Appendix 41

Meadowbank and Whale Tail
2025 Quality Assurance-Quality Control Results

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SECTION 1. QAQC SAMPLING

As required by NIRB Project Certificate No.004, Condition 23: ***ensure that water quality monitoring performed at locations within receiving waters that allow for an assimilative capacity assessment of concern to regulators, be carried out by an independent contractor and submitted to an independent accredited lab for analysis, on a type and frequency basis as determined by the NWB; results of analysis shall be provided to the NWB and NIRB's Monitoring Officer.***

And

As required by NWB Water License 2AM-MEA1530 Part I, Item 17: ***The Licensee shall annually review the approved QA/QC Plan and modify the Plan as necessary. Proposed changes shall be submitted to an Accredited Laboratory for approval.***

And

As required by NWB Water License 2AM-WTP1830 Part I, Item 20: ***The Licensee shall annually review the approved QA/QC Plan and modify the Plan as necessary. Proposed changes shall be submitted to an Accredited Laboratory for approval.***

The objective of quality assurance and quality control (QA/QC) program is to assure that the chemical data collected are representative of the material being sampled, are of known quality, are properly documented, and are scientifically defensible. Data quality was assured throughout the collection and analysis of samples using specified standardized procedures, by the employment of accredited laboratories, and by staffing the program with experienced technicians.

Most of the chemical analyses for Meadowbank and Whale Tail sites were performed by Bureau Veritas (BV) in Ontario, an accredited facility. All data from BV lab underwent a vigorous internal QA/QC process, including the use of spiked samples and duplicate samples. All QA/QC data passed the laboratories acceptable limits. The laboratory certificates of quality control can be provided on request for Meadowbank and Whale Tail.

Toxicity and sublethal tests were performed by Nautilus Environmental in Ontario. Testing was conducted as stipulated in the corresponding Environment Canada Biological Test Methods. QA/QC measures implemented by the lab, including the use of reference toxicants, met the acceptable limits. Toxicity reports for Meadowbank and Whale Tail can be provided on request.

Agnico Eagle also requires the services of laboratories such as Bureau Veritas in Edmonton, Alberta, H2Lab in Val-D'Or, Quebec, and SGS in Lakefield, Ontario. Agnico Eagle also uses the services of ALS for the CREMP water quality analysis.

Field blanks (FB) are laboratory bottles filled with deionized water (DI), which are opened in the field and treated as a normal sample (N). They are used to identify errors or contamination in sample collection and analysis. Trip blank (TB) are laboratory pre-filed bottles with DI water carried to the sampling location and are left unopened. Duplicate field water quality samples (FD) are collected simultaneously in the field and used to assess sampling variability and sample homogeneity.

Analytical precision is a measurement of the variability associated with duplicate analyses of the same sample in the laboratory. Duplicate results were assessed using the relative percent difference (RPD)

between measurements. RPD values is also calculated for field blanks and lab blanks. The equation used to calculate a RPD is:

RPD = (A-B)/ ((A+B)/2)*100; where: A = field sample; B = duplicate sample.

Large variations in RPD values are often observed between duplicate samples when the concentrations of analytes are low and approaching the detection limit. Consequently, a RPD of 20% for concentrations of field and duplicates samples that both exceed 10x the method detection limit (MDL) is considered notable.

The analytical precision of one QA/QC sampling event is characterized as:

- High, when less than 10% of the parameters have variations that are notable;
- Medium, when 10 to 30% of the parameters have variations that are notable;
- Low, when more than 30% of the parameters have variations that are notable.

In 2025, the QA/QC plan was followed, and samples were collected by qualified technicians. It is common to have some RPD exceedances as a result of the discrete differences in the original and field duplicates. Given the variability of these exceedances (occurring with different parameters, on different dates for different sampling programs) and the high number of successful samples, it is evident that field QA/QC standards during water sampling were maintained during sampling in 2025. Agnico Eagle technicians will continue to follow standard QA/QC procedures for surface water sampling that requires the use of sample bottles that are provided by an accredited laboratory, proper handling and storage of bottles to prevent cross-contamination between areas and, if appropriate, thoroughly rinsing the sample containers with sample water prior to sample collection. Each equipment used for field measurement are calibrated prior each usage. Calibration datasheets are kept for future reference, if needed. QAQC results for Meadowbank and Whale Tail sites is presented on the following sections.

1.1 MEADOWBANK SITE

In 2025, 294 water samples were collected (excluding Groundwater and CREMP monitoring programs), 57 duplicates, 55 field blanks and 42 trip blanks, representing 19% of duplicates, 19% of field blanks and 14% of trip blanks which is above the QA/QC duplicate and trip blank program objective of 10%.

The following presents the percentage of duplicate and field samples collected from each of the monitoring programs:

- MDMER and EEM monitoring programs: 11 duplicate samples, 11 field blanks and 9 trip blanks were collected from a total of 49 samples, representing 22% of duplicates, 22% of field blanks, and 18% of trip blanks;
- Sewage Treatment Plant monitoring program: 6 duplicate samples, 6 field blanks, and 6 trip blanks were collected from a total of 36 samples, representing 17% of duplicates, 17% of field blanks, and 17% for trip blanks;
- Surface water monitoring programs: 37 duplicate samples, 35 field blanks and 26 trip blanks were collected from a total of 203 samples, representing 18% for duplicates, 17% for field blanks, and 13% for trip blanks;

- Bulk fuel storage facilities monitoring program: 3 duplicate samples, 3 field blanks, and 1 trip blank were collected from a total of 6 samples, representing 50 % for duplicates, 50% for field blanks, and 17% for trip blanks;

- Groundwater monitoring program: Duplicates were collected for each station during the June and August/September monitoring sessions. One (1) field blank and one (1) trip blank were also collected for each groundwater monitoring sessions, which aligns with the frequency outlined in the current QAQC Management Plan. Refer to Section 4.8 of the 2025 Meadowbank Groundwater Monitoring Report for more details; and

- Core Receiving Environment Monitoring Program: A combined total of 20 duplicates were collected between the Meadowbank Lakes, Baker Lake, and the Whale Tail Lakes, corresponding to approximately 16% of the total number of water samples (218) collected in 2025. Travel blanks (TB), de-ionized (DI) blanks and Equipment Blanks were submitted for all sampling events, which aligns with the frequency outlined in the current QAQC Management Plan. Refer to 2025 CREMP Report for more details.

Meadowbank results of the QA/QC data are presented below in Table 1-1 to Table 1-36 for the MDMER and EEM, Surface Water, Sewage Treatment Plant and Bulk Fuel Storage Facility monitoring programs. The following is a summary of the analytical precision (RPD), per sampling program:

- MDMER and EEM (Table 1-1 to Table 1-7): All the duplicate samples collected were considered as having high analytical precision, with the exception of one (1) sample having a medium analytical precision of 15%.

- Surface Water (Table 1-8 to Table 1-34): All QA/QC sampling events conducted within the surface water quality program are rated as having high analytical precision except for seven (7) samples having a medium analytical precision of 10% (x2), 11% (x2), 14% and 17% (x2).

- Sewage Treatment Plant (Table 1-35): Half duplicate samples collected were considered as having high analytical precision, two (2) samples as having medium analytical precision (13% and 22%), and one (1) sample having low analytical precision of 38%.

- Bulk Fuel Storage Facility (Table 1-36): All the duplicate samples collected were considered as having high analytical precision.

RPD values were also calculated for field blanks and lab blanks in 2025. All field blank samples are considered to have high analytical precision.

Table 1-1 Meadowbank 2025 Vault Attenuation Pond Discharge MDMER QAQC (ST-MMER-2)

ST-MMER-2	Sample date		9/2/2025							9/22/2025						10/6/2025		
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Trip Blank**	**Original**
Conventional Parameters																		
TSS	mg/L	1	1	1	1	2	3	**40.00**	0.00	1	1	1	1	0.00	0.00	1	1	3
Major Ions																		
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005	0.0005
Nutrients																		
Un-Ionized Ammonia, calculated	mg/L	0.0001	0.0004	0.0004	-	0.0004	0.0004	0.00	-	-	-	0.0004	0.0004	0.00	-	-	-	0.0004
Total Metals																		
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.00048	0.00054	11.76	0.00	0.0001	0.0001	0.00057	0.00056	1.77	0.00	0.0001	0.0001	0.00059
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00249	0.00443	**56.07**	0.00	0.0005	0.0005	0.00181	0.00274	**40.88**	0.00	0.0005	0.0005	0.00163
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.00034	0.00041	18.67	0.00	0.0002	0.0002	0.0002	0.00026	**26.09**	0.00	0.0002	0.0002	0.0002
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.0011
Zinc	mg/L	0.005	0.005	0.005	0.005	0.0186	0.0134	**32.50**	0.00	0.005	0.005	0.0157	0.0159	1.27	0.00	0.005	0.005	0.005
Radionuclides																		
Radium-226	Bq/l	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005
% Exceedance*								0%	0%					0%	0%			

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-2 Meadowbank 2025 East Dike Discharge MDMER QAQC (ST-MMER-3)

ST-MMER-3	Sample date		1/6/2025							3/3/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters																
TSS	mg/L	1	1	1	1	3	3	0.00	0.00	1	1	1	2	2	0.00	0.00
Major Ions																
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Nutrients																
Un-Ionized Ammonia, calculated	mg/L	0.0001	-	-	-	0.0046	0.0046	0.00	-	-	-	-	0.00059	0.00059	0.00	-
Total Metals																
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.00099	0.00095	4.12	0.00	0.0001	0.0001	0.0001	0.00096	0.00094	2.11	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00122	0.00125	2.43	0.00	0.0005	0.0005	0.0005	0.00131	0.00142	8.06	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Radionuclides																
Radium-226	Bq/l	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*								0%	0%						0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-3 Meadowbank 2025 Vault Attenuation Pond Discharge EEM Effluent Characterization QAQC (ST-MMER-2-EEM)

ST-MMER-2-EEM	Sample date		9/22/2025							10/6/2025						11/10/2025	
Parameter	Unit	MDL	Trip Blank	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	Trip Blank	Original
Conventional Parameters																	
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	63.5	63.3	0.32	-	0.5	-	61.5	61.7	0.32	-	0.5	71.7
Total alkalinity, as $CaCO_3$	mg/L	1	1	1.1	1	32	41	24.66	9.52	1.9	1	35	33	5.88	**62.07**	1	37
Major Ions																	
Chloride	mg/L	1	1	1	1	2.4	2.9	18.87	0.00	1	1	2.5	2.5	0.00	0.00	1	2.4
Sulfate	mg/L	0.5	0.5	0.5	0.5	36	37	2.74	0.00	0.57	0.5	38	40	5.13	13.08	0.5	43
Nutrients																	
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.0011	0.002	**58.06**	0.00	0.0013	0.0011	0.0029	0.0047	**47.37**	16.67	0.001	0.0015
Total Metals																	
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.0116	0.0111	4.41	0.00	0.003	0.003	0.0419	0.0405	3.40	0.00	0.003	0.0223
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001
Cobalt	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002
Iron	mg/L	0.01	0.01	0.01	0.01	0.024	0.021	13.33	0.00	0.01	0.01	0.079	0.08	1.26	0.00	0.01	0.077
Manganese	mg/L	0.001	0.001	0.001	0.001	0.0029	0.0029	0.00	0.00	0.001	0.001	0.0054	0.0054	0.00	0.00	0.001	0.01
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.0037	0.0036	2.74	0.00	0.001	0.001	0.0035	0.0035	0.00	0.00	0.001	0.0035
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00084	0.00084	0.00	0.00	0.0001	0.0001	0.0008	0.00077	3.82	0.00	0.0001	0.00099
% Exceedance*								6%	0%					0%	0%		

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-4 Meadowbank 2025 East Dike EEM Effluent Characterization QAQC (ST-MMER-3-EEM)

ST-MMER-3-EEM	Sample date		1/6/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters								
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	33	30.3	8.53	-
Total alkalinity, as $CaCO_3$	mg/L	1	6.4	1	54	28	63.41	**145.95**
Major Ions								
Chloride	mg/L	1	1	1	1.4	1.3	7.41	0.00
Sulfate	mg/L	0.5	0.5	0.5	8.6	8.4	2.35	0.00
Nutrients								
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.0017	0.0014	19.35	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.0488	0.0457	6.56	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Iron	mg/L	0.01	0.01	0.01	0.051	0.045	12.50	0.00
Manganese	mg/L	0.001	0.001	0.001	0.0014	0.0013	7.41	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.0004	0.00038	5.13	0.00
% Exceedance*							6%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-5 Meadowbank 2025 EEM Exposure Area Second Portage QAQC (ST-MMER-2-EEM-WLE)

ST-MMER-2-EEM-WLE	Sample date		9/21/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters									
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	24.4	24	1.65	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	1	15	15	0.00	0.00
TSS	mg/L	1	1	1	1	1	1	0.00	0.00
Major Ions									
Chloride	mg/L	1	1	1	1	1	1	0.00	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	0.5	10	11	9.52	0.00
Nutrients									
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Un-Ionized Ammonia, calculated	mg N/L	0.0001	-	-	-	0.0004	0.0004	0.00	-
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.0019	0.0011	0.0017	**42.86**	**62.07**
Total Metals									
Aluminum	mg/L	0.0005	0.00209	0.03	0.0005	0.0074	0.00683	8.01	*193.44*
Arsenic	mg/L	0.00002	0.00002	0.000027	0.00002	0.000339	0.000318	6.39	**29.79**
Cadmium	mg/L	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00
Chromium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Cobalt	mg/L	0.000005	0.000005	0.0000095	0.000005	0.0000204	0.0000197	3.49	**62.07**
Copper	mg/L	0.00005	0.00005	0.000102	0.00005	0.00126	0.00125	0.80	**68.42**
Iron	mg/L	0.001	0.001	0.0111	0.001	0.0296	0.0223	28.13	*166.94*
Lead	mg/L	0.000005	0.000005	0.0000612	0.000005	0.0000215	0.0000247	13.85	*169.79*
Manganese	mg/L	0.00005	0.00005	0.000371	0.00005	0.00215	0.00205	4.76	**152.49**
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.00005	0.00005	0.000146	0.00005	0.000231	0.000262	12.58	**97.96**
Nickel	mg/L	0.00002	0.00002	0.000123	0.00002	0.000537	0.000513	4.57	**144.06**
Selenium	mg/L	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00	0.00
Thallium	mg/L	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.00	0.00
Uranium	mg/L	0.000002	0.0000027	0.0000055	0.000002	0.000077	0.0000715	7.41	**93.33**
Zinc	mg/L	0.0001	0.00031	0.00144	0.0001	0.00041	0.00046	11.49	*174.03*
Radionuclides									
Radium-226	Bq/l	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*								4%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-6 Meadowbank 2025 EEM Exposure Area Second Portage QAQC (ST-MMER-3-EEM-SPLE)

ST-MMER-3-EEM-SPLE	Sample date		2/2/2025						4/27/2025	
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Conventional Parameters										
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	17.8	18.3	2.77	-	0.5	18.8
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	11	11	0.00	0.00	1	15
TSS	mg/L	1	1	1	1	1	0.00	0.00	1	1
Major Ions										
Chloride	mg/L	1	1	1	1	1	0.00	0.00	1	1.2
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.00054
Sulfate	mg/L	0.5	0.5	0.5	7.6	7.7	1.31	0.00	0.5	7.4
Nutrients										
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05
Un-Ionized Ammonia, calculated	mg N/L	0.0001	-	-	0.0004	0.0004	0.00	-	-	0.0004
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001
Total Metals										
Aluminum	mg/L	0.0005	0.0005	0.0005	0.0127	0.00552	78.81	0.00	0.0005	0.00782
Arsenic	mg/L	0.00002	0.00002	0.00002	0.00055	0.00039	34.04	0.00	0.00002	0.000458
Cadmium	mg/L	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00	0.000005	0.000005
Chromium	mg/L	0.0001	0.0001	0.0001	0.00013	0.0001	**26.09**	0.00	0.0001	0.0001
Cobalt	mg/L	0.000005	0.000005	0.000005	0.000035	0.000014	**85.71**	0.00	0.000005	0.0000185
Copper	mg/L	0.00005	0.00005	0.00005	0.00183	0.000647	95.52	0.00	0.00005	0.000686
Iron	mg/L	0.001	0.001	0.001	0.0208	0.0076	*92.96*	0.00	0.001	0.0112
Lead	mg/L	0.000005	0.000005	0.000005	0.000603	0.000027	*182.86*	0.00	0.000005	0.0000067
Manganese	mg/L	0.00005	0.00005	0.00005	0.00195	0.000638	101.39	0.00	0.00005	0.000612
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.000154	0.000147	4.65	0.00	0.00005	0.000159
Nickel	mg/L	0.00002	0.00002	0.00002	0.000809	0.000703	14.02	0.00	0.00002	0.000919
Selenium	mg/L	0.00004	0.00004	0.00004	0.00004	0.00004	0.00	0.00	0.00004	0.00004
Thallium	mg/L	0.000002	0.000002	0.000002	0.000002	0.000002	0.00	0.00	0.000002	0.000002
Uranium	mg/L	0.000002	0.000002	0.000002	0.000072	0.000068	5.71	0.00	0.000002	0.0000685
Zinc	mg/L	0.0001	0.0001	0.0001	0.00281	0.00032	*159.11*	0.00	0.0001	0.00139
Radionuclides										
Radium-226	Bq/l	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
% Exceedance*							15%	0%		

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-7 Meadowbank 2025 EEM Reference Area Third Portage Lake QAQC (ST-MMER-1-EEM-TPS)

ST-MMER-1-EEM-TPS	Sample date		2/2/2025						4/27/2025		9/21/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters																
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	12	11.6	3.39	-	0.5	11.1	0.5	-	10.5	10.6	0.95	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	7.4	6.8	8.45	0.00	1	10	1.4	1	7.1	6.6	7.30	**33.33**
TSS	mg/L	1	1	1	1	1	0.00	0.00	1	1	1	1	1	1	0.00	0.00
Major Ions																
Chloride	mg/L	1	1	1	1	1	0.00	0.00	1	1	1	1	1	1	0.00	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.00051	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	5.2	5.3	1.90	0.00	0.5	4.8	0.5	0.5	4.1	4.2	2.41	0.00
Nutrients																
Ammonia Nitrogen	mg N/L	0.05	0.057	0.05	0.05	0.05	0.00	13.08	0.05	0.05	0.05	0.05	0.078	0.072	8.00	0.00
Un-Ionized Ammonia, calculated	mg N/L	0.0001	-	-	0.0004	0.0004	0.00	-	-	0.0004	-	-	0.0004	0.0004	0.00	-
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.0014	**33.33**	0.00	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Total Metals																
Aluminum	mg/L	0.0005	0.0005	0.0005	0.00465	0.00558	18.18	0.00	0.0005	0.00501	0.00194	0.0005	0.00416	0.00385	7.74	**118.03**
Arsenic	mg/L	0.00002	0.00002	0.00002	0.000198	0.000186	6.25	0.00	0.00002	0.000196	0.00002	0.00002	0.00018	0.000181	0.55	0.00
Cadmium	mg/L	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00
Chromium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.00011	0.0001	0.0001	0.00015	0.0001	**40.00**	0.00
Cobalt	mg/L	0.000005	0.000005	0.000005	0.000019	0.00002	5.13	0.00	0.000005	0.0000113	0.000005	0.000005	0.0000139	0.0000114	19.76	0.00
Copper	mg/L	0.000005	0.00005	0.00005	0.000447	0.000445	0.45	0.00	0.00005	0.000501	0.00005	0.00005	0.000454	0.000434	4.50	0.00
Iron	mg/L	0.001	0.001	0.001	0.0049	0.0057	15.09	0.00	0.001	0.0058	0.001	0.001	0.0069	0.0064	7.52	0.00
Lead	mg/L	0.000005	0.00001	0.000005	0.000028	0.000035	**22.22**	**66.67**	0.000005	0.0000086	0.000005	0.000005	0.000005	0.0000053	5.83	0.00
Manganese	mg/L	0.00005	0.00005	0.00005	0.000617	0.000702	12.89	0.00	0.00005	0.000492	0.00005	0.00005	0.00149	0.00159	6.49	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.000119	0.00011	7.86	0.00	0.00005	0.000126	0.00005	0.00005	0.000099	0.0001	1.01	0.00
Nickel	mg/L	0.00002	0.00002	0.00002	0.00065	0.000618	5.05	0.00	0.000021	0.000696	0.000025	0.00002	0.000544	0.000555	2.00	**22.22**
Selenium	mg/L	0.00004	0.00004	0.00004	0.00004	0.00004	0.00	0.00	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00	0.00
Thallium	mg/L	0.000002	0.000002	0.000002	0.000002	0.000002	0.00	0.00	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.00	0.00
Uranium	mg/L	0.000002	0.000002	0.000002	0.000055	0.000058	5.31	0.00	0.000002	0.0000522	0.000002	0.000002	0.0000356	0.0000352	1.13	0.00
Zinc	mg/L	0.0001	0.0001	0.0001	0.00022	0.00063	**96.47**	0.00	0.0001	0.00057	0.00069	0.0001	0.00015	0.00021	**33.33**	**149.37**
Radionuclides																
Radium-226	Bq/l	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*							0%	0%							0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-8 Meadowbank 2025 Non-Contact Water East Diversion Ditch QAQC (ST-5)

ST-5	Sample date		6/8/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters									
TSS	mg/L	1	1	1	1	2	1	**66.67**	0.00
Major Ions									
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.00056	0.0005	11.32	0.00
Sulfate	mg/L	1	1	1	1	5.8	5.8	0.00	0.00
Total Metals									
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.129	0.12	7.23	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.00466	0.00491	5.22	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.0052	0.00572	9.52	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.00043	0.00047	8.89	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0022	0.0023	4.44	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Radionuclides									
Radium-226	Bq/l	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*								0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-9 Meadowbank 2025 Non-Contact Water West Diversion Ditch QAQC (ST-6)

ST-6	Sample date		7/12/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters									
TSS	mg/L	1	1	1	1	2	2	0.00	0.00
Major Ions									
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Sulfate	mg/L	1	1	1	1	5.1	5.1	0.00	0.00
Total Metals									
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.0195	0.0208	6.45	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.00029	0.00033	12.90	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00053	5.83	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Radionuclides									
Radium-226	Bq/l	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*								0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.
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Table 1-10 Meadowbank 2025 East Dike Discharge QAQC (ST-8)

ST-8	Sample date		1/6/2025							3/3/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters																
TSS	mg/L	1	1	1	1	3	3	0.00	0.00	1	1	1	2	2	0.00	0.00
Major Ions																
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	0.5	8.5	8.5	0.00	0.00	0.5	0.5	0.5	11	11	0.00	0.00
Total Metals																
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.0471	0.0594	23.10	0.00	0.003	0.003	0.003	0.0392	0.0386	1.54	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.00099	0.00095	4.12	0.00	0.0001	0.0001	0.0001	0.00096	0.00094	2.11	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00122	0.00125	2.43	0.00	0.0005	0.0005	0.0005	0.00131	0.00142	8.06	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Radionuclides																
Radium-226	Bq/l	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*								10%	0%						0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-11 Meadowbank 2025 Vault Attenuation Pond Discharge QAQC (ST-10)

ST-10	Sample date		9/2/2025							9/22/2025						10/6/2025	
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Conventional Parameters																	
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	57.8	57.8	0.00	-	0.5	-	62.1	64	3.01	-	0.5	62
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	1	31	31	0.00	0.00	1	1	32	31	3.17	0.00	2.7	31
Carbonate, as $CaCO_3$	mg/L	1	1	1	-	1	1	0.00	-	1	-	1	1	0.00	-	1	1
Bicarbonate, as $CaCO_3$	mg/L	1	1	1	-	31	31	0.00	-	1	-	31	31	0.00	-	2.7	31
TDS	mg/L	10	10	10	10	80	65	**20.69**	0.00	10	10	65	75	14.29	0.00	10	55
TSS	mg/L	1	1	1	1	2	3	**40.00**	0.00	1	1	1	1	0.00	0.00	1	3
Total organic carbon	mg/L	0.4	0.4	0.4	0.4	2.6	2.6	0.00	0.00	0.4	0.4	2.5	2.5	0.00	0.00	0.4	2.5
Dissolved organic carbon	mg/L	0.4	0.4	0.4	0.4	2.6	2.5	3.92	0.00	0.43	0.4	2.3	2.3	0.00	7.23	0.4	2.3
Major Ions																	
Chloride	mg/L	1	1	1	1	2.4	2.4	0.00	0.00	1	1	2.4	2.4	0.00	0.00	1	2.5
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005
Cyanide (free)	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005
Silica	mg/L	0.05	0.05	0.05	0.05	0.14	0.16	13.33	0.00	0.05	0.05	0.15	0.08	**60.87**	0.00	0.05	0.2
Sulfate	mg/L	0.5	0.5	0.5	0.5	35	35	0.00	0.00	0.5	0.5	36	36	0.00	0.00	0.54	38
Nutrients																	
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	0.1	0.15	0.14	6.90	0.00	0.1	0.1	0.16	0.18	11.76	0.00	0.1	0.13
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.0019	0.001	0.001	0.00	**62.07**	0.0017	0.0032
Orthophosphate	mg P/L	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01
Total Metals																	
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.0215	0.0209	2.83	0.00	0.003	0.003	0.012	0.012	0.00	0.00	0.003	0.0422
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.00048	0.00054	11.76	0.00	0.0001	0.0001	0.00057	0.00056	1.77	0.00	0.0001	0.00059
Barium	mg/L	0.001	0.001	0.001	0.001	0.0087	0.0087	0.00	0.00	0.001	0.001	0.0094	0.0095	1.06	0.00	0.001	0.0102
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Calcium (total)	mg/L	0.05	0.05	0.05	-	16.3	16.1	1.23	-	0.05	-	17.3	17.9	3.41	-	0.05	17
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00249	0.00443	**56.07**	0.00	0.0005	0.0005	0.00181	0.00274	**40.88**	0.00	0.0005	0.00163
Iron	mg/L	0.01	0.01	0.01	0.01	0.038	0.035	8.22	0.00	0.01	0.01	0.026	0.024	8.00	0.00	0.01	0.082
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.00034	0.00041	18.67	0.00	0.0002	0.0002	0.0002	0.00026	**26.09**	0.00	0.0002	0.0002
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.00	0.00	0.002	0.002	0.002	0.002	0.00	0.00	0.002	0.002
Magnesium (total)	mg/L	0.05	0.05	0.05	-	4.17	4.26	2.14	-	0.05	-	4.6	4.68	1.72	-	0.05	4.73
Manganese	mg/L	0.001	0.001	0.001	0.001	0.0031	0.003	3.28	0.00	0.001	0.001	0.0029	0.0027	7.14	0.00	0.001	0.0054
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.0033	0.0034	2.99	0.00	0.001	0.001	0.0036	0.0036	0.00	0.00	0.001	0.0036
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.0011
Potassium (total)	mg/L	0.05	0.05	0.05	-	1.3	1.31	0.77	-	0.05	-	1.33	1.32	0.75	-	0.05	1.34
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Sodium (total)	mg/L	0.05	0.05	0.05	-	1.5	1.52	1.32	-	0.05	-	1.55	1.55	0.00	-	0.05	1.6
Strontium	mg/L	0.001	0.001	0.001	0.001	0.0876	0.0873	0.34	0.00	0.001	0.001	0.0979	0.0948	3.22	0.00	0.001	0.0979
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00086	0.00087	1.16	0.00	0.0001	0.0001	0.00083	0.00085	2.38	0.00	0.0001	0.00079
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Zinc	mg/L	0.005	0.005	0.005	0.005	0.0186	0.0134	**32.50**	0.00	0.005	0.005	0.0157	0.0159	1.27	0.00	0.005	0.005

ST-10	Sample date		9/2/2025							9/22/2025						10/6/2025	
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Dissolved Metals																	
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.0077	0.0086	11.04	0.00	0.003	0.003	0.0058	0.0064	9.84	0.00	0.003	0.0087
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.0013	0.00193	39.01	0.00	0.0001	0.0001	0.00074	0.00058	**24.24**	0.00	0.0001	0.00053
Barium	mg/L	0.001	0.001	0.001	0.001	0.0089	0.0092	3.31	0.00	0.001	0.001	0.009	0.0094	4.35	0.00	0.001	0.0096
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.000011	9.52	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001
Copper	mg/L	0.0002	0.0002	0.0002	0.0002	0.00403	0.0206	134.55	0.00	0.0002	0.0002	0.00385	0.00762	65.74	0.00	0.0002	0.0013
Iron	mg/L	0.005	0.005	0.005	0.005	0.005	0.0058	14.81	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.012
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.002	0.00	0.00	0.002	0.002	0.002	0.002	0.00	0.00	0.002	0.002
Manganese	mg/L	0.001	0.001	0.001	0.001	0.0055	0.0028	**65.06**	0.00	0.001	0.001	0.0012	0.0013	8.00	0.00	0.001	0.002
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.0034	0.0035	2.90	0.00	0.001	0.001	0.0033	0.0034	2.99	0.00	0.001	0.0034
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0018	0.0095	**136.28**	0.00	0.001	0.001	0.001	0.0012	18.18	0.00	0.001	0.001
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00024	**82.35**	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Strontium	mg/L	0.001	0.001	0.001	0.001	0.0915	0.0904	1.21	0.00	0.001	0.001	0.0921	0.0937	1.72	0.00	0.001	0.0979
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00076	0.00074	2.67	0.00	0.0001	0.0001	0.00088	0.00089	1.13	0.00	0.0001	0.00082
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Zinc	mg/L	0.005	0.005	0.005	0.005	0.0063	0.0084	**28.57**	0.00	0.005	0.005	0.0136	0.0172	**23.38**	0.00	0.005	0.005
Volatile Organics																	
Petroleum Hydrocarbons F (C10-C50)	mg/L	0.2	0.2	0.2	-	0.2	0.2	0.00	-	0.2	-	0.25	0.25	0.00	-	0.2	0.2
% Exceedance*								3%	0%					1%	0%		

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-12 Meadowbank 2025 Portage WRSF QAQC (ST-16)

ST-16	Sample date		7/14/2025						9/8/2025	
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Conventional Parameters										
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	123	121	1.64	-	0.5	172
Total alkalinity, as $CaCO_3$	mg/L	1	1.2	1	86	85	1.17	18.18	1	110
Carbonate, as $CaCO_3$	mg/L	1	1	-	1	1	0.00	-	1	1
Bicarbonate, as $CaCO_3$	mg/L	1	1.2	-	86	85	1.17	-	1	110
TDS	mg/L	10	10	10	180	175	2.82	0.00	10	250
TSS	mg/L	1	1	1	21	18	15.38	0.00	1	4
Total organic carbon	mg/L	0.4	0.4	0.4	3.4	3.4	0.00	0.00	0.4	3.3
Dissolved organic carbon	mg/L	0.4	0.4	0.4	3.1	3.1	0.00	0.00	0.4	3.1
Colour	TCU	2	2	2	17	18	5.71	0.00	2	13
Major Ions										
Bromide	mg/L	1	1	1	1	1	0.00	0.00	1	1
Chloride	mg/L	1	1	1	2	2	0.00	0.00	1	3.5
Cyanide	mg/L	0.0005	0.0005	0.0005	0.00239	0.00248	3.70	0.00	0.0005	0.00213
Cyanide (free)	mg/L	0.0005	0.00061	0.0005	0.0011	0.00107	2.76	19.82	0.0005	0.00111
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.0014	0.0014	0.00	0.00	0.0005	0.0015
Fluoride	mg/L	0.1	0.1	0.1	0.2	0.2	0.00	0.00	0.1	0.19
Silica	mg/L	0.05	0.05	0.05	4.3	4.4	2.30	0.00	0.05	4.1
Sulfate	mg/L	0.5	0.5	0.5	63	64	1.57	0.00	0.5	97
Nutrients										
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.068	0.13	**62.63**	0.00	0.05	0.16
Nitrate	mg N/L	0.1	0.1	0.1	0.71	0.71	0.00	0.00	0.1	1.71
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.012	18.18	0.00	0.01	0.01
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	0.32	0.29	9.84	0.00	0.1	0.27
Total phosphorus	mg P/L	0.001	0.001	0.001	0.011	0.01	9.52	0.00	0.001	0.0027
Orthophosphate	mg P/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01
Total Metals										
Aluminum	mg/L	0.003	0.003	0.003	0.217	0.0733	99.00	0.00	0.003	0.0272
Antimony	mg/L	0.0005	0.0005	0.0005	0.00091	0.00089	2.22	0.00	0.0005	0.00052
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00929	0.0085	8.88	0.00	0.0001	0.00639
Barium	mg/L	0.001	0.001	0.001	0.0139	0.0134	3.66	0.00	0.001	0.0205
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Calcium (total)	mg/L	0.05	0.05	-	27.8	27.6	0.72	-	0.05	38.2
Chromium	mg/L	0.001	0.001	0.001	0.0038	0.0012	**104.00**	0.00	0.001	0.001
Cobalt	mg/L	0.0002	0.0002	0.0002	0.00098	0.00059	**49.68**	0.00	0.0002	0.00069
Copper	mg/L	0.0005	0.0005	0.0005	0.00876	0.0058	40.66	0.00	0.0005	0.00389
Iron	mg/L	0.01	0.01	0.01	0.747	0.475	44.52	0.00	0.01	0.496

ST-16	Sample date		7/14/2025						9/8/2025	
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00	0.002	0.002
Magnesium (total)	mg/L	0.05	0.05	-	13	12.7	2.33	-	0.05	18.5
Manganese	mg/L	0.001	0.001	0.001	0.134	0.113	17.00	0.00	0.001	0.223
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.001	0.001	0.001	0.0183	0.0185	1.09	0.00	0.001	0.0156
Nickel	mg/L	0.001	0.001	0.001	0.0093	0.0067	**32.50**	0.00	0.001	0.0072
Potassium (total)	mg/L	0.05	0.05	-	5.78	5.8	0.35	-	0.05	8.31
Selenium	mg/L	0.0001	0.0001	0.0001	0.00033	0.00033	0.00	0.00	0.0001	0.00024
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002
Sodium (total)	mg/L	0.05	0.05	-	4.43	4.36	1.59	-	0.05	6.1
Strontium	mg/L	0.001	0.001	0.001	0.151	0.153	1.32	0.00	0.001	0.203
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000011	9.52	0.00	0.00001	0.00001
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Titanium	mg/L	0.005	0.005	0.005	0.0064	0.005	**24.56**	0.00	0.005	0.005
Uranium	mg/L	0.0001	0.0001	0.0001	0.00375	0.00312	18.34	0.00	0.0001	0.00542
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Dissolved Metals										
Aluminum	mg/L	0.003	0.003	0.003	0.0119	0.0056	**72.00**	0.00	0.003	0.0056
Antimony	mg/L	0.0005	0.0005	0.0005	0.00088	0.00091	3.35	0.00	0.0005	0.00052
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00783	0.00936	17.80	0.00	0.0001	0.00259
Barium	mg/L	0.001	0.001	0.001	0.0129	0.0125	3.15	0.00	0.001	0.0226
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001
Cobalt	mg/L	0.0002	0.0002	0.0002	0.00063	0.00077	20.00	0.00	0.0002	0.00074
Copper	mg/L	0.0002	0.0002	0.0002	0.0151	0.00527	96.51	0.00	0.0002	0.00527
Iron	mg/L	0.005	0.005	0.005	0.198	0.178	10.64	0.00	0.005	0.0953
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00	0.002	0.002
Manganese	mg/L	0.001	0.001	0.001	0.121	0.124	2.45	0.00	0.001	0.25
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.001	0.001	0.001	0.0182	0.0164	10.40	0.00	0.001	0.0165
Nickel	mg/L	0.001	0.001	0.001	0.0072	0.0073	1.38	0.00	0.001	0.0079
Selenium	mg/L	0.0001	0.0001	0.0001	0.00032	0.00037	14.49	0.00	0.0001	0.00026
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002
Strontium	mg/L	0.001	0.001	0.001	0.153	0.15	1.98	0.00	0.001	0.202
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001

ST-16	Sample date		7/14/2025						9/8/2025	
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Uranium	mg/L	0.0001	0.0001	0.0001	0.0037	0.00363	1.91	0.00	0.0001	0.00599
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
% Exceedance*							5%	0%		

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-13 Meadowbank 2025 NP-2 South QAQC

NP2-South	Sample date		8/17/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters								
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	95.7	91.8	4.16	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	65	64	1.55	0.00
Carbonate, as $CaCO_3$	mg/L	1	1	-	1	1	0.00	-
Bicarbonate, as $CaCO_3$	mg/L	1	1	-	65	64	1.55	-
TDS	mg/L	10	10	10	110	90	20.00	0.00
TSS	mg/L	1	1	1	3	1	**100.00**	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	4	3.9	2.53	0.00
Dissolved organic carbon	mg/L	0.4	0.4	0.4	3.8	3.8	0.00	0.00
Colour	TCU	2	2	2	5	6	18.18	0.00
Major Ions								
Bromide	mg/L	1	1	1	1	1	0.00	0.00
Chloride	mg/L	1	1	1	2.3	2.3	0.00	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Cyanide (free)	mg/L	0.0005	0.0005	0.0005	0.00053	0.0005	5.83	0.00
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.14	0.14	0.00	0.00
Silica	mg/L	0.05	0.05	0.05	0.33	0.35	5.88	0.00
Sulfate	mg/L	0.5	0.5	0.5	40	39	2.53	0.00
Nutrients								
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	0.19	0.23	19.05	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.0018	0.002	10.53	0.00
Orthophosphate	mg P/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.0081	0.0074	9.03	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00251	0.00239	4.90	0.00
Barium	mg/L	0.001	0.001	0.001	0.0051	0.0048	6.06	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Calcium (total)	mg/L	0.05	0.05	-	23.3	22.4	3.94	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0023	0.00223	3.09	0.00
Iron	mg/L	0.01	0.01	0.01	0.046	0.044	4.44	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00
Magnesium (total)	mg/L	0.05	0.05	-	9.09	8.73	4.04	-
Manganese	mg/L	0.001	0.001	0.001	0.0102	0.01	1.98	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0031	0.003	3.28	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0095	0.0089	6.52	0.00
Potassium (total)	mg/L	0.05	0.05	-	2.27	2.14	5.90	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Sodium (total)	mg/L	0.05	0.05	-	2.69	2.59	3.79	-
Strontium	mg/L	0.001	0.001	0.001	0.102	0.0973	4.72	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.00236	0.00225	4.77	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Dissolved Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.0047	0.0063	**29.09**	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00217	0.00269	21.40	0.00
Barium	mg/L	0.001	0.001	0.001	0.0069	0.0058	17.32	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00424	0.00236	56.97	0.00
Iron	mg/L	0.005	0.005	0.005	0.0104	0.0123	16.74	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00

NP2-South	Sample date		8/17/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	0.0034	0.0039	13.70	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.003	0.0031	3.28	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0087	0.009	3.39	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Strontium	mg/L	0.001	0.001	0.001	0.102	0.102	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.00269	0.00262	2.64	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*							3%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-14 Meadowbank 2025 North Portage Pit QAQC (ST-17)

ST-17	Sample date		1/5/2025						8/3/2025		10/5/2025						12/1/2025	
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Conventional Parameters																		
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	993	975	1.83	-	0.5	978	0.5	-	985	869	12.51	-	0.5	1130
Total alkalinity, as $CaCO_3$	mg/L	1	1.7	1	150	150	0.00	**51.85**	1	120	1	1	120	110	8.70	0.00	1.2	120
Carbonate, as $CaCO_3$	mg/L	1	1	-	1	1.3	**26.09**	-	1	1	1	-	1	1	0.00	-	1	1
Bicarbonate, as $CaCO_3$	mg/L	1	1.7	-	150	150	0.00	-	1	120	1	-	110	110	0.00	-	1.2	120
TDS	mg/L	10	10	10	2830	2830	0.00	0.00	10	3220	10	10	3390	3360	0.89	0.00	10	3560
TSS	mg/L	1	1	1	3	2	**40.00**	0.00	1	6	1	1	5	4	**22.22**	0.00	1	4
Total organic carbon	mg/L	0.4	0.4	0.4	27	27	0.00	0.00	0.4	32	0.4	0.4	41	40	2.47	0.00	0.4	42
Dissolved organic carbon	mg/L	0.4	0.4	0.4	27	27	0.00	0.00	0.4	31	0.4	0.4	40	40	0.00	0.00	0.4	43
Sodium Adsorption Ratio	-		NC	-	5.4	5.4	0.00	-	NC	5.1	NC	-	6.3	6.3	0.00	-	NC	6
Oxidation-Reduction Potential	mV	0	290	-	230	240	4.26	-	320	280	250	-	240	190	23.26	-	350	240
Major Ions																		
Bromide	mg/L	1	1	1	2.4	2.4	0.00	0.00	1	1.8	1	1	2.4	2.4	0.00	0.00	1	3.2
Chloride	mg/L	1	1	1	230	220	4.44	0.00	1	230	1	1	270	270	0.00	0.00	1	290
Cyanide	mg/L	0.0005	0.0005	0.0005	0.757	0.787	3.89	0.00	0.0005	0.0427	0.0005	0.0005	0.834	0.787	5.80	0.00	0.0005	0.777
Cyanide (free)	mg/L	0.002[1] / 0.0005	0.0022	0.002	0.58	0.57	1.74	9.52	0.0005	0.0192	0.0005	0.0005	0.615	0.603	1.97	0.00	0.0005	0.646
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.67	0.68	1.48	0.00	0.0005	0.028	0.00052	0.0005	0.8	0.74	7.79	3.92	0.0005	0.74
Fluoride	mg/L	0.1	0.1	0.1	0.23	0.23	0.00	0.00	0.1	0.22	0.1	0.1	0.18	0.18	0.00	0.00	0.1	0.19
Silica	mg/L	0.05	0.05	0.05	6.7	6.7	0.00	0.00	0.05	5.8	0.05	0.05	5.8	5.9	1.71	0.00	0.05	6.5
Sulfate	mg/L	0.5	0.5	0.5	1600	1600	0.00	0.00	0.5	1600	0.5	0.5	1700	1700	0.00	0.00	0.5	1800
Nutrients																		
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	44	46	4.44	0.00	0.05	29	0.05	0.05	30	31	3.28	0.00	0.05	27
Nitrate	mg N/L	0.1	0.1	0.1	1.12	1.12	0.00	0.00	0.1	4.46	0.1	0.1	6.37	6.38	0.16	0.00	0.1	8.08
Nitrite	mg N/L	0.01	0.01	0.01	0.282	0.278	1.43	0.00	0.01	0.089	0.01	0.01	0.142	0.142	0.00	0.00	0.01	0.199
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	74	73	1.36	0.00	0.1	89	0.1	0.1	74	75	1.34	0.00	0.1	65
Total phosphorus	mg P/L	0.001	0.001	0.001	0.0079	0.0076	3.87	0.00	0.001	0.019	0.0012	0.001	0.026	0.025	3.92	18.18	0.0015	0.026
Orthophosphate	mg P/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.033	0.01	0.01	0.017	0.022	**25.64**	0.00	0.01	0.027
Total Metals																		
Aluminum	mg/L	0.003[1] / 0.0005	0.0005	0.0005	0.0254	0.0192	27.80	0.00	0.0005	0.219	0.0011	0.0005	0.0682	0.0421	47.33	**75.00**	0.0005	0.051
Antimony	mg/L	0.00002	0.00002	0.00002	0.00601	0.00596	0.84	0.00	0.00002	0.0102	0.00002	0.00002	0.0128	0.0117	8.98	0.00	0.00002	0.0154
Arsenic	mg/L	0.00002	0.00002	0.00002	0.0736	0.0733	0.41	0.00	0.00002	0.129	0.00002	0.00002	0.145	0.125	14.81	0.00	0.00002	0.161
Barium	mg/L	0.00002	0.00002	0.00002	0.059	0.0577	2.23	0.00	0.00002	0.0674	0.00002	0.00005	0.08	0.0711	11.78	**85.71**	0.00002	0.0841
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00002	0.00002	0.00	0.00	0.00001	0.00002	0.00001	0.00001	0.00002	0.00002	0.00	0.00	0.00001	0.00005
Boron	mg/L	0.01	0.01	0.01	0.236	0.251	6.16	0.00	0.01	0.263	0.01	0.01	0.331	0.253	26.71	0.00	0.01	0.345
Cadmium	mg/L	0.000005	0.000005	0.000005	0.000229	0.000224	2.21	0.00	0.000005	0.000095	0.000005	0.000005	0.00002	0.000022	9.52	0.00	0.000005	0.000025
Calcium (total)	mg/L	0.01	0.05	-	339	333	1.79	-	0.05	337	0.05	-	348	308	12.20	-	0.05	407
Chromium	mg/L	0.0001	0.0001	0.0001	0.00036	0.00032	11.76	0.00	0.0001	0.00062	0.0001	0.0001	0.00138	0.0008	*53.21*	0.00	0.0001	0.0005
Copper	mg/L	0.0001[1] / 0.00005	0.00005	0.00005	0.649	0.616	5.22	0.00	0.00005	0.676	0.00005	0.00005	1.43	1.28	11.07	0.00	0.00005	1.06
Iron	mg/L	0.005[1] / 0.001	0.001	0.001	0.0353	0.0357	1.13	0.00	0.001	0.305	0.0026	0.001	0.203	0.128	45.32	**88.89**	0.001	0.103
Lead	mg/L	0.00002[1] / 0.000005	0.000005	0.000005	0.0012	0.00108	10.53	0.00	0.000005	0.000938	0.000005	0.000005	0.00231	0.00196	16.39	0.00	0.000005	0.000912
Lithium	mg/L	0.0005	0.0005	0.0005	0.0049	0.0047	4.17	0.00	0.0005	0.0047	0.0005	0.0005	0.0042	0.0033	**24.00**	0.00	0.0005	0.0081
Magnesium (total)	mg/L	0.01	0.05	-	35.8	35	2.26	-	0.05	33	0.05	-	28.1	24.1	15.33	-	0.05	28.8
Manganese	mg/L	0.0001[1] / 0.00005	0.00005	0.00005	0.116	0.112	3.51	0.00	0.00005	0.356	0.00005	0.00005	0.084	0.0742	12.39	0.00	0.00005	0.0748
Mercury	mg/L	0.0001[1] / 0.00001	0.00001	0.00001	0.0001	0.0001	0.00	0.00	0.00001	0.0001	0.00001	0.00001	0.0001	0.0001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.0932	0.0924	0.86	0.00	0.00005	0.0782	0.00005	0.00005	0.0891	0.0787	12.40	0.00	0.00005	0.0965
Nickel	mg/L	0.0001[1] / 0.00002	0.00002	0.00002	0.303	0.292	3.70	0.00	0.00002	0.151	0.00002	0.00002	0.139	0.124	11.41	0.00	0.00002	0.147
Potassium (total)	mg/L	0.01	0.05	-	127	123	3.20	-	0.05	129	0.05	-	162	144	11.76	-	0.05	177
Selenium	mg/L	0.00004	0.00004	0.00004	0.063	0.0598	5.21	0.00	0.00004	0.0634	0.00004	0.00004	0.0677	0.0614	9.76	0.00	0.00004	0.0572
Silver	mg/L	0.00001[1] / 0.000005	0.000005	0.000005	0.000021	0.000021	0.00	0.00	0.000005	0.000078	0.000005	0.000005	0.000336	0.000306	9.35	0.00	0.000005	0.000025
Sodium (total)	mg/L	0.01	0.05	-	399	404	1.25	-	0.05	375	0.05	-	426	370	14.07	-	0.05	481
Strontium	mg/L	0.00005	0.00005	0.00005	1.75	1.77	1.14	0.00	0.000108	1.93	0.00005	0.00005	2.17	1.91	12.75	0.00	0.00005	2.16
Thallium	mg/L	0.000002	0.000002	0.000002	0.0000234	0.0000248	5.81	0.00	0.000002	0.0000207	0.000002	0.000002	0.0000468	0.000038	20.75	0.00	0.000002	0.000058

ST-17	Sample date		1/5/2025						8/3/2025		10/5/2025						12/1/2025	
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Tin	mg/L	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00	0.0002	0.0004	0.0002	0.0002	0.0004	0.0004	0.00	0.00	0.0002	0.001
Titanium	mg/L	0.002[1] / 0.0005	0.0005	0.0005	0.001	0.001	0.00	0.00	0.0005	0.0018	0.0005	0.0005	0.004	0.004	0.00	0.00	0.0005	0.0025
Uranium	mg/L	0.000005[1] / 0.000002	0.000002	0.000002	0.0232	0.0227	2.18	0.00	0.000002	0.0184	0.000002	0.000002	0.0158	0.0142	10.67	0.00	0.000002	0.0113
Vanadium	mg/L	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00	0.0002	0.00131	0.0002	0.0002	0.0004	0.0004	0.00	0.00	0.0002	0.001
Zinc	mg/L	0.001[1] / 0.0001	0.0001	0.0001	0.0007	0.00044	**45.61**	0.00	0.0001	0.0273	0.00077	0.0001	0.002	0.002	0.00	**154.02**	0.0001	0.00105
Dissolved Metals																		
Aluminum	mg/L	0.0005	0.0005	0.0005	0.0076	0.0074	2.67	0.00	0.00065	0.0102	0.0005	0.0005	0.0191	0.0309	47.20	0.00	0.0005	0.0051
Antimony	mg/L	0.00002	0.00002	0.00002	0.0061	0.00598	1.99	0.00	0.00002	0.0104	0.00002	0.00002	0.0139	0.014	0.72	0.00	0.00002	0.0162
Arsenic	mg/L	0.00002	0.00002	0.00002	0.0722	0.0711	1.54	0.00	0.00002	0.118	0.00002	0.00002	0.125	0.127	1.59	0.00	0.00002	0.163
Barium	mg/L	0.00002	0.00002	0.00002	0.0548	0.054	1.47	0.00	0.00002	0.0649	0.00002	0.00002	0.0805	0.0819	1.72	0.00	0.00002	0.0836
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00002	0.00002	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00002	0.00002	0.00	0.00	0.00001	0.00005
Boron	mg/L	0.01	0.01	0.01	0.227	0.22	3.13	0.00	0.01	0.285	0.01	0.01	0.304	0.304	0.00	0.00	0.01	0.384
Cadmium	mg/L	0.000005	0.000005	0.000005	0.000212	0.000213	0.47	0.00	0.000005	0.0000763	0.000005	0.000005	0.000012	0.000015	**22.22**	0.00	0.000005	0.000025
Chromium	mg/L	0.0001	0.0001	0.0001	0.0002	0.0002	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.00	0.00	0.0001	0.0005
Copper	mg/L	0.00005	0.00005	0.00005	0.665	0.652	1.97	0.00	0.00005	0.56	0.00005	0.00005	1.54	1.54	0.00	0.00	0.00005	0.635
Iron	mg/L	0.001	0.001	0.001	0.01	0.0098	2.02	0.00	0.001	0.002	0.0015	0.001	0.002	0.002	0.00	**40.00**	0.001	0.005
Lead	mg/L	0.000005	0.000005	0.000005	0.000598	0.000614	2.64	0.00	0.000005	0.0000549	0.000005	0.000005	0.000227	0.000206	9.70	0.00	0.000005	0.000068
Lithium	mg/L	0.0005	0.0005	0.0005	0.0058	0.0056	3.51	0.00	0.0005	0.00452	0.0005	0.0005	0.0039	0.0038	2.60	0.00	0.0005	0.0076
Manganese	mg/L	0.00005	0.00005	0.00005	0.122	0.118	3.33	0.00	0.00005	0.336	0.00005	0.00005	0.0834	0.0856	2.60	0.00	0.00005	0.0717
Mercury	mg/L	0.0001[1] / 0.00001	0.00001	0.00001	0.0001	0.0001	0.00	0.00	0.00001	0.0001	0.00001	0.00001	0.0001	0.0001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.1	0.0981	1.92	0.00	0.00005	0.084	0.00005	0.00005	0.0913	0.0938	2.70	0.00	0.00005	0.0956
Nickel	mg/L	0.00002	0.000029	0.00002	0.285	0.269	5.78	**36.73**	0.00002	0.145	0.00002	0.00002	0.141	0.142	0.71	0.00	0.00002	0.142
Selenium	mg/L	0.00004	0.00004	0.00004	0.0659	0.0657	0.30	0.00	0.00004	0.0613	0.00004	0.00004	0.0699	0.0707	1.14	0.00	0.00004	0.0537
Silver	mg/L	0.000005	0.000005	0.000005	0.000165	0.000157	4.97	0.00	0.000005	0.000188	0.000005	0.000005	0.000379	0.000388	2.35	0.00	0.000005	0.000025
Strontium	mg/L	0.00005	0.00005	0.00005	1.76	1.7	3.47	0.00	0.00005	1.84	0.00005	0.00005	2.2	2.25	2.25	0.00	0.00005	2.21
Thallium	mg/L	0.000002	0.000002	0.000002	0.0000228	0.0000237	3.87	0.00	0.000002	0.0000206	0.000002	0.000002	0.000045	0.0000436	3.16	0.00	0.000002	0.00006
Tin	mg/L	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00	0.0002	0.001
Titanium	mg/L	0.0005	0.0005	0.0005	0.001	0.001	0.00	0.00	0.0005	0.0005	0.0005	0.0005	0.001	0.001	0.00	0.00	0.0005	0.0025
Uranium	mg/L	0.000002	0.000002	0.000002	0.0259	0.0245	5.56	0.00	0.000002	0.0181	0.000002	0.000002	0.016	0.0165	3.08	0.00	0.0000105	0.00322
Vanadium	mg/L	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00	0.0002	0.001
Zinc	mg/L	0.0001	0.0001	0.0001	0.00173	0.0014	21.09	0.00	0.0001	0.00298	0.0001	0.0001	0.00093	0.00126	*30.14*	0.00	0.0001	0.00099
% Exceedance*							3%	0%							8%	0%		

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.
[1] Different MDL used for this parameter.

Table 1-15 Meadowbank 2025 South Portage Pit QAQC (ST-19)

ST-19	Sample date		1/5/2025						5/18/2025		11/9/2025						
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters																	
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	1480	1450	2.05	-	0.5	1050	0.5	0.5	-	896	970	7.93	-
Total alkalinity, as $CaCO_3$	mg/L	1	1.9	1	110	110	0.00	**62.07**	1	150	1	1	1	120	120	0.00	0.00
Carbonate, as $CaCO_3$	mg/L	1	1	-	1	1	0.00	-	1	1	1	1	-	1	1	0.00	-
Bicarbonate, as $CaCO_3$	mg/L	1	1.9	-	110	110	0.00	-	1	150	1	1	-	120	120	0.00	-
TDS	mg/L	10	10	10	4370	4390	0.46	0.00	10	3510	10	10	10	2950	2970	0.68	0.00
TSS	mg/L	1	1	1	2	3	**40.00**	0.00	1	2	1	1	1	3	3	0.00	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	73	73	0.00	0.00	0.4	41	0.4	0.4	0.4	44	44	0.00	0.00
Dissolved organic carbon	mg/L	0.4	0.4	0.4	72	73	1.38	0.00	0.4	41	0.4	0.4	0.4	42	42	0.00	0.00
Sodium Adsorption Ratio	-		NC	-	7	7.1	1.42	-	NC	5.7	0.52	NC	-	5.9	5.8	1.71	-
Oxidation-Reduction Potential	mV	0	290	-	210	240	13.33	-	300	110	290	290	-	240	240	0.00	-
Major Ions																	
Bromide	mg/L	1	1	1	3.1	3.3	6.25	0.00	1	2.7	1	1	1	2.5	2.5	0.00	0.00
Chloride	mg/L	1	1	1	370	370	0.00	0.00	1	290	1	1	1	250	250	0.00	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	1.43	1.65	14.29	0.00	0.0005	1.04	0.0005	0.0005	0.0005	0.115	0.118	2.58	0.00
Cyanide (free)	mg/L	0.002[1] / 0.0005	0.0029	0.002	0.91	0.9	1.10	**36.73**	0.0005	0.326	0.0005	0.0005	0.0005	0.0255	0.0284	10.76	0.00
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	1.3	1.5	14.29	0.00	0.0005	0.97	0.0005	0.0005	0.0005	0.09	0.091	1.10	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.19	0.17	11.11	0.00	0.1	0.26	0.1	0.1	0.1	0.21	0.24	13.33	0.00
Silica	mg/L	0.05	0.05	0.05	5.9	6	1.68	0.00	0.05	6.7	0.05	0.05	0.05	5.3	6	12.39	0.00
Sulfate	mg/L	0.5	0.5	0.5	2100	1900	10.00	0.00	0.5	1800	0.63	0.5	0.5	1600	1500	6.45	0.00
Nutrients																	
Ammonia Nitrogen	mg N/L	0.05	0.097	0.05	49	49	0.00	**63.95**	0.05	45	0.05	0.05	0.05	31	31	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	19.1	19.1	0.00	0.00	0.1	4.65	0.1	0.1	0.1	8.29	8.38	1.08	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.331	0.332	0.30	0.00	0.01	0.183	0.01	0.01	0.01	0.269	0.269	0.00	0.00
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	130	130	0.00	0.00	0.1	86	0.1	0.1	0.1	79	83	4.94	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.014	0.015	6.90	0.00	0.001	0.0029	0.001	0.001	0.001	0.0041	0.0036	12.99	0.00
Orthophosphate	mg P/L	0.01	0.01	0.01	0.016	0.014	13.33	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals																	
Aluminum	mg/L	0.0005	0.0005	0.0005	0.0138	0.0108	24.39	0.00	0.0005	0.0152	0.0005	0.0005	0.0005	0.0187	0.0224	18.00	0.00
Antimony	mg/L	0.00002	0.00002	0.00002	0.017	0.0172	1.17	0.00	0.00002	0.00815	0.00002	0.00002	0.00002	0.0087	0.00976	11.48	0.00
Arsenic	mg/L	0.00002	0.00002	0.00002	0.0969	0.0999	3.05	0.00	0.00002	0.0235	0.00002	0.00002	0.00002	0.0343	0.0397	14.59	0.00
Barium	mg/L	0.00002	0.00002	0.00002	0.0828	0.0843	1.80	0.00	0.00002	0.0467	0.00002	0.000051	0.00002	0.0389	0.0438	11.85	**87.32**
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00005	0.00005	0.00	0.00	0.00001	0.00002	0.00001	0.00001	0.00001	0.00002	0.00002	0.00	0.00
Boron	mg/L	0.01	0.01	0.01	0.397	0.409	2.98	0.00	0.01	0.296	0.01	0.01	0.01	0.286	0.297	3.77	0.00
Cadmium	mg/L	0.000005	0.000005	0.000005	0.00042	0.000134	103.25	0.00	0.000005	0.000031	0.000005	0.000005	0.000005	0.000058	0.000059	1.71	0.00
Calcium (total)	mg/L	0.01	0.05	-	551	539	2.20	-	0.05	370	0.05	0.05	-	318	341	6.98	-
Chromium	mg/L	0.0001	0.0001	0.0001	0.0005	0.0005	0.00	0.00	0.0001	0.0002	0.0001	0.0001	0.0001	0.0002	0.00068	**109.09**	0.00
Copper	mg/L	0.00005	0.00005	0.00005	2.8	2.88	2.82	0.00	0.00005	0.537	0.00005	0.00005	0.00005	0.644	0.887	31.74	0.00
Iron	mg/L	0.001	0.001	0.001	0.0383	0.0406	5.83	0.00	0.001	0.0691	0.001	0.001	0.001	0.0463	0.0567	20.19	0.00
Lead	mg/L	0.000005	0.000005	0.000005	0.00126	0.000235	137.12	0.00	0.000005	0.000192	0.000005	0.0000195	0.000005	0.000203	0.000265	26.50	**118.37**
Lithium	mg/L	0.0005	0.0005	0.0005	0.0049	0.0052	5.94	0.00	0.0005	0.0049	0.0005	0.0005	0.0005	0.0043	0.0047	8.89	0.00
Magnesium (total)	mg/L	0.01	0.05	-	24.7	24.8	0.40	-	0.05	31.7	0.05	0.05	-	24.7	28.5	14.29	-
Manganese	mg/L	0.00005	0.00005	0.00005	0.0583	0.059	1.19	0.00	0.00005	0.163	0.00005	0.00005	0.00005	0.167	0.189	12.36	0.00
Mercury	mg/L	0.0001[1] / 0.00001	0.00001	0.00001	0.0001	0.0001	0.00	0.00	0.00001	0.0001	0.00001	0.00001	0.00001	0.0001	0.0001	0.00	0.00
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.0956	0.0995	4.00	0.00	0.00005	0.098	0.00005	0.00005	0.00005	0.073	0.0802	9.40	0.00
Nickel	mg/L	0.00002	0.00002	0.00002	0.416	0.423	1.67	0.00	0.000038	0.347	0.00002	0.00002	0.00002	0.5	0.555	10.43	0.00
Potassium (total)	mg/L	0.01	0.05	-	181	186	2.72	-	0.05	157	0.05	0.05	-	123	138	11.49	-
Selenium	mg/L	0.00004	0.00004	0.00004	0.226	0.221	2.24	0.00	0.00004	0.102	0.00004	0.00004	0.00004	0.0937	0.105	11.37	0.00
Silver	mg/L	0.000005	0.000005	0.000005	0.00027	0.000256	5.32	0.00	0.000005	0.000058	0.000005	0.000005	0.000005	0.000115	0.000174	40.83	0.00
Sodium (total)	mg/L	0.01	0.05	-	610	630	3.23	-	0.05	443	0.05	0.05	-	369	416	11.97	-
Strontium	mg/L	0.00005	0.00005	0.00005	2.7	2.73	1.10	0.00	0.00005	2.38	0.00005	0.00005	0.000062	1.8	1.96	8.51	**21.43**

ST-19	Sample date		1/5/2025						5/18/2025		11/9/2025						
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Thallium	mg/L	0.000002	0.000002	0.000002	0.000043	0.000012	*112.73*	0.00	0.0000021	0.000016	0.000002	0.000002	0.000002	0.0000239	0.0000298	21.97	0.00
Tin	mg/L	0.0002	0.0002	0.0002	0.001	0.001	0.00	0.00	0.0002	0.0004	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00
Titanium	mg/L	0.0005	0.0005	0.0005	0.0025	0.0025	0.00	0.00	0.0005	0.001	0.0005	0.0005	0.0005	0.001	0.001	0.00	0.00
Uranium	mg/L	0.000002	0.000002	0.000002	0.013	0.013	0.00	0.00	0.000002	0.0305	0.000002	0.000002	0.000002	0.0225	0.0254	12.11	0.00
Vanadium	mg/L	0.0002	0.0002	0.0002	0.001	0.001	0.00	0.00	0.0002	0.0004	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00
Zinc	mg/L	0.0001	0.0001	0.0001	0.00314	0.00163	63.31	0.00	0.00049	0.0202	0.00016	0.0001	0.0001	0.00201	0.0039	63.96	0.00
Dissolved Metals																	
Aluminum	mg/L	0.0005	0.0005	0.0005	0.0091	0.0082	10.40	0.00	0.0005	0.0064	0.0345	0.0005	0.0005	0.0082	0.0074	10.26	0.00
Antimony	mg/L	0.00002	0.00002	0.00002	0.0165	0.0166	0.60	0.00	0.00002	0.00773	0.00002	0.00002	0.00002	0.00988	0.00891	10.32	0.00
Arsenic	mg/L	0.00002	0.00002	0.00002	0.0906	0.0905	0.11	0.00	0.00002	0.0219	0.00002	0.00002	0.00002	0.0376	0.0347	8.02	0.00
Barium	mg/L	0.00002	0.00002	0.00002	0.0722	0.0729	0.96	0.00	0.00002	0.0438	0.000072	0.00002	0.00002	0.0444	0.0403	9.68	0.00
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00005	0.00005	0.00	0.00	0.00001	0.00002	0.00001	0.00001	0.00001	0.00002	0.00002	0.00	0.00
Boron	mg/L	0.01	0.01	0.01	0.385	0.378	1.83	0.00	0.01	0.278	0.01	0.01	0.01	0.317	0.287	9.93	0.00
Cadmium	mg/L	0.000005	0.000005	0.000005	0.00013	0.000122	6.35	0.00	0.000005	0.000031	0.000005	0.000005	0.000005	0.000069	0.000055	22.58	0.00
Chromium	mg/L	0.0001	0.0001	0.0001	0.0005	0.0005	0.00	0.00	0.0001	0.0002	0.0001	0.0001	0.0001	0.0002	0.0002	0.00	0.00
Copper	mg/L	0.00005	0.00005	0.00005	2.84	2.79	1.78	0.00	0.00005	0.487	0.000061	0.00005	0.00005	0.42	0.384	8.96	0.00
Iron	mg/L	0.001	0.001	0.001	0.0241	0.0222	8.21	0.00	0.001	0.0096	0.0019	0.001	0.001	0.002	0.002	0.00	0.00
Lead	mg/L	0.000005	0.000005	0.000005	0.000058	0.000071	20.16	0.00	0.000005	0.000037	0.0000163	0.000005	0.000005	0.000032	0.000024	**28.57**	0.00
Lithium	mg/L	0.0005	0.0005	0.0005	0.0061	0.0059	3.33	0.00	0.0005	0.0044	0.0005	0.0005	0.0005	0.0048	0.0044	8.70	0.00
Manganese	mg/L	0.00005	0.00005	0.00005	0.056	0.0553	1.26	0.00	0.00005	0.159	0.000124	0.00005	0.00005	0.197	0.183	7.37	0.00
Mercury	mg/L	0.0001[1] / 0.00001	0.00001	0.00001	0.0001	0.0001	0.00	0.00	0.00001	0.0001	0.00001	0.00001	0.00001	0.0001	0.0001	0.00	0.00
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.0977	0.0972	0.51	0.00	0.00005	0.0929	0.000137	0.00005	0.00005	0.085	0.0773	9.49	0.00
Nickel	mg/L	0.00002	0.000022	0.00002	0.388	0.385	0.78	9.52	0.00002	0.339	0.000067	0.00002	0.00002	0.589	0.521	12.25	0.00
Selenium	mg/L	0.00004	0.00004	0.00004	0.228	0.223	2.22	0.00	0.00004	0.0893	0.00004	0.00004	0.00004	0.108	0.1	7.69	0.00
Silver	mg/L	0.000005	0.000005	0.000005	0.000322	0.000322	0.00	0.00	0.000005	0.000201	0.000005	0.000005	0.000005	0.000068	0.000062	9.23	0.00
Strontium	mg/L	0.00005	0.00005	0.00005	2.54	2.55	0.39	0.00	0.00005	2.13	0.000454	0.00005	0.00005	2.07	1.88	9.62	0.00
Thallium	mg/L	0.000002	0.000002	0.000002	0.000015	0.000017	12.50	0.00	0.000002	0.0000331	0.0000021	0.000002	0.000002	0.0000226	0.0000218	3.60	0.00
Tin	mg/L	0.0002	0.0002	0.0002	0.001	0.001	0.00	0.00	0.0002	0.0004	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00
Titanium	mg/L	0.0005	0.0005	0.0005	0.0025	0.0025	0.00	0.00	0.0005	0.001	0.0009	0.0005	0.0005	0.001	0.001	0.00	0.00
Uranium	mg/L	0.000002	0.000002	0.000002	0.0125	0.0126	0.80	0.00	0.000002	0.0316	0.000003	0.000002	0.000002	0.0256	0.0235	8.55	0.00
Vanadium	mg/L	0.0002	0.0002	0.0002	0.001	0.001	0.00	0.00	0.0002	0.0004	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00
Zinc	mg/L	0.0001	0.0001	0.0001	0.00403	0.00149	92.03	0.00	0.0001	0.00243	0.00089	0.0001	0.0001	0.0021	0.00194	7.92	0.00
% Exceedance*							8%	0%								9%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.
[1] Different MDL used for this parameter.

Table 1-16 Meadowbank 2025 Goose Pit QAQC (ST-20)

ST-20	Sample date		3/24/2025						10/5/2025							12/1/2025	
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Conventional Parameters																	
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	683	735	7.33	-	0.5	0.5	-	572	585	2.25	-	0.5	560
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	140	130	7.41	0.00	1	1	1	110	110	0.00	0.00	1	46
Carbonate, as $CaCO_3$	mg/L	1	1	-	1	1	0.00	-	1	1	-	1	1	0.00	-	1	1
Bicarbonate, as $CaCO_3$	mg/L	1	1	-	140	130	7.41	-	1	1	-	110	110	0.00	-	1	46
TDS	mg/L	10	10	10	1770	1760	0.57	0.00	10	10	10	1580	1620	2.50	0.00	10	1690
TSS	mg/L	1	1	1	5	5	0.00	0.00	1	1	1	2	2	0.00	0.00	1	3
Total organic carbon	mg/L	0.4	0.88	0.4	2.9	2.9	0.00	**75.00**	0.4	0.4	0.4	1.9	1.9	0.00	0.00	0.4	1.9
Dissolved organic carbon	mg/L	0.4	0.4	0.4	2.6	2.5	3.92	0.00	0.4	0.4	0.4	1.8	1.8	0.00	0.00	0.4	2
Sodium Adsorption Ratio	-		0.24	-	4	3.9	2.53	-	NC	NC	-	3.4	3.4	0.00	-	NC	3.4
Oxidation-Reduction Potential	mV	0	230	-	180	180	0.00	-	250	250	-	210	210	0.00	-	370	240
Major Ions																	
Bromide	mg/L	1	1	1	1	1	0.00	0.00	1	1	1	1	1	0.00	0.00	1	1
Chloride	mg/L	1	1	1	89	89	0.00	0.00	1	1	1	79	78	1.27	0.00	1	82
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0116	0.0129	10.61	0.00	0.0005	0.0005	0.0005	0.00511	0.0068	28.38	0.00	0.0005	0.00459
Cyanide (free)	mg/L	0.0005	0.0005	0.0005	0.00266	0.00285	6.90	0.00	0.0005	0.0005	0.0005	0.00363	0.00366	0.82	0.00	0.0005	0.00138
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.0032	0.0036	11.76	0.00	0.0005	0.0005	0.0005	0.0043	0.0044	2.30	0.00	0.0005	0.0034
Fluoride	mg/L	0.1	0.1	0.1	0.35	0.34	2.90	0.00	0.1	0.1	0.1	0.31	0.31	0.00	0.00	0.1	0.34
Silica	mg/L	0.05	0.05	0.05	7.7	8	3.82	0.00	0.05	0.05	0.05	7.5	7.5	0.00	0.00	0.05	7.3
Sulfate	mg/L	0.5	0.5	0.5	1100	1100	0.00	0.00	0.5	0.5	0.5	1000	1000	0.00	0.00	0.5	1000
Nutrients																	
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	42	42	0.00	0.00	0.05	0.05	0.05	38	37	2.67	0.00	0.05	32
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1	0.1	1.22	1.24	1.63	0.00	0.1	4.32
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.059	0.062	4.96	0.00	0.01	0.116
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	46	44	4.44	0.00	0.1	0.1	0.1	39	35	10.81	0.00	0.1	34
Total phosphorus	mg P/L	0.001	0.001	0.001	0.13	0.13	0.00	0.00	0.0013	0.0011	0.001	0.24	0.24	0.00	9.52	0.0018	0.21
Orthophosphate	mg P/L	0.01	0.01	0.01	0.11	0.11	0.00	0.00	0.01	0.01	0.01	0.23	0.23	0.00	0.00	0.01	0.19
Total Metals																	
Aluminum	mg/L	0.003[1] / 0.0005	0.0005	0.0005	0.0301	0.0317	5.18	0.00	0.0005	0.00826	0.0005	0.0122	0.0141	14.45	*177.17*	0.0005	0.0343
Antimony	mg/L	0.00002	0.00002	0.00002	0.00843	0.00903	6.87	0.00	0.00002	0.00002	0.00002	0.00801	0.00778	2.91	0.00	0.00002	0.00789
Arsenic	mg/L	0.00002	0.00002	0.00002	0.407	0.439	7.57	0.00	0.00002	0.00002	0.00002	0.288	0.283	1.75	0.00	0.00002	0.295
Barium	mg/L	0.00002	0.00002	0.00005	0.0474	0.0508	6.92	**85.71**	0.00002	0.000055	0.00005	0.0391	0.0393	0.51	9.52	0.000025	0.0377
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00002	0.00002	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Boron	mg/L	0.01	0.01	0.01	0.18	0.19	5.41	0.00	0.01	0.01	0.01	0.193	0.191	1.04	0.00	0.01	0.208
Cadmium	mg/L	0.000005	0.000005	0.000005	0.000014	0.000017	19.35	0.00	0.000005	0.000005	0.000005	0.0000136	0.0000122	10.85	0.00	0.000005	0.0000182
Calcium (total)	mg/L	0.01	0.05	-	247	266	7.41	-	0.05	0.066	-	204	209	2.42	-	0.05	201
Chromium	mg/L	0.0001	0.0001	0.0001	0.0003	0.00035	15.38	0.00	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.00065
Copper	mg/L	0.0001[1] / 0.00005	0.00005	0.00005	0.00893	0.00934	4.49	0.00	0.00005	0.000061	0.00005	0.00397	0.00413	3.95	19.82	0.00005	0.00569
Iron	mg/L	0.005[1] / 0.001	0.001	0.001	0.293	0.307	4.67	0.00	0.001	0.0022	0.001	0.0326	0.0361	10.19	**75.00**	0.001	0.0819
Lead	mg/L	0.00002[1] / 0.000005	0.000005	0.000005	0.000474	0.000434	8.81	0.00	0.000005	0.0000173	0.000005	0.0000265	0.0000277	4.43	**110.31**	0.000005	0.0003
Lithium	mg/L	0.0005	0.0005	0.0005	0.005	0.0053	5.83	0.00	0.0005	0.0005	0.0005	0.00438	0.00461	5.12	0.00	0.0005	0.00458
Magnesium (total)	mg/L	0.01	0.05	-	16.2	16.9	4.23	-	0.05	0.05	-	15.3	15.6	1.94	-	0.05	14.2
Manganese	mg/L	0.0001[1] / 0.00005	0.00005	0.00005	0.128	0.138	7.52	0.00	0.00005	0.00005	0.00005	0.127	0.133	4.62	0.00	0.00008	0.121
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.0816	0.0867	6.06	0.00	0.00005	0.000067	0.00005	0.0716	0.0696	2.83	**29.06**	0.00005	0.0694
Nickel	mg/L	0.0001[1] / 0.00002	0.00002	0.00002	0.0806	0.087	7.64	0.00	0.00002	0.000065	0.00002	0.065	0.0664	2.13	**105.88**	0.000024	0.0593
Potassium (total)	mg/L	0.01	0.05	-	100	108	7.69	-	0.05	0.05	-	85	86.3	1.52	-	0.05	84.2
Selenium	mg/L	0.00004	0.00004	0.00004	0.0154	0.017	9.88	0.00	0.00004	0.00004	0.00004	0.0176	0.0173	1.72	0.00	0.00004	0.0161
Silver	mg/L	0.00001[1] / 0.000005	0.000005	0.000005	0.00001	0.00001	0.00	0.00	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00	0.000005	0.00001
Sodium (total)	mg/L	0.01	0.05	-	222	236	6.11	-	0.05	0.05	-	189	192	1.57	-	0.05	182
Strontium	mg/L	0.00005	0.00005	0.00005	0.863	0.905	4.75	0.00	0.00005	0.000116	0.00005	0.78	0.769	1.42	**79.52**	0.00005	0.698

ST-20	Sample date		3/24/2025						10/5/2025							12/1/2025	
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Thallium	mg/L	0.000002	0.000002	0.000002	0.0000066	0.0000093	**33.96**	0.00	0.000002	0.000002	0.000002	0.0000123	0.0000138	11.49	0.00	0.0000025	0.0000093
Tin	mg/L	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002
Titanium	mg/L	0.002[1] / 0.0005	0.0005	0.0005	0.001	0.001	0.00	0.00	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.002
Uranium	mg/L	0.000005[1] / 0.000002	0.000002	0.000002	0.00913	0.00992	8.29	0.00	0.000002	0.000002	0.000002	0.00839	0.0085	1.30	0.00	0.000002	0.00811
Vanadium	mg/L	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00	0.0002	0.0002	0.0002	0.00021	0.00022	4.65	0.00	0.0002	0.0002
Zinc	mg/L	0.001[1] / 0.0001	0.0001	0.0001	0.00177	0.00166	6.41	0.00	0.00013	0.00083	0.0001	0.00117	0.00121	3.36	**156.99**	0.0001	0.004
Dissolved Metals																	
Aluminum	mg/L	0.0005	0.0005	0.0005	0.0089	0.0088	1.13	0.00	0.0005	0.0038	0.0005	0.00566	0.00645	13.05	**153.49**	0.0005	0.00159
Antimony	mg/L	0.00002	0.00002	0.00002	0.00674	0.00664	1.49	0.00	0.00002	0.00002	0.00002	0.00774	0.00772	0.26	0.00	0.00002	0.00818
Arsenic	mg/L	0.00002	0.00002	0.00002	0.388	0.381	1.82	0.00	0.00002	0.00002	0.00002	0.272	0.27	0.74	0.00	0.00002	0.292
Barium	mg/L	0.00002	0.00002	0.00002	0.0437	0.0437	0.00	0.00	0.00002	0.000155	0.00002	0.0379	0.038	0.26	**154.29**	0.00002	0.0394
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00002	0.00002	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.000011	9.52	0.00	0.00001	0.00001
Boron	mg/L	0.01	0.01	0.01	0.196	0.194	1.03	0.00	0.01	0.01	0.01	0.175	0.172	1.73	0.00	0.01	0.179
Cadmium	mg/L	0.000005	0.000005	0.000005	0.00001	0.000017	**51.85**	0.00	0.000005	0.000005	0.000005	0.0000113	0.0000103	9.26	0.00	0.000005	0.0000088
Chromium	mg/L	0.0001	0.0001	0.0001	0.0002	0.0002	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Copper	mg/L	0.00005	0.00005	0.00005	0.0028	0.00251	10.92	0.00	0.00005	0.000073	0.00005	0.00335	0.00334	0.30	**37.40**	0.00005	0.00422
Iron	mg/L	0.001	0.001	0.001	0.185	0.191	3.19	0.00	0.001	0.004	0.001	0.0043	0.0042	2.35	**120.00**	0.001	0.0058
Lead	mg/L	0.000005	0.000005	0.000005	0.000077	0.000075	2.63	0.00	0.000005	0.0000116	0.000005	0.000005	0.000005	0.00	**79.52**	0.000005	0.0000468
Lithium	mg/L	0.0005	0.0005	0.0005	0.0053	0.0051	3.85	0.00	0.0005	0.0005	0.0005	0.00437	0.00444	1.59	0.00	0.0005	0.00453
Manganese	mg/L	0.00005	0.00005	0.00005	0.125	0.122	2.43	0.00	0.00005	0.000165	0.00005	0.12	0.126	4.88	**106.98**	0.00005	0.124
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.0788	0.0766	2.83	0.00	0.00005	0.000075	0.00005	0.069	0.0684	0.87	**40.00**	0.00005	0.0752
Nickel	mg/L	0.00002	0.00002	0.00002	0.0732	0.0733	0.14	0.00	0.00002	0.000077	0.00002	0.0646	0.0651	0.77	**117.53**	0.00002	0.054
Selenium	mg/L	0.00004	0.00004	0.00004	0.0148	0.0146	1.36	0.00	0.00004	0.00004	0.00004	0.0177	0.0178	0.56	0.00	0.00004	0.0168
Silver	mg/L	0.000005	0.000005	0.000005	0.00001	0.00001	0.00	0.00	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00	0.000005	0.000005
Strontium	mg/L	0.00005	0.00005	0.00005	0.826	0.809	2.08	0.00	0.00005	0.000242	0.00005	0.743	0.732	1.49	**131.51**	0.00005	0.705
Thallium	mg/L	0.000002	0.000002	0.000002	0.000004	0.000004	0.00	0.00	0.000002	0.000002	0.000002	0.0000115	0.0000115	0.00	0.00	0.000002	0.0000088
Tin	mg/L	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002
Titanium	mg/L	0.0005	0.0005	0.0005	0.001	0.001	0.00	0.00	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005
Uranium	mg/L	0.000002	0.000002	0.000002	0.00897	0.00879	2.03	0.00	0.000002	0.000002	0.000002	0.00916	0.00921	0.54	0.00	0.000002	0.00392
Vanadium	mg/L	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00	0.0002	0.0002	0.0002	0.00022	0.0002	9.52	0.00	0.0002	0.0002
Zinc	mg/L	0.0001	0.0001	0.0001	0.0026	0.00267	2.66	0.00	0.00015	0.00125	0.0001	0.00121	0.00109	10.43	*170.37*	0.0001	0.00227
% Exceedance*							0%	0%						1%	0%		

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.
[1] Different MDL used for this parameter.

Table 1-17 Meadowbank 2025 Goose Pit Sump QAQC (ST-20 Pit Sump)

ST-20 PIT SUMP	Sample date		7/20/2025						9/15/2025	
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Conventional Parameters										
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	202	203	0.49	-	0.5	195
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	62	57	8.40	0.00	1.2	58
TDS	mg/L	10	10	10	315	335	6.15	0.00	10	375
TSS	mg/L	1	1	1	4	4	0.00	0.00	1	1
Major Ions										
Chloride	mg/L	1	1	1	9.7	9.6	1.04	0.00	1	11
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0006	0.0007	15.38	0.00	0.0005	0.0059
Cyanide (free)	mg/L	0.0005	0.0005	0.0005	0.00091	0.00066	**31.85**	0.00	0.0058	0.0025
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.00054	0.00063	15.38	0.00	0.0005	0.0033
Fluoride	mg/L	0.1	0.1	0.1	0.22	0.21	4.65	0.00	0.1	0.25
Sulfate	mg/L	0.5	0.5	0.5	170	170	0.00	0.00	0.5	170
Nutrients										
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.089	0.05
Nitrate	mg N/L	0.1	0.1	0.1	0.51	0.52	1.94	0.00	0.1	0.54
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01
Total Metals										
Aluminum	mg/L	0.003[1] / 0.0005	0.0005	0.0005	0.0754	0.0948	22.80	0.00	0.00642	0.0289
Arsenic	mg/L	0.00002	0.00002	0.00002	0.00469	0.00487	3.77	0.00	0.00002	0.00209
Barium	mg/L	0.00002	0.00002	0.00002	0.0192	0.0193	0.52	0.00	0.000048	0.0171
Cadmium	mg/L	0.000005	0.000005	0.000005	0.0000114	0.000012	5.13	0.00	0.000005	0.0000157
Chromium	mg/L	0.0001	0.0001	0.0001	0.00055	0.00078	**34.59**	0.00	0.0001	0.00026
Copper	mg/L	0.0001[1] / 0.00005	0.00005	0.00005	0.00103	0.00111	7.48	0.00	0.00005	0.00144
Iron	mg/L	0.005[1] / 0.001	0.001	0.001	0.118	0.167	34.39	0.00	0.0016	0.0523
Lead	mg/L	0.00002[1] / 0.000005	0.000005	0.000005	0.0001	0.000171	52.40	0.00	0.000242	0.000064
Manganese	mg/L	0.0001[1] / 0.00005	0.00005	0.00005	0.0274	0.0284	3.58	0.00	0.000058	0.0251
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.00306	0.00304	0.66	0.00	0.00005	0.00311
Nickel	mg/L	0.0001[1] / 0.00002	0.00002	0.00002	0.0496	0.0497	0.20	0.00	0.000114	0.0573
Selenium	mg/L	0.00004	0.00004	0.00004	0.000336	0.000317	5.82	0.00	0.00004	0.000305
Silver	mg/L	0.00001[1] / 0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00	0.000005	0.00001
Thallium	mg/L	0.000002	0.000002	0.000002	0.0000335	0.0000359	6.92	0.00	0.000002	0.0000343
Zinc	mg/L	0.001[1] / 0.0001	0.00022	0.0001	0.00075	0.00085	12.50	**75.00**	0.00092	0.001
% Exceedance*							10%	0%		

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.
[1] Different MDL used for this parameter.

Table 1-18 Meadowbank 2025 Tailings Storage Facility QAQC (ST-21)

ST-21-S	Sample date		6/10/2025			8/3/2025		
Parameter	**Unit**	**MDL**	**Duplicate**	**Original**	**RPD (FD/N)**	**Duplicate**	**Original**	**RPD (FD/N)**
Conventional Parameters								
Hardness, as $CaCO_3$	mg/L	0.5	168	161	4.26	1700	1660	2.38
Total alkalinity, as $CaCO_3$	mg/L	1	58	45	25.24	100	110	9.52
TDS	mg/L	10	315	335	6.15	5310	5320	0.19
TSS	mg/L	1	11	11	0.00	15	13	14.29
Major Ions								
Chloride	mg/L	1	8.6	8.7	1.16	290	290	0.00
Cyanide	mg/L	0.0005	0.0175	0.0184	5.01	1.38	0.842	48.42
Cyanide (free)	mg/L	0.0005	0.0059	0.0052	12.61	0.36	0.445	21.12
Cyanide (WAD)	mg/L	0.0005	0.0059	0.0053	10.71	1.3	0.71	58.71
Fluoride	mg/L	0.1	0.1	0.11	9.52	0.28	0.28	0.00
Sulfate	mg/L	0.5	180	180	0.00	2100	2200	4.65
Nutrients								
Ammonia Nitrogen	mg N/L	0.05	1.4	1.3	7.41	65	64	1.55
Nitrate	mg N/L	0.1	2.34	2.28	2.60	23.6	24.2	2.51
Nitrite	mg N/L	0.01	0.056	0.055	1.80	0.209	0.213	1.90
Total Metals								
Aluminum	mg/L	0.0005	0.0169	0.326	180.29	0.0239	0.0253	5.69
Arsenic	mg/L	0.00002	0.014	0.0193	31.83	0.146	0.146	0.00
Barium	mg/L	0.00002	0.0155	0.0167	7.45	0.144	0.143	0.70
Cadmium	mg/L	0.000005	0.0000438	0.000444	*164.08*	0.000221	0.000216	2.29
Chromium	mg/L	0.0001	0.0001	0.00253	*184.79*	0.0005	0.0005	0.00
Copper	mg/L	0.00005	0.00846	0.0218	88.17	7.2	7.17	0.42
Iron	mg/L	0.001	0.013	0.703	192.74	0.0135	0.0166	20.60
Lead	mg/L	0.000005	0.0000455	0.00311	*194.23*	0.000298	0.000311	4.27
Manganese	mg/L	0.00005	0.166	0.188	12.43	0.221	0.223	0.90
Mercury	mg/L	0.0001[1] / 0.00001	0.00001	0.00001	0.00	0.00001	0.0001	163.64
Molybdenum	mg/L	0.00005	0.00747	0.00695	7.21	0.113	0.113	0.00
Nickel	mg/L	0.00002	0.0454	0.0454	0.00	2.59	2.59	0.00
Selenium	mg/L	0.00004	0.000868	0.000799	8.28	0.227	0.227	0.00
Silver	mg/L	0.000005	0.0000061	0.0000141	**79.21**	0.00108	0.00107	0.93
Thallium	mg/L	0.000002	0.0000088	0.000015	**52.10**	0.000019	0.000015	**23.53**
Zinc	mg/L	0.0001	0.00752	0.225	187.06	0.00313	0.00324	3.45
% Exceedance*					17%			14%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.
[1] Different MDL used for this parameter

Table 1-19 Meadowbank 2025 Vault WRSF QAQC (ST-24)

ST-24	Sample date		7/14/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters								
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	65.1	68.6	5.24	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	35	34	2.90	0.00
TDS	mg/L	10	10	10	90	95	5.41	0.00
TSS	mg/L	1	1	1	3	8	**90.91**	0.00
Major Ions								
Chloride	mg/L	1	1	1	1	1	0.00	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.00051	0.0005	1.98	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	44	43	2.30	0.00
Nutrients								
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.36	0.36	0.00	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.0551	0.1	57.90	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00185	0.00219	16.83	0.00
Barium	mg/L	0.001	0.001	0.001	0.006	0.0068	12.50	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00198	0.0032	**47.10**	0.00
Iron	mg/L	0.01	0.01	0.01	0.095	0.206	*73.75*	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.00026	**26.09**	0.00
Manganese	mg/L	0.001	0.001	0.001	0.0035	0.0058	**49.46**	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0211	0.0235	10.76	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0011	0.0017	**42.86**	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.00021	0.0002	4.88	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*							4%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-20 Meadowbank 2025 Vault Attenuation Pond QAQC (ST-25)

ST-25	Sample date		8/11/2025						10/6/2025	
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Conventional Parameters										
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	56.3	56.4	0.18	-	0.5	64.1
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	30	30	0.00	0.00	1	37
TDS	mg/L	10	10	10	70	60	15.38	0.00	10	75
TSS	mg/L	1	1	1	1	1	0.00	0.00	1	23
Major Ions										
Chloride	mg/L	1	1	1	2.4	2.4	0.00	0.00	1	2.2
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.11
Sulfate	mg/L	0.5	0.5	0.5	35	36	2.82	0.00	0.5	36
Nutrients										
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01
Total Metals										
Aluminum	mg/L	0.003	0.003	0.003	0.0131	0.0135	3.01	0.00	0.003	0.313
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00045	0.00045	0.00	0.00	0.0001	0.00111
Barium	mg/L	0.001	0.001	0.001	0.0086	0.0085	1.17	0.00	0.001	0.0118
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.000013
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.0011
Copper	mg/L	0.0005	0.0005	0.0005	0.0013	0.00131	0.77	0.00	0.0005	0.00205
Iron	mg/L	0.01	0.01	0.01	0.014	0.016	13.33	0.00	0.01	0.572
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.00087
Manganese	mg/L	0.001	0.001	0.001	0.0035	0.0034	2.90	0.00	0.001	0.016
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.001	0.001	0.001	0.0032	0.0031	3.17	0.00	0.001	0.0035
Nickel	mg/L	0.001	0.001	0.001	0.0011	0.001	9.52	0.00	0.001	0.002
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
% Exceedance*							0%	0%		

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-21 Meadowbank 2025 Vault Pit QAQC (ST-26)

ST-26	Sample date		8/4/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters								
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	98.3	99.1	0.81	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	46	55	17.82	0.00
Carbonate, as $CaCO_3$	mg/L	1	1	-	1	1	0.00	-
Bicarbonate, as $CaCO_3$	mg/L	1	1	-	46	54	16.00	-
TDS	mg/L	10	10	10	140	140	0.00	0.00
TSS	mg/L	1	1	1	1	3	**100.00**	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	1.4	1.4	0.00	0.00
Dissolved organic carbon	mg/L	0.4	0.4	0.4	1.6	1.5	6.45	0.00
Major Ions								
Chloride	mg/L	1	1	1	8.7	8.6	1.16	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Cyanide (free)	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Silica	mg/L	0.05	0.05	0.05	1.9	2.1	10.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	52	51	1.94	0.00
Nutrients								
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.84	0.8	4.88	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	0.18	0.1	**57.14**	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Orthophosphate	mg P/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals								
Aluminum	mg/L	0.0005	0.0005	0.0005	0.041	0.037	10.26	0.00
Antimony	mg/L	0.00002	0.00002	0.00002	0.00107	0.00105	1.89	0.00
Arsenic	mg/L	0.00002	0.00002	0.000023	0.00283	0.00277	2.14	13.95
Barium	mg/L	0.00002	0.00002	0.00005	0.0117	0.0116	0.86	**85.71**
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Boron	mg/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Cadmium	mg/L	0.000005	0.000005	0.000005	0.0000087	0.000011	**23.35**	0.00
Calcium (total)	mg/L	0.01	0.05	-	28.8	29.5	2.40	-
Chromium	mg/L	0.0001	0.0001	0.00017	0.00011	0.0001	9.52	**51.85**
Copper	mg/L	0.00005	0.00005	0.00005	0.00116	0.00303	89.26	0.00
Iron	mg/L	0.001	0.001	0.001	0.0525	0.0461	12.98	0.00
Lead	mg/L	0.000005	0.000005	0.000005	0.000209	0.000159	27.17	0.00
Lithium	mg/L	0.0005	0.0005	0.0005	0.00178	0.0018	1.12	0.00
Magnesium (total)	mg/L	0.01	0.05	-	6.39	6.21	2.86	-
Manganese	mg/L	0.00005	0.00005	0.00005	0.00583	0.0055	5.83	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.0254	0.0251	1.19	0.00
Nickel	mg/L	0.00002	0.00002	0.00002	0.00143	0.00136	5.02	0.00
Potassium (total)	mg/L	0.01	0.05	-	2.05	1.98	3.47	-
Selenium	mg/L	0.00004	0.00004	0.00004	0.000193	0.000192	0.52	0.00
Sodium (total)	mg/L	0.01	0.05	-	2.1	1.93	8.44	-
Strontium	mg/L	0.00005	0.00005	0.00005	0.183	0.182	0.55	0.00
Thallium	mg/L	0.000002	0.000002	0.000002	0.0000115	0.0000116	0.87	0.00
Tin	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Titanium	mg/L	0.0005	0.0005	0.0005	0.00068	0.00054	**22.95**	0.00
Uranium	mg/L	0.000002	0.000002	0.000002	0.00438	0.00432	1.38	0.00
Vanadium	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Zinc	mg/L	0.0001	0.0001	0.0001	0.00109	0.00147	29.69	0.00
Dissolved Metals								
Aluminum	mg/L	0.0005	0.0005	0.0005	0.0162	0.0135	18.18	0.00
Antimony	mg/L	0.00002	0.00002	0.00002	0.000999	0.000984	1.51	0.00
Arsenic	mg/L	0.00002	0.00002	0.00002	0.00389	0.00287	30.18	0.00
Barium	mg/L	0.00002	0.00002	0.00002	0.0122	0.0121	0.82	0.00
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Boron	mg/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Cadmium	mg/L	0.000005	0.000005	0.000005	0.0000083	0.0000057	**37.14**	0.00
Chromium	mg/L	0.0001	0.0001	0.0001	0.00011	0.0001	9.52	0.00
Copper	mg/L	0.00005	0.00005	0.00005	0.00629	0.00288	74.37	0.00
Iron	mg/L	0.001	0.001	0.001	0.0056	0.0055	1.80	0.00
Lead	mg/L	0.000005	0.000005	0.0000075	0.0000618	0.000026	*81.55*	**40.00**
Lithium	mg/L	0.0005	0.0005	0.0005	0.00188	0.00191	1.58	0.00
Manganese	mg/L	0.00005	0.00005	0.00005	0.00397	0.00303	26.86	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.0235	0.0236	0.42	0.00
Nickel	mg/L	0.00002	0.00002	0.00002	0.00189	0.00167	12.36	0.00
Selenium	mg/L	0.00004	0.00004	0.00004	0.000179	0.000175	2.26	0.00
Strontium	mg/L	0.00005	0.000066	0.000088	0.183	0.184	0.54	**28.57**
Thallium	mg/L	0.000002	0.000002	0.000002	0.0000091	0.0000101	10.42	0.00
Tin	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Titanium	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Uranium	mg/L	0.000002	0.000002	0.000002	0.00441	0.00444	0.68	0.00
Vanadium	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Zinc	mg/L	0.0001	0.0001	0.0001	0.00544	0.00198	93.26	0.00
% Exceedance*							10%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-22 Meadowbank 2025 West Extension Pool WEP 1 QAQC (ST-30)

ST-30	Sample date		6/8/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters									
Turbidity	NTU	0.1	0.1	0.1	0.1	14	10	33.33	0.00
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	87.3	84.8	2.91	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	1	60	51	16.22	0.00
TDS	mg/L	10	10	10	10	85	90	5.71	0.00
TSS	mg/L	1	1	1	1	100	87	13.90	0.00
Major Ions									
Chloride	mg/L	1	1	1	1	1.4	1.3	7.41	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.00803	0.00802	0.12	0.00
Cyanide (free)	mg/L	0.0005	0.0005	0.0005	0.0005	0.00133	0.00132	0.75	0.00
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.0005	0.0021	0.0022	4.65	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.11	0.11	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	0.5	30	27	10.53	0.00
Nutrients									
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.28	0.23	19.61	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.26	0.27	3.77	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.012	18.18	0.00
Total Metals									
Aluminum	mg/L	0.003	0.003	0.003	0.003	1.42	1.54	8.11	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.00647	0.00661	2.14	0.00
Barium	mg/L	0.001	0.001	0.001	0.001	0.0203	0.0204	0.49	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000033	0.000036	8.70	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.0077	0.0084	8.70	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.01	0.0101	1.00	0.00
Iron	mg/L	0.01	0.01	0.01	0.01	3.34	3.51	4.96	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.00167	0.00177	5.81	0.00
Manganese	mg/L	0.001	0.001	0.001	0.001	0.516	0.492	4.76	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.0023	0.0023	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0072	0.0073	1.38	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00013	0.00014	7.41	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.000026	0.000023	12.24	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000029	0.000029	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.0072	0.0091	**23.31**	0.00
% Exceedance*								3%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-23 Meadowbank 2025 West Extension Pool WEP 2 QAQC (ST-31)

ST-31	Sample date		8/3/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters									
Turbidity	NTU	0.1	0.1	0.1	0.1	5.7	2.9	65.12	0.00
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	124	125	0.80	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	1	87	84	3.51	0.00
TDS	mg/L	10	10	10	10	185	170	8.45	0.00
TSS	mg/L	1	1	1	1	19	5	*116.67*	0.00
Major Ions									
Chloride	mg/L	1	1	1	1	1.5	1.4	6.90	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.00103	0.00133	**25.42**	0.00
Cyanide (free)	mg/L	0.0005	0.0005	0.0005	0.0005	0.00085	0.00076	11.18	0.00
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.0005	0.00086	0.0013	**40.74**	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.17	0.17	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	0.5	45	46	2.20	0.00
Nutrients									
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.12	0.12	0.00	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals									
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.344	0.598	53.93	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.00455	0.00685	40.35	0.00
Barium	mg/L	0.001	0.001	0.001	0.001	0.0148	0.016	7.79	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.000012	18.18	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.0051	0.0086	**51.09**	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00202	0.00254	**22.81**	0.00
Iron	mg/L	0.01	0.01	0.01	0.01	0.975	1.62	49.71	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.00045	0.00078	**53.66**	0.00
Manganese	mg/L	0.001	0.001	0.001	0.001	0.049	0.0711	36.80	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.0042	0.0042	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0052	0.0072	**32.26**	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.000012	18.18	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*								17%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-24 Meadowbank 2025 Saddle Dam 3 QAQC (ST-32)

ST-32	Sample date		6/8/2025						7/20/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters														
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	59.2	61.2	3.32	-	0.5	-	307	309	0.65	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	37	34	8.45	0.00	1	1	80	81	1.24	0.00
TDS	mg/L	10	10	10	65	75	14.29	0.00	10	10	550	550	0.00	0.00
TSS	mg/L	1	1	1	38	42	10.00	0.00	1	1	2	2	0.00	0.00
Major Ions														
Chloride	mg/L	1	1	1	2.7	2.1	**25.00**	0.00	1	1	30	30	0.00	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.00911	0.00847	7.28	0.00	0.0005	0.0005	0.0016	0.00118	**30.22**	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1	0.24	0.24	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	28	27	3.64	0.00	0.5	0.5	200	190	5.13	0.00
Nutrients														
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.62	0.52	17.54	0.00	0.1	0.1	7.24	7.25	0.14	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.016	0.018	11.76	0.00	0.01	0.01	0.026	0.027	3.77	0.00
Total Metals														
Aluminum	mg/L	0.003	0.003	0.003	1.25	1.32	5.45	0.00	0.003	0.003	0.0395	0.0333	17.03	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0117	0.012	2.53	0.00	0.0001	0.0001	0.0169	0.0167	1.19	0.00
Barium	mg/L	0.001	0.001	0.001	0.0216	0.0216	0.00	0.00	0.001	0.001	0.0537	0.0534	0.56	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000025	0.000031	**21.43**	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.014	0.014	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00884	0.00903	2.13	0.00	0.0005	0.0005	0.00193	0.00193	0.00	0.00
Iron	mg/L	0.01	0.01	0.01	2.37	2.4	1.26	0.00	0.01	0.01	0.097	0.076	**24.28**	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00555	0.00559	0.72	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	0.0645	0.0654	1.39	0.00	0.001	0.001	0.0115	0.0111	3.54	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0029	0.003	3.39	0.00	0.001	0.001	0.0064	0.0063	1.57	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0176	0.0179	1.69	0.00	0.001	0.001	0.0474	0.0472	0.42	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.00012	0.00013	8.00	0.00	0.0001	0.0001	0.00065	0.00063	3.12	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00003	0.000026	14.29	0.00	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00004	0.000038	5.13	0.00	0.00001	0.00001	0.000039	0.000036	8.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.0058	0.0058	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*							0%	0%					0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-25 Meadowbank 2025 Phaser Pit QAQC (ST-41 Lake)

ST-41 LAKE	Sample date		7/20/2025						10/6/2025	
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Conventional Parameters										
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	59.1	60.7	2.67	-	0.5	104
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	39	37	5.26	0.00	1	53
Carbonate, as $CaCO_3$	mg/L	1	1	-	1	1	0.00	-	1	1
Bicarbonate, as $CaCO_3$	mg/L	1	1	-	38	37	2.67	-	1	53
TDS	mg/L	10	10	10	70	75	6.90	0.00	10	95
TSS	mg/L	1	1	1	1	1	0.00	0.00	1	1
Total organic carbon	mg/L	0.4	0.4	0.4	2.3	2.3	0.00	0.00	0.4	2.4
Dissolved organic carbon	mg/L	0.4	0.4	0.4	2.3	2.3	0.00	0.00	0.4	2.3
Major Ions										
Chloride	mg/L	1	1	1	3.3	3.3	0.00	0.00	1	6.1
Cyanide	mg/L	0.0005	0.0005	0.0005	0.00052	0.00058	10.91	0.00	0.0005	0.0005
Cyanide (free)	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005
Silica	mg/L	0.05	0.05	0.05	1.3	1.3	0.00	0.00	0.4	2.2
Sulfate	mg/L	0.5	0.5	0.5	27	27	0.00	0.00	0.5	45
Nutrients										
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.061
Nitrate	mg N/L	0.1	0.1	0.1	0.24	0.24	0.00	0.00	0.1	0.47
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	0.13	0.18	**32.26**	0.00	0.1	0.14
Total phosphorus	mg P/L	0.001	0.005	0.001	0.0076	0.001	**153.49**	**133.33**	0.001	0.001
Orthophosphate	mg P/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01
Total Metals										
Aluminum	mg/L	0.0005	0.00074	0.0005	0.0213	0.0195	8.82	**38.71**	0.0005	0.0133
Antimony	mg/L	0.00002	0.00002	0.00002	0.000307	0.000329	6.92	0.00	0.00002	0.000606
Arsenic	mg/L	0.00002	0.00002	0.00002	0.0014	0.00169	18.77	0.00	0.00002	0.00136
Barium	mg/L	0.00002	0.00012	0.00002	0.0085	0.00801	5.94	**142.86**	0.00002	0.0156
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Boron	mg/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01
Cadmium	mg/L	0.000005	0.000005	0.000005	0.0000051	0.0000055	7.55	0.00	0.000005	0.0000063
Calcium (total)	mg/L	0.01	0.074	-	17.5	18	2.82	-	0.05	31.4
Chromium	mg/L	0.0001	0.0001	0.0001	0.00106	0.00108	1.87	0.00	0.0001	0.0001
Copper	mg/L	0.00005	0.00005	0.00005	0.00406	0.00422	3.86	0.00	0.00005	0.0031
Iron	mg/L	0.001	0.001	0.001	0.0126	0.008	*44.66*	0.00	0.001	0.0097
Lead	mg/L	0.000005	0.000005	0.000005	0.0000435	0.0000368	16.69	0.00	0.000005	0.0000601
Lithium	mg/L	0.0005	0.0005	0.0005	0.00116	0.00128	9.84	0.00	0.0005	0.00167
Magnesium (total)	mg/L	0.01	0.05	-	3.74	3.8	1.59	-	0.05	6.32
Manganese	mg/L	0.00005	0.000268	0.00005	0.00219	0.00205	6.60	**137.11**	0.00005	0.0015
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.00618	0.00606	1.96	0.00	0.00005	0.0102
Nickel	mg/L	0.00002	0.00002	0.00002	0.00202	0.00203	0.49	0.00	0.00002	0.00172
Potassium (total)	mg/L	0.01	0.05	-	1.14	1.06	7.27	-	0.05	1.63
Selenium	mg/L	0.00004	0.00004	0.00004	0.000093	0.00013	**33.18**	0.00	0.00004	0.000144
Sodium (total)	mg/L	0.01	0.076	-	1.14	1.17	2.60	-	0.05	1.49
Strontium	mg/L	0.00005	0.000453	0.00005	0.0911	0.0882	3.23	**160.24**	0.00005	0.157
Thallium	mg/L	0.000002	0.000002	0.000002	0.0000058	0.0000051	12.84	0.00	0.000002	0.0000062
Tin	mg/L	0.0002	0.0002	0.0002	0.00161	0.00102	**44.87**	0.00	0.0002	0.0002
Titanium	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005
Uranium	mg/L	0.000002	0.000002	0.000002	0.00195	0.00206	5.49	0.00	0.000002	0.00417
Vanadium	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002
Zinc	mg/L	0.0001	0.00079	0.0001	0.00283	0.00192	38.32	**155.06**	0.0001	0.00019
Dissolved Metals										
Aluminum	mg/L	0.0005	0.0005	0.0005	0.00466	0.00472	1.28	0.00	0.0005	0.00894
Antimony	mg/L	0.00002	0.00002	0.00002	0.000327	0.000344	5.07	0.00	0.00002	0.000582
Arsenic	mg/L	0.00002	0.00002	0.00002	0.00124	0.00124	0.00	0.00	0.00002	0.00128
Barium	mg/L	0.00002	0.000027	0.00002	0.00717	0.00727	1.39	**29.79**	0.00002	0.0147
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Boron	mg/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01
Cadmium	mg/L	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00	0.000005	0.0000054
Chromium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Copper	mg/L	0.00005	0.00005	0.00005	0.00187	0.00196	4.70	0.00	0.00005	0.00289
Iron	mg/L	0.001	0.001	0.001	0.0041	0.004	2.47	0.00	0.001	0.0022
Lead	mg/L	0.000005	0.000005	0.000005	0.0000158	0.0000164	3.73	0.00	0.000005	0.0000077
Lithium	mg/L	0.0005	0.0005	0.0005	0.00109	0.00103	5.66	0.00	0.0005	0.00163
Manganese	mg/L	0.00005	0.00005	0.00005	0.000094	0.000123	**26.73**	0.00	0.00005	0.000173
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.00659	0.00666	1.06	0.00	0.00005	0.00983
Nickel	mg/L	0.00002	0.00002	0.00002	0.00128	0.00128	0.00	0.00	0.00002	0.00174
Selenium	mg/L	0.00004	0.00004	0.00004	0.000086	0.000085	1.17	0.00	0.00004	0.000131
Strontium	mg/L	0.00005	0.00005	0.00005	0.0835	0.084	0.60	0.00	0.00005	0.155
Thallium	mg/L	0.000002	0.000002	0.000002	0.000006	0.0000054	10.53	0.00	0.000002	0.0000084
Tin	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002
Titanium	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005
Uranium	mg/L	0.000002	0.000002	0.000002	0.000487	0.000481	1.24	0.00	0.000002	0.00404
Vanadium	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002
Zinc	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.00022
% Exceedance*							1%	0%		

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-26 Meadowbank 2025 BB Phaser Pit QAQC (ST-42 Lake)

ST-42 Lake	Sample date		8/4/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters									
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	59.7	61	2.15	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	1	33	34	2.99	0.00
Carbonate, as $CaCO_3$	mg/L	1	1	1	-	1	1	0.00	-
Bicarbonate, as $CaCO_3$	mg/L	1	1	1	-	33	34	2.99	-
TDS	mg/L	10	10	10	10	80	70	13.33	0.00
TSS	mg/L	1	1	1	1	1	1	0.00	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	0.4	2.9	3.5	18.75	0.00
Dissolved organic carbon	mg/L	0.4	0.4	0.4	0.4	2.9	3.3	12.90	0.00
Major Ions									
Chloride	mg/L	1	1	1	1	3.4	3.4	0.00	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Cyanide (free)	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00051	1.98	0.00
Silica	mg/L	0.05	0.05	0.05	0.05	2	2	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	0.5	29	30	3.39	0.00
Nutrients									
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.31	0.31	0.00	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	0.1	0.2	0.46	**78.79**	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.001	0.0012	18.18	0.00
Orthophosphate	mg P/L	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals									
Aluminum	mg/L	0.0005	0.00228	0.0005	0.0005	0.0244	0.041	50.76	0.00
Antimony	mg/L	0.00002	0.00002	0.00002	0.00002	0.000299	0.000302	1.00	0.00
Arsenic	mg/L	0.00002	0.00002	0.00002	0.000023	0.00124	0.00126	1.60	13.95
Barium	mg/L	0.00002	0.000092	0.000056	0.00005	0.00821	0.00855	4.06	11.32
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000287	0.00001	*186.53*	0.00
Boron	mg/L	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Cadmium	mg/L	0.000005	0.000005	0.000005	0.000005	0.0000118	0.0000182	**42.67**	0.00
Calcium (total)	mg/L	0.01	0.095	0.05	-	17.6	17.8	1.13	-
Chromium	mg/L	0.0001	0.0001	0.0001	0.00017	0.0001	0.00022	**75.00**	**51.85**
Copper	mg/L	0.00005	0.00005	0.00005	0.00005	0.00276	0.00312	12.24	0.00
Iron	mg/L	0.001	0.0016	0.0019	0.001	0.0216	0.0438	67.89	**62.07**
Lead	mg/L	0.000005	0.0000085	0.000005	0.000005	0.0000432	0.000107	*84.95*	0.00
Lithium	mg/L	0.0005	0.0005	0.0005	0.0005	0.00142	0.00137	3.58	0.00
Magnesium (total)	mg/L	0.01	0.05	0.05	-	3.82	4	4.60	-
Manganese	mg/L	0.00005	0.00005	0.00005	0.00005	0.00362	0.00434	18.09	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.00005	0.00388	0.0039	0.51	0.00
Nickel	mg/L	0.00002	0.00002	0.00002	0.00002	0.00235	0.00255	8.16	0.00
Potassium (total)	mg/L	0.01	0.05	0.05	-	1.03	1.39	29.75	-
Selenium	mg/L	0.00004	0.00004	0.00004	0.00004	0.000069	0.000074	6.99	0.00
Sodium (total)	mg/L	0.01	0.05	0.05	-	1.01	1.34	28.09	-
Strontium	mg/L	0.00005	0.000073	0.00005	0.00005	0.0805	0.081	0.62	0.00
Thallium	mg/L	0.000002	0.000002	0.000002	0.000002	0.0000061	0.0000067	9.38	0.00
Tin	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Titanium	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00079	**44.96**	0.00
Uranium	mg/L	0.000002	0.000002	0.000002	0.000002	0.00215	0.00217	0.93	0.00
Vanadium	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Zinc	mg/L	0.0001	0.00021	0.0001	0.0001	0.00054	0.0146	*185.73*	0.00
Dissolved Metals									
Aluminum	mg/L	0.0005	0.0069	0.0185	0.0005	0.0195	0.0186	4.72	*189.47*
Antimony	mg/L	0.00002	0.00002	0.00002	0.00002	0.000368	0.000325	12.41	0.00
Arsenic	mg/L	0.00002	0.00002	0.000025	0.00002	0.00351	0.00286	20.41	**22.22**
Barium	mg/L	0.00002	0.000242	0.000802	0.00002	0.00951	0.0082	14.79	*190.27*
Beryllium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Boron	mg/L	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Cadmium	mg/L	0.000005	0.000005	0.000005	0.000005	0.0000089	0.0000075	17.07	0.00
Chromium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00013	**26.09**	0.00
Copper	mg/L	0.00005	0.00005	0.00044	0.00005	0.0239	0.015	45.76	**159.18**
Iron	mg/L	0.001	0.0025	0.0094	0.001	0.0092	0.0096	4.26	**161.54**
Lead	mg/L	0.000005	0.0000184	0.000045	0.0000075	0.000033	0.0000343	3.86	**142.86**
Lithium	mg/L	0.0005	0.0005	0.0005	0.0005	0.00099	0.00108	8.70	0.00
Manganese	mg/L	0.00005	0.000225	0.000828	0.00005	0.0042	0.00379	10.26	*177.22*
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.00005	0.000102	0.000381	0.00005	0.00417	0.00394	5.67	**153.60**
Nickel	mg/L	0.00002	0.000057	0.000361	0.00002	0.015	0.00819	58.73	*179.00*
Selenium	mg/L	0.00004	0.00004	0.00004	0.00004	0.00104	0.000459	77.52	0.00
Strontium	mg/L	0.00005	0.000437	0.00159	0.000088	0.0864	0.0821	5.10	*179.02*
Thallium	mg/L	0.000002	0.0000042	0.000002	0.000002	0.0000045	0.0000045	0.00	0.00
Tin	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Titanium	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Uranium	mg/L	0.000002	0.000002	0.000002	0.000002	0.00196	0.00195	0.51	0.00
Vanadium	mg/L	0.0002	0.00028	0.00073	0.0002	0.0002	0.0002	0.00	**113.98**
Zinc	mg/L	0.0001	0.00105	0.00563	0.0001	0.00245	0.00264	7.47	*193.02*
% Exceedance*								11%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-27 Meadowbank 2025 Phaser Attenuation Pond QAQC (ST-43)

ST-43	Sample date		7/14/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters									
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	76.5	74.9	2.11	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1.2	1	38	52	31.11	18.18
TDS	mg/L	10	10	10	10	95	100	5.13	0.00
TSS	mg/L	1	1	1	1	1	1	0.00	0.00
Major Ions									
Chloride	mg/L	1	1	1	1	5.5	5.4	1.83	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.00065	0.00057	13.11	0.00
Cyanide (free)	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.0005	0.00055	0.0005	9.52	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	0.5	38	38	0.00	0.00
Nutrients									
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals									
Aluminum	mg/L	0.0005	0.00267	0.0005	0.0005	0.0261	0.0257	1.54	0.00
Arsenic	mg/L	0.00002	0.00002	0.00002	0.00002	0.000658	0.000648	1.53	0.00
Barium	mg/L	0.00002	0.00002	0.00002	0.00005	0.0106	0.0104	1.90	**85.71**
Cadmium	mg/L	0.000005	0.000005	0.000005	0.000005	0.0000077	0.0000076	1.31	0.00
Chromium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Copper	mg/L	0.00005	0.00005	0.00005	0.00005	0.00256	0.00254	0.78	0.00
Iron	mg/L	0.001	0.001	0.001	0.001	0.159	0.15	5.83	0.00
Lead	mg/L	0.000005	0.000005	0.000005	0.000005	0.000117	0.000115	1.72	0.00
Manganese	mg/L	0.00005	0.00005	0.00005	0.00005	0.0108	0.0102	5.71	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.00005	0.00152	0.00152	0.00	0.00
Nickel	mg/L	0.00002	0.00002	0.00002	0.00002	0.00202	0.00199	1.50	0.00
Selenium	mg/L	0.00004	0.00004	0.00004	0.00004	0.000069	0.000073	5.63	0.00
Silver	mg/L	0.000005	0.000005	0.000005	0.000005	0.0000074	0.0000079	6.54	0.00
Thallium	mg/L	0.000002	0.000002	0.000002	0.000002	0.0000064	0.0000063	1.57	0.00
Zinc	mg/L	0.0001	0.0001	0.0001	0.0001	0.0006	0.00063	4.88	0.00
% Exceedance*								3%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.
[1] Different MDL used for this parameter.

Table 1-28 Meadowbank 2025 KM 87 Water Quality Monitoring (ST-44)

ST-44	Sample date		7/7/2025							9/9/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters																
TSS	mg/L	1	1	1	1	2	3	**40.00**	0.00	1	1	1	3	3	0.00	0.00
General Organics																
Total oil and grease	mg/L	0.5	0.5	0.5	0.5	0.6	2.7	**127.27**	0.00	0.5	0.5	0.5	0.5	0.5	0.00	0.00
Volatile Organics																
Benzene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Ethylbenzene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Toluene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Xylenes	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.00	0.00	0.0004	0.0004	0.0004	0.0004	0.0004	0.00	0.00
m,p-Xylenes	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.00	0.00	0.0004	0.0004	0.0004	0.0004	0.0004	0.00	0.00
o-Xylene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
F2 (C10-C16)	mg/L	0.09	0.09	0.09	0.09	0.09	0.09	0.00	0.00	0.09	0.09	0.09	0.09	0.09	0.00	0.00
F3 (C16-C34)	mg/L	0.2	0.2	0.2	0.2	0.2	0.2	0.00	0.00	0.2	0.2	0.2	0.2	0.2	0.00	0.00
F4 (C34-C50)	mg/L	0.2	0.2	0.2	0.2	0.2	0.2	0.00	0.00	0.2	0.2	0.2	0.2	0.2	0.00	0.00
Petroleum Hydrocarbons F (C10-C50)	mg/L	0.2	0.2	0.2	0.2	0.2	0.2	0.00	0.00	0.2	0.2	-	0.2	0.2	0.00	-
% Exceedance*								0%	0%						0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-29 Meadowbank 2025 East Dike Seepage QAQC (ST-S-1)

ST-S-1	Sample date		5/18/2025						10/27/2025						
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters															
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	36.4	35.1	3.64	-	0.5	0.5	-	52.6	54.3	3.18	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	33	34	2.99	0.00	1	1	1	32	32	0.00	0.00
TDS	mg/L	10	10	10	45	45	0.00	0.00	10	10	10	70	60	15.38	0.00
TSS	mg/L	1	1	1	2	2	0.00	0.00	1	1	1	2	1	**66.67**	0.00
Major Ions															
Chloride	mg/L	1	1	1	1.6	1.5	6.45	0.00	1	1	1	2.1	2.1	0.00	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.11	0.11	0.00	0.00	0.1	0.1	0.1	0.12	0.12	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	8.5	8.5	0.00	0.00	0.5	0.5	0.5	28	27	3.64	0.00
Nutrients															
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.11	0.11	0.00	0.00	0.1	0.1	0.1	0.41	0.4	2.47	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals															
Aluminum	mg/L	0.003	0.003	0.003	0.0327	0.0346	5.65	0.00	0.003	0.003	0.003	0.0519	0.056	7.60	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00033	0.0003	9.52	0.00	0.0001	0.0001	0.0001	0.00183	0.00179	2.21	0.00
Barium	mg/L	0.001	0.001	0.001	0.0088	0.0085	3.47	0.00	0.001	0.001	0.001	0.0103	0.0102	0.98	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00101	0.00093	8.25	0.00	0.0005	0.0005	0.0005	0.00197	0.00183	7.37	0.00
Iron	mg/L	0.01	0.01	0.01	0.036	0.038	5.41	0.00	0.01	0.01	0.01	0.073	0.07	4.20	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	0.001	0.0011	9.52	0.00	0.001	0.001	0.001	0.0033	0.0034	2.99	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.0011	0.0011	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.0023	0.0021	9.09	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*							0%	0%						0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-30 Meadowbank 2025 Saddle Dam 1 QAQC (ST-S-2)

ST-S-2	Sample date		7/14/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters								
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	359	368	2.48	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	59	60	1.68	0.00
TDS	mg/L	10	10	10	630	615	2.41	0.00
TSS	mg/L	1	1	1	5	3	**50.00**	0.00
Major Ions								
Chloride	mg/L	1	1	1	7.4	7.4	0.00	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0053	0.00582	9.35	0.00
Cyanide (free)	mg/L	0.0005	0.0005	0.0005	0.00061	0.00077	**23.19**	0.00
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.0012	0.0013	8.00	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.21	0.22	4.65	0.00
Sulfate	mg/L	0.5	0.5	0.5	350	360	2.82	0.00
Nutrients								
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	6.89	6.93	0.58	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.0339	0.032	5.77	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0124	0.0125	0.80	0.00
Barium	mg/L	0.001	0.001	0.001	0.0231	0.023	0.43	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000026	0.000031	17.54	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00144	0.00156	8.00	0.00
Iron	mg/L	0.01	0.01	0.01	0.088	0.089	1.13	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	0.0392	0.039	0.51	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0138	0.0139	0.72	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0155	0.0154	0.65	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.00167	0.00169	1.19	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.576	0.565	1.93	0.00
% Exceedance*							0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-31 Meadowbank 2025 Central Dike Seepage QAQC (ST-S-5)

ST-S-5	Sample date		1/5/2025						11/9/2025						
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters															
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	857	884	3.10	-	0.5	0.5	-	949	905	4.75	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	190	190	0.00	0.00	1	1	1	180	180	0.00	0.00
TDS	mg/L	10	10	10	2150	2100	2.35	0.00	10	10	10	2030	2020	0.49	0.00
TSS	mg/L	1	1	1	8	7	13.33	0.00	1	1	1	4	4	0.00	0.00
Major Ions															
Chloride	mg/L	1	1	1	110	100	9.52	0.00	1	1	1	100	100	0.00	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0732	0.0839	13.62	0.00	0.0005	0.0005	0.0005	0.0251	0.0293	15.44	0.00
Cyanide (free)	mg/L	0.002	0.0026	0.002	0.012	0.012	0.00	**26.09**	0.0005	0.0005	0.0005	0.0133	0.0123	7.81	0.00
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.024	0.021	13.33	0.00	0.0005	0.0005	0.0005	0.015	0.018	18.18	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.48	0.48	0.00	0.00	0.1	0.1	0.1	0.43	0.42	2.35	0.00
Sulfate	mg/L	0.5	0.52	0.5	1300	1300	0.00	3.92	0.5	0.6	0.5	1300	1200	8.00	18.18
Nutrients															
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	20	20	0.00	0.00	0.05	0.05	0.05	20	20	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1	0.1	0.4	0.4	0.00	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.032	0.031	3.17	0.00
Total Metals															
Aluminum	mg/L	0.003	0.003	0.003	0.0336	0.006	*139.39*	0.00	0.003	0.003	0.003	0.0112	0.0379	*108.76*	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0722	0.0774	6.95	0.00	0.0001	0.0001	0.0001	0.0219	0.0208	5.15	0.00
Barium	mg/L	0.001	0.001	0.001	0.0223	0.0225	0.89	0.00	0.001	0.001	0.001	0.0245	0.0291	17.16	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00002	0.00002	0.00	0.00	0.00001	0.00001	0.00001	0.000026	0.000034	**26.67**	0.00
Chromium	mg/L	0.001	0.001	0.001	0.002	0.002	0.00	0.00	0.001	0.001	0.001	0.002	0.002	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.001	0.001	0.00	0.00	0.0005	0.0005	0.0005	0.001	0.001	0.00	0.00
Iron	mg/L	0.01	0.01	0.01	2.81	2.88	2.46	0.00	0.01	0.01	0.01	0.717	0.691	3.69	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	1.81	1.93	6.42	0.00	0.001	0.001	0.001	2.15	2	7.23	0.00
Mercury	mg/L	0.0001[1] / 0.00001	0.00001	0.00001	0.0001	0.0001	0.00	0.00	0.00001	0.00001	0.00001	0.0001	0.0001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0629	0.0674	6.91	0.00	0.001	0.001	0.001	0.0599	0.0569	5.14	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0022	0.0020	9.52	0.00	0.001	0.001	0.001	0.0307	0.0289	6.04	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.00022	0.00021	4.65	0.00	0.0001	0.0001	0.0001	0.00194	0.00188	3.14	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00004	0.00004	0.00	0.00	0.00002	0.00002	0.00002	0.00004	0.00004	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00002	0.00002	0.00	0.00	0.00001	0.00001	0.00001	0.00002	0.00002	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.01	0.01	0.00	0.00	0.005	0.005	0.005	0.01	0.01	0.00	0.00
Dissolved Metals															
Aluminum	mg/L	0.003	0.003	0.003	0.006	0.006	0.00	0.00	0.003	0.003	0.003	0.006	0.006	0.00	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0789	0.0823	4.22	0.00	0.0001	0.0001	0.0001	0.00971	0.0126	25.91	0.00
Barium	mg/L	0.001	0.001	0.001	0.0229	0.0239	4.27	0.00	0.001	0.001	0.001	0.0273	0.0281	2.89	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00002	0.00002	0.00	0.00	0.00001	0.00001	0.00001	0.000024	0.000027	11.76	0.00
Chromium	mg/L	0.001	0.001	0.001	0.002	0.002	0.00	0.00	0.001	0.001	0.001	0.002	0.002	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00	0.0002	0.0002	0.0002	0.0475	0.1	71.19	0.00
Iron	mg/L	0.005	0.005	0.005	2.81	2.76	1.80	0.00	0.005	0.005	0.005	0.076	0.068	11.11	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	1.97	2.07	4.95	0.00	0.001	0.001	0.001	1.87	1.49	22.62	0.00
Mercury	mg/L	0.0001[1] / 0.00001	0.00001	0.00001	0.0001	0.0001	0.00	0.00	0.00001	0.00001	0.00001	0.0001	0.0001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0668	0.0689	3.10	0.00	0.001	0.001	0.001	0.0608	0.0599	1.49	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0022	0.0022	0.00	0.00	0.001	0.001	0.001	0.0877	0.156	56.05	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.00044	0.00046	4.44	0.00	0.0001	0.0001	0.0001	0.0149	0.0263	55.34	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00004	0.00004	0.00	0.00	0.00002	0.00002	0.00002	0.00004	0.00004	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00002	0.00002	0.00	0.00	0.00001	0.00001	0.00001	0.00002	0.00002	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.01	0.01	0.00	0.00	0.005	0.005	0.005	0.01	0.01	0.00	0.00
% Exceedance*							0%	0%						11%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.
[1] Different MDL used for this parameter.

Table 1-32 Meadowbank 2025 Assay Road Seepage QAQC (TPL-Assay)

TPL-Assay	Sample date		8/6/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters								
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	54	54.3	0.55	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	30	30	0.00	0.00
Carbonate, as $CaCO_3$	mg/L	1	1	-	1	1	0.00	-
Bicarbonate, as $CaCO_3$	mg/L	1	1	-	30	30	0.00	-
TDS	mg/L	10	10	10	85	60	**34.48**	0.00
TSS	mg/L	1	1	1	1	1	0.00	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	2.1	2.5	17.39	0.00
Dissolved organic carbon	mg/L	0.4	0.4	0.4	1.9	1.9	0.00	0.00
Colour	TCU	2	2	2	2	2	0.00	0.00
Major Ions								
Bromide	mg/L	1	1	1	1	1	0.00	0.00
Chloride	mg/L	1	1	1	8.6	8.8	2.30	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0008	0.00051	**44.27**	0.00
Cyanide (free)	mg/L	0.0005	0.0005	0.0005	0.00068	0.00083	19.87	0.00
Cyanide (WAD)	mg/L	0.0005	0.0005	0.0005	0.00066	0.0005	**27.59**	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Silica	mg/L	0.05	0.05	0.05	0.5	0.48	4.08	0.00
Sulfate	mg/L	0.5	0.5	0.5	18	19	5.41	0.00
Nutrients								
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	0.11	0.22	**66.67**	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.0034	0.0049	**36.14**	0.00
Orthophosphate	mg P/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.0052	0.0106	**68.35**	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00065	0.00066	1.53	0.00
Barium	mg/L	0.001	0.001	0.001	0.0064	0.0067	4.58	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Calcium (total)	mg/L	0.05	0.05	-	15.2	15.2	0.00	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00074	0.00128	**53.47**	0.00
Iron	mg/L	0.01	0.01	0.01	0.037	0.05	**29.89**	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00
Magnesium (total)	mg/L	0.05	0.05	-	3.89	3.93	1.02	-
Manganese	mg/L	0.001	0.001	0.001	0.0057	0.0063	10.00	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Potassium (total)	mg/L	0.05	0.05	-	1.53	1.63	6.33	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Sodium (total)	mg/L	0.05	0.05	-	2.03	2.14	5.28	-
Strontium	mg/L	0.001	0.001	0.001	0.0833	0.082	1.57	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.00029	0.00028	3.51	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.0091	**58.16**	0.00
Dissolved Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.0036	0.0059	**48.42**	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00151	0.00108	33.20	0.00
Barium	mg/L	0.001	0.001	0.001	0.0067	0.0065	3.03	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00576	0.00828	35.90	0.00
Iron	mg/L	0.005	0.005	0.005	0.0052	0.0073	**33.60**	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	0.0032	0.0038	17.14	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0014	**33.33**	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Strontium	mg/L	0.001	0.001	0.001	0.0821	0.0806	1.84	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.00028	0.00028	0.00	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.0053	5.83	0.00
% Exceedance*							3%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-33 Meadowbank 2025 Assay Road Seepage Trench QAQC (Mill-Trench)

MILL-TRENCH	Sample date		7/20/2025						10/13/2025	
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Major Ions										
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0173	0.0175	1.15	0.00	0.0005	0.0055
Cyanide (free)	mg/L	0.0005	0.0005	0.0005	0.0146	0.0145	0.69	0.00	0.0005	0.00249
Total Metals										
Copper	mg/L	0.0005	0.0005	0.0005	0.00497	0.00487	2.03	0.00	0.0005	0.00457
Iron	mg/L	0.01	0.01	0.01	0.185	0.179	3.30	0.00	0.01	0.295
% Exceedance*							0%	0%		

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-34 Meadowbank 2025 Landfarm QAQC (ST-14b)

ST-14b	Sample date		6/15/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters									
TSS	mg/L	1	1	1	1	48	50	4.08	0.00
Total Metals									
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.193	0.211	8.91	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00059	0.00052	12.61	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0009	0.00098	8.51	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0312	0.0328	5.00	0.00
Volatile Organics									
Benzene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Ethylbenzene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Toluene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Xylenes	mg/L	0.0004	0.0004	0.0004	0.0004	0.00079	0.00077	2.56	0.00
F2 (C10-C16)	mg/L	0.09	0.09	0.09	0.09	0.23	0.27	16.00	0.00
F3 (C16-C34)	mg/L	0.2	0.2	0.2	0.2	0.32	0.48	**40.00**	0.00
F4 (C34-C50)	mg/L	0.2	0.2	0.2	0.2	0.2	0.2	0.00	0.00
Petroleum Hydrocarbons F (C10-C50)	mg/L	0.2	0.22	0.2	-	0.63	0.89	**34.21**	-
% Exceedance*								0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-35 Meadowbank 2025 Sewage Treatment Plant QAQC (STP-IN, STP-LJ-MIX, STP-SEP)

STP-IN	Sample date		1/7/2025						6/2/2025		10/7/2025						
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters																	
TSS	mg/L	1	1	1	63	56	11.76	0.00	1	100	1	1	1	260	820	103.70	0.00
Nutrients																	
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	61	60	1.65	0.00	0.05	84	0.12	0.05	0.05	71	78	9.40	0.00
Un-Ionized Ammonia, calculated	mg N/L	0.0001	-	-	0.19	0.19	0.00	-	-	0.22	-	-	-	0.4	0.44	9.52	-
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	76	74	2.67	0.00	0.1	100	0.1	0.1	0.1	80	82	2.47	0.00
Biochemical Oxygen Demand	mg/L	2	2	2	150	170	12.50	0.00	2	120	2	2	2	88	20	125.93	0.00
Chemical Oxygen Demand	mg/L	4	4	4	360	340	5.71	0.00	4	350	4	4	4	780	270	97.14	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	7.9	6.6	17.93	0.00	0.001	9.9	0.001	0.001	0.001	12	8.5	34.15	0.00
% Exceedance*							0%	0%								22%	0%

STP-LJ-MIX	Sample date		2/10/2025							11/10/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters																
TSS	mg/L	1	1	1	1	11	14	24.00	0.00	1	1	1	17	10	51.85	0.00
Nutrients																
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	10	9.9	1.01	0.00	0.05	0.05	0.05	9.9	18	58.06	0.00
Un-Ionized Ammonia, calculated	mg N/L	0.0001	-	-	-	0.0034	0.0033	2.99	-	-	-	-	0.0014	0.0025	56.41	-
Nitrate	mg N/L	0.1	0.1	0.1	0.1	14.5	14.2	2.09	0.00	0.1	0.1	0.1	32.3	26.9	18.24	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.254	0.269	5.74	0.00	0.01	0.01	0.01	0.048	0.05	4.08	0.00
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	0.1	14	13	7.41	0.00	0.1	0.1	0.1	12	15	22.22	0.00
Biochemical Oxygen Demand,	mg/L	2	2	2	2	14	16	13.33	0.00	2	2	2	5	4	**22.22**	0.00
Chemical Oxygen Demand	mg/L	4	4	4	4	50	52	3.92	0.00	4	4	4	210	27	*154.43*	0.00
% Exceedance*								13%	0%						38%	0%

STP-SEP	Sample date		3/3/2025							11/10/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters																
TSS	mg/L	1	1	1	1	6	7	15.38	0.00	1	1	1	8	10	**22.22**	0.00
Nutrients																
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	36	36	0.00	0.00	0.05	0.05	0.05	26	26	0.00	0.00
Un-Ionized Ammonia, calculated	mg N/L	0.0001	-	-	-	0.11	0.1	9.52	-	-	-	-	0.076	0.076	0.00	-
Nitrate	mg N/L	0.1	0.1	0.1	0.1	4.6	4.72	2.58	0.00	0.1	0.1	0.1	9.12	10.4	13.11	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	1.44	1.38	4.26	0.00	0.01	0.01	0.01	1.5	1.47	2.02	0.00
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	0.1	39	39	0.00	0.00	0.1	0.1	0.1	28	33	16.39	0.00
Biochemical Oxygen Demand	mg/L	2	2	2	2	5	7	**33.33**	0.00	2	2	2	11	10	9.52	0.00
Chemical Oxygen Demand	mg/L	4	4	4	4	34	35	2.90	0.00	4	4	4	44	37	17.28	0.00
% Exceedance*								0%	0%						0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-36 Meadowbank 2025 Bulk Fuel QAQC (ST-40.1, ST-40.2, ST-40.3)

ST-40.1	Sample date		6/1/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters									
TSS	mg/L	1	1	1	1	19	4	*130.43*	0.00
Nutrients									
Total Ammonia (NH_3)	mg N/L	0.061	0.061	0.061	-	0.061	0.061	0.00	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00
General Organics									
Total oil and grease	mg/L	0.5	0.5	0.5	0.5	1.3	0.5	**88.89**	0.00
Total Metals									
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.00034	0.00025	**30.51**	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00518	0.00297	*54.23*	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.00059	0.00029	**68.18**	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.006	0.005	18.18	0.00
Volatile Organics									
Benzene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	-	-	0.00
Ethylbenzene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	-	-	0.00
Toluene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	-	-	0.00
Xylenes	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004	-	-	0.00
Petroleum Hydrocarbons F (C10-C50)	mg/L	0.2	0.2	0.2	-	0.2	-	-	-
% Exceedance*								0%	0%

ST-40.2	Sample date		6/1/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters								
TSS	mg/L	1	1	1	6	6	0.00	0.00
Nutrients								
Total Ammonia (NH_3)	mg N/L	0.061	0.061	-	0.061	0.061	0.00	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
General Organics								
Total oil and grease	mg/L	0.5	0.5	0.5	0.5	0.5	0.00	0.00
Total Metals								
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00063	0.0006	4.88	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00208	0.00196	5.94	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00036	0.00032	11.76	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Volatile Organics								
Benzene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Ethylbenzene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Toluene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Xylenes	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004	0.00	0.00
Petroleum Hydrocarbons F (C10-C50)	mg/L	0.2	0.2	-	0.2	0.2	0.00	-
% Exceedance*							0%	0%

ST-40.3	Sample date		6/1/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters								
TSS	mg/L	1	1	1	6	6	0.00	0.00
Nutrients								
Total Ammonia (NH_3)	mg N/L	0.061	0.17	-	0.063	0.061	3.23	-
Ammonia Nitrogen	mg N/L	0.05	0.14	0.05	0.052	0.05	3.92	**94.74**
General Organics								
Total oil and grease	mg/L	0.5	0.5	0.5	0.5	0.5	0.00	0.00
Total Metals								
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00044	0.00049	10.75	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00095	0.00109	13.73	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Volatile Organics								
Benzene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Ethylbenzene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Toluene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Xylenes	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004	0.00	0.00
Petroleum Hydrocarbons F (C10-C50)	mg/L	0.2	0.2	-	0.2	0.2	0.00	-
% Exceedance*							0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.
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1.2 WHALE TAIL SITE

In 2025, 286 samples were collected (excluding Groundwater and CREMP monitoring programs), 59 duplicates, 59 field blanks, and 44 trip blanks, which represents 21% of duplicates, 21% of field blanks, and 15% of trip blanks which is higher than the QA/QC duplicate and trip blank program objective of 10%.

The following presents the percentage of duplicate and field samples collected from each of the monitoring programs:

- MDMER and EEM monitoring programs: 19 duplicate samples, 18 field blanks, and 16 trip blanks were collected from a total of 55 samples, representing 35% of duplicates, 33% of field blanks, and 29% of trip blanks;

- Surface water monitoring programs: 38 duplicate samples, 39 field blanks, and 26 trip blanks were collected from a total of 218 samples, representing 17% of duplicates, 18% of field blanks, and 12% of trip blanks;

- Sewage Treatment Plant monitoring program: 2 duplicate samples, 2 field blanks, and 2 trip blanks were collected from a total of 13 samples, representing 15% of duplicates, 15% of field blanks, and 15% of trip blanks.

- Groundwater monitoring program: 2 duplicate samples, 1 field blank and 1 trip blank were collected for this program in 2025, which aligns with the frequency outlined in the current QAQC Management Plan. Refer to Attachment A to the 2025 Whale Tail Groundwater Management Monitoring Report for more details; and

- Core Receiving Environment Monitoring Program: A combined total of 20 duplicates were collected between the Meadowbank Lakes, Baker Lake, and the Whale Tail Lakes, corresponding to approximately 16% of the total number of water samples (218) collected in 2025. Travel blanks (TB), de-ionized (DI) blanks and Equipment Blanks were submitted for all sampling events, which aligns with the frequency outlined in the current QAQC Management Plan. Refer to the 2025 CREMP Report for more details.

Whale Tail results of the QA/QC data are presented below in Table 1-37 to Table 1-66 for the MDMER and EEM, Surface Water and Sewage Treatment Plant monitoring program. The following is a summary of the analytical precision (RPD), per sampling program:

- MDMER and EEM (Table 1-37 to Table 1-43): All the duplicate samples collected were considered as having high analytical precision except for two (2) samples having a medium analytical precision of 11% (x2).

- Surface Water (Table 1-44 to Table 1-65): All QAQC sampling events conducted within the surface water quality program are rated as having high analytical precision except for one (1) sample having a medium analytical precision of 19%.

- Sewage Treatment Plant (Table 1-66): All the duplicate samples collected were considered as having high analytical precision.

RPD values were also calculated for field blanks and lab blanks in 2025. All field blank samples are considered to have high analytical precision.

Table 1-37 Whale Tail 2025 Attenuation Pond Discharge MDMER QAQC (ST-MDMER-8)

ST-MDMER-8	Sample date		7/7/2025							8/4/2025						9/8/2025						
Parameter	Unit	MDL	Trip Blank	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	Trip Blank	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters																						
TSS	mg/L	1	1	1	1	1	1	0.00	0.00	1	1	1	1	0.00	0.00	1	1	1	2	1	**66.67**	0.00
Major Ions																						
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.00653	0.00649	0.61	0.00	0.0005	0.0005	0.00394	0.00401	1.76	0.00	0.0005	0.0005	0.0005	0.00128	0.00132	3.08	0.00
Nutrients																						
Un-Ionized Ammonia, calculated	mg N/L	0.0001	0.0004	0.0004	-	0.0025	0.0024	4.08	-	0.0004	-	0.0018	0.0018	0.00	-	0.0004	0.0004	-	0.0004	0.0004	0.00	-
Total Metals																						
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.0132	0.0127	3.86	0.00	0.0001	0.0001	0.0145	0.0149	2.72	0.00	0.0001	0.0001	0.0001	0.00988	0.00978	1.02	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00145	0.00139	4.23	0.00	0.0005	0.0005	0.00089	0.00074	18.40	0.00	0.0005	0.0005	0.0005	0.00081	0.00062	**26.57**	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0172	0.0166	3.55	0.00	0.001	0.001	0.0117	0.0125	6.61	0.00	0.001	0.001	0.001	0.0067	0.006	11.02	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.023	0.014	**48.65**	0.00	0.005	0.005	0.0092	0.0086	6.74	0.00	0.005	0.005	0.005	0.0056	0.005	11.32	0.00
Radionuclides																						
Radium-226	Bq/l	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.006	0.007	15.38	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*								0%	0%					0%	0%						0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-38 Whale Tail 2025 Attenuation Pond Discharge MDMER QAQC (ST-MDMER-11)

ST-MDMER-11	Sample date		4/14/2025							5/5/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters																
TSS	mg/L	1	1	1	1	1	1	0.00	0.00	1	1	1	1	1	0.00	0.00
Major Ions																
Cyanide	mg/L	0.0005	0.00058	0.0005	0.0005	0.00555	0.0054	2.74	0.00	0.0005	0.0005	0.0005	0.00873	0.00945	7.92	0.00
Nutrients																
Un-Ionized Ammonia, calculated	mg N/L	0.0001	0.0004	0.0004	-	0.0004	0.0004	0.00	-	-	-	-	0.0006	0.0006	0.00	-
Total Metals																
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.00597	0.00496	18.48	0.00	0.0001	0.0001	0.0001	0.0116	0.0113	2.62	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00087	0.00065	**28.95**	0.00	0.0005	0.0005	0.0005	0.00094	0.00079	17.34	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.00029	0.0002	**36.73**	0.00	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0095	0.0095	0.00	0.00	0.001	0.001	0.001	0.0256	0.0255	0.39	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.008	0.0059	**30.22**	0.00	0.005	0.005	0.005	0.0065	0.0065	0.00	0.00
Radionuclides																
Radium-226	Bq/l	0.005	0.005	0.005	0.005	0.015	0.016	6.45	0.00	0.005	0.005	0.005	0.016	0.018	11.76	0.00
% Exceedance*								0%	0%						0%	0%

ST-MDMER-11	Sample date		10/6/2025							11/10/2025						12/1/2025	
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Conventional Parameters																	
TSS	mg/L	1	1	1	1	2	2	0.00	0.00	1	1	1	2	**66.67**	0.00	1	2
Major Ions																	
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.00456	0.00426	6.80	0.00	0.0005	0.0005	0.00843	0.00844	0.12	0.00	0.00055	0.0104
Nutrients																	
Un-Ionized Ammonia, calculated	mg N/L	0.0001	0.0004	0.0004	-	0.0008	0.0007	13.33	-	-	-	0.0004	0.0004	0.00	-	0.0004	0.0004
Total Metals																	
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.0309	0.0466	40.52	0.00	0.0001	0.0001	0.0172	0.0227	27.57	0.00	0.0001	0.00777
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00097	0.00097	0.00	0.00	0.0005	0.0005	0.00096	0.00129	**29.33**	0.00	0.0005	0.00069
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0133	0.0134	0.75	0.00	0.001	0.001	0.0159	0.0157	1.27	0.00	0.001	0.0067
Zinc	mg/L	0.005	0.005	0.005	0.005	0.0083	0.0073	12.82	0.00	0.005	0.005	0.005	0.0052	3.92	0.00	0.005	0.005
Radionuclides																	
Radium-226	Bq/l	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
% Exceedance*								11%	0%					11%	0%		

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-39 Whale Tail 2025 Attenuation Pond Discharge EEM Effluent Characterization QAQC (ST-MDMER-EEM-8)

ST-MDMER-8-EEM	Sample date		7/7/2025							8/4/2025					
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters															
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	155	155	0.00	-	0.5	-	215	215	0.00	-
Total alkalinity, as $CaCO_3$	mg/L	1	5.8	1.2	1	47	49	4.17	18.18	1.4	1	48	45	6.45	**33.33**
Major Ions															
Chloride	mg/L	1	1	1	1	43	43	0.00	0.00	1	1	82	83	1.21	0.00
Sulfate	mg/L	0.5	0.5	0.5	0.5	85	82	3.59	0.00	0.5	0.5	96	96	0.00	0.00
Nutrients															
Nitrate	mg N/L	0.1	0.1	0.1	0.1	4.42	4.42	0.00	0.00	0.1	0.1	4.16	4.15	0.24	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Total Metals															
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.0139	0.0158	12.79	0.00	0.003	0.003	0.0088	0.01	12.77	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.000011	9.52	0.00	0.00001	0.00001	0.000018	0.000016	11.76	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.0002	0.00133	0.00138	3.69	0.00	0.0002	0.0002	0.00105	0.00107	1.89	0.00
Iron	mg/L	0.01	0.01	0.01	0.01	0.245	0.25	2.02	0.00	0.01	0.01	0.195	0.201	3.03	0.00
Manganese	mg/L	0.001	0.001	0.001	0.001	0.13	0.133	2.28	0.00	0.001	0.001	0.0895	0.09	0.56	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.0052	0.0054	3.77	0.00	0.001	0.001	0.0062	0.0061	1.63	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00023	0.00023	0.00	0.00	0.0001	0.0001	0.00026	0.00026	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000026	0.000025	3.92	0.00	0.00001	0.00001	0.000026	0.000028	7.41	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00086	0.00087	1.16	0.00	0.0001	0.0001	0.00201	0.00196	2.52	0.00
% Exceedance*								0%	0%					0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-40 Whale Tail 2025 Attenuation Pond Discharge EEM Effluent Characterization QAQC (ST-MDMER-EEM-11)

ST-MDMER-11-EEM	Sample date		4/14/2025						6/2/2025							10/6/2025			
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Duplicate**	**Original**	**RPD (FD/N)**
Conventional Parameters																			
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	152	138	9.66	-	0.5	0.5	-	102	103	0.98	-	0.5	241	231	4.24
Total alkalinity, as $CaCO_3$	mg/L	1	3.7	1	66	58	12.90	**114.89**	6.7	4.7	1	35	34	2.90	**129.82**	1.2	47	47	0.00
Major Ions																			
Chloride	mg/L	1	1	1	44	43	2.30	0.00	1	1	1	33	34	2.99	0.00	1	92	91	1.09
Sulfate	mg/L	0.5	0.5	0.5	66	66	0.00	0.00	0.5	0.5	0.5	46	46	0.00	0.00	0.56	120	120	0.00
Nutrients																			
Nitrate	mg N/L	0.1	0.1	0.1	1.17	1.22	4.18	0.00	0.1	0.1	0.1	1.41	1.4	0.71	0.00	0.1	3.49	3.5	0.29
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.0027	91.89
Total Metals																			
Aluminum	mg/L	0.003	0.003	0.003	0.0056	0.0049	13.33	0.00	0.003	0.003	0.003	0.0332	0.0287	14.54	0.00	0.003	0.0164	0.0164	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000011	0.000012	8.70	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.000013	0.000012	8.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.00
Cobalt	mg/L	0.0002	0.0002	0.0002	0.00116	0.00104	10.91	0.00	0.0002	0.0002	0.0002	0.00135	0.00143	5.76	0.00	0.0002	0.00115	0.00112	2.64
Iron	mg/L	0.01	0.01	0.01	0.314	0.303	3.57	0.00	0.01	0.01	0.01	0.348	0.403	14.65	0.00	0.01	0.763	0.753	1.32
Manganese	mg/L	0.001	0.001	0.001	0.3	0.267	11.64	0.00	0.001	0.001	0.001	0.192	0.2	4.08	0.00	0.001	0.0821	0.0794	3.34
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0058	0.0055	5.31	0.00	0.001	0.001	0.001	0.0028	0.0027	3.64	0.00	0.001	0.0057	0.0056	1.77
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.00014	0.00017	19.35	0.00	0.0001	0.0003	0.00031	3.28
Thallium	mg/L	0.00001	0.00001	0.00001	0.000021	0.000019	10.00	0.00	0.00001	0.00001	0.00001	0.000013	0.000012	8.00	0.00	0.00001	0.000017	0.000017	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.00087	0.00079	9.64	0.00	0.0001	0.0001	0.0001	0.00059	0.00062	4.96	0.00	0.0001	0.00233	0.00228	2.17
% Exceedance*							0%	0%						0%	0%				0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-41 Whale Tail 2025 EEM Exposure Area Kangislulik Lake QAQC (EEM-7-MAME-2)

EEM-7-MAME-2	Sample date		7/8/2025							8/10/2025						9/9/2025	
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Conventional Parameters																	
Hardness, as $CaCO_3$	mg/L	0.5	0.67	0.5	-	46.7	46.5	0.43	-	0.65	-	61.5	62	0.81	-	0.5	65.6
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	1	24	17	34.15	0.00	1	1	24	22	8.70	0.00	1.9	26
TSS	mg/L	1	1	1	1	1	1	0.00	0.00	1	1	1	1	0.00	0.00	2	7
Major Ions																	
Chloride	mg/L	1	1	1	1	14	14	0.00	0.00	1	1	18	18	0.00	0.00	1	21
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00058	14.81	0.00	0.0005	0.0005	0.00066	0.00079	17.93	0.00	0.0005	0.00209
Sulfate	mg/L	0.5	0.5	0.5	0.5	20	20	0.00	0.00	0.5	0.5	24	25	4.08	0.00	0.5	28
Nutrients																	
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05	0.05	0.054	7.69	0.00	0.05	0.05
Un-Ionized Ammonia, calculated	mg N/L	0.0001	0.0004	0.0004	-	0.0004	0.0004	0.00	-	0.00066	-	0.00066	0.00072	8.70	-	0.0004	0.0004
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.39	0.4	2.53	0.00	0.1	0.1	0.54	0.55	1.83	0.00	0.1	0.72
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.0019	0.0015	**23.53**	0.00	0.001	0.001
Total Metals																	
Aluminum	mg/L	0.0005	0.02	0.00159	0.0005	0.00851	0.0107	22.80	**104.31**	0.0191	0.0005	0.00673	0.00544	21.20	*189.80*	0.0005	0.0113
Arsenic	mg/L	0.00002	0.000027	0.00002	0.00002	0.00148	0.0015	1.34	0.00	0.000021	0.00002	0.00197	0.002	1.51	4.88	0.00002	0.00191
Cadmium	mg/L	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00	0.000005	0.000005	0.000005	0.000005	0.00	0.00	0.000005	0.000005
Chromium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00021	0.0002	4.88	0.00	0.00014	0.0001	0.00011	0.00021	**62.50**	**33.33**	0.0001	0.00024
Cobalt	mg/L	0.000005	0.0000058	0.000005	0.000005	0.0000484	0.0000543	11.49	0.00	0.0000254	0.000005	0.0000585	0.0000729	21.92	**134.21**	0.000005	0.0000892
Copper	mg/L	0.00005	0.000191	0.00005	0.00005	0.000433	0.000467	7.56	0.00	0.000224	0.00005	0.000507	0.000517	1.95	**127.01**	0.00005	0.00057
Iron	mg/L	0.001	0.004	0.001	0.001	0.0269	0.0268	0.37	0.00	0.005	0.001	0.0258	0.0223	14.55	**133.33**	0.001	0.0293
Lead	mg/L	0.000005	0.000107	0.000005	0.000005	0.0000135	0.0000247	**58.64**	0.00	0.0000907	0.000005	0.0000407	0.0000144	**95.46**	*179.10*	0.000005	0.000019
Manganese	mg/L	0.00005	0.000375	0.00005	0.00005	0.00725	0.00709	2.23	0.00	0.0004	0.000063	0.00761	0.00766	0.65	**145.57**	0.00005	0.0227
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.00005	0.000561	0.000573	2.12	0.00	0.00005	0.00005	0.00097	0.000983	1.33	0.00	0.00005	0.00131
Nickel	mg/L	0.00002	0.00202	0.000042	0.00002	0.00139	0.00141	1.43	**70.97**	0.000124	0.00002	0.00138	0.0014	1.44	**144.44**	0.00002	0.00161
Selenium	mg/L	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00	0.00	0.00004	0.00004	0.000054	0.000048	11.76	0.00	0.00004	0.000075
Thallium	mg/L	0.000002	0.000002	0.000002	0.000002	0.0000031	0.0000026	17.54	0.00	0.000002	0.000002	0.0000046	0.0000047	2.15	0.00	0.000002	0.0000033
Uranium	mg/L	0.000002	0.000002	0.000002	0.000002	0.00012	0.000122	1.65	0.00	0.000004	0.000002	0.000263	0.000254	3.48	**66.67**	0.000002	0.000314
Zinc	mg/L	0.0001	0.00367	0.0002	0.0001	0.00049	0.00172	*111.31*	**66.67**	0.00171	0.0001	0.00054	0.00043	**22.68**	*177.90*	0.00017	0.00034
Radionuclides																	
Radium-226	Bq/l	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
% Exceedance*								7%	0%					7%	0%		

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-42 Whale Tail 2025 EEM Exposure Area WTSE QAQC (WTSE-1)

WTSE-1	Sample date		4/21/2025							11/28/2025							12/12/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters																							
Hardness, as $CaCO_3$	mg/L	0.5	0.5	1.35	-	74.3	74	0.40	-	0.8	1.31	-	73.1	72.9	0.27	-	0.5	1.14	-	81.4	78.9	3.12	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	1	26	27	3.77	0.00	1	1	1	26	37	34.92	0.00	1	1	1	26	27	3.77	0.00
TSS	mg/L	1	1	1	1	1	1	0.00	0.00	1	1	1	1	1	0.00	0.00	1	1	1	1	1	0.00	0.00
Major Ions																							
Chloride	mg/L	1	1	1	1	23	23	0.00	0.00	1	1	1	24	26	8.00	0.00	1	1	1	23	23	0.00	0.00
Cyanide	mg/L	0.0005	0.0005	0.0005	0.0005	0.00066	0.0007	5.88	0.00	0.00054	0.0005	0.0005	0.00137	0.00157	13.61	0.00	0.0005	0.0005	0.0005	0.00093	0.00092	1.08	0.00
Sulfate	mg/L	0.5	0.5	0.5	0.5	29	29	0.00	0.00	0.5	0.72	0.5	32	32	0.00	**36.07**	0.5	0.5	0.5	32	32	0.00	0.00
Nutrients																							
Ammonia Nitrogen	mg N/L	0.05	0.05	0.066	0.05	0.05	0.098	**64.86**	**27.59**	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05	0.05	0.066	0.053	**21.85**	0.00
Un-Ionized Ammonia, calculated	mg N/L	0.0001	0.0004	0.0004	-	0.0004	0.0004	0.00	-	0.0004	0.0004	-	0.0004	0.0004	0.00	-	-	-	-	0.0004	0.0004	0.00	-
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.99	1	1.01	0.00	0.1	0.1	0.1	0.76	0.76	0.00	0.00	0.1	0.1	0.1	0.71	0.72	1.40	0.00
Total phosphorus	mg P/L	0.001	0.002	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.0013	0.0021	**47.06**	0.00	0.001	0.001	0.001	0.0017	0.0015	12.50	0.00
Total Metals																							
Aluminum	mg/L	0.0005	0.00171	0.0134	0.0005	0.00704	0.00676	4.06	*185.61*	0.00488	0.0384	0.0005	0.00462	0.00545	16.48	*194.86*	0.0005	0.0195	0.0005	0.00476	0.0119	*85.71*	*190.00*
Arsenic	mg/L	0.00002	0.00002	0.00002	0.00002	0.00106	0.000997	6.13	0.00	0.00002	0.000306	0.00002	0.00132	0.00125	5.45	*175.46*	0.00002	0.00002	0.00002	0.000986	0.000982	0.41	0.00
Cadmium	mg/L	0.000005	0.000005	0.0000138	0.000005	0.000005	0.000005	0.00	**93.62**	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00
Chromium	mg/L	0.0001	0.0001	0.00014	0.0001	0.00034	0.00018	**61.54**	**33.33**	0.0001	0.00019	0.0001	0.00011	0.00012	8.70	**62.07**	0.0001	0.0001	0.0001	0.0001	0.00071	**150.62**	0.00
Cobalt	mg/L	0.000005	0.000005	0.0000119	0.000005	0.0000711	0.0000761	6.79	**81.66**	0.000005	0.0000224	0.000005	0.000132	0.000132	0.00	**127.01**	0.000005	0.000019	0.000005	0.000124	0.000123	0.81	**116.67**
Copper	mg/L	0.00005	0.00005	0.00064	0.00005	0.000631	0.000624	1.12	*171.01*	0.000104	0.000463	0.00005	0.000503	0.000489	2.82	**161.01**	0.00005	0.00041	0.00005	0.000477	0.000534	11.28	**156.52**
Iron	mg/L	0.001	0.0015	0.0097	0.001	0.024	0.0215	10.99	**162.62**	0.0012	0.0138	0.001	0.0283	0.0304	7.16	*172.97*	0.001	0.0117	0.001	0.0194	0.0331	52.19	*168.50*
Lead	mg/L	0.000005	0.000005	0.000357	0.000005	0.000009	0.0000143	**45.49**	*194.48*	0.0000109	0.000143	0.000005	0.0000377	0.00015	*119.66*	*186.49*	0.000005	0.000113	0.000005	0.000008	0.000035	**125.58**	*183.05*
Manganese	mg/L	0.00005	0.00005	0.00112	0.00005	0.00256	0.00251	1.97	*182.91*	0.000132	0.000768	0.00005	0.0199	0.0205	2.97	*175.55*	0.00005	0.000686	0.00005	0.0171	0.0168	1.77	*172.83*
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.00005	0.00112	0.00109	2.71	0.00	0.00034	0.000234	0.00005	0.00153	0.00136	11.76	**129.58**	0.00005	0.00108	0.00005	0.00141	0.00142	0.71	*182.30*
Nickel	mg/L	0.00002	0.00002	0.000475	0.00002	0.00363	0.00361	0.55	*183.84*	0.000139	0.000631	0.00002	0.0031	0.00301	2.95	*187.71*	0.00002	0.000305	0.00002	0.00278	0.00289	3.88	*175.38*
Selenium	mg/L	0.00004	0.00004	0.00004	0.00004	0.00007	0.000071	1.42	0.00	0.00004	0.00004	0.00004	0.00004	0.00004	0.00	0.00	0.00004	0.00004	0.00004	0.000049	0.000047	4.17	0.00
Thallium	mg/L	0.000002	0.000002	0.000002	0.000002	0.0000024	0.0000032	**28.57**	0.00	0.000002	0.000002	0.000002	0.000004	0.0000056	**33.33**	0.00	0.000002	0.000002	0.000002	0.000004	0.000003	**28.57**	0.00
Uranium	mg/L	0.000002	0.000002	0.0000038	0.000002	0.000215	0.000229	6.31	**62.07**	0.000002	0.000132	0.000002	0.000279	0.000277	0.72	*194.03*	0.000002	0.000005	0.000002	0.000282	0.000282	0.00	**85.71**
Zinc	mg/L	0.0001	0.0014	0.0112	0.0001	0.00096	0.00101	5.08	*196.46*	0.0104	0.023	0.0001	0.00107	0.00311	97.61	*198.27*	0.0001	0.00571	0.0001	0.00069	0.001	**36.69**	*193.12*
Radionuclides																							
Radium-226	Bq/l	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*								0%	0%						7%	0%						4%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-43 Whale Tail 2025 EEM Reference Area Third Portage Lake QAQC (ST-MMER-1-EEM-TPS)

ST-MMER-1-EEM-TPS	Sample date		7/8/2025							12/12/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters																
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	10.3	9.81	4.87	-	0.5	0.5	-	10.9	10.7	1.85	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	1	6.8	8.8	**25.64**	0.00	1	1	1	7.7	15	*64.32*	0.00
TSS	mg/L	1	1	1	1	1	1	0.00	0.00	1	1	1	1	1	0.00	0.00
Major Ions																
Chloride	mg/L	1	1	1	1	1	1	0.00	0.00	1	1	1	1	1	0.00	0.00
Cyanide	mg/L	0.0005	0.00055	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	0.5	4.5	4.4	2.25	0.00	0.5	0.5	0.5	4.6	4.6	0.00	0.00
Nutrients																
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Un-Ionized Ammonia, calculated	mg N/L	0.0001	-	-	-	0.0004	0.0004	0.00	-	-	-	-	0.0027	0.0027	0.00	-
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.0014	0.001	0.001	0.001	0.001	0.00	0.00
Total Metals																
Aluminum	mg/L	0.003 / 0.0005	0.0005	0.00063	0.0005	0.0148	0.0102	36.80	**23.01**	0.0005	0.0013	0.0005	0.0059	0.0042	**33.66**	**88.89**
Arsenic	mg/L	0.00002	0.00002	0.00002	0.00002	0.000185	0.000163	12.64	0.00	0.00002	0.00002	0.00002	0.000172	0.000179	3.99	0.00
Cadmium	mg/L	0.000005	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00	0.000005	0.000005	0.000005	0.000005	0.000005	0.00	0.00
Chromium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00011	0.0001	9.52	0.00	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Cobalt	mg/L	0.00001 / 0.000005	0.000005	0.000005	0.000005	0.0000328	0.0000241	**30.58**	0.00	0.000005	0.000005	0.000005	0.000015	0.000013	14.29	0.00
Copper	mg/L	0.00001 / 0.000005	0.00005	0.00005	0.00005	0.000592	0.000478	*21.31*	0.00	0.00005	0.00005	0.00005	0.00463	0.0008	*141.07*	0.00
Iron	mg/L	0.001 / 0.005	0.001	0.0022	0.001	0.0231	0.0124	60.28	**75.00**	0.001	0.001	0.001	0.0058	0.0076	**26.87**	0.00
Lead	mg/L	0.000005	0.000005	0.000005	0.000005	0.0000512	0.0000247	*69.83*	0.00	0.000005	0.000005	0.000005	0.000022	0.000023	4.44	0.00
Manganese	mg/L	0.0001 / 0.00005	0.00005	0.00005	0.00005	0.00249	0.00222	11.46	0.00	0.00005	0.00005	0.00005	0.00111	0.00098	12.44	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.00005	0.00005	0.00005	0.00005	0.000171	0.000122	**33.45**	0.00	0.00005	0.00005	0.00005	0.000179	0.000118	**41.08**	0.00
Nickel	mg/L	0.0001 / 0.00002	0.00002	0.00002	0.00002	0.00085	0.00078	8.59	0.00	0.00002	0.00002	0.00002	0.00058	0.00056	3.51	0.00
Selenium	mg/L	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00	0.00	0.00004	0.00004	0.00004	0.00004	0.00004	0.00	0.00
Thallium	mg/L	0.000002	0.000002	0.000002	0.000002	0.000002	0.000002	0.00	0.00	0.000002	0.000002	0.000002	0.000002	0.000002	0.00	0.00
Uranium	mg/L	0.000002 / 0.000005	0.000002	0.000002	0.0000039	0.0000456	0.0000451	1.10	**64.41**	0.000002	0.000002	0.000002	0.000044	0.000045	2.25	0.00
Zinc	mg/L	0.001 / 0.0001	0.0001	0.0001	0.0001	0.00186	0.00089	*70.55*	0.00	0.0001	0.0001	0.0001	0.0022	0.001	**75.00**	0.00
Radionuclides																
Radium-226	Bq/l	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*								7%	0%						0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.
[1] Different MDL used for this parameter.

Table 1-44 Whale Tail Attenuation Pond 2025 QAQC (ST-WT-1)

ST-WT-1	Sample date		2/2/2025						4/14/2025						5/12/2025	
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Conventional Parameters																
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	109	109	0.00	-	0.5	-	135	139	2.92	-	0.5	109
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	56	53	5.50	0.00	1	1	58	58	0.00	0.00	1.9	50
TDS	mg/L	10	10	10	170	175	2.90	0.00	10	10	240	235	2.11	0.00	10	150
TSS	mg/L	1	1	1	5	6	18.18	0.00	1	1	43	40	7.23	0.00	1	4
Major Ions																
Chloride	mg/L	1	1	1	30	31	3.28	0.00	1	1	39	39	0.00	0.00	1	31
Fluoride	mg/L	0.1	0.1	0.1	0.13	0.15	14.29	0.00	0.1	0.1	0.13	0.14	7.41	0.00	0.1	0.14
Sulfate	mg/L	0.5	0.5	0.5	44	45	2.25	0.00	0.5	0.5	58	58	0.00	0.00	0.5	42
Nutrients																
Ammonia (NH_3)	mg/L	0.061	0.061	-	0.26	0.27	3.77	-	0.061	-	0.27	0.27	0.00	-	0.061	0.12
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.21	0.22	4.65	0.00	0.05	0.05	0.22	0.22	0.00	0.00	0.05	0.1
Nitrate	mg N/L	0.1	0.1	0.1	0.52	0.51	1.94	0.00	0.1	0.1	1.04	1.07	2.84	0.00	0.1	0.37
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.018	0.016	11.76	0.00	0.01	0.01
Total phosphorus	mg P/L	0.001	0.001	0.001	0.0022	0.0032	**37.04**	0.00	0.001	0.001	0.031	0.027	13.79	0.00	0.001	0.006
Total Metals																
Aluminum	mg/L	0.003	0.003	0.003	0.0737	0.0696	5.72	0.00	0.003	0.003	0.449	0.422	6.20	0.00	0.003	0.0515
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0143	0.0151	5.44	0.00	0.0001	0.0001	0.0147	0.0148	0.68	0.00	0.0001	0.0938
Barium	mg/L	0.001	0.001	0.001	0.0507	0.0521	2.72	0.00	0.001	0.001	0.0599	0.0614	2.47	0.00	0.001	0.0588
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.000017	0.000018	5.71	0.00	0.00001	0.00001
Chromium	mg/L	0.001	0.001	0.001	0.0042	0.0012	**111.11**	0.00	0.0037	0.001	0.0076	0.0069	9.66	**114.89**	0.001	0.001
Copper	mg/L	0.0005	0.0005	0.0005	0.00536	0.00302	*55.85*	0.00	0.0005	0.0005	0.00151	0.00155	2.61	0.00	0.0005	0.0005
Iron	mg/L	0.01	0.01	0.01	0.759	0.634	17.95	0.00	0.014	0.01	1.56	1.51	3.26	**33.33**	0.01	0.549
Lead	mg/L	0.0002	0.0002	0.0002	0.00032	0.00021	**41.51**	0.00	0.0002	0.0002	0.00071	0.0007	1.42	0.00	0.0002	0.00024
Manganese	mg/L	0.001	0.001	0.001	0.259	0.235	9.72	0.00	0.001	0.001	0.34	0.355	4.32	0.00	0.001	0.221
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.001	0.001	0.001	0.0063	0.0067	6.15	0.00	0.001	0.001	0.0046	0.0048	4.26	0.00	0.001	0.0037
Nickel	mg/L	0.001	0.001	0.001	0.0046	0.0041	11.49	0.00	0.001	0.001	0.0089	0.009	1.12	0.00	0.001	0.0084
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.000028	0.000026	7.41	0.00	0.00001	0.000013
Zinc	mg/L	0.005	0.005	0.005	0.005	0.0076	**41.27**	0.00	0.005	0.005	0.0054	0.0076	**33.85**	0.00	0.005	0.005
% Exceedance*							0%	0%					0%	0%		

ST-WT-1	Sample date		8/11/2025						9/1/2025	
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Conventional Parameters										
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	191	187	2.12	-	0.5	249
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	48	50	4.08	0.00	1	49
TDS	mg/L	10	10	10	400	420	4.88	0.00	10	470
TSS	mg/L	1	1	1	10	6	**50.00**	0.00	1	29
Major Ions										
Chloride	mg/L	1	1	1	84	83	1.20	0.00	1	120
Fluoride	mg/L	0.1	0.1	0.1	0.11	0.12	8.70	0.00	0.1	0.16
Sulfate	mg/L	0.5	0.5	0.5	82	83	1.21	0.00	0.5	65
Nutrients										
Ammonia (NH_3)	mg/L	0.061	0.066	-	0.53	0.55	3.70	-	0.061	0.41
Ammonia Nitrogen	mg N/L	0.05	0.054	0.05	0.44	0.45	2.25	7.69	0.05	0.33
Nitrate	mg N/L	0.1	0.1	0.1	1.61	1.72	6.61	0.00	0.1	1.42
Nitrite	mg N/L	0.01	0.01	0.01	0.069	0.068	1.46	0.00	0.01	0.035
Total phosphorus	mg P/L	0.001	0.001	0.001	0.0086	0.0074	15.00	0.00	0.001	0.021
Total Metals										
Aluminum	mg/L	0.003	0.003	0.003	0.164	0.157	4.36	0.00	0.003	0.549
Arsenic	mg/L	0.0001	0.0001	0.0001	0.116	0.114	1.74	0.00	0.0001	0.0579
Barium	mg/L	0.001	0.001	0.001	0.0539	0.0537	0.37	0.00	0.001	0.0703
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000041	0.000039	5.00	0.00	0.00001	0.000062
Chromium	mg/L	0.001	0.001	0.001	0.0034	0.0035	2.90	0.00	0.001	0.0111
Copper	mg/L	0.0005	0.0005	0.0005	0.00081	0.0008	1.24	0.00	0.0005	0.00153
Iron	mg/L	0.01	0.01	0.01	0.501	0.497	0.80	0.00	0.01	1.29
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.00057
Manganese	mg/L	0.001	0.001	0.001	0.213	0.215	0.93	0.00	0.001	0.25
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.001	0.001	0.001	0.0052	0.0049	5.94	0.00	0.001	0.0068
Nickel	mg/L	0.001	0.001	0.001	0.0157	0.0157	0.00	0.00	0.001	0.0177
Selenium	mg/L	0.0001	0.0001	0.0001	0.00021	0.00022	4.65	0.00	0.0001	0.00018
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002
Thallium	mg/L	0.00001	0.00001	0.00001	0.000024	0.000024	0.00	0.00	0.00001	0.000034
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
% Exceedance*							0%	0%		

ST-WT-1	Sample date		11/3/2025							12/8/2025	
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Conventional Parameters											
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	164	170	3.59	-	0.5	130
Total alkalinity, as $CaCO_3$	mg/L	1	2.1	1	1	57	58	1.74	0.00	1	55
TDS	mg/L	10	10	10	10	295	290	1.71	0.00	10	185
TSS	mg/L	1	1	1	5	14	14	0.00	**133.33**	1	7
Major Ions											
Chloride	mg/L	1	1	1	1	60	60	0.00	0.00	1	43
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.15	0.15	0.00	0.00	0.1	0.13
Sulfate	mg/L	0.5	0.5	0.5	0.5	110	82	29.17	0.00	0.5	54
Nutrients											
Ammonia (NH_3)	mg/L	0.061	0.061	0.061	-	0.74	0.74	0.00	-	0.061	0.4
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.61	0.6	1.65	0.00	0.05	0.33
Nitrate	mg N/L	0.1	0.1	0.1	0.1	1.76	1.77	0.57	0.00	0.1	1
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.088	0.089	1.13	0.00	0.01	0.031
Total phosphorus	mg P/L	0.001	0.0017	0.0011	0.001	0.0073	0.0055	**28.13**	9.52	0.001	0.0043
Total Metals											
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.339	0.344	1.46	0.00	0.003	0.152
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.135	0.141	4.35	0.00	0.0001	0.0648
Barium	mg/L	0.001	0.001	0.001	0.001	0.0565	0.0599	5.84	0.00	0.001	0.059
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000023	0.000029	**23.08**	0.00	0.00001	0.000017
Chromium	mg/L	0.001	0.001	0.001	0.001	0.0093	0.0096	3.17	0.00	0.001	0.0042
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00134	0.00118	12.70	0.00	0.0005	0.00199
Iron	mg/L	0.01	0.01	0.01	0.01	0.844	0.885	4.74	0.00	0.01	0.48
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.00031	0.0003	3.28	0.00	0.0002	0.0002
Manganese	mg/L	0.001	0.001	0.001	0.001	0.273	0.285	4.30	0.00	0.001	0.249
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.0067	0.0071	5.80	0.00	0.001	0.0065
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0195	0.0203	4.02	0.00	0.001	0.0098
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00014	0.00015	6.90	0.00	0.0001	0.0001
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00002	0.000022	9.52	0.00	0.00001	0.000018
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
% Exceedance*								4%	0%		

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-45 Whale Tail / IVR Attenuation Pond 2025 Discharge to Kangislulik Lake QAQC (ST-WT-2a)

ST-WT-2a	Sample date		7/7/2025							8/4/2025						9/8/2025						
Parameter	Unit	MDL	Trip Blank	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	Trip Blank	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Conventional Parameters																						
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	156	149	4.59	-	0.5	-	204	212	3.85	-	0.5	0.5	-	232	226	2.62	-
Total alkalinity, as $CaCO_3$	mg/L	1	1.5	1.7	1	47	50	6.19	**51.85**	1	1	45	45	0.00	0.00	1	1.3	1	57	45	23.53	**26.09**
Carbonate, as $CaCO_3$	mg/L	1	1	1	-	1	1	0.00	-	1	-	1	1	0.00	-	1	1	-	1	1	0.00	-
Bicarbonate, as $CaCO_3$	mg/L	1	1.5	1.7	-	47	50	6.19	-	1	-	45	45	0.00	-	1	1.3	-	56	45	21.78	-
TDS	mg/L	10	10	10	10	265	270	1.87	0.00	10	10	445	445	0.00	0.00	10	10	10	360	370	2.74	0.00
TSS	mg/L	1	1	1	1	1	1	0.00	0.00	1	1	1	1	0.00	0.00	1	1	1	2	1	**66.67**	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	0.4	1.8	1.7	5.71	0.00	0.4	0.4	2	2	0.00	0.00	0.4	0.4	0.4	2.3	2.1	9.09	0.00
Dissolved organic carbon	mg/L	0.4	0.4	0.4	0.4	1.8	1.7	5.71	0.00	1.5	0.4	2.1	2.1	0.00	**115.79**	3.9	0.43	0.4	2	2	0.00	7.23
Major Ions																						
Chloride	mg/L	1	1	1	1	43	43	0.00	0.00	1	1	81	81	0.00	0.00	1	1	1	79	80	1.26	0.00
Silica	mg/L	0.05	0.05	0.05	0.05	4.9	5.1	4.00	0.00	0.05	0.05	4.9	4.9	0.00	0.00	0.05	0.05	0.05	4.1	4.1	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	0.5	83	87	4.71	0.00	0.5	0.5	100	100	0.00	0.00	0.5	0.5	0.5	100	98	2.02	0.00
Nutrients																						
Ammonia (NH_3)	mg/L	0.061	0.061	0.061	-	0.76	0.76	0.00	-	0.061	-	0.36	0.37	2.74	-	0.061	0.061	-	0.11	0.11	0.00	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.62	0.62	0.00	0.00	0.05	0.05	0.29	0.3	3.39	0.00	0.05	0.05	0.05	0.091	0.093	2.17	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.1	4.77	4.85	1.66	0.00	0.1	0.1	4.05	4.06	0.25	0.00	0.1	0.1	0.1	4.17	4.2	0.72	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.155	0.158	1.92	0.00	0.01	0.01	0.082	0.082	0.00	0.00	0.01	0.01	0.01	0.012	0.012	0.00	0.00
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	0.1	0.59	0.63	6.56	0.00	0.1	0.1	0.53	0.53	0.00	0.00	0.1	0.1	0.1	0.49	0.48	2.06	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.0012	0.001	18.18	0.00	0.001	0.001	0.0013	0.001	**26.09**	0.00	0.001	0.001	0.001	0.001	0.0012	18.18	0.00
Orthophosphate	mg P/L	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals																						
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.0165	0.0152	8.20	0.00	0.003	0.003	0.0092	0.0085	7.91	0.00	0.003	0.003	0.003	0.0037	0.003	**20.90**	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.0112	0.0106	5.50	0.00	0.0005	0.0005	0.0104	0.0109	4.69	0.00	0.0005	0.0005	0.0005	0.00812	0.00801	1.36	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.0132	0.0127	3.86	0.00	0.0001	0.0001	0.0145	0.0149	2.72	0.00	0.0001	0.0001	0.0001	0.00988	0.00978	1.02	0.00
Barium	mg/L	0.001	0.001	0.001	0.001	0.0561	0.0542	3.45	0.00	0.001	0.001	0.059	0.0614	3.99	0.00	0.001	0.001	0.001	0.0583	0.0578	0.86	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.05	0.057	0.058	1.74	0.00	0.05	0.05	0.057	0.057	0.00	0.00	0.05	0.05	0.05	0.051	0.05	1.98	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000011	0.00001	9.52	0.00	0.00001	0.00001	0.000012	0.000014	15.38	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Calcium (total)	mg/L	0.05	0.05	0.05	-	44.6	42	6.00	-	0.05	-	60.5	62.3	2.93	-	0.05	0.05	-	69.5	66.6	4.26	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00145	0.00139	4.23	0.00	0.0005	0.0005	0.00089	0.00074	18.40	0.00	0.0005	0.0005	0.0005	0.00081	0.00062	**26.57**	0.00
Iron	mg/L	0.01	0.01	0.01	0.01	0.261	0.248	5.11	0.00	0.01	0.01	0.194	0.194	0.00	0.00	0.01	0.01	0.01	0.203	0.182	10.91	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.002	0.0075	0.0073	2.70	0.00	0.002	0.002	0.0133	0.0136	2.23	0.00	0.002	0.002	0.002	0.0141	0.014	0.71	0.00
Magnesium (total)	mg/L	0.05	0.05	0.05	-	10.9	10.8	0.92	-	0.05	-	12.9	13.6	5.28	-	0.05	0.05	-	14.3	14.5	1.39	-
Manganese	mg/L	0.001	0.001	0.001	0.001	0.129	0.125	3.15	0.00	0.001	0.001	0.0852	0.0907	6.25	0.00	0.001	0.001	0.001	0.0391	0.0357	9.09	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.0052	0.0051	1.94	0.00	0.001	0.001	0.0058	0.0059	1.71	0.00	0.001	0.001	0.001	0.0063	0.0064	1.57	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0172	0.0166	3.55	0.00	0.001	0.001	0.0117	0.0125	6.61	0.00	0.001	0.001	0.001	0.0067	0.006	11.02	0.00
Potassium (total)	mg/L	0.05	0.05	0.05	-	12.1	11.5	5.08	-	0.05	-	13.1	13.7	4.48	-	0.05	0.05	-	13.1	13.2	0.76	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00025	0.00024	4.08	0.00	0.0001	0.0001	0.00025	0.00028	11.32	0.00	0.0001	0.0001	0.0001	0.00027	0.00027	0.00	0.00
Sodium (total)	mg/L	0.05	0.05	0.05	-	12.7	12.5	1.59	-	0.05	-	11.7	12.4	5.81	-	0.05	0.05	-	12.3	12.8	3.98	-
Strontium	mg/L	0.001	0.001	0.001	0.001	0.446	0.428	4.12	0.00	0.001	0.001	0.649	0.662	1.98	0.00	0.001	0.001	0.001	0.648	0.654	0.92	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000025	0.000025	0.00	0.00	0.00001	0.00001	0.000027	0.000026	3.77	0.00	0.00001	0.00001	0.00001	0.000019	0.000018	5.41	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00086	0.00085	1.17	0.00	0.0001	0.0001	0.00175	0.00183	4.47	0.00	0.0001	0.0001	0.0001	0.00266	0.00225	16.70	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.023	0.014	**48.65**	0.00	0.005	0.005	0.0092	0.0086	6.74	0.00	0.005	0.005	0.005	0.0056	0.005	11.32	0.00

ST-WT-2a	Sample date		7/7/2025							8/4/2025						9/8/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Dissolved Metals																						
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.003	0.003	0.00	0.00	0.003	0.003	0.003	0.003	0.00	0.00	0.003	0.003	0.003	0.003	0.003	0.00	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.011	0.0111	0.90	0.00	0.0005	0.0005	0.0109	0.0101	7.62	0.00	0.0005	0.0005	0.0005	0.00811	0.00784	3.39	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.00243	0.00291	17.98	0.00	0.0001	0.0001	0.00411	0.00405	1.47	0.00	0.0001	0.0001	0.0001	0.00218	0.0021	3.74	0.00
Barium	mg/L	0.001	0.001	0.001	0.001	0.0568	0.0572	0.70	0.00	0.001	0.001	0.0631	0.0632	0.16	0.00	0.001	0.001	0.001	0.0573	0.0573	0.00	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.05	0.062	0.06	3.28	0.00	0.05	0.05	0.064	0.101	**44.85**	0.00	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.000011	9.52	0.00	0.00001	0.00001	0.000017	0.000019	11.11	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.0002	0.00132	0.00116	12.90	0.00	0.0002	0.0002	0.0009	0.00098	8.51	0.00	0.0002	0.0002	0.0002	0.00087	0.00081	7.14	0.00
Iron	mg/L	0.005	0.005	0.005	0.005	0.0136	0.0127	6.84	0.00	0.005	0.005	0.011	0.0092	17.82	0.00	0.005	0.005	0.005	0.0062	0.0068	9.23	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.002	0.0072	0.0072	0.00	0.00	0.002	0.002	0.0142	0.0159	11.30	0.00	0.002	0.002	0.002	0.0129	0.0132	2.30	0.00
Manganese	mg/L	0.001	0.001	0.001	0.001	0.131	0.128	2.32	0.00	0.001	0.001	0.095	0.0949	0.11	0.00	0.001	0.001	0.001	0.0378	0.0379	0.26	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.0054	0.0053	1.87	0.00	0.001	0.001	0.0059	0.006	1.68	0.00	0.001	0.001	0.001	0.0063	0.0062	1.60	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0173	0.0168	2.93	0.00	0.001	0.001	0.0125	0.0117	6.61	0.00	0.001	0.001	0.001	0.0065	0.0064	1.55	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00024	0.00022	8.70	0.00	0.0001	0.0001	0.00028	0.00029	3.51	0.00	0.0001	0.0001	0.0001	0.00024	0.00026	8.00	0.00
Strontium	mg/L	0.001	0.001	0.001	0.001	0.437	0.444	1.59	0.00	0.001	0.001	0.698	0.698	0.00	0.00	0.001	0.001	0.001	0.656	0.655	0.15	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000029	0.000028	3.51	0.00	0.00001	0.00001	0.000028	0.000028	0.00	0.00	0.00001	0.00001	0.00001	0.000018	0.000018	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00092	0.00092	0.00	0.00	0.0001	0.0001	0.00201	0.00173	14.97	0.00	0.0001	0.0001	0.0001	0.00257	0.00258	0.39	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.0086	0.0083	3.55	0.00	0.005	0.005	0.0089	0.0082	8.19	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Volatile Organics																						
Petroleum Hydrocarbons F (C10-C50)	mg/L	0.2	0.2	0.2	-	0.2	0.2	0.00	-	0.2	-	0.2	0.2	0.00	-	0.2	0.2	-	0.2	0.2	0.00	-
% Exceedance*								0%	0%					0%	0%						3%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-46 Whale Tail WRSF Pond 2025 QAQC (ST-WT-3)

	Sample date		6/15/2025							8/3/2025					
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters															
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	76.3	76.6	0.39	-	0.5	-	126	118	6.56	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1.2	1	30	30	0.00	18.18	1	1	40	40	0.00	0.00
TDS	mg/L	10	10	10	10	120	125	4.08	0.00	10	10	235	220	6.59	0.00
TSS	mg/L	1	1	1	1	5	4	**22.22**	0.00	1	1	1	2	**66.67**	0.00
Major Ions															
Chloride	mg/L	1	1	1	1	2.2	2.2	0.00	0.00	1	1	3	3	0.00	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1	0.1	0.1	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	0.5	52	52	0.00	0.00	0.5	0.5	92	95	3.21	0.00
Nutrients															
Ammonia (NH_3)	mg/L	0.061	0.063	0.061	-	0.061	0.12	**65.19**	-	0.061	-	0.061	0.061	0.00	-
Ammonia Nitrogen	mg N/L	0.05	0.052	0.05	0.05	0.05	0.096	**63.01**	0.00	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.1	1.06	1.07	0.94	0.00	0.1	0.1	1.99	1.98	0.50	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.009	0.0068	**27.85**	0.00	0.001	0.001	0.0042	0.0036	15.38	0.00
Total Metals															
Aluminum	mg/L	0.003	0.003	0.0105	0.003	0.168	0.164	2.41	**111.11**	0.003	0.003	0.0333	0.0306	8.45	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.00556	0.00582	4.57	0.00	0.0001	0.0001	0.016	0.0149	7.12	0.00
Barium	mg/L	0.001	0.001	0.001	0.001	0.0272	0.0275	1.10	0.00	0.001	0.001	0.0386	0.0359	7.25	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.000024	**82.35**	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.0034	0.0033	2.99	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00143	0.00147	2.76	0.00	0.0005	0.0005	0.0019	0.00172	9.94	0.00
Iron	mg/L	0.01	0.01	0.01	0.01	0.319	0.301	5.81	0.00	0.01	0.01	0.071	0.069	2.86	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	0.001	0.021	0.0207	1.44	0.00	0.001	0.001	0.0043	0.004	7.23	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.0022	0.0021	4.65	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0072	0.0073	1.38	0.00	0.001	0.001	0.0044	0.0041	7.06	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00019	0.00022	14.63	0.00	0.0001	0.0001	0.00063	0.00057	10.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000016	0.000016	0.00	0.00	0.00001	0.00001	0.00002	0.00002	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
Dissolved Metals															
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.0112	0.0125	10.97	0.00	0.003	0.003	0.0084	0.0081	3.64	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.00527	0.00538	2.07	0.00	0.0001	0.0001	0.016	0.016	0.00	0.00
Barium	mg/L	0.001	0.001	0.001	0.001	0.025	0.026	3.92	0.00	0.001	0.001	0.0383	0.0386	0.78	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000022	0.00001	**75.00**	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.0002	0.00306	0.00277	9.95	0.00	0.0002	0.0002	0.00581	0.00557	4.22	0.00
Iron	mg/L	0.005	0.005	0.005	0.005	0.0437	0.0399	9.09	0.00	0.005	0.005	0.0157	0.0137	13.61	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	0.001	0.0209	0.0209	0.00	0.00	0.001	0.001	0.0044	0.0047	6.59	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.0022	0.0022	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0065	0.0068	4.51	0.00	0.001	0.001	0.0044	0.0045	2.25	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00021	0.0002	4.88	0.00	0.0001	0.0001	0.00066	0.00062	6.25	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000013	0.000013	0.00	0.00	0.00001	0.00001	0.00002	0.000021	4.88	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*								0%	0%					0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-47 Whale Tail Pit Sump 2025 QAQC (ST-WT-4)

ST-WT-4	Sample date		3/2/2025						8/4/2025						11/5/2025	
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Conventional Parameters																
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	340	327	3.90	-	0.5	-	179	187	4.37	-	0.5	267
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	42	43	2.35	0.00	1	1	56	55	1.80	0.00	1	110
TDS	mg/L	10	10	10	240	235	2.11	0.00	10	10	400	385	3.82	0.00	10	395
TSS	mg/L	1	1	1	1200	1200	0.00	0.00	1	1	6	8	**28.57**	0.00	1	120
Major Ions																
Chloride	mg/L	1	1	1	47	47	0.00	0.00	1	1	58	57	1.74	0.00	1	77
Fluoride	mg/L	0.1	0.1	0.1	0.19	0.19	0.00	0.00	0.1	0.1	0.14	0.13	7.41	0.00	0.1	0.19
Sulfate	mg/L	0.5	0.5	0.5	50	50	0.00	0.00	0.5	0.5	89	87	2.27	0.00	0.68	100
Nutrients																
Ammonia (NH_3)	mg/L	0.061	0.061	-	0.2	0.21	4.88	-	0.061	-	0.19	0.27	**34.78**	-	0.061	11
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.16	0.17	6.06	0.00	0.05	0.05	0.16	0.23	**35.90**	0.00	0.05	8.9
Nitrate	mg N/L	0.1	0.1	0.1	0.18	0.19	5.41	0.00	0.1	0.1	0.53	0.53	0.00	0.00	0.1	12.1
Nitrite	mg N/L	0.01	0.01	0.01	0.035	0.036	2.82	0.00	0.01	0.01	0.021	0.019	10.00	0.00	0.01	0.454
Total phosphorus	mg/L	0.001	0.001	0.001	1	0.88	12.77	0.00	0.001	0.0017	0.015	0.016	6.45	**51.85**	0.0011	0.034
Total Metals																
Aluminum	mg/L	0.003	0.003	0.003	26.4	28.2	6.59	0.00	0.003	0.003	0.16	0.155	3.17	0.00	0.003	4.63
Arsenic	mg/L	0.0001	0.0001	0.0001	0.173	0.175	1.15	0.00	0.0001	0.0001	0.192	0.198	3.08	0.00	0.0001	0.0648
Barium	mg/L	0.001	0.001	0.001	0.431	0.413	4.27	0.00	0.001	0.001	0.083	0.0865	4.13	0.00	0.001	0.156
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000195	0.000186	4.72	0.00	0.00001	0.00001	0.000062	0.000064	3.17	0.00	0.00001	0.000024
Chromium	mg/L	0.001	0.001	0.001	0.667	0.679	1.78	0.00	0.001	0.001	0.0046	0.0044	4.44	0.00	0.001	0.165
Copper	mg/L	0.0005	0.0005	0.0005	0.0229	0.0232	1.30	0.00	0.0005	0.0005	0.0005	0.0005	0.00	0.00	0.0005	0.00896
Iron	mg/L	0.01	0.01	0.01	45.2	47.8	5.59	0.00	0.01	0.01	0.429	0.443	3.21	0.00	0.01	7.5
Lead	mg/L	0.0002	0.0002	0.0002	0.0146	0.0137	6.36	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.00174
Manganese	mg/L	0.001	0.001	0.001	0.931	0.91	2.28	0.00	0.001	0.001	0.207	0.213	2.86	0.00	0.001	0.207
Mercury	mg/L	0.0001[1] / 0.00001	0.00001	0.00001	0.0001	0.0001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.001	0.001	0.001	0.0077	0.0075	2.63	0.00	0.001	0.001	0.0059	0.0063	6.56	0.00	0.001	0.0225
Nickel	mg/L	0.001	0.001	0.001	0.193	0.2	3.56	0.00	0.001	0.001	0.0094	0.0096	2.11	0.00	0.001	0.0591
Selenium	mg/L	0.0001	0.0001	0.0001	0.0005	0.0005	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0003
Silver	mg/L	0.00002	0.00002	0.00002	0.0001	0.0001	0.00	0.00	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.000029
Thallium	mg/L	0.00001	0.00001	0.00001	0.00052	0.000566	8.47	0.00	0.00001	0.00001	0.000017	0.000019	11.11	0.00	0.00001	0.000092
Zinc	mg/L	0.005	0.005	0.005	0.095	0.096	1.05	0.00	0.005	0.005	0.0122	0.0132	7.87	0.00	0.005	0.0117
% Exceedance*							0%	0%					0%	0%		

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.
[1] Different MDL used for this parameter.

Table 1-48 Whale Tail South Channel 2025 QAQC (ST-WT-13)

ST-WT-13	Sample date		8/4/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters									
TSS	mg/L	1	1	1	1	1	1	0.00	0.00
Major Ions									
Sulfate	mg/L	1	1	1	1	12	12	0.00	0.00
Nutrients									
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Un-Ionized Ammonia, calculated	mg N/L	0.02	0.00061	0.00061	-	0.00061	0.00061	0.00	-
Total Metals									
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.0101	0.0085	17.20	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.0013	0.00123	5.53	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00052	0.0005	3.92	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*								0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-49 Whale Tail 2025 Lake A16 Outlet QAQC (ST-WT-14)

ST-WT-14	Sample date		7/21/2025						9/2/2025	
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Conventional Parameters										
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	40.1	42.1	4.87	-	0.5	46.3
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	16	22	31.58	0.00	1	21
Carbonate, as $CaCO_3$	mg/L	1	1	-	1	1	0.00	-	1	1
Bicarbonate, as $CaCO_3$	mg/L	1	1	-	16	21	27.03	-	1	21
TDS	mg/L	10	10	10	80	85	6.06	0.00	10	70
TSS	mg/L	1	1	1	1	1	0.00	0.00	1	1
Total organic carbon	mg/L	0.4	0.4	0.4	2.3	2.3	0.00	0.00	0.4	2.2
Dissolved organic carbon	mg/L	0.4	0.42	0.4	2.4	2.3	4.26	4.88	0.44	2.4
Major Ions										
Chloride	mg/L	1	1	1	12	12	0.00	0.00	1	14
Silica	mg/L	0.05	0.05	0.05	0.46	0.48	4.26	0.00	0.05	0.39
Sulfate	mg/L	0.5	0.5	0.5	19	20	5.13	0.00	0.5	23
Nutrients										
Ammonia (NH_3)	mg/L	0.061	0.061	-	0.061	0.061	0.00	-	0.061	0.061
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05
Nitrate	mg N/L	0.1	0.1	0.1	0.26	0.26	0.00	0.00	0.1	0.31
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	0.11	0.1	9.52	0.00	0.1	0.13
Total phosphorus	mg P/L	0.001	0.001	0.001	0.0018	0.001	**57.14**	0.00	0.001	0.0016
Orthophosphate	mg P/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01
Total Metals										
Aluminum	mg/L	0.003	0.003	0.003	0.0039	0.004	2.53	0.00	0.003	0.003
Antimony	mg/L	0.0005	0.0005	0.0005	0.00062	0.00064	3.17	0.00	0.0005	0.00072
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0009	0.00094	4.35	0.00	0.0001	0.00077
Barium	mg/L	0.001	0.001	0.001	0.0143	0.0152	6.10	0.00	0.001	0.0143
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Calcium (total)	mg/L	0.05	0.05	-	11.3	11.8	4.33	-	0.05	12.7
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001
Copper	mg/L	0.0005	0.0005	0.0005	0.00061	0.0005	19.82	0.00	0.0005	0.0005
Iron	mg/L	0.01	0.01	0.01	0.017	0.016	6.06	0.00	0.01	0.036
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00	0.002	0.002
Magnesium (total)	mg/L	0.05	0.05	-	2.86	3.09	7.73	-	0.05	3.57
Manganese	mg/L	0.001	0.001	0.001	0.0037	0.0038	2.67	0.00	0.001	0.0043
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001
Potassium (total)	mg/L	0.05	0.05	-	2.5	2.75	9.52	-	0.05	2.79
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Sodium (total)	mg/L	0.05	0.05	-	2.02	2.38	16.36	-	0.05	2.69
Strontium	mg/L	0.001	0.001	0.001	0.0786	0.0853	8.18	0.00	0.001	0.0902
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Dissolved Metals										
Aluminum	mg/L	0.003	0.003	0.003	0.004	0.0062	**43.14**	0.00	0.003	0.003
Antimony	mg/L	0.0005	0.0005	0.0005	0.00065	0.00066	1.53	0.00	0.0005	0.0008
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00132	0.00264	66.67	0.00	0.0001	0.00118
Barium	mg/L	0.001	0.001	0.001	0.0151	0.0152	0.66	0.00	0.001	0.0162
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001
Copper	mg/L	0.0002	0.0002	0.0002	0.00178	0.00112	**45.52**	0.00	0.0002	0.00124
Iron	mg/L	0.005	0.005	0.005	0.0062	0.0088	**34.67**	0.00	0.005	0.0101
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00	0.002	0.002
Manganese	mg/L	0.001	0.001	0.001	0.0015	0.0031	**69.57**	0.00	0.001	0.004
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0013	**26.09**	0.00	0.001	0.0013
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Strontium	mg/L	0.001	0.001	0.001	0.0829	0.0834	0.60	0.00	0.001	0.101
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
% Exceedance*							4%	0%		

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-50 Whale Tail 2025 Lake A15 Outlet QAQC (ST-WT-15)

ST-WT-15	Sample date		7/21/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters								
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	39.3	42	6.64	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	17	18	5.71	0.00
Carbonate, as $CaCO_3$	mg/L	1	1	-	1	1	0.00	-
Bicarbonate, as $CaCO_3$	mg/L	1	1	-	17	18	5.71	-
TDS	mg/L	10	10	10	90	90	0.00	0.00
TSS	mg/L	1	1	1	1	1	0.00	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	2.2	2.2	0.00	0.00
Dissolved organic carbon	mg/L	0.4	0.4	0.4	2.1	2.2	4.65	0.00
Major Ions								
Chloride	mg/L	1	1	1	12	12	0.00	0.00
Silica	mg/L	0.05	0.05	0.05	0.48	0.5	4.08	0.00
Sulfate	mg/L	0.5	0.5	0.5	19	19	0.00	0.00
Nutrients								
Ammonia (NH_3)	mg/L	0.061	0.061	-	0.061	0.061	0.00	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.27	0.28	3.64	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Orthophosphate	mg P/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.0036	0.0032	11.76	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0006	0.00065	8.00	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00081	0.00087	7.14	0.00
Barium	mg/L	0.001	0.001	0.001	0.0144	0.0153	6.06	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Calcium (total)	mg/L	0.05	0.05	-	11	11.7	6.17	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.0005	0.00	0.00
Iron	mg/L	0.01	0.01	0.01	0.013	0.013	0.00	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00
Magnesium (total)	mg/L	0.05	0.05	-	2.85	3.07	7.43	-
Manganese	mg/L	0.001	0.001	0.001	0.0027	0.0027	0.00	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Potassium (total)	mg/L	0.05	0.05	-	2.38	2.63	9.98	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Sodium (total)	mg/L	0.05	0.05	-	2.12	2.17	2.33	-
Strontium	mg/L	0.001	0.001	0.001	0.0765	0.0829	8.03	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Dissolved Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.003	0.00	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.00067	0.00066	1.50	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.00103	0.00477	128.97	0.00
Barium	mg/L	0.001	0.001	0.001	0.0156	0.015	3.92	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.00262	0.00264	0.76	0.00
Iron	mg/L	0.005	0.005	0.005	0.005	0.0056	11.32	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.002	0.002	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	0.0012	0.0024	**66.67**	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0019	**62.07**	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00021	**70.97**	0.00
Strontium	mg/L	0.001	0.001	0.001	0.0879	0.0827	6.10	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*							1%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-51 Whale Tail Dike Seepage 2025 QAQC (ST-WT-17)

ST-WT-17	Sample date		2/2/2025		6/8/2025						10/20/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Original**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters																	
Hardness, as $CaCO_3$	mg/L	0.5	0.5	77.7	0.5	-	73.8	76.2	3.20	-	0.5	0.5	-	67	65.6	2.11	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	37	1	1	38	38	0.00	0.00	1	1	1	30	31	3.28	0.00
TDS	mg/L	10	10	120	10	10	130	150	14.29	0.00	10	10	10	90	95	5.41	0.00
TSS	mg/L	1	1	23	1	1	8	8	0.00	0.00	1	1	1	1	1	0.00	0.00
Major Ions																	
Chloride	mg/L	1	1	20	1	1	20	20	0.00	0.00	1	1	1	16	16	0.00	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Sulfate	mg/L	0.5	0.5	36	0.5	0.5	32	33	3.08	0.00	0.5	0.5	0.5	30	30	0.00	0.00
Nutrients																	
Ammonia (NH_3)	mg/L	0.061	0.061	0.061	0.061	-	0.061	0.061	0.00	-	0.061	0.061	-	0.061	0.067	9.38	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05	0.05	0.05	0.055	9.52	0.00
Nitrate	mg N/L	0.1	0.1	0.61	0.1	0.1	0.56	0.56	0.00	0.00	0.1	0.1	0.1	0.36	0.35	2.82	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.012	0.01	18.18	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.001	0.0029	0.0021	**32.00**	0.00	0.0011	0.001	0.001	0.001	0.001	0.00	0.00
Total Metals																	
Aluminum	mg/L	0.003	0.003	0.22	0.003	0.003	0.0843	0.0763	9.96	0.00	0.003	0.003	0.003	0.0242	0.0235	2.94	0.00
Arsenic	mg/L	0.0001	0.0001	0.00475	0.0001	0.0001	0.00575	0.00589	2.41	0.00	0.0001	0.0001	0.0001	0.00418	0.00429	2.60	0.00
Barium	mg/L	0.001	0.001	0.0378	0.001	0.001	0.0422	0.0425	0.71	0.00	0.001	0.001	0.001	0.0305	0.0304	0.33	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.000017	0.000018	5.71	0.00	0.00001	0.00001	0.00001	0.000018	0.000019	5.41	0.00
Chromium	mg/L	0.001	0.001	0.0013	0.001	0.001	0.0019	0.001	**62.07**	0.00	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.00136	0.0005	0.0005	0.00116	0.00108	7.14	0.00	0.0005	0.0005	0.0005	0.00082	0.00103	**22.70**	0.00
Iron	mg/L	0.01	0.01	1.24	0.01	0.01	0.807	0.802	0.62	0.00	0.01	0.01	0.01	0.454	0.448	1.33	0.00
Lead	mg/L	0.0002	0.0002	0.00029	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Manganese	mg/L	0.001	0.001	0.205	0.001	0.001	0.235	0.232	1.28	0.00	0.001	0.001	0.001	0.14	0.14	0.00	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.0014	0.001	0.001	0.0014	0.0014	0.00	0.00	0.001	0.001	0.001	0.0014	0.0014	0.00	0.00
Nickel	mg/L	0.001	0.001	0.0014	0.001	0.001	0.0015	0.0015	0.00	0.00	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.000017	0.000013	**26.67**	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*									0%	0%						0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-52 Whale Tail 2025 IVR Pit Sump QAQC (ST-WT-18)

ST-WT-18	Sample date		4/27/2025							9/7/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters																
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	115	138	18.18	-	0.5	0.5	-	377	395	4.66	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	1	58	56	3.51	0.00	1.6	1	1	100	100	0.00	0.00
TDS	mg/L	10	10	10	10	205	185	10.26	0.00	10	10	10	690	700	1.44	0.00
TSS	mg/L	1	1	1	1	1	2	**66.67**	0.00	1	1	1	1	1	0.00	0.00
Major Ions																
Chloride	mg/L	1	1	1	1	37	37	0.00	0.00	1	1	1	33	34	2.99	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.13	0.16	**20.69**	0.00	0.1	0.1	0.1	0.23	0.22	4.44	0.00
Sulfate	mg/L	0.5	0.5	0.5	0.5	51	52	1.94	0.00	0.5	0.5	0.5	300	300	0.00	0.00
Nutrients																
Ammonia (NH_3)	mg/L	0.061	0.061	0.061	-	0.61	0.62	1.63	-	0.061	0.061	-	4.4	4.5	2.25	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.5	0.51	1.98	0.00	0.05	0.05	0.05	3.7	3.7	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.1	1.2	1.23	2.47	0.00	0.1	0.1	0.1	15.2	15.9	4.50	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	1.72	1.7	1.17	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.0014	0.15	0.16	6.45	**33.33**
Total Metals																
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.0161	0.0167	3.66	0.00	0.003	0.003	0.003	0.015	0.015	0.00	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.0593	0.0676	13.08	0.00	0.0001	0.0001	0.0001	1.96	2.06	4.98	0.00
Barium	mg/L	0.001	0.001	0.001	0.001	0.0493	0.0594	18.58	0.00	0.001	0.001	0.001	0.0394	0.0408	3.49	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.000016	**46.15**	0.00	0.00001	0.00001	0.00001	0.00005	0.00005	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.005	0.005	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00077	0.00064	18.44	0.00	0.0005	0.0005	0.0005	0.0025	0.0025	0.00	0.00
Iron	mg/L	0.01	0.01	0.01	0.01	0.163	0.219	29.32	0.00	0.01	0.01	0.01	0.053	0.053	0.00	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.001	0.001	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	0.001	0.236	0.258	8.91	0.00	0.001	0.001	0.001	0.218	0.217	0.46	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.008	0.0082	2.47	0.00	0.001	0.001	0.001	0.0175	0.0188	7.16	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0161	0.0157	2.52	0.00	0.001	0.001	0.001	0.157	0.163	3.75	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.00227	0.00233	2.61	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002	0.00002	0.0001	0.0001	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000013	0.00002	**42.42**	0.00	0.00001	0.00001	0.00001	0.000067	0.00007	4.38	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.025	0.025	0.00	0.00
% Exceedance*								4%	0%						0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-53 Whale Tail 2025 Groundwater Storage Pond (GSP-1) QAQC (ST-WT-20)

ST-WT-20	Sample date		3/2/2025						8/4/2025		10/5/2025						
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters																	
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	5210	5200	0.19	-	0.5	3260	0.5	0.5	-	5680	5360	5.80	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	120	110	8.70	0.00	1	12	1	1	1	51	52	1.94	0.00
TDS	mg/L	10	10	10	7440	7330	1.49	0.00	10	5090	10	10	10	7590	7670	1.05	0.00
TSS	mg/L	1	1	1	7	7	0.00	0.00	1	14	1	1	1	33	11	100.00	0.00
Major Ions																	
Chloride	mg/L	1	1	1	4100	4000	2.47	0.00	1	2500	1	1	1	4300	4300	0.00	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.24	0.25	4.08	0.00	0.1	0.18	0.1	0.1	0.1	0.23	0.23	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	200	200	0.00	0.00	0.5	130	0.58	0.51	0.5	170	160	6.06	1.98
Nutrients																	
Ammonia (NH_3)	mg/L	0.061	0.061	-	21	20	4.88	-	0.061	8.5	0.061	0.061	-	14	14	0.00	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	17	17	0.00	0.00	0.05	7	0.05	0.05	0.05	12	12	0.00	0.00
Un-Ionized Ammonia, calculated	mg N/L	0.02	-	-	20	20	0.00	-	0.018	2.5	0.051	0.051	-	12	12	0.00	-
Nitrate	mg N/L	0.1	0.1	0.1	94.9	91.6	3.54	0.00	0.1	51.3	0.1	0.1	0.1	87	87.7	0.80	0.00
Nitrite	mg N/L	0.01	0.01	0.01	3.23	3.22	0.31	0.00	0.01	1.78	0.01	0.01	0.01	2.58	2.52	2.35	0.00
Total Metals																	
Aluminum	mg/L	0.003	0.003	0.003	0.03	0.03	0.00	0.00	0.003	0.768	0.003	0.003	0.003	1.11	0.903	20.57	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0033	0.0034	2.99	0.00	0.0001	0.0044	0.0001	0.0001	0.0001	0.0075	0.0073	2.70	0.00
Barium	mg/L	0.001	0.001	0.001	0.657	0.681	3.59	0.00	0.001	0.393	0.001	0.001	0.001	0.638	0.616	3.51	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.0001	0.0001	0.00	0.00	0.00001	0.0001	0.00001	0.00001	0.00001	0.0001	0.0001	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.034	0.036	5.71	0.00	0.001	0.03	0.001	0.001	0.001	0.041	0.039	5.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.005	0.005	0.00	0.00	0.0005	0.005	0.0005	0.0005	0.0005	0.005	0.005	0.00	0.00
Iron	mg/L	0.01	0.01	0.01	0.18	0.11	48.28	0.00	0.01	1.55	0.01	0.01	0.01	2.06	1.82	12.37	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.002	0.002	0.00	0.00	0.0002	0.002	0.0002	0.0002	0.0002	0.0042	0.0043	2.35	0.00
Manganese	mg/L	0.001	0.001	0.001	0.01	0.01	0.00	0.00	0.001	0.072	0.001	0.001	0.001	0.055	0.054	1.83	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.019	0.019	0.00	0.00	0.001	0.013	0.001	0.001	0.001	0.022	0.02	9.52	0.00
Nickel	mg/L	0.001	0.001	0.001	0.01	0.01	0.00	0.00	0.001	0.02	0.001	0.001	0.001	0.01	0.01	0.00	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0011	0.0011	0.00	0.00	0.0001	0.001	0.0001	0.0001	0.0001	0.001	0.001	0.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.0002	0.0002	0.00	0.00	0.00002	0.0002	0.00002	0.00002	0.00002	0.0002	0.0002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00018	0.00017	5.71	0.00	0.00001	0.00011	0.00001	0.00001	0.00001	0.00017	0.00016	6.06	0.00
Zinc	mg/L	0.005	0.005	0.005	0.05	0.05	0.00	0.00	0.005	0.05	0.005	0.005	0.005	0.05	0.05	0.00	0.00
% Exceedance*							4%	0%								7%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-54 Whale Tail 2025 IVR Attenuation Pond QAQC (ST-WT-23)

ST-WT-23	Sample date		3/24/2025							7/14/2025					
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters															
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	139	140	0.72	-	0.5	-	142	132	7.30	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1.9	1	58	62	6.67	**62.07**	1	1	52	51	1.94	0.00
TDS	mg/L	10	10	10	10	265	255	3.85	0.00	10	10	250	250	0.00	0.00
TSS	mg/L	1	1	1	1	3	2	**40.00**	0.00	1	1	2	2	0.00	0.00
Major Ions															
Chloride	mg/L	1	1	1	1	39	39	0.00	0.00	1	1	44	43	2.30	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.15	0.16	6.45	0.00	0.1	0.1	0.11	0.12	8.70	0.00
Sulfate	mg/L	0.5	0.5	0.5	0.5	65	65	0.00	0.00	0.5	0.5	66	69	4.44	0.00
Nutrients															
Ammonia (NH_3)	mg/L	0.061	0.061	0.061	-	0.41	0.35	15.79	-	0.061	-	0.33	0.061	**137.60**	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.34	0.29	15.87	0.00	0.05	0.05	0.27	0.05	**137.50**	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.1	1.17	1.18	0.85	0.00	0.1	0.1	4.36	4.55	4.26	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.02	0.019	5.13	0.00	0.01	0.01	0.035	0.036	2.82	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.0012	0.001	0.0068	0.0067	1.48	18.18
Total Metals															
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.0492	0.0568	14.34	0.00	0.003	0.003	0.0769	0.0598	25.02	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.0131	0.0129	1.54	0.00	0.0001	0.0001	0.121	0.111	8.62	0.00
Barium	mg/L	0.001	0.001	0.001	0.001	0.0546	0.0538	1.48	0.00	0.001	0.001	0.0521	0.049	6.13	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000012	0.00001	18.18	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.0012	0.0014	15.38	0.00	0.001	0.001	0.0021	0.0017	**21.05**	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00062	0.00071	13.53	0.00	0.0005	0.0005	0.00199	0.00099	**67.11**	0.00
Iron	mg/L	0.01	0.01	0.01	0.01	0.366	0.382	4.28	0.00	0.01	0.01	0.168	0.137	20.33	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	0.001	0.25	0.234	6.61	0.00	0.001	0.001	0.0348	0.0315	9.95	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.0056	0.0051	9.35	0.00	0.001	0.001	0.0061	0.0056	8.55	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0075	0.0075	0.00	0.00	0.001	0.001	0.01	0.0082	19.78	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.00022	0.00022	0.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000022	0.000022	0.00	0.00	0.00001	0.00001	0.000027	0.000025	7.69	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*								0%	0%					7%	0%

ST-WT-23	Sample date		9/1/2025							11/10/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters																
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	213	218	2.32	-	0.5	0.5	-	248	244	1.63	-
Total alkalinity, as $CaCO_3$	mg/L	1	1.6	1	1	51	52	1.94	0.00	1	1	1	61	67	9.38	0.00
TDS	mg/L	10	10	10	10	415	410	1.21	0.00	10	10	10	420	405	3.64	0.00
TSS	mg/L	1	1	1	1	3	4	**28.57**	0.00	1	1	1	3	2	**40.00**	0.00
Major Ions																
Chloride	mg/L	1	1	1	1	83	82	1.21	0.00	1	1	1	93	91	2.17	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.18	0.14	**25.00**	0.00	0.1	0.1	0.1	0.13	0.13	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	0.5	88	90	2.25	0.00	0.5	0.5	0.5	120	120	0.00	0.00
Nutrients																
Ammonia (NH_3)	mg/L	0.061	0.061	0.061	-	0.15	0.13	14.29	-	0.061	0.061	-	0.25	0.27	7.69	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.12	0.11	8.70	0.00	0.05	0.05	0.05	0.21	0.22	4.65	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.1	4.25	4.26	0.24	0.00	0.1	0.1	0.1	3.52	3.51	0.28	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.047	0.048	2.11	0.00	0.01	0.01	0.01	0.049	0.049	0.00	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.0082	0.0093	12.57	0.00	0.001	0.001	0.001	0.0069	0.0068	1.46	0.00
Total Metals																
Aluminum	mg/L	0.003	0.003	0.005	0.003	0.0646	0.0652	0.92	**50.00**	0.003	0.003	0.003	0.0617	0.0544	12.58	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.102	0.104	1.94	0.00	0.0001	0.0001	0.0001	0.118	0.116	1.71	0.00
Barium	mg/L	0.001	0.001	0.001	0.001	0.0618	0.0617	0.16	0.00	0.001	0.001	0.001	0.0722	0.0701	2.95	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.000014	**33.33**	0.00	0.00001	0.00001	0.00001	0.000027	0.000024	11.76	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.0016	0.0016	0.00	0.00	0.001	0.001	0.001	0.0016	0.0014	13.33	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00076	0.00078	2.60	0.00	0.0005	0.0005	0.0005	0.00086	0.00083	3.55	0.00
Iron	mg/L	0.01	0.01	0.01	0.01	0.197	0.281	35.15	0.00	0.01	0.01	0.01	0.213	0.199	6.80	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	0.001	0.0372	0.038	2.13	0.00	0.001	0.001	0.001	0.133	0.13	2.28	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.0068	0.007	2.90	0.00	0.001	0.001	0.001	0.0062	0.0061	1.63	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0077	0.0077	0.00	0.00	0.001	0.001	0.001	0.0157	0.0156	0.64	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0003	0.00029	3.39	0.00	0.0001	0.0001	0.0001	0.00023	0.00024	4.26	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000022	0.000022	0.00	0.00	0.00001	0.00001	0.00001	0.000018	0.000017	5.71	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*								4%	0%						0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-55 Whale Tail / IVR Attenuation Pond 2025 Discharge to Whale Tail South QAQC (ST-WT-24)

ST-WT-24	Sample date		4/14/2025							5/5/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters																
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	143	142	0.70	-	0.5	0.5	-	133	133	0.00	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	1	57	64	11.57	0.00	1	1	1	56	54	3.64	0.00
Carbonate, as $CaCO_3$	mg/L	1	1	1	-	1	1	0.00	-	1	1	-	1	1	0.00	-
Bicarbonate, as $CaCO_3$	mg/L	1	1	1	-	57	64	11.57	-	1	1	-	56	53	5.50	-
TDS	mg/L	10	10	10	10	240	240	0.00	0.00	10	10	10	220	250	12.77	0.00
TSS	mg/L	1	1	1	1	1	1	0.00	0.00	1	1	1	1	1	0.00	0.00
Total organic carbon	mg/L	0.4	0.4	0.4	0.4	2.4	2.4	0.00	0.00	0.4	0.4	0.4	2.2	2.1	4.65	0.00
Dissolved organic carbon	mg/L	0.4	0.65	0.58	0.4	2.3	2.3	0.00	**36.73**	0.47	0.61	0.4	2.1	2	4.88	**41.58**
Major Ions																
Chloride	mg/L	1	1	1	1	43	43	0.00	0.00	1	1	1	42	41	2.41	0.00
Silica	mg/L	0.05	0.05	0.05	0.05	8.9	9	1.12	0.00	0.05	0.05	0.05	8.3	8.4	1.20	0.00
Sulfate	mg/L	0.5	0.5	0.5	0.5	67	65	3.03	0.00	0.5	0.5	0.5	64	64	0.00	0.00
Nutrients																
Ammonia (NH_3)	mg/L	0.061	0.061	0.061	-	0.36	0.38	5.41	-	0.061	0.061	-	0.64	0.62	3.17	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.29	0.31	6.67	0.00	0.05	0.05	0.05	0.52	0.51	1.94	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.1	1.15	1.16	0.87	0.00	0.1	0.1	0.1	1.71	1.69	1.18	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.014	0.015	6.90	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	0.1	0.51	0.46	10.31	0.00	0.12	0.1	0.1	0.72	0.74	2.74	0.00
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.002	0.001	**66.67**	0.00	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Orthophosphate	mg P/L	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals																
Aluminum	mg/L	0.003	0.0066	0.003	0.003	0.0083	0.006	**32.17**	0.00	0.003	0.003	0.003	0.0081	0.0062	**26.57**	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.00322	0.00326	1.23	0.00	0.0005	0.0005	0.0005	0.0069	0.0067	2.94	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.00597	0.00496	18.48	0.00	0.0001	0.0001	0.0001	0.0116	0.0113	2.62	0.00
Barium	mg/L	0.001	0.001	0.001	0.001	0.0588	0.0608	3.34	0.00	0.001	0.001	0.001	0.056	0.0567	1.24	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000011	0.000012	8.70	0.00	0.00001	0.00001	0.00001	0.000012	0.000011	8.70	0.00
Calcium (total)	mg/L	0.05	0.05	0.05	-	41.7	41.2	1.21	-	0.05	0.05	-	39.2	39.2	0.00	-
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00087	0.00065	**28.95**	0.00	0.0005	0.0005	0.0005	0.00094	0.00079	17.34	0.00
Iron	mg/L	0.01	0.01	0.01	0.01	0.384	0.29	27.89	0.00	0.01	0.01	0.01	0.347	0.385	10.38	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.00029	0.0002	**36.73**	0.00	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.002	0.0049	0.005	2.02	0.00	0.002	0.002	0.002	0.005	0.0051	1.98	0.00
Magnesium (total)	mg/L	0.05	0.05	0.05	-	9.34	9.45	1.17	-	0.05	0.05	-	8.61	8.49	1.40	-
Manganese	mg/L	0.001	0.001	0.001	0.001	0.269	0.277	2.93	0.00	0.001	0.001	0.001	0.256	0.259	1.17	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.0054	0.0055	1.83	0.00	0.001	0.001	0.001	0.0072	0.0068	5.71	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0095	0.0095	0.00	0.00	0.001	0.001	0.001	0.0256	0.0255	0.39	0.00
Potassium (total)	mg/L	0.05	0.05	0.05	-	7.07	7.25	2.51	-	0.05	0.05	-	7.29	7.14	2.08	-
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.00012	0.0001	18.18	0.00
Sodium (total)	mg/L	0.05	0.05	0.05	-	8.49	8.63	1.64	-	0.05	0.05	-	8.52	8.28	2.86	-
Strontium	mg/L	0.001	0.001	0.001	0.001	0.376	0.382	1.58	0.00	0.001	0.001	0.001	0.337	0.336	0.30	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000018	0.000019	5.41	0.00	0.00001	0.00001	0.00001	0.000017	0.000018	5.71	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00081	0.0008	1.24	0.00	0.0001	0.0001	0.0001	0.00096	0.00091	5.35	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.008	0.0059	**30.22**	0.00	0.005	0.005	0.005	0.0065	0.0065	0.00	0.00

ST-WT-24	Sample date		4/14/2025							5/5/2025						
Parameter	Unit	MDL	Trip Blank	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	Trip Blank	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)
Dissolved Metals																
Aluminum	mg/L	0.003	0.003	0.0056	0.003	0.003	0.003	0.00	**60.47**	0.003	0.003	0.003	0.003	0.003	0.00	0.00
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.00332	0.00332	0.00	0.00	0.0005	0.0005	0.0005	0.00668	0.00677	1.34	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.0027	0.00262	3.01	0.00	0.0001	0.0001	0.0001	0.00259	0.00251	3.14	0.00
Barium	mg/L	0.001	0.001	0.001	0.001	0.0613	0.0609	0.65	0.00	0.001	0.001	0.001	0.0576	0.0575	0.17	0.00
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000014	0.000013	7.41	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0002	0.0002	0.0002	0.0002	0.00106	0.00094	12.00	0.00	0.0002	0.0002	0.0002	0.00106	0.00106	0.00	0.00
Iron	mg/L	0.005	0.005	0.005	0.005	0.066	0.0663	0.45	0.00	0.005	0.005	0.005	0.19	0.181	4.85	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Lithium	mg/L	0.002	0.002	0.002	0.002	0.0048	0.0051	6.06	0.00	0.002	0.002	0.002	0.0049	0.0049	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	0.001	0.281	0.28	0.36	0.00	0.001	0.001	0.001	0.267	0.271	1.49	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.0057	0.0055	3.57	0.00	0.001	0.001	0.001	0.0069	0.007	1.44	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0101	0.01	1.00	0.00	0.001	0.001	0.001	0.0256	0.026	1.55	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.00012	0.00013	8.00	0.00
Strontium	mg/L	0.001	0.001	0.001	0.001	0.387	0.383	1.04	0.00	0.001	0.001	0.001	0.356	0.363	1.95	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000018	0.000018	0.00	0.00	0.00001	0.00001	0.00001	0.000017	0.000019	11.11	0.00
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00084	0.00082	2.41	0.00	0.0001	0.0001	0.0001	0.00095	0.00098	3.11	0.00
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.005	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.0066	0.0068	2.99	0.00	0.005	0.005	0.005	0.0071	0.0065	8.82	0.00
Volatile Organics																
Petroleum Hydrocarbons F (C10-C50)	mg/L	0.2	0.2	0.2	-	0.2	0.2	0.00	-	0.27	0.2	-	0.2	0.2	0.00	-
% Exceedance*								1%	0%						0%	0%

ST-WT-24	Sample date		10/6/2025							11/10/2025						12/1/2025	
Parameter	Unit	MDL	Trip Blank	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	Field Blank	Lab Blank	Duplicate	Original	RPD (FD/N)	RPD (FB/LB)	Trip Blank	Original
Conventional Parameters																	
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	225	231	2.63	-	0.5	-	247	249	0.81	-	0.5	139
Total alkalinity, as $CaCO_3$	mg/L	1	1.8	1.7	1	47	48	2.11	**51.85**	1.1	1	59	59	0.00	9.52	1	63
Carbonate, as $CaCO_3$	mg/L	1	1	1	-	1	1	0.00	-	1	-	1	1	0.00	-	1	1
Bicarbonate, as $CaCO_3$	mg/L	1	1.8	1.7	-	47	48	2.11	-	1.1	-	59	59	0.00	-	1	63
TDS	mg/L	10	10	10	10	380	395	3.87	0.00	10	10	410	400	2.47	0.00	10	205
TSS	mg/L	1	1	1	1	2	2	0.00	0.00	1	1	1	2	**66.67**	0.00	1	2
Total organic carbon	mg/L	0.4	0.4	0.4	0.4	2.3	2.3	0.00	0.00	0.4	0.4	2.4	2.5	4.08	0.00	0.4	2.3
Dissolved organic carbon	mg/L	0.4	0.4	0.4	0.4	2.1	2.1	0.00	0.00	0.4	0.4	2.3	2.3	0.00	0.00	0.4	2.1
Major Ions																	
Chloride	mg/L	1	1	1	1	96	97	1.04	0.00	1	1	93	93	0.00	0.00	1	49
Silica	mg/L	0.05	0.05	0.05	0.05	4.3	4.1	4.76	0.00	0.1	0.05	6.9	6.9	0.00	**66.67**	0.05	7.3
Sulfate	mg/L	0.5	0.6	0.5	0.56	110	110	0.00	11.32	0.5	0.5	120	120	0.00	0.00	0.5	69
Nutrients																	
Ammonia (NH_3)	mg/L	0.061	0.061	0.061	-	0.27	0.24	11.76	-	0.061	-	0.26	0.27	3.77	-	0.061	0.32
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.22	0.2	9.52	0.00	0.05	0.05	0.21	0.22	4.65	0.00	0.05	0.26
Nitrate	mg N/L	0.1	0.1	0.1	0.1	3.81	3.77	1.06	0.00	0.1	0.1	3.51	3.48	0.86	0.00	0.1	1.97
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.039	0.039	0.00	0.00	0.01	0.01	0.05	0.049	2.02	0.00	0.01	0.018
Total Kjeldahl nitrogen	mg N/L	0.1	0.1	0.1	0.1	0.39	0.35	10.81	0.00	0.1	0.1	0.41	0.32	**24.66**	0.00	0.1	0.36
Total phosphorus	mg P/L	0.001	0.001	0.001	0.001	0.0014	0.0017	19.35	0.00	0.001	0.001	0.0019	0.0022	14.63	0.00	0.001	0.001

ST-WT-24	Sample date		10/6/2025							11/10/2025						12/1/2025	
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Orthophosphate	mg P/L	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01
Total Metals																	
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.0092	0.0163	**55.69**	0.00	0.003	0.003	0.0101	0.0128	**23.58**	0.00	0.003	0.0116
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.00816	0.00839	2.78	0.00	0.0005	0.0005	0.00861	0.00899	4.32	0.00	0.0005	0.00364
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.0309	0.0466	40.52	0.00	0.0001	0.0001	0.0172	0.0227	27.57	0.00	0.0001	0.00777
Barium	mg/L	0.001	0.001	0.001	0.001	0.0584	0.0595	1.87	0.00	0.001	0.001	0.0704	0.0733	4.04	0.00	0.001	0.0476
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05	0.05	0.053	5.83	0.00	0.05	0.05
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000011	0.00001	9.52	0.00	0.00001	0.00001	0.000019	0.00002	5.13	0.00	0.00001	0.000013
Calcium (total)	mg/L	0.05	0.05	0.05	-	65.4	67.2	2.71	-	0.05	-	74	74.9	1.21	-	0.05	40.2
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00097	0.00097	0.00	0.00	0.0005	0.0005	0.00096	0.00129	**29.33**	0.00	0.0005	0.00069
Iron	mg/L	0.01	0.01	0.01	0.01	0.53	0.717	29.99	0.00	0.01	0.01	0.331	0.414	22.28	0.00	0.01	0.346
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002
Lithium	mg/L	0.002	0.002	0.002	0.002	0.0152	0.0158	3.87	0.00	0.002	0.002	0.0127	0.013	2.33	0.00	0.002	0.0057
Magnesium (total)	mg/L	0.05	0.05	0.05	-	14.9	15.4	3.30	-	0.05	-	15.2	15.1	0.66	-	0.05	9.33
Manganese	mg/L	0.001	0.001	0.001	0.001	0.0765	0.0786	2.71	0.00	0.001	0.001	0.152	0.154	1.31	0.00	0.001	0.181
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.0054	0.0056	3.64	0.00	0.001	0.001	0.0059	0.006	1.68	0.00	0.001	0.0041
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0133	0.0134	0.75	0.00	0.001	0.001	0.0159	0.0157	1.27	0.00	0.001	0.0067
Potassium (total)	mg/L	0.05	0.05	0.05	-	12.4	12.8	3.17	-	0.05	-	12.2	12.3	0.82	-	0.05	7.01
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00028	0.00028	0.00	0.00	0.0001	0.0001	0.00026	0.00025	3.92	0.00	0.0001	0.0001
Sodium (total)	mg/L	0.05	0.05	0.05	-	11.5	11.9	3.42	-	0.05	-	14.4	14.1	2.11	-	0.05	11.6
Strontium	mg/L	0.001	0.001	0.001	0.001	0.785	0.787	0.25	0.00	0.001	0.001	0.716	0.734	2.48	0.00	0.001	0.366
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000015	0.000016	6.45	0.00	0.00001	0.00001	0.000017	0.000017	0.00	0.00	0.00001	0.000012
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00222	0.00231	3.97	0.00	0.0001	0.0001	0.00261	0.00269	3.02	0.00	0.0001	0.00101
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Zinc	mg/L	0.005	0.005	0.005	0.005	0.0083	0.0073	12.82	0.00	0.005	0.005	0.005	0.0052	3.92	0.00	0.005	0.005
Dissolved Metals																	
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.003	0.003	0.00	0.00	0.003	0.003	0.003	0.003	0.00	0.00	0.003	0.003
Antimony	mg/L	0.0005	0.0005	0.0005	0.0005	0.00773	0.00782	1.16	0.00	0.0005	0.0005	0.00835	0.00829	0.72	0.00	0.0005	0.00429
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.00329	0.00323	1.84	0.00	0.0001	0.0001	0.00226	0.00227	0.44	0.00	0.0001	0.00111
Barium	mg/L	0.001	0.001	0.001	0.001	0.0551	0.0537	2.57	0.00	0.001	0.001	0.0709	0.0707	0.28	0.00	0.001	0.0556
Beryllium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Boron	mg/L	0.05	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.05	0.05	0.062	0.061	1.63	0.00	0.05	0.05
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000016	0.000018	11.76	0.00	0.00001	0.00001	0.000018	0.000017	5.71	0.00	0.00001	0.000013
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001
Copper	mg/L	0.0002	0.0002	0.0002	0.0002	0.00124	0.00118	4.96	0.00	0.0002	0.0002	0.00179	0.00187	4.37	0.00	0.0002	0.00378
Iron	mg/L	0.005	0.005	0.005	0.005	0.0619	0.0601	2.95	0.00	0.005	0.005	0.0323	0.0306	5.41	0.00	0.005	0.0193
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002	0.0002	0.0002	0.00	0.00	0.0002	0.0002
Lithium	mg/L	0.002	0.002	0.002	0.002	0.0161	0.0159	1.25	0.00	0.002	0.002	0.0144	0.0143	0.70	0.00	0.002	0.0063
Manganese	mg/L	0.001	0.001	0.001	0.001	0.0791	0.0774	2.17	0.00	0.001	0.001	0.15	0.153	1.98	0.00	0.001	0.204
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.0053	0.0053	0.00	0.00	0.001	0.001	0.0061	0.006	1.65	0.00	0.001	0.0048
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0141	0.0139	1.43	0.00	0.001	0.001	0.0154	0.0155	0.65	0.00	0.001	0.0075
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00033	0.00033	0.00	0.00	0.0001	0.0001	0.00024	0.00022	8.70	0.00	0.0001	0.0001
Strontium	mg/L	0.001	0.001	0.001	0.001	0.671	0.674	0.45	0.00	0.001	0.001	0.717	0.707	1.40	0.00	0.001	0.401
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000015	0.000016	6.45	0.00	0.00001	0.00001	0.000017	0.000016	6.06	0.00	0.00001	0.000013

ST-WT-24	Sample date		10/6/2025							11/10/2025						12/1/2025	
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Tin	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Titanium	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Uranium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00225	0.00225	0.00	0.00	0.0001	0.0001	0.00258	0.00252	2.35	0.00	0.0001	0.00096
Vanadium	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005	0.005	0.005	0.00	0.00	0.005	0.005
Zinc	mg/L	0.005	0.005	0.005	0.005	0.0079	0.0081	2.50	0.00	0.005	0.005	0.0052	0.005	3.92	0.00	0.005	0.0062
Volatile Organics																	
Petroleum Hydrocarbons F (C10-C50)	mg/L	0.2	0.2	0.2	-	0.2	0.2	0.00	-	0.2	-	0.2	0.2	0.00	-	0.2	0.21
% Exceedance*								3%	0%					3%	0%		

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-56 Whale Tail 2025 Landfarm QAQC (ST-WT-27)

ST-WT-27	Sample date		7/27/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters									
TSS	mg/L	1	1	1	1	10	15	40.00	0.00
Total Metals									
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.136	0.144	5.71	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00272	0.00288	5.71	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.00068	0.0007	2.90	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0247	0.0257	3.97	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.272	0.27	0.74	0.00
Volatile Organics									
Benzene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Ethylbenzene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Toluene	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Xylenes	mg/L	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.00	0.00
F2 (C10-C16)	mg/L	0.09	0.09	0.09	0.09	0.09	0.09	0.00	0.00
F3 (C16-C34)	mg/L	0.2	0.2	0.2	0.2	0.61	0.76	**21.90**	0.00
F4 (C34-C50)	mg/L	0.2	0.2	0.2	0.2	0.2	0.2	0.00	0.00
Petroleum Hydrocarbons F (C10-C50)	mg/L	0.2	0.2	0.2	0.2	0.7	0.88	**22.78**	0.00
% Exceedance*								0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-57 Whale Tail 2025 IVR WRSF Sump QAQC (ST-WT-28)

ST-WT-28	Sample date		8/3/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters									
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	290	270	7.14	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	1	73	73	0.00	0.00
TDS	mg/L	10	10	10	10	505	505	0.00	0.00
TSS	mg/L	1	1	1	1	3	5	**50.00**	0.00
Major Ions									
Chloride	mg/L	1	1	1	1	57	57	0.00	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.11	0.12	8.70	0.00
Sulfate	mg/L	0.5	0.5	0.5	0.5	160	170	6.06	0.00
Nutrients									
Ammonia (NH_3)	mg/L	0.061	0.061	0.061	-	0.061	0.098	**46.54**	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.081	**47.33**	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.1	7.11	7.12	0.14	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.024	0.024	0.00	0.00
Total Metals									
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.0907	0.0834	8.39	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	1.18	1.1	7.02	0.00
Barium	mg/L	0.001	0.001	0.001	0.001	0.0739	0.0678	8.61	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000059	0.000062	4.96	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.0023	0.0023	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.0011	0.001	9.52	0.00
Iron	mg/L	0.01	0.01	0.01	0.01	0.166	0.163	1.82	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0004	0.0004	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	0.001	0.336	0.315	6.45	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.0086	0.008	7.23	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0496	0.0463	6.88	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00131	0.00133	1.52	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00004	0.00004	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000073	0.000071	2.78	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.01	0.01	0.00	0.00
% Exceedance*								0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-58 Whale Tail WRSF Ponding 2025 QAQC (ST-WT-30)

ST-WT-30	Sample date		7/6/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters								
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	91.5	95.2	3.96	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	46	45	2.20	0.00
TDS	mg/L	10	10	10	160	145	9.84	0.00
TSS	mg/L	1	1	1	1	1	0.00	0.00
Major Ions								
Chloride	mg/L	1	1	1	1.3	1.2	8.00	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	54	55	1.83	0.00
Nutrients								
Ammonia (NH_3)	mg/L	0.061	0.061	-	0.061	0.061	0.00	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	2.38	2.34	1.69	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.057	0.0605	5.96	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0187	0.0199	6.22	0.00
Barium	mg/L	0.001	0.001	0.001	0.0442	0.0455	2.90	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.002	0.002	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00182	0.00184	1.09	0.00
Iron	mg/L	0.01	0.01	0.01	0.086	0.099	14.05	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	0.0074	0.0081	9.03	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0021	0.0022	4.65	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0054	0.0056	3.64	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.00116	0.00121	4.22	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.000019	0.000018	5.41	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*							0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-59 Whale Tail WRSF Ponding 2025 QAQC (ST-WT-31)

ST-WT-31	Sample date		6/8/2025				7/6/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Original**	**RPD (FB/LB)**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters												
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	11	-	0.5	-	52.4	49.6	5.49	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	12	0.00	1	1	37	37	0.00	0.00
TDS	mg/L	10	10	10	10	0.00	10	10	95	90	5.41	0.00
TSS	mg/L	1	1	1	2	0.00	1	1	1	1	0.00	0.00
Major Ions												
Chloride	mg/L	1	1	1	1	0.00	1	1	1	1.2	18.18	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.00	0.1	0.1	0.1	0.1	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	1.1	0.00	0.5	0.5	26	26	0.00	0.00
Nutrients												
Ammonia (NH_3)	mg/L	0.061	0.061	-	0.061	-	0.061	-	0.061	0.061	0.00	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.1	0.00	0.1	0.1	0.8	0.75	6.45	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals												
Aluminum	mg/L	0.003	0.003	0.003	0.104	0.00	0.003	0.003	0.0764	0.0737	3.60	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0143	0.00	0.0001	0.0001	0.059	0.0556	5.93	0.00
Barium	mg/L	0.001	0.001	0.001	0.0068	0.00	0.001	0.001	0.023	0.0216	6.28	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.0031	0.00	0.001	0.001	0.0024	0.0024	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00151	0.00	0.0005	0.0005	0.00228	0.00223	2.22	0.00
Iron	mg/L	0.01	0.01	0.01	0.168	0.00	0.01	0.01	0.12	0.121	0.83	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00027	0.00	0.0002	0.0002	0.00021	0.0002	4.88	0.00
Manganese	mg/L	0.001	0.001	0.001	0.0196	0.00	0.001	0.001	0.0042	0.004	4.88	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.00	0.001	0.001	0.0025	0.0024	4.08	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0033	0.00	0.001	0.001	0.006	0.0058	3.39	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.00	0.0001	0.0001	0.00049	0.00048	2.06	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00	0.00001	0.00001	0.000015	0.000018	18.18	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.00	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*						0%					0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-60 Whale Tail WRSF Ponding 2025 QAQC (ST-WT-32)

ST-WT-32	Sample date		7/6/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters								
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	100	99.9	0.10	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	35	35	0.00	0.00
TDS	mg/L	10	10	10	175	155	12.12	0.00
TSS	mg/L	1	1	1	1	1	0.00	0.00
Major Ions								
Chloride	mg/L	1	1	1	1.4	1.4	0.00	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	73	73	0.00	0.00
Nutrients								
Ammonia (NH_3)	mg/L	0.061	0.061	-	0.061	0.061	0.00	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	3.46	3.7	6.70	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.01	0.00	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.0264	0.023	13.77	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0173	0.0172	0.58	0.00
Barium	mg/L	0.001	0.001	0.001	0.0561	0.0558	0.54	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00059	0.00057	3.45	0.00
Iron	mg/L	0.01	0.01	0.01	0.031	0.031	0.00	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Manganese	mg/L	0.001	0.001	0.001	0.0032	0.003	6.45	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0046	0.0047	2.15	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0028	0.0028	0.00	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.00124	0.00124	0.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*							0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-61 Whale Tail WRSF Ponding 2025 QAQC (ST-WT-33)

ST-WT-33	Sample date		7/6/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters								
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	113	117	3.48	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	63	62	1.60	0.00
TDS	mg/L	10	10	10	195	200	2.53	0.00
TSS	mg/L	1	1	1	15	11	30.77	0.00
Major Ions								
Chloride	mg/L	1	1	1	1.4	1.5	6.90	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	66	67	1.50	0.00
Nutrients								
Ammonia (NH_3)	mg/L	0.061	0.061	-	0.061	0.061	0.00	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	1.28	1.35	5.32	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.012	0.013	8.00	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.638	0.633	0.79	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0993	0.103	3.66	0.00
Barium	mg/L	0.001	0.001	0.001	0.058	0.0593	2.22	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000016	0.000014	13.33	0.00
Chromium	mg/L	0.001	0.001	0.001	0.021	0.021	0.00	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00252	0.00261	3.51	0.00
Iron	mg/L	0.01	0.01	0.01	1.04	1.04	0.00	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00184	0.00186	1.08	0.00
Manganese	mg/L	0.001	0.001	0.001	0.0302	0.031	2.61	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0035	0.0036	2.82	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0116	0.0117	0.86	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.00073	0.00072	1.38	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.000049	0.000047	4.17	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*							4%	0%

Footnotes:
RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-62 Whale Tail 2025 IVR WRSF Ponding QAQC (ST-WT-34)

ST-WT-34	Sample date		6/8/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters								
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	81.8	83.5	2.06	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	68	65	4.51	0.00
TDS	mg/L	10	10	10	140	135	3.64	0.00
TSS	mg/L	1	1	1	23	24	4.26	0.00
Major Ions								
Chloride	mg/L	1	1	1	14	14	0.00	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	23	23	0.00	0.00
Nutrients								
Ammonia (NH_3)	mg/L	0.061	0.061	-	0.071	0.1	**33.92**	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.058	0.084	**36.62**	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.56	0.55	1.80	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.01	0.011	9.52	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.799	0.769	3.83	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0459	0.0468	1.94	0.00
Barium	mg/L	0.001	0.001	0.001	0.0566	0.0587	3.64	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.000011	9.52	0.00
Chromium	mg/L	0.001	0.001	0.001	0.0226	0.0214	5.45	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00156	0.00145	7.31	0.00
Iron	mg/L	0.01	0.01	0.01	1.48	1.43	3.44	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00079	0.00077	2.56	0.00
Manganese	mg/L	0.001	0.001	0.001	0.0968	0.097	0.21	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0026	0.0027	3.77	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0119	0.0118	0.84	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.000033	0.000033	0.00	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*							0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-63 Whale Tail 2025 IVR WRSF Ponding QAQC (ST-WT-35)

ST-WT-35	Sample date		6/8/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters								
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	67.4	69.2	2.64	-
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	55	45	20.00	0.00
TDS	mg/L	10	10	10	90	75	18.18	0.00
TSS	mg/L	1	1	1	66	64	3.08	0.00
Major Ions								
Chloride	mg/L	1	1	1	5.2	5.2	0.00	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	15	14	6.90	0.00
Nutrients								
Ammonia (NH_3)	mg/L	0.061	0.061	-	0.061	0.16	**89.59**	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.13	**88.89**	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.59	0.57	3.45	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.017	0.015	12.50	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	3.05	3.11	1.95	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0499	0.0511	2.38	0.00
Barium	mg/L	0.001	0.001	0.001	0.074	0.0747	0.94	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00002	0.00002	0.00	0.00
Chromium	mg/L	0.001	0.001	0.001	0.0993	0.1	0.70	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0039	0.00399	2.28	0.00
Iron	mg/L	0.01	0.01	0.01	5.17	5.21	0.77	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00232	0.00236	1.71	0.00
Manganese	mg/L	0.001	0.001	0.001	0.164	0.166	1.21	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0013	0.0013	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0357	0.0363	1.67	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.00021	0.00022	4.65	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.000075	0.000074	1.34	0.00
Zinc	mg/L	0.005	0.005	0.005	0.008	0.0082	2.47	0.00
% Exceedance*							0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-64 Whale Tail 2025 IVR WRSF Ponding QAQC (ST-WT-36)

ST-WT-36	Sample date		6/8/2025					
Parameter	**Unit**	**MDL**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters								
Hardness, as $CaCO_3$	mg/L	0.5	0.5	-	40.4	38.1	5.86	-
Total alkalinity, as CaCO3	mg/L	1	1	1	39	39	0.00	0.00
TDS	mg/L	10	10	10	55	60	8.70	0.00
TSS	mg/L	1	1	1	24	11	74.29	0.00
Major Ions								
Chloride	mg/L	1	1	1	1.3	1.2	8.00	0.00
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.00	0.00
Sulfate	mg/L	0.5	0.5	0.5	9.5	9.9	4.12	0.00
Nutrients								
Ammonia (NH_3)	mg/L	0.061	0.061	-	0.061	0.061	0.00	-
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.05	0.00	0.00
Nitrate	mg N/L	0.1	0.1	0.1	0.27	0.28	3.64	0.00
Nitrite	mg N/L	0.01	0.01	0.01	0.014	0.017	19.35	0.00
Total Metals								
Aluminum	mg/L	0.003	0.003	0.003	0.749	0.399	60.98	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.298	0.292	2.03	0.00
Barium	mg/L	0.001	0.001	0.001	0.0243	0.0203	17.94	0.00
Cadmium	mg/L	0.00001	0.00001	0.00001	0.000012	0.000011	8.70	0.00
Chromium	mg/L	0.001	0.001	0.001	0.0202	0.0107	61.49	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.00128	0.00096	**28.57**	0.00
Iron	mg/L	0.01	0.01	0.01	1.38	0.755	58.55	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.00088	0.00064	**31.58**	0.00
Manganese	mg/L	0.001	0.001	0.001	0.104	0.0862	18.72	0.00
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00
Molybdenum	mg/L	0.001	0.001	0.001	0.0011	0.0011	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.0178	0.0141	23.20	0.00
Selenium	mg/L	0.0001	0.0001	0.0001	0.00012	0.00012	0.00	0.00
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00
Thallium	mg/L	0.00001	0.00001	0.00001	0.000028	0.000019	**38.30**	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*							19%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-65 Whale Tail 2025 IVR Diversion Ditch QAQC (ST-WT-37)

ST-WT-37	Sample date		9/1/2025						
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**
Conventional Parameters									
TSS	mg/L	1	1	1	1	1	1	0.00	0.00
Major Ions									
Sulfate	mg/L	1	1	1	1	13	13	0.00	0.00
Nutrients									
Ammonia Nitrogen	mg N/L	0.05	0.05	0.05	0.05	0.06	0.063	4.88	0.00
Un-Ionized Ammonia, calculated	mg N/L	0.02	0.00061	0.00061	-	0.00061	0.00061	0.00	-
Total Metals									
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.0389	0.0397	2.04	0.00
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.00185	0.0017	8.45	0.00
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00112	0.00102	9.35	0.00
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.00	0.00
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0032	0.003	6.45	0.00
Zinc	mg/L	0.005	0.005	0.005	0.005	0.005	0.005	0.00	0.00
% Exceedance*								0%	0%

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.

Table 1-66 Whale Tail 2025 Sewage Treatment Plant QAQC (ST-WT-11)

ST-WT-11	Sample date		1/6/2025							10/21/2025						11/10/2025	
Parameter	**Unit**	**MDL**	**Trip Blank**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Field Blank**	**Lab Blank**	**Duplicate**	**Original**	**RPD (FD/N)**	**RPD (FB/LB)**	**Trip Blank**	**Original**
Conventional Parameters																	
Hardness, as $CaCO_3$	mg/L	0.5	0.5	0.5	-	87.5	85.2	2.66	-	0.5	-	58.9	60.1	2.02	-	0.5	71.3
Total alkalinity, as $CaCO_3$	mg/L	1	1	1	1	20	22	9.52	0.00	1	1	17	28	48.89	0.00	1	37
TDS	mg/L	10	10	10	10	305	310	1.63	0.00	10	10	235	230	2.15	0.00	10	300
TSS	mg/L	1	1	1	1	2	5	**85.71**	0.00	1	1	1	1	0.00	0.00	1	1
Major Ions																	
Chloride	mg/L	1	1	1	1	80	80	0.00	0.00	1	1	63	62	1.60	0.00	1	77
Fluoride	mg/L	0.1	0.1	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1	0.1	0.1	0.00	0.00	0.1	0.1
Sulfate	mg/L	0.5	0.5	0.5	0.5	62	62	0.00	0.00	0.5	0.5	50	50	0.00	0.00	0.5	55
Nutrients																	
Ammonia (NH_3)	mg/L	0.061	0.061	0.061	-	0.077	0.071	8.11	-	0.061	-	0.062	0.064	3.17	-	0.061	0.061
Ammonia Nitrogen	mg/L	0.05	0.051	0.05	0.05	0.064	0.059	8.13	0.00	0.05	0.05	0.051	0.052	1.94	0.00	0.05	0.05
Un-Ionized Ammonia, calculated	mg/L	0.0001	-	-	-	0.0004	0.0004	0.00	-	-	-	0.00091	0.00093	2.17	-	-	0.00075
Nitrate	mg/L	0.1	0.1	0.1	0.1	12.6	13	3.13	0.00	0.1	0.1	9.99	8.87	11.88	0.00	0.1	8.31
Nitrite	mg/L	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.036
Biochemical Oxygen Demand	mg/L	2	2	2	2	4	3	**28.57**	0.00	2	2	2	2	0.00	0.00	2	2
Total phosphorus	mg/L	0.001	0.001	0.001	0.001	0.74	0.78	5.26	0.00	0.001	0.001	1	1.2	18.18	0.00	0.0011	1
Orthophosphate	mg/L	0.01	0.01	0.01	0.01	0.71	0.7	1.42	0.00	0.01	0.01	0.98	1.1	11.54	0.00	0.01	0.87
Total Metals																	
Total oil and grease	mg/L	0.5	0.5	0.5	0.5	0.5	0.5	0.00	0.00	0.5	0.5	0.5	0.5	0.00	0.00	0.7	0.5
Total Metals																	
Aluminum	mg/L	0.003	0.003	0.003	0.003	0.0625	0.142	77.75	0.00	0.003	0.003	0.0304	0.0293	3.69	0.00	0.003	0.0169
Arsenic	mg/L	0.0001	0.0001	0.0001	0.0001	0.00802	0.00803	0.12	0.00	0.0001	0.0001	0.00918	0.00903	1.65	0.00	0.0001	0.00498
Barium	mg/L	0.001	0.001	0.001	0.001	0.0035	0.0036	2.82	0.00	0.001	0.001	0.0024	0.0023	4.26	0.00	0.001	0.0032
Cadmium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.000013	**26.09**	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Chromium	mg/L	0.001	0.001	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001
Copper	mg/L	0.0005	0.0005	0.0005	0.0005	0.00265	0.00439	**49.43**	0.00	0.0005	0.0005	0.00194	0.00171	12.60	0.00	0.0005	0.002
Iron	mg/L	0.01	0.01	0.01	0.01	0.037	0.057	**42.55**	0.00	0.01	0.01	0.038	0.033	14.08	0.00	0.01	0.026
Lead	mg/L	0.0002	0.0002	0.0002	0.0002	0.00025	0.00058	**79.52**	0.00	0.0002	0.0002	0.00029	0.00028	3.51	0.00	0.0002	0.00023
Manganese	mg/L	0.001	0.001	0.001	0.001	0.0245	0.0238	2.90	0.00	0.001	0.001	0.0263	0.0275	4.46	0.00	0.001	0.0162
Mercury	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Molybdenum	mg/L	0.001	0.001	0.001	0.001	0.0015	0.0014	6.90	0.00	0.001	0.001	0.001	0.001	0.00	0.00	0.001	0.001
Nickel	mg/L	0.001	0.001	0.001	0.001	0.0054	0.0137	*86.91*	0.00	0.001	0.001	0.0072	0.0067	7.19	0.00	0.001	0.0122
Selenium	mg/L	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001	0.0001	0.0001	0.00	0.00	0.0001	0.0001
Silver	mg/L	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002	0.00002	0.00002	0.00	0.00	0.00002	0.00002
Thallium	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001	0.00001	0.00001	0.00	0.00	0.00001	0.00001
Zinc	mg/L	0.005	0.005	0.005	0.005	0.0371	0.0494	**28.44**	0.00	0.005	0.005	0.0383	0.0322	17.30	0.00	0.005	0.0534
% Exceedance*								3%	0%					3%	0%		

RPD = Relative Percent Difference; MDL: Method Detection Limit
All values "<DL" have been replaced by "DL".
* Percentage of parameters exceeding the QAQC objectives for one sampling event which corresponds to grey shaded cells.
Bold values correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are within 10x the MDL.
Grey shaded cells correspond to a RPD higher than 20% and for which concentrations of parent and duplicate samples are above 10x the MDL.
Italic values correspond to a RPD higher than 20% and for which one of the results is within 10X the MDL and the other one exceeds 10x the MDL.