

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW050-0023 **USGS Hydrologic Unit:** 050800030501
Stream Name: Tributary of Salt Creek **County:** Decatur
Description: CR 150 N **Latitude:** 39 21 25.42100 **Longitude:** -85 18 57.12500
Drainage: **Site Number:** 14T-001

SiteID: GMW050-0023 **Sample Date:** 08/04/2014 **IDEM Sample #:** AB17813
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	Method
% Sat	79.7 %		ASTM D888-09(C)
DO	7.4 mg/L		ASTM D888-09(C)
pH (Field)	7.38 SU		EPA 150.2
Specific Conductance (Field)	446 umho/cm		SM2510B
Temperature	18.97 °C		SM2550B(2)
Turbidity (Hach)	3.82 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	157.6 MPN/100mL	1	SM9223B

SiteID: GMW050-0023 **Sample Date:** 08/11/2014 **IDEM Sample #:** AB17830
Water Flow Type Glide **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	85.1 %		ASTM D888-09(C)
DO	7.35 mg/L		ASTM D888-09(C)
pH (Field)	7.74 SU		EPA 150.2
Specific Conductance (Field)	387 umho/cm		SM2510B
Temperature	22.62 °C		SM2550B(2)
Turbidity (Hach)	56.5 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	9 Lookup		Observation
Wind Strength	3 Lookup		Observation

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Lab ID # 513991	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	157 mg/L	10	EPA 310.2
Chloride	14 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	177 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	26 mg/L	4	SM2540D
Solids, Total (TS)	270 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	226 mg/L	10	SM2540C
Sulfate	18 mg/L	5	EPA 375.2
COD	26.2 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.3 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.122 mg/L	0.03	EPA 365.1
TKN	0.8 mg/L	0.3	EPA 351.2
TOC	5.9 mg/L	1	SM5310B

Lab ID # AB17830a	Result	Reporting Limit	Method
Coliforms (Total)	> 24196 MPN/100mL	24196	SM9223B
E. coli	> 24196 MPN/100mL	24196	SM9223B

SiteID: GMW050-0023 **Sample Date:** 09/22/2014 **IDEM Sample #:** AB19097
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	Method
% Sat	70.7 %		ASTM D888-09(C)
DO	7.13 mg/L		ASTM D888-09(C)
pH (Field)	7.66 SU		EPA 150.2
Specific Conductance (Field)	458 umho/cm		SM2510B
Temperature	14.84 °C		SM2550B(2)
Turbidity (Hach)	3.49 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

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Lab ID # 517649	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	212 mg/L	10	EPA 310.2
Chloride	19 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	234 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	296 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	275 mg/L	10	SM2540C
Sulfate	18 mg/L	5	EPA 375.2
COD	20.1 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.05 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	4.7 mg/L	1	SM5310B

Lab ID # AB19097	Result	Reporting Limit	Method
Coliforms (Total)	2419.6 MPN/100mL	1	SM9223B
E. coli	49.6 MPN/100mL	1	SM9223B

SiteID: GMW050-0023 **Sample Date:** 10/20/2014 **IDEM Sample #:** AB19376
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	Method
% Sat	91.2 %		ASTM D888-09(C)
DO	9.86 mg/L		ASTM D888-09(C)
pH (Field)	7.87 SU		EPA 150.2
Specific Conductance (Field)	557 umho/cm		SM2510B
Temperature	11.79 °C		SM2550B(2)
Turbidity (Hach)	2.54 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	3 Lookup		Observation

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Lab ID # 520219	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	255 mg/L	10	EPA 310.2
Chloride	22 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	284 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	350 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	331 mg/L	10	SM2540C
Sulfate	25 mg/L	5	EPA 375.2
COD	18 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.7 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.034 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	4.7 mg/L	1	SM5310B

Lab ID # AB19376	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 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	

**Indiana Department of Environmental Management
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SiteID: GMW-05-0006 **USGS Hydrologic Unit:** 050800030502
Stream Name: Salt Creek **County:** Decatur
Description: CR 50 N **Latitude:** 39 20 51.70366 **Longitude:** -85 18 22.94456
Drainage: **Site Number:** 14T-002

SiteID: GMW-05-0006 **Sample Date:** 08/04/2014 **IDEM Sample #:** AB17789
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	Method
% Sat	90.1 %		ASTM D888-09(C)
DO	8.38 mg/L		ASTM D888-09(C)
pH (Field)	8.01 SU		EPA 150.2
Specific Conductance (Field)	445 umho/cm		SM2510B
Temperature	18.69 °C		SM2550B(2)
Turbidity (Hach)	5.86 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	2419.6 MPN/100mL	1	SM9223B
E. coli	727 MPN/100mL	1	SM9223B

SiteID: GMW-05-0006 **Sample Date:** 08/11/2014 **IDEM Sample #:** AB17831
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	86.2 %		ASTM D888-09(C)
DO	7.38 mg/L		ASTM D888-09(C)
pH (Field)	7.79 SU		EPA 150.2
Specific Conductance (Field)	382 umho/cm		SM2510B
Temperature	23.23 °C		SM2550B(2)
Turbidity (Hach)	56.6 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	3 Lookup		Observation

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Lab ID # 513992	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	152 mg/L	10	EPA 310.2
Chloride	14 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	172 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	34 mg/L	4	SM2540D
Solids, Total (TS)	270 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	221 mg/L	10	SM2540C
Sulfate	18 mg/L	5	EPA 375.2
COD	24.4 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.2 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.128 mg/L	0.03	EPA 365.1
TKN	0.8 mg/L	0.3	EPA 351.2
TOC	6 mg/L	1	SM5310B

Lab ID # AB17831a	Result	Reporting Limit	Method
Coliforms (Total)	> 24196 MPN/100mL	24196	SM9223B
E. coli	> 24196 MPN/100mL	24196	SM9223B

SiteID: GMW-05-0006 **Sample Date:** 09/22/2014 **IDEM Sample #:** AB19098
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	Method
% Sat	77.1 %		ASTM D888-09(C)
DO	7.76 mg/L		ASTM D888-09(C)
pH (Field)	7.73 SU		EPA 150.2
Specific Conductance (Field)	480 umho/cm		SM2510B
Temperature	14.93 °C		SM2550B(2)
Turbidity (Hach)	9.12 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

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Lab ID # 517650	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	196 mg/L	10	EPA 310.2
Chloride	17 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	211 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	5 mg/L	4	SM2540D
Solids, Total (TS)	285 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	263 mg/L	10	SM2540C
Sulfate	25 mg/L	5	EPA 375.2
COD	16.7 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.036 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	5.5 mg/L	1	SM5310B

Lab ID # AB19098	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	1203.3 MPN/100mL	1	SM9223B

SiteID: GMW-05-0006 **Sample Date:** 10/20/2014 **IDEM Sample #:** AB19377
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	99.4 %		ASTM D888-09(C)
DO	10.72 mg/L		ASTM D888-09(C)
pH (Field)	7.89 SU		EPA 150.2
Specific Conductance (Field)	545 umho/cm		SM2510B
Temperature	11.9 °C		SM2550B(2)
Turbidity (Hach)	4.77 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	21 Lookup		Observation
Wind Strength	2 Lookup		Observation

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Lab ID # 520220	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	249 mg/L	10	EPA 310.2
Chloride	20 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	284 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	183 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	165 mg/L	10	SM2540C
Sulfate	24 mg/L	5	EPA 375.2
COD	21.5 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.6 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.057 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	6 mg/L	1	SM5310B

Lab ID # AB19377	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	325.5 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
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SiteID: GMW-05-0014 **USGS Hydrologic Unit:** 050800030502
Stream Name: Righthand Fork Salt Creek **County:** Decatur
Description: E CR 550 N **Latitude:** 39 25 20.10720 **Longitude:** -85 19 14.20680
Drainage: **Site Number:** 14T-003

SiteID: GMW-05-0014 **Sample Date:** 08/04/2014 **IDEM Sample #:** AB17812
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	Method
% Sat	54.4 %		ASTM D888-09(C)
DO	5.18 mg/L		ASTM D888-09(C)
pH (Field)	7.44 SU		EPA 150.2
Specific Conductance (Field)	744 umho/cm		SM2510B
Temperature	17.55 °C		SM2550B(2)
Turbidity (Hach)	16.3 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	410.6 MPN/100mL	1	SM9223B

SiteID: GMW-05-0014 **Sample Date:** 08/11/2014 **IDEM Sample #:** AB17832
Water Flow Type Pool **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	64.4 %		ASTM D888-09(C)
DO	6.43 mg/L		ASTM D888-09(C)
pH (Field)	7.59 SU		EPA 150.2
Specific Conductance (Field)	676 umho/cm		SM2510B
Temperature	21.07 °C		SM2550B(2)
Turbidity (Hach)	17.9 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	3 Lookup		Observation

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Lab ID # 513993	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	295 mg/L	10	EPA 310.2
Chloride	26 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	350 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	12 mg/L	4	SM2540D
Solids, Total (TS)	422 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	390 mg/L	10	SM2540C
Sulfate	30 mg/L	5	EPA 375.2
COD	16.2 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.2 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.091 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	4 mg/L	1	SM5310B

Lab ID # AB17832	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	> 2419.6 MPN/100mL	2419.6	SM9223B

SiteID: GMW-05-0014 **Sample Date:** 09/22/2014 **IDEM Sample #:** AB19099
Water Flow Type Pool **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	54.8 %		ASTM D888-09(C)
DO	5.64 mg/L		ASTM D888-09(C)
pH (Field)	7.6 SU		EPA 150.2
Specific Conductance (Field)	778 umho/cm		SM2510B
Temperature	13.94 °C		SM2550B(2)
Turbidity (Hach)	10.7 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

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Lab ID # 517651	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	315 mg/L	10	EPA 310.2
Chloride	47 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	299 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	7 mg/L	4	SM2540D
Solids, Total (TS)	477 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	444 mg/L	10	SM2540C
Sulfate	31 mg/L	5	EPA 375.2
COD	17.8 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.092 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	4.2 mg/L	1	SM5310B

Lab ID # AB19099	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	290.9 MPN/100mL	1	SM9223B

SiteID: GMW-05-0014 **Sample Date:** 10/20/2014 **IDEM Sample #:** AB19378
Water Flow Type Pool **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	63.3 %		ASTM D888-09(C)
DO	6.95 mg/L		ASTM D888-09(C)
pH (Field)	7.51 SU		EPA 150.2
Specific Conductance (Field)	783 umho/cm		SM2510B
Temperature	10.95 °C		SM2550B(2)
Turbidity (Hach)	5.33 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	4 Lookup		Observation

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Lab ID # 520221	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	340 mg/L	10	EPA 310.2
Chloride	51 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	365 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	501 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	474 mg/L	10	SM2540C
Sulfate	31 mg/L	5	EPA 375.2
COD	18.7 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.4 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.185 mg/L	0.03	EPA 365.1
TKN	0.3 mg/L	0.3	EPA 351.2
TOC	5.1 mg/L	1	SM5310B

Lab ID # AB19378	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	166.4 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
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SiteID: GMW-05-0011 **USGS Hydrologic Unit:** 050800030502
Stream Name: Righthand Fork Salt Creek **County:** Franklin
Description: Hamburg Rd **Latitude:** 39 22 54.94878 **Longitude:** -85 17 10.87400
Drainage: **Site Number:** 14T-004

SiteID: GMW-05-0011 **Sample Date:** 08/04/2014 **IDEM Sample #:** AB17816
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	Method
% Sat	78.3 %		ASTM D888-09(C)
DO	7.25 mg/L		ASTM D888-09(C)
pH (Field)	7.64 SU		EPA 150.2
Specific Conductance (Field)	561 umho/cm		SM2510B
Temperature	18.95 °C		SM2550B(2)
Turbidity (Hach)	11.5 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	1203.3 MPN/100mL	1	SM9223B

SiteID: GMW-05-0011 **Sample Date:** 08/11/2014 **IDEM Sample #:** AB17829
Water Flow Type Pool **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	78.3 %		ASTM D888-09(C)
DO	6.86 mg/L		ASTM D888-09(C)
pH (Field)	7.5 SU		EPA 150.2
Specific Conductance (Field)	518 umho/cm		SM2510B
Temperature	21.55 °C		SM2550B(2)
Turbidity (Hach)	15.2 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 513994	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	112 mg/L	10	EPA 310.2
Chloride	42 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	160 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	17 mg/L	4	SM2540D
Solids, Total (TS)	364 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	312 mg/L	10	SM2540C
Sulfate	20 mg/L	5	EPA 375.2
COD	25.9 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	13 mg/L	0.25	EPA 353.1
Phosphorus, Total	2.278 mg/L	0.075	EPA 365.1
TKN	1 mg/L	0.3	EPA 351.2
TOC	6 mg/L	1	SM5310B

Lab ID # AB17829	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	2419.6 MPN/100mL	1	SM9223B

SiteID: GMW-05-0011 **Sample Date:** 09/22/2014 **IDEM Sample #:** AB19096
Water Flow Type Pool **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	72.6 %		ASTM D888-09(C)
DO	7.26 mg/L		ASTM D888-09(C)
pH (Field)	7.48 SU		EPA 150.2
Specific Conductance (Field)	631 umho/cm		SM2510B
Temperature	15.05 °C		SM2550B(2)
Turbidity (Hach)	5.3 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 517652	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	133 mg/L	10	EPA 310.2
Chloride	58 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	209 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	11 mg/L	4	SM2540D
Solids, Total (TS)	429 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	376 mg/L	10	SM2540C
Sulfate	21 mg/L	5	EPA 375.2
COD	22.5 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	16 mg/L	0.25	EPA 353.1
Phosphorus, Total	3.945 mg/L	0.075	EPA 365.1
TKN	0.7 mg/L	0.3	EPA 351.2
TOC	4.9 mg/L	1	SM5310B

Lab ID # AB19096	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	866.4 MPN/100mL	1	SM9223B

SiteID: GMW-05-0011 **Sample Date:** 10/20/2014 **IDEM Sample #:** AB19375
Water Flow Type Run **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	95.2 %		ASTM D888-09(C)
DO	10.05 mg/L		ASTM D888-09(C)
pH (Field)	7.79 SU		EPA 150.2
Specific Conductance (Field)	320 umho/cm		SM2510B
Temperature	12.87 °C		SM2550B(2)
Turbidity (Hach)	11.7 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520222	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	125 mg/L	10	EPA 310.2
Chloride	16 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	125 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	12 mg/L	4	SM2540D
Solids, Total (TS)	201 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	180 mg/L	10	SM2540C
Sulfate	10 mg/L	5	EPA 375.2
COD	28.7 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.3 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.17 mg/L	0.03	EPA 365.1
TKN	1.1 mg/L	0.3	EPA 351.2
TOC	6 mg/L	1	SM5310B

Lab ID # AB19375	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	119.8 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-05-0009 **USGS Hydrologic Unit:** 050800030503
Stream Name: Bull Fork **County:** Franklin
Description: Bullfork Rd **Latitude:** 39 23 41.04332 **Longitude:** -85 15 12.36757
Drainage: **Site Number:** 14T-005

SiteID: GMW-05-0009 **Sample Date:** 08/04/2014 **IDEM Sample #:** AB17786
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	Method
% Sat	82 %		ASTM D888-09(C)
DO	7.67 mg/L		ASTM D888-09(C)
pH (Field)	7.81 SU		EPA 150.2
Specific Conductance (Field)	505 umho/cm		SM2510B
Temperature	18.52 °C		SM2550B(2)
Turbidity (Hach)	10.6 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	165.8 MPN/100mL	1	SM9223B

SiteID: GMW-05-0009 **Sample Date:** 08/11/2014 **IDEM Sample #:** AB17828
Water Flow Type Pool **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	83.2 %		ASTM D888-09(C)
DO	7.22 mg/L		ASTM D888-09(C)
pH (Field)	7.79 SU		EPA 150.2
Specific Conductance (Field)	509 umho/cm		SM2510B
Temperature	22.07 °C		SM2550B(2)
Turbidity (Hach)	12.4 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 513995	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	237 mg/L	10	EPA 310.2
Chloride	12 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	271 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	10 mg/L	4	SM2540D
Solids, Total (TS)	312 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	338 mg/L	10	SM2540C
Sulfate	20 mg/L	5	EPA 375.2
COD	11.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.2 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.03 mg/L	0.03	EPA 365.1
TKN	0.3 mg/L	0.3	EPA 351.2
TOC	2.8 mg/L	1	SM5310B

Lab ID # AB17828	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	410.6 MPN/100mL	1	SM9223B

SiteID: GMW-05-0009 **Sample Date:** 09/22/2014 **IDEM Sample #:** AB19095
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	Method
% Sat	81.1 %		ASTM D888-09(C)
DO	8.5 mg/L		ASTM D888-09(C)
pH (Field)	7.77 SU		EPA 150.2
Specific Conductance (Field)	534 umho/cm		SM2510B
Temperature	13.19 °C		SM2550B(2)
Turbidity (Hach)	4.48 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 517653	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	252 mg/L	10	EPA 310.2
Chloride	10 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	250 mg/L	75	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	317 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	300 mg/L	10	SM2540C
Sulfate	15 mg/L	5	EPA 375.2
COD	10.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.02 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.1 mg/L	1	SM5310B

Lab ID # AB19095	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	22.8 MPN/100mL	1	SM9223B

SiteID: GMW-05-0009 **Sample Date:** 10/20/2014 **IDEM Sample #:** AB19374
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	Method
% Sat	92.4 %		ASTM D888-09(C)
DO	10.27 mg/L		ASTM D888-09(C)
pH (Field)	7.87 SU		EPA 150.2
Specific Conductance (Field)	548 umho/cm		SM2510B
Temperature	10.63 °C		SM2550B(2)
Turbidity (Hach)	2.59 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520223	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	270 mg/L	10	EPA 310.2
Chloride	12 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	220 mg/L	75	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	342 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	331 mg/L	10	SM2540C
Sulfate	21 mg/L	5	EPA 375.2
COD	13.8 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.9 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.014 mg/L	0.03	EPA 365.1
TKN	0.3 mg/L	0.3	EPA 351.2
TOC	4.1 mg/L	1	SM5310B

Lab ID # AB19374	Result	Reporting Limit	Method
Coliforms (Total)	1299.7 MPN/100mL	1	SM9223B
E. coli	10.9 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-05-0007 **USGS Hydrologic Unit:** 050800030502
Stream Name: Salt Creek **County:** Franklin
Description: Rail Fence Rd **Latitude:** 39 23 3.70466 **Longitude:** -85 13 6.11403
Drainage: **Site Number:** 14T-006

SiteID: GMW-05-0007 **Sample Date:** 08/04/2014 **IDEM Sample #:** AB17796
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	Method
% Sat	73.4 %		ASTM D888-09(C)
DO	6.76 mg/L		ASTM D888-09(C)
pH (Field)	7.81 SU		EPA 150.2
Specific Conductance (Field)	424 umho/cm		SM2510B
Temperature	19.3 °C		SM2550B(2)
Turbidity (Hach)	15.1 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	165.8 MPN/100mL	1	SM9223B

SiteID: GMW-05-0007 **Sample Date:** 08/11/2014 **IDEM Sample #:** AB17822
Water Flow Type Riffle **Water Appearance** Brown **Water Depth** **Algae?**
Water Flow (cf/sec): **Flow Estimated?** **Aquatic Life?** **Canopy Closed %** 0-20%
Sampler Comments: Recent rain-creek up

Lab ID #	Result	Reporting Limit	Method
% Sat	85.9 %		ASTM D888-09(C)
DO	7.32 mg/L		ASTM D888-09(C)
pH (Field)	7.82 SU		EPA 150.2
Specific Conductance (Field)	416 umho/cm		SM2510B
Temperature	23.95 °C		SM2550B(2)
Turbidity (Hach)	44.4 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Flow	26.3897 cf/sec		TM D5389-95/D3858
Sky Conditions	4 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 513997	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	157 mg/L	10	EPA 310.2
Chloride	18 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	182 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	43 mg/L	4	SM2540D
Solids, Total (TS)	290 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	238 mg/L	10	SM2540C
Sulfate	23 mg/L	5	EPA 375.2
COD	17 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.106 mg/L	0.03	EPA 365.1
TKN	0.8 mg/L	0.3	EPA 351.2
TOC	4.3 mg/L	1	SM5310B

Lab ID # AB17822a	Result	Reporting Limit	Method
Coliforms (Total)	> 24196 MPN/100mL	24196	SM9223B
E. coli	5475 MPN/100mL	10	SM9223B

SiteID: GMW-05-0007 **Sample Date:** 09/22/2014 **IDEM Sample #:** AB19089
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	Method
% Sat	64.1 %		ASTM D888-09(C)
DO	6.49 mg/L		ASTM D888-09(C)
pH (Field)	7.45 SU		EPA 150.2
Specific Conductance (Field)	528 umho/cm		SM2510B
Temperature	14.8 °C		SM2550B(2)
Turbidity (Hach)	12.6 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Flow	0.5011 cf/sec		TM D5389-95/D3858
Sky Conditions	2 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 517654	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	192 mg/L	10	EPA 310.2
Chloride	25 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	246 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	13 mg/L	4	SM2540D
Solids, Total (TS)	326 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	296 mg/L	10	SM2540C
Sulfate	36 mg/L	5	EPA 375.2
COD	17.5 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.2 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.056 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	3.6 mg/L	1	SM5310B

Lab ID # AB19089	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	60.9 MPN/100mL	1	SM9223B

SiteID: GMW-05-0007 **Sample Date:** 10/20/2014 **IDEM Sample #:** AB19368
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	Method
% Sat	81.6 %		ASTM D888-09(C)
DO	8.89 mg/L		ASTM D888-09(C)
pH (Field)	7.59 SU		EPA 150.2
Specific Conductance (Field)	467 umho/cm		SM2510B
Temperature	11.46 °C		SM2550B(2)
Turbidity (Hach)	9.06 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Flow	5.5315 cf/sec		TM D5389-95/D3858
Sky Conditions	3 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520224	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	182 mg/L	10	EPA 310.2
Chloride	24 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	207 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	5 mg/L	4	SM2540D
Solids, Total (TS)	296 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	280 mg/L	10	SM2540C
Sulfate	28 mg/L	5	EPA 375.2
COD	25.1 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.6 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.147 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	6.9 mg/L	1	SM5310B

Lab ID # AB19368	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	80.9 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-05-0012 **USGS Hydrologic Unit:** 050800030505
Stream Name: Harvey Branch **County:** Franklin
Description: Rail Fence Rd **Latitude:** 39 23 4.06250 **Longitude:** -85 12 59.52865
Drainage: **Site Number:** 14T-007

SiteID: GMW-05-0012 **Sample Date:** 08/04/2014 **IDEM Sample #:** AB17815
Water Flow Type Pool **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	59 %		ASTM D888-09(C)
DO	5.54 mg/L		ASTM D888-09(C)
pH (Field)	7.69 SU		EPA 150.2
Specific Conductance (Field)	543 umho/cm		SM2510B
Temperature	19.13 °C		SM2550B(2)
Turbidity (Hach)	18.3 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	207.5 MPN/100mL	1	SM9223B

SiteID: GMW-05-0012 **Sample Date:** 08/11/2014 **IDEM Sample #:** AB17827
Water Flow Type Pool **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	74.3 %		ASTM D888-09(C)
DO	6.43 mg/L		ASTM D888-09(C)
pH (Field)	7.73 SU		EPA 150.2
Specific Conductance (Field)	588 umho/cm		SM2510B
Temperature	22.39 °C		SM2550B(2)
Turbidity (Hach)	17.4 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 513998	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	177 mg/L	10	EPA 310.2
Chloride	53 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	215 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	9 mg/L	4	SM2540D
Solids, Total (TS)	366 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	342 mg/L	10	SM2540C
Sulfate	35 mg/L	5	EPA 375.2
COD	16.8 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.107 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	4.5 mg/L	1	SM5310B

Lab ID # AB17827	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	613.1 MPN/100mL	1	SM9223B

SiteID: GMW-05-0012 **Sample Date:** 09/22/2014 **IDEM Sample #:** AB19094
Water Flow Type Pool **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	62 %		ASTM D888-09(C)
DO	6.35 mg/L		ASTM D888-09(C)
pH (Field)	7.61 SU		EPA 150.2
Specific Conductance (Field)	591 umho/cm		SM2510B
Temperature	13.79 °C		SM2550B(2)
Turbidity (Hach)	11.1 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 517656	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	172 mg/L	10	EPA 310.2
Chloride	53 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	211 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	8 mg/L	4	SM2540D
Solids, Total (TS)	342 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	320 mg/L	10	SM2540C
Sulfate	34 mg/L	5	EPA 375.2
COD	21.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.4 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.098 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	4.4 mg/L	1	SM5310B

Lab ID # AB19094	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	62.4 MPN/100mL	1	SM9223B

SiteID: GMW-05-0012 **Sample Date:** 10/20/2014 **IDEM Sample #:** AB19373
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	Method
% Sat	84.8 %		ASTM D888-09(C)
DO	9.51 mg/L		ASTM D888-09(C)
pH (Field)	7.67 SU		EPA 150.2
Specific Conductance (Field)	571 umho/cm		SM2510B
Temperature	10.24 °C		SM2550B(2)
Turbidity (Hach)	3.74 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520225	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	202 mg/L	10	EPA 310.2
Chloride	41 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	221 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	353 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	338 mg/L	10	SM2540C
Sulfate	38 mg/L	5	EPA 375.2
COD	26.8 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.3 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.198 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	6.2 mg/L	1	SM5310B

Lab ID # AB19373	Result	Reporting Limit	Method
Coliforms (Total)	2419.6 MPN/100mL	1	SM9223B
E. coli	31.1 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-05-0015 **USGS Hydrologic Unit:** 050800030504
Stream Name: S Fk Little Salt Cr **County:** Franklin
Description: Chapel Rd **Latitude:** 39 27 58.63320 **Longitude:** -85 16 38.64720
Drainage: **Site Number:** 14T-008

SiteID: GMW-05-0015 **Sample Date:** 08/04/2014 **IDEM Sample #:** AB17807
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	Method
% Sat	71.9 %		ASTM D888-09(C)
DO	6.61 mg/L		ASTM D888-09(C)
pH (Field)	7.54 SU		EPA 150.2
Specific Conductance (Field)	574 umho/cm		SM2510B
Temperature	19.33 °C		SM2550B(2)
Turbidity (Hach)	6.16 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	313 MPN/100mL	1	SM9223B

SiteID: GMW-05-0015 **Sample Date:** 08/11/2014 **IDEM Sample #:** AB17833
Water Flow Type Pool **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	84.3 %		ASTM D888-09(C)
DO	7.41 mg/L		ASTM D888-09(C)
pH (Field)	7.78 SU		EPA 150.2
Specific Conductance (Field)	312 umho/cm		SM2510B
Temperature	21.74 °C		SM2550B(2)
Turbidity (Hach)	49.1 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	4 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 513999	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	117 mg/L	10	EPA 310.2
Chloride	12 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	128 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	17 mg/L	4	SM2540D
Solids, Total (TS)	228 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	194 mg/L	10	SM2540C
Sulfate	15 mg/L	5	EPA 375.2
COD	27.1 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.6 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.212 mg/L	0.03	EPA 365.1
TKN	0.9 mg/L	0.3	EPA 351.2
TOC	7.7 mg/L	1	SM5310B

Lab ID # AB17833	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	> 2419.6 MPN/100mL	2419.6	SM9223B

SiteID: GMW-05-0015 **Sample Date:** 09/22/2014 **IDEM Sample #:** AB19100
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	Method
% Sat	77.5 %		ASTM D888-09(C)
DO	7.89 mg/L		ASTM D888-09(C)
pH (Field)	7.65 SU		EPA 150.2
Specific Conductance (Field)	612 umho/cm		SM2510B
Temperature	14.36 °C		SM2550B(2)
Turbidity (Hach)	3.5 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 517657	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	266 mg/L	10	EPA 310.2
Chloride	26 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	303 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	362 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	340 mg/L	10	SM2540C
Sulfate	20 mg/L	5	EPA 375.2
COD	15.8 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.041 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	3.6 mg/L	1	SM5310B

Lab ID # AB19100	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	727 MPN/100mL	1	SM9223B

SiteID: GMW-05-0015 **Sample Date:** 10/20/2014 **IDEM Sample #:** AB19379
Water Flow Type Pool **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	94.2 %		ASTM D888-09(C)
DO	10.12 mg/L		ASTM D888-09(C)
pH (Field)	7.89 SU		EPA 150.2
Specific Conductance (Field)	692 umho/cm		SM2510B
Temperature	12.03 °C		SM2550B(2)
Turbidity (Hach)	2.58 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	3 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520227	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	315 mg/L	10	EPA 310.2
Chloride	35 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	356 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	441 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	413 mg/L	10	SM2540C
Sulfate	29 mg/L	5	EPA 375.2
COD	19.7 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.8 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.038 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	4.1 mg/L	1	SM5310B

Lab ID # AB19379	Result	Reporting Limit	Method
Coliforms (Total)	2419.6 MPN/100mL	1	SM9223B
E. coli	52.9 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-05-0008 **USGS Hydrologic Unit:** 050800030504
Stream Name: Little Salt Creek **County:** Franklin
Description: Stipps Hill Rd **Latitude:** 39 26 14.52460 **Longitude:** -85 11 43.56081
Drainage: **Site Number:** 14T-009

SiteID: GMW-05-0008 **Sample Date:** 08/04/2014 **IDEM Sample #:** AB17788
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	Method
% Sat	126.5 %		ASTM D888-09(C)
DO	10.92 mg/L		ASTM D888-09(C)
pH (Field)	7.58 SU		EPA 150.2
Specific Conductance (Field)	574 umho/cm		SM2510B
Temperature	22.46 °C		SM2550B(2)
Turbidity (Hach)	4.76 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	21.1 MPN/100mL	1	SM9223B

SiteID: GMW-05-0008 **Sample Date:** 08/11/2014 **IDEM Sample #:** AB17834
Water Flow Type Riffle **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	85.1 %		ASTM D888-09(C)
DO	7.18 mg/L		ASTM D888-09(C)
pH (Field)	7.57 SU		EPA 150.2
Specific Conductance (Field)	396 umho/cm		SM2510B
Temperature	23.06 °C		SM2550B(2)
Turbidity (Hach)	98.5 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	7 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 514000	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	167 mg/L	10	EPA 310.2
Chloride	11 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	184 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	51 mg/L	4	SM2540D
Solids, Total (TS)	308 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	234 mg/L	10	SM2540C
Sulfate	19 mg/L	5	EPA 375.2
COD	13.9 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.3 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.104 mg/L	0.03	EPA 365.1
TKN	0.6 mg/L	0.3	EPA 351.2
TOC	3.7 mg/L	1	SM5310B

Lab ID # AB17834a	Result	Reporting Limit	Method
Coliforms (Total)	24196 MPN/100mL	10	SM9223B
E. coli	4352 MPN/100mL	10	SM9223B

SiteID: GMW-05-0008 **Sample Date:** 09/22/2014 **IDEM Sample #:** AB19101
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	Method
% Sat	116 %		ASTM D888-09(C)
DO	10.7 mg/L		ASTM D888-09(C)
pH (Field)	7.57 SU		EPA 150.2
Specific Conductance (Field)	567 umho/cm		SM2510B
Temperature	19.15 °C		SM2550B(2)
Turbidity (Hach)	4.56 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 517658	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	258 mg/L	10	EPA 310.2
Chloride	15 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	290 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	331 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	317 mg/L	10	SM2540C
Sulfate	18 mg/L	5	EPA 375.2
COD	13.4 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.021 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.3 mg/L	1	SM5310B

Lab ID # AB19101	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	21.3 MPN/100mL	1	SM9223B

SiteID: GMW-05-0008 **Sample Date:** 10/20/2014 **IDEM Sample #:** AB19380
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	Method
% Sat	111.4 %		ASTM D888-09(C)
DO	11.33 mg/L		ASTM D888-09(C)
pH (Field)	7.77 SU		EPA 150.2
Specific Conductance (Field)	533 umho/cm		SM2510B
Temperature	14.49 °C		SM2550B(2)
Turbidity (Hach)	2.53 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	3 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520228	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	255 mg/L	10	EPA 310.2
Chloride	18 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	281 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	329 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	308 mg/L	10	SM2540C
Sulfate	23 mg/L	5	EPA 375.2
COD	14.2 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.016 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.2 mg/L	1	SM5310B

Lab ID # AB19380	Result	Reporting Limit	Method
Coliforms (Total)	1986.3 MPN/100mL	1	SM9223B
E. coli	75.9 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-05-0010 **USGS Hydrologic Unit:** 050800030505
Stream Name: Salt Creek **County:** Franklin
Description: SR 229 **Latitude:** 39 26 46.54508 **Longitude:** -85 9 1.67470
Drainage: **Site Number:** 14T-010

SiteID: GMW-05-0010 **Sample Date:** 08/04/2014 **IDEM Sample #:** AB17817
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	Method
% Sat	97.7 %		ASTM D888-09(C)
DO	7.78 mg/L		ASTM D888-09(C)
pH (Field)	7.77 SU		EPA 150.2
Specific Conductance (Field)	499 umho/cm		SM2510B
Temperature	26.89 °C		SM2550B(2)
Turbidity (Hach)	12.7 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	32.4 MPN/100mL	1	SM9223B

SiteID: GMW-05-0010 **Sample Date:** 08/11/2014 **IDEM Sample #:** AB17823
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	84.8 %		ASTM D888-09(C)
DO	6.72 mg/L		ASTM D888-09(C)
pH (Field)	7.72 SU		EPA 150.2
Specific Conductance (Field)	503 umho/cm		SM2510B
Temperature	27.22 °C		SM2550B(2)
Turbidity (Hach)	20.3 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Flow	8.9014 cf/sec		TM D5389-95/D3858
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	3 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
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Lab ID # 514001	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	224 mg/L	10	EPA 310.2
Chloride	14 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	247 mg/L	75	EPA 130.1
Solids, Suspended Total, (TSS)	27 mg/L	4	SM2540D
Solids, Total (TS)	322 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	284 mg/L	10	SM2540C
Sulfate	18 mg/L	5	EPA 375.2
COD	10.7 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.049 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	2 mg/L	1	SM5310B

Lab ID # AB17823	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	579.4 MPN/100mL	1	SM9223B

SiteID: GMW-05-0010 **Sample Date:** 08/19/2014 **IDEM Sample #:** AB17874
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	Method
% Sat	81.8 %		SM4500-OG
DO	6.55 mg/L		SM4500-OG
pH (Field)	7.59 SU		EPA 150.2
Specific Conductance (Field)	464 umho/cm		SM2510B
Temperature	25.02 °C		SM2550B(2)
Turbidity (Hach)	8.86 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-05-0010 Sample Date: 09/22/2014 IDEM Sample #: AB19090
 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	Method
% Sat	105.6 %		ASTM D888-09(C)
DO	9.52 mg/L		ASTM D888-09(C)
pH (Field)	7.78 SU		EPA 150.2
Specific Conductance (Field)	530 umho/cm		SM2510B
Temperature	20.24 °C		SM2550B(2)
Turbidity (Hach)	11.7 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Flow	1.6487 cf/sec		TM D5389-95/D3858
Sky Conditions	1 Lookup		Observation
Wind Direction	9 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID # 517659	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	227 mg/L	10	EPA 310.2
Chloride	17 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	269 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	9 mg/L	4	SM2540D
Solids, Total (TS)	314 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	292 mg/L	10	SM2540C
Sulfate	20 mg/L	5	EPA 375.2
COD	14.9 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.027 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.3 mg/L	1	SM5310B

Lab ID # AB19090	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	74.3 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-05-0010 Sample Date: 10/20/2014 IDEM Sample #: AB19369
 Water Flow Type Run 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	89.5 %		ASTM D888-09(C)
DO	9.19 mg/L		ASTM D888-09(C)
pH (Field)	7.67 SU		EPA 150.2
Specific Conductance (Field)	497 umho/cm		SM2510B
Temperature	14.11 °C		SM2550B(2)
Turbidity (Hach)	16.1 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Flow	8.5314 cf/sec		FM D5389-95/D3858
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID # 520229	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	218 mg/L	10	EPA 310.2
Chloride	18 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	243 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	12 mg/L	4	SM2540D
Solids, Total (TS)	319 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	293 mg/L	10	SM2540C
Sulfate	26 mg/L	5	EPA 375.2
COD	27.3 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.2 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.044 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	4.6 mg/L	1	SM5310B

Lab ID # AB19369	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	137.6 MPN/100mL	1	SM9223B

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
2 - Scattered	9 - Snow	9 - East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	18 - South (180 Degrees)	2 - Mod./Light
4 - Cloudy		27 - West (270 Degrees)	3 - Moderate
5 - Mist			4 - Mod./Strong
6 - Fog			5 - Strong
7 - Shower			6 - > 86

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-04-0018 **USGS Hydrologic Unit:** 050800030408
Stream Name: Whitewater River **County:** Franklin
Description: US 52 **Latitude:** 39 26 58.81830 **Longitude:** -85 8 54.46486
Drainage: **Site Number:** 14T-011

SiteID: GMW-04-0018 **Sample Date:** 08/04/2014 **IDEM Sample #:** AB17787
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	Method
% Sat	125.2 %		ASTM D888-09(C)
DO	10.76 mg/L		ASTM D888-09(C)
pH (Field)	8.09 SU		EPA 150.2
Specific Conductance (Field)	604 umho/cm		SM2510B
Temperature	23.13 °C		SM2550B(2)
Turbidity (Hach)	5.97 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	8.4 MPN/100mL	1	SM9223B

SiteID: GMW-04-0018 **Sample Date:** 08/05/2014 **IDEM Sample #:** AB18774
Water Flow Type Run **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	109.7 %		ASTM D888-09(C)
DO	8.99 mg/L		ASTM D888-09(C)
pH (Field)	8.04 SU		EPA 150.2
Specific Conductance (Field)	558 umho/cm		SM2510B
Temperature	24.08 °C		SM2550B(2)
Turbidity (Hach)	5.23 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-04-0018 Sample Date: 08/11/2014 IDEM Sample #: AB17824
 Water Flow Type Riffle 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	104.3 %		ASTM D888-09(C)
DO	8.67 mg/L		ASTM D888-09(C)
pH (Field)	7.95 SU		EPA 150.2
Specific Conductance (Field)	571 umho/cm		SM2510B
Temperature	24.74 °C		SM2550B(2)
Turbidity (Hach)	57.1 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID # 514002	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	235 mg/L	10	EPA 310.2
Chloride	20 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	305 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	74 mg/L	4	SM2540D
Solids, Total (TS)	430 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	334 mg/L	10	SM2540C
Sulfate	26 mg/L	5	EPA 375.2
COD	13.5 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	2.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.073 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	2.1 mg/L	1	SM5310B

Lab ID # AB17824	Result	Reporting Limit	Method
E. coli	980.4 MPN/100mL	1	SM9223B

Lab ID # AB17824a	Result	Reporting Limit	Method
Coliforms (Total)	12033 MPN/100mL	10	SM9223B

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-04-0018 Sample Date: 09/22/2014 IDEM Sample #: AB19091
 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	Method
% Sat	146.4 %		ASTM D888-09(C)
DO	13.72 mg/L		ASTM D888-09(C)
pH (Field)	8.18 SU		EPA 150.2
Specific Conductance (Field)	588 umho/cm		SM2510B
Temperature	18.45 °C		SM2550B(2)
Turbidity (Hach)	4.07 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID # 517660	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	240 mg/L	10	EPA 310.2
Chloride	23 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	304 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	5 mg/L	4	SM2540D
Solids, Total (TS)	360 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	330 mg/L	10	SM2540C
Sulfate	27 mg/L	5	EPA 375.2
COD	12.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.9 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.021 mg/L	0.03	EPA 365.1
TKN	0.3 mg/L	0.3	EPA 351.2
TOC	1.7 mg/L	1	SM5310B

Lab ID # AB19091	Result	Reporting Limit	Method
Coliforms (Total)	1732.9 MPN/100mL	1	SM9223B
E. coli	43.1 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-04-0018 Sample Date: 10/20/2014 IDEM Sample #: AB19370
 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	Method
% Sat	125.6 %		ASTM D888-09(C)
DO	12.82 mg/L		ASTM D888-09(C)
pH (Field)	8.17 SU		EPA 150.2
Specific Conductance (Field)	591 umho/cm		SM2510B
Temperature	14.44 °C		SM2550B(2)
Turbidity (Hach)	4.48 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	3 Lookup		Observation

Lab ID # 520230	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	266 mg/L	10	EPA 310.2
Chloride	23 mg/L	5	SM4500CI-E
Hardness (as CaCO3)	322 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	249 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	232 mg/L	10	SM2540C
Sulfate	28 mg/L	5	EPA 375.2
COD	16.2 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.8 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.015 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.4 mg/L	1	SM5310B

Lab ID # AB19370	Result	Reporting Limit	Method
Coliforms (Total)	1046.2 MPN/100mL	1	SM9223B
E. coli	33.6 MPN/100mL	1	SM9223B

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

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-06-0019 **USGS Hydrologic Unit:** 050800030603
Stream Name: Duck Creek **County:** Franklin
Description: US 52 **Latitude:** 39 26 54.31200 **Longitude:** -85 7 58.71360
Drainage: **Site Number:** 14T-012

SiteID: GMW-06-0019 **Sample Date:** 08/11/2014 **IDEM Sample #:** AB17825
Water Flow Type Run **Water Appearance** Brown **Water Depth** **Algae?**
Water Flow (cf/sec): **Flow Estimated?** **Aquatic Life?** **Canopy Closed %** 0-20%
Sampler Comments: Muddy

<u>Lab ID #</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	91.8 %		ASTM D888-09(C)
DO	7.79 mg/L		ASTM D888-09(C)
pH (Field)	7.76 SU		EPA 150.2
Specific Conductance (Field)	318 umho/cm		SM2510B
Temperature	23.57 °C		SM2550B(2)
Turbidity (Hach)	511 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	9 Lookup		Observation
Wind Strength	1 Lookup		Observation

<u>Lab ID # 514003</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Alkalinity (as CaCO3)	104 mg/L	10	EPA 310.2
Chloride	16 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	159 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	286 mg/L	8	SM2540D
Solids, Total (TS)	512 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	237 mg/L	10	SM2540C
Sulfate	15 mg/L	5	EPA 375.2
COD	12.1 mg/L	10	SM5220D
Nitrogen, Ammonia	0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.5 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.308 mg/L	0.03	EPA 365.1
TKN	1.2 mg/L	0.3	EPA 351.2
TOC	5.1 mg/L	1	SM5310B

<u>Lab ID # AB17825a</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
Coliforms (Total)	> 24196 MPN/100mL	24196	SM9223B
E. coli	12997 MPN/100mL	10	SM9223B

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-06-0019 Sample Date: 10/20/2014 IDEM Sample #: AB19371
 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	Method
% Sat	112.6 %		ASTM D888-09(C)
DO	11.71 mg/L		ASTM D888-09(C)
pH (Field)	7.94 SU		EPA 150.2
Specific Conductance (Field)	508 umho/cm		SM2510B
Temperature	13.53 °C		SM2550B(2)
Turbidity (Hach)	3.6 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	3 Lookup		Observation

Lab ID # 520231	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	249 mg/L	10	EPA 310.2
Chloride	8.9 mg/L	5	SM4500CI-E
Hardness (as CaCO3)	240 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	311 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	294 mg/L	10	SM2540C
Sulfate	25 mg/L	5	EPA 375.2
COD	16.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.3 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.012 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.8 mg/L	1	SM5310B

Lab ID # AB19371	Result	Reporting Limit	Method
Coliforms (Total)	1732.9 MPN/100mL	1	SM9223B
E. coli	17.3 MPN/100mL	1	SM9223B

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

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-06-0022 **USGS Hydrologic Unit:** 050800030605
Stream Name: Whitewater Canal **County:** Franklin
Description: Park Ave at Whitewater Canal State Histo **Latitude:** 39 26 58.77240 **Longitude:** -85 7 10.49160
Drainage: **Site Number:** 14T-013

SiteID: GMW-06-0022 **Sample Date:** 08/04/2014 **IDEM Sample #:** AB17859
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	103.3 %		SM4500-OG
DO	8.5 mg/L		SM4500-OG
pH (Field)	8.13 SU		EPA 150.2
Specific Conductance (Field)	560 umho/cm		SM2510B
Temperature	23.87 °C		SM2550B(2)
Turbidity (Hach)	44.7 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: GMW-06-0022 **Sample Date:** 08/04/2014 **IDEM Sample #:** AB17785
Water Flow Type Run **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	112.4 %		ASTM D888-09(C)
DO	9.48 mg/L		ASTM D888-09(C)
pH (Field)	8.12 SU		EPA 150.2
Specific Conductance (Field)	604 umho/cm		SM2510B
Temperature	23.87 °C		SM2550B(2)
Turbidity (Hach)	74 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	396.8 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-06-0022 Sample Date: 08/11/2014 IDEM Sample #: AB17826
 Water Flow Type Glide 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	86.2 %		ASTM D888-09(C)
DO	7.18 mg/L		ASTM D888-09(C)
pH (Field)	7.78 SU		EPA 150.2
Specific Conductance (Field)	350 umho/cm		SM2510B
Temperature	24.51 °C		SM2550B(2)
Turbidity (Hach)	388 NTU		EPA 180.1
Air Temp	6 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID # 514004	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	139 mg/L	10	EPA 310.2
Chloride	19 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	178 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	186 mg/L	8	SM2540D
Solids, Total (TS)	475 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	263 mg/L	10	SM2540C
Sulfate	25 mg/L	5	EPA 375.2
COD	11 mg/L	10	SM5220D
Nitrogen, Ammonia	0.2 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.233 mg/L	0.03	EPA 365.1
TKN	0.9 mg/L	0.3	EPA 351.2
TOC	3.9 mg/L	1	SM5310B

Lab ID # AB17826	Result	Reporting Limit	Method
E. coli	1553.1 MPN/100mL	1	SM9223B

Lab ID # AB17826a	Result	Reporting Limit	Method
Coliforms (Total)	> 24196 MPN/100mL	24196	SM9223B

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-06-0022 Sample Date: 09/22/2014 IDEM Sample #: AB19093
 Water Flow Type Run 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	113.4 %		ASTM D888-09(C)
DO	10.46 mg/L		ASTM D888-09(C)
pH (Field)	8.14 SU		EPA 150.2
Specific Conductance (Field)	585 umho/cm		SM2510B
Temperature	19.23 °C		SM2550B(2)
Turbidity (Hach)	63.9 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID # 517661	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	240 mg/L	10	EPA 310.2
Chloride	23 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	283 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	56 mg/L	4	SM2540D
Solids, Total (TS)	404 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	330 mg/L	10	SM2540C
Sulfate	32 mg/L	5	EPA 375.2
COD	15.9 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.8 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.058 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	1.9 mg/L	1	SM5310B

Lab ID # AB19093	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	225.4 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-06-0022

Sample Date: 10/20/2014

IDEM Sample #: AB19372

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	97.4 %		ASTM D888-09(C)
DO	10 mg/L		ASTM D888-09(C)
pH (Field)	8.06 SU		EPA 150.2
Specific Conductance (Field)	596 umho/cm		SM2510B
Temperature	14.07 °C		SM2550B(2)
Turbidity (Hach)	71.3 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	3 Lookup		Observation

Lab ID # 520232	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	260 mg/L	10	EPA 310.2
Chloride	23 mg/L	5	SM4500CI-E
Hardness (as CaCO3)	320 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	62 mg/L	4	SM2540D
Solids, Total (TS)	436 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	353 mg/L	10	SM2540C
Sulfate	29 mg/L	5	EPA 375.2
COD	17.5 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.7 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.073 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	2.8 mg/L	1	SM5310B

Lab ID # AB19372	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	156.5 MPN/100mL	1	SM9223B

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

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-06-0015 **USGS Hydrologic Unit:** 050800030604
Stream Name: Pipe Creek **County:** Franklin
Description: Silver Creek Rd **Latitude:** 39 25 53.45715 **Longitude:** -85 6 38.84657
Drainage: **Site Number:** 14T-014

SiteID: GMW-06-0015 **Sample Date:** 08/05/2014 **IDEM Sample #:** AB17809
Water Flow Type Pool **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	71.7 %		ASTM D888-09(C)
DO	6.12 mg/L		ASTM D888-09(C)
pH (Field)	7.58 SU		EPA 150.2
Specific Conductance (Field)	475 umho/cm		SM2510B
Temperature	23.2 °C		SM2550B(2)
Turbidity (Hach)	18.8 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	48.1 MPN/100mL	1	SM9223B

SiteID: GMW-06-0015 **Sample Date:** 08/11/2014 **IDEM Sample #:** AB17886
Water Flow Type Pool **Water Appearance** Murky **Water Depth** **Algae?**
Water Flow (cf/sec): **Flow Estimated?** **Aquatic Life?** **Canopy Closed %** 0-20%
Sampler Comments: Water appearance also had a sheen

Lab ID #	Result	Reporting Limit	Method
% Sat	55 %		SM4500-OG
DO	4.4 mg/L		SM4500-OG
pH (Field)	7.32 SU		EPA 150.2
Specific Conductance (Field)	445 umho/cm		SM2510B
Temperature	24.87 °C		SM2550B(2)
Turbidity (Hach)	10.3 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	0 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-06-0015 Sample Date: 08/12/2014 IDEM Sample #: AB17846
 Water Flow Type Pool Water Appearance Green Water Depth Algae?
 Water Flow (cf/sec): Flow Estimated? Aquatic Life? Canopy Closed % 0-20%
 Sampler Comments:

Lab ID #	Result	Reporting Limit	Method
% Sat	45.4 %		ASTM D888-09(C)
DO	3.77 mg/L		ASTM D888-09(C)
pH (Field)	7.34 SU		EPA 150.2
Specific Conductance (Field)	479 umho/cm		SM2510B
Temperature	23.86 °C		SM2550B(2)
Turbidity (Hach)	21.1 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Flow	1.4351 cf/sec		FM D5389-95/D3858
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	4 Lookup		Observation

Lab ID # 514317	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	209 mg/L	10	EPA 310.2
Chloride	16 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	229 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	37 mg/L	4	SM2540D
Solids, Total (TS)	304 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	266 mg/L	10	SM2540C
Sulfate	17 mg/L	5	EPA 375.2
COD	19.9 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.059 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	3.1 mg/L	1	SM5310B

Lab ID # AB17846	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	68.9 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-06-0015 Sample Date: 09/23/2014 IDEM Sample #: AB19113
 Water Flow Type Pool 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	61.5 %		ASTM D888-09(C)
DO	6.14 mg/L		ASTM D888-09(C)
pH (Field)	7.53 SU		EPA 150.2
Specific Conductance (Field)	449 umho/cm		SM2510B
Temperature	15.45 °C		SM2550B(2)
Turbidity (Hach)	26.9 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Flow	0.3092 cf/sec		FM D5389-95/D3858
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID # 517980	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	190 mg/L	10	EPA 310.2
Chloride	15 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	211 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	21 mg/L	4	SM2540D
Solids, Total (TS)	277 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	250 mg/L	10	SM2540C
Sulfate	13 mg/L	5	EPA 375.2
COD	16.1 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.035 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	4 mg/L	1	SM5310B

Lab ID # AB19113	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	41.4 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-06-0015 Sample Date: 10/21/2014 IDEM Sample #: AB19392
 Water Flow Type Run 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	55.4 %		ASTM D888-09(C)
DO	5.83 mg/L		ASTM D888-09(C)
pH (Field)	7.46 SU		EPA 150.2
Specific Conductance (Field)	460 umho/cm		SM2510B
Temperature	13.05 °C		SM2550B(2)
Turbidity (Hach)	23.2 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Flow	2.2267 cf/sec		FM D5389-95/D3858
Sky Conditions	4 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID # 520457	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	188 mg/L	10	EPA 310.2
Chloride	20 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	173 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	16 mg/L	4	SM2540D
Solids, Total (TS)	299 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	275 mg/L	10	SM2540C
Sulfate	25 mg/L	5	EPA 375.2
COD	26.8 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.04 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	6.3 mg/L	1	SM5310B

Lab ID # AB19392	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	71.7 MPN/100mL	1	SM9223B

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
2 - Scattered	9 - Snow	9 - East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	18 - South (180 Degrees)	2 - Mod./Light
4 - Cloudy		27 - West (270 Degrees)	3 - Moderate
5 - Mist			4 - Mod./Strong
6 - Fog			5 - Strong
7 - Shower			6 - > 86

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-06-0013 **USGS Hydrologic Unit:** 050800030602
Stream Name: Clear Fork **County:** Franklin
Description: Schwegman Rd **Latitude:** 39 22 20.84904 **Longitude:** -85 8 36.02632
Drainage: **Site Number:** 14T-015

SiteID: GMW-06-0013 **Sample Date:** 08/05/2014 **IDEM Sample #:** AB17794
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	Method
% Sat	63.3 %		ASTM D888-09(C)
DO	5.77 mg/L		ASTM D888-09(C)
pH (Field)	7.62 SU		EPA 150.2
Specific Conductance (Field)	500 umho/cm		SM2510B
Temperature	19.7 °C		SM2550B(2)
Turbidity (Hach)	5.73 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	8.5 MPN/100mL	1	SM9223B

SiteID: GMW-06-0013 **Sample Date:** 09/23/2014 **IDEM Sample #:** AB19119
Water Flow Type Pool **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	78.8 %		ASTM D888-09(C)
DO	8.73 mg/L		ASTM D888-09(C)
pH (Field)	7.7 SU		EPA 150.2
Specific Conductance (Field)	520 umho/cm		SM2510B
Temperature	10.69 °C		SM2550B(2)
Turbidity (Hach)	3.32 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 517981	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	219 mg/L	10	EPA 310.2
Chloride	21 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	250 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	307 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	290 mg/L	10	SM2540C
Sulfate	20 mg/L	5	EPA 375.2
COD	14.8 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.017 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.3 mg/L	1	SM5310B

Lab ID # AB19119	Result	Reporting Limit	Method
Coliforms (Total)	1732.9 MPN/100mL	1	SM9223B
E. coli	15.5 MPN/100mL	1	SM9223B

SiteID: GMW-06-0013 **Sample Date:** 10/21/2014 **IDEM Sample #:** AB19398
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	Method
% Sat	87.3 %		ASTM D888-09(C)
DO	9.51 mg/L		ASTM D888-09(C)
pH (Field)	7.82 SU		EPA 150.2
Specific Conductance (Field)	500 umho/cm		SM2510B
Temperature	11.47 °C		SM2550B(2)
Turbidity (Hach)	5.89 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520458	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	216 mg/L	10	EPA 310.2
Chloride	22 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	235 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	302 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	290 mg/L	10	SM2540C
Sulfate	21 mg/L	5	EPA 375.2
COD	14.9 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.014 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	3.1 mg/L	1	SM5310B

Lab ID # AB19398	Result	Reporting Limit	Method
Coliforms (Total)	1732.9 MPN/100mL	1	SM9223B
E. coli	78.9 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-06-0020 **USGS Hydrologic Unit:** 050800030604
Stream Name: Pipe Creek **County:** Franklin
Description: St Marys Rd **Latitude:** 39 21 6.72840 **Longitude:** -85 6 35.01720
Drainage: **Site Number:** 14T-016

SiteID: GMW-06-0020 **Sample Date:** 08/05/2014 **IDEM Sample #:** AB17792
Water Flow Type Riffle **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	81.3 %		ASTM D888-09(C)
DO	7.39 mg/L		ASTM D888-09(C)
pH (Field)	7.7 SU		EPA 150.2
Specific Conductance (Field)	530 umho/cm		SM2510B
Temperature	19.93 °C		SM2550B(2)
Turbidity (Hach)	7.94 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	157.6 MPN/100mL	1	SM9223B

SiteID: GMW-06-0020 **Sample Date:** 08/12/2014 **IDEM Sample #:** AB17850
Water Flow Type Pool **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	73.1 %		ASTM D888-09(C)
DO	6.98 mg/L		ASTM D888-09(C)
pH (Field)	7.52 SU		EPA 150.2
Specific Conductance (Field)	590 umho/cm		SM2510B
Temperature	21.2 °C		SM2550B(2)
Turbidity (Hach)	7.93 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 514319	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	208 mg/L	10	EPA 310.2
Chloride	25 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	243 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	19 mg/L	4	SM2540D
Solids, Total (TS)	325 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	293 mg/L	10	SM2540C
Sulfate	24 mg/L	5	EPA 375.2
COD	20.5 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.2 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.032 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	3.8 mg/L	1	SM5310B

Lab ID # AB17850	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	328.2 MPN/100mL	1	SM9223B

SiteID: GMW-06-0020 **Sample Date:** 09/23/2014 **IDEM Sample #:** AB19117

Water Flow Type Pool **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	62.7 %		ASTM D888-09(C)
DO	6.7 mg/L		ASTM D888-09(C)
pH (Field)	7.43 SU		EPA 150.2
Specific Conductance (Field)	600 umho/cm		SM2510B
Temperature	12.34 °C		SM2550B(2)
Turbidity (Hach)	4.5 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 517982	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	221 mg/L	10	EPA 310.2
Chloride	28 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	276 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	4 mg/L	4	SM2540D
Solids, Total (TS)	335 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	317 mg/L	10	SM2540C
Sulfate	23 mg/L	5	EPA 375.2
COD	15.8 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.017 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	3.6 mg/L	1	SM5310B

Lab ID # AB19117	Result	Reporting Limit	Method
Coliforms (Total)	2419.6 MPN/100mL	1	SM9223B
E. coli	67.7 MPN/100mL	1	SM9223B

SiteID: GMW-06-0020 **Sample Date:** 10/21/2014 **IDEM Sample #:** AB19396
Water Flow Type Pool **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	84.1 %		ASTM D888-09(C)
DO	9.38 mg/L		ASTM D888-09(C)
pH (Field)	7.74 SU		EPA 150.2
Specific Conductance (Field)	555 umho/cm		SM2510B
Temperature	10.42 °C		SM2550B(2)
Turbidity (Hach)	3.51 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520460	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	228 mg/L	10	EPA 310.2
Chloride	32 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	226 mg/L	75	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	345 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	338 mg/L	10	SM2540C
Sulfate	27 mg/L	5	EPA 375.2
COD	19 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.031 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	4.9 mg/L	1	SM5310B

Lab ID # AB19396	Result	Reporting Limit	Method
Coliforms (Total)	980.4 MPN/100mL	1	SM9223B
E. coli	47.3 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-06-0014 **USGS Hydrologic Unit:** 050800030601
Stream Name: Tributary of Pipe Creek **County:** Ripley
Description: St Marys Rd **Latitude:** 39 17 56.56584 **Longitude:** -85 6 15.47564
Drainage: **Site Number:** 14T-017

SiteID: GMW-06-0014 **Sample Date:** 10/21/2014 **IDEM Sample #:** AB19393
Water Flow Type Pool **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	48.3 %		ASTM D888-09(C)
DO	5.33 mg/L		ASTM D888-09(C)
pH (Field)	7.43 SU		EPA 150.2
Specific Conductance (Field)	554 umho/cm		SM2510B
Temperature	10.91 °C		SM2550B(2)
Turbidity (Hach)	4.48 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID # 520461	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	226 mg/L	10	EPA 310.2
Chloride	32 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	249 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	349 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	333 mg/L	10	SM2540C
Sulfate	26 mg/L	5	EPA 375.2
COD	30 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.3 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.134 mg/L	0.03	EPA 365.1
TKN	0.6 mg/L	0.3	EPA 351.2
TOC	9.2 mg/L	1	SM5310B

Lab ID # AB19393	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	344.8 MPN/100mL	1	SM9223B

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
2 - Scattered	9 - Snow	9 - East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	18 - South (180 Degrees)	2 - Mod./Light
4 - Cloudy		27 - West (270 Degrees)	3 - Moderate
5 - Mist			4 - Mod./Strong
6 - Fog			5 - Strong
7 - Shower			6 - > 86
			6 - Gale

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW060-0027 **USGS Hydrologic Unit:** 050800030601
Stream Name: Pipe Creek **County:** Ripley
Description: Pipe Creek Rd **Latitude:** 39 17 44.29900 **Longitude:** -85 5 58.54500
Drainage: **Site Number:** 14T-018

SiteID: GMW060-0027 **Sample Date:** 08/04/2014 **IDEM Sample #:** AB17861
Water Flow Type Pool **Water Appearance** Murky **Water Depth** **Algae?**
Water Flow (cf/sec): **Flow Estimated?** **Aquatic Life?** **Canopy Closed %** 0-20%
Sampler Comments: Q4 Turbidity = 64.7; DO taken again at 11:30 w/Q4 = 3.3 mg/L

<u>Lab ID #</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	30.1 %		SM4500-OG
DO	2.84 mg/L		SM4500-OG
pH (Field)	7.71 SU		EPA 150.2
Specific Conductance (Field)	403 umho/cm		SM2510B
Temperature	17.93 °C		SM2550B(2)
Turbidity (Hach)	9.61 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

SiteID: GMW060-0027 **Sample Date:** 10/21/2014 **IDEM Sample #:** AB19383
Water Flow Type Glide **Water Appearance** Clear **Water Depth** **Algae?**
Water Flow (cf/sec): **Flow Estimated?** **Aquatic Life?** **Canopy Closed %** 0-20%
Sampler Comments:

<u>Lab ID #</u>	<u>Result</u>	<u>Reporting Limit</u>	<u>Method</u>
% Sat	40.8 %		ASTM D888-09(C)
DO	4.52 mg/L		ASTM D888-09(C)
pH (Field)	7.33 SU		EPA 150.2
Specific Conductance (Field)	446 umho/cm		SM2510B
Temperature	10.71 °C		SM2550B(2)
Turbidity (Hach)	5.91 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520462	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	184 mg/L	10	EPA 310.2
Chloride	36 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	187 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	303 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	292 mg/L	10	SM2540C
Sulfate	20 mg/L	5	EPA 375.2
COD	37.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.065 mg/L	0.03	EPA 365.1
TKN	0.6 mg/L	0.3	EPA 351.2
TOC	9.7 mg/L	1	SM5310B

Lab ID # AB19383	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	121.1 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-06-0012 **USGS Hydrologic Unit:** 050800030605
Stream Name: Whitewater River **County:** Franklin
Description: St Marys Rd **Latitude:** 39 25 15.85784 **Longitude:** -85 0 54.84792
Drainage: **Site Number:** 14T-019

SiteID: GMW-06-0012 **Sample Date:** 08/05/2014 **IDEM Sample #:** AB17793
Water Flow Type Eddy **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	97.4 %		ASTM D888-09(C)
DO	8.38 mg/L		ASTM D888-09(C)
pH (Field)	7.94 SU		EPA 150.2
Specific Conductance (Field)	594 umho/cm		SM2510B
Temperature	22.72 °C		SM2550B(2)
Turbidity (Hach)	10.7 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	31.8 MPN/100mL	1	SM9223B

SiteID: GMW-06-0012 **Sample Date:** 08/12/2014 **IDEM Sample #:** AB17851
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	91.5 %		ASTM D888-09(C)
DO	7.93 mg/L		ASTM D888-09(C)
pH (Field)	7.94 SU		EPA 150.2
Specific Conductance (Field)	578 umho/cm		SM2510B
Temperature	22.41 °C		SM2550B(2)
Turbidity (Hach)	49.2 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 514320	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	243 mg/L	10	EPA 310.2
Chloride	20 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	279 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	58 mg/L	4	SM2540D
Solids, Total (TS)	408 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	334 mg/L	10	SM2540C
Sulfate	28 mg/L	5	EPA 375.2
COD	13.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.8 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.054 mg/L	0.03	EPA 365.1
TKN	0.6 mg/L	0.3	EPA 351.2
TOC	1.9 mg/L	1	SM5310B

Lab ID # AB17851	Result	Reporting Limit	Method
E. coli	686.7 MPN/100mL	1	SM9223B

Lab ID # AB17851a	Result	Reporting Limit	Method
Coliforms (Total)	> 24196 MPN/100mL	24196	SM9223B

SiteID: GMW-06-0012 **Sample Date:** 08/20/2014 **IDEM Sample #:** AB17866
Water Flow Type Run **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	97.5 %		SM4500-OG
DO	8.11 mg/L		SM4500-OG
pH (Field)	8.1 SU		EPA 150.2
Specific Conductance (Field)	540 umho/cm		SM2510B
Temperature	22.83 °C		SM2550B(2)
Turbidity (Hach)	12.3 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	0 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-06-0012 Sample Date: 09/23/2014 IDEM Sample #: AB19118
 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	Method
% Sat	120.3 %		ASTM D888-09(C)
DO	11.61 mg/L		ASTM D888-09(C)
pH (Field)	7.99 SU		EPA 150.2
Specific Conductance (Field)	579 umho/cm		SM2510B
Temperature	17.06 °C		SM2550B(2)
Turbidity (Hach)	6 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID # 517983	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	238 mg/L	10	EPA 310.2
Chloride	22 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	311 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	5 mg/L	4	SM2540D
Solids, Total (TS)	364 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	336 mg/L	10	SM2540C
Sulfate	26 mg/L	5	EPA 375.2
COD	14.2 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.5 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.012 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.7 mg/L	1	SM5310B

Lab ID # AB19118	Result	Reporting Limit	Method
Coliforms (Total)	1986.3 MPN/100mL	1	SM9223B
E. coli	48.7 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-06-0012

Sample Date: 10/21/2014

IDEM Sample #: AB19397

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	95.4 %		ASTM D888-09(C)
DO	10.01 mg/L		ASTM D888-09(C)
pH (Field)	7.91 SU		EPA 150.2
Specific Conductance (Field)	587 umho/cm		SM2510B
Temperature	13.15 °C		SM2550B(2)
Turbidity (Hach)	5.74 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

Lab ID # 520463	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	257 mg/L	10	EPA 310.2
Chloride	22 mg/L	5	SM4500CI-E
Hardness (as CaCO3)	296 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	5 mg/L	4	SM2540D
Solids, Total (TS)	369 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	347 mg/L	10	SM2540C
Sulfate	27 mg/L	5	EPA 375.2
COD	11.1 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.6 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.009 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.2 mg/L	1	SM5310B

Lab ID # AB19397	Result	Reporting Limit	Method
Coliforms (Total)	1986.3 MPN/100mL	1	SM9223B
E. coli	95.8 MPN/100mL	1	SM9223B

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

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-07-0026 **USGS Hydrologic Unit:** 050800030717
Stream Name: East Fork Whitewater River **County:** Franklin
Description: US 52 **Latitude:** 39 24 44.54104 **Longitude:** -85 0 39.39133
Drainage: **Site Number:** 14T-020

SiteID: GMW-07-0026 **Sample Date:** 08/05/2014 **IDEM Sample #:** AB17808
Water Flow Type Eddy **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	132.1 %		ASTM D888-09(C)
DO	13.03 mg/L		ASTM D888-09(C)
pH (Field)	8.08 SU		EPA 150.2
Specific Conductance (Field)	490 umho/cm		SM2510B
Temperature	15.93 °C		SM2550B(2)
Turbidity (Hach)	2.92 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	31.1 MPN/100mL	1	SM9223B

SiteID: GMW-07-0026 **Sample Date:** 08/12/2014 **IDEM Sample #:** AB17845
Water Flow Type Glide **Water Appearance** Clear **Water Depth** **Algae?**
Water Flow (cf/sec): **Flow Estimated?** **Aquatic Life?** **Canopy Closed %** 0-20%
Sampler Comments: Below reservoir

Lab ID #	Result	Reporting Limit	Method
% Sat	116.3 %		ASTM D888-09(C)
DO	11.5 mg/L		ASTM D888-09(C)
pH (Field)	8 SU		EPA 150.2
Specific Conductance (Field)	488 umho/cm		SM2510B
Temperature	16.54 °C		SM2550B(2)
Turbidity (Hach)	3.82 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 514321	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	193 mg/L	10	EPA 310.2
Chloride	24 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	225 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	301 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	281 mg/L	10	SM2540C
Sulfate	20 mg/L	5	EPA 375.2
COD	18.9 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.5 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.059 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	3.6 mg/L	1	SM5310B

Lab ID # AB17845	Result	Reporting Limit	Method
Coliforms (Total)	2419.6 MPN/100mL	1	SM9223B
E. coli	42 MPN/100mL	1	SM9223B

SiteID: GMW-07-0026 **Sample Date:** 09/23/2014 **IDEM Sample #:** AB19112
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	Method
% Sat	71.2 %		ASTM D888-09(C)
DO	7.24 mg/L		ASTM D888-09(C)
pH (Field)	7.43 SU		EPA 150.2
Specific Conductance (Field)	495 umho/cm		SM2510B
Temperature	14.53 °C		SM2550B(2)
Turbidity (Hach)	3.17 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 517984	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	197 mg/L	10	EPA 310.2
Chloride	24 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	245 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	301 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	286 mg/L	10	SM2540C
Sulfate	18 mg/L	5	EPA 375.2
COD	16.5 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.2 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.087 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	3.6 mg/L	1	SM5310B

Lab ID # AB19112	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	7.5 MPN/100mL	1	SM9223B

SiteID: GMW-07-0026 **Sample Date:** 10/21/2014 **IDEM Sample #:** AB19391
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	Method
% Sat	86.9 %		ASTM D888-09(C)
DO	8.44 mg/L		ASTM D888-09(C)
pH (Field)	7.52 SU		EPA 150.2
Specific Conductance (Field)	446 umho/cm		SM2510B
Temperature	16.67 °C		SM2550B(2)
Turbidity (Hach)	5.6 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520464	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	175 mg/L	10	EPA 310.2
Chloride	25 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	199 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	4 mg/L	4	SM2540D
Solids, Total (TS)	273 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	255 mg/L	10	SM2540C
Sulfate	23 mg/L	5	EPA 375.2
COD	20.1 mg/L	10	SM5220D
Nitrogen, Ammonia	0.2 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.5 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.023 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	3.5 mg/L	1	SM5310B

Lab ID # AB19391	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	13.5 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0026 **USGS Hydrologic Unit:** 050800030802
Stream Name: Wolf Creek **County:** Franklin
Description: Blue Creek Rd **Latitude:** 39 23 55.37091 **Longitude:** -85 1 5.20564
Drainage: **Site Number:** 14T-021

SiteID: GMW-08-0026 **Sample Date:** 08/05/2014 **IDEM Sample #:** AB17797
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	94.3 %		ASTM D888-09(C)
DO	8.52 mg/L		ASTM D888-09(C)
pH (Field)	7.52 SU		EPA 150.2
Specific Conductance (Field)	549 umho/cm		SM2510B
Temperature	20.16 °C		SM2550B(2)
Turbidity (Hach)	3.5 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	90.6 MPN/100mL	1	SM9223B

SiteID: GMW-08-0026 **Sample Date:** 08/12/2014 **IDEM Sample #:** AB17854
Water Flow Type Pool **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	91.7 %		ASTM D888-09(C)
DO	8.16 mg/L		ASTM D888-09(C)
pH (Field)	7.63 SU		EPA 150.2
Specific Conductance (Field)	506 umho/cm		SM2510B
Temperature	21.11 °C		SM2550B(2)
Turbidity (Hach)	3.83 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 514322	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	212 mg/L	10	EPA 310.2
Chloride	14 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	241 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	12 mg/L	4	SM2540D
Solids, Total (TS)	311 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	288 mg/L	10	SM2540C
Sulfate	32 mg/L	5	EPA 375.2
COD	< 10 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.035 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.7 mg/L	1	SM5310B

Lab ID # AB17854	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	328.2 MPN/100mL	1	SM9223B

SiteID: GMW-08-0026 **Sample Date:** 09/23/2014 **IDEM Sample #:** AB19121

Water Flow Type Pool **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	73.7 %		ASTM D888-09(C)
DO	7.69 mg/L		ASTM D888-09(C)
pH (Field)	7.43 SU		EPA 150.2
Specific Conductance (Field)	566 umho/cm		SM2510B
Temperature	13.32 °C		SM2550B(2)
Turbidity (Hach)	2.45 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 517985	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	242 mg/L	10	EPA 310.2
Chloride	15 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	262 mg/L	75	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	339 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	327 mg/L	10	SM2540C
Sulfate	31 mg/L	5	EPA 375.2
COD	< 10 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.016 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.6 mg/L	1	SM5310B

Lab ID # AB19121	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	18.1 MPN/100mL	1	SM9223B

SiteID: GMW-08-0026 **Sample Date:** 10/21/2014 **IDEM Sample #:** AB19400
Water Flow Type Pool **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	83.4 %		ASTM D888-09(C)
DO	8.77 mg/L		ASTM D888-09(C)
pH (Field)	7.6 SU		EPA 150.2
Specific Conductance (Field)	529 umho/cm		SM2510B
Temperature	13 °C		SM2550B(2)
Turbidity (Hach)	3.44 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520465	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	219 mg/L	10	EPA 310.2
Chloride	18 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	246 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	326 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	314 mg/L	10	SM2540C
Sulfate	35 mg/L	5	EPA 375.2
COD	12 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.02 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.3 mg/L	1	SM5310B

Lab ID # AB19400	Result	Reporting Limit	Method
Coliforms (Total)	1119.9 MPN/100mL	1	SM9223B
E. coli	9.7 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW080-0003 **USGS Hydrologic Unit:** 050800030802
Stream Name: Blue Creek **County:** Franklin
Description: Highland Center Rd **Latitude:** 39 23 45.00000 **Longitude:** -85 0 55.00000
Drainage: 32.6 **Site Number:** 14T-022

SiteID: GMW080-0003 **Sample Date:** 08/05/2014 **IDEM Sample #:** AB17811
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	74.1 %		ASTM D888-09(C)
DO	6.48 mg/L		ASTM D888-09(C)
pH (Field)	7.31 SU		EPA 150.2
Specific Conductance (Field)	547 umho/cm		SM2510B
Temperature	21.86 °C		SM2550B(2)
Turbidity (Hach)	7.66 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	1299.7 MPN/100mL	1	SM9223B

SiteID: GMW080-0003 **Sample Date:** 08/12/2014 **IDEM Sample #:** AB17849
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	Method
% Sat	68.7 %		ASTM D888-09(C)
DO	5.95 mg/L		ASTM D888-09(C)
pH (Field)	7.43 SU		EPA 150.2
Specific Conductance (Field)	517 umho/cm		SM2510B
Temperature	22.48 °C		SM2550B(2)
Turbidity (Hach)	13.2 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Flow	1.0211 cf/sec		TM D5389-95/D3858
Sky Conditions	5 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	3 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 514324	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	219 mg/L	10	EPA 310.2
Chloride	16 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	240 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	6 mg/L	4	SM2540D
Solids, Total (TS)	310 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	291 mg/L	10	SM2540C
Sulfate	27 mg/L	5	EPA 375.2
COD	14.3 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.032 mg/L	0.03	EPA 365.1
TKN	0.3 mg/L	0.3	EPA 351.2
TOC	2.3 mg/L	1	SM5310B

Lab ID # AB17849	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	186 MPN/100mL	1	SM9223B

SiteID: GMW080-0003 **Sample Date:** 09/23/2014 **IDEM Sample #:** AB19116
Water Flow Type Pool **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	59.8 %		ASTM D888-09(C)
DO	6.09 mg/L		ASTM D888-09(C)
pH (Field)	7.27 SU		EPA 150.2
Specific Conductance (Field)	514 umho/cm		SM2510B
Temperature	14.41 °C		SM2550B(2)
Turbidity (Hach)	10.1 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Flow	0.566 cf/sec		TM D5389-95/D3858
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	0 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 517987	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	239 mg/L	10	EPA 310.2
Chloride	17 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	290 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	5 mg/L	4	SM2540D
Solids, Total (TS)	337 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	319 mg/L	10	SM2540C
Sulfate	29 mg/L	5	EPA 375.2
COD	14.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.028 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.2 mg/L	1	SM5310B

Lab ID # AB19116	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	156.5 MPN/100mL	1	SM9223B

SiteID: GMW080-0003 **Sample Date:** 10/21/2014 **IDEM Sample #:** AB19395
Water Flow Type Pool **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	72.7 %		ASTM D888-09(C)
DO	7.66 mg/L		ASTM D888-09(C)
pH (Field)	7.54 SU		EPA 150.2
Specific Conductance (Field)	521 umho/cm		SM2510B
Temperature	13.02 °C		SM2550B(2)
Turbidity (Hach)	6.5 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Flow	1.0674 cf/sec		TM D5389-95/D3858
Sky Conditions	3 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520467	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	222 mg/L	10	EPA 310.2
Chloride	19 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	235 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	345 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	326 mg/L	10	SM2540C
Sulfate	36 mg/L	5	EPA 375.2
COD	< 10 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.016 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.6 mg/L	1	SM5310B

Lab ID # AB19395	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	60.5 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0014 **USGS Hydrologic Unit:** 050800030802
Stream Name: Blue Creek **County:** Franklin
Description: Blue Creek Rd **Latitude:** 39 21 25.92724 **Longitude:** -85 2 6.60695
Drainage: **Site Number:** 14T-023

SiteID: GMW-08-0014 **Sample Date:** 08/05/2014 **IDEM Sample #:** AB17806
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. Stream nearly pooled at bridge

Lab ID #	Result	Reporting Limit	Method
% Sat	49.2 %		ASTM D888-09(C)
DO	4.33 mg/L		ASTM D888-09(C)
pH (Field)	7.36 SU		EPA 150.2
Specific Conductance (Field)	546 umho/cm		SM2510B
Temperature	21.77 °C		SM2550B(2)
Turbidity (Hach)	2.93 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	83.9 MPN/100mL	1	SM9223B

SiteID: GMW-08-0014 **Sample Date:** 08/12/2014 **IDEM Sample #:** AB17844
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	Method
% Sat	91.5 %		ASTM D888-09(C)
DO	7.94 mg/L		ASTM D888-09(C)
pH (Field)	7.95 SU		EPA 150.2
Specific Conductance (Field)	520 umho/cm		SM2510B
Temperature	22.33 °C		SM2550B(2)
Turbidity (Hach)	7.96 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Flow	0.5613 cf/sec		TM D5389-95/D3858
Sky Conditions	1 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 514325	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	207 mg/L	10	EPA 310.2
Chloride	24 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	235 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	99 mg/L	4	SM2540D
Solids, Total (TS)	403 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	302 mg/L	10	SM2540C
Sulfate	28 mg/L	5	EPA 375.2
COD	13.7 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.025 mg/L	0.03	EPA 365.1
TKN	0.3 mg/L	0.3	EPA 351.2
TOC	2.7 mg/L	1	SM5310B

Lab ID # AB17844	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	727 MPN/100mL	1	SM9223B

SiteID: GMW-08-0014 **Sample Date:** 09/23/2014 **IDEM Sample #:** AB19111
Water Flow Type Riffle **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	44.5 %		ASTM D888-09(C)
DO	4.44 mg/L		ASTM D888-09(C)
pH (Field)	7.37 SU		EPA 150.2
Specific Conductance (Field)	570 umho/cm		SM2510B
Temperature	15.38 °C		SM2550B(2)
Turbidity (Hach)	4.77 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Flow	0.0575 cf/sec		TM D5389-95/D3858
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	0 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 517989	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	223 mg/L	10	EPA 310.2
Chloride	24 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	284 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	353 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	332 mg/L	10	SM2540C
Sulfate	39 mg/L	5	EPA 375.2
COD	13.7 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.2 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.026 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.3 mg/L	1	SM5310B

Lab ID # AB19111	Result	Reporting Limit	Method
Coliforms (Total)	727 MPN/100mL	1	SM9223B
E. coli	6.3 MPN/100mL	1	SM9223B

SiteID: GMW-08-0014 **Sample Date:** 10/21/2014 **IDEM Sample #:** AB19390
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	Method
% Sat	85.2 %		ASTM D888-09(C)
DO	9.13 mg/L		ASTM D888-09(C)
pH (Field)	7.66 SU		EPA 150.2
Specific Conductance (Field)	583 umho/cm		SM2510B
Temperature	12.21 °C		SM2550B(2)
Turbidity (Hach)	3.63 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Flow	0.4231 cf/sec		TM D5389-95/D3858
Sky Conditions	4 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520468	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	227 mg/L	10	EPA 310.2
Chloride	29 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	253 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	389 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	373 mg/L	10	SM2540C
Sulfate	48 mg/L	5	EPA 375.2
COD	< 10 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.017 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.9 mg/L	1	SM5310B

Lab ID # AB19390	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	1119.9 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0022 **USGS Hydrologic Unit:** 050800030801
Stream Name: East Fork Blue Creek **County:** Franklin
Description: Blue Creek Rd **Latitude:** 39 20 41.77852 **Longitude:** -85 1 53.88210
Drainage: **Site Number:** 14T-024

SiteID: GMW-08-0022 **Sample Date:** 08/05/2014 **IDEM Sample #:** AB17799
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. Stream nearly pooled at bridge

Lab ID #	Result	Reporting Limit	Method
% Sat	97 %		ASTM D888-09(C)
DO	8.38 mg/L		ASTM D888-09(C)
pH (Field)	7.67 SU		EPA 150.2
Specific Conductance (Field)	632 umho/cm		SM2510B
Temperature	22.51 °C		SM2550B(2)
Turbidity (Hach)	5.29 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	31.8 MPN/100mL	1	SM9223B

SiteID: GMW-08-0022 **Sample Date:** 08/12/2014 **IDEM Sample #:** AB17856
Water Flow Type Pool **Water Appearance** Clear **Water Depth** **Algae?**
Water Flow (cf/sec): **Flow Estimated?** **Aquatic Life?** **Canopy Closed %** 0-20%
Sampler Comments: Not much flow, but not stagnant

Lab ID #	Result	Reporting Limit	Method
% Sat	97.1 %		ASTM D888-09(C)
DO	8.3 mg/L		ASTM D888-09(C)
pH (Field)	7.71 SU		EPA 150.2
Specific Conductance (Field)	609 umho/cm		SM2510B
Temperature	23.05 °C		SM2550B(2)
Turbidity (Hach)	19.5 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 514326	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	257 mg/L	10	EPA 310.2
Chloride	29 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	294 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	14 mg/L	4	SM2540D
Solids, Total (TS)	394 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	367 mg/L	10	SM2540C
Sulfate	28 mg/L	5	EPA 375.2
COD	18.9 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.052 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	2.6 mg/L	1	SM5310B

Lab ID # AB17856	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	10.9 MPN/100mL	1	SM9223B

SiteID: GMW-08-0022 **Sample Date:** 09/23/2014 **IDEM Sample #:** AB19123
Water Flow Type Pool **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	97.4 %		ASTM D888-09(C)
DO	9.93 mg/L		ASTM D888-09(C)
pH (Field)	7.56 SU		EPA 150.2
Specific Conductance (Field)	693 umho/cm		SM2510B
Temperature	14.35 °C		SM2550B(2)
Turbidity (Hach)	3.86 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 517990	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	277 mg/L	10	EPA 310.2
Chloride	29 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	362 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	441 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	418 mg/L	10	SM2540C
Sulfate	52 mg/L	5	EPA 375.2
COD	12.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.024 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.1 mg/L	1	SM5310B

Lab ID # AB19123	Result	Reporting Limit	Method
Coliforms (Total)	< 1 MPN/100mL	1	SM9223B
E. coli	8.5 MPN/100mL	1	SM9223B

SiteID: GMW-08-0022 **Sample Date:** 10/21/2014 **IDEM Sample #:** AB19402
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	Method
% Sat	91.8 %		ASTM D888-09(C)
DO	9.8 mg/L		ASTM D888-09(C)
pH (Field)	7.48 SU		EPA 150.2
Specific Conductance (Field)	629 umho/cm		SM2510B
Temperature	12.39 °C		SM2550B(2)
Turbidity (Hach)	3.11 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520469	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	244 mg/L	10	EPA 310.2
Chloride	30 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	309 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	443 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	422 mg/L	10	SM2540C
Sulfate	62 mg/L	5	EPA 375.2
COD	15.5 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.016 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.9 mg/L	1	SM5310B

Lab ID # AB19402	Result	Reporting Limit	Method
Coliforms (Total)	648.8 MPN/100mL	1	SM9223B
E. coli	27.5 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0015 **USGS Hydrologic Unit:** 050800030804
Stream Name: Whitewater River **County:** Franklin
Description: SR 1 **Latitude:** 39 21 33.76751 **Longitude:** -84 57 16.95374
Drainage: **Site Number:** 14T-025

SiteID: GMW-08-0015 **Sample Date:** 08/06/2014 **IDEM Sample #:** AB17805
Water Flow Type Eddy **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	81 %		ASTM D888-09(C)
DO	7.13 mg/L		ASTM D888-09(C)
pH (Field)	7.93 SU		EPA 150.2
Specific Conductance (Field)	573 umho/cm		SM2510B
Temperature	21.56 °C		SM2550B(2)
Turbidity (Hach)	10.8 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	6 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	68.3 MPN/100mL	1	SM9223B

SiteID: GMW-08-0015 **Sample Date:** 08/13/2014 **IDEM Sample #:** AB17843
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	Method
% Sat	84.4 %		ASTM D888-09(C)
DO	7.65 mg/L		ASTM D888-09(C)
pH (Field)	8.02 SU		EPA 150.2
Specific Conductance (Field)	570 umho/cm		SM2510B
Temperature	20.09 °C		SM2550B(2)
Turbidity (Hach)	27.9 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	0 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 514327	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	240 mg/L	10	EPA 310.2
Chloride	22 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	267 mg/L	75	EPA 130.1
Solids, Suspended Total, (TSS)	38 mg/L	4	SM2540D
Solids, Total (TS)	386 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	336 mg/L	10	SM2540C
Sulfate	26 mg/L	5	EPA 375.2
COD	10 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.9 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.06 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	2 mg/L	1	SM5310B

Lab ID # AB17843	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	290.9 MPN/100mL	1	SM9223B

SiteID: GMW-08-0015 **Sample Date:** 09/08/2014 **IDEM Sample #:** AB17883
Water Flow Type Run **Water Appearance** Clear **Water Depth** **Algae?**
Water Flow (cf/sec): **Flow Estimated?** **Aquatic Life?** **Canopy Closed %** 0-20%
Sampler Comments: Q2 Turbidity= 50.2

Lab ID #	Result	Reporting Limit	Method
% Sat	108.8 %		SM4500-OG
DO	9.56 mg/L		SM4500-OG
pH (Field)	8.18 SU		EPA 150.2
Specific Conductance (Field)	460 umho/cm		SM2510B
Temperature	20.6 °C		SM2550B(2)
Turbidity (Hach)	3.63 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	9 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0015 Sample Date: 09/24/2014 IDEM Sample #: AB19110
 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	Method
% Sat	85.4 %		ASTM D888-09(C)
DO	8.37 mg/L		ASTM D888-09(C)
pH (Field)	7.95 SU		EPA 150.2
Specific Conductance (Field)	544 umho/cm		SM2510B
Temperature	16.2 °C		SM2550B(2)
Turbidity (Hach)	8.03 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID # 517991	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	223 mg/L	10	EPA 310.2
Chloride	23 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	266 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	8 mg/L	4	SM2540D
Solids, Total (TS)	352 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	316 mg/L	10	SM2540C
Sulfate	24 mg/L	5	EPA 375.2
COD	14.7 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.4 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.025 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2 mg/L	1	SM5310B

Lab ID # AB19110	Result	Reporting Limit	Method
Coliforms (Total)	2419.6 MPN/100mL	1	SM9223B
E. coli	68.9 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0015 Sample Date: 10/22/2014 IDEM Sample #: AB19389
 Water Flow Type Run 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	85.8 %		ASTM D888-09(C)
DO	8.83 mg/L		ASTM D888-09(C)
pH (Field)	7.79 SU		EPA 150.2
Specific Conductance (Field)	492 umho/cm		SM2510B
Temperature	13.99 °C		SM2550B(2)
Turbidity (Hach)	11.6 NTU		EPA 180.1
Air Temp	2 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID # 520470	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	201 mg/L	10	EPA 310.2
Chloride	24 mg/L	5	SM4500CI-E
Hardness (as CaCO3)	200 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	15 mg/L	4	SM2540D
Solids, Total (TS)	327 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	295 mg/L	10	SM2540C
Sulfate	24 mg/L	5	EPA 375.2
COD	12.8 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.9 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.018 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	2.9 mg/L	1	SM5310B

Lab ID # AB19389	Result	Reporting Limit	Method
Coliforms (Total)	2419.6 MPN/100mL	1	SM9223B
E. coli	28.2 MPN/100mL	1	SM9223B

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

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0016 **USGS Hydrologic Unit:** 050800030803
Stream Name: Big Cedar Creek **County:** Franklin
Description: US 52 **Latitude:** 39 21 27.80481 **Longitude:** -84 56 26.33933
Drainage: **Site Number:** 14T-026

SiteID: GMW-08-0016 **Sample Date:** 08/13/2014 **IDEM Sample #:** AB17842
Water Flow Type Riffle **Water Appearance** Clear **Water Depth** **Algae?**
Water Flow (cf/sec): **Flow Estimated?** **Aquatic Life?** **Canopy Closed %** 0-20%
Sampler Comments: Attached algae: brown, possibly indicating stream has been dry

Lab ID #	Result	Reporting Limit	Method
% Sat	92.2 %		ASTM D888-09(C)
DO	8.38 mg/L		ASTM D888-09(C)
pH (Field)	8.1 SU		EPA 150.2
Specific Conductance (Field)	486 umho/cm		SM2510B
Temperature	19.88 °C		SM2550B(2)
Turbidity (Hach)	9.15 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Flow	0.1474 cf/sec		TM D5389-95/D3858
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID # 514328	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	207 mg/L	10	EPA 310.2
Chloride	12 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	239 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	299 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	278 mg/L	10	SM2540C
Sulfate	34 mg/L	5	EPA 375.2
COD	18.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.018 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.8 mg/L	1	SM5310B

Lab ID # AB17842	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	488.4 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0016 Sample Date: 10/22/2014 IDEM Sample #: AB19388
 Water Flow Type Pool 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	92.2 %		ASTM D888-09(C)
DO	10.47 mg/L		ASTM D888-09(C)
pH (Field)	8.06 SU		EPA 150.2
Specific Conductance (Field)	562 umho/cm		SM2510B
Temperature	9.69 °C		SM2550B(2)
Turbidity (Hach)	1.95 NTU		EPA 180.1
Air Temp	2 Lookup		Observation
Flow	0.5712 cf/sec		FM D5389-95/D3858
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID # 520471	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	240 mg/L	10	EPA 310.2
Chloride	20 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	243 mg/L	75	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	370 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	343 mg/L	10	SM2540C
Sulfate	47 mg/L	5	EPA 375.2
COD	10.9 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.005 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.6 mg/L	1	SM5310B

Lab ID # AB19388	Result	Reporting Limit	Method
Coliforms (Total)	920.8 MPN/100mL	1	SM9223B
E. coli	165.8 MPN/100mL	1	SM9223B

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
2 - Scattered	9 - Snow	9 - East (90 Degrees)	1 - Light
3 - Partly	10 - Sleet	18 - South (180 Degrees)	2 - Mod./Light
4 - Cloudy		27 - West (270 Degrees)	3 - Moderate
5 - Mist			4 - Mod./Strong
6 - Fog			5 - Strong
7 - Shower			6 - > 86
			6 - Gale

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0024 **USGS Hydrologic Unit:** 050800030803
Stream Name: Big Cedar Creek **County:** Franklin
Description: Big Cedar Rd **Latitude:** 39 25 13.21578 **Longitude:** -84 54 24.67967
Drainage: **Site Number:** 14T-027

SiteID: GMW-08-0024 **Sample Date:** 08/06/2014 **IDEM Sample #:** AB17798
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. Flow through rocks is just a trickle

Lab ID #	Result	Reporting Limit	Method
% Sat	76.9 %		ASTM D888-09(C)
DO	6.88 mg/L		ASTM D888-09(C)
pH (Field)	7.85 SU		EPA 150.2
Specific Conductance (Field)	537 umho/cm		SM2510B
Temperature	20.73 °C		SM2550B(2)
Turbidity (Hach)	7.81 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	13.2 MPN/100mL	1	SM9223B

SiteID: GMW-08-0024 **Sample Date:** 08/13/2014 **IDEM Sample #:** AB17855
Water Flow Type Pool **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	64.6 %		ASTM D888-09(C)
DO	5.87 mg/L		ASTM D888-09(C)
pH (Field)	7.84 SU		EPA 150.2
Specific Conductance (Field)	534 umho/cm		SM2510B
Temperature	20 °C		SM2550B(2)
Turbidity (Hach)	12.6 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	3 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 514329	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	229 mg/L	10	EPA 310.2
Chloride	17 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	292 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	11 mg/L	4	SM2540D
Solids, Total (TS)	344 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	315 mg/L	10	SM2540C
Sulfate	32 mg/L	5	EPA 375.2
COD	18.4 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.065 mg/L	0.03	EPA 365.1
TKN	0.6 mg/L	0.3	EPA 351.2
TOC	3.9 mg/L	1	SM5310B

Lab ID # AB17855	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	43.5 MPN/100mL	1	SM9223B

SiteID: GMW-08-0024 **Sample Date:** 10/22/2014 **IDEM Sample #:** AB19401
Water Flow Type Pool **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	75.6 %		ASTM D888-09(C)
DO	8.72 mg/L		ASTM D888-09(C)
pH (Field)	7.72 SU		EPA 150.2
Specific Conductance (Field)	692 umho/cm		SM2510B
Temperature	8.95 °C		SM2550B(2)
Turbidity (Hach)	5.96 NTU		EPA 180.1
Air Temp	2 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520472	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	309 mg/L	10	EPA 310.2
Chloride	30 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	342 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	453 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	430 mg/L	10	SM2540C
Sulfate	43 mg/L	5	EPA 375.2
COD	10.5 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.036 mg/L	0.03	EPA 365.1
TKN	0.3 mg/L	0.3	EPA 351.2
TOC	3.9 mg/L	1	SM5310B

Lab ID # AB19401	Result	Reporting Limit	Method
Coliforms (Total)	1986.3 MPN/100mL	1	SM9223B
E. coli	104.6 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0019 **USGS Hydrologic Unit:** 050800030806
Stream Name: Logan Creek **County:** Dearborn
Description: SR 46 **Latitude:** 39 16 38.48942 **Longitude:** -84 52 58.09151
Drainage: **Site Number:** 14T-028

SiteID: GMW-08-0019 **Sample Date:** 08/06/2014 **IDEM Sample #:** AB17802
Water Flow Type Pool **Water Appearance** Murky **Water Depth** **Algae?**
Water Flow (cf/sec): **Flow Estimated?** **Aquatic Life?** **Canopy Closed %** 0-20%
Sampler Comments: Stream nearly pooled at bridge

Lab ID #	Result	Reporting Limit	Method
% Sat	65.1 %		ASTM D888-09(C)
DO	5.7 mg/L		ASTM D888-09(C)
pH (Field)	7.55 SU		EPA 150.2
Specific Conductance (Field)	700 umho/cm		SM2510B
Temperature	21.9 °C		SM2550B(2)
Turbidity (Hach)	26.1 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	53.8 MPN/100mL	1	SM9223B

SiteID: GMW-08-0019 **Sample Date:** 08/13/2014 **IDEM Sample #:** AB17840
Water Flow Type Stagnant **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	41.6 %		ASTM D888-09(C)
DO	3.67 mg/L		ASTM D888-09(C)
pH (Field)	7.45 SU		EPA 150.2
Specific Conductance (Field)	715 umho/cm		SM2510B
Temperature	21.65 °C		SM2550B(2)
Turbidity (Hach)	43.5 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 514330	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	219 mg/L	10	EPA 310.2
Chloride	68 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	312 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	34 mg/L	4	SM2540D
Solids, Total (TS)	488 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	424 mg/L	10	SM2540C
Sulfate	41 mg/L	5	EPA 375.2
COD	27.3 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.114 mg/L	0.03	EPA 365.1
TKN	0.9 mg/L	0.3	EPA 351.2
TOC	4.5 mg/L	1	SM5310B

Lab ID # AB17840	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	67.6 MPN/100mL	1	SM9223B

SiteID: GMW-08-0019 **Sample Date:** 09/24/2014 **IDEM Sample #:** AB19107
Water Flow Type Pool **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	54.5 %		ASTM D888-09(C)
DO	5.51 mg/L		ASTM D888-09(C)
pH (Field)	7.44 SU		EPA 150.2
Specific Conductance (Field)	693 umho/cm		SM2510B
Temperature	14.65 °C		SM2550B(2)
Turbidity (Hach)	20.5 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 517992	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	198 mg/L	10	EPA 310.2
Chloride	60 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	288 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	15 mg/L	4	SM2540D
Solids, Total (TS)	468 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	434 mg/L	10	SM2540C
Sulfate	59 mg/L	5	EPA 375.2
COD	21.9 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.054 mg/L	0.03	EPA 365.1
TKN	0.6 mg/L	0.3	EPA 351.2
TOC	4.4 mg/L	1	SM5310B

Lab ID # AB19107	Result	Reporting Limit	Method
Coliforms (Total)	1986.3 MPN/100mL	1	SM9223B
E. coli	51.2 MPN/100mL	1	SM9223B

SiteID: GMW-08-0019 **Sample Date:** 10/22/2014 **IDEM Sample #:** AB19386
Water Flow Type Pool **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	36.2 %		ASTM D888-09(C)
DO	3.9 mg/L		ASTM D888-09(C)
pH (Field)	7.33 SU		EPA 150.2
Specific Conductance (Field)	691 umho/cm		SM2510B
Temperature	11.89 °C		SM2550B(2)
Turbidity (Hach)	13.2 NTU		EPA 180.1
Air Temp	2 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520473	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	213 mg/L	10	EPA 310.2
Chloride	58 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	254 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	8 mg/L	4	SM2540D
Solids, Total (TS)	456 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	429 mg/L	10	SM2540C
Sulfate	68 mg/L	5	EPA 375.2
COD	15.3 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.049 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	5 mg/L	1	SM5310B

Lab ID # AB19386	Result	Reporting Limit	Method
Coliforms (Total)	1203.3 MPN/100mL	1	SM9223B
E. coli	15.8 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0030 **USGS Hydrologic Unit:** 050800030805
Stream Name: Whitewater River **County:** Franklin
Description: St Peters Rd **Latitude:** 39 18 52.04520 **Longitude:** -84 54 20.31480
Drainage: **Site Number:** 14T-029

SiteID: GMW-08-0030 **Sample Date:** 08/06/2014 **IDEM Sample #:** AB17791
Water Flow Type Eddy **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	93.5 %		ASTM D888-09(C)
DO	8.11 mg/L		ASTM D888-09(C)
pH (Field)	8.04 SU		EPA 150.2
Specific Conductance (Field)	564 umho/cm		SM2510B
Temperature	22.4 °C		SM2550B(2)
Turbidity (Hach)	9.72 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	2 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	56.5 MPN/100mL	1	SM9223B

SiteID: GMW-08-0030 **Sample Date:** 08/13/2014 **IDEM Sample #:** AB17848
Water Flow Type Run **Water Appearance** Green **Water Depth** **Algae?**
Water Flow (cf/sec): **Flow Estimated?** **Aquatic Life?** **Canopy Closed %** 0-20%
Sampler Comments:

Lab ID #	Result	Reporting Limit	Method
% Sat	92.7 %		ASTM D888-09(C)
DO	8.27 mg/L		ASTM D888-09(C)
pH (Field)	8.07 SU		EPA 150.2
Specific Conductance (Field)	566 umho/cm		SM2510B
Temperature	20.81 °C		SM2550B(2)
Turbidity (Hach)	15.9 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 514331	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	240 mg/L	10	EPA 310.2
Chloride	21 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	305 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	18 mg/L	4	SM2540D
Solids, Total (TS)	372 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	325 mg/L	10	SM2540C
Sulfate	26 mg/L	5	EPA 375.2
COD	13 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.8 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.043 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	2.1 mg/L	1	SM5310B

Lab ID # AB17848	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	157.6 MPN/100mL	1	SM9223B

SiteID: GMW-08-0030 **Sample Date:** 09/09/2014 **IDEM Sample #:** AB17864
Water Flow Type Riffle **Water Appearance** Clear **Water Depth** **Algae?**
Water Flow (cf/sec): **Flow Estimated?** **Aquatic Life?** **Canopy Closed %** 0-20%
Sampler Comments: Q2 turbidity = 12.9

Lab ID #	Result	Reporting Limit	Method
% Sat	93.1 %		SM4500-OG
DO	8.18 mg/L		SM4500-OG
pH (Field)	8.2 SU		EPA 150.2
Specific Conductance (Field)	469 umho/cm		SM2510B
Temperature	20.23 °C		SM2550B(2)
Turbidity (Hach)	5.66 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	0 Lookup		Observation
Wind Strength	0 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0030 Sample Date: 09/24/2014 IDEM Sample #: AB19115
 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	Method
% Sat	89.1 %		ASTM D888-09(C)
DO	8.86 mg/L		ASTM D888-09(C)
pH (Field)	8.1 SU		EPA 150.2
Specific Conductance (Field)	549 umho/cm		SM2510B
Temperature	15.55 °C		SM2550B(2)
Turbidity (Hach)	7.43 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID # 517993	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	226 mg/L	10	EPA 310.2
Chloride	23 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	279 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	6 mg/L	4	SM2540D
Solids, Total (TS)	352 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	315 mg/L	10	SM2540C
Sulfate	25 mg/L	5	EPA 375.2
COD	14.1 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.3 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.028 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.9 mg/L	1	SM5310B

Lab ID # AB19115	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	59.1 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0030

Sample Date: 10/22/2014

IDEM Sample #: AB19394

Water Flow Type Run

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	88.8 %		ASTM D888-09(C)
DO	9.33 mg/L		ASTM D888-09(C)
pH (Field)	7.92 SU		EPA 150.2
Specific Conductance (Field)	494 umho/cm		SM2510B
Temperature	13.07 °C		SM2550B(2)
Turbidity (Hach)	13 NTU		EPA 180.1
Air Temp	2 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID # 520474	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	203 mg/L	10	EPA 310.2
Chloride	25 mg/L	5	SM4500CI-E
Hardness (as CaCO3)	236 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	16 mg/L	4	SM2540D
Solids, Total (TS)	330 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	295 mg/L	10	SM2540C
Sulfate	27 mg/L	5	EPA 375.2
COD	12.2 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.022 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	2.9 mg/L	1	SM5310B

Lab ID # AB19394	Result	Reporting Limit	Method
Coliforms (Total)	2419.6 MPN/100mL	1	SM9223B
E. coli	58.1 MPN/100mL	1	SM9223B

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

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0018 **USGS Hydrologic Unit:** 050800030806
Stream Name: Johnson Fork **County:** Dearborn
Description: Johnson Fork Rd **Latitude:** 39 17 16.19872 **Longitude:** -84 50 24.95531
Drainage: **Site Number:** 14T-030

SiteID: GMW-08-0018 **Sample Date:** 08/06/2014 **IDEM Sample #:** AB17803
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	64.5 %		ASTM D888-09(C)
DO	5.5 mg/L		ASTM D888-09(C)
pH (Field)	7.62 SU		EPA 150.2
Specific Conductance (Field)	568 umho/cm		SM2510B
Temperature	23.12 °C		SM2550B(2)
Turbidity (Hach)	4.08 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	98.4 MPN/100mL	1	SM9223B

SiteID: GMW-08-0018 **Sample Date:** 08/13/2014 **IDEM Sample #:** AB17841
Water Flow Type Pool **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	77.7 %		ASTM D888-09(C)
DO	6.99 mg/L		ASTM D888-09(C)
pH (Field)	7.68 SU		EPA 150.2
Specific Conductance (Field)	590 umho/cm		SM2510B
Temperature	20.46 °C		SM2550B(2)
Turbidity (Hach)	5.41 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 514332	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	194 mg/L	10	EPA 310.2
Chloride	30 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	288 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	377 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	355 mg/L	10	SM2540C
Sulfate	57 mg/L	5	EPA 375.2
COD	13.8 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.015 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.1 mg/L	1	SM5310B

Lab ID # AB17841	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	1299.7 MPN/100mL	1	SM9223B

SiteID: GMW-08-0018 **Sample Date:** 09/24/2014 **IDEM Sample #:** AB19108

Water Flow Type Pool **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	66.2 %		ASTM D888-09(C)
DO	6.64 mg/L		ASTM D888-09(C)
pH (Field)	7.5 SU		EPA 150.2
Specific Conductance (Field)	620 umho/cm		SM2510B
Temperature	15.12 °C		SM2550B(2)
Turbidity (Hach)	4.5 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 517994	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	198 mg/L	10	EPA 310.2
Chloride	31 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	292 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	412 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	386 mg/L	10	SM2540C
Sulfate	69 mg/L	5	EPA 375.2
COD	14.5 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.018 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.8 mg/L	1	SM5310B

Lab ID # AB19108	Result	Reporting Limit	Method
Coliforms (Total)	1299.7 MPN/100mL	1	SM9223B
E. coli	34.6 MPN/100mL	1	SM9223B

SiteID: GMW-08-0018 **Sample Date:** 10/22/2014 **IDEM Sample #:** AB19387

Water Flow Type Pool **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	86.8 %		ASTM D888-09(C)
DO	9.53 mg/L		ASTM D888-09(C)
pH (Field)	7.8 SU		EPA 150.2
Specific Conductance (Field)	643 umho/cm		SM2510B
Temperature	11.06 °C		SM2550B(2)
Turbidity (Hach)	2.31 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520475	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	222 mg/L	10	EPA 310.2
Chloride	31 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	327 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	469 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	448 mg/L	10	SM2540C
Sulfate	88 mg/L	5	EPA 375.2
COD	11.8 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.005 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	2.2 mg/L	1	SM5310B

Lab ID # AB19387	Result	Reporting Limit	Method
Coliforms (Total)	980.4 MPN/100mL	1	SM9223B
E. coli	72.3 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0021 **USGS Hydrologic Unit:** 050800030810
Stream Name: Whitewater River **County:** Dearborn
Description: Jamison Rd **Latitude:** 39 14 57.51189 **Longitude:** -84 49 15.29368
Drainage: **Site Number:** 14T-031

SiteID: GMW-08-0021 **Sample Date:** 08/06/2014 **IDEM Sample #:** AB17800
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	Method
% Sat	100.9 %		ASTM D888-09(C)
DO	8.59 mg/L		ASTM D888-09(C)
pH (Field)	7.95 SU		EPA 150.2
Specific Conductance (Field)	564 umho/cm		SM2510B
Temperature	23.3 °C		SM2550B(2)
Turbidity (Hach)	9.27 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	32.4 MPN/100mL	1	SM9223B

SiteID: GMW-08-0021 **Sample Date:** 08/13/2014 **IDEM Sample #:** AB17838
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	Method
% Sat	100.6 %		ASTM D888-09(C)
DO	8.81 mg/L		ASTM D888-09(C)
pH (Field)	8.01 SU		EPA 150.2
Specific Conductance (Field)	543 umho/cm		SM2510B
Temperature	21.82 °C		SM2550B(2)
Turbidity (Hach)	12 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 514333	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	225 mg/L	10	EPA 310.2
Chloride	21 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	275 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	14 mg/L	4	SM2540D
Solids, Total (TS)	345 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	314 mg/L	10	SM2540C
Sulfate	25 mg/L	5	EPA 375.2
COD	13.1 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.6 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.029 mg/L	0.03	EPA 365.1
TKN	0.5 mg/L	0.3	EPA 351.2
TOC	2.4 mg/L	1	SM5310B

Lab ID # AB17838	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	59.5 MPN/100mL	1	SM9223B

SiteID: GMW-08-0021 **Sample Date:** 09/10/2014 **IDEM Sample #:** AB17878
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	Method
% Sat	103.1 %		SM4500-OG
DO	8.93 mg/L		SM4500-OG
pH (Field)	8.24 SU		EPA 150.2
Specific Conductance (Field)	468 umho/cm		SM2510B
Temperature	21.42 °C		SM2550B(2)
Turbidity (Hach)	5.92 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	4 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0021 Sample Date: 09/24/2014 IDEM Sample #: AB19105
 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	Method
% Sat	103.6 %		ASTM D888-09(C)
DO	10.04 mg/L		ASTM D888-09(C)
pH (Field)	7.99 SU		EPA 150.2
Specific Conductance (Field)	536 umho/cm		SM2510B
Temperature	16.83 °C		SM2550B(2)
Turbidity (Hach)	6.2 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID # 517995	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	220 mg/L	10	EPA 310.2
Chloride	24 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	271 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	5 mg/L	4	SM2540D
Solids, Total (TS)	343 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	311 mg/L	10	SM2540C
Sulfate	25 mg/L	5	EPA 375.2
COD	13.6 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1.4 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.016 mg/L	0.03	EPA 365.1
TKN	< 0.3 mg/L	0.3	EPA 351.2
TOC	1.9 mg/L	1	SM5310B

Lab ID # AB19105	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	53.8 MPN/100mL	1	SM9223B

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0021 Sample Date: 10/22/2014 IDEM Sample #: AB19384
 Water Flow Type Run 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	97.2 %		ASTM D888-09(C)
DO	10.05 mg/L		ASTM D888-09(C)
pH (Field)	7.95 SU		EPA 150.2
Specific Conductance (Field)	501 umho/cm		SM2510B
Temperature	13.82 °C		SM2550B(2)
Turbidity (Hach)	14 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

Lab ID # 520476	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	208 mg/L	10	EPA 310.2
Chloride	25 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	195 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	15 mg/L	4	SM2540D
Solids, Total (TS)	341 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	310 mg/L	10	SM2540C
Sulfate	25 mg/L	5	EPA 375.2
COD	13.1 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.022 mg/L	0.03	EPA 365.1
TKN	0.3 mg/L	0.3	EPA 351.2
TOC	2.8 mg/L	1	SM5310B

Lab ID # AB19384	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	63.3 MPN/100mL	1	SM9223B

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

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0027 **USGS Hydrologic Unit:** 050800030808
Stream Name: Sours Run **County:** Franklin
Description: Drewersburg Rd **Latitude:** 39 22 43.93458 **Longitude:** -84 50 12.39149
Drainage: **Site Number:** 14T-032

SiteID: GMW-08-0027 **Sample Date:** 08/06/2014 **IDEM Sample #:** AB17795
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	67.3 %		ASTM D888-09(C)
DO	6.13 mg/L		ASTM D888-09(C)
pH (Field)	7.53 SU		EPA 150.2
Specific Conductance (Field)	599 umho/cm		SM2510B
Temperature	19.79 °C		SM2550B(2)
Turbidity (Hach)	7.1 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	167 MPN/100mL	1	SM9223B

SiteID: GMW-08-0027 **Sample Date:** 08/13/2014 **IDEM Sample #:** AB17853
Water Flow Type Pool **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	47.2 %		ASTM D888-09(C)
DO	4.94 mg/L		ASTM D888-09(C)
pH (Field)	7.37 SU		EPA 150.2
Specific Conductance (Field)	677 umho/cm		SM2510B
Temperature	17.76 °C		SM2550B(2)
Turbidity (Hach)	6.06 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	9 Lookup		Observation
Wind Strength	2 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 514334	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	298 mg/L	10	EPA 310.2
Chloride	29 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	322 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	9 mg/L	4	SM2540D
Solids, Total (TS)	416 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	383 mg/L	10	SM2540C
Sulfate	27 mg/L	5	EPA 375.2
COD	20.8 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.2 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.036 mg/L	0.03	EPA 365.1
TKN	0.6 mg/L	0.3	EPA 351.2
TOC	4 mg/L	1	SM5310B

Lab ID # AB17853	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	151.5 MPN/100mL	1	SM9223B

SiteID: GMW-08-0027 **Sample Date:** 09/24/2014 **IDEM Sample #:** AB19120
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	Method
% Sat	64 %		ASTM D888-09(C)
DO	7.03 mg/L		ASTM D888-09(C)
pH (Field)	7.44 SU		EPA 150.2
Specific Conductance (Field)	683 umho/cm		SM2510B
Temperature	11.03 °C		SM2550B(2)
Turbidity (Hach)	3.25 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 517996	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	305 mg/L	10	EPA 310.2
Chloride	22 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	367 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	419 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	396 mg/L	10	SM2540C
Sulfate	19 mg/L	5	EPA 375.2
COD	16.5 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	0.2 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.041 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	3.9 mg/L	1	SM5310B

Lab ID # AB19120	Result	Reporting Limit	Method
Coliforms (Total)	1732.9 MPN/100mL	1	SM9223B
E. coli	31.5 MPN/100mL	1	SM9223B

SiteID: GMW-08-0027 **Sample Date:** 10/22/2014 **IDEM Sample #:** AB19399

Water Flow Type Pool **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	47.8 %		ASTM D888-09(C)
DO	5.38 mg/L		ASTM D888-09(C)
pH (Field)	7.49 SU		EPA 150.2
Specific Conductance (Field)	668 umho/cm		SM2510B
Temperature	9.77 °C		SM2550B(2)
Turbidity (Hach)	4.27 NTU		EPA 180.1
Air Temp	1 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	2 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520477	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	315 mg/L	10	EPA 310.2
Chloride	28 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	351 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	443 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	424 mg/L	10	SM2540C
Sulfate	26 mg/L	5	EPA 375.2
COD	19.2 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.068 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	5.7 mg/L	1	SM5310B

Lab ID # AB19399	Result	Reporting Limit	Method
Coliforms (Total)	2419.6 MPN/100mL	1	SM9223B
E. coli	686.7 MPN/100mL	1	SM9223B

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	

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

SiteID: GMW-08-0020 **USGS Hydrologic Unit:** 050800030807
Stream Name: Dry Fork Whitewater River **County:** Franklin
Description: Dickson Rd **Latitude:** 39 23 33.28802 **Longitude:** -84 49 16.68112
Drainage: **Site Number:** 14T-033

SiteID: GMW-08-0020 **Sample Date:** 08/06/2014 **IDEM Sample #:** AB17801
Water Flow Type Riffle **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	100.5 %		ASTM D888-09(C)
DO	9.09 mg/L		ASTM D888-09(C)
pH (Field)	7.98 SU		EPA 150.2
Specific Conductance (Field)	540 umho/cm		SM2510B
Temperature	20.18 °C		SM2550B(2)
Turbidity (Hach)	5.63 NTU		EPA 180.1
Air Temp	4 Lookup		Observation
Sky Conditions	3 Lookup		Observation
Wind Direction	18 Lookup		Observation
Wind Strength	0 Lookup		Observation

Lab ID #	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	387.3 MPN/100mL	1	SM9223B

SiteID: GMW-08-0020 **Sample Date:** 08/13/2014 **IDEM Sample #:** AB17839
Water Flow Type Pool **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	68.8 %		ASTM D888-09(C)
DO	6.44 mg/L		ASTM D888-09(C)
pH (Field)	7.76 SU		EPA 150.2
Specific Conductance (Field)	523 umho/cm		SM2510B
Temperature	18.39 °C		SM2550B(2)
Turbidity (Hach)	9.07 NTU		EPA 180.1
Air Temp	5 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	29 Lookup		Observation
Wind Strength	2 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 514335	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	230 mg/L	10	EPA 310.2
Chloride	20 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	275 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	5 mg/L	4	SM2540D
Solids, Total (TS)	320 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	296 mg/L	10	SM2540C
Sulfate	18 mg/L	5	EPA 375.2
COD	16.4 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.044 mg/L	0.03	EPA 365.1
TKN	0.4 mg/L	0.3	EPA 351.2
TOC	3.5 mg/L	1	SM5310B

Lab ID # AB17839	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	435.2 MPN/100mL	1	SM9223B

SiteID: GMW-08-0020 **Sample Date:** 09/24/2014 **IDEM Sample #:** AB19106

Water Flow Type Pool **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	60.9 %		ASTM D888-09(C)
DO	6.64 mg/L		ASTM D888-09(C)
pH (Field)	7.62 SU		EPA 150.2
Specific Conductance (Field)	544 umho/cm		SM2510B
Temperature	11.34 °C		SM2550B(2)
Turbidity (Hach)	5.61 NTU		EPA 180.1
Air Temp	3 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 517997	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	244 mg/L	10	EPA 310.2
Chloride	21 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	266 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	331 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	308 mg/L	10	SM2540C
Sulfate	28 mg/L	5	EPA 375.2
COD	16.8 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.04 mg/L	0.03	EPA 365.1
TKN	0.3 mg/L	0.3	EPA 351.2
TOC	3.6 mg/L	1	SM5310B

Lab ID # AB19106	Result	Reporting Limit	Method
Coliforms (Total)	> 2419.6 MPN/100mL	2419.6	SM9223B
E. coli	344.8 MPN/100mL	1	SM9223B

SiteID: GMW-08-0020 **Sample Date:** 10/22/2014 **IDEM Sample #:** AB19385
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	Method
% Sat	81.5 %		ASTM D888-09(C)
DO	9.37 mg/L		ASTM D888-09(C)
pH (Field)	7.92 SU		EPA 150.2
Specific Conductance (Field)	633 umho/cm		SM2510B
Temperature	9.12 °C		SM2550B(2)
Turbidity (Hach)	2.55 NTU		EPA 180.1
Air Temp	2 Lookup		Observation
Sky Conditions	1 Lookup		Observation
Wind Direction	27 Lookup		Observation
Wind Strength	1 Lookup		Observation

**Indiana Department of Environmental Management
Office of Water Quality-Watershed Assessment and Planning Branch
Surface Water Results Summary**

Lab ID # 520478	Result	Reporting Limit	Method
Alkalinity (as CaCO3)	296 mg/L	10	EPA 310.2
Chloride	26 mg/L	5	SM4500Cl-E
Hardness (as CaCO3)	335 mg/L	30	EPA 130.1
Solids, Suspended Total, (TSS)	< 4 mg/L	4	SM2540D
Solids, Total (TS)	413 mg/L	10	SM2540B
Solids, Total Dissolved (TDS)	392 mg/L	10	SM2540C
Sulfate	25 mg/L	5	EPA 375.2
COD	15.7 mg/L	10	SM5220D
Nitrogen, Ammonia	< 0.1 mg/L	0.1	EPA 350.1
Nitrogen, Nitrate+Nitrite	< 0.1 mg/L	0.1	EPA 353.1
Phosphorus, Total	0.029 mg/L	0.03	EPA 365.1
TKN	0.3 mg/L	0.3	EPA 351.2
TOC	5 mg/L	1	SM5310B

Lab ID # AB19385	Result	Reporting Limit	Method
Coliforms (Total)	1986.3 MPN/100mL	1	SM9223B
E. coli	30.9 MPN/100mL	1	SM9223B

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	