Foth

Memorandum

2121 Innovation Court, Suite 100 P.O. Box 5095 De Pere, WI 54115-5095 (920) 497-2500 foth.com

November 15, 2024

TO: Molly Gardner, Wisconsin Department of Natural Resources

CC: Leland Roberts, Rio Tinto; Steve Donohue, Foth Infrastructure & Environment, LLC; Bill Adams, Red Cap Consulting; Bob Gensemer, Jennifer Lynch, and Ashley Romero, GEI Consultants. Inc.

FR: Nick Glander and Mark Ciardelli, Foth Infrastructure & Environment, LLC

RE: Stream C April – August 2024 Sampling Results Summary Reclaimed Flambeau Mine, Ladysmith, Wisconsin

1. Introduction

Foth Infrastructure & Environment, LLC (Foth) and GEI Consultants, Inc. (GEI) prepared a plan to evaluate Stream C, located on the Reclaimed Flambeau Mine site in Ladysmith, Wisconsin (WI). Figure 1 provides the location of the Reclaimed Flambeau Mine. The *Stream C Evaluation Work Plan – Revision 2 (Work Plan)* (Foth and GEI, 2024) was submitted to the Wisconsin Department of Natural Resources (Department) on August 30, 2024.

This memorandum presents the activities and results from the spring and summer of 2024 (April through August) Stream C sampling period.

2. Scope of Work

As outlined in the Work Plan, the spring and summer scope of work included the following:

- Flow monitoring
- Water chemistry

2.1 Flow

Flow monitoring consisted of visual observations and flow rate determination. Visual observations were conducted at a frequency of twice per month from April through June 2024 – prior to increasing the frequency to weekly starting in July using a combination of field notes and photos. The flow inspection forms are provided in Attachment 1.

When there was flow, the flow rate was manually monitored near the mouth of Stream C with a hand-held velocimeter unit, which records velocity and depth at a single location at a stream cross-section and automatically calculates flow rate. The location of flow monitoring near the mouth of Stream C, at SW-STM, was established during the first event based on field observations; and the same location was used during subsequent flow monitoring. Its location is shown on Figure 2.

Flow rates were monitored with a hand-held velocimeter unit at the Highway 27 and Copper Park Lane culverts until dedicated pressure transducers were installed to continuously monitor the pressure/flow. The pressure transducers were installed on April 12, 2024, in the existing staff gauge brackets at the two culverts and were set to record water depth every 15 minutes. Pressure-to-flow conversion was accomplished with a combination of continuous depth monitoring and known flow hydraulics associated with the culvert characteristics using the standard operating procedure (SOP) established in the *Work Plan*.

The results of individual monitoring events are presented in Section 3.

2.2 Water Chemistry

When there was visible surface flow within Stream C, water quality monitoring was completed at 10 locations approximately every 14 days. The monitoring locations are shown on Figure 2. Based on flow conditions, water quality samples were collected twice in May, once in July, and once in August. One duplicate sample was collected during each sampling event. Analytical laboratory reports are provided in Attachment 2, and analytical results are summarized in Table 1.

Field parameters were measured and recorded using a water quality meter. Water samples were collected using a peristaltic pump and new tubing for each sample to minimize the potential for sediment disturbance and cross-contamination between samples following the guidance outlined in the *Work Plan*.

Laboratory analytical activities were performed by Pace Analytical Services (Pace), located in Green Bay, WI. Pace is a WI Admin. Code NR 149-certified laboratory.

Where appropriate, elements of the 2020 *Quality Assurance Project Plan (QAPP)* (Foth, 2020) were utilized to manage quality through all phases of each sampling event, including sample collection, sample custody and transportation, and data validation and management.

3. April to August 2024 Stream C Sampling Event Summaries

3.1 May 8, 2024 Sampling Event

On May 8, 2024, a sampling event was completed following over 2.2 inches of rain over the previous week. Field parameters and surface water samples were collected from the 10 sample locations throughout the day. The field forms are provided in Attachment 3. The collected samples were delivered to Pace for analysis. The analytical report is provided in Attachment 2, and the results are summarized in Table 1.

Flow was noted at the beginning of the sampling event. Velocity measurements were taken at the upstream end of the two culverts and at sample location SW-STM near the confluence of the Flambeau River. This data is provided on the cover page of the field forms in Attachment 3.

On May 9, 2024 Stream C samples were collected for Whole Effluent Toxicity (WET) testing. The analytical report is provided in Attachment 2.

3.2 May 23, 2024 Sampling Event

A second May sampling event was conducted on May 23, 2024, following the recording of 2.61 inches of rain starting on May 22, 2024. The rain occurred overnight, and the sampling

began the following morning. Field parameters and surface water samples were collected from the 10 sample locations. The field forms from the May 23, 2024 sampling event are provided in Attachment 4. The collected samples were delivered to Pace for analysis. The analytical report is provided in Attachment 2, and the results are summarized in Table 1.

3.3 July 24, 2024 Sampling Event

On July 24, 2024, a sampling event was completed following 1.42 inches of rain starting on July 23, 2024. The rain occurred overnight, and the sampling began the following morning. Field parameters and surface water samples were collected from the 10 sample locations. The field forms are provided in Attachment 5. The collected samples were delivered to Pace for analysis. The analytical report is provided in Attachment 2, and the results are summarized in Table 1.

3.4 August 30, 2024 Sampling Event

On August 28, 2024, 0.66 inches of precipitation recorded, along with an additional 1.06 inches of precipitation on August 29 and 30, 2024, provided enough precipitation volume to induce flow throughout Stream C, leading to a sampling event on August 30, 2024. Field parameters and surface water samples were collected from the 10 sample locations. The field forms are provided in Attachment 6. The collected samples were delivered to Pace for analysis. The analytical report is provided in Attachment 2, and the results are summarized in Table 1.

4. Future Sampling Events

Stream C sampling events will continue throughout fall 2024 (September through November) as flow conditions allow. Flow analysis will continue with weekly inspections and data downloads from the dedicated transducers.

5. References

Foth Infrastructure & Environment, LLC, 2020. Quality Assurance Project Plan: Long-Term Care Monitoring for the Reclaimed Flambeau Mine. August 2020.

Foth and GEI Consultants, Inc., 2024. Steam C Evaluation Work Plan – Revision 2. August 30, 2024.

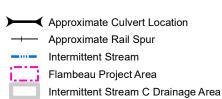
Attachments:

Figures Figure 1 Site Location Map Figure 2 Stream C Evaluation Locations Tables Table 1 2024 Analytical Results Summary Attachment 1 Flow Inspection Forms Attachment 2 Pace Laboratory Analytical Reports Attachment 3 Field Forms - May 8, 2024 Attachment 4 Field Forms - May 23, 2024 Attachment 5 Field Forms - July 24, 2024 Attachment 6 Field Forms - August 30, 2024

Figures



- Corporation and its data suppliers.
- 2. Horizontal datum based on NAD 1983. Horizontal coordinates based on Wisconsin State Plane North (Feet).
- Surface Water Sampling Locations
- Groundwater Wells MONITORED FOR WATER LEVELS ONLY
- **Groundwater Wells**
- Flambeau River Surface Water Monitoring Location

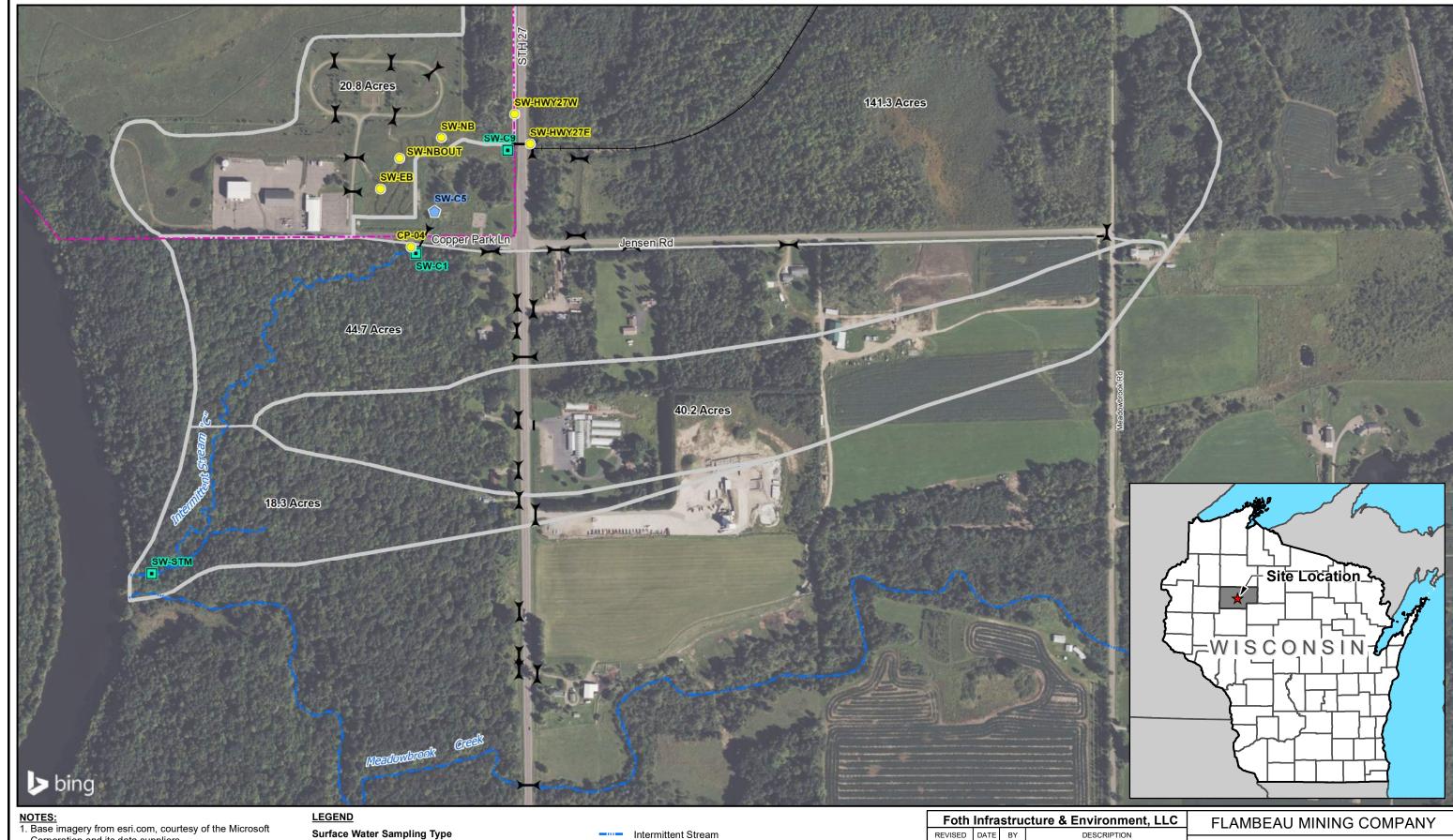


REVISED DATE DESCRIPTION DATE: MAR. '23 PREPARED BY: MCC2

FIGURE 1

SITE LAYOUT MAP STREAM C EVALUATION WORK PLAN





- Corporation and its data suppliers.

 2. Horizontal datum based on NAD 1983. Horizontal coordinates based on Wisconsin State Plane North (Feet).
- Flow, Visual Oberservation, Water Quality, WET Test
- Visual Oberservation, Water Quality, WET Test
- Visual Oberservation, Water Quality
- → Approximate Culvert Location



Flambeau Project Area

Intermittent Stream C Drainage Area



Foth	Intra	stru	<u>cture & Environm</u>	ent, LLC	l F	LAN
REVISED	DATE	BY	DESCRIPTIO	N	-	
						STRI
						STRI
PREPARED	BY:	MCC2		DATE: MAR. '23		
CHECKED I	BY:	SVF	[DATE: MAR. '23	Scale:	0

FIGURE 2

REAM C EVALUATION LOCATIONS REAM C EVALUATION WORK PLAN

Date: MARCH 2023 DATE: MAR. '23 Scale APPROVED BY: SVF DATE:MAR.'23 Drafted by: Project No: 17F777.23

Tables

Table 1
Stream C Analytical Results Summary

		Location		CP-04			CP-04	1		CP-04	Ι		CP-04	
				CP-0 4 4_20240508	,		CP-04 1_20240523			CP-0 4 4_20240724				1
		Sample Name			'			'			•		4_20240830	l
		Sample Data Sample Type		/8/2024 Normal			23/2024 Normal			/24/2024 Normal			30/2024 Normal	
		Sample Type		Lab	Validation		Lab	Validation		Lab	Validation		Lab	Validation
Parameter	Total / Dissolved	Units	Result	Qualifier	Qualifier	Result	Qualifier	Qualifier	Result	Qualifier	Qualifier	Result	Qualifier	Qualifier
Alkalinity as CaCO₃	Total	mg/L	154			141								
Alkalinity as CaCO ₃	Dissolved	mg/L	148	M0		143								
Calcium	Total	ug/L	16800			13100								
Calcium	Dissolved	ug/L	19100	D9		14800	D9							
Chloride	Total	mg/L	127			66.0								
Chloride	Dissolved	mg/L	128	D9		69.9	D9							
Copper	Total	ug/L	28.4			28.0			33.7			6.1	J	
Copper	Dissolved	ug/L	22.8			24.7			22.2			5.4	J	
Dissolved Organic Carbon	Dissolved	mg/L	13.0			18.1			24.0			10.5		
Dissolved Oxygen	Total	mg/L	1.78			2.28			1.63			0.9		
Hardness	Total	mg/L	78.8			59.5			61.0			87.8		
Hardness	Dissolved	mg/L	86.9			67.5			62.8			90.4	D9	
Iron	Total	ug/L	720			736								
Iron	Dissolved	ug/L	95.7	J		190	J							
Magnesium	Total	ug/L	8970			6500								
Magnesium	Dissolved	ug/L	9510	D9		7400	D9							
Manganese	Total	ug/L	33.0			95.3								
Manganese	Dissolved	ug/L	22.2			18.1								
pH	Total	s.u.	6.99			7.28			7.19			7.34		
Potassium	Total	ug/L	1670			1400								
Potassium	Dissolved	ug/L	1690	D9		1500	D9							
Redox Potential	Total	mV	168.7			178.7			163.6			165.6		
Sodium	Total	ug/L	126000			78600								
Sodium	Dissolved	ug/L	129000	D9		93500	D9							
Specific Conductance	Total	umhos/cm	736			462			376			288		
Sulfate	Total	mg/L	4.5			2.8	J D3							
Sulfate	Dissolved	mg/L	4.5			< 2.2	U D3							
Sulfide	Total	mg/L	1.6	J		< 1.2	U							
Sulfide	Dissolved	mg/L	< 1.2	U		1.2	J							
Temperature	Total	deg c	15.8			13.02			19.76			18.47		
Total Suspended Solids	Total	mg/L	3.0			4.6								
Zinc	Total	ug/L	< 10.3	U		< 10.3	U		16.6	J		< 10.3	U	
Zinc	Dissolved	ug/L	< 10.3	U		< 10.3	U		< 10.3	U		< 10.3	U	
Comment - Sample Color	Total	None	Stained light			Stained light			Stained light			Stained light		
			brown			brown			brown			brown		
Comment - Sample Odor	Total	None	None			None			None			None		
Comment - Sample Turbidity	Total	None	Slight			Slight			Slight			Slight		

		Location Sample Name Sample Data Sample Type	SW-C 5	SW-C1 1_20240508 /8/2024 Normal	В	SW-C 5/	SW-C1 1_20240523 23/2024 Normal	3	SW-C 7/	SW-C1 1_20240724 /24/2024 Normal	1	SW-C 8/	SW-C1 1_20240830 30/2024 Normal	0
Parameter	Total / Dissolved	Units	Result	Lab Qualifier	Validation Qualifier	Result	Lab Qualifier	Validation Qualifier	Result	Lab Qualifier	Validation Qualifier	Result	Lab Qualifier	Validation Qualifier
Alkalinity as CaCO ₃	Total	mg/L	15.9	J	Qualifier	11.1	J	Qualifier	35.1	Qualifier	Quaimer	29.2	Qualifier	Quaimer
Alkalinity as CaCO ₃	Dissolved	-	13.0			10.8			32.2		1	31.0		
		mg/L		J			J							<u> </u>
Calcium	Total	ug/L	5150	D0		4910			11700			8920		
Calcium	Dissolved	ug/L	5350	D9		5270	D9		12000	D9		8880		<u> </u>
Chloride	Total	mg/L	8.1			5.4	J D3		29.3			23.0		 '
Chloride	Dissolved	mg/L	7.6			5.4	J D3		28.4			22.3		<u> </u>
Copper	Total	ug/L	16.8			13.6			11.8			12.9		<u> </u>
Copper	Dissolved	ug/L	14.5			12.5			6.7			8.5		'
Dissolved Organic Carbon	Dissolved	mg/L	15.6			16.2			10.3			11.3		
Dissolved Oxygen	Total	mg/L	6.76			3.93			2.68			1.25		
Hardness	Total	mg/L	21.0			19.5			48.8			37.8		
Hardness	Dissolved	mg/L	21.4			21.0			49.7			37.6		
Iron	Total	ug/L	915			914			2320			1740		
Iron	Dissolved	ug/L	324			557			603			427		
Magnesium	Total	ug/L	1980			1770			4730			3760		
Magnesium	Dissolved	ug/L	1960			1900	D9		4790	D9		3750		
Manganese	Total	ug/L	18.8			27.3			562			116		
Manganese	Dissolved	ug/L	9.3			21.2			557			102		
pH	Total	s.u.	6.57			6.41			6.64			6.72		
Potassium	Total	ug/L	792			418	J		556	J		1690		1
Potassium	Dissolved	ug/L	741	J		414	J		534	J		1590		
Redox Potential	Total	mV	178.4			174.4			160.7			101.2		+
Sodium	Total	ug/L	6870			3590			11200			12700		†
Sodium	Dissolved	ug/L	7320	D9		3970	D9		11200			12800	D9	
Specific Conductance	Total	umhos/cm	66			48			159			140		
Sulfate	Total	mg/L	1.5	J		< 2.2	U D3		3.3			2.4		
Sulfate	Dissolved	mg/L	1.4	J		< 2.2	U D3		3.5	D9		2.3		+
Sulfide	Total	mg/L	1.2	J		1.8	, J		< 1.2	U	†	< 1.2	U	
Sulfide	Dissolved	mg/L	< 1.2	U		< 1.2	U		< 1.2	U	†	< 1.2	U	
Temperature	Total	deg c	15.88			13.29	<u> </u>		17.33		†	18.04		
Total Suspended Solids	Total	mg/L	4.0		 	1.7	T3,PP		6.9		†	5.3		
Zinc	Total	ug/L	12.8	J		14.7	J		18.7	J		< 10.3	U	<u> </u>
Zinc	Dissolved	ug/L	12.2	J		14.4	J		14.9	J		< 10.3	U	
Comment - Sample Color	Total	None	Stained light	J		Stained light			Stained light	J		Stained light		+
			brown			brown			brown			brown		
Comment - Sample Odor	Total	None	None		 	None			None		 	None		+
Comment - Sample Turbidity	Total	None	Slight		 	Slight			Slight		+ +	Slight		+

		Location Sample Name Sample Data Sample Type	SW-C1-	SW-C1 DUP-202405 5/8/2024 d Duplicate	508	SW-C 5	SW-C5 5_20240508 /8/2024 Normal	В	SW-C 5/	SW-C5 5_20240523 23/2024 Normal		SW-C 7/	SW-C5 5_20240724 24/2024 Normal	4
Parameter	Total / Dissolved	Units	Result	Lab Qualifier	Validation Qualifier	Result	Lab Qualifier	Validation Qualifier	Result	Lab Qualifier	Validation Qualifier	Result	Lab Qualifier	Validation Qualifier
Alkalinity as CaCO ₃	Total	mg/L	17.3	J	Qualifiei	16.3	J	Qualifier	10	J	Qualifier	43.2	Qualifier	Qualifier
				-			<u> </u>	 					1	
Alkalinity as CaCO ₃	Dissolved	mg/L	13.1	J		11.0	J		8.6	J		20.5	J	
Calcium	Total	ug/L	5230			4150			3980			5930		
Calcium	Dissolved	ug/L	5490	D9		4700	D9		4400	D9		6040	D9	
Chloride	Total	mg/L	7.9	M0		6.5			3.6	J M0,D3		12.0		
Chloride	Dissolved	mg/L	7.9			6.4			3.9	J D3		11.4		
Copper	Total	ug/L	17.1			15.9			13.2			12.5		
Copper	Dissolved	ug/L	14.5			13.9			11.8			5.0	J	
Dissolved Organic Carbon	Dissolved	mg/L	15.6			15.8			16.6			11.0		
Dissolved Oxygen	Total	mg/L				6.14			3.37			1.15		
Hardness	Total	mg/L	21.4			17.3			15.7			24.2		
Hardness	Dissolved	mg/L	22.3			18.8			17.3			24.8		
Iron	Total	ug/L	841			866			865			1700		
Iron	Dissolved	ug/L	308			350			528			661		
Magnesium	Total	ug/L	2030			1680			1410			2280		
Magnesium	Dissolved	ug/L	2090	D9		1720	D9		1540	D9		2350	D9	
Manganese	Total	ug/L	20.5			14.3			22.0			571		†
Manganese	Dissolved	ug/L	9.2			7.2			16.3			586	D9	
pH	Total	s.u.				6.54			6.17			6.31		+
Potassium	Total	ug/L	804			721	J		349	J		377	J	
Potassium	Dissolved	ug/L	784	J		715	J		358	J		378	J	+
Redox Potential	Total	mV				232.3			183.4			88		
Sodium	Total	ug/L	7080			5900			2880	<u> </u>		7010		
Sodium	Dissolved	ug/L	7210	D9		6470	D9		3130	D9		7240	D9	
Specific Conductance	Total	umhos/cm		+		56	1		39			84		
Sulfate	Total	mg/L	1.5	J M0		1.4	.,		< 2.2	U M0,D3		2.1		
Sulfate	Dissolved	mg/L	1.5	J		1.3	J		< 2.2	U D3		2.2	D9	
Sulfide	Total	mg/L	< 1.2	T U		1.2	i i		< 1.2	U		< 1.2	U	+
Sulfide	Dissolved	mg/L	< 1.2	U	+	< 1.2	U		< 1.2	U	 	< 1.2	U	+
Temperature	Total	deg c	` 1.2	+ -		15.26	 		13.52	 		17.6	 	+
Total Suspended Solids	Total	mg/L	4.1	+	+	1.8	T3,PP		1.6	T3,PP		4.8	1q	+
Zinc	Total	ug/L	13.8			13.9	10,55		13.9	10,55		19.3	14	+
Zinc	Dissolved	ug/L	< 10.3	U		24.4	1		13.7	J		20.8	J	+
Comment - Sample Color	Total	None	× 10.5	U		Stained light	J		Stained light	J		Stained light	J	+
Comment - Sample Color	I Olai	inoile				brown			brown			brown		
Comment Comple Oder	Total	None		1										+
Comment - Sample Odor	Total	None		1		None			None	1		None		+
Comment - Sample Turbidity	Total	None				None			None			None		

		Location Sample Name Sample Data Sample Type	SW-C 8/	SW-C5 5_20240830 30/2024 Normal	D	•	SW-C5 -DUP-202407 7/24/2024 eld Duplicate	724	SW-C 5	SW-C9 9_20240508 /8/2024 Normal	3	SW-C 5/	SW-C9 9_20240523 23/2024 Normal	3
Dorometer	Total / Discalved	Units	Decult	Lab Qualifier	Validation	Decult	Lab Qualifier	Validation Qualifier	Decult	Lab Qualifier	Validation Qualifier	Decult	Lab Qualifier	Validation Qualifier
Parameter Alkalinity as CaCO ₃	Total / Dissolved	mg/L	Result 23.6	Qualifier	Qualifier	Result 18.5	 	Qualifier	Result 10.3	J	Qualifier	Result < 7.4	U	Qualifier
		-		J			J							 '
Alkalinity as CaCO ₃	Dissolved	mg/L	27.2			19.7	J		< 7.4	U		< 7.4	U	<u> </u> '
Calcium	Total	ug/L	7610			6470			3370			3100	M0	<u> </u> '
Calcium	Dissolved	ug/L	7410			6100			3460	D9		2890		<u> </u>
Chloride	Total	mg/L	19.0			11.9			3.7			< 3.0	U D3	
Chloride	Dissolved	mg/L	19.4	D9		11.5			3.2			< 3.0	U D3	
Copper	Total	ug/L	12.2			13.1			9.7			6.5		
Copper	Dissolved	ug/L	8.5			5.2	J		8.2			4.6	J	<u> </u>
Dissolved Organic Carbon	Dissolved	mg/L	10.9			10.9			15.8			17.2		
Dissolved Oxygen	Total	mg/L	1.18						4.9			3.88		
Hardness	Total	mg/L	31.5			26.0			13.4			12.0		
Hardness	Dissolved	mg/L	31.2			24.7			13.5			11.5		
Iron	Total	ug/L	1530			1760			1300			1260		
Iron	Dissolved	ug/L	536			690			587			459		
Magnesium	Total	ug/L	3030			2400			1220			1020		1
Magnesium	Dissolved	ug/L	3070	D9		2310			1190			1040	D9	1
Manganese	Total	ug/L	91.6			598			45.7			57.7		1
Manganese	Dissolved	ug/L	84.0			583			24.4			46.6		
pH	Total	s.u.	6.36						6.31			6.15		
Potassium	Total	ug/L	1530			384	J		938			797		
Potassium	Dissolved	ug/L	1530			389	J		854			764	J	
Redox Potential	Total	mV	32.2						174			214.5		1
Sodium	Total	ug/L	11100			7250			3910			1840		1
Sodium	Dissolved	ug/L	11300	D9		6980			4180	D9		1950	D9	
Specific Conductance	Total	umhos/cm	119						36			26		
Sulfate	Total	mg/L	1.8	J		2.1			0.74	J		< 2.2	U D3	1
Sulfate	Dissolved	mg/L	1.9	J		2.2	D9		0.72	J		< 2.2	U D3	
Sulfide	Total	mg/L	< 1.2	Ü	† †	< 1.2	U		< 1.2	U R1	UJ	< 1.2	U	†
Sulfide	Dissolved	mg/L	< 1.2	Ü	† †	< 1.2	U		< 1.2	U		< 1.2	Ü	
Temperature	Total	deg c	18.11		† †		1	<u> </u>	11.94	<u> </u>		13.69		
Total Suspended Solids	Total	mg/L	3.6			6.4	1q	<u> </u>	6.6			3.4		1
Zinc	Total	ug/L	11.9	J		21.3	J		15.5	J		15.5	J	+
Zinc	Dissolved	ug/L	< 10.3	U		19.6	J		13.6	J		15.4	J	+
Comment - Sample Color	Total	None	Stained light						Stained light			Stained light		
			brown						brown			brown		
Comment - Sample Odor	Total	None	None		† †		1		None		† †	None		
Comment - Sample Turbidity	Total	None	None		† †		+		Moderate			Moderate		

		Location Sample Name Sample Data Sample Type	SW-C 7/	SW-C9 9_20240724 24/2024 Normal	1	SW-C 8/	SW-C9 9_20240830 30/2024 Normal	0	5	SW-C9 DUP-202405 /23/2024 Id Duplicate	523	SW-E	SW-EB 3_20240508 /8/2024 N	В
Parameter	Total / Dissolved	Units	Decult	Lab Qualifier	Validation Qualifier	Decult	Lab Qualifier	Validation Qualifier	Decult	Lab Qualifier	Validation Qualifier	Decult	Lab Qualifier	Validation Qualifier
Alkalinity as CaCO ₃	Total	mg/L	Result 10.3	J	Quaimer	Result 10.7	J	Quaimer	Result < 7.4	U	Quaimer	Result 33.0	Quaimer	Quaimer
		-						1			 			
Alkalinity as CaCO ₃	Dissolved	mg/L	8.4	J		12.0	J		< 7.4	U		31.2		
Calcium	Total	ug/L	2930			2750		1	3120			8850		
Calcium	Dissolved	ug/L	2860			2630			2950			10500	D9	
Chloride	Total	mg/L	7.9			5.2			3.2	J D3		25.2		
Chloride	Dissolved	mg/L	7.5			5.1	M0		< 3.0	U D3		12.7		
Copper	Total	ug/L	16.6			14.0			6.6			14.1		
Copper	Dissolved	ug/L	11.7			11.4			5.2	J		11.8		
Dissolved Organic Carbon	Dissolved	mg/L	12.3			13.5			17.2			11.0		
Dissolved Oxygen	Total	mg/L	3.16			1.17						7.69		
Hardness	Total	mg/L	11.4			10.8			12.0			36.5		
Hardness	Dissolved	mg/L	11.1			10.1			11.5			43.5		
Iron	Total	ug/L	3100			2610			1290			1170		
Iron	Dissolved	ug/L	960			1000			442			547		
Magnesium	Total	ug/L	990			954			1030			3500		
Magnesium	Dissolved	ug/L	953			859			1010			4220	D9	
Manganese	Total	ug/L	143			117			59.8			29.3		
Manganese	Dissolved	ug/L	90.3			99.6			49.4			8.3		
pH	Total	s.u.	6.29			6.05						7.15		+
Potassium	Total	ug/L	668	J		1250			807			1100		
Potassium	Dissolved	ug/L	629	J		1160			764	J		1130	D9	+
Redox Potential	Total	mV	89.7			197.6						228.4		
Sodium	Total	ug/L	7420			6410			1890			14800		
Sodium	Dissolved	ug/L	7700	D9		6530	D9		2400	CR		7870		+
Specific Conductance	Total	umhos/cm	170			41						121		
Sulfate	Total	mg/L	1.7	J		1.4	J		< 2.2	U D3		2.1		
Sulfate	Dissolved	mg/L	1.6	J		1.3	J M0		< 2.2	U D3		4.5	D9	+
Sulfide	Total	mg/L	< 1.2	U		< 1.2	U		< 1.2	U	 	1.8	J	1
Sulfide	Dissolved	mg/L	< 1.2	U		< 1.2	U		< 1.2	Ü	†	< 1.2	Ü	+
Temperature	Total	deg c	18.97			18.13	 			 	† †	14.86		+
Total Suspended Solids	Total	mg/L	9.2			5.2			2.9		†	3.4		+
Zinc	Total	ug/L	< 10.3	U		13.6	.]		17.7	J		14.6	J	+
Zinc	Dissolved	ug/L	< 10.3	U		13.2	J		18.4	J		< 10.3	U	+
Comment - Sample Color	Total	None	Stained light			Stained light			10. 1	<u> </u>		Stained light		+
Comment Campic Color		110/10	brown			brown						brown		
Comment - Sample Odor	Total	None	Slight organic			None		+ +			+ +	Slight organic		
Comment - Sample Turbidity	Total	None	Slight			Slight		+ +			+ +	Slight		+

		Location Sample Name Sample Data Sample Type	SW-E	SW-EB B_20240523 23/2024 N	3	SW-E	SW-EB B_20240724 (24/2024 N	4	SW-EI	SW-EB B_20240830 30/2024 N		SW-HWY	-HWY27E 27E_20240 /8/2024 N	508
Davamatas	Tatal / Diagolys d	Haita	Dagult	Lab	Validation	Dagult	Lab	Validation	Dooule	Lab	Validation	Desult	Lab	Validation
Parameter	Total / Dissolved	Units	Result	Qualifier	Qualifier	Result	Qualifier	Qualifier	Result	Qualifier	Qualifier	Result 10	Qualifier	Qualifier
Alkalinity as CaCO ₃		mg/L	29.4					ļ					J	
Alkalinity as CaCO ₃	Dissolved	mg/L	31.7									< 7.4	U M0	
Calcium	Total	ug/L	9220									2830		
Calcium	Dissolved	ug/L	10000	D9								3090	D9	
Chloride	Total	mg/L	12.3									2.1		
Chloride	Dissolved	mg/L	11.6									2.5	D9	
Copper	Total	ug/L	11.3			3.7	J		12.4			8.9		
Copper	Dissolved	ug/L	9.2			3.0	J		7.5			7.5		
Dissolved Organic Carbon	Dissolved	mg/L	18.4			12.4			7.7			15.5		
Dissolved Oxygen	Total	mg/L	3.79			1.21			1.22			3.43		
Hardness	Total	mg/L	39.8			54.5			49.8			11.6		
Hardness	Dissolved	mg/L	42.0			56.2			50.3	D9		12.2		
Iron	Total	ug/L	1470									1150		
Iron	Dissolved	ug/L	708									450		
Magnesium	Total	ug/L	4060									1110		
Magnesium	Dissolved	ug/L	4140	D9								1080		
Manganese	Total	ug/L	99.5									24.3		
Manganese	Dissolved	ug/L	92.6									14.5		
pH	Total	s.u.	7.02			6.48			6.81			6.38		
Potassium	Total	ug/L	957									1010		1
Potassium	Dissolved	ug/L	954									996		
Redox Potential	Total	mV	161.8			49.2			59.3			177		
Sodium	Total	ug/L	9440									2490		
Sodium	Dissolved	ug/L	9950	D9								2840	D9	
Specific Conductance	Total	umhos/cm	107			214			156			25		
Sulfate	Total	mg/L	< 2.2	U M0								0.84	J	1
Sulfate	Dissolved	mg/L	< 2.2	U D3								0.88	J	
Sulfide	Total	mg/L	< 1.2	U								< 1.2	U	
Sulfide	Dissolved	mg/L	< 1.2	U								< 1.2	U	1
Temperature	Total	deg c	13.62		 	21.16			19.51			11.6		+
Total Suspended Solids	Total	mg/L	4.1						-			4.0		1
Zinc	Total	ug/L	10.4	J		< 10.3	U		< 10.3	U		12.0	J	+
Zinc	Dissolved	ug/L	< 10.3	U		< 10.3	U		< 10.3	U		< 10.3	U	1
Comment - Sample Color	Total	None	Stained light			Stained light			Stained light			Stained light		1
			brown			brown			brown			brown		
Comment - Sample Odor	Total	None	Slight organic			Slight organic			Slight organic			Slight organic		
Comment - Sample Turbidity	Total	None	Slight			Slight			Slight			Moderate		+

		Location Sample Name Sample Data Sample Type	SW-HWY	-HWY27E 27E_20240 23/2024 N	523	SW-HWY	7-HWY27E 727E_20240 724/2024 N	724	SW-HWY	'-HWY27E '27E_20240 '30/2024 N	B30	SW-HWY	-HWY27W 27W_20240 /8/2024 N)508
_				Lab	Validation		Lab	Validation		Lab	Validation		Lab	Validation
Parameter	Total / Dissolved	Units	Result	Qualifier	Qualifier	Result	Qualifier	Qualifier	Result	Qualifier	Qualifier	Result	Qualifier	Qualifier
Alkalinity as CaCO ₃	Total	mg/L	< 7.4	U								10.4	J	
Alkalinity as CaCO ₃	Dissolved	mg/L	< 7.4	U								8.1	J	
Calcium	Total	ug/L	2750									5690		
Calcium	Dissolved	ug/L	2990	D9								5700	D9	
Chloride	Total	mg/L	< 3.0	U D3								51.7		
Chloride	Dissolved	mg/L	< 3.0	U D3								51.8	D9	
Copper	Total	ug/L	5.4	J		8.2			13.7			16.5		
Copper	Dissolved	ug/L	5.0	J		6.8			9.5			14.0		
Dissolved Organic Carbon	Dissolved	mg/L	17.7			9.1			10.1			28.1		
Dissolved Oxygen	Total	mg/L	4.23			3.17			1.22			3.58		
Hardness	Total	mg/L	10.9			8.9			8.1		1	21.4		
Hardness	Dissolved	mg/L	11.5			8.5			6.5			21.3		
Iron	Total	ug/L	930									1930		
Iron	Dissolved	ug/L	611									1270		
Magnesium	Total	ug/L	972									1740		
Magnesium	Dissolved	ug/L	974	D9								1710		
Manganese	Total	ug/L	33.5									23.4		
Manganese	Dissolved	ug/L	29.8									19.6		
pH	Total	s.u.	6.12			6.17			6.03			6.29		
Potassium	Total	ug/L	697	J								1250		
Potassium	Dissolved	ug/L	679	J								1250		
Redox Potential	Total	mV	210.6			21.4			176.6			174.4		
Sodium	Total	ug/L	932									36500		
Sodium	Dissolved	ug/L	998	D9								35900		
Specific Conductance	Total	umhos/cm	21			31			25			200		
Sulfate	Total	mg/L	< 2.2	U D3								0.94	J	
Sulfate	Dissolved	mg/L	< 2.2	U D3								0.92	J	
Sulfide	Total	mg/L	< 1.2	U								< 1.2	U	
Sulfide	Dissolved	mg/L	< 1.2	U							†	< 1.2	U	
Temperature	Total	deg c	15.08			19.17			17.86		 	12.56		
Total Suspended Solids	Total	mg/L	1.7	T3,PP							 	1.1	T3,PP	1
Zinc	Total	ug/L	12.9	J		12.4	J		13.9	J		30.4	J	1
Zinc	Dissolved	ug/L	13.3	J		11.0	J		< 10.3	U		27.7	J	
Comment - Sample Color	Total	None	Stained light			Stained light			Stained light			Stained light		
· ·			brown			brown			brown			brown		
Comment - Sample Odor	Total	None	Slight organic			Slight organic			Slight organic			Slight organic		1
Comment - Sample Turbidity	Total	None	Moderate			Moderate			Moderate			None		

		Location Sample Name Sample Data Sample Type	SW-HWY	-HWY27W 27W_20240 23/2024 N	523	SW-HWY	-HWY27W 27W_20240 24/2024 N	724	SW-HWY	-HWY27W 27W_20240 (30/2024 N	830	SW-HWY2	W-HWY27W 27W-DUP_202 8/30/2024 FD	240830
				Lab	Validation		Lab	Validation	5 !:	Lab	Validation	- I	Lab	Validation
Parameter	Total / Dissolved	Units	Result	Qualifier	Qualifier	Result	Qualifier	Qualifier	Result	Qualifier	Qualifier	Result	Qualifier	Qualifier
Alkalinity as CaCO ₃	Total	mg/L	10.1	J										
Alkalinity as CaCO ₃	Dissolved	mg/L	9.2	J										
Calcium	Total	ug/L	5490											
Calcium	Dissolved	ug/L	5990	D9										
Chloride	Total	mg/L	24.2											
Chloride	Dissolved	mg/L	23.2											
Copper	Total	ug/L	9.8			14.7			20.4			19.8		
Copper	Dissolved	ug/L	8.0			7.1			11.5			11.5		
Dissolved Organic Carbon	Dissolved	mg/L	31.1			13.3			15.5			15.4		
Dissolved Oxygen	Total	mg/L	2.24			3.36			1.12					
Hardness	Total	mg/L	20.2			28.2			27.6			27.8		
Hardness	Dissolved	mg/L	22.2			27.1			27.2			27.3		
Iron	Total	ug/L	2600											
Iron	Dissolved	ug/L	1780											
Magnesium	Total	ug/L	1570											
Magnesium	Dissolved	ug/L	1760	D9										
Manganese	Total	ug/L	34.6											
Manganese	Dissolved	ug/L	34.1											
pH	Total	s.u.	6.28			5.78			5.74					
Potassium	Total	ug/L	779	J										
Potassium	Dissolved	ug/L	834	D9										1
Redox Potential	Total	mV	152			176.1			107.5					
Sodium	Total	ug/L	16000			-								
Sodium	Dissolved	ug/L	18000	D9							1			
Specific Conductance	Total	umhos/cm	120			154			304					
Sulfate	Total	mg/L	< 2.2	U D3										
Sulfate	Dissolved	mg/L	< 2.2	U D3										
Sulfide	Total	mg/L	< 1.2	U										
Sulfide	Dissolved	mg/L	< 1.2	Ü							†			1
Temperature	Total	deg c	14.56			21.21			19.18		†			1
Total Suspended Solids	Total	mg/L	3.5											1
Zinc	Total	ug/L	22.4	J		33.6	J		24.3	J		27.1	J	1
Zinc	Dissolved	ug/L	23.4	J		27.0	J		25.9	J		20.7	J	
Comment - Sample Color	Total	None	Stained light			Stained light			Stained light					1
			brown			brown			brown					
Comment - Sample Odor	Total	None	Slight organic			Slight organic			Slight organic		†			1
Comment - Sample Turbidity	Total	None	Slight			Slight			Slight		 			†

		Location Sample Name Sample Data Sample Type	SW-N	SW-NB B_20240508 /8/2024 N	3	SW-N	SW-NB B_20240523 23/2024 N	3	SW-N	SW-NB B_20240724 24/2024 N	ı	SW-NI	SW-NB 3_20240830 30/2024 N)
Parameter	Total / Dissolved	Units	Result	Lab Qualifier	Validation Qualifier									
Alkalinity as CaCO ₃	Total	mg/L	10.5	J	,	15.3	J			•	,		•	
Alkalinity as CaCO ₃	Dissolved	mg/L	10.1	J		15.4	J							
Calcium	Total	ug/L	7340			7500								
Calcium	Dissolved	ug/L	7760	D9		7400								
Chloride	Total	mg/L	38.4			19.1								
Chloride	Dissolved	mg/L	38.4			17.7								
Copper	Total	ug/L	18.0			16.8			4.6	J		7.5		
Copper	Dissolved	ug/L	15.6			15.0			3.2	J		4.3	J	
Dissolved Organic Carbon	Dissolved	mg/L	24.6			24.8			11.2			13.3		
Dissolved Oxygen	Total	mg/L	5.94			3.21			4.76			0.95		
Hardness	Total	mg/L	29.7			29.4			38.5			46.7		
Hardness	Dissolved	mg/L	31.0			29.9			37.8			47.5	D9	1
Iron	Total	ug/L	1680			2110								
Iron	Dissolved	ug/L	774			1200								
Magnesium	Total	ug/L	2760			2600								
Magnesium	Dissolved	ug/L	2820	D9		2760	D9							
Manganese	Total	ug/L	40.8			73.1								1
Manganese	Dissolved	ug/L	30.9			65.9								
pH	Total	s.u.	6.21			6.44			6.5			6.27		
Potassium	Total	ug/L	1010			650	J							
Potassium	Dissolved	ug/L	995			613	J							
Redox Potential	Total	mV	130.3			132.7			147.7			82.5		
Sodium	Total	ug/L	23400			11500								
Sodium	Dissolved	ug/L	23600	D9		12600	D9							
Specific Conductance	Total	umhos/cm	159			104			237			273		
Sulfate	Total	mg/L	1.1	J		< 2.2	U M0							
Sulfate	Dissolved	mg/L	1.1	J		< 2.2	U D3							
Sulfide	Total	mg/L	1.2	J		< 1.2	U							
Sulfide	Dissolved	mg/L	< 1.2	U		< 1.2	U							
Temperature	Total	deg c	13.91			12.02			28.02			18.2		
Total Suspended Solids	Total	mg/L	2.6			4.6								
Zinc	Total	ug/L	30.5	J		24.7	J		< 10.3	U		< 10.3	U	
Zinc	Dissolved	ug/L	24.3	J		24.8	J		< 10.3	U		< 10.3	U	
Comment - Sample Color	Total	None	Stained light brown											
Comment - Sample Odor	Total	None	Slight organic											
Comment - Sample Turbidity	Total	None	Slight			Slight			Slight			Slight		

		Location Sample Name Sample Data Sample Type	SW-NBC	V-NBOUT OUT_202405 /8/2024 N	508	SW-NBC	V-NBOUT OUT_202405 23/2024 N	23	SW-NBC	V-NBOUT OUT_202407 24/2024 N	24	SW-NBC	V-NBOUT OUT_202408 30/2024 N	330
Parameter	Total / Dissolved	Units	Popult	Lab Qualifier	Validation Qualifier	Pooult.	Lab Qualifier	Validation Qualifier	Pagult.	Lab Qualifier	Validation Qualifier	Dogult	Lab Qualifier	Validation Qualifier
Alkalinity as CaCO ₃	Total	mg/L	Result 40.2	Qualifier	Qualifier	Result 45.2	Qualifier	Qualifier	Result	Quaimer	Quaimer	Result	Quaimer	Quaimer
-		-									-			<u> </u>
Alkalinity as CaCO ₃	Dissolved	mg/L	35.6			43.7								
Calcium	Total	ug/L	10600			12000								
Calcium	Dissolved	ug/L	11100	D9		12600	D9							
Chloride	Total	mg/L	7.5			6.7	J M0							
Chloride	Dissolved	mg/L	6.3			6.9	J D3							
Copper	Total	ug/L	9.9			8.0			2.6	J		4.7	J	
Copper	Dissolved	ug/L	8.1			7.2			< 1.9	U		3.4	J	
Dissolved Organic Carbon	Dissolved	mg/L	15.4			16.5			9.9			12.7		
Dissolved Oxygen	Total	mg/L	6.17			3.40			2.62			1.48		
Hardness	Total	mg/L	45.5			51.5			54.4			61.6		
Hardness	Dissolved	mg/L	48.3			54.1			54.5			60.9		
Iron	Total	ug/L	755			988								
Iron	Dissolved	ug/L	179	J		456								
Magnesium	Total	ug/L	4640			5220								
Magnesium	Dissolved	ug/L	5010	D9		5500	D9							
Manganese	Total	ug/L	15.9			46.0								
Manganese	Dissolved	ug/L	8.6			42.6								
pH	Total	s.u.	6.75			6.86			6.58			6.81		
Potassium	Total	ug/L	1060			518	J							1
Potassium	Dissolved	ug/L	1050			505	J							+
Redox Potential	Total	mV	224.9			172			156.3			109.1		
Sodium	Total	ug/L	5610			5030								1
Sodium	Dissolved	ug/L	5390			5460	D9							1
Specific Conductance	Total	umhos/cm	102			111			217			218		
Sulfate	Total	mg/L	2.7			< 2.2	U M0							
Sulfate	Dissolved	mg/L	2.7			< 2.2	U D3							
Sulfide	Total	mg/L	1.8	J		< 1.2	U							
Sulfide	Dissolved	mg/L	< 1.2	Ü		< 1.2	Ü				†			1
Temperature	Total	deg c	13.58			12.04			21.28		1	19.05		1
Total Suspended Solids	Total	mg/L	2.0	T3,PP		2.2	T3,PP		_:•					1
Zinc	Total	ug/L	< 10.3	U		< 10.3	U		< 10.3	U		< 10.3	U	1
Zinc	Dissolved	ug/L	< 10.3	U		< 10.3	U		< 10.3	U		< 10.3	U	+
Comment - Sample Color	Total	None	Stained light			Stained light			Stained light			Stained light		+
		110/10	brown			brown			brown			brown		1
Comment - Sample Odor	Total	None	Slight organic			Slight organic			Slight organic		 	Slight organic		+
Comment - Sample Turbidity	Total	None	Slight			Slight			Slight		 	Slight		+

		Location Sample Name Sample Data Sample Type	SW-ST	SW-STM M_2024050 /8/2024 N)8	SW-ST	SW-STM M_2024052 23/2024 N	23	SW-ST	SW-STM M_2024072 /24/2024 N	4	SW-ST	SW-STM M_2024083 /30/2024 N	30
Parameter	Total / Dissolved	Units	Result	Lab Qualifier	Validation Qualifier	Result	Lab Qualifier	Validation Qualifier	Result	Lab Qualifier	Validation Qualifier	Result	Lab Qualifier	Validation Qualifier
Alkalinity as CaCO ₃	Total	mg/L	15.4	J	- Quantities	10.8	J	- Quanties	31.9	- Quantities	Quanto	33.5	- Quantities	
Alkalinity as CaCO ₃	Dissolved	mg/L	13.1	J		10.3	J		30.1			34.4		+
Calcium	Total	ug/L	5430			4850			12800			12000		+
Calcium	Dissolved	ug/L	5670	D9		5320	D9		12900	D9		11800		+
Chloride	Total	mg/L	10.6			7.4	J D3		38.4			35.4		+
Chloride	Dissolved	mg/L	10.5			7.1	J D3		37.1			34.3		+
Copper	Total	ug/L	15.6			13.0	0.50		7.6			8.6		+
Copper	Dissolved	ug/L	12.8			12.6			5.5	J		5.9	J	+
Dissolved Organic Carbon	Dissolved	mg/L	16.0			16.0			10.5			9.9		+
Dissolved Oxygen	Total	mg/L	8.76			2.99			4.39			1.39		+
Hardness	Total	mg/L	22.1			19.8			53.3			50.4		+
Hardness	Dissolved	mg/L	22.5			21.6			53.6			49.4		+
Iron	Total	ug/L	1090			1010			1010			1130		
Iron	Dissolved	ug/L	319			500			184	J		315		
Magnesium	Total	ug/L	2070			1860			5220			4970		
Magnesium	Dissolved	ug/L	2030			2020	D9		5200			4820		
Manganese	Total	ug/L	35.3			24.0			99.7			52.9		
Manganese	Dissolved	ug/L	11.5			16.3			13.2			28.7		
pH	Total	s.u.	7.16			6.83			7.21			7.43		
Potassium	Total	ug/L	1070			823			1210			1770		
Potassium	Dissolved	ug/L	1030			853	D9		1250	D9		1690		
Redox Potential	Total	mV	191.1			157.6			161.5			125.5		
Sodium	Total	ug/L	8660			4930			13700			16600		
Sodium	Dissolved	ug/L	9300	D9		5670	D9		14000	D9		16200		
Specific Conductance	Total	umhos/cm	74			52			185			174		
Sulfate	Total	mg/L	1.7	J		< 2.2	U D3		7.9			3.0		
Sulfate	Dissolved	mg/L	1.7	J		< 2.2	U D3		4.1			2.9		
Sulfide	Total	mg/L	1.2	J		< 1.2	U		< 1.2	U		< 1.2	U	
Sulfide	Dissolved	mg/L	< 1.2	U		< 1.2	U		< 1.2	U		< 1.2	U	
Temperature	Total	deg c	17.60			12.80			18.23			18.09		
Total Suspended Solids	Total	mg/L	8.1			4.6			7.1			4.1		
Zinc	Total	ug/L	13.3	J		12.7	J		< 10.3	U		< 10.3	U	
Zinc	Dissolved	ug/L	< 10.3	U		< 10.3	U		< 10.3	U		< 10.3	U	
Comment - Sample Color	Total	None	Stained light			Stained light			Stained light			Stained light		
			brown			brown			brown			brown		
Comment - Sample Odor	Total	None	None			None			None			None		
Comment - Sample Turbidity	Total	None	Slight			Slight			Slight			Slight		

Prepared by: MCC2 Checked by: KMC2

Attachment 1 Flow Inspection Forms



Client:	Flambeau Mining Company	Scope ID	17F777.24
Project:	Stream C – Flow Monitoring	Inspected by:	Jim Engelhardt / Merjent
Date:	5/3/2024	Prepared by:	Nick Glander / Foth
Weather:	72°, Fair / Fog in morning, 16-21 mph west wind, 1.3-in. precip. event		

Precipitation event of greater that 1.3-inches of precipitation starting on 3-MAY-2024 with continual daily rainfall of an addition 0.8-inches over the next few days. Stream C flow was observed and documented. Due to the volume of precipitation, the sampling event will be conducted after high flow has passed and the precipitation has adequate time to interact with the Stream C riverbed.



Client:	Flambeau Mining Company	Scope ID	17F777.24
Project:	Stream C – Flow Monitoring	Inspected by:	Jim Engelhardt / Merjent
Date:	5/17/2024	Prepared by:	Nick Glander / Foth
Weather:	High of 78°, Overcast/Partly Cloudy, 13-18 mph south wind		

Stream C was inspected today. Low to limited flow noted and was unable to be measured with a meter. Flow was not continuous to the Flambeau River.



Client:	Flambeau Mining Company	Scope ID	17F777.24
Project:	Stream C – Flow Monitoring	Inspected by:	Jim Engelhardt / Merjent
Date:	5/31/2024	Prepared by:	Nick Glander / Foth
Weather:	High of 71°, Overcast/Cloudy, 4-9 mph south wind		

Stream C was inspected today. Low to no flow noted and flow was unable to be measured with a meter. Flow was not continuous to the Flambeau River. A few pools of water were observed in a few portions of the Stream C streambed.



Client:	Flambeau Mining Company	Scope ID	17F777.24
Project:	Stream C – Flow Monitoring	Inspected by:	Jim Engelhardt / Merjent
Date:	6/7/2024	Prepared by:	Nick Glander / Foth
Weather:	High of 66°, Overcast/Cloudy, 15-19mph west wind		

Stream C was inspected today. Low to no flow noted and flow was unable to be measured with a meter. Flow was not continuous to the Flambeau River. Conditions are dry.



Client:	Flambeau Mining Company	Scope ID	17F777.24
Project:	Stream C – Flow Monitoring	Inspected by:	Jim Engelhardt / Merjent
Date:	6/14/2024	Prepared by:	Nick Glander / Foth
Weather:	High of 78°, Fair/Cloudy, 3-8mph west wind		

Stream C was inspected today. Low to no flow noted and flow was unable to be measured with a meter. Flow was not continuous to the Flambeau River. Conditions are dry.



Client:	Flambeau Mining Company	Scope ID	17F777.24
Project:	Stream C – Flow Monitoring	Inspected by:	Jim Engelhardt / Merjent
Date:	6/17/2024	Prepared by:	Nick Glander / Foth
Weather:	High of 77°, Cloudy / Lt. Rain, 9-14mph east wind		

Stream C was inspected today after a 0.9-inch rain event on June 16th. With conditions dry, this rain event did not fill the Stream C system and there was limited, sporadic flow that was unable to be measured with a meter. Flow was not continuous to the Flambeau River.



Client:	Flambeau Mining Company	Scope ID	17F777.24
Project:	Stream C – Flow Monitoring	Inspected by:	Jim Engelhardt / Merjent
Date:	6/24/2024	Prepared by:	Nick Glander / Foth
Weather:	High of 83°, Fair/Partly Cloudy, 11-16mph south wind		

Stream C was inspected today. Low to no flow noted and flow was unable to be measured with a meter. Flow was not continuous to the Flambeau River. Conditions are dry.



Client:	Flambeau Mining Company	Scope ID	17F777.24
Project:	Stream C – Flow Monitoring	Inspected by:	Jim Engelhardt / Merjent
Date:	7/1/2024	Prepared by:	Nick Glander / Foth
Weather:	High of 76°, Fair, 15-20mph south wind		

Stream C was inspected today. Low to no flow noted and flow was unable to be measured with a meter. Flow was not continuous to the Flambeau River. Conditions are dry.



Client:	Flambeau Mining Company	Scope ID	17F777.24
Project:	Stream C – Flow Monitoring	Inspected by:	Jim Engelhardt / Merjent
Date:	7/8/2024	Prepared by:	Nick Glander / Foth
Weather:	High of 80°, Overcast, 3-8mph west wind		

Stream C was inspected today. Low to no flow noted and flow was unable to be measured with a meter. Flow was not continuous to the Flambeau River. Conditions are dry.



Client:	Flambeau Mining Company	Scope ID	17F777.24	
Project:	Stream C – Flow Monitoring	Inspected by:	Jim Engelhardt / Merjent	
Date:	7/15/2024	Prepared by:	Nick Glander / Foth	
Weather:	High of 80°, Overcast / Lt. Rain, 3	High of 80°, Overcast / Lt. Rain, 3-8mph west wind		

Stream C was inspected today. 0.42-inches of precipitation on July 14th. System continues to be dryer, and flow was unable to be measured with a meter. Flow was not continuous to the Flambeau River.



Client:	Flambeau Mining Company	Scope ID	17F777.24	
Project:	Stream C – Flow Monitoring	Inspected by:	Jim Engelhardt / Merjent	
Date:	7/23/2024	Prepared by:	Nick Glander / Foth	
Weather:	High of 73°, Cloudy, 4-9mph nor	High of 73°, Cloudy, 4-9mph north wind		

Stream C was inspected today due to at 1.42-inches of precipitation beginning on July 23^{rd} . Continuous flow was noted throughout the system and minimal flow was observed at the Flambeau River. A surface water sampling event will be conducted on July 24^{th} .



Client:	Flambeau Mining Company	Scope ID	17F777.24
Project:	Stream C – Flow Monitoring	Inspected by:	Jim Engelhardt / Merjent
Date:	7/30/2024	Prepared by:	Nick Glander / Foth
Weather:	High of 70°, Fair, 7-12mph south wind		

Stream C was inspected today. Low to no flow noted and flow was unable to be measured with a meter. Flow was not continuous to the Flambeau River. Conditions are dry. A few pools of water were noted along the Stream C streambed.



Client:	Flambeau Mining Company	Scope ID	17F777.24
Project:	Stream C – Flow Monitoring	Inspected by:	Jim Engelhardt / Merjent
Date:	8/5/2024	Prepared by:	Nick Glander / Foth
Weather:	High of 67°, Overcast / Lt. Rain, 11-15mph east wind		

Stream C was inspected today with precipitation beginning on August 4th. A total of 1.1-inches of rain was recorded. Due to the dryness, of the Stream C system, no continuous flow now seen to the Flambeau River. System still not full to capacity that would have flowing water.



Client:	Flambeau Mining Company	Scope ID	17F777.24
Project:	Stream C – Flow Monitoring	Inspected by:	Jim Engelhardt / Merjent
Date:	8/15/2024	Prepared by:	Nick Glander / Foth
Weather:	High of 78°, Overcast / Lt. Rain, 8-12mph south wind		

Stream C was inspected today with precipitation beginning on August 12th. A total of 1.25-inches of rain was recorded. Due to the dryness of the Stream C system, no continuous flow now seen to the Flambeau River. System still not full to capacity.



Client:	Flambeau Mining Company	Scope ID	17F777.24
Project:	Stream C – Flow Monitoring	Inspected by:	Jim Engelhardt / Merjent
Date:	8/23/2024	Prepared by:	Nick Glander / Foth
Weather:	High of 79°, Fair / Mostly Cloudy, 5-10mph south wind		

Stream C was inspected today. Low to no flow noted and flow was unable to be measured with a meter. Flow was not continuous to the Flambeau River. Conditions are dry. A few pools of water were noted along the Stream C streambed.



Client:	Flambeau Mining Company	Scope ID	17F777.24
Project:	Stream C – Flow Monitoring	Inspected by:	Jim Engelhardt / Merjent
Date:	8/28/2024	Prepared by:	Nick Glander / Foth
Weather:	High of 72°, Cloudy, 5-10mph east wind		

Stream C was inspected today with 0.66-inch of precipitation beginning on August 27th. The Stream C system has flowing water; however, was unable to measure flow at Copper Park culvert. No continuous flow to the Flambeau River was noted.

Attachment 2 Pace Laboratory Analytical Reports





May 24, 2024

Nick Glander Foth Infrastructure & Environment, LLC 2121 Innovation Court Suite 300 De Pere, WI 54115

RE: Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Dear Nick Glander:

Enclosed are the analytical results for sample(s) received by the laboratory on May 10, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

• Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod Noltemeyer

Tod nolteneya

tod.noltemeyer@pacelabs.com (920)469-2436

Project Manager

Enclosures

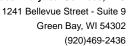
cc: MARK CIARDELLI, Foth Infrastructure & Environment,

LLC

Krystal Clark, Foth Infrastructure & Environment SHARON KOZICKI, Foth Infrastructure & Environment,

LLC







CERTIFICATIONS

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302 Florida/NELAP Certification #: E87948 Illinois Certification #: 200050 Kentucky UST Certification #: 82 Louisiana Certification #: 04168 Minnesota Certification #: 055-999-334 New York Certification #: 12064 North Dakota Certification #: R-150

South Carolina Certification #: 83006001 Texas Certification #: T104704529-21-8 Virginia VELAP Certification ID: 11873 Wisconsin Certification #: 405132750 Wisconsin DATCP Certification #: 105-444 USDA Soil Permit #: P330-21-00008 Federal Fish & Wildlife Permit #: 51774A



SAMPLE SUMMARY

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40278088001	SW-C9_202405	Water	05/08/24 10:27	05/10/24 08:00
40278088002	SW-C1_202405	Water	05/08/24 13:37	05/10/24 08:00
40278088003	SW-STM_202405	Water	05/08/24 15:01	05/10/24 08:00
40278088004	SW-C5_202405	Water	05/08/24 12:34	05/10/24 08:00
40278088005	SW-EB_202405	Water	05/08/24 12:20	05/10/24 08:00
40278088006	SW-NBOUT_202405	Water	05/08/24 11:58	05/10/24 08:00
40278088007	SW-NB_202405	Water	05/08/24 11:04	05/10/24 08:00
40278088008	SW-HWY27W_202405	Water	05/08/24 10:03	05/10/24 08:00
40278088009	SW-HWY27E_202405	Water	05/08/24 09:40	05/10/24 08:00
40278088010	CP-04_202405	Water	05/08/24 13:00	05/10/24 08:00
40278088011	SW-C1-DUP-202405	Water	05/08/24 13:37	05/10/24 08:00



SAMPLE ANALYTE COUNT

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

₋ab ID	Sample ID	Method	Analysts	Analytes Reported
0278088001	SW-C9_202405	EPA 6020B	KXS	9
		EPA 6020B	TXW	g
		SM 2540D	LMB	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	HMB	2
		EPA 300.0	HMB	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
0278088002	SW-C1_202405	EPA 6020B	KXS	ç
		EPA 6020B	TXW	Ç
		SM 2540D	LMB	
		SM 4500-S F (2000)	LMB	
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	HMB	2
		EPA 300.0	HMB	2
		EPA 310.2	MT	
		EPA 310.2	MT	
		SM 5310C	TJJ	1
0278088003	SW-STM_202405	EPA 6020B	KXS	Ş
		EPA 6020B	TXW	Ş
		SM 2540D	LMB	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	HMB	2
		EPA 300.0	HMB	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
0278088004	SW-C5_202405	EPA 6020B	KXS	9
		EPA 6020B	TXW	Ş
		SM 2540D	LMB	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	НМВ	2
		EPA 300.0	НМВ	2

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



SAMPLE ANALYTE COUNT

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
0278088005	SW-EB_202405	EPA 6020B	KXS	9
		EPA 6020B	KXS, TXW	9
		SM 2540D	LMB	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	НМВ	2
		EPA 300.0	НМВ	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
0278088006	SW-NBOUT_202405	EPA 6020B	KXS	9
		EPA 6020B	KXS, TXW	9
		SM 2540D	LMB	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	HMB	2
		EPA 300.0	НМВ	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
0278088007	SW-NB_202405	EPA 6020B	KXS	9
		EPA 6020B	KXS, TXW	9
		SM 2540D	LMB	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	HMB	2
		EPA 300.0	HMB	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
0278088008	SW-HWY27W_202405	EPA 6020B	KXS	9
		EPA 6020B	KXS, TXW	9
		SM 2540D	LMB	1
		SM 4500-S F (2000)	LMB	1

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.

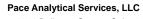


SAMPLE ANALYTE COUNT

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

_ab ID	Sample ID	Method	Analysts	Analytes Reported
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	НМВ	2
		EPA 300.0	НМВ	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
0278088009	SW-HWY27E_202405	EPA 6020B	KXS	9
		EPA 6020B	KXS, TXW	9
		SM 2540D	LMB	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	HMB	2
		EPA 300.0	HMB	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
278088010	CP-04_202405	EPA 6020B	KXS	9
		EPA 6020B	KXS, TXW	9
		SM 2540D	LMB	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	HMB	2
		EPA 300.0	HMB	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
278088011	SW-C1-DUP-202405	EPA 6020B	KXS	9
		EPA 6020B	KXS, TXW	9
		SM 2540D	LMB	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	HMB	2
		EPA 300.0	HMB	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1



Pace

1241 Bellevue Street - Suite 9 Green Bay, WI 54302 (920)469-2436

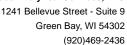
SAMPLE ANALYTE COUNT

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Lab ID Sample ID Method Analysts Reported

PASI-G = Pace Analytical Services - Green Bay





PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Method: EPA 6020B

Description: 6020B MET ICPMS

Client: Foth Infrastructure & Environment

Date: May 24, 2024

General Information:

11 samples were analyzed for EPA 6020B by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Green Bay, WI 54302 (920)469-2436

PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Method: EPA 6020B

Description: 6020B MET ICPMS, Dissolved **Client:** Foth Infrastructure & Environment

Date: May 24, 2024

General Information:

11 samples were analyzed for EPA 6020B by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



Green Bay, WI 54302 (920)469-2436



PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Method: SM 2540D

Description: 2540D Total Suspended Solids **Client:** Foth Infrastructure & Environment

Date: May 24, 2024

General Information:

11 samples were analyzed for SM 2540D by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 474504

PP: The mass of dried residue obtained did not meet the test method requirements based on volume used.

- SW-C5_202405 (Lab ID: 40278088004)
 - Total Suspended Solids
- SW-HWY27W_202405 (Lab ID: 40278088008)
 - Total Suspended Solids
- SW-NBOUT_202405 (Lab ID: 40278088006)
 - Total Suspended Solids

T3: Insufficient sample received from client to perform the analysis per EPA method requirements.

- SW-C5_202405 (Lab ID: 40278088004)
 - Total Suspended Solids
- SW-HWY27W_202405 (Lab ID: 40278088008)
 - Total Suspended Solids
- SW-NBOUT_202405 (Lab ID: 40278088006)
 - Total Suspended Solids



1241 Bellevue Street - Suite 9 Green Bay, WI 54302 (920)469-2436

PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Method: SM 4500-S F (2000)

Description: 4500S2F Sulfide, lodometric **Client:** Foth Infrastructure & Environment

Date: May 24, 2024

General Information:

11 samples were analyzed for SM 4500-S F (2000) by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

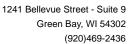
QC Batch: 474329

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278088001

R1: RPD value was outside control limits.

• MSD (Lab ID: 2716079)

• Sulfide





PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Method: SM 4500-S F (2000)

Description: 4500S2F Sulfide,Diss Iodometrc **Client:** Foth Infrastructure & Environment

Date: May 24, 2024

General Information:

11 samples were analyzed for SM 4500-S F (2000) by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

(920)469-2436



PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Method: EPA 300.0

Description: 300.0 IC Anions

Client: Foth Infrastructure & Environment

Date: May 24, 2024

General Information:

11 samples were analyzed for EPA 300.0 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 474528

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278022001,40278088011

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2717305)
 - Chloride
 - Sulfate
- MSD (Lab ID: 2717306)
 - Chloride
 - Sulfate

(920)469-2436



PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Method: EPA 300.0

Description: 300.0 IC Anions, Dissolved **Client:** Foth Infrastructure & Environment

Date: May 24, 2024

General Information:

11 samples were analyzed for EPA 300.0 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 474718

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278082012,40278144004

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2719098)
 - · Chloride, Dissolved
 - Sulfate, Dissolved



Green Bay, WI 54302 (920)469-2436

PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Method: EPA 310.2
Description: 310.2 Alkalinity

Client: Foth Infrastructure & Environment

Date: May 24, 2024

General Information:

11 samples were analyzed for EPA 310.2 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

(920)469-2436



PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Method: EPA 310.2

Description: 310.2 Alkalinity, Dissolved

Client: Foth Infrastructure & Environment

Date: May 24, 2024

General Information:

11 samples were analyzed for EPA 310.2 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 474308

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278088010,40278142001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2715990)
 - · Alkalinity, Total as CaCO3, Dissolved
- MS (Lab ID: 2715992)
 - Alkalinity, Total as CaCO3, Dissolved
- MSD (Lab ID: 2715991)
 - Alkalinity, Total as CaCO3, Dissolved
- MSD (Lab ID: 2715993)
 - · Alkalinity, Total as CaCO3, Dissolved

QC Batch: 474307

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278077016,40278088009

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2715984)
 - · Alkalinity, Total as CaCO3, Dissolved
- MSD (Lab ID: 2715985)
 - Alkalinity, Total as CaCO3, Dissolved
- MSD (Lab ID: 2715987)
 - · Alkalinity, Total as CaCO3, Dissolved

Additional Comments:



241 Bellevue Street - Suite 9 Green Bay, WI 54302 (920)469-2436

PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Method: SM 5310C

Description: 5310C Dissolved Organic Carbon **Client:** Foth Infrastructure & Environment

Date: May 24, 2024

General Information:

11 samples were analyzed for SM 5310C by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-C9_202405	Lab ID:	40278088001	Collected	: 05/08/24	10:27	Received: 05/	10/24 08:00 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prepa	aration Met	nod: EF	PA 3010A			
	Pace Anal	ytical Services	- Green Bay	,					
Calcium	3370	ug/L	254	76.2	1	05/13/24 06:51	05/20/24 18:17	7440-70-2	
Copper	9.7	ug/L	6.4	1.9	1	05/13/24 06:51	05/20/24 18:17		
ron	1300	ug/L	250	58.0	1	05/13/24 06:51	05/20/24 18:17	7439-89-6	
Magnesium	1220	ug/L	250	31.2	1	05/13/24 06:51	05/20/24 18:17	7439-95-4	
Manganese	45.7	ug/L	4.0	1.2	1	05/13/24 06:51	05/20/24 18:17	7439-96-5	
Potassium	938	ug/L	789	237	1	05/13/24 06:51	05/20/24 18:17	7440-09-7	
Sodium	3910	ug/L	250	42.0	1	05/13/24 06:51	05/20/24 18:17	7440-23-5	
Total Hardness by 2340B	13.4	mg/L	1.7	0.32	1	05/13/24 06:51	05/20/24 18:17		
Zinc	15.5J	ug/L	34.4	10.3	1	05/13/24 06:51	05/20/24 18:17	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Prepa	aration Met	nod: EF	PA 3010A			
-, -		ytical Services							
Calcium, Dissolved	3460	ug/L	254	76.2	1	05/13/24 06:47	05/22/24 10:51	7440-70-2	D9
Copper, Dissolved	8.2	ug/L	6.4	1.9	1		05/22/24 10:51		
ron, Dissolved	587	ug/L	250	58.0	1	05/13/24 06:47	05/22/24 10:51	7439-89-6	
Magnesium, Dissolved	1190	ug/L	250	31.2	1		05/22/24 10:51		
langanese, Dissolved	24.4	ug/L	4.0	1.2	1		05/22/24 10:51		
Potassium, Dissolved	854	ug/L	789	237	1		05/22/24 10:51		
Sodium, Dissolved	4180	ug/L	250	42.0	1		05/22/24 10:51		D9
otal Hardness by 2340B, Dissolved	13.5	mg/L	1.7	0.32	1		05/22/24 10:51		
Zinc, Dissolved	13.6J	ug/L	34.4	10.3	1	05/13/24 06:47	05/22/24 10:51	7440-66-6	
2540D Total Suspended Solids	Analytical	Method: SM 25	40D						
	Pace Anal	ytical Services	- Green Bay	•					
Total Suspended Solids	6.6	mg/L	1.0	0.48	1		05/15/24 14:25		
1500S2F Sulfide, lodometric	Analytical	Method: SM 45	600-S F (200	00)					
,		ytical Services							
Sulfide	<1.2	mg/L	4.0	1.2	1		05/14/24 13:44		R1
1500S2F Sulfide, Diss Iodometrc	Analytical	Method: SM 45	600-S F (200	00)					
		ytical Services							
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		05/14/24 15:23		
300.0 IC Anions	Analytical	Method: EPA 3	00.0						
ood to Amond	•	ytical Services		,					
Chloride	3.7	mg/L	2.0	0.59	1		05/17/24 21:49	16887-00-6	
Sulfate	0.74J	mg/L	2.0	0.44	1		05/17/24 21:49	14808-79-8	
800.0 IC Anions, Dissolved	Analytical	Method: EPA 3	0.00						
	•	ytical Services		,					
Chloride, Dissolved	3.2	mg/L	2.0	0.59	1		05/21/24 14:42	16887-00-6	
J Diocontoa	0.72J	mg/L	2.0	5.00	•		55/2 I/27 17.72	.0007 00 0	

(920)469-2436



ANALYTICAL RESULTS

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-C9_202405	Lab ID:	40278088001	Collecte	d: 05/08/2	10:27	Received: 05/	/10/24 08:00 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	10.3J	mg/L	25.0	7.4	1		05/20/24 11:43		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	<7.4	mg/L	25.0	7.4	1		05/14/24 14:33		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
_	Pace Anal	ytical Services	- Green Ba	y					
Dissolved Organic Carbon	15.8	mg/L	0.50	0.19	1		05/14/24 22:51		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-C1_202405	Lab ID:	40278088002	Collected	l: 05/08/24	13:37	Received: 05/	10/24 08:00 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical N	Method: EPA 60	020B Prepa	aration Met	hod: EF	PA 3010A			
	Pace Analy	tical Services	Green Bay	/					
Calcium	5150	ug/L	254	76.2	1	05/13/24 06:51	05/20/24 18:39	7440-70-2	
Copper	16.8	ug/L	6.4	1.9	1	05/13/24 06:51			
ron	915	ug/L	250	58.0	1	05/13/24 06:51			
Magnesium	1980	ug/L	250	31.2	1	05/13/24 06:51			
Manganese	18.8	ug/L	4.0	1.2	1	05/13/24 06:51	05/20/24 18:39	7439-96-5	
Potassium	792	ug/L	789	237	1	05/13/24 06:51			
Sodium	6870	ug/L	250	42.0	1	05/13/24 06:51			
Total Hardness by 2340B	21.0	mg/L	1.7	0.32	1	05/13/24 06:51			
Zinc	12.8J	ug/L	34.4	10.3	1		05/20/24 18:39	7440-66-6	
020B MET ICPMS, Dissolved	Analytical N	Method: EPA 60	120B Pren:	aration Met	hod: FF	ΡΑ 3010Α			
020D MILT TOT MIG, DISSUIVED	-	rtical Services			ou. LF	7, 50 10/4			
Calaium Diagalyad	,		,		4	0E/13/24 06:47	0E/22/24 44:42	7440 70 0	DC
Calcium, Dissolved	5350	ug/L	254	76.2	1		05/22/24 11:12		D9
Copper, Dissolved	14.5	ug/L	6.4	1.9	1		05/22/24 11:12		
ron, Dissolved	324	ug/L	250	58.0	1		05/22/24 11:12		
Agnesium, Dissolved	1960	ug/L	250	31.2	1		05/22/24 11:12		
Manganese, Dissolved	9.3	ug/L	4.0	1.2	1		05/22/24 11:12		
Potassium, Dissolved	741J	ug/L	789	237	1		05/22/24 11:12		
Sodium, Dissolved	7320	ug/L	250	42.0	1		05/22/24 11:12	7440-23-5	D9
otal Hardness by 2340B, Dissolved	21.4	mg/L	1.7	0.32	1	05/13/24 06:47	05/22/24 11:12		
inc, Dissolved	12.2J	ug/L	34.4	10.3	1	05/13/24 06:47	05/22/24 11:12	7440-66-6	
2540D Total Suspended Solids	Analytical N	Method: SM 25	40D						
	Pace Analy	tical Services -	Green Bay	/					
Total Suspended Solids	4.0	mg/L	1.0	0.49	1		05/15/24 14:25		
1500S2F Sulfide, lodometric	•	Method: SM 45	`	,					
	Pace Analy	rtical Services -	Green Bay	/					
Sulfide	1.2J	mg/L	4.0	1.2	1		05/14/24 14:14		
1500S2F Sulfide,Diss Iodometrc	Analytical N	Method: SM 45	00-S F (200	00)					
	Pace Analy	tical Services -	Green Bay	/					
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		05/14/24 15:27		
300.0 IC Anions	Analytical N	Method: EPA 30	0.00						
	•	rtical Services		/					
Chloride	8.1	mg/L	2.0	0.59	1		05/17/24 22:04	16887-00-6	
Sulfate	1.5J	mg/L	2.0	0.44	1		05/17/24 22:04		
300.0 IC Anions, Dissolved	Analytical M	Method: EPA 30	0.0						
volvio Alliolia, Diagoliteu		rtical Services		/					
Chloride, Dissolved	7.6	mg/L	2.0		1		05/21/24 14:56	16887 00 6	
Jilioliue, Dissolved	7.6 1.4J	mg/L	2.0	0.59	1		03/21/24 14.30	10007-00-6	



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-C1_202405	Lab ID:	40278088002	Collecte	d: 05/08/24	1 13:37	Received: 05/	/10/24 08:00 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Ana	lytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	15.9J	mg/L	25.0	7.4	1		05/20/24 11:44		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Ana	lytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	13.0J	mg/L	25.0	7.4	1		05/14/24 14:34		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
	Pace Ana	lytical Services	- Green Ba	y					
Dissolved Organic Carbon	15.6	mg/L	0.50	0.19	1		05/14/24 23:09		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-STM_202405	Lab ID: 4	0278088003	Collected	l: 05/08/24	15:01	Received: 05/	10/24 08:00 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical M	lethod: EPA 60	020B Prepa	aration Met	hod: EF	PA 3010A			
	-	tical Services -							
Calcium	5430	ug/L	254	76.2	1	05/13/24 06:51	05/20/24 18:49	7440-70-2	
Copper	15.6	ug/L	6.4	1.9	1	05/13/24 06:51			
ron	1090	ug/L	250	58.0	1	05/13/24 06:51			
Magnesium	2070	ug/L	250	31.2	1	05/13/24 06:51			
Manganese	35.3	ug/L	4.0	1.2	1	05/13/24 06:51			
Potassium	1070	ug/L	789	237	1	05/13/24 06:51			
Sodium	8660	ug/L	250	42.0	1	05/13/24 06:51			
Total Hardness by 2340B	22.1	mg/L	1.7	0.32	1	05/13/24 06:51	05/20/24 18:49	20 0	
Zinc	13.3J	ug/L	34.4	10.3	1		05/20/24 18:49	7440-66-6	
020B MET ICPMS, Dissolved	Analytical M	lethod: EPA 60	020B Prepa	aration Met	hod: FF	PA 3010A			
	-	tical Services							
Calcium, Dissolved	5670	ug/L	254	76.2	1	05/13/24 06:47	05/22/24 11:23	7440-70-2	D9
Copper, Dissolved	12.8	ug/L	6.4	1.9	1		05/22/24 11:23		20
ron, Dissolved	319	ug/L	250	58.0	1		05/22/24 11:23		
Magnesium, Dissolved	2030	ug/L	250	31.2	1		05/22/24 11:23		
Manganese, Dissolved	11.5	ug/L	4.0	1.2	1		05/22/24 11:23		
Potassium, Dissolved	1030	ug/L	789	237	1		05/22/24 11:23		
Sodium, Dissolved	9300	ug/L	250	42.0	1		05/22/24 11:23		D9
otal Hardness by 2340B, Dissolved	22.5	mg/L	1.7	0.32	1		05/22/24 11:23	7440 23 3	Б3
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	05/13/24 06:47	05/22/24 11:23	7440-66-6	
540D Total Suspended Solids	Analytical M	lethod: SM 25	40D						
io los lotal ouopolidou collac	•	tical Services		/					
otal Suspended Solids	8.1	mg/L	1.0	0.49	1		05/15/24 14:25		
1500S2F Sulfide, Iodometric	Analytical M	1ethod: SM 45	00-S F (200	00)					
outlier, loudinetric	•	tical Services	•	,					
Sulfide	1.2J	mg/L	4.0	1.2	1		05/14/24 14:18		
1500S2F Sulfide,Diss Iodometro	Analytical M	lethod: SM 45	00-S E (20(00)					
500521 Sullide, Diss lodoliletic	•	tical Services	•	•					
Sulfide, Dissolved	•	mg/L	•		1		05/14/24 15:29		
300.0 IC Anions	Analytical M	1ethod: EPA 30	00.0						
	•	tical Services		,					
Chloride	10.6	mg/L	2.0	0.59	1		05/17/24 22:18	16887-00-6	
Sulfate	1.7J	mg/L	2.0	0.44	1		05/17/24 22:18		
300.0 IC Anions, Dissolved	Analytical M	1ethod: EPA 30	00.0						
	•	tical Services		/					
Chloride, Dissolved	10.5	mg/L	2.0	0.59	1		05/21/24 15:11	16887-00-6	
Sulfate, Dissolved	1.7J	mg/L	2.0	0.44	1		05/21/24 15:11		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-STM_202405	Lab ID:	40278088003	Collected	d: 05/08/24	1 15:01	Received: 05/	/10/24 08:00 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Bay	/					
Alkalinity, Total as CaCO3	15.4J	mg/L	25.0	7.4	1		05/20/24 11:45		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Bay	/					
Alkalinity, Total as CaCO3, Dissolved	13.1J	mg/L	25.0	7.4	1		05/14/24 14:35		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
	Pace Anal	ytical Services	- Green Bay	/					
Dissolved Organic Carbon	16.0	mg/L	0.50	0.19	1		05/14/24 23:26		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-C5_202405	Lab ID:	40278088004	Collected	: 05/08/24	12:34	Received: 05/	10/24 08:00 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 60	020B Prepa	aration Met	nod: EF	PA 3010A			
	Pace Anal	ytical Services -	- Green Bay	,					
Calcium	4150	ug/L	254	76.2	1	05/13/24 06:51	05/20/24 18:55	7440-70-2	
Copper	15.9	ug/L	6.4	1.9	1	05/13/24 06:51	05/20/24 18:55		
Iron	866	ug/L	250	58.0	1	05/13/24 06:51	05/20/24 18:55	7439-89-6	
Magnesium	1680	ug/L	250	31.2	1	05/13/24 06:51	05/20/24 18:55	7439-95-4	
Manganese	14.3	ug/L	4.0	1.2	1	05/13/24 06:51	05/20/24 18:55	7439-96-5	
Potassium	721J	ug/L	789	237	1	05/13/24 06:51	05/20/24 18:55	7440-09-7	
Sodium	5900	ug/L	250	42.0	1	05/13/24 06:51			
Total Hardness by 2340B	17.3	mg/L	1.7	0.32	1	05/13/24 06:51			
Zinc	13.9J	ug/L	34.4	10.3	1	05/13/24 06:51		7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 60	020B Prepa	aration Met	nod: EF	PA 3010A			
	-	ytical Services							
Calcium, Dissolved	4700	ug/L	254	76.2	1	05/13/24 06:47	05/22/24 11:28	7440-70-2	D9
Copper, Dissolved	13.9	ug/L	6.4	1.9	1	05/13/24 06:47	05/22/24 11:28	7440-50-8	
Iron, Dissolved	350	ug/L	250	58.0	1	05/13/24 06:47	05/22/24 11:28		
Magnesium, Dissolved	1720	ug/L	250	31.2	1	05/13/24 06:47	05/22/24 11:28	7439-95-4	D9
Manganese, Dissolved	7.2	ug/L	4.0	1.2	1		05/22/24 11:28		
Potassium, Dissolved	715J	ug/L	789	237	1		05/22/24 11:28		
Sodium, Dissolved	6470	ug/L	250	42.0	1		05/22/24 11:28		D9
Total Hardness by 2340B, Dissolved	18.8	mg/L	1.7	0.32	1		05/22/24 11:28		
Zinc, Dissolved	24.4J	ug/L	34.4	10.3	1	05/13/24 06:47	05/22/24 11:28	7440-66-6	
2540D Total Suspended Solids	•	Method: SM 25 ytical Services		,					
Total Suspended Solids	1.8	mg/L	1.0	0.48	1		05/15/24 14:25		PP,T3
4500S2F Sulfide, Iodometric	-	Method: SM 45							
Sulfide	1.2J	mg/L	4.0	1.2	1		05/14/24 14:55		
4500525 Sulfide Dice Indometre		Method: SM 45							
4500S2F Sulfide,Diss Iodometrc	-	ytical Services							
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		05/14/24 15:30		
300.0 IC Anions	•	Method: EPA 30 ytical Services		,					
Chloride	6.5	mg/L	2.0	0.59	1		05/17/24 22:32	16887-00-6	
Sulfate	1.4J	mg/L	2.0	0.44	1		05/17/24 22:32		
300.0 IC Anions, Dissolved		Method: EPA 30 ytical Services		,					
Chloride, Dissolved	6.4	mg/L	2.0	0.59	1		05/21/24 15:25	16887-00-6	
Sulfate, Dissolved	1.3J	mg/L	2.0	0.44	1		05/21/24 15:25		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-C5_202405	Lab ID:	40278088004	Collected	d: 05/08/2	1 12:34	Received: 05/	/10/24 08:00 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Ana	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	16.3J	mg/L	25.0	7.4	1		05/20/24 11:46		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Ana	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	11.0J	mg/L	25.0	7.4	1		05/14/24 14:36		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	10C						
	Pace Ana	ytical Services	- Green Ba	y					
Dissolved Organic Carbon	15.8	mg/L	0.50	0.19	1		05/14/24 23:44		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-EB_202405	Lab ID:	40278088005	Collected	1: 05/08/24	12:20	Received: 05/	10/24 08:00 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical N	Method: EPA 6	020B Prepa	aration Met	hod: EF	PA 3010A			
	-	tical Services							
Calcium	8850	ug/L	254	76.2	1	05/13/24 06:51	05/20/24 19:00	7440 70 2	
Copper	14.1	ug/L ug/L	6.4	1.9	1	05/13/24 06:51	05/20/24 19:00		
lron	1170	ug/L ug/L	250	58.0	1	05/13/24 06:51			
Magnesium	3500	ug/L	250	31.2	1	05/13/24 06:51			
Manganese	29.3	ug/L	4.0	1.2	1	05/13/24 06:51			
Potassium	1100	ug/L	789	237	1	05/13/24 06:51			
Sodium	14800	ug/L	250	42.0	1	05/13/24 06:51	05/20/24 19:00		
Total Hardness by 2340B	36.5	mg/L	1.7	0.32	1	05/13/24 06:51	05/20/24 19:00		
Zinc	14.6J	ug/L	34.4	10.3	1	05/13/24 06:51	05/20/24 19:00	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical N	Method: EPA 6	020B Prepa	aration Met	hod: EF	PA 3010A			
	Pace Analy	tical Services	- Green Bay	•					
Calcium, Dissolved	10500	ug/L	254	76.2	1	05/13/24 06:47	05/22/24 11:44	7440-70-2	D9
Copper, Dissolved	11.8	ug/L	6.4	1.9	1	05/13/24 06:47	05/22/24 11:44	7440-50-8	
ron, Dissolved	547	ug/L	250	58.0	1	05/13/24 06:47	05/22/24 11:44	7439-89-6	
Magnesium, Dissolved	4220	ug/L	250	31.2	1	05/13/24 06:47	05/22/24 11:44	7439-95-4	D9
Manganese, Dissolved	8.3	ug/L	4.0	1.2	1	05/13/24 06:47	05/22/24 11:44	7439-96-5	
Potassium, Dissolved	1130	ug/L	789	237	1	05/13/24 06:47	05/22/24 11:44	7440-09-7	D9
Sodium, Dissolved	7870	ug/L	250	42.0	1	05/13/24 06:47	05/22/24 22:56	7440-23-5	
Total Hardness by 2340B, Dissolved	43.5	mg/L	1.7	0.32	1	05/13/24 06:47	05/22/24 11:44		
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	05/13/24 06:47	05/22/24 11:44	7440-66-6	
2540D Total Suspended Solids	Analytical N	Method: SM 25	40D						
	Pace Analy	tical Services	- Green Bay	,					
Total Suspended Solids	3.4	mg/L	1.0	0.48	1		05/15/24 14:25		
4500S2F Sulfide, lodometric	Analytical N	Method: SM 45	00-S F (200	00)					
	Pace Analy	tical Services	- Green Bay	•					
Sulfide	1.8J	mg/L	4.0	1.2	1		05/14/24 14:56		
4500S2F Sulfide,Diss Iodometrc	Analytical N	Method: SM 45	00-S F (200	00)					
	Pace Analy	tical Services	- Green Bay	,					
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		05/14/24 15:32		
300.0 IC Anions	Analytical N	Method: EPA 3	00.0						
	Pace Analy	tical Services	- Green Bay	,					
Chloride	25.2	mg/L	2.0	0.59	1		05/17/24 23:30	16887-00-6	
Sulfate	2.1	mg/L	2.0	0.44	1		05/17/24 23:30		
300.0 IC Anions, Dissolved	Analytical N	Method: EPA 3	00.0						
,		tical Services		,					
Chloride, Dissolved	12.7	mg/L	2.0	0.59	1		05/21/24 15:39	16887-00-6	
Sulfate, Dissolved	4.5	mg/L	2.0	0.44	1		05/21/24 15:39	14808-79-8	D9



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-EB_202405	Lab ID:	40278088005	Collected	d: 05/08/24	1 12:20	Received: 05	/10/24 08:00 Ma	trix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	•	Method: EPA 3 lytical Services		<i>(</i>					
Alkalinity, Total as CaCO3	33.0	mg/L	25.0	7.4	1		05/20/24 11:47		
310.2 Alkalinity, Dissolved	•	Method: EPA 3 lytical Services		/					
Alkalinity, Total as CaCO3, Dissolved	31.2	mg/L	25.0	7.4	1		05/14/24 14:37		
5310C Dissolved Organic Carbon	,	Method: SM 53 lytical Services		<i>'</i>					
Dissolved Organic Carbon	11.0	mg/L	0.50	0.19	1		05/15/24 00:00		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-NBOUT_202405	Lab ID:	40278088006	Collected	: 05/08/24	11:58	Received: 05/	/10/24 08:00 Ma	atrix: Water			
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual		
6020B MET ICPMS	Analytical	Method: EPA 60	020B Prepa	aration Met	hod: EF	PA 3010A					
	Pace Anal	ytical Services	Green Bay	,							
Calcium	10600	ug/L	254	76.2	1	05/13/24 06:51	05/20/24 19:05	7440-70-2			
Copper	9.9	ug/L	6.4	1.9	1	05/13/24 06:51	05/20/24 19:05				
Iron	755	ug/L	250	58.0	1	05/13/24 06:51	05/20/24 19:05	7439-89-6			
Magnesium	4640	ug/L	250	31.2	1	05/13/24 06:51	05/20/24 19:05	7439-95-4			
Manganese	15.9	ug/L	4.0	1.2	1	05/13/24 06:51	05/20/24 19:05	7439-96-5			
Potassium	1060	ug/L	789	237	1	05/13/24 06:51					
Sodium	5610	ug/L	250	42.0	1	05/13/24 06:51					
Total Hardness by 2340B	45.5	mg/L	1.7	0.32	1	05/13/24 06:51					
Zinc	<10.3	ug/L	34.4	10.3	1	05/13/24 06:51		7440-66-6			
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 60	020B Prepa	aration Met	hod: EF	PA 3010A					
	-	ytical Services -									
Calcium, Dissolved	11100	ug/L	254	76.2	1	05/13/24 06:47	05/22/24 11:50	7440-70-2	D9		
Copper, Dissolved	8.1	ug/L	6.4	1.9	1	05/13/24 06:47	05/22/24 11:50	7440-50-8			
Iron, Dissolved	179J	ug/L	250	58.0	1	05/13/24 06:47	05/22/24 11:50	7439-89-6			
Magnesium, Dissolved	5010	ug/L	250	31.2	1		05/22/24 11:50		D9		
Manganese, Dissolved	8.6	ug/L	4.0	1.2	1		05/22/24 11:50				
Potassium, Dissolved	1050	ug/L	789	237	1		05/22/24 11:50				
Sodium, Dissolved	5390	ug/L	250	42.0	1		05/22/24 23:02				
Total Hardness by 2340B, Dissolved	48.3	mg/L	1.7	0.32	1		05/22/24 11:50				
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	05/13/24 06:47	05/22/24 11:50	7440-66-6			
2540D Total Suspended Solids	•	Method: SM 25 lytical Services		,							
Total Suspended Solids	2.0	mg/L	1.0	0.49	1		05/15/24 14:25		PP,T3		
·		•			'		00/10/24 14.20		11,13		
4500S2F Sulfide, Iodometric	-	Method: SM 45 lytical Services -									
Sulfide	1.8J	mg/L	4.0	1.2	1		05/14/24 14:58				
4500S2F Sulfide,Diss Iodometrc	-	Method: SM 45 ytical Services									
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		05/14/24 15:34				
300.0 IC Anions	,	Method: EPA 30 ytical Services		,							
Chloride	7.5	mg/L	2.0	0.59	1		05/17/24 23:44	16887-00-6			
Sulfate	2.7	mg/L	2.0	0.44	1		05/17/24 23:44				
300.0 IC Anions, Dissolved	-	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Chloride, Dissolved	6.3	mg/L	2.0	0.59	1		05/21/24 15:54	16887-00-6			
Sulfate, Dissolved	2.7	mg/L	2.0	0.44	1		05/21/24 15:54				



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-NBOUT_202405	Lab ID:	40278088006	Collected	d: 05/08/24	1 11:58	Received: 05/	/10/24 08:00 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	40.2	mg/L	25.0	7.4	1		05/20/24 11:48		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	35.6	mg/L	25.0	7.4	1		05/14/24 14:38		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	10C						
	Pace Anal	ytical Services	- Green Ba	y					
Dissolved Organic Carbon	15.4	mg/L	0.50	0.19	1		05/15/24 00:18		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-NB_202405	Lab ID: 4	10278088007	Collected	l: 05/08/24	11:04	Received: 05/	10/24 08:00 Ma	atrix: Water		
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua	
6020B MET ICPMS	Analytical M	lethod: EPA 6	020B Prepa	aration Met	hod: EF	PA 3010A				
	Pace Analy	tical Services	- Green Bay	/						
Calcium	7340	ug/L	254	76.2	1	05/13/24 06:51	05/20/24 19:21	7440-70-2		
Copper	18.0	ug/L	6.4	1.9	1	05/13/24 06:51				
ron	1680	ug/L	250	58.0	1	05/13/24 06:51				
Magnesium	2760	ug/L	250	31.2	1	05/13/24 06:51				
Manganese	40.8	ug/L	4.0	1.2	1	05/13/24 06:51				
Potassium	1010	ug/L	789	237	1	05/13/24 06:51		7440-09-7		
Sodium	23400	ug/L	250	42.0	1	05/13/24 06:51				
Total Hardness by 2340B	29.7	mg/L	1.7	0.32	1	05/13/24 06:51	05/20/24 19:21			
inc	30.5J	ug/L	34.4	10.3	1	05/13/24 06:51	05/20/24 19:21	7440-66-6		
020B MET ICPMS, Dissolved	Analytical N	lethod: EPA 6	020B Prepa	aration Met	hod: EF	PA 3010A				
,	-	tical Services								
Calcium, Dissolved	7760	ug/L	254	76.2	1	05/13/24 06:47	05/22/24 11:55	7440-70-2	D9	
Copper, Dissolved	15.6	ug/L	6.4	1.9	1	05/13/24 06:47	05/22/24 11:55	7440-50-8		
ron, Dissolved	774	ug/L	250	58.0	1		05/22/24 11:55			
Magnesium, Dissolved	2820	ug/L	250	31.2	1		05/22/24 11:55		D9	
Manganese, Dissolved	30.9	ug/L	4.0	1.2	1		05/22/24 11:55			
Potassium, Dissolved	995	ug/L	789	237	1		05/22/24 11:55			
Sodium, Dissolved	23600	ug/L	250	42.0	1		05/22/24 23:07		D9	
Total Hardness by 2340B, Dissolved	31.0	mg/L	1.7	0.32	1		05/22/24 11:55	7 1 10 20 0	20	
Zinc, Dissolved	24.3J	ug/L	34.4	10.3	1	05/13/24 06:47	05/22/24 11:55	7440-66-6		
540D Total Suspended Solids	Analytical N	Method: SM 25	40D							
	-	tical Services		/						
Total Suspended Solids	2.6	mg/L	1.0	0.48	1		05/15/24 14:25			
1500S2F Sulfide, Iodometric	•	Method: SM 45	•	,						
D. 10.1	,		,				05/44/04 44 50			
Sulfide	1.2J	mg/L	4.0	1.2	1		05/14/24 14:59			
1500S2F Sulfide,Diss Iodometrc	•	lethod: SM 45 tical Services	•	•						
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		05/14/24 15:35			
800.0 IC Anions	Analytical N	lethod: EPA 3	00.0							
	Pace Analytical Services - Green Bay									
Chloride	38.4	mg/L	2.0	0.59	1		05/17/24 23:58	16887-00-6		
Sulfate	1.1J	mg/L	2.0	0.44	1		05/17/24 23:58			
800.0 IC Anions, Dissolved	Analytical N	Method: EPA 3	00.0							
20000000	-	tical Services		/						
Chloride, Dissolved	38.4	mg/L	2.0	0.59	1		05/21/24 16:08	16887-00-6		
Sulfate, Dissolved	1.1J	mg/L	2.0	0.44	1		05/21/24 16:08			

(920)469-2436



ANALYTICAL RESULTS

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-NB_202405	Lab ID:	40278088007	Collecte	d: 05/08/2	11:04	Received: 05/10/24 08:00 Matrix: Water			
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	10.5J	mg/L	25.0	7.4	1		05/20/24 11:49		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
•	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	10.1J	mg/L	25.0	7.4	1		05/14/24 14:39		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
_	Pace Anal	ytical Services	- Green Ba	y					
Dissolved Organic Carbon	24.6	mg/L	0.50	0.19	1		05/15/24 00:38		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-HWY27W_202405	Lab ID: 4	0278088008	Collected	: 05/08/24	10:03	Received: 05/	10/24 08:00 M	atrix: Water			
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua		
6020B MET ICPMS	Analytical M	1ethod: EPA 60	020B Prepa	aration Met	hod: EF	PA 3010A					
	Pace Analyt	tical Services -	Green Bay								
Calcium	5690	ug/L	254	76.2	1	05/13/24 06:51	05/20/24 19:27	7440-70-2			
Copper	16.5	ug/L	6.4	1.9	1	05/13/24 06:51	05/20/24 19:27				
Iron	1930	ug/L	250	58.0	1	05/13/24 06:51					
Magnesium	1740	ug/L	250	31.2	1	05/13/24 06:51					
Manganese	23.4	ug/L	4.0	1.2	1	05/13/24 06:51					
Potassium	1250	ug/L	789	237	1	05/13/24 06:51					
Sodium	36500	ug/L	250	42.0	1	05/13/24 06:51					
Total Hardness by 2340B	21.4	mg/L	1.7	0.32	1	05/13/24 06:51					
Zinc	30.4J	ug/L	34.4	10.3	1	05/13/24 06:51					
6020B MET ICPMS, Dissolved	Analytical M	lethod: EPA 60	020B Prepa	aration Met	hod: EF	PA 3010A					
,	Pace Analyt	tical Services -	- Green Bay								
Calcium, Dissolved	5700	ug/L	254	76.2	1	05/13/24 06:47	05/22/24 12:00	7440-70-2	D9		
Copper, Dissolved	14.0	ug/L	6.4	1.9	1		05/22/24 12:00				
Iron, Dissolved	1270	ug/L	250	58.0	1		05/22/24 12:00				
Magnesium, Dissolved	1710	ug/L	250	31.2	1		05/22/24 12:00				
Manganese, Dissolved	19.6	ug/L	4.0	1.2	1		05/22/24 12:00				
Potassium, Dissolved	1250	ug/L	789	237	1		05/22/24 12:00				
Sodium, Dissolved	35900	ug/L	250	42.0	1	05/13/24 06:47	05/22/24 23:12	7440-23-5			
Total Hardness by 2340B, Dissolved	21.3	mg/L	1.7	0.32	1	05/13/24 06:47	05/22/24 12:00				
Zinc, Dissolved	27.7J	ug/L	34.4	10.3	1	05/13/24 06:47	05/22/24 12:00	7440-66-6			
2540D Total Suspended Solids	Analytical M	lethod: SM 25	40D								
	Pace Analyt	tical Services -	Green Bay								
Total Suspended Solids	1.1	mg/L	1.0	0.48	1		05/15/24 14:25		PP,T3		
4500S2F Sulfide, Iodometric	•	lethod: SM 45 tical Services	,	•							
Sulfide	<1.2	mg/L	4.0	1.2	1		05/14/24 15:03				
4500S2F Sulfide,Diss Iodometrc	•	Method: SM 45	•	,							
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		05/14/24 15:37				
300.0 IC Anions	•	Method: EPA 30 tical Services									
Chloride	51.7	mg/L	2.0	0.59	1		05/18/24 00:13	16887-00-6			
Sulfate	0.94J	mg/L	2.0	0.44	1		05/18/24 00:13				
300.0 IC Anions, Dissolved	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay										
Chloride, Dissolved	51.8	mg/L	2.0	0.59	1		05/21/24 16:22	16887-00-6	D9		
Sulfate, Dissolved	0.92J	mg/L	2.0	0.44	1		05/21/24 16:22				



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-HWY27W_202405	Lab ID:	40278088008	Collecte	d: 05/08/24	1 10:03	Received: 05/	/10/24 08:00 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	10.4J	mg/L	25.0	7.4	1		05/20/24 11:50		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	8.1J	mg/L	25.0	7.4	1		05/14/24 14:40		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	10C						
	Pace Anal	ytical Services	- Green Ba	y					
Dissolved Organic Carbon	28.1	mg/L	3.0	1.1	6		05/15/24 19:43		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-HWY27E_202405	Lab ID:	40278088009	Collected	d: 05/08/24	1 09:40	Received: 05/	/10/24 08:00 M	atrix: Water		
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prep	aration Met	hod: EF	PA 3010A				
	Pace Anal	ytical Services	- Green Bay	y						
Calcium	2830	ug/L	254	76.2	1	05/13/24 06:51	05/20/24 19:32	7440-70-2		
Copper	8.9	ug/L	6.4	1.9	1	05/13/24 06:51				
Iron	1150	ug/L	250	58.0	1	05/13/24 06:51				
Magnesium	1110	ug/L	250	31.2	1	05/13/24 06:51				
Manganese	24.3	ug/L	4.0	1.2	1	05/13/24 06:51				
Potassium	1010	ug/L	789	237	1	05/13/24 06:51				
Sodium	2490	ug/L	250	42.0	1	05/13/24 06:51				
Total Hardness by 2340B	11.6	mg/L	1.7	0.32	1	05/13/24 06:51		20 0		
Zinc	12.0J	ug/L	34.4	10.3	1	05/13/24 06:51		7440-66-6		
6020P MET ICPMS Discolved	Analytical	Mothod: EDA 6	020B Bron	aration Mot	had: EE	2Λ 2010Λ				
6020B MET ICPMS, Dissolved	-	Method: EPA 6 ytical Services			nou. EF	A 30 10A				
		•	•				a= /aa /s · · ·			
Calcium, Dissolved	3090	ug/L	254	76.2	1	05/13/24 06:47			D9	
Copper, Dissolved	7.5	ug/L	6.4	1.9	1	05/13/24 06:47				
ron, Dissolved	450	ug/L	250	58.0	1		05/22/24 12:06			
Magnesium, Dissolved	1080	ug/L	250	31.2	1		05/22/24 12:06			
Manganese, Dissolved	14.5	ug/L	4.0	1.2	1		05/22/24 12:06			
Potassium, Dissolved	996	ug/L	789	237	1		05/22/24 12:06			
Sodium, Dissolved	2840	ug/L	250	42.0	1	05/13/24 06:47		7440-23-5	D9	
Total Hardness by 2340B, Dissolved	12.2	mg/L	1.7	0.32	1	05/13/24 06:47	05/22/24 12:06			
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	05/13/24 06:47	05/22/24 12:06	7440-66-6		
2540D Total Suspended Solids	Analytical	Method: SM 25	40D							
•	Pace Anal	ytical Services	- Green Ba	y						
Total Suspended Solids	4.0	mg/L	1.0	0.49	1		05/15/24 14:25			
4500S2F Sulfide, lodometric	•	Method: SM 45	,	,						
- · · ·		ytical Services	•							
Sulfide	<1.2	mg/L	4.0	1.2	1		05/14/24 15:07			
4500S2F Sulfide,Diss Iodometrc	•	Method: SM 45	•	•						
Sulfide, Dissolved		mg/L	•	•	1		05/14/24 15:38			
300.0 IC Anions	•	Method: EPA 3		y						
Chloride	2.1	mg/L	2.0	0.59	1		05/18/24 00:27	16887-00-6		
Sulfate	0.84J	mg/L	2.0	0.44	1		05/18/24 00:27			
300.0 IC Anions, Dissolved	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
		•	•				a= /a / /a · · · -		D .	
Chloride, Dissolved	2.5	mg/L	2.0	0.59	1		05/21/24 16:37		D9	
Sulfate, Dissolved	0.88J	mg/L	2.0	0.44	1		05/21/24 16:37	14808-79-8		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-HWY27E_202405	Lab ID:	40278088009	Collected	d: 05/08/24	1 09:40	Received: 05	/10/24 08:00 Ma	trix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Ana	lytical Services	- Green Ba	У					
Alkalinity, Total as CaCO3	10J	mg/L	25.0	7.4	1		05/20/24 11:51		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Ana	lytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	<7.4	mg/L	25.0	7.4	1		05/14/24 14:41		MO
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	10C						
	Pace Ana	lytical Services	- Green Ba	y					
Dissolved Organic Carbon	15.5	mg/L	0.50	0.19	1		05/15/24 01:18		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: CP-04_202405	Lab ID:	Lab ID: 40278088010 Collected: 05/08/24 13:00 Receiv						eceived: 05/10/24 08:00 Matrix: Water				
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual			
6020B MET ICPMS	Analytical	Method: EPA 60	020B Prepa	aration Met	hod: EF	PA 3010A						
	Pace Ana	lytical Services -	- Green Bay	,								
Calcium	16800	ug/L	254	76.2	1	05/13/24 06:51	05/20/24 19:37	7440-70-2				
Copper	28.4	ug/L	6.4	1.9	1	05/13/24 06:51	05/20/24 19:37					
Iron	720	ug/L	250	58.0	1	05/13/24 06:51	05/20/24 19:37	7439-89-6				
Magnesium	8970	ug/L	250	31.2	1	05/13/24 06:51	05/20/24 19:37	7439-95-4				
Manganese	33.0	ug/L	4.0	1.2	1	05/13/24 06:51	05/20/24 19:37	7439-96-5				
Potassium	1670	ug/L	789	237	1	05/13/24 06:51						
Sodium	126000	ug/L	250	42.0	1	05/13/24 06:51						
Total Hardness by 2340B	78.8	mg/L	1.7	0.32	1	05/13/24 06:51						
Zinc	<10.3	ug/L	34.4	10.3	1	05/13/24 06:51		7440-66-6				
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 60	020B Prepa	aration Met	hod: EF	PA 3010A						
	-	lytical Services -										
Calcium, Dissolved	19100	ug/L	254	76.2	1	05/13/24 06:47	05/22/24 12:11	7440-70-2	D9			
Copper, Dissolved	22.8	ug/L	6.4	1.9	1	05/13/24 06:47	05/22/24 12:11	7440-50-8				
Iron, Dissolved	95.7J	ug/L	250	58.0	1		05/22/24 12:11	7439-89-6				
Magnesium, Dissolved	9510	ug/L	250	31.2	1	05/13/24 06:47			D9			
Manganese, Dissolved	22.2	ug/L	4.0	1.2	1		05/22/24 12:11					
Potassium, Dissolved	1690	ug/L	789	237	1		05/22/24 12:11		D9			
Sodium, Dissolved	129000	ug/L	250	42.0	1		05/22/24 23:23		D9			
Total Hardness by 2340B, Dissolved	86.9	mg/L	1.7	0.32	1		05/22/24 12:11	20 0	20			
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	05/13/24 06:47	05/22/24 12:11	7440-66-6				
2540D Total Suspended Solids	•	Method: SM 25 lytical Services		,								
Total Suspended Solids	3.0	mg/L	1.0	0.48	1		05/15/24 14:25					
4500S2F Sulfide, Iodometric	-	Method: SM 45 lytical Services										
Sulfide	1.6J	mg/L	4.0	1.2	1		05/14/24 15:10					
4500S2F Sulfide,Diss Iodometrc	-	Method: SM 45 lytical Services										
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		05/14/24 15:39					
300.0 IC Anions	,	Method: EPA 30 lytical Services		,								
Chloride	127	mg/L	10.0	3.0	5		05/20/24 14:21	16887-00-6				
Sulfate	4.5	mg/L	2.0	0.44	1		05/18/24 00:41					
300.0 IC Anions, Dissolved	•	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay										
Chloride, Dissolved	128	mg/L	10.0	3.0	5		05/22/24 16:22	16887-00-6	D9			
Sulfate, Dissolved	4.5	mg/L	2.0	0.44	1		05/21/24 16:51					



ANALYTICAL RESULTS

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: CP-04_202405	Lab ID:	40278088010	Collected	d: 05/08/24	1 13:00	Received: 05	/10/24 08:00 Ma	trix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Ana	lytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	154	mg/L	25.0	7.4	1		05/20/24 11:55		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Ana	lytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	148	mg/L	25.0	7.4	1		05/14/24 14:50		MO
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	10C						
	Pace Ana	lytical Services	- Green Ba	y					
Dissolved Organic Carbon	13.0	mg/L	0.50	0.19	1		05/15/24 01:55		



ANALYTICAL RESULTS

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Calcicium	Sample: SW-C1-DUP-202405	Lab ID:	40278088011	Collected:	05/08/24	13:37	Received: 05/	/10/24 08:00 Ma	atrix: Water	
Calcium	Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Calcium	6020B MET ICPMS	Analytical I	Method: EPA 6	020B Prepai	ration Met	hod: EF	PA 3010A			
Copper		Pace Analy	tical Services	- Green Bay						
Copper	Calcium	5230	ug/L	254	76.2	1	05/13/24 06:51	05/20/24 19:43	7440-70-2	
Iron	Copper	17.1	•	6.4	1.9	1	05/13/24 06:51	05/20/24 19:43	7440-50-8	
Manganese 20.5 ug/L 4.0 1.2 1 0.5/13/24 06:51 0.5/20/24 19:43 7439-66-5 Polassium 7080 ug/L 250 42.0 1 0.5/13/24 06:51 0.5/20/24 19:43 7440-09-7 7440-66-6 7080 ug/L 250 42.0 1 0.5/13/24 06:51 0.5/20/24 19:43 7440-66-6 7440-66	Iron	841	ug/L	250	58.0	1	05/13/24 06:51	05/20/24 19:43	7439-89-6	
Potassium 10	Magnesium	2030	ug/L	250	31.2	1	05/13/24 06:51	05/20/24 19:43	7439-95-4	
Potassium 10	Manganese	20.5	ug/L	4.0	1.2	1	05/13/24 06:51	05/20/24 19:43	7439-96-5	
Total Hardness by 2340B 21.4 mg/L 1.7 0.32 1 05/13/24 06.51 05/20/24 19.43 740-66-6	Potassium	804	-	789	237	1	05/13/24 06:51	05/20/24 19:43	7440-09-7	
Total Hardness by 2340B 21.4 mg/L 34.4 10.3 1 05/13/24 06:51 05/20/24 19:43 7440-66-6	Sodium	7080	J			1	05/13/24 06:51	05/20/24 19:43	7440-23-5	
Manual			J			1				
Calcium, Dissolved	Zinc		•						7440-66-6	
Calcium, Dissolved	6020B MET ICPMS. Dissolved	Analytical I	Method: EPA 6	020B Prepai	ration Met	hod: EF	PA 3010A			
Copper, Dissolved 14.5 ug/L 6.4 1.9 1 05/13/24 06:47 05/22/24 12:17 7440-50-8 1/40. 1/4		-								
Copper, Dissolved 14.5 ug/L 6.4 1.9 1 05/13/24 06:47 05/22/24 12:17 7440-50-8 1/40. 1/4	Calcium, Dissolved	5490	ug/L	254	76.2	1	05/13/24 06:47	05/22/24 12:17	7440-70-2	D9
Iron, Dissolved 308 ug/L 250 58.0 1 05/13/24 06:47 05/22/24 12:17 7439-96-6 De Magnasium, Dissolved 299 ug/L 250 31.2 1 05/13/24 06:47 05/22/24 12:17 7439-96-6 De Magnasium, Dissolved 9.2 ug/L 4.0 1.2 1 05/13/24 06:47 05/22/24 12:17 7439-96-5 Potassium, Dissolved 784.1 ug/L 789 237 1 05/13/24 06:47 05/22/24 12:17 7440-09-7 Sodium, Dissolved 7210 ug/L 250 42.0 1 05/13/24 06:47 05/22/24 12:17 7440-09-7 Sodium, Dissolved 7210 ug/L 250 42.0 1 05/13/24 06:47 05/22/24 12:17 7440-09-7 Sodium, Dissolved 210.3 ug/L 34.4 10.3 1 05/13/24 06:47 05/22/24 12:17 7440-66-6	•		-							
Magnesium, Dissolved 2090			-							
Manganese, Dissolved 9.2 ug/L 4.0 1.2 1 05/13/24 06:47 05/22/24 12:17 7439-96-5 7484 ug/L 789 237 1 05/13/24 06:47 05/22/24 12:17 7440-09-7 7440-09-7 750dium, Dissolved 7210 ug/L 250 42.0 1 05/13/24 06:47 05/22/24 12:17 7440-09-7 7440-09-7 750dium, Dissolved 7210 ug/L 250 42.0 1 05/13/24 06:47 05/22/24 12:17 7440-09-7 750dium, Dissolved 710.3 ug/L 34.4 10.3 1 05/13/24 06:47 05/22/24 12:17 7440-66-6 74	•		-							D9
Potassium, Dissolved 784J ug/L 789 237 1 05/13/24 06:47 05/22/24 12:17 7440-09-7 7210 ug/L 250 42.0 1 05/13/24 06:47 05/22/24 12:17 7440-09-7 70161 Hardness by 2340B, Dissolved 22.3 mg/L 1.7 0.32 1 05/13/24 06:47 05/22/24 12:17 7440-09-7 7440-09-7 70161 Potarless by 2340B, Dissolved 210.3 ug/L 34.4 10.3 1 05/13/24 06:47 05/22/24 12:17 7440-66-6 7440-09-7 7440-09-7 7440-66-6 7440-09-7 7440-09-7 7440-66-6 7440-09-7 7440-09-7 7440-09-7 7440-09-7 7440-09-7 7440-09-7 7440-09-7 7440-09-7 7440-09-7 7			J							50
Sodium, Dissolved 7210 ug/L 250 42.0 1 05/13/24 06:47 05/22/24 23:28 7440-23-5 D9	•		•							
Total Hardness by 2340B, Dissolved 22.3 mg/L 1.7 0.32 1 05/13/24 06:47 05/22/24 12:17 7440-66-6 2540D Total Suspended Solids Analytical Method: SM 2540D Pace Analytical Services - Green Bay Total Suspended Solids A.1 mg/L 1.0 0.48 1 05/13/24 06:47 05/22/24 12:17 7440-66-6	•		J							D9
Zinc, Dissolved \$\begin{array}{c c c c c c c c c c c c c c c c c c c	Total Hardness by 2340B,		-						7 1 10 20 0	20
Pace Analytical Services - Green Bay	Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	05/13/24 06:47	05/22/24 12:17	7440-66-6	
Pace Analytical Services - Green Bay	2540D Total Suspended Solids	Analytical I	Method: SM 25	40D						
Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay Sulfide		•								
Pace Analytical Services - Green Bay	Total Suspended Solids	4.1	mg/L	1.0	0.48	1		05/15/24 14:25		
Pace Analytical Services - Green Bay	4500S2F Sulfide, Iodometric	Analytical I	Method: SM 45	00-S F (2000	O)					
4500S2F Sulfide,Diss lodometrc Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay Sulfide, Dissolved 4.0 4.0 1.2 1 05/14/24 15:40 300.0 IC Anions Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride 7.9 mg/L 2.0 0.59 1 05/18/24 00:56 16887-00-6 M0 Sulfate 1.5J mg/L 2.0 0.44 1 05/18/24 00:56 14808-79-8 M0 300.0 IC Anions, Dissolved Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride, Dissolved 7.9 mg/L 2.0 0.59 1 05/21/24 17:48 16887-00-6		-			-,					
Pace Analytical Services - Green Bay Sulfide, Dissolved	Sulfide	<1.2	mg/L	4.0	1.2	1		05/14/24 15:12		
Sulfide, Dissolved 4.0 4.0 1.2 1 05/14/24 15:40 300.0 IC Anions Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride 7.9 mg/L 2.0 0.59 1 05/18/24 00:56 16887-00-6 M0 Sulfate 1.5J mg/L 2.0 0.44 1 05/18/24 00:56 14808-79-8 M0 300.0 IC Anions, Dissolved Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride, Dissolved 7.9 mg/L 2.0 0.59 1 05/21/24 17:48 16887-00-6	4500S2F Sulfide, Diss Iodometrc	Analytical I	Method: SM 45	00-S F (2000	0)					
300.0 IC Anions Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride 7.9 mg/L 2.0 0.59 1 05/18/24 00:56 16887-00-6 M0 Sulfate 1.5J mg/L 2.0 0.44 1 05/18/24 00:56 14808-79-8 M0 300.0 IC Anions, Dissolved Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride, Dissolved 7.9 mg/L 2.0 0.59 1 05/21/24 17:48 16887-00-6		Pace Analy	tical Services	- Green Bay						
Pace Analytical Services - Green Bay Chloride 7.9 mg/L 2.0 0.59 1 05/18/24 00:56 16887-00-6 M0 Sulfate 1.5J mg/L 2.0 0.44 1 05/18/24 00:56 14808-79-8 M0 300.0 IC Anions, Dissolved Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride, Dissolved 7.9 mg/L 2.0 0.59 1 05/21/24 17:48 16887-00-6	Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		05/14/24 15:40		
Pace Analytical Services - Green Bay Chloride 7.9 mg/L 2.0 0.59 1 05/18/24 00:56 16887-00-6 M0 Sulfate 1.5J mg/L 2.0 0.44 1 05/18/24 00:56 14808-79-8 M0 300.0 IC Anions, Dissolved Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride, Dissolved 7.9 mg/L 2.0 0.59 1 05/21/24 17:48 16887-00-6	300.0 IC Anions	Analytical I	Method: EPA 3	00.0						
Sulfate 1.5J mg/L 2.0 0.44 1 05/18/24 00:56 14808-79-8 M0 300.0 IC Anions, Dissolved Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride, Dissolved 7.9 mg/L 2.0 0.59 1 05/21/24 17:48 16887-00-6		,								
300.0 IC Anions, Dissolved Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride, Dissolved 7.9 mg/L 2.0 0.59 1 05/21/24 17:48 16887-00-6	Chloride	7.9	mg/L	2.0	0.59	1		05/18/24 00:56	16887-00-6	M0
Pace Analytical Services - Green Bay Chloride, Dissolved 7.9 mg/L 2.0 0.59 1 05/21/24 17:48 16887-00-6	Sulfate	1.5J	mg/L	2.0	0.44	1		05/18/24 00:56	14808-79-8	MO
Pace Analytical Services - Green Bay Chloride, Dissolved 7.9 mg/L 2.0 0.59 1 05/21/24 17:48 16887-00-6	300.0 IC Anions, Dissolved	Analytical I	Method: EPA 3	00.0						
, and the second		•								
, and the second	Chloride, Dissolved	•		-	0.59	1		05/21/24 17:48	16887-00-6	
	Sulfate, Dissolved	1.5J	mg/L	2.0	0.44	1				



ANALYTICAL RESULTS

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Sample: SW-C1-DUP-202405	Lab ID:	40278088011	Collecte	d: 05/08/24	1 13:37	Received: 05/	/10/24 08:00 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	17.3J	mg/L	25.0	7.4	1		05/20/24 11:56		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	13.1J	mg/L	25.0	7.4	1		05/14/24 14:53		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
	Pace Anal	ytical Services	- Green Ba	y					
Dissolved Organic Carbon	15.6	mg/L	0.50	0.19	1		05/15/24 02:13		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

QC Batch: 474176 Analysis Method: EPA 6020B
QC Batch Method: EPA 3010A Analysis Description: 6020B MET

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

 $40278088008,\,40278088009,\,40278088010,\,40278088011$

METHOD BLANK: 2715500 Matrix: Water

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

40278088008, 40278088009, 40278088010, 40278088011

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Calcium	ug/L	<76.2	254	05/17/24 00:52	
Copper	ug/L	<1.9	6.4	05/17/24 00:52	
Iron	ug/L	<58.0	250	05/17/24 00:52	
Magnesium	ug/L	<31.2	250	05/17/24 00:52	
Manganese	ug/L	<1.2	4.0	05/17/24 00:52	
Potassium	ug/L	<237	789	05/17/24 00:52	
Sodium	ug/L	<42.0	250	05/17/24 00:52	
Total Hardness by 2340B	mg/L	< 0.32	1.7	05/17/24 00:52	
Zinc	ug/L	<10.3	34.4	05/17/24 00:52	

LABORATORY CONTROL SAMPLE:	2715501					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Calcium	ug/L	10000	10200	102	80-120	
Copper	ug/L	250	235	94	80-120	
Iron	ug/L	10000	9910	99	80-120	
Magnesium	ug/L	10000	9740	97	80-120	
Manganese	ug/L	250	251	100	80-120	
Potassium	ug/L	10000	9860	99	80-120	
Sodium	ug/L	10000	9390	94	80-120	
Total Hardness by 2340B	mg/L		65.5			
Zinc	ug/L	250	251	100	80-120	

MATRIX SPIKE & MATRIX SI	PIKE DUPLI	CATE: 2715	502		2715503							
Parameter	Units	40278088001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	ug/L	3370	10000	10000	13800	14100	104	108	75-125	2	20	
Copper	ug/L	9.7	250	250	271	272	104	105	75-125	0	20	
Iron	ug/L	1300	10000	10000	12300	12300	110	109	75-125	0	20	
Magnesium	ug/L	1220	10000	10000	11800	11700	106	105	75-125	1	20	
Manganese	ug/L	45.7	250	250	316	318	108	109	75-125	1	20	
Potassium	ug/L	938	10000	10000	11000	11000	101	101	75-125	0	20	
Sodium	ug/L	3910	10000	10000	14300	14400	104	104	75-125	1	20	
Total Hardness by 2340B	mg/L	13.4			83.0	83.5				1	20	
Zinc	ug/L	15.5J	250	250	274	270	103	102	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

QC Batch: 474170 Analysis Method: EPA 6020B

QC Batch Method: EPA 3010A Analysis Description: 6020B MET Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

 $40278088008,\,40278088009,\,40278088010,\,40278088011$

METHOD BLANK: 2715477 Matrix: Water

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

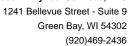
40278088008, 40278088009, 40278088010, 40278088011

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Calcium, Dissolved	ug/L	<76.2	254	05/22/24 10:40	_
Copper, Dissolved	ug/L	<1.9	6.4	05/22/24 10:40	
Iron, Dissolved	ug/L	<58.0	250	05/22/24 10:40	
Magnesium, Dissolved	ug/L	<31.2	250	05/22/24 10:40	
Manganese, Dissolved	ug/L	<1.2	4.0	05/22/24 10:40	
Potassium, Dissolved	ug/L	<237	789	05/22/24 10:40	
Sodium, Dissolved	ug/L	<42.0	250	05/22/24 10:40	
Total Hardness by 2340B, Dissolved	mg/L	<0.32	1.7	05/22/24 10:40	
Zinc, Dissolved	ug/L	<10.3	34.4	05/22/24 10:40	

LABORATORY CONTROL SAMPLE:	2715478					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Calcium, Dissolved	ug/L	10000	11400	114	80-120	
Copper, Dissolved	ug/L	250	277	111	80-120	
Iron, Dissolved	ug/L	10000	11200	112	80-120	
Magnesium, Dissolved	ug/L	10000	11200	112	80-120	
Manganese, Dissolved	ug/L	250	279	112	80-120	
Potassium, Dissolved	ug/L	10000	11200	112	80-120	
Sodium, Dissolved	ug/L	10000	10800	108	80-120	
Total Hardness by 2340B, Dissolved	mg/L		74.8			
Zinc, Dissolved	ug/L	250	281	112	80-120	

MATRIX SPIKE & MATRIX S	SPIKE DUPL	ICATE: 2715	479 MS	MSD	2715480	l						
		40278088001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Calcium, Dissolved	ug/L	3460	10000	10000	14100	14400	106	110	75-125	3	20	
Copper, Dissolved	ug/L	8.2	250	250	278	279	108	108	75-125	0	20	
Iron, Dissolved	ug/L	587	10000	10000	11500	11700	109	111	75-125	2	20	
Magnesium, Dissolved	ug/L	1190	10000	10000	12000	12400	108	112	75-125	3	20	
Manganese, Dissolved	ug/L	24.4	250	250	295	299	108	110	75-125	1	20	
Potassium, Dissolved	ug/L	854	10000	10000	11800	11900	110	110	75-125	1	20	
Sodium, Dissolved	ug/L	4180	10000	10000	14900	15400	107	112	75-125	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

MATRIX SPIKE & MATRIX SI	PIKE DUPL	ICATE: 2715	479		2715480							
Parameter	Units	40278088001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec	RPD	Max RPD	Qual
Parameter	Units	Resuit	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	KPD	KPD	Quai
Total Hardness by 2340B, Dissolved	mg/L	13.5			84.7	87.1				3	20	
Zinc, Dissolved	ug/L	13.6J	250	250	280	282	107	107	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

QC Batch: 474504 Analysis Method: SM 2540D

QC Batch Method: SM 2540D Analysis Description: 2540D Total Suspended Solids

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

40278088008, 40278088009, 40278088010, 40278088011

METHOD BLANK: 2717176 Matrix: Water

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

40278088008, 40278088009, 40278088010, 40278088011

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Total Suspended Solids mg/L <0.48 1.0 05/15/24 14:24

LABORATORY CONTROL SAMPLE: 2717177

Spike LCS LCS % Rec Parameter Units Result % Rec Limits Qualifiers Conc. 80-120 **Total Suspended Solids** mg/L 100 104 104

SAMPLE DUPLICATE: 2717178

Date: 05/24/2024 05:16 PM

40278029001 Dup Max **RPD RPD** Parameter Units Result Result Qualifiers 32.4 33.2 2 10 Total Suspended Solids mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

QC Batch: 474331 Analysis Method: SM 4500-S F (2000)

QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Dissolved Iodometric

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

40278088008, 40278088009, 40278088010, 40278088011

METHOD BLANK: 2716080 Matrix: Water

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

40278088008, 40278088009, 40278088010, 40278088011

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Sulfide mg/L <1.2 4.0 05/14/24 15:19

LABORATORY CONTROL SAMPLE: 2716081

LCS LCS % Rec Spike Units % Rec Limits Qualifiers Parameter Conc. Result Sulfide mg/L 47.6 46.8 98 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2716082 2716083

MS MSD

40278088001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual Sulfide 2 20 <1.2 47.6 47.6 45.6 95 97 80-120 mg/L 46.4

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

(920)469-2436



QUALITY CONTROL DATA

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Sulfide

Date: 05/24/2024 05:16 PM

QC Batch: 474329 Analysis Method: SM 4500-S F (2000)

QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric

Laboratory: Pace Analytical Services - Green Bay

4 0

05/14/24 13:33

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

40278088008, 40278088009, 40278088010, 40278088011

METHOD BLANK: 2716076 Matrix: Water

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

40278088008, 40278088009, 40278088010, 40278088011

Blank Reporting

<1.2

Parameter Units Result Limit Analyzed Qualifiers

LABORATORY CONTROL SAMPLE: 2716077

LCS LCS % Rec Spike Units % Rec Limits Qualifiers Parameter Conc. Result Sulfide mg/L 46.8 49.6 106 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2716078 2716079

mg/L

MS MSD

40278088001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual Sulfide <1.2 46.8 46.8 42.0 50.4 88 106 80-120 18 10 R1 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

QC Batch: 474718 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions, Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

40278088008, 40278088009, 40278088010, 40278088011

METHOD BLANK: 2719096 Matrix: Water

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

40278088008, 40278088009, 40278088010, 40278088011

Blank Reporting Parameter Units Qualifiers Result I imit Analyzed Chloride 05/21/24 11:36 mg/L < 0.59 2.0 05/21/24 11:36 Sulfate mg/L < 0.44 2.0

LABORATORY CONTROL SAMPLE: LCS LCS % Rec Spike Parameter Units Conc. Result % Rec Limits Qualifiers Chloride 20 19.7 99 90-110 mq/L Sulfate 20 99 90-110 mg/L 19.7

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2719098 2719099 MS MSD 40278082012 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Chloride mg/L 44.4 100 100 162 153 118 108 90-110 6 15 M0 Sulfate mg/L 34.3 100 100 152 142 118 108 90-110 7 15 M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2719100 2719101 MS MSD 40278144004 MSD MS MSD Spike Spike MS % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Chloride 42.1 400 400 440 444 99 100 90-110 15 mg/L Sulfate mg/L 652 400 400 1030 1030 94 93 90-110 0 15

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

QC Batch: 474528 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

40278088008, 40278088009, 40278088010, 40278088011

METHOD BLANK: 2717301 Matrix: Water

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

40278088008, 40278088009, 40278088010, 40278088011

Blank Reporting Parameter Units Qualifiers Result I imit Analyzed Chloride mg/L < 0.59 2.0 05/17/24 18:00 05/17/24 18:00 Sulfate mg/L < 0.44 2.0

LABORATORY CONTROL SAMPLE: 2717302 LCS LCS % Rec Spike Parameter Units Conc. Result % Rec Limits Qualifiers Chloride 20 19.7 98 90-110 mq/L Sulfate 20 109 90-110 mg/L 21.8

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2717303 2717304 MS MSD 40278022001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Chloride mg/L 22.4J 400 400 447 446 106 106 90-110 0 15 Sulfate mg/L 676 400 400 1080 1090 101 104 90-110 1 15

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2717305 2717306 MSD MS 40278088011 MSD MS MSD Spike Spike MS % Rec Max RPD Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** Qual Chloride 7.9 20 20 31.1 30.5 116 113 90-110 2 15 M0 mg/L Sulfate mg/L 1.5J 20 20 23.8 23.9 112 112 90-110 0 15 M0

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

QC Batch: 474699 Analysis Method: EPA 310.2

QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

40278088008, 40278088009, 40278088010, 40278088011

METHOD BLANK: 2718776 Matrix: Water

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

40278088008, 40278088009, 40278088010, 40278088011

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Alkalinity, Total as CaCO3 mg/L <7.4 25.0 05/20/24 11:29

LABORATORY CONTROL SAMPLE: 2718777

LCS LCS % Rec Spike % Rec Limits Qualifiers Parameter Units Conc. Result Alkalinity, Total as CaCO3 mg/L 100 98.2 98 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2718778 2718779

MS MSD

40277996001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual Alkalinity, Total as CaCO3 473 471 20 370 100 100 103 101 90-110 0 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2718780 2718781

MS MSD MSD MSD 40278101004 Spike Spike MS MS % Rec Max % Rec Parameter Units Conc. Conc. Result % Rec **RPD** RPD Qual Result Result Limits Alkalinity, Total as CaCO3 719 500 500 1210 1230 99 102 90-110 20 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

QC Batch: 474307 Analysis Method: EPA 310.2

QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity, Dissolved

> Laboratory: Pace Analytical Services - Green Bay

> > 25.0

05/14/24 14:12

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

40278088008, 40278088009

METHOD BLANK: 2715982 Matrix: Water

Associated Lab Samples:

40278088008, 40278088009

Blank Reporting

Parameter Units Limit Qualifiers Result Analyzed Alkalinity, Total as CaCO3, mg/L

<74

Dissolved

LABORATORY CONTROL SAMPLE: 2715983

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Alkalinity, Total as CaCO3, mg/L 100 98.9 99 90-110

Dissolved

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2715985 2715984 MS MSD

MSD MS 40278077016 MS MSD Spike Spike % Rec Max RPD Parameter Result Result % Rec % Rec Limits **RPD** Units Result Conc. Conc. Qual Alkalinity, Total as CaCO3, 20 M0 133 100 100 247 247 114 114 90-110 0 mg/L

Dissolved

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2715987

2715986 MS MSD 40278088009 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result % Rec % Rec **RPD** RPD Qual Result Conc. Conc. Result Limits Alkalinity, Total as CaCO3, mg/L <7.4 100 100 114 116 108 111 90-110 2 20 M0

Dissolved

Date: 05/24/2024 05:16 PM

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

QC Batch: 474308 Analysis Method: EPA 310.2

QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity, Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278088010, 40278088011

METHOD BLANK: 2715988 Matrix: Water

Associated Lab Samples: 40278088010, 40278088011

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Alkalinity, Total as CaCO3, mg/L <7.4 25.0 05/14/24 14:48

Dissolved

LABORATORY CONTROL SAMPLE: 2715989

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Alkalinity, Total as CaCO3, mg/L 100 98.4 98 90-110

Dissolved

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2715990 2715991

MS MSD

40278088010 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual Alkalinity, Total as CaCO3, 100 20 M0 148 100 213 262 65 114 90-110 20 mg/L

Dissolved

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2715992 2715993

MS MSD

40278142001 Spike Spike MS MSD MS MSD % Rec Max % Rec % Rec **RPD** RPD Parameter Units Result Conc. Conc. Result Result Limits Qual Alkalinity, Total as CaCO3, 95.2 100 100 207 209 112 114 90-110 20 M0 mg/L

Dissolved

Date: 05/24/2024 05:16 PM

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

QC Batch: 474287 Analysis Method: SM 5310C

QC Batch Method: SM 5310C Analysis Description: 5310C Dissolved Organic Carbon

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

40278088008, 40278088009, 40278088010, 40278088011

METHOD BLANK: 2715903 Matrix: Water

Associated Lab Samples: 40278088001, 40278088002, 40278088003, 40278088004, 40278088005, 40278088006, 40278088007,

40278088008, 40278088009, 40278088010, 40278088011

Blank Reporting

ParameterUnitsResultLimitAnalyzedQualifiersDissolved Organic Carbonmg/L<0.19</td>0.5005/14/24 19:41

LABORATORY CONTROL SAMPLE: 2715904

LCS LCS % Rec Spike Parameter Units % Rec Limits Qualifiers Conc. Result Dissolved Organic Carbon mg/L 12.5 12.4 99 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2715905 2715906

MS MSD

40278077012 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual Dissolved Organic Carbon 3.6 6 6 2 20 9.3 9.4 94 97 80-120 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2715907 2715908

MS MSD MSD MSD 40278077013 Spike Spike MS MS % Rec Max Parameter % Rec Units Conc. Conc. Result % Rec **RPD** RPD Qual Result Result Limits Dissolved Organic Carbon 2.9 6 6 8.6 9.0 95 102 80-120 5 20 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALIFIERS

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - The reported result is an estimated value.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

DL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Analyte was not detected and is reported as less than the LOD or as defined by the customer.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 05/24/2024 05:16 PM

D9	Dissolved result is greater than the total. Data is within laboratory control limits.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
PP	The mass of dried residue obtained did not meet the test method requirements based on volume used.
R1	RPD value was outside control limits.
T3	Insufficient sample received from client to perform the analysis per EPA method requirements.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

_ab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
10278088001	SW-C9_202405	EPA 3010A	474176	EPA 6020B	474264
0278088002	SW-C1_202405	EPA 3010A	474176	EPA 6020B	474264
0278088003	SW-STM_202405	EPA 3010A	474176	EPA 6020B	474264
0278088004	SW-C5_202405	EPA 3010A	474176	EPA 6020B	474264
0278088005	SW-EB_202405	EPA 3010A	474176	EPA 6020B	474264
0278088006	SW-NBOUT_202405	EPA 3010A	474176	EPA 6020B	474264
0278088007	SW-NB 202405	EPA 3010A	474176	EPA 6020B	474264
0278088008	SW-HWY27W_202405	EPA 3010A	474176	EPA 6020B	474264
0278088009	SW-HWY27E_202405	EPA 3010A	474176	EPA 6020B	474264
0278088010	CP-04_202405	EPA 3010A	474176	EPA 6020B	474264
0278088011	SW-C1-DUP-202405	EPA 3010A	474176	EPA 6020B	474264
0278088001	SW-C9_202405	EPA 3010A	474170	EPA 6020B	474263
0278088002	SW-C1_202405	EPA 3010A	474170	EPA 6020B	474263
0278088003	SW-STM_202405	EPA 3010A	474170	EPA 6020B	474263
0278088004	SW-C5_202405	EPA 3010A	474170	EPA 6020B	474263
0278088005	SW-EB_202405	EPA 3010A	474170	EPA 6020B	474263
0278088006	SW-NBOUT_202405	EPA 3010A	474170	EPA 6020B	474263
0278088007	SW-NB_202405	EPA 3010A	474170	EPA 6020B	474263
0278088008	SW-HWY27W_202405	EPA 3010A	474170	EPA 6020B	474263
0278088009	SW-HWY27E 202405	EPA 3010A	474170	EPA 6020B	474263
278088010	CP-04_202405	EPA 3010A	474170	EPA 6020B	474263
0278088011	SW-C1-DUP-202405	EPA 3010A	474170	EPA 6020B	474263
0278088001	SW-C9_202405	SM 2540D	474504		
0278088002	SW-C1_202405	SM 2540D	474504		
0278088003	SW-STM_202405	SM 2540D	474504		
0278088004	SW-C5_202405	SM 2540D	474504		
0278088005	SW-EB_202405	SM 2540D	474504		
0278088006	SW-NBOUT_202405	SM 2540D	474504		
0278088007	SW-NB_202405	SM 2540D	474504		
0278088008	SW-HWY27W_202405	SM 2540D	474504		
0278088009	SW-HWY27E_202405	SM 2540D	474504		
0278088010	CP-04_202405	SM 2540D	474504		
0278088011	SW-C1-DUP-202405	SM 2540D	474504		
0278088001	SW-C9_202405	SM 4500-S F (2000)	474329		
278088002	SW-C1_202405	SM 4500-S F (2000)	474329		
0278088003	SW-STM_202405	SM 4500-S F (2000)	474329		
278088004	SW-C5_202405	SM 4500-S F (2000)	474329		
0278088005	SW-EB_202405	SM 4500-S F (2000)	474329		
278088006	SW-NBOUT_202405	SM 4500-S F (2000)	474329		
278088007	SW-NB_202405	SM 4500-S F (2000)	474329		
278088008	SW-HWY27W_202405	SM 4500-S F (2000)	474329		
278088009	SW-HWY27E_202405	SM 4500-S F (2000)	474329		
278088010	CP-04_202405	SM 4500-S F (2000)	474329		
0278088010	SW-C1-DUP-202405	SM 4500-S F (2000)	474329		
0278088001	SW-C9_202405	SM 4500-S F (2000)	474331		
0278088002	SW-C1_202405	SM 4500-S F (2000)	474331		
, 00000 2	31. 31_232 100	3.11 1333 31 (2000)			



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

_ab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
10278088004	SW-C5_202405	SM 4500-S F (2000)	474331		
10278088005	SW-EB_202405	SM 4500-S F (2000)	474331		
0278088006	SW-NBOUT_202405	SM 4500-S F (2000)	474331		
0278088007	SW-NB 202405	SM 4500-S F (2000)	474331		
0278088008	SW-HWY27W_202405	SM 4500-S F (2000)	474331		
0278088009	SW-HWY27E_202405	SM 4500-S F (2000)	474331		
0278088010	CP-04_202405	SM 4500-S F (2000)	474331		
0278088011	SW-C1-DUP-202405	SM 4500-S F (2000)	474331		
0278088001	SW-C9_202405	EPA 300.0	474528		
0278088002	SW-C1_202405	EPA 300.0	474528		
0278088003	SW-STM_202405	EPA 300.0	474528		
0278088004	SW-C5_202405	EPA 300.0	474528		
0278088005	SW-EB_202405	EPA 300.0	474528		
0278088006	SW-NBOUT_202405	EPA 300.0	474528		
0278088007	SW-NB_202405	EPA 300.0	474528		
0278088008	SW-HWY27W_202405	EPA 300.0	474528		
0278088009	SW-HWY27E_202405	EPA 300.0	474528		
0278088010	CP-04_202405	EPA 300.0	474528		
0278088011	SW-C1-DUP-202405	EPA 300.0	474528		
0278088001	SW-C9_202405	EPA 300.0	474718		
278088002	SW-C1_202405	EPA 300.0	474718		
278088003	SW-STM_202405	EPA 300.0	474718		
0278088004	SW-C5_202405	EPA 300.0	474718		
0278088005	SW-EB_202405	EPA 300.0	474718		
0278088006	SW-NBOUT_202405	EPA 300.0	474718		
0278088007	SW-NB 202405	EPA 300.0	474718		
0278088008	SW-HWY27W_202405	EPA 300.0	474718		
0278088009	SW-HWY27E_202405	EPA 300.0	474718		
0278088010	CP-04_202405	EPA 300.0	474718		
0278088011	SW-C1-DUP-202405	EPA 300.0	474718		
0278088001	SW-C9_202405	EPA 310.2	474699		
0278088002	SW-C1_202405	EPA 310.2	474699		
0278088003	SW-STM_202405	EPA 310.2	474699		
0278088004	SW-C5_202405	EPA 310.2	474699		
0278088005	SW-EB_202405	EPA 310.2	474699		
0278088006	SW-NBOUT_202405	EPA 310.2	474699		
0278088007	SW-NB_202405	EPA 310.2	474699		
0278088008	SW-HWY27W_202405	EPA 310.2	474699		
0278088009	SW-HWY27E_202405	EPA 310.2	474699		
0278088010	CP-04_202405	EPA 310.2	474699		
0278088011	SW-C1-DUP-202405	EPA 310.2	474699		
0278088001	SW-C9_202405	EPA 310.2	474307		
0278088002	SW-C1_202405	EPA 310.2	474307		
0278088003	SW-STM_202405	EPA 310.2	474307		
0278088004	SW-C5_202405	EPA 310.2	474307		
0278088005	SW-EB_202405	EPA 310.2	474307		
0278088006	SW-NBOUT_202405	EPA 310.2	474307		



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278088

Date: 05/24/2024 05:16 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
40278088007	SW-NB_202405	EPA 310.2	474307		
40278088008	SW-HWY27W_202405	EPA 310.2	474307		
40278088009	SW-HWY27E_202405	EPA 310.2	474307		
40278088010	CP-04_202405	EPA 310.2	474308		
40278088011	SW-C1-DUP-202405	EPA 310.2	474308		
40278088001	SW-C9_202405	SM 5310C	474287		
40278088002	SW-C1_202405	SM 5310C	474287		
40278088003	SW-STM_202405	SM 5310C	474287		
40278088004	SW-C5_202405	SM 5310C	474287		
40278088005	SW-EB_202405	SM 5310C	474287		
40278088006	SW-NBOUT_202405	SM 5310C	474287		
40278088007	SW-NB_202405	SM 5310C	474287		
40278088008	SW-HWY27W_202405	SM 5310C	474287		
40278088009	SW-HWY27E_202405	SM 5310C	474287		
40278088010	CP-04_202405	SM 5310C	474287		
40278088011	SW-C1-DUP-202405	SM 5310C	474287		

* Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed and accurate.

Page: Cooler# 1 of 2 of 1

COC# FMC-2024_04

Require	ed Ship to Lab:	Requirad Proje	ct information:			Required invol	ca information:														2700	
ab Nar	na. Pace Analytical Services	*Facility ID #:	Flambeau Min	a Co	,	Send Invoice to	. Accounting							TAT	r: Standa	ard 10	day	×		Rush		Mark One
Address	3:	*Task Code#	FMC-2024	_04	,	Address. 2121	Innovation Court P O.	Box 5126	Da P	ere, WI	•			If R	ush, Dat	e due						
1241 Be	ellavua Straet - Suite 9, Green Bay, WI	Site Address	<u> -'</u>			City/Stata	Da Para, Wi 541	15	Ph#	920-	497-25	500		QC	level Re	quired	: Star	dard		x s	pecial	Mark one
Lab PM	: Tod Noltamayar	City LADYS	MITH St	ate	WI	17F777.23-0	7-73							Lat	Project	t ID (la	b use)				
Phone/F	ax: (608) 232-3300	Project Conta	act: Mark C	lardallı		Send EDD to	D: Nick Glander										Rec	ueste	ed Ar	nalys	es	
Lab PM	amail Tod Noitemeyer@pacelabs.com	Phone/Fax:	920-496-6656			CC Hardcop	v report to	Kozicki, N	ck Gla	nder					F	iltered	(Y/N)			T		
Applice	ola Lab Quota #:	Email:	Mark Cia	rdelli@	ofoth com	CC alactronic co	opy report to Sharo	n.Kozick	i@fol	h.con	1							П	П	П		l
							nick.g	lander@	foth c	om				N	Y	N	Υ	YN	ı N	Υ		
		Valid Matrix Codes MATRIX TORRIXING WATER WP GROUND WATER WG	MATRIX SURFACE WATER WS WATER DC WQ	DE	JWP DMP			SS	Т	Pi	esarv	etivas	T_	Mg,	i, Fe, n,	,,	ił, Ci,					
	+SAMDLE ID	WASTE WATER WAY	BLUCCE BL	*MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE	SAMPLE TIME	CONTAINERS					& NaOF	tu, Fe, Zn,	Ca, Cu, Na, Zn,	Įį.	Kalin			ntfid		İ
_	*SAMPLE ID Samples IDs MUST BE UNIQUE	SOIL SO OIL OIL OIL SWITE SW AMBIENT AIR AE SOIL GAB 99	LAB LEACHATE - SPLP ILS LAB LEACHATE - TOLP ILT	Ê	RAB	DATE	(Military)	NO NE	pev.				tate &	Na, Z	A K	kalir	ed A		Sulfide	Pag		1
TEM#		801, GA8 99		≨.	& <u>6</u> 8 6			OF C	Jupreserved	SON THE	고 교 교	la2S203	Methanol	Total Ca, C Mn, K, Na, Hardness	Dissolved C Mg, Mn, K, h Hardness	Total Alkalinity, CI, Sulfate	Dissolved Alkalinity, Sulfate	DOC	Total S	Dissolved Sulfide	Comme	
		1 5		╂∸			1	#		+++	외	2 2		ı	1	<u> </u>		X X			Lab Samp	le I.D.
	SW-C9_202405			ws	G	5/8/2024	,	8	3	1-1	╬	++	2	X	X	X	X				500	
	SW-C1_202405			ws	G	5/8/2024		8	3	1-1	+	++	2	<u> </u>	X	X	X	XX	(x	 	<u> </u>	
	SW-STM_202405			ws	G	5/8/2024		8	3	17		++	2	X	×	X	X 	 	-	 	w4	
	SW-C5_202405			ws	G	5/8/2024		8	3	+	\dashv	╁┼	12	X	X	X	×	1-1-	1		$\frac{\omega_{5}}{\omega_{5}}$	
	SW-EB-202405			ws	G	5/8/2024		8	\vdash	2	-	╁┼	²	×	X	X	X	X X	\neg		$\frac{\omega_{\delta}}{\omega_{\delta}}$	
	SW-NBOUT_202405			ws	G	5/8/2024		8		1 2	+	╁	2	X	X	X	×	XX	\neg		ω	
i	SW-NB_202405			ws	G	5/8/2024	11.04	8		1 2	-	++	12	×	X	×	×	X >			W ₀	
i	SW-HWY27W_202405			ws	G	5/8/2024		8	3	1 2	-	++	2	×	×	×	X	T	(X		W9	
i	SW-HWY27E_202405			ws	G	5/8/2024	9.40	8	3	1 2	\dashv		2		×	×	×		(X			
	CP-04_202405			ws	G	5/8/2024	13:00	8	3	1 2	_	++	2	X	×	×	X		× ×		<u>7,0</u>	
11	SW-C1-DUP-202405			ws	G	5/8/2024	13:37	8	3	1 2	4	++	2	X	×	×	 ×	<u> </u>	x x	×	011	
																			-	Щ.	Becelot Con	distance
Additio	nal Commants/Spacial instructions:			RELI	NQUISHED BY	/ AFFILIATION	DATE	4	ACC	I PIE) 8Y /	AFFILI	ATIO	4		DATE	H	Λŧ-	Sa	<u> </u>	Receipt Cont	
				Jim E	Engelhardt/N	<u>ferjent</u>	9-May	1000	ļ.,			7					100		+-		Y/N Y/N	
				17	Mh	<u>ن</u>	SION	080	1	$\underline{\sim}$	\mathcal{V}	<u> </u>			210	7NA	U	W	业	12	MAN (3)/8	
											•						-		╄		Y/N Y/N	
																		سي	┸		Y/N Y/N	
						D: (mark as appr		LER NAM	E ANI	ADIS C	INTUR	RE							i.		82 음당	ank
Includ	de Equis EDD's			UPS	COURIER	1	n Engelhardt					. In.+-	Plant d	·	- I=				- Lemb	.	Samples on Ice? Sample intact?	Trip Blank?
*Reau	ired information for electronic data	deliverable.		US N	MAIL	SIGN	ATURE of SAMPLER	12	u	u	16	DATE	Signed	5/8	/2024 Ti	me	22	00	ē		8 8	ij

Effective Date: 8/16/2022

_							г —				below. paper:			713	□No		□N// b Std	-	prese	rvatio	n (ıf pl	l adju	sted)			-		co	tıal wh mplete	ed: r	nll	Date/ Time:	
		(Slass						Plast	ic					Via	als				J	ars			Gen	eral		(>6mm) *	H <2	Act pH ≥9	212	52	after adjusted	Volume
AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	769V	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2	/OA Vials (>6mm)	42SO4 pH	√aOH+Zn Act pH ≥9	VaOH pH ≥12	-1NO3 pH ≤2	pH after a	(mL)
1			$\overline{1}$			Π	Ī	2		2		2			Ĺ		Ĺ		Í	Í			<u> </u>	• •			ŕ		X		Ÿ		2.5 / 5
)2	1 1 1	1	1.,	, ,			i	2	. 17	2	, 14	2	1 54	4	1 1 4 1	11,		1 1		. 4	31.7	. ,	441	anti'	(h)		V_{2r}	6, 1	X	111 12	X	1 1,	2.5/5
3	1		7				T	2		2		12																	X	\Box	X		2.5 / 5
)4	1	` .	T	1 11			1	2		2		2		. In		,	: , h:	, 1	112	,,,,	lali i	H + 1 - 6		1, 4, 4	1 pk ial	E. S. I	to par		X	la6 -1	Ý	415 (1) 1 4 (1) 1	2.5 / 5
)5			T				I	2		2		2																	X		Ϋ́		2.5 / 5
)6			1	111			1.,	2	a 3 22	2	5.0	1		11.5	7 , N , 1 1 (3)	1 1	Fr () 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	111 41 1	3 11 11	5 500	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	, i,,		14.	ger a	56 M		1.41	X	3.0	Y		2.5/5
)7			1				I	2		1		12																	X		X		2.5/5
)8	10.5	, , , , }	1 400	1616	H JB	1 2 - 10	100	2		2	4357	2	11.43	1 11 11	No.	10 3 2	2010	7 i 1 in j		4.,	٠.,	(*1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Lands	18	1 1	1 1 2	1 1	X	1 2 1 1 1 1 1 1 1	Х	1 1 2 1 2	2.5/5
9							١	2]	12		12																	X		χ		2.5/5
0	4			i i		(3.9		2		12	1 1	12	, e	1,17	*y +		11/4/1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	. ' . '	, 1 d	1 2	17.11		1137	2 (1) 1 (1)	. '4	,;; ;		X	11.1	X	1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2.5/5
1							1	2		1		2																	X		X		2.5 / 5
2	_																			,		1,1 1			1								2.5 / 5
13								<u> </u>																									2.5 / 5
4	, ,	,		1.			,						1			ļ., .	100		,	1.1		11 .	, · ,	, ,			, ,,			,			2.5 / 5
5																																	2.5 / 5
6	, ,	1			1	C	10	M	٠,,		1,	.:	\$ 5 m		44	1.04			1,100	1	1 ₃₀ 1 4 4 4	14 1 ¹⁸ 1 ² 1	in the s	1 2 1 10	3 3 3	د, ۱۰	45	1.4.1	25.5	, 1, ,11	1100	, 17,	2.5 / 5
7	<u> </u>			1	Ver	<u> </u>																									L		2.5 / 5
8	1 1			,)			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				, ' , '	4.4	1.1			16.1	10		1 6					7.7. 7. 4		1 15	3		, ,	1 "	, ,	1, 1	2.5 / 5
9																																	2.5 / 5
20.	, ,		. 1		,			, ,			1.	,	1 11	٠,٠					1 1			, 4		7 s - 6s				,	1		,	, ,	2.5 / 5
17 18 20 20 20 20 20 20 20 2	er am er cle er am i mL a	ber glas ar glas ber gla mber	ass s ass H glass glass	VOA	O4 es	BI BI BI BI	TOC, P1U P3U P3B P3N P3S	1 lite 250 250 250 250	er plas mL pl mL pl mL pl mL pl mL pl	astic astic astic astic	pres unpre NaOH HNO3 H2SC	s I	henoli	cs, O	VC VC VC	59C 59T 59H 59M 59D	40 m 40 m 40 m 40 m 40 m	nL clean L am nL clean L clean L clean L clean L clean	ber N ar vial ar vial ar vial	orbic a Thic unpri HCL MeO	w/ HC o es		JO JO W(WI	als (>6 GFU GPU GFU PFU PST PLC	4 oz 9 oz 4 oz 4 oz 120 r	ambe ambe clear plasti	rjaru rjaru jarun cjaru	inpres	; ;		es look	in hea	

DC#_Title: ENV-FRM-GBAY-0014 v03_SCUR

Effective Date: 8/17/2022

Sample Condition Upon Receipt Form (SCUR)

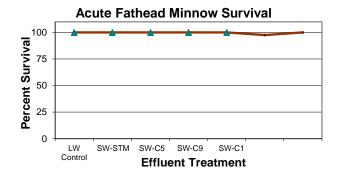
- M		Project #: 110# - 40070000
Client Name: TOW		WO#:40278088
Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS		altco
Client Pace Other:		
Tracking #: 3892519		40278088
Custody Seal on Cooler/Box Present: yesno Seals in	ntact:	☐ yes ☐ qo
•	ntact:	☐ yes ☐ po
	None	
	Wet	Blue Dry None Meltwater Only Person examining contents:
Cooler Temperature Uncorr: 1,1,2 /Corr: 1,1,1		4 .
15 Jos 15 W	ical T	issue is Frozen: ☐ yes☐ no Date! Not /Initials / Ill
Temp should be above freezing to 6°C. Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.		Labeled By Initials:
Chain of Custody Present: ☐Yes ☐No ☐	□n/a	1.
Chain of Custody Filled Out: ☐Yes ☐No ☐	□N/A	2.
Chain of Custody Relinquished: ✓ Yes □No	□n/a	3.
Sampler Name & Signature on COC: ✓Yes ☐No	□n/a	4.
Samples Arrived within Hold Time: ☐Yes ☐No		5.
- DI VOA Samples frozen upon receipt □Yes □No		Date/Time.
Short Hold Time Analysis (<72hr): □Yes → Ho		6.
Rush Turn Around Time Requested: □Yes ☑No		7.
Sufficient Volume:		8.
For Analysis: Pres DNo MS/MSD: Dres DNo	□n/a	
Correct Containers Used: ☐No		9.
Correct Type: Pace Green Bay, Pace IR, Non-Pace		
Containers Intact: ☐Yes ☐No		10.
Filtered volume received for Dissolved tests	□n/a	11.
Sample Labels match COC:	□n/a	12.
-Includes date/time/ID/Analysis Matrix: V	_	
Trip Blank Present: □Yes □No ✓	□N/A	13.
Trip Blank Custody Seals Present □Yes □No ↓	Ø/A	
Pace Trip Blank Lot # (if purchased):		
Client Notification/ Resolution:	Date/T	If checked, see attached form for additional comments
Person Contacted: [Comments/ Resolution:	Date/ I	inie.
	,	
DM Davious in decumented electronically in LIMA Description	n tha :	project, the PM acknowledges they have reviewed the sample logi
rin Review is documented electronically in Links. by feleasing	y uie j	project, the PM acknowledges they have reviewed the sample logil
		Page of

WHOLE EFFLUENT TOXICITY (WET) TEST REPORT FORM

			GENER	AL INFOR	MATION											
	FACILITY:	Foth Infrastructu	re & Env.	WPD	ES PERM	IIT NO.:	N/A	1								
OU	ΓFALL NO.:				DRATORY				nv	ironi	mer	ntal				
	G WATER:			LADO	210/11/0111	TV/ (IVIL.	00	VC L	.110	11 0111	ПСІ	itai				
RECEIVING	S WATER.	IN/A	OAMBI	E INIEGO	AATION											
		0.11451.5.00		E INFORM			_							_		=
		SAMPLE CO		SAMPLE		pH at		HAI			l _F	HOI D	TIME		SAM	
SAMPLE	SAMPLE	BEGINNING	END	COLLEC	AT LAB	LAB		ELIV				< 36			ACC	
NO.	TYPE	DATE	DATE	TION	AT LAD	נו	Υ	∕es, <u><</u>	4 hr	r?)		_ 00	1 IIX:		TAB	E?
1	SW-STM		5/9/2024		2.2	6.86		Yes	V	No	V	Yes	No	\ \ \	Yes	No
2	SW-C5		5/9/2024		2.0	6.31		Yes	_	No	_	Yes		_	Yes	No
3	SW-C9		5/9/2024		1.8	6.09		Yes	_	No	_	Yes			Yes	No
4	SW-C1		5/9/2024		2.4	6.28		Yes		No	_	Yes			Yes	No
-						-		Yes	Ť	No	Ť	Yes	No	_	Yes	No
								Yes	_	No	H	Yes	No	-	Yes	No
	Describe a	ny unusual conditions du	ring sampling that may in	ofluence test i	raculta (caa	Part 6 1 2			tho		anus				165	INO
CC	DESCRIBE UR	ny ariasaar corrainons da			-	7 art 0.1.2	Or ar	ic ivic		us ivit	arrad	ii ioi ex	атрісо.	,		
				INFORM	ATION											
			ACUTE							(CHF	RONIC	;			
Date Tes	st Initiated:		5/10/2024													
Te	sts Are For:				•										•	
	Initial Test:															
ZID	D/IWC Info.:	ZID Compliance	Concentration =	100.00		Instre	eam	ı Wa	iste	e Co	nce	entration	on =			
		C.dubia	FHM	Oth	ner	(C.dı	ıbia				FH	М		Oth	er
Dilu	ıtion Water:	RW	RW		RW			RW				П	RW			RW
	ľ	✓ LW	✓ LW		LW		_	LW					W			LW
				C CONDIT							-					
			Q.7, Q	O OOMBII			ACL	ITF			Г		CHR	ON	IC:	
Temperatur	es maintaine	ed during test? (20 ±	· 1°C or 25 + 1°C)			√ Ye		_	No				Yes		No.	
		mg/l throughout test				✓ Ye			No							
		within 6.0 - 9.0 s.u. t											Yes		No	
		eference tests within				✓ Ye			No		+		Yes		No	
				40		✓ Ye			No		-		Yes		No	
		rbon dioxide atmosp				✓ Ye			No				Yes		✓ No	
		nodified prior to test	Ing?(ex. filtration, aerati	on, chem add	dition)	Ye	S	V	No				Yes		No	1
	OMMENTS:	w	ATER CHEMISTRY		reported in n	ord/L except	ot nH	1)								
SAMPLE								s.u.)				TC	TAL F	PES	ΙΠΙΙΔ	
TYPE	NO.	HARDNESS	ALKALINITY	TOTAL A		Afte	r W	armi				- 10	CHL	DRI	ΝE	_
	SW-STM	72	24	0.0			7.						Not d			
Effluent	SW-C5	64	16	0.0			6.						Not d			
	SW-C9	148	20	0.0			6.						Not d			
	SW-C1	124	26	0.0			6.						Not d			
	MH7324	110	60	N/	/A		7.	4					Not d	etec	ted	
Lab Water																
CC	OMMENTS:	TRC measured via DPD	powder packets, per V	VI protocol.												

	A OUTE TEST O	ONTROL	DEDEGE	MANIOE		
DECENTING WATER	ACUTE TEST C	ONTROL	. PERFOR		ED CONTD	01.0
RECEIVING WATER		Г	athead Minn		ER CONTR	
Fathead Minnow	Ceriodaphnia dubia				C	eriodaphnia dubia
Survival > 90%	Survival > 90%	5	Survival > 90			Survival > 90%
✓ Yes No COMMENTS:	✓ Yes No		✓ Yes	_ INO		✓ Yes No
COMMENTS.						
	ACU	TE TEST	DATA			
SPECIES	EFFLUENT TREATMENT	Pe	rcent Surviv	al By Repli	cate	Mean Percent Survival
		1	2	3	4	
	MH Control	100	100	100	100	100.0
Fathead Minnow	SW-STM	100	100	100	100	100.0
	SW-C5	100	100	100	100	100.0
Age of Organism:	SW-C9	100	100	100	100	100.0
5 Days	SW-C1	100	100	100	100	100.0
FATHEAD MINNOW ACUTE R		>100	C.I.% =	NC	TU _a =	<1
Please descri	ibe any unusual behavior and/or s statistical difference to run Spe EFFLUENT	appearance of earman-Karbe	organisms.(see	e Part 6.1.2 of earman-Karb	the Methods Mer, or Probit N	fanual for ex.)
Please descri COMMENTS: Not enough:	ibe any unusual behavior and/or s statistical difference to run Spe	appearance of earman-Karbe	organisms.(see	e Part 6.1.2 of earman-Karb	the Methods Mer, or Probit N	danual for ex.) lethod for statistical analysis.
Please descri COMMENTS: Not enough:	ibe any unusual behavior and/or s statistical difference to run Spe EFFLUENT	appearance of earman-Karbe Pe	organisms.(see r, Trimmed Sp	e Part 6.1.2 of earman-Karb	the Methods Meer, or Probit N	danual for ex.) lethod for statistical analysis.
Please descri COMMENTS: Not enough:	EFFLUENT TREATMENT MH Control SW-STM	appearance of earman-Karbe Pe	organisms.(see r, Trimmed Sp rcent Surviv	e Part 6.1.2 of earman-Karb al By Repli	the Methods Meer, or Probit N	danual for ex.) lethod for statistical analysis. Mean Percent Survival
Please descriction Please descri	ibe any unusual behavior and/or statistical difference to run Spe EFFLUENT TREATMENT	Pe	organisms.(see r, Trimmed Sp rcent Surviv 2 100	e Part 6.1.2 of earman-Karb al By Repli 3 100	the Methods Meer, or Probit N	Mean Percent Survival
Please descriction Please descri	EFFLUENT TREATMENT MH Control SW-STM SW-C5 SW-C9	Pe 1 100 100	organisms.(see r, Trimmed Sp rcent Surviv 2 100 100	e Part 6.1.2 of earman-Karb al By Replie 3 100 100	the Methods Moer, or Probit Nocate	Mean Percent Survival 100.0 100.0
Please descriction of the comment of	EFFLUENT TREATMENT MH Control SW-STM SW-C5	Pe 1 100 100 100	rcent Surviv	e Part 6.1.2 of earman-Karb al By Repli 3 100 100 100	the Methods Moer, or Probit Notes at the Methods Moer, or Probit Notes at the Methods Moer, or Probit Notes at the Methods Met	Mean Percent Survival 100.0 100.0 100.0
Please descriction of the comment of	EFFLUENT TREATMENT MH Control SW-STM SW-C5 SW-C9	Pe 1 100 100 100 100 100 100	rcent Surviv	e Part 6.1.2 of earman-Karb al By Replication 100 100 100 100 100	the Methods Moer, or Probit Notes at the Methods Moer at the Methods Moer, or Probit Notes at the Methods Moer, or Probit	Mean Percent Survival 100.0 100.0 100.0 100.0 100.0
Please descriction of the comment of	EFFLUENT TREATMENT MH Control SW-STM SW-C5 SW-C9	Pe 1 100 100 100 100 100 100	rcent Surviv	e Part 6.1.2 of earman-Karb al By Replication 100 100 100 100 100	the Methods Moer, or Probit Notes at the Methods Moer at the Methods Moer, or Probit Notes at the Methods Moer, or Probit	Mean Percent Survival 100.0 100.0 100.0 100.0 100.0
Please descriction of the comment of	EFFLUENT TREATMENT MH Control SW-STM SW-C5 SW-C9 SW-C1	Pe 1 100 100 100 100 100 100	rcent Surviv	e Part 6.1.2 of earman-Karb al By Replication 100 100 100 100 100	the Methods Moer, or Probit Notes at the Methods Moer at the Methods Moer, or Probit Notes at the Methods Moer, or Probit	Mean Percent Survival 100.0 100.0 100.0 100.0 100.0

COMMENTS: Not enough statistical difference to run Spearman-Karber, Trimmed Spearman-Karber, or Probit Method for statistical analysis.



Acute C. dubia Survival 100 Percent Survival 0 SW-C9 LW Control SW-STM SW-C5 SW-C1 **Effluent Treatment**

Facility: Foth Infrastructure & Environment, LLC

Permit #: N/A Acute Test Date: 5/10/2024 I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including

the possibility of fine and imprisonment for knowing violations.

LAB REPRESENTATIVE:	Sarah Brown	V		NATURE:	Sar		-
PHONE:	(405) 372-2122	LAB CERT #:	39915458	80		DATE:	5/20/2024
PERMITTEE			SIC	NATURE:			
REPRESENTATIVE:			310.	NATUKE.			
PHONE:			DATE:				

Send <u>all 4 pages</u> of this form (plus any attachments or additional information which you believe to be relevant to the test) to: Biomonitoring Coordinator, Bureau of Watershed Management, Department of Natural Resources, 101 South Webster St., P.O. Box 7921, Madison, WI 53707-7921; according to the timelines specified in your WPDES permit.

Copies of the State of Wisconsin Aquatic Life Toxicity Testing Methods Manual (Methods Manual) and the WET Guidance Document can be obtained from the Biomonitoring Coordinator at the address given above or at: http://dnr.wi.gov/org/water/wm/ww/biomon/biomon.htm

_						
Т	O BE COMPLE	ETED BY THE WIS	CONSIN DEPAR			
				DII	D TESTS PASS	3?
ACUTE	Fathe	ad Minnow	Yes	☐ No	Inconclusive	Unacceptable
ACUTE	Cerioda	phnia dubia	Yes	☐ No	Inconclusive	Unacceptable
CHRONIC	Fathe	ad Minnow	Yes	☐ No	Inconclusive	Unacceptable
CHRONIC	Cerioda	phnia dubia	Yes	☐ No	Inconclusive	Unacceptable
Retests Required?	Yes	No A	Acute / Chronic:	Both Species	C.dubia only	FHM only
Due To:	Failure	QA Problem				
WET Limit Violation?	Yes	No limit in permit	Results Er	ntered Into Data	abase?	Yes No
COMMENTS:						
REVIEWED BY:				DATE:		
CC:				BASIN ENG	INEER	
				PERMIT CC	ORDINATOR	
				PERMIT FIL	E	

Facility: Foth Infrastructure & Environment, LLC

Permit #: N/A
Test Date: 5/10/2024

TEST ID:	191 191-1-24	TEST DATE:	5/10/24
	-		
100% EFFLU	JENT		
Sample ID	Alkalinity mg/L	Hardness mg/L CaCO3	Ammonia mg/L NH3N
051024-06	24	72	0.031
051024-07	16	64	0.023
051024-08	20	148	0.017
051024-09	26	124	0.019
	1		
		1	
CONTROL /	DII LITION WATE	=R	
Sample	Alkalinity	Hardness	Ammonia ma/I NH3N
Sample ID	Alkalinity mg/L	Hardness mg/L CaCO3	mg/L NH3N
Sample	Alkalinity	Hardness	
Sample ID	Alkalinity mg/L	Hardness mg/L CaCO3	mg/L NH3N
Sample ID	Alkalinity mg/L	Hardness mg/L CaCO3	mg/L NH3N
Sample ID	Alkalinity mg/L	Hardness mg/L CaCO3	mg/L NH3N
Sample ID	Alkalinity mg/L	Hardness mg/L CaCO3	mg/L NH3N
Sample ID	Alkalinity mg/L	Hardness mg/L CaCO3	mg/L NH3N
Sample ID	Alkalinity mg/L	Hardness mg/L CaCO3	mg/L NH3N
Sample ID	Alkalinity mg/L	Hardness mg/L CaCO3	mg/L NH3N
Sample ID	Alkalinity mg/L	Hardness mg/L CaCO3	mg/L NH3N
Sample ID	Alkalinity mg/L	Hardness mg/L CaCO3	mg/L NH3N
Sample ID	Alkalinity mg/L	Hardness mg/L CaCO3	mg/L NH3N
Sample ID	Alkalinity mg/L	Hardness mg/L CaCO3	mg/L NH3N
Sample ID	Alkalinity mg/L	Hardness mg/L CaCO3	mg/L NH3N

B.1.0 Page 1 of 1

CLIENT: 191	TEST DATE: 5/10/2024	Comments:
	TEST ID: 191-1-24	

					Initial								Final			
Concentration	Sample ID	Control Water	Client ID	Dilution	pH (s.u.)	DO (mg/L)	Conductivity (µS/cm)	Temp (°C)	Sample ID	Control Water	Client ID	Dilution	pH (s.u.)	DO (mg/L)	Conductivity (µS/cm)	Temp (°C)
0% (SYN)	N/A	MH7324	191	s	7.41	8.12	339	25.4	N/A	MH7324	191	s	7.57	7.83	365	24.2
SW-STM 100%	051024-06	N/A	191	SW-STM	7.39	8.89	101	25.4	051024-06	N/A	191	SW-STM	7.83	7.83	106	24.2
SW-C5 100%	051024-07	N/A	191	SW-C5	6.89	7.25	68	25.5	051024-07	N/A	191	SW-C5	7.82	7.87	71	24.1
SW-C9 100%	051024-08	N/A	191	SW-C9	6.28	6.65	38	25.5	051024-08	N/A	191	SW-C9	7.75	7.86	41	24.0
SW-C1 100%	051024-09	N/A	191	SW-C1	6.2	6.72	84	25.5	051024-09	N/A	191	SW-C1	7.59	7.84	87	24.0
				-	Initial			_				-	<u>Final</u>	/ "		_
Concentration	Sample ID	Control Water	Client ID	Dilution	Initial pH (s.u.)	DO (mg/L)	Conductivity (uS/cm)	Temp (°C)	Sample ID	Control Water	Client ID	Dilution	Final pH (s.u.)	DO (mg/L)	Conductivity (uS/cm)	Temp (°C)
Concentration 0% (SYN)	Sample ID	Control Water	Client ID	Dilution		DO (mg/L)			Sample ID		Client ID	Dilution	pН	DO (mg/L)		
		1			pH (s.u.)		(uS/cm)	(°C)		Water			pH (s.u.)		(uS/cm)	(°C)
0% (SYN)	N/A	MH7324	191	s	pH (s.u.)	7.90	(uS/cm) 356	(°C) 25.5	N/A	Water MH7324	191	s	pH (s.u.) 7.55	7.84	(uS/cm) 369	(°C) 25.0
0% (SYN) SW-STM 100%	N/A 051024-06	MH7324 N/A	191 191	S SW-STM	7.54 6.43	7.90 8.99	(uS/cm) 356 103	(°C) 25.5 25.5	N/A 051024-06	Water MH7324 N/A	191 191	S SW-STM	pH (s.u.) 7.55 7.23	7.84 8.08	(uS/cm) 369 109	(°C) 25.0 24.9

Comments:

CLIENT:		191				STUDY	ID:	191-1	I-24			STAR ¹	T DATE	Ē:		5/	10/2024
TEST TYPE:		Scr	een			•	_		· · ·					TYPE:		M	
ORGANISM SOUF	RCE.		ove			РНОТО	PERIOD:	16 brs lie	aht/8 h	rs dark		- · · · ·					
5.107 II II OIII 0001	·				•		. <u> </u>		g.140 II	. J dain							
TEST ORGANISM:	C -	lubia	ORGANISM	BATCH #-		Cd2024-1	31	TEST ORGA	VISW.		P. prom	nelas	· <u> </u>	ORGANIS	M RATC	ц <i>#</i> . В	p2024-127
TEST METHOD:	WI PUB-		ALGAE BAT			ABSAlg2		TEST METH				WT-797		BRINE BA			rine2024-01
TEST VESSEL CAPACITY			YCT BATCH			YCT0124		TEST VESS			250 mL			-		E START:	
TEST SOLUTION VOLUM		15 mL	FED 2HRS E	SEFORE STA	RT:	СО		TEST SOLU	ITION VO	LUME:	200 mL			RANDOM	IIZED:		СО
NO. ORGANISMS/VESSEI	L <u>:</u>	5	RANDOMIZE	ED:		СО		NO. ORGAN	NISMS/VE	SSEL:	10			AGE:			
NO. REPLICATES:		4	•					NO. REPLIC	CATES:		4			TEMPER	ATURE:		
LIGHT STATION:	CO2 Cha	ımber	•					LIGHT STA	TION:		CO2 Ch	amber		-			
	_				1.40				_								
	(%)	Vessel ID	0	Surviv 24	/al (#) 48	DEAD		-	(%)	Vessel ID	0	24	Surviv 48	/al (#) 72	96	DEAD	
-	(70)				-10	22,12			(70)				-10			<u> </u>	
		S1	5	5	5	0		 		S1	10	10	10	10	10	0	
	%	S2	5	5	5	0			%	S2	10	10	10	10	10	0	
	0 - 1	S3	5	5	5	0			0 - 0	S3	10	10	10	10	10	0	
	Syn	S4	5	5	5	0			Syn	S4	10	10	10	10	10	0	
			,	,	•	Ü				0.	. 0				. 0	j	
	%0	A1	5	5	5	0			%0	A1	10	10	10	10	10	0	
	10	A2	5	5	5	0			10	A2	10	10	10	10	10	0	
	SW-STM - 100%	А3	5	5	5	0			SW-STM - 100%	АЗ	10	10	10	10	10	0	
	LS->	A4	5	5	5	0			-S	A4	10	10	10	10	10	0	
	S								S								
	%	B1	5	5	5	0			%	B1	10	10	10	10	10	0	
	001	B2	5	5	5	0			- 100%	B2	10	10	10	10	10	0	
	5 -	В3	5	5	5	0			2 -	В3	10	10	10	10	10	0	
	SW-C5 - 100%	B4	5	5	5	0			SW-C5	B4	10	10	10	10	10	0	
	S								Ś								
	%(C1	5	5	5	0			%(C1	10	10	10	10	10	0	
	- 100%	C2	5	5	5	0			V-C9 - 100%	C2	10	10	10	10	10	0	
	N-C9 -	C3	5	5	5	0			- 60	C3	10	10	10	10	10	0	
	SW-C	C4	5	5	5	0			SW-C	C4	10	10	10	10	10	0	
	0)								0)							\square	
	%(D1	5	5	5	0			%(D1	10	10	10	10	10	0	
	100	D2	5	5	5	0			- 100%	D2	10	10	10	10	10	0	
	- 5	D3	5	5	5	0			- 5	D3	10	10	10	10	10	0	
	SW-C1 - 100%	D4	5	5	5	0			SW-C1	D4	10	10	10	10	10	0	
	S								S								
		Initials:	SS	JS	СО					Initials	JS	JS	SS	SS	SS	1	
		Time:	1805	1230	1800					Time:	1800	1240	1240	1245	1800]	
		Date:	5/10	5/11	5/12					Date:	5/10	5/11	5/12	5/13	5/14		
		Checked:	SS	JS						Checke	СО	JS	SS	SS		J	
Dilutio	ne	Initials	СО	СО				Dilution	e	Initials	СО	СО	1				
טווענוס	112	Time:	1755	1145				Dilution	3	Time:	1755	1145					
		7 mmg.						1		i iiile.	55						

B.9.0 Page 1 of 1

Reviewed by:

QA Review:

SS

SB

Cove Aquatic Toxicity Laboratory WI Sample Receipt Checklist:

Study ID: _/9/-(-24 Checked in by:	
Date: 5/10/29 Time: 09/5	
 Upon arrival by: Client -was cooler closed and intact and w/ COC? Shipping Courier- was cooler sealed with tape and/or custody seal and was COC attached? 	YES NO
 2. Is the COC filled out correctly? Client Name Analysis Requested Sample location Sampler's Signature Date/Time On/Off Preservation Type (if Any) 	YES NO YES NO YES NO YES NO YES NO
 3. Were the sample(s) received below 6°C? 4. Was ice or ice packs present? 5. Were the sample(s) received within 36 hours of collection? 6. Were the sample(s) shipped in appropriate containers and sealed? 	YES NO YES NO YES NO YES NO
7. Were the sample(s) easy to identify? (Labeled correctly if different?)8. Was total volume of sample adequate to perform the required analysis?	YES NO
Sample ID Description pH DO TRC Pull off	NH3/pH dups

Sample ID	Description	pН	DO	TRC	Pull off Date/Time	NH3/pH dups pulled?
051024-06	SW-STM	6.86	9.96	-	5/9/150	NA
-07	SW-CS	6.31	6.99	-	1000	DATE
-08	SW-C9	6.09	6-93	_	0930	DIE
-09	SW-CI	6.28	7.29	-	Y 1100	V
					Date Hare	12/4/11

WI Secondary Checklist

NH3 STD	NH3 Blank	NH3 Dup	NH3	Chlorine
54	54	54	56	NIA

ULR Vials for NH3 // Run chlorine only if sample is positive

Comments:	
Concurrent WI Reftox necessary	
Do Not Dechlorinate	



AQUATIC TOXICITY LABORATORY

3400 W. Lakeview Rd. Stillwater, OK 74075 Phone 405.372.2122 www.covesciences.com

FLAM	Client/Faci	ility Name: INE Co.	Submit Email:	report to: 5; SHARON: K	DZICK	Kozia	al CON	KICK GLANDER	on con	FOR LAB USE ONLY Client# - Project# - Work On	
			Phone:	(920) 36	2-87	744 F	O No.		Th	YPES: C-Compliance S-Screen	O-Other
Test Sample	Sample	Comi	Type of Sample	Grab	No. of	Cont. Type	Type of	Analysis Required	TEST	SAMPLE ID:	TEMP
No.	Location	Date/Time On	Date/Time Off	Date/Time	Cont.	(P/G)	Preserv.		1177		
1	SW-STM	_	_	5/9/29-115	01	P	NONE	WET TEST /TOXICI	74	05/024-06	2.200
Z	5W-C5	_	_	5/9/24-100		P	NONE	WET TES /TOXICI		-07	2.0%
3	5W-C9	_	-	5/1/24 - 00		P	-	WET TEST/TOXICI		-06	1.8°C
4	5w-C1	-	_	5/9/24-110		P		WET TEST/TOXICE		- 09	2.400
Sample	er's Signature	2	Comments:							✓ On ice upon arrival□ Delivery with attempt to o□ No ice present	cool
	Relinquished b		Date/Time	Sai	mple Rece	ived by:				/Time	
Jim	ENGELHA	ORD?	5/9/24						5	110 24 0915	

CHAIN OF CUSTODY RECORD

(Please complete form as thoroughly as possible, using black or blue ink.)

* UNLESS OTHERWISE NOTED, ALL SAMPLES ARE STORED BELOW 6°C *

Cove Aquatic Toxicity Laboratory Shipping Label Receipt:

Study ID: 191-1-29 Sample ID: 05/024 - 06- 07
- 08
- 09







June 12, 2024

Nick Glander Foth Infrastructure & Environment, LLC 2121 Innovation Court Suite 300 De Pere, WI 54115

RE: Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Dear Nick Glander:

Enclosed are the analytical results for sample(s) received by the laboratory on May 24, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod Noltemeyer

Tod nolteneya

tod.noltemeyer@pacelabs.com

(920)469-2436

Project Manager

Enclosures

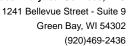
cc: MARK CIARDELLI, Foth Infrastructure & Environment,

LLC

Krystal Clark, Foth Infrastructure & Environment SHARON KOZICKI, Foth Infrastructure & Environment,

LLC







CERTIFICATIONS

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302 Florida/NELAP Certification #: E87948 Illinois Certification #: 200050 Kentucky UST Certification #: 82 Louisiana Certification #: 04168 Minnesota Certification #: 055-999-334 New York Certification #: 12064 North Dakota Certification #: R-150

South Carolina Certification #: 83006001 Texas Certification #: T104704529-21-8 Virginia VELAP Certification ID: 11873 Wisconsin Certification #: 405132750 Wisconsin DATCP Certification #: 105-444 USDA Soil Permit #: P330-21-00008 Federal Fish & Wildlife Permit #: 51774A



SAMPLE SUMMARY

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40278809001	SW-C9_20240523	Water	05/23/24 10:37	05/24/24 11:05
40278809002	SW-C1_20240523	Water	05/23/24 09:44	05/24/24 11:05
40278809003	SW-STM_20240523	Water	05/23/24 07:07	05/24/24 11:05
40278809004	SW-C5_20240523	Water	05/23/24 10:05	05/24/24 11:05
40278809005	SW-EB_20240523	Water	05/23/24 08:57	05/24/24 11:05
40278809006	SW-NBOUT_20240523	Water	05/23/24 08:32	05/24/24 11:05
40278809007	SW-NB_20240523	Water	05/23/24 08:02	05/24/24 11:05
40278809008	SW-HWY27W_20240523	Water	05/23/24 11:35	05/24/24 11:05
40278809009	SW-HWY27E_20240523	Water	05/23/24 12:17	05/24/24 11:05
40278809010	CP-04_20240523	Water	05/23/24 09:22	05/24/24 11:05
40278809011	SW-C9-DUP-20240523	Water	05/23/24 10:37	05/24/24 11:05



SAMPLE ANALYTE COUNT

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

ab ID	Sample ID	Method	Analysts	Analytes Reported
0278809001	SW-C9_20240523	EPA 6020B	TXW	9
		EPA 6020B	TXW	9
		SM 2540D	TXW	1
		SM 4500-S F (2000)	TXW	1
		SM 4500-S F (2000)	TXW	1
		EPA 300.0	HMB	2
		EPA 300.0	TMK	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
278809002	SW-C1_20240523	EPA 6020B	TXW	9
		EPA 6020B	TXW	9
		SM 2540D	TXW	1
		SM 4500-S F (2000)	TXW	1
		SM 4500-S F (2000)	TXW	1
		EPA 300.0	HMB	2
		EPA 300.0	TMK	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
278809003	SW-STM_20240523	EPA 6020B	TXW	9
		EPA 6020B	TXW	9
		SM 2540D	TXW	1
		SM 4500-S F (2000)	TXW	1
		SM 4500-S F (2000)	TXW	1
		EPA 300.0	HMB	2
		EPA 300.0	TMK	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
278809004	SW-C5_20240523	EPA 6020B	TXW	9
		EPA 6020B	TXW	9
		SM 2540D	TXW	1
		SM 4500-S F (2000)	TXW	1
		SM 4500-S F (2000)	TXW	1
		EPA 300.0	HMB	2
		EPA 300.0	TMK	2

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



SAMPLE ANALYTE COUNT

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
0278809005	SW-EB_20240523	EPA 6020B	TXW	9
		EPA 6020B	TXW	9
		SM 2540D	TXW	1
		SM 4500-S F (2000)	TXW	1
		SM 4500-S F (2000)	TXW	1
		EPA 300.0	HMB	2
		EPA 300.0	TMK	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
40278809006	SW-NBOUT_20240523	EPA 6020B	TXW	9
		EPA 6020B	TXW	9
		SM 2540D	TXW	1
		SM 4500-S F (2000)	TXW	1
		SM 4500-S F (2000)	TXW	1
		EPA 300.0	HMB	2
		EPA 300.0	TMK	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
0278809007	SW-NB_20240523	EPA 6020B	TXW	9
		EPA 6020B	TXW	9
		SM 2540D	TXW	1
		SM 4500-S F (2000)	TXW	1
		SM 4500-S F (2000)	TXW	1
		EPA 300.0	HMB	2
		EPA 300.0	TMK	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
0278809008	SW-HWY27W_20240523	EPA 6020B	TXW	9
		EPA 6020B	TXW	9
		SM 2540D	TXW	1
		SM 4500-S F (2000)	TXW	1

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.

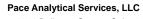


SAMPLE ANALYTE COUNT

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

_ab ID	Sample ID	Method	Analysts	Analytes Reported
		SM 4500-S F (2000)	TXW	1
		EPA 300.0	НМВ	2
		EPA 300.0	TMK	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
0278809009	SW-HWY27E_20240523	EPA 6020B	TXW	9
		EPA 6020B	TXW	9
		SM 2540D	TXW	1
		SM 4500-S F (2000)	TXW	1
		SM 4500-S F (2000)	TXW	1
		EPA 300.0	HMB	2
		EPA 300.0	TMK	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
0278809010	CP-04_20240523	EPA 6020B	TXW	9
		EPA 6020B	TXW	9
		SM 2540D	TXW	1
		SM 4500-S F (2000)	TXW	1
		SM 4500-S F (2000)	TXW	1
		EPA 300.0	HMB	2
		EPA 300.0	TMK	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
0278809011	SW-C9-DUP-20240523	EPA 6020B	TXW	9
		EPA 6020B	TXW	9
		SM 2540D	TXW	1
		SM 4500-S F (2000)	TXW	1
		SM 4500-S F (2000)	TXW	1
		EPA 300.0	HMB	2
		EPA 300.0	TMK	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1





SAMPLE ANALYTE COUNT

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Lab ID Sample ID Method Analysts Reported

PASI-G = Pace Analytical Services - Green Bay



Green Bay, WI 54302 (920)469-2436

PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Method: EPA 6020B

Description: 6020B MET ICPMS

Client: Foth Infrastructure & Environment

Date: June 12, 2024

General Information:

11 samples were analyzed for EPA 6020B by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

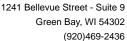
QC Batch: 475331

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278809001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2722864)
 - Calcium

Additional Comments:





PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Method: EPA 6020B

Description: 6020B MET ICPMS, Dissolved **Client:** Foth Infrastructure & Environment

Date: June 12, 2024

General Information:

11 samples were analyzed for EPA 6020B by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:



Green Bay, WI 54302 (920)469-2436

PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Method: SM 2540D

Description: 2540D Total Suspended Solids **Client:** Foth Infrastructure & Environment

Date: June 12, 2024

General Information:

11 samples were analyzed for SM 2540D by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 475590

PP: The mass of dried residue obtained did not meet the test method requirements based on volume used.

- SW-C1_20240523 (Lab ID: 40278809002)
 - Total Suspended Solids
- SW-C5_20240523 (Lab ID: 40278809004)
 - Total Suspended Solids
- SW-HWY27E_20240523 (Lab ID: 40278809009)
 - Total Suspended Solids
- SW-NBOUT_20240523 (Lab ID: 40278809006)
 - Total Suspended Solids

T3: Insufficient sample received from client to perform the analysis per EPA method requirements.

- SW-C1_20240523 (Lab ID: 40278809002)
 - Total Suspended Solids
- SW-C5_20240523 (Lab ID: 40278809004)
 - Total Suspended Solids
- SW-HWY27E_20240523 (Lab ID: 40278809009)
 - Total Suspended Solids
- SW-NBOUT_20240523 (Lab ID: 40278809006)
 - Total Suspended Solids



PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Method: SM 4500-S F (2000)

Description: 4500S2F Sulfide, lodometric

Client: Foth Infrastructure & Environment

Date: June 12, 2024

General Information:

11 samples were analyzed for SM 4500-S F (2000) by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:



PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Method: SM 4500-S F (2000)

Description: 4500S2F Sulfide,Diss Iodometrc **Client:** Foth Infrastructure & Environment

Date: June 12, 2024

General Information:

11 samples were analyzed for SM 4500-S F (2000) by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:



PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Method: EPA 300.0

Description: 300.0 IC Anions

Client: Foth Infrastructure & Environment

Date: June 12, 2024

General Information:

11 samples were analyzed for EPA 300.0 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 475848

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278809004

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2725174)
 - Chloride
 - Sulfate

Additional Comments:

Analyte Comments:

QC Batch: 475847

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- SW-C1_20240523 (Lab ID: 40278809002)
 - Chloride
 - Sulfate
- SW-C9_20240523 (Lab ID: 40278809001)
 - Chloride
 - Sulfate
- SW-STM_20240523 (Lab ID: 40278809003)
 - Chloride
 - Sulfate

QC Batch: 475848

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- CP-04 20240523 (Lab ID: 40278809010)
 - Sulfate
- SW-C5_20240523 (Lab ID: 40278809004)
 - Chloride



PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Method: EPA 300.0
Description: 300.0 IC Anions

Client: Foth Infrastructure & Environment

Date: June 12, 2024

Analyte Comments: QC Batch: 475848

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- SW-C5_20240523 (Lab ID: 40278809004)
 - Sulfate
- SW-C9-DUP-20240523 (Lab ID: 40278809011)
 - ChlorideSulfate
- SW-HWY27E_20240523 (Lab ID: 40278809009)
 - ChlorideSulfate
- SW-HWY27W_20240523 (Lab ID: 40278809008)
 - Sulfate



Green Bay, WI 54302 (920)469-2436

PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Method: EPA 300.0

Description: 300.0 IC Anions, Dissolved **Client:** Foth Infrastructure & Environment

Date: June 12, 2024

General Information:

11 samples were analyzed for EPA 300.0 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 475997

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40278790010,40278809006

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MSD (Lab ID: 2726179)
 - · Sulfate, Dissolved

Additional Comments:

Analyte Comments:

QC Batch: 475997

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- SW-C1_20240523 (Lab ID: 40278809002)
 - · Chloride, Dissolved
 - Sulfate, Dissolved
- SW-C5_20240523 (Lab ID: 40278809004)
 - Chloride, Dissolved
 - · Sulfate, Dissolved
- SW-C9_20240523 (Lab ID: 40278809001)
 - · Chloride, Dissolved
 - Sulfate, Dissolved
- SW-EB_20240523 (Lab ID: 40278809005)
 - · Sulfate, Dissolved
- SW-NBOUT_20240523 (Lab ID: 40278809006)
 - · Chloride, Dissolved
 - · Sulfate, Dissolved
- SW-STM_20240523 (Lab ID: 40278809003)
 - Chloride, Dissolved
 - · Sulfate, Dissolved



Green Bay, WI 54302 (920)469-2436

PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Method: EPA 300.0

Description: 300.0 IC Anions, Dissolved **Client:** Foth Infrastructure & Environment

Date: June 12, 2024

Analyte Comments: QC Batch: 476089

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- CP-04_20240523 (Lab ID: 40278809010)
 - · Sulfate, Dissolved
- SW-C9-DUP-20240523 (Lab ID: 40278809011)
 - Chloride, Dissolved
 - · Sulfate, Dissolved
- SW-HWY27E_20240523 (Lab ID: 40278809009)
 - · Chloride, Dissolved
 - · Sulfate, Dissolved
- SW-HWY27W_20240523 (Lab ID: 40278809008)
 - · Sulfate, Dissolved
- SW-NB_20240523 (Lab ID: 40278809007)
 - Sulfate, Dissolved



PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Method: EPA 310.2 Description: 310.2 Alkalinity

Client: Foth Infrastructure & Environment

Date: June 12, 2024

General Information:

11 samples were analyzed for EPA 310.2 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

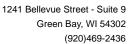
Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:





PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Method: EPA 310.2

Description: 310.2 Alkalinity, Dissolved

Client: Foth Infrastructure & Environment

Date: June 12, 2024

General Information:

11 samples were analyzed for EPA 310.2 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

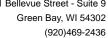
Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:





PROJECT NARRATIVE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Method: SM 5310C

Description: 5310C Dissolved Organic Carbon **Client:** Foth Infrastructure & Environment

Date: June 12, 2024

General Information:

11 samples were analyzed for SM 5310C by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

Sample: SW-C9_20240523	Lab ID: 4	10278809001	Collected	d: 05/23/24	1 10:37	Received: 05/	24/24 11:05 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical N	/lethod: EPA 6	020B Prepa	aration Met	hod: EF	PA 3010A			
	Pace Analy	tical Services	- Green Bay	/					
Calcium	3100	ug/L	254	76.2	1	05/28/24 06:50	06/08/24 13:31	7440-70-2	MO
Copper	6.5	ug/L	6.4	1.9	1	05/28/24 06:50	06/08/24 13:31		
Iron	1260	ug/L	250	58.0	1	05/28/24 06:50			
Magnesium	1020	ug/L	250	31.2	1	05/28/24 06:50	06/08/24 13:31	7439-95-4	
Manganese	57.7	ug/L	4.0	1.2	1	05/28/24 06:50	06/08/24 13:31	7439-96-5	
Potassium	797	ug/L	789	237	1	05/28/24 06:50	06/08/24 13:31	7440-09-7	
Sodium	1840	ug/L	250	42.0	1	05/28/24 06:50	06/08/24 13:31	7440-23-5	
Total Hardness by 2340B	12.0	mg/L	1.7	0.32	1	05/28/24 06:50	06/08/24 13:31		
Zinc	15.5J	ug/L	34.4	10.3	1	05/28/24 06:50	06/08/24 13:31	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical N	/lethod: EPA 6	020B Prepa	aration Met	hod: EF	PA 3010A			
	Pace Analy	tical Services	- Green Bay	/					
Calcium, Dissolved	2890	ug/L	254	76.2	1	06/03/24 07:25	06/08/24 10:49	7440-70-2	
Copper, Dissolved	4.6J	ug/L	6.4	1.9	1	06/03/24 07:25	06/08/24 10:49	7440-50-8	
Iron, Dissolved	459	ug/L	250	58.0	1	06/03/24 07:25			
Magnesium, Dissolved	1040	ug/L	250	31.2	1		06/08/24 10:49		D9
Manganese, Dissolved	46.6	ug/L	4.0	1.2	1	06/03/24 07:25			
Potassium, Dissolved	764J	ug/L	789	237	1	06/03/24 07:25	06/08/24 10:49	7440-09-7	
Sodium, Dissolved	1950	ug/L	250	42.0	1	06/03/24 07:25	06/08/24 10:49	7440-23-5	D9
Total Hardness by 2340B, Dissolved	11.5	mg/L	1.7	0.32	1	06/03/24 07:25	06/08/24 10:49		
Zinc, Dissolved	15.4J	ug/L	34.4	10.3	1	06/03/24 07:25	06/08/24 10:49	7440-66-6	
2540D Total Suspended Solids	•	Method: SM 25		/					
Total Suspended Solids	3.4	mg/L	1.1	0.50	1		05/29/24 15:40		
4500S2F Sulfide, Iodometric		леthod: SM 45	00-S F (200	00)					
	Pace Analy	tical Services	- Green Bay	/					
Sulfide	<1.2	mg/L	4.0	1.2	1		05/30/24 11:46		
4500S2F Sulfide,Diss Iodometrc	-	Method: SM 45	•	,					
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		05/30/24 12:49		
		Method: EPA 3		-					
300.0 IC Anions	•	tical Services		/					
Chloride	<3.0	mg/L	10.0	3.0	5		06/05/24 01:38		D3
Sulfate	<2.2	mg/L	10.0	2.2	5		06/05/24 01:38	14808-79-8	D3
300.0 IC Anions, Dissolved	•	Method: EPA 30 tical Services		<i>(</i>					
Chloride, Dissolved	<3.0	mg/L	10.0	3.0	5		06/06/24 15:37	16887-00-6	D3
Sulfate, Dissolved	<2.2	mg/L	10.0	2.2	5		06/06/24 15:37		D3

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Sample: SW-C9_20240523	Lab ID:	40278809001	Collecte	d: 05/23/24	1 10:37	Received: 05/	/24/24 11:05 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	<7.4	mg/L	25.0	7.4	1		05/29/24 10:23		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	<7.4	mg/L	25.0	7.4	1		05/29/24 11:34		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
_	Pace Anal	ytical Services	- Green Ba	y					
Dissolved Organic Carbon	17.2	mg/L	0.50	0.19	1		06/03/24 11:05		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

Sample: SW-C1_20240523	Lab ID:	40278809002	Collected:	: 05/23/24	1 09:44	Received: 05/	24/24 11:05 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 60	020B Prepa	ration Met	hod: EF	PA 3010A			
	Pace Anal	ytical Services -	- Green Bay						
Calcium	4910	ug/L	254	76.2	1	05/28/24 06:50	06/08/24 14:00	7440-70-2	
Copper	13.6	ug/L	6.4	1.9	1	05/28/24 06:50	06/08/24 14:00		
Iron	914	ug/L	250	58.0	1	05/28/24 06:50	06/08/24 14:00	7439-89-6	
Magnesium	1770	ug/L	250	31.2	1	05/28/24 06:50	06/08/24 14:00	7439-95-4	
Manganese	27.3	ug/L	4.0	1.2	1	05/28/24 06:50	06/08/24 14:00	7439-96-5	
Potassium	418J	ug/L	789	237	1	05/28/24 06:50		7440-09-7	
Sodium	3590	ug/L	250	42.0	1	05/28/24 06:50		7440-23-5	
Total Hardness by 2340B	19.5	mg/L	1.7	0.32	1	05/28/24 06:50			
Zinc	14.7J	ug/L	34.4	10.3	1	05/28/24 06:50		7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 60	020B Prepa	ration Met	hod: EF	PA 3010A			
,		ytical Services							
Calcium, Dissolved	5270	ug/L	254	76.2	1	06/03/24 07:25	06/08/24 11:14	7440-70-2	D9
Copper, Dissolved	12.5	ug/L	6.4	1.9	1	06/03/24 07:25	06/08/24 11:14	7440-50-8	
Iron, Dissolved	557	ug/L	250	58.0	1	06/03/24 07:25	06/08/24 11:14	7439-89-6	
Magnesium, Dissolved	1900	ug/L	250	31.2	1	06/03/24 07:25	06/08/24 11:14	7439-95-4	D9
Manganese, Dissolved	21.2	ug/L	4.0	1.2	1	06/03/24 07:25			
Potassium, Dissolved	414J	ug/L	789	237	1	06/03/24 07:25	06/08/24 11:14	7440-09-7	
Sodium, Dissolved	3970	ug/L	250	42.0	1	06/03/24 07:25	06/08/24 11:14	7440-23-5	D9
Total Hardness by 2340B, Dissolved	21.0	mg/L	1.7	0.32	1	06/03/24 07:25	06/08/24 11:14		
Zinc, Dissolved	14.4J	ug/L	34.4	10.3	1	06/03/24 07:25	06/08/24 11:14	7440-66-6	
2540D Total Suspended Solids	•	Method: SM 25 ytical Services							
Total Suspended Solids	1.7	mg/L	1.1	0.50	1		05/29/24 15:40		PP,T3
4500S2F Sulfide, lodometric		Method: SM 45 ytical Services							
Sulfide	1.8J	mg/L	4.0	1.2	1		05/30/24 11:51		
4500S2F Sulfide,Diss Iodometrc		Method: SM 45 ytical Services							
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		05/30/24 12:53		
300.0 IC Anions	,	Method: EPA 30 ytical Services							
Chloride	5.4J	mg/L	10.0	3.0	5		06/05/24 01:53	16887-00-6	D3
Sulfate	<2.2	mg/L	10.0	2.2	5		06/05/24 01:53		D3
300.0 IC Anions, Dissolved	•	Method: EPA 30 ytical Services							
Chloride, Dissolved	5.4J	mg/L	10.0	3.0	5		06/06/24 15:52	16887-00-6	D3
Critoriae, Dissolved									



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Sample: SW-C1_20240523	Lab ID:	40278809002	Collected	d: 05/23/24	4 09:44	Received: 05	/24/24 11:05 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	•	Method: EPA 3 lytical Services		<i>(</i>					
Alkalinity, Total as CaCO3	11.1J	mg/L	25.0	7.4	1		05/29/24 10:24		
310.2 Alkalinity, Dissolved	•	Method: EPA 3 lytical Services		/					
Alkalinity, Total as CaCO3, Dissolved	10.8J	mg/L	25.0	7.4	1		05/29/24 11:35		
5310C Dissolved Organic Carbon	,	Method: SM 53 lytical Services		<i>'</i>					
Dissolved Organic Carbon	16.2	mg/L	0.50	0.19	1		06/03/24 11:22		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

Sample: SW-STM_20240523	Lab ID:	40278809003	Collected	: 05/23/24	07:07	Received: 05/	24/24 11:05 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 60	020B Prepa	ration Met	hod: EF	PA 3010A			
	Pace Anal	ytical Services -	- Green Bay						
Calcium	4850	ug/L	254	76.2	1	05/28/24 06:50	06/08/24 14:08	7440-70-2	
Copper	13.0	ug/L	6.4	1.9	1	05/28/24 06:50	06/08/24 14:08		
Iron	1010	ug/L	250	58.0	1	05/28/24 06:50	06/08/24 14:08	7439-89-6	
Magnesium	1860	ug/L	250	31.2	1	05/28/24 06:50	06/08/24 14:08	7439-95-4	
Manganese	24.0	ug/L	4.0	1.2	1	05/28/24 06:50	06/08/24 14:08	7439-96-5	
Potassium	823	ug/L	789	237	1	05/28/24 06:50		7440-09-7	
Sodium	4930	ug/L	250	42.0	1	05/28/24 06:50			
Total Hardness by 2340B	19.8	mg/L	1.7	0.32	1	05/28/24 06:50			
Zinc	12.7J	ug/L	34.4	10.3	1		06/08/24 14:08	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 60	020B Prepa	ration Met	hod: EF	PA 3010A			
,	-	ytical Services							
Calcium, Dissolved	5320	ug/L	254	76.2	1	06/03/24 07:25	06/08/24 11:22	7440-70-2	D9
Copper, Dissolved	12.6	ug/L	6.4	1.9	1	06/03/24 07:25	06/08/24 11:22		_ •
Iron, Dissolved	500	ug/L	250	58.0	1		06/08/24 11:22		
Magnesium, Dissolved	2020	ug/L	250	31.2	1		06/08/24 11:22		D9
Manganese, Dissolved	16.3	ug/L	4.0	1.2	1	06/03/24 07:25			20
Potassium, Dissolved	853	ug/L	789	237	1	06/03/24 07:25			D9
Sodium, Dissolved	5670	ug/L	250	42.0	1	06/03/24 07:25	06/08/24 11:22		D9
Total Hardness by 2340B, Dissolved	21.6	mg/L	1.7	0.32	1		06/08/24 11:22	7 7 70 20 0	20
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	06/03/24 07:25	06/08/24 11:22	7440-66-6	
2540D Total Suspended Solids	•	Method: SM 25							
	Pace Anal	ytical Services -	- Green Bay						
Total Suspended Solids	4.6	mg/L	1.1	0.50	1		05/29/24 15:40		
4500S2F Sulfide, Iodometric	-	Method: SM 45 ytical Services							
Sulfide	<1.2	mg/L	4.0	1.2	1		05/30/24 11:52		
4500S2F Sulfide,Diss Iodometrc	-	Method: SM 45 ytical Services							
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		05/30/24 12:55		
300.0 IC Anions	,	Method: EPA 30 ytical Services							
Chloride	7.4J	mg/L	10.0	3.0	5		06/05/24 02:08	16887-00-6	D3
Sulfate	<2.2	mg/L	10.0	2.2	5		06/05/24 02:08		D3
300.0 IC Anions, Dissolved	-	Method: EPA 30 ytical Services							
Chloride, Dissolved	7.1J	mg/L	10.0	3.0	5		06/06/24 16:51	16887-00-6	D3
· · / · · · · · · · · · · · · · · · · ·	<2.2	mg/L			-				-

(920)469-2436



ANALYTICAL RESULTS

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Sample: SW-STM_20240523	Lab ID:	40278809003	Collecte	d: 05/23/24	1 07:07	Received: 05/	/24/24 11:05 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Anal	lytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	10.8J	mg/L	25.0	7.4	1		05/29/24 10:25		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Anal	lytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	10.3J	mg/L	25.0	7.4	1		05/29/24 11:36		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
	Pace Anal	lytical Services	- Green Ba	y					
Dissolved Organic Carbon	16.0	mg/L	0.50	0.19	1		06/03/24 11:39		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

Sample: SW-C5_20240523	Lab ID:	40278809004	Collected	: 05/23/24	10:05	Received: 05/	24/24 11:05 Ma	atrix: Water			
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual		
6020B MET ICPMS	Analytical	Method: EPA 60	020B Prepa	ration Met	hod: EF	PA 3010A					
	Pace Ana	lytical Services -	Green Bay								
Calcium	3980	ug/L	254	76.2	1	05/28/24 06:50	06/08/24 14:13	7440-70-2			
Copper	13.2	ug/L	6.4	1.9	1	05/28/24 06:50	06/08/24 14:13	7440-50-8			
Iron	865	ug/L	250	58.0	1	05/28/24 06:50	06/08/24 14:13	7439-89-6			
Magnesium	1410	ug/L	250	31.2	1	05/28/24 06:50	06/08/24 14:13	7439-95-4			
Manganese	22.0	ug/L	4.0	1.2	1	05/28/24 06:50	06/08/24 14:13	7439-96-5			
Potassium	349J	ug/L	789	237	1	05/28/24 06:50		7440-09-7			
Sodium	2880	ug/L	250	42.0	1	05/28/24 06:50	06/08/24 14:13	7440-23-5			
Total Hardness by 2340B	15.7	mg/L	1.7	0.32	1	05/28/24 06:50					
Zinc	13.9J	ug/L	34.4	10.3	1		06/08/24 14:13	7440-66-6			
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 60	020B Prepa	ration Met	hod: EF	PA 3010A					
	-	lytical Services									
Calcium, Dissolved	4400	ug/L	254	76.2	1	06/03/24 07:25	06/08/24 11:26	7440-70-2	D9		
Copper, Dissolved	11.8	ug/L	6.4	1.9	1	06/03/24 07:25					
Iron, Dissolved	528	ug/L	250	58.0	1	06/03/24 07:25					
Magnesium, Dissolved	1540	ug/L	250	31.2	1		06/08/24 11:26		D9		
Manganese, Dissolved	16.3	ug/L	4.0	1.2	1	06/03/24 07:25			В		
Potassium, Dissolved	358J	ug/L	789	237	1	06/03/24 07:25					
Sodium, Dissolved	3130	ug/L	250	42.0	1	06/03/24 07:25			D9		
Total Hardness by 2340B,	17.3	mg/L	1.7	0.32	1	06/03/24 07:25		7440-23-3	Da		
Dissolved		•	1.7		'	00/03/24 07.23	00/08/24 11.20				
Zinc, Dissolved	13.7J	ug/L	34.4	10.3	1	06/03/24 07:25	06/08/24 11:26	7440-66-6			
2540D Total Suspended Solids	Analytical	Method: SM 25	40D								
	Pace Ana	lytical Services -	Green Bay								
Total Suspended Solids	1.6	mg/L	1.0	0.49	1		05/29/24 15:40		PP,T3		
4500S2F Sulfide, Iodometric	-	Method: SM 45 lytical Services									
Sulfide	<1.2	mg/L	4.0	1.2	1		05/30/24 11:54				
4500S2F Sulfide,Diss Iodometrc	-	Method: SM 45									
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		05/30/24 13:00				
300.0 IC Anions		Method: EPA 30	20.0								
300.0 IC AIIIOIIS	•	lytical Services									
Chloride	3.6J	mg/L	10.0	3.0	5		06/05/24 15:48		D3,M0		
Sulfate	<2.2	mg/L	10.0	2.2	5		06/05/24 15:48	14808-79-8	D3,M0		
300.0 IC Anions, Dissolved	-	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Chloride, Dissolved	3.9J	mg/L	10.0	3.0	5		06/06/24 17:06	16887-00-6	D3		
Sulfate, Dissolved	<2.2	mg/L						_			



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Sample: SW-C5_20240523	Lab ID:	40278809004	Collected	d: 05/23/24	1 10:05	Received: 05/	/24/24 11:05 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Ana	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	10J	mg/L	25.0	7.4	1		05/29/24 10:26		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Ana	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	8.6J	mg/L	25.0	7.4	1		05/29/24 11:37		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
	Pace Ana	ytical Services	- Green Ba	У					
Dissolved Organic Carbon	16.6	mg/L	0.50	0.19	1		06/03/24 11:57		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

Sample: SW-EB_20240523	Lab ID: 4027	8809005	Collected	: 05/23/24	08:57	Received: 05/	24/24 11:05 Ma	atrix: Water	
Parameters	Results U	nits	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical Meth	od: EPA 60	20B Prepa	aration Met	hod: EF	PA 3010A			
	Pace Analytical	Services -	Green Bay	,					
Calcium	9220 u	g/L	254	76.2	1	05/28/24 06:50	06/08/24 13:52	7440-70-2	
Copper		g/L g/L	6.4	1.9	1	05/28/24 06:50			
ron		g/L	250	58.0	1		06/08/24 13:52		
Magnesium		g/L	250	31.2	1	05/28/24 06:50			
Manganese		g/L	4.0	1.2	1		06/08/24 13:52		
Potassium		g/L	789	237	1		06/08/24 13:52		
Sodium		g/L	250	42.0	1	05/28/24 06:50			
Total Hardness by 2340B		g/L	1.7	0.32	1	05/28/24 06:50		20 0	
Zinc		g/L	34.4	10.3	1		06/08/24 13:52	7440-66-6	
020B MET ICPMS, Dissolved	Analytical Meth	od: EPA 60	20B Prepa	aration Met	hod: EF	PA 3010A			
	Pace Analytical								
Calcium, Dissolved	10000 u	g/L	254	76.2	1	06/03/24 07:25	06/08/24 11:30	7440-70-2	D9
Copper, Dissolved		g/L	6.4	1.9	1	06/03/24 07:25	06/08/24 11:30		
ron, Dissolved		g/L	250	58.0	1		06/08/24 11:30		
Magnesium, Dissolved		g/L	250	31.2	1		06/08/24 11:30		D9
langanese, Dissolved		g/L	4.0	1.2	1		06/08/24 11:30		
Potassium, Dissolved		g/L	789	237	1		06/08/24 11:30		
Sodium, Dissolved		g/L	250	42.0	1		06/08/24 11:30		D9
otal Hardness by 2340B, Dissolved		g/L	1.7	0.32	1		06/08/24 11:30	20 0	
Zinc, Dissolved	<10.3 u	g/L	34.4	10.3	1	06/03/24 07:25	06/08/24 11:30	7440-66-6	
540D Total Suspended Solids	Analytical Meth	od: SM 254	40D						
•	Pace Analytical			,					
Total Suspended Solids	4.1 m	g/L	1.1	0.51	1		05/29/24 15:40		
1500S2F Sulfide, lodometric	Analytical Meth Pace Analytical		•	,					
Sulfide	<1.2 m	g/L	4.0	1.2	1		05/30/24 11:56		
500S2F Sulfide, Diss Iodometro	Analytical Meth	od: SM 450	00-S F (200	00)					
	Pace Analytical	Services -	Green Bay	,					
Sulfide, Dissolved	<1.2 m	g/L	4.0	1.2	1		05/30/24 13:01		
300.0 IC Anions	Analytical Meth	od: EPA 30	0.0						
	Pace Analytical	Services -	Green Bay	,					
Chloride	12.3 m	g/L	10.0	3.0	5		06/05/24 16:33	16887-00-6	
Sulfate		g/L	10.0	2.2	5		06/05/24 16:33		MO
800.0 IC Anions, Dissolved	Analytical Meth	od: EPA 30	0.0						
	Pace Analytical			,					
Chloride, Dissolved	11.6 m	g/L	10.0	3.0	5		06/06/24 17:21	16887-00-6	
Sulfate, Dissolved		g/L	10.0	2.2	5		06/06/24 17:21		D3

(920)469-2436



ANALYTICAL RESULTS

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Sample: SW-EB_20240523	Lab ID:	40278809005	Collected	d: 05/23/24	1 08:57	Received: 05	5/24/24 11:05 Ma	trix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	•	Method: EPA 3 lytical Services		/					
Alkalinity, Total as CaCO3	29.4	mg/L	25.0	7.4	1		05/29/24 10:27		
310.2 Alkalinity, Dissolved	•	Method: EPA 3 lytical Services		/					
Alkalinity, Total as CaCO3, Dissolved	31.7	mg/L	25.0	7.4	1		05/29/24 11:38		
5310C Dissolved Organic Carbon	,	Method: SM 53 lytical Services		/					
Dissolved Organic Carbon	18.4	mg/L	1.5	0.57	3		06/03/24 12:44		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

				08:32		24/24 11:05 Ma	atrix: Water	
Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Analytical	Method: EPA 6	020B Prepa	ration Met	hod: EF	PA 3010A			
Pace Anal	ytical Services	Green Bay						
12000	ug/L	254	76.2	1	05/28/24 06:50	06/08/24 14:17	7440-70-2	
8.0	•	6.4	1.9	1	05/28/24 06:50			
988	ug/L	250	58.0	1	05/28/24 06:50	06/08/24 14:17	7439-89-6	
5220	Ū	250	31.2	1	05/28/24 06:50			
46.0	-	4.0	1.2	1	05/28/24 06:50	06/08/24 14:17	7439-96-5	
518J	•		237	1			7440-09-7	
	ŭ			1	05/28/24 06:50	06/08/24 14:17	7440-23-5	
	•	1.7		1				
<10.3	ug/L	34.4	10.3	1			7440-66-6	
Analytical	Method: EPA 6	020B Prepa	ration Met	hod: EF	PA 3010A			
12600	ug/L	254	76.2	1	06/03/24 07:25	06/08/24 11:35	7440-70-2	D9
7.2	•	6.4	1.9	1	06/03/24 07:25	06/08/24 11:35	7440-50-8	
456	-		58.0	1	06/03/24 07:25	06/08/24 11:35	7439-89-6	
	-		31.2	1	06/03/24 07:25	06/08/24 11:35	7439-95-4	D9
	•		1.2	1				
505J	•		237	1	06/03/24 07:25	06/08/24 11:35	7440-09-7	
5460	•			1	06/03/24 07:25		7440-23-5	D9
54.1	mg/L	1.7	0.32	1	06/03/24 07:25	06/08/24 11:35		
<10.3	ug/L	34.4	10.3	1	06/03/24 07:25	06/08/24 11:35	7440-66-6	
•								
2.2	mg/L	1.0	0.48	1		05/29/24 15:40		PP,T3
<1.2	mg/L	4.0	1.2	1		05/30/24 11:59		
<1.2	mg/L	4.0	1.2	1		05/30/24 13:03		
•								
6.7J	mg/L	10.0	3.0	5		06/05/24 16:47	16887-00-6	МО
<2.2	mg/L	10.0	2.2	5				M0
•								
6.9J	mg/L	10.0	3.0	5		06/06/24 17:36	16887-00-6	D3
<2.2	mg/L	10.0	2.2	5		06/06/24 17:36		D3
	Analytical Pace Anal 12000 8.0 988 5220 46.0 518J 5030 51.5 <10.3 Analytical Pace Anal 12600 7.2 456 5500 42.6 505J 5460 54.1 <10.3 Analytical Pace Anal 2.2 Analytical Pace Anal <1.2 Analytical Pace Anal	Analytical Method: EPA 66 Pace Analytical Services - 12000 ug/L 8.0 ug/L 988 ug/L 5220 ug/L 46.0 ug/L 518J ug/L 5030 ug/L 51.5 mg/L <10.3 ug/L Analytical Method: EPA 66 Pace Analytical Services - 12600 ug/L 7.2 ug/L 456 ug/L 5500 ug/L 5550 ug/L 5460 ug/L 54.1 mg/L <10.3 ug/L Analytical Method: SM 25 Pace Analytical Services - 2.2 mg/L Analytical Method: SM 45 Pace Analytical Services - <1.2 mg/L Analytical Method: SM 45 Pace Analytical Services - <1.2 mg/L Analytical Method: SM 45 Pace Analytical Services - <1.2 mg/L Analytical Method: SM 45 Pace Analytical Services - <1.2 mg/L Analytical Method: SM 45 Pace Analytical Services - <1.2 mg/L Analytical Method: EPA 36 Pace Analytical Services - <1.2 mg/L Analytical Method: EPA 36 Pace Analytical Services - <1.2 mg/L Analytical Method: EPA 36 Pace Analytical Services - <1.2 mg/L Analytical Method: EPA 36 Pace Analytical Services - <1.2 mg/L Analytical Method: EPA 36 Pace Analytical Services - <1.2 mg/L Analytical Method: EPA 36 Pace Analytical Services - <1.2 mg/L Analytical Method: EPA 36 Pace Analytical Services - <1.2 mg/L Analytical Method: EPA 36 Pace Analytical Services - <1.2 mg/L Analytical Method: EPA 36 Pace Analytical Services - <1.2 mg/L Analytical Method: EPA 36 Pace Analytical Services -	Analytical Method: EPA 6020B Prepared Pace Analytical Services - Green Bay 12000	Analytical Method: EPA 6020B Preparation Method Pace Analytical Services - Green Bay 12000 ug/L 254 76.2 8.0 ug/L 6.4 1.9 988 ug/L 250 58.0 5220 ug/L 250 31.2 46.0 ug/L 4.0 1.2 518J ug/L 789 237 5030 ug/L 250 42.0 51.5 mg/L 1.7 0.32 <10.3 ug/L 34.4 10.3 Analytical Method: EPA 6020B Preparation Method Ug/L 254 76.2 7.2 ug/L 6.4 1.9 456 ug/L 250 58.0 5500 ug/L 255 58.0 5500 ug/L 255 58.0 5500 ug/L 254 76.2 7.2 ug/L 6.4 1.9 456 ug/L 250 58.0 5500 ug/L 250 31.2 42.6 ug/L 4.0 1.2 505J ug/L 789 237 5460 ug/L 250 42.0 54.1 mg/L 1.7 0.32 <10.3 ug/L 34.4 10.3 Analytical Method: SM 2540D Pace Analytical Services - Green Bay 2.2 mg/L 1.0 0.48 Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay <1.2 mg/L 4.0 1.2 Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay <1.2 mg/L 4.0 1.2 Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay <1.2 mg/L 4.0 1.2 Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay <1.2 mg/L 4.0 1.2 Analytical Method: SPA 300.0 Pace Analytical Services - Green Bay 6.7J mg/L 10.0 3.0 <2.2 mg/L 10.0 2.2 Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay	Analytical Method: EPA 6020B Preparation Method: EFP ace Analytical Services - Green Bay 12000 ug/L 254 76.2 1 8.0 ug/L 6.4 1.9 1 988 ug/L 250 58.0 1 5220 ug/L 250 31.2 1 46.0 ug/L 789 237 1 518J ug/L 789 237 1 5030 ug/L 250 42.0 1 51.5 mg/L 1.7 0.32 1 <10.3 ug/L 34.4 10.3 1 Analytical Method: EPA 6020B Preparation Method: EFP ace Analytical Services - Green Bay 12600 ug/L 254 76.2 1 7.2 ug/L 6.4 1.9 1 456 ug/L 250 58.0 1 5500 ug/L 250 58.0 1 5500 ug/L 250 58.0 1 5500 ug/L 250 31.2 1 42.6 ug/L 250 31.2 1 42.6 ug/L 320 31.2 1 42.6 ug/L 4.0 1.2 1 505J ug/L 789 237 1 5460 ug/L 250 42.0 1 54.1 mg/L 1.7 0.32 1 <10.3 ug/L 34.4 10.3 1 Analytical Method: SM 2540D Pace Analytical Services - Green Bay 2.2 mg/L 1.0 0.48 1 Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay <1.2 mg/L 4.0 1.2 1 Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay <1.2 mg/L 4.0 1.2 1 Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay <1.2 mg/L 4.0 1.2 1 Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay <1.2 mg/L 4.0 1.2 1 Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay 6.7J mg/L 10.0 3.0 5 <2.2 mg/L 10.0 2.2 5 Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Green Bay 12000 ug/L 254 76.2 1 05/28/24 06:50 8.0 ug/L 6.4 1.9 1 05/28/24 06:50 988 ug/L 250 58.0 1 05/28/24 06:50 5220 ug/L 250 31.2 1 05/28/24 06:50 46.0 ug/L 4.0 1.2 1 05/28/24 06:50 518.J ug/L 789 237 1 05/28/24 06:50 5030 ug/L 250 42.0 1 05/28/24 06:50 51.5 mg/L 1.7 0.32 1 05/28/24 06:50 51.5 mg/L 1.7 0.32 1 05/28/24 06:50 41.0.3 ug/L 34.4 10.3 1 05/28/24 06:50 Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Green Bay 12600 ug/L 254 76.2 1 06/03/24 07:25 7.2 ug/L 6.4 1.9 1 06/03/24 07:25 456 ug/L 250 58.0 1 06/03/24 07:25 5500 ug/L 250 31.2 1 06/03/24 07:25 42.6 ug/L 4.0 1.2 1 06/03/24 07:25 42.6 ug/L 4.0 1.2 1 06/03/24 07:25 505J ug/L 789 237 1 06/03/24 07:25 544.6 ug/L 4.0 1.2 1 06/03/24 07:25 544.6 ug/L 4.0 1.2 1 06/03/24 07:25 5450 ug/L 250 42.0 1 06/03/24 07:25 5460 ug/L 250 42.0 1 06/03/24 07:25 541 mg/L 1.7 0.32 1 06/03/24 07:25 41.1 mg/L 1.7 0.32 1 06/03/24 07:25 Analytical Method: SM 2540D Pace Analytical Services - Green Bay Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay 41.2 mg/L 4.0 1.2 1 Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay 41.2 mg/L 4.0 1.2 1 Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay 41.2 mg/L 4.0 1.2 1 Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay 41.2 mg/L 4.0 1.2 1 Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay 41.2 mg/L 4.0 1.2 5 42.0 mg/L 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Green Bay 12000	Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Green Bay 12000 ug/L 254 76.2 1 05/28/24 06:50 06/08/24 14:17 7440-70-2 8.0 ug/L 6.4 1.9 1 05/28/24 06:50 06/08/24 14:17 7439-96-5 988 ug/L 250 58.0 1 05/28/24 06:50 06/08/24 14:17 7439-96-5 5220 ug/L 250 31.2 1 05/28/24 06:50 06/08/24 14:17 7439-96-5 518.J ug/L 789 237 1 05/28/24 06:50 06/08/24 14:17 7439-96-5 518.J ug/L 789 237 1 05/28/24 06:50 06/08/24 14:17 7440-09-7 5030 ug/L 250 42.0 1 05/28/24 06:50 06/08/24 14:17 7440-09-7 5030 ug/L 250 42.0 1 05/28/24 06:50 06/08/24 14:17 7440-66-6 Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Green Bay 12600 ug/L 254 76.2 1 06/03/24 07:25 06/08/24 11:35 7440-50-2 7.2 ug/L 6.4 1.9 1 06/03/24 07:25 06/08/24 11:35 7440-50-2 7.2 ug/L 6.4 1.9 1 06/03/24 07:25 06/08/24 11:35 7439-89-6 5500 ug/L 250 31.2 1 06/03/24 07:25 06/08/24 11:35 7439-89-6 5500 ug/L 250 31.2 1 06/03/24 07:25 06/08/24 11:35 7439-89-6 5500 ug/L 250 31.2 1 06/03/24 07:25 06/08/24 11:35 7439-89-6 5501 ug/L 4.0 1.2 1 06/03/24 07:25 06/08/24 11:35 7439-89-6 5505 ug/L 789 237 1 06/03/24 07:25 06/08/24 11:35 7439-95-4 42.6 ug/L 4.0 1.2 1 06/03/24 07:25 06/08/24 11:35 7439-95-4 5460 ug/L 250 42.0 1 06/03/24 07:25 06/08/24 11:35 7439-95-4 5460 ug/L 250 42.0 1 06/03/24 07:25 06/08/24 11:35 7439-95-5 5460 ug/L 250 42.0 1 06/03/24 07:25 06/08/24 11:35 7440-09-7 5460 ug/L 250 42.0 1 06/03/24 07:25 06/08/24 11:35 7440-09-7 5460 ug/L 250 42.0 1 06/03/24 07:25 06/08/24 11:35 7440-09-7 5460 ug/L 250 42.0 1 06/03/24 07:25 06/08/24 11:35 7440-09-7 5460 ug/L 250 42.0 1 06/03/24 07:25 06/08/24 11:35 7440-09-7 5460 ug/L 250 42.0 1 06/03/24 07:25 06/08/24 11:35 7440-09-7 5460 ug/L 250 42.0 1 06/03/24 07:25 06/08/24 11:35 7440-09-7 5460 ug/L 250 42.0 1 06/03/24 07:25 06/08/24 11:35 7440-09-7 5460 ug/L 250 42.0 1 06/03/24 07:25 06/08/24 11:35 7440-09-7 5460 ug/L 250 42.0 1 06/03/24 07:25 06/08/24 11:35 7440-09-7 5460 ug/L 250 42.0 1 06/03/24 07:25 06/08/24 11:35 7440-09-7 5460 ug/L 250 42.0 1 06/03/24

(920)469-2436



ANALYTICAL RESULTS

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Sample: SW-NBOUT_20240523	Lab ID:	40278809006	Collected	d: 05/23/24	1 08:32	Received: 05/	/24/24 11:05 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Ana	lytical Services	- Green Ba	У					
Alkalinity, Total as CaCO3	45.2	mg/L	25.0	7.4	1		05/29/24 10:28		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
•	Pace Ana	lytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	43.7	mg/L	25.0	7.4	1		05/29/24 11:42		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
_	Pace Ana	lytical Services	- Green Ba	y					
Dissolved Organic Carbon	16.5	mg/L	0.50	0.19	1		06/03/24 13:56		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

Sample: SW-NB_20240523	Lab ID:	40278809007	Collected:	05/23/24	1 08:02	Received: 05/	24/24 11:05 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 60	020B Prepai	ration Met	hod: EF	PA 3010A			
	Pace Anal	ytical Services -	Green Bay						
Calcium	7500	ug/L	254	76.2	1	05/28/24 06:50	06/08/24 14:21	7440-70-2	
Copper	16.8	ug/L	6.4	1.9	1	05/28/24 06:50			
Iron	2110	ug/L	250	58.0	1	05/28/24 06:50			
Magnesium	2600	ug/L	250	31.2	1	05/28/24 06:50			
Manganese	73.1	ug/L	4.0	1.2	1	05/28/24 06:50			
Potassium	650J	ug/L	789	237	1	05/28/24 06:50			
Sodium	11500	ug/L	250	42.0	1	05/28/24 06:50			
Total Hardness by 2340B	29.4	mg/L	1.7	0.32	1	05/28/24 06:50		20 0	
Zinc	24.7J	ug/L	34.4	10.3	1	05/28/24 06:50	06/08/24 14:21	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 60	020B Prenai	ration Met	hod: FF	PA 3010A			
0020B MET 101 MO, BISSOIVEU		ytical Services		allon we	1100. LI	71001071			
Calcium, Dissolved	7400	ug/L	254	76.2	1	06/03/24 07:25	06/08/24 11:39	7440-70-2	
Copper, Dissolved	15.0	ug/L	6.4	1.9	1	06/03/24 07:25	06/08/24 11:39		
Iron, Dissolved	1200	ug/L	250	58.0	1	06/03/24 07:25			
Magnesium, Dissolved	2760	ug/L	250	31.2	1	06/03/24 07:25			D9
Manganese, Dissolved	65.9	ug/L	4.0	1.2	1	06/03/24 07:25			Da
Potassium, Dissolved	613J	ug/L ug/L	789	237	1	06/03/24 07:25			
Sodium, Dissolved	12600	ug/L ug/L	250	42.0	1	06/03/24 07:25			D9
Total Hardness by 2340B,	29.9	mg/L	1.7	0.32	1	06/03/24 07:25		7440-23-3	Da
Dissolved	29.9	IIIg/L	1.7	0.32	1	00/03/24 07.23	06/06/24 11.39		
Zinc, Dissolved	24.8J	ug/L	34.4	10.3	1	06/03/24 07:25	06/08/24 11:39	7440-66-6	
2540D Total Suspended Solids	Analytical	Method: SM 25	40D						
	Pace Anal	ytical Services -	Green Bay						
Total Suspended Solids	4.6	mg/L	1.0	0.49	1		05/29/24 15:40		
4500S2F Sulfide, Iodometric	Analytical	Method: SM 45	00-S F (2000	0)					
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		ytical Services -		,					
Sulfide	<1.2	mg/L	4.0	1.2	1		05/30/24 12:00		
4500S2F Sulfide, Diss Iodometro	Analytical	Method: SM 45	00-S E (2000	n)					
430032F 3uilide,Diss lodoilleit		ytical Services)					
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		05/30/24 13:05		
200 0 IC Aniona	Analytical	Method: EPA 30	20.0						
300.0 IC Anions	,	ytical Services							
Chloride	19.1	mg/L	10.0	3.0	5		06/05/24 17:02	16887-00-6	
Sulfate	<2.2	mg/L	10.0	2.2	5		06/05/24 17:02	14808-79-8	M0
300.0 IC Anions, Dissolved	Analytical	Method: EPA 30	0.00						
,	•	ytical Services -							
Chloride, Dissolved	17.7	mg/L	10.0	3.0	5		06/06/24 18:50	16887-00-6	
	<2.2	····g- -		0.0	-				

(920)469-2436



ANALYTICAL RESULTS

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Sample: SW-NB_20240523	Lab ID:	40278809007	Collecte	d: 05/23/24	1 08:02	Received: 05/	/24/24 11:05 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	15.3J	mg/L	25.0	7.4	1		05/29/24 10:29		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	15.4J	mg/L	25.0	7.4	1		05/29/24 11:43		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
_	Pace Anal	ytical Services	- Green Ba	y					
Dissolved Organic Carbon	24.8	mg/L	1.0	0.38	2		06/03/24 14:12		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

Sample: SW-HWY27W_20240523	Lab ID:	40278809008	Collected	d: 05/23/24	11:35	Received: 05/	24/24 11:05 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical I	Method: EPA 6	020B Prepa	aration Met	hod: EF	PA 3010A		•	
	-	tical Services							
Calcium	5490	ug/L	254	76.2	1	05/28/24 06:50	06/08/24 14:25	7440-70-2	
Copper	9.8	ug/L	6.4	1.9	1	05/28/24 06:50	06/08/24 14:25		
ron	2600	ug/L	250	58.0	1	05/28/24 06:50			
Magnesium	1570	ug/L	250	31.2	1	05/28/24 06:50	06/08/24 14:25		
Manganese	34.6	ug/L	4.0	1.2	1	05/28/24 06:50			
Potassium	779J	ug/L	789	237	1	05/28/24 06:50	06/08/24 14:25		
Sodium	16000	ug/L	250	42.0	1	05/28/24 06:50	06/08/24 14:25	7440-23-5	
Total Hardness by 2340B	20.2	mg/L	1.7	0.32	1	05/28/24 06:50	06/08/24 14:25		
Zinc	22.4J	ug/L	34.4	10.3	1	05/28/24 06:50	06/08/24 14:25	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical I	Method: EPA 6	020B Prepa	aration Met	hod: EF	PA 3010A			
·	Pace Analy	tical Services	- Green Bay	/					
Calcium, Dissolved	5990	ug/L	254	76.2	1	06/03/24 07:25	06/08/24 11:43	7440-70-2	D9
Copper, Dissolved	8.0	ug/L	6.4	1.9	1	06/03/24 07:25	06/08/24 11:43		
ron, Dissolved	1780	ug/L	250	58.0	1	06/03/24 07:25			
Magnesium, Dissolved	1760	ug/L	250	31.2	1		06/08/24 11:43		D9
Manganese, Dissolved	34.1	ug/L	4.0	1.2	1	06/03/24 07:25	06/08/24 11:43		
Potassium, Dissolved	834	ug/L	789	237	1	06/03/24 07:25	06/08/24 11:43		D9
Sodium, Dissolved	18000	ug/L	250	42.0	1	06/03/24 07:25	06/08/24 11:43		D9
otal Hardness by 2340B, Dissolved	22.2	mg/L	1.7	0.32	1	06/03/24 07:25	06/08/24 11:43		
Zinc, Dissolved	23.4J	ug/L	34.4	10.3	1	06/03/24 07:25	06/08/24 11:43	7440-66-6	
2540D Total Suspended Solids	Analytical	Method: SM 25	40D						
·	Pace Analy	tical Services	- Green Bay	/					
Total Suspended Solids	3.5	mg/L	1.2	0.58	1		05/29/24 15:41		
4500S2F Sulfide, lodometric	•	Method: SM 45	•	,					
Sulfide	<1.2	mg/L	4.0	1.2	1		05/30/24 12:01		
1500S2F Sulfide,Diss Iodometrc		Method: SM 45							
1300321 Sumue, Diss louometro	-	tical Services	,	•					
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		05/30/24 13:06		
300.0 IC Anions	Analytical I	Method: EPA 3	00.0						
	•	tical Services		/					
Chloride	24.2	mg/L	10.0	3.0	5		06/05/24 17:17	16887-00-6	
Sulfate	<2.2	mg/L	10.0	2.2	5		06/05/24 17:17	14808-79-8	D3
300.0 IC Anions, Dissolved	Analytical I	Method: EPA 3	0.00						
	Pace Analy	tical Services	- Green Bay	/					
Chloride, Dissolved	23.2	mg/L	10.0	3.0	5		06/06/24 20:19	16887-00-6	
Sulfate, Dissolved	<2.2	mg/L	10.0	2.2	5		06/06/24 20:19	14808-79-8	D3

(920)469-2436



ANALYTICAL RESULTS

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Sample: SW-HWY27W_20240523	Lab ID:	40278809008	Collecte	d: 05/23/24	11:35	Received: 05/	/24/24 11:05 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Anal	lytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	10.1J	mg/L	25.0	7.4	1		05/29/24 10:30		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Anal	lytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	9.2J	mg/L	25.0	7.4	1		05/29/24 11:44		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	10C						
	Pace Anal	lytical Services	- Green Ba	y					
Dissolved Organic Carbon	31.1	mg/L	1.5	0.57	3		06/03/24 14:28		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

Parameters	Sample: SW-HWY27E_20240523	Lab ID:	40278809009	Collected	: 05/23/24	12:17	Received: 05/	/24/24 11:05 Ma	atrix: Water		
Pace Analytical Services - Green Bay Calcium 2750 ug/L 254 76.2 1 05/28/24 06:50 06/08/24 14:29 7440-70-2 7440-70-2 7440-70-2 7440-70-2 7440-70-3 7440-7	Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
Calcium	6020B MET ICPMS	Analytical	Method: EPA 6	020B Prepa	aration Met	hod: Ef	PA 3010A				
Copper		Pace Ana	lytical Services	- Green Bay	,						
Copper S.4. wg/L 6.4 1.9 1 0.528/24 06:50 06/08/24 14:29 7440-50-8 V430-50-8 V4	Calcium	2750	ug/L	254	76.2	1	05/28/24 06:50	06/08/24 14:29	7440-70-2		
Iron	Copper		•	6.4	1.9	1	05/28/24 06:50	06/08/24 14:29	7440-50-8		
Manganese 33.5	• •	930	ug/L	250	58.0	1	05/28/24 06:50	06/08/24 14:29	7439-89-6		
Potassium 697,	Magnesium	972	ug/L	250	31.2	1	05/28/24 06:50	06/08/24 14:29	7439-95-4		
Potassium 697,	Manganese	33.5	ug/L	4.0	1.2	1	05/28/24 06:50	06/08/24 14:29	7439-96-5		
Sodium 932	Potassium	697J	-	789	237	1	05/28/24 06:50	06/08/24 14:29	7440-09-7		
10.9 mg/L 1.7 0.32 1 05/28/24 06:50 06/08/24 14:29 740-66-6 12.9 ug/L 34.4 01.3 1 05/28/24 06:50 06/08/24 14:29 740-66-6 12.9 ug/L 254 76.2 1 06/03/24 07:25 06/08/24 11:47 740-70-2 740-70	Sodium	932	•		42.0	1			7440-23-5		
2.9.1 12.9.1 12.9.1 13.4.1 10.3 1 10.5/28/24 06.50 06/08/24 14.29 7440-66-6	Total Hardness by 2340B	10.9	ū	1.7	0.32	1	05/28/24 06:50	06/08/24 14:29			
Calcium, Dissolved 2990 ug/L 254 76.2 1 06/03/24 07:25 06/08/24 11:47 7440-70-2 D9 Copper, Dissolved 5.0J ug/L 6.4 1.9 1 06/03/24 07:25 06/08/24 11:47 7440-50-8 1 Magnesium, Dissolved 611 ug/L 250 58.0 1 06/03/24 07:25 06/08/24 11:47 7439-96-5 4 Magnesium, Dissolved 974 ug/L 250 31.2 1 06/03/24 07:25 06/08/24 11:47 7439-96-5 9 Manganese, Dissolved 998 ug/L 250 31.2 1 06/03/24 07:25 06/08/24 11:47 7440-09-7 240-09-7 2000 1 06/03/24 07:25 06/08/24 11:47 7440-09-7 240-09-7 2000 1 06/03/24 07:25 06/08/24 11:47 7440-09-7 240-09-7 2000 1 06/03/24 07:25 06/08/24 11:47 7440-09-7 240-09-7 2000 2000 2000 2000 2000 2000 2000 2	•	12.9J	•	34.4	10.3	1	05/28/24 06:50	06/08/24 14:29	7440-66-6		
Calcium, Dissolved 2990 ug/L 254 76.2 1 06/03/24 07:25 06/08/24 11:47 7440-70-2 D9 29 Copper, Dissolved 5.0 ug/L 6.4 1.9 1 06/03/24 07:25 06/08/24 11:47 7440-50-8 1 06/03/24 07:25 06/08/24 11:47 7440-50-8 1 06/03/24 07:25 06/08/24 11:47 7440-50-8 1 06/03/24 07:25 06/08/24 11:47 7439-98-5 1 06/03/24 07:25 06/08/24 11:47 7439-98-5 1 06/03/24 07:25 06/08/24 11:47 7439-98-5 1 06/03/24 07:25 06/08/24 11:47 7439-98-5 09 06/03/24 07:25 06/08/24 11:47 7440-09-7 06/03/24 07:25 06/08/24 11:47 7440-09-7 06/03/24 07:25 06/08/24 11:47 7440-09-7 06/03/24 07:25 06/08/24 11:47 7440-09-7 06/03/24 07:25 06/08/24 11:47 7440-09-7 06/08/24 11:47 7440-09-7 06/08/24 11:47 7440-09-7 06/08/24 11:47 7440-09-7 06/08/24 11:47 7440-09-7 06/08/24 11:47 7440-09-7 06/08/24 11:47	6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Prepa	aration Met	hod: Ef	PA 3010A				
Copper, Dissolved Iron, Dissolved Iron	·	Pace Ana	lytical Services	- Green Bay	•						
Copper, Dissolved (no., Dissolved (11) ug/L 5.0J ug/L 6.4 ug/L 1.9 bs (0.00 cs) 06/03/24 07:25 bs (0.00 cs) 06/08/24 11:47 bs (0.00 cs) 7440-50-8 ls (0.00 cs) 1 cs (0.00 cs) 06/03/24 07:25 bs (0.00 cs) 06/08/24 11:47 bs (0.00 cs) 7439-89-6 ls (0.00 cs) 1 cs (0.00 cs) 06/03/24 07:25 bs (0.00 cs) 06/03/24 11:47 bs (0.00 cs) 7440-09-7 cs 05/03/24 07:25 bs (0.00 cs) 06/03/24 07:25 bs (0.00 cs) 06/03/24 11:47 bs (0.00 cs) 7440-09-7 cs 05/03/24 11:47 bs (0.00 cs) 06/03/24 07:25 bs (0.00 cs) 06/03/24 11:47 bs (0.00 cs) 7440-09-7 cs 05/03/24 11:47 bs (0.00 cs) 06/03/24 07:25 bs (0.00 cs) 06/08/24 11:47 bs (0.00 cs) 7440-09-7 cs 05/03/24 11:47 bs (0.00 cs) 06/03/24 07:25 bs (0.00 cs) 06/03/24 07:25 bs (0.00 cs) 06/03/24 11:47 bs (0.00 cs)	Calcium, Dissolved	2990	ug/L	254	76.2	1	06/03/24 07:25	06/08/24 11:47	7440-70-2	D9	
Fron, Dissolved 611 ug/L 250 58.0 1 06/03/24 07:25 06/08/24 11:47 7439-86 7440-86 7	•	5.0J	•	6.4	1.9	1	06/03/24 07:25	06/08/24 11:47	7440-50-8		
Magnesium, Dissolved 974 ug/L 250 ug/L 4.0 1.2 1 060/03/24 07:25 06/08/24 11:47 7439-96-4 Potassium, Dissolved 29.8 ug/L 4.0 1.2 1 060/03/24 07:25 06/08/24 11:47 7439-96-5 Potassium, Dissolved Dissolved 679J ug/L 789 237 1 06/03/24 07:25 06/08/24 11:47 7430-97-7 Potassium, Dissolved 998 ug/L 250 42.0 1 06/03/24 07:25 06/08/24 11:47 7440-09-7 Potassium, Dissolved 998 ug/L 250 42.0 1 06/03/24 07:25 06/08/24 11:47 7440-09-7 Potassium, Dissolved 11.5 mg/L 1.7 0.32 1 06/03/24 07:25 06/08/24 11:47 7440-09-7 Potassium, Dissolved 11.5 mg/L 1.7 0.32 1 06/03/24 07:25 06/08/24 11:47 7440-09-7 Potassium, Dissolved 11.5 mg/L 1.7 0.32 1 06/03/24 07:25 06/08/24 11:47 7440-09-7 Potassium, Dissolved 11.5 mg/L 1.7 0.32 1 06/03/24 07:25 06/08/24 11:47 7440-09-7 Potassium, Dissolved 11.5 mg/L 1.7 0.32 1 06/03/24 07:25 06/08/24 11:47 7440-09-7 Potassium, Dissolved 11.5 mg/L 1.7 0.32 1 06/03/24 07:25 06/08/24 11:47 7440-09-7 Potassium, Dissolved 11.5 mg/L 1.7 0.32 1 06/03/24 07:25 06/08/24 11:47 7440-09-7 Potassium, Dissolved 11.5 mg/L 1.7 0.32 1 06/03/24 07:25 06/08/24 11:47 7440-09-7 Potassium, Dissolved 11.5 mg/L 1.7 0.32 1 06/03/24 07:25 06/08/24 11:47 7440-09-7 Potassium, Dissolved 11.5 mg/L 1.0 0.0 0.48 1 0.0 06/03/24 07:25 06/08/24 11:47 7440-09-7 Potassium, Dissolved 11.5 mg/L 1.0 0.0 0.48 1 0.0 06/03/24 07:25 06/08/24 11:47 7440-09-7 Potassium, Dissolved 11.5 mg/L 1.0 0.0 0.48 1 0.0 06/03/24 07:25 06/08/24 11:47 7440-09-7 Potassium, Dissolved 11.5 mg/L 1.0 0.0 0.48 1 0.0 0.0 0.0 06/03/24 07:25 06/08/24 11:47 7440-09-7 Potassium, Dissolved 11.5 mg/L 1.0 0.0 0.48 1 0.0 06/03/24 07:25 06/08/24 11:47 7440-09-7 Potassium, Dissolved 12.5 mg/L 1.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	• •	611	-	250	58.0	1	06/03/24 07:25	06/08/24 11:47	7439-89-6		
Manganese, Dissolved 29.8 (97L) ug/L 789 4.0 (1.2) (1.2) (1.0) (06/03/24 07:25) (06/08/24 11:47 7440-09-7 7440-09-7 7450) 7439-96-5 (978) (1.2) (1.2) (06/03/24 07:25) (06/08/24 11:47 7440-09-7 7440-09-7 7450) 7440-09-7 7440-09-7 7450 7450 7450 7450 7450 7450 7450 745	-		ū			1	06/03/24 07:25	06/08/24 11:47	7439-95-4	D9	
Potassium, Dissolved 679 ug/L 789 237 1 06/03/24 07:25 06/08/24 11:47 7440-09-7	9		Ū				06/03/24 07:25	06/08/24 11:47	7439-96-5		
Sodium, Dissolved 998 ug/L 250 42.0 1 06/03/24 07:25 06/08/24 11:47 7440-23-5 D9 Total Hardness by 2340B, Dissolved 11.5 mg/L 1.7 0.32 1 06/03/24 07:25 06/08/24 11:47 7440-66-6 Pace Analytical Fervices - Green Bay 2540D Total Suspended Solids Analytical Method: SM 2540D Pace Analytical Services - Green Bay Total Suspended Solids 1.7 mg/L 1.0 0.48 1 05/29/24 15:41 7440-66-6 PP,T3 4500S2F Sulfide, Iodometric Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay 4.0 1.2 1 05/30/24 12:03	•		•				06/03/24 07:25				
Total Hardness by 2340B, Dissolved 11.5 mg/L 1.7 0.32 1 06/03/24 07:25 06/08/24 11:47 7440-66-6	-		•							D9	
2540D Total Suspended Solids Analytical Method: SM 2540D Pace Analytical Services - Green Bay Total Suspended Solids 1.7 mg/L 1.0 0.48 1 05/29/24 15:41 PP,T3 4500S2F Sulfide, lodometric Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay Sulfide 4.0 1.2 1 05/30/24 12:03 4500S2F Sulfide,Diss Iodometrc Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay Sulfide, Dissolved 4.0 1.2 1 05/30/24 12:03 4500S2F Sulfide,Diss Iodometrc Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay Sulfide, Dissolved 4.1.2 mg/L 4.0 1.2 1 05/30/24 13:56 300.0 IC Anions Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride 4.0 1.2 1 05/30/24 17:32 16887-00-6 D3 Sulfate Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride, Dissolved Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride, Dissolved Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride, Dissolved Analytical Services - Green Bay Chloride, Dissolved 4.0 3.0 5 06/06/24 20:34 16887-00-6 D3	Total Hardness by 2340B,		•								
Pace Analytical Services - Green Bay Total Suspended Solids 1.7 mg/L 1.0 0.48 1 05/29/24 15:41 PP,T3	Zinc, Dissolved	13.3J	ug/L	34.4	10.3	1	06/03/24 07:25	06/08/24 11:47	7440-66-6		
Total Suspended Solids 1.7 mg/L 1.0 0.48 1 05/29/24 15:41 PP,T3	2540D Total Suspended Solids	•									
4500S2F Sulfide, Iodometric		Pace Ana	lytical Services	- Green Bay	,						
Pace Analytical Services - Green Bay Sulfide <1.2 mg/L 4.0 1.2 1 05/30/24 12:03 450052F Sulfide,Diss Iodometrc Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay Sulfide, Dissolved <1.2 mg/L 4.0 1.2 1 05/30/24 13:56 4	Total Suspended Solids	1.7	mg/L	1.0	0.48	1		05/29/24 15:41		PP,T3	
4500S2F Sulfide,Diss lodometrc Analytical Method: SM 4500-S F (2000) Pace Analytical Services - Green Bay Sulfide, Dissolved 4.0 4.0 1.2 1 05/30/24 13:56 300.0 IC Anions Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride Analytical Services - Green Bay Chloride Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride, Dissolved Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride, Dissolved 3.0 mg/L 10.0 3.0 5 06/06/24 20:34 16887-00-6 D3 Chloride, Dissolved 3.0 mg/L 10.0 3.0 5 06/06/24 20:34 16887-00-6 D3	4500S2F Sulfide, Iodometric	•		•	,						
Pace Analytical Services - Green Bay	Sulfide	<1.2	mg/L	4.0	1.2	1		05/30/24 12:03			
Pace Analytical Services - Green Bay	4500S2F Sulfide Diss Indometro	Analytical	Method: SM 45	00-S F (200	١٥)						
300.0 IC Anions Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride 	4300321 Juliue, Diss louolilette	•		`	,						
Pace Analytical Services - Green Bay Chloride 3.0 mg/L 10.0 3.0 5 06/05/24 17:32 16887-00-6 D3 Sulfate	Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		05/30/24 13:56			
Sulfate <2.2 mg/L 10.0 2.2 5 06/05/24 17:32 14808-79-8 D3 300.0 IC Anions, Dissolved Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride, Dissolved <3.0	300.0 IC Anions	•	·								
Sulfate <2.2 mg/L 10.0 2.2 5 06/05/24 17:32 14808-79-8 D3 300.0 IC Anions, Dissolved Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay Chloride, Dissolved <3.0	Chloride	- 3 0	ma/l	10.0	3 በ	5		06/05/24 17:32	16887-00-6	D3	
Pace Analytical Services - Green Bay Chloride, Dissolved			-								
·	300.0 IC Anions, Dissolved	•									
·	Chloride, Dissolved	<3.0	mg/L	10.0	3.0	5		06/06/24 20:34	16887-00-6	D3	
			-								



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Sample: SW-HWY27E_20240523	Lab ID:	40278809009	Collected	d: 05/23/24	1 12:17	Received: 05	5/24/24 11:05 Ma	trix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	•	Method: EPA 3 lytical Services		/					
Alkalinity, Total as CaCO3	<7.4	mg/L	25.0	7.4	1		05/29/24 10:31		
310.2 Alkalinity, Dissolved	•	Method: EPA 3 lytical Services		/					
Alkalinity, Total as CaCO3, Dissolved	<7.4	mg/L	25.0	7.4	1		05/29/24 11:45		
5310C Dissolved Organic Carbon	,	Method: SM 53 lytical Services		/					
Dissolved Organic Carbon	17.7	mg/L	0.50	0.19	1		06/03/24 14:45		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

Sample: CP-04_20240523	Lab ID:	40278809010	Collected	d: 05/23/24	1 09:22	Received: 05/	24/24 11:05 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prep	aration Met	hod: EF	PA 3010A			
	Pace Anal	ytical Services	- Green Bay	/					
Calcium	13100	ug/L	254	76.2	1	05/28/24 06:50	06/08/24 14:42	7440-70-2	
Copper	28.0	ug/L	6.4	1.9	1	05/28/24 06:50			
Iron	736	ug/L	250	58.0	1	05/28/24 06:50			
Magnesium	6500	ug/L	250	31.2	1	05/28/24 06:50			
Manganese	95.3	ug/L	4.0	1.2	1	05/28/24 06:50	06/08/24 14:42	7439-96-5	
Potassium	1400	ug/L	789	237	1		06/08/24 14:42		
Sodium	78600	ug/L	250	42.0	1	05/28/24 06:50	06/08/24 14:42	7440-23-5	
Total Hardness by 2340B	59.5	mg/L	1.7	0.32	1	05/28/24 06:50			
Zinc	<10.3	ug/L	34.4	10.3	1	05/28/24 06:50	06/08/24 14:42	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Prep	aration Met	hod: EF	PA 3010A			
,	-	ytical Services							
Calcium, Dissolved	14800	ug/L	254	76.2	1	06/03/24 07:25	06/08/24 11:51	7440-70-2	D9
Copper, Dissolved	24.7	ug/L	6.4	1.9	1	06/03/24 07:25	06/08/24 11:51		
Iron, Dissolved	190J	ug/L	250	58.0	1		06/08/24 11:51		
Magnesium, Dissolved	7400	ug/L	250	31.2	1		06/08/24 11:51		D9
Manganese, Dissolved	18.1	ug/L	4.0	1.2	1		06/08/24 11:51		
Potassium, Dissolved	1500	ug/L	789	237	1		06/08/24 11:51		D9
Sodium, Dissolved	93500	ug/L	250	42.0	1	06/03/24 07:25			D9
Total Hardness by 2340B, Dissolved	67.5	mg/L	1.7	0.32	1		06/08/24 11:51		
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	06/03/24 07:25	06/08/24 11:51	7440-66-6	
2540D Total Suspended Solids	Analytical	Method: SM 25	40D						
•	Pace Anal	ytical Services	- Green Ba	/					
Total Suspended Solids	4.6	mg/L	1.0	0.48	1		05/29/24 15:41		
4500S2F Sulfide, Iodometric	•	Method: SM 45 ytical Services	`	,					
Sulfide	<1.2	mg/L	4.0	1.2	1		05/30/24 12:05		
4500S2F Sulfide,Diss Iodometrc	•	Method: SM 45 ytical Services	,	•					
Sulfide, Dissolved	1.2J	mg/L	4.0	1.2	1		05/30/24 14:00		
300.0 IC Anions	•	Method: EPA 30 ytical Services		/					
Chloride	66.0	mg/L	10.0	3.0	5		06/10/24 13:23		
Sulfate	2.8J	mg/L	10.0	2.2	5		06/10/24 13:23	14808-79-8	D3
300.0 IC Anions, Dissolved	-	Method: EPA 30 ytical Services		/					
Chloride, Dissolved	69.9	mg/L	10.0	3.0	5		06/06/24 20:49	16887-00-6	D9
Sulfate, Dissolved	<2.2	mg/L	10.0	2.2	5		06/06/24 20:49		

(920)469-2436



ANALYTICAL RESULTS

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Sample: CP-04_20240523	Lab ID:	40278809010	Collected	d: 05/23/2	4 09:22	Received: 05	5/24/24 11:05 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	•	Method: EPA 3 lytical Services		y					
Alkalinity, Total as CaCO3	141	mg/L	25.0	7.4	1		05/29/24 10:32		
310.2 Alkalinity, Dissolved	•	Method: EPA 3 lytical Services		y					
Alkalinity, Total as CaCO3, Dissolved	143	mg/L	25.0	7.4	1		05/29/24 11:50		
5310C Dissolved Organic Carbon	,	Method: SM 53 lytical Services		y					
Dissolved Organic Carbon	18.1	mg/L	1.0	0.38	2		06/03/24 15:02		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

Sample: SW-C9-DUP-20240523	Lab ID:	40278809011	Collected	d: 05/23/24	10:37	Received: 05/	24/24 11:05 M	atrix: Water			
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua		
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prepa	aration Met	hod: El	PA 3010A					
	-	ytical Services									
Calcium	3120	ug/L	254	76.2	1	05/28/24 06:50	06/08/24 14:46	7440-70-2			
Copper	6.6	ug/L	6.4	1.9	1	05/28/24 06:50	06/08/24 14:46	7440-50-8			
Iron	1290	ug/L	250	58.0	1	05/28/24 06:50	06/08/24 14:46	7439-89-6			
Magnesium	1030	ug/L	250	31.2	1	05/28/24 06:50	06/08/24 14:46	7439-95-4			
Manganese	59.8	ug/L	4.0	1.2	1	05/28/24 06:50	06/08/24 14:46	7439-96-5			
Potassium	807	ug/L	789	237	1	05/28/24 06:50	06/08/24 14:46	7440-09-7			
Sodium	1890	ug/L	250	42.0	1	05/28/24 06:50	06/08/24 14:46	7440-23-5			
Total Hardness by 2340B	12.0	mg/L	1.7	0.32	1	05/28/24 06:50	06/08/24 14:46				
Zinc	17.7J	ug/L	34.4	10.3	1	05/28/24 06:50	06/08/24 14:46	7440-66-6			
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Prepa	aration Met	hod: El	PA 3010A					
•	Pace Ana	ytical Services	- Green Bay	/							
Calcium, Dissolved	2950	ug/L	254	76.2	1	06/03/24 07:25	06/08/24 12:12	7440-70-2			
Copper, Dissolved	5.2J	ug/L	6.4	1.9	1	06/03/24 07:25	06/08/24 12:12	7440-50-8			
Iron, Dissolved	442	ug/L	250	58.0	1	06/03/24 07:25	06/08/24 12:12	7439-89-6			
Magnesium, Dissolved	1010	ug/L	250	31.2	1	06/03/24 07:25	06/08/24 12:12	7439-95-4			
Manganese, Dissolved	49.4	ug/L	4.0	1.2	1		06/08/24 12:12				
Potassium, Dissolved	764J	ug/L	789	237	1	06/03/24 07:25	06/08/24 12:12	7440-09-7			
Sodium, Dissolved	2400	ug/L	250	42.0	1	06/03/24 07:25	06/08/24 12:12	7440-23-5	CR		
Total Hardness by 2340B, Dissolved	11.5	mg/L	1.7	0.32	1	06/03/24 07:25	06/08/24 12:12				
Zinc, Dissolved	18.4J	ug/L	34.4	10.3	1	06/03/24 07:25	06/08/24 12:12	7440-66-6			
2540D Total Suspended Solids	•	Method: SM 25 lytical Services		/							
Total Suspended Solids	2.9	mg/L	1.0	0.48	1		05/29/24 15:41				
4500S2F Sulfide, lodometric	•	Method: SM 45	•	,							
Sulfide	<1.2	mg/L	4.0	1.2	1		05/30/24 12:06				
4500S2F Sulfide, Diss Iodometro	Analytical	Method: SM 45	500-S F (200	00)							
Todour Guinao, piece Todomonio	•	ytical Services	`	,							
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		05/30/24 14:02				
300.0 IC Anions	•	Method: EPA 3 ytical Services		/							
Chloride	3.2J	mg/L	10.0	3.0	5		06/10/24 14:20	16887-00-6	D3		
Sulfate	<2.2	mg/L	10.0	2.2	5		06/10/24 14:20				
300.0 IC Anions, Dissolved	,	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Chloride, Dissolved	<3.0	mg/L	10.0	3.0	5		06/06/24 21:04	16887-00-6	D3		
•	<2.2	5			-		• •		D3		



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Sample: SW-C9-DUP-20240523	Lab ID:	40278809011	Collected	d: 05/23/24	10:37	Received: 05/	/24/24 11:05 Ma	atrix: Water		
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
310.2 Alkalinity	Analytical	Method: EPA 3	10.2							
	Pace Anal	ytical Services	- Green Ba	У						
Alkalinity, Total as CaCO3	<7.4	mg/L	25.0	7.4	1		05/29/24 10:36			
310.2 Alkalinity, Dissolved	Analytical	Analytical Method: EPA 310.2								
	Pace Anal	ytical Services	- Green Ba	y						
Alkalinity, Total as CaCO3, Dissolved	<7.4	mg/L	25.0	7.4	1		05/29/24 11:56			
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C							
_	Pace Anal	ytical Services	- Green Ba	y						
Dissolved Organic Carbon	17.2	mg/L	0.50	0.19	1		06/03/24 15:18			



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

QC Batch: 475331 Analysis Method: EPA 6020B
QC Batch Method: EPA 3010A Analysis Description: 6020B MET

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278809001, 40278809002, 40278809003, 40278809004, 40278809005, 40278809006, 40278809007,

 $40278809008,\,40278809009,\,40278809010,\,40278809011$

METHOD BLANK: 2722862 Matrix: Water

Associated Lab Samples: 40278809001, 40278809002, 40278809003, 40278809004, 40278809005, 40278809006, 40278809007,

40278809008, 40278809009, 40278809010, 40278809011

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Calcium	ug/L	<76.2	254	06/08/24 13:06	
Copper	ug/L	<1.9	6.4	06/08/24 13:06	
Iron	ug/L	<58.0	250	06/08/24 13:06	
Magnesium	ug/L	<31.2	250	06/08/24 13:06	
Manganese	ug/L	<1.2	4.0	06/08/24 13:06	
Potassium	ug/L	<237	789	06/08/24 13:06	
Sodium	ug/L	<42.0	250	06/08/24 13:06	
Total Hardness by 2340B	mg/L	< 0.32	1.7	06/08/24 13:06	
Zinc	ug/L	<10.3	34.4	06/08/24 13:06	

LABORATORY CONTROL SAMPLE:	2722863					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Calcium	ug/L	10000	11700	117	80-120	
Copper	ug/L	250	268	107	80-120	
Iron	ug/L	10000	10900	109	80-120	
Magnesium	ug/L	10000	10700	107	80-120	
Manganese	ug/L	250	268	107	80-120	
Potassium	ug/L	10000	10200	102	80-120	
Sodium	ug/L	10000	10200	102	80-120	
Total Hardness by 2340B	mg/L		73.1			
Zinc	ug/L	250	278	111	80-120	

MATRIX SPIKE & MATRIX S	PIKE DUPL	ICATE: 2722	864		2722865							
Parameter	Units	40278809001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	ug/L	3100	10000	10000	16200	15000	131	119	75-125	8	20	MO
Copper	ug/L	6.5	250	250	299	284	117	111	75-125	5	20	
Iron	ug/L	1260	10000	10000	13100	12400	118	112	75-125	5	20	
Magnesium	ug/L	1020	10000	10000	12800	12100	118	111	75-125	5	20	
Manganese	ug/L	57.7	250	250	353	336	118	111	75-125	5	20	
Potassium	ug/L	797	10000	10000	11800	11200	110	104	75-125	5	20	
Sodium	ug/L	1840	10000	10000	13000	12500	112	106	75-125	4	20	
Total Hardness by 2340B	mg/L	12.0			93.1	87.4				6	20	
Zinc	ug/L	15.5J	250	250	320	297	122	113	75-125	7	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

QC Batch: 475332 Analysis Method: EPA 6020B

QC Batch Method: EPA 3010A Analysis Description: 6020B MET Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278809001, 40278809002, 40278809003, 40278809004, 40278809005, 40278809006, 40278809007,

 $40278809008,\,40278809009,\,40278809010,\,40278809011$

METHOD BLANK: 2722866 Matrix: Water

Associated Lab Samples: 40278809001, 40278809002, 40278809003, 40278809004, 40278809005, 40278809006, 40278809007,

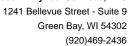
40278809008, 40278809009, 40278809010, 40278809011

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Calcium, Dissolved	ug/L	<76.2	254	06/08/24 10:24	_
Copper, Dissolved	ug/L	<1.9	6.4	06/08/24 10:24	
Iron, Dissolved	ug/L	<58.0	250	06/08/24 10:24	
Magnesium, Dissolved	ug/L	<31.2	250	06/08/24 10:24	
Manganese, Dissolved	ug/L	<1.2	4.0	06/08/24 10:24	
Potassium, Dissolved	ug/L	<237	789	06/08/24 10:24	
Sodium, Dissolved	ug/L	<42.0	250	06/08/24 10:24	
Total Hardness by 2340B, Dissolved	mg/L	<0.32	1.7	06/08/24 10:24	
Zinc, Dissolved	ug/L	<10.3	34.4	06/08/24 10:24	

LABORATORY CONTROL SAMPLE:	2722867					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Calcium, Dissolved	ug/L	10000	11300	113	80-120	
Copper, Dissolved	ug/L	250	269	108	80-120	
Iron, Dissolved	ug/L	10000	10900	109	80-120	
Magnesium, Dissolved	ug/L	10000	10600	106	80-120	
Manganese, Dissolved	ug/L	250	268	107	80-120	
Potassium, Dissolved	ug/L	10000	10400	104	80-120	
Sodium, Dissolved	ug/L	10000	10400	104	80-120	
Total Hardness by 2340B, Dissolved	mg/L		72.0			
Zinc, Dissolved	ug/L	250	285	114	80-120	

MATRIX SPIKE & MATRIX S	SPIKE DUPL	ICATE: 2722	868 MS	MSD	2722869	ı						
Б		40278809001	Spike	Spike	MS	MSD	MS	MSD	% Rec	555	Max	0 1
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Calcium, Dissolved	ug/L	2890	10000	10000	14600	15300	117	125	75-125	5	20	
Copper, Dissolved	ug/L	4.6J	250	250	278	283	109	112	75-125	2	20	
Iron, Dissolved	ug/L	459	10000	10000	11400	11600	110	111	75-125	1	20	
Magnesium, Dissolved	ug/L	1040	10000	10000	11900	12200	108	112	75-125	3	20	
Manganese, Dissolved	ug/L	46.6	250	250	320	325	110	111	75-125	1	20	
Potassium, Dissolved	ug/L	764J	10000	10000	11100	11300	104	105	75-125	1	20	
Sodium, Dissolved	ug/L	1950	10000	10000	12500	12700	105	108	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

MATRIX SPIKE & MATRIX SI	PIKE DUPLI	CATE: 2722	868		2722869							
		40278809001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Total Hardness by 2340B, Dissolved	mg/L	11.5			85.4	88.6				4	20	
Zinc, Dissolved	ug/L	15.4J	250	250	300	301	114	114	75-125	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

QC Batch: 475590 Analysis Method: SM 2540D

QC Batch Method: SM 2540D Analysis Description: 2540D Total Suspended Solids

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278809001, 40278809002, 40278809003, 40278809004, 40278809005, 40278809006, 40278809007,

40278809008, 40278809009, 40278809010, 40278809011

METHOD BLANK: 2723921 Matrix: Water

Associated Lab Samples: 40278809001, 40278809002, 40278809003, 40278809004, 40278809005, 40278809006, 40278809007,

40278809008, 40278809009, 40278809010, 40278809011

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Total Suspended Solids mg/L <0.48 1.0 05/29/24 15:38

LABORATORY CONTROL SAMPLE: 2723922

Spike LCS LCS % Rec Parameter Units Result % Rec Limits Qualifiers Conc. 96 **Total Suspended Solids** mg/L 100 96.0 80-120

SAMPLE DUPLICATE: 2723923

Date: 06/12/2024 08:47 AM

40278761001 Dup Max **RPD RPD** Parameter Units Result Result Qualifiers 37.0 34.0 8 10 Total Suspended Solids mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Sulfide

Date: 06/12/2024 08:47 AM

QUALITY CONTROL DATA

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

QC Batch: 475602 Analysis Method: SM 4500-S F (2000)

QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Dissolved Iodometric

> Pace Analytical Services - Green Bay Laboratory:

> > 05/30/24 12:29

4 0

Associated Lab Samples: 40278809001, 40278809002, 40278809003, 40278809004, 40278809005, 40278809006, 40278809007,

40278809008, 40278809009, 40278809010, 40278809011

METHOD BLANK: 2723998 Matrix: Water

Associated Lab Samples:

40278809008, 40278809009, 40278809010, 40278809011

Blank Reporting

<1.2

Parameter Units Limit Qualifiers Result Analyzed

LABORATORY CONTROL SAMPLE: 2723999

LCS LCS Spike % Rec Units Result % Rec Limits Qualifiers Parameter Conc. Sulfide mg/L 44.8 43.2 96 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2724000 2724001

mg/L

MSD MS

40278809001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual

Sulfide 20 <1.2 44.8 44.8 41.6 45.6 92 101 80-120 9 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALITY CONTROL DATA

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

QC Batch: 475601 Analysis Method: SM 4500-S F (2000)

QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278809001, 40278809002, 40278809003, 40278809004, 40278809005, 40278809006, 40278809007,

40278809008, 40278809009, 40278809010, 40278809011

METHOD BLANK: 2723994 Matrix: Water

Associated Lab Samples: 40278809001, 40278809002, 40278809003, 40278809004, 40278809005, 40278809006, 40278809007,

40278809008, 40278809009, 40278809010, 40278809011

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Sulfide mg/L <1.2 4.0 05/30/24 11:03

LABORATORY CONTROL SAMPLE: 2723995

Date: 06/12/2024 08:47 AM

LCS LCS % Rec Spike Units Result % Rec Limits Qualifiers Parameter Conc. Sulfide 81 mg/L 43.2 34.8 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2723996 2723997

MS MSD

40278809001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual Sulfide 2 <1.2 43.2 43.2 40.8 41.6 93 94 80-120 10 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Chloride

Date: 06/12/2024 08:47 AM

Sulfate

QC Batch: 475997 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions, Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278809001, 40278809002, 40278809003, 40278809004, 40278809005, 40278809006

METHOD BLANK: 2726176 Matrix: Water

Associated Lab Samples: 40278809001, 40278809002, 40278809003, 40278809004, 40278809005, 40278809006

Blank Reporting Parameter Units Result Limit Analyzed Qualifiers < 0.59 2.0 06/06/24 10:17 mg/L < 0.44 2.0 06/06/24 10:17 mg/L

LABORATORY CONTROL SAMPLE: 2726177

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Chloride 20 21.0 105 mg/L 90-110 Sulfate 20 21.1 105 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2726178 2726179 MS MSD 40278790010 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Chloride mg/L 28.1 100 100 133 132 105 104 90-110 15 Sulfate 182 100 100 272 270 90-110 mg/L 91 88 15 M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2726180 2726181 MS MSD 40278809006 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Result Result % Rec % Rec **RPD RPD** Qual Conc. Limits Chloride mg/L 6.9J 100 100 113 112 106 105 90-110 15 Sulfate mg/L <2.2 100 100 110 108 109 107 90-110 15

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Chloride

Sulfate

Date: 06/12/2024 08:47 AM

QUALITY CONTROL DATA

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

QC Batch: 476089 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions, Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278809007, 40278809008, 40278809009, 40278809010, 40278809011

METHOD BLANK: 2726736 Matrix: Water

Associated Lab Samples: 40278809007, 40278809008, 40278809009, 40278809010, 40278809011

Blank Reporting Qualifiers Parameter Units Result Limit Analyzed < 0.59 2.0 06/06/24 18:20 mg/L mg/L < 0.44 2.0 06/06/24 18:20

LABORATORY CONTROL SAMPLE: 2726737

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Chloride 20 21.0 105 90-110 mg/L 90-110 Sulfate mg/L 20 21.2 106

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2726738 2726739 MS MSD 40278809007 Spike Spike MS MSD MS MSD % Rec Max Parameter RPD Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** Qual Chloride mg/L 17.7 100 100 123 128 105 110 90-110 15 Sulfate <2.2 100 100 106 109 106 109 90-110 3 mg/L 15

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Chloride

Sulfate

Date: 06/12/2024 08:47 AM

QUALITY CONTROL DATA

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

QC Batch: 475847 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278809001, 40278809002, 40278809003

METHOD BLANK: 2725163 Matrix: Water

Associated Lab Samples: 40278809001, 40278809002, 40278809003

Blank Reporting Qualifiers Parameter Units Result Limit Analyzed < 0.59 2.0 06/04/24 22:40 mg/L mg/L < 0.44 2.0 06/04/24 22:40

LABORATORY CONTROL SAMPLE: 2725164

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Chloride 20 20.8 104 90-110 mg/L 90-110 Sulfate mg/L 20 20.9 104

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2725165 2725166 MS MSD 40278773001 Spike Spike MS MSD MS MSD % Rec Max RPD Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** Qual Chloride mg/L 123 400 400 532 541 102 104 90-110 2 15 Sulfate 400 400 523 533 102 104 90-110 2 mg/L 116 15

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

QC Batch: 475848 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278809004, 40278809005, 40278809006, 40278809007, 40278809008, 40278809009, 40278809010,

40278809011

METHOD BLANK: 2725172 Matrix: Water

Associated Lab Samples: 40278809004, 40278809005, 40278809006, 40278809007, 40278809008, 40278809009, 40278809010,

40278809011

Blank Reporting Parameter Units Limit Qualifiers Result Analyzed Chloride mg/L < 0.59 2.0 06/05/24 15:18 Sulfate < 0.44 06/05/24 15:18 mg/L 2.0

LABORATORY CONTROL SAMPLE: 2725173

Date: 06/12/2024 08:47 AM

Spike LCS LCS % Rec Qualifiers Parameter Units Conc. Result % Rec Limits Chloride mg/L 20 19.9 100 90-110 Sulfate 20 19.9 100 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2725174 2725175 MSD MS 40278809004 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Chloride mg/L 3.6J 100 100 117 109 114 106 90-110 15 M0 Sulfate mg/L <2.2 100 100 113 107 113 107 90-110 6 15 M0

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALITY CONTROL DATA

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

QC Batch: 475489 Analysis Method: EPA 310.2

QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278809001, 40278809002, 40278809003, 40278809004, 40278809005, 40278809006, 40278809007,

40278809008, 40278809009, 40278809010, 40278809011

METHOD BLANK: 2723324 Matrix: Water

Associated Lab Samples: 40278809001, 40278809002, 40278809003, 40278809004, 40278809005, 40278809006, 40278809007,

40278809008, 40278809009, 40278809010, 40278809011

Blank Reporting

ParameterUnitsResultLimitAnalyzedQualifiersAlkalinity, Total as CaCO3mg/L<7.4</td>25.005/29/24 10:10

LABORATORY CONTROL SAMPLE: 2723325

LCS LCS % Rec Spike Units % Rec Limits Qualifiers Parameter Conc. Result Alkalinity, Total as CaCO3 mg/L 100 104 104 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2723326 2723327

MS MSD

40278850001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual Alkalinity, Total as CaCO3 20 154 100 100 248 251 95 97 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2723328 2723329

MS MSD MSD MSD 40278839001 Spike Spike MS MS % Rec Max Parameter Units Conc. Conc. Result % Rec % Rec **RPD** RPD Qual Result Result Limits Alkalinity, Total as CaCO3 71.8 100 100 182 177 110 105 90-110 3 20 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

QC Batch: 475491 Analysis Method: EPA 310.2

QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity, Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278809001, 40278809002, 40278809003, 40278809004, 40278809005, 40278809006, 40278809007,

40278809008, 40278809009

METHOD BLANK: 2723336 Matrix: Water

Associated Lab Samples: 40278809001, 40278809002, 40278809003, 40278809004, 40278809005, 40278809006, 40278809007,

40278809008, 40278809009

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Alkalinity, Total as CaCO3, mg/L <7.4 25.0 05/29/24 11:16 Dissolved

LABORATORY CONTROL SAMPLE: 2723337

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits Qualifiers

Alkalinity, Total as CaCO3, mg/L 100 102 102 90-110

Dissolved

Date: 06/12/2024 08:47 AM

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2723338 2723339 MS MSD MSD MS 40278790013 MS MSD Spike Spike % Rec Max % Rec RPD Parameter Result Result % Rec Limits **RPD** Units Result Conc. Conc. Qual

Alkalinity, Total as CaCO3, mg/L 267 100 100 365 367 98 100 90-110 0 20 Dissolved

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2723340 2723341

MS MSD 40278809009 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result % Rec % Rec **RPD** RPD Qual Result Conc. Conc. Result Limits

Alkalinity, Total as CaCO3, mg/L <7.4 100 100 107 105 107 105 90-110 2 20 Dissolved

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

QC Batch: 475492 Analysis Method: EPA 310.2

QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity, Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278809010, 40278809011

METHOD BLANK: 2723342 Matrix: Water

Associated Lab Samples: 40278809010, 40278809011

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Alkalinity, Total as CaCO3, mg/L <7.4 25.0 05/29/24 11:48

Dissolved

LABORATORY CONTROL SAMPLE: 2723343

Spike LCS LCS % Rec Qualifiers Parameter Units Conc. Result % Rec Limits Alkalinity, Total as CaCO3, mg/L 100 104 104 90-110

Dissolved

Date: 06/12/2024 08:47 AM

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2723344 2723345

MS MSD

40278809010 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual Alkalinity, Total as CaCO3, 143 100 251 251 108 107 0 20 100 90-110 mg/L Dissolved

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

QC Batch: 475731 Analysis Method: SM 5310C

QC Batch Method: SM 5310C Analysis Description: 5310C Dissolved Organic Carbon

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278809001, 40278809002, 40278809003, 40278809004

METHOD BLANK: 2724561 Matrix: Water

Associated Lab Samples: 40278809001, 40278809002, 40278809003, 40278809004

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Dissolved Organic Carbon mg/L <0.19 0.50 06/03/24 04:15

LABORATORY CONTROL SAMPLE: 2724562

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Dissolved Organic Carbon 12.5 12.6 101 80-120 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2724563 2724564

MS MSD

40278579001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Result Result **RPD** RPD Result Conc. % Rec % Rec Limits Qual Dissolved Organic Carbon 20 mg/L 1.3 6 6 6.9 7.2 94 98 80-120 3

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2724565 2724566

MS MSD

40278579002 MS MSD MS MSD % Rec Spike Spike Max RPD Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD Qual 6.0 12 12 Dissolved Organic Carbon 18.1 18.0 100 100 0 20 mg/L 80-120

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALITY CONTROL DATA

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

QC Batch: 475863 Analysis Method: SM 5310C

QC Batch Method: SM 5310C Analysis Description: 5310C Dissolved Organic Carbon

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40278809005, 40278809006, 40278809007, 40278809008, 40278809009, 40278809010, 40278809011

METHOD BLANK: 2725790 Matrix: Water

Associated Lab Samples: 40278809005, 40278809006, 40278809007, 40278809008, 40278809009, 40278809010, 40278809011

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Dissolved Organic Carbon mg/L 0.45J 0.50 06/03/24 12:13

LABORATORY CONTROL SAMPLE: 2725791

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits Qualifiers

Dissolved Organic Carbon mg/L 12.5 12.6 101 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2725792 2725793

MS MSD

40278809005 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Result Result **RPD** RPD Qual Result Conc. % Rec % Rec Limits Dissolved Organic Carbon mg/L 18.4 18 18 36.3 35.8 99 97 80-120 20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALIFIERS

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - The reported result is an estimated value.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

DL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Analyte was not detected and is reported as less than the LOD or as defined by the customer.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 06/12/2024 08:47 AM

CR	The dissolved metal result was greater than the total metal result for this element. Results were confirmed by reanalysis.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
D9	Dissolved result is greater than the total. Data is within laboratory control limits.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
PP	The mass of dried residue obtained did not meet the test method requirements based on volume used.
Т3	Insufficient sample received from client to perform the analysis per EPA method requirements.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

ab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
10278809001	SW-C9_20240523	EPA 3010A	475331	EPA 6020B	475455
0278809002	SW-C1 20240523	EPA 3010A	475331	EPA 6020B	475455
0278809003	SW-STM_20240523	EPA 3010A	475331	EPA 6020B	475455
0278809004	SW-C5_20240523	EPA 3010A	475331	EPA 6020B	475455
0278809005	SW-EB_20240523	EPA 3010A	475331	EPA 6020B	475455
0278809006	SW-NBOUT_20240523	EPA 3010A	475331	EPA 6020B	475455
0278809007	SW-NB_20240523	EPA 3010A	475331	EPA 6020B	475455
0278809008	SW-HWY27W_20240523	EPA 3010A	475331	EPA 6020B	475455
0278809009	SW-HWY27E 20240523	EPA 3010A	475331	EPA 6020B	475455
0278809010	CP-04_20240523	EPA 3010A	475331	EPA 6020B	475455
0278809011	SW-C9-DUP-20240523	EPA 3010A	475331	EPA 6020B	475455
0278809001	SW-C9_20240523	EPA 3010A	475332	EPA 6020B	475955
0278809002	SW-C1_20240523	EPA 3010A	475332	EPA 6020B	475955
0278809003	SW-STM_20240523	EPA 3010A	475332	EPA 6020B	475955
0278809004	SW-C5_20240523	EPA 3010A	475332	EPA 6020B	475955
0278809005	SW-EB_20240523	EPA 3010A	475332	EPA 6020B	475955
0278809006	SW-NBOUT_20240523	EPA 3010A	475332	EPA 6020B	475955
0278809007	SW-NB_20240523	EPA 3010A	475332	EPA 6020B	475955
0278809008	SW-HWY27W 20240523	EPA 3010A	475332	EPA 6020B	475955
0278809009	SW-HWY27E_20240523	EPA 3010A	475332	EPA 6020B	475955
0278809010	CP-04 20240523	EPA 3010A	475332	EPA 6020B	475955
0278809011	SW-C9-DUP-20240523	EPA 3010A	475332	EPA 6020B	475955
0278809001	SW-C9_20240523	SM 2540D	475590		
0278809002	SW-C1_20240523	SM 2540D	475590		
0278809003	SW-STM_20240523	SM 2540D	475590		
0278809004	SW-C5_20240523	SM 2540D	475590		
0278809005	SW-EB_20240523	SM 2540D	475590		
0278809006	SW-NBOUT_20240523	SM 2540D	475590		
0278809007	SW-NB_20240523	SM 2540D	475590		
0278809008	SW-HWY27W_20240523	SM 2540D	475590		
0278809009	SW-HWY27E_20240523	SM 2540D	475590		
0278809010	CP-04_20240523	SM 2540D	475590		
0278809011	SW-C9-DUP-20240523	SM 2540D	475590		
0278809001	SW-C9_20240523	SM 4500-S F (2000)	475601		
0278809002	SW-C1_20240523	SM 4500-S F (2000)	475601		
0278809003	SW-STM_20240523	SM 4500-S F (2000)	475601		
0278809004	SW-C5_20240523	SM 4500-S F (2000)	475601		
0278809005	SW-EB_20240523	SM 4500-S F (2000)	475601		
0278809006	SW-NBOUT_20240523	SM 4500-S F (2000)	475601		
0278809007	SW-NB 20240523	SM 4500-S F (2000)	475601		
0278809008	SW-HWY27W_20240523	SM 4500-S F (2000)	475601		
0278809009	SW-HWY27E_20240523	SM 4500-S F (2000)	475601		
0278809010	CP-04_20240523	SM 4500-S F (2000)	475601		
0278809011	SW-C9-DUP-20240523	SM 4500-S F (2000)	475601		
0278809001	SW-C9_20240523	SM 4500-S F (2000)	475602		
0278809002	SW-C1_20240523	SM 4500-S F (2000)	475602		
	JII J: 20270020	OW 4000 O I (2000)	710002		

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

ab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytic Batch
10278809004	SW-C5_20240523	SM 4500-S F (2000)	475602		
0278809005	SW-EB_20240523	SM 4500-S F (2000)	475602		
0278809006	SW-NBOUT_20240523	SM 4500-S F (2000)	475602		
0278809007	SW-NB_20240523	SM 4500-S F (2000)	475602		
0278809008	SW-HWY27W_20240523	SM 4500-S F (2000)	475602		
0278809009	SW-HWY27E_20240523	SM 4500-S F (2000)	475602		
0278809010	CP-04_20240523	SM 4500-S F (2000)	475602		
0278809011	SW-C9-DUP-20240523	SM 4500-S F (2000)	475602		
0278809001	SW-C9_20240523	EPA 300.0	475847		
0278809002	SW-C1_20240523	EPA 300.0	475847		
0278809003	SW-STM_20240523	EPA 300.0	475847		
0278809004	SW-C5_20240523	EPA 300.0	475848		
0278809005	SW-EB_20240523	EPA 300.0	475848		
0278809006	SW-NBOUT_20240523	EPA 300.0	475848		
0278809007	SW-NB_20240523	EPA 300.0	475848		
0278809008	SW-HWY27W_20240523	EPA 300.0	475848		
0278809009	SW-HWY27E_20240523	EPA 300.0	475848		
0278809010	CP-04_20240523	EPA 300.0	475848		
0278809011	SW-C9-DUP-20240523	EPA 300.0	475848		
0278809001	SW-C9_20240523	EPA 300.0	475997		
0278809002	SW-C1_20240523	EPA 300.0	475997		
278809003	SW-STM_20240523	EPA 300.0	475997		
0278809004	SW-C5_20240523	EPA 300.0	475997		
278809005	SW-EB_20240523	EPA 300.0	475997		
0278809006	SW-NBOUT_20240523	EPA 300.0	475997		
0278809007	SW-NB_20240523	EPA 300.0	476089		
0278809008	SW-HWY27W_20240523	EPA 300.0	476089		
0278809009	SW-HWY27E_20240523	EPA 300.0	476089		
0278809010	CP-04_20240523	EPA 300.0	476089		
0278809011	SW-C9-DUP-20240523	EPA 300.0	476089		
0278809001	SW-C9_20240523	EPA 310.2	475489		
0278809002	SW-C1_20240523	EPA 310.2	475489		
0278809003	SW-STM_20240523	EPA 310.2	475489		
0278809004	SW-C5_20240523	EPA 310.2	475489		
0278809005	SW-EB_20240523	EPA 310.2	475489		
0278809006	SW-NBOUT_20240523	EPA 310.2	475489		
0278809007	SW-NB_20240523	EPA 310.2	475489		
0278809008	SW-HWY27W_20240523	EPA 310.2	475489		
278809009	SW-HWY27E_20240523	EPA 310.2	475489		
278809010	CP-04_20240523	EPA 310.2	475489		
0278809011	SW-C9-DUP-20240523	EPA 310.2	475489		
0278809001	SW-C9_20240523	EPA 310.2	475491		
0278809002	SW-C1_20240523	EPA 310.2	475491		
0278809003	SW-STM_20240523	EPA 310.2	475491		
0278809004	SW-C5_20240523	EPA 310.2	475491		
0278809005	SW-EB_20240523	EPA 310.2	475491		



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FMC-2024_04 FLAMBEAU MINE CO.

Pace Project No.: 40278809

Date: 06/12/2024 08:47 AM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40278809006	SW-NBOUT_20240523	EPA 310.2	475491		
40278809007	SW-NB_20240523	EPA 310.2	475491		
40278809008	SW-HWY27W_20240523	EPA 310.2	475491		
40278809009	SW-HWY27E_20240523	EPA 310.2	475491		
40278809010	CP-04_20240523	EPA 310.2	475492		
40278809011	SW-C9-DUP-20240523	EPA 310.2	475492		
40278809001	SW-C9_20240523	SM 5310C	475731		
40278809002	SW-C1_20240523	SM 5310C	475731		
40278809003	SW-STM_20240523	SM 5310C	475731		
40278809004	SW-C5_20240523	SM 5310C	475731		
40278809005	SW-EB_20240523	SM 5310C	475863		
40278809006	SW-NBOUT_20240523	SM 5310C	475863		
40278809007	SW-NB_20240523	SM 5310C	475863		
40278809008	SW-HWY27W_20240523	SM 5310C	475863		
40278809009	SW-HWY27E_20240523	SM 5310C	475863		
40278809010	CP-04_20240523	SM 5310C	475863		
40278809011	SW-C9-DUP-20240523	SM 5310C	475863		



CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed and accurate

40278809 Page: Cooler#

1 of 1 of 33

COC# FMC-2024_0523

Required Ship to Lab:		Required	Project In	nformation	<u>ı·</u> _		Required	Invoice	Information:																
ab Name Pace Analyti	cal Services	*Facility I	Te.	ambeau Mii			Send inv		Accounting							TA	T. Stand	dard 10	day	X		Rus	h		Mark One
Address		*Task Cod	ie#	FMC-2024	4_04		Address	2121 Inr	novation Court P O	Box 512	5, De l	Pere, '	ΝI			If F	lush, Da	ate due		T '-					
1241 Bellevue Street - Si	uite 9, Green Bay, Wi	Site Addre	ss -	J			City/State		De Pere, WI 5411	5	Ph#	92	0-497-	2500		QC	level R	equire	Sta	ndard		Х	Special		Mark one
ab PM Tod Nolteme	yer	City L	ADYSMIT	H S	tate	WI	17F777	.H.G	73°		.1					La	Projec	ct ID (la	ab us	∋)				***************************************	
Phone/Fax (608) 23:	2-3300	Project (Contact	Mark	Cıardellı	4	Send E	DD to	Nick Glander								*		Re	quest	ed A	naly	ses		
Lab PM email Tod Noit	emeyer@pacelabs.com	Phone/F		0-496-6656	3		CC Har		enort to	Kozicki, N	lick GI	ander			••••		i	Filtered				T			
Applicable Lab Quote#		Email		Mark Cı	ardellı(@foth com	CC electr	onic copy	report to Sharon	n Kozic ander@	ki@fc	oth co	<u>om</u>			N	Y	N	Y	YN	I N	Y			
₃ Samples I	SAMPLE ID	Valid Matrix C MATRIX PROPRING WATER GROUND WATER WASTE WATER FREE PRODUCT SOIL OIL WIPE ADDIENT AR SOIL GAS	MAT WP SURI WG WATI WW SLUC UF RINS SO LAB	TRIX FAGE WATER WS ER QC WG DGE SL SEATE WM LEACHATE- LEACHATE- LLEACHATE- LLEACHATE-	, ≚.	SAMPLE TYPE G=GRAB C=COMP	SAM DA		SAMPLE TIME (Military)	# OF CONTAINERS	Unpreserved	H2SO4 HNO3	Preser	Native Na2S203	Methanol	Total Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness	Dissolved Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness	Total Alkalınıty, CI, Sulfate	Dissolved Alkalınıty, CI, Sulfate	DOC	Total Sulfide	Dissolved Sulfide		Commer b Şampl	
1 SW-C9_20	240523				ws	G	05/23	/2024	1037	8	3	1 2			2	х	х	×	х	x x	(x	×	0	U	
2 SW-C1_20	240523				ws	G	05/23	/2024	0944	8	3	1 2			2	×	х	×	X	x x	x x	х	0	<u>TL</u>	
з SW-STM_2	20240523				ws	G	05/23	/2024	0707	8	3	1 2			2	Х	х	х	х	x x	x x	х	0	03	
4 SW-C5_20	240523				ws	G	05/23	/2024	1005	8	3	1 2			2	Х	×	×	x	хх	$ \mathbf{x} $	х	Ki.	<u>au</u>	
5 SW-EB-202	240523				ws	G	05/23	/2024	0857	8	3	1 2			2	х	х	х	х	ХX	×	х	_ <u>\</u>	<u> </u>	
6 SW-NBOU	T_20240523				ws	G	05/23	/2024	0832	8	3	1 2			2	х	Х	x	x	ХX	x x	х	d	06	
7 SW-NB_20	240523				ws	G	05/23	/2024	0802	8	3	1 2			2	х	x	×	X	x x	×	×	0	06	
	7W_20240523				ws	G	05/23	/2024	1135	8	3	1 2	П		2	Х	Х	x	Х	x x	x	х		XB	
	7E 20240523				ws	G	05/23	/2024	1217	8	3	1 2		,	2	х	х	х	X	x x	x	х	Ö	99	
10 CP-04 202	40523				ws	G	05/23	/2024	0922	8	3	1 2			2	Х	Х	х	X	x x	x	х	(1	10	
11 _ SW-C9-DU	P-20240523				ws	G	05/23	/2024	1037	8	3	1 2			2	Х	х	х	X	x x	x	х	<u>U</u>	[[
		MIT.									П														
Additional Comments/S	pecial instructions:				RELI	NQUISHED BY	AFFILIAT	ON	DATE	TIME	ACC	CEPT	D BY	/ AFF	LIATIO	N		DATE	AIT.	ΛE	Sai	mple	Recei	pt Condi	tions
					Jim I	Engelhardt/M	erient _		23-May	1403	1	2/14	ere	//	5000	1	۶	123 /24	140	/3			Y/N	Y/N	Y/N
						Mac	70	17	5/2/2	1403	M	edf)	On	X	am	WAFO	CC 108	1674	111	105	0.	·Ur	Y) N	Q)/N	Y/N
							-) 		19		1											Г	Y/N	Y/N	Y/N
																							Y/N	Y/N	Y/N
						PING METHOD				ER NAM	E ANI	D SIG	NATU	RE							ာ့ ၂		S	- ee 다	ınk?
Include Equis EDD	's				UPS	COURIER	FEDEX														ē in		Samples on Ice?	Sample intact?	Trip Blank?
·	tion for electronic data d	eliverabl	e.		US N	MAIL		SIGNATUR	E of SAMPLER		11	1	1	OA.	E Signed	05/23/	2024 Tin	ne			Temp		Sar	<i>σ</i> ,≔	Tr



CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed and accurate

40278809 Page:

Cooler#

Zof 2. of

COC# FMC-2024_05 23

Require	ed Ship to Lab:	Required Project Information	on.		Required Invol	ce information:													
Lab Nar	me Pace Analytical Services	*Faculity ID #: Flambeau	Aine Co		Send Invoice to	Accounting					TA	T Stanc	ard 10	day	X	F	≀ush		Mark One
Address	s	*Task Code # FMC-20	24_04		Address 2121	Innovation Court P	O Box 512	8, De Per	e, Wi		lf F	Rush, Da	te due						.l
1241 Be	ellevue Street - Suite 9, Green Bay, WI	Site Address			City/State	De Pere, Wi 5	4115	Ph#	920-497-	2500	Q	level R	equired	l. Star	ndard	X	Specia	1	Mark one
Lab PM	Tod Noitemeyer	City LADYSMITH	State	WI	17F777.25		·····	.1			La	b Projec	t ID (la	b use	:)			<u></u>	1
Phone/	Fax (608) 232-3300	Project Contact Mar	k Cıardellı		Send EDD to	D. Nick Glander					-					d An	alvses		
Lab PM	f email Tod.Noltemeyer@pacelabs.com	Phone/Fax 920-496-66			CC Hardcop	v report to	on Kozicki, N	link Clane					- Utorod		ueste	u An	aryses		
Applicat	ble Lab Quote #	Email: Mark (Ciardelli@	ofoth com	CC electronic co	opy report to Sha	ron Kozic	kı@foth	com		_	T	iltered	(1/N)		П	-		
						nick	glander@	ofoth co	m			١.,	١			١١.			
ITEM#	*SAMPLE ID Samples IDs: MUST BE UNIQUE	WASTE WATER WW SLUDGE FREE PRODUCT F RINGEATE SOIL BO LAB LEACHATE- OIL OIL SUPP WIPE SW LIB LEACHATE- MINENT AIR AF SIVE AIR AF	F F F F F F F F F F F F F F F F F F F	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME (M _i litary)	TAI	inpreserved 2SO4		vaCSSZO3	Zinc Acetate & NaOH Total Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Harrhees	Dissolved Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness	ufy, CI,	olved Alkalınıty, CI, te	DOC X		Dissolved Suitide	Commen ab Sample	
	SW-C9_20240523		ws	G	05/23/2024	4 1037	8	3 1	2	Z Z S	Ā - ∠ 1 2 X	X	X		ХХ		_		: I.D.
	SW-C1 20240523		ws	G	05/23/2024	7	8	3 1	2		2 X	×	×	×	XX			102	-
	SW-STM_20240523		ws	G	05/23/2024		8	3 1	2		2 X	×	×	X	x x			113	
	SW-C5 20240523		ws	G	05/23/2024		8	3 1	2		2 X	X	×	X	x x	1-1-	× 0	为年	
	SW-EB-20240523		ws	G	05/23/2024		8	3 1	2		2 X	×	×	X	ХX		× O	75	
6	SW-NBOUT 20240523		ws	G	05/23/2024	4 0832	8	3 1	2		2 X	×	×	X	x x			716.	-
	SW-NB_20240523		ws	G	05/23/2024		8	3 1	2		2 X	×	×	X	x x	\vdash	x M	07	
	SW-HWY27W 20240523		ws	G	05/23/2024		8	3 1	2		2 X	×	×	X	x x		×	<u>QX</u>	
9	SW-HWY27E_20240523		ws	G	05/23/2024		8	3 1	2		2 X	×	×		ХX		× O	09	-
10	CP-04 20240523		ws	G	05/23/2024	4 0922	8	3 1	2		2 X	x	×		хх	TT	x O		
11	SW-C9-DUP-20240523		ws	G	05/23/2024	4 1037	8	3 1	2		2 X	X	×	x	хx	x :	× O	1.6	
												1				П		- V	
Additio	onal Comments/Special Instructions:		RELIN	NQUISHED BY	/ AFFILIATION	. DAT	TE TIME	ACCE	TED BY	/ AFFILIATI	NC		DATE	TIM	Ε	Sam	ple Rece	eipt Condit	tions
			Jım E	Engelhardt/M	lenent	23-M	lay 1403	1/2	19/	7.7	FOTA	57:	23/29	14	02		Y/N	Y/N	Y/N
				Post	(FOT)	+) %	12/105	MA	#18	msa	mliel	Mar-C	Shulta	rt II	1:05	0.0	GIN	(C)N	Y/N
						7	7/1-	1100			16-664		s 12. fra	[Ī	Y/N	Y/N	Y/N
																1	Y/N	Y/N	Y/N
			SHIPE	PING METHOD); (mark as appro	opriate) SAM	IPLER NAM	E AND S	IGNATU	RE						ပွ			
Includ	de Equis EDD's		UPS	COURIER	FEDEX Jim	Engelhardt										⊆	Samples on Ice?	Sample infact?	Trıp Blank?
	uired information for electronic data	deliverable.	US N	IAIL	SIGNA	ATURE of SAMPLER	SA	-	14	OATE Sign	05/23	/2024 Tir	ne			Temp	Sam on lo	‰ ⊑	Tr dir

Fodh

CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed and accurate

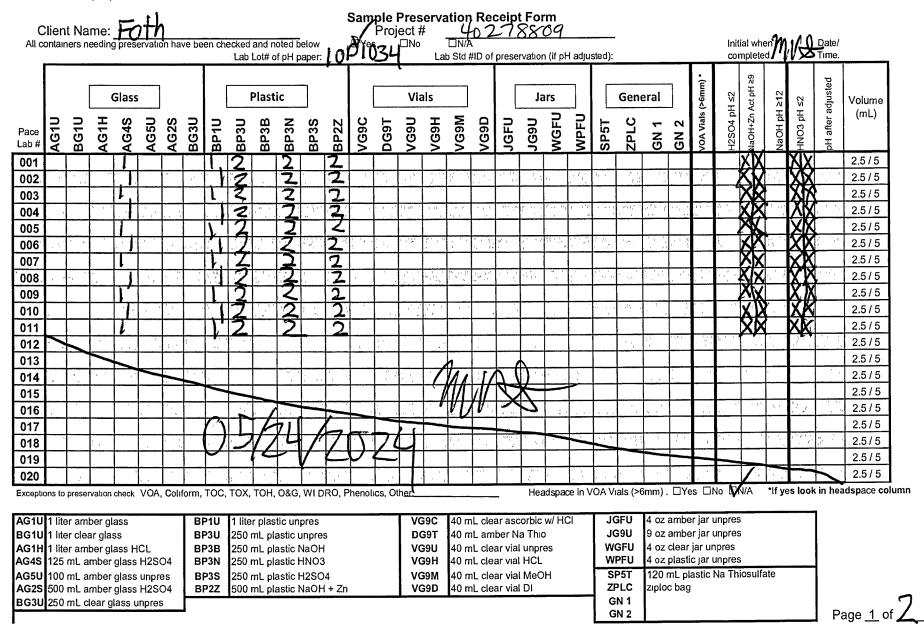
40278809

Page: Cooler# **3** of **3** of 3

COC# FMC-2024_0623

equired Shi	o to Lab:	Required Projec				Required Invoice								JTA5	r Ctand	- nd 10	dou	- TV		IDuah			Mark One
ab Name Pa	ice Analytical Services	*Facility ID #:	Flambeau Mine			Send Invoice to	Accountin		F404	D : D	- 147				r. Stand		uay	^		Rush		-	
ddress		*Task Code #	FMC-2024_	_04	<u> </u>			ourt P O Box							ush, Dat			L		IV 10			T
241 Bellevue	Street - Suite 9, Green Bay, WI	Site Address				City/State	1	WI 54115	F	Ph#	920-497-	2500		QC	level Re	equired	Star	ndard		X S	pecial		Mark one
ab PM To	d Noltemeyer	City LADYSM	IITH Sta	ite	Wi	17F777.23-05-2	782							Lab	Projec	t ID (la	b use	:)					
hone/Fax	(608) 232-3300	Project Conta	ct Mark C	ıardellı		Send EDD to	Nick Glan	der									Red	uest	ed A	nalyse	es		
ab PM email	Tod.Noltemeyer@pacelabs.com	Phone/Fax	920-496-6656			CC Hardcopy re		Sharon Kozid						<u> </u>	F	iltered	(Y/N)						
pplicable Lat	Quote #	Email	Mark Cia	rdellı@	ofoth com	CC electronic copy	1	Sharon Ko nick gland															
								INON GIATIO	<u> </u>	<u> </u>				N	Y	N	Υ	Y	N N	Υ			
	*SAMPLE ID amples IDs MUST BE UNIQUE	DRINKING WATER WP GROUND WATER WG WASTE WATER WW FREE PRODUCT LF SOUL SO	MATRIX SURFACE WATER WS WITTER OC SUDGE SL RINSEATE WH LAB LEACHATE SPUP LLS LEACHATE TOLP LLT	*MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAM TIN (Milit	ЛЕ <u>ξ</u>	# OF COUNTAINERS	Jnpreserved H2SO4	Preser IOI IOI	vative:	Methanol Zinc Acetate & NaOH	Total Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness	Dissolved Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness	Total Alkalınıty, CI, Sulfate	Dissolved Alkalınıty, Cl, Sulfate	200	Total Sulfide	Dissolved Sulfide	Lab	Commer Sampl	
	C9_20240523	1		ws	G	05/23/2024	103			3 1	2		2	Х	х	Х	Х	x :	×Χ	х	OC		
	C1_20240523			ws	G	05/23/2024	094	44	В	3 1	2		2	Х	Х	х	Х	x :	x x	х	_0(12	
	STM 20240523			ws	G	05/23/2024	070	07	8	3 1	2		2	Х	х	×	Х	x >	(χ	х)3_	
	C5 20240523			ws	G	05/23/2024	100	05	В	3 1	2		2	х	×	×	Х	x :	x x	х		<u> </u>	
	EB-20240523			ws	G	05/23/2024	08	57	В	3 1	2		2	х	х	×	Х	x :	κx	х	00	15	
	NBOUT_20240523			ws	G	05/23/2024	08:	32	В	3 1	2		2	х	х	х	х	x :	×Χ	х		16	
	NB 20240523			ws	G	05/23/2024	080	02	в	3 1	2		2	х	×	x	Х	x :	x x	х	(1)	17	
	HWY27W_20240523			ws	G	05/23/2024	113	35	В	3 1	2		2	Х	х	x	Х	x ;	x x	х	_[/(J <u>X</u> _	
	HWY27E_20240523			ws	G	05/23/2024	12	17	В	3 1	2		2	Х	х	×	Х	x :	x x	х	10		
	04 20240523			ws	G	05/23/2024	093	22	В	3 1	2		2	х	х	×	Х	x :	x x	х	<u>Vi</u>	<u>, y</u>	
	C9-DUP-20240523			ws	G	05/23/2024	103	37	8	3 1	2		2	Х	×	X	Х	X :	x x	х	V	<u> </u>	
11 000	00 001 202 10020						1							<u> </u>									
dditional Co	mments/Special instructions:			RELIN	NQUISHED BY	/ AFFILIATION		DATE TI	ME	ACCE	PTED BY	/ AFFI	LIATION	1		DATE	TIN		_	mple !	Receip	t Condi	tions
				Jım E	Engelhardt/M	erient		23-May 14	03	N	my.		50	TFS		23/4		103			<u>//N</u>	Y/N	YIN
				1	2000	FOIH		5/2/2/1	2	Mot	t)Van	20	mly	Wefa	CR ON	24/104	11:	:05	1/r	<u>UG</u>) _{/N}	(V) N	T A (M
				1										•						<u> Y</u>	/N	CY/N	Y/N
																				Y	′/N	Y/N	Y/N
				SHIPE	PING METHOD): (mark as appropri	ate)	SAMPLER I	NAME	AND S	SIGNATU	RE							ပ္စ		SS.	를 갖	Trip Blank?
noluda En	uis EDD's			UPS	COURIER	FEDEX Jim E								_					Тетр In		Samples on Ice?	Sample intact?	d
	information for electronic data o	l - III un h l o		US N	1AIL	SIGNATUI	RE of SAMPLE	ER C		N	MI	DAT	E Signed	05/23/	2024 Tim	10			Te.		Sa	<u>.</u>	<u> </u>

Effective Date: 8/16/2022



DC#_Title: ENV-FRM-GBAY-0014 v03_SCUR

Effective Date: 8/17/2022

Sample Condition Upon Receipt Form (SCUR)

H-11		Project #:		
Client Name: TOTN			WO# : 4	40278809
Courier: ☐ 98 Logistics ☐ Fed Ex ☐ Speede	e 🗆 UPS 🗀 V	Valtco		
☑ Client ☐ Pace Other:				
Tracking #:		_	40278809	
Custody Seal on Cooler/Box Present: yes	no Seals intac	∷ 🗖 yes 🚺 🕫 📗		
Custody Seal on Samples Present: yey \		∷ 🔲 yes 🏹 no		
Packing Material: Bubble Wrap Bubb		1		
Thermometer Used SR - 121,121,121	Type of Ice: Wet	Blue Dry None	Meltwater 0	Only Person examining contents:
Cooler Temperature Unform 15,0,5,0.5 Corr. 0.		Tiesus is Everen. F	i ver 🗆 no	1 25/211/2014 VW
Temp Blank Present:	biological	Tissue is Frozen:	J yes I no	Date: 17/19/Initials: 17/19
Temp should be above freezing to 6°C. Biota Samples may be received at ≤ 0°C if shipped on Dr	y Ice			Labeled By Initials:
Chain of Custody Present:	MYS NO NA	1.		
Chain of Custody Filled Out:	Yes ONO ON/A	2.		
Chain of Custody Relinquished:	MYes □No □N/A	3.		
Sampler Name & Signature on COC:	ÛV/98 □No □N/A	4.		
Samples Arrived within Hold Time:	Yes □No	5.		
- DI VOA Samples frozen upon receipt	□Yes □No	Date/Time:		
Short Hold Time Analysis (<72hr):	Varyes □No	6.		
Rush Turn Around Time Requested:	□Yes MNo	7.		
Sufficient Volume:		8.		" "
For Analysis: MYes □No MS/MSD	: Dyes Mino Dn/A			
Correct Containers Used:	Yes □No	9.		
Correct Type: Pace Green Bay, Pace IR, Non-Pace				
Containers Intact:	V Yes □No	10.		
Filtered volume received for Dissolved tests	MY95 DNO DN/A	11.		
Sample Labels match COC:	MYes DNo DN/A	12.		
-Includes date/time/ID/Analysis Matrix:	\overline{W}_{A}			
Trıp Blank Present:	□Yes □No MN	13.		
Trip Blank Custody Seals Present	□Yes □No N/A			
Pace Trip Blank Lot # (if purchased):				
Client Notification/ Resolution: Person Contacted:	Data	lf c⊦ ∕Tıme:	necked, see attach	ned form for additional comments
Comments/ Resolution:	Date	Time.		
PM Review is documented electronically in LIM	s. By releasing the	project, the PM ack	nowledges the	y have reviewed the sample logic
				Page of 2



August 08, 2024

Nick Glander Foth Infrastructure & Environment, LLC 2121 Innovation Court Suite 300 De Pere, WI 54115

RE: Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Dear Nick Glander:

Enclosed are the analytical results for sample(s) received by the laboratory on July 26, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

• Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod Noltemeyer

Tod nolteneya

tod.noltemeyer@pacelabs.com (920)469-2436

Project Manager

Enclosures

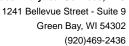
cc: MARK CIARDELLI, Foth Infrastructure & Environment,

LLC

Krystal Clark, Foth Infrastructure & Environment SHARON KOZICKI, Foth Infrastructure & Environment,

LLC







CERTIFICATIONS

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302 Florida/NELAP Certification #: E87948 Illinois Certification #: 200050 Kentucky UST Certification #: 82 Louisiana Certification #: 04168 Minnesota Certification #: 055-999-334 New York Certification #: 12064 North Dakota Certification #: R-150

South Carolina Certification #: 83006001 Texas Certification #: T104704529-21-8 Virginia VELAP Certification ID: 11873 Wisconsin Certification #: 405132750 Wisconsin DATCP Certification #: 105-444 USDA Soil Permit #: P330-21-00008 Federal Fish & Wildlife Permit #: 51774A



SAMPLE SUMMARY

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40281683001	SW-C9_20240724	Water	07/24/24 12:48	07/26/24 07:50
40281683002	SW-C1_20240724	Water	07/24/24 16:43	07/26/24 07:50
40281683003	SW-STM_20240724	Water	07/24/24 17:27	07/26/24 07:50
40281683004	SW-C5_20240724	Water	07/24/24 16:10	07/26/24 07:50
40281683005	SW-EB_20240724	Water	07/24/24 14:36	07/26/24 07:50
40281683006	SW-NBOUT_20240724	Water	07/24/24 14:23	07/26/24 07:50
40281683007	SW-NB_20240724	Water	07/24/24 13:49	07/26/24 07:50
40281683008	SW-HWY27W_20240724	Water	07/24/24 13:02	07/26/24 07:50
40281683009	SW-HWY27E_20240724	Water	07/24/24 12:27	07/26/24 07:50
40281683010	CP-04_20240724	Water	07/24/24 15:10	07/26/24 07:50
40281683011	SW-C5-DUP-20240724	Water	07/24/24 16:10	07/26/24 07:50



SAMPLE ANALYTE COUNT

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40281683001	SW-C9_20240724	EPA 6020B	KXS	9
		EPA 6020B	KXS	9
		SM 2540D	TXW	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	HMB	2
		EPA 300.0	HMB	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
0281683002	SW-C1_20240724	EPA 6020B	KXS	9
		EPA 6020B	KXS	9
		SM 2540D	TXW	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	HMB	2
		EPA 300.0	HMB	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
0281683003	SW-STM_20240724	EPA 6020B	KXS	9
		EPA 6020B	KXS	9
		SM 2540D	TXW	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	HMB	2
		EPA 300.0	HMB	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
0281683004	SW-C5_20240724	EPA 6020B	KXS	9
		EPA 6020B	KXS	9
		SM 2540D	TXW	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	HMB	2
		EPA 300.0	HMB	2

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



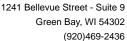
SAMPLE ANALYTE COUNT

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
40281683005	SW-EB_20240724	EPA 6020B	KXS	3
		EPA 6020B	KXS	3
		SM 5310C	TJJ	1
40281683006	SW-NBOUT_20240724	EPA 6020B	KXS	3
		EPA 6020B	KXS	3
		SM 5310C	TJJ	1
40281683007	SW-NB_20240724	EPA 6020B	KXS	3
		EPA 6020B	KXS	3
		SM 5310C	TJJ	1
40281683008	SW-HWY27W_20240724	EPA 6020B	KXS	3
		EPA 6020B	KXS	3
		SM 5310C	TJJ	1
40281683009	SW-HWY27E_20240724	EPA 6020B	KXS	3
		EPA 6020B	KXS	3
		SM 5310C	TJJ	1
40281683010	CP-04_20240724	EPA 6020B	KXS	3
		EPA 6020B	KXS	3
		SM 5310C	TJJ	1
40281683011	SW-C5-DUP-20240724	EPA 6020B	KXS	g
		EPA 6020B	KXS	g
		SM 2540D	TXW	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	HMB	2
		EPA 300.0	HMB	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1

PASI-G = Pace Analytical Services - Green Bay





Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Method: EPA 6020B

Description: 6020B MET ICPMS

Client: Foth Infrastructure & Environment

Date: August 08, 2024

General Information:

11 samples were analyzed for EPA 6020B by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

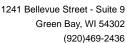
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.





Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Method: EPA 6020B

Description: 6020B MET ICPMS, Dissolved **Client:** Foth Infrastructure & Environment

Date: August 08, 2024

General Information:

11 samples were analyzed for EPA 6020B by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

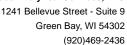
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.





FMC-2024_Q4 FLAMBEAU MINE CO. Project:

Pace Project No.: 40281683

Method: SM 2540D

Description: 2540D Total Suspended Solids Client: Foth Infrastructure & Environment

Date: August 08, 2024

General Information:

5 samples were analyzed for SM 2540D by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

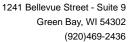
Additional Comments:

Analyte Comments:

QC Batch: 480675

1q: Filtration >10min.

- SW-C5-DUP-20240724 (Lab ID: 40281683011)
 - Total Suspended Solids
- SW-C5_20240724 (Lab ID: 40281683004)
 - Total Suspended Solids





Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Method: SM 4500-S F (2000)

Description: 4500S2F Sulfide, Iodometric **Client:** Foth Infrastructure & Environment

Date: August 08, 2024

General Information:

5 samples were analyzed for SM 4500-S F (2000) by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

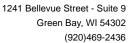
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.





Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Method: SM 4500-S F (2000)

Description: 4500S2F Sulfide, Diss Iodometro **Client:** Foth Infrastructure & Environment

Date: August 08, 2024

General Information:

5 samples were analyzed for SM 4500-S F (2000) by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



PROJECT NARRATIVE

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Method: EPA 300.0

Description: 300.0 IC Anions

Client: Foth Infrastructure & Environment

Date: August 08, 2024

General Information:

5 samples were analyzed for EPA 300.0 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 480512

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40281669003,40281685006

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2752306)
 - Sulfate
- MSD (Lab ID: 2752307)
 - Sulfate
- MSD (Lab ID: 2752309)
 - Sulfate



PROJECT NARRATIVE

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Method: EPA 300.0

Description: 300.0 IC Anions, Dissolved **Client:** Foth Infrastructure & Environment

Date: August 08, 2024

General Information:

5 samples were analyzed for EPA 300.0 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 480825

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40281323001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2753628)
 - Sulfate, Dissolved
- MSD (Lab ID: 2753629)
 - Chloride, Dissolved



1241 Bellevue Street - Suite 9 Green Bay, WI 54302 (920)469-2436

PROJECT NARRATIVE

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Method: EPA 310.2
Description: 310.2 Alkalinity

Client: Foth Infrastructure & Environment

Date: August 08, 2024

General Information:

5 samples were analyzed for EPA 310.2 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:



Green Bay, WI 54302 (920)469-2436

PROJECT NARRATIVE

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Method: EPA 310.2

Description: 310.2 Alkalinity, Dissolved

Client: Foth Infrastructure & Environment

Date: August 08, 2024

General Information:

5 samples were analyzed for EPA 310.2 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

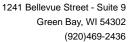
Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:





PROJECT NARRATIVE

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Method: SM 5310C

Description: 5310C Dissolved Organic Carbon **Client:** Foth Infrastructure & Environment

Date: August 08, 2024

General Information:

11 samples were analyzed for SM 5310C by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.



Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Sample: SW-C9_20240724	Lab ID:	40281683001	Collected	d: 07/24/24	12:48	Received: 07/	26/24 07:50 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical I	Method: EPA 6	020B Prep	aration Met	hod: EF	PA 3010A			
	-	tical Services							
Calcium	2930	ug/L	254	76.2	1	07/31/24 06:08	07/31/24 18:28	7440-70-2	
Copper	16.6	ug/L ug/L	6.4	1.9	1	07/31/24 06:08			
ron	3100	ug/L	250	58.0	1		07/31/24 18:28		
Vagnesium	990	ug/L	250	31.2	1		07/31/24 18:28		
Manganese	143	ug/L	4.0	1.2	1		07/31/24 18:28		
Potassium	668J	ug/L	789	237	1		07/31/24 18:28		
Sodium	7420	ug/L	250	42.0	1		07/31/24 18:28		
Total Hardness by 2340B	11.4	mg/L	1.7	0.32	1		07/31/24 18:28	7440 20 0	
Zinc	<10.3	ug/L	34.4	10.3	1		07/31/24 18:28	7440-66-6	
020B MET ICPMS, Dissolved	Analytical I	Method: EPA 6	020B Pren	aration Met	hod: FF	PA 3010A			
NOTED INITIAL TOTAL NO. PISSOIVED	•	tical Services			1100. E1	71001071			
Calcium, Dissolved	2860	ug/L	254	76.2	1	07/31/24 06:17	07/31/24 20:05	7440-70-2	
Copper, Dissolved	11.7	ug/L	6.4	1.9	1		07/31/24 20:05		
ron, Dissolved	960	ug/L	250	58.0	1		07/31/24 20:05		
Aagnesium, Dissolved	953	ug/L	250	31.2	1		07/31/24 20:05		
Manganese, Dissolved	90.3	ug/L	4.0	1.2	1		07/31/24 20:05		
Potassium, Dissolved	629J	ug/L	789	237	1		07/31/24 20:05		
Sodium, Dissolved	7700	ug/L	250	42.0	1		07/31/24 20:05		D9
Total Hardness by 2340B, Dissolved	11.1	mg/L	1.7	0.32	1		07/31/24 20:05	7 1 10 20 0	20
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	07/31/24 06:17	07/31/24 20:05	7440-66-6	
2540D Total Suspended Solids	Analytical I	Method: SM 25	40D						
	•	tical Services		/					
Total Suspended Solids	9.2	mg/L	2.5	1.2	1		07/30/24 11:42		
1500S2F Sulfide, Iodometric	Analytical N	Method: SM 45	00-S F (20)	20)					
50052i Sumue, louometric		tical Services							
Sulfide	<1.2	mg/L	4.0	1.2	1		07/31/24 16:51		
1500S2F Sulfide, Diss Iodometro		Method: SM 45							
130032F Sullide,Diss lodoliletic	•	tical Services	,	,					
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		07/31/24 17:17		
300.0 IC Anions	Analytical M	Method: EPA 3							
oo.o to Amons	•	tical Services		/					
Chloride	7.9	mg/L	2.0	0.59	1		07/30/24 18:24	16887-00-6	
Sulfate	1.7J	mg/L	2.0	0.44	1		07/30/24 18:24	14808-79-8	
800.0 IC Anions, Dissolved	Analytical I	Method: EPA 3	0.00						
		tical Services		/					
Chloride, Dissolved	7.5	mg/L	2.0	0.59	1		07/31/24 13:37	16887-00-6	
Sulfate, Dissolved	1.6J	mg/L	2.0	0.44	1		07/31/24 13:37	14808-79-8	



Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Sample: SW-C9_20240724	Lab ID:	40281683001	Collected	d: 07/24/24	1 12:48	Received: 07	/26/24 07:50 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	10.3J	mg/L	25.0	7.4	1		08/01/24 11:27		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	8.4J	mg/L	25.0	7.4	1		08/01/24 12:52		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
_	Pace Anal	ytical Services	- Green Ba	y					
Dissolved Organic Carbon	12.3	mg/L	1.0	0.38	2		07/30/24 03:47		



Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Sample: SW-C1_20240724	Lab ID:	40281683002	Collected	d: 07/24/24	1 16:43	Received: 07/	26/24 07:50 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prepa	aration Met	hod: EF	PA 3010A			
	Pace Anal	ytical Services	- Green Bay	/					
Calcium	11700	ug/L	254	76.2	1	07/31/24 06:08	07/31/24 18:45	7440-70-2	
Copper	11.8	ug/L	6.4	1.9	1	07/31/24 06:08			
ron	2320	ug/L	250	58.0	1		07/31/24 18:45		
Magnesium	4730	ug/L	250	31.2	1		07/31/24 18:45		
Manganese	562	ug/L	4.0	1.2	1	07/31/24 06:08	07/31/24 18:45	7439-96-5	
Potassium	556J	ug/L	789	237	1		07/31/24 18:45		
Sodium	11200	ug/L	250	42.0	1		07/31/24 18:45		
Total Hardness by 2340B	48.8	mg/L	1.7	0.32	1		07/31/24 18:45		
Zinc	18.7J	ug/L	34.4	10.3	1		07/31/24 18:45	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Pren	aration Met	hod: FF	PA 3010A			
0020D MET ICFING, DISSUIVED	-	vtical Services			iiou. Lr	A 30 10A			
Calaium Diagalyad		•	•		4	07/24/24 06:47	07/24/04 20:00	7440 70 0	DO
Calcium, Dissolved	12000	ug/L	254	76.2	1		07/31/24 20:22		D9
Copper, Dissolved	6.7	ug/L	6.4	1.9	1		07/31/24 20:22		
ron, Dissolved	603	ug/L	250	58.0	1		07/31/24 20:22		D.O.
Magnesium, Dissolved	4790	ug/L	250	31.2	1		07/31/24 20:22		D9
Manganese, Dissolved	557	ug/L	4.0	1.2	1		07/31/24 20:22		
Potassium, Dissolved	534J	ug/L	789	237	1		07/31/24 20:22		
Sodium, Dissolved	11200	ug/L	250	42.0	1		07/31/24 20:22	7440-23-5	
otal Hardness by 2340B, Dissolved	49.7	mg/L	1.7	0.32	1	07/31/24 06:17	07/31/24 20:22		
Zinc, Dissolved	14.9J	ug/L	34.4	10.3	1	07/31/24 06:17	07/31/24 20:22	7440-66-6	
2540D Total Suspended Solids	Analytical	Method: SM 25	40D						
	Pace Anal	ytical Services	- Green Bay	/					
Total Suspended Solids	6.9	mg/L	2.8	1.3	1		07/30/24 11:43		
4500S2F Sulfide, Iodometric	•	Method: SM 45	`	,					
	Pace Anal	ytical Services	- Green Bay	/					
Sulfide	<1.2	mg/L	4.0	1.2	1		07/31/24 16:57		
4500S2F Sulfide,Diss Iodometrc	Analytical	Method: SM 45	00-S F (200	00)					
	Pace Anal	ytical Services	- Green Bay	/					
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		07/31/24 17:22		
300.0 IC Anions	Analytical	Method: EPA 3	0.00						
	•	ytical Services		/					
Chloride	29.3	mg/L	2.0	0.59	1		07/30/24 18:35	16887-00-6	
Sulfate	3.3	mg/L	2.0	0.44	1		07/30/24 18:35		
300.0 IC Anions, Dissolved	Analytical	Method: EPA 3	0.00						
Julio 10 Alliono, Diagolitou		ytical Services		/					
Chloride, Dissolved	28.4	mg/L	2.0		1		08/01/24 20:54	16887 00 6	
Jilionae, Dissolved	26.4 3.5	mg/L	2.0	0.59 0.44	1 1		08/01/24 20:51 08/01/24 20:51		D9



Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Sample: SW-C1_20240724	Lab ID:	40281683002	Collected	d: 07/24/24	1 16:43	Received: 07	/26/24 07:50 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Ana	lytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	35.1	mg/L	25.0	7.4	1		08/01/24 11:30		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Ana	lytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	32.2	mg/L	25.0	7.4	1		08/01/24 13:36		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
_	Pace Ana	lytical Services	- Green Ba	y					
Dissolved Organic Carbon	10.3	mg/L	1.0	0.38	2		07/30/24 04:57		



Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Sample: SW-STM_20240724	Lab ID: 4	10281683003	Collected	: 07/24/24	17:27	Received: 07/	26/24 07:50 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical N	/lethod: EPA 60	020B Prepa	aration Met	hod: EF	PA 3010A			
	Pace Analy	tical Services	Green Bay						
Calcium	12800	ug/L	254	76.2	1	07/31/24 06:08	07/31/24 18:54	7440-70-2	
Copper	7.6	ug/L	6.4	1.9	1	07/31/24 06:08	07/31/24 18:54		
Iron	1010	ug/L	250	58.0	1		07/31/24 18:54		
Magnesium	5220	ug/L	250	31.2	1		07/31/24 18:54		
Manganese	99.7	ug/L	4.0	1.2	1		07/31/24 18:54		
Potassium	1210	ug/L	789	237	1		07/31/24 18:54		
Sodium	13700	ug/L	250	42.0	1		07/31/24 18:54		
Total Hardness by 2340B	53.3	mg/L	1.7	0.32	1		07/31/24 18:54		
Zinc	<10.3	ug/L	34.4	10.3	1		07/31/24 18:54		
6020B MET ICPMS, Dissolved	Analytical N	/lethod: EPA 60	020B Prepa	aration Met	hod: EF	PA 3010A			
·	Pace Analy	tical Services -	- Green Bay						
Calcium, Dissolved	12900	ug/L	254	76.2	1	07/31/24 06:17	07/31/24 20:30	7440-70-2	D9
Copper, Dissolved	5.5J	ug/L	6.4	1.9	1		07/31/24 20:30		-
Iron, Dissolved	184J	ug/L	250	58.0	1		07/31/24 20:30		
Magnesium, Dissolved	5200	ug/L	250	31.2	1		07/31/24 20:30		
Manganese, Dissolved	13.2	ug/L	4.0	1.2	1		07/31/24 20:30		
Potassium, Dissolved	1250	ug/L	789	237	1		07/31/24 20:30		D9
Sodium, Dissolved	14000	ug/L	250	42.0	1	07/31/24 06:17	07/31/24 20:30	7440-23-5	D9
Total Hardness by 2340B, Dissolved	53.6	mg/L	1.7	0.32	1		07/31/24 20:30		
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	07/31/24 06:17	07/31/24 20:30	7440-66-6	
2540D Total Suspended Solids	Analytical M	/lethod: SM 25	40D						
·	Pace Analy	tical Services -	Green Bay						
Total Suspended Solids	7.1	mg/L	1.0	0.48	1		07/30/24 11:43		
4500S2F Sulfide, Iodometric	-	Method: SM 45 tical Services	,	•					
Sulfide	<1.2	mg/L	4.0	1.2	1		07/31/24 16:59		
4500S2F Sulfide,Diss Iodometrc	•	Method: SM 45 tical Services -	`	,					
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		07/31/24 17:23		
300.0 IC Anions	•	Method: EPA 30 tical Services							
Chloride	38.4	mg/L	2.0	0.59	1		07/30/24 18:46	16887-00-6	
Sulfate	7.9	mg/L	2.0	0.44	1		07/30/24 18:46		
300.0 IC Anions, Dissolved	-	Method: EPA 30 tical Services							
Chloride, Dissolved	37.1	mg/L	2.0	0.59	1		08/01/24 21:05	16887-00-6	
Sulfate, Dissolved	4.1	mg/L	2.0	0.44	1		08/01/24 21:05	14808-79-8	



Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Sample: SW-STM_20240724	Lab ID:	40281683003	Collecte	d: 07/24/2	1 17:27	Received: 07/	/26/24 07:50 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	31.9	mg/L	25.0	7.4	1		08/01/24 11:31		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	30.1	mg/L	25.0	7.4	1		08/01/24 13:37		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	10C						
	Pace Anal	ytical Services	- Green Ba	y					
Dissolved Organic Carbon	10.5	mg/L	0.50	0.19	1		07/30/24 05:46		



Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Sample: SW-C5_20240724	Lab ID:	40281683004	Collected	d: 07/24/2	4 16:10	Received: 07/	26/24 07:50 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prepa	aration Me	hod: EF	PA 3010A			
	Pace Anal	ytical Services	- Green Bay	/					
Calcium	5930	ug/L	254	76.2	1	07/31/24 06:08	07/31/24 18:58	7440-70-2	
Copper	12.5	ug/L	6.4	1.9	1	07/31/24 06:08			
Iron	1700	ug/L	250	58.0	1		07/31/24 18:58		
Magnesium	2280	ug/L	250	31.2	1		07/31/24 18:58		
Manganese	571	ug/L	4.0	1.2	1		07/31/24 18:58		
Potassium	377J	ug/L	789	237	1		07/31/24 18:58		
Sodium	7010	ug/L	250	42.0	1		07/31/24 18:58		
Total Hardness by 2340B	24.2	mg/L	1.7	0.32	1		07/31/24 18:58	20 0	
Zinc	19.3J	ug/L	34.4	10.3	1		07/31/24 18:58	7440-66-6	
6020B MET ICBMS Dissolved	Analytical	Method: EDA 6	020B Pren	aration Me	hod: EE	2Δ 3Ω1ΩΔ			
6020B MET ICPMS, Dissolved	-	Method: EPA 60 vtical Services			nou. EF	A 30 10A			
		•	•				0=10.415 :		5.6
Calcium, Dissolved	6040	ug/L	254	76.2	1	07/31/24 06:17			D9
Copper, Dissolved	5.0J	ug/L	6.4	1.9	1		07/31/24 20:34		
ron, Dissolved	661	ug/L	250	58.0	1		07/31/24 20:34		
Magnesium, Dissolved	2350	ug/L	250	31.2	1		07/31/24 20:34		D9
Manganese, Dissolved	586	ug/L	4.0	1.2	1		07/31/24 20:34		D9
Potassium, Dissolved	378J	ug/L	789	237	1		07/31/24 20:34		
Sodium, Dissolved	7240	ug/L	250	42.0	1		07/31/24 20:34	7440-23-5	D9
Total Hardness by 2340B, Dissolved	24.8	mg/L	1.7	0.32	1	07/31/24 06:17	07/31/24 20:34		
Zinc, Dissolved	20.8J	ug/L	34.4	10.3	1	07/31/24 06:17	07/31/24 20:34	7440-66-6	
2540D Total Suspended Solids	Analytical	Method: SM 25	40D						
·	•	ytical Services		/					
Total Suspended Solids	4.8	mg/L	3.2	1.5	1		07/30/24 11:43		1q
4500S2F Sulfide, Iodometric	•	Method: SM 45 ytical Services	`	,					
Sulfide	<1.2	mg/L	4.0	1.2	1		07/31/24 17:03		
4500S2F Sulfide,Diss Iodometrc	•	Method: SM 45 ytical Services	,	•					
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		07/31/24 17:26		
300.0 IC Anions	•	Method: EPA 30 ytical Services		/					
Chloride	12.0	mg/L	2.0	0.59	1		07/30/24 18:57	16887-00-6	
Sulfate	2.1	mg/L	2.0	0.44	1		07/30/24 18:57	14808-79-8	
300.0 IC Anions, Dissolved	-	Method: EPA 30 ytical Services		/					
Chloride, Dissolved	11.4	mg/L	2.0	0.59	1		08/01/24 21:19	16887-00-6	
Sulfate, Dissolved	2.2	mg/L	2.0	0.44	1		08/01/24 21:19		D9



Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Sample: SW-C5_20240724	Lab ID:	40281683004	Collected	d: 07/24/24	1 16:10	Received: 07	/26/24 07:50 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Ana	lytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	43.2	mg/L	25.0	7.4	1		08/01/24 11:32		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
•	Pace Ana	lytical Services	- Green Bay	y					
Alkalinity, Total as CaCO3, Dissolved	20.5J	mg/L	25.0	7.4	1		08/01/24 13:38		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
_	Pace Ana	lytical Services	- Green Ba	y					
Dissolved Organic Carbon	11.0	mg/L	0.50	0.19	1		07/30/24 06:04		



ANALYTICAL RESULTS

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Sample: SW-EB_20240724	Lab ID:	40281683005	Collecte	d: 07/24/24	4 14:36	Received: 07/	/26/24 07:50 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	у					
Copper	3.7J	ug/L	6.4	1.9	1	07/31/24 06:08	07/31/24 19:02	7440-50-8	
Total Hardness by 2340B	54.5	mg/L	1.7	0.32	1	07/31/24 06:08	07/31/24 19:02		
Zinc	<10.3	ug/L	34.4	10.3	1	07/31/24 06:08	07/31/24 19:02	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	у					
Copper, Dissolved	3.0J	ug/L	6.4	1.9	1	07/31/24 06:17	07/31/24 20:39	7440-50-8	
Total Hardness by 2340B, Dissolved	56.2	mg/L	1.7	0.32	1	07/31/24 06:17	07/31/24 20:39		
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	07/31/24 06:17	07/31/24 20:39	7440-66-6	
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
_	Pace Anal	ytical Services	- Green Ba	у					
Dissolved Organic Carbon	12.4	mg/L	0.50	0.19	1		07/30/24 06:22		



ANALYTICAL RESULTS

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Sample: SW-NBOUT_20240724	Lab ID:	40281683006	Collecte	d: 07/24/24	4 14:23	Received: 07/	/26/24 07:50 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	у					
Copper	2.6J	ug/L	6.4	1.9	1	07/31/24 06:08	07/31/24 19:06	7440-50-8	
Total Hardness by 2340B	54.4	mg/L	1.7	0.32	1	07/31/24 06:08	07/31/24 19:06		
Zinc	<10.3	ug/L	34.4	10.3	1	07/31/24 06:08	07/31/24 19:06	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	у					
Copper, Dissolved	<1.9	ug/L	6.4	1.9	1	07/31/24 06:17	07/31/24 20:43	7440-50-8	
Total Hardness by 2340B, Dissolved	54.5	mg/L	1.7	0.32	1	07/31/24 06:17	07/31/24 20:43		
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	07/31/24 06:17	07/31/24 20:43	7440-66-6	
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	10C						
•	•	ytical Services		у					
Dissolved Organic Carbon	9.9	mg/L	0.50	0.19	1		07/30/24 06:39		



ANALYTICAL RESULTS

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Sample: SW-NB_20240724	Lab ID:	40281683007	Collecte	d: 07/24/24	4 13:49	Received: 07/	/26/24 07:50 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	y					
Copper	4.6J	ug/L	6.4	1.9	1	07/31/24 06:08	07/31/24 19:19	7440-50-8	
Total Hardness by 2340B	38.5	mg/L	1.7	0.32	1	07/31/24 06:08	07/31/24 19:19		
Zinc	<10.3	ug/L	34.4	10.3	1	07/31/24 06:08	07/31/24 19:19	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	y					
Copper, Dissolved	3.2J	ug/L	6.4	1.9	1	07/31/24 06:17	07/31/24 20:55	7440-50-8	
Total Hardness by 2340B, Dissolved	37.8	mg/L	1.7	0.32	1	07/31/24 06:17	07/31/24 20:55		
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	07/31/24 06:17	07/31/24 20:55	7440-66-6	
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	10C						
_	Pace Anal	ytical Services	- Green Ba	y					
Dissolved Organic Carbon	11.2	mg/L	0.50	0.19	1		07/30/24 06:55		



ANALYTICAL RESULTS

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Sample: SW-HWY27W_20240724	Lab ID:	40281683008	Collecte	d: 07/24/2	4 13:02	Received: 07/	/26/24 07:50 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	у					
Copper	14.7	ug/L	6.4	1.9	1	07/31/24 06:08	07/31/24 19:23	7440-50-8	
Total Hardness by 2340B	28.2	mg/L	1.7	0.32	1	07/31/24 06:08	07/31/24 19:23		
Zinc	33.6J	ug/L	34.4	10.3	1	07/31/24 06:08	07/31/24 19:23	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	у					
Copper, Dissolved	7.1	ug/L	6.4	1.9	1	07/31/24 06:17	07/31/24 21:00	7440-50-8	
Total Hardness by 2340B, Dissolved	27.1	mg/L	1.7	0.32	1	07/31/24 06:17	07/31/24 21:00		
Zinc, Dissolved	27.0J	ug/L	34.4	10.3	1	07/31/24 06:17	07/31/24 21:00	7440-66-6	
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
Ů	Pace Anal	ytical Services	- Green Ba	у					
Dissolved Organic Carbon	13.3	mg/L	0.50	0.19	1		07/30/24 07:12		



ANALYTICAL RESULTS

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Sample: SW-HWY27E_20240724	Lab ID:	40281683009	Collecte	d: 07/24/24	1 12:27	Received: 07/	26/24 07:50 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	у					
Copper	8.2	ug/L	6.4	1.9	1	07/31/24 06:08	07/31/24 19:27	7440-50-8	
Total Hardness by 2340B	8.9	mg/L	1.7	0.32	1	07/31/24 06:08	07/31/24 19:27		
Zinc	12.4J	ug/L	34.4	10.3	1	07/31/24 06:08	07/31/24 19:27	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	у					
Copper, Dissolved	6.8	ug/L	6.4	1.9	1	07/31/24 06:17	07/31/24 21:04	7440-50-8	
Total Hardness by 2340B, Dissolved	8.5	mg/L	1.7	0.32	1	07/31/24 06:17	07/31/24 21:04		
Zinc, Dissolved	11.0J	ug/L	34.4	10.3	1	07/31/24 06:17	07/31/24 21:04	7440-66-6	
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	10C						
_	Pace Anal	ytical Services	- Green Ba	у					
Dissolved Organic Carbon	9.1	mg/L	0.50	0.19	1		07/30/24 07:49		



ANALYTICAL RESULTS

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Sample: CP-04_20240724	Lab ID:	40281683010	Collecte	d: 07/24/24	4 15:10	Received: 07/	26/24 07:50 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	у					
Copper	33.7	ug/L	6.4	1.9	1	07/31/24 06:08	07/31/24 19:31	7440-50-8	
Total Hardness by 2340B	61.0	mg/L	1.7	0.32	1	07/31/24 06:08	07/31/24 19:31		
Zinc	16.6J	ug/L	34.4	10.3	1	07/31/24 06:08	07/31/24 19:31	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	у					
Copper, Dissolved	22.2	ug/L	6.4	1.9	1	07/31/24 06:17	07/31/24 21:08	7440-50-8	
Total Hardness by 2340B, Dissolved	62.8	mg/L	1.7	0.32	1	07/31/24 06:17	07/31/24 21:08		
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	07/31/24 06:17	07/31/24 21:08	7440-66-6	
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	10C						
, and the second	Pace Anal	ytical Services	- Green Ba	у					
Dissolved Organic Carbon	24.0	mg/L	1.5	0.57	3		07/30/24 08:06		



Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Sample: SW-C5-DUP-20240724	Lab ID: 4	0281683011	Collected:	07/24/24	16:10	Received: 07/	26/24 07:50 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical M	lethod: EPA 6	020B Prepar	ation Met	hod: EP	PA 3010A			
	Pace Analyt	ical Services	- Green Bay						
Calcium	6470	ug/L	254	76.2	1	07/31/24 06:08	07/31/24 19:36	7440-70-2	
Copper	13.1	ug/L	6.4	1.9	1	07/31/24 06:08	07/31/24 19:36	7440-50-8	
ron	1760	ug/L	250	58.0	1	07/31/24 06:08	07/31/24 19:36	7439-89-6	
Magnesium	2400	ug/L	250	31.2	1	07/31/24 06:08	07/31/24 19:36	7439-95-4	
Manganese	598	ug/L	4.0	1.2	1	07/31/24 06:08	07/31/24 19:36	7439-96-5	
Potassium	384J	ug/L	789	237	1	07/31/24 06:08	07/31/24 19:36	7440-09-7	
Sodium	7250	ug/L	250	42.0	1	07/31/24 06:08	07/31/24 19:36	7440-23-5	
Total Hardness by 2340B	26.0	mg/L	1.7	0.32	1	07/31/24 06:08			
Zinc	21.3J	ug/L	34.4	10.3	1	07/31/24 06:08	07/31/24 19:36		
6020B MET ICPMS, Dissolved	Analytical M	lethod: EPA 6	020B Prepar	ation Met	hod: EP	PA 3010A			
,		ical Services							
Calcium, Dissolved	6100	ug/L	254	76.2	1	07/31/24 06:17	07/31/24 21:12	7440-70-2	
Copper, Dissolved	5.2J	ug/L	6.4	1.9	1	07/31/24 06:17			
Iron, Dissolved	690	ug/L	250	58.0	1	07/31/24 06:17			
Magnesium, Dissolved	2310	ug/L	250	31.2	1	07/31/24 06:17			
Manganese, Dissolved	583	ug/L	4.0	1.2	1	07/31/24 06:17			
Potassium, Dissolved	389J	ug/L	789	237	1	07/31/24 06:17			
Sodium, Dissolved	6980	ug/L	250	42.0	1	07/31/24 06:17			
Total Hardness by 2340B, Dissolved	24.7	mg/L	1.7	0.32	1	07/31/24 06:17			
Zinc, Dissolved	19.6J	ug/L	34.4	10.3	1	07/31/24 06:17	07/31/24 21:12	7440-66-6	
2540D Total Suspended Solids	Analytical M	lethod: SM 25	40D						
	•	ical Services							
Total Suspended Solids	6.4	mg/L	2.8	1.3	1		07/30/24 11:43		1q
4500S2F Sulfide, Iodometric	Analytical M	lethod: SM 45	00-S F (2000))					
+300021 Guillac, louolliculo		ical Services		′)					
Sulfide	<1.2	mg/L	4.0	1.2	1		07/31/24 17:06		
4500S2F Sulfide, Diss Iodometro	Analytical M	lethod: SM 45	00-S E (2000	1)					
4300321 Sumue,Diss louometre	-	ical Services	•	,)					
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		07/31/24 17:27		
300.0 IC Anions	Analytical M	lethod: EPA 3	00.0						
	•	ical Services							
Chloride	11.9	mg/L	2.0	0.59	1		07/30/24 19:40	16887-00-6	
Sulfate	2.1	mg/L	2.0	0.44	1		07/30/24 19:40	14808-79-8	
300.0 IC Anions, Dissolved	Analytical M	lethod: EPA 3	00.0						
,	,	ical Services							
Chloride, Dissolved	11.5	mg/L	2.0	0.59	1		08/01/24 21:34	16887-00-6	
Sulfate, Dissolved	2.2	mg/L	2.0	0.44	1			14808-79-8	D9



Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Sample: SW-C5-DUP-20240724	Lab ID:	40281683011	Collected	d: 07/24/2	1 16:10	Received: 07/	/26/24 07:50 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	18.5J	mg/L	25.0	7.4	1		08/01/24 11:33		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
•	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	19.7J	mg/L	25.0	7.4	1		08/01/24 13:39		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
_	Pace Anal	ytical Services	- Green Ba	y					
Dissolved Organic Carbon	10.9	mg/L	0.50	0.19	1		07/30/24 08:24		



Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

QC Batch: 480751 Analysis Method: EPA 6020B
QC Batch Method: EPA 3010A Analysis Description: 6020B MET

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40281683001, 40281683002, 40281683003, 40281683004, 40281683005, 40281683006, 40281683007,

 $40281683008,\,40281683009,\,40281683010,\,40281683011$

METHOD BLANK: 2753194 Matrix: Water

Associated Lab Samples: 40281683001, 40281683002, 40281683003, 40281683004, 40281683005, 40281683006, 40281683007,

40281683008, 40281683009, 40281683010, 40281683011

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Calcium	ug/L	<76.2	254	07/31/24 15:29	
Copper	ug/L	<1.9	6.4	07/31/24 15:29	
Iron	ug/L	<58.0	250	07/31/24 15:29	
Magnesium	ug/L	<31.2	250	07/31/24 15:29	
Manganese	ug/L	<1.2	4.0	07/31/24 15:29	
Potassium	ug/L	<237	789	07/31/24 15:29	
Sodium	ug/L	<42.0	250	07/31/24 15:29	
Total Hardness by 2340B	mg/L	< 0.32	1.7	07/31/24 15:29	
Zinc	ug/L	<10.3	34.4	07/31/24 15:29	

LABORATORY CONTROL SAMPLE:	2753195					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Calcium	ug/L	10000	10100	101	80-120	
Copper	ug/L	250	266	107	80-120	
Iron	ug/L	10000	10200	102	80-120	
Magnesium	ug/L	10000	10100	101	80-120	
Manganese	ug/L	250	254	102	80-120	
Potassium	ug/L	10000	10100	101	80-120	
Sodium	ug/L	10000	10100	101	80-120	
Total Hardness by 2340B	mg/L		66.9			
Zinc	ug/L	250	252	101	80-120	

MATRIX SPIKE & MATRIX SI	PIKE DUPL	ICATE: 2753	196		2753197	•						
Parameter	Units	40281683001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	ug/L	2930	10000	10000	12800	12700	99	98	75-125	1	20	
Copper	ug/L	16.6	250	250	268	263	100	98	75-125	2	20	
Iron	ug/L	3100	10000	10000	13500	13200	104	101	75-125	2	20	
Magnesium	ug/L	990	10000	10000	11000	11000	100	100	75-125	0	20	
Manganese	ug/L	143	250	250	405	392	105	100	75-125	3	20	
Potassium	ug/L	668J	10000	10000	10800	10700	102	100	75-125	2	20	
Sodium	ug/L	7420	10000	10000	17800	17500	104	100	75-125	2	20	
Total Hardness by 2340B	mg/L	11.4			77.4	77.1				0	20	
Zinc	ug/L	<10.3	250	250	260	256	100	99	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

QC Batch: 480752 Analysis Method: EPA 6020B

QC Batch Method: EPA 3010A Analysis Description: 6020B MET Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40281683001, 40281683002, 40281683003, 40281683004, 40281683005, 40281683006, 40281683007,

 $40281683008,\,40281683009,\,40281683010,\,40281683011$

METHOD BLANK: 2753198 Matrix: Water

Associated Lab Samples: 40281683001, 40281683002, 40281683003, 40281683004, 40281683005, 40281683006, 40281683007,

40281683008, 40281683009, 40281683010, 40281683011

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Calcium, Dissolved	ug/L	<76.2	254	07/31/24 16:07	
Copper, Dissolved	ug/L	<1.9	6.4	07/31/24 16:07	
Iron, Dissolved	ug/L	<58.0	250	07/31/24 16:07	
Magnesium, Dissolved	ug/L	<31.2	250	07/31/24 16:07	
Manganese, Dissolved	ug/L	<1.2	4.0	07/31/24 16:07	
Potassium, Dissolved	ug/L	<237	789	07/31/24 16:07	
Sodium, Dissolved	ug/L	<42.0	250	07/31/24 16:07	
Total Hardness by 2340B, Dissolved	mg/L	<0.32	1.7	07/31/24 16:07	
Zinc, Dissolved	ug/L	<10.3	34.4	07/31/24 16:07	

LABORATORY CONTROL SAMPLE:	2753199					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Calcium, Dissolved	ug/L	10000	9890	99	80-120	
Copper, Dissolved	ug/L	250	262	105	80-120	
Iron, Dissolved	ug/L	10000	9970	100	80-120	
Magnesium, Dissolved	ug/L	10000	9550	96	80-120	
Manganese, Dissolved	ug/L	250	250	100	80-120	
Potassium, Dissolved	ug/L	10000	9650	96	80-120	
Sodium, Dissolved	ug/L	10000	9480	95	80-120	
Total Hardness by 2340B, Dissolved	mg/L		64.0			
Zinc, Dissolved	ug/L	250	251	100	80-120	

MATRIX SPIKE & MATRIX S	SPIKE DUPLIC	CATE: 2753	200 MS	MSD	2753201							
Parameter	Units	0281683001 Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
										——		— Quai
Calcium, Dissolved	ug/L	2860	10000	10000	12900	12700	100	99	75-125	1	20	
Copper, Dissolved	ug/L	11.7	250	250	259	258	99	99	75-125	0	20	
Iron, Dissolved	ug/L	960	10000	10000	11100	11000	101	100	75-125	1	20	
Magnesium, Dissolved	ug/L	953	10000	10000	10700	10600	98	96	75-125	2	20	
Manganese, Dissolved	ug/L	90.3	250	250	340	337	100	99	75-125	1	20	
Potassium, Dissolved	ug/L	629J	10000	10000	10500	10500	99	98	75-125	1	20	
Sodium, Dissolved	ug/L	7700	10000	10000	17300	16800	96	91	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





QUALITY CONTROL DATA

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

MATRIX SPIKE & MATRIX S	PIKE DUPLI	CATE: 2753	200		2753201							
Parameter	Units	40281683001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Hardness by 2340B, Dissolved	mg/L	11.1			76.3	75.3				1	20	
Zinc, Dissolved	ug/L	<10.3	250	250	260	257	101	99	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

Qualifiers



QUALITY CONTROL DATA

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

QC Batch: 480675 Analysis Method: SM 2540D

QC Batch Method: SM 2540D Analysis Description: 2540D Total Suspended Solids

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40281683001, 40281683002, 40281683003, 40281683004, 40281683011

METHOD BLANK: 2752826 Matrix: Water

Associated Lab Samples: 40281683001, 40281683002, 40281683003, 40281683004, 40281683011

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Total Suspended Solids mg/L <0.48 1.0 07/30/24 11:42

LABORATORY CONTROL SAMPLE: 2752827

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits

Total Suspended Solids mg/L 100 100 80-120

SAMPLE DUPLICATE: 2752919

Date: 08/08/2024 02:54 PM

40281689001 Dup Max **RPD** Parameter Units Result Result **RPD** Qualifiers 89.0 **Total Suspended Solids** mg/L 98.0 10 10

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALITY CONTROL DATA

FMC-2024_Q4 FLAMBEAU MINE CO. Project:

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

QC Batch: 480790 Analysis Method: SM 4500-S F (2000)

QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Dissolved Iodometric

> Laboratory: Pace Analytical Services - Green Bay

40281683001, 40281683002, 40281683003, 40281683004, 40281683011 Associated Lab Samples:

METHOD BLANK: Matrix: Water

Associated Lab Samples: 40281683001, 40281683002, 40281683003, 40281683004, 40281683011

> Blank Reporting

Qualifiers Parameter Units Result Limit Analyzed

Sulfide <1.2 4.0 07/31/24 17:13 mg/L

LABORATORY CONTROL SAMPLE: 2753318

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units

Sulfide 40 38.0 95 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2753319 2753320

> MSD MS

40281683001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Result Result % Rec **RPD** RPD Qual Result Conc. % Rec Limits 104 Sulfide mg/L <1.2 40 40 41.6 40.0 100 80-120 10

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALITY CONTROL DATA

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

QC Batch: 480789 Analysis Method: SM 4500-S F (2000)

QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40281683001, 40281683002, 40281683003, 40281683004, 40281683011

METHOD BLANK: 2753313 Matrix: Water

Associated Lab Samples: 40281683001, 40281683002, 40281683003, 40281683004, 40281683011

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Sulfide mg/L <1.2 4.0 07/31/24 16:47

LABORATORY CONTROL SAMPLE: 2753314

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Sulfide 40.8 39.6 97 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2753315 2753316

MS MSD

40281683001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Result Result **RPD** RPD Qual Result Conc. % Rec % Rec Limits Sulfide mg/L <1.2 40.8 40.8 37.6 38.4 92 94 80-120 2 10

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

QC Batch Method:

480506

EPA 300.0

Analysis Method:

EPA 300.0

Analysis Description:

300.0 IC Anions, Dissolved

Laboratory:

Pace Analytical Services - Green Bay

Associated Lab Samples: 40281683001

METHOD BLANK: 2752282 Matrix: Water

Associated Lab Samples: 40281683001

Blank

Result

Reporting Limit

Analyzed

Qualifiers

Chloride Sulfate

QC Batch:

Units mg/L mg/L

Units

40281669002

Result

0.60J < 0.44 2.0 07/29/24 18:15 2.0 07/29/24 18:15

LABORATORY CONTROL SAMPLE:

Parameter

Parameter

2752283

Spike Conc.

LCS Result

LCS % Rec % Rec Limits

90-110

Qualifiers

Chloride Sulfate

Chloride

Sulfate

Chloride

Sulfate

mg/L mg/L

Units

mg/L

mg/L

mg/L

mg/L

20 20 20.0 20.1 100 101

90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:

2752284 MS Spike

Conc.

MSD Spike

Conc.

400

2000

MS MSD Result Result

546

3010

2752285

MS % Rec MSD

% Rec

Max **RPD** RPD

Parameter

130

905

553 104 2760 105 % Rec 106 93 Limits 90-110

15 9 15

Qual

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:

MSD

Conc.

2752287

90-110

2752286

105

% Rec Max **RPD RPD** Qual Limits

40281683001 Parameter Units Result

7.5

1.6J

MS Spike

20

20

Conc.

400

2000

Spike

20

20

MS Result

28.8

22.5

MSD MS Result % Rec 28.7

22.5

% Rec 107

MSD

105

106 90-110

0

15 90-110 0 15

Date: 08/08/2024 02:54 PM

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Sulfate

Date: 08/08/2024 02:54 PM

QUALITY CONTROL DATA

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

QC Batch: 480825 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions, Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40281683002, 40281683003, 40281683004, 40281683011

METHOD BLANK: 2753626 Matrix: Water

Associated Lab Samples: 40281683002, 40281683003, 40281683004, 40281683011

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Chloride mg/L <0.59 2.0 08/01/24 19:39 Sulfate mg/L <0.44 2.0 08/01/24 19:39

58.5

mg/L

LABORATORY CONTROL SAMPLE: 2753627

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Chloride 20 21.8 109 90-110 mg/L 90-110 Sulfate mg/L 20 21.9 110

100

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2753628 2753629 MS MSD 40281323001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Chloride mg/L 8.3 20 20 30.3 30.5 110 111 90-110 15 M0

100

176

165

107

117

90-110

6

15 M0

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Chloride

Sulfate

Sulfate

Date: 08/08/2024 02:54 PM

QC Batch: 480512 Analysis Method: EPA 300.0 QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

> Laboratory: Pace Analytical Services - Green Bay

40281683001, 40281683002, 40281683003, 40281683004, 40281683011 Associated Lab Samples:

METHOD BLANK: Matrix: Water

mg/L

mg/L

Associated Lab Samples: 40281683001, 40281683002, 40281683003, 40281683004, 40281683011

> Blank Reporting Qualifiers Parameter Units Result Limit Analyzed < 0.59 2.0 07/30/24 14:58 mg/L < 0.44 2.0 07/30/24 14:58 mg/L

LABORATORY CONTROL SAMPLE: 2752305 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers

Chloride 20 20.6 103 mg/L 90-110 Sulfate 20 21.1 105 90-110 mg/L

10.3

20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2752306 2752307 MS MSD 40281669003 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Chloride mg/L 8.2J 100 100 113 117 105 109 90-110 3 15 Sulfate 3.0J 100 100 118 90-110 15 M0

114

32.2

32.9

111

110

115

113

90-110

3

2

15 M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2752308 2752309 MS MSD 40281685006 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result % Rec % Rec **RPD RPD** Qual Result Limits Chloride mg/L 39.3 100 100 147 147 108 107 90-110 0 15

20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

QC Batch: 480884 Analysis Method: EPA 310.2

QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40281683001, 40281683002, 40281683003, 40281683004, 40281683011

METHOD BLANK: 2753929 Matrix: Water

Associated Lab Samples: 40281683001, 40281683002, 40281683003, 40281683004, 40281683011

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Alkalinity, Total as CaCO3 mg/L <7.4 25.0 08/01/24 11:25

LABORATORY CONTROL SAMPLE: 2753930

Spike LCS LCS % Rec Conc. % Rec Limits Qualifiers Parameter Units Result Alkalinity, Total as CaCO3 100 105 105 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2753931 2753932

MS MSD

40281683001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Result **RPD** RPD Result Conc. Conc. % Rec % Rec Limits Qual 20 Alkalinity, Total as CaCO3 mg/L 10.3J 100 100 108 112 98 101 90-110 3

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2753933 2753934

MS MSD

40281724015 MS MSD MS MSD % Rec Spike Spike Max **RPD** RPD Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits Qual 200 93 Alkalinity, Total as CaCO3 603 200 788 789 93 0 20 mg/L 90-110

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

QC Batch: 480888 Analysis Method: EPA 310.2

QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity, Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40281683001, 40281683002, 40281683003, 40281683004, 40281683011

METHOD BLANK: 2753962 Matrix: Water

Associated Lab Samples: 40281683001, 40281683002, 40281683003, 40281683004, 40281683011

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Alkalinity, Total as CaCO3, mg/L <7.4 25.0 08/01/24 12:50

Dissolved

LABORATORY CONTROL SAMPLE: 2753963

Spike LCS LCS % Rec Qualifiers Parameter Units Conc. Result % Rec Limits Alkalinity, Total as CaCO3, mg/L 100 108 108 90-110

Dissolved

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2753964 2753965

MS MSD

MS 40281683001 Spike Spike MS MSD MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual Alkalinity, Total as CaCO3, 100 107 107 20 8.4J 100 115 99 90-110 7 mg/L

Dissolved

Date: 08/08/2024 02:54 PM

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Dissolved Organic Carbon

Date: 08/08/2024 02:54 PM

QC Batch: 480621 Analysis Method: SM 5310C

QC Batch Method: SM 5310C Analysis Description: 5310C Dissolved Organic Carbon

> Laboratory: Pace Analytical Services - Green Bay

> > 0.50

07/30/24 02:41

40281683001, 40281683002, 40281683003, 40281683004, 40281683005, 40281683006, 40281683007, Associated Lab Samples:

40281683008, 40281683009, 40281683010, 40281683011

METHOD BLANK: 2752612 Matrix: Water

40281683001, 40281683002, 40281683003, 40281683004, 40281683005, 40281683006, 40281683007, Associated Lab Samples:

40281683008, 40281683009, 40281683010, 40281683011

Blank Reporting

< 0.19

Parameter Units Limit Qualifiers Result Analyzed mg/L

LABORATORY CONTROL SAMPLE: 2752613

LCS LCS Spike % Rec Parameter Units % Rec Limits Qualifiers Conc. Result Dissolved Organic Carbon mg/L 12.5 12.7 102 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2752614 2752615

> MSD MS

40281683001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual 20 Dissolved Organic Carbon 12.3 12 12 25.1 25.1 107 107 80-120 0 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2752616 2752617

MS MSD MSD MSD 40281683002 Spike Spike MS MS % Rec Max Parameter Units Conc. Conc. Result % Rec % Rec **RPD** RPD Qual Result Result Limits Dissolved Organic Carbon 10.3 12 12 22.9 22.5 105 102 80-120 2 20 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALIFIERS

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - The reported result is an estimated value.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

DL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Analyte was not detected and is reported as less than the LOD or as defined by the customer.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 08/08/2024 02:54 PM

1q Filtration >10min.

D9 Dissolved result is greater than the total. Data is within laboratory control limits.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
40281683001	SW-C9_20240724	EPA 3010A	480751	EPA 6020B	480819
40281683002	SW-C1_20240724	EPA 3010A	480751	EPA 6020B	480819
10281683003	SW-STM_20240724	EPA 3010A	480751	EPA 6020B	480819
0281683004	SW-C5_20240724	EPA 3010A	480751	EPA 6020B	480819
0281683005	SW-EB_20240724	EPA 3010A	480751	EPA 6020B	480819
0281683006	SW-NBOUT_20240724	EPA 3010A	480751	EPA 6020B	480819
0281683007	SW-NB_20240724	EPA 3010A	480751	EPA 6020B	480819
0281683008	SW-HWY27W 20240724	EPA 3010A	480751	EPA 6020B	480819
0281683009	SW-HWY27E_20240724	EPA 3010A EPA 3010A	480751	EPA 6020B	480819
0281683010	CP-04_20240724	EPA 3010A	480751	EPA 6020B	480819
0281683011	SW-C5-DUP-20240724	EPA 3010A	480751	EPA 6020B	480819
0281683001	SW-C9_20240724	EPA 3010A	480752	EPA 6020B	480820
0281683002	SW-C1_20240724	EPA 3010A	480752	EPA 6020B	480820
0281683003	SW-STM_20240724	EPA 3010A	480752	EPA 6020B	480820
0281683004	SW-C5_20240724	EPA 3010A	480752	EPA 6020B	480820
0281683005	SW-EB_20240724	EPA 3010A	480752	EPA 6020B	480820
0281683006	SW-NBOUT_20240724	EPA 3010A	480752	EPA 6020B	480820
0281683007	SW-NB_20240724	EPA 3010A	480752	EPA 6020B	480820
0281683008	SW-HWY27W_20240724	EPA 3010A	480752	EPA 6020B	480820
0281683009	SW-HWY27E_20240724	EPA 3010A	480752	EPA 6020B	480820
0281683010	CP-04_20240724	EPA 3010A	480752	EPA 6020B	480820
0281683011	SW-C5-DUP-20240724	EPA 3010A	480752	EPA 6020B	480820
0281683001	SW-C9_20240724	SM 2540D	480675		
0281683002	SW-C1_20240724	SM 2540D	480675		
0281683003	SW-STM_20240724	SM 2540D	480675		
0281683004	SW-C5_20240724	SM 2540D	480675		
0281683011	SW-C5-DUP-20240724	SM 2540D	480675		
0281683001	SW-C9_20240724	SM 4500-S F (2000)	480789		
0281683002	SW-C1_20240724	SM 4500-S F (2000)	480789		
0281683003	SW-STM_20240724	SM 4500-S F (2000)	480789		
	SW-C5_20240724	SM 4500-S F (2000)	480789		
0281683004 0281683011	SW-C5_20240724 SW-C5-DUP-20240724	SM 4500-S F (2000)	480789		
		,			
0281683001	SW-C9_20240724	SM 4500-S F (2000)	480790		
0281683002	SW-C1_20240724	SM 4500-S F (2000)	480790		
0281683003	SW-STM_20240724	SM 4500-S F (2000)	480790		
0281683004	SW-C5_20240724	SM 4500-S F (2000)	480790		
0281683011	SW-C5-DUP-20240724	SM 4500-S F (2000)	480790		
0281683001	SW-C9_20240724	EPA 300.0	480512		
0281683002	SW-C1_20240724	EPA 300.0	480512		
0281683003	SW-STM_20240724	EPA 300.0	480512		
0281683004	SW-C5_20240724	EPA 300.0	480512		
0281683011	SW-C5-DUP-20240724	EPA 300.0	480512		
10281683001	SW-C9_20240724	EPA 300.0	480506		
0281683002	SW-C1_20240724	EPA 300.0	480825		
0281683003	SW-STM_20240724				



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FMC-2024_Q4 FLAMBEAU MINE CO.

Pace Project No.: 40281683

Date: 08/08/2024 02:54 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
40281683004	SW-C5_20240724	EPA 300.0	480825		
40281683011	SW-C5-DUP-20240724	EPA 300.0	480825		
40281683001	SW-C9_20240724	EPA 310.2	480884		
40281683002	SW-C1_20240724	EPA 310.2	480884		
40281683003	SW-STM_20240724	EPA 310.2	480884		
40281683004	SW-C5_20240724	EPA 310.2	480884		
40281683011	SW-C5-DUP-20240724	EPA 310.2	480884		
40281683001	SW-C9_20240724	EPA 310.2	480888		
40281683002	SW-C1_20240724	EPA 310.2	480888		
40281683003	SW-STM_20240724	EPA 310.2	480888		
40281683004	SW-C5_20240724	EPA 310.2	480888		
40281683011	SW-C5-DUP-20240724	EPA 310.2	480888		
40281683001	SW-C9_20240724	SM 5310C	480621		
40281683002	SW-C1_20240724	SM 5310C	480621		
40281683003	SW-STM_20240724	SM 5310C	480621		
40281683004	SW-C5_20240724	SM 5310C	480621		
40281683005	SW-EB_20240724	SM 5310C	480621		
40281683006	SW-NBOUT_20240724	SM 5310C	480621		
40281683007	SW-NB_20240724	SM 5310C	480621		
40281683008	SW-HWY27W_20240724	SM 5310C	480621		
40281683009	SW-HWY27E_20240724	SM 5310C	480621		
40281683010	CP-04_20240724	SM 5310C	480621		
40281683011	SW-C5-DUP-20240724	SM 5310C	480621		



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed and accurate.

40281683

Page: of 1 of Cooler# 1 of

1 2

COC#

l .	
FMC-2024_	ΩÆ.
1 1010-505-	

lequired 9	hip to Lab:	Required Project	information			Required invoice	nformation:	i																		
	Pace Analytical Services		Flembeau Mine	Co.		Send Invoice to:											П	T	Rush	$\neg \neg$		Mark One				
ddress.		*Task Code #	FMC-2024_	04		Address: 2121 Inr	ovetion Cour	tP.O B	ox 5128,	De Pe	re, WI.				If R	ush, Dat	e due				ــــــــــــــــــــــــــــــــــــــ					
241 Bellev	rue Street - Sulte 9, Green Bay, Wi			City/State	1. 54115	Ph#. 920-497-2500						QC	level Re	dard		П	T	×ξ	Special	Mark one						
ab PM	Tod Noltemeyer	te	WI	17F777.23-07-	23-07-73									Projec	t ID (la	b use)		T	一						
hone/Fax.	(608) 232-3300	Project Contac	t: Mark C	ardoli.		Send EDD to:	Nick Glande	·						_					Ren	uesi	ted A	nalys				
ab PM em	ail Tod Noltemeyer@pacelabs.com		920-496-6656	ai QBiii		CC Hardcopy r	enort to		ozieki Nic	k Glas	dor			7			Filt	ered (Ť			
pplicable	Lab Quote #.	Email:	Mark Cia	rdelli@	foth com	CC electronic copy	Sharon Kozicki, Nick Glander Filtered (Y/N) Selectronic copy report to Sharon Kozicki@foth com nick glander@foth com NYNYYNNNYYY		\neg																	
							ni	ick glar	nder@f	oth co	<u>om</u>				N	V	N	V	$ \downarrow $	N N		v	V			
ITEM#	*SAMPLE ID Samples IDs MUST BE UNIQUE	Valid Matth's Codes MATRIX DERROND WATER WAS GROUND WATER WAS	AATRIX SURFACE WATER WATER CO SUDDE	*MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	*	E	# OF CONTAINERS	Jnpreserved -IZSO4		Serva	103 101	1 8	Total Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness	Dissolved Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness	Total Alkalinity, CI, Sulfate	Dissolved Alkalınıty, CI, Sulfate			lardness	n and	Dissolved Sulfide		Commen b Sample	
	N-C9_20240724	**************************************		ws	G	7/24/2024	1248	,		3 1	2	1		2	×	х	x	x	1 1	x >			х	Ol	N	
	N-C1 20240724			ws	G	7/24/2024	1643	,	8	3 1	2			2	х	х	х	х	x	x >	ζ		х	00	2	
3 SI	W-STM_20240724			ws	G	7/24/2024	1727	7.	8	3 1	2		П	2	х	х	х	х	х	x >	۲		х	00	13,	
4 S	W-C5_20240724			ws	G	7/24/2024	1810	,	8	3 1	2			2	х	х	х	х	х	x >	к		х	00	14	
5 S	W-EB-20240724			ws	G	7/24/2024	1436	3	3	1	2								х		х	x		<u> </u>	<u> 15 </u>	
6 S	W-NBOUT_20240724			ws	G	7/24/2024	1423	3	3	1	2		П						x		х	х		UČ	76_	
7 S	W-NB_20240724			ws	G	7/24/2024	1349	9 !	3	1	2								x		х	х			07_	
8 S	W-HWY27W_20240724			ws	G	7/24/2024	1302	2/	3	1	2	Τ	П						х		х	х		U	08	
9 S'	W-HWY27E_20240724			ws	G	7/24/2024	1227	7	3	1	2								х		х	х		Q	V9	
10 C	P-04_20240724			ws	G	7/24/2024	1510	0	3	1	2		П						х		x	х		\mathcal{O}	40	
11 S	W-C5-DUP-20240724			ws	G	7/24/2024	1610	0	8	3 1	2		П	2	х	х	х	x	x	х	х		х	0	11	
													П											<u> </u>		
Additiona	i Comments/Special instructions:		WS G 7/24/2024 1248 8 3 1 2 2 2 2 2 2 3 3 3 2 2	elp	t Cond	litions																				
				Jım	Engelhardt/N	lerjent																		Y/N	Y/N	Y/N
				1	A 1 7		Ç	7/24	57,50	Na	h	处	cm	LOTE	Au	20	2024	0	7:50	0	<u>()</u> :	\mathcal{O}		PN (P)	ON	Y/N
											•													Y/N	Y/N	Y/N
																								Y/N	Y/N	Y/N
				SHIP	PING METHO) (mark as approp	nate) (SAMPLE	ER NAM	AND	SIGN	ATUR	E								ပွ			v	o c	- K 2
Inciude	Equis EDD's			UPS	COURIER	FEDEX Jim	_														ē			Samples on Ice?	Sample intact?	Trip Blank?
	ed information for electronic data	deliverable.		USI	MAIL	SIGNAT	JRE of SAMPLER.		52.	1	M	#	DATE	Signed	7/25	/2024 ¹	ime	0	915		Тетр			San	o :=	ĮĔ

Effective Date: 8/16/2022

All Cont	ainers	needin	g pres	ervatio	on ha	ve be	en ch			of pH			<u>D.</u>	37	3	5 La	⊔N// b Std	A #ID of	prese	rvatio	n (ıf pl	l adju	sted)·					Ini co	tial wh mplete	en// ed.	4/1/2	Date/	
			Glass					Plastic							Vi	Vials]		Jä	ars		Ger		eral		(>6mm) *	1≤2	Act pH ≥9	≥12	<25	djusted	Volume
b#	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	V G9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2	/OA Vials	H2SO4 pH	NaOH+Zn Act pH ≥9	VaOH pH ≥12	-1NO3 pH ≤2	pH after adjusted	(mL)
01			П				1.	7		2		7			ľ		Γ									Γ.			W		XIX	-	2.5 / 5
02	4	- 4	.]	,	i .		, 1	2		2		2							-					·					XX	- 12	XX		2.5 / 5
03			1				1.	2		3		7																	XX		XX		2.5 / 5
04				1 6 ,	i. P			2				Z							9.3		. 1.		11.	16.5			,	1 1, 1	XX		XX	,	2.5 / 5
05										2																					XX		2.5 / 5
06	l j	1 1 1	1	tigates a				1	, e, ~ 1	2	200		, ,	1.50	J. (2)	Contract	1.7	10.5	74 t	1.45	1 ;	1 /8	иГ _а	1 a 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1101	1.	47	, 1	1	34,5	$\mathbf{M}\mathbf{x}$	100	2.5 / 5
07			1							7																					XX		2.5 / 5
80			1		į.			5.4		2	. ,	3" 10		1	. 1	1.7.					. ,		10 M			1' 10			1		XX		2.5 / 5
09		T	IL.							2			T																		XX		2.5 / 5
10	1	1			,	7	٠.			12	1 11					1		1111	. 7	1	- 17		7.7		;			' '	15 7		XV	77 %.	2.5 / 5
11			1				Π	2		2		2		1												\vdash			XX		XX		2.5 / 5
12		1.7	i.							C 10							. :		e + 1 +		, "			100	;}r	Ing. 1							2.5/5
13																										T							2.5/5
14.		1			,		1					1		1			1 1	1		<u> </u>				. "					1	1			2.5/5
15												1		1																			2.5 / 5
16						n	1.7		<u> </u>		1	,			·	, '			1.			4	1 7	1 4		1. 1.	P. C. Phy				10.5	,	2.5 / 5
17									 					T																			2.5 / 5
18	1.				, ,,	Ĺ 4. ,	1 . 1	١.	101 3 d	1.7	<u> </u>	1	11.7				,		14.7				1.7	1.11		.5.,	, , ,	. '			1 1	. 50 ,1	2.5 / 5
19							<u> </u>							1																П			2.5 / 5
20					1		1		100		1.1	3.0		1				.,				7 -		. ,						. "	٠,	٠, ٠,	2.5 / 5
G1U 1 G1U 1 G1H 1 G4S 12	liter ar liter cl liter ar 25 mL 00 mL	mber g ear gla mber g amber	lass ss lass H glass glass	CL H2S0 unpre	O4 es	BI BI BI BI	BP1U 1 liter plastic unpres BP3U 250 mL plastic unpres BP3B 250 mL plastic NaOH BP3N 250 mL plastic HNO3 BP3S 250 mL plastic HNO3 BP3S 250 mL plastic H2SO4 BP2Z 500 mL plastic NaOH + Zn									G9C									JGFU 4 oz amber jar unpres JG9U 9 oz amber jar unpres WGFU 4 oz clear jar unpres WPFU 4 oz plastic jar unpres SP5T 120 mL plastic Na Thiosulfate ziploc bag								

DC#_Title: ENV-FRM-GBAY-0014 v03_SCUR Effective Date: 8/17/2022

Sample C	Condi	tion	Upor	n Receipt Form (SCUR)
Client Name: Courier: _ CS Logistics _ Fed Ex _ Speede Other: Speede	no no ble Bag	Seals Seals of Ice:	None Wet	40281683
Biota Samples may be received at $\leq 0^{\circ}$ C if shipped on Dr	y Ice.			Labeled By Initials:
Chain of Custody Present:	Yes	□No	□n/a	1.
Chain of Custody Filled Out:	Yes	□No	□n/a	2.
Chain of Custody Relinquished:	Vyes	□No	□n/a	3.
Sampler Name & Signature on COC:	Yes	□No	□n/a	4.
Samples Arrived within Hold Time:	Yes	□No		5.
- DI VOA Samples frozen upon receipt	□Yes	□No		Date/Time:
Short Hold Time Analysis (<72hr): \	Yes	□No		6.
Rush Turn Around Time Requested:	□Yes	No		7.
Sufficient Volume: For Analysis: MYes □No MS/MSD: Correct Containers Used:	Yes		□n/a	8. 9.
Correct Type: Pace Green Bay Pace IR, Non-Pace	}			<u> </u>
Containers Intact:	Yes	□No		10.
Filtered volume received for Dissolved tests	Yes	□No	□n/a	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix:	□Yes	MNo	□n/a	130 the label of 1439 in Steel of 13494 as on the provi
Trip Blank Present:	□Yes	□No	IN/A	· · · · · · · · · · · · · · · · · · ·
Trip Blank Custody Seals Present	□Yes	□No	N/A	
Pace Trip Blank Lot # (if purchased):	=			
Client Notification/ Resolution: Person Contacted: Comments/ Resolution:			_Date/	If checked, see attached form for additional comments Fime:
PM Review is documented electronically in LIMs	s. By re	eleasir	ng the	project, the PM acknowledges they have reviewed the sample logi



September 17, 2024

Nick Glander Foth Infrastructure & Environment, LLC 2121 Innovation Court Suite 300 De Pere, WI 54115

RE: Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Dear Nick Glander:

Enclosed are the analytical results for sample(s) received by the laboratory on August 30, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

• Pace Analytical Services - Green Bay

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Tod nottemeyor

Tod Noltemeyer tod.noltemeyer@pacelabs.com (920)469-2436 Project Manager

Enclosures

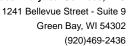
cc: MARK CIARDELLI, Foth Infrastructure & Environment,

LLC

Krystal Clark, Foth Infrastructure & Environment SHARON KOZICKI, Foth Infrastructure & Environment,

LLC







CERTIFICATIONS

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302 Florida/NELAP Certification #: E87948 Illinois Certification #: 200050 Kentucky UST Certification #: 82 Louisiana Certification #: 04168 Minnesota Certification #: 055-999-334 New York Certification #: 12064 North Dakota Certification #: R-150

South Carolina Certification #: 83006001 Texas Certification #: T104704529-21-8 Virginia VELAP Certification ID: 11873 Wisconsin Certification #: 405132750 Wisconsin DATCP Certification #: 105-444 USDA Soil Permit #: P330-21-00008 Federal Fish & Wildlife Permit #: 51774A



SAMPLE SUMMARY

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40283424001	SW-C9_20240830	Water	08/30/24 11:57	08/30/24 17:40
40283424002	SW-C1_20240830	Water	08/30/24 09:35	08/30/24 17:40
40283424003	SW-STM_20240830	Water	08/30/24 08:00	08/30/24 17:40
40283424004	SW-C5_20240830	Water	08/30/24 09:55	08/30/24 17:40
40283424005	SW-EB_20240830	Water	08/30/24 11:01	08/30/24 17:40
40283424006	SW-NBOUT_20240830	Water	08/30/24 10:42	08/30/24 17:40
40283424007	SW-NB_20240830	Water	08/30/24 10:21	08/30/24 17:40
40283424008	SW-HWY27W_20240830	Water	08/30/24 11:33	08/30/24 17:40
40283424009	SW-HWY27E_20240830	Water	08/30/24 11:16	08/30/24 17:40
40283424010	CP-04_20240830	Water	08/30/24 09:23	08/30/24 17:40
40283424011	SW-HWY27W-DUP_20240830	Water	08/30/24 11:33	08/30/24 17:40



SAMPLE ANALYTE COUNT

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40283424001	SW-C9_20240830	EPA 6020B	KXS	9
		EPA 6020B	KXS	9
		SM 2540D	LMB	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	HMB	2
		EPA 300.0	HMB	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
40283424002	SW-C1_20240830	EPA 6020B	KXS	9
		EPA 6020B	KXS	9
		SM 2540D	LMB	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	HMB	2
		EPA 300.0	HMB	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
40283424003	SW-STM_20240830	EPA 6020B	KXS	9
		EPA 6020B	KXS	9
		SM 2540D	LMB	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	HMB	2
		EPA 300.0	HMB	2
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
40283424004	SW-C5_20240830	EPA 6020B	KXS	9
		EPA 6020B	KXS	9
		SM 2540D	LMB	1
		SM 4500-S F (2000)	LMB	1
		SM 4500-S F (2000)	LMB	1
		EPA 300.0	HMB	2
		EPA 300.0	HMB	2

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



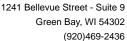
SAMPLE ANALYTE COUNT

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 310.2	MT	1
		EPA 310.2	MT	1
		SM 5310C	TJJ	1
40283424005	SW-EB_20240830	EPA 6020B	KXS	3
		EPA 6020B	KXS	3
		SM 5310C	TJJ	1
40283424006	SW-NBOUT_20240830	EPA 6020B	KXS	3
		EPA 6020B	KXS	3
		SM 5310C	TJJ	1
40283424007	SW-NB_20240830	EPA 6020B	KXS	3
		EPA 6020B	KXS	3
		SM 5310C	TJJ	1
40283424008	SW-HWY27W_20240830	EPA 6020B	KXS	3
		EPA 6020B	KXS	3
		SM 5310C	TJJ	1
40283424009	SW-HWY27E_20240830	EPA 6020B	KXS	3
		EPA 6020B	KXS	3
		SM 5310C	TJJ	1
40283424010	CP-04_20240830	EPA 6020B	KXS	3
		EPA 6020B	KXS	3
		SM 5310C	TJJ	1
40283424011	SW-HWY27W-DUP_20240830	EPA 6020B	KXS	3
		EPA 6020B	KXS	3
		SM 5310C	TJJ	1

PASI-G = Pace Analytical Services - Green Bay





PROJECT NARRATIVE

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Method: EPA 6020B

Description: 6020B MET ICPMS

Client: Foth Infrastructure & Environment

Date: September 17, 2024

General Information:

11 samples were analyzed for EPA 6020B by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Green Bay, WI 54302 (920)469-2436





PROJECT NARRATIVE

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Method: EPA 6020B

Description: 6020B MET ICPMS, Dissolved **Client:** Foth Infrastructure & Environment

Date: September 17, 2024

General Information:

11 samples were analyzed for EPA 6020B by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



PROJECT NARRATIVE

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Method: SM 2540D

Description: 2540D Total Suspended Solids **Client:** Foth Infrastructure & Environment

Date: September 17, 2024

General Information:

4 samples were analyzed for SM 2540D by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 483505

R1: RPD value was outside control limits.

- DUP (Lab ID: 2767919)
 - Total Suspended Solids



Green Bay, WI 54302 (920)469-2436

PROJECT NARRATIVE

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Method: SM 4500-S F (2000)

Description: 4500S2F Sulfide, Iodometric **Client:** Foth Infrastructure & Environment

Date: September 17, 2024

General Information:

4 samples were analyzed for SM 4500-S F (2000) by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



241 Bellevue Street - Suite 9 Green Bay, WI 54302 (920)469-2436

PROJECT NARRATIVE

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Method: SM 4500-S F (2000)

Description: 4500S2F Sulfide,Diss Iodometrc **Client:** Foth Infrastructure & Environment

Date: September 17, 2024

General Information:

4 samples were analyzed for SM 4500-S F (2000) by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



PROJECT NARRATIVE

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Method: EPA 300.0

Description: 300.0 IC Anions

Client: Foth Infrastructure & Environment

Date: September 17, 2024

General Information:

4 samples were analyzed for EPA 300.0 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 483760

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40283424001,40283503001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2769784)
 - Sulfate
- MSD (Lab ID: 2769785)
 - Sulfate



PROJECT NARRATIVE

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Method: EPA 300.0

Description: 300.0 IC Anions, Dissolved **Client:** Foth Infrastructure & Environment

Date: September 17, 2024

General Information:

4 samples were analyzed for EPA 300.0 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 483584

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40283424001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2768343)
 - · Chloride, Dissolved
 - Sulfate, Dissolved



PROJECT NARRATIVE

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Method: EPA 310.2 Description: 310.2 Alkalinity

Client: Foth Infrastructure & Environment

Date: September 17, 2024

General Information:

4 samples were analyzed for EPA 310.2 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.



241 Bellevue Street - Suite 9 Green Bay, WI 54302 (920)469-2436

PROJECT NARRATIVE

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Method: EPA 310.2

Description: 310.2 Alkalinity, Dissolved **Client:** Foth Infrastructure & Environment

Date: September 17, 2024

General Information:

4 samples were analyzed for EPA 310.2 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.





PROJECT NARRATIVE

FMC-2024_Q4 FLAMBEAU MINE CO Project:

Pace Project No.: 40283424

Method: SM 5310C

Description: 5310C Dissolved Organic Carbon Client: Foth Infrastructure & Environment

Date: September 17, 2024

General Information:

11 samples were analyzed for SM 5310C by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.



Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

Sample: SW-C9_20240830	Lab ID: 4	10283424001	Collected	l: 08/30/24	11:57	Received: 08/	30/24 17:40 M	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical N	/lethod: EPA 6	020B Prepa	aration Met	hod: EF	PA 3010A			
	-	tical Services							
Calcium	2750	ug/L	254	76.2	1	09/03/24 11:29	09/06/24 09:42	7440-70-2	
Copper	14.0	ug/L ug/L	6.4	1.9	1	09/03/24 11:29	09/06/24 09:42		
Iron	2610	ug/L ug/L	250	58.0	1	09/03/24 11:29	09/06/24 09:42		
Magnesium	954	ug/L	250	31.2	1	09/03/24 11:29	09/06/24 09:42		
Manganese	117	ug/L	4.0	1.2	1	09/03/24 11:29	09/06/24 09:42		
Potassium	1250	ug/L	789	237	1	09/03/24 11:29	09/06/24 09:42		
Sodium	6410	ug/L	250	42.0	1	09/03/24 11:29	09/06/24 09:42		
Total Hardness by 2340B	10.8	mg/L	1.7	0.32	1	09/03/24 11:29		7440-23-3	
Zinc	13.6J	ug/L	34.4	10.3	1	09/03/24 11:29		7440-66-6	
6020B MET ICPMS, Dissolved	•	fethod: EPA 6	•		noa: EF	A 3010A			
	Pace Analy	tical Services	Green Bay	′					
Calcium, Dissolved	2630	ug/L	254	76.2	1	09/03/24 11:30	09/06/24 08:09	7440-70-2	
Copper, Dissolved	11.4	ug/L	6.4	1.9	1	09/03/24 11:30	09/06/24 08:09	7440-50-8	
Iron, Dissolved	1000	ug/L	250	58.0	1	09/03/24 11:30	09/06/24 08:09	7439-89-6	
Magnesium, Dissolved	859	ug/L	250	31.2	1	09/03/24 11:30	09/06/24 08:09	7439-95-4	
Manganese, Dissolved	99.6	ug/L	4.0	1.2	1	09/03/24 11:30	09/06/24 08:09	7439-96-5	
Potassium, Dissolved	1160	ug/L	789	237	1	09/03/24 11:30	09/06/24 08:09	7440-09-7	
Sodium, Dissolved	6530	ug/L	250	42.0	1	09/03/24 11:30	09/06/24 08:09	7440-23-5	D9
Total Hardness by 2340B, Dissolved	10.1	mg/L	1.7	0.32	1	09/03/24 11:30	09/06/24 08:09		
Zinc, Dissolved	13.2J	ug/L	34.4	10.3	1	09/03/24 11:30	09/06/24 08:09	7440-66-6	
2540D Total Suspended Solids	Analytical N	Method: SM 25	40D						
20102 Total Gaoponaga Gonag	•	tical Services		,					
Total Suspended Solids	5.2	mg/L	2.0	0.95	1		09/04/24 09:04		
4500S2F Sulfide, Iodometric		Method: SM 45 tical Services							
Sulfide	<1.2	mg/L	4.0	1.2	1		09/06/24 14:25		
4500S2F Sulfide,Diss Iodometrc	•	Method: SM 45 tical Services	•	,					
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		09/06/24 13:59		
300.0 IC Anions	•	Method: EPA 30 tical Services		,					
Chloride	5.2	mg/L	2.0	0.59	1		09/10/24 18:59	16887-00-6	
Sulfate	1.4J	mg/L	2.0	0.44	1		09/10/24 18:59		
300.0 IC Anions, Dissolved	•	Method: EPA 30 tical Services		,					
Chloride, Dissolved	5.1	mg/L	2.0	0.59	1		09/05/24 14:52	16887-00-6	MO
Sulfate, Dissolved	1.3J	mg/L	2.0	0.44	1		09/05/24 14:52		MO



Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

Sample: SW-C9_20240830	Lab ID:	40283424001	Collecte	d: 08/30/2	1 11:57	Received: 08	/30/24 17:40 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Anal	lytical Services	- Green Ba	у					
Alkalinity, Total as CaCO3	10.7J	mg/L	25.0	7.4	1		09/03/24 15:11		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Anal	lytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	12.0J	mg/L	25.0	7.4	1		09/03/24 15:26		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
	Pace Anal	lytical Services	- Green Ba	y					
Dissolved Organic Carbon	13.5	mg/L	1.5	0.57	3		09/06/24 04:11		



Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

Sample: SW-C1_20240830	Lab ID:	40283424002	Collected	: 08/30/24	09:35	Received: 08/	/30/24 17:40 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prepa	ration Met	hod: EF	PA 3010A			
	Pace Anal	ytical Services	- Green Bay						
Calcium	8920	ug/L	254	76.2	1	09/03/24 11:29	09/06/24 09:58	7440-70-2	
Copper	12.9	ug/L	6.4	1.9	1	09/03/24 11:29	09/06/24 09:58		
ron	1740	ug/L	250	58.0	1	09/03/24 11:29	09/06/24 09:58	7439-89-6	
Magnesium	3760	ug/L	250	31.2	1	09/03/24 11:29	09/06/24 09:58	7439-95-4	
Manganese	116	ug/L	4.0	1.2	1	09/03/24 11:29	09/06/24 09:58	7439-96-5	
Potassium	1690	ug/L	789	237	1	09/03/24 11:29			
Sodium	12700	ug/L	250	42.0	1	09/03/24 11:29	09/06/24 09:58		
Total Hardness by 2340B	37.8	mg/L	1.7	0.32	1	09/03/24 11:29	09/06/24 09:58		
Zinc	<10.3	ug/L	34.4	10.3	1	09/03/24 11:29	09/06/24 09:58	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Prepa	ration Met	hod: EF	PA 3010A			
-, -	-	ytical Services							
Calcium, Dissolved	8880	ug/L	254	76.2	1	09/03/24 11:30	09/06/24 08:26	7440-70-2	
Copper, Dissolved	8.5	ug/L	6.4	1.9	1	09/03/24 11:30	09/06/24 08:26	7440-50-8	
ron, Dissolved	427	ug/L	250	58.0	1	09/03/24 11:30	09/06/24 08:26	7439-89-6	
Magnesium, Dissolved	3750	ug/L	250	31.2	1	09/03/24 11:30			
Manganese, Dissolved	102	ug/L	4.0	1.2	1	09/03/24 11:30	09/06/24 08:26		
Potassium, Dissolved	1590	ug/L	789	237	1	09/03/24 11:30	09/06/24 08:26		
Sodium, Dissolved	12800	ug/L	250	42.0	1	09/03/24 11:30	09/06/24 08:26		D9
Total Hardness by 2340B, Dissolved	37.6	mg/L	1.7	0.32	1	09/03/24 11:30	09/06/24 08:26		
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	09/03/24 11:30	09/06/24 08:26	7440-66-6	
2540D Total Suspended Solids	Analytical	Method: SM 25	40D						
	Pace Anal	ytical Services	- Green Bay						
Total Suspended Solids	5.3	mg/L	1.2	0.57	1		09/04/24 13:35		
4500S2F Sulfide, Iodometric	-	Method: SM 45							
Sulfide	<1.2	mg/L	4.0	1.2	1		09/06/24 14:29		
		•			•		00,00,2		
4500S2F Sulfide,Diss Iodometrc	-	Method: SM 45 ytical Services							
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		09/06/24 14:06		
300.0 IC Anions	,	Method: EPA 3							
Chlorido		•	•		4		00/10/24 10:42	16007.00.0	
Chloride Sulfate	23.0 2.4	mg/L mg/L	2.0 2.0	0.59 0.44	1 1		09/10/24 19:42 09/10/24 19:42		
300.0 IC Anions, Dissolved	Analytical	Method: EPA 3	00.0						
, -, -, -, -, -, -, -, -, -, -, -, -,	•	ytical Services							
Chloride, Dissolved	22.3	mg/L	2.0	0.59	1		09/05/24 15:35	16887-00-6	
Sulfate, Dissolved	2.3	mg/L	2.0	0.44	1		09/05/24 15:35	14808-79-8	



ANALYTICAL RESULTS

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

Sample: SW-C1_20240830	Lab ID:	40283424002	Collected	d: 08/30/24	1 09:35	Received: 08/	/30/24 17:40 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Anal	lytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	29.2	mg/L	25.0	7.4	1		09/03/24 15:12		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
-	Pace Anal	lytical Services	- Green Bay	y					
Alkalinity, Total as CaCO3, Dissolved	31.0	mg/L	25.0	7.4	1		09/03/24 15:29		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
	Pace Anal	lytical Services	- Green Ba	y					
Dissolved Organic Carbon	11.3	mg/L	1.5	0.57	3		09/06/24 04:59		



Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

Sample: SW-STM_20240830	Lab ID:	40283424003	Collected	d: 08/30/24	08:00	Received: 08/	30/24 17:40 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical I	Method: EPA 6	020B Prepa	aration Met	hod: EF	PA 3010A			
	-	tical Services							
Calcium	12000	ug/L	254	76.2	1	09/03/24 11:29	09/06/24 10:07	7440 70 2	
Copper	8.6	ug/L ug/L	6.4	1.9	1	09/03/24 11:29	09/06/24 10:07		
ron	1130	ug/L	250	58.0	1	09/03/24 11:29			
Magnesium	4970	ug/L	250	31.2	1	09/03/24 11:29			
Manganese	52.9	ug/L	4.0	1.2	1	09/03/24 11:29			
Potassium	1770	ug/L	789	237	1	09/03/24 11:29	09/06/24 10:07		
Sodium	16600	ug/L ug/L	250	42.0	1	09/03/24 11:29	09/06/24 10:07		
Fotal Hardness by 2340B	50.4	mg/L	1.7	0.32	1	09/03/24 11:29	09/06/24 10:07	7440-23-3	
Zinc	<10.3	ug/L	34.4	10.3	1	09/03/24 11:29	09/06/24 10:07	7440-66-6	
		Ü							
6020B MET ICPMS, Dissolved	•	Method: EPA 6	•		noa: EF	A 3010A			
	•	tical Services	- Green Bay	/					
Calcium, Dissolved	11800	ug/L	254	76.2	1	09/03/24 11:30	09/06/24 08:34	7440-70-2	
Copper, Dissolved	5.9J	ug/L	6.4	1.9	1	09/03/24 11:30	09/06/24 08:34	7440-50-8	
ron, Dissolved	315	ug/L	250	58.0	1	09/03/24 11:30	09/06/24 08:34	7439-89-6	
/lagnesium, Dissolved	4820	ug/L	250	31.2	1	09/03/24 11:30	09/06/24 08:34	7439-95-4	
/langanese, Dissolved	28.7	ug/L	4.0	1.2	1	09/03/24 11:30	09/06/24 08:34	7439-96-5	
Potassium, Dissolved	1690	ug/L	789	237	1	09/03/24 11:30	09/06/24 08:34	7440-09-7	
Sodium, Dissolved	16200	ug/L	250	42.0	1	09/03/24 11:30	09/06/24 08:34	7440-23-5	
otal Hardness by 2340B, Dissolved	49.4	mg/L	1.7	0.32	1	09/03/24 11:30	09/06/24 08:34		
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	09/03/24 11:30	09/06/24 08:34	7440-66-6	
2540D Total Suspended Solids	Analytical I	Method: SM 25	40D						
	•	tical Services		/					
Total Suspended Solids	4.1	mg/L	1.0	0.48	1		09/04/24 13:35		
Total Gusperiaea Gollas		· ·			•		00/04/24 10:00		
4500S2F Sulfide, lodometric	•	Method: SM 45 /tical Services -	•	•					
Sulfide	<1.2	mg/L	4.0	1.2	1		09/06/24 14:33		
4500S2F Sulfide, Diss Iodometrc	Analytical I	Method: SM 45	00-S F (200	00)					
	-	tical Services	,	,					
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		09/06/24 14:10		
300 0 IC Anions	Analytical I	Method: EPA 3	00.0						
300.0 IC Anions	•	tical Services		/					
Chloride	35.4	mg/L	2.0	0.59	1		09/10/24 19:57	16887-00-6	
Sulfate	3.0	mg/L	2.0	0.44	1		09/10/24 19:57	14808-79-8	
300.0 IC Anions, Dissolved	Analytical I	Method: EPA 3	0.00						
Journal of Milloria, Diagonia		tical Services		/					
Chloride, Dissolved	34.3	mg/L	2.0	0.59	1		09/05/24 15:49	16007 00 6	
Shionae, Dissoivea	34.3	IIIQ/L	7.0	0.59	- 1		U9/U3/24 T5:49	1000/-UU-b	



ANALYTICAL RESULTS

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

Sample: SW-STM_20240830	Lab ID:	40283424003	Collected	d: 08/30/24	1 08:00	Received: 08/	/30/24 17:40 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Ana	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	33.5	mg/L	25.0	7.4	1		09/03/24 15:13		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Ana	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	34.4	mg/L	25.0	7.4	1		09/03/24 15:33		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	10C						
	Pace Ana	ytical Services	- Green Ba	y					
Dissolved Organic Carbon	9.9	mg/L	1.5	0.57	3		09/06/24 05:34		



Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

Sample: SW-C5_20240830	Lab ID:	40283424004	Collected	l: 08/30/24	1 09:55	Received: 08/	30/24 17:40 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prepa	aration Met	hod: EF	PA 3010A			
	-	ytical Services							
Calcium	7610	ug/L	254	76.2	1	09/03/24 11:29	09/06/24 10:11	7440-70-2	
Copper	12.2	ug/L ug/L	6.4	1.9	1	09/03/24 11:29	09/06/24 10:11		
ron	1530	ug/L ug/L	250	58.0	1	09/03/24 11:29	09/06/24 10:11		
Magnesium	3030	ug/L	250	31.2	1	09/03/24 11:29			
Manganese	91.6	ug/L	4.0	1.2	1	09/03/24 11:29			
Potassium	1530	ug/L	789	237	1	09/03/24 11:29	09/06/24 10:11		
Sodium	11100	ug/L	250	42.0	1	09/03/24 11:29	09/06/24 10:11		
Total Hardness by 2340B	31.5	mg/L	1.7	0.32	1	09/03/24 11:29	09/06/24 10:11	7440 20 0	
Zinc	11.9J	ug/L	34.4	10.3	1	09/03/24 11:29	09/06/24 10:11	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Pren	aration Met	hod: FF	ΡΑ 3010Α			
7020D MET TOT MO, DISSOIVED	•	ytical Services	•		110u. L1	71001071			
Calcium, Dissolved	7410	ug/L	254	76.2	1	09/03/24 11:30	09/06/24 08:38	7440-70-2	
Copper, Dissolved	8.5	ug/L ug/L	6.4	1.9	1	09/03/24 11:30	09/06/24 08:38		
ron, Dissolved	536	ug/L ug/L	250	58.0	1	09/03/24 11:30			
Magnesium, Dissolved	3070	ug/L ug/L	250	31.2	1	09/03/24 11:30			D9
Manganese, Dissolved	84.0	ug/L ug/L	4.0	1.2	1	09/03/24 11:30	09/06/24 08:38		Da
Potassium, Dissolved	1530	ug/L ug/L	789	237	1	09/03/24 11:30			
Sodium, Dissolved	11300	ug/L ug/L	250	42.0	1	09/03/24 11:30	09/06/24 08:38		D9
otal Hardness by 2340B,	31.2	mg/L	1.7	0.32	1	09/03/24 11:30	09/06/24 08:38	7440-23-3	Da
Dissolved Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	09/03/24 11:30	09/06/24 08:38	7440-66-6	
2540D Total Suspended Solids	Analytical	Method: SM 25	40D						
2340D Total Suspended Solids	•	ytical Services		,					
Fatal Circumon de di Calida	•	,	•		4		00/04/04 40:05		
Total Suspended Solids	3.6	mg/L	1.3	0.63	1		09/04/24 13:35		
4500S2F Sulfide, Iodometric		Method: SM 45 ytical Services							
Sulfide	<1.2	mg/L	4.0	1.2	1		09/06/24 14:36		
4500S2F Sulfide, Diss Iodometrc	Analytical	Method: SM 45	00-S F (200	00)					
	•	ytical Services	,	,					
Sulfide, Dissolved	<1.2	mg/L	4.0	1.2	1		09/06/24 14:12		
300.0 IC Anions	Analytical	Method: EPA 3	00.0						
	•	ytical Services		/					
Chloride	19.0	mg/L	2.0	0.59	1		09/10/24 20:11	16887-00-6	
Sulfate	1.8J	mg/L	2.0	0.44	1		09/10/24 20:11	14808-79-8	
800.0 IC Anions, Dissolved	Analytical	Method: EPA 3	00.0						
•		ytical Services		/					
Chloride, Dissolved	19.4	mg/L	2.0	0.59	1		09/05/24 16:05	16887-00-6	D9
Sulfate, Dissolved	1.9J	mg/L	2.0	0.44	1		09/05/24 16:05		_ 3



Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

Sample: SW-C5_20240830	Lab ID:	40283424004	Collected	d: 08/30/2	1 09:55	Received: 08/	/30/24 17:40 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
310.2 Alkalinity	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3	23.6J	mg/L	25.0	7.4	1		09/03/24 15:14		
310.2 Alkalinity, Dissolved	Analytical	Method: EPA 3	10.2						
	Pace Anal	ytical Services	- Green Ba	y					
Alkalinity, Total as CaCO3, Dissolved	27.2	mg/L	25.0	7.4	1		09/03/24 15:34		
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	10C						
_	Pace Anal	ytical Services	- Green Ba	y					
Dissolved Organic Carbon	10.9	mg/L	1.5	0.57	3		09/06/24 05:48		



ANALYTICAL RESULTS

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

Sample: SW-EB_20240830	Lab ID:	40283424005	Collecte	d: 08/30/24	11:01	Received: 08/	/30/24 17:40 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	y					
Copper	12.4	ug/L	6.4	1.9	1	09/03/24 11:29	09/05/24 18:59	7440-50-8	
Total Hardness by 2340B	49.8	mg/L	1.7	0.32	1	09/03/24 11:29	09/05/24 18:59		
Zinc	<10.3	ug/L	34.4	10.3	1	09/03/24 11:29	09/05/24 18:59	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	y					
Copper, Dissolved	7.5	ug/L	6.4	1.9	1	09/03/24 11:30	09/05/24 17:14	7440-50-8	
Total Hardness by 2340B, Dissolved	50.3	mg/L	1.7	0.32	1	09/03/24 11:30	09/05/24 17:14		D9
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	09/03/24 11:30	09/05/24 17:14	7440-66-6	
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
5	•	ytical Services		y					
Dissolved Organic Carbon	7.7	mg/L	1.5	0.57	3		09/06/24 06:03		



ANALYTICAL RESULTS

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

Sample: SW-NBOUT_20240830	Lab ID:	40283424006	Collecte	d: 08/30/24	1 10:42	Received: 08/	30/24 17:40 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	у					
Copper	4.7J	ug/L	6.4	1.9	1	09/03/24 11:29	09/05/24 19:04	7440-50-8	
Total Hardness by 2340B	61.6	mg/L	1.7	0.32	1	09/03/24 11:29	09/05/24 19:04		
Zinc	<10.3	ug/L	34.4	10.3	1	09/03/24 11:29	09/05/24 19:04	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Prep	aration Met	hod: E	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	у					
Copper, Dissolved	3.4J	ug/L	6.4	1.9	1	09/03/24 11:30	09/05/24 17:18	7440-50-8	
Total Hardness by 2340B, Dissolved	60.9	mg/L	1.7	0.32	1	09/03/24 11:30	09/05/24 17:18		
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	09/03/24 11:30	09/05/24 17:18	7440-66-6	
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	10C						
, and the second	Pace Anal	ytical Services	- Green Ba	у					
Dissolved Organic Carbon	12.7	mg/L	1.5	0.57	3		09/06/24 06:18		



ANALYTICAL RESULTS

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

Sample: SW-NB_20240830	Lab ID:	40283424007	Collecte	d: 08/30/24	1 10:21	Received: 08/	/30/24 17:40 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	y					
Copper	7.5	ug/L	6.4	1.9	1	09/03/24 11:29	09/05/24 19:08	7440-50-8	
Total Hardness by 2340B	46.7	mg/L	1.7	0.32	1	09/03/24 11:29	09/05/24 19:08		
Zinc	<10.3	ug/L	34.4	10.3	1	09/03/24 11:29	09/05/24 19:08	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	y					
Copper, Dissolved	4.3J	ug/L	6.4	1.9	1	09/03/24 11:30	09/05/24 17:22	7440-50-8	
Total Hardness by 2340B, Dissolved	47.5	mg/L	1.7	0.32	1	09/03/24 11:30	09/05/24 17:22		D9
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	09/03/24 11:30	09/05/24 17:22	7440-66-6	
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	10C						
J	•	ytical Services		y					
Dissolved Organic Carbon	13.3	mg/L	1.5	0.57	3		09/06/24 06:33		



ANALYTICAL RESULTS

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

Sample: SW-HWY27W_20240830	Lab ID:	40283424008	Collecte	d: 08/30/2	4 11:33	Received: 08/	/30/24 17:40 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prep	aration Met	thod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	y					
Copper	20.4	ug/L	6.4	1.9	1	09/03/24 11:29	09/05/24 19:12	7440-50-8	
Total Hardness by 2340B	27.6	mg/L	1.7	0.32	1	09/03/24 11:29	09/05/24 19:12		
Zinc	24.3J	ug/L	34.4	10.3	1	09/03/24 11:29	09/05/24 19:12	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	y					
Copper, Dissolved	11.5	ug/L	6.4	1.9	1	09/03/24 11:30	09/05/24 17:27	7440-50-8	
Total Hardness by 2340B, Dissolved	27.2	mg/L	1.7	0.32	1	09/03/24 11:30	09/05/24 17:27		
Zinc, Dissolved	25.9J	ug/L	34.4	10.3	1	09/03/24 11:30	09/05/24 17:27	7440-66-6	
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	10C						
-	Pace Anal	ytical Services	- Green Ba	y					
Dissolved Organic Carbon	15.5	mg/L	1.5	0.57	3		09/06/24 06:49		



ANALYTICAL RESULTS

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

Sample: SW-HWY27E_20240830	Lab ID:	40283424009	Collecte	d: 08/30/24	4 11:16	Received: 08/	/30/24 17:40 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	у					
Copper	13.7	ug/L	6.4	1.9	1	09/03/24 11:29	09/05/24 19:16	7440-50-8	
Total Hardness by 2340B	8.1	mg/L	1.7	0.32	1	09/03/24 11:29	09/05/24 19:16		
Zinc	13.9J	ug/L	34.4	10.3	1	09/03/24 11:29	09/05/24 19:16	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Prep	aration Met	hod: El	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	у					
Copper, Dissolved	9.5	ug/L	6.4	1.9	1	09/03/24 11:30	09/05/24 17:31	7440-50-8	
Total Hardness by 2340B, Dissolved	6.5	mg/L	1.7	0.32	1	09/03/24 11:30	09/05/24 17:31		
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	09/03/24 11:30	09/05/24 17:31	7440-66-6	
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
_	Pace Anal	ytical Services	- Green Ba	у					
Dissolved Organic Carbon	10.1	mg/L	1.5	0.57	3		09/06/24 07:05		



ANALYTICAL RESULTS

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

Sample: CP-04_20240830	Lab ID:	40283424010	Collecte	d: 08/30/24	4 09:23	Received: 08/	/30/24 17:40 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA 6	020B Prep	aration Met	hod: E	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	у					
Copper	6.1J	ug/L	6.4	1.9	1	09/03/24 11:29	09/05/24 19:29	7440-50-8	
Total Hardness by 2340B	87.8	mg/L	1.7	0.32	1	09/03/24 11:29	09/05/24 19:29		
Zinc	<10.3	ug/L	34.4	10.3	1	09/03/24 11:29	09/05/24 19:29	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA 6	020B Prep	aration Met	hod: E	PA 3010A			
	Pace Anal	ytical Services	- Green Ba	у					
Copper, Dissolved	5.4J	ug/L	6.4	1.9	1	09/03/24 11:30	09/05/24 17:35	7440-50-8	
Total Hardness by 2340B, Dissolved	90.4	mg/L	1.7	0.32	1	09/03/24 11:30	09/05/24 17:35		D9
Zinc, Dissolved	<10.3	ug/L	34.4	10.3	1	09/03/24 11:30	09/05/24 17:35	7440-66-6	
5310C Dissolved Organic Carbon	Analytical	Method: SM 53	310C						
ŭ	Pace Anal	ytical Services	- Green Ba	y					
Dissolved Organic Carbon	10.5	mg/L	1.5	0.57	3		09/06/24 07:21		



Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

Sample: SW-HWY27W-DUP_20240830 Lab ID: 40283424011 Collected: 08/30/24 11:33 Received: 08/30/24 17:40 Matrix: Water

DOP_20240630									
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020B MET ICPMS	Analytical	Method: EPA	A 6020B Prep	aration Met	hod: E	PA 3010A			
	Pace Anal	ytical Service	es - Green Ba	У					
Copper	19.8	ug/L	6.4	1.9	1	09/03/24 11:29	09/05/24 19:33	7440-50-8	
Total Hardness by 2340B	27.8	mg/L	1.7	0.32	1	09/03/24 11:29	09/05/24 19:33		
Zinc	27.1J	ug/L	34.4	10.3	1	09/03/24 11:29	09/05/24 19:33	7440-66-6	
6020B MET ICPMS, Dissolved	Analytical	Method: EPA	A 6020B Prep	aration Met	hod: E	PA 3010A			
	Pace Anal	ytical Service	es - Green Bay	y					
Copper, Dissolved	11.5	ug/L	6.4	1.9	1	09/03/24 11:30	09/05/24 17:56	7440-50-8	
Total Hardness by 2340B, Dissolved	27.3	mg/L	1.7	0.32	1	09/03/24 11:30	09/05/24 17:56		
Zinc, Dissolved	20.7J	ug/L	34.4	10.3	1	09/03/24 11:30	09/05/24 17:56	7440-66-6	
5310C Dissolved Organic Carbon	Analytical	Method: SM	5310C						
-	Pace Anal	ytical Service	es - Green Ba	y					
Dissolved Organic Carbon	15.4	mg/L	1.5	0.57	3		09/06/24 07:36		



Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

QC Batch: 483422 Analysis Method: EPA 6020B
QC Batch Method: EPA 3010A Analysis Description: 6020B MET

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004, 40283424005, 40283424006, 40283424007,

40283424008, 40283424009, 40283424010, 40283424011

METHOD BLANK: 2767720 Matrix: Water

Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004, 40283424005, 40283424006, 40283424007,

40283424008, 40283424009, 40283424010, 40283424011

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Calcium	ug/L	<76.2	254	09/06/24 08:51	
Copper	ug/L	<1.9	6.4	09/06/24 08:51	
Iron	ug/L	<58.0	250	09/06/24 08:51	
Magnesium	ug/L	<31.2	250	09/06/24 08:51	
Manganese	ug/L	<1.2	4.0	09/06/24 08:51	
Potassium	ug/L	<237	789	09/06/24 08:51	
Sodium	ug/L	<42.0	250	09/06/24 08:51	
Total Hardness by 2340B	mg/L	< 0.32	1.7	09/06/24 08:51	
Zinc	ug/L	<10.3	34.4	09/06/24 08:51	

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Calcium	ug/L	10000	9910	99	80-120	
Copper	ug/L	250	233	93	80-120	
Iron	ug/L	10000	10300	103	80-120	
Magnesium	ug/L	10000	10000	100	80-120	
Manganese	ug/L	250	242	97	80-120	
Potassium	ug/L	10000	10400	104	80-120	
Sodium	ug/L	10000	10100	101	80-120	
Total Hardness by 2340B	mg/L		66.1			
Zinc	ug/L	250	250	100	80-120	

MATRIX SPIKE & MATRIX SI	PIKE DUPLI	CATE: 2767	722		2767723							
Parameter	Units	40283424001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	ug/L	2750	10000	10000	12600	12500	98	98	75-125	1	20	
Copper	ug/L	14.0	250	250	251	243	95	91	75-125	3	20	
Iron	ug/L	2610	10000	10000	12600	12600	100	100	75-125	0	20	
Magnesium	ug/L	954	10000	10000	10800	10600	98	96	75-125	2	20	
Manganese	ug/L	117	250	250	354	349	95	93	75-125	1	20	
Potassium	ug/L	1250	10000	10000	11300	11100	101	98	75-125	2	20	
Sodium	ug/L	6410	10000	10000	16400	15900	100	95	75-125	3	20	
Total Hardness by 2340B	mg/L	10.8			75.7	74.9				1	20	
Zinc	ug/L	13.6J	250	250	262	250	99	95	75-125	5	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

QC Batch: 483420 Analysis Method: EPA 6020B

QC Batch Method: EPA 3010A Analysis Description: 6020B MET Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004, 40283424005, 40283424006, 40283424007,

 $40283424008,\,40283424009,\,40283424010,\,40283424011$

METHOD BLANK: 2767716 Matrix: Water

Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004, 40283424005, 40283424006, 40283424007,

40283424008, 40283424009, 40283424010, 40283424011

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Calcium, Dissolved	ug/L	<76.2	254	09/06/24 08:01	
Copper, Dissolved	ug/L	<1.9	6.4	09/06/24 08:01	
Iron, Dissolved	ug/L	<58.0	250	09/06/24 08:01	
Magnesium, Dissolved	ug/L	<31.2	250	09/06/24 08:01	
Manganese, Dissolved	ug/L	<1.2	4.0	09/06/24 08:01	
Potassium, Dissolved	ug/L	<237	789	09/06/24 08:01	
Sodium, Dissolved	ug/L	<42.0	250	09/06/24 08:01	
Total Hardness by 2340B, Dissolved	mg/L	<0.32	1.7	09/06/24 08:01	
Zinc, Dissolved	ug/L	<10.3	34.4	09/06/24 08:01	

LABORATORY CONTROL SAMPLE:	2767717					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Calcium, Dissolved	ug/L	10000	9790	98	80-120	
Copper, Dissolved	ug/L	250	232	93	80-120	
Iron, Dissolved	ug/L	10000	10100	101	80-120	
Magnesium, Dissolved	ug/L	10000	9880	99	80-120	
Manganese, Dissolved	ug/L	250	235	94	80-120	
Potassium, Dissolved	ug/L	10000	10100	101	80-120	
Sodium, Dissolved	ug/L	10000	10100	101	80-120	
Total Hardness by 2340B, Dissolved	mg/L		65.1			
Zinc, Dissolved	ug/L	250	245	98	80-120	

MATRIX SPIKE & MATRIX S	SPIKE DUPL	ICATE: 2767	2767719 MSD									
		40283424001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Calcium, Dissolved	ug/L	2630	10000	10000	12600	12400	99	98	75-125	1	20	
Copper, Dissolved	ug/L	11.4	250	250	246	250	94	95	75-125	1	20	
Iron, Dissolved	ug/L	1000	10000	10000	11300	11300	103	103	75-125	0	20	
Magnesium, Dissolved	ug/L	859	10000	10000	10900	11200	100	103	75-125	3	20	
Manganese, Dissolved	ug/L	99.6	250	250	340	341	96	97	75-125	0	20	
Potassium, Dissolved	ug/L	1160	10000	10000	11500	11500	104	103	75-125	0	20	
Sodium, Dissolved	ug/L	6530	10000	10000	16700	17100	102	106	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

MATRIX SPIKE & MATRIX S	718		2767719									
Parameter	Units	40283424001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Hardness by 2340B, Dissolved	mg/L	10.1			76.2	76.9				1	20	
Zinc, Dissolved	ug/L	13.2J	250	250	267	262	101	100	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

QC Batch: 483505 Analysis Method: SM 2540D

QC Batch Method: SM 2540D Analysis Description: 2540D Total Suspended Solids

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40283424001

METHOD BLANK: 2767917 Matrix: Water

Associated Lab Samples: 40283424001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Total Suspended Solids mg/L <0.48 1.0 09/04/24 09:03

LABORATORY CONTROL SAMPLE: 2767918

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits Qualifiers

Total Suspended Solids mg/L 100 100 80-120

SAMPLE DUPLICATE: 2767919

Date: 09/17/2024 03:44 PM

40283377001 Dup Max **RPD RPD** Parameter Units Result Result Qualifiers 21.6 Total Suspended Solids mg/L 18.8 10 R1 14

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

Qualifiers



QUALITY CONTROL DATA

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

QC Batch: 483560 Analysis Method: SM 2540D

QC Batch Method: SM 2540D Analysis Description: 2540D Total Suspended Solids

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40283424002, 40283424003, 40283424004

METHOD BLANK: 2768249 Matrix: Water

Associated Lab Samples: 40283424002, 40283424003, 40283424004

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Total Suspended Solids mg/L <0.48 1.0 09/04/24 13:35

LABORATORY CONTROL SAMPLE: 2768250

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits

Total Suspended Solids mg/L 100 104 104 80-120

SAMPLE DUPLICATE: 2768251

Date: 09/17/2024 03:44 PM

40283449001 Dup Max **RPD** Parameter Units Result Result **RPD** Qualifiers 13.0 Total Suspended Solids mg/L 12.0 8 10

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

QC Batch: 483727 Analysis Method: SM 4500-S F (2000)

QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Dissolved Iodometric

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004

METHOD BLANK: 2769206 Matrix: Water

Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Sulfide mg/L <1.2 4.0 09/06/24 12:44

LABORATORY CONTROL SAMPLE: 2769207

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:

Date: 09/17/2024 03:44 PM

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units mg/L Sulfide 41.6 45.2 109 90-110

2769208 2769209 MS MSD

40283424001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Result Result % Rec **RPD** RPD Qual Result Conc. % Rec Limits Sulfide mg/L <1.2 41.6 41.6 41.6 40.4 100 97 80-120 3 10

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

QC Batch: 483726 Analysis Method: SM 4500-S F (2000)

QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004

METHOD BLANK: 2769201 Matrix: Water

Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Sulfide mg/L <1.2 4.0 09/06/24 14:21

LABORATORY CONTROL SAMPLE: 2769202

Spike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits Qualifiers

Sulfide mg/L 41.6 40.8 98 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2769203 2769204

MS MSD

40283424001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Conc. Conc. Result Result **RPD** RPD Qual Result % Rec % Rec Limits Sulfide mg/L <1.2 41.6 41.6 40.4 42.4 97 101 80-120 5 10

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

(920)469-2436



QUALITY CONTROL DATA

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

QC Batch: 483584 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions, Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004

METHOD BLANK: 2768341 Matrix: Water

Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

 Chloride
 mg/L
 <0.59</th>
 2.0
 09/05/24 11:16

 Sulfate
 mg/L
 <0.44</td>
 2.0
 09/05/24 11:16

LABORATORY CONTROL SAMPLE: 2768342

Date: 09/17/2024 03:44 PM

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Chloride 20 19.7 98 90-110 mg/L 90-110 Sulfate mg/L 20 19.8 99

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2768343 2768344 MS MSD 40283424001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Chloride mg/L 5.1 20 20 27.5 26.5 112 107 90-110 15 M0 Sulfate 1.3J 20 20 23.6 22.3 105 90-110 6 15 M0 mg/L 111

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Chloride

Date: 09/17/2024 03:44 PM

Sulfate

QC Batch: 483760 Analysis Method: EPA 300.0

QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004

METHOD BLANK: 2769780 Matrix: Water
Associated Lab Samples: 40283424001 40283424002 40283424003 402834240

Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004

Blank Reporting Parameter Units Result Limit Analyzed Qualifiers < 0.59 2.0 09/10/24 18:16 mg/L < 0.44 2.0 09/10/24 18:16 mg/L

LABORATORY CONTROL SAMPLE: 2769781 Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Chloride 20 21.1 106 mg/L 90-110 Sulfate 20 21.1 105 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2769782 2769783 MS MSD 40283424001 Spike Spike MS MSD MS MSD % Rec Max Result Parameter Units Result Conc. Conc. Result % Rec % Rec Limits **RPD** RPD Qual Chloride mg/L 5.2 20 20 26.8 26.8 108 108 90-110 0 15 Sulfate 20 20 22.6 22.5 90-110 mg/L 1.4J 106 106 0 15

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2769784 2769785 MS MSD 40283503001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec **RPD RPD** Qual Limits Chloride mg/L 203 100 100 297 294 94 91 90-110 15 Sulfate mg/L <2.2 100 100 115 115 115 115 90-110 0 15 M0

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Alkalinity, Total as CaCO3

Date: 09/17/2024 03:44 PM

QC Batch: 483455 Analysis Method: EPA 310.2

QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity

Laboratory: Pace Analytical Services - Green Bay

92

94

90-110

0 20

Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004

METHOD BLANK: 2767773 Matrix: Water
Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Alkalinity, Total as CaCO3 mg/L <7.4 25.0 09/03/24 14:53

LABORATORY CONTROL SAMPLE: 2767774

Spike LCS LCS % Rec Conc. Result % Rec Limits Qualifiers Parameter Units Alkalinity, Total as CaCO3 100 103 103 90-110 mg/L

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2767775 2767776

MS MSD 40283339001 Spike Spike

40283339001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Result **RPD** RPD Result Conc. Conc. % Rec % Rec Limits Qual 20 Alkalinity, Total as CaCO3 mg/L 173 100 100 272 275 99 102 90-110

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2767777 2767778

mg/L

350

100

MS MSD 40283441003 MS MSD MS MSD % Rec Spike Spike Max **RPD** RPD Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits Qual

100

442

444

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

QC Batch: 483456 Analysis Method: EPA 310.2

QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity, Dissolved

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004

METHOD BLANK: 2767779 Matrix: Water

Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Alkalinity, Total as CaCO3, mg/L <7.4 25.0 09/03/24 15:24

Dissolved

LABORATORY CONTROL SAMPLE: 2767780

Spike LCS LCS % Rec Qualifiers Parameter Units Conc. Result % Rec Limits Alkalinity, Total as CaCO3, mg/L 100 102 102 90-110

Dissolved

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2767781 2767782

MS MSD

MS 40283424001 Spike Spike MS MSD MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual Alkalinity, Total as CaCO3, 100 2 20 12.0J 100 113 116 101 104 90-110 mg/L

Dissolved

Date: 09/17/2024 03:44 PM

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

QC Batch: 483700 Analysis Method: SM 5310C

QC Batch Method: SM 5310C Analysis Description: 5310C Dissolved Organic Carbon

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004, 40283424005, 40283424006, 40283424007,

40283424008, 40283424009, 40283424010, 40283424011

METHOD BLANK: 2769076 Matrix: Water

Associated Lab Samples: 40283424001, 40283424002, 40283424003, 40283424004, 40283424005, 40283424006, 40283424007,

40283424008, 40283424009, 40283424010, 40283424011

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Dissolved Organic Carbon mg/L 0.21J 0.50 09/06/24 01:30

LABORATORY CONTROL SAMPLE: 2769077

LCS LCS % Rec Spike Parameter Units % Rec Limits Qualifiers Conc. Result Dissolved Organic Carbon mg/L 12.5 12.2 98 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2769078 2769079

MS MSD

40283384001 Spike Spike MS MSD MS MSD % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits RPD RPD Qual 96 80-120

Dissolved Organic Carbon mg/L 2.7 6 6 8.4 8.5 94 96 80-120 1 20

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2769080 2769081

MS MSD

MSD MS MSD 40283424001 Spike Spike MS % Rec Max Parameter % Rec Units Conc. Conc. Result % Rec **RPD** RPD Qual Result Result Limits Dissolved Organic Carbon 13.5 18 18 31.0 31.7 97 101 80-120 2 20 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALIFIERS

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - The reported result is an estimated value.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

DL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Analyte was not detected and is reported as less than the LOD or as defined by the customer.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

Date: 09/17/2024 03:44 PM

D9 Dissolved result is greater than the total. Data is within laboratory control limits.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

R1 RPD value was outside control limits.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
40283424001	SW-C9_20240830	EPA 3010A	483422	EPA 6020B	483490
10283424002	SW-C1_20240830	EPA 3010A	483422	EPA 6020B	483490
0283424003	SW-STM 20240830	EPA 3010A	483422	EPA 6020B	483490
0283424004	SW-C5_20240830	EPA 3010A	483422	EPA 6020B	483490
0283424005	SW-EB_20240830	EPA 3010A	483422	EPA 6020B	483490
0283424006	SW-NBOUT_20240830	EPA 3010A	483422	EPA 6020B	483490
0283424007	SW-NB_20240830	EPA 3010A	483422	EPA 6020B	483490
0283424008	SW-HWY27W 20240830	EPA 3010A	483422	EPA 6020B	483490
0283424009	SW-HWY27E_20240830	EPA 3010A	483422	EPA 6020B	483490
0283424010	CP-04_20240830	EPA 3010A	483422	EPA 6020B	483490
0283424011	SW-HWY27W-DUP_20240830	EPA 3010A	483422	EPA 6020B	483490
0283424001	SW-C9_20240830	EPA 3010A	483420	EPA 6020B	483488
0283424002	SW-C1_20240830	EPA 3010A	483420	EPA 6020B	483488
0283424003	SW-STM_20240830	EPA 3010A	483420	EPA 6020B	483488
0283424003 0283424004	SW-C5 20240830	EPA 3010A	483420	EPA 6020B	483488
0283424005	SW-EB_20240830	EPA 3010A	483420	EPA 6020B	483488
0283424006	SW-NBOUT 20240830	EPA 3010A	483420	EPA 6020B	483488
0283424007	SW-NB_20240830	EPA 3010A	483420	EPA 6020B	483488
0283424007 0283424008	SW-HWY27W_20240830	EPA 3010A	483420	EPA 6020B	483488
0283424009	SW-HWY27E_20240830		483420		483488
	_	EPA 3010A	483420	EPA 6020B	483488
)283424010)283424011	CP-04_20240830 SW-HWY27W-DUP_20240830	EPA 3010A EPA 3010A	483420 483420	EPA 6020B EPA 6020B	483488
0283424001	SW-C9_20240830	SM 2540D	483505	2.7.00202	.00.00
0283424002	SW-C1_20240830	SM 2540D	483560		
0283424003	SW-STM_20240830	SM 2540D	483560		
0283424004	SW-C5_20240830	SM 2540D	483560		
	_				
0283424001	SW-C9_20240830	SM 4500-S F (2000)	483726		
0283424002	SW-C1_20240830	SM 4500-S F (2000)	483726		
0283424003	SW-STM_20240830	SM 4500-S F (2000)	483726		
0283424004	SW-C5_20240830	SM 4500-S F (2000)	483726		
0283424001	SW-C9_20240830	SM 4500-S F (2000)	483727		
0283424002	SW-C1_20240830	SM 4500-S F (2000)	483727		
0283424003	SW-STM_20240830	SM 4500-S F (2000)	483727		
0283424004	SW-C5_20240830	SM 4500-S F (2000)	483727		
0283424001	SW-C9_20240830	EPA 300.0	483760		
0283424002	SW-C1_20240830	EPA 300.0	483760		
0283424003	SW-STM_20240830	EPA 300.0	483760		
0283424004	SW-C5_20240830	EPA 300.0	483760		
0283424001	SW-C9 20240830	EPA 300.0	483584		
0283424002	SW-C1_20240830	EPA 300.0	483584		
0283424003	SW-STM_20240830	EPA 300.0	483584		
0283424003 0283424004	SW-C5_20240830	EPA 300.0	483584		
0283424001	SW-C9 20240830	EPA 310.2			
	_		483455		
0283424002	SW-C1_20240830	EPA 310.2	483455		
0283424003	SW-STM_20240830	EPA 310.2	483455		



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FMC-2024_Q4 FLAMBEAU MINE CO

Pace Project No.: 40283424

Date: 09/17/2024 03:44 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
40283424004	SW-C5_20240830	EPA 310.2	483455		
40283424001	SW-C9_20240830	EPA 310.2	483456		
40283424002	SW-C1_20240830	EPA 310.2	483456		
40283424003	SW-STM_20240830	EPA 310.2	483456		
40283424004	SW-C5_20240830	EPA 310.2	483456		
40283424001	SW-C9_20240830	SM 5310C	483700		
40283424002	SW-C1_20240830	SM 5310C	483700		
40283424003	SW-STM_20240830	SM 5310C	483700		
40283424004	SW-C5_20240830	SM 5310C	483700		
40283424005	SW-EB_20240830	SM 5310C	483700		
40283424006	SW-NBOUT_20240830	SM 5310C	483700		
40283424007	SW-NB_20240830	SM 5310C	483700		
40283424008	SW-HWY27W_20240830	SM 5310C	483700		
40283424009	SW-HWY27E_20240830	SM 5310C	483700		
40283424010	CP-04_20240830	SM 5310C	483700		
40283424011	SW-HWY27W-DUP_20240830	SM 5310C	483700		

* Foth

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevent fields must be completed end accurate

40283424

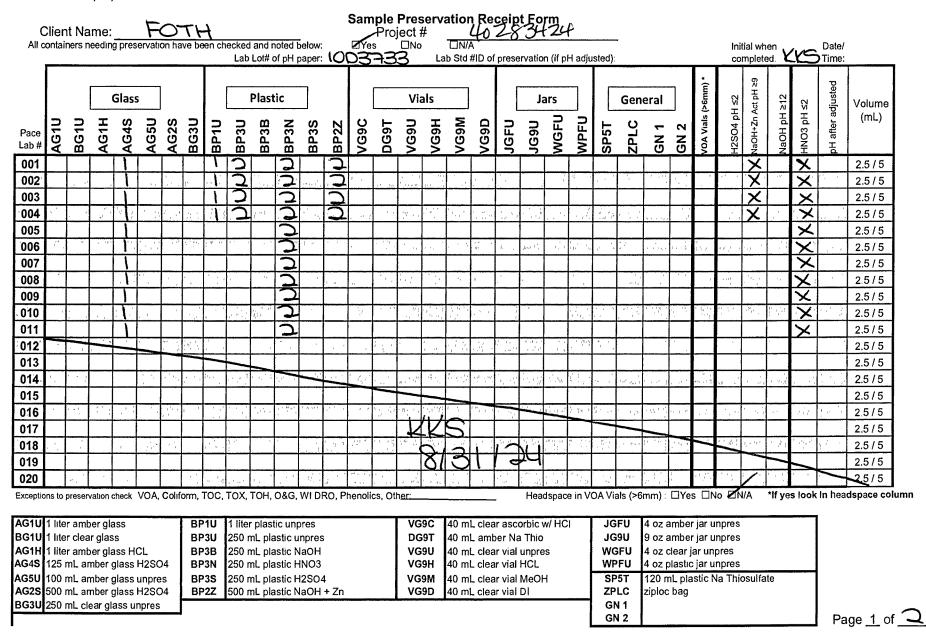
Page: of 1 of Cooler# 2 of

COC# FMC-2024_04

Require	d Ship to Lab:	Required Project				Required invoice															,						1
Leb Nan	Pece Analytical Services	*Facility ID #;	iambeau Min	e Co.		Send Invoice to:	Accounti									: Standa		day	ľ	×	<u> </u>		Rush	h		Merk One	
Address		*Taak Code #	FMC-2024	_04		Address: 2121 in	novation C	ourt P.O.	Box 5126	3, De l	ere, Wi				If Ru	ısh, Dat	e due										
1241 Be	levue Street - Suite 9, Green Bay, WI	Site Address -				City/State	De Pere,	WI. 5411	5	Ph #.	920-	197-25	00		QC	level Re	quired	: Stan	darc	1			X S	Special		Mark one	
Lab PM	Tod Noltemeyer	City LADYSMIT	TH Sta	ate	WI	17F777.23-07-	73								Lab	Projec	t ID (la	b use)								l
Phone/F	ax: (608) 232-3300	Project Contact	: Merk C	iardelli		Send EDD to:	Nick Glar	nder											Rec	uest	ed A	naly	ses				l
Lab PM	email Tod Noltemeyer@pacelabs.com	Phone/Fax: 9	20-496-6658			CC Hardcopy n	eport to	Sharon I	Kozicki, N	lick Gl	ander						Filte	ered (Y/N)								İ
Applicab	e Leb Quote #.	Email:	Mark.Cia	rdelli@	@foth.com	CC electronic copy	report to	Sharon nick gla	Kozick ander@			!			N	Y	N	Y	Υ	N N	N	Υ	Υ				
ITEM#	*SAMPLE ID Samples IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX MM PRIMONOR WATER WA SW GROUND WATER WW WATER WATER WATER WATER OOL SO LA OOL OOL SP WATER WATER OOL OOL SP WATER WATER OOL OOL SP OOL OOL OOL SP OOL OOL OOL SP OOL OOL OOL OOL OOL OOL OOL OOL OOL OO	ATRIX URFACE WATER WS ATER OC WCQ UDGIE 8L NOBATE WAT 8 LEACHATE- 1-P LLS 8 LEACHATE- 1,P LLS	*MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	•	IPLE ME tary)	# OF CONTAINERS	Unpreserved		eserva HOEN	Na2S2O3 59	Znc Acetate & NaOH	Total Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness	Dissolved Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness	Total Alkalinty, CI, Sulfate	Dissolved Alkalinity, CI, Suffate	DOC	TSS Total Sulfide	Total Cu, Zn and Hardness	Dissolved Cu, Zn and Hardness	Dissolved Sulfide	-	omment Sample		
1 5	SW-C9_20240830			ws	G	8/30/2024	115	7_	8	3	1 2			2	х	х	х	х	х	x x	Ш		x		01		
2 8	SW-C1_20240830			ws	G	8/30/2024	09	35	8	3	1 2			2	х	Х	х	х	x	x x	Ш		x	_0	07		
3 8	SW-STM_20240830			ws	G	8/30/2024	og		8	3	1 2	_		2	х	х	х	х	×	x x	Ш		x		ro 3	<u>, </u>	
4	SW-C5_20240830			ws	G	8/30/2024	099		8	3	1 2	\perp		2	х	х	×	x	X	x x			x		TOL	1	
5	SW-EB-20240830			ws	G	8/30/2024	11		3	Ш	1 2			Ц					x	_	X	х	\sqcup	(20 L	<u></u>	
6	SW-NBOUT_20240830			ws	G	8/30/2024	104		3	Ш	1 2			Ц					X	_	X	X	\sqcup		106	<u></u>	
7	SW-NB_20240830			ws	G	8/30/2024	102		3	Ш	1 2								X		X	х	$oldsymbol{\sqcup}$	(JO_		
8	SW-HWY27W_20240830			ws	G	8/30/2024	1/3		3		1 2			Ц					×	_	X	х	\sqcup	<u>`</u>	201	<u> </u>	
9	SW-HWY27E_20240830			ws	G	8/30/2024		16	3		1 2	$oldsymbol{\perp}$		Ц					x		X	х	\sqcup		100	1	
10	CP-04_20240830			ws	G	8/30/2024	09.		3	Ш	1 2	\bot							x		X	х	\sqcup	$-\mathcal{G}$	710		
11	SW-HWY27W-DUP-20240830			ws	G	8/30/2024	113	3	3	Ш	1 2			Ц					×		X	х	$oldsymbol{\sqcup}$	d	13		
				_				4		Ш													Ц	-4		m V	5
Addition	al Comments/Special instructions:			RELI	NQUISHED BY	AFFILIATION		DATE	TIME			,	FFILIATI		- //	[DATE	TIM		Sa	mpl	e Red	celpt	Conditi	ons	08/3	100
				Jim I	Engelhardt/M		<i>yy</i> _	30-Aug	1340		χV	<u>\</u>	\	يک	ofh,		130	145		,		. 1		Y/N	Y/N	Y/N	*
				1	MU2	Tot Cot	<u>h</u>	8/30	1746	ζW	WIL	10	7000	7 <u>11</u> 1	WW.	ency	124	44	1	102	-10	امارا	ЦΝ	N N	Y/N	Y/H	<i>/t</i> t
					1													<u> </u>				, 	<u> </u>	Y/N	Y/N	Y/N	-
																							<u> </u>	Y/N	Y/N	Y/N	
						(mark as appropri		SAMPLE	ER NAME	AND	SIGNA	TURE								ျှင				8	용상	ank?	
Include	Equis EDD's			UPS	COURIER	FEDEX Jim E	-													Temp ir				Samples on Ice?	Sample intact?	Trip Blank?	
*Requi	red Information for electronic data d	eliverable.		บรา	MAIL	Other SIGNATUR	E of SAMPLE	K	4	10	UB	4	DATE Sign	ned .	8/30/2	024 Tim	^e /2	<u> </u>		ē				Sa	~,·	Ë	J

DC#_Title: ENV-FRM-GBAY-0035 v03_Sample Preservation Receipt Form

Effective Date: 8/16/2022



DC#_Title: ENV-FRM-GBAY-0014 v03_SCUR Effective Date: 8/17/2022

Sample	Condition	Upoi	n Receipt Form	(SCUR)	
			Project #:	ПО# .	40000404
Client Name: Foth		•		MO#:	40283424
Courier: CS Logistics Fed Ex Speed	5.	□ w	FOH		
8131170	NH OH	vdC	HETE MOIN-IN	40283424	11 - 11 1 - 11 1
Tracking #: N/A	Seala	intest	- Type Fine	· · · · · · · · · · · · · · · · · · ·	
Custody Seal on Cooler/Box Present: yes Custody Seal on Samples Present: yes			☐ yes ☐ no ☐		
Packing Material: Bubble Wrap But		None			
Thermometer Used SR - 140			Blue Dry None	☐ Meltwater	
Cooler Temperature Uncorr: Q.O, I.O /Corr:	2.0; 1.0				Person examining contents:
Temp Blank Present:	Biolo	gical 7	issue is Frozen: 🗌] yes∏ no	Date: KKS /Initials: KKS
Temp should be above freezing to 6°C. Biota Samples may be received at ≤ 0°C if shipped on	Drv Ice.				Labeled By Initials:
Chain of Custody Present:	Yes □No	□n/a	1.		
	Yes, □No	□n/a			
Chain of Custody Filled Out: Chain of Custody Relinquished:	Yes □No	□n/a			
Sampler Name & Signature on COC:	Yes □No	□N/A			
Samples Arrived within Hold Time:	Yes □No		5.		
- DI VOA Samples frozen upon receipt	□Yes □No		Date/Time:		
Short Hold Time Analysis (<72hr):	□Yes ☑No		6.		
Rush Turn Around Time Requested:	□Yes ZNo		7.		
Sufficient Volume:		_	8.	-	
For Analysis: ☑Yes ☐No MS/MS	D: □Yes ZNo	□n/a			
Correct Containers Used:	✓Yes □No		9.		
Correct Type Pace Green Bay, Pace IR, Non-Pa	ice				
Containers Intact:	ZYes □No	·	10.		
Filtered volume received for Dissolved tests	□Yes ☑No	□n/a	11.		
Sample Labels match COC:	ØYes □No	□n/a	12.		
-Includes date/time/ID/Analysis Matrix:	W				
Trip Blank Present:	□Yes □No	ØN/A	13.		
Trip Blank Custody Seals Present	□Yes □No	ØN/A			
Pace Trip Blank Lot # (if purchased):					
Client Notification/ Resolution: Person Contacted:		_Date/		necked, see attac	ched form for additional comments
Comments/ Resolution:					
PM Review is documented electronically in LI	Me Ryroloasir	na the	project the PM ack	nowledges th	ev have reviewed the sample lo
r m neview is documented electronically in Li	 1 6166311	.ye	p. ojoog the r m den		Page 2 of 2

Attachment 3 Field Forms – May 8, 2024



Flambeau Mining Co
Flambeau Stream C - Spring Event
Jim Engelhardt/Merjent
NMG1 / Foth

Project ID: 17F777.24

Date: 05/08/24 Date: 07/29/24

TECHNICIAN(S) NAME (INITIALS), COMPANY

Jin Engelhardt / Merjent

SUMMARY OF SAMPLING ACTIVITIES

Sample Date(s): 5/8/2024

Activities:

Collected field parameter measurements, and water quality samples for laboratory analysis by Pace Analytical.

Collected field quality control samples for laboratory analysis by Pace Analytical

Weather, Stream Conditions and Comments:

Temp: 64 degrees Fahrenheit, Clear, 10-12 mph Southwest Wind. 0.88-inches of rain occurred over the last 24 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

Stream C Samples: Total Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness

Dissolved Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness

Total Alkalinity (EPA310.2), Cl, Sulfate Dissolved Alkalinity (EPA310.2), Cl, Sulfate

DOC TSS

Total Sulfide Dissolved Sulfide

Velocity Measurements (collecteed at US end of culverts and at SW-STM near confluence of Flambeau River):

Location:	Velocity (ft/sec)	Depth (ft)
HWY 27 Culvert	0.1	1.19
Copper Park Lane Culvert	2.7	0.37
SW-STM Confluence	1.3	0.68

FIELD REPORT ATTACHMENTS

Summary of Field Parameters Summary of Field Quality Control Samples Field Forms

COMMENTS

The data collected during this event was conducted under the "Stream C Evaluation Work Plan" dated March 10, 2023.



Flambeau Mining Co

Flambeau Stream C - Spring Event

Jim Engelhardt/Merjent

NMG1 / Foth

Project ID: 17F777.24

Date: 05/08/24 Date: 07/29/24

SUMMARY OF FIELD PARAMETERS

Location	Sample Date	Sample Time	pH (SU)	Specific Conductance (mS/cm)	Temperature (⁰ C)	ORP (mV)	DO (mg/l)	Odor (visual)	Turbidity (visual)	Color (visual)
SW-C9	5/8/2024	1027	6.31	0.036	11.94	174.0	4.90	None	Moderate	Stained lt. Brown
SW-C1	5/8/2024	1337	6.57	0.066	15.88	178.4	6.76	None	Slight	Stained lt. Brown
SW-STM	5/8/2024	1501	7.16	0.074	17.60	191.1	8.76	None	Slight	Stained lt. Brown
SW-C5	5/8/2024	1234	6.54	0.056	15.26	232.3	6.14	None	None	Stained lt. Brown
SW-EB	5/8/2024	1220	7.15	0.121	14.86	228.4	7.69	Slt. Organic	Slight	Stained lt. Brown
SW-NB	5/8/2024	1104	6.21	0.159	13.91	130.3	5.94	Slt. Organic	Slight	Stained lt. Brown
SW-NBOUT	5/8/2024	1158	6.75	0.102	13.58	224.9	6.17	Slt. Organic	Slight	Stained lt. Brown
SW-HWY27W	5/8/2024	1003	6.29	0.200	12.56	174.4	3.58	Slt. Organic	None	Stained lt. Brown
SW-HWY27E	5/8/2024	940	6.38	0.025	11.60	177.0	3.43	Slt. Organic	Moderate	Stained lt. Brown
CP-04	5/8/2024	1300	6.99	0.736	15.80	168.7	1.78	None	Slight	Stained lt. Brown

Note

 $\begin{aligned} ORP &= Oxidation \ Reduction \ Potential \\ \mu mhos/cm &= micromhos/centimeter \end{aligned}$

SU = Standard Unit

mV = Millivolts

°C = Degrees Celsius

NA = not applicable



Project ID: 17F777.24

Date: 05/08/24 Date: 07/29/24

SUMMARY OF FIELD QUALITY CONTROL SAMPLES

Sample Date	Description
5/8/2024	Duplicate Taken at SW-C1 sampling location
	•



Flambeau Mining Co	Project ID: 17F777.24
Flambeau Stream C - Spring Event	
Jim Engelhardt/Merjent	Date: 05/08/24
NMG1 / Foth	Date: 07/29/24

FIELD NOTES

Site ID: SW-C9 Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump, Date: 5/8/2024

Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: 64 degrees Fahrenheit, Clear, 10-12 mph Southwest Wind. 0.88-inches of rain occurred over the last 24 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate
1	N	Plastic 250 mL	None	TSS
1	Y	Amber 125 mL	H2SO4	DOC
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (°C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	1027	6.31	0.036	11.94	174.00	4.90	None	Moderate	Stained lt. Brown



Project ID: 17F777.24

Date: 05/08/24 Date: 07/29/24

FIELD NOTES

Site ID: SW-C1 Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 5/8/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: 64 degrees Fahrenheit, Clear, 10-12 mph Southwest Wind. 0.88-inches of rain occurred over the last 24 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate
1	N	Plastic 250 mL	None	TSS
1	Y	Amber 125 mL	H2SO4	DOC
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
•	1337	6.57	0.066	15.88	178.40	6.76	None	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 05/08/24 Date: 07/29/24

FIELD NOTES

Site ID: SW-STM Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 5/8/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: 64 degrees Fahrenheit, Clear, 10-12 mph Southwest Wind. 0.88-inches of rain occurred over the last 24 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate
1	N	Plastic 250 mL	None	TSS
1	Y	Amber 125 mL	H2SO4	DOC
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
_	1501	7.16	0.074	17.60	191.10	8.76	None	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 05/08/24 Date: 07/29/24

FIELD NOTES

Site ID: SW-C5 Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 5/8/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: 64 degrees Fahrenheit, Clear, 10-12 mph Southwest Wind. 0.88-inches of rain occurred over the last 24 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

_	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	1234	6.54	0.056	15.26	232.30	6.14	None	None	Stained lt. Brown



Project ID: 17F777.24

Date: 05/08/24 Date: 07/29/24

FIELD NOTES

Site ID: SW-EB Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 5/8/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: 64 degrees Fahrenheit, Clear, 10-12 mph Southwest Wind. 0.88-inches of rain occurred over the last 24 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate
1	N	Plastic 250 mL	None	TSS
1	Y	Amber 125 mL	H2SO4	DOC
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	1220	7.15	0.121	14.86	228.40	7.69	Slt. Organic	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 05/08/24 Date: 07/29/24

FIELD NOTES

Site ID: SW-NBOUT **Equipment:** GPS, Multi-parameter probe, Camera, Peristaltic pump,

5/8/2024 Date: Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: 64 degrees Fahrenheit, Clear, 10-12 mph Southwest Wind. 0.88-inches of rain occurred over the last 24 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate
1	N	Plastic 250 mL	None	TSS
1	Y	Amber 125 mL	H2SO4	DOC
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide

FIELD PARAMETERS

_	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	1104	6.21	0.159	13.91	130.30	5.94	Slt. Organic	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 05/08/24 Date: 07/29/24

FIELD NOTES

Site ID: SW-NB Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 5/8/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: 64 degrees Fahrenheit, Clear, 10-12 mph Southwest Wind. 0.88-inches of rain occurred over the last 24 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate
1	N	Plastic 250 mL	None	TSS
1	Y	Amber 125 mL	H2SO4	DOC
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	1158	6.75	0.102	13.58	224.90	6.17	Slt. Organic	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 05/08/24 Date: 07/29/24

FIELD NOTES

Site ID: SW-HWY27W Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 5/8/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: 64 degrees Fahrenheit, Clear, 10-12 mph Southwest Wind. 0.88-inches of rain occurred over the last 24 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate
1	N	Plastic 250 mL	None	TSS
1	Y	Amber 125 mL	H2SO4	DOC
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	1003	6.29	0.200	12.56	174.40	3.58	Slt. Organic	None	Stained lt. Brown



Project ID: 17F777.24

Date: 05/08/24 Date: 07/29/24

FIELD NOTES

Site ID: SW-HWY27E **Equipment:** GPS, Multi-parameter probe, Camera, Peristaltic pump, Date: 5/8/2024

Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: 64 degrees Fahrenheit, Clear, 10-12 mph Southwest Wind. 0.88-inches of rain occurred over the last 24 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y Plastic 250 mL		HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	940	6.38	0.025	11.60	177.00	3.43	Slt. Organic	Moderate	Stained lt. Brown



Project ID: 17F777.24

Date: 05/08/24 Date: 07/29/24

FIELD NOTES

Site ID: CP-04 **Equipment:** GPS, Multi-parameter probe, Camera, Peristaltic pump, 5/8/2024 Date:

Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: 64 degrees Fahrenheit, Clear, 10-12 mph Southwest Wind. 0.88-inches of rain occurred over the last 24 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	1300	6.99	0.736	15.80	168.70	1.78	None	Slight	Stained lt. Brown

Attachment 4 Field Forms – May 23, 2024



Project ID: 17F777.24

Date: 05/23/24 Date: 07/29/24

TECHNICIAN(S) NAME (INITIALS), COMPANY

Jin Engelhardt / Merjent

SUMMARY OF SAMPLING ACTIVITIES

Sample Date(s): 5/23/2024

Activities:

Collected field parameter measurements, and water quality samples for laboratory analysis by Pace Analytical.

Collected field quality control samples for laboratory analysis by Pace Analytical

Weather, Stream Conditions and Comments:

Temp:58 degrees Fahrenheit, partly cloudy, 0-5 mph South Southwest Wind. 2.79-inches of rain occurred over the last 48 hrs. per National Weather Sc

LABORATORY ANALYTICAL PARAMETERS

Stream C Samples: Total Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness

Dissolved Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness

Total Alkalinity (EPA310.2), Cl, Sulfate Dissolved Alkalinity (EPA310.2), Cl, Sulfate

DOC TSS

Total Sulfide Dissolved Sulfide

Velocity Measurements (collecteed at US end of culverts and at SW-STM near confluence of Flambeau River):

Location:	Velocity (ft/sec)	Depth (ft)
HWY 27 Culvert	0.3	1.22
Copper Park Lane Culvert	1.0	0.37
SW-STM Confluence	0.7	0.55

FIELD REPORT ATTACHMENTS

Summary of Field Parameters Summary of Field Quality Control Samples Field Forms

COMMENTS

The data collected during this event was conducted under the "Stream C Evaluation Work Plan" dated March 10, 2023.



Flambeau Mining Co

Flambeau Stream C - Spring Event #2

Jim Engelhardt/Merjent

NMG1 / Foth

Project ID: 17F777.24

Date: 05/23/24 Date: 07/29/24

SUMMARY OF FIELD PARAMETERS

Location	Sample Date	Sample Time	pH (SU)	Specific Conductance (mS/cm)	Temperature (°C)	ORP (mV)	DO (mg/l)	Odor	Turbidity (visual)	Color (visual)
SW-C9	5/23/2024	1037	6.15	0.026	13.69	214.5	3.88	None	Moderate	Stained lt. Brown
SW-C1	5/23/2024	0944	6.41	0.048	13.29	174.4	3.93	None	Slight	Stained lt. Brown
SW-STM	5/23/2024	0707	6.83	0.052	12.80	157.6	2.99	None	Slight	Stained lt. Brown
SW-C5	5/23/2024	1005	6.17	0.039	13.52	183.4	3.37	None	None	Stained lt. Brown
SW-EB	5/23/2024	857	7.02	0.107	13.62	161.8	3.79	Slt. Organic	Slight	Stained lt. Brown
SW-NB	5/23/2024	0802	6.44	0.104	12.02	132.7	3.21	Slt. Organic	Slight	Stained lt. Brown
SW-NBOUT	5/23/2024	832	6.86	0.111	12.04	172.0	3.40	Slt. Organic	Slight	Stained lt. Brown
SW-HWY27W	5/23/2024	1135	6.28	0.120	14.56	152.0	2.24	Slt. Organic	Slight	Stained lt. Brown
SW-HWY27E	5/23/2024	1217	6.12	0.021	15.08	210.6	4.23	Slt. Organic	Moderate	Stained lt. Brown
CP-04	5/23/2024	922	7.28	0.462	13.02	178.7	2.28	None	Slight	Stained lt. Brown

Note

 $\begin{aligned} ORP &= Oxidation \ Reduction \ Potential \\ \mu mhos/cm &= micromhos/centimeter \end{aligned}$

SU = Standard Unit

mV = Millivolts

°C = Degrees Celsius

NA = not applicable



Project ID: 17F777.24

Date: 05/23/24 Date: 07/29/24

SUMMARY OF FIELD QUALITY CONTROL SAMPLES

Sample ID	Sample Date	Description
SW-C1-DUP_20240508	5/8/2024	Duplicate Taken at SW-C1 sampling location



Project ID: 17F777.24

Date: 05/23/24 Date: 07/29/24

FIELD NOTES

Site ID:SW-C9Equipment:GPS, Multi-parameter probe, Camera, Peristaltic pump,Date:5/23/2024Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp:58 degrees Fahrenheit, partly cloudy, 0-5 mph South Southwest Wind. 2.79-inches of rain occurred over the last 48 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	Y Plastic 250 mL		HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate
1	N	Plastic 250 mL	None	TSS
1	Y	Amber 125 mL	H2SO4	DOC
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (°C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	1037	6.15	0.026	13.69	214.50	3.88	None	Moderate	Stained lt. Brown



Project ID: 17F777.24

Date: 05/23/24 Date: 07/29/24

FIELD NOTES

Site ID: SW-C1 Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 5/23/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp:58 degrees Fahrenheit, partly cloudy, 0-5 mph South Southwest Wind. 2.79-inches of rain occurred over the last 48 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter			
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)			
1	Y Plastic 250 mL		HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)			
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate			
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate			
1	N	Plastic 250 mL	None	TSS			
1	Y	Amber 125 mL	H2SO4	DOC			
1	1 N Plastic 500 mL		Zinc Acetate & NaOH	Total Sulfide			
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide			

FIELD PARAMETERS

Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
0944	6.41	0.048	13.29	174.40	3.93	None	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 05/23/24 Date: 07/29/24

FIELD NOTES

Site ID: SW-STM **Equipment:** GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 5/23/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp:58 degrees Fahrenheit, partly cloudy, 0-5 mph South Southwest Wind. 2.79-inches of rain occurred over the last 48 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected Filtered (Y/N)		Bottle	Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y	Plastic 250 mL HNO ₃ Dissolved (Ca, Cu, Fe, Mg		Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	0707	6.83	0.052	12.80	157.60	2.99	None	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 05/23/24 Date: 07/29/24

FIELD NOTES

Site ID: SW-C5 Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 5/23/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp:58 degrees Fahrenheit, partly cloudy, 0-5 mph South Southwest Wind. 2.79-inches of rain occurred over the last 48 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y	Plastic 250 mL	astic 250 mL HNO ₃ Dissolved (Ca, Cu, Fe, Mg, Mn, K, N			
1	N	Plastic 250 mL	Plastic 250 mL None Total Alkalinit			
1	Y	Plastic 250 mL	Plastic 250 mL None Dissolved Alkalinity, C			
1	N	Plastic 250 mL	mL None TSS			
1	Y	Amber 125 mL	Amber 125 mL H2SO4 DO			
1	N	Plastic 500 mL Zinc Acetate & NaOH		Total Sulfide		
1	Y	Plastic 500 mL Zinc Acetate & NaOH Dissolved Sulfide		Dissolved Sulfide		

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
•	1005	6.17	0.039	13.52	183.40	3.37	None	None	Stained lt. Brown



Project ID: 17F777.24

Date: 05/23/24 Date: 07/29/24

FIELD NOTES

Site ID: SW-EB **Equipment:** GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 5/23/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp:58 degrees Fahrenheit, partly cloudy, 0-5 mph South Southwest Wind. 2.79-inches of rain occurred over the last 48 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected Filtered (Y/N)		Bottle	Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y	Plastic 250 mL	Plastic 250 mL HNO ₃ Dissolved (Ca, Cu, Fe, Mg, M			
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
857	7.02	0.107	13.62	161.80	3.79	Slt. Organic	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 05/23/24 Date: 07/29/24

FIELD NOTES

Site ID: SW-NBOUT **Equipment:** GPS, Multi-parameter probe, Camera, Peristaltic pump,

5/23/2024 Date: Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp:58 degrees Fahrenheit, partly cloudy, 0-5 mph South Southwest Wind. 2.79-inches of rain occurred over the last 48 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Collected Filtered (Y/N) Bottle		Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
0802	6.44	0.104	12.02	132.70	3.21	Slt. Organic	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 05/23/24 Date: 07/29/24

FIELD NOTES

Site ID: SW-NB Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 5/23/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp:58 degrees Fahrenheit, partly cloudy, 0-5 mph South Southwest Wind. 2.79-inches of rain occurred over the last 48 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Collected Filtered (Y/N) Bottle		Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
•	832	6.86	0.111	12.04	172.00	3.40	Slt. Organic	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 05/23/24 Date: 07/29/24

FIELD NOTES

Site ID: SW-HWY27W Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 5/23/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp:58 degrees Fahrenheit, partly cloudy, 0-5 mph South Southwest Wind. 2.79-inches of rain occurred over the last 48 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Collected Filtered (Y/N) Bottle		Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
•	1135	6.28	0.120	14.56	152.00	2.24	Slt. Organic	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 05/23/24 Date: 07/29/24

FIELD NOTES

Site ID: SW-HWY27E Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 5/23/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp:58 degrees Fahrenheit, partly cloudy, 0-5 mph South Southwest Wind. 2.79-inches of rain occurred over the last 48 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Collected Filtered (Y/N) Bottle		Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

_	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	1217	6.12	0.021	15.08	210.60	4.23	Slt. Organic	Moderate	Stained lt. Brown



Project ID: 17F777.24

Date: 05/23/24 Date: 07/29/24

FIELD NOTES

Site ID: CP-04 Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 5/23/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp:58 degrees Fahrenheit, partly cloudy, 0-5 mph South Southwest Wind. 2.79-inches of rain occurred over the last 48 hrs. per National Weather Service

LABORATORY ANALYTICAL PARAMETERS

#Collected	Collected Filtered (Y/N) Bottle		Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

_	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	922	7.28	0.462	13.02	178.70	2.28	None	Slight	Stained lt. Brown

Attachment 5 Field Forms – July 24, 2024



Date: 07/24/24

Date: 10/30/24

Project ID: 17F777.24

TECHNICIAN(S) NAME (INITIALS), COMPANY

Jin Engelhardt / Merjent

SUMMARY OF SAMPLING ACTIVITIES

Sample Date(s): 7/24/2024

Activities:

Collected field parameter measurements, and water quality samples for laboratory analysis by Pace Analytical.

Collected field quality control samples for laboratory analysis by Pace Analytical

Weather, Stream Conditions and Comments:

Temp: High of 76 degrees Fahrenheit, Cloudy, 5-9 mph South East Wind.

LABORATORY ANALYTICAL PARAMETERS

Stream C Samples: Total Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness

Dissolved Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness

Total Alkalinity (EPA310.2), Cl, Sulfate Dissolved Alkalinity (EPA310.2), Cl, Sulfate

DOC TSS

Total Sulfide Dissolved Sulfide

Velocity Measurements (collecteed at US end of culverts and at SW-STM near confluence of Flambeau River):

Location: Velocity (ft/sec) Depth (ft)

HWY 27 Culvert Copper Park Lane Culvert SW-STM Confluence

FIELD REPORT ATTACHMENTS

Summary of Field Parameters Summary of Field Quality Control Samples Field Forms

COMMENTS

The data collected during this event was conducted under the "Stream C Evaluation Work Plan" dated March 10, 2023.



Flambeau Mining Co

Flambeau Stream C - Spring Event #2

Jim Engelhardt/Merjent

NMG1 / Foth

Project ID: 17F777.24

Date: 07/24/24 Date: 10/30/24

SUMMARY OF FIELD PARAMETERS

Location	Sample Date	Sample Time	pH (SU)	Specific Conductance (mS/cm)	Temperature (⁰ C)	ORP (mV)	DO (mg/l)	Odor	Turbidity (visual)	Color (visual)
SW-C9	7/24/2024	1248	6.29	0.170	18.97	89.7	3.16	Slt. Organic	Slight	Stained lt. Brown
SW-C1	7/24/2024	1643	6.64	0.159	17.33	160.7	2.68	None	Slight	Stained lt. Brown
SW-STM	7/24/2024	1727	7.21	0.185	18.23	161.5	4.39	None	Slight	Stained lt. Brown
SW-C5	7/24/2024	1610	6.31	0.084	17.60	88.0	1.15	None	None	Stained lt. Brown
SW-EB	7/24/2024	1436	6.48	0.214	21.16	49.2	1.21	Slt. Organic	Slight	Stained lt. Brown
SW-NB	7/24/2024	1349	6.50	0.237	28.02	147.7	4.76	Slt. Organic	Slight	Stained lt. Brown
SW-NBOUT	7/24/2024	1423	6.58	0.217	21.28	156.3	2.62	Slt. Organic	Slight	Stained lt. Brown
SW-HWY27W	7/24/2024	1302	5.78	0.154	21.21	176.1	3.36	Slt. Organic	Slight	Stained lt. Brown
SW-HWY27E	7/24/2024	1227	6.17	0.031	19.17	21.4	3.17	Slt. Organic	Slight	Stained lt. Brown
CP-04	7/24/2024	1510	7.19	0.376	19.76	163.6	1.63	None	Slight	Stained lt. Brown

Note

 $\begin{aligned} ORP &= Oxidation \ Reduction \ Potential \\ \mu mhos/cm &= micromhos/centimeter \end{aligned}$

SU = Standard Unit

mV = Millivolts

°C = Degrees Celsius

NA = not applicable



Project ID: <u>17F777.24</u>

Date: 07/24/24 Date: 10/30/24

SUMMARY OF FIELD QUALITY CONTROL SAMPLES

Sample ID	Sample Date	Description
SW-C5-DUP_20240724	7/24/2024	Duplicate Taken at SW-C5 sampling location

NMG1 / Foth



Project ID: 17F777.24

Equipment:

Date: 07/24/24 Date: 10/30/24

Disposable Filters, Battery

GPS, Multi-parameter probe, Camera, Peristaltic pump,

FIELD NOTES

Site ID: SW-C9 **Date:** 7/24/2024

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 76 degrees Fahrenheit, Cloudy, 5-9 mph South East Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected	cted Filtered (Y/N) Bottle		Preservative	Parameter
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate
1	N	Plastic 250 mL	None	TSS
1	Y	Amber 125 mL	H2SO4	DOC
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide

FIELD PARAMETERS

Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (°C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
1248	6.29	0.170	18.97	89.70	3.16	Slt. Organic	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 07/24/24 Date: 10/30/24

FIELD NOTES

Site ID: SW-C1 Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 7/24/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 76 degrees Fahrenheit, Cloudy, 5-9 mph South East Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
•	1643	6.64	0.159	17.33	160.70	2.68	None	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 07/24/24 Date: 10/30/24

FIELD NOTES

Site ID: SW-STM Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 7/24/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 76 degrees Fahrenheit, Cloudy, 5-9 mph South East Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected	#Collected Filtered (Y/N) Bottle		Preservative	Parameter
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate
1	N	Plastic 250 mL	None	TSS
1	Y	Amber 125 mL	H2SO4	DOC
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
_	1727	7.21	0.185	18.23	161.50	4.39	None	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 07/24/24 Date: 10/30/24

FIELD NOTES

Site ID: SW-C5 Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 7/24/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 76 degrees Fahrenheit, Cloudy, 5-9 mph South East Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	ve Parameter			
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)			
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)			
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate			
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate			
1	N	Plastic 250 mL	None	TSS			
1	Y	Amber 125 mL	H2SO4	DOC			
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide			
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide			

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	1610	6.31	0.084	17.60	88.00	1.15	None	None	Stained lt. Brown



Project ID: 17F777.24

Date: 07/24/24 Date: 10/30/24

FIELD NOTES

SW-EB Site ID: **Equipment:** GPS, Multi-parameter probe, Camera, Peristaltic pump, Date: 7/24/2024

Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 76 degrees Fahrenheit, Cloudy, 5-9 mph South East Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	ve Parameter			
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)			
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)			
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate			
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate			
1	N	Plastic 250 mL	None	TSS			
1	Y	Amber 125 mL	H2SO4	DOC			
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide			
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide			

FIELD PARAMETERS

Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
1436	6.48	0.214	21.16	49.20	1.21	Slt. Organic	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 07/24/24 Date: 10/30/24

FIELD NOTES

SW-NBOUT Site ID: GPS, Multi-parameter probe, Camera, Peristaltic pump, **Equipment:**

7/24/2024 Date: Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 76 degrees Fahrenheit, Cloudy, 5-9 mph South East Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected	#Collected Filtered (Y/N) Bottle		Preservative	Parameter
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate
1	N	Plastic 250 mL	None	TSS
1	Y	Amber 125 mL	H2SO4	DOC
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	1349	6.50	0.237	28.02	147.70	4.76	Slt. Organic	Slight	Stained lt. Brown



Client: Project: Prepared by: Checked by:

Flambeau Mining Co Flambeau Stream C - Spring Event #2 Jim Engelhardt/Merjent NMG1 / Foth

Project ID: 17F777.24

Date: 07/24/24 Date: 10/30/24

FIELD NOTES

SW-NB Site ID: **Equipment:** GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 7/24/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 76 degrees Fahrenheit, Cloudy, 5-9 mph South East Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	N	Plastic 250 mL None T		Total Alkalinity, Chloride, Sulfate
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate
1	N	Plastic 250 mL	None	TSS
1	Y Amber 125 mL		H2SO4	DOC
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
•	1423	6.58	0.217	21.28	156.30	2.62	Slt. Organic	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 07/24/24 Date: 10/30/24

FIELD NOTES

Site ID:SW-HWY27WEquipment:GPS, Multi-parameter probe, Camera, Peristaltic pump,Date:7/24/2024Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent

Weather, Stream Conditions and Comments:

Temp: High of 76 degrees Fahrenheit, Cloudy, 5-9 mph South East Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

_	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	1302	5.78	0.154	21.21	176.10	3.36	Slt. Organic	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 07/24/24 Date: 10/30/24

FIELD NOTES

Site ID: SW-HWY27E Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 7/24/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 76 degrees Fahrenheit, Cloudy, 5-9 mph South East Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected Filtered (Y/N)		Bottle	Preservative	Parameter
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate
1	N	Plastic 250 mL	None	TSS
1	Y	Amber 125 mL	H2SO4	DOC
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide

FIELD PARAMETERS

_	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
_	1227	6.17	0.031	19.17	21.40	3.17	Slt. Organic	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 07/24/24 Date: 10/30/24

FIELD NOTES

Site ID: CP-04 **Equipment:** GPS, Multi-parameter probe, Camera, Peristaltic pump,

7/24/2024 Date: Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 76 degrees Fahrenheit, Cloudy, 5-9 mph South East Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate
1	N	Plastic 250 mL	None	TSS
1	Y	Amber 125 mL	H2SO4	DOC
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
•	1510	7.19	0.376	19.76	163.60	1.63	None	Slight	Stained lt. Brown

Attachment 6 Field Forms – August 30, 2024



Date: 08/30/24

Date: 10/30/24

Project ID: 17F777.24

TECHNICIAN(S) NAME (INITIALS), COMPANY

Jin Engelhardt / Merjent

SUMMARY OF SAMPLING ACTIVITIES

Sample Date(s): 8/30/2024

Activities:

Collected field parameter measurements, and water quality samples for laboratory analysis by Pace Analytical.

Collected field quality control samples for laboratory analysis by Pace Analytical

Weather, Stream Conditions and Comments:

Temp: High of 78 degrees Fahrenheit, Cloudy, 7-12 mph West Wind.

LABORATORY ANALYTICAL PARAMETERS

Stream C Samples: Total Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness

Dissolved Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness

Total Alkalinity (EPA310.2), Cl, Sulfate Dissolved Alkalinity (EPA310.2), Cl, Sulfate

DOC TSS

Total Sulfide Dissolved Sulfide

Velocity Measurements (collecteed at US end of culverts and at SW-STM near confluence of Flambeau River):

Location: Velocity (ft/sec) Depth (ft)

HWY 27 Culvert Copper Park Lane Culvert SW-STM Confluence

FIELD REPORT ATTACHMENTS

Summary of Field Parameters Summary of Field Quality Control Samples Field Forms

COMMENTS

The data collected during this event was conducted under the "Stream C Evaluation Work Plan" dated March 10, 2023.



Flambeau Mining Co

Flambeau Stream C - Spring Event #2

Jim Engelhardt/Merjent

NMG1 / Foth

Project ID: 17F777.24

Date: 08/30/24 Date: 10/30/24

SUMMARY OF FIELD PARAMETERS

Location	Sample Date	Sample Time	pH (SU)	Specific Conductance (mS/cm)	Temperature (⁰ C)	ORP (mV)	DO (mg/l)	Odor	Turbidity (visual)	Color (visual)
SW-C9	8/30/2024	11:57	6.05	0.041	18.13	197.6	1.17	None	Slight	Stained lt. Brown
SW-C1	8/30/2024	9:35	6.72	0.140	18.04	101.2	1.25	None	Slight	Stained lt. Brown
SW-STM	8/30/2024	8:00	7.43	0.174	18.09	125.5	1.39	None	Slight	Stained lt. Brown
SW-C5	8/30/2024	9:55	6.36	0.119	18.11	32.2	1.18	None	None	Stained lt. Brown
SW-EB	8/30/2024	11:01	6.81	0.156	19.51	59.3	1.22	Slt. Organic	Slight	Stained lt. Brown
SW-NB	8/30/2024	10:21	6.27	0.273	18.20	82.5	0.95	Slt. Organic	Slight	Stained lt. Brown
SW-NBOUT	8/30/2024	10:42	6.81	0.218	19.05	109.1	1.48	Slt. Organic	Slight	Stained lt. Brown
SW-HWY27W	8/30/2024	11:33	5.74	0.304	19.18	107.5	1.12	Slt. Organic	Slight	Stained lt. Brown
SW-HWY27E	8/30/2024	11:16	6.03	0.025	17.86	176.6	1.22	Slt. Organic	Moderate	Stained lt. Brown
CP-04	8/30/2024	9:23	7.34	0.288	18.47	165.6	0.90	None	Slight	Stained lt. Brown

Note

 $\begin{aligned} ORP &= Oxidation \ Reduction \ Potential \\ \mu mhos/cm &= micromhos/centimeter \end{aligned}$

SU = Standard Unit

mV = Millivolts

 $^{\circ}$ C = Degrees Celsius

NA = not applicable



Project ID: 17F777.24

Date: 08/30/24 Date: 10/30/24

SUMMARY OF FIELD QUALITY CONTROL SAMPLES

Sample ID	Sample Date	Description
SW-HWY27W-DUP_202408:	8/30/2024	Duplicate Taken at SW-HWY27W sampling location



Project ID: 17F777.24

Equipment:

Date: 08/30/24 Date: 10/30/24

Disposable Filters, Battery

GPS, Multi-parameter probe, Camera, Peristaltic pump,

FIELD NOTES

Site ID: SW-C9 **Date:** 8/30/2024

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 78 degrees Fahrenheit, Cloudy, 7-12 mph West Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate
1	N	Plastic 250 mL	None	TSS
1	Y	Amber 125 mL	H2SO4	DOC
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide

FIELD PARAMETERS

Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
0	6.05	0.041	18.13	197.60	1.17	None	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 08/30/24 Date: 10/30/24

FIELD NOTES

Site ID: Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 8/30/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 78 degrees Fahrenheit, Cloudy, 7-12 mph West Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected Filtered (Y/N) Bottle		Bottle	Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
9:35	6.72	0.140	18.04	101.20	1.25	None	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 08/30/24 Date: 10/30/24

FIELD NOTES

Site ID: SW-STM Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 8/30/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 78 degrees Fahrenheit, Cloudy, 7-12 mph West Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

_	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	8:00	7.43	0.174	18.09	125.50	1.39	None	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 08/30/24 Date: 10/30/24

FIELD NOTES

Site ID: SW-C5 Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 8/30/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 78 degrees Fahrenheit, Cloudy, 7-12 mph West Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected Filtered (Y/N)		Bottle	Preservative	Parameter		
1	N Plastic 250 mL		HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y Plastic 250 mL		HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

_	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	0	6.36	0.119	18.11	32.20	1.18	None	None	Stained lt. Brown



Project ID: 17F777.24

Date: 08/30/24 Date: 10/30/24

FIELD NOTES

Site ID: SW-EB Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 8/30/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 78 degrees Fahrenheit, Cloudy, 7-12 mph West Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected	#Collected Filtered (Y/N) Bottle		Preservative	Parameter
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate
1	N	Plastic 250 mL	None	TSS
1	Y	Amber 125 mL	H2SO4	DOC
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
•	0	6.81	0.156	19.51	59.30	1.22	Slt. Organic	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 08/30/24 Date: 10/30/24

FIELD NOTES

Site ID: SW-NBOUT Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 8/30/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 78 degrees Fahrenheit, Cloudy, 7-12 mph West Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate
1	N	Plastic 250 mL	None	TSS
1	Y	Amber 125 mL	H2SO4	DOC
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide

FIELD PARAMETERS

Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
10:21	6.27	0.273	18.20	82.50	0.95	Slt. Organic	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 08/30/24 Date: 10/30/24

FIELD NOTES

Site ID: SW-NB Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 8/30/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 78 degrees Fahrenheit, Cloudy, 7-12 mph West Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected Filtered (Y/N)		Bottle	Preservative	Parameter		
1	N Plastic 250 mL		HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y Plastic 250 mL		HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	0	6.81	0.218	19.05	109.10	1.48	Slt. Organic	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 08/30/24 Date: 10/30/24

FIELD NOTES

SW-HWY27W Site ID: GPS, Multi-parameter probe, Camera, Peristaltic pump, **Equipment:** Date:

8/30/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 78 degrees Fahrenheit, Cloudy, 7-12 mph West Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y Plastic 500 mL		Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

_	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	0	5.74	0.304	19.18	107.50	1.12	Slt. Organic	Slight	Stained lt. Brown



Project ID: 17F777.24

Date: 08/30/24 Date: 10/30/24

FIELD NOTES

Site ID: SW-HWY27E Equipment: GPS, Multi-parameter probe, Camera, Peristaltic pump,

Date: 8/30/2024 Disposable Filters, Battery

Technician(s) Initials: Jim Engelhardt / Merjent Weather, Stream Conditions and Comments:

Temp: High of 78 degrees Fahrenheit, Cloudy, 7-12 mph West Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N)	Bottle	Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
-	0	6.03	0.025	17.86	176.60	1.22	Slt. Organic	Moderate	Stained lt. Brown



Project ID: 17F777.24

Date: 08/30/24 Date: 10/30/24

FIELD NOTES

Site ID: CP-04 **Equipment:** GPS, Multi-parameter probe, Camera, Peristaltic pump, Date:

8/30/2024 Disposable Filters, Battery Technician(s) Initials: Jim Engelhardt / Merjent

Weather, Stream Conditions and Comments:

Temp: High of 78 degrees Fahrenheit, Cloudy, 7-12 mph West Wind.

LABORATORY ANALYTICAL PARAMETERS

#Collected	Filtered (Y/N) Bottle		Preservative	Parameter		
1	N	Plastic 250 mL	HNO ₃	TOTAL (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	Y	Plastic 250 mL	HNO_3	Dissolved (Ca, Cu, Fe, Mg, Mn, K, Na, Zn, Hardness)		
1	N	Plastic 250 mL	None	Total Alkalinity, Chloride, Sulfate		
1	Y	Plastic 250 mL	None	Dissolved Alkalinity, Chloride, Sulfate		
1	N	Plastic 250 mL	None	TSS		
1	Y	Amber 125 mL	H2SO4	DOC		
1	N	Plastic 500 mL	Zinc Acetate & NaOH	Total Sulfide		
1	Y	Plastic 500 mL	Zinc Acetate & NaOH	Dissolved Sulfide		

FIELD PARAMETERS

	Time	pH (SU)	Specifc Conductance (mS/cm)	Temperature (⁰ C)	Redox Potential (mV)	Dissolved Oxygen (mg/l)	Odor	Turbidity	Color
•	0	7.34	0.288	18.47	165.60	0.90	None	Slight	Stained lt. Brown