

Instructions: Bold fields must be completed

**Station Summary**

<b>Waterbody Name</b> BARDON CREEK	<b>Waterbody ID Code</b> 2860900	<b>Sample ID (YYYYMMDD-CY-FD)</b> 20161010-16-02
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<b>Sampling Location</b> 20m US STH13	<b>Database Key</b> 134666910
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<b>SWIMS Station ID</b> 10013114	<b>SWIMS Station Name</b> BARDON CREEK- 150 METERS UPSTREAM OF HWY 13- STATION #1
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<b>Latitude</b> 46.64743	<b>Longitude</b> -91.74182	<b>Lat/Long Determination Method (circle)</b> SWIMS SWDV <u>GPS</u>	<b>Datum Used if using GPS</b> <u>WGS84</u> or NAD83
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<b>Basin (WMU)</b> LAKE SUPERIOR	<b>Watershed Name</b> AMNICON AND MIDDLE RIVERS	<b>County</b> DOUGLAS
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**Sample and Site Descriptors**

<b>Sample Collector (Last Name, First)</b> CRAIG ROESLER	<b>Project Name</b> NORTH DISTRICT NC STREAM STRATIFIED SITES 2016
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**Sampling Device**

Kick Net     
  Surber Sampler     
  Eckman  
 Ponar     
  Artificial Substrate     
  Hess Sampler     
  Other: \_\_\_\_\_

**Habitat Sampled**

Riffle     
  Run     
  Pool  
 Other     
  Shoreline Composite     
  Proportionally-Sampled Habitat  
 Littoral Zone     
  Profundal Zone     
  Wetland

<b>Total Sampling Time (min)</b> 15	<b>Estimated Area Sampled (m<sup>2</sup>)</b> 15	<b>Number of Samples in Composite</b> 3	<b>Replicate No.</b> <u>1</u> of <u>1</u>
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**Reason For Sampling**

Least Impacted Reference     
  Baseline     
  Impact/ Treatment Site  
 Control Site     
  Trend     
  Other: \_\_\_\_\_

<b>Water Temp. (C)</b> 9.2	<b>D.O. (mg/l)</b> 10.7	<b>D.O. (% sat.)</b>	<b>pH (su)</b> 7.8	<b>Conductivity (umhos/cm)</b> 243	<b>Transparency (cm)</b> 22
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<b>Water Color</b> <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Stained	<b>Estimated Stream Velocity (m/s)</b> <input type="checkbox"/> Slow (< 0.15 m/s) <input checked="" type="checkbox"/> Moderate (0.15 m/s - 0.5 m/s) <input type="checkbox"/> Fast (> 0.5 m/s)
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<b>Measured Velocity</b> 1.0	circle units m/s or <u>(f/s)</u>	<b>Average Stream Depth of reach (m)</b> 0.3	<b>Average Stream Width of reach (m)</b> 4
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**Composition of Substrate Sampled (Percent):**

Bedrock: \_\_\_\_\_ Boulders (basketball or larger): \_\_\_\_\_ Rubble (tennisball to basketball): \_\_\_\_\_ Gravel (ladybug to tennisball): 100  
 Sand: \_\_\_\_\_ Clay: \_\_\_\_\_ Silt/Muck: \_\_\_\_\_ Overhanging Vegetation: \_\_\_\_\_  
 Aquatic Macrophytes: \_\_\_\_\_ Leaf Snags: \_\_\_\_\_ Coarse Woody Debris: \_\_\_\_\_ Other (\_\_\_\_): \_\_\_\_\_  
 Embeddedness of Substrate at Sample Site (%) 10 Canopy Cover at Sample Site (%) 0

**Stream and Watershed Descriptors**

N = Not a problem  
 U = Uncertain  
 PL = Present, Low Impact  
 PH = Present, High Impact

Factors that may be influencing Water Resource Integrity		Local	Water-shed	Factors that may be influencing Water Resource Integrity		Local	Water-shed
<b>Biological</b>				<b>Chemical</b>			
Algae: - Diatoms / Periphyton				Chlorine			
- Filamentous Algae				Dissolved Oxygen			
- Planktonic Algae				Nutrients (P, N...)			
Iron Bacteria				Toxics: - Inorganic (Metals)			
Macrophytes				- Organic (PCBs, pesticides...)			
Slimes				Other - Specify:			
Other - Specify:				<b>Sources of Stream Impacts</b>			
				Bank Erosion			
				Point Source - Specify:			
				Pasturing of Livestock			
				Runoff: - Barnyard			
				- Construction			
				- Cropland			
				- Urban			
				Septic Systems			
				Tile Drainage - Organic Soils			
				- Mineral Soils			
				Springs			
				Tributary(s)			
				Wetland			
				Other - Specify:			
<b>Physical</b>							
Bank Erosion							
Channelization - Upstream							
- Downstream							
Hydraulic Scour / Channel Incision							
Impoundment - Upstream							
- Downstream							
Low Flow							
Sedimentation							
Sludge							
Thermal							
Turbidity							
Other - Specify:							

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter Candice Olson	Taxonomist Dunmick, Jeffrey	Estimated Percent of Sample Sorted 13.7%
Date Processed 11/29/16	Specimens Saved Subsample archived in dnr lab Sept 2020	

C3: 65 = 13.7

D2: 72

Taxa	Life Stage	Bench Tally	Count	Taxonomic Reference	Condition	Unique Taxon
Allocapnia	L	III	3	Hilsenhoff 1995		
Paracapnia angulata	L	I	1	Hilsenhoff 1995		
Baetis brunneicollis	L	III	3	Kluge & Franz 2010		
B. flavistriga species complex	L	-II	7	"		
Aeoperna	L	I	1	"	dam	N
A. macdunnoughi	L	III	4	"		
A. pygmaea	L	III	4	"		
Cadix	L	I	1	"	imm	N
C. latipennis	L	III	3	"		
Centropneuste	L	II	2	"	imm	N
Stenonema femoratum	L	II	2	"		
Levaneuta	L	-II	8	"		
Leptophlebia	L	I	1	"	dam	
Paraleptophlebia	L	III	3	"	dam	
Chamaetopsycha	L	XIII	14	Hilsenhoff 1995		
Hydropsyche barteni	L	I	1	Schum. Hils. 1986		
Ceratopsyche	L	I	1	Hilsenhoff 1995	dam	N
C. glossanae	L	XII	12	Schum. Hils. 1986		
C. sparna	L	I	1	"		
C. mucosa	L	I	1	"		
Psychomyia flavida	L	III	23	Hilsenhoff 1995		
Holochilus strabus	A	I	1	Hils. Schum. 1992		
Oligoneurus	L	II	2	"	imm	N
O. fastidius L. 7 A. 3	L, A	X	10	"		
Stenelmis	L	I	1	"		
Liodesmus affinis	A	I	1	Hilsenhoff 1994		
Antocha	L	-	5	Hilsenhoff 1995		
Dicranota	L	-	5	"		
Tubificinae w/o capilliform chaetae	A	III	3	Kluge 1985		
Natania baldimorea	L	I	1	Epler 2001		
Eukiefferiella devonica group	L	I	1	Anderson 2013		
Arctotanytus (Cricotopus) fremulus group	L	I	1	"		
Cladotanytus	L	I	1	Epler et al 2013		
Microtendipes	L	I	1	"		
Microtendipes pedellus group	L	-III	8	"		
Paratanytarsus sp A	L	II	2	Hilsenhoff 1994		

