USGS Hydrologic Unit: **SiteID:** WEM090-0003 051202070706 Stream Name: Vernon Fork Muscatatuck River County: Jackson Description: CR 600 South Latitude: 38 47 36.72884 Longitude: -85 53 2.67155 Site Number: 21T-001 Drainage: 391.167 SiteID: WEM090-0003 Sample Date: 8/4/2021 IDEM Sample #: AB48095 ☐ Algae? **Water Flow Type** Water Appearance **Water Depth** Glide Brown ☐ Flow Estimated? ■ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Lab ID #: **Reporting Limit Method** Result 59.2 % ASTM D888-09(C) % Sat DO 5.15 mg/L ASTM D888-09(C) pH (Field) 7.56 SU EPA 150.2 Specific Conductance (Field) 411.6 umho/cm SM2510B Temperature 22.4 °C SM2550B(2) Turbidity (Hach) 28.8 NTU EPA 180.1 Air Temp 5 Lookup Observation Sky Conditions Observation 1 Lookup Wind Direction 27 Lookup Observation

2 00		-00.10p		0.000. (0
Wind Strength	1 L	_ookup		Observation
Lab ID #: 500-203424-22	Result		Reporting Limit	Method
Alkalinity (as CaCO3)	170 r	mg/L	5	SM2320B
Chloride	13 r	mg/L	0.4	EPA 300.0
Hardness (as CaCO3)	200 r	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	36 r	mg/L	5	SM2540D
Solids, Total (TS)	340 r	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	330 r	mg/L	10	SM2540C
Sulfate	16 r	mg/L	0.4	EPA 300.0
Calcium (Total)	57 r	mg/L	0.2	EPA 200.7
Magnesium (Total)	14 r	mg/L	0.1	EPA 200.7
COD	20 r	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2 r	mg/L	0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.38 r	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.1 r	mg/L	0.05	SM4500P-E
TKN	0.44 r	mg/L	0.4	SM4500N(Org)-D
TOC	3.6 r	mg/L	1	SM5310C
Lab ID #: AB48095	Result		Reporting Limit	Method
Coliforms (Total)	> 2419.6 N	MPN/100mL	2419.6	SM9223B
E. coli	81.3 M	MPN/100mL	1	SM9223B

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SiteID: WEM090-0003	<b>Sample Date:</b> 8/24/2021	IDEM Samp	le #: AB47653	
Vater Flow Type Pool	Water Appearance	Murky	Water Depth	☐ Algae?
Vater Flow (cf/sec):	☐ Flow Estimated?	☐ Aquatic Life?	Canopy Closed %	0-20%
Sampler Comments:				
Lab ID #:		Result	Reporting Limit	<u>Method</u>
% Sat		58.4 %		ASTM D888-09(C)
DO		4.76 mg/L		ASTM D888-09(C)
pH (Field)		7.56 SU		EPA 150.2
Specific Conductance (Field)		435 umho/cm		SM2510B
Temperature		25.9 °C		SM2550B(2)
Turbidity (Hach)		21.7 NTU		EPA 180.1
Air Temp		5 Lookup		Observation
Sky Conditions		1 Lookup		Observation
		27 Lookup		Observation
Wind Direction		· ·		
Wind Direction Wind Strength  SiteID: WEM090-0003	Sample Date: 9/15/2021	0 Lookup	le#: AB48388	Observation
Wind Strength	Sample Date: 9/15/2021 Water Appearance		ole #: AB48388 Water Depth	Observation  Algae?
Wind Strength  SiteID: WEM090-0003  Vater Flow Type Run	·	0 Lookup  IDEM Samp		☐ Algae?
Wind Strength  SiteID: WEM090-0003	Water Appearance	0 Lookup  IDEM Samp  Brown	Water Depth	☐ Algae?
Wind Strength  SiteID: WEM090-0003  Vater Flow Type Run  Vater Flow (cf/sec):	Water Appearance	0 Lookup  IDEM Samp  Brown	Water Depth	☐ Algae?
Wind Strength  SiteID: WEM090-0003  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:	Water Appearance	0 Lookup  IDEM Samp  Brown  Aquatic Life?	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method
Wind Strength  SiteID: WEM090-0003  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	0 Lookup  IDEM Samp  Brown  Aquatic Life?  Result	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C)
Wind Strength  SiteID: WEM090-0003  Vater Flow Type Run  Vater Flow (cf/sec):  sampler Comments:  Lab ID #:  % Sat	Water Appearance	IDEM Samp Brown Aquatic Life?  Result  65.3 %	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C)
Wind Strength  itelD: WEM090-0003  /ater Flow Type Run  /ater Flow (cf/sec): ampler Comments:  _ab ID #:  % Sat DO	Water Appearance	IDEM Samp Brown Aquatic Life?  Result  65.3 % 5.55 mg/L	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C)
Wind Strength  itelD: WEM090-0003  /ater Flow Type Run  /ater Flow (cf/sec): ampler Comments:  _ab ID #:  % Sat	Water Appearance	IDEM Samp Brown Aquatic Life?  Result  65.3 % 5.55 mg/L 7.43 SU	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2
Wind Strength  iteID: WEM090-0003  /ater Flow Type Run  /ater Flow (cf/sec): ampler Comments:  _ab ID #:  % Sat	Water Appearance	IDEM Samp Brown Aquatic Life?  Result  65.3 % 5.55 mg/L 7.43 SU 348.3 umho/cm	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B
Wind Strength  SiteID: WEM090-0003  Vater Flow Type Run  Vater Flow (cf/sec):  campler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature	Water Appearance	IDEM Samp Brown Aquatic Life?  Result  65.3 % 5.55 mg/L 7.43 SU 348.3 umho/cm 23.2 °C	Water Depth Canopy Closed %	☐ Algae?  0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2)
Wind Strength  SiteID: WEM090-0003  Vater Flow Type Run  Vater Flow (cf/sec):  ampler Comments:  -ab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach)	Water Appearance	IDEM Samp Brown Aquatic Life?  Result  65.3 % 5.55 mg/L 7.43 SU 348.3 umho/cm 23.2 °C 21.2 NTU	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1
Wind Strength  SiteID: WEM090-0003  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp	Water Appearance	IDEM Samp Brown Aquatic Life?  Result  65.3 % 5.55 mg/L 7.43 SU 348.3 umho/cm 23.2 °C 21.2 NTU 5 Lookup	Water Depth Canopy Closed %	☐ Algae?  0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #</b> : 500-205399-21		Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)		130	mg/L	5	SM2320B
Chloride			mg/L	1	EPA 300.0
Hardness (as CaCO3)			mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)			mg/L	5	SM2540D
Solids, Total (TS)		340	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		140	mg/L	10	SM2540C
Sulfate			mg/L	0.4	EPA 300.0
Calcium (Total)		44	mg/L	0.2	EPA 200.7
Magnesium (Total)		11	mg/L	0.1	EPA 200.7
COD		7.9	mg/L	10	SM5220C
Nitrogen, Ammonia		0.14	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite		0.49	mg/L	0.1	SM4500NO3-F
Phosphorus, Total		0.11	mg/L	0.05	SM4500P-E
TKN		0.56	mg/L	0.4	SM4500N(Org)-D
TOC		4.1	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48388		Result		Reporting Limit	Method
					0110000
Coliforms (Total)		> 2419.6	MPN/100mL	2419.6	SM9223B
Coliforms (Total) E. coli			MPN/100mL MPN/100mL	2419.6 1	SM9223B SM9223B
	Sample Date: 10/13/2021 Water Appearance  Flow Estimated?	214.2 Brown	MPN/100mL  IDEM Sample	1	SM9223B
E. coli SiteID: WEM090-0003 Water Flow Type Run	Water Appearance	214.2 Brown	MPN/100mL  IDEM Sample :	1 #: AB48868 /ater Depth	SM9223B
E. coli SiteID: WEM090-0003 Water Flow Type Run Water Flow (cf/sec):	Water Appearance	214.2 Brown	MPN/100mL  IDEM Sample :	1 #: AB48868 /ater Depth	SM9223B
SiteID: WEM090-0003 Water Flow Type Run Water Flow (cf/sec): Sampler Comments:	Water Appearance	Brown	MPN/100mL  IDEM Sample :  Wiguatic Life?	#: AB48868 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method
E. coli  SiteID: WEM090-0003  Water Flow Type Run  Water Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	Brown Aq Result	MPN/100mL  IDEM Sample :  Wiguatic Life?	#: AB48868 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C)
SiteID: WEM090-0003  Water Flow Type Run  Water Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	Brown Aq Result	IDEM Sample :  Watic Life?	#: AB48868 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C)
E. coli  SiteID: WEM090-0003  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO	Water Appearance	Brown Aq  Result 73.9 6.75 7.62	IDEM Sample :  Watic Life?	#: AB48868 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C)
E. coli  SiteID: WEM090-0003  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	Brown Aq  Result 73.9 6.75 7.62	MPN/100mL  IDEM Sample :  Wiguatic Life?  % mg/L SU umho/cm	#: AB48868 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2
E. coli  SiteID: WEM090-0003  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	Brown  Result  73.9 6.75 7.62 381.1 19.8	MPN/100mL  IDEM Sample :  Wiguatic Life?  % mg/L SU umho/cm	#: AB48868 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B
SiteID: WEM090-0003 Water Flow Type Run Water Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature	Water Appearance	214.2  Brown  Aq  Result  73.9 6.75 7.62 381.1 19.8 16.6	MPN/100mL  IDEM Sample :  Wiguatic Life?  % mg/L SU umho/cm °C	#: AB48868 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2)
SiteID: WEM090-0003 Water Flow Type Run Water Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach)	Water Appearance	214.2  Brown  Result  73.9 6.75 7.62 381.1 19.8 16.6 4	MPN/100mL  IDEM Sample :  Watic Life?  % mg/L SU umho/cm °C NTU	#: AB48868 /ater Depth Canopy Closed %	SM9223B  Algae?  0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1
SiteID: WEM090-0003 Water Flow Type Run Water Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp	Water Appearance	214.2  Brown  Ac  Result  73.9 6.75 7.62 381.1 19.8 16.6 4 1	MPN/100mL  IDEM Sample :  Wattic Life?  % mg/L SU umho/cm °C NTU Lookup	#: AB48868 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #</b> : 500-206919-22	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	150	mg/L	5	SM2320B
Chloride	22	mg/L	1	EPA 300.0
Hardness (as CaCO3)	170	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	17	mg/L	5	SM2540D
Solids, Total (TS)	300	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	200	mg/L	10	SM2540C
Sulfate	25	mg/L	1	EPA 300.0
Calcium (Total)	47	mg/L	0.2	EPA 200.7
Magnesium (Total)	11	mg/L	0.1	EPA 200.7
COD	16	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	0.27	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.12	mg/L	0.05	SM4500P-E
TKN	0.54	mg/L	0.4	SM4500N(Org)-D
TOC	5.8	mg/L	1	SM5310C
<b>Lab ID #:</b> AB48868	Result		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	201.4	MPN/100mL	1	SM9223B

	Weather Code Definitions							
S	C		WD	WS	AT			
Sky Co	nditions	1	Wind Direction	Wind Strength	Air Temp			
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32			
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45			
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60			
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75			
5 - Mist				4 - Mod./Strong	5 - 76-85			
6 - Fog				5 - Strong	6 - > 86			
7 - Shower				6 - Gale				

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SiteID:WEM-07-0010USGS Hydrologic Unit:051202070706Stream Name:Grassy CreekCounty:Jackson

**Description:** CR 600 **Latitude:** 38 47 38.57330 **Longitude:** -85 52 9.53353

**Drainage**: 12.633 **Site Number**: 21T-002

**SiteID**: WEM-07-0010 **Sample Date**: 8/4/2021 **IDEM Sample #**: AB48096

Water Flow Type Stagnant Water Appearance Murky Water Depth 

Algae?

Water Flow (cf/sec): 

Flow Estimated? 

Aquatic Life? 

Canopy Closed % 0-20%

Sampler Comments: slight film/sheen on water; murky green/gray color

Lab ID #:	<u>Result</u>		Reporting Limit	<u>Method</u>
% Sat	68.7	%		ASTM D888-09(C)
DO	6.52	mg/L		ASTM D888-09(C)
pH (Field)	7.86	SU		EPA 150.2
Specific Conductance (Field)	886	umho/cm		SM2510B
Temperature	18	°C		SM2550B(2)
Turbidity (Hach)	9.1	NTU		EPA 180.1
Air Temp	5	Lookup		Observation
Sky Conditions	1	Lookup		Observation
Wind Direction	27	Lookup		Observation
Wind Strength	1	Lookup		Observation
<b>Lab ID #</b> : 500-203424-23	Result		Reporting Limit	Method
Alkalinity (as CaCO3)	310	mg/L	5	SM2320B
Chloride	56	mg/L	5	EPA 300.0
Hardness (as CaCO3)	360	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	7.4	mg/L	5	SM2540D
Solids, Total (TS)	740	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	750	mg/L	10	SM2540C
Sulfate	63	mg/L	5	EPA 300.0
Calcium (Total)	99	mg/L	0.2	EPA 200.7
Magnesium (Total)	27	mg/L	0.1	EPA 200.7
COD	12	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.9	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	2.2	mg/L	0.25	SM4500P-E
TKN	0.26	mg/L	0.4	SM4500N(Org)-D
TOC	2.1	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48096	Result		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	206.4	MPN/100mL	1	SM9223B

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SiteID: WEM-07-0010 Sample Date: 8/24/2021 IDEM Sample #: AB47654 Water Depth ✓ Algae? Water Flow Type Pool Water Appearance Green ☐ Flow Estimated? ✓ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Lab ID #: Result **Reporting Limit Method** 70.4 % ASTM D888-09(C) % Sat DO 6.25 mg/L ASTM D888-09(C) pH (Field) 7.85 SU EPA 150.2 Specific Conductance (Field) 901 umho/cm SM2510B Temperature 21 °C SM2550B(2) Turbidity (Hach) 22.5 NTU EPA 180.1 Air Temp 6 Lookup Observation Sky Conditions 2 Lookup Observation Wind Direction 27 Lookup Observation Wind Strength 0 Lookup Observation SiteID: WEM-07-0010 Sample Date: 9/15/2021 IDEM Sample #: AB48389 ✓ Algae? **Water Depth** Water Flow Type Stagnant **Water Appearance** Murky ☐ Flow Estimated? ■ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** barley flowing (but deep), excessive duckweed Lab ID #: **Reporting Limit Method** Result 75.3 % ASTM D888-09(C) % Sat DO 6.84 ma/L ASTM D888-09(C) pH (Field) 7.71 SU EPA 150.2 Specific Conductance (Field) 907 umho/cm SM2510B 19.5 °C SM2550B(2) Temperature Turbidity (Hach) 4.22 NTU EPA 180.1 Air Temp 5 Lookup Observation Sky Conditions Observation 4 Lookup Wind Direction 27 Lookup Observation Wind Strength 0 Lookup Observation

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<b>Lab ID #</b> : 500-205399-22		Result		Reporting Limit	Method
Alkalinity (as CaCO3)		320	mg/L	5	SM2320B
Chloride		82	mg/L	5	EPA 300.0
Hardness (as CaCO3)		360	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)		2.4	mg/L	5	SM2540D
Solids, Total (TS)		810	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		500	mg/L	10	SM2540C
Sulfate		59	mg/L	5	EPA 300.0
Calcium (Total)		99	mg/L	0.2	EPA 200.7
Magnesium (Total)		28	mg/L	0.1	EPA 200.7
COD		< 10	mg/L	10	SM5220C
Nitrogen, Ammonia		< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite		1.8	mg/L	0.1	SM4500NO3-F
Phosphorus, Total		2.9	mg/L	0.25	SM4500P-E
TKN		0.55	mg/L	0.4	SM4500N(Org)-D
TOC		2.6	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48389		Result		Reporting Limit	Method
Coliforms (Total)		> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli		579.4	MPN/100mL	1	SM9223B
<b>SiteID:</b> WEM-07-0010	Sample Date: 10/13/2021		IDEM Sample #	: AB48869	
Water Flow Type Glide	Sample Date: 10/13/2021  Water Appearance	Murky	•	ater Depth	☐ Algae?
	☐ Flow Estimated?		uatic Life?	•	_
Water Flow (cf/sec):			quatic Life?	Canopy Closed %	0-20%
Sampler Comments: very sta	gnant with duckweed, wetland-lik	Ke			
Lab ID #:		Result		Reporting Limit	Method
% Sat		51.7	%		ASTM D888-09(C)
DO		4.89	mg/L		ASTM D888-09(C)
pH (Field)		7.69	SU		EPA 150.2
Specific Conductance (Field)		881	umho/cm		SM2510B
Temperature		18.2	°C		SM2550B(2)
Turbidity (Hach)		4.22	NTU		EPA 180.1
Air Temp		4	Lookup		Observation
Sky Conditions		1	Lookup		Observation

27 Lookup

0 Lookup

Observation

Observation

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Wind Direction

Wind Strength

<b>Lab ID #</b> : 500-206919-23	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	300	mg/L	5	SM2320B
Chloride	97	mg/L	5	EPA 300.0
Hardness (as CaCO3)	330	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	2.4	mg/L	5	SM2540D
Solids, Total (TS)	620	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	510	mg/L	10	SM2540C
Sulfate	76	mg/L	5	EPA 300.0
Calcium (Total)	91	mg/L	0.2	EPA 200.7
Magnesium (Total)	25	mg/L	0.1	EPA 200.7
COD	15	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	1	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	2.8	mg/L	0.25	SM4500P-E
TKN	0.54	mg/L	0.4	SM4500N(Org)-D
TOC	3.9	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48869	Result		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	58.6	MPN/100mL	1	SM9223B

Weather Code Definitions							
S	C		WD	WS	AT		
Sky Co	nditions	1	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32		
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45		
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60		
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75		
5 - Mist				4 - Mod./Strong	5 - 76-85		
6 - Fog				5 - Strong	6 - > 86		
7 - Shower				6 - Gale			

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SiteID:WEM090-0008USGS Hydrologic Unit:051202070706Stream Name:Vernon Fork Muscatatuck RiverCounty:Jackson

**Description:** CR 400 South **Latitude:** 38 49 19.42466 **Longitude:** -85 53 3.10163

**Drainage:** 382.401 **Site Number:** 21T-003

**SitelD:** WEM090-0008 **Sample Date:** 8/4/2021 **IDEM Sample #:** AB48094

Water Flow Type Stagnant Water Appearance Black Water Depth Algae?

Water Flow (cf/sec): 

Flow Estimated? 

Aquatic Life? 

Canopy Closed % 0-20%

Sampler Comments: water black with an oily sheen. lots of corn debris in water. bad smell

Lab ID #:	Result		Reporting Limit	<u>Method</u>
% Sat	5	%		ASTM D888-09(C)
DO	0.41	mg/L		ASTM D888-09(C)
pH (Field)	6.78	SU		EPA 150.2
Specific Conductance (Field)	430.4	umho/cm		SM2510B
Temperature	20.5	°C		SM2550B(2)
Turbidity (Hach)	31.3	NTU		EPA 180.1
Air Temp	5	Lookup		Observation
Sky Conditions	1	Lookup		Observation
Wind Direction	27	Lookup		Observation
Wind Strength	1	Lookup		Observation
<b>Lab ID #</b> : 500-203424-21	<u>Result</u>		Reporting Limit	Method
Alkalinity (as CaCO3)	160	mg/L	5	SM2320B
Chloride	27	mg/L	1	EPA 300.0
Hardness (as CaCO3)	160	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	12	mg/L	5	SM2540D
Solids, Total (TS)	300	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	380	mg/L	10	SM2540C
Sulfate	6	mg/L	0.2	EPA 300.0
Calcium (Total)	43	mg/L	0.2	EPA 200.7
Magnesium (Total)	12	mg/L	0.1	EPA 200.7
COD	35	mg/L	10	SM5220C
Nitrogen, Ammonia	0.52	mg/L	0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.46	mg/L	0.05	SM4500P-E
TKN	1.1	mg/L	0.4	SM4500N(Org)-D
TOC	9.9	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48094	Result		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	365.4	MPN/100mL	1	SM9223B

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SiteID: WEM090-0008	Sample Date: 9/15/2021	IDEM Sample	e #: AB48387 Water Depth	✓ Algae?
Nater Flow Type Stagnant	Water Appearance		water Depth	▼ Algae?
Nater Flow (cf/sec):	☐ Flow Estimated?	□ Aquatic Life?	Canopy Closed %	0-20%
Sampler Comments: Water s	till nearly black, excessive duckwo	eed and decaying corn de	ebris. Cattle have access	s to stream.
Lab ID #:		Result	Reporting Limit	Method
% Sat		4.5 %		ASTM D888-09(C)
DO		0.42 mg/L		ASTM D888-09(C
pH (Field)		6.43 SU		EPA 150.2
Specific Conductance (Field)		532 umho/cm		SM2510B
Temperature		18.9 °C		SM2550B(2)
Turbidity (Hach)		22.8 NTU		EPA 180.1
Air Temp		5 Lookup		Observation
Sky Conditions		4 Lookup		Observation
Wind Direction		27 Lookup		Observation
Wind Strength		0 Lookup		Observation
<b>Lab ID #</b> : 500-205399-20		Result	Reporting Limit	Method
Alkalinity (as CaCO3)		180 mg/L	5	SM2320B
Chloride		36 mg/L	2	EPA 300.0
Hardness (as CaCO3)		160 mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)		9 mg/L	5	SM2540D
Solids, Total (TS)		380 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		190 mg/L	10	SM2540C
Sulfate		7.2 mg/L	0.2	EPA 300.0
Calcium (Total)		41 mg/L	0.2	EPA 200.7
Magnesium (Total)		14 mg/L	0.1	EPA 200.7
COD		11 mg/L	10	SM5220C
Nitrogen, Ammonia		< 0.2 mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite		< 0.1 mg/L	0.1	SM4500NO3-F
Phosphorus, Total		0.22 mg/L	0.05	SM4500P-E
TKN		0.92 mg/L	0.4	SM4500N(Org)-D
TOC		6.5 mg/L	1	SM5310C
<b>Lab ID #</b> : AB48387		Result	Reporting Limit	Method
Coliforms (Total)		> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli		365.4 MPN/100mL	1	SM9223B

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SiteID: WEM090-0008 Sample Date: 10/13/2021 IDEM Sample #: AB48867 Water Depth ☐ Algae? Water Flow Type Water Appearance Brown Stagnant ☐ Flow Estimated? ☐ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% Sampler Comments: water still very stagnant with a sheen. lots of woody and corn debris and duckweed Lab ID #: Result **Reporting Limit Method** 5.6 % % Sat ASTM D888-09(C) DO 0.53 mg/L ASTM D888-09(C) 6.81 SU pH (Field) EPA 150.2 Specific Conductance (Field) 474.5 umho/cm SM2510B Temperature 18.1 °C SM2550B(2) Turbidity (Hach) 26.8 NTU EPA 180.1 Air Temp 4 Lookup Observation Sky Conditions 1 Lookup Observation Wind Direction 27 Lookup Observation Wind Strength 1 Lookup Observation Lab ID #: 500-206919-21 **Reporting Limit** Result **Method** Alkalinity (as CaCO3) 180 mg/L 5 SM2320B Chloride 34 mg/L 2 EPA 300.0 Hardness (as CaCO3) 180 mg/L 0.91 SM2340B 10 mg/L Solids, Suspended Total, (TSS) 5 SM2540D Solids, Total (TS) 320 mg/L 10 SM2540B Solids, Total Dissolved (TDS) 240 mg/L 10 SM2540C Sulfate 9.3 mg/L 0.2 EPA 300.0 Calcium (Total) 48 mg/L 0.2 EPA 200.7 Magnesium (Total) 14 mg/L 0.1 EPA 200.7 COD 28 mg/L 10 SM5220C Nitrogen, Ammonia 0.49 mg/L 0.2 SM4500NH3-G Nitrogen, Nitrate+Nitrite < 0.1 mg/L 0.1 SM4500NO3-F 0.46 mg/L 0.05 Phosphorus, Total SM4500P-E 0.98 mg/L SM4500N(Org)-D TKN 0.4 TOC SM5310C 8.1 mg/L 1 Lab ID #: AB48867 **Reporting Limit** Result **Method** Coliforms (Total) > 2419.6 MPN/100mL 2419.6 SM9223B E. coli 96 MPN/100mL 1 SM9223B

Weather Code Definitions							
S	C		WD	WS	AT		
Sky Co	nditions	1	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32		
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45		
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60		
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75		
5 - Mist				4 - Mod./Strong	5 - 76-85		
6 - Fog				5 - Strong	6 - > 86		
7 - Shower				6 - Gale			

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 SiteID:
 WEM-07-0015
 USGS Hydrologic Unit:
 051202070706

 Stream Name:
 John McDonald Ditch
 County:
 Jackson

**Description:** CR 125 South **Latitude:** 38 51 46.92645 **Longitude:** -85 50 44.12462

**Drainage:** 4.799 **Site Number:** 21T-005

**SitelD:** WEM-07-0015 **Sample Date:** 8/4/2021 **IDEM Sample #:** AB48093

Water Flow Type Glide Water Appearance Clear Water Depth 

Algae?

Water Flow (cf/sec): ☐ Flow Estimated? ✓ Aquatic Life? Canopy Closed % 0-20%

Sampler Comments: very stagnant/slow moving. lots of aquatic macrophytes..area very wetland-like.

Lab ID #:	Result		Reporting Limit	Method
% Sat	37.9	%		ASTM D888-09(C)
DO	3.53	mg/L		ASTM D888-09(C)
pH (Field)	7.53	SU		EPA 150.2
Specific Conductance (Field)	495.4	umho/cm		SM2510B
Temperature	19	°C		SM2550B(2)
Turbidity (Hach)	6.87	NTU		EPA 180.1
Air Temp	5	Lookup		Observation
Sky Conditions	1	Lookup		Observation
Wind Direction	27	Lookup		Observation
Wind Strength	0	Lookup		Observation
<b>Lab ID #</b> : 500-203424-20	<u>Result</u>		Reporting Limit	Method
Alkalinity (as CaCO3)	220	mg/L	5	SM2320B
Chloride	18	mg/L	2	EPA 300.0
Hardness (as CaCO3)	230	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	5	mg/L	5	SM2540D
Solids, Total (TS)	330	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	230	mg/L	10	SM2540C
Sulfate	18	mg/L	2	EPA 300.0
Calcium (Total)	64	mg/L	0.2	EPA 200.7
Magnesium (Total)	16	mg/L	0.1	EPA 200.7
COD	8.2	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.38	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.1	mg/L	0.05	SM4500P-E
TKN	0.31	mg/L	0.4	SM4500N(Org)-D
TOC	3.2	mg/L	1	SM5310C
Lab ID #: AB48093	Result		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	387.3	MPN/100mL	1	SM9223B

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SiteID: WEM-07-0015	<b>Sample Date:</b> 8/24/2021	•	ole #: AB47657	
Water Flow Type Stagnant	Water Appearance	Sheen	Water Depth	✓ Algae?
Water Flow (cf/sec):	☐ Flow Estimated?	✓ Aquatic Life?	Canopy Closed %	0-20%
Sampler Comments:				
Lab ID #:		Result	Reporting Limit	<u>Method</u>
% Sat		75.5 %		ASTM D888-09(C)
DO		6.17 mg/L		ASTM D888-09(C
pH (Field)		7.6 SU		EPA 150.2
Specific Conductance (Field)		520 umho/cm		SM2510B
Temperature		25.5 °C		SM2550B(2)
Turbidity (Hach)		4.4 NTU		EPA 180.1
Air Temp		6 Lookup		Observation
Sky Conditions		2 Lookup		Observation
Wind Dinesin		27 Lookup		Observation
Wind Direction		ooup		
Wind Strength Wind Strength SiteID: WEM-07-0015	Sample Date: 9/15/2021	0 Lookup	ole #: AB48386	Observation
Wind Strength	Sample Date: 9/15/2021 Water Appearance	0 Lookup	ole #: AB48386 Water Depth	Observation  Algae?
Wind Strength  SiteID: WEM-07-0015  Water Flow Type Glide	·	0 Lookup		☐ Algae?
Wind Strength  SiteID: WEM-07-0015  Water Flow Type Glide  Water Flow (cf/sec):	Water Appearance	0 Lookup  IDEM Samp	Water Depth	☐ Algae?
Wind Strength  SiteID: WEM-07-0015  Water Flow Type Glide  Water Flow (cf/sec):	Water Appearance  Flow Estimated?	0 Lookup  IDEM Samp	Water Depth	☐ Algae?
Wind Strength  SiteID: WEM-07-0015  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments: stagnan	Water Appearance  Flow Estimated?	0 Lookup  IDEM Samp  Murky  Aquatic Life?	Water Depth Canopy Closed %	Algae? 0-20%  Method
Wind Strength  SiteID: WEM-07-0015  Water Flow Type Glide  Water Flow (cf/sec):  Sampler Comments: stagnan  Lab ID #:	Water Appearance  Flow Estimated?	0 Lookup  IDEM Samp  Murky  Aquatic Life?  Result	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C
Wind Strength  SiteID: WEM-07-0015  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments: stagnan  Lab ID #:	Water Appearance  Flow Estimated?	O Lookup  IDEM Samp  Murky  Aquatic Life?  Result  39.1 %	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C
Wind Strength  SiteID: WEM-07-0015  Nater Flow Type Glide  Nater Flow (cf/sec): Sampler Comments: stagnan  Lab ID #:  % Sat DO	Water Appearance  Flow Estimated?	O Lookup  IDEM Samp  Murky  Aquatic Life?  Result  39.1 %  3.48 mg/L	Water Depth Canopy Closed %	O-20%  Method  ASTM D888-09(C ASTM D888-09(C
Wind Strength  SiteID: WEM-07-0015  Vater Flow Type Glide  Vater Flow (cf/sec):  Sampler Comments: stagnan  Lab ID #:  % Sat	Water Appearance  Flow Estimated?	O Lookup  IDEM Samp  Murky  Aquatic Life?  Result  39.1 % 3.48 mg/L 7.46 SU	Water Depth Canopy Closed %	O-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2
Wind Strength  SiteID: WEM-07-0015  Vater Flow Type Glide  Vater Flow (cf/sec):  Sampler Comments: stagnan  Lab ID #:  % Sat	Water Appearance  Flow Estimated?	O Lookup  IDEM Samp  Murky  Aquatic Life?  Result  39.1 % 3.48 mg/L 7.46 SU 506 umho/cm	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B
Wind Strength  SiteID: WEM-07-0015  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments: stagnan  Lab ID #:  % Sat	Water Appearance  Flow Estimated?	IDEM Samp Murky  Aquatic Life?  Result  39.1 % 3.48 mg/L 7.46 SU 506 umho/cm 21.6 °C	Water Depth Canopy Closed %	☐ Algae?  0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2)
Wind Strength  SiteID: WEM-07-0015  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments: stagnan  Lab ID #:  % Sat	Water Appearance  Flow Estimated?	IDEM Samp Murky Aquatic Life?  Result  39.1 % 3.48 mg/L 7.46 SU 506 umho/cm 21.6 °C 6.97 NTU	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2) EPA 180.1
Wind Strength  SiteID: WEM-07-0015  Water Flow Type Glide  Water Flow (cf/sec): Sampler Comments: stagnan  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp	Water Appearance  Flow Estimated?	IDEM Samp Murky Aquatic Life?  Result  39.1 % 3.48 mg/L 7.46 SU 506 umho/cm 21.6 °C 6.97 NTU 5 Lookup	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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Water Flow (cf/sec):         Flow Estimated?         Aquatic Life?         Canopy Closed %         0-20%           Sampler Comments:         stagnant (swamp-like); lots of duckweed         Result         Reporting Limit         Method           Lab ID #:         Result         Reporting Limit         Method           % Sat         16 %         ASTM D888-09(C)           DO         1.56 mg/L         ASTM D888-09(C)           pH (Field)         7.51 SU         EPA 150.2           Specific Conductance (Field)         521 umho/cm         SM2510B           Temperature         17.9 °C         SM2550B(2)           Turbidity (Hach)         4.93 NTU         EPA 180.1           Air Temp         4 Lookup         Observation	<b>Lab ID #</b> : 500-205399-19		Result		Reporting Limit	Method
Hardness (as CaCO3)	Alkalinity (as CaCO3)		230	mg/L	5	SM2320B
Solids, Suspended Total, (TSS)	Chloride		16	mg/L	1	EPA 300.0
Solids, Total (TS)   390 mg/L   10	Hardness (as CaCO3)		240	mg/L	0.91	SM2340B
Solids, Total Dissolved (TDS)   340 mg/L   10   SM2540C	Solids, Suspended Total, (TSS)		4.6	mg/L	5	SM2540D
Sulfate   15 mg/L	Solids, Total (TS)		390	mg/L	10	SM2540B
Calcium (Total)	Solids, Total Dissolved (TDS)		340	mg/L	10	SM2540C
Magnesium (Total)	Sulfate		15	mg/L	1	EPA 300.0
Nitrogen, Ammonia   C.O.2 mg/L   D.2 SM4500NH3-G	Calcium (Total)		67	mg/L	0.2	EPA 200.7
Nitrogen, Ammonia	Magnesium (Total)		18	mg/L	0.1	EPA 200.7
Nitrogen, Nitrate+Nitrite	COD		11	mg/L	10	SM5220C
Phosphorus, Total	Nitrogen, Ammonia		< 0.2	mg/L	0.2	SM4500NH3-G
TKN   0.59 mg/L   0.4   SM4500N(Org)-D   TOC   3.8 mg/L   1   SM5310C	Nitrogen, Nitrate+Nitrite		0.16	mg/L	0.1	SM4500NO3-F
TOC   3.8 mg/L   1   SM5310C	Phosphorus, Total		0.17	mg/L	0.05	SM4500P-E
Lab ID #: AB48386   Result   Reporting Limit   Method	TKN		0.59	mg/L	0.4	SM4500N(Org)-D
Coliforms (Total)	TOC		3.8	mg/L	1	SM5310C
E. coli   275.5 MPN/100mL   1 SM9223B	<b>Lab ID #</b> : AB48386		Result		Reporting Limit	Method
SiteID: WEM-07-0015   Sample Date: 10/13/2021   IDEM Sample #: AB48866     Water Flow Type   Glide   Water Appearance   Murky   Water Depth   Algae?     Water Flow (cf/sec):	Coliforms (Total)		> 2419.6	MPN/100mL	2419.6	SM9223B
Water Flow Type Glide Water Appearance Murky Water Depth Algae?  Water Flow (cf/sec): Flow Estimated? Aquatic Life? Canopy Closed % 0-20%  Eab ID #: Result Reporting Limit Method    ASTM D888-09(C)	E. coli		275.5	MPN/100mL	1	SM9223B
Water Flow Type Glide Water Appearance Murky Water Depth Algae?  Water Flow (cf/sec): Flow Estimated? Aquatic Life? Canopy Closed % 0-20%  Sampler Comments: stagnant (swamp-like); lots of duckweed  Result Reporting Limit Method  ASTM D888-09(C)  DO 1.56 mg/L ASTM D888-09(C)  PH (Field) 7.51 SU EPA 150.2  Specific Conductance (Field) 521 umho/cm SM2510B  Temperature 17.9 °C SM2550B(2)  Turbidity (Hach) 4 Lookup Observation	SiteID: WEM-07-0015	Sample Date: 10/13/2021		IDFM Sample	#· AB48866	
Result         Reporting Limit         Method           % Sat         16 %         ASTM D888-09(C)           DO         1.56 mg/L         ASTM D888-09(C)           pH (Field)         7.51 SU         EPA 150.2           Specific Conductance (Field)         521 umho/cm         SM2510B           Temperature         17.9 °C         SM2550B(2)           Turbidity (Hach)         4.93 NTU         EPA 180.1           Air Temp         4 Lookup         Observation		·	Murky	•		☐ Algae?
Result         Reporting Limit         Method           % Sat         16 %         ASTM D888-09(C)           DO         1.56 mg/L         ASTM D888-09(C)           pH (Field)         7.51 SU         EPA 150.2           Specific Conductance (Field)         521 umho/cm         SM2510B           Temperature         17.9 °C         SM2550B(2)           Turbidity (Hach)         4.93 NTU         EPA 180.1           Air Temp         4 Lookup         Observation	Water Flow (cf/sec):	Flow Estimated?		nuatic Life?	Canony Closed %	0-20%
% Sat       16 %       ASTM D888-09(C)         DO       1.56 mg/L       ASTM D888-09(C)         pH (Field)       7.51 SU       EPA 150.2         Specific Conductance (Field)       521 umho/cm       SM2510B         Temperature       17.9 °C       SM2550B(2)         Turbidity (Hach)       4.93 NTU       EPA 180.1         Air Temp       4 Lookup       Observation	` ,			quatio Elic .	Carlopy Closed 70	0 20 /0
DO         1.56 mg/L         ASTM D888-09(C)           pH (Field)         7.51 SU         EPA 150.2           Specific Conductance (Field)         521 umho/cm         SM2510B           Temperature         17.9 °C         SM2550B(2)           Turbidity (Hach)         4.93 NTU         EPA 180.1           Air Temp         4 Lookup         Observation	Lab ID #:		Result		Reporting Limit	<u>Method</u>
DO         1.56 mg/L         ASTM D888-09(C)           pH (Field)         7.51 SU         EPA 150.2           Specific Conductance (Field)         521 umho/cm         SM2510B           Temperature         17.9 °C         SM2550B(2)           Turbidity (Hach)         4.93 NTU         EPA 180.1           Air Temp         4 Lookup         Observation	% Sat		16	%		ASTM D888-09(C)
pH (Field)         7.51 SU         EPA 150.2           Specific Conductance (Field)         521 umho/cm         SM2510B           Temperature         17.9 °C         SM2550B(2)           Turbidity (Hach)         4.93 NTU         EPA 180.1           Air Temp         4 Lookup         Observation						` '
Specific Conductance (Field)         521 umho/cm         SM2510B           Temperature         17.9 °C         SM2550B(2)           Turbidity (Hach)         4.93 NTU         EPA 180.1           Air Temp         4 Lookup         Observation				•		` '
Temperature         17.9 °C         SM2550B(2)           Turbidity (Hach)         4.93 NTU         EPA 180.1           Air Temp         4 Lookup         Observation	• • •		_			
Turbidity (Hach) 4.93 NTU EPA 180.1  Air Temp 4 Lookup Observation						
Air Temp 4 Lookup Observation	•					` '
·	• • • •					
	Sky Conditions			•		Observation

27 Lookup

0 Lookup

Observation

Observation

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Wind Direction

Wind Strength

Lab ID #: 500-206919-20	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	240	mg/L	5	SM2320B
Chloride	22	mg/L	1	EPA 300.0
Hardness (as CaCO3)	240	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	4	mg/L	5	SM2540D
Solids, Total (TS)	360	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	270	mg/L	10	SM2540C
Sulfate	12	mg/L	1	EPA 300.0
Calcium (Total)	67	mg/L	0.2	EPA 200.7
Magnesium (Total)	18	mg/L	0.1	EPA 200.7
COD	25	mg/L	10	SM5220C
Nitrogen, Ammonia	0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	< 0.1	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.25	mg/L	0.05	SM4500P-E
TKN	0.91	mg/L	0.4	SM4500N(Org)-D
TOC	6.6	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48866	Result		Reporting Limit	Method
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	387.3	MPN/100mL	1	SM9223B

	Weather Code Definitions							
SC Sky Conditions		WD Wind Direction		WS Wind Strength	AT Air Temp			
SKy Co	1	'	Willa Direction	wind Strength	An Temp			
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32			
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45			
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60			
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75			
5 - Mist				4 - Mod./Strong	5 - 76-85			
6 - Fog				5 - Strong	6 - > 86			
7 - Shower				6 - Gale				

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 SiteID:
 WEM-07-0021
 USGS Hydrologic Unit:
 051202070705

 Stream Name:
 Tea Creek
 County:
 Jennings

**Description:** CR 650 South **Latitude:** 38 53 17.94956 **Longitude:** -85 41 20.64590

**Drainage:** 4.617 **Site Number:** 21T-006

**SiteID:** WEM-07-0021 **Sample Date:** 8/3/2021 **IDEM Sample #:** AB48083

Water Flow Type Riffle Water Appearance Clear Water Depth Algae?

Water Flow (cf/sec): ☐ Flow Estimated? ✓ Aquatic Life? Canopy Closed % 0-20%

**Sampler Comments:** 

Lab ID #:	Result		Reporting Limit	<u>Method</u>
% Sat	95.4	%		ASTM D888-09(C)
DO	8.7	mg/L		ASTM D888-09(C)
pH (Field)	7.97	SU		EPA 150.2
Specific Conductance (Field)	390.7	umho/cm		SM2510B
Temperature	19.9	°C		SM2550B(2)
Turbidity (Hach)	2.78	NTU		EPA 180.1
Air Temp	5	Lookup		Observation
Sky Conditions	1	Lookup		Observation
Wind Direction	27	Lookup		Observation
Wind Strength	1	Lookup		Observation
<b>Lab ID #</b> : 500-203424-10	Result		Reporting Limit	Method
Alkalinity (as CaCO3)	180	mg/L	5	SM2320B
Chloride	8.2	mg/L	0.4	EPA 300.0
Hardness (as CaCO3)	190	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	2	mg/L	5	SM2540D
Solids, Total (TS)	280	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	240	mg/L	10	SM2540C
Sulfate	9	mg/L	0.2	EPA 300.0
Calcium (Total)	58	mg/L	0.2	EPA 200.7
Magnesium (Total)	12	mg/L	0.1	EPA 200.7
COD	14	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.12	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.05	mg/L	0.05	SM4500P-E
TKN	0.64	mg/L	0.4	SM4500N(Org)-D
тос	2.6	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48083	Result		Reporting Limit	Method
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	107.1	MPN/100mL	1	SM9223B

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SiteID: WEM-07-0021 Sample Date: 8/16/2021 IDEM Sample #: AB47658 **Water Appearance** Water Depth ✓ Algae? Water Flow Type Pool Clear ☐ Flow Estimated? ✓ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Becoming isolated pools Lab ID #: Result **Reporting Limit Method** 132.1 % ASTM D888-09(C) % Sat DO 11.36 mg/L ASTM D888-09(C) pH (Field) 7.99 SU EPA 150.2 Specific Conductance (Field) 396.7 umho/cm SM2510B Temperature 22.5 °C SM2550B(2) Turbidity (Hach) 2.22 NTU EPA 180.1 Air Temp 5 Lookup Observation Sky Conditions 1 Lookup Observation Wind Direction 27 Lookup Observation Observation Wind Strength 0 Lookup SiteID: WEM-07-0021 Sample Date: IDEM Sample #: AB48376 9/14/2021 ☐ Algae? **Water Depth** Water Flow Type Pool **Water Appearance** Clear ✓ Aquatic Life? ☐ Flow Estimated? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** isolated pools Lab ID #: **Reporting Limit Method** Result 52.3 % ASTM D888-09(C) % Sat DO 4.59 ma/L ASTM D888-09(C) pH (Field) 7.65 SU EPA 150.2 Specific Conductance (Field) 436 umho/cm SM2510B Temperature 21.8 °C SM2550B(2) Turbidity (Hach) 2.76 NTU EPA 180.1 Air Temp 5 Lookup Observation Sky Conditions Observation 1 Lookup Wind Direction 27 Lookup Observation Wind Strength 1 Lookup Observation

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<b>Lab ID #</b> : 500-205399-11		Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)		220	mg/L	5	SM2320B
Chloride		8.3	mg/L	0.4	EPA 300.0
Hardness (as CaCO3)		230	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)		4	mg/L	8.3	SM2540D
Solids, Total (TS)		390	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		280	mg/L	10	SM2540C
Sulfate		11	mg/L	0.4	EPA 300.0
Calcium (Total)		70	mg/L	0.2	EPA 200.7
Magnesium (Total)		14	mg/L	0.1	EPA 200.7
COD		13	mg/L	10	SM5220C
Nitrogen, Ammonia		< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite		0.044	mg/L	0.1	SM4500NO3-F
Phosphorus, Total		0.057	mg/L	0.05	SM4500P-E
TKN		0.67	mg/L	0.4	SM4500N(Org)-D
TOC		3.8	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48376		Result		Reporting Limit	Method
Coliforms (Total)		> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli		1203.3	MPN/100mL	1	SM9223B
Water Flow Type Pool	Sample Date: 10/12/2021 Water Appearance  Flow Estimated?	Clear		Vater Depth	☐ Algae?
	Water Appearance  Flow Estimated?		•		
Water Flow Type Pool Water Flow (cf/sec):	Water Appearance  Flow Estimated?		V	Vater Depth	
Water Flow Type Pool  Water Flow (cf/sec):  Sampler Comments: isolated	Water Appearance  Flow Estimated?	☐ Ac	V Juatic Life?	Vater Depth  Canopy Closed %	0-20%
Nater Flow Type Pool  Nater Flow (cf/sec):  Sampler Comments: isolated  Lab ID #:	Water Appearance  Flow Estimated?	Result	V Juatic Life?	Vater Depth  Canopy Closed %	0-20%
Vater Flow Type Pool Vater Flow (cf/sec): Sampler Comments: isolated Lab ID #:  % Sat	Water Appearance  Flow Estimated?	Result	V quatic Life? % mg/L	Vater Depth  Canopy Closed %	0-20%  Method  ASTM D888-09(C)
Vater Flow Type Pool Vater Flow (cf/sec): Sampler Comments: isolated Lab ID #:  % Sat DO	Water Appearance  Flow Estimated?	Result 59.7 5.5 7.29	V quatic Life? % mg/L	Vater Depth  Canopy Closed %	0-20%  Method  ASTM D888-09(C) ASTM D888-09(C)
Vater Flow Type Pool  Vater Flow (cf/sec):  Sampler Comments: isolated  Lab ID #:  % Sat DO pH (Field)	Water Appearance  Flow Estimated?	Result 59.7 5.5 7.29	yuatic Life?  % mg/L SU umho/cm	Vater Depth  Canopy Closed %	0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2
Vater Flow Type Pool  Vater Flow (cf/sec):  Sampler Comments: isolated  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field)	Water Appearance  Flow Estimated?	Result 59.7 5.5 7.29 471.5 19.4	yuatic Life?  % mg/L SU umho/cm	Vater Depth  Canopy Closed %	0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B
Nater Flow Type Pool  Nater Flow (cf/sec):  Sampler Comments: isolated  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature	Water Appearance  Flow Estimated?	Sesult  59.7 5.5 7.29 471.5 19.4 2.39	% mg/L SU umho/cm °C	Vater Depth  Canopy Closed %	0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2)
Nater Flow Type Pool Nater Flow (cf/sec): Sampler Comments: isolated Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach)	Water Appearance  Flow Estimated?	Sesult  59.7 5.5 7.29 471.5 19.4 2.39 4	% mg/L SU umho/cm °C NTU	Vater Depth  Canopy Closed %	0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1
Nater Flow Type Pool Nater Flow (cf/sec): Sampler Comments: isolated  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp	Water Appearance  Flow Estimated?	Fesult  59.7 5.5 7.29 471.5 19.4 2.39 4	watic Life?  % mg/L SU umho/cm °C NTU Lookup	Vater Depth  Canopy Closed %	0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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1 Lookup

Observation

Wind Strength

<b>Lab ID #:</b> 500-206919-11	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	230	mg/L	5	SM2320B
Chloride	10	mg/L	0.4	EPA 300.0
Hardness (as CaCO3)	230	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	< 5	mg/L	5	SM2540D
Solids, Total (TS)	310	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	210	mg/L	10	SM2540C
Sulfate	8.8	mg/L	0.4	EPA 300.0
Calcium (Total)	70	mg/L	0.2	EPA 200.7
Magnesium (Total)	14	mg/L	0.1	EPA 200.7
COD	21	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	< 0.1	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.08	mg/L	0.05	SM4500P-E
TKN	0.49	mg/L	0.4	SM4500N(Org)-D
TOC	6.8	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48856	Result		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	90.8	MPN/100mL	1	SM9223B

	Weather Code Definitions						
S	C		WD	WS	AT		
Sky Co	nditions	1	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32		
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45		
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60		
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75		
5 - Mist				4 - Mod./Strong	5 - 76-85		
6 - Fog				5 - Strong	6 - > 86		
7 - Shower				6 - Gale			

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WEM070-0029 **USGS Hydrologic Unit:** 051202070705 SiteID: Stream Name: Tea Creek County: Jennings Description: CR 650 West Latitude: 38 53 9.76552 Longitude: -85 43 52.69889 Drainage: 10.632 Site Number: 21T-007 SiteID: WEM070-0029 Sample Date: 8/3/2021 IDEM Sample #: AB48082 ☐ Algae? Clear **Water Depth Water Flow Type** Glide Water Appearance ☐ Flow Estimated? Aquatic Life? Water Flow (cf/sec): Canopy Closed % Sampler Comments: Lab ID #: Result **Reporting Limit** Method 75.3 % ASTM D888-09(C) % Sat ASTM D888-09(C) DO 6.68 mg/L 7.73 SU EPA 150.2 pH (Field) Specific Conductance (Field) 454.4 umho/cm SM2510B 21.1 °C Temperature SM2550B(2) 9.14 NTU Turbidity (Hach) EPA 180.1 5 Lookup Air Temp Observation Sky Conditions 1 Lookup Observation Wind Direction 27 Lookup Observation Wind Strength 0 Lookup Observation Lab ID #: 500-203424-9 **Reporting Limit** Result **Method** Alkalinity (as CaCO3) 210 mg/L 5 SM2320B Chloride 7.7 mg/L 0.4 EPA 300.0 Hardness (as CaCO3) 230 mg/L 0.91 SM2340B 5.2 mg/L Solids, Suspended Total, (TSS) 5 SM2540D Solids, Total (TS) 320 mg/L 10 SM2540B Solids, Total Dissolved (TDS) 260 mg/L 10 SM2540C Sulfate 13 mg/L 0.4 EPA 300.0 Calcium (Total) 69 mg/L 0.2 EPA 200.7 Magnesium (Total) 14 mg/L 0.1 EPA 200.7 COD 12 mg/L 10 SM5220C Nitrogen, Ammonia < 0.2 mg/L 0.2 EPA 350.1 Nitrogen, Nitrate+Nitrite 0.25 mg/L 0.1 SM4500NO3-F < 0.05 mg/L 0.05 SM4500P-E Phosphorus, Total 0.33 mg/L SM4500N(Org)-D TKN 0.4 TOC 2.2 mg/L 1 SM5310C Lab ID #: AB48082 Result **Reporting Limit Method** 

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> 2419.6 MPN/100mL

770.1 MPN/100mL

2419.6

1

SM9223B

SM9223B

Coliforms (Total)

E. coli

SiteID: WEM070-0029	<b>Sample Date:</b> 8/17/2021	IDEM Samp	le #: AB47659	
Vater Flow Type Pool	Water Appearance	Clear	Water Depth	☐ Algae?
Vater Flow (cf/sec):	☐ Flow Estimated?	☐ Aquatic Life?	Canopy Closed %	0-20%
Sampler Comments: Becomin	ng isolated pools			
Lab ID #:		Result	Reporting Limit	Method
% Sat		54 %		ASTM D888-09(C)
DO		4.64 mg/L		ASTM D888-09(C)
pH (Field)		7.47 SU		EPA 150.2
Specific Conductance (Field)		467.7 umho/cm		SM2510B
Temperature		23.6 °C		SM2550B(2)
Turbidity (Hach)		4.58 NTU		EPA 180.1
Air Temp		5 Lookup		Observation
Sky Conditions		1 Lookup		Observation
Wind Direction		27 Lookup		Observation
Wind Strength		0 Lookup		Observation
SiteID: WEM070-0029  Vater Flow Type Run	Sample Date: 9/14/2021 Water Appearance	IDEM Samp Clear	le #: AB48375 Water Depth	☐ Algae?
Vater Flow (cf/sec):	☐ Flow Estimated?	✓ Aquatic Life?	Canopy Closed %	0-20%
Sampler Comments:				
Lab ID #:		Result	Reporting Limit	Method
% Sat		62.6 %		ASTM D888-09(C)
DO		5.36 mg/L		ASTM D888-09(C)
pH (Field)		7.76 SU		EPA 150.2
Specific Conductance (Field)		429.7 umho/cm		SM2510B
Temperature		22.9 °C		SM2550B(2)
Turbidity (Hach)		3.64 NTU		EPA 180.1
Air Temp		5 Lookup		Observation
Sky Conditions		1 Lookup		Ohaam satiasa
Wind Direction		1 Lookup		Observation
Willia Direction		27 Lookup		Observation

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<b>Lab ID #</b> : 500-205399-10		Result		Reporting Limit	Method
Alkalinity (as CaCO3)		210	mg/L	5	SM2320B
Chloride		8.9	mg/L	0.4	EPA 300.0
Hardness (as CaCO3)		210	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)		3.6	mg/L	5	SM2540D
Solids, Total (TS)		380	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		240	mg/L	10	SM2540C
Sulfate		6.6	mg/L	0.4	EPA 300.0
Calcium (Total)		62	mg/L	0.2	EPA 200.7
Magnesium (Total)		14	mg/L	0.1	EPA 200.7
COD		8.9	mg/L	10	SM5220C
Nitrogen, Ammonia		< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite		< 0.1	mg/L	0.1	SM4500NO3-F
Phosphorus, Total		0.034	mg/L	0.05	SM4500P-E
TKN		0.57	mg/L	0.4	SM4500N(Org)-D
TOC		3.3	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48375		Result		Reporting Limit	Method
Coliforms (Total)		> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli		45.5	MPN/100mL	1	SM9223B
SiteID: WEM070-0029	Sample Date: 10/12/2021	Munda	IDEM Sample		☐ Algae?
Water Flow Type Run	Water Appearance	Murky		Water Depth	□ Algae?
Water Flow (cf/sec):	☐ Flow Estimated?	□ Ac	quatic Life?	Canopy Closed %	0-20%
Sampler Comments: lots of le	eaf debris and low flow condition:	s			
Lab ID #:		Result		Reporting Limit	<u>Method</u>
% Sat		28.5	%		ASTM D888-09(C)
DO		2.6	mg/L		ASTM D888-09(C)
pH (Field)		7.23			EPA 150.2
Specific Conductance (Field)		420.8	umho/cm		SM2510B
Temperature		19.9	°C		SM2550B(2)
Turbidity (Hach)		4.75	NTU		EPA 180.1
Air Temp		4	Lookup		Observation
Sky Conditions			Lookup		Observation
Wind Direction			Lookup		Observation
			'		

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1 Lookup

Observation

Wind Strength

<b>Lab ID #:</b> 500-206919-10	<u>Result</u>		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	210	mg/L	5	SM2320B
Chloride	9.5	mg/L	0.4	EPA 300.0
Hardness (as CaCO3)	200	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	3.4	mg/L	5	SM2540D
Solids, Total (TS)	280	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	190	mg/L	10	SM2540C
Sulfate	6.6	mg/L	0.2	EPA 300.0
Calcium (Total)	59	mg/L	0.2	EPA 200.7
Magnesium (Total)	13	mg/L	0.1	EPA 200.7
COD	18	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	< 0.1	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.081	mg/L	0.05	SM4500P-E
TKN	2.2	mg/L	0.4	SM4500N(Org)-D
TOC	5.6	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48855	Result		Reporting Limit	Method
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	224.7	MPN/100mL	1	SM9223B

	Weather Code Definitions								
SC			WD	WS	AT				
Sky Co	onditions	ions Wind Direction		Wind Strength	Air Temp				
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32				
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45				
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60				
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75				
5 - Mist				4 - Mod./Strong	5 - 76-85				
6 - Fog				5 - Strong	6 - > 86				
7 - Shower				6 - Gale					

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USGS Hydrologic Unit: **SiteID:** WEM070-0039 051202070705 Stream Name: Vernon Fork Muscatatuck River County: Jennings Description: CR 500 South 38 54 39.57440 Longitude: -85 43 48.30341 Site Number: 21T-008 Drainage: 234.158 SiteID: WEM070-0039 Sample Date: 8/3/2021 IDEM Sample #: AB48102 ☐ Algae? **Water Flow Type Water Appearance** Clear **Water Depth** ☐ Flow Estimated? ■ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Lab ID #: **Reporting Limit Method** Result 78 % ASTM D888-09(C) % Sat DO 6.77 mg/L ASTM D888-09(C) pH (Field) 7.64 SU EPA 150.2 Specific Conductance (Field) 439 umho/cm SM2510B Temperature 22.4 °C SM2550B(2) Turbidity (Hach) 20.3 NTU EPA 180.1 Air Temp 5 Lookup Observation Sky Conditions Observation 1 Lookup Wind Direction 27 Lookup Observation

Wind Strength	1	Lookup		Observation
<b>Lab ID #</b> : 500-203424-7	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	180	mg/L	5	SM2320B
Chloride	11	mg/L	2	EPA 300.0
Hardness (as CaCO3)	220	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	23	mg/L	5	SM2540D
Solids, Total (TS)	330	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	290	mg/L	10	SM2540C
Sulfate	22	mg/L	2	EPA 300.0
Calcium (Total)	61	mg/L	0.2	EPA 200.7
Magnesium (Total)	16	mg/L	0.1	EPA 200.7
COD	11	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.67	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.08	mg/L	0.05	SM4500P-E
TKN	0.47	mg/L	0.4	SM4500N(Org)-D
TOC	2.3	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48102	Result		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	111.2	MPN/100mL	1	SM9223B

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<b>SiteID:</b> WEM070-0039	Sample Date:	8/17/2021		IDEM Samp	le #: AB47660	
Water Flow Type Run	Water	Appearance	Clear		Water Depth	☐ Algae?
Water Flow (cf/sec):	☐ Flov	v Estimated?	✓ Aq	uatic Life?	Canopy Closed %	0-20%
Sampler Comments:						
Lab ID #:			Result		Reporting Limit	<u>Method</u>
% Sat			55.3	%		ASTM D888-09(C)
DO			4.67	mg/L		ASTM D888-09(C)
pH (Field)			7.5	SU		EPA 150.2
Specific Conductance (Field)			476	umho/cm		SM2510B
Temperature			23.9	°C		SM2550B(2)
Turbidity (Hach)			11.6	NTU		EPA 180.1
Air Temp			4	Lookup		Observation
Sky Conditions			1	Lookup		Observation
Wind Direction			27	Lookup		Observation
Wind Strength SiteID: WEM070-0039	Sample Date:	9/14/2021	0	Lookup  IDEM Samp	<b>le #</b> : AB48395	Observation
Wind Strength	•	9/14/2021 <b>Appearance</b>	0 Murky		le #: AB48395 Water Depth	Observation  Algae?
Wind Strength  SiteID: WEM070-0039  Water Flow Type Glide	Water		Murky			☐ Algae?
Wind Strength SiteID: WEM070-0039	Water	Appearance	Murky	IDEM Samp	Water Depth	☐ Algae?
Wind Strength  SiteID: WEM070-0039  Water Flow Type Glide  Water Flow (cf/sec):	Water	Appearance	Murky	IDEM Samp	Water Depth	☐ Algae?
Wind Strength  SiteID: WEM070-0039  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments:	Water	Appearance	Murky	IDEM Samp	Water Depth Canopy Closed %	Algae? 0-20%  Method
Wind Strength  SiteID: WEM070-0039  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water	Appearance	Murky  Aq  Result	IDEM Samp	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C
Wind Strength  SiteID: WEM070-0039  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water	Appearance	Murky  Aq  Result	IDEM Samp quatic Life?	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C
Wind Strength  SiteID: WEM070-0039  Vater Flow Type Glide  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water	Appearance	Murky  Aq  Result  68.4 5.74 7.46	IDEM Samp quatic Life?	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C
Wind Strength  SiteID: WEM070-0039  Vater Flow Type Glide  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field)	Water	Appearance	Murky  Aq  Result  68.4 5.74 7.46	Muatic Life?  % mg/L SU umho/cm	Water Depth Canopy Closed %	O-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2
Wind Strength  SiteID: WEM070-0039  Vater Flow Type Glide  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field)	Water	Appearance	Murky  Result  68.4 5.74 7.46 329.1 23.9	Muatic Life?  % mg/L SU umho/cm	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B
Wind Strength  SiteID: WEM070-0039  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature	Water	Appearance	Murky  Result  68.4 5.74 7.46 329.1 23.9 11	JUEM Samp  Juatic Life?  %  mg/L SU  umho/cm °C	Water Depth Canopy Closed %	☐ Algae?  0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2)
Wind Strength  SiteID: WEM070-0039  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water	Appearance	Murky  Result  68.4 5.74 7.46 329.1 23.9 11 5	Muatic Life?  % mg/L SU umho/cm °C NTU	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2) EPA 180.1
Wind Strength  SiteID: WEM070-0039  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp	Water	Appearance	Murky  Result  68.4 5.74 7.46 329.1 23.9 11 5	Muatic Life?  % mg/L SU umho/cm °C NTU Lookup	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #</b> : 500-205399-8		Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)		140	mg/L	5	SM2320B
Chloride			mg/L	1	EPA 300.0
Hardness (as CaCO3)			mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)		10	mg/L	5	SM2540D
Solids, Total (TS)		330	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		190	mg/L	10	SM2540C
Sulfate		10	mg/L	1	EPA 300.0
Calcium (Total)		45	mg/L	0.2	EPA 200.7
Magnesium (Total)			mg/L	0.1	EPA 200.7
COD		< 10	mg/L	10	SM5220C
Nitrogen, Ammonia			mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite			mg/L	0.1	SM4500NO3-F
Phosphorus, Total		0.064	-	0.05	SM4500P-E
TKN			mg/L	0.4	SM4500N(Org)-D
TOC			mg/L	1	SM5310C
<b>Lab ID #</b> : AB48395		Result		Reporting Limit	Method
		0440.0	MDN/400ml	0440.0	CMOSSSD
Coliforms (Total)		> 2419.6	MPN/100mL	2419.6	SM9223B
Coliforms (Total) E. coli			MPN/100mL	1	SM9223B SM9223B
E. coli	Sample Date: 10/12/2021			1	
E. coli SiteID: WEM070-0039	Sample Date: 10/12/2021 Water Appearance		MPN/100mL  IDEM Sample #	1	
E. coli SiteID: WEM070-0039	•	172.3	MPN/100mL  IDEM Sample #	1 #: AB48875	SM9223B
E. coli SiteID: WEM070-0039 Water Flow Type Run	Water Appearance	172.3	MPN/100mL  IDEM Sample #	1 #: AB48875 /ater Depth	SM9223B
E. coli  SiteID: WEM070-0039  Nater Flow Type Run  Nater Flow (cf/sec):	Water Appearance	172.3	MPN/100mL  IDEM Sample #	1 #: AB48875 /ater Depth	SM9223B
E. coli  SiteID: WEM070-0039  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:	Water Appearance	Clear	MPN/100mL  IDEM Sample #  W  Juatic Life?	#: AB48875  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%
E. coli  SiteID: WEM070-0039  Water Flow Type Run  Water Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	Clear Aq Result	MPN/100mL  IDEM Sample #  W  Juatic Life?	#: AB48875  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method
E. coli  SiteID: WEM070-0039  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	Clear Aq Result	MPN/100mL  IDEM Sample #  Wattic Life?	#: AB48875  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C)
E. coli  SiteID: WEM070-0039  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO	Water Appearance	Clear Aq  Result 76.1 6.81 7.35	MPN/100mL  IDEM Sample #  Wattic Life?	#: AB48875  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C)
E. coli  SiteID: WEM070-0039  Vater Flow Type Run  Vater Flow (cf/sec):  sampler Comments:  Lab ID #:  % Sat DO pH (Field)	Water Appearance	Clear Aq  Result 76.1 6.81 7.35	MPN/100mL  IDEM Sample #  Waguatic Life?  % mg/L SU umho/cm	#: AB48875  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2
E. coli  SiteID: WEM070-0039  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	Clear  Result  76.1 6.81 7.35 393.4 20.8	MPN/100mL  IDEM Sample #  Waguatic Life?  % mg/L SU umho/cm	#: AB48875  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B
E. coli  SiteID: WEM070-0039  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  ** Sat* DO pH (Field) Specific Conductance (Field) Temperature	Water Appearance	Clear  Result  76.1 6.81 7.35 393.4 20.8 9.21	MPN/100mL  IDEM Sample #  Watic Life?  %  mg/L SU umho/cm °C	#: AB48875  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2)
E. coli  SiteID: WEM070-0039  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	Clear  Result  76.1 6.81 7.35 393.4 20.8 9.21 4	MPN/100mL  IDEM Sample #  W  Juatic Life?  %  mg/L SU  umho/cm °C  NTU	#: AB48875  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1
E. coli  SiteID: WEM070-0039  Nater Flow Type Run  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat	Water Appearance	Clear  Result  76.1 6.81 7.35 393.4 20.8 9.21 4	MPN/100mL  IDEM Sample #  Watic Life?  % mg/L SU umho/cm °C NTU Lookup	#: AB48875  /ater Depth  Canopy Closed %	SM9223B  Algae?  0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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	ma/l		
	111g/ L	5	SM2320B
16	mg/L	2	EPA 300.0
180	mg/L	0.91	SM2340B
6.8	mg/L	5	SM2540D
270	mg/L	10	SM2540B
200	mg/L	10	SM2540C
24	mg/L	2	EPA 300.0
51	mg/L	0.2	EPA 200.7
12	mg/L	0.1	EPA 200.7
16	mg/L	10	SM5220C
< 0.2	mg/L	0.2	SM4500NH3-G
0.78	mg/L	0.1	SM4500NO3-F
0.074	mg/L	0.05	SM4500P-E
0.49	mg/L	0.4	SM4500N(Org)-D
3.9	mg/L	1	SM5310C
Result		Reporting Limit	Method
> 2419.6	MPN/100mL	2419.6	SM9223B
160.7	MPN/100mL	1	SM9223B
	16 180 6.8 270 200 24 51 12 16 < 0.2 0.78 0.074 0.49 3.9  Result	150 mg/L 16 mg/L 180 mg/L 6.8 mg/L 270 mg/L 200 mg/L 201 mg/L 51 mg/L 12 mg/L 16 mg/L <0.2 mg/L 0.78 mg/L 0.074 mg/L 0.49 mg/L 3.9 mg/L  Result  > 2419.6 MPN/100mL 160.7 MPN/100mL	16 mg/L 2 180 mg/L 0.91 6.8 mg/L 5 270 mg/L 10 200 mg/L 10 24 mg/L 2 51 mg/L 0.2 12 mg/L 0.1 16 mg/L 10 < 0.2 mg/L 0.1 16 mg/L 0.2 0.78 mg/L 0.1 0.074 mg/L 0.1 0.074 mg/L 0.4 3.9 mg/L 1  Result Reporting Limit

	Weather Code Definitions								
SC Sky Conditions		,	WD Wind Direction	WS Wind Strength	AT Air Temp				
	8 - Rain 9 - Snow 10 - Sleet	0 9 18 27	North (0 Degrees) East (90 Degrees) South (180 Degrees) West (270 Degrees)	0 - Calm 1 - Light 2 - Mod./Light 3 - Moderate 4 - Mod./Strong 5 - Strong 6 - Gale	1 - < 32 2 - 33-45 3 - 46-60 4 - 61-75 5 - 76-85 6 - > 86				

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Turbidity (Hach)

Sky Conditions

Air Temp

USGS Hydrologic Unit: **SiteID:** WEM070-0020 051202070705 Stream Name: Vernon Fork Muscatatuck River County: Jackson US 31 Description: 38 54 21.96418 Longitude: -85 49 15.82271 292.076 Site Number: 21T-009 Drainage: SiteID: WEM070-0020 Sample Date: 8/4/2021 IDEM Sample #: AB48090 ☐ Algae? **Water Flow Type Water Appearance** Clear **Water Depth** Riffle ☐ Flow Estimated? ■ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Lab ID #: **Reporting Limit Method** Result 52.8 % ASTM D888-09(C) % Sat DO 4.51 mg/L ASTM D888-09(C) pH (Field) 7.4 SU EPA 150.2 Specific Conductance (Field) 426.7 umho/cm SM2510B Temperature 22.9 °C SM2550B(2)

24 NTU

5 Lookup

1 Lookup

EPA 180.1

Observation

Observation

Wind Direction	27	Lookup		Observation
Wind Strength	1	Lookup		Observation
<b>Lab ID #</b> : 500-203424-18	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	180	mg/L	5	SM2320B
Chloride	11	mg/L	0.4	EPA 300.0
Hardness (as CaCO3)	210	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	26	mg/L	5	SM2540D
Solids, Total (TS)	380	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	260	mg/L	10	SM2540C
Sulfate	23	mg/L	2	EPA 300.0
Calcium (Total)	60	mg/L	0.2	EPA 200.7
Magnesium (Total)	14	mg/L	0.1	EPA 200.7
COD	14	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.45	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.072	mg/L	0.05	SM4500P-E
TKN	0.49	mg/L	0.4	SM4500N(Org)-D
TOC	3	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48090	Result		Reporting Limit	Method
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	42.2	MPN/100mL	1	SM9223B

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SiteID: WEM070-0020 Sample Date: IDEM Sample #: AB47661 8/18/2021 ✓ Algae? Water Flow Type Water Appearance Clear Water Depth ☐ Flow Estimated? ✓ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Riffle is riprap DS of bridge, live mussels seen at site, crayfish appears to be F. rusticus based on coloration seen at site; readings taken DS of bridge and riffle in run. Lab ID #: **Reporting Limit Method** Result 47.7 % ASTM D888-09(C) % Sat DO ASTM D888-09(C) 4 mg/L pH (Field) 7.33 SU EPA 150.2 Specific Conductance (Field) 435 umho/cm SM2510B 24.3 °C Temperature SM2550B(2) Turbidity (Hach) 15.1 NTU EPA 180.1 Air Temp 4 Lookup Observation Sky Conditions Observation 2 Lookup Wind Direction 18 Lookup Observation Wind Strength 0 Lookup Observation SiteID: WEM070-0020 Sample Date: 9/15/2021 IDEM Sample #: AB48383 Water Flow Type Clear Water Depth ■ Algae? Water Appearance ☐ Flow Estimated? Water Flow (cf/sec): ■ Aquatic Life? Canopy Closed % **Sampler Comments:** Lab ID #: **Reporting Limit** Result **Method** % Sat 51 % ASTM D888-09(C) DO 4.35 mg/L ASTM D888-09(C) pH (Field) 7.13 SU EPA 150.2 Specific Conductance (Field) 337.4 umho/cm SM2510B 23.3 °C Temperature SM2550B(2) Turbidity (Hach) 14.4 NTU EPA 180.1 Air Temp 4 Lookup Observation Sky Conditions 4 Lookup Observation Wind Direction 27 Lookup Observation Wind Strength Observation 1 Lookup

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<b>Lab ID #</b> : 500-205399-17		Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)		130	mg/L	5	SM2320B
Chloride			mg/L	1	EPA 300.0
Hardness (as CaCO3)			mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)			mg/L	5	SM2540D
Solids, Total (TS)		370	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		300	mg/L	10	SM2540C
Sulfate		20	mg/L	1	EPA 300.0
Calcium (Total)		43	mg/L	0.2	EPA 200.7
Magnesium (Total)		11	mg/L	0.1	EPA 200.7
COD		12	mg/L	10	SM5220C
Nitrogen, Ammonia		0.11	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite		0.17	mg/L	0.1	SM4500NO3-F
Phosphorus, Total		0.087	mg/L	0.05	SM4500P-E
TKN			mg/L	0.4	SM4500N(Org)-D
TOC		4.1	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48383		Result		Reporting Limit	Method
Coliforms (Total)		2419.6	MPN/100mL	1	SM9223B
· · · · · · · · · · · · · · · · · ·				•	
E. coli			MPN/100mL	1	SM9223B
E. coli SiteID: WEM070-0020	Sample Date: 10/13/2021 Water Appearance		MPN/100mL  IDEM Sample :	1 #: AB48863	SM9223B
SiteID: WEM070-0020 Water Flow Type Riffle	•	172.5	MPN/100mL  IDEM Sample a	1 #: AB48863 /ater Depth	SM9223B
E. coli SiteID: WEM070-0020	Water Appearance	172.5	MPN/100mL  IDEM Sample :	1 #: AB48863	SM9223B
E. coli SiteID: WEM070-0020 Water Flow Type Riffle Water Flow (cf/sec):	Water Appearance	172.5	MPN/100mL  IDEM Sample a	1 #: AB48863 /ater Depth	SM9223B
E. coli  SiteID: WEM070-0020  Water Flow Type Riffle  Water Flow (cf/sec):  Sampler Comments:	Water Appearance	Clear	MPN/100mL  IDEM Sample :  Watic Life?	#: AB48863 //ater Depth Canopy Closed %	SM9223B  Algae? 0-20%
E. coli  SiteID: WEM070-0020  Water Flow Type Riffle  Water Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	Clear Aq Result	MPN/100mL  IDEM Sample :  Watic Life?	#: AB48863 //ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method
E. coli  SiteID: WEM070-0020  Vater Flow Type Riffle  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	Clear Aq Result	IDEM Sample : Watic Life?	#: AB48863 //ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C)
E. coli  SiteID: WEM070-0020  Vater Flow Type Riffle  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO	Water Appearance	Clear Aq Result 61 5.58 7.48	IDEM Sample : Watic Life?	#: AB48863 //ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C)
E. coli  SiteID: WEM070-0020  Vater Flow Type Riffle  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field)	Water Appearance	Clear Aq Result 61 5.58 7.48	MPN/100mL  IDEM Sample :  Watter Life?  % mg/L SU umho/cm	#: AB48863 //ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2
E. coli  SiteID: WEM070-0020  Vater Flow Type Riffle  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	Clear  Result  61 5.58 7.48 383.7 19.7	MPN/100mL  IDEM Sample :  Watter Life?  % mg/L SU umho/cm	#: AB48863 //ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B
E. coli  SiteID: WEM070-0020  Nater Flow Type Riffle  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature	Water Appearance	Clear  Result  61 5.58 7.48 383.7 19.7 16.2	MPN/100mL  IDEM Sample a  Watic Life?  %  mg/L SU umho/cm °C	#: AB48863 //ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2)
SiteID: WEM070-0020  Nater Flow Type Riffle  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach)	Water Appearance	Clear  Result  61 5.58 7.48 383.7 19.7 16.2 4	MPN/100mL  IDEM Sample a  Watic Life?  % mg/L SU umho/cm °C NTU	#: AB48863 //ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1
SiteID: WEM070-0020  Nater Flow Type Riffle  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp	Water Appearance	Clear  Result  61 5.58 7.48 383.7 19.7 16.2 4 1	MPN/100mL  IDEM Sample a  Watic Life?  % mg/L SU umho/cm °C NTU Lookup	#: AB48863 //ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #:</b> 500-206919-18	<u>Result</u>		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	150	mg/L	5	SM2320B
Chloride	16	mg/L	1	EPA 300.0
Hardness (as CaCO3)	170	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	15	mg/L	5	SM2540D
Solids, Total (TS)	280	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	190	mg/L	10	SM2540C
Sulfate	25	mg/L	1	EPA 300.0
Calcium (Total)	50	mg/L	0.2	EPA 200.7
Magnesium (Total)	12	mg/L	0.1	EPA 200.7
COD	17	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	0.38	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.2	mg/L	0.05	SM4500P-E
TKN	0.53	mg/L	0.4	SM4500N(Org)-D
TOC	4.5	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48863	Result		Reporting Limit	Method
Coliforms (Total)	2419.6	MPN/100mL	1	SM9223B
E. coli	218.7	MPN/100mL	1	SM9223B

	Weather Code Definitions								
S	C		WD	WS	AT				
Sky Co	nditions	ditions Wind Direction		Wind Strength	Air Temp				
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32				
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45				
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60				
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75				
5 - Mist				4 - Mod./Strong	5 - 76-85				
6 - Fog				5 - Strong	6 - > 86				
7 - Shower				6 - Gale					

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Turbidity (Hach)

Sky Conditions

Air Temp

USGS Hydrologic Unit: **SiteID:** WEM090-0015 051202070706 Stream Name: Vernon Fork Muscatatuck River County: Jackson Description: CR 50 North 38 53 18.85460 Longitude: -85 51 6.07579 364.501 Site Number: 21T-010 Drainage: SitelD: WEM090-0015 Sample Date: 8/4/2021 IDEM Sample #: AB48091 ☐ Algae? **Water Flow Type Water Appearance Water Depth** Glide Brown ☐ Flow Estimated? ■ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Lab ID #: **Reporting Limit Method** Result 51.3 % ASTM D888-09(C) % Sat DO 4.42 mg/L ASTM D888-09(C) pH (Field) 7.54 SU EPA 150.2 Specific Conductance (Field) 417.8 umho/cm SM2510B Temperature 22.5 °C SM2550B(2)

17.7 NTU

5 Lookup

1 Lookup

EPA 180.1

Observation

Observation

Wind Direction	27	Lookup		Observation
Wind Strength	1	Lookup		Observation
<b>Lab ID #</b> : 500-203424-19	<u>Result</u>		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	180	mg/L	5	SM2320B
Chloride	13	mg/L	1	EPA 300.0
Hardness (as CaCO3)	200	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	18	mg/L	5	SM2540D
Solids, Total (TS)	280	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	350	mg/L	10	SM2540C
Sulfate	16	mg/L	1	EPA 300.0
Calcium (Total)	57	mg/L	0.2	EPA 200.7
Magnesium (Total)	14	mg/L	0.1	EPA 200.7
COD	17	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.42	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.044	mg/L	0.05	SM4500P-E
TKN	0.38	mg/L	0.4	SM4500N(Org)-D
TOC	3.4	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48091	<u>Result</u>		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	95.9	MPN/100mL	1	SM9223B

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SiteID: WEM090-0015 Sample Date: 8/24/2021 IDEM Sample #: AB46789 Water Depth ✓ Algae? Water Flow Type Run Water Appearance Murky ☐ Flow Estimated? ✓ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Lab ID #: Result **Reporting Limit Method** 55.8 % ASTM D888-09(C) % Sat DO 4.35 mg/L ASTM D888-09(C) pH (Field) 7.34 SU EPA 150.2 Specific Conductance (Field) 430.8 umho/cm SM2510B Temperature 28.2 °C SM2550B(2) Turbidity (Hach) 24.7 NTU EPA 180.1 Air Temp 6 Lookup Observation Sky Conditions 2 Lookup Observation Wind Direction 27 Lookup Observation Wind Strength 0 Lookup Observation SiteID: WEM090-0015 Sample Date: IDEM Sample #: AB47662 8/30/2021 ✓ Algae? **Water Depth** Water Flow Type Run Water Appearance Murky ✓ Aquatic Life? ☐ Flow Estimated? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Lab ID #: **Reporting Limit Method** Result 42.6 % ASTM D888-09(C) % Sat DO 3.42 mg/L ASTM D888-09(C) pH (Field) 7.39 SU EPA 150.2 Specific Conductance (Field) 437.5 umho/cm SM2510B 26.5 °C SM2550B(2) Temperature Turbidity (Hach) 14.7 NTU EPA 180.1 Air Temp 5 Lookup Observation Sky Conditions Observation 4 Lookup Wind Direction 27 Lookup Observation Wind Strength 0 Lookup Observation

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SiteID: WEM090-0015	<b>Sample Date:</b> 9/15/2021	IDEM Sampl	<b>e #:</b> AB48384	
Water Flow Type Glide	Water Appearance	Murky	Water Depth	☐ Algae?
Water Flow (cf/sec):	☐ Flow Estimated?	☐ Aquatic Life?	Canopy Closed %	0-20%
Sampler Comments:				
Lab ID #:		Result	Reporting Limit	Method
% Sat		49 %		ASTM D888-09(C)
DO		4.19 mg/L		ASTM D888-09(C)
pH (Field)		7.19 SU		EPA 150.2
Specific Conductance (Field)		347.9 umho/cm		SM2510B
Temperature		23.6 °C		SM2550B(2)
Turbidity (Hach)		16.3 NTU		EPA 180.1
Air Temp		5 Lookup		Observation
Sky Conditions		4 Lookup		Observation
Wind Direction		27 Lookup		Observation
Wind Strength		0 Lookup		Observation
<b>Lab ID #</b> : 500-205399-18		Result	Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)		130 mg/L	5	SM2320B
Chloride		17 mg/L	1	EPA 300.0
Hardness (as CaCO3)		150 mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)		16 mg/L	5	SM2540D
Solids, Total (TS)		370 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		300 mg/L	10	SM2540C
Sulfate		21 mg/L	1	EPA 300.0
Calcium (Total)		44 mg/L	0.2	EPA 200.7
Magnesium (Total)		11 mg/L	0.1	EPA 200.7
COD		11 mg/L	10	SM5220C
Nitrogen, Ammonia		< 0.2 mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite		0.24 mg/L	0.1	SM4500NO3-F
Phosphorus, Total		0.073 mg/L	0.05	SM4500P-E
TKN		0.69 mg/L	0.4	SM4500N(Org)-D
TOC		4.4 mg/L	1	SM5310C
<b>Lab ID #</b> : AB48384		Result	Reporting Limit	Method
Coliforms (Total)		> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli		290.9 MPN/100mL	1	SM9223B

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SiteID: WEM090-0015 Sample Date: 10/13/2021 IDEM Sample #: AB48864 Murky Water Depth ☐ Algae? Water Flow Type Run Water Appearance ☐ Flow Estimated? ☐ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Lab ID #: Result **Reporting Limit Method** 58.9 % % Sat ASTM D888-09(C) DO 5.43 mg/L ASTM D888-09(C) pH (Field) 7.66 SU EPA 150.2 Specific Conductance (Field) 384 umho/cm SM2510B Temperature 19.4 °C SM2550B(2) Turbidity (Hach) 15.5 NTU EPA 180.1 Air Temp 4 Lookup Observation Sky Conditions 1 Lookup Observation Wind Direction 27 Lookup Observation Wind Strength 0 Lookup Observation Lab ID #: 500-206919-19 Result **Reporting Limit Method** Alkalinity (as CaCO3) 160 mg/L 5 SM2320B Chloride 17 mg/L 1 EPA 300.0 Hardness (as CaCO3) 170 mg/L 0.91 SM2340B 15 mg/L Solids, Suspended Total, (TSS) SM2540D 5 Solids, Total (TS) 270 mg/L 10 SM2540B Solids, Total Dissolved (TDS) 180 mg/L 10 SM2540C Sulfate 19 mg/L 1 EPA 300.0 Calcium (Total) 49 mg/L EPA 200.7 0.2 Magnesium (Total) 12 mg/L 0.1 EPA 200.7 COD 19 mg/L 10 SM5220C Nitrogen, Ammonia < 0.2 mg/L 0.2 SM4500NH3-G Nitrogen, Nitrate+Nitrite 0.25 mg/L 0.1 SM4500NO3-F 0.13 mg/L 0.05 Phosphorus, Total SM4500P-E 0.61 mg/L SM4500N(Org)-D TKN 0.4 TOC SM5310C 5.5 mg/L 1 Lab ID #: AB48864 **Reporting Limit** Result **Method** Coliforms (Total) > 2419.6 MPN/100mL 2419.6 SM9223B E. coli 166.4 MPN/100mL 1 SM9223B

Weather Code Definitions										
SC			WD	WS	AT					
Sky Conditions		Wind Direction		Wind Strength	Air Temp					
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32					
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45					
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60					
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75					
5 - Mist				4 - Mod./Strong	5 - 76-85					
6 - Fog				5 - Strong	6 - > 86					
7 - Shower				6 - Gale						

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 SiteID:
 WEM080-0015
 USGS Hydrologic Unit:
 051202070704

 Stream Name:
 Sandy Branch
 County:
 Jackson

**Description:** US 31 **Latitude:** 38 55 52.33966 **Longitude:** -85 50 2.43408

**Drainage:** 8.07 **Site Number:** 21T-011

**SiteID:** WEM080-0015 **Sample Date:** 8/4/2021 **IDEM Sample #:** AB48089

Water Flow Type Glide Water Appearance Clear Water Depth Algae?

Water Flow (cf/sec): ☐ Flow Estimated? ✓ Aquatic Life? Canopy Closed % 0-20%

**Sampler Comments:** 

Lab ID #:	Result		Reporting Limit	Method
% Sat	76.7	%		ASTM D888-09(C)
DO	7.16	mg/L		ASTM D888-09(C)
pH (Field)	7.88	SU		EPA 150.2
Specific Conductance (Field)	646	umho/cm		SM2510B
Temperature	18.7	°C		SM2550B(2)
Turbidity (Hach)	4.31	NTU		EPA 180.1
Air Temp	4	Lookup		Observation
Sky Conditions	1	Lookup		Observation
Wind Direction	27	Lookup		Observation
Wind Strength	0	Lookup		Observation
<b>Lab ID #</b> : 500-203424-17	Result		Reporting Limit	Method
Alkalinity (as CaCO3)	230	mg/L	5	SM2320B
Chloride	55	mg/L	4	EPA 300.0
Hardness (as CaCO3)	300	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	3.8	mg/L	5	SM2540D
Solids, Total (TS)	560	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	500	mg/L	10	SM2540C
Sulfate	34	mg/L	4	EPA 300.0
Calcium (Total)	84	mg/L	0.2	EPA 200.7
Magnesium (Total)	22	mg/L	0.1	EPA 200.7
COD	15	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.51	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.071	mg/L	0.05	SM4500P-E
TKN	0.38	mg/L	0.4	SM4500N(Org)-D
TOC	2.3	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48089	Result		Reporting Limit	Method
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	344.8	MPN/100mL	1	SM9223B

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SiteID: WEM080-0015	<b>Sample Date:</b> 9/15/2021	IDEM Sample	<b>e #:</b> AB48382	
Water Flow Type Glide	Water Appearance	Clear	Water Depth	☐ Algae?
Water Flow (cf/sec):	☐ Flow Estimated?	☐ Aquatic Life?	Canopy Closed %	0-20%
Sampler Comments:				
Lab ID #:		Result	Reporting Limit	<u>Method</u>
% Sat		65 %		ASTM D888-09(C)
DO		5.69 mg/L		ASTM D888-09(C)
pH (Field)		7.68 SU		EPA 150.2
Specific Conductance (Field)		647 umho/cm		SM2510B
Temperature		22 °C		SM2550B(2)
Turbidity (Hach)		5.53 NTU		EPA 180.1
Air Temp		4 Lookup		Observation
Sky Conditions		5 Lookup		Observation
Wind Direction		27 Lookup		Observation
Wind Strength		1 Lookup		Observation
<b>Lab ID #</b> : 500-205399-16		Result	Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)		230 mg/L	5	SM2320B
Chloride		57 mg/L	2	EPA 300.0
Hardness (as CaCO3)		290 mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)		7 mg/L	5	SM2540D
Solids, Total (TS)		610 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		480 mg/L	10	SM2540C
Sulfate		32 mg/L	2	EPA 300.0
Calcium (Total)		81 mg/L	0.2	EPA 200.7
Magnesium (Total)		21 mg/L	0.1	EPA 200.7
COD		< 10 mg/L	10	SM5220C
Nitrogen, Ammonia		< 0.2 mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite		0.35 mg/L	0.1	SM4500NO3-F
Phosphorus, Total		0.12 mg/L	0.05	SM4500P-E
TKN		0.61 mg/L	0.4	SM4500N(Org)-D
TOC		2.8 mg/L	1	SM5310C
<b>Lab ID #:</b> AB48382		Result	Reporting Limit	<u>Method</u>
Coliforms (Total)		> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli		387.3 MPN/100mL	1	SM9223B

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SiteID: WEM080-0015 Sample Date: 10/13/2021 IDEM Sample #: AB48862 Murky Water Depth ☐ Algae? **Water Flow Type** Glide Water Appearance ☐ Flow Estimated? ☐ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Lab ID #: Result **Reporting Limit Method** 63.9 % % Sat ASTM D888-09(C) DO 6.16 mg/L ASTM D888-09(C) pH (Field) 7.68 SU EPA 150.2 Specific Conductance (Field) 656 umho/cm SM2510B Temperature 17.1 °C SM2550B(2) Turbidity (Hach) 6.55 NTU EPA 180.1 Air Temp 4 Lookup Observation Sky Conditions 1 Lookup Observation Wind Direction 27 Lookup Observation Wind Strength 0 Lookup Observation Lab ID #: 500-206919-17 Result **Reporting Limit Method** Alkalinity (as CaCO3) 230 mg/L 5 SM2320B Chloride 55 mg/L 2 EPA 300.0 Hardness (as CaCO3) 280 mg/L 0.91 SM2340B 3.8 mg/L Solids, Suspended Total, (TSS) 5 SM2540D Solids, Total (TS) 440 mg/L 10 SM2540B Solids, Total Dissolved (TDS) 380 mg/L 10 SM2540C Sulfate 29 mg/L 2 EPA 300.0 Calcium (Total) 78 mg/L EPA 200.7 0.2 20 mg/L Magnesium (Total) 0.1 EPA 200.7 COD 14 mg/L 10 SM5220C Nitrogen, Ammonia < 0.2 mg/L 0.2 SM4500NH3-G Nitrogen, Nitrate+Nitrite 0.2 mg/L 0.1 SM4500NO3-F 0.078 mg/L 0.05 Phosphorus, Total SM4500P-E 0.85 mg/L SM4500N(Org)-D TKN 0.4 TOC SM5310C 3.3 mg/L 1 Lab ID #: AB48862 **Reporting Limit** Result **Method** Coliforms (Total) > 2419.6 MPN/100mL 2419.6 SM9223B E. coli 74.9 MPN/100mL 1 SM9223B

Weather Code Definitions							
S	SC .		WD	WS	AT		
Sky Co	nditions	1	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32		
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45		
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60		
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75		
5 - Mist				4 - Mod./Strong	5 - 76-85		
6 - Fog				5 - Strong	6 - > 86		
7 - Shower				6 - Gale			

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SiteID: WEM080-0014 USGS Hydrologic Unit: 051202070704 Stream Name: Mutton Creek Ditch County: Jackson Description: CR 400 North 38 56 26.63883 Longitude: -85 48 56.24634 29.807 Site Number: 21T-012 Drainage: SiteID: WEM080-0014 Sample Date: 8/4/2021 IDEM Sample #: AB48088 Water Depth ☐ Algae? Water Flow Type Water Appearance Brown Glide ☐ Flow Estimated? ☐ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20%

Sampler Comments: water very stagnant, slight sheen/film on top; some duckweed present

Lab ID #:	Result		Reporting Limit	<u>Method</u>
% Sat	28.3 %	, 0		ASTM D888-09(C)
DO	2.51 m	ng/L		ASTM D888-09(C)
pH (Field)	7.22 S	U		EPA 150.2
Specific Conductance (Field)	387.9 ur	mho/cm		SM2510B
Temperature	21.1 °C	0		SM2550B(2)
Turbidity (Hach)	8.66 N	ITU		EPA 180.1
Air Temp	4 Lo	ookup		Observation
Sky Conditions	1 Lo	ookup		Observation
Wind Direction	27 Lo	ookup		Observation
Wind Strength	0 Lo	ookup		Observation
<b>Lab ID #</b> : 500-203424-16	Result		Reporting Limit	Method
Alkalinity (as CaCO3)	150 m	ng/L	5	SM2320B
Chloride	18 m	ng/L	1	EPA 300.0
Hardness (as CaCO3)	170 m	ng/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	8.2 m	ng/L	5	SM2540D
Solids, Total (TS)	360 m	ng/L	10	SM2540B
Solids, Total Dissolved (TDS)	210 m	ng/L	10	SM2540C
Sulfate	12 m	ng/L	1	EPA 300.0
Calcium (Total)	47 m	ng/L	0.2	EPA 200.7
Magnesium (Total)	13 m	ng/L	0.1	EPA 200.7
COD	12 m	ng/L	10	SM5220C
Nitrogen, Ammonia	< 0.2 m	ng/L	0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.94 m	ng/L	0.1	SM4500NO3-F
Phosphorus, Total	0.13 m	ng/L	0.05	SM4500P-E
TKN	0.32 m		0.4	SM4500N(Org)-D
TOC	4.2 m	ng/L	1	SM5310C
<b>Lab ID #</b> : AB48088	Result		Reporting Limit	Method
Coliforms (Total)	> 2419.6 M		2419.6	SM9223B
E. coli	39.3 M	1PN/100mL	1	SM9223B

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SiteID: WEM080-0014	Sample Date: 8/17/2	2021	IDEM Sample	e #: AB47664	
Water Flow Type Glide	Water Appear	rance Sheen		Water Depth	✓ Algae?
Water Flow (cf/sec):	☐ Flow Estim	ated? 🗹 Aq	uatic Life?	Canopy Closed %	0-20%
Sampler Comments:					
Lab ID #:		Result		Reporting Limit	<u>Method</u>
% Sat		16.3	%		ASTM D888-09(C
DO		1.4	mg/L		ASTM D888-09(C)
pH (Field)		7.21	SU		EPA 150.2
Specific Conductance (Field)		405.5	umho/cm		SM2510B
Temperature		23.4	°C		SM2550B(2)
Turbidity (Hach)		8.52	NTU		EPA 180.1
Air Temp		5	Lookup		Observation
Sky Conditions		4	Lookup		Observation
Wind Direction		9	Lookup		Observation
Wind Strength SiteID: WEM080-0014	Sample Date: 9/15/2	0	Lookup  IDEM Sample	e#: AB48381	Observation
Wind Strength	Sample Date: 9/15/2 Water Appear	2021	IDEM Sample	e#: AB48381 Water Depth	Observation  Algae?
Wind Strength  SiteID: WEM080-0014  Water Flow Type Glide	•	2021 Brown	IDEM Sample		☐ Algae?
Wind Strength SiteID: WEM080-0014	Water Appear	2021 Brown	IDEM Sample	Water Depth	☐ Algae?
Wind Strength  SiteID: WEM080-0014  Nater Flow Type Glide  Nater Flow (cf/sec):	Water Appear	2021 Brown	IDEM Sample	Water Depth	☐ Algae?
Wind Strength  SiteID: WEM080-0014  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments:	Water Appear	0 2021 rance Brown ated? Aq	IDEM Sample	Water Depth Canopy Closed %	Algae? 0-20%  Method
Wind Strength  SiteID: WEM080-0014  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appear	2021 rance Brown rated? Aq Result	IDEM Sample	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C
Wind Strength  SiteID: WEM080-0014  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appear	2021 rance Brown rated? Aq Result	IDEM Sample uatic Life?  % mg/L	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C
Wind Strength  SiteID: WEM080-0014  Vater Flow Type Glide  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO	Water Appear	0 2021 2021 2021 2021 2021 2021 2021 20	IDEM Sample uatic Life?  % mg/L	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C
Wind Strength  SiteID: WEM080-0014  Vater Flow Type Glide  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field)	Water Appear	0 2021 2021 2021 2021 2021 2021 2021 20	We mg/L SU umho/cm	Water Depth Canopy Closed %	O-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2
Wind Strength  SiteID: WEM080-0014  Vater Flow Type Glide  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field)	Water Appear	2021  rance Brown ated? Aq  Result  5.4  0.46  6.96  362.8  20.8	We mg/L SU umho/cm	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B
Wind Strength  SiteID: WEM080-0014  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature	Water Appear	2021  rance Brown rated? Aq  Result  5.4 0.46 6.96 362.8 20.8 10.5	We mg/L SU umho/cm	Water Depth Canopy Closed %	☐ Algae?  0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2)
Wind Strength  SiteID: WEM080-0014  Nater Flow Type Glide  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach)	Water Appear	2021  rance Brown rated? Aq  Result  5.4 0.46 6.96 362.8 20.8 10.5 4	IDEM Sample uatic Life?  % mg/L SU umho/cm °C NTU	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2) EPA 180.1
Wind Strength  SiteID: WEM080-0014  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp	Water Appear	2021  rance Brown rated? Aq  Result  5.4 0.46 6.96 362.8 20.8 10.5 4	"C" NTU Lookup	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #:</b> 500-205399-15		Result		Reporting Limit	Method
Alkalinity (as CaCO3)		130	mg/L	5	SM2320B
Chloride		15	mg/L	1	EPA 300.0
Hardness (as CaCO3)		140	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)		10	mg/L	7.1	SM2540D
Solids, Total (TS)		340	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		270	mg/L	10	SM2540C
Sulfate		8.9	mg/L	0.2	EPA 300.0
Calcium (Total)		40	mg/L	0.2	EPA 200.7
Magnesium (Total)		11	mg/L	0.1	EPA 200.7
COD		25	mg/L	10	SM5220C
Nitrogen, Ammonia		< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite		0.05	mg/L	0.1	SM4500NO3-F
Phosphorus, Total		0.16	mg/L	0.05	SM4500P-E
TKN		0.97	mg/L	0.4	SM4500N(Org)-D
тос		9.8	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48381		Result		Reporting Limit	Method
Coliforms (Total)		> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli		248.1	MPN/100mL	1	SM9223B
SiteID: WEM080-0014	Sample Date: 10/13/2021		IDEM Sample :	#: AB48861	
Water Flow Type Glide	Water Appearance	Murky	•	Vater Depth	☐ Algae?
Water Flow (cf/sec):	☐ Flow Estimated?	☐ Ac	uatic Life?	Canopy Closed %	0-20%
Sampler Comments: very low	flow/stagnant				
Lab ID #:		Result		Reporting Limit	<u>Method</u>
% Sat		16.7	%		ASTM D888-09(C)
DO		1.55	mg/L		ASTM D888-09(C)
pH (Field)		7.08	SU		EPA 150.2
Specific Conductance (Field)		384.1	umho/cm		SM2510B
Temperature		19	°C		SM2550B(2)
Turbidity (Hach)		12.6	NTU		EPA 180.1
Air Temp		4	Lookup		Observation
			_00.101		
Sky Conditions			Lookup		Observation

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27 Lookup

0 Lookup

Observation

Observation

Wind Direction

Wind Strength

<b>Lab ID #</b> : 500-206919-16	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	150	mg/L	5	SM2320B
Chloride	12	mg/L	1	EPA 300.0
Hardness (as CaCO3)	180	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	11	mg/L	5	SM2540D
Solids, Total (TS)	280	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	180	mg/L	10	SM2540C
Sulfate	9.1	mg/L	1	EPA 300.0
Calcium (Total)	49	mg/L	0.2	EPA 200.7
Magnesium (Total)	13	mg/L	0.1	EPA 200.7
COD	24	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	0.45	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.21	mg/L	0.05	SM4500P-E
TKN	0.64	mg/L	0.4	SM4500N(Org)-D
TOC	6.9	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48861	Result		Reporting Limit	Method
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	235.9	MPN/100mL	1	SM9223B

Weather Code Definitions							
S	С		WD	WS	AT		
Sky Co	nditions	Wind Direction		Wind Direction		Wind Strength	Air Temp
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32		
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45		
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60		
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75		
5 - Mist				4 - Mod./Strong	5 - 76-85		
6 - Fog				5 - Strong	6 - > 86		
7 - Shower				6 - Gale			

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 SiteID:
 WEM-07-0016
 USGS Hydrologic Unit:
 051202070704

 Stream Name:
 Tributary of Mutton Creek
 County:
 Jackson

**Description:** CR 700 North **Latitude:** 38 59 2.20225 **Longitude:** -85 49 42.77626

**Drainage:** 5.117 **Site Number:** 21T-013

**SiteID:** WEM-07-0016 **Sample Date:** 8/4/2021 **IDEM Sample #**: AB48084

Water Flow Type Riffle Water Appearance Clear Water Depth 

Algae?

Water Flow (cf/sec): 

Flow Estimated? 

Aquatic Life? 

Canopy Closed % 0-20%

**Sampler Comments:** 

Lab ID #:	Result	Reporting Limit	<u>Method</u>
% Sat	73.8 %		ASTM D888-09(C)
DO	6.96 mg/l	_	ASTM D888-09(C)
pH (Field)	7.67 SU		EPA 150.2
Specific Conductance (Field)	424.2 umh	o/cm	SM2510B
Temperature	18.2 °C		SM2550B(2)
Turbidity (Hach)	3.74 NTL	J	EPA 180.1
Air Temp	4 Look	kup	Observation
Sky Conditions	1 Look	kup	Observation
Wind Direction	27 Lool	kup	Observation
Wind Strength	0 Look	kup	Observation
<b>Lab ID #</b> : 500-203424-11	Result	Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	170 mg/l	_ 5	SM2320B
Chloride	19 mg/l	_ 2	EPA 300.0
Hardness (as CaCO3)	200 mg/l	_ 0.91	SM2340B
Solids, Suspended Total, (TSS)	4.4 mg/l	_ 5	SM2540D
Solids, Total (TS)	340 mg/l	_ 10	SM2540B
Solids, Total Dissolved (TDS)	260 mg/l	_ 10	SM2540C
Sulfate	15 mg/l	_ 2	EPA 300.0
Calcium (Total)	55 mg/l	_ 0.2	EPA 200.7
Magnesium (Total)	16 mg/l	_ 0.1	EPA 200.7
COD	9.2 mg/l	_ 10	SM5220C
Nitrogen, Ammonia	< 0.2 mg/l	_ 0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.8 mg/l	_ 0.1	SM4500NO3-F
Phosphorus, Total	0.075 mg/l	_ 0.05	SM4500P-E
TKN	0.42 mg/l	_ 0.4	SM4500N(Org)-D
TOC	2.6 mg/l	_ 1	SM5310C
<b>Lab ID #</b> : AB48084	Result	Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6 MPN	V/100mL 2419.6	SM9223B
E. coli	108.6 MPN	N/100mL 1	SM9223B

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SiteID: WEM-07-0016	Sample Date:	8/16/2021		IDEM Samp	le #: AB47665	
Water Flow Type Run	Water A	Appearance	Clear		Water Depth	✓ Algae?
Nater Flow (cf/sec):	☐ Flow	Estimated?	✓ Aq	uatic Life?	Canopy Closed %	0-20%
Sampler Comments:						
Lab ID #:			Result		Reporting Limit	Method
% Sat			127.8	%		ASTM D888-09(C
DO			10.38	mg/L		ASTM D888-09(C
pH (Field)			8.04	SU		EPA 150.2
Specific Conductance (Field)			416.5	umho/cm		SM2510B
Temperature			25.9	°C		SM2550B(2)
Turbidity (Hach)			4.9	NTU		EPA 180.1
Air Temp			5	Lookup		Observation
Sky Conditions			3	Lookup		Observation
Wind Discation			27	Lookup		Observation
Wind Direction						
Wind Strength Wind Strength SiteID: WEM-07-0016	Sample Date:	9/15/2021		Lookup  IDEM Samp	<b>le #</b> : AB48377	Observation
Wind Strength	•	9/15/2021 Appearance			le #: AB48377 Water Depth	Observation  ✓ Algae?
Wind Strength SiteID: WEM-07-0016	Water A		1 Clear			<b>✓</b> Algae?
Wind Strength  SiteID: WEM-07-0016  Water Flow Type Run	Water A	Appearance	1 Clear	IDEM Samp	Water Depth	<b>✓</b> Algae?
Wind Strength  SiteID: WEM-07-0016  Water Flow Type Run  Water Flow (cf/sec):	Water A	Appearance	1 Clear	IDEM Samp	Water Depth	<b>✓</b> Algae?
Wind Strength  SiteID: WEM-07-0016  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:	Water A	Appearance	Clear	IDEM Samp	Water Depth Canopy Closed %	✓ Algae? 0-20% Method
Wind Strength  SiteID: WEM-07-0016  Water Flow Type Run  Water Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water A	Appearance	Clear Aq Result	IDEM Samp	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C
Wind Strength  SiteID: WEM-07-0016  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water A	Appearance	Clear Aq Result	IDEM Sampi uatic Life? % mg/L	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C
Wind Strength  SiteID: WEM-07-0016  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO	Water A	Appearance	Clear Aq Result 65.5 5.69 7.69	IDEM Sampi uatic Life? % mg/L	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C
Wind Strength  SiteID: WEM-07-0016  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water A	Appearance	Clear Aq Result 65.5 5.69 7.69	uatic Life?  % mg/L SU umho/cm	Water Depth Canopy Closed %	Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2
Wind Strength  SiteID: WEM-07-0016  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field)	Water A	Appearance	Clear Aq Result 65.5 5.69 7.69 380	Uatic Life?  % mg/L SU umho/cm °C	Water Depth Canopy Closed %	✓ Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B
Wind Strength  SiteID: WEM-07-0016  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature	Water A	Appearance	Clear Aq  Result 65.5 5.69 7.69 380 22.8 3.64	Uatic Life?  % mg/L SU umho/cm °C	Water Depth Canopy Closed %	■ Algae?  0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2)
Wind Strength  SiteID: WEM-07-0016  Nater Flow Type Run  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat	Water A	Appearance	Clear Aq  Result  65.5 5.69 7.69 380 22.8 3.64 4	"C" NTU	Water Depth Canopy Closed %	■ Algae?  0-20%  Method  ASTM D888-09(C  ASTM D888-09(C  EPA 150.2  SM2510B  SM2550B(2)  EPA 180.1
Wind Strength  SiteID: WEM-07-0016  Nater Flow Type Run  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp	Water A	Appearance	Clear Aq  Result  65.5 5.69 7.69 380 22.8 3.64 4 8	"We mg/L SU umho/cm °C NTU Lookup	Water Depth Canopy Closed %	■ Algae?  0-20%    Method     ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #:</b> 500-205399-12		Result		Reporting Limit	Method
Alkalinity (as CaCO3)		160	mg/L	5	SM2320B
Chloride		18	mg/L	1	EPA 300.0
Hardness (as CaCO3)		180	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)		5	mg/L	5	SM2540D
Solids, Total (TS)		390	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		260	mg/L	10	SM2540C
Sulfate		13	mg/L	1	EPA 300.0
Calcium (Total)		48	mg/L	0.2	EPA 200.7
Magnesium (Total)		15	mg/L	0.1	EPA 200.7
COD		15	mg/L	10	SM5220C
Nitrogen, Ammonia		< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite		0.18	mg/L	0.1	SM4500NO3-F
Phosphorus, Total			mg/L	0.05	SM4500P-E
TKN		0.65	mg/L	0.4	SM4500N(Org)-D
TOC		4.2	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48377		Result		Reporting Limit	Method
Coliforms (Total)		> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli		> 2419.6	MPN/100mL	2419.6	SM9223B
SiteID: WEM-07-0016	Sample Date: 10/13/2021		IDEM Sample #	#: AB48857	
Water Flow Type Run	Water Appearance	Clear	•	ater Depth	✓ Algae?
		_		•	-
Water Flow (cf/sec):	☐ Flow Estimated?	∐ Ac	quatic Life?	Canopy Closed %	0-20%
Sampler Comments:					
Lab ID #:		Result		Reporting Limit	<u>Method</u>
% Sat		74	%		ASTM D888-09(C)
DO		7.29	mg/L		ASTM D888-09(C)
pH (Field)		7.38			EPA 150.2
Specific Conductance (Field)		452.3	umho/cm		SM2510B
Temperature		16.1	°C		SM2550B(2)
Turbidity (Hach)		4.4	NTU		EPA 180.1
Air Temp		4	Lookup		Observation
Sky Conditions		1	Lookup		Observation

27 Lookup

0 Lookup

Observation

Observation

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Wind Direction

Wind Strength

<b>Lab ID #</b> : 500-206919-12	<u>Result</u>		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	180	mg/L	5	SM2320B
Chloride	24	mg/L	1	EPA 300.0
Hardness (as CaCO3)	210	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	2.4	mg/L	5	SM2540D
Solids, Total (TS)	320	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	250	mg/L	10	SM2540C
Sulfate	15	mg/L	1	EPA 300.0
Calcium (Total)	58	mg/L	0.2	EPA 200.7
Magnesium (Total)	17	mg/L	0.1	EPA 200.7
COD	17	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	0.91	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.046	mg/L	0.05	SM4500P-E
TKN	0.52	mg/L	0.4	SM4500N(Org)-D
тос	4.2	mg/L	1	SM5310C
<b>Lab ID #:</b> AB48857	Result		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	140.1	MPN/100mL	1	SM9223B

	Weather Code Definitions							
_	SC		WD	ws	AT			
Sky Co	onditions	١ ١	Wind Direction	Wind Strength	Air Temp			
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32			
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45			
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60			
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75			
5 - Mist				4 - Mod./Strong	5 - 76-85			
6 - Fog				5 - Strong	6 - > 86			
7 - Shower				6 - Gale				

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SiteID: WEM080-0027 **USGS Hydrologic Unit:** 051202070704 Stream Name: Mutton Creek County: Jackson Description: CR 800 North Latitude: 38 59 55.12075 Longitude: -85 48 22.97647 Drainage: 18.199 Site Number: 21T-014 SiteID: WEM080-0027 Sample Date: 8/3/2021 IDEM Sample #: AB48081 ☐ Algae? Clear **Water Depth** Water Flow Type Run Water Appearance ☐ Flow Estimated? Aquatic Life? Water Flow (cf/sec): Canopy Closed % Sampler Comments: Lab ID #: Result **Reporting Limit** Method 65 % ASTM D888-09(C) % Sat ASTM D888-09(C) DO 5.89 mg/L 7.52 SU EPA 150.2 pH (Field) Specific Conductance (Field) 360.7 umho/cm SM2510B 20.2 °C Temperature SM2550B(2) 11 NTU Turbidity (Hach) EPA 180.1 Air Temp 4 Lookup Observation Sky Conditions 1 Lookup Observation Wind Direction 27 Lookup Observation Wind Strength 0 Lookup Observation Lab ID #: 500-203424-1 **Reporting Limit** Result **Method** Alkalinity (as CaCO3) 150 mg/L 5 SM2320B Chloride 12 mg/L 1 EPA 300.0 Hardness (as CaCO3) 170 mg/L 0.91 SM2340B 8.4 mg/L Solids, Suspended Total, (TSS) SM2540D 5 Solids, Total (TS) 260 mg/L 10 SM2540B Solids, Total Dissolved (TDS) 250 mg/L 10 SM2540C Sulfate 12 mg/L 1 EPA 300.0 Calcium (Total) 46 mg/L 0.2 EPA 200.7 Magnesium (Total) 12 mg/L 0.1 EPA 200.7 COD 17 mg/L 10 SM5220C Nitrogen, Ammonia < 0.2 mg/L 0.2 EPA 350.1 Nitrogen, Nitrate+Nitrite 0.12 mg/L 0.1 SM4500NO3-F 0.062 mg/L 0.05 SM4500P-E Phosphorus, Total 0.53 mg/L SM4500N(Org)-D TKN 0.4 TOC 3.9 mg/L 1 SM5310C Lab ID #: AB48081 Result **Reporting Limit Method** 

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> 2419.6 MPN/100mL

920.8 MPN/100mL

2419.6

1

SM9223B

SM9223B

Coliforms (Total)

E. coli

itelD: WEM080-0027	<b>Sample Date</b> : 8/16/2021	IDEM Samp	ole #: AB47666	
ater Flow Type Pool	Water Appearance	Clear	Water Depth	✓ Algae?
ater Flow (cf/sec):	☐ Flow Estimated?	✓ Aquatic Life?	Canopy Closed %	0-20%
ampler Comments: Saw And	cyronyx and Enochrus adults in s	ample, not picked (not f	ound during 15 minute pic	k).
.ab ID #:		Result	Reporting Limit	<u>Method</u>
% Sat		57 %		ASTM D888-09(C)
DO		4.84 mg/L		ASTM D888-09(C)
pH (Field)		7.4 SU		EPA 150.2
Specific Conductance (Field)		373.8 umho/cm		SM2510B
Temperature		23.7 °C		SM2550B(2)
Turbidity (Hach)		10.4 NTU		EPA 180.1
Air Temp		5 Lookup		Observation
Sky Conditions		3 Lookup		Observation
Wind Direction		27 Lookup		Observation
Wind Strength		1 Lookup		Observation
itelD: WEM080-0027	<b>Sample Date:</b> 9/14/2021	IDEM Samp	ole #: AB48374	
ater Flow Type Pool	Water Appearance	Murky	Water Depth	☐ Algae?
••	Water Appearance  Flow Estimated?	Murky Aquatic Life?	Water Depth  Canopy Closed %	
ater Flow Type Pool ater Flow (cf/sec): ampler Comments:		_	-	
ater Flow (cf/sec):		_	-	
ater Flow (cf/sec): ampler Comments:		☐ Aquatic Life?	Canopy Closed %	0-20%
ater Flow (cf/sec): ampler Comments: ab ID #:		Aquatic Life?	Canopy Closed %	0-20%
ater Flow (cf/sec): ampler Comments: ab ID #:		Aquatic Life?  Result  65.9 %	Canopy Closed %	0-20%  Method  ASTM D888-09(C)
ater Flow (cf/sec): ampler Comments:  ab ID #:  % Sat DO		Aquatic Life?  Result  65.9 % 5.84 mg/L	Canopy Closed %	0-20%  Method  ASTM D888-09(C) ASTM D888-09(C)
ater Flow (cf/sec): ampler Comments:  ab ID #:  % Sat DO pH (Field)		Result  65.9 % 5.84 mg/L 7.3 SU	Canopy Closed %	0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2
ater Flow (cf/sec): ampler Comments:  ab ID #:  % Sat DO pH (Field) Specific Conductance (Field)		Result  65.9 % 5.84 mg/L 7.3 SU 391.8 umho/cm	Canopy Closed %	0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B
ater Flow (cf/sec): ampler Comments:  ab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature		Aquatic Life?  Result  65.9 % 5.84 mg/L 7.3 SU 391.8 umho/cm 21.7 °C	Canopy Closed %	0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2)
ater Flow (cf/sec): ampler Comments:  ab ID #:  % Sat		Aquatic Life?  Result  65.9 % 5.84 mg/L 7.3 SU 391.8 umho/cm 21.7 °C 4.25 NTU	Canopy Closed %	0-20%  Method  ASTM D888-09(C)  ASTM D888-09(C)  EPA 150.2  SM2510B  SM2550B(2)  EPA 180.1
later Flow (cf/sec): ampler Comments:  .ab ID #:  % Sat		Aquatic Life?  Result  65.9 % 5.84 mg/L 7.3 SU 391.8 umho/cm 21.7 °C 4.25 NTU 4 Lookup	Canopy Closed %	0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #</b> : 500-205399-1		Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)		180	mg/L	5	SM2320B
Chloride		15	mg/L	0.4	EPA 300.0
Hardness (as CaCO3)		180	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)		4.4	mg/L	5	SM2540D
Solids, Total (TS)		330	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		190	mg/L	10	SM2540C
Sulfate		4.1	mg/L	0.2	EPA 300.0
Calcium (Total)		47	mg/L	0.2	EPA 200.7
Magnesium (Total)		14	mg/L	0.1	EPA 200.7
COD		12	mg/L	10	SM5220C
Nitrogen, Ammonia		< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite		0.062	mg/L	0.1	SM4500NO3-F
Phosphorus, Total		0.069	mg/L	0.05	SM4500P-E
TKN		0.74	mg/L	0.4	SM4500N(Org)-D
TOC		4.8	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48374		Result		Reporting Limit	Method
Coliforms (Total)		> 2419.6	MPN/100mL	2419.6	SM9223B
Coliforms (Total) E. coli			MPN/100mL MPN/100mL	2419.6 1	SM9223B SM9223B
	Sample Date: 10/12/2021 Water Appearance		MPN/100mL  IDEM Sample	1	
E. coli SiteID: WEM080-0027	-	50.4	MPN/100mL  IDEM Sample	1 #: AB48854	SM9223B
E. coli SiteID: WEM080-0027 Water Flow Type Run	Water Appearance	50.4	MPN/100mL  IDEM Sample :	1 #: AB48854 /ater Depth	SM9223B
E. coli SiteID: WEM080-0027  Nater Flow Type Run  Nater Flow (cf/sec):	Water Appearance	50.4	MPN/100mL  IDEM Sample :	1 #: AB48854 /ater Depth	SM9223B
E. coli  SiteID: WEM080-0027  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:	Water Appearance	Clear	MPN/100mL  IDEM Sample :  Watic Life?	1 #: AB48854 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%
E. coli  SiteID: WEM080-0027  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	Clear Aq Result	MPN/100mL  IDEM Sample :  Watic Life?	1 #: AB48854 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method
E. coli  SiteID: WEM080-0027  Nater Flow Type Run  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:	Water Appearance	Clear Aq Result	IDEM Sample :  Wattic Life?	1 #: AB48854 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C)
E. coli  SiteID: WEM080-0027  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO	Water Appearance	Clear Aq Result 59.7 5.42 7.12	IDEM Sample :  Wattic Life?	1 #: AB48854 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C)
E. coli  SiteID: WEM080-0027  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field)	Water Appearance	Clear Aq  Result  59.7 5.42 7.12 391.6	MPN/100mL  IDEM Sample :  Watter Life?	1 #: AB48854 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2
E. coli  SiteID: WEM080-0027  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	Clear  Result  59.7 5.42 7.12 391.6 20	MPN/100mL  IDEM Sample :  Watter Life?  %  mg/L SU umho/cm	1 #: AB48854 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B
E. coli  SiteID: WEM080-0027  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	50.4  Clear  Result  59.7 5.42 7.12 391.6 20 11.7	MPN/100mL  IDEM Sample :  Wiguatic Life?  %  mg/L SU umho/cm °C	1 #: AB48854 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2)
E. coli  SiteID: WEM080-0027  Nater Flow Type Run  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat	Water Appearance	50.4  Clear  Result  59.7 5.42 7.12 391.6 20 11.7 4	MPN/100mL  IDEM Sample :  Wiguatic Life?  % mg/L SU umho/cm °C NTU	1 #: AB48854 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1
E. coli  SiteID: WEM080-0027  Nater Flow Type Run  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp	Water Appearance	So.4  Clear  Result  59.7 5.42 7.12 391.6 20 11.7 4	MPN/100mL  IDEM Sample :  Wattic Life?  % mg/L SU umho/cm °C NTU Lookup	1 #: AB48854 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #:</b> 500-206919-1	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	150	mg/L	5	SM2320B
Chloride	15	mg/L	1	EPA 300.0
Hardness (as CaCO3)	180	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	9.2	mg/L	5	SM2540D
Solids, Total (TS)	240	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	210	mg/L	10	SM2540C
Sulfate	22	mg/L	1	EPA 300.0
Calcium (Total)	50	mg/L	0.2	EPA 200.7
Magnesium (Total)	14	mg/L	0.1	EPA 200.7
COD	19	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	0.55	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.07	mg/L	0.05	SM4500P-E
TKN	0.55	mg/L	0.4	SM4500N(Org)-D
TOC	5.6	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48854	Result		Reporting Limit	Method
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	272.3	MPN/100mL	1	SM9223B

Weather Code Definitions						
S	С		WD	WS	AT	
Sky Co	nditions	1	Wind Direction	Wind Strength	Air Temp	
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32	
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45	
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60	
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75	
5 - Mist				4 - Mod./Strong	5 - 76-85	
6 - Fog				5 - Strong	6 - > 86	
7 - Shower				6 - Gale		

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WEM080-0025 **USGS Hydrologic Unit:** 051202070704 SiteID: Stream Name: Mutton Creek County: Jennings Description: CR 300 North Latitude: 39 40.68763 Longitude: -85 45 55.47689 Drainage: 8.239 Site Number: 21T-015 SiteID: WEM080-0025 Sample Date: 8/3/2021 IDEM Sample #: AB48092 ☐ Algae? Clear **Water Depth** Water Flow Type Run Water Appearance ☐ Flow Estimated? Aquatic Life? Water Flow (cf/sec): Canopy Closed % Sampler Comments: Lab ID #: Result **Reporting Limit** Method 71 % ASTM D888-09(C) % Sat ASTM D888-09(C) DO 6.52 mg/L 7.67 SU EPA 150.2 pH (Field) Specific Conductance (Field) 352 umho/cm SM2510B 19.3 °C Temperature SM2550B(2) 6.64 NTU Turbidity (Hach) EPA 180.1 4 Lookup Air Temp Observation Sky Conditions 1 Lookup Observation Wind Direction 27 Lookup Observation Wind Strength 0 Lookup Observation Lab ID #: 500-203424-2 **Reporting Limit** Result **Method** Alkalinity (as CaCO3) 150 mg/L 5 SM2320B Chloride 12 mg/L 1 EPA 300.0 Hardness (as CaCO3) 180 mg/L 0.91 SM2340B Solids, Suspended Total, (TSS) 5.6 mg/L SM2540D 5 Solids, Total (TS) 300 mg/L 10 SM2540B Solids, Total Dissolved (TDS) 190 mg/L 10 SM2540C Sulfate 20 mg/L 1 EPA 300.0 Calcium (Total) 51 mg/L 0.2 EPA 200.7 Magnesium (Total) 12 mg/L 0.1 EPA 200.7 COD 10 SM5220C 11 mg/L Nitrogen, Ammonia < 0.2 mg/L 0.2 EPA 350.1 Nitrogen, Nitrate+Nitrite 0.9 mg/L 0.1 SM4500NO3-F 0.025 mg/L 0.05 SM4500P-E Phosphorus, Total 0.51 mg/L SM4500N(Org)-D TKN 0.4 TOC 2.7 mg/L 1 SM5310C Lab ID #: AB48092 Result **Reporting Limit Method** 

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> 2419.6 MPN/100mL

387.3 MPN/100mL

2419.6

1

SM9223B

SM9223B

Coliforms (Total)

E. coli

itelD: WEM080-0025	<b>Sample Date:</b> 8/16/2021	IDEM Samp	le #: AB47667	
/ater Flow Type Pool	Water Appearance	Clear	Water Depth	☐ Algae?
/ater Flow (cf/sec):	☐ Flow Estimated?	✓ Aquatic Life?	Canopy Closed %	0-20%
ampler Comments:				
_ab ID #:		Result	Reporting Limit	<u>Method</u>
% Sat		54.3 %		ASTM D888-09(C)
DO		4.77 mg/L		ASTM D888-09(C)
pH (Field)		7.39 SU		EPA 150.2
Specific Conductance (Field)		369.9 umho/cm		SM2510B
Temperature		22.1 °C		SM2550B(2)
Turbidity (Hach)		6.89 NTU		EPA 180.1
Air Temp		4 Lookup		Observation
Sky Conditions		4 Lookup		Observation
Wind Direction		18 Lookup		Observation
Wind Strength	Sample Date: 9/14/2021	1 Lookup	No #- AR48385	Observation
Wind Strength iteID: WEM080-0025	Sample Date: 9/14/2021 Water Appearance	IDEM Samp		
Wind Strength itelD: WEM080-0025 //ater Flow Type Run	Water Appearance	IDEM Samp	Water Depth	☐ Algae?
Wind Strength iteID: WEM080-0025 /ater Flow Type Run /ater Flow (cf/sec):	•	IDEM Samp		☐ Algae?
Wind Strength itelD: WEM080-0025 //ater Flow Type Run	Water Appearance	IDEM Samp	Water Depth	☐ Algae?
Wind Strength iteID: WEM080-0025 /ater Flow Type Run /ater Flow (cf/sec):	Water Appearance	IDEM Samp	Water Depth	☐ Algae?
Wind Strength  itelD: WEM080-0025  /ater Flow Type Run  /ater Flow (cf/sec):  ampler Comments:	Water Appearance	IDEM Samp Clear Aquatic Life?	Water Depth Canopy Closed %	☐ Algae? 0-20% Method
Wind Strength  iteID: WEM080-0025  /ater Flow Type Run  /ater Flow (cf/sec):  ampler Comments:  _ab ID #:	Water Appearance	IDEM Samp Clear Aquatic Life?  Result	Water Depth Canopy Closed %	☐ <b>Algae?</b> 0-20%
Wind Strength  itelD: WEM080-0025  /ater Flow Type Run  /ater Flow (cf/sec): ampler Comments:  _ab ID #:  % Sat	Water Appearance	IDEM Samp Clear Aquatic Life?  Result 60.6 %	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C)
Wind Strength  itelD: WEM080-0025  later Flow Type Run  later Flow (cf/sec): ampler Comments:  ab ID #:  % Sat DO	Water Appearance	IDEM Samp Clear Aquatic Life?  Result  60.6 % 5.32 mg/L	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C)
Wind Strength  itelD: WEM080-0025  later Flow Type Run  later Flow (cf/sec): ampler Comments:  ab ID #:  % Sat DO pH (Field)	Water Appearance	IDEM Samp Clear Aquatic Life?  Result  60.6 % 5.32 mg/L 7.44 SU	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2
Wind Strength  iteID: WEM080-0025  /ater Flow Type Run  /ater Flow (cf/sec): ampler Comments:  _ab ID #:  % Sat	Water Appearance	IDEM Samp Clear Aquatic Life?  Result  60.6 % 5.32 mg/L 7.44 SU 345.4 umho/cm	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B
Wind Strength  itelD: WEM080-0025  /ater Flow Type Run  /ater Flow (cf/sec): ampler Comments:  _ab ID #:  % Sat	Water Appearance	IDEM Samp Clear Aquatic Life?  Result  60.6 % 5.32 mg/L 7.44 SU 345.4 umho/cm 21.7 °C	Water Depth Canopy Closed %	☐ Algae?  0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2)
Wind Strength  itelD: WEM080-0025  /ater Flow Type Run  /ater Flow (cf/sec): ampler Comments:  _ab ID #:  % Sat	Water Appearance	Clear	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1
Wind Strength  itelD: WEM080-0025  /ater Flow Type Run  /ater Flow (cf/sec): ampler Comments:  _ab ID #:  % Sat	Water Appearance	Clear	Water Depth Canopy Closed %	☐ Algae?  0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #:</b> 500-205399-2		Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)		150	mg/L	5	SM2320B
Chloride		7.9	mg/L	0.4	EPA 300.0
Hardness (as CaCO3)		170	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)		6.2	mg/L	5	SM2540D
Solids, Total (TS)		310	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		170	mg/L	10	SM2540C
Sulfate		16	mg/L	0.4	EPA 300.0
Calcium (Total)		47	mg/L	0.2	EPA 200.7
Magnesium (Total)		13	mg/L	0.1	EPA 200.7
COD		15	mg/L	10	SM5220C
Nitrogen, Ammonia		< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite		< 0.1	mg/L	0.1	SM4500NO3-F
Phosphorus, Total		0.053	-	0.05	SM4500P-E
TKN			mg/L	0.4	SM4500N(Org)-D
TOC		3.8	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48385		Result		Reporting Limit	Method
Coliforms (Total)		> 2419.6	MPN/100mL	2419.6	SM9223B
Coliforms (Total) E. coli			MPN/100mL MPN/100mL	2419.6 1	SM9223B SM9223B
E. coli SitelD: WEM080-0025	Sample Date: 10/12/2021 Water Appearance	209.8	MPN/100mL  IDEM Sample	1 #: AB48865	SM9223B
E. coli SiteID: WEM080-0025 Water Flow Type Run	Water Appearance	209.8	MPN/100mL  IDEM Sample :	1 #: AB48865 /ater Depth	SM9223B
E. coli SitelD: WEM080-0025	-	209.8	MPN/100mL  IDEM Sample	1 #: AB48865	SM9223B
E. coli SiteID: WEM080-0025  Water Flow Type Run  Water Flow (cf/sec):	Water Appearance	209.8	MPN/100mL  IDEM Sample :	1 #: AB48865 /ater Depth	SM9223B
E. coli  SiteID: WEM080-0025  Water Flow Type Run  Water Flow (cf/sec):  Sampler Comments:	Water Appearance	Clear	MPN/100mL  IDEM Sample :  Watic Life?	#: AB48865 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method
E. coli  SiteID: WEM080-0025  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	Clear Aq Result	MPN/100mL  IDEM Sample :  Watic Life?	#: AB48865 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C
E. coli  SiteID: WEM080-0025  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	Clear Aq Result	IDEM Sample :  Wattic Life?	#: AB48865 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C
E. coli  SiteID: WEM080-0025  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO	Water Appearance	209.8  Clear  Aq  Result  49 4.46 7.24	IDEM Sample :  Wattic Life?	#: AB48865 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C
E. coli  SiteID: WEM080-0025  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field)	Water Appearance	209.8  Clear  Aq  Result  49 4.46 7.24	MPN/100mL  IDEM Sample :  Watter Life?  %  mg/L SU umho/cm	#: AB48865 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2
E. coli  SiteID: WEM080-0025  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	Clear  Result  49 4.46 7.24 405.5 19.9	MPN/100mL  IDEM Sample :  Wiguatic Life?  %  mg/L SU umho/cm °C	#: AB48865 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B
E. coli  SiteID: WEM080-0025  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	209.8  Clear  Aq  Result  49  4.46  7.24  405.5  19.9  5.15	MPN/100mL  IDEM Sample :  Watter Life?  %  mg/L SU umho/cm	#: AB48865 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2)
E. coli  SiteID: WEM080-0025  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp	Water Appearance	Clear  Result  49 4.46 7.24 405.5 19.9 5.15 4	MPN/100mL  IDEM Sample :  Wattic Life?  % mg/L SU umho/cm °C NTU Lookup	#: AB48865 /ater Depth Canopy Closed %	Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2) EPA 180.1
E. coli  SiteID: WEM080-0025  Nater Flow Type Run  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat	Water Appearance	Clear  Result  49 4.46 7.24 405.5 19.9 5.15 4	MPN/100mL  IDEM Sample :  Wiguatic Life?  % mg/L SU umho/cm °C NTU	#: AB48865 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #</b> : 500-206919-2	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	160	mg/L	5	SM2320B
Chloride	13	mg/L	1	EPA 300.0
Hardness (as CaCO3)	200	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	4.2	mg/L	5	SM2540D
Solids, Total (TS)	250	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	200	mg/L	10	SM2540C
Sulfate	24	mg/L	1	EPA 300.0
Calcium (Total)	57	mg/L	0.2	EPA 200.7
Magnesium (Total)	13	mg/L	0.1	EPA 200.7
COD	14	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	0.18	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.087	mg/L	0.05	SM4500P-E
TKN	0.45	mg/L	0.4	SM4500N(Org)-D
TOC	5	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48865	Result		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	435.2	MPN/100mL	1	SM9223B

	Weather Code Definitions						
S	C		WD	WS	AT		
Sky Co	nditions	1	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32		
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45		
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60		
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75		
5 - Mist				4 - Mod./Strong	5 - 76-85		
6 - Fog				5 - Strong	6 - > 86		
7 - Shower				6 - Gale			

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 SiteID:
 WEM080-0013
 USGS Hydrologic Unit:
 051202070703

 Stream Name:
 Storm Creek Ditch
 County:
 Jackson

**Description:** CR 400 North **Latitude:** 38 56 25.99130 **Longitude:** -85 48 21.34228

**Drainage**: 17.513 **Site Number**: 21T-016

**SitelD:** WEM080-0013 **Sample Date:** 8/4/2021 **IDEM Sample #:** AB48087

Water Flow Type Glide Water Appearance Brown Water Depth Algae?

Water Flow (cf/sec): 

Flow Estimated? 

Aquatic Life? 

Canopy Closed % 0-20%

Sampler Comments: Almost stagnant/not moving, some duckweed present

Lab ID #:	Result		Reporting Limit	Method
% Sat	9.6	%		ASTM D888-09(C)
DO	0.84	mg/L		ASTM D888-09(C)
pH (Field)	7.12	SU		EPA 150.2
Specific Conductance (Field)	351.5	umho/cm		SM2510B
Temperature	20.8	°C		SM2550B(2)
Turbidity (Hach)	14.5	NTU		EPA 180.1
Air Temp	4	Lookup		Observation
Sky Conditions	1	Lookup		Observation
Wind Direction	27	Lookup		Observation
Wind Strength	0	Lookup		Observation
<b>Lab ID #</b> : 500-203424-15	<u>Result</u>		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	150	mg/L	5	SM2320B
Chloride	11	mg/L	0.4	EPA 300.0
Hardness (as CaCO3)	160	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	18	mg/L	5	SM2540D
Solids, Total (TS)	320	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	190	mg/L	10	SM2540C
Sulfate	7.1	mg/L	0.2	EPA 300.0
Calcium (Total)	45	mg/L	0.2	EPA 200.7
Magnesium (Total)	11	mg/L	0.1	EPA 200.7
COD	20	mg/L	10	SM5220C
Nitrogen, Ammonia	0.7	mg/L	0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.051	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.1	mg/L	0.05	SM4500P-E
TKN		mg/L	0.4	SM4500N(Org)-D
TOC	5.6	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48087	Result		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	81.3	MPN/100mL	1	SM9223B

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SiteID: WEM080-0013 Sample Date: 8/17/2021 IDEM Sample #: AB47668 Water Depth ✓ Algae? **Water Flow Type** Glide Water Appearance Sheen ☐ Flow Estimated? ✓ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% Sampler Comments: Canoe site, entirely a deep canal, no kick Lab ID #: Result **Reporting Limit Method** 2.1 % % Sat ASTM D888-09(C) DO 0.18 mg/L ASTM D888-09(C) 7.12 SU pH (Field) EPA 150.2 Specific Conductance (Field) 388.8 umho/cm SM2510B Temperature 22.7 °C SM2550B(2) Turbidity (Hach) 9.73 NTU EPA 180.1 Air Temp 4 Lookup Observation Sky Conditions 4 Lookup Observation Wind Direction 9 Lookup Observation Wind Strength 0 Lookup Observation SiteID: WEM080-0013 Sample Date: IDEM Sample #: AB48380 9/15/2021 ☐ Algae? **Water Depth** Water Flow Type Glide Water Appearance Brown ☐ Flow Estimated? ■ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Excessive duckweed, little to no flow Lab ID #: **Reporting Limit Method** Result 3.6 % ASTM D888-09(C) % Sat DO 0.28 mg/L ASTM D888-09(C) pH (Field) 6.99 SU EPA 150.2 Specific Conductance (Field) 405.1 umho/cm SM2510B 20.8 °C SM2550B(2) Temperature Turbidity (Hach) 15.3 NTU EPA 180.1 Air Temp 4 Lookup Observation Sky Conditions Observation 4 Lookup Wind Direction 27 Lookup Observation Wind Strength 1 Lookup Observation

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<b>Lab ID #:</b> 500-205399-14	<u>Result</u>		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	140	mg/L	5	SM2320B
Chloride	11	mg/L	0.4	EPA 300.0
Hardness (as CaCO3)	140	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	19	mg/L	13	SM2540D
Solids, Total (TS)	350	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	280	mg/L	10	SM2540C
Sulfate	7.7	mg/L	0.2	EPA 300.0
Calcium (Total)	40	mg/L	0.2	EPA 200.7
Magnesium (Total)	10	mg/L	0.1	EPA 200.7
COD	41	mg/L	10	SM5220C
Nitrogen, Ammonia	0.18	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	< 0.1	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.1	mg/L	0.05	SM4500P-E
TKN	1.5	mg/L	0.4	SM4500N(Org)-D
TOC	15	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48380	Result		Reporting Limit	Method
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	98.7	MPN/100mL	1	SM9223B

**SiteID:** WEM080-0013 **Sample Date:** 10/13/2021 **IDEM Sample #:** AB48860

Water Flow Type Glide Water Appearance Murky Water Depth ✓ Algae?

Water Flow (cf/sec): ☐ Flow Estimated? ☑ Aquatic Life? Canopy Closed % 0-20%

Sampler Comments: very low flow/stagnant

ıb ID #:	Result		Reporting Limit	<u>Method</u>
% Sat	5.1	%		ASTM D888-09(C)
DO	0.49	mg/L		ASTM D888-09(C)
pH (Field)	7.02	SU		EPA 150.2
Specific Conductance (Field)	399.5	umho/cm		SM2510B
Temperature	18.7	°C		SM2550B(2)
Turbidity (Hach)	7.54	NTU		EPA 180.1
Air Temp	4	Lookup		Observation
Sky Conditions	1	Lookup		Observation
Wind Direction	27	Lookup		Observation
Wind Strength	0	Lookup		Observation

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Lab ID #: 500-206919-15	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	180 m	g/L	5	SM2320B
Chloride	15 m	g/L	0.4	EPA 300.0
Hardness (as CaCO3)	180 m	g/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	10 m	g/L	6.3	SM2540D
Solids, Total (TS)	280 m	g/L	10	SM2540B
Solids, Total Dissolved (TDS)	200 m	g/L	10	SM2540C
Sulfate	11 m	g/L	0.4	EPA 300.0
Calcium (Total)	50 m	g/L	0.2	EPA 200.7
Magnesium (Total)	13 m	g/L	0.1	EPA 200.7
COD	28 m	g/L	10	SM5220C
Nitrogen, Ammonia	0.18 m	g/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	< 0.1 m	g/L	0.1	SM4500NO3-F
Phosphorus, Total	0.25 m	g/L	0.05	SM4500P-E
TKN	0.7 m	g/L	0.4	SM4500N(Org)-D
TOC	6.8 m	g/L	1	SM5310C
<b>Lab ID #</b> : AB48860	Result		Reporting Limit	Method
Coliforms (Total)	> 2419.6 M	PN/100mL	2419.6	SM9223B
E. coli	107.6 M	PN/100mL	1	SM9223B

		W	eather Code Def	initions	
Sky Co	C nditions	,	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear	8 - Rain	h		0 - Calm	1 - < 32
		U	North (0 Degrees)		
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

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 SiteID:
 WEM080-0005
 USGS Hydrologic Unit:
 051202070703

 Stream Name:
 Tributary to Richart Lake
 County:
 Jennings

**Description:** CR 900 West **Latitude:** 38 58 10.31116 **Longitude:** -85 46 38.64888

**Drainage:** 1.529 **Site Number:** 21T-017

**SiteID:** WEM080-0005 **Sample Date:** 8/4/2021 **IDEM Sample #:** AB48086

Water Flow Type Pool Water Appearance Clear Water Depth Algae?

Water Flow (cf/sec): ☐ Flow Estimated? ✓ Aquatic Life? Canopy Closed % 0-20%

Sampler Comments: very low flow

Lab ID #:	Result		Reporting Limit	Method
% Sat	51.2	%		ASTM D888-09(C)
DO	4.86	mg/L		ASTM D888-09(C)
pH (Field)	7.4	SU		EPA 150.2
Specific Conductance (Field)	523	umho/cm		SM2510B
Temperature	18.1	°C		SM2550B(2)
Turbidity (Hach)	6.01	NTU		EPA 180.1
Air Temp	4	Lookup		Observation
Sky Conditions	1	Lookup		Observation
Wind Direction	27	Lookup		Observation
Wind Strength	1	Lookup		Observation
<b>Lab ID #</b> : 500-203424-13	Result		Reporting Limit	Method
Alkalinity (as CaCO3)	170	mg/L	5	SM2320B
Chloride	32	mg/L	4	EPA 300.0
Hardness (as CaCO3)	210	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	6	mg/L	5	SM2540D
Solids, Total (TS)	430	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	510	mg/L	10	SM2540C
Sulfate	46	mg/L	4	EPA 300.0
Calcium (Total)	54	mg/L	0.2	EPA 200.7
Magnesium (Total)	18	mg/L	0.1	EPA 200.7
COD	21	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.1	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.068	mg/L	0.05	SM4500P-E
TKN	0.29	mg/L	0.4	SM4500N(Org)-D
TOC	3.8	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48086	Result		Reporting Limit	Method
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	1119.9	MPN/100mL	1	SM9223B

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SiteID: WEM080-0005 Sample Date: 8/17/2021 IDEM Sample #: AB47669 Water Depth ✓ Algae? Water Flow Type Pool Water Appearance Clear ☐ Flow Estimated? ✓ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Isolated pools Lab ID #: Result **Reporting Limit Method** 4 % ASTM D888-09(C) % Sat DO 0.36 mg/L ASTM D888-09(C) pH (Field) 7.33 SU EPA 150.2 Specific Conductance (Field) 543 umho/cm SM2510B Temperature 22.3 °C SM2550B(2) Turbidity (Hach) 5.93 NTU EPA 180.1 Air Temp 6 Lookup Observation Sky Conditions 4 Lookup Observation Wind Direction 27 Lookup Observation Wind Strength 1 Lookup Observation SiteID: WEM080-0005 Sample Date: 10/13/2021 IDEM Sample #: AB48859 ☐ Algae? **Water Depth** Water Flow Type Water Appearance Clear ☐ Flow Estimated? ■ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** very low flow Lab ID #: **Reporting Limit Method** Result 22.9 % ASTM D888-09(C) % Sat DO 2.24 mg/L ASTM D888-09(C) pH (Field) 7.28 SU EPA 150.2 Specific Conductance (Field) 639 umho/cm SM2510B Temperature 16.9 °C SM2550B(2) Turbidity (Hach) 4.12 NTU EPA 180.1 Air Temp 4 Lookup Observation Sky Conditions Observation 1 Lookup Wind Direction 27 Lookup Observation Wind Strength 0 Lookup Observation

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<b>Lab ID #:</b> 500-206919-14	<u>Result</u>		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	220	mg/L	5	SM2320B
Chloride	53	mg/L	2	EPA 300.0
Hardness (as CaCO3)	250	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	3	mg/L	5	SM2540D
Solids, Total (TS)	420	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	330	mg/L	10	SM2540C
Sulfate	38	mg/L	2	EPA 300.0
Calcium (Total)	64	mg/L	0.2	EPA 200.7
Magnesium (Total)	22	mg/L	0.1	EPA 200.7
COD	24	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	< 0.1	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.12	mg/L	0.05	SM4500P-E
TKN	0.52	mg/L	0.4	SM4500N(Org)-D
TOC	7.1	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48859	Result		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	307.6	MPN/100mL	1	SM9223B

		W	eather Code Def	initions	
S	C		WD	WS	AT
Sky Co	nditions	1	Wind Direction	Wind Strength	Air Temp
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

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SiteID: WEM-07-0014 **USGS Hydrologic Unit:** 051202070703 Stream Name: Storm Creek County: Jennings Description: Base Road 38 58 59.52422 **Longitude**: -85 47 12.15271 Drainage: 9.378 Site Number: 21T-018 SiteID: WEM-07-0014 Sample Date: 8/4/2021 IDEM Sample #: AB48085 ☐ Algae? Water Flow Type **Water Appearance** Clear Water Depth Run ☐ Flow Estimated? ■ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Lab ID #: **Reporting Limit Method** Result 71 % ASTM D888-09(C) % Sat DO ASTM D888-09(C) 6.63 mg/L pH (Field) 7.43 SU EPA 150.2 Specific Conductance (Field) 414.8 umho/cm SM2510B Temperature 18.8 °C SM2550B(2) Turbidity (Hach) 5.15 NTU EPA 180.1 Air Temp 4 Lookup Observation Sky Conditions Observation 1 Lookup Wind Direction 27 Lookup Observation

Wind Strength	0 1	Lookup		Observation
<b>Lab ID #</b> : 500-203424-12	Result		Reporting Limit	Method
Alkalinity (as CaCO3)	180 r	mg/L	5	SM2320B
Chloride	14 r	mg/L	1	EPA 300.0
Hardness (as CaCO3)	190 r	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	4.2 r	mg/L	5	SM2540D
Solids, Total (TS)	320 r	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	280 r	mg/L	10	SM2540C
Sulfate	15 r	mg/L	1	EPA 300.0
Calcium (Total)	53 r	mg/L	0.2	EPA 200.7
Magnesium (Total)	13 r	mg/L	0.1	EPA 200.7
COD	12 r	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2 r	mg/L	0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.81 r	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.062 r		0.05	SM4500P-E
TKN	0.41 r	-	0.4	SM4500N(Org)-D
TOC	2.8 r		1	SM5310C
<b>Lab ID #</b> : AB48085	Result		Reporting Limit	Method
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	648.8	MPN/100mL	1	SM9223B

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SiteID: WEM-07-0014	Sample Date: 8/	16/2021	IDEM Samp	ole #: AB47670	
Water Flow Type Pool	Water App	pearance	Clear	Water Depth	✓ Algae?
Nater Flow (cf/sec):	☐ Flow Es	stimated?	✓ Aquatic Life?	Canopy Closed %	0-20%
Sampler Comments:					
Lab ID #:		<u>F</u>	<u>Result</u>	Reporting Limit	Method
% Sat			79 %		ASTM D888-09(C
DO			6.77 mg/L		ASTM D888-09(C)
pH (Field)			7.6 SU		EPA 150.2
Specific Conductance (Field)			311.3 umho/cm		SM2510B
Temperature			22.6 °C		SM2550B(2)
Turbidity (Hach)			4.23 NTU		EPA 180.1
Air Temp			5 Lookup		Observation
Sky Conditions			2 Lookup		Observation
Wind Direction			27 Lookup		Observation
2 00					
Wind Strength  SiteID: WEM-07-0014	Sample Date: 9/	(15/2021	0 Lookup	<b>ble #</b> : AB48378	Observation
Wind Strength	Sample Date: 9/		0 Lookup	ole #: AB48378 Water Depth	Observation  Algae?
Wind Strength  SiteID: WEM-07-0014  Water Flow Type Pool	Water App		0 Lookup		☐ Algae?
Wind Strength SiteID: WEM-07-0014	Water App	pearance	0 Lookup  IDEM Samp	Water Depth	☐ Algae?
Wind Strength  SiteID: WEM-07-0014  Water Flow Type Pool  Water Flow (cf/sec):	Water App	pearance	0 Lookup  IDEM Samp	Water Depth	☐ Algae?
Wind Strength  SiteID: WEM-07-0014  Nater Flow Type Pool  Nater Flow (cf/sec):  Sampler Comments:	Water App	pearance	0 Lookup  IDEM Samp  Clear  Aquatic Life?	Water Depth Canopy Closed %	Algae? 0-20%  Method
Wind Strength  SiteID: WEM-07-0014  Water Flow Type Pool  Water Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water App	pearance	0 Lookup  IDEM Samp  Clear  Aquatic Life?	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C
Wind Strength  SiteID: WEM-07-0014  Nater Flow Type Pool  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water App	pearance	0 Lookup  IDEM Samp  Clear  Aquatic Life?  Result  56.4 %	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C
Wind Strength  SiteID: WEM-07-0014  Vater Flow Type Pool  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO	Water App	pearance	O Lookup  IDEM Samp  Clear  Aquatic Life?  Result  56.4 % 4.97 mg/L	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C
Wind Strength  SiteID: WEM-07-0014  Vater Flow Type Pool  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water App	pearance	IDEM Samp Clear Aquatic Life?  Result 56.4 % 4.97 mg/L 7.5 SU	Water Depth Canopy Closed %	O-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2
Wind Strength  SiteID: WEM-07-0014  Vater Flow Type Pool  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water App	pearance	IDEM Samp Clear Aquatic Life?  Result  56.4 % 4.97 mg/L 7.5 SU 414.8 umho/cm	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B
Wind Strength  SiteID: WEM-07-0014  Nater Flow Type Pool  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature	Water App	pearance	IDEM Samp Clear Aquatic Life?  Result  56.4 % 4.97 mg/L 7.5 SU 414.8 umho/cm 21.6 °C	Water Depth Canopy Closed %	☐ Algae?  0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2)
Wind Strength  SiteID: WEM-07-0014  Vater Flow Type Pool  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach)	Water App	pearance	IDEM Samp Clear Aquatic Life?  Result  56.4 % 4.97 mg/L 7.5 SU 414.8 umho/cm 21.6 °C 3.71 NTU	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2) EPA 180.1
Wind Strength  SiteID: WEM-07-0014  Nater Flow Type Pool  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp	Water App	pearance	IDEM Samp Clear Aquatic Life?  Result  56.4 % 4.97 mg/L 7.5 SU 414.8 umho/cm 21.6 °C 3.71 NTU 4 Lookup	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #</b> : 500-205399-13		Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)		180	mg/L	5	SM2320B
Chloride			mg/L	1	EPA 300.0
Hardness (as CaCO3)			mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)		7.2	mg/L	5	SM2540D
Solids, Total (TS)		350	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		280	mg/L	10	SM2540C
Sulfate		13	mg/L	1	EPA 300.0
Calcium (Total)		51	mg/L	0.2	EPA 200.7
Magnesium (Total)		14	mg/L	0.1	EPA 200.7
COD		9.3	mg/L	10	SM5220C
Nitrogen, Ammonia			mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite			mg/L	0.1	SM4500NO3-F
Phosphorus, Total		0.068	-	0.05	SM4500P-E
TKN			mg/L	0.4	SM4500N(Org)-D
TOC			mg/L	1	SM5310C
<b>Lab ID #</b> : AB48378		Result		Reporting Limit	Method
Coliforms (Total)		> 2419.6	MPN/100mL	2419.6	SM9223B
Coliforms (Total) E. coli			MPN/100mL MPN/100mL	2419.6 2419.6	SM9223B SM9223B
E. coli	<b>Sample Date:</b> 10/13/2021			2419.6	
E. coli SiteID: WEM-07-0014	Sample Date: 10/13/2021 Water Appearance		MPN/100mL  IDEM Sample	2419.6	
E. coli SiteID: WEM-07-0014	-	> 2419.6 Clear	MPN/100mL  IDEM Sample	2419.6 #: AB48858	SM9223B
E. coli SiteID: WEM-07-0014  Nater Flow Type Run  Nater Flow (cf/sec):	Water Appearance	> 2419.6 Clear	MPN/100mL  IDEM Sample	2419.6 #: AB48858 Vater Depth	SM9223B
E. coli  SiteID: WEM-07-0014  Water Flow Type Run  Water Flow (cf/sec):  Sampler Comments:	Water Appearance	> 2419.6  Clear	MPN/100mL  IDEM Sample  V  Juatic Life?	#: AB48858 Vater Depth Canopy Closed %	SM9223B  Algae? 0-20%
E. coli  SiteID: WEM-07-0014  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	> 2419.6  Clear  Aq  Result	MPN/100mL  IDEM Sample  V  Juatic Life?	#: AB48858 Vater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method
E. coli  SiteID: WEM-07-0014  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	> 2419.6  Clear  Aq  Result	IDEM Sample V Juatic Life?  % mg/L	#: AB48858 Vater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C)
E. coli  SiteID: WEM-07-0014  Vater Flow Type Run  Vater Flow (cf/sec):  sampler Comments:  Lab ID #:  % Sat DO	Water Appearance	> 2419.6  Clear  Aq  Result  39  3.79  6.98	IDEM Sample V Juatic Life?  % mg/L	#: AB48858 Vater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C)
E. coli  SiteID: WEM-07-0014  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field)	Water Appearance	> 2419.6  Clear  Aq  Result  39  3.79  6.98	MPN/100mL  IDEM Sample  V  Juatic Life?  %  mg/L SU  umho/cm	#: AB48858 Vater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2
E. coli  SiteID: WEM-07-0014  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	> 2419.6  Clear  Aq  Result  39  3.79  6.98  356.1  16.7	MPN/100mL  IDEM Sample  V  Juatic Life?  %  mg/L SU  umho/cm	#: AB48858 Vater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B
E. coli  SiteID: WEM-07-0014  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	> 2419.6  Clear  Aq  Result  39  3.79  6.98  356.1  16.7  2.22	MPN/100mL  IDEM Sample  V  Juatic Life?  %  mg/L SU  umho/cm °C	#: AB48858 Vater Depth Canopy Closed %	Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2)
E. coli  SiteID: WEM-07-0014  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	> 2419.6  Clear  Aq  Result  39  3.79  6.98  356.1  16.7  2.22  4	MPN/100mL  IDEM Sample  V  Juatic Life?  %  mg/L SU  umho/cm °C  NTU	#: AB48858 Vater Depth Canopy Closed %	Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1
E. coli  SiteID: WEM-07-0014  Nater Flow Type Run  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat	Water Appearance	> 2419.6  Clear  Aq  Result  39  3.79  6.98  356.1  16.7  2.22  4  1	MPN/100mL  IDEM Sample  V Juatic Life?  % mg/L SU umho/cm °C NTU Lookup	#: AB48858 Vater Depth Canopy Closed %	Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #:</b> 500-206919-13	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	160	mg/L	5	SM2320B
Chloride	12	mg/L	0.4	EPA 300.0
Hardness (as CaCO3)	160	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	< 5	mg/L	5	SM2540D
Solids, Total (TS)	250	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	180	mg/L	10	SM2540C
Sulfate	10	mg/L	0.4	EPA 300.0
Calcium (Total)	45	mg/L	0.2	EPA 200.7
Magnesium (Total)	12	mg/L	0.1	EPA 200.7
COD	19	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	< 0.1	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.11	mg/L	0.05	SM4500P-E
TKN	0.5	mg/L	0.4	SM4500N(Org)-D
TOC	5.5	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48858	<u>Result</u>		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	285.1	MPN/100mL	1	SM9223B

		W	eather Code Def	initions	
S	C		WD	WS	AT
Sky Co	nditions	1	Wind Direction	Wind Strength	Air Temp
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

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 SiteID:
 WEM-07-0017
 USGS Hydrologic Unit:
 051202070702

Stream Name: Sixmile Creek County: Jennings

**Description:** CR 500 South **Latitude:** 38 54 40.15219 **Longitude:** -85 45 44.37870

**Drainage:** 30.679 **Site Number:** 21T-019

**SiteID:** WEM-07-0017 **Sample Date:** 8/3/2021 **IDEM Sample #:** AB48103

Water Flow Type Riffle Water Appearance Clear Water Depth ✓ Algae?

Water Flow (cf/sec): 

Flow Estimated? 

Aquatic Life? 

Canopy Closed % 0-20%

**Sampler Comments:** 

Lab ID #:	Result		Reporting Limit	<u>Method</u>
% Sat	109.9	%		ASTM D888-09(C)
DO	9.36	mg/L		ASTM D888-09(C)
pH (Field)	8.03	SU		EPA 150.2
Specific Conductance (Field)	397.8	umho/cm		SM2510B
Temperature	23.5	°C		SM2550B(2)
Turbidity (Hach)	16	NTU		EPA 180.1
Air Temp	5	Lookup		Observation
Sky Conditions	1	Lookup		Observation
Wind Direction	27	Lookup		Observation
Wind Strength	1	Lookup		Observation
<b>Lab ID #</b> : 500-203424-8	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	110	mg/L	5	SM2320B
Chloride	20	mg/L	2	EPA 300.0
Hardness (as CaCO3)	170	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	13	mg/L	5	SM2540D
Solids, Total (TS)	350	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	310	mg/L	10	SM2540C
Sulfate	60	mg/L	2	EPA 300.0
Calcium (Total)	47	mg/L	0.2	EPA 200.7
Magnesium (Total)	12	mg/L	0.1	EPA 200.7
COD	13	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.81	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.15	mg/L	0.05	SM4500P-E
TKN	0.39	mg/L	0.4	SM4500N(Org)-D
TOC	4.5	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48103	Result		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	209.8	MPN/100mL	1	SM9223B

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SiteID: WEM-07-0017	<b>Sample Date:</b> 8/16/2021		ole #: AB47671	
Nater Flow Type Run	Water Appearance	Clear	Water Depth	✓ Algae?
Nater Flow (cf/sec):	☐ Flow Estimated?	☐ Aquatic Life?	Canopy Closed %	0-20%
Sampler Comments:				
Lab ID #:		Result	Reporting Limit	<u>Method</u>
% Sat		102.6 %		ASTM D888-09(C)
DO		8.44 mg/L		ASTM D888-09(C)
pH (Field)		7.9 SU		EPA 150.2
Specific Conductance (Field)		340 umho/cm		SM2510B
Temperature		25.2 °C		SM2550B(2)
Turbidity (Hach)		14.4 NTU		EPA 180.1
Air Temp		5 Lookup		Observation
Sky Conditions		1 Lookup		Observation
Wind Direction		27 Lookup		Observation
Willia Dilection				
Wind Strength  SiteID: WEM-07-0017	Sample Date: 9/14/2021	1 Lookup	ole#: AB48396	Observation
Wind Strength	Sample Date: 9/14/2021 Water Appearance	1 Lookup	ole #: AB48396 Water Depth	Observation  Algae?
Wind Strength SiteID: WEM-07-0017	•	1 Lookup  IDEM Samp		☐ Algae?
Wind Strength  SiteID: WEM-07-0017  Water Flow Type Run	Water Appearance	1 Lookup  IDEM Samp	Water Depth	☐ Algae?
Wind Strength  SiteID: WEM-07-0017  Nater Flow Type Run  Nater Flow (cf/sec):	Water Appearance	1 Lookup  IDEM Samp	Water Depth	☐ Algae?
Wind Strength  SiteID: WEM-07-0017  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:	Water Appearance	IDEM Samp Clear Aquatic Life?  Result  118.4 %	Water Depth Canopy Closed %	☐ Algae? 0-20% Method
Wind Strength  SiteID: WEM-07-0017  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	1 Lookup  IDEM Samp  Clear  Aquatic Life?  Result	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C)
Wind Strength  SiteID: WEM-07-0017  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	IDEM Samp Clear Aquatic Life?  Result  118.4 %	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C)
Wind Strength  SiteID: WEM-07-0017  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO	Water Appearance	IDEM Samp Clear Aquatic Life?  Result  118.4 % 9.58 mg/L	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C)
Wind Strength  SiteID: WEM-07-0017  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field)	Water Appearance	IDEM Samp Clear Aquatic Life?  Result  118.4 % 9.58 mg/L 8.18 SU	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2
Wind Strength  SiteID: WEM-07-0017  Vater Flow Type Run  Vater Flow (cf/sec):  sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field)	Water Appearance	IDEM Samp Clear Aquatic Life?  Result  118.4 % 9.58 mg/L 8.18 SU 407 umho/cm	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B
Wind Strength  SiteID: WEM-07-0017  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	IDEM Samp Clear Aquatic Life?  Result  118.4 % 9.58 mg/L 8.18 SU 407 umho/cm 26.1 °C	Water Depth Canopy Closed %	☐ Algae?  0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2)
Wind Strength  SiteID: WEM-07-0017  Nater Flow Type Run  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat	Water Appearance	1 Lookup  IDEM Samp  Clear  Aquatic Life?  Result  118.4 % 9.58 mg/L 8.18 SU 407 umho/cm 26.1 °C 15.8 NTU	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1
Wind Strength  SiteID: WEM-07-0017  Nater Flow Type Run  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat	Water Appearance	IDEM Samp Clear Aquatic Life?  Result  118.4 % 9.58 mg/L 8.18 SU 407 umho/cm 26.1 °C 15.8 NTU 5 Lookup	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #</b> : 500-205399-9		Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)		120	mg/L	5	SM2320B
Chloride			mg/L	2	EPA 300.0
Hardness (as CaCO3)			mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)			mg/L	5	SM2540D
Solids, Total (TS)			mg/L	10	SM2540B
Solids, Total Dissolved (TDS)			mg/L	10	SM2540C
Sulfate			mg/L	2	EPA 300.0
Calcium (Total)			mg/L	0.2	EPA 200.7
Magnesium (Total)			mg/L	0.1	EPA 200.7
COD			mg/L	10	SM5220C
Nitrogen, Ammonia			mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite			mg/L	0.1	SM4500NO3-F
Phosphorus, Total			mg/L	0.05	SM4500P-E
TKN			mg/L	0.4	SM4500N(Org)-D
TOC			mg/L	1	SM5310C
<b>Lab ID #</b> : AB48396		Result		Reporting Limit	Method
Coliforms (Total)		> 2419.6	MPN/100mL	2419.6	SM9223B
Coliforms (Total) E. coli			MPN/100mL MPN/100mL	2419.6 1	SM9223B SM9223B
E. coli SiteID: WEM-07-0017	Sample Date: 10/12/2021	196.8	MPN/100mL  IDEM Sample	1 #: AB48876	SM9223B
E. coli SiteID: WEM-07-0017 Water Flow Type Run	Water Appearance	196.8	MPN/100mL  IDEM Sample :	1 #: AB48876 /ater Depth	SM9223B  Algae?
E. coli SiteID: WEM-07-0017		196.8	MPN/100mL  IDEM Sample	1 #: AB48876	SM9223B  Algae?
E. coli  SiteID: WEM-07-0017  Water Flow Type Run	Water Appearance	196.8	MPN/100mL  IDEM Sample :	1 #: AB48876 /ater Depth	SM9223B  Algae?
E. coli  SiteID: WEM-07-0017  Nater Flow Type Run  Nater Flow (cf/sec):	Water Appearance	196.8	MPN/100mL  IDEM Sample :	1 #: AB48876 /ater Depth	SM9223B  Algae?
E. coli  SiteID: WEM-07-0017  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:	Water Appearance	Clear	MPN/100mL  IDEM Sample :  Waguatic Life?	#: AB48876  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%
E. coli  SiteID: WEM-07-0017  Water Flow Type Run  Water Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	Clear Ac  Result	MPN/100mL  IDEM Sample :  Waguatic Life?	#: AB48876  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method
E. coli  SiteID: WEM-07-0017  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	Clear Ac  Result	MPN/100mL  IDEM Sample :  Waquatic Life?	#: AB48876  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C)
E. coli  SiteID: WEM-07-0017  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO	Water Appearance	196.8  Clear  Ac  Result  93.1  8.33  7.62	MPN/100mL  IDEM Sample :  Waquatic Life?	#: AB48876  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C)
E. coli  SiteID: WEM-07-0017  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field)	Water Appearance	196.8  Clear  Ac  Result  93.1  8.33  7.62	MPN/100mL  IDEM Sample :  With the sample in	#: AB48876  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2
E. coli  SiteID: WEM-07-0017  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	Clear  Result  93.1 8.33 7.62 421.7 20.7	MPN/100mL  IDEM Sample :  With the sample in	#: AB48876  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B
E. coli  SiteID: WEM-07-0017  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature	Water Appearance	Clear  Result  93.1 8.33 7.62 421.7 20.7 8.17	MPN/100mL  IDEM Sample :  Wiguatic Life?  % mg/L SU umho/cm °C	#: AB48876  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2)
E. coli  SiteID: WEM-07-0017  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	196.8  Clear  Ac  Result  93.1  8.33  7.62  421.7  20.7  8.17  4	MPN/100mL  IDEM Sample :  Wiguatic Life?  % mg/L SU umho/cm °C NTU	#: AB48876  /ater Depth  Canopy Closed %	Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1
SiteID: WEM-07-0017  Nater Flow Type Run  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp	Water Appearance	196.8  Clear  Ac  Result  93.1  8.33  7.62  421.7  20.7  8.17  4	MPN/100mL  IDEM Sample :  Waquatic Life?  % mg/L SU umho/cm °C NTU Lookup	#: AB48876  /ater Depth  Canopy Closed %	Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #:</b> 500-206919-9	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	120	mg/L	5	SM2320B
Chloride	14	mg/L	2	EPA 300.0
Hardness (as CaCO3)	180	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	7.2	mg/L	5	SM2540D
Solids, Total (TS)	300	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	230	mg/L	10	SM2540C
Sulfate	37	mg/L	2	EPA 300.0
Calcium (Total)	49	mg/L	0.2	EPA 200.7
Magnesium (Total)	13	mg/L	0.1	EPA 200.7
COD	26	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	0.26	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.14	mg/L	0.05	SM4500P-E
TKN	0.64	mg/L	0.4	SM4500N(Org)-D
TOC	5.9	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48876	Result		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	260.3	MPN/100mL	1	SM9223B

		W	eather Code Def	initions	
_	C onditions	,	WD Wind Direction	WS Wind Strength	AT Air Temp
1 - Clear 2 - Scattered 3 - Partly 4 - Cloudy	8 - Rain 9 - Snow 10 - Sleet	0 9 18 27	North (0 Degrees) East (90 Degrees) South (180 Degrees) West (270 Degrees)	0 - Calm 1 - Light 2 - Mod./Light 3 - Moderate	1 - < 32 2 - 33-45 3 - 46-60 4 - 61-75
5 - Mist 6 - Fog 7 - Shower				4 - Mod./Strong 5 - Strong 6 - Gale	5 - 76-85 6 - > 86

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 SiteID:
 WEM-07-0018
 USGS Hydrologic Unit:
 051202070702

Stream Name: Sixmile Creek County: Jennings

**Description:** CR 200 South **Latitude:** 38 57 15.78425 **Longitude:** -85 43 55.69768

**Drainage:** 24.444 **Site Number:** 21T-020

**SiteID:** WEM-07-0018 **Sample Date:** 8/3/2021 **IDEM Sample #**: AB48101

Water Flow Type Run Water Appearance Clear Water Depth 

Algae?

Water Flow (cf/sec): 

Flow Estimated? 

Aquatic Life? 

Canopy Closed % 0-20%

**Sampler Comments:** 

Lab ID #:	Result		Reporting Limit	<u>Method</u>
% Sat	92.9	%		ASTM D888-09(C)
DO	8.31	mg/L		ASTM D888-09(C)
pH (Field)	7.98	SU		EPA 150.2
Specific Conductance (Field)	330.2	umho/cm		SM2510B
Temperature	20.8	°C		SM2550B(2)
Turbidity (Hach)	11.7	NTU		EPA 180.1
Air Temp	4	Lookup		Observation
Sky Conditions	1	Lookup		Observation
Wind Direction	27	Lookup		Observation
Wind Strength	1	Lookup		Observation
<b>Lab ID #</b> : 500-203424-6	Result		Reporting Limit	Method
Alkalinity (as CaCO3)	110	mg/L	5	SM2320B
Chloride	15	mg/L	2	EPA 300.0
Hardness (as CaCO3)	130	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	9.6	mg/L	5	SM2540D
Solids, Total (TS)	270	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	240	mg/L	10	SM2540C
Sulfate	31	mg/L	2	EPA 300.0
Calcium (Total)	38	mg/L	0.2	EPA 200.7
Magnesium (Total)	9.1	mg/L	0.1	EPA 200.7
COD	22	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.2	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.37	mg/L	0.05	SM4500P-E
TKN	0.57	mg/L	0.4	SM4500N(Org)-D
тос	5.4	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48101	Result		Reporting Limit	Method
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	727	MPN/100mL	1	SM9223B

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SiteID: WEM-07-0018	Sample Date: 8/18/2021	IDEM Samp	ole #: AB47672	
Vater Flow Type Pool	Water Appearance	Clear	Water Depth	☐ Algae?
Vater Flow (cf/sec):	☐ Flow Estimated?	☐ Aquatic Life?	Canopy Closed %	0-20%
campler Comments: Photos ta	aken of 2 Hagenius brevistylus, t	hen released.		
Lab ID #:		Result	Reporting Limit	<u>Method</u>
% Sat		80.1 %		ASTM D888-09(C)
DO		6.86 mg/L		ASTM D888-09(C)
pH (Field)		7.76 SU		EPA 150.2
Specific Conductance (Field)		333.9 umho/cm		SM2510B
Temperature		23 °C		SM2550B(2)
Turbidity (Hach)		9.26 NTU		EPA 180.1
Air Temp		4 Lookup		Observation
Sky Conditions		1 Lookup		Observation
Wind Direction		27 Lookup		Observation
Wind Strength		0 Lookup		Observation
SiteID: WEM-07-0018  Vater Flow Type Glide	Sample Date: 9/14/2021  Water Appearance	IDEM Samp Murky	ole #: AB48394  Water Depth	☐ Algae?
Vater Flow (cf/sec):	☐ Flow Estimated?	☐ Aquatic Life?	Canopy Closed %	0-20%
ampler Comments:				
Lab ID #:		_		
% Sat		Result	Reporting Limit	<u>Method</u>
DO		102.7 %	Reporting Limit	Method  ASTM D888-09(C)
DO			Reporting Limit	
pH (Field)		102.7 %	Reporting Limit	ASTM D888-09(C)
		102.7 % 8.83 mg/L	Reporting Limit	ASTM D888-09(C) ASTM D888-09(C)
pH (Field)		102.7 % 8.83 mg/L 7.97 SU	Reporting Limit	ASTM D888-09(C) ASTM D888-09(C) EPA 150.2
pH (Field) Specific Conductance (Field)		102.7 % 8.83 mg/L 7.97 SU 392.1 umho/cm	Reporting Limit	ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B
pH (Field) Specific Conductance (Field) Temperature		102.7 % 8.83 mg/L 7.97 SU 392.1 umho/cm 23 °C	Reporting Limit	ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2)
pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach)		102.7 % 8.83 mg/L 7.97 SU 392.1 umho/cm 23 °C 14.8 NTU	Reporting Limit	ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1
pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp		102.7 % 8.83 mg/L 7.97 SU 392.1 umho/cm 23 °C 14.8 NTU 5 Lookup	Reporting Limit	ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #</b> : 500-205399-7		Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)		110	mg/L	5	SM2320B
Chloride		20	mg/L	2	EPA 300.0
Hardness (as CaCO3)		160	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)		14	mg/L	5	SM2540D
Solids, Total (TS)		500	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		240	mg/L	10	SM2540C
Sulfate		50	mg/L	2	EPA 300.0
Calcium (Total)		43	mg/L	0.2	EPA 200.7
Magnesium (Total)		12	mg/L	0.1	EPA 200.7
COD		22	mg/L	10	SM5220C
Nitrogen, Ammonia		< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite		0.67	mg/L	0.1	SM4500NO3-F
Phosphorus, Total		0.32	mg/L	0.05	SM4500P-E
TKN		0.89	mg/L	0.4	SM4500N(Org)-D
TOC		6.4	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48394		Result		Reporting Limit	Method
Coliforms (Total)		> 2419.6	MPN/100mL	2419.6	SM9223B
Coliforms (Total) E. coli			MPN/100mL MPN/100mL	2419.6 1	SM9223B SM9223B
E. coli SiteID: WEM-07-0018	Sample Date: 10/12/2021	648.8	MPN/100mL  IDEM Sample	1 #: AB48874	SM9223B
E. coli SiteID: WEM-07-0018 Water Flow Type Glide	Water Appearance	648.8 Murky	MPN/100mL  IDEM Sample :	1 #: AB48874 /ater Depth	SM9223B
E. coli SiteID: WEM-07-0018	-	648.8 Murky	MPN/100mL  IDEM Sample	1 #: AB48874	SM9223B
E. coli SiteID: WEM-07-0018 Water Flow Type Glide	Water Appearance	648.8 Murky	MPN/100mL  IDEM Sample :	1 #: AB48874 /ater Depth	SM9223B
E. coli  SiteID: WEM-07-0018  Water Flow Type Glide  Water Flow (cf/sec):	Water Appearance	648.8 Murky	MPN/100mL  IDEM Sample :	1 #: AB48874 /ater Depth	SM9223B
SiteID: WEM-07-0018  Water Flow Type Glide  Water Flow (cf/sec):  Sampler Comments:	Water Appearance	Murky	MPN/100mL  IDEM Sample :  Watic Life?	#: AB48874  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%
E. coli  SiteID: WEM-07-0018  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	Murky Aq Result 86.7	MPN/100mL  IDEM Sample :  Watic Life?	#: AB48874  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method
E. coli  SiteID: WEM-07-0018  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	Murky Aq Result 86.7	MPN/100mL  IDEM Sample :  Wattic Life?	#: AB48874  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C)
E. coli  SiteID: WEM-07-0018  Vater Flow Type Glide  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO	Water Appearance	Murky Aq  Result  86.7 7.76 7.63	MPN/100mL  IDEM Sample :  Wattic Life?	#: AB48874  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C)
E. coli  SiteID: WEM-07-0018  Vater Flow Type Glide  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field)	Water Appearance	Murky Aq  Result  86.7 7.76 7.63	MPN/100mL  IDEM Sample :  Watter Life?  %  mg/L SU umho/cm	#: AB48874  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2
E. coli  SiteID: WEM-07-0018  Vater Flow Type Glide  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field)	Water Appearance	Murky  Result  86.7 7.76 7.63 368.8 20.7	MPN/100mL  IDEM Sample :  Watter Life?  %  mg/L SU umho/cm	#: AB48874  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B
E. coli  SiteID: WEM-07-0018  Water Flow Type Glide  Water Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature	Water Appearance	Murky  Result  86.7 7.76 7.63 368.8 20.7 8.14	MPN/100mL  IDEM Sample :  Watic Life?  %  mg/L SU umho/cm °C	#: AB48874  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2)
E. coli  SiteID: WEM-07-0018  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	Murky  Result  86.7 7.76 7.63 368.8 20.7 8.14 4	MPN/100mL  IDEM Sample :  Watic Life?  % mg/L SU umho/cm °C NTU	#: AB48874  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1
SiteID: WEM-07-0018  Nater Flow Type Glide  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp	Water Appearance	Murky  Result  86.7 7.76 7.63 368.8 20.7 8.14 4	MPN/100mL  IDEM Sample :  Watic Life?  % mg/L SU umho/cm °C NTU Lookup	#: AB48874  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #</b> : 500-206919-7	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	120	mg/L	5	SM2320B
Chloride	19	mg/L	2	EPA 300.0
Hardness (as CaCO3)	150	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	6.6	mg/L	5	SM2540D
Solids, Total (TS)	240	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	180	mg/L	10	SM2540C
Sulfate	36	mg/L	2	EPA 300.0
Calcium (Total)	44	mg/L	0.2	EPA 200.7
Magnesium (Total)	10	mg/L	0.1	EPA 200.7
COD	25	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	0.25	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.24	mg/L	0.05	SM4500P-E
TKN	0.68	mg/L	0.4	SM4500N(Org)-D
TOC	6.8	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48874	<u>Result</u>		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	120.1	MPN/100mL	1	SM9223B

Weather Code Definitions						
SC Sky Conditions		WD Wind Direction		WS Wind Strength	AT Air Temp	
SKy Co	1	'	Willa Direction	wind Strength	An Temp	
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32	
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45	
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60	
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75	
5 - Mist				4 - Mod./Strong	5 - 76-85	
6 - Fog				5 - Strong	6 - > 86	
7 - Shower				6 - Gale		

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SitelD: WEM-07-0019 USGS Hydrologic Unit: 051202070702

Stream Name: Sixmile Creek County: Jennings

**Description**: CR 175 North **Latitude**: 39 0 36.34528 **Longitude**: -85 42 17.91439

Drainage: 13.834 Site Number: 21T-021

**SiteID:** WEM-07-0019 **Sample Date:** 8/3/2021 **IDEM Sample #:** AB48097

Water Flow Type Run Water Appearance Clear Water Depth 

Algae?

Water Flow (cf/sec): ☐ Flow Estimated? ✓ Aquatic Life? Canopy Closed % 0-20%

**Sampler Comments:** 

Lab ID #:	Result		Reporting Limit	<u>Method</u>
% Sat	74.9	%		ASTM D888-09(C)
DO	6.65 ।	mg/L		ASTM D888-09(C)
pH (Field)	7.66	SU		EPA 150.2
Specific Conductance (Field)	271.3	umho/cm		SM2510B
Temperature	21 '	°C		SM2550B(2)
Turbidity (Hach)	8.29	NTU		EPA 180.1
Air Temp	4 1	Lookup		Observation
Sky Conditions	1	Lookup		Observation
Wind Direction	27	Lookup		Observation
Wind Strength	0 1	Lookup		Observation
<b>Lab ID #</b> : 500-203424-14	<u>Result</u>		Reporting Limit	Method
Alkalinity (as CaCO3)	90 ।	mg/L	5	SM2320B
Chloride	13 ו	mg/L	1	EPA 300.0
Hardness (as CaCO3)	100 ו	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	5.8 ।	mg/L	5	SM2540D
Solids, Total (TS)	290 ו	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	260 ו	mg/L	10	SM2540C
Sulfate	15 ו	mg/L	1	EPA 300.0
Calcium (Total)	29 ו	mg/L	0.2	EPA 200.7
Magnesium (Total)	7 :	mg/L	0.1	EPA 200.7
COD	23 ।	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.4 ı	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.5 ।	•	0.05	SM4500P-E
TKN	0.79 ו	•	0.4	SM4500N(Org)-D
TOC	6.2 ।	•	1	SM5310C
<b>Lab ID #</b> : AB48097	Result		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	193.5	MPN/100mL	1	SM9223B

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SiteID: WEM-07-0019	<b>Sample Date:</b> 8/16/2021	IDEM Samp	le #: AB47673	
Water Flow Type Run	Water Appearance	Brown	Water Depth	☐ Algae?
Water Flow (cf/sec):	☐ Flow Estimated?	☐ Aquatic Life?	Canopy Closed %	0-20%
Sampler Comments:				
Lab ID #:		Result	Reporting Limit	<u>Method</u>
% Sat		84.4 %		ASTM D888-09(C
DO		7.15 mg/L		ASTM D888-09(C)
pH (Field)		7.79 SU		EPA 150.2
Specific Conductance (Field)		276.7 umho/cm		SM2510B
Temperature		23.6 °C		SM2550B(2)
Turbidity (Hach)		10.2 NTU		EPA 180.1
Air Temp		4 Lookup		Observation
Sky Conditions		3 Lookup		Observation
Wind Direction		27 Lookup		Observation
Wind Strength SiteID: WEM-07-0019	Sample Date: 9/14/2021	2 Lookup  IDEM Samp	le#: AB48390	Observation
Wind Strength	Sample Date: 9/14/2021 Water Appearance		le #: AB48390 Water Depth	Observation  Algae?
Wind Strength  SiteID: WEM-07-0019  Water Flow Type Run	•	IDEM Samp		☐ Algae?
Wind Strength SiteID: WEM-07-0019	Water Appearance	IDEM Samp	Water Depth	☐ Algae?
Wind Strength  SiteID: WEM-07-0019  Water Flow Type Run  Water Flow (cf/sec):	Water Appearance	IDEM Samp	Water Depth	☐ Algae?
Wind Strength  SiteID: WEM-07-0019  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:	Water Appearance	IDEM Samp Clear Aquatic Life?	Water Depth Canopy Closed %	Algae? 0-20%  Method
Wind Strength  SiteID: WEM-07-0019  Water Flow Type Run  Water Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	IDEM Samp Clear Aquatic Life? Result	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C
Wind Strength  SiteID: WEM-07-0019  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	IDEM Samp Clear Aquatic Life?  Result 77.6 %	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C
Wind Strength  SiteID: WEM-07-0019  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO	Water Appearance	IDEM Samp Clear Aquatic Life?  Result 77.6 % 6.66 mg/L	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C
Wind Strength  SiteID: WEM-07-0019  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	IDEM Samp Clear Aquatic Life?  Result 77.6 % 6.66 mg/L 7.61 SU	Water Depth Canopy Closed %	O-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2
Wind Strength  SiteID: WEM-07-0019  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	IDEM Samp Clear Aquatic Life?  Result  77.6 % 6.66 mg/L 7.61 SU 292.4 umho/cm	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B
Wind Strength  SiteID: WEM-07-0019  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature	Water Appearance	IDEM Samp Clear Aquatic Life?  Result  77.6 % 6.66 mg/L 7.61 SU 292.4 umho/cm 22.9 °C	Water Depth Canopy Closed %	☐ Algae?  0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2)
Wind Strength  SiteID: WEM-07-0019  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach)	Water Appearance	IDEM Samp Clear Aquatic Life?  Result  77.6 % 6.66 mg/L 7.61 SU 292.4 umho/cm 22.9 °C 9.9 NTU	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2) EPA 180.1
Wind Strength  SiteID: WEM-07-0019  Nater Flow Type Run  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp	Water Appearance	Clear	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #:</b> 500-205399-3		Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)		97	mg/L	5	SM2320B
Chloride		16	mg/L	1	EPA 300.0
Hardness (as CaCO3)		120	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)		11	mg/L	5	SM2540D
Solids, Total (TS)		330	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		160	mg/L	10	SM2540C
Sulfate		17	mg/L	1	EPA 300.0
Calcium (Total)		33	mg/L	0.2	EPA 200.7
Magnesium (Total)		8	mg/L	0.1	EPA 200.7
COD		27	mg/L	10	SM5220C
Nitrogen, Ammonia		< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite		0.95	mg/L	0.1	SM4500NO3-F
Phosphorus, Total		0.36	mg/L	0.05	SM4500P-E
TKN		1.1	mg/L	0.4	SM4500N(Org)-D
TOC		6.8	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48390		Result		Reporting Limit	Method
Coliforms (Total)		> 2419.6	MPN/100mL	2419.6	SM9223B
Coliforms (Total) E. coli			MPN/100mL MPN/100mL	2419.6 1	SM9223B SM9223B
	Sample Date: 10/12/2021 Water Appearance		MPN/100mL  IDEM Sample	1	
E. coli SiteID: WEM-07-0019	-	298.7	MPN/100mL  IDEM Sample	1 #: AB48870	SM9223B
SiteID: WEM-07-0019 Water Flow Type Run	Water Appearance	298.7	MPN/100mL  IDEM Sample a	1 #: AB48870 /ater Depth	SM9223B
E. coli SiteID: WEM-07-0019 Water Flow Type Run Water Flow (cf/sec):	Water Appearance	298.7	MPN/100mL  IDEM Sample a	1 #: AB48870 /ater Depth	SM9223B
SiteID: WEM-07-0019 Water Flow Type Run Water Flow (cf/sec): Sampler Comments:	Water Appearance	Clear	MPN/100mL  IDEM Sample :  Watic Life?	#: AB48870  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%
SiteID: WEM-07-0019 Water Flow Type Run Water Flow (cf/sec): Sampler Comments: Lab ID #:	Water Appearance	Clear Aq Result	MPN/100mL  IDEM Sample :  Watic Life?	#: AB48870  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method
SiteID: WEM-07-0019 Water Flow Type Run Water Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat	Water Appearance	Clear Aq Result	IDEM Sample a W quatic Life?	#: AB48870  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C)
SiteID: WEM-07-0019 Water Flow Type Run Water Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO	Water Appearance	298.7  Clear  Aq  Result  81.4  7.34  7.38	IDEM Sample a W quatic Life?	#: AB48870  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C)
SiteID: WEM-07-0019 Water Flow Type Run Water Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field)	Water Appearance	298.7  Clear  Aq  Result  81.4  7.34  7.38	MPN/100mL  IDEM Sample :  Watter Life?  % mg/L SU umho/cm	#: AB48870  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2
SiteID: WEM-07-0019 Water Flow Type Run Water Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field)	Water Appearance	298.7  Clear  Result  81.4  7.34  7.38  313.2  20.4	MPN/100mL  IDEM Sample :  Watter Life?  % mg/L SU umho/cm	#: AB48870  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B
SiteID: WEM-07-0019 Water Flow Type Run Water Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature	Water Appearance	298.7  Clear  Result  81.4  7.34  7.38  313.2  20.4  6.19	MPN/100mL  IDEM Sample a  W  Juatic Life?  %  mg/L SU  umho/cm °C	#: AB48870  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2)
SiteID: WEM-07-0019 Water Flow Type Run Water Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach)	Water Appearance	298.7  Clear  Result  81.4  7.34  7.38  313.2  20.4  6.19  4	MPN/100mL  IDEM Sample a  W  Juatic Life?  %  mg/L SU  umho/cm °C  NTU	#: AB48870  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1
SiteID: WEM-07-0019 Water Flow Type Run Water Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp	Water Appearance	298.7  Clear  Result  81.4 7.34 7.38 313.2 20.4 6.19 4 3	MPN/100mL  IDEM Sample a  Watic Life?  % mg/L SU umho/cm °C NTU Lookup	#: AB48870  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #</b> : 500-206919-3	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	97	mg/L	5	SM2320B
Chloride	18	mg/L	1	EPA 300.0
Hardness (as CaCO3)	130	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	5.2	mg/L	5	SM2540D
Solids, Total (TS)	200	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	160	mg/L	10	SM2540C
Sulfate	26	mg/L	1	EPA 300.0
Calcium (Total)	37	mg/L	0.2	EPA 200.7
Magnesium (Total)	8.3	mg/L	0.1	EPA 200.7
COD	28	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	0.65	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.26	mg/L	0.05	SM4500P-E
TKN	0.59	mg/L	0.4	SM4500N(Org)-D
TOC	6.9	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48870	<u>Result</u>		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	261.3	MPN/100mL	1	SM9223B

Weather Code Definitions					
SC		WD		WS	AT
Sky Co	nditions		Wind Direction	Wind Strength	Air Temp
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75
5 - Mist				4 - Mod./Strong	5 - 76-85
6 - Fog				5 - Strong	6 - > 86
7 - Shower				6 - Gale	

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WEM-07-0020 **USGS Hydrologic Unit:** 051202070702 SiteID: Stream Name: Sixmile Creek County: Jennings Description: CR 415 North Latitude: 39 44.73366 Longitude: -85 40 35.18964 Drainage: Site Number: 21T-022 8.944 SiteID: WEM-07-0020 Sample Date: 8/3/2021 IDEM Sample #: AB48098 ☐ Algae? Clear **Water Depth Water Flow Type** Glide Water Appearance ☐ Flow Estimated? Aquatic Life? Water Flow (cf/sec): Canopy Closed % Sampler Comments: Lab ID #: Result **Reporting Limit** Method 50.7 % ASTM D888-09(C) % Sat ASTM D888-09(C) DO 4.8 mg/L 7.28 SU EPA 150.2 pH (Field) Specific Conductance (Field) 627 umho/cm SM2510B 17.7 °C Temperature SM2550B(2) 5.86 NTU Turbidity (Hach) EPA 180.1 Air Temp 4 Lookup Observation Sky Conditions 1 Lookup Observation Wind Direction 27 Lookup Observation Wind Strength 0 Lookup Observation Lab ID #: 500-203424-3 **Reporting Limit** Result **Method** Alkalinity (as CaCO3) 200 mg/L 5 SM2320B Chloride 29 mg/L 2 EPA 300.0 Hardness (as CaCO3) 280 mg/L 0.91 SM2340B Solids, Suspended Total, (TSS) < 5 mg/L 5 SM2540D Solids, Total (TS) 480 mg/L 10 SM2540B Solids, Total Dissolved (TDS) 460 mg/L 10 SM2540C Sulfate 60 mg/L 2 EPA 300.0 Calcium (Total) 80 mg/L 0.2 EPA 200.7 Magnesium (Total) 20 mg/L 0.1 EPA 200.7 COD 13 mg/L 10 SM5220C Nitrogen, Ammonia < 0.2 mg/L 0.2 EPA 350.1 Nitrogen, Nitrate+Nitrite 1.7 mg/L 0.1 SM4500NO3-F 0.055 mg/L 0.05 SM4500P-E Phosphorus, Total 0.48 mg/L SM4500N(Org)-D TKN 0.4 TOC 2.4 mg/L 1 SM5310C Lab ID #: AB48098 Result **Reporting Limit Method** 

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> 2419.6 MPN/100mL

770.1 MPN/100mL

2419.6

1

SM9223B

SM9223B

Coliforms (Total)

E. coli

SiteID: WEM-07-0020 Sample Date: 8/16/2021 IDEM Sample #: AB47674 Water Depth ✓ Algae? Water Flow Type Pool Water Appearance Clear ☐ Flow Estimated? ✓ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Floating algal mats Lab ID #: Result **Reporting Limit Method** 63.6 % ASTM D888-09(C) % Sat DO 5.15 mg/L ASTM D888-09(C) pH (Field) 7.54 SU EPA 150.2 Specific Conductance (Field) 715 umho/cm SM2510B Temperature 20.1 °C SM2550B(2) Turbidity (Hach) 2.93 NTU EPA 180.1 Air Temp 4 Lookup Observation Sky Conditions 4 Lookup Observation Wind Direction 27 Lookup Observation Wind Strength 0 Lookup Observation SiteID: WEM-07-0020 Sample Date: IDEM Sample #: AB48391 9/14/2021 ☐ Algae? **Water Depth** Water Flow Type Glide Water Appearance Clear ☐ Flow Estimated? ■ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Lab ID #: **Reporting Limit Method** Result 48.5 % ASTM D888-09(C) % Sat DO 4.38 mg/L ASTM D888-09(C) pH (Field) 7.11 SU EPA 150.2 Specific Conductance (Field) 651 umho/cm SM2510B Temperature 19.8 °C SM2550B(2) Turbidity (Hach) 1.48 NTU EPA 180.1 Air Temp 5 Lookup Observation Sky Conditions Observation 1 Lookup Wind Direction 27 Lookup Observation Wind Strength 1 Lookup Observation

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<b>Lab ID #</b> : 500-205399-4		Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)		200	mg/L	5	SM2320B
Chloride		49	mg/L	2	EPA 300.0
Hardness (as CaCO3)		250	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)		< 5	mg/L	5	SM2540D
Solids, Total (TS)		650	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		380	mg/L	10	SM2540C
Sulfate		60	mg/L	2	EPA 300.0
Calcium (Total)		73	mg/L	0.2	EPA 200.7
Magnesium (Total)		18	mg/L	0.1	EPA 200.7
COD		10	mg/L	10	SM5220C
Nitrogen, Ammonia		0.11	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite		0.32	mg/L	0.1	SM4500NO3-F
Phosphorus, Total		0.093	mg/L	0.05	SM4500P-E
TKN		0.75	mg/L	0.4	SM4500N(Org)-D
TOC		4.1	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48391		Result		Reporting Limit	Method
Coliforms (Total)		> 2419.6	MPN/100mL	2419.6	SM9223B
Coliforms (Total) E. coli			MPN/100mL MPN/100mL	2419.6 1	SM9223B SM9223B
E. coli SiteID: WEM-07-0020	Sample Date: 10/12/2021 Water Appearance		MPN/100mL  IDEM Sample :	1	
E. coli SiteID: WEM-07-0020	-	248.9	MPN/100mL  IDEM Sample :	1 #: AB48871	SM9223B
E. coli SiteID: WEM-07-0020 Water Flow Type Glide	Water Appearance	248.9	MPN/100mL  IDEM Sample a	1 #: AB48871 /ater Depth	SM9223B
SiteID: WEM-07-0020 Water Flow Type Glide Water Flow (cf/sec):	Water Appearance	248.9	MPN/100mL  IDEM Sample a	1 #: AB48871 /ater Depth	SM9223B
SiteID: WEM-07-0020 Water Flow Type Glide Water Flow (cf/sec): Sampler Comments:	Water Appearance	Clear	MPN/100mL  IDEM Sample :  Watic Life?	#: AB48871  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%
E. coli  SiteID: WEM-07-0020  Water Flow Type Glide  Water Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	Clear Aq Result	MPN/100mL  IDEM Sample :  Watic Life?	#: AB48871  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method
E. coli  SiteID: WEM-07-0020  Vater Flow Type Glide  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	Clear Aq Result	MPN/100mL  IDEM Sample :  Wattic Life?	#: AB48871  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C)
E. coli  SiteID: WEM-07-0020  Vater Flow Type Glide  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO	Water Appearance	Clear  Aq  Result  45.2 4.2 7.19	MPN/100mL  IDEM Sample :  Wattic Life?	#: AB48871  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C)
E. coli  SiteID: WEM-07-0020  Vater Flow Type Glide  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field)	Water Appearance	Clear  Aq  Result  45.2 4.2 7.19	MPN/100mL  IDEM Sample :  Watter Life?  % mg/L SU umho/cm	#: AB48871  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2
E. coli  SiteID: WEM-07-0020  Vater Flow Type Glide  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	Clear  Result  45.2 4.2 7.19 602 18.9	MPN/100mL  IDEM Sample :  Watter Life?  % mg/L SU umho/cm	#: AB48871  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B
E. coli  SiteID: WEM-07-0020  Vater Flow Type Glide  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	Clear  Result  45.2 4.2 7.19 602 18.9 2.98	MPN/100mL  IDEM Sample :  Waguatic Life?  % mg/L SU umho/cm °C	#: AB48871  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2)
E. coli  SiteID: WEM-07-0020  Vater Flow Type Glide  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	Clear  Result  45.2 4.2 7.19 602 18.9 2.98 4	MPN/100mL  IDEM Sample a  Watic Life?  % mg/L SU umho/cm °C NTU	#: AB48871  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1
E. coli  SiteID: WEM-07-0020  Nater Flow Type Glide  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp	Water Appearance	Clear  Result  45.2 4.2 7.19 602 18.9 2.98 4 3	MPN/100mL  IDEM Sample :  Watic Life?  % mg/L SU umho/cm °C NTU Lookup	#: AB48871  /ater Depth  Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #:</b> 500-206919-4	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	190	mg/L	5	SM2320B
Chloride	27	mg/L	5	EPA 300.0
Hardness (as CaCO3)	250	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	2.8	mg/L	5	SM2540D
Solids, Total (TS)	380	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	320	mg/L	10	SM2540C
Sulfate	31	mg/L	5	EPA 300.0
Calcium (Total)	72	mg/L	0.2	EPA 200.7
Magnesium (Total)	17	mg/L	0.1	EPA 200.7
COD	17	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	0.32	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.14	mg/L	0.05	SM4500P-E
TKN	0.48	mg/L	0.4	SM4500N(Org)-D
TOC	5.2	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48871	<u>Result</u>		Reporting Limit	Method
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	613.1	MPN/100mL	1	SM9223B

	Weather Code Definitions						
S	C		WD	WS	AT		
Sky Co	nditions	1	Wind Direction	Wind Strength	Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32		
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45		
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60		
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75		
5 - Mist				4 - Mod./Strong	5 - 76-85		
6 - Fog				5 - Strong	6 - > 86		
7 - Shower				6 - Gale			

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Sky Conditions

**SiteID:** WEM070-0036 USGS Hydrologic Unit: 051202070701 Stream Name: Vernon Fork Muscatatuck River County: Jennings Description: CR 400 West 38 57 15.46163 Longitude: -85 41 5.94729 Site Number: 21T-023 Drainage: 218.283 SiteID: WEM070-0036 Sample Date: 8/3/2021 IDEM Sample #: AB48100 ☐ Algae? Water Flow Type Water Appearance **Water Depth** Run Brown ☐ Flow Estimated? ☐ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Lab ID #: **Reporting Limit Method** Result 87.8 % ASTM D888-09(C) % Sat DO 7.54 mg/L ASTM D888-09(C) pH (Field) 7.66 SU EPA 150.2 Specific Conductance (Field) 423.9 umho/cm SM2510B Temperature 22.9 °C SM2550B(2) Turbidity (Hach) 20.5 NTU EPA 180.1 Air Temp Observation 4 Lookup

Wind Direction	27	Lookup		Observation
Wind Strength	1	Lookup		Observation
<b>Lab ID #</b> : 500-203424-5	Result		Reporting Limit	Method
Alkalinity (as CaCO3)	170	mg/L	5	SM2320B
Chloride	12	mg/L	2	EPA 300.0
Hardness (as CaCO3)	200	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	23	mg/L	5	SM2540D
Solids, Total (TS)	330	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	290	mg/L	10	SM2540C
Sulfate	24	mg/L	2	EPA 300.0
Calcium (Total)	55	mg/L	0.2	EPA 200.7
Magnesium (Total)	15	mg/L	0.1	EPA 200.7
COD	15	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.6	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.085	mg/L	0.05	SM4500P-E
TKN	0.45	mg/L	0.4	SM4500N(Org)-D
тос	2.3	mg/L	1	SM5310C
Lab ID #: AB48100	Result		Reporting Limit	Method
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	48	MPN/100mL	1	SM9223B

1 Lookup

Observation

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SiteID: WEM070-0036 Sample Date: 8/18/2021 IDEM Sample #: AB47675 Water Depth ✓ Algae? Water Flow Type Riffle Water Appearance Clear ☐ Flow Estimated? ✓ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% Sampler Comments: Photo taken of 1 Hagenius brevistylus, then released Lab ID #: Result **Reporting Limit Method** 82.3 % % Sat ASTM D888-09(C) DO 6.85 mg/L ASTM D888-09(C) pH (Field) 7.67 SU EPA 150.2 Specific Conductance (Field) 468.6 umho/cm SM2510B Temperature 24.5 °C SM2550B(2) Turbidity (Hach) 8.81 NTU EPA 180.1 Air Temp 5 Lookup Observation Sky Conditions 2 Lookup Observation Wind Direction 27 Lookup Observation Wind Strength 1 Lookup Observation SiteID: WEM070-0036 Sample Date: IDEM Sample #: AB48393 9/14/2021 ☐ Algae? **Water Depth** Water Flow Type Run **Water Appearance** Clear ☐ Flow Estimated? ■ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Lab ID #: **Reporting Limit Method** Result 95.9 % ASTM D888-09(C) % Sat DO 8.06 mg/L ASTM D888-09(C) pH (Field) 7.75 SU EPA 150.2 Specific Conductance (Field) 322.6 umho/cm SM2510B 24.1 °C SM2550B(2) Temperature Turbidity (Hach) 7.82 NTU EPA 180.1 Air Temp 5 Lookup Observation Sky Conditions Observation 1 Lookup Wind Direction 27 Lookup Observation Wind Strength 3 Lookup Observation

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<b>Lab ID #</b> : 500-205399-6		Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)		140	mg/L	5	SM2320B
Chloride		11	mg/L	0.4	EPA 300.0
Hardness (as CaCO3)		150	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)		8.8	mg/L	5	SM2540D
Solids, Total (TS)		340	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		170	mg/L	10	SM2540C
Sulfate		12	mg/L	0.4	EPA 300.0
Calcium (Total)		43	mg/L	0.2	EPA 200.7
Magnesium (Total)		9.9	mg/L	0.1	EPA 200.7
COD		11	mg/L	10	SM5220C
Nitrogen, Ammonia		< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite		0.12	mg/L	0.1	SM4500NO3-F
Phosphorus, Total		0.08	mg/L	0.05	SM4500P-E
TKN		0.57	mg/L	0.4	SM4500N(Org)-D
TOC		3.5	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48393		Result		Reporting Limit	<u>Method</u>
Coliforms (Total)		> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli		35	MPN/100mL	1	SM9223B
SiteID: WEM070-0036  Water Flow Type Run  Water Flow (cf/sec):  Sampler Comments:	Sample Date: 10/12/2021 Water Appearance  Flow Estimated?	Clear	IDEM Sample \ quatic Life?	#: AB48873 Water Depth Canopy Closed %	☐ Algae? 0-20%
Lab ID #:		Result		Reporting Limit	Method
% Sat		79.7	%		ASTM D888-09(C
DO		7.08	mg/L		ASTM D888-09(C
pH (Field)		7.53	SU		EPA 150.2
Specific Conductance (Field)		372.9	umho/cm		SM2510B
Temperature		21.1	°C		SM2550B(2)
Turbidity (Hach)		7.05	NTU		
		7.35	1110		EPA 180.1
Air Temp			Lookup		EPA 180.1 Observation
Air Temp Sky Conditions		4	_		
•		4	Lookup		Observation

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1 Lookup

Observation

Wind Strength

<b>Lab ID #</b> : 500-206919-6	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	150	mg/L	5	SM2320B
Chloride	15	mg/L	1	EPA 300.0
Hardness (as CaCO3)	170	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	7	mg/L	5	SM2540D
Solids, Total (TS)	240	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	170	mg/L	10	SM2540C
Sulfate	19	mg/L	1	EPA 300.0
Calcium (Total)	48	mg/L	0.2	EPA 200.7
Magnesium (Total)	12	mg/L	0.1	EPA 200.7
COD	13	mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	0.4	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.12	mg/L	0.05	SM4500P-E
TKN	0.44	mg/L	0.4	SM4500N(Org)-D
TOC	4.2	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48873	Result		Reporting Limit	<u>Method</u>
Coliforms (Total)	> 2419.6	MPN/100mL	2419.6	SM9223B
E. coli	107.1	MPN/100mL	1	SM9223B

	Weather Code Definitions							
SC Sky Conditions		,	WD Wind Direction	WS Wind Strength	AT Air Tem			
1 - Clear 2 - Scattered 3 - Partly 4 - Cloudy 5 - Mist 6 - Fog 7 - Shower	8 - Rain 9 - Snow 10 - Sleet	0 9 18 27	North (0 Degrees) East (90 Degrees) South (180 Degrees) West (270 Degrees)	0 - Calm 1 - Light 2 - Mod./Light 3 - Moderate 4 - Mod./Strong 5 - Strong 6 - Gale	1 - < 32 2 - 33-45 3 - 46-60 4 - 61-75 5 - 76-85 6 - > 86			

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Air Temp

Sky Conditions

USGS Hydrologic Unit: SiteID: WEM070-0001 051202070701 Vernon Fork Muscatatuck River Stream Name: County: Jennings Description: CR 60 South, Vernon 38 58 34.90130 Longitude: -85 37 11.37519 Drainage: 197.56 Site Number: 21T-025 SiteID: WEM070-0001 Sample Date: 8/3/2021 IDEM Sample #: AB48099 ☐ Algae? Water Flow Type Water Appearance Clear **Water Depth** Run ☐ Flow Estimated? ☐ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** Lab ID #: **Reporting Limit Method** Result 80.5 % % Sat ASTM D888-09(C) 7.14 mg/L DO ASTM D888-09(C) pH (Field) 8.03 SU EPA 150.2 Specific Conductance (Field) 418.9 umho/cm SM2510B Temperature 21.2 °C SM2550B(2) Turbidity (Hach) 4.2 NTU EPA 180.1

4 Lookup

1 Lookup

Observation

Observation

27 l	Lookup		Observation
0 1	Lookup		Observation
Result		Reporting Limit	Method
170 г	mg/L	5	SM2320B
14 г	mg/L	1	EPA 300.0
200 1	mg/L	0.91	SM2340B
4 1	mg/L	5	SM2540D
320 г	mg/L	10	SM2540B
200 г	mg/L	10	SM2540C
26 г	mg/L	1	EPA 300.0
54 1	mg/L	0.2	EPA 200.7
16 r	mg/L	0.1	EPA 200.7
7 1	mg/L	10	SM5220C
< 0.2	mg/L	0.2	EPA 350.1
1 1	mg/L	0.1	SM4500NO3-F
0.11 r	mg/L	0.05	SM4500P-E
0.47 r	mg/L	0.4	SM4500N(Org)-D
2.5 1	mg/L	1	SM5310C
Result		Reporting Limit	Method
> 2419.6	MPN/100mL	2419.6	SM9223B
70.3 1	MPN/100mL	1	SM9223B
	0  Result  170 14 200 4 320 200 26 54 16 7 <0.2 1 0.11 0.47 2.5  Result  > 2419.6	170 mg/L 14 mg/L 200 mg/L 4 mg/L 320 mg/L 320 mg/L 200 mg/L 26 mg/L 54 mg/L 16 mg/L 7 mg/L < 0.2 mg/L 1 mg/L 0.11 mg/L 0.47 mg/L 2.5 mg/L	Result         Reporting Limit           170 mg/L         5           14 mg/L         1           200 mg/L         0.91           4 mg/L         5           320 mg/L         10           200 mg/L         10           26 mg/L         1           54 mg/L         0.2           16 mg/L         0.1           7 mg/L         10           < 0.2 mg/L

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SiteID: WEM070-0001	<b>Sample Date:</b> 8/17/2021		le #: AB47676	
Water Flow Type Riffle	Water Appearance	Clear	Water Depth	✓ Algae?
Nater Flow (cf/sec):	☐ Flow Estimated?	✓ Aquatic Life?	Canopy Closed %	0-20%
Sampler Comments:				
Lab ID #:		Result	Reporting Limit	<u>Method</u>
% Sat		103.9 %		ASTM D888-09(C)
DO		8.62 mg/L		ASTM D888-09(C)
pH (Field)		8.35 SU		EPA 150.2
Specific Conductance (Field)		466.8 umho/cm		SM2510B
Temperature		24.5 °C		SM2550B(2)
Turbidity (Hach)		3.2 NTU		EPA 180.1
Air Temp		5 Lookup		Observation
Sky Conditions		2 Lookup		Observation
Wind Direction		27 Lookup		Observation
WING DIFECTION		ooup		
Wind Strength  SiteID: WEM070-0001	Sample Date: 9/14/2021	2 Lookup	l <b>e #</b> : AB48392	Observation
Wind Strength	Sample Date: 9/14/2021 Water Appearance	2 Lookup	le #: AB48392 Water Depth	Observation  Algae?
Wind Strength SiteID: WEM070-0001	·	2 Lookup  IDEM Samp		☐ Algae?
Wind Strength  SiteID: WEM070-0001  Water Flow Type Run	Water Appearance	2 Lookup  IDEM Samp  Clear	Water Depth	☐ Algae?
Wind Strength  SiteID: WEM070-0001  Nater Flow Type Run  Nater Flow (cf/sec):	Water Appearance	2 Lookup  IDEM Samp  Clear	Water Depth	☐ Algae?
Wind Strength  SiteID: WEM070-0001  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:	Water Appearance  Flow Estimated?	IDEM Samp Clear Aquatic Life?	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method
Wind Strength  SiteID: WEM070-0001  Water Flow Type Run  Water Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance  Flow Estimated?	IDEM Samp Clear Aquatic Life?  Result	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C)
Wind Strength  SiteID: WEM070-0001  Nater Flow Type Run  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:	Water Appearance  Flow Estimated?	IDEM Samp Clear Aquatic Life?  Result 89.8 %	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C)
Wind Strength  SiteID: WEM070-0001  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO	Water Appearance  Flow Estimated?	IDEM Samp Clear Aquatic Life?  Result  89.8 % 7.6 mg/L	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C)
Wind Strength  SiteID: WEM070-0001  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance  Flow Estimated?	IDEM Samp Clear Aquatic Life?  Result  89.8 % 7.6 mg/L 8.49 SU	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2
Wind Strength  SiteID: WEM070-0001  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field)	Water Appearance  Flow Estimated?	IDEM Samp Clear Aquatic Life?  Result  89.8 % 7.6 mg/L 8.49 SU 327.7 umho/cm	Water Depth Canopy Closed %	☐ Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B
Wind Strength  SiteID: WEM070-0001  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature	Water Appearance  Flow Estimated?	IDEM Samp Clear Aquatic Life?  Result  89.8 % 7.6 mg/L 8.49 SU 327.7 umho/cm 23.6 °C	Water Depth Canopy Closed %	☐ Algae?  0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2)
Wind Strength  SiteID: WEM070-0001  Nater Flow Type Run  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat	Water Appearance  Flow Estimated?	2 Lookup  IDEM Samp  Clear  Aquatic Life?  Result  89.8 % 7.6 mg/L 8.49 SU 327.7 umho/cm 23.6 °C 4.55 NTU	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1
Wind Strength  SiteID: WEM070-0001  Water Flow Type Run  Water Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance  Flow Estimated?	IDEM Samp Clear Aquatic Life?  Result  89.8 % 7.6 mg/L 8.49 SU 327.7 umho/cm 23.6 °C 4.55 NTU 5 Lookup	Water Depth Canopy Closed %	Algae? 0-20%  Method  ASTM D888-09(C) ASTM D888-09(C) EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #</b> : 500-205399-5		Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)		120	mg/L	5	SM2320B
Chloride		15	mg/L	1	EPA 300.0
Hardness (as CaCO3)		140	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)		3.8	mg/L	5	SM2540D
Solids, Total (TS)		340	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)		180	mg/L	10	SM2540C
Sulfate		19	mg/L	1	EPA 300.0
Calcium (Total)		40	mg/L	0.2	EPA 200.7
Magnesium (Total)		10	mg/L	0.1	EPA 200.7
COD		16	mg/L	10	SM5220C
Nitrogen, Ammonia		< 0.2	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite			mg/L	0.1	SM4500NO3-F
Phosphorus, Total			mg/L	0.05	SM4500P-E
TKN		0.57	mg/L	0.4	SM4500N(Org)-D
TOC		4.4	mg/L	1	SM5310C
<b>Lab ID #</b> : AB48392		Result		Reporting Limit	<u>Method</u>
Coliforms (Total)		> 2419.6	MPN/100mL	2419.6	SM9223B
Coliforms (Total) E. coli			MPN/100mL MPN/100mL	2419.6 1	SM9223B SM9223B
E. coli SiteID: WEM070-0001 Water Flow Type Run	Sample Date: 10/12/2021 Water Appearance	98.7	MPN/100mL  IDEM Sample a	1 #: AB48872 /ater Depth	SM9223B
E. coli SitelD: WEM070-0001	•	98.7	MPN/100mL  IDEM Sample a	1 #: AB48872	SM9223B
E. coli  SiteID: WEM070-0001  Water Flow Type Run  Water Flow (cf/sec):	Water Appearance	98.7	MPN/100mL  IDEM Sample a	1 #: AB48872 /ater Depth	SM9223B
SiteID: WEM070-0001  Water Flow Type Run  Water Flow (cf/sec):  Sampler Comments:	Water Appearance	98.7  Clear	MPN/100mL  IDEM Sample :  Watic Life?	1 #: AB48872 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method
E. coli  SiteID: WEM070-0001  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	Clear Acc Result	MPN/100mL  IDEM Sample :  Watic Life?	1 #: AB48872 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C
E. coli  SiteID: WEM070-0001  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:	Water Appearance	Clear Acc Result	MPN/100mL  IDEM Sample :  Watter Life?	1 #: AB48872 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C
E. coli  SiteID: WEM070-0001  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO	Water Appearance	98.7  Clear  Ac  Result  94.4  8.44  7.84	MPN/100mL  IDEM Sample :  Watter Life?	1 #: AB48872 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C)
E. coli  SiteID: WEM070-0001  Vater Flow Type Run  Vater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat DO pH (Field)	Water Appearance	98.7  Clear  Ac  Result  94.4  8.44  7.84	MPN/100mL  IDEM Sample :  Wiguatic Life?  % mg/L SU umho/cm	1 #: AB48872 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2
E. coli  SiteID: WEM070-0001  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	98.7  Clear  Result  94.4  8.44  7.84  381.2  20.7	MPN/100mL  IDEM Sample :  Wiguatic Life?  % mg/L SU umho/cm	1 #: AB48872 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B
E. coli  SiteID: WEM070-0001  Nater Flow Type Run  Nater Flow (cf/sec):  Sampler Comments:  Lab ID #:  % Sat	Water Appearance	98.7  Clear  Ac  Result  94.4  8.44  7.84  381.2  20.7  3.3	MPN/100mL  IDEM Sample :  Wiguatic Life?  % mg/L SU umho/cm °C	1 #: AB48872 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2)
SiteID: WEM070-0001  Nater Flow Type Run  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach)	Water Appearance	98.7  Clear  Ac  Result  94.4  8.44  7.84  381.2  20.7  3.3  4	MPN/100mL  IDEM Sample :  Wiguatic Life?  % mg/L SU umho/cm °C NTU	1 #: AB48872 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2) EPA 180.1
E. coli  SiteID: WEM070-0001  Nater Flow Type Run  Nater Flow (cf/sec): Sampler Comments:  Lab ID #:  % Sat DO pH (Field) Specific Conductance (Field) Temperature Turbidity (Hach) Air Temp	Water Appearance	98.7  Clear  Ac  Result  94.4  8.44  7.84  381.2  20.7  3.3  4  3	MPN/100mL  IDEM Sample :  Wattic Life?  % mg/L SU umho/cm °C NTU Lookup	1 #: AB48872 /ater Depth Canopy Closed %	SM9223B  Algae? 0-20%  Method  ASTM D888-09(C ASTM D888-09(C EPA 150.2 SM2510B SM2550B(2) EPA 180.1 Observation

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<b>Lab ID #</b> : 500-206919-5	<u>Result</u>		Reporting Limit	<u>Method</u>	
Alkalinity (as CaCO3)	150	mg/L	5	SM2320B	
Chloride	15	mg/L	1	EPA 300.0	
Hardness (as CaCO3)	180	mg/L	0.91	SM2340B	
Solids, Suspended Total, (TSS)	< 5	mg/L	5	SM2540D	
Solids, Total (TS)	260	mg/L	10	SM2540B	
Solids, Total Dissolved (TDS)	170	mg/L	10	SM2540C	
Sulfate	21	mg/L	1	EPA 300.0	
Calcium (Total)	50	mg/L	0.2	EPA 200.7	
Magnesium (Total)	12	mg/L	0.1	EPA 200.7	
COD	17	mg/L	10	SM5220C	
Nitrogen, Ammonia	< 0.2	mg/L	0.2	SM4500NH3-G	
Nitrogen, Nitrate+Nitrite	0.81	mg/L	0.1	SM4500NO3-F	
Phosphorus, Total	0.14	mg/L	0.05	SM4500P-E	
TKN	0.47	mg/L	0.4	SM4500N(Org)-D	
TOC	4.7	mg/L	1	SM5310C	
<b>Lab ID #</b> : AB48872	Result		Reporting Limit	Method	
Coliforms (Total)	2419.6	MPN/100mL	1	SM9223B	
E. coli	41.4	MPN/100mL	1	SM9223B	

	Weather Code Definitions							
S	С		WD	WS	AT			
Sky Co	nditions	1	Wind Direction	Wind Strength	Air Temp			
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32			
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45			
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60			
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75			
5 - Mist				4 - Mod./Strong	5 - 76-85			
6 - Fog				5 - Strong	6 - > 86			
7 - Shower				6 - Gale				

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SiteID:WEM-07-0022USGS Hydrologic Unit:051202070706Stream Name:Nehrt DitchCounty:Jackson

**Description:** CR 600 S **Latitude:** 38 47 37.42800 **Longitude:** -85 51 21.89160

**Drainage:** Site Number: 21T-026

**SiteID**: WEM-07-0022 **Sample Date**: 9/22/2021 **IDEM Sample #**: AB48738

Water Flow Type Glide Water Appearance Murky Water Depth Algae?

Water Flow (cf/sec): 

Flow Estimated? 

Aquatic Life? Canopy Closed % 0-20%

Sampler Comments: slight effluent smell

Lab ID #:	<u>Result</u>		Reporting Limit	<u>Method</u>
% Sat	54.6	%		ASTM D888-09(C)
DO	5.04	mg/L		ASTM D888-09(C)
pH (Field)	6.99	SU		EPA 150.2
Specific Conductance (Field)	484.4	umho/cm		SM2510B
Temperature	19.3	°C		SM2550B(2)
Turbidity (Hach)	15.1	NTU		EPA 180.1
Air Temp	3	Lookup		Observation
Sky Conditions	4	Lookup		Observation
Wind Direction	27	Lookup		Observation
Wind Strength	1	Lookup		Observation
<b>Lab ID #</b> : 500-205776-1	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	110	mg/L	5	SM2320B
Chloride	50	mg/L	4	EPA 300.0
Hardness (as CaCO3)	140	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	15	mg/L	5	SM2540D
Solids, Total (TS)	360	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	310	mg/L	10	SM2540C
Sulfate	27	mg/L	4	EPA 300.0
Calcium (Total)	41	mg/L	0.2	EPA 200.7
Magnesium (Total)	9.1	mg/L	0.1	EPA 200.7
COD	25	mg/L	10	SM5220C
Nitrogen, Ammonia	0.21	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	1.2	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	2	mg/L	0.25	SM4500P-E
TKN		mg/L	0.4	SM4500N(Org)-D
TOC	7.2	mg/L	1	SM5310C

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**SiteID:** WEM-07-0022 **Sample Date:** 10/20/2021 **IDEM Sample #:** AB48881

Water Flow Type Run Water Appearance Clear Water Depth Algae?

Water Flow (cf/sec): 

Flow Estimated? 

Aquatic Life? Canopy Closed % 0-20%

Sampler Comments: excessive algae

.ab ID #:	Result		Reporting Limit	<u>Method</u>
% Sat	90.3	%		ASTM D888-09(C)
DO	9.13	mg/L		ASTM D888-09(C)
pH (Field)	7.66	SU		EPA 150.2
Specific Conductance (Field)	938	umho/cm		SM2510B
Temperature	14.8	°C		SM2550B(2)
Turbidity (Hach)	4.32	NTU		EPA 180.1
Air Temp	4	Lookup		Observation
Sky Conditions	1	Lookup		Observation
Wind Direction	27	Lookup		Observation
Wind Strength	1	Lookup		Observation
<b>.ab ID #</b> : 500-207277-1	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	320	mg/L	5	SM2320B
Chloride	81	mg/L	5	EPA 300.0
Hardness (as CaCO3)	370	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	2.2	mg/L	5	SM2540D
Solids, Total (TS)	590	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	520	mg/L	10	SM2540C
Sulfate	72	mg/L	5	EPA 300.0
Calcium (Total)	100	mg/L	0.2	EPA 200.7
Magnesium (Total)	27	mg/L	0.1	EPA 200.7
<b>o</b> , ,		mg/L	10	SM5220C
COD	10	mg/L		
• ,		mg/L	0.2	SM4500NH3-G
COD	0.11	J	0.2 0.1	SM4500NH3-G SM4500NO3-F
COD Nitrogen, Ammonia	0.11 2.7	mg/L	-	
COD Nitrogen, Ammonia Nitrogen, Nitrate+Nitrite	0.11 2.7 2.7	mg/L mg/L	0.1	SM4500NO3-F

	Weather Code Definitions							
SC Sky Conditions		,	WD Wind Direction	WS Wind Strength	AT Air Temp			
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32			
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45			
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60			
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75			
5 - Mist				4 - Mod./Strong	5 - 76-85			
6 - Fog				5 - Strong	6 - > 86			
7 - Shower				6 - Gale				

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 SiteID:
 WEM-07-0023
 USGS Hydrologic Unit:
 0512020707070

 Stream Name:
 Blau Ditch
 County:
 Jackson

 Description:
 CR 1000 E
 Latitude:
 38 48 4.53060
 Longitude:
 -85 51 4.83840

 Drainage:
 Site Number:
 21T-027

**SiteID:** WEM-07-0023 **Sample Date:** 9/22/2021 **IDEM Sample #**: AB48737

Water Flow Type Glide Water Appearance Murky Water Depth Algae?

Water Flow (cf/sec): 

Flow Estimated? 

Aquatic Life? Canopy Closed % 0-20%

**Sampler Comments:** 

Lab ID #:	Result		Reporting Limit	<u>Method</u>
% Sat	72	%		ASTM D888-09(C)
DO	6.73	mg/L		ASTM D888-09(C)
pH (Field)	6.89	SU		EPA 150.2
Specific Conductance (Field)	325.8	umho/cm		SM2510B
Temperature	18.5	°C		SM2550B(2)
Turbidity (Hach)	28.2	NTU		EPA 180.1
Air Temp	3	Lookup		Observation
Sky Conditions	4	Lookup		Observation
Wind Direction	27	Lookup		Observation
Wind Strength	1	Lookup		Observation
<b>Lab ID #</b> : 500-205776-2	Result		Reporting Limit	Method
Alkalinity (as CaCO3)	84	mg/L	5	SM2320B
Chloride	22	mg/L	1	EPA 300.0
Hardness (as CaCO3)	110	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	18	mg/L	5	SM2540D
Solids, Total (TS)	320	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	240	mg/L	10	SM2540C
Sulfate	28	mg/L	1	EPA 300.0
Calcium (Total)	29	mg/L	0.2	EPA 200.7
Magnesium (Total)	8	mg/L	0.1	EPA 200.7
COD	46	mg/L	10	SM5220C
Nitrogen, Ammonia	0.16	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	0.79	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	0.65	mg/L	0.05	SM4500P-E
TKN	1.4	mg/L	0.4	SM4500N(Org)-D
TOC	16	mg/L	1	SM5310C

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SiteID: WEM-07-0023 Sample Date: 10/20/2021 IDEM Sample #: AB48880 **Water Appearance** Clear **Water Depth** ☐ Algae? Water Flow Type Glide ☐ Flow Estimated? ☐ Aquatic Life? Water Flow (cf/sec): Canopy Closed % 0-20% **Sampler Comments:** excessive algae Lab ID #: **Reporting Limit Method** Result 41.6 % ASTM D888-09(C) % Sat DO 4.38 mg/L ASTM D888-09(C) pH (Field) 7.43 SU EPA 150.2 Specific Conductance (Field) 520 umho/cm SM2510B Temperature 13 °C SM2550B(2) Turbidity (Hach) 3.89 NTU EPA 180.1 Air Temp 4 Lookup Observation Sky Conditions 1 Lookup Observation Wind Direction 27 Lookup Observation Observation Wind Strength 1 Lookup Lab ID #: 500-207277-2 Result **Reporting Limit Method** 180 mg/L Alkalinity (as CaCO3) 5 SM2320B 2 Chloride 45 mg/L EPA 300.0 190 mg/L Hardness (as CaCO3) 0.91 SM2340B

Soli	ids, Total (TS)			310 mg/L	10	SM2540B
Solids, Total Dis	ssolved (TDS)			260 mg/L	10	SM2540C
	Sulfate			23 mg/L	2	EPA 300.0
C	alcium (Total)			53 mg/L	0.2	EPA 200.7
Mag	nesium (Total)			14 mg/L	0.1	EPA 200.7
	COD			22 mg/L	10	SM5220C
Nitro	gen, Ammonia			0.12 mg/L	0.2	SM4500NH3-G
Nitrogen,	Nitrate+Nitrite			0.66 mg/L	0.1	SM4500NO3-F
Pho	sphorus, Total			0.32 mg/L	0.05	SM4500P-E
	TKN			0.55 mg/L	0.4	SM4500N(Org)-D
	TOC			8 mg/L	1	SM5310C
	Weather Code De	finitions				
ec.	WD	WC	A TE			

< 5 mg/L

5

SM2540D

Weather Code Definitions							
SC Sky Conditions		,	WD Wind Direction	WS Wind Strength	AT Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32		
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45		
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60		
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75		
5 - Mist				4 - Mod./Strong	5 - 76-85		
6 - Fog				5 - Strong	6 - > 86		
7 - Shower				6 - Gale			

Solids, Suspended Total, (TSS)

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 SiteID:
 WEM-07-0024
 USGS Hydrologic Unit:
 051202070706

 Stream Name:
 Grassy Creek
 County:
 Jackson

**Description:** US 31 **Latitude:** 38 49 4.53360 **Longitude:** -85 50 14.74080

Drainage: Site Number: 21T-028

**SiteID**: WEM-07-0024 **Sample Date**: 9/22/2021 **IDEM Sample #**: AB48736

Water Flow Type Run Water Appearance Brown Water Depth Algae?

Water Flow (cf/sec): ☐ Flow Estimated? ✓ Aquatic Life? Canopy Closed % 0-20%

**Sampler Comments:** 

Lab ID #:	Result		Reporting Limit	Method
% Sat	76.3	%		ASTM D888-09(C)
DO	7.09	mg/L		ASTM D888-09(C)
pH (Field)	6.8	SU		EPA 150.2
Specific Conductance (Field)	323.3	umho/cm		SM2510B
Temperature	18.9	°C		SM2550B(2)
Turbidity (Hach)	75	NTU		EPA 180.1
Air Temp	3	Lookup		Observation
Sky Conditions	7	Lookup		Observation
Wind Direction	27	Lookup		Observation
Wind Strength	1	Lookup		Observation
<b>Lab ID #</b> : 500-205776-3	Result		Reporting Limit	<u>Method</u>
Alkalinity (as CaCO3)	86	mg/L	5	SM2320B
Chloride	22	mg/L	1	EPA 300.0
Hardness (as CaCO3)	97	mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	55	mg/L	8.3	SM2540D
Solids, Total (TS)	340	mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	210	mg/L	10	SM2540C
Sulfate	25	mg/L	1	EPA 300.0
Calcium (Total)	27	mg/L	0.2	EPA 200.7
Magnesium (Total)	7.3	mg/L	0.1	EPA 200.7
COD	38	mg/L	10	SM5220C
Nitrogen, Ammonia	0.11	mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	0.47	mg/L	0.1	SM4500NO3-F
Phosphorus, Total	1.9	mg/L	0.25	SM4500P-E
TKN	0.89	mg/L	0.4	SM4500N(Org)-D
TOC	12	mg/L	4	SM5310C

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**SitelD:** WEM-07-0024 **Sample Date:** 10/20/2021 **IDEM Sample #:** AB48879

Water Flow Type Glide Water Appearance Clear Water Depth Algae?

Water Flow (cf/sec): 

Flow Estimated? 

Aquatic Life? Canopy Closed % 0-20%

Sampler Comments: stagnant, not moving

.ab ID #:	Result	Reporting Limit	<u>Method</u>
% Sat	50.7 %		ASTM D888-09(C)
DO	5.34 mg/L		ASTM D888-09(C)
pH (Field)	7.42 SU		EPA 150.2
Specific Conductance (Field)	514 umho/	cm	SM2510B
Temperature	13.1 °C		SM2550B(2)
Turbidity (Hach)	5 NTU		EPA 180.1
Air Temp	4 Looku	р	Observation
Sky Conditions	1 Looku	р	Observation
Wind Direction	27 Looku	p	Observation
Wind Strength	1 Looku	p	Observation
<b>.ab ID #</b> : 500-207277-3	<u>Result</u>	Reporting Limit	Method
Alkalinity (as CaCO3)	210 mg/L	5	SM2320B
Chloride	29 mg/L	1	EPA 300.0
Hardness (as CaCO3)	220 mg/L	0.91	SM2340B
Solids, Suspended Total, (TSS)	2.6 mg/L	5	SM2540D
Solids, Total (TS)	310 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	250 mg/L	10	SM2540C
Sulfate	19 mg/L	1	EPA 300.0
Calcium (Total)	59 mg/L	0.2	EPA 200.7
Magnesium (Total)	17 mg/L	0.1	EPA 200.7
COD	24 mg/L	10	SM5220C
Nitrogen, Ammonia	< 0.2 mg/L	0.2	SM4500NH3-G
Nitrogen, Nitrate+Nitrite	0.29 mg/L	0.1	SM4500NO3-F
<b>9</b> ,			
Phosphorus, Total	0.25 mg/L	0.05	SM4500P-E
<b>3</b> ·	0.25 mg/L 0.72 mg/L	0.05 0.4	SM4500P-E SM4500N(Org)-D

Weather Code Definitions							
SC Sky Conditions		,	WD Wind Direction	WS Wind Strength	AT Air Temp		
1 - Clear	8 - Rain	0	North (0 Degrees)	0 - Calm	1 - < 32		
2 - Scattered	9 - Snow	9	East (90 Degrees)	1 - Light	2 - 33-45		
3 - Partly	10 - Sleet	18	South (180 Degrees)	2 - Mod./Light	3 - 46-60		
4 - Cloudy		27	West (270 Degrees)	3 - Moderate	4 - 61-75		
5 - Mist				4 - Mod./Strong	5 - 76-85		
6 - Fog				5 - Strong	6 - > 86		
7 - Shower				6 - Gale			

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