NOTE: The data below represents sediment-water interface samples that were collected on Feb 8, 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 surface water are all below the EPA ERSLs with the exception of copper and lead. 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]		**Hwy 880**		**Hwy 880**		**Hwy 880**	
Sample Information								
Sample ID	-		EDEN-BH-C-BW-20140208		EDEN-BH-L-BW-20140208		EDEN-BH-R-BW-20140208	
Date	-		2/8/2014		2/8/2014		2/8/2014	
Time	-		1705		1600		1730	
Status	-		Validation Complete		Validation Complete		Validation Complete	
Type	-		Sediment-Water Interface		Sediment-Water Interface		Sediment-Water Interface	
Water Quality Monitoring								
Temperature	-		-	-	6.15	°C	10.02	°C
Dissolved Oxygen	<6	mg/L	-	-	10	mg/L	11	mg/L
Specific Conductance	-		-	-	0.04	mS/cm	0.094	mS/cm
pH	6.5 - 9.0	std	-	-	6.68	std	6.38	std
Turbidity	50	NTU	-	-	-	-	13	NTU
Total Metals	**SW6010C/6020A/7470A**							
Aluminum	2,000	µg/L	1,950	µg/L	885	µg/L	475	µg/L
Antimony	5.6	µg/L	5.00U	µg/L	5.00U	µg/L	5.00U	µg/L
Arsenic	10	µg/L	4.51	µg/L	1.13J	µg/L	0.662J	µg/L
Barium	220	µg/L	76.8	µg/L	33.9	µg/L	26.8	µg/L
Beryllium	0.66	µg/L	0.494J	µg/L	1.00U	µg/L	1.00U	µg/L
Boron	0.36	mg/L	0.143J+	mg/L	0.141J+	mg/L	0.143J+	mg/L
Cadmium	2	µg/L	0.700U	µg/L	0.700U	µg/L	0.700U	µg/L
Calcium	-	-	7,150	µg/L	6,650	µg/L	6,790	µg/L
Chromium	29	µg/L	2.83	µg/L	1.35J	µg/L	0.819J	µg/L
Cobalt	24	µg/L	1.65J	µg/L	0.717J	µg/L	5.00U	µg/L
Copper	3	µg/L	7.55	µg/L	2.28J+	µg/L	2.21J+	µg/L
Iron	2,300	µg/L	1,960	µg/L	1,140	µg/L	687	µg/L
Lead	0.6	µg/L	2.42	µg/L	1.03J+	µg/L	1.00U	µg/L
Magnesium	-	-	2,640	µg/L	2,450	µg/L	2,420	µg/L
Manganese	200	µg/L	50.9	µg/L	35.2	µg/L	21.7	µg/L
Mercury	0.000012	mg/L	0.00020U	mg/L	0.00020U	mg/L	0.00020U	µg/L
Molybdenum	-	-	5.00U	µg/L	5.00U	µg/L	5.00U	µg/L
Nickel	17	µg/L	5.00U	µg/L	5.00U	µg/L	5.00U	µg/L
Potassium	53,000	µg/L	1,680	µg/L	1,390	µg/L	1,340	µg/L
Selenium	5	µg/L	0.840J	µg/L	5.00U	µg/L	5.00U	µg/L
Silica	-	-	8.62	mg/L	7.82	mg/L	7.24	mg/L
Silver	0.06	µg/L	1.00U	µg/L	1.00U	µg/L	1.00U	µg/L
Sodium	680,000	µg/L	4,360	µg/L	4,370	µg/L	4,320	µg/L
Thallium	0.24	µg/L	0.158J	µg/L	0.200U	µg/L	0.200U	µg/L
Vanadium	27	µg/L	8.10	µg/L	3.57J	µg/L	2.00J	µg/L
Zinc	39	µg/L	10.4U	µg/L	10.0U	µg/L	10.0U	µg/L

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.

Analyte	Ecological Screening Standard for Surface Water Samples[1]		0.5 Mile Downstream Berry Hill Ridge Road		0.5 Mile Downstream Berry Hill Ridge Road	
Sample Information						
Sample ID	-		EDEN-BH0.5D-L-BW_20140208		EDEN-BH0.5D-R-BW_20140208	
Date	-		2/8/2014		2/8/2014	
Time	-		1110		1115	
Status	-		Validation Complete		Validation Complete	
Type	-		Sediment-Water Interface		Sediment-Water Interface	
Water Quality Monitoring						
Temperature	-		-	-	-	-
Dissolved Oxygen	<6	mg/L	-	-	-	-
Specific Conductance	-		-	-	-	-
pH	6.5 - 9.0	std	-	-	-	-
Turbidity	50	NTU	-	-	-	-
Total Metals	**SW6010C/6020A/7470A**					
Aluminum	2,000	µg/L	354	µg/L	326	µg/L
Antimony	5.6	µg/L	5.00U	µg/L	5.00U	µg/L
Arsenic	10	µg/L	5.00U	µg/L	5.00U	µg/L
Barium	220	µg/L	23.7	µg/L	22.7	µg/L
Beryllium	0.66	µg/L	1.00U	µg/L	1.00U	µg/L
Boron	0.36	mg/L	0.133J+	mg/L	0.133J+	mg/L
Cadmium	2	µg/L	0.700U	µg/L	0.700U	µg/L
Calcium	-	-	6,860	µg/L	6,740	µg/L
Chromium	29	µg/L	0.697J	µg/L	0.643J	µg/L
Cobalt	24	µg/L	5.00U	µg/L	5.00U	µg/L
Copper	3	µg/L	2.00U	µg/L	2.00U	µg/L
Iron	2,300	µg/L	615	µg/L	580	µg/L
Lead	0.6	µg/L	1.00U	µg/L	1.00U	µg/L
Magnesium	-	-	2,440	µg/L	2,390	µg/L
Manganese	200	µg/L	22.5	µg/L	26.8	µg/L
Mercury	0.000012	mg/L	0.00020U	mg/L	0.00020U	mg/L
Molybdenum	-	-	5.00U	µg/L	5.00U	µg/L
Nickel	17	µg/L	5.00U	µg/L	5.00U	µg/L
Potassium	53,000	µg/L	1,380	µg/L	1,340	µg/L
Selenium	5	µg/L	5.00U	µg/L	5.00U	µg/L
Silica	-	-	6.94	mg/L	6.81	mg/L
Silver	0.06	µg/L	1.00U	µg/L	1.00U	µg/L
Sodium	680,000	µg/L	4,830	µg/L	4,710	µg/L
Thallium	0.24	µg/L	0.200U	µg/L	0.200U	µg/L
Vanadium	27	µg/L	1.53J	µg/L	1.48J	µg/L
Zinc	39	µg/L	10.0U	µg/L	10.0U	µg/L

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

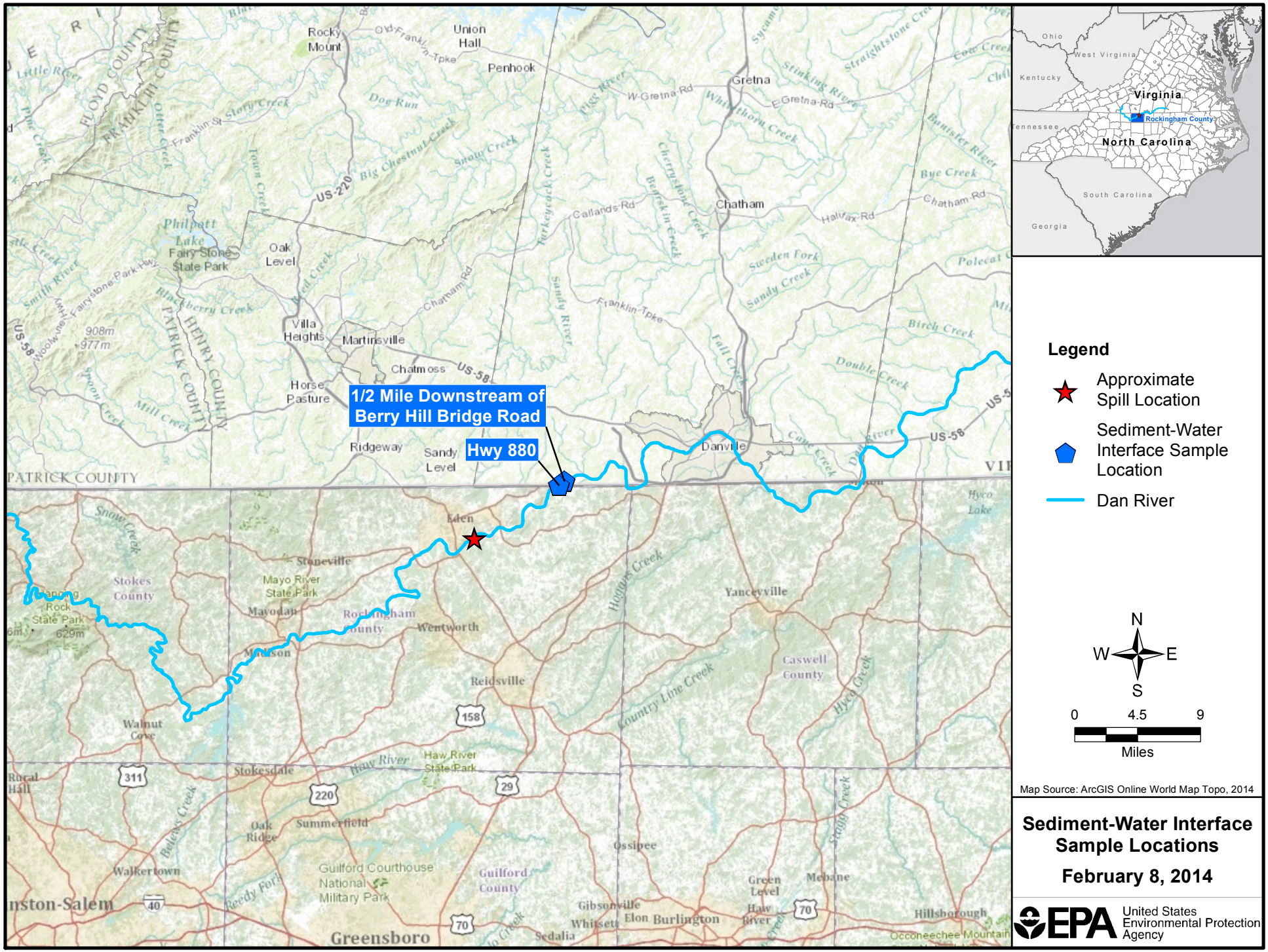
mg/L milligrams per liter

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
- Dan River

Map Source: ArcGIS Online World Map Topo, 2014

Sediment-Water Interface Sample Locations

February 8, 2014

EPA United States Environmental Protection Agency

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