



**Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Classification Attainment Report**

Station Information

Station Number: S-815	River Basin: Maine Coastal
Waterbody: Card Brook - Station 815	HUC8 Name: Maine Coastal
Town: Ellsworth	Latitude: 44 31 51.95 N
Directions: 32 METERS DOWNSTREAM OF RT 230	Longitude: 68 25 5.99 W
	Stream Order: 3

Sample Information

Log Number: 2482	Type of Sample: ROCK BAG	Date Deployed: 7/18/2016
Subsample Factor: X1	Replicates: 3	Date Retrieved: 8/15/2016

Classification Attainment

Statutory Class: B	Final Determination: I	Date: 1/30/2017
Model Result with $P \geq 0.6$: I	Reason for Determination: Best Professional Judgement	
Date Last Calculated: 1/27/2017	Comments: Minimum Provisions for Total Mean Abundance and Generic Richness not met. Resample.	

Model Probabilities

<u>First Stage Model</u>		<u>C or Better Model</u>	
Class A	0.00	Class A, B, or C	0.00
Class B	0.00	Non-Attainment	1.00
<u>B or Better Model</u>		<u>A Model</u>	
Class A or B	0.00	Class A	0.03
Class C or Non-Attainment	1.00	Class B or C or Non-Attainment	0.97

Model Variables

01 Total Mean Abundance	7.33	18 Relative Abundance Ephemeroptera	0.00
02 Generic Richness	4.00	19 EPT Generic Richness	0.00
03 Plecoptera Mean Abundance	0.00	21 Sum of Abundances: <i>Dicrotendipes</i> , <i>Micropsectra</i> , <i>Parachironomus</i> , <i>Helobdella</i>	0.00
04 Ephemeroptera Mean Abundance	0.00	23 Relative Generic Richness- Plecoptera	0.00
05 Shannon-Wiener Generic Diversity	1.41	25 Sum of Abundances: <i>Cheumatopsyche</i> , <i>Cricotopus</i> , <i>Tanytarsus</i> , <i>Ablabesmyia</i>	0.00
06 Hilsenhoff Biotic Index	2.00	26 Sum of Abundances: <i>Acroneuria</i> , <i>Maccaffertium</i> , <i>Stenonema</i>	0.00
07 Relative Abundance - Chironomidae	0.00	28 EP Generic Richness/14	0.00
08 Relative Generic Richness Diptera	0.00	30 Presence of Class A Indicator Taxa/7	0.00
09 <i>Hydropsyche</i> Abundance	0.00		
11 <i>Cheumatopsyche</i> Abundance	0.00		
12 EPT Generic Richness/ Diptera Generic Richness	0.00		
13 Relative Abundance - Oligochaeta	0.00		
15 Perlidae Mean Abundance (Family Functional Group)	0.00		
16 Tanypodinae Mean Abundance (Family Functional Group)	0.00		
17 Chironomini Abundance (Family Functional Group)	0.00		

Five Most Dominant Taxa

Rank	Taxon Name	Percent
1	Rhabditophora	54.55
2	<i>Promoresia</i>	36.36
3	<i>Boyeria</i>	4.55
4	Ancylidae	4.55



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Station Number: S-815 Town: Ellsworth Date Deployed: 7/18/2016
Log Number: 2482 Waterbody: Card Brook - Station 815 Date Retrieved: 8/15/2016

Sample Collection and Processing Information

Sampling Organization: BIOMONITORING UNIT Taxonomist: ECOANALYSTS IDAHO

Waterbody Information - Deployment

Temperature: 21.4 deg C
Dissolved Oxygen: 9.68 mg/l
Dissolved Oxygen Saturation: 109.2 %
Specific Conductance: 480 uS/cm
Velocity: 27.4 cm/s
pH: 7.81
Wetted Width: 7.7 m
Bankfull Width: 9.7 m
Depth: 26 cm

Waterbody Information - Retrieval

Temperature: 22 deg C
Dissolved Oxygen: 9.87 mg/l
Dissolved Oxygen Saturation: 112.3 %
Specific Conductance: 667 uS/cm
Velocity: 15.24 cm/s
pH: 7.71
Wetted Width: 7.1 m
Bankfull Width: 9.7 m
Depth: 21 cm

Water Chemistry

Summary of Habitat Characteristics

<u>Landuse Name</u>	<u>Canopy Cover</u>	<u>Terrain</u>	
Upland Hardwood	Dense	Rolling	
Urban			
<u>Potential Stressor</u>	<u>Location</u>	<u>Substrate</u>	
Altered Hydrology	Below Road Crossing	Boulder	75 %
Urban Runoff	Below Town	Gravel	5 %
	Below Urban NPS	Rubble/Cobble	15 %
		Sand	5 %

Landcover Summary - 2004 Data

Total Area (ac)	4539	High Int. Dev. %	5.9	Water %	0.0	Non-vegetated %	2.2
		Med Int. Dev. %	4.0	Wetland %	13.8	Tilled Agriculture %	4.7
		Low Int. Dev. %	7.4	Upland Woody %	54.8	Grassland %	3.9
		Development %	17.4	Natural %	68.7	Human Altered %	31.2
						Impervious %	9.6

Sample Comments

LOW WATER ON RETRIEVAL.



**Maine Department of Environmental Protection
Biological Monitoring Program
Aquatic Life Taxonomic Inventory Report**

Station Number: S-815

Waterbody: Card Brook - Station 815

Town: Ellsworth

Log Number: 2482

Subsample Factor: X1

Replicates: 3

Calculated: 1/27/2017

Taxon	Maine Taxonomic Code	Count (Mean of Samplers)		Hilsenhoff Biotic Index	Functional Feeding Group	Relative Abundance %	
		Actual	Adjusted			Actual	Adjusted
Rhabditophora	0301	4.00	4.00		--	54.5	54.5
<i>Boyeria</i>	09020301004		0.33	2	PR		4.5
<i>Boyeria vinosa</i>	09020301004012	0.33			--	4.5	
<i>Promoresia</i>	09021113069		2.67		--		36.4
<i>Promoresia tardella</i>	09021113069052	2.67			--	36.4	
Ancylidae	10010204	0.33	0.33		SC	4.5	4.5