

LABORATORY REPORT

If you have any questions concerning this report, please do not hesitate to call us at $(800)\ 332-4345$ or $(574)\ 233-4777$.

This report may not be reproduced, except in full, without written approval from EEA.



110 South Hill Street South Bend, IN 46617 Tel: (574) 233-4777 Fax: (574) 233-8207 1 800 332 4345

Laboratory Report

Client: Superior Watershed Partnership & Land Trust Report: 334329

Attn: Geraldine Grant Priority: Standard Written

2 Peter White Drive Status: Final

Presque Isle Park PWS ID: Not Supplied

Marquette, MI 49855

Copies

to: None

	Sa	mple Information			
EEA ID#	Client ID	Method	Collected Date / Time	Collected By:	Received Date / Time
3188795	MER001 CEM-10010234	200.8	02/16/15 09:30	Client	02/17/15 12:00
3188795	MER001 CEM-10010234	245.1	02/16/15 09:30	Client	02/17/15 12:00
3188795	MER001 CEM-10010234	200.7	02/16/15 09:30	Client	02/17/15 12:00
3188799	MER001 CEM-10010234	4500-NH3 D	02/16/15 09:30	Client	02/17/15 12:00
3188803	MER001 CEM-10010234	300.0	02/16/15 09:30	Client	02/17/15 12:00
3188803	MER001 CEM-10010234	353.2	02/16/15 09:30	Client	02/17/15 12:00
3188803	MER001 CEM-10010234	353.2	02/16/15 09:30	Client	02/17/15 12:00
3188803	MER001 CEM-10010234	2320 B	02/16/15 09:30	Client	02/17/15 12:00
3188807	MER001 CEM-10010234	4500-P E	02/16/15 09:30	Client	02/17/15 12:00
3188796	MER003 CEM-10010235	200.8	02/16/15 11:00	Client	02/17/15 12:00
3188796	MER003 CEM-10010235	245.1	02/16/15 11:00	Client	02/17/15 12:00
3188796	MER003 CEM-10010235	200.7	02/16/15 11:00	Client	02/17/15 12:00
3188800	MER003 CEM-10010235	4500-NH3 D	02/16/15 11:00	Client	02/17/15 12:00
3188804	MER003 CEM-10010235	300.0	02/16/15 11:00	Client	02/17/15 12:00
3188804	MER003 CEM-10010235	353.2	02/16/15 11:00	Client	02/17/15 12:00
3188804	MER003 CEM-10010235	353.2	02/16/15 11:00	Client	02/17/15 12:00
3188804	MER003 CEM-10010235	2320 B	02/16/15 11:00	Client	02/17/15 12:00
3188808	MER003 CEM-10010235	4500-P E	02/16/15 11:00	Client	02/17/15 12:00
3188797	WBR001 CEM-10010236	200.8	02/16/15 11:30	Client	02/17/15 12:00
3188797	WBR001 CEM-10010236	245.1	02/16/15 11:30	Client	02/17/15 12:00
3188797	WBR001 CEM-10010236	200.7	02/16/15 11:30	Client	02/17/15 12:00
3188801	WBR001 CEM-10010236	4500-NH3 D	02/16/15 11:30	Client	02/17/15 12:00
3188805	WBR001 CEM-10010236	300.0	02/16/15 11:30	Client	02/17/15 12:00
3188805	WBR001 CEM-10010236	353.2	02/16/15 11:30	Client	02/17/15 12:00
3188805	WBR001 CEM-10010236	353.2	02/16/15 11:30	Client	02/17/15 12:00
3188805	WBR001 CEM-10010236	2320 B	02/16/15 11:30	Client	02/17/15 12:00
3188809	WBR001 CEM-10010236	4500-P E	02/16/15 11:30	Client	02/17/15 12:00
3188798	WBR003 CEM-10010237	200.8	02/16/15 12:00	Client	02/17/15 12:00
3188798	WBR003 CEM-10010237	245.1	02/16/15 12:00	Client	02/17/15 12:00
3188798	WBR003 CEM-10010237	200.7	02/16/15 12:00	Client	02/17/15 12:00
3188802	WBR003 CEM-10010237	4500-NH3 D	02/16/15 12:00	Client	02/17/15 12:00

Client Name: Superior Watershed Partnership & Land Trust

3188806	WBR003 CEM-10010237	300.0	02/16/15 12:00	Client	02/17/15 12:00
3188806	WBR003 CEM-10010237	353.2	02/16/15 12:00	Client	02/17/15 12:00
3188806	WBR003 CEM-10010237	353.2	02/16/15 12:00	Client	02/17/15 12:00
3188806	WBR003 CEM-10010237	2320 B	02/16/15 12:00	Client	02/17/15 12:00
3188810	WBR003 CEM-10010237	4500-P E	02/16/15 12:00	Client	02/17/15 12:00

Report #: 334329

Report Summary

Detailed quantitative results are presented on the following pages. The results presented relate only to the samples provided for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call Jim Vernon at (574) 233-4777.

Note: This report may not be reproduced, except in full, without written approval from EEA.

Authorized Signature Title Date

Client Name: Superior Watershed Partnership & Land Trust

Report #: 334329

Client Name: Superior Watershed Partnership & Land Trust Report #: 334329

Sampling Point: MER001 CEM-10010234 PWS ID: Not Supplied

	General Chemistry										
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#		
	Alkalinity, Bicarbonate	2320 B		1.00	24.2	mg/L as CaCO3		02/18/15 19:48	3188803		
16887-00-6	Chloride	300.0	250 ^	2.0	10	mg/L		02/26/15 18:27	3188803		
14808-79-8	Sulfate	300.0	250 ^	5.0	< 5.0	mg/L		02/26/15 18:27	3188803		
14797-55-8	Nitrate	353.2	10 *	0.1	0.2	mg/L		02/17/15 23:08	3188803		
14797-65-0	Nitrite	353.2	1 *	0.01	< 0.01	mg/L		02/17/15 19:54	3188803		
7664-41-7	Nitrogen, Ammonia	4500-NH3 D		0.1	< 0.1	mg/L		02/24/15 17:23	3188799		
7723-14-0	Phosphorus	4500-P E		0.05	0.05	mg P/L		03/16/15 22:25	3188807		

	Metals												
Analyte ID#	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#				
7440-70-2	Calcium	200.7		0.1	8.6	mg/L	03/12/15 17:35	03/13/15 16:28	3188795				
7439-89-6	Iron	200.7	0.3 ^	0.020	1.4	mg/L	03/12/15 17:35	03/13/15 16:28	3188795				
7439-95-4	Magnesium	200.7		0.1	2.5	mg/L	03/12/15 17:35	03/13/15 16:28	3188795				
7440-09-7	Potassium	200.7		0.2	0.7	mg/L	03/12/15 17:35	03/13/15 16:28	3188795				
7440-23-5	Sodium	200.7		0.1	5.0	mg/L	03/12/15 17:35	03/13/15 16:28	3188795				
7440-36-0	Antimony	200.8	6 *	1.0	< 1.0	ug/L	03/12/15 17:35	03/13/15 13:08	3188795				
7440-38-2	Arsenic	200.8	10 *	1.0	< 1.0	ug/L	03/12/15 17:35	03/13/15 13:08	3188795				
7440-39-3	Barium	200.8	2000 *	2.0	6.9	ug/L	03/12/15 17:35	03/13/15 13:08	3188795				
7440-41-7	Beryllium	200.8	4 *	0.3	< 0.3	ug/L	03/12/15 17:35	03/13/15 13:08	3188795				
7440-42-8	Boron	200.8		5.0	5.6	ug/L	03/12/15 17:35	03/13/15 13:08	3188795				
7440-47-3	Chromium	200.8	100 *	0.9	< 0.9	ug/L	03/12/15 17:35	03/13/15 13:08	3188795				
7440-48-4	Cobalt	200.8		2.0	< 2.0	ug/L	03/12/15 17:35	03/13/15 13:08	3188795				
7440-50-8	Copper	200.8	1300 !	1.0	< 1.0	ug/L	03/12/15 17:35	03/13/15 13:08	3188795				
7439-92-1	Lead	200.8	15 !	1.0	< 1.0	ug/L	03/12/15 17:35	03/13/15 13:08	3188795				
7439-93-2	Lithium	200.8		2.0	< 2.0	ug/L	03/12/15 17:35	03/13/15 13:08	3188795				
7439-96-5	Manganese	200.8	50 ^	2.0	78	ug/L	03/12/15 17:35	03/13/15 13:08	3188795				
7439-98-7	Molybdenum	200.8		2.0	< 2.0	ug/L	03/12/15 17:35	03/13/15 13:08	3188795				
7440-02-0	Nickel	200.8		1.0	< 1.0	ug/L	03/12/15 17:35	03/13/15 13:08	3188795				
7440-24-6	Strontium	200.8		2.0	23	ug/L	03/12/15 17:35	03/13/15 13:08	3188795				
7440-28-0	Thallium	200.8	2 *	0.3	< 0.3	ug/L	03/12/15 17:35	03/13/15 13:08	3188795				
7440-62-2	Vanadium	200.8		2.0	< 2.0	ug/L	03/12/15 17:35	03/13/15 13:08	3188795				
7440-66-6	Zinc	200.8	5000 ^	5.0	13	ug/L	03/12/15 17:35	03/13/15 13:08	3188795				
7439-97-6	Mercury	245.1	2 *	0.1	< 0.1	ug/L	03/05/15 00:00	03/05/15 18:52	3188795				

Client Name: Superior Watershed Partnership & Land Trust Report #: 334329

Sampling Point: MER003 CEM-10010235 PWS ID: Not Supplied

	General Chemistry										
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#		
	Alkalinity, Bicarbonate	2320 B		1.00	31.5	mg/L as CaCO3		02/18/15 19:55	3188804		
16887-00-6	Chloride	300.0	250 ^	2.0	10	mg/L		02/26/15 18:50	3188804		
14808-79-8	Sulfate	300.0	250 ^	5.0	12	mg/L		02/26/15 18:50	3188804		
14797-55-8	Nitrate	353.2	10 *	0.1	0.2	mg/L		02/17/15 23:11	3188804		
14797-65-0	Nitrite	353.2	1 *	0.01	< 0.01	mg/L		02/17/15 19:56	3188804		
7664-41-7	Nitrogen, Ammonia	4500-NH3 D		0.1	< 0.1	mg/L		02/24/15 17:36	3188800		
7723-14-0	Phosphorus	4500-P E		0.05	0.08	mg P/L		03/16/15 22:26	3188808		

	Metals												
Analyte ID#	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#				
7440-70-2	Calcium	200.7		0.1	12	mg/L	03/12/15 17:35	03/13/15 16:31	3188796				
7439-89-6	Iron	200.7	0.3 ^	0.020	1.7	mg/L	03/12/15 17:35	03/13/15 16:31	3188796				
7439-95-4	Magnesium	200.7		0.1	3.7	mg/L	03/12/15 17:35	03/13/15 16:31	3188796				
7440-09-7	Potassium	200.7		0.2	1.1	mg/L	03/12/15 17:35	03/13/15 16:31	3188796				
7440-23-5	Sodium	200.7		0.1	6.5	mg/L	03/12/15 17:35	03/13/15 16:31	3188796				
7440-36-0	Antimony	200.8	6 *	1.0	< 1.0	ug/L	03/12/15 17:35	03/13/15 13:11	3188796				
7440-38-2	Arsenic	200.8	10 *	1.0	1.1	ug/L	03/12/15 17:35	03/13/15 13:11	3188796				
7440-39-3	Barium	200.8	2000 *	2.0	8.5	ug/L	03/12/15 17:35	03/13/15 13:11	3188796				
7440-41-7	Beryllium	200.8	4 *	0.3	< 0.3	ug/L	03/12/15 17:35	03/13/15 13:11	3188796				
7440-42-8	Boron	200.8		5.0	9.5	ug/L	03/12/15 17:35	03/13/15 13:11	3188796				
7440-47-3	Chromium	200.8	100 *	0.9	< 0.9	ug/L	03/12/15 17:35	03/13/15 13:11	3188796				
7440-48-4	Cobalt	200.8		2.0	< 2.0	ug/L	03/12/15 17:35	03/13/15 13:11	3188796				
7440-50-8	Copper	200.8	1300 !	1.0	< 1.0	ug/L	03/12/15 17:35	03/13/15 13:11	3188796				
7439-92-1	Lead	200.8	15 !	1.0	< 1.0	ug/L	03/12/15 17:35	03/13/15 13:11	3188796				
7439-93-2	Lithium	200.8		2.0	< 2.0	ug/L	03/12/15 17:35	03/13/15 13:11	3188796				
7439-96-5	Manganese	200.8	50 ^	2.0	110	ug/L	03/12/15 17:35	03/13/15 13:11	3188796				
7439-98-7	Molybdenum	200.8		2.0	< 2.0	ug/L	03/12/15 17:35	03/13/15 13:11	3188796				
7440-02-0	Nickel	200.8		1.0	1.0	ug/L	03/12/15 17:35	03/13/15 13:11	3188796				
7440-24-6	Strontium	200.8		2.0	35	ug/L	03/12/15 17:35	03/13/15 13:11	3188796				
7440-28-0	Thallium	200.8	2 *	0.3	< 0.3	ug/L	03/12/15 17:35	03/13/15 13:11	3188796				
7440-62-2	Vanadium	200.8		2.0	< 2.0	ug/L	03/12/15 17:35	03/13/15 13:11	3188796				
7440-66-6	Zinc	200.8	5000 ^	5.0	< 5.0	ug/L	03/12/15 17:35	03/13/15 13:11	3188796				
7439-97-6	Mercury	245.1	2 *	0.1	< 0.1	ug/L	03/05/15 00:00	03/05/15 18:54	3188796				

Client Name: Superior Watershed Partnership & Land Trust Report #: 334329

Sampling Point: WBR001 CEM-10010236 PWS ID: Not Supplied

	General Chemistry										
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#		
	Alkalinity, Bicarbonate	2320 B		1.0	2.3	mg/L as CaCO3		02/18/15 20:02	3188805		
16887-00-6	Chloride	300.0	250 ^	2.0	18	mg/L		02/26/15 19:14	3188805		
14808-79-8	Sulfate	300.0	250 ^	5.0	< 10.0	mg/L		02/26/15 19:14	3188805		
14797-55-8	Nitrate	353.2	10 *	0.1	< 0.1	mg/L		02/17/15 23:12	3188805		
14797-65-0	Nitrite	353.2	1 *	0.01	0.02	mg/L		02/17/15 19:57	3188805		
7664-41-7	Nitrogen, Ammonia	4500-NH3 D		0.1	0.2	mg/L		02/24/15 17:50	3188801		
7723-14-0	Phosphorus	4500-P E		0.05	0.09	mg P/L		03/16/15 22:26	3188809		

	Metals												
Analyte ID#	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#				
7440-70-2	Calcium	200.7		0.1	4.6	mg/L	03/12/15 17:35	03/13/15 16:34	3188797				
7439-89-6	Iron	200.7	0.3 ^	0.020	2.0	mg/L	03/12/15 17:35	03/13/15 16:34	3188797				
7439-95-4	Magnesium	200.7		0.1	1.8	mg/L	03/12/15 17:35	03/13/15 16:34	3188797				
7440-09-7	Potassium	200.7		0.2	0.6	mg/L	03/12/15 17:35	03/13/15 16:34	3188797				
7440-23-5	Sodium	200.7		0.1	8.2	mg/L	03/12/15 17:35	03/13/15 16:34	3188797				
7440-36-0	Antimony	200.8	6 *	1.0	< 1.0	ug/L	03/12/15 17:35	03/13/15 13:15	3188797				
7440-38-2	Arsenic	200.8	10 *	1.0	1.2	ug/L	03/12/15 17:35	03/13/15 13:15	3188797				
7440-39-3	Barium	200.8	2000 *	2.0	9.3	ug/L	03/12/15 17:35	03/13/15 13:15	3188797				
7440-41-7	Beryllium	200.8	4 *	0.3	< 0.3	ug/L	03/12/15 17:35	03/13/15 13:15	3188797				
7440-42-8	Boron	200.8		5.0	< 5.0	ug/L	03/12/15 17:35	03/13/15 13:15	3188797				
7440-47-3	Chromium	200.8	100 *	0.9	< 0.9	ug/L	03/12/15 17:35	03/13/15 13:15	3188797				
7440-48-4	Cobalt	200.8		2.0	< 2.0	ug/L	03/12/15 17:35	03/13/15 13:15	3188797				
7440-50-8	Copper	200.8	1300 !	1.0	< 1.0	ug/L	03/12/15 17:35	03/13/15 13:15	3188797				
7439-92-1	Lead	200.8	15 !	1.0	1.4	ug/L	03/12/15 17:35	03/13/15 13:15	3188797				
7439-93-2	Lithium	200.8		2.0	< 2.0	ug/L	03/12/15 17:35	03/13/15 13:15	3188797				
7439-96-5	Manganese	200.8	50 ^	2.0	100	ug/L	03/12/15 17:35	03/13/15 13:15	3188797				
7439-98-7	Molybdenum	200.8		2.0	< 2.0	ug/L	03/12/15 17:35	03/13/15 13:15	3188797				
7440-02-0	Nickel	200.8		1.0	< 1.0	ug/L	03/12/15 17:35	03/13/15 13:15	3188797				
7440-24-6	Strontium	200.8		2.0	15	ug/L	03/12/15 17:35	03/13/15 13:15	3188797				
7440-28-0	Thallium	200.8	2 *	0.3	< 0.3	ug/L	03/12/15 17:35	03/13/15 13:15	3188797				
7440-62-2	Vanadium	200.8		2.0	< 2.0	ug/L	03/12/15 17:35	03/13/15 13:15	3188797				
7440-66-6	Zinc	200.8	5000 ^	5.0	6.0	ug/L	03/12/15 17:35	03/13/15 13:15	3188797				
7439-97-6	Mercury	245.1	2 *	0.1	< 0.1	ug/L	03/05/15 00:00	03/05/15 18:56	3188797				

Client Name: Superior Watershed Partnership & Land Trust

Sampling Point: WBR003 CEM-10010237 PWS ID: Not Supplied

	General Chemistry										
Analyte ID #	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#		
	Alkalinity, Bicarbonate	2320 B		1.00	34.9	mg/L as CaCO3		02/18/15 20:09	3188806		
16887-00-6	Chloride	300.0	250 ^	2.0	34	mg/L		02/26/15 19:37	3188806		
14808-79-8	Sulfate	300.0	250 ^	5.0	< 10.0	mg/L		02/26/15 19:37	3188806		
14797-55-8	Nitrate	353.2	10 *	0.1	< 0.1	mg/L		02/17/15 23:12	3188806		
14797-65-0	Nitrite	353.2	1 *	0.01	0.01	mg/L		02/17/15 19:58	3188806		
7664-41-7	Nitrogen, Ammonia	4500-NH3 D		0.1	0.2	mg/L		02/24/15 17:54	3188802		
7723-14-0	Phosphorus	4500-P E		0.05	0.08	mg P/L		03/16/15 22:27	3188810		

Report #: 334329

	Metals												
Analyte ID#	Analyte	Method	Reg Limit	MRL†	Result	Units	Preparation Date	Analyzed Date	EEA ID#				
7440-70-2	Calcium	200.7		0.1	11	mg/L	03/12/15 17:35	03/13/15 16:37	3188798				
7439-89-6	Iron	200.7	0.3 ^	0.020	6.1	mg/L	03/12/15 17:35	03/13/15 16:37	3188798				
7439-95-4	Magnesium	200.7		0.1	5.0	mg/L	03/12/15 17:35	03/13/15 16:37	3188798				
7440-09-7	Potassium	200.7		0.2	1.6	mg/L	03/12/15 17:35	03/13/15 16:37	3188798				
7440-23-5	Sodium	200.7		0.1	19	mg/L	03/12/15 17:35	03/13/15 16:37	3188798				
7440-36-0	Antimony	200.8	6 *	1.0	< 1.0	ug/L	03/12/15 17:35	03/13/15 13:18	3188798				
7440-38-2	Arsenic	200.8	10 *	1.0	2.3	ug/L	03/12/15 17:35	03/13/15 13:18	3188798				
7440-39-3	Barium	200.8	2000 *	2.0	11	ug/L	03/12/15 17:35	03/13/15 13:18	3188798				
7440-41-7	Beryllium	200.8	4 *	0.3	< 0.3	ug/L	03/12/15 17:35	03/13/15 13:18	3188798				
7440-42-8	Boron	200.8		5.0	8.6	ug/L	03/12/15 17:35	03/13/15 13:18	3188798				
7440-47-3	Chromium	200.8	100 *	0.9	< 0.9	ug/L	03/12/15 17:35	03/13/15 13:18	3188798				
7440-48-4	Cobalt	200.8		2.0	< 2.0	ug/L	03/12/15 17:35	03/13/15 13:18	3188798				
7440-50-8	Copper	200.8	1300 !	1.0	< 1.0	ug/L	03/12/15 17:35	03/13/15 13:18	3188798				
7439-92-1	Lead	200.8	15 !	1.0	< 1.0	ug/L	03/12/15 17:35	03/13/15 13:18	3188798				
7439-93-2	Lithium	200.8		2.0	< 2.0	ug/L	03/12/15 17:35	03/13/15 13:18	3188798				
7439-96-5	Manganese	200.8	50 ^	2.0	1000	ug/L	03/12/15 17:35	03/13/15 13:18	3188798				
7439-98-7	Molybdenum	200.8		2.0	< 2.0	ug/L	03/12/15 17:35	03/13/15 13:18	3188798				
7440-02-0	Nickel	200.8		1.0	1.5	ug/L	03/12/15 17:35	03/13/15 13:18	3188798				
7440-24-6	Strontium	200.8		2.0	38	ug/L	03/12/15 17:35	03/13/15 13:18	3188798				
7440-28-0	Thallium	200.8	2 *	0.3	< 0.3	ug/L	03/12/15 17:35	03/13/15 13:18	3188798				
7440-62-2	Vanadium	200.8		2.0	< 2.0	ug/L	03/12/15 17:35	03/13/15 13:18	3188798				
7440-66-6	Zinc	200.8	5000 ^	5.0	< 5.0	ug/L	03/12/15 17:35	03/13/15 13:18	3188798				
7439-97-6	Mercury	245.1	2 *	0.1	< 0.1	ug/L	03/05/15 00:00	03/05/15 18:58	3188798				

[†] EEA has demonstrated it can achieve these report limits in reagent water, but can not document them in all sample matrices.

Reg Limit Type:	MCL	SMCL	AL
Symbol:	*	۸	l !

Lab Definitions

Report #: 334329

Continuing Calibration Check Standard (CCC) / Continuing Calibration Verification (CCV) / Initial Calibration Verification Standard (ICV) / Initial Performance Check (IPC) - is a standard containing one or more of the target analytes that is prepared from the same standards used to calibrate the instrument. This standard is used to verify the calibration curve at the beginning of each analytical sequence, and may also be analyzed throughout and at the end of the sequence. The concentration of continuing standards may be varied, when prescribed by the reference method, so that the range of the calibration curve is verified on a regular basis.

Internal Standards (IS) - are pure compounds with properties similar to the analytes of interest, which are added to field samples or extracts, calibration standards, and quality control standards at a known concentration. They are used to measure the relative responses of the analytes of interest and surrogates in the sample, calibration standard or quality control standard.

Laboratory Duplicate (LD) - is a field sample aliquot taken from the same sample container in the laboratory and analyzed separately using identical procedures. Analysis of laboratory duplicates provides a measure of the precision of the laboratory procedures.

Laboratory Fortified Blank (LFB) / Laboratory Control Sample (LCS) - is an aliquot of reagent water to which known concentrations of the analytes of interest are added. The LFB is analyzed exactly the same as the field samples. LFBs are used to determine whether the method is in control.

Laboratory Method Blank (LMB) / Laboratory Reagent Blank (LRB) - is a sample of reagent water included in the sample batch analyzed in the same way as the associated field samples. The LMB is used to determine if method analytes or other background contamination have been introduced during the preparation or analytical procedure. The LMB is analyzed exactly the same as the field samples.

Laboratory Trip Blank (LTB) / Field Reagent Blank (FRB) - is a sample of laboratory reagent water placed in a sample container in the laboratory and treated as a field sample, including storage, preservation, and all analytical procedures. The FRB/LTB container follows the collection bottles to and from the collection site, but the FRB/LTB is not opened at any time during the trip. The FRB/LTB is primarily a travel blank used to verify that the samples were not contaminated during shipment.

Matrix Spike Duplicate Sample (MSD) / Laboratory Fortified Sample Matrix Duplicate (LFSMD) - is a sample aliquot taken from the same field sample source as the Matrix Spike Sample to which known quantities of the analytes of interest are added in the laboratory. The MSD is analyzed exactly the same as the field samples. Analysis of the MSD provides a measure of the precision of the laboratory procedures in a specific matrix.

Matrix Spike Sample (MS) / Laboratory Fortified Sample Matrix (LFSM) - is a sample aliquot taken from field sample source to which known quantities of the analytes of interest are added in the laboratory. The MS is analyzed exactly the same as the field samples. The purpose is to demonstrate recovery of the analytes from a sample matrix to determine if the specific matrix contributes bias to the analytical results.

Quality Control Standard (QCS) / Second Source Calibration Verification (SSCV) - is a solution containing known concentrations of the analytes of interest prepared from a source different from the source of the calibration standards. The solution is obtained from a second manufacturer or lot if the lot can be demonstrated by the manufacturer as prepared independently from other lots. The QCS sample is analyzed using the same procedures as field samples. The QCS is used as a check on the calibration standards used in the method on a routine basis.

Reporting Limit Check (RLC) / Initial Calibration Check Standard (ICCS) - is a procedural standard that is analyzed each day to evaluate instrument performance at or below the minimum reporting limit (MRL).

Surrogate Standard (SS) / Surrogate Analyte (SUR) - is a pure compound with properties similar to the analytes of interest, which is highly unlikely to be found in any field sample, that is added to the field samples, calibration standards, blanks and quality control standards before sample preparation. The SS is used to evaluate the efficiency of the sample preparation process.



Sample Analysis Report

Client:

Superior Watershed Partnership & Land Trust

Contact:

Geraldine Grant

2 Peter White Dr. Presque Isle Park

Marquette, MI 49855 Voice: (906)228-6095

geri@superiorwatersheds.org

Order No.: 272069

Receipt Batch No.: 334329

Analytical Method Summary:

This was an ICP-MS method based on EPA Method 200.8 with linear calibration ranges of 0.2-100 μ g/L for silver and cadmium, and 1.0-100 μ g/L for selenium. These samples displayed turbidity > 1 NTU and required digestion prior to analysis. The acidified, digested samples were analyzed in an analysis batch that included an initial calibration curve, initial calibration verification (ICV), an initial calibration blank (ICB), two digested reporting level checks (DRL) at the minimum reporting limit (MRL) for each analyte, a quality control sample (QCS), a laboratory digested blank (LDB), a digested fortified blank (DFB), a continuing calibration verification (CCV), and a continuing calibration blank (CCB) at the end of the run.

QC RESULTS:

Analyte	MRL (µg/L)	DRL Recovery (%)	LFB Recovery (%)	QCS Recovery (%)	CCV Recovery (%)
Se82	1.0	140	102	106	101
Ag107	0.2	114	98	107	100
Cd111	0.2	143	98	107	101

Sample Lab ID: 3188811

Sample Site: MER001 CEM-10010234

Analyte	MRL (µg/L)	Result (µg/L)	MS Recovery (%)	MSD Recovery (%)
Se82	1.0	< 1.0	103	NA
Ag107	0.2	< 0.2	97	NA
Cd111	0.2	< 0.2	100	NA

Sample Lab ID: 3188812 Sample Site: MER003 CEM-10010235

Sample Lah ID: 318	38812		Sample offer Thereof	
Sample Lab ID: 318	MRL	Result	MS	MSD
Analyte	(µg/L)	(µg/L)	Recovery (%)	Recovery (%)
			NA	NA
Se82	1.0	< 1.0		
	0.2	< 0.2	l NA	NA NA
Ag107	0.2	< 0.2	NIA.	NA
Cd111	0.2	< 0.2	NA	INA
Culli	0.2			

Sample Lab ID: 3188813 Sample Site: WBR001 CEM-10010236

Sample Lab ID: 318	38813		Sample Siter 1121te	
Campie Las III a	MRL	Result	MS	MSD
Analyte	(µg/L)	(µg/L)	Recovery (%)	Recovery (%)
		< 1.0	NA	NA
Se82	1.0			NA
Ag107	0.2	< 0.2	NA	
		< 0.2	NA	NA
Cd111	0.2	< 0.2	1	

Sample Lab ID: 3188814 Sample Site: WBR003 CEM-10010237

Sample Lab ID: 318	500 14		Sample Siter 1121to	
Analyte	MRL	Result	MS Recovery (%)	MSD Recovery (%)
			NA NA	NA
			NA	NA
		< 0.2	NA	NA
Se82 Ag107 Cd111	(μg/L) 1.0 0.2 0.2	(μg/L) < 1.0 < 0.2 < 0.2	NA NA	NA NA

Analyst signature Date

Reviewer signature



Eaton Analytical

Batch # 334339 Order # 260740 110 S. Hill Street South Bend, IN 46617 T: 1.800.332.4345 F: 1.574.233.8207

C C C C C C C C C C	SAMPLER (Signalure) C. AULL View No Populations engin project name populations engin project name populations engin project name populations and the state of t	www.eatonanalytical.com	tical.com	CHAIN	CHAIN OF CUSTODY RECORD	RD		Page	jo	0
C. HWALLANGE NO POPULATION SERVED SOURCE WATER CEPT POPULATION SERVED SOURCE WATER CONFIGURATED COLLECTION SAMPLING SITE TIME AN PAN MERCOL CEPT POPULATION SERVED SOURCE WATER CEPT POPULATION SERVED SOURCE WATE	WHY HE ST NAME CONPLIANCE MONITORING COLLECTION SAMPLING SITE THE TIME AND PRINCE WATER CONPLIANCE MONITORING SAMPLING SITE TEST NAME				T C CWG	STATE (comple princip	THE PERSON NAMED IN		1	1
COMPLIANCE No POPULATION SERVED SOUNCE WATER CEPTIFY MONTORING COLLECTION SAMPLING SITE TIME AMI PM MERCOL CEPTIFY Table 7 Collection CEPTIFY COLLORINATED COLLO	### ### COMPLIANCE NO POPULATION SERVED SOURCE WATER CEPTIFY COLLECTION SAMPLING SITE TIME AM PART SAMPLING SITE TIME AM PART SAMPLING SITE TO SAMPLE REMARKS COLLECTION SAMPLING SITE TEST NAME TEST NAM	Ceri Grant		C. Hute R	# CI SAA	MT MT	PROJECT NAME	#001		
COLLECTION SAMPLING SITE TEST NAME SAMPLE REMARKS CHLOPINATED COLLECTION SAMPLE REMARKS CHLOPINATED COLLECTION SAMPLE REMARKS CHLOPINATED COLLECTION CAPACITY C	COLLECTION SAMPLING SITE Table	BILL TO: 2 PETEC Whith I	Or Hadia Had C			SOURCE WATER	CEMIL		SABNIAT	ODE
3/16/15 11:00 9m x MEROOJ CEM-10010234 Table 7 Quarkelly mithis x 4 2/16/15 11:00 9m x MEROOJ CEM-10010235 X 4 2/16/15 13:00 x WORCOOJ CEM-10010237 L Included X X 1	3/16/15 11:00 9m & MERODI CEM-10010 234 Table 7 Quartelly mutins × 4 2/16/15 11:00 M MBROOS CEM-10010 336 2/16/15 13:00 M WBROOS CEM-10010 327 2/16/15 13:00 M WBROOS CEM-10010 327 2/16/15 13:00 M WBROOS CEM-10010 327 2/16/15 13:00 M WBROOS LEM-10010 327 2/16/15 13:00 M	LAB Number	ΙZΠ		TEST N	AME	SAMPLE REMARKS	CHLORINATED	OE CON	O XIATAN
3/16/15 11:00 mm x MEROO3 CEM-COOLO & 35 2/16/15 11:00 x WBROO3 CEM-COOLO & 35 2/16/15 13:00 x WBROO3 CEM-COOLO & 32 2/16/15 13:00 x WBROO3 CEM-COOLO & 27 2/16/15 13:00 x	3/16/15 11:00 AM X MEROO3 CEM-10010 & 3 & X X X X X X X X X X X X X X X X X			MEROOI	Table 7	Jartelli.	MAHAIS	╀-	1	7 3
4/16/15 13:00 × WBROO3 CEM-10010 A36 2/16/15 13:00 × WBROO3 CEM-10010 A37 L Included V X I	4/16/15 13:00 × WBROO3 CEM-10010337 L Included X L 2/16/15 13:00 × WBROO3 CEM-10010337 2/16/15 13:00 × WBROO3 CEM-1001037 2/16/15 1	207		MEROO		,		×		
WBROOS CEM-10010337 Included XII	4/16/15 13:00 N WBRD03 CEM-10010337 Included 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	141	+	WBF00				*		
	DATE TIME RECEIVED BY:(Signature) DATE TIME	867	4/16/15 14:00	N WBROOS CEM-10010337	7	Included	>	×)
	DATE TIME RECEIVED BY:(Signature) DATE TIME	9							1	+
	DATE TIME RECEIVED BY:(Signature) DATE TIME	2							\dagger	+
	DATE TIME RECEIVED BY:(Signature) DATE TIME	8							1	1
	DATE TIME RECEIVED BY:(Signature) DATE TIME	6							1	\dagger
	DATE TIME RECEIVED BY:(Signature) DATE TIME	10								
	DATE TIME RECEIVED BY:(Signature) DATE TIME	11								
	DATE TIME RECEIVED BY:(Signature) DATE TIME	12							\dagger	\dagger
	DATE TIME RECEIVED BY:(Signature) DATE TIME	13							1	+
	DATE TIME RECEIVED BY:(Signature) DATE TIME	14								1
	DATE TIME RECEIVED BY:(Signature) DATE TIME		łŀ						1	1

RELINQUISHED BY:(Signature)	DATE	TIME	TIME RECEIVED BY:(Signature)		DATE	TIME	The state of the s	
, , ,	111110	2.5					LAB RESERVES THE RIGHT TO RET	LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT
Charle To	4/16/15 X.E	3				LAB	LAB COMMENTS	
0.0		AM PM				AM PM		
RELINQUISHED BY:(Signature)	DATE	TIME	RECEIVED BY:(Signature)		DATE	TIME		
0		AM PM				AM PM		
RELINQUISHED BY:(Signature)	DATE	TIME	TIME RECEIVED FOR LABORATORY BY:		DATE	_	CONDITIONS LIPON PECEIPT (chart one):	
				470	ŕ	(200)	K loed/Wet/Blue Amb	Ambient O S Unon Becaint
		AM PM		6		AM PM	1	
MATRIX CODES:	TURN-ARO	UND TIME	TURN-AROUND TIME (TAT) - SURCHARGES					A STATE OF THE PROPERTY OF THE
DW-DRINKING WATER	SW = Standard	Written: (15 v	SW = Standard Written: (15 working days) 0%	2	* = Immediate	IV* = Immediate Verbal: (3 working days)	avs) 100%	
RW-REAGENT WATER GW-GROUND WATER	RV* = Rush Verbal: (5 working days)	bal: (5 working	%05 (skap 6u	2	V* =Immediate	IW* =Immediate Written: (3 working days)		
EW-EXPOSURE WATER SW-SURFACE WATER	RW* = Rush Written: (5 working days)	itten: (5 worki	ing days) 75%	ŝ	SP* = Weekend, Holiday	. Holiday		Samples received unannounced with less than 48 hours holding time remaining may
PW-POOL WATER				S	STAT* = Less than 48 hours	han 48 hours	CALL	be subject to additional charges.
WW-WASTE WATER	* Please call,	, expedited	Please call, expedited service not available for all testing	Fr.				

06-10-79435 Issue 4.0 Effective Date: 2014-105-01
Discussed by Customer are deemed material alterations and are rejected unless expressly agree to in writing by EEA.

620212

www.eatonanalytical.com

Eaton Analytical

Order # Batch #

110 S. Hill Street South Bend, IN 46617 T: 1.800.332.4345 F: 1.574.233.8207

Shaded area for EEA use only	CHAIN OF	CHAIN OF CUSTODY RECORD		Page 2	v e	
REPORT TO:	SAMPLER (Signature)	PWS ID # STATE (sample origin)	gin) PROJECT NAME	BO#		-
Ceri Orant	C. Shute By	IN	1			
BILL TO: 2 PEHCWNIK Or	COMPLIANCE	POPULATION SERVED SOURCE WATER	TT		VERS	= BMIT C
Marquette no sound 42355	MONING					ОПИ
COLL	SAMPLING SITE	TEST NAME	SAMPI E REMARKS	CHLORINATED		
DATE TIME				YES NO		-
1 3155 744 3/16/5 4:50 X	MEROOI CEM-10010234	Table 7 Burton oute	DOODOON!	1_	1	17
2 500 3/16/15 11:00 Am x		-	-	×	T	+-
X	WBK001 (FM-10010236			×	-	-
4 \$ 802 2/16/15 13:00	N WBROO3 CEM-10010337	I Included	7	×	1	-1
5						
9						
7				+	1	
8				<u> </u>	1	
O				-	l	
10						
11						-
12						
13					+	F
14 mil 2 mil 2 mil 2 mil 3 mi					+	
RELINQUISHED BY:(Signature) DATE TIME	TIME RECEIVED BY:(Signature) DATE	TIME			$\ $	\prod

RELINQUISHED BY; (Signature) DATE TIME RECEIVED BY; (Signature) DATE	The state of the s									
DATE TIME RECEIVED BY: (Signature) DATE TIME LAB COMM AM PM P										Т
AM PM PM PM PM PM PM PM	RELINQUISHED BY:(Signature)	DATE	TIME RECEIVED BY:(Signate	ure)	DATE	TIME	TABLE CT TUCKS BUT SOURCES			Т
AM PM PM RECEIVED BY;(Signature) DATE TIME RECEIVED BY;(Signature) DATE TIME AM PM AM PM AM PM AM PM TURN-AROUND TIME (TAT) - SURCHARGES W* = Rush Verbal: (3 working days) W* = Rush Written: (15 working days) 75% SP* = Weekend, Holiday CALL STAT* = Less than 48 hours	, , , , ,	111110	2.50				CAB NESERVES THE RIGHT TO RETURN UT	NUSED PURITONS OF NON-AQUEOUS SAMPLES T	O CLIENT	
DATE TIME RECEIVED BY: (Signature) DATE TIME	CANT B	0/191/0	3 .			LAB CON	IMENTS			
DATE TIME RECEIVED BY: (Signature) DATE TIME	0:0:0		AM PM			AM PM				
DATE TIME RECEIVED FOR LABORATORY BY: DATE TIME CONDITIONS UPON RECEIPT (check one): AM PM TURN-AROUND TIME (TAT) - SURCHARGES SW = Standard Written: (15 working days) 0% RV' = Rush Venal: (5 working days) 75% RW' = Rush Written: (3 working days) 75% SP' = Weekend, Holiday CALL STAT' = Less than 48 hours CALL STAT' = Less than 48 hours CALL	RELINQUISHED BY:(Signature)	DATE	TIME RECEIVED BY:(Signate	ure)	DATE	TIME				
DATE TIME RECEIVED FOR LABORATORY BY: DATE TIME CONDITIONS UPON RECEIPT (check one): AM PM TURN-AROUND TIME (TA1) - SURCHARGES SW = Standard Written: (15 working days) 0% IN* = Immediate Verbal: (3 working days) 100% IN* = Rush Written: (5 working days) 75% SP* = Weekend, Holiday CALL **Please call, expedited service not available for all testing CALL **TORN-AROUND TIME (TA1) - SURCHARGES SW = Standard Working days) 100% IN* = Immediate Written: (3 working days) 125% CALL **TORN-AROUND TIME (TA1) - SURCHARGES SW = Standard Working days) 125% CALL **TORN-AROUND TIME (TA1) - SURCHARGES SW = Standard Written: (3 working days) 125% CALL **TORN-AROUND TIME (TA1) - SURCHARGES STAT* = Less than 48 hours **CALL **TORN-AROUND TIME (TA1) - SURCHARGES **TORN-AROUND TIME (TA1) - SURCH	20									
DATE TIME RECEIVED FOR LABORATORY BY: DATE TIME CONDITIONS UPON RECEIPT (check one): AM PM PM CONDITIONS UPON RECEIPT (check one): TURN-AROUND TIME (TAT) - SURCHARGES SW = Standard Written: (15 working days) 0% RW = Rush Venda! (5 working days) 75% RW = Rush Written: (3 working days) 75% SP = Weekend, Holiday CALL STAT* = Less than 48 hours CALL										
DATE TIME RECEIVED FOR LABORATORY BY: DATE TIME RECEIVED FOR LABORATORY BY: DATE TIME CONDITIONS UPON RECEIPT (check one):			AM PM			AM PM				
TURN-AROUND TIME (TAT) - SURCHARGES V = Immediate Verbair (3 working days) TS% SP = Weekend, Holiday CALL STAT" = Less than 48 hours CALL STAT" = Less than 48 hours CALL Cedf WedBlue Ambient A	RELINQUISHED BY:(Signature)	DATE	TIME RECEIVED FOR LABOR	ATORY BY:	DATE		Tail old Modif Six			
TURN-AROUND TIME (TAT) - SURCHARGES V* = Immediate Verbal: (3 working days) 75% SW* = Rush Written: (5 working days) 75% SW* = Rush Written: (5 working days) 75% SP* = Weekend, Holiday CALL STAT* = Less than 48 hours CALL STAT* = Less than 48 hours CALL					ĭ	Control Control	NAS UPON KECEIP I (check one):	٥,		A.
IES: TURN-AROUND TIME (TAT) - SURCHARGES SW = Standard Written: (15 working days) 0%				_	1	207		C. & Sc. I'm Becain	KITA	
I TURN-AROUND TIME (TAT) - SURCHARGES SW = Standard Written: (15 working days) 0% RV* = Rush Verbal: (3 working days) 75% RW* = Rush Written: (3 working days) 75% RW* = Rush Written: (3 working days) 75% SP* = Weekend, Holiday CALL STAT* = Less than 48 hours CALL			エート					- a oboil vecell	Y.Y	946
SW = Slandard Written: (15 working days) 0% IV* = Immediate Verbal: (3 working days) 100% RV* = Rush Verbal: (5 working days) 50% IW* = Immediate Written: (3 working days) 125% RW* = Rush Written: (5 working days) 75% SP* = Weekend, Holiday CALL STAT* = Less than 48 hours CALL * Please call, expedited service not available for all testing	MATRIX CODES:	TURN-ARC	JUND TIME (TAT) - SURCHARGE	S					Section of the second second	
RW* = Rush Verbal: (5 working days) 50% IW* = Immediate Written: (3 working days) 125% RW* = Rush Written: (5 working days) 75% SP* = Weekend, Holiday CALL STAT* = Less than 48 hours CALL * Please call, expedited service not available for all testing	DW-DRINKING WATER	SW = Standard			IV* = Immediate	Verbal: (3 working days)				
RW* = Rush Written: (5 working days) 75% SP* = Weekend, Holiday GALL STAT* = Less than 48 hours GALL * Please call, expedited service not available for all testing	GW-GROUND WATER	RV* = Rush Ve			IW* =Immediate	Written: (3 working dave)				
RW* = Rush Written: (5 working days) 75% SP* = Weekend, Holiday CALL STAT* = Less than 48 hours CALL * Please call, expedited service not available for all testing						(cfpp fi)		Samples received unannounced with less		
STAT* = Less than 48 hours CALL * Please call, expedited service not available for all testing	SW-SURFACE WATER	RW* = Rush W			SP* = Weekend	, Holiday	CALL	than 48 hours holding time remaining may		
* Please call, expedited service not available for all testing	PW-POOL WATER				STAT* = Less t	an 48 hours	CALL	be subject to additional charges.		
	WW-WASTE WATER	* Please cal	l, expedited service not available fo	r all testing						

Sample analysis will be provided according to the standard EEA/Water Services Terms, which are available upon request. Any other terms proposed by Customer are deemed material alterations and are rejected unless expressly agree to in writing by EEA. 06-LO-F0435 Issue 4.0 Effective Date: 2014-05-01

272069

eurofins ...

Eaton Analytical

South Bend, IN 46617 T: 1.800.332.4345 F: 1.574.233.8207

Order #2

Batch #

110 S. Hill Street

35 NATRIX CODE 5 o # OF CONTAINERS 7 CHLORINATED a YES NO #Od Page. SAMPLE REMARKS STATE (sample origin) PROJECT NAME CEMP SOURCE WATER Included TH Quelelle CHAIN OF CUSTODY RECORD TEST NAME POPULATION SERVED table 9 N CEM-1001023 FM-1001023 CFM-10010234 CEIM-10010835 SAMPLING SITE C. Huth R SAMPLER (Signature) COMPLIANCE MEROOS WBR003 MEROOI WBK 00 | 8 AM PM 11:00 Am COLLECTION TIME Marquette MT MANG HABSS 2/16/15 13:00 9:30 2/16/15 11:30 Shaded area for EEA use only 3/19/18 5/91/e DATE BILL TO: 2 PETEC White Or 908 804 803 Oeri Orant www.eatonanalytical.com LAB Number 3818 REPORT TO:

9

89 6 10 12

36

TURNAROUND TIME

The second secon				
RELINQUISHED BY:(Signature)	DATE TIME RECEIVED BY:(Signature)	DATE TIME		AB RESERVES THE RIGHT TO BETTIRN IMIRED BODTONE OF NAM ACHIECULE AND TO SEE THE
C. Auto B	3/16/15 2:00		LAB COMMENTS	TOOLOT ON TOTAL OF TO
	AM PM	AM PM	Mc	
RELINQUISHED BY:(Signature)	DATE TIME RECEIVED BY:(Signature)	DATE TIME		
	AM PM	AM PM	N	
RELINQUISHED BY:(Signature)	DATE TIME RECEIVED FOR LABORATORY BY:	DATE TIME	E CONDITIONO DE CENTRAL DE CONDITIONO DE CENTRAL DE CONDITIONO DE CENTRAL DE	
		051 31-4	CONDITIONS OF ON MECETIF (check one).	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\
	AM PW There e	AM		C Upon Receipt N/A
MATRIX CODES:	TURN-AROUND TIME (TAT) - SURCHARGES			
DW-DRINKING WATER	SW = Standard Written: (15 working days) 0%	IV* = Immediate Verbal: (3 working days)	3 working days) 100%	
RW-REAGENT WATER GW-GROUND WATER	RV* = Rush Verbal: (5 working days) 50%	IW* =Immediate Written: (3 working days)	(3 working days) 125%	Camples received inservences a site in
EW-EXPOSURE WATER SW-SURFACE WATER	RW* = Rush Written: (5 working days) 75%	SP* = Weekend, Holiday	CALL	than 48 hours holding time remaining may
PW-POOL WATER		STAT* = Less than 48 hours	urs CALL	be subject to additional charges.
WW-WASTE WATER	* Please call, expedited service not available for all testing			OE TO EDATE TO EMERGE TO THE OFFICE OF THE OFFICE O

Sample analysis will be provided according to the standard EEA/Water Services Terms, which are available upon request. Any other terms proposed by Customer are deemed material alterations and are rejected unless expressly agree to in writing by 06-LO-F0435 Issue 4.0 Effective Date: 2014-05-01

620212

eurofins 🛟

Eaton Analytical

Order #260740 Batch #

110 S. Hill Street South Bend, IN 46617 T: 1.800.332.4345 F: 1.574.233.8207

	10	-		37111	CODE	XIX.	TAN	17 34	_		1											$\ $
	S			NERS	11ATV	: COI	4 O t	Т	-	F	1											TAU S
	Page 4	#Od	5			CHLORINATED	YES NO	┞-	×	×	×											JEOUS SAMPLES TO
		PROJECT NAME	/ Kim P			O NAMO DI CAMADO		T. 0h09			5											SED PORTIONS OF NON-ACI
	Q	STATE (sample origin)	IN	SOURCE WATER		ш	J	7 Burtollyours	1 17		Included											LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-ACILECIUS SAMPI ES TO CLENT
	CHAIN OF CUSTODY RECORD	PWS ID #		POPULATION SERVED		TEST NAME		Table 7 Bu	-		7											
	AIN OF CUS			N N				_			7											DATE TIME
		SAMPLER (Signature)	C. Hute By	COMPLIANCE	MONITORING	SAMPLING SITE		MEROOI CEM-10010234	MEROOS CEIN-10010235	٦	N WBROOS CEM-10010337											TIME RECEIVED BY:(Signature)
					44955	COLLECTION	H	4:20 X	W X	X	2/16/15 13:00 A											DATE TIME
mon legitulenenotes munu	Shaded area for EEA use only	REPORT TO:	Geri Orant	BILL TO: 2 PETER WIN'H Dr	marquette no samp 49355	LAB Number C			2 808 3/16/15	3 809 3/16/15 11:30	4 SID 3/16/15	5	9	7	8	6	10	11	12	13	14	RELINQUISHED BY:(Signature)

MIT GNUOAANAUT 3

Control of the Contro	The second secon				-
					_
RELINQUISHED BY:(Signature)	DATE TIME RECEIVED BY:(Signature)	DATE	TIME	AB RESERVES THE RIGHT TO BETHEN HAIRED DODITIONE OF MAN AMERICA DE CAMPITE TO ALCUM	_
, , , , ,	01.6 /11/110			TOTAL	_
C. 24. 10	9/16/12 8:00		LAB COMMENTS	ENTS	
Din	AM PM		AM PM	6 13 0	_
RELINQUISHED BY:(Signature)	DATE TIME RECEIVED BY:(Signature)	DATE		months made medium on the same	
					-
					_
	AM PM		AM PM		_
RELINQUISHED BY:(Signature)	DATE RECEIVED FOR LABORATORY BY:	DATE	TIME	COMPITIONS (IPON RECEIPT (when your)	_
		びん	(200)	O Company of the Comp	_
			1200 X	L Iced/wedBlue Ambient O. 8 C Upon Receipt	_
	AM PM TOUR		AM PM		_
MATRIX CODES:	TURN-AROUND TIME (TAT) - SURCHARGES				_
DW-DRINKING WATER	SW = Standard Written: (15 working days) 0%	IV* = Immediate	IV* = Immediate Verbal: (3 working days)	100%	_
RW-REAGENT WATER GW-GROUND WATER	RV* = Rush Verbal: (5 working days) 50%	IW* =Immediate	IW* =Immediate Written: (3 working days)	125% Camples reading inaumanaced with 1	_
EW-EXPOSURE WATER	RW* = Rush Written: (5 working days) 75%	SP* = Weekend, Holiday	Holiday	CALL than 48 hours holding time remaining may	
PW-POOL WATER		STAT* = Less than 48 hours	an 48 hours	CALL be subject to additional charges.	_
WW-WASTE WATER	* Please call, expedited service not available for all testing			C TO CONTRACT OF THE CONTRACT	_
				The state of the s	٠

Sample analysis will be provided according to the standard EEA/Water Services Terms, which are available upon request. Any other terms proposed by Customer are deemed material alterations and are rejected unless expressly agree to in writing by EEA.

3.5 7 MATRIX CODE of OF CONTAINERS 7 Order # CHLORINATED YES NO Batch # #Od Page_ SAMPLE REMARKS PROJECT NAME 110 S. Hill Street South Bend, IN 46617 T: 1.800.332.4345 F: 1.574.233.8207 CEMP RD100 STATE (sample origin) SOURCE WATER Included TH Brarkelly CHAIN OF CUSTODY RECORD TEST NAME POPULATION SERVED Table 2 CEM-10010337 FM-10010236 CFM-10010234 CEM-10010235 SAMPLING SITE Yes C. Hute Ry Eaton Analytical SAMPLER (Signature) COMPLIANCE MEROOS MBROO3 MEROOL WBK 00 AM COLLECTION 11:00 Am 13:00 Marquette nt sappo 46955 9:30 2/16/15 11:30 Shaded area for EEA use only : eurofins 2/16/15 3/16/15 DATE 3/10/18 BILL TO: 2 PETER White Or 814 813 813 Seri Grant 1888 www.eatonanalytical.com LAB Number REPORT TO: 4 ы

8 6 0 1 2 2 2 4

2 9 7

38

ЭМІТ ФИЛОЯАИЯП.

RELINQUISHED BY:(Signature)	DATE	TIME RE	TIME RECEIVED BY:(Signature)	DATE	TIME	LAB RESERVES THE RIGHT TO RETURN UN	LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT
C. Strike	3/16/15 2:00	3:6			12	LAB COMMENTS	
Pinano.		AM PM			AM PM	9. 20 av 00	of the Downed Off from the Isl
RELINQUISHED BY:(Signature)	DATE	TIME RE	RECEIVED BY:(Signature)	DATE	TIME	Boule. st	707
		AM PM			AM PM		
RELINQUISHED BY:(Signature)	DATE	TIME RE	RECEIVED FOR LABORATORY BY:	DATE	TIME	CONDITIONS UPON RECEIPT (check one):	
				2-1-10	SOCI	X leed/WetBlue Ambient	Ambient O S of Hon Becaint
		AM PM	イマラショ		AM PM	1	
MATRIX CODES:	TURN-ARO	UND TIME (T.	TURN-AROUND TIME (TAT) - SURCHARGES				
DW-DRINKING WATER	SW = Standard	SW = Standard Written: (15 working days)	ing days) 0%	IV* = Immediate	IV* = Immediate Verbal: (3 working days)	ng days) 100%	
RW-REAGENT WATER GW-GROUND WATER	RV* = Rush Ver	RV* = Rush Verbal: (5 working days)	ys) 50%	IW* =Immediate	IW* =Immediate Written: (3 working days)	ing days) 125%	Samples received unannounced with leas
EW-EXPOSURE WATER	RW* = Rush Wr	RW* = Rush Written: (5 working days)	ays) 75%	SP* = Weekend, Holiday	f, Holiday	CALL	than 48 hours holding time remaining may
PW-POOL WATER				STAT* = Less than 48 hours	han 48 hours	CALL	be subject to additional charges.
WW-WASTE WATER	* Please call	, expedited se	Please call, expedited service not available for all testing				06-1 O-50435 Issue 4 0 Effective Date: 2014-05-01

Ub-LO-10435 Issue 4.0 Effective Date: 2014-05-01
Sample analysis will be provided according to the standard EEA/Water Services Terms, which are available upon request. Any other terms proposed by Customer are deemed material alterations and are rejected unless expressly agree to in writing by EEA,

Table 1
Parameters, Analytical Methods and Target Detection Limits
Humboldt Mill Surface Water Samples

Parameter	Frequency of Analysis*	Sample Type	Analytical Method	Quantitation/R eporting Limit	Units
Field					
Flow	Quarterly	Grab	Field	NA	cfs
Temperature	Quarterly	Grab	Field	NA	°C
Dissolved Oxygen	Quarterly	Grab	Field	NA	mg/L
Specific Conductance	Quarterly	Grab	Field	NA	µmhos/cm
pH	Quarterly	Grab	Field	NA	S.U.
Turbidity	Quarterly	Grab	Field	NA	NTU
Metals					
Aluminum	Quarterly	Grab	EPA 6010	50	µg/l
Antimony	Quarterly	Grab	EPA 6020	2.0	μg/l
Arsenic	Quarterly	Grab	EPA 6020	1.0	μg/l
Barium	Quarterly	Grab	EPA 6020	10.0	μg/l
Beryllium	Quarterly	Grab	EPA 6020	1.0	μg/l
Boron	Quarterly	Grab	EPA 6020	50.0	µg/l
Cadmium	Quarterly	Grab	EPA-1638	0.01	μg/l
Chromium	Quarterly	Grab	EPA 6020	1.0	μg/l
Cobalt	Quarterly	Grab	EPA-1638	0.10	μg/l
Copper	Quarterly	Grab	EPA-1638	0.05	μg/l
Iron	Quarterly	Grab	EPA 6010	20.0	μg/l
Lead	Quarterly	Grab	EPA-1638	0.05	μg/l
Lithium	Quarterly	Grab	EPA 6010	10.0	μg/l
Manganese	Quarterly	Grab	EPA 6020	10.0	μg/l
Mercury (low level)	Quarterly	Grab	EPA-1631C	0.0005	µg/l
Molybdenum	Quarterly	Grab	EPA 6020	10.0	µg/l
Nickel	Quarterly	Grab	EPA-1638	0.20	μg/l
Selenium	Quarterly	Grab	EPA-1638	0.05	μg/l
Silver	Quarterly	Grab	EPA 6020	0.2	μg/l
Thallium	Quarterly	Grab	EPA 6020	2.0	μg/l
Vanadium	Quarterly	Grab	EPA 6020	2.0	μg/l
Zinc	Quarterly	Grab	EPA-1638	0.20	μg/l
Anions	the same of the sa				
Alkalinity, Bicarbonate	Quarterly	Grab	310.2/SM 2320 B	2.0	mg/l
Alkalinity, Carbonate	Quarterly	Grab	310.2/SM 2320 B	2.0	mg/l
Chloride	Quarterly	Grab	325.2/ 4500-CLE	1.0	mg/l
Fluoride	Quarterly	Grab	SM 4500 F-C	0.1	mg/l
Nitrate	Quarterly	Grab	353.2/ 4500 NO3F	0.5	mg/l
Nitrite	Quarterly	Grab	354.1/ 4500 NO3F or 353.2	0.5	mg/l
Nitrogen, Ammonia	Quarterly	Grab	350.1/4500 NH3 G	0.5	mg/l
Sulfate	Quarterly	Grab	ASTMD516-90(02)	1.0	mg/l
Sulfide	Quarterly	Grab	376.1/ 4500 S2-D	5.0	mg/l
Cations				N. Marketta	
Calcium (Total)	Quarterly	Grab	EPA-200.7/ 6010B	0.50	mg/l
Sodium (Total)	Quarterly	Grab	EPA-200.7/ 6010B	0.50	mg/l
Magnesium (Total)	Quarterly	Grab	EPA-200.7/ 6010B	0.50	mg/l
Potassium	Quarterly	Grab	EPA-200.7/ 6010B	0.50	mg/l
General Chemistry	accitori,				
Hardness, (calculated) as CaCO3	Quarterly	Grab	Freeze and Cherry, 1979	NL	mg/l
Total Dissolved Solids	Quarterly	Grab	EPA-160.2/SM 2540 C	50.0	mg/l
Total Suspended Solids	Quarterly	Grab	EPA-160.2/SM 2540 D	1 / 3.3	mg/l



4511 W. 1st St., Suite #1, Duluth, MN 55807

MDH Lab # 027-137-389 WDNR Lab # 399017190

<u> Analytical Report</u>

Project: CEMP

Superior Watershed Partnership

Attn: Ger i Grant
2 Peter White Dr.
Marquette, MI 49855

Chain of Custody # 18232

Report Date: 2/24/2015

Sample Receipt Date: 2/17/2015

Phone: 906-228-6095 ex 13 EPA Method 1631E

Fax: 906-228-6863 Method Blanks (ng/L): < 0.100, < 0.100, < 0.100

Sample #	Client Sample ID	Mercury (ng/L)	Collection Date	Collection Time	Sampled By	Date Analyzed	Analyzed by	LOD (ng/L)	LOQ (ng/L)
75762	MER001 CEM-10010234M	1.96	2/16/2015	9:30	Hunter King	2/23/2015	LC	0.10	0.30
75763	MER003 CEM-10010235M	1.94	2/16/2015	11:00	Hunter King	2/23/2015	LC	0.10	0.30
75764	WBR001 CEM-10010236M	7.64	2/16/2015	11:30	Hunter King	2/23/2015	LC	0.10	0.30
75765	WBR003 CEM-10010237M	1.64	2/16/2015	12:00	Hunter King	2/23/2015	LC	0.10	0.30

Reported by:

If you have any questions or feedback please call

Reviewed by:

Chris Gross or Linda Christensen at 218-729-4658.

Values in brackets represent results greater than the LOD but less than or equal to the LOQ and are within a region of "Less Certain Quanitation". Results greater than the LOQ are considered to be in the region of "Certain Quanitation".

LOD = Limit of Detection

LOQ = Limit of Quantitation

Page 1 of 1

North Shore Analytical, Inc.

4511 W. 1st St., Suite #1 Duluth, MN 55807 Phone (218) 729-4658 Fax (218) 729-4659

Record #:

(4,52,3)

STF-COC-001 Revision Number: 5 Revision Date: 05/01/06

Chain of Custody

						TIMIT O	or castody				
Client Name	Superior Watershed Parthership	shed Parthership				Report to: 6	Geri Grant		Sampled by: Hon ter King	AC King	
Address J R	Address A R. Hr White Dr					Phone:	Phone: 406 226 609 5		Project:		
City Mari	Narguette		State MT	Zip 44953		Fax:			CEMP		
NSA Lab#	Bottle # Client	Client Sample Identification	Date Collected	Time Collected	Matrix	Sampl	Sample Type	Container/ Preservation	Analy	Analysis Requested	
75762	(344.20 M	4m10010+34m	21/9/10	a:30 Am	510			G/NA	Lowellowel	E Ta	
Sale?	04.360	CFM-16010235m		1:00 Arm	l						
757LBY	697, NJ WIBROOL	(EM-1901/0236M		(1;30 gm							
Sols!	646.30 WBR003	646.70 YBROOD CEM-10010232m	4	12:00 PM	4	+		4	•	7	
					ar I						
					-						
Transfer #	Reling.	Relinquished By	Date	Time		Accepted By	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Date	Time	Condition	
_	C. Shuth	Jr.	3/19/12	2:00pm		146	1	2/17/16	1346	44	
2	2)						, ,			
3											
4					-						
ADDITION.	ADDITIONAL COMMENTS:		i	:							
Low-level m	ercury bottles supplied	Low-level mercury bottles supplied by North Shore Analytical?	tical?			×		Z			T
KEY:	Matrix:				Containers:		-	Preservation:			
	SW = Surface Water	GW = Ground Water	Water		P = Plastic	T = Teflon/Fluoropolymer	ropolymer	NA = None Added	p,		
Lab use me.	LAD USE ME WW = Wastewater	DW = Drinking Water	g Water		G = Glass			H = Hydrochloric Acid	Acid		
only	P = Precipitation				B = Plastic Bag	5		B = Bromine Monochloride	nochloride		