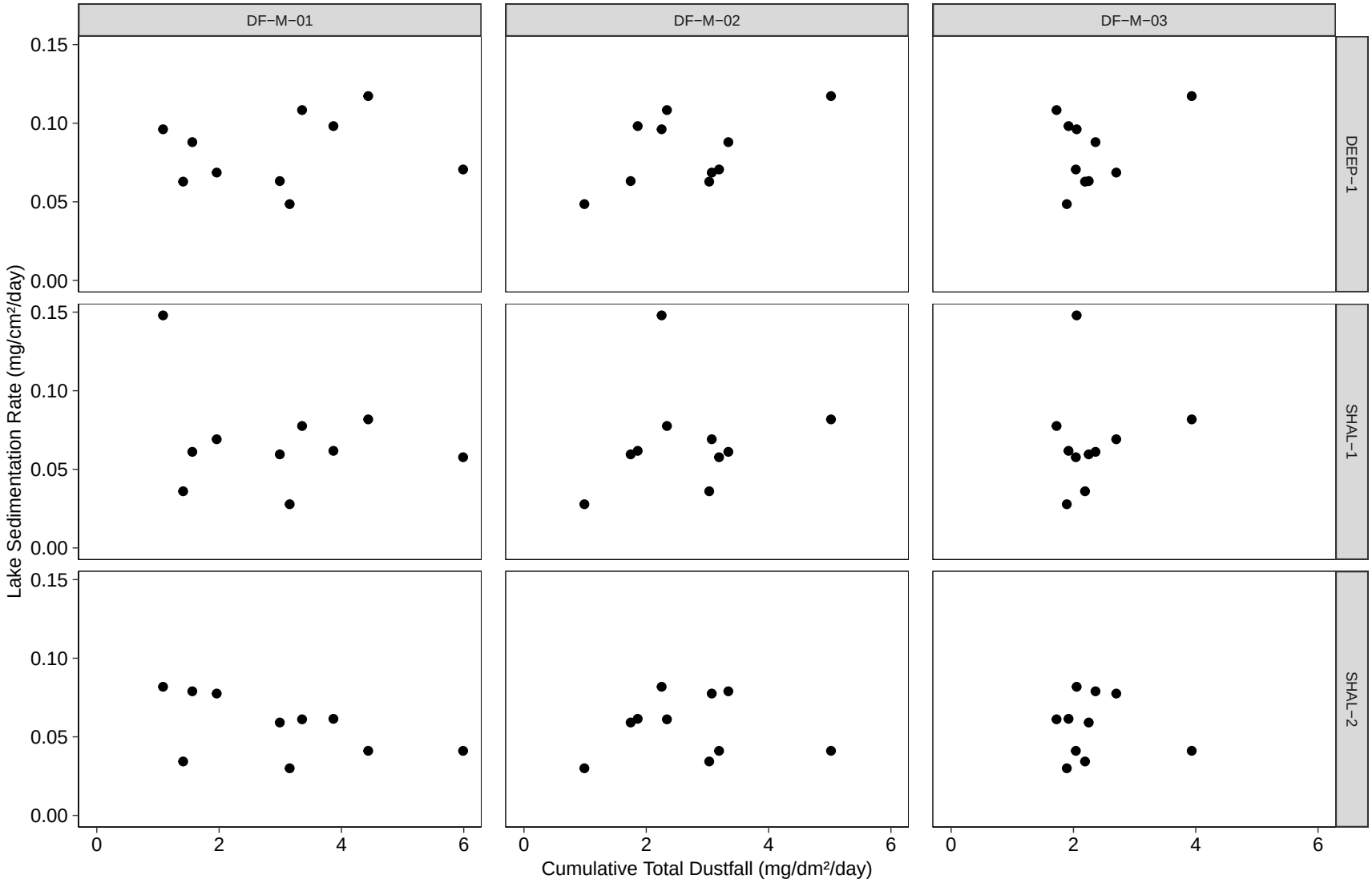

Figure A.4: Comparison of Total Dustfall (mg/dm²/day) to Sedimentation Rate and Sediment Accumulation Thickness Estimates at Sheardown Lake NW, Ice Cover Period, 2014 to 2025

Note: Dustfall data less than the lower reporting limit were replaced with the lower reporting limit for calculation of cumulative dustfall for a given period.

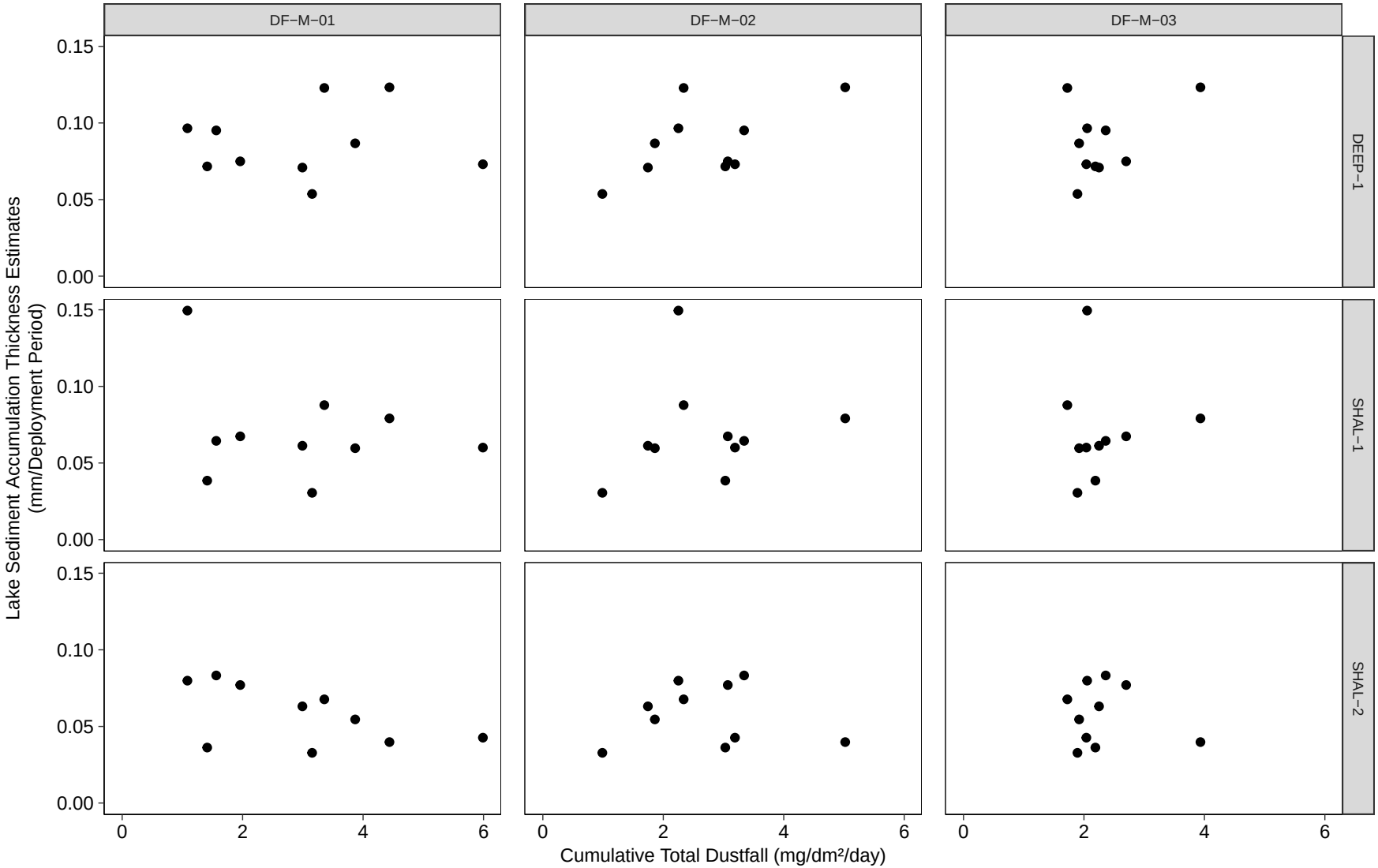

Figure A.4: Comparison of Total Dustfall (mg/dm²/day) to Sedimentation Rate and Sediment Accumulation Thickness Estimates at Sheardown Lake NW, Ice Cover Period, 2014 to 2025

Note: Dustfall data less than the lower reporting limit were replaced with the lower reporting limit for calculation of cumulative dustfall for a given period.

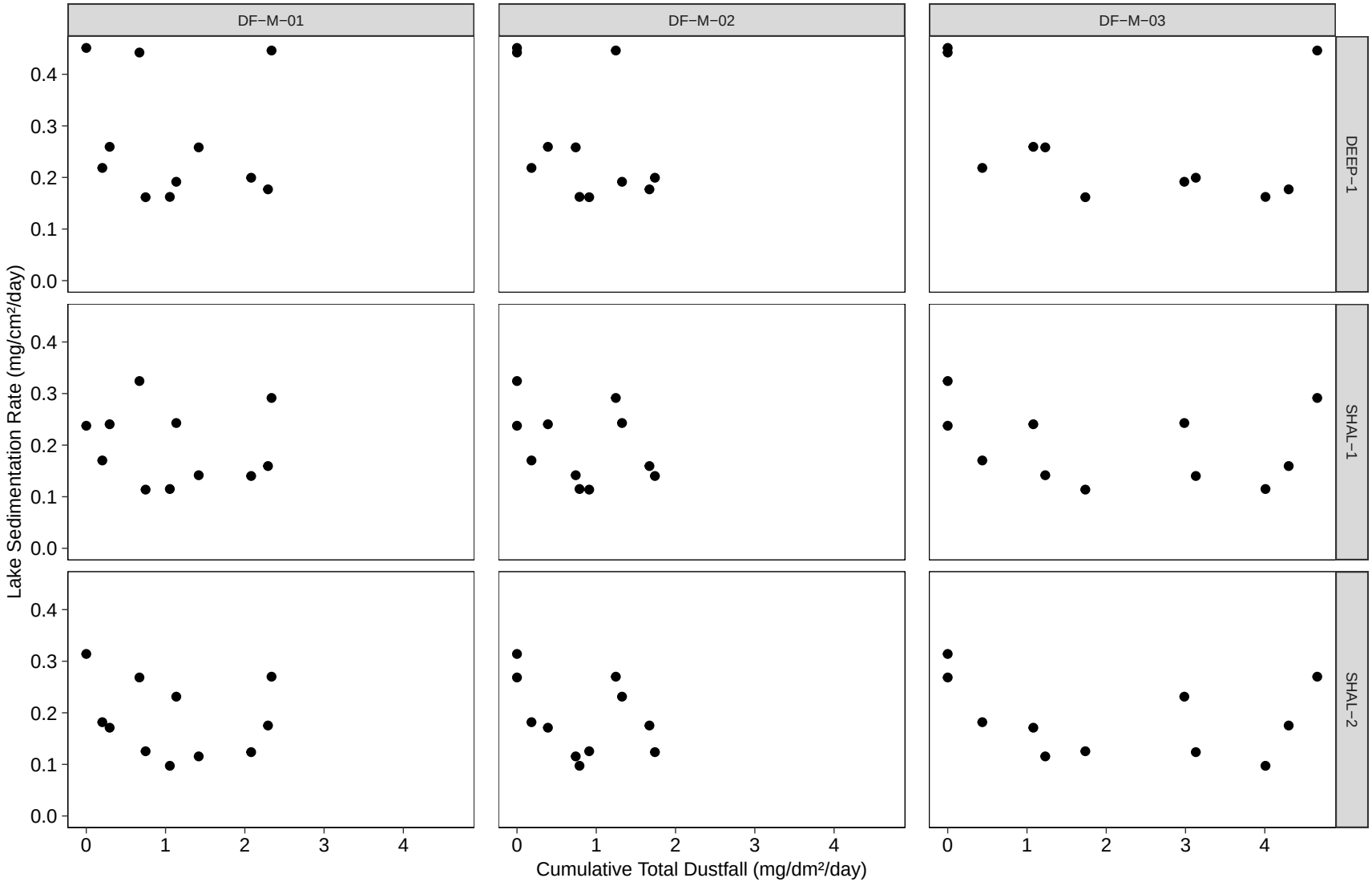

Figure A.5: Comparison of Total Dustfall (mg/dm²/day) to Sedimentation Rate and Sediment Accumulation Thickness Estimates at Sheardown Lake NW, Open Water Period, 2014 to 2025

Note: Dustfall data less than the lower reporting limit were replaced with the lower reporting limit for calculation of cumulative dustfall for a given period.

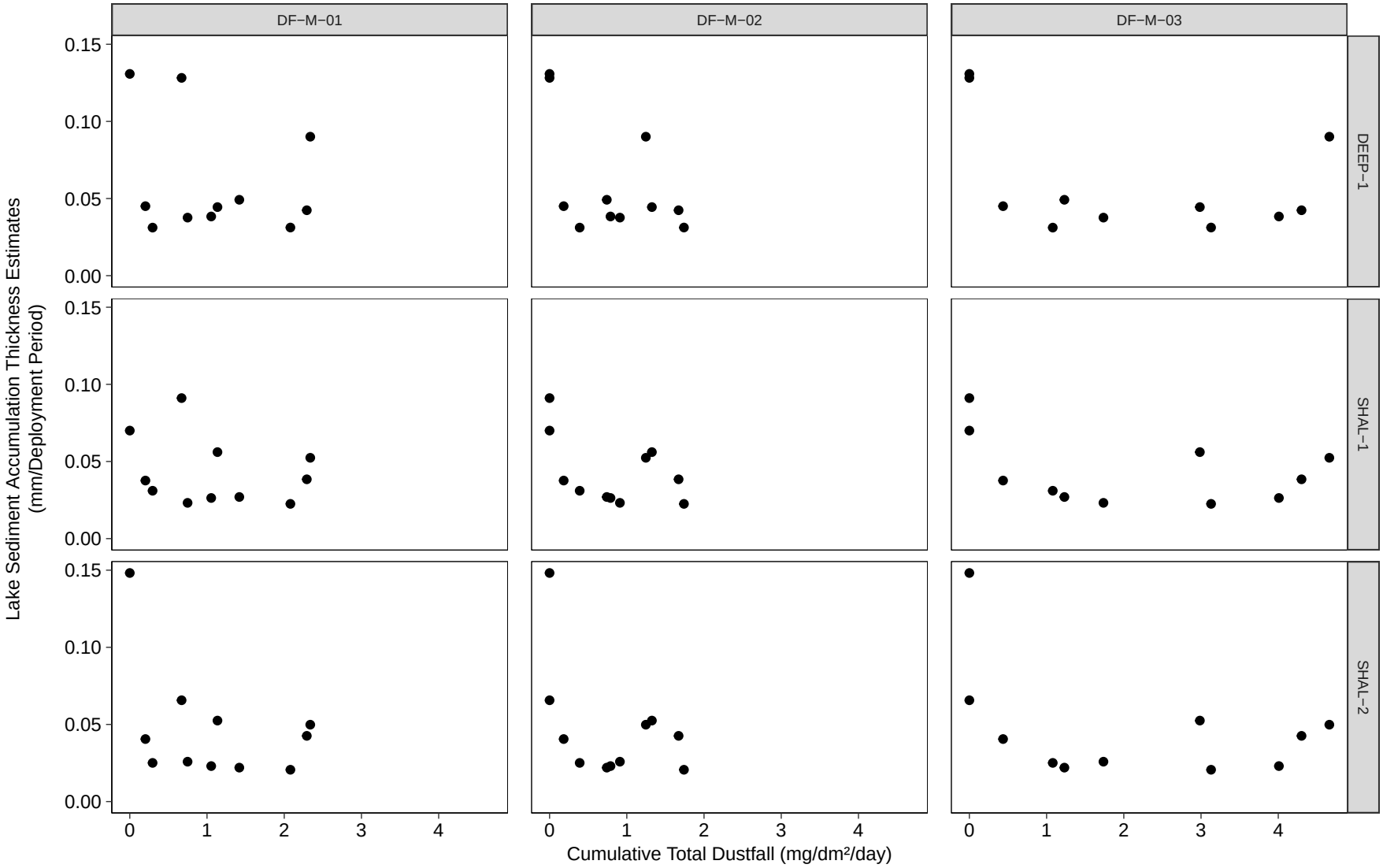

Figure A.5: Comparison of Total Dustfall (mg/dm²/day) to Sedimentation Rate and Sediment Accumulation Thickness Estimates at Sheardown Lake NW, Open Water Period, 2014 to 2025

Note: Dustfall data less than the lower reporting limit were replaced with the lower reporting limit for calculation of cumulative dustfall for a given period.

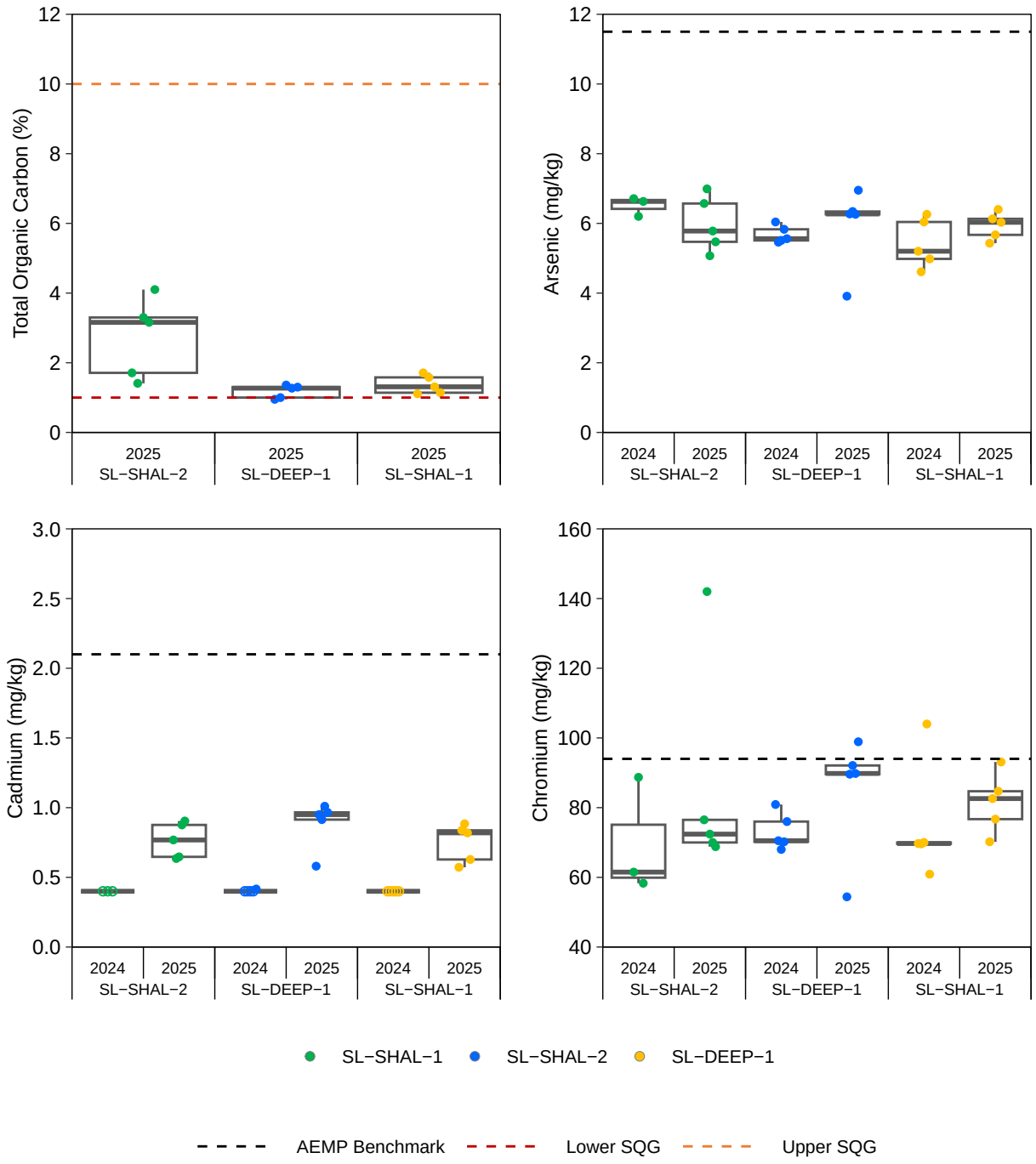

Figure A.6: Sediment Trap Material Chemistry During the Ice Cover Period, 2024 to 2025

Notes: Values below the laboratory reporting limit (LRL) were substituted with the LRL. Boxplots consist of all data for a given area throughout the ice cover period. AEMP = Aquatic Effects Monitoring Plan (Revision 2; Baffinland 2024). The total organic carbon sediment quality guidelines (SQG) are the Ontario Provincial SQG for the lowest effect level and severe effect level (OMOE 1993). The molybdenum and silver SQG are the lower and upper BC Working SQGs (BCMOE 2025).

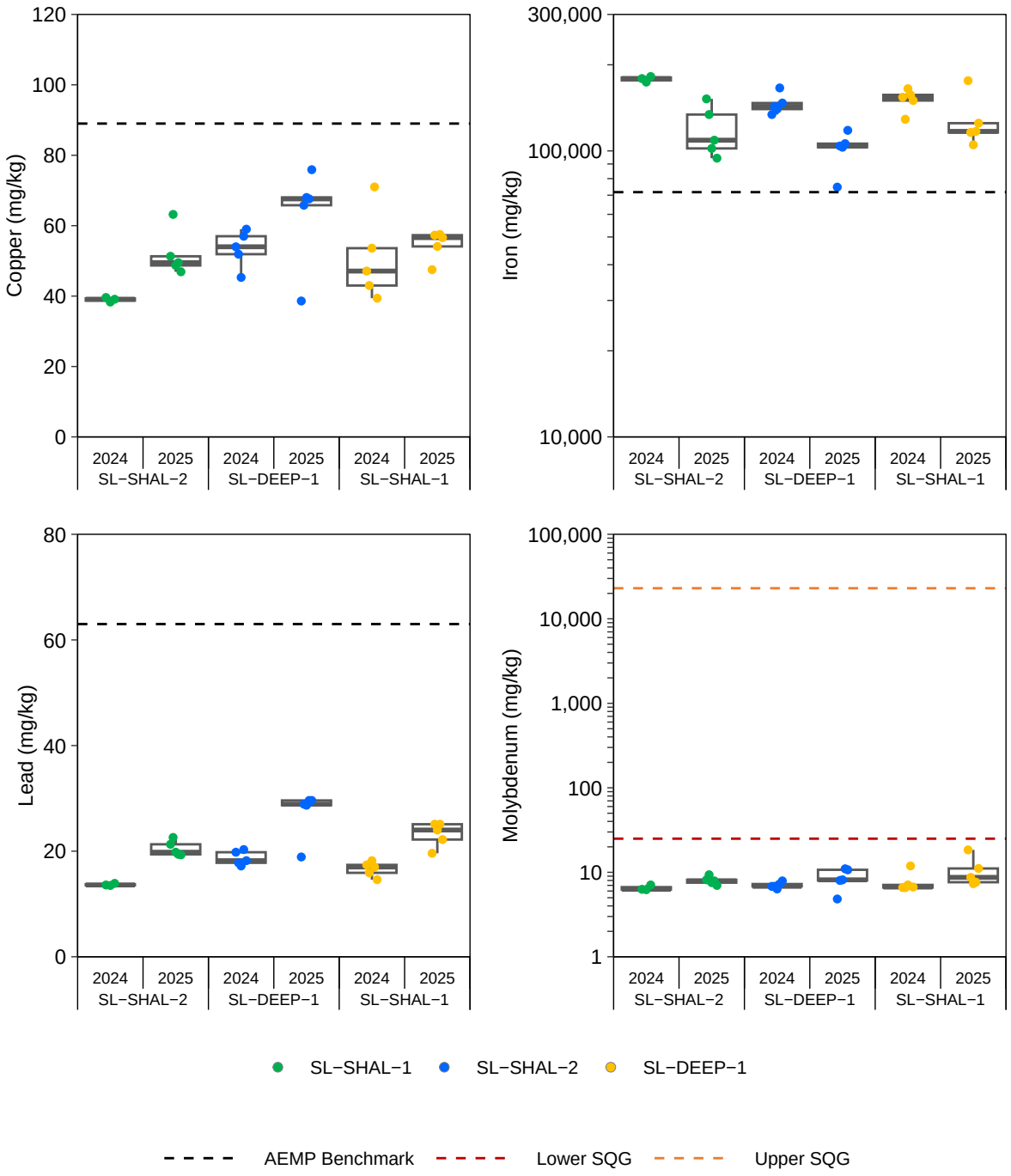

Figure A.6: Sediment Trap Material Chemistry During the Ice Cover Period, 2024 to 2025

Notes: Values below the laboratory reporting limit (LRL) were substituted with the LRL. Boxplots consist of all data for a given area throughout the ice cover period. AEMP = Aquatic Effects Monitoring Plan (Revision 2; Baffinland 2024). The total organic carbon sediment quality guidelines (SQG) are the Ontario Provincial SQG for the lowest effect level and severe effect level (OMOE 1993). The molybdenum and silver SQG are the lower and upper BC Working SQGs (BCMOE 2025).

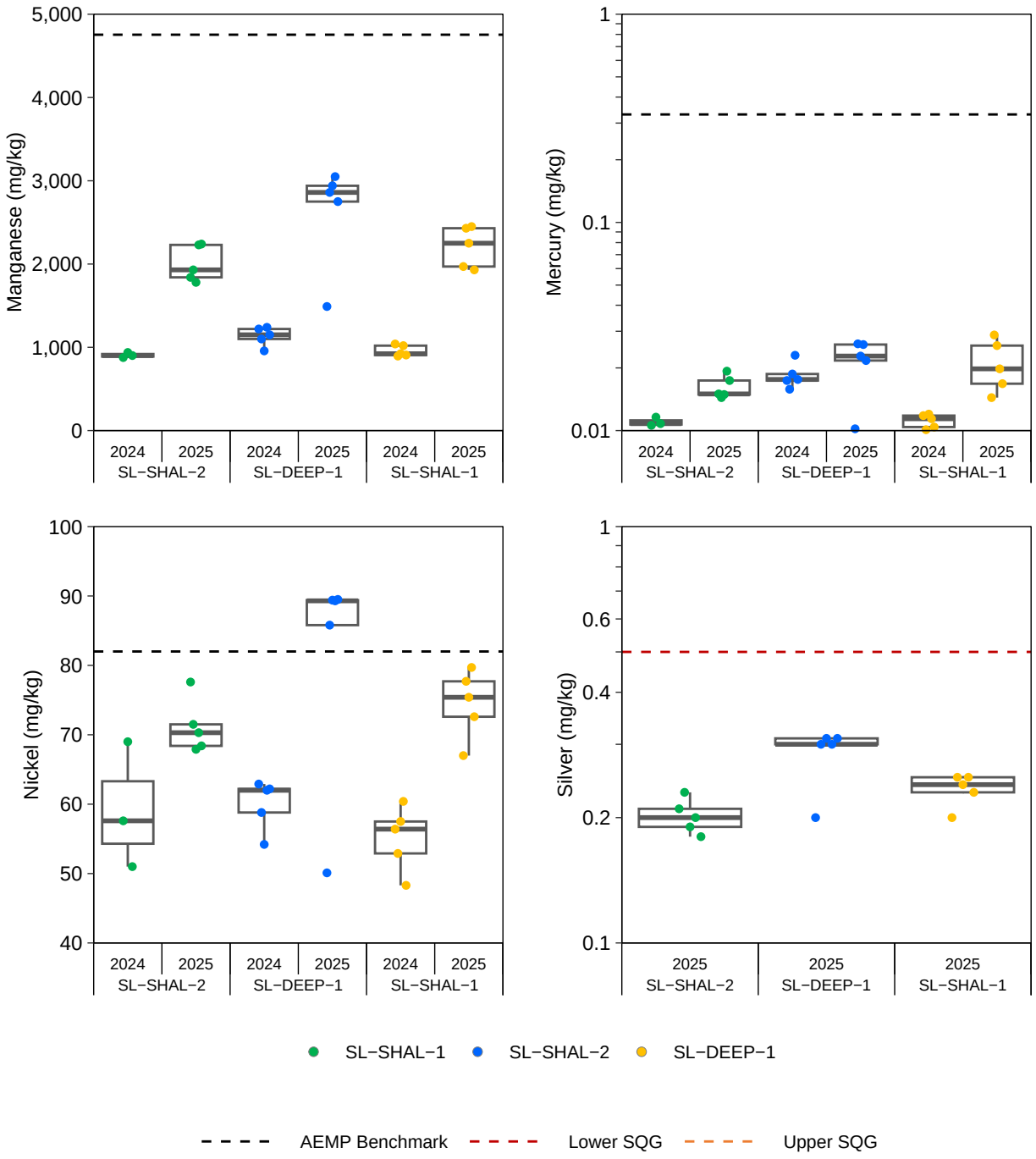

Figure A.6: Sediment Trap Material Chemistry During the Ice Cover Period, 2024 to 2025

Notes: Values below the laboratory reporting limit (LRL) were substituted with the LRL. Boxplots consist of all data for a given area throughout the ice cover period. AEMP = Aquatic Effects Monitoring Plan (Revision 2; Baffinland 2024). The total organic carbon sediment quality guidelines (SQG) are the Ontario Provincial SQG for the lowest effect level and severe effect level (OMOE 1993). The molybdenum and silver SQG are the lower and upper BC Working SQGs (BCMOE 2025).

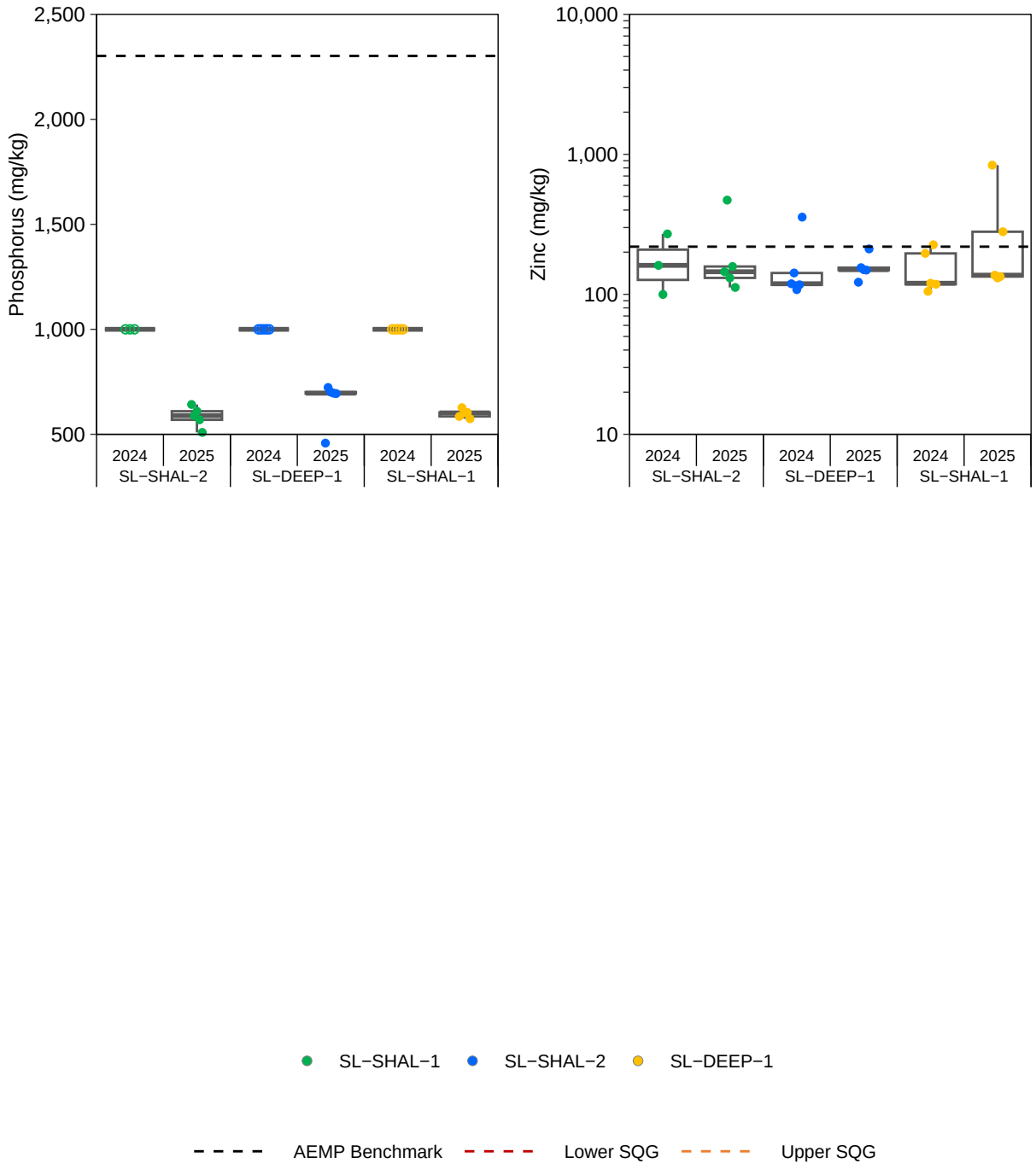

Figure A.6: Sediment Trap Material Chemistry During the Ice Cover Period, 2024 to 2025

Notes: Values below the laboratory reporting limit (LRL) were substituted with the LRL. Boxplots consist of all data for a given area throughout the ice cover period. AEMP = Aquatic Effects Monitoring Plan (Revision 2; Baffinland 2024). The total organic carbon sediment quality guidelines (SQG) are the Ontario Provincial SQG for the lowest effect level and severe effect level (OMOE 1993). The molybdenum and silver SQG are the lower and upper BC Working SQGs (BCMOE 2025).

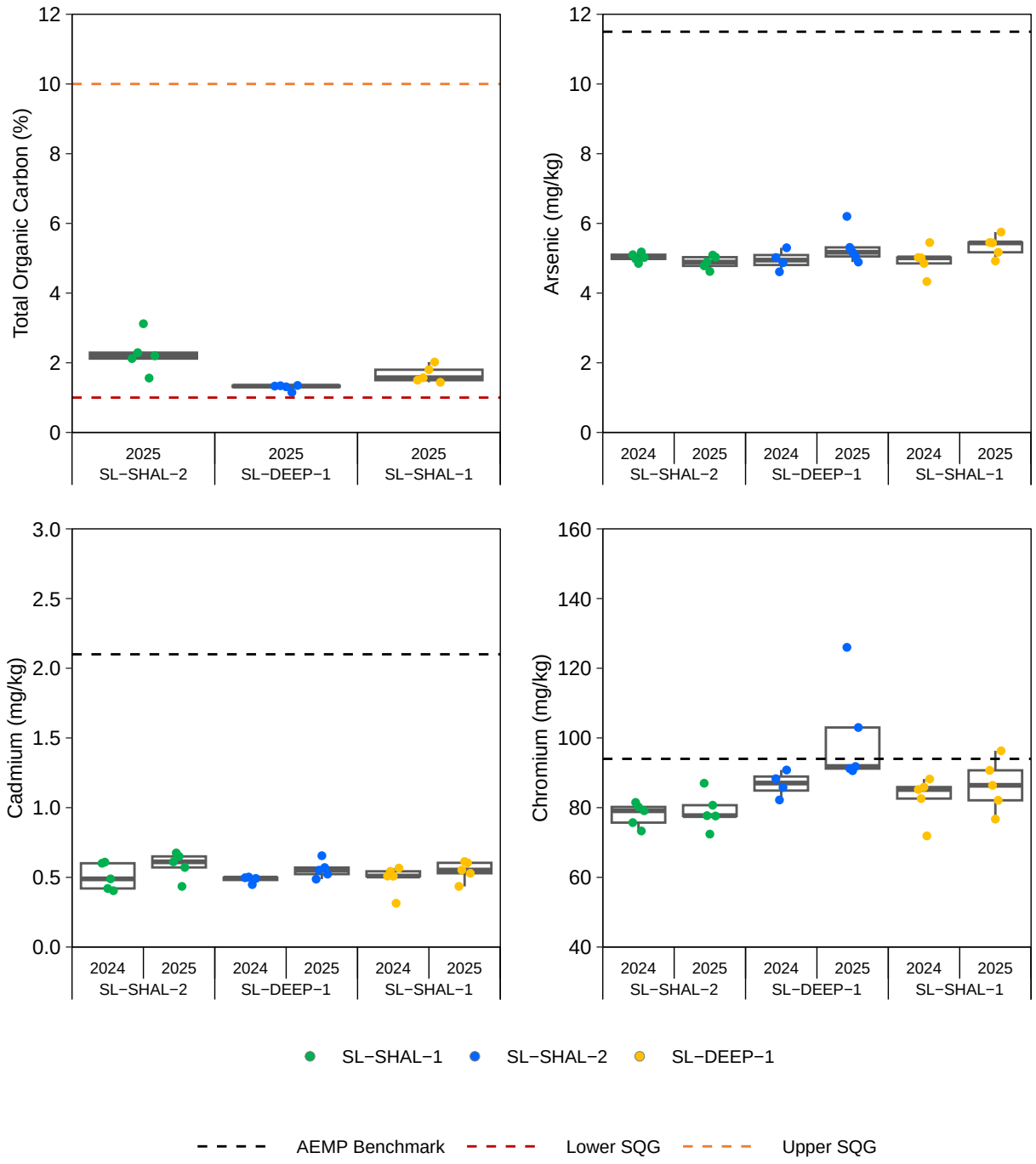

Figure A.7: Sediment Trap Material Chemistry During the Open Water Period, 2024 to 2025

Notes: Values below the laboratory reporting limit (LRL) were substituted with the LRL. Boxplots consist of all data for a given area throughout the open water period. AEMP = Aquatic Effects Monitoring Plan (Revision 2; Baffinland 2024). The total organic carbon sediment quality guidelines (SQG) are the Ontario Provincial SQG for the lowest effect level and severe effect level (OMOE 1993). The molybdenum and silver SQG are the lower and upper BC Working SQGs (BCMOE 2025).

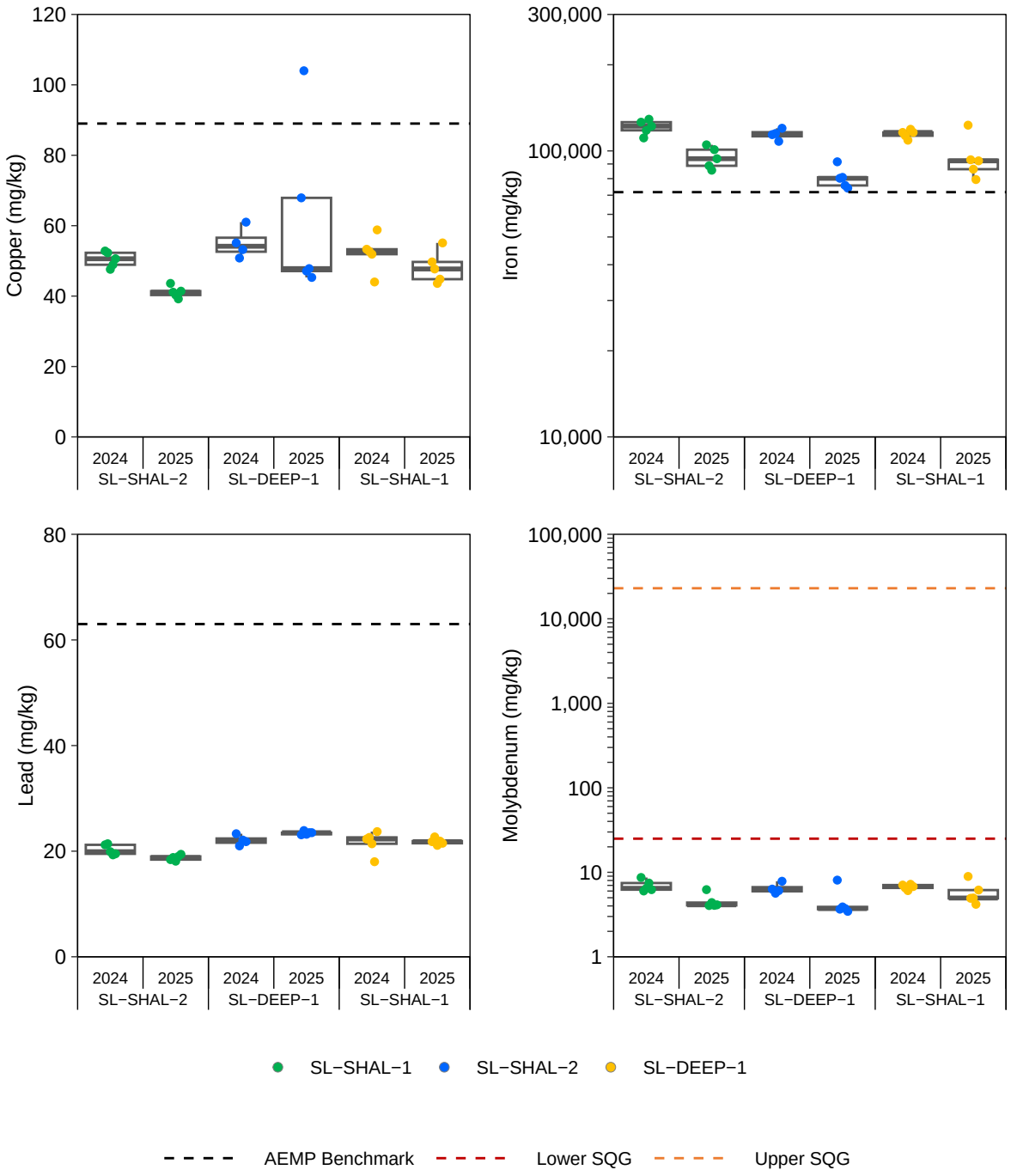

Figure A.7: Sediment Trap Material Chemistry During the Open Water Period, 2024 to 2025

Notes: Values below the laboratory reporting limit (LRL) were substituted with the LRL. Boxplots consist of all data for a given area throughout the open water period. AEMP = Aquatic Effects Monitoring Plan (Revision 2; Baffinland 2024). The total organic carbon sediment quality guidelines (SQG) are the Ontario Provincial SQG for the lowest effect level and severe effect level (OMOE 1993). The molybdenum and silver SQG are the lower and upper BC Working SQGs (BCMOE 2025).

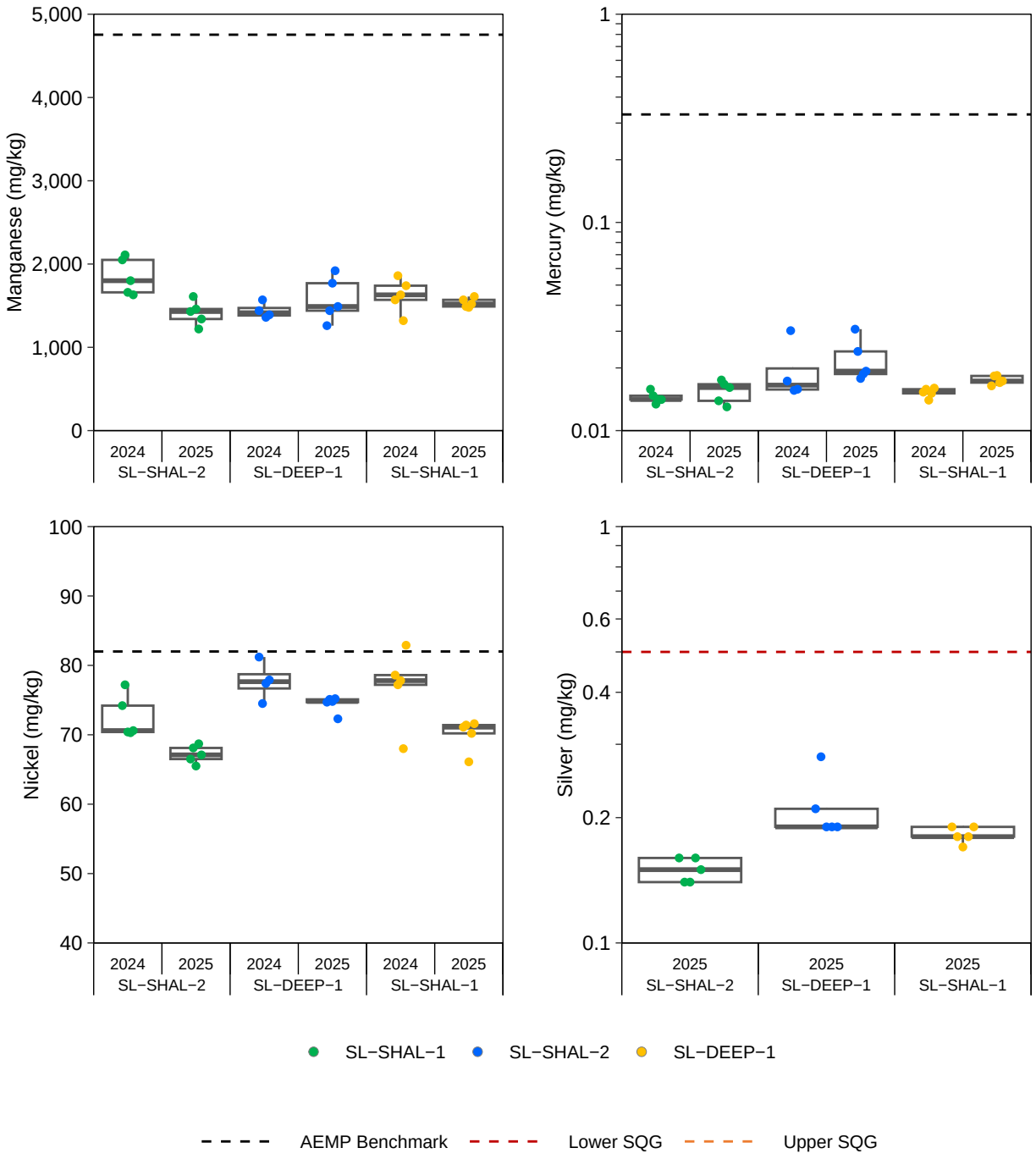

Figure A.7: Sediment Trap Material Chemistry During the Open Water Period, 2024 to 2025

Notes: Values below the laboratory reporting limit (LRL) were substituted with the LRL. Boxplots consist of all data for a given area throughout the open water period. AEMP = Aquatic Effects Monitoring Plan (Revision 2; Baffinland 2024). The total organic carbon sediment quality guidelines (SQG) are the Ontario Provincial SQG for the lowest effect level and severe effect level (OMOE 1993). The molybdenum and silver SQG are the lower and upper BC Working SQGs (BCMOE 2025).

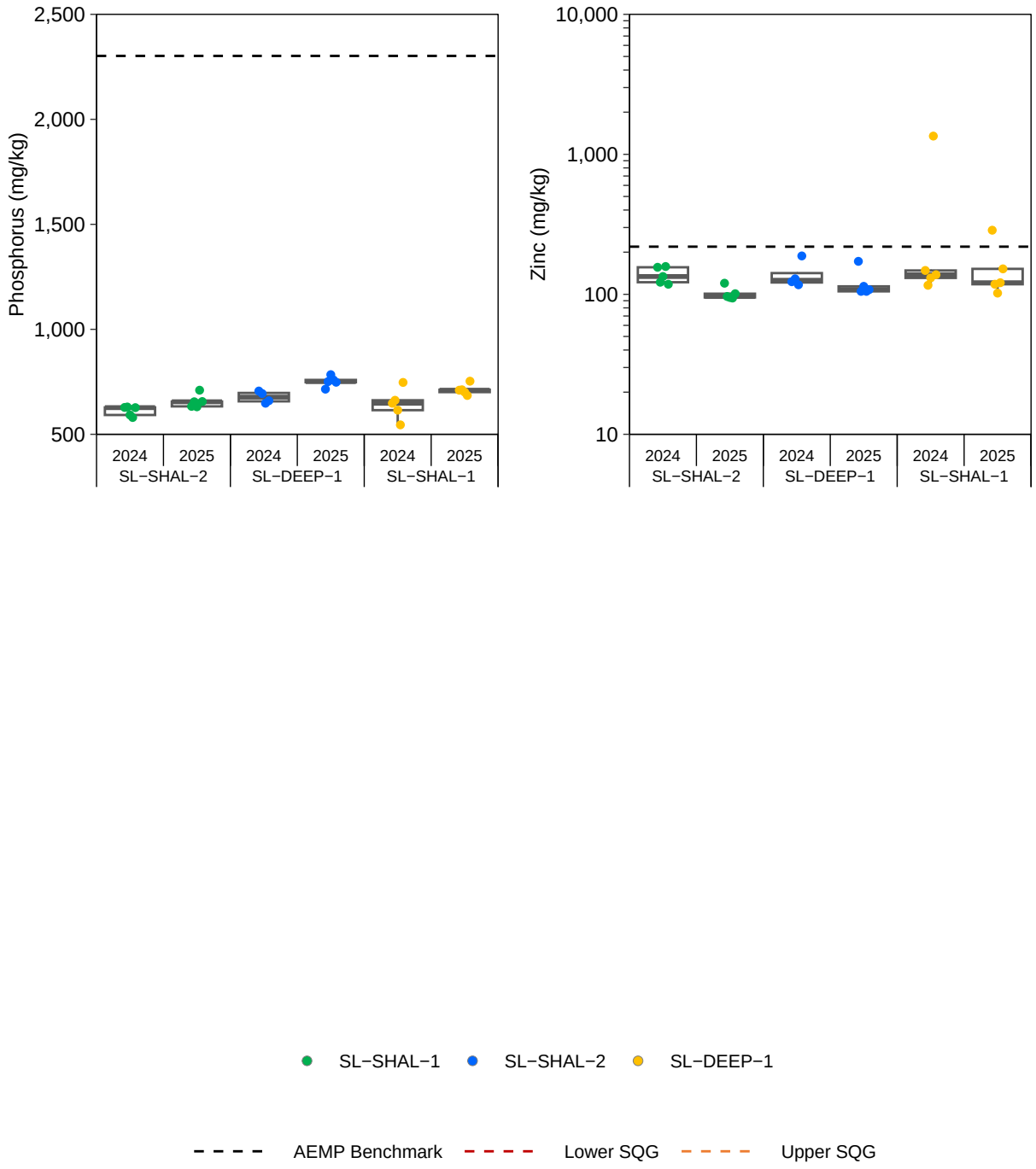

Figure A.7: Sediment Trap Material Chemistry During the Open Water Period, 2024 to 2025

Notes: Values below the laboratory reporting limit (LRL) were substituted with the LRL. Boxplots consist of all data for a given area throughout the open water period. AEMP = Aquatic Effects Monitoring Plan (Revision 2; Baffinland 2024). The total organic carbon sediment quality guidelines (SQG) are the Ontario Provincial SQG for the lowest effect level and severe effect level (OMOE 1993). The molybdenum and silver SQG are the lower and upper BC Working SQGs (BCMOE 2025).

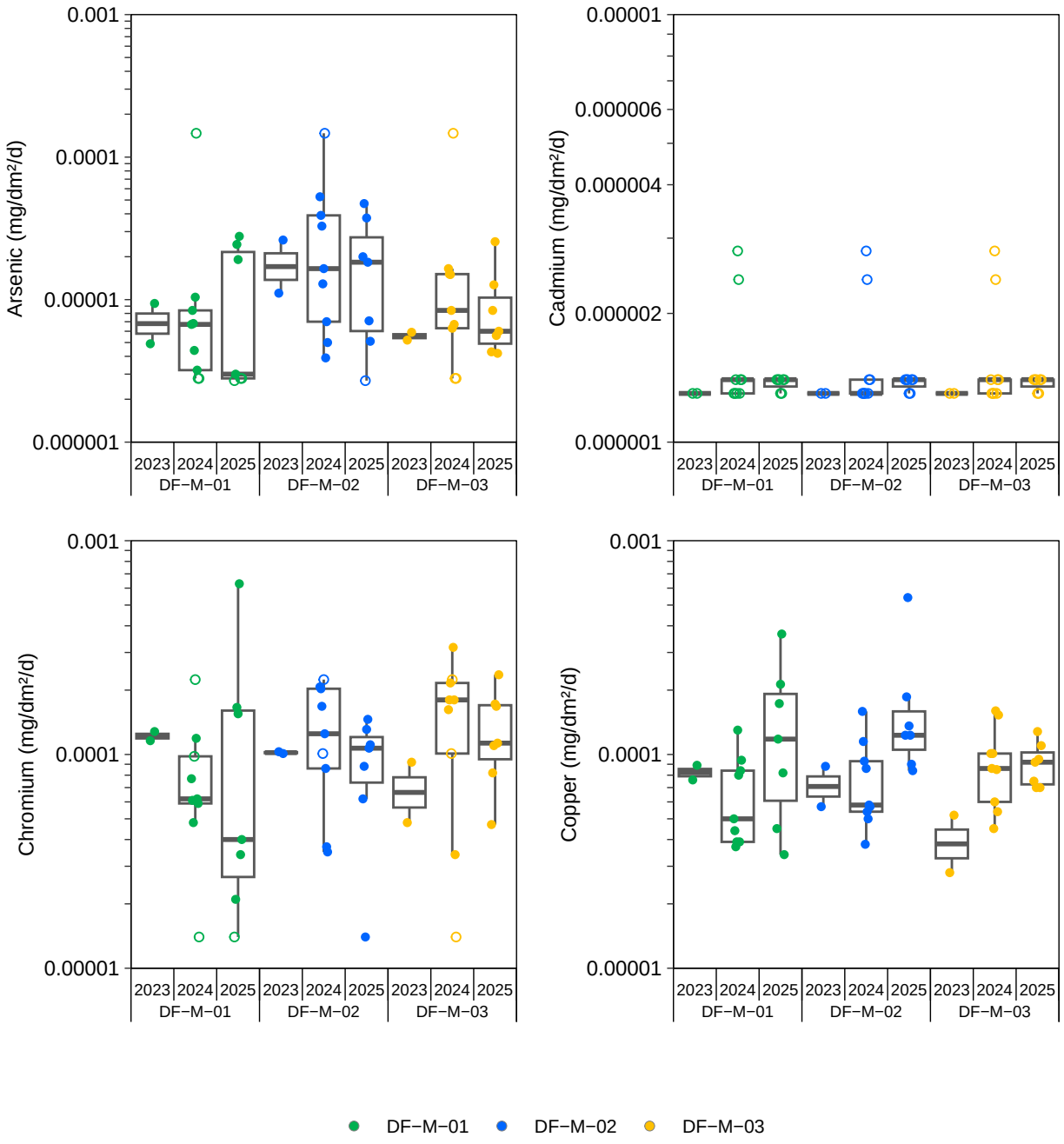

Figure A.8: Dustfall Chemistry During the Ice Cover Period, 2023 to 2025

Notes: Values below the laboratory reporting limit (LRL) were substituted with the LRL. Boxplots consist of all data for a given area throughout the ice cover period.

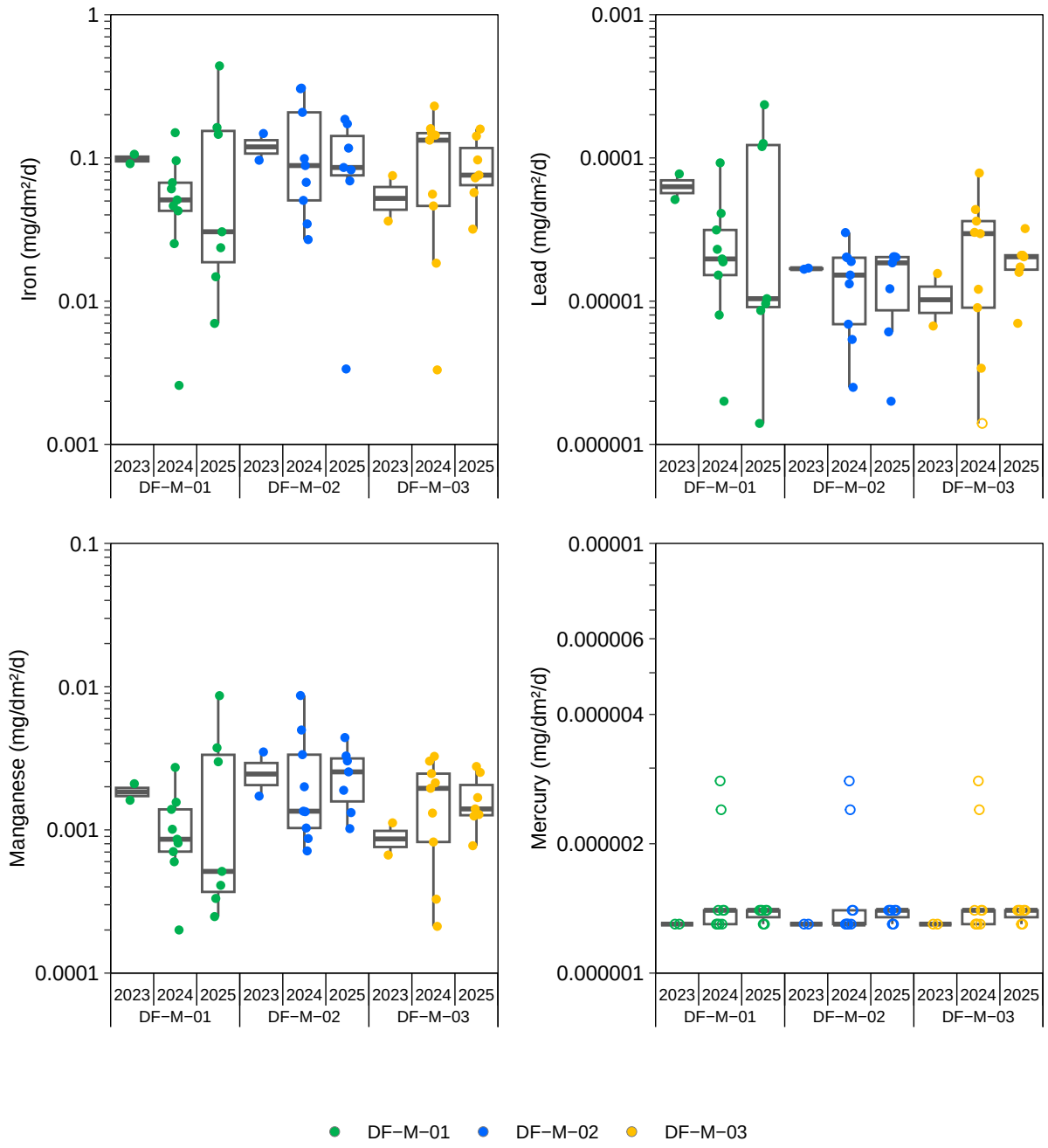

Figure A.8: Dustfall Chemistry During the Ice Cover Period, 2023 to 2025

Notes: Values below the laboratory reporting limit (LRL) were substituted with the LRL. Boxplots consist of all data for a given area throughout the ice cover period.

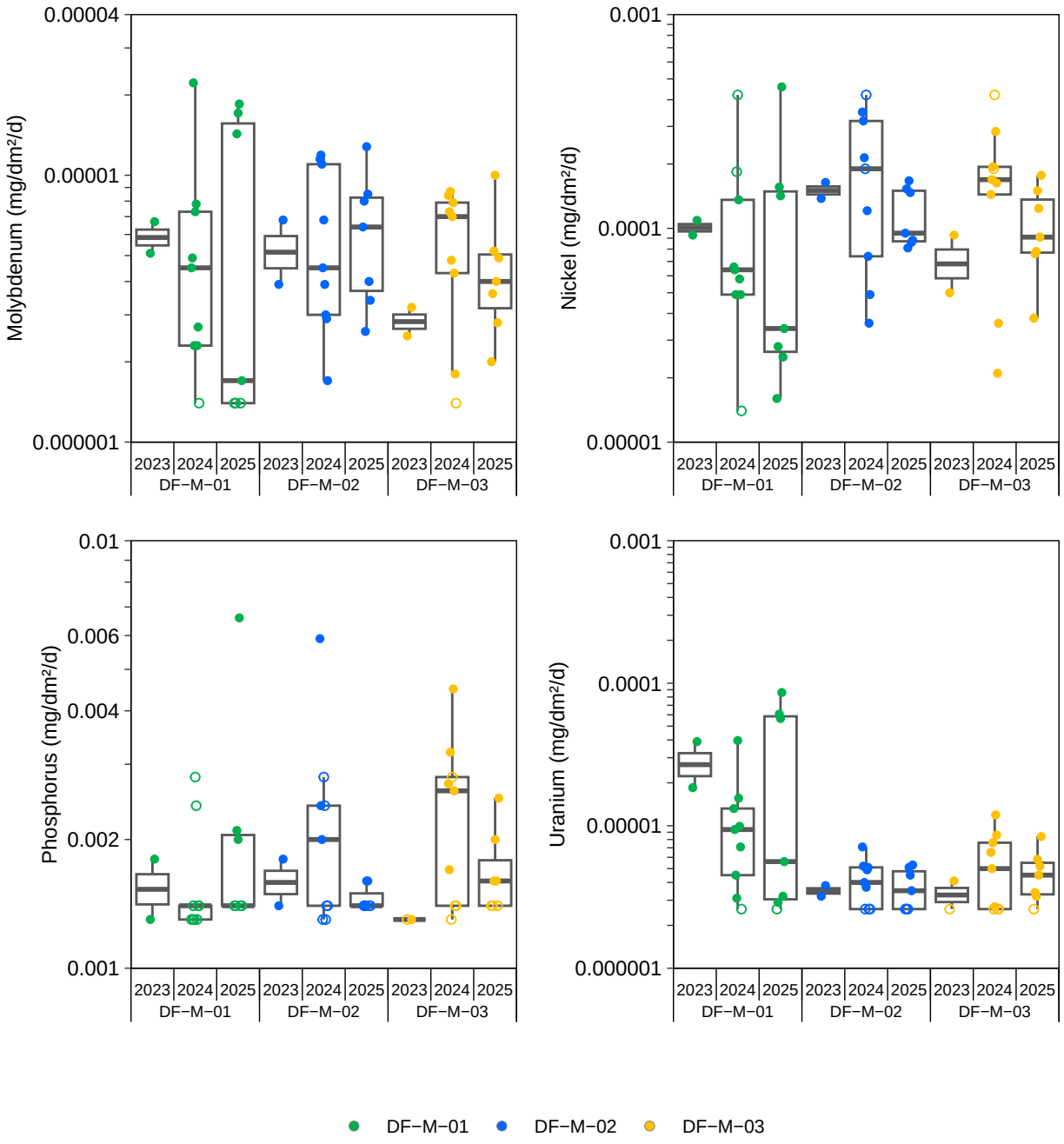

Figure A.8: Dustfall Chemistry During the Ice Cover Period, 2023 to 2025

Notes: Values below the laboratory reporting limit (LRL) were substituted with the LRL. Boxplots consist of all data for a given area throughout the ice cover period.

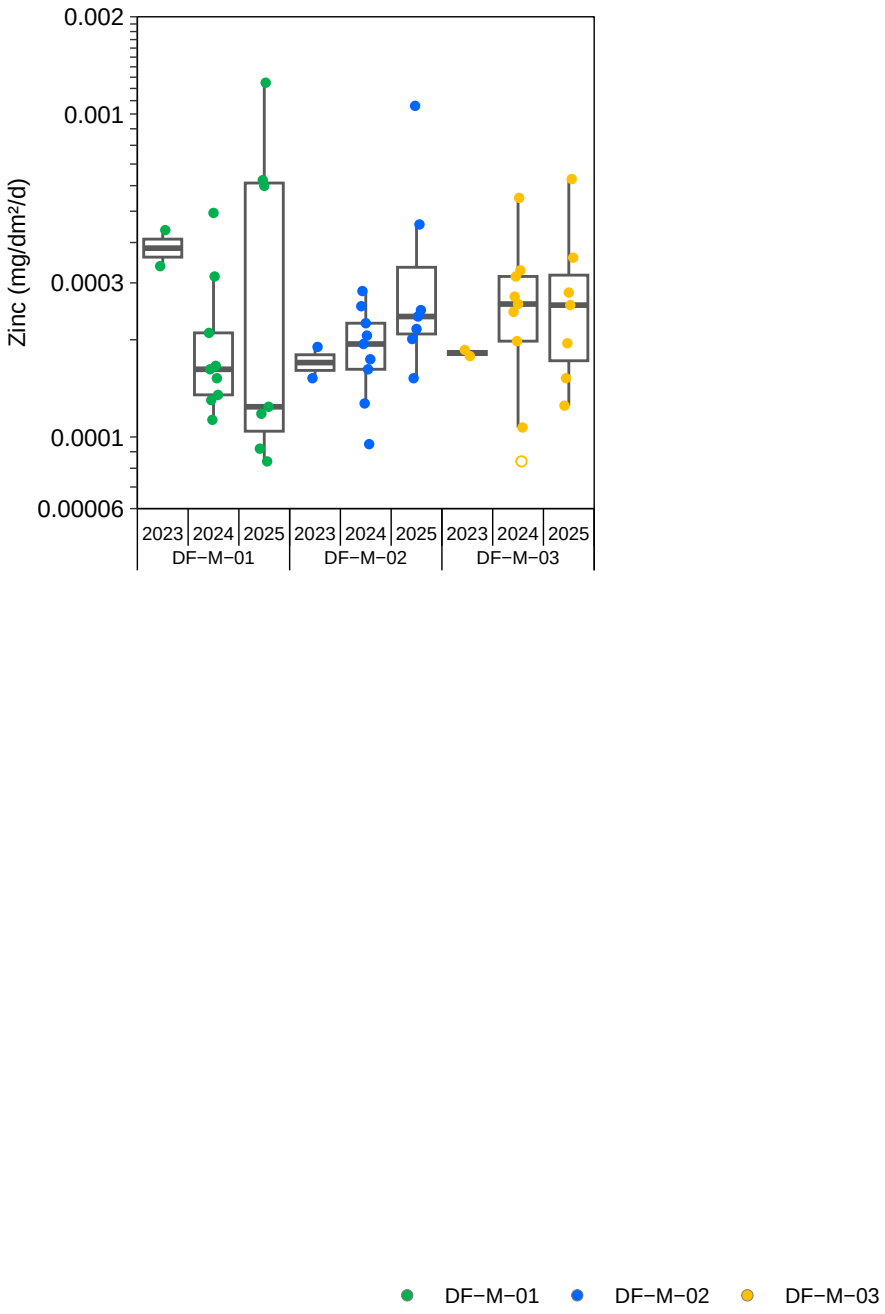

Figure A.8: Dustfall Chemistry During the Ice Cover Period, 2023 to 2025

Notes: Values below the laboratory reporting limit (LRL) were substituted with the LRL. Boxplots consist of all data for a given area throughout the ice cover period.

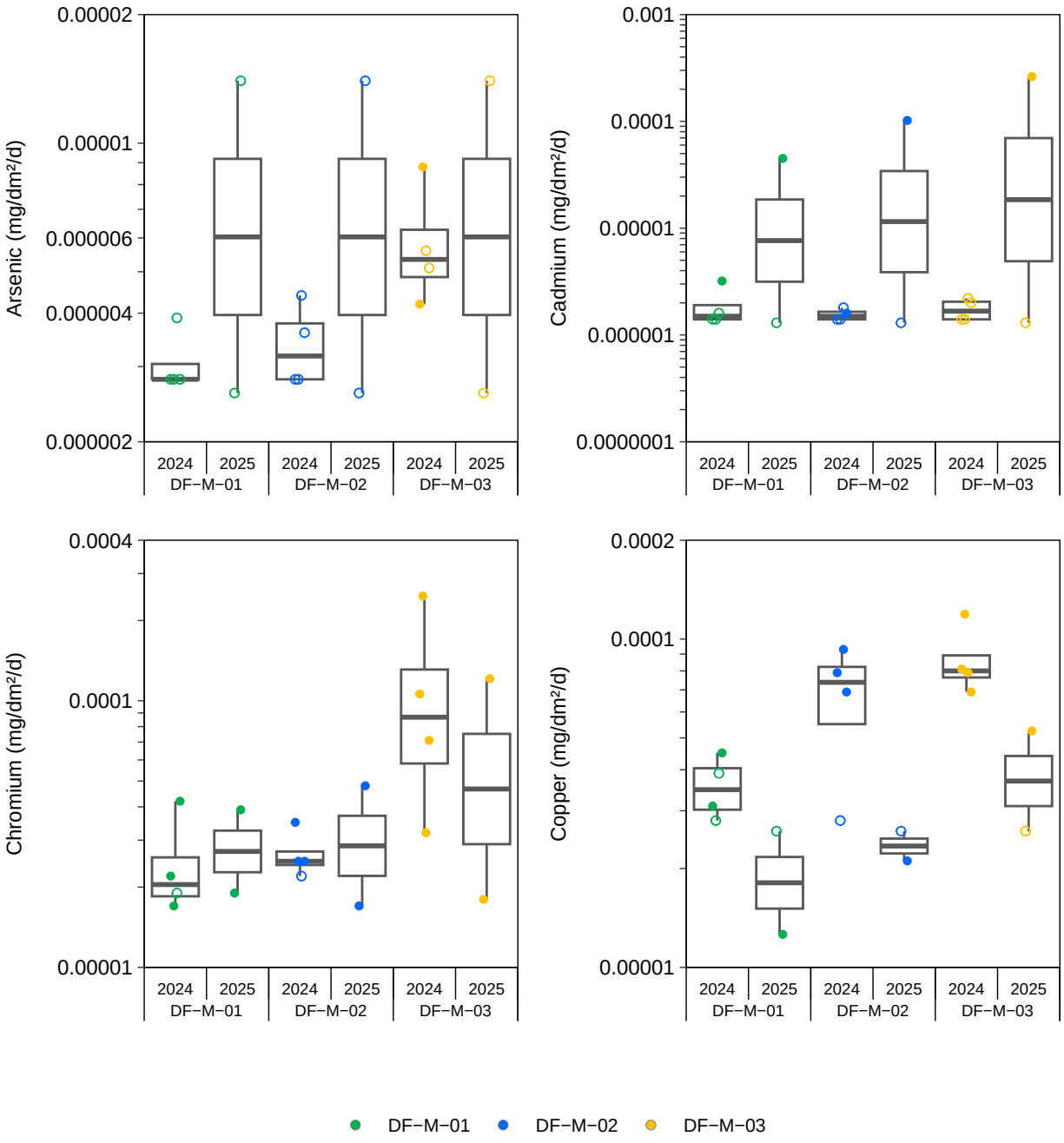

Figure A.9: Dustfall Chemistry During the Open Water Period, 2024 to 2025

Notes: Values below the laboratory reporting limit (LRL) were substituted with the LRL. Boxplots consist of all data for a given area throughout the open water period.

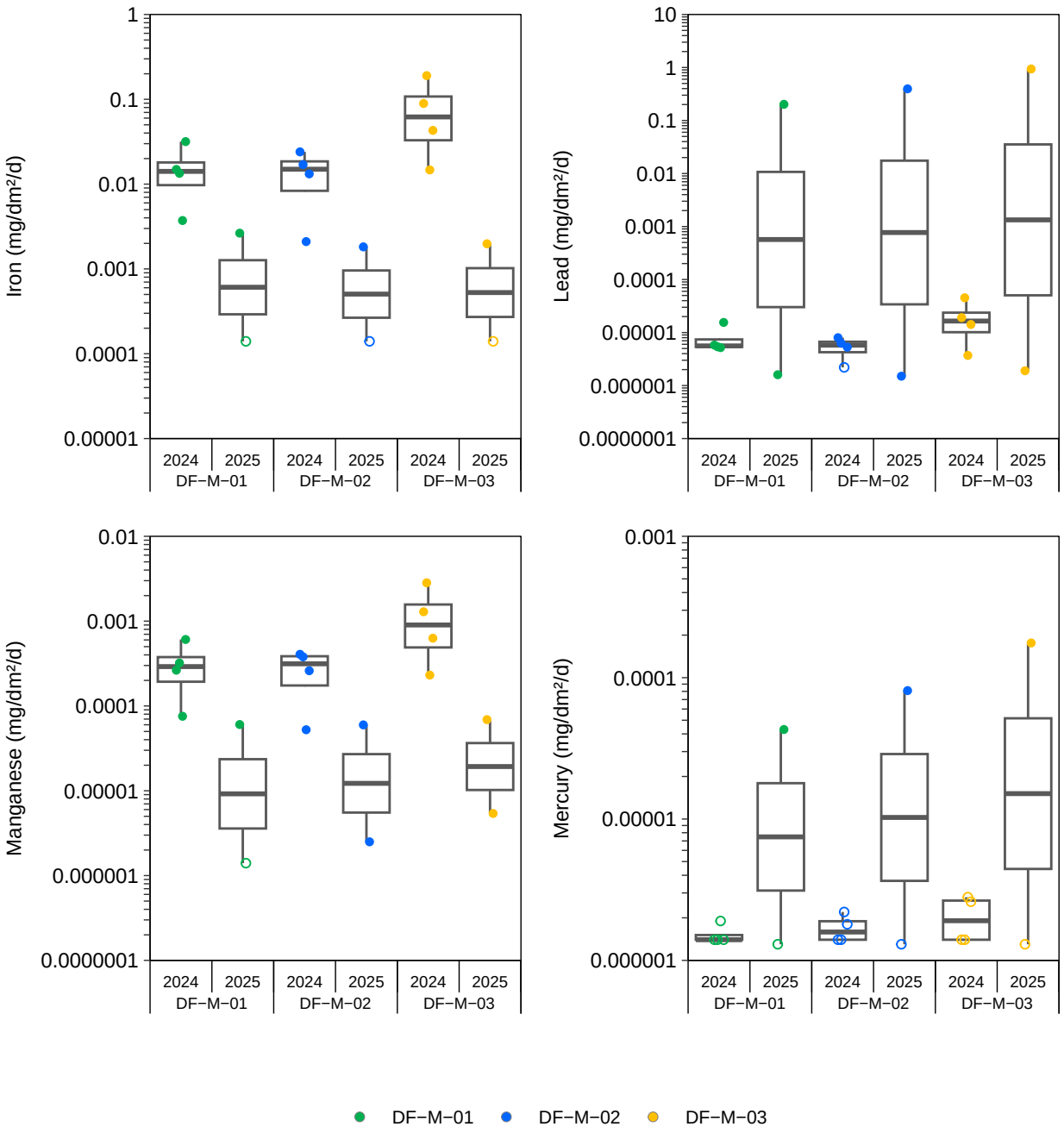

Figure A.9: Dustfall Chemistry During the Open Water Period, 2024 to 2025

Notes: Values below the laboratory reporting limit (LRL) were substituted with the LRL. Boxplots consist of all data for a given area throughout the open water period.

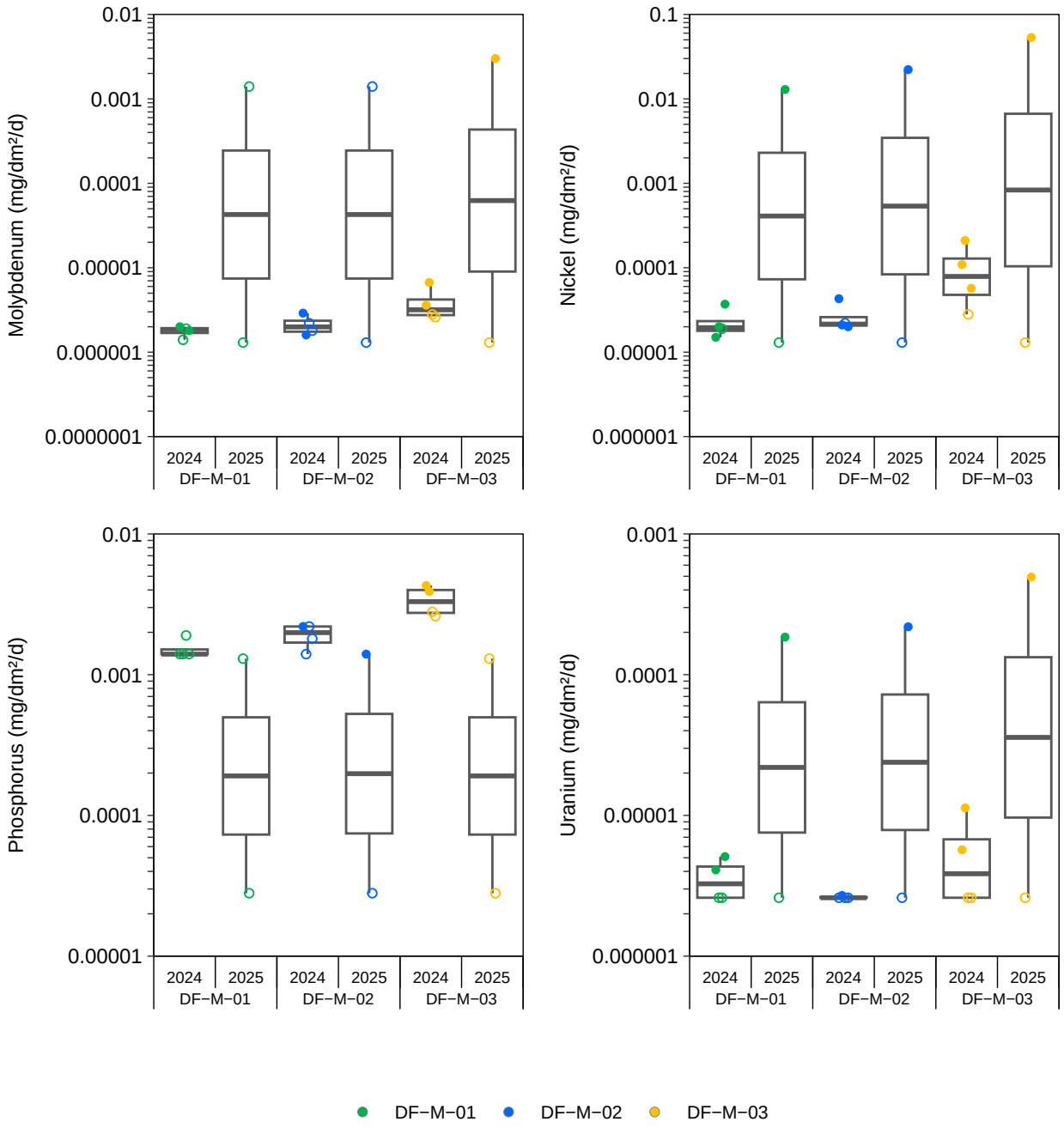

Figure A.9: Dustfall Chemistry During the Open Water Period, 2024 to 2025

Notes: Values below the laboratory reporting limit (LRL) were substituted with the LRL. Boxplots consist of all data for a given area throughout the open water period.

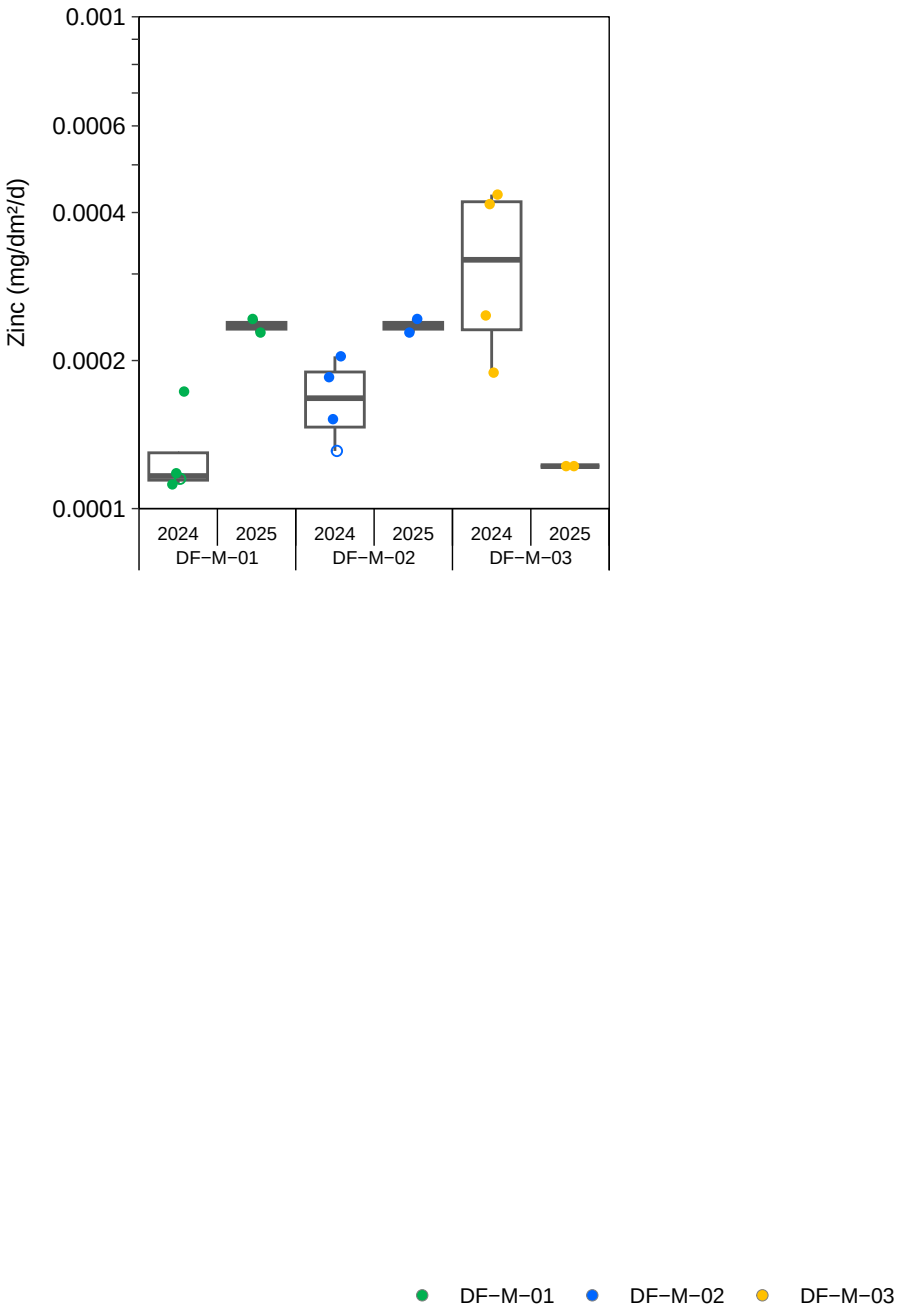

Figure A.9: Dustfall Chemistry During the Open Water Period, 2024 to 2025

Notes: Values below the laboratory reporting limit (LRL) were substituted with the LRL. Boxplots consist of all data for a given area throughout the open water period.

Table A.1: Sedimentation Rate Summary Statistics for Sheardown Lake Northwest (NW) Sediment Trap Monitoring Areas, Lake Sedimentation Monitoring Study, 2024 to 2025

Deployment Period	Area	Sample Size	Units	Mean	Standard Deviation	Standard Error	Minimum	Median	Maximum
Ice Cover 2024 to 2025	SL-SHAL-1	5	$mg/cm^2/day$	0.0618	0.00623	0.00279	0.0511	0.0646	0.0659
	SL-SHAL-2	4	$mg/cm^2/day$	0.0615	0.00824	0.00412	0.0491	0.0651	0.0664
	SL-DEEP-1	5	$mg/cm^2/day$	0.0982	0.0286	0.0128	0.0815	0.0880	0.149
Open Water 2025	SL-SHAL-1	5	$mg/cm^2/day$	0.238	0.0253	0.0113	0.213	0.224	0.270
	SL-SHAL-2	5	$mg/cm^2/day$	0.314	0.0102	0.00456	0.297	0.315	0.323
	SL-DEEP-1	5	$mg/cm^2/day$	0.451	0.0547	0.0245	0.363	0.471	0.494
Annual [a] October 2024 to October 2025	SL-SHAL-1	10	$mg/cm^2/y$	36.1	2.19	0.69	31.4	35.5	39.9
	SL-SHAL-2	9	$mg/cm^2/y$	42.4	4.92	1.64	39.6	42.5	44.3
	SL-DEEP-1	10	$mg/cm^2/y$	62.9	7.67	2.43	52.8	62.5	76.1
	Average (all areas)	**3**	$mg/cm^2/y$	**47.1**	**14.0**	**8.09**	**36.1**	**42.5**	**76.1**

Note: Sample size corresponds to the number of stations (sediment trap replicates). Stations with missing ice cover and open water data were removed from the annual minimum and maximum sedimentation rates.

[a] Annual sedimentation rates are the sum of the rates over the ice cover and open water periods.

Table A.2: Temporal and Spatial Comparison of Sedimentation Rates (mg/cm^2/day) During Ice Cover Periods, Sheardown Lake Northwest (NW), Lake Sedimentation Monitoring Study, 2013 to 2025

ANOVA Model					Year	Temporal Comparison									Spatial Comparison		
						Sedimentation Rate (mg/cm^2/day)			Temporal Difference [a]			MOD Relative to Baseline Year (2013 to 2014) [b]			MOD [c]		
Season	Trans-formation	Area	Year	Area x Year		SHAL-1	SHAL-2	DEEP-1	SHAL-1	SHAL-2	DEEP-1	SHAL-1	SHAL-2	DEEP-1	SHAL-1 vs SHAL-2	SHAL-1 vs DEEP-1	SHAL-2 vs DEEP-1
Ice Cover	rank	<0.001	<0.001	<0.001	2013 to 2014	0.0335	0.0280	0.0485	E	D	E	-	-	-	ns	ns	73.2
					2014 to 2015	0.0188	0.0293	0.0474	E	D	E	ns	ns	ns	ns	ns	ns
					2015 to 2016	0.0619	0.0821	0.0822	D	A	ABC	84.7	193	69.4	32.7	32.8	ns
					2016 to 2017	0.0766	0.0598	0.118	ABC	C	A	129	114	143	-22.0	ns	96.8
					2017 to 2018	0.0577	0.0355	0.0730	CDE	CD	BCD	ns	ns	50.6	ns	ns	106
					2018 to 2019	0.0371	0.0312	0.0641	E	D	DE	ns	ns	ns	ns	72.5	106
					2019 to 2020	0.0568	0.0603	0.0626	D	C	DE	69.6	115	ns	ns	ns	ns
					2021 to 2022	0.0822	0.0387	0.0812	AB	CD	ABC	145	ns	67.4	-52.9	ns	110
					2022 to 2023	0.113	0.0813	0.0947	A	A	A	236	190	95.4	-27.8	ns	ns
					2023 to 2024	0.0693	0.0706	0.0671	BCD	AB	CD	107	152	38.4	ns	ns	ns
					2024 to 2025	0.0646	0.0651	0.0880	CD	BC	AB	92.8	133	81.4	ns	36.2	35.1

P-value <0.05.
Indicates significant difference and later year lower relative to baseline or area B lower relative to area A.
Indicates significant difference and later year higher relative to baseline or area B higher relative to area A.

Notes: ANOVA = Analysis of Variance. mg/cm^2/day = milligrams per square centimetre per day. MOD = Magnitude of Difference. < = less than. - = no data. ns = not significant.

[a] Deployment periods denoted by the same letter do not differ significantly based on tests conducted for each individual area.

[b] MOD is calculated as $((year_{recent} - baseline\ year) / baseline\ year)*100$.

[c] MOD calculated as $((area_B - area_A) / area_A)*100$.

Table A.3: Temporal and Spatial Comparison of Sedimentation Rates (mg/cm^2/day) During Open Water Periods, Sheardown Lake Northwest (NW), Lake Sedimentation Monitoring Study, 2014 to 2025

ANOVA Model					Year	Temporal Comparison									Spatial Comparison		
						Sedimentation Rate (mg/cm^2/day)			Temporal Difference [a]			MOD Relative to Baseline Year (2014) [b]			MOD [c]		
Season	Trans-formation	Area	Year	Area x Year		SHAL-1	SHAL-2	DEEP-1	SHAL-1	SHAL-2	DEEP-1	SHAL-1	SHAL-2	DEEP-1	SHAL-1 vs SHAL-2	SHAL-1 vs DEEP-1	SHAL-2 vs DEEP-1
Open Water	rank	<0.001	<0.001	<0.001	2014	0.0890	0.120	0.133	C	BCD	D	-	-	-	35.4	ns	ns
					2015	0.142	0.134	0.198	BC	CD	BC	60.0	ns	49.0	ns	39.2	47.8
					2016	0.140	0.116	0.257	BC	CD	AB	ns	ns	93.3	ns	83.2	121
					2017	0.234	0.162	0.265	A	BC	AB	162	ns	99.4	-30.8	ns	64.0
					2018	0.170	0.160	0.215	ABC	BC	BC	ns	ns	61.6	ns	ns	ns
					2019	0.113	0.0927	0.164	BC	D	CD	ns	-23.0	ns	ns	44.4	76.6
					2020	0.110	0.109	0.163	BC	CD	CD	ns	ns	ns	ns	48.1	ns
					2021	0.161	0.187	0.175	B	BC	BCD	81.0	ns	31.9	ns	ns	ns
					2022	0.236	0.224	0.183	A	AB	BC	165	85.6	37.5	ns	ns	ns
					2023	0.275	0.280	0.463	A	A	A	209	132	248	ns	ns	ns
					2024	0.308	0.251	0.448	A	A	A	246	108	237	ns	ns	ns
					2025	0.224	0.315	0.471	A	A	A	151	161	254	40.9	111	ns

P-value <0.05.
Indicates significant difference and later year lower relative to baseline or area B lower relative to area A.
Indicates significant difference and later year higher relative to baseline or area B higher relative to area A.

Notes: ANOVA = Analysis of Variance. mg/cm^2/day = milligrams per square centimetre per day. MOD = Magnitude of Difference. < = less than. - = no data. ns = not significant.

[a] Deployment periods denoted by the same letter do not differ significantly based on tests conducted for each individual area.

[b] MOD is calculated as (($year_{recent}$ - baseline year) / baseline year)*100.

[c] MOD calculated as (($area_B$ - $area_A$) / $area_A$)*100.

Table A.4: Statistical Comparison of Sedimentation Rate (mg/cm^2/day) Among Seasons (Ice Cover and Open Water) at Sheardown Lake Northwest (NW) Sediment Trap Monitoring Areas, 2024 to 2025

Area	Overall 2-group Comparison					
	Statistical Test [a]	Transformation	Measure of Central Tendency		P-value	MOD [b]
			Open Water	Ice Cover		
SL-SHAL-1	t-test (equal)	none	0.238	0.0618	0.001	285
SL-SHAL-2	M-W	rank	0.315	0.0651	0.016	384
SL-DEEP-1	t-test (equal)	none	0.451	0.0982	0.001	360

Significant difference between study areas based on p-value <0.05.
P-value <0.05 and positive MOD (open water > ice cover).
P-value <0.05 and negative MOD (open water < ice cover).

Notes: MOD = Magnitude of Difference. < = less than. > = greater than. The measure of central tendency (MCT) is the arithmetic mean for non-transformed data, geometric mean for $\log_{10}$ transformed data, and the median for rank-transformed data.

[a] Statistical tests include paired t-test (for unequal or equal variance) and Mann-Whitney (M-W) pair-wise tests.

[b] MOD = ((Open Water - Ice Cover)/Ice Cover)*100.

Table A.5: Sediment Accumulation Thickness Estimate (mm) Summary Statistics for Sheardown Lake Northwest (NW), Lake Sedimentation Monitoring Study, 2024 to 2025

Deployment Period	Area	Sample Size	Mean	Standard Deviation	Standard Error	Minimum	Median	Maximum	Accumulation During the Open Water Period (%) [a]
Ice Cover 2024 to 2025	SL-SHAL-1	5	0.0597	0.00588	0.00263	0.0496	0.0628	0.0634	-
	SL-SHAL-2	4	0.0546	0.00735	0.00368	0.0435	0.0582	0.0584	-
	SL-DEEP-1	5	0.0867	0.0248	0.0111	0.0725	0.0780	0.131	-
Open Water 2025	SL-SHAL-1	5	0.0700	0.00823	0.00368	0.0634	0.0647	0.0802	-
	SL-SHAL-2	5	0.148	0.00644	0.00288	0.137	0.151	0.153	-
	SL-DEEP-1	5	0.131	0.0161	0.00720	0.104	0.135	0.143	-
Annual September 2024 to October 2025	SL-SHAL-1	10	0.130	0.00868	0.00274	0.113	0.128	0.144	54.0
	SL-SHAL-2	9	0.203	0.0498	0.0166	0.181	0.209	0.211	73.1
	SL-DEEP-1	10	0.217	0.0304	0.00963	0.176	0.213	0.274	60.1
	Average (all areas)	**3**	**0.183**	**0.0470**	**0.0271**	**0.113**	**0.209**	**0.274**	**70.8**

Notes: "-" = data not reported. Sample size corresponds to the number of stations (sediment trap replicates). Average sediment accumulation thickness estimates during the ice cover and open water periods were calculated from the mean of ice cover and open water sediment accumulation thickness estimates for each sediment monitoring area.

[a] The proportion of estimated sediment accumulated for SHAL-1, SHAL-2, and DEEP-1 during the 2025 open water period was calculated as a percentage of the quotient of the sediment accumulation thickness estimates during the open water period to the annual sediment accumulation thickness estimates.

Table A.6: Temporal and Spatial Comparison of Sediment Accumulation Thickness Estimates (mm) During Ice Cover Periods, Sheardown Lake Northwest (NW) Lake Sedimentation Monitoring Study, 2014 to 2025

ANOVA Model					Year	Temporal Comparison									Spatial Comparison		
						Accumulation Rate (mm/Deployment Period)			Temporal Difference [a]			MOD Relative to Baseline Year (2014 to 2015) [b]			MOD [c]		
Season	Trans-formation	Area	Year	Area x Year		SHAL-1	SHAL-2	DEEP-1	SHAL-1	SHAL-2	DEEP-1	SHAL-1	SHAL-2	DEEP-1	SHAL-1 vs SHAL-2	SHAL-1 vs DEEP-1	SHAL-2 vs DEEP-1
Ice Cover	rank	<0.001	<0.001	<0.001	2014 to 2015	0.0207	0.0320	0.0524	D	F	F	-	-	-	ns	ns	ns
					2015 to 2016	0.0652	0.0866	0.0869	C	A	ABC	215	171	65.9	32.7	33.2	ns
					2016 to 2017	0.0863	0.0693	0.132	AB	BCD	A	316	116	152	-19.7	ns	90.4
					2017 to 2018	0.0601	0.0368	0.0756	BCD	EF	CDE	ns	ns	44.4	ns	ns	106
					2018 to 2019	0.0402	0.0328	0.0722	D	F	DE	ns	ns	37.9	ns	79.6	120
					2019 to 2020	0.0587	0.0642	0.0700	CD	CDE	E	183	101	33.6	ns	19.2	ns
					2021 to 2022	0.0794	0.0378	0.0859	AB	EF	ABCD	283	ns	64.0	-52.3	ns	127
					2022 to 2023	0.114	0.0790	0.0947	A	AB	AB	449	147	80.9	-30.5	ns	19.9
					2023 to 2024	0.0673	0.0697	0.0740	BC	ABC	BCDE	224	118	41.3	ns	ns	ns
					2024 to 2025	0.0628	0.0582	0.0780	CD	DEF	ABCDE	ns	ns	49.0	ns	24.3	34.2

P-value <0.05.

Indicates significant difference and later year lower relative to baseline or area B lower relative to area A.

Indicates significant difference and later year higher relative to baseline or area B higher relative to area A.

Notes: ANOVA = Analysis of Variance. Mm = millimetres. MOD = Magnitude of Difference. < = less than. - = no data. ns = not significant. Median accumulation rate values are presented for each year for each area because data were rank-transformed before analysis.

[a] Deployment periods denoted by the same letter do not differ significantly based on tests conducted for each individual area.

[b] MOD is calculated as $((year_{recent} - baseline\ year) / baseline\ year)*100$.

[c] MOD calculated as $((station_B - station_A) / station_A)*100$.

Table A.7: Temporal and Spatial Comparison of Sediment Accumulation Thickness Estimates (mm) During Open Water Periods, Sheardown Lake Northwest (NW), Lake Sedimentation Monitoring Study, 2015 to 2025

ANOVA Model					Year	Temporal Comparison									Spatial Comparison		
						Accumulation Rate (mm/Deployment Period)			Temporal Difference [a]			MOD Relative to Baseline Year (2015) [b]			MOD [c]		
Season	Trans-formation	Area	Year	Area x Year		SHAL-1	SHAL-2	DEEP-1	SHAL-1	SHAL-2	DEEP-1	SHAL-1	SHAL-2	DEEP-1	SHAL-1 vs SHAL-2	SHAL-1 vs DEEP-1	SHAL-2 vs DEEP-1
Open Water	rank	<0.001	<0.001	<0.001	2015	0.0223	0.0223	0.0310	D	D	F	-	-	-	ns	39.3	38.8
					2016	0.0267	0.0222	0.0490	CD	D	BC	ns	ns	57.9	ns	83.2	121
					2017	0.0293	0.0256	0.0319	CD	D	EF	31.8	ns	ns	ns	ns	ns
					2018	0.0376	0.0360	0.0473	BCD	C	CD	69.1	61.0	52.4	ns	ns	ns
					2019	0.0272	0.0202	0.0378	D	D	DEF	ns	ns	ns	ns	39.3	87.1
					2020	0.0223	0.0226	0.0383	D	D	DEF	ns	ns	ns	ns	71.7	69.8
					2022	0.0542	0.0493	0.0426	AB	BC	CD	144	120	37.2	ns	ns	ns
					2023	0.0491	0.0515	0.0941	AB	BC	AB	120	130	203	ns	91.6	82.7
					2024	0.0907	0.0648	0.126	A	B	A	308	190	307	ns	ns	94.8
					2025	0.0647	0.151	0.135	A	A	A	191	576	335	134	ns	ns

P-value <0.05.

Indicates significant difference and later year lower relative to baseline or area B lower relative to area A.

Indicates significant difference and later year higher relative to baseline or area B higher relative to area A.

Notes: ANOVA = Analysis of Variance. Mm = millimetres. MOD = Magnitude of Difference. < = less than. - = no data. ns = not significant. Median accumulation rate values are presented for each year for each area because data were rank-transformed before analysis.

[a] Deployment periods denoted by the same letter do not differ significantly based on tests conducted for each individual area.

[b] MOD is calculated as $((year_{recent} - baseline\ year) / baseline\ year)*100$.

[c] MOD calculated as $((station_B - station_A) / station_A)*100$.

Table A.8: Statistical Comparison of Accumulation Thickness Estimates (mm/Deployment Period) Among Seasons (Ice Cover and Open Water) at Sheardown Lake Northwest (NW) Sediment Trap Monitoring Areas, 2024 to 2025

Area	Overall 2-group Comparison					
	Statistical Test [a]	Transformation	Measure of Central Tendency		P-value	MOD [b]
			Open Water	Ice Cover		
SL-SHAL-1	t-test (equal)	none	0.0700	0.0597	0.051	ns
SL-SHAL-2	M-W	rank	0.151	0.0582	0.019	160
SL-DEEP-1	t-test (equal)	none	0.131	0.0867	0.010	51

Significant difference between study areas based on p-value <0.05.
P-value <0.05 and positive MOD (open water > ice cover).
P-value <0.05 and negative MOD (open water < ice cover).

Notes: MOD = Magnitude of Difference. < = less than. > = greater than. The measure of central tendency (MCT) is the arithmetic mean for non-transformed data, geometric mean for $\log_{10}$ transformed data, and the median for rank-transformed data.

[a] Statistical tests include paired t-test (for unequal or equal variance) and Mann-Whitney (M-W) pair-wise tests.

[b] MOD = ((Open Water - Ice Cover)/Ice Cover)*100.

Table A.9: Spearman Correlations Between Sediment Accumulation Thickness Estimates and Sedimentation Rate at Stations in Sheardown Lake NW and Total Cumulative Dustfall on Baffinland Iron Mine Property Calculated by Season, 2013 to 2025

Season	Lake Station	Dustfall Station	Sediment Accumulation Thickness Estimate vs Total Cumulative Dustfall		Sedimentation Rate vs Total Cumulative Dustfall	
			p-value	Spearman's ρ	p-value	Spearman's ρ
Ice Cover	SL-SHAL-1	DF-M-01	0.682	-0.152	0.892	-0.0545
		DF-M-02	0.313	0.358	0.407	0.297
		DF-M-03	0.470	0.261	0.492	0.248
	SL-SHAL-2	DF-M-01	0.218	-0.430	0.232	-0.418
		DF-M-02	0.584	0.200	0.682	0.152
		DF-M-03	0.537	0.224	0.514	0.236
	SL-DEEP-1	DF-M-01	0.759	0.115	0.296	0.370
		DF-M-02	0.104	0.552	0.218	0.430
		DF-M-03	0.608	0.188	0.892	0.0545
Open Water	SL-SHAL-1	DF-M-01	0.503	-0.227	0.797	-0.0909
		DF-M-02	0.174	-0.442	0.325	-0.328
		DF-M-03	0.290	-0.351	0.449	-0.255
	SL-SHAL-2	DF-M-01	0.386	-0.291	0.503	-0.227
		DF-M-02	0.252	-0.378	0.325	-0.328
		DF-M-03	0.346	-0.314	0.384	-0.292
	SL-DEEP-1	DF-M-01	0.673	-0.145	0.468	-0.245
		DF-M-02	0.105	-0.515	0.0758	-0.556
		DF-M-03	0.290	-0.351	0.169	-0.446

Indicates a significant correlation (p-value < 0.05).

Indicates a moderate positive correlation (0.600 > ρ > 0.400).

Indicates a strong positive correlation (ρ > 0.600).

Note: "ρ" = Spearman's Rho. Cumulative dustfall was calculated for a given station in a given season as the quotient of the total dustfall and the total deployment days.

APPENDIX B
RAW DATA AND METHODS

Table B.1: Dry Weight of Sediment Trap Samples Collected at Sheardown Lake Northwest (NW), 2024 to 2025

Deployment Period	Sample Identification	Collection Date	Dry Weight (g)
Ice Cover 2024 to 2025	SL-DEEP-1A	7-Jul-25	1.42
	SL-DEEP-1B	7-Jul-25	1.35
	SL-DEEP-1C	5-Jul-25	2.38
	SL-DEEP-1D	8-Jul-25	1.42
	SL-DEEP-1E	9-Jul-25	1.32
	SL-SHAL-1A	6-Jul-25	1.06
	SL-SHAL-1B	5-Jul-25	0.990
	SL-SHAL-1C	8-Jul-25	1.05
	SL-SHAL-1D	5-Jul-25	1.06
	SL-SHAL-1E	8-Jul-25	0.830
	SL-SHAL-2A	5-Jul-25	1.06
	SL-SHAL-2B	7-Jul-25	1.05
	SL-SHAL-2C-HIS [a]	5-Jul-25	3.47
	SL-SHAL-2D	7-Jul-25	1.06
	SL-SHAL-2E	5-Jul-25	0.790
Open Water 2025	SL-DEEP-1A	25-Sep-25	2.32
	SL-DEEP-1B	25-Sep-25	2.33
	SL-DEEP-1C	25-Sep-25	2.10
	SL-DEEP-1D	25-Sep-25	1.69
	SL-DEEP-1E	25-Sep-25	2.19
	SL-SHAL-1A	25-Sep-25	1.29
	SL-SHAL-1B	25-Sep-25	1.03
	SL-SHAL-1C	25-Sep-25	1.04
	SL-SHAL-1D	25-Sep-25	1.25
	SL-SHAL-1E	25-Sep-25	1.02
	SL-SHAL-2A	25-Sep-25	1.55
	SL-SHAL-2B	25-Sep-25	1.40
	SL-SHAL-2C	25-Sep-25	1.56
	SL-SHAL-2D	26-Sep-25	1.50
	SL-SHAL-2E	26-Sep-25	1.54

Note: g = grams.

[a] Sediment trap was deployed for longer than one ice cover period (September 2023 to July 2025).

Table B.2: Bulk Density (BD) of Sediment Trap Samples Collected at Sheardown Lake Northwest (NW), 2018 to 2025

Deployment Period	Sample Identification	Retrieval Date	Bulk Density (g/cm^3)
Open Water 2018	SDNW DBD	21-Sep-18	2.94
Ice Cover 2018 to 2019	BD-SHAL-A	12-Aug-19	2.76
	BD-SHAL-B	12-Aug-19	2.76
	BD-DEEP	12-Aug-19	2.88
Open Water 2019	BD-SHAL	Oct-19	2.53
	BD-DEEP	Oct-19	2.59
Ice Cover 2019 to 2020	BD-SHAL-A	18-Jul-20	3.03
	BD-SHAL-B	18-Jul-20	2.91
	BD-DEEP	14-Jul-20	2.75
Open Water 2020	BD-SHAL-A	4-Sep-20	2.37
	BD-SHAL-B	5-Sep-20	2.46
	BD-DEEP	5-Sep-20	2.22
Open Water 2021	BD-SHAL-A	12-Sep-21	2.82
	BD-SHAL-B	13-Sep-21	2.79
	BD-DEEP	11-Sep-21	2.82
Ice Cover 2021 to 2022	BD-SHAL	12-Jul-22	3.14
	BD-DEEP	13-Jul-22	2.91
Open Water 2022	BD-SHAL	17-Sep-22	2.83
	BD-DEEP	17-Sep-22	2.71
Ice Cover 2022 to 2023	BD-SHAL-1	24-Jul-23	2.82
	BD-SHAL-2	22-Jul-23	3.30
	BD-SHAL-4	22-Jul-23	2.98
	BD-SHAL-5	22-Jul-23	3.37
	BD-SHAL-A	Jul-2023	3.15
	BD-SHAL-B	Jul-2023	3.12
	BD-SHAL-B-R	Jul-2023	3.16
	BD-DEEP-1	22-Jul-23	2.84
	BD-DEEP-2	22-Jul-23	2.95
	BD-DEEP-3	24-Jul-23	3.52
	BD-DEEP	Jul-23	3.00
Open Water 2023	BD-SHAL-1	10-Sep-23	2.96
	BD-SHAL-2	19-Sep-23	3.43
	BD-SHAL-5	18-Sep-23	3.10
	BD-SHAL-A	Sep-2023	3.11
	BD-DEEP-1	18-Sep-13	2.76
	BD-DEEP-3	18-Sep-23	2.80
	BD-DEEP	Sep-23	2.90
Ice Cover 2023 to 2024	BD-DEEP	12-Jul-24	2.73
	BD-SHAL-A	13-Jul-24	3.08
	BD-SHAL-B	12-Jul-24	3.02

Notes: g/cm^3 = grams per cubic centimetre. "R" indicates replicate samples. When the day of sampling is unknown only the month and year are shown.

[a] The reported bulk density is a composite sample produced from BD-SHAL-1 and BD-SHAL-2 due to insufficient sample mass to run the analysis independently.

[b] The reported bulk density is a composite sample produced from BD-SHAL-3, BD-SHAL-4, and BD-SHAL-5 due to insufficient sample mass to run the analysis independently.

[c] The reported bulk density is a composite sample produced from BD-DEEP-1, BD-DEEP-2, and BD-DEEP-3 due to insufficient sample mass to run the analysis independently.

Table B.2: Bulk Density (BD) of Sediment Trap Samples Collected at Sheardown Lake Northwest (NW), 2018 to 2025

Deployment Period	Sample Identification	Retrieval Date	Bulk Density (g/cm^3)
Open Water 2024	BD-SHAL-1	5-Oct-24	2.83
	BD-SHAL-2	5-Oct-24	2.82
	BD-SHAL-3	5-Oct-24	3.36
	BD-SHAL-4	5-Oct-24	3.20
	BD-SHAL-5	5-Oct-24	3.18
	BD-DEEP-1	7-Oct-24	3.07
	BD-DEEP-2	7-Oct-24	2.63
Ice Cover 2024 to 2025	BD-SHAL-1 [a]	7-Jul-25	2.84
	BD-SHAL-2 [a]	7-Jul-25	
	BD-SHAL-3 [b]	7-Jul-25	3.08
	BD-SHAL-4 [b]	8-Jul-25	
	BD-SHAL-5 [b]	8-Jul-25	
	BD-DEEP-1 [c]	6-Jul-25	3.09
	BD-DEEP-2 [c]	7-Jul-25	
	BD-DEEP-3 [c]	8-Jul-25	
Open Water 2025	BD-SHAL-1 [a]	26-Sep-25	2.73
	BD-SHAL-2 [a]	25-Sep-25	
	BD-SHAL-3 [b]	25-Sep-25	1.73
	BD-SHAL-4 [b]	25-Sep-25	
	BD-SHAL-5 [b]	26-Sep-25	
	BD-DEEP-1 [c]	25-Sep-25	2.76
	BD-DEEP-2 [c]	25-Sep-25	
	BD-DEEP-3 [c]	25-Sep-25	

Notes: g/cm^3 = grams per cubic centimetre. "R" indicates replicate samples. When the day of sampling is unknown only the month and year are shown.

[a] The reported bulk density is a composite sample produced from BD-SHAL-1 and BD-SHAL-2 due to insufficient sample mass to run the analysis independently.

[b] The reported bulk density is a composite sample produced from BD-SHAL-3, BD-SHAL-4, and BD-SHAL-5 due to insufficient sample mass to run the analysis independently.

[c] The reported bulk density is a composite sample produced from BD-DEEP-1, BD-DEEP-2, and BD-DEEP-3 due to insufficient sample mass to run the analysis independently.

Table B.3: Particle Size Distribution of Sediment Trap Material During the 2024/2025 Ice Cover Period, Sheardown Lake Northwest (NW), Lake Sedimentation Monitoring Study

Sample	Monitoring Area Name	Particle Size Distribution (%) [a]			
		Coarse Sand	Medium Sand	Fine Sand	Silt and/or Clay
		5 to 2 mm	2 to 0.5 mm	0.5 to 0.075 mm	<0.075 mm
BD-SHAL-A	SHAL-1	0.50	7.50	57.5	34.5
BD-SHAL-B	SHAL-2	0.67	7.00	48.7	43.7
BD-DEEP	DEEP-1	0.00	0.50	56.5	43.0

Notes: % = percent. mm = millimeters. < = less than. BD-SHAL-A represents the average particle size distributions from samples BD-SHAL-1 and BD-SHAL-2. BD-SHAL-B represents the average particle size distributions from samples BD-SHAL-3, BD-SHAL-4, and BD-SHAL-5. BD-DEEP represents the average particle sizes from samples BD-DEEP-1 and BD-DEEP-2.

[a]ASTM D2487-17E01 Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System). 2020. American Society for Testing and Standards (ASTM) International. West Conshohocken, PA, USA.

Table B.4: Particle Size Distribution of Sediment Trap Material During the 2025 Open Water Period, Sheardown Lake Northwest (NW), Lake Sedimentation Monitoring Study

Sample	Particle Size Distribution (%) [a]			
	Coarse Sand	Medium Sand	Fine Sand	Silt and/or Clay
	5 to 2 mm	2 to 0.5 mm	0.5 to 0.075 mm	<0.075 mm
BD-SHAL-A [b]	0.00	1.00	68.0	31.0
BD-SHAL-B [b]	0.00	19.0	50.0	31.0
BD-DEEP [b]	0.00	1.00	56.0	43.0

Notes: % = percent. mm = millimetres. < = less than. BD-SHAL-A represents the average particle size distributions from samples BD-SHAL-1 and BD-SHAL-2. BD-SHAL-B represents the average particle size distributions from samples BD-SHAL-3, BD-SHAL-4, and BD-SHAL-5. BD-DEEP represents the average particle sizes from samples BD-DEEP-1, BD-DEEP-2, and BD-DEEP-3.

[a] ASTM D2487-17E01 Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System). 2020. American Society for Testing and Standards (ASTM) International. West Conshohocken, PA, USA.

[b] BD-SHAL-A, BD-SHAL-B, and BD-DEEP correspond to Composite 1, Composite 2, and Composite 3, respectively, in the laboratory report.

Table B.5: Sediment Trap Chemistry Results for the 2024/2025 Ice Cover Period, Sheardown Lake Northwest (NW)

Parameter	Units	Canadian or Provincial SQG Criteria [a]		AEMP Benchmark [b]	Baseline Period Sediment Chemistry [c]		Mean			Littoral Stations										Profundal Stations				
		Lower	Upper		Littoral	Profundal	SHAL-1	SHAL-2	DEEP-1	SHAL-1A	SHAL-1B	SHAL-1C	SHAL-1D	SHAL-1E	SHAL-2A	SHAL-2B	SHAL-2C	SHAL-2D	SHAL-2E	DEEP-1A	DEEP-1B	DEEP-1C	DEEP-1D	DEEP-1E
										06-Jul-25	05-Jul-25	08-Jul-25	05-Jul-25	08-Jul-25	05-Jul-25	07-Jul-25	05-Jul-25	07-Jul-25	05-Jul-25	07-Jul-25	07-Jul-25	05-Jul-25	08-Jul-25	09-Jul-25
TOC	%	1.0 [α]	10 [α]	-	-	-	**1.4**	**2.7**	**1.2**	**1.6**	**1.7**	**1.1**	**1.1**	**1.3**	**3.3**	**4.1**	-	**3.2**	**1.4**	**1.4**	1.00	0.95	**1.3**	**1.3**
Organic Matter	%	-	-	-	-	-	2.4	4.7	2.0	2.7	3.0	2.0	1.9	2.3	5.7	7.1	3.0	5.5	2.4	2.3	1.7	1.6	2.2	2.2
Aluminum	mg/kg	-	-	-	11,792	17,745	33,060	29,300	36,080	33,400	34,600	33,600	28,800	34,900	27,700	28,400	32,700	28,400	29,300	39,500	39,300	23,800	38,900	38,900
Antimony	mg/kg	-	-	-	1.00	1.00	0.30	0.25	0.26	0.19	0.26	0.31	0.49	0.23	0.20	0.19	0.26	0.21	0.39	0.18	0.32	0.21	0.22	0.35
Arsenic	mg/kg	-	-	11.5	3.0	3.2	5.9	6.0	5.9	5.7	6.1	6.0	5.4	6.4	5.1	5.5	6.6	5.8	7.0	6.3	6.3	3.9	6.3	7.0
Barium	mg/kg	-	-	-	78	93	179	156	200	171	188	178	167	190	140	152	171	157	158	217	218	121	222	221
Beryllium	mg/kg	-	-	-	1.00	1.00	1.4	1.3	1.6	1.3	1.6	1.4	1.2	1.5	1.3	1.2	1.4	1.2	1.2	1.7	1.8	1.1	1.7	1.7
Bismuth	mg/kg	-	-	-	-	-	0.79	0.72	0.98	0.77	0.86	0.77	0.68	0.88	0.64	0.71	0.87	0.69	0.69	1.0	1.0	0.65	1.1	1.1
Boron	mg/kg	-	-	-	3.0	3.0	374	219	377	295	458	363	397	356	149	234	140	221	352	390	563	258	262	414
Cadmium	mg/kg	-	-	2.1	0.50	0.50	0.75	0.77	0.88	0.88	0.84	0.63	0.57	0.82	0.65	0.90	0.77	0.88	0.64	0.91	0.95	0.58	1.0	0.97
Calcium	mg/kg	-	-	-	2,697	3,558	7,110	5,626	7,088	6,340	7,780	7,060	7,320	7,050	5,440	5,820	5,030	5,470	6,370	7,120	8,590	6,000	6,280	7,450
Chromium	mg/kg	-	-	94	53	81	81	86	85	77	83	93	70	85	72	69	77	70	142	92	90	54	90	99
Cobalt	mg/kg	-	-	-	10.0	15	24	22	27	24	26	24	22	26	20	21	26	22	23	29	29	16	30	29
Copper	mg/kg	-	-	89	33	48	55	52	63	54	57	57	48	58	49	47	51	50	63	68	66	39	68	76
Iron	mg/kg	-	-	71,736	28,120	40,382	127,800	118,260	101,140	105,000	116,000	125,000	176,000	117,000	102,000	94,300	152,000	109,000	134,000	103,000	104,000	74,700	106,000	118,000
Lead	mg/kg	-	-	63	13	20	23	20	27	24	25	22	20	25	20	19	21	19	23	29	29	19	30	30
Lithium	mg/kg	-	-	-	-	-	42	37	50	41	47	42	36	45	36	35	43	35	37	56	56	31	53	56
Magnesium	mg/kg	-	-	-	7,448	11,498	25,100	21,800	27,860	24,500	26,500	25,300	21,800	27,400	20,100	20,800	24,400	21,000	22,700	30,400	30,000	18,600	30,100	30,200
Manganese	mg/kg	-	-	4,754	756	2,164	2,206	2,004	2,618	2,250	2,430	1,930	1,970	2,450	1,780	2,240	1,840	2,230	1,930	2,940	2,860	1,490	3,050	2,750
Mercury	mg/kg	-	-	0.33	0.100	0.100	0.021	0.016	0.021	0.026	0.029	0.017	0.014	0.020	0.015	0.017	0.015	0.019	0.014	0.023	0.026	0.010	0.026	0.022
Molybdenum	mg/kg	25 [β]	23,000 [β]	-	3.4	3.5	11	8.0	8.5	7.3	8.7	11	18	7.6	7.5	7.0	8.2	7.9	9.4	8.1	8.0	4.8	11	11
Nickel	mg/kg	-	-	82	49	69	74	71	81	75	78	73	67	80	68	68	78	70	72	89	86	50	89	90
Phosphorus	mg/kg	-	-	2,302	863	1,400	598	584	654	602	627	574	585	604	610	509	642	569	589	701	723	458	696	694
Potassium	mg/kg	-	-	-	2,681	4,612	7,400	6,854	8,350	7,450	7,830	7,500	6,330	7,890	6,380	6,750	7,670	6,840	6,630	8,830	8,620	6,140	9,110	9,050
Selenium	mg/kg	-	-	-	1.00	1.00	0.58	0.64	0.55	0.55	0.67	0.51	0.57	0.60	0.68	0.70	0.57	0.78	0.49	0.60	0.55	0.32	0.57	0.69
Silver	mg/kg	0.5 [β]	-	-	0.30	0.30	0.23	0.20	0.28	0.24	0.25	0.23	0.20	0.25	0.19	0.18	0.21	0.20	0.23	0.31	0.30	0.20	0.30	0.31
Sodium	mg/kg	-	-	-	249	342	298	280	342	296	323	292	264	314	290	257	279	259	313	370	392	240	348	360
Strontium	mg/kg	-	-	-	7.2	11	21	16	22	19	24	21	22	21	15	17	13	16	20	23	28	15	20	24
Sulphur	mg/kg	-	-	-	-	-	1,120	1,320	<1000	<1000	<1100	<1000	<1000	<1500	1,200	1,300	<1000	1,200	<1900	<1000	<1000	<1000	<1000	<1000
Thallium	mg/kg	-	-	-	1.00	1.00	0.44	0.41	0.47	0.45	0.48	0.43	0.37	0.46	0.40	0.40	0.45	0.40	0.41	0.50	0.50	0.32	0.53	0.51
Tin	mg/kg	-	-	-	-	-	4.0	4.6	3.2	<2.0	2.8	8.7	3.4	<2.9	2.9	<2.0	2.2	11	4.3	2.6	2.5	5.8	2.1	2.9
Titanium	mg/kg	-	-	-	-	-	1,324	1,182	1,322	1,310	1,400	1,320	1,150	1,440	1,150	1,090	1,260	1,110	1,300	1,410	1,420	989	1,360	1,430
Tungsten	mg/kg	-	-	-	-	-	1.3	1.2	1.0	1.0	1.3	1.3	1.3	1.3	1.2	1.1	1.1	1.1	1.5	0.93	0.92	1.6	0.75	1.0
Uranium	mg/kg	-	-	-	-	-	9.4	9.5	8.2	7.7	8.3	8.5	15	7.7	11	9.7	8.4	10	8.3	9.1	8.8	4.7	8.8	9.5
Vanadium	mg/kg	-	-	-	37	58	51	47	57	52	54	52	44	56	47	44	51	45	49	62	61	38	62	61
Zinc	mg/kg	-	-	219	51	76	304	203	157	131	137	280	837	134	131	112	145	158	471	150	155	122	149	211
Zirconium	mg/kg	-	-	-	-	-	13	9.5	13	12	15	12	12	13	7.0	9.6	9.4	9.1	13	12	13	11	14	15

Indicates parameter concentration above the AEMP Benchmark.

ITALIC Indicates a parameter concentration above the Lower SQG.

BOLD Indicates a parameter concentration above the Upper SQG.

Notes: Values at or below the laboratory reporting limit (LRL) were replaced with the LRL for calculating summary statistics. The dates reported in the table are the retrieval dates of the sediment trap. SQG = Sediment Quality Guideline. AEMP = Aquatic Effects Monitoring Plan. TOC = total organic carbon. % = percent. - = not applicable/no data. mg/kg = milligrams per kilogram dry weight.

[a] α = Ontario Provincial Sediment Quality Guideline (PSQG; OMOE 1993) and β = British Columbia Working SQG (BCMOE 2025).

[b] AEMP Sediment Quality Benchmarks were developed using existing SQG, background sediment quality data, and reference area sediment quality data (Baffinland 2024).

[c] Baseline chemistry data for sediments is sourced from surface sediments collected in the CREMP (TCC 2026 in prep.).

Table B.6: Sediment Trap Chemistry Results for the 2025 Open Water Period, Sheardown Lake Northwest (NW)

Parameter	Units	Provincial SQG Criteria [a]		AEMP Benchmark [b]	Baseline Period Sediment Chemistry [c]		Mean			Littoral Stations										Profundal Stations				
		Lower	Upper		Littoral	Profundal	SHAL-1	SHAL-2	DEEP-1	SHAL-1A	SHAL-1B	SHAL-1C	SHAL-1D	SHAL-1E	SHAL-2A	SHAL-2B	SHAL-2C	SHAL-2D	SHAL-2E	DEEP-1A	DEEP-1B	DEEP-1C	DEEP-1D	DEEP-1E
										25-Sep-25	25-Sep-25	25-Sep-25	25-Sep-25	25-Sep-25	25-Sep-25	25-Sep-25	25-Sep-25	25-Sep-25	25-Sep-25	25-Sep-25	25-Sep-25	25-Sep-25	25-Sep-25	25-Sep-25
TOC	%	1 [α]	10 [α]	-	-	-	**1.7**	**2.3**	**1.3**	**1.8**	**2.0**	**1.4**	**1.5**	**1.6**	**3.1**	**2.3**	**2.1**	**2.2**	**1.6**	**1.3**	**1.4**	**1.3**	**1.3**	**1.2**
Organic Matter	%	-	-	-	-	-	2.9	3.9	2.2	3.1	3.5	2.5	2.6	2.7	5.4	4.0	3.7	3.8	2.7	2.3	2.3	2.3	2.3	2.0
Aluminum	mg/kg	-	-	-	11,792	17,745	29,260	24,020	28,720	27,300	29,400	30,500	28,800	30,300	23,500	24,200	22,800	25,200	24,400	29,200	27,600	28,500	29,800	28,500
Antimony	mg/kg	-	-	-	1.0	1.0	0.21	0.16	0.30	0.15	0.14	0.30	0.30	0.17	0.14	0.15	0.23	0.13	0.14	0.13	0.13	0.35	0.13	0.75
Arsenic	mg/kg	-	-	11.5	3.0	3.2	5.3	4.9	5.3	4.9	5.2	5.8	5.5	5.4	4.6	4.9	4.8	5.0	5.1	5.2	4.9	6.2	5.3	5.1
Barium	mg/kg	-	-	-	78	93	148	119	145	146	148	149	147	150	118	124	117	121	116	149	137	143	144	151
Beryllium	mg/kg	-	-	-	1.0	1.0	1.2	1.0	1.2	1.1	1.2	1.2	1.2	1.3	1.0	1.0	0.99	1.0	1.0	1.2	1.2	1.2	1.3	1.3
Bismuth	mg/kg	-	-	-	-	-	0.50	0.45	0.49	0.49	0.51	0.49	0.48	0.52	0.46	0.46	0.43	0.44	0.44	0.47	0.47	0.52	0.50	0.47
Boron	mg/kg	-	-	-	3.0	3.0	294	167	275	303	311	276	221	357	132	232	108	182	182	289	261	298	253	275
Cadmium	mg/kg	-	-	2.1	0.50	0.50	0.55	0.59	0.56	0.61	0.60	0.53	0.44	0.55	0.65	0.68	0.61	0.57	0.44	0.66	0.52	0.49	0.55	0.57
Calcium	mg/kg	-	-	-	2,697	3,558	8,586	8,138	9,236	7,970	8,670	9,010	7,980	9,300	7,350	8,590	7,820	7,950	8,980	9,450	9,320	9,120	8,970	9,320
Chromium	mg/kg	-	-	94	53	81	86	79	101	77	82	96	91	86	72	78	87	78	81	91	103	126	91	92
Cobalt	mg/kg	-	-	-	10	15	21	19	21	19	21	21	22	21	18	19	19	19	19	21	21	21	22	21
Copper	mg/kg	-	-	89	33	48	48	41	62	44	45	55	50	48	40	41	44	41	39	47	45	68	104	48
Iron	mg/kg	-	-	71,736	28,120	40,382	94,820	94,840	80,480	86,300	79,400	92,300	123,000	93,100	85,600	88,700	105,000	93,900	101,000	80,800	74,100	91,600	80,200	75,700
Lead	mg/kg	-	-	63	13	20	22	19	23	21	22	22	22	23	18	19	18	19	19	23	24	23	24	24
Lithium	mg/kg	-	-	-	-	-	42	35	45	39	43	41	41	44	34	36	33	35	35	44	44	43	47	47
Magnesium	mg/kg	-	-	-	7,448	11,498	21,580	18,840	21,940	20,300	21,300	22,300	21,800	22,200	17,900	19,100	18,700	18,600	19,900	22,300	21,300	21,500	22,900	21,700
Manganese	mg/kg	-	-	4,754	756	2,164	1,534	1,412	1,576	1,480	1,520	1,610	1,570	1,490	1,460	1,610	1,430	1,340	1,220	1,770	1,490	1,260	1,440	1,920
Mercury	mg/kg	-	-	0.33	0.100	0.100	0.017	0.015	0.022	0.018	0.017	0.017	0.016	0.018	0.017	0.018	0.014	0.016	0.013	0.018	0.019	0.031	0.024	0.019
Molybdenum	mg/kg	25 [β]	23,000 [β]	-	3.4	3.5	5.8	4.6	4.6	5.0	4.2	6.2	8.9	4.9	4.4	4.0	6.2	4.1	4.1	3.9	3.5	8.1	3.7	3.7
Nickel	mg/kg	-	-	82	49	69	70	67	74	66	70	72	71	71	66	68	67	67	69	75	72	75	75	75
Phosphorus	mg/kg	-	-	2,302	863	1,400	712	657	751	701	685	753	710	712	631	655	633	656	710	784	748	715	751	759
Potassium	mg/kg	-	-	-	2,681	4,612	6,946	5,664	6,980	6,590	7,060	7,180	6,780	7,120	5,460	5,650	5,470	5,890	5,850	6,990	6,950	6,780	7,020	7,160
Selenium	mg/kg	-	-	-	1.0	1.0	0.58	0.55	0.48	0.57	0.50	0.58	0.64	0.60	0.58	0.57	0.52	0.54	0.52	0.51	0.44	0.45	0.52	0.50
Silver	mg/kg	0.5 [β]	-	-	0.30	0.30	0.18	0.15	0.21	0.17	0.18	0.19	0.19	0.18	0.14	0.14	0.16	0.15	0.16	0.19	0.19	0.21	0.28	0.19
Sodium	mg/kg	-	-	-	249	342	373	313	420	351	373	379	372	390	297	326	293	330	319	415	395	424	434	434
Strontium	mg/kg	-	-	-	7.2	11	21	17	22	21	21	21	19	24	15	18	16	18	19	23	21	22	21	22
Sulphur	mg/kg	-	-	-	-	-	1,080	<1000	<1000	<1000	<1100	<1200	<1000	<1100	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<1000
Thallium	mg/kg	-	-	-	1.0	1.0	0.48	0.41	0.51	0.47	0.46	0.48	0.47	0.50	0.40	0.41	0.40	0.44	0.40	0.52	0.51	0.51	0.52	0.53
Tin	mg/kg	-	-	-	-	-	3.3	3.0	2.6	<2.0	<2.2	6.8	3.1	<2.3	<2.0	<2.0	2.4	6.4	2.4	2.7	<2.0	3.3	3.1	<2.0
Titanium	mg/kg	-	-	-	-	-	1,506	1,268	1,584	1,390	1,510	1,580	1,490	1,560	1,190	1,250	1,240	1,310	1,350	1,600	1,580	1,520	1,620	1,600
Tungsten	mg/kg	-	-	-	-	-	0.84	0.72	0.63	0.81	0.83	0.85	0.83	0.87	0.71	0.72	0.76	0.68	0.74	0.63	0.64	0.63	0.62	0.65
Uranium	mg/kg	-	-	-	-	-	8.0	7.7	7.1	8.0	7.0	7.3	10	7.4	7.6	8.2	7.9	7.5	7.2	6.8	7.0	7.9	6.7	7.2
Vanadium	mg/kg	-	-	-	37	58	56	49	61	53	56	58	57	58	47	49	48	50	51	61	60	59	63	61
Zinc	mg/kg	-	-	219	51	76	156	101	121	102	121	152	287	118	95	97	120	101	94	114	108	172	105	105
Zirconium	mg/kg	-	-	-	-	-	19	16	22	16	19	20	18	20	15	15	15	16	16	21	21	23	20	22

Indicates parameter concentration above the AEMP Benchmark.

ITALIC Indicates a parameter concentration above the Lower SQG.

BOLD Indicates a parameter concentration above the Upper SQG.

Notes: Values at or below the laboratory reporting limit (LRL) were replaced with the LRL for calculating summary statistics. The dates reported in the table are the retrieval dates of the sediment trap. SQG = Sediment Quality Guideline. AEMP = Aquatic Effects Monitoring Plan. TOC = total organic carbon. % = percent. - = not applicable/no data. mg/kg = milligrams per kilogram dry weight.

[a] α = Ontario Provincial Sediment Quality Guideline (PSQG; OMOE 1993) and β = British Columbia Working SQG (BCMOE 2025).

[b] AEMP Sediment Quality Benchmarks were developed using existing SQG, background sediment quality data, and reference area sediment quality data (Baffinland 2024).

[c] Baseline chemistry data for sediments is sourced from surface sediments collected in the CREMP (TCC 2026 in prep.).

Table B.7: **Dustfall Chemistry Results for Selected Parameters at Dustfall Monitorings Stations Located Near Sheardown Lake Northwest (NW), 2024 to 2025**

Season	Station ID	Date Sampled	Arsenic	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Phosphorus	Uranium	Zinc
			mg/dm^2/d	mg/dm^2/d	mg/dm^2/d	mg/dm^2/d	mg/dm^2/d	mg/dm^2/d	mg/dm^2/d	mg/dm^2/d	mg/dm^2/d	mg/dm^2/d	mg/dm^2/d	mg/dm^2/d	mg/dm^2/d
2024 to 2025 Ice Cover	DF-M-01	17-Nov-24	<0.0000028	<0.0000014	0.000059	0.000084	0.043	0.000019	0.00081	<0.0000014	0.0000027	0.000049	<0.0014	0.0000071	0.00015
		15-Dec-24	<0.0000028	<0.0000014	<0.000014	0.000094	0.0026	0.000002	0.00020	<0.0000014	<0.0000014	<0.000014	<0.0014	<0.0000026	0.00014
		13-Jan-25	<0.0000027	<0.0000014	<0.000014	0.000045	0.0070	0.0000014	0.00025	<0.0000014	<0.0000014	0.000016	<0.0014	<0.0000026	0.000092
		10-Feb-25	0.000003	<0.0000014	0.000021	0.00012	0.015	0.0000086	0.00033	<0.0000014	<0.0000014	0.000028	<0.0014	0.0000029	0.00012
		11-Mar-25	0.000024	<0.0000014	0.00017	0.00017	0.16	0.00012	0.0037	<0.0000014	0.000014	0.00016	0.0021	0.000061	0.00062
		12-Apr-25	0.000019	<0.0000013	0.00016	0.00021	0.15	0.00013	0.0030	<0.0000013	0.000017	0.00014	0.0020	0.000057	0.00060
		14-May-25	0.000028	<0.0000013	0.00063	0.00037	0.44	0.00024	0.0087	<0.0000013	0.000019	0.00046	0.0066	0.000086	0.0013
		11-Jun-25	<0.0000028	<0.0000014	0.000034	0.000082	0.024	0.0000096	0.00041	<0.0000014	<0.0000014	0.000025	<0.0014	0.0000032	0.000084
		09-Jul-25	<0.0000028	<0.0000014	0.000040	0.000034	0.031	0.000010	0.00051	<0.0000014	0.0000017	0.000034	<0.0014	0.0000056	0.00012
	DF-M-02	17-Nov-24	0.000007	<0.0000014	0.000037	0.000058	0.035	0.0000054	0.00071	<0.0000014	0.0000029	0.000036	<0.0014	<0.0000026	0.000095
		15-Dec-24	0.000005	<0.0000014	0.000035	0.000057	0.027	0.0000025	0.00087	<0.0000014	0.0000017	0.000049	<0.0014	<0.0000026	0.00017
		13-Jan-25	0.000020	<0.0000014	0.000062	0.00012	0.086	0.0000061	0.0019	<0.0000014	0.0000064	0.000095	0.0014	<0.0000026	0.00020
		10-Feb-25	0.000047	<0.0000014	0.000088	0.00019	0.19	0.000012	0.0044	<0.0000014	0.000008	0.00015	<0.0014	<0.0000026	0.00015
		11-Mar-25	<0.0000027	<0.0000014	0.000014	0.00054	0.0034	0.000002	0.0033	<0.0000014	0.0000026	0.000081	<0.0014	<0.0000026	0.0011
		12-Apr-25	0.000037	<0.0000013	0.00013	0.00014	0.17	0.000019	0.0030	<0.0000013	0.000013	0.00017	0.0016	0.0000051	0.00022
		14-May-25	0.000018	<0.0000013	0.00015	0.00012	0.12	0.000020	0.0025	<0.0000013	0.0000085	0.00015	0.0016	0.0000045	0.00024
		11-Jun-25	0.0000071	<0.0000014	0.00011	0.000090	0.069	0.000020	0.0010	<0.0000014	0.000004	0.000086	<0.0014	0.0000035	0.00046
		09-Jul-25	0.0000051	<0.0000014	0.00011	0.000084	0.083	0.000020	0.0013	<0.0000014	0.0000034	0.000088	<0.0014	0.0000053	0.00025
	DF-M-03	17-Nov-24	<0.0000028	<0.0000014	0.000034	0.000054	0.018	0.0000034	0.00033	<0.0000014	0.0000018	0.000021	<0.0014	<0.0000026	<0.000084
		15-Dec-24	<0.0000028	<0.0000014	<0.000014	0.00015	0.0033	<0.0000014	0.00021	<0.0000014	<0.0000014	0.000036	<0.0014	<0.0000026	0.00011
		13-Jan-25	0.0000043	<0.0000014	0.000047	0.000075	0.032	0.000007	0.00078	<0.0000014	0.000002	0.000038	<0.0014	<0.0000026	0.00013
		10-Feb-25	0.0000084	<0.0000014	0.000082	0.000092	0.057	0.000016	0.0013	<0.0000014	0.0000036	0.000076	<0.0014	0.0000034	0.00015
		11-Mar-25	0.000013	<0.0000014	0.00011	0.000070	0.073	0.000017	0.0014	<0.0000014	0.0000052	0.000078	0.0016	0.0000032	0.00020
		12-Apr-25	0.000026	<0.0000013	0.00017	0.00013	0.14	0.000021	0.0028	<0.0000013	0.000010	0.00015	0.0020	0.0000058	0.00028
		14-May-25	0.0000056	<0.0000013	0.00017	0.000095	0.097	0.000021	0.0017	<0.0000013	0.000004	0.00012	0.0016	0.0000045	0.00026
		11-Jun-25	0.0000042	<0.0000014	0.00011	0.000070	0.076	0.000020	0.0013	<0.0000014	0.0000028	0.000091	<0.0014	0.0000052	0.00063
		09-Jul-25	0.000006	<0.0000014	0.00024	0.00011	0.16	0.000032	0.0025	<0.0000014	0.0000049	0.00018	0.0025	0.0000084	0.00036
2025 Open Water	DF-M-01	09-Aug-25	<0.0000026	<0.0000013	0.000019	<0.000026	0.0026	0.0000016	0.000060	<0.0000013	<0.0000013	<0.000013	<0.0013	<0.0000026	0.00024
		06-Sep-25	<0.000014	0.000045	0.000039	0.000013	<0.00014	0.20	<0.0000014	0.000043	<0.0014	0.013	<0.000028	0.00019	0.00023
		04-Oct-25	0.0000034	<0.0000014	0.000045	0.000039	0.036	0.000013	0.0069	<0.0000014	<0.0000014	0.000043	<0.0014	0.0000038	0.00019
	DF-M-02	09-Aug-25	<0.0000026	<0.0000013	0.000017	<0.000026	0.0018	0.0000015	0.000060	<0.0000013	<0.0000013	<0.000013	0.0014	<0.0000026	0.00023
		06-Sep-25	<0.000014	0.00010	0.000048	0.000021	<0.00014	0.40	0.0000025	0.000081	<0.0014	0.022	<0.000028	0.00022	0.00024
		04-Oct-25	0.0000055	<0.0000014	0.00010	0.000048	0.071	0.000021	0.013	<0.0000014	0.0000025	0.000081	<0.0014	0.0000044	0.00022
	DF-M-03	09-Aug-25	<0.0000026	<0.0000013	0.000018	<0.000026	0.0020	0.0000019	0.000069	<0.0000013	<0.0000013	<0.000013	<0.0013	<0.0000026	0.00012
		06-Sep-25	<0.000014	0.00026	0.00012	0.000053	<0.00014	0.94	0.0000054	0.00018	0.0030	0.053	<0.000028	0.00049	0.00012
		04-Oct-25	0.000012	<0.0000014	0.00026	0.00012	0.18	0.000053	0.030	<0.0000014	0.0000054	0.00018	0.0030	0.0000091	0.00049

Note: mg/dm^2/d = milligrams per square decimetre per day. < = less than. Metal depositional rates presented are the total metal concentrations.

Table B.8: Dustfall Deposition Rates for Dustfall Monitoring Stations Near Sheardown Lake Northwest (NW), 2013 to 2025

Season	Station ID	Period	Sample Date	Unit	Sampling Days	Insoluble Dustfall		
						Fixed	Volatile	Total
Ice Cover	DF-M-01	2013 to 2014	14-Dec-13	mg/dm²/day	39	<0.10	<0.10	<0.10
	DF-M-01		13-Jan-14	mg/dm²/day	30	0.28	<0.10	0.28
	DF-M-01		26-Feb-14	mg/dm²/day	44	0.39	<0.10	0.39
	DF-M-01		17-Mar-14	mg/dm²/day	19	<0.16	<0.16	0.20
	DF-M-01		14-Apr-14	mg/dm²/day	28	4.9	0.57	5.5
	DF-M-01		19-May-14	mg/dm²/day	35	0.80	<0.10	0.79
	DF-M-01		29-Jun-14	mg/dm²/day	41	1.0	<0.10	1.0
	DF-M-01	2014 to 2015	12-Sep-14	mg/dm²/day	33	0.45	<0.10	0.45
	DF-M-01		7-Dec-14	mg/dm²/day	86	1.1	<0.10	1.2
	DF-M-01		4-Jan-15	mg/dm²/day	30	0.37	<0.11	0.37
	DF-M-01		7-Feb-15	mg/dm²/day	35	2.9	<0.10	2.9
	DF-M-01		8-Mar-15	mg/dm²/day	28	0.72	<0.11	0.66
	DF-M-01		7-Apr-15	mg/dm²/day	30	11	<0.10	10
	DF-M-01		9-May-15	mg/dm²/day	32	14	0.29	14
	DF-M-01		8-Jun-15	mg/dm²/day	30	1.7	<0.10	1.7
	DF-M-01		10-Jul-15	mg/dm²/day	32	0.41	<0.10	0.41
	DF-M-01	2015 to 2016	8-Oct-15	mg/dm²/day	32	0.48	<0.10	0.50
	DF-M-01		17-Nov-15	mg/dm²/day	40	0.16	<0.10	0.16
	DF-M-01		21-Dec-15	mg/dm²/day	34	0.17	<0.10	0.18
	DF-M-01		18-Jan-16	mg/dm²/day	28	0.36	<0.10	0.38
	DF-M-01		16-Feb-16	mg/dm²/day	29	0.31	<0.10	0.31
	DF-M-01		14-Mar-16	mg/dm²/day	27	1.2	<0.10	1.3
	DF-M-01		11-Apr-16	mg/dm²/day	28	1.0	<0.10	1.1
	DF-M-01		9-May-16	mg/dm²/day	28	6.1	0.71	6.8
	DF-M-01		11-Jun-16	mg/dm²/day	33	2.4	<0.10	2.5
	DF-M-01		12-Jul-16	mg/dm²/day	31	3.1	<0.10	3.1
	DF-M-01	2016 to 2017	17-Oct-16	mg/dm²/day	24	4.5	<1.0	4.7
	DF-M-01		19-Nov-16	mg/dm²/day	33	2.6	0.18	2.8
	DF-M-01		19-Dec-16	mg/dm²/day	30	0.53	<0.10	0.53
	DF-M-01		19-Jan-17	mg/dm²/day	31	5.5	0.48	6.0
	DF-M-01		19-Feb-17	mg/dm²/day	31	<0.10	<0.10	<0.10
	DF-M-01		22-Mar-17	mg/dm²/day	31	0.84	<0.10	0.89
	DF-M-01		23-Apr-17	mg/dm²/day	32	1.5	<0.10	1.5
	DF-M-01		21-May-17	mg/dm²/day	28	9.6	0.3	9.9
	DF-M-01		19-Jun-17	mg/dm²/day	29	2.4	<0.10	2.5
	DF-M-01		21-Jul-17	mg/dm²/day	32	5.3	0.17	5.5
	DF-M-01	2017 to 2018	15-Oct-17	mg/dm²/day	25	2.7	0.18	2.8
	DF-M-01		14-Nov-17	mg/dm²/day	30	0.75	0.12	0.87
	DF-M-01		10-Dec-17	mg/dm²/day	26	40	1.2	42
	DF-M-01		9-Jan-18	mg/dm²/day	30	0.42	<0.10	0.44
	DF-M-01		13-Feb-18	mg/dm²/day	35	2.7	0.14	2.8
	DF-M-01		17-Mar-18	mg/dm²/day	32	2.1	<0.10	2.1
	DF-M-01		20-Apr-18	mg/dm²/day	34	4.4	0.12	4.5
	DF-M-01		13-May-18	mg/dm²/day	23	4.7	0.79	5.5
	DF-M-01		15-Jun-18	mg/dm²/day	33	3.9	<0.10	4.0
	DF-M-01		17-Jul-18	mg/dm²/day	32	0.84	<0.10	0.87
	DF-M-01	2018 to 2019	10-Oct-18	mg/dm²/day	27	2.7	0.14	2.9
	DF-M-01		10-Nov-18	mg/dm²/day	32	0.49	<0.10	0.49
	DF-M-01		9-Dec-18	mg/dm²/day	29	0.45	<0.10	0.45
	DF-M-01		7-Jan-19	mg/dm²/day	29	1.5	<0.10	1.5
	DF-M-01		4-Feb-19	mg/dm²/day	28	0.87	<0.10	0.91

Notes: ID = identifier. mg/dm^2/day = milligram per square decimetre per day. < = less than. - = no data.

Table B.8: Dustfall Deposition Rates for Dustfall Monitoring Stations Near Sheardown Lake Northwest (NW), 2013 to 2025

Season	Station ID	Period	Sample Date	Unit	Sampling Days	Insoluble Dustfall		
						Fixed	Volatile	Total
Ice Cover	DF-M-01	2018 to 2019	4-Mar-19	mg/dm²/day	28	0.24	<0.10	0.25
	DF-M-01		2-Apr-19	mg/dm²/day	29	3.1	0.21	3.3
	DF-M-01		2-May-19	mg/dm²/day	30	3.0	0.11	3.1
	DF-M-01		29-May-19	mg/dm²/day	27	1.8	<0.10	1.9
	DF-M-01		25-Jun-19	mg/dm²/day	27	0.18	<0.10	0.19
	DF-M-01		24-Jul-19	mg/dm²/day	29	0.50	<0.10	0.55
	DF-M-01	2019 to 2020	16-Oct-19	mg/dm²/day	28	0.70	<0.10	0.72
	DF-M-01		13-Nov-19	mg/dm²/day	28	0.28	<0.10	0.30
	DF-M-01		12-Dec-19	mg/dm²/day	29	1.7	<0.10	1.7
	DF-M-01		8-Jan-20	mg/dm²/day	27	2.2	<0.10	2.2
	DF-M-01		5-Feb-20	mg/dm²/day	28	0.31	<0.10	0.33
	DF-M-01		4-Mar-20	mg/dm²/day	28	0.39	<0.10	0.41
	DF-M-01		1-Apr-20	mg/dm²/day	28	6.4	0.21	6.6
	DF-M-01		1-May-20	mg/dm²/day	30	1.8	<0.10	1.9
	DF-M-01		29-May-20	mg/dm²/day	28	17	0.49	17
	DF-M-01		29-Jun-20	mg/dm²/day	31	1.2	<0.10	1.2
	DF-M-01		27-Jul-20	mg/dm²/day	28	0.79	<0.10	0.84
	DF-M-01	2020 to 2021	21-Oct-20	mg/dm²/day	30	5.7	0.15	5.9
	DF-M-01		19-Nov-20	mg/dm²/day	29	0.28	<0.10	0.30
	DF-M-01		20-Dec-20	mg/dm²/day	31	1.5	<0.10	1.5
	DF-M-01		18-Jan-21	mg/dm²/day	29	10.0	0.45	10
	DF-M-01		17-Feb-21	mg/dm²/day	30	0.87	<0.10	0.93
	DF-M-01		20-Mar-21	mg/dm²/day	31	2.6	<0.10	2.6
	DF-M-01		25-Apr-21	mg/dm²/day	36	2.9	0.11	3.0
	DF-M-01		20-May-21	mg/dm²/day	28	9.9	0.36	10
	DF-M-01		20-Jun-21	mg/dm²/day	31	3.2	<0.10	3.3
	DF-M-01		22-Jul-21	mg/dm²/day	32	0.46	<0.10	0.46
	DF-M-01	2021 to 2022	21-Oct-21	mg/dm²/day	29	1.0	<0.10	1.1
	DF-M-01		18-Nov-21	mg/dm²/day	28	0.85	<0.10	0.88
	DF-M-01		17-Dec-21	mg/dm²/day	29	7.8	0.2	8.0
	DF-M-01		15-Jan-22	mg/dm²/day	29	4.9	0.16	5.0
	DF-M-01		17-Feb-22	mg/dm²/day	33	5.6	<0.10	5.6
	DF-M-01		19-Mar-22	mg/dm²/day	30	0.89	<0.10	0.91
	DF-M-01		18-Apr-22	mg/dm²/day	30	3.6	0.14	3.8
	DF-M-01		17-May-22	mg/dm²/day	29	13	0.37	13
	DF-M-01		17-Jun-22	mg/dm²/day	31	3.2	<0.10	3.3
	DF-M-01		16-Jul-22	mg/dm²/day	29	2.4	<0.10	2.5
	DF-M-01	2022 to 2023	11-Oct-22	mg/dm²/day	29	1.2	<0.10	1.2
	DF-M-01		18-Nov-22	mg/dm²/day	38	0.56	<0.10	0.57
	DF-M-01		16-Dec-22	mg/dm²/day	28	2.3	<0.10	2.3
	DF-M-01		16-Jan-23	mg/dm²/day	31	0.48	< 0.10	0.5
	DF-M-01		16-Feb-23	mg/dm²/day	31	0.49	< 0.10	0.49
	DF-M-01		11-Mar-23	mg/dm²/day	23	0.51	< 0.10	0.52
	DF-M-01		9-Apr-23	mg/dm²/day	83	0.79	< 0.10	0.81
	DF-M-01		8-May-23	mg/dm²/day	81	1.8	< 0.10	1.8
	DF-M-01		3-Jun-23	mg/dm²/day	26	1.8	< 0.10	1.8
	DF-M-01		1-Jul-23	mg/dm²/day	28	1.4	< 0.10	1.4
	DF-M-01	2023 to 2024	Oct-23	mg/dm²/day	n.a	-	-	-
	DF-M-01		18-Nov-23	mg/dm²/day	n.a	2.6	< 0.1	2.7
	DF-M-01		24-Dec-23	mg/dm²/day	36	2.1	< 0.1	2.2
	DF-M-01		23-Jan-24	mg/dm²/day	30	1.8	<0.10	1.9

Notes: ID = identifier. mg/dm^2/day = milligram per square decimetre per day. < = less than. - = no data.

Table B.8: Dustfall Deposition Rates for Dustfall Monitoring Stations Near Sheardown Lake Northwest (NW), 2013 to 2025

Season	Station ID	Period	Sample Date	Unit	Sampling Days	Insoluble Dustfall		
						Fixed	Volatile	Total
Ice Cover	DF-M-01	2023 to 2024	22-Feb-24	mg/dm²/day	30	1.8	0.16	1.9
	DF-M-01		22-Mar-24	mg/dm²/day	29	1.4	<0.10	1.5
	DF-M-01		23-Apr-24	mg/dm²/day	32	0.95	<0.10	0.99
	DF-M-01		7-May-24	mg/dm²/day	14	6.3	0.12	6.4
	DF-M-01		23-May-24	mg/dm²/day	16	2.9	<0.10	3.0
	DF-M-01		26-Jun-24	mg/dm²/day	34	1.3	<0.10	1.4
	DF-M-01		24-Jul-24	mg/dm²/day	28	0.47	<0.10	0.49
	DF-M-01	2024 to 2025	17-Nov-24	mg/dm²/day	28	1.7	<0.10	1.7
	DF-M-01		15-Dec-24	mg/dm²/day	28	0.36	<0.10	0.41
	DF-M-01		13-Jan-25	mg/dm²/day	29	0.17	<0.10	0.2
	DF-M-01		10-Feb-25	mg/dm²/day	28	0.68	<0.10	0.72
	DF-M-01		11-Mar-25	mg/dm²/day	29	7.1	0.22	7.3
	DF-M-01		12-Apr-25	mg/dm²/day	32	6.3	0.15	6.5
	DF-M-01		14-May-25	mg/dm²/day	32	15	0.34	15
	DF-M-01		11-Jun-25	mg/dm²/day	28	0.3	<0.10	0.32
	DF-M-01		9-Jul-25	mg/dm²/day	28	0.81	<0.10	0.83
	DF-M-02	2013 to 2014	14-Dec-13	mg/dm²/day	39	<0.10	<0.10	<0.10
	DF-M-02		13-Jan-14	mg/dm²/day	30	0.12	<0.10	0.12
	DF-M-02		26-Feb-14	mg/dm²/day	44	0.13	<0.10	0.13
	DF-M-02		17-Mar-14	mg/dm²/day	19	1.1	<0.16	1.1
	DF-M-02		14-Apr-14	mg/dm²/day	28	1.0	<0.11	1.0
	DF-M-02		19-May-14	mg/dm²/day	35	1.0	<0.10	1.0
	DF-M-02		29-Jun-14	mg/dm²/day	41	0.23	<0.10	0.27
	DF-M-02	2014 to 2015	12-Sep-14	mg/dm²/day	33	0.21	<0.10	0.21
	DF-M-02		7-Dec-14	mg/dm²/day	86	0.66	<0.10	0.68
	DF-M-02		4-Jan-15	mg/dm²/day	30	0.65	<0.11	0.65
	DF-M-02		7-Feb-15	mg/dm²/day	35	0.84	<0.10	0.86
	DF-M-02		8-Mar-15	mg/dm²/day	27	1.1	<0.11	1.1
	DF-M-02		6-Apr-15	mg/dm²/day	30	0.90	<0.10	0.88
	DF-M-02		9-May-15	mg/dm²/day	33	3.0	<0.10	3.0
	DF-M-02		8-Jun-15	mg/dm²/day	30	1.4	<0.10	1.3
	DF-M-02		10-Jul-15	mg/dm²/day	32	0.66	<0.10	0.66
	DF-M-02	2015 to 2016	8-Oct-15	mg/dm²/day	33	0.29	<0.10	0.28
	DF-M-02		17-Nov-15	mg/dm²/day	40	0.46	<0.10	0.46
	DF-M-02		21-Dec-15	mg/dm²/day	34	0.89	<0.10	0.91
	DF-M-02		18-Jan-16	mg/dm²/day	28	2.6	<0.10	2.6
	DF-M-02		16-Feb-16	mg/dm²/day	29	2.1	<0.10	2.2
	DF-M-02		14-Mar-16	mg/dm²/day	27	6.5	<0.10	6.6
	DF-M-02		11-Apr-16	mg/dm²/day	28	3.3	<0.10	3.3
	DF-M-02		9-May-16	mg/dm²/day	28	13	0.93	14
	DF-M-02		11-Jun-16	mg/dm²/day	33	4.3	0.12	4.5
	DF-M-02		12-Jul-16	mg/dm²/day	31	1.3	<0.10	1.3
	DF-M-02	2016 to 2017	17-Oct-16	mg/dm²/day	24	<1.0	<1.0	<1.0
	DF-M-02		19-Nov-16	mg/dm²/day	33	5.9	<1.0	6.6
	DF-M-02		19-Dec-16	mg/dm²/day	30	0.90	<0.10	0.91
	DF-M-02		16-Jan-17	mg/dm²/day	28	3.1	0.16	3.3
	DF-M-02		17-Feb-17	mg/dm²/day	32	0.25	<0.10	0.26
	DF-M-02		22-Mar-17	mg/dm²/day	33	2.2	0.13	2.3
	DF-M-02		23-Apr-17	mg/dm²/day	32	1.1	<0.10	1.1
	DF-M-02		21-May-17	mg/dm²/day	28	4.0	0.14	4.2
	DF-M-02		19-Jun-17	mg/dm²/day	29	0.84	<0.10	0.88
	DF-M-02		22-Jul-17	mg/dm²/day	33	2.5	<0.10	2.5
	DF-M-02	2017 to 2018	15-Oct-17	mg/dm²/day	25	1.6	<0.10	1.7
	DF-M-02		14-Nov-17	mg/dm²/day	30	1.5	<0.10	1.6
	DF-M-02		10-Dec-17	mg/dm²/day	26	10	0.19	11
	DF-M-02		9-Jan-18	mg/dm²/day	30	1.8	<0.10	1.8
	DF-M-02		13-Feb-18	mg/dm²/day	35	4.6	0.17	4.7
	DF-M-02		17-Mar-18	mg/dm²/day	32	1.5	<0.10	1.5
	DF-M-02		20-Apr-18	mg/dm²/day	34	4.9	<0.10	5.0
	DF-M-02		13-May-18	mg/dm²/day	23	3.1	0.11	3.2

Notes: ID = identifier. mg/dm^2/day = milligram per square decimetre per day. < = less than. - = no data.

Table B.8: Dustfall Deposition Rates for Dustfall Monitoring Stations Near Sheardown Lake Northwest (NW), 2013 to 2025

Season	Station ID	Period	Sample Date	Unit	Sampling Days	Insoluble Dustfall		
						Fixed	Volatile	Total
Ice Cover	DF-M-02	2017 to 2018	15-Jun-18	mg/dm²/day	33	2.4	<0.10	2.4
	DF-M-02		17-Jul-18	mg/dm²/day	32	<0.10	<0.10	0.11
	DF-M-02	2018 to 2019	10-Oct-18	mg/dm²/day	27	4.4	<0.10	4.4
	DF-M-02		10-Nov-18	mg/dm²/day	31	2.7	<0.10	2.7
	DF-M-02		9-Dec-18	mg/dm²/day	29	1.8	<0.10	1.8
	DF-M-02		7-Jan-19	mg/dm²/day	29	3.5	0.19	3.7
	DF-M-02		4-Feb-19	mg/dm²/day	28	2.4	<0.10	2.5
	DF-M-02		4-Mar-19	mg/dm²/day	28	2.1	<0.10	2.1
	DF-M-02		2-Apr-19	mg/dm²/day	29	9.6	0.36	9.9
	DF-M-02		29-May-19	mg/dm²/day	27	1.7	<0.10	1.7
	DF-M-02		25-Jun-19	mg/dm²/day	28	0.23	<0.10	0.23
	DF-M-02		24-Jul-19	mg/dm²/day	28	1.0	<0.10	1.1
	DF-M-02	2019 to 2020	16-Oct-19	mg/dm²/day	28	0.50	<0.10	0.52
	DF-M-02		13-Nov-19	mg/dm²/day	28	0.20	<0.10	0.21
	DF-M-02		12-Dec-19	mg/dm²/day	29	2.8	<0.10	2.8
	DF-M-02		8-Jan-20	mg/dm²/day	27	0.71	<0.10	0.73
	DF-M-02		5-Feb-20	mg/dm²/day	28	1.3	<0.10	1.3
	DF-M-02		4-Mar-20	mg/dm²/day	28	1.9	<0.10	1.9
	DF-M-02		1-Apr-20	mg/dm²/day	28	5.1	0.32	5.5
	DF-M-02		1-May-20	mg/dm²/day	30	1.9	<0.10	2.0
	DF-M-02		29-May-20	mg/dm²/day	28	2.8	0.1	2.9
	DF-M-02		29-Jun-20	mg/dm²/day	31	0.43	<0.10	0.44
	DF-M-02		27-Jul-20	mg/dm²/day	28	0.92	<0.10	0.97
	DF-M-02	2020 to 2021	20-Dec-20	mg/dm²/day	31	1.2	<0.10	1.3
	DF-M-02		21-Oct-20	mg/dm²/day	30	4.8	0.1	4.9
	DF-M-02		19-Nov-20	mg/dm²/day	29	0.69	<0.10	0.73
	DF-M-02		18-Jan-21	mg/dm²/day	29	8.0	0.69	8.7
	DF-M-02		17-Feb-21	mg/dm²/day	30	1.3	<0.10	1.3
	DF-M-02		20-Mar-21	mg/dm²/day	31	1.6	<0.10	1.7
	DF-M-02		22-Apr-21	mg/dm²/day	33	1.8	<0.10	1.8
	DF-M-02		20-May-21	mg/dm²/day	28	1.2	<0.10	1.2
	DF-M-02		20-Jun-21	mg/dm²/day	31	1.4	<0.10	1.4
	DF-M-02		22-Jul-21	mg/dm²/day	32	0.27	<0.10	0.27
	DF-M-02	2021 to 2022	21-Oct-21	mg/dm²/day	29	0.85	<0.10	0.88
	DF-M-02		18-Nov-21	mg/dm²/day	28	1.0	<0.10	1.1
	DF-M-02		17-Dec-21	mg/dm²/day	29	5.9	0.15	6.1
	DF-M-02		15-Jan-22	mg/dm²/day	29	1.9	<0.10	2.0
	DF-M-02		17-Feb-22	mg/dm²/day	33	18	0.25	19
	DF-M-02		20-Mar-22	mg/dm²/day	31	3.3	<0.10	3.4
	DF-M-02		18-Apr-22	mg/dm²/day	29	5.8	0.11	5.9
	DF-M-02		18-May-22	mg/dm²/day	30	4.5	<0.10	4.5
	DF-M-02		17-Jun-22	mg/dm²/day	31	1.5	<0.10	1.5
	DF-M-02		16-Jul-22	mg/dm²/day	29	4.5	0.14	4.7
	DF-M-02	2022 to 2023	11-Oct-22	mg/dm²/day	29	0.97	<0.10	0.99
	DF-M-02		18-Nov-22	mg/dm²/day	30	5.1	<0.10	5.2
	DF-M-02		18-Dec-22	mg/dm²/day	38	0.59	<0.10	0.60
	DF-M-02		16-Jan-23	mg/dm²/day	29	2.4	< 0.10	2.4
	DF-M-02		16-Feb-23	mg/dm²/day	31	3.7	< 0.10	3.7
	DF-M-02		11-Mar-23	mg/dm²/day	23	2.5	< 0.10	2.5
	DF-M-02		10-Apr-23	mg/dm²/day	53	2.6	< 0.10	2.6
	DF-M-02		8-May-23	mg/dm²/day	81	2.6	< 0.10	2.6

Notes: ID = identifier. mg/dm^2/day = milligram per square decimetre per day. < = less than. - = no data.

Table B.8: Dustfall Deposition Rates for Dustfall Monitoring Stations Near Sheardown Lake Northwest (NW), 2013 to 2025

Season	Station ID	Period	Sample Date	Unit	Sampling Days	Insoluble Dustfall		
						Fixed	Volatile	Total
Ice Cover	DF-M-02	2022 to 2023	3-Jun-23	mg/dm²/day	26	1.1	< 0.10	1.1
	DF-M-02		1-Jul-23	mg/dm²/day	28	0.88	< 0.10	0.9
	DF-M-02	2023 to 2024	Oct-23	mg/dm²/day	n.a	n.a	n.a	n.a
	DF-M-02		19-Nov-23	mg/dm²/day	n.a	2.2	< 0.1	2.3
	DF-M-02		24-Dec-23	mg/dm²/day	35	3.7	< 0.1	3.8
	DF-M-02		23-Jan-24	mg/dm²/day	30	3.8	0.16	4.0
	DF-M-02		22-Feb-24	mg/dm²/day	30	5.3	0.1	5.5
	DF-M-02		23-Mar-24	mg/dm²/day	30	6.0	0.21	6.2
	DF-M-02		23-Apr-24	mg/dm²/day	31	1.6	<0.10	1.6
	DF-M-02		7-May-24	mg/dm²/day	14	3.0	<0.10	3.1
	DF-M-02		23-May-24	mg/dm²/day	16	1.8	<0.10	1.9
	DF-M-02		26-Jun-24	mg/dm²/day	34	1.3	<0.10	1.3
	DF-M-02		24-Jul-2024	mg/dm²/day	28	0.56	<0.10	0.6
	DF-M-02	2024 to 2025	17-Nov-24	mg/dm²/day	28	0.58	<0.10	0.61
	DF-M-02		15-Dec-24	mg/dm²/day	28	0.93	<0.10	0.99
	DF-M-02		13-Jan-25	mg/dm²/day	29	1.6	<0.10	1.7
	DF-M-02		10-Feb-25	mg/dm²/day	28	3.8	0.11	3.9
	DF-M-02		11-Mar-25	mg/dm²/day	29	<0.10	0.14	0.14
	DF-M-02		12-Apr-25	mg/dm²/day	32	3.3	<0.10	3.4
	DF-M-02		14-May-25	mg/dm²/day	32	2.5	<0.10	2.5
	DF-M-02		11-Jun-25	mg/dm²/day	28	1.3	<0.10	1.4
	DF-M-02		9-Jul-25	mg/dm²/day	28	1.9	<0.10	2.0
	DF-M-03	2013 to 2014	14-Dec-13	mg/dm²/day	39	0.35	<0.10	0.35
	DF-M-03		13-Jan-14	mg/dm²/day	30	0.30	<0.10	0.30
	DF-M-03		26-Feb-14	mg/dm²/day	44	<0.10	<0.10	<0.10
	DF-M-03		17-Mar-14	mg/dm²/day	19	<0.16	<0.16	<0.16
	DF-M-03		14-Apr-14	mg/dm²/day	28	0.16	<0.11	0.16
	DF-M-03		19-May-14	mg/dm²/day	35	0.69	<0.10	0.66
	DF-M-03		29-Jun-14	mg/dm²/day	41	0.29	<0.10	0.31
	DF-M-03	2014 to 2015	12-Sep-14	mg/dm²/day	33	0.45	<0.10	0.45
	DF-M-03		7-Dec-14	mg/dm²/day	86	3.0	<0.10	3.0
	DF-M-03		4-Jan-15	mg/dm²/day	30	0.90	<0.11	0.98
	DF-M-03		7-Feb-15	mg/dm²/day	38	0.51	<0.10	0.54
	DF-M-03		7-Mar-15	mg/dm²/day	24	0.79	<0.13	0.69
	DF-M-03		6-Apr-15	mg/dm²/day	30	1.9	<0.10	1.8
	DF-M-03		9-May-15	mg/dm²/day	33	3.3	<0.10	3.3
	DF-M-03		8-Jun-15	mg/dm²/day	30	2.5	<0.10	2.6
	DF-M-03		10-Jul-15	mg/dm²/day	32	1.7	<0.10	1.7
	DF-M-03	2015 to 2016	8-Oct-15	mg/dm²/day	32	0.50	<0.10	0.50
	DF-M-03		17-Nov-15	mg/dm²/day	40	0.75	<0.10	0.75
	DF-M-03		21-Dec-15	mg/dm²/day	34	0.45	<0.10	0.48
	DF-M-03		18-Jan-16	mg/dm²/day	28	0.99	<0.10	1.1
	DF-M-03		16-Feb-16	mg/dm²/day	29	1.1	<0.10	1.1
	DF-M-03		14-Mar-16	mg/dm²/day	27	1.6	<0.10	1.7
	DF-M-03		11-Apr-16	mg/dm²/day	28	7.6	0.28	7.9
	DF-M-03		9-May-16	mg/dm²/day	28	3.4	0.11	3.5
	DF-M-03		11-Jun-16	mg/dm²/day	33	2.5	<0.10	2.6
	DF-M-03		12-Jul-16	mg/dm²/day	31	4.9	0.15	5.0
	DF-M-03	2016 to 2017	17-Oct-16	mg/dm²/day	23	<1.0	<1.0	<1.0
	DF-M-03		19-Nov-16	mg/dm²/day	33	1.2	<0.10	1.2
	DF-M-03		19-Dec-16	mg/dm²/day	29	0.51	<0.10	0.54
	DF-M-03		16-Jan-17	mg/dm²/day	28	0.87	<0.10	0.89
	DF-M-03		17-Feb-17	mg/dm²/day	32	0.19	<0.10	0.19
	DF-M-03		22-Mar-17	mg/dm²/day	33	1.4	<0.10	1.5
	DF-M-03		23-Apr-17	mg/dm²/day	32	0.96	<0.10	1.0
	DF-M-03		21-May-17	mg/dm²/day	28	3.8	<0.10	3.9
	DF-M-03		19-Jun-17	mg/dm²/day	29	1.7	<0.10	1.7
	DF-M-03		22-Jul-17	mg/dm²/day	33	4.9	0.12	5.0
	DF-M-03	2017 to 2018	15-Oct-17	mg/dm²/day	25	2.6	<0.10	2.7
	DF-M-03		14-Nov-17	mg/dm²/day	30	0.76	<0.10	0.81

Notes: ID = identifier. mg/dm^2/day = milligram per square decimetre per day. < = less than. - = no data.

Table B.8: Dustfall Deposition Rates for Dustfall Monitoring Stations Near Sheardown Lake Northwest (NW), 2013 to 2025

Season	Station ID	Period	Sample Date	Unit	Sampling Days	Insoluble Dustfall		
						Fixed	Volatile	Total
Ice Cover	DF-M-03	2017 to 2018	10-Dec-17	mg/dm²/day	26	2.8	<0.10	2.9
	DF-M-03		9-Jan-18	mg/dm²/day	30	1.3	<0.10	1.3
	DF-M-03		13-Feb-18	mg/dm²/day	35	1.7	0.32	2.1
	DF-M-03		17-Mar-18	mg/dm²/day	32	0.92	<0.10	0.93
	DF-M-03		20-Apr-18	mg/dm²/day	34	2.4	<0.10	2.3
	DF-M-03		13-May-18	mg/dm²/day	23	1.4	<0.10	1.4
	DF-M-03		15-Jun-18	mg/dm²/day	33	4.3	<0.10	4.3
	DF-M-03		17-Jul-18	mg/dm²/day	29	1.5	<0.10	1.6
	DF-M-03	2018 to 2019	10-Oct-18	mg/dm²/day	27	3.5	<0.10	3.5
	DF-M-03		11-Nov-18	mg/dm²/day	32	1.1	<0.10	1.1
	DF-M-03		10-Dec-18	mg/dm²/day	29	0.48	<0.10	0.47
	DF-M-03		7-Jan-19	mg/dm²/day	28	1.1	<0.10	1.1
	DF-M-03		4-Feb-19	mg/dm²/day	29	1.6	<0.10	1.7
	DF-M-03		7-Mar-19	mg/dm²/day	30	2.4	<0.10	2.5
	DF-M-03		2-Apr-19	mg/dm²/day	26	6.9	0.46	7.4
	DF-M-03		2-May-19	mg/dm²/day	30	2.4	<0.10	2.5
	DF-M-03		29-May-19	mg/dm²/day	27	1.4	<0.10	1.4
	DF-M-03		26-Jun-19	mg/dm²/day	28	0.74	<0.10	0.76
	DF-M-03		24-Jul-19	mg/dm²/day	28	2.2	<0.10	2.3
	DF-M-03	2019 to 2020	16-Oct-19	mg/dm²/day	28	1.4	<0.10	1.5
	DF-M-03		13-Nov-19	mg/dm²/day	28	0.52	<0.10	0.54
	DF-M-03		12-Dec-19	mg/dm²/day	29	1.9	<0.10	2.0
	DF-M-03		8-Jan-20	mg/dm²/day	28	0.31	<0.10	0.33
	DF-M-03		5-Feb-20	mg/dm²/day	27	0.45	<0.10	0.46
	DF-M-03		4-Mar-20	mg/dm²/day	28	1.4	<0.10	1.4
	DF-M-03		1-Apr-20	mg/dm²/day	28	2.2	0.14	2.3
	DF-M-03		1-May-20	mg/dm²/day	30	3.9	0.1	4.0
	DF-M-03		29-May-20	mg/dm²/day	28	6.8	0.17	7.0
	DF-M-03		29-Jun-20	mg/dm²/day	31	1.9	<0.10	1.9
	DF-M-03		27-Jul-20	mg/dm²/day	28	3.1	<0.10	3.2
	DF-M-03	2020 to 2021	20-Dec-20	mg/dm²/day	31	0.48	<0.10	0.49
	DF-M-03		21-Oct-20	mg/dm²/day	30	5.8	0.12	6.0
	DF-M-03		19-Nov-20	mg/dm²/day	29	0.37	<0.10	0.38
	DF-M-03		18-Jan-21	mg/dm²/day	29	0.79	<0.10	0.83
	DF-M-03		17-Feb-21	mg/dm²/day	30	0.84	<0.10	0.89
	DF-M-03		20-Mar-21	mg/dm²/day	31	1.5	<0.10	1.5
	DF-M-03		25-Apr-21	mg/dm²/day	36	0.74	<0.10	0.78
	DF-M-03		21-May-21	mg/dm²/day	26	0.75	<0.10	0.78
	DF-M-03		21-Jun-21	mg/dm²/day	31	4.3	<0.10	4.4
	DF-M-03		22-Jul-21	mg/dm²/day	31	1.3	<0.10	1.4
	DF-M-03	2021-2022	21-Oct-21	mg/dm²/day	29	0.53	<0.10	0.56
	DF-M-03		18-Nov-21	mg/dm²/day	28	1.5	<0.10	1.6
	DF-M-03		17-Dec-21	mg/dm²/day	29	1.9	<0.10	2.0
	DF-M-03		15-Jan-22	mg/dm²/day	29	4.7	0.12	4.8
	DF-M-03		18-Feb-22	mg/dm²/day	34	6.9	0.21	7.1
	DF-M-03		19-Mar-22	mg/dm²/day	29	2.9	<0.10	3.0
	DF-M-03		18-Apr-22	mg/dm²/day	30	1.6	<0.10	1.7
	DF-M-03		18-May-22	mg/dm²/day	30	7.3	0.23	7.6
	DF-M-03		17-Jun-22	mg/dm²/day	30	4.2	0.11	4.4
	DF-M-03		16-Jul-22	mg/dm²/day	29	5.8	0.17	6.0
	DF-M-03	2022-2023	11-Oct-22	mg/dm²/day	29	0.56	<0.10	0.59

Notes: ID = identifier. mg/dm^2/day = milligram per square decimetre per day. < = less than. - = no data.

Table B.8: Dustfall Deposition Rates for Dustfall Monitoring Stations Near Sheardown Lake Northwest (NW), 2013 to 2025

Season	Station ID	Period	Sample Date	Unit	Sampling Days	Insoluble Dustfall		
						Fixed	Volatile	Total
Ice Cover	DF-M-03	2022 to 2023	18-Nov-22	mg/dm²/day	38	0.48	<0.10	0.49
	DF-M-03		20-Dec-22	mg/dm²/day	32	0.51	<0.10	0.52
	DF-M-03		16-Jan-23	mg/dm²/day	28	1.0	< 0.10	1.1
	DF-M-03		16-Feb-23	mg/dm²/day	31	0.92	< 0.10	0.95
	DF-M-03		11-Mar-23	mg/dm²/day	23	1.1	< 0.10	1.2
	DF-M-03		10-Apr-23	mg/dm²/day	111	6.0	0.1	6.1
	DF-M-03		9-May-23	mg/dm²/day	82	3.9	0.11	4.0
	DF-M-03		3-Jun-23	mg/dm²/day	25	2.9	0.11	3.0
	DF-M-03		1-Jul-23	mg/dm²/day	28	3.2	< 0.10	3.2
	DF-M-03	2023 to 2024	Oct-23	mg/dm²/day	n.a	n.a	n.a	n.a
	DF-M-03		24-Nov-23	mg/dm²/day	n.a	1.0	< 0.1	1.1
	DF-M-03		27-Dec-23	mg/dm²/day	33	1.8	< 0.1	1.9
	DF-M-03		23-Jan-24	mg/dm²/day	27	3.2	<0.10	3.3
	DF-M-03		22-Feb-24	mg/dm²/day	30	2.9	<0.10	3.0
	DF-M-03		23-Mar-24	mg/dm²/day	30	4.5	0.29	4.8
	DF-M-03		23-Apr-24	mg/dm²/day	31	1.5	<0.10	1.6
	DF-M-03		7-May-24	mg/dm²/day	14	1.2	<0.10	1.2
	DF-M-03		23-May-24	mg/dm²/day	16	5.6	0.13	5.7
	DF-M-03		26-Jun-24	mg/dm²/day	34	3.3	<0.10	3.4
	DF-M-03		24-Jul-24	mg/dm²/day	28	1.9	<0.10	1.9
	DF-M-03	2024 to 2025	17-Nov-24	mg/dm²/day	28	0.45	<0.10	0.47
	DF-M-03		15-Dec-24	mg/dm²/day	28	0.45	<0.10	0.48
	DF-M-03		13-Jan-25	mg/dm²/day	29	0.72	<0.10	0.75
	DF-M-03		10-Feb-25	mg/dm²/day	28	2.2	<0.10	2.3
	DF-M-03		11-Mar-25	mg/dm²/day	29	1.7	<0.10	1.8
	DF-M-03		12-Apr-25	mg/dm²/day	32	3.9	0.12	4.0
	DF-M-03		14-May-25	mg/dm²/day	32	2.1	<0.10	2.1
	DF-M-03		11-Jun-25	mg/dm²/day	28	1.3	<0.10	1.4
	DF-M-03		9-Jul-25	mg/dm²/day	28	3.6	<0.10	3.7
Open Water	DF-M-01	2013	17-Aug-13	mg/dm²/day	28	<0.11	<0.11	<0.11
	DF-M-01		18-Sep-13	mg/dm²/day	33	0.10	<0.10	0.10
	DF-M-01	2014	10-Aug-14	mg/dm²/day	42	0.29	<0.10	0.35
	DF-M-01	2015	8-Aug-15	mg/dm²/day	29	1.4	<0.10	1.4
	DF-M-01		6-Sep-15	mg/dm²/day	29	2.6	0.14	2.7
	DF-M-01	2016	15-Aug-16	mg/dm²/day	34	1.9	<0.10	2.0
	DF-M-01		23-Sep-16	mg/dm²/day	39	0.90	<0.10	0.92
	DF-M-01	2017	19-Aug-17	mg/dm²/day	29	0.36	<0.10	0.40
	DF-M-01		20-Sep-17	mg/dm²/day	32	0.18	<0.10	0.20
	DF-M-01	2018	14-Aug-18	mg/dm²/day	28	0.12	<0.10	0.13
	DF-M-01		13-Sep-18	mg/dm²/day	30	0.26	<0.10	0.27
	DF-M-01	2019	20-Aug-19	mg/dm²/day	27	1.2	<0.10	1.2
	DF-M-01		18-Sep-19	mg/dm²/day	29	0.88	<0.10	0.90
	DF-M-01	2020	23-Aug-20	mg/dm²/day	27	0.91	<0.10	0.94
	DF-M-01		21-Sep-20	mg/dm²/day	29	0.56	<0.10	0.57
	DF-M-01	2021	21-Aug-21	mg/dm²/day	30	1.2	<0.10	1.2
	DF-M-01		22-Sep-21	mg/dm²/day	31	3.2	0.12	3.3
	DF-M-01	2022	14-Aug-22	mg/dm²/day	30	1.6	0.14	1.7
	DF-M-01		12-Sep-22	mg/dm²/day	29	0.48	<0.10	0.51
	DF-M-01	2023	29-Jul-23	mg/dm²/day	28	2.4	< 0.10	2.4
	DF-M-01		28-Aug-23	mg/dm²/day	30	0.4	< 0.10	0.41
	DF-M-01		25-Sep-23	mg/dm²/day	28	4.1	0.18	4.3
	DF-M-01	2024	21-Aug-24	mg/dm²/day	28	0.46	<0.10	0.49
	DF-M-01		20-Sep-24	mg/dm²/day	30	<0.34	<0.10	<0.34
	DF-M-01		20-Oct-24	mg/dm²/day	30	1.1	<0.10	1.2
	DF-M-01	2025	9-Aug-25	mg/dm²/day	31	<0.10	<0.10	<0.10
	DF-M-01		6-Sep-25	mg/dm²/day	28	0.23	<0.10	0.26
	DF-M-01		4-Oct-25	mg/dm²/day	28	-	-	1.1
	DF-M-02	2013	17-Aug-13	mg/dm²/day	28	<0.11	<0.11	<0.11
	DF-M-02		18-Sep-13	mg/dm²/day	33	<0.10	<0.10	<0.10
	DF-M-02	2014	10-Aug-14	mg/dm²/day	42	0.16	<0.10	0.19
	DF-M-02	2015	8-Aug-15	mg/dm²/day	29	0.91	<0.10	0.94
	DF-M-02		6-Sep-15	mg/dm²/day	29	2.5	<0.10	2.5
	DF-M-02	2016	15-Aug-16	mg/dm²/day	34	0.53	<0.10	0.57

Notes: ID = identifier. mg/dm^2/day = milligram per square decimetre per day. < = less than. - = no data.

Table B.8: Dustfall Deposition Rates for Dustfall Monitoring Stations Near Sheardown Lake Northwest (NW), 2013 to 2025

Season	Station ID	Period	Sample Date	Unit	Sampling Days	Insoluble Dustfall		
						Fixed	Volatile	Total
Open Water	DF-M-02	2016	23-Sep-16	mg/dm²/day	39	0.85	<0.10	0.89
	DF-M-02	2017	19-Aug-17	mg/dm²/day	30	0.20	<0.10	0.22
	DF-M-02		20-Sep-17	mg/dm²/day	30	0.55	<0.10	0.56
	DF-M-02	2018	14-Aug-18	mg/dm²/day	28	<0.10	<0.10	<0.10
	DF-M-02		11-Sep-18	mg/dm²/day	30	0.25	<0.10	0.26
	DF-M-02	2019	20-Aug-19	mg/dm²/day	27	0.93	<0.10	0.97
	DF-M-02		18-Sep-19	mg/dm²/day	29	0.60	<0.10	0.62
	DF-M-02	2020	23-Aug-20	mg/dm²/day	27	1.1	<0.10	1.2
	DF-M-02		21-Sep-20	mg/dm²/day	29	0.65	<0.10	0.66
	DF-M-02	2021	21-Aug-21	mg/dm²/day	30	0.36	<0.10	0.38
	DF-M-02		22-Sep-21	mg/dm²/day	31	2.8	0.11	2.9
	DF-M-02	2022	14-Aug-22	mg/dm²/day	29	1.5	<0.10	1.6
	DF-M-02		12-Sep-22	mg/dm²/day	29	1.0	<0.10	1.0
	DF-M-02	2023	29-Jul-23	mg/dm²/day	28	2.0	< 0.10	2.1
	DF-M-02		28-Aug-23	mg/dm²/day	30	0.24	< 0.10	0.26
	DF-M-02		25-Sep-23	mg/dm²/day	28	1.4	< 0.10	1.5
	DF-M-02	2024	21-Aug-24	mg/dm²/day	28	0.5	<0.10	0.52
	DF-M-02		20-Sep-24	mg/dm²/day	30	<0.40	<0.10	<0.40
	DF-M-02		20-Oct-24	mg/dm²/day	30	0.32	<0.10	0.34
	DF-M-02	2025	9-Aug-25	mg/dm²/day	31	<0.10	<0.10	<0.10
	DF-M-02		6-Sep-25	mg/dm²/day	28	0.23	<0.10	0.24
	DF-M-02		4-Oct-25	mg/dm²/day	28	-	-	1.6
	DF-M-03	2013	17-Aug-13	mg/dm²/day	28	<0.11	<0.11	<0.11
	DF-M-03		18-Sep-13	mg/dm²/day	33	0.52	<0.10	0.52
	DF-M-03	2014	10-Aug-14	mg/dm²/day	42	0.13	<0.10	0.15
	DF-M-03	2015	8-Aug-15	mg/dm²/day	29	0.76	<0.10	0.85
	DF-M-03		6-Sep-15	mg/dm²/day	29	5.3	0.16	5.4
	DF-M-03	2016	15-Aug-16	mg/dm²/day	34	1.1	<0.10	1.1
	DF-M-03		24-Sep-16	mg/dm²/day	40	1.3	<0.10	1.4
	DF-M-03	2017	19-Aug-17	mg/dm²/day	30	0.9	<0.10	0.95
	DF-M-03		20-Sep-17	mg/dm²/day	30	1.1	<0.10	1.2
	DF-M-03	2018	16-Aug-18	mg/dm²/day	30	0.33	<0.10	0.34
	DF-M-03		13-Sep-18	mg/dm²/day	28	0.52	<0.10	0.54
	DF-M-03	2019	20-Aug-19	mg/dm²/day	29	3.2	0.11	3.3
	DF-M-03		18-Sep-19	mg/dm²/day	27	4.6	0.15	4.8
	DF-M-03	2020	23-Aug-20	mg/dm²/day	27	2.1	<0.10	2.1
	DF-M-03		21-Sep-20	mg/dm²/day	29	1.3	<0.10	1.4
	DF-M-03	2021	21-Aug-21	mg/dm²/day	30	0.48	<0.10	0.5
	DF-M-03		22-Sep-21	mg/dm²/day	31	7.8	0.19	8.0
	DF-M-03	2022	14-Aug-22	mg/dm²/day	30	4.3	0.14	4.4
	DF-M-03		12-Sep-22	mg/dm²/day	29	1.5	<0.10	1.5
	DF-M-03	2023	29-Jul-23	mg/dm²/day	28	3.5	< 0.10	3.6
	DF-M-03		28-Aug-23	mg/dm²/day	30	0.16	< 0.10	0.17
	DF-M-03		25-Sep-23	mg/dm²/day	28	10	0.39	11
	DF-M-03	2024	21-Aug-24	mg/dm²/day	28	4.3	0.1	4.4
	DF-M-03		20-Sep-24	mg/dm²/day	30	<0.50	<0.10	<0.50
	DF-M-03		20-Oct-24	mg/dm²/day	30	1.0	<0.10	1.1
	DF-M-03	2025	9-Aug-25	mg/dm²/day	31	<0.10	<0.10	<0.10
	DF-M-03		7-Sep-25	mg/dm²/day	29	1.5	<0.10	1.5
	DF-M-03		4-Oct-25	mg/dm²/day	27	-	-	3.8

Notes: ID = identifier. mg/dm^2/day = milligram per square decimetre per day. < = less than. - = no data.

APPENDIX C
BENTHIC INVERTEBRATE COMMUNITY SEDIMENTATION CORRELATIONS

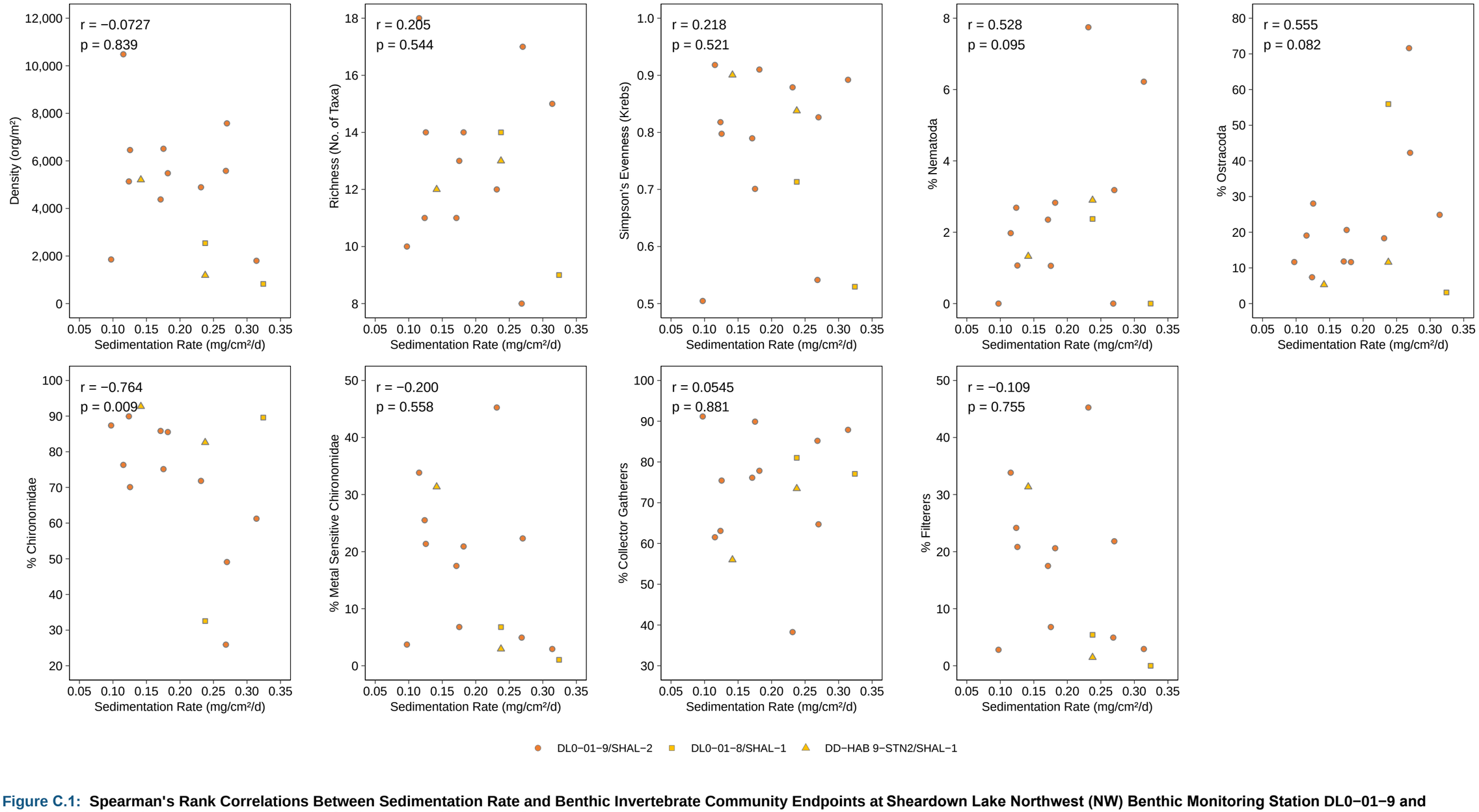

Figure C.1: Spearman's Rank Correlations Between Sedimentation Rate and Benthic Invertebrate Community Endpoints at Sheardown Lake Northwest (NW) Benthic Monitoring Station DL0−01−9 and Sedimentation Monitoring Area SHAL-2, Lake Sedimentation Monitoring Program, 2015 to 2025

Notes: SHAL−1 stations were not included in the correlation analysis, but are included in the plots for reference. "mg" = milligram; "cm^2" = centimeters squared; "d" = day; "m^2" = meters squared; "No." = number; "%" = percent.

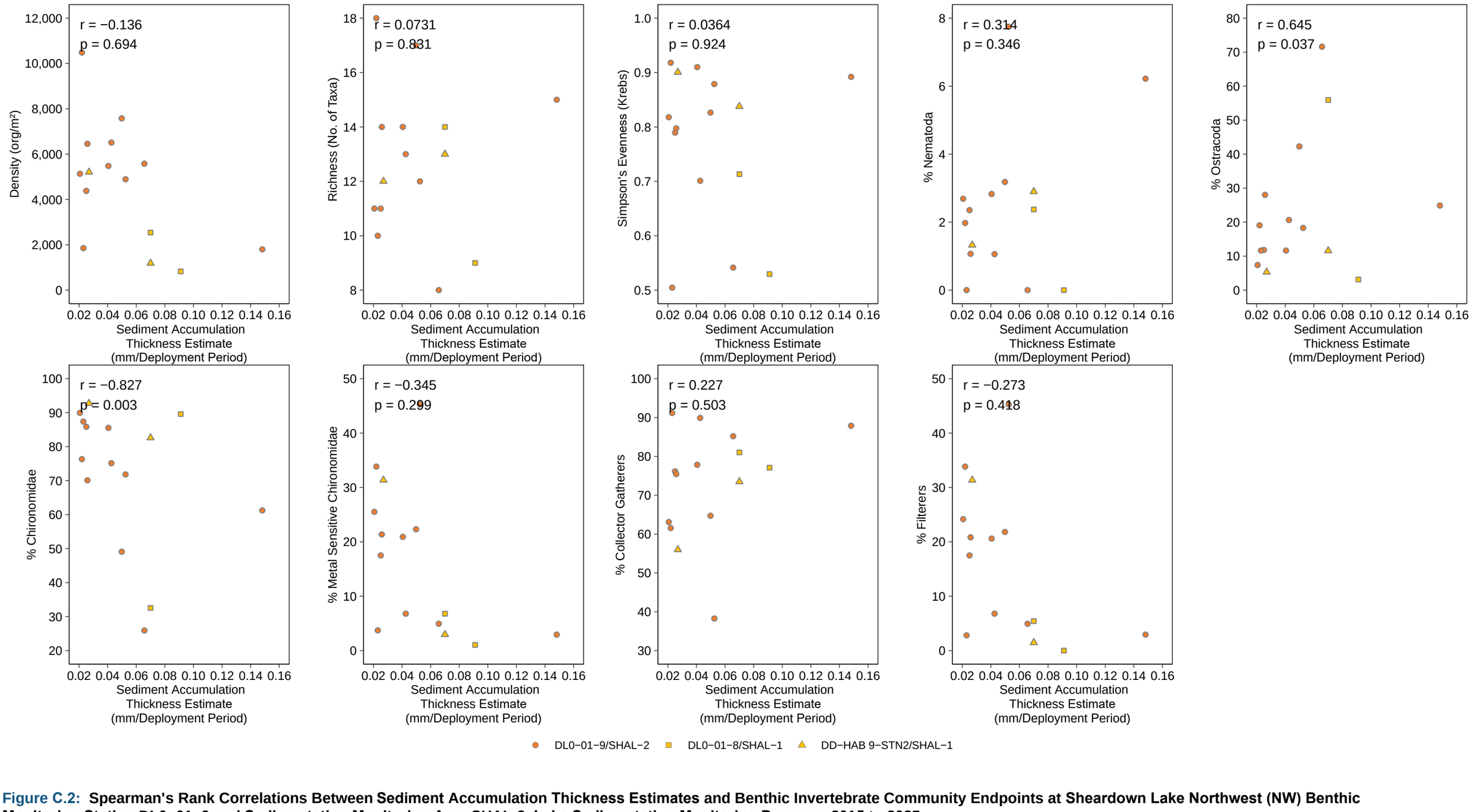

Figure C.2: Spearman's Rank Correlations Between Sediment Accumulation Thickness Estimates and Benthic Invertebrate Community Endpoints at Sheardown Lake Northwest (NW) Benthic Monitoring Station DL0−01−9 and Sedimentation Monitoring Area SHAL-2, Lake Sedimentation Monitoring Program, 2015 to 2025

Notes: SHAL−1 stations were not included in the correlation analysis, but are included in the plots for reference. "mm" = millimeter; "m^2" = meters squared; "No." = number; "%" = percent.

Table C.1: Benthic Invertebrate Community Endpoints Used in Sedimentation Correlation Analyses for Sheardown Lake Northwest (NW), Lake Sedimentation Monitoring Study, 2015 to 2025

Habitat	Station	Year	Density (organism/m²)	Richness (No. of Taxa)	Simpson's Evenness (Krebs)	% Nematoda	% Ostracoda	% Chironomidae	% Metal Sensitive Chironomidae	% Collector Gatherers	% Filterers
Littoral	DL0-01-9/SHAL-2	2015	5,136	11.0	0.818	2.69	7.38	89.9	25.5	63.1	24.2
		2016	10,484	18.0	0.918	1.97	19.1	76.3	33.8	61.5	33.8
		2017	4,378	11.0	0.790	2.35	11.8	85.8	17.5	76.1	17.5
		2018	5,481	14.0	0.910	2.83	11.6	85.5	20.9	77.8	20.6
		2019	1,854	10.00	0.505	0.00	11.6	87.4	3.72	91.2	2.80
		2020	6,457	14.0	0.798	1.07	28.0	70.1	21.4	75.4	20.8
		2021	6,510	13.0	0.701	1.06	20.6	75.1	6.79	89.9	6.79
		2022	4,891	12.0	0.879	7.75	18.3	71.8	45.2	38.3	45.2
		2023	7,578	17.0	0.826	3.18	42.3	49.1	22.3	64.7	21.8
		2024	5,580	8.00	0.541	0.00	71.6	25.9	4.94	85.2	4.94
		2025	1,800	15.0	0.892	6.22	24.9	61.2	2.94	87.9	2.94
	DL0-01-8/SHAL-1	2024	827	9.00	0.530	0.00	3.12	89.6	1.04	77.1	0.00
		2025	2,540	14.0	0.713	2.37	55.9	32.5	6.78	81.0	5.42
	DD-HAB 9-STN2/ SHAL-1	2016	5,205	12.0	0.901	1.33	5.30	92.7	31.4	56.0	31.4
		2025	1,188	13.0	0.838	2.90	11.6	82.6	2.95	73.5	1.48

Notes: m^2 = square metres. No. = number. % = percent.

APPENDIX D
BULK DENSITY METHODS

Method: Density 1

Method Reference: Density of Solid Materials by Pyknometer

Method Summary:

Sample Preparation: Samples were crushed and/or ground prior to analysis.

Sample analysis: All flasks were cleaned, dried, and pre-weighed. Each flask was filled to volume with deionized water and placed under vacuum then weighed. An aliquot of sample was weighed and then transferred to one of the pre-weighed volumetric flasks. The flask was then topped up with DI water and placed under vacuum until all the air was evacuated. The flasks were then filled to volume and reweighed. All weights were entered into the database and the rock density calculated. The temperature of the water was recorded at the time of all measurements and included in the calculations.

Detection Limit: The detection limit is 0.01 g/cc.

Quality Control: One of every 40 samples is analyzed in duplicate. All Quality Control results must be within specified limits otherwise corrective action is taken.

Geoanalytical Laboratories
Saskatchewan Research Council | 2901 Cleveland Avenue | Saskatoon SK
306-933-8118 | Fax 306-933-5656 | geolab@src.sk.ca | www.src.sk.ca

APPENDIX E
RAW LABORATORY REPORTS

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	:	**WT2522742**			
Client	:	**Baffinland Iron Mines Corporation**	Laboratory	:	ALS Environmental - Waterloo
Contact	:	Environmental Lab Results	Account Manager	:	Rick Hawthorne
Address	:	360 Oakville Place Dr Suite 300 Oakville Ontario Canada L6H 6K8	Address	:	60 Northland Road, Unit 1 Waterloo ON Canada N2V 2B8
Telephone	:	----	Telephone	:	+1 519 886 6910
Project	:	SEDIMENT TRAPS	Date Samples Received	:	15-Aug-2025 09:00
PO	:	4500156571	Date Analysis Commenced	:	26-Aug-2025
C-O-C number	:	25 07 09 - SEDIMENT TRAPS	Issue Date	:	11-Sep-2025 08:45
Sampler	:	AG/JM/ET			
Site	:	----			
Quote number	:	2024-2025 Scope of Work			
No. of samples received	:	15			
No. of samples analysed	:	15			

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Kevin Baxter		Inorganics, Winnipeg, Manitoba

No Breaches Found

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key: LOR: Limit of Reporting (detection limit).

Unit	*Description*
g	grams

>: greater than.
<: less than.

Red shading is applied where the result or the LOR is greater than the Guideline Upper Limit (or lower than the Guideline Lower Limit, if applicable).
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit.

Analytical Results Evaluation

Matrix: Soil/Solid				Client sample ID	SL-SHAL-2C_2025-07-05 ----	SL-SHAL-2E_2025-07-05 ----	SL-SHAL-2A_2025-07-05 ----	SL-DEEP-1C_2025-07-05 ----	SL-SHAL-1D_2025-07-05 ----	SL-SHAL-1B_2025-07-05 ----	SL-SHAL-1A_2025-07-06 ----
				Client sampling date / time	05-Jul-2025 10:10	05-Jul-2025 10:45	05-Jul-2025 11:20	05-Jul-2025 13:55	05-Jul-2025 15:20	05-Jul-2025 16:05	06-Jul-2025 14:20
				Sub-Matrix	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
Analyte	CAS Number	Method/Lab	Unit		WT2522742-001	WT2522742-002	WT2522742-003	WT2522742-004	WT2522742-005	WT2522742-006	WT2522742-007
					Result	Result	Result	Result	Result	Result	Result
Physical Tests											
Sample weight, total	----	E146/WP	g		3.47	0.79	1.06	2.38	1.06	0.99	1.06

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Matrix: Soil/Solid				Client sample ID	SL-SHAL-2D_2025-07-07 ----	SL-SHAL-2B_2025-07-07 ----	SL-DEEP-1B_2025-07-07 ----	SL-DEEP-1A_2025-07-07 ----	SL-SHAL-1E_2025-07-08 ----	SL-DEEP-1D_2025-07-08 ----	SL-SHAL-1C_2025-07-08 ----
				Client sampling date / time	07-Jul-2025 11:40	07-Jul-2025 12:35	07-Jul-2025 13:15	07-Jul-2025 14:38	08-Jul-2025 10:30	08-Jul-2025 13:10	08-Jul-2025 15:15
				Sub-Matrix	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
Analyte	CAS Number	Method/Lab	Unit		WT2522742-008	WT2522742-009	WT2522742-010	WT2522742-011	WT2522742-012	WT2522742-013	WT2522742-014
					Result	Result	Result	Result	Result	Result	Result
Physical Tests											
Sample weight, total	----	E146/WP	g		1.06	1.05	1.35	1.42	0.83	1.42	1.05

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Matrix: Soil/Solid				Client sample ID	SL-DEEP-1E_2025-07-09 ----	----	----	----	----	----	----
				Client sampling date / time	09-Jul-2025 08:35	----	----	----	----	----	----
				Sub-Matrix	Soil/Solid	----	----	----	----	----	----
Analyte	CAS Number	Method/Lab	Unit		WT2522742-015	----	----	----	----	----	----
					Result	----	----	----	----	----	----
Physical Tests											
Sample weight, total	----	E146/WP	g		1.32	----	----	----	----	----	----

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Summary of Guideline Limits

CERTIFICATE OF ANALYSIS

Work Order	:	**WT2522742**			
Client	:	**Baffinland Iron Mines Corporation**	Laboratory	:	ALS Environmental - Waterloo
Contact	:	Environmental Lab Results	Account Manager	:	Rick Hawthorne
Address	:	360 Oakville Place Dr Suite 300 Oakville Ontario Canada L6H 6K8	Address	:	60 Northland Road, Unit 1 Waterloo ON Canada N2V 2B8
Telephone	:	----	E-mail	:	Rick.Hawthorne@ALSGlobal.com
Project	:	SEDIMENT TRAPS	Telephone	:	+1 519 886 6910
PO	:	4500156571	Date Samples Received	:	15-Aug-2025 09:00
C-O-C number	:	25 07 09 - SEDIMENT TRAPS	Date Analysis Commenced	:	26-Aug-2025
Sampler	:	AG/JM/ET	Issue Date	:	11-Sep-2025 08:45
Site	:	----			
Quote number	:	2024-2025 Scope of Work			
No. of samples received	:	15			
No. of samples analysed	:	15			

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Kevin Baxter		Inorganics, Winnipeg, Manitoba

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key: CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
LOR: Limit of Reporting (detection limit).

Unit	*Description*
g	grams

<: less than.
>: greater than.
Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical Results

Sub-Matrix: Soil/Solid
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SL-SHAL-2C_2025-07-05 ----	SL-SHAL-2E_2025-07-05 ----	SL-SHAL-2A_2025-07-05 ----	SL-DEEP-1C_2025-07-05 ----	SL-SHAL-1D_2025-07-05 ----
					Client sampling date / time	05-Jul-2025 10:10	05-Jul-2025 10:45	05-Jul-2025 11:20	05-Jul-2025 13:55	05-Jul-2025 15:20
						WT2522742-001	WT2522742-002	WT2522742-003	WT2522742-004	WT2522742-005
						Result	Result	Result	Result	Result
Physical Tests										
Sample weight, total	----	E146/WP	0.10	g		3.47	0.79	1.06	2.38	1.06

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: Soil/Solid
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SL-SHAL-1B_2025-07-05 ----	SL-SHAL-1A_2025-07-06 ----	SL-SHAL-2D_2025-07-07 ----	SL-SHAL-2B_2025-07-07 ----	SL-DEEP-1B_2025-07-07 ----
					Client sampling date / time	05-Jul-2025 16:05	06-Jul-2025 14:20	07-Jul-2025 11:40	07-Jul-2025 12:35	07-Jul-2025 13:15
						WT2522742-006	WT2522742-007	WT2522742-008	WT2522742-009	WT2522742-010
						Result	Result	Result	Result	Result
Physical Tests										
Sample weight, total	----	E146/WP	0.10	g		0.99	1.06	1.06	1.05	1.35

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: Soil/Solid
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SL-DEEP-1A_2025-07-07 ----	SL-SHAL-1E_2025-07-08 ----	SL-DEEP-1D_2025-07-08 ----	SL-SHAL-1C_2025-07-08 ----	SL-DEEP-1E_2025-07-09 ----
					Client sampling date / time	07-Jul-2025 14:38	08-Jul-2025 10:30	08-Jul-2025 13:10	08-Jul-2025 15:15	09-Jul-2025 08:35
						WT2522742-011	WT2522742-012	WT2522742-013	WT2522742-014	WT2522742-015
						Result	Result	Result	Result	Result
Physical Tests										
Sample weight, total	----	E146/WP	0.10	g		1.42	0.83	1.42	1.05	1.32

Please refer to the General Comments section for an explanation of any qualifiers detected.

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right solutions.
right partner.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **WT2522742**	Page	: 1 of 6
Client	: **Baffinland Iron Mines Corporation**	Laboratory	: ALS Environmental - Waterloo
Contact	: Environmental Lab Results	Account Manager	: Rick Hawthorne
Address	: 360 Oakville Place Dr Suite 300 Oakville ON Canada L6H 6K8	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: ----	Telephone	: +1 519 886 6910
Project	: SEDIMENT TRAPS	Date Samples Received	: 15-Aug-2025 09:00
PO	: 4500156571	Issue Date	: 11-Sep-2025 08:45
C-O-C number	: 25 07 09 - SEDIMENT TRAPS		
Sampler	: AG/JM/ET		
Site	: ----		
Quote number	: 2024-2025 Scope of Work		
No. of samples received	: 15		
No. of samples analysed	: 15		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / **Container / Client Sample ID(s)**	*Method*	*Sampling Date*	*Extraction / Preparation*				*Analysis*			
			Preparation Date	*Holding Times*		*Eval*	*Analysis Date*	*Holding Times*		*Eval*
				Rec	*Actual*			*Rec*	*Actual*	
Physical Tests : Total Sample Weight by Gravimetry										
HDPE Pail SL-DEEP-1A_2025-07-07	E146	07-Jul-2025	----	----	----		04-Sep-2025	----	----	
Physical Tests : Total Sample Weight by Gravimetry										
HDPE Pail SL-DEEP-1B_2025-07-07	E146	07-Jul-2025	----	----	----		04-Sep-2025	----	----	
Physical Tests : Total Sample Weight by Gravimetry										
HDPE Pail SL-DEEP-1C_2025-07-05	E146	05-Jul-2025	----	----	----		28-Aug-2025	----	----	
Physical Tests : Total Sample Weight by Gravimetry										
HDPE Pail SL-DEEP-1D_2025-07-08	E146	08-Jul-2025	----	----	----		05-Sep-2025	----	----	
Physical Tests : Total Sample Weight by Gravimetry										
HDPE Pail SL-DEEP-1E_2025-07-09	E146	09-Jul-2025	----	----	----		08-Sep-2025	----	----	
Physical Tests : Total Sample Weight by Gravimetry										
HDPE Pail SL-SHAL-1A_2025-07-06	E146	06-Jul-2025	----	----	----		29-Aug-2025	----	----	
Physical Tests : Total Sample Weight by Gravimetry										
HDPE Pail SL-SHAL-1B_2025-07-05	E146	05-Jul-2025	----	----	----		29-Aug-2025	----	----	

Matrix: **Soil/Solid**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : Total Sample Weight by Gravimetry										
HDPE Pail SL-SHAL-1C_2025-07-08	E146	08-Jul-2025	----	----	----		08-Sep-2025	----	----	
Physical Tests : Total Sample Weight by Gravimetry										
HDPE Pail SL-SHAL-1D_2025-07-05	E146	05-Jul-2025	----	----	----		28-Aug-2025	----	----	
Physical Tests : Total Sample Weight by Gravimetry										
HDPE Pail SL-SHAL-1E_2025-07-08	E146	08-Jul-2025	----	----	----		05-Sep-2025	----	----	
Physical Tests : Total Sample Weight by Gravimetry										
HDPE Pail SL-SHAL-2A_2025-07-05	E146	05-Jul-2025	----	----	----		27-Aug-2025	----	----	
Physical Tests : Total Sample Weight by Gravimetry										
HDPE Pail SL-SHAL-2B_2025-07-07	E146	07-Jul-2025	----	----	----		03-Sep-2025	----	----	
Physical Tests : Total Sample Weight by Gravimetry										
HDPE Pail SL-SHAL-2C_2025-07-05	E146	05-Jul-2025	----	----	----		26-Aug-2025	----	----	
Physical Tests : Total Sample Weight by Gravimetry										
HDPE Pail SL-SHAL-2D_2025-07-07	E146	07-Jul-2025	----	----	----		03-Sep-2025	----	----	
Physical Tests : Total Sample Weight by Gravimetry										
HDPE Pail SL-SHAL-2E_2025-07-05	E146	05-Jul-2025	----	----	----		27-Aug-2025	----	----	

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Soil/Solid**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Control Samples (LCS)							
Total Sample Weight by Gravimetry	E146	2206155	8	15	53.3	5.0	✓
Method Blanks (MB)							
Total Sample Weight by Gravimetry	E146	2206155	8	15	53.3	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by “mod”).

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Total Sample Weight by Gravimetry	E146 ALS Environmental - Winnipeg	Soil/Solid	Direct Measurement	The whole sample is removed from the sample container and weighed.

QUALITY CONTROL REPORT

Work Order	: **WT2522742**	Page	: 1 of 4
Client	: Baffinland Iron Mines Corporation	Laboratory	: ALS Environmental - Waterloo
Contact	: Environmental Lab Results	Account Manager	: Rick Hawthorne
Address	: 360 Oakville Place Dr Suite 300 Oakville ON Canada L6H 6K8	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: ----	Telephone	: +1 519 886 6910
Project	: SEDIMENT TRAPS	Date Samples Received	: 15-Aug-2025 09:00
PO	: 4500156571	Date Analysis Commenced	: 26-Aug-2025
C-O-C number	: 25 07 09 - SEDIMENT TRAPS	Issue Date	: 11-Sep-2025 08:45
Sampler	: AG/JM/ET		
Site	: ----		
Quote number	: 2024-2025 Scope of Work		
No. of samples received	: 15		
No. of samples analysed	: 15		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Kevin Baxter	Supervisor - Inorganic	Winnipeg Inorganics, Winnipeg, Manitoba

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 2206155)						
Sample weight, total	----	E146	0.1	g	<0.10	----
Physical Tests (QCLot: 2206160)						
Sample weight, total	----	E146	0.1	g	<0.10	----
Physical Tests (QCLot: 2206164)						
Sample weight, total	----	E146	0.1	g	<0.10	----
Physical Tests (QCLot: 2206183)						
Sample weight, total	----	E146	0.1	g	<0.10	----
Physical Tests (QCLot: 2206191)						
Sample weight, total	----	E146	0.1	g	<0.10	----
Physical Tests (QCLot: 2206196)						
Sample weight, total	----	E146	0.1	g	<0.10	----
Physical Tests (QCLot: 2206206)						
Sample weight, total	----	E146	0.1	g	<0.10	----
Physical Tests (QCLot: 2206238)						
Sample weight, total	----	E146	0.1	g	<0.10	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 2206155)									
Sample weight, total	----	E146	0.1	g	0.4 g	89.0	85.0	115	----
Physical Tests (QCLot: 2206160)									
Sample weight, total	----	E146	0.1	g	0.4 g	88.4	85.0	115	----
Physical Tests (QCLot: 2206164)									
Sample weight, total	----	E146	0.1	g	0.4 g	100.0	85.0	115	----
Physical Tests (QCLot: 2206183)									
Sample weight, total	----	E146	0.1	g	0.4 g	101	85.0	115	----
Physical Tests (QCLot: 2206191)									
Sample weight, total	----	E146	0.1	g	0.4 g	113	85.0	115	----
Physical Tests (QCLot: 2206196)									
Sample weight, total	----	E146	0.1	g	0.4 g	93.4	85.0	115	----
Physical Tests (QCLot: 2206206)									
Sample weight, total	----	E146	0.1	g	0.4 g	89.2	85.0	115	----
Physical Tests (QCLot: 2206238)									
Sample weight, total	----	E146	0.1	g	0.4 g	96.1	85.0	115	----

Baffinland

Chain of Custody: 25 07 09 - Sediment Traps

Client Info	Project Info	Laboratory Info	
Baffinland Iron Mine Corporation 2275 Upper Middle Rd E, Suite 300 Oakville, ON, L6H 0C3 **Phone:** 647-253-0596 x6016/6039/4131 **Email:** environment.coordinators@baffinland.com; environment.superintendents@baffinland.com	**Job Reference (Project):** Sediment Traps **Task:** , AEMP_Sediment_240705 **Site:** MS	**Lab Name:** ALS Waterloo **Contact:** Rick Hawthorne **Phone:** 519.886.6910 **Email:** Rick.Hawthorne@ALSGlobal.com	**Address:** Unit 1 - 60 Northland Road Waterloo, ON,N2V 2B8
Email Invoice: ap@baffinland.com; environment.superintendents@baffinland.com **Email EDD:** bim.equissa@baffinland.com **Email COA:** environment.labresults@baffinland.com	**Turn around Time:** Routine (R) **Sampler 1:** AG **Sampler 2:** JM **Sampler 3:** ET	**ALS Quote #:** WT2020BIMC1000001 **ALS PO #:** 4500156571	**Lab**

Environmental Division
Waterloo
Work Order Reference
WT2522742

Telephone : +1 519 886 6910

Sample Details				Field Data		Anal											
Sample ID (sys_sample_code)	Location (sys_loc_code)	Sample Date and Time	Matrix			Total # of Containers	ALS_AEMP (SED)	E440 & E510	TOC								
SL-SHAL-2C_2025-07-05	SL-SHAL-2C	7/5/2025 10:10:00 AM	SE			1	X	X	X								
SL-SHAL-2E_2025-07-05	SL-SHAL-2E	7/5/2025 10:45:00 AM	SE			1	X	X	X								
SL-SHAL-2A_2025-07-05	SL-SHAL-2A	7/5/2025 11:20:00 AM	SE			1	X	X	X								
SL-DEEP-1C_2025-07-05	SL-DEEP-1C	7/5/2025 1:55:00 PM	SE			1	X	X	X								
SL-SHAL-1D_2025-07-05	SL-SHAL-1D	7/5/2025 3:20:00 PM	SE			1	X	X	X								
SL-SHAL-1B_2025-07-05	SL-SHAL-1B	7/5/2025 4:05:00 PM	SE			1	X	X	X								
SL-SHAL-1A_2025-07-06	SL-SHAL-1A	7/6/2025 2:20:00 PM	SE			1	X	X	X								
SL-SHAL-2D_2025-07-07	SL-SHAL-2D	7/7/2025 11:40:00 AM	SE			1	X	X	X								

Baffinland

Sample Details				Field Data			Analysis Requested											
Sample ID (sys_sample_code)	Location (sys_loc_code)	Sample Date and Time	Matrix			Total # of Containers	ALS_AEMP (SED)	E440 & E510	TOC									
SL-SHAL-2B_2025-07-07	SL-SHAL-2B	7/7/2025 12:35:00 PM	SE			1	X	X	X									
SL-DEEP-1B_2025-07-07	SL-DEEP-1B	7/7/2025 1:15:00 PM	SE			1	X	X	X									
SL-DEEP-1A_2025-07-07	SL-DEEP-1A	7/7/2025 2:38:00 PM	SE			1	X	X	X									
SL-SHAL-1E_2025-07-08	SL-SHAL-1E	7/8/2025 10:30:00 AM	SE			1	X	X	X									
SL-DEEP-1D_2025-07-08	SL-DEEP-1D	7/8/2025 1:10:00 PM	SE			1	X	X	X									
SL-SHAL-1C_2025-07-08	SL-SHAL-1C	7/8/2025 3:15:00 PM	SE			1	X	X	X									
SL-DEEP-1E_2025-07-09	SL-DEEP-1E	7/9/2025 8:35:00 AM	SE			1	X	X	X									

Relinquished by:	Bradley Rasmussen	**Date:**	7/9/2025 1:24:00 PM
Additional Comments	Sample mass is priority. Samples with insufficient mass should be combined. If there is insufficient sample mass from traps for individual trap chemistry those samples with inadequate mass should be combined with others from the same station to create 1 sample for chemistry. The other samples that have enough mass will be run as-is, after sample weight has been measured. Please make note if samples are combined in the data provided. Note from Rick Hawthorne: "We'll likely do the same as last year, with the caveat of the addition of TOC. The reporting of the metals and TOC would fall under special request again. On the report, we'll highlight the deviation denoting that the reportables were from the leftover sediment/filters from the Sediment Trap analysis method. I can communicate with BIM how we proceed once they arrive. If it is anything like last year we reported the metallics on a separate file entirely once the Traps were done as a special handling and reporting considerations."		
Initial Shipment Reception (lab use only)		**Final Shipment Reception** (lab use only)	

Baffinland

Received by:		**Received by:**	
Date/Time:		**Date/Time:**	15 AUG 2019

Particle Size Analysis Report

Sample Identification

Company: **Baffinlands Iron Mines Corp.**

PO#:

Sample ID: **BD-DEEP-1**

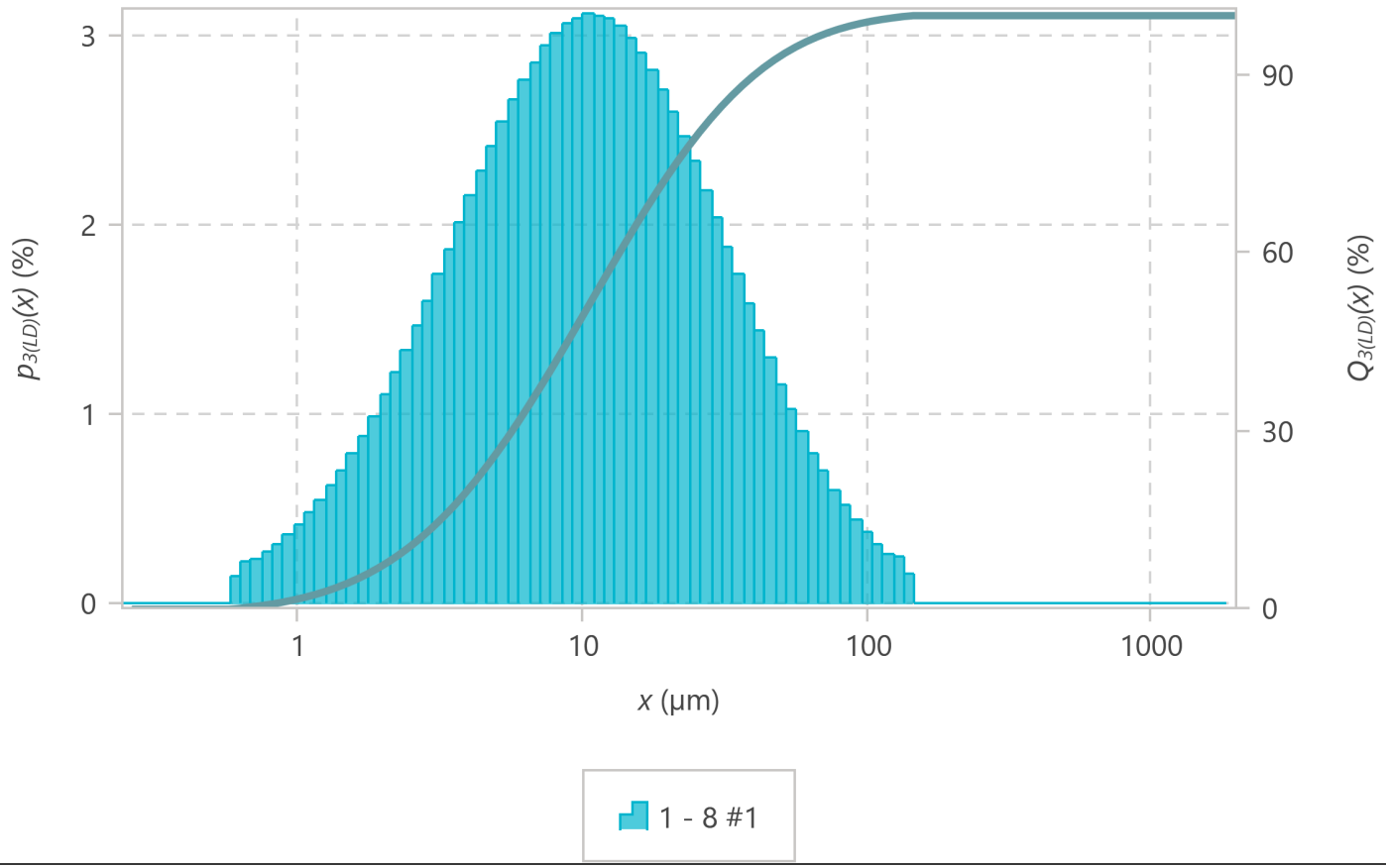
Method

Refractive Index red	1.55
Absorption Coefficient red	
Refractive Index blue	1.55
Absorption Coefficient blue	
Transparency	Transparent
Shape	Irregular
Fluid name	Water
Fluid refractive index	1.33

%Percentile

20 %	4.01 µm
50 %	10.34 µm
80 %	25.81 µm

Measurement Graph



Summary

Mean volume diameter ($M_{4,3}$)	17.37 µm
Mean area diameter ($M_{3,2}$)	5.72 µm
Mean number diameter ($M_{1,0}$)	1.25 µm

%Cumulative Passing

125 µm	100%
30 µm	84%
20 µm	73%
16 µm	65%
12 µm	55%
9 µm	45%
7 µm	36%
5 µm	26%
3 µm	14%
1 µm	2%

Results apply to samples as received. All sampling is completed by the cllient.

Signature

Particle Size Analysis Report

Sample Identification

Company: **Baffinlands Iron Mines Corp.**

PO#:

Sample ID: **BD-DEEP-2**

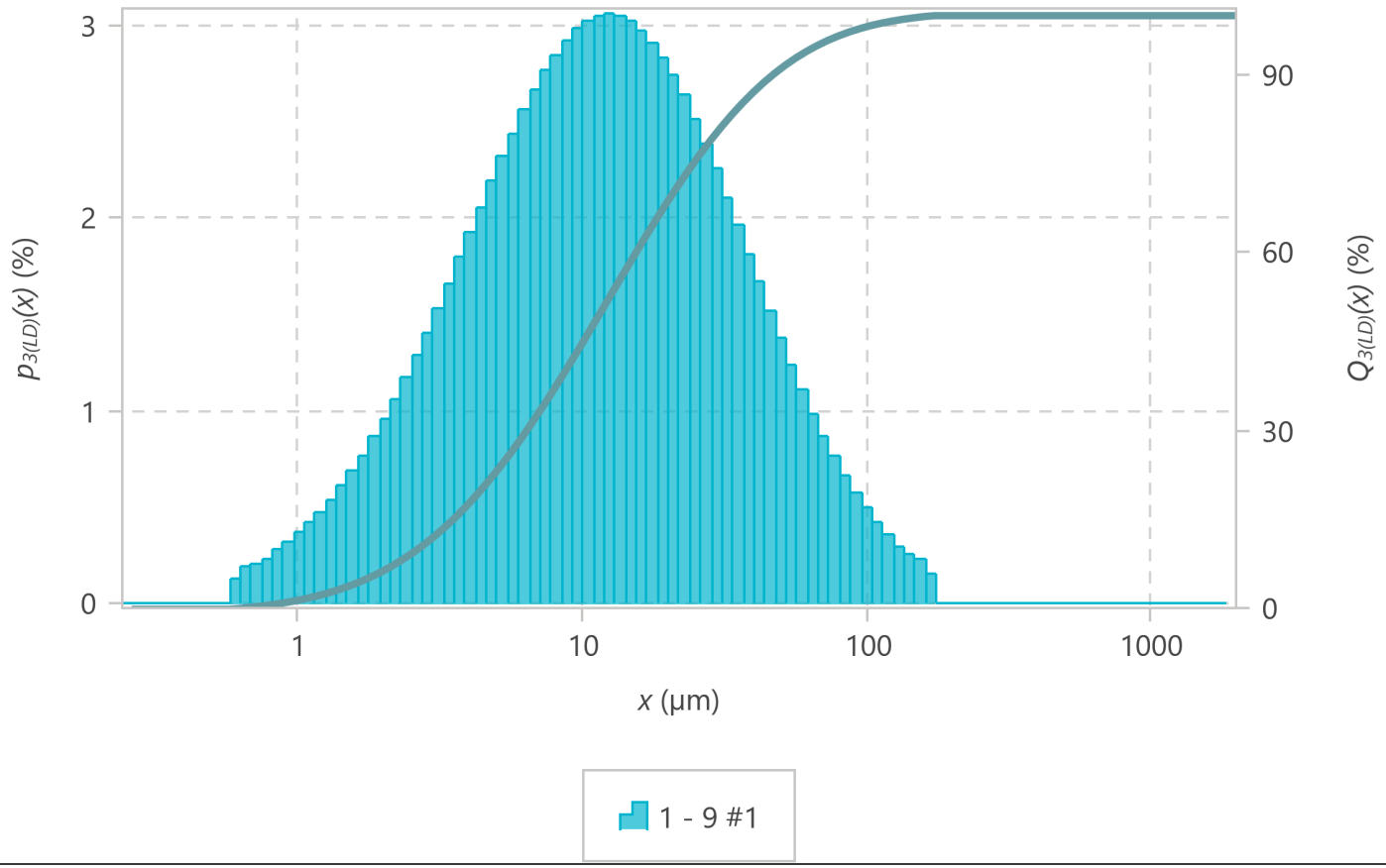
Method

Refractive Index red	1.55
Absorption Coefficient red	
Refractive Index blue	1.55
Absorption Coefficient blue	
Transparency	Transparent
Shape	Irregular
Fluid name	Water
Fluid refractive index	1.33

%Percentile

20 %	4.46 µm
50 %	11.76 µm
80 %	29.74 µm

Measurement Graph



Summary

Mean volume diameter ($M_{4,3}$)	20.01 µm
Mean area diameter ($M_{3,2}$)	6.28 µm
Mean number diameter ($M_{1,0}$)	1.25 µm

%Cumulative Passing

125 µm	99%
30 µm	80%
20 µm	68%
16 µm	61%
12 µm	51%
9 µm	41%
7 µm	33%
5 µm	23%
3 µm	12%
1 µm	1%

Results apply to samples as received. All sampling is completed by the cllient.

Signature

Particle Size Analysis Report

Sample Identification

Company: **Baffinlands Iron Mines Corp.**

PO#: G#2025-2013

Sample ID: **BD-SHAL-1**

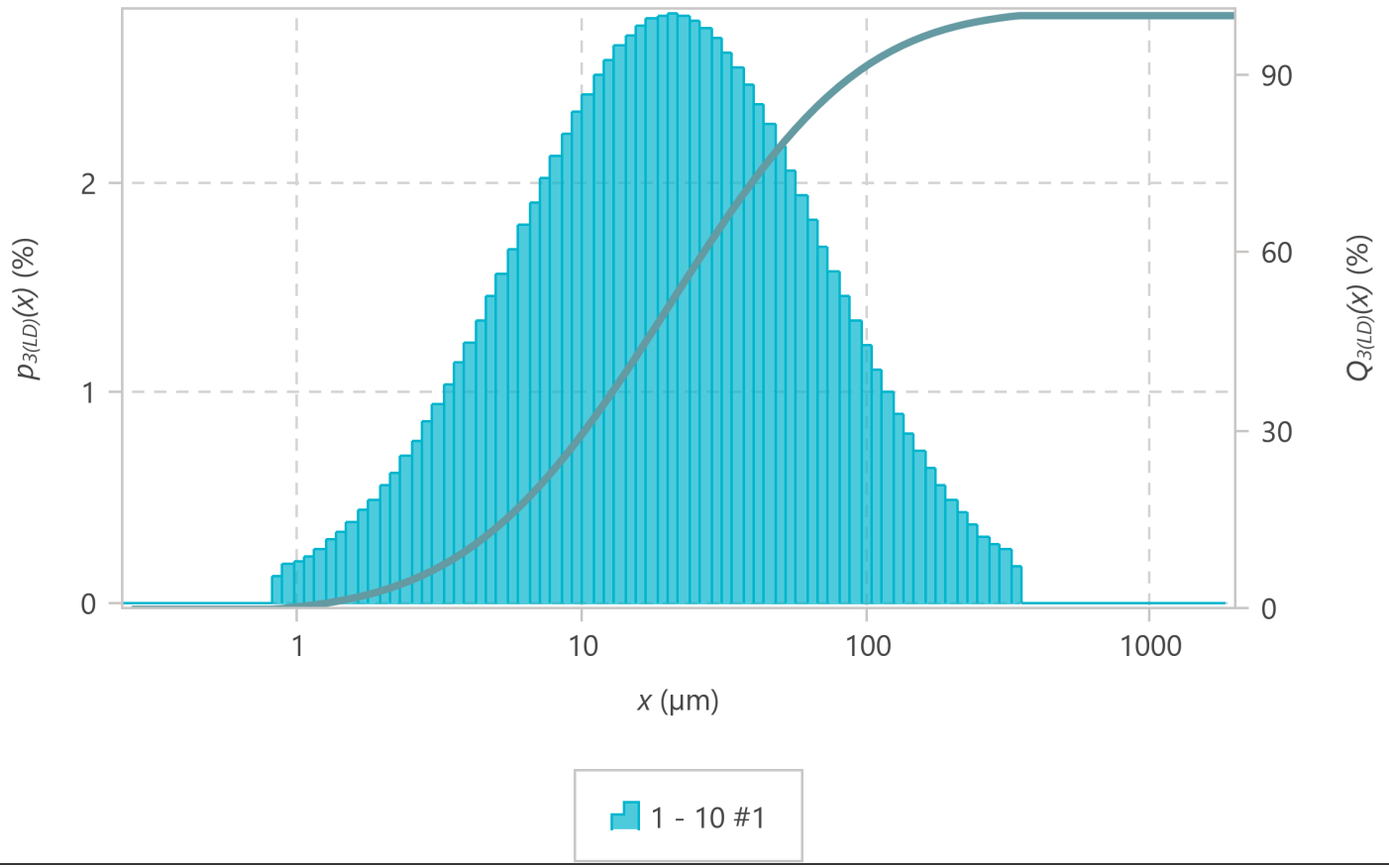
Method

Refractive Index red	1.55
Absorption Coefficient red	
Refractive Index blue	1.55
Absorption Coefficient blue	
Transparency	Transparent
Shape	Irregular
Fluid name	Water
Fluid refractive index	1.33

%Percentile

20 %	6.95 µm
50 %	19.84 µm
80 %	54.94 µm

Measurement Graph



Summary

Mean volume diameter ($M_{4,3}$)	37.31 µm
Mean area diameter ($M_{3,2}$)	9.72 µm
Mean number diameter ($M_{1,0}$)	1.74 µm

%Cumulative Passing

250 µm	99%
65 µm	84%
45 µm	75%
30 µm	63%
20 µm	50%
15 µm	41%
12 µm	34%
8 µm	23%
5 µm	13%
1.2 µm	1%

Results apply to samples as received. All sampling is completed by the cllient.

Signature

Particle Size Analysis Report

Sample Identification

Company: **Baffinlands Iron Mines Corp.**

PO#: G#2025-2013

Sample ID: **BD-SHAL-2**

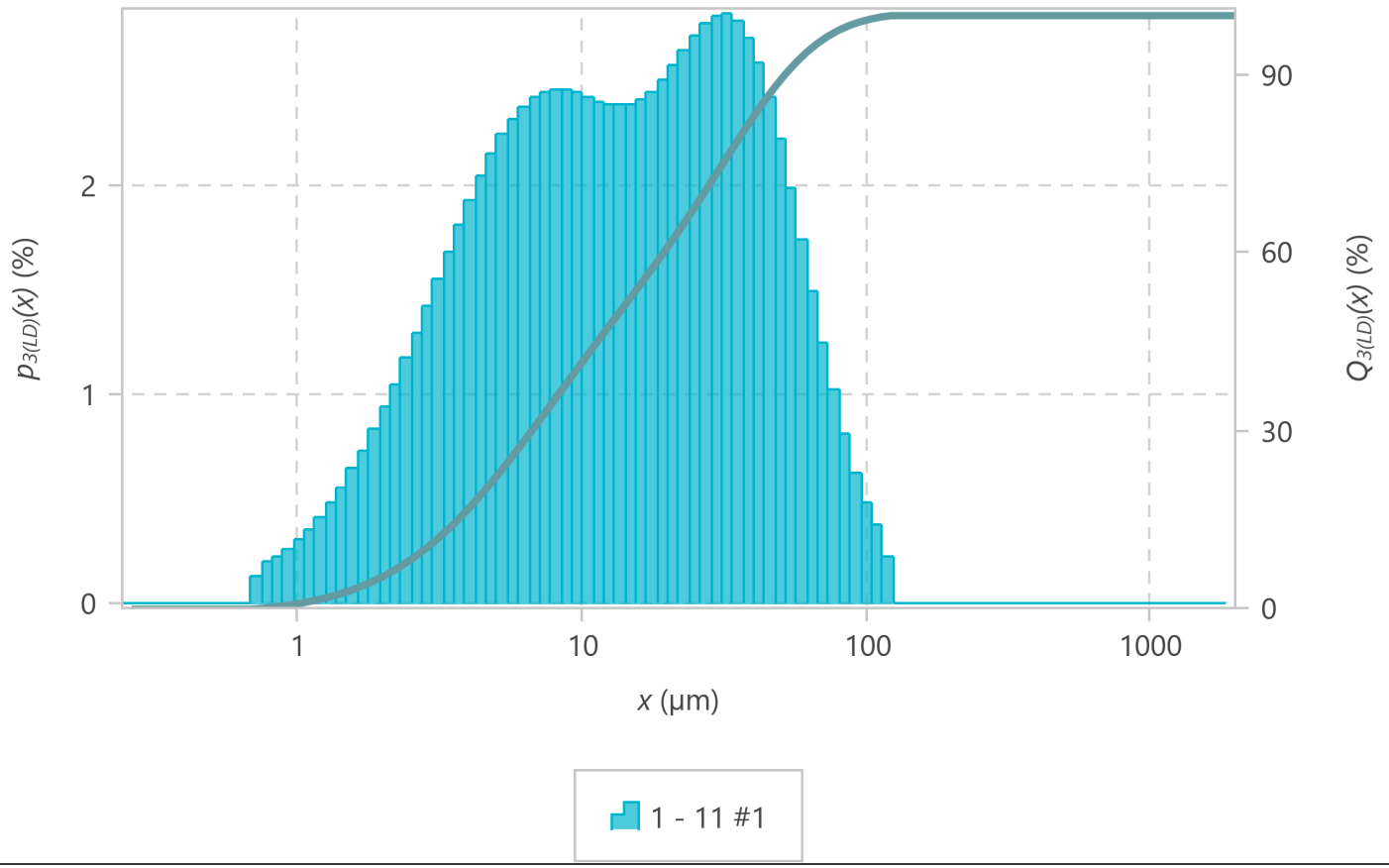
Method

Refractive Index red	1.55
Absorption Coefficient red	
Refractive Index blue	1.55
Absorption Coefficient blue	
Transparency	Transparent
Shape	Irregular
Fluid name	Water
Fluid refractive index	1.33

%Percentile

20 %	4.61 µm
50 %	13.74 µm
80 %	36.97 µm

Measurement Graph



Summary

Mean volume diameter ($M_{4,3}$)	21.8 µm
Mean area diameter ($M_{3,2}$)	6.93 µm
Mean number diameter ($M_{1,0}$)	1.5 µm

%Cumulative Passing

150 µm	100%
45 µm	86%
30 µm	73%
20 µm	61%
15 µm	52%
12 µm	46%
8 µm	35%
5 µm	22%
3 µm	11%
1 µm	1%

Results apply to samples as received. All sampling is completed by the cllient.

Signature

Particle Size Analysis Report

Sample Identification

Company: **Baffinlands Iron Mines Corp.**

PO#: G#2025-2013

Sample ID: **BD-SHAL-3**

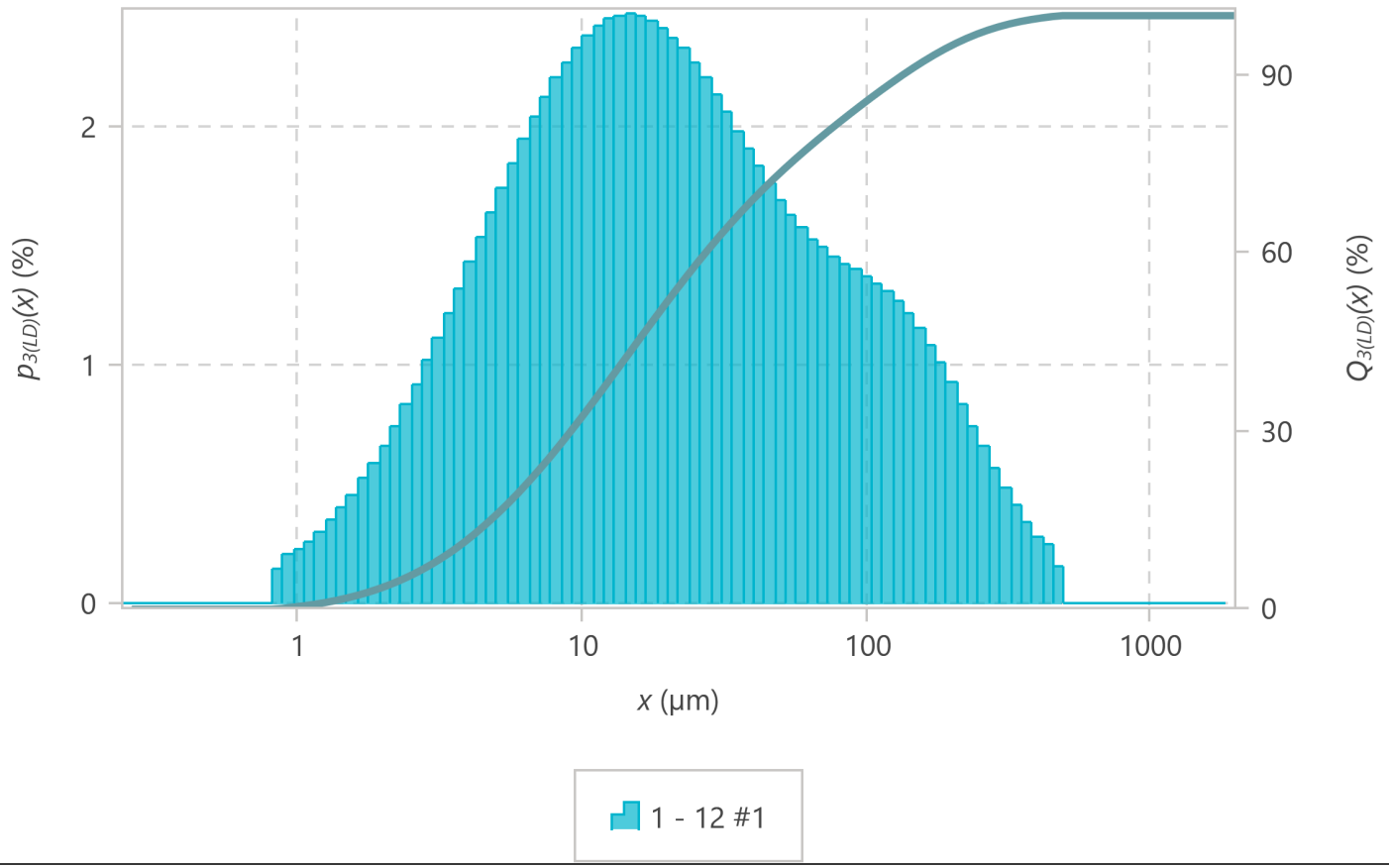
Method

Refractive Index red	1.55
Absorption Coefficient red	
Refractive Index blue	1.55
Absorption Coefficient blue	
Transparency	Transparent
Shape	Irregular
Fluid name	Water
Fluid refractive index	1.33

%Percentile

20 %	6.17 µm
50 %	18.96 µm
80 %	72.21 µm

Measurement Graph



Summary

Mean volume diameter ($M_{4,3}$)	48.21 µm
Mean area diameter ($M_{3,2}$)	9.09 µm
Mean number diameter ($M_{1,0}$)	1.73 µm

%Cumulative Passing

300 µm	98%
125 µm	89%
65 µm	78%
30 µm	62%
20 µm	51%
15 µm	43%
10 µm	32%
7 µm	23%
5 µm	16%
1.2 µm	1%

Results apply to samples as received. All sampling is completed by the cllient.

Signature

Particle Size Analysis Report

Sample Identification

Company: **Baffinlands Iron Mines Corp.**

PO#: G#2025-2013

Sample ID: **BD-SHAL-4**

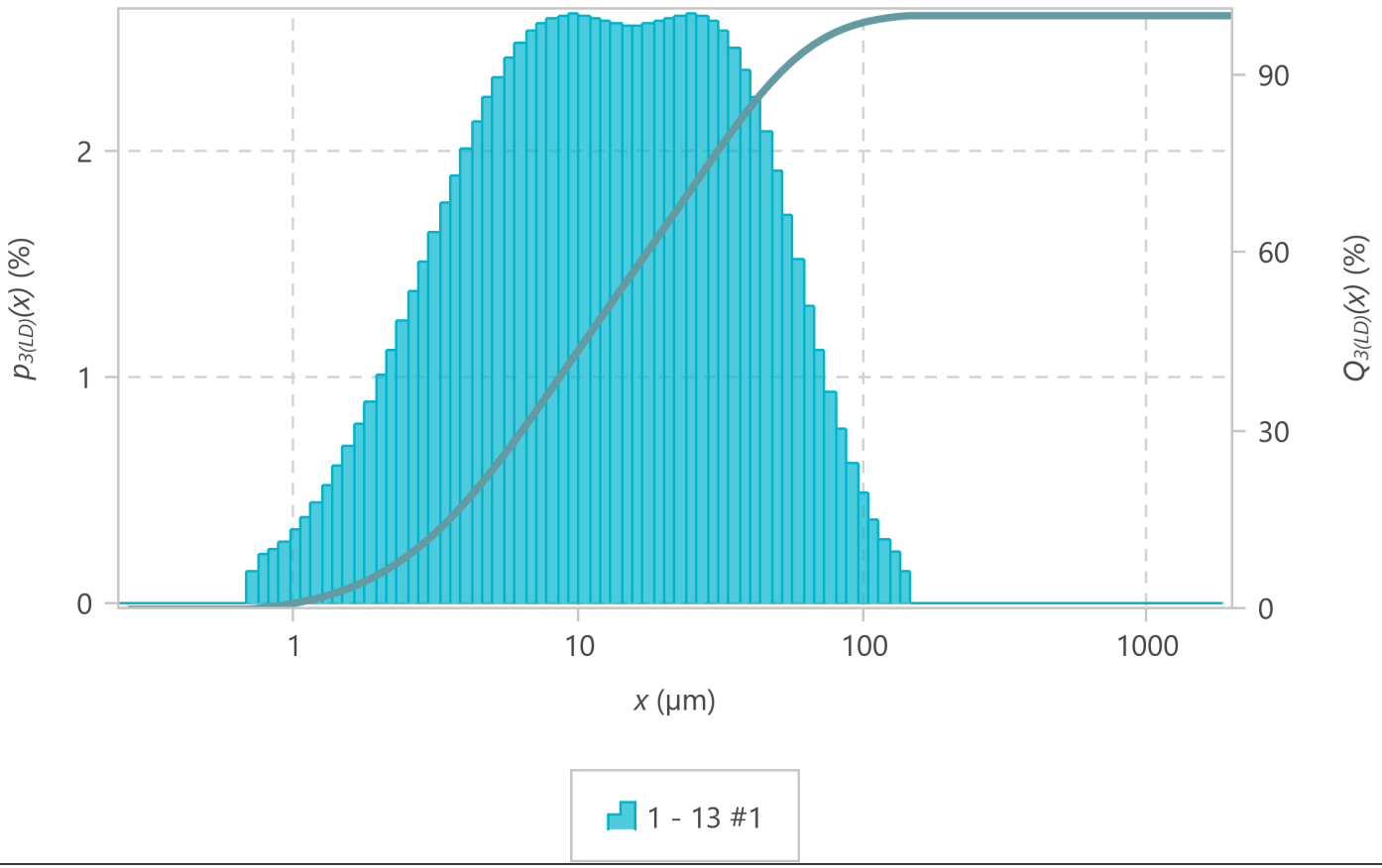
Method

Refractive Index red	1.55
Absorption Coefficient red	
Refractive Index blue	1.55
Absorption Coefficient blue	
Transparency	Transparent
Shape	Irregular
Fluid name	Water
Fluid refractive index	1.33

%Percentile

20 %	4.42 µm
50 %	12.56 µm
80 %	34.55 µm

Measurement Graph



Summary

Mean volume diameter ($M_{4,3}$)	21 µm
Mean area diameter ($M_{3,2}$)	6.62 µm
Mean number diameter ($M_{1,0}$)	1.5 µm

%Cumulative Passing

125 µm	100%
40 µm	84%
30 µm	76%
20 µm	64%
15 µm	55%
10 µm	43%
7 µm	33%
5 µm	23%
3 µm	12%
1 µm	1%

Results apply to samples as received. All sampling is completed by the cllient.

Signature

Particle Size Analysis Report

Sample Identification

Company: **Baffinlands Iron Mines Corp.**

PO#: G#2025-2013

Sample ID: **BD-SHAL-5**

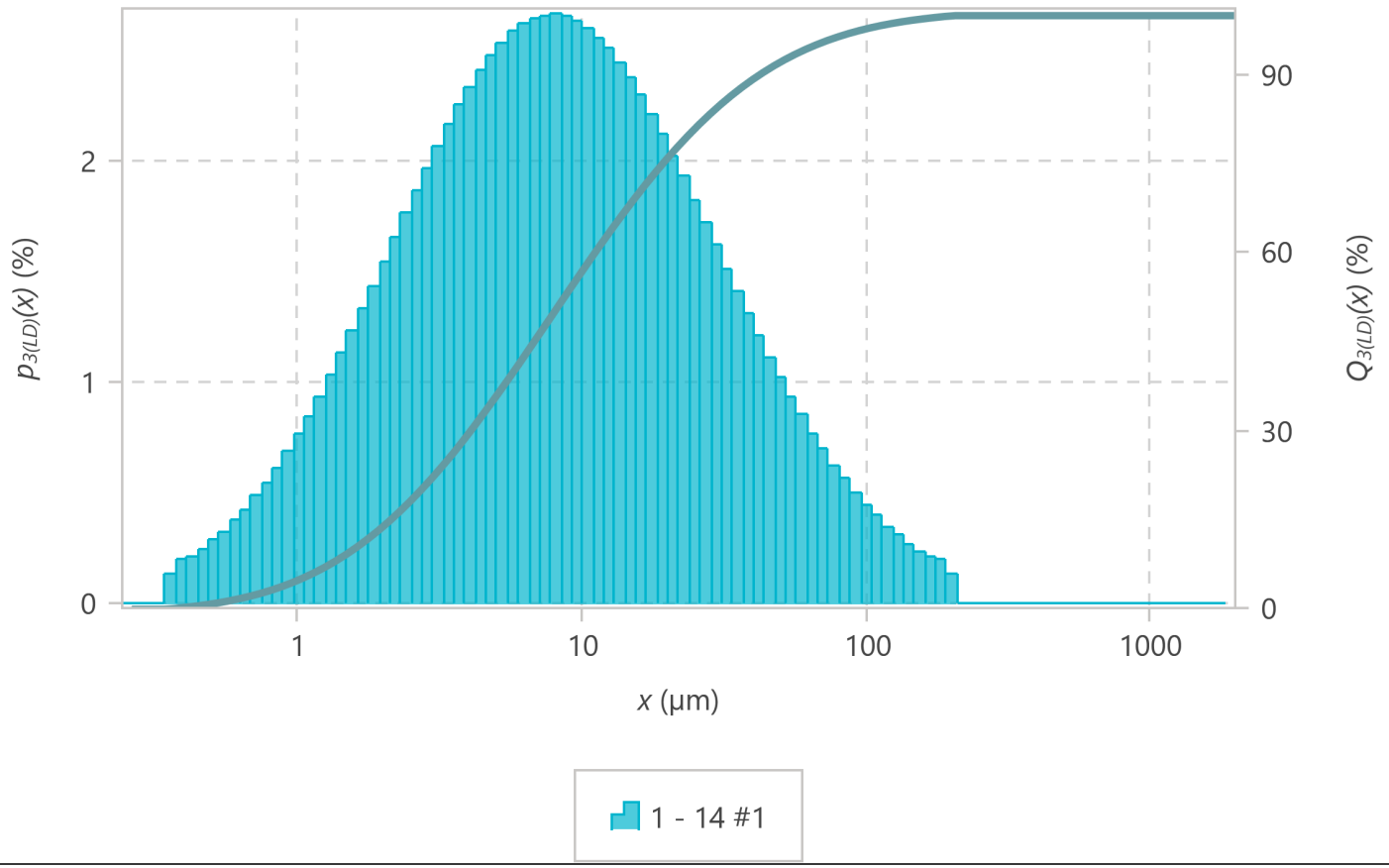
Method

Refractive Index red	1.55
Absorption Coefficient red	
Refractive Index blue	1.55
Absorption Coefficient blue	
Transparency	Transparent
Shape	Irregular
Fluid name	Water
Fluid refractive index	1.33

%Percentile

20 %	2.75 µm
50 %	8.09 µm
80 %	24.21 µm

Measurement Graph



Summary

Mean volume diameter ($M_{4,3}$)	17.3 µm
Mean area diameter ($M_{3,2}$)	3.92 µm
Mean number diameter ($M_{1,0}$)	0.73 µm

%Cumulative Passing

125 µm	99%
30 µm	84%
20 µm	76%
15 µm	68%
10 µm	56%
7 µm	46%
5 µm	35%
3 µm	22%
2 µm	14%
0.5 µm	1%

Results apply to samples as received. All sampling is completed by the cllient.

Signature

Particle Size Analysis Report

Sample Identification

Company: **Baffinland Iron Mines Corp.**

PO#: Group# 2025-3523

Sample ID: **Comp1____(BD-SHAL-1 + SHAL-2)**

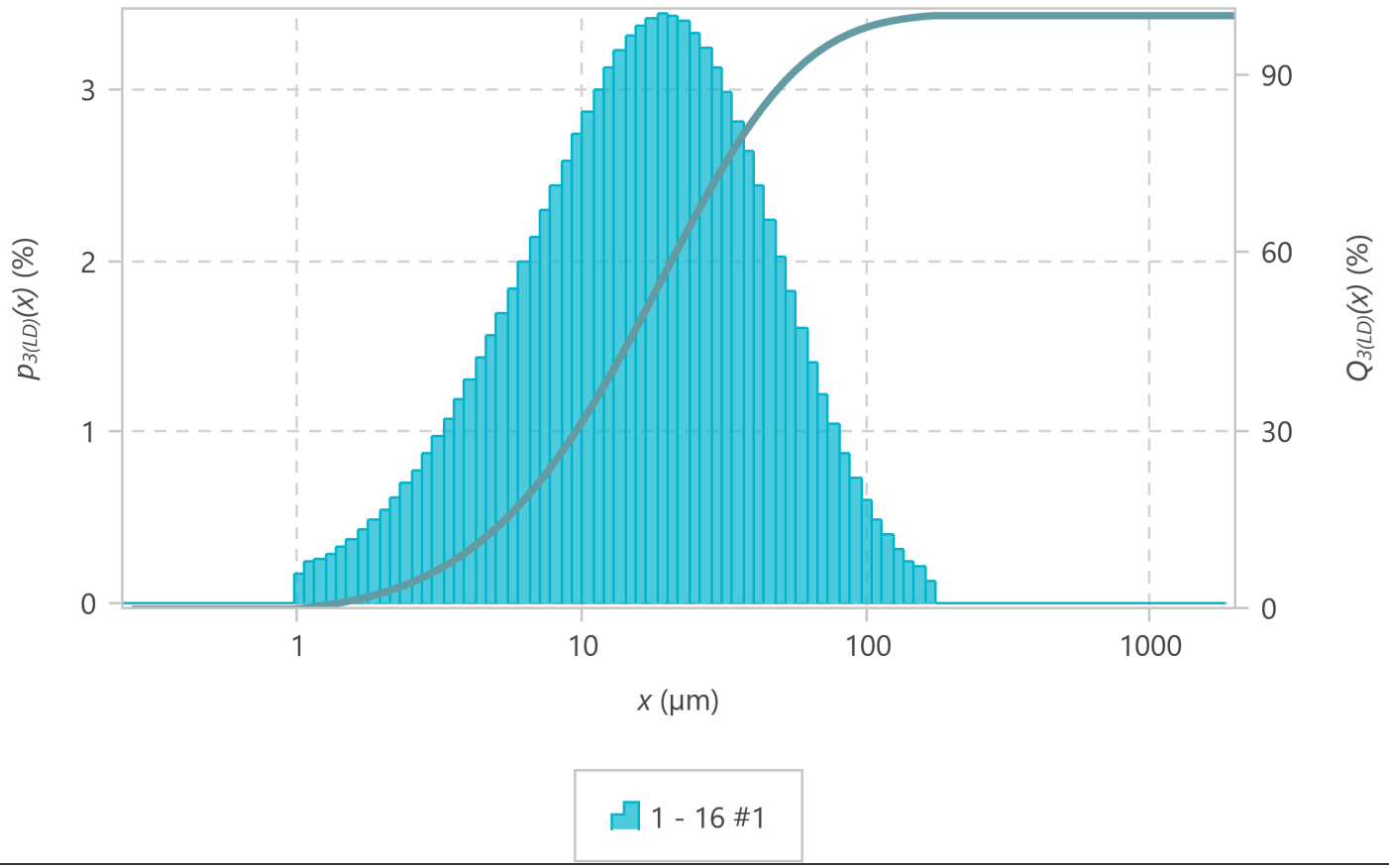
Method

Refractive Index red	1.55
Absorption Coefficient red	
Refractive Index blue	1.55
Absorption Coefficient blue	
Transparency	Transparent
Shape	Irregular
Fluid name	Water
Fluid refractive index	1.33

%Percentile

20 %	6.78 µm
50 %	16.83 µm
80 %	37.55 µm

Measurement Graph



Summary

Mean volume diameter ($M_{4,3}$)	24.63 µm
Mean area diameter ($M_{3,2}$)	9.42 µm
Mean number diameter ($M_{1,0}$)	2.06 µm

%Cumulative Passing

125 µm	99%
45 µm	85%
35 µm	78%
25 µm	66%
20 µm	57%
15 µm	46%
10 µm	31%
7 µm	21%
5 µm	13%
1.5 µm	1%

Results apply to samples as received. All sampling is completed by the cllient.

Signature

Particle Size Analysis Report

Sample Identification

Company: **Baffinland Iron Mines Corp.**

PO#: Group# 2025-3523

Sample ID: **Comp2_____(BD-SHAL-3 + SHAL-4 + SHAL-5)**

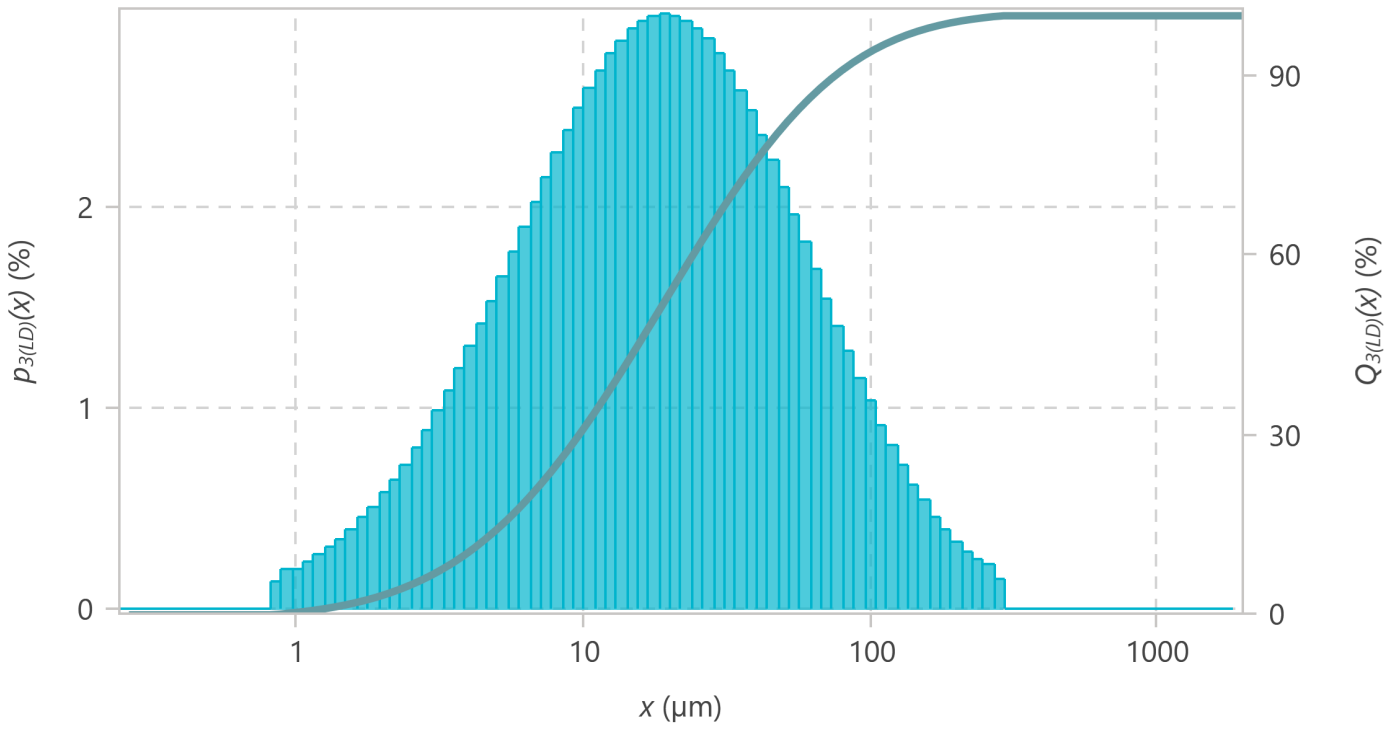
Method

Refractive Index red	1.55
Absorption Coefficient red	
Refractive Index blue	1.55
Absorption Coefficient blue	
Transparency	Transparent
Shape	Irregular
Fluid name	Water
Fluid refractive index	1.33

%Percentile

20 %	6.68 µm
50 %	18.2 µm
80 %	47.4 µm

Measurement Graph



Summary

Mean volume diameter ($M_{4,3}$)	31.99 µm
Mean area diameter ($M_{3,2}$)	9.33 µm
Mean number diameter ($M_{1,0}$)	1.75 µm

%Cumulative Passing

160 µm	98%
50 µm	81%
35 µm	72%
25 µm	61%
20 µm	53%
15 µm	43%
10 µm	31%
7 µm	21%
5 µm	14%
1.5 µm	2%

Results apply to samples as received. All sampling is completed by the cllient.

Signature

Particle Size Analysis Report

Sample Identification

Company: **Baffinland Iron Mines Corp.**

PO#: Group# 2025-3523

Sample ID: **Comp3____(BD-DEEP 1+2+3)**

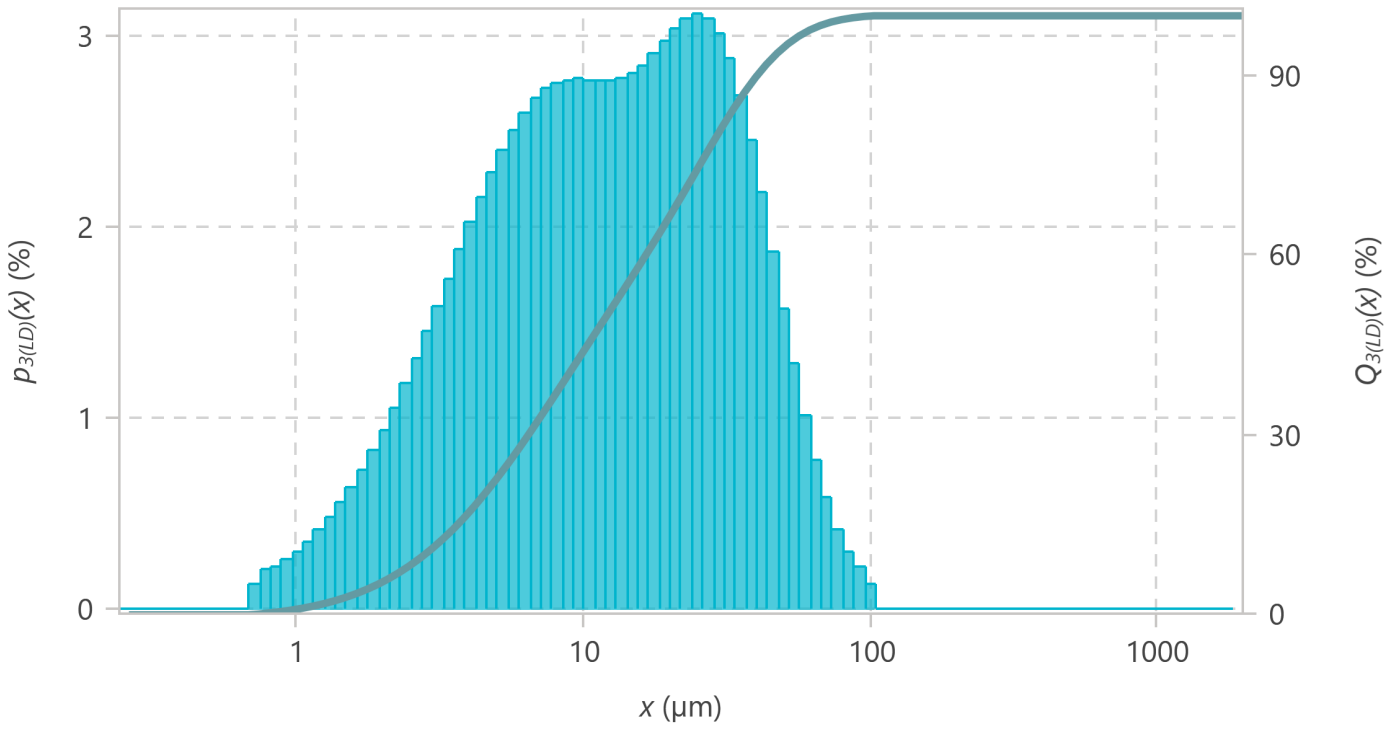
Method

Refractive Index red	1.55
Absorption Coefficient red	
Refractive Index blue	1.55
Absorption Coefficient blue	
Transparency	Transparent
Shape	Irregular
Fluid name	Water
Fluid refractive index	1.33

%Percentile

20 %	4.56 µm
50 %	12.27 µm
80 %	29.63 µm

Measurement Graph



Summary

Mean volume diameter ($M_{4,3}$)	17.9 µm
Mean area diameter ($M_{3,2}$)	6.68 µm
Mean number diameter ($M_{1,0}$)	1.52 µm

%Cumulative Passing

70 µm	99%
35 µm	86%
25 µm	74%
20 µm	66%
15 µm	56%
10 µm	43%
7 µm	32%
5 µm	22%
3 µm	11%
1 µm	1%

Results apply to samples as received. All sampling is completed by the cllient.

Signature

Baffinland Iron Mines Corp.
Attention: Environment Lab Results
PO #/Project:
Samples: 7

SRC Geoanalytical Laboratories
2901 Cleveland Avenue, Saskatoon, Saskatchewan, S7K 8A9
Phone: (306) 933-8118 Email: geolab@src.sk.ca

Report No: G-2025-2013

Date of Report: Sep 10, 2025

Laser Diffraction

Column Header Details

D50 in (D50)

Sample Number	D50
BD-DEEP-1	10.34
BD-DEEP-2	11.76
BD-SHAL-1	19.84
BD-SHAL-2	13.74
BD-SHAL-3	18.96
BD-SHAL-4	12.56
BD-SHAL-5	8.09

PSA by Microtrac Laser Diffraction Analyzer.
Results apply to samples as received. All sampling is completed by cllient.

SRC Geoanalytical Laboratories
2901 Cleveland Avenue, Saskatoon, Saskatchewan, S7K 8A9
Phone: (306) 933-8118 Email: geolab@src.sk.ca

Baffinland Iron Mines Corp.
Attention: Environment Lab Results
Dispatch:
PO #/Project:
Samples: 7

				D50 Laser Diffraction
Group #	Description	Date	Sample Type	
G-2025-2013	BD-DEEP-1	08-06-2025	Other	10.34
G-2025-2013	BD-DEEP-2	08-06-2025	Other	11.76
G-2025-2013	BD-SHAL-1	08-06-2025	Other	19.84
G-2025-2013	BD-SHAL-2	08-06-2025	Other	13.74
G-2025-2013	BD-SHAL-3	08-06-2025	Other	18.96
G-2025-2013	BD-SHAL-4	08-06-2025	Other	12.56
G-2025-2013	BD-SHAL-5	08-06-2025	Other	8.09

SASKATCHEWAN RESEARCH COUNCIL
Geoanalytical Laboratories
2901 Cleveland Avenue, Saskatoon, SK Canada S7K 8A9
T: 306-933-8118 F: 306-933-5656
E: geolab@src.sk.ca
www.src.sk.ca/geoanalytical

Report No: G-2025-2013

September 10, 2025

Baffinland Iron Mines Corp.
2275 Upper Middle Road East
Suite 300
Oakville, ONT L6H 0C3
Attn: Environment Lab Results

This document constitutes the **final official test report.** Liability for the SRC Geoanalytical Laboratories', if any, will be limited to the cost of analysis for samples in this test report. The results contained in this test report relate only to the items tested. It is the customer's responsibility to ensure that all interpretation of analysis is done using the data from this report.

The customer will not use the name of the Saskatchewan Research Council in connection with the sale, offer, advertisement or the promotion of any article, product, or company without the prior written consent of the SRC.

Results Reviewed and Approved by: _____
Herman Coceancigh
ICP Supervisor

Baffinland Iron Mines Corp.
Attention: Environment Lab Results
PO #/Project:
Samples: 5

SRC Geoanalytical Laboratories
2901 Cleveland Avenue, Saskatoon, Saskatchewan, S7K 8A9
Phone: (306) 933-8118 Email: geolab@src.sk.ca

Report No: G-2025-3048

Date of Report: Oct 21, 2025

DPulp

Column Header Details

Density in g/cc (Density)

Sample Number	Density g/cc
QQ	2.60
BD-SHAL-Comp- 1 2	2.82
BD-SHAL-Comp- 3 4 5	3.08
BD-DEEP-Comp- 1 2 3	3.09
BD-DEEP-Comp- 1 2 3 R	3.09

Rock Density by Pycnometer Method.
The standard used is QQ.
Results apply to samples as received. All sampling is completed by the client.

Baffinland Iron Mines Corp.
Attention: Environment Lab Results
PO #/Project:
Samples: 4

SRC Geoanalytical Laboratories
2901 Cleveland Avenue, Saskatoon, Saskatchewan, S7K 8A9
Phone: (306) 933-8118 Email: geolab@src.sk.ca

Report No: G-2025-3523

Date of Report: Jan 16, 2026

DPulp

Column Header Details

Density in g/cc (Density)

Sample Number	Density g/cc
QQ	2.63
Composite 1	2.73
Composite 2	1.73
Composite 3	2.76

Rock Density by Pycnometer Method.
The standard used is QQ.
Results apply to samples as received. All sampling is completed by the client.

Note - Due to sample size:
Composite 1 --> BD-SHAL-1, BD-SHAL-2
Composite 2 --> BD-SHAL-3, BD-SHAL-4, and BD-SHAL-5
Composite 3 --> BD-DEEP-1, BD-DEEP-2, BD-DEEP-3
as per email discussion with Jaime Caplette.

Baffinland Iron Mines Corp.
Attention: Environment Lab Results
PO #/Project:
Samples: 5

SRC Geoanalytical Laboratories
2901 Cleveland Avenue, Saskatoon, Saskatchewan, S7K 8A9
Phone: (306) 933-8118 Email: geolab@src.sk.ca

Report No: G-2025-3523

Date of Report: Jan 16, 2026

Laser Diffraction

Column Header Details

D50 in (D50)

Sample Number	D50
Glass_1	58.56
Glass_2	669.14
Composite 1	16.83
Composite 2	18.20
Composite 3	12.27

PSA by Microtrac Laser Diffraction Analyzer.
Results apply to samples as received. All sampling is completed by client.

Note - Due to sample size:
Composite 1 --> BD-SHAL-1, BD-SHAL-2
Composite 2 --> BD-SHAL-3, BD-SHAL-4, and BD-SHAL-5
Composite 3 --> BD-DEEP-1, BD-DEEP-2, BD-DEEP-3
as per email discussion with Jaime Caplette.

SASKATCHEWAN RESEARCH COUNCIL
Geoanalytical Laboratories
2901 Cleveland Avenue, Saskatoon, SK Canada S7K 8A9
T: 306-933-8118 F: 306-933-5656
E: geolab@src.sk.ca
www.src.sk.ca/geoanalytical

Report No: G-2025-3523

January 16, 2026

Baffinland Iron Mines Corp.
2275 Upper Middle Road East
Suite 300
Oakville, ONT L6H 0C3
Attn: Environment Lab Results

This document constitutes the **final official test report.** Liability for the SRC Geoanalytical Laboratories', if any, will be limited to the cost of analysis for samples in this test report. The results contained in this test report relate only to the items tested. It is the customer's responsibility to ensure that all interpretation of analysis is done using the data from this report.

The customer will not use the name of the Saskatchewan Research Council in connection with the sale, offer, advertisement or the promotion of any article, product, or company without the prior written consent of the SRC.

Results Reviewed and Approved by: _____
Herman Coceancigh
ICP Supervisor

ALS Canada Ltd.

right solutions.
right partner.

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	:	**WT2525447**			
Client	:	**Baffinland Iron Mines Corporation**	Laboratory	:	ALS Environmental - Waterloo
Contact	:	Environmental Lab Results	Account Manager	:	Rick Hawthorne
Address	:	360 Oakville Place Dr Suite 300 Oakville Ontario Canada L6H 6K8	Address	:	60 Northland Road, Unit 1 Waterloo ON Canada N2V 2B8
Telephone	:	----	Telephone	:	+1 519 886 6910
Project	:	SEDIMENT TRAPS	Date Samples Received	:	15-Aug-2025 09:00
PO	:	4500156571	Date Analysis Commenced	:	17-Dec-2025
C-O-C number	:	----	Issue Date	:	31-Dec-2025 12:10
Sampler	:	AG/JM/ET			
Site	:	----			
Quote number	:	2024-2025 Scope of Work			
No. of samples received	:	16			
No. of samples analysed	:	16			

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Greg Pokocky	Manager - Inorganics	Metals, Waterloo, Ontario
Greg Pokocky	Manager - Inorganics	Inorganics, Waterloo, Ontario
Travis Peel	Laboratory Analyst	Centralized Prep, Waterloo, Ontario

No Breaches Found

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key: LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
%	percent
mg/kg	milligrams per kilogram

>: greater than.
<: less than.

Red shading is applied where the result or the LOR is greater than the Guideline Upper Limit (or lower than the Guideline Lower Limit, if applicable).
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit.

Qualifiers

Qualifier	Description
DLIS	Detection Limit Adjusted due to insufficient sample.

Analytical Results Evaluation

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	SL-SHAL-2C_2025-07-05 ----	SL-SHAL-2E_2025-07-05 ----	SL-SHAL-2A_2025-07-05 ----	SL-DEEP-1C_2025-07-05 ----	SL-SHAL-1D_2025-07-05 ----	SL-SHAL-1B_2025-07-05 ----	SL-SHAL-1A_2025-07-06 ----
				Client sampling date / time	05-Jul-2025 10:10	05-Jul-2025 10:45	05-Jul-2025 11:20	05-Jul-2025 13:55	05-Jul-2025 15:20	05-Jul-2025 16:05	06-Jul-2025 14:20
				Sub-Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
					WT2525447-001	WT2525447-002	WT2525447-003	WT2525447-004	WT2525447-005	WT2525447-006	WT2525447-007
					Result	Result	Result	Result	Result	Result	Result
Sample Preparation											
Dummy analyte	----	EP357/WT	-		Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
Metals											
Aluminum	7429-90-5	E440/WT	mg/kg		32700	29300	27700	23800	28800	34600	33400
Antimony	7440-36-0	E440/WT	mg/kg		0.26	0.39	0.20	0.21	0.49	0.26	0.19
Arsenic	7440-38-2	E440/WT	mg/kg		6.57	6.99	5.07	3.91	5.43	6.13	5.67
Barium	7440-39-3	E440/WT	mg/kg		171	158	140	121	167	188	171
Beryllium	7440-41-7	E440/WT	mg/kg		1.44	1.22	1.26	1.06	1.18	1.60	1.34
Bismuth	7440-69-9	E440/WT	mg/kg		0.87	0.69	0.64	0.65	0.68	0.86	0.77
Boron	7440-42-8	E440/WT	mg/kg		140	352	149	258	397	458	295
Cadmium	7440-43-9	E440/WT	mg/kg		0.768	0.635	0.647	0.580	0.572	0.837	0.884
Calcium	7440-70-2	E440/WT	mg/kg		5030	6370	5440	6000	7320	7780	6340
Chromium	7440-47-3	E440/WT	mg/kg		76.5	142	72.4	54.4	70.2	82.6	76.7
Cobalt	7440-48-4	E440/WT	mg/kg		25.8	22.5	20.4	16.3	22.3	25.5	23.9
Copper	7440-50-8	E440/WT	mg/kg		51.3	63.2	48.7	38.6	47.5	57.3	54.1
Iron	7439-89-6	E440/WT	mg/kg		152000	134000	102000	74700	176000	116000	105000
Lead	7439-92-1	E440/WT	mg/kg		21.3	22.6	19.8	18.9	19.6	25.1	24.0
Lithium	7439-93-2	E440/WT	mg/kg		42.9	37.2	36.2	31.1	36.0	47.2	41.1
Magnesium	7439-95-4	E440/WT	mg/kg		24400	22700	20100	18600	21800	26500	24500
Manganese	7439-96-5	E440/WT	mg/kg		1840	1930	1780	1490	1970	2430	2250

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	SL-SHAL-2C_2025-07-05 ----	SL-SHAL-2E_2025-07-05 ----	SL-SHAL-2A_2025-07-05 ----	SL-DEEP-1C_2025-07-05 ----	SL-SHAL-1D_2025-07-05 ----	SL-SHAL-1B_2025-07-05 ----	SL-SHAL-1A_2025-07-06 ----
				Client sampling date / time	05-Jul-2025 10:10	05-Jul-2025 10:45	05-Jul-2025 11:20	05-Jul-2025 13:55	05-Jul-2025 15:20	05-Jul-2025 16:05	06-Jul-2025 14:20
				Sub-Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
					WT2525447-001	WT2525447-002	WT2525447-003	WT2525447-004	WT2525447-005	WT2525447-006	WT2525447-007
					Result	Result	Result	Result	Result	Result	Result
Metals											
Mercury	7439-97-6	E510/WT	mg/kg		0.0150	0.0144	0.0149	0.0102	0.0144	0.0288	0.0256
Molybdenum	7439-98-7	E440/WT	mg/kg		8.15	9.35	7.54	4.83	18.4	8.71	7.33
Nickel	7440-02-0	E440/WT	mg/kg		77.6	71.5	67.9	50.1	67.0	77.7	75.4
Phosphorus	7723-14-0	E440/WT	mg/kg		642	589	610	458	585	627	602
Potassium	7440-09-7	E440/WT	mg/kg		7670	6630	6380	6140	6330	7830	7450
Selenium	7782-49-2	E440/WT	mg/kg		0.57	0.49	0.68	0.32	0.57	0.67	0.55
Silver	7440-22-4	E440/WT	mg/kg		0.21	0.23	0.19	0.20	0.20	0.25	0.24
Sodium	7440-23-5	E440/WT	mg/kg		279	313	290	240	264	323	296
Strontium	7440-24-6	E440/WT	mg/kg		13.4	19.6	14.7	14.9	21.5	24.0	18.9
Sulfur	7704-34-9	E440/WT	mg/kg		<1000	<1900 DLIS	1200	<1000	<1000	<1100 DLIS	<1000
Thallium	7440-28-0	E440/WT	mg/kg		0.445	0.406	0.396	0.317	0.374	0.479	0.453
Tin	7440-31-5	E440/WT	mg/kg		2.2	4.3	2.9	5.8	3.4	2.8	<2.0
Titanium	7440-32-6	E440/WT	mg/kg		1260	1300	1150	989	1150	1400	1310
Tungsten	7440-33-7	E440/WT	mg/kg		1.14	1.46	1.16	1.60	1.34	1.27	1.03
Uranium	7440-61-1	E440/WT	mg/kg		8.38	8.32	11.2	4.68	15.0	8.33	7.65
Vanadium	7440-62-2	E440/WT	mg/kg		50.8	48.6	46.9	38.0	44.0	54.3	51.7
Zinc	7440-66-6	E440/WT	mg/kg		145	471	131	122	837	137	131
Zirconium	7440-67-7	E440/WT	mg/kg		9.4	12.6	7.0	11.4	11.5	15.4	12.1
Aggregate Organics											
Carbon, total organic [TOC]	----	E357/WT	%		1.71	1.41	3.30	0.95	1.11	1.71	1.58

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	SL-SHAL-2C_2025-07-05 ----	SL-SHAL-2E_2025-07-05 ----	SL-SHAL-2A_2025-07-05 ----	SL-DEEP-1C_2025-07-05 ----	SL-SHAL-1D_2025-07-05 ----	SL-SHAL-1B_2025-07-05 ----	SL-SHAL-1A_2025-07-06 ----
				Client sampling date / time	05-Jul-2025 10:10	05-Jul-2025 10:45	05-Jul-2025 11:20	05-Jul-2025 13:55	05-Jul-2025 15:20	05-Jul-2025 16:05	06-Jul-2025 14:20
				Sub-Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
					WT2525447-001	WT2525447-002	WT2525447-003	WT2525447-004	WT2525447-005	WT2525447-006	WT2525447-007
					Result	Result	Result	Result	Result	Result	Result
Aggregate Organics											
Organic matter	----	E357/WT	%		2.95	2.43	5.69	1.64	1.91	2.95	2.72

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	SL-SHAL-2D_2025-07-07 ----	SL-SHAL-2B_2025-07-07 ----	SL-DEEP-1B_2025-07-07 ----	SL-DEEP-1A_2025-07-07 ----	SL-SHAL-1E_2025-07-08 ----	SL-DEEP-1D_2025-07-08 ----	SL-SHAL-1C_2025-07-08 ----
				Client sampling date / time	07-Jul-2025 11:40	07-Jul-2025 12:35	07-Jul-2025 13:15	07-Jul-2025 14:38	08-Jul-2025 10:30	08-Jul-2025 13:10	08-Jul-2025 15:15
				Sub-Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
					WT2525447-008	WT2525447-009	WT2525447-010	WT2525447-011	WT2525447-012	WT2525447-013	WT2525447-014
					Result	Result	Result	Result	Result	Result	Result
Sample Preparation											
Dummy analyte	----	EP357/WT	-		Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
Metals											
Aluminum	7429-90-5	E440/WT	mg/kg		28400	28400	39300	39500	34900	38900	33600
Antimony	7440-36-0	E440/WT	mg/kg		0.21	0.19	0.32	0.18	0.23	0.22	0.31
Arsenic	7440-38-2	E440/WT	mg/kg		5.78	5.47	6.27	6.34	6.40	6.26	6.03
Barium	7440-39-3	E440/WT	mg/kg		157	152	218	217	190	222	178
Beryllium	7440-41-7	E440/WT	mg/kg		1.20	1.21	1.78	1.74	1.51	1.71	1.37
Bismuth	7440-69-9	E440/WT	mg/kg		0.69	0.71	1.04	1.04	0.88	1.09	0.77
Boron	7440-42-8	E440/WT	mg/kg		221	234	563	390	356	262	363
Cadmium	7440-43-9	E440/WT	mg/kg		0.876	0.904	0.950	0.914	0.819	1.01	0.628
Calcium	7440-70-2	E440/WT	mg/kg		5470	5820	8590	7120	7050	6280	7060

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	SL-SHAL-2D_2025-07-07 ----	SL-SHAL-2B_2025-07-07 ----	SL-DEEP-1B_2025-07-07 ----	SL-DEEP-1A_2025-07-07 ----	SL-SHAL-1E_2025-07-08 ----	SL-DEEP-1D_2025-07-08 ----	SL-SHAL-1C_2025-07-08 ----
				Client sampling date / time	07-Jul-2025 11:40	07-Jul-2025 12:35	07-Jul-2025 13:15	07-Jul-2025 14:38	08-Jul-2025 10:30	08-Jul-2025 13:10	08-Jul-2025 15:15
				Sub-Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
					WT2525447-008	WT2525447-009	WT2525447-010	WT2525447-011	WT2525447-012	WT2525447-013	WT2525447-014
					Result	Result	Result	Result	Result	Result	Result
Metals											
Chromium	7440-47-3	E440/WT	mg/kg		70.0	68.8	89.6	92.1	84.7	89.8	93.1
Cobalt	7440-48-4	E440/WT	mg/kg		22.2	21.4	28.5	29.2	25.9	29.8	23.5
Copper	7440-50-8	E440/WT	mg/kg		49.5	46.9	65.8	68.0	57.5	67.6	56.6
Iron	7439-89-6	E440/WT	mg/kg		109000	94300	104000	103000	117000	106000	125000
Lead	7439-92-1	E440/WT	mg/kg		19.4	19.3	28.9	28.7	25.1	29.6	22.2
Lithium	7439-93-2	E440/WT	mg/kg		34.7	34.6	55.9	56.3	44.5	53.4	41.5
Magnesium	7439-95-4	E440/WT	mg/kg		21000	20800	30000	30400	27400	30100	25300
Manganese	7439-96-5	E440/WT	mg/kg		2230	2240	2860	2940	2450	3050	1930
Mercury	7439-97-6	E510/WT	mg/kg		0.0193	0.0174	0.0261	0.0228	0.0198	0.0259	0.0168
Molybdenum	7439-98-7	E440/WT	mg/kg		7.91	6.99	8.01	8.14	7.63	11.0	11.1
Nickel	7440-02-0	E440/WT	mg/kg		70.3	68.4	85.8	89.4	79.7	89.3	72.6
Phosphorus	7723-14-0	E440/WT	mg/kg		569	509	723	701	604	696	574
Potassium	7440-09-7	E440/WT	mg/kg		6840	6750	8620	8830	7890	9110	7500
Selenium	7782-49-2	E440/WT	mg/kg		0.78	0.70	0.55	0.60	0.60	0.57	0.51
Silver	7440-22-4	E440/WT	mg/kg		0.20	0.18	0.30	0.31	0.25	0.30	0.23
Sodium	7440-23-5	E440/WT	mg/kg		259	257	392	370	314	348	292
Strontium	7440-24-6	E440/WT	mg/kg		15.9	17.2	27.9	23.3	20.8	19.5	20.8
Sulfur	7704-34-9	E440/WT	mg/kg		1200	1300	<1000	<1000	<1500 DLIS	<1000	<1000
Thallium	7440-28-0	E440/WT	mg/kg		0.397	0.396	0.501	0.499	0.464	0.525	0.428
Tin	7440-31-5	E440/WT	mg/kg		11.4	<2.0	2.5	2.6	<2.9 DLIS	2.1	8.7

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	SL-SHAL-2D_2025-07-07 ----	SL-SHAL-2B_2025-07-07 ----	SL-DEEP-1B_2025-07-07 ----	SL-DEEP-1A_2025-07-07 ----	SL-SHAL-1E_2025-07-08 ----	SL-DEEP-1D_2025-07-08 ----	SL-SHAL-1C_2025-07-08 ----
				Client sampling date / time	07-Jul-2025 11:40	07-Jul-2025 12:35	07-Jul-2025 13:15	07-Jul-2025 14:38	08-Jul-2025 10:30	08-Jul-2025 13:10	08-Jul-2025 15:15
				Sub-Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
					WT2525447-008	WT2525447-009	WT2525447-010	WT2525447-011	WT2525447-012	WT2525447-013	WT2525447-014
					Result	Result	Result	Result	Result	Result	Result
Metals											
Titanium	7440-32-6	E440/WT	mg/kg		1110	1090	1420	1410	1440	1360	1320
Tungsten	7440-33-7	E440/WT	mg/kg		1.08	1.10	0.92	0.93	1.33	0.75	1.29
Uranium	7440-61-1	E440/WT	mg/kg		10.1	9.67	8.76	9.12	7.69	8.77	8.45
Vanadium	7440-62-2	E440/WT	mg/kg		45.2	44.0	61.1	62.1	55.6	61.9	51.5
Zinc	7440-66-6	E440/WT	mg/kg		158	112	155	150	134	149	280
Zirconium	7440-67-7	E440/WT	mg/kg		9.1	9.6	12.9	12.1	12.9	13.6	12.3
Aggregate Organics											
Carbon, total organic [TOC]	----	E357/WT	%		3.16	4.10	1.00	1.36	1.31	1.27	1.14
Organic matter	----	E357/WT	%		5.45	7.07	1.72	2.34	2.26	2.19	1.97

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	SL-DEEP-1E_2025-07-09 ----	Filter Blank ----	----	----	----	----	----
				Client sampling date / time	09-Jul-2025 08:35	09-Jul-2025 00:00	----	----	----	----	----
				Sub-Matrix	Sediment	Sediment	----	----	----	----	----
					WT2525447-015	WT2525447-016	----	----	----	----	----
					Result	Result	----	----	----	----	----
Sample Preparation											
Dummy analyte	----	EP357/WT	-		Not Authorised	----	----	----	----	----	----
Metals											
Aluminum	7429-90-5	E440/WT	mg/kg		38900	26300	----	----	----	----	----

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	SL-DEEP-1E_2025-07-09 ----	Filter Blank ----	----	----	----	----	----
				Client sampling date / time	09-Jul-2025 08:35	09-Jul-2025 00:00	----	----	----	----	----
				Sub-Matrix	Sediment	Sediment	----	----	----	----	----
					WT2525447-015	WT2525447-016	----	----	----	----	----
					Result	Result	----	----	----	----	----
Metals											
Antimony	7440-36-0	E440/WT	mg/kg		0.35	0.12	----	----	----	----	----
Arsenic	7440-38-2	E440/WT	mg/kg		6.95	7.71	----	----	----	----	----
Barium	7440-39-3	E440/WT	mg/kg		221	76.8	----	----	----	----	----
Beryllium	7440-41-7	E440/WT	mg/kg		1.71	0.37	----	----	----	----	----
Bismuth	7440-69-9	E440/WT	mg/kg		1.06	<0.20	----	----	----	----	----
Boron	7440-42-8	E440/WT	mg/kg		414	5970	----	----	----	----	----
Cadmium	7440-43-9	E440/WT	mg/kg		0.966	0.042	----	----	----	----	----
Calcium	7440-70-2	E440/WT	mg/kg		7450	48100	----	----	----	----	----
Chromium	7440-47-3	E440/WT	mg/kg		98.9	8.16	----	----	----	----	----
Cobalt	7440-48-4	E440/WT	mg/kg		29.1	0.68	----	----	----	----	----
Copper	7440-50-8	E440/WT	mg/kg		75.9	3.05	----	----	----	----	----
Iron	7439-89-6	E440/WT	mg/kg		118000	946	----	----	----	----	----
Lead	7439-92-1	E440/WT	mg/kg		29.6	8.87	----	----	----	----	----
Lithium	7439-93-2	E440/WT	mg/kg		55.6	52.8	----	----	----	----	----
Magnesium	7439-95-4	E440/WT	mg/kg		30200	8020	----	----	----	----	----
Manganese	7439-96-5	E440/WT	mg/kg		2750	25.3	----	----	----	----	----
Mercury	7439-97-6	E510/WT	mg/kg		0.0217	<0.0050	----	----	----	----	----
Molybdenum	7439-98-7	E440/WT	mg/kg		10.7	4.34	----	----	----	----	----
Nickel	7440-02-0	E440/WT	mg/kg		89.5	3.40	----	----	----	----	----
Phosphorus	7723-14-0	E440/WT	mg/kg		694	70	----	----	----	----	----

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	SL-DEEP-1E_2025-07-09 ----	Filter Blank ----	----	----	----	----	----
				Client sampling date / time	09-Jul-2025 08:35	09-Jul-2025 00:00	----	----	----	----	----
				Sub-Matrix	Sediment	Sediment	----	----	----	----	----
					WT2525447-015	WT2525447-016	----	----	----	----	----
					Result	Result	----	----	----	----	----
Metals											
Potassium	7440-09-7	E440/WT	mg/kg		9050	590	----	----	----	----	----
Selenium	7782-49-2	E440/WT	mg/kg		0.69	<0.20	----	----	----	----	----
Silver	7440-22-4	E440/WT	mg/kg		0.31	<0.10	----	----	----	----	----
Sodium	7440-23-5	E440/WT	mg/kg		360	618	----	----	----	----	----
Strontium	7440-24-6	E440/WT	mg/kg		23.8	187	----	----	----	----	----
Sulfur	7704-34-9	E440/WT	mg/kg		<1000	<1000	----	----	----	----	----
Thallium	7440-28-0	E440/WT	mg/kg		0.507	<0.050	----	----	----	----	----
Tin	7440-31-5	E440/WT	mg/kg		2.9	<2.0	----	----	----	----	----
Titanium	7440-32-6	E440/WT	mg/kg		1430	296	----	----	----	----	----
Tungsten	7440-33-7	E440/WT	mg/kg		1.04	<0.50	----	----	----	----	----
Uranium	7440-61-1	E440/WT	mg/kg		9.52	1.14	----	----	----	----	----
Vanadium	7440-62-2	E440/WT	mg/kg		61.3	9.67	----	----	----	----	----
Zinc	7440-66-6	E440/WT	mg/kg		211	10.9	----	----	----	----	----
Zirconium	7440-67-7	E440/WT	mg/kg		14.8	14.7	----	----	----	----	----
Aggregate Organics											
Carbon, total organic [TOC]	----	E357/WT	%		1.30	----	----	----	----	----	----
Organic matter	----	E357/WT	%		2.24	----	----	----	----	----	----

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Summary of Guideline Limits

CERTIFICATE OF ANALYSIS

Work Order	:	**WT2525447**			
Client	:	**Baffinland Iron Mines Corporation**	Laboratory	:	ALS Environmental - Waterloo
Contact	:	Environmental Lab Results	Account Manager	:	Rick Hawthorne
Address	:	360 Oakville Place Dr Suite 300 Oakville Ontario Canada L6H 6K8	Address	:	60 Northland Road, Unit 1 Waterloo ON Canada N2V 2B8
Telephone	:	----	E-mail	:	Rick.Hawthorne@ALSGlobal.com
Project	:	SEDIMENT TRAPS	Telephone	:	+1 519 886 6910
PO	:	4500156571	Date Samples Received	:	15-Aug-2025 09:00
C-O-C number	:	----	Date Analysis Commenced	:	17-Dec-2025
Sampler	:	AG/JM/ET	Issue Date	:	31-Dec-2025 12:10
Site	:	----			
Quote number	:	2024-2025 Scope of Work			
No. of samples received	:	16			
No. of samples analysed	:	16			

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Greg Pokocky	Manager - Inorganics	Metals, Waterloo, Ontario
Greg Pokocky	Manager - Inorganics	Inorganics, Waterloo, Ontario
Travis Peel	Laboratory Analyst	Centralized Prep, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key: CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
%	percent
mg/kg	milligrams per kilogram

<: less than.
>: greater than.
Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

Qualifier	Description
DLIS	Detection Limit Adjusted due to insufficient sample.

Analytical Results

Sub-Matrix: Sediment
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SL-SHAL-2C_2025-07-05 ----	SL-SHAL-2E_2025-07-05 ----	SL-SHAL-2A_2025-07-05 ----	SL-DEEP-1C_2025-07-05 ----	SL-SHAL-1D_2025-07-05 ----
					Client sampling date / time	05-Jul-2025 10:10	05-Jul-2025 10:45	05-Jul-2025 11:20	05-Jul-2025 13:55	05-Jul-2025 15:20
						WT2525447-001	WT2525447-002	WT2525447-003	WT2525447-004	WT2525447-005
						Result	Result	Result	Result	Result
Sample Preparation										
Dummy analyte	----	EP357/WT	1	-		Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
Metals										
Aluminum	7429-90-5	E440/WT	50	mg/kg		32700	29300	27700	23800	28800
Antimony	7440-36-0	E440/WT	0.10	mg/kg		0.26	0.39	0.20	0.21	0.49
Arsenic	7440-38-2	E440/WT	0.10	mg/kg		6.57	6.99	5.07	3.91	5.43
Barium	7440-39-3	E440/WT	0.50	mg/kg		171	158	140	121	167
Beryllium	7440-41-7	E440/WT	0.10	mg/kg		1.44	1.22	1.26	1.06	1.18
Bismuth	7440-69-9	E440/WT	0.20	mg/kg		0.87	0.69	0.64	0.65	0.68
Boron	7440-42-8	E440/WT	5.0	mg/kg		140	352	149	258	397
Cadmium	7440-43-9	E440/WT	0.020	mg/kg		0.768	0.635	0.647	0.580	0.572
Calcium	7440-70-2	E440/WT	50	mg/kg		5030	6370	5440	6000	7320
Chromium	7440-47-3	E440/WT	0.50	mg/kg		76.5	142	72.4	54.4	70.2
Cobalt	7440-48-4	E440/WT	0.10	mg/kg		25.8	22.5	20.4	16.3	22.3
Copper	7440-50-8	E440/WT	0.50	mg/kg		51.3	63.2	48.7	38.6	47.5
Iron	7439-89-6	E440/WT	50	mg/kg		152000	134000	102000	74700	176000
Lead	7439-92-1	E440/WT	0.50	mg/kg		21.3	22.6	19.8	18.9	19.6
Lithium	7439-93-2	E440/WT	2.0	mg/kg		42.9	37.2	36.2	31.1	36.0
Magnesium	7439-95-4	E440/WT	20	mg/kg		24400	22700	20100	18600	21800
Manganese	7439-96-5	E440/WT	1.0	mg/kg		1840	1930	1780	1490	1970
Mercury	7439-97-6	E510/WT	0.0050	mg/kg		0.0150	0.0144	0.0149	0.0102	0.0144

Analytical Results

Sub-Matrix: Sediment
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SL-SHAL-2C_2025-07-05 ----	SL-SHAL-2E_2025-07-05 ----	SL-SHAL-2A_2025-07-05 ----	SL-DEEP-1C_2025-07-05 ----	SL-SHAL-1D_2025-07-05 ----
					Client sampling date / time	05-Jul-2025 10:10	05-Jul-2025 10:45	05-Jul-2025 11:20	05-Jul-2025 13:55	05-Jul-2025 15:20
						WT2525447-001	WT2525447-002	WT2525447-003	WT2525447-004	WT2525447-005
						Result	Result	Result	Result	Result
Metals										
Molybdenum	7439-98-7	E440/WT	0.10	mg/kg		8.15	9.35	7.54	4.83	18.4
Nickel	7440-02-0	E440/WT	0.50	mg/kg		77.6	71.5	67.9	50.1	67.0
Phosphorus	7723-14-0	E440/WT	50	mg/kg		642	589	610	458	585
Potassium	7440-09-7	E440/WT	100	mg/kg		7670	6630	6380	6140	6330
Selenium	7782-49-2	E440/WT	0.20	mg/kg		0.57	0.49	0.68	0.32	0.57
Silver	7440-22-4	E440/WT	0.10	mg/kg		0.21	0.23	0.19	0.20	0.20
Sodium	7440-23-5	E440/WT	50	mg/kg		279	313	290	240	264
Strontium	7440-24-6	E440/WT	0.50	mg/kg		13.4	19.6	14.7	14.9	21.5
Sulfur	7704-34-9	E440/WT	1000	mg/kg		<1000	<1900 DLIS	1200	<1000	<1000
Thallium	7440-28-0	E440/WT	0.050	mg/kg		0.445	0.406	0.396	0.317	0.374
Tin	7440-31-5	E440/WT	2.0	mg/kg		2.2	4.3	2.9	5.8	3.4
Titanium	7440-32-6	E440/WT	1.0	mg/kg		1260	1300	1150	989	1150
Tungsten	7440-33-7	E440/WT	0.50	mg/kg		1.14	1.46	1.16	1.60	1.34
Uranium	7440-61-1	E440/WT	0.050	mg/kg		8.38	8.32	11.2	4.68	15.0
Vanadium	7440-62-2	E440/WT	0.20	mg/kg		50.8	48.6	46.9	38.0	44.0
Zinc	7440-66-6	E440/WT	2.0	mg/kg		145	471	131	122	837
Zirconium	7440-67-7	E440/WT	1.0	mg/kg		9.4	12.6	7.0	11.4	11.5
Aggregate Organics										
Carbon, total organic [TOC]	----	E357/WT	0.10	%		1.71	1.41	3.30	0.95	1.11
Organic matter	----	E357/WT	0.20	%		2.95	2.43	5.69	1.64	1.91

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: Sediment
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SL-SHAL-1B_2025-07-05 ----	SL-SHAL-1A_2025-07-06 ----	SL-SHAL-2D_2025-07-07 ----	SL-SHAL-2B_2025-07-07 ----	SL-DEEP-1B_2025-07-07 ----
					Client sampling date / time	05-Jul-2025 16:05	06-Jul-2025 14:20	07-Jul-2025 11:40	07-Jul-2025 12:35	07-Jul-2025 13:15
						WT2525447-006	WT2525447-007	WT2525447-008	WT2525447-009	WT2525447-010
						Result	Result	Result	Result	Result
Sample Preparation										
Dummy analyte	----	EP357/WT	1	-		Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
Metals										
Aluminum	7429-90-5	E440/WT	50	mg/kg		34600	33400	28400	28400	39300
Antimony	7440-36-0	E440/WT	0.10	mg/kg		0.26	0.19	0.21	0.19	0.32
Arsenic	7440-38-2	E440/WT	0.10	mg/kg		6.13	5.67	5.78	5.47	6.27
Barium	7440-39-3	E440/WT	0.50	mg/kg		188	171	157	152	218
Beryllium	7440-41-7	E440/WT	0.10	mg/kg		1.60	1.34	1.20	1.21	1.78
Bismuth	7440-69-9	E440/WT	0.20	mg/kg		0.86	0.77	0.69	0.71	1.04
Boron	7440-42-8	E440/WT	5.0	mg/kg		458	295	221	234	563
Cadmium	7440-43-9	E440/WT	0.020	mg/kg		0.837	0.884	0.876	0.904	0.950
Calcium	7440-70-2	E440/WT	50	mg/kg		7780	6340	5470	5820	8590
Chromium	7440-47-3	E440/WT	0.50	mg/kg		82.6	76.7	70.0	68.8	89.6
Cobalt	7440-48-4	E440/WT	0.10	mg/kg		25.5	23.9	22.2	21.4	28.5
Copper	7440-50-8	E440/WT	0.50	mg/kg		57.3	54.1	49.5	46.9	65.8
Iron	7439-89-6	E440/WT	50	mg/kg		116000	105000	109000	94300	104000
Lead	7439-92-1	E440/WT	0.50	mg/kg		25.1	24.0	19.4	19.3	28.9
Lithium	7439-93-2	E440/WT	2.0	mg/kg		47.2	41.1	34.7	34.6	55.9
Magnesium	7439-95-4	E440/WT	20	mg/kg		26500	24500	21000	20800	30000
Manganese	7439-96-5	E440/WT	1.0	mg/kg		2430	2250	2230	2240	2860
Mercury	7439-97-6	E510/WT	0.0050	mg/kg		0.0288	0.0256	0.0193	0.0174	0.0261
Molybdenum	7439-98-7	E440/WT	0.10	mg/kg		8.71	7.33	7.91	6.99	8.01

Analytical Results

Sub-Matrix: Sediment
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SL-SHAL-1B_2025-07-05 ----	SL-SHAL-1A_2025-07-06 ----	SL-SHAL-2D_2025-07-07 ----	SL-SHAL-2B_2025-07-07 ----	SL-DEEP-1B_2025-07-07 ----
					Client sampling date / time	05-Jul-2025 16:05	06-Jul-2025 14:20	07-Jul-2025 11:40	07-Jul-2025 12:35	07-Jul-2025 13:15
						WT2525447-006	WT2525447-007	WT2525447-008	WT2525447-009	WT2525447-010
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E440/WT	0.50	mg/kg		77.7	75.4	70.3	68.4	85.8
Phosphorus	7723-14-0	E440/WT	50	mg/kg		627	602	569	509	723
Potassium	7440-09-7	E440/WT	100	mg/kg		7830	7450	6840	6750	8620
Selenium	7782-49-2	E440/WT	0.20	mg/kg		0.67	0.55	0.78	0.70	0.55
Silver	7440-22-4	E440/WT	0.10	mg/kg		0.25	0.24	0.20	0.18	0.30
Sodium	7440-23-5	E440/WT	50	mg/kg		323	296	259	257	392
Strontium	7440-24-6	E440/WT	0.50	mg/kg		24.0	18.9	15.9	17.2	27.9
Sulfur	7704-34-9	E440/WT	1000	mg/kg		<1100 DLIS	<1000	1200	1300	<1000
Thallium	7440-28-0	E440/WT	0.050	mg/kg		0.479	0.453	0.397	0.396	0.501
Tin	7440-31-5	E440/WT	2.0	mg/kg		2.8	<2.0	11.4	<2.0	2.5
Titanium	7440-32-6	E440/WT	1.0	mg/kg		1400	1310	1110	1090	1420
Tungsten	7440-33-7	E440/WT	0.50	mg/kg		1.27	1.03	1.08	1.10	0.92
Uranium	7440-61-1	E440/WT	0.050	mg/kg		8.33	7.65	10.1	9.67	8.76
Vanadium	7440-62-2	E440/WT	0.20	mg/kg		54.3	51.7	45.2	44.0	61.1
Zinc	7440-66-6	E440/WT	2.0	mg/kg		137	131	158	112	155
Zirconium	7440-67-7	E440/WT	1.0	mg/kg		15.4	12.1	9.1	9.6	12.9
Aggregate Organics										
Carbon, total organic [TOC]	----	E357/WT	0.10	%		1.71	1.58	3.16	4.10	1.00
Organic matter	----	E357/WT	0.20	%		2.95	2.72	5.45	7.07	1.72

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: Sediment
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SL-DEEP-1A_2025-07-07 ----	SL-SHAL-1E_2025-07-08 ----	SL-DEEP-1D_2025-07-08 ----	SL-SHAL-1C_2025-07-08 ----	SL-DEEP-1E_2025-07-09 ----
					Client sampling date / time	07-Jul-2025 14:38	08-Jul-2025 10:30	08-Jul-2025 13:10	08-Jul-2025 15:15	09-Jul-2025 08:35
						WT2525447-011	WT2525447-012	WT2525447-013	WT2525447-014	WT2525447-015
						Result	Result	Result	Result	Result
Sample Preparation										
Dummy analyte	----	EP357/WT	1	-		Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
Metals										
Aluminum	7429-90-5	E440/WT	50	mg/kg		39500	34900	38900	33600	38900
Antimony	7440-36-0	E440/WT	0.10	mg/kg		0.18	0.23	0.22	0.31	0.35
Arsenic	7440-38-2	E440/WT	0.10	mg/kg		6.34	6.40	6.26	6.03	6.95
Barium	7440-39-3	E440/WT	0.50	mg/kg		217	190	222	178	221
Beryllium	7440-41-7	E440/WT	0.10	mg/kg		1.74	1.51	1.71	1.37	1.71
Bismuth	7440-69-9	E440/WT	0.20	mg/kg		1.04	0.88	1.09	0.77	1.06
Boron	7440-42-8	E440/WT	5.0	mg/kg		390	356	262	363	414
Cadmium	7440-43-9	E440/WT	0.020	mg/kg		0.914	0.819	1.01	0.628	0.966
Calcium	7440-70-2	E440/WT	50	mg/kg		7120	7050	6280	7060	7450
Chromium	7440-47-3	E440/WT	0.50	mg/kg		92.1	84.7	89.8	93.1	98.9
Cobalt	7440-48-4	E440/WT	0.10	mg/kg		29.2	25.9	29.8	23.5	29.1
Copper	7440-50-8	E440/WT	0.50	mg/kg		68.0	57.5	67.6	56.6	75.9
Iron	7439-89-6	E440/WT	50	mg/kg		103000	117000	106000	125000	118000
Lead	7439-92-1	E440/WT	0.50	mg/kg		28.7	25.1	29.6	22.2	29.6
Lithium	7439-93-2	E440/WT	2.0	mg/kg		56.3	44.5	53.4	41.5	55.6
Magnesium	7439-95-4	E440/WT	20	mg/kg		30400	27400	30100	25300	30200
Manganese	7439-96-5	E440/WT	1.0	mg/kg		2940	2450	3050	1930	2750
Mercury	7439-97-6	E510/WT	0.0050	mg/kg		0.0228	0.0198	0.0259	0.0168	0.0217
Molybdenum	7439-98-7	E440/WT	0.10	mg/kg		8.14	7.63	11.0	11.1	10.7

Analytical Results

Sub-Matrix: Sediment
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SL-DEEP-1A_2025-07-07 ----	SL-SHAL-1E_2025-07-08 ----	SL-DEEP-1D_2025-07-08 ----	SL-SHAL-1C_2025-07-08 ----	SL-DEEP-1E_2025-07-09 ----
					Client sampling date / time	07-Jul-2025 14:38	08-Jul-2025 10:30	08-Jul-2025 13:10	08-Jul-2025 15:15	09-Jul-2025 08:35
						WT2525447-011	WT2525447-012	WT2525447-013	WT2525447-014	WT2525447-015
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E440/WT	0.50	mg/kg		89.4	79.7	89.3	72.6	89.5
Phosphorus	7723-14-0	E440/WT	50	mg/kg		701	604	696	574	694
Potassium	7440-09-7	E440/WT	100	mg/kg		8830	7890	9110	7500	9050
Selenium	7782-49-2	E440/WT	0.20	mg/kg		0.60	0.60	0.57	0.51	0.69
Silver	7440-22-4	E440/WT	0.10	mg/kg		0.31	0.25	0.30	0.23	0.31
Sodium	7440-23-5	E440/WT	50	mg/kg		370	314	348	292	360
Strontium	7440-24-6	E440/WT	0.50	mg/kg		23.3	20.8	19.5	20.8	23.8
Sulfur	7704-34-9	E440/WT	1000	mg/kg		<1000	<1500 DLIS	<1000	<1000	<1000
Thallium	7440-28-0	E440/WT	0.050	mg/kg		0.499	0.464	0.525	0.428	0.507
Tin	7440-31-5	E440/WT	2.0	mg/kg		2.6	<2.9 DLIS	2.1	8.7	2.9
Titanium	7440-32-6	E440/WT	1.0	mg/kg		1410	1440	1360	1320	1430
Tungsten	7440-33-7	E440/WT	0.50	mg/kg		0.93	1.33	0.75	1.29	1.04
Uranium	7440-61-1	E440/WT	0.050	mg/kg		9.12	7.69	8.77	8.45	9.52
Vanadium	7440-62-2	E440/WT	0.20	mg/kg		62.1	55.6	61.9	51.5	61.3
Zinc	7440-66-6	E440/WT	2.0	mg/kg		150	134	149	280	211
Zirconium	7440-67-7	E440/WT	1.0	mg/kg		12.1	12.9	13.6	12.3	14.8
Aggregate Organics										
Carbon, total organic [TOC]	----	E357/WT	0.10	%		1.36	1.31	1.27	1.14	1.30
Organic matter	----	E357/WT	0.20	%		2.34	2.26	2.19	1.97	2.24

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: Sediment
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Filter Blank ----	----	----	----	----
					Client sampling date / time	09-Jul-2025 00:00	----	----	----	----
					WT2525447-016	----	----	----	----	----
					Result	----	----	----	----	----
Metals										
Aluminum	7429-90-5	E440/WT	50	mg/kg	26300	----	----	----	----	
Antimony	7440-36-0	E440/WT	0.10	mg/kg	0.12	----	----	----	----	
Arsenic	7440-38-2	E440/WT	0.10	mg/kg	7.71	----	----	----	----	
Barium	7440-39-3	E440/WT	0.50	mg/kg	76.8	----	----	----	----	
Beryllium	7440-41-7	E440/WT	0.10	mg/kg	0.37	----	----	----	----	
Bismuth	7440-69-9	E440/WT	0.20	mg/kg	<0.20	----	----	----	----	
Boron	7440-42-8	E440/WT	5.0	mg/kg	5970	----	----	----	----	
Cadmium	7440-43-9	E440/WT	0.020	mg/kg	0.042	----	----	----	----	
Calcium	7440-70-2	E440/WT	50	mg/kg	48100	----	----	----	----	
Chromium	7440-47-3	E440/WT	0.50	mg/kg	8.16	----	----	----	----	
Cobalt	7440-48-4	E440/WT	0.10	mg/kg	0.68	----	----	----	----	
Copper	7440-50-8	E440/WT	0.50	mg/kg	3.05	----	----	----	----	
Iron	7439-89-6	E440/WT	50	mg/kg	946	----	----	----	----	
Lead	7439-92-1	E440/WT	0.50	mg/kg	8.87	----	----	----	----	
Lithium	7439-93-2	E440/WT	2.0	mg/kg	52.8	----	----	----	----	
Magnesium	7439-95-4	E440/WT	20	mg/kg	8020	----	----	----	----	
Manganese	7439-96-5	E440/WT	1.0	mg/kg	25.3	----	----	----	----	
Mercury	7439-97-6	E510/WT	0.0050	mg/kg	<0.0050	----	----	----	----	
Molybdenum	7439-98-7	E440/WT	0.10	mg/kg	4.34	----	----	----	----	
Nickel	7440-02-0	E440/WT	0.50	mg/kg	3.40	----	----	----	----	
Phosphorus	7723-14-0	E440/WT	50	mg/kg	70	----	----	----	----	

Analytical Results

Sub-Matrix: Sediment
(Matrix: Soil/Solid)

					Client sample ID	Filter Blank ----	----	----	----	----
					Client sampling date / time	09-Jul-2025 00:00	----	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit		WT2525447-016	----	----	----	----
						Result	----	----	----	----
Metals										
Potassium	7440-09-7	E440/WT	100	mg/kg		590	----	----	----	----
Selenium	7782-49-2	E440/WT	0.20	mg/kg		<0.20	----	----	----	----
Silver	7440-22-4	E440/WT	0.10	mg/kg		<0.10	----	----	----	----
Sodium	7440-23-5	E440/WT	50	mg/kg		618	----	----	----	----
Strontium	7440-24-6	E440/WT	0.50	mg/kg		187	----	----	----	----
Sulfur	7704-34-9	E440/WT	1000	mg/kg		<1000	----	----	----	----
Thallium	7440-28-0	E440/WT	0.050	mg/kg		<0.050	----	----	----	----
Tin	7440-31-5	E440/WT	2.0	mg/kg		<2.0	----	----	----	----
Titanium	7440-32-6	E440/WT	1.0	mg/kg		296	----	----	----	----
Tungsten	7440-33-7	E440/WT	0.50	mg/kg		<0.50	----	----	----	----
Uranium	7440-61-1	E440/WT	0.050	mg/kg		1.14	----	----	----	----
Vanadium	7440-62-2	E440/WT	0.20	mg/kg		9.67	----	----	----	----
Zinc	7440-66-6	E440/WT	2.0	mg/kg		10.9	----	----	----	----
Zirconium	7440-67-7	E440/WT	1.0	mg/kg		14.7	----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

Quality Control Interpretive Report

Work Order	:	**WT2525447**			
Client	:	Baffinland Iron Mines Corporation	Laboratory	:	ALS Environmental - Waterloo
Contact	:	Environmental Lab Results	Account Manager	:	Rick Hawthorne
Address	:	360 Oakville Place Dr Suite 300 Oakville ON Canada L6H 6K8	Address	:	60 Northland Road, Unit 1 Waterloo ON Canada N2V 2B8
Telephone	:	----	Telephone	:	+1 519 886 6910
Project	:	SEDIMENT TRAPS	Date Samples Received	:	15-Aug-2025 09:00
PO	:	4500156571	Issue Date	:	31-Dec-2025 12:11
C-O-C number	:	----			
Sampler	:	AG/JM/ET			
Site	:	----			
Quote number	:	2024-2025 Scope of Work			
No. of samples received	:	16			
No. of samples analysed	:	16			

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Laboratory Control Sample Duplicate (LCSD) outliers occur
- No Matrix Spike outliers occur.
- No Matrix Spike Duplicate (MSD) outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and/or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: Soil/Solid

Evaluation: × = Holding time exceedance; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client sample ID	ALS Sample ID	QC Lot	Method	Sampling Date	Extraction / Preparation				Analysis			
					Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
						Rec	Actual			Rec	Actual	
Aggregate Organics : Total Organic Carbon by Wet Oxidation and Titration												
Glass soil jar/Teflon lined cap												
SL-SHAL-2C_2025-07-05	001	2219008	E357	05-Jul-2025	17-Dec-2025	28 days	165 days	× EHTR	17-Dec-2025	28 days	165 days	× EHTR
SL-SHAL-2E_2025-07-05	002	2219008	E357	05-Jul-2025	17-Dec-2025	28 days	165 days	× EHTR	17-Dec-2025	28 days	165 days	× EHTR
SL-SHAL-2A_2025-07-05	003	2219008	E357	05-Jul-2025	17-Dec-2025	28 days	165 days	× EHTR	17-Dec-2025	28 days	165 days	× EHTR
SL-DEEP-1C_2025-07-05	004	2219008	E357	05-Jul-2025	17-Dec-2025	28 days	165 days	× EHTR	17-Dec-2025	28 days	165 days	× EHTR
SL-SHAL-1D_2025-07-05	005	2219008	E357	05-Jul-2025	17-Dec-2025	28 days	165 days	× EHTR	17-Dec-2025	28 days	165 days	× EHTR
SL-SHAL-1B_2025-07-05	006	2219008	E357	05-Jul-2025	17-Dec-2025	28 days	165 days	× EHTR	17-Dec-2025	28 days	165 days	× EHTR
SL-SHAL-1A_2025-07-06	007	2219008	E357	06-Jul-2025	17-Dec-2025	28 days	164 days	× EHTR	17-Dec-2025	28 days	164 days	× EHTR
SL-SHAL-2D_2025-07-07	008	2219008	E357	07-Jul-2025	17-Dec-2025	28 days	163 days	× EHTR	17-Dec-2025	28 days	163 days	× EHTR
SL-SHAL-2B_2025-07-07	009	2219008	E357	07-Jul-2025	17-Dec-2025	28 days	163 days	× EHTR	17-Dec-2025	28 days	163 days	× EHTR
SL-DEEP-1B_2025-07-07	010	2219008	E357	07-Jul-2025	17-Dec-2025	28 days	163 days	× EHTR	17-Dec-2025	28 days	163 days	× EHTR
SL-DEEP-1A_2025-07-07	011	2219008	E357	07-Jul-2025	17-Dec-2025	28 days	163 days	× EHTR	17-Dec-2025	28 days	163 days	× EHTR
SL-SHAL-1E_2025-07-08	012	2219008	E357	08-Jul-2025	17-Dec-2025	28 days	162 days	× EHTR	17-Dec-2025	28 days	162 days	× EHTR
SL-DEEP-1D_2025-07-08	013	2219008	E357	08-Jul-2025	17-Dec-2025	28 days	162 days	× EHTR	17-Dec-2025	28 days	162 days	× EHTR

Matrix: Soil/Solid

Evaluation: × = Holding time exceedance; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client sample ID	ALS Sample ID	QC Lot	Method	Sampling Date	Extraction / Preparation				Analysis			
					Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
						Rec	Actual			Rec	Actual	
Aggregate Organics : Total Organic Carbon by Wet Oxidation and Titration												
Glass soil jar/Teflon lined cap												
SL-SHAL-1C_2025-07-08	014	2219008	E357	08-Jul-2025	17-Dec-2025	28 days	162 days	× EHTR	17-Dec-2025	28 days	162 days	× EHTR
SL-DEEP-1E_2025-07-09	015	2219008	E357	09-Jul-2025	17-Dec-2025	28 days	161 days	× EHTR	17-Dec-2025	28 days	161 days	× EHTR
Metals : Mercury in Soil/Solid by CVAAS												
Glass soil jar/Teflon lined cap												
SL-SHAL-2C_2025-07-05	001	2219009	E510	05-Jul-2025	17-Dec-2025	28 days	165 days	× EHTR	18-Dec-2025	28 days	0 days	✓
SL-SHAL-2E_2025-07-05	002	2219009	E510	05-Jul-2025	17-Dec-2025	28 days	165 days	× EHTR	18-Dec-2025	28 days	0 days	✓
SL-SHAL-2A_2025-07-05	003	2219009	E510	05-Jul-2025	17-Dec-2025	28 days	165 days	× EHTR	18-Dec-2025	28 days	0 days	✓
SL-DEEP-1C_2025-07-05	004	2219009	E510	05-Jul-2025	17-Dec-2025	28 days	165 days	× EHTR	18-Dec-2025	28 days	0 days	✓
SL-SHAL-1D_2025-07-05	005	2219009	E510	05-Jul-2025	17-Dec-2025	28 days	165 days	× EHTR	18-Dec-2025	28 days	0 days	✓
SL-SHAL-1B_2025-07-05	006	2219009	E510	05-Jul-2025	17-Dec-2025	28 days	165 days	× EHTR	18-Dec-2025	28 days	0 days	✓
SL-SHAL-1A_2025-07-06	007	2219009	E510	06-Jul-2025	17-Dec-2025	28 days	164 days	× EHTR	18-Dec-2025	28 days	0 days	✓
SL-SHAL-2D_2025-07-07	008	2219009	E510	07-Jul-2025	17-Dec-2025	28 days	163 days	× EHTR	18-Dec-2025	28 days	0 days	✓
SL-SHAL-2B_2025-07-07	009	2219009	E510	07-Jul-2025	17-Dec-2025	28 days	163 days	× EHTR	18-Dec-2025	28 days	0 days	✓
SL-DEEP-1B_2025-07-07	010	2219009	E510	07-Jul-2025	17-Dec-2025	28 days	163 days	× EHTR	18-Dec-2025	28 days	0 days	✓
SL-DEEP-1A_2025-07-07	011	2219009	E510	07-Jul-2025	17-Dec-2025	28 days	163 days	× EHTR	18-Dec-2025	28 days	0 days	✓
SL-SHAL-1E_2025-07-08	012	2219009	E510	08-Jul-2025	17-Dec-2025	28 days	162 days	× EHTR	18-Dec-2025	28 days	0 days	✓
SL-DEEP-1D_2025-07-08	013	2219009	E510	08-Jul-2025	17-Dec-2025	28 days	162 days	× EHTR	18-Dec-2025	28 days	0 days	✓
SL-SHAL-1C_2025-07-08	014	2219009	E510	08-Jul-2025	17-Dec-2025	28 days	162 days	× EHTR	18-Dec-2025	28 days	0 days	✓

Matrix: Soil/Solid

Evaluation: × = Holding time exceedance; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client sample ID	ALS Sample ID	QC Lot	Method	Sampling Date	Extraction / Preparation				Analysis			
					Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
						Rec	Actual			Rec	Actual	
Metals : Mercury in Soil/Solid by CVAAS												
Glass soil jar/Teflon lined cap												
SL-DEEP-1E_2025-07-09	015	2219009	E510	09-Jul-2025	17-Dec-2025	28 days	161 days	× EHTR	18-Dec-2025	28 days	0 days	✓
Filter Blank	016	2402645	E510	09-Jul-2025	17-Dec-2025	28 days	161 days	× EHTR	31-Dec-2025	28 days	14 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS												
Glass soil jar/Teflon lined cap												
SL-SHAL-2C_2025-07-05	001	2219010	E440	05-Jul-2025	17-Dec-2025	180 days	165 days	✓	18-Dec-2025	180 days	165 days	✓
SL-SHAL-2E_2025-07-05	002	2219010	E440	05-Jul-2025	17-Dec-2025	180 days	165 days	✓	18-Dec-2025	180 days	165 days	✓
SL-SHAL-2A_2025-07-05	003	2219010	E440	05-Jul-2025	17-Dec-2025	180 days	165 days	✓	18-Dec-2025	180 days	165 days	✓
SL-DEEP-1C_2025-07-05	004	2219010	E440	05-Jul-2025	17-Dec-2025	180 days	165 days	✓	18-Dec-2025	180 days	165 days	✓
SL-SHAL-1D_2025-07-05	005	2219010	E440	05-Jul-2025	17-Dec-2025	180 days	165 days	✓	18-Dec-2025	180 days	165 days	✓
SL-SHAL-1B_2025-07-05	006	2219010	E440	05-Jul-2025	17-Dec-2025	180 days	165 days	✓	18-Dec-2025	180 days	165 days	✓
SL-SHAL-1A_2025-07-06	007	2219010	E440	06-Jul-2025	17-Dec-2025	180 days	164 days	✓	18-Dec-2025	180 days	164 days	✓
SL-SHAL-2D_2025-07-07	008	2219010	E440	07-Jul-2025	17-Dec-2025	180 days	163 days	✓	18-Dec-2025	180 days	163 days	✓
SL-SHAL-2B_2025-07-07	009	2219010	E440	07-Jul-2025	17-Dec-2025	180 days	163 days	✓	18-Dec-2025	180 days	163 days	✓
SL-DEEP-1B_2025-07-07	010	2219010	E440	07-Jul-2025	17-Dec-2025	180 days	163 days	✓	18-Dec-2025	180 days	163 days	✓
SL-DEEP-1A_2025-07-07	011	2219010	E440	07-Jul-2025	17-Dec-2025	180 days	163 days	✓	18-Dec-2025	180 days	163 days	✓
SL-SHAL-1E_2025-07-08	012	2219010	E440	08-Jul-2025	17-Dec-2025	180 days	162 days	✓	18-Dec-2025	180 days	162 days	✓
SL-DEEP-1D_2025-07-08	013	2219010	E440	08-Jul-2025	17-Dec-2025	180 days	162 days	✓	18-Dec-2025	180 days	162 days	✓
SL-SHAL-1C_2025-07-08	014	2219010	E440	08-Jul-2025	17-Dec-2025	180 days	162 days	✓	18-Dec-2025	180 days	162 days	✓

Matrix: Soil/Solid

Evaluation: × = Holding time exceedance; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client sample ID	ALS Sample ID	QC Lot	Method	Sampling Date	Extraction / Preparation				Analysis			
					Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
						Rec	Actual			Rec	Actual	
Metals : Metals in Soil/Solid by CRC ICPMS												
Glass soil jar/Teflon lined cap												
SL-DEEP-1E_2025-07-09	015	2219010	E440	09-Jul-2025	17-Dec-2025	180 days	161 days	✓	18-Dec-2025	180 days	162 days	✓
Filter Blank	016	2402644	E440	09-Jul-2025	17-Dec-2025	180 days	161 days	✓	30-Dec-2025	180 days	174 days	✓

Legend & Qualifier Definitions

EHTR: Exceeded ALS recommended hold time prior to sample receipt.

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: Soil/Solid

Evaluation: × = QC frequency outside specification; ✓ = QC frequency within specification

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	Method	QC Lot #	QC	Regular	Actual	Expected	Evaluation
Laboratory Duplicates (DUP)							
Total Organic Carbon by Wet Oxidation and Titration	E357	2219008	1	15	6.7	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	2219010	1	17	5.9	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	2219009	1	17	5.9	5.0	✓
Laboratory Control Samples (LCS)							
Total Organic Carbon by Wet Oxidation and Titration	E357	2219008	2	15	13.3	10.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	2219010	2	17	11.8	10.0	✓
Mercury in Soil/Solid by CVAAS	E510	2219009	2	17	11.8	10.0	✓
Method Blanks (MB)							
Total Organic Carbon by Wet Oxidation and Titration	E357	2219008	1	15	6.7	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	2219010	1	17	5.9	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	2219009	1	17	5.9	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Mercury in Soil/Solid by CVAAS	E510 ALS Environmental - Waterloo	Soil/Solid	EPA 200.2/1631 Appendix (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl, followed by CVAAS analysis.
Metals in Soil/Solid by CRC ICPMS	E440 ALS Environmental - Waterloo	Soil/Solid	EPA 6020B (mod)	This method is intended to liberate metals that may be environmentally available. Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl. Dependent on sample matrix, some metals may be only partially recovered, including Al, Ba, Be, Cr, Sr, Ti, Tl, V, W, and Zr. Silicate minerals are not solubilized. Volatile forms of sulfur (including sulfide) may not be captured, as they may be lost during sampling, storage, or digestion. This method does not adequately recover elemental sulfur, and is unsuitable for assessment of elemental sulfur standards or guidelines. Analysis is by Collision/Reaction Cell ICPMS.
Total Organic Carbon by Wet Oxidation and Titration	E357 ALS Environmental - Waterloo	Soil/Solid	CSSS (2008) 21.3.2 (mod)	Total Organic Carbon is determined by wet oxidation digestion using potassium dichromate and sulfuric acid (Walkley-Black). Oxidized organic carbon is determined by back-titration with ferrous ammonium sulfate. Organic matter is estimated from the organic carbon result using the Van Bemmelon factor.
Preparation Methods	**Method / Lab**	**Matrix**	**Method Reference**	**Method Descriptions**
Digestion for Metals and Mercury	EP440 ALS Environmental - Waterloo	Soil/Solid	EPA 200.2 (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl. This method is intended to liberate metals that may be environmentally available.
Sample Preparation - TOC by Wet Oxidation and Titration	EP357 ALS Environmental - Waterloo	Soil/Solid	Soil Sampling and Methods of Analysis, Carter 2008	A sample is set in a tray and is dried at less than 60°C until dry (typically overnight). The dried sample is then mechanically disaggregated and passed through a 2 mm sieve. The portion of sample passing 2 mm sieve is used for analysis.

QUALITY CONTROL REPORT

Work Order	: **WT2525447**	Page	: 1 of 10
Client	: Baffinland Iron Mines Corporation	Laboratory	: ALS Environmental - Waterloo
Contact	: Environmental Lab Results	Account Manager	: Rick Hawthorne
Address	: 360 Oakville Place Dr Suite 300 Oakville ON Canada L6H 6K8	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: ----	Telephone	: +1 519 886 6910
Project	: SEDIMENT TRAPS	Date Samples Received	: 15-Aug-2025 09:00
PO	: 4500156571	Date Analysis Commenced	: 17-Dec-2025
C-O-C number	: ----	Issue Date	: 31-Dec-2025 12:10
Sampler	: AG/JM/ET		
Site	: ----		
Quote number	: 2024-2025 Scope of Work		
No. of samples received	: 16		
No. of samples analysed	: 16		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Reference Material (RM) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Greg Pokocky	Manager - Inorganics	Waterloo Inorganics, Waterloo, Ontario
Greg Pokocky	Manager - Inorganics	Waterloo Metals, Waterloo, Ontario
Travis Peel	Laboratory Analyst	Waterloo Centralized Prep, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Metals (QC Lot: 2219009)											
WT2525447-001	SL-SHAL-2C_2025-07-05	Mercury	7439-97-6	E510	0.0050	mg/kg	0.0150	0.0153	0.0003	Diff <2x LOR	----
Metals (QC Lot: 2219010)											
WT2525447-001	SL-SHAL-2C_2025-07-05	Aluminum	7429-90-5	E440	50	mg/kg	32700	31400	4.13%	40%	----
		Antimony	7440-36-0	E440	0.10	mg/kg	0.26	0.22	0.04	Diff <2x LOR	----
		Arsenic	7440-38-2	E440	0.10	mg/kg	6.57	6.45	1.80%	30%	----
		Barium	7440-39-3	E440	0.50	mg/kg	171	166	3.15%	40%	----
		Beryllium	7440-41-7	E440	0.10	mg/kg	1.44	1.41	2.40%	30%	----
		Bismuth	7440-69-9	E440	0.20	mg/kg	0.87	0.76	0.10	Diff <2x LOR	----
		Boron	7440-42-8	E440	5.0	mg/kg	140	129	8.49%	30%	----
		Cadmium	7440-43-9	E440	0.020	mg/kg	0.768	0.754	1.75%	30%	----
		Calcium	7440-70-2	E440	50	mg/kg	5030	4820	4.31%	30%	----
		Chromium	7440-47-3	E440	0.50	mg/kg	76.5	75.7	1.04%	30%	----
		Cobalt	7440-48-4	E440	0.10	mg/kg	25.8	25.5	0.948%	30%	----
		Copper	7440-50-8	E440	0.50	mg/kg	51.3	50.9	0.821%	30%	----
		Iron	7439-89-6	E440	50	mg/kg	152000	151000	0.898%	30%	----
		Lead	7439-92-1	E440	0.50	mg/kg	21.3	20.4	4.58%	40%	----
		Lithium	7439-93-2	E440	2.0	mg/kg	42.9	41.5	3.34%	30%	----
		Magnesium	7439-95-4	E440	20	mg/kg	24400	23800	2.55%	30%	----
		Manganese	7439-96-5	E440	1.0	mg/kg	1840	1870	2.00%	30%	----
		Molybdenum	7439-98-7	E440	0.10	mg/kg	8.15	8.08	0.874%	40%	----
		Nickel	7440-02-0	E440	0.50	mg/kg	77.6	76.4	1.53%	30%	----
		Phosphorus	7723-14-0	E440	50	mg/kg	642	639	0.466%	30%	----
		Potassium	7440-09-7	E440	100	mg/kg	7670	7080	7.97%	40%	----
		Selenium	7782-49-2	E440	0.20	mg/kg	0.57	0.56	0.009	Diff <2x LOR	----
		Silver	7440-22-4	E440	0.10	mg/kg	0.21	0.21	0.003	Diff <2x LOR	----
		Sodium	7440-23-5	E440	50	mg/kg	279	263	5.97%	40%	----
		Strontium	7440-24-6	E440	0.50	mg/kg	13.4	13.1	2.03%	40%	----
		Sulfur	7704-34-9	E440	1000	mg/kg	<1000	<1000	0	Diff <2x LOR	----
		Thallium	7440-28-0	E440	0.050	mg/kg	0.445	0.416	6.79%	30%	----
		Tin	7440-31-5	E440	2.0	mg/kg	2.2	2.1	0.05	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Metals (QC Lot: 2219010) - continued											
WT2525447-001	SL-SHAL-2C_2025-07-05	Titanium	7440-32-6	E440	1.0	mg/kg	1260	1230	2.36%	40%	----
		Tungsten	7440-33-7	E440	0.50	mg/kg	1.14	1.03	0.12	Diff <2x LOR	----
		Uranium	7440-61-1	E440	0.050	mg/kg	8.38	8.11	3.27%	30%	----
		Vanadium	7440-62-2	E440	0.20	mg/kg	50.8	50.5	0.526%	30%	----
		Zinc	7440-66-6	E440	2.0	mg/kg	145	145	0.131%	30%	----
		Zirconium	7440-67-7	E440	1.0	mg/kg	9.4	9.5	1.65%	30%	----
Aggregate Organics (QC Lot: 2219008)											
WT2525447-001	SL-SHAL-2C_2025-07-05	Carbon, total organic [TOC]	----	E357	0.10	%	1.71	1.65	3.64%	20%	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Metals (QCLot: 2219009)						
Mercury	7439-97-6	E510	0.005	mg/kg	<0.0050	----
Metals (QCLot: 2219010)						
Aluminum	7429-90-5	E440	50	mg/kg	<50	----
Antimony	7440-36-0	E440	0.1	mg/kg	<0.10	----
Arsenic	7440-38-2	E440	0.1	mg/kg	<0.10	----
Barium	7440-39-3	E440	0.5	mg/kg	<0.50	----
Beryllium	7440-41-7	E440	0.1	mg/kg	<0.10	----
Bismuth	7440-69-9	E440	0.2	mg/kg	<0.20	----
Boron	7440-42-8	E440	5	mg/kg	<5.0	----
Cadmium	7440-43-9	E440	0.02	mg/kg	<0.020	----
Calcium	7440-70-2	E440	50	mg/kg	<50	----
Chromium	7440-47-3	E440	0.5	mg/kg	<0.50	----
Cobalt	7440-48-4	E440	0.1	mg/kg	<0.10	----
Copper	7440-50-8	E440	0.5	mg/kg	<0.50	----
Iron	7439-89-6	E440	50	mg/kg	<50	----
Lead	7439-92-1	E440	0.5	mg/kg	<0.50	----
Lithium	7439-93-2	E440	2	mg/kg	<2.0	----
Magnesium	7439-95-4	E440	20	mg/kg	<20	----
Manganese	7439-96-5	E440	1	mg/kg	<1.0	----
Molybdenum	7439-98-7	E440	0.1	mg/kg	<0.10	----
Nickel	7440-02-0	E440	0.5	mg/kg	<0.50	----
Phosphorus	7723-14-0	E440	50	mg/kg	<50	----
Potassium	7440-09-7	E440	100	mg/kg	<100	----
Selenium	7782-49-2	E440	0.2	mg/kg	<0.20	----
Silver	7440-22-4	E440	0.1	mg/kg	<0.10	----
Sodium	7440-23-5	E440	50	mg/kg	<50	----
Strontium	7440-24-6	E440	0.5	mg/kg	<0.50	----
Sulfur	7704-34-9	E440	1000	mg/kg	<1000	----
Thallium	7440-28-0	E440	0.05	mg/kg	<0.050	----
Tin	7440-31-5	E440	2	mg/kg	<2.0	----
Titanium	7440-32-6	E440	1	mg/kg	<1.0	----
Uranium	7440-61-1	E440	0.05	mg/kg	<0.050	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Metals (QCLot: 2219010) - continued						
Vanadium	7440-62-2	E440	0.2	mg/kg	<0.20	----
Zinc	7440-66-6	E440	2	mg/kg	<2.0	----
Zirconium	7440-67-7	E440	1	mg/kg	<1.0	----
Aggregate Organics (QCLot: 2219008)						
Carbon, total organic [TOC]	----	E357	0.1	%	<0.10	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Metals (QCLot: 2219009)									
Mercury	7439-97-6	E510	0.005	mg/kg	0.1 mg/kg	107	80.0	120	----
Metals (QCLot: 2219010)									
Aluminum	7429-90-5	E440	50	mg/kg	200 mg/kg	96.6	80.0	120	----
Antimony	7440-36-0	E440	0.1	mg/kg	100 mg/kg	105	80.0	120	----
Arsenic	7440-38-2	E440	0.1	mg/kg	100 mg/kg	103	80.0	120	----
Barium	7440-39-3	E440	0.5	mg/kg	25 mg/kg	97.7	80.0	120	----
Beryllium	7440-41-7	E440	0.1	mg/kg	10 mg/kg	97.8	80.0	120	----
Bismuth	7440-69-9	E440	0.2	mg/kg	100 mg/kg	96.8	80.0	120	----
Boron	7440-42-8	E440	5	mg/kg	100 mg/kg	98.7	80.0	120	----
Cadmium	7440-43-9	E440	0.02	mg/kg	10 mg/kg	96.8	80.0	120	----
Calcium	7440-70-2	E440	50	mg/kg	5000 mg/kg	97.9	80.0	120	----
Chromium	7440-47-3	E440	0.5	mg/kg	25 mg/kg	96.8	80.0	120	----
Cobalt	7440-48-4	E440	0.1	mg/kg	25 mg/kg	97.3	80.0	120	----
Copper	7440-50-8	E440	0.5	mg/kg	25 mg/kg	97.1	80.0	120	----
Iron	7439-89-6	E440	50	mg/kg	100 mg/kg	97.2	80.0	120	----
Lead	7439-92-1	E440	0.5	mg/kg	50 mg/kg	99.1	80.0	120	----
Lithium	7439-93-2	E440	2	mg/kg	25 mg/kg	91.7	80.0	120	----
Magnesium	7439-95-4	E440	20	mg/kg	5000 mg/kg	103	80.0	120	----
Manganese	7439-96-5	E440	1	mg/kg	25 mg/kg	97.0	80.0	120	----
Molybdenum	7439-98-7	E440	0.1	mg/kg	25 mg/kg	104	80.0	120	----
Nickel	7440-02-0	E440	0.5	mg/kg	50 mg/kg	96.2	80.0	120	----
Phosphorus	7723-14-0	E440	50	mg/kg	1000 mg/kg	101	80.0	120	----
Potassium	7440-09-7	E440	100	mg/kg	5000 mg/kg	99.0	80.0	120	----
Selenium	7782-49-2	E440	0.2	mg/kg	100 mg/kg	97.7	80.0	120	----
Silver	7440-22-4	E440	0.1	mg/kg	10 mg/kg	91.9	80.0	120	----
Sodium	7440-23-5	E440	50	mg/kg	5000 mg/kg	97.2	80.0	120	----
Strontium	7440-24-6	E440	0.5	mg/kg	25 mg/kg	96.8	80.0	120	----
Sulfur	7704-34-9	E440	1000	mg/kg	5000 mg/kg	92.5	80.0	120	----
Thallium	7440-28-0	E440	0.05	mg/kg	100 mg/kg	96.9	80.0	120	----
Tin	7440-31-5	E440	2	mg/kg	50 mg/kg	99.3	80.0	120	----
Titanium	7440-32-6	E440	1	mg/kg	25 mg/kg	96.9	80.0	120	----
Uranium	7440-61-1	E440	0.05	mg/kg	0.5 mg/kg	98.3	80.0	120	----
Vanadium	7440-62-2	E440	0.2	mg/kg	50 mg/kg	97.9	80.0	120	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Metals (QCLot: 2219010) - continued									
Zinc	7440-66-6	E440	2	mg/kg	50 mg/kg	94.7	80.0	120	----
Zirconium	7440-67-7	E440	1	mg/kg	10 mg/kg	97.1	80.0	120	----
Aggregate Organics (QCLot: 2219008)									
Carbon, total organic [TOC]	----	E357	0.1	%	42.1 %	112	80.0	120	----

Reference Material (RM) Report

A Reference Material (RM) is a homogenous material with known and well-established analyte concentrations. RMs are processed in an identical manner to test samples, and are used to monitor and control the accuracy and precision of a test method for a typical sample matrix. RM results are expressed as percent recovery of the target analyte concentration. RM targets may be certified target concentrations provided by the RM supplier, or may be ALS long-term mean values (for empirical test methods).

Sub-Matrix:

					Reference Material (RM) Report				
					RM Target	Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Concentration	RM	Low	High	Qualifier
Metals (QCLot: 2219009)									
QC-2219009-003	RM	Mercury	7439-97-6	E510	0.068 mg/kg	103	70.0	130	----
Metals (QCLot: 2219010)									
QC-2219010-003	RM	Aluminum	7429-90-5	E440	22500 mg/kg	105	70.0	130	----
QC-2219010-003	RM	Antimony	7440-36-0	E440	24.8 mg/kg	107	70.0	130	----
QC-2219010-003	RM	Arsenic	7440-38-2	E440	21.2 mg/kg	97.9	70.0	130	----
QC-2219010-003	RM	Barium	7440-39-3	E440	788 mg/kg	98.2	70.0	130	----
QC-2219010-003	RM	Beryllium	7440-41-7	E440	1.82 mg/kg	103	70.0	130	----
QC-2219010-003	RM	Bismuth	7440-69-9	E440	1.78 mg/kg	93.7	70.0	130	----
QC-2219010-003	RM	Cadmium	7440-43-9	E440	2.15 mg/kg	102	70.0	130	----
QC-2219010-003	RM	Calcium	7440-70-2	E440	4900 mg/kg	103	70.0	130	----
QC-2219010-003	RM	Chromium	7440-47-3	E440	56.9 mg/kg	100	70.0	130	----
QC-2219010-003	RM	Cobalt	7440-48-4	E440	32 mg/kg	99.7	70.0	130	----
QC-2219010-003	RM	Copper	7440-50-8	E440	969 mg/kg	106	70.0	130	----
QC-2219010-003	RM	Iron	7439-89-6	E440	32700 mg/kg	103	70.0	130	----
QC-2219010-003	RM	Lead	7439-92-1	E440	919 mg/kg	98.6	70.0	130	----
QC-2219010-003	RM	Lithium	7439-93-2	E440	47.3 mg/kg	100	70.0	130	----
QC-2219010-003	RM	Magnesium	7439-95-4	E440	7780 mg/kg	107	70.0	130	----
QC-2219010-003	RM	Manganese	7439-96-5	E440	8640 mg/kg	102	70.0	130	----
QC-2219010-003	RM	Molybdenum	7439-98-7	E440	25.1 mg/kg	103	70.0	130	----
QC-2219010-003	RM	Nickel	7440-02-0	E440	1000 mg/kg	104	70.0	130	----
QC-2219010-003	RM	Phosphorus	7723-14-0	E440	660 mg/kg	98.8	70.0	130	----
QC-2219010-003	RM	Potassium	7440-09-7	E440	10800 mg/kg	104	70.0	130	----
QC-2219010-003	RM	Selenium	7782-49-2	E440	1.04 mg/kg	108	60.0	140	----
QC-2219010-003	RM	Silver	7440-22-4	E440	8.98 mg/kg	100	70.0	130	----
QC-2219010-003	RM	Sodium	7440-23-5	E440	1770 mg/kg	109	70.0	130	----
QC-2219010-003	RM	Strontium	7440-24-6	E440	41 mg/kg	97.7	70.0	130	----
QC-2219010-003	RM	Sulfur	7704-34-9	E440	3940 mg/kg	107	50.0	150	----
QC-2219010-003	RM	Thallium	7440-28-0	E440	0.907 mg/kg	99.8	70.0	130	----
QC-2219010-003	RM	Tin	7440-31-5	E440	3.79 mg/kg	104	40.0	160	----
QC-2219010-003	RM	Titanium	7440-32-6	E440	2790 mg/kg	103	70.0	130	----
QC-2219010-003	RM	Tungsten	7440-33-7	E440	6.99 mg/kg	121	70.0	130	----
QC-2219010-003	RM	Uranium	7440-61-1	E440	3.97 mg/kg	99.5	70.0	130	----
QC-2219010-003	RM	Vanadium	7440-62-2	E440	66.2 mg/kg	99.6	70.0	130	----

Sub-Matrix:

					Reference Material (RM) Report				
					RM Target	Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Concentration	RM	Low	High	Qualifier
Metals (QCLot: 2219010) - continued									
QC-2219010-003	RM	Zinc	7440-66-6	E440	828 mg/kg	99.4	70.0	130	----
QC-2219010-003	RM	Zirconium	7440-67-7	E440	6.91 mg/kg	121	70.0	130	----
Aggregate Organics (QCLot: 2219008)									
QC-2219008-003	RM	Carbon, total organic [TOC]	----	E357	0.386 %	94.7	70.0	130	----

Baffinland

Chain of Custody: 25 07 09 - Sediment Traps

Client Info	Project Info	Laboratory Info	
Baffinland Iron Mine Corporation 2275 Upper Middle Rd E, Suite 300 Oakville, ON, L6H 0C3 **Phone:** 647-253-0596 x6016/6039/4131 **Email:** environment.coordinators@baffinland.com; environment.superintendents@baffinland.com	**Job Reference (Project):** Sediment Traps **Task:** , AEMP_Sediment_240705 **Site:** MS	**Lab Name:** ALS Waterloo **Contact:** Rick Hawthorne **Phone:** 519.886.6910 **Email:** Rick.Hawthorne@ALSGlobal.com	**Address:** Unit 1 - 60 Northland Road Waterloo, ON,N2V 2B8
Email Invoice: ap@baffinland.com; environment.superintendents@baffinland.com **Email EDD:** bim.equissa@baffinland.com **Email COA:** environment.labresults@baffinland.com	**Turn around Time:** Routine (R) **Sampler 1:** AG **Sampler 2:** JM **Sampler 3:** ET	**ALS Quote #:** WT2020BIMC1000001 **ALS PO #:** 4500156571	**Lab Work Order #** (lab use only): l

Environmental Division
Waterloo
Work Order Reference
WT2525447

elephone : - 1 519 886 6910

Sample Details				Field Data		Ana												
Sample ID (sys_sample_code)	Location (sys_loc_code)	Sample Date and Time	Matrix			Total # of Containers	ALS_AEMP (SED)	E440 & E510	TOC									
SL-SHAL-2C_2025-07-05	SL-SHAL-2C	7/5/2025 10:10:00 AM	SE			1	X	X	X									
SL-SHAL-2E_2025-07-05	SL-SHAL-2E	7/5/2025 10:45:00 AM	SE			1	X	X	X									
SL-SHAL-2A_2025-07-05	SL-SHAL-2A	7/5/2025 11:20:00 AM	SE			1	X	X	X									
SL-DEEP-1C_2025-07-05	SL-DEEP-1C	7/5/2025 1:55:00 PM	SE			1	X	X	X									
SL-SHAL-1D_2025-07-05	SL-SHAL-1D	7/5/2025 3:20:00 PM	SE			1	X	X	X									
SL-SHAL-1B_2025-07-05	SL-SHAL-1B	7/5/2025 4:05:00 PM	SE			1	X	X	X									
SL-SHAL-1A_2025-07-06	SL-SHAL-1A	7/6/2025 2:20:00 PM	SE			1	X	X	X									
SL-SHAL-2D_2025-07-07	SL-SHAL-2D	7/7/2025 11:40:00 AM	SE			1	X	X	X									

Baffinland

Sample Details				Field Data		Analysis Requested												
Sample ID (sys_sample_code)	Location (sys_loc_code)	Sample Date and Time	Matrix			Total # of Containers	ALS_AEMP (SED)	E440 & E510	TOC									
SL-SHAL-2B_2025-07-07	SL-SHAL-2B	7/7/2025 12:35:00 PM	SE			1	X	X	X									
SL-DEEP-1B_2025-07-07	SL-DEEP-1B	7/7/2025 1:15:00 PM	SE			1	X	X	X									
SL-DEEP-1A_2025-07-07	SL-DEEP-1A	7/7/2025 2:38:00 PM	SE			1	X	X	X									
SL-SHAL-1E_2025-07-08	SL-SHAL-1E	7/8/2025 10:30:00 AM	SE			1	X	X	X									
SL-DEEP-1D_2025-07-08	SL-DEEP-1D	7/8/2025 1:10:00 PM	SE			1	X	X	X									
SL-SHAL-1C_2025-07-08	SL-SHAL-1C	7/8/2025 3:15:00 PM	SE			1	X	X	X									
SL-DEEP-1E_2025-07-09	SL-DEEP-1E	7/9/2025 8:35:00 AM	SE			1	X	X	X									

Relinquished by:	Bradley Rasmussen	**Date:**	7/9/2025 1:24:00 PM
Additional Comments	Sample mass is priority. Samples with insufficient mass should be combined. If there is insufficient sample mass from traps for individual trap chemistry those samples with inadequate mass should be combined with others from the same station to create 1 sample for chemistry. The other samples that have enough mass will be run as-is, after sample weight has been measured. Please make note if samples are combined in the data provided. Note from Rick Hawthorne: "We'll likely do the same as last year, with the caveat of the addition of TOC. The reporting of the metals and TOC would fall under special request again. On the report, we'll highlight the deviation denoting that the reportables were from the leftover sediment/filters from the Sediment Trap analysis method. I can communicate with BIM how we proceed once they arrive. If it is anything like last year we reported the metallics on a separate file entirely once the Traps were done as a special handling and reporting considerations."		
Initial Shipment Reception (lab use only)		**Final Shipment Reception** (lab use only)	

CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	:	**WT2536082**			
Client	:	**Baffinland Iron Mines Corporation**	Laboratory	:	ALS Environmental - Waterloo
Contact	:	Environmental Lab Results	Account Manager	:	Rick Hawthorne
Address	:	360 Oakville Place Dr Suite 300 Oakville Ontario Canada L6H 6K8	Address	:	60 Northland Road, Unit 1 Waterloo ON Canada N2V 2B8
Telephone	:	----	Telephone	:	+1 519 886 6910
Project	:	AEMP FALL SEDIMENT	Date Samples Received	:	20-Nov-2025 11:45
PO	:	4500156571	Date Analysis Commenced	:	23-Dec-2025
C-O-C number	:	25 09 26_AEMP FALL SEDIMENT	Issue Date	:	31-Dec-2025 12:18
Sampler	:	LG/JM/RR			
Site	:	----			
Quote number	:	2024-2025 Scope of Work			
No. of samples received	:	16			
No. of samples analysed	:	16			

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Guideline Comparison

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Greg Pokocky	Manager - Inorganics	Inorganics, Waterloo, Ontario
Greg Pokocky	Manager - Inorganics	Metals, Waterloo, Ontario
Travis Peel	Laboratory Analyst	Centralized Prep, Waterloo, Ontario

No Breaches Found

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key: LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
%	percent
mg/kg	milligrams per kilogram

>: greater than.
<: less than.

Red shading is applied where the result or the LOR is greater than the Guideline Upper Limit (or lower than the Guideline Lower Limit, if applicable).
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit.

Qualifiers

Qualifier	Description
DLIS	Detection Limit Adjusted due to insufficient sample.

Analytical Results Evaluation

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	SL-DEEP-IC_2025-09-25 ----	SL-DEEP-ID_2025-09-25 ----	SL-DEEP-IA_2025-09-25 ----	SL-DEEP-IE_2025-09-25 ----	SL-DEEP-IB_2025-09-25 ----	SL-SHAL-1D_2025-09-25 ----	SL-SHAL-1E_2025-09-25 ----
				Client sampling date / time	25-Sep-2025 10:30	25-Sep-2025 10:55	25-Sep-2025 11:00	25-Sep-2025 11:10	25-Sep-2025 11:15	25-Sep-2025 12:25	25-Sep-2025 12:25
				Sub-Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
					WT2536082-001	WT2536082-002	WT2536082-003	WT2536082-004	WT2536082-005	WT2536082-006	WT2536082-007
					Result	Result	Result	Result	Result	Result	Result
Sample Preparation											
Dummy analyte	----	EP357/WT	-		Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
Metals											
Aluminum	7429-90-5	E440/WT	mg/kg		28500	29800	29200	28500	27600	28800	30300
Antimony	7440-36-0	E440/WT	mg/kg		0.35	0.13	0.13	0.75	0.13	0.30	0.17
Arsenic	7440-38-2	E440/WT	mg/kg		6.20	5.31	5.17	5.05	4.89	5.45	5.44
Barium	7440-39-3	E440/WT	mg/kg		143	144	149	151	137	147	150
Beryllium	7440-41-7	E440/WT	mg/kg		1.24	1.25	1.21	1.29	1.17	1.17	1.26
Bismuth	7440-69-9	E440/WT	mg/kg		0.52	0.50	0.47	0.47	0.47	0.48	0.52
Boron	7440-42-8	E440/WT	mg/kg		298	253	289	275	261	221	357
Cadmium	7440-43-9	E440/WT	mg/kg		0.487	0.551	0.655	0.570	0.523	0.435	0.552
Calcium	7440-70-2	E440/WT	mg/kg		9120	8970	9450	9320	9320	7980	9300
Chromium	7440-47-3	E440/WT	mg/kg		126	91.2	90.6	91.8	103	90.7	86.4
Cobalt	7440-48-4	E440/WT	mg/kg		20.9	21.5	21.3	21.4	20.5	21.8	21.1
Copper	7440-50-8	E440/WT	mg/kg		67.9	104	47.1	47.8	45.3	49.7	47.7
Iron	7439-89-6	E440/WT	mg/kg		91600	80200	80800	75700	74100	123000	93100
Lead	7439-92-1	E440/WT	mg/kg		23.1	23.9	23.2	23.5	23.5	21.8	22.7
Lithium	7439-93-2	E440/WT	mg/kg		43.2	47.3	44.0	47.0	43.6	41.4	43.5
Magnesium	7439-95-4	E440/WT	mg/kg		21500	22900	22300	21700	21300	21800	22200

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	SL-DEEP-IC_2025-09-25 ----	SL-DEEP-ID_2025-09-25 ----	SL-DEEP-IA_2025-09-25 ----	SL-DEEP-IE_2025-09-25 ----	SL-DEEP-IB_2025-09-25 ----	SL-SHAL-1D_2025-09-25 ----	SL-SHAL-1E_2025-09-25 ----
				Client sampling date / time	25-Sep-2025 10:30	25-Sep-2025 10:55	25-Sep-2025 11:00	25-Sep-2025 11:10	25-Sep-2025 11:15	25-Sep-2025 12:25	25-Sep-2025 12:25
				Sub-Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
					WT2536082-001	WT2536082-002	WT2536082-003	WT2536082-004	WT2536082-005	WT2536082-006	WT2536082-007
					Result	Result	Result	Result	Result	Result	Result
Metals											
Manganese	7439-96-5	E440/WT	mg/kg		1260	1440	1770	1920	1490	1570	1490
Mercury	7439-97-6	E510/WT	mg/kg		0.0307	0.0240	0.0178	0.0187	0.0193	0.0164	0.0183
Molybdenum	7439-98-7	E440/WT	mg/kg		8.08	3.66	3.89	3.72	3.45	8.93	4.92
Nickel	7440-02-0	E440/WT	mg/kg		74.7	75.1	74.8	75.2	72.3	71.1	71.4
Phosphorus	7723-14-0	E440/WT	mg/kg		715	751	784	759	748	710	712
Potassium	7440-09-7	E440/WT	mg/kg		6780	7020	6990	7160	6950	6780	7120
Selenium	7782-49-2	E440/WT	mg/kg		0.45	0.52	0.51	0.50	0.44	0.64	0.60
Silver	7440-22-4	E440/WT	mg/kg		0.21	0.28	0.19	0.19	0.19	0.19	0.18
Sodium	7440-23-5	E440/WT	mg/kg		424	434	415	434	395	372	390
Strontium	7440-24-6	E440/WT	mg/kg		22.0	20.9	22.7	22.1	21.2	19.1	23.8
Sulfur	7704-34-9	E440/WT	mg/kg		<1000	<1000	<1000	<1000	<1000	<1000	<1100 DLIS
Thallium	7440-28-0	E440/WT	mg/kg		0.506	0.517	0.517	0.525	0.507	0.473	0.500
Tin	7440-31-5	E440/WT	mg/kg		3.3	3.1	2.7	<2.0	<2.0	3.1	<2.3 DLIS
Titanium	7440-32-6	E440/WT	mg/kg		1520	1620	1600	1600	1580	1490	1560
Tungsten	7440-33-7	E440/WT	mg/kg		0.63	0.62	0.63	0.65	0.64	0.83	0.87
Uranium	7440-61-1	E440/WT	mg/kg		7.91	6.72	6.80	7.16	7.00	10.2	7.38
Vanadium	7440-62-2	E440/WT	mg/kg		59.4	62.5	60.8	61.4	59.7	56.7	58.1
Zinc	7440-66-6	E440/WT	mg/kg		172	105	114	105	108	287	118
Zirconium	7440-67-7	E440/WT	mg/kg		23.2	20.0	21.3	22.1	21.3	18.2	19.5

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	SL-DEEP-IC_2025-09-25 ----	SL-DEEP-ID_2025-09-25 ----	SL-DEEP-IA_2025-09-25 ----	SL-DEEP-IE_2025-09-25 ----	SL-DEEP-IB_2025-09-25 ----	SL-SHAL-1D_2025-09-25 ----	SL-SHAL-1E_2025-09-25 ----
				Client sampling date / time	25-Sep-2025 10:30	25-Sep-2025 10:55	25-Sep-2025 11:00	25-Sep-2025 11:10	25-Sep-2025 11:15	25-Sep-2025 12:25	25-Sep-2025 12:25
				Sub-Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
					WT2536082-001	WT2536082-002	WT2536082-003	WT2536082-004	WT2536082-005	WT2536082-006	WT2536082-007
					Result	Result	Result	Result	Result	Result	Result
Aggregate Organics											
Carbon, total organic [TOC]	----	E357/WT	%		1.33	1.34	1.31	1.15	1.35	1.50	1.57
Organic matter	----	E357/WT	%		2.29	2.31	2.26	1.98	2.33	2.59	2.71

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	SL-SHAL-1A_2025-09-25 ----	SL-SHAL-1B_2025-09-25 ----	SL-SHAL-IC_2025-09-25 ----	SL-SHAL-2C_2025-09-25 ----	SL-SHAL-2B_2025-09-25 ----	SL-SHAL-2A_2025-09-25 ----	SL-SHAL-2E_2025-09-26 ----
				Client sampling date / time	25-Sep-2025 12:30	25-Sep-2025 12:45	25-Sep-2025 12:45	25-Sep-2025 13:20	25-Sep-2025 13:45	25-Sep-2025 14:45	26-Sep-2025 15:30
				Sub-Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
					WT2536082-008	WT2536082-009	WT2536082-010	WT2536082-011	WT2536082-012	WT2536082-013	WT2536082-014
					Result	Result	Result	Result	Result	Result	Result
Sample Preparation											
Dummy analyte	----	EP357/WT	-		Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
Metals											
Aluminum	7429-90-5	E440/WT	mg/kg		27300	29400	30500	22800	24200	23500	24400
Antimony	7440-36-0	E440/WT	mg/kg		0.15	0.14	0.30	0.23	0.15	0.14	0.14
Arsenic	7440-38-2	E440/WT	mg/kg		4.92	5.17	5.75	4.78	4.89	4.62	5.09
Barium	7440-39-3	E440/WT	mg/kg		146	148	149	117	124	118	116
Beryllium	7440-41-7	E440/WT	mg/kg		1.13	1.18	1.19	0.99	1.02	1.01	1.02
Bismuth	7440-69-9	E440/WT	mg/kg		0.49	0.51	0.49	0.43	0.46	0.46	0.44
Boron	7440-42-8	E440/WT	mg/kg		303	311	276	108	232	132	182

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	SL-SHAL-1A_2025-09-25 ----	SL-SHAL-1B_2025-09-25 ----	SL-SHAL-IC_2025-09-25 ----	SL-SHAL-2C_2025-09-25 ----	SL-SHAL-2B_2025-09-25 ----	SL-SHAL-2A_2025-09-25 ----	SL-SHAL-2E_2025-09-26 ----
				Client sampling date / time	25-Sep-2025 12:30	25-Sep-2025 12:45	25-Sep-2025 12:45	25-Sep-2025 13:20	25-Sep-2025 13:45	25-Sep-2025 14:45	26-Sep-2025 15:30
				Sub-Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
					WT2536082-008	WT2536082-009	WT2536082-010	WT2536082-011	WT2536082-012	WT2536082-013	WT2536082-014
					Result	Result	Result	Result	Result	Result	Result
Metals											
Cadmium	7440-43-9	E440/WT	mg/kg		0.613	0.604	0.529	0.611	0.675	0.650	0.435
Calcium	7440-70-2	E440/WT	mg/kg		7970	8670	9010	7820	8590	7350	8980
Chromium	7440-47-3	E440/WT	mg/kg		76.7	82.1	96.3	87.0	77.7	72.4	80.7
Cobalt	7440-48-4	E440/WT	mg/kg		19.4	20.5	21.0	18.6	19.0	18.3	19.4
Copper	7440-50-8	E440/WT	mg/kg		43.6	44.8	55.1	43.6	41.1	40.3	39.2
Iron	7439-89-6	E440/WT	mg/kg		86300	79400	92300	105000	88700	85600	101000
Lead	7439-92-1	E440/WT	mg/kg		21.1	21.9	21.5	18.4	18.8	18.1	19.0
Lithium	7439-93-2	E440/WT	mg/kg		38.6	42.9	41.4	33.2	36.0	33.7	34.5
Magnesium	7439-95-4	E440/WT	mg/kg		20300	21300	22300	18700	19100	17900	19900
Manganese	7439-96-5	E440/WT	mg/kg		1480	1520	1610	1430	1610	1460	1220
Mercury	7439-97-6	E510/WT	mg/kg		0.0184	0.0170	0.0173	0.0139	0.0175	0.0167	0.0130
Molybdenum	7439-98-7	E440/WT	mg/kg		4.96	4.18	6.16	6.23	4.04	4.38	4.06
Nickel	7440-02-0	E440/WT	mg/kg		66.1	70.2	71.6	66.5	68.1	65.5	68.7
Phosphorus	7723-14-0	E440/WT	mg/kg		701	685	753	633	655	631	710
Potassium	7440-09-7	E440/WT	mg/kg		6590	7060	7180	5470	5650	5460	5850
Selenium	7782-49-2	E440/WT	mg/kg		0.57	0.50	0.58	0.52	0.57	0.58	0.52
Silver	7440-22-4	E440/WT	mg/kg		0.17	0.18	0.19	0.16	0.14	0.14	0.16
Sodium	7440-23-5	E440/WT	mg/kg		351	373	379	293	326	297	319
Strontium	7440-24-6	E440/WT	mg/kg		21.0	21.4	21.3	15.5	18.1	15.3	18.9

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	SL-SHAL-1A_2025-09-25 ----	SL-SHAL-1B_2025-09-25 ----	SL-SHAL-IC_2025-09-25 ----	SL-SHAL-2C_2025-09-25 ----	SL-SHAL-2B_2025-09-25 ----	SL-SHAL-2A_2025-09-25 ----	SL-SHAL-2E_2025-09-26 ----
				Client sampling date / time	25-Sep-2025 12:30	25-Sep-2025 12:45	25-Sep-2025 12:45	25-Sep-2025 13:20	25-Sep-2025 13:45	25-Sep-2025 14:45	26-Sep-2025 15:30
				Sub-Matrix	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment	Sediment
					WT2536082-008	WT2536082-009	WT2536082-010	WT2536082-011	WT2536082-012	WT2536082-013	WT2536082-014
					Result	Result	Result	Result	Result	Result	Result
Metals											
Sulfur	7704-34-9	E440/WT	mg/kg		<1000	<1100 DLIS	<1200 DLIS	<1000	<1000	<1000	<1000
Thallium	7440-28-0	E440/WT	mg/kg		0.469	0.460	0.479	0.400	0.407	0.399	0.402
Tin	7440-31-5	E440/WT	mg/kg		<2.0	<2.2 DLIS	6.8	2.4	<2.0	<2.0	2.4
Titanium	7440-32-6	E440/WT	mg/kg		1390	1510	1580	1240	1250	1190	1350
Tungsten	7440-33-7	E440/WT	mg/kg		0.81	0.83	0.85	0.76	0.72	0.71	0.74
Uranium	7440-61-1	E440/WT	mg/kg		8.00	6.98	7.33	7.92	8.18	7.59	7.22
Vanadium	7440-62-2	E440/WT	mg/kg		53.0	56.3	58.3	47.5	48.9	46.7	51.1
Zinc	7440-66-6	E440/WT	mg/kg		102	121	152	120	96.5	95.0	94.1
Zirconium	7440-67-7	E440/WT	mg/kg		16.3	18.8	20.0	15.3	15.3	15.1	15.7
Aggregate Organics											
Carbon, total organic [TOC]	----	E357/WT	%		1.80	2.02	1.44	2.12	2.29	3.12	1.56
Organic matter	----	E357/WT	%		3.10	3.48	2.48	3.65	3.95	5.38	2.69

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	SL-SHAL-2D_2025-09-26 ----	Filter Blank ----	----	----	----	----	----
				Client sampling date / time	26-Sep-2025 15:40	26-Sep-2025 00:00	----	----	----	----	----
				Sub-Matrix	Sediment	Sediment	----	----	----	----	----
					WT2536082-015	WT2536082-016	----	----	----	----	----
					Result	Result	----	----	----	----	----
Sample Preparation											
Dummy analyte	----	EP357/WT	-		Not Authorised	----	----	----	----	----	----
Metals											
Aluminum	7429-90-5	E440/WT	mg/kg		25200	31700	----	----	----	----	----
Antimony	7440-36-0	E440/WT	mg/kg		0.13	0.13	----	----	----	----	----
Arsenic	7440-38-2	E440/WT	mg/kg		5.03	6.28	----	----	----	----	----
Barium	7440-39-3	E440/WT	mg/kg		121	220	----	----	----	----	----
Beryllium	7440-41-7	E440/WT	mg/kg		1.02	0.45	----	----	----	----	----
Bismuth	7440-69-9	E440/WT	mg/kg		0.44	<0.20	----	----	----	----	----
Boron	7440-42-8	E440/WT	mg/kg		182	7880	----	----	----	----	----
Cadmium	7440-43-9	E440/WT	mg/kg		0.571	0.038	----	----	----	----	----
Calcium	7440-70-2	E440/WT	mg/kg		7950	60700	----	----	----	----	----
Chromium	7440-47-3	E440/WT	mg/kg		77.6	8.60	----	----	----	----	----
Cobalt	7440-48-4	E440/WT	mg/kg		19.1	0.62	----	----	----	----	----
Copper	7440-50-8	E440/WT	mg/kg		41.4	2.40	----	----	----	----	----
Iron	7439-89-6	E440/WT	mg/kg		93900	874	----	----	----	----	----
Lead	7439-92-1	E440/WT	mg/kg		19.4	10.7	----	----	----	----	----
Lithium	7439-93-2	E440/WT	mg/kg		35.3	60.2	----	----	----	----	----
Magnesium	7439-95-4	E440/WT	mg/kg		18600	8010	----	----	----	----	----
Manganese	7439-96-5	E440/WT	mg/kg		1340	19.7	----	----	----	----	----
Mercury	7439-97-6	E510/WT	mg/kg		0.0161	<0.0050	----	----	----	----	----

Matrix: Soil/Solid

Analyte	CAS Number	Method/Lab	Unit	Client sample ID	SL-SHAL-2D_2025-09-26 ----	Filter Blank ----	----	----	----	----	----
				Client sampling date / time	26-Sep-2025 15:40	26-Sep-2025 00:00	----	----	----	----	----
				Sub-Matrix	Sediment	Sediment	----	----	----	----	----
					WT2536082-015	WT2536082-016	----	----	----	----	----
					Result	Result	----	----	----	----	----
Metals											
Molybdenum	7439-98-7	E440/WT	mg/kg		4.12	2.73	----	----	----	----	----
Nickel	7440-02-0	E440/WT	mg/kg		67.1	2.76	----	----	----	----	----
Phosphorus	7723-14-0	E440/WT	mg/kg		656	86	----	----	----	----	----
Potassium	7440-09-7	E440/WT	mg/kg		5890	620	----	----	----	----	----
Selenium	7782-49-2	E440/WT	mg/kg		0.54	<0.20	----	----	----	----	----
Silver	7440-22-4	E440/WT	mg/kg		0.15	<0.10	----	----	----	----	----
Sodium	7440-23-5	E440/WT	mg/kg		330	591	----	----	----	----	----
Strontium	7440-24-6	E440/WT	mg/kg		17.6	188	----	----	----	----	----
Sulfur	7704-34-9	E440/WT	mg/kg		<1000	<1000	----	----	----	----	----
Thallium	7440-28-0	E440/WT	mg/kg		0.436	<0.050	----	----	----	----	----
Tin	7440-31-5	E440/WT	mg/kg		6.4	<2.0	----	----	----	----	----
Titanium	7440-32-6	E440/WT	mg/kg		1310	352	----	----	----	----	----
Tungsten	7440-33-7	E440/WT	mg/kg		0.68	<0.50	----	----	----	----	----
Uranium	7440-61-1	E440/WT	mg/kg		7.47	1.41	----	----	----	----	----
Vanadium	7440-62-2	E440/WT	mg/kg		50.4	11.0	----	----	----	----	----
Zinc	7440-66-6	E440/WT	mg/kg		101	11.3	----	----	----	----	----
Zirconium	7440-67-7	E440/WT	mg/kg		16.3	19.5	----	----	----	----	----
Aggregate Organics											
Carbon, total organic [TOC]	----	E357/WT	%		2.20	----	----	----	----	----	----
Organic matter	----	E357/WT	%		3.79	----	----	----	----	----	----

Please refer to the General Comments section for an explanation of any result qualifiers detected.

Summary of Guideline Limits

CERTIFICATE OF ANALYSIS

Work Order	:	**WT2536082**			
Client	:	**Baffinland Iron Mines Corporation**	Laboratory	:	ALS Environmental - Waterloo
Contact	:	Environmental Lab Results	Account Manager	:	Rick Hawthorne
Address	:	360 Oakville Place Dr Suite 300 Oakville Ontario Canada L6H 6K8	Address	:	60 Northland Road, Unit 1 Waterloo ON Canada N2V 2B8
Telephone	:	----	E-mail	:	Rick.Hawthorne@ALSGlobal.com
Project	:	AEMP FALL SEDIMENT	Telephone	:	+1 519 886 6910
PO	:	4500156571	Date Samples Received	:	20-Nov-2025 11:45
C-O-C number	:	25 09 26_AEMP FALL SEDIMENT	Date Analysis Commenced	:	23-Dec-2025
Sampler	:	LG/JM/RR	Issue Date	:	31-Dec-2025 12:18
Site	:	----			
Quote number	:	2024-2025 Scope of Work			
No. of samples received	:	16			
No. of samples analysed	:	16			

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Greg Pokocky	Manager - Inorganics	Inorganics, Waterloo, Ontario
Greg Pokocky	Manager - Inorganics	Metals, Waterloo, Ontario
Travis Peel	Laboratory Analyst	Centralized Prep, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key: CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
%	percent
mg/kg	milligrams per kilogram

<: less than.
>: greater than.
Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

Qualifier	Description
DLIS	Detection Limit Adjusted due to insufficient sample.

Analytical Results

Sub-Matrix: Sediment
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SL-DEEP-IC_2025-09-25 ----	SL-DEEP-ID_2025-09-25 ----	SL-DEEP-IA_2025-09-25 ----	SL-DEEP-IE_2025-09-25 ----	SL-DEEP-IB_2025-09-25 ----
					Client sampling date / time	25-Sep-2025 10:30	25-Sep-2025 10:55	25-Sep-2025 11:00	25-Sep-2025 11:10	25-Sep-2025 11:15
						WT2536082-001	WT2536082-002	WT2536082-003	WT2536082-004	WT2536082-005
						Result	Result	Result	Result	Result
Sample Preparation										
Dummy analyte	----	EP357/WT	1	-		Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
Metals										
Aluminum	7429-90-5	E440/WT	50	mg/kg		28500	29800	29200	28500	27600
Antimony	7440-36-0	E440/WT	0.10	mg/kg		0.35	0.13	0.13	0.75	0.13
Arsenic	7440-38-2	E440/WT	0.10	mg/kg		6.20	5.31	5.17	5.05	4.89
Barium	7440-39-3	E440/WT	0.50	mg/kg		143	144	149	151	137
Beryllium	7440-41-7	E440/WT	0.10	mg/kg		1.24	1.25	1.21	1.29	1.17
Bismuth	7440-69-9	E440/WT	0.20	mg/kg		0.52	0.50	0.47	0.47	0.47
Boron	7440-42-8	E440/WT	5.0	mg/kg		298	253	289	275	261
Cadmium	7440-43-9	E440/WT	0.020	mg/kg		0.487	0.551	0.655	0.570	0.523
Calcium	7440-70-2	E440/WT	50	mg/kg		9120	8970	9450	9320	9320
Chromium	7440-47-3	E440/WT	0.50	mg/kg		126	91.2	90.6	91.8	103
Cobalt	7440-48-4	E440/WT	0.10	mg/kg		20.9	21.5	21.3	21.4	20.5
Copper	7440-50-8	E440/WT	0.50	mg/kg		67.9	104	47.1	47.8	45.3
Iron	7439-89-6	E440/WT	50	mg/kg		91600	80200	80800	75700	74100
Lead	7439-92-1	E440/WT	0.50	mg/kg		23.1	23.9	23.2	23.5	23.5
Lithium	7439-93-2	E440/WT	2.0	mg/kg		43.2	47.3	44.0	47.0	43.6
Magnesium	7439-95-4	E440/WT	20	mg/kg		21500	22900	22300	21700	21300
Manganese	7439-96-5	E440/WT	1.0	mg/kg		1260	1440	1770	1920	1490
Mercury	7439-97-6	E510/WT	0.0050	mg/kg		0.0307	0.0240	0.0178	0.0187	0.0193

Analytical Results

Sub-Matrix: Sediment
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SL-DEEP-IC_2025-09-25 ----	SL-DEEP-ID_2025-09-25 ----	SL-DEEP-IA_2025-09-25 ----	SL-DEEP-IE_2025-09-25 ----	SL-DEEP-IB_2025-09-25 ----
					Client sampling date / time	25-Sep-2025 10:30	25-Sep-2025 10:55	25-Sep-2025 11:00	25-Sep-2025 11:10	25-Sep-2025 11:15
						WT2536082-001	WT2536082-002	WT2536082-003	WT2536082-004	WT2536082-005
						Result	Result	Result	Result	Result
Metals										
Molybdenum	7439-98-7	E440/WT	0.10	mg/kg		8.08	3.66	3.89	3.72	3.45
Nickel	7440-02-0	E440/WT	0.50	mg/kg		74.7	75.1	74.8	75.2	72.3
Phosphorus	7723-14-0	E440/WT	50	mg/kg		715	751	784	759	748
Potassium	7440-09-7	E440/WT	100	mg/kg		6780	7020	6990	7160	6950
Selenium	7782-49-2	E440/WT	0.20	mg/kg		0.45	0.52	0.51	0.50	0.44
Silver	7440-22-4	E440/WT	0.10	mg/kg		0.21	0.28	0.19	0.19	0.19
Sodium	7440-23-5	E440/WT	50	mg/kg		424	434	415	434	395
Strontium	7440-24-6	E440/WT	0.50	mg/kg		22.0	20.9	22.7	22.1	21.2
Sulfur	7704-34-9	E440/WT	1000	mg/kg		<1000	<1000	<1000	<1000	<1000
Thallium	7440-28-0	E440/WT	0.050	mg/kg		0.506	0.517	0.517	0.525	0.507
Tin	7440-31-5	E440/WT	2.0	mg/kg		3.3	3.1	2.7	<2.0	<2.0
Titanium	7440-32-6	E440/WT	1.0	mg/kg		1520	1620	1600	1600	1580
Tungsten	7440-33-7	E440/WT	0.50	mg/kg		0.63	0.62	0.63	0.65	0.64
Uranium	7440-61-1	E440/WT	0.050	mg/kg		7.91	6.72	6.80	7.16	7.00
Vanadium	7440-62-2	E440/WT	0.20	mg/kg		59.4	62.5	60.8	61.4	59.7
Zinc	7440-66-6	E440/WT	2.0	mg/kg		172	105	114	105	108
Zirconium	7440-67-7	E440/WT	1.0	mg/kg		23.2	20.0	21.3	22.1	21.3
Aggregate Organics										
Carbon, total organic [TOC]	----	E357/WT	0.10	%		1.33	1.34	1.31	1.15	1.35
Organic matter	----	E357/WT	0.20	%		2.29	2.31	2.26	1.98	2.33

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: Sediment
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SL-SHAL-1D_2025-09-25 ----	SL-SHAL-1E_2025-09-25 ----	SL-SHAL-1A_2025-09-25 ----	SL-SHAL-1B_2025-09-25 ----	SL-SHAL-IC_2025-09-25 ----
					Client sampling date / time	25-Sep-2025 12:25	25-Sep-2025 12:25	25-Sep-2025 12:30	25-Sep-2025 12:45	25-Sep-2025 12:45
						WT2536082-006	WT2536082-007	WT2536082-008	WT2536082-009	WT2536082-010
						Result	Result	Result	Result	Result
Sample Preparation										
Dummy analyte	----	EP357/WT	1	-		Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
Metals										
Aluminum	7429-90-5	E440/WT	50	mg/kg		28800	30300	27300	29400	30500
Antimony	7440-36-0	E440/WT	0.10	mg/kg		0.30	0.17	0.15	0.14	0.30
Arsenic	7440-38-2	E440/WT	0.10	mg/kg		5.45	5.44	4.92	5.17	5.75
Barium	7440-39-3	E440/WT	0.50	mg/kg		147	150	146	148	149
Beryllium	7440-41-7	E440/WT	0.10	mg/kg		1.17	1.26	1.13	1.18	1.19
Bismuth	7440-69-9	E440/WT	0.20	mg/kg		0.48	0.52	0.49	0.51	0.49
Boron	7440-42-8	E440/WT	5.0	mg/kg		221	357	303	311	276
Cadmium	7440-43-9	E440/WT	0.020	mg/kg		0.435	0.552	0.613	0.604	0.529
Calcium	7440-70-2	E440/WT	50	mg/kg		7980	9300	7970	8670	9010
Chromium	7440-47-3	E440/WT	0.50	mg/kg		90.7	86.4	76.7	82.1	96.3
Cobalt	7440-48-4	E440/WT	0.10	mg/kg		21.8	21.1	19.4	20.5	21.0
Copper	7440-50-8	E440/WT	0.50	mg/kg		49.7	47.7	43.6	44.8	55.1
Iron	7439-89-6	E440/WT	50	mg/kg		123000	93100	86300	79400	92300
Lead	7439-92-1	E440/WT	0.50	mg/kg		21.8	22.7	21.1	21.9	21.5
Lithium	7439-93-2	E440/WT	2.0	mg/kg		41.4	43.5	38.6	42.9	41.4
Magnesium	7439-95-4	E440/WT	20	mg/kg		21800	22200	20300	21300	22300
Manganese	7439-96-5	E440/WT	1.0	mg/kg		1570	1490	1480	1520	1610
Mercury	7439-97-6	E510/WT	0.0050	mg/kg		0.0164	0.0183	0.0184	0.0170	0.0173
Molybdenum	7439-98-7	E440/WT	0.10	mg/kg		8.93	4.92	4.96	4.18	6.16

Analytical Results

Sub-Matrix: Sediment
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SL-SHAL-1D_2025-09-25 ----	SL-SHAL-1E_2025-09-25 ----	SL-SHAL-1A_2025-09-25 ----	SL-SHAL-1B_2025-09-25 ----	SL-SHAL-IC_2025-09-25 ----
					Client sampling date / time	25-Sep-2025 12:25	25-Sep-2025 12:25	25-Sep-2025 12:30	25-Sep-2025 12:45	25-Sep-2025 12:45
						WT2536082-006	WT2536082-007	WT2536082-008	WT2536082-009	WT2536082-010
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E440/WT	0.50	mg/kg		71.1	71.4	66.1	70.2	71.6
Phosphorus	7723-14-0	E440/WT	50	mg/kg		710	712	701	685	753
Potassium	7440-09-7	E440/WT	100	mg/kg		6780	7120	6590	7060	7180
Selenium	7782-49-2	E440/WT	0.20	mg/kg		0.64	0.60	0.57	0.50	0.58
Silver	7440-22-4	E440/WT	0.10	mg/kg		0.19	0.18	0.17	0.18	0.19
Sodium	7440-23-5	E440/WT	50	mg/kg		372	390	351	373	379
Strontium	7440-24-6	E440/WT	0.50	mg/kg		19.1	23.8	21.0	21.4	21.3
Sulfur	7704-34-9	E440/WT	1000	mg/kg		<1000	<1100 DLIS	<1000	<1100 DLIS	<1200 DLIS
Thallium	7440-28-0	E440/WT	0.050	mg/kg		0.473	0.500	0.469	0.460	0.479
Tin	7440-31-5	E440/WT	2.0	mg/kg		3.1	<2.3 DLIS	<2.0	<2.2 DLIS	6.8
Titanium	7440-32-6	E440/WT	1.0	mg/kg		1490	1560	1390	1510	1580
Tungsten	7440-33-7	E440/WT	0.50	mg/kg		0.83	0.87	0.81	0.83	0.85
Uranium	7440-61-1	E440/WT	0.050	mg/kg		10.2	7.38	8.00	6.98	7.33
Vanadium	7440-62-2	E440/WT	0.20	mg/kg		56.7	58.1	53.0	56.3	58.3
Zinc	7440-66-6	E440/WT	2.0	mg/kg		287	118	102	121	152
Zirconium	7440-67-7	E440/WT	1.0	mg/kg		18.2	19.5	16.3	18.8	20.0
Aggregate Organics										
Carbon, total organic [TOC]	----	E357/WT	0.10	%		1.50	1.57	1.80	2.02	1.44
Organic matter	----	E357/WT	0.20	%		2.59	2.71	3.10	3.48	2.48

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: Sediment
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SL-SHAL-2C_2025-09-25 ----	SL-SHAL-2B_2025-09-25 ----	SL-SHAL-2A_2025-09-25 ----	SL-SHAL-2E_2025-09-26 ----	SL-SHAL-2D_2025-09-26 ----
					Client sampling date / time	25-Sep-2025 13:20	25-Sep-2025 13:45	25-Sep-2025 14:45	26-Sep-2025 15:30	26-Sep-2025 15:40
						WT2536082-011	WT2536082-012	WT2536082-013	WT2536082-014	WT2536082-015
						Result	Result	Result	Result	Result
Sample Preparation										
Dummy analyte	----	EP357/WT	1	-		Not Authorised	Not Authorised	Not Authorised	Not Authorised	Not Authorised
Metals										
Aluminum	7429-90-5	E440/WT	50	mg/kg		22800	24200	23500	24400	25200
Antimony	7440-36-0	E440/WT	0.10	mg/kg		0.23	0.15	0.14	0.14	0.13
Arsenic	7440-38-2	E440/WT	0.10	mg/kg		4.78	4.89	4.62	5.09	5.03
Barium	7440-39-3	E440/WT	0.50	mg/kg		117	124	118	116	121
Beryllium	7440-41-7	E440/WT	0.10	mg/kg		0.99	1.02	1.01	1.02	1.02
Bismuth	7440-69-9	E440/WT	0.20	mg/kg		0.43	0.46	0.46	0.44	0.44
Boron	7440-42-8	E440/WT	5.0	mg/kg		108	232	132	182	182
Cadmium	7440-43-9	E440/WT	0.020	mg/kg		0.611	0.675	0.650	0.435	0.571
Calcium	7440-70-2	E440/WT	50	mg/kg		7820	8590	7350	8980	7950
Chromium	7440-47-3	E440/WT	0.50	mg/kg		87.0	77.7	72.4	80.7	77.6
Cobalt	7440-48-4	E440/WT	0.10	mg/kg		18.6	19.0	18.3	19.4	19.1
Copper	7440-50-8	E440/WT	0.50	mg/kg		43.6	41.1	40.3	39.2	41.4
Iron	7439-89-6	E440/WT	50	mg/kg		105000	88700	85600	101000	93900
Lead	7439-92-1	E440/WT	0.50	mg/kg		18.4	18.8	18.1	19.0	19.4
Lithium	7439-93-2	E440/WT	2.0	mg/kg		33.2	36.0	33.7	34.5	35.3
Magnesium	7439-95-4	E440/WT	20	mg/kg		18700	19100	17900	19900	18600
Manganese	7439-96-5	E440/WT	1.0	mg/kg		1430	1610	1460	1220	1340
Mercury	7439-97-6	E510/WT	0.0050	mg/kg		0.0139	0.0175	0.0167	0.0130	0.0161
Molybdenum	7439-98-7	E440/WT	0.10	mg/kg		6.23	4.04	4.38	4.06	4.12

Analytical Results

Sub-Matrix: Sediment
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	SL-SHAL-2C_2025-09-25 ----	SL-SHAL-2B_2025-09-25 ----	SL-SHAL-2A_2025-09-25 ----	SL-SHAL-2E_2025-09-26 ----	SL-SHAL-2D_2025-09-26 ----
					Client sampling date / time	25-Sep-2025 13:20	25-Sep-2025 13:45	25-Sep-2025 14:45	26-Sep-2025 15:30	26-Sep-2025 15:40
						WT2536082-011	WT2536082-012	WT2536082-013	WT2536082-014	WT2536082-015
						Result	Result	Result	Result	Result
Metals										
Nickel	7440-02-0	E440/WT	0.50	mg/kg		66.5	68.1	65.5	68.7	67.1
Phosphorus	7723-14-0	E440/WT	50	mg/kg		633	655	631	710	656
Potassium	7440-09-7	E440/WT	100	mg/kg		5470	5650	5460	5850	5890
Selenium	7782-49-2	E440/WT	0.20	mg/kg		0.52	0.57	0.58	0.52	0.54
Silver	7440-22-4	E440/WT	0.10	mg/kg		0.16	0.14	0.14	0.16	0.15
Sodium	7440-23-5	E440/WT	50	mg/kg		293	326	297	319	330
Strontium	7440-24-6	E440/WT	0.50	mg/kg		15.5	18.1	15.3	18.9	17.6
Sulfur	7704-34-9	E440/WT	1000	mg/kg		<1000	<1000	<1000	<1000	<1000
Thallium	7440-28-0	E440/WT	0.050	mg/kg		0.400	0.407	0.399	0.402	0.436
Tin	7440-31-5	E440/WT	2.0	mg/kg		2.4	<2.0	<2.0	2.4	6.4
Titanium	7440-32-6	E440/WT	1.0	mg/kg		1240	1250	1190	1350	1310
Tungsten	7440-33-7	E440/WT	0.50	mg/kg		0.76	0.72	0.71	0.74	0.68
Uranium	7440-61-1	E440/WT	0.050	mg/kg		7.92	8.18	7.59	7.22	7.47
Vanadium	7440-62-2	E440/WT	0.20	mg/kg		47.5	48.9	46.7	51.1	50.4
Zinc	7440-66-6	E440/WT	2.0	mg/kg		120	96.5	95.0	94.1	101
Zirconium	7440-67-7	E440/WT	1.0	mg/kg		15.3	15.3	15.1	15.7	16.3
Aggregate Organics										
Carbon, total organic [TOC]	----	E357/WT	0.10	%		2.12	2.29	3.12	1.56	2.20
Organic matter	----	E357/WT	0.20	%		3.65	3.95	5.38	2.69	3.79

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: Sediment
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Filter Blank ----	----	----	----	----
					Client sampling date / time	26-Sep-2025 00:00	----	----	----	----
					WT2536082-016	----	----	----	----	----
					Result	----	----	----	----	----
Metals										
Aluminum	7429-90-5	E440/WT	50	mg/kg	31700	----	----	----	----
Antimony	7440-36-0	E440/WT	0.10	mg/kg	0.13	----	----	----	----
Arsenic	7440-38-2	E440/WT	0.10	mg/kg	6.28	----	----	----	----
Barium	7440-39-3	E440/WT	0.50	mg/kg	220	----	----	----	----
Beryllium	7440-41-7	E440/WT	0.10	mg/kg	0.45	----	----	----	----
Bismuth	7440-69-9	E440/WT	0.20	mg/kg	<0.20	----	----	----	----
Boron	7440-42-8	E440/WT	5.0	mg/kg	7880	----	----	----	----
Cadmium	7440-43-9	E440/WT	0.020	mg/kg	0.038	----	----	----	----
Calcium	7440-70-2	E440/WT	50	mg/kg	60700	----	----	----	----
Chromium	7440-47-3	E440/WT	0.50	mg/kg	8.60	----	----	----	----
Cobalt	7440-48-4	E440/WT	0.10	mg/kg	0.62	----	----	----	----
Copper	7440-50-8	E440/WT	0.50	mg/kg	2.40	----	----	----	----
Iron	7439-89-6	E440/WT	50	mg/kg	874	----	----	----	----
Lead	7439-92-1	E440/WT	0.50	mg/kg	10.7	----	----	----	----
Lithium	7439-93-2	E440/WT	2.0	mg/kg	60.2	----	----	----	----
Magnesium	7439-95-4	E440/WT	20	mg/kg	8010	----	----	----	----
Manganese	7439-96-5	E440/WT	1.0	mg/kg	19.7	----	----	----	----
Mercury	7439-97-6	E510/WT	0.0050	mg/kg	<0.0050	----	----	----	----
Molybdenum	7439-98-7	E440/WT	0.10	mg/kg	2.73	----	----	----	----
Nickel	7440-02-0	E440/WT	0.50	mg/kg	2.76	----	----	----	----
Phosphorus	7723-14-0	E440/WT	50	mg/kg	86	----	----	----	----

Analytical Results

Sub-Matrix: Sediment
(Matrix: Soil/Solid)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID: Filter Blank ----	----	----	----	----
					Client sampling date / time: 26-Sep-2025 00:00	----	----	----	----
					WT2536082-016	----	----	----	----
					Result	----	----	----	----
Metals									
Potassium	7440-09-7	E440/WT	100	mg/kg	620	----	----	----	----
Selenium	7782-49-2	E440/WT	0.20	mg/kg	<0.20	----	----	----	----
Silver	7440-22-4	E440/WT	0.10	mg/kg	<0.10	----	----	----	----
Sodium	7440-23-5	E440/WT	50	mg/kg	591	----	----	----	----
Strontium	7440-24-6	E440/WT	0.50	mg/kg	188	----	----	----	----
Sulfur	7704-34-9	E440/WT	1000	mg/kg	<1000	----	----	----	----
Thallium	7440-28-0	E440/WT	0.050	mg/kg	<0.050	----	----	----	----
Tin	7440-31-5	E440/WT	2.0	mg/kg	<2.0	----	----	----	----
Titanium	7440-32-6	E440/WT	1.0	mg/kg	352	----	----	----	----
Tungsten	7440-33-7	E440/WT	0.50	mg/kg	<0.50	----	----	----	----
Uranium	7440-61-1	E440/WT	0.050	mg/kg	1.41	----	----	----	----
Vanadium	7440-62-2	E440/WT	0.20	mg/kg	11.0	----	----	----	----
Zinc	7440-66-6	E440/WT	2.0	mg/kg	11.3	----	----	----	----
Zirconium	7440-67-7	E440/WT	1.0	mg/kg	19.5	----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

Quality Control Interpretive Report

Work Order	:	**WT2536082**			
Client	:	Baffinland Iron Mines Corporation	Laboratory	:	ALS Environmental - Waterloo
Contact	:	Environmental Lab Results	Account Manager	:	Rick Hawthorne
Address	:	360 Oakville Place Dr Suite 300 Oakville ON Canada L6H 6K8	Address	:	60 Northland Road, Unit 1 Waterloo ON Canada N2V 2B8
Telephone	:	----	Telephone	:	+1 519 886 6910
Project	:	AEMP FALL SEDIMENT	Date Samples Received	:	20-Nov-2025 11:45
PO	:	4500156571	Issue Date	:	31-Dec-2025 12:19
C-O-C number	:	25 09 26_AEMP FALL SEDIMENT			
Sampler	:	LG/JM/RR			
Site	:	----			
Quote number	:	2024-2025 Scope of Work			
No. of samples received	:	16			
No. of samples analysed	:	16			

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Laboratory Control Sample Duplicate (LCSD) outliers occur
- No Matrix Spike outliers occur.
- No Matrix Spike Duplicate (MSD) outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and/or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: Soil/Solid

Evaluation: × = Holding time exceedance; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client sample ID	ALS Sample ID	QC Lot	Method	Sampling Date	Extraction / Preparation				Analysis			
					Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
						Rec	Actual			Rec	Actual	
Aggregate Organics : Total Organic Carbon by Wet Oxidation and Titration												
Glass soil jar/Teflon lined cap												
SL-DEEP-IC_2025-09-25	001	2383261	E357	25-Sep-2025	23-Dec-2025	28 days	89 days	× EHTR	23-Dec-2025	28 days	89 days	× EHTR
SL-DEEP-ID_2025-09-25	002	2383261	E357	25-Sep-2025	23-Dec-2025	28 days	89 days	× EHTR	23-Dec-2025	28 days	89 days	× EHTR
SL-DEEP-IA_2025-09-25	003	2383261	E357	25-Sep-2025	23-Dec-2025	28 days	89 days	× EHTR	23-Dec-2025	28 days	89 days	× EHTR
SL-DEEP-IE_2025-09-25	004	2383261	E357	25-Sep-2025	23-Dec-2025	28 days	89 days	× EHTR	23-Dec-2025	28 days	89 days	× EHTR
SL-DEEP-IB_2025-09-25	005	2383261	E357	25-Sep-2025	23-Dec-2025	28 days	89 days	× EHTR	23-Dec-2025	28 days	89 days	× EHTR
SL-SHAL-1D_2025-09-25	006	2383261	E357	25-Sep-2025	23-Dec-2025	28 days	89 days	× EHTR	23-Dec-2025	28 days	89 days	× EHTR
SL-SHAL-1E_2025-09-25	007	2383261	E357	25-Sep-2025	23-Dec-2025	28 days	89 days	× EHTR	23-Dec-2025	28 days	89 days	× EHTR
SL-SHAL-1A_2025-09-25	008	2383261	E357	25-Sep-2025	23-Dec-2025	28 days	89 days	× EHTR	23-Dec-2025	28 days	89 days	× EHTR
SL-SHAL-1B_2025-09-25	009	2383261	E357	25-Sep-2025	23-Dec-2025	28 days	89 days	× EHTR	23-Dec-2025	28 days	89 days	× EHTR
SL-SHAL-IC_2025-09-25	010	2383261	E357	25-Sep-2025	23-Dec-2025	28 days	89 days	× EHTR	23-Dec-2025	28 days	89 days	× EHTR
SL-SHAL-2C_2025-09-25	011	2383261	E357	25-Sep-2025	23-Dec-2025	28 days	89 days	× EHTR	23-Dec-2025	28 days	89 days	× EHTR
SL-SHAL-2B_2025-09-25	012	2383261	E357	25-Sep-2025	23-Dec-2025	28 days	89 days	× EHTR	23-Dec-2025	28 days	89 days	× EHTR
SL-SHAL-2A_2025-09-25	013	2383261	E357	25-Sep-2025	23-Dec-2025	28 days	89 days	× EHTR	23-Dec-2025	28 days	89 days	× EHTR

Matrix: Soil/Solid

Evaluation: × = Holding time exceedance; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client sample ID	ALS Sample ID	QC Lot	Method	Sampling Date	Extraction / Preparation				Analysis			
					Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
						Rec	Actual			Rec	Actual	
Aggregate Organics : Total Organic Carbon by Wet Oxidation and Titration												
Glass soil jar/Teflon lined cap												
SL-SHAL-2E_2025-09-26	014	2383261	E357	26-Sep-2025	23-Dec-2025	28 days	88 days	× EHTR	23-Dec-2025	28 days	88 days	× EHTR
SL-SHAL-2D_2025-09-26	015	2383261	E357	26-Sep-2025	23-Dec-2025	28 days	88 days	× EHTR	23-Dec-2025	28 days	88 days	× EHTR
Metals : Mercury in Soil/Solid by CVAAS												
Glass soil jar/Teflon lined cap												
SL-DEEP-IC_2025-09-25	001	2386632	E510	25-Sep-2025	30-Dec-2025	28 days	96 days	× EHTR	31-Dec-2025	28 days	0 days	✓
SL-DEEP-ID_2025-09-25	002	2386632	E510	25-Sep-2025	30-Dec-2025	28 days	96 days	× EHTR	31-Dec-2025	28 days	0 days	✓
SL-DEEP-IA_2025-09-25	003	2386632	E510	25-Sep-2025	30-Dec-2025	28 days	96 days	× EHTR	31-Dec-2025	28 days	0 days	✓
SL-DEEP-IE_2025-09-25	004	2386632	E510	25-Sep-2025	30-Dec-2025	28 days	96 days	× EHTR	31-Dec-2025	28 days	0 days	✓
SL-DEEP-IB_2025-09-25	005	2386632	E510	25-Sep-2025	30-Dec-2025	28 days	96 days	× EHTR	31-Dec-2025	28 days	0 days	✓
SL-SHAL-1D_2025-09-25	006	2386632	E510	25-Sep-2025	30-Dec-2025	28 days	96 days	× EHTR	31-Dec-2025	28 days	0 days	✓
SL-SHAL-1E_2025-09-25	007	2386632	E510	25-Sep-2025	30-Dec-2025	28 days	96 days	× EHTR	31-Dec-2025	28 days	0 days	✓
SL-SHAL-1A_2025-09-25	008	2386632	E510	25-Sep-2025	30-Dec-2025	28 days	96 days	× EHTR	31-Dec-2025	28 days	0 days	✓
SL-SHAL-1B_2025-09-25	009	2386632	E510	25-Sep-2025	30-Dec-2025	28 days	96 days	× EHTR	31-Dec-2025	28 days	0 days	✓
SL-SHAL-IC_2025-09-25	010	2386632	E510	25-Sep-2025	30-Dec-2025	28 days	96 days	× EHTR	31-Dec-2025	28 days	0 days	✓
SL-SHAL-2C_2025-09-25	011	2386632	E510	25-Sep-2025	30-Dec-2025	28 days	96 days	× EHTR	31-Dec-2025	28 days	0 days	✓
SL-SHAL-2B_2025-09-25	012	2386632	E510	25-Sep-2025	30-Dec-2025	28 days	96 days	× EHTR	31-Dec-2025	28 days	0 days	✓
SL-SHAL-2A_2025-09-25	013	2386632	E510	25-Sep-2025	30-Dec-2025	28 days	96 days	× EHTR	31-Dec-2025	28 days	0 days	✓
SL-SHAL-2E_2025-09-26	014	2386632	E510	26-Sep-2025	30-Dec-2025	28 days	95 days	× EHTR	31-Dec-2025	28 days	0 days	✓

Matrix: Soil/Solid

Evaluation: × = Holding time exceedance; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client sample ID	ALS Sample ID	QC Lot	Method	Sampling Date	Extraction / Preparation				Analysis			
					Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
						Rec	Actual			Rec	Actual	
Metals : Mercury in Soil/Solid by CVAAS												
Glass soil jar/Teflon lined cap												
SL-SHAL-2D_2025-09-26	015	2386632	E510	26-Sep-2025	30-Dec-2025	28 days	95 days	× EHTR	31-Dec-2025	28 days	0 days	✓
Filter Blank	016	2402645	E510	26-Sep-2025	30-Dec-2025	28 days	95 days	× EHTR	31-Dec-2025	28 days	0 days	✓
Metals : Metals in Soil/Solid by CRC ICPMS												
Glass soil jar/Teflon lined cap												
SL-DEEP-IC_2025-09-25	001	2386633	E440	25-Sep-2025	30-Dec-2025	180 days	96 days	✓	30-Dec-2025	180 days	96 days	✓
SL-DEEP-ID_2025-09-25	002	2386633	E440	25-Sep-2025	30-Dec-2025	180 days	96 days	✓	30-Dec-2025	180 days	96 days	✓
SL-DEEP-IA_2025-09-25	003	2386633	E440	25-Sep-2025	30-Dec-2025	180 days	96 days	✓	30-Dec-2025	180 days	96 days	✓
SL-DEEP-IE_2025-09-25	004	2386633	E440	25-Sep-2025	30-Dec-2025	180 days	96 days	✓	30-Dec-2025	180 days	96 days	✓
SL-DEEP-IB_2025-09-25	005	2386633	E440	25-Sep-2025	30-Dec-2025	180 days	96 days	✓	30-Dec-2025	180 days	96 days	✓
SL-SHAL-1D_2025-09-25	006	2386633	E440	25-Sep-2025	30-Dec-2025	180 days	96 days	✓	30-Dec-2025	180 days	96 days	✓
SL-SHAL-1E_2025-09-25	007	2386633	E440	25-Sep-2025	30-Dec-2025	180 days	96 days	✓	30-Dec-2025	180 days	96 days	✓
SL-SHAL-1A_2025-09-25	008	2386633	E440	25-Sep-2025	30-Dec-2025	180 days	96 days	✓	30-Dec-2025	180 days	96 days	✓
SL-SHAL-1B_2025-09-25	009	2386633	E440	25-Sep-2025	30-Dec-2025	180 days	96 days	✓	30-Dec-2025	180 days	96 days	✓
SL-SHAL-IC_2025-09-25	010	2386633	E440	25-Sep-2025	30-Dec-2025	180 days	96 days	✓	30-Dec-2025	180 days	96 days	✓
SL-SHAL-2C_2025-09-25	011	2386633	E440	25-Sep-2025	30-Dec-2025	180 days	96 days	✓	30-Dec-2025	180 days	96 days	✓
SL-SHAL-2B_2025-09-25	012	2386633	E440	25-Sep-2025	30-Dec-2025	180 days	96 days	✓	30-Dec-2025	180 days	96 days	✓
SL-SHAL-2A_2025-09-25	013	2386633	E440	25-Sep-2025	30-Dec-2025	180 days	96 days	✓	30-Dec-2025	180 days	96 days	✓
SL-SHAL-2E_2025-09-26	014	2386633	E440	26-Sep-2025	30-Dec-2025	180 days	95 days	✓	30-Dec-2025	180 days	95 days	✓

Matrix: Soil/Solid

Evaluation: × = Holding time exceedance; ✓ = Within Holding Time

Analyte Group : Analytical Method / Container / Client sample ID	ALS Sample ID	QC Lot	Method	Sampling Date	Extraction / Preparation				Analysis			
					Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
						Rec	Actual			Rec	Actual	
Metals : Metals in Soil/Solid by CRC ICPMS												
Glass soil jar/Teflon lined cap												
SL-SHAL-2D_2025-09-26	015	2386633	E440	26-Sep-2025	30-Dec-2025	180 days	95 days	✓	30-Dec-2025	180 days	95 days	✓
Filter Blank	016	2402644	E440	26-Sep-2025	30-Dec-2025	180 days	95 days	✓	30-Dec-2025	180 days	95 days	✓

Legend & Qualifier Definitions

EHTR: Exceeded ALS recommended hold time prior to sample receipt.

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: Soil/Solid

Evaluation: × = QC frequency outside specification; ✓ = QC frequency within specification

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	Method	QC Lot #	QC	Regular	Actual	Expected	Evaluation
Laboratory Duplicates (DUP)							
Total Organic Carbon by Wet Oxidation and Titration	E357	2383261	1	15	6.7	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	2386633	1	17	5.9	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	2386632	1	17	5.9	5.0	✓
Laboratory Control Samples (LCS)							
Total Organic Carbon by Wet Oxidation and Titration	E357	2383261	2	15	13.3	10.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	2386633	2	17	11.8	10.0	✓
Mercury in Soil/Solid by CVAAS	E510	2386632	2	17	11.8	10.0	✓
Method Blanks (MB)							
Total Organic Carbon by Wet Oxidation and Titration	E357	2383261	1	15	6.7	5.0	✓
Metals in Soil/Solid by CRC ICPMS	E440	2386633	1	17	5.9	5.0	✓
Mercury in Soil/Solid by CVAAS	E510	2386632	1	17	5.9	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Digestion for Metals and Mercury	EP440 ALS Environmental - Waterloo	Soil/Solid	EPA 200.2 (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl. This method is intended to liberate metals that may be environmentally available.
Sample Preparation - TOC by Wet Oxidation and Titration	EP357 ALS Environmental - Waterloo	Soil/Solid	Soil Sampling and Methods of Analysis, Carter 2008	A sample is set in a tray and is dried at less than 60°C until dry (typically overnight). The dried sample is then mechanically disaggregated and passed through a 2 mm sieve. The portion of sample passing 2 mm sieve is used for analysis.
Analytical Methods	**Method / Lab**	**Matrix**	**Method Reference**	**Method Descriptions**
Mercury in Soil/Solid by CVAAS	E510 ALS Environmental - Waterloo	Soil/Solid	EPA 200.2/1631 Appendix (mod)	Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl, followed by CVAAS analysis.
Metals in Soil/Solid by CRC ICPMS	E440 ALS Environmental - Waterloo	Soil/Solid	EPA 6020B (mod)	This method is intended to liberate metals that may be environmentally available. Samples are dried, then sieved through a 2 mm sieve, and digested with HNO3 and HCl. Dependent on sample matrix, some metals may be only partially recovered, including Al, Ba, Be, Cr, Sr, Ti, Tl, V, W, and Zr. Silicate minerals are not solubilized. Volatile forms of sulfur (including sulfide) may not be captured, as they may be lost during sampling, storage, or digestion. This method does not adequately recover elemental sulfur, and is unsuitable for assessment of elemental sulfur standards or guidelines. Analysis is by Collision/Reaction Cell ICPMS.
Total Organic Carbon by Wet Oxidation and Titration	E357 ALS Environmental - Waterloo	Soil/Solid	CSSS (2008) 21.3.2 (mod)	Total Organic Carbon is determined by wet oxidation digestion using potassium dichromate and sulfuric acid (Walkley-Black). Oxidized organic carbon is determined by back-titration with ferrous ammonium sulfate. Organic matter is estimated from the organic carbon result using the Van Bemmelon factor.

QUALITY CONTROL REPORT

Work Order	: **WT2536082**	Page	: 1 of 10
Client	: Baffinland Iron Mines Corporation	Laboratory	: ALS Environmental - Waterloo
Contact	: Environmental Lab Results	Account Manager	: Rick Hawthorne
Address	: 360 Oakville Place Dr Suite 300 Oakville ON Canada L6H 6K8	Address	: 60 Northland Road, Unit 1 Waterloo, Ontario Canada N2V 2B8
Telephone	: ----	Telephone	: +1 519 886 6910
Project	: AEMP FALL SEDIMENT	Date Samples Received	: 20-Nov-2025 11:45
PO	: 4500156571	Date Analysis Commenced	: 23-Dec-2025
C-O-C number	: 25 09 26_AEMP FALL SEDIMENT	Issue Date	: 31-Dec-2025 12:18
Sampler	: LG/JM/RR		
Site	: ----		
Quote number	: 2024-2025 Scope of Work		
No. of samples received	: 16		
No. of samples analysed	: 16		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Reference Material (RM) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Greg Pokocky	Manager - Inorganics	Waterloo Inorganics, Waterloo, Ontario
Greg Pokocky	Manager - Inorganics	Waterloo Metals, Waterloo, Ontario
Travis Peel	Laboratory Analyst	Waterloo Centralized Prep, Waterloo, Ontario

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Metals (QC Lot: 2386632)											
WT2536082-005	SL-DEEP-IB_2025-09-25	Mercury	7439-97-6	E510	0.0050	mg/kg	0.0193	0.0201	0.0008	Diff <2x LOR	----
Metals (QC Lot: 2386633)											
WT2536082-005	SL-DEEP-IB_2025-09-25	Aluminum	7429-90-5	E440	50	mg/kg	27600	28100	1.62%	40%	----
		Antimony	7440-36-0	E440	0.10	mg/kg	0.13	0.13	0.003	Diff <2x LOR	----
		Arsenic	7440-38-2	E440	0.10	mg/kg	4.89	4.95	1.12%	30%	----
		Barium	7440-39-3	E440	0.50	mg/kg	137	143	4.05%	40%	----
		Beryllium	7440-41-7	E440	0.10	mg/kg	1.17	1.21	3.12%	30%	----
		Bismuth	7440-69-9	E440	0.20	mg/kg	0.47	0.47	0.003	Diff <2x LOR	----
		Boron	7440-42-8	E440	5.0	mg/kg	261	307	16.3%	30%	----
		Cadmium	7440-43-9	E440	0.020	mg/kg	0.523	0.540	3.06%	30%	----
		Calcium	7440-70-2	E440	50	mg/kg	9320	9490	1.79%	30%	----
		Chromium	7440-47-3	E440	0.50	mg/kg	103	104	1.38%	30%	----
		Cobalt	7440-48-4	E440	0.10	mg/kg	20.5	20.6	0.551%	30%	----
		Copper	7440-50-8	E440	0.50	mg/kg	45.3	45.0	0.710%	30%	----
		Iron	7439-89-6	E440	50	mg/kg	74100	74100	0.0187%	30%	----
		Lead	7439-92-1	E440	0.50	mg/kg	23.5	23.2	1.05%	40%	----
		Lithium	7439-93-2	E440	2.0	mg/kg	43.6	44.4	1.95%	30%	----
		Magnesium	7439-95-4	E440	20	mg/kg	21300	21800	2.08%	30%	----
		Manganese	7439-96-5	E440	1.0	mg/kg	1490	1530	3.13%	30%	----
		Molybdenum	7439-98-7	E440	0.10	mg/kg	3.45	3.62	4.74%	40%	----
		Nickel	7440-02-0	E440	0.50	mg/kg	72.3	73.1	1.09%	30%	----
		Phosphorus	7723-14-0	E440	50	mg/kg	748	743	0.564%	30%	----
		Potassium	7440-09-7	E440	100	mg/kg	6950	6930	0.333%	40%	----
		Selenium	7782-49-2	E440	0.20	mg/kg	0.44	0.48	0.04	Diff <2x LOR	----
		Silver	7440-22-4	E440	0.10	mg/kg	0.19	0.19	0.001	Diff <2x LOR	----
		Sodium	7440-23-5	E440	50	mg/kg	395	427	7.62%	40%	----
		Strontium	7440-24-6	E440	0.50	mg/kg	21.2	22.3	5.19%	40%	----
		Sulfur	7704-34-9	E440	1000	mg/kg	<1000	<1000	0	Diff <2x LOR	----
		Thallium	7440-28-0	E440	0.050	mg/kg	0.507	0.496	2.24%	30%	----
		Tin	7440-31-5	E440	2.0	mg/kg	<2.0	2.1	0.07	Diff <2x LOR	----

Sub-Matrix: **Soil/Solid**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Metals (QC Lot: 2386633) - continued											
WT2536082-005	SL-DEEP-IB_2025-09-25	Titanium	7440-32-6	E440	1.0	mg/kg	1580	1610	1.84%	40%	----
		Tungsten	7440-33-7	E440	0.50	mg/kg	0.64	0.62	0.02	Diff <2x LOR	----
		Uranium	7440-61-1	E440	0.050	mg/kg	7.00	6.92	1.27%	30%	----
		Vanadium	7440-62-2	E440	0.20	mg/kg	59.7	60.5	1.25%	30%	----
		Zinc	7440-66-6	E440	2.0	mg/kg	108	113	4.33%	30%	----
		Zirconium	7440-67-7	E440	1.0	mg/kg	21.3	22.2	4.14%	30%	----
Aggregate Organics (QC Lot: 2383261)											
WT2536082-001	SL-DEEP-IC_2025-09-25	Carbon, total organic [TOC]	----	E357	0.10	%	1.33	1.41	5.67%	20%	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Metals (QCLot: 2386632)						
Mercury	7439-97-6	E510	0.005	mg/kg	<0.0050	----
Metals (QCLot: 2386633)						
Aluminum	7429-90-5	E440	50	mg/kg	<50	----
Antimony	7440-36-0	E440	0.1	mg/kg	<0.10	----
Arsenic	7440-38-2	E440	0.1	mg/kg	<0.10	----
Barium	7440-39-3	E440	0.5	mg/kg	<0.50	----
Beryllium	7440-41-7	E440	0.1	mg/kg	<0.10	----
Bismuth	7440-69-9	E440	0.2	mg/kg	<0.20	----
Boron	7440-42-8	E440	5	mg/kg	<5.0	----
Cadmium	7440-43-9	E440	0.02	mg/kg	<0.020	----
Calcium	7440-70-2	E440	50	mg/kg	<50	----
Chromium	7440-47-3	E440	0.5	mg/kg	<0.50	----
Cobalt	7440-48-4	E440	0.1	mg/kg	<0.10	----
Copper	7440-50-8	E440	0.5	mg/kg	<0.50	----
Iron	7439-89-6	E440	50	mg/kg	<50	----
Lead	7439-92-1	E440	0.5	mg/kg	<0.50	----
Lithium	7439-93-2	E440	2	mg/kg	<2.0	----
Magnesium	7439-95-4	E440	20	mg/kg	<20	----
Manganese	7439-96-5	E440	1	mg/kg	<1.0	----
Molybdenum	7439-98-7	E440	0.1	mg/kg	<0.10	----
Nickel	7440-02-0	E440	0.5	mg/kg	<0.50	----
Phosphorus	7723-14-0	E440	50	mg/kg	<50	----
Potassium	7440-09-7	E440	100	mg/kg	<100	----
Selenium	7782-49-2	E440	0.2	mg/kg	<0.20	----
Silver	7440-22-4	E440	0.1	mg/kg	<0.10	----
Sodium	7440-23-5	E440	50	mg/kg	<50	----
Strontium	7440-24-6	E440	0.5	mg/kg	<0.50	----
Sulfur	7704-34-9	E440	1000	mg/kg	<1000	----
Thallium	7440-28-0	E440	0.05	mg/kg	<0.050	----
Tin	7440-31-5	E440	2	mg/kg	<2.0	----
Titanium	7440-32-6	E440	1	mg/kg	<1.0	----
Uranium	7440-61-1	E440	0.05	mg/kg	<0.050	----

Sub-Matrix: **Soil/Solid**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Metals (QCLot: 2386633) - continued						
Vanadium	7440-62-2	E440	0.2	mg/kg	<0.20	----
Zinc	7440-66-6	E440	2	mg/kg	<2.0	----
Zirconium	7440-67-7	E440	1	mg/kg	<1.0	----
Aggregate Organics (QCLot: 2383261)						
Carbon, total organic [TOC]	----	E357	0.1	%	<0.10	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Metals (QCLot: 2386632)									
Mercury	7439-97-6	E510	0.005	mg/kg	0.1 mg/kg	104	80.0	120	----
Metals (QCLot: 2386633)									
Aluminum	7429-90-5	E440	50	mg/kg	200 mg/kg	109	80.0	120	----
Antimony	7440-36-0	E440	0.1	mg/kg	100 mg/kg	107	80.0	120	----
Arsenic	7440-38-2	E440	0.1	mg/kg	100 mg/kg	112	80.0	120	----
Barium	7440-39-3	E440	0.5	mg/kg	25 mg/kg	107	80.0	120	----
Beryllium	7440-41-7	E440	0.1	mg/kg	10 mg/kg	104	80.0	120	----
Bismuth	7440-69-9	E440	0.2	mg/kg	100 mg/kg	102	80.0	120	----
Boron	7440-42-8	E440	5	mg/kg	100 mg/kg	103	80.0	120	----
Cadmium	7440-43-9	E440	0.02	mg/kg	10 mg/kg	105	80.0	120	----
Calcium	7440-70-2	E440	50	mg/kg	5000 mg/kg	105	80.0	120	----
Chromium	7440-47-3	E440	0.5	mg/kg	25 mg/kg	108	80.0	120	----
Cobalt	7440-48-4	E440	0.1	mg/kg	25 mg/kg	104	80.0	120	----
Copper	7440-50-8	E440	0.5	mg/kg	25 mg/kg	104	80.0	120	----
Iron	7439-89-6	E440	50	mg/kg	100 mg/kg	105	80.0	120	----
Lead	7439-92-1	E440	0.5	mg/kg	50 mg/kg	105	80.0	120	----
Lithium	7439-93-2	E440	2	mg/kg	25 mg/kg	109	80.0	120	----
Magnesium	7439-95-4	E440	20	mg/kg	5000 mg/kg	114	80.0	120	----
Manganese	7439-96-5	E440	1	mg/kg	25 mg/kg	107	80.0	120	----
Molybdenum	7439-98-7	E440	0.1	mg/kg	25 mg/kg	106	80.0	120	----
Nickel	7440-02-0	E440	0.5	mg/kg	50 mg/kg	104	80.0	120	----
Phosphorus	7723-14-0	E440	50	mg/kg	1000 mg/kg	112	80.0	120	----
Potassium	7440-09-7	E440	100	mg/kg	5000 mg/kg	109	80.0	120	----
Selenium	7782-49-2	E440	0.2	mg/kg	100 mg/kg	105	80.0	120	----
Silver	7440-22-4	E440	0.1	mg/kg	10 mg/kg	114	80.0	120	----
Sodium	7440-23-5	E440	50	mg/kg	5000 mg/kg	107	80.0	120	----
Strontium	7440-24-6	E440	0.5	mg/kg	25 mg/kg	108	80.0	120	----
Sulfur	7704-34-9	E440	1000	mg/kg	5000 mg/kg	98.2	80.0	120	----
Thallium	7440-28-0	E440	0.05	mg/kg	100 mg/kg	101	80.0	120	----
Tin	7440-31-5	E440	2	mg/kg	50 mg/kg	108	80.0	120	----
Titanium	7440-32-6	E440	1	mg/kg	25 mg/kg	106	80.0	120	----
Uranium	7440-61-1	E440	0.05	mg/kg	0.5 mg/kg	109	80.0	120	----
Vanadium	7440-62-2	E440	0.2	mg/kg	50 mg/kg	108	80.0	120	----

Sub-Matrix: **Soil/Solid**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Metals (QCLot: 2386633) - continued									
Zinc	7440-66-6	E440	2	mg/kg	50 mg/kg	102	80.0	120	----
Zirconium	7440-67-7	E440	1	mg/kg	10 mg/kg	105	80.0	120	----
Aggregate Organics (QCLot: 2383261)									
Carbon, total organic [TOC]	----	E357	0.1	%	42.1 %	118	80.0	120	----

Reference Material (RM) Report

A Reference Material (RM) is a homogenous material with known and well-established analyte concentrations. RMs are processed in an identical manner to test samples, and are used to monitor and control the accuracy and precision of a test method for a typical sample matrix. RM results are expressed as percent recovery of the target analyte concentration. RM targets may be certified target concentrations provided by the RM supplier, or may be ALS long-term mean values (for empirical test methods).

Sub-Matrix:

					Reference Material (RM) Report				
					RM Target	Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Concentration	RM	Low	High	Qualifier
Metals (QCLot: 2386632)									
QC-2386632-003	RM	Mercury	7439-97-6	E510	0.068 mg/kg	99.5	70.0	130	----
Metals (QCLot: 2386633)									
QC-2386633-003	RM	Aluminum	7429-90-5	E440	22500 mg/kg	108	70.0	130	----
QC-2386633-003	RM	Antimony	7440-36-0	E440	24.8 mg/kg	97.8	70.0	130	----
QC-2386633-003	RM	Arsenic	7440-38-2	E440	21.2 mg/kg	99.9	70.0	130	----
QC-2386633-003	RM	Barium	7440-39-3	E440	788 mg/kg	98.0	70.0	130	----
QC-2386633-003	RM	Beryllium	7440-41-7	E440	1.82 mg/kg	102	70.0	130	----
QC-2386633-003	RM	Bismuth	7440-69-9	E440	1.78 mg/kg	91.9	70.0	130	----
QC-2386633-003	RM	Cadmium	7440-43-9	E440	2.15 mg/kg	103	70.0	130	----
QC-2386633-003	RM	Calcium	7440-70-2	E440	4900 mg/kg	99.0	70.0	130	----
QC-2386633-003	RM	Chromium	7440-47-3	E440	56.9 mg/kg	101	70.0	130	----
QC-2386633-003	RM	Cobalt	7440-48-4	E440	32 mg/kg	101	70.0	130	----
QC-2386633-003	RM	Copper	7440-50-8	E440	969 mg/kg	101	70.0	130	----
QC-2386633-003	RM	Iron	7439-89-6	E440	32700 mg/kg	105	70.0	130	----
QC-2386633-003	RM	Lead	7439-92-1	E440	919 mg/kg	97.8	70.0	130	----
QC-2386633-003	RM	Lithium	7439-93-2	E440	47.3 mg/kg	105	70.0	130	----
QC-2386633-003	RM	Magnesium	7439-95-4	E440	7780 mg/kg	106	70.0	130	----
QC-2386633-003	RM	Manganese	7439-96-5	E440	8640 mg/kg	104	70.0	130	----
QC-2386633-003	RM	Molybdenum	7439-98-7	E440	25.1 mg/kg	97.7	70.0	130	----
QC-2386633-003	RM	Nickel	7440-02-0	E440	1000 mg/kg	104	70.0	130	----
QC-2386633-003	RM	Phosphorus	7723-14-0	E440	660 mg/kg	102	70.0	130	----
QC-2386633-003	RM	Potassium	7440-09-7	E440	10800 mg/kg	110	70.0	130	----
QC-2386633-003	RM	Selenium	7782-49-2	E440	1.04 mg/kg	98.6	60.0	140	----
QC-2386633-003	RM	Silver	7440-22-4	E440	8.98 mg/kg	94.3	70.0	130	----
QC-2386633-003	RM	Sodium	7440-23-5	E440	1770 mg/kg	114	70.0	130	----
QC-2386633-003	RM	Strontium	7440-24-6	E440	41 mg/kg	102	70.0	130	----
QC-2386633-003	RM	Sulfur	7704-34-9	E440	3940 mg/kg	104	50.0	150	----
QC-2386633-003	RM	Thallium	7440-28-0	E440	0.907 mg/kg	101	70.0	130	----
QC-2386633-003	RM	Tin	7440-31-5	E440	3.79 mg/kg	99.7	40.0	160	----
QC-2386633-003	RM	Titanium	7440-32-6	E440	2790 mg/kg	104	70.0	130	----
QC-2386633-003	RM	Tungsten	7440-33-7	E440	6.99 mg/kg	104	70.0	130	----
QC-2386633-003	RM	Uranium	7440-61-1	E440	3.97 mg/kg	88.7	70.0	130	----
QC-2386633-003	RM	Vanadium	7440-62-2	E440	66.2 mg/kg	101	70.0	130	----

Sub-Matrix:

					Reference Material (RM) Report				
					RM Target	Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Reference Material ID	Analyte	CAS Number	Method	Concentration	RM	Low	High	Qualifier
Metals (QCLot: 2386633) - continued									
QC-2386633-003	RM	Zinc	7440-66-6	E440	828 mg/kg	98.6	70.0	130	----
QC-2386633-003	RM	Zirconium	7440-67-7	E440	6.91 mg/kg	123	70.0	130	----
Aggregate Organics (QCLot: 2383261)									
QC-2383261-003	RM	Carbon, total organic [TOC]	----	E357	0.386 %	89.8	70.0	130	----

SC7.185

Baffinland

Chain of Custody: 25 09 26_AEMP Fall Sediment

Client Info	Project Info	Laboratory Info	
Baffinland Iron Mine Corporation 2275 Upper Middle Rd E, Suite 300 Oakville, ON, L6H 0C3 **Phone:** 647-253-0596 x6016/6039/4131 **Email:** environment.coordinators@baffinland.com; environment.superintendents@baffinland.com	**Job Reference (Project):** AEMP Fall Sediment **Task:** , AEMP_Sediment_250925 **Site:** MS	**Lab Name:** ALS Waterloo **Contact:** Rick Hawthorne **Phone:** 519.886.6910 **Email:** Rick.Hawthorne@ALSGlobal.com	**Address:** Unit 1 - 60 Northland Road Waterloo, ON,N2V 2B8
Email Invoice: ap@baffinland.com; environment.superintendents@baffinland.com **Email EDD:** bim.equissa@baffinland.com **Email COA:** environment.labresults@baffinland.com	**Turn around Time:** Routine (R) **Sampler 1:** LG **Sampler 2:** JM **Sampler 3:** RR	**ALS Quote #:** WT2020BIMC1000001 **ALS PO #:** 4500156571	

Environmental Division
Waterloo
Work Order Reference
WT2536082

Telephone : +1 519 886 6910

Sample Details				Field Data														
Sample ID (sys_sample_code)	Location (sys_loc_code)	Sample Date and Time	Matrix			Total # of Containers	E137	E440 & E510										
SL-DEEP-1C_2025-09-25	SL-DEEP-1C	9/25/2025 10:30:00 AM	SE			1	X											
SL-DEEP-1C_2025-09-25	SL-DEEP-1C	9/25/2025 10:30:00 AM	SE			1		X										
SL-DEEP-1D_2025-09-25	SL-DEEP-1D	9/25/2025 10:55:00 AM	SE			1	X											
SL-DEEP-1D_2025-09-25	SL-DEEP-1D	9/25/2025 10:55:00 AM	SE			1		X										
SL-DEEP-1A_2025-09-25	SL-DEEP-1A	9/25/2025 11:00:00 AM	SE			1	X											
SL-DEEP-1A_2025-09-25	SL-DEEP-1A	9/25/2025 11:00:00 AM	SE			1		X										
SL-DEEP-1E_2025-09-25	SL-DEEP-1E	9/25/2025 11:10:00 AM	SE			1	X											
SL-DEEP-1E_2025-09-25	SL-DEEP-1E	9/25/2025 11:10:00 AM	SE			1		X										

Baffinland

Sample Details				Field Data			Analysis Requested											
Sample ID (sys_sample_code)	Location (sys_loc_code)	Sample Date and Time	Matrix			Total # of Containers	E137	E440 & E510										
SL-DEEP-1B_2025-09-25	SL-DEEP-1B	9/25/2025 11:15:00 AM	SE			1	X											
SL-DEEP-1B_2025-09-25	SL-DEEP-1B	9/25/2025 11:15:00 AM	SE			1		X										
SL-SHAL-1D_2025-09-25	SL-SHAL-1D	9/25/2025 12:25:00 PM	SE			1	X											
SL-SHAL-1D_2025-09-25	SL-SHAL-1D	9/25/2025 12:25:00 PM	SE			1		X										
SL-SHAL-1E_2025-09-25	SL-SHAL-1E	9/25/2025 12:25:00 PM	SE			1	X											
SL-SHAL-1E_2025-09-25	SL-SHAL-1E	9/25/2025 12:25:00 PM	SE			1		X										
SL-SHAL-1A_2025-09-25	SL-SHAL-1A	9/25/2025 12:30:00 PM	SE			1	X											
SL-SHAL-1A_2025-09-25	SL-SHAL-1A	9/25/2025 12:30:00 PM	SE			1		X										
SL-SHAL-1B_2025-09-25	SL-SHAL-1B	9/25/2025 12:45:00 PM	SE			1	X											
SL-SHAL-1B_2025-09-25	SL-SHAL-1B	9/25/2025 12:45:00 PM	SE			1		X										
SL-SHAL-1C_2025-09-25	SL-SHAL-1C	9/25/2025 12:45:00 PM	SE			1	X											
SL-SHAL-1C_2025-09-25	SL-SHAL-1C	9/25/2025 12:45:00 PM	SE			1		X										
SL-SHAL-2C_2025-09-25	SL-SHAL-2C	9/25/2025 1:20:00 PM	SE			1	X											
SL-SHAL-2C_2025-09-25	SL-SHAL-2C	9/25/2025 1:20:00 PM	SE			1		X										

Baffinland

Sample Details				Field Data			Analysis Requested												
Sample ID (sys_sample_code)	Location (sys_loc_code)	Sample Date and Time	Matrix			Total # of Containers	E137	E440 & E510											
SL-SHAL-2B_2025-09-25	SL-SHAL-2B	9/25/2025 1:45:00 PM	SE			1	X												
SL-SHAL-2B_2025-09-25	SL-SHAL-2B	9/25/2025 1:45:00 PM	SE			1		X											
SL-SHAL-2A_2025-09-25	SL-SHAL-2A	9/25/2025 2:45:00 PM	SE			1	X												
SL-SHAL-2A_2025-09-25	SL-SHAL-2A	9/25/2025 2:45:00 PM	SE			1		X											
SL-SHAL-2E_2025-09-26	SL-SHAL-2E	9/26/2025 3:30:00 PM	SE			1	X												
SL-SHAL-2E_2025-09-26	SL-SHAL-2E	9/26/2025 3:30:00 PM	SE			1		X											
SL-SHAL-2D_2025-09-26	SL-SHAL-2D	9/26/2025 3:40:00 PM	SE			1	X												
SL-SHAL-2D_2025-09-26	SL-SHAL-2D	9/26/2025 3:40:00 PM	SE			1		X											

Relinquished by:	Rachel Noddle	Date:	
Additional Comments			
Initial Shipment Reception (lab use only)		Final Shipment Reception (lab use only)	
Received by:		Received by:	
Date/Time:		Date/Time:	20 NOV 25 11:45

Dry weights and bulk density should be prioritized. Provided there's enough sample, we can analyze filters for metals and TOC If there are any issues with sample masses for particle size/chemistry/bulk density - reach out to BIM before proceeding.