



## ANALYTICAL SUMMARY REPORT

May 08, 2023

Water and Environmental Technologies

480 E Park St Ste 200

Butte, MT 59701-1923

Work Order: H23040619

Project Name: BSBPWM041

Energy Laboratories Inc Helena MT received the following 4 samples for Water and Environmental Technologies on 4/25/2023 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H23040619-001	001A	04/25/23 10:50	04/25/23	Aqueous	Metals by ICP/ICPMS, Tot. Rec. Chemical Oxygen Demand Oil & Grease, Gravimetric Nitrogen, Nitrate + Nitrite Nitrogen, Total Kjeldahl Nitrogen, Total (TKN+NO3+NO2) pH Metals Digestion by E200.2 Preparation for COD testing HACH 8000 E365.1 Digestion, Total P TKN Prep Phosphorus, Total Solids, Total Suspended
H23040619-002	002A	04/25/23 10:30	04/25/23	Aqueous	Same As Above
H23040619-003	001B	04/25/23 12:00	04/25/23	Aqueous	Same As Above
H23040619-004	002B	04/25/23 11:20	04/25/23	Aqueous	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:



**CLIENT:** Water and Environmental Technologies  
**Project:** BSBPWM041  
**Work Order:** H23040619

**Report Date:** 05/08/23

## CASE NARRATIVE

Tests associated with analyst identified as ELI-G were subcontracted to Energy Laboratories, 400 W. Boxelder Rd., Gillette, WY, EPA Number WY00006.



## LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies  
**Project:** BSBPWM041  
**Lab ID:** H23040619-001  
**Client Sample ID:** 001A

**Report Date:** 05/08/23  
**Collection Date:** 04/25/23 10:50  
**Date Received:** 04/25/23  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>PHYSICAL PROPERTIES</b>							
pH	8.3	s.u.	H	0.1		A4500-H B	04/26/23 11:43 / ams
pH Measurement Temp	14.3	°C				A4500-H B	04/26/23 11:43 / ams
Solids, Total Suspended TSS @ 105 C	358	mg/L	D	50		A2540 D	04/28/23 09:47 / ams
<b>AGGREGATE ORGANICS</b>							
Oxygen Demand, Chemical (COD)	137	mg/L	D	10		E410.4	04/28/23 11:20 / ams
<b>NUTRIENTS</b>							
Nitrogen, Kjeldahl, Total as N	1.7	mg/L		0.5		E351.2	04/28/23 14:58 / JAR
Nitrogen, Nitrate+Nitrite as N	0.14	mg/L		0.01		E353.2	04/27/23 15:39 / JAR
Nitrogen, Total	1.8	mg/L		0.5		Calculation	05/04/23 14:51 / tkj
Phosphorus, Total as P	0.67	mg/L		0.01		E365.1	05/02/23 15:53 / JAR
<b>METALS, TOTAL RECOVERABLE</b>							
Copper	0.226	mg/L		0.005		E200.8	04/28/23 17:54 / dck
Lead	0.079	mg/L		0.001		E200.8	04/28/23 17:54 / dck
Zinc	0.35	mg/L		0.01		E200.8	04/28/23 17:54 / dck
<b>ORGANIC CHARACTERISTICS</b>							
Oil & Grease (HEM)	5	mg/L		1		E1664A	04/28/23 09:19 / eli-g

**Report Definitions:**  
 RL - Analyte Reporting Limit  
 QCL - Quality Control Limit  
 D - Reporting Limit (RL) increased due to sample matrix

MCL - Maximum Contaminant Level  
 ND - Not detected at the Reporting Limit (RL)  
 H - Analysis performed past the method holding time



## LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies  
**Project:** BSBPWM041  
**Lab ID:** H23040619-002  
**Client Sample ID:** 002A

**Report Date:** 05/08/23  
**Collection Date:** 04/25/23 10:30  
**Date Received:** 04/25/23  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>PHYSICAL PROPERTIES</b>							
pH	8.0	s.u.	H	0.1		A4500-H B	04/26/23 11:46 / ams
pH Measurement Temp	12.5	°C				A4500-H B	04/26/23 11:46 / ams
Solids, Total Suspended TSS @ 105 C	411	mg/L	D	70		A2540 D	04/28/23 09:47 / ams
<b>AGGREGATE ORGANICS</b>							
Oxygen Demand, Chemical (COD)	162	mg/L	D	10		E410.4	04/28/23 11:20 / ams
<b>NUTRIENTS</b>							
Nitrogen, Kjeldahl, Total as N	1.8	mg/L		0.5		E351.2	04/28/23 14:59 / JAR
Nitrogen, Nitrate+Nitrite as N	0.31	mg/L		0.01		E353.2	04/27/23 15:40 / JAR
Nitrogen, Total	2.1	mg/L		0.5		Calculation	05/04/23 14:51 / tkj
Phosphorus, Total as P	0.54	mg/L		0.01		E365.1	05/02/23 15:54 / JAR
<b>METALS, TOTAL RECOVERABLE</b>							
Copper	0.175	mg/L		0.005		E200.8	04/28/23 17:57 / dck
Lead	0.051	mg/L		0.001		E200.8	04/28/23 17:57 / dck
Zinc	0.30	mg/L		0.01		E200.8	04/28/23 17:57 / dck
<b>ORGANIC CHARACTERISTICS</b>							
Oil & Grease (HEM)	6	mg/L		1		E1664A	04/28/23 09:19 / eli-g

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## LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies  
**Project:** BSBPWM041  
**Lab ID:** H23040619-003  
**Client Sample ID:** 001B

**Report Date:** 05/08/23  
**Collection Date:** 04/25/23 12:00  
**Date Received:** 04/25/23  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>PHYSICAL PROPERTIES</b>							
pH	8.2	s.u.	H	0.1		A4500-H B	04/26/23 11:48 / ams
pH Measurement Temp	12.8	°C				A4500-H B	04/26/23 11:48 / ams
Solids, Total Suspended TSS @ 105 C	208	mg/L	D	60		A2540 D	04/28/23 09:48 / ams
<b>AGGREGATE ORGANICS</b>							
Oxygen Demand, Chemical (COD)	78	mg/L	D	10		E410.4	04/28/23 11:20 / ams
<b>NUTRIENTS</b>							
Nitrogen, Kjeldahl, Total as N	1.3	mg/L		0.5		E351.2	04/28/23 15:14 / JAR
Nitrogen, Nitrate+Nitrite as N	0.19	mg/L		0.01		E353.2	04/27/23 15:41 / JAR
Nitrogen, Total	1.5	mg/L		0.5		Calculation	05/04/23 14:51 / tkj
Phosphorus, Total as P	0.43	mg/L		0.01		E365.1	05/02/23 14:48 / JAR
<b>METALS, TOTAL RECOVERABLE</b>							
Copper	0.108	mg/L		0.005		E200.8	04/28/23 17:59 / dck
Lead	0.143	mg/L		0.001		E200.8	04/28/23 17:59 / dck
Zinc	0.48	mg/L		0.01		E200.8	04/28/23 17:59 / dck
<b>ORGANIC CHARACTERISTICS</b>							
Oil & Grease (HEM)	3	mg/L		1		E1664A	04/28/23 09:19 / eli-g

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## LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies  
**Project:** BSBPWM041  
**Lab ID:** H23040619-004  
**Client Sample ID:** 002B

**Report Date:** 05/08/23  
**Collection Date:** 04/25/23 11:20  
**Date Received:** 04/25/23  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>PHYSICAL PROPERTIES</b>							
pH	8.5	s.u.	H	0.1		A4500-H B	04/26/23 11:50 / ams
pH Measurement Temp	13.9	°C				A4500-H B	04/26/23 11:50 / ams
Solids, Total Suspended TSS @ 105 C	307	mg/L	D	80		A2540 D	04/28/23 09:48 / ams
<b>AGGREGATE ORGANICS</b>							
Oxygen Demand, Chemical (COD)	121	mg/L	D	10		E410.4	04/28/23 11:21 / ams
<b>NUTRIENTS</b>							
Nitrogen, Kjeldahl, Total as N	1.6	mg/L		0.5		E351.2	04/28/23 15:16 / JAR
Nitrogen, Nitrate+Nitrite as N	0.09	mg/L		0.01		E353.2	04/27/23 15:45 / JAR
Nitrogen, Total	1.7	mg/L		0.5		Calculation	05/04/23 14:51 / tkj
Phosphorus, Total as P	0.63	mg/L		0.01		E365.1	05/02/23 15:55 / JAR
<b>METALS, TOTAL RECOVERABLE</b>							
Copper	0.231	mg/L		0.005		E200.8	04/28/23 18:02 / dck
Lead	0.067	mg/L		0.001		E200.8	04/28/23 18:02 / dck
Zinc	0.33	mg/L		0.01		E200.8	04/28/23 18:02 / dck
<b>ORGANIC CHARACTERISTICS</b>							
Oil & Grease (HEM)	5	mg/L		1		E1664A	04/28/23 09:19 / eli-g

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## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23040619

**Report Date:** 05/08/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method:</b> A2540 D									Batch: TSS230428A	
<b>Lab ID:</b> MB-1_230428									Run: ACCU-124 (14410200)_23042	
Solids, Total Suspended TSS @ 105 C									04/28/23 09:46	
		Method Blank	ND	mg/L	0.3					
<b>Lab ID:</b> H23040613-001A DUP									Run: ACCU-124 (14410200)_23042	
Solids, Total Suspended TSS @ 105 C									04/28/23 09:47	
		Sample Duplicate	137	mg/L	83			4.8	10	
<b>Lab ID:</b> LCS-2_230428									Run: ACCU-124 (14410200)_23042	
Solids, Total Suspended TSS @ 105 C									04/28/23 15:59	
		Laboratory Control Sample	81.0	mg/L	25	81	80	120		

### Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23040619

**Report Date:** 05/08/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B								Analytical Run: PHSC_101-H_230426A		
Lab ID: pH 7	2	Initial Calibration Verification Standard							04/26/23 08:26	
pH		7.0	s.u.	0.1	99	98	102			
pH Measurement Temp		19.1	°C			0	0			
Lab ID: CCV - pH 7								04/26/23 10:59		
	2	Continuing Calibration Verification Standard								
pH		7.0	s.u.	0.1	99	98	102			
pH Measurement Temp		19.6	°C			0	0			
Method: A4500-H B								Batch: R184013		
Lab ID: H23040619-001ADUP	2	Sample Duplicate							04/26/23 11:45	
		Run: PHSC_101-H_230426A								
pH		8.3	s.u.	0.1				0.7	3	
pH Measurement Temp		13.9	°C							

### Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)





## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23040619

**Report Date:** 05/08/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E1664A										Batch: G_230428A
Lab ID: MBLK2304280834	Method Blank					Run: SUB-G276834			04/28/23 09:14	
Oil & Grease (HEM)		ND	mg/L	0.8						
Lab ID: LCS2304280834	Laboratory Control Sample					Run: SUB-G276834			04/28/23 09:14	
Oil & Grease (HEM)	37	mg/L		5.0	93	78	114			
Lab ID: LCSD2304280834	Laboratory Control Sample Duplicate					Run: SUB-G276834			04/28/23 09:14	
Oil & Grease (HEM)	37	mg/L		5.0	92	78	114	1.4	18	
Lab ID: G23040475-001GMS	Sample Matrix Spike					Run: SUB-G276834			04/28/23 09:17	
Oil & Grease (HEM)	16	mg/L		5.0	34	78	114		S	

### Qualifiers:

RL - Analyte Reporting Limit

S - Spike recovery outside of advisory limits

ND - Not detected at the Reporting Limit (RL)



## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23040619

**Report Date:** 05/08/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>										Batch: 66233
<b>Lab ID: MB-66233</b>	3	Method Blank						Run: ICPMS205-H_230427B		04/27/23 18:44
Copper		ND	mg/L	0.0003						
Lead		ND	mg/L	0.0001						
Zinc		ND	mg/L	0.001						
<b>Lab ID: LCS-66233</b>	3	Laboratory Control Sample						Run: ICPMS205-H_230427B		04/27/23 19:00
Copper		0.512	mg/L	0.0050	102	85	115			
Lead		0.518	mg/L	0.0010	104	85	115			
Zinc		0.515	mg/L	0.010	103	85	115			
<b>Lab ID: H23040640-001AMS3</b>	3	Sample Matrix Spike						Run: ICPMS205-H_230427B		04/27/23 19:02
Copper		0.495	mg/L	0.0050	99	70	130			
Lead		0.518	mg/L	0.0010	104	70	130			
Zinc		0.483	mg/L	0.010	96	70	130			
<b>Lab ID: H23040640-001AMSD</b>	3	Sample Matrix Spike Duplicate						Run: ICPMS205-H_230427B		04/27/23 19:05
Copper		0.504	mg/L	0.0050	101	70	130	1.7	20	
Lead		0.518	mg/L	0.0010	104	70	130	0.1	20	
Zinc		0.488	mg/L	0.010	97	70	130	1.0	20	
<b>Method: E200.8</b>										Analytical Run: ICPMS205-H_230428A
<b>Lab ID: ICV</b>	3	Initial Calibration Verification Standard						04/28/23 12:33		
Copper		0.0584	mg/L	0.010	97	90	110			
Lead		0.0575	mg/L	0.010	96	90	110			
Zinc		0.0582	mg/L	0.010	97	90	110			
<b>Lab ID: CCV</b>	3	Continuing Calibration Verification Standard						04/28/23 17:44		
Copper		0.0502	mg/L	0.010	100	90	110			
Lead		0.0521	mg/L	0.010	104	90	110			
Zinc		0.0531	mg/L	0.010	106	90	110			
<b>Method: E200.8</b>										Batch: 66233
<b>Lab ID: MB-66233</b>	3	Method Blank						Run: ICPMS205-H_230428A		04/28/23 17:49
Copper		ND	mg/L	0.0003						
Lead		ND	mg/L	0.0001						
Zinc		ND	mg/L	0.001						

### Qualifiers:

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ND - Not detected at the Reporting Limit (RL)



## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23040619

**Report Date:** 05/08/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method:</b> E351.2								Analytical Run: SEAL AA500_230428B		
<b>Lab ID:</b> ICV		Initial Calibration Verification Standard								04/28/23 14:25
Nitrogen, Kjeldahl, Total as N		9.80	mg/L	0.50	98	90	110			
<b>Lab ID:</b> CCV		Continuing Calibration Verification Standard								04/28/23 15:01
Nitrogen, Kjeldahl, Total as N		10.2	mg/L	0.50	102	90	110			
<b>Method:</b> E351.2								Batch: 66238		
<b>Lab ID:</b> MB-66238		Method Blank								04/28/23 14:29
Nitrogen, Kjeldahl, Total as N		ND	mg/L	0.1				Run: SEAL AA500_230428B		
<b>Lab ID:</b> LCS-66238		Laboratory Control Sample								04/28/23 14:32
Nitrogen, Kjeldahl, Total as N		9.25	mg/L	0.50	92	90	110			
<b>Lab ID:</b> H23040591-001Dms		Sample Matrix Spike								04/28/23 14:47
Nitrogen, Kjeldahl, Total as N		10.4	mg/L	0.50	100	90	110			
<b>Lab ID:</b> H23040591-001Dmsd		Sample Matrix Spike Duplicate								04/28/23 14:49
Nitrogen, Kjeldahl, Total as N		10.2	mg/L	0.50	98	90	110	1.8	10	

### Qualifiers:

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## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23040619

**Report Date:** 05/08/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E353.2</b>										Analytical Run: FIA203-HE_230427B
<b>Lab ID: ICV</b>	Initial Calibration Verification Standard									
Nitrogen, Nitrate+Nitrite as N		1.01	mg/L	0.010	101	90	110			04/27/23 14:01
<b>Lab ID: CCV</b>	Continuing Calibration Verification Standard									
Nitrogen, Nitrate+Nitrite as N		0.521	mg/L	0.010	104	90	110			04/27/23 15:26
<b>Lab ID: CCV</b>	Continuing Calibration Verification Standard									
Nitrogen, Nitrate+Nitrite as N		0.503	mg/L	0.010	101	90	110			04/27/23 15:42
<b>Method: E353.2</b>										Batch: R184085
<b>Lab ID: MBLK</b>	Method Blank									
Nitrogen, Nitrate+Nitrite as N		ND	mg/L	0.008						Run: FIA203-HE_230427B 04/27/23 14:02
<b>Lab ID: LFB</b>	Laboratory Fortified Blank									
Nitrogen, Nitrate+Nitrite as N		0.993	mg/L	0.011	99	90	110			Run: FIA203-HE_230427B 04/27/23 14:03
<b>Lab ID: H23040608-001FMS</b>	Sample Matrix Spike									
Nitrogen, Nitrate+Nitrite as N		1.05	mg/L	0.011	104	90	110			Run: FIA203-HE_230427B 04/27/23 15:34
<b>Lab ID: H23040608-001FMSD</b>	Sample Matrix Spike Duplicate									
Nitrogen, Nitrate+Nitrite as N		1.03	mg/L	0.011	102	90	110	1.9	10	Run: FIA203-HE_230427B 04/27/23 15:35
<b>Lab ID: H23040625-001BMS</b>	Sample Matrix Spike									
Nitrogen, Nitrate+Nitrite as N		1.04	mg/L	0.011	104	90	110			Run: FIA203-HE_230427B 04/27/23 15:47
<b>Lab ID: H23040625-001BMSD</b>	Sample Matrix Spike Duplicate									
Nitrogen, Nitrate+Nitrite as N		1.03	mg/L	0.011	103	90	110	0.8	10	Run: FIA203-HE_230427B 04/27/23 15:48

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## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23040619

**Report Date:** 05/08/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E365.1								Analytical Run: SEAL AA500_230502A		
Lab ID: ICV		Initial Calibration Verification Standard							05/02/23 13:52	
Phosphorus, Total as P		0.258	mg/L	0.010	103	90	110			
Lab ID: CCV		Continuing Calibration Verification Standard							05/02/23 14:35	
Phosphorus, Total as P		0.0996	mg/L	0.010	100	90	110			
Lab ID: CCV		Continuing Calibration Verification Standard							05/02/23 15:49	
Phosphorus, Total as P		0.105	mg/L	0.010	105	90	110			
Method: E365.1								Batch: 66280		
Lab ID: LCS-66280		Laboratory Control Sample				Run: SEAL AA500_230502A			05/02/23 13:58	
Phosphorus, Total as P		0.423	mg/L	0.010	106	90	110			
Lab ID: MB-66280		Method Blank				Run: SEAL AA500_230502A			05/02/23 14:07	
Phosphorus, Total as P		ND	mg/L	0.001						
Lab ID: H23040608-001Dms		Sample Matrix Spike				Run: SEAL AA500_230502A			05/02/23 14:41	
Phosphorus, Total as P		0.226	mg/L	0.010	110	90	110			
Lab ID: H23040608-001Dmsd		Sample Matrix Spike Duplicate				Run: SEAL AA500_230502A			05/02/23 14:42	
Phosphorus, Total as P		0.225	mg/L	0.010	110	90	110	0.4	20	
Lab ID: H23040653-001Bms		Sample Matrix Spike				Run: SEAL AA500_230502A			05/02/23 15:01	
Phosphorus, Total as P		0.339	mg/L	0.010	109	90	110			
Lab ID: H23040653-001Bmsd		Sample Matrix Spike Duplicate				Run: SEAL AA500_230502A			05/02/23 15:02	
Phosphorus, Total as P		0.340	mg/L	0.010	110	90	110	0.4	20	

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## QA/QC Summary Report

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**Client:** Water and Environmental Technologies

**Work Order:** H23040619

**Report Date:** 05/08/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E410.4</b>								Analytical Run: GENESYS 20_230428C		
<b>Lab ID: CCV</b>		Continuing Calibration Verification Standard								04/28/23 11:20
Oxygen Demand, Chemical (COD)		53.5	mg/L	5.0	107	90	110			
<b>Method: E410.4</b>								Batch: 66246		
<b>Lab ID: MB-66246</b>		Method Blank								04/28/23 11:20
Oxygen Demand, Chemical (COD)		ND	mg/L	4						
<b>Lab ID: LCS-66246</b>		Laboratory Control Sample								04/28/23 11:20
Oxygen Demand, Chemical (COD)		54.1	mg/L	5.0	90	90	110			
<b>Lab ID: H23040619-003CMS</b>		Sample Matrix Spike								04/28/23 11:20
Oxygen Demand, Chemical (COD)		176	mg/L	10	82	90	110			S
<b>Lab ID: H23040619-003CMSD</b>		Sample Matrix Spike Duplicate								04/28/23 11:20
Oxygen Demand, Chemical (COD)		177	mg/L	10	83	90	110	0.8	20	S

### Qualifiers:

RL - Analyte Reporting Limit

S - Spike recovery outside of advisory limits

ND - Not detected at the Reporting Limit (RL)



# Work Order Receipt Checklist

Water and Environmental Technologies

H23040619

Login completed by: Rebecca A. Tooke

Date Received: 4/25/2023

Reviewed by: wjohnson

Received by: wjj

Reviewed Date: 4/26/2023

Carrier name: Hand Deliver

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	3.0°C On Ice - From Field		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>

---

## Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

---

## Contact and Corrective Action Comments:

pH is listed on Bottle Order but not on COC. Emailed to confirm pH is needed and metals should be total recoverable. Per email pH is wanted and metals are total recoverable. 4/26/23 rt



[www.energylab.com](http://www.energylab.com)

Page 1 of 1**Report Information** (if different than Account Information)

Company Name WET  
Contact Stephen Cole  
Phone 406-299-9858  
Mailing Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_  
Email Sc@waterentech.com  
Receive Report ☐ Hard Copy ☒ Email  
Special Report/Formats:  
☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other \_\_\_\_\_

## Analysis Requested

A - Air	W - Water	S - Solids	V - Vegetation	B - Blossessy	O - Other	DW - Drinking Water
<p>5 A2540D</p> <p>11/NO3 + NO2/744M</p> <p>(E 110.4)</p> <p>219 (E 365.1)</p> <p>8 (E 16.4)</p> <p>421.5, TR by JCP/24</p> <p>200.7-8</p> <p>Attached</p>						

[illegible]

		Received by (print)	Date/Time	Signature
		Received by Laboratory (print) WILLIAMSON	Date/Time 7-25-2016	Signature 
LABORATORY USE ONLY				
Temp Blank (Y) N	On Ice (Y) N	CC	Payment Type Cash      Check	Amount \$
				Receipt Number (cash/check only)

**ELI-COC-06/08 v.2**





## ANALYTICAL SUMMARY REPORT

July 11, 2023

Water and Environmental Technologies

480 E Park St Ste 200

Butte, MT 59701-1923

Work Order: H23061025

Project Name: BSBPWM041

Energy Laboratories Inc Helena MT received the following 4 samples for Water and Environmental Technologies on 6/26/2023 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H23061025-001	001A	06/23/23 17:40	06/26/23	Aqueous	Metals by ICP/ICPMS, Total Chemical Oxygen Demand Oil & Grease, Gravimetric Nitrogen, Nitrate + Nitrite Nitrogen, Total Kjeldahl Nitrogen, Total (TKN+NO3+NO2) pH Metals Digestion by E200.2 Preparation for COD testing HACH 8000 E365.1 Digestion, Total P TKN Prep Phosphorus, Total Solids, Total Suspended
H23061025-002	002A	06/23/23 17:55	06/26/23	Aqueous	Same As Above
H23061025-003	001B	06/23/23 17:10	06/26/23	Aqueous	Same As Above
H23061025-004	002B	06/23/23 17:25	06/26/23	Aqueous	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:



**CLIENT:** Water and Environmental Technologies  
**Project:** BSBPWM041  
**Work Order:** H23061025

**Report Date:** 07/11/23

## **CASE NARRATIVE**

Tests associated with analyst identified as ELI-G were subcontracted to Energy Laboratories, 400 W. Boxelder Rd., Gillette, WY, EPA Number WY00006.



## LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies  
**Project:** BSBPWM041  
**Lab ID:** H23061025-001  
**Client Sample ID:** 001A

**Report Date:** 07/11/23  
**Collection Date:** 06/23/23 17:40  
**Date Received:** 06/26/23  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>PHYSICAL PROPERTIES</b>							
pH	7.6	s.u.	H	0.1		A4500-H B	06/27/23 11:30 / SRW
pH Measurement Temp	14.5	°C				A4500-H B	06/27/23 11:30 / SRW
Solids, Total Suspended TSS @ 105 C	293	mg/L		40		A2540 D	06/27/23 14:41 / SRW
<b>AGGREGATE ORGANICS</b>							
Oxygen Demand, Chemical (COD)	87	mg/L		5		E410.4	06/30/23 09:07 / ams
<b>NUTRIENTS</b>							
Nitrogen, Kjeldahl, Total as N	2.2	mg/L		0.5		E351.2	07/07/23 15:03 / JAR
Nitrogen, Nitrate+Nitrite as N	0.41	mg/L		0.01		E353.2	07/06/23 16:33 / SRW
Nitrogen, Total	2.6	mg/L		0.5		Calculation	07/10/23 08:52 / rrs
Phosphorus, Total as P	0.85	mg/L		0.01		E365.1	07/10/23 15:49 / JAR
<b>METALS, TOTAL</b>							
Copper	0.216	mg/L		0.005		E200.8	07/09/23 16:16 / dck
Lead	0.078	mg/L		0.001		E200.8	07/09/23 16:16 / dck
Zinc	0.29	mg/L		0.01		E200.8	07/09/23 16:16 / dck
<b>ORGANIC CHARACTERISTICS</b>							
Oil & Grease (HEM)	2	mg/L		1		E1664A	07/10/23 08:52 / eli-g

**Report Definitions:**  
RL - Analyte Reporting Limit  
QCL - Quality Control Limit  
H - Analysis performed past the method holding time

MCL - Maximum Contaminant Level  
ND - Not detected at the Reporting Limit (RL)



## LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies  
**Project:** BSBPWM041  
**Lab ID:** H23061025-002  
**Client Sample ID:** 002A

**Report Date:** 07/11/23  
**Collection Date:** 06/23/23 17:55  
**Date Received:** 06/26/23  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>PHYSICAL PROPERTIES</b>							
pH	7.2	s.u.	H	0.1		A4500-H B	06/27/23 11:32 / SRW
pH Measurement Temp	14.9	°C				A4500-H B	06/27/23 11:32 / SRW
Solids, Total Suspended TSS @ 105 C	184	mg/L		40		A2540 D	06/27/23 14:41 / SRW
<b>AGGREGATE ORGANICS</b>							
Oxygen Demand, Chemical (COD)	78	mg/L		5		E410.4	06/30/23 09:07 / ams
<b>NUTRIENTS</b>							
Nitrogen, Kjeldahl, Total as N	1.6	mg/L		0.5		E351.2	07/07/23 15:08 / JAR
Nitrogen, Nitrate+Nitrite as N	0.85	mg/L		0.01		E353.2	07/06/23 16:36 / SRW
Nitrogen, Total	2.5	mg/L		0.5		Calculation	07/10/23 08:52 / rrs
Phosphorus, Total as P	0.48	mg/L		0.01		E365.1	07/10/23 15:50 / JAR
<b>METALS, TOTAL</b>							
Copper	0.142	mg/L		0.005		E200.8	07/09/23 16:19 / dck
Lead	0.038	mg/L		0.001		E200.8	07/09/23 16:19 / dck
Zinc	0.16	mg/L		0.01		E200.8	07/09/23 16:19 / dck
<b>ORGANIC CHARACTERISTICS</b>							
Oil & Grease (HEM)	2	mg/L		1		E1664A	07/10/23 08:52 / eli-g

**Report Definitions:**  
RL - Analyte Reporting Limit  
QCL - Quality Control Limit  
H - Analysis performed past the method holding time

MCL - Maximum Contaminant Level  
ND - Not detected at the Reporting Limit (RL)



## LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies  
**Project:** BSBPWM041  
**Lab ID:** H23061025-003  
**Client Sample ID:** 001B

**Report Date:** 07/11/23  
**Collection Date:** 06/23/23 17:10  
**Date Received:** 06/26/23  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>PHYSICAL PROPERTIES</b>							
pH	7.0	s.u.	H	0.1		A4500-H B	06/27/23 11:34 / SRW
pH Measurement Temp	15.3	°C				A4500-H B	06/27/23 11:34 / SRW
Solids, Total Suspended TSS @ 105 C	254	mg/L		50		A2540 D	06/27/23 14:41 / SRW
<b>AGGREGATE ORGANICS</b>							
Oxygen Demand, Chemical (COD)	174	mg/L		50		E410.4	06/30/23 09:07 / ams
<b>NUTRIENTS</b>							
Nitrogen, Kjeldahl, Total as N	2.9	mg/L		0.5		E351.2	07/07/23 15:12 / JAR
Nitrogen, Nitrate+Nitrite as N	0.48	mg/L		0.01		E353.2	07/06/23 16:37 / SRW
Nitrogen, Total	3.3	mg/L		0.5		Calculation	07/10/23 08:52 / rrs
Phosphorus, Total as P	0.69	mg/L		0.01		E365.1	07/10/23 15:51 / JAR
<b>METALS, TOTAL</b>							
Copper	0.132	mg/L		0.005		E200.8	07/09/23 16:23 / dck
Lead	0.086	mg/L		0.001		E200.8	07/09/23 16:23 / dck
Zinc	0.44	mg/L		0.01		E200.8	07/09/23 16:23 / dck
<b>ORGANIC CHARACTERISTICS</b>							
Oil & Grease (HEM)	2	mg/L		1		E1664A	07/10/23 08:53 / eli-g

**Report Definitions:**  
RL - Analyte Reporting Limit  
QCL - Quality Control Limit  
H - Analysis performed past the method holding time

MCL - Maximum Contaminant Level  
ND - Not detected at the Reporting Limit (RL)



## LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies  
**Project:** BSBPWM041  
**Lab ID:** H23061025-004  
**Client Sample ID:** 002B

**Report Date:** 07/11/23  
**Collection Date:** 06/23/23 17:25  
**Date Received:** 06/26/23  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>PHYSICAL PROPERTIES</b>							
pH	8.2	s.u.	H	0.1		A4500-H B	06/27/23 11:36 / SRW
pH Measurement Temp	15.6	°C				A4500-H B	06/27/23 11:36 / SRW
Solids, Total Suspended TSS @ 105 C	842	mg/L		50		A2540 D	06/27/23 14:42 / SRW
<b>AGGREGATE ORGANICS</b>							
Oxygen Demand, Chemical (COD)	188	mg/L		50		E410.4	06/30/23 09:07 / ams
<b>NUTRIENTS</b>							
Nitrogen, Kjeldahl, Total as N	2.0	mg/L		0.5		E351.2	07/07/23 15:21 / JAR
Nitrogen, Nitrate+Nitrite as N	0.52	mg/L		0.01		E353.2	07/06/23 16:38 / SRW
Nitrogen, Total	2.5	mg/L		0.5		Calculation	07/10/23 08:52 / rrs
Phosphorus, Total as P	1.62	mg/L		0.02		E365.1	07/10/23 16:54 / JAR
<b>METALS, TOTAL</b>							
Copper	0.406	mg/L		0.005		E200.8	07/09/23 16:26 / dck
Lead	0.181	mg/L		0.001		E200.8	07/09/23 16:26 / dck
Zinc	0.65	mg/L		0.01		E200.8	07/09/23 16:26 / dck
<b>ORGANIC CHARACTERISTICS</b>							
Oil & Grease (HEM)	3	mg/L		1		E1664A	07/10/23 08:53 / eli-g

**Report Definitions:**  
RL - Analyte Reporting Limit  
QCL - Quality Control Limit  
H - Analysis performed past the method holding time

MCL - Maximum Contaminant Level  
ND - Not detected at the Reporting Limit (RL)



## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23061025

**Report Date:** 07/11/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2540 D</b>										Batch: TSS230627A
<b>Lab ID: MB-1_230627</b>		Method Blank								Run: ACCU-124 (14410200)_23062 06/27/23 12:56
Solids, Total Suspended TSS @ 105 C		ND	mg/L	0.3						
<b>Lab ID: LCS-2_230627</b>										Run: ACCU-124 (14410200)_23062 06/27/23 12:56
Solids, Total Suspended TSS @ 105 C		90.0	mg/L	25	90	80	120			
<b>Lab ID: H23060955-006A DUP</b>										Run: ACCU-124 (14410200)_23062 06/27/23 12:57
Solids, Total Suspended TSS @ 105 C		ND	mg/L	10						10
- TSS did not obtain the minimum residue requirement of 2.5 mg residue.										

### Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23061025

**Report Date:** 07/11/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B								Analytical Run: PHSC_101-H_230627A		
Lab ID: pH 7	2	Initial Calibration Verification Standard							06/27/23 09:33	
pH		7.0	s.u.	0.1	100	98	102			
pH Measurement Temp		21.6	°C			0	0			
Lab ID: CCV - pH 7								06/27/23 10:48		
	2	Continuing Calibration Verification Standard								
pH		7.0	s.u.	0.1	101	98	102			
pH Measurement Temp		18.9	°C			0	0			
Method: A4500-H B										
								Batch: R185755		
Lab ID: H23061025-004ADUP	2	Sample Duplicate				Run: PHSC_101-H_230627A				06/27/23 11:38
pH		8.2	s.u.	0.1				0.5	3	H
pH Measurement Temp		15.5	°C							

### Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

H - Analysis performed past the method holding time





## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23061025

**Report Date:** 07/11/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E1664A</b>										Batch: G_230710A
<b>Lab ID: MBLK2307100815</b>		Method Blank					Run: SUB-G278050			07/10/23 08:49
Oil & Grease (HEM)		ND	mg/L	0.8						
<b>Lab ID: LCS2307100815</b>		Laboratory Control Sample					Run: SUB-G278050			07/10/23 08:50
Oil & Grease (HEM)	39		mg/L	5.0	97	78	114			
<b>Lab ID: LCSD2307100815</b>		Laboratory Control Sample Duplicate					Run: SUB-G278050			07/10/23 08:50
Oil & Grease (HEM)	36		mg/L	5.0	89	78	114	8.6	18	
<b>Lab ID: G23060522-001BMS</b>		Sample Matrix Spike					Run: SUB-G278050			07/10/23 08:51
Oil & Grease (HEM)	20		mg/L	5.0	48	78	114			S

### Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

S - Spike recovery outside of advisory limits



## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23061025

**Report Date:** 07/11/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Analytical Run: ICPMS206-H_230709A			
<b>Lab ID: ICV</b>	3	Initial Calibration Verification Standard							07/09/23 14:03	
Copper		0.0610	mg/L	0.010	102	90	110			
Lead		0.0598	mg/L	0.010	100	90	110			
Zinc		0.0615	mg/L	0.010	102	90	110			
<b>Lab ID: CCV</b>	3	Continuing Calibration Verification Standard							07/09/23 16:01	
Copper		0.0521	mg/L	0.010	104	90	110			
Lead		0.0504	mg/L	0.010	101	90	110			
Zinc		0.0518	mg/L	0.010	104	90	110			
<b>Method: E200.8</b>							Batch: 67148			
<b>Lab ID: MB-67148</b>	3	Method Blank							Run: ICPMS206-H_230709A 07/09/23 16:08	
Copper		ND	mg/L	0.0001						
Lead		ND	mg/L	0.00005						
Zinc		ND	mg/L	0.0006						
<b>Lab ID: LCS-67148</b>	3	Laboratory Control Sample							Run: ICPMS206-H_230709A 07/09/23 16:30	
Copper		0.515	mg/L	0.0050	103	85	115			
Lead		0.511	mg/L	0.0010	102	85	115			
Zinc		0.488	mg/L	0.010	98	85	115			
<b>Lab ID: H23061025-001CMS3</b>	3	Sample Matrix Spike							Run: ICPMS206-H_230709A 07/09/23 16:33	
Copper		1.23	mg/L	0.0050	101	70	130			
Lead		1.09	mg/L	0.0010	101	70	130			
Zinc		1.25	mg/L	0.010	96	70	130			
<b>Lab ID: H23061025-001CMSD3</b>	3	Sample Matrix Spike Duplicate							Run: ICPMS206-H_230709A 07/09/23 16:36	
Copper		1.22	mg/L	0.0050	100	70	130	0.6	20	
Lead		1.09	mg/L	0.0010	101	70	130	0.2	20	
Zinc		1.25	mg/L	0.010	95	70	130	0.5	20	

### Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



## QA/QC Summary Report

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies

Work Order: H23061025

Report Date: 07/11/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E351.2</b>										Analytical Run: SEAL AA500_230707A
<b>Lab ID: ICV</b>		Initial Calibration Verification Standard								07/07/23 14:42
Nitrogen, Kjeldahl, Total as N		10.4	mg/L	0.50	104	90	110			
<b>Lab ID: CCV</b>										Continuing Calibration Verification Standard
Nitrogen, Kjeldahl, Total as N		9.16	mg/L	0.50	92	90	110			07/07/23 15:14
<b>Method: E351.2</b>										Batch: 67217
<b>Lab ID: MB-67217</b>		Method Blank								Run: SEAL AA500_230707A
Nitrogen, Kjeldahl, Total as N		ND	mg/L	0.1						07/07/23 14:45
<b>Lab ID: LCS-67217</b>		Laboratory Control Sample								Run: SEAL AA500_230707A
Nitrogen, Kjeldahl, Total as N		10.1	mg/L	0.50	101	90	110			07/07/23 14:48
<b>Lab ID: H23061025-001Dms</b>		Sample Matrix Spike								Run: SEAL AA500_230707A
Nitrogen, Kjeldahl, Total as N		12.0	mg/L	0.50	98	90	110			07/07/23 15:05
<b>Lab ID: H23061025-001Dmsd</b>		Sample Matrix Spike Duplicate								Run: SEAL AA500_230707A
Nitrogen, Kjeldahl, Total as N		11.7	mg/L	0.50	95	90	110	2.3	10	07/07/23 15:06
<b>Method: E351.2</b>										Batch: 67218
<b>Lab ID: MB-67218</b>		Method Blank								Run: SEAL AA500_230707A
Nitrogen, Kjeldahl, Total as N		ND	mg/L	0.1						07/07/23 14:47
<b>Lab ID: LCS-67218</b>		Laboratory Control Sample								Run: SEAL AA500_230707A
Nitrogen, Kjeldahl, Total as N		10.0	mg/L	0.50	100	90	110			07/07/23 14:50
<b>Lab ID: H23061025-002Dms</b>		Sample Matrix Spike								Run: SEAL AA500_230707A
Nitrogen, Kjeldahl, Total as N		11.4	mg/L	0.50	98	90	110			07/07/23 15:09
<b>Lab ID: H23061025-002Dmsd</b>		Sample Matrix Spike Duplicate								Run: SEAL AA500_230707A
Nitrogen, Kjeldahl, Total as N		11.4	mg/L	0.50	98	90	110	0	10	07/07/23 15:11

### Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23061025

**Report Date:** 07/11/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual	
Method: E353.2								Analytical Run: SEAL AA500_230706B			
Lab ID: ICV	Initial Calibration Verification Standard										07/06/23 13:05
Nitrogen, Nitrate+Nitrite as N		1.05	mg/L	0.010	105	90	110				
Lab ID: CCV	Continuing Calibration Verification Standard										07/06/23 16:20
Nitrogen, Nitrate+Nitrite as N		0.978	mg/L	0.010	98	90	110				
Lab ID: CCV	Continuing Calibration Verification Standard										07/06/23 16:34
Nitrogen, Nitrate+Nitrite as N		0.999	mg/L	0.010	100	90	110				
Method: E353.2								Batch: R186043			
Lab ID: ICB	Method Blank										07/06/23 13:03
Nitrogen, Nitrate+Nitrite as N		ND	mg/L	0.01				Run: SEAL AA500_230706B			
Lab ID: LFB	Laboratory Fortified Blank										07/06/23 13:06
Nitrogen, Nitrate+Nitrite as N		1.00	mg/L	0.011	100	90	110	Run: SEAL AA500_230706B			
Lab ID: H23060989-003DMS	Sample Matrix Spike										07/06/23 16:23
Nitrogen, Nitrate+Nitrite as N		1.08	mg/L	0.011	104	90	110	Run: SEAL AA500_230706B			
Lab ID: H23060989-003DMSD	Sample Matrix Spike Duplicate										07/06/23 16:24
Nitrogen, Nitrate+Nitrite as N		1.09	mg/L	0.011	105	90	110	0.6	10		
Lab ID: H23061043-001EMS	Sample Matrix Spike										07/06/23 16:44
Nitrogen, Nitrate+Nitrite as N		1.07	mg/L	0.011	104	90	110	Run: SEAL AA500_230706B			
Lab ID: H23061043-001EMSD	Sample Matrix Spike Duplicate										07/06/23 16:45
Nitrogen, Nitrate+Nitrite as N		1.08	mg/L	0.011	106	90	110	1.2	10		

### Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23061025

**Report Date:** 07/11/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual	
Method: E365.1								Analytical Run: SEAL AA500_230710A			
Lab ID: ICV	Initial Calibration Verification Standard										07/10/23 13:59
Phosphorus, Total as P		0.241	mg/L	0.010	96	90	110				
Lab ID: CCV	Continuing Calibration Verification Standard										07/10/23 15:42
Phosphorus, Total as P		0.105	mg/L	0.010	105	90	110				
Lab ID: CCV	Continuing Calibration Verification Standard										07/10/23 16:51
Phosphorus, Total as P		0.106	mg/L	0.010	106	90	110				
Method: E365.1								Batch: 67240			
Lab ID: MB-67240	Method Blank										07/10/23 14:03
Phosphorus, Total as P		ND	mg/L	0.001				Run: SEAL AA500_230710A			
Lab ID: LCS-67240	Laboratory Control Sample										07/10/23 14:09
Phosphorus, Total as P		0.437	mg/L	0.010	109	90	110	Run: SEAL AA500_230710A			
Lab ID: H23061083-001Bms	Sample Matrix Spike										07/10/23 15:56
Phosphorus, Total as P		0.318	mg/L	0.010	114	90	110	Run: SEAL AA500_230710A		S	
Lab ID: H23061083-001Bmsd	Sample Matrix Spike Duplicate										07/10/23 15:57
Phosphorus, Total as P		0.320	mg/L	0.010	115	90	110	0.5	20	S	

### Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

S - Spike recovery outside of advisory limits



## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23061025

**Report Date:** 07/11/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E410.4								Analytical Run: GENESYS 20_230630A		
Lab ID: CCV	Continuing Calibration Verification Standard									06/30/23 09:07
Oxygen Demand, Chemical (COD)		52.0	mg/L	5.0	104	90	110			
Method: E410.4								Batch: 67099		
Lab ID: MB-67099	Method Blank									06/30/23 09:07
Oxygen Demand, Chemical (COD)		ND	mg/L	4				Run: GENESYS 20_230630A		
Lab ID: LCS-67099	Laboratory Control Sample									06/30/23 09:07
Oxygen Demand, Chemical (COD)		57.3	mg/L	5.0	96	90	110			
Lab ID: H23061107-001DMS	Sample Matrix Spike									06/30/23 09:07
Oxygen Demand, Chemical (COD)		64.5	mg/L	5.0	107	90	110			
Lab ID: H23061107-001DMSD	Sample Matrix Spike Duplicate									06/30/23 09:07
Oxygen Demand, Chemical (COD)		64.4	mg/L	5.0	107	90	110	0	20	

### Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



# Work Order Receipt Checklist

Water and Environmental Technologies

H23061025

Login completed by: Taylor K. Jones

Date Received: 6/26/2023

Reviewed by: rtooke

Received by: RAT

Reviewed Date: 6/27/2023

Carrier name: Hand Deliver

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	5.6°C On Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>

## Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

## Contact and Corrective Action Comments:

The temperature of the sample(s) for shipping container 1 was 5.6°C and the Temperature Blank temperature for shipping container 2 was 5.6°C. tj 6/26/23



## Chain of Custody & Analytical Request Record

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[www.energylab.com](http://www.energylab.com)

Page 1 of 1

## Account Information *(Billing information)*

Company Name	WET		
Contact			
Phone	406-780-5220		
Mailing Address	780 E Park St		
City, State, Zip	Butte, MT 59701		
Email	accounting@waterenvtech.com		
Receive Invoice	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	Receive Report <input type="checkbox"/> Hard Copy <input type="checkbox"/> Email
Purchase Order	Quote		Bottle Order
			173176

## Report Information (if different than Account Information)

Company Name	WET
Contact	Stephen Coe
Phone	406-299-7858
Mailing Address	
City, State, Zip	
Email	SCOE@waterentech.com
Receive Report	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> EMail
Special Report/Formats:	
<input type="checkbox"/> LEVEL IV	<input type="checkbox"/> NELAC
<input type="checkbox"/> EDD/EDT	<input type="checkbox"/> (contact laboratory)
<input type="checkbox"/> Other	

## Comments

For  $F_{200.718}$ ,  
only analyze  
 $Cu, Pb, Zn$  only

## Project Information

Project Name, PWSID, Permit, etc.		83BFWM041	
Sampler Name	D. Livingston	Sampler Phone	406 321 9471
Sample Origin State	MT	EPA/State Compliance	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

MINING CLIENTS, please indicate sample type.  
 "If ore has been processed or refined, call before sending.  
☐ Byproduct 11 (e)2 material ☐ Unprocessed ore (NOT ground or refined)\*

### Matrix Codes

A - Air  
W - Water  
S - Soils/  
Solids  
V - Vegetation  
B - Bioassay  
O - Other  
DW - Drinking  
Water

## Analysis Requested

[illegible]

All turnaround times are standard unless marked as RUSH.

Energy Laboratories  
JUST be contacted prior to  
JSH sample submittal for  
charges and scheduling –  
See Instructions Page

[illegible][illegible]

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-12/16 v.1





## ANALYTICAL SUMMARY REPORT

July 11, 2023

Water and Environmental Technologies

480 E Park St Ste 200

Butte, MT 59701-1923

Work Order: H23061025

Project Name: BSBPWM041

Energy Laboratories Inc Helena MT received the following 4 samples for Water and Environmental Technologies on 6/26/2023 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H23061025-001	001A	06/23/23 17:40	06/26/23	Aqueous	Metals by ICP/ICPMS, Total Chemical Oxygen Demand Oil & Grease, Gravimetric Nitrogen, Nitrate + Nitrite Nitrogen, Total Kjeldahl Nitrogen, Total (TKN+NO3+NO2) pH Metals Digestion by E200.2 Preparation for COD testing HACH 8000 E365.1 Digestion, Total P TKN Prep Phosphorus, Total Solids, Total Suspended
H23061025-002	002A	06/23/23 17:55	06/26/23	Aqueous	Same As Above
H23061025-003	001B	06/23/23 17:10	06/26/23	Aqueous	Same As Above
H23061025-004	002B	06/23/23 17:25	06/26/23	Aqueous	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

If you have any questions regarding these test results, please contact your Project Manager.

Report Approved By:



**CLIENT:** Water and Environmental Technologies  
**Project:** BSBPWM041  
**Work Order:** H23061025

**Report Date:** 07/11/23

## **CASE NARRATIVE**

Tests associated with analyst identified as ELI-G were subcontracted to Energy Laboratories, 400 W. Boxelder Rd., Gillette, WY, EPA Number WY00006.



## LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies  
**Project:** BSBPWM041  
**Lab ID:** H23061025-001  
**Client Sample ID:** 001A

**Report Date:** 07/11/23  
**Collection Date:** 06/23/23 17:40  
**Date Received:** 06/26/23  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>PHYSICAL PROPERTIES</b>							
pH	7.6	s.u.	H	0.1		A4500-H B	06/27/23 11:30 / SRW
pH Measurement Temp	14.5	°C				A4500-H B	06/27/23 11:30 / SRW
Solids, Total Suspended TSS @ 105 C	293	mg/L		40		A2540 D	06/27/23 14:41 / SRW
<b>AGGREGATE ORGANICS</b>							
Oxygen Demand, Chemical (COD)	87	mg/L		5		E410.4	06/30/23 09:07 / ams
<b>NUTRIENTS</b>							
Nitrogen, Kjeldahl, Total as N	2.2	mg/L		0.5		E351.2	07/07/23 15:03 / JAR
Nitrogen, Nitrate+Nitrite as N	0.41	mg/L		0.01		E353.2	07/06/23 16:33 / SRW
Nitrogen, Total	2.6	mg/L		0.5		Calculation	07/10/23 08:52 / rrs
Phosphorus, Total as P	0.85	mg/L		0.01		E365.1	07/10/23 15:49 / JAR
<b>METALS, TOTAL</b>							
Copper	0.216	mg/L		0.005		E200.8	07/09/23 16:16 / dck
Lead	0.078	mg/L		0.001		E200.8	07/09/23 16:16 / dck
Zinc	0.29	mg/L		0.01		E200.8	07/09/23 16:16 / dck
<b>ORGANIC CHARACTERISTICS</b>							
Oil & Grease (HEM)	2	mg/L		1		E1664A	07/10/23 08:52 / eli-g

**Report Definitions:**  
RL - Analyte Reporting Limit  
QCL - Quality Control Limit  
H - Analysis performed past the method holding time

MCL - Maximum Contaminant Level  
ND - Not detected at the Reporting Limit (RL)



## LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies  
**Project:** BSBPWM041  
**Lab ID:** H23061025-002  
**Client Sample ID:** 002A

**Report Date:** 07/11/23  
**Collection Date:** 06/23/23 17:55  
**Date Received:** 06/26/23  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>PHYSICAL PROPERTIES</b>							
pH	7.2	s.u.	H	0.1		A4500-H B	06/27/23 11:32 / SRW
pH Measurement Temp	14.9	°C				A4500-H B	06/27/23 11:32 / SRW
Solids, Total Suspended TSS @ 105 C	184	mg/L		40		A2540 D	06/27/23 14:41 / SRW
<b>AGGREGATE ORGANICS</b>							
Oxygen Demand, Chemical (COD)	78	mg/L		5		E410.4	06/30/23 09:07 / ams
<b>NUTRIENTS</b>							
Nitrogen, Kjeldahl, Total as N	1.6	mg/L		0.5		E351.2	07/07/23 15:08 / JAR
Nitrogen, Nitrate+Nitrite as N	0.85	mg/L		0.01		E353.2	07/06/23 16:36 / SRW
Nitrogen, Total	2.5	mg/L		0.5		Calculation	07/10/23 08:52 / rrs
Phosphorus, Total as P	0.48	mg/L		0.01		E365.1	07/10/23 15:50 / JAR
<b>METALS, TOTAL</b>							
Copper	0.142	mg/L		0.005		E200.8	07/09/23 16:19 / dck
Lead	0.038	mg/L		0.001		E200.8	07/09/23 16:19 / dck
Zinc	0.16	mg/L		0.01		E200.8	07/09/23 16:19 / dck
<b>ORGANIC CHARACTERISTICS</b>							
Oil & Grease (HEM)	2	mg/L		1		E1664A	07/10/23 08:52 / eli-g

**Report Definitions:**  
RL - Analyte Reporting Limit  
QCL - Quality Control Limit  
H - Analysis performed past the method holding time

MCL - Maximum Contaminant Level  
ND - Not detected at the Reporting Limit (RL)



## LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies  
**Project:** BSBPWM041  
**Lab ID:** H23061025-003  
**Client Sample ID:** 001B

**Report Date:** 07/11/23  
**Collection Date:** 06/23/23 17:10  
**Date Received:** 06/26/23  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>PHYSICAL PROPERTIES</b>							
pH	7.0	s.u.	H	0.1		A4500-H B	06/27/23 11:34 / SRW
pH Measurement Temp	15.3	°C				A4500-H B	06/27/23 11:34 / SRW
Solids, Total Suspended TSS @ 105 C	254	mg/L		50		A2540 D	06/27/23 14:41 / SRW
<b>AGGREGATE ORGANICS</b>							
Oxygen Demand, Chemical (COD)	174	mg/L		50		E410.4	06/30/23 09:07 / ams
<b>NUTRIENTS</b>							
Nitrogen, Kjeldahl, Total as N	2.9	mg/L		0.5		E351.2	07/07/23 15:12 / JAR
Nitrogen, Nitrate+Nitrite as N	0.48	mg/L		0.01		E353.2	07/06/23 16:37 / SRW
Nitrogen, Total	3.3	mg/L		0.5		Calculation	07/10/23 08:52 / rrs
Phosphorus, Total as P	0.69	mg/L		0.01		E365.1	07/10/23 15:51 / JAR
<b>METALS, TOTAL</b>							
Copper	0.132	mg/L		0.005		E200.8	07/09/23 16:23 / dck
Lead	0.086	mg/L		0.001		E200.8	07/09/23 16:23 / dck
Zinc	0.44	mg/L		0.01		E200.8	07/09/23 16:23 / dck
<b>ORGANIC CHARACTERISTICS</b>							
Oil & Grease (HEM)	2	mg/L		1		E1664A	07/10/23 08:53 / eli-g

**Report Definitions:**  
RL - Analyte Reporting Limit  
QCL - Quality Control Limit  
H - Analysis performed past the method holding time

MCL - Maximum Contaminant Level  
ND - Not detected at the Reporting Limit (RL)



## LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies  
**Project:** BSBPWM041  
**Lab ID:** H23061025-004  
**Client Sample ID:** 002B

**Report Date:** 07/11/23  
**Collection Date:** 06/23/23 17:25  
**Date Received:** 06/26/23  
**Matrix:** Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
<b>PHYSICAL PROPERTIES</b>							
pH	8.2	s.u.	H	0.1		A4500-H B	06/27/23 11:36 / SRW
pH Measurement Temp	15.6	°C				A4500-H B	06/27/23 11:36 / SRW
Solids, Total Suspended TSS @ 105 C	842	mg/L		50		A2540 D	06/27/23 14:42 / SRW
<b>AGGREGATE ORGANICS</b>							
Oxygen Demand, Chemical (COD)	188	mg/L		50		E410.4	06/30/23 09:07 / ams
<b>NUTRIENTS</b>							
Nitrogen, Kjeldahl, Total as N	2.0	mg/L		0.5		E351.2	07/07/23 15:21 / JAR
Nitrogen, Nitrate+Nitrite as N	0.52	mg/L		0.01		E353.2	07/06/23 16:38 / SRW
Nitrogen, Total	2.5	mg/L		0.5		Calculation	07/10/23 08:52 / rrs
Phosphorus, Total as P	1.62	mg/L		0.02		E365.1	07/10/23 16:54 / JAR
<b>METALS, TOTAL</b>							
Copper	0.406	mg/L		0.005		E200.8	07/09/23 16:26 / dck
Lead	0.181	mg/L		0.001		E200.8	07/09/23 16:26 / dck
Zinc	0.65	mg/L		0.01		E200.8	07/09/23 16:26 / dck
<b>ORGANIC CHARACTERISTICS</b>							
Oil & Grease (HEM)	3	mg/L		1		E1664A	07/10/23 08:53 / eli-g

**Report Definitions:**  
RL - Analyte Reporting Limit  
QCL - Quality Control Limit  
H - Analysis performed past the method holding time

MCL - Maximum Contaminant Level  
ND - Not detected at the Reporting Limit (RL)



## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23061025

**Report Date:** 07/11/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: A2540 D</b>										Batch: TSS230627A
<b>Lab ID: MB-1_230627</b>										
		Method Blank				Run: ACCU-124 (14410200)_23062		06/27/23 12:56		
Solids, Total Suspended TSS @ 105 C		ND	mg/L	0.3						
<b>Lab ID: LCS-2_230627</b>										
		Laboratory Control Sample				Run: ACCU-124 (14410200)_23062		06/27/23 12:56		
Solids, Total Suspended TSS @ 105 C		90.0	mg/L	25	90	80	120			
<b>Lab ID: H23060955-006A DUP</b>										
		Sample Duplicate				Run: ACCU-124 (14410200)_23062		06/27/23 12:57		
Solids, Total Suspended TSS @ 105 C		ND	mg/L	10					10	
- TSS did not obtain the minimum residue requirement of 2.5 mg residue.										

### Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23061025

**Report Date:** 07/11/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-H B								Analytical Run: PHSC_101-H_230627A		
Lab ID: pH 7	2	Initial Calibration Verification Standard							06/27/23 09:33	
pH		7.0	s.u.	0.1	100	98	102			
pH Measurement Temp		21.6	°C			0	0			
Lab ID: CCV - pH 7								06/27/23 10:48		
	2	Continuing Calibration Verification Standard								
pH		7.0	s.u.	0.1	101	98	102			
pH Measurement Temp		18.9	°C			0	0			
Method: A4500-H B								Batch: R185755		
Lab ID: H23061025-004ADUP	2	Sample Duplicate			Run: PHSC_101-H_230627A				06/27/23 11:38	
pH		8.2	s.u.	0.1				0.5	3	H
pH Measurement Temp		15.5	°C							

### Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

H - Analysis performed past the method holding time





## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23061025

**Report Date:** 07/11/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E1664A</b>										Batch: G_230710A
<b>Lab ID: MBLK2307100815</b>		Method Blank					Run: SUB-G278050			07/10/23 08:49
Oil & Grease (HEM)		ND	mg/L	0.8						
<b>Lab ID: LCS2307100815</b>		Laboratory Control Sample					Run: SUB-G278050			07/10/23 08:50
Oil & Grease (HEM)	39		mg/L	5.0	97	78	114			
<b>Lab ID: LCSD2307100815</b>		Laboratory Control Sample Duplicate					Run: SUB-G278050			07/10/23 08:50
Oil & Grease (HEM)	36		mg/L	5.0	89	78	114	8.6	18	
<b>Lab ID: G23060522-001BMS</b>		Sample Matrix Spike					Run: SUB-G278050			07/10/23 08:51
Oil & Grease (HEM)	20		mg/L	5.0	48	78	114			S

### Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

S - Spike recovery outside of advisory limits



## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23061025

**Report Date:** 07/11/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E200.8</b>							Analytical Run: ICPMS206-H_230709A			
<b>Lab ID: ICV</b>	3	Initial Calibration Verification Standard							07/09/23 14:03	
Copper		0.0610	mg/L	0.010	102	90	110			
Lead		0.0598	mg/L	0.010	100	90	110			
Zinc		0.0615	mg/L	0.010	102	90	110			
<b>Lab ID: CCV</b>	3	Continuing Calibration Verification Standard							07/09/23 16:01	
Copper		0.0521	mg/L	0.010	104	90	110			
Lead		0.0504	mg/L	0.010	101	90	110			
Zinc		0.0518	mg/L	0.010	104	90	110			
<b>Method: E200.8</b>							Batch: 67148			
<b>Lab ID: MB-67148</b>	3	Method Blank							Run: ICPMS206-H_230709A 07/09/23 16:08	
Copper		ND	mg/L	0.0001						
Lead		ND	mg/L	0.00005						
Zinc		ND	mg/L	0.0006						
<b>Lab ID: LCS-67148</b>	3	Laboratory Control Sample							Run: ICPMS206-H_230709A 07/09/23 16:30	
Copper		0.515	mg/L	0.0050	103	85	115			
Lead		0.511	mg/L	0.0010	102	85	115			
Zinc		0.488	mg/L	0.010	98	85	115			
<b>Lab ID: H23061025-001CMS3</b>	3	Sample Matrix Spike							Run: ICPMS206-H_230709A 07/09/23 16:33	
Copper		1.23	mg/L	0.0050	101	70	130			
Lead		1.09	mg/L	0.0010	101	70	130			
Zinc		1.25	mg/L	0.010	96	70	130			
<b>Lab ID: H23061025-001CMSD3</b>	3	Sample Matrix Spike Duplicate							Run: ICPMS206-H_230709A 07/09/23 16:36	
Copper		1.22	mg/L	0.0050	100	70	130	0.6	20	
Lead		1.09	mg/L	0.0010	101	70	130	0.2	20	
Zinc		1.25	mg/L	0.010	95	70	130	0.5	20	

### Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23061025

**Report Date:** 07/11/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E351.2</b>										Analytical Run: SEAL AA500_230707A
<b>Lab ID: ICV</b>		Initial Calibration Verification Standard								07/07/23 14:42
Nitrogen, Kjeldahl, Total as N		10.4	mg/L	0.50	104	90	110			
<b>Lab ID: CCV</b>										Continuing Calibration Verification Standard
Nitrogen, Kjeldahl, Total as N		9.16	mg/L	0.50	92	90	110			07/07/23 15:14
<b>Method: E351.2</b>										Batch: 67217
<b>Lab ID: MB-67217</b>		Method Blank								Run: SEAL AA500_230707A
Nitrogen, Kjeldahl, Total as N		ND	mg/L	0.1						07/07/23 14:45
<b>Lab ID: LCS-67217</b>		Laboratory Control Sample								Run: SEAL AA500_230707A
Nitrogen, Kjeldahl, Total as N		10.1	mg/L	0.50	101	90	110			07/07/23 14:48
<b>Lab ID: H23061025-001Dms</b>		Sample Matrix Spike								Run: SEAL AA500_230707A
Nitrogen, Kjeldahl, Total as N		12.0	mg/L	0.50	98	90	110			07/07/23 15:05
<b>Lab ID: H23061025-001Dmsd</b>		Sample Matrix Spike Duplicate								Run: SEAL AA500_230707A
Nitrogen, Kjeldahl, Total as N		11.7	mg/L	0.50	95	90	110	2.3	10	07/07/23 15:06
<b>Method: E351.2</b>										Batch: 67218
<b>Lab ID: MB-67218</b>		Method Blank								Run: SEAL AA500_230707A
Nitrogen, Kjeldahl, Total as N		ND	mg/L	0.1						07/07/23 14:47
<b>Lab ID: LCS-67218</b>		Laboratory Control Sample								Run: SEAL AA500_230707A
Nitrogen, Kjeldahl, Total as N		10.0	mg/L	0.50	100	90	110			07/07/23 14:50
<b>Lab ID: H23061025-002Dms</b>		Sample Matrix Spike								Run: SEAL AA500_230707A
Nitrogen, Kjeldahl, Total as N		11.4	mg/L	0.50	98	90	110			07/07/23 15:09
<b>Lab ID: H23061025-002Dmsd</b>		Sample Matrix Spike Duplicate								Run: SEAL AA500_230707A
Nitrogen, Kjeldahl, Total as N		11.4	mg/L	0.50	98	90	110	0	10	07/07/23 15:11

### Qualifiers:

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## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23061025

**Report Date:** 07/11/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E353.2</b>										Analytical Run: SEAL AA500_230706B
<b>Lab ID: ICV</b>		Initial Calibration Verification Standard								07/06/23 13:05
Nitrogen, Nitrate+Nitrite as N		1.05	mg/L	0.010	105	90	110			
<b>Lab ID: CCV</b>		Continuing Calibration Verification Standard								07/06/23 16:20
Nitrogen, Nitrate+Nitrite as N		0.978	mg/L	0.010	98	90	110			
<b>Lab ID: CCV</b>		Continuing Calibration Verification Standard								07/06/23 16:34
Nitrogen, Nitrate+Nitrite as N		0.999	mg/L	0.010	100	90	110			
<b>Method: E353.2</b>										Batch: R186043
<b>Lab ID: ICB</b>		Method Blank								Run: SEAL AA500_230706B 07/06/23 13:03
Nitrogen, Nitrate+Nitrite as N		ND	mg/L	0.01						
<b>Lab ID: LFB</b>		Laboratory Fortified Blank								Run: SEAL AA500_230706B 07/06/23 13:06
Nitrogen, Nitrate+Nitrite as N		1.00	mg/L	0.011	100	90	110			
<b>Lab ID: H23060989-003DMS</b>		Sample Matrix Spike								Run: SEAL AA500_230706B 07/06/23 16:23
Nitrogen, Nitrate+Nitrite as N		1.08	mg/L	0.011	104	90	110			
<b>Lab ID: H23060989-003DMSD</b>		Sample Matrix Spike Duplicate								Run: SEAL AA500_230706B 07/06/23 16:24
Nitrogen, Nitrate+Nitrite as N		1.09	mg/L	0.011	105	90	110	0.6	10	
<b>Lab ID: H23061043-001EMS</b>		Sample Matrix Spike								Run: SEAL AA500_230706B 07/06/23 16:44
Nitrogen, Nitrate+Nitrite as N		1.07	mg/L	0.011	104	90	110			
<b>Lab ID: H23061043-001EMSD</b>		Sample Matrix Spike Duplicate								Run: SEAL AA500_230706B 07/06/23 16:45
Nitrogen, Nitrate+Nitrite as N		1.08	mg/L	0.011	106	90	110	1.2	10	

### Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



## QA/QC Summary Report

Prepared by Helena, MT Branch

Client: Water and Environmental Technologies

Work Order: H23061025

Report Date: 07/11/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E365.1</b> Analytical Run: SEAL AA500_230710A										
<b>Lab ID: ICV</b> Initial Calibration Verification Standard 07/10/23 13:59										
Phosphorus, Total as P		0.241	mg/L	0.010	96	90	110			
<b>Lab ID: CCV</b> Continuing Calibration Verification Standard 07/10/23 15:42										
Phosphorus, Total as P		0.105	mg/L	0.010	105	90	110			
<b>Lab ID: CCV</b> Continuing Calibration Verification Standard 07/10/23 16:51										
Phosphorus, Total as P		0.106	mg/L	0.010	106	90	110			
<b>Method: E365.1</b> Batch: 67240										
<b>Lab ID: MB-67240</b> Method Blank Run: SEAL AA500_230710A 07/10/23 14:03										
Phosphorus, Total as P		ND	mg/L	0.001						
<b>Lab ID: LCS-67240</b> Laboratory Control Sample Run: SEAL AA500_230710A 07/10/23 14:09										
Phosphorus, Total as P		0.437	mg/L	0.010	109	90	110			
<b>Lab ID: H23061083-001Bms</b> Sample Matrix Spike Run: SEAL AA500_230710A 07/10/23 15:56										
Phosphorus, Total as P		0.318	mg/L	0.010	114	90	110			S
<b>Lab ID: H23061083-001Bmsd</b> Sample Matrix Spike Duplicate Run: SEAL AA500_230710A 07/10/23 15:57										
Phosphorus, Total as P		0.320	mg/L	0.010	115	90	110	0.5	20	S

### Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

S - Spike recovery outside of advisory limits



## QA/QC Summary Report

Prepared by Helena, MT Branch

**Client:** Water and Environmental Technologies

**Work Order:** H23061025

**Report Date:** 07/11/23

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
<b>Method: E410.4</b>										
Analytical Run: GENESYS 20_230630A										
<b>Lab ID: CCV</b>	Continuing Calibration Verification Standard									
Oxygen Demand, Chemical (COD)		52.0	mg/L	5.0	104	90	110			06/30/23 09:07
<b>Method: E410.4</b>										
Batch: 67099										
<b>Lab ID: MB-67099</b>	Method Blank									
Oxygen Demand, Chemical (COD)		ND	mg/L	4						Run: GENESYS 20_230630A 06/30/23 09:07
<b>Lab ID: LCS-67099</b>	Laboratory Control Sample									
Oxygen Demand, Chemical (COD)		57.3	mg/L	5.0	96	90	110			Run: GENESYS 20_230630A 06/30/23 09:07
<b>Lab ID: H23061107-001DMS</b>	Sample Matrix Spike									
Oxygen Demand, Chemical (COD)		64.5	mg/L	5.0	107	90	110			Run: GENESYS 20_230630A 06/30/23 09:07
<b>Lab ID: H23061107-001DMSD</b>	Sample Matrix Spike Duplicate									
Oxygen Demand, Chemical (COD)		64.4	mg/L	5.0	107	90	110	0	20	Run: GENESYS 20_230630A 06/30/23 09:07

### Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



# Work Order Receipt Checklist

Water and Environmental Technologies

H23061025

Login completed by: Taylor K. Jones

Date Received: 6/26/2023

Reviewed by: rtooke

Received by: RAT

Reviewed Date: 6/27/2023

Carrier name: Hand Deliver

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	5.6°C On Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>

## Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

## Contact and Corrective Action Comments:

The temperature of the sample(s) for shipping container 1 was 5.6°C and the Temperature Blank temperature for shipping container 2 was 5.6°C. tj 6/26/23





Trust our People. Trust our Data

# Chain of Custody & Analytical Request Record

www.energylab.com

Page 1 of 1

## Account Information (Billing Information)

Company/Name	WET		
Contact			
Phone	406-782-5220		
Mailing Address	480 E Park St		
City, State, Zip	Butte, MT 59701		
Email	accounting@waterentech.com		
Receive Invoice	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	Receive Report <input type="checkbox"/> Hard Copy <input type="checkbox"/> Email
Purchase Order	Quote	Bottle Order	
		173176	

## Report Information (If different than Account Information)

Company/Name	WET		
Contact	Stephan Coe		
Phone	406-299-9858		
Mailing Address			
City, State, Zip			
Email	SCOE@waterentech.com		
Receive Report	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	
Special Report/Formats:	<input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other		

## Comments

For E200.718,  
only analysis  
Cu, Pb, Zn only

## Project Information

Project Name, PWSID, Permit, etc.	BSBFWM041	
Sampler Name	0. Livingston	Sampler Phone 406 322 9471
Sample Origin State	MT	EPA/State Compliance <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

MINING CLIENTS, please indicate sample type.  
☐ Byproduct 11 (e)2 material ☐ Unprocessed ore (NOT ground or refined)\*

## Matrix Codes

A - Air	
W - Water	
S - Solids	
V - Vegetation	
B - Bioassay	
O - Other	
DW - Drinking Water	

## Analysis Requested

Analysis Requested	See Attached
755 AAS400	X
PH A4500-HB	X
TICN/NO3+NO2/NO2W	X
E351.0/E353.2	X
COD F910.4	X
Total P E365.1	X
C:1 & Grease	X
Gra. F166.4	X
Metals by TCPI/TCMS	X
E200.718	X

All turnaround times are standard unless marked as RUSH.  
 Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling - See Instructions Page

## Sample Identification

Sample Identification (Name, Location, Interval, etc.)	Collection Date	Time	Matrix (See Codes Above)
001A	6/26/23	1710	W
002A		1755	
001B		1710	
002B		1725	

See Attached

ELI LAB ID Laboratory Use Only  
 H23061025

## Custody Record MUST be signed

Relinquished by (print)	Date/Time	Signature
Alex Livingston	6/26/23 1740	[Signature]
Relinquished by (print)	Date/Time	Signature
Josh Malpass	6/26/23 1721	[Signature]

## Received by (print)

Received by (print)	Date/Time	Signature
Josh Malpass	6/26/23 1240	[Signature]
Relinquished by (print)	Date/Time	Signature
Josh Malpass	6/26/23 1421	[Signature]

## LABORATORY USE ONLY

Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
Y N	Y N	Cash Check	\$	

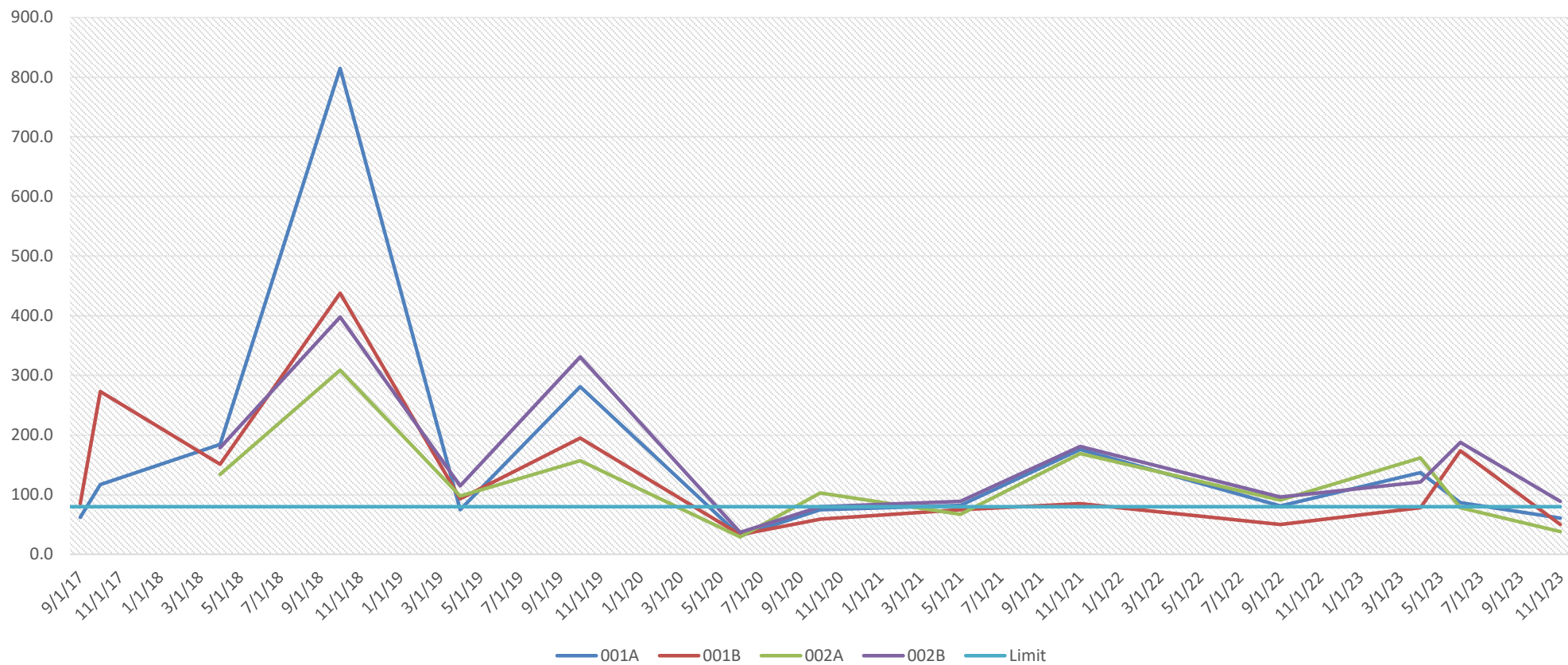
## Shipped By

Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp
[Signature]	2	(Y) (N) (C) (B)	Y N	6156 °C

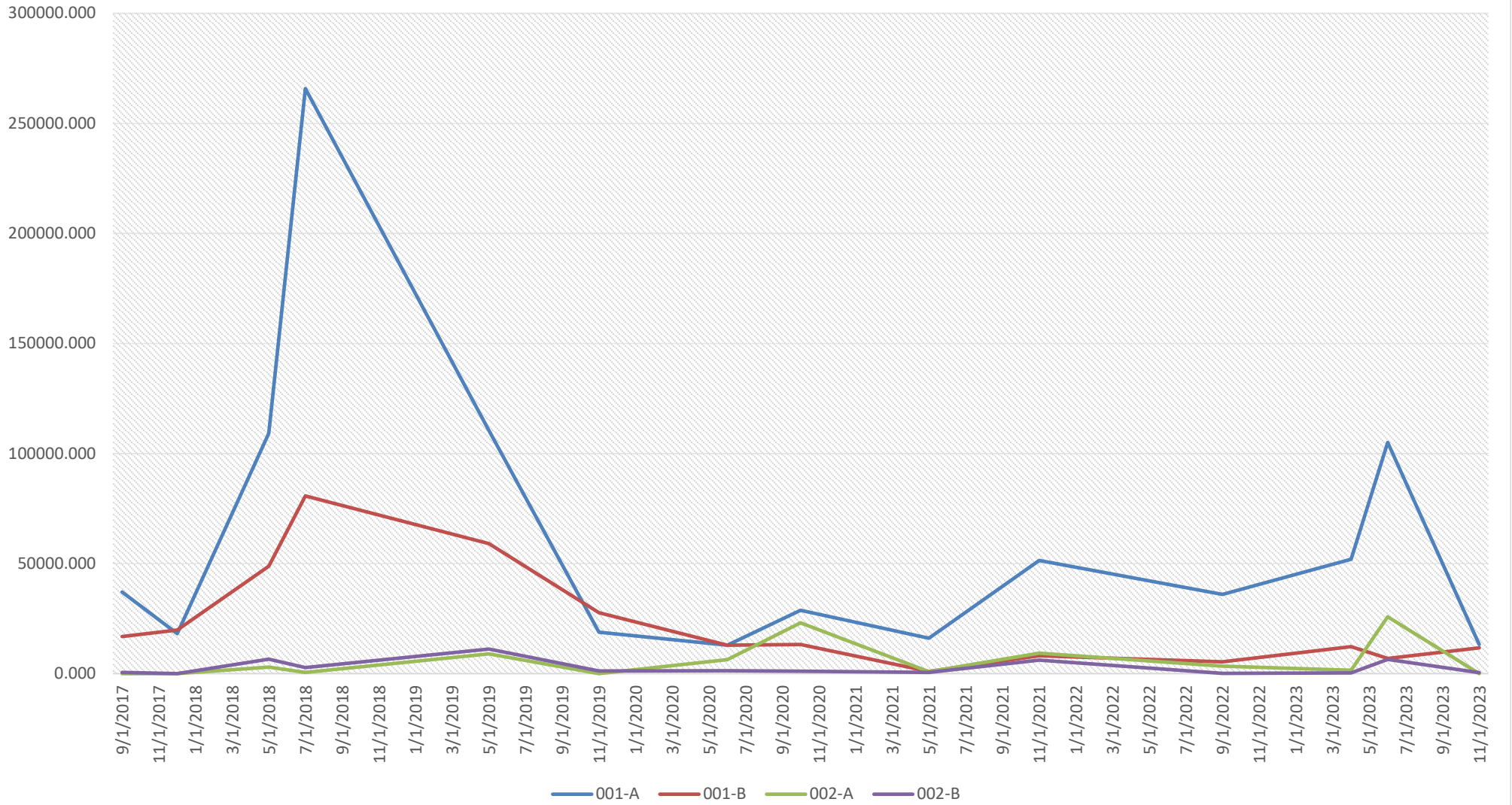
In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.



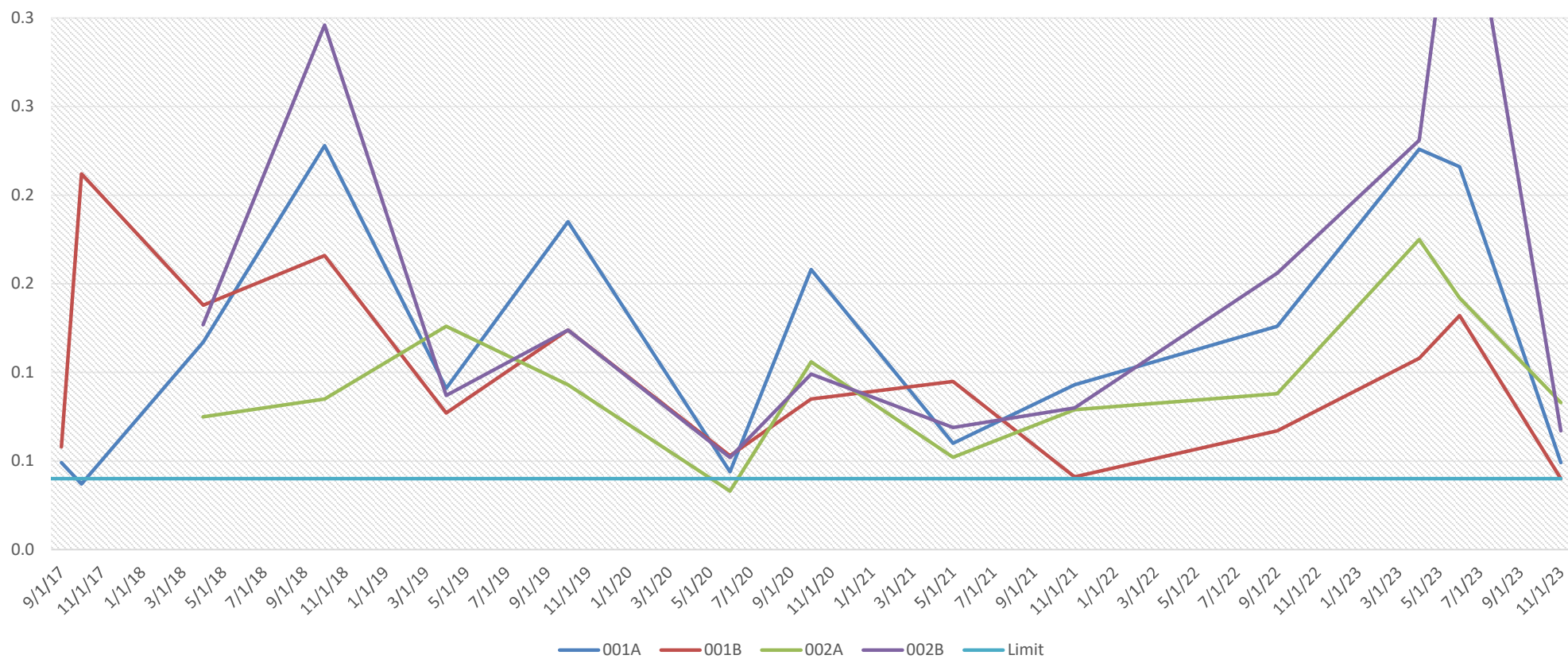
BSB MS4 COD Conc mg/l



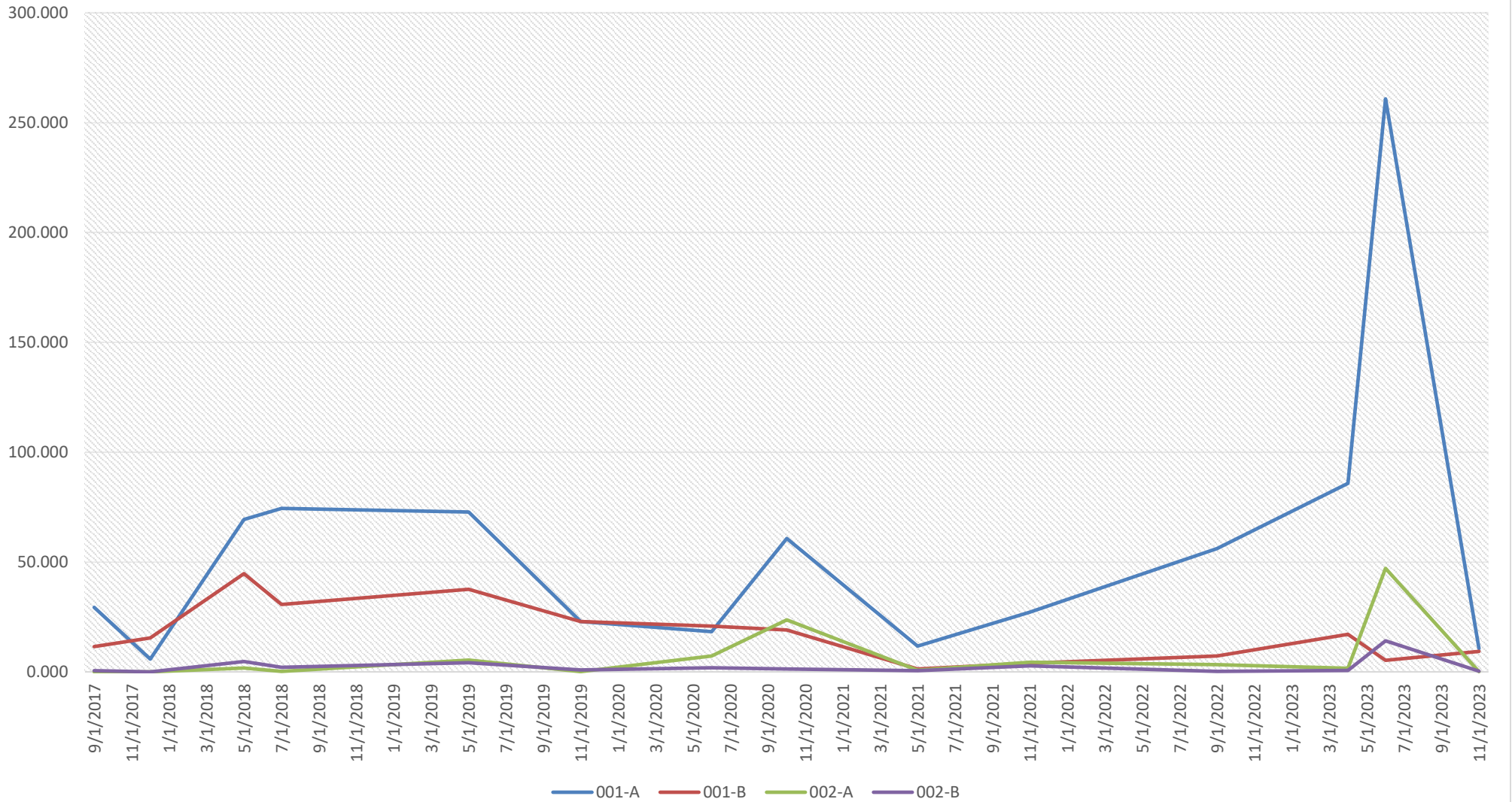
## COD Mass Loading - LB/Day



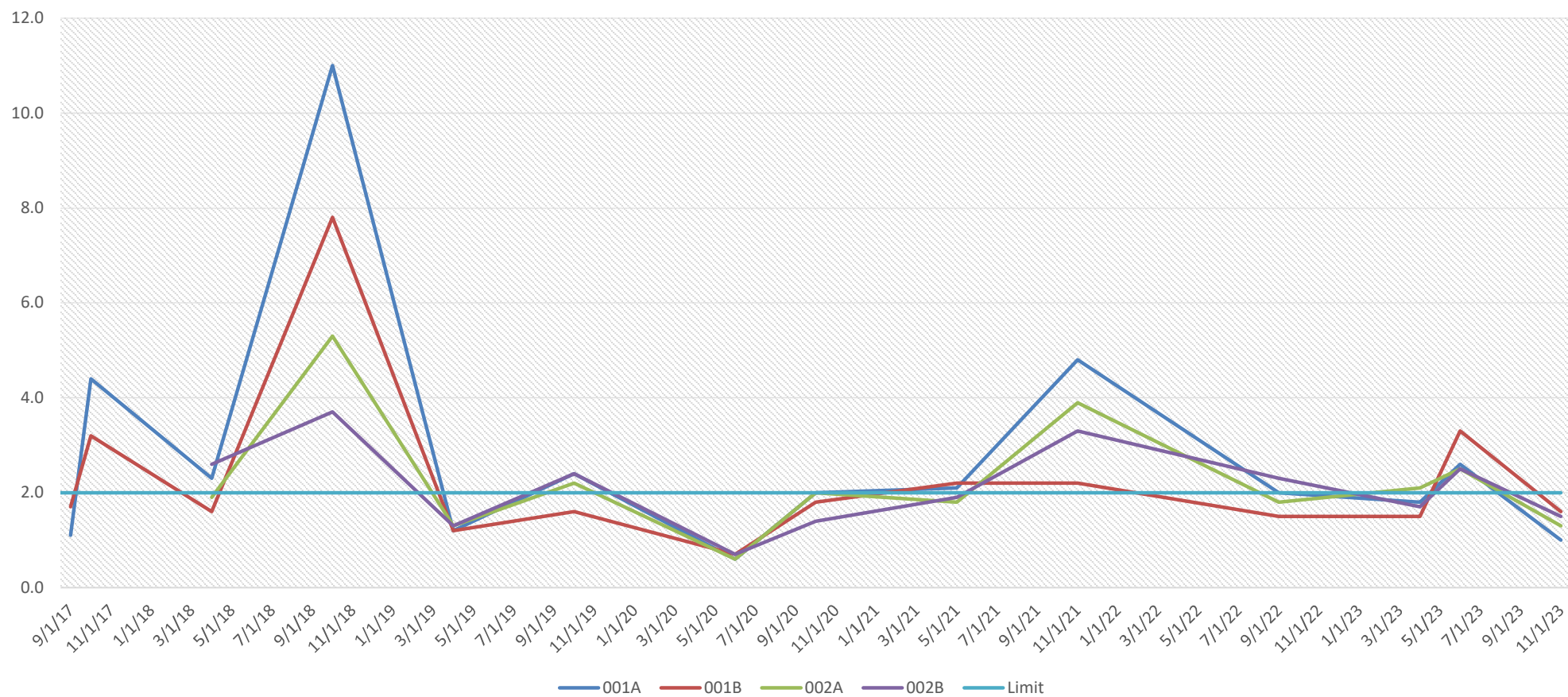
BSB MS4 Copper Conc mg/l



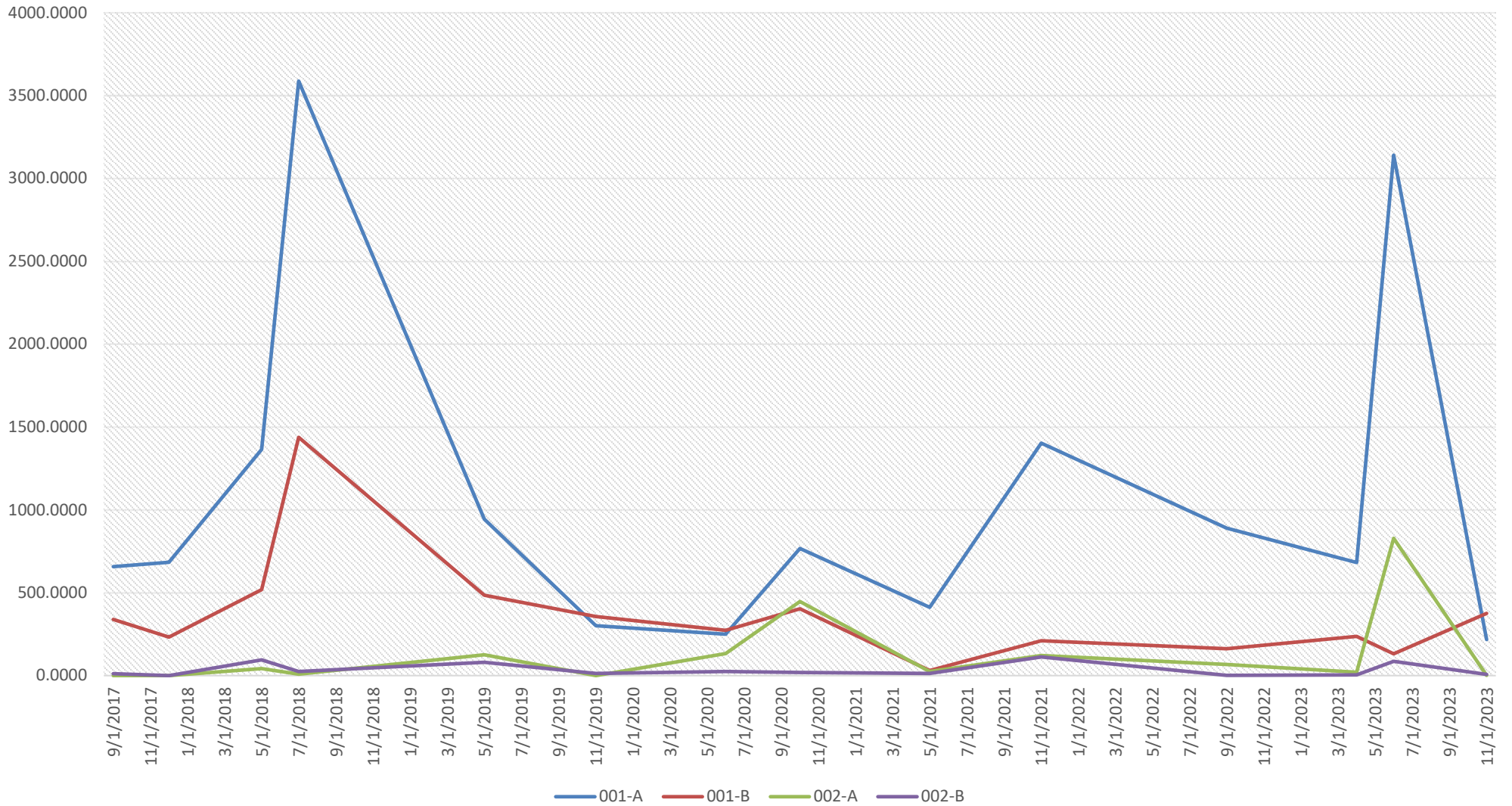
## Copper Mass Loading - LB/Day



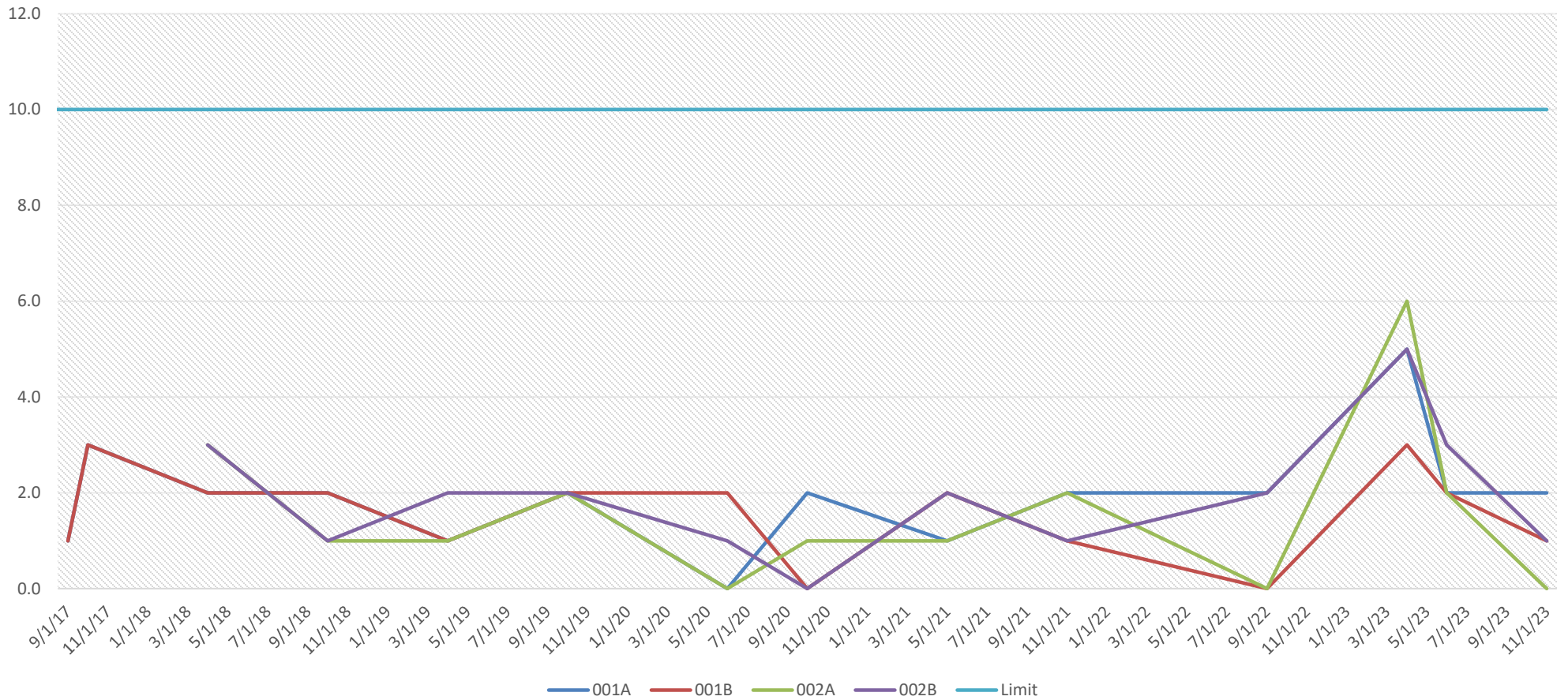
BSB MS4 Nitrogen (Total) Conc mg/l



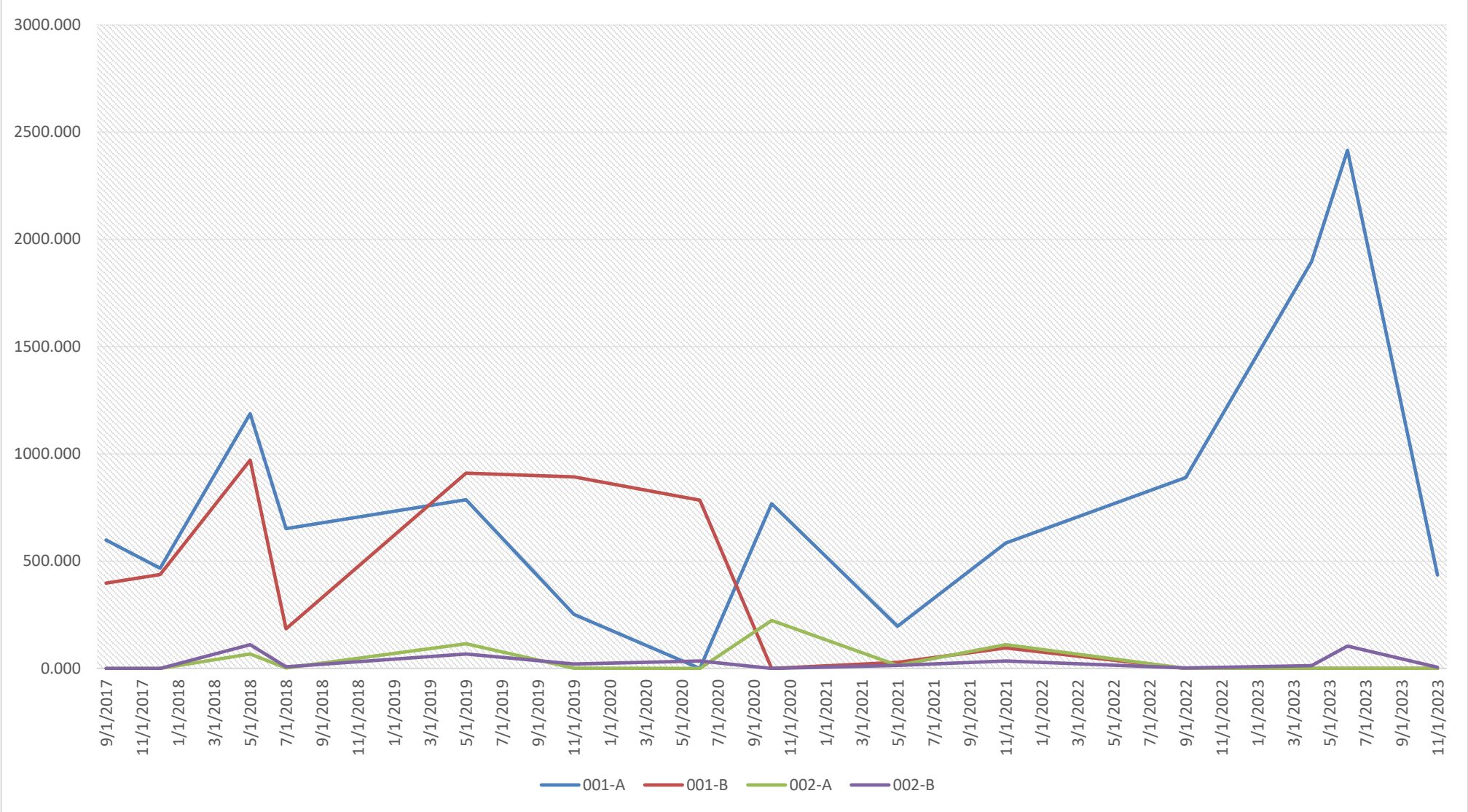
# Nitrogen Mass Loading - LB/Day



BSB MS4 Oil & Grease Conc mg/l

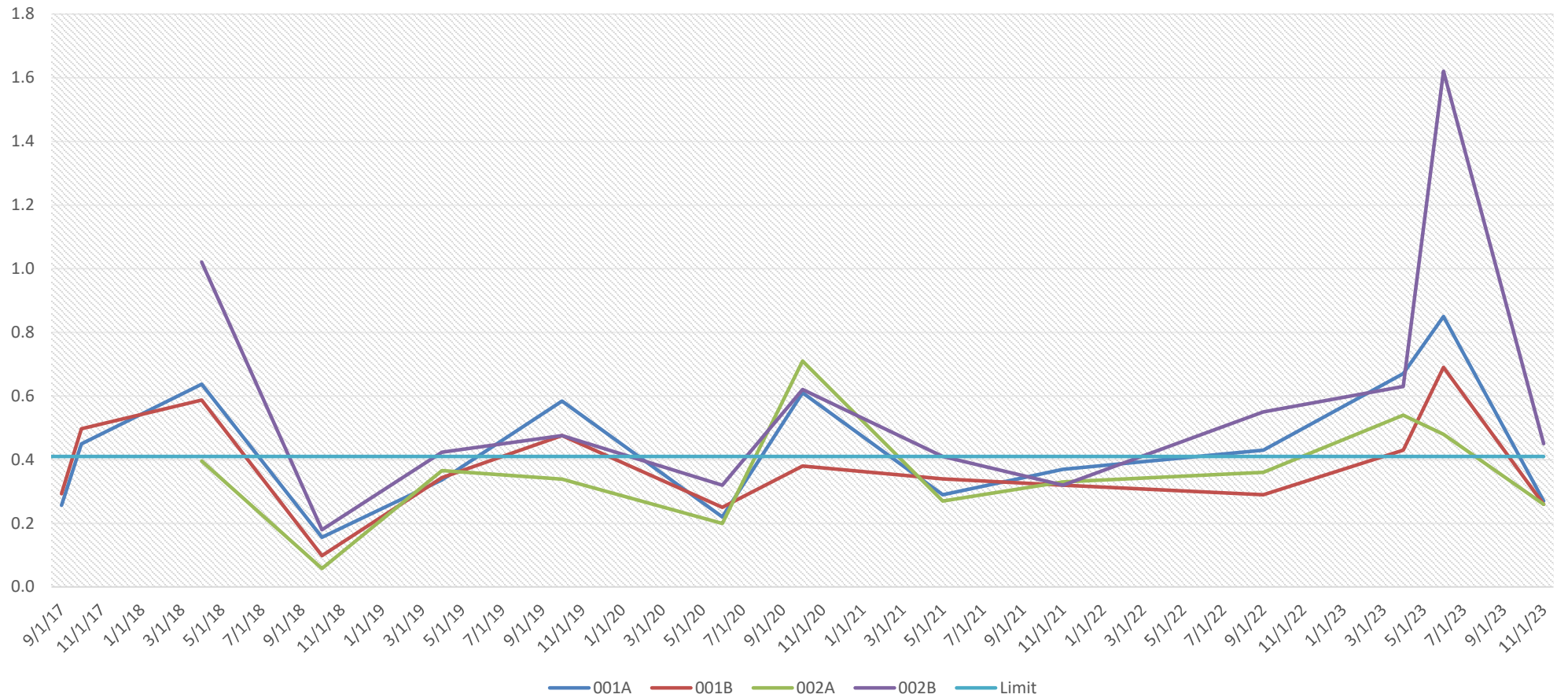


Oil & Grease Mass Loading - LB/Day

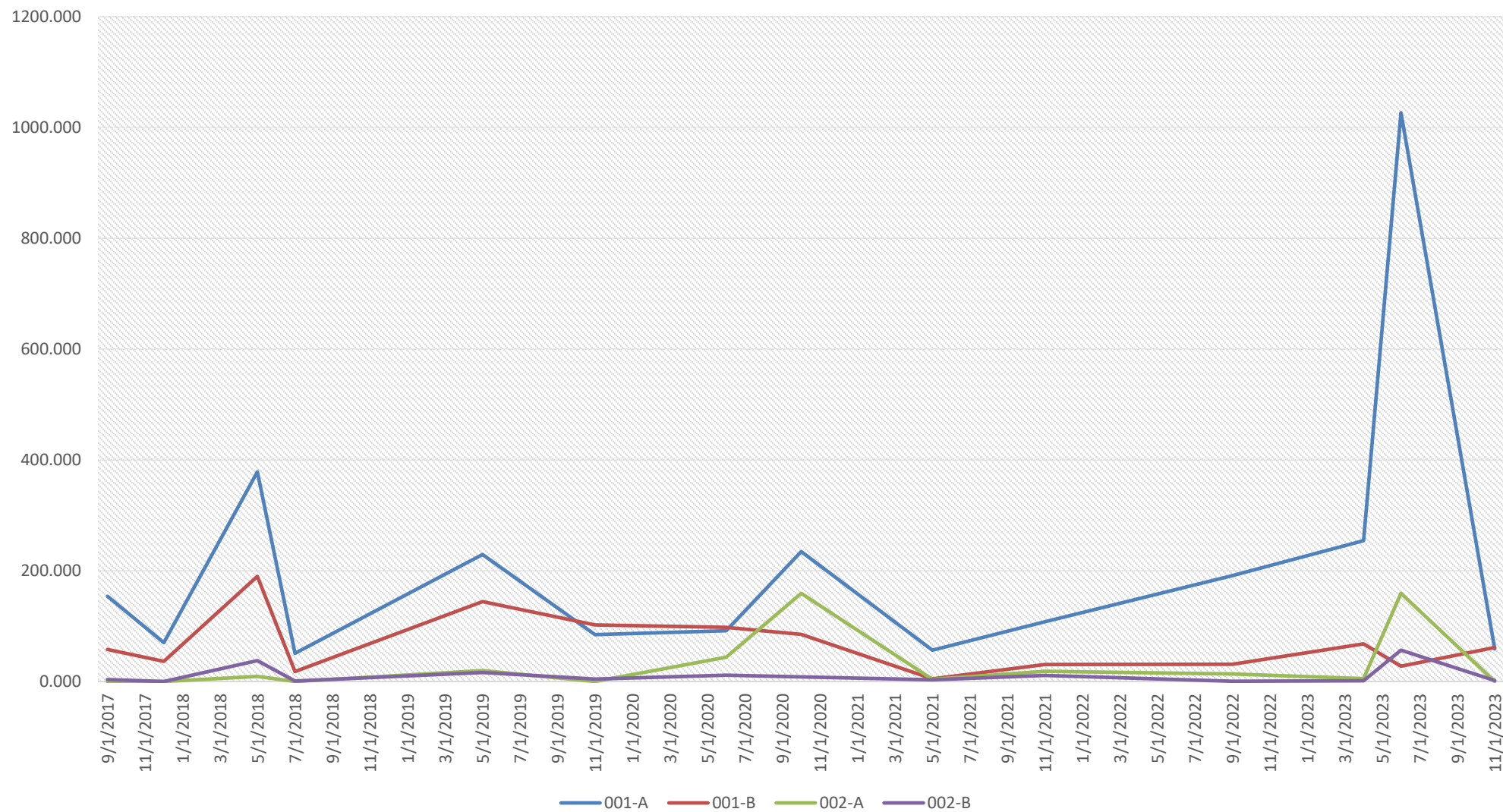




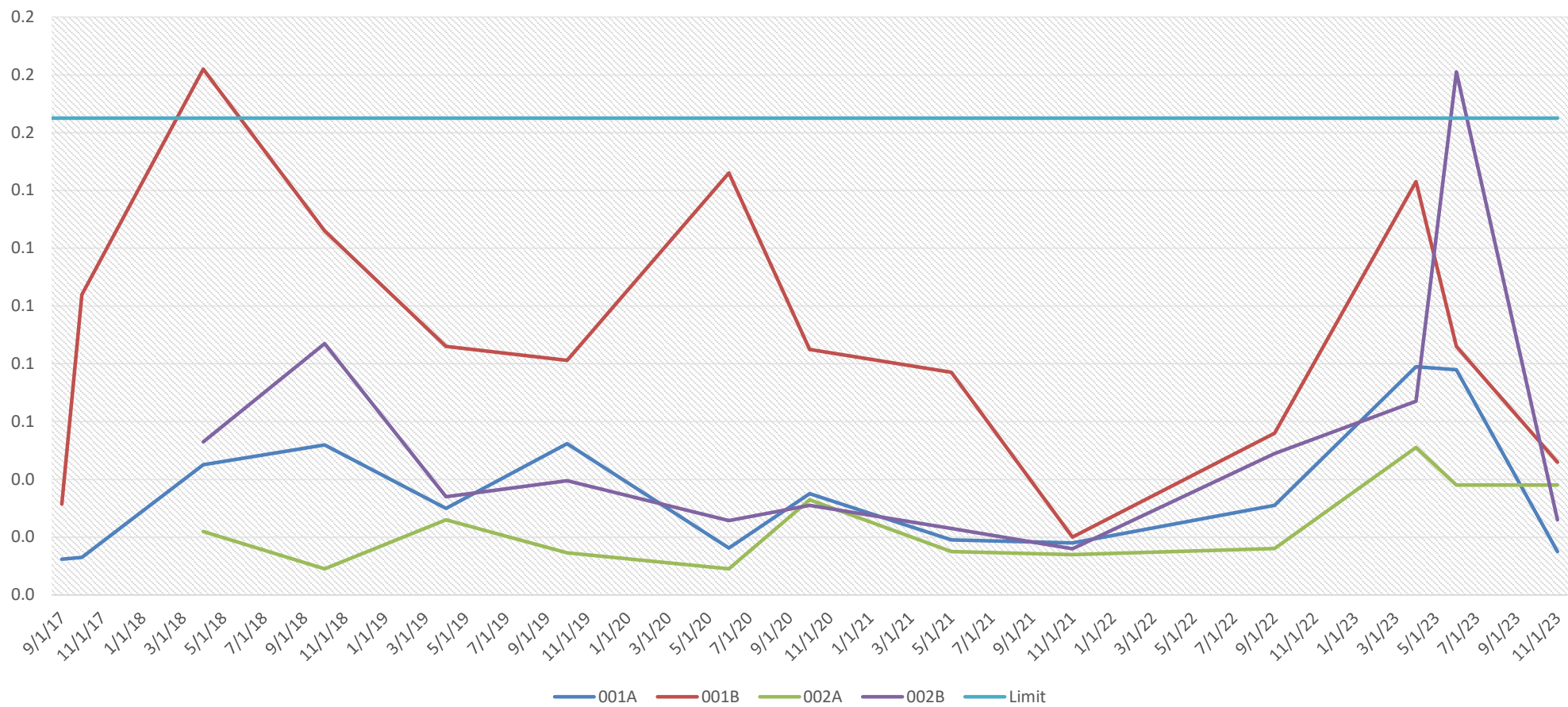
BSB MS4 Phosphorus (Total) Conc mg/l



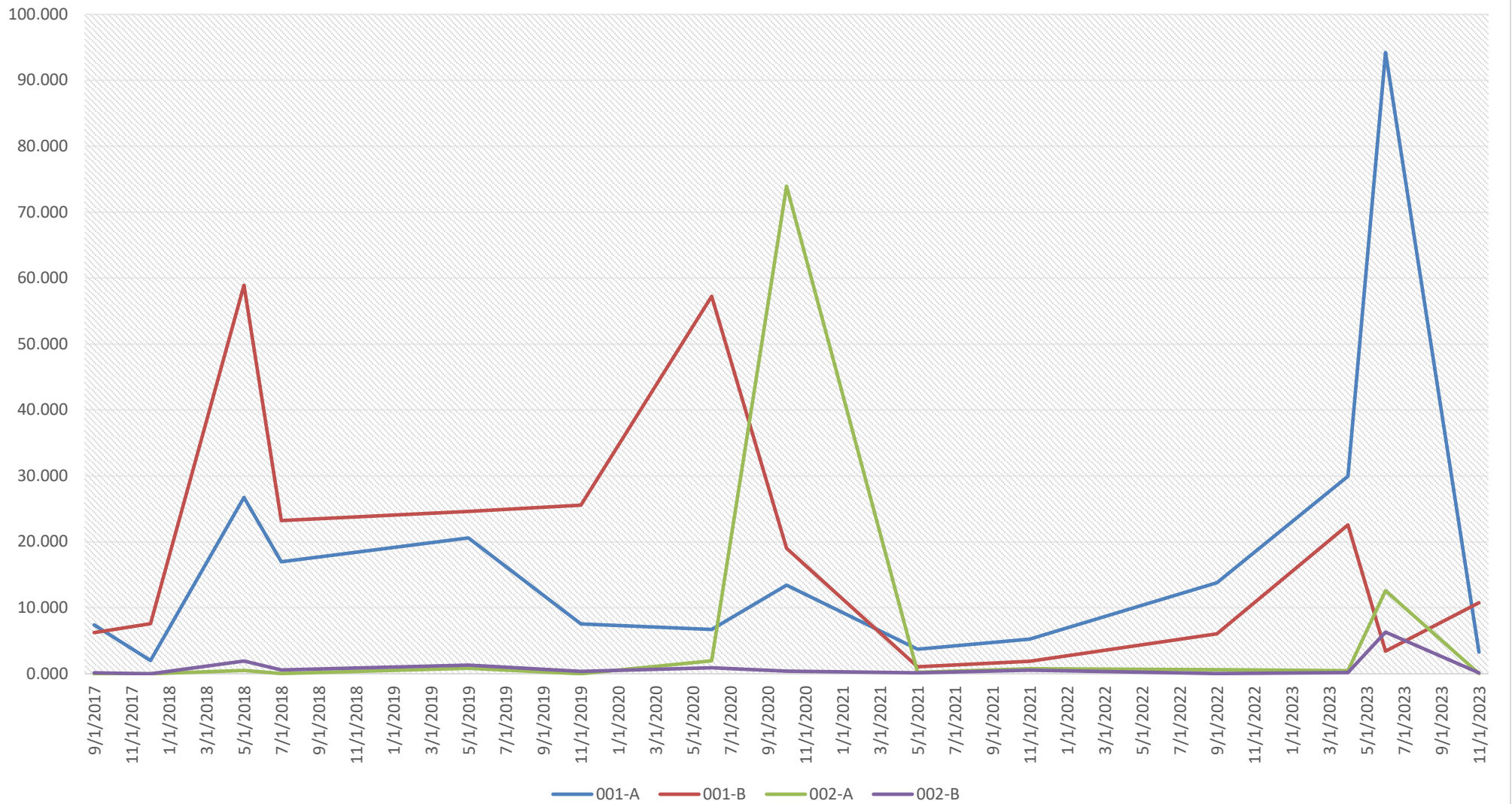
## Phosphorus Mass Loading - LB/Day



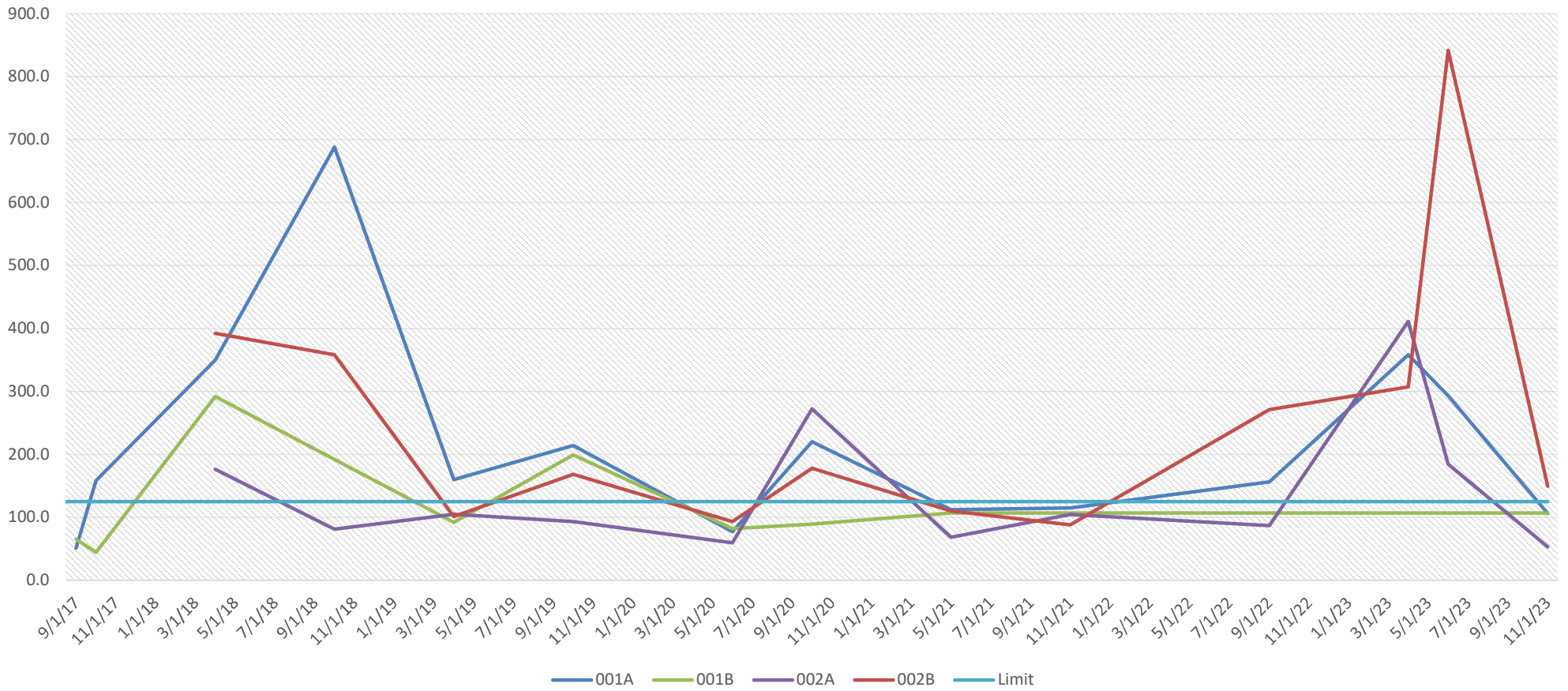
BSB MS4 Lead Conc mg/l



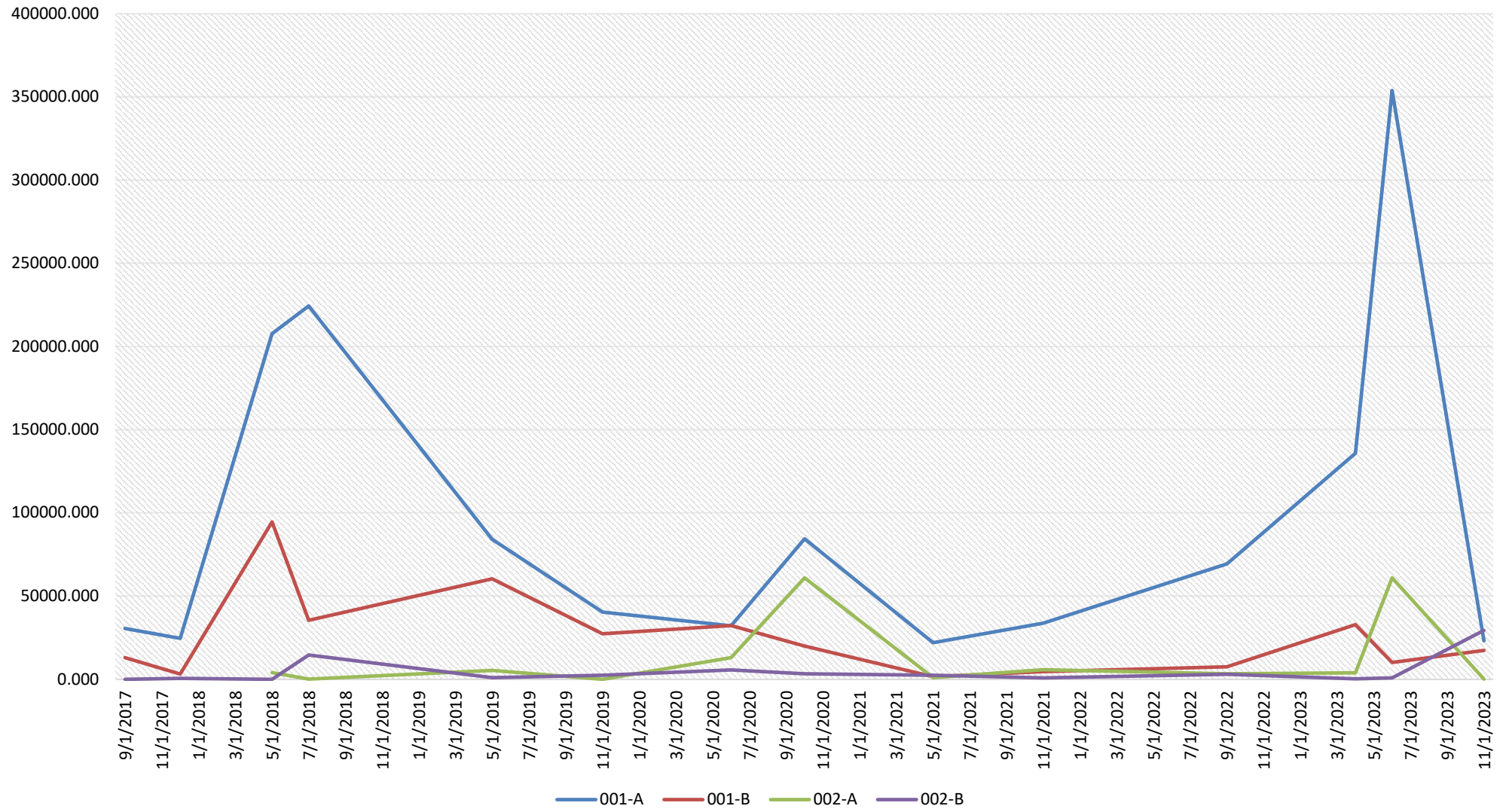
## Lead Mass Loading - LB/Day



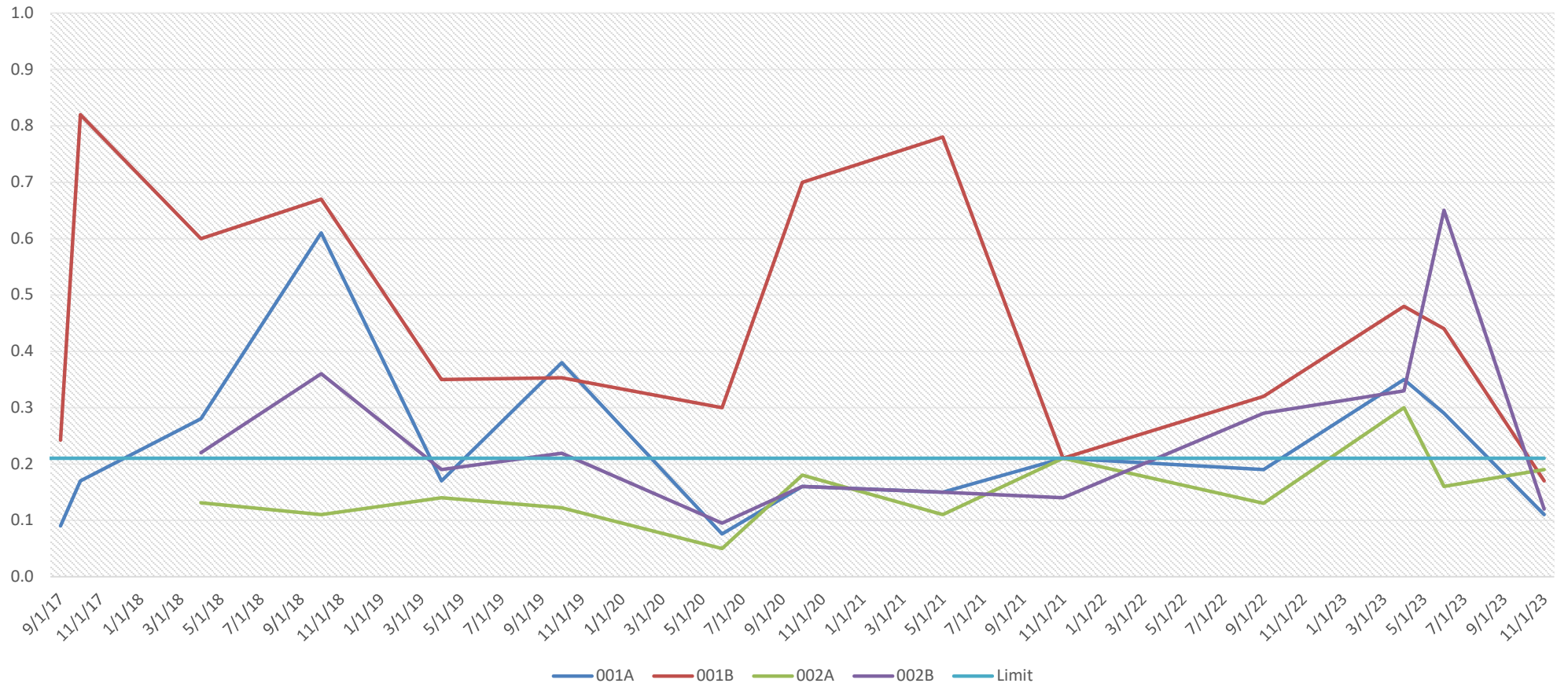
BSB MS4 TSS Conc mg/l



# TSS Mass Loading - LB/Day



BSB MS4 Zinc Conc mg/l



## Zinc Mass Loading - LB/Day

