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Pharmacia Corporation and Solutia Inc.

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing

Anniston PCB Site, Operable Unit 4

Anniston, Alabama

September 2011

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1. Introduction

As part of the remediation studies for the Anniston, Alabama Polychlorinated Biphenyl (PCB) Site, the United States Environmental Protection Agency (USEPA) requested that Pharmacia Corporation and Solutia Inc. (P/S) conduct long-term toxicity tests with *Hyalella azteca* (a freshwater amphipod) and *Chironomus dilutus* (a freshwater midge) using sediment samples collected from Operable Unit 4 (OU-4). At the request of the USEPA, P/S also conducted bioaccumulation testing using the oligochaete *Lumbriculus variegates*. Toxicity and bioaccumulation testing will be performed by the U.S. Geological Survey (USGS) and U.S. Army Corps of Engineers (USACE) in collaborative agreement with P/S as represented by ARCADIS. Chemistry testing in support of the biological testing was assigned by expertise and was performed by laboratories under subcontract to ARCADIS and by the USGS and USACE.

The sediment toxicity testing results will be used as part of a weight-of-evidence assessment to develop a toxicity reference value (TRV) for the protection of benthic receptors. Specific components of the toxicity testing program were conducted as described in the Sediment Toxicity Testing Plan (STTP), included as Attachment B to the Anniston PCB Site Phase 2 Field Sampling Plan for Operable Unit 4 (OU-4 Phase 2 FSP) Revision 2 (ARCADIS 2010).

This Chemistry Data Report provides tabulated data for the chemical analyses conducted as a part of the toxicity and bioaccumulation testing. The following chemical data are included in tables included as Attachments to this report:

Prepared by ARCADIS and included in Attachment A:

- Characterization of sediment before organisms were introduced
- Testing of *Lumbriculus* samples for PCBs following exposure to sediment

Prepared by USGS and USACE and included in Attachment B:

- Sediment acid volatile sulfide/simultaneously extracted metals (AVS/SEM) collected concurrently with organism exposure
- Sediment pore water for metals collected using peepers

- Sediment pore water for characteristics and metals collected using centrifuge and filtering

- Solid phase microextraction (SPME) fibers exposed to sediment concurrently with organism exposure

Section 2 of this data report summarizes the procedures used to collect and ship sediment samples for testing. Section 3 summarizes the laboratory chemical procedures and lists the data tables included in this report.

2. Sediment Sample Collection

Details of the design of the sediment toxicity and bioaccumulation testing and the procedures followed to collect and analyze samples are included in the STTP. Where appropriate, the STTP references field standard operating procedures (SOPs) and laboratory methods from the Site-wide Quality Assurance Project Plan (QAPP). A brief summary of the sample collection procedures, locations, and identifiers is included in this section.

The sediment toxicity and bioaccumulation testing program was developed through iterative discussions with the USEPA to target six categories of organic carbon (OC) normalized PCB concentrations. The six OC normalized concentration ranges identified by USEPA, on a dry weight milligrams PCB per kilogram OC (mg PCB/kg OC) basis, include:

- < 100,
- 100 – 500,
- 500 – 1,000,
- 1,000 – 5,000,
- 5,000 -– 10,000, and
- > 10,000.

Based on sediment data collected during previous sampling events, a set of primary and alternate sample locations and depths was identified for the collection of sediment samples that would meet the target concentration ranges. Samples were successfully collected from the locations identified in Table 1. Table 1 also identifies the field identifier for the sediments collected during the toxicity and bioaccumulation testing program. Sample locations are shown on Figures 1 through 3.

Sediment sampling was conducted by a three-person ARCADIS team with oversight and assistance from the USEPA and USGS. Sediment samples were collected first from the reference location (Figure 1) and then from the four collection locations (TX30, TX40, TX50 and TX60, see Figure 2) in the backwater area. From there, sampling efforts moved downstream to TX10 and TX20 (Figure 3).

Sediments were collected using 4-inch Lexan® tubes in accordance with the SOP included as Appendix 3 to the STTP. The target depth horizons were segmented and each segment placed into one of two 5-gallon buckets. Sampling at each location continued until each bucket was filled with sediment to approximately two thirds of its capacity. Approximately 12 to 16 liters of sediment were placed into each bucket such that the sediment could be sieved, and the post-sieving volume was at least 20 liters as requested by the USEPA. Care was taken to drain overlying water (surface water) from each core and to retain pore water entrained in the sediment matrix. Water collected with each sample was not decanted from the buckets prior to sieving.

Buckets of sediment were transported to the sample processing area, and the sediments from each sample were sieved using a 2.0 millimeter (mm) sieve. Sieved sediment was collected into the buckets used to ship the materials to the USGS sediment toxicity testing laboratory in Columbia, MO. Decontamination of equipment between samples was performed in accordance with the SOP included as Appendix 3 to the STTP. Material retained on the 2.0 mm sieve was packaged and shipped to the analytical laboratory for analysis. However, upon receipt at the laboratory, it became apparent that the sieved materials were a mix of different sizes, including large gravel, fine-grained sediment, and water. The variability in size made the samples unsuitable for conventional laboratory preparation (extraction) and analysis and impractical to achieve the desired data quality objective of a representative sample that could be used for mass balance. Therefore, these oversized material mixtures were not analyzed.

The 20+ liters of homogenized, sieved sediment for each sample was contained in 5-gallon buckets and shipped using Federal Express Custom Critical refrigerated shipping to the USGS laboratory in Columbia, MO. Samples were kept in dedicated, refrigerated storage at the USGS facility until they were homogenized again and portions allocated to chemical and biological testing. Prior to each phase of testing, samples were homogenized using an electrical drill with a rotary auger. Standing water separated from the sediment during shipping and storage was not decanted, and was mixed back into the sediment during homogenization. Samples were randomly assigned sample IDs (1 to 33) to be blind to the toxicity and bioaccumulation testing laboratories. The corresponding sample IDs for chemical analysis were designated by phase as follows:

- Phase 1a: X9001##
- Phase 1b: X9002##

Where ## is the sample ID used by the toxicity and bioaccumulation testing laboratories. The sample identifications are summarized in Table 2. Sediments were initially homogenized at USGS on September 8 and 9, 2010 and aliquots collected for rapid turnaround PCB analysis. These preliminary PCB results were used to select the sediments for testing during Phases 1a and 1b. These preliminary results are superseded by definitive, validated data for the samples that were homogenized and collected at the beginning of each phase, and the preliminary results are not repeated in this report.

After homogenization at the USGS facility, aliquots of sample were collected into appropriate containers for shipment to the USACE Engineering Research and Development Center (ERDC) laboratory in Vicksburg, MS and to the analytical laboratories. Homogenization and shipping for Phase 1a were conducted on October 20 and 21, 2010. Homogenization and shipping for Phase 1b were conducted on January 5, 2011.

Note that, because of the testing time for Phase 1a and the time needed to evaluate the results between tests, Phase 1b was, out of necessity, conducted outside of the recommended 2-month holding time from field collection. This deviation from the method recommendations was necessary in order to use the same sediment for both Phases 1a and 1b, and was chosen as preferable to the potential uncertainties that would be introduced by re-sampling. To document the chemistry of the Phase 1b sediments and for comparison to those used in Phase 1a, samples for Phase 1b were rehomogenized and tested for chemical parameters at the beginning of Phase 1b. Samples were collected to be representative of the sediments that the testing organisms were exposed to at the beginning of the test period for that particular phase of testing. Therefore, holding times for chemical analyses were counted from the day of homogenization and collection of the aliquot for chemical analysis, and not using the date of field collection. Also, because of holding time issues and the sample sieving and homogenization processes, results from the chemical analyses of samples collected at the USGS laboratory are no longer representative of field conditions and should not be used as a means to characterize field conditions, regardless of differences from previously collected data.

3. Laboratory Analysis and Data Validation

Chemical analyses were performed on sediment, pore water, and on bioaccumulation *Lumbriculus variegatus* tissue in accordance with the procedures provided in the Site-wide QAPP and the STTP. SPME fibers were also deployed in sediments concurrently with testing and were retrieved and analyzed for PCBs following exposures. Samples were analyzed by the following laboratories:

- Sediment – grain size, total organic carbon (TOC), PCBs, metals, polycyclic aromatic hydrocarbons (PAHs), pesticides: TestAmerica, VT
- Sediment - dioxins and furans: Maxxam Analytics, ON
- Lumbriculus tissue – PCBs: TestAmerica, TN
- Sediment –AVS/SEM: USGS
- Pore water – characteristics and metals: USGS
- SPME – PCBs: USACE

Sediment and *Lumbriculus* data provided by TestAmerica and Maxxam were validated in accordance with the Site-wide QAPP. The laboratory reporting and data validation process applies data qualifiers based on quality control (QC) results to assist the data user with understanding the potential variability (bias) in the results. Validated data tables and qualifier definitions for TestAmerica and Maxxam are included in Attachment A.

Chemical data for sediment, pore water, and SPMEs collected concurrently with the toxicity and bioaccumulation exposures by USACE and USGS are included in Attachment B. Attachment B also includes laboratory QC results provided by those laboratories.

4. Reference

ARCADIS. 2010. Anniston PCB Site Phase 2 Field Sampling Plan for Operable Unit 4 Revision 2. April.

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Tables

Table 1
Sediment Sampling Locations and Depths

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston AL

Target Concentration Range (mg PCB/kg OC)	Toxicity and Bioaccumulation ID	Sampling Depths (ft)	Number of Samples
<100	TX10	0.0 to 1.0	3
100 - 500	TX20	0.0 to 1.0	3
500 -1,000	TX30	2.0 to 3.0	5
1,000 - 5,000	TX40	0.0 to 2.0	5
5,000 -10,000	TX50	1.0 to 2.0	5
>10,000	TX60	3.0 to 4.0	5
reference	TXR1	0.0 to 0.5	6

Notes:
ft = feet
mg PCB/kg OC = milligrams polychlorinated biphenyl per kilogram organic carbon

Table 2
Field and Laboratory Identifiers

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

Field ID	USACE and USGS Lab ID	Phase 1a Chemistry ID	Phase 1b Chemistry ID
TX10-01	16	X900116	X900216
TX10-02	32	X900132	X900232
TX10-03	3	X900103	X900203
TX20-01	28	X900128	X900228
TX20-02	12	X900112	X900212
TX20-03	24	X900124	X900224
TX30-01	25	X900125	X900225
TX30-02	18	X900118	X900218
TX30-03	7	X900107	X900207
TX30-04	23	X900123	X900223
TX30-05	2	X900102	X900202
TX40-01	27	X900127	X900227
TX40-02	17	X900117	X900217
TX40-03	15	X900115	X900215
TX40-04	1	X900101	X900201
TX40-05	14	X900114	X900214
TX50-01	8	X900108	X900208
TX50-02	19	X900119	X900219
TX50-03	31	X900131	X900231
TX50-04	11	X900111	X900211
TX50-05	30	X900130	X900230
TX60-01	21	X900121	X900221
TX60-02	20	X900120	X900220
TX60-03	6	X900106	X900206
TX60-04	13	X900113	X900213
TX60-05	5	X900105	X900205
TXR1-01	26	X900126	X900226
TXR1-02	9	X900109	X900209
TXR1-03	4	X900104	X900204
TXR1-04	22	X900122	X900222
TXR1-05	29	X900129	X900229
TXR1-06	10	X900110	X900210
Control (West Bearskin)	33	X900133	X900233

Notes:
USACE = U.S, Army Corps of Engineers
USGS = U.S. Geological Survey

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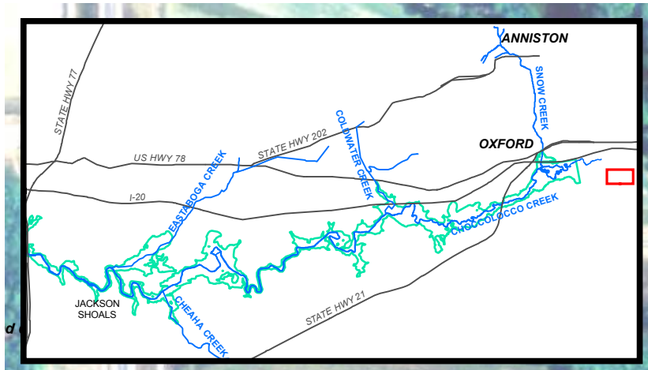
Figures



LEGEND:

▲ SEDIMENT TOXICITY COLLECTION LOCATION

0 300 600 Feet

GRAPHIC SCALE

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ANNISTON PCB SITE
ANNISTON, ALABAMA
CHEMISTRY DATA REPORT FOR SEDIMENT TOXICITY AND BIOACCUMULATION TESTING

SEDIMENT TOXICITY SAMPLE COLLECTION LOCATION

ARCADIS

FIGURE 1

CITY: ROCH DIV/GROUP: 40 DB: EAL LD: PIC: PM: TM: TR:
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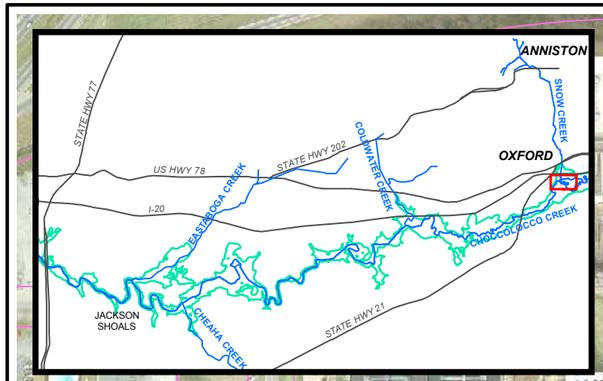

TX60
(3-4 ft)

TX30/TX50
(2-3 ft / 1-2 ft)

TX40
(0-2 ft)

LEGEND:

- SEDIMENT TOXICITY COLLECTION LOCATION
- TAX PARCEL

0 300 600 Feet

GRAPHIC SCALE

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ANNISTON, ALABAMA
CHEMISTRY DATA REPORT FOR SEDIMENT TOXICITY AND BIOACCUMULATION TESTING

SEDIMENT TOXICITY SAMPLE COLLECTION LOCATIONS

ARCADIS

FIGURE
2

CITY: ROCH DIV/GROUP: 40 DB: EAL LD: PIC: PM: TM: TR:
Anniston
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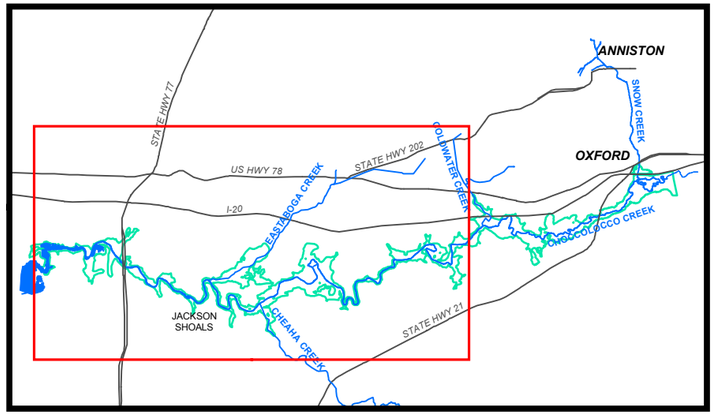

LEGEND:

▲ SEDIMENT TOXICITY COLLECTION LOCATION

0 5,000 10,000 Feet

GRAPHIC SCALE

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ANNISTON PCB SITE
ANNISTON, ALABAMA
CHEMISTRY DATA REPORT FOR SEDIMENT TOXICITY AND BIOACCUMULATION TESTING

SEDIMENT TOXICITY SAMPLE COLLECTION LOCATIONS

ARCADIS

FIGURE
3

CITY: ROCH DIV/GROUP: 40 DB: EAL LD: PIC: PM: TM: TR:
Anniston
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Attachment A

Analytical Results for Sediment and Lumbriculus Samples (ARCADIS)

A-1 Sediment Toxicity Testing Phase 1a Sediment Data

A-2 Sediment Toxicity Testing Phase 1b Sediment Data

A-3 Lumbriculus Phase 1a Data

A-4 Lumbriculus Phase 1b Data

Attachment A-1
Sediment Toxicity Testing Phase 1a Sediment Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

Field ID		TX40-04-P	TX60-03-P	TX30-03-P	TX50-01-P	TXR1-02-P	TX50-04-P	TX60-04-P	TX30-02-P	TX50-02-P	TX60-02-P	TX30-01-P	TX40-01-P	TX20-01-P	TX50-05-P	Control
Sample ID		X900101	X900106	X900107	X900108	X900109	X900111	X900113	X900118	X900119	X900120	X900125	X900127	X900128	X900130	X900133
Date Collected	Units	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10
Grain Size, Moisture and TOC																
Gravel	%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coarse Sand	%	0	0	0	0	0.3	0	0	0	0.1	0.1	0	0	0.8	0	1.4
Medium Sand	%	7.8	15.7	2.7	4	22.1	3.1	5.3	1.2	3.7	11.1	2	5.5	77.9	12.1	7
Fine Sand	%	21.8	41	22.5	20.4	63.1	23.8	46.6	8.4	10.9	58.5	34.7	22.2	15	31.2	54.7
Silt	%	40.7	25.7	42.9	41.9	10.1	43.9	28.9	49.3	45.8	19	37.8	41.4	3.6	30.9	32.6
Clay	%	29.7	17.6	31.9	33.7	4.4	29.2	19.2	41.1	39.5	11.3	25.5	30.9	2.7	25.8	4.3
Percent Moisture	%	37	35	43	40	29	41	34	45	41	27	40	38	28	41	42
TOC by Lloyd Kahn	mg/kg	18800	13300	39900	27600	7180	25200	11000	26400	25900	11100	25900	15300	5510	23000	11600
PCB Aroclors																
Aroclor-1016	mg/kg	5.5 UJ	5.1 UJ	5.8 UJ	28 UJ	0.046 U	12 UJ	2.8 UJ	62 UJ	56 UJ	0.23 U	2.8 UJ	1.3 UJ	0.048 U	16 UJ	0.058 U
Aroclor-1221	mg/kg	5.5 UJ	5.1 UJ	5.8 UJ	28 UJ	0.046 U	12 UJ	2.8 UJ	62 UJ	56 UJ	0.23 U	2.8 UJ	1.3 UJ	0.048 U	16 UJ	0.058 U
Aroclor-1232	mg/kg	5.5 UJ	5.1 UJ	5.8 UJ	28 UJ	0.046 U	12 UJ	2.8 UJ	62 UJ	56 UJ	0.23 U	2.8 UJ	1.3 UJ	0.048 U	16 UJ	0.058 U
Aroclor-1242	mg/kg	27 J	25 J	36 J	190 J	0.046 U	49 J	11 J	350 J	250 J	1.5 J	16 J	5.4 J	0.1	100 J	0.058 U
Aroclor-1248	mg/kg	5.5 UJ	5.1 UJ	5.8 UJ	28 UJ	0.046 U	12 UJ	2.8 UJ	62 UJ	56 UJ	0.23 U	2.8 UJ	1.3 UJ	0.048 U	16 UJ	0.058 U
Aroclor-1254	mg/kg	5.5 UJ	5.1 UJ	14 J	48 J	0.046 U	15 J	2.8 UJ	65 J	61 J	0.32 J	4.1 J	0.73 J	0.2	39 J	0.058 U
Aroclor-1260	mg/kg	5.5 UJ	25 J	11 J	59 J	0.046 U	15 J	3.1 J	61 J	88 J	0.87	4.4 J	1.1 J	0.16	46 J	0.058 U
Aroclor-1262	mg/kg	5.5 UJ	5.1 UJ	5.8 UJ	28 UJ	0.046 U	12 UJ	2.8 UJ	62 UJ	56 UJ	0.23 U	2.8 UJ	1.3 UJ	0.048 U	16 UJ	0.058 U
Aroclor-1268	mg/kg	5.5 UJ	9.9 J	4.4 J	23 J	0.046 U	6.5 J	2.8 UJ	62 UJ	38 J	0.39	1.8 J	1.3 UJ	0.075	19 J	0.058 U
Total PCB Aroclor	mg/kg	27 J	59.9 J	65.4 J	320 J	0.046 U	85.5 J	14.1 J	476 J	437 J	3.08 J	26.3 J	7.23 J	0.535	204 J	0.058 U
PCB Congeners																
BZ#77	mg/kg	0.021 U	0.12 UJ	0.089 U	0.42 UJ	0.0035 U	0.089 U	0.021 U	0.47 UJ	0.43 UJ	0.0036 U	0.042 U	0.012 U	0.0037 U	0.21 UJ	0.0044 U
BZ#81	mg/kg	0.032 U	0.18 UJ	0.14 U	0.65 UJ	0.0054 U	0.14 U	0.033 U	0.73 UJ	0.66 UJ	0.0055 U	0.065 U	0.018 U	0.0056 U	0.32 UJ	0.0068 U
BZ#105	mg/kg	0.011 U	0.06 UJ	0.13	0.22 UJ	0.0018 U	0.046 U	0.011 U	0.24 UJ	0.22 UJ	0.0019 U	0.03	0.004 J	0.0051	0.11 UJ	0.0023 U
BZ#114	mg/kg	0.021 U	0.12 UJ	0.089 U	0.42 UJ	0.0035 U	0.089 U	0.021 U	0.47 UJ	0.43 UJ	0.0036 U	0.042 U	0.012 U	0.0037 U	0.21 UJ	0.0044 U
BZ#118	mg/kg	0.066	0.3 J	0.73	2.1 J	0.0018 U	0.6	0.055	3.2 J	2.2 J	0.0073	0.17	0.02	0.011	1.9 J	0.0023 U
BZ#123	mg/kg	0.021 U	0.12 UJ	0.089 U	0.42 UJ	0.0035 U	0.089 U	0.021 U	0.47 UJ	0.43 UJ	0.0036 U	0.042 U	0.012 U	0.0037 U	0.21 UJ	0.0044 U
BZ#126	mg/kg	0.021 JN	0.18 JN	0.082 JN	0.42 JN	0.0018 U	0.046 U	0.011 U	0.48 JN	0.22 UJ	0.0019 U	0.027 JN	0.0076 JN	0.0019 U	0.11 UJ	0.0023 U
BZ#153	mg/kg	0.29	2 J	0.97	4.7 J	0.0035 U	1.1	0.17	5.5 J	5.9 J	0.031	0.32	0.071	0.017	3.6 J	0.0044 U
BZ#156	mg/kg	0.011 U	0.06 UJ	0.072	0.26 J	0.0018 U	0.06	0.0083 J	0.35 J	0.32 J	0.0019 U	0.018 J	0.0031 J	0.0023	0.27 J	0.0023 U
BZ#157	mg/kg	0.021 U	0.12 UJ	0.089 U	0.42 UJ	0.0035 U	0.089 U	0.021 U	0.47 UJ	0.43 UJ	0.0036 U	0.042 U	0.012 U	0.0037 U	0.21 UJ	0.0044 U
BZ#167	mg/kg	0.021 U	0.12 UJ	0.045 J	0.42 UJ	0.0035 U	0.047 J	0.021 U	0.47 UJ	0.43 UJ	0.0036 U	0.042 U	0.012 U	0.0037 U	0.16 J	0.0044 U
BZ#169	mg/kg	0.011 U	0.06 UJ	0.046 U	0.22 UJ	0.0018 U	0.046 U	0.011 U	0.24 UJ	0.22 UJ	0.0019 U	0.022 U	0.006 U	0.0019 U	0.11 UJ	0.0023 U
BZ#189	mg/kg	0.011 U	0.06 UJ	0.046 U	0.22 UJ	0.0018 U	0.046 JN	0.011 U	0.24 UJ	0.22 UJ	0.0019 U	0.022 U	0.006 U	0.0019 U	0.11 JN	0.0023 U
PCB Homolog Groups																
Total MonoCB	mg/kg	8.6	24 J	46 J	230 J	0.024	72 J	5.3	140 J	320 J	2	18 J	2.2	0.009	130 J	0.043
Total DiCB	mg/kg	18	26 J	47 J	240 J	0.024	74 J	9.1	250 J	400 J	2.7	17 J	4	0.023	120 J	0.047
Total TriCB	mg/kg	18	15 J	26 J	130 J	0.014	38 J	6.7	170 J	200 J	1.5	11 J	3.3	0.077	62 J	0.036
Total TetraCB	mg/kg	11	6.4 J	15 J	61 J	0.015 U	21 J	3.1	75 J	110 J	0.8	5.3 J	2.3	0.079	35 J	0.018 J
Total PeCB	mg/kg	5.2	7.5 J	9.3 J	43 J	0.015 U	15 J	2.5	47 J	65 J	0.63	4 J	1.2	0.079	24 J	0.011 J
Total HxCB	mg/kg	4.4	13 J	6.6 J	37 J	0.015 U	11 J	2.4	35 J	52 J	0.65	3.2 J	0.82	0.07	21 J	0.019 U
Total HpCB	mg/kg	1.8	8.2 J	2.9 J	17 J	0.014 U	4.9 J	1.2	14 J	26 J	0.34	1.4 J	0.4	0.035	10 J	0.017 U
Total OctaCB	mg/kg	0.5	3.2 J	1.1 J	5.5 J	0.0045 U	1.7 J	0.38	4.6 J	8.9 J	0.11	0.48 J	0.16	0.015	3.3 J	0.0056 U
Total NonaCB	mg/kg	0.18 J	0.96 J	0.52 J	2.4 J	0.0045 U	0.73 J	0.14 J	1.9 J	2.8 J	0.048	0.54 UJ	0.063 J	0.011	1.3 J	0.0056 U
DecaCB	mg/kg	0.057 J	0.11 J	0.17 J	0.68 J	0.0018 U	0.2 J	0.11 U	0.5 J	0.72 J	0.012 J	0.22 UJ	0.021 J	0.0073	0.38 J	0.0023 U
Total Homolog PCB	mg/kg	68	100 J	150 J	770 J	0.062 J	240 J	31	740 J	1200 J	8.8	60 J	14	0.41	410 J	0.16

Attachment A-1
Sediment Toxicity Testing Phase 1a Sediment Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

Field ID		TX40-04-P	TX60-03-P	TX30-03-P	TX50-01-P	TXR1-02-P	TX50-04-P	TX60-04-P	TX30-02-P	TX50-02-P	TX60-02-P	TX30-01-P	TX40-01-P	TX20-01-P	TX50-05-P	Control
Sample ID		X900101	X900106	X900107	X900108	X900109	X900111	X900113	X900118	X900119	X900120	X900125	X900127	X900128	X900130	X900133
Date Collected	Units	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10
Metals																
Aluminum	mg/kg	10400	6730	10900	10300	2900	10400	8050	12200	12400	5430	11500	10800	4440	9440	5820
Antimony	mg/kg	9.4 UJ	7.7 UJ	8.8 UJ	7.8 UJ	7.8 UJ	9.2 UJ	9.4 UJ	9.3 UJ	8.9 UJ	7.8 U	8.5 UJ	6.7 UJ	8.1 UJ	8.4 UJ	8.2 UJ
Arsenic	mg/kg	5.1	3.2	7.8	7.2	2.7	6.6	3.8	7.3	8.8	2.7	5.2	4.5	2.6	7.3	2.3
Barium	mg/kg	247	105	745	1880	33.9	773	200	2640	923	70.1	249	147	56.6	2180	26.7 J
Beryllium	mg/kg	0.84	0.55 J	0.92	1.1	0.3 J	0.87	0.59 J	1.3	1.4	0.41 J	0.87	0.79	0.6 J	1	0.44 J
Cadmium	mg/kg	0.19 J	0.35 J	0.32 J	0.53 J	0.65 U	0.36 J	0.19 J	0.48 J	0.68 J	0.12 J	0.23 J	0.091 J	0.2 J	0.39 J	0.29 J
Calcium	mg/kg	1010	2290	2620	4020	649	2120	1130	3840	4880	676	1670	650	3370	3030	3160
Chromium	mg/kg	12.2	11.9	13.7	16.5	7	11.9	9.9	17.5	32.8	10.4	11.5	10.4	20.1	15	16.9
Cobalt	mg/kg	8.7	5.8 J	11.3	12	3.2 J	10.9	6.4 J	13.4	14.1	4.3 J	9.1	8.2	5.4 J	11.3	5 J
Copper	mg/kg	15.4	16.7	32.7	62.6	3.3	51.5	17.9	55.2	65.4	11.8	20.2	13.9	9.3	48.2	8.7
Iron	mg/kg	17000	10100	19300	23600	6310	18200	12300	26200	29500	7830	15600	14500	9310	22200	17600
Lead	mg/kg	31.8	26.8	66.9	153	4	71.3	27.4	137	188	14.6	37.4	20.9	10.8	116	7.8
Magnesium	mg/kg	1150	1270	1000	1050	766	946	930	1160	1610	748	1010	1130	1460	937	2450
Manganese	mg/kg	392	286	488	736	165	507	341	811	894	129	401	587	423	703	433
Mercury	mg/kg	8.8	12.9	8.3	14.1	0.046 U	6.4	7	31.2	40.2	1.8	2.1	1.5	0.58	22.1	0.023 J
Nickel	mg/kg	8.7	6.5	12.8	21.8	3.9 J	12.4	5.5 J	23.4	30.7	4.5 J	8.7	6.3	8.5	18.9	13
Potassium	mg/kg	778 J	561 J	759	762	385 J	734 J	629 J	1020	1000	458 J	734	743	457 J	794	619 J
Selenium	mg/kg	5.5 U	4.5 U	5.1 U	4.5 U	4.5 U	5.4 U	5.5 U	5.4 U	5.2 U	4.6 U	4.9 U	3.9 U	4.7 U	4.9 U	4.8 U
Silver	mg/kg	1.6 U	1.3 U	1.5 U	1.3 U	1.3 U	1.5 U	1.6 U	1.6 U	1.5 U	1.3 U	1.4 U	1.1 U	1.3 U	1.4 U	1.4 U
Sodium	mg/kg	33.7 J	30.8 J	51.7 J	65.5 J	15.1 J	47 J	32.7 J	79.6 J	67.4 J	21.5 J	45.7 J	31.5 J	38.5 J	58.3 J	288 J
Thallium	mg/kg	3.9 U	3.2 U	3.7 U	3.2 U	3.2 U	3.9 U	3.9 U	3.9 U	3.7 U	3.3 U	3.5 U	2.8 U	3.4 U	3.5 U	3.4 U
Vanadium	mg/kg	18.4	11.5	26.6	29.5	4.1 J	22.5	13.9	35.2	37.2	9.5	21.6	15.2	10	26.8	29.2
Zinc	mg/kg	64.2	55.3	110	173	16.4	145	47.9	163	207	28	71.3	47.9	45	164	44

Attachment A-1
Sediment Toxicity Testing Phase 1a Sediment Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

Field ID		TX40-04-P	TX60-03-P	TX30-03-P	TX50-01-P	TXR1-02-P	TX50-04-P	TX60-04-P	TX30-02-P	TX50-02-P	TX60-02-P	TX30-01-P	TX40-01-P	TX20-01-P	TX50-05-P	Control
Sample ID		X900101	X900106	X900107	X900108	X900109	X900111	X900113	X900118	X900119	X900120	X900125	X900127	X900128	X900130	X900133
Date Collected	Units	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10
Semi-volatiles																
1,1'-Biphenyl	ug/kg	220	200 J	310 J	1800 J	0.96 U	450 J	24	1200 J	630 J	6.8	120	11	6.5 U	670 J	1.2 U
1-Methylnaphthalene	ug/kg	22 U	50 UJ	22 J	300 J	0.96 U	120 UJ	11 U	620 UJ	1100 UJ	6.3 U	12 J	3.3 U	6.5 U	540 UJ	1.2 U
1-Methylphenanthrene	ug/kg	41	95 J	280 J	1500 J	0.65 J	200 J	22	550 J	950 J	5.1 J	83	5.7	4.7 J	450 J	0.42 J
2,3,5-Trimethylnaphthalene	ug/kg	23	51 J	170 J	430 J	0.96 U	76 J	11	620 UJ	1100 UJ	2.5 J	67	4.3	6.5 U	540 UJ	1.2 U
2,6-Dimethylnaphthalene	ug/kg	27	51 J	77 J	480 J	0.96 U	91 J	9.4 J	280 J	1100 UJ	6.3 U	38	3.8	6.5 U	540 UJ	1.2 U
2-Methylnaphthalene	ug/kg	22 U	50 UJ	34 J	290 J	0.96 U	48 J	11 U	620 UJ	1100 UJ	6.3 U	18	1.2 J	6.5 U	540 UJ	0.48 J
Acenaphthene	ug/kg	61	73 J	180 J	2100 J	0.96 U	240 J	13	910 J	1400 J	3.8 J	57	6.8	6.5 U	680 J	1.2 U
Acenaphthylene	ug/kg	22 U	50 UJ	59 UJ	550 UJ	0.96 U	120 UJ	11 U	620 UJ	1100 UJ	6.3 U	16 U	3.3 U	6.5 U	540 UJ	1.2 U
Anthracene	ug/kg	79	210 J	260 J	3200 J	0.59 J	260 J	38	1200 J	3700 J	9.8	70	11	15	1100 J	0.53 J
Benzo(a)anthracene	ug/kg	250	270 J	700 J	5200 J	5.5	710 J	230	2300 J	3600 J	48 J	230	39	120	1900 J	1.8
Benzo(a)pyrene	ug/kg	110	110 J	490 J	2100 J	5.1	460 J	170	970 J	1300 J	43 J	180	19	110	830 J	1.8
Benzo(b)fluoranthene	ug/kg	140	160 J	540 J	2500 J	6.1	540 J	160	1500 J	1700 J	49 J	200	27	120	990 J	4.2
Benzo(g,h,i)perylene	ug/kg	63	67 J	340 J	1100 J	3.1	300 J	92	420 J	500 J	25 J	140	14	58	350 J	2.5
Benzo(k)fluoranthene	ug/kg	150	150 J	430 J	2900 J	4.7	520 J	180	1100 J	2000 J	40 J	170	22	120	1100 J	3.1
Benzo_e_pyrene	ug/kg	110	140 J	390 J	1900 J	4.3	420 J	120	910 J	1300 J	34 J	150	21	88	710 J	2.8
C1-Chrysenes	ug/kg	170 J	220 J	550 J	3000 J	6.7 J	530 J	150 J	1400 J	2000 J	34 J	220 J	32 J	70 J	1100 J	1.9 J
C1-Dibenzothiophenes	ug/kg	42 J	89 J	270 J	1100 J	0.96 U	190 J	26 J	620 UJ	1100 UJ	6.3 U	110 J	7 J	6.5 U	540 UJ	1.2 U
C1-Fluoranthenes/Pyrenes	ug/kg	610 J	680 J	1500 J	10000 J	5.6 J	1400 J	380 J	4900 J	8000 J	73 J	520 J	95 J	120 J	3700 J	3.5 J
C1-Fluorenes	ug/kg	69 J	110 J	190 J	1500 J	0.96 U	160 J	20 J	620 UJ	1100 J	6.3 U	81 J	9.2 J	6.5 U	540 UJ	1.2 U
C1-Naphthalenes	ug/kg	22 U	50 UJ	59 UJ	550 UJ	0.96 U	120 UJ	11 U	620 UJ	1100 UJ	6.3 U	22 J	3.3 U	6.5 U	540 UJ	1.2 U
C1-Phenanthrenes/Anthracenes	ug/kg	210 J	440 J	1000 J	6900 J	2.4 J	860 J	120 J	2900 J	5100 J	28 J	390 J	33 J	20 J	2400 J	1.9 J
C2-Chrysenes	ug/kg	69 J	120 J	360 J	1600 J	2.2 J	310 J	73 J	750 J	1100 UJ	19 J	160 J	15 J	26 J	540 UJ	1.2 U
C2-Dibenzothiophenes	ug/kg	44 J	100 J	620 J	1200 J	1.1 J	250 J	41 J	620 UJ	1100 UJ	9.9 J	240 J	8.6 J	6.5 U	540 UJ	1.2 U
C2-Fluoranthenes/Pyrenes	ug/kg	180 J	260 J	740 J	2800 J	3.5 J	590 J	140 J	1700 J	2400 J	32 J	290 J	33 J	47 J	1200 J	2.1 J
C2-Fluorenes	ug/kg	150 J	210 J	480 J	2000 J	0.96 U	340 J	53 J	890 J	1200 J	11 J	230 J	23 J	6.5 U	610 J	1.2 U
C2-Naphthalenes	ug/kg	97 J	220 J	380 J	2500 J	0.96 U	360 J	39 J	1100 J	1800 J	9.1 J	180 J	17 J	6.5 U	680 J	1.2 U
C2-Phenanthrenes/Anthracenes	ug/kg	140 J	320 J	1300 J	4200 J	2.5 J	730 J	110 J	1900 J	2600 J	26 J	470 J	25 J	18 J	1400 J	1.6 J
C3-Chrysenes	ug/kg	22 U	50 UJ	170 J	610 J	0.96 U	140 J	33 J	620 UJ	1100 UJ	6.5 J	96 J	3.3 U	7.5 J	540 UJ	1.2 U
C3-Dibenzothiophenes	ug/kg	31 J	78 J	360 J	810 J	0.96 U	230 J	11 U	620 UJ	1100 UJ	6.3 U	120 J	6.6 J	6.5 U	540 UJ	1.2 U
C3-Fluoranthenes/Pyrenes	ug/kg	44 J	50 UJ	270 J	910 J	1.3 J	200 J	39 J	620 UJ	1100 UJ	9.4 J	120 J	8.9 J	11 J	540 UJ	1.2 U
C3-Fluorenes	ug/kg	22 U	150 J	710 J	1600 J	0.96 U	350 J	47 J	900 J	1100 UJ	12 J	280 J	3.3 U	6.5 U	550 J	1.2 U
C3-Naphthalenes	ug/kg	160 J	350 J	1100 J	3000 J	0.96 U	510 J	78 J	1200 J	2200 J	20 J	430 J	30 J	6.5 U	900 J	1.2 U
C3-Phenanthrenes/Anthracenes	ug/kg	120 J	280 J	970 J	3400 J	1.1 J	660 J	100 J	1800 J	2000 J	25 J	420 J	23 J	10 J	1100 J	1.2 U
C4-Chrysenes	ug/kg	22 U	50 UJ	59 UJ	550 UJ	0.96 U	120 UJ	11 U	620 UJ	1100 UJ	6.3 U	32 J	3.3 U	6.5 U	540 UJ	1.2 U
C4-Dibenzothiophenes	ug/kg	22 U	92 J	380 J	680 J	0.96 U	180 J	11 U	620 UJ	1100 UJ	6.3 U	130 J	6.8 J	6.5 U	540 UJ	1.2 U
C4-Naphthalenes	ug/kg	200 J	380 J	1500 J	3300 J	0.96 U	690 J	110 J	1600 J	2400 J	28 J	610 J	42 J	6.5 U	1100 J	1.2 U
C4-Phenanthrenes/Anthracenes	ug/kg	22 U	87 J	520 J	960 J	0.96 U	250 J	42 J	620 UJ	1100 UJ	11 J	210 J	8.6 J	6.5 U	540 UJ	1.2 U
Chrysene	ug/kg	360	560 J	1100 J	7200 J	7	1300 J	290	3300 J	4800 J	67 J	370	58	140	2500 J	3.6
Dibenzo(a,h)anthracene	ug/kg	26	22 J	120 J	410 J	0.98	110 J	39	160 J	1100 UJ	9.5	49	5.1	20	540 UJ	0.56 J
Dibenzothiophene	ug/kg	34	60 J	86 J	1300 J	0.96 U	140 J	11	580 J	1100 UJ	3.1 J	39	5	6.5 U	540 UJ	0.3 J
Fluoranthene	ug/kg	760	1500 J	2100 J	26000 J	11	3100 J	510	11000 J	19000 J	130	680	120	200	9500 J	6.8
Fluorene	ug/kg	110	130 J	170 J	3500 J	0.44 J	330 J	18	1500 J	2800 J	4 J	84	11	2.9 J	1100 J	0.67 J
Indeno(1,2,3-cd)pyrene	ug/kg	65	62 J	340 J	1100 J	3.1	280 J	96	430 J	510 J	25 J	130	13	58	340 J	2.7
Naphthalene	ug/kg	22 U	50 UJ	27 J	550 UJ	0.39 J	120 UJ	11 U	620 UJ	1100 UJ	6.3 U	13 J	1.1 J	6.5 U	540 UJ	0.77 J
Perylene	ug/kg	450	480 J	600 J	780 J	25	410 J	450	470 J	470 J	210	440	130	40	320 J	48
Phenanthrene	ug/kg	470	840 J	1100 J	17000 J	3.4	1800 J	150	7700 J	14000 J	42 J	410	60	29	6400 J	3.2
Pyrene	ug/kg	870	890 J	1900 J	16000 J	9	2100 J	440	7900 J	13000 J	100	660	130	180	6200 J	4.7

Attachment A-1
Sediment Toxicity Testing Phase 1a Sediment Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

Field ID		TX40-04-P	TX60-03-P	TX30-03-P	TX50-01-P	TXR1-02-P	TX50-04-P	TX60-04-P	TX30-02-P	TX50-02-P	TX60-02-P	TX30-01-P	TX40-01-P	TX20-01-P	TX50-05-P	Control
Sample ID		X900101	X900106	X900107	X900108	X900109	X900111	X900113	X900118	X900119	X900120	X900125	X900127	X900128	X900130	X900133
Date Collected	Units	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10	10/20/10
Pesticides																
4,4'-DDD	ug/kg	8.1 J	11	38	130 J	0.93 J	28	11 U	67 J	70 J	1.8	11 U	2.7	1.6	24	1.3 J
4,4'-DDE	ug/kg	8.6 J	9 J	23 U	74 J	0.96 U	24 U	6.5 J	120 UJ	110 UJ	2.5	11 U	4	0.68 J	21 U	2.3 U
4,4'-DDT	ug/kg	9.4 J	16	45	160 J	4.9	24 U	11 U	120 UJ	110 UJ	4.6	11 U	3.3	6.1	21 U	3.3
Aldrin	ug/kg	11 U	9.9 U	23 U	110 UJ	0.96 U	24 U	11 U	120 UJ	110 UJ	1.7 U	11 U	2 U	0.97 U	21 U	2.3 U
Alpha-BHC	ug/kg	50	51	140	930 J	9.5	24 U	11 U	120 UJ	110 UJ	12 J	11 U	9.4	14	21 U	7.7
Alpha-Chlordane	ug/kg	9.7 J	28	23 U	82 J	0.96 U	12 J	19	63 J	100 J	1.3 J	11 U	1.6 J	0.97 U	27	2.3 U
Beta-BHC	ug/kg	11 U	9.9 U	23 U	110 UJ	0.96 U	24 U	11 U	120 UJ	110 UJ	1.7 U	11 U	2 U	0.97 U	21 U	2.3 U
Delta-BHC	ug/kg	11 U	9.9 U	23 U	110 UJ	0.96 U	24 U	11 U	120 UJ	110 UJ	1.7 U	11 U	2 U	0.97 U	21 U	2.3 U
Dieldrin	ug/kg	11 U	9.9 U	23 U	110 UJ	0.96 U	24 U	11 U	120 UJ	110 UJ	1.7 U	11 U	2 U	0.97 U	21 U	2.3 U
Endosulfan I	ug/kg	11 U	9.9 U	23 U	110 UJ	0.96 U	24 U	11 U	120 UJ	110 UJ	1.7 U	11 U	2 U	0.97 U	21 U	2.3 U
Endosulfan II	ug/kg	11 U	9.9 U	23 U	110 UJ	0.96 U	24 U	11 U	120 UJ	110 UJ	1.7 U	11 U	2 U	0.97 U	21 U	2.3 U
Endosulfan Sulfate	ug/kg	11 U	9.9 U	23 U	110 UJ	0.96 U	24 U	11 U	120 UJ	110 UJ	1.7 U	11 U	2 U	0.97 U	21 U	2.3 U
Endrin	ug/kg	11 U	9.9 U	23 U	110 UJ	0.96 U	24 U	11 U	120 UJ	110 UJ	1.7 U	11 U	2 U	0.97 U	21 U	2.3 U
Endrin Aldehyde	ug/kg	11 U	9.9 U	23 U	110 UJ	0.96 U	24 U	11 U	120 UJ	110 UJ	1.7 U	11 U	2 U	0.97 U	21 U	2.3 U
Endrin Ketone	ug/kg	11 U	9.9 U	23 U	110 UJ	0.96 U	24 U	11 U	120 UJ	110 UJ	1.7 U	11 U	2 U	0.97 U	21 U	2.3 U
Gamma-BHC (Lindane)	ug/kg	11 U	9.9 U	23 U	110 UJ	0.96 U	24 U	11 U	120 UJ	110 UJ	1.7 U	11 U	2 U	0.97 U	21 U	2.3 U
Gamma-Chlordane	ug/kg	13	35	23 U	89 J	0.96 U	13 J	30	73 J	120 J	2.6	11 U	2.3	0.97 U	27	2.3 U
Heptachlor	ug/kg	11 U	9.9 U	23 U	110 UJ	0.96 U	24 U	11 U	120 UJ	110 UJ	1.7 U	11 U	2 U	0.97 U	21 U	2.3 U
Heptachlor Epoxide	ug/kg	11 U	9.9 U	23 U	110 UJ	0.96 U	24 U	11 U	120 UJ	110 UJ	1.7 U	11 U	2 U	0.97 U	21 U	2.3 U
Methoxychlor	ug/kg	11 U	9.9 U	23 U	110 UJ	0.96 U	24 U	11 U	120 UJ	110 UJ	1.7 U	11 U	2 U	0.97 U	21 U	2.3 U
Toxaphene	ug/kg	5500 U	4900 U	12000 U	57000 UJ	480 U	12000 U	5400 U	62000 UJ	56000 UJ	870 UJ	5500 U	1000 U	480 U	11000 U	1100 U
Dioxins and Furans																
2,3,7,8-TCDD	ng/kg	1.03	0.326 J	3.9	21.5	0.0554 U	8.71	0.472 J	18.5	12.9	0.0674 U	1.78	0.122 UXA	0.0522 U	16.4	0.0569 U
1,2,3,7,8-PeCDD	ng/kg	0.513 J	0.435 J	2.65 J	4.66 J	0.0563 U	2.75 J	0.348 J	7.7	4.39 J	0.0899 J	0.853 J	0.211 J	0.0735 J	4.89 J	0.232 J
1,2,3,4,7,8-HxCDD	ng/kg	0.708 J	0.711 J	3.27 J	5.22	0.0538 U	3.38 J	0.48 J	10.6	4.57 J	0.174 J	0.884 J	0.333 UXA	0.117 J	5.7	0.26 J
1,2,3,6,7,8-HxCDD	ng/kg	2.64 J	2.97 J	8.75	16.3	0.0815 UXA	10.4	1.77 J	27.2	17.6	0.723 J	2.9 J	1.02 J	0.35 J	15.1	0.632 J
1,2,3,7,8,9-HxCDD	ng/kg	2.7 JX	2.51 JX	7.11	17.8	0.127 J	8.77	1.92 J	23.4	16.8	0.671 J	3.81 J	1.24 J	0.316 J	20.1 X	0.627 J
1,2,3,4,6,7,8-HpCDD	ng/kg	61.1	61.7	136	244	4.31 J	182	57.4	640	284	26.8	72.5	40.7	9.33	179	12
Octa CDD	ng/kg	1580	1210	2280	2670	222	2380	1440	2990	3370	717 J	1500	1390	233	1880	81.7
2,3,7,8-TCDF	ng/kg	20.2	70.7	193	404	0.0918 UY	208	8.8	651	472 J	3.63	38.4	6.99	3.2	317	0.425 J
1,2,3,7,8-PeCDF	ng/kg	14.4	58.3	32	64.9	0.056 U	28.9	3.19 J	107	139	1.47 J	7.11	3.96 J	0.751 J	65.5	0.164 J
2,3,4,7,8-PeCDF	ng/kg	10.7	34.4	87.2	103	0.0541 U	54.3	4.13 J	263	127	1.35 J	13.6	2.71 J	1.55 J	129	0.23 J
1,2,3,4,7,8-HxCDF	ng/kg	76.2	240	164	306	0.102 J	171	12.7	495	852	7.8	29.5	13.5	1.72 J	291	0.409 J
1,2,3,6,7,8-HxCDF	ng/kg	19.5	61.3	54.2	112	0.0572 J	59	4.88 J	194	215	2.13 J	12.5	4.1 J	0.723 J	114	0.283 J
1,2,3,7,8,9-HxCDF	ng/kg	1.73 UXA	5.56	2.15 J	7.36	0.0548 U	2.94 J	0.449 J	8.14	19.8	0.206 J	0.687 UXA	0.549 UXA	0.0807 J	5.19	0.0329 UXA
2,3,4,6,7,8-HxCDF	ng/kg	6.94	14.9	78.6	120	0.0528 U	67.8	4.08 J	275	86.6	1.16 J	14.1	1.44 J	0.45 J	142	0.233 J
1,2,3,4,6,7,8-HpCDF	ng/kg	58.1	130	240	614	0.368 UXA	332	25.2	902	681	9.71	66.8	14.5	3.62 J	603	2.6 J
1,2,3,4,7,8,9-HpCDF	ng/kg	21	57	30.8	111	0.0657 J	48.3	5.73	121	302	2.4 J	9.35	5.45	0.772 J	88.5	0.385 J
Octa CDF	ng/kg	105	254	183	788	0.765 J	303	41.5	750	1740	22.5	68.9	34.2	7.48 J	633	5.47 J

See notes at the end of tables

Attachment A-2
Sediment Toxicity Testing Phase 1b Sediment Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

Field ID		TX30-05-P	TXR1-03-P	TX60-03-P	TX30-03-P	TX50-01-P	TXR1-06-P	TX50-04-P	TX60-04-P	TX40-05-P	TX40-03-P	TX10-01-P	TX40-02-P	TX60-02-P	TXR1-04-P	TX30-04-P
Sample ID		X900202	X900204	X900206	X900207	X900208	X900210	X900211	X900213	X900214	X900215	X900216	X900217	X900220	X900222	X900223
Date Collected	Units	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11
Grain Size, Moisture and TOC																
Gravel	%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Coarse Sand	%	0.2	1	0	0	0	0	0	0	0	0	0.2	0	0	0.4	0
Medium Sand	%	4.7	33.5	15.3	2.2	4.2	0.3	3	5.5	2.8	3.6	11.9	2.3	12.1	21.5	1.7
Fine Sand	%	24.3	53.3	40.9	21.8	20.3	73.1	23.5	47.3	16.9	7.5	46.9	26.8	59	65.5	42.2
Silt	%	42	9.3	24.4	38.4	41.2	19.8	41.3	25.9	43.4	54.3	20.6	39.9	15.9	6.8	29.1
Clay	%	28.8	2.9	19.4	37.6	34.3	6.8	32.2	21.3	36.9	34.6	20.4	31	13	5.8	27
Percent Moisture	%	43	22	33	42	40.1	33	41	34	39.9	37.3	29	37.8	34	31	39.6
Solids, Percent	%	46.2	68.6	66.8	56.8	59.9	67	59.4	65.7	60.1	62.7	70.1	62.2	66.8	70.6	60.4
TOC by Lloyd Kahn	mg/kg	30600	6170 J	16300 J	45000 J	40200	5270	37600	14800	19100	14700	2650 J	10800	6910 J	4740	20800
PCB Aroclors																
Aroclor-1016	mg/kg	1.5 UJ	0.049 U	2.5 UJ	3.1 UJ	17 UJ	0.05 U	2.8 UJ	1 UJ	1.7 UJ	0.053 U	0.048 U	1.6 UJ	0.2 U	0.048 U	0.28 U
Aroclor-1221	mg/kg	1.5 UJ	0.049 U	2.5 UJ	3.1 UJ	17 UJ	0.05 U	2.8 UJ	1 UJ	1.7 UJ	0.053 U	0.048 U	1.6 UJ	0.2 U	0.048 U	0.28 U
Aroclor-1232	mg/kg	1.5 UJ	0.049 U	2.5 UJ	3.1 UJ	17 UJ	0.05 U	2.8 UJ	1 UJ	1.7 UJ	0.053 U	0.048 U	1.6 UJ	0.2 U	0.048 U	0.28 U
Aroclor-1242	mg/kg	18 J	0.049 U	19 J	31 J	170 J	0.05 U	39 J	8 J	15 J	0.29	0.048 U	22 J	1.3	0.048 U	2.5
Aroclor-1248	mg/kg	1.5 UJ	0.049 U	2.5 UJ	3.1 UJ	17 UJ	0.05 U	2.8 UJ	1 UJ	1.7 UJ	0.053 U	0.048 U	1.6 UJ	0.2 U	0.048 U	0.28 U
Aroclor-1254	mg/kg	9.3 J	0.049 U	8.1 J	13 J	44 J	0.05 U	13 J	1.7 J	4.6 J	0.14	0.048 U	4.8 J	0.3 J	0.048 U	1.3
Aroclor-1260	mg/kg	7.8 J	0.049 U	24 J	11 J	59 J	0.05 U	16 J	2.7 J	8.7 J	0.17	0.048 U	11 J	0.82	0.048 U	1.1
Aroclor-1262	mg/kg	1.5 UJ	0.049 U	2.5 UJ	3.1 UJ	17 UJ	0.05 U	2.8 UJ	1 UJ	1.7 UJ	0.053 U	0.048 U	1.6 UJ	0.2 U	0.048 U	0.28 U
Aroclor-1268	mg/kg	2 J	0.049 U	3.6 J	3.1 UJ	17 UJ	0.05 U	3 J	1 UJ	1.7 UJ	0.053 U	0.048 U	1.6 UJ	0.2 U	0.048 U	0.28 U
Total PCB Aroclor	mg/kg	37.1 J	0.049 U	54.7 J	55 J	273 J	0.05 U	71 J	12.4 J	28.3 J	0.6	0.048 U	37.8 J	2.42 J	0.048 U	4.9
PCB Congeners																
BZ#77	mg/kg	0.028 U	0.0038 U	0.076 U	0.094 U	0.22 UJ	0.0038 U	0.087 U	0.0079 U	0.021 U	0.0041 U	0.0037 U	0.042 U	0.0039 U	0.0037 U	0.0042 U
BZ#81	mg/kg	0.043 U	0.0058 U	0.12 U	0.14 U	0.34 UJ	0.0058 U	0.13 U	0.012 U	0.033 U	0.0063 U	0.0057 U	0.064 U	0.006 U	0.0056 U	0.0065 U
BZ#105	mg/kg	0.16	0.0019 U	0.039 U	0.14	0.11 UJ	0.002 U	0.045 U	0.0041 U	0.011 U	0.0019 J	0.0019 U	0.022 U	0.002 U	0.0019 U	0.018
BZ#114	mg/kg	0.028 U	0.0038 U	0.076 U	0.094 U	0.22 UJ	0.0038 U	0.087 U	0.0079 U	0.021 U	0.0041 U	0.0037 U	0.042 U	0.0039 U	0.0037 U	0.0042 U
BZ#118	mg/kg	0.5	0.0019 U	0.28	0.78	2 J	0.002 U	0.63	0.046	0.098	0.0061	0.0019	0.12	0.0077	0.0019 U	0.064
BZ#123	mg/kg	0.028 U	0.0038 U	0.076 U	0.094 U	0.22 UJ	0.0038 U	0.087 U	0.0079 U	0.021 U	0.0041 U	0.0037 U	0.042 U	0.0039 U	0.0037 U	0.0042 U
BZ#126	mg/kg	0.08 JN	0.0019 U	0.039 U	0.092 JN	0.11 UJ	0.002 U	0.11 JN	0.0041 U	0.011 U	0.0021 U	0.0019 U	0.022 U	0.002 U	0.0019 U	0.011 JN
BZ#153	mg/kg	0.61	0.0038 U	1.8	1	4.4 J	0.0038 U	1.2	0.13	0.52	0.017	0.0052	0.69	0.031	0.0037 U	0.087
BZ#156	mg/kg	0.057	0.0019 U	0.039 U	0.075	0.25 J	0.002 U	0.067	0.0073	0.012 J	0.0021 U	0.0019 U	0.02 J	0.0015 J	0.0019 U	0.0066
BZ#157	mg/kg	0.028 U	0.0038 U	0.076 U	0.094 U	0.22 UJ	0.0038 U	0.087 U	0.0079 U	0.021 U	0.0041 U	0.0037 U	0.042 U	0.0039 U	0.0037 U	0.0042 U
BZ#167	mg/kg	0.038	0.0038 U	0.076 U	0.05 J	0.19 J	0.0038 U	0.058 J	0.0079 U	0.011 J	0.0041 U	0.0037 U	0.042 U	0.0039 U	0.0037 U	0.0049
BZ#169	mg/kg	0.015 U	0.0019 U	0.039 U	0.048 U	0.11 UJ	0.002 U	0.045 U	0.0041 U	0.011 U	0.0021 U	0.0019 U	0.022 U	0.002 U	0.0019 U	0.0022 U
BZ#189	mg/kg	0.015 JN	0.0019 U	0.039 U	0.048 U	0.12 JN	0.002 U	0.045 U	0.0053 JN	0.011 JN	0.0021 U	0.0019 U	0.022 U	0.002 U	0.0019 U	0.0022 U
PCB Homolog Groups																
Total MonoCB	mg/kg	30 J	0.0013 J	17 J	34 J	180 J	0.0039 U	44 J	3.8 J	18 J	0.048	0.0019 J	11 J	1.2	0.0038 U	3.7
Total DiCB	mg/kg	30 J	0.0048 U	19 J	39 J	160 J	0.0097 U	47 J	7.1 J	17 J	0.15	0.0047 J	17 J	1.7	0.0094 U	3.9
Total TriCB	mg/kg	20 J	0.015 U	11 J	24 J	87 J	0.029 U	26 J	5.3 J	9.5 J	0.28	0.02 J	11 J	0.96	0.028 U	2.6
Total TetraCB	mg/kg	13 J	0.016 U	5.2 J	18 J	53 J	0.033 U	17 J	2.6 J	6.4 J	0.19	0.017 J	6 J	0.58	0.032 U	1.8
Total PeCB	mg/kg	11 J	0.016 U	6.9 J	13 J	46 J	0.033 U	15 J	2.3 J	5.6 J	0.12	0.018 J	6 J	0.54	0.032 U	1.4
Total HxCB	mg/kg	6.9 J	0.016 U	13 J	9 J	44 J	0.033 U	12 J	2.2 J	6.7 J	0.11	0.022 J	7.4 J	0.57	0.032 U	0.93
Total HpCB	mg/kg	2.8 J	0.015 U	8.1 J	3.7 J	22 J	0.029 U	5.8 J	1 J	3.6 J	0.053	0.028 U	4.2 J	0.32	0.028 U	0.39
Total OctaCB	mg/kg	1.5 J	0.0048 U	3.5 J	1.7 J	11 J	0.0097 U	2.8 J	0.36 J	1.4 J	0.023	0.0076 J	1.4 J	0.12	0.0094 U	0.18
Total NonaCB	mg/kg	0.61 J	0.0048 U	1.1 J	1.2 UJ	11 UJ	0.0097 U	2.2 UJ	0.12 J	0.91 UJ	0.012	0.0094 U	0.36 J	0.044 J	0.0094 U	0.076 J
DecaCB	mg/kg	0.22 J	0.0019 U	0.33 UJ	0.48 UJ	4.5 UJ	0.0039 U	0.89 UJ	0.067 UJ	0.36 UJ	0.0072	0.0038 U	0.21 UJ	0.027 U	0.0038 U	0.023 J
Total Homolog PCB	mg/kg	120 J	0.016 U	85 J	140 J	600 J	0.033 U	170 J	25 J	68 J	0.99	0.0912	64 J	6	0.032 U	15

Attachment A-2
Sediment Toxicity Testing Phase 1b Sediment Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

Field ID		TX30-05-P	TXR1-03-P	TX60-03-P	TX30-03-P	TX50-01-P	TXR1-06-P	TX50-04-P	TX60-04-P	TX40-05-P	TX40-03-P	TX10-01-P	TX40-02-P	TX60-02-P	TXR1-04-P	TX30-04-P
Sample ID		X900202	X900204	X900206	X900207	X900208	X900210	X900211	X900213	X900214	X900215	X900216	X900217	X900220	X900222	X900223
Date Collected	Units	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11
Metals																
Aluminum	mg/kg	10300	2020	5990	9190	9870	3040	8650	5840	10500	11300	9780	9820	5010	2630	8530
Antimony	mg/kg	12.5 UJ	7.7 UJ	7.2 UJ	9 UJ	6.7 UJ	7.4 UJ	7.9 UJ	8.5 UJ	7.6 UJ	8.2 UJ	5.3 UJ	8.1 UJ	6 UJ	0.49 J	5 UJ
Arsenic	mg/kg	8.7	2.8	3.2	6.4	8.1	2.1	6	3.5	5.4	4.4	4.7	4.6	2.6	2	4
Barium	mg/kg	393	27.3	102	589	2040	39.1	759	176	312	126	56.5	116	74.7	30	128
Beryllium	mg/kg	0.91 J	0.27 J	0.5 J	0.78	1.1	0.3 J	0.82	0.49 J	0.79	0.73	0.44 J	0.74	0.39 J	0.24 J	0.59
Cadmium	mg/kg	0.37 J	0.64 U	0.19 J	0.17 J	0.41 J	0.62 U	0.31 J	0.08 J	0.091 J	0.68 U	0.45 U	0.14 J	0.066 J	0.069 J	0.085 J
Calcium	mg/kg	1970	356 J	2810	2020	4030	499 J	1890	928	1680	772	521	979	729	442 J	1070
Chromium	mg/kg	13.9	9	12	11.3	18.5	6.5	11.9	9.3	13.5	9.8	9.4	16	10.1	10.2	8.3
Cobalt	mg/kg	11	3.1 J	5.2 J	8.9	13.1	3.6 J	9.1	5.4 J	9.2	8.5	5.2	7.6	4.6 J	3.1 J	7.3
Copper	mg/kg	56	2.7 J	16.3	26.5	64.8	5.1	47.3	15.7	16.3	8.9	4.1	19.3	9.8	3.1	17.3
Iron	mg/kg	17100	6660	9800	15700	25400	7030	16900	10900	17900	15700	11600	14800	7570	5820	11400
Lead	mg/kg	73 J	3.9	25.9 J	53.7 J	180 J	5.8 J	73.3 J	24.4 J	36.7 J	19.2 J	10.6 J	31.5 J	15.3 J	4.3 J	22.9 J
Magnesium	mg/kg	942 J	525 J	1180	808	1000	688	768	731	1080	1120	389 J	1190	701	646	805
Manganese	mg/kg	358 J	190 J	311 J	396 J	774 J	242 J	462 J	313 J	435 J	661 J	422 J	447 J	144 J	140 J	232 J
Mercury	mg/kg	3.2 D	0.016 J	9.8 D	5.4 D	37.9 D	0.027 J	8.9 D	8.2 D	7.9 D	0.22	0.088	5.9 D	2	0.016 J	0.58
Nickel	mg/kg	13.5	4.6 J	6.5	11.2	25.6	4.2 J	12.1	5.3 J	9.4	7	5.2	8.1	5.2	5.6	6.2
Potassium	mg/kg	679 J	159 J	428 J	597 J	666	235 J	557 J	397 J	692	801	353 J	665 J	376 J	225 J	517
Selenium	mg/kg	7.3 U	4.5 U	4.2 U	5.3 U	3.9 U	4.3 U	4.6 U	4.9 U	4.4 U	4.8 U	3.1 U	4.7 U	3.5 U	3.7 U	2.9 U
Silver	mg/kg	2.1 U	1.3 U	1.2 U	1.5 U	1.1 U	1.2 U	1.3 U	1.4 U	1.3 U	1.4 U	0.89 U	1.4 U	1 U	1 U	0.84 U
Sodium	mg/kg	32.3 J	6.9 J	20.3 J	29.6 J	56.5 J	8.1 J	32.1 J	14.9 J	24.3 J	20.3 J	15.9 J	21.5 J	13.4 J	10.9 J	17.3 J
Thallium	mg/kg	5.2 UJ	3.2 UJ	3 UJ	3.8 UJ	4 UJ	3.1 UJ	4.2 UJ	3.5 UJ	3.1 UJ	3.4 UJ	2.2 UJ	3.4 UJ	2.5 UJ	2.6 UJ	2.1 UJ
Vanadium	mg/kg	21.9	3.9 J	10.3	20.6	30.6	4.4 J	20.4	11.1	18.7	14.7	17.9	14.4	8.6	3.9 J	15
Zinc	mg/kg	154 J	13.4 J	51.8 J	88.5 J	185 J	18.6 J	133 J	40.5 J	65.9 J	40.2 J	18.4 J	65.6 J	27.1 J	15.5 J	45 J

Attachment A-2
Sediment Toxicity Testing Phase 1b Sediment Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

Field ID		TX30-05-P	TXR1-03-P	TX60-03-P	TX30-03-P	TX50-01-P	TXR1-06-P	TX50-04-P	TX60-04-P	TX40-05-P	TX40-03-P	TX10-01-P	TX40-02-P	TX60-02-P	TXR1-04-P	TX30-04-P
Sample ID		X900202	X900204	X900206	X900207	X900208	X900210	X900211	X900213	X900214	X900215	X900216	X900217	X900220	X900222	X900223
Date Collected	Units	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11
Semi-volatiles																
1,1'-Biphenyl	ug/kg	230	2.9 U	130	360	550 J	1 U	520	25	90	3.6	0.97 U	95	9.6	0.96 U	36
1-Methylnaphthalene	ug/kg	40 J	2.9 U	7.3 J	28 J	110 J	1 U	40 J	8.4 U	6.7 J	11	0.97 U	4.4 J	4 U	0.96 U	6.6 J
1-Methylphenanthrene	ug/kg	320	4.7	38	240	400 J	0.93 J	130	12	62	2.7	0.97 U	36	5.6	0.46 J	65
2,3,5-Trimethylnaphthalene	ug/kg	310	2.9 U	35	200	140 J	1 U	77	10	31	9.2	0.97 U	29	2.9 J	0.96 U	61
2,6-Dimethylnaphthalene	ug/kg	120	2.9 U	35	95	170 J	1 U	100	9.2	43	9.3	0.97 U	35	2.2 J	0.96 U	24
2-Methylnaphthalene	ug/kg	55	2.9 U	7.6 J	45	100 J	1 U	63	4.1 J	22 U	7.9	0.97 U	7 J	1.5 J	0.96 U	9.9 J
Acenaphthene	ug/kg	190	4.7	45	170	710 J	0.36 J	240	12	84	0.91 J	0.34 J	42	3.4 J	0.96 U	20
Acenaphthylene	ug/kg	12 J	2.9 U	13 U	40 U	280 UJ	1 U	45 U	8.4 U	22 U	1.5 U	0.97 U	13 U	4 U	0.96 U	11 U
Anthracene	ug/kg	190	16 J	88	180	930 J	0.84 J	210	19	130	1.3 J	0.97 U	76	8.1	0.43 J	27
Benzo(a)anthracene	ug/kg	830	42 J	160	600	1600 J	6.3	690	120	220	5.6	1.5	150	43	4.7	100
Benzo(a)pyrene	ug/kg	680	35 J	66	470	660 J	6.4	470	100	100	5.5	1.8	67	40	3.9	88
Benzo(b)fluoranthene	ug/kg	800	35 J	98	490	870 J	8.2	520	110	140	7.8	2.2	93	44	6.2	98
Benzo(g,h,i)perylene	ug/kg	320	20 J	35	260	290 J	4.4	300	57	54	3.9	1.5	40	25	2.8	58
Benzo(k)fluoranthene	ug/kg	610	38 J	89	520	900 J	7.5	520	110	130	5.1	2	89	42	5.5	91
Benzo_e_pyrene	ug/kg	490	23 J	60	340	550 J	5.3	350	69	87	4.6	1.6	59	29	3.9	65
C1-Chrysenes	ug/kg	690 J	22 J	130 J	530 J	970 J	3.9	530 J	94 J	160 J	7.2 J	1.1 J	150 J	33 J	2.6 J	110
C1-Dibenzothiophenes	ug/kg	430 J	2.9 U	38 J	320 J	360 J	1 U	140 J	16 J	57 J	2.5 J	0.97 U	38 J	5.8 J	0.96 U	92
C1-Fluoranthenes/Pyrenes	ug/kg	1500 J	33 J	450 J	1300 J	3600 J	6.9	1400 J	210 J	530 J	7.8 J	1.4 J	410 J	70 J	5.1 J	240
C1-Fluorenes	ug/kg	300 J	2.9 U	67 J	240 J	460 J	1 U	170 J	15 J	82 J	3 J	0.97 U	62 J	4.9 J	0.96 U	57
C1-Naphthalenes	ug/kg	59 J	2.9 U	13 U	46 J	280 UJ	1 U	65 J	8.4 U	22 U	12 J	0.97 U	13 U	4 U	0.96 U	11 U
C1-Phenanthrenes/Anthracenes	ug/kg	1500 J	21 J	190 J	1100 J	2100 J	3	660 J	64 J	310 J	7.9 J	0.97 U	180 J	29 J	1.6 J	280
C2-Chrysenes	ug/kg	550 J	9 J	77 J	380 J	370 J	2.2	330 J	54 J	94 J	2.2 J	0.97 U	81 J	19 J	1.4 J	89
C2-Dibenzothiophenes	ug/kg	1100 J	2.9 U	48 J	680 J	390 J	1 U	210 J	26 J	67 J	2.5 J	0.97 U	44 J	9.3 J	0.96 U	220
C2-Fluoranthenes/Pyrenes	ug/kg	830 J	12 J	130 J	670 J	980 J	3	570 J	90 J	180 J	3.6 J	0.97 U	110 J	27 J	2.3 J	170
C2-Fluorenes	ug/kg	950 J	2.9 U	90 J	670 J	610 J	1 U	260 J	30 J	90 J	4.7 J	0.97 U	85 J	8.2 J	0.96 U	170
C2-Naphthalenes	ug/kg	610 J	3.8 J	150 J	450 J	850 J	1 U	390 J	38 J	160 J	57 J	0.97 U	130 J	11 J	0.96 U	120
C2-Phenanthrenes/Anthracenes	ug/kg	2100 J	10 J	140 J	1300 J	1300 J	2.9	570 J	62 J	210 J	5.1 J	0.97 U	120 J	25 J	1.5 J	420
C3-Chrysenes	ug/kg	260 J	2.9 U	13 U	150 J	280 UJ	1 U	45 U	24 J	22 U	1.5 U	0.97 U	13 U	6.9 J	0.96 U	36
C3-Dibenzothiophenes	ug/kg	990 J	2.9 U	47 J	580 J	300 J	1 U	180 J	26 J	41 J	1.6 J	0.97 U	33 J	9.2 J	0.96 U	200
C3-Fluoranthenes/Pyrenes	ug/kg	680 J	3.5 J	60 J	490 J	310 J	1.5	340 J	28 J	52 J	2 J	0.97 U	58 J	10 J	1 J	110
C3-Fluorenes	ug/kg	1500 J	2.9 U	87 J	1000 J	570 J	1 U	460 J	43 J	97 J	3.7 J	0.97 U	99 J	12 J	0.96 U	320
C3-Naphthalenes	ug/kg	1700 J	3 J	220 J	1100 J	910 J	1 U	470 J	63 J	200 J	58 J	0.97 U	190 J	18 J	0.96 U	350
C3-Phenanthrenes/Anthracenes	ug/kg	2000 J	3.6 J	100 J	1300 J	990 J	1.5	500 J	66 J	140 J	3.3 J	0.97 U	92 J	19 J	0.96 U	400
C4-Chrysenes	ug/kg	95 J	2.9 U	13 U	52 J	280 UJ	1 U	45 U	8.4 U	22 U	1.5 U	0.97 U	13 U	4 U	0.96 U	12
C4-Dibenzothiophenes	ug/kg	800 J	2.9 U	24 J	390 J	280 UJ	1 U	110 J	19 J	26 J	1.5 U	0.97 U	19 J	6.6 J	0.96 U	150
C4-Naphthalenes	ug/kg	2300 J	2.9 U	200 J	1400 J	850 J	1 U	550 J	73 J	180 J	29 J	0.97 U	190 J	21 J	0.96 U	450
C4-Phenanthrenes/Anthracenes	ug/kg	1400 J	3.5 J	32 J	730 J	380 J	5.1	270 J	39 J	55 J	5.6 J	0.97 U	35 J	13 J	0.96 U	300
Chrysene	ug/kg	1000	41 J	320	1000	2300 J	9	1100	180	340	7.4	2.3	280	62	6.3	150
Dibenzo(a,h)anthracene	ug/kg	99	7.4 J	13	95	120 J	1.5	100	22	19 J	1.1 J	0.41 J	15	8.2	0.81 J	19
Dibenzothiophene	ug/kg	120	2.9	27	100	380 J	0.27 J	110	7.2 J	55	1.7	0.97 U	28	3.2 J	0.96 U	20
Fluoranthene	ug/kg	2000	110	600	1800	8000 J	16	2200	260	1000	17	3.1	540	120	10	320
Fluorene	ug/kg	220	4.8	89	220	1100 J	0.52 J	340	14	170	1.7	0.97 U	110	4.1	0.35 J	31
Indeno(1,2,3-cd)pyrene	ug/kg	310	19 J	33	250	290 J	4.3	280	58	53	3.7	1.3	38	25	2.5	56
Naphthalene	ug/kg	50 UB	2.9 U	13 UB	40 UB	280 UJ	1 UB	45 UB	8.4 UB	22 U	2.4 UB	0.97 UB	13 UB	4 UB	0.52 J	11 UB
Perylene	ug/kg	590	18 J	310	610	240 J	36	400	330	500	56	1	200	170	18	360
Phenanthrene	ug/kg	1200	64 J	360	1000	5200 J	5.9	1300	84	730	10	1 UB	380	43	3	180
Pyrene	ug/kg	1800	72 J	540	1500	5200 J	11	1800	230	670	13	2.4	480	87	9.7	230

Attachment A-2
Sediment Toxicity Testing Phase 1b Sediment Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

Field ID		TX30-05-P	TXR1-03-P	TX60-03-P	TX30-03-P	TX50-01-P	TXR1-06-P	TX50-04-P	TX60-04-P	TX40-05-P	TX40-03-P	TX10-01-P	TX40-02-P	TX60-02-P	TXR1-04-P	TX30-04-P
Sample ID		X900202	X900204	X900206	X900207	X900208	X900210	X900211	X900213	X900214	X900215	X900216	X900217	X900220	X900222	X900223
Date Collected	Units	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11
Pesticides																
4,4'-DDD	ug/kg	28 U	0.97 U	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 U	22 UJ	5.3 U	0.93 UJ	21 UJ	4.9 U	0.94 U	5.4 U
4,4'-DDE	ug/kg	28 U	0.97 U	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 U	22 UJ	2.8 J	0.93 UJ	21 UJ	4.9 U	0.94 U	5.4 U
4,4'-DDT	ug/kg	28 U	0.97 U	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 U	22 UJ	5.3 U	0.93 UJ	21 UJ	4.9 U	0.94 U	5.4 U
Aldrin	ug/kg	28 UJ	0.97 UJ	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 UJ	22 UJ	5.3 UJ	0.93 UJ	21 UJ	4.9 UJ	0.94 UJ	5.4 UJ
Alpha-BHC	ug/kg	28 U	0.97 U	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 U	22 UJ	5.3 U	0.93 UJ	21 UJ	4.9 U	0.94 U	5.4 U
Alpha-Chlordane	ug/kg	28 UJ	0.97 UJ	24 J	60 UJ	110 UJ	0.97 UJ	110 UJ	14 J	22 UJ	5.3 UJ	0.93 UJ	21 UJ	4.9 UJ	0.94 UJ	5.4 UJ
Beta-BHC	ug/kg	28 UJ	0.97 UJ	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 UJ	22 UJ	5.3 UJ	0.93 UJ	21 UJ	4.9 UJ	0.94 UJ	5.4 UJ
Delta-BHC	ug/kg	28 U	0.97 U	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 U	22 UJ	5.3 U	0.93 UJ	21 UJ	4.9 U	0.94 U	5.4 U
Dieldrin	ug/kg	28 U	0.97 U	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 U	22 UJ	5.3 U	0.93 UJ	21 UJ	4.9 U	0.94 UJ	5.4 U
Endosulfan I	ug/kg	28 U	0.97 U	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 U	22 UJ	5.3 U	0.93 UJ	21 UJ	4.9 U	0.94 U	5.4 U
Endosulfan II	ug/kg	28 UJ	0.97 UJ	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 UJ	22 UJ	5.3 UJ	0.93 UJ	21 UJ	4.9 UJ	0.94 UJ	5.4 UJ
Endosulfan Sulfate	ug/kg	28 U	0.97 U	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 U	22 UJ	5.3 U	0.93 UJ	21 UJ	4.9 U	0.94 U	5.4 U
Endrin	ug/kg	28 U	0.97 U	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 U	22 UJ	5.3 U	0.93 UJ	21 UJ	4.9 U	0.94 U	5.4 U
Endrin Aldehyde	ug/kg	28 U	0.97 U	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 U	22 UJ	5.3 U	0.93 UJ	21 UJ	4.9 U	0.94 UJ	5.4 U
Endrin Ketone	ug/kg	28 U	0.97 U	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 U	22 UJ	5.3 U	0.93 UJ	21 UJ	4.9 U	0.94 UJ	5.4 U
Gamma-BHC (Lindane)	ug/kg	28 UJ	0.97 UJ	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 UJ	22 UJ	5.3 UJ	0.93 UJ	21 UJ	4.9 UJ	0.94 UJ	5.4 UJ
Gamma-Chlordane	ug/kg	28 UJ	0.97 UJ	33 J	60 UJ	74 UJ	0.97 UJ	110 UJ	25 J	16 J	5.3 UJ	0.93 UJ	21 UJ	4.9 UJ	0.94 UJ	5.4 UJ
Heptachlor	ug/kg	28 UJ	0.97 UJ	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 UJ	22 UJ	5.3 UJ	0.93 UJ	21 UJ	4.9 UJ	0.94 UJ	5.4 UJ
Heptachlor Epoxide	ug/kg	28 UJ	0.97 UJ	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 UJ	22 UJ	5.3 UJ	0.93 UJ	21 UJ	4.9 UJ	0.94 UJ	5.4 UJ
Methoxychlor	ug/kg	28 U	0.97 U	20 UJ	60 UJ	110 UJ	0.97 UJ	110 UJ	10 U	22 UJ	5.3 U	0.93 UJ	21 UJ	4.9 U	0.94 U	5.4 U
Toxaphene	ug/kg	14000 UJ	480 UJ	10000 UJ	30000 UJ	56000 UJ	480 UJ	56000 UJ	5000 UJ	11000 UJ	2600 UJ	460 UJ	11000 UJ	2400 UJ	470 UJ	2700 UJ
Dioxins and Furans																
2,3,7,8-TCDD	ng/kg	3.27	0.0574 U	0.354 UXA	3.48	21.9	0.0696 U	8.79	0.423 J	0.551 J	0.102 J	0.0506 U	0.441 J	0.165 UXA	0.0596 U	0.63 J
1,2,3,7,8-PeCDD	ng/kg	2.46 J	0.0539 U	0.493 J	2.9 J	5.69	0.0575 U	3.06 J	0.317 J	0.562 J	0.175 J	0.0664 U	0.593 J	0.0911 J	0.0587 U	0.546 J
1,2,3,4,7,8-HxCDD	ng/kg	1.89 J	0.057 J	0.69 J	3.16 J	4.8 J	0.0744 UXA	3.04 J	0.502 J	0.805 J	0.317 J	0.113 UXA	0.825 J	0.196 J	0.0647 J	0.614 J
1,2,3,6,7,8-HxCDD	ng/kg	6.94	0.0921 UB	2.89 J	8.62	15.1	0.154 UXA	8.75	1.82 J	2.89 J	0.77 UB	0.192 UB	3.16 J	0.693 UB	0.116 UB	2.1 J
1,2,3,7,8,9-HxCDD	ng/kg	6.86	0.153 UB	2.54 J	10.7 XC	20.4	0.249 UB	11.6	2.01 J	3.09 J	1.11 J	0.224 UB	2.95 J	0.767 UB	0.16 UB	2.41 XC
1,2,3,4,6,7,8-HpCDD	ng/kg	112	3.31 J	66.3	136	263	8.42	187	63.6	95.6	48.8	12.9	122	29.3	3.82 J	76.3
Octa CDD	ng/kg	2120	165	1240	2390	2880	380	2540	1580	2120	2960	903	2740	783	181	1700
2,3,7,8-TCDF	ng/kg	121	0.072 UB	60	101	378	0.175 UXA	196	7.32	19	1.5	0.911 J	37.1	2.34	0.0777 UB	14.9
1,2,3,7,8-PeCDF	ng/kg	22.1	0.0526 U	62.2	32.7	71.5	0.128 J	29.1	3.07 J	17.3	0.698 J	0.308 J	41.5	1.44 J	0.0545 U	3.78 J
2,3,4,7,8-PeCDF	ng/kg	40.6	0.0788 UXA	35.8	91.2	113	0.146 UB	57.3	4.24 J	12.4	0.739 UB	0.484 UB	24.8	1.3 J	0.0963 UB	6.89
1,2,3,4,7,8-HxCDF	ng/kg	175	0.0975 UB	313	315 XC	650	0.608 UB	351	22.9 XC	134	2.22 J	0.681 UB	180	8.14	0.131 UB	20
1,2,3,6,7,8-HxCDF	ng/kg	44	0.0773 UB	67.6	57.6	131	0.166 UB	69.8	5.29	28.8	0.695 UB	0.262 UB	38.1	2.41 J	0.0867 UB	7.24
1,2,3,7,8,9-HxCDF	ng/kg	2.26 J	0.0564 U	6.85	2.42 J	6.63	0.0744 UXA	2.07 J	0.461 UB	2.33 J	0.146 UB	0.0554 U	3.65 J	0.207 J	0.0539 U	0.455 UB
2,3,4,6,7,8-HxCDF	ng/kg	39.4	0.0571 UB	15.9	81.7	127	0.125 UB	73.5	4.22 J	8.28	0.423 UB	0.149 UB	10.1	1.19 J	0.0777 UB	5.86
1,2,3,4,6,7,8-HpCDF	ng/kg	224	0.691 UXA	153	275	724	1.1 UXA	399	31.6 UXA	95.3 UXA	3.89 UXA	1.02 UXA	106 UXA	10.7 UXA	0.353 UXA	37.5
1,2,3,4,7,8,9-HpCDF	ng/kg	29.9	0.0526 U	60.4	31	119	0.226 UB	51.7	5.96	32.4	0.684 UB	0.237 UB	40.7	2.66 J	0.0818 J	5.36
Octa CDF	ng/kg	197	0.806 UB	269	211	836	2.89 J	357	53.7	187	5.15 J	2.03 J	219	16.7	0.678 UB	41.1

See notes at the end of tables

Attachment A-2
Sediment Toxicity Testing Phase 1b Sediment Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

Field ID		TX20-03-P	TX30-01-P	TXR1-01-P	TX40-01-P	TX20-01-P	TXR1-05-P	TX50-05-P	Control
Sample ID		X900224	X900225	X900226	X900227	X900228	X900229	X900230	X900233
Date Collected	Units	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11
Grain Size, Moisture and TOC									
Gravel	%	0	0	0	0	0	0	0	0
Coarse Sand	%	0.7	0	0.6	0	0.9	0	0	1.3
Medium Sand	%	83.6	2	28	3	74.3	6.6	11.5	6.8
Fine Sand	%	12.8	34.6	60.1	19.7	14.5	74.2	30.5	54.8
Silt	%	3.2	34.9	8.3	42.9	7.5	12.8	28.7	32.9
Clay	%	-0.3	28.5	3	34.4	2.8	6.4	29.3	4.2
Percent Moisture	%	25.2	39.4	24	35.9	30.3	29	37	43
Solids, Percent	%	74.8	60.6	68.2	64.1	69.7	68.1	62.2	53.9
TOC by Lloyd Kahn	mg/kg	2200 J	24300	3030 J	10900	7260 J	4680 J	26700	10800
PCB Aroclors									
Aroclor-1016	mg/kg	0.043 U	1.6 UJ	0.05 U	0.51 U	0.049 U	0.049 U	11 UJ	0.063 U
Aroclor-1221	mg/kg	0.043 U	1.6 UJ	0.05 U	0.51 U	0.049 U	0.049 U	11 UJ	0.063 U
Aroclor-1232	mg/kg	0.043 U	1.6 UJ	0.05 U	0.51 U	0.049 U	0.049 U	11 UJ	0.063 U
Aroclor-1242	mg/kg	0.12	13 J	0.05 U	5.3 J	0.063	0.049 U	100 J	0.063 U
Aroclor-1248	mg/kg	0.043 U	1.6 UJ	0.05 U	0.51 U	0.049 U	0.049 U	11 UJ	0.063 U
Aroclor-1254	mg/kg	0.095	3.5 J	0.05 U	0.78 J	0.09	0.049 U	41 J	0.063 U
Aroclor-1260	mg/kg	0.055	3.9 J	0.05 U	1.2 J	0.069	0.049 U	53 J	0.063 U
Aroclor-1262	mg/kg	0.043 U	1.6 UJ	0.05 U	0.51 U	0.049 U	0.049 U	11 UJ	0.063 U
Aroclor-1268	mg/kg	0.043 U	1.6 UJ	0.05 U	0.51 U	0.049 U	0.049 U	11 UJ	0.063 U
Total PCB Aroclor	mg/kg	0.27	20.4 J	0.05 U	7.28 J	0.222	0.049 U	194 J	0.063 U
PCB Congeners									
BZ#77	mg/kg	0.0033 U	0.012 U	0.0038 U	0.0039 U	0.0038 U	0.0038 U	0.17 UJ	0.0048 U
BZ#81	mg/kg	0.005 U	0.019 U	0.0058 U	0.0061 U	0.0058 U	0.0058 U	0.26 UJ	0.0074 U
BZ#105	mg/kg	0.003	0.028 J	0.002 U	0.002 U	0.0026	0.0019 U	0.36 J	0.0025 U
BZ#114	mg/kg	0.0033 U	0.012 U	0.0038 U	0.0039 U	0.0038 U	0.0038 U	0.17 UJ	0.0048 U
BZ#118	mg/kg	0.0062	0.16	0.002 U	0.023	0.0061	0.0019 U	2.1 J	0.0025 U
BZ#123	mg/kg	0.0033 U	0.012 U	0.0038 U	0.0039 U	0.0038 U	0.0038 U	0.17 UJ	0.0048 U
BZ#126	mg/kg	0.0017 U	0.0064 U	0.002 U	0.002 U	0.0019 U	0.0019 U	0.42 JN	0.0025 U
BZ#153	mg/kg	0.007	0.29	0.0038 U	0.074	0.0086	0.0038 U	3.9 J	0.0048 U
BZ#156	mg/kg	0.00094 J	0.017	0.002 U	0.0038	0.0019 U	0.0019 U	0.29 J	0.0025 U
BZ#157	mg/kg	0.0033 U	0.012 U	0.0038 U	0.0039 U	0.0038 U	0.0038 U	0.17 UJ	0.0048 U
BZ#167	mg/kg	0.0033 U	0.013	0.0038 U	0.0039 U	0.0038 U	0.0038 U	0.18 J	0.0048 U
BZ#169	mg/kg	0.0017 U	0.0064 U	0.002 U	0.002 U	0.0019 U	0.0019 U	0.087 UJ	0.0025 U
BZ#189	mg/kg	0.0017 U	0.0072 JN	0.002 U	0.002 U	0.0019 U	0.0019 U	0.1 JN	0.0025 U
PCB Homolog Groups									
Total MonoCB	mg/kg	0.018	12 J	0.0039 U	1.7	0.0053 J	0.0039 U	140 J	0.0062 U
Total DiCB	mg/kg	0.045	13 J	0.0097 U	3.4	0.015 J	0.0097 U	120 J	0.015 U
Total TriCB	mg/kg	0.072	9.6 J	0.029 U	3	0.038 J	0.029 U	66 J	0.046 U
Total TetraCB	mg/kg	0.069	5.2 J	0.033 U	2.2	0.042 J	0.033 U	45 J	0.053 U
Total PeCB	mg/kg	0.048	4.5 J	0.033 U	1.3	0.046 J	0.033 U	37 J	0.053 U
Total HxCB	mg/kg	0.033	3.7 J	0.033 U	0.88	0.039 J	0.033 U	36 J	0.053 U
Total HpCB	mg/kg	0.014 J	1.5 J	0.029 U	0.43	0.018 J	0.029 U	18 J	0.046 U
Total OctaCB	mg/kg	0.0066 J	0.68 J	0.0097 U	0.16	0.0099 J	0.0097 U	7.6 J	0.015 U
Total NonaCB	mg/kg	0.0084 U	0.53 UJ	0.0097 U	0.065 J	0.0096 UJ	0.0097 U	6.8 UJ	0.015 U
DecaCB	mg/kg	0.0034 U	0.21 UJ	0.0039 U	0.019 J	0.0026 J	0.0039 U	2.7 UJ	0.0062 U
Total Homolog PCB	mg/kg	0.31	50 J	0.033 U	13	0.22 J	0.033 UJ	470 J	0.053 U

Attachment A-2
Sediment Toxicity Testing Phase 1b Sediment Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

Field ID		TX20-03-P	TX30-01-P	TXR1-01-P	TX40-01-P	TX20-01-P	TXR1-05-P	TX50-05-P	Control
Sample ID		X900224	X900225	X900226	X900227	X900228	X900229	X900230	X900233
Date Collected	Units	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11
Metals									
Aluminum	mg/kg	1250	6900	2410	9700	2180	2730	7630	4100
Antimony	mg/kg	7.6 UJ	8.6 UJ	7.6 UJ	7.7 UJ	7.6 UJ	8.1 UJ	8 UJ	10 UJ
Arsenic	mg/kg	1.3	4.6	4.7	4.3	2.4	2.2	6.8	2.2
Barium	mg/kg	19.1 J	180	27.6	142	33.5	32.8	2100	21.7 J
Beryllium	mg/kg	0.24 J	0.52 J	0.24 J	0.7	0.42 J	0.29 J	0.91	0.29 J
Cadmium	mg/kg	0.64 U	0.094 J	0.64 U	0.64 U	0.16 J	0.67 U	0.27 J	0.17 J
Calcium	mg/kg	383 J	1190	328 J	608 J	970	478 J	2730	2180
Chromium	mg/kg	6.7	8.3	10.4	11.5	17.4	9.4	14.3	14.4
Cobalt	mg/kg	2.4 J	6.7 J	3 J	7.6	3.4 J	3.3 J	10.3	5.3 J
Copper	mg/kg	2.9 J	14.7	3.1 J	13.3	5.9	3.7	44.8	7.5
Iron	mg/kg	6640	11100	6480	14300	7270	5800	20400	14900
Lead	mg/kg	5.3 J	33 J	4.1 J	20.2 J	10.2 J	5.1 J	113 J	7.5 J
Magnesium	mg/kg	233 J	621 J	590 J	1060	418 J	663 J	784	1950
Manganese	mg/kg	129 J	280 J	126 J	585 J	226 J	85.4	659 J	398 J
Mercury	mg/kg	0.72	1.9	0.017 J	2	0.34	0.038 U	21.3 D	0.051 U
Nickel	mg/kg	3.4 J	6.5	5.2	7.3	5.7	5.7	19.1	12.8
Potassium	mg/kg	92.5 J	404 J	213 J	608 J	150 J	228 J	574 J	384 J
Selenium	mg/kg	4.5 U	5 U	4.5 U	4.5 U	4.4 U	4.7 U	4.7 U	5.8 U
Silver	mg/kg	1.3 U	1.4 U	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	1.7 U
Sodium	mg/kg	10.7 J	16.9 J	637 U	21.9 J	12.3 J	7.6 J	42.2 J	128 J
Thallium	mg/kg	3.2 UJ	3.6 UJ	3.2 UJ	3.2 UJ	3.2 UJ	3.4 U	3.7 UJ	4.2 UJ
Vanadium	mg/kg	3.5 J	14.3	3.8 J	13.3	6.4	4.2 J	24.1	21.6
Zinc	mg/kg	19.3 J	49.4 J	15.2 J	45.1 J	34.6 J	17.3 J	152 J	38.3 J

Attachment A-2
Sediment Toxicity Testing Phase 1b Sediment Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

Field ID		TX20-03-P	TX30-01-P	TXR1-01-P	TX40-01-P	TX20-01-P	TXR1-05-P	TX50-05-P	Control
Sample ID		X900224	X900225	X900226	X900227	X900228	X900229	X900230	X900233
Date Collected	Units	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11
Semi-volatiles									
1,1'-Biphenyl	ug/kg	4.9 J	140	0.99 U	14	9.3 U	0.98 U	800 J	1.2 U
1-Methylnaphthalene	ug/kg	8.9 U	13 J	0.99 U	1.3 J	9.3 U	0.98 U	83 J	1.2 U
1-Methylphenanthrene	ug/kg	17	60	0.26 J	6.6	9.8	0.51 J	450 J	0.32 J
2,3,5-Trimethylnaphthalene	ug/kg	8.9 U	69	0.99 U	5.2	9.3 U	0.98 U	140 J	1.2 U
2,6-Dimethylnaphthalene	ug/kg	8.9 U	40	0.99 U	4.7	9.3 U	0.98 U	170 J	1.2 U
2-Methylnaphthalene	ug/kg	8.9 U	21	0.99 U	1.9 J	9.3 U	0.98 U	220 UJ	1.2 U
Acenaphthene	ug/kg	8.9 U	55	0.99 U	7.1	5.3 J	0.3 J	750 J	1.2 U
Acenaphthylene	ug/kg	8.9 U	4.1 J	0.99 U	4.2 U	9.3 U	0.98 U	220 UJ	1.2 U
Anthracene	ug/kg	50	45	0.26 J	11	16	0.63 J	1100 J	1.2 U
Benzo(a)anthracene	ug/kg	130	230	2	38	89	4.6	1900 J	0.86 J
Benzo(a)pyrene	ug/kg	77	200	2.2	21	110	4.5	810 J	1.2 UB
Benzo(b)fluoranthene	ug/kg	86	210	2.5	29	110	5.8	1100 J	2.5
Benzo(g,h,i)perylene	ug/kg	40	120	1.8	14	81	3.1	360 J	2.1
Benzo(k)fluoranthene	ug/kg	69	220	2.5	26	120	5.4	1000 J	2
Benzo_e_pyrene	ug/kg	48	140	1.8	18	80	3.7	640 J	1.6
C1-Chrysenes	ug/kg	58 J	220 J	1.1	32 J	47	2.8 J	1100 J	1.4
C1-Dibenzothiophenes	ug/kg	8.9 U	85 J	0.99 U	7.9 J	9.3 U	0.98 U	400 J	1.2 U
C1-Fluoranthenes/Pyrenes	ug/kg	150 J	510 J	2.1	84 J	72	4.7 J	3900 J	1.8
C1-Fluorenes	ug/kg	8.9 U	82 J	0.99 U	9.5 J	9.3 U	0.98 U	500 J	1.2 U
C1-Naphthalenes	ug/kg	8.9 U	21 J	0.99 U	4.2 U	9.3 U	0.98 U	220 UJ	1.2 U
C1-Phenanthrenes/Anthracenes	ug/kg	77 J	270 J	0.99 U	38 J	36	1.8 J	2400 J	1.2 U
C2-Chrysenes	ug/kg	28 J	180 J	0.99 U	18 J	21	0.98 U	520 J	1.2 U
C2-Dibenzothiophenes	ug/kg	8.9 U	190 J	0.99 U	10 J	9.3 U	0.98 U	410 J	1.2 U
C2-Fluoranthenes/Pyrenes	ug/kg	41 J	260 J	1	31 J	27	2.2 J	1200 J	1.2 U
C2-Fluorenes	ug/kg	8.9 U	210 J	0.99 U	16 J	9.3 U	0.98 U	500 J	1.2 U
C2-Naphthalenes	ug/kg	8.9 U	190 J	0.99 U	20 J	9.3 U	0.98 U	720 J	1.2 U
C2-Phenanthrenes/Anthracenes	ug/kg	36 J	370 J	1	30 J	16	1.7 J	1500 J	1.2 U
C3-Chrysenes	ug/kg	8.9 U	72 J	0.99 U	4.2 U	9.3 U	0.98 U	220 UJ	1.2 U
C3-Dibenzothiophenes	ug/kg	8.9 U	170 J	0.99 U	9.2 J	9.3 U	0.98 U	340 J	1.2 U
C3-Fluoranthenes/Pyrenes	ug/kg	14 J	210 J	0.99 U	11 J	9.3 U	1.2 J	380 J	1.2 U
C3-Fluorenes	ug/kg	8.9 U	390 J	0.99 U	17 J	9.3 U	0.98 U	730 J	1.2 U
C3-Naphthalenes	ug/kg	8.9 U	380 J	0.99 U	31 J	9.3 U	0.98 U	870 J	1.2 U
C3-Phenanthrenes/Anthracenes	ug/kg	14 J	340 J	0.99 U	21 J	9.5	0.98 U	890 J	1.2 U
C4-Chrysenes	ug/kg	8.9 U	24 J	0.99 U	4.2 U	9.3 U	0.98 U	220 UJ	1.2 U
C4-Dibenzothiophenes	ug/kg	8.9 U	100 J	0.99 U	5.9 J	9.3 U	0.98 U	220 UJ	1.2 U
C4-Naphthalenes	ug/kg	8.9 U	540 J	0.99 U	36 J	9.3 U	0.98 U	810 J	1.2 U
C4-Phenanthrenes/Anthracenes	ug/kg	8.9 U	240 J	2.4	11 J	9.3 U	0.98 U	420 J	1.2 U
Chrysene	ug/kg	100	370	2.7	58	120	6.3	2500 J	1.9
Dibenzo(a,h)anthracene	ug/kg	15	41	0.58 J	4.8	24	1	130 J	0.48 J
Dibenzothiophene	ug/kg	5.6 J	27	0.99 U	5.6	4.6 J	0.98 U	450 J	1.2 U
Fluoranthene	ug/kg	290	480	4.1	130	250	9.5 J	8700 J	2.8
Fluorene	ug/kg	5.3 J	81	0.99 U	11	7.4 J	0.38 J	1200 J	0.38 J
Indeno(1,2,3-cd)pyrene	ug/kg	40	110	1.7	13	78	3	360 J	2
Naphthalene	ug/kg	8.9 U	15 UB	0.99 UB	4.2 UB	9.3 UB	0.57 J	220 UJ	1.2 UB
Perylene	ug/kg	21	420	12	130	34	43	290 J	32
Phenanthrene	ug/kg	110	260	1.5 UB	62	120	3.3	5900 J	1.3 UB
Pyrene	ug/kg	250	550	3.1	110	170	7.2	5900 J	1.6

Attachment A-2
Sediment Toxicity Testing Phase 1b Sediment Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

Field ID		TX20-03-P	TX30-01-P	TXR1-01-P	TX40-01-P	TX20-01-P	TXR1-05-P	TX50-05-P	Control
Sample ID		X900224	X900225	X900226	X900227	X900228	X900229	X900230	X900233
Date Collected	Units	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11	01/05/11
Pesticides									
4,4'-DDD	ug/kg	0.89 U	22 UJ	0.98 U	10 U	0.95 U	0.99 U	110 UJ	1.2 U
4,4'-DDE	ug/kg	0.89 U	22 UJ	0.98 U	10 U	0.95 U	0.99 U	110 UJ	1.2 U
4,4'-DDT	ug/kg	0.89 U	22 UJ	0.98 U	10 U	0.95 U	1	110 UJ	1.2 U
Aldrin	ug/kg	0.89 UJ	22 UJ	0.98 UJ	10 UJ	0.95 UJ	0.99 UJ	110 UJ	1.2 UJ
Alpha-BHC	ug/kg	0.89 U	22 UJ	0.98 U	10 U	0.95 U	0.99 U	110 UJ	1.2 U
Alpha-Chlordane	ug/kg	0.89 UJ	22 UJ	0.98 UJ	10 UJ	0.95 UJ	0.99 UJ	110 UJ	1.2 UJ
Beta-BHC	ug/kg	0.89 UJ	22 UJ	0.98 UJ	10 UJ	0.95 UJ	0.99 UJ	110 UJ	1.2 UJ
Delta-BHC	ug/kg	0.89 U	22 UJ	0.98 U	10 U	0.95 U	0.99 U	110 UJ	1.2 U
Dieldrin	ug/kg	0.89 U	22 UJ	0.98 U	10 U	0.95 U	0.99 UJ	110 UJ	1.2 U
Endosulfan I	ug/kg	0.89 U	22 UJ	0.98 U	10 U	0.95 U	0.99 U	110 UJ	1.2 U
Endosulfan II	ug/kg	0.89 UJ	22 UJ	0.98 UJ	10 UJ	0.95 UJ	0.99 UJ	110 UJ	1.2 UJ
Endosulfan Sulfate	ug/kg	0.89 U	22 UJ	0.98 U	10 U	0.95 U	0.99 U	110 UJ	1.2 U
Endrin	ug/kg	0.89 U	22 UJ	0.98 U	10 U	0.95 U	0.99 U	110 UJ	1.2 U
Endrin Aldehyde	ug/kg	0.89 U	22 UJ	0.98 U	10 U	0.95 U	0.99 UJ	110 UJ	1.2 U
Endrin Ketone	ug/kg	0.89 U	22 UJ	0.98 U	10 U	0.95 U	0.99 UJ	110 UJ	1.2 U
Gamma-BHC (Lindane)	ug/kg	0.89 UJ	22 UJ	0.98 UJ	10 UJ	0.95 UJ	0.99 UJ	110 UJ	1.2 UJ
Gamma-Chlordane	ug/kg	0.89 UJ	22 UJ	0.98 UJ	10 UJ	0.95 UJ	0.99 UJ	110 UJ	1.2 UJ
Heptachlor	ug/kg	0.89 UJ	22 UJ	0.98 UJ	10 UJ	0.95 UJ	0.99 UJ	110 UJ	1.2 UJ
Heptachlor Epoxide	ug/kg	0.89 UJ	22 UJ	0.98 UJ	10 UJ	0.95 UJ	0.99 UJ	110 UJ	1.2 UJ
Methoxychlor	ug/kg	0.89 U	22 UJ	0.98 U	10 U	0.95 U	0.99 U	110 UJ	1.2 U
Toxaphene	ug/kg	440 UJ	11000 UJ	490 UJ	5100 UJ	470 UJ	490 UJ	52000 UJ	600 UJ
Dioxins and Furans									
2,3,7,8-TCDD	ng/kg	0.0534 U	1.9	0.0584 U	0.195 UXA	0.0533 U	0.0601 U	17.1 UXA	0.0973 UXA
1,2,3,7,8-PeCDD	ng/kg	0.0731 J	0.866 J	0.0557 U	0.237 J	0.0821 UXA	0.0856 U	5.11	0.23 UXA
1,2,3,4,7,8-HxCDD	ng/kg	0.0561 U	1.04 J	0.0545 U	0.4 J	0.105 J	0.0817 UXA	4.76 J	0.255 J
1,2,3,6,7,8-HxCDD	ng/kg	0.13 UB	3.61 J	0.0743 UXA	1.11 J	0.301 UB	0.132 UXA	14.2	0.608 J
1,2,3,7,8,9-HxCDD	ng/kg	0.12 UB	4.3 J	0.126 UB	1.39 J	0.295 UB	0.229 UB	19.2	0.737 J
1,2,3,4,6,7,8-HpCDD	ng/kg	2.37 J	91.4	3.27 J	46.6	8.02	6.56	187	12.1
Octa CDD	ng/kg	54	1840	144	1610	196	278	1980	83.2
2,3,7,8-TCDF	ng/kg	0.716 J	32.7	0.074 UB	5.72	3.44 UB	0.105 UY	397	0.558 J
1,2,3,7,8-PeCDF	ng/kg	0.308 J	8.05	0.054 U	4.66 J	0.681 J	0.0713 UXA	68.4	0.288 J
2,3,4,7,8-PeCDF	ng/kg	0.792 UB	16.2	0.052 U	3.16 J	2.04 UB	0.0979 UXA	138	0.278 J
1,2,3,4,7,8-HxCDF	ng/kg	1.07 J	80.6 XC	0.113 UB	19.5	2.78 UB	0.161 UB	660	0.943 J
1,2,3,6,7,8-HxCDF	ng/kg	0.415 UB	15.9	0.0747 UB	5.05	0.92 UB	0.13 UB	122	0.437 J
1,2,3,7,8,9-HxCDF	ng/kg	0.0597 UXA	0.707 UB	0.0574 U	0.659 UB	0.0795 UB	0.0626 U	4.96 J	0.084 J
2,3,4,6,7,8-HxCDF	ng/kg	0.264 UB	17.6	0.0558 U	1.75 J	0.635 UB	0.0608 U	148	0.322 J
1,2,3,4,6,7,8-HpCDF	ng/kg	2.15 UXA	91.1 UXA	0.421 UXA	18.9 UXA	4.31 UXA	0.536 UXA	712	3.23 J
1,2,3,4,7,8,9-HpCDF	ng/kg	0.422 UB	11.1	0.0529 U	6.36	0.937 J	0.118 UXA	92.6	0.568 J
Octa CDF	ng/kg	3.62 J	95.5	1.38 UB	45	7.58 J	1.27 UB	600	5.88 J

See notes at the end of tables

Attachment A-3
Lumbriculus Phase 1a Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

USACE ID		01					09				
Sample Name		1-1	1-2	1-3	1-4	1-5	9-1	9-2	9-3	9-4	9-5
Correlated Sediment ID		X900101	X900101	X900101	X900101	X900101	X900109	X900109	X900109	X900109	X900109
Date Collected	units	02-Dec-10	02-Dec-10	02-Dec-10	02-Dec-10	02-Dec-10	02-Dec-10	02-Dec-10	02-Dec-10	02-Dec-10	02-Dec-10
Lipids	%	1.5	1.6	1.8	2.2	1.5	1.5	1.5	1.3	1.5	1.4
BZ#77	ug/kg	12 QJ	11 QJ	23 QJ	17 QJ	19 QJ	0.73 U	1.2 U	1.1 U	0.99 U	0.87 U
BZ#81	ug/kg	8.1 U	3.9 U	7.6 U	18 U	6.2 U	0.73 U	1.2 U	1.1 U	0.99 U	0.87 U
BZ#105	ug/kg	4.8 QJ	5.6	6.2 QJ	4.3 QJ	2.9 QJ	0.089 QJ	0.14 QJ	1.1 U	0.99 U	0.052 J
BZ#114	ug/kg	18	16	24	25	6.2 U	0.12 QJ	1.2 U	1.1 U	0.99 U	0.87 U
BZ#118	ug/kg	150	140	190	220	160	1.2	1.1 J	0.37 J	0.23 QJ	0.13 QJ
BZ#123	ug/kg	2.8 QJ	1.8 J	13	12 J	4.2 J	0.045 QJ	1.2 U	1.1 U	0.99 U	0.87 U
BZ#126	ug/kg	8.1 U	0.73 QJ	7.6 U	1.7 QJ	6.2 U	0.73 U	1.2 U	1.1 U	0.99 U	0.87 U
BZ#153	ug/kg	960 J	870 J	1300 J	1400 J	1100 J	5.4 J	4.5 J	1.3 J	0.73 QJ	0.49 J
BZ#156	ug/kg	12 X	10 X	15 X	15 JX	11 X	0.089 JX	1.2 U	1.1 U	0.99 U	0.87 U
BZ#157	ug/kg	12 X	10 X	15 X	15 JX	11 X	0.089 JX	1.2 U	1.1 U	0.99 U	0.87 U
BZ#167	ug/kg	4.8 J	3.7 J	5.6 QJ	8 J	4.4 QJ	0.73 U	0.073 QJ	1.1 U	0.99 U	0.87 U
BZ#169	ug/kg	8.1 U	3.9 U	7.6 U	18 U	6.2 U	0.73 U	1.2 U	1.1 U	0.99 U	0.87 U
BZ#189	ug/kg	6.4 J	5.3	8	10 J	5.9 J	0.73 U	1.2 U	1.1 U	0.99 U	0.87 U
Total MonoCB	ug/kg	840 QJ	2900	3700	1000	2800	11 QJ	17	17	4.4	5.6 QJ
Total DiCB	ug/kg	6700 QJ	13000 QJ	18000 QJ	12000 QJ	13000 QJ	54 QJ	73 QJ	73 QJ	23 QJ	22 QJ
Total TriCB	ug/kg	11000 QJ	11000 QJ	23000	19000 QJ	15000 QJ	76 QJ	79 QJ	57 QJ	18 QJ	11 QJ
Total TetraCB	ug/kg	25000 QJ	21000 QJ	36000 QJ	33000 QJ	28000 QJ	130 QJ	120 QJ	40 QJ	14 QJ	7.1 QJ
Total PeCB	ug/kg	18000 QJ	14000 QJ	21000 QJ	20000 QJ	17000 QJ	81 QJ	66 QJ	20 QJ	5.9 QJ	3.6 QJ
Total HxCB	ug/kg	17000 QJ	15000 QJ	20000 QJ	21000 QJ	18000 QJ	84 QJ	72 QJ	17 QJ	5.4 QJ	3.5 QJ
Total HpCB	ug/kg	7500 QJ	6200 QJ	9800 QJ	11000	8300 QJ	36 QJ	32 QJ	7.1 QJ	2.4 QJ	1.6 QJ
Total OctaCB	ug/kg	1400 QJ	1100	2000	2200 QJ	1500	6.1 QJ	6.9 QJ	1.8 QJ	0.54 QJ	0.68 QJ
Total NonaCB	ug/kg	300	230	440	450	330	1.7 QJ	2	0.67 QJ	0.53 QJ	0.41 QJ
DecaCB	ug/kg	51	40	74	74	55	0.58 J	0.75 J	0.34 QJ	0.31 J	0.34 QJ
Total Homolog PCB	ug/kg	88000	84000	130000	120000	100000	480	470	230	74	56

Attachment A-3
Lumbriculus Phase 1a Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

USACE ID		13					20					25
Sample Name		13-1	13-2	13-3	13-4	13-5	20-1	20-2	20-3	20-4	20-5	25-COMPOSITE
Correlated Sediment ID		X900113	X900113	X900113	X900113	X900113	X900120	X900120	X900120	X900120	X900120	X900125
Date Collected	units	02-Dec-10	02-Dec-10	02-Dec-10	02-Dec-10	02-Dec-10	02-Dec-10	02-Dec-10	02-Dec-10	02-Dec-10	02-Dec-10	03-Dec-10
Lipids	%	1.6	1.4	1.6	1.4	1.5	1.5	1.4	1.8	1.5	2	2.9
BZ#77	ug/kg	13 QJ	11 QJ	12 QJ	12 QJ	12 QJ	2.4 QJ	3.6 QJ	3.3 QJ	3.2 QJ	4.3 QJ	26
BZ#81	ug/kg	1.2 J	2.6 U	1.9 U	0.81 QJ	0.7 QJ	0.28 J	2.1 U	6.6 U	2.1 U	1.7 U	14 U
BZ#105	ug/kg	6.9	5.9	5.5 QJ	5.8	5.9 QJ	1.6 J	2.3	2.2 QJ	3.1	4.6	49
BZ#114	ug/kg	13	11	12	12	9.6	4.4	7.4	7.6	8.2	10	16
BZ#118	ug/kg	160	140	160	170	150	16	28	29	24	38	550
BZ#123	ug/kg	2 QJ	3.6	1.5 QJ	1.8 QJ	2.9 J	0.42 J	0.35 QJ	0.46 QJ	0.81 QJ	1.7 J	5.3 QJ
BZ#126	ug/kg	0.59 QJ	1 J	7.1 QJ	1.3 QJ	0.39 QJ	0.1 QJ	2.7 QJ	0.35 QJ	0.39 J	0.31 QJ	1.8 QJ
BZ#153	ug/kg	610 J	510 J	570 J	540 J	510 J	110 J	190 J	210 J	180 J	280 J	1200 J
BZ#156	ug/kg	18 X	15 X	18 X	17 X	16 X	2.6 X	5 X	5.5 JX	4.4 X	7.2 X	41 X
BZ#157	ug/kg	18 X	15 X	18 X	17 X	16 X	2.6 X	5 X	5.5 JX	4.4 X	7.2 X	41 X
BZ#167	ug/kg	2.9 U	5.9	7.5	6.3	6.3	0.97 J	1.9 J	2.2 J	1.2 QJ	3	17
BZ#169	ug/kg	2.9 U	2.6 U	1.9 U	2.3 U	3 U	3 U	2.1 U	6.6 U	2.1 U	1.7 U	14 U
BZ#189	ug/kg	6.5	4.9	6.9	5.4	5.3	1.3 J	2.4	2.3 J	2.3	3.4	7.6 J
Total MonoCB	ug/kg	1600	990	1300	1200 QJ	990 QJ	280	400	890 QJ	660	1400 QJ	3100
Total DiCB	ug/kg	9000 QJ	5800 QJ	6500 EQJ	5600 QJ	5100 QJ	1500 QJ	2200 QJ	5800 QJ	2300 QJ	7000 EQJ	20000 QJ
Total TriCB	ug/kg	9300 QJ	6700 QJ	7200 QJ	7300 QJ	6600	1600 QJ	2700 QJ	4700 QJ	1900 QJ	5900 QJ	21000 QJ
Total TetraCB	ug/kg	8600 QJ	7300 QJ	7100 QJ	7600 QJ	7200 QJ	1800 QJ	3300 QJ	4300 QJ	2600 QJ	4900 QJ	18000 QJ
Total PeCB	ug/kg	9000 QJ	8000 QJ	8400 QJ	8900 QJ	8100 QJ	2100 QJ	3800 QJ	4000 QJ	3100 QJ	5100 QJ	14000 QJ
Total HxCB	ug/kg	10000 QJ	9100 QJ	9600 QJ	9800 QJ	9100 QJ	2700 QJ	4800 QJ	4800 QJ	4700 QJ	5900 QJ	13000 QJ
Total HpCB	ug/kg	6100 QJ	5100 QJ	5300 QJ	5300 QJ	4900 QJ	1800 QJ	3200 QJ	3200 QJ	2900 QJ	4100 QJ	9900 QJ
Total OctaCB	ug/kg	1200	920	1100	980	950	380	710	740	680 QJ	1100	1800 QJ
Total NonaCB	ug/kg	260	230	280	240	220	100	200	200	200	290	560
DecaCB	ug/kg	36	35	43	34	35	16	30	32	31	40	130
Total Homolog PCB	ug/kg	55000	44000	47000	47000	43000	12000	21000	29000	19000	36000	100000

Attachment A-3
Lumbriculus Phase 1a Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

USACE ID		27				28				
Sample Name		27-COMPOSITE	27-3	27-4	27-5	28-1	28-2	28-3	28-4	28-5
Correlated Sediment ID		X900127	X900127	X900127	X900127	X900128	X900128	X900128	X900128	X900128
Date Collected	units	03-Dec-10	03-Dec-10	03-Dec-10	03-Dec-10	03-Dec-10	03-Dec-10	03-Dec-10	03-Dec-10	03-Dec-10
Lipids	%	7.4	1.3	0.62	1.5	1.2	1.2	1.4	1.3	1.4
BZ#77	ug/kg	26 Q J	6.8 QJ	8.3 QJ	4.8 QJ	4.2	4.7	3.7	4.2 QJ	3.9
BZ#81	ug/kg	74 U	0.83 J	2.4 U	3.6 U	0.73 U	0.96 U	0.9 U	0.4 QJ	0.96 U
BZ#105	ug/kg	21 J	7.1	7.7	3.5 QJ	24	25	21	22	25
BZ#114	ug/kg	33 J	8	8.4	5.5	1.6	2	1.5	1.2	1.6
BZ#118	ug/kg	320	70	72	52	65	73	55	59	65
BZ#123	ug/kg	8.3 Q J	1.8 QJ	2 QJ	2.1 QJ	1.1	1.7 QJ	1.4 QJ	1.4 QJ	1.8
BZ#126	ug/kg	74 U	0.71 J	0.62 QJ	3.6 U	0.87 QJ	0.9 QJ	0.56 QJ	0.83 QJ	0.82 QJ
BZ#153	ug/kg	1500 J	370 J	370 J	290 J	110 J	130 J	95 J	100 J	91 J
BZ#156	ug/kg	38 JX	10 X	11 X	6.9 X	9.2 X	11 X	8.4 X	8.7 X	7.8 X
BZ#157	ug/kg	38 JX	10 X	11 X	6.9 X	9.2 X	11 X	8.4 X	8.7 X	7.8 X
BZ#167	ug/kg	18 J	3.9	4.2 QJ	2.8 J	3.2	3.6	3	3.1	2.9
BZ#169	ug/kg	74 U	3 U	2.4 U	3.6 U	0.73 U	0.96 U	0.9 U	0.85 U	0.96 U
BZ#189	ug/kg	15 J	4.1	4.3	2.5 J	0.66 J	0.81 J	0.65 J	0.68 J	0.59 J
Total MonoCB	ug/kg	790 Q	600	1600 QJ	370	8	12	5.4 QJ	4.1 QJ	3.4 QJ
Total DiCB	ug/kg	14000 Q	4000 QJ	9900 EQJ	3700 QJ	64 QJ	74 QJ	46 QJ	49 QJ	49 QJ
Total TriCB	ug/kg	29000 Q	4700 QJ	9900 QJ	4700 QJ	140 QJ	150 QJ	110 QJ	130 QJ	140 QJ
Total TetraCB	ug/kg	46000 Q	8900 QJ	13000 QJ	7800 QJ	520 QJ	540 QJ	420 QJ	500 QJ	440 QJ
Total PeCB	ug/kg	26000 Q	5600 QJ	6500 QJ	4600 QJ	610 QJ	650 QJ	510 QJ	560 QJ	570 QJ
Total HxCB	ug/kg	19000 Q	5300 QJ	4800 QJ	4000 QJ	590 QJ	670 QJ	540 QJ	580 QJ	530 QJ
Total HpCB	ug/kg	13000 Q	2900 QJ	2600 QJ	2400 QJ	310 QJ	380 QJ	270 QJ	300 QJ	280 QJ
Total OctaCB	ug/kg	3700 Q	780	780	600 QJ	94	110	89	92 QJ	84
Total NonaCB	ug/kg	1100	210	230	170	30	33	28	28	26
DecaCB	ug/kg	230	46	47	35	10	12	9.5	10	8.3
Total Homolog PCB	ug/kg	150000	33000	49000	28000	2400	2600	2000	2300	2100

Attachment A-3
Lumbriculus Phase 1a Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

USACE ID		33					Not Exposed				
Sample Name		33-1	33-2	33-3	33-4	33-5	INITIAL #1	INITIAL #2	INITIAL #3	INITIAL #4	INITIAL #5
Correlated Sediment ID		X900133	X900133	X900133	X900133	X900133	NA	NA	NA	NA	NA
Date Collected	units	03-Dec-10	03-Dec-10	03-Dec-10	03-Dec-10	03-Dec-10	04-Nov-10	04-Nov-10	04-Nov-10	04-Nov-10	04-Nov-10
Lipids	%	1.5	1.3	1	1.6	1.2	1.6	1.3	1.8	1.6	1.5
BZ#77	ug/kg	0.19 QJ	0.014 QJ	0.031 J	0.022 QJ	0.048 J	0.0047 QJ	0.0086 QJ	0.005 QJ	0.0049 QJ	0.0048 QJ
BZ#81	ug/kg	0.79 U	0.11 U	0.071 U	0.15 U	0.064 U	0.042 U	0.04 U	0.043 U	0.062 U	0.043 U
BZ#105	ug/kg	0.22 QJ	0.047 J	0.055 J	0.087 J	0.24	0.088	0.11	0.087	0.099	0.086
BZ#114	ug/kg	0.24 J	0.016 J	0.024 J	0.0092 QJ	0.025 J	0.004 QJ	0.0078 QJ	0.043 U	0.062 U	0.004 QJ
BZ#118	ug/kg	2.5	0.33	0.42	0.35	0.84	0.32	0.4	0.31	0.35	0.31
BZ#123	ug/kg	0.1 QJ	0.11 U	0.0076 QJ	0.15 U	0.0097 QJ	0.0019 QJ	0.003 QJ	0.004 J	0.0052 J	0.0033 J
BZ#126	ug/kg	0.79 U	0.11 U	0.0088 J	0.15 U	0.013 QJ	0.0031 QJ	0.0075 QJ	0.0044 J	0.0037 QJ	0.0043 J
BZ#153	ug/kg	9.6 J	0.74 J	1.2 J	0.64 J	1.7 J	0.56 J	0.73 J	0.56 J	0.63 J	0.56 J
BZ#156	ug/kg	0.27 JX	0.037 JX	0.042 JX	0.035 JX	0.12 X	0.015 QJX	0.027 JX	0.015 JX	0.016 QJX	0.015 JX
BZ#157	ug/kg	0.27 JX	0.037 JX	0.042 JX	0.035 JX	0.12 X	0.015 QJX	0.027 JX	0.015 JX	0.016 QJX	0.015 JX
BZ#167	ug/kg	0.085 J	0.012 J	0.016 J	0.013 QJ	0.038 QJ	0.0076 J	0.01 J	0.0051 QJ	0.005 QJ	0.0058 J
BZ#169	ug/kg	0.79 U	0.11 U	0.071 U	0.15 U	0.064 U	0.042 U	0.04 U	0.043 U	0.062 U	0.043 U
BZ#189	ug/kg	0.79 U	0.011 J	0.0089 QJ	0.15 U	0.0091 QJ	0.042 U	0.0026 QJ	0.043 U	0.062 U	0.043 U
Total MonoCB	ug/kg	100	1.3	3.6	1.6 QJ	5.1 QJ	0.022 QJ	0.035 QJ	0.019 J	0.054 J	0.024 J
Total DiCB	ug/kg	470 QJ	6.1 QJ	25	9.7 QJ	20 QJ	0.45 QJ	0.54 QJ	0.37 QJ	0.53 QJ	0.43 QJ
Total TriCB	ug/kg	320 QJ	6.2 QJ	27 QJ	8.6 QJ	12 QJ	0.56 QJ	0.76 QJ	0.53 QJ	0.61 QJ	0.56 QJ
Total TetraCB	ug/kg	290 QJ	5.2 QJ	26 QJ	7.3 QJ	12 QJ	0.72 QJ	0.95 QJ	0.68 QJ	0.82 QJ	0.68 QJ
Total PeCB	ug/kg	180 QJ	12 QJ	21 QJ	6.7 QJ	13 QJ	2 QJ	2.4 QJ	1.9 QJ	2.1 QJ	1.9 QJ
Total HxCB	ug/kg	140 QJ	10 QJ	17 QJ	5.5 QJ	13 QJ	2.3 QJ	3 QJ	2.2 QJ	2.5 QJ	2.2 QJ
Total HpCB	ug/kg	69 QJ	6.4 QJ	8.4 QJ	2.7 QJ	8 QJ	0.85 QJ	1.2 QJ	0.82 QJ	0.91 QJ	0.81 QJ
Total OctaCB	ug/kg	19 QJ	1.7 QJ	1.6 QJ	0.65 QJ	1.8 QJ	0.17 QJ	0.27 QJ	0.18 QJ	0.2 QJ	0.17 QJ
Total NonaCB	ug/kg	5.1 QJ	0.71 QJ	0.46	0.25	0.62 QJ	0.14 QJ	0.22	0.15	0.16	0.14
DecaCB	ug/kg	1.1	0.2	0.12	0.14 J	0.2	0.11	0.15	0.11	0.13	0.11
Total Homolog PCB	ug/kg	1600	50	130	43	86	7.3	9.5	7.0	8.0	7.0

See notes at the end of tables

Attachment A-4
Lumbriculus Phase 1b Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

USACE ID		02					11				
Sample Name		2-1	2-2	2-3	2-4	2-5	11-1	11-2	11-3	11-4	11-5
Correlated Sediment ID		X900202	X900202	X900202	X900202	X900202	X900211	X900211	X900211	X900211	X900211
Date Collected	units	4/27/2011	4/27/2011	4/27/2011	4/27/2011	4/27/2011	4/27/2011	4/27/2011	4/27/2011	4/27/2011	4/27/2011
Lipids	%	1.5	2.2	1.5	1.6	1.5	1.1	1.6	1.4	1.2	1.2
BZ#77	ug/kg	21	22 QJ	23	25	24	33	35	33	29	29
BZ#81	ug/kg	10 U	1.6 QJ	1.2 J	1.7 QJ	8.4 U	6.8 U	2.5 QJ	2.7 J	1.1 QJ	1.5 QJ
BZ#105	ug/kg	190	210	190	200	200	140	120	120	130	120
BZ#114	ug/kg	19 QJ	23	20	23	22	3.9 QJ	2.3 J	1.9 J	2.8 QJ	1.2 QJ
BZ#118	ug/kg	840	940	920	990	940	1500	1400	1300	1400	1300
BZ#123	ug/kg	17	17	15 QJ	18	15	6.8 U	34	26	28	45
BZ#126	ug/kg	10 U	11 U	7.2 U	9.3 U	8.4 U	0.75 QJ	6.6 U	6.6 U	5.8 U	13 U
BZ#153	ug/kg	850 J	920 J	910 J	1000 J	990 J	3300 J	3100 J	2900 J	3100 J	2900 J
BZ#156	ug/kg	59 X	67 X	62 X	66 X	69 X	96 X	96 X	84 X	92 X	82 X
BZ#157	ug/kg	59 X	67 X	62 X	66 X	69 X	96 X	96 X	84 X	92 X	82 X
BZ#167	ug/kg	15 QJ	18	19	22	22	40	36	33	36	31
BZ#169	ug/kg	10 U	11 U	7.2 U	9.3 U	8.4 U	6.8 U	6.6 U	6.6 U	5.8 U	13 U
BZ#189	ug/kg	3.8 J	3.2 J	4.3 J	4.3 QJ	4.7 QJ	20	17	17	18	16
Total MonoCB	ug/kg	1000	1400	1400 QJ	1000 QJ	1400 QJ	600	2100	1300	990	410 QJ
Total DiCB	ug/kg	5000 QJ	7000 QJ	6200 QJ	5100 QJ	5400 QJ	3500 QJ	7200 QJ	5000 QJ	3900	2800 QJ
Total TriCB	ug/kg	8800 QJ	11000 QJ	9500 QJ	9500 QJ	9000 QJ	13000 QJ	14000 QJ	12000 QJ	12000 QJ	11000 QJ
Total TetraCB	ug/kg	11000 QJ	14000 QJ	13000 QJ	14000 QJ	13000 QJ	33000 QJ	31000 QJ	29000 QJ	30000 QJ	28000 QJ
Total PeCB	ug/kg	13000 QJ	14000 QJ	14000 QJ	16000 QJ	14000 QJ	38000 QJ	35000 QJ	32000	34000 QJ	33000 QJ
Total HxCB	ug/kg	10000 QJ	11000 QJ	11000 QJ	13000 QJ	11000 QJ	40000 QJ	37000 QJ	34000 QJ	37000 QJ	34000 QJ
Total HpCB	ug/kg	3700 QJ	3900 QJ	4100 QJ	4700 QJ	4400 QJ	16000 QJ	15000 QJ	14000 QJ	16000 QJ	14000 QJ
Total OctaCB	ug/kg	680 QJ	710 QJ	700 QJ	810	800 QJ	2800	2500	2500	2700	2500
Total NonaCB	ug/kg	170	160	150	180	200	620	580	600	630	580
DecaCB	ug/kg	28	25	24	26	35	76	68	120	77	69
Total Homolog PCB	ug/kg	53000	63000	60000	64000	59000	150000	140000	130000	140000	130000

Attachment A-4
Lumbriculus Phase 1b Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

USACE ID		14					16				
Sample Name		14-1	14-2	14-3	14-4	14-5	16-1	16-2	16-3	16-4	16-5
Correlated Sediment ID		X900214	X900214	X900214	X900214	X900214	X900216	X900216	X900216	X900216	X900216
Date Collected	units	4/27/2011	4/27/2011	4/27/2011	4/27/2011	4/27/2011	4/28/2011	4/28/2011	4/28/2011	4/28/2011	4/28/2011
Lipids	%	1.5	1.5	1.5	1.3	1.5	1.2	1.5	1.8	1.7	1.5
BZ#77	ug/kg	5.9 J	8.4	7.8	5.7 QJ	6.7 J	0.57	0.54	0.53	0.58	0.52 QJ
BZ#81	ug/kg	0.71 QJ	1.1 QJ	1.5 J	1.1 QJ	0.72 QJ	0.092 QJ	0.058 QJ	0.063 J	0.036 QJ	0.043 QJ
BZ#105	ug/kg	8.5	7.2	17	9.5	8.2	9.6	8.8	8.5	9.2	9.7
BZ#114	ug/kg	1.6 J	8	4.7 QJ	0.54 QJ	3 J	0.64 QJ	0.65	0.54 QJ	0.58	0.31 QJ
BZ#118	ug/kg	290	320	280	270	300	27	27	23	26	26
BZ#123	ug/kg	6.3 QJ	4.7 J	9.1	6.4 J	6.9 QJ	0.52	0.3 QJ	0.53	0.55	0.59
BZ#126	ug/kg	6.5 U	6.6 U	6.7 U	6.6 U	7 U	0.056 QJ	0.066 QJ	0.062 QJ	0.044 QJ	0.47 U
BZ#153	ug/kg	2700 J	2800 J	2700 J	2600 J	2700 J	89 J	79 J	79 J	86 J	88 J
BZ#156	ug/kg	29 X	32 X	31 X	31 X	30 X	4.5 X	4.1 X	4.1 X	3.9 X	4.4 X
BZ#157	ug/kg	29 X	32 X	31 X	31 X	30 X	4.5 X	4.1 X	4.1 X	3.9 X	4.4 X
BZ#167	ug/kg	13	13 QJ	12	12	14	1.2	1.1	1.1	1	1.1
BZ#169	ug/kg	0.84 QJ	1.5 QJ	6.7 U	1.9 QJ	0.48 QJ	0.5 U	0.075 J	0.49 U	0.49 U	0.47 U
BZ#189	ug/kg	17	18	17	17	18	0.54	0.51 J	0.55	0.48 QJ	0.57
Total MonoCB	ug/kg	390	710 QJ	490	530	360 QJ	2.5 QJ	0.9 QJ	2.3 QJ	0.8 QJ	0.8 QJ
Total DiCB	ug/kg	2300 QJ	2900 QJ	2400 QJ	2800 QJ	2300 QJ	19 QJ	12 QJ	15 QJ	10 QJ	9.7 QJ
Total TriCB	ug/kg	7900	8000 QJ	6200 QJ	7100 QJ	6500 QJ	72 QJ	63 QJ	65 QJ	58 QJ	57 QJ
Total TetraCB	ug/kg	23000 QJ	24000 QJ	19000 QJ	21000 QJ	21000 QJ	390 QJ	340 QJ	350 QJ	350 QJ	350 QJ
Total PeCB	ug/kg	26000 QJ	27000 QJ	24000 QJ	24000 QJ	26000 QJ	520 QJ	480 QJ	480 QJ	500 QJ	520 QJ
Total HxCB	ug/kg	37000 QJ	39000 QJ	37000 QJ	37000 QJ	38000 QJ	640 QJ	550 QJ	560 QJ	620 QJ	640 QJ
Total HpCB	ug/kg	20000 QJ	21000 QJ	19000 QJ	19000 QJ	19000 QJ	280	260 QJ	250 QJ	280 QJ	290 QJ
Total OctaCB	ug/kg	3300	3300	3200	3300	3400	89	80	80	88 QJ	91
Total NonaCB	ug/kg	580	610	600	650	660	23	20	20	22	23
DecaCB	ug/kg	81	84	85	88	96	5.9	5.4	5.1	5.8	5.8
Total Homolog PCB	ug/kg	120000	130000	110000	120000	120000	2000	1800	1800	1900	2000

Attachment A-4
Lumbriculus Phase 1b Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

USACE ID		23					24					29				
Sample Name		23-1	23-2	23-3	23-4	23-5	24-1	24-2	24-3	24-4	24-5	29-1	29-2	29-3	29-4	29-5
Correlated Sediment ID		X900223	X900223	X900223	X900223	X900223	X900224	X900224	X900224	X900224	X900224	X900229	X900229	X900229	X900229	X900229
Date Collected	units	4/28/2011	4/28/2011	4/28/2011	4/28/2011	4/28/2011	4/28/2011	4/28/2011	4/28/2011	4/28/2011	4/28/2011	4/29/2011	4/29/2011	4/29/2011	4/29/2011	4/29/2011
Lipids	%	1.8	1.4	1.7	1.8	2.4	0.99	1.4	1.3	1.8	1.5	1.4	1.5	0.98	1.2	1.3
BZ#77	ug/kg	5.2	4.7	5.9	4.8	4.7	8.7	9.1	8.2	8.8	9.4	0.38 U	0.38 U	0.34 U	0.37 U	0.45 U
BZ#81	ug/kg	2.6 U	3.8 U	4.3 U	4.3 U	4.5 U	0.37 QJ	0.42 QJ	0.29 QJ	0.29 QJ	0.26 QJ	0.38 U	0.38 U	0.34 U	0.37 U	0.45 U
BZ#105	ug/kg	60	60	71	57	59	120	110	110	110	110	0.08 QJ	0.12 J	0.094 QJ	0.19 J	0.16 J
BZ#114	ug/kg	1.7 J	2.8 J	7.3 QJ	4.3 U	1.9 J	8.5	7.6	7.2	7.7	8.1	0.38 U	0.38 U	0.34 U	0.37 U	0.45 U
BZ#118	ug/kg	270	290	330	250	250	360	330	330	330	330	0.39	0.42	0.56	0.72	0.47
BZ#123	ug/kg	4.7	3.6 QJ	5.9 QJ	5.4	5.5	3.8 QJ	4.5 QJ	5.5	6	5.3 QJ	0.38 U	0.38 U	0.34 U	0.021 J	0.45 U
BZ#126	ug/kg	2.6 U	3.8 U	0.37 QJ	4.3 U	4.5 U	0.49 QJ	0.49 QJ	0.49 QJ	0.31 QJ	0.33 QJ	0.38 U	0.38 U	0.34 U	0.37 U	0.45 U
BZ#153	ug/kg	450 J	420 J	510 J	420 J	430 J	440 J	390 J	380 J	360 J	410 J	1.1 J	0.96 J	1.6 J	1.6 J	1.2 J
BZ#156	ug/kg	24 X	22 X	26 X	22 X	23 X	42 X	39 X	38 X	37 X	39 X	0.043 X	0.038 X	0.34 U	0.075 X	0.074 X
BZ#157	ug/kg	24 X	22 X	26 X	22 X	23 X	42 X	39 X	38 X	37 X	39 X	0.043 X	0.038 X	0.34 U	0.075 X	0.074 X
BZ#167	ug/kg	8.4	7.6	8.7	7.4	8.8	12	10	9.2	9.5	10	0.38 U	0.38 U	0.34 U	0.37 U	0.45 U
BZ#169	ug/kg	2.6 U	3.8 U	4.3 U	4.3 U	4.5 U	1.7 U	0.33 QJ	0.27 QJ	0.38 QJ	0.13 QJ	0.38 U	0.38 U	0.34 U	0.37 U	0.45 U
BZ#189	ug/kg	2.8	2.2 J	2.7 J	2.3 J	2 QJ	3.6	3.1	3	2.7	3.3	0.38 U	0.38 U	0.34 U	0.37 U	0.45 U
Total MonoCB	ug/kg	270	360 QJ	480	290 QJ	250	36	4.1 QJ	9.1 QJ	11	7.3 QJ	1.2	0.28 J	1.3	1.6	1.1
Total DiCB	ug/kg	1600 QJ	1800 QJ	2400 QJ	1500 QJ	1500 QJ	260 QJ	84 QJ	81 QJ	110 QJ	110 QJ	5.2 QJ	1.9 QJ	7.1 QJ	6.9 QJ	4.2 QJ
Total TriCB	ug/kg	2600 QJ	2600 QJ	3200 QJ	2400 QJ	2300 QJ	620 QJ	340 QJ	290 QJ	370 QJ	430 QJ	3.6	1.9 QJ	5.8 QJ	5.9 QJ	2.6 QJ
Total TetraCB	ug/kg	4000 QJ	3900 QJ	4600 QJ	3700	3700 QJ	1700 QJ	1200 QJ	1100 QJ	1200 QJ	1400 QJ	3.6 QJ	2.3 QJ	4.9 QJ	6.4 QJ	2.7 QJ
Total PeCB	ug/kg	5100 QJ	4800 QJ	5800 QJ	4600 QJ	4500 QJ	2800 QJ	2300 QJ	2300 QJ	2300 QJ	2400 QJ	4.5 QJ	3.5 QJ	5.8 QJ	8.2 QJ	4 QJ
Total HxCB	ug/kg	4900 QJ	4700 QJ	5400 QJ	4500 QJ	4400 QJ	2600 QJ	2200 QJ	2100 QJ	2000 QJ	2300 QJ	5.8 QJ	4.6 QJ	8.8 QJ	9.1 QJ	5.6 QJ
Total HpCB	ug/kg	2300 QJ	2200 QJ	2400 QJ	2200 QJ	2100 QJ	1100 QJ	860 QJ	870 QJ	860 QJ	940 QJ	3 QJ	2.3 QJ	5.3 QJ	4.6 QJ	3.1 QJ
Total OctaCB	ug/kg	530 QJ	460	510	490 QJ	510	410 QJ	370	370 QJ	380	380	1.1 QJ	1 QJ	1.9 QJ	2 QJ	1.5 QJ
Total NonaCB	ug/kg	130	120	130	140	140	140	130	130	130	130	0.82 QJ	0.65 QJ	1.1	1.2 QJ	1 QJ
DecaCB	ug/kg	22	19	19	24	24	39	40	41	45	40	0.44 QJ	0.41 QJ	0.52	0.75	0.69
Total Homolog PCB	ug/kg	21000	21000	25000	20000	19000	9700	7500	7300	7400	8100	29	19	43	47	26

Attachment A-4
Lumbriculus Phase 1b Data

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

USACE ID		33					Not Exposed				
Sample Name		33-1	33-2	33-3	33-4	33-5	INITIAL 1	INITIAL 2	INITIAL 3	INITIAL 4	INITIAL 5
Correlated Sediment ID		X900233	X900233	X900233	X900233	X900233	NA	NA	NA	NA	NA
Date Collected	units	4/29/2011	4/29/2011	4/29/2011	4/29/2011	4/29/2011	3/30/2011	3/30/2011	3/30/2011	3/30/2011	3/30/2011
Lipids	%	0.74	1.7	1	1.1	1.3	2	1.7	1.7	1.1	1.5
BZ#77	ug/kg	1.5 U	0.33 U	0.27 U	0.36 U	0.35 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U
BZ#81	ug/kg	1.5 U	0.33 U	0.27 U	0.36 U	0.35 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U
BZ#105	ug/kg	1.5 U	0.072 J	0.032 QJ	0.039 QJ	0.036 QJ	0.084 J	0.1 J	0.11 J	0.091 J	0.074 QJ
BZ#114	ug/kg	1.5 U	0.33 U	0.27 U	0.36 U	0.35 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U
BZ#118	ug/kg	0.37 J	0.42	0.24 QJ	0.26 J	0.27 J	0.37	0.42	0.45	0.41	0.37 QJ
BZ#123	ug/kg	1.5 U	0.33 U	0.27 U	0.36 U	0.35 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U
BZ#126	ug/kg	1.5 U	0.33 U	0.27 U	0.36 U	0.35 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U
BZ#153	ug/kg	0.76 J	1 J	0.7 J	0.57 J	0.6 J	0.71 J	0.71 J	0.82 J	0.7 J	0.75 J
BZ#156	ug/kg	1.5 U	0.036 X	0.024 X	0.36 U	0.35 U	0.026 X	0.027 X	0.024 X	0.024 X	0.033 X
BZ#157	ug/kg	1.5 U	0.036 X	0.024 X	0.36 U	0.35 U	0.026 X	0.027 X	0.024 X	0.024 X	0.033 X
BZ#167	ug/kg	1.5 U	0.33 U	0.27 U	0.36 U	0.35 U	0.013 QJ	0.2 U	0.19 U	0.19 U	0.2 U
BZ#169	ug/kg	1.5 U	0.33 U	0.27 U	0.36 U	0.35 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U
BZ#189	ug/kg	1.5 U	0.33 U	0.27 U	0.36 U	0.35 U	0.21 U	0.2 U	0.19 U	0.19 U	0.2 U
Total MonoCB	ug/kg	0.26 QJ	0.79 QJ	0.69 QJ	0.82	0.23 QJ	0.21 U	0.0069 J	0.19 U	0.19 U	0.2 U
Total DiCB	ug/kg	2.7 QJ	4.4 QJ	3.6 QJ	4.1 QJ	2.1 QJ	0.14 QJ	0.18 QJ	0.12 QJ	0.069 QJ	0.064 QJ
Total TriCB	ug/kg	2.7 QJ	4.4 QJ	2.8 QJ	2.8 QJ	2.2 QJ	0.21 QJ	0.2 QJ	0.26 QJ	0.2 QJ	0.19 QJ
Total TetraCB	ug/kg	3.8 QJ	5.5 QJ	3.3 QJ	2.9 QJ	2.8 QJ	1.1 QJ	1.2 QJ	1.4 QJ	1.2 QJ	1.2 QJ
Total PeCB	ug/kg	3.9 QJ	6.8 QJ	3.8 QJ	2.7 QJ	3 QJ	2.1 QJ	2.4 QJ	2.5 QJ	2.2 QJ	2.1 QJ
Total HxCB	ug/kg	4.7 QJ	7.5 QJ	4.1 QJ	3.2 QJ	3.6 QJ	2.3 QJ	2.3 QJ	2.8 QJ	2.2 QJ	2.4 QJ
Total HpCB	ug/kg	1.7 QJ	3.8 QJ	1.7 QJ	1.4 QJ	1.5 QJ	0.42 QJ	0.44 QJ	0.58 QJ	0.4 QJ	0.5 QJ
Total OctaCB	ug/kg	0.12 QJ	0.96 QJ	0.42 QJ	0.34 QJ	0.37 QJ	0.1 J	0.057 QJ	0.13 QJ	0.13 QJ	0.11 QJ
Total NonaCB	ug/kg	0.18 QJ	0.31 QJ	0.17 QJ	0.16 QJ	0.1 J	0.077 QJ	0.04 J	0.1 J	0.041 QJ	0.086 QJ
DecaCB	ug/kg	0.063 QJ	0.089 QJ	0.055 QJ	0.07 J	0.056 QJ	0.059 J	0.049 QJ	0.046 QJ	0.045 QJ	0.067 QJ
Total Homolog PCB	ug/kg	20	35	21	18	16	6.5	6.9	7.9	6.5	6.7

See notes at the end of tables

Attachment A
Table Notes

Chemistry Data Report for Sediment Toxicity and Bioaccumulation Testing
Anniston PCB Site, Anniston, AL

1. Total PCBs – calculated as the sum of the detected analytes (non–detects considered 0)
2. Sediment data are reported on a dry weight basis
3. Biota data (*Lumbriculus*) are reported uncorrected for moisture or lipids

Data qualifiers

D	analyte result is calculated from a dilution
J	estimated value
N	presumptive evidence to make a tentative identification, the associated numerical value is an estimated concentration
U	analyte was analyzed for and not detected above the given reporting limit
UB	analyte considered non-detect at the listed value due to its presence in an associated blank
UXA	estimated maximum possible concentration (EMPC) / peak does not meet ratio identification criteria, report as non–detect
UY	analyte was analyzed for and not detected above the given reporting limit/peak is outside of expected retention time window (from internal standard), identification is uncertain
XC	EMPC / Merged Peak
Q	chromatographic data that does not meet all the qualitative criteria for a positive identification given in the method
X	chromatographically unresolved congeners
XA	EMPC / peak does not meet ratio identification criteria, report as non–detect
Y	peak is outside of expected retention time window (from internal standard), identification is uncertain

Abbreviations

BHC	benzene hexachloride
BZ	Ballschmiter–Zell designation for PCB congeners
CB	chlorinated biphenyl
CDD	chlorinated dibenzo–p–dioxin
CDF	chlorinated dibenzofuran
DDD	dichlorodiphenyldichloroethane
DDE	dichlorodiphenyldichloroethylene
DDT	dichlorodiphenyltrichloroethane
Hp	hepta
Hx	hexa
PCB	polychlorinated biphenyl
Pe	penta
T (CDD)	tetra
TOC	total organic carbon

Units

kg	kilogram
mg	milligram
ng	nanogram
ug	microgram
%	percent

ARCADIS

Attachment B

Analytical Results for Samples Collected During Exposure (USACE and USGS)

Attachment B

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Table 5. Blank equivalent concentrations (µg/L) of elements in USGS peeper blanks collected with the pore water sample set.

Comparison of loss on ignition (%), acid volatile sulfide (µmol/g dw), simultaneously extracted metals (µg/g dw) and SEM-AVS (µmol/g dw) values in Anniston sediments across individual toxicity tests.

Table 1. Percent moisture, loss on ignition, acid volatile sulfide (µmol/g dry wgt), and simultaneously extracted metals (µg/g dry wgt) in Anniston sediments.

Table 2. Concentrations of elements in a continuing calibration blank (CCB) and independent calibration verification standard (ICVS) ran every 10 samples during sediment SEM sample runs for Cu, Ni, Zn, Cd, and Pb. Results expressed as ng/mL.

Table 3. Concentrations of elements in a continuing calibration blank (CCB) and independent calibration verification standard (ICVS) ran every 10 samples during sediment SEM sample runs for Cu, Ni, Zn, Cd, and Pb. Results expressed as ng/mL.

Table 4. Performance of a standardized Na2S used for instrument calibration verification during AVS determination of sediments.

Table 5. Recoveries of elements from reference solutions used as laboratory control samples.

Table 6. Measured concentrations of sulfide in 1N HCl extracted sediment reference materials.

Table 7. Concentrations of elements from the 1N HCl extraction and analysis of a sediment reference material.

Table 8. Relative percent difference from the duplicate 1N HCL extraction and analysis of Anniston sediments for SEM.

Table 9. Relative percent difference from the duplicate 1N HCL extraction and determination of AVS in sediment.

Table 10. Relative percent difference from the duplicate analysis of sediment extract digestates.

Table 11. Relative percent difference from the duplicate analysis of sediment extract digestates.

Table 12. Spike recoveries for 1N HCL extracted blanks.

Table 13. Spike recoveries for 1N HCL extracted blanks.

Table 14. Percent recoveries of AVS and SEMs in post-extraction spikes.

Table 15. Percent recoveries of AVS and SEMs in post-extraction spikes.

Table 16. Interference checks for elements using dilution percent difference.

Table 17. Interference checks for elements using dilution percent difference.

Table 18. Recovery of Cu, Ni, Zn, Cd, and Pb from an interference check solution.

Table 19. Acid volatile sulfide blank equivalent concentrations (BEC).

Table 20. Elemental blank equivalent concentrations (BECs) for the sediment extraction procedure.

Table 21. Elemental blank equivalent concentrations (BECs) for reagent blanks.

Table 22. Instrumental and method detection limits for the AVS procedure.

Table 23. Instrument detection limits, method detection limits, and method quantitation limits for the sediment SEM

Anniston Cycle 1a SPME PCB Data – Midge

Anniston Cycle 1a SPME PCB Data – Hyalella

Anniston Cycle 1a SPME PCB Data – Lumbriculus

Anniston Cycle 1b SPME PCB Data – Midge

Anniston Cycle 1b SPME PCB Data – Hyalella

Anniston Cycle 1b SPME PCB Data – Lumbriculus

Note:

Files received in Excel format in e-mail from C. Ingersoll to H. Douglas 6/8/2011 and from Jeffery Stevens on 8/4/2011. Files were modified to include relevant data and formatted to print.

Concentrations of selected constituents in centrifuged/filtered pore waters of Cycle 1a sediment samples from Anniston PCB Site, Anniston, AL.

Samples collected 10-20-2010 and 10-21-2010. All concentrations in mg/L.

Field ID	CERC ID	DOC	S^{2-}	Ca	Fe	K	Mg	Mn	Na	Sr	F^-	Cl^-	NO_3^-	SO_4^{2-}
TX40-04-P	01	13.2	<0.01	25.4	23.5	2.7	10.1	1.3	2.7	0.079	0.3	3.8	<0.1	21.1
TX60-03-P	06	9.8	<0.01	53.0	14.0	2.1	12.8	1.5	3.0	0.100	<0.1	3.8	<0.1	7.9
TX30-03-P	07	17.7	<0.01	65.9	13.9	5.8	22.5	1.4	4.2	0.243	0.3	14.8	<0.1	8.8
TX50-01-P	08	61.8	<0.01	71.9	20.4	4.2	25.6	2.5	3.8	0.222	0.3	20.0	<0.1	9.5
TXR1-02-P	09	9.3	<0.01	45.5	13.4	3.0	20.9	10.7	2.4	0.101	0.1	2.9	<0.1	20.6
TX50-04-P	11	13.8	<0.01	49.9	19.5	3.2	15.6	1.9	3.3	0.182	0.3	5.1	<0.1	24.9
TX60-04-P	13	11.9	<0.01	33.6	17.2	2.3	12.3	1.7	3.4	0.125	0.2	4.4	<0.1	4.6
TX30-02-P	18	19.2	<0.01	86.5	20.3	6.8	35.5	1.2	4.7	0.272	0.3	41.4	<0.1[a]	7.2
TX50-02-P	19	81.8	<0.01	84.6	16.0	5.9	30.8	2.2	4.4	0.247	0.3	44.7	<0.1[a]	3.3
TX60-02-P	20	12.6	<0.01	30.1	4.6	2.3	15.9	0.7	3.8	0.132	0.3	4.3	<0.1	1.8
TX30-01-P	25	16.7	<0.01	43.6	15.3	3.7	15.1	1.5	3.1	0.201	0.3	7.1	<0.1	8.5
TX40-01-P	27	60.4	<0.01	15.0	28.0	3.2	6.8	2.5	9.6	0.080	0.6	4.8	0.1	8.2
TX20-01-P	28	11.4	<0.01	56.6	36.1	10.8	18.9	15.4	7.2	0.132	0.1	7.6	<0.1	1.9
TX50-05-P	30	11.7	<0.01	64.8	16.8	2.8	17.4	4.7	3.3	0.222	0.4	6.3	<0.1[a]	10.2
Control (WB)	33	98.6	0.01	46.1	14.9	3.3	16.7	24.6	7.1	0.165	0.3	3.4	<0.1	9.3
BLK-1A	Filter/bottle blank	0.4	<0.01	<0.1	<0.02	<0.1	0.0	<0.002	1.1	<0.0005	0.1	0.2	<0.1	<0.1

Notes:

[a] analysis of sample exceeded recommended holding time of 48 hours for nitrate (by approx 48 hours).

Concentrations of selected constituents in filtered pore waters of Cycle 1b sediment samples from Anniston PCB Site, Anniston, AL.

All samples collected 1/10/2011. All concentrations in mg/L

Field ID	CERC ID	DOC	S^{2-}	Ca	Fe	K	Mg	Mn	Na	Sr	F^-	Cl^-	NO_3^-	SO_4^{2-}
TX30-05-P	02	5.4	<0.01	44.2	16.1	2.1	15.9	2.44	3.6	0.295	0.16	4.2	nm	28.9
TXR1-03-P	04	6.9	<0.01	59.2	3.93	3.0	30.5	12.8	3.7	0.105	<0.10	3.0	nm	1.7
TXR1-06-P	10	8.4	<0.01	50.3	28.3	4.0	17.7	17.5	3.4	0.153	<0.10	2.8	nm	1.2
TX60-04-P	13	8.3	<0.01	28.5	17.8	1.7	10.7	1.62	3.4	0.0957	0.11	5.0	nm	24.1
TX40-05-P	14	14.4	<0.01	48.4	19.2	2.5	13.3	0.88	2.9	0.115	0.11	4.3	nm	11.9
TX40-03-P	15	25.1	<0.01	20.2	27.9	5.5	8.69	2.25	7.8	0.0991	0.27	5.7	nm	2.4
TX10-01-P	16	0.4	<0.01	11.6	<0.02	<0.1	2.06	0.04	3.3	0.028	<0.10	5.5	nm	32.7
TX40-02-P	17	14.7	0.02	21.2	25.0	2.3	7.24	2.11	2.8	0.066	<0.10	4.3	nm	9.9
TX60-02-P	20	5.6	<0.01	27.1	2.34	1.8	15.2	0.72	3.6	0.113	0.10	5.0	nm	70.0
TX60-01-P	21	4.4	<0.01	30.4	0.03	1.1	21.3	0.17	3.1	0.107	<0.10	4.2	nm	26.8
TXR1-04-P	22	8.7	<0.01	65.4	2.27	3.3	34.5	8.77	3.4	0.118	<0.10	3.6	nm	2.7
TX30-04-P	23	8.0	<0.01	31.1	17.8	2.0	12.5	1.64	3.4	0.181	0.16	4.7	nm	24.0
TX20-03-P	24	4.9	<0.01	58.2	5.06	4.9	18.4	13.8	7.3	0.115	<0.10	7.9	nm	1.1
TXR1-01-P	26	4.5	<0.01	44.0	3.08	3.4	20.9	5.38	3.4	0.0977	<0.10	3.7	nm	3.0
TX40-01-P	27	13.3	<0.01	13.0	26.4	2.1	6.18	2.44	6.8	0.0542	0.17	4.0	nm	13.2
TX20-01-P	28	7.0	<0.01	47.9	13.0	9.9	17.1	11.9	8.0	0.108	<0.10	9.5	nm	1.3
TXR1-05-P	29	8.9	<0.01	45.2	6.82	2.4	23.9	2.78	3.2	0.0754	<0.10	2.7	nm	2.3
Control (WB)	33	13.9	<0.01	29.0	11.0	1.7	11.2	15.7	7.8	0.104	0.11	3.5	nm	104
BLK 1B	Filter Blank	0.16	<0.01	<0.1	<0.02	<0.1	<0.01	<0.002	0.6	<0.0005	<0.10	0.3	nm	0.7

Comparison of selected constituents in centrifuged/filtered pore waters obtained from repeated sub-sampling of sediments from Anniston PCB Site, Anniston, AL.

Field ID	CERC ID	Cycle/Test	Sampling Date	DOC	S^{2-}	Ca	Fe	K	Mg	Mn	Na	Sr	F^-	Cl^-	NO_3^-	SO_4^{2-}
TX60-04-P	13	1a	10/20/2010	11.9	<0.01	33.6	17.2	2.3	12.3	1.7	3.4	0.125	0.20	4.4	<0.1	4.6
TX60-04-P	13	1b	1/10/2011	8.3	<0.01	28.5	17.8	1.7	10.7	1.6	3.4	0.096	0.11	5.0	nm	24.1
TX60-02-P	20	1a	10/20/2010	12.6	<0.01	30.1	4.6	2.3	15.9	0.7	3.8	0.132	0.30	4.3	<0.1	1.8
TX60-02-P	20	1b	1/10/2011	5.6	<0.01	27.1	2.3	1.8	15.2	0.7	3.6	0.113	0.10	5.0	nm	70.0
TX40-01-P	27	1a	10/20/2010	60.4	<0.01	15.0	28.0	3.2	6.8	2.5	9.6	0.080	0.60	4.8	0.1	8.2
TX40-01-P	27	1b	1/10/2011	13.3	<0.01	13.0	26.4	2.1	6.18	2.4	6.8	0.054	0.17	4.0	nm	13.2
TX20-01-P	28	1a	10/20/2010	11.4	<0.01	56.6	36.1	10.8	18.9	15.4	7.2	0.132	0.10	7.6	<0.1	1.9
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TX20-01-P	28	1b	1/10/2011	7.0	<0.01	47.9	13.0	9.9	17.1	11.9	8.0	0.108	<0.10	9.5	nm	1.3
Control (WB)	33	1a	10/20/2010	98.6	0.01	46.1	14.9	3.3	16.7	24.6	7.1	0.165	0.30	3.4	<0.1	9.3
Control (WB)	33	1b	1/10/2011	13.9	<0.01	29.0	11.0	1.7	11.2	15.7	7.8	0.104	0.11	3.5	nm	104

Anniston sediment cycle 1a toxicity testing, Day-21 pore-water element concentrations.
Samples obtained using in-situ peeper samplers; measurements using ICPMS semiquantitative scan. Values in bold type = CERC samples; non-bold=ERDC samples.

		Peeper Blanks								**Test species and sediment-peeper ID**			
		CERC			ERDC								
Element	units	**Blk-1**	**Blk-2**	**Blk-3**	Blk-1	Blk-2	Blk-3	Blk-4	Blk-5	**Midge-1**	HA-1	**Midge-6**	HA-6
Na	mg/L	**5**	**5**	**5**	6	6	6	6	6	**5**	8	**5**	10
Mg	mg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**4**	4	**5**	4
K	mg/L	**0.6**	**< 0.1**	**0.1**	0.1	< 0.1	0.2	0.1	0.1	**2**	2	**1**	2
Ca	mg/L	**0.1**	**< 0.1**	**0.1**	0.2	0.1	< 0.1	0.1	0.2	**15**	12	**23**	19
Al	µg/L	**15**	**9**	**17**	15	13	20	13	12	**19**	120	**3**	24
Li	µg/L	**0.3**	**< 0.1**	**0.3**	0.2	0.2	< 0.1	0.1	0.3	**0.2**	0.9	**0.5**	< 0.1
Be	µg/L	**0.2**	**< 0.1**	**0.2**	< 0.1	0.2	< 0.1	< 0.1	0.2	**0.2**	0.9	**0.5**	< 0.1
Ti	µg/L	**2**	**0.7**	**3**	0.3	1	3	< 0.1	1	**4**	5	**5**	6
V	µg/L	**0.5**	**0.5**	**1**	0.9	0.9	0.7	0.5	0.5	**2**	2	**0.4**	1
Cr	µg/L	**10**	**4**	**10**	10	7	< 0.1	5	7	**5**	9	**6**	9
Mn	µg/L	**29**	**15**	**14**	9	8	10	9	7	**930**	960	**720**	630
Fe	µg/L	**16**	**< 1**	**120**	< 1	< 1	< 1	< 1	< 1	**14,900**	14,300	**9,100**	8,100
Co	µg/L	**0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	0.1	0.1	< 0.1	**2**	3	**1**	1
Ni	µg/L	**1**	**1**	**0.9**	0.7	0.9	1	1	0.7	**2**	3	**2**	2
Cu	µg/L	**1**	**0.8**	**1**	1	1	1	2	6	**1**	2	**4**	0.7
Zn	µg/L	**16**	**15**	**15**	24	23	16	22	21	**5**	13	**7**	9
Ga	µg/L	**< 0.1**	**0.1**	**< 0.1**	0.1	0.1	0.1	0.1	< 0.1	**0.1**	0.2	**0.3**	0.3
Ge	µg/L	**0.1**	**< 0.1**	**< 0.1**	0.2	< 0.1	< 0.1	0.2	< 0.1	**0.1**	0.3	**0.3**	0.1
As*	µg/L	**0.5**	**0.1**	**0.4**	< 0.1	0.1	0.9	< 0.1	0.7	**24**	21	**14**	15
Rb	µg/L	**0.4**	**0.1**	**0.1**	0.1	< 0.1	< 0.1	< 0.1	< 0.1	**5**	6	**3**	3
Sr	µg/L	**< 1**	**< 1**	**< 1**	< 1	< 1	< 1	< 1	< 1	**48**	41	**49**	35
Y	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	0.1	**0.1**	0.4	**< 0.1**	< 0.1
Zr	µg/L	**< 0.1**	**< 0.1**	**0.3**	< 0.1	0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1
Nb	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Mo	µg/L	**0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**1**	5	**0.8**	3
Ru	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Pd	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ag	µg/L	**0.7**	**0.2**	**0.4**	0.3	0.3	0.6	0.2	0.2	**0.3**	0.6	**0.3**	0.2
Cd	µg/L	**0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	0.1
In	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Sn	µg/L	**3**	**2**	**< 0.1**	0.8	1	3	1	1	**0.5**	0.9	**0.6**	< 0.1
Sb	µg/L	**0.4**	**0.2**	**0.1**	< 0.1	0.1	0.4	< 0.1	< 0.1	**0.1**	0.1	**0.1**	0.1
Te	µg/L	**0.4**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	0.4	< 0.1	< 0.1	**< 0.1**	0.2	**< 0.1**	< 0.1
Cs	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ba	µg/L	**< 1**	**< 1**	**< 1**	< 1	< 1	< 1	< 1	< 1	**250**	310	**73**	61
La	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**0.1**	0.4	**< 0.1**	< 0.1
Ce	µg/L	**0.4**	**0.3**	**0.3**	0.1	0.1	0.1	0.1	0.1	**0.4**	1	**0.3**	0.2
Pr	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1
Nd	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**0.1**	0.5	**0.1**	< 0.1
Sm	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1
Eu	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1
Gd	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1
Tb	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Dy	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1
Ho	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Er	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Tm	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Yb	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Lu	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Hf	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ta	µg/L	**0.2**	**0.2**	**0.1**	0.1	0.1	0.3	< 0.1	< 0.1	**0.1**	0.2	**0.1**	0.1
W	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	0.1
Re	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Os	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ir	µg/L	**0.5**	**0.2**	**0.2**	< 0.1	< 0.1	0.6	< 0.1	< 0.1	**0.1**	< 0.1	**0.2**	< 0.1
Pt	µg/L	**0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Au	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Tl	µg/L	**0.3**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	1	**< 0.1**	< 0.1
Pb	µg/L	**0.2**	**< 0.1**	**0.1**	0.1	0.1	0.1	0.1	< 0.1	**0.2**	0.9	**0.1**	0.2
Bi	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	2	**< 0.1**	< 0.1
U	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1

Anniston sediment cycle 1a toxicity testing, Day-21 pore-water element concentrations.
Samples obtained using in-situ peeper samplers; measurements using ICPMS semiquantitative scan. Values in bold type = CERC samples; non-bold=ERDC samples.

		Test species and sediment-peeper ID											
Element	units	**Amph-6**	CD-6	**Midge-7**	HA-7	**Midge-8**	HA-8	**Midge-9**	HA-9	**Midge-11**	HA-11	**Amph-11**	CD-11
Na	mg/L	**6**	10	**6**	17	**6**	11	**6**	11	**6**	11	**6**	10
Mg	mg/L	**5**	5	**6**	8	**6**	7	**7**	6	**5**	4	**5**	5
K	mg/L	**1**	2	**2**	4	**3**	3	**1**	2	**2**	2	**2**	3
Ca	mg/L	**25**	24	**25**	31	**29**	29	**24**	17	**25**	18	**25**	23
Al	µg/L	**14**	40	**26**	41	**31**	31	**33**	23	**16**	110	**28**	21
Li	µg/L	**0.5**	0.3	**0.1**	0.7	**1**	0.6	**4**	2	**0.3**	0.3	**0.9**	0.4
Be	µg/L	**0.2**	< 0.1	**< 0.1**	0.2	**0.5**	0.2	**< 0.1**	0.4	**< 0.1**	0.2	**0.2**	< 0.1
Ti	µg/L	**7**	10	**4**	9	**5**	7	**4**	3	**4**	7	**4**	8
V	µg/L	**0.9**	1	**0.6**	1	**2**	1	**1**	0.6	**1**	1	**2**	0.9
Cr	µg/L	**11**	6	**7**	25	**11**	4	**8**	5	**9**	6	**12**	9
Mn	µg/L	**690**	750	**620**	1,100	**980**	1,100	**4,800**	4,900	**1,000**	800	**1,100**	1,100
Fe	µg/L	**8,200**	12,900	**10,000**	11,500	**14,100**	11,600	**16,900**	13,000	**12,700**	11,600	**12,500**	17,500
Co	µg/L	**1**	1	**1**	3	**2**	3	**5**	5	**3**	2	**2**	3
Ni	µg/L	**2**	3	**2**	3	**4**	4	**2**	3	**3**	2	**3**	2
Cu	µg/L	**0.6**	0.5	**0.7**	1	**1**	1	**2**	2	**0.5**	1	**0.8**	0.6
Zn	µg/L	**7**	21	**7**	37	**24**	13	**17**	29	**12**	32	**6**	9
Ga	µg/L	**0.7**	0.5	**0.3**	0.4	**0.4**	0.6	**0.6**	1	**0.4**	0.4	**0.2**	0.5
Ge	µg/L	**< 0.1**	0.2	**0.2**	0.2	**0.2**	0.2	**< 0.1**	0.2	**< 0.1**	0.3	**< 0.1**	< 0.1
As*	µg/L	**12**	14	**17**	28	**10**	13	**13**	14	**11**	9	**11**	18
Rb	µg/L	**2**	4	**5**	7	**5**	7	**3**	6	**5**	5	**4**	6
Sr	µg/L	**49**	48	**95**	120	**97**	91	**93**	51	**94**	70	**90**	92
Y	µg/L	**< 0.1**	0.1	**0.1**	0.1	**< 0.1**	0.1	**0.2**	0.1	**< 0.1**	0.2	**< 0.1**	0.1
Zr	µg/L	**< 0.1**	< 0.1	**0.3**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**0.1**	0.4	**< 0.1**	< 0.1
Nb	µg/L	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Mo	µg/L	**1**	1	**2**	4	**5**	3	**0.5**	1	**1**	1	**4**	2
Ru	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Pd	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ag	µg/L	**0.3**	0.2	**0.4**	0.3	**0.6**	0.3	**0.4**	0.2	**0.3**	0.3	**0.6**	0.2
Cd	µg/L	**< 0.1**	0.2	**< 0.1**	< 0.1	**0.6**	< 0.1	**< 0.1**	0.3	**< 0.1**	< 0.1	**0.1**	0.1
In	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Sn	µg/L	**< 0.1**	1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	0.9	**< 0.1**	1	**0.6**	1
Sb	µg/L	**0.1**	0.1	**0.2**	0.1	**0.1**	0.1	**0.1**	0.1	**0.1**	0.1	**0.1**	0.1
Te	µg/L	**< 0.1**	< 0.1	**< 0.1**	5	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	4
Cs	µg/L	**< 0.1**	0.1	**0.1**	0.1	**0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1
Ba	µg/L	**66**	140	**300**	480	**560**	650	**92**	82	**540**	550	**500**	740
La	µg/L	**< 0.1**	0.1	**0.1**	0.1	**< 0.1**	< 0.1	**0.2**	0.1	**< 0.1**	0.3	**< 0.1**	0.1
Ce	µg/L	**0.2**	0.4	**0.4**	0.5	**0.3**	0.3	**0.6**	0.3	**0.2**	0.9	**0.3**	0.2
Pr	µg/L	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**0.1**	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1
Nd	µg/L	**< 0.1**	0.2	**< 0.1**	0.2	**< 0.1**	< 0.1	**0.1**	< 0.1	**< 0.1**	0.2	**< 0.1**	< 0.1
Sm	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Eu	µg/L	**< 0.1**	< 0.1	**0.1**	0.1	**0.1**	0.1	**< 0.1**	< 0.1	**0.1**	0.1	**0.1**	0.1
Gd	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Tb	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Dy	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ho	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Er	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Tm	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Yb	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Lu	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Hf	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ta	µg/L	**< 0.1**	0.1	**0.1**	0.1	**0.3**	0.1	**0.1**	< 0.1	**0.1**	< 0.1	**0.2**	0.1
W	µg/L	**< 0.1**	< 0.1	**0.1**	< 0.1	**0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**0.1**	< 0.1
Re	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Os	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ir	µg/L	**< 0.1**	< 0.1	**0.1**	< 0.1	**0.1**	< 0.1	**0.1**	< 0.1	**0.1**	< 0.1	**< 0.1**	< 0.1
Pt	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Au	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Tl	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**0.8**	< 0.1	**0.1**	< 0.1	**< 0.1**	< 0.1	**0.7**	< 0.1
Pb	µg/L	**0.1**	0.5	**0.1**	0.9	**0.7**	0.6	**0.4**	1	**0.1**	1	**0.3**	0.2
Bi	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**2**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**2**	< 0.1
U	µg/L	**< 0.1**	< 0.1	**0.1**	0.1	**0.1**	0.1	**0.1**	< 0.1	**0.1**	< 0.1	**0.1**	< 0.1

Anniston sediment cycle 1a toxicity testing, Day-21 pore-water element concentrations.
Samples obtained using in-situ peeper samplers; measurements using ICPMS semiquantitative scan. Values in bold type = CERC samples; non-bold=ERDC samples.

		Test species and sediment-peeper ID											
Element	units	**Midge-18**	HA-18	CD-18	**Midge-19**	**Amph-19**	HA-19	**Midge-20**	HA-20	**Midge-25**	HA-25	**Amph-25**	CD-25
Na	mg/L	**7**	17	16	**6**	**7**	12	**5**	9	**5**	11	**6**	11
Mg	mg/L	**8**	7	7	**6**	**7**	6	**5**	5	**4**	5	**4**	4
K	mg/L	**3**	4	4	**3**	**3**	3	**1**	2	**2**	3	**2**	2
Ca	mg/L	**32**	29	29	**28**	**30**	25	**16**	12	**19**	16	**17**	16
Al	µg/L	**19**	32	18	**20**	**17**	24	**31**	43	**42**	47	**16**	63
Li	µg/L	**0.5**	0.5	0.2	**0.4**	**0.7**	0.4	**0.9**	1	**0.9**	0.8	**0.8**	0.6
Be	µg/L	**0.2**	< 0.1	< 0.1	**0.4**	**< 0.1**	< 0.1	**0.2**	< 0.1	**< 0.1**	0.4	**< 0.1**	< 0.1
Ti	µg/L	**6**	5	7	**6**	**4**	6	**1**	5	**2**	4	**4**	7
V	µg/L	**0.8**	1	1	**1**	**2**	1	**1**	0.6	**1**	2	**2**	2
Cr	µg/L	**13**	5	8	**8**	**10**	3	**6**	4	**6**	6	**8**	290
Mn	µg/L	**730**	670	500	**800**	**1,200**	790	**600**	540	**770**	830	**620**	680
Fe	µg/L	**9,700**	8,200	10,800	**8,800**	**8,000**	7,400	**1,400**	1,200	**9,600**	9,200	**8,700**	13,600
Co	µg/L	**3**	2	2	**2**	**3**	2	**2**	1	**2**	2	**2**	2
Ni	µg/L	**30**	4	3	**6**	**6**	6	**0.8**	2	**2**	2	**2**	5
Cu	µg/L	**1**	1	0.5	**2**	**0.5**	0.9	**0.8**	4	**0.6**	2	**0.6**	1
Zn	µg/L	**19**	9	9	**12**	**5**	26	**50**	29	**8**	36	**7**	28
Ga	µg/L	**0.5**	0.5	0.5	**0.4**	**0.3**	0.5	**0.1**	0.4	**0.4**	0.5	**0.4**	0.7
Ge	µg/L	**< 0.1**	0.2	0.2	**0.1**	**0.1**	0.3	**0.2**	0.3	**0.2**	< 0.1	**0.3**	0.1
As*	µg/L	**10**	12	8	**12**	**13**	11	**9**	11	**14**	12	**8**	14
Rb	µg/L	**6**	7	8	**6**	**5**	6	**4**	5	**5**	5	**3**	5
Sr	µg/L	**100**	88	96	**89**	**91**	70	**74**	54	**89**	74	**80**	78
Y	µg/L	**< 0.1**	0.1	0.1	**< 0.1**	**< 0.1**	0.1	**0.1**	0.1	**0.1**	0.1	**< 0.1**	0.1
Zr	µg/L	**< 0.1**	0.1	0.2	**< 0.1**	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**0.1**	< 0.1
Nb	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Mo	µg/L	**3**	3	3	**4**	**4**	4	**1**	3	**0.8**	2	**1**	3
Ru	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Pd	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ag	µg/L	**0.4**	0.3	0.4	**0.3**	**0.3**	0.3	**0.2**	0.1	**0.4**	0.2	**0.3**	0.1
Cd	µg/L	**0.1**	0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**0.1**	< 0.1	**< 0.1**	< 0.1	**0.1**	0.1
In	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Sn	µg/L	**0.5**	< 0.1	2	**< 0.1**	**< 0.1**	1	**0.8**	0.5	**< 0.1**	1	**0.6**	< 0.1
Sb	µg/L	**0.1**	0.1	0.1	**0.2**	**0.3**	0.1	**< 0.1**	0.1	**0.1**	< 0.1	**0.1**	0.2
Te	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	0.9	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Cs	µg/L	**0.1**	0.1	0.1	**0.1**	**0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	0.1
Ba	µg/L	**480**	480	620	**310**	**280**	280	**100**	100	**250**	290	**210**	240
La	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	0.1	**0.1**	0.2	**< 0.1**	0.2
Ce	µg/L	**0.2**	0.3	0.2	**0.2**	**0.2**	0.1	**0.2**	0.5	**0.3**	0.5	**0.2**	0.6
Pr	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	0.1
Nd	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	0.1	**0.1**	0.1	**< 0.1**	< 0.1
Sm	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Eu	µg/L	**0.1**	0.1	0.1	**< 0.1**	**0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Gd	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Tb	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Dy	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ho	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Er	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Tm	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Yb	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Lu	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Hf	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ta	µg/L	**0.1**	0.2	0.1	**< 0.1**	**0.1**	< 0.1	**0.1**	< 0.1	**0.1**	0.1	**0.1**	0.3
W	µg/L	**0.1**	0.1	< 0.1	**0.1**	**0.2**	0.2	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Re	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Os	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ir	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	0.4
Pt	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Au	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Tl	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Pb	µg/L	**0.2**	0.3	0	**0.7**	**0.3**	0.4	**0.1**	0.5	**0.3**	0.4	**0.1**	0
Bi	µg/L	**< 0.1**	< 0.1	< 0.1	**< 0.1**	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
U	µg/L	**0.1**	< 0.1	< 0.1	**0.1**	**0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1

Anniston sediment cycle 1a toxicity testing, Day-21 pore-water element concentrations.
Samples obtained using in-situ peeper samplers; measurements using ICPMS semiquantitative scan. Values in bold type = CERC samples; non-bold=ERDC samples.

		Test species and sediment-peeper ID							
Element	units	**Midge-30**	HA-30	**Amph-30**	CD-30	**Midge-33**	HA-33	**Amph-33**	CD-33
Na	mg/L	**6**	12	**6**	16	**7**	16	**7**	17
Mg	mg/L	**6**	5	**5**	6	**5**	4	**5**	5
K	mg/L	**2**	2	**2**	3	**2**	2	**2**	2
Ca	mg/L	**34**	23	**28**	29	**20**	15	**20**	15
Al	µg/L	**14**	77	**13**	22	**10**	13	**14**	18
Li	µg/L	**0.3**	1	**0.9**	0.9	**6**	4	**5**	4
Be	µg/L	**< 0.1**	0.2	**< 0.1**	< 0.1	**< 0.1**	0.2	**0.2**	< 0.1
Ti	µg/L	**5**	5	**7**	8	**7**	6	**6**	7
V	µg/L	**0.8**	1	**0.9**	0.8	**1**	1	**0.8**	2
Cr	µg/L	**< 0.1**	9	**6**	2	**< 0.1**	7	**8**	5
Mn	µg/L	**2,300**	2,000	**2,000**	2,100	**8,500**	6,900	**8,000**	7,600
Fe	µg/L	**11,800**	2,100	**9,700**	14,000	**13,200**	15,200	**12,000**	14,800
Co	µg/L	**3**	3	**2**	3	**0.9**	0.6	**1**	0.9
Ni	µg/L	**4**	6	**3**	2	**4**	3	**5**	3
Cu	µg/L	**1**	2	**0.7**	0.8	**1**	0.7	**0.8**	1
Zn	µg/L	**5**	58	**6**	18	**7**	16	**49**	13
Ga	µg/L	**0.7**	0.4	**0.5**	0.6	**1**	0.9	**1**	2
Ge	µg/L	**0.1**	< 0.1	**0.2**	0.2	**0.2**	0.2	**0.1**	0.3
As*	µg/L	**17**	15	**10**	24	**19**	29	**13**	33
Rb	µg/L	**5**	4	**4**	6	**3**	3	**3**	3
Sr	µg/L	**120**	80	**97**	110	**77**	54	**77**	62
Y	µg/L	**0.1**	0.2	**< 0.1**	0.1	**< 0.1**	0.1	**0.1**	0.1
Zr	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**0.1**	0.5
Nb	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Mo	µg/L	**2**	5	**1**	3	**17**	23	**18**	26
Ru	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Pd	µg/L	**< 0.1**	< 0.1	**0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ag	µg/L	**0.4**	0.4	**0.3**	0.4	**0.3**	0.3	**0.2**	0.2
Cd	µg/L	**0.1**	< 0.1	**< 0.1**	0.2	**0.1**	0.2	**0.3**	< 0.1
In	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Sn	µg/L	**1**	< 0.1	**< 0.1**	2	**< 0.1**	< 0.1	**< 0.1**	2
Sb	µg/L	**0.1**	0.2	**0.1**	0.1	**0.1**	0.1	**0.1**	< 0.1
Te	µg/L	**< 0.1**	< 0.1	**< 0.1**	0.7	**< 0.1**	0.4	**< 0.1**	0.5
Cs	µg/L	**0.1**	0.1	**< 0.1**	0.1	**0.1**	0.1	**0.1**	0.1
Ba	µg/L	**710**	700	**590**	740	**66**	59	**65**	67
La	µg/L	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1
Ce	µg/L	**0.2**	0.6	**0.2**	0.2	**0.2**	0.2	**0.2**	0.2
Pr	µg/L	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Nd	µg/L	**< 0.1**	0.3	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Sm	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Eu	µg/L	**< 0.1**	0.1	**0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Gd	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Tb	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Dy	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ho	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Er	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Tm	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Yb	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Lu	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Hf	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ta	µg/L	**0.1**	0.2	**0.1**	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1
W	µg/L	**< 0.1**	< 0.1	**0.1**	0.1	**< 0.1**	0.1	**< 0.1**	< 0.1
Re	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Os	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ir	µg/L	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Pt	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Au	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Tl	µg/L	**< 0.1**	0.7	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Pb	µg/L	**0.1**	2	**0.2**	0.7	**< 0.1**	0.2	**< 0.1**	0.3
Bi	µg/L	**< 0.1**	2	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
U	µg/L	**0.1**	0.1	**0.1**	< 0.1	**< 0.1**	< 0.1	**0.1**	< 0.1

* Semi-quantative measurements for As tend to be biased high (depending on sample constituents)

Anniston sediment cycle 1b toxicity testing, Day-21 pore-water element concentrations.
Samples obtained using in-situ peeper samplers; measurements using ICPMS semiquantitative scan. Values in bold

		peeper blanks						Testing Laboratory and sediment-peeper ID			
		CERC			ERDC						
Element	units	**BLK-1**	**BLK-2**	**BLK-3**	BLK-1	BLK-2	BLK-3	**CERC-2**	ERDC-2	**CERC-4**	ERDC-4
Na	mg/L	**6**	**6**	**6**	16	16	16	**7**	20	**7**	18
Mg	mg/L	**< 0.1**	**< 0.1**	**< 0.1**	0.4	0.2	0.2	**6**	6	**8**	9
K	mg/L	**< 0.1**	**< 0.1**	**< 0.1**	0.2	0.1	0.1	**2**	2	**1**	3
Ca	mg/L	**0.1**	**< 0.1**	**< 0.1**	0.4	0.2	0.1	**20**	13	**23**	15
Li	µg/L	**< 0.1**	**0.1**	**0.1**	0.5	0.3	0.3	**1**	1	**1**	3
Be	µg/L	**< 0.1**	**< 0.1**	**0.1**	0.1	< 0.1	< 0.1	**< 0.1**	0.1	**0.1**	< 0.1
Al	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	120	27	29	**< 0.1**	120	**< 0.1**	89
Ti	µg/L	**0.9**	**0.5**	**0.5**	1	0.7	0.7	**5**	7	**2**	5
V	µg/L	**0.1**	**0.2**	**0.2**	< 0.1	< 0.1	< 0.1	**0.2**	0.4	**0.3**	0.2
Cr	µg/L	**0.4**	**0.4**	**0.5**	0.7	0.6	0.6	**0.3**	0.6	**0.2**	0.7
Mn	µg/L	**0.1**	**0.1**	**0.1**	3	2	2	**1400**	1000	**7000**	4200
Fe	µg/L	**< 1**	**< 1**	**< 1**	170	180	170	**6500**	2400	**11500**	3200
Co	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	0.2	0.1	0.1	**2**	2	**5**	3
Ni	µg/L	**0.2**	**0.2**	**0.2**	4	2	3	**1**	4	**1**	3
Cu	µg/L	**0.2**	**0.2**	**0.1**	12	8	9	**0.7**	13	**0.3**	11
Zn	µg/L	**15**	**16**	**15**	61	47	46	**2**	39	**1**	28
Ga	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	0.1	0.1	0.1	**0.1**	0.3	**0.4**	0.4
Ge	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
As*	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	0.1	0.1	0.1	**13**	11	**21**	10
Rb	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	0.7	0.4	0.4	**3**	4	**4**	6
Sr	µg/L	**< 1**	**< 1**	**< 1**	8	3	2	**120**	86	**62**	54
Y	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	0.1	< 0.1	< 0.1	**< 0.1**	0.2	**0.2**	0.2
Zr	µg/L	**0.1**	**0.1**	**0.1**	0.2	0.3	0.3	**0.1**	0.2	**0.1**	0.2
Nb	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Mo	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	0.1	0.1	< 0.1	**2**	2	**1**	1
Ru	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Pd	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ag	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	0.1	0.1	0.1	**< 0.1**	0.1	**< 0.1**	0.1
Cd	µg/L	**0.1**	**< 0.1**	**< 0.1**	0.1	0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	0.1
In	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Sn	µg/L	**0.4**	**0.4**	**0.3**	5	4	5	**0.2**	12	**0.1**	9
Sb	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	0.1	< 0.1	0.1	**0.2**	0.1	**< 0.1**	< 0.1
Te	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Cs	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	0.1	< 0.1	< 0.1	**< 0.1**	0.1	**< 0.1**	0.1
Ba	µg/L	**0.3**	**0.1**	**0.1**	2	2	2	**240**	170	**92**	55
La	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	0.1	< 0.1	< 0.1	**< 0.1**	0.1	**0.2**	0.2
Ce	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	0.3	0.1	0.1	**0.1**	0.4	**0.5**	0.4
Pr	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**0.1**	0.1
Nd	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	0.1	< 0.1	< 0.1	**< 0.1**	0.2	**0.2**	0.2
Sm	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Eu	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Gd	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	0.1
Tb	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Dy	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ho	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Er	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Tm	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Yb	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Lu	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Hf	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ta	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
W	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**0.1**	0.1	**< 0.1**	< 0.1
Re	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Os	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ir	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Pt	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Au	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Tl	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Pb	µg/L	**0.1**	**0.1**	**0.1**	13	6	6	**0.2**	8	**0.1**	7
Bi	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	0.1	< 0.1	< 0.1	**< 0.1**	0.1	**< 0.1**	0.1
U	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	0.1

Anniston sediment cycle 1b toxicity testing, Day-21 pore-water element concentrations.
Samples obtained using in-situ peeper samplers; measurements using ICPMS semiquantitative scan. Values in bold

		Testing Laboratory and sediment-peeper ID									
Element	units	**CERC-10**	ERDC-10	**CERC-13**	ERDC-13	**CERC-14**	ERDC-14	**CERC-15**	ERDC-15	**CERC-16**	ERDC-16	**CERC-17**
Na	mg/L	**11**	20	**7**	18	**7**	16	**6**	17	**8**	19	**7**
Mg	mg/L	**12**	5	**6**	5	**5**	5	**4**	5	**4**	3	**5**
K	mg/L	**2**	2	**1**	2	**2**	3	**3**	5	**0.7**	1	**2**
Ca	mg/L	**38**	13	**16**	11	**20**	15	**10**	9	**17**	11	**14**
Li	µg/L	**6**	1	**0.9**	1	**0.7**	0.9	**0.6**	3	**0.3**	0.7	**0.4**
Be	µg/L	**0.1**	< 0.1	**0.1**	< 0.1	**0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1	**0.1**
Al	µg/L	**< 0.1**	75	**< 0.1**	76	**< 0.1**	160	**< 0.1**	130	**< 0.1**	220	**< 0.1**
Ti	µg/L	**3**	6	**5**	4	**4**	7	**2**	5	**0.5**	4	**5**
V	µg/L	**0.2**	0.2	**0.3**	0.7	**0.4**	0.7	**0.5**	0.9	**0.2**	0.5	**0.4**
Cr	µg/L	**0.2**	0.5	**0.4**	0.7	**< 0.1**	1	**0.2**	0.9	**< 0.1**	1	**0.1**
Mn	µg/L	**6100**	4600	**1100**	1100	**620**	550	**1200**	2400	**350**	25	**1100**
Fe	µg/L	**6900**	7700	**8000**	2000	**3700**	2600	**9500**	3000	**< 1**	480	**11500**
Co	µg/L	**3**	3	**3**	3	**3**	2	**5**	5	**1**	0.3	**2**
Ni	µg/L	**2**	3	**1**	3	**1**	4	**1**	4	**0.5**	3	**1**
Cu	µg/L	**0.4**	10	**0.4**	11	**0.3**	11	**0.2**	12	**0.3**	13	**0.3**
Zn	µg/L	**2**	27	**1**	29	**20**	35	**2**	33	**0.4**	32	**6**
Ga	µg/L	**0.4**	0.4	**0.1**	0.3	**0.1**	0.3	**0.2**	0.3	**< 0.1**	0.2	**0.1**
Ge	µg/L	**0.1**	< 0.1	**0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
As*	µg/L	**11**	12	**16**	9	**14**	12	**11**	5	**0.1**	0.3	**19**
Rb	µg/L	**3**	6	**3**	4	**3**	5	**6**	9	**2**	2	**4**
Sr	µg/L	**160**	46	**56**	39	**54**	42	**48**	43	**47**	29	**45**
Y	µg/L	**0.2**	0.2	**0.1**	0.1	**0.1**	0.3	**0.4**	0.5	**0.2**	0.4	**0.2**
Zr	µg/L	**0.1**	0.2	**0.1**	0.2	**0.1**	0.3	**0.1**	0.3	**0.1**	0.2	**0.1**
Nb	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Mo	µg/L	**0.6**	0.4	**1**	2	**2**	2	**0.6**	0.7	**0.1**	0.1	**2**
Ru	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Pd	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Ag	µg/L	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	1	**< 0.1**	0.8	**< 0.1**	0.1	**< 0.1**
Cd	µg/L	**0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1	**0.1**	< 0.1	**< 0.1**
In	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Sn	µg/L	**0.3**	8	**0.3**	9	**0.2**	9	**0.1**	11	**0.1**	13	**0.2**
Sb	µg/L	**< 0.1**	< 0.1	**0.1**	0.1	**0.1**	0.1	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**
Te	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Cs	µg/L	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**
Ba	µg/L	**71**	52	**200**	150	**190**	180	**41**	38	**29**	24	**52**
La	µg/L	**0.1**	0.2	**< 0.1**	0.1	**< 0.1**	0.3	**0.3**	0.4	**0.1**	0.3	**0.1**
Ce	µg/L	**0.2**	0.5	**0.1**	0.3	**0.1**	0.7	**0.9**	1	**0.1**	0.6	**0.2**
Pr	µg/L	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	0.1	**0.1**	0.1	**< 0.1**	0.1	**< 0.1**
Nd	µg/L	**0.1**	0.2	**< 0.1**	0.1	**< 0.1**	0.4	**0.4**	0.6	**0.1**	0.4	**0.1**
Sm	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Eu	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Gd	µg/L	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	0.1	**0.1**	0.1	**< 0.1**	0.1	**< 0.1**
Tb	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Dy	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	0.1	**0.1**	0.1	**< 0.1**	0.1	**< 0.1**
Ho	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Er	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Tm	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Yb	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Lu	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Hf	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Ta	µg/L	**0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
W	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Re	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Os	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Ir	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Pt	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Au	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Tl	µg/L	**< 0.1**	< 0.1	**0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**
Pb	µg/L	**0.1**	7	**0.2**	8	**0.3**	8	**0.2**	7	**< 0.1**	7	**0.4**
Bi	µg/L	**< 0.1**	0.1	**0.3**	0.4	**0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**
U	µg/L	**0.5**	0.1	**< 0.1**	< 0.1	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**

Anniston sediment cycle 1b toxicity testing, Day-21 pore-water element concentrations.
Samples obtained using in-situ peeper samplers; measurements using ICPMS semiquantitative scan. Values in bold

		Testing Laboratory and sediment-peeper ID										
Element	units	ERDC-17	**CERC-20**	ERDC-20	**CERC-22**	ERDC-22	**CERC-23**	ERDC-23	**CERC-24**	ERDC-24	**CERC-26**	ERDC-26
Na	mg/L	16	**7**	ns	**8**	20	**8**	22	**10**	21	**9**	20
Mg	mg/L	3	**8**	ns	**8**	7	**6**	9	**8**	6	**7**	7
K	mg/L	2	**2**	ns	**1**	3	**2**	3	**2**	3	**2**	3
Ca	mg/L	8	**20**	ns	**22**	14	**16**	18	**27**	13	**22**	12
Li	µg/L	0.8	**2**	ns	**1**	2	**0.8**	5	**4**	4	**2**	3
Be	µg/L	0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Al	µg/L	180	**< 0.1**	ns	**< 0.1**	53	**< 0.1**	250	**< 0.1**	64	**< 0.1**	100
Ti	µg/L	7	**3**	ns	**2**	4	**2**	12	**2**	3	**2**	5
V	µg/L	0.9	**0.3**	ns	**0.2**	0.1	**0.2**	1	**< 0.1**	0.1	**0.1**	0.2
Cr	µg/L	1	**2**	ns	**< 0.1**	0.4	**0.2**	0.9	**0.4**	1	**0.4**	2
Mn	µg/L	1000	**700**	ns	**4500**	3500	**910**	760	**6100**	3500	**3100**	2600
Fe	µg/L	6000	**2400**	ns	**7300**	5000	**4400**	6100	**2100**	410	**7000**	2300
Co	µg/L	2	**3**	ns	**3**	3	**3**	3	**4**	3	**3**	2
Ni	µg/L	4	**2**	ns	**1**	3	**1**	3	**2**	4	**1**	4
Cu	µg/L	12	**0.4**	ns	**0.2**	10	**0.3**	13	**0.3**	11	**0.2**	12
Zn	µg/L	39	**2**	ns	**0.3**	25	**8**	32	**< 0.1**	32	**2**	31
Ga	µg/L	0.3	**0.1**	ns	**0.2**	0.3	**0.2**	0.5	**0.3**	0.4	**0.2**	0.3
Ge	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
As*	µg/L	14	**16**	ns	**15**	11	**6**	9	**6**	2	**14**	8
Rb	µg/L	6	**4**	ns	**4**	6	**3**	6	**3**	5	**3**	5
Sr	µg/L	24	**86**	ns	**66**	42	**89**	95	**100**	44	**75**	44
Y	µg/L	0.5	**< 0.1**	ns	**0.1**	0.1	**0.1**	0.7	**< 0.1**	0.1	**0.1**	0.1
Zr	µg/L	0.2	**0.1**	ns	**0.1**	0.2	**0.1**	0.3	**0.1**	0.3	**0.1**	0.2
Nb	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Mo	µg/L	2	**3**	ns	**1**	1	**2**	1	**1**	2	**0.7**	0.8
Ru	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Pd	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ag	µg/L	0.1	**< 0.1**	ns	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1
Cd	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
In	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Sn	µg/L	8	**0.1**	ns	**0.2**	7	**0.1**	8	**2**	6	**0.1**	11
Sb	µg/L	0.1	**0.1**	ns	**< 0.1**	< 0.1	**0.1**	0.2	**0.1**	0.3	**< 0.1**	< 0.1
Te	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Cs	µg/L	0.1	**< 0.1**	ns	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1
Ba	µg/L	37	**71**	ns	**55**	46	**100**	100	**73**	57	**54**	39
La	µg/L	0.4	**< 0.1**	ns	**0.1**	0.1	**< 0.1**	0.6	**0.1**	0.1	**0.1**	0.1
Ce	µg/L	1	**< 0.1**	ns	**0.2**	0.3	**< 0.1**	2	**0.1**	0.2	**0.3**	0.3
Pr	µg/L	0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	0.2	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Nd	µg/L	0.6	**< 0.1**	ns	**0.1**	0.1	**< 0.1**	0.8	**< 0.1**	0.1	**0.1**	0.2
Sm	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Eu	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Gd	µg/L	0.2	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	0.2	**< 0.1**	< 0.1	**< 0.1**	0.1
Tb	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Dy	µg/L	0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ho	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Er	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Tm	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Yb	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Lu	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Hf	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ta	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
W	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**0.2**	0.1	**0.5**	0.2	**< 0.1**	< 0.1
Re	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Os	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ir	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Pt	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Au	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Tl	µg/L	< 0.1	**< 0.1**	ns	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Pb	µg/L	8	**0.1**	ns	**0.1**	6	**0.2**	8	**0.1**	7	**0.1**	8
Bi	µg/L	0.1	**< 0.1**	ns	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1
U	µg/L	0.1	**< 0.1**	ns	**0.1**	0.1	**< 0.1**	0.1	**0.1**	0.1	**0.1**	0.1

Anniston sediment cycle 1b toxicity testing, Day-21 pore-water element concentrations.
Samples obtained using in-situ peeper samplers; measurements using ICPMS semiquantitative scan. Values in bold

		Testing Laboratory and sediment-peeper ID							
Element	units	**CERC-27**	ERDC-27	**CERC-28**	ERDC-28	**CERC-29**	ERDC-29	**CERC-33**	ERDC-33
Na	mg/L	**7**	16	**8**	23	**8**	20	**9**	22
Mg	mg/L	**5**	4	**6**	8	**7**	6	**7**	6
K	mg/L	**2**	2	**3**	4	**1**	2	**2**	3
Ca	mg/L	**12**	6	**22**	14	**19**	12	**21**	14
Li	µg/L	**1**	0.8	**3**	4	**2**	2	**5**	6
Be	µg/L	**< 0.1**	< 0.1	**0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Al	µg/L	**< 0.1**	130	**< 0.1**	76	**< 0.1**	60	**< 0.1**	21
Ti	µg/L	**2**	5	**7**	8	**2**	4	**5**	5
V	µg/L	**0.6**	1	**0.2**	0.1	**0.2**	0.2	**0.4**	0.3
Cr	µg/L	**0.4**	0.9	**0.2**	0.7	**< 0.1**	0.4	**< 0.1**	0.4
Mn	µg/L	**2000**	1500	**4400**	3100	**1400**	1100	**10100**	7900
Fe	µg/L	**11200**	7800	**11200**	5000	**4500**	3000	**10300**	2800
Co	µg/L	**5**	2	**5**	4	**2**	2	**2**	2
Ni	µg/L	**1**	3	**1**	3	**1**	3	**3**	7
Cu	µg/L	**0.2**	11	**0.2**	10	**0.1**	10	**0.4**	8
Zn	µg/L	**1**	38	**< 0.1**	25	**8**	42	**4**	24
Ga	µg/L	**0.2**	0.3	**0.2**	0.3	**0.1**	0.2	**0.4**	0.5
Ge	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**0.1**	0.1
As*	µg/L	**16**	15	**8**	10	**10**	8	**20**	9
Rb	µg/L	**5**	6	**4**	5	**3**	4	**2**	3
Sr	µg/L	**49**	26	**75**	51	**56**	30	**83**	56
Y	µg/L	**0.2**	0.6	**0.1**	0.2	**0.1**	0.2	**0.1**	0.1
Zr	µg/L	**0.1**	0.2	**0.1**	0.1	**0.1**	0.2	**0.1**	0.2
Nb	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Mo	µg/L	**2**	2	**0.5**	0.9	**0.9**	1	**30**	28
Ru	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Pd	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ag	µg/L	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1
Cd	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**0.1**	< 0.1	**0.3**	0.1
In	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Sn	µg/L	**0.2**	10	**0.2**	7	**0.2**	6	**0.2**	4
Sb	µg/L	**0.1**	< 0.1	**0.1**	0.2	**< 0.1**	< 0.1	**0.1**	0.1
Te	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Cs	µg/L	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1
Ba	µg/L	**93**	71	**76**	51	**34**	31	**57**	46
La	µg/L	**0.1**	0.4	**0.1**	0.2	**< 0.1**	0.1	**< 0.1**	0.1
Ce	µg/L	**0.3**	1	**0.2**	0.4	**0.1**	0.3	**0.1**	0.1
Pr	µg/L	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Nd	µg/L	**0.2**	0.6	**0.1**	0.2	**0.1**	0.2	**< 0.1**	0.1
Sm	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Eu	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Gd	µg/L	**0.1**	0.2	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	< 0.1
Tb	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Dy	µg/L	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ho	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Er	µg/L	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Tm	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Yb	µg/L	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Lu	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Hf	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ta	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**0.1**	< 0.1	**< 0.1**	< 0.1
W	µg/L	**< 0.1**	< 0.1	**0.2**	0.4	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Re	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Os	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Ir	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Pt	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Au	µg/L	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Tl	µg/L	**0.1**	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1
Pb	µg/L	**0.1**	8	**0.1**	7	**< 0.1**	7	**0.1**	6
Bi	µg/L	**0.3**	0.1	**< 0.1**	0.4	**< 0.1**	0.1	**< 0.1**	0.1
U	µg/L	**< 0.1**	0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1

* Semi-quantative measurements for As tend to be biased high (depending on sample constituents)

Comparison of element concentrations in Day-21 test pore water across all six tests for control sediment 33.

Samples obtained using in-situ peeper samplers; measurements using ICPMS semiquantitative scan. Values in bold type = CERC samples; non-bold=ERDC samples.

		Peeper Blanks Cycle 1a								**Peeper blanks Cycle 1b**		
		CERC			ERDC					CERC		
Element	units	**Blk-1**	**Blk-2**	**Blk-3**	Blk-1	Blk-2	Blk-3	Blk-4	Blk-5	**BLK-1**	**BLK-2**	**BLK-3**
Na	mg/L	**5**	**5**	**5**	6	6	6	6	6	**6**	**6**	**6**
Mg	mg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
K	mg/L	**0.6**	**< 0.1**	**0.1**	0.1	< 0.1	0.2	0.1	0.1	**< 0.1**	**< 0.1**	**< 0.1**
Ca	mg/L	**0.1**	**< 0.1**	**0.1**	0.2	0.1	< 0.1	0.1	0.2	**0.1**	**< 0.1**	**< 0.1**
Al	µg/L	**15**	**9**	**17**	15	13	20	13	12	**< 0.1**	**0.1**	**0.1**
Li	µg/L	**0.3**	**< 0.1**	**0.3**	0.2	0.2	< 0.1	0.1	0.3	**< 0.1**	**< 0.1**	**0.1**
Be	µg/L	**0.2**	**< 0.1**	**0.2**	< 0.1	0.2	< 0.1	< 0.1	0.2	**< 0.1**	**< 0.1**	**< 0.1**
Ti	µg/L	**2**	**0.7**	**3**	0.3	1	3	< 0.1	1	**0.9**	**0.5**	**0.5**
V	µg/L	**0.5**	**0.5**	**1**	0.9	0.9	0.7	0.5	0.5	**0.1**	**0.2**	**0.2**
Cr	µg/L	**10**	**4**	**10**	10	7	< 0.1	5	7	**0.4**	**0.4**	**0.5**
Mn	µg/L	**29**	**15**	**14**	9	8	10	9	7	**0.1**	**0.1**	**0.1**
Fe	µg/L	**16**	**< 1**	**120**	< 1	< 1	< 1	< 1	< 1	**< 1**	**< 1**	**< 1**
Co	µg/L	**0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	0.1	0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Ni	µg/L	**1**	**1**	**0.9**	0.7	0.9	1	1	0.7	**0.2**	**0.2**	**0.2**
Cu	µg/L	**1**	**0.8**	**1**	1	1	1	2	6	**0.2**	**0.2**	**0.1**
Zn	µg/L	**16**	**15**	**15**	24	23	16	22	21	**15**	**16**	**15**
Ga	µg/L	**< 0.1**	**0.1**	**< 0.1**	0.1	0.1	0.1	0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Ge	µg/L	**0.1**	**< 0.1**	**< 0.1**	0.2	< 0.1	< 0.1	0.2	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
As*	µg/L	**0.5**	**0.1**	**0.4**	< 0.1	0.1	0.9	< 0.1	0.7	**< 0.1**	**< 0.1**	**< 0.1**
Rb	µg/L	**0.4**	**0.1**	**0.1**	0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Sr	µg/L	**< 1**	**< 1**	**< 1**	< 1	< 1	< 1	< 1	< 1	**< 1**	**< 1**	**< 1**
Y	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	0.1	**< 0.1**	**< 0.1**	**< 0.1**
Zr	µg/L	**< 0.1**	**< 0.1**	**0.3**	< 0.1	0.1	< 0.1	< 0.1	< 0.1	**0.1**	**0.1**	**0.1**
Nb	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Mo	µg/L	**0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Ru	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Pd	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Ag	µg/L	**0.7**	**0.2**	**0.4**	0.3	0.3	0.6	0.2	0.2	**< 0.1**	**< 0.1**	**< 0.1**
Cd	µg/L	**0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	0.1	< 0.1	**0.1**	**< 0.1**	**< 0.1**
In	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Sn	µg/L	**3**	**2**	**< 0.1**	0.8	1	3	1	1	**0.4**	**0.4**	**0.3**
Sb	µg/L	**0.4**	**0.2**	**0.1**	< 0.1	0.1	0.4	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Te	µg/L	**0.4**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	0.4	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Cs	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Ba	µg/L	**< 1**	**< 1**	**< 1**	< 1	< 1	< 1	< 1	< 1	**0.3**	**0.1**	**0.1**
La	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Ce	µg/L	**0.4**	**0.3**	**0.3**	0.1	0.1	0.1	0.1	0.1	**< 0.1**	**< 0.1**	**< 0.1**
Pr	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Nd	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Sm	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Eu	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Gd	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Tb	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Dy	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Ho	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Er	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Tm	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Yb	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Lu	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Hf	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Ta	µg/L	**0.2**	**0.2**	**0.1**	0.1	0.1	0.3	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
W	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Re	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Os	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Ir	µg/L	**0.5**	**0.2**	**0.2**	< 0.1	< 0.1	0.6	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Pt	µg/L	**0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Au	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Tl	µg/L	**0.3**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
Pb	µg/L	**0.2**	**< 0.1**	**0.1**	0.1	0.1	0.1	0.1	< 0.1	**0.1**	**0.1**	**0.1**
Bi	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**
U	µg/L	**< 0.1**	**< 0.1**	**< 0.1**	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	**< 0.1**	**< 0.1**	**< 0.1**

Comparison of element concentrations in Day-21 test pore water across all six tests for control sediment 33.

Samples obtained using in-situ peeper samplers; measurements using ICPMS semiquantitative scan. Values in bold type = CERC samples; non-bold=ERDC samples.

		Peeper blanks Cycle 1b									
		ERDC			Cycle 1a				Cycle 1b		
Element	units	BLK-1	BLK-2	BLK-3	**Midge-33**	HA-33	**Amph-33**	CD-33	**CERC-33**	ERDC-33	ERDC-33 BLK-CORR
Na	mg/L	16	16	16	**7**	16	**7**	17	**9**	22	
Mg	mg/L	0.4	0.2	0.2	**5**	4	**5**	5	**7**	6	
K	mg/L	0.2	0.1	0.1	**2**	2	**2**	2	**2**	3	
Ca	mg/L	0.4	0.2	0.1	**20**	15	**20**	15	**21**	14	
Al	µg/L	0.5	0.3	0.3	**10**	13	**14**	18	**5**	6	
Li	µg/L	0.1	< 0.1	< 0.1	**6**	4	**5**	4	**< 0.1**	< 0.1	
Be	µg/L	120	27	29	**< 0.1**	0.2	**0.2**	< 0.1	**< 0.1**	21	-38
Ti	µg/L	1	0.7	0.7	**7**	6	**6**	7	**5**	5	
V	µg/L	< 0.1	< 0.1	< 0.1	**1**	1	**0.8**	2	**0.4**	0.3	
Cr	µg/L	0.7	0.6	0.6	**< 0.1**	7	**8**	5	**< 0.1**	0.4	
Mn	µg/L	3	2	2	**8,500**	6,900	**8,000**	7,600	**10100**	7900	
Fe	µg/L	170	180	170	**13,200**	15,200	**12,000**	14,800	**10300**	2800	
Co	µg/L	0.2	0.1	0.1	**0.9**	0.6	**1**	0.9	**2**	2	
Ni	µg/L	4	2	3	**4**	3	**5**	3	**3**	7	4
Cu	µg/L	12	8	9	**1**	0.7	**0.8**	1	**0.4**	8	-2
Zn	µg/L	61	47	46	**7**	16	**49**	13	**4**	24	-27
Ga	µg/L	0.1	0.1	0.1	**1**	0.9	**1**	2	**0.4**	0.5	
Ge	µg/L	< 0.1	< 0.1	< 0.1	**0.2**	0.2	**0.1**	0.3	**0.1**	0.1	
As*	µg/L	0.1	0.1	0.1	**19**	29	**13**	33	**20**	9	
Rb	µg/L	0.7	0.4	0.4	**3**	3	**3**	3	**2**	3	
Sr	µg/L	8	3	2	**77**	54	**77**	62	**83**	56	52
Y	µg/L	0.1	< 0.1	< 0.1	**< 0.1**	0.1	**0.1**	0.1	**0.1**	0.1	
Zr	µg/L	0.2	0.3	0.3	**< 0.1**	< 0.1	**0.1**	0.5	**0.1**	0.2	
Nb	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Mo	µg/L	0.1	0.1	< 0.1	**17**	23	**18**	26	**30**	28	
Ru	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Pd	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Ag	µg/L	0.1	0.1	0.1	**0.3**	0.3	**0.2**	0.2	**< 0.1**	0.1	
Cd	µg/L	0.1	0.1	< 0.1	**0.1**	0.2	**0.3**	< 0.1	**0.3**	0.1	
In	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Sn	µg/L	5	4	5	**< 0.1**	< 0.1	**< 0.1**	2	**0.2**	4	
Sb	µg/L	0.1	< 0.1	0.1	**0.1**	0.1	**0.1**	< 0.1	**0.1**	0.1	
Te	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	0.4	**< 0.1**	0.5	**< 0.1**	< 0.1	
Cs	µg/L	0.1	< 0.1	< 0.1	**0.1**	0.1	**0.1**	0.1	**< 0.1**	0.1	
Ba	µg/L	2	2	2	**66**	59	**65**	67	**57**	46	
La	µg/L	0.1	< 0.1	< 0.1	**< 0.1**	0.1	**< 0.1**	0.1	**< 0.1**	0.1	
Ce	µg/L	0.3	0.1	0.1	**0.2**	0.2	**0.2**	0.2	**0.1**	0.1	
Pr	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Nd	µg/L	0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	0.1	
Sm	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Eu	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Gd	µg/L	0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Tb	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Dy	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Ho	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Er	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Tm	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Yb	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Lu	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Hf	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Ta	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
W	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Re	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Os	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Ir	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Pt	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Au	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Tl	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	
Pb	µg/L	13	6	6	**< 0.1**	0.2	**< 0.1**	0.3	**0.1**	6	-2
Bi	µg/L	0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**< 0.1**	< 0.1	**< 0.1**	0.1	
U	µg/L	< 0.1	< 0.1	< 0.1	**< 0.1**	< 0.1	**0.1**	< 0.1	< 0.1	< 0.1	

* Semi-quantative measurements for As tend to be biased high (depending on sample constituents)

Table 1. Measured concentrations of elements in Anniston cycle 1a peeper pore water samples as determined by ICP-MS semi-quantitative scan. Units µg/L unless otherwise noted.

Element	53300 PPW Blk-1	53301 PPW Blk-2	53302 PPW Blk-3	53303 PPW Midge-1	53304 PPW Midge-6	53305 PPW Midge-7	53306 PPW Midge-8	53307 PPW Midge-9	53308 PPW Midge-11	53309 PPW Midge-18	53310 PPW Midge-19	53311 PPW Midge-20	53312 PPW Midge-25	53313 PPW Midge-30
Li	0.3	< 0.1	0.3	0.2	0.5	0.1	1	4	0.3	0.5	0.4	0.9	0.9	0.3
Be	0.2	< 0.1	0.2	0.2	0.5	< 0.1	0.5	< 0.1	< 0.1	0.2	0.4	0.2	< 0.1	< 0.1
Na[a]	5	5	5	5	5	6	6	6	6	7	6	5	5	6
Mg[a]	< 0.1	< 0.1	< 0.1	4.0	5.0	6.0	6.0	7.0	5.0	8.0	6.0	5.0	4.0	6.0
Al	15	9	17	19	3	26	31	33	16	19	20	31	42	14
K[a]	0.6	< 0.1	0.1	2	1	2	3	1	2	3	3	1	2	2
Ca[a]	0.1	< 0.1	0.1	15.0	23.0	25.0	29	24	25	32	28	16	19	34
Ti	2	0.7	3	4	5	4	5	4	4	6	6	1	2	5
V	0.5	0.5	1	2	0.4	0.6	2	1	1	0.8	1	1	1	0.8
Cr	10	4	10	5	6	7	11	8	9	13	8	6	6	< 0.1
Mn	29	15	14	930	720	620	980	4800	1000	730	800	600	770	2300
Fe	16	< 1	120	14900	9100	10000	14100	16900	12700	9700	8800	1400	9600	11800
Co	0.1	< 0.1	< 0.1	2	1	1	2	5	3	3	2	2	2	3
Ni	1	1	0.9	2	2	2	4	2	3	30	6	0.8	2	4
Cu	1	0.8	1	1	4	0.7	1	2	0.5	1	2	0.8	0.6	1
Zn	16	15	15	5	7	7	24	17	12	19	12	50	8	5
Ga	< 0.1	0.1	< 0.1	0.1	0.3	0.3	0.4	0.6	0.4	0.5	0.4	0.1	0.4	0.7
Ge	0.1	< 0.1	< 0.1	0.1	0.3	0.2	0.2	< 0.1	< 0.1	< 0.1	0.1	0.2	0.2	0.1
As	0.5	0.1	0.4	24	14	17	10	13	11	10	12	9	14	17
Rb	0.4	0.1	0.1	5	3	5	5	3	5	6	6	4	5	5
Sr	< 1	< 1	< 1	48	49	95	97	93	94	100	89	74	89	120
Y	< 0.1	< 0.1	< 0.1	0.1	< 0.1	0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	0.1	0.1	0.1
Zr	< 0.1	< 0.1	0.3	< 0.1	< 0.1	0.3	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1
Mo	0.1	< 0.1	< 0.1	1	0.8	2	5	0.5	1	3	4	1	0.8	2
Ru	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pd	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ag	0.7	0.2	0.4	0.3	0.3	0.4	0.6	0.4	0.3	0.4	0.3	0.2	0.4	0.4
Cd	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.6	< 0.1	< 0.1	0.1	< 0.1	0.1	< 0.1	0.1
In	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Sn	3	2	< 0.1	0.5	0.6	< 0.1	< 0.1	< 0.1	< 0.1	0.5	< 0.1	0.8	< 0.1	1

[a]units mg/L.

Table 1. Measured concentrations of elements in Anniston cycle 1a peeper pore water samples as determined by ICP-MS semi-quantitative scan. Units µg/L unless otherwise noted….(cont'd)….

Element	53300 PPW Blk-1	53301 PPW Blk-2	53302 PPW Blk-3	53303 PPW Midge-1	53304 PPW Midge-6	53305 PPW Midge-7	53306 PPW Midge-8	53307 PPW Midge-9	53308 PPW Midge-11	53309 PPW Midge-18	53310 PPW Midge-19	53311 PPW Midge-20	53312 PPW Midge-25	53313 PPW Midge-30
Sb	0.4	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	< 0.1	0.1	0.1
Te	0.4	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Cs	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1	< 0.1	< 0.1	0.1	0.1	< 0.1	< 0.1	0.1
Ba	< 1	< 1	< 1	250	73	300	560	92	540	480	310	100	250	710
La	< 0.1	< 0.1	< 0.1	0.1	< 0.1	0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1
Ce	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.6	0.2	0.2	0.2	0.2	0.3	0.2
Pr	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nd	< 0.1	< 0.1	< 0.1	0.1	0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1
Sm	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Eu	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1	< 0.1	0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1
Gd	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dy	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ho	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Er	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tm	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Yb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Lu	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hf	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ta	0.2	0.2	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	< 0.1	0.1	0.1	0.1
W	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1	< 0.1	< 0.1	0.1	0.1	< 0.1	< 0.1	< 0.1
Re	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Os	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ir	0.5	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pt	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Au	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tl	0.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.8	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pb	0.2	< 0.1	0.1	0.2	0.1	0.1	0.7	0.4	0.1	0.2	0.7	0.1	0.3	0.1
Bi	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1	0.1	0.1	0.1	0.1	< 0.1	< 0.1	0.1

Table 1. Measured concentrations of elements in Anniston cycle 1a peeper pore water samples as determined by ICP-MS semi-quantitative scan. Units µg/L unless otherwise noted….(cont'd)….

Element	53314 PPW Midge-33	53315 PPW Amph.-6	53316 PPW Amph.-11	53317 PPW Amph.-19	53318 PPW Amph.-25	53319 PPW Amph.-30	53320 PPW Amph.-33	53411 PPW Blk-1	53412 PPW Blk-2	53413 PPW Blk-3	53414 PPW Blk-4	53415 PPW Blk-5	53416 PPW Ha-1	53417 PPW Ha-6
Li	6	0.5	0.9	0.7	0.8	0.9	5	0.2	0.2	< 0.1	0.1	0.3	0.9	< 0.1
Be	< 0.1	0.2	0.2	< 0.1	< 0.1	< 0.1	0.2	< 0.1	0.2	< 0.1	< 0.1	0.2	0.9	< 0.1
Na[a]	7	6	6	7	6	6	7	6	6	6	6	6	8	10
Mg[a]	5	5	5	7	4	5	5	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	4	4
Al	10	14	28	17	16	13	14	15	13	20	13	12	120	24
K[a]	2	1	2	3	2	2	2	0.1	< 0.1	0.2	0.1	0.1	2	2
Ca[a]	20	25	25	30	17	28	20	0.2	0.1	< 0.1	0.1	0.2	12	19
Ti	7	7	4	4	4	7	6	0.3	1	3	< 0.1	1	5	6
V	1	0.9	2	2	2	0.9	0.8	0.9	0.9	0.7	0.5	0.5	2	1
Cr	< 0.1	11	12	10	8	6	8	10	7	< 0.1	5	7	9	9
Mn	8500	690	1100	1200	620	2000	8000	9	8	10	9	7	960	630
Fe	13200	8200	12500	8000	8700	9700	12000	< 1	< 1	< 1	< 1	< 1	14300	8100
Co	0.9	1	2	3	2	2	1	< 0.1	< 0.1	0.1	0.1	< 0.1	3	1
Ni	4	2	3	6	2	3	5	0.7	0.9	1	1	0.7	3	2
Cu	1	0.6	0.8	0.5	0.6	0.7	0.8	1	1	1	2	6	2	0.7
Zn	7	7	6	5	7	6	49	24	23	16	22	21	13	9
Ga	1	0.7	0.2	0.3	0.4	0.5	1	0.1	0.1	0.1	0.1	< 0.1	0.2	0.3
Ge	0.2	< 0.1	< 0.1	0.1	0.3	0.2	0.1	0.2	< 0.1	< 0.1	0.2	< 0.1	0.3	0.1
As	19	12	11	13	8	10	13	< 0.1	0.1	0.9	< 0.1	0.7	21	15
Rb	3	2	4	5	3	4	3	0.1	< 0.1	< 0.1	< 0.1	< 0.1	6	3
Sr	77	49	90	91	80	97	77	< 1	< 1	< 1	< 1	< 1	41	35
Y	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.4	< 0.1
Zr	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1
Nb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Mo	17	1	4	4	1	1	18	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	5	3
Ru	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pd	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ag	0.3	0.3	0.6	0.3	0.3	0.3	0.2	0.3	0.3	0.6	0.2	0.2	0.6	0.2
Cd	0.1	< 0.1	0.1	< 0.1	0.1	< 0.1	0.3	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	0.1
In	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Sn	< 0.1	< 0.1	0.6	< 0.1	0.6	< 0.1	< 0.1	0.8	1	3	1	1	0.9	< 0.1

[a]units mg/L.

Table 1. Measured concentrations of elements in Anniston cycle 1a peeper pore water samples as determined by ICP-MS semi-quantitative scan. Units µg/L unless otherwise noted….(cont'd)….

Element	53314 PPW Midge-33	53315 PPW Amph.-6	53316 PPW Amph.-11	53317 PPW Amph.-19	53318 PPW Amph.-25	53319 PPW Amph.-30	53320 PPW Amph.-33	53411 PPW Blk-1	53412 PPW Blk-2	53413 PPW Blk-3	53414 PPW Blk-4	53415 PPW Blk-5	53416 PPW Ha-1	53417 PPW Ha-6
Sb	0.1	0.1	0.1	0.3	0.1	0.1	0.1	< 0.1	0.1	0.4	< 0.1	< 0.1	0.1	0.1
Te	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.4	< 0.1	< 0.1	0.2	< 0.1
Cs	0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ba	66	66	500	280	210	590	65	< 1	< 1	< 1	< 1	< 1	310	61
La	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.4	< 0.1
Ce	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	1	0.2
Pr	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1
Nd	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.5	< 0.1
Sm	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1
Eu	< 0.1	< 0.1	0.1	0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1
Gd	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1
Tb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dy	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1
Ho	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Er	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tm	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Yb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Lu	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hf	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ta	< 0.1	< 0.1	0.2	0.1	0.1	0.1	< 0.1	0.1	0.1	0.3	< 0.1	< 0.1	0.2	0.1
W	< 0.1	< 0.1	0.1	0.2	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1
Re	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Os	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ir	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.6	< 0.1	< 0.1	< 0.1	< 0.1
Pt	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Au	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tl	< 0.1	< 0.1	0.7	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	1	< 0.1
Pb	< 0.1	0.1	0.3	0.3	0.1	0.2	< 0.1	0.1	0.1	0.1	0.1	< 0.1	0.9	0.2
Bi	< 0.1	< 0.1	2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	2	< 0.1
U	< 0.1	< 0.1	0.1	0.1	< 0.1	0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1

Table 1. Measured concentrations of elements in Anniston cycle 1a peeper pore water samples as determined by ICP-MS semi-quantitative scan. Units µg/L unless otherwise noted….(cont'd)….

Element	53418 PPW Ha-7	53419 PPW Ha-8	53420 PPW Ha-9	53421 PPW Ha-11	53422 PPW Ha-18	53423 PPW Ha-19	53424 PPW Ha-20	53425 PPW Ha-25	53426 PPW Ha-30	53427 PPW Ha-33	53428 PPW Cd-6	53429 PPW Cd-11	53430 PPW Cd-18	53431 PPW Cd-25	53432 PPW Cd-30	53433 PPW Cd-33
Li	0.7	0.6	2	0.3	0.5	0.4	1	0.8	1	4	0.3	0.4	0.2	0.6	0.9	4
Be	0.2	0.2	0.4	0.2	< 0.1	< 0.1	< 0.1	0.4	0.2	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Na	17	11	11	11	17	12	9	11	12	16	10	10	16	11	16	17
Mg	8	7	6	4	7	6	5	5	5	4	5	5	7	4	6	5
Al	41	31	23	110	32	24	43	47	77	13	40	21	18	63	22	18
K	4	3	2	2	4	3	2	3	2	2	2	3	4	2	3	2
Ca	31	29	17	18	29	25	12	16	23	15	24	23	29	16	29	15
Ti	9	7	3	7	5	6	5	4	5	6	10	8	7	7	8	7
V	1	1	0.6	1	1	1	0.6	2	1	1	1	0.9	1	2	0.8	2
Cr	25	4	5	6	5	3	4	6	9	7	6	9	8	290	2	5
Mn	1100	1100	4900	800	670	790	540	830	2000	6900	750	1100	500	680	2100	7600
Fe	11500	11600	13000	11600	8200	7400	1200	9200	2100	15200	12900	17500	10800	13600	14000	14800
Co	3	3	5	2	2	2	1	2	3	0.6	1	3	2	2	3	0.9
Ni	3	4	3	2	4	6	2	2	6	3	3	2	3	5	2	3
Cu	1	1	2	1	1	0.9	4	2	2	0.7	0.5	0.6	0.5	1	0.8	1
Zn	37	13	29	32	9	26	29	36	58	16	21	9	9	28	18	13
Ga	0.4	0.6	1	0.4	0.5	0.5	0.4	0.5	0.4	0.9	0.5	0.5	0.5	0.7	0.6	2
Ge	0.2	0.2	0.2	0.3	0.2	0.3	0.3	< 0.1	< 0.1	0.2	0.2	< 0.1	0.2	0.1	0.2	0.3
As	28	13	14	9	12	11	11	12	15	29	14	18	8	14	24	33
Rb	7	7	6	5	7	6	5	5	4	3	4	6	8	5	6	3
Sr	120	91	51	70	88	70	54	74	80	54	48	92	96	78	110	62
Y	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Zr	< 0.1	< 0.1	< 0.1	0.4	0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	0.5
Nb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Mo	4	3	1	1	3	4	3	2	5	23	1	2	3	3	3	26
Ru	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pd	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ag	0.3	0.3	0.2	0.3	0.3	0.3	0.1	0.2	0.4	0.3	0.2	0.2	0.4	0.1	0.4	0.2
Cd	< 0.1	< 0.1	0.3	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.2	0.2	0.1	< 0.1	0.1	0.2	< 0.1
In	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Sn	< 0.1	< 0.1	0.9	1	< 0.1	1	0.5	1	< 0.1	< 0.1	1	1	2	< 0.1	2	2

Table 1. Measured concentrations of elements in Anniston cycle 1a peeper pore water samples as determined by ICP-MS semi-quantitative scan. Units µg/L unless otherwise noted….(cont'd)….

Element	53418 PPW Ha-7	53419 PPW Ha-8	53420 PPW Ha-9	53421 PPW Ha-11	53422 PPW Ha-18	53423 PPW Ha-19	53424 PPW Ha-20	53425 PPW Ha-25	53426 PPW Ha-30	53427 PPW Ha-33	53428 PPW Cd-6	53429 PPW Cd-11	53430 PPW Cd-18	53431 PPW Cd-25	53432 PPW Cd-30	53433 PPW Cd-33
Sb	0.1	0.1	0.1	0.1	0.1	0.1	0.1	< 0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	< 0.1
Te	5	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.9	< 0.1	< 0.1	0.4	< 0.1	4	< 0.1	< 0.1	0.7	0.5
Cs	0.1	0.1	< 0.1	0.1	0.1	0.1	< 0.1	< 0.1	0.1	0.1	0.1	< 0.1	0.1	0.1	0.1	0.1
Ba	480	650	82	550	480	280	100	290	700	59	140	740	620	240	740	67
La	0.1	< 0.1	0.1	0.3	< 0.1	< 0.1	0.1	0.2	0.1	0.1	0.1	0.1	< 0.1	0.2	0.1	0.1
Ce	0.5	0.3	0.3	0.9	0.3	0.1	0.5	0.5	0.6	0.2	0.4	0.2	0.2	0.6	0.2	0.2
Pr	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1
Nd	0.2	< 0.1	< 0.1	0.2	< 0.1	< 0.1	0.1	0.1	0.3	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Sm	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Eu	0.1	0.1	< 0.1	0.1	0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	0.1	0.1	< 0.1	0.1	< 0.1
Gd	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dy	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ho	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Er	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tm	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Yb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Lu	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hf	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ta	0.1	0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.3	< 0.1	< 0.1
W	< 0.1	0.1	< 0.1	< 0.1	0.1	0.2	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1
Re	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Os	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ir	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.4	< 0.1	< 0.1
Pt	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Au	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tl	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.7	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pb	0.9	0.6	1	1	0.3	0.4	0.5	0.4	2	0.2	0.5	0.2	0	0	0.7	0.3
Bi	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
U	0.1	0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Table 2. Percent relative standard deviation from repeated analysis of Trace Metals in Drinking Water Standard[a] during a semi-quantitative sample run of pore water samples. Results expressed in ng/mL unless otherwise noted.

Ele.	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Run #7	Actual Conc	Mean Conc	SD	% RSD
Li	20.8	20.0	20.6	21.0	20.3	19.8	19.9	20.	20.3	0.5	2.4
Be	20.6	20.0	20.4	20.7	19.6	20.5	20.3	20.	20.3	0.4	1.8
Na[b]	6.1	6.1	6.3	6.4	6.2	6.6	6.4	6.0	6.3	0.2	3.1
Mg[b]	9.4	9.5	9.8	9.9	9.3	9.9	10.0	9.0	9.7	0.3	2.8
Al	126.	125.	125.	129.	126.	130.	131.	120.	127.5	2.3	1.8
K[b]	3.5	3.4	3.5	3.5	3.5	3.5	3.5	2.5	3.5	0.1	1.5
Ca[b]	35.9	34.7	36.1	36.4	35.2	36.3	35.4	35.	35.7	0.6	1.8
V	29.6	29.5	30.1	29.7	29.1	30.6	29.6	30.	29.7	0.5	1.6
Cr	20.7	20.3	20.7	21.0	19.7	20.9	20.0	20.	20.5	0.5	2.3
Mn	39.9	39.2	39.4	40.3	39.5	39.7	39.0	40.	39.6	0.4	1.1
Fe	163.	157.	166.	160.	154.	150.	156.	100.	158.1	5.5	3.5
Co	25.7	25.2	25.7	26.0	24.9	25.2	25.7	25.	25.5	0.4	1.6
Ni	59.9	61.3	62.2	61.1	58.2	61.0	60.2	60.	60.6	1.3	2.1
Cu	19.9	19.8	20.0	19.8	19.6	20.4	19.8	20.	19.9	0.2	1.3
Zn	70.1	69.6	69.4	70.0	68.1	69.5	67.8	70.	69.2	0.9	1.3
As	78.9	79.6	79.4	79.9	78.6	79.4	78.9	80.	79.2	0.5	0.6
Se	10.4	9.7	9.7	10.2	9.9	9.9	9.0	10.	9.8	0.5	4.6
Rb	10.8	10.7	10.4	10.8	9.0	10.9	9.2	10.	10.3	0.8	7.6
Sr	329.	331.	245.	249.	246.	332.	330.	250.	294.5	44.8	15.
Mo	100.	98.	100.	101.	99.	100.	100.	100.	99.8	0.9	0.9
Ag	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	0.0	0.8
Cd	10.3	10.3	10.0	10.5	10.1	10.2	10.2	10.	10.2	0.1	1.4
Sb	10.3	10.2	10.4	10.4	10.3	10.5	10.4	10.	10.4	0.1	0.9
Te	3.1	3.2	3.3	3.3	3.0	3.1	3.2	3.0	3.2	0.1	3.7
Ba	53.2	52.2	53.8	55.0	53.4	54.3	54.9	50.	53.8	1.0	1.8
Pr	10.5	10.4	10.7	10.7	10.6	10.5	10.7	10.	10.6	0.1	1.1
Tb	10.3	10.1	10.6	10.4	10.3	10.2	10.5	10.	10.3	0.2	1.5
Tm	10.2	10.0	10.3	10.2	10.0	10.3	10.1	10.	10.1	0.1	1.4
Ta	10.6	10.5	10.7	10.6	10.1	10.5	10.2	10.	10.5	0.2	1.9
Au	0.51	0.50	0.52	0.53	0.51	0.51	0.53	10.	0.5	0.0	2.2
Tl	10.24	10.2	10.7	10.5	10.4	10.4	10.3	10.	10.4	0.2	1.7
Pb	41.8	40.6	42.5	42.2	40.7	40.9	40.8	40.	41.3	0.8	2.0
Bi	8.7	8.4	8.8	8.6	8.6	8.6	8.6	10.	8.6	0.1	1.5
U	10.6	10.3	10.5	10.4	10.1	10.3	9.9	10.	10.3	0.3	2.5

[a]High Purity Trace Metals in Drinking Water, Cat # CRM-TMDW, Charleston, SC.; Pr, Tb, Tm, Ta, and Au manually added to represent rare earth region of the mass spectral range.

[b]concentrations are ppm (µg/mL)

Table 3. Recovery of elements from laboratory control samples determined with semi-quantitative analysis of pore water samples.

a. SPEX ClaritasPPT[a]

Element	Actual Conc	Meas Conc	% Rec
Be	50.	56.	112.
Na	500.	537.	107.
Mg	500.	434.	87.
Al	50.	62.	125.
K	500.	705.	141.
Ca	500.	572.	114.
Ti	50.	54.	109.
V	50.	53.	107.
Cr	50.	53.	106.
Mn	50.	53.	107.
Fe	500.	595.	119.
Co	50.	56.	112.
Ni	50.	56.	113.
Cu	50.	57.	113.
Zn	50.	60.	119.
As	50.	55.	109.
Se	50.	59.	118.
Sr	50.	50.	99.
Mo	50.	49.	98.
Ag	50.	54.	108.
Cd	50.	53.	107.
Sn	50.	58.	115.
Sb	50.	52.	105.
Ba	50.	55.	110.
Tl	50.	54.	109.
Pb	50.	56.	112.

[a] a mixture of SPEX Claritas PPT Instrument Check Standards 1 (CL-ICS-1), 3 (CL-ICS-3, and 5 (CL-ICS-5); SPEX CertiPrep, Inc., Metuchen, NJ; units ng/mL.

b. SPEX Custom Multielement Standards[b]

Element	Actual Conc	Meas Conc	% Rec
Pr	10.	10.1	101.
Tb	10.	9.7	97.
Tm	10.	9.8	98.
Ta	10.	11.1	111.
Ir	10.	9.9	99.

[b] a mixture of SPEX Custom Multielement Standards XCERCMO-1 and XCERCMO-2; SPEX CertiPrep, Inc., Metuchen, NJ; units ng/mL.

Table 4. Percent change in internal standards from beginning to end of the ICP-MS semi-quantitative run of pore water samples.

BID	Run Date	IS	Conc (ppb)	Matrix	Initial Intensity	End Intensity	% Change
12/19/10	12/22/10	Sc	10.	pore water	137388	120067	14.
12/19/10	12/22/10	Rh	10.	pore water	183773	153040	20.
12/19/10	12/22/10	Th	10.	pore water	229240	203067	13.

Table 5. Blank equivalent concentrations (µg/g) of elements in reagent/container blanks for the pore water sample set.

Element	BEC Blk 1	BEC Blk 2	BEC Blk 3
Li	0.3	< 0.1	0.3
Be	0.2	< 0.1	0.2
Na	5	5	5
Mg	< 0.1	< 0.1	< 0.1
Al	15	9	17
K	0.6	< 0.1	0.1
Ca	0.1	< 0.1	0.1
Ti	2.0	0.7	3
V	0.5	0.5	1
Cr	10	4	10
Mn	29	15	14
Fe	16	< 1	120
Co	0.1	< 0.1	< 0.1
Ni	1	1	0.9
Cu	1	0.8	1
Zn	16	15	15
Ga	< 0.1	0.1	< 0.1
Ge	0.1	< 0.1	< 0.1
As	0.5	0.1	0.4
Se	< 1	< 1	< 1
Rb	0.4	0.1	0.1
Sr	< 1	< 1	< 1
Y	< 0.1	< 0.1	< 0.1
Zr	< 0.1	< 0.1	0.3
Nb	< 0.1	< 0.1	< 0.1
Mo	0.1	< 0.1	< 0.1
Ru	< 0.1	< 0.1	< 0.1
Pd	< 0.1	< 0.1	< 0.1
Ag	0.7	0.2	0.4
Cd	0.1	< 0.1	< 0.1
In	< 0.1	< 0.1	< 0.1
Sn	3	2	< 0.1
Sb	0.4	0.2	0.1
Te	0.4	< 0.1	< 0.1
Cs	< 0.1	< 0.1	< 0.1
Ba	< 1	< 1	< 1
La	< 0.1	< 0.1	< 0.1
Ce	0.4	0.3	0.3
Pr	< 0.1	< 0.1	< 0.1
Nd	< 0.1	< 0.1	< 0.1
Sm	< 0.1	< 0.1	< 0.1
Eu	< 0.1	< 0.1	< 0.1
Gd	< 0.1	< 0.1	< 0.1
Tb	< 0.1	< 0.1	< 0.1
Dy	< 0.1	< 0.1	< 0.1
Ho	< 0.1	< 0.1	< 0.1
Er	< 0.1	< 0.1	< 0.1
Tm	< 0.1	< 0.1	< 0.1
Yb	< 0.1	< 0.1	< 0.1
Lu	< 0.1	< 0.1	< 0.1
Hf	< 0.1	< 0.1	< 0.1
Ta	0.2	0.2	0.1
W	< 0.1	< 0.1	< 0.1
Re	< 0.1	< 0.1	< 0.1
Os	< 0.1	< 0.1	< 0.1
Ir	0.5	0.2	0.2
Pt	0.1	< 0.1	< 0.1
Au	< 0.1	< 0.1	< 0.1
Tl	0.3	< 0.1	< 0.1
Pb	0.2	< 0.1	0.1
Bi	< 0.1	< 0.1	< 0.1
U	< 0.1	< 0.1	< 0.1

Table 6. Blank equivalent concentrations (µg/g) of elements in reagent/container blanks for the pore water sample set.

Element	BEC Blk 1	BEC Blk 2	BEC Blk 3	BEC Blk 4	BEC Blk 5
Li	0.2	0.2	< 0.1	0.1	0.3
Be	< 0.1	0.2	< 0.1	< 0.1	0.2
Na	6	6	6	6	6
Mg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Al	15	13	20	13	12
K	0.1	< 0.1	0.2	0.1	0.1
Ca	0.2	0.1	< 0.1	0.1	0.2
Ti	0.3	1	3	< 0.1	1
V	0.9	0.9	0.7	0.5	0.5
Cr	10	7	< 0.1	5	7
Mn	9	8	10	9	7
Fe	< 1	< 1	< 1	< 1	< 1
Co	< 0.1	< 0.1	0.1	0.1	< 0.1
Ni	0.7	0.9	1	1	0.7
Cu	1	1	1	2	6
Zn	24	23	16	22	21
Ga	0.1	0.1	0.1	0.1	< 0.1
Ge	0.2	< 0.1	< 0.1	0.2	< 0.1
As	< 0.1	0.1	0.9	< 0.1	0.7
Se	< 1	< 1	< 1	< 1	< 1
Rb	0.1	< 0.1	< 0.1	< 0.1	< 0.1
Sr	< 1	< 1	< 1	< 1	< 1
Y	< 0.1	< 0.1	< 0.1	< 0.1	0.1
Zr	< 0.1	0.1	< 0.1	< 0.1	< 0.1
Nb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Mo	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ru	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pd	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ag	0.3	0.3	0.6	0.2	0.2
Cd	< 0.1	< 0.1	< 0.1	0.1	< 0.1
In	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Sn	0.8	1	3	1	1

Element	BEC Blk 1	BEC Blk 2	BEC Blk 3	BEC Blk 4	BEC Blk 5
Sb	< 0.1	0.1	0.4	< 0.1	< 0.1
Te	< 0.1	< 0.1	0.4	< 0.1	< 0.1
Cs	< 0.1	0.1	< 0.1	< 0.1	< 0.1
Ba	< 1	< 1	< 1	< 1	< 1
La	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ce	0.1	0.1	0.1	0.1	0.1
Pr	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nd	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Sm	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Eu	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Gd	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dy	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ho	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Er	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tm	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Yb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Lu	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hf	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ta	0.1	0.1	0.3	< 0.1	< 0.1
W	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Re	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Os	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ir	< 0.1	< 0.1	0.6	< 0.1	< 0.1
Pt	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Au	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tl	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pb	0.1	0.1	0.1	0.1	< 0.1
Bi	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Table 1. Measured concentrations of elements in Anniston cycle 1b peeper samples as determined by ICP-MS semi-quantitative scan. Units µg/L unless otherwise noted.

	53992 PW BLK-1	53993 PW BLK-2	53994 PW BLK-3	53995 PW-2	53996 PW-4	53997 PW-10	53998 PW-13	53999 PW-14	54000 PW-15	54001 PW-16	54002 PW-17	54003 PW-20	54004 PW-22	54005 PW-23	54006 PW-24
Li	< 0.1	0.1	0.1	1	1	6	0.9	0.7	0.6	0.3	0.4	2	1	0.8	4
Be	< 0.1	< 0.1	0.1	< 0.1	0.1	0.1	0.1	0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1
Na[a]	6	6	6	7	7	11	7	7	6	8	7	7	8	8	10
Mg[a]	< 0.1	< 0.1	< 0.1	6	8	12	6	5	4	4	5	8	8	6	8
Al	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
K[a]	< 0.1	< 0.1	< 0.1	2	1	2	1	2	3	0.7	2	2	1	2	2
Ca[a]	0.1	< 0.1	< 0.1	20.0	23.0	38.0	16	20	10	17	14	20	22	16	27
Ti	0.9	0.5	0.5	5	2	3	5	4	2	0.5	5	3	2	2	2
V	0.1	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.5	0.2	0.4	0.3	0.2	0.2	< 0.1
Cr	0.4	0.4	0.5	0.3	0.2	0.2	0.4	< 0.1	0.2	< 0.1	0.1	2	< 0.1	0.2	0.4
Mn	0.1	0.1	0.1	1400	7000	6100	1100	620	1200	350	1100	700	4500	910	6100
Fe	< 1	< 1	< 1	6500	11500	6900	8000	3700	9500	< 1	11500	2400	7300	4400	2100
Co	< 0.1	< 0.1	< 0.1	2	5	3	3	3	5	1	2	3	3	3	4
Ni	0.2	0.2	0.2	1	1	2	1	1	1	0.5	1	2	1	1	2
Cu	0.2	0.2	0.1	0.7	0.3	0.4	0.4	0.3	0.2	0.3	0.3	0.4	0.2	0.3	0.3
Zn	15	16	15	2	1	2	1	20	2	0.4	6	2	0.3	8	< 0.1
Ga	< 0.1	< 0.1	< 0.1	0.1	0.4	0.4	0.1	0.1	0.2	< 0.1	0.1	0.1	0.2	0.2	0.3
Ge	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
As	< 0.1	< 0.1	< 0.1	13	21	11	16	14	11	0.1	19	16	15	6	6
Rb	< 0.1	< 0.1	< 0.1	3	4	3	3	3	6	2	4	4	4	3	3
Sr	< 1	< 1	< 1	120	62	160	56	54	48	47	45	86	66	89	100
Y	< 0.1	< 0.1	< 0.1	< 0.1	0.2	0.2	0.1	0.1	0.4	0.2	0.2	< 0.1	0.1	0.1	< 0.1
Zr	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Mo	< 0.1	< 0.1	< 0.1	2	1	0.6	1	2	0.6	0.1	2	3	1	2	1
Ru	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pd	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ag	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Cd	0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
In	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Sn	0.4	0.4	0.3	0.2	0.1	0.3	0.3	0.2	0.1	0.1	0.2	0.1	0.2	0.1	2

[a]units mg/L.

Table 1. Measured concentrations of elements in Anniston cycle 1b peeper samples as determined by ICP-MS semi-quantitative scan (cont'd). Units µg/L unless otherwise noted.

	53992 PW BLK-1	53993 PW BLK-2	53994 PW BLK-3	53995 PW-2	53996 PW-4	53997 PW-10	53998 PW-13	53999 PW-14	54000 PW-15	54001 PW-16	54002 PW-17	54003 PW-20	54004 PW-22	54005 PW-23	54006 PW-24
Sb	< 0.1	< 0.1	< 0.1	0.2	< 0.1	< 0.1	0.1	0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	0.1	0.1
Te	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Cs	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ba	0.3	0.1	0.1	240	92	71	200	190	41	29	52	71	55	100	73
La	< 0.1	< 0.1	< 0.1	< 0.1	0.2	0.1	< 0.1	< 0.1	0.3	0.1	0.1	< 0.1	0.1	< 0.1	0.1
Ce	< 0.1	< 0.1	< 0.1	0.1	0.5	0.2	0.1	0.1	0.9	0.1	0.2	< 0.1	0.2	< 0.1	0.1
Pr	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nd	< 0.1	< 0.1	< 0.1	< 0.1	0.2	0.1	< 0.1	< 0.1	0.4	0.1	0.1	< 0.1	0.1	< 0.1	< 0.1
Sm	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Eu	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Gd	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dy	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ho	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Er	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tm	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Yb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Lu	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hf	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ta	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
W	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.2	0.5
Re	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Os	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ir	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pt	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Au	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tl	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pb	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.3	0.2	< 0.1	0.4	0.1	0.1	0.2	0.1
Bi	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.3	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
U	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.5	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	0.1

Table 1. Measured concentrations of elements in Anniston cycle 1b peeper samples as determined by ICP-MS semi-quantitative scan (cont'd). Units µg/L unless otherwise noted.

	54007 PW-26	54008 PW-27	54009 PW-28	54010 PW-29	54011 PW-33	54176 ERDC BLK-1	54177 ERDC BLK-2	54178 ERDC BLK-3	54179 ERDC-2	54180 ERDC-4	54181 ERDC-10	54182 ERDC-13	54183 ERDC-14	54184 ERDC-15	54185 ERDC-16
Li	2	1	3	2	5	0.5	0.3	0.3	1	3	1	1	0.9	3	0.7
Be	< 0.1	< 0.1	0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	0.1	0.1	0.1
Na[a]	9	7	8	8	9	16	16	16	20	18	20	18	16	17	19
Mg[a]	7	5	6	7	7	0.4	0.2	0.2	6	9	5	5	5	5	3
Al	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	120	27	29	120	89	75	76	160	130	220
K[a]	2	2	3	1	2	0.2	0.1	0.1	2	3	2	2	3	5	1
Ca[a]	22	12	22	19	21	0.4	0.2	0.1	13	15	13	11	15	9	11
Ti	2	2	7	2	5	1	0.7	0.7	7	5	6	4	7	5	4
V	0.1	0.6	0.2	0.2	0.4	< 0.1	< 0.1	< 0.1	0.4	0.2	0.2	0.7	0.7	0.9	0.5
Cr	0.4	0.4	0.2	< 0.1	< 0.1	0.7	0.6	0.6	0.6	0.7	0.5	0.7	1	0.9	1
Mn	3100	2000	4400	1400	10100	3	2	2	1000	4200	4600	1100	550	2400	25
Fe	7000	11200	11200	4500	10300	170	180	170	2400	3200	7700	2000	2600	3000	480
Co	3	5	5	2	2	0.2	0.1	0.1	2	3	3	3	2	5	0.3
Ni	1	1	1	1	3	4	2	3	4	3	3	3	4	4	3
Cu	0.2	0.2	0.2	0.1	0.4	12	8	9	13	11	10	11	11	12	13
Zn	2	1	< 0.1	8	4	61	47	46	39	28	27	29	35	33	32
Ga	0.2	0.2	0.2	0.1	0.4	0.1	0.1	0.1	0.3	0.4	0.4	0.3	0.3	0.3	0.2
Ge	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
As	14	16	8	10	20	0.1	0.1	0.1	11	10	12	9	12	5	0.3
Rb	3	5	4	3	2	0.7	0.4	0.4	4	6	6	4	5	9	2
Sr	75	49	75	56	83	8	3	2	86	54	46	39	42	43	29
Y	0.1	0.2	0.1	0.1	0.1	0.1	< 0.1	< 0.1	0.2	0.2	0.2	0.1	0.3	0.5	0.4
Zr	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2
Nb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Mo	0.7	2	0.5	0.9	30	0.1	0.1	< 0.1	2	1	0.4	2	2	0.7	0.1
Ru	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pd	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ag	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1	0.8	0.1
Cd	< 0.1	< 0.1	< 0.1	0.1	0.3	0.1	0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1
In	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Sn	0.1	0.2	0.2	0.2	0.2	5	4	5	12	9	8	9	9	11	13

[a]units mg/L.

Table 1. Measured concentrations of elements in Anniston cycle 1b peeper samples as determined by ICP-MS semi-quantitative scan (cont'd). Units µg/L unless otherwise noted.

	54007 PW-26	54008 PW-27	54009 PW-28	54010 PW-29	54011 PW-33	54176 ERDC BLK-1	54177 ERDC BLK-2	54178 ERDC BLK-3	54179 ERDC-2	54180 ERDC-4	54181 ERDC-10	54182 ERDC-13	54183 ERDC-14	54184 ERDC-15	54185 ERDC-16
Sb	< 0.1	0.1	0.1	< 0.1	0.1	0.1	< 0.1	0.1	0.1	< 0.1	< 0.1	0.1	0.1	0.1	< 0.1
Te	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Cs	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Ba	54	93	76	34	57	2	2	2	170	55	52	150	180	38	24
La	0.1	0.1	0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	0.1	0.2	0.2	0.1	0.3	0.4	0.3
Ce	0.3	0.3	0.2	0.1	0.1	0.3	0.1	0.1	0.4	0.4	0.5	0.3	0.7	1	0.6
Pr	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1	< 0.1	0.1	0.1	0.1
Nd	0.1	0.2	0.1	0.1	< 0.1	0.1	< 0.1	< 0.1	0.2	0.2	0.2	0.1	0.4	0.6	0.4
Sm	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Eu	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1
Gd	< 0.1	0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	0.1	0.1	< 0.1	0.1	0.1	0.1
Tb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dy	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1	0.1
Ho	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Er	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tm	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Yb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Lu	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hf	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ta	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
W	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1
Re	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Os	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ir	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pt	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Au	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tl	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1
Pb	0.1	0.1	0.1	< 0.1	0.1	13	6	6	8	7	7	8	8	7	7
Bi	< 0.1	0.3	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.1
U	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	0.1	< 0.1	0.1	0.1	< 0.1

Table 1. Measured concentrations of elements in Anniston cycle 1b peeper samples as determined by ICP-MS semi-quantitative scan (cont'd). Units µg/L unless otherwise noted.

	54186 ERDC-17	54187 ERDC-22	54188 ERDC-23	54189 ERDC-24	54190 ERDC-26	54191 ERDC-27	54192 ERDC-28	54193 ERDC-29	54194 ERDC-33
Li	0.8	2	5	4	3	0.8	4	2	6
Be	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Na	16	20	22	21	20	16	23	20	22
Mg	3	7	9	6	7	4	8	6	6
Al	180	53	250	64	100	130	76	60	21
K	2	3	3	3	3	2	4	2	3
Ca	8	14	18	13	12	6	14	12	14
Ti	7	4	12	3	5	5	8	4	5
V	0.9	0.1	1	0.1	0.2	1	0.1	0.2	0.3
Cr	1	0.4	0.9	1	2	0.9	0.7	0.4	0.4
Mn	1000	3500	760	3500	2600	1500	3100	1100	7900
Fe	6000	5000	6100	410	2300	7800	5000	3000	2800
Co	2	3	3	3	2	2	4	2	2
Ni	4	3	3	4	4	3	3	3	7
Cu	12	10	13	11	12	11	10	10	8
Zn	39	25	32	32	31	38	25	42	24
Ga	0.3	0.3	0.5	0.4	0.3	0.3	0.3	0.2	0.5
Ge	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1
As	14	11	9	2	8	15	10	8	9
Rb	6	6	6	5	5	6	5	4	3
Sr	24	42	95	44	44	26	51	30	56
Y	0.5	0.1	0.7	0.1	0.1	0.6	0.2	0.2	0.1
Zr	0.2	0.2	0.3	0.3	0.2	0.2	0.1	0.2	0.2
Nb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Mo	2	1	1	2	0.8	2	0.9	1	28
Ru	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pd	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ag	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Cd	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1
In	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Sn	8	7	8	6	11	10	7	6	4

Table 1. Measured concentrations of elements in Anniston cycle 1b peeper samples as determined by ICP-MS semi-quantitative scan (cont'd). Units µg/L unless otherwise noted.

	54186 ERDC-17	54187 ERDC-22	54188 ERDC-23	54189 ERDC-24	54190 ERDC-26	54191 ERDC-27	54192 ERDC-28	54193 ERDC-29	54194 ERDC-33
Sb	0.1	< 0.1	0.2	0.3	< 0.1	< 0.1	0.2	< 0.1	0.1
Te	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Cs	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Ba	37	46	100	57	39	71	51	31	46
La	0.4	0.1	0.6	0.1	0.1	0.4	0.2	0.1	0.1
Ce	1	0.3	2	0.2	0.3	1	0.4	0.3	0.1
Pr	0.1	< 0.1	0.2	< 0.1	< 0.1	0.1	0.1	< 0.1	< 0.1
Nd	0.6	0.1	0.8	0.1	0.2	0.6	0.2	0.2	0.1
Sm	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Eu	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Gd	0.2	< 0.1	0.2	< 0.1	0.1	0.2	0.1	0.1	< 0.1
Tb	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dy	0.1	< 0.1	0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1
Ho	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Er	< 0.1	< 0.1	0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1
Tm	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Yb	< 0.1	< 0.1	0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1
Lu	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hf	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ta	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
W	< 0.1	< 0.1	0.1	0.2	< 0.1	< 0.1	0.4	< 0.1	< 0.1
Re	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Os	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ir	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pt	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Au	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Tl	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1
Pb	8	6	8	7	8	8	7	7	6
Bi	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.1	0.1
U	0.1	0.1	0.1	0.1	0.1	0.1	0.1	< 0.1	< 0.1

Table 2. Percent relative standard deviation from repeated analysis of Trace Metals in Drinking Water Standard[a] during a semi-quantitative sample run of cycle 1b pore water samples. Results expressed in ng/mL unless otherwise noted.

Ele.	Run #1	Run #2	Run #3	Run #4	Run #5	Run #6	Actual Conc	Mean Conc	SD	% RSD
Li	19.6	20.1	21.1	21.6	21.9	22.9	20.	21.2	1.2	5.7
Be	20.9	21.2	20.4	21.3	21.0	22.3	20.	21.2	0.6	2.9
Na[b]	5.9	6.3	6.9	7.3	7.5	7.5	6.0	6.9	0.7	9.6
Mg[b]	8.8	9.6	10.2	10.7	11.1	11.4	9.0	10.3	1.0	9.6
Al	117.	126.	127.	135.	131.	139.	120.	129.2	7.8	6.1
K[b]	2.7	2.9	3.1	3.2	3.2	3.3	2.5	3.1	0.2	7.1
Ca[b]	34.8	35.1	37.0	38.0	37.8	37.8	35.	36.7	1.4	3.9
V	28.7	29.8	30.3	30.4	29.8	30.7	30.	29.9	0.7	2.3
Cr	20.0	19.9	19.8	21.1	20.5	20.5	20.	20.3	0.5	2.4
Mn	36.3	38.2	40.0	42.2	42.1	42.7	40.	40.3	2.6	6.4
Fe	99.	101.	102.	110.	110.	116.	100.	106.4	6.7	6.3
Co	24.7	25.4	25.3	25.9	26.2	26.4	25.	25.6	0.6	2.5
Ni	59.1	59.7	59.8	61.0	61.9	62.3	60.	60.6	1.3	2.1
Cu	19.3	19.7	19.5	20.1	20.0	20.2	20.	19.8	0.3	1.6
Zn	64.1	66.9	68.2	71.9	72.2	72.9	70.	69.4	3.5	5.1
As	76.2	78.4	78.6	81.2	82.2	81.5	80.	79.7	2.3	2.9
Se	9.3	9.9	10.4	10.5	10.4	10.8	10.	10.2	0.5	5.2
Rb	8.9	9.8	9.7	10.1	10.2	10.1	10.	9.8	0.5	4.7
Sr	218.	237.	257.	266.	274.	270.	250.	253.7	21.9	8.6
Mo	96.	96.	96.	98.	97.	95.	100.	96.4	0.8	0.8
Ag	2.1	2.0	2.0	2.0	1.9	1.9	2.0	2.0	0.1	2.6
Cd	9.8	9.8	9.8	9.5	9.3	9.3	10.	9.6	0.3	2.8
Sb	10.4	10.2	9.8	9.3	8.7	8.8	10.	9.5	0.7	7.6
Te	3.4	3.2	3.0	2.9	2.7	2.7	3.0	3.0	0.3	9.9
Ba	54.7	50.8	46.0	43.4	41.0	41.4	50.	46.2	5.5	12.
Pr	11.6	10.6	9.6	9.3	8.7	8.8	10.	9.8	1.1	11.
Tb	12.2	10.9	9.8	9.5	9.5	9.5	10.	10.2	1.1	11.
Tm	12.1	11.2	10.1	9.9	9.9	9.9	10.	10.5	0.9	8.7
Ta	11.9	10.6	10.0	11.5	9.7	9.8	10.	10.6	0.9	8.9
Au	0.61	0.60	0.57	0.57	0.55	0.56	10.	0.6	0.0	4.1
Tl	10.66	10.6	10.0	9.9	10.1	10.0	10.	10.2	0.3	3.1
Pb	42.1	39.6	40.0	41.6	41.3	42.1	40.	41.1	1.1	2.6
Bi	8.6	8.8	8.4	8.3	8.5	8.6	10.	8.5	0.2	2.0
U	10.2	10.2	10.4	10.5	10.3	10.1	10.	10.3	0.1	1.4

[a]High Purity Trace Metals in Drinking Water, Cat # CRM-TMDW, Charleston, SC.; Pr, Tb, Tm, Ta, and Au manually added to represent rare earth region of the mass spectral range.

[b]concentrations are ppm (µg/mL)

Table 3. Recovery of elements from laboratory control samples determined with semi-quantitative analysis of cycle 1b pore water samples.

a. SPEX ClaritasPPT[a]

Element	Actual Conc	Meas Conc	% Rec
Be	50.	56.	112.
Na	500.	559.	112.
Mg	500.	539.	108.
Al	50.	56.	112.
K	500.	605.	121.
Ca	500.	564.	113.
Ti	50.	52.	103.
V	50.	51.	103.
Cr	50.	52.	104.
Mn	50.	52.	104.
Fe	500.	441.	88.
Co	50.	56.	111.
Ni	50.	54.	109.
Cu	50.	55.	111.
Zn	50.	57.	114.
As	50.	54.	109.
Se	50.	56.	112.
Sr	50.	50.	100.
Mo	50.	48.	95.
Ag	50.	53.	106.
Cd	50.	49.	98.
Sn	50.	55.	110.
Sb	50.	48.	96.
Ba	50.	51.	103.
Tl	50.	56.	112.
Pb	50.	57.	113.

[a] a mixture of SPEX Claritas PPT Instrument Check Standards 1 (CL-ICS-1), 3 (CL-ICS-3, and 5 (CL-ICS-5); SPEX CertiPrep, Inc., Metuchen, NJ; units ng/mL.

b. SPEX Custom Multielement Standards[b]

Element	Actual Conc	Meas Conc	% Rec
Pr	10.	9.3	93.
Tb	10.	9.7	97.
Tm	10.	10.1	101.
Ta	10.	11.4	114.
Ir	10.	10.2	102.

[b] a mixture of SPEX Custom Multielement Standards XCERCMO-1 and XCERCMO-2; SPEX CertiPrep, Inc., Metuchen, NJ; units ng/mL.

Table 4. Percent change in internal standards from beginning to end of the ICP-MS semi-quantitative run of cycle 1b pore water samples.

BID	Run Date	IS	Conc (ppb)	Matrix	Initial Intensity	End Intensity	% Change
02/11/11	03/01/11	Sc	10.	pore water	175476	182975	4.1
02/11/11	03/01/11	Rh	10.	pore water	259910	261865	0.7
02/11/11	03/01/11	Th	10.	pore water	255179	314143	19.

Table 5. Blank equivalent concentrations (µg/L) of elements in USGS peeper blanks collected with the pore water sample set.

Element	PW Blk 1	PW Blk 2	PW Blk 3	Element	PW Blk 1	PW Blk 2	PW Blk 3
Li	< 0.1	0.1	0.1	Sb	< 0.1	< 0.1	< 0.1
Be	< 0.1	< 0.1	0.1	Te	< 0.1	< 0.1	< 0.1
Na	6	6	6	Cs	< 0.1	< 0.1	< 0.1
Mg	< 0.1	< 0.1	< 0.1	Ba	0.3	0.1	0.1
Al	< 0.1	< 0.1	< 0.1	La	< 0.1	< 0.1	< 0.1
K	< 0.1	< 0.1	< 0.1	Ce	< 0.1	< 0.1	< 0.1
Ca	0.1	< 0.1	< 0.1	Pr	< 0.1	< 0.1	< 0.1
Ti	0.9	0.5	0.5	Nd	< 0.1	< 0.1	< 0.1
V	0.1	0.2	0.2	Sm	< 0.1	< 0.1	< 0.1
Cr	0.4	0.4	0.5	Eu	< 0.1	< 0.1	< 0.1
Mn	0.1	0.1	0.1	Gd	< 0.1	< 0.1	< 0.1
Fe	< 1	< 1	< 1	Tb	< 0.1	< 0.1	< 0.1
Co	< 0.1	< 0.1	< 0.1	Dy	< 0.1	< 0.1	< 0.1
Ni	0.2	0.2	0.2	Ho	< 0.1	< 0.1	< 0.1
Cu	0.2	0.2	0.1	Er	< 0.1	< 0.1	< 0.1
Zn	15	16	15	Tm	< 0.1	< 0.1	< 0.1
Ga	< 0.1	< 0.1	< 0.1	Yb	< 0.1	< 0.1	< 0.1
Ge	< 0.1	< 0.1	< 0.1	Lu	< 0.1	< 0.1	< 0.1
As	< 0.1	< 0.1	< 0.1	Hf	< 0.1	< 0.1	< 0.1
Se	< 1	< 1	< 1	Ta	< 0.1	< 0.1	< 0.1
Rb	< 0.1	< 0.1	< 0.1	W	< 0.1	< 0.1	< 0.1
Sr	< 1	< 1	< 1	Re	< 0.1	< 0.1	< 0.1
Y	< 0.1	< 0.1	< 0.1	Os	< 0.1	< 0.1	< 0.1
Zr	0.1	0.1	0.1	Ir	< 0.1	< 0.1	< 0.1
Nb	< 0.1	< 0.1	< 0.1	Pt	< 0.1	< 0.1	< 0.1
Mo	< 0.1	< 0.1	< 0.1	Au	< 0.1	< 0.1	< 0.1
Ru	< 0.1	< 0.1	< 0.1	Tl	< 0.1	< 0.1	< 0.1
Pd	< 0.1	< 0.1	< 0.1	Pb	0.1	0.1	0.1
Ag	< 0.1	< 0.1	< 0.1	Bi	< 0.1	< 0.1	< 0.1
Cd	0.1	< 0.1	< 0.1	U	< 0.1	< 0.1	< 0.1
In	< 0.1	< 0.1	< 0.1				
Sn	0.4	0.4	0.3				

Comparison of loss on ignition (%), acid volatile sulfide (µmol/g dw), simultaneously extracted metals (µg/g dw) and SEM-AVS (µmol/g dw) values in Anniston sediments across individual toxicity tests.
All samples obtained from testing beakers on Day 21 of tests and analyzed at CERC. Values in italics are less than quantitation limits.

Cycle 1a

	LOI				AVS			
Test Species	Midge	Amph	HA	CD	Midge	Amph	HA	CD
SED ID								
1	2.3		---	---	1.15		0.90	
6	3.0	3.5	---	---	0.80	0.56	0.61	1.20
7	8.6		---	---	2.63		2.74	
8	7.5		---	---	1.29		1.03	
9	1.4		---	---	0.46		0.46	
11	7.2	7.4	---	---	1.34	0.96	1.23	1.97
18	7.4		---	---	1.50		1.01	2.53
19	6.9	7.3	---	---	1.44	0.70	1.01	
20	2.3		---	---	0.64		0.56	
25	6.6	6.5	---	---	1.63	1.21	1.80	2.09
30	5.6	5.6	---	---	0.99	0.87	0.95	1.73
33	2.4	2.5	---	---	1.31	1.31	1.61	1.82

	SEM_Cu				SEM_Ni				SEM_Zn				SEM_Cd				SEM_Pb				SEM-AVS			
Test Species	Midge	Amph	HA	CD	Midge	Amph	HA	CD	Midge	Amph	HA	CD	Midge	Amph	HA	CD	Midge	Amph	HA	CD	Midge	Amph	HA	CD
SED ID																								
1	3.95		4.19		1.92		2.04		25.5		21.9		0.10		0.085		20.7		16.9		-0.56		-0.38	
6	5.25	6.68	6.86	1.66	2.41	5.56	2.37	3.08	29.1	27.3	28.3	27.6	0.15	0.15	0.15	0.11	19.3	16.6	17.4	19.1	-0.14	0.14	0.057	-0.61
7	7.02		6.99		4.37		3.83		66.8		65.5		0.24		0.22		44.8		42.1		-1.20		-1.36	
8	11.0		16.6		7.75		11.0		108.		120.		0.37		0.41		119.		124.		1.24		1.86	
9	1.34		1.49		1.76		2.42		4.7		5.7		0.042		0.018		2.46		2.78		-0.33		-0.29	
11	14.5	14.8	12.7	4.99	3.50	4.06	4.05	4.32	109.	93.1	107.	100.	0.28	0.26	0.29	0.26	57.4	48.7	56.2	54.8	0.90	1.00	0.95	- 0.025
18	11.0		17.1	7.20	8.75		8.64	8.01	103.		110.	102.	0.42		0.44	0.39	112.		113.	109.	0.95		1.64	-0.19
19	12.4	14.9	15.0		12.6	10.8	13.5		125.	110.	125.		0.55	0.38	0.42		146.	122.	145.		1.59	2.00	2.07	
20	3.48		4.32		1.41		13.8		12.6		12.6		0.061		0.046		10.6		10.4		-0.31		- 0.012	
25	5.11	5.69	5.15	1.98	3.18	2.82	3.96	2.26	38.4	33.2	36.7	32.7	0.13	0.12	0.14	0.11	23.9	20.9	23.1	22.7	-0.79	-0.47	-0.98	-1.41
30	9.51	13.4	12.7	6.92	5.02	5.57	12.1	6.22	83.9	99.4	99.9	105.	0.27	0.25	0.26	0.31	70.1	76.9	82.2	83.8	0.87	1.33	1.38	0.50
33	3.52	3.56	3.76	3.41	6.29	5.87	6.21	6.91	20.8	21.5	23.4	23.0	0.14	0.15	0.18	0.17	5.10	5.38	5.72	5.62	-0.81	-0.80	-1.05	-1.27

Cycle 1b

	AVS		SEM_Cu		SEM_Ni		SEM_Zn		SEM_Cd		SEM_Pb		SEM-AVS	
Testing Lab	CERC	ERDC	CERC	ERDC	CERC	ERDC	CERC	ERDC	CERC	ERDC	CERC	ERDC	CERC	ERDC
SED ID														
2	1.85	1.86	10.2	13.0	4.05	3.36	112.	114.	0.38	0.36	56.6	56.1	0.37	0.42
4	0.20	0.20	1.12	1.35	2.50	2.37	4.1	4.0	< 0.023	< 0.023	2.20	2.27	- 0.063	- 0.066
10	0.43	0.65	2.83	2.76	3.34	3.39	8.8	7.3	*0.038*	*0.037*	3.93	3.95	-0.18	-0.41
13	0.63	0.59	9.68	9.36	3.38	2.60	26.8	25.1	0.11	0.15	22.8	20.5	0.10	0.088
14	0.67	0.88	8.67	7.91	3.18	3.03	38.8	37.4	0.15	0.17	28.6	28.9	0.25	0.014
15	0.38	0.36	5.55	4.68	1.27	1.45	12.2	11.1	0.077	*0.073*	15.6	15.0	- 0.004	- 0.020
16	0.00	0.00	1.20	0.91	1.21	0.45	2.4	2.0	0.05	*0.046*	4.63	4.25	0.10	0.074
17	0.40	0.55	9.28	9.00	2.12	4.53	32.6	33.1	0.14	0.14	23.1	23.8	0.39	0.29
20	0.32	---	4.90	---	1.58	---	13.5	---	0.078	---	11.7	---	0.043	---
22	0.49	0.46	1.38	1.63	2.51	6.66	4.9	4.9	*0.030*	*0.032*	2.56	2.76	-0.34	-0.23
23	1.25	1.32	5.10	6.76	1.65	5.44	26.0	26.7	*0.085*	0.10	16.3	16.7	-0.67	-0.63
24	0.30	0.36	1.38	2.11	1.69	5.30	13.7	12.2	*0.050*	*0.048*	3.45	3.25	- 0.028	- 0.032
26	0.34	0.36	1.12	1.20	2.67	4.58	4.4	4.6	< 0.023	< 0.023	2.36	2.46	-0.20	-0.18
27	0.55	0.34	6.40	6.66	2.48	2.97	17.6	17.1	0.093	*0.073*	15.5	14.9	- 0.067	0.15
28	0.52	0.89	3.55	3.06	2.17	3.45	19.2	20.3	0.10	0.087	4.89	9.60	-0.11	-0.42
29	0.55	0.56	1.53	1.72	2.22	5.28	6.3	5.9	*0.039*	*0.025*	3.63	3.21	-0.37	-0.33
33	1.19	1.29	5.35	4.86	7.03	6.61	28.2	26.0	0.22	0.22	7.26	6.81	-0.52	-0.67

ED 33 (contrc	Test #	Testing Lab	AVS	SEM_Cu	SEM_Ni	SEM_Zn	SEM_Cd	SEM_Pb	SEM-AVS
	1	CERC	1.31	3.52	6.29	20.8	0.14	5.10	-0.81
	2	ERDC	1.31	3.56	5.87	21.5	0.15	5.38	-0.80
	3	CERC	1.61	3.76	6.21	23.4	0.18	5.72	-1.05
	4	ERDC	1.82	3.41	6.91	23.0	0.17	5.62	-1.27
	5	CERC	1.19	5.35	7.03	28.2	0.22	7.26	-0.52
	6	ERDC	1.29	4.86	6.61	26.0	0.22	6.81	-0.67

Table 1. Percent moisture, loss on ignition, acid volatile sulfide (µmol/g dry wgt), and simultaneously extracted metals (µg/g dry wgt) in Anniston sediments.

CERC #	Submitter ID	% Moisture	% LOI	AVS	SEM Cu	SEM Ni	SEM Zn	SEM Cd	SEM Pb	Σ / AVS[a]	Σ - AVS[b]
53321	Sed Midge-1	34.2	2.3	1.15	3.95	1.92	25.5	0.10	20.7	0.51	-0.56
53322	Sed Midge-6	31.9	3.0	0.80	5.25	2.41	29.1	0.15	19.3	0.83	-0.14
53323	Sed Midge-7	44.8	8.6	2.63	7.02	4.37	66.8	0.24	44.8	0.54	-1.20
53324	Sed Midge-8	39.5	7.5	1.29	11.0	7.75	108.	0.37	119.	1.96	1.24
53325	Sed Midge-9	23.4	1.4	0.46	1.34	1.76	4.7	0.042	2.46	0.29	-0.33
53326	Sed Midge-11	40.0	7.2	1.34	14.5	3.50	109.	0.28	57.4	1.67	0.90
53327	Sed Midge-18	43.0	7.4	1.50	11.0	8.75	103.	0.42	112.	1.63	0.95
53328	Sed Midge-19	40.6	6.9	1.44	12.4	12.6	125.	0.55	146.	2.10	1.59
53329	Sed Midge-20	25.8	2.3	0.64	3.48	1.41	12.6	0.061	10.6	0.51	-0.31
53330	Sed Midge-25	38.3	6.6	1.63	5.11	3.18	38.4	0.13	23.9	0.52	-0.79
53331	Sed Midge-30	22.0	5.6	0.99	9.51	5.02	83.9	0.27	70.1	1.88	0.87
53332	Sed Midge-33	27.2	2.4	1.31	3.52	6.29	20.8	0.14	5.10	0.39	-0.81
53333	Sed Amph.-6	18.9	3.5	0.56	6.68	5.56	27.3	0.15	16.6	1.25	0.14
53334	Sed Amph.-11	27.6	7.4	0.96	14.8	4.06	93.1	0.26	48.7	2.04	1.00
53335	Sed Amph.-19	29.3	7.3	0.70	14.9	10.8	110.	0.38	122.	3.86	2.00
53336	Sed Amph.-25	27.5	6.5	1.21	5.69	2.82	33.2	0.12	20.9	0.62	-0.47
53337	Sed Amph.-30	25.0	5.6	0.87	13.4	5.57	99.4	0.25	76.9	2.52	1.33
53338	Sed Amph.-33	28.3	2.5	1.31	3.56	5.87	21.5	0.15	5.38	0.39	-0.80
53434	Sed Ha-1	20.6	---	0.90	4.19	2.04	21.9	0.085	16.9	0.58	-0.38
53435	Sed Ha-6	20.9	---	0.61	6.86	2.37	28.3	0.15	17.4	1.09	0.057
53436	Sed Ha-7	43.4	---	2.74	6.99	3.83	65.5	0.22	42.1	0.50	-1.36
53437	Sed Ha-8	39.4	---	1.03	16.6	11.0	120.	0.41	124.	2.81	1.86
53438	Sed Ha-9	22.7	---	0.46	1.49	2.42	5.7	0.018	2.78	0.36	-0.29
53439	Sed Ha-11	39.1	---	1.23	12.7	4.05	107.	0.29	56.2	1.77	0.95
53440	Sed Ha-18	41.8	---	1.01	17.1	8.64	110.	0.44	113.	2.62	1.64
53441	Sed Ha-19	40.1	---	1.01	15.0	13.5	125.	0.42	145.	3.05	2.07
53442	Sed Ha-20	24.1	---	0.56	4.32	13.8	12.6	0.046	10.4	0.98	- 0.012

Table 1. Percent moisture, loss on ignition, acid volatile sulfide (µmol/g dry wgt), and simultaneously extracted metals (µg/g dry wgt) in Anniston sediments.

(***bold and italicized*** values are less than the method quantitation limit and have high uncertainty)

CERC #	Submitter ID	% Moisture	% LOI	AVS	SEM Cu	SEM Ni	SEM Zn	SEM Cd	SEM Pb	Σ / AVS[a]	Σ - AVS[b]
53443	Sed Ha-25	36.9	---	1.80	5.15	3.96	36.7	0.14	23.1	0.46	-0.98
53444	Sed Ha-30	33.3	---	0.95	12.7	12.1	99.9	0.26	82.2	2.45	1.38
53445	Sed Ha-33	36.8	---	1.61	3.76	6.21	23.4	0.18	5.72	0.34	-1.05
53446	Sed Cd-6	30.5	---	1.20	1.66	3.08	27.6	0.11	19.1	0.49	-0.61
53447	Sed Cd-11	39.5	---	1.97	4.99	4.32	100.	0.26	54.8	0.99	- 0.025
53448	Sed Cd-18	43.9	---	2.53	7.20	8.01	102.	0.39	109.	0.93	-0.19
53449	Sed Cd-25	38.5	---	2.09	1.98	2.26	32.7	0.11	22.7	0.32	-1.41
53450	Sed Cd-30	36.7	---	1.73	6.92	6.22	105.	0.31	83.8	1.29	0.50
53451	Sed Cd-33	37.0	---	1.82	3.41	6.91	23.0	0.17	5.62	0.30	-1.27
54012	SED-2	46.3	---	1.85	10.2	4.05	112.	0.38	56.6	1.20	0.37
54013	SED-4	21.8	---	0.20	1.12	2.50	4.1	< 0.023	2.20	0.68	- 0.063
54014	SED-10	29.9	---	0.43	2.83	3.34	8.8	***0.038***	3.93	0.59	-0.18
54015	SED-13	32.2	---	0.63	9.68	3.38	26.8	0.11	22.8	1.15	0.10
54016	SED-14	39.1	---	0.67	8.67	3.18	38.8	0.15	28.6	1.38	0.25
54017	SED-15	35.8	---	0.38	5.55	1.27	12.2	0.077	15.6	0.99	- 0.004
54018	SED-16	27.0	---	< 0.01	1.20	1.21	2.4	0.05	4.63	nd[c]	0.10
54019	SED-17	36.0	---	0.40	9.28	2.12	32.6	0.14	23.1	1.98	0.39
54020	SED-20	25.0	---	0.32	4.90	1.58	13.5	0.078	11.7	1.13	0.043
54021	SED-22	22.7	---	0.49	1.38	2.51	4.9	***0.030***	2.56	0.31	-0.34
54022	SED-23	36.3	---	1.25	5.10	1.65	26.0	***0.085***	16.3	0.47	-0.67
54023	SED-24	22.6	---	0.30	1.38	1.69	13.7	***0.050***	3.45	0.91	- 0.028
54024	SED-26	21.8	---	0.34	1.12	2.67	4.4	< 0.023	2.36	0.42	-0.20
54025	SED-27	33.7	---	0.55	6.40	2.48	17.6	0.093	15.5	0.88	- 0.067
54026	SED-28	23.6	---	0.52	3.55	2.17	19.2	0.10	4.89	0.79	-0.11
54027	SED-29	24.1	---	0.55	1.53	2.22	6.3	***0.039***	3.63	0.32	-0.37
54028	SED-33	40.3	---	1.19	5.35	7.03	28.2	0.22	7.26	0.57	-0.52

Table 1. Percent moisture, loss on ignition, acid volatile sulfide (µmol/g dry wgt), and simultaneously extracted metals (µg/g dry wgt) in Anniston sediments.

(***bold and italicized*** values are less than the method quantitation limit and have high uncertainty)

CERC #	Submitter ID	% Moisture	% LOI	AVS	SEM Cu	SEM Ni	SEM Zn	SEM Cd	SEM Pb	Σ / AVS[a]	Σ - AVS[b]
54195	ERDC-2	46.4	---	1.86	13.0	3.36	114.	0.36	56.1	1.22	0.42
54196	ERDC-4	22.5	---	0.20	1.35	2.37	4.0	< 0.023	2.27	0.67	- 0.066
54197	ERDC-10	27.8	---	0.65	2.76	3.39	7.3	***0.037***	3.95	0.36	-0.41
54198	ERDC-13	31.6	---	0.59	9.36	2.60	25.1	0.15	20.5	1.15	0.088
54199	ERDC-14	37.6	---	0.88	7.91	3.03	37.4	0.17	28.9	1.02	0.014
54200	ERDC-15	36.0	---	0.36	4.68	1.45	11.1	***0.073***	15.0	0.95	- 0.020
54201	ERDC-16	28.3	---	< 0.01	0.91	0.45	2.0	***0.046***	4.25	nd[c]	0.074
54202	ERDC-17	33.2	---	0.55	9.00	4.53	33.1	0.14	23.8	1.54	0.29
54203	ERDC-22	23.8	---	0.46	1.63	6.66	4.9	***0.032***	2.76	0.50	-0.23
54204	ERDC-23	35.9	---	1.32	6.76	5.44	26.7	0.10	16.7	0.52	-0.63
54205	ERDC-24	20.7	---	0.36	2.11	5.30	12.2	***0.048***	3.25	0.91	- 0.032
54206	ERDC-26	19.2	---	0.36	1.20	4.58	4.6	< 0.023	2.46	0.50	-0.18
54207	ERDC-27	31.1	---	0.34	6.66	2.97	17.1	***0.073***	14.9	1.46	0.15
54208	ERDC-28	21.7	---	0.89	3.06	3.45	20.3	0.087	9.60	0.52	-0.42
54209	ERDC-29	24.4	---	0.56	1.72	5.28	5.9	***0.025***	3.21	0.40	-0.33
54210	ERDC-33	39.7	---	1.29	4.86	6.61	26.0	0.22	6.81	0.48	-0.67

[a] Σ / AVS = Σ[Cu,Ni,Zn,Cd,Pb] µmol/g ÷AVS µmol/g.

[b] Σ - AVS = Σ[Cu,Ni,Zn,Cd,Pb] µmol/g - AVS µmol/g.

[c] ratio not determined (not meaningful because AVS was not-detected)

Table 2. Concentrations of elements in a continuing calibration blank (CCB) and independent calibration verification standard (ICVS) ran every 10 samples during sediment SEM sample runs for Cu, Ni, Zn, Cd, and Pb. Results expressed as ng/mL.

BID[a]	Ele.	CCB[b]	ICVS	% Rec (ICVS)[c]	BID[a]	Ele.	CCB[b]	ICVS	% Rec (ICVS)[c]
12/20/10	Cu	0.00213	14.0	93.	12/20/10	Cu	0.00053	13.5	90.
12/13/10	Ni	0.00050	14.1	94.	12/13/10	Ni	-0.00045	13.8	92.
Run #1	Zn	-0.00172	196.	98.	Run #6	Zn	0.00179	192.	96.
	Cd	0.00071	3.94	99.		Cd	-0.00033	3.78	94.
	Pb	0.00208	13.9	93.		Pb	0.00029	13.7	91.
12/20/10	Cu	-0.00008	13.7	91.	12/20/10	Cu	-0.00084	13.6	91.
12/13/10	Ni	-0.00062	13.9	92.	12/13/10	Ni	-0.00078	13.8	92.
Run #2	Zn	-0.00251	193.	96.	Run #7	Zn	-0.00697	192.	96.
	Cd	0.00074	3.91	98.		Cd	-0.00007	3.81	95.
	Pb	-0.00005	13.9	93.		Pb	-0.00076	13.7	91.
12/20/10	Cu	-0.00033	13.7	91.	12/20/10	Cu	-0.00058	13.6	91.
12/13/10	Ni	-0.00028	13.8	92.	12/13/10	Ni	0.00043	13.9	93.
Run #3	Zn	-0.00627	191.	95.	Run #8	Zn	-0.00382	189.	94.
	Cd	0.00036	3.89	97.		Cd	-0.00018	3.81	95.
	Pb	0.00040	13.9	93.		Pb	-0.00032	13.8	92.
12/20/10	Cu	0.00130	13.7	91.					
12/13/10	Ni	0.00029	13.9	92.					
Run #4	Zn	-0.00318	193.	96.					
	Cd	0.00023	3.85	96.					
	Pb	0.00066	13.9	92.					
12/20/10	Cu	-0.00085	13.7	91.					
12/13/10	Ni	-0.00042	13.8	92.					
Run #5	Zn	-0.00307	191.	95.					
	Cd	-0.00033	3.79	95.					
	Pb	-0.00121	13.6	91.					

[a]BID = Block Initiation Date: a date assigned to each member of a group of samples that will identify the sample as a member of the group or "block."

[b]acceptance criteria for CCB is +/- 3 X IDL for each element.

[c]acceptance criteria for ICVS = +/- 10% (90% - 110%); ICVS = 200ppb for Zn, 15ppb for Co, Ni, Pb; 4ppb for Cd.

Table 3. Concentrations of elements in a continuing calibration blank (CCB) and independent calibration verification standard (ICVS) ran every 10 samples during sediment SEM sample runs for Cu, Ni, Zn, Cd, and Pb. Results expressed as ng/mL.

BID[a]	Ele.	CCB[b]	ICVS	% Rec (ICVS)[c]	BID[a]	Ele.	CCB[b]	ICVS	% Rec (ICVS)[c]
02/22/11	Cu	0.00339	14.7	98.	02/22/11	Cu	0.00037	15.2	101.
03/01/11	Ni	0.00109	14.7	98.	03/01/11	Ni	-0.00124	15.2	101.
Run #1	Zn	0.00394	196.	98.	Run #6	Zn	-0.02973	201.	101.
	Cd	-0.00042	4.08	102.		Cd	-0.00001	4.18	104.
	Pb	0.00194	14.9	100.		Pb	0.00185	15.1	101.
02/22/11	Cu	0.00068	14.7	98.	02/22/11	Cu	-0.00097	15.0	100.
03/01/11	Ni	0.00014	14.8	98.	03/01/11	Ni	-0.00240	15.1	101.
Run #2	Zn	0.00135	196.	98.	Run #7	Zn	-0.03235	199.	99.
	Cd	-0.00023	4.07	102.		Cd	-0.00034	4.20	105.
	Pb	0.00026	15.0	100.		Pb	-0.00025	15.4	102.
02/22/11	Cu	0.00050	15.0	100.	02/22/11	Cu	0.00313	15.2	101.
03/01/11	Ni	-0.00014	15.2	101.	03/01/11	Ni	0.00228	15.2	101.
Run #3	Zn	0.00303	201.	100.	Run #8	Zn	-0.00232	200.	100.
	Cd	-0.00105	4.19	105.		Cd	0.00011	4.25	106.
	Pb	-0.00038	15.2	101.		Pb	0.00386	15.3	102.
02/22/11	Cu	0.00161	15.1	100.					
03/01/11	Ni	0.00029	15.1	101.					
Run #4	Zn	0.00229	201.	100.					
	Cd	-0.00034	4.19	105.					
	Pb	0.00025	15.1	101.					
02/22/11	Cu	-0.00053	15.2	101.					
03/01/11	Ni	-0.00136	15.3	102.					
Run #5	Zn	-0.02841	202.	101.					
	Cd	-0.00046	4.18	105.					
	Pb	-0.00055	15.3	102.					

[a]BID = Block Initiation Date: a date assigned to each member of a group of samples that will identify the sampleas a member of the group or "block."

[b]acceptance criteria for CCB is +/- 3 X IDL for each element.

[c]acceptance criteria for ICVS = +/- 10% (90% - 110%); ICVS = 200ppb for Zn, 15ppb for Co,Ni,Pb; 4ppb for Cd.

Table 4. Performance of a standardized Na_2S used for instrument calibration verification during AVS determination of sediments.

BID[a]	Ele.	Run Date	Reference Solution	Actual Conc	Meas Conc 1	Meas Conc 2	% Error 1	% Error 2	ISOP[b]	Oper Init.
12/13/10	AVS	12/16/10	Na_2S	21	21.3	19.2	1.43	-8.57	P.197	VDM
12/20/10	AVS	12/22/10	Na_2S	21	20.9	20.4	-0.48	-2.86	P.197	VDM
02/22/11	AVS	02/28/11	Na_2S	41.2	40.2	39.6	-2.43	-3.88	P.197	VDM
03/01/11	AVS	03/03/11	Na_2S	20.6	21.1	21.1	2.43	2.43	P.197	VDM

[a]BID = Block Initiation Date: a date assigned to each member of a group of samples that will identify the sample as a member of the group or "block."

[b]ISOP = instrumental standard operating procedure.

Table 5. Recoveries of elements from reference solutions used as laboratory control samples.

BID	Analysis Date	Reference Material	Element	Actual Conc. (ng/mL)	Mean Meas. Conc.	Units	% Rec[a]	ISOP	Oper. Init.
12/13/10	03/04/11	NIST 1643e[b]	Cu	22.76 +/- 0.31	20.3	ng/mL	90.	P.241	MJW/TWM
&	03/04/11	NIST 1643e[b]	Ni	62.41 +/- 0.69	57.7	ng/mL	93.	P.241	MJW/TWM
12/20/10	03/04/11	Spex ICS -1[c]	Zn	200 +/- 20	195.	ng/mL	100.	P.241	MJW/TWM
	03/04/11	NIST 1643e[b]	Cd	6.568 +/- 0.073	5.93	ng/mL	91.	P.241	MJW/TWM
	03/04/11	NIST 1640a[d]	Pb	12.101 +/- 0.05	11.3	ng/mL	94.	P.241	MJW/TWM
02/22/11	03/04/11	NIST 1643e[b]	Cu	22.76 +/- 0.31	22.1	ng/mL	98.	P.241	MJW/TWM
&	03/04/11	NIST 1643e[b]	Ni	62.41 +/- 0.69	62.1	ng/mL	100.	P.241	MJW/TWM
03/01/11	03/04/11	Spex ICS -1[c]	Zn	200 +/- 20	196.	ng/mL	100.	P.241	MJW/TWM
	03/04/11	NIST 1643e[b]	Cd	6.568 +/- 0.073	6.35	ng/mL	98.	P.241	MJW/TWM
	03/04/11	NIST 1640a[d]	Pb	12.101 +/- 0.05	12.2	ng/mL	100.	P.241	MJW/TWM

[a]recovery within certified range is considered as 100%, otherwise calculation of recovery is performed relative to upper or lower limit.

[b]NIST 1643e = National Institute of Standards and Technology Standard Reference Material Trace Elements in Water 1643e. Concentration results expressed as ng/mL. Solution used as laboratory control sample.

[c]Spex PPT = Spex Claritas PPT CLZN2-2Y; concentration results in ng/mL. Solution used as laboratory control sample.

[d]NIST 1640a = National Institute of Standards and Technology Standard Reference Material Trace Elements in Natural Water 1640a. Concentration results expressed as ng/mL. Solution used as laboratory control sample.

Table 6. Measured concentrations of sulfide in 1N HCl extracted sediment reference materials.

BID[a]	Ele.	QC #	Meas. Conc.	Reference Material	Matrix	Upper Limit	Lower Limit	% Rec[b]	Prep SOP	Prep Init.	ISOP[c]	Oper. Init.
12/13/10	AVS	61	211.	NIST 1645[d]	river sediment	240	160	100.	P.197	WGB	P.197	VDM
12/20/10	AVS	61	222.	NIST 1645[d]	river sediment	240	160	100.	P.197	WGB	P.197	VDM
02/22/11	AVS	61	154.	NIST 1645[d]	river sediment	240	160	96.	P.197	WGB	P.197	VDM
03/01/11	AVS	61	242.	NIST 1645[d]	river sediment	240	160	101.	P.197	WGB	P.197	VDM

[a]BID = Block Initiation Date: a date assigned to each member of a group of samples that will identify the sample as a member of the group or "block."

[b]%Rec = percent recovery calculated based on upper or lower limit of certified range.

[c]ISOP = instrumental standard operating procedure.

[d]NIST 1645 River Sediment = National Institute of Standards and Technology SRM 1645 River Sediment extracted with 1 N HCl; results in ug/g dry weight.

Table 7. Concentrations of elements from the 1N HCl extraction and analysis of a sediment reference material.

NIST 1645 River Sediment[a] Extract (µg/g)

Analysis date	Element	Certified Total Conc	Meas. Conc	% Rec[b]
12/13/10	Cu	109 +/- 19	43.2	48.
	Ni	45.8 +/- 2.9	21.8	51.
	Zn	1720 +/- 170	1148.	74.
	Cd	10.2 +/- 1.5	5.72	66.
	Pb	714 +/- 28	474.	69.
12/20/10	Cu	109 +/- 19	43.5	48.
	Ni	45.8 +/- 2.9	25.7	60.
	Zn	1720 +/- 170	1218.	79.
	Cd	10.2 +/- 1.5	6.35	73.
	Pb	714 +/- 28	484.	71.
02/22/11	Cu	109 +/- 19	51.3	57.
	Ni	45.8 +/- 2.9	22.2	52.
	Zn	1720 +/- 170	1231.	79.
	Cd	10.2 +/- 1.5	6.67	77.
	Pb	714 +/- 28	523.	76.
03/01/11	Cu	109 +/- 19	51.8	58.
	Ni	45.8 +/- 2.9	28.4	66.
	Zn	1720 +/- 170	1330.	86.
	Cd	10.2 +/- 1.5	7.03	81.
	Pb	714 +/- 28	549.	80.

[a]National Institute of Standards and Technology Standard Reference Material 1645: River Sediment.

[b]%Rec = percent recovery calculated based on upper or lower limit of certified total range.

Table 8. Relative percent difference from the duplicate 1N HCL extraction and analysis of Anniston sediments for SEM.

Analysis Date	Ele.	CERC#	Matrix	Dup 1	Dup 2	Mean	Units	Diff[a]	RPD[b]	PSOP	Prep. Init.	ISOP[c]	Oper. Init.
03/04/11	Cu	5331	sediment extract	9.51	9.82	9.66	µg/g	0.31	3.2	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Ni	5331	sediment extract	5.02	5.91	5.47	µg/g	0.89	16.	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Zn	5331	sediment extract	83.9	86.8	85.4	µg/g	2.92	3.4	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Cd	5331	sediment extract	0.27	0.26	0.27	µg/g	0.011	4.2	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Pb	5331	sediment extract	70.1	71.8	70.9	µg/g	1.74	2.5	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Cu	53442	sediment extract	4.32	4.05	4.18	µg/g	0.28	6.6	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Ni	53442	sediment extract	13.8	1.87	7.85	µg/g	12.0	152.	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Zn	53442	sediment extract	12.6	13.0	12.8	µg/g	0.39	3.0	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Cd	53442	sediment extract	0.046	0.065	0.056	µg/g	0.020	35.	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Pb	53442	sediment extract	10.4	11.0	10.7	µg/g	0.63	5.9	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Cu	54024	sediment extract	1.1	1.1	1.1	µg/g	0.0	1.2	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Ni	54024	sediment extract	2.67	3.04	2.86	µg/g	0.37	13.	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Zn	54024	sediment extract	4.4	4.8	4.6	µg/g	0.37	8.0	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Cd	54024	sediment extract	0.016	0.019	0.017	µg/g	0.003	15.	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Pb	54024	sediment extract	2.36	2.71	2.54	µg/g	0.35	14.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Cu	54201	sediment extract	0.9	0.9	0.9	µg/g	0.0	1.7	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Ni	54201	sediment extract	0.45	1.13	0.79	µg/g	0.68	86.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Zn	54201	sediment extract	2.0	2.2	2.1	µg/g	0.21	9.8	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Cd	54201	sediment extract	0.046	0.054	0.050	µg/g	0.007	15.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Pb	54201	sediment extract	4.25	4.62	4.43	µg/g	0.37	8.2	P.197	JWA/VDM	P.241	MJW/TWM

[a]Diff = Dup 1 - Dup 2.

[b]RPD = relative percent difference, calculated as Diff/Mean X 100; target criteria +/- 10%

[c]ISOP = standard operating procedure used for instrumental analysis of sample.

Table 9. Relative percent difference from the duplicate 1N HCL extraction and determination of AVS in sediment.

Analysis Date	Ele.	Matrix	Dup 1	Dup 2	Mean	Units	Diff[a]	RPD[b]	PSOP	Prep. Init.	ISOP[c]	Oper. Init.
12/13/10	AVS	sediment extract	0.99	1.01	1.00	µmol/g	-0.020	2.0	P.197	VDM	P.197	VDM
12/20/10	AVS	sediment extract	0.56	0.54	0.55	µmol/g	0.020	3.7	P.197	VDM	P.197	VDM
02/22/11	AVS	sediment extract	0.34	0.39	0.36	µmol/g	-0.049	13.	P.197	VDM	P.197	VDM
03/01/11	AVS	sediment extract	<0.01	<0.01	<0.01	µmol/g	--	--	P.197	VDM	P.197	VDM

[a]Diff = Dup 1 - Dup 2.

[b]RPD = relative percent difference, calculated as Diff/Mean X 100; acceptance criteria +/- 10%

[c]ISOP = standard operating procedure used for instrumental analysis of sample.

Table 10. Relative percent difference from the duplicate analysis of sediment extract digestates.

Analysis Date	Ele.	Matrix	CERC#	Dup 1	Dup 2	Mean	Units	Diff[a]	RPD[b]	PSOP	Prep. Init.	ISOP[c]	Oper. Init.
03/04/11	Cu	sediment extract	53321	18.2	18.1	18.1	ng/mL	0.033	0.2	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Ni	sediment extract	53321	18.1	18.2	18.1	ng/mL	0.07	0.4	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Zn	sediment extract	53321	145.	146.	146.	ng/mL	0.75	0.5	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Cd	sediment extract	53321	5.72	5.73	5.72	ng/mL	0.007	0.1	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Pb	sediment extract	53321	19.3	19.4	19.4	ng/mL	0.17	0.9	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Cu	sediment extract	53434	18.5	18.3	18.4	ng/mL	0.208	1.1	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Ni	sediment extract	53434	18.5	18.3	18.4	ng/mL	0.17	0.9	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Zn	sediment extract	53434	148.	147.	147.	ng/mL	0.655	0.4	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Cd	sediment extract	53434	5.68	5.69	5.69	ng/mL	0.012	0.2	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Pb	sediment extract	53434	19.6	19.6	19.6	ng/mL	0.037	0.2	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Cu	sediment extract	53435	18.2	18.5	18.4	ng/mL	0.333	1.8	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Ni	sediment extract	53435	18.1	18.4	18.3	ng/mL	0.31	1.7	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Zn	sediment extract	53435	145.	147.	146.	ng/mL	2.142	1.5	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Cd	sediment extract	53435	5.62	5.71	5.66	ng/mL	0.096	1.7	P.197	JWA/VDM	P.241	MJW/TWM
03/04/11	Pb	sediment extract	53435	19.6	19.6	19.6	ng/mL	0.032	0.2	P.197	JWA/VDM	P.241	MJW/TWM

[a]Diff = Dup 1 - Dup 2; sample spiked with mid-range standard prior to analysis.

[b]RPD = relative percent difference, calculated as Diff/Mean X 100; target criteria +/- 10%

[c]ISOP = standard operating procedure used for instrumental analysis of sample.

Table 11. Relative percent difference from the duplicate analysis of sediment extract digestates.

Analysis Date	Ele.	Matrix	CERC#	Dup 1	Dup 2	Mean	Units	Diff[a]	RPD[b]	PSOP	Prep. Init.	ISOP[c]	Oper. Init.
03/07/11	Cu	sediment extract	54012	20.4	20.4	20.4	ng/mL	0.087	0.4	P.197	JWA/VDM	P.241	MJW/TWM
03/07/11	Ni	sediment extract	54012	20.1	20.0	20.0	ng/mL	0.02	0.1	P.197	JWA/VDM	P.241	MJW/TWM
03/07/11	Zn	sediment extract	54012	157.	158.	157.	ng/mL	0.36	0.2	P.197	JWA/VDM	P.241	MJW/TWM
03/07/11	Cd	sediment extract	54012	6.19	6.19	6.19	ng/mL	0.008	0.1	P.197	JWA/VDM	P.241	MJW/TWM
03/07/11	Pb	sediment extract	54012	23.3	23.2	23.3	ng/mL	0.08	0.3	P.197	JWA/VDM	P.241	MJW/TWM
03/07/11	Cu	sediment extract	54195	20.6	20.5	20.5	ng/mL	0.081	0.4	P.197	JWA/VDM	P.241	MJW/TWM
03/07/11	Ni	sediment extract	54195	20.1	20.0	20.0	ng/mL	0.08	0.4	P.197	JWA/VDM	P.241	MJW/TWM
03/07/11	Zn	sediment extract	54195	157.	157.	157.	ng/mL	0.533	0.3	P.197	JWA/VDM	P.241	MJW/TWM
03/07/11	Cd	sediment extract	54195	6.20	6.22	6.21	ng/mL	0.021	0.3	P.197	JWA/VDM	P.241	MJW/TWM
03/07/11	Pb	sediment extract	54195	23.1	23.1	23.1	ng/mL	0.048	0.2	P.197	JWA/VDM	P.241	MJW/TWM
03/07/11	Cu	sediment extract	54196	19.9	20.0	20.0	ng/mL	0.077	0.4	P.197	JWA/VDM	P.241	MJW/TWM
03/07/11	Ni	sediment extract	54196	20.1	20.0	20.0	ng/mL	0.13	0.7	P.197	JWA/VDM	P.241	MJW/TWM
03/07/11	Zn	sediment extract	54196	152.	152.	152.	ng/mL	0.610	0.4	P.197	JWA/VDM	P.241	MJW/TWM
03/07/11	Cd	sediment extract	54196	6.24	6.31	6.27	ng/mL	0.063	1.0	P.197	JWA/VDM	P.241	MJW/TWM
03/07/11	Pb	sediment extract	54196	20.3	20.4	20.4	ng/mL	0.124	0.6	P.197	JWA/VDM	P.241	MJW/TWM

[a]Diff = Dup 1 - Dup 2; sample spiked with mid-range standard prior to analysis.

[b]RPD = relative percent difference, calculated as Diff/Mean X 100; target criteria +/- 10%

[c]ISOP = standard operating procedure used for instrumental analysis of sample.

Table 12. Spike recoveries for 1N HCL extracted blanks.

BID[a]	Ele.	Spike Type	Units	Spk Amt[b]	Vol (mL) or Wgt.(g)	Effec. Conc	Unspiked Conc	Spiked[c] Conc	% REC[d]	PSOP	Prep. Init.	ISOP	Oper. Init.
12/13/10	AVS	SEM Blank	µg/g	673.	2.50	269.	0.00	230.	85.	P.197	JWA/VDM	P.241	MJW/TWM
12/13/10	Cu	SEM Blank	µg/g	200.	3.65	54.8	0.24	49.1	89.	P.197	JWA/VDM	P.241	MJW/TWM
12/13/10	Ni	SEM Blank	µg/g	40.	3.65	11.0	3.21	12.0	80.	P.197	JWA/VDM	P.241	MJW/TWM
12/13/10	Zn	SEM Blank	µg/g	400.	3.65	110.	0.010	104.	95.	P.197	JWA/VDM	P.241	MJW/TWM
12/13/10	Cd	SEM Blank	µg/g	10.0	3.65	2.74	- 0.008	2.64	97.	P.197	JWA/VDM	P.241	MJW/TWM
12/13/10	Pb	SEM Blank	µg/g	200.	3.65	54.8	0.004	49.5	90.	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	AVS	SEM Blank	µg/g	673.	2.50	269.	0.00	259.	96.	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Cu	SEM Blank	µg/g	200.	3.37	59.3	0.042	52.5	88.	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Ni	SEM Blank	µg/g	40.	3.37	11.9	0.89	10.8	84.	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Zn	SEM Blank	µg/g	400.	3.37	119.	0.088	111.	93.	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Cd	SEM Blank	µg/g	10.0	3.37	2.97	- 0.019	2.66	90.	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Pb	SEM Blank	µg/g	200.	3.37	59.3	- 0.013	53.1	89.	P.197	JWA/VDM	P.241	MJW/TWM

[a]BID = Block Initiation Date: a date assigned to each member of a group of samples that will identify the sample as a member of the group or "block."

[b]Spk Amt = the absolute µg amount of the spike added to a sample.

[c]Spiked Conc = concentration of the analyte in the sample spike measured by the instrument (spike + unspiked).

[d]%REC = Spiked Conc - Unspiked Conc divided by the Spk Amt. X 100.

Table 13. Spike recoveries for 1N HCL extracted blanks.

BID[a]	Ele.	Spike Type	Units	Spk Amt[b]	Vol (mL) or Wgt.(g)	Effec. Conc	Unspiked Conc	Spiked[c] Conc	% REC[d]	PSOP	Prep. Init.	ISOP	Oper. Init.
02/22/11	AVS	SEM Blank	µg/g	660.	2.50	264.	0.000	237.	90.	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	AVS	SEM Blank	µg/g	660.	2.50	264.	0.000	235.	89.	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Cu	SEM Blank	µg/g	200.	3.66	54.6	0.046	56.4	103.	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Ni	SEM Blank	µg/g	40.	3.66	10.9	2.55	11.3	80.	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Zn	SEM Blank	µg/g	400.	3.66	109.	0.42	114.	104.	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Cd	SEM Blank	µg/g	10.0	3.66	2.73	0.005	2.86	104.	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Pb	SEM Blank	µg/g	200.	3.66	54.6	0.002	56.4	103.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	AVS	SEM Blank	µg/g	660.	2.50	264.	0.00	268.	102.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Cu	SEM Blank	µg/g	200.	3.73	53.6	0.011	53.3	99.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Ni	SEM Blank	µg/g	40.	3.73	10.7	0.60	11.5	102.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Zn	SEM Blank	µg/g	400.	3.73	107.	0.19	107.	100.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Cd	SEM Blank	µg/g	10.0	3.73	2.68	0.004	2.81	105.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Pb	SEM Blank	µg/g	200.	3.73	53.6	0.018	53.8	100.	P.197	JWA/VDM	P.241	MJW/TWM

[a]BID = Block Initiation Date: a date assigned to each member of a group of samples that will identify the sample as a member of the group or "block."

[b]Spk Amt = the absolute µg amount of the spike added to a sample.

[c]Spiked Conc = concentration of the analyte in the sample spike measured by the instrument (spike + unspiked).

[d]%REC = Spiked Conc - Unspiked Conc divided by the Spk Amt. X 100.

Table 14. Percent recoveries of AVS and SEMs in post-extraction spikes.

BID[a]	Ele.	Spike Type	Units	Spk Amt[b]	Vol.	Effec. Conc	Unspiked Conc	Spiked[c] Conc	% REC[d]	PSOP	Prep. Init.	ISOP	Oper. Init.
12/13/10	AVS	53324 - Analytical	µmol	21.	1.0	21.	4.35	24.0	94.	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	AVS	53437 - Analytical	µmol	21.	1.0	21.	3.39	24.7	101.	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	AVS	54014 - Analytical	µmol	21.	1.0	21.	2.43	24.9	109.	P.197	WGB	P.197	VDM
03/01/11	AVS	54203 - Analytical	µmol	21.	1.0	21.	1.80	25.1	113.	P.197	WGB	P.197	VDM
12/13/10	Cu	53321 - Analytical	ng/mL	200.	10.	20.	0.26	18.1	89.	P.197	JWA/VDM	P.241	MJW/TWM
12/13/10	Ni	53321 - Analytical	ng/mL	200.	10.	20.	0.13	18.1	90.	P.197	JWA/VDM	P.241	MJW/TWM
12/13/10	Zn	53321 - Analytical	ng/mL	1500.	10.	150.	1.76	145.	95.	P.197	JWA/VDM	P.241	MJW/TWM
12/13/10	Cd	53321 - Analytical	ng/mL	60.	10.	6.	0.007	5.71	95.	P.197	JWA/VDM	P.241	MJW/TWM
12/13/10	Pb	53321 - Analytical	ng/mL	200.	10.	20.	1.29	19.5	91.	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Cu	53434 - Analytical	ng/mL	200.	10.	20.	0.40	18.5	91.	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Ni	53434 - Analytical	ng/mL	200.	10.	20.	0.18	18.3	91.	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Zn	53434 - Analytical	ng/mL	1500.	10.	150.	2.03	148.	97.	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Cd	53434 - Analytical	ng/mL	60.	10.	6.	0.009	5.71	95.	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Pb	53434 - Analytical	ng/mL	200.	10.	20.	1.47	19.6	91.	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Cu	53435 - Analytical	ng/mL	200.	10.	20.	0.60	19.3	94.	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Ni	53435 - Analytical	ng/mL	200.	10.	20.	0.22	19.4	96.	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Zn	53435 - Analytical	ng/mL	1500.	10.	150.	2.54	154.	101.	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Cd	53435 - Analytical	ng/mL	60.	10.	6.	0.013	6.00	100.	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Pb	53435 - Analytical	ng/mL	200.	10.	20.	1.41	20.5	95.	P.197	JWA/VDM	P.241	MJW/TWM

[a]BID = Block Initiation Date: a date assigned to each member of a group of samples that will identify the sample as a member of the group or "block."

[b]Spk Amt = the absolute µmol (AVS) or ng (SEM) amount of the spike added to a sample.

[c]Spiked Conc = ng/mL of the analyte in the sample spike measured by the instrument (spike + unspiked).

[d]%REC = Spiked Conc - Unspiked Conc divided by the Spk Amt. X 100.

Table 15. Percent recoveries of AVS and SEMs in post-extraction spikes.

BID[a]	Ele.	Spike Type	Units	Spk Amt[b]	Vol.	Effec. Conc	Unspiked Conc	Spiked[c] Conc	% REC[d]	PSOP	Prep. Init.	ISOP	Oper. Init.
02/22/11	Cu	54012 - Analytical	ng/mL	200.	10.	20.	0.57	20.5	100.	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Ni	54012 - Analytical	ng/mL	200.	10.	20.	0.21	20.1	99.	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Zn	54012 - Analytical	ng/mL	1500.	10.	150.	5.73	159.	102.	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Cd	54012 - Analytical	ng/mL	60.	10.	6.	0.022	6.21	103.	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Pb	54012 - Analytical	ng/mL	200.	10.	20.	2.93	23.2	102.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Cu	54195 - Analytical	ng/mL	200.	10.	20.	0.67	20.5	99.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Ni	54195 - Analytical	ng/mL	200.	10.	20.	0.18	20.1	100.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Zn	54195 - Analytical	ng/mL	1500.	10.	150.	5.77	158.	102.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Cd	54195 - Analytical	ng/mL	60.	10.	6.	0.019	6.29	105.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Pb	54195 - Analytical	ng/mL	200.	10.	20.	2.89	23.2	101.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Cu	54196 - Analytical	ng/mL	200.	10.	20.	0.12	20.0	99.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Ni	54196 - Analytical	ng/mL	200.	10.	20.	0.19	20.1	99.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Zn	54196 - Analytical	ng/mL	1500.	10.	150.	0.36	153.	102.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Cd	54196 - Analytical	ng/mL	60.	10.	6.	0.006	6.29	105.	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Pb	54196 - Analytical	ng/mL	200.	10.	20.	0.19	20.3	101.	P.197	JWA/VDM	P.241	MJW/TWM

[a]BID = Block Initiation Date: a date assigned to each member of a group of samples that will identify the sample as a member of the group or "block."

[b]Spk Amt = the absolute µmol (AVS) or ng (SEM) amount of the spike added to a sample.

[c]Spiked Conc = ng/mL of the analyte in the sample spike measured by the instrument (spike + unspiked).

[d]%REC = Spiked Conc - Unspiked Conc divided by the Spk Amt. X 100.

Table 16. Interference checks for elements using dilution percent difference.

BID[a]	Run Date	Sample Used	Water Type	Element	Undiluted Sample	Diluted Sample[b]	Units	DPD[c]
12/13/10	03/04/11	53321	sediment extract	Cu	18.0	3.65	ng/mL	1.1
12/13/10	03/04/11	53321	sediment extract	Ni	18.1	3.63	ng/mL	0.3
12/13/10	03/04/11	53321	sediment extract	Zn	145.	29.1	ng/mL	0.2
12/13/10	03/04/11	53321	sediment extract	Cd	5.73	1.14	ng/mL	0.9
12/13/10	03/04/11	53321	sediment extract	Pb	19.3	3.89	ng/mL	0.6
12/20/10	03/04/11	53434	sediment extract	Cu	18.3	3.75	ng/mL	2.6
12/20/10	03/04/11	53434	sediment extract	Ni	18.4	3.67	ng/mL	0.2
12/20/10	03/04/11	53434	sediment extract	Zn	147.	29.7	ng/mL	1.2
12/20/10	03/04/11	53434	sediment extract	Cd	5.68	1.13	ng/mL	0.1
12/20/10	03/04/11	53434	sediment extract	Pb	19.8	3.93	ng/mL	0.7
12/20/10	03/04/11	53435	sediment extract	Cu	18.7	3.82	ng/mL	2.2
12/20/10	03/04/11	53435	sediment extract	Ni	18.7	3.77	ng/mL	0.8
12/20/10	03/04/11	53435	sediment extract	Zn	148.	30.0	ng/mL	1.6
12/20/10	03/04/11	53435	sediment extract	Cd	5.79	1.16	ng/mL	0.0
12/20/10	03/04/11	53435	sediment extract	Pb	19.7	3.95	ng/mL	0.6

[a]BID = Block Initiation Date: a date assigned to each member of a group of samples that will identify the sample as a member of the group or "block."

[b]dilution factor = 5X.

[c]DPD = dilution % difference; acceptance criteria = +/- 10%; concentrations exceeding +/- 10%. indicative of suspect interferent.

Table 17. Interference checks for elements using dilution percent difference.

BID[a]	Run Date	Sample Used	Water Type	Element	Undiluted Sample	Diluted Sample[b]	Units	DPD[c]
02/22/11	03/07/11	54012	sediment extract	Cu	20.5	4.10	ng/mL	0.0
02/22/11	03/07/11	54012	sediment extract	Ni	20.3	4.07	ng/mL	0.3
02/22/11	03/07/11	54012	sediment extract	Zn	158.	31.6	ng/mL	0.3
02/22/11	03/07/11	54012	sediment extract	Cd	6.22	1.26	ng/mL	1.2
02/22/11	03/07/11	54012	sediment extract	Pb	23.3	4.62	ng/mL	1.1
02/22/11	03/07/11	54195	sediment extract	Cu	20.5	4.12	ng/mL	0.4
02/22/11	03/07/11	54195	sediment extract	Ni	20.0	4.02	ng/mL	0.6
02/22/11	03/07/11	54195	sediment extract	Zn	157.	32.0	ng/mL	1.6
02/22/11	03/07/11	54195	sediment extract	Cd	6.26	1.25	ng/mL	0.1
02/22/11	03/07/11	54195	sediment extract	Pb	23.1	4.65	ng/mL	0.6
02/22/11	03/07/11	54196	sediment extract	Cu	20.1	4.05	ng/mL	0.9
02/22/11	03/07/11	54196	sediment extract	Ni	19.9	4.05	ng/mL	1.8
02/22/11	03/07/11	54196	sediment extract	Zn	152.	30.7	ng/mL	1.3
02/22/11	03/07/11	54196	sediment extract	Cd	6.29	1.25	ng/mL	0.2
02/22/11	03/07/11	54196	sediment extract	Pb	20.5	4.13	ng/mL	0.8

[a]BID = Block Initiation Date: a date assigned to each member of a group of samples that will identify the sample as a member of the group or "block."

[b]dilution factor = 5X.

[c]DPD = dilution % difference; acceptance criteria = +/- 10%; concentrations exceeding +/- 10%. indicative of suspect interferent.

Table 18. Recovery of Cu, Ni, Zn, Cd, and Pb from an interference check solution[a].

BID	Run Date	Element	Conc (ppb) actual	Conc (ppb) measured	Dilution Factor[b]	% Rec.[c]
12/13/10	03/04/11	Cu	100.	8.57	10	86.
&	03/04/11	Ni	200.	17.3		86.
12/20/10	03/04/11	Zn[c]	10.[c]	85.6	---	86.
	03/04/11	Cd	50.	4.80	10	96.
	03/04/11	Pb[c]	10.[c]	9.80	---	98.
02/22/11	03/07/11	Cu	100.	9.62	10	96.
&	03/07/11	Ni	200.	19.0		95.
03/01/11	03/07/11	Zn[c]	10.[c]	90.2	---	90.
	03/07/11	Cd	50.	5.06	10	101.
	03/07/11	Pb[c]	10.[c]	10.6	---	106.

[a]High Purity ICP-MS Solution AB in 2% nitric acid, Charleston, SC.; CAT # ICP-MS-ICS.

[b]interference check solution diluted 5X.

[c]suggested acceptance tolerance 80% - 120%.

[c]Zn conc adjusted to 100ppb and Pb 10ppb in 10X diluted solution; Indigenous Zn and Pb concentrations too low in 10X diluted AB solution for an accurate interference check.

Table 19. Acid volatile sulfide blank equivalent concentrations (BEC).

BID[a]	Ele.	Matrix	Soln Units	Blk Conc 1	Blk Conc 2	Blk Conc 3	Dil Vol (mL)	Mean Conc	Wgt (g)[b]	BEC (ug/g)	BEC SD	PSOP	Prep Init.	ISOP[c]	Analyst
12/13/10	AVS	sediment extract	µmol/g	0.00008	0.00000	0.00000	1.0	0.00003	2.5	0.00001	0.00002	P.197	WGB	P.197	VDM
12/20/10	AVS	sediment extract	µmol/g	0.00015	0.00013	0.00017	1.0	0.0002	2.5	0.00006	0.00001	P.197	WGB	P.197	VDM
02/22/11	AVS	sediment extract	µmol/g	0.00003	---	---	1.0	0.000009	2.5	0.000004	---	P.197	WGB	P.197	VDM
03/01/11	AVS	sediment extract	µmol/g	0.00001	---	---	1.0	0.000003	2.5	0.000001	---	P.197	WGB	P.197	VDM

[a]BID = Block Initiation Date: a date assigned to each member of a group of samples that will identify the sample as a member of the group or "block."

[b]dry weight (g) for samples used to compute BEC.

[c]ISOP = standard operating procedure used for instrumental analysis of sample.

Table 20. Elemental blank equivalent concentrations (BECs) for the sediment extraction procedure.

BID[a]	Ele.	Matrix	Soln Units	Blk Conc	Dil Vol (mL)	Wgt (g)[b]	Mean BEC µg/g	PSOP	Prep Init.	ISOP[c]	Analyst
12/13/10	Cu	Extraction Blk	ng/mL	0.21	5000.	3.65	0.29	P.197	JWA/VDM	P.241	MJW/TWM
12/13/10	Ni	Extraction Blk	ng/mL	2.36	5000.	3.65	3.23	P.197	JWA/VDM	P.241	MJW/TWM
12/13/10	Zn	Extraction Blk	ng/mL	0.10	5000.	3.65	0.13	P.197	JWA/VDM	P.241	MJW/TWM
12/13/10	Cd	Extraction Blk	ng/mL	0.008	5000.	3.65	0.012	P.197	JWA/VDM	P.241	MJW/TWM
12/13/10	Pb	Extraction Blk	ng/mL	0.011	5000.	3.65	0.014	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Cu	Extraction Blk	ng/mL	0.061	5000.	3.37	0.090	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Ni	Extraction Blk	ng/mL	0.62	5000.	3.37	0.92	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Zn	Extraction Blk	ng/mL	0.15	5000.	3.37	0.22	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Cd	Extraction Blk	ng/mL	0.001	5000.	3.37	0.002	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Pb	Extraction Blk	ng/mL	- 0.001	5000.	3.37	- 0.001	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Cu	Extraction Blk	ng/mL	0.033	5000.	3.66	0.045	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Ni	Extraction Blk	ng/mL	1.87	5000.	3.66	2.55	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Zn	Extraction Blk	ng/mL	1.01	5000.	3.66	1.37	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Cd	Extraction Blk	ng/mL	0.001	5000.	3.66	0.001	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Pb	Extraction Blk	ng/mL	0.001	5000.	3.66	0.001	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Cu	Extraction Blk	ng/mL	0.008	5000.	3.73	0.011	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Ni	Extraction Blk	ng/mL	0.45	5000.	3.73	0.60	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Zn	Extraction Blk	ng/mL	0.84	5000.	3.73	1.12	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Cd	Extraction Blk	ng/mL	0.000	5000.	3.73	0.000	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Pb	Extraction Blk	ng/mL	0.012	5000.	3.73	0.017	P.197	JWA/VDM	P.241	MJW/TWM

[a]BID = Block Initiation Date: a date assigned to each member of a group of samples that will identify the sample as a member of the group or "block."
[b]dry sediment weight used to compute BECs.
[c]ISOP = standard operating procedure used for instrumental analysis of sample.

Table 21. Elemental blank equivalent concentrations (BECs) for reagent blanks.

BID[a]	Ele.	Matrix	Soln Units	Blk Conc 1	Blk Conc 2	Blk Conc 3	Dil Vol (mL)	Mean (µg)	Wgt (g)[b]	Mean BEC µg/g	BEC SD	PSOP	Prep Init.	ISOP[c]	Analyst
12/13/10	Cu	reagent blk	ng/mL	0.044	0.038	0.016	5000.	0.16	3.51	0.047	0.021	P.197	JWA/VDM	P.241	MJW/TWM
&	Ni	reagent blk	ng/mL	0.024	0.023	0.010	5000.	0.096	3.51	0.027	0.011	P.197	JWA/VDM	P.241	MJW/TWM
12/20/10	Zn	reagent blk	ng/mL	0.073	0.090	0.101	5000.	0.44	3.51	0.13	0.021	P.197	JWA/VDM	P.241	MJW/TWM
	Cd	reagent blk	ng/mL	0.014	0.015	0.014	5000.	0.071	3.51	0.020	0.001	P.197	JWA/VDM	P.241	MJW/TWM
	Pb	reagent blk	ng/mL	0.009	0.006	0.008	5000.	0.039	3.51	0.011	0.002	P.197	JWA/VDM	P.241	MJW/TWM
02/22/11	Cu	reagent blk	ng/mL	0.01	- 0.002	- 0.004	5000.	- 0.001	3.70	0.00	0.006	P.197	JWA/VDM	P.241	MJW/TWM
&	Ni	reagent blk	ng/mL	0.01	0.001	- 0.005	5000.	0.011	3.70	0.00	0.010	P.197	JWA/VDM	P.241	MJW/TWM
03/01/11	Zn	reagent blk	ng/mL	0.80	0.61	0.69	5000.	3.489	3.70	0.94	0.13	P.197	JWA/VDM	P.241	MJW/TWM
	Cd	reagent blk	ng/mL	- 0.004	0.000	- 0.005	5000.	- 0.015	3.70	- 0.004	0.004	P.197	JWA/VDM	P.241	MJW/TWM
	Pb	reagent blk	ng/mL	0.001	- 0.002	- 0.001	5000.	- 0.003	3.70	- 0.001	0.001	P.197	JWA/VDM	P.241	MJW/TWM

[a]BID = Block Initiation Date: a date assigned to each member of a group of samples that will identify the sample as a member of the group or "block."
[b]dry sediment weight used to compute BECs.
[c]ISOP = standard operating procedure used for instrumental analysis of sample.

Table 22. Instrumental and method detection limits for the AVS procedure.

Note: Reporting limit for AVS = 0.01 umol/g

IDL[a]

BID	Run Date	Element	Std Conc	SD 1	SD 2	SD 3	IDL	IDL SOP	Oper Init
12/13/10	08/29/02	AVS	0.0084	0.0011	0.0010	0.0008	0.003	C4.103	VDM

[a]IDL = instrument detection limit (umol), computed as 3 X mean of standard deviations from analysis of 0 standard.

MDL[b]

BID	Element	Matrix	W/D/L[c]	Sample SD	Blank SD	MDL	PSOP	Prep Init	ISOP	Oper Init	Units
12/13/10	AVS	sediment extract	D	0.00	0.00005	0.0001	P.197	JWA/VDM	P.197	VDM/WGB	µmol/g
12/20/10	AVS	sediment extract	D	0.00	0.00001	0.00002	P.197	JWA/VDM	P.197	VDM/WGB	µmol/g
02/22/11	AVS	sediment extract	D	0.00	0.00001	0.00004	P.197	JWA/VDM	P.197	VDM/WGB	µmol/g
03/01/11	AVS	sediment extract	D	0.00	0.00004	0.0001	P.197	JWA/VDM	P.197	VDM/WGB	µmol/g

[b]MDL = method detection limit (uM/g), computed as $3 \times (SD_{st}^2 + SD_s^2)^{1/2}$ where Sample SD = standard deviation of low sample and Blank SD = standard deviation of a reagent blank.

[c]D = dry; MDL expressed as µmol/g dry weight.

Table 23. Instrument detection limits, method detection limits, and method quantitation limits for the sediment SEM analytical runs.

BID	Element	Matrix	Std Conc.[a]	SD_b [b]	SD_{st} [c]	IDL[d]	MDL[e]	MQL[f]	Units	ISOP	Oper. Init.
12/13/10	Cu	sediment extract	5.0	0.021	0.001	0.048	0.063	0.21	µg/g	P.241	MJW/TWM
&	Ni	sediment extract	5.0	0.011	0.011	0.004	0.048	0.16	µg/g	P.241	MJW/TWM
12/20/10	Zn	sediment extract	75.0	0.021	0.036	0.87	0.12	0.40	µg/g	P.241	MJW/TWM
	Cd	sediment extract	1.5	0.001	0.002	0.002	0.005	0.017	µg/g	P.241	MJW/TWM
	Pb	sediment extract	5.0	0.002	0.001	0.004	0.007	0.023	µg/g	P.241	MJW/TWM
02/22/11	Cu	sediment extract	5.0	0.006	0.003	0.048	0.021	0.069	µg/g	P.241	MJW/TWM
&	Ni	sediment extract	5.0	0.010	0.006	0.004	0.036	0.12	µg/g	P.241	MJW/TWM
03/01/11	Zn	sediment extract	75.0	0.13	0.012	0.87	0.40	1.32	µg/g	P.241	MJW/TWM
	Cd	sediment extract	1.5	0.004	0.007	0.002	0.023	0.076	µg/g	P.241	MJW/TWM
	Pb	sediment extract	5.0	0.001	0.002	0.004	0.007	0.023	µg/g	P.241	MJW/TWM

[a]concentration of low level standard (ppb) used in analysis of MDL.

[b]SD_b = standard deviation from analysis of blanks (n=3) diluted 10X.

[c]SD_{st} = standard deviation from analysis of a low level standard diluted 10X (n=3).

[d]IDL = instrument detection limit (ng/mL), computed as 3 X mean of standard deviations from analysis of 0 standard (reagent blk) 7 consecutive times on 3 non-consecutive days.

[e]MDL = method detection limit (ng/mL), computed as $3 X (SD_b^2 + SD_{st}^2)^{1/2}$ where SD_b = standard deviation of a reagent blank diluted 10X (n = 3) and SD_{st} = standard deviation of a low level standard diluted 10X (n = 3).

[f]MQL = method quantitation limit (ng/mL), computed as 3.3 X the MDL.

Sediment			1	6	6	7	8	9	11	11	18	18	19	20	25	25	30	30	33	33
Sample ID			C1	2	C6	C7	C8	C9	1	C11	3	C18	C19	C20	6	C25	4	C30	5	C33
	Units	Reporting Limit																		
PCB Homolog Groups																				
Total Monochlorobiphenyl	µg/L		21.4	118.4	95.5	53.0	64.2	BDL	127.5	74.6	224.0	130.8	128.7	BDL	48.8	19.7	300.9	191.8	1.6	BDL
Total Dichlorobiphenyl	µg/L		14.9	21.1	19.2	8.8	18.1	BDL	20.9	17.1	50.3	39.9	29.9	1.8	8.0	5.9	36.8	31.4	0.2	BDL
Total Trichlorobiphenyl	µg/L		12.0	20.7	19.0	8.2	19.8	BDL	21.5	17.2	38.0	29.4	26.9	3.0	8.5	6.6	34.8	29.2	0.1	BDL
Total Tetrachlorobiphenyl	µg/L		2.57	2.29	1.86	1.32	2.51	BDL	2.70	1.94	5.55	4.05	3.33	0.49	0.84	0.71	5.10	3.83	BDL	BDL
Total Pentachlorobiphenyl	µg/L		0.29	0.43	0.34	0.21	0.45	BDL	0.46	0.28	0.94	0.63	0.45	0.08	0.16	0.15	0.84	0.60	BDL	BDL
Total Hexachlorobiphenyl	µg/L		0.05	0.18	0.12	0.03	0.11	BDL	0.10	0.06	0.21	0.11	0.10	0.02	0.03	0.03	0.22	0.15	BDL	BDL
Total Heptachlorobiphenyl	µg/L		0.003	0.024	0.015	0.003	0.013	BDL	0.011	0.004	0.021	0.010	0.010	0.002	0.003	0.002	0.025	0.012	BDL	BDL
Total Octachlorobiphenyl	µg/L		0.00021	0.00190	0.00096	0.00009	0.00075	BDL	0.00099	0.00033	0.00151	0.00052	0.00129	0.00012	0.00016	0.00020	0.00195	0.00103	BDL	BDL
Total Nonachlorobiphenyl	µg/L		0.00000	0.00009	0.00004	0.00001	0.00005	BDL	0.00007	0.00002	0.00016	0.00003	0.00012	0.00000	BDL	0.00001	0.00014	0.00008	BDL	BDL
Total Homolog PCB	µg/L		51.2	163.1	136.1	71.6	105.2	BDL	173.2	111.1	319.0	204.9	189.5	5.4	66.3	33.1	378.6	257.0	1.9	BDL
PCB Congener																				
1	ng/L	160	20259	118377	93648	52994	64195	BDL	127540	74559	213018	121818	128707	BDL	48784	19676	300889	191827	1579	BDL
3	ng/L	93	1099	BDL	1863	BDL	BDL	BDL	BDL	BDL	10971	9009	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4	ng/L	102	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
5	ng/L	48	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
6	ng/L	39	4489	1089	964	542	1354	BDL	1524	1261	4687	3605	2465	124	551	390	2918	2418	BDL	BDL
7	ng/L	38	472	962	840	130	336	BDL	332	236	1229	894	485	14	129	76	986	821	BDL	BDL
8	ng/L	38	6801	8071	7283	3262	7571	BDL	6945	6014	30302	24564	12406	590	3154	2314	12500	10871	59	BDL
9	ng/L	39	184	208	186	179	383	BDL	562	432	1012	744	730	37	275	180	668	563	BDL	BDL
10	ng/L	65	2940	10715	9823	4679	8446	BDL	11435	9150	12662	9794	13736	1077	3931	2972	19586	16564	137	BDL
12/13	ng/L	24	BDL	100	103	46	BDL	BDL	74	BDL	374	286	117	BDL	BDL	BDL	116	129	BDL	BDL
14	ng/L	23	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
17	ng/L	25	2717	3320	2990	1127	4124	BDL	3047	2609	10510	8533	4599	406	2239	1828	5074	4352	BDL	BDL
18	ng/L	25	2359	459	419	376	436	BDL	555	449	1502	1213	678	75	160	125	1377	1105	BDL	BDL
19	ng/L	42	3824	13650	12759	5099	11155	BDL	13940	11003	15974	12080	16999	2084	4455	3426	21612	18432	96	BDL
20	ng/L	11	cannot be resolved due to mutiple co-elutions																	
22	ng/L	11	45	BDL	52	34	87	BDL	51	39	304	219	147	BDL	BDL	BDL	264	185	BDL	BDL
24	ng/L	19	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
25	ng/L	9	436	204	167	78	195	BDL	180	140	616	466	274	32	63	47	338	269	BDL	BDL
26/29	ng/L	10	456	262	243	185	399	BDL	432	442	942	727	508	38	127	99	541	447	BDL	BDL
27	ng/L	16	405	922	808	516	1422	BDL	1696	1291	2271	1656	1611	148	515	409	2614	2092	BDL	BDL
28/31	ng/L	9	654	816	671	263	588	BDL	512	374	1944	1411	683	42	191	92	1132	868	BDL	BDL
32	ng/L	16	1095	973	875	485	1342	BDL	1030	766	3817	3008	1365	130	688	554	1665	1317	BDL	BDL
33	ng/L	11	cannot be resolved due to mutiple co-elutions																	
34	ng/L	9	0	0	0	0	0	BDL	0	0	0	0	0	BDL	0	0	0	0	BDL	BDL
35	ng/L	6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
37	ng/L	6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
40	ng/L	9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
41	ng/L	9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
42	ng/L	7	118	29	BDL	37	52	BDL	45	BDL	136	107	67	8	13	13	108	90	BDL	BDL
44	ng/L	7	253	60	48	47	55	BDL	64	45	306	206	105	8	15	13	229	172	BDL	BDL
45	ng/L	13	146	240	195	92	297	BDL	328	235	725	498	221	32	127	111	429	312	BDL	BDL
46	ng/L	13	53	29	28	34	63	BDL	55	39	128	91	81	BDL	BDL	BDL	178	127	BDL	BDL
47	ng/L	6	190	222	181	135	315	BDL	352	257	586	428	488	62	155	110	636	399	BDL	BDL
48	ng/L	7	BDL	37	30	9	15	BDL	13	6	47	32	10	BDL	BDL	3	48	34	BDL	BDL
49	ng/L	6	422	171	136	145	262	BDL	280	192	772	522	334	39	92	77	518	395	BDL	BDL
51	ng/L	10	cannot be resolved due to mutiple co-elutions																	
52	ng/L	6	678	224	202	201	278	BDL	293	211	660	498	305	51	97	87	489	398	BDL	BDL
53	ng/L	10	342	346	252	279	451	BDL	486	369	900	706	625	93	134	114	921	754	BDL	BDL
54	ng/L	27	178	713	636	168	373	BDL	473	369	520	433	848	157	95	80	871	673	BDL	BDL
56	ng/L	3	BDL	7	BDL	6	8	BDL	6	4	28	20	9	BDL	BDL	BDL	26	20	BDL	BDL
59	ng/L	5	10	20	BDL	8	23	BDL	BDL	BDL	43	32	22	3	7	7	34	26	BDL	BDL
60	ng/L	3	BDL	4	BDL	3	4	BDL	4	3	5	4	4	BDL	2	4	7	7	BDL	BDL
63	ng/L	3	7	13	10	8	18	BDL	22	15	39	25	19	2	6	5	38	27	BDL	BDL
64	ng/L	5	91	66	58	49	123	BDL	106	75	242	176	BDL	15	49	44	170	129	BDL	BDL
66	ng/L	3	4	11	11	23	35	BDL	27	19	88	61	34	BDL	7	8	73	53	BDL	BDL
67	ng/L	2.6	cannot be resolved due to mutiple co-elutions																	
69	ng/L	3.8	BDL	13.6	10.4	4.3	15.4	BDL	19.1	12.9	27.6	18.0	15.0	2.8	5.5	4.6	34.7	19.8	BDL	BDL
70	ng/L	2.6	5.1	9.5	6.5	24.6	27.0	BDL	28.4	18.0	101.9	64.9	32.5	1.1	7.9	6.8	89.3	63.1	BDL	BDL
71	ng/L	4.3	65.0	24.4	22.9	26.8	56.0	BDL	55.5	37.6	89.5	61.1	63.1	5.1	13.0	12.3	100.2	83.4	BDL	BDL
73	ng/L	3.8	7.0	17.7	11.8	11.3	17.0	BDL	22.3	14.9	29.4	18.5	28.5	5.3	4.6	3.6	43.3	27.5	BDL	BDL
74	ng/L	2.6	BDL	15.9	12.6	7.1	9.1	BDL	5.3	BDL	30.4	19.7	BDL	BDL	2.7	2.7	31.4	BDL	BDL	BDL

Sediment			1	6	6	7	8	9	11	11	18	18	19	20	25	25	30	30	33	33
Sample ID			C1	2	C6	C7	C8	C9	1	C11	3	C18	C19	C20	6	C25	4	C30	5	C33
	Units	**Reporting Limit**																		
75	ng/L	3.7	BDL	14.2	11.5	5.8	14.4	BDL	18.6	12.4	38.9	25.4	16.2	1.7	5.4	4.3	29.7	20.0	BDL	BDL
77	ng/L	1.8	BDL	0.5	BDL	BDL	BDL	BDL	0.6	BDL	2.1	2.1	1.5	BDL	BDL	BDL	1.7	2.7	BDL	BDL
81	ng/L	1.8	cannot be resolved due to mutiple co-elutions																	
82	ng/L	2.6	BDL	BDL	BDL	1.0	BDL	BDL	BDL	BDL	3.5	2.4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
83	ng/L	2.2	6.8	10.4	7.1	2.5	8.4	BDL	8.6	6.1	24.9	15.1	7.4	1.0	3.2	1.8	21.1	10.2	BDL	BDL
84	ng/L	3.8	34.2	33.5	32.7	28.9	52.0	BDL	47.6	32.0	108.0	68.1	45.7	4.4	19.1	17.4	88.6	63.7	BDL	BDL
85	ng/L	2.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
87	ng/L	2.1	cannot be resolved due to mutiple co-elutions																	
90/101	ng/L	1.7	23.2	68.2	48.4	30.1	60.8	BDL	61.2	32.7	115.6	99.7	74.2	10.9	24.0	17.6	123.4	84.1	BDL	BDL
91	ng/L	3.0	27.6	51.7	36.0	25.6	60.3	BDL	65.4	37.6	131.4	81.6	93.6	12.1	20.8	19.1	125.5	88.6	BDL	BDL
92	ng/L	1.8	28.3	70.2	49.2	16.1	54.1	BDL	59.8	34.9	120.6	69.6	50.8	11.5	17.5	15.5	96.0	66.0	BDL	BDL
93	ng/L	3.8	cannot be resolved due to mutiple co-elutions																	
95	ng/L	3.0	106.8	84.1	79.4	48.4	117.1	BDL	113.5	71.2	199.1	154.1	73.7	17.0	43.3	49.4	167.6	139.7	BDL	BDL
97	ng/L	2.1	0.9	5.4	3.9	3.6	3.8	BDL	3.8	2.2	18.9	9.9	3.8	0.2	1.3	1.3	18.3	10.2	BDL	BDL
99	ng/L	1.6	6.0	34.9	24.0	8.9	15.9	BDL	17.1	9.9	46.0	25.8	19.0	1.6	6.2	4.6	40.2	28.2	BDL	BDL
100	ng/L	2.4	cannot be resolved due to mutiple co-elutions																	
103	ng/L	2.5	7.0	13.0	8.6	5.9	13.1	BDL	9.0	7.1	17.7	12.2	14.8	6.1	3.5	4.7	19.1	15.1	BDL	BDL
104	ng/L	6.5	6.2	11.5	9.7	3.7	6.6	BDL	8.4	5.6	18.5	10.8	16.7	5.1	BDL	BDL	17.2	11.4	BDL	BDL
105	ng/L	0.9	0.5	0.5	0.6	1.0	0.8	BDL	0.8	0.6	2.6	1.3	0.9	0.6	0.7	0.5	3.3	2.0	BDL	BDL
107	ng/L	0.8	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
110	ng/L	1.3	33.8	34.1	26.1	20.7	46.1	BDL	48.4	31.1	91.2	57.5	31.3	6.8	18.5	16.6	79.4	58.7	BDL	BDL
114	ng/L	0.9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
115	ng/L	1.3	cannot be resolved due to mutiple co-elutions																	
117	ng/L	1.4	BDL	4.7	4.6	3.8	4.1	BDL	4.6	4.1	8.6	6.9	8.9	2.6	1.9	2.7	10.1	6.5	BDL	BDL
118	ng/L	0.7	1.2	5.1	3.3	3.3	5.1	BDL	5.2	3.0	14.3	7.9	4.3	1.1	1.7	1.7	13.5	9.6	BDL	BDL
119	ng/L	1.0	4.2	6.9	4.8	2.3	5.8	BDL	7.4	4.3	14.1	7.2	7.5	1.2	2.6	1.8	12.8	9.4	BDL	BDL
122	ng/L	0.9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
123	ng/L	0.7	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
124	ng/L	0.7	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
126	ng/L	0.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
128	ng/L	0.7	BDL	0.4	BDL	BDL	0.6	BDL	0.4	0.4	1.4	0.8	BDL	BDL	BDL	BDL	1.5	1.2	BDL	BDL
129	ng/L	0.7	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
130	ng/L	0.6	BDL	2.3	1.4	BDL	0.9	BDL	BDL	BDL	2.2	BDL	BDL	BDL	BDL	BDL	2.3	1.7	BDL	BDL
131	ng/L	1.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
132	ng/L	1.0	5.2	13.8	9.7	3.0	11.6	BDL	11.1	6.5	22.4	12.2	7.5	1.0	3.4	3.3	21.5	15.6	BDL	BDL
134	ng/L	1.1	1.8	4.2	3.1	BDL	4.4	BDL	4.0	2.6	7.2	3.8	3.5	BDL	1.4	1.4	7.5	4.9	BDL	BDL
135	ng/L	0.9	6.2	13.8	11.4	3.1	10.2	BDL	10.0	6.3	15.8	10.8	7.8	3.5	3.6	3.8	15.1	10.9	BDL	BDL
136	ng/L	2.5	11.9	32.4	22.0	7.2	24.4	BDL	21.2	12.2	46.3	23.7	19.6	4.0	6.9	6.8	48.4	30.3	BDL	BDL
137	ng/L	0.6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
138/163	ng/L	0.5	2.8	9.8	6.6	2.6	7.3	BDL	7.3	3.7	15.1	7.5	7.5	1.5	2.2	2.0	16.6	11.9	BDL	BDL
141	ng/L	0.6	BDL	1.0	1.0	0.8	1.1	BDL	0.5	0.4	1.7	0.9	BDL	BDL	BDL	0.7	1.4	1.7	BDL	BDL
144	ng/L	0.8	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.4	0.5	BDL	BDL	BDL	BDL	0.6	BDL	BDL
146	ng/L	0.5	1.5	10.8	7.3	0.9	2.8	BDL	2.7	1.4	5.5	2.8	3.1	0.5	0.8	0.8	5.3	3.7	BDL	BDL
147	ng/L	0.9	0.9	3.5	BDL	1.2	2.7	BDL	2.4	1.4	6.8	3.5	13.2	2.1	0.5	0.4	8.1	5.1	BDL	BDL
149	ng/L	0.8	13.1	44.3	29.2	7.6	25.9	BDL	25.1	13.9	45.2	24.3	19.1	4.6	8.5	7.8	48.5	33.9	BDL	BDL
151	ng/L	0.9	5.2	24.0	15.5	3.5	12.8	BDL	12.4	6.7	24.2	12.7	12.5	3.0	3.8	3.4	24.9	17.3	BDL	BDL
153	ng/L	0.5	1.0	8.5	7.0	1.3	4.5	BDL	3.6	1.7	7.4	4.2	4.5	0.5	1.0	0.8	7.8	6.5	BDL	BDL
154	ng/L	0.7	1.8	6.6	4.3	BDL	3.5	BDL	3.5	1.9	6.3	2.8	3.5	1.0	1.1	1.0	8.2	4.2	BDL	BDL
156	ng/L	0.3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
157	ng/L	0.3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
158	ng/L	0.4	BDL	0.3	0.2	0.2	0.3	BDL	0.3	0.2	1.2	0.4	BDL	BDL	0.2	BDL	1.2	0.6	BDL	BDL
164	ng/L	0.4	BDL	0.3	BDL	BDL	0.2	BDL	BDL	BDL	0.4	0.3	BDL	BDL	BDL	BDL	0.4	BDL	BDL	BDL
165	ng/L	0.3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
167	ng/L	0.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
169	ng/L	0.1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
170	ng/L	0.2	0.1	0.5	0.3	0.1	0.3	BDL	0.2	0.1	0.7	0.3	0.4	BDL	0.1	0.1	0.8	0.5	BDL	BDL
171	ng/L	0.3	0.2	0.5	0.4	BDL	0.3	BDL	0.2	0.2	0.6	0.3	0.4	BDL	0.1	0.2	0.7	0.5	BDL	BDL
172	ng/L	0.2	BDL	BDL	0.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.2	BDL	BDL	0.1	BDL	BDL	BDL	BDL
173	ng/L	0.4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
174	ng/L	0.3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
175	ng/L	0.3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
176	ng/L	0.7	BDL	1.7	BDL	BDL	1.3	BDL	BDL	BDL	1.3	BDL	0.9	BDL	BDL	BDL	2.0	1.1	BDL	BDL
177	ng/L	0.3	0.6	2.8	1.8	0.4	1.7	BDL	1.5	0.8	3.4	1.3	1.6	0.3	0.4	0.4	3.6	2.1	BDL	BDL

Sediment			1	6	6	7	8	9	11	11	18	18	19	20	25	25	30	30	33	33
Sample ID			C1	2	C6	C7	C8	C9	1	C11	3	C18	C19	C20	6	C25	4	C30	5	C33
	Units	Reporting Limit																		
178	ng/L	0.3	0.7	2.1	1.4	0.5	1.5	BDL	1.4	1.0	2.2	1.2	1.4	0.6	0.5	0.5	2.4	1.7	BDL	BDL
179	ng/L	0.7	BDL	7.0	5.0	1.3	4.0	BDL	3.2	BDL	5.7	3.3	BDL	BDL	1.1	BDL	6.8	BDL	BDL	BDL
180	ng/L	0.2	0.1	1.5	0.9	0.2	0.1	BDL	0.6	0.3	1.4	0.6	1.0	0.1	0.1	0.1	1.6	1.2	BDL	BDL
183	ng/L	0.2	0.1	0.9	0.6	0.1	0.4	BDL	0.3	0.2	0.8	0.4	0.6	BDL	BDL	0.1	1.0	0.7	BDL	BDL
185	ng/L	0.3	BDL	0.2	0.1	0.0	0.1	BDL	0.0	0.0	0.2	0.1	0.1	BDL	BDL	0.0	0.3	0.2	BDL	BDL
187	ng/L	0.3	1.0	6.0	3.7	0.8	3.0	BDL	3.0	1.5	4.6	2.3	3.0	0.7	0.9	0.8	5.4	3.9	BDL	BDL
189	ng/L	0.1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
190	ng/L	0.1	BDL	0.1	0.0	BDL	0.1	BDL	0.0	0.0	0.1	0.1	0.1	BDL	BDL	BDL	0.1	0.1	BDL	BDL
191	ng/L	0.1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
193	ng/L	0.1	0.0	0.2	0.1	0.0	0.1	BDL	0.1	0.0	0.1	0.1	0.1	BDL	BDL	0.1	0.1	0.1	BDL	BDL
194	ng/L	0.1	0.0	0.1	0.1	0.0	0.1	BDL	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.1	BDL	BDL
195	ng/L	0.1	BDL	0.1	0.0	BDL	0.0	BDL	0.0	0.0	0.1	0.0	0.1	BDL	BDL	BDL	0.1	0.0	BDL	BDL
196	ng/L	0.1	0.0	0.1	0.1	0.0	0.1	BDL	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	BDL	BDL
197	ng/L	0.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
199	ng/L	0.1	0.1	0.5	0.3	0.1	0.2	BDL	0.2	0.1	0.4	0.1	0.3	0.0	0.1	0.0	0.4	0.3	BDL	BDL
200	ng/L	0.2	BDL	0.2	BDL	BDL	BDL	BDL	0.2	BDL	0.3	BDL	BDL	BDL	BDL	BDL	0.3	BDL	BDL	BDL
201	ng/L	0.2	BDL	0.2	BDL	BDL	BDL	BDL	0.1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.2	BDL	BDL	BDL
202	ng/L	0.1	0.1	0.2	0.2	BDL	0.1	BDL	0.1	0.1	0.2	0.1	0.1	0.1	BDL	0.1	0.2	0.2	BDL	BDL
203	ng/L	0.2	0.1	0.5	0.3	BDL	0.2	BDL	0.3	0.1	0.3	0.2	0.4	BDL	0.1	0.1	0.4	0.4	BDL	BDL
205	ng/L	0.1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
206	ng/L	0.029	0.005	0.058	0.025	0.007	0.030	BDL	0.040	0.013	0.078	0.019	0.073	0.005	BDL	0.006	0.082	0.043	BDL	BDL
207	ng/L	0.067	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
208	ng/L	0.072	BDL	0.030	0.019	BDL	0.024	BDL	0.029	0.009	0.085	0.014	0.043	BDL	BDL	BDL	0.063	0.033	BDL	BDL
209	ng/L	0.024	BDL	BDL	0.002	BDL	0.006	BDL	BDL	0.003	1.288	0.003	BDL	BDL	BDL	BDL	1.063	0.007	BDL	BDL

Sediment			1	6	6	7	8	9	11	11	18	19	19	20	25	25	30	30	33	33
Sample ID			24	23	6U	36	35	34	33	11U	32	31	19U	26	27	25U	28	30U	29	33U
	Units	**Reporting Limit**																		
PCB Homolog Groups																				
Total Monochlorobiphenyl	µg/L		71.6	155.3	70.6	93.8	128.4	BDL	52.9	80.5	280.1	253.8	302.4	18.7	56.1	BDL	280.8	54.8	BDL	BDL
Total Dichlorobiphenyl	µg/L		25.2	29.4	18.4	13.5	21.5	BDL	13.1	19.5	62.1	73.8	75.5	4.3	9.3	6.0	38.2	14.1	0.10	BDL
Total Trichlorobiphenyl	µg/L		19.2	29.6	23.2	9.8	20.2	BDL	17.1	20.7	41.7	60.1	72.2	5.3	9.5	7.3	35.4	17.0	0.06	BDL
Total Tetrachlorobiphenyl	µg/L		3.60	3.23	2.89	1.29	2.31	BDL	1.99	2.47	4.55	7.80	9.72	0.65	0.81	0.74	4.36	2.73	BDL	BDL
Total Pentachlorobiphenyl	µg/L		0.49	0.71	0.60	0.17	0.40	BDL	0.49	0.36	1.10	1.19	1.13	0.13	0.17	0.16	0.80	0.44	BDL	BDL
Total Hexachlorobiphenyl	µg/L		0.09	0.27	0.25	0.03	0.10	BDL	0.10	0.07	0.18	0.33	0.25	0.02	0.03	0.03	0.16	0.10	BDL	BDL
Total Heptachlorobiphenyl	µg/L		0.01	0.04	0.02	0.00	0.01	BDL	0.01	0.01	0.01	0.03	0.02	0.00	0.00	0.00	0.02	0.01	BDL	BDL
Total Octachlorobiphenyl	µg/L		0.00	0.00	0.00	0.00	0.00	BDL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	BDL	BDL
Total Nonachlorobiphenyl	µg/L		0.00	0.00	0.00	0.00	0.00	BDL	0.00	0.00	0.00	0.00	0.00	0.00	BDL	0.00	0.00	0.00	BDL	BDL
Total Homolog PCB	µg/L		120.2	218.5	115.9	118.6	172.9	0.0	85.7	123.6	389.8	397.1	461.3	29.0	75.9	14.3	359.8	89.2	0.17	0.00
PCB Congener																				
1	ng/L	160	68402	152195	70611	93778	126683	BDL	52852	80547	263027	247758	302436	18664	56118	BDL	278443	54766	BDL	BDL
3	ng/L	93	3183	3057	BDL	BDL	1682	BDL	BDL	BDL	17059	6054	BDL	BDL	BDL	BDL	2364	BDL	BDL	BDL
4	ng/L	102	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
5	ng/L	48	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	112	113	BDL	BDL	BDL	BDL	39	BDL	BDL	BDL
6	ng/L	39	7565	1680	859	846	1476	BDL	924	1434	5951	6575	6987	289	643	331	3041	924	BDL	BDL
7	ng/L	38	897	1429	741	235	405	BDL	154	283	1612	1425	1607	39	138	BDL	1067	261	BDL	BDL
8	ng/L	38	10968	11412	6837	5202	8659	BDL	4285	6536	37757	29744	30823	1284	3642	1779	13336	4561	58	BDL
9	ng/L	39	346	326	164	304	470	BDL	295	514	1297	1955	2411	88	312	BDL	727	218	BDL	BDL
10	ng/L	65	5454	14373	9766	6940	10485	BDL	7449	10744	14884	33553	33287	2608	4522	3886	19825	8111	46	BDL
12/13	ng/L	24	BDL	172	BDL	BDL	BDL	BDL	BDL	BDL	526	422	421	BDL	BDL	BDL	215	BDL	BDL	BDL
14	ng/L	23	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
17	ng/L	25	4128	4731	3225	1446	4221	BDL	2422	2952	11833	10138	12185	632	2502	1964	5286	2024	17	BDL
18	ng/L	25	3679	699	464	475	448	BDL	440	617	1756	1608	1906	126	190	140	1376	528	BDL	BDL
19	ng/L	42	6563	19265	15640	6169	11600	BDL	11257	13493	17246	36875	44449	3833	5025	3971	22110	11143	47	BDL
20	ng/L	11	cannot be resolved due to mutiple co-elutions																	
22	ng/L	11	80	BDL	BDL	46	79	BDL	38	38	363	401	440	BDL	13	BDL	273	97	BDL	BDL
24	ng/L	19	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
25	ng/L	9	682	331	217	95	169	BDL	151	154	704	733	833	45	66	33	333	132	BDL	BDL
26/29	ng/L	10	667	418	330	190	372	BDL	BDL	419	1058	1264	1382	70	138	103	560	282	BDL	BDL
27	ng/L	16	672	1380	1126	567	1383	BDL	1454	1567	2381	3928	4830	245	569	430	2635	1459	BDL	BDL
28/31	ng/L	9	1036	1216	950	277	543	BDL	439	430	2060	1785	2082	87	198	97	1081	477	BDL	BDL
32	ng/L	16	1649	1463	1190	522	1370	BDL	842	931	4184	3184	3889	210	751	584	1648	831	BDL	BDL
33	ng/L	10.70	cannot be resolved due to mutiple co-elutions																	
34	ng/L	9	40	86	54	24	64	BDL	72	72	126	186	217	12	27	20	127	53	BDL	BDL
35	ng/L	6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
37	ng/L	6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
40	ng/L	9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
41	ng/L	9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
42	ng/L	7	157	46	BDL	32	43	BDL	46	BDL	140	176	187	10	17	13	96	70	BDL	BDL
44	ng/L	7	377	90	77	44	52	BDL	61	57	288	269	309	8	15	13	197	128	BDL	BDL
45	ng/L	13	236	360	293	81	279	BDL	300	275	685	533	679	51	138	119	373	203	BDL	BDL
46	ng/L	13	76	42	40	41	62	BDL	47	52	125	211	263	11	9	9	144	91	BDL	BDL
47	ng/L	6	191	299	297	155	285	BDL	302	404	554	981	1708	64	108	133	540	323	BDL	BDL
48	ng/L	7	BDL	64	43	BDL	13	BDL	11	BDL	46	37	BDL	BDL	3	BDL	40	17	BDL	BDL
49	ng/L	6	584	255	234	134	234	BDL	267	242	666	801	866	51	87	73	417	294	BDL	BDL
51	ng/L	10	cannot be resolved due to mutiple co-elutions																	
52	ng/L	6	905	348	309	180	253	BDL	280	265	666	695	784	68	98	86	442	307	BDL	BDL
53	ng/L	10	516	463	399	284	422	BDL	BDL	455	175	1514	1772	139	138	113	856	598	BDL	BDL
54	ng/L	27	254	944	948	167	373	BDL	364	476	451	1706	2431	200	87	80	678	513	BDL	BDL
56	ng/L	3	8	BDL	BDL	5	7	BDL	4	BDL	29	27	31	BDL	BDL	BDL	23	14	BDL	BDL
59	ng/L	5	13	29	BDL	7	21	BDL	22	BDL	39	60	65	4	7	5	31	19	BDL	BDL
60	ng/L	3	3	4	BDL	4	4	BDL	4	BDL	6	8	8	BDL	4	BDL	7	4	BDL	BDL
63	ng/L	3	10	20	16	8	17	BDL	21	17	39	55	55	3	6	5	31	15	BDL	BDL
64	ng/L	5	121	95	94	45	103	BDL	105	95	241	229	BDL	18	50	49	149	BDL	BDL	BDL
66	ng/L	3	8	18	11	22	32	BDL	24	22	86	91	82	2	8	7	66	37	BDL	BDL
67	ng/L	2.58	cannot be resolved due to mutiple co-elutions																	
69	ng/L	3.77	3.9	21.5	19.4	3.9	13.5	BDL	17.9	16.5	25.6	42.9	47.9	3.3	5.1	4.9	24.8	17.6	BDL	BDL
70	ng/L	2.58	8.1	13.4	10.4	22.7	25.8	BDL	25.9	22.2	97.8	85.6	89.3	1.5	7.3	6.6	70.3	45.1	BDL	BDL
71	ng/L	4.35	94.8	42.0	33.3	26.1	52.2	BDL	53.5	44.7	98.6	153.6	153.5	7.0	14.7	12.6	96.9	BDL	BDL	BDL
73	ng/L	3.77	11.4	26.1	20.8	8.5	BDL	BDL	18.7	17.2	23.3	74.2	129.6	8.0	3.9	4.3	33.2	24.6	BDL	BDL
74	ng/L	2.58	12.8	22.8	22.7	12.6	BDL	BDL	BDL	BDL	32.0	BDL	BDL	BDL	BDL	BDL	22.6	BDL	BDL	BDL
75	ng/L	3.68	11.6	23.9	18.9	5.2	14.3	BDL	15.3	13.3	32.6	43.8	51.3	2.6	4.4	3.9	22.7	13.3	BDL	BDL
77	ng/L	1.76	BDL	0.7	BDL	BDL	BDL	BDL	0.5	BDL	2.5	2.6	3.6	BDL	BDL	BDL	1.7	1.6	BDL	BDL
81	ng/L	1.76	cannot be resolved due to mutiple co-elutions																	
82	ng/L	2.58	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3.34	BDL	BDL	BDL	BDL	BDL	3.50	BDL	BDL	BDL
83	ng/L	2.24	12.03	14.38	10.23	2.38	9.32	BDL	9.87	7.30	22.98	25.91	26.34	1.47	2.00	2.01	10.98	7.47	BDL	BDL
84	ng/L	3.77	51.86	63.07	48.13	22.21	38.69	BDL	52.98	37.14	107.58	105.89	96.12	9.76	23.45	21.61	77.90	48.55	BDL	BDL
85	ng/L	2.03	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
87	ng/L	2.08	cannot be resolved due to mutiple co-elutions																	

Sediment			1	6	6	7	8	9	11	11	18	19	19	20	25	25	30	30	33	33
Sample ID			24	23	6U	36	35	34	33	11U	32	31	19U	26	27	25U	28	30U	29	33U
	Units	**Reporting Limit**																		
90/101	ng/L	1.72	47.64	103.90	91.33	24.61	54.13	BDL	60.99	43.46	109.96	200.63	183.30	37.37	20.12	15.89	93.62	59.77	BDL	BDL
91	ng/L	3.05	46.78	70.77	64.37	21.71	55.38	BDL	61.22	50.71	114.68	247.48	237.93	14.46	18.57	18.66	86.73	62.05	BDL	BDL
92	ng/L	1.81	45.81	102.61	95.13	13.73	49.12	BDL	55.52	43.95	106.64	139.77	129.89	13.77	14.59	15.01	67.72	48.60	BDL	BDL
93	ng/L	3.77	cannot be resolved due to mutiple co-elutions																	
95	ng/L	3.05	186.78	182.07	123.97	42.55	108.15	BDL	140.35	93.49	420.80	183.83	189.10	28.50	59.85	47.73	301.00	107.14	BDL	BDL
97	ng/L	2.08	1.54	6.41	5.68	3.14	3.59	BDL	4.12	2.58	15.56	12.44	12.88	0.31	1.18	1.13	13.40	7.43	BDL	BDL
99	ng/L	1.64	10.19	54.86	47.34	8.13	15.25	BDL	19.10	12.42	38.04	54.34	47.90	BDL	5.43	4.66	29.18	20.30	BDL	BDL
100	ng/L	2.40	cannot be resolved due to mutiple co-elutions																	
103	ng/L	2.46	12.80	21.49	21.14	5.03	11.91	BDL	11.88	12.54	18.78	35.65	31.37	5.08	2.87	6.53	13.52	11.30	BDL	BDL
104	ng/L	6.50	8.01	17.21	15.13	2.87	5.32	BDL	7.10	5.62	14.93	48.53	48.20	6.06	BDL	BDL	13.48	9.45	BDL	BDL
105	ng/L	0.89	0.70	BDL	BDL	1.06	0.84	BDL	1.11	0.73	2.76	1.63	1.28	0.57	0.73	0.48	2.36	1.33	BDL	BDL
107	ng/L	0.77	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
110	ng/L	1.33	50.34	51.09	47.46	18.76	42.18	BDL	50.40	37.42	87.07	82.86	78.87	8.34	16.69	16.36	63.23	43.54	BDL	BDL
114	ng/L	0.89	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
115	ng/L	1.30	cannot be resolved due to mutiple co-elutions																	
117	ng/L	1.4	4.4	5.1	5.8	BDL	BDL	BDL	6.8	4.7	9.7	19.4	16.1	2.5	2.5	2.7	7.2	4.8	BDL	BDL
118	ng/L	0.7	2.1	7.6	11.1	2.9	4.9	BDL	4.9	3.5	13.4	13.2	10.9	0.8	1.4	1.8	11.1	6.3	BDL	BDL
119	ng/L	1.0	6.9	10.1	8.4	2.3	5.8	BDL	6.4	5.2	11.6	21.1	19.1	1.5	1.9	1.8	9.8	5.9	BDL	BDL
122	ng/L	0.9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
123	ng/L	0.7	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
124	ng/L	0.7	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
126	ng/L	0.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
128	ng/L	0.7	BDL	0.6	BDL	BDL	BDL	BDL	BDL	BDL	1.4	1.8	1.1	BDL	BDL	BDL	1.4	0.9	BDL	BDL
129	ng/L	0.7	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
130	ng/L	0.6	0.8	3.7	3.3	BDL	1.0	BDL	BDL	BDL	2.0	3.1	2.5	BDL	BDL	BDL	1.9	0.9	BDL	BDL
131	ng/L	1.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
132	ng/L	1.0	9.1	20.8	19.5	3.4	12.0	BDL	10.9	6.8	21.1	24.2	18.7	1.2	3.2	3.6	17.0	10.9	BDL	BDL
134	ng/L	1.1	3.9	8.5	6.1	BDL	3.9	BDL	4.3	BDL	7.5	11.8	7.8	BDL	BDL	1.1	6.6	3.4	BDL	BDL
135	ng/L	0.9	10.3	24.1	22.3	3.2	10.0	BDL	9.6	7.8	14.2	50.1	15.2	3.4	3.1	3.6	11.3	8.1	BDL	BDL
136	ng/L	2.5	19.2	50.6	45.2	6.4	20.0	BDL	20.1	14.9	37.5	56.5	47.2	4.8	5.8	6.4	29.8	20.3	BDL	BDL
137	ng/L	0.6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
138/163	ng/L	0.5	4.9	15.0	14.0	2.6	7.1	BDL	6.7	4.3	13.6	23.7	18.5	1.6	1.8	2.0	13.9	8.2	BDL	BDL
141	ng/L	0.6	BDL	1.3	BDL	BDL	BDL	BDL	BDL	0.6	BDL	BDL	1.8	BDL	BDL	0.7	BDL	1.4	BDL	BDL
144	ng/L	0.8	BDL	0.5	0.5	BDL	BDL	BDL	BDL	BDL	0.6	0.5	BDL	BDL	BDL	0.3	0.6	0.5	BDL	BDL
146	ng/L	0.5	3.1	15.8	15.0	0.8	2.8	BDL	2.9	1.7	5.0	9.5	7.4	0.6	0.6	0.7	4.3	2.8	BDL	BDL
147	ng/L	0.9	1.3	5.9	5.4	1.2	BDL	BDL	2.3	1.7	5.9	33.4	31.1	2.2	0.4	0.5	5.4	3.4	BDL	BDL
149	ng/L	0.8	23.4	65.1	60.3	7.2	23.7	BDL	23.1	16.7	40.1	56.3	45.6	5.7	6.9	7.8	35.7	23.0	BDL	BDL
151	ng/L	0.9	9.6	35.7	32.8	3.2	11.9	BDL	11.7	8.2	21.1	37.3	30.1	3.6	3.0	3.5	17.9	11.6	BDL	BDL
153	ng/L	0.5	2.2	14.0	13.9	1.8	4.7	BDL	3.6	2.1	7.9	12.1	9.3	0.4	0.7	1.1	7.7	4.7	BDL	BDL
154	ng/L	0.68	3.38	9.92	9.23	1.04	2.99	BDL	3.21	2.28	4.74	10.28	8.23	1.24	0.87	0.95	4.57	2.70	BDL	BDL
156	ng/L	0.25	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
157	ng/L	0.25	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
158	ng/L	0.37	BDL	0.41	BDL	BDL	BDL	BDL	0.24	BDL	0.60	0.79	BDL	BDL	BDL	BDL	0.64	BDL	BDL	BDL
164	ng/L	0.37	BDL	0.53	0.48	BDL	BDL	BDL	BDL	BDL	0.39	0.57	0.58	BDL	BDL	BDL	0.37	BDL	BDL	BDL
165	ng/L	0.34	BDL	0.40	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.89	0.67	BDL	BDL	BDL	BDL	BDL	BDL	BDL
167	ng/L	0.20	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.16	0.34	BDL	BDL	BDL	BDL	0.20	BDL	BDL	BDL
169	ng/L	0.14	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
170	ng/L	0.20	0.13	0.71	0.77	0.13	0.35	BDL	0.18	0.13	0.64	1.38	0.86	0.03	0.08	0.06	0.77	0.37	BDL	BDL
171	ng/L	0.30	0.21	0.85	0.87	BDL	BDL	BDL	0.22	0.27	0.51	1.08	0.92	0.11	BDL	0.20	0.65	0.38	BDL	BDL
172	ng/L	0.18	BDL	BDL	0.51	0.11	BDL	BDL	BDL	0.15	BDL	BDL	0.60	0.07	BDL	0.10	BDL	0.25	BDL	BDL
173	ng/L	0.37	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
174	ng/L	0.30	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
175	ng/L	0.26	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
176	ng/L	0.68	0.70	3.17	2.49	BDL	BDL	BDL	1.20	0.49	1.59	2.91	1.71	BDL	BDL	BDL	1.85	0.68	BDL	BDL
177	ng/L	0.32	1.25	4.35	4.33	0.42	1.64	BDL	1.41	0.92	2.59	4.73	3.39	0.43	0.38	0.45	2.75	1.42	BDL	BDL
178	ng/L	0.28	1.00	2.83	2.93	0.52	1.22	BDL	1.17	1.02	1.77	3.85	2.70	BDL	BDL	0.54	1.92	1.26	BDL	BDL
179	ng/L	0.73	BDL	10.90	BDL	1.23	3.58	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.36	BDL	BDL	BDL	BDL
180	ng/L	0.16	0.33	2.11	2.10	0.20	0.82	BDL	0.47	0.26	1.25	2.79	2.15	0.13	0.13	0.16	1.79	0.89	BDL	BDL
183	ng/L	0.24	0.24	1.40	1.33	0.12	0.42	BDL	0.28	0.21	0.83	1.78	1.21	BDL	0.08	0.10	0.93	0.45	BDL	BDL
185	ng/L	0.30	0.10	0.29	0.24	0.03	0.14	BDL	0.06	0.04	0.18	0.64	0.27	BDL	0.03	0.02	0.38	0.10	BDL	BDL
187	ng/L	0.26	2.22	8.80	8.60	0.82	2.72	BDL	2.64	1.66	4.26	8.64	6.35	1.01	0.75	0.85	4.98	2.54	BDL	BDL
189	ng/L	0.07	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
190	ng/L	0.13	0.03	0.12	0.15	BDL	BDL	BDL	0.03	0.04	0.08	0.24	0.18	BDL	BDL	BDL	0.11	0.06	BDL	BDL
191	ng/L	0.10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
193	ng/L	0.11	0.04	0.22	0.22	0.03	0.09	BDL	0.06	0.02	0.12	0.32	0.17	0.01	0.01	0.02	0.10	0.10	BDL	BDL
194	ng/L	0.06	0.04	0.17	0.19	0.02	0.10	BDL	0.04	0.03	0.10	0.26	0.20	0.01	0.01	0.02	0.21	0.08	BDL	BDL
195	ng/L	0.10	BDL	0.10	0.12	BDL	0.05	BDL	0.03	0.01	0.06	0.16	0.11	BDL	BDL	BDL	0.10	0.04	BDL	BDL
196	ng/L	0.08	0.04	0.19	0.22	0.03	0.09	BDL	0.05	0.03	0.09	0.25	0.17	0.02	BDL	0.02	0.17	0.07	BDL	BDL
197	ng/L	0.19	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
199	ng/L	0.09	0.12	0.68	0.74	0.06	0.25	BDL	0.14	0.11	0.29	0.68	0.49	0.05	0.05	0.06	0.49	0.21	BDL	BDL
200	ng/L	0.24	BDL	0.47	BDL	BDL	BDL	BDL	0.13	BDL	0.30	0.71	BDL	BDL	BDL	BDL	0.33	BDL	BDL	BDL

Sediment			1	6	6	7	8	9	11	11	18	19	19	20	25	25	30	30	33	33
Sample ID			24	23	6U	36	35	34	33	11U	32	31	19U	26	27	25U	28	30U	29	33U
	Units	**Reporting Limit**																		
201	ng/L	0.20	BDL	0.28	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.33	BDL	BDL	BDL	BDL	0.30	BDL	BDL	BDL
202	ng/L	0.09	0.09	0.40	0.30	0.06	0.12	BDL	0.12	0.08	0.25	0.42	0.23	0.07	0.04	0.05	0.21	0.09	BDL	BDL
203	ng/L	0.22	0.13	0.74	0.83	BDL	0.30	BDL	0.18	0.12	0.32	0.88	0.59	0.07	0.05	0.07	0.67	0.25	BDL	BDL
205	ng/L	0.08	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
206	ng/L	0.029	0.042	0.065	0.071	0.009	0.047	BDL	0.026	BDL	0.048	BDL	0.106	0.010	BDL	0.012	0.154	0.036	BDL	BDL
207	ng/L	0.067	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
208	ng/L	0.072	0.019	0.057	0.059	BDL	0.027	BDL	0.014	0.011	0.026	0.066	0.043	BDL	BDL	0.009	0.089	0.024	BDL	BDL
209	ng/L	0.024	0.047	BDL	0.006	BDL	BDL	BDL	BDL	0.003	0.008	0.012	0.019	BDL	BDL	0.003	0.023	0.007	BDL	BDL

Sediment			1	9	13	20	25	27	28	33
Sample ID			7	9	14	8	12	11	10	13
	Units	**Reporting Limit**								
PCB Homolog Groups										
Total Monochlorobiphenyl	µg/L		27.5	BDL	35.5	7.7	63.1	29.4	BDL	BDL
Total Dichlorobiphenyl	µg/L		9.0	BDL	9.3	2.0	8.6	9.7	0.03	BDL
Total Trichlorobiphenyl	µg/L		9.8	BDL	8.5	3.2	9.5	9.2	0.11	BDL
Total Tetrachlorobiphenyl	µg/L		3.4	BDL	1.0	0.4	1.1	1.5	0.05	BDL
Total Pentachlorobiphenyl	µg/L		0.59	BDL	0.18	0.09	0.25	0.22	0.03	BDL
Total Hexachlorobiphenyl	µg/L		0.173	BDL	0.048	0.027	0.065	0.032	0.004	BDL
Total Heptachlorobiphenyl	µg/L		0.020	BDL	0.005	0.003	0.006	0.003	BDL	BDL
Total Octachlorobiphenyl	µg/L		0.00135	BDL	0.00041	0.00031	0.00038	0.00008	BDL	BDL
Total Nonachlorobiphenyl	µg/L		0.000052	BDL	0.000017	0.000018	BDL	BDL	BDL	BDL
Total Homolog PCB	µg/L		50.5	BDL	54.5	13.5	82.5	50.0	0.2	BDL
PCB Congener										
1	ng/L	160	27547	BDL	35475	7691	63081	29350	BDL	BDL
3	ng/L	93	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4	ng/L	102	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
5	ng/L	48	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
6	ng/L	39	2574	BDL	689	121	587	1588	BDL	BDL
7	ng/L	38	237	BDL	284	18	127	161	BDL	BDL
8	ng/L	38	3682	BDL	4273	553	3294	4309	35	BDL
9	ng/L	39	100	BDL	182	41	298	214	BDL	BDL
10	ng/L	65	2378	BDL	3851	1309	4288	3450	BDL	BDL
12/13	ng/L	24	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
14	ng/L	23	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
17	ng/L	25	1600	BDL	2144	369	2452	1641	37	BDL
18	ng/L	25	1580	BDL	352	71	295	1196	14	BDL
19	ng/L	42	3659	BDL	4338	2344	4814	4436	42	BDL
20	ng/L	11	cannot be resolved due to mutiple co-elutions							
22	ng/L	11	26	BDL	13	BDL	13	38	BDL	BDL
24	ng/L	19	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
25	ng/L	9	336	BDL	209	32	71	174	BDL	BDL
26/29	ng/L	10	482	BDL	167	38	221	297	4	BDL
27	ng/L	16	398	BDL	396	153	594	360	BDL	BDL
28/31	ng/L	9	660	BDL	320	61	220	312	3	BDL
32	ng/L	16	1035	BDL	528	141	757	709	10	BDL
33	ng/L	11	cannot be resolved due to mutiple co-elutions							
34	ng/L	9	19	BDL	20	BDL	31	20	BDL	BDL
35	ng/L	6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
37	ng/L	6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
40	ng/L	9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
41	ng/L	9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
42	ng/L	7	147	BDL	17	10	18	46	BDL	BDL

Sediment			1	9	13	20	25	27	28	33
Sample ID			7	9	14	8	12	11	10	13
	Units	**Reporting Limit**								
44	ng/L	7	346	BDL	20	7	19	108	8	BDL
45	ng/L	13	169	BDL	135	37	164	106	BDL	BDL
46	ng/L	13	59	BDL	BDL	BDL	11	24	BDL	BDL
47	ng/L	6	313	BDL	124	62	163	130	11	BDL
48	ng/L	7	BDL	BDL	2	BDL	4	BDL	BDL	BDL
49	ng/L	6	615	BDL	130	40	130	255	11	BDL
51	ng/L	10	cannot be resolved due to mutiple co-elutions							
52	ng/L	6	862	BDL	137	53	128	394	15	BDL
53	ng/L	10	388	BDL	182	BDL	175	BDL	BDL	BDL
54	ng/L	27	183	BDL	158	172	120	328	BDL	BDL
56	ng/L	3	4	BDL	BDL	BDL	BDL	BDL	BDL	BDL
59	ng/L	5	16	BDL	10	4	10	BDL	BDL	BDL
60	ng/L	3	4	BDL	BDL	BDL	3	BDL	BDL	BDL
63	ng/L	3	10	BDL	6	BDL	10	4	BDL	BDL
64	ng/L	5	113	BDL	43	18	63	43	3	BDL
66	ng/L	3	8	BDL	4	BDL	8	3	2	BDL
67	ng/L	3	cannot be resolved due to mutiple co-elutions							
69	ng/L	4	3	BDL	6	3	9	3	BDL	BDL
70	ng/L	3	8	BDL	6	1	11	6	2	BDL
71	ng/L	4	83	BDL	11	5	16	30	BDL	BDL
73	ng/L	4	12	BDL	5	9	7	8	BDL	BDL
74	ng/L	3	BDL	BDL	BDL	BDL	4	BDL	BDL	BDL
75	ng/L	4	14	BDL	7	3	8	BDL	BDL	BDL
77	ng/L	2	BDL	BDL	0	BDL	BDL	BDL	BDL	BDL
81	ng/L	2	cannot be resolved due to mutiple co-elutions							
82	ng/L	3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
83	ng/L	2	17	BDL	3	1	4	4	0	BDL
84	ng/L	4	69	BDL	20	7	27	18	BDL	BDL
85	ng/L	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
87	ng/L	2	cannot be resolved due to mutiple co-elutions							
90/101	ng/L	2	55	BDL	28	14	34	24	6	BDL
91	ng/L	3	64	BDL	22	13	36	22	2	BDL
92	ng/L	2	72	BDL	27	14	28	19	BDL	BDL
93	ng/L	4	cannot be resolved due to mutiple co-elutions							
95	ng/L	3	172	BDL	47	22	67	90	13	BDL
97	ng/L	2	2	BDL	1	0	2	0	1	BDL
99	ng/L	2	16	BDL	4	BDL	9	4	BDL	BDL
100	ng/L	2	cannot be resolved due to mutiple co-elutions							
103	ng/L	2	19	BDL	6	4	6	18	BDL	BDL
104	ng/L	7	10	BDL	BDL	BDL	BDL	BDL	BDL	BDL
105	ng/L	1	0	BDL	BDL	BDL	1	BDL	1	BDL
107	ng/L	1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Sediment			1	9	13	20	25	27	28	33
Sample ID			7	9	14	8	12	11	10	13
	Units	**Reporting Limit**								
110	ng/L	1	76	BDL	20	8	30	21	3	BDL
114	ng/L	0.9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
115	ng/L	1.3	cannot be resolved due to mutiple co-elutions							
117	ng/L	1.4	3.4	BDL	2.1	2.0	1.9	0.6	BDL	BDL
118	ng/L	0.7	2.1	BDL	1.2	BDL	2.9	BDL	BDL	BDL
119	ng/L	1.0	11.3	BDL	3.1	1.5	3.4	2.6	0.2	BDL
122	ng/L	0.9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
123	ng/L	0.7	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
124	ng/L	0.7	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
126	ng/L	0.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
128	ng/L	0.7	BDL	BDL	BDL	BDL	0.3	BDL	BDL	BDL
129	ng/L	0.7	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
130	ng/L	0.6	1.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL
131	ng/L	1.0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
132	ng/L	1.0	18.4	BDL	5.8	1.7	7.3	2.6	BDL	BDL
134	ng/L	1.1	5.2	BDL	1.8	BDL	2.4	1.3	BDL	BDL
135	ng/L	0.9	14.6	BDL	5.5	3.5	6.1	3.5	0.8	BDL
136	ng/L	2.5	34.6	BDL	9.6	4.7	13.4	7.5	BDL	BDL
137	ng/L	0.58	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
138/163	ng/L	0.48	10.13	BDL	3.10	1.88	4.84	2.05	0.58	BDL
141	ng/L	0.59	BDL	BDL	BDL	BDL	0.43	BDL	BDL	BDL
144	ng/L	0.85	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
146	ng/L	0.50	6.80	BDL	0.89	0.53	1.70	0.97	BDL	BDL
147	ng/L	0.91	2.63	BDL	0.80	2.63	0.87	0.62	0.11	BDL
149	ng/L	0.85	48.44	BDL	12.03	5.80	15.96	7.65	1.27	BDL
151	ng/L	0.91	18.60	BDL	5.89	3.74	7.18	4.11	0.67	BDL
153	ng/L	0.47	4.44	BDL	0.94	0.75	1.85	0.94	0.35	BDL
154	ng/L	0.68	7.07	BDL	1.80	1.49	2.05	1.08	BDL	BDL
156	ng/L	0.25	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
157	ng/L	0.25	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
158	ng/L	0.37	0.18	BDL	0.18	BDL	0.41	BDL	BDL	BDL
164	ng/L	0.37	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
165	ng/L	0.34	BDL	BDL	BDL	0.23	BDL	BDL	BDL	BDL
167	ng/L	0.20	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
169	ng/L	0.14	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
170	ng/L	0.20	0.30	BDL	0.11	0.06	0.14	BDL	BDL	BDL
171	ng/L	0.30	0.38	BDL	0.14	BDL	BDL	BDL	BDL	BDL
172	ng/L	0.18	BDL	BDL	BDL	0.07	BDL	BDL	BDL	BDL
173	ng/L	0.37	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
174	ng/L	0.30	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
175	ng/L	0.26	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
176	ng/L	0.68	1.78	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Sediment			1	9	13	20	25	27	28	33
Sample ID			7	9	14	8	12	11	10	13
	Units	**Reporting Limit**								
177	ng/L	0.32	2.80	BDL	0.78	0.60	1.24	0.45	BDL	BDL
178	ng/L	0.28	2.26	BDL	0.80	0.68	0.95	0.57	BDL	BDL
179	ng/L	0.73	6.09	BDL	1.64	BDL	2.16	BDL	BDL	BDL
180	ng/L	0.16	0.73	BDL	0.27	0.13	BDL	0.16	BDL	BDL
183	ng/L	0.24	0.52	BDL	0.17	0.11	0.20	0.13	BDL	BDL
185	ng/L	0.30	0.07	BDL	0.03	BDL	BDL	BDL	BDL	BDL
187	ng/L	0.26	5.28	BDL	1.40	1.23	1.75	1.21	BDL	BDL
189	ng/L	0.07	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
190	ng/L	0.13	0.09	BDL	0.01	0.02	BDL	BDL	BDL	BDL
191	ng/L	0.10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
193	ng/L	0.11	0.09	BDL	0.02	BDL	BDL	BDL	BDL	BDL
194	ng/L	0.06	0.09	BDL	BDL	0.03	0.03	0.02	BDL	BDL
195	ng/L	0.10	0.06	BDL	0.03	BDL	BDL	BDL	BDL	BDL
196	ng/L	0.08	0.09	BDL	0.03	0.03	0.03	BDL	BDL	BDL
197	ng/L	0.19	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
199	ng/L	0.09	0.30	BDL	0.07	0.07	0.10	0.06	BDL	BDL
200	ng/L	0.24	0.19	BDL	0.06	BDL	BDL	BDL	BDL	BDL
201	ng/L	0.20	0.09	BDL	0.07	BDL	BDL	BDL	BDL	BDL
202	ng/L	0.09	0.18	BDL	0.06	0.08	0.08	BDL	BDL	BDL
203	ng/L	0.22	0.35	BDL	0.10	0.10	0.13	BDL	BDL	BDL
205	ng/L	0.08	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
206	ng/L	0.03	BDL	BDL	0.02	0.02	BDL	BDL	BDL	BDL
207	ng/L	0.07	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
208	ng/L	0.07	0.05	BDL	BDL	BDL	BDL	BDL	BDL	BDL
209	ng/L	0.0236	0.0047	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Sediment			2	4	10	13	14	15	16	17	22	23	24	26	27	28	29	20	33
Sample ID			2	4	10	13	14	15	16	17	22	23	24	26	27	28	29	20B	33B
	Units	Reporting Limit																	
PCB Homolog Groups																			
Total Monochlorobiphenyl	µg/L		9	BDL	BDL	10	48	BDL	BDL	32	BDL	4	BDL	BDL	8	BDL	BDL	8	BDL
Total Dichlorobiphenyl	ng/L		4	BDL	BDL	6	13	0	BDL	16	BDL	2	0	BDL	6	0	BDL	3	BDL
Total Trichlorobiphenyl	µg/L		4	BDL	BDL	8	11	0	0	15	BDL	2	0	BDL	7	0	BDL	4	BDL
Total Tetrachlorobiphenyl	ng/L		0.67	BDL	BDL	1.12	2.37	0.12	0.04	2.50	BDL	0.37	0.13	BDL	1.78	0.12	BDL	0.71	BDL
Total Pentachlorobiphenyl	µg/L		0.11	BDL	BDL	0.15	0.27	0.02	0.01	0.36	BDL	0.06	0.02	BDL	0.17	0.01	BDL	0.07	BDL
Total Hexachlorobiphenyl	ng/L		0.021	BDL	BDL	0.033	0.064	0.003	0.001	0.085	BDL	0.009	0.003	BDL	0.023	0.001	BDL	0.019	BDL
Total Heptachlorobiphenyl	µg/L		0.002	BDL	BDL	0.004	0.008	0.0002	BDL	0.011	BDL	0.001	BDL	BDL	0.003	BDL	BDL	0.002	BDL
Total Octachlorobiphenyl	ng/L		0.00015	BDL	BDL	0.000323	0.001	BDL	BDL	0.001	BDL	0.00002	BDL	BDL	0.0001	BDL	BDL	0.0002	BDL
Total Nonachlorobiphenyl	µg/L		0.00001	BDL	BDL	0.000009	0.000009	BDL	0.00003	0.00003	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Total Homolog PCB	µg/L		18.2	BDL	BDL	25.7	74.8	0.9	0.1	65.1	BDL	9.2	0.9	BDL	23.3	0.2	BDL	16.0	BDL
PCB Congeners																			
1	ng/L	96	8836	BDL	BDL	10102	47758	BDL	BDL	31561	BDL	4493	BDL	BDL	7577	BDL	BDL	8017	BDL
3	ng/L	56	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4	ng/L	61	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
5	ng/L	29	16	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	12	BDL	BDL	BDL	BDL	BDL	BDL	BDL
6	ng/L	23	412	BDL	BDL	548	1961	141	BDL	1839	BDL	192	33	BDL	1218	BDL	BDL	248	BDL
7	ng/L	23	100	BDL	BDL	218	321	BDL	BDL	445	BDL	42	8	BDL	118	BDL	BDL	97	BDL
8	ng/L	23	1504	BDL	BDL	3259	4007	179	BDL	8750	BDL	807	147	BDL	3045	20	BDL	1025	BDL
9	ng/L	23	97	BDL	BDL	134	423	BDL	BDL	449	BDL	65	8	BDL	153	BDL	BDL	76	BDL
10	ng/L	39	2035	BDL	BDL	2009	5862	27	BDL	3808	BDL	966	109	BDL	1501	BDL	BDL	1668	BDL
12/13	ng/L	15	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	9	BDL	BDL	BDL	BDL	BDL	29	BDL
14	ng/L	14	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
15/16	ng/L	15	191	BDL	BDL	264	485	58	BDL	459	BDL	100	24	BDL	335	BDL	BDL	73	BDL
17	ng/L	15	678	BDL	BDL	1972	1535	63	16	2837	BDL	339	83	BDL	1308	24	BDL	534	BDL
18	ng/L	15	188	BDL	BDL	217	1006	118	17	877	BDL	103	37	BDL	1059	BDL	BDL	108	BDL
19	ng/L	25	2491	BDL	BDL	3872	6287	39	17	7081	BDL	1177	183	BDL	3242	24	BDL	2764	BDL
20	ng/L	7	cannot be resolved due to mutiple co-elutions																
22	ng/L	7	16	BDL	BDL	5	23	4	BDL	27	BDL	9	4	BDL	32	BDL	BDL	BDL	BDL
24	ng/L	12	9	BDL	BDL	9	25	BDL	BDL	13	BDL	4	BDL	BDL	4	BDL	BDL	3	BDL
25	ng/L	5	33	BDL	BDL	183	170	14	BDL	330	BDL	29	8	BDL	156	BDL	BDL	41	BDL
26/29	ng/L	6	128	BDL	BDL	219	333	21	BDL	390	BDL	67	14	BDL	247	2	BDL	75	BDL
27	ng/L	9	240	BDL	BDL	346	639	7	BDL	768	BDL	122	19	BDL	283	BDL	BDL	175	BDL
28/31	ng/L	5	202	BDL	BDL	519	598	42	3	1226	BDL	118	34	BDL	465	7	BDL	123	BDL
32	ng/L	9	167	BDL	BDL	492	612	19	BDL	1197	BDL	110	27	BDL	534	6	BDL	160	BDL
33	ng/L	6	cannot be resolved due to mutiple co-elutions																
34	ng/L	6	12	BDL	BDL	17	39	BDL	BDL	47	BDL	9	2	BDL	13	BDL	BDL	8	BDL
35	ng/L	4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
37	ng/L	4	cannot be resolved due to mutiple co-elutions																
40/71	ng/L	6	43	BDL	BDL	52	108	12	BDL	139	BDL	21	11	BDL	87	BDL	BDL	23	BDL
41	ng/L	5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
42	ng/L	4	13	BDL	BDL	11	43	6	3	33	BDL	6	4	BDL	39	BDL	BDL	5	BDL
44/47	ng/L	4	121	BDL	BDL	163	269	27	5	223	BDL	64	22	BDL	183	10	BDL	73	BDL
45	ng/L	8	74	BDL	BDL	123	185	6	BDL	221	BDL	39	4	BDL	86	BDL	BDL	34	BDL
46	ng/L	8	11	BDL	BDL	BDL	31	BDL	BDL	25	BDL	5	BDL	BDL	19	BDL	BDL	4	BDL
48	ng/L	4	5	BDL	BDL	7	9	BDL	BDL	13	BDL	4	BDL	BDL	BDL	BDL	BDL	BDL	BDL
49	ng/L	4	58	BDL	BDL	99	189	17	5	198	BDL	31	14	BDL	188	5	BDL	37	BDL
51	ng/L	6	47	BDL	BDL	111	274	BDL	BDL	221	BDL	20	10	BDL	139	3	BDL	84	BDL
52	ng/L	4	82	BDL	BDL	123	303	28	17	330	BDL	45	19	BDL	309	8	BDL	51	BDL
53	ng/L	6	77	BDL	BDL	158	380	8	5	481	BDL	47	17	BDL	300	5	BDL	125	BDL
54	ng/L	16	72	BDL	BDL	151	383	BDL	BDL	393	BDL	32	9	BDL	319	BDL	BDL	214	BDL
56	ng/L	2	7	BDL	BDL	8	BDL	BDL	BDL	3	BDL	1	1	BDL	2	BDL	BDL	BDL	BDL
59/75	ng/L	3	BDL	BDL	BDL	24	36	2	BDL	39	BDL	7	1	BDL	18	BDL	BDL	10	BDL
60	ng/L	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
63	ng/L	2	3	BDL	BDL	5	7	BDL	BDL	7	BDL	3	1	BDL	4	BDL	BDL	2	BDL
64/71	ng/L	3	43	BDL	BDL	66	118	12	4	151	BDL	33	16	BDL	78	85	BDL	33	BDL

Sediment			2	4	10	13	14	15	16	17	22	23	24	26	27	28	29	20	33
Sample ID			2	4	10	13	14	15	16	17	22	23	24	26	27	28	29	20B	33B
	Units	Reporting Limit																	
66	ng/L		cannot be resolved due to mutiple co-elutions																
67	ng/L		cannot be resolved due to mutiple co-elutions																
69	ng/L	2.26	2.59	BDL	BDL	5.15	7.53	BDL	BDL	6.87	BDL	1.60	BDL	BDL	2.16	BDL	BDL	2.19	BDL
70	ng/L	1.55	7.44	BDL	BDL	4.32	4.06	0.90	BDL	4.07	BDL	3.99	2.09	BDL	4.69	0.77	BDL	0.78	BDL
73	ng/L	2.26	2.89	BDL	BDL	4.70	12.59	BDL	BDL	7.33	BDL	BDL	BDL	BDL	4.78	BDL	BDL	4.94	BDL
74	ng/L	1.55	2.94	BDL	BDL	1.26	11.50	0.32	BDL	6.50	BDL	1.46	0.76	BDL	0.80	BDL	BDL	5.78	BDL
77	ng/L	1.06	0.46	BDL	BDL	BDL	0.70	BDL	BDL	1.20	BDL	BDL	BDL	BDL	0.49	BDL	BDL	BDL	BDL
81	ng/L		cannot be resolved due to mutiple co-elutions																
82	ng/L	1.55	0.91	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
83	ng/L	1.34	1.40	BDL	BDL	1.87	4.82	BDL	BDL	7.29	BDL	0.68	0.23	BDL	2.72	BDL	BDL	0.76	BDL
84	ng/L	2.26	16.75	BDL	BDL	18.13	34.86	1.88	BDL	35.53	BDL	6.61	1.50	BDL	BDL	BDL	BDL	BDL	BDL
85	ng/L	1.22	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
87	ng/L		cannot be resolved due to mutiple co-elutions																
88	ng/L	2.11	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
90/101	ng/L	1.03	10.64	BDL	BDL	15.32	30.47	1.37	0.59	29.76	BDL	6.24	2.11	BDL	12.79	1.17	BDL	9.72	BDL
91	ng/L	1.83	10.13	BDL	BDL	16.19	29.52	0.99	0.55	32.75	BDL	5.06	1.39	BDL	14.87	0.58	BDL	9.46	BDL
92	ng/L	1.08	10.49	BDL	BDL	22.30	40.66	1.43	BDL	43.19	BDL	5.51	0.94	BDL	14.20	0.83	BDL	10.42	BDL
93	ng/L		cannot be resolved due to mutiple co-elutions																
95	ng/L	1.83	40.51	BDL	BDL	50.15	78.95	6.88	3.54	137.36	BDL	20.86	5.65	BDL	84.86	3.14	BDL	18.25	BDL
97	ng/L	1.25	1.57	BDL	BDL	0.38	0.78	BDL	BDL	1.69	BDL	0.82	0.54	BDL	0.38	BDL	BDL	BDL	BDL
99	ng/L	0.99	3.17	BDL	BDL	2.44	6.72	0.50	BDL	10.38	BDL	1.78	0.79	BDL	2.14	BDL	BDL	0.72	BDL
100	ng/L	1.44	1.17	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3.02	BDL	BDL	6.18	BDL
103	ng/L	1.48	2.08	BDL	BDL	3.87	6.85	BDL	BDL	21.29	BDL	0.73	BDL	BDL	9.64	BDL	BDL	2.78	BDL
104	ng/L	3.90	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
105	ng/L	0.53	1.39	BDL	BDL	1.56	4.68	0.60	BDL	6.25	BDL	0.84	0.46	BDL	1.46	0.39	BDL	0.68	BDL
107	ng/L	0.46	BDL	BDL	BDL	0.42	0.52	BDL	BDL	0.57	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
110	ng/L	0.80	11.31	BDL	BDL	14.87	21.72	1.77	0.75	30.25	BDL	5.74	1.96	BDL	16.46	0.95	BDL	5.78	BDL
114	ng/L	0.53	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
115	ng/L		cannot be resolved due to mutiple co-elutions																
117	ng/L	0.84	0.67	BDL	BDL	2.03	1.83	0.99	BDL	2.04	BDL	1.07	0.69	BDL	1.20	BDL	BDL	1.55	BDL
118	ng/L	0.43	1.89	BDL	BDL	0.79	0.76	0.20	BDL	1.67	BDL	0.83	0.43	BDL	0.48	0.32	BDL	0.27	BDL
119	ng/L	0.63	0.79	BDL	BDL	1.79	3.23	BDL	BDL	4.03	BDL	0.43	BDL	BDL	1.80	BDL	BDL	1.11	BDL
122	ng/L	0.55	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
123	ng/L	0.43	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
124	ng/L	0.44	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
128	ng/L	0.4	0.165	BDL	BDL	BDL	BDL	BDL	BDL	0.189	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
129	ng/L	0.4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
130	ng/L	0.4	BDL	BDL	BDL	BDL	0.489	BDL	BDL	0.937	BDL	BDL	BDL	BDL	0.137	BDL	BDL	BDL	BDL
131	ng/L	0.6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
132	ng/L	0.6	2.574	BDL	BDL	3.504	4.533	1.133	0.484	5.672	BDL	1.278	0.672	BDL	1.764	0.532	BDL	1.567	BDL
134	ng/L	0.7	0.848	BDL	BDL	1.127	1.601	BDL	BDL	2.193	BDL	0.400	BDL	BDL	0.834	BDL	BDL	0.578	BDL
135	ng/L	0.5	3.365	BDL	BDL	5.202	11.223	0.165	BDL	13.100	BDL	1.123	0.104	BDL	3.325	BDL	BDL	2.862	BDL
136	ng/L	1.5	3.173	BDL	BDL	6.090	11.246	BDL	BDL	16.785	BDL	1.559	0.462	BDL	4.998	BDL	BDL	2.927	BDL
137	ng/L	0.3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
138/163	ng/L	0.3	1.598	BDL	BDL	1.961	3.109	0.147	0.121	4.534	BDL	0.643	0.211	BDL	1.369	0.170	BDL	1.084	BDL
141	ng/L	0.4	0.302	BDL	BDL	0.287	BDL	0.170	BDL	0.360	BDL	0.161	BDL	BDL	BDL	BDL	BDL	0.190	BDL
144	ng/L	0.5	1.176	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
146	ng/L	0.3	0.301	BDL	BDL	0.492	2.460	0.121	BDL	3.193	BDL	0.211	0.060	BDL	0.663	BDL	BDL	0.331	BDL
147	ng/L	0.5	0.273	BDL	BDL	0.491	1.272	BDL	BDL	1.090	BDL	BDL	BDL	BDL	0.363	0.036	BDL	1.599	BDL
149	ng/L	0.5	3.689	BDL	BDL	7.191	13.435	0.829	0.389	19.493	BDL	2.031	0.592	BDL	5.212	0.355	BDL	3.604	BDL
151	ng/L	0.5	2.435	BDL	BDL	4.161	8.521	0.400	BDL	11.101	BDL	1.036	0.236	BDL	2.871	BDL	BDL	2.562	BDL
153	ng/L	0.3	0.973	BDL	BDL	0.917	2.310	0.253	0.122	3.479	BDL	0.458	0.262	BDL	0.786	0.187	BDL	0.486	BDL
154	ng/L	0.4	BDL	BDL	BDL	1.326	3.403	BDL	BDL	3.267	BDL	0.314	BDL	BDL	0.902	BDL	BDL	0.957	BDL
156	ng/L	0.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
157	ng/L	0.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
158	ng/L	0.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
165	ng/L	0.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Sediment			2	4	10	13	14	15	16	17	22	23	24	26	27	28	29	20	33
Sample ID			2	4	10	13	14	15	16	17	22	23	24	26	27	28	29	20B	33B
	Units	Reporting Limit																	
167	ng/L	0.1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
170	ng/L	0.1	0.045	BDL	BDL	0.110	0.106	BDL	BDL	0.371	BDL	BDL	BDL	BDL	0.082	BDL	BDL	0.045	BDL
171	ng/L	0.2	BDL	BDL	BDL	BDL	0.083	BDL	BDL	0.185	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
172	ng/L	0.1	BDL	BDL	BDL	0.060	BDL	BDL	BDL	0.141	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
173	ng/L	0.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
174	ng/L	0.2	BDL	BDL	BDL	BDL	0.286	BDL	BDL	0.626	BDL	0.101	BDL	BDL	0.137	BDL	BDL	BDL	BDL
175	ng/L	0.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
176	ng/L	0.4	BDL	BDL	BDL	0.191	0.519	BDL	BDL	0.724	BDL	BDL	BDL	BDL	0.164	BDL	BDL	BDL	BDL
177	ng/L	0.2	BDL	BDL	BDL	0.576	1.165	BDL	BDL	1.555	BDL	0.154	BDL	BDL	0.358	BDL	BDL	0.365	BDL
178	ng/L	0.2	0.216	BDL	BDL	0.477	0.827	BDL	BDL	1.121	BDL	BDL	BDL	BDL	0.377	BDL	BDL	0.389	BDL
179	ng/L	0.4	0.660	BDL	BDL	1.321	2.231	BDL	BDL	3.214	BDL	0.308	BDL	BDL	0.690	BDL	BDL	0.895	BDL
180	ng/L	0.1	0.099	BDL	BDL	0.135	0.244	0.033	BDL	0.557	BDL	0.063	BDL	BDL	0.135	BDL	BDL	0.082	BDL
183	ng/L	0.1	0.053	BDL	BDL	0.077	0.140	BDL	BDL	0.327	BDL	BDL	BDL	BDL	0.087	BDL	BDL	0.058	BDL
185	ng/L	0.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.072	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
187	ng/L	0.2	0.538	BDL	BDL	0.894	1.882	0.119	BDL	2.424	BDL	0.264	BDL	BDL	0.589	BDL	BDL	0.625	BDL
189	ng/L	0.04	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
190	ng/L	0.08	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.034	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
191	ng/L	0.06	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
193	ng/L	0.07	BDL	BDL	BDL	BDL	0.036	BDL	BDL	0.054	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
194	ng/L	0.03	BDL	BDL	BDL	0.013	0.027	BDL	BDL	0.050	BDL	BDL	BDL	BDL	0.014	BDL	BDL	BDL	BDL
195	ng/L	0.06	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.039	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
196	ng/L	0.05	BDL	BDL	BDL	BDL	0.041	BDL	BDL	0.040	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
197	ng/L	0.11	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
199	ng/L	0.05	0.036	BDL	BDL	0.039	0.080	BDL	BDL	0.130	BDL	0.020	BDL	BDL	0.034	BDL	BDL	0.027	BDL
200	ng/L	0.14	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
201	ng/L	0.12	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
202	ng/L	0.05	0.116	BDL	BDL	0.201	0.414	BDL	BDL	0.533	BDL	BDL	BDL	BDL	0.025	BDL	BDL	0.130	BDL
203	ng/L	0.13	BDL	BDL	BDL	0.070	0.088	BDL	BDL	0.158	BDL	BDL	BDL	BDL	0.057	BDL	BDL	BDL	BDL
205	ng/L	0.05	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
206	ng/L	0.02	0.008	BDL	BDL	BDL	0.009	BDL	BDL	0.013	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
207	ng/L	0.04	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
208	ng/L	0.04	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.019	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
209	ng/L	0.01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Sediment			2	4	10	13	14	15	16	17	22	23	24	26	27	28	29	20
Sample ID			41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
	Units	**Reporting Limit**																
PCB Homolog Groups																		
Total Monochlorobiphenyl	µg/L		4.3	BDL	BDL	15.9	35.5	BDL	BDL	21.3	BDL	7.8	0.3	BDL	6.7	BDL	BDL	BDL
Total Dichlorobiphenyl	µg/L		3.01	BDL	BDL	6.35	15.30	0.23	BDL	17.16	BDL	2.85	0.43	BDL	6.95	0.02	BDL	BDL
Total Trichlorobiphenyl	µg/L		3.59	BDL	BDL	6.93	16.83	0.21	0.07	18.59	BDL	2.86	0.51	BDL	8.56	0.09	BDL	BDL
Total Tetrachlorobiphenyl	µg/L		0.78	BDL	BDL	1.17	3.62	0.07	0.06	3.72	BDL	0.62	0.14	BDL	2.54	0.05	BDL	BDL
Total Pentachlorobiphenyl	µg/L		0.13	BDL	BDL	0.16	0.40	0.01	0.02	0.49	BDL	0.12	0.02	BDL	0.28	0.01	BDL	BDL
Total Hexachlorobiphenyl	µg/L		0.0236	BDL	BDL	0.0429	0.0991	0.0013	0.0055	0.1152	BDL	0.0251	0.0039	BDL	0.0375	0.0026	BDL	BDL
Total Heptachlorobiphenyl	µg/L		0.0025	BDL	BDL	0.0051	0.0114	0.0001	0.0009	0.0135	BDL	0.0033	0.0002	BDL	0.0040	0.0004	BDL	BDL
Total Octachlorobiphenyl	µg/L		0.0003	BDL	BDL	0.0002	0.0004	BDL	BDL	0.0011	BDL	0.0001	BDL	BDL	0.0001	BDL	BDL	BDL
Total Nonachlorobiphenyl	µg/L		0.00001	BDL	BDL	0.00002	0.00002	BDL	0.00003	0.00003	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Total Homolog PCB	µg/L		11.8	BDL	BDL	30.5	71.8	0.5	0.2	61.4	BDL	14.2	1.4	BDL	25.0	0.2	BDL	BDL
PCB Congeners																		
1	ng/L	96	4271	BDL	BDL	15871	35549	BDL	BDL	21336	BDL	7750	288	BDL	6652	BDL	BDL	BDL
3	ng/L	56	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4	ng/L	61	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
5	ng/L	29	17	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	25	BDL	BDL	BDL	BDL	BDL	BDL
6	ng/L	23	251	BDL	BDL	508	2282	64	BDL	2125	BDL	236	42	BDL	1260	BDL	BDL	BDL
7	ng/L	23	56	BDL	BDL	198	384	7	BDL	577	BDL	66	9	BDL	136	BDL	BDL	BDL
8	ng/L	23	1061	BDL	BDL	2996	4895	114	BDL	9113	BDL	1052	178	BDL	3248	22	BDL	BDL
9	ng/L	23	66	BDL	BDL	144	523	BDL	BDL	574	BDL	79	8	BDL	172	BDL	BDL	BDL
10	ng/L	39	1399	BDL	BDL	2215	6618	BDL	BDL	4041	BDL	1241	162	BDL	1738	BDL	BDL	BDL
12/13	ng/L	15	10	BDL	BDL	19	BDL	BDL	BDL	61	BDL	16	BDL	BDL	BDL	BDL	BDL	BDL
14	ng/L	14	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
15/16	ng/L	15	155	BDL	BDL	269	593	40	BDL	668	BDL	133	32	BDL	395	BDL	BDL	BDL
17	ng/L	15	593	BDL	BDL	1824	2288	42	18	3688	BDL	485	118	BDL	1609	19	BDL	BDL
18	ng/L	15	171	BDL	BDL	235	1483	78	25	1207	BDL	166	45	BDL	1266	11	BDL	BDL
19	ng/L	25	2049	BDL	BDL	3299	9288	26	17	8448	BDL	1586	226	BDL	3614	32	BDL	BDL
20	ng/L	cannot be resolved due to mutiple co-elutions																
22	ng/L	7	18	BDL	BDL	14	28	3	BDL	33	BDL	14	3	BDL	40	BDL	BDL	BDL
24	ng/L	12	6	BDL	BDL	6	28	BDL	BDL	BDL	BDL	7	BDL	BDL	BDL	BDL	BDL	BDL
25	ng/L	5	54	BDL	BDL	161	270	9	BDL	441	BDL	44	10	BDL	203	2	BDL	BDL
26/29	ng/L	6	83	BDL	BDL	123	393	11	2	445	BDL	71	12	BDL	242	3	BDL	BDL
27	ng/L	9	235	BDL	BDL	316	1053	4	2	988	BDL	178	21	BDL	338	3	BDL	BDL
28/31	ng/L	5	218	BDL	BDL	494	1027	25	4	1663	BDL	183	41	BDL	576	9	BDL	BDL
32	ng/L	9	150	BDL	BDL	437	899	11	4	1612	BDL	110	37	BDL	648	8	BDL	BDL
33	ng/L	cannot be resolved due to mutiple co-elutions																
34	ng/L	6	14	BDL	BDL	17	69	BDL	BDL	62	BDL	11	BDL	BDL	21	BDL	BDL	BDL
35	ng/L	4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
37	ng/L	cannot be resolved due to mutiple co-elutions																
40/71	ng/L	6	49	BDL	BDL	48	168	8	BDL	204	BDL	34	10	BDL	121	BDL	BDL	BDL
41	ng/L	5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
42	ng/L	4	15	BDL	BDL	13	66	5	5	BDL	BDL	11	4	BDL	56	3	BDL	BDL
44/47	ng/L	4	133	BDL	BDL	167	403	15	11	331	BDL	118	25	BDL	265	12	BDL	BDL
45	ng/L	8	65	BDL	BDL	132	296	BDL	BDL	327	BDL	62	6	BDL	140	BDL	BDL	BDL
46	ng/L	8	11	BDL	BDL	7	58	BDL	BDL	31	BDL	8	BDL	BDL	31	BDL	BDL	BDL
48	ng/L	4	6	BDL	BDL	BDL	10	BDL	BDL	19	BDL	6	1	BDL	BDL	BDL	BDL	BDL
49	ng/L	4	68	BDL	BDL	107	314	9	12	296	BDL	57	14	BDL	267	6	BDL	BDL
51	ng/L	6	64	BDL	BDL	107	365	BDL	BDL	370	BDL	36	9	BDL	195	4	BDL	BDL
52	ng/L	4	90	BDL	BDL	122	435	18	30	481	BDL	70	22	BDL	426	11	BDL	BDL
53	ng/L	6	98	BDL	BDL	158	559	BDL	BDL	672	BDL	78	20	BDL	427	7	BDL	BDL
54	ng/L	16	75	BDL	BDL	185	626	BDL	BDL	667	BDL	51	11	BDL	453	BDL	BDL	BDL
56	ng/L	2	3	BDL	BDL	BDL	7	BDL	BDL	BDL	BDL	2	1	BDL	3	BDL	BDL	BDL
59/75	ng/L	3	15	BDL	BDL	25	56	BDL	BDL	61	BDL	14	1	BDL	29	BDL	BDL	BDL
60	ng/L	2	1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2	BDL	BDL	BDL	BDL	BDL	BDL
63	ng/L	2	4	BDL	BDL	5	11	BDL	BDL	11	BDL	3	BDL	BDL	6	BDL	BDL	BDL
64/71	ng/L	3	57	BDL	BDL	72	204	11	5	204	BDL	51	12	BDL	108	6	BDL	BDL
66	ng/L	cannot be resolved due to mutiple co-elutions																
67	ng/L	cannot be resolved due to mutiple co-elutions																
69	ng/L	2.26	4	BDL	BDL	6	14	BDL	BDL	11	BDL	3	BDL	BDL	3	BDL	BDL	BDL
70	ng/L	1.55	10	BDL	BDL	5	7	1	0	6	BDL	7	2	BDL	6	1	BDL	BDL
73	ng/L	2.26	4	BDL	BDL	11	19	BDL	BDL	15	BDL	3	BDL	BDL	7	BDL	BDL	BDL
74	ng/L	1.55	4	BDL	BDL	BDL	BDL	BDL	BDL	9	BDL	3	1	BDL	1	BDL	BDL	BDL
77	ng/L	1.06	1	BDL	BDL	BDL	1	BDL	BDL	2	BDL	BDL	BDL	BDL	1	BDL	BDL	BDL
81	ng/L	cannot be resolved due to mutiple co-elutions																
82	ng/L	1.55	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
83	ng/L	1.34	2	BDL	BDL	3	9	BDL	0	11	BDL	2	0	BDL	4	BDL	BDL	BDL
84	ng/L	2.26	18	BDL	BDL	16	51	BDL	BDL	54	BDL	15	2	BDL	32	1	BDL	BDL
85	ng/L	1.22	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
87	ng/L	cannot be resolved due to mutiple co-elutions																
88	ng/L	2.11	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Sediment			2	4	10	13	14	15	16	17	22	23	24	26	27	28	29	20
Sample ID			41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
	Units	Reporting Limit																
90/101	ng/L	1.03	16	BDL	BDL	14	45	1	2	44	BDL	15	3	BDL	20	2	BDL	BDL
91	ng/L	1.83	14	BDL	BDL	20	46	1	2	46	BDL	12	2	BDL	24	1	BDL	BDL
92	ng/L	1.08	12	BDL	BDL	25	59	1	1	60	BDL	13	1	BDL	23	1	BDL	BDL
93	ng/L	cannot be resolved due to mutiple co-elutions																
95	ng/L	1.83	39.7	BDL	BDL	50.3	113.1	4.3	8.9	168.0	BDL	34.7	7.3	BDL	119.5	4.3	BDL	BDL
97	ng/L	1.25	2.3	BDL	BDL	BDL	1.6	BDL	BDL	2.6	BDL	1.9	BDL	BDL	0.6	BDL	BDL	BDL
99	ng/L	0.99	4.6	BDL	BDL	3.5	11.3	BDL	0.7	14.7	BDL	4.5	1.0	BDL	3.4	0.7	BDL	BDL
100	ng/L	1.44	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
103	ng/L	1.48	2.2	BDL	BDL	6.2	14.7	BDL	BDL	31.8	BDL	2.3	BDL	BDL	21.2	BDL	BDL	BDL
104	ng/L	3.90	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
105	ng/L	0.53	1.3	BDL	BDL	1.5	6.8	0.3	0.5	7.7	BDL	1.6	0.6	BDL	1.9	0.6	BDL	BDL
107	ng/L	0.46	0.5	BDL	BDL	0.9	1.0	BDL	BDL	0.8	BDL	0.5	BDL	BDL	0.4	BDL	BDL	BDL
110	ng/L	0.80	14.3	BDL	BDL	17.4	35.5	1.0	2.0	39.7	BDL	12.1	2.7	BDL	21.8	1.3	BDL	BDL
114	ng/L	0.53	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
115	ng/L	cannot be resolved due to mutiple co-elutions																
117	ng/L	0.84	1.2	BDL	BDL	1.7	2.8	BDL	BDL	2.3	BDL	1.2	BDL	BDL	1.4	BDL	BDL	BDL
118	ng/L	0.43	1.7	BDL	BDL	0.9	1.3	BDL	0.3	1.8	BDL	1.5	0.6	BDL	0.6	0.5	BDL	BDL
119	ng/L	0.63	1.4	BDL	BDL	BDL	5.3	BDL	BDL	5.9	BDL	1.2	BDL	BDL	2.8	BDL	BDL	BDL
122	ng/L	0.55	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
123	ng/L	0.43	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
124	ng/L	0.44	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
128	ng/L	0.4	0.20	BDL	BDL	BDL	BDL	BDL	BDL	0.24	BDL	0.18	BDL	BDL	BDL	BDL	BDL	BDL
129	ng/L	0.4	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
130	ng/L	0.4	0.15	BDL	BDL	0.24	0.89	BDL	BDL	1.30	BDL	0.19	BDL	BDL	0.23	BDL	BDL	BDL
131	ng/L	0.6	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
132	ng/L	0.6	2.59	BDL	BDL	3.84	6.61	0.63	1.00	7.37	BDL	2.68	0.78	BDL	2.51	0.52	BDL	BDL
134	ng/L	0.7	0.80	BDL	BDL	1.41	2.63	BDL	BDL	3.06	BDL	0.83	BDL	BDL	1.23	BDL	BDL	BDL
135	ng/L	0.5	2.94	BDL	BDL	7.06	16.08	BDL	0.33	17.84	BDL	3.25	0.27	BDL	5.50	BDL	BDL	BDL
136	ng/L	1.5	4.89	BDL	BDL	8.49	18.93	BDL	1.11	23.37	BDL	4.73	0.64	BDL	8.59	0.39	BDL	BDL
137	ng/L	0.3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
138/163	ng/L	0.3	1.34	BDL	BDL	2.11	4.52	0.10	0.44	5.45	BDL	1.40	0.38	BDL	1.98	0.25	BDL	BDL
141	ng/L	0.4	0.25	BDL	BDL	0.24	0.24	BDL	0.19	0.46	BDL	0.26	0.20	BDL	0.23	0.14	BDL	BDL
144	ng/L	0.5	0.17	BDL	BDL	BDL	BDL	BDL	BDL	0.32	BDL	0.20	BDL	BDL	BDL	BDL	BDL	BDL
146	ng/L	0.3	0.42	BDL	BDL	0.78	3.89	BDL	0.11	4.27	BDL	0.58	BDL	BDL	0.95	BDL	BDL	BDL
147	ng/L	0.5	0.42	BDL	BDL	0.73	2.13	BDL	BDL	1.53	BDL	0.47	BDL	BDL	0.65	BDL	BDL	BDL
149	ng/L	0.5	5.21	BDL	BDL	9.90	22.78	0.47	1.51	24.89	BDL	5.40	0.91	BDL	7.55	0.76	BDL	BDL
151	ng/L	0.5	2.54	BDL	BDL	5.05	12.23	BDL	0.47	15.97	BDL	2.98	0.40	BDL	5.25	0.25	BDL	BDL
153	ng/L	0.3	0.90	BDL	BDL	1.10	3.31	0.13	0.38	4.01	BDL	1.10	0.34	BDL	1.16	0.33	BDL	BDL
154	ng/L	0.4	0.75	BDL	BDL	1.91	4.89	BDL	BDL	5.08	BDL	0.83	BDL	BDL	1.65	BDL	BDL	BDL
156	ng/L	0.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
157	ng/L	0.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
158	ng/L	0.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
165	ng/L	0.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
167	ng/L	0.1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
170	ng/L	0.1	0.05	BDL	BDL	0.11	0.15	BDL	0.04	0.28	BDL	0.07	BDL	BDL	0.08	BDL	BDL	BDL
171	ng/L	0.2	BDL	BDL	BDL	0.07	0.13	BDL	BDL	0.21	BDL	0.07	BDL	BDL	0.06	BDL	BDL	BDL
172	ng/L	0.1	BDL	BDL	BDL	BDL	0.13	BDL	BDL	0.19	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
173	ng/L	0.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
174	ng/L	0.2	0.13	BDL	BDL	0.18	0.42	BDL	0.10	0.72	BDL	0.17	BDL	BDL	0.17	BDL	BDL	BDL
175	ng/L	0.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
176	ng/L	0.4	0.16	BDL	BDL	0.33	0.81	BDL	BDL	0.92	BDL	0.22	BDL	BDL	0.25	BDL	BDL	BDL
177	ng/L	0.2	0.26	BDL	BDL	0.73	1.66	BDL	BDL	1.84	BDL	0.37	BDL	BDL	0.53	BDL	BDL	BDL
178	ng/L	0.2	0.23	BDL	BDL	0.57	1.23	BDL	BDL	1.34	BDL	0.26	BDL	BDL	0.51	BDL	BDL	BDL
179	ng/L	0.4	0.95	BDL	BDL	1.67	3.63	BDL	0.56	4.08	BDL	1.17	BDL	BDL	1.29	0.31	BDL	BDL
180	ng/L	0.1	0.13	BDL	BDL	0.22	0.35	BDL	0.06	0.61	BDL	0.14	0.03	BDL	0.14	0.03	BDL	BDL
183	ng/L	0.1	0.08	BDL	BDL	0.13	0.23	BDL	BDL	0.40	BDL	0.12	BDL	BDL	0.12	BDL	BDL	BDL
185	ng/L	0.2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
187	ng/L	0.2	0.54	BDL	BDL	1.13	2.58	0.06	0.18	2.83	BDL	0.67	0.12	BDL	0.86	0.09	BDL	BDL
189	ng/L	0.04	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
190	ng/L	0.08	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.04	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
191	ng/L	0.06	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
193	ng/L	0.07	BDL	BDL	BDL	BDL	0.05	BDL	BDL	0.06	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
194	ng/L	0.03	BDL	BDL	BDL	0.02	0.04	BDL	BDL	0.05	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
195	ng/L	0.06	BDL	BDL	BDL	BDL	0.03	BDL	BDL	0.04	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
196	ng/L	0.05	BDL	BDL	BDL	0.02	0.03	BDL	BDL	0.04	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
197	ng/L	0.11	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
199	ng/L	0.05	0.03	BDL	BDL	0.05	0.12	BDL	BDL	0.14	BDL	0.04	BDL	BDL	0.04	BDL	BDL	BDL
200	ng/L	0.14	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
201	ng/L	0.12	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
202	ng/L	0.05	0.02	BDL	BDL	0.05	0.09	BDL	BDL	0.64	BDL	0.04	BDL	BDL	0.04	BDL	BDL	BDL
203	ng/L	0.13	0.21	BDL	BDL	0.07	0.13	BDL	BDL	0.18	BDL	0.06	BDL	BDL	0.06	BDL	BDL	BDL
205	ng/L	0.05	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
206	ng/L	0.02	0.01	BDL	BDL	BDL	BDL	BDL	BDL	0.02	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
207	ng/L	0.04	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Sediment			2	4	10	13	14	15	16	17	22	23	24	26	27	28	29	20
Sample ID			41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56
	Units	Reporting Limit																
208	ng/L	0.04	BDL	BDL	BDL	BDL	0.02	BDL	BDL	0.02	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
209	ng/L	0.01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Sediment			2	11	14	16	23	24	29	33
Sample ID										
	Units	**Reporting Limit**								
PCB Homolog Groups										
Total Monochlorobiphenyl	µg/L		BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
Total Dichlorobiphenyl	µg/L		0.697	6.019	1.405	BLD	0.111	BLD	BLD	BLD
Total Trichlorobiphenyl	µg/L		2.288	13.089	4.052	BLD	0.510	0.007	BLD	BLD
Total Tetrachlorobiphenyl	µg/L		0.836	2.892	1.529	0.029	0.190	0.041	BLD	BLD
Total Pentachlorobiphenyl	µg/L		0.168	0.471	0.236	0.011	0.037	0.015	BLD	BLD
Total Hexachlorobiphenyl	µg/L		0.033	0.111	0.065	0.004	0.007	0.004	BLD	BLD
Total Heptachlorobiphenyl	µg/L		0.004	0.013	0.009	0.004	0.000	0.004	BLD	BLD
Total Octachlorobiphenyl	µg/L		0.033	0.111	0.065	0.004	0.007	0.004	BLD	BLD
Total Nonachlorobiphenyl	µg/L		0	0	0	BLD	BLD	BLD	BLD	BLD
Total Homolog PCB	µg/L		4.1	22.7	7.4	0.1	0.9	0.1	BLD	BLD
PCB Congeners										
1	ng/L	96	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
3	ng/L	56	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
4	ng/L	61	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
5	ng/L	29	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
6	ng/L	23	64.6	541.0	209.0	BLD	BLD	BLD	BLD	BLD
7	ng/L	23	11.5	99.2	29.3	BLD	BLD	BLD	BLD	BLD
8	ng/L	23	402.8	3168.4	790.2	BLD	79.4	BLD	BLD	BLD
9	ng/L	23	15.8	193.7	40.2	BLD	BLD	BLD	BLD	BLD
10	ng/L	39	73.5	1416.4	119.9	BLD	BLD	BLD	BLD	BLD
12/13	ng/L	15	BLD	52.1	BLD	BLD	BLD	BLD	BLD	BLD
14	ng/L	14	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
15/16	ng/L	15	129.0	548.3	216.4	BLD	32.1	BLD	BLD	BLD
17	ng/L	15	405.9	2069.2	622.1	BLD	105.0	BLD	BLD	BLD
18	ng/L	15	113.4	324.1	402.9	BLD	27.2	BLD	BLD	BLD
19	ng/L	25	901.5	6283.5	1502.0	BLD	165.3	BLD	BLD	BLD
20	ng/L		BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
22	ng/L	7	16.1	41.1	11.5	BLD	4.4	BLD	BLD	BLD
24	ng/L	12	6.0	32.8	5.3	BLD	BLD	BLD	BLD	BLD
25	ng/L	5	42.1	176.1	100.4	BLD	11.2	BLD	BLD	BLD
26/29	ng/L	6	89.9	461.3	158.9	BLD	30.4	2.2	BLD	BLD
27	ng/L	9	369.0	2144.8	591.9	BLD	82.7	BLD	BLD	BLD
28/31	ng/L	5	205.8	732.7	348.3	BLD	55.2	5.2	BLD	BLD
32	ng/L	9	127.6	763.8	288.4	BLD	28.8	BLD	BLD	BLD
33	ng/L		BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
34	ng/L	6	10.9	59.4	19.9	BLD	BLD	BLD	BLD	BLD
35	ng/L	4	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
37	ng/L		BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
40/71	ng/L	6	7.0	8.6	8.3	BLD	2.0	BLD	BLD	BLD
41	ng/L	5	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
42	ng/L	4	18.7	44.8	32.8	2.3	4.4	2.6	BLD	BLD
44/47	ng/L	4	150.5	488.0	197.6	4.6	40.7	11.0	BLD	BLD
45	ng/L	8	92.6	332.1	154.4	BLD	22.4	BLD	BLD	BLD

Sediment			2	11	14	16	23	24	29	33
Sample ID										
	Units	**Reporting Limit**								
46	ng/L	8	10.7	42.1	18.2	BLD	BLD	BLD	BLD	BLD
48	ng/L	4	6.0	15.0	3.9	BLD	2.0	BLD	BLD	BLD
49	ng/L	4	84.0	255.6	154.7	5.7	20.6	6.4	BLD	BLD
51	ng/L	6	67.7	334.1	178.1	BLD	9.7	BLD	BLD	BLD
52	ng/L	4	106.8	279.8	239.9	12.5	26.6	9.7	BLD	BLD
53	ng/L	6	110.2	429.6	224.5	2.8	22.5	4.9	BLD	BLD
54	ng/L	16	69.5	368.9	179.1	BLD	14.1	BLD	BLD	BLD
56	ng/L	2	5.0	9.2	4.0	BLD	1.0	1.1	BLD	BLD
59/75	ng/L	3	18.5	66.6	27.7	BLD	4.7	0.7	BLD	BLD
60	ng/L	2	1.4	0.9	BLD	BLD	BLD	BLD	BLD	BLD
63	ng/L	2	4.3	20.6	8.4	BLD	1.1	BLD	BLD	BLD
64/71	ng/L	3	62.3	135.0	85.8	1.2	12.8	1.6	BLD	BLD
66	ng/L		BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
67	ng/L		BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
69	ng/L	2.26	3.9	16.1	5.9	BLD	BLD	BLD	BLD	BLD
70	ng/L	1.55	11.9	23.2	3.0	0.3	2.5	2.0	BLD	BLD
73	ng/L	2.26	BLD	13.0	BLD	BLD	1.6	BLD	BLD	BLD
74	ng/L	1.55	4.2	6.4	1.5	BLD	1.0	0.8	BLD	BLD
77	ng/L	1.06	1.0	2.5	1.1	BLD	BLD	BLD	BLD	BLD
81	ng/L		BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
82	ng/L	1.55	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
83	ng/L	1.34	2.3	8.5	3.7	0.2	0.5	BLD	BLD	BLD
84	ng/L	2.26	24.6	59.0	31.0	1.9	4.6	2.1	BLD	BLD
85	ng/L	1.22	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
87	ng/L		BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
88	ng/L	2.11	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
90/101	ng/L	1.03	23.7	58.4	28.9	1.3	4.7	3.0	BLD	BLD
91	ng/L	1.83	15.6	51.9	23.8	0.8	3.3	1.1	BLD	BLD
92	ng/L	1.08	16.9	61.9	39.3	0.6	4.3	1.0	BLD	BLD
93	ng/L		BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
95	ng/L	1.83	49.9	130.5	70.0	4.7	11.5	5.3	BLD	BLD
97	ng/L	1.25	2.6	3.7	0.7	BLD	0.6	0.8	BLD	BLD
99	ng/L	0.99	5.4	14.7	5.9	0.4	1.3	1.0	BLD	BLD
100	ng/L	1.44	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
103	ng/L	1.48	2.4	10.1	7.0	BLD	BLD	BLD	BLD	BLD
104	ng/L	3.90	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
105	ng/L	0.53	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
107	ng/L	0.46	0.7	3.4	0.6	BLD	BLD	BLD	BLD	BLD
110	ng/L	0.80	18.5	52.7	19.2	1.5	4.2	BLD	BLD	BLD
114	ng/L	0.53	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
115	ng/L		BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
117	ng/L	0.84	1.7	5.9	1.9	BLD	0.8	BLD	BLD	BLD
118	ng/L	0.43	2.3	5.2	1.2	BLD	0.7	0.8	BLD	BLD
119	ng/L	0.63	1.4	5.3	2.6	BLD	0.3	BLD	BLD	BLD
122	ng/L	0.55	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
123	ng/L	0.43	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
124	ng/L	0.44	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD

Sediment			2	11	14	16	23	24	29	33
Sample ID										
	Units	**Reporting Limit**								
128	ng/L	0.4	0.3	0.4	BLD	BLD	BLD	BLD	BLD	BLD
129	ng/L	0.4	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
130	ng/L	0.4	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
131	ng/L	0.6	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
132	ng/L	0.6	4.2	12.4	5.6	0.6	1.1	0.7	BLD	BLD
134	ng/L	0.7	1.2	4.0	1.8	BLD	BLD	BLD	BLD	BLD
135	ng/L	0.5	4.3	15.3	10.4	0.3	0.9	0.4	BLD	BLD
136	ng/L	1.5	6.3	19.9	11.3	0.7	1.2	0.7	BLD	BLD
137	ng/L	0.3	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
138/163	ng/L	0.3	2.0	6.1	2.8	0.3	0.4	0.4	BLD	BLD
141	ng/L	0.4	0.3	0.6	0.2	0.1	BLD	0.1	BLD	BLD
144	ng/L	0.5	0.2	0.2	BLD	BLD	BLD	BLD	BLD	BLD
146	ng/L	0.3	0.6	2.6	2.5	BLD	0.1	0.1	BLD	BLD
147	ng/L	0.5	0.5	2.4	1.3	BLD	BLD	BLD	BLD	BLD
149	ng/L	0.5	6.6	22.0	13.4	0.9	1.4	0.8	BLD	BLD
151	ng/L	0.5	4.1	14.1	8.9	0.3	0.9	0.4	BLD	BLD
153	ng/L	0.3	1.6	5.4	2.9	0.3	0.4	0.5	BLD	BLD
154	ng/L	0.4	0.89	4.52	3.38	BLD	0.23	BLD	BLD	BLD
156	ng/L	0.2	BLD	0.12	BLD	BLD	BLD	BLD	BLD	BLD
157	ng/L	0.2	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
158	ng/L	0.2	0.16	0.27	0.12	BLD	0.15	BLD	BLD	BLD
165	ng/L	0.2	BLD	0.23	0.19	BLD	BLD	BLD	BLD	BLD
167	ng/L	0.1	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
170	ng/L	0.1	0.13	0.36	0.17	BLD	BLD	BLD	BLD	BLD
171	ng/L	0.2	0.08	0.21	0.13	BLD	BLD	BLD	BLD	BLD
172	ng/L	0.1	BLD	0.09	0.09	BLD	BLD	BLD	BLD	BLD
173	ng/L	0.2	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
174	ng/L	0.2	0.25	0.73	0.41	0.08	BLD	BLD	BLD	BLD
175	ng/L	0.2	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
176	ng/L	0.4	0.27	0.64	0.66	BLD	BLD	BLD	BLD	BLD
177	ng/L	0.2	0.56	2.22	1.54	BLD	0.12	BLD	BLD	BLD
178	ng/L	0.2	0.39	1.44	0.84	BLD	0.07	BLD	BLD	BLD
179	ng/L	0.4	1.29	4.12	2.89	BLD	BLD	BLD	BLD	BLD
180	ng/L	0.1	0.19	0.57	0.26	0.06	0.05	0.05	BLD	BLD
183	ng/L	0.1	0.13	0.34	0.18	BLD	BLD	BLD	BLD	BLD
185	ng/L	0.2	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
187	ng/L	0.2	0.69	2.61	1.79	0.08	0.16	0.09	BLD	BLD
189	ng/L	0.04	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
190	ng/L	0.08	BLD	0.04	BLD	BLD	BLD	BLD	BLD	BLD
191	ng/L	0.06	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
193	ng/L	0.07	BLD	0.06	0.04	BLD	BLD	BLD	BLD	BLD
194	ng/L	0.03	0.02	0.07	0.03	BLD	BLD	BLD	BLD	BLD
195	ng/L	0.06	BLD	0.06	0.03	BLD	BLD	BLD	BLD	BLD
196	ng/L	0.05	BLD	0.06	0.03	BLD	BLD	BLD	BLD	BLD
197	ng/L	0.11	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
199	ng/L	0.05	0.07	0.22	0.13	BLD	BLD	BLD	BLD	BLD
200	ng/L	0.14	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD

Sediment			2	11	14	16	23	24	29	33
Sample ID										
	Units	**Reporting Limit**								
201	ng/L	0.12	BLD	0.10	BLD	BLD	BLD	BLD	BLD	BLD
202	ng/L	0.05	0.05	0.20	0.10	BLD	BLD	BLD	BLD	BLD
203	ng/L	0.13	0.11	0.29	0.14	BLD	BLD	BLD	BLD	BLD
205	ng/L	0.05	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
206	ng/L	0.02	0.01	0.03	0.01	BLD	BLD	BLD	BLD	BLD
207	ng/L	0.04	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD
208	ng/L	0.04	0.02	0.03	0.02	BLD	BLD	BLD	BLD	BLD
209	ng/L	0.01	BLD	BLD	BLD	BLD	BLD	BLD	BLD	BLD