

SCI SUMMARY FORM

 Work Order:
 2013 02 028

 Collection Date:
 02/19/2013

 Sample Location:
 LWD

 Sample ID:
 201302028

Macroinvertebrate Data	Results	Qualifier Code
madrom voltosiato Bata	rtodito	Qualifier Couc
Habitat Score	108	
Total Taxa (avg.)*	30	Α
% Very Tolerant	4.0	Α
% Tanytarsini	6.45	Α
Clinger Taxa	10.0	Α
% Filterers	2.8	Α
EPT Taxa	3.0	Α
Sensitive Taxa	3.35	Α
% Dominant Taxa	8.4	Α
Long-lived Taxa	10.0	Α
Trichoptera Taxa	7.15	Α
SWDI	4.151	Α
Final SCI Score	67.5	А

Water Quality Parameter	Code	e Units
Field Readings Depth	0.25	meters
Temperature	14.3	° celcius
Dissolved Oxygen	9.3	mg/L
рН	7.4	units
Conductivity	278	μS/cm
Velocity **	0.49 J	ft/sec
Water Clarity	Clear	n/a
Water Color	Clear	n/a
Secchi Depth	0.5}	meters
Total Depth	0.5	meters

^{*}Average of total taxa from set A and total taxa from set B

 $^{^{\}star}$ * Velocity is approximate and does not represent average velocity of the stream cross section.

Macroinvertebrate Stream Analysis Summary - Collapsed

Biotic Index Summary

Program: LW

Sample ID: 2013020280101

Total Species: 31

Location: LWD 52+ A

Date Analysis Complete: 12/31/2013

Total # Individuals: 146

Sample Date: 2/19/2013

No of Aliquot Used: 0.375 out of 72

SamplingMethod: DframeNet-SCI

Method Reference: FDEP Field SOPs 7000, LT7000

E/P/T Ratio: 24.7%

Class 1 # of Species:	5	16.1%	Class 1 # of Individuals:	31	21.2%
Class 2 # of Species:	3	9.7%	Class 2 # of Individuals:	7	4.8%
Class 3 # of Species:	1	3.2%	Class 3 # of Individuals:	1	0.7%
Class 4 # of Species:	1	3.2%	Class 4 # of Individuals:	7	4.8%
Class 5 # of Species:	21	67.7%	Class 5 # of Individuals:	100	68.5%

		_	Taxa Summary		·	***************************************		
Class HEXAPODA:	85	58.2%	Order VENEROIDA:	7	4.8%	Family HYDROPSYCHIDAE:	4	2.7%
Class GASTROPODA:	22	15.1%	Order TRICHOPTERA:	32	21.9%	Family ARRENURIDAE:	26	17.8%
Class BIVALVIA:	7	4.8%	Order ODONATA:	15	10.3%	Family BAETIDAE:	3	2.1%
Class ARACHNIDA:	32	21.9%	Order NEOTAENIOGLOSSA:	19	13.0%	Family CHIRONOMIDAE:	27	18.5%
			Order EPHEMEROPTERA:	4	2.7%	Family COENAGRIONIDAE:	12	8.2%
			Order DIPTERA:	27	18.5%	Family CORBICULIDAE:	7	4.8%
10.0			Order COLEOPTERA:	7	4.8%	Family ELMIDAE:	7	4.8%
			Order BASOMMATOPHORA:	3	2.1%	Family ANCYLIDAE:	2	1.4%
			Order ACARIFORMES:	32	21.9%	Family HYDROBIIDAE:	19	13.0%
						Family UNIONICOLIDAE:	4	2.7%
						Family HYDROPTILIDAE:	26	17.8%

Family LEBERTIIDAE: 1 0.7% Family LEPTOCERIDAE: 2 1.4% Family LIBELLULIDAE: 3 2.1% Family LIMNESIIDAE: 1 0.7%

Family PHYSIDAE: 1 0.7% Family HEPTAGENIIDAE: 1 0.7%

10	Functional	Feed	ing Groups	<u>Sensitivit</u>	y Lev	<u>e/</u>	<u>Life (</u>	<u>Cycle</u>		<u>Habit</u>		1.50%,
	Shredder:	8	5.5%	Very Tolerant:	13	8.9%	N/A:	139	95.2%	Sprawler:	5	3.4%
	Scraper:	27	18.5%	Sensitive:	1	0.7%	Long-Lived:	7	4.8%	N/A:	71	48.6%
	Predator:	58	39.7%	N/A:	132	90.4%				Clinger:	36	24.7%
	Piercer:	22	15.1%							Climbers:	32	21.9%
	Gatherer:	16	11.0%							Burrowers:	1	0.7%
	Filterer:	15	10.3%							Bottom Dweller:	1	0.7%

Metric Summary

	Raw Data	Score	Raw	Data	Score
SCI % Very Tolerant:	9	4.4	SCI Sensitive Taxa:	1	1.1
SCI % Tanytarsini:	5	5.4	SCI % Dominance:	18	8.2
SCI Clinger Taxa:	12	10.0	SCI Long-Lived Taxa:	7	10.0
SCI % Filterer:	10	2.3	SCI Trichoptera Taxa:	6	8.6
I Ephemeroptera Taxa:	2	4.0	SCI Total Taxa:	31	6.0

the will be the the

^{*} Standing Crop only valid for MHD and PDredge Sampling Methods.

Program: LW

Sample ID: 2013020280101

Taxomist: EFJ

(1) (2) JB

JD

Location: LWD Jet A

Date Analysis Complete: 12/31/2013

Sort Tech: EFJ

Sample Date: 2/19/2013

No of Aliquot Used: 0.375 out of 72

Mount Tech: EFJ

SamplingMethod: DframeNet-SCI

Collected By: efj, mac

Method Reference: FDEP Field SOPs 7000, LT7000

Post 1 19 2

Metric: Fair

Phylum	ylum Class Order Family		Family	Sub Family	Genus Species	BI	Tally
ARTHROPODA	ARACHNIDA	ACARIFORMES	ARRENURIDAE	Z/A	Arrenurus sp.	5	26
ARTHROPODA	ARACHNIDA	ACARIFORMES	LEBERTIIDAE	Z/A	Lebertia sp.	5	1
ARTHROPODA	ARACHNIDA	ACARIFORMES	LIMNESIIDAE	Z/A	Limnesia sp.	5	1
ARTHROPODA	ARACHNIDA	ACARIFORMES	UNIONICOLIDAE	Z/A	Neumania sp.	5	3
ARTHROPODA	ARACHNIDA	ACARIFORMES	UNIONICOLIDAE	Z/A	Unionicola sp.	5	1
ARTHROPODA	HEXAPODA	COLEOPTERA	ELMIDAE	Z/A	Stenelmis sp.	4	7
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - CHIRONOMINI	Dicrotendipes neomodestus	5	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - CHIRONOMINI	Paracladopelma nereis	5	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - CHIRONOMINI	Polypedilum flavum	5	8
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Cladotanytarsus cf. daviesi	5	2
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Cladotanytarsus sp.G	5	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Rheotanytarsus exiguus grp	1	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Tanytarsus sp. A	5	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Tanytarsus sp. C	5	3
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	ORTHOCLADIINAE	SUBFAMILY: ORTHOCLADIINAE	1	8
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	TANYPODINAE	Ablabesmyia mallochi	1	1
ARTHROPODA	HEXAPODA	EPHEMEROPTERA	BAETIDAE	Z/A	FAMILY: BAETIDAE	5	3
ARTHROPODA	HEXAPODA	EPHEMEROPTERA	HEPTAGENIIDAE	Z/A	Stenacron interpunctatum	2	1
ARTHROPODA	HEXAPODA	ODONATA	COENAGRIONIDAE	Z/A	Enallagma sp.	5	1
ARTHROPODA	HEXAPODA	ODONATA	COENAGRIONIDAE	Z/A	Ischnura sp.	5	11
ARTHROPODA	HEXAPODA	ODONATA	LIBELLULIDAE	Z/A	FAMILY: LIBELLULIDAE	5	3
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPSYCHIDAE	Z/A	Cheumatopsyche sp.	2	4
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPTILIDAE	Z/A	Hydroptila sp.	1	1
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPTILIDAE	Z/A	Neotrichia sp.	5	4
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPTILIDAE	Z/A	Oxyethira sp.	∞ 1	20
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPTILIDAE	Z/A	Stactobiella sp.	5	1
ARTHROPODA	HEXAPODA	TRICHOPTERA	LEPTOCERIDAE	Z/A	Oecetis sp.	2	2
							7

(1) (2)

JB

JD

Program: LW

Sample ID: 2013020280101

Taxomist: EFJ

Location: LWD retA

Date Analysis Complete: 12/31/2013

Sort Tech: EFJ

Sample Date: 2/19/2013

Mount Tech: EFJ

SamplingMethod: DframeNet-SCI

No of Aliquot Used: 0.375 out of 72

Method Reference: FDEP Field SOPs 7000, LT7000

Collected By: efj, mac

Metric: Fair

Phylum	Class	Order	Family	Sub Family	Genus Species	BI	Tally
MOLLUSCA	BIVALVIA	VENEROIDA	CORBICULIDAE	Z/A	Corbicula sp.	5	7
MOLLUSCA	GASTROPODA	BASOMMATOPHORA	ANCYLIDAE	Z/A	FAMILY: ANCYLIDAE	5	2
MOLLUSCA	GASTROPODA	BASOMMATOPHORA	PHYSIDAE	Z/A	FAMILY: PHYSIDAE	3	1
MOLLUSCA	GASTROPODA	NEOTAENIOGLOSSA	HYDROBIIDAE	Z/A	FAMILY: HYDROBIIDAE	5	19

Sample ID: 2013020280101		-	
SCI Score	67	F	
# EPT Taxa	8	F	
SW Diversity Index	4.068	F	
HI Score	7	F	
Total # Species	31	F	

Macroinvertebrate Stream Analysis Summary - Raw

Program: LW

Sample ID: 2013020280101

Total Species: 35

Location: LWD Jet A

Date Analysis Complete: 12/31/2013

Total # Individuals: 146

Sample Date: 2/19/2013

No of Aliquot Used: 0.375 out of 72

Sampling Method: DframeNet-SCI

Method Reference: FDEP Field SOPs 7000, LT7000

E/P/T Ratio: 24.7%

Biotic	Index	Summary	
-			

Class 1 # of Species:	5	14.3%	Class 1 # of Individuals:	31	21.2%
Class 2 # of Species:	3	8.6%	Class 2 # of Individuals:	5	3.4%
Class 3 # of Species:	1	2.9%	Class 3 # of Individuals:	1	0.7%
Class 4 # of Species:	1	2.9%	Class 4 # of Individuals:	7	4.8%
Class 5 # of Species:	25	71.4%	Class 5 # of Individuals:	102	69.9%

Taxa Summary

Class HEXAPODA:	85	58.2%	Order VENEROIDA:	7	4.8%	Family HYDROPSYCHIDAE:	4	2.7%
Class GASTROPODA:	22	15.1%	Order TRICHOPTERA:	32	21.9%	Family ARRENURIDAE:	25	17.1%
Class BIVALVIA:	7	4.8%	Order ODONATA:	15	10.3%	Family BAETIDAE:	3	2.1%
Class ARACHNIDA:	32	21.9%	Order NEOTAENIOGLOSSA:	19	13.0%	Family CHIRONOMIDAE:	27	18.5%
			Order EPHEMEROPTERA:	4	2.7%	Family COENAGRIONIDAE:	12	8.2%
			Order DIPTERA:	27	18.5%	Family CORBICULIDAE:	7	4.8%
			Order COLEOPTERA:	7	4.8%	Family ELMIDAE:	7	4.8%
			Order BASOMMATOPHORA:	3	2.1%	Family ANCYLIDAE:	2	1.4%

32

21.9%

UNCOLLAPSED RAW DATA

Order ACARIFORMES:

Family Z/A: 1 0.7% Family HYDROPTILIDAE: 26 17.8%

19

13.0%

0.7%

Family HYDROBIIDAE:

Family LEBERTIIDAE: 1 0.7% Family LEPTOCERIDAE: 2 1.4% 3 2.1%

Family LIBELLULIDAE: Family LIMNESIIDAE: 1

Family PHYSIDAE: 1 0.7% Family UNIONICOLIDAE: 4 2.7%

Family HEPTAGENIIDAE: 0.7%

Functional Feeding Groups Sensitivity Level Life Cycle Habit Shredder: 5.5% Very Tolerant: 13 8.9% N/A: 139 Sprawler: 95.2% 5 3.4% 27 Sensitive: 3 7 Scraper: 18.5% 2.1% Long-Lived: 4.8% N/A: 71 48.6% Predator: 58 130 39.7% N/A: 89.0% Clinger: 36 24.7% Piercer: 15.1% Climbers: 32 21.9% Gatherer: 16 11.0% Burrowers: 0.7% Filterer: 0.7% 15 10.3% Bottom Dweller: 1

Metric Summary

	Raw Data	Score	Ra	w Data	Score
SCI % Very Tolerant:	: 9	4.4	SCI Sensitive Taxa:	3	3.3
SCI % Tanytarsini:	: 5	5.4	SCI % Dominance:	17	8.4
SCI Clinger Taxa:	: 14	10.0	SCI Long-Lived Taxa:	7	10.0
SCI % Filterer:	: 10	2.3	SCI Trichoptera Taxa:	7	10.0
SCI Ephemeroptera Taxa:	2	4.0	SCI Total Taxa:	35	7.6

^{*} Standing Crop only valid for MHD and PDredge Sampling Methods.

Program: LW

Sample ID: 2013020280101

(1) (2) Taxomist: EFJ JB

Location: LWD 18th

-13.

Date Analysis Complete: 12/31/2013

Sort Tech: EFJ JD

Sample Date: 2/19/2013

No of Aliquot Used: 0.375 out of 72

Mount Tech: EFJ

SamplingMethod: DframeNet-SCI

Collected By: efj, mac

Method Reference: FDEP Field SOPs 7000, LT7000

Metric: Good

	ARACHNIDA			Sub Family	Genus Species	BI	Tally
	ARACHNIDA	ACARIFORMES	ARRENURIDAE	Z/A	Arrenurus sp.	5	25
ARTHROPODA	ARACHNIDA	ACARIFORMES	LEBERTIIDAE	Z/A	Lebertia sp.	5	1
ARTHROPODA	ARACHNIDA	ACARIFORMES	LIMNESIIDAE	Z/A	Limnesia sp.	5	1
ARTHROPODA	ARACHNIDA	ACARIFORMES	UNIONICOLIDAE	Z/A	Neumania sp.	5	3
ARTHROPODA	ARACHNIDA	ACARIFORMES	UNIONICOLIDAE	Z/A	Unionicola sp.	5	1
ARTHROPODA	ARACHNIDA	ACARIFORMES	Z/A	Z/A	ORDER: ACARIFORMES	5	1
ARTHROPODA	HEXAPODA	COLEOPTERA	ELMIDAE	Z/A	Stenelmis sp.	4	7
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - CHIRONOMINI	Dicrotendipes neomodestus	5	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - CHIRONOMINI	Paracladopelma nereis	5	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - CHIRONOMINI	Polypedilum flavum	5	8
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Cladotanytarsus cf. daviesi Cladotanytarsus sp.	5	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Cladotanytarsus sp.	5	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Cladotanytarsus sp.G Rheotanytarsus exiguus grp.	5	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Rheotanytarsus exiguus grp.	1	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Tanytarsus sp.	5	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Tanytarsus sp. A	5	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Tanytarsus sp. C	5	2
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	ORTHOCLADIINAE	SUBFAMILY: ORTHOCLADIINAE	1	8
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	TANYPODINAE	Ablabesmyia mallochi	1	1
ARTHROPODA	HEXAPODA	EPHEMEROPTERA	BAETIDAE	Z/A	FAMILY: BAETIDAE	5	3
ARTHROPODA	HEXAPODA	EPHEMEROPTERA	HEPTAGENIIDAE	Z/A	Stenacron interpunctatum	2	1
ARTHROPODA	HEXAPODA	ODONATA	COENAGRIONIDAE	Z/A	Enallagma sp.	5	1
ARTHROPODA	HEXAPODA	ODONATA	COENAGRIONIDAE	Z/A	Ischnura sp.	5	11
ARTHROPODA	HEXAPODA	ODONATA	LIBELLULIDAE	Z/A	FAMILY: LIBELLULIDAE	5	3
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPSYCHIDAE	Z/A	Cheumatopsyche sp.	2	2
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPSYCHIDAE	Z/A	FAMILY: HYDROPSYCHIDAE	5	2
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPTILIDAE	Z/A	Hydroptila sp.	1	1

Program: LW
Sample ID: 2013020280101
Taxomist: EFJ JB
Location: LWD 5et Analysis Complete: 12/31/2013
Sort Tech: EFJ JD

Sample Date: 2/19/2013 No of Aliquot Used: 0.375 out of 72 Mount Tech: EFJ

SamplingMethod: DframeNet-SCI Method Reference: FDEP Field SOPs 7000, LT7000 Collected By: efj, mac

Metric: Good

Phylum	Class	Order	Family	Sub Family	Genus Species	BI	Tally
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPTILIDAE	Z/A	Neotrichia sp.	5	4
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPTILIDAE	Z/A	Oxyethira sp.	1	20
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPTILIDAE	Z/A	Stactobiella sp.	5	1
ARTHROPODA	HEXAPODA	TRICHOPTERA	LEPTOCERIDAE	Z/A	Oecetis sp.	2	2
MOLLUSCA	BIVALVIA	VENEROIDA	CORBICULIDAE	Z/A	Corbicula sp.	5	7
MOLLUSCA	GASTROPODA	BASOMMATOPHORA	ANCYLIDAE	Z/A	FAMILY: ANCYLIDAE	5	2
MOLLUSCA	GASTROPODA	BASOMMATOPHORA	PHYSIDAE	Z/A	FAMILY: PHYSIDAE	3	1
MOLLUSCA	GASTROPODA	NEOTAENIOGLOSSA	HYDROBIIDAE	Z/A	FAMILY: HYDROBIIDAE	5	19

Sample ID: 2013020280101	-		
SCI Score	73	F	
# EPT Taxa	9	F	
SW Diversity Index	4.17	F	
HI Score	7	F	
Total # Species	35	F	

UNCOLLAPSED RAW DATA PER SOP

120 2 27

PC- 1/3/14

Macroinvertebrate Stream Analysis Summary - Collapsed

Program: LW

Sample ID: 2013020280102

Total Species: 29

Location: LWD 58+3

Date Analysis Complete: 12/31/2013

Total # Individuals: 144

Sample Date: 2/19/2013

No of Aliquot Used: 0.375 out of

SamplingMethod: DframeNet-SCI

Method Reference: FDEP Field SOPs 7000, LT7000

Biotic Index Summary

E/P/T Ratio: 29.2%

		29.2%	42	lividuals:	of Inc	Class 1 #	17.2%	5	Class 1 # of Species:	
		3.5%	5	lividuals:	of Inc	Class 2 #	6.9%	2	Class 2 # of Species:	
		2.1%	3	lividuals:	of Inc	Class 3 #	6.9%	2	Class 3 # of Species:	
		8.3%	12	ividuals:	of Inc	Class 4 #	13.8%	4	Class 4 # of Species:	
		56.9%	82	ividuals:	of Ind	Class 5 #	55.2%	16	Class 5 # of Species:	
						Taxa Summary		•		
10.4%	15	Family HYDROBIIDAE:		4.9%	7	Order VENEROIDA:	72.9%	105	Class HEXAPODA:	
5.6%	8	Family ARRENURIDAE:		28.5%	41	Order TRICHOPTERA:	14.6%	21	Class GASTROPODA:	
0.7%	1	Family BAETIDAE:		4.2%	6	Order ODONATA:	0.7%	1	Class CRUSTACEA:	
33.3%	48	Family CHIRONOMIDAE:		10.4%	15	Order NEOTAENIOGLOSSA:	4.9%	7	Class BIVALVIA:	
4.2%	6	Family COENAGRIONIDAE:		0.7%	1	Order HETEROPTERA:	6.9%	10	Class ARACHNIDA:	
4.9%	7	Family CORBICULIDAE:		0.7%	1	Order EPHEMEROPTERA:			ing a flour thing	
1.4%	2	Family ANCYLIDAE:		33.3%	48	Order DIPTERA:			- 13, 7 NOA, 5 NI	
0.7%	1	Family GERRIDAE:		5.6%	8	Order COLEOPTERA:				
0.7%	1	Family UNIONICOLIDAE:		4.2%	6	Order BASOMMATOPHORA:				
3.5%	5	Family HYDROPSYCHIDAE:		0.7%	1	Order AMPHIPODA:				
25.0%	36	Family HYDROPTILIDAE:		6.9%	10	Order ACARIFORMES:				
0.7%	1	Family LEBERTIIDAE:								
0.7%	1	Family PHYSIDAE:								
2.1%	3	Family PLANORBIDAE:								
0.7%	1	Family TALITRIDAE:								
5.6%	8	Family ELMIDAE:								
J.U /0		Tanny LL IZDAL.								

<u> </u>	-unctional	Feed	<u>ing Groups</u>	<u>Sensitivit</u>	y Lev	<u>el</u>	<u>Life</u> (Cycle		<u>Habit</u>		
	Shredder:	20	13.9%	Very Tolerant:	19	13.2%	N/A:	137	95.1%	Sprawler:	4	2.8%
14	Scraper:	21	14.6%	Sensitive:	5	3.5%	Long-Lived:	7	4.9%	Skaters:	1	0.7%
	Predator:	24	16.7%	N/A:	120	83.3%				N/A:	49	34.0%
	Piercer:	36	25.0%							Clinger:	55	38.2%
	Gatherer:	23	16.0%							Climbers:	29	20.1%
	Filterer:	20	13.9%							Burrowers:	5	3.5%
										Bottom Dweller:	1	0.7%

Metric Summary

	Raw Data	Score	Raw	Data	Score
SCI % Very Tolerant	: 13	3.6	SCI Sensitive Taxa:	5	5.6
SCI % Tanytarsini	: 11	7.5	SCI % Dominance:	16	8.6
SCI Clinger Taxa:	: 12	10.0	SCI Long-Lived Taxa:	7	10.0
SCI % Filterer:	14	3.3	SCI Trichoptera Taxa:	4	5.7
SCI Ephemeroptera Taxas	1	2.0	SCI Total Taxa:	29	5.2

^{*} Standing Crop only valid for MHD and PDredge Sampling Methods.

Program: LW

· gartage

Sample ID: 2013020280102

(1) (2) **Taxomist:** EFJ JB

Location: LWD 5et B

Date Analysis Complete: 12/31/2013

Sort Tech: EFJ JD

Sample Date: 2/19/2013

No of Aliquot Used: 0.375 out of

Mount Tech: EFJ

SamplingMethod: DframeNet-SCI

Method Reference: FDEP Field SOPs 7000, LT7000

Collected By: efj, mac
Metric: Fair

					1710	mic. Pall	
Phylum	Class	Order	Family	Sub Family	Genus Species	BI	Tally
ARTHROPODA	ARACHNIDA	ACARIFORMES	ARRENURIDAE	Z/A	Arrenurus sp.	5	8
ARTHROPODA	ARACHNIDA	ACARIFORMES	LEBERTIIDAE	Z/A	Lebertia sp.	5	1
ARTHROPODA	ARACHNIDA	ACARIFORMES	UNIONICOLIDAE	Z/A	Neumania sp.	5	1
ARTHROPODA	CRUSTACEA	AMPHIPODA	TALITRIDAE	Z/A	Hyalella azteca	5	1
ARTHROPODA	HEXAPODA	COLEOPTERA	ELMIDAE	Z/A	Dubiraphia sp.	4	2
ARTHROPODA	HEXAPODA	COLEOPTERA	ELMIDAE	Z/A	Stenelmis sp.	4	6
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - CHIRONOMIN!	Dicrotendipes neomodestus	5	5
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - CHIRONOMINI	Polypedilum flavum	5	13
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - CHIRONOMINI	Polypedilum halterale grp.	2	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - CHIRONOMINI	Polypedilum illinoense grp.	2	4
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - CHIRONOMINI	Połypedilum scalaenum grp.	3	2
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Cladotanytarsus cf. daviesi	5	8
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Tanytarsus sp. A	5	7
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Tanytarsus sp. C	5	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	ORTHOCLADIINAE	SUBFAMILY: ORTHOCLADIINAE	1	3
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	TANYPODINAE	Ablabesmyia mallochi	1	2
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	TANYPODINAE	Pentaneura inconspicua	1	2
ARTHROPODA	HEXAPODA	EPHEMEROPTERA	BAETIDAE	Z/A	FAMILY: BAETIDAE	5	1
ARTHROPODA	HEXAPODA	HETEROPTERA	GERRIDAE	Z/A	FAMILY: GERRIDAE	4	1
ARTHROPODA	HEXAPODA	ODONATA	COENAGRIONIDAE	Z/A	Ischnura sp.	5	6
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPSYCHIDAE	Z/A	FAMILY: HYDROPSYCHIDAE	5	5
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPTILIDAE	Z/A	Hydroptila sp.	1	12
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPTILIDAE	Z/A	Oxyethira sp.	1	23
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPTILIDAE	Z/A	Stactobiella sp.	5	1
MOLLUSCA	BIVALVIA	VENEROIDA	CORBICULIDAE	Z/A	Corbicula sp.	5	7
MOLLUSCA	GASTROPODA	BASOMMATOPHORA	ANCYLIDAE	Z/A	FAMILY: ANCYLIDAE	5	2
MOLLUSCA	GASTROPODA	BASOMMATOPHORA	PHYSIDAE	Z/A	FAMILY: PHYSIDAE	3	1

Sugar France

Program: LW

Sample ID: 2013020280102

(1) (2) Taxomist: EFJ JB

Location: LWD FOTR

Date Analysis Complete: 12/31/2013

Sort Tech: EFJ JD

Sample Date: 2/19/2013

No of Aliquot Used: 0.375 out of

Mount Tech: EFJ

SamplingMethod: DframeNet-SCI

Method Reference: FDEP Field SOPs 7000, LT7000

Collected By: efj, mac

Metric: Fair

Phylum	Class	Order	Family	Sub Family	Genus Species	BI	Tally
MOLLUSCA	GASTROPODA	BASOMMATOPHORA	PLANORBIDAE	Z/A	FAMILY: PLANORBIDAE	4	3
MOLLUSCA	GASTROPODA	NEOTAENIOGLOSSA	HYDROBIIDAE	Z/A	FAMILY: HYDROBIIDAE	5	15

Sample ID: 201302028010	2		
SCI Score	68	F	
# EPT Taxa	5	F	
SW Diversity Index	4.234	F	
HI Score	8	F	
Total # Species	29	F	

Macroinvertebrate Stream Analysis Summary - Raw

Program: LW

Sample ID: 2013020280102

Total Species: 32

Location: LWD 58+B

Date Analysis Complete: 12/31/2013

Total # Individuals: 144

Sample Date: 2/19/2013

No of Aliquot Used: 0.375 out of

SamplingMethod: DframeNet-SCI

Method Reference: FDEP Field SOPs 7000, LT7000

E/P/T Ratio: 29.2%

Biotic	Index	Summary

Class 1 # of Species:	5	15.6%	Class 1 # of Individuals:	42	29.2%
Class 2 # of Species:	2	6.3%	Class 2 # of Individuals:	5	3.5%
Class 3 # of Species:	2	6.3%	Class 3 # of Individuals:	3	2.1%
Class 4 # of Species:	4	12.5%	Class 4 # of Individuals:	12	8.3%
Class 5 # of Species:	19	59.4%	Class 5 # of Individuals:	82	56.9%

Taxa Summary

					ruxu Quillillary			
3.5%	5	Family HYDROPSYCHIDAE:	4.9%	7	Order VENEROIDA:	72.9%	105	Class HEXAPODA:
5.6%	8	Family ARRENURIDAE:	28.5%	41	Order TRICHOPTERA:	14.6%	21	Class GASTROPODA:
0.7%	1	Family BAETIDAE:	4.2%	6	Order ODONATA:	0.7%	1	Class CRUSTACEA:
33.3%	48	Family CHIRONOMIDAE:	10.4%	15	Order NEOTAENIOGLOSSA:	4.9%	7	Class BIVALVIA:
2.8%	4	Family COENAGRIONIDAE:	0.7%	1	Order HETEROPTERA:	6.9%	10	Class ARACHNIDA:
4.9%	7	Family CORBICULIDAE:	0.7%	1	Order EPHEMEROPTERA:			
5.6%	8	Family ELMIDAE:	33.3%	48	Order DIPTERA:			
1.4%	2	Family ANCYLIDAE:	5.6%	8	Order COLEOPTERA:			
10.4%	15	Family HYDROBIIDAE:	4.2%	6	Order BASOMMATOPHORA:			
1.4%	2	Family Z/A:	0.7%	1	Order AMPHIPODA:			
25.0%	36	Family HYDROPTILIDAE:	6.9%	10	Order ACARIFORMES:			

UNCOLLAPSED RAW DATA

Family LEBERTIIDAE: 1 0.7% Family PHYSIDAE: 1 0.7% Family PLANORBIDAE: 3 2.1% Family TALITRIDAE: 1 0.7% Family UNIONICOLIDAE: 1 0.7%

Family GERRIDAE: 0.7%

Functional Feeding Groups Sensitivity Level Life Cycle <u>Habit</u> Shredder: 20 Very Tolerant: 15 N/A: 137 13.9% 10.4% 95.1% Sprawler: Scraper: Sensitive: 5 3.5% Long-Lived: Skaters: 14.6% 4.9%

Predator: 24 16.7% 36 Piercer: 25.0% Gatherer: 23

20

Filterer:

16.0%

13.9%

N/A: 124 86.1%

2.8% 1 0.7%

18.8%

N/A: 51 35.4% Clinger: 55 38.2%

27

5 Burrowers: 3.5%

Climbers:

Bottom Dweller: 0.7%

Metric Summary

	Raw Data	Score	Re	aw Data	Score
SCI % Very Tolerant:	10	4.2	SCI Sensitive Taxa:	5	5.6
SCI % Tanytarsini:	11	7.5	SCI % Dominance:	16	8.6
SCI Clinger Taxa:	12	10.0	SCI Long-Lived Taxa:	7	10.0
SCI % Filterer:	14	3.3	SCI Trichoptera Taxa:	4	5.7
CI Ephemeroptera Taxa:	1	2.0	SCI Total Taxa:	32	6.4

^{*} Standing Crop only valid for MHD and PDredge Sampling Methods.

Program: LW

Sample ID: 2013020280102

(1) (2) Taxomist: EFJ JB

Location: LWD Jet 3

Date Analysis Complete: 12/31/2013

Sort Tech: EFJ JD

Sample Date: 2/19/2013

No of Aliquot Used: 0.375 out of

Mount Tech: EFJ

SamplingMethod: DframeNet-SCI

Method Reference: FDEP Field SOPs 7000, LT7000

Collected By: efj, mac
Metric: Fair

Phylum	Class	Order	Family	Sub Family	Genus Species	BI	Tally
ARTHROPODA	ARACHNIDA	ACARIFORMES	ARRENURIDAE	Z/A	Arrenurus sp.	5	8
ARTHROPODA	ARACHNIDA	ACARIFORMES	LEBERTIIDAE	Z/A	Lebertia sp.	5	. 1
ARTHROPODA	ARACHNIDA	ACARIFORMES	UNIONICOLIDAE	Z/A	Neumania sp.	5	. 1
ARTHROPODA	CRUSTACEA	AMPHIPODA	TALITRIDAE	Z/A	Hyalella azteca	C 5	1
ARTHROPODA	HEXAPODA	COLEOPTERA	ELMIDAE	Z/A	Dubiraphia sp.	5 2 4 0 4	2
ARTHROPODA	HEXAPODA	COLEOPTERA	ELMIDAE	Z/A	Stenelmis sp.	<u>Q</u> 4	6
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - CHIRONOMINI	Dicrotendipes neomodestus	5	3
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - CHIRONOMINI	Dicrotendipes sp.	5	2
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - CHIRONOMINI	Polypedilum flavum	5 5 5 5 6 7 8 2 2	13
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - CHIRONOMINI	Polypedilum halterale grp.	2	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - CHIRONOMINI	Polypedilum illinoense grp.	2	4
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - CHIRONOMINI	Polypedilum scalaenum grp.	3	2
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Cladotanytarsus cf. daviesi	5	7
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Cladotanytarsus sp.	5	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Tanytarsus sp. A	5	7
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	C - TANYTARSINI	Tanytarsus sp. C	5	1
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	ORTHOCLADIINAE	SUBFAMILY: ORTHOCLADIINAE	1	3
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	TANYPODINAE	Ablabesmyia mallochi	1	2
ARTHROPODA	HEXAPODA	DIPTERA	CHIRONOMIDAE	TANYPODINAE	Pentaneura inconspicua	1	2
ARTHROPODA	HEXAPODA	EPHEMEROPTERA	BAETIDAE	Z/A	FAMILY: BAETIDAE	5	1
ARTHROPODA	HEXAPODA	HETEROPTERA	GERRIDAE	Z/A	FAMILY: GERRIDAE	4	1
ARTHROPODA	HEXAPODA	ODONATA	COENAGRIONIDAE	Z/A	Ischnura sp.	5	4
ARTHROPODA	HEXAPODA	ODONATA	Z/A	Z/A	ORDER: ODONATA	5	2
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPSYCHIDAE	Z/A	FAMILY: HYDROPSYCHIDAE	5	5
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPTILIDAE	Z/A	Hydroptila sp.	1	12
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPTILIDAE	Z/A	Oxyethira sp.	1	23
ARTHROPODA	HEXAPODA	TRICHOPTERA	HYDROPTILIDAE	Z/A	Stactobiella sp.	5	1

Program: LW

Sample ID: 2013020280102

(1) (2) Taxomist: EFJ JB

Location: LWD 70+8

Date Analysis Complete: 12/31/2013

Sort Tech: EFJ JD

Sample Date: 2/19/2013

No of Aliquot Used: 0.375 out of

Mount Tech: EFJ

SamplingMethod: DframeNet-SCI

Method Reference: FDEP Field SOPs 7000, LT7000

Collected By: efj, mac

Metric: Fair

Phylum	Class	Order	Family	Sub Family	Genus Species	BI	Tally
MOLLUSCA	BIVALVIA	VENEROIDA	CORBICULIDAE	Z/A	Corbicula sp.	5	7
MOLLUSCA	GASTROPODA	BASOMMATOPHORA	ANCYLIDAE	Z/A	FAMILY: ANCYLIDAE	5	2
MOLLUSCA	GASTROPODA	BASOMMATOPHORA	PHYSIDAE	Z/A	FAMILY: PHYSIDAE	3	1
MOLLUSCA	GASTROPODA -	BASOMMATOPHORA	PLANORBIDAE	Z/A	FAMILY: PŁANORBIDAE	4	3
MOLLUSCA	GASTROPODA	NEOTAENIOGLOSSA	HYDROBIIDAE	Z/A	FAMILY: HYDROBIIDAE	5	15

Sample ID: 20130202801	102		
SCI Score	70	F	
# EPT Taxa	5	F	
SW Diversity Index	4.336	F	
HI Score	8	F	
Total # Species	32	F	

QC gs 1/5/14