ADVANCED ECOLOGICAL MANAGEMENT

Memo

Date: 11/21/2008

To: Alicia Duex, Kennecott Eagle Minerals Company

From: Doug Workman

RE: Eagle Project – Summary of 2008 brook trout metals data

Introduction

This memo provides a summary of metals content data in brook trout (*Salvelinus fontinalis*) collected from streams in the vicinity of the Eagle Project as part of the fall 2008 fish survey. Information from this survey is intended to provide baseline data regarding metals concentrations within brook trout that were collected from the project vicinity. A brief description of sample methodology is included within this memo and will also be described in detail along with the complete analyses of all metals data, which will be provided in the annual 2008 Aquatic Survey Report of the Eagle Project.

Fish Collection

Consistent with the methodology described in the October 20, 2008 Eagle Brook Trout Metals Analyses Plan that was submitted to the Michigan Department of Environmental Quality, Advanced Ecological Management, LLC (AEM) followed the Great Lakes and Environmental Assessment Section, Procedure 31 protocol to collect and handle brook trout that were analyzed for metals. A total of ten stream segments (stations) were surveyed by AEM fisheries personnel as part of the fall survey using a backpack electro-shocker or a barge electro-shocking unit (Figure 1-1). Brook trout were collected for metals analyses during the fall aquatic survey within, or in the nearby vicinity of established stream stations. All collected fish were placed immediately in water-filled tubs to keep collected fish alive. Tubs contained portable battery-operated aerators, and were placed in the stream shocking unit or along the stream banks.

Upon completion of the annual fish survey within a station and in accordance with the October 20, 2008, Eagle Brook Trout Metals Analyses Plan, the number of brook trout was recorded. Based on sample size, a determination was made to keep approximately 15% of the brook trout collected from the sample station, or release all if five or fewer brook trout were collected. For several sites where more than five brook trout greater than two inches in length were collected, AEM sampled beyond the typical station length in an attempt to provide additional data for metals analyses. Additional sampling beyond the established station length was conducted once the survey of the station area was complete. AEM attempted to select brook trout for metals analyses of similar size among all stations.

Processing

The processing area and all processing materials (e.g., knives, table, and balance tray) were rinsed with de-ionized water prior to processing. Photographs of each fish labeled with date, length, weight, and sample location information were collected. Working from the smallest specimen to the largest specimen, each fish was weighed, measured, and sexed as they were processed. Scale samples were taken and placed in aging sample envelopes labeled with pertinent information. Fillet and liver samples taken from each fish were individually placed in aluminum foil with dull side to fish. Samples were placed in individual sample containers, labeled, and placed on ice. Fillet tissue samples were processed according to guidance provided in Attachment 10 of GLEAS Procedure 31.

AEM shipped the fish samples to Pace Analytical Services, Inc via next-day courier service following the completion of surveying all ten stations. Fillets and livers were processed by Pace Analytical Services, Inc. using the Inductively Coupled Plasma-Mass-Spectrometry Method 6020. Fillets were processed for the following metals: aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, chromium, cobalt, copper, iron, lead, manganese, mercury, molybdenum, nickel, selenium, silver, strontium, and zinc. Livers were processed for divalent metals, including cadmium, copper, lead, nickel, silver, and zinc.

Results

A total of 108 brook trout were collected from all ten stations (Table 1), and 23 brook trout, including 16 males and seven females were selected for metals analyses from Stations 2, 3, 4, 5, 9, and 10. Twelve brook trout were taken from fish collected within established sample stations, and an additional 11 brook trout were collected from adjacent stream sections, where populations were deemed sufficient for collections to take place. The presence of beaver dams affected access to some stations including Station 4 (Figure 1-2). When possible, sampling was conducted downstream of these sample stations to provide fish tissues for metals analyses.

Among all brook trout collected during the fall survey, length ranged from 2.2 inches to 9.0 inches, and average length was 4.4 inches (sample size; n = 108; standard deviation; s = 1.4 inches). These length statistics also include brook trout collected from locations that were adjacent to the stations (upstream or downstream of stations) that are typically surveyed. AEM attempted to select brook trout that were approximately 4 to 5 inches in length for conducting metals analyses.

Copper, mercury, and nickel concentrations are summarized within the text of this memo and all other metals data are summarized within Tables 2, 3, 4, and 5. Chain of custody forms are presented in Attachment 1.

Stations 2 and 3 – Salmon Trout River, Main Branch

A total of 11 brook trout were collected in the vicinity of Stations 2 and 3 (Table 1). To increase the sample size for metals analyses, an additional 100 feet of stream was sampled immediately downstream of Station 3. A total of three brook trout, including two males and one female were selected for metals analyses within the vicinity of Stations 2 and 3. One of the three brook trout was collected from the additional metals survey area downstream of Station 3. Brook trout selected for metals analyses from Stations 2 and 3 ranged in length from 4.8 inches to 6.3 inches (average length; $\bar{x}$ = 5.6 inches; s = 0.7 inches), and ranged in weight from 0.7 ounces to 1.3 ounces ($\bar{x}$ = 0.9 ounces; s = 0.4 ounces).

Copper concentrations from brook trout collected within the vicinity of Stations 2 and 3 ranged from 0.41 mg/kg to 0.66 mg/kg ($\bar{x}$ = 0.54 mg/kg; *s* = 0.13 mg/kg) in fillets and from 7.80 mg/kg to 35.3 mg/kg ($\bar{x}$ = 19.13 mg/kg; *s* = 14.37 mg/kg) in livers. Nickel concentrations ranged from 0.05 to 0.06 ($\bar{x}$ = 0.05 mg/kg; *s* = 0.01 mg/kg) in fillets, and ranged from 0.22 mg/kg to 1.10 mg/kg ($\bar{x}$ = 0.51 mg/kg; *s* = 0.51 mg/kg) in livers. Mercury levels were only measured in brook trout fillets and ranged from 0.06 mg/kg to 0.12 mg/kg ($\bar{x}$ = 0.09 mg/kg; *s* = 0.03 mg/kg). See Tables 2, 3, 4, and 5 for additional data on metals data observed in brook trout collected from Stations 2, 3, and their adjacent reaches.

Station 4 – Cedar Creek

Since the June 2008 aquatic survey was conducted by AEM, a beaver dam had been constructed immediately downstream of Station 4 and impounded water to a depth that did not permit effective sampling throughout the station (Figure 1-2). A total of six brook trout were collected from Cedar Creek for metals analyses 100 feet downstream of Northwestern Road (Table 1). Four of the brook trout were males and two were females. Brook trout ranged in length from 5.0 inches to 6.2 inches ($\bar{x}$ = 5.6 inches; *s* = 0.5 inches) and ranged in weight from 0.6 ounces to 1.2 ounces ($\bar{x}$ = 0.9 ounces; *s* = 0.2 ounces).

Copper concentrations from brook trout collected within the vicinity of Station 4 ranged from 0.32 mg/kg to 0.67 mg/kg ($\bar{x}$ = 0.55 mg/kg; *s* = 0.12 mg/kg) in fillets and from 6.60 mg/kg to 23.60 mg/kg ($\bar{x}$ = 13.85 mg/kg; *s* = 7.34 mg/kg) in livers. Nickel concentrations ranged from 0.05 to 0.09 ($\bar{x}$ = 0.06 mg/kg; *s* = 0.02 mg/kg) in fillets and ranged from 0.10 mg/kg to 2.20 mg/kg ($\bar{x}$ = 0.62 mg/kg; *s* = 0.80 mg/kg) in livers. Mercury levels in fillets ranged from 0.07 mg/kg to 0.15 mg/kg ($\bar{x}$ = 0.11 mg/kg; *s* = 0.04 mg/kg) in Station 4. See Tables 2, 3, 4, and 5 for additional data on metals data observed in brook trout collected from Stations 4.

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Station 5 – Yellow Dog River

A total of 36 brook trout were collected from Station 5 (Table 1). Six brook trout were selected for metals analyses from Station 5, and all were males. Brook trout selected for metals analyses ranged in length from 4.1 inches to 5 inches ($\bar{x}$ = 4.5 inches; *s* = 0.4 inches), and ranged in weight from 0.3 ounces to 0.6 ounces ($\bar{x}$ = 0.5 ounces; *s* = 0.1 ounces).

Copper concentrations from brook trout collected in Station 5 ranged from 0.36 mg/kg to 0.51 mg/kg ($\bar{x}$ = 0.44 mg/kg; *s* = 0.06 mg/kg) in fillets and from 15.4 mg/kg to 45.3 mg/kg ($\bar{x}$ = 27.75 mg/kg; *s* = 11.35 mg/kg) in livers. Nickel concentrations ranged from 0.04 to 0.05 ($\bar{x}$ = 0.04 mg/kg; *s* = 0.01 mg/kg) in fillets and ranged from 0.31 mg/kg to 7.3 mg/kg ($\bar{x}$ = 2.03 mg/kg; *s* = 2.67 mg/kg) in livers. Mercury levels in fillets ranged from 0.01 mg/kg to 0.02 mg/kg ($\bar{x}$ = 0.02 mg/kg; *s* = 0.001 mg/kg). See Tables 2, 3, 4, and 5 for additional data on metals contents observed in brook trout collected from Station 5.

Station 8 – Salmon Trout River, East Branch

Station 8 was not surveyed due to high water from a beaver dam that was recently constructed immediately downstream of the Northwestern Road crossing (Figure 1-3). The water was too deep to permit the usage of electroshocking survey gear.

Station 9 – Salmon Trout River, East Branch

A total of 33 brook trout were collected from the vicinity of Station 9 (Table 1). Six brook trout were selected for metals analyses within the vicinity of Station 9. Most of the brook trout that were collected within Station 9 were smaller than four inches or larger than five inches and were not selected for metals analyses. Two brook trout were selected within Station 9, and four brook trout were selected from the 100-foot reach that was surveyed immediately downstream of Station 9. Four males and two females were selected from the vicinity of Station 9 for metals analyses. Brook trout selected for metals analyses ranged in length from 4.1 inches to 6.2 inches ($\bar{x}$ = 5.0 inches; *s* = 0.9 inches), and ranged in weight from 0.4 ounces to 1.3 ounces ($\bar{x}$ = 0.7 ounces; *s* = 0.4 ounces).

Copper concentrations from brook trout collected within the vicinity of Station 9 ranged from 0.30 mg/kg to 0.48 mg/kg ($\bar{x}$ = 0.43 mg/kg; *s* = 0.07 mg/kg) in fillets and from 6.6 mg/kg to 19.6 mg/kg ($\bar{x}$ = 12.37 mg/kg; *s* = 4.69 mg/kg) in livers. Nickel concentrations ranged from 0.04 to 0.07 ($\bar{x}$ = 0.05 mg/kg; *s* = 0.01 mg/kg) in fillets and ranged from 0.06 mg/kg to 1.70 mg/kg ($\bar{x}$ = 0.70 mg/kg; *s* = 0.71 mg/kg) in livers. Mercury levels in fillets ranged from 0.02 mg/kg to 0.11 mg/kg ($\bar{x}$ = 0.06 mg/kg; *s* = 0.04 mg/kg). See Tables 2, 3, 4, and 5 for additional data on metals contents observed in brook trout collected in the vicinity of Station 9.

Station 10 – Salmon Trout River, East Branch

A total of 10 brook trout were collected from the vicinity of Station 10 (Table 1). An additional 100 feet of stream was surveyed upstream of Station 10. Two male brook trout were selected for metals analyses from fish collected within Station 10. Brook trout selected for metals analyses ranged in length from 4.0 inches to 4.2 inches, and ranged in weight from 0.3 ounces to 0.4 ounces.

Copper concentrations from brook trout collected in Station 10 ranged from 0.51 mg/kg to 0.66 mg/kg in fillets and from 11.6 mg/kg to 12.9 mg/kg in livers. Nickel concentrations ranged from 0.05 mg/kg to 0.06 mg/kg in fillets and ranged from 0.40 mg/kg to 0.78 mg/kg in livers. Mercury levels in fillets ranged from 0.04 mg/kg to 0.05 mg/kg. See Tables 2, 3, 4, and 5 for additional data on metals contents observed in brook trout collected in Station 10.

Table 1. 2008 Brook Trout Collection Data.

	Station									
	1	**2**	**3**	**4***	**5****	**6**	**7**	**8[Ŧ]**	**9**	**10**
Number collected in station	4	6	4	0	36	2	0	0	25	10
Number collected adjacent to station	ns	ns	1	6	ns	ns	ns	ns	8	ns
Number selected for metals analyses	0	2	1	6	6	0	0	0	6	2
Total collected from station vicinity	**4**	**6**	**5**	**6**	**36**	**2**	**0**	**0**	**33**	**10**

*** - Cedar Creek**
**** - Yellow Dog River**
[Ŧ] – Not sampled because of high water
ns – Not sampled

Table 2. Average Fillet Metals Contents and Average Fish Size among Stations for Brook Trout (*Salvelinus fontinalis*) Collected in October, 2008.

Parameter	CAS No.	Units	Station 2-3	Station 4	Station 5	Station 9	Station 10
Fish Length		*inches*	5.6	5.6	4.5	5.0	4.1
Fish Weight		*ounces*	0.95	0.86	0.46	0.71	0.36
Aluminum	7429-90-5	mg/kg	2.4	1.4	1.1	1.3	1.3
Antimony	7440-36-0	mg/kg	0.05	0.05	0.05	0.05	0.05
Arsenic	7440-38-2	mg/kg	0.330	0.273	0.305	0.293	0.590
Barium	7440-39-3	mg/kg	0.07	0.06	0.09	0.08	0.07
Beryllium	7440-41-7	mg/kg	0.010	0.012	0.012	0.012	0.010
Boron	7440-42-8	mg/kg	0.25	0.29	0.25	0.25	0.25
Cadmium	7440-43-9	mg/kg	0.010	0.009	0.032	0.007	0.010
Chromium	7440-47-3	mg/kg	0.07	0.08	0.07	0.07	0.07
Cobalt	7440-48-4	mg/kg	0.05	0.05	0.05	0.05	0.05
Copper	7440-50-8	mg/kg	0.54	0.55	0.44	0.43	0.59
Iron	7439-89-6	mg/kg	6.9	6.1	5.9	6.4	4.9
Lead	7439-92-1	mg/kg	0.04	0.04	0.04	0.04	0.05
Manganese	7439-96-5	mg/kg	0.70	0.55	0.32	0.89	0.68
Mercury	7439-97-6	mg/kg	0.090	0.107	0.018	0.059	0.050
Molybdenum	7439-98-7	mg/kg	0.020	0.019	0.020	0.017	0.020
Nickel	7440-02-0	mg/kg	0.05	0.06	0.04	0.05	0.06
Selenium	7782-49-2	mg/kg	0.29	0.33	0.28	0.40	0.37
Silver	7440-22-4	mg/kg	0.03	0.03	0.03	0.03	0.03
Strontium	7440-24-6	mg/kg	0.30	0.15	0.66	0.28	0.19
Zinc	7440-66-6	mg/kg	6.5	5.1	7.6	7.3	7.0

CAS No. = chemical abstract service number
mm = millimeters
g = grams
mg/kg = milligrams per kilograms

Table 3. Average Liver Metals Contents and Average Fish Size among Stations for Brook Trout (*Salvelinus fontinalis*) Collected in October, 2008.

Parameter	CAS No.	Units	Station 2-3	Station 4	Station 5	Station 9	Station 10
Fish Length		*inches*	5.6	5.6	4.5	5.0	4.1
Fish Weight		*ounces*	0.95	0.86	0.46	0.71	0.36
Cadmium	7440-43-9	mg/kg	0.12	0.11	0.15	0.10	0.22
Copper	7440-50-8	mg/kg	19.1	13.9	27.8	12.4	12.3
Lead	7439-92-1	mg/kg	0.30	0.23	0.98	0.53	0.44
Nickel	7440-02-0	mg/kg	0.51	0.62	2.03	0.70	0.59
Silver	7440-22-4	mg/kg	0.22	0.15	0.55	0.31	0.30
Zinc	7440-66-6	mg/kg	37.2	40.4	62.8	34.5	40.2

CAS No. = chemical abstract service number
mm = millimeters
g = grams
mg/kg = milligrams per kilograms

Table 4. Metals Contents of Brook Trout (*Salvelinus fontinalis*) Fillets - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851001	BKT#1	ST4-CCR	Aluminum	1.2	0.87	25	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Antimony	0.05	0.05	0.1	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Arsenic	0.19	0.02	0.1	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Barium	0.04	0.037	0.1	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Beryllium	0.012	0.012	0.1	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Boron	0.25	0.25	0.5	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Cadmium	0.0096	0.0068	0.1	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Chromium	0.073	0.04	0.1	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Cobalt	0.05	0.05	0.1	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Copper	0.6	0.069	0.5	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Iron	4.9	3.4	25	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Lead	0.045	0.045	0.1	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Manganese	0.4	0.13	0.5	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Mercury	0.071	0.0057	0.02	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Molybdenum	0.017	0.017	1	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Nickel	0.05	0.026	0.1	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Selenium	0.36	0.063	0.2	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Silver	0.025	0.025	0.05	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Strontium	0.065	0.032	0.1	mg/kg	10/24/2008	11/13/2008
4010851001	BKT#1	ST4-CCR	Zinc	4.7	0.89	2	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Aluminum	3	0.87	24.8	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Antimony	0.05	0.05	0.099	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Arsenic	0.38	0.02	0.099	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Barium	0.11	0.037	0.099	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Beryllium	0.012	0.012	0.099	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Boron	0.51	0.25	0.5	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Cadmium	0.016	0.0067	0.099	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Chromium	0.11	0.04	0.099	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Cobalt	0.05	0.05	0.099	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Copper	0.59	0.069	0.5	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Iron	8.3	3.4	24.8	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Lead	0.044	0.044	0.099	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Manganese	1.2	0.13	0.5	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Mercury	0.081	0.0057	0.02	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Molybdenum	0.031	0.017	0.99	mg/kg	10/24/2008	11/13/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST4-CCR – Station 4 within Cedar Creek

Table 4 (continued). Metals Contents of Brook Trout (*Salvelinus fontinalis*) Fillets - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851002	BKT#2	ST4-CCR	Nickel	0.091	0.026	0.099	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Selenium	0.41	0.062	0.2	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Silver	0.025	0.025	0.05	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Strontium	0.3	0.031	0.099	mg/kg	10/24/2008	11/13/2008
4010851002	BKT#2	ST4-CCR	Zinc	5.6	0.88	2	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Aluminum	1.5	0.87	25	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Antimony	0.05	0.05	0.1	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Arsenic	0.19	0.02	0.1	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Barium	0.037	0.037	0.1	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Beryllium	0.012	0.012	0.1	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Boron	0.25	0.25	0.5	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Cadmium	0.0068	0.0068	0.1	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Chromium	0.052	0.04	0.1	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Cobalt	0.05	0.05	0.1	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Copper	0.55	0.069	0.5	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Iron	6.1	3.4	25	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Lead	0.045	0.045	0.1	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Manganese	0.27	0.13	0.5	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Mercury	0.15	0.0057	0.02	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Molybdenum	0.017	0.017	1	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Nickel	0.053	0.026	0.1	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Selenium	0.36	0.063	0.2	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Silver	0.025	0.025	0.05	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Strontium	0.054	0.032	0.1	mg/kg	10/24/2008	11/13/2008
4010851003	BKT#3	ST4-CCR	Zinc	5	0.89	2	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Aluminum	1.1	0.87	24.8	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Antimony	0.05	0.05	0.099	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Arsenic	0.085	0.02	0.099	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Barium	0.037	0.037	0.099	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Beryllium	0.012	0.012	0.099	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Boron	0.25	0.25	0.5	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Cadmium	0.0067	0.0067	0.099	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Chromium	0.11	0.04	0.099	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Cobalt	0.05	0.05	0.099	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Copper	0.55	0.069	0.5	mg/kg	10/24/2008	11/13/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST4-CCR – Station 4 within Cedar Creek

Table 4 (continued). Metals Contents of Brook Trout (*Salvelinus fontinalis*) Fillets - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851004	BKT#4	ST4-CCR	Iron	5.9	3.4	24.8	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Lead	0.044	0.044	0.099	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Manganese	0.19	0.13	0.5	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Mercury	0.15	0.0057	0.02	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Molybdenum	0.017	0.017	0.99	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Nickel	0.053	0.026	0.099	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Selenium	0.16	0.062	0.2	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Silver	0.025	0.025	0.05	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Strontium	0.032	0.031	0.099	mg/kg	10/24/2008	11/13/2008
4010851004	BKT#4	ST4-CCR	Zinc	4.5	0.88	2	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Aluminum	0.9	0.87	25	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Antimony	0.05	0.05	0.1	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Arsenic	0.59	0.02	0.1	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Barium	0.037	0.037	0.1	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Beryllium	0.012	0.012	0.1	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Boron	0.25	0.25	0.5	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Cadmium	0.0068	0.0068	0.1	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Chromium	0.068	0.04	0.1	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Cobalt	0.05	0.05	0.1	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Copper	0.32	0.069	0.5	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Iron	4.1	3.4	25	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Lead	0.045	0.045	0.1	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Manganese	0.22	0.13	0.5	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Mercury	0.079	0.0057	0.02	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Molybdenum	0.017	0.017	1	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Nickel	0.049	0.026	0.1	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Selenium	0.31	0.063	0.2	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Silver	0.025	0.025	0.05	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Strontium	0.074	0.032	0.1	mg/kg	10/24/2008	11/13/2008
4010851005	BKT#5	ST4-CCR	Zinc	4.5	0.89	2	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Aluminum	0.99	0.87	25	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Antimony	0.05	0.05	0.1	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Arsenic	0.2	0.02	0.1	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Barium	0.089	0.037	0.1	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Beryllium	0.012	0.012	0.1	mg/kg	10/24/2008	11/13/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST4-CCR – Station 4 within Cedar Creek

Table 4 (continued). Metals Contents of Brook Trout (*Salvelinus fontinalis*) Fillets - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851006	BKT#6	ST4-CCR	Boron	0.25	0.25	0.5	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Cadmium	0.0068	0.0068	0.1	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Chromium	0.077	0.04	0.1	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Cobalt	0.05	0.05	0.1	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Copper	0.67	0.069	0.5	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Iron	7.3	3.4	25	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Lead	0.045	0.045	0.1	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Manganese	1	0.13	0.5	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Mercury	0.11	0.0057	0.02	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Molybdenum	0.017	0.017	1	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Nickel	0.05	0.026	0.1	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Selenium	0.35	0.063	0.2	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Silver	0.025	0.025	0.05	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Strontium	0.39	0.032	0.1	mg/kg	10/24/2008	11/13/2008
4010851006	BKT#6	ST4-CCR	Zinc	6.4	0.89	2	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Aluminum	1.2	0.87	25.1	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Antimony	0.05	0.05	0.1	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Arsenic	0.5	0.02	0.1	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Barium	0.063	0.037	0.1	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Beryllium	0.012	0.012	0.1	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Boron	0.25	0.25	0.5	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Cadmium	0.0068	0.0068	0.1	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Chromium	0.056	0.041	0.1	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Cobalt	0.05	0.05	0.1	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Copper	0.66	0.069	0.5	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Iron	5.3	3.4	25.1	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Lead	0.045	0.045	0.1	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Manganese	0.51	0.13	0.5	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Mercury	0.051	0.0057	0.02	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Molybdenum	0.017	0.017	1	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Nickel	0.049	0.026	0.1	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Selenium	0.35	0.063	0.2	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Silver	0.025	0.025	0.05	mg/kg	10/24/2008	11/13/2008
4010851007	BKT#7	ST10-EBR	Strontium	0.12	0.032	0.1	mg/kg	10/24/2008	11/13/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST4-CCR – Station 4 within Cedar Creek
ST10-EBR – Station 10 within Salmon Trout River East Branch

Table 4 (continued). Metals Contents of Brook Trout (*Salvelinus fontinalis*) Fillets - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851007	BKT#7	ST10-EBR	Zinc	6.1	0.89	2	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Aluminum	1.3	0.87	25	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Antimony	0.05	0.05	0.1	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Arsenic	0.68	0.02	0.1	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Barium	0.075	0.037	0.1	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Beryllium	0.012	0.012	0.1	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Boron	0.25	0.25	0.5	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Cadmium	0.0068	0.0068	0.1	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Chromium	0.08	0.04	0.1	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Cobalt	0.05	0.05	0.1	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Copper	0.51	0.069	0.5	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Iron	4.4	3.4	25	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Lead	0.045	0.045	0.1	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Manganese	0.84	0.13	0.5	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Mercury	0.042	0.0057	0.02	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Molybdenum	0.017	0.017	1	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Nickel	0.063	0.026	0.1	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Selenium	0.38	0.063	0.2	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Silver	0.025	0.025	0.05	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Strontium	0.25	0.032	0.1	mg/kg	10/24/2008	11/13/2008
4010851008	BKT#8	ST10-EBR	Zinc	7.9	0.89	2	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Aluminum	0.88	0.87	24.8	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Antimony	0.05	0.05	0.099	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Arsenic	0.22	0.02	0.099	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Barium	0.058	0.037	0.099	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Beryllium	0.012	0.012	0.099	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Boron	0.25	0.25	0.5	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Cadmium	0.0067	0.0067	0.099	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Chromium	0.073	0.04	0.099	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Cobalt	0.05	0.05	0.099	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Copper	0.47	0.069	0.5	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Iron	7.1	3.4	24.8	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Lead	0.044	0.044	0.099	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Manganese	0.45	0.13	0.5	mg/kg	10/24/2008	11/13/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST9-EBR – Station 9 within Salmon Trout River East Branch
ST10-EBR – Station 10 within Salmon Trout River East Branch

Table 4 (continued). Metals Contents of Brook Trout (*Salvelinus fontinalis*) Fillets - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851009	BKT#9	ST9-EBR	Mercury	0.025	0.0057	0.02	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Molybdenum	0.017	0.017	0.99	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Nickel	0.05	0.026	0.099	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Selenium	0.49	0.062	0.2	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Silver	0.025	0.025	0.05	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Strontium	0.16	0.031	0.099	mg/kg	10/24/2008	11/13/2008
4010851009	BKT#9	ST9-EBR	Zinc	5.5	0.88	2	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Aluminum	1.2	0.87	24.9	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Antimony	0.05	0.05	0.1	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Arsenic	0.26	0.02	0.1	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Barium	0.06	0.037	0.1	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Beryllium	0.012	0.012	0.1	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Boron	0.25	0.25	0.5	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Cadmium	0.0068	0.0068	0.1	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Chromium	0.059	0.04	0.1	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Cobalt	0.05	0.05	0.1	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Copper	0.47	0.069	0.5	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Iron	5.8	3.4	24.9	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Lead	0.045	0.045	0.1	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Manganese	0.42	0.13	0.5	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Mercury	0.11	0.0057	0.02	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Molybdenum	0.017	0.017	1	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Nickel	0.053	0.026	0.1	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Selenium	0.42	0.063	0.2	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Silver	0.025	0.025	0.05	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Strontium	0.14	0.031	0.1	mg/kg	10/24/2008	11/13/2008
4010851010	BKT#10	ST9-EBR	Zinc	6.6	0.88	2	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Aluminum	0.87	0.87	24.8	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Antimony	0.05	0.05	0.099	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Arsenic	0.19	0.02	0.099	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Barium	0.037	0.037	0.099	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Beryllium	0.012	0.012	0.099	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Boron	0.25	0.25	0.5	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Cadmium	0.0067	0.0067	0.099	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Chromium	0.053	0.04	0.099	mg/kg	10/24/2008	11/13/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST9-EBR – Station 9 within Salmon Trout River East Branch

Table 4 (continued). Metals Contents of Brook Trout (*Salvelinus fontinalis*) Fillets - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851011	BKT#11	ST9-EBR	Cobalt	0.05	0.05	0.099	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Copper	0.44	0.069	0.5	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Iron	4.4	3.4	24.8	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Lead	0.044	0.044	0.099	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Manganese	0.31	0.13	0.5	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Mercury	0.096	0.0057	0.02	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Molybdenum	0.017	0.017	0.99	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Nickel	0.039	0.026	0.099	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Selenium	0.4	0.062	0.2	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Silver	0.025	0.025	0.05	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Strontium	0.11	0.031	0.099	mg/kg	10/24/2008	11/13/2008
4010851011	BKT#11	ST9-EBR	Zinc	4.8	0.88	2	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Aluminum	1.1	0.87	24.8	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Antimony	0.05	0.05	0.099	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Arsenic	0.16	0.02	0.099	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Barium	0.04	0.037	0.099	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Beryllium	0.012	0.012	0.099	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Boron	0.25	0.25	0.5	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Cadmium	0.0067	0.0067	0.099	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Chromium	0.062	0.04	0.099	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Cobalt	0.05	0.05	0.099	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Copper	0.42	0.069	0.5	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Iron	4.9	3.4	24.8	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Lead	0.044	0.044	0.099	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Manganese	0.26	0.13	0.5	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Mercury	0.032	0.0057	0.02	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Molybdenum	0.017	0.017	0.99	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Nickel	0.053	0.026	0.099	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Selenium	0.31	0.062	0.2	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Silver	0.025	0.025	0.05	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Strontium	0.061	0.031	0.099	mg/kg	10/24/2008	11/13/2008
4010851012	BKT#12	ST9-EBR	Zinc	11.4	0.88	2	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Aluminum	2.7	0.87	25	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Antimony	0.05	0.05	0.1	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Arsenic	0.87	0.02	0.1	mg/kg	10/24/2008	11/13/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST9-EBR – Station 9 within Salmon Trout River East Branch

Table 4 (continued). Metals Contents of Brook Trout (*Salvelinus fontinalis*) Fillets - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851013	BKT#13	ST9-EBR	Barium	0.051	0.037	0.1	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Beryllium	0.012	0.012	0.1	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Boron	0.25	0.25	0.5	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Cadmium	0.0068	0.0068	0.1	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Chromium	0.1	0.04	0.1	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Cobalt	0.05	0.05	0.1	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Copper	0.3	0.069	0.5	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Iron	10.3	3.4	25	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Lead	0.045	0.045	0.1	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Manganese	0.39	0.13	0.5	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Mercury	0.015	0.0057	0.02	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Molybdenum	0.017	0.017	1	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Nickel	0.071	0.026	0.1	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Selenium	0.46	0.063	0.2	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Silver	0.025	0.025	0.05	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Strontium	0.1	0.032	0.1	mg/kg	10/24/2008	11/13/2008
4010851013	BKT#13	ST9-EBR	Zinc	5.5	0.89	2	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Aluminum	1.1	0.87	24.9	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Antimony	0.05	0.05	0.099	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Arsenic	0.06	0.02	0.099	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Barium	0.22	0.037	0.099	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Beryllium	0.012	0.012	0.099	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Boron	0.25	0.25	0.5	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Cadmium	0.007	0.0068	0.099	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Chromium	0.089	0.04	0.099	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Cobalt	0.05	0.05	0.099	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Copper	0.48	0.069	0.5	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Iron	5.7	3.4	24.9	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Lead	0.045	0.045	0.099	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Manganese	3.5	0.13	0.5	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Mercury	0.077	0.0057	0.02	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Molybdenum	0.017	0.017	0.99	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Selenium	0.33	0.063	0.2	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Silver	0.025	0.025	0.05	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Strontium	1.1	0.031	0.099	mg/kg	10/24/2008	11/13/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST9-EBR – Station 9 within Salmon Trout River East Branch

Table 4 (continued). Metals Contents of Brook Trout (*Salvelinus fontinalis*) Fillets - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851014	BKT#14	ST9-EBR	Nickel	0.057	0.026	0.099	mg/kg	10/24/2008	11/13/2008
4010851014	BKT#14	ST9-EBR	Zinc	10.2	0.88	2	mg/kg	10/24/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Aluminum	1.2	0.87	24.9	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Antimony	0.05	0.05	0.099	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Arsenic	0.44	0.02	0.099	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Barium	0.26	0.037	0.099	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Beryllium	0.012	0.012	0.099	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Boron	0.25	0.25	0.5	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Cadmium	0.027	0.0068	0.099	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Chromium	0.12	0.04	0.099	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Cobalt	0.05	0.05	0.099	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Copper	0.49	0.069	0.5	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Iron	6.3	3.4	24.9	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Lead	0.045	0.045	0.099	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Manganese	0.36	0.13	0.5	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Mercury	0.02	0.0057	0.02	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Molybdenum	0.017	0.017	0.99	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Nickel	0.053	0.026	0.099	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Selenium	0.29	0.063	0.2	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Silver	0.025	0.025	0.05	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Strontium	0.87	0.031	0.099	mg/kg	10/25/2008	11/13/2008
4010851015	BKT#15	ST5-YDR	Zinc	7.1	0.88	2	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Aluminum	1.3	0.87	24.9	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Antimony	0.05	0.05	0.099	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Arsenic	0.099	0.02	0.099	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Barium	0.071	0.037	0.099	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Beryllium	0.012	0.012	0.099	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Boron	0.25	0.25	0.5	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Cadmium	0.074	0.0068	0.099	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Chromium	0.089	0.04	0.099	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Cobalt	0.05	0.05	0.099	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Copper	0.51	0.069	0.5	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Iron	9.8	3.4	24.9	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Lead	0.045	0.045	0.099	mg/kg	10/25/2008	11/13/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST5-YDR – Station 5 within Yellow Dog River
ST9-EBR – Station 9 within Salmon Trout River East Branch

Table 4 (continued). Metals Contents of Brook Trout (*Salvelinus fontinalis*) Fillets - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851016	BKT#16	ST5-YDR	Manganese	0.37	0.13	0.5	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Mercury	0.016	0.0057	0.02	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Molybdenum	0.033	0.017	0.99	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Nickel	0.052	0.026	0.099	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Selenium	0.31	0.063	0.2	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Silver	0.025	0.025	0.05	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Strontium	0.75	0.031	0.099	mg/kg	10/25/2008	11/13/2008
4010851016	BKT#16	ST5-YDR	Zinc	8	0.88	2	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Aluminum	1.2	0.87	24.8	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Antimony	0.05	0.05	0.099	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Arsenic	0.21	0.02	0.099	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Barium	0.05	0.037	0.099	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Beryllium	0.012	0.012	0.099	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Boron	0.25	0.25	0.5	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Cadmium	0.034	0.0067	0.099	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Chromium	0.054	0.04	0.099	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Cobalt	0.05	0.05	0.099	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Copper	0.4	0.069	0.5	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Iron	5.4	3.4	24.8	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Lead	0.044	0.044	0.099	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Manganese	0.32	0.13	0.5	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Mercury	0.019	0.0057	0.02	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Molybdenum	0.017	0.017	0.99	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Nickel	0.046	0.026	0.099	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Selenium	0.3	0.062	0.2	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Silver	0.025	0.025	0.05	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Strontium	0.77	0.031	0.099	mg/kg	10/25/2008	11/13/2008
4010851017	BKT#17	ST5-YDR	Zinc	7.6	0.88	2	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Aluminum	0.87	0.87	25	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Antimony	0.05	0.05	0.1	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Arsenic	0.41	0.02	0.1	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Barium	0.038	0.037	0.1	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Beryllium	0.012	0.012	0.1	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Boron	0.25	0.25	0.5	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Cadmium	0.024	0.0068	0.1	mg/kg	10/25/2008	11/13/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST5-YDR – Station 5 within Yellow Dog River

Table 4 (continued). Metals Contents of Brook Trout (*Salvelinus fontinalis*) Fillets - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851018	BKT#18	ST5-YDR	Chromium	0.04	0.04	0.1	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Cobalt	0.05	0.05	0.1	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Copper	0.44	0.069	0.5	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Iron	5	3.4	25	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Lead	0.045	0.045	0.1	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Manganese	0.29	0.13	0.5	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Mercury	0.018	0.0057	0.02	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Molybdenum	0.017	0.017	1	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Nickel	0.035	0.026	0.1	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Selenium	0.24	0.063	0.2	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Silver	0.025	0.025	0.05	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Strontium	0.32	0.032	0.1	mg/kg	10/25/2008	11/13/2008
4010851018	BKT#18	ST5-YDR	Zinc	7.7	0.89	2	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Aluminum	0.88	0.87	25	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Antimony	0.05	0.05	0.1	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Arsenic	0.31	0.02	0.1	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Barium	0.037	0.037	0.1	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Beryllium	0.012	0.012	0.1	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Boron	0.25	0.25	0.5	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Cadmium	0.012	0.0068	0.1	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Chromium	0.041	0.04	0.1	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Cobalt	0.05	0.05	0.1	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Copper	0.41	0.069	0.5	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Iron	4.4	3.4	25	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Lead	0.045	0.045	0.1	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Manganese	0.22	0.13	0.5	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Mercury	0.014	0.0057	0.02	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Molybdenum	0.017	0.017	1	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Nickel	0.04	0.026	0.1	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Selenium	0.23	0.063	0.2	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Silver	0.025	0.025	0.05	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Strontium	0.16	0.032	0.1	mg/kg	10/25/2008	11/13/2008
4010851019	BKT#19	ST5-YDR	Zinc	4.8	0.89	2	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Aluminum	0.91	0.87	24.9	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Antimony	0.05	0.05	0.099	mg/kg	10/25/2008	11/13/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST5-YDR – Station 5 within Yellow Dog River

Table 4 (continued). Metals Contents of Brook Trout (*Salvelinus fontinalis*) Fillets - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851020	BKT#20	ST5-YDR	Arsenic	0.36	0.02	0.099	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Barium	0.057	0.037	0.099	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Beryllium	0.012	0.012	0.099	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Boron	0.25	0.25	0.5	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Cadmium	0.021	0.0068	0.099	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Chromium	0.057	0.04	0.099	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Cobalt	0.05	0.05	0.099	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Copper	0.36	0.069	0.5	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Iron	4.4	3.4	24.9	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Lead	0.045	0.045	0.099	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Manganese	0.37	0.13	0.5	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Mercury	0.018	0.0057	0.02	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Molybdenum	0.017	0.017	0.99	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Nickel	0.041	0.026	0.099	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Selenium	0.29	0.063	0.2	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Silver	0.025	0.025	0.05	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Strontium	1.1	0.031	0.099	mg/kg	10/25/2008	11/13/2008
4010851020	BKT#20	ST5-YDR	Zinc	10.4	0.88	2	mg/kg	10/25/2008	11/13/2008
4010851021	BKT#21	ST2-3	Aluminum	3.5	0.87	25	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Antimony	0.05	0.05	0.1	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Arsenic	0.077	0.02	0.1	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Barium	0.11	0.037	0.1	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Beryllium	0.012	0.012	0.1	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Boron	0.25	0.25	0.5	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Cadmium	0.0068	0.0068	0.1	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Chromium	0.063	0.04	0.1	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Cobalt	0.05	0.05	0.1	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Copper	0.55	0.069	0.5	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Iron	6.3	3.4	25	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Lead	0.045	0.045	0.1	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Manganese	1.3	0.13	0.5	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Mercury	0.12	0.0057	0.02	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Molybdenum	0.017	0.017	1	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Nickel	0.057	0.026	0.1	mg/kg	10/25/2008	11/14/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST2-3 – Stations 2 and 3 within Salmon Trout River
ST5-YDR – Station 5 within Yellow Dog River

Table 4 (continued). Metals Contents of Brook Trout (*Salvelinus fontinalis*) Fillets - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851021	BKT#21	ST2-3	Selenium	0.23	0.063	0.2	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Silver	0.025	0.025	0.05	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Strontium	0.54	0.032	0.1	mg/kg	10/25/2008	11/14/2008
4010851021	BKT#21	ST2-3	Zinc	5.6	0.89	2	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Aluminum	2.1	0.87	24.9	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Antimony	0.05	0.05	0.1	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Arsenic	0.1	0.02	0.1	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Barium	0.06	0.037	0.1	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Beryllium	0.012	0.012	0.1	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Boron	0.25	0.25	0.5	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Cadmium	0.015	0.0068	0.1	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Chromium	0.08	0.04	0.1	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Cobalt	0.05	0.05	0.1	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Copper	0.66	0.069	0.5	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Iron	8.2	3.4	24.9	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Lead	0.045	0.045	0.1	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Manganese	0.4	0.13	0.5	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Mercury	0.098	0.0057	0.02	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Molybdenum	0.027	0.017	1	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Nickel	0.061	0.026	0.1	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Selenium	0.22	0.063	0.2	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Silver	0.025	0.025	0.05	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Strontium	0.13	0.031	0.1	mg/kg	10/25/2008	11/14/2008
4010851022	BKT#22	ST2-3	Zinc	8.2	0.88	2	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Aluminum	1.7	0.87	24.8	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Antimony	0.05	0.05	0.099	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Arsenic	0.82	0.02	0.099	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Barium	0.053	0.037	0.099	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Beryllium	0.012	0.012	0.099	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Boron	0.25	0.25	0.5	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Cadmium	0.011	0.0067	0.099	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Chromium	0.061	0.04	0.099	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Cobalt	0.05	0.05	0.099	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Copper	0.41	0.069	0.5	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Iron	6.3	3.4	24.8	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Lead	0.044	0.044	0.099	mg/kg	10/25/2008	11/14/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST2-3 – Stations 2 and 3 within Salmon Trout River

Table 4 (continued). Metals Contents of Brook Trout (*Salvelinus fontinalis*) Fillets - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851023	BKT#23	ST2-3	Manganese	0.41	0.13	0.5	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Mercury	0.064	0.0057	0.02	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Molybdenum	0.017	0.017	0.99	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Nickel	0.046	0.026	0.099	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Selenium	0.43	0.062	0.2	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Silver	0.025	0.025	0.05	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Strontium	0.24	0.031	0.099	mg/kg	10/25/2008	11/14/2008
4010851023	BKT#23	ST2-3	Zinc	5.7	0.88	2	mg/kg	10/25/2008	11/14/2008

***MDL = Minimum detection limit**

****EQL = Estimated quantification limit**

*****mg/kg = Milligrams per kilogram**

ST2-3 – Stations 2 and 3 within Salmon Trout River

Table 5. Metals Contents of Brook Trout (*Salvelinus fontinalis*) Livers - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851024	BKT#1	ST4-CCR	Copper	20.2	0.15	1.1	mg/kg	10/24/2008	11/14/2008
4010851024	BKT#1	ST4-CCR	Lead	0.097	0.097	0.22	mg/kg	10/24/2008	11/14/2008
4010851024	BKT#1	ST4-CCR	Nickel	0.095	0.056	0.22	mg/kg	10/24/2008	11/14/2008
4010851024	BKT#1	ST4-CCR	Silver	0.2	0.054	0.11	mg/kg	10/24/2008	11/14/2008
4010851024	BKT#1	ST4-CCR	Zinc	38.6	1.9	4.3	mg/kg	10/24/2008	11/14/2008
4010851024	BKT#1	ST4-CCR	Cadmium	0.15	0.015	0.22	mg/kg	10/24/2008	11/14/2008
4010851025	BKT#2	ST4-CCR	Copper	8.8	0.21	1.5	mg/kg	10/24/2008	11/14/2008
4010851025	BKT#2	ST4-CCR	Zinc	36	2.7	6	mg/kg	10/24/2008	11/14/2008
4010851025	BKT#2	ST4-CCR	Silver	0.075	0.075	0.15	mg/kg	10/24/2008	11/14/2008
4010851025	BKT#2	ST4-CCR	Cadmium	0.1	0.02	0.3	mg/kg	10/24/2008	11/14/2008
4010851025	BKT#2	ST4-CCR	Lead	0.13	0.13	0.3	mg/kg	10/24/2008	11/14/2008
4010851025	BKT#2	ST4-CCR	Nickel	0.2	0.078	0.3	mg/kg	10/24/2008	11/14/2008
4010851026	BKT#3	ST4-CCR	Zinc	39	4.9	11	mg/kg	10/24/2008	11/14/2008
4010851026	BKT#3	ST4-CCR	Cadmium	0.14	0.037	0.55	mg/kg	10/24/2008	11/14/2008
4010851026	BKT#3	ST4-CCR	Copper	7	0.38	2.7	mg/kg	10/24/2008	11/14/2008
4010851026	BKT#3	ST4-CCR	Lead	0.25	0.25	0.55	mg/kg	10/24/2008	11/14/2008
4010851026	BKT#3	ST4-CCR	Nickel	2.2	0.14	0.55	mg/kg	10/24/2008	11/14/2008
4010851026	BKT#3	ST4-CCR	Silver	0.14	0.14	0.27	mg/kg	10/24/2008	11/14/2008
4010851027	BKT#4	ST4-CCR	Zinc	42.5	5.6	12.7	mg/kg	10/24/2008	11/14/2008
4010851027	BKT#4	ST4-CCR	Silver	0.16	0.16	0.32	mg/kg	10/24/2008	11/14/2008
4010851027	BKT#4	ST4-CCR	Nickel	0.38	0.16	0.63	mg/kg	10/24/2008	11/14/2008
4010851027	BKT#4	ST4-CCR	Lead	0.28	0.28	0.63	mg/kg	10/24/2008	11/14/2008
4010851027	BKT#4	ST4-CCR	Cadmium	0.043	0.043	0.63	mg/kg	10/24/2008	11/14/2008
4010851027	BKT#4	ST4-CCR	Copper	16.9	0.44	3.2	mg/kg	10/24/2008	11/14/2008
4010851028	BKT#5	ST4-CCR	Copper	23.6	0.75	5.4	mg/kg	10/24/2008	11/14/2008
4010851028	BKT#5	ST4-CCR	Zinc	57.6	9.6	21.7	mg/kg	10/24/2008	11/14/2008
4010851028	BKT#5	ST4-CCR	Silver	0.27	0.27	0.54	mg/kg	10/24/2008	11/14/2008
4010851028	BKT#5	ST4-CCR	Lead	0.49	0.49	1.1	mg/kg	10/24/2008	11/14/2008
4010851028	BKT#5	ST4-CCR	Cadmium	0.2	0.074	1.1	mg/kg	10/24/2008	11/14/2008
4010851028	BKT#5	ST4-CCR	Nickel	0.67	0.28	1.1	mg/kg	10/24/2008	11/14/2008
4010851029	BKT#6	ST4-CCR	Zinc	28.8	2.9	6.6	mg/kg	10/24/2008	11/14/2008
4010851029	BKT#6	ST4-CCR	Cadmium	0.054	0.022	0.33	mg/kg	10/24/2008	11/14/2008
4010851029	BKT#6	ST4-CCR	Copper	6.6	0.23	1.6	mg/kg	10/24/2008	11/14/2008
4010851029	BKT#6	ST4-CCR	Lead	0.15	0.15	0.33	mg/kg	10/24/2008	11/14/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST4-CCR – Station 4 within Cedar Creek

Table 5 (continued). Metals Contents of Brook Trout (*Salvelinus fontinalis*) Livers - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851029	BKT#6	ST4-CCR	Nickel	0.19	0.085	0.33	mg/kg	10/24/2008	11/14/2008
4010851029	BKT#6	ST4-CCR	Silver	0.082	0.082	0.16	mg/kg	10/24/2008	11/14/2008
4010851030	BKT#7	ST10-EBR	Zinc	48	11.1	25	mg/kg	10/24/2008	11/14/2008
4010851030	BKT#7	ST10-EBR	Silver	0.33	0.31	0.62	mg/kg	10/24/2008	11/14/2008
4010851030	BKT#7	ST10-EBR	Nickel	0.78	0.32	1.2	mg/kg	10/24/2008	11/14/2008
4010851030	BKT#7	ST10-EBR	Lead	0.56	0.56	1.2	mg/kg	10/24/2008	11/14/2008
4010851030	BKT#7	ST10-EBR	Cadmium	0.25	0.085	1.2	mg/kg	10/24/2008	11/14/2008
4010851030	BKT#7	ST10-EBR	Copper	11.6	0.87	6.2	mg/kg	10/24/2008	11/14/2008
4010851031	BKT#8	ST10-EBR	Copper	12.9	0.5	3.6	mg/kg	10/24/2008	11/14/2008
4010851031	BKT#8	ST10-EBR	Silver	0.27	0.18	0.36	mg/kg	10/24/2008	11/14/2008
4010851031	BKT#8	ST10-EBR	Zinc	32.4	6.3	14.3	mg/kg	10/24/2008	11/14/2008
4010851031	BKT#8	ST10-EBR	Cadmium	0.18	0.049	0.71	mg/kg	10/24/2008	11/14/2008
4010851031	BKT#8	ST10-EBR	Nickel	0.4	0.18	0.71	mg/kg	10/24/2008	11/14/2008
4010851031	BKT#8	ST10-EBR	Lead	0.32	0.32	0.71	mg/kg	10/24/2008	11/14/2008
4010851032	BKT#9	ST9-EBR	Silver	0.15	0.11	0.23	mg/kg	10/24/2008	11/14/2008
4010851032	BKT#9	ST9-EBR	Zinc	25.3	4	9	mg/kg	10/24/2008	11/14/2008
4010851032	BKT#9	ST9-EBR	Nickel	0.2	0.12	0.45	mg/kg	10/24/2008	11/14/2008
4010851032	BKT#9	ST9-EBR	Lead	0.2	0.2	0.45	mg/kg	10/24/2008	11/14/2008
4010851032	BKT#9	ST9-EBR	Copper	15.9	0.31	2.3	mg/kg	10/24/2008	11/14/2008
4010851032	BKT#9	ST9-EBR	Cadmium	0.11	0.031	0.45	mg/kg	10/24/2008	11/14/2008
4010851033	BKT#10	ST9-EBR	Copper	11.2	0.069	0.5	mg/kg	10/24/2008	11/14/2008
4010851033	BKT#10	ST9-EBR	Lead	0.045	0.045	0.1	mg/kg	10/24/2008	11/14/2008
4010851033	BKT#10	ST9-EBR	Nickel	0.055	0.026	0.1	mg/kg	10/24/2008	11/14/2008
4010851033	BKT#10	ST9-EBR	Silver	0.062	0.025	0.05	mg/kg	10/24/2008	11/14/2008
4010851033	BKT#10	ST9-EBR	Zinc	23.9	0.89	2	mg/kg	10/24/2008	11/14/2008
4010851033	BKT#10	ST9-EBR	Cadmium	0.043	0.0068	0.1	mg/kg	10/24/2008	11/14/2008
4010851034	BKT#11	ST9-EBR	Nickel	1.7	0.76	2.9	mg/kg	10/24/2008	11/14/2008
4010851034	BKT#11	ST9-EBR	Silver	0.74	0.74	1.5	mg/kg	10/24/2008	11/14/2008
4010851034	BKT#11	ST9-EBR	Copper	9.2	2	14.7	mg/kg	10/24/2008	11/14/2008
4010851034	BKT#11	ST9-EBR	Cadmium	0.2	0.2	2.9	mg/kg	10/24/2008	11/14/2008
4010851034	BKT#11	ST9-EBR	Zinc	56.1	26.1	58.8	mg/kg	10/24/2008	11/14/2008
4010851034	BKT#11	ST9-EBR	Lead	1.3	1.3	2.9	mg/kg	10/24/2008	11/14/2008
4010851035	BKT#12	ST9-EBR	Silver	0.23	0.23	0.46	mg/kg	10/24/2008	11/14/2008
4010851035	BKT#12	ST9-EBR	Zinc	34.4	8.2	18.5	mg/kg	10/24/2008	11/14/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST4-CCR – Station 4 within Cedar Creek
ST9-EBR – Station 9 within Salmon Trout River East Branch
ST10-EBR – Station 10 within Salmon Trout River East Branch

Table 5 (continued). Metals Contents of Brook Trout (*Salvelinus fontinalis*) Livers - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851035	BKT#12	ST9-EBR	Nickel	0.47	0.24	0.93	mg/kg	10/24/2008	11/14/2008
4010851035	BKT#12	ST9-EBR	Lead	0.41	0.41	0.93	mg/kg	10/24/2008	11/14/2008
4010851035	BKT#12	ST9-EBR	Copper	6.6	0.64	4.6	mg/kg	10/24/2008	11/14/2008
4010851035	BKT#12	ST9-EBR	Cadmium	0.063	0.063	0.93	mg/kg	10/24/2008	11/14/2008
4010851036	BKT#13	ST9-EBR	Copper	19.6	1.5	10.9	mg/kg	10/24/2008	11/14/2008
4010851036	BKT#13	ST9-EBR	Lead	0.97	0.97	2.2	mg/kg	10/24/2008	11/14/2008
4010851036	BKT#13	ST9-EBR	Nickel	1.5	0.56	2.2	mg/kg	10/24/2008	11/14/2008
4010851036	BKT#13	ST9-EBR	Silver	0.54	0.54	1.1	mg/kg	10/24/2008	11/14/2008
4010851036	BKT#13	ST9-EBR	Zinc	44.3	19.3	43.5	mg/kg	10/24/2008	11/14/2008
4010851036	BKT#13	ST9-EBR	Cadmium	0.15	0.15	2.2	mg/kg	10/24/2008	11/14/2008
4010851037	BKT#14	ST9-EBR	Copper	11.7	0.36	2.6	mg/kg	10/24/2008	11/14/2008
4010851037	BKT#14	ST9-EBR	Zinc	23.1	4.6	10.4	mg/kg	10/24/2008	11/14/2008
4010851037	BKT#14	ST9-EBR	Silver	0.13	0.13	0.26	mg/kg	10/24/2008	11/14/2008
4010851037	BKT#14	ST9-EBR	Nickel	0.3	0.13	0.52	mg/kg	10/24/2008	11/14/2008
4010851037	BKT#14	ST9-EBR	Cadmium	0.04	0.035	0.52	mg/kg	10/24/2008	11/14/2008
4010851037	BKT#14	ST9-EBR	Lead	0.23	0.23	0.52	mg/kg	10/24/2008	11/14/2008
4010851038	BKT#15	ST5-YDR	Silver	0.18	0.18	0.36	mg/kg	10/25/2008	11/14/2008
4010851038	BKT#15	ST5-YDR	Zinc	42	6.3	14.3	mg/kg	10/25/2008	11/14/2008
4010851038	BKT#15	ST5-YDR	Nickel	0.34	0.18	0.71	mg/kg	10/25/2008	11/14/2008
4010851038	BKT#15	ST5-YDR	Lead	0.32	0.32	0.71	mg/kg	10/25/2008	11/14/2008
4010851038	BKT#15	ST5-YDR	Copper	45.3	0.5	3.6	mg/kg	10/25/2008	11/14/2008
4010851038	BKT#15	ST5-YDR	Cadmium	0.049	0.049	0.71	mg/kg	10/25/2008	11/14/2008
4010851039	BKT#16	ST5-YDR	Copper	22.1	0.94	6.8	mg/kg	10/25/2008	11/14/2008
4010851039	BKT#16	ST5-YDR	Lead	0.61	0.61	1.4	mg/kg	10/25/2008	11/14/2008
4010851039	BKT#16	ST5-YDR	Nickel	1.8	0.35	1.4	mg/kg	10/25/2008	11/14/2008
4010851039	BKT#16	ST5-YDR	Silver	0.34	0.34	0.68	mg/kg	10/25/2008	11/14/2008
4010851039	BKT#16	ST5-YDR	Zinc	49.1	12	27	mg/kg	10/25/2008	11/14/2008
4010851039	BKT#16	ST5-YDR	Cadmium	0.092	0.092	1.4	mg/kg	10/25/2008	11/14/2008
4010851040	BKT#17	ST5-YDR	Nickel	0.6	0.12	0.46	mg/kg	10/25/2008	11/14/2008
4010851040	BKT#17	ST5-YDR	Silver	0.12	0.12	0.23	mg/kg	10/25/2008	11/14/2008
4010851040	BKT#17	ST5-YDR	Copper	35.3	0.32	2.3	mg/kg	10/25/2008	11/14/2008
4010851040	BKT#17	ST5-YDR	Cadmium	0.031	0.031	0.46	mg/kg	10/25/2008	11/14/2008
4010851040	BKT#17	ST5-YDR	Zinc	32.6	4.1	9.3	mg/kg	10/25/2008	11/14/2008
4010851040	BKT#17	ST5-YDR	Lead	0.21	0.21	0.46	mg/kg	10/25/2008	11/14/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST5-YDR – Station 5 within Yellow Dog River
ST9-EBR – Station 9 within Salmon Trout River East Branch

Table 5 (continued). Metals Contents of Brook Trout (*Salvelinus fontinalis*) Livers - 2008 Laboratory Data.

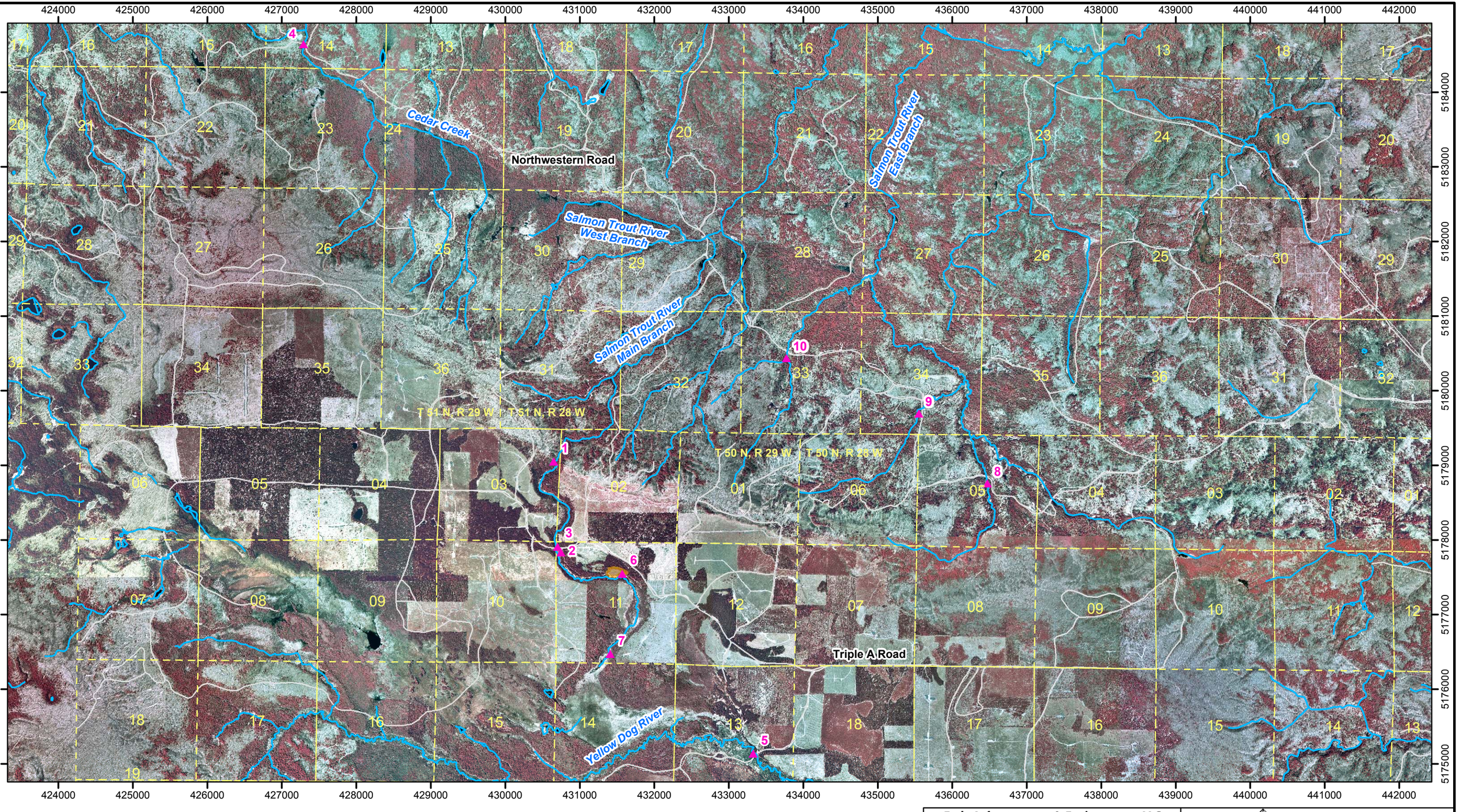
Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851041	BKT#18	ST5-YDR	Silver	0.12	0.12	0.23	mg/kg	10/25/2008	11/13/2008
4010851041	BKT#18	ST5-YDR	Zinc	40.9	4.1	9.3	mg/kg	10/25/2008	11/13/2008
4010851041	BKT#18	ST5-YDR	Nickel	0.31	0.12	0.46	mg/kg	10/25/2008	11/13/2008
4010851041	BKT#18	ST5-YDR	Lead	0.21	0.21	0.46	mg/kg	10/25/2008	11/13/2008
4010851041	BKT#18	ST5-YDR	Copper	30.1	0.32	2.3	mg/kg	10/25/2008	11/13/2008
4010851041	BKT#18	ST5-YDR	Cadmium	0.058	0.031	0.46	mg/kg	10/25/2008	11/13/2008
4010851042	BKT#19	ST5-YDR	Copper	18.3	1.2	8.9	mg/kg	10/25/2008	11/13/2008
4010851042	BKT#19	ST5-YDR	Lead	0.8	0.8	1.8	mg/kg	10/25/2008	11/13/2008
4010851042	BKT#19	ST5-YDR	Nickel	1.8	0.46	1.8	mg/kg	10/25/2008	11/13/2008
4010851042	BKT#19	ST5-YDR	Silver	0.45	0.45	0.89	mg/kg	10/25/2008	11/13/2008
4010851042	BKT#19	ST5-YDR	Zinc	64.3	15.8	35.7	mg/kg	10/25/2008	11/13/2008
4010851042	BKT#19	ST5-YDR	Cadmium	0.12	0.12	1.8	mg/kg	10/25/2008	11/13/2008
4010851043	BKT#20	ST5-YDR	Nickel	7.3	2.2	8.3	mg/kg	10/25/2008	11/13/2008
4010851043	BKT#20	ST5-YDR	Silver	2.1	2.1	4.2	mg/kg	10/25/2008	11/13/2008
4010851043	BKT#20	ST5-YDR	Copper	15.4	5.8	41.7	mg/kg	10/25/2008	11/13/2008
4010851043	BKT#20	ST5-YDR	Cadmium	0.57	0.57	8.3	mg/kg	10/25/2008	11/13/2008
4010851043	BKT#20	ST5-YDR	Lead	3.7	3.7	8.3	mg/kg	10/25/2008	11/13/2008
4010851043	BKT#20	ST5-YDR	Zinc	148	74	167	mg/kg	10/25/2008	11/13/2008
4010851044	BKT#21	ST2-3	Cadmium	0.074	0.014	0.21	mg/kg	10/25/2008	11/13/2008
4010851044	BKT#21	ST2-3	Copper	35.3	0.15	1.1	mg/kg	10/25/2008	11/13/2008
4010851044	BKT#21	ST2-3	Lead	0.095	0.095	0.21	mg/kg	10/25/2008	11/13/2008
4010851044	BKT#21	ST2-3	Nickel	0.22	0.055	0.21	mg/kg	10/25/2008	11/13/2008
4010851044	BKT#21	ST2-3	Silver	0.2	0.053	0.11	mg/kg	10/25/2008	11/13/2008
4010851044	BKT#21	ST2-3	Zinc	35.8	1.9	4.3	mg/kg	10/25/2008	11/13/2008
4010851045	BKT#22	ST2-3	Cadmium	0.15	0.092	1.4	mg/kg	10/25/2008	11/13/2008
4010851045	BKT#22	ST2-3	Zinc	49.6	12	27	mg/kg	10/25/2008	11/13/2008
4010851045	BKT#22	ST2-3	Silver	0.34	0.34	0.68	mg/kg	10/25/2008	11/13/2008
4010851045	BKT#22	ST2-3	Nickel	1.1	0.35	1.4	mg/kg	10/25/2008	11/13/2008
4010851045	BKT#22	ST2-3	Copper	14.3	0.94	6.8	mg/kg	10/25/2008	11/13/2008
4010851045	BKT#22	ST2-3	Lead	0.61	0.61	1.4	mg/kg	10/25/2008	11/13/2008
4010851046	BKT#23	ST2-3	Zinc	26.1	3.7	8.4	mg/kg	10/25/2008	11/13/2008
4010851046	BKT#23	ST2-3	Cadmium	0.14	0.029	0.42	mg/kg	10/25/2008	11/13/2008
4010851046	BKT#23	ST2-3	Copper	7.8	0.29	2.1	mg/kg	10/25/2008	11/13/2008
4010851046	BKT#23	ST2-3	Lead	0.19	0.19	0.42	mg/kg	10/25/2008	11/13/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST2-3 – Stations 2 and 3 within Salmon Trout River
ST5-YDR – Station 5, Yellow Dog River

Table 5 (continued). Metals Contents of Brook Trout (*Salvelinus fontinalis*) Livers - 2008 Laboratory Data.

Lab Sample Number	Field ID	Sample Station	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
4010851046	BKT#23	ST2-3	Nickel	0.22	0.11	0.42	mg/kg	10/25/2008	11/13/2008
4010851046	BKT#23	ST2-3	Silver	0.11	0.11	0.21	mg/kg	10/25/2008	11/13/2008

***MDL = Minimum detection limit**
****EQL = Estimated quantification limit**
*****mg/kg = Milligrams per kilogram**
ST2-3 – Stations 2 and 3 within Salmon Trout River



NOTES

1. Surface Property Boundary, Ore Body, and Orthophotography supplied by Kennecott via Golder Associates Inc., August, 2005.
2. Horizontal datum based on NAD 83/94.
   Horizontal coordinates based on UTM Zone 16.
3. Site Location - Project Site within Sections 11 &12, T50N, R29W, Town of Michigamme, Marquette County, Michigan.

LEGEND

- 6 ▲ Aquatic Sampling Location and Number
- River
- Ore Body

N

ADVANCED ECOLOGICAL MANAGEMENT

Foth Infrastructure & Environment, LLC

Foth Infrastructure & Environment, LLC

REVISED	DATE	BY	DESCRIPTION

CHECKED BY:	DM	DATE:	NOV. '08
APPROVED BY:	RDW	DATE:	NOV. '08
APPROVED BY:		DATE:	

Kennecott Eagle Minerals

FIGURE 1-1

KENNECOTT EAGLE PROJECT
2008 AQUATIC SAMPLING LOCATIONS

Scale: 0 600 1,200 Meters

Date: NOVEMBER 2008

Prepared by: DAT

Scope: 04W018

M:\kmceagle\mxd\AEM\\samplinglocations_11x17.mxd November 14, 2008

Figure 1-2. Photograph of beaver dam located downstream of Station 4 and upstream of Northwestern Road.

Figure 1-3. Photograph of beaver dam located downstream of Station 8 downstream of Northwestern Road.

Attachment 1

Chain of Custody Forms

Pace Analytical®
www.pacelabs.com

CHAIN OF CUSTODY

(Please Print Clearly)	
Company Name:	ADVANCED GEOLOGICAL MANAGEMENT
Branch/Location:	MORLEY MI
Project Contact:	DOUG WORKMAN
Phone:	231-856-7707
Project Number:	
Project Name:	KENNEDY EAGLE
Project State:	MICHIGAN
Sampled By (Print):	DOUG WORKMAN
Sampled By (Sign):	Doug Work
PO #:	Regulatory Program:

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, W = Water, B = Biota, DW = Drinking Water, C = Charcoal, GW = Ground Water, O = Oil, SW = Surface Water, S = Soil, WW = Waste Water, SI = Sludge, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)
001	BKT #1 ST4-CLR	10-24-08	11 DD				2 fillets $1 Liver per DAY	1-ziplock A
002	BKT #2 ST4-CLR	10-24-08	11 DD					
003	BKT #3 ST4-CLR	10-24-08	11 DD					
004	BKT #4 ST4-CLR	10-24-08	11 DD				PLEASE USE Method 1631 for analyses including Hg	
005	BKT #5 ST4-CLR	10-24-08	11 DD					
006	BKT #6 ST4-CLR	10-24-08	11 DD					
007	BKT #7 ST10-EBR	10-24-08	13 35					
008	BKT #8 ST10-EBR	10-24-08	13 40					
009	BKT #9 ST9-EBR	10-24-08	17 30					
010	BKT #10 ST9-EBR	10-24-08	17 30					
011	BKT #11 ST9-EBR	10-24-08	17 30					
012	BKT #12 ST9-EBR	10-24-08	17 30					
013	BKT #13 ST9-EBR	10-24-08	17 30					

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	10-27-08 1554	[signature]	10/27/08 1554
[signature]	10/28/08 1000	[signature]	10/28/08 1000

PACE Project No. 4010851

Receipt Temp = 1 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal ~~Present / Not Present~~ Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

Pace Analytical®
www.pacelabs.com

CHAIN OF CUSTODY

(Please Print Clearly)	
Company Name:	ADVANCED GEOLOGICAL MANAGEMENT
Branch/Location:	MOLEY MI
Project Contact:	DOUG WORKMAN
Phone:	231-856-0059
Project Number:	
Project Name:	KENNELDIT EAGLE
Project State:	MICHIGAN
Sampled By (Print):	DOUG WORKMAN
Sampled By (Sign):	Doug Work
PO #:	Regulatory Program:

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
SI = Sludge	WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
014	BKT #14 ST3-EBR	10-24-08	1730					2 fillets and liver per bag	1-Ziplock A	
015	BKT #15 ST5-YOR	10-25-08	1000					Please use method 6020 for analyses including Hg		
016	BKT #16 ST5-YOR	10-25-08	1000							
017	BKT #17 ST5-YOR	10-25-08	1000							
018	BKT #18 ST5-YOR	10-25-08	1000							
019	BKT #19 ST5-YOR	10-25-08	1000							
020	BKT #20 ST5-YOR	10-25-08	1000							
021	BKT #21 ST2-3 STR	10-25-08	1600							
022	BKT #22 ST2-3 STR	10-25-08	1600							
023	BKT #23 ST2-3 STR	10-25-08	1600							

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
RJ HSE	10-27-08 15:54	Fed Ex	10/27/08 1554
Fed Ex	10/28/08 1000	KBurdick	10/28/08 1000

PACE Project No.: 4010851

Receipt Temp = 1 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal: Present / ~~Not Present~~ (circled) Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

Sample Condition Upon Receipt

Pace Analytical

Client Name: Advanced Ecological Management Project # 4010851

Courier: [X] Fed Ex [ ] UPS [ ] USPS [ ] Client [ ] Commercial [ ] Pace Other _____

Optional: Proj. Due Date: Proj. Name:

Tracking #: _____

Custody Seal on Cooler/Box Present: [ ] yes [X] no Seals intact: [ ] yes [ ] no

Packing Material: [ ] Bubble Wrap [ ] Bubble Bags [ ] None [X] Other Baggies

Thermometer Used IR **Type of Ice:** (Wet) Blue None [ ] Samples on ice, cooling process has begun

Cooler Temperature 1° **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C **Comments:**

Date and Initials of person examining contents: 10/28/08 RB

Chain of Custody Present:	[X]Yes [ ]No [ ]N/A	1.
Chain of Custody Filled Out:	[X]Yes [ ]No [ ]N/A	2.
Chain of Custody Relinquished:	[X]Yes [ ]No [ ]N/A	3.
Sampler Name & Signature on COC:	[X]Yes [ ]No [ ]N/A	4.
Samples Arrived within Hold Time:	[X]Yes [ ]No [ ]N/A	5.
Short Hold Time Analysis (<72hr):	[ ]Yes [X]No [ ]N/A	6.
Rush Turn Around Time Requested:	[ ]Yes [X]No [ ]N/A	7.
Sufficient Volume:	[X]Yes [ ]No [ ]N/A	8.
Correct Containers Used:	[X]Yes [ ]No [ ]N/A	9.
-Pace Containers Used:	[X]Yes [ ]No [ ]N/A	
Containers Intact:	[X]Yes [ ]No [ ]N/A	10.
Filtered volume received for Dissolved tests	[ ]Yes [ ]No [X]N/A	11.
Sample Labels match COC:	[X]Yes [ ]No [ ]N/A	12.
-Includes date/time/ID/Analysis Matrix: B		
All containers needing preservation have been checked.	[ ]Yes [ ]No [X]N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	[ ]Yes [ ]No [X]N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	[ ]Yes [ ]No	Initial when completed: _____ Lot # of added preservative: _____
Samples checked for dechlorination:	[ ]Yes [ ]No [X]N/A	14.
Headspace in VOA Vials (>6mm):	[ ]Yes [ ]No [X]N/A	15.
Trip Blank Present:	[ ]Yes [ ]No [X]N/A	16.
Trip Blank Custody Seals Present	[ ]Yes [ ]No [X]N/A	
Pace Trip Blank Lot # (if purchased): _____		

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 10/30/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)