

EDEN NORTH CAROLINA COAL ASH SPILL SEDIMENT-WATER INTERFACE RESULTS

NOTE: The data below represents sediment-water interface samples that were collected on May 6, 2014 by EPA START (Team 1) sampling teams. Water sample measurements are in milligrams per liter (mg/L) and/or micrograms per liter (µg/L) for these samples. The data is being compared to EPA ecological risk screening levels (ERSLs) to protect aquatic life in the surface water of the Dan River. Specific qualifiers and footnotes are listed below the summary table. These samples were collected at various locations along the river (refer to map for generalized locations). The detected concentrations in sediment-water interface are all below the EPA ERSLs with the exception of lead and mercury. When chemical concentrations exceed the screening values it doesn't mean there will be adverse health or ecological effects, but recommends further investigation may be needed.

Analyte	Ecological Screening Standard for Surface Water Samples ¹		Transect FWS 4A Right Descending		Transect FWS 4B Left Descending		Transect EPA 02 Right Descending	
Sample Information								
Sample ID	-		EDEN-FWS4A-R-SW-20140506		EDEN-FWS4B-L-SW-20140506		EDEN-EPA02-R-SW-20140506	
Date	-		05/06/2014		05/06/2014		05/06/2014	
Time	-		1120		1245		1420	
Status	-		Validation Complete		Validation Complete		Validation Complete	
Type	-		Sediment-Water Interface		Sediment-Water Interface		Sediment-Water Interface	
Dissolved metals								
Aluminum	87	µg/L	33	µg/L	35	µg/L	39	µg/L
Antimony	5.6	µg/L	1U	µg/L	1U	µg/L	1U	µg/L
Arsenic	10	µg/L	1U	µg/L	1U	µg/L	0.47J	µg/L
Barium	220	µg/L	20	µg/L	20	µg/L	20	µg/L
Beryllium	0.66	µg/L	0.4U	µg/L	0.4U	µg/L	0.4U	µg/L
Boron	0.36	mg/L	0.091J	mg/L	0.098J	mg/L	0.099J	mg/L
Cadmium	0.1	µg/L	0.1U	µg/L	0.1U	µg/L	0.1U	µg/L
Calcium	-	-	6,700	µg/L	6,900	µg/L	6,900	µg/L
Chromium	25	µg/L	2U	µg/L	2U	µg/L	2U	µg/L
Cobalt	3	µg/L	0.4U	µg/L	0.4U	µg/L	0.4U	µg/L
Copper	3	µg/L	0.58J	µg/L	0.55J	µg/L	0.82J	µg/L
Iron	1,000	µg/L	180	µg/L	180	µg/L	190	µg/L
Lead	0.59	µg/L	0.3U	µg/L	0.3U	µg/L	0.3U	µg/L
Magnesium	-	-	2,600	µg/L	2,600	µg/L	2,600	µg/L
Manganese	200	µg/L	1.4J	µg/L	2.7	µg/L	2.4J	µg/L
Mercury	0.000012	mg/L	0.0002U	mg/L	0.0002U	mg/L	0.0002U	mg/L
Molybdenum	800	µg/L	1U	µg/L	1U	µg/L	1U	µg/L
Nickel	17	µg/L	0.4J	µg/L	1U	µg/L	1U	µg/L
Potassium	53,000	µg/L	1,500	µg/L	1,500	µg/L	1,500	µg/L
Selenium	5	µg/L	2U	µg/L	2U	µg/L	2U	µg/L
Silver	0.06	µg/L	1U	µg/L	1U	µg/L	1U	µg/L
Sodium	680,000	µg/L	4,500	µg/L	4,700	µg/L	4,500	µg/L
Thallium	0.24	µg/L	0.2U	µg/L	0.2U	µg/L	0.2U	µg/L
Vanadium	27	µg/L	0.72J	µg/L	0.86J	µg/L	0.68J	µg/L
Zinc	39	µg/L	20U	µg/L	20U	µg/L	20U	µg/L

**EDEN NORTH CAROLINA COAL ASH SPILL
SEDIMENT-WATER INTERFACE RESULTS**

Analyte	Ecological Screening Standard for Surface Water Samples ¹		Transect FWS 4A Right Descending		Transect FWS 4B Left Descending		Transect EPA 02 Right Descending	
Sample Information								
Sample ID	-		EDEN-FWS4A-R-SW-20140506		EDEN-FWS4B-L-SW-20140506		EDEN-EPA02-R-SW-20140506	
Date	-		05/06/2014		05/06/2014		05/06/2014	
Time	-		1120		1245		1420	
Status	-		Validation Complete		Validation Complete		Validation Complete	
Type	-		Sediment-Water Interface		Sediment-Water Interface		Sediment-Water Interface	
Total Dissolved Solids								
Total Dissolved Solids	-	-	43	mg/L	63	mg/L	47	mg/L
Total Suspended Solids								
Total Suspended Solids	-	-	24	mg/L	17	mg/L	17	mg/L
Total Metals								
Aluminum	2,000	µg/L	130	µg/L	150	µg/L	150	µg/L
Antimony	5.6	µg/L	1U	µg/L	1U	µg/L	1U	µg/L
Arsenic	10	µg/L	2	µg/L	2	µg/L	2	µg/L
Barium	220	µg/L	22	µg/L	24	µg/L	23	µg/L
Beryllium	0.66	µg/L	0.4U	µg/L	0.4U	µg/L	0.4U	µg/L
Boron	0.36	mg/L	0.091J	mg/L	0.095J	mg/L	0.096J	mg/L
Cadmium	2	µg/L	0.1U	µg/L	0.1U	µg/L	0.1U	µg/L
Calcium	-	-	6,800	µg/L	6,800	µg/L	6,700	µg/L
Chromium	29	µg/L	2.2	µg/L	2.2	µg/L	2.7	µg/L
Cobalt	24	µg/L	0.22J	µg/L	0.25J	µg/L	0.23J	µg/L
Copper	3	µg/L	0.85J	µg/L	0.93J	µg/L	0.94J	µg/L
Iron	2,300	µg/L	440	µg/L	460	µg/L	440	µg/L
Lead	0.6	µg/L	0.35	µg/L	0.53	µg/L	0.39	µg/L
Magnesium	-	-	2,600	µg/L	2,500	µg/L	2,500	µg/L
Manganese	200	µg/L	25	µg/L	35	µg/L	28	µg/L
Mercury	0.000012	mg/L	0.0002U	mg/L	0.0002U	mg/L	0.0002U	mg/L
Molybdenum	-	-	1U	µg/L	1U	µg/L	1U	µg/L
Nickel	17	µg/L	1U	µg/L	0.43J	µg/L	0.45J	µg/L
Potassium	53,000	µg/L	1,500	µg/L	1,500	µg/L	1,400	µg/L
Selenium	5	µg/L	2U	µg/L	2U	µg/L	2U	µg/L
Silver	0.06	µg/L	1U	µg/L	1U	µg/L	1U	µg/L
Sodium	680,000	µg/L	4,500	µg/L	4,500	µg/L	4,400	µg/L
Thallium	0.24	µg/L	0.2U	µg/L	0.2U	µg/L	0.2U	µg/L
Vanadium	27	µg/L	6.7	µg/L	6.5	µg/L	7.2	µg/L
Zinc	39	µg/L	20U	µg/L	20U	µg/L	20U	µg/L

EDEN NORTH CAROLINA COAL ASH SPILL SEDIMENT-WATER INTERFACE RESULTS

Analyte	Ecological Screening Standard for Surface Water Samples ¹		Transect FWS 4A Right Descending		Transect FWS 4B Left Descending		Transect EPA 02 Right Descending	
Sample Information								
Sample ID	-		EDEN-FWS4A-R-SW-20140506		EDEN-FWS4B-L-SW-20140506		EDEN-EPA02-R-SW-20140506	
Date	-		05/06/2014		05/06/2014		05/06/2014	
Time	-		1120		1245		1420	
Status	-		Validation Complete		Validation Complete		Validation Complete	
Type	-		Sediment-Water Interface		Sediment-Water Interface		Sediment-Water Interface	
Anions								
Bromide	-	-	52	µg/L	54	µg/L	54	µg/L
Chloride	230	mg/L	7.1	mg/L	7.2	mg/L	7.2	mg/L
Sulfate	-	-	4.5	mg/L	4.6	mg/L	4.5	mg/L
Wet Chemistry								
Alkalinity, Total (As CaCO ₃)	-	-	22	mg/L	25	mg/L	25	mg/L
Hardness, Calcium/Magnesium (As CaCO ₃)	-	-	28	mg/L	27	mg/L	27	mg/L
Organic Carbon, Dissolved	-	-	1.4	mg/L	1.4	mg/L	1.3	mg/L
pH	6.5 - 9.0		std	7.34J	std	7.14J	std	7.43J

Notes

¹ Value obtained from the GL Tier 2 Values; National Recommended Water Quality Criteria; Suter and Tsao (1996); Reference condition for EcoRegion XI (25 percentile); NCDENR State Standards for surface water

°C degrees Celsius

EPA U.S. Environmental Protection Agency

J Value is estimated

J+ Value is estimated with a possible high bias

µg/L micrograms per liter

mg/L milligrams per liter

mS/cm milliSiemens per centimeter

NTU Nephelometric turbidity units

std standard

U Analyte was not detected at the listed reporting limit.

**EDEN NORTH CAROLINA COAL ASH SPILL
SEDIMENT-WATER INTERFACE RESULTS**

Analyte	Ecological Screening Standard for Surface Water Samples ¹		Transect FWS SFI1 Left Descending		Transect FWS SFI2 Right Descending		Transect FWS SFI3 Left Descending	
Sample Information								
Sample ID	-		EDEN-FWSSFI1-L-SW-20140506		EDEN-FWSSFI2-R-SW-20140506		EDEN-FWSSFI3-L-SW-20140506	
Date	-		05/06/2014		05/06/2014		05/06/2014	
Time	-		1040		1135		1220	
Status	-		Validation Complete		Validation Complete		Validation Complete	
Type	-		Sediment-Water Interface		Sediment-Water Interface		Sediment-Water Interface	
Dissolved metals								
Aluminum	87	µg/L	41	µg/L	43	µg/L	40	µg/L
Antimony	5.6	µg/L	1U	µg/L	1U	µg/L	1U	µg/L
Arsenic	10	µg/L	0.51J	µg/L	1U	µg/L	1U	µg/L
Barium	220	µg/L	20J+	µg/L	22J+	µg/L	22J+	µg/L
Beryllium	0.66	µg/L	0.4U	µg/L	0.4U	µg/L	0.4U	µg/L
Boron	0.36	mg/L	0.1	mg/L	0.1	mg/L	0.1	mg/L
Cadmium	0.1	µg/L	0.1U	µg/L	0.1U	µg/L	0.1U	µg/L
Calcium	-	-	6,700	µg/L	7,000	µg/L	6,900	µg/L
Chromium	25	µg/L	2U	µg/L	2U	µg/L	2U	µg/L
Cobalt	3	µg/L	0.4U	µg/L	0.4U	µg/L	0.4U	µg/L
Copper	3	µg/L	0.91J	µg/L	0.58J	µg/L	0.57J	µg/L
Iron	1,000	µg/L	200	µg/L	230	µg/L	210	µg/L
Lead	0.59	µg/L	0.07J	µg/L	0.066J	µg/L	0.06J	µg/L
Magnesium	-	-	2,500	µg/L	2,600	µg/L	2,600	µg/L
Manganese	200	µg/L	6.5	µg/L	26	µg/L	18	µg/L
Mercury	0.000012	mg/L	0.00046	mg/L	0.000099J	mg/L	0.00039J	mg/L
Molybdenum	800	µg/L	1U	µg/L	1U	µg/L	1U	µg/L
Nickel	17	µg/L	1U	µg/L	1U	µg/L	1U	µg/L
Potassium	53,000	µg/L	1,500	µg/L	1,500	µg/L	1,500	µg/L
Selenium	5	µg/L	2U	µg/L	2U	µg/L	2U	µg/L
Silver	0.06	µg/L	1U	µg/L	1U	µg/L	1U	µg/L
Sodium	680,000	µg/L	4,600	µg/L	4,700	µg/L	4,600	µg/L
Thallium	0.24	µg/L	0.2U	µg/L	0.2U	µg/L	0.2U	µg/L
Vanadium	27	µg/L	0.75J	µg/L	0.85J	µg/L	0.78J	µg/L
Zinc	39	µg/L	20U	µg/L	20U	µg/L	20U	µg/L

**EDEN NORTH CAROLINA COAL ASH SPILL
SEDIMENT-WATER INTERFACE RESULTS**

Analyte	Ecological Screening Standard for Surface Water Samples ¹		Transect FWS SFI1 Left Descending		Transect FWS SFI2 Right Descending		Transect FWS SFI3 Left Descending	
Sample Information								
Sample ID	-		EDEN-FWSSFI1-L-SW-20140506		EDEN-FWSSFI2-R-SW-20140506		EDEN-FWSSFI3-L-SW-20140506	
Date	-		05/06/2014		05/06/2014		05/06/2014	
Time	-		1040		1135		1220	
Status	-		Validation Complete		Validation Complete		Validation Complete	
Type	-		Sediment-Water Interface		Sediment-Water Interface		Sediment-Water Interface	
Total Dissolved Solids								
Total Dissolved Solids	-	-	50	mg/L	58	mg/L	44	mg/L
Total Suspended Solids								
Total Suspended Solids	-	-	8.5	mg/L	42	mg/L	9.5	mg/L
Total Metals								
Aluminum	2,000	µg/L	98	µg/L	150	µg/L	110	µg/L
Antimony	5.6	µg/L	1U	µg/L	1U	µg/L	1U	µg/L
Arsenic	10	µg/L	0.6J	µg/L	1.7	µg/L	1.4	µg/L
Barium	220	µg/L	23	µg/L	24	µg/L	24	µg/L
Beryllium	0.66	µg/L	0.4U	µg/L	0.4U	µg/L	0.4U	µg/L
Boron	0.36	mg/L	0.1	mg/L	0.1	mg/L	0.1	mg/L
Cadmium	2	µg/L	0.1U	µg/L	0.1U	µg/L	0.14	µg/L
Calcium	-	-	6,900	µg/L	7,100	µg/L	7,000	µg/L
Chromium	29	µg/L	1.3J	µg/L	2.5	µg/L	2.6	µg/L
Cobalt	24	µg/L	0.16J	µg/L	0.25J	µg/L	0.2J	µg/L
Copper	3	µg/L	0.83J	µg/L	0.93J	µg/L	0.87J	µg/L
Iron	2,300	µg/L	370	µg/L	470	µg/L	410	µg/L
Lead	0.6	µg/L	0.22J	µg/L	0.36	µg/L	0.28J	µg/L
Magnesium	-	-	2,600	µg/L	2,600	µg/L	2,600	µg/L
Manganese	200	µg/L	18	µg/L	47	µg/L	31	µg/L
Mercury	0.000012	mg/L	0.0041	mg/L	0.0012	mg/L	0.00032J	mg/L
Molybdenum	-	-	1U	µg/L	1U	µg/L	1U	µg/L
Nickel	17	µg/L	0.49J	µg/L	0.42J	µg/L	0.41J	µg/L
Potassium	53,000	µg/L	1,500	µg/L	1,500	µg/L	1,500	µg/L
Selenium	5	µg/L	2U	µg/L	2U	µg/L	2U	µg/L
Silver	0.06	µg/L	1U	µg/L	1U	µg/L	1U	µg/L
Sodium	680,000	µg/L	4,700	µg/L	4,700	µg/L	4,700	µg/L
Thallium	0.24	µg/L	0.2U	µg/L	0.2U	µg/L	0.2U	µg/L
Vanadium	27	µg/L	1.2	µg/L	1.9	µg/L	1.6	µg/L
Zinc	39	µg/L	20U	µg/L	20U	µg/L	20U	µg/L

EDEN NORTH CAROLINA COAL ASH SPILL SEDIMENT-WATER INTERFACE RESULTS

Analyte	Ecological Screening Standard for Surface Water Samples ¹		Transect FWS SFI1 Left Descending		Transect FWS SFI2 Right Descending		Transect FWS SFI3 Left Descending	
Sample Information								
Sample ID	-		EDEN-FWSSFI1-L-SW-20140506		EDEN-FWSSFI2-R-SW-20140506		EDEN-FWSSFI3-L-SW-20140506	
Date	-		05/06/2014		05/06/2014		05/06/2014	
Time	-		1040		1135		1220	
Status	-		Validation Complete		Validation Complete		Validation Complete	
Type	-		Sediment-Water Interface		Sediment-Water Interface		Sediment-Water Interface	
Anions								
Bromide	-	-	58	µg/L	56	µg/L	57	µg/L
Chloride	230	mg/L	7.5	mg/L	7.4	mg/L	7.4	mg/L
Sulfate	-	-	4.7	mg/L	4.7	mg/L	4.7	mg/L
Wet Chemistry								
Alkalinity, Total (As CaCO ₃)	-	-	28	mg/L	24	mg/L	24	mg/L
Hardness, Calcium/Magnesium (As CaCO ₃)	-	-	28	mg/L	28	mg/L	28	mg/L
Organic Carbon, Dissolved	-	-	1.6	mg/L	1.5	mg/L	1.5	mg/L
pH	6.5 - 9.0	std	7.49J	std	7.36J	std	7.3J	std

Notes

¹ Value obtained from the GL Tier 2 Values; National Recommended Water Quality Criteria; Suter and Tsao (1996); Reference condition for EcoRegion XI (25 percentile); NCDENR State Standards for surface water

°C degrees Celsius

EPA U.S. Environmental Protection Agency

J Value is estimated

J+ Value is estimated with a possible high bias

µg/L micrograms per liter

mg/L milligrams per liter

mS/cm milliSiemens per centimeter

NTU Nephelometric turbidity units

std standard

U Analyte was not detected at the listed reporting limit.

**EDEN NORTH CAROLINA COAL ASH SPILL
SEDIMENT-WATER INTERFACE RESULTS**

Analyte	Ecological Screening Standard for Surface Water Samples ¹		Transect FWS SFI4 Left Descending		Transect EPA 03 Left Descending		Transect FWS SFI5 Left Descending	
Sample Information								
Sample ID	-		EDEN-FWSSFI4-L-SW-20140506		EDEN-EPA03-L-SW-20140506		EDEN-FWSSFI5-L-SW-20140506	
Date	-		05/06/2014		05/06/2014		05/06/2014	
Time	-		1300		1335		1410	
Status	-		Validation Complete		Validation Complete		Validation Complete	
Type	-		Sediment-Water Interface		Sediment-Water Interface		Sediment-Water Interface	
Dissolved metals								
Aluminum	87	µg/L	39	µg/L	42	µg/L	47	µg/L
Antimony	5.6	µg/L	1U	µg/L	1U	µg/L	1U	µg/L
Arsenic	10	µg/L	0.6J	µg/L	0.58J	µg/L	1U	µg/L
Barium	220	µg/L	22J+	µg/L	22	µg/L	23J+	µg/L
Beryllium	0.66	µg/L	0.4U	µg/L	0.4U	µg/L	0.4U	µg/L
Boron	0.36	mg/L	0.1	mg/L	0.1	mg/L	0.1	mg/L
Cadmium	0.1	µg/L	0.048J	µg/L	0.1U	µg/L	0.1U	µg/L
Calcium	-	-	7,000	µg/L	7,000	µg/L	7,000	µg/L
Chromium	25	µg/L	2U	µg/L	2U	µg/L	2U	µg/L
Cobalt	3	µg/L	0.4U	µg/L	0.4U	µg/L	0.18J	µg/L
Copper	3	µg/L	0.59J	µg/L	0.57J	µg/L	0.78J	µg/L
Iron	1,000	µg/L	220	µg/L	240	µg/L	280	µg/L
Lead	0.59	µg/L	0.3U	µg/L	0.067J	µg/L	0.1J	µg/L
Magnesium	-	-	2,600	µg/L	2,600	µg/L	2,600	µg/L
Manganese	200	µg/L	22	µg/L	26	µg/L	55	µg/L
Mercury	0.000012	mg/L	0.00028	mg/L	0.0002U	mg/L	0.00017J	mg/L
Molybdenum	800	µg/L	1U	µg/L	1U	µg/L	1U	µg/L
Nickel	17	µg/L	1U	µg/L	0.46J	µg/L	0.98J	µg/L
Potassium	53,000	µg/L	1,500	µg/L	1,500	µg/L	1,500	µg/L
Selenium	5	µg/L	2U	µg/L	2U	µg/L	2U	µg/L
Silver	0.06	µg/L	1U	µg/L	1U	µg/L	1U	µg/L
Sodium	680,000	µg/L	4,700	µg/L	4,500	µg/L	4,600	µg/L
Thallium	0.24	µg/L	0.2U	µg/L	0.2U	µg/L	0.2U	µg/L
Vanadium	27	µg/L	0.88J	µg/L	1	µg/L	1.2	µg/L
Zinc	39	µg/L	20U	µg/L	20U	µg/L	20U	µg/L

**EDEN NORTH CAROLINA COAL ASH SPILL
SEDIMENT-WATER INTERFACE RESULTS**

Analyte	Ecological Screening Standard for Surface Water Samples ¹		Transect FWS SFI4 Left Descending		Transect EPA 03 Left Descending		Transect FWS SFI5 Left Descending	
Sample Information								
Sample ID	-		EDEN-FWSSFI4-L-SW-20140506		EDEN-EPA03-L-SW-20140506		EDEN-FWSSFI5-L-SW-20140506	
Date	-		05/06/2014		05/06/2014		05/06/2014	
Time	-		1300		1335		1410	
Status	-		Validation Complete		Validation Complete		Validation Complete	
Type	-		Sediment-Water Interface		Sediment-Water Interface		Sediment-Water Interface	
Total Dissolved Solids								
Total Dissolved Solids	-	-	46	mg/L	39	mg/L	53	mg/L
Total Suspended Solids								
Total Suspended Solids	-	-	23	mg/L	18	mg/L	27	mg/L
Total Metals								
Aluminum	2,000	µg/L	100	µg/L	150	µg/L	170	µg/L
Antimony	5.6	µg/L	1U	µg/L	1U	µg/L	1U	µg/L
Arsenic	10	µg/L	1.7	µg/L	1.9	µg/L	2.1	µg/L
Barium	220	µg/L	24	µg/L	26	µg/L	28	µg/L
Beryllium	0.66	µg/L	0.4U	µg/L	0.4U	µg/L	0.4U	µg/L
Boron	0.36	mg/L	0.099J	mg/L	0.1	mg/L	0.1	mg/L
Cadmium	2	µg/L	0.1U	µg/L	0.1U	µg/L	0.1U	µg/L
Calcium	-	-	6,900	µg/L	6,900	µg/L	7,300	µg/L
Chromium	29	µg/L	2.7	µg/L	2.2	µg/L	2.3	µg/L
Cobalt	24	µg/L	0.25J	µg/L	0.38J	µg/L	0.53	µg/L
Copper	3	µg/L	0.96J	µg/L	1.1	µg/L	1.2	µg/L
Iron	2,300	µg/L	430	µg/L	570	µg/L	690	µg/L
Lead	0.6	µg/L	0.35	µg/L	0.55	µg/L	0.72	µg/L
Magnesium	-	-	2,500	µg/L	2,600	µg/L	2,700	µg/L
Manganese	200	µg/L	43	µg/L	71	µg/L	110	µg/L
Mercury	0.000012	mg/L	0.00083	mg/L	0.00048	mg/L	0.001	mg/L
Molybdenum	-	-	1U	µg/L	1U	µg/L	1U	µg/L
Nickel	17	µg/L	0.4J	µg/L	0.47J	µg/L	0.52J	µg/L
Potassium	53,000	µg/L	1,500	µg/L	1,500	µg/L	1,600	µg/L
Selenium	5	µg/L	2U	µg/L	2U	µg/L	2U	µg/L
Silver	0.06	µg/L	1U	µg/L	1U	µg/L	1U	µg/L
Sodium	680,000	µg/L	4,300	µg/L	4,400	µg/L	4,600	µg/L
Thallium	0.24	µg/L	0.2U	µg/L	0.2U	µg/L	0.2U	µg/L
Vanadium	27	µg/L	5.8	µg/L	3.4	µg/L	2.6	µg/L
Zinc	39	µg/L	20U	µg/L	20U	µg/L	20U	µg/L

EDEN NORTH CAROLINA COAL ASH SPILL SEDIMENT-WATER INTERFACE RESULTS

Analyte	Ecological Screening Standard for Surface Water Samples ¹		Transect FWS SFI4 Left Descending		Transect EPA 03 Left Descending		Transect FWS SFI5 Left Descending	
Sample Information								
Sample ID	-		EDEN-FWSSFI4-L-SW-20140506		EDEN-EPA03-L-SW-20140506		EDEN-FWSSFI5-L-SW-20140506	
Date	-		05/06/2014		05/06/2014		05/06/2014	
Time	-		1300		1335		1410	
Status	-		Validation Complete		Validation Complete		Validation Complete	
Type	-		Sediment-Water Interface		Sediment-Water Interface		Sediment-Water Interface	
Anions								
Bromide	-	-	59	µg/L	58	µg/L	57	µg/L
Chloride	230	mg/L	7.4	mg/L	7.4	mg/L	7.3	mg/L
Sulfate	-	-	4.7	mg/L	4.7	mg/L	4.7	mg/L
Wet Chemistry								
Alkalinity, Total (As CaCO ₃)	-	-	25	mg/L	24	mg/L	25	mg/L
Hardness, Calcium/Magnesium (As CaCO ₃)	-	-	27	mg/L	28	mg/L	29	mg/L
Organic Carbon, Dissolved	-	-	1.7	mg/L	1.6	mg/L	1.6	mg/L
pH	6.5 - 9.0		std	7.34J	std	7.24J	std	7.25J

Notes

¹ Value obtained from the GL Tier 2 Values; National Recommended Water Quality Criteria; Suter and Tsao (1996); Reference condition for EcoRegion XI (25 percentile); NCDENR State Standards for surface water

°C degrees Celsius

EPA U.S. Environmental Protection Agency

J Value is estimated

J+ Value is estimated with a possible high bias

µg/L micrograms per liter

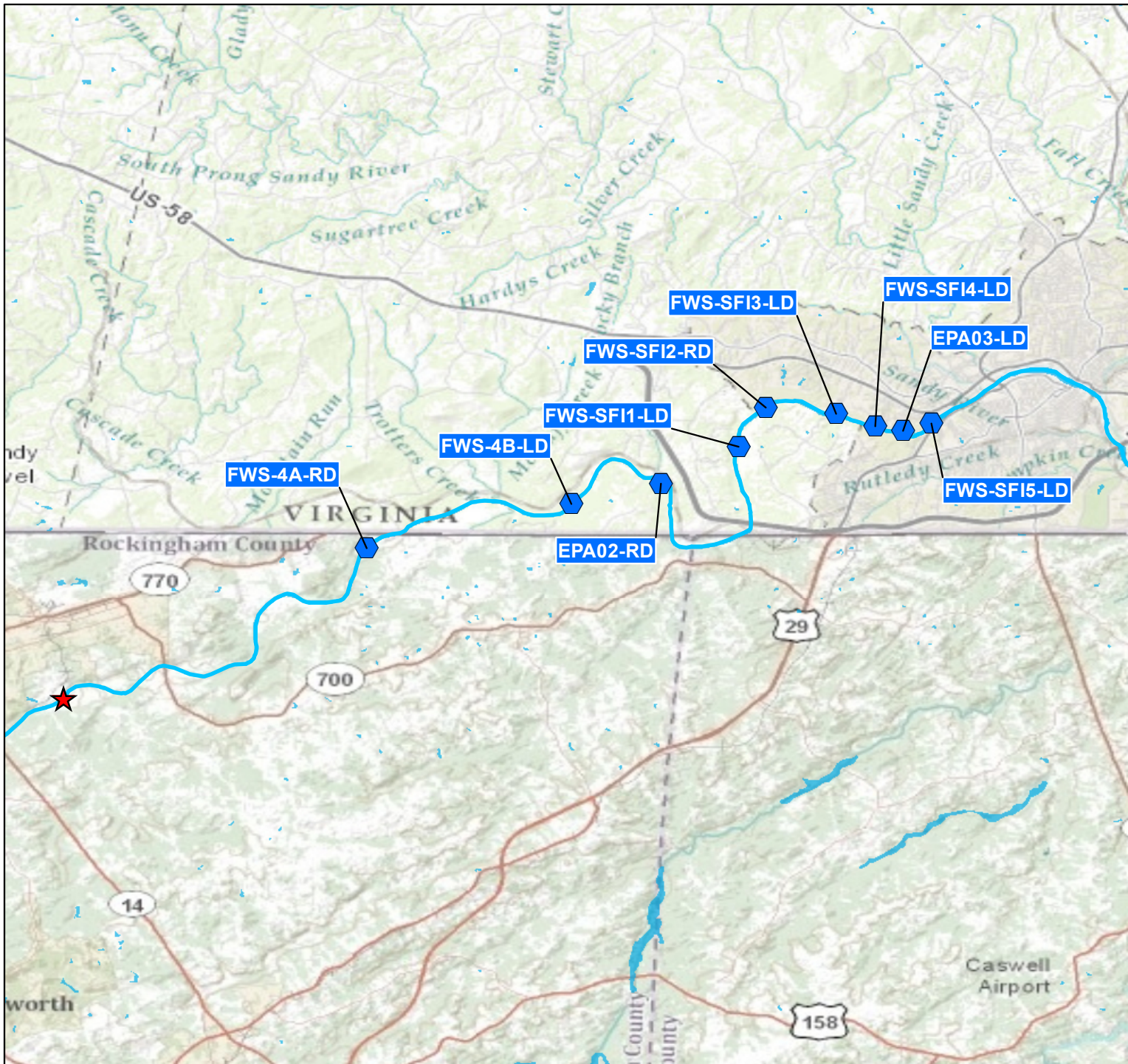
mg/L milligrams per liter

mS/cm milliSiemens per centimeter



NTU Nephelometric turbidity units

std standard

U Analyte was not detected at the listed reporting limit.



Legend

-  Approximate Spill Location
-  Sediment-Water Interface Sample Location

Imagery Source:
ESRI, USGS Mapping Service, 2013



1.5 0.75 0 1.5 Miles

Eden Coal Ash Spill
Eden, North Carolina

Sediment-Water Interface
Sample Locations
May 06, 2014

