAS-T5-S3-0-0.5FT	1,4-difluorobenzene	46 %R	See affected analytes listed below	UJ
DAS-T5-S3-0-0.5FT	chlorobenzene-d5	43 %R	See affected analytes listed below	UJ
DAS-T4-S1-0-0.5FT	chlorobenzene-d5	43 %R	See affected analytes listed below	UJ
DAS-T5-S1-0-0.5FT	chlorobenzene-d5	48 %R	See affected analytes listed below	UJ

Note:
%R indicates percentage recovery.

The analytes affected by internal standard 1,4-difluorobenzene include the following: benzene, 1,2-dichloroethane, trichloroethene, 1,2-dichloropropane, bromodichloromethane, trans-1,3-dichloropropene, 1,1,2-trichloroethane, 4-methyl-2-pentanone, toluene, 1,1,1-trichloroethane, carbon tetrachloride, cis-1,3-dichloropropene.

The analytes affected by internal standard chlorobenzene-d5 include the following: dibromochloromethane, bromoform, 2-hexanone, tetrachloroethene, 1,1,2,2-tetrachloroethane, chlorobenzene, ethylbenzene, styrene, xylenes.

Sample re-analysis
One sample was reanalyzed due to internal standard excursions detected by the laboratory in the initial analyses. The following table summarizes the sample reanalyzed.

Table 101. *Soil samples reanalyzed for VOCs*

Sample ID	Reason for re-analysis
UAS- T7-S7-0-0.5FT	Internal standard excursions were detected in the initial analysis; internal standard excursions were not detected in the re-analysis results. Therefore, the re-analysis was reported.

Overall data assessment

- The target analytes in sample UAS-T7-S7-0-0.5FT were qualified as approximate (UJ, J) due to a low surrogate recovery.
- Nineteen results for target analytes in soil samples were qualified for blank contamination since acetone and 2-butanone were detected in blanks.
- Twelve results for target were qualified as approximate (UJ, J) due to MS/MSD precision excursions.
- Two results for target were qualified as approximate (UJ, J) due to MS/MSD accuracy excursions.
- Thirty-nine results for target analytes in soil samples were qualified as approximate (UJ) due to internal standard recovery excursions.
- Sample UAS-T7-S7-0-0.5FT was reanalyzed due to internal standard excursions.

4.3. SVOC analyses of soil samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for SVOCs analyzed by USEPA Method 8270C were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Sample preservation and percentage solids
- GC/MS tuning criteria
- Initial and continuing calibration
- Surrogate recovery
- LCS analysis
- Internal standards performance
- Target analyte quantitation and system performance
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2 and any additional observations are summarized below.

Holding times
The results for target analytes in soil samples were qualified as approximate (UJ, J) due to extraction holding time excursions. The following table summarizes the holding time excursion.

Table 102. *Holding time excursions for SVOCs in soil samples*

Sample ID	Target analyte	Excursion	Action
BS-EEG-108-3-6FT	Target analytes	4 days outside of extraction holding time	UJ, J
UAS-T5-S6-0-0.5FTFD	Target analytes	8 days outside of extraction holding time	UJ, J

Blank analysis

Samples which contained phthalates at less than ten times the blank concentration and remaining compounds at less than five times the blank concentration were qualified as undetected (U) due to the blank contamination. The blank excursions are summarized in the following table:

Table 103. *Blank excursion for SVOC analyses in soil samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
02146 MB	Di-n-butyl phthalate	56 µg/Kg	BS-EEG-108-3-6FT	U
0420 MB	Benzo(g,h,i)perylene	37 µg/Kg	DAS-T1-S1-0-0.5FT DAS-T2-S1-0-0.5FT DAS-T2-S3-0-0.5FT	U
0424 MB	Di-n-butyl phthalate	35 µg/Kg	DAS-T6-S2-0-0.5FT DAS-T4-S2-3-6FT DAS-T4-S3-3-6FT DAS-T7-S2-0-0.5FT DAS-T6-S3-0-0.5FT DAS-T4-S2-0-0.5FT DAS-T7-S1-3-6FT DAS-T7-S2-3-6FT DAS-T6-S1-0-0.5FT	U
0424 MB	Benzo(g,h,i)perylene	36 µg/Kg	DAS-T6-S2-0-0.5FT	U
1124B-EMB	Benzo(b)fluoroanthene	29 µg/Kg	UAS-T4-S6-3-6FT UAS-T4-S6-0-0.5FT UAS-T4-S4-0-0.5FT UAS-T4-S1-0-0.5FT UAS-T4-S3-3-6FT UAS-T4-S2-3-6FT UAS-T4-S3-3-6FTFD UAS-T4-S4-3-6FT	U
1124B-EMB	Benzo(k)fluoranthene	33 µg/Kg	UAS-T4-S6-3-6FT UAS-T4-S6-0-0.5FT UAS-T4-S4-0-0.5FT UAS-T4-S1-0-0.5FT UAS-T4-S3-3-6FT UAS-T4-S3-3-6FTFD UAS-T4-S4-3-6FT	U
1124B-EMB	Benzo(a)pyrene	36 µg/Kg	UAS-T4-S6-3-6FT UAS-T4-S6-0-0.5FT UAS-T4-S4-0-0.5FT UAS-T4-S1-0-0.5FT UAS-T4-S5-3-6FT UAS-T4-S3-3-6FT UAS-T4-S2-3-6FT UAS-T4-S3-3-6FTFD UAS-T4-S4-3-6FT	U
1124B-EMB	Indeno(1,2,3-cd)pyrene	40 µg/Kg	UAS-T4-S6-0-0.5FT UAS-T4-S4-0-0.5FT UAS-T4-S1-0-0.5FT UAS-T4-S3-3-6FT UAS-T4-S7-0-0.5FT	U

Table 103. *Blank excursion for SVOC analyses in soil samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
1124B-EMB	Dibenzo(a,h)anthracene	39 µg/Kg	UAS-T4-S6-3-6FT UAS-T4-S6-0-0.5FT UAS-T4-S4-0-0.5FT UAS-T4-S3-0-0.5FTFD UAS-T4-S5-0-0.5FT UAS-T4-S1-0-0.5FT UAS-T4-S3-3-6FT UAS-T4-S4-3-6FT	U
1124B-EMB	Benzo(g,h,i)perylene	41 µg/Kg	UAS-T4-S6-3-6FT UAS-T4-S4-0-0.5FT UAS-T4-S5-3-6FT UAS-T4-S3-3-6FT UAS-T4-S2-3-6FT UAS-T4-S3-3-6FTFD UAS-T4-S4-3-6FT	U
1124B-EMB	Bis (2-ethylhexyl) phthalate	60 µg/Kg	UAS-T4-S6-3-6FT UAS-T4-S6-0-0.5FT UAS-T4-S4-0-0.5FT UAS-T4-S3-0-0.5FTFD UAS-T4-S3-0-0.5FT UAS-T4-S2-0-0.5FT UAS-T4-S5-0-0.5FT UAS-T4-S1-0-0.5FT UAS-T4-S5-3-6FT UAS-T4-S3-3-6FT UAS-T4-S2-3-6FT UAS-T4-S3-3-6FTFD UAS-T4-S7-3-6FT UAS-T4-S4-3-6FT UAS-T5-S4-3-6FT	U
1130E-MB	Benzo(k)fluoranthene	35 µg/Kg	UAS-T5-S4-0-0.5FT UAS-T5-S6-3-6FTFD UAS-T5-S6-0-0.5FT UAS-T5-S5-0-0.5FT UAS-T6-S5-3-6FT UAS-T6-S1-0-0.5FT UAS-T6-S2-0-0.5FT UAS-T6-S3-0-0.5FT UAS-T6-S4-0-0.5FT UAS-T6-S5-0-0.5FT	U
	Benzo(a)pyrene	30 µg/Kg	UAS-T5-S4-0-0.5FT UAS-T5-S6-3-6FTFD UAS-T5-S6-0-0.5FT UAS-T5-S5-0-0.5FT UAS-T6-S5-3-6FT UAS-T6-S2-0-0.5FT UAS-T6-S3-0-0.5FT UAS-T6-S4-0-0.5FT UAS-T6-S5-0-0.5FT	U
	Benzo(g,h,i)perylene	40 µg/Kg	UAS-T5-S4-0-0.5FT UAS-T5-S6-3-6FTFD UAS-T5-S6-3-6FT UAS-T5-S6-0-0.5FT UAS-T5-S5-0-0.5FT UAS-T6-S2-3-6FT UAS-T6-S4-3-6FT UAS-T6-S5-3-6FT UAS-T6-S2-0-0.5FT UAS-T6-S3-0-0.5FT UAS-T6-S4-0-0.5FT UAS-T6-S5-0-0.5FT	U

Table 103. *Blank excursion for SVOC analyses in soil samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
1118B-GMB	Di-n-butylphthalate	42 µg/Kg	UAS-T2-S6-0-0.5FT UAS-T3-S6-0-0.5FT UAS-T3-S7-3-6FT	U

Note:
MB indicates method blank.

MS/MSD analysis

The results for target analytes MS/MSD samples were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 104. *MS/MSD excursions for SVOC analyses in soil samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
BS-EEG-108-3-6FT	1,3-dichlorobenzene	19 %R, 22 %R	BS-EEG-108-3-6FT	UJ
	1,2-dichlorobenzene	21 %R, 24 %R		
	hexachlorobutadiene	22 %R, 26 %R		
	2-methylnaphthalane	24 %R, 28%R		
	2-chloronaphthalene	26 %R, 31 %R		
	dimethylphthalate	43 %R, 48%R		
	n-nitrosodiphenylamine	43 %R, 50%R		
DAS-T5-S3-3-6FT	dimethylphthalate	46 %R, 43 %R	DAS-T5-S3-3-6FT	UJ
	n-nitrosodiphenylamine	46 %R, 46 %R		
	butyl benzyl phthalate	51 %R, 54 %R		
	benzo(a)anthracene	49 %R, 51 %R		
	chrysene	54 %R, 54 %R		
DAS-T4-S3-0-0.5FT	butyl benzyl phthalate	49 %R, 54 %R	DAS-T4-S3-0-0.5FT	UJ
	chrysene	46 %R, 54 %R		
UAS-T5-S4-3-6FT	chrysene	54 %R, 53 %R	UAS-T5-S4-3-6FT	UJ
UAS-T5-S4-0-0.5FT	benzo(a)anthracene	53 %R, 48 %R	UAS-T5-S4-0-0.5FT	J
	chrysene	53 %R, 47 %R		
UAS-T2-S4-3-6FT	1,2-dichlorobenzene	28 RPD	UAS-T2-S4-3-6FT	UJ
	hexachloroethane	33 RPD		UJ
	1,2,4-trichlorobenzene	28 RPD		UJ
	4-bromophenyl phenyl ether	28 RPD		UJ
	bis(2-ethyl hexyl) phthalate	23 RPD		J

Note:
%R indicates percentage recovery.
RPD indicates relative percent difference

Target analyte identification

As a result of the data validation process, a correction was made to a sample result due to laboratory interpretation errors. The identification excursion corrected in the sample result is summarized in the following table:

Table 105. *Identification excursions for SVOC analyses in soil samples*

Sample ID	Excursion	Correction
UAS-T2-S3-0-0.5FT	Mass spectrum misinterpreted for phenol; secondary ions missing	phenol reported as not detected (210 µg/Kg)

Target analyte reported detection limits

Sample UAS-T4-S7-3-6FT was analyzed at a dilution as a result of the presence of fluoranthene and pyrene at concentrations that exceeded the calibration range. The dilution utilized in the analysis of SVOCs is summarized in the following table:

Table 106. *SVOCs in soil sample analyzed by dilution*

Sample ID	Dilution Used	Reason
UAS-T4-S7-3-6FT	Undiluted/1:2	High concentration of fluoranthene and pyrene

Sample re-analysis

Soil samples were reanalyzed due to analysis excursions detected by the laboratory in the initial analyses. The following table summarizes the samples reanalyzed.

Table 107. *Soil samples reanalyzed for SVOCs*

Sample ID	Reason for re-analysis
BS-EEG-108-3-6FT	Surrogate recovery excursions were detected in the initial analysis; surrogate excursions were not detected in the re-analysis results. Therefore, the re-analysis was reported.
DAS-T1-S3-3-6FT	The MS/MSD was spiked with 11 of the full target compound list; re-analysis MS/MSDs were spiked with full target compound list.
DAS-T3-S1-3-6FT DAS-T3-S3-3-6FT	Samples were re-extracted due to surrogate excursions; initial analysis utilized since only one surrogate was outside of the recovery control limit.
UAS-T5-S6-0-0.5FTFD	Surrogate and internal standard excursions were detected in the initial analysis; results were improved in the re-analysis results. Therefore, the re-analysis was reported.

Overall data assessment

- Target analytes in samples BS-EEG-108-3-6FT and UAS-T5-S6-0-0.5FTFD were qualified as approximate (UJ, J) due to holding time excursions.
- One hundred seven results for target analytes in soil samples were qualified for blank contamination.
- Five results for target analytes in soil samples were qualified as approximate (UJ, J) due to MS/MSD precision excursions.
- Seventeen results for target analytes in soil samples were qualified as approximate (UJ, J) due to MS/MSD accuracy excursions.

- The result for phenol in sample UAS-T2-S3-0-0.5FT was edited during the validation process due to a laboratory interpretation error.
- Sample UAS-T4-S7-3-6FT was analyzed at a dilution as a result of the presence of fluoranthene and pyrene at concentrations that exceeded the calibration range.
- Samples BS-EEG-108-3-6FT, DAS-T1-S3-3-6FT, DAS-T3-S1-3-6FT, DAS-T3-S3-3-6FT, and UAS-T5-S6-0-0.5FTFD were reanalyzed due to analysis excursions.

4.4. Pesticide analysis of soil samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for pesticides analyzed by USEPA Method 8081A were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Sample preservation and percentage solids
- GC performance
- Analytical sequence
- Initial calibration
- LCS analysis
- Retention time window
- Target analyte identification, quantitation, and system performance
- Cleanup verification
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Holding times
Holding times were evaluated based on sample collection, extraction, and analysis dates. Target analytes in sample UAS-T3-S3-3-6FTFD, which was extracted outside of the holding time, were qualified as approximate (UJ) to indicate a minor representativeness excursion. The following table summarizes the holding time excursion.

Table 108. *Holding time excursion for pesticides in soil samples*

Sample ID	Target analyte	Excursion	Action
UAS-T3-S3-3-6FTFD	Target analytes	2 days outside of extraction holding time	UJ

Calibration verification
The calibration verification for alpha-BHC and delta-BHC in the calibration analyzed on both the DB-5 column and the DB-608 columns were not met for the analysis performed 11/23/99 and 11/29/99 respectively. Alpha-BHC and delta-BHC results in the samples affected

by the excursions were qualified as approximate (UJ) to indicate minor accuracy excursions.

The samples qualified due to the minor calibration excursions are summarized in the following table.

Table 109. *Calibration verification excursions for pesticides in soil samples*

Calibration verification ID	Standard analytes	Excursion	Affected samples	Affected analytes	Action
11/23/99 2308/2332	Alpha-BHC	16.8 %D (DB-5) 16.6 %D (DB-608)	UAS-T3-S3-0-0.5FT UAS-T3-S6-3-6FT UAS-T3-S5-3-6FT UAS-T3-S4-0-0.5FT UAS-T3-S6-0-0.5FT UAS-T3-S5-0-0.5FT UAS-T3-S4-3-6FT UAS-T2-S2-3-6FT UAS-T2-S3-0-0.5FT UAS-T2-S3-3-6FT UAS-T2-S4-3-6FT UAS-T2-S5-3-6FT UAS-T2-S5-0-0.5FT UAS-T2-S6-3-6FT UAS-T2-S6-0-0.5FT UAS-T3-S2-0-0.5FT UAS-T3-S1-3-6FT UAS-T3-S3-3-6FT	Alpha-BHC	UJ
11/29/99 1049/1112	Delta-BHC	16.0 %D (DB-608) 16.3 %D (DB-5)	UAS-T3-S7-3-6FT	Delta-BHC	UJ

Note:
%D indicates percent difference.

Blank analysis

Samples which contained common laboratory contaminants at less than five times the blank concentration were qualified as undetected (U) due to the blank contamination. The blank excursions are summarized in the following table:

Table 110. *Blank excursion for pesticide analyses in soil samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
0427N MB	Heptachlor	0.34 µg/Kg	DAS-T7-S2-0-0.5FT	U
	Aldrin	0.19 µg/Kg	DAS-T4-S3-0-0.5FT	U
			DAS-T6-S3-0-0.5FT	U
	Dieldrin	0.85 µg/Kg	DAS-T6-S3-0-0.5FT	U
			DAS-T7-S1-0-0.5FT	U
			DAS-T7-S2-0-0.5FT	U
			DAS-T4-S3-0-0.5FT	U
			DAS-T6-S1-0-0.5FT	U
	4,4'-DDD	0.14 µg/Kg	DAS-T6-S2-0-0.5FT	U

Table 110. *Blank excursion for pesticide analyses in soil samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
	4,4-DDT	0.43 µg/Kg	DAS-T4-S2-3-6FT	U
			DAS-T6-S1-3-6FT	U
			DAS-T6-S3-3-6FT	U
			DAS-T4-S2-0-0.5FT	U
			DAS-T4-S3-0-0.5FT	U
			DAS-T6-S1-0-0.5FT	U
			DAS-T6-S2-0-0.5FT	U
			DAS-T6-S3-0-0.5FT	U

Note:
MB indicates method blank.

Surrogate recovery

Recoveries for surrogates were outside of the laboratory control limits. In the case that surrogate recovery excursions were detected in three surrogate recoveries in the dual-column results, affected target analytes were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The following table presents the target analytes qualified as a result of the minor surrogate recovery excursion:

Table 111. *Surrogate excursion for pesticide analysis in soil samples*

Sample ID	Surrogate	Excursion	Affected analytes	Action
UAS-T3-S6-0-0.5FT	TCMX	28 %R (DB-608)	Target analytes	UJ
	DCB	221 %R (DB-608), 200 %R (DB-5)		
UAS-T4-S5-3-6FT	TCMX	25 %R (DB-608), 24 %R (DB-5)	Target analytes	UJ, J
	DCB	28 %R (DB-5)		
UAS-T4-S1-3-6FT	TCMX	22 %R (DB-608), 20 %R (DB-5)	Target analytes	UJ, J
	DCB	26 %R (DB-5)		
DAS-T2-S3-3-6FT	TCMX	22 %R (DB-608), 23 %R (DB-5)	Target analytes	UJ
	DCB	28 %R (DB-608)		
DAS-T4-S1-0-0.5FTFD	TCMX	22 %R (DB-5)	Target analytes	UJ, J
	DCB	430 %R (DB-608), 290 %R (DB-5)		

Note:
%R indicates percentage recovery.
DCB indicates decachlorobiphenyl.
TCMX indicates 2,4,5,6-tetrachloro-m-xylene.

MS/MSD analysis

Target analytes MS/MSD samples were qualified as approximate (UJ, J) to indicate minor accuracy and precision excursions. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 112. *MS/MSD excursions for pesticide analyses in soil samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
UAS-T1-S1-0-0.5FT	Heptachlor	45 RPD	UAS-T1-S1-0-0.5FT	UJ
	4,4'-DDE	28 RPD		J
UAS-T5-S4-0-0.5FT	4,4'-DDE	30 %R, 25 %R	UAS-T5-S4-0-0.5FT	UJ
UAS-T7-S5-0-0.5FT	Endrin	29 %R, 49 %R, 51 RPD	UAS-T7-S5-0-0.5FT	UJ
UAS-T7-S5-3-6FT	4,4'-DDE	20 %R, 25 %R, 22 RPD	UAS-T7-S5-3-6FT	UJ
	Endrin	20 %R, 25 %R, 22 RPD		
	Endosulfan sulfate	53 RPD		
	4,4'-DDT	31 RPD		

Table 112. *MS/MSD excursions for pesticide analyses in soil samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
BS-EEG-108-3-6FT	Alpha-BHC	18 %R, 11 %R, 48 RPD	BS-EEG-108-3-6FT	UJ
	Endrin	28 %R, 17 %R, 49 RPD		
	Gamma-BHC	42 RPD		
	Endosulfan I	48 RPD		
	Dieldrin	39 RPD		
	4,4'-DDE	44 RPD		
	4,4'-DDT	42 RPD		
	Endrin ketone	42 RPD		
	Gamma chlordane	45 RPD		
DAS-T1-S3-3-6FT	Dieldrin	51 RPD	DAS-T1-S3-3-6FT	UJ
DAS-T5-S3-3-6FT	Delta-BHC	67 RPD	DAS-T5-S3-3-6FT	UJ

Note: %R indicates percentage recovery.
RPD indicates relative percent difference.

Confirmation analysis

For target analytes that were detected by the laboratory but were at concentrations that were less than the reported detection limit, the laboratory applied a "J" flag to the analyte result. During the validation process, the "J" flag was retained since the concentration is considered to be approximate. Due to the numerous values reported by the laboratory below the reported detection limits, if the RPD values were greater than 40% for the confirmation analysis and the target analyte concentration was flagged "J," additional validation qualifiers were not applied to the sample data.

The RPD values calculated for positive results from the two chromatographic columns (DB608, DB5) in soil sample analyses were greater than 40% indicating confirmation excursions. Target analytes with a RPD greater than 40% were qualified as approximate (J) to indicate minor representativeness excursions. The analyte identification excursions are summarized in the following table:

Table 113. *Analyte confirmation excursions for pesticide analyses in soil samples*

Sample ID	Analyte	Excursion	Action
UAS-T4-S2-0-0.5FT	Beta-BHC	47 RPD	J
	Heptachlor epoxide	88 RPD	J
	Endrin ketone	67 RPD	J
UAS-T4-S5-0-0.5FT	Beta-BHC	79 RPD	J
	Dieldrin	86 RPD	J
	Gamma chlordane	48 RPD	J
UAS-T6-S2-0-0.5FT	4,4'-DDT	56 RPD	J
UAS-T3-S7-0-0.5FT	Beta-BHC	91 RPD	J
BS-EE-20-0-0.5FT	4,4'-DDT	72 RPD	J
DAS-T3-S1-0-0.5FT	Gamma chlordane	158 RPD	J
DAS-T5-S1-0-0.5FT	Heptachlor epoxide	46 RPD	J
	Gamma chlordane	99 RPD	
DAS-T5-S3-0-0.5FT	4,4'-DDD	63 RPD	J
DAS-T7-S2-0-0.5FT	Gamma chlordane	111 RPD	J
DAS-T6-S3-0-0.5FT	Beta-BHC	50 RPD	J
	Gamma chlordane	59 RPD	J

Note:
RPD indicates relative percent difference.

Target analyte reported detection limits

The following table presents the samples analyzed by dilution due to matrix interferences or concentrations of target analytes that exceeded the calibration limit.

Table 114. *Pesticides in soil samples analyzed by dilution*

Sample ID	Target analytes	Dilution	Reason
DAS-T5-S1-0-0.5FT	Target analytes	1:2/1:5*	High concentration of target analytes/ High concentration of alpha chlordane, gamma chlordane
DAS-T5-S3-0-0.5FT	Target analytes	1:5/1:10*	High concentration of target analytes/ High concentration of heptachlor, gamma chlordane
DAS-T6-S3-0-0.5FT	Target analytes	1:2	High concentration of target analytes
UAS-T7-S7-0-0.5FT	Target analytes	1:5	Matrix interferences
UAS-T5-S6-0-0.5FTFD	Target analytes	1:5	Matrix interferences
UAS-T5-S6-0-0.5FT	Target analytes	1:5	Matrix interferences
UAS-T6-S2-3-6FT	Target analytes	1:2	Matrix interferences
UAS-T6-S3-3-6FT	Target analytes	1:10	Matrix interferences
UAS-T6-S4-3-6FT	Target analytes	1:5	Matrix interferences
UAS-T6-S5-3-6FT	Target analytes	1:20	Matrix interferences
UAS-T6-S2-0-0.5FT	Target analytes	1:5	Matrix interferences and high concentration of target analytes
UAS-T6-S3-0-0.5FT	Target analytes	1:5	Matrix interferences
UAS-T6-S4-0-0.5FT	Target analytes	1:5	High concentration of target analytes
UAS-T6-S5-0-0.5FT	Target analytes	1:5	Matrix interferences

Note:
* indicates that results from the two analyses were combined in the report; the detection limits and sample results were taken from the smaller dilution or undiluted analysis and the results for sample results that exceeded the calibration range were taken from the larger dilution analysis and identified with a "D" qualifier.

Sample re-analysis

The following samples were reanalyzed due to sample analysis excursions.

Table 115. *Ground water samples reanalyzed for pesticides*

Sample ID	Reason for re-analysis
UAS-T3-S3-3-6FTFD	Sample was re-extracted due to surrogate excursions. The re-extraction results were reported due to improved surrogate recoveries.
UAS-T4-S5-3-6FT	Sample was re-extracted due to surrogate excursions. The re-extraction results were reported due to improved surrogate recoveries.

Overall data assessment

- Target analytes in sample UAS-T3-S3-3-6FTFD were qualified as approximate (UJ) due to an extraction holding time excursion.
- Nineteen results for target analytes in soil samples were qualified as approximate (UJ) in due to calibration verification excursions.
- Seventeen results for target analytes in soil samples were qualified due to blank contamination.
- Target analytes in five soil samples were qualified as approximate (UJ, J) due to surrogate recovery excursions.
- Eighteen results for target analytes in soil samples were qualified as approximate (UJ, J) due to MS/MSD precision excursions.
- The result for endrin in sample UAS-T5-S4-0-0.5FT was qualified as approximate (UJ) due to an MS/MSD accuracy excursion.

- Sixteen results for target analytes in soil samples were qualified as approximate (J) due to confirmation excursions.
- Samples DAS-T5-S1-0-0.5FT, DAS-T5-S3-0-0.5FT, DAS-T6-S3-0-0.5FT, UAS-T7-S7-0-0.5FT, UAS-T5-S6-0-0.5FTFD, UAS-T5-S6-0-0.5FT, UAS-T6-S2-3-6FT, UAS-T6-S3-3-6FT, UAS-T6-S4-3-6FT, UAS-T6-S5-3-6FT, UAS-T6-S2-0-0.5FT, UAS-T6-S3-0-0.5FT, UAS-T6-S4-0-0.5FT, and UAS-T6-S5-0-0.5FT were analyzed at a dilution.
- Samples UAS-T3-S3-3-6FTFD and UAS-T4-S5-3-6FT were re-extracted due to analysis excursions.

4.5. Herbicide analysis of soil samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for herbicides analyzed by USEPA Method 8151A were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Sample preservation and percentage solids
- GC performance
- Analytical sequence
- Initial calibration and calibration verification
- Retention time window
- Target analyte identification, quantitation, and system performance Cleanup verification

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Holding times

Holding times were evaluated based on sample collection, extraction, and analysis dates. The results for target analytes in soil samples, which were extracted outside of the holding times, were qualified as approximate (UJ, J) to indicate minor representativeness excursions. The following table summarizes the holding time excursions.

Table 116. *Holding time excursions for herbicides in soil samples*

Sample ID	Target analyte	Excursion	Action
UAS-T3-S2-0-0.5FT DL	MCPP	23 days outside of extraction holding time	J
DAS-T3-S1-0-0.5FT	Dinoseb*	15 days outside of extraction holding time	UJ
DAS-T3-S2-0-0.5FT			
DAS-T3-S3-0-0.5FT			
DAS-T4-S1-0-0.5FT			
DAS-T4-S1-0-0.5FTFD			
DAS-T5-S1-0-0.5FT			
DAS-T5-S2-0-0.5FT			
DAS-T5-S3-0-0.5FT			
DAS-T3-S1-3-6FT			
DAS-T3-S2-3-6FT			
DAS-T3-S3-3-6FT			
DAS-T4-S1-3-6FT			
DAS-T4-S1-3-6FTFD			
DAS-T5-S1-3-6FT			
DAS-T5-S2-3-6FT			
DAS-T5-S3-3-6FT			
DAS-T4-S2-3-6FT	Target analytes	15 days outside of extraction holding time	UJ, J
DAS-T4-S3-3-6FT			
DAS-T6-S1-3-6FT			
DAS-T6-S2-3-6FT			
DAS-T6-S3-3-6FT			
DAS-T7-S1-0-0.5FT			
DAS-T7-S2-0-0.5FT			
DAS-T4-S2-0-0.5FT			
DAS-T4-S3-0-0.5FT			
DAS-T7-S1-3-6FT			
DAS-T7-S2-3-6FT			
DAS-T6-S1-0-0.5FT			
DAS-T6-S2-0-0.5FT			
DAS-T6-S3-0-0.5FT			

Note: DL indicates a dilution analysis was performed.
* indicates that the re-analysis results were reported for dinoseb and the remaining target analytes were reported from the initial analyses, since the recovery for dinoseb in the LCS analyzed in the initial analysis was less than 10%.

Blank analysis

Samples which contained common laboratory contaminants at less than five times the blank concentration were qualified as undetected (U) due to the blank contamination. The blank excursions are summarized in the following table:

Table 117. *Blank excursion for herbicide analyses in soil samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
1121P-RMB	pentachlorophenol	12 µg/Kg	UAS-T2-S2-3-6FT	U
			UAS-T2-S3-0-0.5FT	
			UAS-T2-S3-3-6FT	
			UAS-T2-S5-0-0.5FT	
			UAS-T2-S6-0-0.5FT	
			UAS-T3-S5-0-0.5FT	

Note:
MB indicates method blank.

Surrogate recovery

Recoveries for surrogates in soil samples were outside of the laboratory control limits. As a result of the surrogate recovery excursions, target analytes were qualified as approximate (UJ) to indicate minor accuracy excursions. The target analytes in sample UAS-T3-S3-0-0.5FT were rejected (R) since the surrogate recoveries on both columns were less than 10%. This sample was re-analyzed; however, the results from the re-analysis were not utilized since the re-analysis was performed outside of the holding time. The surrogate recovery excursions are summarized in the following table:

Table 118. *Surrogate excursion for herbicide analysis in soil samples*

Sample ID	Surrogate	Excursion	Affected analytes	Action
UAS-T3-S3-0-0.5FTFD	DCAA	14 %R (DB-608) 11 %R (DB-5)	Target analytes	UJ
UAS-T3-S3-0-0.5FT	DCAA	8 %R (DB-608) 6 %R (DB-5)	Target analytes	R
UAS-T7-S6-0-0.5FT	DCAA	11%R (DB-608) 20%R (DB-5)	Target analytes	UJ

Note: %R indicates percentage recovery.
DCAA indicates 2,4-dichlorophenylacetic acid

MS/MSD analysis

The results for target analytes in MS/MSD samples UAS-T2-S4-0.5FT, UAS-T5-S4-0-0.5FT, and UAS-T2-S4-3-6FT were qualified as approximate (UJ, J) to indicate minor accuracy and precision excursions. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 119. *MS/MSD excursions for herbicide analyses in soil samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
UAS-T2-S4-0-0.5FT	Dalapon	126 RPD	UAS-T2-S4-0-0.5FT	UJ
	2,4-DB	86 RPD		
UAS-T5-S4-0-0.5FT	MCPP	200 RPD	UAS-T5-S4-0-0.5FT	J
	MCPA	14 %R, 0 %R, 200 RPD		J
	Dalapon	93 RPD		UJ
	2,4-DB	42 RPD		UJ
UAS-T2-S4-3-6FT	Dalapon	132 RPD	UAS-T2-S4-3-6FT	UJ
	MCPP	88 RPD		
	MCPA	96 RPD		
	Dichloroprop	70 RPD		
	2,4-D	54 RPD		
	Pentachlorophenol	61 RPD		

Note: RPD indicates relative percent difference.
% R indicates percentage recovery

LCS analysis

Recoveries for dinoseb and pentachlorophenol in LCS analyses were outside of the laboratory control limits. The target analytes in the samples associated with the LCSs were qualified as approximate (UJ) to indicate minor accuracy excursions. The LCS excursions are summarized in the following table:

Table 120. *LCS excursions for herbicide analyses in soil samples*

LCS ID	Analyte	Excursion	Affected Samples	Action
1121P-RMBLCS	Dinoseb	8 %R*	UAS-T2-S2-3-6FT	UJ
	Pentachlorophenol	6 %R*	UAS-T2-S3-0-0.5FT	
			UAS-T2-S3-3-6FT	
			UAS-T2-S5-0-0.5FT	
			UAS-T2-S5-3-6FT	
			UAS-T2-S4-3-6FT	
			UAS-T2-S6-0-0.5FT	
			UAS-T2-S6-3-6FT	
			UAS-T3-S2-0-0.5FT	
			UAS-T3-S1-3-6FT	
			UAS-T3-S3-3-6FT	
			UAS-T3-S3-3-6FTFD	
			UAS-T3-S4-0-0.5FT	
			UAS-T3-S6-0-0.5FT	
			UAS-T3-S5-0-0.5FT	
			UAS-T3-S7-3-6FT	
			UAS-T3-S4-3-6FT	
			UAS-T3-S6-3-6FT	
			UAS-T3-S5-3-6FT	
			UAS-T3-S3-0-0.5FT	
11280-RMB	Dinoseb	0 %R**	UAS-T3-S2-3-6FT	UJ
			UAS-T3-S7-0-0.5FT	
			UAS-T3-S1-0-0.5FT	
			UAS-T3-S3-0-0.5FTFD	
			UAS-T7-S1-0-0.5FT	
			UAS-T7-S1-3-6FT	
			UAS-T7-S2-0-0.5FT	
			UAS-T7-S2-3-6FT	
			UAS-T7-S3-0-0.5FT	
			UAS-T7-S3-3-6FT	
			UAS-T7-S3-0-0.5FTFD	
			UAS-T7-S3-3-6FTFD	
			UAS-T7-S4-3-6FT	
			UAS-T7-S5-0-0.5FT	
11210-RMB	Dinoseb	20 %R	UAS-T1-S1-0-0.5FT	UJ
			UAS-T1-S1-3-6FT	
			UAS-T1-S2-0-0.5FT	
			UAS-T1-S2-3-6FT	
			UAS-T1-S3-0-0.5FT	
			UAS-T1-S3-3-6FT	
			UAS-T1-S4-0-0.5FT	
			UAS-T1-S4-3-6FT	
			UAS-T1-S5-0-0.5FT	
			UAS-T1-S5-3-6FT	
			UAS-T1-S6-0-0.5FT	
			UAS-T1-S6-3-6FT	
			UAS-T1-S7-0-0.5FT	
			UAS-T1-S7-3-6FT	
			UAS-T1-S7-0-0.5FTFD	
			UAS-T1-S7-3-6FTFD	
			UAS-T2-S1-0-0.5FT	
			UAS-T2-S1-3-6FT	
			UAS-T2-S2-0-0.5FT	
			UAS-T2-S4-0-0.5FT	

Table 120. *LCS excursions for herbicide analyses in soil samples*

LCS ID	Analyte	Excursion	Affected Samples	Action
1128Q-RMB	Dinoseb	0 %R**	UAS-T5-S4-0-0.5FT	UJ
			UAS-T5-S6-3-6FTFD	
			UAS-T5-S6-0-0.5FTFD	
			UAS-T5-S6-3-6FT	
			UAS-T5-S6-0-0.5FT	
			UAS-T5-S5-3-6FT	
			UAS-T5-S5-0-0.5FT	
			UAS-T5-S1-3-6FT	
			UAS-T5-S2-3-6FT	
			UAS-T5-S3-3-6FT	
			UAS-T6-S1-3-6FT	
			UAS-T6-S2-3-6FT	
			UAS-T6-S3-3-6FT	
			UAS-T6-S4-3-6FT	
			UAS-T6-S5-3-6FT	
			UAS-T6-S1-0-0.5FT	
			UAS-T6-S2-0-0.5FT	
			UAS-T6-S3-0-0.5FT	
			UAS-T6-S4-0-0.5FT	
			UAS-T6-S5-0-0.5FT	
0518Q	Dinoseb	14 %R	DAS-T3-S1-0-0.5FT	UJ
			DAS-T3-S2-0-0.5FT	
			DAS-T3-S3-0-0.5FT	
			DAS-T4-S1-0-0.5FT	
			DAS-T4-S1-0-0.5FTFD	
			DAS-T5-S1-0-0.5FT	
			DAS-T5-S2-0-0.5FT	
			DAS-T5-S3-0-0.5FT	
			DAS-T3-S1-3-6FT	
			DAS-T3-S2-3-6FT	
			DAS-T3-S3-3-6FT	
			DAS-T4-S1-3-6FT	
			DAS-T4-S1-3-6FTFD	
			DAS-T5-S1-3-6FT	
			DAS-T5-S2-3-6FT	
			DAS-T5-S3-3-6FT	
0519N	Dinoseb	21 %R	DAS-T4-S2-3-6FT	UJ
			DAS-T4-S3-3-6FT	
			DAS-T6-S1-3-6FT	
			DAS-T6-S2-3-6FT	
			DAS-T6-S3-3-6FT	
			DAS-T7-S1-0-0.5FT	
			DAS-T7-S2-0-0.5FT	
			DAS-T4-S2-0-0.5FT	
			DAS-T4-S3-0-0.5FT	
			DAS-T7-S1-3-6FT	
			DAS-T7-S2-3-6FT	
			DAS-T6-S1-0-0.5FT	
			DAS-T6-S2-0-0.5FT	
			DAS-T6-S3-0-0.5FT	

Note:
%R indicates percentage recovery.
* indicates that, although recoveries for dinoseb and pentachlorophenol were less than 10 %, dinoseb and pentachlorophenol were qualified as approximate in the associated samples, since both were recovered in the MS/MSD sample extracted with the soil samples.
**indicates that, although the recovery for dinoseb was less than 10% (10%R - 130%R), dinoseb was qualified as approximate in the associated samples, since dinoseb was recovered in the MS/MSD sample extracted with the soil samples.

Confirmation analysis

For target analytes that were detected by the laboratory but were at concentrations that were less than the reported detection limit, the laboratory applied a "J" flag to the analyte result. During the validation process, the "J" flag was retained since the concentration is considered to be approximate. Due to the numerous values reported by the laboratory below the reported detection limits, if the RPD values were greater than 40% for the confirmation analysis and the target analyte concentration was flagged "J," additional validation qualifiers were not applied to the sample data.

The RPD values calculated for positive results from the two chromatographic columns (DB608, DB5) in soil samples were greater than 40% indicating confirmation excursions. The target analytes with an RPD greater than 40% were qualified as approximate (J) to indicate minor representativeness excursions. The analyte identification excursions are summarized in the following table:

Table 121. *Analyte confirmation excursion for herbicide analyses in soil samples*

Sample ID	Analyte	Excursion	Action
UAS-T1-S5-0-0.5FT	MCPP	79 RPD	J
UAS-T5-S4-0-0.5FT	MCPA	44.2 RPD	J
UAS-T6-S1-0-0.5FT	MCPP	42.1 RPD	J
UAS-T2-S3-0-0.5FT	MCPA	51 RPD	J
UAS-T3-S4-0-0.5FT	MCPA	177 RPD	J
	2,4-DB	41 RPD	J
BS-EE-20-0-0.5FT	MCPA	200 RPD	J
	Pentachlorophenol	81 RPD	J
	2,4,5-TP	100 RPD	J
BS-EE-04-0-0.5FT	MCPA	200 RPD	J
	Pentachlorophenol	171 RPD	J
BS-EE-04-0-0.5FTFD	Pentachlorophenol	177 RPD	J
	2,4,5-TP	70 RPD	J
DAS-T4-S1-0-0.5FT	2,4-D	95 RPD	J
DAS-T5-S1-0-0.5FT	2,4-D	103 RPD	J
DAS-T5-S3-0-0.5FT	2,4-D	94 RPD	J

Note:
RPD indicates relative percent difference.

Target analyte reported detection limits

Sample UAS-T3-S2-0-0.5FT was analyzed at a dilution as a result of the presence of a concentration of MCPP that exceeded the calibration limit. The dilution utilized in the analysis of soil samples for herbicides is summarized in the following table:

Table 122. *Herbicides in soil samples analyzed by dilution*

Sample ID	Dilution Used	Reason
UAS-T3-S2-0-0.5FT	1:3	High concentration of MCPP
UAS-T1-S4-0-0.5FT	1:2	High concentration of MCPA

Note:
RPD indicates relative percent difference.

Sample re-analysis
The following samples were reanalyzed due to sample analysis excursions.

Table 123. *Soil samples reanalyzed for herbicides*

Sample ID	Reason for re-analysis
UAS-T3-S3-0-0.5FTFD	Sample was re-extracted due to surrogate excursion. The initial analysis was reported since the re-extraction was performed outside of the holding times.
Samples in SDG SIL021	Samples were re-extracted due to LCS recovery excursions for dinoseb and pentachlorophenol. The re-extractions met LCS recovery criteria but were not reported since the extractions were performed outside of holding times.
UAS-T7-S6-0-0.5FT	Sample was re-extracted due to surrogate excursion. The initial analysis was reported since the re-extraction was performed outside of holding times.
Samples in SDG SIL051	Sample was re-extracted due to LCS recoveries less than 10% for dinoseb in the initial analysis. The re-extracted analyses for dinoseb were reported since the re-extraction LCS provided improved results. The remaining target analytes were reported from the initial analysis.
Samples in SDG SIL052	Sample was re-extracted due to LCS and MS/MSD excursions in the initial analysis. The re-extracted analyses were reported since the re-extraction quality control analyses provided improved results.

Data completeness
The result for 2,4-DB in sample DAS-T5-S3-3-6FT was corrected during the validation process due to a laboratory transcription error.

Overall data assessment
- The result for the target analyte in 14 soil samples were qualified as approximate (UJ, J) due to holding time excursions.
- Seventeen results for dinoseb in soil samples were qualified as approximate (UJ) due to holding time excursions since the results for dinoseb were reported from re-analyses due to low LCS recoveries in the initial analyses.
- Six results for pentachlorophenol in soil samples were qualified for blank contamination.
- The results for target analytes in two soil samples were qualified as approximate (UJ) due to surrogate recovery excursions.
- The target analytes in sample UAS-T3-S3-0-0.5FT were rejected (R) as a result of surrogate recoveries on both columns being less than 10%.
- Twelve results for target analytes in soil samples were qualified for MS/MSD precision excursions.
- One hundred twenty-four results for target analytes in soil samples were qualified as approximate (UJ) due to low LCS recoveries.
- Sixteen results for target analytes in soil samples were qualified as approximate (J) due to confirmation excursions.
- Samples UAS-T3-S2-0-0.5FT and UAS-T1-S4-0-0.5FT were analyzed at a dilution.
- Samples UAS-T3-S3-0-0.5FTFD, samples in SDG SIL021, UAS-T7-S6-0-0.5FT, samples in SDG SIL051, and samples in SDG SIL052 were reanalyzed due to analysis excursions.

- The result for 2,4-DB in sample DAS-T5-S3-3-6FT was corrected during the validation process due to a laboratory transcription error.

4.6. PCB analysis of soil samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for PCBs analyzed by USEPA Method 680 were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Sample preservation and percentage solids
- GC/MS tuning and window-defining criteria
- Initial and continuing calibration
- Blank analysis
- LCS analysis
- Sample data identification, quantitation, and system performance
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Holding times
Holding times were evaluated based on sample collection, extraction, and analysis dates. The result for target analytes in soil samples which were extracted outside of the holding time were qualified as approximate (UJ, J) to indicate minor representativeness excursions. The following table summarizes the holding time excursions.

Table 124. *Holding time excursions for PCBs in soil samples*

Sample ID	Target analyte	Excursion	Action
UAS-T1-S3-0-0.5FT	Target analytes	5 days outside of extraction holding time	UJ, J
UAS-T1-S6-0-0.5FT	Target analytes	5 days outside of extraction holding time	UJ, J
UAS-T2-S1-3-6FT	Target analytes	4 days outside of extraction holding time	UJ
UAS-T5-S3-0-0.5FT	Target analytes	3 days outside of extraction holding time	UJ, J
UAS-T2-S2-3-6FT	Target analytes	3 days outside of extraction holding time	UJ
UAS-T2-S3-0-0.5FT	Target analytes	3 days outside of extraction holding time	UJ, J
UAS-T2-S3-3-6FT	Target analytes	3 days outside of extraction holding time	UJ, J
UAS-T2-S5-0-0.5FT	Target analytes	3 days outside of extraction holding time	UJ, J
UAS-T5-S6-0-0.5FTFD	Target analytes	3 days outside of extraction holding time	UJ, J
UAS-T5-S6-0-0.5FT	Target analytes	3 days outside of extraction holding time	UJ, J
UAS-T6-S4-3-6FT	Target analytes	15 days outside of extraction holding time	UJ, J
UAS-T6-S1-0-0.5FT	Target analytes	15 days outside of extraction holding time	UJ, J
UAS-T6-S4-0-0.5FT	Target analytes	15 days outside of extraction holding time	UJ, J
UAS-T6-S5-0-0.5FT	Target analytes	15 days outside of extraction holding time	UJ, J

Surrogate recovery

Recoveries for surrogates in soil samples were outside of the laboratory control limits. Target analytes in samples with surrogate excursions were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The target analytes in sample BS-EEG-108-3-6FT were rejected (R) due to a surrogate recovery of less than 10%. The MS/MSD analysis of this sample confirmed the low surrogate recovery. The sample, MS and MSD samples were re-extracted and reanalyzed to additionally confirm the low surrogate recovery excursion. Samples qualified due to minor surrogate excursions are summarized in the following table.

Table 124. *Surrogate excursions for PCBs in soil samples*

Sample ID	Surrogate ID	Excursion	Affected target analytes	Action
UAS-T4-S1-0-0.5FT	$^{13}C_{12}$ decachlorobiphenyl	29 %R	Target analytes	UJ, J
UAS-T5-S6-3-6FTFD	$^{13}C_{12}$ decachlorobiphenyl	23 %R	Target analytes	UJ, J
UAS-T5-S5-0-0.5FT	$^{13}C_{12}$ decachlorobiphenyl	28 %R	Target analytes	UJ, J
UAS-T5-S3-3-6FT	$^{13}C_{12}$ decachlorobiphenyl	27 %R	Target analytes	UJ, J
UAS-T6-S1-3-6FT	$^{13}C_{12}$ decachlorobiphenyl	18 %R	Target analytes	UJ, J
UAS-T6-S2-3-6FT	$^{13}C_{12}$ decachlorobiphenyl	28 %R	Target analytes	UJ, J
UAS-T7-S5-3-6FT	$^{13}C_{12}$ decachlorobiphenyl	26 %R	Target analytes	UJ
BS-EEG-108-0-0.5FT	$^{13}C_{12}$ decachlorobiphenyl	13 %R	Target analytes	UJ
BS-EE-04-3-6FT	$^{13}C_{12}$ decachlorobiphenyl	12 %R	Target analytes	UJ
BS-EEG-108-3-6FT	$^{13}C_{12}$ decachlorobiphenyl	1 %R	Target analytes	R
DAS-T6-S2-0-0.5FT	$^{13}C_{12}$ decachlorobiphenyl	25 %R	Target analytes	UJ, J

Note:
%R indicates percentage recovery.

MS/MSD analysis

Target analytes in MS/MSD samples were qualified as approximate (UJ) to indicate minor accuracy excursions. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 125. *MS/MSD excursions for PCB analyses in soil samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
UAS-T2-S4-3-6FT	TRCB	36 %R, 25 %R	UAS-T2-S4-3-6FT	UJ
	PTCB	33 %R, 26 %R		
	HXCB	36 %R, 27 %R		
	HPCB	34 %R, 27 %R		
	OCB	34 %R, 27 %R		
DAS-T1-S3-3-6FT	TRCB	38 %R, 36 %R	DAS-T1-S3-3-6FT	UJ
DAS-T5-S3-3-6FT	TRCB	25 %R, 33 %R	DAS-T5-S3-3-6FT	UJ
	PTCB	25 %R, 32 %R		
	HXCB	25 %R, 33 %R		
	HPCB	28 %R, 38 %R		
	OCB	29 %R, 37 %R		
DAS-T4-S3-0-0.5FT	MCB	58 RPD	DAS-T4-S3-0-0.5FT	UJ
	TRCB	51 RPD		
	PTCB	51 RPD		
	HXCB	58 RPD		
	HPCB	56 RPD		

Table 125. *MS/MSD excursions for PCB analyses in soil samples*

Note: %R indicates percentage recovery.
RPD indicates relative percent difference
MCB indicates monochlorobiphenyl
TRCB indicates tetrachlorobiphenyl
PTCB indicates pentachlorobiphenyl
HXCB indicates hexachlorobiphenyl
HPCB indicates heptachlorobiphenyl
OCB indicates octachlorobiphenyl

Internal standards criteria

Target analytes associated with internal standards recoveries that were outside of the laboratory control limits were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The following table summarizes the internal standard excursions.

Table 126. *Internal standard excursions for PCBs in soil samples*

Sample ID	Internal standard	Excursion	Affected analytes	Action
UAS-T1-S7-3-6FTFD	Chrysene-d12	66 %R	For affected target analytes see below	UJ, J
UAS-T2-S4-0-0.5FT	Chrysene-d12	68 %R	For affected target analytes see below	UJ, J
UAS-T1-S3-0-0.5FT	Chrysene-d12	64 %R	For affected target analytes see below	UJ, J
UAS-T2-S5-3-6FT	Chrysene-d12	62 %R	For affected target analytes see below	UJ
UAS-T3-S1-3-6FT	Chrysene-d12	68 %R	For affected target analytes see below	UJ
UAS-T3-S3-3-6FT	Chrysene-d12	68 %R	For affected target analytes see below	UJ
UAS-T5-S6-0-0.5FTFD	Chrysene-d12	67 %r	For affected target analytes see below	UJ, J
BS-EE-04-3-6FT	Chrysene-d12	57 %R	For affected target analytes see below	UJ
DAS-T5-S3-0-0.5FT	Chrysene-d12	56 %R	For affected target analytes see below	UJ, J

Note:
%R indicates percentage recovery.

The analytes affected by internal standard chrysene-d12 include the following : MCB, DCB, TCB, TRCB, PTCB, HXCB, HPCB, OCB, NCB, DCCB

MCB indicates monochlorobiphenyl
DCB indicates dichlorobiphenyl
TCB indicates trichlorobiphenyl
TRCB indicates tetrachlorobiphenyl
PTCB indicates pentachlorobiphenyl
HXCB indicates hexachlorobiphenyl
HPCB indicates heptachlorobiphenyl
OCB indicates octachlorobiphenyl
NCB indicates nonachlorobiphenyl
DCCB indicates decachlorobiphenyl

Sample re-analysis

The following sample was re-extracted and reanalyzed due to a sample analysis excursion.

Table 127. *Soil samples reanalyzed for PCBs*

Sample ID	Reason for re-analysis
UAS-T1-S3-0-0.5FT UAS-T1-S6-0-0.5FT UAS-T2-S1-3-6FT UAS-T5-S3-0-0.5FT	Surrogate recovery excursions detected in the initial analysis; surrogates met criteria in the re-extraction and analysis, which was reported.

Table 127. *Soil samples reanalyzed for PCBs*

Sample ID	Reason for re-analysis
UAS-T2-S2-3-6FT UAS-T2-S3-0-0.5FT UAS-T2-S3-3-6FT UAS-T2-S5-0-0.5FT	Surrogate and internal standard recovery excursions detected in the initial analysis; surrogate and internal standard recoveries were improved in the re-extraction and analysis. Therefore, re-analysis was reported.
UAS-T4-S1-0-0.5FT UAS-T5-S6-3-6FTFD UAS-T5-S3-3-6FT UAS-T6-S1-3-6FT UAS-T6-S2-3-6FT UAS-T7-S5-3-6FT BS-EE-04-3-6FT BS-EE-108-0-0.5FT DAS-T6-S2-0-0.5FT	Surrogate recovery excursions detected in the initial analyses; surrogate recoveries were not improved in the re-extraction and analyses. Therefore, initial analyses were reported.
UAS-T6-S4-3-6FT UAS-T6-S1-0-0.5FT UAS-T6-S4-0-0.5FT UAS-T6-S5-0-0.5FT UAS-T5-S6-0-0.5FTFD UAS-T5-S6-0-0.5FT	Surrogate recovery excursions detected in the initial analyses; surrogate recoveries were improved in the re-extraction and analyses. Therefore, re-analyses were reported.

Target analyte reported detection limits

The following table presents the samples analyzed by dilution due to matrix interferences or concentration of target analytes that exceeded the calibration limit.

Table 128. *PCBs in soil samples analyzed by dilution*

Sample ID	Target analytes	Dilution	Reason
UAS-T4-S2-0-0.5FT	Target analytes	1:5	Matrix interference
UAS-T4-S5-0-0.5FT	Target analytes	1:5	Matrix interference
UAS-T4-S7-3-6FT	Target analytes	1:5	Matrix interference or elevated target analyte concentrations
UAS-T3-S7-0-0.5FT	Target analytes	1:10	Matrix interference or elevated target analyte concentrations
UAS-T6-S3-3-6FT	Target analytes	1:5	Matrix interference

Overall data assessment

- Target analytes in fourteen soil samples were qualified as approximate (UJ, J) due to holding time excursions.
- Target analytes in ten soil samples were qualified as approximate (UJ, J) due to surrogate recovery excursions.
- The target analytes in sample BS-EEG-108-3-6FT were rejected (R) due to a surrogate recovery of less than 10%.
- Eleven results for target analytes in soil samples were qualified as approximate (UJ) due to MS/MSD recovery excursions.
- Five results for target analytes in soil samples were qualified as approximate (UJ) due to MS/MSD precision excursions.
- Ninety results for target analytes in soil samples were qualified as approximate (UJ, J) due to internal standard excursions.

- The following samples were reanalyzed due to analysis excursions: UAS-T1-S3-0-0.5FT, UAS-T1-S6-0-0.5FT, UAS-T2-S1-3-6FT, UAS-T5-S3-0-0.5FT, UAS-T2-S2-3-6FT, UAS-T2-S3-0-0.5FT, UAS-T2-S3-3-6FT, UAS-T2-S5-0-0.5FT, UAS-T4-S1-0-0.5FT, UAS-T5-S6-3-6FTFD, UAS-T5-S3-3-6FT, UAS-T6-S1-3-6FT, UAS-T6-S2-3-6FT, UAS-T7-S5-3-6FT, BS-EE-04-3-6FT, BS-EE108-0-0.5FT, DAS-T6-S2-0-0.5FT, UAS-T6-S4-3-6FT, UAS-T6-S1-0-0.5FT, UAS-T6-S4-0-0.5FT, UAS-T6-S5-0-0.5FT, UAS-T5-S6-0-0.5FTFD, UAS-T5-S6-0-0.5FT.
- The following samples were analyzed at a dilution: UAS-T4-S2-0-0.5FT, UAS-T4-S5-0-0.5FT, UAS-T4-S7-3-6FT, UAS-T3-S7-0-0.5FT, UAS-T6-S3-3-6FT.

4.7. Metals, mercury, and cyanide analysis of soil samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for metals analyzed by USEPA Method 6010B, mercury by USEPA Method 7471A, and cyanide by USEPA Method 9010B were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times, sample preservation, and percentage solids
- Calibration analysis
- ICP interference check sample analysis
- Verification of instrument parameters
- Analyte quantitation and reported detection limits
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2 and any additional observations are summarized below.

Blank analysis

The field/equipment blank UAS-T7-S6-0-0.5FTEB, collected 11/19/99 was not utilized to evaluate sample results for blank contamination since the field/equipment blank was highly contaminated. Based on discussions with field collection personnel, it is suspected that the source of the field/equipment blank water was contaminated.

Target analytes were detected in preparation, calibration and field/equipment blanks that were analyzed for metals. The samples which contained target analytes at less than five times the associated blank concentration were qualified as not detected (U) and samples which contained target analytes at greater than five times the associated blank concentration were qualified as approximate (J) due to the blank contamination. The blank excursions are summarized in the following table:

Table 129. *Blank excursions for metal analyses in soil samples*

Blank ID*	Analyte	Detected Concentration	Affected Sample Results	Action
UAS-T1-S7-0-0.5FTEB UAS-T1-S7-3-6FTEB UAS-T3-S7-3-6FTEB UAS-T3-S5-0-0.5FTEB	Aluminum Calcium	0.065 mg/L 0.44 mg/L	UAS-T1-S1-0-0.5FT UAS-T1-S1-3-6FT UAS-T1-S2-0-0.5FT UAS-T1-S2-3-6FT UAS-T1-S3-0-0.5FT UAS-T1-S3-3-6FT UAS-T1-S4-0-0.5FT UAS-T1-S4-3-6FT UAS-T1-S5-0-0.5FT UAS-T1-S5-3-6FT UAS-T1-S6-0-0.5FT UAS-T1-S6-3-6FT UAS-T1-S7-0-0.5FT UAS-T1-S7-3-6FT UAS-T1-S7-0-0.5FTFD UAS-T1-S7-3-6FTFD UAS-T2-S1-0-0.5FT UAS-T2-S1-3-6FT UAS-T2-S2-0-0.5FT UAS-T2-S4-0-0.5FT	J
UAS-T1-S7-0-0.5FTEB UAS-T1-S7-3-6FTEB UAS-T3-S7-3-6FTEB UAS-T3-S5-0-0.5FTEB	Sodium	0.84 mg/L	UAS-T1-S1-0-0.5FT UAS-T1-S1-3-6FT UAS-T1-S2-0-0.5FT UAS-T1-S2-3-6FT UAS-T1-S3-0-0.5FT UAS-T1-S3-3-6FT UAS-T1-S4-0-0.5FT UAS-T1-S4-3-6FT UAS-T1-S5-0-0.5FT UAS-T1-S5-3-6FT UAS-T1-S6-0-0.5FT UAS-T1-S6-3-6FT UAS-T1-S7-0-0.5FT UAS-T1-S7-3-6FT UAS-T1-S7-0-0.5FTFD UAS-T1-S7-3-6FTFD UAS-T2-S1-0-0.5FT UAS-T2-S1-3-6FT UAS-T2-S2-0-0.5FT UAS-T2-S4-0-0.5FT	U

Table 129. *Blank excursions for metal analyses in soil samples*

Blank ID*	Analyte	Detected Concentration	Affected Sample Results	Action
CCB3-CCB6 12/16/99	Beryllium	0.134 mg/Kg	UAS-T2-S2-3-6FT UAS-T2-S3-3-6FT UAS-T2-S5-0-0.5FT UAS-T2-S5-3-6FT UAS-T2-S4-3-6FT UAS-T2-S6-0-0.5FT UAS-T2-S6-3-6FT UAS-T3-S1-3-6FT UAS-T3-S3-3-6FT UAS-T3-S3-3-6FTFD UAS-T3-S6-0-0.5FT UAS-T3-S7-3-6FT UAS-T3-S4-3-6FT UAS-T3-S5-3-6FT UAS-T3-S3-0-0.5FT	U
	Beryllium	0.134 mg/Kg	UAS-T2-S3-0-0.5FT UAS-T3-S2-0-0.5FT UAS-T3-S4-0-0.5FT UAS-T3-S5-0-0.5FT UAS-T3-S6-3-6FT	J
	Barium Vanadium	0.2 mg/Kg 0.237 mg/Kg	UAS-T2-S2-3-6FT UAS-T2-S3-3-6FT UAS-T2-S5-0-0.5FT UAS-T2-S5-3-6FT UAS-T2-S4-3-6FT UAS-T2-S6-0-0.5FT UAS-T2-S6-3-6FT UAS-T3-S1-3-6FT UAS-T3-S3-3-6FT UAS-T3-S3-3-6FTFD UAS-T3-S6-0-0.5FT UAS-T3-S7-3-6FT UAS-T3-S4-3-6FT UAS-T3-S5-3-6FT UAS-T3-S3-0-0.5FT UAS-T2-S3-0-0.5FT UAS-T3-S2-0-0.5FT UAS-T3-S4-0-0.5FT UAS-T3-S5-0-0.5FT UAS-T3-S6-3-6FT	J
	Zinc	1.29 mg/Kg	UAS-T2-S2-3-6FT UAS-T2-S3-0-0.5FT UAS-T2-S3-3-6FT UAS-T2-S5-0-0.5FT UAS-T2-S5-3-6FT UAS-T2-S4-3-6FT UAS-T2-S6-0-0.5FT	J

Table 129. *Blank excursions for metal analyses in soil samples*

Blank ID*	Analyte	Detected Concentration	Affected Sample Results	Action
UAS-T3-S7-3-6FTEB UAS-T3-S5-0-0.5FTEB UAS-T5-S5-3-6FTEB UAS-T5-S5-0-0.5FTEB UAS-T1-S7-0-0.5FTEB UAS-T1-S7-3-6FTEB	Aluminum Calcium	0.065 mg/L 0.44 mg/L	UAS-T2-S2-3-6FT UAS-T2-S3-3-6FT UAS-T2-S5-0-0.5FT UAS-T2-S5-3-6FT UAS-T2-S4-3-6FT UAS-T2-S6-0-0.5FT UAS-T2-S6-3-6FT UAS-T3-S1-3-6FT UAS-T3-S3-3-6FT UAS-T3-S3-3-6FTFD UAS-T3-S6-0-0.5FT UAS-T3-S7-3-6FT UAS-T3-S4-3-6FT UAS-T3-S5-3-6FT UAS-T3-S3-0-0.5FT UAS-T2-S3-0-0.5FT UAS-T3-S2-0-0.5FT UAS-T3-S4-0-0.5FT UAS-T3-S5-0-0.5FT UAS-T3-S6-3-6FT	J
UAS-T1-S7-0-0.5FTEB UAS-T1-S7-3-6FTEB UAS-T3-S7-3-6FTFD UAS-T3-S5-0-0.5FTFD	Sodium	0.84 mg/L	UAS-T3-S2-3-6FT UAS-T3-S7-0-0.5FT UAS-T3-S1-0-0.5FT UAS-T3-S3-0-0.5FTFD	U
	Aluminum Calcium	0.065 mg/L 0.44 mg/L	UAS-T3-S2-3-6FT UAS-T3-S7-0-0.5FT UAS-T3-S1-0-0.5FT UAS-T3-S3-0-0.5FTFD	J
UAS-T3-S7-3-6FTEB UAS-T3-S5-0-0.5FTEB UAS-T5-S5-3-6FTEB UAS-T5-S5-0-0.5FTEB UAS-T1-S7-0-0.5FTEB UAS-T1-S7-3-6FTEB	Sodium	0.84 mg/L	UAS-T2-S2-3-6FT UAS-T2-S3-3-6FT UAS-T2-S5-0-0.5FT UAS-T2-S5-3-6FT UAS-T2-S4-3-6FT UAS-T2-S6-0-0.5FT UAS-T2-S6-3-6FT UAS-T3-S1-3-6FT UAS-T3-S3-3-6FT UAS-T3-S3-3-6FTFD UAS-T3-S6-0-0.5FT UAS-T3-S7-3-6FT UAS-T3-S4-3-6FT UAS-T2-S3-0-0.5FT UAS-T3-S2-0-0.5FT UAS-T3-S4-0-0.5FT UAS-T3-S5-0-0.5FT UAS-T3-S6-3-6FT	U

Table 129. *Blank excursions for metal analyses in soil samples*

Blank ID*	Analyte	Detected Concentration	Affected Sample Results	Action
CCB 11/30/99	Beryllium	1.35 µg/L	UAS-T7-S1-0-0.5FT UAS-T7-S2-0-0.5FT UAS-T7-S2-3-6FT UAS-T7-S3-3-6FT UAS-T7-S3-3-6FTFD UAS-T7-S4-0-0.5FT	U
	Beryllium	1.35 µg/L	UAS-T7-S1-3-6FT UAS-T7-S3-0-0.5FT UAS-T7-S3-0-0.5FTFD	J
	Iron Lead	0.45 mg/Kg 0.481 mg/Kg	UAS-T7-S1-0-0.5FT UAS-T7-S1-3-6FT UAS-T7-S2-0-0.5FT UAS-T7-S2-3-6FT UAS-T7-S3-0-0-0.5FT UAS-T7-S3-3-6FT UAS-T7-S3-0-0.5FTFD UAS-T7-S3-3-6FTFD UAS-T7-S4-0-0.5FT UAS-T7-S4-3-6FT UAS-T7-S5-0-0.5FT	
UAS-T7-S6-3-6FTEB	Sodium	0.3 mg/L	UAS-T7-S1-0-0.5FT UAS-T7-S1-3-6FT UAS-T7-S2-0-0.5FT UAS-T7-S2-3-6FT UAS-T7-S3-0-0.5FT UAS-T7-S3-3-6FT UAS-T7-S3-0-0.5FTFD UAS-T7-S3-3-6FTFD UAS-T7-S4-0-0.5FT UAS-T7-S4-3-6FT UAS-T7-S5-0-0.5FT	U
UAS-T7-S6-3-6FTEB	Calcium	0.18 mg/L	UAS-T7-S1-0-0.5FT UAS-T7-S1-3-6FT UAS-T7-S2-0-0.5FT UAS-T7-S2-3-6FT UAS-T7-S3-0-0.5FT UAS-T7-S3-3-6FT UAS-T7-S3-0-0.5FTFD UAS-T7-S3-3-6FTFD UAS-T7-S4-0-0.5FT UAS-T7-S4-3-6FT UAS-T7-S5-0-0.5FT	J
UAS-T3-S7-3-6FTEB UAS-T3-S5-0-0.5FTEB	Aluminum Calcium	0.065 mg/L 0.44 mg/L	UAS-T4-S6-3-6FT UAS-T4-S6-0-0.5FT UAS-T4-S4-0-0.5FT UAS-T4-S3-0-0.5FTFD UAS-T4-S3-0-0.5FT UAS-T4-S2-0-0.5FT UAS-T4-S5-0-0.5FT UAS-T4-S1-0-0.5FT UAS-T4-S5-3-6FT	J
UAS-T3-S7-3-6FTEB UAS-T3-S5-0-0.5FTEB	Sodium	0.68 mg/L	UAS-T4-S6-3-6FT UAS-T4-S6-0-0.5FT UAS-T4-S4-0-0.5FT UAS-T4-S3-0-0.5FTFD UAS-T4-S3-0-0.5FT UAS-T4-S2-0-0.5FT UAS-T4-S5-0-0.5FT UAS-T4-S1-0-0.5FT UAS-T4-S5-3-6FT	U

Table 129. *Blank excursions for metal analyses in soil samples*

Blank ID*	Analyte	Detected Concentration	Affected Sample Results	Action
UAS-T5-S5-0-0.5FTEB UAS-T5-S5-3-6FTEB	Aluminum Calcium	0.053 mg/L 0.28 mg/L	UAS-T4-S1-3-6FT UAS-T4-S3-3-6FT UAS-T4-S2-3-6FT UAS-T4-S3-3-6FTFD UAS-T4-S7-3-6FT UAS-T5-S1-0-0.5FT UAS-T4-S4-3-6FT UAS-T5-S3-0-0.5FT UAS-T4-S7-0-0.5FT UAS-T5-S2-0-0.5FT UAS-T5-S4-3-6FT	J
UAS-T5-S5-0-0.5FTEB UAS-T5-S5-3-6FTEB	Sodium	0.62 mg/L	UAS-T4-S1-3-6FT UAS-T4-S3-3-6FT UAS-T4-S3-3-6FTFD UAS-T4-S7-3-6FT UAS-T5-S1-0-0.5FT UAS-T4-S4-3-6FT UAS-T5-S3-0-0.5FT UAS-T4-S7-0-0.5FT UAS-T5-S2-0-0.5FT UAS-T5-S4-3-6FT	U
	Sodium	0.62 mg/L	UAS-T4-S2-3-6FT	J
UAS-T5-S5-0-0.5FTEB UAS-T5-S5-3-6FTEB	Aluminum Calcium	0.053 mg/L 0.28 mg/L	UAS-T5-S4-0-0.5FT UAS-T5-S6-3-6FTFD UAS-T5-S6-0-0.5FTFD UAS-T5-S6-3-6FT UAS-T5-S6-0-0.5FT UAS-T5-S5-3-6FT UAS-T5-S5-0-0.5FT UAS-T5-S1-3-6FT UAS-T5-S2-3-6FT UAS-T5-S3-3-6FT	J
UAS-T5-S5-0-0.5FTEB UAS-T5-S5-3-6FTEB	Sodium	0.62 mg/L	UAS-T5-S4-0-0.5FT UAS-T5-S6-3-6FTFD UAS-T5-S6-0-0.5FTFD UAS-T5-S6-3-6FT UAS-T5-S6-0-0.5FT UAS-T5-S5-3-6FT UAS-T5-S5-0-0.5FT UAS-T5-S1-3-6FT UAS-T5-S2-3-6FT UAS-T5-S3-3-6FT	U

Table 129. *Blank excursions for metal analyses in soil samples*

Blank ID*	Analyte	Detected Concentration	Affected Sample Results	Action
UAS-T6-S6-3-6FTEB UAS-T6-S3-0-0.5FTEB	Beryllium	0.0007 mg/L	UAS-T6-S5-0-0.5FT UAS-T6-S1-3-6FT UAS-T6-S2-3-6FT UAS-T6-S3-3-6FT UAS-T6-S4-3-6FT UAS-T6-S5-3-6FT UAS-T6-S1-0-0.5FT UAS-T6-S3-0-0.5FT UAS-T6-S4-0-0.5FT	J
	Beryllium	0.0007 mg/L	UAS-T6-S2-0-0.5FT	U
	Calcium Lead Zinc	0.29 mg/L 0.0021 mg/L 0.0067 mg/L	UAS-T6-S1-3-6FT UAS-T6-S2-3-6FT UAS-T6-S3-3-6FT UAS-T6-S4-3-6FT UAS-T6-S5-3-6FT UAS-T6-S1-0-0.5FT UAS-T6-S2-0-0.5FT UAS-T6-S3-0-0.5FT UAS-T6-S4-0-0.5FT UAS-T6-S5-0-0.5FT	J
	Sodium	0.44 mg/L	UAS-T6-S1-3-6FT UAS-T6-S2-3-6FT UAS-T6-S3-3-6FT UAS-T6-S4-3-6FT UAS-T6-S5-3-6FT UAS-T6-S1-0-0.5FT UAS-T6-S2-0-0.5FT UAS-T6-S3-0-0.5FT UAS-T6-S4-0-0.5FT UAS-T6-S5-0-0.5FT	U
CCB7	Barium	1.41 mg/Kg	UAS-T7-S5-3-6FT UAS-T7-S6-0-0.5FT UAS-T7-S6-3-6FT UAS-T7-S7-0-0.5FT UAS-T7-S7-3-6FT	U
CCB7	Molybdenum	10.2 mg/Kg	UAS-T7-S5-3-6FT UAS-T7-S6-0-0.5FT UAS-T7-S6-3-6FT UAS-T7-S7-3-6FT	U
	Molybdenum	10.2 mg/Kg	UAS-T7-S7-0-0.5FT	J
UAS-T7-S6-3-6FT	Calcium	0.18 mg/L	UAS-T7-S5-3-6FT UAS-T7-S6-0-0.5FT UAS-T7-S6-3-6FT UAS-T7-S7-0-0.5FT UAS-T7-S7-3-6FT	J
PB 11/30/99	Iron Lead	4.5 mg/L 0.481 mg/L	UAS-T7-S5-3-6FT UAS-T7-S6-0-0.5FT UAS-T7-S6-3-6FT UAS-T7-S7-0-0.5FT UAS-T7-S7-3-6FT	J
UAS-T7-S6-3-6FT	Sodium	0.38 mg/L	UAS-T7-S5-3-6FT UAS-T7-S6-0-0.5FT UAS-T7-S6-3-6FT UAS-T7-S7-0-0.5FT UAS-T7-S7-3-6FT	U
CCB4/CCB5 2/9/00	Thallium	0.0076 mg/L	BS-EE-20-0-0.5FT BS-EE-20-3-6FT	U

Table 129. *Blank excursions for metal analyses in soil samples*

Blank ID[a]	Analyte	Detected Concentration	Affected Sample Results	Action
PBS 4/27/00	Sodium	49.8 mg/Kg	DAS-T1-S1-0-0.5FT DAS-T1-S1-0-0.5FTFD DAS-T1-S2-0-0.5FT DAS-T1-S3-0-0.5FT DAS-T2-S1-0-0.5FT DAS-T2-S2-0-0.5FT DAS-T2-S3-0-0.5FT DAS-T1-S1-3-6FT DAS-T1-S2-3-6FT DAS-T1-S3-3-6FT DAS-T2-S1-3-6FT DAS-T2-S2-3-6FT DAS-T2-S3-3-6FT DAS-T2-S3-3-6FTFD	U
CCB 5/1/00	Mercury	0.101 µg/L	DAS-T1-S1-3-6FT DAS-T1-S2-3-6FT DAS-T1-S3-3-6FT DAS-T2-S1-3-6FT	UJ
	Mercury	0.101 µg/L	DAS-T1-S1-0-0.5FT DAS-T1-S1-0-0.5FTFD DAS-T1-S2-0-0.5FT DAS-T1-S3-0-0.5FT DAS-T2-S1-0-0.5FT DAS-T2-S2-0-0.5FT DAS-T2-S3-0-0.5FT	J
PBS 4/28/00	Mercury	0.0054 mg/Kg	DAS-T4-S2-3-6FT DAS-T4-S3-3-6FT DAS-T6-S1-3-6FT DAS-T6-S2-3-6FT DAS-T7-S1-3-6FT	UJ
	Mercury	0.0054 mg/Kg	DAS-T7-S2-3-6FT DAS-T6-S1-0-0.5FT DAS-T6-S2-0-0.5FT DAS-T6-S3-0-0.5FT DAS-T6-S3-3-6FT DAS-T7-S1-0-0.5FT DAS-T7-S2-0-0.5FT DAS-T4-S2-0-0.5FT DAS-T4-S3-0-0.5FT	J
CCB6 5/2/00	Vanadium	0.13 µg/L	DAS-T4-S3-0-0.5FT DAS-T7-S1-3-6FT DAS-T7-S2-3-6FT DAS-T6-S1-0-0.5FT DAS-T6-S2-0-0.5FT DAS-T6-S3-0-0.5FT	J
BS-EEG-108-0-0.5FTEB	Calcium Iron Zinc	0.21 mg/L 0.043 mg/L 0.014 mg/L	BS-EE-20-0-0.5FT BS-EE-20-3-6FT BS-EE-04-3-6FT BS-EEG-108-0-0.5FT BS-EEG-108-3-6FT BS-EE-04-0-0.5FTFD BS-EE-04-0-0.5FT	J
	Sodium	0.58 mg/L	BS-EE-20-0-0.5FT BS-EE-20-3-6FT BS-E04-3-6FT BS-EE-04-0-0.5FTFD BS-EE-04-0-0.5FT	U
	Sodium	0.58 mg/L	BS-EEG-108-0-0.5FT BS-EEG-108-3-6FT	J

Table 129. *Blank excursions for metal analyses in soil samples*

Blank ID*	Analyte	Detected Concentration	Affected Sample Results	Action
DAS-T5-S1-0-0.5FTEB DAS-T3-S3-0-0.5FTEB	Calcium Iron Lead	0.13 mg/L 0.028 mg/L 0.0016 mg/L	DAS-T1-S1-0-0.5FT DAS-T1-S1-0-0.5FTFD DAS-T1-S2-0-0.5FT DAS-T1-S3-0-0.5FT DAS-T2-S1-0-0.5FT DAS-T2-S2-0-0.5FT DAS-T2-S3-0-0.5FT DAS-T3-S1-0-0.5FT DAS-T3-S2-0-0.5FT DAS-T3-S3-0-0.5FT DAS-T4-S1-0-0.5FT DAS-T4-S1-0-0.5FTFD DAS-T5-S1-0-0.5FT DAS-T5-S2-0-0.5FT DAS-T5-S3-0-0.5FT DAS-T7-S1-0-0.5FT DAS-T7-S2-0-0.5FT DAS-T4-S2-0-0.5FT DAS-T4-S3-0-0.5FT DAS-T6-S1-0-0.5FT DAS-T6-S2-0-0.5FT DAS-T6-S3-0-0.5FT	J
	Sodium	0.33 mg/L	DAS-T1-S1-0-0.5FT DAS-T1-S1-0-0.5FTFD DAS-T1-S2-0-0.5FT DAS-T1-S3-0-0.5FT DAS-T2-S1-0-0.5FT DAS-T2-S2-0-0.5FT DAS-T2-S3-0-0.5FT DAS-T3-S1-0-0.5FT DAS-T3-S2-0-0.5FT DAS-T3-S3-0-0.5FT DAS-T4-S1-0-0.5FT DAS-T4-S1-0-0.5FTFD DAS-T5-S1-0-0.5FT DAS-T5-S2-0-0.5FT DAS-T5-S3-0-0.5FT DAS-T7-S1-0-0.5FT DAS-T7-S2-0-0.5FT DAS-T4-S2-0-0.5FT DAS-T4-S3-0-0.5FT DAS-T6-S1-0-0.5FT DAS-T6-S2-0-0.5FT DAS-T6-S3-0-0.5FT	U
	Mercury	0.00011 mg/L	DAS-T3-S1-0-0.5FT DAS-T3-S2-0-0.5FT DAS-T3-S3-0-0.5FT DAS-T4-S1-0-0.5FT DAS-T4-S1-0-0.5FTFD DAS-T5-S1-0-0.5FT DAS-T5-S2-0-0.5FT DAS-T5-S3-0-0.5FT.	J

Note:
* indicates that the highest concentration from the blanks were used to qualify samples.
CCB indicates continuing calibration blank.
PB indicates method (preparation) blank.

MS/MSD analysis

Target analytes in MS samples analyzed for metals were outside of the laboratory control limits. Post-digestion spikes analyses met method criteria, which confirmed the matrix interference for these samples. When the sample concentrations were less than four times the spike concentrations, target analytes with MS recoveries that were outside of

control limits, but are greater than 30% were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The results for antimony in 67 soil samples were initially rejected (R) due to MS/MSD recoveries of less than 30%. The laboratory re-digested the majority of the affected samples using an alternative digestion procedure. Analysis of the re-digested samples provided MS recoveries that met the laboratory criteria. Samples BS-EEG-108-3-6FT, BS-EEG-108-0-0.5FT, BS-EE-20-0-0.5FT, BS-EE-04-0-0.5FTFD were unable to be re-digested since the laboratory had disposed of the samples. Therefore, the results for antimony were rejected (R) in samples BS-EEG-108-3-6FT, BS-EEG-108-0-0.5FT, BS-EE-20-0-0.5FT and BS-EE-04-0-0.5FTFD. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 130. *MS/MSD excursions for metal in soil samples*

MS/MSD ID	Analyte	Excursion	Affected Sample	Action
UAS-T2-S4-0-0.5FT	Antimony	17 %R	UAS-T1-S1-0-0.5FT UAS-T1-S1-3-6FT UAS-T1-S2-0-0.5FT UAS-T1-S2-3-6FT UAS-T1-S3-0-0.5FT UAS-T1-S3-3-6FT UAS-T1-S4-0-0.5FT UAS-T1-S4-3-6FT UAS-T1-S5-0-0.5FT UAS-T1-S5-3-6FT UAS-T1-S6-0-0.5FT UAS-T1-S6-3-6FT UAS-T1-S7-0-0.5FT UAS-T1-S7-3-6FT UAS-T1-S7-0-0.5FTFD UAS-T1-S7-3-6FTFD UAS-T2-S1-0-0.5FT UAS-T2-S1-3-6FT UAS-T2-S2-0-0.5FT UAS-T2-S4-0-0.5FT	R*

Table 130. *MS/MSD excursions for metal in soil samples*

MS/MSD ID	Analyte	Excursion	Affected Sample	Action
UAS-T2-S4-3-6FT	Antimony	26 %R	UAS-T2-S2-3-6FT UAS-T2-S3-3-6FT UAS-T2-S5-0-0.5FT UAS-T2-S4-3-6FT UAS-T2-S6-0-0.5FT UAS-T2-S6-3-6FT UAS-T3-S1-3-6FT UAS-T3-S3-3-6FT UAS-T3-S3-3-6FTFD UAS-T3-S6-0-0.5FT UAS-T3-S7-3-6FT UAS-T3-S4-3-6FT UAS-T3-S5-3-6FT UAS-T3-S3-0-0.5FT UAS-T2-S3-0-0.5FT UAS-T3-S2-0-0.5FT UAS-T3-S4-0-0.5FT UAS-T3-S5-0-0.5FT UAS-T3-S6-3-6FT	R*
	Antimony	26 %R	UAS-T2-S5-3-6FT	J
	Molybdenum Potassium	74 %R 153 %R	UAS-T2-S2-3-6FT UAS-T2-S3-3-6FT UAS-T2-S5-0-0.5FT UAS-T2-S5-3-6FT UAS-T2-S4-3-6FT UAS-T2-S6-0-0.5FT UAS-T2-S6-3-6FT UAS-T3-S1-3-6FT UAS-T3-S3-3-6FT UAS-T3-S3-3-6FTFD UAS-T3-S6-0-0.5FT UAS-T3-S7-3-6FT UAS-T3-S4-3-6FT UAS-T3-S5-3-6FT UAS-T3-S3-0-0.5FT UAS-T2-S3-0-0.5FT UAS-T3-S2-0-0.5FT UAS-T3-S4-0-0.5FT UAS-T3-S5-0-0.5FT UAS-T3-S6-3-6FT	J
UAS-T7-S5-0-0.5FT	Antimony	38 %R, 31 %R	UAS-T3-S2-3-6FT UAS-T3-S7-0-0.5FT UAS-T3-S1-0-0.5FT UAS-T3-S3-0-0.5FT UAS-T7-S1-0-0.5FT UAS-T7-S1-3-6FT UAS-T7-S2-0-0.5FT UAS-T7-S2-3-6FT UAS-T7-S3-0-0.5FT UAS-T7-S3-3-6FT UAS-T7-S3-0-0.5FTFD UAS-T7-S3-3-6FTFD UAS-T7-S4-0-0.5FT UAS-T7-S4-3-6FT UAS-T7-S5-0-0.5FT	UJ

Table 130. *MS/MSD excursions for metal in soil samples*

MS/MSD ID	Analyte	Excursion	Affected Sample	Action
UAS-T7-S5-0-0.5FT	Potassium	143 %R, 155 %R	UAS-T3-S2-3-6FT UAS-T3-S7-0-0.5FT UAS-T3-S1-0-0.5FT UAS-T3-S3-0-0.5FT UAS-T7-S1-0-0.5FT UAS-T7-S1-3-6FT UAS-T7-S2-0-0.5FT UAS-T7-S2-3-6FT UAS-T7-S3-0-0.5FT UAS-T7-S3-3-6FT UAS-T7-S3-0-0.5FTFD UAS-T7-S3-3-6FTFD UAS-T7-S4-0-0.5FT UAS-T7-S4-3-6FT UAS-T7-S5-0-0.5FT	J
UAS-T4-S4-3-6FT UAS-T5-S4-3-6FT	Antimony	48 %R, 60 %R 44 %R, 39 %R	UAS-T4-S6-3-6FT UAS-T4-S6-0-0.5FT UAS-T4-S4-0-0.5FT UAS-T4-S4-0-0.5FTFD UAS-T4-S3-0-0.5FT UAS-T4-S2-0-0.5FT UAS-T4-S5-0-0.5FT UAS-T4-S1-0-0.5FT UAS-T4-S5-3-6FT UAS-T4-S1-3-6FT UAS-T4-S3-3-6FT UAS-T4-S2-3-6FT UAS-T4-S3-3-6FTFD UAS-T4-S7-3-6FT UAS-T5-S1-0-0.5FT UAS-T4-S4-3-6FT UAS-T5-S3-0-0.5FT UAS-T4-S7-0-0.5FT UAS-T5-S2-0-0.5FT UAS-T5-S4-3-6FT	UJ
UAS-T5-S4-3-6FT	Manganese Potassium	55 %R, 74 %R 74 %R	UAS-T4-S6-3-6FT UAS-T4-S6-0-0.5FT UAS-T4-S4-0-0.5FT UAS-T4-S4-0-0.5FTFD UAS-T4-S3-0-0.5FT UAS-T4-S2-0-0.5FT UAS-T4-S5-0-0.5FT UAS-T4-S1-0-0.5FT UAS-T4-S5-3-6FT UAS-T4-S1-3-6FT UAS-T4-S3-3-6FT UAS-T4-S2-3-6FT UAS-T4-S3-3-6FTFD UAS-T4-S7-3-6FT UAS-T5-S1-0-0.5FT UAS-T4-S4-3-6FT UAS-T5-S3-0-0.5FT UAS-T4-S7-0-0.5FT UAS-T5-S2-0-0.5FT UAS-T5-S4-3-6FT	J

Table 130. *MS/MSD excursions for metal in soil samples*

MS/MSD ID	Analyte	Excursion	Affected Sample	Action
UAS-T5-S4-0-0.5FT	Antimony	25 %R, 25 %R	UAS-T5-S4-0-0.5FT UAS-T5-S6-3-6FTFD UAS-T5-S6-0-0.5FTFD UAS-T5-S6-3-6FT UAS-T5-S6-0-0.5FT UAS-T5-S5-3-6FT UAS-T5-S5-0-0.5FT UAS-T5-S1-3-6FT UAS-T5-S2-3-6FT UAS-T5-S3-3-6FT UAS-T6-S1-3-6FT UAS-T6-S2-3-6FT UAS-T6-S3-3-6FT UAS-T6-S4-3-6FT UAS-T6-S5-3-6FT UAS-T6-S1-0-0.5FT UAS-T6-S2-0-0.5FT UAS-T6-S3-0-0.5FT UAS-T6-S4-0-0.5FT UAS-T6-S5-0-0.5FT	R*
UAS-T5-S4-0-0.5FT	Potassium	125 %R, 180 %R	UAS-T5-S4-0-0.5FT UAS-T5-S6-3-6FTFD UAS-T5-S6-0-0.5FTFD UAS-T5-S6-3-6FT UAS-T5-S6-0-0.5FT UAS-T5-S5-3-6FT UAS-T5-S5-0-0.5FT UAS-T5-S1-3-6FT UAS-T5-S2-3-6FT UAS-T5-S3-3-6FT UAS-T6-S1-3-6FT UAS-T6-S2-3-6FT UAS-T6-S3-3-6FT UAS-T6-S4-3-6FT UAS-T6-S5-3-6FT UAS-T6-S1-0-0.5FT UAS-T6-S2-0-0.5FT UAS-T6-S3-0-0.5FT UAS-T6-S4-0-0.5FT UAS-T6-S5-0-0.5FT	J
UAS-T7-S5-3-6FT	Antimony	40 %R, 43 %R	UAS-T7-S5-3-6FT UAS-T7-S6-0-0.5FT UAS-T7-S6-3-6FT UAS-T7-S7-0-0.5FT UAS-T7-S7-3-6FT	UJ, J
BS-EEG-108-3-6FT	Antimony	20 %R, 28 %R	BS-EEG-108-3-6FT BS-EEG-108-0-0.5FT BS-EE-20-0-0.5FT BS-EE-04-0-0.5FTFD	R**
	Antimony	20 %R, 28 %R	BS-EE-04-0-0.5FT BS-EE-04-3-6FT	R*
	Antimony	20 %R, 28 %R	BS-EE-20-3-6FT	J
BS-EEG-108-3-6FT	Mercury	122 %R, 145 %R	BS-EEG-20-0-0.5FT BS-EE-20-3-6FT BS-EE-04-0-0.5FT BS-EE-04-3-6FT BS-EE-04-0-0.5FTFD BS-EEG-108-0-0.5FT BS-EEG-108-3-6FT	J

Table 130. *MS/MSD excursions for metal in soil samples*

MS/MSD ID	Analyte	Excursion	Affected Sample	Action
DAS-T1-S3-3-6FT	Antimony	40 %R, 40 %R	DAS-T1-S1-0-0.5FT DAS-T1-S1-0-0.5FTFD DAS-T1-S2-0-0.5FT DAS-T1-S3-0-0.5FT DAS-T2-S1-0-0.5FT DAS-T2-S2-0-0.5FT DAS-T2-S3-0-0.5FT DAS-T1-S1-3-6FT DAS-T1-S2-3-6FT DAS-T1-S3-3-6FT DAS-T2-S1-3-6FT DAS-T2-S2-3-6FT DAS-T2-S3-3-6FT DAS-T2-S3-3-6FTFD	UJ, J
DAS-T3-S1-0-0.5FT	Antimony	46 %R, 47 %R	DAS-T3-S1-0-0.5FT DAS-T3-S2-0-0.5FT DAS-T3-S3-0-0.5FT DAS-T4-S1-0-0.5FT DAS-T4-S1-0-0.5FTFD DAS-T5-S1-0-0.5FT DAS-T5-S2-0-0.5FT DAS-T5-S3-0-0.5FT DAS-T3-S1-3-6FT DAS-T3-S2-3-6FT DAS-T3-S3-3-6FT DAS-T4-S1-3-6FT DAS-T4-S1-3-6FTFD DAS-T5-S1-3-6FT DAS-T5-S2-3-6FT DAS-T5-S3-3-6FT	UJ, J
DAS-T4-S3-0-0.5FT	Mercury Antimony Potassium	75 %R, 73 %R 40 %R, 38 %R 185 %R, 163 %R	DAS-T4-S2-3-6FT DAS-T4-S3-3-6FT DAS-T6-S1-3-6FT DAS-T6-S2-3-6FT DAS-T6-S3-3-6FT DAS-T7-S1-0-0.5FT DAS-T7-S2-0-0.5FT DAS-T4-S2-0-0.5FT DAS-T4-S3-0-0.5FT DAS-T7-S1-3-6FT DAS-T7-S2-3-6FT DAS-T6-S1-0-0.5FT DAS-T6-S2-0-0.5FT DAS-T6-S3-0-0.5FT	UJ, J

Note: %R indicates percentage recovery.
* indicates that the laboratory re-digested the affected samples using an alternative digestion procedure. Analysis of the re-digested samples provided data that met the laboratory criteria.
** indicates that the laboratory was not able to perform re-digestion on the samples since the laboratory had disposed of the samples. The results for antimony in these samples were rejected.

Laboratory duplicate analysis

Laboratory duplicate results were outside of the control limits of 20 RPD for target analytes greater than five times the reported detection limit and ± the reporting limit for target analytes less than five times the reported detection limit. The MS/MSD RPD results were utilized to evaluate precision. The results for the analytes in the associated samples were qualified as approximate (J) to indicate minor precision excursions. The laboratory duplicate excursions are summarized in the following table:

Table 131. *Laboratory duplicate excursions for metal analyses in soil samples*

Laboratory duplicate ID	Analyte	Excursion	Affected samples	Action
UAS-T7-S5-0-0.5FT	Antimony	22 RPD	UAS-T3-S2-3-6FT UAS-T3-S7-0-0.5FT UAS-T3-S1-0-0.5FT UAS-T3-S3-0-0.5FT UAS-T7-S1-0-0.5FT UAS-T7-S1-3-6FT UAS-T7-S2-0-0.5FT UAS-T7-S2-3-6FT UAS-T7-S3-0-0.5FT UAS-T7-S3-3-6FT UAS-T7-S3-0-0.5FTFD UAS-T7-S3-3-6FTFD UAS-T7-S4-0-0.5FT UAS-T7-S4-3-6FT UAS-T7-S5-0-0.5FT	UJ
UAS-T4-S4-3-6FT	Antimony	21 RPD	UAS-T4-S6-3-6FT UAS-T4-S6-0-0.5FT UAS-T4-S4-0-0.5FT UAS-T4-S4-0-0.5FTFD UAS-T4-S3-0-0.5FT UAS-T4-S2-0-0.5FT UAS-T4-S5-0-0.5FT UAS-T4-S1-0-0.5FT UAS-T4-S5-3-6FT UAS-T4-S1-3-6FT UAS-T4-S3-3-6FT UAS-T4-S2-3-6FT UAS-T4-S3-3-6FTFD UAS-T4-S7-3-6FT UAS-T5-S1-0-0.5FT UAS-T4-S4-3-6FT UAS-T5-S3-0-0.5FT UAS-T4-S7-0-0.5FT UAS-T5-S2-0-0.5FT UAS-T5-S4-3-6FT	UJ
DAS-T3-S1-0-0.5FT	Calcium	81 RPD	DAS-T3-S1-0-0.5FT DAS-T3-S2-0-0.5FT DAS-T3-S3-0-0.5FT DAS-T3-S3-3-6FT DAS-T4-S1-0-0.5FT DAS-T4-S1-0-0.5FTFD DAS-T5-S1-0-0.5FT DAS-T5-S2-0-0.5FT DAS-T5-S3-0-0.5FT DAS-T3-S1-3-6FT DAS-T3-S2-3-6FT DAS-T4-S1-3-6FT DAS-T4-S1-3-6FTFD DAS-T5-S1-3-6FT DAS-T5-S2-3-6FT DAS-T5-S3-3-6FT	J

Note:
RPD indicates relative percent difference.

ICP serial dilution analysis

The serial dilution recoveries for analytes in samples were greater than the 10%D criterion for analytes with concentrations greater than 50 times the IDL. The results for the affected analytes in the associated samples were qualified as approximate (J) to indicate minor accuracy excursions. The ICP serial dilution excursions are summarized in the following table:

Table 132. *ICP serial dilution excursions for metal analyses in soil samples*

Serial dilution ID	Analyte	Excursion	Affected samples	Action
UAS-T2-S4-0-0.5FT	Zinc	11.3 %D	UAS-T1-S1-0-0.5FT UAS-T1-S1-3-6FT UAS-T1-S2-0-0.5FT UAS-T1-S2-3-6FT UAS-T1-S3-0-0.5FT UAS-T1-S3-3-6FT UAS-T1-S4-0-0.5FT UAS-T1-S4-3-6FT UAS-T1-S5-0-0.5FT UAS-T1-S5-3-6FT UAS-T1-S6-0-0.5FT UAS-T1-S6-3-6FT UAS-T1-S7-0-0.5FT UAS-T1-S7-3-6FT UAS-T1-S7-0-0.5FTFD UAS-T1-S7-3-6FTFD UAS-T2-S1-0-0.5FT UAS-T2-S1-3-6FT UAS-T2-S2-0-0.5FT UAS-T2-S4-0-0.5FT	J
UAS-T7-S5-0-0.5FT	Lead	11.1 %D	UAS-T3-S2-3-6FT UAS-T3-S7-0-0.5FT UAS-T3-S1-0-0.5FT UAS-T3-S3-0-0.5FT UAS-T7-S1-0-0.5FT UAS-T7-S1-3-6FT UAS-T7-S2-0-0.5FT UAS-T7-S2-3-6FT UAS-T7-S3-0-0.5FT UAS-T7-S3-3-6FT UAS-T7-S3-0-0.5FTFD UAS-T7-S3-3-6FTFD UAS-T7-S4-0-0.5FT UAS-T7-S4-3-6FT UAS-T7-S5-0-0.5FT	J
DAS-T3-S1-0-0.5FT	Zinc	14.5 %D	DAS-T3-S1-0-0.5FT DAS-T3-S2-0-0.5FT DAS-T3-S3-0-0.5FT DAS-T4-S1-0-0.5FT DAS-T4-S1-0-0.5FTFD DAS-T5-S1-0-0.5FT DAS-T5-S2-0-0.5FT DAS-T5-S3-0-0.5FT DAS-T3-S1-3-6FT DAS-T3-S2-3-6FT DAS-T4-S1-3-6FT DAS-T4-S1-3-6FTFD DAS-T5-S1-3-6FT DAS-T5-S2-3-6FT DAS-T5-S3-3-6FT DAS-T3-S3-3-6FT	J

Note:
%D indicates percent difference.

Field duplicate analysis

Field duplicate results were outside of the laboratory control limits of 20 RPD for target analytes greater than five times the reported detection limit and ± the reporting limit for target analytes less than five times the reported detection limit. The results for the analytes in the associated samples were qualified as approximate (J) to indicate minor precision excursions. The field duplicate excursions are summarized in the following table:

Table 133. *Field duplicate excursions for metal analyses in soil samples*

Field duplicate ID	Analyte	Excursion	Affected samples	Action
UAS-T3-S3-0-0.5FTFD	Aluminum Arsenic Barium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Vanadium Zinc	87 RPD 85 RPD 83 RPD 79 RPD 83 RPD 85 RPD 78 RPD 91 RPD 83 RPD 82 RPD 80 RPD 83 RPD 28 RPD 79 RPD 78 RPD 82 RPD 77 RPD	UAS-T3-S3-0-0.5FT UAS-T3-S3-0-0.5FTFD	J
UAS-T7-S3-3-6FTFD	Aluminum Arsenic Barium Cobalt Copper Iron Lead Chromium Manganese Nickel Potassium Vanadium Zinc	31 RPD 27 RPD 22 RPD 25 RPD 51 RPD 29 RPD 42 RPD 156 RPD 37 RPD 128 RPD 37 RPD 30 RPD 29 RPD	UAS-T7-S3-3-6FT UAS-T7-S3-3-6FTFD	J
UAS-T4-S3-3-6FT	Aluminum Chromium Copper Nickel	24 RPD 76 RPD 38 RPD 37 RPD	UAS-T4-S3-3-6FT UAS-T4-S3-3-6FTFD	J
BS-EE-04-0-0.5FTFD	Barium Manganese	21 RPD 24 RPD	BS-EE-20-0-0.5FT BS-EE-20-3-6FT BS-EE-04-0-0.5FT BS-EE-04-3-6FT BS-EE-04-0-0.5FTFD BS-EE108-0-0.5FT BS-EEG-108-3-6FT	J
DAS-T1-S1-0-0.5FTFD	Copper Lead Zinc	26 RPD 30 RPD 37 RPD	DAS-T1-S1-0-0.5FT DAS-T1-S1-0-0.5FTFD DAS-T1-S2-0-0.5FT DAS-T1-S3-0-0.5FT DAS-T2-S2-0-0.5FT DAS-T2-S3-0-0.5FT DAS-T2-S1-0-0.5FT	J
	Cadmium	Difference greater than ± the reporting limit	DAS-T1-S1-0-0.5FT DAS-T1-S1-0-0.5FTFD DAS-T1-S2-0-0.5FT DAS-T1-S3-0-0.5FT DAS-T2-S2-0-0.5FT DAS-T2-S3-0-0.5FT DAS-T2-S1-0-0.5FT	J
DAS-T2-S3-3-6FTFD	Barium Magnesium Vanadium	21 RPD 22 RPD 26 RPD	DAS-T1-S1-3-6FT DAS-T1-S2-3-6FT DAS-T1-S3-3-6FT DAS-T2-S1-3-6FT DAS-T2-S2-3-6FT DAS-T2-S3-3-6FT DAS-T2-S3-3-6FTFD	J

Note:
RPD indicates relative percent difference.

Overall data assessment

- Six hundred eight results for target analytes in soil samples were qualified as non-detected (U) or as approximate (J) due to blank contamination.
- The results for antimony in 67 soil samples were initially rejected (R) due to MS/MSD recoveries of less than 30%. The laboratory re-digested the majority of the affected samples using an alternative digestion procedure. Analysis of the re-digested samples provided MS recoveries that met the laboratory criteria and were not qualified. Samples BS-EEG-108-3-6FT, BS-EEG-108-0-0.5FT, BS-EE-20-0-0.5FT, BS-EE-04-0-0.5FTFD were unable to be re-digested since the laboratory had disposed of the samples. Therefore, the results for antimony were rejected (R) in samples BS-EEG-108-3-6FT, BS-EEG-108-0-0.5FT, BS-EE-20-0-0.5FT and BS-EE-04-0-0.5FTFD.
- Two hundred thirty-six results for target analytes in soil samples were qualified as approximate (UJ, J) due to MS/MSD accuracy excursions.
- Fifty-one results for target analytes in soil samples were qualified as approximate (UJ, J) due to laboratory duplicate excursions.
- Fifty-one results for target analytes in soil samples were qualified as approximate (J) due to ICP serial dilution excursions.
- One hundred thirty-three results for target analytes in soil samples were qualified as approximate (J) due to field duplicate excursions.

4.8. PCDD and PCDF analysis of soil samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for PCDD and PCDFs analyzed by USEPA Method 8280A were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Percentage solids
- Instrument performance (mass resolution, GC column performance check)
- Initial and continuing calibration
- Internal standard criteria
- Surrogate/alternative/cleanup standard recovery
- Duplicate analysis
- MS/MSD analysis
- Sample data (identification and quantitation)
- Estimated detection limits
- Estimated maximum possible concentration (EMPC)
- Second column confirmation

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Holding times

Holding times were evaluated based on sample collection, extraction, and analysis dates. The result for target analytes in soil samples which were extracted outside of the holding time were qualified as approximate (UJ, J) to indicate minor representativeness excursions. The following table summarizes the holding time excursions.

Table 134. *Holding time excursions for PCDDs and PCDFs in soil samples*

Sample ID	Target analyte	Excursion	Action
UAS-T1-S6-0-0.5FT	Target analytes	16 days outside of extraction holding time	UJ, J
UAS-T1-S6-3-6FT	Target analytes	16 days outside of extraction holding time	UJ
UAS-T7-S3-3-6FTFD	Target analytes	7 days outside of extraction holding time	UJ

Sample preservation

The temperature of the coolers that were used to ship samples to the laboratory was documented by the laboratory. The following table summarizes cooler temperatures that were above 10 °C. Sample results were not qualified due to elevated cooler temperatures.

Table 135. *Elevated cooler temperatures in soil samples analyzed for PCDDs and PCDFs*

Sample ID	Excursion
UAS-T3-S3-0-0.5FT	Cooler temperature 12 °C
UAS-T3-S3-3-6FT	
UAS-T3-S3-0-0.5FTFD	
UAS-T3-S3-3-6FTFD	

Blank analysis

Target analytes were detected in blanks analyzed for PCDDs and PCDFs. Samples with target analytes at concentrations less than or equal to five times the concentrations in the associated method blank were flagged as EMPCs. The samples flagged as EMPCs due to method blank contamination are summarized in the following table.

Table 136. *Blank contamination for PCDDS and PCDFs in soil samples*

Blank ID	Target analyte	Concentration	Affected samples	Action
MB 49930A	OCDD	0.02 µg/Kg	UAS-T4-S6-3-6FT	EMPC
MB 49914B	OCDD	0.02 µg/Kg	UAS-T3-S3-3-6FT UAS-T3-S3-3-6FTFD	EMPC
MB 50863	OCDD	0.6 µg/Kg	DAS-T2-S3-3-6FTFD DAS-T1-S3-3-6FT DAS-T2-S2-0-0.5FT DAS-T2-S3-3-6FT DAS-T2-S3-0-0.5FT	EMPC
MB 50869	OCDD	0.14 µg/Kg	DAS-T5-S2-3-6FT	EMPC
MB 50883	OCDD	0.14 µg/Kg	DAS-T6-S1-3-6FT	EMPC

Note:
MB indicates method blank.
OCDD indicates octachlorodibenzo-p-dioxin

Recovery standard criteria

The recovery standard areas for several samples were outside of the criteria of 50% to 200% of the associated continuing calibration. As a result of recovery standard excursions, analytes in the affected samples were qualified as approximate (UJ, J) to indicate minor accuracy excursions.

The sample results qualified as a result of the recovery standard excursions are summarized in the following table.

Table 137. *Recovery standard area excursions for PCDDs and PCDFs in soil samples*

Sample ID	Recovery standard	Excursion	Affected analytes	Action
UAS-T1-S6-0-0.5FT	$^{13C}_{12}$123789- HxCDD	41 %R	For target analytes see below	UJ, J
UAS-T1-S6-3-6FT	$^{13C}_{12}$123789- HxCDD	42 %R	For target analytes see below	UJ
UAS-T7-S3-3-6FTFD	$^{13C}_{12}$123789- HxCDD	44 %R	For target analytes see below	UJ
UAS-T4-S6-0-0.5FT	$^{13C}_{12}$1234-TCDD	296 %R	For target analytes see below	UJ
UAS-T3-S3-0-0.5FTFD	$^{13C}_{12}$123789- HxCDD	233 %R	For target analytes see below	UJ, J
UAS-T2-S4-3-6FT	$^{13C}_{12}$123789- HxCDD	44 %R	For target analytes see below	UJ, J
BS-EEG-04-3-6FT	$^{13C}_{12}$1234-TCDD	33 %R	For target analytes see below	UJ
	$^{13C}_{12}$123789- HxCDD	32 %R	For target analytes see below	UJ
BS-EEG-04-0-0.5FTFD	$^{13C}_{12}$1234-TCDD	30 %R	For target analytes see below	UJ
	$^{13C}_{12}$123789- HxCDD	30 %R	For target analytes see below	UJ, J
BS-EEG-04-0-0.5FT	$^{13C}_{12}$1234-TCDD	29 %R	For target analytes see below	UJ
	$^{13C}_{12}$123789- HxCDD	30 %R	For target analytes see below	UJ, J
BS-EE-20-3-6FT	$^{13C}_{12}$1234-TCDD	28 %R	For target analytes see below	UJ
	$^{13C}_{12}$123789- HxCDD	29 %R	For target analytes see below	UJ, J
DAS-T4-S1-0-0.5FT	$^{13C}_{12}$1234-TCDD	37 %R	For target analytes see below	UJ
	$^{13C}_{12}$123789- HxCDD	41 %R	For target analytes see below	UJ, J
DAS-T4-S1-0-0.5FTFD	$^{13C}_{12}$1234-TCDD	36 %R	For target analytes see below	UJ
	$^{13C}_{12}$123789- HxCDD	35 %R	For target analytes see below	UJ, J
DAS-T1-S3-3-6FT	$^{13C}_{12}$123789- HxCDD	27 %R	For target analytes see below	UJ, J
DAS-T2-S3-0-0.5FT	$^{13C}_{12}$123789- HxCDD	27 %R	For target analytes see below	UJ, J

Note:

The associated target analytes for recovery standard $^{13C}_{12}$1234- TCDD include 2378-TCDD, 2378-TCDF, 12378-PeCDD, 12378-PeCDF, and 23478-PeCDF.

The associated target analytes for recovery standard $^{13C}_{12}$123789- HxCDD include 123678-HxCDD, 123478-HxCDD, 123789-HxCDD, 1234678-HpCDD, OCDD, 123678-HxCDF, 123789-HxCDF, 123478-HxCDF, 234678-HxCDF, 1234678-HpCDF, 1234789-HpCDF, and OCDF.

%R indicates percentage recovery.
TCDD indicates tetrachlorodibenzo-p-dioxin
TCDF indicates tetrachlorodibenzofuran
PeCDD indicates pentachlorodibenzo-p-dioxin
PeCDF indicates pentachlorodibenzofuran
HxCDD indicates hexachlorodibenzo-p-dioxin
HxCDF indicates hexachlorodibenzofuran
HpCDD indicates heptachlorodibenzo-p-dioxin
HpCDF indicates heptachlorodibenzofuran
OCDD indicates octachlorodibenzo-p-dioxin
OCDF indicates octachlorodibenzofuran

LCS/LCSD analysis

The recoveries for analytes in LCS/LCSDs were outside the laboratory control limits. As a result of the LCS/LCSD excursions, analytes in the associated samples were qualified as approximate (J) to indicate minor accuracy excursions. The following table summarizes the LCS/LCSD excursions.

Table 138. *LCS/LCSD excursions for PCDDs and PCDFs in soil samples*

LCS/LCSD ID	Target analyte	Excursion	Affected samples	Action
50863	OCDD	47 %R	DAS-T1-S3-3-6FT DAS-T2-S2-0-0.5FT DAS-T2-S3-3-6FT DAS-T2-S1-0-0.5FT DAS-T1-S3-0-0.5FT DAS-T1-S1-0-0.5FTFD DAS-T1-S2-0-0.5FT DAS-T2-S3-0-0.5FT DAS-T1-S1-0-0.5FT DAS-T2-S3-3-6FTFD	J
50863	123478-HxCDF	49 %R	DAS-T1-S3-3-6FT DAS-T2-S2-0-0.5FT DAS-T2-S3-3-6FT DAS-T2-S1-0-0.5FT DAS-T1-S3-0-0.5FT DAS-T1-S1-0-0.5FTFD DAS-T1-S2-0-0.5FT DAS-T2-S3-0-0.5FT DAS-T1-S1-0-0.5FT DAS-T2-S3-3-6FTFD	UJ
50863	OCDF	47 %R	DAS-T1-S3-3-6FT DAS-T2-S2-0-0.5FT DAS-T2-S1-0-0.5FT DAS-T1-S3-0-0.5FT DAS-T1-S1-0-0.5FTFD DAS-T1-S2-0-0.5FT DAS-T2-S3-0-0.5FT DAS-T1-S1-0-0.5FT DAS-T2-S3-3-6FTFD	J
50863	OCDF	47 %R	DAS-T2-S3-3-6FT	UJ

Note:
%R indicates percentage recovery.

HxCDF indicates hexachlorodibenzofuran
OCDD indicates octachlorodibenzo-p-dioxin
OCDF indicates octachlorodibenzofuran

Sample re-analysis

The following samples were reanalyzed due to sample analysis excursions.

Table 139. *PCDDs and PCDFs in soil samples analyzed by dilution*

Sample ID	Reason for re-analysis
UAS-T5-S4-3-6FT UAS-T5-S4-0-0.5FT UAS-T4-S1-3-6FT	Interferences detected during initial analysis.

Data completeness

For the MS/MSD analysis of sample UGGW-EE-04-60Ft, Triangle Labs used the incorrect concentrations for the native sample UGGW-EE-04-60FT to calculate the recoveries and RPDs. The corrected information was provided during the data validation process.

Overall data assessment

- The target analytes in samples UAS-T1-S6-0-0.5FT, UAS-T1-S6-3-6FT, and UAS-T7-S3-3-6FTFD were qualified as approximate (UJ, J) since the samples were extracted out of the holding time.
- The temperature of the cooler used to ship samples UAS-T3-S3-0-0.5FT, UAS-T3-S3-3-6FT, UAS-T3-S3-0-0.5FTFD, and UAS-T3-S3-3-6FTFD was elevated.
- Ten results for target analytes in soil samples were qualified as EMPCs due to blank contamination.
- One hundred ninety-one results for target analytes in soil samples were qualified as approximate (UJ, J) due to recovery standard excursions.
- Thirty results for target analytes in soil samples were qualified as approximate (UJ, J) due to low LCS/LCSD accuracy recoveries.
- Samples UAS-T5-S4-3-6FT, UAS-T5-S4-0-0.5FT, and UAS-T4-S1-3-6FT were reanalyzed due to interferences detected in the initial analysis.
- Corrected information for the MS/MSD analysis of sample UGGW-EE-04-60FT was provided during the data validation process.

5. Industry specific sediment (undeveloped, developed, borrow pit lake)

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for PCBs analyzed by USEPA Method 680 were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Sample preservation
- GC/MS tuning and window-defining criteria
- Initial and continuing calibration
- Blank analysis
- LCS analysis
- Field duplicate analysis
- Sample data identification, quantitation, and system performance
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Holding times
Holding times were evaluated based on sample collection, extraction, and analysis dates. The result for target analytes in industry-specific sediment samples which were extracted outside of the holding time were qualified as approximate (UJ, J) to indicate minor representativeness excursions. The following table summarizes the holding time excursions.

Table 140. *Holding time excursions for PCBs in industry-specific sediment samples*

Sample ID	Target analyte	Excursion	Action
FASED-CSE-S19E-0-28INFD	Target analytes	17 days outside of extraction holding time	UJ, J
FASED-CSE-S20E-0-33IN	Target analytes	17 days outside of extraction holding time	UJ
FASED-CSE-S22E-0-26IN	Target analytes	16 days outside of extraction holding time	UJ, J
FASED-CSD-S6E-0-13IN	Target analytes	12 days outside of extraction holding time	UJ, J

Note:
MCB indicates monochlorobiphenyl
DCB indicates dichlorobiphenyl
TCB indicates trichlorobiphenyl
TRCB indicates tetrachlorobiphenyl
PTCB indicates pentachlorobiphenyl
HXCB indicates hexachlorobiphenyl
HPCB indicates heptachlorobiphenyl
OCB indicates octachlorobiphenyl
NCB indicates nonachlorobiphenyl
DCCB indicates decachlorobiphenyl

Percentage solids

The result for several samples were qualified as approximate (UJ, J) since, although the samples were analyzed as solids, the percentage solids reported by the laboratory was less than or equal to 50%. The following table summarizes samples qualified due to low percentage solids.

Table 141. *PCBs qualified for low percentage solids in industry-specific sediment samples*

Sample ID	Percentage solids	Affected analytes	Action
FASED-CSE-S7W-0-13IN	42%	target analytes	UJ, J
FASED-CSB-S9W-0-9IN	34%	target analytes	UJ, J
FASED-CSC-S8-0-16IN	37%	target analytes	UJ, J
FASED-CSC-S9-0-27IN	35%	target analytes	UJ, J
FASED-CSC-S10-0-28IN	49%	target analytes	UJ, J
FASED-CSC-S11-0-25IN	33%	target analytes	UJ, J
FASED-CSC-S11-0-25INFD	39%	target analytes	UJ, J
FASED-CSC-S12E-0-18IN	50%	target analytes	UJ, J
FASED-CSB-S2-0-23IN	36%	target analytes	UJ, J
FASED-CSB-S4W-0-23IN	50%	target analytes	UJ, J
FASED-CSE-S10W-0-27IN	46%	target analytes	UJ, J
FASED-CSE-S14W-0-31IN	41%	target analytes	UJ
FASED-CSE-S15-0-19IN	50%	target analytes	UJ
FASED-CSE-S16E-0-21IN	50%	target analytes	UJ, J
FASED-CSE-S23-0-23IN	46%	target analytes	UJ
FASED-CSC-S2-0-28IN	48%	target analytes	UJ, J
FASED-CSC-S2-0-28INFD	45%	target analytes	UJ, J
FASED-CSC-S3-0-20IN	50%	target analytes	UJ, J
FASED-CSC-S4-0-22IN	44%	target analytes	UJ, J
FASED-CSC-S5W-0-26IN	49%	target analytes	UJ, J
FASED-CSF-S13W-0-15IN	47%	target analytes	UJ, J
FASED-CSF-S14W-0-15IN	49%	target analytes	UJ, J
FASED-CSF-S19-0-13IN	50%	target analytes	UJ, J
FASED-CSF-S21-0-13INFD	49%	target analytes	UJ, J
FASED-CSF-S25E-0-10IN	46%	target analytes	UJ, J

Surrogate recovery

Recoveries for surrogates in industry-specific sediment samples were outside of the laboratory control limits. Target analytes in samples with surrogate excursions were qualified as approximate (UJ, J) to indicate minor accuracy excursions. Samples qualified due to minor surrogate excursions are summarized in the following table.

Table 142. *Surrogate excursions for PCBs in industry-specific sediment samples*

Sample ID	Surrogate ID	Excursion	Affected target analytes	Action
FASED-CSB-S7-0-18IN	$^{13}C_{12}$ decachlorobiphenyl	12 %R	Target analytes	UJ, J
FASED-CSE-S11W-0-22IN	$^{13}C_{12}$ decachlorobiphenyl	22 %R	Target analytes	UJ
FASED-CSE-S20E-0-33IN	$^{13}C_{12}$ decachlorobiphenyl	28 %R	Target analytes	UJ
FASED-CSE-S24W-0-27IN	$^{13}C_{12}$ decachlorobiphenyl	14 %R	Target analytes	UJ, J
FASED-BPL-S1-0-10IN	$^{13}C_{12}$ decachlorobiphenyl	24 %R	Target analytes	UJ
FASED-BPL-S3-0-8IN	$^{13}C_{12}$ decachlorobiphenyl	29 %R	Target analytes	UJ
FASED-BPL-S4-0-10IN	$^{13}C_{12}$ decachlorobiphenyl	27%R	Target analytes	UJ
FASED-BPL-S5-0-9IN	$^{13}C_{12}$ decachlorobiphenyl	21%R	Target analytes	UJ
FASED-BPL-S6-0-11IN	$^{13}C_{12}$ decachlorobiphenyl	25%R	Target analytes	UJ
FASED-BPL-S6-0-11INFD	$^{13}C_{12}$ decachlorobiphenyl	12 %R	Target analytes	UJ

Note:
%R indicates percentage recovery.

MS/MSD analysis

Target analytes MS/MSD samples were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 143. *MS/MSD excursions for PCB analyses in industry-specific sediment samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
FASED-CSE-S22E-0-26IN	MCB	27 %R, 26 %R	FASED-CSE-S22E-0-26IN	UJ
	DCB	29 %R, 25 %R		UJ
	PTCB	300 %R, 210 %R		J
	HXCB	270 %R, 250 %R		J
FASED-CSF-S15W-0-28IN	PTCB	64 RPD	FASED-CSF-S15W-0-28IN	J
FASED-CSF-S39S-0-26IN	MCB	27 %R, 28 %R	FASED-CSF-S39S-0-26IN	UJ
	TRCB	12 %R, 36 %R, 100RPD		J
	PTCB	0 %R, 8 %R, 200 RPD		J
	OCB	30 %R, 35 %R		UJ

Note: %R indicates percentage recovery.
RPD indicates relative percent difference.

MCB indicates monochlorobiphenyl
DCB indicates dichlorobiphenyl
TRCB indicates tetrachlorobiphenyl
PTCB indicates pentachlorobiphenyl
HXCB indicates hexachlorobiphenyl
OCB indicates octachlorobiphenyl

Internal standards criteria

Target analytes associated with internal standards recoveries that were outside of the laboratory control limits were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The following table summarizes the internal standard excursions.

Table 144. *Internal standard excursions for PCBs in industry-specific sediment samples*

Sample ID	Internal standard	Excursion	Affected analytes	Action
FASED-CSF-S33-0-13IN	Chrysene-d12	63 %R	Target analytes	UJ, J
FASED-CSF-S37N-0-13IN	Chrysene-d12	152 %R	PTCB HXCB	J
FASED-CSE-S22E-0-26IN	Chrysene-d12	159 %R	TRCB PTCB HXCB DCCB	J
FASED-CSD-S3-0-21IN	Chrysene-d12	63 %R	Target analytes	UJ, J
FASED-CSD-S4-0-23IN	Chrysene-d12	69 %R	Target analytes	UJ, J
FASED-CSC-S4-0-22IN	Chrysene-d12	67 %R	Target analytes	UJ, J
FASED-CSD-S8-0-29IN	Chrysene-d12	140 %R	TCB HXCB DCCB	J
FASED-S5W-0-26IN	Chrysene-d12	135 %R	TCB TRCB PTCB HXCB HPCB DCCB	J
FASED-CSC-S2-0-28IN	Chrysene-d12	151 %R	DCB TCB TRCB PTCB HXCB HPCB OCB NCB DCCB	J
FASED-CSF-S19-0-13IN	Chrysene-d12	68 %R	Target analytes	UJ, J
FASED-CSF-S23-0-15IN	Chrysene-d12	67 %R	Target analytes	UJ, J
FASED-CSF-S29W-0-10IN	Chrysene-d12	67 %R	Target analytes	UJ
FASED-CSF-S30N-0-8IN	Chrysene-d12	69 %R	Target analytes	UJ, J
FASED-CSF-S28-0-10IN	Chrysene-d12	67 %R	Target analytes	UJ, J
FASED-CSF-S40-0-20IN	Chrysene-d12	67 %R	Target analytes	UJ, J
FASED-CSF-S31N-0-13IN	Chrysene-d12	62 %R	Target analytes	UJ

Note:
%R indicates percentage recovery.

The analytes affected by internal standard chrysene-d12 include the following : MCB, DCB, TCB, TRCB, PTCB, HXCB, HPCB, OCB, NCB, DCCB

MCB indicates monochlorobiphenyl
DCB indicates dichlorobiphenyl
TCB indicates trichlorobiphenyl
TRCB indicates tetrachlorobiphenyl
PTCB indicates pentachlorobiphenyl
HXCB indicates hexachlorobiphenyl
HPCB indicates heptachlorobiphenyl
OCB indicates octachlorobiphenyl
NCB indicates nonachlorobiphenyl
DCCB indicates decachlorobiphenyl

Sample re-analysis

The following sample was re-extracted and reanalyzed due to a sample analysis excursion.

Table 145. *Industry-specific sediment samples reanalyzed for PCBs*

Sample ID	Reason for re-analysis
FASED-CSE-S11W-0-22IN	Surrogate recovery excursions detected in the initial analysis; Re-extraction did not provide improved surrogate recoveries. Therefore, initial analysis was reported.
FASED-CSE-S24W-0-27IN FASED-CSE-S17-0-28IN FASED-CSB-S7-0-18IN	Samples were re-extracted due to analysis excursions; re-extractions were performed outside of holding times. Therefore, initial analyses were reported.
FASED-CSE-S19E-0-28IN FASED-CSE-S22E-0-26IN FASED-CSD-S6E-0-13IN	Surrogate recovery excursions were detected in the initial analysis; Re-extraction results met surrogate recovery criteria. Therefore, re-extraction analyses were reported.
Samples in SIL044	Surrogate recovery excursions detected in the initial analysis; Initial analysis reported due to holding time excursions.
FASED-BPL-S1-0-10IN	Sample was re-extracted due to analysis excursions re-extractions were performed outside of holding times. Therefore, initial analysis was reported

Target analyte reported detection limits

The following table presents the industry-specific sediment samples analyzed by dilution due to matrix interferences or concentrations of target analytes that exceeded the calibration limit.

Table 146. *PCBs in industry-specific sediment samples analyzed by dilution*

Sample ID	Target analytes	Dilution	Reasons
FASED-CSF-S32S-0-11IN	Target analytes	1:5	Matrix interference or elevated target analyte concentration
FASED-CSF-S34S-0-14IN	Target analytes	1:5	Matrix interference or elevated target analyte concentration
FASED-CSF-S37N-0-13IN	Target analytes	1:2	Matrix interference or elevated target analyte concentration
FASED-CSF-S32S-0-11IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSF-S36N-0-12INFD	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSE-S3-0-13IN	Target analytes	1:5	Matrix interference or elevated target analyte concentration
FASED-CSE-S4E-0-17IN	Target analytes	1:5	Matrix interference or elevated target analyte concentration
FASED-CSE-S5E-0-24IN	Target analytes	1:50	Matrix interference or elevated target analyte concentration
FASED-CSE-S6W-0-35INFD	Target analytes	1:5	Matrix interference or elevated target analyte concentration
FASED-CSE-S7W-0-13IN	Target analytes	1:20	Matrix interference or elevated target analyte concentration
FASED-CSE-S8-0-32IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSE-S9-0-31IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSE-S6W-0-35IN	Target analytes	1:5	Matrix interference or elevated target analyte concentration
FASED-CSB-S9W-0-9IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSC-S8-0-16IN	Target analytes	1:20	Matrix interference or elevated target analyte concentration
FASED-CSC-S9-0-27IN	Target analytes	1:100	Matrix interference or elevated target analyte concentration
FASED-CSC-S9-0-27INFD	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSC-S10-0-28IN	Target analytes	1:20	Matrix interference or elevated target analyte concentration
FASED-CSC-S11-0-25IN	Target analytes	1:20	Matrix interference or elevated target analyte concentration
FASED-CSC-S11-0-25INFD	Target analytes	1:100	Matrix interference or elevated target analyte concentration
FASED-CSC-S12E-0-18IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSB-S1W-0-25IN	Target analytes	1:20	Matrix interference or elevated target analyte concentration
FASED-CSB-S2-0-23IN	Target analytes	1:50	Matrix interference or elevated target analyte concentration
FASED-CSB-S3-0-26IN	Target analytes	1:5	Matrix interference or elevated target analyte concentration
FASED-CSB-S4W-0-23IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSB-S5-0-22IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSB-S6-0-20IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSB-S8E-0-22IN	Target analytes	1:5	Matrix interference or elevated target analyte concentration
FASED-CSB-S10-0-9IN	Target analytes	1:5	Matrix interference or elevated target analyte concentration
FASED-CSB-S10-0-9INFD	Target analytes	1:5	Matrix interference or elevated target analyte concentration
FASED-CSD-S1W-0-24IN	Target analytes	1:5	Matrix interference or elevated target analyte concentration
FASED-CSF-S35S-0-21IN	Target analytes	1:5	Matrix interference or elevated target analyte concentration
FASED-CSE-S10W-0-27IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration

Table 146. *PCBs in industry-specific sediment samples analyzed by dilution*

Sample ID	Target analytes	Dilution	Reasons
FASED-CSE-S11W-0-22IN	Target analytes	1:5	Matrix interference or elevated target analyte concentration
FASED-CSE-S12-0-21IN	Target analytes	1:50	Matrix interference or elevated target analyte concentration
FASED-CSE-S13E-0-21IN	Target analytes	1:5	Matrix interference or elevated target analyte concentration
FASED-CSE-S14W-0-31IN	Target analytes	1:50	Matrix interference or elevated target analyte concentration
FASED-CSE-S15-0-19IN	Target analytes	1:50	Matrix interference or elevated target analyte concentration
FASED-CSE-S16E-0-21IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSE-S17-0-28IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSE-S18-0-25IN	Target analytes	1:50	Matrix interference or elevated target analyte concentration
FASED-CSE-S23-0-23IN	Target analytes	1:100	Matrix interference or elevated target analyte concentration
FASED-CSD-S2E-0-15IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSD-S3-0-21IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSD-S4-0-23IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSD-S7-0-33IN	Target analytes	1:50	Matrix interference or elevated target analyte concentration
FASED-CSD-S8-0-29IN	Target analytes	1:20	Matrix interference or elevated target analyte concentration
FASED-CSD-S9W-0-23IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSC-S1-0-13IN	Target analytes	1:50	Matrix interference or elevated target analyte concentration
FASED-CSC-S2-0-28IN	Target analytes	1:20	Matrix interference or elevated target analyte concentration
FASED-CSC-S2-0-28INFD	Target analytes	1:20	Matrix interference or elevated target analyte concentration
FASED-CSC-S4-0-22IN	Target analytes	1:5	Matrix interference or elevated target analyte concentration
FASED-CSC-S5W-0-26IN	Target analytes	1:20	Matrix interference or elevated target analyte concentration
FASED-CSC-S6-0-26IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSC-S7-0-26IN	Target analytes	1:20	Matrix interference or elevated target analyte concentration
FASED-CSF-S2-0-7IN	Target analytes	1:20	Matrix interference or elevated target analyte concentration
FASED-CSF-S15W-0-28IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSF-S28-0-10IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSF-S31N-0-13IN	Target analytes	1:20	Matrix interference or elevated target analyte concentration
FASED-CSF-S40-0-20IN	Target analytes	1:2	Matrix interference or elevated target analyte concentration
FASED-CSE-S1-0-12IN	Target analytes	1:10	Matrix interference or elevated target analyte concentration
FASED-CSE-S2W-0-19IN	Target analytes	1:20	Matrix interference or elevated target analyte concentration

Overall data assessment

- Target analytes in four industry-specific sediment samples were qualified as approximate (UJ, J) due to holding time excursions.
- The results for 25 industry-specific sediment samples were qualified as approximate (UJ, J) due to low percentage solids.
- Target analytes in ten industry-specific sediment samples were qualified as approximate (UJ, J) due to surrogate recovery excursions.
- Six results for target analytes in industry-specific sediment samples were qualified as approximate (UJ, J) due to MS/MSD accuracy excursions.
- Three results for target analytes in industry-specific sediment samples were qualified as approximate (UJ, J) due to MS/MSD precision excursions.
- One hundred thirty-four results for target analytes in industry-specific sediment samples were qualified as approximate (UJ, J) due to internal standard excursions.

- The following samples were reanalyzed due to analysis excursions: FASED-CSE-S11W-0-22IN, FASED-CSE-S24W-0-27IN, FASED-BPL-S1-0-10IN, FASED-CSE-S17-0-28IN, FASED-CSB-S7-0-18IN, FASED-CSE-S19E-0-28IN, FASED-CSE-S22E-0-26IN, FASED-CSD-S6E-0-13IN, and samples in SDG SIL044, FASED-BPL-S1-0-10IN.
- Sixty-two industry-specific sediment samples submitted for PCB analysis were analyzed at a dilution.

6. Full-scan sediment (borrow pit lake, dead creek, ecological)

6.1. Document completeness

The chain-of-custody associated with samples collected 10/06/99 and submitted for dioxin/dibenzofuran analysis was incomplete, since the field sampler did not complete the "relinquished by" box. The field samplers provided information in the project file that indicated that the samples were in the custody of the samplers until the cooler was relinquished to the courier (on 10/06/99).

6.2. VOC analysis of full-scan sediment samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for VOCs analyzed by USEPA Method 8260B were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- GC/MS tuning criteria
- Initial and continuing calibration
- Surrogate recovery
- LCS analysis
- Internal standards performance
- Target analyte identification, reported detection limits, and system performance
- Sample re-analysis

Excursions from QA/QC criteria presented in Section 1.2.2 and any additional observations are summarized below.

Percentage solids
The percentage solids for full-scan sediment samples were reported as less than 50%. The results for this sample was qualified as approximate (UJ, J) since the sample was analyzed as solid but contained high percentage moisture content. The following table presents the samples qualified as a result of low percentage solids:

Table 147. *VOCs qualified for low percentage soils in full-scan sediment samples*

Sample ID	Percentage solids	Affected analytes	Action
SED-CSB-S1-0.2FT	40 %	target analytes	UJ,J
SED-CSB-S1-0.2FTFD	45 %	target analytes	UJ,J
SED-CSB-S2-0.2FT	40 %	target analytes	UJ,J
SED-CSB-S3-0.2FT	30 %	target analytes	UJ,J
SED-M-S1	20 %	target analytes	UJ,J
SED-CSC-S1-0.2FT	29 %	target analytes	UJ,J
SED-CSC-S2-0.2FT	35 %	target analytes	UJ,J
SED-CSC-S3-0.2FT	26 %	target analytes	UJ,J
SED-CSD-S1-0.2FT	23 %	target analytes	UJ,J
SED-CSD-S2-0.2FT	21 %	target analytes	UJ,J
SED-CSD-S3-0.2FT	34 %	target analytes	UJ,J
SED-CSE-S3	30 %	target analytes	UJ,J
SED-CSE-S1	28 %	target analytes	UJ
SED-CSE-S2	38 %	target analytes	UJ
SED-CSF-S1	43 %	target analytes	UJ
SED-CSF-S2	19 %	target analytes	UJ
SED-CSF-S3	27 %	target analytes	UJ,J
SED-RA1-S2-0.2FT	37 %	target analytes	UJ,J
SED-RA2-S1-0.2FT	48 %	target analytes	UJ,J
SED-RA2-S1-0.2FTFD	48 %	target analytes	UJ
SED-RA2-S2-0.2FT	46 %	target analytes	UJ,J
BPL-ESED-S1-0.2FT	36 %	target analytes	UJ
BPL-ESED-S1-0.2FTFD	36 %	target analytes	UJ
BPL-ESED-S3-0.2FT	36 %	target analytes	UJ
BPL-ESED-S2	34 %	target analytes	UJ

Blank analysis

Samples which contained acetone at less than ten times the blank concentration and 2-butanone at less than five times the blank concentration were qualified as undetected (U) due to the blank contamination. The blank excursions are summarized in the following table:

Table 148. *Blank excursions for VOC analyses in full-scan sediment samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
1M1011MB	acetone	13 µg/Kg	SED-CSB-S1-0.2FT SED-CSB-S3-0.2FT SED-M-S1	U
	2-butanone	3.9 µg/Kg	SED-CSB-S1-0.2FT SED-CSB-S3-0.2FT SED-M-S1	U

Table 148. *Blank excursions for VOC analyses in full-scan sediment samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
1M1012MB	acetone	6.9 µg/Kg	SED-CSB-S1-0.2FTFD SED-CSE-S2	U
TB 10/6/99	2-butanone	7.8 µg/L	SED-CSB-S2-0.2FT	U
TB 10/7/99	2-butanone	6.8 µg/L	SED-CSE-S1 SED-CSE-S2 BPL-ESED-S1-0.2FT BPL-ESED-S1-0.2FTFD BPL-ESED-S3-0.2FT	U
TB 10/7/99	acetone	26 µg/L	SED-CSE-S1 SED-CSE-S2 BPL-ESED-S1-0.2FT BPL-ESED-S1-0.2FTFD BPL-ESED-S3-0.2FT BPL-ESED-S2-0.2FT	U
TB 10/8/99	acetone	14 µg/L	SED-CSF-S2 SED-CSF-S3 SED-CSF-S1	U
TB 10/8/99	2-butanone	4.6 µg/L	SED-CSF-S2 SED-CSF-S3 SED-CSF-S1	U

Note:
TB indicates trip blank.
MB indicates method blank.

MS/MSD analysis

As a result of an MS/MSD RPD excursion, the result for acetone in sample SED-CSE-S3 was qualified as approximate (J) to indicate a minor precision excursion. The following table presents the target analyte qualified as a result of the MS/MSD excursion:

Table 149. *MS/MSD excursion for VOC analyses in full-scan sediment samples*

MS/MSD ID	Analyte	Excursion	Affected Sample	Action
SED-CSE-S3	Acetone	102 RPD	SED-CSE-S3	J

Note: RPD indicates relative percent difference.

Data completeness

The calculation utilized by the laboratory for the reported results for sample SED-RA2-S2-0.2FT did not include the percentage solids value. The results were corrected to reflect the 46 % solids value during the data validation process.

Overall data assessment

- Target analytes in twenty-five full-scan sediment samples were qualified as approximate (UJ, J) due to percentage solids that were less than 50.
- Twenty-six results for target analytes in full-scan sediment samples were qualified for blank contamination.

- The result for acetone in sample SED-CSE-S3 was qualified as approximate (J) due to MS/MSD precision excursions.
- The results for sample SED-RA2-S2-0.2FT were corrected to include the percentage solids value during the data validation process.

6.3. SVOC analyses of full-scan sediment samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for SVOCs analyzed by USEPA Method 8270C were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- GC/MS tuning criteria
- Initial and continuing calibration
- Blank analysis
- Surrogate recovery
- LCS analysis
- Internal standards performance
- Target analyte identification, quantitation, reported detection limits, and system performance

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Percentage solids
The percentage solids for full-scan sediment samples were reported as less than 50%. The results for this sample was qualified as approximate (UJ, J) since the sample was analyzed as solid but contained high percentage moisture content. The following table presents the samples qualified as a result of low percentage solids:

Table 150. *SVOCs qualified for low percentage soils in full-scan sediment samples*

Sample ID	Percentage solids	Affected analytes	Action
SED-CSB-S1-0.2FT	40 %	target analytes	UJ, J
SED-CSB-S1-0.2FTFD	45 %	target analytes	UJ, J
SED-CSB-S2-0.2FT	40 %	target analytes	UJ, J
SED-CSB-S3-0.2FT	30 %	target analytes	UJ, J
SED-M-S1	20 %	target analytes	UJ, J
SED-CSC-S1-0.2FT	29 %	target analytes	UJ, J
SED-CSC-S2-0.2FT	35 %	target analytes	UJ, J
SED-CSC-S3-0.2FT	26 %	target analytes	UJ, J
SED-CSD-S1-0.2FT	23 %	target analytes	UJ, J
SED-CSD-S2-0.2FT	21 %	target analytes	UJ, J
SED-CSD-S3-0.2FT	34 %	target analytes	UJ, J

Table 150. *SVOCs qualified for low percentage soils in full-scan sediment samples*

Sample ID	Percentage solids	Affected analytes	Action
SED-CSE-S3	30 %	target analytes	UJ, J
SED-CSE-S1	28 %	target analytes	UJ, J
SED-CSE-S2	38 %	target analytes	UJ
SED-CSF-S1	43 %	target analytes	UJ, J
SED-CSF-S2	19 %	target analytes	UJ, J
SED-CSF-S3	27 %	target analytes	UJ, J
SED-RA1-S2-0.2FT	37 %	target analytes	UJ
SED-RA2-S1-0.2FT	48 %	target analytes	UJ
SED-RA2-S1-0.2FTFD	48 %	target analytes	UJ
SED-RA2-S2-0.2FT	46 %	target analytes	UJ
BPL-ESED-S1-0.2FT	36 %	target analytes	UJ
BPL-ESED-S1-0.2FTFD	36 %	target analytes	UJ
BPL-ESED-S3-0.2FT	36 %	target analytes	UJ
BPL-ESED-S2-0.2FT	34 %	target analytes	UJ

MS/MSD analysis

The results for target analytes MS/MSD samples were qualified as approximate (UJ, J) indicate minor accuracy excursions. The result for hexachlorocyclopentadiene in sample SED-CSE-S3 was rejected (R) due to an MS/MSD recovery of less than 10%. The laboratory control sample associated with the sample met criteria. Therefore, matrix interference is suspected to have been the cause of the major accuracy excursion. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 151. *MS/MSD excursions for SVOC analyses in full-scan sediment samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
SED-CSE-S3	anthracene	37 RPD	SED-CSE-S3	UJ
	hexachlorobenzene	40 RPD		UJ
	4-chloro-3-methylphenol	38 RPD		UJ
	di-n-octylphthalate	45 RPD		UJ
	3-nitroaniline	36 RPD		UJ
	chrysene	42 RPD		J
	bis(2-ethylhexyl)phthalate	46 RPD		J
	benzo(b)fluoranthene	62 RPD		J
	butylbenzyl phthalate	39 RPD		UJ
	benzo(a)anthracene	48 RPD		J
	2,4-dinitrotoluene	45 RPD		UJ
	4-bromophenyl phenyl ether	36 RPD		UJ
	phenanthrene	39 RPD		J
	indeno(1,2,3-cd)pyrene	64 RPD		J
	dibenzo(a,h)anthracene	51 RPD		UJ
SED-CSE-S3	hexachlorocyclopentadiene	2 %R, 4 %R	SED-CSE-S3	R

Table 151. *MS/MSD excursions for SVOC analyses in full-scan sediment samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
SED-RA2-S2-0.2FT	bis(2-ethylhexyl)phthalate	34 RPD	SED-RA2-S2-0.2FT	UJ
	2-chlorophenol	40 RPD		
	1,3-dichlorobenzene	35 RPD		
	1,4-dichlorobenzene	39 RPD		
	1,2-dichlorobenzene	34 RPD		
	bis(2-chloroisopropyl)ether	39 RPD		
	hexachloroethane	44 RPD		
	1,2,4-tichlorobenzene	37 RPD		
	hexachlorocyclopentadiene	86 RPD		
	2,4,6-trichlorophenol	33 RPD		
	dibenzo(a,h)anthracene	29 RPD		
	3-nitroaniline	34 RPD		
	4-bromophenylphenyl ether	35 RPD		
	phenanthrene	32 RPD		
	anthracene	28 RPD		
	butylbenzyl phthalate	32 RPD		
BSSED-PDC-DS-S-0.55IN	phenol	41 RPD	BSSED-PDC-DS-S-0-30IN	UJ
	1,3-dichlorobenzene	35 RPD		
	1,4-dichlorobenzene	40 RPD		
	bis(2-chloroisopropyl)ether	40 RPD		
	n-nitroso-di-n-propylamine	43 RPD		
	hexachloroethane	40 RPD		
	nitrobenzene	48 RPD		
	1,2,4-trichlorobenzene	42 RPD		
	naphthalene	41 RPD		
	4-chloro-3-methylphenol	40 RPD		
	2,4,6-trichlorophenol	45 RPD		
	2,4,5-trichlorophenol	43 RPD		
	3-nitroaniline	34 RPD		
	2,4-dinitrotoluene	41 RPD		
	4-bromophenylphenyl ether	37 RPD		
	phenanthrene	37 RPD		
	anthracene	37 RPD		
	butylbenzyl phthalate	36 RPD		
	chrysene	42 RPD		
	bis(2-ethylhexyl) phthalate	36 RPD		
	indeno(1,2,3-cd)pyrene	31 RPD		
	dibenzo(a,h)anthracene	43 RPD		

Note: %R indicates percentage recovery.
RPD indicates relative percent difference

Data completeness

The calculation utilized by the laboratory for the reported results for sample SED-CSF-S1 did not include the percentage solids value. The results were corrected to reflect the 43 % solids value during the data validation process.

Sample re-analysis

Full-scan sediment samples were reanalyzed due to analysis excursions detected by the laboratory in the initial analyses. The following table summarizes the samples reanalyzed.

Table 152. *Full-scan sediment samples reanalyzed for SVOCs*

Sample ID	Reason for re-analysis
SED-RA1-S2-0.2FT SED-RA2-S1-0.2FT SED-RA2FD	Analysis excursions detected in the initial analysis; reanalyses provided improved results and were reported.

Overall data assessment

- Target analytes in twenty-five full-scan sediment samples were qualified as approximate (UJ, J) due to percentage solids that were less than 50.
- Fifty-three results for target analytes in full-scan sediment samples were qualified as approximate (UJ, J) due to MS/MSD precision excursions.
- The result for hexachlorocyclopentadiene in sample SED-CSE-S3 was rejected (R) due to an MS/MSD recovery of less than 10% in the spiked sample.
- The results for sample SED-CSF-S1 were corrected to include the percentage solids value during the data validation process.
- The following samples were reanalyzed due to analysis excursions: SED-RA1-S2-0.2FT, SED-RA2-S1-0.2FT, SED-RA2-S1-0.2FTFD.

6.4. Pesticide analysis of full-scan samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for pesticides analyzed by USEPA Method 8081A were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation,
- GC performance
- Analytical sequence
- Initial calibration and calibration verification
- Blank analysis
- LCS analysis
- Retention time window
- Target analyte quantitation and system performance
- Cleanup verification
- Sample re-analysis
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Percentage solids

The result for several samples were qualified as approximate (UJ, J) since, although the samples were analyzed as solids, the percentage solids reported by the laboratory was less than 50%. The following table summarizes samples qualified due to low percentage solids.

Table 153. *Pesticides qualified for low percentage solids in full-scan sediment samples*

Sample ID	Percentage solids	Affected analytes	Action
SED-CSB-S1-0.2FT	40 %	target analytes	UJ, J
SED-CSB-S1-0.2FTFD	45 %	target analytes	UJ, J
SED-CSB-S2-0.2FT	40 %	target analytes	UJ, J
SED-CSB-S3-0.2FT	30 %	target analytes	UJ, J
SED-M-S1	20 %	target analytes	UJ, J
SED-CSC-S1-0.2FT	29 %	target analytes	UJ, J
SED-CSC-S2-0.2FT	35 %	target analytes	UJ, J
SED-CSC-S3-0.2FT	26 %	target analytes	UJ, J
SED-CSD-S1-0.2FT	23 %	target analytes	UJ, J
SED-CSD-S2-0.2FT	21 %	target analytes	UJ, J
SED-CSD-S3-0.2FT	34 %	target analytes	UJ, J
SED-CSE-S3	30 %	target analytes	UJ, J
SED-CSE-S1	28 %	target analytes	UJ, J
SED-CSE-S2	38 %	target analytes	UJ, J
SED-CSF-S1	43 %	target analytes	UJ, J
SED-CSF-S2	19 %	target analytes	UJ, J
SED-CSF-S3	27 %	target analytes	UJ, J
SED-RA1-S2-0.2FT	37 %	target analytes	UJ
SED-RA2-S1-0.2FT	48 %	target analytes	UJ
SED-RA2-S1-0.2FTFD	48 %	target analytes	UJ
SED-RA2-S2-0.2FT	46 %	target analytes	UJ
BPL-ESED-S1-0.2FT	36 %	target analytes	UJ, J
BPL-ESED-S1-0.2FTFD	36 %	target analytes	UJ, J
BPL-ESED-S3-0.2FT	36 %	target analytes	UJ, J
BPL-ESED-S2-0.2FT	34 %	target analytes	UJ, J

Surrogate recovery

Recoveries for surrogates were outside of the laboratory control limits. In the case that surrogate recovery excursions were detected in at least three surrogate recoveries in the dual-column results, affected target analytes were qualified as approximate (UJ) to indicate minor accuracy excursions. The following table presents the target analytes qualified as a result of the minor surrogate recovery excursion:

Table 154. *Surrogate excursion for pesticide analysis in full-scan sediment samples*

Sample ID	Surrogate	Excursion	Affected analytes	Action
SED-RA2-S1-0.2FT	TCMX DCB	25 %R (DB-608) 28 %R (DB-608), 28 %R (DB-5)	Target analytes	UJ
SED-RA2-S1-0.2FTFD	TCMX DCB	24 %R (DB-608), 24 %R (DB-5) 29 %R (DB-5)	Target analytes	UJ

Note:
%R indicates percentage recovery.
DCB indicates decachlorobiphenyl.
TCMX indicates 2,4,5,6-tetrachloro-m-xylene.

MS/MSD analysis

Target analytes in MS/MSD samples were qualified as approximate (UJ) to indicate minor precision excursions. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 155. *MS/MSD excursions for pesticide analyses in full-scan sediment samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
SED-RA2-S2-0.2FT	4,4'-DDT	40 RPD	SED-RA2-S2-0.2FT	UJ
BSSED-PDS-DS-S-0-54IN	Beta-BHC Dieldrin Endrin	42 RPD 31 RPD 40 RPD	BSSED-PDS-DS-S-0-54	UJ

Note:
RPD indicates relative percent difference.

Confirmation analysis

For target analytes that were detected by the laboratory but were at concentrations that were less than the reported detection limit, the laboratory applied a "J" flag to the analyte result. During the validation process, the "J" flag was retained since the concentration is considered to be approximate. Due to the numerous values reported by the laboratory below the reported detection limits, if the RPD values were greater than 40% for the confirmation analysis and the target analyte concentration was flagged "J," additional validation qualifiers were not applied to the sample data.

The RPD values calculated for positive results from the two chromatographic columns (DB608, DB5) in full-scan sediment sample analyses were greater than 40% indicating confirmation excursions. Target analytes with a RPD greater than 40% were qualified as approximate (J) to indicate minor representativeness excursions. The analyte identification excursions are summarized in the following table:

Table 156. *Analyte confirmation excursions for pesticide analyses in full-scan sediment samples*

Sample ID	Analyte	Excursion	Action
SED-CSC-S2-0.2FT	Gamma chlordane	49 RPD	J
SED-CSD-S1-0.2FT	Gamma chlordane	53 RPD	J
SED-CSB-S1-0.2FT	Aldrin Gamma chlordane	45 RPD 125 RPD	J
SED-CSB-S2-0.2FT	Heptachlor Aldrin	113 RPD 42 RPD	J
SED-CSB-S1-0.2FTFD	Gamma chlordane	117 RPD	J

Note:
RPD indicates relative percent difference.

Target analyte identification
Due to coelution with matrix interference peaks, the results for endosulfan sulfate were reported by the laboratory using the DB-608 column and the results for 4,4'-DDT were reported using the DB-5 column. Therefore, confirmation could not be performed for these target analytes in the affected full-scan sediment samples.

Target analyte reported detection limits
Samples were analyzed at a dilution as a result of the presence of matrix interference. The dilutions utilized in the analysis of full-scan sediment for pesticides are summarized in the following table:

Table 157. *Pesticides in full-scan sediment samples analyzed by dilution*

Sample ID	Dilution Used	Reason
SED-CSE-S1	1:10	Matrix interference
SED-CSE-S2	1:10	Matrix interference
SED-CSF-S1	1:2	Matrix interference
SED-CSF-S2	1:2	Matrix interference
SED-CSF-S3	1:2	Matrix interference
BPL-ESED-S2-0.2FT	1:2	Matrix interference
BPL-ESED-S1-0.2FT	1:2	Matrix interference
BPL-ESED-S3-0.2FT	1:2	Matrix interference
SED-CSC-S1-0.2FT	1:2	Matrix interference
SED-CSC-S2-0.2FT	1:5	Matrix interference
SED-CSC-S3-0.2FT	1:5	Matrix interference
SED-CSB-S1-0.2FT	1:20	Matrix interference
SED-CSB-S2-0.2FT	1:20	Matrix interference
SED-CSB-S3-0.2FT	1:10	Matrix interference
SED-CSB-S1-0.2FTFD	1:20	Matrix interference
SED-M-S1-	1:5	Matrix interference
SED-CSE-S3	1:2	Matrix interference

Overall data assessment

- The results for 25 full-scan sediment samples were qualified as approximate (UJ, J) due to low percentage solids.
- The results for the target analytes in two full-scan sediment samples were
- qualified as approximate (UJ) due to surrogate recovery excursions.

- Four results for target analytes in full-scan sediment samples were qualified as approximate (UJ) due to MS/MSD precision excursions.
- Seven results for target analytes in full-scan sediment samples were qualified as approximate (J) due to confirmation excursions.
- Eighteen full-scan sediment samples were analyzed at a dilution.

6.5. Herbicide analysis of full-scan sediment samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for herbicides analyzed by USEPA Method 8151A were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- GC performance
- Analytical sequence
- Initial calibration
- Retention time window
- Target analyte identification, quantitation, reported detection limits, and system performance
- Cleanup verification
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Percentage solids

The result for several samples were qualified as approximate (J) since, although the samples were analyzed as solids, the percentage solids reported by the laboratory was less than 50%. The following table summarizes samples qualified due to low percentage solids.

Table 158. *PCBs qualified for low percentage solids in full-scan sediment samples*

Sample ID	Percentage solids	Affected analytes	Action
SED-CSB-S1-0.2FT	40 %	target analytes	UJ, J
SED-CSB-S1-0.2FTFD	45 %	target analytes	UJ, J
SED-CSB-S2-0.2FT	40 %	target analytes	UJ, J
SED-CSB-S3-0.2FT	30 %	target analytes	UJ, J
SED-M-S1	20 %	target analytes	UJ, J
SED-CSC-S1-0.2FT	29 %	target analytes	UJ, J
SED-CSC-S2-0.2FT	35 %	target analytes	UJ, J
SED-CSC-S3-0.2FT	26 %	target analytes	UJ, J
SED-CSD-S1-0.2FT	23 %	target analytes	UJ
SED-CSD-S2-0.2FT	21 %	target analytes	UJ, J
SED-CSD-S3-0.2FT	34 %	target analytes	UJ, J

Table 158. *PCBs qualified for low percentage solids in full-scan sediment samples*

Sample ID	Percentage solids	Affected analytes	Action
SED-CSE-S3	30 %	target analytes	UJ, J
SED-CSE-S1	28 %	target analytes	UJ, J
SED-CSE-S2	38 %	target analytes	UJ
SED-CSF-S1	43 %	target analytes	UJ
SED-CSF-S2	19 %	target analytes	UJ
SED-CSF-S3	27 %	target analytes	UJ, J
SED-RA1-S2-0.2FT	37 %	target analytes	UJ
SED-RA2-S1-0.2FT	48 %	target analytes	UJ
SED-RA2-S1-0.2FTFD	48 %	target analytes	UJ
SED-RA2-S2-0.2FT	46 %	target analytes	UJ
BPL-ESED-S1-0.2FT	36 %	target analytes	UJ
BPL-ESED-S1-0.2FTFD	36 %	target analytes	UJ, J
BPL-ESED-S3-0.2FT	36 %	target analytes	UJ, J
BPL-ESED-S2-0.2FT	34 %	target analytes	UJ

Calibration verification

The calibration verification criteria for target analytes in calibration verification analyses from 10/27/99 on both the DB-608 and DB-5 columns were not met. Target analytes in samples affected by the excursion were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The samples qualified due to the minor calibration excursions are summarized in the following table.

Table 159. *Calibration verification excursions for herbicides in full-scan sediment samples*

Calibration verification ID	Standard analytes	Excursion	Affected samples	Action
10/27/99 2143	2,4-D	22.9 %D DB-608)	SED-RA1-S1-0.2FT	J
		32.7 %D (DB-5)	SED-CSE-S1	J
10/27/99 2143	MCPA	21.7 %D (DB-608)	SED-RA1-S1-0.2FT	UJ
		28.1 %D (DB-5)	SED-CSE-S1	UJ

Note:
%D indicates percent difference.

Blank analysis

Samples that contained pentachlorophenol at less than five times the blank concentration were qualified as undetected (U) due to the blank contamination. The blank excursions are summarized in the following table:

Table 160. *Blank excursion for herbicide analyses in full-scan sediment samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
0217P MB	pentachlorophenol	1.3 µg/Kg	BSSED-PDC-DS-S-0-30IN	U
			BSSED-PDC-US-N-0-20IN	

Note:
MB indicates method blank.

Surrogate recovery

Recoveries for surrogates in one full-scan sediment sample were outside of the laboratory control limits. As a result of the surrogate recovery excursions, target analytes were qualified as approximate (UJ) to indicate minor accuracy excursions. The surrogate recovery excursions are summarized in the following table:

Table 161. *Surrogate excursion for herbicide analysis in full-scan sediment samples*

Sample ID	Surrogate	Excursion	Affected analytes	Action
SED-RA2-S1-0.2FTFD	DCAA	24 %R (DB-608) 18 %R (DB-5)	Target analytes	UJ

Note: %R indicates percentage recovery.
DCAA indicates 2,4-dichlorophenylacetic acid

MS/MSD analysis

The results for target analytes in MS/MSD samples SED-CSE-S3 and SED-RA2-S2-0.2FT were qualified as approximate (UJ, J) to indicate minor precision excursions. The undetected result for dinoseb in MS/MSD sample SED-CSE-S3 was rejected (R) due to a %R of less than 10%. The laboratory control sample associated with the samples met criteria. Therefore, matrix interference is suspected to have been the cause of the major accuracy excursion. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 162. *MS/MSD excursions for herbicide analyses in full-scan sediment samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
SED-CSE-S3	Dinoseb	3 %R, 1 %R	SED-CSE-S3	R
	MCPP	45 RPD		UJ
	Dicamba	67 RPD		UJ
	MCPA	46 RPD		UJ
	Pentachlorophenol	60 RPD		J
	2,4,5-TP	41 RPD		UJ
SED-RA2-S2-0.2FT	Dalapon	0 %R*, 200 RPD	SED-RA2-S2-0.2FT	UJ
	MCPA	45 RPD		UJ
	2,4-D	74 RPD		UJ
	2,4,5-T	72 RPD		UJ
	Dinoseb	130 RPD		UJ
	2,4-DB	77 RPD		UJ

Note: %R indicates percentage recovery.
RPD indicates relative percent difference.

LCS analysis

The recovery for MCPP in one LCS analysis was outside of the laboratory control limits. The result for MCPP in sample SED-RA2-S2-0.2FT was qualified as approximate (UJ) as a result of the LCS excursion to indicate a minor accuracy excursion. The LCS excursion is summarized in the following table:

Table 163. *LCS excursion for herbicide analyses in full-scan sediment samples*

LCS ID	Analyte	Excursion	Affected Samples	Action
1012P-RMBLCS	MCPP	25 %R	SED-RA2-S2-0.2FT	UJ

Note:
%R indicates percentage recovery.

Confirmation analysis

For target analytes that were detected by the laboratory but were at concentrations that were less than the reported detection limit, the laboratory applied a "J" flag to the analyte result. During the validation process, the "J" flag was retained since the concentration is considered to be approximate.

One RPD value calculated for positive results from the two chromatographic columns (DB608, DB5) in full-scan sediment samples was greater than 40% indicating confirmation excursions. The target analyte with an RPD greater than 40% was qualified as approximate (J) to indicate a minor representativeness excursion. The analyte identification excursion is summarized in the following table:

Table 164. *Analyte confirmation excursion for herbicides in full-scan sediment samples*

Sample ID	Analyte	Excursion	Action
SED-CSE-S1	2,4-D	190 RPD	J

Note:
RPD indicates relative percent difference.

Sample re-analysis

The following samples were reanalyzed due to sample analysis excursions.

Table 165. *Full-scan sediment samples reanalyzed for herbicides*

Sample ID	Reason for re-analysis
Samples in SDG SIL005	Samples were re-extracted due to LCS excursions. The initial analyses were reported since the re-extraction analysis did not provide improved LCS recovery results.
SED-RA2-S2-0.2FT SED-RA2-S1-0.2FTFD	Samples were re-extracted due to surrogate excursions. The initial analyses were reported since the re-extraction analysis did not provide improved surrogate recovery results.

Overall data assessment

- The results for 25 full-scan sediment samples were qualified as approximate (UJ, J) due to low percentage solids.
- Four results for target analytes in full-scan sediment samples were qualified as approximate (UJ, J) due to calibration verification excursions.
- The result for pentachlorophenol in samples BSSED-PDC-DS-S-0-30IN and BSSED-PDC-US-N-0-20IN were qualified for blank contamination.
- The results for target analytes in sample SED-RA2-S1-0.2FTFD were qualified as approximate (UJ) due to low surrogate recoveries.
- Eleven results for target analytes in full-scan sediment samples were qualified as approximate (UJ, J) due to MS/MSD precision excursions.
- The undetected result for dinoseb in MS/MSD sample SED-CSE-S3 was rejected (R) due to an MS/MSD accuracy excursion since the recovery was less than 10%.
- The result for MCPP in sample SED-RA2-S2-0.2FT was qualified as approximate (UJ) due to an LCS recovery excursion.

- The result for 2,4-D in sample SED-CSE-S1 was qualified as approximate (J) due to a confirmation excursion.
- Samples in SDG SIL005, SED-RA2-S2-0.2FT, and SED-RA2-S1-0.2FTFD were reanalyzed due to analysis excursions.

6.6. PCB analysis of full-scan sediment samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for PCBs analyzed by USEPA Method 680 were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Sample preservation
- GC/MS tuning
- Initial and continuing calibration
- Surrogate recovery
- Blank analysis
- LCS analysis
- Sample data identification, quantitation, and system performance
- Sample re-analysis

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Holding times
Holding times were evaluated based on sample collection, extraction, and analysis dates. The result for the target analytes in full-scan sediment sample SED-CSC-S1-0.2FT which was extracted outside of the holding time were qualified as approximate (UJ, J) to a indicate a minor representativeness excursion. The following table summarizes the holding time excursion.

Table 166. *Holding time excursion for PCBs in full-scan sediment samples*

Sample ID	Target analyte	Excursion	Action
SED-CSC-S1-0.2FT	Target analytes	1 day outside of extraction holding time	UJ, J

Percentage solids
The result for several samples were qualified as approximate (J) since, although the samples were analyzed as solids, the percentage solids reported by the laboratory was less than 50%. The following table summarizes samples qualified due to low percentage solids.

Table 167. *PCBs qualified for low percentage solids in full-scan sediment samples*

Sample ID	Percentage solids	Affected analytes	Action
SED-CSB-S1-0.2FT	40 %	target analytes	UJ, J
SED-CSB-S1-0.2FTFD	45 %	target analytes	UJ, J
SED-CSB-S2-0.2FT	40 %	target analytes	UJ, J
SED-CSB-S3-0.2FT	30 %	target analytes	UJ, J
SED-M-S1-0.2FT	20 %	target analytes	UJ, J
SED-CSC-S1-0.2FT	29 %	target analytes	UJ, J
SED-CSC-S2-0.2FT	35 %	target analytes	UJ, J
SED-CSC-S3-0.2FT	26 %	target analytes	UJ, J
SED-CSD-S1-0.2FT	23 %	target analytes	UJ, J
SED-CSD-S2-0.2FT	21 %	target analytes	UJ, J
SED-CSD-S3-0.2FT	34 %	target analytes	UJ, J
SED-CSE-S3	30 %	target analytes	UJ, J
SED-CSE-S1	28 %	target analytes	UJ, J
SED-CSE-S2	38 %	target analytes	UJ
SED-CSF-S1	43 %	target analytes	UJ, J
SED-CSF-S2	19 %	target analytes	UJ, J
SED-CSF-S3	27 %	target analytes	UJ
SED-RA1-S2-0.2FT	37 %	target analytes	UJ
SED-RA2-S1-0.2FT	48 %	target analytes	UJ
SED-RA2-S1-0.2FTFD	48 %	target analytes	UJ
SED-RA2-S2-0.2FT	46 %	target analytes	UJ
BPL-ESED-S1-0.2FT	36 %	target analytes	UJ
BPL-ESED-S1-0.2FTFD	36 %	target analytes	UJ
BPL-ESED-S3-0.2FT	36 %	target analytes	UJ
BPL-ESED-S2-0.2FT	34 %	target analytes	UJ

Window-defining criteria

The window defining mixtures were not analyzed with the full-scan sediment samples analyzed on 10/16/99 and 10/19/99. Sample results were not qualified due to this method deviation.

MS/MSD analysis

Target analytes MS/MSD samples were qualified as approximate (UJ) to indicate minor accuracy excursions. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 168. *MS/MSD excursions for PCB analyses in full-scan sediment samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
BSSED-PDC-DS-S-0-30IN	MCB	23 %R, 27 %R	BSSED-PDC-DS-S-0-30IN	UJ
	DCB	26 %R, 27 %R		
	TCB	28 %R, 29 %R		
	TRCB	27 %R, 30 %R		
	PTCB	30 %R, 34 %R		
	HXCB	31 %R, 33 %R		
	HPCB	32 %R, 34 %R		
	OCB	33 %R, 33 %R		

Note: %R indicates percentage recovery.

MCB indicates monochlorobiphenyl
DCB indicates dichlorobiphenyl
TCB indicates trichlorobiphenyl
TRCB indicates tetrachlorobiphenyl
PTCB indicates pentachlorobiphenyl
HXCB indicates hexachlorobiphenyl
HPCB indicates heptachlorobiphenyl
OCB indicates octachlorobiphenyl
NCB indicates nonachlorobiphenyl
DCCB indicates decachlorobiphenyl

Internal standards criteria

Target analytes associated with internal standards recoveries that were outside of the laboratory control limits were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The following table summarizes the internal standard excursions.

Table 169. *Internal standard excursions for PCBs in full-scan sediment samples*

Sample ID	Internal standard	Excursion	Affected analytes	Action
SED-CSB-S3-0.2FT	Chrysene-d12	63 %R	For affected target analytes see below	UJ, J
SED-CSB-S1-0.2FTFD	Chrysene-d12	66 %R	For affected target analytes see below	UJ, J
SED-M-S1-0.2FT	Chrysene-d12	62 %R	For affected target analytes see below	UJ, J

Note:
%R indicates percentage recovery.

The analytes affected by internal standard chrysene-d12 include the following : MCB, DCB, TCB, TRCB, PTCB, HXCB, HPCB, OCB, NCB, DCCB

MCB indicates monochlorobiphenyl
DCB indicates dichlorobiphenyl
TCB indicates trichlorobiphenyl
TRCB indicates tetrachlorobiphenyl
PTCB indicates pentachlorobiphenyl
HXCB indicates hexachlorobiphenyl
HPCB indicates heptachlorobiphenyl
OCB indicates octachlorobiphenyl
NCB indicates nonachlorobiphenyl
DCCB indicates decachlorobiphenyl

Target analyte reported detection limits

The following table presents the samples analyzed by dilution due to matrix interferences.

Table 170. *PCBs in full-scan sediment samples analyzed by dilution*

Sample ID	Target analytes	Dilution	Reason
SED-CSE-S2	Target analytes	1:10	Matrix interference
SED-CSF-S3	Target analytes	1:5	Matrix interference
BPL-ESED-S1-0.2FT	Target analytes	1:5	Matrix interference
SED-CSC-S1-0.2FT	Target analytes	1:5	Matrix interference
SED-CSC-S2-0.2FT	Target analytes	1:10	Matrix interference
SED-CSC-S3-0.2FT	Target analytes	1:10	Matrix interference
SED-CSB-S1-0.2FT	Target analytes	1:10	Matrix interference
SED-CSB-S2-0.2FT	Target analytes	1:10	Matrix interference
SED-CSB-S3-0.2FT	Target analytes	1:10	Matrix interference
SED-CSB-S1-0.2FTFD	Target analytes	1:10	Matrix interference
SED-M-S1-0.2FT	Target analytes	1:10	Matrix interference

Data completeness

The result for pentachlorobiphenyl in sample SED-CSF-S1 was incorrectly calculated by the laboratory. The result was corrected during the data validation process. The revision for PCBs is summarized in the following table:

Table 171. *Revised result for PCBs in full-scan sediment samples*

Sample ID	Revision
SED-CSF-S1	Pentachlorobiphenyl revised to 61 µg/Kg

Overall data assessment

- The results for 25 full-scan sediment samples were qualified as approximate (UJ, J) due to low percentage solids.
- The target analytes in sample SED-CSC-S1-0.2FT were qualified as approximate (UJ, J) due to a holding time excursion.
- The window defining mixtures were not analyzed with the full-scan sediment samples on 10/16/99 and 10/19/99.
- Eight results for target analytes were qualified as approximate (UJ) due to MS/MSD recovery excursions.
- The results for three full-scan sediment samples were qualified as approximate (UJ, J) due to internal standard recovery excursions.
- Eleven full-scan sediment samples were analyzed at a dilution.
- The result for pentachlorobiphenyl in sample SED-CSF-S1 was corrected during the validation process due to a calculation excursion.

6.7. Metals, mercury, cyanide, and TOC analysis of full-scan sediment samples

Critical compliance

QA/QC parameters presented in Section 1.2.2 for metals analyzed by USEPA Method 6010B, mercury by USEPA Method 7471A, cyanide by USEPA Method 9010B, and TOC by USEPA Method 9060 were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Sample preservation
- Calibration analysis
- ICP interference check sample analysis
- LCS analysis
- Verification of instrument parameters
- Analyte quantitation and reported detection limits
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2 and any additional observations are summarized below.

Holding times
The results for antimony in samples SED-RA1-S1-0.2FT, SED-RA2-S1-0.2FTFD, BPL-ESED-S1-0.2FTFD, SED-CSF-S3-0.2FT, and BPL-ESED-S2-0.2FT were qualified as approximate (UJ, J) due to holding time excursions. The samples were re-digested used an alternative digestion procedure since the results for antimony were rejected in the initial analysis due to low MS recoveries. The following table summarizes the holding time excursions.

Table 172. *Holding time excursions for metals in full-scan sediment samples*

Sample ID	Target analyte	Excursion	Action
SED-RA1-S1-0.2FT	antimony	86 days outside of extraction holding time	UJ
SED-RA2-S1-0.2FTFD	antimony	86 days outside of extraction holding time	UJ
BPL-ESED-S1-0.2FTFD	antimony	88 days outside of extraction holding time	UJ
SED-CSF-S3-0.2FT	antimony	87 days outside of extraction holding time	J
BPL-ESED-S2-0.2FT	antimony	87 days outside of extraction holding time	UJ

Percentage solids
The result for full-scan sediment samples were qualified as approximate (UJ, J) since, although the samples were analyzed as solids, the percentage solids reported by the laboratory was less than 50%. The following table summarizes samples qualified due to low percentage solids.

Table 173. *Metals, mercury, cyanide, and TOC samples qualified for low percentage solids in full-scan sediment samples*

Sample ID	Percentage solids	Affected analytes	Action
SED-CSB-S1-0.2FT	40 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-CSB-S1-0.2FTFD	45 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-CSB-S2-0.2FT	40 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-CSB-S3-0.2FT	30 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-M-S1-0.2FT	20 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-CSC-S1-0.2FT	29 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-CSC-S2-0.2FT	35 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-CSC-S3-0.2FT	26 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-CSD-S1-0.2FT	23 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-CSD-S2-0.2FT	21 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-CSD-S3-0.2FT	34 %	Metal, mercury, cyanide, TOC target analytes	UJ, J

Table 173. *Metals, mercury, cyanide, and TOC samples qualified for low percentage solids in full-scan sediment samples*

Sample ID	Percentage solids	Affected analytes	Action
SED-CSE-S3	30 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-CSE-S1	28 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-CSE-S2	38 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-CSF-S1	43 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-CSF-S2	19 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-CSF-S3	27 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-RA1-S2-0.2FT	37 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-RA2-S1-0.2FT	48 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
SED-RA2-S1-0.2FTFD	48 %	Metal, mercury, cyanide, TOC target analytes	UJ,J
SED-RA2-S2-0.2FT	46 %	Metal, mercury, cyanide, TOC target analytes	UJ,J
BPL-ESED-S1-0.2FT	36 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
BPL-ESED-S1-0.2FTFD	36 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
BPL-ESED-S3-0.2FT	36 %	Metal, mercury, cyanide, TOC target analytes	UJ, J
BPL-ESED-S2-0.2FT	34 %	Metal, mercury, cyanide, TOC target analytes	UJ, J

Calibration analysis

The recovery for calibration standards near the reported detection limit (CRI) is evaluated based on the control limits of 75 %R to 125 %R. The result for antimony in sample SED-CSE-S1 was qualified as approximate (J) due to a CRI recovery excursion to indicate a minor accuracy excursion. The CRI excursion is summarized in the following table:

Table 174. *CRI excursion for metal analyses in full-scan sediment samples*

CRI ID	Analyte	Excursion	Affected Sample Results	Action
1312 10/15/99	Antimony	127 %R	SED-CSE-S1	J
Note: %R indicates percentage recovery.				

Blank analysis

The field/equipment blank SED-RA2-S1-0.2FTEB, collected 10/8/99 was not utilized to evaluate sample results for blank contamination since the field/equipment blank was highly contaminated. According to the field collection personnel, the source of the field/equipment blank water was suspected to be contaminated.

Target analytes were detected in preparation, calibration and field/equipment blanks that were analyzed for metals. The samples which contained target analytes at less than five times the associated blank concentration were qualified as not detected (U), and samples which contained target analytes at greater than five times the associated blank concentration were qualified as approximate (J) due to the blank contamination. The blank excursions are summarized in the following table:

Table 175. *Blank excursions for metal analyses in full-scan sediment samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
CCB3/CCB5 10/13/99	Beryllium	1.18 µg/L	SED-CSC-S1-0.2FT SED-CSC-S2-0.2FT SED-CSC-S3-0.2FT SED-CSD-S1-0.2FT SED-CSD-S2-0.2FT SED-CSD-S3-0.2FT SED-CSB-S1-0.2FT SED-CSB-S2-0.2FT SED-CSB-S3-0.2FT SED-CSB-S1-0.2FTFD SED-M-S1-0.2FT SED-CSE-S3	U
	Vanadium	2.10 µg/L	SED-CSC-S1-0.2FT SED-CSC-S2-0.2FT SED-CSC-S3-0.2FT SED-CSD-S1-0.2FT SED-CSD-S2-0.2FT SED-CSD-S3-0.2FT SED-CSB-S1-0.2FT SED-CSB-S~2 SED-CSB-S3-0.2FT SED-CSB-S1-0.2FTFD SED-M-S1-0.2FT SED-CSE-S3	J
CCB5 10/13/99	Molybdenum	1.4 µg/L	SED-CSC-S1-0.2FT SED-CSC-S2-0.2FT	J
			SED-CSC-S3-0.2FT SED-CSD-S1-0.2FT SED-CSD-S2-0.2FT SED-CSD-S3-0.2FT	U
	Selenium	6.13 µg/L	SED-CSC-S1-0.2FT SED-CSC-S3-0.2FT SED-CSD-S1-0.2FT SED-CSD-S2-0.2FT	U
SED-CSBEB	Barium Calcium Copper Iron Lead Zinc	0.003 mg/L 0.41 mg/L 0.006 mg/L 0.042 mg/L 0.0019 mg/L 0.023 mg/L	SED-CSC-S1-0.2FT SED-CSC-S2-0.2FT SED-CSC-S3-0.2FT SED-CSD-S1-0.2FT SED-CSD-S2-0.2FT SED-CSD-S3-0.2FT SED-CSB-S1-0.2FT SED-CSB-S2-0.2FT SED-CSB-S3-0.2FT SED-CSB-S1-0.2FTFD SED-M-S1-0.2FT SED-CSE-S3	J
SED-CSBEB	Sodium	0.39 mg/L	SED-CSC-S1-0.2FT SED-CSC-S2-0.2FT SED-CSC-S3-0.2FT SED-CSD-S1-0.2FT SED-CSD-S2-0.2FT SED-CSD-S3-0.2FT SED-CSB-S1-0.2FT SED-CSB-S2-0.2FT SED-CSB-S3-0.2FT SED-CSB-S1-0.2FTFD SED-M-S1-0.2FT SED-CSE-S3	U

Table 175. *Blank excursions for metal analyses in full-scan sediment samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
CCB4/CCB7 10/14/99 –10/15/99	Aluminum Barium Chromium Manganese	91.5 µg/L 4.07 µg/L 3.08 µg/L 3.15 µg/L	SED-CSE-S1 SED-CSE-S2 SED-CSF-S1 SED-CSF-S2 SED-CSF-S3 SED-RA1-S1-0.2FT SED-RA2-S1-0.2FT SED-RA2-S1-0.2FTFD SED-RA1-S2-0.2FT BPL-ESED-S1-0.2FT BPL-ESED-S1-0.2FTFD BPL-ESED-S3-0.2FT BPL-ESED-S2-0.2FT	J
	Selenium	5.45 µg/L	SED-CSE-S1 SED-CSE-S2	U
SED-CSBEB	Barium	0.003 mg/L	SED-RA2-S2-0.2FT	J
	Calcium Copper Iron Lead Zinc	0.41 mg/L 0.0062 mg/L 0.042 mg/L 0.0019 mg/L 0.023 mg/L	SED-CSE-S1 SED-CSE-S2 SED-CSF-S1 SED-CSF-S2 SED-CSF-S3 SED-RA1-S1-0.2FT SED-RA2-S1-0.2FT SED-RA2-S1-0.2FTFD SED-RA1-S2-0.2FT BPL-ESED-S1-0.2FT BPL-ESED-S1-0.2FTFD BPL-ESED-S3-0.2FT BPL-ESED-S2-0.2FT SED-RA2-S2-0.2FT	J
	Sodium	0.39 mg/L	SED-CSE-S1 SED-CSE-S2 SED-CSF-S1 SED-CSF-S2 SED-CSF-S3 SED-RA1-S1-0.2FT SED-RA2-S1-0.2FT SED-RA2-S1-0.2FTFD SED-RA1-S2-0.2FT SED-RA2-S2-0.2FT BPL-ESED-S1-0.2FT BPL-ESED-S1-0.2FTFD BPL-ESED-S3-0.2FT BPL-ESED-S2-0.2FT	U
PBS 2/14/00	Barium	0.29 mg/Kg	BSSED-PDC-DS-S-0-30IN BSSED-PDC-US-N-0-20IN BSSED-PDC-US-N-0-20INFD	J
CCB4 2/17/00	Chromium	1.85 µg/L	BSSED-PDC-DS-S-0-30IN BSSED-PDC-US-N-0-20IN BSSED-PDC-US-N-0-20INFD	J
	Thallium	7.29 µg/L	BSSED-PDC-US-N-0-20IN BSSED-PDC-US-N-0-20INFD	U

Note:
PB indicates preparation blank.
CCB indicates continuing calibration blank.

MS/MSD analysis

Target analytes in MS samples analyzed for metals were outside of the laboratory control limits. Post-digestion spike analyses met method criteria, which confirmed the matrix interference for these samples. When the sample concentrations were less than four times the spike concentrations, target analytes with MS recoveries that were outside of control limits, but are greater than 30% were qualified as approximate

(UJ, J) to indicate minor accuracy excursions. The results for antimony in seven soil samples were initially rejected (R) due to MS/MSD recoveries of less than 30%. The laboratory re-digested the majority of the affected samples using an alternative digestion procedure. Analysis of the re-digested samples provided MS recoveries that met the laboratory criteria. Samples SED-CSF-S1 and SED-RA2-S2-0.2FT were unable to be re-digested since the laboratory had disposed of the samples. Therefore, the results for antimony were rejected (R) in samples SED-CSF-S1 AA and SED-RA2-S2-0.2FT. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 176. *MS/MSD excursions for metal in full-scan sediment samples*

MS/MSD ID	Analyte	Excursion	Affected Sample	Action
SED-CSE-S3	Antimony Potassium Cyanide	54 %R, 40 %R 164 %R, 154 %R 63 %R, 67 %R	SED-CSE-S3 SED-CSB-S1-0.2FTFD SED-CSB-S1-0.2FTFD SED-CSB-S2-0.2FT SED-CSB-S3-0.2FT SED-M-S1-0.2FT SED-CSC-S1-0.2FT SED-CSC-S2-0.2FT SED-CSC-S3-0.2FT SED-CSC-S3-0.2FT SED-CSD-S1-0.2FT SED-CSD-S2-0.2FT SED-CSD-S3-0.2FT	UJ, J
SED-RA1-S1-0.2FT	Antimony	24 %R, 38 %R	SED-CSF-S3 SED-RA1-S1-0.2FT SED-RA2-S1-0.2FTFD BPL-ESED-S2-0.2FT BPL-ESED-S1-0.2FTFD	R*
	Antimony	24 %R, 38 %R	SED-CSF-S1	R**
	Antimony	24 %R, 38 %R	SED-CSE-S1 SED-CSE-S2 SED-CSF-S2 SED-RA1-S2-0.2FT SED-RA2-S1-0.2FT BPL-ESED-S3-0.2FT BPL-ESED-S1-0.2FT	J
SED-RA2-S2-0.2FT	Antimony	25 %R, 34 %R	SED-RA2-S2-0.2FT	R**
BSSED-PDC-DS-S-0-30IN	Antimony	38 %R, 48 %R	BSSED-PDC-DS-S-0-30IN BSSED-PDC-US-N-0-20IN BSSED-PDC-US-N-0-20INFD	UJ

Note: %R indicates percentage recovery.

* indicates that the laboratory re-digested the affected samples using an alternative digestion procedure. Analysis of the re-digested samples provided data that met the laboratory criteria.
** indicates that the laboratory was not able to perform re-digestion on the sample since the laboratory had disposed of the samples. The results for antimony in these samples were rejected.

Laboratory duplicate analysis

Laboratory duplicate results were outside of the control limits of 20 RPD for target analytes greater than five times the reported detection limit and ± the reporting limit for target analytes less than five times the reported detection limit. The MS/MSD RPD results were utilized to evaluate precision. The results for the analytes in the associated samples were

qualified as approximate (J) to indicate minor precision excursions. The laboratory duplicate excursions are summarized in the following table:

Table 177. *Laboratory duplicate excursions for metal analyses in full-scan sediment samples*

Laboratory duplicate ID	Analyte	Excursion	Affected samples	Action
SED-CSE-S3	Antimony	31 RPD	SED-CSB-S1-0.2FT SED-CSB-S1-0.2FTFD SED-CSB-S2-0.2FT SED-CSB-S3-0.2FT SED-M-1 SED-CSC-S1-0.2FT SED-CSC-S2-0.2FT SED-CSC-S3-0.2FT SED-CSD-S1-0.2FT SED-CSD-S2-0.2FT SED-CSD-S3-0.2FT SED-CSE-S3	UJ, J
SED-RA1-S1-0.2FT	Antimony	45 RPD	SED-CSF-S1 SED-CSF-S3 SED-RA1-S1-0.2FT SED-RA2-S1-0.2FTFD BPL-ESED-S2-0.2FT BPL-ESED-S1-0.2FTFD SED-CSE-S1 SED-CSE-S2 SED-CSF-S2 SED-RA1-S2-0.2FT SED-RA2-S1-0.2FT BPL-ESED-S3-0.2FT BPL-ESED-S1	UJ, J
SED-RA2-S2-0.2FT	Antimony	28 RPD	SED-RA2-S2-0.2FT	UJ
BSSED-PDC-DS-S-0-30IN	Antimony	23 RPD	BSSED-PDC-DS-S-0-30IN BSSED-PDC-US-N-0-20IN BSSED-PDC-US-N-0-20INFD	UJ

Note:
RPD indicates relative percent difference.

ICP serial dilution analysis

The serial dilution recoveries for analytes in samples were greater than the 10%D criterion for analytes with concentrations greater than 50 times the IDL. The results for the affected analytes in the associated samples were qualified as approximate (J) to indicate minor accuracy excursions. The ICP serial dilution excursions are summarized in the following table:

Table 178. *ICP serial dilution excursions for metal analyses in full-scan sediment samples*

Serial dilution ID	Analyte	Excursion	Affected samples	Action
SED-RA1-S1-0.2FT	Zinc	15 %D	SED-CSF-S1 SED-CSF-S3 SED-RA1-S1-0.2FT SED-RA2-S1-0.2FTFD BPL-ESED-S2-0.2FT BPL-ESED-S1-0.2FTFD SED-CSE-S1 SED-CSE-S2 SED-CSF-S2 SED-RA1-S2-0.2FT SED-RA2-S1-0.2FT BPL-ESED-S3-0.2FT BPL-ESED-S1-0.2FT	J
SED-RA2-S2-0.2FT	Cobalt Potassium Zinc	11 %D 12 %D 20 %D	SED-RA2-S2-0.2FT	J

Note:
%D indicates percent difference.

Field duplicate analysis

Field duplicate results were outside of the laboratory control limits of 20 RPD for metal and TOC target analytes greater than five times the reported detection limit and ± the reporting limit for target analytes less than five times the reported detection limit. The results for the metal and TOC analytes in the associated samples were qualified as approximate (J) to indicate minor precision excursions. The field duplicate excursions are summarized in the following table:

Table 179. *Field duplicate excursions for metal and TOC analyses in full-scan sediment samples*

Field duplicate ID	Analyte	Excursion	Affected samples	Action
SED-CSB-S1-0.2FTFD	Barium Cadmium Chromium Lead Mercury Nickel Zinc	53 RPD 27 RPD 36 RPD 25 RPD 53 RPD 27 RPD 22 RPD	SED-CSB-S1-0.2FT SED-CSB-S1-0.2FTFD SED-CSB-S2-0.2FT SED-CSB-S3-0.2FT SED-M-1 SED-CSC-S1-0.2FT SED-CSC-S2-0.2FT SED-CSC-S3-0.2FT SED-CSD-S1-0.2FT SED-CSD-S2-0.2FT SED-CSD-S3-0.2FT SED-CSE-S3	J
BPL-ESED-S1-0.2FTFD	TOC	51 RPD	SED-CSF-S1 SED-CSF-S3 BPL-ESED-S2-0.2FT BPL-ESED-S1-0.2FTFD SED-CSE-S1 SED-CSE-S2 SED-CSF-S2 BPL-ESED-S3-0.2FT BPL-ESED-S1-0.2FT	J
BSSED-PDC-US-N-0-20N	Manganese Potassium	21 RPD 22 RPD	BSSED-PDC-DS-S-0-30IN BSSED-PDC-US-N-0-20IN BSSED-PDC-US-N-0-20INFD	J

Note:
RPD indicates relative percent difference.

Overall data assessment

- The results for antimony in full-scan sediment samples SED-RA1-S1-0.2FT, SED-RA2-S1-0.2FTFD, BPL-ESED-S1-0.2FTFD, SED-CSF-S3-0.2FT, and BPL-ESED-S2-0.2FT were qualified as approximate (UJ, J) due to holding time excursions.
- Target analytes in twenty-five full-scan sediment samples were qualified as approximate (UJ, J) due to percentage solids that were less than 50.
- The result for antimony in sample SED-CSE-S1 was qualified as approximate (J) due to a CRI recovery excursion
- Two hundred sixty-five results for target analytes in full-scan sediment samples were qualified as non-detected (U) or approximate (J) due to blank contamination.
- Forty-nine results for target analytes in full-scan sediment samples were qualified as approximate (UJ, J) due to MS/MSD recovery excursions.

- The results for antimony in seven soil samples were initially rejected (R) due to MS/MSD recoveries of less than 30%. The laboratory re-digested the majority of the affected samples using an alternative digestion procedure. Analysis of the re-digested samples provided MS recoveries that met the laboratory criteria and were not qualified. Samples SED-CSF-S1 and SED-RA2-S2-0.2FT were unable to be re-digested since the laboratory had disposed of the samples. Therefore, the results for antimony were rejected (R) in samples SED-CSF-S1 AA and SED-RA2-S2-0.2FT.
- Twenty-nine results for antimony in full-scan sediment samples were qualified as approximate (UJ, J) due to laboratory duplicate excursions.
- Sixteen results for target analytes in full-scan sediment samples were qualified as approximate (J) due to ICP serial dilution excursions.
- Ninety results for metal analytes in full-scan sediment samples were qualified as approximate (J) due to field duplicate excursions.
- Nine results for TOC analytes in full-scan sediment samples were qualified as approximate (J) due to field duplicate excursions.

6.8. PCDD and PCDF analysis of full-scale sediment samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for PCDD and PCDFs analyzed by USEPA Method 8290 were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Sample preservation
- Instrument performance (mass resolution, GC column performance check)
- Initial and continuing calibration
- Duplicate analysis
- MS/MSD analysis
- Estimated detection limits
- Estimated maximum possible concentration (EMPC)

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Holding times

Holding times were evaluated based on sample collection, extraction, and analysis dates. The result for target analytes in full-scan sediment samples which were extracted outside of the holding time were qualified as approximate (J) to indicate minor representativeness excursions. The following table summarizes the holding time excursions.

Table 180. *Holding time excursions for PCDDs and PCDFs in full-scan sediment samples*

Sample ID	Target analyte	Excursion	Action
SED-CSF-S3-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	8 days outside of extraction holding time	J
SED-CSF-S2-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	8 days outside of extraction holding time	J
SED-CSF-S1-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	8 days outside of extraction holding time	J
BPL-ESED-S2-0.2FT	OCDD	8 days outside of extraction holding time	J
SED-CSB-S2-0.2FT	2378-TCDD 12378-PeCDD 123478-HxCDD 123678-HxCDD 123789-HxCDD 1234678-HpCDD OCDD 2378-TCDF 123478-HxCDF 123678-HxCDF 234678-HxCDF 1234678-HpCDF 1234789-HpCDF OCDF	10 days outside of extraction holding time	J
SED-CSB-S1-0.2FT	123678-HxCDD 123789-HxCDD 1234678-HpCDD OCDD 123478-HxCDF 1234678-HpCDF 1234789-HpCDF OCDF	10 days outside of extraction holding time	J
SED-CSB-S3-0.2FT	2378-TCDD 123678-HxCDD 123789-HxCDD 1234678-HpCDD OCDD 123478-HxCDF 234678-HxCDF 1234678-HpCDF 1234789-HpCDF OCDF	10 days outside of extraction holding time	J
SED-CSB-S1-0.2FTFD	123678-HxCDD 123789-HxCDD 1234678-HpCDD OCDD 1234678-HpCDF 1234789-HpCDF OCDF	14 days outside of extraction holding time	J
SED-M-S1-0.2FT	123678-HxCDD 123789-HxCDD 1234678-HpCDD OCDD 123478-HxCDF 1234678-HpCDF 1234789-HpCDF OCDF	10 days outside of extraction holding time	J

Table 180. *Holding time excursions for PCDDs and PCDFs in full-scan sediment samples*

Sample ID	Target analyte	Excursion	Action
SED-CSC-S2-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	11days outside of extraction holding time	J
SED-CSC-S3-0.2FT	123678-HxCDD 1234678-HpCDD OCDD 1234678-HpCDF 1234789-HpCDF OCDF	11days outside of extraction holding time	J
SED-CSC-S1-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	11days outside of extraction holding time	J
SED-CSD-S1-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	11days outside of extraction holding time	J
SED-CSD-S2-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	11days outside of extraction holding time	J
SED-CSD-S3-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	11days outside of extraction holding time	J
SED-RA1-S2-0.2FT	OCDD	7days outside of extraction holding time	J
SED-RA2-S1-0.2FTFD	OCDD	7days outside of extraction holding time	J
SED-RA2-S1-0.2FT	OCDD	7days outside of extraction holding time	J
SED-CSE-S2-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	7days outside of extraction holding time	J
SED-CSE-S1-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	7days outside of extraction holding time	J
SED-CSE-S3-0.2FT	1234678-HpCDD OCDD OCDF	7days outside of extraction holding time	J
BPL-ESED-S1-0.2FT	OCDD	9 days outside of extraction holding time	J
BPL-ESED-S3-0.2FT	OCDD	9 days outside of extraction holding time	J
BPL-ESED-S1-0.2FTFD	OCDD	9 days outside of extraction holding time	J

Note:
TCDD indicates tetrachlorodibenzo-p-dioxin
TCDF indicates tetrachlorodibenzofuran
PeCDD indicates pentachlorodibenzo-p-dioxin
HxCDD indicates hexachlorodibenzo-p-dioxin
HxCDF indicates hexachlorodibenzofuran
HpCDD indicates heptachlorodibenzo-p-dioxin
HpCDF indicates heptachlorodibenzofuran
OCDD indicates octachlorodibenzo-p-dioxin
OCDF indicates octachlorodibenzofuran

Percentage solids

The result for several samples were qualified as approximate (J) since, although the samples were analyzed as solids, the percentage solids reported by the laboratory was less than 50%. The following table summarizes samples qualified due to low percentage solids.

Table 181. *PCDDs and PCDFs qualified for low percentage soils in full-scan sediment samples*

Sample ID	Excursion	Action
SED-CSF-S3-0.2FT	30.1 %S	J
SED-CSF-S2-0.2FT	16.5 %S	J
SED-CSF-S1-0.2FT	49.0 %S	J
BPL-ESSED-S2-0.2FT	34.5 %S	J
SED-CSB-S1-0.2FT	31.8 %S	J
SED-CSB-S2-0.2FT	41.3 %S	J
SED-CSB-S3-0.2FT	28.9 %S	J
SED-CSB-S1-0.2FTFD	39.2 %S	J
SED-M-S1-0.2FT	23.8 %S	J
SED-RA2-S2-0.2FT	45.6 %S	J
SED-CSC-S1	29.2 %S	J
SED-CSC-S2	31.6 %S	J
SED-CSC-S3	24.7 %S	J
SED-CSD-S1	22.0 %S	J
SED-CSD-S2	21.7 %S	J
SED-CSD-S3	33.6 %R	J
SED-RA1-S2-0.2FT	41.7 %S	J
SED-CSE-S2-0.2FT	38.4 %S	J
SED-CSE-S1-0.2FT	27.9 %S	J
SED-CSE-S3-0.2FT	21.5 %S	J
BPL-ESED-S1-0.2FT	33.6 %S	J
BPL-ESED-S1-0.2FTFD	32.4 %S	J
BPL-ESED-S3-0.2FT	37.7 %S	J

Note:
%S indicates percentage solids

Blank analysis

Target analytes were detected in the method blank analyzed for PCDDs and PCDFs. Samples with target analytes at concentrations less than or equal to five times the concentrations in the associated method blank were flagged as EMPCs. The samples flagged as EMPCs due to method blank contamination are summarized in the following table.

Table 182. *Blank contamination for PCDDS and PCDFs in full-scan sediment samples*

Blank ID	Target analyte	Concentration	Affected samples	Action
MB 49614C	12378-PeCDF	0.31 ppt	SED-RA1-S2-0.2FT	EMPC
MB 49614C	23478-PeCDF	0.49 ppt	SED-RA2-S1-0.2FT SED-RA1-S2-0.2FT	EMPC
MB 49614C	123478-HxCDF	0.49 ppt	SED-RA2-S1-0.2FT SED-RA2-S1-0.2FTFD SED-RA1-S1-0.2FT	EMPC
MB 49614C	123678-HxCDF	0.27 ppt	SED-RA2-S1-0.2FT SED-RA1-S1-0.2FT SED-RA1-S2-0.2FT	EMPC
MB 49614C	234678-HxCDF	0.29 ppt	SED-RA2-S1-0.2FT SED-RA1-S1-0.2FT	EMPC

Note:
MB indicates method blank.
ppt indicates parts per trillion.
PeCDF indicates pentachlorodibenzofuran
HxCDF indicates hexachlorodibenzofuran

Internal standard criteria

Target analytes associated with internal standards that exhibited recoveries of less than 25% or greater than 135%R were qualified as approximate (J,) to indicate minor accuracy excursions. The following table summarizes the internal standard excursion.

Table 183. *Internal standard excursion for PCDDs and PCDFs in full-scan sediment samples*

Sample ID	Internal standard	Excursion	Affected analytes	Action
BSSED-PCD-US-N-0-34.5INFD	$^{13C}_{12}$ OCDD	157 %R	OCDF	J

Note:
%R indicates percentage recovery.
PeCDD indicates pentachlorodibenzo-p-dioxin
OCDD indicates octachlorodibenzo-p-dioxin

In the report for several samples, the ion abundance ratio for $^{13C}_{12}$ 1234678-HpCDF was below the control limit for ion abundance ratio range, which is 15% of the theoretical ratio. As a result of the internal standard identification excursion, the target analyte associated with this internal standard that was reported from the affected analysis was qualified as approximate (J) to indicate minor representativeness excursions. The following table summarizes the sample qualified due to the internal standard ion ratio excursion.

Table 184. *Internal standard ion ratio excursions for PCDDs and PCDFs in full-scan sediment samples*

Sample ID	Internal standard	Excursion	Affected analytes	Action
SED-CSC-S2	$^{13C}_{12}$ 1234678-HpCDF	0.62 ion abundance ratio	1234789-HpCDF	J
SED-CSE-S2-02FT	$^{13C}_{12}$ 1234678-HpCDF	0.35 ion abundance ratio	1234678-HpCDF	J
SED-CSE-S1-0.2FT	$^{13C}_{12}$ 1234678-HpCDF	0.62 ion abundance ratio	1234678-HpCDF	J

Note:
HpCDF indicates heptachlorodibenzofuran

Surrogate/alternative/cleanup standard recovery

During the validation process, the recoveries of the surrogate, alternative, and cleanup standards were evaluated for each sample result using the control limits of 45% to 135% recovery. Target analytes in samples with surrogate or cleanup standard excursions were qualified as approximate (J) to indicate minor accuracy excursions. Samples qualified due to minor surrogate/cleanup excursions are summarized in the following table.

Table 185. *Surrogate/alternative/cleanup standard excursions for PCDDs and PCDFs in full-scan sediment samples*

Sample ID	Surrogate/alternative/ cleanup standard	Excursion	Affected target analytes	Action
SED-CSE-S3-0.2FT	$^{13C}_{12}$ 123789-HxCDF (surrogate)	142 %R	Detected target analytes	J
SED-CSB-S2-0.2FT	$^{37Cl}_{4}$ 2378-TCDD (cleanup standard)	173 %R	Detected target analytes	J

Note:
%R indicates percentage recovery.
HxCDF indicates hexachlorodibenzofuran
TCDD indicates tetrachlorodibenzo-p-dioxin

Recovery standard criteria

The recovery standard areas for several samples were outside of the criteria of 50% to 200% of the associated continuing calibration. As a result of recovery standard excursions, analytes in the affected samples were qualified as approximate (J) to indicate minor accuracy excursions.

The sample results qualified as a result of the recovery standard excursions are summarized in the following table.

Table 186. *Recovery standard area excursions for PCDDs and PCDFs in full-scan sediment samples*

Sample ID	Recovery standard	Excursion	Affected analytes	Action
SED-CSB-S1-0.2FT	$^{13C}_{12}$123789- HxCDD	30 %R	For target analytes see below (affects undiluted target analytes only)**	J
SED-CSB-S1-0.2FT	$^{13C}_{12}$1234- TCDD (DB-225)	33 %R	2378-TCDF	J
SED-CSB-S2-0.2FT	$^{13C}_{12}$1234- TCDD	46 %R	For target analytes see below (affects undiluted target analytes only)**	J
	$^{13C}_{12}$123789- HxCDD	24 %R	For target analytes see below (affects undiluted target analytes only)**	J
SED-CSB-S2-0.2FT	$^{13C}_{12}$1234- TCDD (DB-225)	14 %R	2378-TCDF	J
SED-CSB-S3-0.2FT	$^{13C}_{12}$1234- TCDD	27 %R	For target analytes see below (affects undiluted target analytes only)**	J
	$^{13C}_{12}$123789- HxCDD	12 %R	For target analytes see below (affects undiluted target analytes only)**	J
SED-CSB-S3-0.2FT	$^{13C}_{12}$1234- TCDD (DB-225)	29 %R	2378-TCDF	J
SED-CSB-S1-0.2FTFD	$^{13C}_{12}$123789- HxCDD	28 %R	For target analytes see below (affects undiluted target analytes only)**	J
SED-CSB-S1-0.2FTFD	$^{13C}_{12}$1234- TCDD (DB-225)	31 %R	2378-TCDF	J
SED-M-S1-0.2FT	$^{13C}_{12}$1234- TCDD	19 %R	For target analytes see below (affects undiluted target analytes only)**	J
	$^{13C}_{12}$123789- HxCDD	10 %R	For target analytes see below (affects undiluted target analytes only)**	J
SED-M-S1-0.2FT	$^{13C}_{12}$1234- TCDD (DB-225)	27 %R	2378-TCDF	J
SED-RA2-S2-0.2FT	$^{13C}_{12}$1234- TCDD (DB-225)	43 %R	2378-TCDF	J
SED-CSD-S3	$^{13C}_{12}$123789- HxCDD	40 %R	For target analytes see below (affects undiluted target analytes only)**	J
SED-RA2-S1-0.2FT	$^{13C}_{12}$1234- TCDD (DB-225)	35 %R	2378-TCDF	J
SED-RA1-S2-0.2FT	$^{13C}_{12}$1234- TCDD (DB-225)	23 %R	2378-TCDF	J
SED-RA2-S1-0.2FTFD	$^{13C}_{12}$1234- TCDD (DB-225)	46 %R	2378-TCDF	J
SED-RA1-S1-0.2FT	$^{13C}_{12}$1234- TCDD (DB-225)	27 %R	2378-TCDF	J
SED-RA2-S1-0.2FTFD	$^{13C}_{12}$123789- HxCDD	562 %R	OCDD	J

Table 186. *Recovery standard area excursions for PCDDs and PCDFs in full-scan sediment samples*

Sample ID	Recovery standard	Excursion	Affected analytes	Action
SED-RA1-S2-0.2FT	$^{13C}_{12}$123789- HxCDD	526 %R	OCDD	J
SED-CSE-S2-0.2FT	$^{13C}_{12}$1234- TCDD	43 %R	For target analytes see below	J
	$^{13C}_{12}$123789- HxCDD	33 %R	For target analytes see below (affects undiluted target analytes only)**	J
SED-CSE-S1-0.2FT	$^{13C}_{12}$1234- TCDD	40 %R	For target analytes see below	J
	$^{13C}_{12}$123789- HxCDD	22 %R	For target analytes see below (affects undiluted target analytes only)**	J
SED-CSE-S1-0.2FT	$^{13C}_{12}$1234- TCDD (DB-225)	39 %R	2378-TCDF	J
SED-CSE-S3-0.2FT	$^{13C}_{12}$1234- TCDD	28 %R	For target analytes see below (affects undiluted target analytes only)**	J
	$^{13C}_{12}$123789- HxCDD	15 %R	For target analytes see below (affects undiluted target analytes only)**	J
SED-CSE-S3-0.2FT	$^{13C}_{12}$1234- TCDD (DB-225)	46 %R	2378-TCDF	J
BPL-ESED-S1-0.2FT	$^{13C}_{12}$1234- TCDD	30 %R	For target analytes see below	J
	$^{13C}_{12}$123789- HxCDD	18 %R	For target analytes see below (affects undiluted target analytes only)**	J, *
	$^{13C}_{12}$123789- HxCDD	210 %R	OCDD	J
BPL-ESED-S1-0.2FTFD	$^{13C}_{12}$1234- TCDD (DB-225)	22 %R	2378-TCDF	J
BPL-ESED-S3-0.2FT	$^{13C}_{12}$1234- TCDD (DB-225)	22 %R	2378-TCDF	J

Note:

* indicates that for sample BPL-ESED-S1-0.2FT the dilution result for target analyte 1234789-HpCDF was reported. The nondetected result for that analyte in the original analysis was rejected since the recovery of the recovery standard was less than 25%.

** indicates that, of the associated target analytes listed below, only the undiluted target analytes were qualified due to the recovery standard excursion. The diluted target analytes were not affected by the recovery standard excursion.

The associated target analytes for recovery standard $^{13C}_{12}$1234- TCDD include 2378-TCDD, 2378-TCDF, 12378-PeCDD, 12378-PeCDF, and 23478-PeCDF.

For DB-225, the associated target analyte for recovery standard $^{13C}_{12}$1234- TCDD includes 2378-TCDF.

The associated target analytes for recovery standard $^{13C}_{12}$123789- HxCDD include 123678-HxCDD, 123478-HxCDD, 123789-HxCDD, 1234678-HpCDD, OCDD, 123678-HxCDF, 123789-HxCDF, 123478-HxCDF, 234678-HxCDF, 1234678-HpCDF, 1234789-HpCDF, and OCDF.

%R indicates percentage recovery.
TCDD indicates tetrachlorodibenzo-p-dioxin
TCDF indicates tetrachlorodibenzofuran
PeCDD indicates pentachlorodibenzo-p-dioxin
PeCDF indicates pentachlorodibenzofuran
HxCDD indicates hexachlorodibenzo-p-dioxin
HxCDF indicates hexachlorodibenzofuran
HpCDD indicates heptachlorodibenzo-p-dioxin
HpCDF indicates heptachlorodibenzofuran
OCDD indicates octachlorodibenzo-p-dioxin
OCDF indicates octachlorodibenzofuran

LCS/LCSD analysis

The recoveries and RPDs for analytes in LCS/LCSDs were outside the laboratory control limits. As a result of the LCS/LCSD excursions, analytes in the associated samples were qualified as approximate (J) to indicate minor accuracy and precision excursions. The following table summarizes the LCS/LCSD excursions.

Table 187. *LCS/LCSD excursions for PCDDs and PCDFs in full-scan sediment samples*

LCS/LCSD ID	Target analyte	Excursion	Affected samples	Action
49608A	234678-HxCDF	145 %R, 32 RPD	SED-CSF-S3-0.2FT	J
	123789-HxCDF	147 %R, 32 RPD	SED-CSF-S2-0.2FT	
	1234789-HpCDF	152 %R	SED-CSF-S1-0.2FT	
			BPL-ESED-S2-0.2FT	

Note:
%R indicates percentage recovery.
RPD indicates relative percent difference.
HxCDF indicates hexachlorodibenzofuran
HpCDF indicates heptachlorodibenzofuran

Sample data (identification and quantitation)

As a result of interferences, the affected target analytes were qualified as approximate (J) to indicate minor representativeness excursions. The following table summarizes the samples qualified due to interferences.

Table 188. *Full-scan sediment samples analyzed for PCDDs and PCDFs qualified due to interferences*

Sample ID	Affected target analytes	Qualified target analytes	Action
SED-CSF-S2-0.2FT	12378-PeCDF	12378-PeCDF	J
SED-M-S1-0.2FT	1234789-HpCDF OCDF	1234789-HpCDF OCDF	J
SED-CSB-S3-0.2FT	1234789-HpCDF OCDF	1234789-HpCDF OCDF	J
SED-CSB-S1-0.2FTFD	1234789-HpCDF OCDF	1234789-HpCDF OCDF	J
SED-CSC-S2-0.2FT	12378-PeCDF OCDD OCDF	12378-PeCDF OCDF OCDD	J
BSSED-PCD-US-N-0-34.5IN	12378-PeCDF	12378-PeCDF	J

Note:
PeCDF indicates pentachlorodibenzofuran
HpCDF indicates heptachlorodibenzofuran
OCDD indicates octachlorodibenzo-p-dioxin
OCDF indicates octachlorodibenzofuran

Second column confirmation
In the following sample, the 2378-TCDF concentration was confirmed by analysis on the DB-225 column.

Table 189. *2378-TCDF result confirmed on column DB-225 in full-scan sediment samples*

Sample ID	Reason for confirmation
SED-CSF-S3-0.2FT	Concentration of 2378-TCDF in sample above the detection limit
SED-CSF-S2-0.2FT	
SED-CSF-S1-0.2FT	
BPL-ESED-S2-0.2FT	
SED-M-S1-0.2FT	
SED-CSB-S2-0.2FT	
SED-CSB-S1-0.2FT	
SED-CSB-S3-0.2FT	
SED-CSB-S1-0.2FTFD	
SED-RA2-S2-0.2FT	
SED-CSC-S2-0.2FT	
SED-CSC-S3-0.2FT	
SED-CSC-S1-0.2FT	
SED-CSD-S1-0.2FT	
SED-CSD-S2-0.2FT	
SED-CSD-S3-0.2FT	
SED-RA2-S1-0.2FT	
SED-RA1-S2-0.2FT	
SED-RA2-S1-0.2FTFD	
SED-RA1-S1-0.2FT	
SED-CSE-S1-0.2FT	
SED-CSE-S2-0.2FT	
SED-CSE-S3-0.2FT	
BPL-ESED-S1-0.2FT	
BPL-ESED-S3-0.2FT	
BPL-ESED-S1-0.2FTFD	

Sample re-analysis
The following sample was re-extracted and reanalyzed due to a sample analysis excursion.

Table 190. *Full-scan sediment sample reanalyzed for PCDDs and PCDFs*

Sample ID	Reason for re-analysis
SED-CSB-S1-0.2FTFD	Extraction error occurred during dilution re-extraction; second re-extraction analysis was reported

The following table presents the samples analyzed by dilution due to high concentration of target analytes or saturation.

Table 191. *PCDDs and PCDFs in full-scan sediment samples analyzed by dilution*

Sample ID	Target analytes	Dilution	Reasons
SED-CSF-S3-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	1:100	High concentration of target analytes
SED-CSF-S2-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	1:100	High concentrations of target analytes
SED-CSF-S1-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	1:100	High concentrations or saturation of target analytes
BPL-ESED-S2-0.2FT	OCDD	1:100	High concentrations of target analytes
SED-CSB-S2-0.2FT	2378-TCDD 12378-PeCDD 123478-HxCDD 123678-HxCDD 123789-HxCDD 1234678-HpCDD OCDD 2378-TCDF 123478-HxCDF 123678-HxCDF 234678-HxCDF 1234678-HpCDF 1234789-HpCDF OCDF	1:1000	High concentrations or saturation of target analytes
SED-CSB-S1-0.2FT	123678-HxCDD 123789-HxCDD 1234678-HpCDD OCDD 123478-HxCDF 1234678-HpCDF 1234789-HpCDF OCDF	1:1000	High concentrations of target analytes
SED-CSB-S3-0.2FT	2378-TCDD 123678-HxCDD 123789-HxCDD 1234678-HpCDD OCDD 123478-HxCDF 234678-HxCDF 1234678-HpCDF 1234789-HpCDF OCDF	1:1000	High concentrations or saturation of target analytes
SED-CSB-S1-0.2FTFD	123678-HxCDD 123789-HxCDD 1234678-HpCDD OCDD 1234678-HpCDF 1234789-HpCDF OCDF	1:1000	High concentrations or saturation of target analytes

Table 191. *PCDDs and PCDFs in full-scan sediment samples analyzed by dilution*

Sample ID	Target analytes	Dilution	Reasons
SED-M-S1-0.2FT	123678-HxCDD 123789-HxCDD 1234678-HpCDD OCDD 123478-HxCDF 1234678-HpCDF 1234789-HpCDF OCDF	1:1000	High concentrations or saturation of target analytes
SED-CSC-S2-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	1:1000	High concentrations or saturation of target analytes
SED-CSC-S3-0.2FT	123678-HxCDD 1234678-HpCDD OCDD 1234678-HpCDF 1234789-HpCDF OCDF	1:1000	High concentrations or saturation of target analytes
SED-CSC-S1-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	1:1000	High concentrations of target analytes
SED-CSD-S1-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	1:1000	High concentrations of target analytes
SED-CSD-S2-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	1:1000	High concentrations of target analytes
SED-CSD-S3-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	1:1000	High concentrations of target analytes
SED-RA2-S1-0.2FT	OCDD	1:100	High concentrations of target analyte
SED-RA1-S2-0.2FT	OCDD	1:100	High concentrations of target analyte
SED-RA2-S1-0.2FTFD	OCDD	1:100	High concentrations of target analyte
SED-CSE-S2-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	1:100	High concentrations or saturation of target analytes
SED-CSE-S1-0.2FT	1234678-HpCDD OCDD 1234678-HpCDF OCDF	1:100	High concentrations or saturation of target analytes
SED-CSE-S3-0.2FT	1234678-HpCDD OCDD OCDF	1:100	High concentrations of target analytes
BPL-ESED-S1-0.2FT	OCDD	1:100	High concentrations of target analyte
BPL-ESED-S3-0.2FT	OCDD	1:100	High concentrations of target analyte
BPL-ESED-S1-0.2FTFD	OCDD	1:100	High concentrations of target analyte
BSSED-PDC-DS-S-54IN	OCDD	1:10	High concentrations of target analyte
BSSED-PDC-US-N-0-20IN	OCDD	1:10	High concentrations of target analyte
BSSED-PDC-US-N-0-20INFD	OCDD	1:10	Saturation of target analyte

Table 191. *PCDDs and PCDFs in full-scan sediment samples analyzed by dilution*

Sample ID	Target analytes	Dilution	Reasons
Note:			
TCDD indicates tetrachlorodibenzo-p-dioxin			
TCDF indicates tetrachlorodibenzofuran			
PeCDD indicates pentachlorodibenzo-p-dioxin			
HxCDD indicates hexachlorodibenzo-p-dioxin			
HxCDF indicates hexachlorodibenzofuran			
HpCDD indicates heptachlorodibenzo-p-dioxin			
HpCDF indicates heptachlorodibenzofuran			
OCDD indicates octachlorodibenzo-p-dioxin			
OCDF indicates octachlorodibenzofuran			

Data completeness

The "B" flag applied to target analytes 2378-TCDD, 23478-PeCDF, and 123678-HxCDF in sample BSSED-PDC-US-N-0-20FD to denote blank contamination in the associated method blank, were incorrectly applied to sample data. This laboratory error was corrected during the data validation process.

Overall data assessment

- One hundred three results for target analytes in full-scan sediment samples were qualified as approximate (UJ, J) due to holding time excursions.
- Target analytes in twenty-three full-scan sediment samples were qualified as approximate (J) due to percentage solids that were less than 50.
- Eleven results for target analytes in full-scan sediment samples were qualified as EMPCs due to blank contamination.
- Five results for target analytes in full-scan sediment samples were qualified as approximate (J) due to internal standard recovery excursions.
- Three results for target analytes in full-scan sediment samples were qualified as approximate (J) due to internal standard identification excursions.
- Thirty-four results for detected target analytes were qualified as approximate (J) in samples SED-CSE-S3-0.2FT and SED-CSB-S2-0.2FT due to surrogate and cleanup recovery excursions.
- One hundred four results for target analytes in full-scan sediment samples were qualified as approximate (UJ, J) due to recovery standard excursions.
- Four results for target analytes in full-scan sediment samples were qualified as approximate (J) due to LCS/LCSD accuracy excursions.
- Eight results for target analytes in full-scan sediment samples were qualified as approximate (J) due to LCS/LCSD precision excursions.
- Eleven results for target analytes in full-scan sediment samples were qualified as approximate (J) due to interference excursions.
- The results for 2378-TCDF in twenty-six full-scan sediment samples were confirmed through utilizing analysis on the DB-225 column.
- Sample SED-CSB-S1-0.2FTFD was reanalyzed due to an extraction error.
- Twenty-seven full-scan sediment samples were analyzed at a dilution due to high concentration or saturation of target analytes.

- The "B" flag applied to target analytes 2378-TCDD, 23478-PeCDF, and 123678-HxCDF in sample BSSED-PDC-US-N-0-20FD to denote blank contamination in the associated method blank were removed during the data validation process.

7. Surface water

7.1. Document completeness

The chain-of-custody associated with samples collected 10/06/99 and submitted for dioxin/dibenzofuran analysis was incomplete, since the field sampler did not complete the "relinquished by" box. The field samplers provided information in the project file that indicated that the samples were in the custody of the samplers until the cooler was relinquished to the courier (on 10/06/99).

7.2. VOC analysis of surface water samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for VOCs analyzed by USEPA Method 8260B were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- GC/MS tuning criteria
- Initial and continuing calibration
- Surrogate recovery
- LCS analysis
- Internal standards performance
- Target analyte identification, quantitation, reported detection limits, and system performance
- Sample re-analysis
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2 and any additional observations are summarized below.

Blank analysis
Samples which contained methylene chloride at less than ten times the blank concentration were qualified as undetected (U) due to the blank contamination. The blank excursions are summarized in the following table:

Table 192. *Blank excursions for VOC analyses in surface water samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
1B1011MB	Methylene chloride	1.1 µg/L	SW-CSB-S3 SW-BPL-S1 SW-M-S1 SW-BPL-S2 SW-CSD-S1 SW-CSD-S2	U
1B0212 MB	Methylene chloride	1.9 µg/L	SW-PCD-DS SW-PDC-US SW-PDC-USFD	U

Note:
MB indicates method blank.

Overall data assessment
The results for methylene chloride in nine surface water samples were qualified for blank contamination.

7.3. SVOC analyses of surface water samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for SVOCs analyzed by USEPA Method 8270C were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- GC/MS tuning criteria
- Initial and continuing calibration
- Surrogate recovery
- LCS analysis
- Internal standards performance
- Target analyte identification, quantitation, and system performance
- Sample re-analysis
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Blank analysis
Samples which contained indeno(1,2,3-cd)pyrene or benzo(g,h,i) perylene at less than five times the blank concentration were qualified as undetected (U) due to the blank contamination. The blank excursions are summarized in the following table:

Table 193. *Blank excursion for SVOC analyses in surface water samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
0209D MB	Indeno(1,2,3-cd)pyrene	0.78 µg/L	SW-PDC-DS SW-PDC-US	U
	Benzo(g,h,i) perylene	1.2 µg/L	SW-PDC-DS SW-PDC-US SW-PDC-USFD	U

Note:
MB indicates method blank.

MS/MSD analysis

Target analytes in samples used for MS/MSD analyses were qualified as approximate (UJ) to indicate minor accuracy and precision excursions. The result for 3,3'-dichlorobenzidine in sample SW-RA1-S2 was rejected (R) due to a recovery in the MS/MSD analysis of less than 10%. The laboratory control sample associated with the sample met criteria. Therefore, matrix interference is suspected to have been the cause of the major accuracy excursion. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 194. *MS/MSD excursions for SVOC analyses in surface water samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
SW-RA1-S1	hexachlorobutadiene	47 RPD	SW-RA1-S1	UJ
	4-bromophenyl-phenyl ether	39 RPD		
	anthracene	36 RPD		
	di-n-butyl phthalate	45 RPD		
	fluoranthene	50 RPD		
	pyrene	46 RPD		
	butyl benzyl phthalate	50 RPD		
	benzo(a)anthracene	48 RPD		
	chrysene	52 RPD		
	bis(2-ethyl hexyl) phthalate	51 RPD		
	di-n-octyl phthalate	53 RPD		
	benzo(b)fluoranthene	58 RPD		
	benzo(k)fluoranthene	46 RPD		
	benzo(a)pyrene	53 RPD		
	indeno(1,2,3-cd)pyrene	53 RPD		
	dibenzo(a,h)anthracene	54 RPD		
	benzo(g,h,i)perylene	58 RPD		
	hexachlorobenzene	51 RPD		
	phenanthrene	34 RPD		
	4-chlorophenyl phenyl ether	36 RPD		
	n-nitrosodiphenylamine	46 RPD		

Table 194. *MS/MSD excursions for SVOC analyses in surface water samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
SW-RA1-S2	hexachlorobutadiene	23 %R, 22 %R	SW-RA1-S2	UJ
	dibenzofuran	40 %R, 43 %R		
	fluorene	38 %R, 39 %R		
	4-bromophenyl-phenyl ether	23 %R, 20 %R		
	n-nitrosodiphenyl amine	40 RPD		
	hexachlorobenzene	25 %R, 19 %R		
	phenanthracene	32 %R, 29 %R		
	anthracene	25 %R, 21 %R		
	di-n-butyl phthalate	32 %R, 27 %R		
	fluoranthene	29 %R, 23 %R		
	pyrene	27 %R, 21 %R		
	butyl benzyl phthalate	32 %R, 26 %R		
	benzo(a)anthracene	24 %R, 19 %R		
	chrysene	24 %R, 20 %R		
	bis(2-ethyl hexyl) phthalate	32 %R, 22 %R		
	benzo(b)fluoranthene	23 %R, 19 %R		
	benzo(k)fluoranthene	22 %R, 17%R		
	benzo(a)pyrene	22 %R, 16 %R		
	indeno(1,2,3-cd)pyrene	20 %R, 20 %R		
	dibenzo(a,h)anthracene	24 %R, 19 %R		
	benzo(g,h,i)perylene	24 %R, 18 %R		
	carbazole	46 %R, 44 %R		
SW-RA1-S2	3,3'-dichlorobenzidine	4 %R, 3 %R	SW-RA1-S2	R
SW-PDC-DS	4-bromophenyl phenyl ether	28 RPD	SW-PDC-DS	UJ
	hexachlorobenzene	34 RPD		UJ
	anthracene	28 RPD		UJ
	fluoranthene	31 RPD		UJ
	benzo(a)anthracene	41 RPD		J
	chrysene	41 RPD		J
	bis(2-ethyl hexyl) phthalate	43 RPD		J
	di-n-octyl phthalate	43 RPD		J
	benzo(b)fluoranthene	38 RPD		J
	benzo(k)fluoranthene	41 RPD		J
	benzo(a)pyrene	42 RPD		J
	indeno(1,2,3-cd)pyrene	46 RPD		UJ
	dibenzo(a,h)anthracene	42 RPD		J

Note: %R indicates percentage recovery.
RPD indicate relative percent difference.

Target analyte reported detection limits

The reported detection limits for the surface water samples were lower than the lowest concentration used in the initial calibration performed for 2,4,6-trichlorophenol, 4-bromophenyl phenyl ether, bis(2-ethyl hexyl) phthalate, fluorene, hexachloroethane, 2,4-dinitrophenol, nitrobenzene, pentachlorophenol, 4,6-dinitro-2-methylphenol. Sample results were not qualified due to this method deviation.

Overall data assessment

- Five results for target analytes in surface water samples were qualified for blank contamination.
- Twenty-one results for target analytes were qualified as approximate in surface water samples due to MS/MSD accuracy excursions.
- Thirty-five results for target analytes were qualified as approximate in surface water samples due to MS/MSD precision excursions.
- The nondetected result for 3,3'-dichlorobenzidine in sample SW-RA1-S2 was rejected (R) due to low MS/MSD recoveries.

- The reported detection limits for the surface water samples were lower than the lowest concentration used in the initial calibration performed for 2,4,6-trichlorophenol, 4-bromophenyl phenyl ether, bis(2-ethyl hexyl) phthalate, fluorene, hexachloroethane, 2,4-dinitrophenol, nitrobenzene, pentachlorophenol, 4,6-dinitro-2-methylphenol.

7.4. Pesticide analysis of surface water samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for pesticides analyzed by USEPA Method 8081A were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times, sample preservation
- GC performance
- Analytical sequence
- Initial calibration
- Blank analysis
- Retention time window
- Target analyte identification, quantitation, reported detection limits, and system performance
- Cleanup verification
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Calibration verification

The %RSD criteria for endrin aldehyde, methoxychlor, endosulfan sulfate, and endrin ketone were exceeded in the calibration verification performed on 10/12/99. The results for these target analytes were qualified as approximate (UJ) in the samples associated with the calibration to indicate the minor accuracy excursions. The samples qualified due to the minor calibration excursions are summarized in the following table.

Table 195. *Calibration verification excursions for pesticides in surface water samples*

Calibration verification ID	Standard analytes	Excursion (%RSD)	Affected samples	Action
2108/2132 10/12/99	Endrin aldehyde	23.3 (DB-17), 18.9 (DB-5)	SW-CSB-S3	UJ
	Methoxychlor	23.7 (DB-17), 18.0 (DB-5)		
	Endosulfan sulfate	22.0 (DB-17), 19.4 (DB-5)		
	Endrin ketone	40.4 (DB-17), 24.3 (DB-5)		

Note:
%RSD indicates relative standard deviation.

Surrogate recovery

Recoveries for surrogates were outside of the laboratory control limits. In the case that surrogate recovery excursions were detected in at least three surrogate recoveries in the dual-column results, affected target analytes were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The following table presents the target analytes qualified as a result of the minor surrogate recovery excursion:

Table 196. *Surrogate excursion for pesticide analysis in surface water samples*

Sample ID	Surrogate	Excursion	Affected analytes	Action
SW-CSB-S3	TCMX	25 %R (DB-5)	Target analytes	UJ, J
	DCB	22 %R (DB-608), 20 %R (DB-5)		
SW-CSF-S3	TCMX	24 %R, (DB-608), 26 %R (DB-5)	Target analytes	UJ
	DCB	17 %R (DB-608), 18 %R (DB-5)		
SW-PDC-DS	TCMX	26 %R, (DB-608)	Target analytes	UJ
	DCB	18 %R (DB-608), 19 %R (DB-5)		

Note:
%R indicates percentage recovery.
DCB indicates decachlorobiphenyl.
TCMX indicates 2,4,5,6-tetrachloro-m-xylene.

MS/MSD analysis

Target analytes MS/MSD samples were qualified as approximate (UJ, J) to indicate minor accuracy and precision excursions. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 197. *MS/MSD excursions for pesticide analyses in surface water samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
SW-RA1-S2	Methoxychlor	41 %R, 55 %R	SW-RA1-S2	UJ
	Beta-BHC	65 RPD		J
	Gamma-BHC	29 RPD		UJ
	Heptachlor	36 RPD		UJ
	Endosulfan I	27 RPD		J
	4,4'-DDE	28 RPD		UJ
	Endrin	28 RPD		J
	Endrin ketone	27 RPD		UJ
SW-PDC-DS	Alpha-BHC	41 RPD	SW-PDC-DS	UJ
	Delta-BHC	83 RPD		UJ
	4,4'-DDE	54 RPD		UJ
	Endrin	55 RPD		UJ

Note: %R indicates percentage recovery.
RPD indicates relative percent difference.

LCS analysis

The recoveries for delta-BHC in two LCS analyses were outside of the laboratory control limits. The results for delta-BHC in samples SW-CSB-S3, SW-PDC-DS, SW-PDC-US, and SW-PDC-USFD were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The LCS excursion is summarized in the following table:

Table 198. *LCS excursion for pesticide analyses in surface water samples*

LCS ID	Analyte	Excursion	Affected Samples	Action
1007Q-MMBLCS	Delta-BHC	45 %R	SW-CSB-S3	J
0209R	Delta-BHC	38 %R	SW-PDC-DS SW-PDC-US SW-PDC-USFD	UJ

Note:
%R indicates percentage recovery.

Confirmation analysis

For target analytes that were detected by the laboratory but were at concentrations that were less than the reported detection limit, the laboratory applied a "J" flag to the analyte result. During the validation process, the "J" flag was retained since the concentration is considered to be approximate. Due to the numerous values reported by the laboratory below the reported detection limits, if the RPD values were greater than 40% for the confirmation analysis and the target analyte concentration was flagged "J," additional validation qualifiers were not applied to the sample data.

The RPD values calculated for positive results from the two chromatographic columns (DB608, DB5) in ground water sample analyses were greater than 40% indicating confirmation excursions. Target analytes with a RPD greater than 40% were qualified as approximate (J) to indicate minor representativeness excursions. The analyte identification excursions are summarized in the following table:

Table 199. *Analyte confirmation excursions for pesticide analyses in surface water samples*

Sample ID	Analyte	Excursion	Action
SW-CSD-S1	Gamma-BHC	100 RPD	J
SW-RA2-S1	Beta-BHC	91 RPD	J
SW-RA2-S2	Beta-BHC	50 RPD	J

Note:
RPD indicates relative percent difference.

Sample re-analysis

The following samples were reanalyzed due to sample analysis excursions.

Table 200. *Surface water samples reanalyzed for pesticides*

Sample ID	Reason for re-analysis
SW-CSF-S1, SW-CSF-S2, SW-CSF-S3, SW-CSE-S3, SW-RA2-S1, SW-RA1-S2, SW-RA2-S2, SW-RA1-S2FD	Samples were re-extracted to confirm the surrogate spiking solution concentration. The initial results were reported since the concentration in the initial analysis was performed using the correct surrogate concentration.
SW-PDC-DS, SW-PDC-US, SW-PDC-USFD	Samples were re-extracted due to LCS recovery excursion. The initial analyses were reported since the re-extractions were performed outside of holding time.

Overall data assessment

- Four results for target analytes in surface water samples were qualified as approximate (UJ) due to calibration verification excursions.
- Target analytes in samples SW-CSB-S3, SW-CSF-S3, and SW-PDC-DS were qualified as approximate (UJ, J) due to surrogate recovery excursions.
- The result for methoxychlor in sample SW-RA1-S2 was qualified as approximate (UJ) due to a MS/MSD recovery excursion.
- Eleven results for target analytes in surface water samples were qualified as approximate (UJ, J) due to MS/MSD precision excursions.
- Four results for target analytes in surface water samples were qualified as approximate (UJ, J) due to LCS excursions.
- Three results for target analytes in surface water samples were qualified as approximate (J) due to confirmation excursions.
- The following samples were re-analyzed due to analysis excursions: SW-CSF-S1, SW-CSF-S2, SW-CSF-S3, SW-CSE-S3, SW-RA2-S1, SW-RA1-S2, SW-RA2-S2, SW-RA1-S2FD, SW-PDC-DS, SW-PDC-US, SW-PDC-USFD.

7.5. Herbicide analysis of surface water samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for herbicides analyzed by USEPA Method 8151A were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- GC performance
- Analytical sequence
- Initial calibration
- Blank analysis
- Surrogate analysis
- LCS analysis
- Retention time window
- Target analyte identification, quantitation, reported detection limits, and system performance
- Cleanup verification
- Confirmation analysis
- Sample re-analysis
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Calibration verification

The calibration verification criteria for MCPA and MCPP in the calibration verification analysis of 10/13/99 on both the DB-608 and DB-5 columns were not met. MCPA and MCPP in samples affected by the excursion were qualified as approximate (UJ) to indicate minor accuracy excursions. The samples qualified due to the minor calibration excursions are summarized in the following table.

Table 201. *Calibration verification excursions for herbicides in surface water samples*

Calibration verification ID	Standard analytes	Excursion	Affected samples	Action
1304 10/13/99	MCPA	34.8 %D (DB-608) 30.4 %D (DB-5)	SW-CSB-S3	UJ
1304 10/13/99	MCPP	21.7 %D (DB-608) 17.4 %D (DB-5)	SW-CSB-S1 SW-BPL-S1	UJ

Note:
%D indicates percent difference.

MS/MSD analysis

The results for MCPA in MS/MSD sample SW-CSF-S2 were qualified as approximate (UJ) to indicate a minor precision excursion. The following table presents the target analyte qualified as a result of the MS/MSD excursion:

Table 202. *MS/MSD excursion for herbicide analyses in surface water samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
SW-CSF-S2	MCPA	34 RPD	SW-CSF-S2	UJ

Note: RPD indicates relative percent difference.

Overall data assessment

- Three results for target analytes in surface water samples were qualified as approximate (UJ) due to calibration verification excursions.
- The result for MCPA in sample SW-CSF-S2 was qualified as approximate (UJ) due to a MS/MSD precision excursion.

7.6. PCB analysis of surface water samples

Criteria Compliance

The QA/QC parameters presented in Section 1.2.2 for PCBs analyzed by USEPA Method 680 were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- GC/MS tuning and window-defining criteria

- Initial and continuing calibration
- Blank analysis
- Surrogate recovery
- LCS analysis
- MS/MSD analysis
- Sample data identification, quantitation and system performance
- Sample re-analysis
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Internal standards criteria
Target analytes in sample SW-CSF-S1 associated with an internal standard recovery that was outside of the laboratory control limits were qualified as approximate (UJ) to indicate a minor accuracy excursion. The following table summarizes the internal standard excursion.

Table 203. *Internal standard excursion for PCBs in surface water samples*

Sample ID	Internal standard	Excursion	Affected analytes	Action
SW-CSF-S1	Chrysene-d12	66 %R	Target analytes	UJ

Note:
%R indicates percentage recovery.

The analytes affected by internal standard chrysene-d12 include the following : MCB, DCB, TCB, TRCB, PTCB, HXCB, HPCB, OCB, NCB, DCCB

MCB indicates monochlorobiphenyl
DCB indicates dichlorobiphenyl
TCB indicates trichlorobiphenyl
TRCB indicates tetrachlorobiphenyl
PTCB indicates pentachlorobiphenyl
HXCB indicates hexachlorobiphenyl
HPCB indicates heptachlorobiphenyl
OCB indicates octachlorobiphenyl
NCB indicates nonachlorobiphenyl
DCCB indicates decachlorobiphenyl

Target analyte reported detection limits
The following table presents the samples analyzed by dilution due to matrix interferences.

Table 204. *PCBs in surface water samples analyzed by dilution*

Sample ID	Target analytes	Dilution	Reason
SW-CSD-S1	Target analytes	1:5	Matrix interference
SW-CSD-S2	Target analytes	1:5	Matrix interference
SW-CSD-S1FD	Target analytes	1:5	Matrix interference

Overall data assessment
- Target analytes in sample SW-CSF-S1 were qualified as approximate (UJ) due to an internal standard excursion.
- The results in the following samples were analyzed at a dilution: SW-CSD-S1, SW-CSD-S2, SW-CSD-S1FD.

7.7. Metals, mercury, cyanide, fluoride ortho-phosphate, TDS, TSS, and total phosphorus analysis of surface water samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for metals analyzed by USEPA Method 6010B, mercury by USEPA Method 7470A, cyanide by USEPA Method 9010B, fluoride by USEPA Method 300.0, ortho-phosphate by USEPA Method 365.2, TDS by USEPA Method 160.1, TSS by USEPA Method 160.2, and total phosphorus by USEPA Method 365.4 were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- ICP interference check sample analysis
- LCS analysis
- ICP serial dilution analysis
- Verification of instrument parameters
- Analyte quantitation and reported detection limits
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2 and any additional observations are summarized below.

Calibration analysis

The recovery for calibration standards near the reported detection limit (CRI) is evaluated based on the control limits of 75 %R to 125 %R. The results for target analytes with concentrations that were less than three times the reported detection limit in the associated samples were qualified as approximate (UJ, J) due to CRI recovery excursions to indicate minor accuracy excursions. The CRI excursions are summarized in the following table:

Table 205. *CRI excursions for metal analyses in surface water samples*

CRI ID	Analyte	Excursion	Affected Sample Results	Action
1256 10/12/99	Arsenic	129 %R	SW-CSB-S3	J
	Lead	140 %R	SW-CSB-S3 SW-CSB-S1	J
	Thallium	68 %R	SW-CSB-S3 SW-CSB-S1	UJ
Note: %R indicates percentage recovery.				

Blank analysis

Target analytes were detected in preparation, initial calibration and continuing calibration blanks which were analyzed for metals. The samples which contained target analytes at less than five times the associated blank concentration were qualified as not detected (U), and samples which contained target analytes at greater than five times the associated blank concentration were qualified as approximate (J) due to the blank contamination. The blank excursions are summarized in the following table:

Table 206. *Blank excursions for metal analyses in surface water samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
SW-CSDEB	Calcium	0.29 mg/L	SW-CSB-S3 SW-BPL-S1 SW-M-S1 SW-CSD-S1 SW-CSD-S2 SW-CSD-S3 SW-BPL-S3 SW-CSD-S1FD SW-BPL-S2 SW-CSB-S1 SW-CSB-S2	J
	Iron	0.039mg/L	SW-CSB-S3 SW-BPL-S1 SW-M-S1 SW-CSD-S1 SW-CSD-S2 SW-CSD-S3 SW-BPL-S3 SW-CSD-S1FD SW-BPL-S2	J
	Iron	0.039 mg/L	SW-CSB-S1 SW-CSB-S2	U
	Sodium	0.58 mg/L	SW-CSB-S3 SW-BPL-S1 SW-M-S1 SW-CSD-S1 SW-CSD-S2 SW-CSD-S3 SW-BPL-S3 SW-CSD-S1FD SW-BPL-S2 SW-CSB-S1 SW-CSB-S2	J
SW-RA2EB	Calcium Sodium	0.19 mg/L 0.42 mg/L	SW-RA1-S1 SW-CSF-S1 SW-CSF-S2 SW-CSF-S3 SW-CSE-S3 SW-RA2-S1 SW-RA1-S2 SW-RA2-S2 SW-RA1-S2FD	J
CCB6/CCB7 2/17/00	Barium Manganese	0.00173 mg/L 0.00178 mg/L	SW-PDC-DS SW-PDC-US SW-PDC-USFD	J
	Chromium Copper Vanadium Thallium	0.00185 mg/L 0.00193 mg/L 0.00239 mg/L 0.00729 mg/L	SW-PDC-DS SW-PDC-US SW-PDC-USFD	U
BSSED-PDC-US-N-0-20INEB	Calcium Sodium	0.15 mg/L 0.58 mg/L	SW-PDC-DS SW-PDC-US SW-PDC-USFD	J

Table 206. *Blank excursions for metal analyses in surface water samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
Note: CCB indicates continuing calibration blank. PB indicates method (preparation) blank.				

MS/MSD analysis

Target analytes in MS samples analyzed for metals were outside of the laboratory control limits. Post-digestion spikes analyses met method criteria, which confirmed the matrix interference for these samples. When the sample concentrations were less than four times the spike concentrations, target analytes with MS recoveries that were outside of control limits, but are greater than 30% were qualified as approximate (J) to indicate minor accuracy excursions. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 207. *MS/MSD excursions for metal in surface water samples*

MS/MSD ID	Analyte	Excursion	Affected Sample	Action
SW-RA1-S2	Manganese	127 %R, 148 %R	SW-CSF-S1 SW-CSF-S2 SW-CSF-S3 SW-CSE-S3 SW-RA2-S1 SW-RA1-S2 SW-RA2-S2 SW-RA1-S2FD	J
Note: %R indicates percentage recovery.				

Laboratory duplicate analysis

Laboratory duplicate results were outside of the control limits of 20 RPD for target analytes greater than five times the reported detection limit and ± the reporting limit for target analytes less than five times the reported detection limit. The MS/MSD RPD results were utilized to evaluate precision. The results for the analytes in the associated samples were qualified as approximate (J) to indicate minor precision excursions. The laboratory duplicate excursions are summarized in the following table:

Table 208. *Laboratory duplicate excursions for metal analyses in surface water samples*

Laboratory duplicate ID	Analyte	Excursion	Affected samples	Action
SW-PDC-DS	Aluminum Iron	34 RPD 30 RPD	SW-PDC-DS SW-PDC-US SW-PDC-USFD	J
Note: RPD indicates relative percent difference.				

Field duplicate analysis

Field duplicate results were outside of the laboratory control limits of 20 RPD for target analytes greater than five times the reported detection limit and ± the reporting limit for target analytes less than five times the reported detection limit. The results for the analytes in the associated samples were qualified as approximate (J) to indicate minor precision excursions. The field duplicate excursions are summarized in the following table:

Table 209. *Field duplicate excursions for ortho-phosphate analyses in surface water samples*

Field duplicate ID	Analyte	Excursion	Affected samples	Action
SW-RA1-S2FD	Ortho-phosphate	51 RPD	SW-CSF-S1 SW-CSF-S2 SW-CSF-S3 SW-CSE-S3 SW-RA2-S1 SW-RA1-S2 SW-RA2-S2 SW-RA1-S2FD	UJ, J

Note:
RPD indicates relative percent difference.

Overall data assessment

- Five results for target analytes in surface water samples were qualified as approximate (UJ, J) due to CRI recovery excursions.
- Seventy-five results for target analytes in surface waters were qualified for blank contamination.
- Eight results for manganese in surface water samples were qualified as approximate (J) due to MS/MSD recovery excursions.
- Six results for target analytes in surface water samples were qualified as approximate (J) due to laboratory duplicate excursions.
- The results for ortho-phosphate in eight surface water samples were qualified as approximate (UJ, J) due to field duplicate excursions.

7.8. PCDD and PCDF analysis of surface water samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for PCDD and PCDFs analyzed by USEPA Method 8290 were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Sample preservation
- Instrument performance (mass resolution, GC column performance check)
- Initial and continuing calibration
- Internal standard criteria
- Surrogate/alternative/cleanup standard recovery
- Duplicate analysis
- MS/MSD analysis

- LCS/LCSD analysis
- Sample data (identification and quantitation)
- Estimated detection limits
- Estimated maximum possible concentration (EMPC)
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Holding times
Holding times were evaluated based on sample collection, extraction, and analysis dates. The result for target analytes in sample SW-PDC-USFD, which was extracted outside of the holding time, were qualified as approximate (UJ, J) to indicate a minor representativeness excursion. The following table summarizes the holding time excursions.

Table 210. *Holding time excursions for PCDDs and PCDFs in surface water samples*

Sample ID	Target analyte	Excursion	Action
SW-PDC-USFD	Target analytes	17 days outside of extraction holding time	UJ, J

Blank analysis
Target analytes were detected in the method blank analyzed for PCDDs and PCDFs. Samples with target analytes at concentrations less than or equal to five times the concentrations in the associated method blank were flagged as EMPCs. The samples flagged as EMPCs due to method blank contamination are summarized in the following table.

Table 211. *Blank contamination for PCDDS and PCDFs in surface water samples*

Blank ID	Target analyte	Concentration	Affected samples	Action
MB 49608B	OCDD	36.5 ppq	SW-CSF-S1	EMPC
MB 49614A	2378-TCDD	4.0 ppq	SW-RA1-S2FD SW-RA2-S1	EMPC
MB 49614A	123478-HxCDF	3.0 ppq	SW-RA1-S2FD SW-RA2-S1 SW-RA1-S1 SW-RA1-S2 SW-RA2-S2	EMPC
MB 49614A	234678-HxCDF	2.80 ppq	SW-RA1-S2FD SW-RA2-S1 SW-RA1-S1 SW-RA2-S2	EMPC
MB 49614A	OCDF	15.3 ppq	SW-RA2-S1	EMPC

Note:
MB indicates method blank.
ppq indicates parts per quadrillion.
TCDD indicates tetrachlorodibenzo-p-dioxin
HxCDF indicates hexachlorodibenzofuran
OCDD indicates octachlorodibenzo-p-dioxin
OCDF indicates octachlorodibenzofuran

Recovery standard criteria

The recovery standard areas for several samples were outside of the criteria of 50% to 200% of the associated continuing calibration. As a result of recovery standard excursions, analytes in the affected samples were qualified as approximate (UJ, J) to indicate minor accuracy excursions.

The sample results qualified as a result of the recovery standard excursions are summarized in the following table.

Table 212. *Recovery standard area excursions for PCDDs and PCDFs in surface water samples*

Sample ID	Recovery standard	Excursion	Affected analytes	Action
SW-RA1-S2FD	$^{13C}_{12}$1234- TCDD	34 %R	For target analytes see below	UJ, J
	$^{13C}_{12}$123789- HxCDD	25 %R	For target analytes see below	J
SW-RA1-S1	$^{13C}_{12}$1234- TCDD	25 %R	For target analytes see below	UJ, J
	$^{13C}_{12}$123789- HxCDD	33 %R	For target analytes see below	UJ, J
SW-RA1-S2	$^{13C}_{12}$1234- TCDD	30 %R	For target analytes see below	UJ, J
	$^{13C}_{12}$123789- HxCDD	45 %R	For target analytes see below	UJ, J
SW-RA2-S1	$^{13C}_{12}$1234- TCDD	39 %R	For target analytes see below	J
	$^{13C}_{12}$123789- HxCDD	30 %R	For target analytes see below	J
SW-RA2-S2	$^{13C}_{12}$1234- TCDD	43 %R	For target analytes see below	UJ, J
	$^{13C}_{12}$123789- HxCDD	36 %R	For target analytes see below	J
SW-CSD-S1FD	$^{13C}_{12}$1234- TCDD	38 %R	2378-TCDF	J
SW-CSB-S3	$^{13C}_{12}$1234- TCDD	37 %R	2378-TCDF	J

Note:

The associated target analytes for recovery standard $^{13C}_{12}$1234- TCDD include 2378-TCDD, 2378-TCDF, 12378-PeCDD, 12378-PeCDF, and 23478-PeCDF.

The associated target analytes for recovery standard $^{13C}_{12}$123789- HxCDD include 123678-HxCDD, 123478-HxCDD, 123789-HxCDD, 1234678-HpCDD, OCDD, 123678-HxCDF, 123789-HxCDF, 123478-HxCDF, 234678-HxCDF, 1234678-HpCDF, 1234789-HpCDF, and OCDF.

%R indicates percentage recovery.
TCDD indicates tetrachlorodibenzo-p-dioxin
TCDF indicates tetrachlorodibenzofuran
PeCDD indicates pentachlorodibenzo-p-dioxin
PeCDF indicates pentachlorodibenzofuran
HxCDD indicates hexachlorodibenzo-p-dioxin
HxCDF indicates hexachlorodibenzofuran
HpCDD indicates heptachlorodibenzo-p-dioxin
HpCDF indicates heptachlorodibenzofuran
OCDD indicates octachlorodibenzo-p-dioxin
OCDF indicates octachlorodibenzofuran

Second column confirmation

In the following samples, the 2378-TCDF concentration was confirmed by analysis on the DB-225 column.

Table 213. *2378-TCDF result confirmed on column DB-225 in surface water samples*

Sample ID	Reason for confirmation
SW-RA1-S2FD	Concentration of 2378-TCDF in sample above the detection limit
SW-CSD-S1FD	
SW-CSB-S3	

Sample re-analysis

The following samples were re-extracted and reanalyzed due to sample analysis excursions.

Table 214. *Surface water samples reanalyzed for PCDDS and PCDFs*

Sample ID	Reason for re-analysis
SW-PDC-DS SW-PDC-US SW-PDC-USFD	Quality control sample failure and low internal standard recoveries in the initial analysis; re-analysis provided improved quality control with the exception of samples SW-PDS-US and SW-PDC-DS, which exhibited low internal standard recoveries. The initial analyses of these samples were reported. The re-analysis of sample SW-PDC-USFD was reported.

Overall data assessment

- Target analytes in sample SW-PCD-USFD were qualified as approximate (UJ, J) since the sample was extracted outside of the holding time.
- Thirteen results for target analytes in surface water samples were qualified as EMPCs due to blank contamination.
- Ninety-two results for target analytes in surface water samples were qualified as approximate (UJ, J) due to recovery standard excursions.
- The results for 2378-TCDF in samples SW-RA1-S2FD, SW-CSD-S1FD, and SW-CSB-S3 were confirmed through the analysis utilizing the DB-225 column.
- Samples SW-PDC-DS, SW-PDC-US, and SW-PDC-USFD were reanalyzed due to analysis excursions.

8. Air

8.1. VOC analysis of air samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for VOCs analyzed by USEPA Method TO-1 were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- GC/MS tuning criteria
- Initial calibration
- Target analyte identification, reported detection limits, and system performance
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2 and any additional observations are summarized below.

Continuing calibration
Continuing calibrations analyzed 10/4/99 and 10/6/99 did not meet calibration criteria. Target analytes in air samples were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The samples qualified due to the minor calibration excursions are summarized in the following table.

Table 215. *Continuing calibration excursions for VOCs in air samples*

Continuing Calibration ID	Standard analytes	Excursion	Affected samples	Action
0910 10/4/99	Acetone	90.6 %D	AIR-V-13-TUBE1	UJ, J
	1,1-Dichloroethane	42.2 %D	AIR-V-1-TUBE2	
			AIR-V-2-TUBE2	
			AIR-V-3-TUBE2	
			AIR-V-4-TUBE2	
			AIR-V-5-TUBE2	
			AIR-V-6-TUBE2	
			AIR-V-7-TUBE2	
			AIR-V-8-TUBE2	
			AIR-V-9-TUBE2	
			AIR-V-10-TUBE2	
			AIR-V-11-TUBE2	
			AIR-V-12-TUBE2	
			AIR-V-13-TUBE2	

Table 215. *Continuing calibration excursions for VOCs in air samples*

Continuing Calibration ID	Standard analytes	Excursion	Affected samples	Action
1336 10/6/99	Chloromethane	34.2 %D	AIR-V-1-TUBE1	UJ, J
	Bromoform	33.9 %D	AIR-V-2-TUBE1	
	1,2-Dibromo-3-chloropropane	35.5 %D		
	Carbon disulfide	50.8 %D		
	Vinyl acetate	87.4 %D		

Note:
%D indicates percent difference.

Surrogate recovery
Surrogate compounds were not utilized in the analysis of air samples analyzed for VOCs. However, internal standards were added to samples prior to sample analysis to measure the recovery of target analytes during the analysis of the air samples.

Blank analysis
Considerable field blank contamination was detected during the evaluation of air samples for blank contamination. In addition, the concentrations of target analytes in the back-up tubes (TUBE-2) were not consistently less than 20%of the concentrations in the first tube (TUBE-1). Samples which contained common laboratory contaminants at less than ten times the blank concentration and remaining compounds at less than five times the blank concentration were qualified as undetected (U) due to the blank contamination. The blank excursions are summarized in the following table:

Table 216. *Blank excursions for VOC analyses in air samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
IC1004 MB	2-Butanone	0.12 µg/tube	AIR-V-13-TUBE1	U
			AIR-V-7-TUBE2	
			AIR-V-10-TUBE2	
	2-Hexanone	0.10 µg/tube	AIR-V-7-TUBE2	U
AIR-VFB	Chloromethane	0.92 µg/tube	AIR-V-1-TUBE1	U
			AIR-V-3-TUBE1	
			AIR-V-4-TUBE1	
			AIR-V-5-TUBE1	
			AIR-V-6-TUBE1	
			AIR-V-7-TUBE1	
			AIR-V-8-TUBE1	
			AIR-V-9-TUBE1	
			AIR-V-10-TUBE1	
			AIR-V-1-TUBE2	
			AIR-V-2-TUBE2	
			AIR-V-3-TUBE2	
			AIR-V-4-TUBE2	
			AIR-V-5-TUBE2	
			AIR-V-6-TUBE2	
			AIR-V-8-TUBE2	
			AIR-V-9-TUBE2	
			AIR-V-10-TUBE2	
			AIR-V-11-TUBE2	
			AIR-V-12-TUBE2	
			AIR-V-13-TUBE2	

Table 216. *Blank excursions for VOC analyses in air samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
	Styrene	0.012 µg/tube	AIR-V-4-TUBE1	U
			AIR-V-5-TUBE1	
			AIR-V-7-TUBE1	
			AIR-V-8-TUBE1	
			AIR-V-9-TUBE1	
			AIR-V-10-TUBE1	
			AIR-V-13-TUBE1	
			AIR-V-1-TUBE2	
			AIR-V-3-TUBE2	
			AIR-V-6-TUBE2	
			AIR-V-9-TUBE2	
			AIR-V-10-TUBE2	
			AIR-V-11-TUBE2	
			AIR-V-13-TUBE2	
	1,4-Dichlorobenzene	0.022 µg/tube	AIR-V-3-TUBE1	U
			AIR-V-4-TUBE1	
			AIR-V-5-TUBE1	
			AIR-V-7-TUBE1	
			AIR-V-8-TUBE1	
			AIR-V-9-TUBE1	
			AIR-V-10-TUBE1	
			AIR-V-12-TUBE1	
			AIR-V-1-TUBE2	
			AIR-V-3-TUBE2	
			AIR-V-7-TUBE2	
			AIR-V-8-TUBE2	
			AIR-V-11-TUBE2	
	Naphthalene	0.016 µg/tube	AIR-V-4-TUBE1	U
			AIR-V-7-TUBE2	
	Benzene	0.029 µg/tube	AIR-V-3-TUBE1	U
			AIR-V-4-TUBE1	
			AIR-V-7-TUBE1	
			AIR-V-8-TUBE1	
			AIR-V-9-TUBE1	
			AIR-V-13-TUBE1	
			AIR-V-1-TUBE2	
			AIR-V-3-TUBE2	
			AIR-V-4-TUBE2	
			AIR-V-5-TUBE2	
			AIR-V-6-TUBE2	
			AIR-V-7-TUBE2	
			AIR-V-8-TUBE2	
			AIR-V-9-TUBE2	
			AIR-V-10-TUBE2	
			AIR-V-13-TUBE2	

Table 216. *Blank excursions for VOC analyses in air samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
	Toluene	0.16 µg/tube	AIR-V-3-TUBE1	U
			AIR-V-4-TUBE1	
			AIR-V-5-TUBE1	
			AIR-V-6-TUBE1	
			AIR-V-7-TUBE1	
			AIR-V-8-TUBE1	
			AIR-V-9-TUBE1	
			AIR-V-10-TUBE1	
			AIR-V-12-TUBE1	
			AIR-V-13-TUBE1	
			AIR-V-1-TUBE2	
			AIR-V-2-TUBE2	
			AIR-V-3-TUBE2	
			AIR-V-4-TUBE2	
			AIR-V-5-TUBE2	
			AIR-V-6-TUBE2	
			AIR-V-8-TUBE2	
			AIR-V-9-TUBE2	
			AIR-V-10-TUBE2	
			AIR-V-11-TUBE2	
			AIR-V-12-TUBE2	
			AIR-V-13-TUBE2	

Note:
FB indicates field/equipment blank.

MS/MSD analysis
Although listed in the QAPP, an MS/MSD analysis was not performed for the air samples. Therefore, matrix effects were not evaluated for air samples analyzed for VOCs.

LCS analysis
The LCS analyses performed for the air samples analyzed for VOCs utilized a spiking solution that included only five representative target analytes. The LCS results provided for the air samples were evaluated during the validation process.

Internal standards performance
Recoveries for internal standards in sample AIR-V-3-TUBE1 were outside of the laboratory control limits. As a result of the internal standard excursions, affected target analytes were qualified as approximate (J) to indicate a minor accuracy excursion. The internal standard area excursions are summarized in the following table:

Table 217. *Internal standard area excursions for VOC analyses in air samples*

Sample ID	Internal standard	Excursion	Affected Analytes	Action
AIR-V-3-TUBE1	1,4-dichlorobenzene-d4	236 %R	Chloromethane	J
	1,2-dichloroethane-d4	312 %R	Methylene chloride	
	1,4-difluorobenzene	252 %R	Benzene	
	chlorobenzene-d2	247 %R	Toluene	
			M,P-Xylenes	
			Trichloroethene	
			Isoproplybenzene	
			1,4-Dichlorobenzene	
			Acetone	
			2-Butanone	

Note:
%R indicates percentage recovery.

Target analyte quantitation

The results for methylene chloride in samples AIR-V-3-TUBE1, AIR-V-11-TUBE1, AIR-V-2-TUBE2, and AIR-V-8-TUBE2 exceeded the calibration range. As a result of the quantitation excursion, the affected results for methylene chloride were qualified as approximate (J). The quantitation excursions are summarized in the following table:

Table 218. *Quantitation excursions for VOCs in air samples*

Sample ID	Affected analyte	Excursion	Action
AIR-V-3-TUBE1 AIR-V-11-TUBE1 AIR-V-2-TUBE2 AIR-V-8-TUBE2	Methylene chloride	Concentrations greater than calibration limit	J

Sample re-analysis

Samples were reanalyzed due to analysis excursions detected by the laboratory. The following table summarizes the samples reanalyzed.

Table 219. *Air samples reanalyzed for VOCs*

Sample ID	Reason for re-analysis
AIR-V-1-TUBE1 AIR-V-2-TUBE1	Samples were incorrectly analyzed and internal standard excursions were detected; reanalyses were performed using the correct method. Therefore, the re-analyses were reported.

Overall data assessment

- Thirty-eight results for target analytes in air samples were qualified as approximate (UJ, J) due to continuing calibration excursions.
- Four results for target analytes in air samples were qualified for blank contamination due to the detection of 2-butanone and 2-hexanone in a method blank.
- Eighty-eight results for target analytes in air samples were qualified for blank contamination due to the detection of the following analytes in the field blank: 2-butanone, 2-hexanone, chloromethane, styrene, 1,4-dichlorobenzene, naphthalene, benzene, toluene.
- Ten results for target analytes in sample AIR-V-3-TUBE1 were qualified as approximate (J) due to internal standard excursions.

- The results for methylene chloride in four air samples were qualified as approximate (J) due to quantitation excursions.
- Samples AIR-V-1-TUBE1 and AIR-V-2-TUBE1 were reanalyzed due to analysis excursions.

8.2. SVOC analyses of air samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for SVOCs analyzed by USEPA Method TO-13 were applied to the samples listed in Table A-1 and Table A-1 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Sample preservation
- GC/MS tuning criteria
- Initial and continuing calibration
- Surrogate recovery
- Internal standards performance
- Target analyte identification, quantitation, and system performance
- Sample re-analysis
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below

Holding times
The results for the target analytes in air samples which were extracted outside of the holding times were qualified as approximate (UJ, J) to indicate minor representativeness excursions. The following table summarizes the holding time excursions.

Table 220. *Holding time excursions for SVOCs in air samples*

Sample ID	Target analyte	Excursion	Action
AIR-S-1	Target analytes	3-4 days outside of extraction holding time	UJ, J
AIR-S-2			
AIR-S-3			
AIR-S-4			
AIR-S-5			
AIR-S-6			
AIR-S-7			
AIR-S-8			
AIR-S-9			

Blank analysis
Considerable field blank contamination was detected during the evaluation of air samples for blank contamination. Samples which contained ten times the blank concentration and remaining compounds at less than five times the blank concentration were qualified as undetected (U) due to the blank contamination. The blank excursions are summarized in the following table:

Table 221. *Blank excursion for SVOC analyses in air samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
AIR-SFB	Phenol	59 µg/puff	AIR-S-11 AIR-S-12 AIR-S-13 AIR-S-1 AIR-S-2 AIR-S-3 AIR-S-4 AIR-S-5 AIR-S-6 AIR-S-7 AIR-S-8 AIR-S-9	U
	Isophorone	6.2 µg/puff	AIR-S-10 AIR-S-11 AIR-S-12 AIR-S-13 AIR-S-1 AIR-S-2 AIR-S-4 AIR-S-6 AIR-S-7 AIR-S-8 AIR-S-9	U
	Naphthalene Di-n-butyl phthalate Butylbenzyl phthalate	52 µg/puff 61 µg/puff 450 µg/puff	AIR-S-10 AIR-S-11 AIR-S-12 AIR-S-13 AIR-S-1 AIR-S-2 AIR-S-3 AIR-S-4 AIR-S-5 AIR-S-6 AIR-S-7 AIR-S-8 AIR-S-9	U

Note:
MB indicates method blank.

MS/MSD analysis
Although listed in the QAPP, an MS/MSD analysis was not performed for the air samples. Therefore, matrix effects were not evaluated for air samples analyzed for SVOCs.

LCS analysis
The LCS analyses performed for the air samples analyzed for SVOCs utilized a spiking solution that included only representative target analytes. The LCS results provided for the air samples were evaluated during the validation process.

The recovery for target analytes in LCS analyses were outside of the laboratory control limits. The results in air samples were qualified as approximate (UJ, J) to indicate minor recovery excursions. The LCS excursions are summarized in the following table:

Table 222. *LCS excursions for SVOC analyses in air samples*

LCS ID	Analyte	Excursion	Affected Samples	Action
0917B	n-nitroso-di-n-propylamine	56 %R	AIR-S-10	UJ, J
	1,2,4-trichlorobenzene	56 %R	AIR-S-11	
	4-chloro-3-methyl phenol	65 %R	AIR-S-12	
	acenaphthalene	66 %R	AIR-S-13	
	2,4-dinitrotoluene	64 %R		
	pyrene	68 %R		
0920E	phenol	140 %R	AIR-S-1	J
			AIR-S-2	
			AIR-S-3	
			AIR-S-4	
			AIR-S-5	
			AIR-S-6	
			AIR-S-7	
			AIR-S-8	
			AIR-S-9	

Note:
%R indicates percentage recovery.

Target analyte reported detection limits

Air samples were analyzed at a dilution as a result of the presence of butylbenzyl phthalate in the samples and the field/equipment blank. The dilutions utilized in the analysis of SVOCs are summarized in the following table:

Table 223. *SVOCs in air samples analyzed by dilution*

Sample ID	Dilution Used	Reason
AIR-S-10	Undiluted/1:2*	High concentration of butylbenzyl phthalate
AIR-S-11		
AIR-S-12		
AIR-S-13		
AIR-S-1		
AIR-S-2		
AIR-S-4		
AIR-S-5		
AIR-S-6		
AIR-S-7		
AIR-S-8		
AIR-S-9		
AIR-S-3	1:2	High concentration of target analytes

Note:
* indicates that results from the two analyses were combined in the report; the detection limits and sample results were taken from the undiluted analysis and the results for sample results that exceeded the calibration range were taken from the larger dilution analysis and identified with a "D" qualifier.

Overall data assessment

- Nine air samples were qualified as approximate (UJ, J) due to holding time excursions
- Sixty-two results for target analytes in air samples were qualified for blank contamination since the following analytes were detected in the field/equipment blank: phenol, isophorone, naphthalene, di-n-butyl phthalate, butylbenzyl phthalate

- Thirty-three results for target analytes in air samples were qualified as approximate (UJ, J) due to LCS excursions.
- Thirteen air samples were analyzed at a dilution.

8.3. PCB analysis of air samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for PCBs analyzed by USEPA Method 680 were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- GC/MS tuning and window-defining criteria
- Initial and continuing calibration
- Blank analysis
- Sample data identification, quantitation, and system performance
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Surrogate recovery
Since samples were prepared using method TO4 and analyzed using method 680, surrogate concentrations were diluted and recoveries were not evaluated.

MS/MSD analysis
Although listed in the QAPP, an MS/MSD analysis was not performed for the air samples. Therefore, matrix effects were not evaluated for air samples analyzed for PCBs.

Internal standards criteria
Target analytes in sample AIR-P-1 were qualified as approximate (UJ,) due to an internal standard excursion to indicate a minor accuracy excursion. The following table summarizes the internal standard excursion.

Table 224. *Internal standard excursion for PCBs in air samples*

Sample ID	Internal standard	Excursion	Affected analytes	Action
AIR-P-1	Chrysene-d12	68 %R	Target analytes	UJ

Note:
%R indicates percentage recovery.

LCS analysis
Since samples were prepared using method TO4 and analyzed using method 680, LCS results were diluted and recoveries were not evaluated.

Sample re-analysis and reported detection limits
Air samples submitted for PCB analysis were extracted and analyzed using USEPA Method TO4. As a result of severe matrix interferences and elevated detection limits (1000 µg/puff) due to dilutions, samples were re-analyzed using USEPA Method 680 to achieve lower detection limits (1 µg/puff to 5 µg/puff). The results for TO4 were not reported.

Since the air samples were initially extracted for the TO4 method, the samples were analyzed using USEPA Method 680 at a dilution. The following table summarizes the dilutions used for air samples.

Table 225. *Air samples analyzed for PCBs at dilution*

Sample ID	Dilution used	Reason
AIR-P-1	1:10	Extractions performed using method TO4
AIR-P-2		
AIR-P-3		
AIR-P-4		
AIR-P-5		
AIR-P-6		
AIR-P-7		
AIR-P-8		
AIR-P-9		
AIR-P-10		
AIR-P-11		
AIR-P-12		
AIR-P-13		

Overall data assessment

- Target analytes in sample AIR-P-1 were qualified as approximate (UJ) due to an internal standard excursion.
- Air samples submitted for PCB analysis were extracted and analyzed using USEPA Method TO4. As a result of severe matrix interferences and elevated detection limits (1000 µg/puff) due to dilutions, samples were re-analyzed using USEPA Method 680 to achieve lower detection limits (1 µg/puff to 5 µg/puff). The results for TO4 were not reported.
- Since the air samples were initially extracted for the TO4 method, thirteen air samples were analyzed at a dilution.

8.4. Metal analysis of air samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for metals analyzed by USEPA Method 6010B were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- Calibration analysis
- ICP interference check sample analysis
- MS/MSD analysis

- Field duplicate analysis
- LCS analysis
- Laboratory duplicate analysis
- ICP serial dilution analysis
- Verification of instrument parameters
- Analyte quantitation and reported detection limits
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2 and any additional observations are summarized below.

Blank analysis

Considerable field blank contamination was detected during the evaluation of air samples for blank contamination. Target analytes were detected in calibration and field/equipment blanks which were analyzed for metals. The samples which contained target analytes at less than five times the associated blank concentration were qualified as not detected (U), and samples which contained target analytes at greater than five times the associated blank concentration were qualified as approximate (J) due to the blank contamination. The blank excursions are summarized in the following table:

Table 226. *Blank excursions for metal analyses in air samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
CCB5-CCB7 9/28/99	Aluminum	0.0042 mg/filter	AIR-M-1 AIR-M-2 AIR-M-3 AIR-M-4 AIR-M-5 AIR-M-6 AIR-M-7 AIR-M-8 AIR-M-9 AIR-M-11 AIR-M-12 AIR-M-13	U
	Aluminum	0.0042 mg/filter	AIR-M-10	J
	Barium Chromium	0.00023 mg/filter 0.00025 mg/filter	AIR-M-1 AIR-M-2 AIR-M-3 AIR-M-4 AIR-M-5 AIR-M-6 AIR-M-7 AIR-M-8 AIR-M-9 AIR-M-10 AIR-M-11 AIR-M-12 AIR-M-13	U
	Manganese	0.0023 mg/filter	AIR-M-1 AIR-M-2 AIR-M-4	J

Table 226. *Blank excursions for metal analyses in air samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
CCB5-CCB7 9/28/99	Manganese	0.0023 mg/filter	AIR-M-3 AIR-M-5 AIR-M-6 AIR-M-7 AIR-M-8 AIR-M-9 AIR-M-10 AIR-M-11 AIR-M-12 AIR-M-13	U
AIR-MFB	Calcium	0.0018 mg/filter	AIR-M-1 AIR-M-3 AIR-M-4 AIR-M-5 AIR-M-7 AIR-M-9 AIR-M-10 AIR-M-13	J
	Calcium	0.0018 mg/filter	AIR-M-2 AIR-M-6 AIR-M-8 AIR-M-11 AIR-M-12	U
	Copper	0.00045 mg/filter	AIR-M-1 AIR-M-2 AIR-M-3 AIR-M-4 AIR-M-5 AIR-M-6 AIR-M-7 AIR-M-9	J
	Copper	0.00045 mg/filter	AIR-M-8 AIR-N-10 AIR-M-11 AIR-M-12 AIR-M-13	U
	Iron	0.0018 mg/filter	AIR-M-13	J
	Iron	0.0018 mg/filter	AIR-M-1 AIR-M-2 AIR-M-3 AIR-M-4 AIR-M-5 AIR-M-6 AIR-M-7 AIR-M-8 AIR-M-9 AIR-M-10 AIR-M-11 AIR-M-12	U
	Potassium Zinc Tin	0.0011 mg/filter 0.0010 mg/filter 0.0012 mg/filter	AIR-M-1 AIR-M-2 AIR-M-3 AIR-M-4 AIR-M-5 AIR-M-6 AIR-M-7 AIR-M-8 AIR-M-9 AIR-M-10 AIR-M-11 AIR-M-12 AIR-M-13	U

Note:
CCB indicates continuing calibration blank.
FB indicates field/equipment blank.

Overall data assessment

- Fifty-two results for target analytes in air samples were qualified as non-detected (U) or approximate (J) due to calibration blank contamination.
- Seventy-eight results for air samples were qualified as non-detected (U) or approximate (J) since the following target analytes were detected in the field/equipment blank: calcium, copper, iron, potassium, zinc, tin.

8.5. PCDD and PCDF analysis of air samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for PCDD and PCDFs analyzed by USEPA Method TO9/8290 were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Sample preservation
- Instrument performance (mass resolution, GC column performance check)
- Initial and continuing calibration
- Blank analysis
- Duplicate analysis
- Estimated detection limits
- Estimated maximum possible concentration (EMPC)
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Holding times

Holding times were evaluated based on sample collection, extraction, and analysis dates using the criteria of seven days from collection to extraction and 40 days from extraction to analysis. The result for target analytes in air samples which were extracted outside of the holding time were qualified as approximate (UJ, J) to indicate minor representativeness excursions. The following table summarizes the holding time excursions.

Table 227. *Holding time excursions for PCDDs and PCDFs in air samples*

Sample ID	Target analyte	Excursion	Action
AIR-D-1	Target analytes	4 days outside of extraction holding time	UJ, J
AIR-D-2			
AIR-D-3			
AIR-D-4			
AIR-D-5			
AIR-D-6			
AIR-D-8			
AIR-D-9			
AIR-D-10			
AIR-D-11			
AIR-D-12			
AIR-D-13			
AIR-D-7	Target analytes	3 days outside of extraction holding time	UJ, J

Internal standard criteria

For sample AIR-D-7, major interferences were detected in the recovery standard 123789-HxCDD results from the initial analysis. Low internal standard recoveries were detected in the re-cleaned extracts; therefore the original analysis was reported with a limited target analyte list as a result of the major interferences associated with the recovery standard.

For the remaining air samples, major interferences were detected in the recovery standard 123789-HxCDD results from the initial analysis. The analysis of the re-cleaned extracts provided improved results but interferences associated with the recovery standard were still detected. The internal standard recoveries were biased high or biased low, depending on the response of the recovery standard due to the interferences. Sample results affected by the internal standards/recovery standard interferences were qualified accordingly during the validation process.

Target analytes associated with internal standards that exhibited recoveries of less than 25% or greater than 135%R were qualified as approximate (J) to indicate minor accuracy excursions. Six nondetected results for 123789-HxCDF, 123478-HxCDD, 123678-HxCDD, 123789-HxCDD, 1234678-HpCDF, and 1234789-HpCDF in sample AIR-D-13 were rejected (R) since the recoveries for the internal standards associate with the target analytes were less than 25%, to indicate major accuracy excursions. In accordance with laboratory policy, samples with internal standard recoveries that are outside criteria are acceptable if the signal-to-noise ratios are equal to or greater than 10:1. Therefore, corrective action was not performed by the laboratory. The following table summarizes the internal standard excursions.

Table 228. *Internal standard excursions for PCDDs and PCDFs in air samples*

Sample ID	Internal standard	Excursion	Affected analytes	Action
AIR-D-11	$^{13C}_{12}$ 2378-TCDF	23 %R	2378-TCDF	J
	$^{13C}_{12}$ 2378-OCDD	23 %R	OCDF OCDD	J
AIR-D-13	$^{13C}_{12}$ 123678-HxCDF	22 %R	123478-HxCDF 123678-HxCDF 234678-HxCDF 123789-HxCDF	J J J R
	$^{13C}_{12}$ 123678-HxCDD	23 %R	123478-HxCDD 123678-HxCDD 123789-HxCDD	R R R
	$^{13C}_{12}$ 1234678-HpCDF	20 %R	1234678-HpCDF 1234789-HpCDF	R R
	$^{13C}_{12}$ 1234678-HpCDD	21 %R	1234678-HpCDD	J
	$^{13C}_{12}$ 2378-OCDD	12 %R	OCDD OCDF	J J
AIR-D-7	Low internal standard recoveries were detected in the re-cleaned extracts; therefore, the original analysis was reported with a limited target analyte list as a result of the major interferences associated with the recovery standard. The reported target analyte list included 2378-TCDD, 2378-TCDF, 12378-PeCDD, 1234678-HpCDF, 1234789-HpCDF, 1234678-HpCDD, OCDD, and OCDF.			

Note:
%R indicates percentage recovery.
TCDF indicates tetrachlorodibenzofuran
HxCDD indicates hexachlorodibenzo-p-dioxin
HxCDF indicates hexachlorodibenzofuran
HpCDD indicates heptachlorodibenzo-p-dioxin
HpCDF indicates heptachlorodibenzofuran
OCDD indicates octachlorodibenzo-p-dioxin

Surrogate/alternative/cleanup standard recovery
Interferences were detected in the surrogate and alternative standard results analyzed for air samples. The samples affected by the interferences are described in the sample interference section presented below.

Recovery standard criteria
For sample AIR-D-7, major interferences were detected in the recovery standard 123789-HxCDD results from the initial analysis. Low internal standard recoveries were detected in the re-cleaned extracts; therefore the original analysis was reported with a limited target analyte list as a result of the major interferences associated with the recovery standard. The reported target analyte list included 2378-TCDD, 2378-TCDF, 12378-PeCDD, 1234678-HpCDF, 1234789-HpCDF, 1234678-HpCDD, OCDD, and OCDF.

For the remaining air samples, major interferences were detected in the recovery standard 123789-HxCDD results from the initial analysis. The re-cleaned extracts provided improved results but interferences associated with the recovery standard were still detected. The internal standard recoveries were biased high or biased low, depending on the response of the recovery standard due to the interferences. Sample results affected by the internal standards/recovery standard interferences were qualified accordingly during the validation process.

The recovery standard areas for several samples were outside of the criteria of 50% to 200% of the associated continuing calibration. As a result of recovery standard excursions, analytes in the affected samples were qualified as approximate (UJ, J) to indicate minor accuracy excursions.

The sample results qualified as a result of the recovery standard excursions are summarized in the following table.

Table 229. *Recovery standard area excursions for PCDDs and PCDFs in air samples*

Sample ID	Recovery standard	Excursion	Affected analytes	Action
AIR-D-12	$^{13C}_{12}$123789- HxCDD	ion abundance ratio exceeded limits	For target analytes see below	UJ, J
AIR-D-1 AIR-D-2 AIR-D-3 AIR-D-5 AIR-D-6 AIR-D-8 AIR-D-9 AIR-D-11 AIR-D-13	$^{13C}_{12}$123789- HxCDD	ion abundance ratio exceeded limits	For target analytes see below	UJ, J
AIR-D-12	$^{13C}_{12}$123789- HxCDD	257 %R	For target analytes see below	UJ, J
AIR-D-7	$^{13C}_{12}$1234- TCDD	31 %R	For target analytes see below	UJ, J

Note:

The associated target analytes for recovery standard $^{13C}_{12}$1234- TCDD in sample AIR-D-7 include 2378-TCDD, 2378-TCDF, 12378-PeCDD, 1234678-HpCDD, OCDD, 1234678-HpCDF, 1234789-HpCDF, OCDF.

The associated target analytes for recovery standard $^{13C}_{12}$123789- HxCDD include 123678-HxCDD, 123478-HxCDD, 123789-HxCDD, 1234678-HpCDD, OCDD, 123678-HxCDF, 123789-HxCDF, 123478-HxCDF, 234678-HxCDF, 1234678-HpCDF, 1234789-HpCDF, and OCDF.

%R indicates percentage recovery.
TCDD indicates tetrachlorodibenzo-p-dioxin
TCDF indicates tetrachlorodibenzofuran
PeCDD indicates pentachlorodibenzo-p-dioxin
PeCDF indicates pentachlorodibenzofuran
HxCDD indicates hexachlorodibenzo-p-dioxin
HxCDF indicates hexachlorodibenzofuran
HpCDD indicates heptachlorodibenzo-p-dioxin
HpCDF indicates heptachlorodibenzofuran
OCDD indicates octachlorodibenzo-p-dioxin
OCDF indicates octachlorodibenzofuran

MS/MSD analysis

Although listed in the QAPP, a MS/MSD samples were not collected and were not analyzed with the air sample batch. Laboratory precision was evaluated based on the LCS/LCSD results. The effect of the sample matrix could not be evaluated during the validation process.

LCS/LCSD analysis

The recovery for 123789-HxCDD in LCS/LCSD 49455 was outside the laboratory control limits. As a result of the LCS/LCSD excursion, 123789-HxCDD in the associated samples was qualified as approximate (J) to indicate a minor accuracy excursion. The following table summarizes the LCS/LCSD excursion.

Table 230. *LCS/LCSD excursion for PCDDs and PCDFs in air samples*

LCS/LCSD ID	Target analyte	Excursion	Affected samples	Action
49455	123789-HxCDD	134 %R	AIR-D-1 AIR-D-2 AIR-D-3 AIR-D-8 AIR-D-11 AIR-D-12	J

Note:
%R indicates percentage recovery.
HxCDD indicates hexachlorodibenzo-p-dioxin

Second column confirmation

Although the result for 2378-TCDF in samples AIR-D-11, AIR-D-12, and AIR-D-13 were reported at concentrations that were above the detection limits, these results were not confirmed by Triangle Labs on the DB-225 column due to insufficient sample volume. Therefore, the results for 2378-TCDF were qualified as approximate (J) in AIR-D-11, AIR-D-12, and AIR-D-13 since the concentrations are considered to be approximate without confirmation on the appropriate column. The following table summarizes the samples qualified due to confirmation excursions.

Table 231. *Air samples analyzed for PCDDs and PCDFs qualified due to confirmation excursion*

Sample ID	Affected target analyte	Action
AIR-D-11 AIR-D-12 AIR-D-13	2378-TCDF	J

Note:
TCDF indicates tetrachlorodibenzofuran

Sample data (identification and quantitation)

As a result of interferences, the affected target analytes were qualified as approximate (J) to indicate minor representativeness excursions. The following table summarizes the interferences detected in air samples.

Table 232. *Interferences detected in air samples analyzed for PCDDs and PCDFs*

Sample ID	Affected target analytes or internal standards	Qualified target analytes	Action
AIR-D-1 AIR-D-12	123789-HxCDD (target analyte)	123789-HxCDD	J
AIR-D-1 AIR-D-2 AIR-D-11 AIR-D-12 AIR-D-13	$^{13C}{}_{12}$123678-HxCDF (internal standard)	123478-HxCDF 123678-HxCDF 234678-HxCDF 123789-HxCDF	UJ, J

Table 232. *Interferences detected in air samples analyzed for PCDDs and PCDFs*

Sample ID	Affected target analytes or internal standards	Qualified target analytes	Action
AIR-D-1 AIR-D-2 AIR-D-3 AIR-D-11 AIR-D-12 AIR-D-13	$^{13C}_{12}$123678-HxCDD (internal standard)	123478-HxCDD 123678-HxCDD 123789-HxCDD	UJ, J
AIR-D-1 AIR-D-2 AIR-D-3 AIR-D-11 AIR-D-12 AIR-D-13	$^{13C}_{12}$1234678-HpCDF (internal standard)	1234678-HpCDF 1234789-HpCDF	UJ, J
AIR-D-1 AIR-D-2 AIR-D-3 AIR-D-11 AIR-D-12 AIR-D-13	$^{13C}_{12}$1234678-HpCDD (internal standard)	1234678-HpCDD	J
AIR-D-1 AIR-D-2 AIR-D-3 AIR-D-11 AIR-D-12 AIR-D-13	$^{13C}_{12}$1234- OCDD (internal standard)	OCDD OCDF	J
AIR-D-1 AIR-D-2 AIR-D-11 AIR-D-12 AIR-D-13	$^{13C}_{12}$123478-HxCDF $^{13C}_{12}$123478-HxCDD $^{13C}_{12}$1234789-HpCDF $^{13C}_{12}$123789-HxCDF $^{13C}_{12}$234678-HxCDF $^{13C}_{12}$123789-HxCDD (surrogate/alternative/recovery standards)	NA	NA
AIR-D-3	$^{13C}_{12}$123478-HxCDD $^{13C}_{12}$1234789-HpCDF $^{13C}_{12}$123789-HxCDD (surrogate/alternative/recovery standards)	NA	NA
AIR-D-5 AIR-D-6 AIR-D-8 AIR-D-9	$^{13C}_{12}$123789-HxCDD (recovery standards)	NA	NA

Note:
HxCDD indicates hexachlorodibenzo-p-dioxin
HxCDF indicates hexachlorodbenzofuran
HpCDD indicates heptachlorodbenzo-p-dioxin
HpCDF indicates heptachlorodibenzofuran
OCDD indicates octachlorodibenzo-p-dioxin
OCDF indicates octachlorodibenzofuran

Sample re-analysis

The following samples were reanalyzed due to sample analysis excursions.

Table 233. *Air samples reanalyzed for PCDDs and PCDFs*

Sample ID	Reason for re-analysis
AIR-D-7	Major interferences present in the recovery standard results from the initial analysis; low internal standard recoveries detected in the re-cleaned extract. Therefore, original analysis reported with limited target analyte list due to major interferences present. List included 2378-TCDD, 2378-TCDF, 12378-PeCDD, 1234678-HpCDF, 1234789-HpCDF, 1234678-HpCDD, OCDD, and OCDF.
AIR-D-1 AIR-D-2 AIR-D-3 AIR-D-4 AIR-D-5 AIR-D-6 AIR-D-8 AIR-D-9 AIR-D-10 AIR-D-11 AIR-D-12 AIR-D-13	Major interferences present in the recovery standard results from the initial analysis; re-cleaned extract provided improved results but interferences were still detected. Sample results affected by internal standards/recovery standard interferences were qualified accordingly during the validation process.

Overall data assessment

- Target analytes in the following samples were qualified as approximate (UJ, J) since the samples were extracted outside of the holding time: AIR-D-1, AIR-D-2, AIR-D-3, AIR-D-4, AIR-D-5, AIR-D-6, AIR-D-8, AIR-D-9, AIR-D-10, AIR-D-11, AIR-D-12, AIR-D-13, AIR-D-7.
- The non-detected results for 123789-HxCDF, 123478-HxCDD, 123678-HxCDD, 123789-HxCDD, 1234678-HpCDF, and 1234789-HpCDF in sample AIR-D-13 were rejected (R) since the recoveries for the internal standards associate with the target analytes were less than 25%.
- Nine results for the target analytes in air samples were qualified as approximate (J) due to internal standard recovery excursions.
- For sample AIR-D-7, the original analysis was reported with a limited target analyte list as a result of the major interferences associated with the recovery standard. The reported target analyte list included 2378-TCDD, 2378-TCDF, 12378-PeCDD, 1234678-HpCDF, 1234789-HpCDF, 1234678-HpCDD, OCDD, and OCDF.
- One hundred twenty results for target analytes in air samples were qualified as approximate (UJ, J) due to identification excursions in the recovery standards.
- Twenty results for target analytes in air samples were qualified as approximate (J) due to recovery standard excursions.
- The results for 2378-TCDF in samples AIR-D-11, AIR-D-12, and AIR-D-13 were confirmed utilizing an analysis on the DB-225 column.
- Six results for target analytes in air samples were qualified as approximate (J) due to LCS/LCSD accuracy excursions.

- Seventy results for target analytes were qualified as approximate (UJ, J) due to identification excursions.
- Samples AIR-D-1, AIR-D-2, AIR-D-3, AIR-D-4, AIR-D-5, AIR-D-6, AIR-D-7, AIR-D-8, AIR-D-9, AIR-D-10, AIR-D-11, AIR-D-12, and AIR-D-13 were reanalyzed due to interferences present in the initial analyses.

9. Biota

9.1. SVOC analyses of biota samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for SVOCs analyzed by USEPA Method 8270C were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- GC/MS tuning criteria
- Initial and continuing calibration
- Surrogate recovery
- MS/MSD analysis
- Internal standards performance
- Target analyte identification, reported detection limits, and system performance
- Sample re-analysis
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Blank analysis
Samples which contained common laboratory contaminants at less than ten times the blank concentration and remaining compounds at less than five times the blank concentration were qualified as undetected (U) due to the blank contamination. The blank excursions are summarized in the following table:

Table 234. *Blank excursion for SVOC analyses in biota samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
0204A MB	Diethyl phthalate	24 µg/Kg	WCREF1COMP1 WCREF1COMP2 WCREF2COMP1 WCREF2COMP2 WC BP COMP 2 WC BP COMP 3	U

Table 234. *Blank excursion for SVOC analyses in biota samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
0205B MB	Diethyl phthalate	41 µg/Kg	WC BP COMP 1 LMB BP COMP 1 LMB BP COMP 2 LMB BP COMP 3 LMB REF 1 COMP 1 LMB REF 1 COMP 2 LMB REF 2 COMP 1 LMB REF 2 COMP 2	U
	Bis(2-ethyl hexyl) phthalate	53 µg/Kg	WC BP COMP 1 LMB BP COMP 1 LMB BP COMP 2 LMB BP COMP 3 LMB REF 1 COMP 1 LMB REF 1 COMP 2 LMB REF 2 COMP 1 LMB REF 2 COMP 2	U
	Chrysene	80 µg/Kg	LMB BP COMP 2	U
	Benzo(b)fluoranthene	50 µg/Kg	WC BP COMP 1 LMB BP COMP 2 LMB BP COMP 3 LMB BP COMP 1 LMB REF 1 COMP 1	U
	Benzo(k)fluoranthene	61 µg/Kg	WC BP COMP 1 LMB COMP 1 LMB COMP 2 LMB COMP 3 LMB REF 1 COMP 1 LMB REF 1 COMP 2	U
	Benzo(a)pyrene	54 µg/Kg	WC BP COMP 1 LMB BP COMP 1 LMB BP COMP 2 LMB BP COMP 3 LMB REF 1 COMP 1 LMB REF 1 COMP 2 LMB REF 2 COMP 1	U
	Indeno(1,2,3-cd)pyrene	38 µg/Kg	WC BP COMP 1 LMB BP COMP 1 LMB BP COMP 2 LMB BP COMP 3 LMB REF 1 COMP 1 LMB REF 1 COMP 2 LMB REF 2 COMP 1	U
	Dibenzo(a,h)anthracene	39 µg/Kg	WC BP COMP 1 LMB BP COMP 1 LMB BP COMP 2 LMB BP COMP 3 LMB REF 1 COMP 1 LMB REF 1 COMP 2 LMB REF 2 COMP 1 LMB REF 2 COMP 2	U
	Benzo(g,h,i)perylene	40 µg/Kg	WC BP COMP 1 LMB BP COMP 1 LMB BP COMP 2 LMB BP COMP 3 LMB REF 1 COMP 1 LMB REF 1 COMP 2 LMB REF 2 COMP 1	U

Note:
MB indicates method blank.

LCS analysis
The LCS analyses performed for the biota samples analyzed for SVOCs utilized a spiking solution that included only representative target analytes. The LCS results provided for the biota samples were evaluated during the validation process.

Target analyte quantitation
Biota samples analyzed for SVOCS were reported uncorrected for lipids.

Overall data assessment
- Sixty-three results for target analytes in biota samples were qualified for blank contamination.
- Biota samples analyzed for SVOCS were reported uncorrected for lipids.

9.2. Pesticide analysis of biota samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for pesticides analyzed by USEPA Method 8081A were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- GC performance
- Analytical sequence
- Initial calibration
- Blank analysis
- Surrogate analysis
- MS/MSD analysis
- LCS analysis
- Retention time window
- Target analyte identification, and system performance
- Sample re-analysis
- Cleanup verification
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Calibration verification
The calibration verification criterion for methoxychlor in the calibration verification analysis of 2/18/00 on both the DB-608 and DB-5 columns was not met. The results for methoxychlor in samples affected by the excursion were qualified as approximate (UJ) to indicate minor accuracy excursions. The samples qualified due to the minor calibration excursions are summarized in the following table.

Table 235. *Calibration verification excursions for pesticides in biota samples*

Calibration verification ID	Standard analytes	Excursion	Affected samples	Action
1806/1928	Methoxychlor	23.3 %D (DB-608)	WC BP COMP 2	UJ
2/18/00		30.3 %D (DB-5)	WB BP FILLET 2	

Note:
%D indicates percent difference.

Confirmation analysis

For target analytes that were detected by the laboratory but were at concentrations that were less than the reported detection limit, the laboratory applied a "J" flag to the analyte result. During the validation process, the "J" flag was retained since the concentration is considered to be approximate. Due to the numerous values reported by the laboratory below the reported detection limits, if the RPD values were greater than 40% for the confirmation analysis and the target analyte concentration was flagged "J," additional validation qualifiers were not applied to the sample data.

The RPD values calculated for positive results from the two chromatographic columns (DB608, DB5) in biota samples were greater than 40% indicating confirmation excursions. Target analytes with a RPD greater than 40% were qualified as approximate (J) to indicate minor representativeness excursions. The analyte identification excursions are summarized in the following table:

Table 236. *Analyte confirmation excursions for pesticide analyses in biota samples*

Sample ID	Analyte	Excursion	Action
LMB BP COMP 1	Gamma chlordane	69 RPD	J
WC REF 2 COMP 1	Heptachlor	128 RPD	J
WB BP FILLET 2	4,4'-DDE	48 RPD	J
	Gamma chlordane	161 RPD	J

Note:
RPD indicates relative percent difference.

Target analyte quantitation

Biota samples analyzed for pesticides were reported uncorrected for lipids.

Target analyte reported detection limits

Samples were analyzed at a dilution as a result of matrix interferences present in the samples. The dilutions utilized in the analysis of biota samples for pesticides are summarized in the following table:

Table 237. *Pesticides in biota samples analyzed by dilution*

Sample ID	Dilution Used	Reason
WC BP COMP 1	1:5	Matrix interference
LMB BP COMP 1		
LMB BP COMP 2		
LMB BP COMP 3		
LMB REF 1 COMP 1		
LBM REF 2 COMP 1		
LMB REF 2 COMP 2		
LMB REF 1 COMP 2	1:2	Matrix interference

Overall data assessment

- The results for methoxychlor in samples WC BP COMP 2 and WB BP FILLET 2 were qualified as approximate (UJ) due to calibration verification excursions.
- Four results for target analytes in air samples were qualified as approximate (J) due to confirmation excursions.
- Eight biota samples were analyzed at a dilution.
- Biota samples analyzed for pesticides were reported uncorrected for lipids.

9.3. Herbicide analysis of biota samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for herbicides analyzed by USEPA Method 8151A were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- GC performance
- Analytical sequence
- Initial calibration and calibration verification
- Retention time window
- Target analyte identification, reported detection limits, and system performance
- Cleanup verification

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Blank analysis

Samples which contained target analytes at less than five times the blank concentration were qualified as undetected (U) due to the blank contamination. The blank excursions are summarized in the following table:

Table 238. *Blank excursions for herbicide analyses in biota samples*

Blank ID	Analyte	Concentration	Affected Samples	Action
0208OO MB	Pentachlorophenol	1.5 µg/Kg	LMB BP COMP 1 LMB BP COMP 3 LMB REF 1 COMP 1 LMB REF 1 COMP 2 LMB REF 2 COMP 2	U

Note:
MB indicates method blank.

Surrogate recovery

Recoveries for surrogates in biota samples were outside of the laboratory control limits. As a result of the surrogate recovery excursions, target analytes were qualified as approximate (UJ) to indicate minor accuracy excursions. The surrogate recovery excursions are summarized in the following table:

Table 239. *Surrogate excursion for herbicide analysis in biota samples*

Sample ID	Surrogate	Excursion	Affected analytes	Action
WC BP COMP 1	DCAA	28 %R (DB-608) 26 %R (DB-5)	Target analytes	UJ
LMB REF 2 COMP 1	DCAA	0 %R (DB-608)*	Target analytes	UJ

Note: %R indicates percentage recovery.
DCAA indicates 2,4-dichlorophenylacetic acid.
* indicates that sample results were qualified as approximate since the criteria were met on the DB-5 column.

MS/MSD analysis

The results for target analytes in MS/MSD samples LMB BP COMP 1 were qualified as approximate (UJ, J) to indicate minor accuracy and precision excursions. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 240. *MS/MSD excursions for herbicide analyses in biota samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
LMB BP COMP 1	Dinoseb	11 %R, 19 %R	LMB BP COMP 1	UJ
	Dalapon	79 RPD		UJ
	Dichloroprop	108 RPD		UJ
	Dicamba	80 RPD		J
	2,4-DB	100 RPD		UJ

Note:
%R indicates percentage recovery.
RPD indicates relative percent difference.

LCS analysis

Recoveries for one LCS result was outside of the laboratory control limits. The target analyte in sample LMB BP COMP 2 was qualified as approximate (UJ) to indicate a minor accuracy excursion. The LCS excursion is summarized in the following table:

Table 241. *LCS excursion for herbicide analyses in biota samples*

LCS ID	Analyte	Excursion	Affected Samples	Action
0307P	2,4-DB	48 %R	LMB BP COMP 2	UJ

Note:
%R indicates percentage recovery.

Confirmation analysis
For target analytes that were detected by the laboratory but were at concentrations that were less than the reported detection limit, the laboratory applied a "J" flag to the analyte result. During the validation process, the "J" flag was retained since the concentration is considered to be approximate.

One RPD value calculated for positive results from the two chromatographic columns (DB608, DB5) in biota sample LMB BP COMP 3 was greater than 40% indicating a confirmation excursion. The target analyte with an RPD greater than 40% was qualified as approximate (J) to indicate a minor representativeness excursion. The analyte identification excursion is summarized in the following table:

Table 242. *Analyte confirmation excursion for herbicide analyses in biota samples*

Sample ID	Analyte	Excursion	Action
LMB BP COMP 3	MCPA	151 RPD	J

Note:
RPD indicates relative percent difference.

Sample re-analysis
The following samples were reanalyzed due to sample analysis excursions.

Table 243. *Biota samples reanalyzed for herbicides*

Sample ID	Reason for re-analysis
WC BP COMP 1	Samples were re-extracted due to surrogate excursions. Initial analyses were reported since the re-extraction analysis did not provide improved surrogate recovery results.
LMB BP COMP 2	Samples were re-extracted due to surrogate excursions. Re-analysis was reported since the re-extraction analysis provided improved surrogate recovery results.

Target analyte quantitation
Biota samples analyzed for herbicides were reported uncorrected for lipids.

Data completeness
The raw data included in the data package for biota samples incorrectly labeled both column results as DB-5 information. The correct column information was provided during the validation process.

Overall data assessment

- The results for pentachlorophenol in samples LMB BP COMP 1, LMB BP COMP 3, LMB REF 1 COMP 1, LMB REF 1 COMP 2, and LMB REF 2 COMP 2 were qualified for blank contamination.
- Target analytes in samples WC BP COMP 1 and LMB REF 2 COMP 1 were qualified as approximate (UJ) due to surrogate recovery excursions.
- Four results for target analytes in sample LMB BP COMP 1 were qualified as approximate (UJ, J) due to MS/MSD precision excursions.
- One result for a target analyte in sample LMB BP COMP 1 was qualified as approximate (UJ) due to a MS/MSD accuracy excursion.
- The result for 2,4-DB in sample LMB BP COMP 2 was qualified as approximate (UJ) due to an LCS excursion.
- The result for MCPA in sample LMB BP COMP 3 was qualified as approximate (J) due to a confirmation excursion.
- Samples WC BP COMP 1 and LMB BP COMP 2 were reanalyzed due to analysis excursions.
- Biota samples analyzed for herbicides were reported uncorrected for lipids.

9.4. PCB analysis of biota samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for PCBs analyzed by USEPA Method 680 were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- GC/MS tuning and window-defining criteria
- Initial and continuing calibration
- Blank analysis
- Internal standards criteria
- LCS analysis
- Sample data identification, reported detection limits and system performance
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

MS/MSD analysis

Target analytes in the MS/MSD sample were qualified as approximate (J) to indicate minor accuracy excursions. The following table presents the target analytes qualified as a result of the MS/MSD excursions:

Table 244. *MS/MSD excursions for PCB analyses in biota samples*

MS/MSD ID	Analyte	Excursion	Affected Samples	Action
LMB BP COMP 1	TRCB	31 %R, 31 %R	LMB BP COMP 1	J
	PTCB	25 %R, 32 %R	LMB BP COMP 1.	J
	HXCB	0 %R, 0 %R	LMB BP COMP 1	J

Note: %R indicates percentage recovery.

TRCB indicates tetrachlorobiphenyl
PTCB indicates pentachlorobiphenyl
HXCB indicates hexachlorobiphenyl

Surrogate recovery

The surrogate recoveries for samples were outside of the laboratory control limits. Target analytes in affected samples were qualified as approximate (UJ, J) to indicate minor accuracy excursions. Samples qualified due to surrogate excursions are summarized in the following table.

Table 245. *Surrogate excursions for PCBs in biota samples*

Sample ID	Surrogate ID	Excursion	Affected target analytes	Action
LMB BP COMP 2	$^{13}C_{12}$ decachlorobiphenyl	28 %R	Target analytes	UJ, J
LMBREF2COMP1	$^{13}C_{12}$ decachlorobiphenyl	25 %R	Target analytes	UJ
LMBREF2COMP2	$^{13}C_{12}$ decachlorobiphenyl	26 %R	Target analytes	UJ

Note:
%R indicates percentage recovery.

Sample re-analysis

The following sample was re-extracted and reanalyzed due to a sample analysis excursion.

Table 246. *Biota samples reanalyzed for PCBs*

Sample ID	Reason for re-analysis
LMB BP COMP 2 LMBREF2COMP1 LMBREF2COMP2	Samples were reanalyzed due to surrogate excursions; the reanalyses did not provide improved results. Therefore, initial analyses were reported.

Target analyte quantitation

Biota samples analyzed for PCBs were reported uncorrected for lipids.

Overall data assessment

- Three results for target analytes in sample LMB BP COMP 1 were qualified as approximate (J) due to MS/MSD accuracy excursions.
- Target analytes in samples LMB BP COMP 2, LMB REF 2 COMP 1, and LMB REF 2 COMP 2 were qualified as approximate (UJ, J) due to surrogate excursions.
- Samples LMB BP COMP 2, LMB REF 2 COMP 1 and LMB REF 2 COMP 2 were reanalyzed due to analysis excursions.
- Biota samples analyzed for PCBs were reported uncorrected for lipids.

9.5. Metals, mercury, and cyanide analysis of biota samples

Criteria compliance

The QA/QC parameters presented in Section 1.2.2 for selected metals analyzed by USEPA Method 6010B (including aluminum, beryllium, cadmium, chromium, copper, lead, nickel, selenium, and zinc), mercury by USEPA Method 7470A, cyanide by USEPA Method 9010B, antimony by USEPA Method 7041, arsenic by USEPA Method 7060A, and silver by USEPA Method 7761 were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times and sample preservation
- Calibration analysis
- ICP interference check sample analysis
- Field duplicate analysis
- LCS analysis
- Laboratory duplicate analysis
- ICP serial dilution analysis
- Verification of instrument parameters
- Analyte quantitation and reported detection limits
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2 and any additional observations are summarized below.

Blank analysis

Target analytes were detected in preparation blank, which were analyzed for metals. The samples which contained target analytes at less than five times the associated blank concentration were qualified as not detected (U), and samples which contained target analytes at greater than five times the associated blank concentration were qualified as approximate (J) due to the blank contamination. The blank excursions are summarized in the following table:

Table 247 *Blank excursions for metal analyses in biota samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
PBS1 2/7/00	Aluminum	5.28 mg/Kg	WCREF1COMP1 WCREF1COMP2 WCREF2COMP1 WCREF2COMP2 WC BP COMP 2 WC BP COMP 3	U
PBS2 2/7/00	Zinc	0.662 mg/Kg	WCREF1COMP1 WCREF1COMP2 WCREF2COMP1 WCREF2COMP2 WC BP COMP 2 WC BP COMP 3	U

Table 247 *Blank excursions for metal analyses in biota samples*

Blank ID	Analyte	Detected Concentration	Affected Sample Results	Action
PBS2 2/7/00	Aluminum	3.57 mg/Kg	WC BP COMP 1 LMB BP COMP 1	U
	Aluminum	3.57 mg/Kg	LMB BP COMP 2 LMB BP COMP 3 LMB REF 1 COMP 1 LMB REF 1 COMP 2 LMB REF 2 COMP 1 LMB REF 2 COMP 2	J
PBS1 2/7/00	Zinc	1.02 mg/Kg	WC BP OMP 1 LMB BP COMP 1 LMB BP COMP 2 LMB BP COMP 3 LMB REF 1 COMP 1 LMB REF 1 COMP 2 LMB REF 2 COMP 1 LMB REF 2 COMP 2	J
PBS1 2/7/00	Mercury	0.00405 mg/Kg	WC BP COMP 1 LMB BP COMP 1	U
	Mercury	0.00405 mg/Kg	LMB BP COMP 2 LMB BP COMP 3 LMB REF 1 COMP 1 LMB REF 1 COMP 2 LMB REF 2 COMP 1 LMB REF 2 COMP 2	J

Note:
PB indicates preparation blank.

MS/MSD analysis

Target analytes in MS samples analyzed for metals were outside of the laboratory control limits. Post-digestion spikes analyses met method criteria, which confirmed the matrix interference for these samples. When the sample concentrations were less than four times the spike concentrations, target analytes with MS recoveries that were outside of control limits, but are greater than 30% were qualified as approximate (UJ, J) to indicate minor accuracy excursions. The following table presents the target analytes qualified as a result of the MS/MSD excursions::

Table 248. *MS/MSD excursions for metal in biota samples*

MS/MSD ID	Analyte	Excursion	Affected Sample	Action
Batch QC S916900-1	Mercury	52 %R, 70 %R	WC REF 1 COMP 1 WC REF 1 COMP 2 WC REF 2 COMP 1 WC REF 2 COMP 2 WC BP COMP 2 WC BP COMP 3	UJ, J
	Zinc	211 %R, 153 %R	WC REF 1 COMP 1 WC REF 1 COMP 2 WC REF 2 COMP 1 WC REF 2 COMP 2 WC BP COMP 2 WC BP COMP 3	J

Table 248. *MS/MSD excursions for metal in biota samples*

MS/MSD ID	Analyte	Excursion	Affected Sample	Action
LMB BP COMP 1	Arsenic	35 %R, 36 %R	WC BP COMP 1 LMB BP COMP 1 LMB BP COMP 2 LMB BP COMP 3 LMB REF 1 COMP 1 LMB REF 1 COMP 2 LMB REF 2 COMP 1 LMB REF 2 COMP 2	UJ, J
LMB BP COMP 3	Mercury	69 %R, 70 %R	WC BP COMP 1 LMB BP COMP 1 LMB BP COMP 2 LMB BP COMP 3 LMB REF 1 COMP 1 LMB REF 1 COMP 2 LMB REF 2 COMP 1 LMB REF 2 COMP 2	UJ, J

Note: %R indicates percentage recovery.

Furnace atomic adsorption analysis

The furnace atomic absorption spike recoveries for arsenic in biota samples were outside the laboratory control limits. As a result of the spike recovery excursions, the results for arsenic in affected samples were qualified as approximate (UJ, J) to indicate minor recovery excursions. The furnace atomic absorption spike excursions are summarized in the following table:

Table 249. *Furnace atomic absorption spike excursions for metal analyses in biota samples*

Sample ID	Analyte	Excursion	Action
WC REF 1 COMP 1	Arsenic	73 %R	UJ
WC REF 1 COMP 2		62 %R	
WC REF 2 COMP 1		65 %R	
WC REF 2 COMP 2		57 %R	
WC BP COMP 2		68 %R	
WC BP COMP 3		64 %R	
LMB BP COMP 1		75 %R	
LMB REF 1 COMP 2		53 %R	
LMB BP COMP 3		75 %R	
LMB REF 2 COMP 1		56 %R	
LMB REF 2 COMP 2		77 %R	
WC BP COMP 1	Arsenic	65 %R	J

Note:
%R indicates percent difference.

Overall data assessment

- Thirty-six results for target analytes in biota samples were qualified as non-detected (U) or approximate (J) due to blank contamination.
- Twenty-eight results for target analytes for biota samples were qualified as approximate (UJ, J) due to MS/MSD recovery excursions.
- The results for arsenic in 12 biota samples were qualified as approximate (UJ, J) due to furnace atomic absorption spike recovery excursions.

9.7. PCDD and PCDF analysis of biota samples

Criteria compliance
The QA/QC parameters presented in Section 1.2.2 for PCDD and PCDFs analyzed by USEPA Method 8290 were applied to the samples listed in Table A-1 and Table A-2 in Appendix A. The following QA/QC parameters were found to meet validation criteria:

- Holding times, sample preservation
- Instrument performance (mass resolution, GC column performance check)
- Initial and continuing calibration
- Internal standard criteria
- Surrogate/alternative/cleanup standard recovery
- Duplicate analysis
- LCS/LCSD analysis
- MS/MSD analysis
- Estimated detection limits
- Estimated maximum possible concentration (EMPC)
- Sample re-analysis
- Data completeness

Excursions from QA/QC criteria presented in Section 1.2.2. and any additional observations are summarized below.

Blank analysis
Target analytes were detected in the method blank analyzed for PCDDs and PCDFs. Samples with target analytes at concentrations less than or equal to five times the concentrations in the associated method blank were flagged as EMPCs. The samples flagged as EMPCs due to method blank contamination are summarized in the following table.

Table 250. *Blank contamination for PCDDS and PCDFs in biota samples*

Blank ID	Target analyte	Concentration	Affected samples	Action
MB 50409	1234678-HpCDD	0.97 ppt	WC REF 1 COMP 1 WC REF 1 COMP 2 LMB BP COMP 1 LMB BP COMP 2	EMPC
MB 50409	OCDD	19.2 ppt*	WC BP COMP 1 WC BP COMP 2 WC BP COMP 3 WC REF 1 COMP 1 WC REF 1 COMP 2 WC REF 2 COMP 2 LMB BP COMP 1 LMB BP COMP 2 LMB BP COMP 3	EMPC
MB 50409	OCDF	3.5 ppt	WC BP COMP 1 WC REF 1 COMP 1 LMB BP COMP 1 LMB BP COMP 2 LMB BP COMP 3	EMPC

Table 250. *Blank contamination for PCDDS and PCDFs in biota samples*

* indicates that the concentration of OCDD in the method blank was greater than the reported detection limit. The re-analysis of the samples associated with the method blank was not performed since sufficient sample volume was not available for re-extraction.

Note:
MB indicates method blank.
ppt indicates parts per trillion
HpCDD indicates hepachlorodibenzo-p-dioxin
OCDD indicates octachlorodibenzo-p-dioxin
OCDF indicates octachlorodibenzofuran

Recovery standard criteria

The recovery standard areas for several samples were outside of the criteria of 50% to 200% of the associated continuing calibration. As a result of a recovery standard excursion, 2378-TCDF in sample LMBREF2COMP1 was qualified as approximate (J) to indicate a minor accuracy excursion.

The sample result qualified as a result of the recovery standard excursion is summarized in the following table.

Table 251. *Recovery standard area excursion for PCDDs and PCDFs in biota samples*

Sample ID	Recovery standard	Excursion	Affected analytes	Action
LMB REF 2 COMP 1	$^{13C}{}_{12}$1234- TCDD (DB225)	245 %R	2378-TCDF	J

Note:
%R indicates percentage recovery.
TCDD indicates tetrachlorodibenzo-p-dioxin
TCDF indicates tetrachlorodibenzofuran

Sample data (identification and quantitation)

Sufficient sample volume was not available to perform the percentage lipids determination for the biota samples. Therefore, biota sample results were reported without correction for percentage lipids.

Second column confirmation

In the following sample, the 2378-TCDF concentration was confirmed by analysis on the DB-225 column.

Table 252. *2378-TCDF result confirmed on column DB-225 in biota samples*

Sample ID	Reason for confirmation
WC BP COMP 1	Concentration of 2378-TCDF in sample above the detection limit
WC BP COMP 2	
WC BP COMP 3	
LMB BP COMP 1	
LMB BP COMP 2	
LMB BP COMP 3	
LMB REF 2 COMP 1	

Overall data assessment

- Fourteen results for target analytes in biota samples were qualified as EMPCs due to blank contamination.

- The result for 2378-TCDF in sample LMBREF2COMP1 was qualified as approximate (J) due to a recovery excursion in the recovery standard result.
- The results for 2378-TCDF in samples WC BP COMP 1, WC BP COMP 2, WC BP COMP 3, LMB BP COMP 1, LMB BP COMP 2, LMB BP COMP 3, and LMB REF 2 COMP 1 were confirmed utilizing an analysis on the DB-225 column.

10. Summary and data usability

The environmental samples and field duplicates collected for the Sauget investigation and submitted for data validation were evaluated based on QA/QC criteria established by USEPA Methods and the QAPP as listed in Section 1.2.2. Data validation qualifiers were applied to environmental samples and field duplicates utilizing the USEPA data validation guidance as listed in Section 1.2.2. The matrix spikes, matrix spike duplicates, field duplicates, trip blanks, and field/equipment blanks collected with the environmental samples were not qualified during data validation, but were used during the evaluation process. In accordance with USEPA Region V guidance, the field/equipment blanks and field duplicates collected for the metals and inorganic samples only were utilized to evaluate and qualify the environmental samples and field duplicates. Results for the field/equipment blanks and comparisons of the field duplicate samples that were collected for the remaining types of analyses are presented in Appendix C and Appendix E, respectively. Major deficiencies in the data generation process resulted in some data being rejected, indicating that the data is considered unusable for either quantitative or qualitative purposes. Minor deficiencies in the data generation process resulted in some sample data being characterized as approximate. Identification of a data point as approximate indicates uncertainty in the reported concentration of the chemical, but not its assigned identity. The quantitative use of approximated analytical data is consistent with the guidance presented in the USEPA Risk Assessment Guidance for Superfund (USEPA 1992).

Based on the QA/QC information review and the qualifiers assigned to the analytical data, an overall evaluation of the data's usability was performed for each type of analysis performed for waste, ground water, soil, sediment, surface water, air and biota samples analyzed for this investigation. The data usability evaluation considered the data parameters of precision, sensitivity, accuracy, representativeness, comparability, and completeness (known as PSARCC parameters). In the following sections, the percentages calculated are based on the number of qualifiers applied to analytical data for each type of excursion detected during the validation process. In many cases, qualifiers were applied to sample data for more than one type of excursion. In the additional perspective on the data set section, presented at the conclusion of the summary and data usability section, the percentages calculated are based on the cumulative effect of the various QA/QC excursions employed in assigning the final data qualifiers to each sample result.

Overall, 100 percent of the VOCs, herbicides, PCBs, metals/mercury/cyanide, and dioxins/dibenzofurans in the waste data, VOCs, pesticides, PCBs, and metals/mercury/cyanide in the ground water data, VOCs, SVOCs, pesticides, mercury/cyanide, and dioxins/dibenzofurans in the soil data, VOCs, pesticides, PCBs, mercury/cyanide, TOC, and dioxins/dibenzofurans in the sediment data, VOCs, pesticides, herbicides, PCBs, metals/mercury/cyanide, TDS, TSS, fluoride, ortho-phosphate, total phosphate, and dioxin/dibenzofurans in the surface water data, VOCs, SVOCs, PCBs, and metals in the air, and SVOCs, pesticides, herbicides, PCBs, metals/mercury/cyanide, and dioxins/dibenzofurans in the biota samples were determined to be usable for qualitative and quantitative purposes.

Approximately 99.9 percent of the SVOC waste data, 95.7 percent of the pesticide waste data, greater than 99.9 percent of the SVOC ground water data, 99.9 percent of the herbicide ground water data, 98.9 percent of the dioxin/dibenzofuran ground water data, 99.3 percent of the herbicide soil data, 99.3 percent of the PCB soil data, 99.9 percent of the metals soil data, greater than 99.9 percent of the SVOC sediment data, 99.7 percent of the herbicide sediment data, 99.7 percent of the metal sediment data, greater than 99.9 percent of the SVOC surface water data, and 97.3 percent of the dioxin/dibenzofuran air data were determined to be usable for qualitative and quantitative purposes.

Rejected data included the following:

- The non-detected result for SVOC analyte 2,4-dinitrophenol in waste sample WASTE-H-B4-0-0.5FT was rejected (R) since the recovery for 2,4-dinitrophenol in the MS/MSD sample was less than 10%.

- The pesticide target analytes in waste sample WASTE-I-B1-0-0.5FT were rejected (R) since the native sample was spiked by MS/MSD spiking solution during preparation due to a laboratory error.

- The results for SVOC analytes hexachlorocyclopentadiene in ground water sample BR-G and 2,4-dinitrophenol in ground water sample UGGW-EE-20 were rejected (R) due to recoveries of less than 10% in the MS/MSD analyses.

- The result for SVOC analyte 3,3'-dichlorobenzidine in ground water sample UGGW-EEG-108-100FT was rejected (R) due to an LCS recovery of less than 10%.

- The result for herbicide analyte 2,4-DB in ground water sample DW-SCHM-1 was rejected (R) due to MS/MSD recoveries of less than 10%.

- The result for herbicide analyte dinoseb in ground water sample AA-I-S1-27-31FT was rejected (R) due to MS/MSD recoveries of less than 10%.

- The non-detected dioxin/dibenzofuran results for 2378-TCDF and 2378-TCDD in ground water sample AA-SW-S1-101-104FT were rejected (R) since the recoveries for the internal standards associated with the target analytes were less than 25%.

- Seventeen non-detected dioxin/dibenzofuran results for the target analytes in ground water sample AA-GHL-S2-62-66FT were rejected (R) since the recoveries for the recovery standards were less than 25%.

- The herbicide target analytes in soil sample UAS-T3-S3-0-0.5FT were rejected (R) since the surrogate recoveries on both columns were less than 10%.

- The PCB target analytes in soil sample BS-EEG-108-3-6FT were rejected (R) due to a surrogate recovery of less than 10%.

- The results for antimony in soil samples BS-EEG-108-3-6FT, BS-EEG-108-0-0.5FT, BS-EE-20-0-0.5FT, BS-EE-04-0-0.5FTFD were rejected (R) in samples due to MS/MSD recoveries of less than 30%.

- The SVOC result for hexachlorocyclopentadiene in full-scan sediment sample SED-CSE-S3 was rejected (R) due to an MS/MSD recovery of less than 10%.

- The undetected herbicide result for dinoseb in sediment sample SED-CSE-S3 was rejected (R) due to a MS/MSD recovery of less than 10%.

- The results for antimony in sediment samples SED-CSF-S1 and SED-RA2-S2-0.2FT were rejected due to MS/MSD recoveries of less than 30%.

- The SVOC result for 3,3'-dichlorobenzidine in surface water sample SW-RA1-S2 was rejected (R) due to a recovery in the MS/MSD analysis of less than 10%.

- The non-detected results for 123789-HxCDF, 123478-HxCDD, 123678-HxCDD, 123789-HxCDD, 1234678-HpCDF, and 1234789-HpCDF in sample AIR-D-13 were rejected (R) since the recoveries for the internal standards associate with the target analytes were less than 25%.

A discussion of the data quality with regard to the parameters follows:

Precision: Data usability with respect to precision is 100% for VOC, SVOC, pesticide, herbicide, PCB, metal/mercury/cyanide, and dioxin/dibenzofuran waste data, VOC, SVOC, pesticide, herbicide, PCB, metal/mercury/cyanide, and dioxin/dibenzofuran ground water data, VOC, SVOC, pesticide, herbicide, PCB, metal/mercury/cyanide, and dioxin/dibenzofuran soil data, VOC, SVOC, pesticide, herbicide, PCB,

metal/mercury/cyanide, TOC, and dioxin/dibenzofuran sediment data, VOC, SVOC, pesticide, herbicide, PCB, metal/mercury/cyanide, TDS, TSS, fluoride, ortho-phosphate, total phosphate, and dioxin/dibenzofuran surface water data, VOC, SVOC, PCB, metal, and dioxin/dibenzofuran air data, SVOC, pesticide, herbicide, PCB, metal/mercury/cyanide, and dioxin/dibenzofuran biota data.

None of the PCB and dioxin/dibenzofuran waste data was qualified for precision excursions.

Approximately 0.1 percent of the VOC waste data were qualified as approximate due to MS/MSD precision excursions.

Approximately 0.9 percent of the SVOC waste data were qualified as approximate due to MS/MSD precision excursions.

Approximately 0.2 percent of the pesticide waste data were qualified as approximate due to MS/MSD precision excursions.

Approximately 5.9 percent of the herbicide waste data were qualified as approximate due to MS/MSD precision excursions.

A total of 30.0 percent of the metal/mercury/cyanide waste data were qualified as approximate due to laboratory duplicate (10.5 percent) and field duplicate (19.5 percent) excursions.

None of the PCB ground water data was qualified for precision excursions.

Approximately 0.02 percent of the VOC ground water data were qualified as approximate due to MS/MSD precision excursions.

Approximately 0.2 percent of the SVOC ground water data were qualified as approximate due to MS/MSD precision excursions.

Approximately 0.6 percent of the pesticide ground water data were qualified as approximate due to MS/MSD precision excursions.

Approximately 0.8 percent of the herbicide ground water data were qualified as approximate due to MS/MSD precision excursions.

A total of 8.4 percent of the metal/mercury/cyanide ground water data were qualified as approximate due to laboratory duplicate (2.3 percent) and field duplicate (6.1 percent) excursions.

A total of 0.5 percent of the dioxin/dibenzofuran ground water data were qualified as approximate due to MS/MSD precision (0.2 percent) and LCS/LCSD precision (0.3 percent) excursions.

None of the dioxin/dibenzofuran soil data was qualified for precision excursions.

Approximately 0.2 percent of the VOC soil data were qualified as approximate due to MS/MSD precision excursions.

Approximately 0.05 percent of the SVOC soil data were qualified as approximate due to MS/MSD precision excursions.

Approximately 0.6 percent of the pesticide soil data were qualified as approximate due to MS/MSD precision excursions.

Approximately 0.7 percent of the herbicide soil data were qualified as approximate due to MS/MSD precision excursions.

Approximately 0.3 percent of the PCB soil data were qualified as approximate due to MS/MSD precision excursions.

A total of 4.7 percent of the metal/mercury/cyanide soil data were qualified as approximate due to laboratory duplicate (1.3 percent) and field duplicate (3.4 percent) excursions.

Approximately 0.1 percent of the VOC sediment data were qualified as approximate due to MS/MSD precision excursions.

Approximately 2.9 percent of the SVOC sediment data were qualified as approximate due to MS/MSD precision excursions.

Approximately 0.6 percent of the pesticide sediment data were qualified as approximate due to MS/MSD precision excursions.

Approximately 3.4 percent of the herbicide sediment data were qualified as approximate due to MS/MSD precision excursions.

Approximately 0.2 percent of the PCB sediment data were qualified as approximate due to MS/MSD precision excursions.

A total of 16.1 percent of the metal/mercury/cyanide sediment data were qualified as approximate due to laboratory duplicate (3.9 percent) and field duplicate (12.2 percent) excursions.

Approximately 31.0 percent of the TOC sediment data were qualified as approximate due to field duplicate excursions.

Approximately 1.6 percent of the dioxin/dibenzofuran sediment data were qualified as approximate due to LCS/LCSD precision excursions.

None of the VOC, PCB, TDS, TSS, fluoride, total phosphate, and dioxin/dibenzofuran surface water data were qualified due to precision excursions.

Approximately 2.4 percent of the SVOC surface water data were qualified as approximate due to MS/MSD precision excursions.

Approximately 2.3 percent of the pesticide surface water data were qualified as approximate due to MS/MSD precision excursions.

Approximately 0.4 percent of the herbicide surface water data were qualified as approximate due to MS/MSD precision excursions.

Approximately 0.8 percent of the metal/mercury/cyanide surface water data were qualified as approximate due to laboratory duplicate excursions.

Approximately 34.7 percent of the ortho-phosphate surface water data was qualified as approximate due to field duplicate excursions.

None of the VOC, SVOC, PCB, metal, or dioxin/dibenzofuran air data were qualified due to precision excursions.

None of the SVOC, pesticide, PCB, metal/mercury/cyanide, and ioxin/dibenzofuran biota data was qualified due to precision excursions.

Approximately 2.6 percent of the herbicide biota data were qualified as approximate due to MS/MSD precision excursions.

Sensitivity: Sensitivity requirements with respect to reported detection limits were acceptable for the sample data in this project. Dilutions were performed for several analyses due to high target analytes present in the samples or matrix interferences. Overall, with the exception of the dilution analyses utilized by the laboratory, the majority of the reported detection limits met the requirements of the QAPP.

Accuracy: Data usability with respect to accuracy is 100% for VOC, pesticide, herbicide, PCB, metal/mercury/cyanide, and dioxin/dibenzofuran waste data, VOC, pesticide, PCB, and metal/mercury/cyanide ground water data, VOC, SVOC, pesticide, mercury/cyanide, and dioxin/dibenzofuran soil data, VOC, pesticide, PCB, mercury/cyanide, TOC and dioxin/dibenzofuran sediment data, VOC, pesticide, herbicide, PCB, metal/mercury/cyanide, TDS, TSS, fluoride, ortho-phosphate, total phosphate, and dioxin/dibenzofuran surface water data, VOC, SVOC, PCB, and metal air data, SVOC, pesticide, herbicide, PCB, metal/mercury/cyanide, and dioxin/dibenzofuran biota data.

Approximately 2.4 percent of the VOC waste data were qualified as approximate due to internal standard excursions.

Approximately 0.6 percent of the SVOC waste data were qualified as approximate due to MS/MSD accuracy excursions.

Approximately 0.1 percent of the SVOC waste data were rejected due to MS/MSD accuracy excursions. The non-detected result for SVOC analyte 2,4-dinitrophenol in waste sample WASTE-H-B4-0-0.5FT was rejected (R) since the recovery for 2,4-dinitrophenol in the MS/MSD sample was less than 10%.

A total of 4.5 percent of the pesticide waste data were qualified as approximate due to calibration (0.2 percent) and surrogate (4.3 percent) excursions.

A total of 7.5 percent of the herbicide waste data were qualified as approximate due to calibration (0.8 percent), surrogate (0.8 percent), and LCS accuracy (5.9 percent) excursions.

A total of 5.2 percent of the PCB waste data were qualified as approximate due to MS/MSD accuracy (0.9 percent) and internal standard (4.3 percent) excursions.

A total of 9.8 percent of the metal/mercury/cyanide waste data were qualified as approximate due to MS/MSD accuracy (6.8 percent) and serial dilution (3.0 percent) excursions.

A total of 17.4 percent of the dioxin/dibenzofuran waste data were qualified as approximate due to recovery standard (15.6 percent) and LCS/LCSD accuracy (1.8 percent) excursions.

Approximately 0.1 percent of the VOC ground water data were qualified as approximate due to LCS excursions.

A total of 0.8 percent of the SVOC ground water data were qualified as approximate due to calibration (0.01 percent), surrogate (0.02 percent), and internal standard (0.8 percent) excursions.

A total of 0.03 percent of the SVOC ground water data were rejected due to MS/MSD accuracy (0.02 percent) and LCS (0.01 percent) excursions. The results for SVOC analytes hexachlorocyclopentadiene in sample ground water BR-G and 2,4-dinitrophenol in ground water sample UGGW-EE-20 were rejected (R) due to recoveries of less than 10% in the MS/MSD analyses. The result for SVOC analyte 3,3'-dichlorobenzidine in sample ground water UGGW-EEG-108-100FT was rejected (R) due to an LCS recovery of less than 10%.

A total of 24.8 percent of the pesticide ground water data were qualified as approximate due to surrogate (24.4 percent), MS/MSD accuracy (0.1 percent), and LCS (0.3 percent) excursions.

A total of 5.3 percent of the herbicide ground water data were qualified as approximate due to calibration (1.1 percent), surrogate (1.2 percent), MS/MSD accuracy (0.1 percent), and LCS accuracy (2.9 percent) excursions.

Approximately 0.1 percent of the herbicide ground water data were rejected due to MS/MSD accuracy excursions. The result for herbicide analyte 2,4-DB in sample ground water DW-SCHM-1 was rejected (R) due to MS/MSD recoveries of less than 10%. The result for herbicide analyte dinoseb in ground water sample AA-I-S1-27-31FT was rejected (R) due to MS/MSD recoveries of less than 10%.

A total of 16.4 percent of the PCB ground water data were qualified as approximate due to surrogate (0.6 percent), MS/MSD accuracy (0.1 percent), LCS (0.2 percent), and internal standard (15.5 percent) excursions.

A total of 2.7 percent of the metal/mercury/cyanide ground water data were qualified as approximate due to calibration (0.6 percent), MS/MSD accuracy (1.5 percent), and serial dilution (0.6 percent) excursions.

A total of 11.9 percent of the dioxin/dibenzofuran ground water data were qualified as approximate due to calibration (0.7 percent), internal standard (0.2 percent), surrogate/cleanup standard recovery (1.2 percent), recovery standard (9.1 percent), MS/MSD accuracy (0.2 percent), and LCS/LCSD accuracy (0.5 percent) excursions.

A total of 1.1 percent of the dioxin/dibenzofuran ground water data were rejected due to internal standard (0.1 percent) and recovery standard (1.0 percent) excursions. The non-detected dioxin/dibenzofuran results for 2378-TCDF and 2378-TCDD in ground water sample AA-SW-S1-101-104FT were rejected (R) since the recoveries for the internal standards associated with the target analytes were less than 25%. Seventeen non-detected dioxin/dibenzofuran results for the target analytes in ground water sample AA-GHL-S2-62-66FT were rejected (R) since the recoveries for the recovery standards were less than 25%.

A total of 1.5 percent of the VOC soil data were qualified as approximate due to surrogate (0.7 percent), MS/MSD accuracy (0.04 percent), and internal standard (0.8 percent) excursions.

Approximately 0.2 percent of the SVOC soil data were qualified as approximate due to MS/MDS accuracy excursions.

A total of 3.9 percent of the pesticide soil data were qualified as approximate due to calibration (0.6 percent), surrogate (3.3 percent), and MS/MSD accuracy (0.03 percent) excursions.

A total of 8.8 percent of the herbicide soil data were qualified as approximate due to surrogate (1.3 percent) and LCS accuracy (7.5 percent) excursions.

Approximately 0.7 percent of the herbicide soil data were rejected due to surrogate excursions. The herbicide target analytes in soil sample UAS-T3-S3-0-0.5FT were rejected (R) since the surrogate recoveries on both columns were less than 10%.

A total of 7.4 percent of the PCB soil data were qualified as approximate due to surrogate (0.7 percent), MS/MSD accuracy (0.7 percent), and internal standard (6.0 percent) excursions.

Approximately 0.7 percent of the PCB soil data were rejected due to surrogate excursions. The PCB target analytes in soil sample BS-EEG-108-3-6FT were rejected (R) due to a surrogate recovery of less than 10%.

A total of 7.3 percent of the metal/mercury/cyanide soil data were qualified as approximate due to MS/MSD accuracy (6.0 percent), and serial dilution (1.3 percent) excursions.

Approximately 0.1 percent of the metal/mercury/cyanide soil data were rejected due to MS/MSD accuracy excursions. The results for antimony in soil samples BS-EEG-108-3-6FT, BS-EEG-108-0-0.5FT, BS-EE-20-0-0.5FT, BS-EE-04-0-0.5FTFD were rejected (R) in samples due to MS/MSD recoveries of less than 30%.

A total of 23.3 percent of the dioxin/dibenzofuran soil data were qualified as approximate due to recovery standard (20.1 percent), and LCS/LCSD accuracy (3.2 percent) excursions.

None of the VOC and TOC sediment data were qualified due to accuracy excursions.

Approximately 0.05 percent of the SVOC sediment data were rejected due to MS/MSD accuracy excursions. The SVOC result for hexachlorocyclopentadiene in full-scan sediment sample SED-CSE-S3 was rejected (R) due to an MS/MSD recovery of less than 10%.

Approximately 6.9 percent of the pesticide sediment data were qualified as approximate due to surrogate excursions.

A total of 4.9 percent of the herbicide sediment data were qualified as approximate due to calibration (1.2 percent), surrogate (3.4 percent), and LCS accuracy (0.3 percent) excursions.

Approximately 0.3 percent of the herbicide sediment data were rejected due to MS/MSD accuracy excursions. The undetected herbicide result for dinoseb in full-scan sediment sample SED-CSE-S3 was rejected (R) due to a MS/MSD recovery of less than 10%.

A total of 19.2 percent of the PCB sediment data were qualified as approximate due to surrogate (6.9 percent), MS/MSD accuracy (1.0 percent), and internal standard (11.3 percent) excursions.

A total of 8.9 percent of the metal/mercury/cyanide sediment data were qualified as approximate due to calibration (0.1 percent), MS/MSD accuracy (6.6 percent), and serial dilution (2.2 percent) excursions.

Approximately 0.3 percent of the metal/mercury/cyanide sediment data were rejected due to MS/MSD accuracy excursions. The results for antimony in full-scan sediment samples SED-CSF-S1 AA and SED-RA2-S2-0.2FT were rejected due to MS/MSD recoveries of less than 30%.

A total of 29.8 percent of the dioxin/dibenzofuran sediment data were qualified as approximate due to internal standard (1.0 percent), recovery standard (21.1 percent), surrogate/cleanup standard (6.9 percent), and LCS/LCSD accuracy (0.8 percent) excursions.

None of the VOC surface water data was qualified due to accuracy excursions.

Approximately 1.4 percent of the SVOC surface water data were qualified as approximate due to MS/MSD accuracy excursions.

Approximately 0.07 percent of the SVOC surface water data were rejected due to MS/MSD accuracy excursions. The SVOC result for 3,3'-dichlorobenzidine in surface water sample SW-RA1-S2 was rejected (R) due to a recovery in the MS/MSD analysis of less than 10%.

A total of 14.8 percent of pesticide surface water data were qualified as approximate due to calibration (0.8 percent), surrogate (13.0 percent), MS/MSD accuracy (0.2 percent), and LCS (0.8 percent) excursions.

Approximately 1.2 percent of the herbicide surface water data were qualified as approximate due to calibration excursions.

Approximately 4.3 percent of the PCB surface water data were qualified as approximate due to internal standard excursions.

A total of 1.8 percent of the metal/mercury/cyanide surface water data were qualified as approximate due to calibration (0.7 percent), and MS/MSD accuracy (1.1 percent) excursions.

Approximately 23.5 percent of the dioxin/dibenzofuran surface water data were qualified as approximate due to recovery standard excursions.

None of the metal air data were qualified due to accuracy excursions.

A total of 2.6 percent of the VOC air data were qualified as approximate due to calibration (2.1 percent) and internal standard (0.5 percent) excursions.

Approximately 4.3 percent of the SVOC air data were qualified as approximate due to LCS excursions.

Approximately 7.7 percent of the PCB air data were qualified as approximate due to internal standard excursions.

A total of 15.8 percent of the dioxin/dibenzofuran air data were qualified as approximate due to internal standard recovery (4.1 percent), recovery standard (9.0 percent), and LCS (2.7 percent) excursions.

Approximately 2.7 percent of the dioxin/dibenzofuran air data were rejected due to internal standard recovery excursions. The non-detected results for 123789-HxCDF, 123478-HxCDD, 123678-HxCDD, 123789-HxCDD, 1234678-HpCDF, and 1234789-HpCDF in sample AIR-D-13 were rejected (R) since the recoveries for the internal standards associate with the target analytes were less than 25%.

None of the SVOC biota data was qualified due to accuracy excursions.

Approximately 0.7 percent of the pesticide biota data were qualified as approximate due to calibration excursions.

A total of 15.5 percent of the herbicide biota data were qualified as approximate due to surrogate (14.3 percent), MS (0.6 percent), and LCS (0.6 percent) excursions.

A total of 23.5 percent of the PCB biota data were qualified as approximate due to MS/MSD accuracy (2.1 percent) and surrogate (21.4 percent) excursions.

A total of 20.3 percent of the metal/mercury/cyanide biota data were qualified as approximate due to MS/MSD accuracy (14.2 percent) and furnace spike recovery (6.1 percent) excursions.

Approximately 0.4 percent of the dioxin/dibenzofuran biota data were qualified due to recovery standard excursions.

Representativeness: Data usability with respect to representativeness is 100% for VOC, SVOC, herbicide, PCB, metal/mercury/cyanide, and dioxin/dibenzofuran waste data, VOC, SVOC, pesticide, herbicide, PCB, metal/mercury/cyanide, and dioxin/dibenzofuran ground water data, VOC, SVOC, pesticide, herbicide, PCB, metal/mercury/cyanide, and dioxin/dibenzofuran soil data, VOC, SVOC, pesticide, herbicide, PCB, metal/mercury/cyanide, TOC, and dioxin/dibenzofuran sediment data, VOC, SVOC, pesticide, herbicide, PCB, metal/mercury/cyanide, TDS, TSS, fluoride, ortho-phosphate, total phosphate, and dioxin/dibenzofuran surface water data, VOC, SVOC, PCB, metal, and dioxin/dibenzofuran air data, and SVOC, pesticide, herbicide, PCB, metal/mercury/cyanide, and dioxin/dibenzofuran biota data.

None of the VOC or PCB waste data was qualified due to representativeness excursions.

Approximately 0.3 percent of the SVOC waste data were qualified as non-detected for blank contamination.

Approximately 3.3 percent of the pesticide waste data were qualified as approximate due to confirmation excursions.

Approximately 4.3 percent of the pesticide waste data were rejected due to a sample preparation excursion. The pesticide target analytes in waste sample WASTE-I-B1-0-0.5FT were rejected (R) since the native sample was spiked by MS/MSD spiking solution during preparation due to a laboratory error.

A total of 4.7 percent of the herbicide waste data were qualified as approximate due to holding time (4.3 percent) and confirmation (0.4 percent) excursions.

A total of 17.1 percent of the metal/mercury/cyanide waste data were qualified as approximate or non-detected due to holding time (0.2 percent) and blank contamination (16.9 percent) excursions.

A total of 6.1 percent of the dioxin/dibenzofuran waste data were qualified as approximate due to holding time (4.3 percent), confirmation (0.5 percent) and quantitation (1.3 percent) excursions.

None of the PCB ground water data was qualified due to representativeness excursions.

Approximately 0.7 percent of the VOC ground water data were qualified as non-detected for blank contamination.

At total of 2.3 percent of the SVOC ground water data were qualified as approximate or non-detected due to holding time (1.8 percent) and blank contamination (0.5 percent).

At total of 3.6 percent of the pesticide ground water data were qualified as approximate or non-detected due to holding time (1.8 percent), blank contamination (0.1 percent), and confirmation (1.7 percent) excursions.

Approximately 1.0 percent of the herbicide ground water data were qualified as approximate due to confirmation excursions.

Approximately 21.3 percent of the metal/mercury/cyanide ground water data were qualified as approximate or non-detected due to blank contamination.

A total of 6.4 percent of the dioxin/dibenzofuran ground water data were qualified as approximate due to holding time (3.3 percent), blank contamination (2.1 percent), quantitation (0.4 percent), and identification (0.6 percent) excursions

Approximately 0.4 percent of the VOC soil data were qualified as non-detected for blank contamination.

At total of 2.4 percent of the SVOC soil data were qualified as approximate or non-detected due to holding time (1.3 percent) and blank contamination (1.1 percent).

At total of 1.7 percent of the pesticide soil data were qualified as approximate or non-detected due to holding time (0.7 percent), blank contamination (0.5 percent), and confirmation (0.5 percent) excursions.

At total of 11.7 percent of the herbicide soil data were qualified as approximate or non-detected due to holding time (10.3 percent), blank contamination (0.4 percent), and confirmation (1.0 percent) excursions.

Approximately 9.3 percent of the PCB soil data were qualified as approximate due to holding time excursions.

Approximately 15.5 percent of the metal/mercury/cyanide soil data were qualified as approximate or non-detected due to blank contamination.

A total of 6.4 percent of the dioxin/dibenzofuran soil data were qualified as approximate due to holding time (5.4 percent) and blank contamination (1.0 percent) excursions

A total of 88.9 percent of the VOC sediment data were qualified as approximate or non-detected due to percentage solids (86.2 percent) or blank contamination (2.7 percent) excursions.

Approximately 86.2 percent of the SVOC sediment data were qualified as approximate due to percentage solids excursions.

At total of 87.3 percent of the pesticide sediment data were qualified as approximate due to percentage solids (86.2 percent) and confirmation (1.1 percent) excursions.

At total of 87.1 percent of the herbicide sediment data were qualified as approximate or non-detected due to percentage solids (86.2 percent), blank contamination (0.6 percent), and confirmation (0.3 percent) excursions.

A total of 37.8 percent of the PCB sediment data were qualified as approximate due to holding time (3.4 percent) and percentage solids (34.4 percent) excursions.

A total of 124.3 percent of the metal/mercury/cyanide sediment data were qualified as approximate or non-detected due to holding time (0.7 percent), percentage solids (87.8 percent), and blank contamination (35.8 percent) excursions.

A total of 105.2 percent of the dioxin/dibenzofuran sediment data were qualified as approximate due to holding time (20.9 percent), percentage solids (79.3 percent), blank contamination (2.2 percent), and identification (2.8 percent) excursions.

None of the herbicide and PCB surface water data was qualified due to representativeness excursions.

Approximately 1.2 percent of the VOC surface water data were qualified as non-detected due to blank contamination excursions.

Approximately 0.3 percent of the SVOC surface water data were qualified as non-detected due to blank contamination excursions.

Approximately 0.6 percent of the pesticide surface water data were qualified as approximate due to confirmation excursions.

Approximately 10.2 percent of the metal/mercury/cyanide surface water data were qualified as approximate or non-detected due to blank contamination excursions.

A total of 7.6 percent of the dioxin/dibenzofuran surface water data were qualified as approximate due to holding time (4.3 percent) and blank contamination (3.3 percent).

A total of 5.2 percent of the VOC air data were qualified as approximate or non-detected due to blank contamination (5.0 percent) and quantitation (0.2 percent) excursions.

A total of 77.3 percent of the SVOC air data were qualified as approximate or non-detected due to holding time (69.2 percent) and blank contamination (8.1 percent) excursions.

Approximately 41.7 percent of the metal air data were qualified as approximate or non-detected due to blank contamination.

A total of 186 percent of the dioxin/dibenzofuran air data were qualified as approximate due to holding time (100 percent), quantitation (54.3 percent), and identification (31.7 percent) excursions.

None of the PCB biota data was qualified due to representativeness excursions.

Approximately 7.0 percent of the SVOC biota data were qualified as non-detected due to blank contamination excursions.

Approximately 1.4 percent of the pesticide biota data were qualified as approximate due to confirmation excursions.

A total of 3.8 percent of the herbicide biota data were qualified as approximate due to blank contamination (3.2 percent) and confirmation (0.6 percent) excursions.

Approximately 18.4 percent of the metal biota data were qualified as non-detected or approximate due to blank contamination.

Approximately 5.5 percent of the dioxin/dibenzofuran biota data were qualified as approximate due to blank contamination.

Comparability: Data usability with respect to comparability is 100%, as standardized analytical methods, reporting limits, reference materials, and data deliverables were used throughout the data generation process for this project.

Completeness: Overall data usability with respect to completeness is 100% for VOC, PCB, herbicide, metals/mercury/cyanide, dioxin/dibenzofuran waste data, VOC, pesticide, PCB, and metal/mercury/cyanide ground water data, VOC, SVOC, pesticide, mercury/cyanide, and dioxin/dibenzofuran soil data, VOC, pesticide, PCB, mercury/cyanide, TOC, and dioxin/dibenzofuran sediment data, VOC, pesticide, herbicide, PCB, metal/mercury/cyanide, TDS, TSS, fluoride, ortho-phosphate, total phosphate, and dioxin/dibenzofuran surface water data, VOC, SVOC, PCB, metal air data, SVOC, pesticide, herbicide, PCB, metal/mercury/cyanide, and dioxin/dibenzofuran biota data.

Approximately 99.9 percent of the SVOC waste data and 95.7 percent of the pesticide waste were determined to be usable for qualitative and quantitative purposes.

Greater than 99.9 percent of the SVOC ground water data, 99.9 percent of the herbicide ground water data, and 98.9 percent of the dioxin/dibenzofuran ground water data were determined to be usable for qualitative and quantitative purposes.

Approximately 99.3 percent of the herbicide soil data, 99.3 percent of the PCB soil data and 99.9 percent of the metals soil data were determined to be usable for qualitative and quantitative purposes.

Greater than 99.9 percent of the SVOC sediment data, 99.7 percent of the herbicide sediment data, and 99.7 percent of the metals sediment data were determined to be usable for qualitative and quantitative purposes.

Greater than 99.9 percent of the SVOC surface water data were determined to be usable for qualitative and quantitative purposes.

Approximately 97.3 percent of the dioxin/dibenzofuran air data were determined to be usable for qualitative and quantitative purposes.

Therefore the completeness objective of 95%, as stated in the QAPP was met.

As noted in the preceding paragraph, the majority of the environmental data met requirements that are standard for qualification purposes. Additional perspective on the data set is provided as follows:

- A total of 72.1 percent of the entire data set were reported as "non-detects," including both qualified and unqualified results. The remaining 27.9 percent of the data set consisted of estimated and quantities data (with numeric values).

- Both the analytical laboratory and the data validator assigned data qualifiers to certain data. As a result, a total of 21.0 percent of the entire data set were qualified. Furthermore, 15.6 percent of the total data set was qualified by the data validator with the remaining qualifiers provided by the laboratory (5.4 percent).

- For sample concentrations reported as "non-detect" (72.1 percent of the total data), 1.2 percent of those results were qualified and 98.8 percent were not qualified.

- For the sample concentrations that were estimated or quantitated (27.9 percent of the total data set), 72.8 percent of the data were qualified and 27.2 percent were not qualified.

- Of the entire data set, 1.0 percent of the waste data were qualified, 5.9 percent of the ground water data were qualified, 4.8 percent of the soil data were qualified, 6.4 percent of the sediment data were qualified, 0.8 percent of the surface water data were qualified, 1.7 percent of the air data were qualified, and 0.4 percent of the biota data were qualified.

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APPENDICES A-F

APPENDIX A

Sample Cross Reference Tables

APPENDIX A-1

Sample Cross Reference Tables By Collection Date

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-1	AIR-D-1	245-59-1	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-10	AIR-D-10	245-59-10	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-11	AIR-D-11	245-59-11	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-12	AIR-D-12	245-59-12	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-13	AIR-D-13	245-59-13	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-2	AIR-D-2	245-59-2	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-3	AIR-D-3	245-59-3	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-4	AIR-D-4	245-59-4	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-5	AIR-D-5	245-59-5	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-6	AIR-D-6	245-59-6	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455	09/10/99	AIR-D-7	AIR-D-7	245-59-7	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-8	AIR-D-8	245-59-8	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-9	AIR-D-9	245-59-9	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-FB	AIR-DFB	245-59-14	8290 (PCDD/PCDF)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-M-1	AIR-M-1	S916203*1	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-M-2	AIR-M-2	S916203*2	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-M-3	AIR-M-3	S916203*3	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-M-4	AIR-M-4	S916203*4	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-M-5	AIR-M-5	S916203*19	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-M-6	AIR-M-6	S916203*20	6010B (Metals)
Air	Savannah Laboratories	SIL001	09/10/99	AIR-P-1	AIR-P-1	S916166*5	TO-13-PCB (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Air	Savannah Laboratories	SIL001	09/10/99	AIR-P-2	AIR-P-2	S916166*6	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/10/99	AIR-P-3	AIR-P-3	S916166*7	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/10/99	AIR-P-4	AIR-P-4	S916166*8	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/10/99	AIR-P-5	AIR-P-5	S916166*9	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/10/99	AIR-P-6	AIR-P-6	S916166*10	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-S-1	AIR-S-1	S916203*45	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-S-2	AIR-S-2	S916203*46	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-S-3	AIR-S-3	S916203*47	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-S-4	AIR-S-4	S916203*48	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-S-5	AIR-S-5	S916203*49	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-S-6	AIR-S-6	S916203*50	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-1 Tube 1	AIR-V-1 TUBE 1	S916203*29	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-1 Tube 2	AIR-V-1 TUBE 2	S916203*56	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-2 Tube 1	AIR-V-2 TUBE 1	S916203*30	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-2 Tube 2	AIR-V-2 TUBE 2	S916203*57	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-3 Tube 1	AIR-V-3 TUBE 1	S916203*31	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-3 Tube 2	AIR-V-3 TUBE 2	S916203*58	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-4 Tube 1	AIR-V-4 TUBE 1	S916203*32	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-4 Tube 2	AIR-V-4 TUBE 2	S916203*59	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-5 Tube 1	AIR-V-5 TUBE 1	S916203*33	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-5 Tube 2	AIR-V-5 TUBE 2	S916203*60	TO-1 (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-6 Tube 1	AIR-V-6 TUBE 1	S916203*34	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-6 Tube 2	AIR-V-6 TUBE 2	S916203*61	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-7 Tube 1	AIR-V-7 TUBE 1	S916203*35	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-7 Tube 2	AIR-V-7 TUBE 2	S916203*62	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-8 Tube 1	AIR-V-8 TUBE 1	S916203*36	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-8 Tube 2	AIR-V-8 TUBE 2	S916203*63	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-M-10	AIR-M-10	S916203*24	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-M-11	AIR-M-11	S916203*25	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-M-12	AIR-M-12	S916203*26	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-M-13	AIR-M-13	S916203*27	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-M-7	AIR-M-7	S916203*21	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-M-8	AIR-M-8	S916203*22	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-M-9	AIR-M-9	S916203*23	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-M-FB	AIR-M-FB	S916203*28	6010B (Metals)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-P-10	AIR-P-10	S916166*14	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-P-11	AIR-P-11	S916166*15	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-P-12	AIR-P-12	S916166*16	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-P-13	AIR-P-13	S916166*17	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-P-7	AIR-P-7	S916166*11	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-P-8	AIR-P-8	S916166*12	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-P-9	AIR-P-9	S916166*13	TO-13-PCB (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Air	Savannah Laboratories	SIL001	09/11/99	AIR-P-FB	AIR-P-FB	S916166*18	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-S-10	AIR-S-10	S916166*1	TO13 (SVOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-S-11	AIR-S-11	S916166*2	TO13 (SVOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-S-12	AIR-S-12	S916166*3	TO13 (SVOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-S-13	AIR-S-13	S916166*4	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-S-7	AIR-S-7	S916203*51	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-S-8	AIR-S-8	S916203*52	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-S-9	AIR-S-9	S916203*53	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-S-FB	AIR-S-FB	S916203*54	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-10 Tube 1	AIR-V-10 TUBE 1	S916203*40	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-10 Tube 2	AIR-V-10 TUBE 2	S916203*65	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-11 Tube 1	AIR-V-11 TUBE 1	S916203*41	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-11 Tube 2	AIR-V-11 TUBE 2	S916203*66	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-12 Tube 1	AIR-V-12 TUBE 1	S916203*42	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-12 Tube 2	AIR-V-12 TUBE 2	S916203*67	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-13 Tube 1	AIR-V-13 TUBE 1	S916203*43	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-13 Tube 2	AIR-V-13 TUBE 2	S916203*68	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-9 Tube 1	AIR-V-9 TUBE 1	S916203*37	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-9 Tube 2	AIR-V-9 TUBE 2	S916203*64	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-FB Tube 1	AIR-V-FB TUBE 1	S916203*44	TO-1 (VOCs)
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-H-B1, (0-0.5')	WASTE-H-B1-0-0.5FT	S916433*19	6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-H-B1, (0-0.5')	WASTE-H-B1-0-0.5FT	S916433*19	680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49540		WASTE-H-B1-0-0.5ft		246-45-1A	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-H-B2, (0-0.5')	WASTE-H-B2-0-0.5FT	S916433*20	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49540		WASTE-H-B2-0-0.5ft		246-45-2A	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-H-B3, (0-0.5')	WASTE-H-B3-0-0.5FT	S916433*21	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-H-B3, (0-0.5')	WASTE-H-B3-0-0.5FT	S916433*21*RE	8260B (VOCs)
						S916433*21	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49540		WASTE-H-B3-0-0.5ft		246-45-3A	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-H-B4, (0-0.5')	WASTE-H-B4-0-0.5FT	S916433*22	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49540		WASTE-H-B4-0-0.5ft		246-45-4A	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-L-B1, (0-0.5')	WASTE-L-B1-0-0.5FT	S916433*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49540		WASTE-L-B1-0-0.5ft		246-45-5A	8280A (PCDD/PCDF)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-L-B2, (0-0.5')	WASTE-L-B2-0-0.5FT	S916433*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49540		WASTE-L-B2-0-0.5ft		246-45-6A	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-L-B3, (0-0.5')	WASTE-L-B3-0-0.5FT	S916433*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49540		WASTE-L-B3-0-0.5ft		246-45-7A	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-L-B4, (0-0.5')	WASTE-L-B4-0-0.5FT	S916433*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-L-B4, (0-0.5')	WASTE-L-B4-0-0.5FT	S916433*4	8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49540		WASTE-L-B4-0-0.5ft		246-45-8A	8280A (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI002	10/04/99	LMB BP COMP 1	LMB BP COMP 1	S916900A*2	6010B (Metals) 680 (PCBs) 7060 (Arsenic) 7471 (Mercury) 7761 (Silver) 8081A (Pesticides) 8151A (Herbicides) 8270C (SVOCs) 9010 (Cyanide) EX41 (% Lipids) SW7041 (Antimony)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/04/99	SED-CSC-S1(0.2')	SED-CSC-S1-0.2FT	S916604*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/04/99	SED-CSC-S1(0.2')	SED-CSC-S1-0.2FT	S916604*1	8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49575C		SED-CSC-S1-0.2ft		246-80-4	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/04/99	SED-CSC-S2(0.2')	SED-CSC-S2-0.2FT	S916604*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49575C		SED-CSC-S2-0.2ft		246-80-5	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/04/99	SED-CSC-S3(0.2')	SED-CSC-S3-0.2FT	S916604*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/04/99	SED-CSC-S3(0.2')	SED-CSC-S3-0.2FT	S916604*3	9060 (TOC)
	Triangle Laboratories	49575C		SED-CSC-S3-0.2ft		246-80-6	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/04/99	SED-CSD-S1(0.2')	SED-CSD-S1-0.2FT	S916604*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49575C		SED-CSD-S1-0.2ft		246-80-7	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/04/99	SED-CSD-S2(0.2')	SED-CSD-S2-0.2FT	S916604*19	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49575C		SED-CSD-S2-0.2ft		246-80-8	8290 (PCDD/PCDF)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/04/99	SED-CSD-S3(0.2')	SED-CSD-S3-0.2FT	S916604*20	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49575C		SED-CSD-S3-0.2ft		246-80-9	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/04/99	SW-CSB-S3	SW-CSB-S3	S916604A*1	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL006	10/04/99	SW-CSB-S3	SW-CSB-S3	S916604A*1	8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49575B				246-80-3A	8290 (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI001	10/04/99	WB BP FILLET 1	WB BP FILLET 1	S916900*21	8151A (Herbicides) EX41 (% Lipids)
Biota - Validated	Savannah Laboratories	SCI001	10/04/99	WB BP FILLET 2	WB BP FILLET 2	S916900*22	8081A (Pesticides) 8151A (Herbicides) EX41 (% Lipids)
Biota - Validated	Savannah Laboratories	SCI002	10/04/99	WC BP COMP 1	WC BP COMP 1	S916900A*1	6010B (Metals) 680 (PCBs) 7060 (Arsenic) 7471 (Mercury) 7761 (Silver) 8081A (Pesticides) 8151A (Herbicides) 8270C (SVOCs) 9010 (Cyanide) EX41 (% Lipids) SW7041 (Antimony)
Biota - Validated	Savannah Laboratories	SCI001	10/04/99	WC REF1 COMP 1	WC REF1 COMP 1	S916900*11	6010B (Metals) 680 (PCBs) 7060 (Arsenic)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Biota - Validated	Savannah Laboratories	SCI001	10/04/99	WC REF1 COMP 1	WC REF1 COMP 1	S916900*11	7471 (Mercury) 7761 (Silver) 8081A (Pesticides) 8151A (Herbicides) 8270C (SVOCs) 9010 (Cyanide) EX41 (% Lipids) SW7041 (Antimony)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL006	10/05/99	SED-CSB-EB	SED-CSB-0.2FTEB	S916640A*6	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49583B				246-88-13A	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/05/99	SED-CSB-S1	SED-CSB-S1-0.2FT	S916640*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/05/99	SED-CSB-S1	SED-CSB-S1-0.2FT	S916640*1	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49583C				246-88-6	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/05/99	SED-CSB-S1-FD	SED-CSB-S1-0.2FTFD	S916640*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49583C		SED-CSB-S1FD		246-88-9	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/05/99	SED-CSB-S2	SED-CSB-S2-0.2FT	S916640*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/05/99	SED-CSB-S2	SED-CSB-S2-0.2FT	S916640*2	9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49583C				246-88-7	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/05/99	SED-CSB-S3	SED-CSB-S3-0.2FT	S916640*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49583C				246-88-8	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/05/99	SED-M-S1	SED-M-S1-0.2FT	S916640*19	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Triangle Laboratories	49583C	10/05/99	SED-M-S1	SED-M-S1-0.2FT	246-88-10	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/05/99	SW-BPL-S1	SW-BPL-S1	S916640A*2	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49583B				246-88-5	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/05/99	SW-BPL-S2	SW-BPL-S2	S916640A*5	8260B (VOCs)
	Triangle Laboratories	49583B				246-88-4A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/05/99	SW-CSB-S1	SW-CSB-S1	S916640A*1	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL006	10/05/99	SW-CSB-S1	SW-CSB-S1	S916640A*1	365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49583B				246-88-1A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/05/99	SW-CSB-S2	SW-CSB-S2	S916640A*4	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL006	10/05/99	SW-CSB-S2	SW-CSB-S2	S916640A*4	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49583B				246-88-2A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/05/99	SW-M-S1	SW-M-S1	S916640A*3	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49583B				246-88-3A	8290 (PCDD/PCDF)
Full Scan - Borrow Pit Lake Sediment	Savannah Laboratories	SIL007	10/06/99	BPL-ESED-S1	BPL-ESED-S1-0.2FT	S916704*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Borrow Pit Lake Sediment	Savannah Laboratories	SIL007	10/06/99	BPL-ESED-S1	BPL-ESED-S1-0.2FT	S916704*3	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49596B		BPL-ESED-S1-0.2ft		247-2-7	8290 (PCDD/PCDF)
Full Scan - Borrow Pit Lake Sediment	Savannah Laboratories	SIL007	10/06/99	BPL-ESED-S1-FD	BPL-ESED-S1-0.2FTFD	S916704*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49596B		BPL-ESED-S1-FD-0.2ft		247-2-8	8290 (PCDD/PCDF)
Full Scan - Borrow Pit Lake Sediment	Savannah Laboratories	SIL007	10/06/99	BPL-ESED-S3	BPL-ESED-S3-0.2FT	S916704*19	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Borrow Pit Lake Sediment	Savannah Laboratories	SIL007	10/06/99	BPL-ESED-S3	BPL-ESED-S3-0.2FT	S916704*19	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49596B		BPL-ESED-S3-0.2ft		247-2-9	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/06/99	SED-CSE-S1	SED-CSE-S1-0.2FT	S916704*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49596B		SED-CSE-S1-0.2ft		247-2-5	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/06/99	SED-CSE-S2	SED-CSE-S2-0.2FT	S916704*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/06/99	SED-CSE-S2	SED-CSE-S2-0.2FT	S916704*2	9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49596B		SED-CSE-S2-0.2ft		247-2-4	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/06/99	SED-CSE-S3	SED-CSE-S3-0.2FT	S916704A*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49596B		SED-CSE-S3-0.2ft		247-2-6	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-BPL-S2	SW-BPL-S2	S916704B*10	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-BPL-S2	SW-BPL-S2	S916704B*10	8081A (Pesticides)
							8151A (Herbicides)
							8270C (SVOCs)
							9010 (Cyanide)
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-BPL-S3	SW-BPL-S3	S916704B*4	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49596A				247-2-16A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-CSD-S1	SW-CSD-S1	S916704B*1	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-CSD-S1	SW-CSD-S1	S916704B*1	300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49596A				247-2-15A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-CSD-S1-FD	SW-CSD-S1FD	S916704B*8	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-CSD-S1-FD	SW-CSD-S1FD	S916704B*8	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49596A				247-2-17A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-CSD-S2	SW-CSD-S2	S916704B*2	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49596A				247-2-2A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-CSD-S3	SW-CSD-S3	S916704B*3	150.1 (pH)
							160.1 (TDS)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-CSD-S3	SW-CSD-S3	S916704B*3	160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49596A				247-2-1A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-CSD-EB	SW-CSDEB	S916704B*9	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-CSD-EB	SW-CSDEB	S916704B*9	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49596A				247-2-3A	8290 (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL007	10/06/99	WASTE-G-B1 (0-0.5')	WASTE-G-B1-0-0.5FT	S916704*57	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49596C		WASTE-G-B1-(0-0.5)		247-2-12	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL007	10/06/99	WASTE-G-B (0-0.5') DUP	WASTE-G-B1-0-0.5FTFD	S916704*63	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL007	10/06/99	WASTE-G-B (0-0.5') DUP	WASTE-G-B1-0-0.5FTFD	S916704*63	9010 (Cyanide)
	Triangle Laboratories	49596C		WASTE-G-B1-(0-0.5)DUP		247-2-14	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL007	10/06/99	WASTE-G-B2 (0-0.5')	WASTE-G-B2-0-0.5FT	S916704*62	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49596C		WASTE-G-B2-(0-0.5)		247-2-13	8280A (PCDD/PCDF)
Full Scan - Borrow Pit Lake Sediment	Savannah Laboratories	SIL007	10/07/99	BPL-ESED-S2	BPL-ESED-S2-0.2FT	S916769*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49608A		BPL-ESED-S2-0.2F		247-14-4	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL008	10/07/99	EEG-102	EEG-102	S916769A*10	6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL008	10/07/99	EEG-102	EEG-102	S916769A*10	680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49608B				247-14-7A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL008	10/07/99	EEG-106	EEG-106	S916769A*11	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49608B				247-14-5A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL008	10/07/99	EEG-107	EEG-107	S916769A*12	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL008	10/07/99	EEG-107	EEG-107	S916769A*12	8260B (VOCs)
						S916769A*12*DL	8270C (SVOCs)
						S916769A*12	9010 (Cyanide)
	Triangle Laboratories	49608B				247-14-6A	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/07/99	SED-CSF-S1	SED-CSF-S1-0.2FT	S916769*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49608A		SED-CSF-S1-0.2F		247-14-3	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/07/99	SED-CSF-S2	SED-CSF-S2-0.2FT	S916769*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/07/99	SED-CSF-S2	SED-CSF-S2-0.2FT	S916769*2	9060 (TOC)
	Triangle Laboratories	49608A		SED-CSF-S2-0.2F		247-14-2	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/07/99	SED-CSF-S3	SED-CSF-S3-0.2FT	S916769*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49608A		SED-CSF-S3-0.2F		247-14-1	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/07/99	SW-CSE-S3	SW-CSE-S3	S916769A*4	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL008	10/07/99	SW-CSE-S3	SW-CSE-S3	S916769A*4	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49608B				247-14-11A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/07/99	SW-CSF-S1	SW-CSF-S1	S916769A*1	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49608B				247-14-8A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/07/99	SW-CSF-S2	SW-CSF-S2	S916769A*2	150.1 (pH)
							160.1 (TDS)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL008	10/07/99	SW-CSF-S2	SW-CSF-S2	S916769A*2	160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49608B				247-14-9A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/07/99	SW-CSF-S3	SW-CSF-S3	S916769A*3	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL008	10/07/99	SW-CSF-S3	SW-CSF-S3	S916769A*3	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49608B				247-14-10A	8290 (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL008	10/07/99	WASTE-G-B (0-0.5) EB	WASTE-G-B-0-0.5FTEB	S916769A*13	6010B/1311 (Metals)
							680 (PCBs)
							7470/1311 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010/1311 (Cyanide)
	Triangle Laboratories	49608B		WASTE-G-B-(0-0.5)EB		247-14-12A	8290 (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL007	10/07/99	WASTE-G-B3 (0-0.5')	WASTE-G-B3-0-0.5FT	S916769*57	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL007	10/07/99	WASTE-G-B3 (0-0.5')	WASTE-G-B3-0-0.5FT	S916769*57	9010 (Cyanide)
	Triangle Laboratories	49608C		WASTE-G-B3(0-0.5)		247-14-13	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL007	10/07/99	WASTE-G-B4 (0-0.5')	WASTE-G-B4-0-0.5FT	S916769*62	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49608C		WASTE-G-B4(0-0.5)		247-14-14	8280A (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL008	10/08/99	EEG-101	EEG-101	S916797A*11	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A				247-20-9A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL008	10/08/99	EEG-104	EEG-104	S916797A*12	6010B (Metals)
							680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL008	10/08/99	EEG-104	EEG-104	S916797A*12	7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A				247-20-11A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL008	10/08/99	EEG-112	EEG-112	S916797A*13	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A				247-20-10A	8290 (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI002	10/08/99	LMB REF 2 COMP 1	LMB REF 2 COMP 1	S916900A*7	6010B (Metals)
							680 (PCBs)
							7060 (Arsenic)
							7471 (Mercury)
							7761 (Silver)
							8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Biota - Validated	Savannah Laboratories	SCI002	10/08/99	LMB REF 2 COMP 1	LMB REF 2 COMP 1	S916900A*7	8151A (Herbicides) 8270C (SVOCs) 9010 (Cyanide) EX41 (% Lipids) SW7041 (Antimony)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/08/99	SED-RA1-S1	SED-RA1-S1-0.2FT	S916797*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide) 9060 (TOC)
	Triangle Laboratories	49614C		SED-RA1-S1-0.2ft		247-20-18	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/08/99	SED-RA1-S2	SED-RA1-S2-0.2FT	S916797*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/08/99	SED-RA1-S2	SED-RA1-S2-0.2FT	S916797*2	9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49614C				247-20-17	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/08/99	SED-RA2-S1	SED-RA2-S1-0.2FT	S916797*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49614C				247-20-15	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL008	10/08/99	SED-RA2-S1-EB	SED-RA2-S1-0.2FTEB	S916797A*14	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A				247-20-8A	8290 (PCDD/PCDF)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/08/99	SED-RA2-S1 DUPLICATE	SED-RA2-S1-0.2FTFD	S916797*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49614C		SED-RA2-S1 DUP		247-20-16	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/08/99	SED-RA2-S2	SED-RA2-S2-0.2FT	S916797*57	8260B (VOCs)
Surface Water	Savannah Laboratories	SIL006	10/08/99	SW-RA1-S1	SW-RA1-S1	S916797B*1	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL006	10/08/99	SW-RA1-S1	SW-RA1-S1	S916797B*1	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A				247-20-7	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/08/99	SW-RA1-S2	SW-RA1-S2	S916797A*2	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A				247-20-6A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/08/99	SW-RA1-S2-FD	SW-RA1-S2FD	S916797A*8	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL008	10/08/99	SW-RA1-S2-FD	SW-RA1-S2FD	S916797A*8	300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A				247-20-2A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/08/99	SW-RA2-S1 (CREEK)	SW-RA2-S1	S916797A*1	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL008	10/08/99	SW-RA2-S1 (CREEK)	SW-RA2-S1	S916797A*1	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A		SW-RA2-S1-(CREEK)		247-20-5A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/08/99	SW-RA2-S2 (POND)	SW-RA2-S2	S916797A*3	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A		SW-RA2-S2-(POND)		247-20-12A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/08/99	SW-RA2-EB	SW-RA2EB	S916797A*10	150.1 (pH)
							160.1 (TDS)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL008	10/08/99	SW-RA2-EB	SW-RA2EB	S916797A*10	160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A				247-20-1A	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL010	10/09/99	SED-RA2-S2	SED-RA2-S2-0.2FT	S916823A*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49629C				247-35-9	8290 (PCDD/PCDF)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL011	10/11/99	EEG-109	EEG-109	S916823*13	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49629B				247-35-6A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL011	10/11/99	EEG-110	EEG-110	S916823*14	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49629B				247-35-5A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL011	10/11/99	EEG-108	UGGW-EEG-108	S916823*11	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Upgradient GW	Savannah Laboratories	SIL011	10/11/99	EEG-108	UGGW-EEG-108	S916823*11	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49629B				247-35-3A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL011	10/11/99	EEG-108 DUP	UGGW-EEG-108FD	S916823*12	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49629B		EEG-108DUP		247-35-4A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL011	10/12/99	EE-01	EE-01	S916847*11	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S916847*11*DL	8270C (SVOCs)
						S916847*11	9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Triangle Laboratories	49642B	10/12/99	EE-01	EE-01	247-48-2A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL011	10/12/99	EE-03	EE-03	S916847*12	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49642B				247-48-3A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL011	10/13/99	EE-05	EE-05	S916897*13	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S916897*13*DL	8270C (SVOCs)
						S916897*13	9010 (Cyanide)
	Triangle Laboratories	49653B				247-59-4A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL011	10/13/99	EE-05 EB	EE-05EB	S916897*15	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL011	10/13/99	EE-05 EB	EE-05EB	S916897*15	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49653B		EE-05EB		247-59-5A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL011	10/13/99	EE-04	UGGW-EE-04	S916897*11	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49653B				247-59-7A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL011	10/13/99	EE-04-60 FT	UGGW-EE-04-60FT	S916897*14	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Upgradient GW	Savannah Laboratories	SIL011	10/13/99	EE-04-60 FT	UGGW-EE-04-60FT	S916897*14	9010 (Cyanide)
	Triangle Laboratories	49653B		UGGW/EE04-60ft		247-59-1A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL011	10/13/99	EE-04 DUP	UGGW-EE-04FD	S916897*12	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49653B		EE-04DUP		247-59-6A	8290 (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL013	10/13/99	WASTE-I-B1 (0-0.5')	WASTE-I-B1-0-0.5FT	S916897A*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49653A		WASTE-I-B1(0-0.5')		247-59-8	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL013	10/13/99	WASTE-I-B2 (0-0.5')	WASTE-I-B2-0-0.5FT	S916897A*2	6010B (Metals)
							680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL013	10/13/99	WASTE-I-B2 (0-0.5')	WASTE-I-B2-0-0.5FT	S916897A*2	7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S916897A*2*DL	8270C (SVOCs)
						S916897A*2	9010 (Cyanide)
	Triangle Laboratories	49653A		WASTE-I-B2(0-0.5')		247-59-10	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL013	10/13/99	WASTE-I-B3 (0-0.5')	WASTE-I-B3-0-0.5FT	S916897A*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49653A		WASTE-I-B3(0-0.5')		247-59-11	8280A (PCDD/PCDF)
Shallow Residential GW	Savannah Laboratories	SIL014	10/14/99	SGW-S1 15'	SGW-S1-15FT	S916933*13	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Shallow Residential GW	Savannah Laboratories	SIL014	10/14/99	SGW-S1 15'	SGW-S1-15FT	S916933*13	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49661B		SGW-S1-15FT		247-67-13A	8290 (PCDD/PCDF)
Shallow Residential GW	Savannah Laboratories	SIL014	10/14/99	SGW-S1 20'	SGW-S1-20FT	S916933*14	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49661B		SGW-S1-20FT		247-67-12A	8290 (PCDD/PCDF)
Shallow Residential GW	Savannah Laboratories	SIL014	10/14/99	SGW-S1 40'	SGW-S1-40FT	S916933*15	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49661B		SGW-S1-40FT		247-67-14A	8290 (PCDD/PCDF)
Shallow Residential GW	Savannah Laboratories	SIL014	10/14/99	SGW-S1-40' DUP	SGW-S1-40FTFD	S916933*16	6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Shallow Residential GW	Savannah Laboratories	SIL014	10/14/99	SGW-S1-40' DUP	SGW-S1-40FTFD	S916933*16	680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49661B		SGW-S1-40FTDUP		247-67-15A	8290 (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL014	10/14/99	WASTE-I-B (0-0.5') EB2	WASTE-I-B-0-0.5FTEB	S916933*11	6010B/1311 (Metals)
							680 (PCBs)
							7470/1311 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010/1311 (Cyanide)
	Triangle Laboratories	49661C		WASTE-I-B(0-0.5)EB2		247-67-3A	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL013	10/14/99	WASTE-I-B4 (0-0.5')	WASTE-I-B4-0-0.5FT	S916933B*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL013	10/14/99	WASTE-I-B4 (0-0.5')	WASTE-I-B4-0-0.5FT	S916933B*1	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49661A		WASTE-I-B4(0-0.5)		247-67-1	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL013	10/14/99	WASTE-I-B4 (0-0.5') DUP 2	WASTE-I-B4-0-0.5FTFD	S916933B*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49661A		WASTE-I-B4(0-0.5)DUP2		247-67-2	8280A (PCDD/PCDF)
Shallow Residential GW	Savannah Laboratories	SIL014	10/15/99	SGW-S2-15'	SGW-S2-15FT	S916977*15	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49668		SGW-S2 15FT		247-74-1A	8290 (PCDD/PCDF)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Shallow Residential GW	Savannah Laboratories	SIL014	10/15/99	SGW-S2-20'	SGW-S2-20FT	S916977*13	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49668		SGW-S2 20FT		247-74-2A	8290 (PCDD/PCDF)
Shallow Residential GW	Savannah Laboratories	SIL014	10/15/99	SGW-S2-40'	SGW-S2-40FT	S916977*12	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49668		SGW-S2 40FT		247-74-5A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL015	10/18/99	EE-20	UGGW-EE-20	S917008*11	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Upgradient GW	Savannah Laboratories	SIL015	10/18/99	EE-20	UGGW-EE-20	S917008*11	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49674				247-80-1A	8290 (PCDD/PCDF)
Domestic Well GW	Savannah Laboratories	SIL015	10/21/99	DW-MCDO-1	DW-MCDO-1	S917102*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49712				248-19-1A	8290 (PCDD/PCDF)
Domestic Well GW	Savannah Laboratories	SIL015	10/21/99	DW-MCDO-1 DUP	DW-MCDO-1FD	S917102*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Domestic Well GW	Triangle Laboratories	49712	10/21/99	DW-MCDO-1DUP	DW-MCDO-1FD	248-19-2A	8290 (PCDD/PCDF)
Domestic Well GW	Savannah Laboratories	SIL015	10/21/99	DW-SETT-1	DW-SETT-1	S917102*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49712				248-19-3A	8290 (PCDD/PCDF)
Domestic Well GW	Savannah Laboratories	SIL015	10/21/99	DW-WRIG-1	DW-WRIG-1	S917102*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49712				248-19-4A	8290 (PCDD/PCDF)
Domestic Well GW	Savannah Laboratories	SIL016	10/22/99	DW-SCHM-1	DW-SCHM-1	S917143*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Domestic Well GW	Savannah Laboratories	SIL016	10/22/99	DW-SCHM-1	DW-SCHM-1	S917143*1	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49716				248-23-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL017	11/01/99	AA-SW-S1-14-16'	AA-SW-S1-14-16FT	S917338*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49781		AA-SW-S1-14-16FT		248-88-1A	8290 (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI002	11/01/99	LMB REF 1 COMP 1	LMB REF 1 COMP 1	S916900A*5	6010B (Metals)
							680 (PCBs)
							7060 (Arsenic)
							7471 (Mercury)
							7761 (Silver)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Biota - Validated	Savannah Laboratories	SCI002	11/01/99	LMB REF 1 COMP 1	LMB REF 1 COMP 1	S916900A*5	8270C (SVOCs) 9010 (Cyanide) EX41 (% Lipids) SW7041 (Antimony)
Biota - Validated	Savannah Laboratories	SCI002	11/01/99	LMB REF 1 COMP 2	LMB REF 1 COMP 2	S916900A*6	6010B (Metals) 680 (PCBs) 7060 (Arsenic) 7471 (Mercury) 7761 (Silver) 8081A (Pesticides) 8151A (Herbicides) 8270C (SVOCs) 9010 (Cyanide) EX41 (% Lipids) SW7041 (Antimony)
Biota - Validated	Savannah Laboratories	SCI001	11/01/99	WC BP COMP 2	WC BP COMP 2	S916900*19	6010B (Metals) 680 (PCBs) 7060 (Arsenic) 7471 (Mercury) 7761 (Silver) 8081A (Pesticides) 8270C (SVOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Biota - Validated	Savannah Laboratories	SCI001	11/01/99	WC BP COMP 2	WC BP COMP 2	S916900*19	9010 (Cyanide) EX41 (% Lipids) SW7041 (Antimony)
Biota - Validated	Savannah Laboratories	SCI001	11/01/99	WC BP-COMP 3	WC BP-COMP 3	S916900*20	6010B (Metals) 680 (PCBs) 7060 (Arsenic) 7471 (Mercury) 7761 (Silver) 8270C (SVOCs) 9010 (Cyanide) EX41 (% Lipids) SW7041 (Antimony)
Biota - Validated	Savannah Laboratories	SCI001	11/01/99	WC REF1 COMP 2	WC REF1 COMP 2	S916900*12	6010B (Metals) 680 (PCBs) 7060 (Arsenic) 7471 (Mercury) 7761 (Silver) 8081A (Pesticides) 8151A (Herbicides) 8270C (SVOCs) 9010 (Cyanide) EX41 (% Lipids)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Biota - Validated	Savannah Laboratories	SCI001	11/01/99	WC REF1 COMP 2	WC REF1 COMP 2	S916900*12	SW7041 (Antimony)
Alluvial Aquifer GW	Savannah Laboratories	SIL017	11/02/99	AA-SW-S1-24-26'	AA-SW-S1-24-26FT	S917386*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL017	11/02/99	AA-SW-S1-34-36'	AA-SW-S1-34-36FT	S917386*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Fill Area GW	Savannah Laboratories	SIL017	11/02/99	EEG-105-GP	EEG-105-GP	S917386*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL017	11/02/99	EEG-105-GP	EEG-105-GP	S917386*3	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49792				248-99-1A	8290 (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI002	11/02/99	LMB BP COMP 3	LMB BP COMP 3	S916900A*4	6010B (Metals)
							680 (PCBs)
							7060 (Arsenic)
							7471 (Mercury)
							7761 (Silver)
							8081A (Pesticides)
							8151A (Herbicides)
							8270C (SVOCs)
							9010 (Cyanide)
							EX41 (% Lipids)
							SW7041 (Antimony)
Biota - Validated	Savannah Laboratories	SCI002	11/02/99	LMB REF 2 COMP 2	LMB REF 2 COMP 2	S916900A*8	6010B (Metals)
							680 (PCBs)
							7060 (Arsenic)
							7471 (Mercury)
							7761 (Silver)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Biota - Validated	Savannah Laboratories	SCI002	11/02/99	LMB REF 2 COMP 2	LMB REF 2 COMP 2	S916900A*8	8270C (SVOCs) 9010 (Cyanide) EX41 (% Lipids) SW7041 (Antimony)
Biota - Validated	Savannah Laboratories	SCI001	11/02/99	WC REF2 COMP 1	WC REF2 COMP 1	S916900*13	6010B (Metals) 680 (PCBs) 7060 (Arsenic) 7471 (Mercury) 7761 (Silver) 8081A (Pesticides) 8151A (Herbicides) 8270C (SVOCs) 9010 (Cyanide) EX41 (% Lipids) SW7041 (Antimony)
Biota - Validated	Savannah Laboratories	SCI001	11/02/99	WC REF2 COMP 2	WC REF2 COMP 2	S916900*14	6010B (Metals) 680 (PCBs) 7060 (Arsenic) 7471 (Mercury) 7761 (Silver) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Biota - Validated	Savannah Laboratories	SCI001	11/02/99	WC REF2 COMP 2	WC REF2 COMP 2	S916900*14	8270C (SVOCs) 9010 (Cyanide) EX41 (% Lipids) SW7041 (Antimony)
Alluvial Aquifer GW	Savannah Laboratories	SIL017	11/03/99	AA-SW-S1-42-46'	AA-SW-S1-42-46FT	S917421*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL017	11/03/99	AA-SW-S1-52-56'	AA-SW-S1-52-56FT	S917421*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Fill Area GW	Savannah Laboratories	SIL017	11/03/99	EEG-103-GP	EEG-103-GP	S917421*3	6010B (Metals) 680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL017	11/03/99	EEG-103-GP	EEG-103-GP	S917421*3	7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49799				249-7-1A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL017	11/03/99	EEG-111-GP	EEG-111-GP	S917421*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49799				249-7-2	8290 (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI002	11/03/99	LMB BP COMP 2	LMB BP COMP 2	S916900A*3	6010B (Metals)
							680 (PCBs)
							7060 (Arsenic)
							7471 (Mercury)
							7761 (Silver)
							8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Biota - Validated	Savannah Laboratories	SCI002	11/03/99	LMB BP COMP 2	LMB BP COMP 2	S916900A*3*RE	8151A (Herbicides)
						S916900A*3	8270C (SVOCs)
							9010 (Cyanide)
							EX41 (% Lipids)
							SW7041 (Antimony)
Alluvial Aquifer GW	Savannah Laboratories	SIL018	11/04/99	AA-SW-S1-62-66'	AA-SW-S1-62-66FT	S917467*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49816r1		AA-SW-S1-62-66ft		249-24-4B	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL018	11/04/99	AA-SW-S1-72-76'	AA-SW-S1-72-76FT	S917467*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL018	11/04/99	EE-02-GP	EE-02-GP	S917467*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S917467*4*DL	8270C (SVOCs)
						S917467*4	9010 (Cyanide)
	Triangle Laboratories	49816				249-24-1A	8290 (PCDD/PCDF)
Fill Area GW	Triangle Laboratories	49816	11/04/99	EE-02-GP FIELD BLANK	EE-02-GPEB	249-24-2A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL018	11/04/99	FIELD DUP EE-02-GP	EE-02-GPFD	S917467*5	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S917467*5*DL	8270C (SVOCs)
						S917467*5	9010 (Cyanide)
Fill Area GW	Savannah Laboratories	SIL018	11/04/99	EE-13-GP	EE-13-GP	S917467*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL018	11/04/99	EE-13-GP	EE-13-GP	S917467*3	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49816				249-24-3A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL018	11/05/99	AA-SW-S1-82-86'	AA-SW-S1-82-86FT	S917504*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL018	11/05/99	AA-SW-S1-91-95'	AA-SW-S1-91-95FT	S917504*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Fill Area GW	Savannah Laboratories	SIL018	11/05/99	EE-12-GP	EE-12-GP	S917504*3	6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL018	11/05/99	EE-12-GP	EE-12-GP	S917504*3	680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S917504*3*DL	8270C (SVOCs)
						S917504*3	9010 (Cyanide)
	Triangle Laboratories	49820				249-28-1A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL018	11/05/99	EE-14-GP	EE-14-GP	S917504*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S917504*4*DL	8270C (SVOCs)
						S917504*4	9010 (Cyanide)
	Triangle Laboratories	49820				249-28-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL018	11/08/99	AA-SW-S1-(101-104)FT	AA-SW-S1-101-104FT	S917546*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL018	11/08/99	AA-SW-S1-(101-104)FT	AA-SW-S1-101-104FT	S917546*1	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49843		AA-SW-S1-101-104FT		249-51-3	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL018	11/08/99	AA-SW-S1-(101-104)FT,FD	AA-SW-S1-101-104FTFD	S917546*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49843		AA-SW-S1-101-104FT-FD		249-51-5	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL018	11/08/99	EE-15-GP	EE-15-GP	S917546*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S917546*3*DL	8270C (SVOCs)
						S917546*3	9010 (Cyanide)
	Triangle Laboratories	49843				249-51-1	8290 (PCDD/PCDF)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL018	11/08/99	EE-15-GP-FD	EE-15-GPFD	S917546*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S917546*4*DL	8270C (SVOCs)
						S917546*4	9010 (Cyanide)
	Triangle Laboratories	49843				249-51-2	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/09/99	AA-SW-S2-14-16'	AA-SW-S2-14-16FT	S917573*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/09/99	AA-SW-S2-22-26'	AA-SW-S2-22-26FT	S917573*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/09/99	AA-SW-S2-22-26'	AA-SW-S2-22-26FT	S917573*3	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49855		AA-SW-S2-22-26FT		249-63-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/09/99	AA-SW-S2-32-36'	AA-SW-S2-32-36FT	S917573*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Triangle Laboratories	49872B	11/10/99	AA-SW-S2-22-26FT-FD	AA-SW-S2-22-26FTFD	249-80-5A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/10/99	AA-SW-S2-42-46'	AA-SW-S2-42-46FT	S917607*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/10/99	AA-SW-S2-52-56'	AA-SW-S2-52-56FT	S917607*7	8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/10/99	AA-SW-S2-62-66'	AA-SW-S2-62-66FT	S917607*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49872B		AA-SW-S2-62-66FT		249-80-4A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/10/99	AA-SW-S2-62-66'-FD	AA-SW-S2-62-66FTFD	S917607*5	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/10/99	AA-SW-S3-14-16'	AA-SW-S3-14-16FT	S917607*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/10/99	AA-SW-S3-14-16'	AA-SW-S3-14-16FT	S917607*1	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/10/99	AA-SW-S3-22-26'	AA-SW-S3-22-26FT	S917607*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49872B		AA-SW-S3-22-26FT		249-80-3A	8290 (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL020	11/10/99	UAS-T1-S1-0.5'	UAS-T1-S1-0-0.5FT	S917607A*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49872A		UAS-T1-S1-0.5FT		249-80-1	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL020	11/10/99	UAS-T1-S1-3-6'	UAS-T1-S1-3-6FT	S917607A*2	6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL020	11/10/99	UAS-T1-S1-3-6'	UAS-T1-S1-3-6FT	S917607A*2	680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49872A		UAS-T1-S1-3.6FT		249-80-2	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL020	11/10/99	UAS-T1-S2-0.5'	UAS-T1-S2-0-0.5FT	S917607A*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/10/99	UAS-T1-S2-3-6'	UAS-T1-S2-3-6FT	S917607A*4	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL020	11/10/99	UAS-T1-S2-3-6'	UAS-T1-S2-3-6FT	S917607A*4	8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/11/99	AA-SW-S2-52-56'	AA-SW-S2-52-56FT	S917656*8	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/11/99	AA-SW-S2-72-76'	AA-SW-S2-72-76FT	S917656*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/11/99	AA-SW-S2-72-76'-EB	AA-SW-S2-72-76FTEB	S917656*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/11/99	AA-SW-S2-72-76'-EB	AA-SW-S2-72-76FTEB	S917656*1	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49888C		AA-SW-S2-72-76FT.EB		249-96-3A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/11/99	AA-SW-S2-82-86'	AA-SW-S2-82-86FT	S917656*5	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/11/99	AA-SW-S3-32-36'	AA-SW-S3-32-36FT	S917656*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/11/99	AA-SW-S3-42-46'	AA-SW-S3-42-46FT	S917656*4	6010B (Metals) 680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/11/99	AA-SW-S3-42-46'	AA-SW-S3-42-46FT	S917656*4	7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S3-0.5'	UAS-T1-S3-0-0.5FT	S917656A*1 S917656A*1*RE S917656A*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S3-3-6'	UAS-T1-S3-3-6FT	S917656A*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S4-0.5'	UAS-T1-S4-0-0.5FT	S917656A*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S4-3-6'	UAS-T1-S4-3-6FT	S917656A*4	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S5-0.5'	UAS-T1-S5-0-0.5FT	S917656A*5	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S5-0.5'	UAS-T1-S5-0-0.5FT	S917656A*5	8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S5-3-6'	UAS-T1-S5-3-6FT	S917656A*6	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S6-0.5'	UAS-T1-S6-0-0.5FT	S917656A*7 S917656A*7*RE S917656A*7	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49888Ar2		UAS-T1-S6-0.5FT		249-96-2	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S6-3-6'	UAS-T1-S6-3-6FT	S917656A*8	6010B (Metals) 680 (PCBs) 7471 (Mercury)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S6-3-6'	UAS-T1-S6-3-6FT	S917656A*8	8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49888Ar2		UAS-T1-S6-3-6FT		249-96-1	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S7-0.5'	UAS-T1-S7-0-0.5FT	S917656A*9	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL019	11/11/99	UAS-T1-S7-0.5-EB	UAS-T1-S7-0-0.5FTEB	S917656*6	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Triangle Laboratories	49888B	11/11/99	UAS-T1-S7-0.5FT-EB	UAS-T1-S7-0-0.5FTEB	249-96-4A	8280 (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S7-0.5'-FD	UAS-T1-S7-0-0.5FTFD	S917656A*11	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S7-3-6'	UAS-T1-S7-3-6FT	S917656A*10	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL019	11/11/99	UAS-T1-S7-3-6'-EB	UAS-T1-S7-3-6FTEB	S917656*7	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL019	11/11/99	UAS-T1-S7-3-6'-EB	UAS-T1-S7-3-6FTEB	S917656*7	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49888B		UAS-T1-S7-3-6FT-EB		249-96-5A	8280 (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S7-3-6'-FD	UAS-T1-S7-3-6FTFD	S917656A*15	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/12/99	AA-SW-S2-92-96'	AA-SW-S2-92-96FT	S917689*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/12/99	AA-SW-S3-52-56'	AA-SW-S3-52-56FT	S917689*1	6010B (Metals) 680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/12/99	AA-SW-S3-52-56'	AA-SW-S3-52-56FT	S917689*1	7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/12/99	AA-SW-S3-62-66'	AA-SW-S3-62-66FT	S917689*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49897B		AA-SW-S3-62-66FT		250-6-7	8290 (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL020	11/12/99	UAS-T2-S1-0.5'	UAS-T2-S1-0-0.5FT	S917689A*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL020	11/12/99	UAS-T2-S1-0.5'	UAS-T2-S1-0-0.5FT	S917689A*1	9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/12/99	UAS-T2-S1-3-6'	UAS-T2-S1-3-6FT	S917689A*2 S917689A*2*RE S917689A*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/12/99	UAS-T2-S2-0.5'	UAS-T2-S2-0-0.5FT	S917689A*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S2-3-6'	UAS-T2-S2-3-6FT	S917689B*1 S917689B*1*RE S917689B*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S2-3-6'	UAS-T2-S2-3-6FT	S917689B*1	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S3-0.5'	UAS-T2-S3-0-0.5FT	S917689B*2 S917689B*2*RE S917689B*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S3-3-6'	UAS-T2-S3-3-6FT	S917689B*3 S917689B*3*RE S917689B*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/12/99	UAS-T2-S4-0-5'	UAS-T2-S4-0-0.5FT	S917689A*4	6010B (Metals) 680 (PCBs) 7471 (Mercury)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL020	11/12/99	UAS-T2-S4-0-5'	UAS-T2-S4-0-0.5FT	S917689A*4	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49897A		UAS-T2-S4-0.5FT		250-6-4	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S4-3-6'	UAS-T2-S4-3-6FT	S917689B*6	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49897Ar1		UAS-T2-S4-3-6FT		250-6-1	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S5-0.5'	UAS-T2-S5-0-0.5FT	S917689B*4	6010B (Metals)
						S917689B*4*RE	680 (PCBs)
						S917689B*4	7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S5-0.5'	UAS-T2-S5-0-0.5FT	S917689B*4	9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S5-3-6'	UAS-T2-S5-3-6FT	S917689B*5	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S6-0.5'	UAS-T2-S6-0-0.5FT	S917689B*7	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S6-3-6'	UAS-T2-S6-3-6FT	S917689B*8	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S6-3-6'	UAS-T2-S6-3-6FT	S917689B*8	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/15/99	AA-SW-S3-102-106'	AA-SW-S2-102-106FT	S917718A*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49914A		AA-SWS2(102-106FT)		250-23-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/15/99	AA-SW-S3-72-76'	AA-SW-S3-72-76FT	S917718A*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/15/99	AA-SW-S3-82-86'	AA-SW-S3-82-86FT	S917718A*2	6010B (Metals) 680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/15/99	AA-SW-S3-82-86'	AA-SW-S3-82-86FT	S917718A*2	7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/15/99	UAS-T3-S1-0.5'	UAS-T3-S1-0-0.5FT	S917718B*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S1-3-6'	UAS-T3-S1-3-6FT	S917718*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S2-0.5'	UAS-T3-S2-0-0.5FT	S917718*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/15/99	UAS-T3-S2-3-6'	UAS-T3-S2-3-6FT	S917718B*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S3-0.5'	UAS-T3-S3-0-0.5FT	S917718*12	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S3-0.5'	UAS-T3-S3-0-0.5FT	S917718*12	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49914B		UAS-T3-S3-0.5FT		250-23-2	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL025	11/15/99	UAS-T3-S3-0.5'-FD	UAS-T3-S3-0-0.5FTFD	S917718B*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49914B		UAS-T3-S3-0.5FT-FD		250-23-4	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S3-3-6'	UAS-T3-S3-3-6FT	S917718*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49914B		UAS-T3-S3-3-6FT		250-23-3	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S3-3-6'-FD	UAS-T3-S3-3-6FTFD	S917718*4	6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S3-3-6'-FD	UAS-T3-S3-3-6FTFD	S917718*4	680 (PCBs)
							7471 (Mercury)
						S917718*4*RE	8081A (Pesticides)
						S917718*4	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49914B		UAS-T3-S3-3-6FT-FD		250-23-5	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S4-0.5'	UAS-T3-S4-0-0.5FT	S917718*5	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S4-3-6'	UAS-T3-S4-3-6FT	S917718*9	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S4-3-6'	UAS-T3-S4-3-6FT	S917718*9	8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S5-0.5'	UAS-T3-S5-0-0.5FT	S917718*7	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S5-3-6'	UAS-T3-S5-3-6FT	S917718*11	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S6-0.5'	UAS-T3-S6-0-0.5FT	S917718*6	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S6-0.5'	UAS-T3-S6-0-0.5FT	S917718*6	8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S6-3-6'	UAS-T3-S6-3-6FT	S917718*10	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/15/99	UAS-T3-S7-0.5'	UAS-T3-S7-0-0.5FT	S917718B*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S7-3-6'	UAS-T3-S7-3-6FT	S917718*8	6010B (Metals) 680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S7-3-6'	UAS-T3-S7-3-6FT	S917718*8	7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/16/99	AA-GHL-S1-12-16'	AA-GHL-S1-12-16FT	S917759A*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/16/99	AA-SW-S3-92-96'	AA-SW-S3-92-96FT	S917759A*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL023	11/16/99	UAS-T3-S5-0.5'-EB	UAS-T3-S5-0-0.5FTEB	S917759A*4	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49930B		UAS-T3-S5-0.5FT-EB		250-39-1A	8290 (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL023	11/16/99	UAS-T3-S7-3-6'-EB	UAS-T3-S7-3-6FTEB	S917759A*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49930B		UAS-T3-S7-3-6FT-EB		250-39-2A	8290 (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S1-0.5'	UAS-T4-S1-0-0.5FT	S917759*8	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S1-0.5'	UAS-T4-S1-0-0.5FT	S917759*8	8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49930A		UAS-T4-S1-0.5FT		250-39-3	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S2-0.5'	UAS-T4-S2-0-0.5FT	S917759*6	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S3-0.5'	UAS-T4-S3-0-0.5FT	S917759*5	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S3-0-5'-FD	UAS-T4-S3-0-0.5FTFD	S917759*4	6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S3-0-5'-FD	UAS-T4-S3-0-0.5FTFD	S917759*4	680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S4-0.5'	UAS-T4-S4-0-0.5FT	S917759*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S5-0.5'	UAS-T4-S5-0-0.5FT	S917759*7	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S5-0.5'	UAS-T4-S5-0-0.5FT	S917759*7	9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S5-3-6'	UAS-T4-S5-3-6FT	S917759*9	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S6-0.5'	UAS-T4-S6-0-0.5FT	S917759*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49930A		UAS-T4-S6-0.5FT		250-39-4	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S6-3-6'	UAS-T4-S6-3-6FT	S917759*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S6-3-6'	UAS-T4-S6-3-6FT	S917759*1	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49930A		UAS-T4-S6-(3-6)		250-39-5	8280A (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/17/99	AA-GHL-S1-22-26'	AA-GHL-S1-22-26FT	S917800B*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49945A		AA-GHL-S1-(22-26)FT		250-54-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/17/99	AA-GHL-S1-22-26'-EB	AA-GHL-S1-22-26FTEB	S917800B*6	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Triangle Laboratories	49945A	11/17/99	AA-GHL-(22-26)FT-EB	AA-GHL-S1-22-26FTEB	250-54-7A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/17/99	AA-GHL-S1-22-26'-FD	AA-GHL-S1-22-26FTFD	S917800B*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide) 8290 (PCDD/PCDF)
	Triangle Laboratories	49945A		AA-GHL-S1-(22-26)FT-FD		250-54-6A	
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/17/99	AA-SW-S3-96-99'-FT	AA-SW-S3-96-99FT	S917800B*4	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide) 8290 (PCDD/PCDF)
	Triangle Laboratories	49945A		AA-SW-S3-(96-99)FT		250-54-5A	
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/17/99	AA-SW-S3-96-99'-EB	AA-SW-S3-96-99FTEB	S917800B*1	6010B (Metals) 680 (PCBs) 7470 (Mercury)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/17/99	AA-SW-S3-96-99'-EB	AA-SW-S3-96-99FTEB	S917800B*1	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49945A		AA-SW-S3-(96-99)FT-EB		250-54-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/17/99	AA-SW-S3-96-99'-FD	AA-SW-S3-96-99FTFD	S917800B*5	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49945A		AA-SW-S3-(96-99)FT-FD		250-54-8A	8290 (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S1-3-6'	UAS-T4-S1-3-6FT	S917800*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S1-3-6'	UAS-T4-S1-3-6FT	S917800*1	9010 (Cyanide)
	Triangle Laboratories	49945Br1		UAS-T4-S1-(3-6)FT		250-54-12	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S2-3-6'	UAS-T4-S2-3-6FT	S917800*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S3-3-6'	UAS-T4-S3-3-6FT	S917800*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S3-3-6'-FD	UAS-T4-S3-3-6FTFD	S917800*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S3-3-6'-FD	UAS-T4-S3-3-6FTFD	S917800*4	8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S4-3-6'	UAS-T4-S4-3-6FT	S917800*7	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S7-0.5'	UAS-T4-S7-0-0.5FT	S917800*9	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S7-3-6'	UAS-T4-S7-3-6FT	S917800*5	6010B (Metals) 680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S7-3-6'	UAS-T4-S7-3-6FT	S917800*5	7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S917800*5*DL	8270C (SVOCs)
						S917800*5	9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T5-S1-0.5'	UAS-T5-S1-0-0.5FT	S917800*6	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S1-3-6'	UAS-T5-S1-3-6FT	S917800A*8	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T5-S2-0.5'	UAS-T5-S2-0-0.5FT	S917800*10	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S2-3-6'	UAS-T5-S2-3-6FT	S917800A*9	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T5-S3-0.5'	UAS-T5-S3-0-0.5FT	S917800*8 S917800*8*RE S917800*8	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T5-S3-0.5'	UAS-T5-S3-0-0.5FT	S917800*8	8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S3-3-6'	UAS-T5-S3-3-6FT	S917800A*10	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S4-0.5'	UAS-T5-S4-0-0.5FT	S917800A*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49945Br1		UAS-T5-S4-(0.5)FT		250-54-11	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T5-S4-3-6'	UAS-T5-S4-3-6FT	S917800*11	6010B (Metals) 680 (PCBs) 7471 (Mercury)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T5-S4-3-6'	UAS-T5-S4-3-6FT	S917800*11	8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49945Br1		UAS-T5-S4-(3-6)FT		250-54-10	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S5-0.5'	UAS-T5-S5-0-0.5FT	S917800A*7	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL023	11/17/99	UAS-T5-S5-0.5'-EB	UAS-T5-S5-0-0.5FTEB	S917800B*7	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S5-3-6'	UAS-T5-S5-3-6FT	S917800A*6	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL023	11/17/99	UAS-T5-S5-3-6'-EB	UAS-T5-S5-3-6FTEB	S917800B*8	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S6-0.5'	UAS-T5-S6-0-0.5FT	S917800A*5 S917800A*5*RE S917800A*5	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S6-0.5'	UAS-T5-S6-0-0.5FT	S917800A*5	8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S6-0.5'-FD	UAS-T5-S6-0-0.5FTFD	S917800A*3 S917800A*3*RE S917800A*3 S917800A*3*RE S917800A*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S6-3-6'	UAS-T5-S6-3-6FT	S917800A*4	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S6-3-6'-FD	UAS-T5-S6-3-6FTFD	S917800A*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S6-3-6'-FD	UAS-T5-S6-3-6FTFD	S917800A*2	8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/18/99	AA-GHL-S1-32-36'	AA-GHL-S1-32-36FT	S917842*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/18/99	AA-GHL-S1-42-46'	AA-GHL-S1-42-46FT	S917842*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/18/99	AA-GHL-S2-12-16'	AA-GHL-S2-12-16FT	S917842*2	6010B (Metals) 680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/18/99	AA-GHL-S2-12-16'	AA-GHL-S2-12-16FT	S917842*2	7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/18/99	AA-GHL-S2-22-26'	AA-GHL-S2-22-26FT	S917842*4	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49958A		AA-GHL-S2-22-26FT		250-67-5A	8290 (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S1-0.5'	UAS-T6-S1-0-0.5FT	S917842A*6 S917842A*6*RE S917842A*6	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S1-0.5'	UAS-T6-S1-0-0.5FT	S917842A*6	9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S1-3-6'	UAS-T6-S1-3-6FT	S917842A*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S2-0.5'	UAS-T6-S2-0-0.5FT	S917842A*7	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S2-3-6'	UAS-T6-S2-3-6FT	S917842A*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S2-3-6'	UAS-T6-S2-3-6FT	S917842A*2	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S3-0.5'	UAS-T6-S3-0-0.5FT	S917842A*8	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49958B		UAS-T6-S3-0.5FT		250-67-2	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL023	11/18/99	UAS-T6-S3-0.5'-EB	UAS-T6-S3-0-0.5FTEB	S917842*5	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49958Cr1		UAS-T6-S3-0.5FT-EB		250-67-4A	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S3-3-6'	UAS-T6-S3-3-6FT	S917842A*3	6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S3-3-6'	UAS-T6-S3-3-6FT	S917842A*3	680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49958B		UAS-T6-S3-3-6FT		250-67-1	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL023	11/18/99	UAS-T6-S3-3-6'-EB	UAS-T6-S3-3-6FTEB	S917842*6	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49958Cr1		UAS-T6-S3-3-6FT-EB		250-67-3A	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S4-0.5'	UAS-T6-S4-0-0.5FT	S917842A*9	6010B (Metals)
						S917842A*9*RE	680 (PCBs)
						S917842A*9	7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S4-0.5'	UAS-T6-S4-0-0.5FT	S917842A*9	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S4-3-6'	UAS-T6-S4-3-6FT	S917842A*4 S917842A*4*RE S917842A*4	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S5-0.5'	UAS-T6-S5-0-0.5FT	S917842A*10 S917842A*10*RE S917842A*10	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S5-3-6'	UAS-T6-S5-3-6FT	S917842A*5	6010B (Metals) 680 (PCBs) 7471 (Mercury)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S5-3-6'	UAS-T6-S5-3-6FT	S917842A*5	8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL026	11/19/99	AA-GHL-S1-52-56'	AA-GHL-S1-52-56FT	S917881*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL026	11/19/99	AA-GHL-S2-32-36'	AA-GHL-S2-32-36FT	S917881*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL026	11/19/99	AA-GHL-S2-32-36'-EB	AA-GHL-S2-32-36FTEB	S917881*1	6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL026	11/19/99	AA-GHL-S2-32-36'-EB	AA-GHL-S2-32-36FTEB	S917881*1	680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL026	11/19/99	AA-GHL-S2-42-46'	AA-GHL-S2-42-46FT	S917881*4	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S1-0.5'	UAS-T7-S1-0-0.5FT	S917881A*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S1-0.5'	UAS-T7-S1-0-0.5FT	S917881A*1	9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S1-3-6'	UAS-T7-S1-3-6FT	S917881A*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S2-0.5'	UAS-T7-S2-0-0.5FT	S917881A*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S2-3-6'	UAS-T7-S2-3-6FT	S917881A*4	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S2-3-6'	UAS-T7-S2-3-6FT	S917881A*4	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S3-0.5'	UAS-T7-S3-0-0.5FT	S917881A*5	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49972		UAS-T7-S3-0.5FT		250-81-1	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S3-0.5'-FD	UAS-T7-S3-0-0.5FTFD	S917881A*7	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49972		UAS-T7-S3-0.5FTFD		250-81-3	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S3-3-6'	UAS-T7-S3-3-6FT	S917881A*6	6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S3-3-6'	UAS-T7-S3-3-6FT	S917881A*6	680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49972		UAS-T7-S3-6FT		250-81-2	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S3-3-6'-FD	UAS-T7-S3-3-6FTFD	S917881A*8	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49972r1		UAS-T7-S3-6FTFD		250-81-4	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S4-0.5'	UAS-T7-S4-0-0.5FT	S917881A*9	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S4-0.5'	UAS-T7-S4-0-0.5FT	S917881A*9	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S4-3-6'	UAS-T7-S4-3-6FT	S917881A*10	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S5-0.5'	UAS-T7-S5-0-0.5FT	S917881A*11	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL027	11/19/99	UAS-T7-S5-3-6'	UAS-T7-S5-3-6FT	S917881B*1	6010B (Metals) 680 (PCBs) 7471 (Mercury)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL027	11/19/99	UAS-T7-S5-3-6'	UAS-T7-S5-3-6FT	S917881B*1	8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL027	11/19/99	UAS-T7-S6-0.5'	UAS-T7-S6-0-0.5FT	S917881B*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL026	11/19/99	UAS-T7-S6-0.5'-EB	UAS-T7-S6-0-0.5FTEB	S917881*5	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL027	11/19/99	UAS-T7-S6-3-6'	UAS-T7-S6-3-6FT	S917881B*3	6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL027	11/19/99	UAS-T7-S6-3-6'	UAS-T7-S6-3-6FT	S917881B*3	680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL026	11/19/99	UAS-T7-S6-3-6'-EB	UAS-T7-S6-3-6FTEB	S917881*6	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL027	11/19/99	UAS-T7-S7-0.5'	UAS-T7-S7-0-0.5FT	S917881B*4 S917881B*4*RE S917881B*4	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL027	11/19/99	UAS-T7-S7-0.5'	UAS-T7-S7-0-0.5FT	S917881B*4	9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL027	11/19/99	UAS-T7-S7-3-6'	UAS-T7-S7-3-6FT	S917881B*5	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/29/99	AA-GHL-S1-62-66'	AA-GHL-S1-62-66FT	S918018*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50010				251-20-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/29/99	AA-GHL-S2-52-56'	AA-GHL-S2-52-56FT	S918018*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/29/99	AA-GHL-S2-52-56'	AA-GHL-S2-52-56FT	S918018*2	8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/30/99	AA-GHL-S1-72-76'	AA-GHL-S1-72-76FT	S918042*5	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/30/99	AA-GHL-S1-82-86'	AA-GHL-S1-82-86FT	S918042*4	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/30/99	AA-GHL-S2-62-66'	AA-GHL-S2-62-66FT	S918042*1	6010B (Metals) 680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/30/99	AA-GHL-S2-62-66'	AA-GHL-S2-62-66FT	S918042*1	7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/30/99	AA-GHL-S2-62-66' FD	AA-GHL-S2-62-66FTFD	S918042*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/30/99	AA-GHL-S2-72-76'	AA-GHL-S2-72-76FT	S918042*2 S918042*2*RE S918042*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL029	11/30/99	WASTE-N-B1-0.5'	WASTE-N-B1-0-0.5FT	S918042A*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50022A		WASTE-N-B1-0.5FT		251-32-2	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL029	11/30/99	WASTE-N-B2-0.5'	WASTE-N-B2-0-0.5FT	S918042A*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S918042A*2*RE	8151A (Herbicides)
						S918042A*2	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50022A		WASTE-N-B2-0.5FT		251-32-3	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL029	11/30/99	WASTE-N-B3-0.5'	WASTE-N-B3-0-0.5FT	S918042A*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL029	11/30/99	WASTE-N-B3-0.5'	WASTE-N-B3-0-0.5FT	S918042A*3	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50022A		WASTE-N-B3-0.5FT		251-32-5	8280A (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/01/99	AA-GHL-S1-102-106'	AA-GHL-S1-102-106FT	S918085*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
						S918085*4*RE	8081A (Pesticides)
						S918085*4	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50030A		AA-GHL-S1-(102-106)FT		251-40-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/01/99	AA-GHL-S1-92-96'	AA-GHL-S1-92-96FT	S918085*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/01/99	AA-GHL-S1-92-96' FD	AA-GHL-S1-92-96FTFD	S918085*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
						S918085*3*RE	8081A (Pesticides)
						S918085*3	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/01/99	AA-GHL-S2-82-86'	AA-GHL-S2-82-86FT	S918085*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/02/99	AA-GHL-S1-107-111'	AA-GHL-S1-107-111FT	S918114*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/02/99	AA-GHL-S1-107-111'	AA-GHL-S1-107-111FT	S918114*2	8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Triangle Laboratories	50042C	12/02/99	AA-GHL-S2-(62-66)FT	AA-GHL-S2-62-66FT	251-52-6A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/02/99	AA-GHL-S2-92-96'	AA-GHL-S2-92-96FT	S918114*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/02/99	AA-GHL-S2-92-96'-EB	AA-GHL-S2-92-96FTEB	S918114*4	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50042C		AA-GHL-S2-(92-96)FT-EB		251-52-8A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/02/99	AA-GHL-S2-99-103'	AA-GHL-S2-99-103FT	S918114*1	6010B (Metals) 680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/02/99	AA-GHL-S2-99-103'	AA-GHL-S2-99-103FT	S918114*1	7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50042C		AA-GHL-S2-(99-103)FT		251-52-7A	8290 (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL029	12/02/99	WASTE-N-B4-0.5'	WASTE-N-B4-0-0.5FT	S918114B*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50042A		WASTE-N-B4-0.5FT		251-52-1	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL028	12/02/99	WASTE-N-B4-0.5'-EB	WASTE-N-B4-0-0.5FTEB	S918114*5	6010B/1311 (Metals)
							680 (PCBs)
							7470/1311 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL028	12/02/99	WASTE-N-B4-0.5'-EB	WASTE-N-B4-0-0.5FTEB	S918114*5	8270C (SVOCs)
							9010/1311 (Cyanide)
	Triangle Laboratories	50042C		WASTE-N-B4-0.5FT-EB		251-52-4A	8290 (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL029	12/02/99	WASTE-N-B4-0.5'-FD	WASTE-N-B4-0-0.5FTFD	S918114B*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50042A		WASTE-N-B4-0.5FT-FD		251-52-2	8280A (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/03/99	AA-I-S2-16-20'	AA-I-S2-16-20FT	S918170*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50058r1		AA-I-S2-16-20FT		251-68-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/03/99	AA-I-S3-24-28'	AA-I-S3-24-28FT	S918170*2	6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/03/99	AA-I-S3-24-28'	AA-I-S3-24-28FT	S918170*2	680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50058r1		AA-I-S3-24-28FT		251-68-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/06/99	AA-I-S2-26-30'	AA-I-S2-26-30FT	S918198*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918198*2*DL	8270C (SVOCs)
						S918198*2	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/06/99	AA-I-S3-34-38'	AA-I-S3-34-38FT	S918198*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/06/99	AA-I-S3-34-38'	AA-I-S3-34-38FT	S918198*3	8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/06/99	AA-I-S3-44-48'	AA-I-S3-44-48FT	S918198*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/07/99	AA-I-S2-36-40'	AA-I-S2-36-40FT	S918235*3 S918235*3*DL S918235*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/07/99	AA-I-S2-46-50'	AA-I-S2-46-50FT	S918235*4	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/07/99	AA-I-S2-46-50'	AA-I-S2-46-50FT	S918235*4	8151A (Herbicides)
							8260B (VOCs)
						S918235*4*DL	8270C (SVOCs)
						S918235*4	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/07/99	AA-I-S3-54-58'	AA-I-S3-54-58FT	S918235*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/07/99	AA-I-S3-64-68'	AA-I-S3-64-68FT	S918235*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918235*1*DL	8270C (SVOCs)
						S918235*1	9010 (Cyanide)
	Triangle Laboratories	50081r1		AA-I-S3-(64-68)FT		251-91-1B	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/08/99	AA-I-S2-56-60'	AA-I-S2-56-60FT	S918304*2	6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/08/99	AA-I-S2-56-60'	AA-I-S2-56-60FT	S918304*2	680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918304*2*DL	8270C (SVOCs)
						S918304*2	9010 (Cyanide)
	Triangle Laboratories	50097		AA-I-S2-(56-60)FT		252-8-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/08/99	AA-I-S2-66-70'	AA-I-S2-66-70FT	S918304*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918304*3*DL	8270C (SVOCs)
						S918304*3	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/08/99	AA-I-S3-74-78'	AA-I-S3-74-78FT	S918304*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/08/99	AA-I-S3-74-78'	AA-I-S3-74-78FT	S918304*1*DL	8270C (SVOCs)
						S918304*1	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/09/99	AA-I-S3-84-88'	AA-I-S3-84-88FT	S918348*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918348*1*DL	8270C (SVOCs)
						S918348*1	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/09/99	AA-I-S3-84-88'-FD	AA-I-S3-84-88FTFD	S918348*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918348*2*DL	8270C (SVOCs)
						S918348*2	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/10/99	AA-I-S2-76-80'	AA-I-S2-76-80FT	S918387*5	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)

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Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/10/99	AA-I-S2-76-80'	AA-I-S2-76-80FT	S918387*5 S918387*5*DL S918387*5	8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/10/99	AA-I-S2-76-80'-EB	AA-I-S2-76-80FTEB	S918387*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/10/99	AA-I-S2-76-80'-FD	AA-I-S2-76-80FTFD	S918387*3 S918387*3*DL S918387*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/10/99	AA-I-S3-84-88'-EB	AA-I-S3-84-88FTEB	S918387*4	6010B (Metals) 680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/10/99	AA-I-S3-84-88'-EB	AA-I-S3-84-88FTEB	S918387*4	7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/10/99	AA-I-S3-94-98'	AA-I-S3-94-98FT	S918387*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918387*2*DL	8270C (SVOCs)
						S918387*2	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/13/99	AA-I-S2-86-90'	AA-I-S2-86-90FT	S918427*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918427*2*DL	8270C (SVOCs)
						S918427*2	9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/13/99	AA-I-S2-96-100'	AA-I-S2-96-100FT	S918427*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918427*1*DL	8270C (SVOCs)
						S918427*1	9010 (Cyanide)
	Triangle Laboratories	50125		AA-I-S2-(96-100)FT		252-36-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/13/99	AA-I-S3-104-108'	AA-I-S3-104-108FT	S918427*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918427*3*DL	8270C (SVOCs)
						S918427*3	9010 (Cyanide)
	Triangle Laboratories	50125		AA-I-S3-(104-108)FT		252-36-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/14/99	AA-GHL-S3-20-24'	AA-GHL-S3-20-24FT	S918496*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/14/99	AA-GHL-S3-20-24'	AA-GHL-S3-20-24FT	S918496*1	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50137		AA-GHL-S3-20-24FT		252-48-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/14/99	AA-I-S1-17-21'	AA-I-S1-17-21FT	S918458*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
						S918496*2	8260B (VOCs)
						S918458*1*DL	8270C (SVOCs)
						S918458*1	9010 (Cyanide)
	Triangle Laboratories	50137		AA-I-S1-17-21FT		252-48-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/14/99	AA-I-S3-110-114'	AA-I-S3-110-114FT	S918458*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
						S918496*3	8260B (VOCs)
						S918458*2*DL	8270C (SVOCs)
						S918458*2	9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/15/99	AA-GHL-S3-30-34'	AA-GHL-S3-30-34FT	S918507*4	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/15/99	AA-GHL-S3-30-34'-FD	AA-GHL-S3-30-34FTFD	S918507*5	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/15/99	AA-GHL-S3-40-44'	AA-GHL-S3-40-44FT	S918507*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/15/99	AA-GHL-S3-40-44'	AA-GHL-S3-40-44FT	S918507*1	8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/15/99	AA-I-S1-27-31'	AA-I-S1-27-31FT	S918507*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918507*2*DL	8270C (SVOCs)
						S918507*2	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/15/99	AA-I-S1-37-41'	AA-I-S1-37-41FT	S918507*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918507*3*DL	8270C (SVOCs)
						S918507*3	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/16/99	AA-GHL-S3-50-54'	AA-GHL-S3-50-54FT	S918559*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/16/99	AA-GHL-S3-50-54'	AA-GHL-S3-50-54FT	S918559*3	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/16/99	AA-GHL-S3-60-64'	AA-GHL-S3-60-64FT	S918559*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50176		AA-GHL-S3-(60-64)FT		252-87-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/16/99	AA-GHL-S3-60-64'-EB	AA-GHL-S3-60-64FTEB	S918559*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50176		AA-GHL-S3-(60-64)FT-EB		252-87-2A	8290 (PCDD/PCDF)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/16/99	AA-I-S1-47-51'	AA-I-S1-47-51FT	S918559*5	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918559*5*DL	8270C (SVOCs)
						S918559*5	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/16/99	AA-I-S1-57-61'	AA-I-S1-57-61FT	S918559*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50176		AA-I-S1-(57-61)FT		252-87-3A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/17/99	AA-GHL-S3-70-74'	AA-GHL-S3-70-74FT	S918611*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/17/99	AA-GHL-S3-70-74'	AA-GHL-S3-70-74FT	S918611*5 S918611*2	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/17/99	AA-GHL-S3-80-84'	AA-GHL-S3-80-84FT	S918611*4	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/17/99	AA-I-S1-67-71'	AA-I-S1-67-71FT	S918611*1 S918611*7 S918611*1*DL S918611*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/17/99	AA-I-S1-67-71'-EB	AA-I-S1-67-71FTEB	S918611*3	6010B (Metals) 680 (PCBs) 7470 (Mercury)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/17/99	AA-I-S1-67-71'-EB	AA-I-S1-67-71FTEB	S918611*3	8081A (Pesticides)
							8151A (Herbicides)
						S918611*6	8260B (VOCs)
						S918611*3	8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/20/99	AA-GHL-S3-(100-104)'	AA-GHL-S3-100-104FT	S918642*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50189		AA-GHL-S3-(100-104)FT		253-1-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/20/99	AA-GHL-S3-(90-94)'	AA-GHL-S3-90-94FT	S918642*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/20/99	AA-I-S1-(77-81)'	AA-I-S1-77-81FT	S918642*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/21/99	AA-GHL-S3-(110-114)'	AA-GHL-S3-110-114FT	S918672*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/21/99	AA-I-S1-(87-91)'	AA-I-S1-87-91FT	S918715*1 S918672*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/21/99	AA-I-S1-(87-91)'	AA-I-S1-87-91FT	S918715*1	8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/21/99	AA-I-S1-(87-91)'FD	AA-I-S1-87-91FTFD	S918672*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918672*1*DL	8270C (SVOCs)
						S918672*1	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/21/99	AA-I-S1-(97-104)'	AA-I-S1-97-101FT	S918715*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
				AA-I-S1-(97-101)'		S918672*4	8260B (VOCs)
				AA-I-S1-(97-104)'		S918715*2	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50201		AA-I-S1-(97-101) FT		253-13-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Triangle Laboratories	50201	12/21/99	AA-I-S1-(97-101) FT.FD	AA-I-S1-97-101FTFD	253-13-2A	8290 (PCDD/PCDF)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/11/00	FASED-CSF-S1E-0-8'	FASED-CSF-S1E-0-8IN	S000180*1	680 (PCBs)

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Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/11/00	FASED-CSF-S2-0-7'	FASED-CSF-S2-0-7IN	S000180*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/11/00	FASED-CSF-S3E-0-6'	FASED-CSF-S3E-0-6IN	S000180*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/11/00	FASED-CSF-S4-0-7'	FASED-CSF-S4-0-7IN	S000180*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/11/00	FASED-CSF-S5W-0-10'	FASED-CSF-S5W-0-10IN	S000180*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/11/00	FASED-CSF-S6E-0-10'	FASED-CSF-S6E-0-10IN	S000180*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/11/00	FASED-CSF-S73-0-11'	FASED-CSF-S7E-0-11IN	S000180*7	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/12/00	FASED-CSF-S10-0-10'	FASED-CSF-S10-0-9IN	S000220*8	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/12/00	FASED-CSF-S11W-0-10'	FASED-CSF-S11W-0-10IN	S000220*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/12/00	FASED-CSF-S12-0-15'	FASED-CSF-S12-0-15IN	S000220*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/12/00	FASED-CSF-S12-0-15'-FD	FASED-CSF-S12-0-15INFD	S000220*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/12/00	FASED-CSF-S13W-0-15'	FASED-CSF-S13W-0-15IN	S000220*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/12/00	FASED-CSF-S14W-0-15'	FASED-CSF-S14W-0-15IN	S000220*7	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/12/00	FASED-CSF-S8-0-15'	FASED-CSF-S8-0-15IN	S000220*1	680 (PCBs)

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Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/12/00	FASED-CSF-S9-0-11'	FASED-CSF-S9-0-11IN	S000220*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/13/00	FASED-CSF-S15W-0-28'	FASED-CSF-S15W-0-28IN	S000243*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/13/00	FASED-CSF-S16-0-23'	FASED-CSF-S16-0-23IN	S000243*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/13/00	FASED-CSF-S17W-0-16'	FASED-CSF-S17W-0-16IN	S000243*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/13/00	FASED-CSF-S18E-0-14'	FASED-CSF-S18E-0-14IN	S000243*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/17/00	FASED-CSF-S19-0-13'	FASED-CSF-S19-0-13IN	S000304*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/17/00	FASED-CSF-S20-0-12'	FASED-CSF-S20-0-12IN	S000304*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/17/00	FASED-CSF-S21-0-14'	FASED-CSF-S21-0-13IN	S000304*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/17/00	FASED-CSF-S21-0-14'FD	FASED-CSF-S21-0-13INFD	S000304*7	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/17/00	FASED-CSF-S22E-0-20'	FASED-CSF-S22E-0-20IN	S000304*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/17/00	FASED-CSF-S23-0-15'	FASED-CSF-S23-0-15IN	S000304*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/17/00	FASED-CSF-S24W-0-13'	FASED-CSF-S24W-0-13IN	S000304*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/18/00	FASED-CSF-S25E-0-10'	FASED-CSF-S25E-0-10IN	S000336*1	680 (PCBs)

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Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/18/00	FASED-CSF-S26W-0-13'	FASED-CSF-S26W-0-13IN	S000336*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/18/00	FASED-CSF-S27E-0-16'	FASED-CSF-S27E-0-16IN	S000336*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/18/00	FASED-CSF-S28-0-10'	FASED-CSF-S28-0-10IN	S000336*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/18/00	FASED-CSF-S29W-0-10'	FASED-CSF-S29W-0-10IN	S000336*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/18/00	FASED-CSF-S30N-0-8'	FASED-CSF-S30N-0-8IN	S000336*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/18/00	FASED-CSF-S31N-0-13'	FASED-CSF-S31N-0-13IN	S000336*7	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/18/00	FASED-CSF-S32S-0-11'	FASED-CSF-S32S-0-11IN	S000336A*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/18/00	FASED-CSF-S32S-0-11'FD	FASED-CSF-S32S-0-11INF D	S000336A*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/18/00	FASED-CSF-S33-0-10'	FASED-CSF-S33-0-13IN	S000336A*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/18/00	FASED-CSF-S34S-0-14'	FASED-CSF-S34S-0-14IN	S000336A*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/18/00	FASED-CSF-S36N-0-12'	FASED-CSF-S36N-0-12IN	S000336A*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/18/00	FASED-CSF-S36N-0-12'FD	FASED-CSF-S36N-0-12INF D	S000336A*7	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/18/00	FASED-CSF-S37N-0-13'	FASED-CSF-S37N-0-13IN	S000336A*5	680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/19/00	FASED-CSE-S1-0-12'	FASED-CSE-S1-0-12IN	S000376*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/19/00	FASED-CSE-S2W-0-19'	FASED-CSE-S2W-0-19IN	S000376*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/19/00	FASED-CSF-S38S-0-14'	FASED-CSF-S38S-0-14IN	S000376*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/19/00	FASED-CSF-S39S-0-26'	FASED-CSF-S39S-0-26IN	S000376*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/19/00	FASED-CSF-S40-0-20'	FASED-CSF-S40-0-20IN	S000376*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/20/00	FASED-CSE-S3-0-13'	FASED-CSE-S3-0-13IN	S000421*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/20/00	FASED-CSE-S4E-0-17'	FASED-CSE-S4E-0-17IN	S000421*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/20/00	FASED-CSE-S5E-0-24'	FASED-CSE-S5E-0-24IN	S000421*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/20/00	FASED-CSE-S6W-0-35'	FASED-CSE-S6W-0-35IN	S000421*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/20/00	FASED-CSE-S6W-0-35' FD	FASED-CSE-S6W-0-35INF D	S000421*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/20/00	FASED-CSE-S7W-0-13'	FASED-CSE-S7W-0-13IN	S000421*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/21/00	FASED-CSE-S8-0-32'	FASED-CSE-S8-0-32IN	S000457*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/21/00	FASED-CSE-S9-0-31'	FASED-CSE-S9-0-31IN	S000457*2	680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Background Soil	Savannah Laboratories	SIL040	01/24/00	BS-EE20-0.5FT	BS-EE-20-0-0.5FT	S000513B*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50355				254-68-1	8280A (PCDD/PCDF)
Background Soil	Savannah Laboratories	SIL040	01/24/00	BS-EE20-3-6FT	BS-EE-20-3-6FT	S000513B*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50355				254-68-2	8280A (PCDD/PCDF)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/24/00	FASED-CSE-S10W-0-27'	FASED-CSE-S10W-0-27IN	S000513*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/24/00	FASED-CSE-S11W-0-22'	FASED-CSE-S11W-0-22IN	S000513*2	680 (PCBs)
Industry Specific - Un/Developed	Savannah Laboratories	SIL038	01/24/00	FASED-CSE-S12-0-21'	FASED-CSE-S12-0-21IN	S000513*3	680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Sediment - Validated							
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/24/00	FASED-CSE-S13E-0-21'	FASED-CSE-S13E-0-21IN	S000513*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/24/00	FASED-CSE-S14W-0-31'	FASED-CSE-S14W-0-31IN	S000513*5	680 (PCBs)
Upgradient GW	Savannah Laboratories	SIL039	01/24/00	UGGW-EE20-60 FT	UGGW-EE-20-60FT	S000513A*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/25/00	FASED-CSE-S15-0-19'	FASED-CSE-S15-0-19IN	S000535*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/25/00	FASED-CSE-S16E-0-21'	FASED-CSE-S16E-0-21IN	S000535*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/25/00	FASED-CSE-S17-0-28'	FASED-CSE-S17-0-28IN	S000535*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/25/00	FASED-CSE-S18-0-25'	FASED-CSE-S18-0-25IN	S000535*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/25/00	FASED-CSE-S19E-0-28'	FASED-CSE-S19E-0-28IN	S000535*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/25/00	FASED-CSE-S19E-0-28' FD	FASED-CSE-S19E-0-28INF D	S000535*6	680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/25/00	FASED-CSE-S20E-0-33'	FASED-CSE-S20E-0-33IN	S000535*7	680 (PCBs)
Biota - Validated	Triangle Laboratories	50409	01/25/00	LMB BP COMP 1	LMB BP COMP 1	255-23-8	8290 (PCDD/PCDF)
Biota - Validated	Triangle Laboratories	50409	01/25/00	LMB BP COMP 2	LMB BP COMP 2	255-23-11	8290 (PCDD/PCDF)
Biota - Validated	Triangle Laboratories	50409	01/25/00	LMB BP COMP 3	LMB BP COMP 3	255-23-12	8290 (PCDD/PCDF)
Biota - Validated	Triangle Laboratories	50410	01/25/00	LMB REF 1 COMP 1	LMB REF 1 COMP 1	255-24-1	8290 (PCDD/PCDF)
Biota - Validated	Triangle Laboratories	50410	01/25/00	LMB REF 1 COMP 2	LMB REF 1 COMP 2	255-24-2	8290 (PCDD/PCDF)
Biota - Validated	Triangle Laboratories	50410	01/25/00	LMB REF 2 COMP 1	LMB REF 2 COMP 1	255-24-3	8290 (PCDD/PCDF)
Biota - Validated	Triangle Laboratories	50410	01/25/00	LMB REF 2 COMP 2	LMB REF 2 COMP 2	255-24-4	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL039	01/25/00	UGGW-EE20-100 FT	UGGW-EE-20-100FT	S000535A*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50351		UGGW-EE20-100FT		254-64-1A	8290 (PCDD/PCDF)
Biota - Validated	Triangle Laboratories	50409	01/25/00	WC BP COMP 1	WC BP COMP 1	255-23-1	8290 (PCDD/PCDF)
Biota - Validated	Triangle Laboratories	50409	01/25/00	WC BP COMP 2	WC BP COMP 2	255-23-2	8290 (PCDD/PCDF)
Biota - Validated	Triangle Laboratories	50409	01/25/00	WC BP COMP 3	WC BP COMP 3	255-23-3	8290 (PCDD/PCDF)
Biota - Validated	Triangle Laboratories	50409	01/25/00	WC REF1 COMP 1	WC REF1 COMP 1	255-23-4	8290 (PCDD/PCDF)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Biota - Validated	Triangle Laboratories	50409	01/25/00	WC REF1 COMP 2	WC REF1 COMP 2	255-23-5	8290 (PCDD/PCDF)
Biota - Validated	Triangle Laboratories	50409	01/25/00	WC REF2 COMP 1	WC REF2 COMP 1	255-23-6	8290 (PCDD/PCDF)
Biota - Validated	Triangle Laboratories	50409	01/25/00	WC REF2 COMP 2	WC REF2 COMP 2	255-23-7	8290 (PCDD/PCDF)
Biota - Validated	Triangle Laboratories	50409	01/25/00	WC REF2 COMP 2 Dup	WC REF2 COMP 2FD	255-23-7 Dup	8290 (PCDD/PCDF)
Background Soil	Savannah Laboratories	SIL040	01/26/00	BS-EE04-0.5FT-SUB	BS-EE-04-0-0.5FT	S000574*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50359				254-72-1	8280A (PCDD/PCDF)
Background Soil	Savannah Laboratories	SIL040	01/26/00	BS-EE04-0.5FT-SUB-FD	BS-EE-04-0-0.5FTFD	S000574*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50359				254-72-2	8280A (PCDD/PCDF)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Background Soil	Savannah Laboratories	SIL040	01/26/00	BS-EE04-3-6FT-SUB	BS-EE-04-3-6FT	S000574*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50359				254-72-3	8280A (PCDD/PCDF)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/26/00	FASED-CSE-S21-0-28'	FASED-CSE-S21-0-28IN	S000574A*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/26/00	FASED-CSE-S22E-0-26'	FASED-CSE-S22E-0-26IN	S000574A*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/26/00	FASED-CSE-S23-0-23'	FASED-CSE-S23-0-23IN	S000574A*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/26/00	FASED-CSE-S24W-0-27'	FASED-CSE-S24W-0-27IN	S000574A*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/26/00	FASED-CSE-S25W-0-29'	FASED-CSE-S25W-0-29IN	S000574A*5	680 (PCBs)
Background Soil	Savannah Laboratories	SIL040	01/27/00	BS-EEG108-0.5FT	BS-EEG-108-0-0.5FT	S000654A*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Background Soil	Savannah Laboratories	SIL040	01/27/00	BS-EEG108-0.5FT	BS-EEG-108-0-0.5FT	S000654A*1	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50364C		BS-EEG-108-0.5FT		254-77-4	8280A (PCDD/PCDF)
Background Soil	Savannah Laboratories	SIL039	01/27/00	BS-EEG108-0.5 FT-EB	BS-EEG-108-0-0.5FTEB	S000654B*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50364B		BS-EEG108-0.5FT-EB		254-77-2A	8280A (PCDD/PCDF)
Background Soil	Savannah Laboratories	SIL040	01/27/00	BS-EEG108-3-6FT	BS-EEG-108-3-6FT	S000654A*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50364C		BS-EEG-108-3-6FT		254-77-5	8280A (PCDD/PCDF)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/27/00	FASED-CSD-S2E-0-15'	FASED-CSD-S2-0-15IN	S000654*2	680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/27/00	FASED-CSD-S3-0-21'	FASED-CSD-S3-0-21IN	S000654*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/27/00	FASED-CSD-S4-0-23'	FASED-CSD-S4-0-23IN	S000654*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/27/00	FASED-CSE-S26E-0-12'	FASED-CSE-S26E-0-12IN	S000654*1	680 (PCBs)
Upgradient GW	Savannah Laboratories	SIL039	01/27/00	UGGW-EE04-100FT-SUB	UGGW-EE-04-100FT	S000654B*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50364A				254-77-1A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL039	01/27/00	UGGW-EE04-100FT-SUB-FD	UGGW-EE-04-100FTFD	S000654B*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Upgradient GW	Triangle Laboratories	50364A	01/27/00	UGGW-EE-04-100FT-SUB-FD	UGGW-EE-04-100FTFD	254-77-3A	8290 (PCDD/PCDF)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/28/00	FASED-CSD-S6E-0-13'	FASED-CSD-S6E-0-13IN	S000625*1	680 (PCBs)
Upgradient GW	Savannah Laboratories	SIL039	01/28/00	UGGW-EEG108-60FT	UGGW-EEG-108-60FT	S000625A*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50354				254-67-2A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL039	01/28/00	UGGW-EEG108-60FT-EB	UGGW-EEG-108-60FTEB	S000625A*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50354				254-67-1A	8290 (PCDD/PCDF)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSC-S1-0-13'	FASED-CSC-S1-0-13IN	S000673A*5	680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSC-S2-0-28'	FASED-CSC-S2-0-28IN	S000673A*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSC-S2-0-28' FD	FASED-CSC-S2-0-28INFD	S000673A*7	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSC-S3-0-20'	FASED-CSC-S3-0-20IN	S000673A*8	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSC-S4-0-22'	FASED-CSC-S4-0-22IN	S000673A*9	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSC-S5W-0-26'	FASED-CSC-S5W-0-26IN	S000673A*10	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSC-S6-0-26'	FASED-CSC-S6W-0-26IN	S000673A*11	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSC-S7-0-26'	FASED-CSC-S7-0-29IN	S000673A*12	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSD-S5-0-10'	FASED-CSD-S5-0-10IN	S000673A*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSD-S7-0-33'	FASED-CSD-S7-0-33IN	S000673A*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSD-S8-0-29'	FASED-CSD-S8-0-29IN	S000673A*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSD-S9W-0-23'	FASED-CSD-S9W-0-23IN	S000673A*4	680 (PCBs)
Upgradient GW	Savannah Laboratories	SIL042	01/31/00	UGGW-EEG-108-100FT	UGGW-EEG-108-100FT	S000673*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Upgradient GW	Savannah Laboratories	SIL042	01/31/00	UGGW-EEG-108-100FT	UGGW-EEG-108-100FT	S000673*1	8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50363		UGGW-EEG108-100FT		254-76-1A	8290 (PCDD/PCDF)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSB-S1W-0-25'	FASED-CSB-S1W-0-25IN	S000709*8	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSB-S2-0-23'	FASED-CSB-S2-0-23IN	S000709*9	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSB-S3-0-26'	FASED-CSB-S3-0-26IN	S000709*10	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSB-S4W-0-23'	FASED-CSB-S4W-0-23IN	S000709*11	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSB-S5-0-22'	FASED-CSB-S5-0-22IN	S000709*12	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSC-S10-0-28'	FASED-CSC-S10-0-28IN	S000709*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSC-S11-0-25'	FASED-CSC-S11-0-25IN	S000709*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSC-S11-0-25' FD	FASED-CSC-S11-0-25INF D	S000709*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSC-S12E-0-18'	FASED-CSC-S12E-0-18IN	S000709*7	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSC-S8-0-16'	FASED-CSC-S8-0-16IN	S000709*1	680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSC-S9-0-27'	FASED-CSC-S9-0-27IN	S000709*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSC-S9-0-27' FD	FASED-CSC-S9-0-27INFD	S000709*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/02/00	FASED-CSB-S10-0-9'	FASED-CSB-S10W-0-9IN	S000736*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/02/00	FASED-CSB-S10-0-9' FD	FASED-CSB-S10W-0-9INF D	S000736*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/02/00	FASED-SCB-S6-0-20'	FASED-CSB-S6-0-20IN	S000736*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/02/00	FASED-CSB-S7-0-18'	FASED-CSB-S7-0-18IN	S000736*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/02/00	FASED-CSB-S8E-0-22'	FASED-CSB-S8E-0-22IN	S000736*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL044	02/02/00	FASED-CSB-S9W-0-9'	FASED-CSB-S9W-0-9IN	S000736A*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/02/00	FASED-CSD-S1W-0-24'	FASED-CSD-S1W-0-24IN	S000736*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/02/00	FASED-CSF-S35S-0-21'	FASED-CSF-S35S-0-21IN	S000736*7	680 (PCBs)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S1-0-10'	FASED-BPL-S1-0-10IN	S000791*1	680 (PCBs)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BLL-S1-0-10' EB	FASED-BPL-S1-0-10INEB	S000791*10	680 (PCBs)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S2-0-10'	FASED-BPL-S2-0-10IN	S000791*2	680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S3-0-8'	FASED-BPL-S3-0-8IN	S000791*3	680 (PCBs)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S4-0-10'	FASED-BPL-S4-0-10IN	S000791*4	680 (PCBs)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S5-0-9'	FASED-BPL-S5-0-9IN	S000791*5	680 (PCBs)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S6-0-11'	FASED-BPL-S6-0-11IN	S000791*6	680 (PCBs)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S6-0-11' FD	FASED-BPL-S6-0-11INFD	S000791*7	680 (PCBs)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S7-0-9'	FASED-BPL-S7-0-9IN	S000791*8	680 (PCBs)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S8-0-9'	FASED-BPL-S8-0-9IN	S000791*9	680 (PCBs)
Full Scan - Dead Creek Sediment	Savannah Laboratories	SIL042	02/04/00	SW-PDC-US-EB	BSSED-PDC-US-N-0-20IN EB	S000819*4	415.1 (TOC) 6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Dead Creek Sediment	Savannah Laboratories	SIL042	02/04/00	SW-PDC-US-EB	BSSED-PDC-US-N-0-20IN EB	S000819*4	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50392r1		BSSED-PDC-US-EB		255-6-6B	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL042	02/04/00	SW-PDC-DS	SW-PDC-DS	S000819*1	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50392				255-6-1A	8290 (PCDD/PCDF)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL042	02/04/00	SW-PDC-US	SW-PDC-US	S000819*2	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50392		SW-PDS-US		255-6-4A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL042	02/04/00	SW-PDC-US-FD	SW-PDC-USFD	S000819*3	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL042	02/04/00	SW-PDC-US-FD	SW-PDC-USFD	S000819*3	680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50392r1		SW-PDS-US-FD		255-6-5B	8290 (PCDD/PCDF)
Full Scan - Dead Creek Sediment	Savannah Laboratories	SIL045	02/07/00	BSSED-PDC-DS-S-0-54'	BSSED-PDC-DS-S-0-30IN	S000852*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	50399		BSSED-PDC-DS-S-0-54"		255-13-1	8290 (PCDD/PCDF)
Full Scan - Dead Creek Sediment	Savannah Laboratories	SIL045	02/07/00	BSSED-PDC-US-N-0-34.5'	BSSED-PDC-US-N-0-20IN	S000852*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Dead Creek Sediment	Savannah Laboratories	SIL045	02/07/00	BSSED-PDC-US-N-0-34.5'	BSSED-PDC-US-N-0-20IN	S000852*2	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	50399		BSSED-PDC-US-N-0-34.5"		255-13-3	8290 (PCDD/PCDF)
Full Scan - Dead Creek Sediment	Savannah Laboratories	SIL045	02/07/00	BSSED-PDC-US-N-0-34.5' FD	BSSED-PDC-US-N-0-20IN FD	S000852*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	50399		BSSED-PDC-US-N-0-34.5"FD		255-13-4	8290 (PCDD/PCDF)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL046	03/07/00	AA-I-54-(56-60) FT	AA-I-S4-56-60FT	S001510*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50574		AA-I-S4-(56-60)FT		256-89-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL046	03/07/00	AA-I-54-(56-60) FT-FD	AA-I-S4-56-60FTFD	S001510*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50574		AA-I-S4-(56-60)FT-FD		256-89-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL046	03/07/00	AA-I-54-(66-70) FT	AA-I-S4-66-70FT	S001510*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL046	03/07/00	AA-I-54-(66-70) FT	AA-I-S4-66-70FT	S001510*3	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50574		AA-I-S4-(66-70)FT		256-89-3A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL046	03/08/00	AA-I-54-(76-80) FT	AA-I-S4-76-80FT	S001547*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50581		AA-I-S4-(76-80)FT		256-96-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL046	03/08/00	AA-I-54-(86-90) FT	AA-I-S4-86-90FT	S001547*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Triangle Laboratories	50581	03/08/00	AA-I-S4-(86-90)FT	AA-I-S4-86-90FT	256-96-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL046	03/09/00	AA-I-54-(96-100) FT	AA-I-S4-96-100FT	S001582*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S001582*1*DL	8270C (SVOCs)
						S001582*1	9010 (Cyanide)
	Triangle Laboratories	50596		AA-I-S4-(96-100)FT		257-12-1A	8290 (PCDD/PCDF)
Background Soil	Savannah Laboratories	SIL047	03/09/00	BS-EEG-108-0.5 FT - REPLACE	BS-EEG-108-0-0.5FT	S001582A*1	8260B (VOCs)
Background Soil	Savannah Laboratories	SIL047	03/09/00	BS-EEG-108-3-6 FT - REPLACE	BS-EEG-108-3-6FT	S001582A*2	8260B (VOCs)
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/10/00	AA-H-SI-(53-57) FT	AA-H-S1-53-57FT	S001630*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S001630*1*DL	8270C (SVOCs)
						S001630*1	9010 (Cyanide)
	Triangle Laboratories	50601		AA-H-S1-(53-57)FT		257-17-1A	8290 (PCDD/PCDF)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/10/00	AA-H-S1-(63-67) FT	AA-H-S1-63-67FT	S001630*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50601		AA-H-S1-(63-67)FT		257-17-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Triangle Laboratories	50657	03/13/00	AA-H-S1(101-105)FT-EB	AA-H-S1-101-105FTEB	257-73-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/13/00	AA-H-S1-(73-77) FT	AA-H-S1-73-77FT	S001658*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S001658*2*DL	8270C (SVOCs)
						S001658*2	9010 (Cyanide)
	Triangle Laboratories	50657		AA-H-S1-(73-77)FT		257-28-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/13/00	AA-H-SI-(73-77) FT-FD	AA-H-S1-73-77FTFD	S001658*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/13/00	AA-H-SI-(73-77) FT-FD	AA-H-S1-73-77FTFD	S001658*3	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S001658*3*DL	8270C (SVOCs)
						S001658*3	9010 (Cyanide)
	Triangle Laboratories	50657		AA-H-S1-(73-77)FT-FD		257-28-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/13/00	AA-H-SI-(83-87) FT	AA-H-S1-83-87FT	S001658*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S001658*1*DL	8270C (SVOCs)
						S001658*1	9010 (Cyanide)
	Triangle Laboratories	50657		AA-H-S1-(83-87)FT		257-28-3A	8290 (PCDD/PCDF)
Upgradient GW	Triangle Laboratories	50657	03/13/00	UGGW-EE20-60FT-REPLACE	UGGW-EE-20-60FT	257-73-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/14/00	AA-H-SI-(83-87) FT-EB	AA-H-S1-83-87FTEB	S001687*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/14/00	AA-H-SI-(83-87) FT-EB	AA-H-S1-83-87FTEB	S001687*1	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50657		AA-H-S1-(83-87)FT-EB		257-43-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/15/00	AA-H-SI-(93-97) FT	AA-H-S1-93-97FT	S001717*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S001717*1*DL	8270C (SVOCs)
						S001717*1	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/16/00	AA-H-SI-(101-105)-FT	AA-H-S1-101-105FT	S001760*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Triangle Laboratories	50657	03/16/00	AA-H-S1-(93-97)FT	AA-H-S1-93-97FT	257-49-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Triangle Laboratories	50657	03/17/00	AA-H-S1-(101-105)FT	AA-H-S1-101-105FT	257-58-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL049	03/17/00	AA-H-SI (101-105) FT - EB	AA-H-S1-101-105FTEB	S001794*1	6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL049	03/17/00	AA-H-SI (101-105) FT - EB	AA-H-S1-101-105FTEB	S001794*1	680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Time Series GW	Savannah Laboratories	SIL049	03/29/00	TS-S1-OHR	TS-S1-0HR	S002041*4	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50714		TS-S1-0 HR		258-29-2A	8290 (PCDD/PCDF)
Time Series GW	Savannah Laboratories	SIL049	03/29/00	TS-S1-12HR	TS-S1-12HR	S002041*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Time Series GW	Savannah Laboratories	SIL049	03/29/00	TS-S1-12HR	TS-S1-12HR	S002041*2	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50714				258-30-1A	8290 (PCDD/PCDF)
Time Series GW	Savannah Laboratories	SIL049	03/29/00	TS-S1-12HR-FD	TS-S1-12HRFD	S002041*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50714				258-30-2A	8290 (PCDD/PCDF)
Time Series GW	Savannah Laboratories	SIL049	03/29/00	TS-S2-OHR	TS-S2-0HR	S002041*5	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50714		TS-S2-0 HR		258-29-1A	8290 (PCDD/PCDF)
Time Series GW	Savannah Laboratories	SIL049	03/29/00	TS-S2-12HR	TS-S2-12HR	S002041*1	6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Time Series GW	Savannah Laboratories	SIL049	03/29/00	TS-S2-12HR	TS-S2-12HR	S002041*1	680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50714				258-30-3A	8290 (PCDD/PCDF)
Time Series GW	Savannah Laboratories	SIL049	03/30/00	TS-S1-24 HR	TS-S1-24HR	S002073*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50714		TS-S1-24HR		258-36-1A	8290 (PCDD/PCDF)
Time Series GW	Savannah Laboratories	SIL049	03/30/00	TS-S2-24 HR	TS-S2-24HR	S002073*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Time Series GW	Savannah Laboratories	SIL049	03/30/00	TS-S2-24 HR	TS-S2-24HR	S002073*2	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50714		TS-S2-24HR		258-36-2A	8290 (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T1-S1-0-0.5FT	DAS-T1-S1-0-0.5FT	S002515*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50863				259-81-11	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T1-S1-0-0.5FT-FD	DAS-T1-S1-0-0.5FTFD	S002515*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50863				259-81-8	8280A (PCDD/PCDF)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T1-S1-3-6FT	DAS-T1-S1-3-6FT	S002515*8	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T1-S2-0-0.5FT	DAS-T1-S2-0-0.5FT	S002515*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50863				259-81-9	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T1-S2-3-6FT	DAS-T1-S2-3-6FT	S002515*9	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T1-S2-3-6FT	DAS-T1-S2-3-6FT	S002515*9	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T1-S3-0-0.5FT	DAS-T1-S3-0-0.5FT	S002515*4	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50863				259-81-7	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T1-S3-3-6FT	DAS-T1-S3-3-6FT	S002515*10	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50863				259-81-2	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S1-0-0.5FT	DAS-T2-S1-0-0.5FT	S002515*5	6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S1-0-0.5FT	DAS-T2-S1-0-0.5FT	S002515*5	680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50863				259-81-6	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S1-3-6FT	DAS-T2-S1-3-6FT	S002515*11	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S2-0-0.5FT	DAS-T2-S2-0-0.5FT	S002515*6	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S2-0-0.5FT	DAS-T2-S2-0-0.5FT	S002515*6	8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50863				259-81-3	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S2-3-6FT	DAS-T2-S2-3-6FT	S002515*12	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S3-0-0.5FT	DAS-T2-S3-0-0.5FT	S002515*7	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50863				259-81-10	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S3-3-6FT	DAS-T2-S3-3-6FT	S002515*13	6010B (Metals) 680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S3-3-6FT	DAS-T2-S3-3-6FT	S002515*13	7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50863				259-81-4	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S3-3-6FT-FD	DAS-T2-S3-3-6FTFD	S002515*14	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50863				259-81-1	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T3-S1-0-0.5FT	DAS-T3-S1-0-0.5FT	S002545*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T3-S1-0-0.5FT	DAS-T3-S1-0-0.5FT	S002545*1	8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50869				259-87-1	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T3-S1-3-6FT	DAS-T3-S1-3-6FT	S002545*9	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T3-S2-0-0.5FT	DAS-T3-S2-0-0.5FT	S002545*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50869				259-87-2	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T3-S2-3-6FT	DAS-T3-S2-3-6FT	S002545*10	6010B (Metals) 680 (PCBs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T3-S2-3-6FT	DAS-T3-S2-3-6FT	S002545*10	7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T3-S3-0-0.5FT	DAS-T3-S3-0-0.5FT	S002545*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50869				259-87-3	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T3-S3-3-6FT	DAS-T3-S3-3-6FT	S002545*11	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T3-S3-3-6FT	DAS-T3-S3-3-6FT	S002545*11	9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T4-S1-0-0.5FT	DAS-T4-S1-0-0.5FT	S002545*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50869				259-87-7	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T4-S1-0-0.5FT-FD	DAS-T4-S1-0-0.5FTFD	S002545*5	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50869		DAS-T4-S1-0-0.5FTFD		259-87-9	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T4-S1-3-6FT	DAS-T4-S1-3-6FT	S002545*12	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T4-S1-3-6FT	DAS-T4-S1-3-6FT	S002545*12	8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T4-S1-3-6FT-FD	DAS-T4-S1-3-6FTFD	S002545*13	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T5-S1-0-0.5FT	DAS-T5-S1-0-0.5FT	S002545*6	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50869				259-87-4	8280A (PCDD/PCDF)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T5-S1-3-6FT	DAS-T5-S1-3-6FT	S002545*14	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T5-S2-0-0.5FT	DAS-T5-S2-0-0.5FT	S002545*7	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50869				259-87-5	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T5-S2-3-6FT	DAS-T5-S2-3-6FT	S002545*15	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T5-S2-3-6FT	DAS-T5-S2-3-6FT	S002545*15	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50869				259-87-8	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T5-S3-0-0.5FT	DAS-T5-S3-0-0.5FT	S002545*8	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50869				259-87-6	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T5-S3-3-6FT	DAS-T5-S3-3-6FT	S002545*16	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T3-S3-0-0.5FT-EB	DAS-T3-S3-0-0.5FTEB	S002607*15	6010B (Metals)

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Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T3-S3-0-0.5FT-EB	DAS-T3-S3-0-0.5FTEB	S002607*15	680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T4-S2-0-0.5FT	DAS-T4-S2-0-0.5FT	S002607*8	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*8*RE	8151A (Herbicides)
						S002607*8	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50883				260-2-1	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T4-S2-3-6FT	DAS-T4-S2-3-6FT	S002607*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*1*RE	8151A (Herbicides)
						S002607*1	8260B (VOCs)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T4-S2-3-6FT	DAS-T4-S2-3-6FT	S002607*1	8270C (SVOCs)
							9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T4-S3-0-0.5FT	DAS-T4-S3-0-0.5FT	S002607*9	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*9*RE	8151A (Herbicides)
						S002607*9	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50883				260-2-2	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T4-S3-3-6FT	DAS-T4-S3-3-6FT	S002607*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*2*RE	8151A (Herbicides)
						S002607*2	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T5-S1-0-0.5FT-EB	DAS-T5-S1-0-0.5FTEB	S002607*16	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T5-S1-0-0.5FT-EB	DAS-T5-S1-0-0.5FTEB	S002607*16	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T6-S1-0-0.5FT	DAS-T6-S1-0-0.5FT	S002607*12	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*12*RE	8151A (Herbicides)
						S002607*12	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50883				260-2-4	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T6-S1-3-6FT	DAS-T6-S1-3-6FT	S002607*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*3*RE	8151A (Herbicides)
						S002607*3	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Triangle Laboratories	50883	04/20/00	DAS-T6-S1-3-6FT	DAS-T6-S1-3-6FT	260-2-5	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T6-S2-0-0.5FT	DAS-T6-S2-0-0.5FT	S002607*13	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*13*RE	8151A (Herbicides)
						S002607*13	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50883				260-2-6	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T6-S2-3-6FT	DAS-T6-S2-3-6FT	S002607*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*4*RE	8151A (Herbicides)
						S002607*4	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T6-S3-0-0.5FT	DAS-T6-S3-0-0.5FT	S002607*14	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T6-S3-0-0.5FT	DAS-T6-S3-0-0.5FT	S002607*14*RE	8151A (Herbicides)
						S002607*14	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50883				260-2-7	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T6-S3-3-6FT	DAS-T6-S3-3-6FT	S002607*5	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*5*RE	8151A (Herbicides)
						S002607*5	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T7-S1-0-0.5FT	DAS-T7-S1-0-0.5FT	S002607*6	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*6*RE	8151A (Herbicides)
						S002607*6	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50883				260-2-8	8280A (PCDD/PCDF)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T7-S1-3-6FT	DAS-T7-S1-3-6FT	S002607*10	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*10*RE	8151A (Herbicides)
						S002607*10	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T7-S2-0-0.5FT	DAS-T7-S2-0-0.5FT	S002607*7	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*7*RE	8151A (Herbicides)
						S002607*7	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50883				260-2-9	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T7-S2-3-6FT	DAS-T7-S2-3-6FT	S002607*11	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*11*RE	8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T7-S2-3-6FT	DAS-T7-S2-3-6FT	S002607*11	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Bedrock GW	Savannah Laboratories	SIL052	04/25/00	BR-I	BR-I	S002677*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
		SIL053				S002705*3	8260B (VOCs)
		SIL052				S002677*1*DL	8270C (SVOCs)
						S002677*1	9010 (Cyanide)
	Triangle Laboratories	50956n1				260-18-2B	8290 (PCDD/PCDF)
Bedrock GW	Savannah Laboratories	SIL054	05/01/00	BR-G	BR-G	S002805*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S002805*2*DL	8270C (SVOCs)
						S002805*2	9010 (Cyanide)
	Triangle Laboratories	50956n1				260-65-2B	8290 (PCDD/PCDF)
Bedrock GW	Savannah Laboratories	SIL054	05/01/00	BR-G-FD	BR-GFD	S002805*3	6010B (Metals)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Bedrock GW	Savannah Laboratories	SIL054	05/01/00	BR-G-FD	BR-GFD	S002805*3	680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S002805*3*DL	8270C (SVOCs)
						S002805*3	9010 (Cyanide)
	Triangle Laboratories	50956n1				260-65-3B	8290 (PCDD/PCDF)
Bedrock GW	Savannah Laboratories	SIL054	05/01/00	BR-H	BR-H	S002805*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S002805*1*DL	8270C (SVOCs)
						S002805*1	9010 (Cyanide)
	Triangle Laboratories	50956				260-65-1A	8290 (PCDD/PCDF)
Bedrock GW	Savannah Laboratories	SIL054	05/02/00	BR-G-EB	BR-GEB	S002850*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-1. *Sample Cross Reference Table - By Collection Date*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Bedrock GW	Savannah Laboratories	SIL054	05/02/00	BR-G-EB	BR-GEB	S002850*1	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50956				260-75-1A	8290 (PCDD/PCDF)

APPENDIX A-2

Sample Cross Reference Tables
By Sample ID

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/01/99	AA-GHL-S1-102-106'	AA-GHL-S1-102-106FT	S918085*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
						S918085*4*RE	8081A (Pesticides)
						S918085*4	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50030A		AA-GHL-S1-(102-106)FT		251-40-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/02/99	AA-GHL-S1-107-111'	AA-GHL-S1-107-111FT	S918114*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/16/99	AA-GHL-S1-12-16'	AA-GHL-S1-12-16FT	S917759A*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/16/99	AA-GHL-S1-12-16'	AA-GHL-S1-12-16FT	S917759A*2	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/17/99	AA-GHL-S1-22-26'	AA-GHL-S1-22-26FT	S917800B*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49945A		AA-GHL-S1-(22-26)FT		250-54-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/17/99	AA-GHL-S1-22-26'-EB	AA-GHL-S1-22-26FTEB	S917800B*6	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49945A		AA-GHL-(22-26)FT-EB		250-54-7A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/17/99	AA-GHL-S1-22-26'-FD	AA-GHL-S1-22-26FTFD	S917800B*3	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/17/99	AA-GHL-S1-22-26'-FD	AA-GHL-S1-22-26FTFD	S917800B*3	680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49945A		AA-GHL-S1-(22-26)FT-FD		250-54-6A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/18/99	AA-GHL-S1-32-36'	AA-GHL-S1-32-36FT	S917842*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/18/99	AA-GHL-S1-42-46'	AA-GHL-S1-42-46FT	S917842*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/18/99	AA-GHL-S1-42-46'	AA-GHL-S1-42-46FT	S917842*3	8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL026	11/19/99	AA-GHL-S1-52-56'	AA-GHL-S1-52-56FT	S917881*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/29/99	AA-GHL-S1-62-66'	AA-GHL-S1-62-66FT	S918018*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50010				251-20-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/30/99	AA-GHL-S1-72-76'	AA-GHL-S1-72-76FT	S918042*5	6010B (Metals) 680 (PCBs) 7470 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/30/99	AA-GHL-S1-72-76'	AA-GHL-S1-72-76FT	S918042*5	8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/30/99	AA-GHL-S1-82-86'	AA-GHL-S1-82-86FT	S918042*4	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/01/99	AA-GHL-S1-92-96'	AA-GHL-S1-92-96FT	S918085*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/01/99	AA-GHL-S1-92-96' FD	AA-GHL-S1-92-96FTFD	S918085*3	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/01/99	AA-GHL-S1-92-96' FD	AA-GHL-S1-92-96FTFD	S918085*3 S918085*3*RE S918085*3	680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/18/99	AA-GHL-S2-12-16'	AA-GHL-S2-12-16FT	S917842*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/18/99	AA-GHL-S2-22-26'	AA-GHL-S2-22-26FT	S917842*4	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/18/99	AA-GHL-S2-22-26'	AA-GHL-S2-22-26FT	S917842*4	9010 (Cyanide)
	Triangle Laboratories	49958A		AA-GHL-S2-22-26FT		250-67-5A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL026	11/19/99	AA-GHL-S2-32-36'	AA-GHL-S2-32-36FT	S917881*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL026	11/19/99	AA-GHL-S2-32-36'-EB	AA-GHL-S2-32-36FTEB	S917881*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL026	11/19/99	AA-GHL-S2-42-46'	AA-GHL-S2-42-46FT	S917881*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL026	11/19/99	AA-GHL-S2-42-46'	AA-GHL-S2-42-46FT	S917881*4	8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/29/99	AA-GHL-S2-52-56'	AA-GHL-S2-52-56FT	S918018*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/30/99	AA-GHL-S2-62-66'	AA-GHL-S2-62-66FT	S918042*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50042C	12/02/99	AA-GHL-S2-(62-66)FT		251-52-6A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/30/99	AA-GHL-S2-62-66' FD	AA-GHL-S2-62-66FTFD	S918042*3	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/30/99	AA-GHL-S2-62-66' FD	AA-GHL-S2-62-66FTFD	S918042*3	680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	11/30/99	AA-GHL-S2-72-76'	AA-GHL-S2-72-76FT	S918042*2 S918042*2*RE S918042*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/01/99	AA-GHL-S2-82-86'	AA-GHL-S2-82-86FT	S918085*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/01/99	AA-GHL-S2-82-86'	AA-GHL-S2-82-86FT	S918085*1	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/02/99	AA-GHL-S2-92-96'	AA-GHL-S2-92-96FT	S918114*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/02/99	AA-GHL-S2-92-96'-EB	AA-GHL-S2-92-96FTEB	S918114*4	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50042C		AA-GHL-S2-(92-96)FT-EB		251-52-8A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/02/99	AA-GHL-S2-99-103'	AA-GHL-S2-99-103FT	S918114*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL028	12/02/99	AA-GHL-S2-99-103'	AA-GHL-S2-99-103FT	S918114*1	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50042C		AA-GHL-S2-(99-103)FT		251-52-7A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/20/99	AA-GHL-S3-(100-104)'	AA-GHL-S3-100-104FT	S918642*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50189		AA-GHL-S3-(100-104)FT		253-1-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/21/99	AA-GHL-S3-(110-114)'	AA-GHL-S3-110-114FT	S918672*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/14/99	AA-GHL-S3-20-24'	AA-GHL-S3-20-24FT	S918496*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50137		AA-GHL-S3-20-24FT		252-48-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/15/99	AA-GHL-S3-30-34'	AA-GHL-S3-30-34FT	S918507*4	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/15/99	AA-GHL-S3-30-34'-FD	AA-GHL-S3-30-34FTFD	S918507*5	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/15/99	AA-GHL-S3-30-34'-FD	AA-GHL-S3-30-34FTFD	S918507*5	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/15/99	AA-GHL-S3-40-44'	AA-GHL-S3-40-44FT	S918507*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/16/99	AA-GHL-S3-50-54'	AA-GHL-S3-50-54FT	S918559*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/16/99	AA-GHL-S3-60-64'	AA-GHL-S3-60-64FT	S918559*4	6010B (Metals) 680 (PCBs) 7470 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/16/99	AA-GHL-S3-60-64'	AA-GHL-S3-60-64FT	S918559*4	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50176		AA-GHL-S3-(60-64)FT		252-87-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/16/99	AA-GHL-S3-60-64'-EB	AA-GHL-S3-60-64FTEB	S918559*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50176		AA-GHL-S3-(60-64)FT-EB		252-87-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/17/99	AA-GHL-S3-70-74'	AA-GHL-S3-70-74FT	S918611*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
						S918611*5	8260B (VOCs)
						S918611*2	8270C (SVOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/17/99	AA-GHL-S3-70-74'	AA-GHL-S3-70-74FT	S918611*2	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/17/99	AA-GHL-S3-80-84'	AA-GHL-S3-80-84FT	S918611*4	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/20/99	AA-GHL-S3-(90-94)'	AA-GHL-S3-90-94FT	S918642*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/16/00	AA-H-SI-(101-105)-FT	AA-H-S1-101-105FT	S001760*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/16/00	AA-H-SI-(101-105)-FT	AA-H-S1-101-105FT	S001760*1	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50657	03/17/00	AA-H-S1-(101-105)FT		257-58-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL049	03/17/00	AA-H-SI (101-105) FT - EB	AA-H-S1-101-105FTEB	S001794*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50657	03/13/00	AA-H-S1(101-105)FT-EB		257-73-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/10/00	AA-H-SI-(53-57) FT	AA-H-S1-53-57FT	S001630*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S001630*1*DL	8270C (SVOCs)
						S001630*1	9010 (Cyanide)
	Triangle Laboratories	50601		AA-H-S1-(53-57)FT		257-17-1A	8290 (PCDD/PCDF)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/10/00	AA-H-S1-(63-67) FT	AA-H-S1-63-67FT	S001630*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50601		AA-H-S1-(63-67)FT		257-17-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/13/00	AA-H-S1-(73-77) FT	AA-H-S1-73-77FT	S001658*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S001658*2*DL	8270C (SVOCs)
						S001658*2	9010 (Cyanide)
	Triangle Laboratories	50657		AA-H-S1-(73-77)FT		257-28-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/13/00	AA-H-SI-(73-77) FT-FD	AA-H-S1-73-77FTFD	S001658*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/13/00	AA-H-SI-(73-77) FT-FD	AA-H-S1-73-77FTFD	S001658*3	8151A (Herbicides)
							8260B (VOCs)
						S001658*3*DL	8270C (SVOCs)
						S001658*3	9010 (Cyanide)
	Triangle Laboratories	50657		AA-H-S1-(73-77)FT-FD		257-28-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/13/00	AA-H-SI-(83-87) FT	AA-H-S1-83-87FT	S001658*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S001658*1*DL	8270C (SVOCs)
						S001658*1	9010 (Cyanide)
	Triangle Laboratories	50657		AA-H-S1-(83-87)FT		257-28-3A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/14/00	AA-H-SI-(83-87) FT-EB	AA-H-S1-83-87FTEB	S001687*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Triangle Laboratories	50657	03/14/00	AA-H-S1-(83-87)FT-EB	AA-H-S1-83-87FTEB	257-43-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL048	03/15/00	AA-H-SI-(93-97) FT	AA-H-S1-93-97FT	S001717*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S001717*1*DL	8270C (SVOCs)
						S001717*1	9010 (Cyanide)
	Triangle Laboratories	50657	03/16/00	AA-H-S1-(93-97)FT		257-49-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/14/99	AA-I-S1-17-21'	AA-I-S1-17-21FT	S918458*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
						S918496*2	8260B (VOCs)
						S918458*1*DL	8270C (SVOCs)
						S918458*1	9010 (Cyanide)
	Triangle Laboratories	50137		AA-I-S1-17-21FT		252-48-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/15/99	AA-I-S1-27-31'	AA-I-S1-27-31FT	S918507*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/15/99	AA-I-S1-27-31'	AA-I-S1-27-31FT	S918507*2	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918507*2*DL	8270C (SVOCs)
						S918507*2	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/15/99	AA-I-S1-37-41'	AA-I-S1-37-41FT	S918507*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918507*3*DL	8270C (SVOCs)
						S918507*3	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/16/99	AA-I-S1-47-51'	AA-I-S1-47-51FT	S918559*5	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918559*5*DL	8270C (SVOCs)
						S918559*5	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/16/99	AA-I-S1-57-61'	AA-I-S1-57-61FT	S918559*2	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/16/99	AA-I-S1-57-61'	AA-I-S1-57-61FT	S918559*2	680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50176		AA-I-S1-(57-61)FT		252-87-3A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/17/99	AA-I-S1-67-71'	AA-I-S1-67-71FT	S918611*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
						S918611*7	8260B (VOCs)
						S918611*1*DL	8270C (SVOCs)
						S918611*1	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/17/99	AA-I-S1-67-71'-EB	AA-I-S1-67-71FTEB	S918611*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
						S918611*6	8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/17/99	AA-I-S1-67-71'-EB	AA-I-S1-67-71FTEB	S918611*3	8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/20/99	AA-I-S1-(77-81)'	AA-I-S1-77-81FT	S918642*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/21/99	AA-I-S1-(87-91)'	AA-I-S1-87-91FT	S918715*1 S918672*3 S918715*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/21/99	AA-I-S1-(87-91)'FD	AA-I-S1-87-91FTFD	S918672*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/21/99	AA-I-S1-(87-91)'FD	AA-I-S1-87-91FTFD	S918672*1	8151A (Herbicides)
							8260B (VOCs)
						S918672*1*DL	8270C (SVOCs)
						S918672*1	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL034	12/21/99	AA-I-S1-(97-104)'	AA-I-S1-97-101FT	S918715*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
				AA-I-S1-(97-101)'		S918672*4	8260B (VOCs)
				AA-I-S1-(97-104)'		S918715*2	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50201		AA-I-S1-(97-101) FT		253-13-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Triangle Laboratories	50201	12/21/99	AA-I-S1-(97-101) FT.FD	AA-I-S1-97-101FTFD	253-13-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/03/99	AA-I-S2-16-20'	AA-I-S2-16-20FT	S918170*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Triangle Laboratories	50058r1	12/03/99	AA-I-S2-16-20FT	AA-I-S2-16-20FT	251-68-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/06/99	AA-I-S2-26-30'	AA-I-S2-26-30FT	S918198*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918198*2*DL	8270C (SVOCs)
						S918198*2	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/07/99	AA-I-S2-36-40'	AA-I-S2-36-40FT	S918235*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918235*3*DL	8270C (SVOCs)
						S918235*3	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/07/99	AA-I-S2-46-50'	AA-I-S2-46-50FT	S918235*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/07/99	AA-I-S2-46-50'	AA-I-S2-46-50FT	S918235*4	8260B (VOCs)
						S918235*4*DL	8270C (SVOCs)
						S918235*4	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/08/99	AA-I-S2-56-60'	AA-I-S2-56-60FT	S918304*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918304*2*DL	8270C (SVOCs)
						S918304*2	9010 (Cyanide)
	Triangle Laboratories	50097		AA-I-S2-(56-60)FT		252-8-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/08/99	AA-I-S2-66-70'	AA-I-S2-66-70FT	S918304*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918304*3*DL	8270C (SVOCs)
						S918304*3	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/10/99	AA-I-S2-76-80'	AA-I-S2-76-80FT	S918387*5	6010B (Metals)
							680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/10/99	AA-I-S2-76-80'	AA-I-S2-76-80FT	S918387*5	7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918387*5*DL	8270C (SVOCs)
						S918387*5	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/10/99	AA-I-S2-76-80'-EB	AA-I-S2-76-80FTEB	S918387*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/10/99	AA-I-S2-76-80'-FD	AA-I-S2-76-80FTFD	S918387*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918387*3*DL	8270C (SVOCs)
						S918387*3	9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/13/99	AA-I-S2-86-90'	AA-I-S2-86-90FT	S918427*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918427*2*DL	8270C (SVOCs)
						S918427*2	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/13/99	AA-I-S2-96-100'	AA-I-S2-96-100FT	S918427*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918427*1*DL	8270C (SVOCs)
						S918427*1	9010 (Cyanide)
	Triangle Laboratories	50125		AA-I-S2-(96-100)FT		252-36-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/13/99	AA-I-S3-104-108'	AA-I-S3-104-108FT	S918427*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/13/99	AA-I-S3-104-108'	AA-I-S3-104-108FT	S918427*3	8260B (VOCs)
						S918427*3*DL	8270C (SVOCs)
						S918427*3	9010 (Cyanide)
	Triangle Laboratories	50125		AA-I-S3-(104-108)FT		252-36-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL033	12/14/99	AA-I-S3-110-114'	AA-I-S3-110-114FT	S918458*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
						S918496*3	8260B (VOCs)
						S918458*2*DL	8270C (SVOCs)
						S918458*2	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/03/99	AA-I-S3-24-28'	AA-I-S3-24-28FT	S918170*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50058r1		AA-I-S3-24-28FT		251-68-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/06/99	AA-I-S3-34-38'	AA-I-S3-34-38FT	S918198*3	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/06/99	AA-I-S3-34-38'	AA-I-S3-34-38FT	S918198*3	680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/06/99	AA-I-S3-44-48'	AA-I-S3-44-48FT	S918198*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/07/99	AA-I-S3-54-58'	AA-I-S3-54-58FT	S918235*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/07/99	AA-I-S3-54-58'	AA-I-S3-54-58FT	S918235*2	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL031	12/07/99	AA-I-S3-64-68'	AA-I-S3-64-68FT	S918235*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918235*1*DL	8270C (SVOCs)
						S918235*1	9010 (Cyanide)
	Triangle Laboratories	50081r1		AA-I-S3-(64-68)FT		251-91-1B	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/08/99	AA-I-S3-74-78'	AA-I-S3-74-78FT	S918304*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918304*1*DL	8270C (SVOCs)
						S918304*1	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/09/99	AA-I-S3-84-88'	AA-I-S3-84-88FT	S918348*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/09/99	AA-I-S3-84-88'	AA-I-S3-84-88FT	S918348*1 S918348*1*DL S918348*1	8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/10/99	AA-I-S3-84-88'-EB	AA-I-S3-84-88FTEB	S918387*4	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/09/99	AA-I-S3-84-88'-FD	AA-I-S3-84-88FTFD	S918348*2 S918348*2*DL S918348*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/10/99	AA-I-S3-94-98'	AA-I-S3-94-98FT	S918387*2	6010B (Metals) 680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL032	12/10/99	AA-I-S3-94-98'	AA-I-S3-94-98FT	S918387*2	7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S918387*2*DL	8270C (SVOCs)
						S918387*2	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL046	03/07/00	AA-I-54-(56-60) FT	AA-I-S4-56-60FT	S001510*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50574		AA-I-S4-(56-60)FT		256-89-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL046	03/07/00	AA-I-54-(56-60) FT-FD	AA-I-S4-56-60FTFD	S001510*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL046	03/07/00	AA-I-54-(56-60) FT-FD	AA-I-S4-56-60FTFD	S001510*2	9010 (Cyanide)
	Triangle Laboratories	50574		AA-I-S4-(56-60)FT-FD		256-89-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL046	03/07/00	AA-I-54-(66-70) FT	AA-I-S4-66-70FT	S001510*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50574		AA-I-S4-(66-70)FT		256-89-3A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL046	03/08/00	AA-I-54-(76-80) FT	AA-I-S4-76-80FT	S001547*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50581		AA-I-S4-(76-80)FT		256-96-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL046	03/08/00	AA-I-54-(86-90) FT	AA-I-S4-86-90FT	S001547*1	6010B (Metals)
							680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL046	03/08/00	AA-I-54-(86-90) FT	AA-I-S4-86-90FT	S001547*1	7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50581		AA-I-S4-(86-90)FT		256-96-2A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL046	03/09/00	AA-I-54-(96-100) FT	AA-I-S4-96-100FT	S001582*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S001582*1*DL	8270C (SVOCs)
						S001582*1	9010 (Cyanide)
	Triangle Laboratories	50596		AA-I-S4-(96-100)FT		257-12-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL018	11/08/99	AA-SW-S1-(101-104)FT	AA-SW-S1-101-104FT	S917546*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL018	11/08/99	AA-SW-S1-(101-104)FT	AA-SW-S1-101-104FT	S917546*1	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49843		AA-SW-S1-101-104FT		249-51-3	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL018	11/08/99	AA-SW-S1-(101-104)FT,FD	AA-SW-S1-101-104FTFD	S917546*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49843		AA-SW-S1-101-104FT-FD		249-51-5	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL017	11/01/99	AA-SW-S1-14-16'	AA-SW-S1-14-16FT	S917338*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49781		AA-SW-S1-14-16FT		248-88-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL017	11/02/99	AA-SW-S1-24-26'	AA-SW-S1-24-26FT	S917386*1	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL017	11/02/99	AA-SW-S1-24-26'	AA-SW-S1-24-26FT	S917386*1	680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL017	11/02/99	AA-SW-S1-34-36'	AA-SW-S1-34-36FT	S917386*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL017	11/03/99	AA-SW-S1-42-46'	AA-SW-S1-42-46FT	S917421*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL017	11/03/99	AA-SW-S1-42-46'	AA-SW-S1-42-46FT	S917421*2	9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL017	11/03/99	AA-SW-S1-52-56'	AA-SW-S1-52-56FT	S917421*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL018	11/04/99	AA-SW-S1-62-66'	AA-SW-S1-62-66FT	S917467*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49816r1		AA-SW-S1-62-66ft		249-24-4B	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL018	11/04/99	AA-SW-S1-72-76'	AA-SW-S1-72-76FT	S917467*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL018	11/04/99	AA-SW-S1-72-76'	AA-SW-S1-72-76FT	S917467*2	8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL018	11/05/99	AA-SW-S1-82-86'	AA-SW-S1-82-86FT	S917504*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL018	11/05/99	AA-SW-S1-91-95'	AA-SW-S1-91-95FT	S917504*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/15/99	AA-SW-S3-102-106'	AA-SW-S2-102-106FT	S917718A*3	6010B (Metals) 680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/15/99	AA-SW-S3-102-106'	AA-SW-S2-102-106FT	S917718A*3	7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49914A		AA-SWS2(102-106FT)		250-23-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/09/99	AA-SW-S2-14-16'	AA-SW-S2-14-16FT	S917573*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/09/99	AA-SW-S2-22-26'	AA-SW-S2-22-26FT	S917573*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/09/99	AA-SW-S2-22-26'	AA-SW-S2-22-26FT	S917573*3	9010 (Cyanide)
	Triangle Laboratories	49855		AA-SW-S2-22-26FT		249-63-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Triangle Laboratories	49872B	11/10/99	AA-SW-S2-22-26FT-FD	AA-SW-S2-22-26FTFD	249-80-5A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/09/99	AA-SW-S2-32-36'	AA-SW-S2-32-36FT	S917573*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/10/99	AA-SW-S2-42-46'	AA-SW-S2-42-46FT	S917607*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/11/99	AA-SW-S2-52-56'	AA-SW-S2-52-56FT	S917656*8	6010B (Metals) 680 (PCBs) 7470 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/11/99	AA-SW-S2-52-56'	AA-SW-S2-52-56FT	S917656*8	8081A (Pesticides)
							8151A (Herbicides)
			11/10/99			S917607*7	8260B (VOCs)
			11/11/99			S917656*8	8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/10/99	AA-SW-S2-62-66'	AA-SW-S2-62-66FT	S917607*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49872B		AA-SW-S2-62-66FT		249-80-4A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/10/99	AA-SW-S2-62-66'-FD	AA-SW-S2-62-66FTFD	S917607*5	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/11/99	AA-SW-S2-72-76'	AA-SW-S2-72-76FT	S917656*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/11/99	AA-SW-S2-72-76'-EB	AA-SW-S2-72-76FTEB	S917656*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49888C		AA-SW-S2-72-76FT.EB		249-96-3A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/11/99	AA-SW-S2-82-86'	AA-SW-S2-82-86FT	S917656*5	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/11/99	AA-SW-S2-82-86'	AA-SW-S2-82-86FT	S917656*5	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/12/99	AA-SW-S2-92-96'	AA-SW-S2-92-96FT	S917689*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/10/99	AA-SW-S3-14-16'	AA-SW-S3-14-16FT	S917607*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/10/99	AA-SW-S3-22-26'	AA-SW-S3-22-26FT	S917607*2	6010B (Metals) 680 (PCBs) 7470 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/10/99	AA-SW-S3-22-26'	AA-SW-S3-22-26FT	S917607*2	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49872B		AA-SW-S3-22-26FT		249-80-3A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/11/99	AA-SW-S3-32-36'	AA-SW-S3-32-36FT	S917656*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/11/99	AA-SW-S3-42-46'	AA-SW-S3-42-46FT	S917656*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/12/99	AA-SW-S3-52-56'	AA-SW-S3-52-56FT	S917689*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL019	11/12/99	AA-SW-S3-62-66'	AA-SW-S3-62-66FT	S917689*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49897B		AA-SW-S3-62-66FT		250-6-7	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/15/99	AA-SW-S3-72-76'	AA-SW-S3-72-76FT	S917718A*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/15/99	AA-SW-S3-72-76'	AA-SW-S3-72-76FT	S917718A*1	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/15/99	AA-SW-S3-82-86'	AA-SW-S3-82-86FT	S917718A*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/16/99	AA-SW-S3-92-96'	AA-SW-S3-92-96FT	S917759A*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/17/99	AA-SW-S3-96-99'-FT	AA-SW-S3-96-99FT	S917800B*4	6010B (Metals) 680 (PCBs) 7470 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/17/99	AA-SW-S3-96-99'-FT	AA-SW-S3-96-99FT	S917800B*4	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49945A		AA-SW-S3-(96-99)FT		250-54-5A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/17/99	AA-SW-S3-96-99'-EB	AA-SW-S3-96-99FTEB	S917800B*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49945A		AA-SW-S3-(96-99)FT-EB		250-54-1A	8290 (PCDD/PCDF)
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/17/99	AA-SW-S3-96-99'-FD	AA-SW-S3-96-99FTFD	S917800B*5	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Alluvial Aquifer GW	Savannah Laboratories	SIL023	11/17/99	AA-SW-S3-96-99'-FD	AA-SW-S3-96-99FTFD	S917800B*5	9010 (Cyanide)
	Triangle Laboratories	49945A		AA-SW-S3-(96-99)FT-FD		250-54-8A	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-1	AIR-D-1	245-59-1	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-10	AIR-D-10	245-59-10	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-11	AIR-D-11	245-59-11	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-12	AIR-D-12	245-59-12	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-13	AIR-D-13	245-59-13	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-2	AIR-D-2	245-59-2	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-3	AIR-D-3	245-59-3	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-4	AIR-D-4	245-59-4	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-5	AIR-D-5	245-59-5	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-6	AIR-D-6	245-59-6	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455	09/10/99	AIR-D-7	AIR-D-7	245-59-7	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-8	AIR-D-8	245-59-8	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-9	AIR-D-9	245-59-9	8290 (PCDD/PCDF)
Air	Triangle Laboratories	49455n1	09/10/99	AIR-D-FB	AIR-DFB	245-59-14	8290 (PCDD/PCDF)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-M-1	AIR-M-1	S916203*1	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-M-10	AIR-M-10	S916203*24	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-M-11	AIR-M-11	S916203*25	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-M-12	AIR-M-12	S916203*26	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-M-13	AIR-M-13	S916203*27	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Air	Savannah Laboratories	SIL002	09/10/99	AIR-M-2	AIR-M-2	S916203*2	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-M-3	AIR-M-3	S916203*3	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-M-4	AIR-M-4	S916203*4	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-M-5	AIR-M-5	S916203*19	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-M-6	AIR-M-6	S916203*20	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-M-7	AIR-M-7	S916203*21	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-M-8	AIR-M-8	S916203*22	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-M-9	AIR-M-9	S916203*23	6010B (Metals)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-M-FB	AIR-M-FB	S916203*28	6010B (Metals)
Air	Savannah Laboratories	SIL001	09/10/99	AIR-P-1	AIR-P-1	S916166*5	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-P-10	AIR-P-10	S916166*14	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-P-11	AIR-P-11	S916166*15	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-P-12	AIR-P-12	S916166*16	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-P-13	AIR-P-13	S916166*17	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/10/99	AIR-P-2	AIR-P-2	S916166*6	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/10/99	AIR-P-3	AIR-P-3	S916166*7	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/10/99	AIR-P-4	AIR-P-4	S916166*8	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/10/99	AIR-P-5	AIR-P-5	S916166*9	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/10/99	AIR-P-6	AIR-P-6	S916166*10	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-P-7	AIR-P-7	S916166*11	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-P-8	AIR-P-8	S916166*12	TO-13-PCB (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Air	Savannah Laboratories	SIL001	09/11/99	AIR-P-9	AIR-P-9	S916166*13	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-P-FB	AIR-P-FB	S916166*18	TO-13-PCB (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-S-1	AIR-S-1	S916203*45	TO13 (SVOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-S-10	AIR-S-10	S916166*1	TO13 (SVOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-S-11	AIR-S-11	S916166*2	TO13 (SVOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-S-12	AIR-S-12	S916166*3	TO13 (SVOCs)
Air	Savannah Laboratories	SIL001	09/11/99	AIR-S-13	AIR-S-13	S916166*4	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-S-2	AIR-S-2	S916203*46	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-S-3	AIR-S-3	S916203*47	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-S-4	AIR-S-4	S916203*48	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-S-5	AIR-S-5	S916203*49	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-S-6	AIR-S-6	S916203*50	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-S-7	AIR-S-7	S916203*51	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-S-8	AIR-S-8	S916203*52	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-S-9	AIR-S-9	S916203*53	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-S-FB	AIR-S-FB	S916203*54	TO13 (SVOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-1 Tube 1	AIR-V-1 TUBE 1	S916203*29	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-1 Tube 2	AIR-V-1 TUBE 2	S916203*56	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-10 Tube 1	AIR-V-10 TUBE 1	S916203*40	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-10 Tube 2	AIR-V-10 TUBE 2	S916203*65	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-11 Tube 1	AIR-V-11 TUBE 1	S916203*41	TO-1 (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-11 Tube 2	AIR-V-11 TUBE 2	S916203*66	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-12 Tube 1	AIR-V-12 TUBE 1	S916203*42	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-12 Tube 2	AIR-V-12 TUBE 2	S916203*67	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-13 Tube 1	AIR-V-13 TUBE 1	S916203*43	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-13 Tube 2	AIR-V-13 TUBE 2	S916203*68	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-2 Tube 1	AIR-V-2 TUBE 1	S916203*30	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-2 Tube 2	AIR-V-2 TUBE 2	S916203*57	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-3 Tube 1	AIR-V-3 TUBE 1	S916203*31	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-3 Tube 2	AIR-V-3 TUBE 2	S916203*58	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-4 Tube 1	AIR-V-4 TUBE 1	S916203*32	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-4 Tube 2	AIR-V-4 TUBE 2	S916203*59	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-5 Tube 1	AIR-V-5 TUBE 1	S916203*33	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-5 Tube 2	AIR-V-5 TUBE 2	S916203*60	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-6 Tube 1	AIR-V-6 TUBE 1	S916203*34	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-6 Tube 2	AIR-V-6 TUBE 2	S916203*61	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-7 Tube 1	AIR-V-7 TUBE 1	S916203*35	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-7 Tube 2	AIR-V-7 TUBE 2	S916203*62	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-8 Tube 1	AIR-V-8 TUBE 1	S916203*36	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/10/99	AIR-V-8 Tube 2	AIR-V-8 TUBE 2	S916203*63	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-9 Tube 1	AIR-V-9 TUBE 1	S916203*37	TO-1 (VOCs)
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-9 Tube 2	AIR-V-9 TUBE 2	S916203*64	TO-1 (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Air	Savannah Laboratories	SIL002	09/11/99	AIR-V-FB Tube 1	AIR-V-FB TUBE 1	S916203*44	TO-1 (VOCs)
Full Scan - Borrow Pit Lake Sediment	Savannah Laboratories	SIL007	10/06/99	BPL-ESED-S1	BPL-ESED-S1-0.2FT	S916704*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49596B		BPL-ESED-S1-0.2ft		247-2-7	8290 (PCDD/PCDF)
Full Scan - Borrow Pit Lake Sediment	Savannah Laboratories	SIL007	10/06/99	BPL-ESED-S1-FD	BPL-ESED-S1-0.2FTFD	S916704*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49596B		BPL-ESED-S1-FD-0.2ft		247-2-8	8290 (PCDD/PCDF)
Full Scan - Borrow Pit Lake Sediment	Savannah Laboratories	SIL007	10/07/99	BPL-ESED-S2	BPL-ESED-S2-0.2FT	S916769*4	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Borrow Pit Lake Sediment	Savannah Laboratories	SIL007	10/07/99	BPL-ESED-S2	BPL-ESED-S2-0.2FT	S916769*4	680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide) 9060 (TOC)
	Triangle Laboratories	49608A		BPL-ESED-S2-0.2F		247-14-4	8290 (PCDD/PCDF)
Full Scan - Borrow Pit Lake Sediment	Savannah Laboratories	SIL007	10/06/99	BPL-ESED-S3	BPL-ESED-S3-0.2FT	S916704*19	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide) 9060 (TOC)
	Triangle Laboratories	49596B		BPL-ESED-S3-0.2ft		247-2-9	8290 (PCDD/PCDF)
Bedrock GW	Savannah Laboratories	SIL054	05/01/00	BR-G	BR-G	S002805*2	6010B (Metals) 680 (PCBs) 7470 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Bedrock GW	Savannah Laboratories	SIL054	05/01/00	BR-G	BR-G	S002805*2	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S002805*2*DL	8270C (SVOCs)
						S002805*2	9010 (Cyanide)
	Triangle Laboratories	50956n1				260-65-2B	8290 (PCDD/PCDF)
Bedrock GW	Savannah Laboratories	SIL054	05/02/00	BR-G-EB	BR-GEB	S002850*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50956				260-75-1A	8290 (PCDD/PCDF)
Bedrock GW	Savannah Laboratories	SIL054	05/01/00	BR-G-FD	BR-GFD	S002805*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S002805*3*DL	8270C (SVOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Bedrock GW	Savannah Laboratories	SIL054	05/01/00	BR-G-FD	BR-GFD	S002805*3	9010 (Cyanide)
	Triangle Laboratories	50956n1				260-65-3B	8290 (PCDD/PCDF)
Bedrock GW	Savannah Laboratories	SIL054	05/01/00	BR-H	BR-H	S002805*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S002805*1*DL	8270C (SVOCs)
						S002805*1	9010 (Cyanide)
	Triangle Laboratories	50956				260-65-1A	8290 (PCDD/PCDF)
Bedrock GW	Savannah Laboratories	SIL052	04/25/00	BR-I	BR-I	S002677*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
		SIL053				S002705*3	8260B (VOCs)
		SIL052				S002677*1*DL	8270C (SVOCs)
						S002677*1	9010 (Cyanide)
	Triangle Laboratories	50956n1				260-18-2B	8290 (PCDD/PCDF)
Background Soil	Savannah Laboratories	SIL040	01/26/00	BS-EE04-0.5FT-SUB	BS-EE-04-0-0.5FT	S000574*1	6010B (Metals)
							680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Background Soil	Savannah Laboratories	SIL040	01/26/00	BS-EE04-0.5FT-SUB	BS-EE-04-0-0.5FT	S000574*1	7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50359				254-72-1	8280A (PCDD/PCDF)
Background Soil	Savannah Laboratories	SIL040	01/26/00	BS-EE04-0.5FT-SUB-FD	BS-EE-04-0-0.5FTFD	S000574*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50359				254-72-2	8280A (PCDD/PCDF)
Background Soil	Savannah Laboratories	SIL040	01/26/00	BS-EE04-3-6FT-SUB	BS-EE-04-3-6FT	S000574*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Background Soil	Savannah Laboratories	SIL040	01/26/00	BS-EE04-3-6FT-SUB	BS-EE-04-3-6FT	S000574*2	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50359				254-72-3	8280A (PCDD/PCDF)
Background Soil	Savannah Laboratories	SIL040	01/24/00	BS-EE20-0.5FT	BS-EE-20-0-0.5FT	S000513B*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50355				254-68-1	8280A (PCDD/PCDF)
Background Soil	Savannah Laboratories	SIL040	01/24/00	BS-EE20-3-6FT	BS-EE-20-3-6FT	S000513B*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50355				254-68-2	8280A (PCDD/PCDF)
Background Soil	Savannah Laboratories	SIL040	01/27/00	BS-EEG108-0.5FT	BS-EEG-108-0-0.5FT	S000654A*1	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Background Soil	Savannah Laboratories	SIL040	01/27/00	BS-EEG108-0.5FT	BS-EEG-108-0-0.5FT	S000654A*1	680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
		SIL047	03/09/00	BS-EEG-108-0.5 FT - REPLACE		S001582A*1	8260B (VOCs)
		SIL040	01/27/00	BS-EEG108-0.5FT		S000654A*1	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50364C		BS-EEG-108-0.5FT		254-77-4	8280A (PCDD/PCDF)
Background Soil	Savannah Laboratories	SIL039	01/27/00	BS-EEG108-0.5 FT-EB	BS-EEG-108-0-0.5FTEB	S000654B*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50364B		BS-EEG108-0.5FT-EB		254-77-2A	8280A (PCDD/PCDF)
Background Soil	Savannah Laboratories	SIL040	01/27/00	BS-EEG108-3-6FT	BS-EEG-108-3-6FT	S000654A*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Background Soil	Savannah Laboratories	SIL040	01/27/00	BS-EEG108-3-6FT	BS-EEG-108-3-6FT	S000654A*2	8151A (Herbicides)
		SIL047	03/09/00	BS-EEG-108-3-6 FT - REPLACE		S001582A*2	8260B (VOCs)
		SIL040	01/27/00	BS-EEG108-3-6FT		S000654A*2	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50364C		BS-EEG-108-3-6FT		254-77-5	8280A (PCDD/PCDF)
Full Scan - Dead Creek Sediment	Savannah Laboratories	SIL045	02/07/00	BSSED-PDC-DS-S-0-54'	BSSED-PDC-DS-S-0-30IN	S000852*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	50399		BSSED-PDC-DS-S-0-54"		255-13-1	8290 (PCDD/PCDF)
Full Scan - Dead Creek Sediment	Savannah Laboratories	SIL045	02/07/00	BSSED-PDC-US-N-0-34.5'	BSSED-PDC-US-N-0-20IN	S000852*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Dead Creek Sediment	Savannah Laboratories	SIL045	02/07/00	BSSED-PDC-US-N-0-34.5'	BSSED-PDC-US-N-0-20IN	S000852*2	8270C (SVOCs) 9010 (Cyanide) 9060 (TOC)
	Triangle Laboratories	50399		BSSED-PDC-US-N-0-34.5"		255-13-3	8290 (PCDD/PCDF)
Full Scan - Dead Creek Sediment	Savannah Laboratories	SIL042	02/04/00	SW-PDC-US-EB	BSSED-PDC-US-N-0-20IN EB	S000819*4	415.1 (TOC) 6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50392r1		BSSED-PDC-US-EB		255-6-6B	8290 (PCDD/PCDF)
Full Scan - Dead Creek Sediment	Savannah Laboratories	SIL045	02/07/00	BSSED-PDC-US-N-0-34.5' FD	BSSED-PDC-US-N-0-20IN FD	S000852*3	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Dead Creek Sediment	Savannah Laboratories	SIL045	02/07/00	BSSED-PDC-US-N-0-34.5' FD	BSSED-PDC-US-N-0-20IN FD	S000852*3	680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	50399		BSSED-PDC-US-N-0-34.5"FD		255-13-4	8290 (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T1-S1-0-0.5FT	DAS-T1-S1-0-0.5FT	S002515*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T1-S1-0-0.5FT	DAS-T1-S1-0-0.5FT	S002515*1	9010 (Cyanide)
	Triangle Laboratories	50863				259-81-11	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T1-S1-0-0.5FT-FD	DAS-T1-S1-0-0.5FTFD	S002515*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50863				259-81-8	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T1-S1-3-6FT	DAS-T1-S1-3-6FT	S002515*8	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T1-S2-0-0.5FT	DAS-T1-S2-0-0.5FT	S002515*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T1-S2-0-0.5FT	DAS-T1-S2-0-0.5FT	S002515*3	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50863				259-81-9	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T1-S2-3-6FT	DAS-T1-S2-3-6FT	S002515*9	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T1-S3-0-0.5FT	DAS-T1-S3-0-0.5FT	S002515*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Triangle Laboratories	50863	04/18/00	DAS-T1-S3-0-0.5FT	DAS-T1-S3-0-0.5FT	259-81-7	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T1-S3-3-6FT	DAS-T1-S3-3-6FT	S002515*10	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50863				259-81-2	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S1-0-0.5FT	DAS-T2-S1-0-0.5FT	S002515*5	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50863				259-81-6	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S1-3-6FT	DAS-T2-S1-3-6FT	S002515*11	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S1-3-6FT	DAS-T2-S1-3-6FT	S002515*11	8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S2-0-0.5FT	DAS-T2-S2-0-0.5FT	S002515*6	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50863				259-81-3	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S2-3-6FT	DAS-T2-S2-3-6FT	S002515*12	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S3-0-0.5FT	DAS-T2-S3-0-0.5FT	S002515*7	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50863				259-81-10	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S3-3-6FT	DAS-T2-S3-3-6FT	S002515*13	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50863				259-81-4	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S3-3-6FT-FD	DAS-T2-S3-3-6FTFD	S002515*14	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL050	04/18/00	DAS-T2-S3-3-6FT-FD	DAS-T2-S3-3-6FTFD	S002515*14	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50863				259-81-1	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T3-S1-0-0.5FT	DAS-T3-S1-0-0.5FT	S002545*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50869				259-87-1	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T3-S1-3-6FT	DAS-T3-S1-3-6FT	S002545*9	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T3-S2-0-0.5FT	DAS-T3-S2-0-0.5FT	S002545*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50869				259-87-2	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T3-S2-3-6FT	DAS-T3-S2-3-6FT	S002545*10	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T3-S3-0-0.5FT	DAS-T3-S3-0-0.5FT	S002545*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T3-S3-0-0.5FT	DAS-T3-S3-0-0.5FT	S002545*3	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50869				259-87-3	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T3-S3-0-0.5FT-EB	DAS-T3-S3-0-0.5FTEB	S002607*15	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T3-S3-3-6FT	DAS-T3-S3-3-6FT	S002545*11	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T4-S1-0-0.5FT	DAS-T4-S1-0-0.5FT	S002545*4	6010B (Metals) 680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T4-S1-0-0.5FT	DAS-T4-S1-0-0.5FT	S002545*4	7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50869				259-87-7	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T4-S1-0-0.5FT-FD	DAS-T4-S1-0-0.5FTFD	S002545*5	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50869		DAS-T4-S1-0-0.5FTFD		259-87-9	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T4-S1-3-6FT	DAS-T4-S1-3-6FT	S002545*12	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T4-S1-3-6FT	DAS-T4-S1-3-6FT	S002545*12	8270C (SVOCs) 9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T4-S1-3-6FT-FD	DAS-T4-S1-3-6FTFD	S002545*13	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T4-S2-0-0.5FT	DAS-T4-S2-0-0.5FT	S002607*8	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides)
						S002607*8*RE	8151A (Herbicides)
						S002607*8	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50883				260-2-1	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T4-S2-3-6FT	DAS-T4-S2-3-6FT	S002607*1	6010B (Metals) 680 (PCBs) 7471 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T4-S2-3-6FT	DAS-T4-S2-3-6FT	S002607*1	8081A (Pesticides)
						S002607*1*RE	8151A (Herbicides)
						S002607*1	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T4-S3-0-0.5FT	DAS-T4-S3-0-0.5FT	S002607*9	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*9*RE	8151A (Herbicides)
						S002607*9	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50883				260-2-2	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T4-S3-3-6FT	DAS-T4-S3-3-6FT	S002607*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*2*RE	8151A (Herbicides)
						S002607*2	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T5-S1-0-0.5FT	DAS-T5-S1-0-0.5FT	S002545*6	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50869				259-87-4	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T5-S1-0-0.5FT-EB	DAS-T5-S1-0-0.5FTEB	S002607*16	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T5-S1-3-6FT	DAS-T5-S1-3-6FT	S002545*14	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T5-S1-3-6FT	DAS-T5-S1-3-6FT	S002545*14	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T5-S2-0-0.5FT	DAS-T5-S2-0-0.5FT	S002545*7	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50869				259-87-5	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T5-S2-3-6FT	DAS-T5-S2-3-6FT	S002545*15	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50869				259-87-8	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T5-S3-0-0.5FT	DAS-T5-S3-0-0.5FT	S002545*8	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T5-S3-0-0.5FT	DAS-T5-S3-0-0.5FT	S002545*8	680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50869				259-87-6	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL051	04/19/00	DAS-T5-S3-3-6FT	DAS-T5-S3-3-6FT	S002545*16	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T6-S1-0-0.5FT	DAS-T6-S1-0-0.5FT	S002607*12	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*12*RE	8151A (Herbicides)
						S002607*12	8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T6-S1-0-0.5FT	DAS-T6-S1-0-0.5FT	S002607*12	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50883				260-2-4	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T6-S1-3-6FT	DAS-T6-S1-3-6FT	S002607*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*3*RE	8151A (Herbicides)
						S002607*3	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50883				260-2-5	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T6-S2-0-0.5FT	DAS-T6-S2-0-0.5FT	S002607*13	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*13*RE	8151A (Herbicides)
						S002607*13	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50883				260-2-6	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T6-S2-3-6FT	DAS-T6-S2-3-6FT	S002607*4	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T6-S2-3-6FT	DAS-T6-S2-3-6FT	S002607*4	680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*4*RE	8151A (Herbicides)
						S002607*4	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T6-S3-0-0.5FT	DAS-T6-S3-0-0.5FT	S002607*14	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*14*RE	8151A (Herbicides)
						S002607*14	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50883				260-2-7	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T6-S3-3-6FT	DAS-T6-S3-3-6FT	S002607*5	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*5*RE	8151A (Herbicides)
						S002607*5	8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T6-S3-3-6FT	DAS-T6-S3-3-6FT	S002607*5	8270C (SVOCs) 9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T7-S1-0-0.5FT	DAS-T7-S1-0-0.5FT	S002607*6	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides)
						S002607*6*RE	8151A (Herbicides)
						S002607*6	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50883				260-2-8	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T7-S1-3-6FT	DAS-T7-S1-3-6FT	S002607*10	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides)
						S002607*10*RE	8151A (Herbicides)
						S002607*10	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T7-S2-0-0.5FT	DAS-T7-S2-0-0.5FT	S002607*7	6010B (Metals) 680 (PCBs) 7471 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T7-S2-0-0.5FT	DAS-T7-S2-0-0.5FT	S002607*7	8081A (Pesticides)
						S002607*7*RE	8151A (Herbicides)
						S002607*7	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50883				260-2-9	8280A (PCDD/PCDF)
Developed Soil	Savannah Laboratories	SIL052	04/20/00	DAS-T7-S2-3-6FT	DAS-T7-S2-3-6FT	S002607*11	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S002607*11*RE	8151A (Herbicides)
						S002607*11	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Domestic Well GW	Savannah Laboratories	SIL015	10/21/99	DW-MCDO-1	DW-MCDO-1	S917102*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Domestic Well GW	Triangle Laboratories	49712	10/21/99	DW-MCDO-1	DW-MCDO-1	248-19-1A	8290 (PCDD/PCDF)
Domestic Well GW	Savannah Laboratories	SIL015	10/21/99	DW-MCDO-1 DUP	DW-MCDO-1FD	S917102*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49712		DW-MCDO-1DUP		248-19-2A	8290 (PCDD/PCDF)
Domestic Well GW	Savannah Laboratories	SIL016	10/22/99	DW-SCHM-1	DW-SCHM-1	S917143*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49716				248-23-1A	8290 (PCDD/PCDF)
Domestic Well GW	Savannah Laboratories	SIL015	10/21/99	DW-SETT-1	DW-SETT-1	S917102*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Domestic Well GW	Savannah Laboratories	SIL015	10/21/99	DW-SETT-1	DW-SETT-1	S917102*3	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49712				248-19-3A	8290 (PCDD/PCDF)
Domestic Well GW	Savannah Laboratories	SIL015	10/21/99	DW-WRIG-1	DW-WRIG-1	S917102*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49712				248-19-4A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL011	10/12/99	EE-01	EE-01	S916847*11	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S916847*11*DL	8270C (SVOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL011	10/12/99	EE-01	EE-01	S916847*11	9010 (Cyanide)
	Triangle Laboratories	49642B				247-48-2A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL018	11/04/99	EE-02-GP	EE-02-GP	S917467*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S917467*4*DL	8270C (SVOCs)
						S917467*4	9010 (Cyanide)
	Triangle Laboratories	49816				249-24-1A	8290 (PCDD/PCDF)
Fill Area GW	Triangle Laboratories	49816	11/04/99	EE-02-GP FIELD BLANK	EE-02-GPEB	249-24-2A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL018	11/04/99	FIELD DUP EE-02-GP	EE-02-GPFD	S917467*5	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S917467*5*DL	8270C (SVOCs)
						S917467*5	9010 (Cyanide)
Fill Area GW	Savannah Laboratories	SIL011	10/12/99	EE-03	EE-03	S916847*12	6010B (Metals)
							680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL011	10/12/99	EE-03	EE-03	S916847*12	7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49642B				247-48-3A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL011	10/13/99	EE-05	EE-05	S916897*13	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S916897*13*DL	8270C (SVOCs)
						S916897*13	9010 (Cyanide)
	Triangle Laboratories	49653B				247-59-4A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL011	10/13/99	EE-05 EB	EE-05EB	S916897*15	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL011	10/13/99	EE-05 EB	EE-05EB	S916897*15	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49653B		EE-05EB		247-59-5A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL018	11/05/99	EE-12-GP	EE-12-GP	S917504*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S917504*3*DL	8270C (SVOCs)
						S917504*3	9010 (Cyanide)
	Triangle Laboratories	49820				249-28-1A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL018	11/04/99	EE-13-GP	EE-13-GP	S917467*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49816				249-24-3A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL018	11/05/99	EE-14-GP	EE-14-GP	S917504*4	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL018	11/05/99	EE-14-GP	EE-14-GP	S917504*4	680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S917504*4*DL	8270C (SVOCs)
						S917504*4	9010 (Cyanide)
	Triangle Laboratories	49820				249-28-2A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL018	11/08/99	EE-15-GP	EE-15-GP	S917546*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S917546*3*DL	8270C (SVOCs)
						S917546*3	9010 (Cyanide)
	Triangle Laboratories	49843				249-51-1	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL018	11/08/99	EE-15-GP-FD	EE-15-GPFD	S917546*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL018	11/08/99	EE-15-GP-FD	EE-15-GPFD	S917546*4	8260B (VOCs)
						S917546*4*DL	8270C (SVOCs)
						S917546*4	9010 (Cyanide)
	Triangle Laboratories	49843				249-51-2	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL008	10/08/99	EEG-101	EEG-101	S916797A*11	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A				247-20-9A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL008	10/07/99	EEG-102	EEG-102	S916769A*10	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49608B				247-14-7A	8290 (PCDD/PCDF)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL017	11/03/99	EEG-103-GP	EEG-103-GP	S917421*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49799				249-7-1A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL008	10/08/99	EEG-104	EEG-104	S916797A*12	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49614A				247-20-11A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL017	11/02/99	EEG-105-GP	EEG-105-GP	S917386*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL017	11/02/99	EEG-105-GP	EEG-105-GP	S917386*3	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49792				248-99-1A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL008	10/07/99	EEG-106	EEG-106	S916769A*11	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49608B				247-14-5A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL008	10/07/99	EEG-107	EEG-107	S916769A*12	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S916769A*12*DL	8270C (SVOCs)
						S916769A*12	9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Triangle Laboratories	49608B	10/07/99	EEG-107	EEG-107	247-14-6A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL011	10/11/99	EEG-109	EEG-109	S916823*13	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49629B				247-35-6A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL011	10/11/99	EEG-110	EEG-110	S916823*14	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49629B				247-35-5A	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL017	11/03/99	EEG-111-GP	EEG-111-GP	S917421*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Fill Area GW	Savannah Laboratories	SIL017	11/03/99	EEG-111-GP	EEG-111-GP	S917421*4	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49799				249-7-2	8290 (PCDD/PCDF)
Fill Area GW	Savannah Laboratories	SIL008	10/08/99	EEG-112	EEG-112	S916797A*13	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A				247-20-10A	8290 (PCDD/PCDF)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S1-0-10'	FASED-BPL-S1-0-10IN	S000791*1	680 (PCBs)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BLL-S1-0-10' EB	FASED-BPL-S1-0-10INEB	S000791*10	680 (PCBs)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S2-0-10'	FASED-BPL-S2-0-10IN	S000791*2	680 (PCBs)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S3-0-8'	FASED-BPL-S3-0-8IN	S000791*3	680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S4-0-10'	FASED-BPL-S4-0-10IN	S000791*4	680 (PCBs)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S5-0-9'	FASED-BPL-S5-0-9IN	S000791*5	680 (PCBs)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S6-0-11'	FASED-BPL-S6-0-11IN	S000791*6	680 (PCBs)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S6-0-11' FD	FASED-BPL-S6-0-11INFD	S000791*7	680 (PCBs)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S7-0-9'	FASED-BPL-S7-0-9IN	S000791*8	680 (PCBs)
Industry Specific - Borrow Pit Lake - Validated	Savannah Laboratories	SIL044	02/03/00	FASED-BPL-S8-0-9'	FASED-BPL-S8-0-9IN	S000791*9	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/02/00	FASED-CSB-S10-0-9'	FASED-CSB-S10W-0-9IN	S000736*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/02/00	FASED-CSB-S10-0-9' FD	FASED-CSB-S10W-0-9INF D	S000736*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSB-S1W-0-25'	FASED-CSB-S1W-0-25IN	S000709*8	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSB-S2-0-23'	FASED-CSB-S2-0-23IN	S000709*9	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSB-S3-0-26'	FASED-CSB-S3-0-26IN	S000709*10	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSB-S4W-0-23'	FASED-CSB-S4W-0-23IN	S000709*11	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSB-S5-0-22'	FASED-CSB-S5-0-22IN	S000709*12	680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/02/00	FASED-SCB-S6-0-20'	FASED-CSB-S6-0-20IN	S000736*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/02/00	FASED-CSB-S7-0-18'	FASED-CSB-S7-0-18IN	S000736*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/02/00	FASED-CSB-S8E-0-22'	FASED-CSB-S8E-0-22IN	S000736*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL044	02/02/00	FASED-CSB-S9W-0-9'	FASED-CSB-S9W-0-9IN	S000736A*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSC-S1-0-13'	FASED-CSC-S1-0-13IN	S000673A*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSC-S10-0-28'	FASED-CSC-S10-0-28IN	S000709*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSC-S11-0-25'	FASED-CSC-S11-0-25IN	S000709*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSC-S11-0-25' FD	FASED-CSC-S11-0-25INF D	S000709*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSC-S12E-0-18'	FASED-CSC-S12E-0-18IN	S000709*7	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSC-S2-0-28'	FASED-CSC-S2-0-28IN	S000673A*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSC-S2-0-28' FD	FASED-CSC-S2-0-28INFD	S000673A*7	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSC-S3-0-20'	FASED-CSC-S3-0-20IN	S000673A*8	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSC-S4-0-22'	FASED-CSC-S4-0-22IN	S000673A*9	680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSC-S5W-0-26'	FASED-CSC-S5W-0-26IN	S000673A*10	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSC-S6-0-26'	FASED-CSC-S6W-0-26IN	S000673A*11	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSC-S7-0-26'	FASED-CSC-S7-0-29IN	S000673A*12	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSC-S8-0-16'	FASED-CSC-S8-0-16IN	S000709*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSC-S9-0-27'	FASED-CSC-S9-0-27IN	S000709*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/01/00	FASED-CSC-S9-0-27' FD	FASED-CSC-S9-0-27INFD	S000709*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/02/00	FASED-CSD-S1W-0-24'	FASED-CSD-S1W-0-24IN	S000736*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/27/00	FASED-CSD-S2E-0-15'	FASED-CSD-S2-0-15IN	S000654*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/27/00	FASED-CSD-S3-0-21'	FASED-CSD-S3-0-21IN	S000654*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/27/00	FASED-CSD-S4-0-23'	FASED-CSD-S4-0-23IN	S000654*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSD-S5-0-10'	FASED-CSD-S5-0-10IN	S000673A*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/28/00	FASED-CSD-S6E-0-13'	FASED-CSD-S6E-0-13IN	S000625*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSD-S7-0-33'	FASED-CSD-S7-0-33IN	S000673A*2	680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSD-S8-0-29'	FASED-CSD-S8-0-29IN	S000673A*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/31/00	FASED-CSD-S9W-0-23'	FASED-CSD-S9W-0-23IN	S000673A*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/19/00	FASED-CSE-S1-0-12'	FASED-CSE-S1-0-12IN	S000376*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/24/00	FASED-CSE-S10W-0-27'	FASED-CSE-S10W-0-27IN	S000513*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/24/00	FASED-CSE-S11W-0-22'	FASED-CSE-S11W-0-22IN	S000513*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/24/00	FASED-CSE-S12-0-21'	FASED-CSE-S12-0-21IN	S000513*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/24/00	FASED-CSE-S13E-0-21'	FASED-CSE-S13E-0-21IN	S000513*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/24/00	FASED-CSE-S14W-0-31'	FASED-CSE-S14W-0-31IN	S000513*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/25/00	FASED-CSE-S15-0-19'	FASED-CSE-S15-0-19IN	S000535*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/25/00	FASED-CSE-S16E-0-21'	FASED-CSE-S16E-0-21IN	S000535*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/25/00	FASED-CSE-S17-0-28'	FASED-CSE-S17-0-28IN	S000535*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/25/00	FASED-CSE-S18-0-25'	FASED-CSE-S18-0-25IN	S000535*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/25/00	FASED-CSE-S19E-0-28'	FASED-CSE-S19E-0-28IN	S000535*5	680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/25/00	FASED-CSE-S19E-0-28' FD	FASED-CSE-S19E-0-28INF D	S000535*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/25/00	FASED-CSE-S20E-0-33'	FASED-CSE-S20E-0-33IN	S000535*7	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/26/00	FASED-CSE-S21-0-28'	FASED-CSE-S21-0-28IN	S000574A*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/26/00	FASED-CSE-S22E-0-26'	FASED-CSE-S22E-0-26IN	S000574A*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/26/00	FASED-CSE-S23-0-23'	FASED-CSE-S23-0-23IN	S000574A*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/26/00	FASED-CSE-S24W-0-27'	FASED-CSE-S24W-0-27IN	S000574A*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL038	01/26/00	FASED-CSE-S25W-0-29'	FASED-CSE-S25W-0-29IN	S000574A*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL041	01/27/00	FASED-CSE-S26E-0-12'	FASED-CSE-S26E-0-12IN	S000654*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/19/00	FASED-CSE-S2W-0-19'	FASED-CSE-S2W-0-19IN	S000376*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/20/00	FASED-CSE-S3-0-13'	FASED-CSE-S3-0-13IN	S000421*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/20/00	FASED-CSE-S4E-0-17'	FASED-CSE-S4E-0-17IN	S000421*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/20/00	FASED-CSE-S5E-0-24'	FASED-CSE-S5E-0-24IN	S000421*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/20/00	FASED-CSE-S6W-0-35'	FASED-CSE-S6W-0-35IN	S000421*5	680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/20/00	FASED-CSE-S6W-0-35' FD	FASED-CSE-S6W-0-35INFD	S000421*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/20/00	FASED-CSE-S7W-0-13'	FASED-CSE-S7W-0-13IN	S000421*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/21/00	FASED-CSE-S8-0-32'	FASED-CSE-S8-0-32IN	S000457*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/21/00	FASED-CSE-S9-0-31'	FASED-CSE-S9-0-31IN	S000457*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/12/00	FASED-CSF-S10-0-10'	FASED-CSF-S10-0-9IN	S000220*8	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/12/00	FASED-CSF-S11W-0-10'	FASED-CSF-S11W-0-10IN	S000220*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/12/00	FASED-CSF-S12-0-15'	FASED-CSF-S12-0-15IN	S000220*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/12/00	FASED-CSF-S12-0-15'-FD	FASED-CSF-S12-0-15INFD	S000220*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/12/00	FASED-CSF-S13W-0-15'	FASED-CSF-S13W-0-15IN	S000220*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/12/00	FASED-CSF-S14W-0-15'	FASED-CSF-S14W-0-15IN	S000220*7	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/13/00	FASED-CSF-S15W-0-28'	FASED-CSF-S15W-0-28IN	S000243*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/13/00	FASED-CSF-S16-0-23'	FASED-CSF-S16-0-23IN	S000243*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/13/00	FASED-CSF-S17W-0-16'	FASED-CSF-S17W-0-16IN	S000243*3	680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/13/00	FASED-CSF-S18E-0-14'	FASED-CSF-S18E-0-14IN	S000243*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/17/00	FASED-CSF-S19-0-13'	FASED-CSF-S19-0-13IN	S000304*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/11/00	FASED-CSF-S1E-0-8'	FASED-CSF-S1E-0-8IN	S000180*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/11/00	FASED-CSF-S2-0-7'	FASED-CSF-S2-0-7IN	S000180*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/17/00	FASED-CSF-S20-0-12'	FASED-CSF-S20-0-12IN	S000304*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/17/00	FASED-CSF-S21-0-14'	FASED-CSF-S21-0-13IN	S000304*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/17/00	FASED-CSF-S21-0-14'FD	FASED-CSF-S21-0-13INFD	S000304*7	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/17/00	FASED-CSF-S22E-0-20'	FASED-CSF-S22E-0-20IN	S000304*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/17/00	FASED-CSF-S23-0-15'	FASED-CSF-S23-0-15IN	S000304*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/17/00	FASED-CSF-S24W-0-13'	FASED-CSF-S24W-0-13IN	S000304*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/18/00	FASED-CSF-S25E-0-10'	FASED-CSF-S25E-0-10IN	S000336*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/18/00	FASED-CSF-S26W-0-13'	FASED-CSF-S26W-0-13IN	S000336*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/18/00	FASED-CSF-S27E-0-16'	FASED-CSF-S27E-0-16IN	S000336*3	680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/18/00	FASED-CSF-S28-0-10'	FASED-CSF-S28-0-10IN	S000336*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/18/00	FASED-CSF-S29W-0-10'	FASED-CSF-S29W-0-10IN	S000336*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/18/00	FASED-CSF-S30N-0-8'	FASED-CSF-S30N-0-8IN	S000336*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/18/00	FASED-CSF-S31N-0-13'	FASED-CSF-S31N-0-13IN	S000336*7	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/18/00	FASED-CSF-S32S-0-11'	FASED-CSF-S32S-0-11IN	S000336A*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/18/00	FASED-CSF-S32S-0-11'FD	FASED-CSF-S32S-0-11INFD	S000336A*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/18/00	FASED-CSF-S33-0-10'	FASED-CSF-S33-0-13IN	S000336A*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/18/00	FASED-CSF-S34S-0-14'	FASED-CSF-S34S-0-14IN	S000336A*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL043	02/02/00	FASED-CSF-S35S-0-21'	FASED-CSF-S35S-0-21IN	S000736*7	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/18/00	FASED-CSF-S36N-0-12'	FASED-CSF-S36N-0-12IN	S000336A*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/18/00	FASED-CSF-S36N-0-12'FD	FASED-CSF-S36N-0-12INFD	S000336A*7	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL037	01/18/00	FASED-CSF-S37N-0-13'	FASED-CSF-S37N-0-13IN	S000336A*5	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/19/00	FASED-CSF-S38S-0-14'	FASED-CSF-S38S-0-14IN	S000376*1	680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/19/00	FASED-CSF-S39S-0-26'	FASED-CSF-S39S-0-26IN	S000376*2	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/11/00	FASED-CSF-S3E-0-6'	FASED-CSF-S3E-0-6IN	S000180*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/11/00	FASED-CSF-S4-0-7'	FASED-CSF-S4-0-7IN	S000180*4	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL036	01/19/00	FASED-CSF-S40-0-20'	FASED-CSF-S40-0-20IN	S000376*3	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/11/00	FASED-CSF-S5W-0-10'	FASED-CSF-S5W-0-10IN	S000180*5	680 (PCBs)
.Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/11/00	FASED-CSF-S6E-0-10'	FASED-CSF-S6E-0-10IN	S000180*6	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/11/00	FASED-CSF-S73-0-11'	FASED-CSF-S7E-0-11IN	S000180*7	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/12/00	FASED-CSF-S8-0-15'	FASED-CSF-S8-0-15IN	S000220*1	680 (PCBs)
Industry Specific - Un/Developed Sediment - Validated	Savannah Laboratories	SIL035	01/12/00	FASED-CSF-S9-0-11'	FASED-CSF-S9-0-11IN	S000220*2	680 (PCBs)
Biota - Validated	Savannah Laboratories	SCI002	10/04/99	LMB BP COMP 1	LMB BP COMP 1	S916900A*2	6010B (Metals) 680 (PCBs) 7060 (Arsenic) 7471 (Mercury) 7761 (Silver) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Biota - Validated	Savannah Laboratories	SCI002	10/04/99	LMB BP COMP 1	LMB BP COMP 1	S916900A*2	8270C (SVOCs)
							9010 (Cyanide)
							EX41 (% Lipids)
							SW7041 (Antimony)
	Triangle Laboratories	50409	01/25/00			255-23-8	8290 (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI002	11/03/99	LMB BP COMP 2	LMB BP COMP 2	S916900A*3	6010B (Metals)
							680 (PCBs)
							7060 (Arsenic)
							7471 (Mercury)
							7761 (Silver)
							8081A (Pesticides)
						S916900A*3*RE	8151A (Herbicides)
						S916900A*3	8270C (SVOCs)
							9010 (Cyanide)
							EX41 (% Lipids)
							SW7041 (Antimony)
	Triangle Laboratories	50409	01/25/00			255-23-11	8290 (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI002	11/02/99	LMB BP COMP 3	LMB BP COMP 3	S916900A*4	6010B (Metals)
							680 (PCBs)
							7060 (Arsenic)
							7471 (Mercury)
							7761 (Silver)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Biota - Validated	Savannah Laboratories	SCI002	11/02/99	LMB BP COMP 3	LMB BP COMP 3	S916900A*4	8081A (Pesticides)
							8151A (Herbicides)
							8270C (SVOCs)
							9010 (Cyanide)
							EX41 (% Lipids)
							SW7041 (Antimony)
	Triangle Laboratories	50409	01/25/00			255-23-12	8290 (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI002	11/01/99	LMB REF 1 COMP 1	LMB REF 1 COMP 1	S916900A*5	6010B (Metals)
							680 (PCBs)
							7060 (Arsenic)
							7471 (Mercury)
							7761 (Silver)
							8081A (Pesticides)
							8151A (Herbicides)
							8270C (SVOCs)
							9010 (Cyanide)
							EX41 (% Lipids)
							SW7041 (Antimony)
	Triangle Laboratories	50410	01/25/00			255-24-1	8290 (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI002	11/01/99	LMB REF 1 COMP 2	LMB REF 1 COMP 2	S916900A*6	6010B (Metals)
							680 (PCBs)
							7060 (Arsenic)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Biota - Validated	Savannah Laboratories	SCI002	11/01/99	LMB REF 1 COMP 2	LMB REF 1 COMP 2	S916900A*6	7471 (Mercury)
							7761 (Silver)
							8081A (Pesticides)
							8151A (Herbicides)
							8270C (SVOCs)
							9010 (Cyanide)
							EX41 (% Lipids)
							SW7041 (Antimony)
	Triangle Laboratories	50410	01/25/00			255-24-2	8290 (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI002	10/08/99	LMB REF 2 COMP 1	LMB REF 2 COMP 1	S916900A*7	6010B (Metals)
							680 (PCBs)
							7060 (Arsenic)
							7471 (Mercury)
							7761 (Silver)
							8081A (Pesticides)
							8151A (Herbicides)
							8270C (SVOCs)
							9010 (Cyanide)
							EX41 (% Lipids)
							SW7041 (Antimony)
	Triangle Laboratories	50410	01/25/00			255-24-3	8290 (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI002	11/02/99	LMB REF 2 COMP 2	LMB REF 2 COMP 2	S916900A*8	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Biota - Validated	Savannah Laboratories	SCI002	11/02/99	LMB REF 2 COMP 2	LMB REF 2 COMP 2	S916900A*8	680 (PCBs)
							7060 (Arsenic)
							7471 (Mercury)
							7761 (Silver)
							8081A (Pesticides)
							8151A (Herbicides)
							8270C (SVOCs)
							9010 (Cyanide)
							EX41 (% Lipids)
							SW7041 (Antimony)
	Triangle Laboratories	50410	01/25/00			255-24-4	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL006	10/05/99	SED-CSB-EB	SED-CSB-0.2FTEB	S916640A*6	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49583B				246-88-13A	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/05/99	SED-CSB-S1	SED-CSB-S1-0.2FT	S916640*1	6010B (Metals)
							680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/05/99	SED-CSB-S1	SED-CSB-S1-0.2FT	S916640*1	7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49583C				246-88-6	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/05/99	SED-CSB-S1-FD	SED-CSB-S1-0.2FTFD	S916640*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49583C		SED-CSB-S1FD		246-88-9	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/05/99	SED-CSB-S2	SED-CSB-S2-0.2FT	S916640*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/05/99	SED-CSB-S2	SED-CSB-S2-0.2FT	S916640*2	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49583C				246-88-7	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/05/99	SED-CSB-S3	SED-CSB-S3-0.2FT	S916640*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49583C				246-88-8	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/04/99	SED-CSC-S1(0.2')	SED-CSC-S1-0.2FT	S916604*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/04/99	SED-CSC-S1(0.2')	SED-CSC-S1-0.2FT	S916604*1	8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49575C		SED-CSC-S1-0.2ft		246-80-4	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/04/99	SED-CSC-S2(0.2')	SED-CSC-S2-0.2FT	S916604*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49575C		SED-CSC-S2-0.2ft		246-80-5	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/04/99	SED-CSC-S3(0.2')	SED-CSC-S3-0.2FT	S916604*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/04/99	SED-CSC-S3(0.2')	SED-CSC-S3-0.2FT	S916604*3	9060 (TOC)
	Triangle Laboratories	49575C		SED-CSC-S3-0.2ft		246-80-6	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/04/99	SED-CSD-S1(0.2')	SED-CSD-S1-0.2FT	S916604*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49575C		SED-CSD-S1-0.2ft		246-80-7	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/04/99	SED-CSD-S2(0.2')	SED-CSD-S2-0.2FT	S916604*19	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49575C		SED-CSD-S2-0.2ft		246-80-8	8290 (PCDD/PCDF)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/04/99	SED-CSD-S3(0.2')	SED-CSD-S3-0.2FT	S916604*20	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49575C		SED-CSD-S3-0.2ft		246-80-9	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/06/99	SED-CSE-S1	SED-CSE-S1-0.2FT	S916704*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49596B		SED-CSE-S1-0.2ft		247-2-5	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/06/99	SED-CSE-S2	SED-CSE-S2-0.2FT	S916704*2	6010B (Metals)
							680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/06/99	SED-CSE-S2	SED-CSE-S2-0.2FT	S916704*2	7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49596B		SED-CSE-S2-0.2ft		247-2-4	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/06/99	SED-CSE-S3	SED-CSE-S3-0.2FT	S916704A*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49596B		SED-CSE-S3-0.2ft		247-2-6	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/07/99	SED-CSF-S1	SED-CSF-S1-0.2FT	S916769*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/07/99	SED-CSF-S1	SED-CSF-S1-0.2FT	S916769*1	8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide) 9060 (TOC)
	Triangle Laboratories	49608A		SED-CSF-S1-0.2F		247-14-3	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/07/99	SED-CSF-S2	SED-CSF-S2-0.2FT	S916769*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide) 9060 (TOC)
	Triangle Laboratories	49608A		SED-CSF-S2-0.2F		247-14-2	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/07/99	SED-CSF-S3	SED-CSF-S3-0.2FT	S916769*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/07/99	SED-CSF-S3	SED-CSF-S3-0.2FT	S916769*3	8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49608A		SED-CSF-S3-0.2F		247-14-1	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL005	10/05/99	SED-M-S1	SED-M-S1-0.2FT	S916640*19	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49583C				246-88-10	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/08/99	SED-RA1-S1	SED-RA1-S1-0.2FT	S916797*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/08/99	SED-RA1-S1	SED-RA1-S1-0.2FT	S916797*1	9060 (TOC)
	Triangle Laboratories	49614C		SED-RA1-S1-0.2ft		247-20-18	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/08/99	SED-RA1-S2	SED-RA1-S2-0.2FT	S916797*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49614C				247-20-17	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/08/99	SED-RA2-S1	SED-RA2-S1-0.2FT	S916797*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49614C				247-20-15	8290 (PCDD/PCDF)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL008	10/08/99	SED-RA2-S1-EB	SED-RA2-S1-0.2FTEB	S916797A*14	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A				247-20-8A	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL007	10/08/99	SED-RA2-S1 DUPLICATE	SED-RA2-S1-0.2FTFD	S916797*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49614C		SED-RA2-S1 DUP		247-20-16	8290 (PCDD/PCDF)
Full Scan - Ecological Sediment	Savannah Laboratories	SIL010	10/09/99	SED-RA2-S2	SED-RA2-S2-0.2FT	S916823A*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Full Scan - Ecological Sediment	Savannah Laboratories	SIL010	10/09/99	SED-RA2-S2	SED-RA2-S2-0.2FT	S916823A*1	8081A (Pesticides)
							8151A (Herbicides)
		SIL007	10/08/99			S916797*57	8260B (VOCs)
		SIL010	10/09/99			S916823A*1	8270C (SVOCs)
							9010 (Cyanide)
							9060 (TOC)
	Triangle Laboratories	49629C				247-35-9	8290 (PCDD/PCDF)
Shallow Residential GW	Savannah Laboratories	SIL014	10/14/99	SGW-S1 15'	SGW-S1-15FT	S916933*13	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49661B		SGW-S1-15FT		247-67-13A	8290 (PCDD/PCDF)
Shallow Residential GW	Savannah Laboratories	SIL014	10/14/99	SGW-S1 20'	SGW-S1-20FT	S916933*14	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Shallow Residential GW	Savannah Laboratories	SIL014	10/14/99	SGW-S1 20'	SGW-S1-20FT	S916933*14	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49661B		SGW-S1-20FT		247-67-12A	8290 (PCDD/PCDF)
Shallow Residential GW	Savannah Laboratories	SIL014	10/14/99	SGW-S1 40'	SGW-S1-40FT	S916933*15	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49661B		SGW-S1-40FT		247-67-14A	8290 (PCDD/PCDF)
Shallow Residential GW	Savannah Laboratories	SIL014	10/14/99	SGW-S1-40' DUP	SGW-S1-40FTFD	S916933*16	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49661B		SGW-S1-40FTDUP		247-67-15A	8290 (PCDD/PCDF)
Shallow Residential GW	Savannah Laboratories	SIL014	10/15/99	SGW-S2-15'	SGW-S2-15FT	S916977*15	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Shallow Residential GW	Savannah Laboratories	SIL014	10/15/99	SGW-S2-15'	SGW-S2-15FT	S916977*15	680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49668		SGW-S2 15FT		247-74-1A	8290 (PCDD/PCDF)
Shallow Residential GW	Savannah Laboratories	SIL014	10/15/99	SGW-S2-20'	SGW-S2-20FT	S916977*13	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49668		SGW-S2 20FT		247-74-2A	8290 (PCDD/PCDF)
Shallow Residential GW	Savannah Laboratories	SIL014	10/15/99	SGW-S2-40'	SGW-S2-40FT	S916977*12	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Shallow Residential GW	Savannah Laboratories	SIL014	10/15/99	SGW-S2-40'	SGW-S2-40FT	S916977*12	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49668		SGW-S2 40FT		247-74-5A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/05/99	SW-BPL-S1	SW-BPL-S1	S916640A*2	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49583B				246-88-5	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-BPL-S2	SW-BPL-S2	S916704B*10	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-BPL-S2	SW-BPL-S2	S916704B*10	300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
			10/05/99			S916640A*5	8260B (VOCs)
			10/06/99			S916704B*10	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49583B	10/05/99			246-88-4A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-BPL-S3	SW-BPL-S3	S916704B*4	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-BPL-S3	SW-BPL-S3	S916704B*4	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49596A				247-2-16A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/05/99	SW-CSB-S1	SW-CSB-S1	S916640A*1	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49583B				246-88-1A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/05/99	SW-CSB-S2	SW-CSB-S2	S916640A*4	150.1 (pH)
							160.1 (TDS)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL006	10/05/99	SW-CSB-S2	SW-CSB-S2	S916640A*4	160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49583B				246-88-2A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/04/99	SW-CSB-S3	SW-CSB-S3	S916604A*1	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL006	10/04/99	SW-CSB-S3	SW-CSB-S3	S916604A*1	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49575B				246-80-3A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-CSD-S1	SW-CSD-S1	S916704B*1	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49596A				247-2-15A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-CSD-S1-FD	SW-CSD-S1FD	S916704B*8	150.1 (pH)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-CSD-S1-FD	SW-CSD-S1FD	S916704B*8	160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49596A				247-2-17A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-CSD-S2	SW-CSD-S2	S916704B*2	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-CSD-S2	SW-CSD-S2	S916704B*2	7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49596A				247-2-2A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-CSD-S3	SW-CSD-S3	S916704B*3	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49596A				247-2-1A	8290 (PCDD/PCDF)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL006	10/06/99	SW-CSD-EB	SW-CSDEB	S916704B*9	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49596A				247-2-3A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/07/99	SW-CSE-S3	SW-CSE-S3	S916769A*4	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL008	10/07/99	SW-CSE-S3	SW-CSE-S3	S916769A*4	680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49608B				247-14-11A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/07/99	SW-CSF-S1	SW-CSF-S1	S916769A*1	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Triangle Laboratories	49608B	10/07/99	SW-CSF-S1	SW-CSF-S1	247-14-8A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/07/99	SW-CSF-S2	SW-CSF-S2	S916769A*2	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49608B				247-14-9A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/07/99	SW-CSF-S3	SW-CSF-S3	S916769A*3	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL008	10/07/99	SW-CSF-S3	SW-CSF-S3	S916769A*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49608B				247-14-10A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/05/99	SW-M-S1	SW-M-S1	S916640A*3	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL006	10/05/99	SW-M-S1	SW-M-S1	S916640A*3	9010 (Cyanide)
	Triangle Laboratories	49583B				246-88-3A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL042	02/04/00	SW-PDC-DS	SW-PDC-DS	S000819*1	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50392				255-6-1A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL042	02/04/00	SW-PDC-US	SW-PDC-US	S000819*2	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL042	02/04/00	SW-PDC-US	SW-PDC-US	S000819*2	365.4 (Phosphorou) 6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50392		SW-PDS-US		255-6-4A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL042	02/04/00	SW-PDC-US-FD	SW-PDC-USFD	S000819*3	150.1 (pH) 160.1 (TDS) 160.2 (TSS) 300.0 (Fluoride) 365.2 (Ortho-Phos) 365.4 (Phosphorou) 6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL042	02/04/00	SW-PDC-US-FD	SW-PDC-USFD	S000819*3	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50392r1		SW-PDS-US-FD		255-6-5B	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL006	10/08/99	SW-RA1-S1	SW-RA1-S1	S916797B*1	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A				247-20-7	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/08/99	SW-RA1-S2	SW-RA1-S2	S916797A*2	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL008	10/08/99	SW-RA1-S2	SW-RA1-S2	S916797A*2	365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A				247-20-6A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/08/99	SW-RA1-S2-FD	SW-RA1-S2FD	S916797A*8	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL008	10/08/99	SW-RA1-S2-FD	SW-RA1-S2FD	S916797A*8	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A				247-20-2A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/08/99	SW-RA2-S1 (CREEK)	SW-RA2-S1	S916797A*1	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A		SW-RA2-S1-(CREEK)		247-20-5A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/08/99	SW-RA2-S2 (POND)	SW-RA2-S2	S916797A*3	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL008	10/08/99	SW-RA2-S2 (POND)	SW-RA2-S2	S916797A*3	300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A		SW-RA2-S2-(POND)		247-20-12A	8290 (PCDD/PCDF)
Surface Water	Savannah Laboratories	SIL008	10/08/99	SW-RA2-EB	SW-RA2EB	S916797A*10	150.1 (pH)
							160.1 (TDS)
							160.2 (TSS)
							300.0 (Fluoride)
							365.2 (Ortho-Phos)
							365.4 (Phosphorou)
							6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Surface Water	Savannah Laboratories	SIL008	10/08/99	SW-RA2-EB	SW-RA2EB	S916797A*10	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49614A				247-20-1A	8290 (PCDD/PCDF)
Time Series GW	Savannah Laboratories	SIL049	03/29/00	TS-S1-OHR	TS-S1-0HR	S002041*4	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50714		TS-S1-0 HR		258-29-2A	8290 (PCDD/PCDF)
Time Series GW	Savannah Laboratories	SIL049	03/29/00	TS-S1-12HR	TS-S1-12HR	S002041*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Time Series GW	Triangle Laboratories	50714	03/29/00	TS-S1-12HR	TS-S1-12HR	258-30-1A	8290 (PCDD/PCDF)
Time Series GW	Savannah Laboratories	SIL049	03/29/00	TS-S1-12HR-FD	TS-S1-12HRFD	S002041*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50714				258-30-2A	8290 (PCDD/PCDF)
Time Series GW	Savannah Laboratories	SIL049	03/30/00	TS-S1-24 HR	TS-S1-24HR	S002073*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50714		TS-S1-24HR		258-36-1A	8290 (PCDD/PCDF)
Time Series GW	Savannah Laboratories	SIL049	03/29/00	TS-S2-OHR	TS-S2-0HR	S002041*5	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Time Series GW	Savannah Laboratories	SIL049	03/29/00	TS-S2-OHR	TS-S2-0HR	S002041*5	8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50714		TS-S2-0 HR		258-29-1A	8290 (PCDD/PCDF)
Time Series GW	Savannah Laboratories	SIL049	03/29/00	TS-S2-12HR	TS-S2-12HR	S002041*1	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50714				258-30-3A	8290 (PCDD/PCDF)
Time Series GW	Savannah Laboratories	SIL049	03/30/00	TS-S2-24 HR	TS-S2-24HR	S002073*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Time Series GW	Savannah Laboratories	SIL049	03/30/00	TS-S2-24 HR	TS-S2-24HR	S002073*2	9010 (Cyanide)
	Triangle Laboratories	50714		TS-S2-24HR		258-36-2A	8290 (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL020	11/10/99	UAS-T1-S1-0.5'	UAS-T1-S1-0-0.5FT	S917607A*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49872A		UAS-T1-S1-0.5FT		249-80-1	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL020	11/10/99	UAS-T1-S1-3-6'	UAS-T1-S1-3-6FT	S917607A*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49872A		UAS-T1-S1-3.6FT		249-80-2	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL020	11/10/99	UAS-T1-S2-0.5'	UAS-T1-S2-0-0.5FT	S917607A*3	6010B (Metals)
							680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL020	11/10/99	UAS-T1-S2-0.5'	UAS-T1-S2-0-0.5FT	S917607A*3	7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/10/99	UAS-T1-S2-3-6'	UAS-T1-S2-3-6FT	S917607A*4	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S3-0.5'	UAS-T1-S3-0-0.5FT	S917656A*1 S917656A*1*RE S917656A*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S3-3-6'	UAS-T1-S3-3-6FT	S917656A*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S4-0.5'	UAS-T1-S4-0-0.5FT	S917656A*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S4-3-6'	UAS-T1-S4-3-6FT	S917656A*4	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S4-3-6'	UAS-T1-S4-3-6FT	S917656A*4	8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S5-0.5'	UAS-T1-S5-0-0.5FT	S917656A*5	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S5-3-6'	UAS-T1-S5-3-6FT	S917656A*6	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S6-0.5'	UAS-T1-S6-0-0.5FT	S917656A*7 S917656A*7*RE S917656A*7	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S6-0.5'	UAS-T1-S6-0-0.5FT	S917656A*7	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49888Ar2		UAS-T1-S6-0.5FT		249-96-2	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S6-3-6'	UAS-T1-S6-3-6FT	S917656A*8	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49888Ar2		UAS-T1-S6-3-6FT		249-96-1	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S7-0.5'	UAS-T1-S7-0-0.5FT	S917656A*9	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL019	11/11/99	UAS-T1-S7-0.5-EB	UAS-T1-S7-0-0.5FTEB	S917656*6	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49888B		UAS-T1-S7-0.5FT-EB		249-96-4A	8280 (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S7-0.5'-FD	UAS-T1-S7-0-0.5FTFD	S917656A*11	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S7-3-6'	UAS-T1-S7-3-6FT	S917656A*10	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S7-3-6'	UAS-T1-S7-3-6FT	S917656A*10	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL019	11/11/99	UAS-T1-S7-3-6'-EB	UAS-T1-S7-3-6FTEB	S917656*7	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49888B		UAS-T1-S7-3-6FT-EB		249-96-5A	8280 (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL020	11/11/99	UAS-T1-S7-3-6'-FD	UAS-T1-S7-3-6FTFD	S917656A*15	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/12/99	UAS-T2-S1-0.5'	UAS-T2-S1-0-0.5FT	S917689A*1	6010B (Metals) 680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL020	11/12/99	UAS-T2-S1-0.5'	UAS-T2-S1-0-0.5FT	S917689A*1	7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/12/99	UAS-T2-S1-3-6'	UAS-T2-S1-3-6FT	S917689A*2 S917689A*2*RE S917689A*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/12/99	UAS-T2-S2-0.5'	UAS-T2-S2-0-0.5FT	S917689A*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S2-3-6'	UAS-T2-S2-3-6FT	S917689B*1 S917689B*1*RE S917689B*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S3-0.5'	UAS-T2-S3-0-0.5FT	S917689B*2 S917689B*2*RE S917689B*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S3-3-6'	UAS-T2-S3-3-6FT	S917689B*3 S917689B*3*RE S917689B*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S3-3-6'	UAS-T2-S3-3-6FT	S917689B*3	8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL020	11/12/99	UAS-T2-S4-0-5'	UAS-T2-S4-0-0.5FT	S917689A*4	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49897A		UAS-T2-S4-0.5FT		250-6-4	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S4-3-6'	UAS-T2-S4-3-6FT	S917689B*6	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49897Ar1		UAS-T2-S4-3-6FT		250-6-1	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S5-0.5'	UAS-T2-S5-0-0.5FT	S917689B*4 S917689B*4*RE	6010B (Metals) 680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S5-0.5'	UAS-T2-S5-0-0.5FT	S917689B*4	7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S5-3-6'	UAS-T2-S5-3-6FT	S917689B*5	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S6-0.5'	UAS-T2-S6-0-0.5FT	S917689B*7	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/12/99	UAS-T2-S6-3-6'	UAS-T2-S6-3-6FT	S917689B*8	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/15/99	UAS-T3-S1-0.5'	UAS-T3-S1-0-0.5FT	S917718B*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S1-3-6'	UAS-T3-S1-3-6FT	S917718*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S1-3-6'	UAS-T3-S1-3-6FT	S917718*2	8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S2-0.5'	UAS-T3-S2-0-0.5FT	S917718*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/15/99	UAS-T3-S2-3-6'	UAS-T3-S2-3-6FT	S917718B*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S3-0.5'	UAS-T3-S3-0-0.5FT	S917718*12	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S3-0.5'	UAS-T3-S3-0-0.5FT	S917718*12	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49914B		UAS-T3-S3-0.5FT		250-23-2	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL025	11/15/99	UAS-T3-S3-0.5'-FD	UAS-T3-S3-0-0.5FTFD	S917718B*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49914B		UAS-T3-S3-0.5FT-FD		250-23-4	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S3-3-6'	UAS-T3-S3-3-6FT	S917718*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Triangle Laboratories	49914B	11/15/99	UAS-T3-S3-3-6FT	UAS-T3-S3-3-6FT	250-23-3	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S3-3-6'-FD	UAS-T3-S3-3-6FTFD	S917718*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
						S917718*4*RE	8081A (Pesticides)
						S917718*4	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49914B		UAS-T3-S3-3-6FT-FD		250-23-5	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S4-0.5'	UAS-T3-S4-0-0.5FT	S917718*5	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S4-3-6'	UAS-T3-S4-3-6FT	S917718*9	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S4-3-6'	UAS-T3-S4-3-6FT	S917718*9	8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S5-0.5'	UAS-T3-S5-0-0.5FT	S917718*7	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL023	11/16/99	UAS-T3-S5-0.5'-EB	UAS-T3-S5-0-0.5FTEB	S917759A*4	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49930B		UAS-T3-S5-0.5FT-EB		250-39-1A	8290 (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S5-3-6'	UAS-T3-S5-3-6FT	S917718*11	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S5-3-6'	UAS-T3-S5-3-6FT	S917718*11	680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S6-0.5'	UAS-T3-S6-0-0.5FT	S917718*6	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S6-3-6'	UAS-T3-S6-3-6FT	S917718*10	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S6-3-6'	UAS-T3-S6-3-6FT	S917718*10	9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/15/99	UAS-T3-S7-0.5'	UAS-T3-S7-0-0.5FT	S917718B*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL021	11/15/99	UAS-T3-S7-3-6'	UAS-T3-S7-3-6FT	S917718*8	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL023	11/16/99	UAS-T3-S7-3-6'-EB	UAS-T3-S7-3-6FTEB	S917759A*3	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL023	11/16/99	UAS-T3-S7-3-6'-EB	UAS-T3-S7-3-6FTEB	S917759A*3	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49930B		UAS-T3-S7-3-6FT-EB		250-39-2A	8290 (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S1-0.5'	UAS-T4-S1-0-0.5FT	S917759*8	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49930A		UAS-T4-S1-0.5FT		250-39-3	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S1-3-6'	UAS-T4-S1-3-6FT	S917800*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49945Br1		UAS-T4-S1-(3-6)FT		250-54-12	8280A (PCDD/PCDF)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S2-0.5'	UAS-T4-S2-0-0.5FT	S917759*6	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S2-3-6'	UAS-T4-S2-3-6FT	S917800*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S3-0.5'	UAS-T4-S3-0-0.5FT	S917759*5	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S3-0.5'	UAS-T4-S3-0-0.5FT	S917759*5	8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S3-0-5'-FD	UAS-T4-S3-0-0.5FTFD	S917759*4	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S3-3-6'	UAS-T4-S3-3-6FT	S917800*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S3-3-6'-FD	UAS-T4-S3-3-6FTFD	S917800*4	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S3-3-6'-FD	UAS-T4-S3-3-6FTFD	S917800*4	8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S4-0.5'	UAS-T4-S4-0-0.5FT	S917759*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S4-3-6'	UAS-T4-S4-3-6FT	S917800*7	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S5-0.5'	UAS-T4-S5-0-0.5FT	S917759*7	6010B (Metals) 680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S5-0.5'	UAS-T4-S5-0-0.5FT	S917759*7	7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S5-3-6'	UAS-T4-S5-3-6FT	S917759*9	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S6-0.5'	UAS-T4-S6-0-0.5FT	S917759*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Triangle Laboratories	49930A	11/16/99	UAS-T4-S6-0.5FT	UAS-T4-S6-0-0.5FT	250-39-4	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL022	11/16/99	UAS-T4-S6-3-6'	UAS-T4-S6-3-6FT	S917759*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49930A		UAS-T4-S6-(3-6)		250-39-5	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S7-0.5'	UAS-T4-S7-0-0.5FT	S917800*9	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S7-3-6'	UAS-T4-S7-3-6FT	S917800*5	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T4-S7-3-6'	UAS-T4-S7-3-6FT	S917800*5 S917800*5*DL S917800*5	8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T5-S1-0.5'	UAS-T5-S1-0-0.5FT	S917800*6	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S1-3-6'	UAS-T5-S1-3-6FT	S917800A*8	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T5-S2-0.5'	UAS-T5-S2-0-0.5FT	S917800*10	6010B (Metals) 680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T5-S2-0.5'	UAS-T5-S2-0-0.5FT	S917800*10	7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S2-3-6'	UAS-T5-S2-3-6FT	S917800A*9	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T5-S3-0.5'	UAS-T5-S3-0-0.5FT	S917800*8 S917800*8*RE S917800*8	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S3-3-6'	UAS-T5-S3-3-6FT	S917800A*10	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S4-0.5'	UAS-T5-S4-0-0.5FT	S917800A*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49945Br1		UAS-T5-S4-(0.5)FT		250-54-11	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T5-S4-3-6'	UAS-T5-S4-3-6FT	S917800*11	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL022	11/17/99	UAS-T5-S4-3-6'	UAS-T5-S4-3-6FT	S917800*11	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49945Br1		UAS-T5-S4-(3-6)FT		250-54-10	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S5-0.5'	UAS-T5-S5-0-0.5FT	S917800A*7	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL023	11/17/99	UAS-T5-S5-0.5'-EB	UAS-T5-S5-0-0.5FTEB	S917800B*7	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S5-3-6'	UAS-T5-S5-3-6FT	S917800A*6	6010B (Metals) 680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S5-3-6'	UAS-T5-S5-3-6FT	S917800A*6	7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL023	11/17/99	UAS-T5-S5-3-6'-EB	UAS-T5-S5-3-6FTEB	S917800B*8	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S6-0.5'	UAS-T5-S6-0-0.5FT	S917800A*5 S917800A*5*RE S917800A*5	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S6-0.5'-FD	UAS-T5-S6-0-0.5FTFD	S917800A*3	6010B (Metals)
						S917800A*3*RE	680 (PCBs)
						S917800A*3	7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S917800A*3*RE	8270C (SVOCs)
						S917800A*3	9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S6-3-6'	UAS-T5-S6-3-6FT	S917800A*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S6-3-6'-FD	UAS-T5-S6-3-6FTFD	S917800A*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL024	11/17/99	UAS-T5-S6-3-6'-FD	UAS-T5-S6-3-6FTFD	S917800A*2	8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S1-0.5'	UAS-T6-S1-0-0.5FT	S917842A*6 S917842A*6*RE S917842A*6	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S1-3-6'	UAS-T6-S1-3-6FT	S917842A*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S2-0.5'	UAS-T6-S2-0-0.5FT	S917842A*7	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S2-0.5'	UAS-T6-S2-0-0.5FT	S917842A*7	8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S2-3-6'	UAS-T6-S2-3-6FT	S917842A*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S3-0.5'	UAS-T6-S3-0-0.5FT	S917842A*8	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49958B		UAS-T6-S3-0.5FT		250-67-2	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL023	11/18/99	UAS-T6-S3-0.5'-EB	UAS-T6-S3-0-0.5FTEB	S917842*5	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL023	11/18/99	UAS-T6-S3-0.5'-EB	UAS-T6-S3-0-0.5FTEB	S917842*5	680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49958Cr1		UAS-T6-S3-0.5FT-EB		250-67-4A	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S3-3-6'	UAS-T6-S3-3-6FT	S917842A*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49958B		UAS-T6-S3-3-6FT		250-67-1	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL023	11/18/99	UAS-T6-S3-3-6'-EB	UAS-T6-S3-3-6FTEB	S917842*6	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL023	11/18/99	UAS-T6-S3-3-6'-EB	UAS-T6-S3-3-6FTEB	S917842*6	8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49958Cr1		UAS-T6-S3-3-6FT-EB		250-67-3A	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S4-0.5'	UAS-T6-S4-0-0.5FT	S917842A*9 S917842A*9*RE S917842A*9	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S4-3-6'	UAS-T6-S4-3-6FT	S917842A*4 S917842A*4*RE S917842A*4	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S5-0.5'	UAS-T6-S5-0-0.5FT	S917842A*10 S917842A*10*RE	6010B (Metals) 680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S5-0.5'	UAS-T6-S5-0-0.5FT	S917842A*10	7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL024	11/18/99	UAS-T6-S5-3-6'	UAS-T6-S5-3-6FT	S917842A*5	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S1-0.5'	UAS-T7-S1-0-0.5FT	S917881A*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S1-3-6'	UAS-T7-S1-3-6FT	S917881A*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S2-0.5'	UAS-T7-S2-0-0.5FT	S917881A*3	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S2-3-6'	UAS-T7-S2-3-6FT	S917881A*4	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S2-3-6'	UAS-T7-S2-3-6FT	S917881A*4	8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S3-0.5'	UAS-T7-S3-0-0.5FT	S917881A*5	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49972		UAS-T7-S3-0.5FT		250-81-1	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S3-0.5'-FD	UAS-T7-S3-0-0.5FTFD	S917881A*7	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49972		UAS-T7-S3-0.5FTFD		250-81-3	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S3-3-6'	UAS-T7-S3-3-6FT	S917881A*6	6010B (Metals) 680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S3-3-6'	UAS-T7-S3-3-6FT	S917881A*6	7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49972		UAS-T7-S3-6FT		250-81-2	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S3-3-6'-FD	UAS-T7-S3-3-6FTFD	S917881A*8	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49972r1		UAS-T7-S3-6FTFD		250-81-4	8280A (PCDD/PCDF)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S4-0.5'	UAS-T7-S4-0-0.5FT	S917881A*9	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S4-0.5'	UAS-T7-S4-0-0.5FT	S917881A*9	8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S4-3-6'	UAS-T7-S4-3-6FT	S917881A*10	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL025	11/19/99	UAS-T7-S5-0.5'	UAS-T7-S5-0-0.5FT	S917881A*11	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL027	11/19/99	UAS-T7-S5-3-6'	UAS-T7-S5-3-6FT	S917881B*1	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL027	11/19/99	UAS-T7-S5-3-6'	UAS-T7-S5-3-6FT	S917881B*1	8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL027	11/19/99	UAS-T7-S6-0.5'	UAS-T7-S6-0-0.5FT	S917881B*2	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL026	11/19/99	UAS-T7-S6-0.5'-EB	UAS-T7-S6-0-0.5FTEB	S917881*5	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL027	11/19/99	UAS-T7-S6-3-6'	UAS-T7-S6-3-6FT	S917881B*3	6010B (Metals) 680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL027	11/19/99	UAS-T7-S6-3-6'	UAS-T7-S6-3-6FT	S917881B*3	7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL026	11/19/99	UAS-T7-S6-3-6'-EB	UAS-T7-S6-3-6FTEB	S917881*6	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Undeveloped Soil	Savannah Laboratories	SIL027	11/19/99	UAS-T7-S7-0.5'	UAS-T7-S7-0-0.5FT	S917881B*4 S917881B*4*RE S917881B*4	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Undeveloped Soil	Savannah Laboratories	SIL027	11/19/99	UAS-T7-S7-3-6'	UAS-T7-S7-3-6FT	S917881B*5	6010B (Metals) 680 (PCBs) 7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
Upgradient GW	Savannah Laboratories	SIL011	10/13/99	EE-04	UGGW-EE-04	S916897*11	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	49653B				247-59-7A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL039	01/27/00	UGGW-EE04-100FT-SUB	UGGW-EE-04-100FT	S000654B*2	6010B (Metals) 680 (PCBs) 7470 (Mercury) 8081A (Pesticides) 8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Upgradient GW	Savannah Laboratories	SIL039	01/27/00	UGGW-EE04-100FT-SUB	UGGW-EE-04-100FT	S000654B*2	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50364A				254-77-1A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL039	01/27/00	UGGW-EE04-100FT-SUB-FD	UGGW-EE-04-100FTFD	S000654B*3	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50364A		UGGW-EE-04-100FT-SUB-FD		254-77-3A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL011	10/13/99	EE-04-60 FT	UGGW-EE-04-60FT	S916897*14	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49653B		UGGW/EE04-60ft		247-59-1A	8290 (PCDD/PCDF)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Upgradient GW	Savannah Laboratories	SIL011	10/13/99	EE-04 DUP	UGGW-EE-04FD	S916897*12	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49653B		EE-04DUP		247-59-6A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL015	10/18/99	EE-20	UGGW-EE-20	S917008*11	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49674				247-80-1A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL039	01/25/00	UGGW-EE20-100 FT	UGGW-EE-20-100FT	S000535A*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Upgradient GW	Savannah Laboratories	SIL039	01/25/00	UGGW-EE20-100 FT	UGGW-EE-20-100FT	S000535A*1	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50351		UGGW-EE20-100FT		254-64-1A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL039	01/24/00	UGGW-EE20-60 FT	UGGW-EE-20-60FT	S000513A*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50657	03/13/00	UGGW-EE20-60FT-REPLACE		257-73-1A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL011	10/11/99	EEG-108	UGGW-EEG-108	S916823*11	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Upgradient GW	Triangle Laboratories	49629B	10/11/99	EEG-108	UGGW-EEG-108	247-35-3A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL042	01/31/00	UGGW-EEG-108-100FT	UGGW-EEG-108-100FT	S000673*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50363		UGGW-EEG108-100FT		254-76-1A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL039	01/28/00	UGGW-EEG108-60FT	UGGW-EEG-108-60FT	S000625A*2	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50354				254-67-2A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL039	01/28/00	UGGW-EEG108-60FT-EB	UGGW-EEG-108-60FTEB	S000625A*1	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Upgradient GW	Savannah Laboratories	SIL039	01/28/00	UGGW-EEG108-60FT-EB	UGGW-EEG-108-60FTEB	S000625A*1	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50354				254-67-1A	8290 (PCDD/PCDF)
Upgradient GW	Savannah Laboratories	SIL011	10/11/99	EEG-108 DUP	UGGW-EEG-108FD	S916823*12	6010B (Metals)
							680 (PCBs)
							7470 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49629B		EEG-108DUP		247-35-4A	8290 (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL008	10/07/99	WASTE-G-B (0-0.5) EB	WASTE-G-B-0-0.5FTEB	S916769A*13	6010B/1311 (Metals)
							680 (PCBs)
							7470/1311 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL008	10/07/99	WASTE-G-B (0-0.5) EB	WASTE-G-B-0-0.5FTEB	S916769A*13	9010/1311 (Cyanide)
	Triangle Laboratories	49608B		WASTE-G-B-(0-0.5)EB		247-14-12A	8290 (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL007	10/06/99	WASTE-G-B1 (0-0.5')	WASTE-G-B1-0-0.5FT	S916704*57	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49596C		WASTE-G-B1-(0-0.5)		247-2-12	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL007	10/06/99	WASTE-G-B (0-0.5') DUP	WASTE-G-B1-0-0.5FTFD	S916704*63	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49596C		WASTE-G-B1-(0-0.5)DUP		247-2-14	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL007	10/06/99	WASTE-G-B2 (0-0.5')	WASTE-G-B2-0-0.5FT	S916704*62	6010B (Metals)
							680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL007	10/06/99	WASTE-G-B2 (0-0.5')	WASTE-G-B2-0-0.5FT	S916704*62	7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49596C		WASTE-G-B2-(0-0.5)		247-2-13	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL007	10/07/99	WASTE-G-B3 (0-0.5')	WASTE-G-B3-0-0.5FT	S916769*57	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49608C		WASTE-G-B3(0-0.5)		247-14-13	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL007	10/07/99	WASTE-G-B4 (0-0.5')	WASTE-G-B4-0-0.5FT	S916769*62	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL007	10/07/99	WASTE-G-B4 (0-0.5')	WASTE-G-B4-0-0.5FT	S916769*62	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49608C		WASTE-G-B4(0-0.5)		247-14-14	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-H-B1, (0-0.5')	WASTE-H-B1-0-0.5FT	S916433*19	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49540		WASTE-H-B1-0-0.5ft		246-45-1A	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-H-B2, (0-0.5')	WASTE-H-B2-0-0.5FT	S916433*20	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49540		WASTE-H-B2-0-0.5ft		246-45-2A	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-H-B3, (0-0.5')	WASTE-H-B3-0-0.5FT	S916433*21	6010B (Metals)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-H-B3, (0-0.5')	WASTE-H-B3-0-0.5FT	S916433*21	680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
						S916433*21*RE	8260B (VOCs)
						S916433*21	8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49540		WASTE-H-B3-0-0.5ft		246-45-3A	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-H-B4, (0-0.5')	WASTE-H-B4-0-0.5FT	S916433*22	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49540		WASTE-H-B4-0-0.5ft		246-45-4A	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL014	10/14/99	WASTE-I-B (0-0.5') EB2	WASTE-I-B-0-0.5FTEB	S916933*11	6010B/1311 (Metals)
							680 (PCBs)
							7470/1311 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL014	10/14/99	WASTE-I-B (0-0.5') EB2	WASTE-I-B-0-0.5FTEB	S916933*11	8260B (VOCs)
							8270C (SVOCs)
							9010/1311 (Cyanide)
	Triangle Laboratories	49661C		WASTE-I-B(0-0.5)EB2		247-67-3A	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL013	10/13/99	WASTE-I-B1 (0-0.5')	WASTE-I-B1-0-0.5FT	S916897A*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49653A		WASTE-I-B1(0-0.5')		247-59-8	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL013	10/13/99	WASTE-I-B2 (0-0.5')	WASTE-I-B2-0-0.5FT	S916897A*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
						S916897A*2*DL	8270C (SVOCs)
						S916897A*2	9010 (Cyanide)
	Triangle Laboratories	49653A		WASTE-I-B2(0-0.5')		247-59-10	8280A (PCDD/PCDF)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL013	10/13/99	WASTE-I-B3 (0-0.5')	WASTE-I-B3-0-0.5FT	S916897A*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49653A		WASTE-I-B3(0-0.5')		247-59-11	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL013	10/14/99	WASTE-I-B4 (0-0.5')	WASTE-I-B4-0-0.5FT	S916933B*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49661A		WASTE-I-B4(0-0.5)		247-67-1	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL013	10/14/99	WASTE-I-B4 (0-0.5') DUP 2	WASTE-I-B4-0-0.5FTFD	S916933B*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL013	10/14/99	WASTE-I-B4 (0-0.5') DUP 2	WASTE-I-B4-0-0.5FTFD	S916933B*2	8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49661A		WASTE-I-B4(0-0.5)DUP2		247-67-2	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-L-B1, (0-0.5')	WASTE-L-B1-0-0.5FT	S916433*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49540		WASTE-L-B1-0-0.5ft		246-45-5A	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-L-B2, (0-0.5')	WASTE-L-B2-0-0.5FT	S916433*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Triangle Laboratories	49540	09/27/99	WASTE-L-B2-0-0.5ft	WASTE-L-B2-0-0.5FT	246-45-6A	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-L-B3, (0-0.5')	WASTE-L-B3-0-0.5FT	S916433*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49540		WASTE-L-B3-0-0.5ft		246-45-7A	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL003	09/27/99	WASTE-L-B4, (0-0.5')	WASTE-L-B4-0-0.5FT	S916433*4	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	49540		WASTE-L-B4-0-0.5ft		246-45-8A	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL029	11/30/99	WASTE-N-B1-0.5'	WASTE-N-B1-0-0.5FT	S918042A*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL029	11/30/99	WASTE-N-B1-0.5'	WASTE-N-B1-0-0.5FT	S918042A*1	8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50022A		WASTE-N-B1-0.5FT		251-32-2	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL029	11/30/99	WASTE-N-B2-0.5'	WASTE-N-B2-0-0.5FT	S918042A*2	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
						S918042A*2*RE	8151A (Herbicides)
						S918042A*2	8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50022A		WASTE-N-B2-0.5FT		251-32-3	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL029	11/30/99	WASTE-N-B3-0.5'	WASTE-N-B3-0-0.5FT	S918042A*3	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL029	11/30/99	WASTE-N-B3-0.5'	WASTE-N-B3-0-0.5FT	S918042A*3	9010 (Cyanide)
	Triangle Laboratories	50022A		WASTE-N-B3-0.5FT		251-32-5	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL029	12/02/99	WASTE-N-B4-0.5'	WASTE-N-B4-0-0.5FT	S918114B*1	6010B (Metals)
							680 (PCBs)
							7471 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010 (Cyanide)
	Triangle Laboratories	50042A		WASTE-N-B4-0.5FT		251-52-1	8280A (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL028	12/02/99	WASTE-N-B4-0.5'-EB	WASTE-N-B4-0-0.5FTEB	S918114*5	6010B/1311 (Metals)
							680 (PCBs)
							7470/1311 (Mercury)
							8081A (Pesticides)
							8151A (Herbicides)
							8260B (VOCs)
							8270C (SVOCs)
							9010/1311 (Cyanide)
	Triangle Laboratories	50042C		WASTE-N-B4-0.5FT-EB		251-52-4A	8290 (PCDD/PCDF)
Waste - Discrete Surface	Savannah Laboratories	SIL029	12/02/99	WASTE-N-B4-0.5'-FD	WASTE-N-B4-0-0.5FTFD	S918114B*2	6010B (Metals)
							680 (PCBs)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Waste - Discrete Surface	Savannah Laboratories	SIL029	12/02/99	WASTE-N-B4-0.5'-FD	WASTE-N-B4-0-0.5FTFD	S918114B*2	7471 (Mercury) 8081A (Pesticides) 8151A (Herbicides) 8260B (VOCs) 8270C (SVOCs) 9010 (Cyanide)
	Triangle Laboratories	50042A		WASTE-N-B4-0.5FT-FD		251-52-2	8280A (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI001	10/04/99	WB BP FILLET 1	WB BP FILLET 1	S916900*21	8151A (Herbicides) EX41 (% Lipids)
Biota - Validated	Savannah Laboratories	SCI001	10/04/99	WB BP FILLET 2	WB BP FILLET 2	S916900*22	8081A (Pesticides) 8151A (Herbicides) EX41 (% Lipids)
Biota - Validated	Savannah Laboratories	SCI002	10/04/99	WC BP COMP 1	WC BP COMP 1	S916900A*1	6010B (Metals) 680 (PCBs) 7060 (Arsenic) 7471 (Mercury) 7761 (Silver) 8081A (Pesticides) 8151A (Herbicides) 8270C (SVOCs) 9010 (Cyanide) EX41 (% Lipids)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Biota - Validated	Savannah Laboratories	SCI002	10/04/99	WC BP COMP 1	WC BP COMP 1	S916900A*1	SW7041 (Antimony)
	Triangle Laboratories	50409	01/25/00			255-23-1	8290 (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI001	11/01/99	WC BP COMP 2	WC BP COMP 2	S916900*19	6010B (Metals)
							680 (PCBs)
							7060 (Arsenic)
							7471 (Mercury)
							7761 (Silver)
							8081A (Pesticides)
							8270C (SVOCs)
							9010 (Cyanide)
							EX41 (% Lipids)
							SW7041 (Antimony)
	Triangle Laboratories	50409	01/25/00			255-23-2	8290 (PCDD/PCDF)
Biota - Validated	Triangle Laboratories	50409	01/25/00	WC BP COMP 3	WC BP COMP 3	255-23-3	8290 (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI001	11/01/99	WC BP-COMP 3	WC BP-COMP 3	S916900*20	6010B (Metals)
							680 (PCBs)
							7060 (Arsenic)
							7471 (Mercury)
							7761 (Silver)
							8270C (SVOCs)
							9010 (Cyanide)
							EX41 (% Lipids)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Biota - Validated	Savannah Laboratories	SCI001	11/01/99	WC BP-COMP 3	WC BP-COMP 3	S916900*20	SW7041 (Antimony)
Biota - Validated	Savannah Laboratories	SCI001	10/04/99	WC REF1 COMP 1	WC REF1 COMP 1	S916900*11	6010B (Metals)
							680 (PCBs)
							7060 (Arsenic)
							7471 (Mercury)
							7761 (Silver)
							8081A (Pesticides)
							8151A (Herbicides)
							8270C (SVOCs)
							9010 (Cyanide)
							EX41 (% Lipids)
							SW7041 (Antimony)
	Triangle Laboratories	50409	01/25/00			255-23-4	8290 (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI001	11/01/99	WC REF1 COMP 2	WC REF1 COMP 2	S916900*12	6010B (Metals)
							680 (PCBs)
							7060 (Arsenic)
							7471 (Mercury)
							7761 (Silver)
							8081A (Pesticides)
							8151A (Herbicides)
							8270C (SVOCs)
							9010 (Cyanide)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Biota - Validated	Savannah Laboratories	SCI001	11/01/99	WC REF1 COMP 2	WC REF1 COMP 2	S916900*12	EX41 (% Lipids)
							SW7041 (Antimony)
	Triangle Laboratories	50409	01/25/00			255-23-5	8290 (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI001	11/02/99	WC REF2 COMP 1	WC REF2 COMP 1	S916900*13	6010B (Metals)
							680 (PCBs)
							7060 (Arsenic)
							7471 (Mercury)
							7761 (Silver)
							8081A (Pesticides)
							8151A (Herbicides)
							8270C (SVOCs)
							9010 (Cyanide)
							EX41 (% Lipids)
							SW7041 (Antimony)
	Triangle Laboratories	50409	01/25/00			255-23-6	8290 (PCDD/PCDF)
Biota - Validated	Savannah Laboratories	SCI001	11/02/99	WC REF2 COMP 2	WC REF2 COMP 2	S916900*14	6010B (Metals)
							680 (PCBs)
							7060 (Arsenic)
							7471 (Mercury)
							7761 (Silver)
							8081A (Pesticides)
							8151A (Herbicides)

Appendix A-2. *Sample Cross Reference Table - By Sample ID*

Sample Matrix	Laboratory	SDG ID	Date Collected	Sample Identification Field ID	Sample Identification Corrected (Standardized)	Sample Identification Laboratory ID	Analysis Requested
Biota - Validated	Savannah Laboratories	SCI001	11/02/99	WC REF2 COMP 2	WC REF2 COMP 2	S916900*14	8270C (SVOCs) 9010 (Cyanide) EX41 (% Lipids) SW7041 (Antimony)
	Triangle Laboratories	50409	01/25/00			255-23-7	8290 (PCDD/PCDF)
Biota - Validated	Triangle Laboratories	50409	01/25/00	WC REF2 COMP 2 Dup	WC REF2 COMP 2FD	255-23-7 Dup	8290 (PCDD/PCDF)