Appendix D.1. 2AM-DOH1335

SUMMARY OF MONTHLY MONITORING REPORTING [SEE PART I ITEM 12]

ST-1 Doris Sedimentation Pond

The Doris Sedimentation Pond (ST-1) was built and became operational in 2011. During the 2025 open water season, all discharges from the facility were directed to the TIA via pipeline in accordance with Part F, Item 17. Each discharge event was metered to track transferred volumes. Water quality samples were collected from an outlet on the discharge pump with the intake on the pump submerged approximately 0.25 m below the water surface. If the pump was not running, samples were collected from the pond itself at the pump intake location.

Water was transferred from ST-1 to the TIA beginning in May and continued until October. The final day of discharge from the Sedimentation Pond was October 11, 2025.

Volumes transferred to the TIA from ST-1 are summarized in Table D1 - 1. These volumes include water conveyed to ST-1 from the Doris Contact Water Pond (ST-2), Doris Contact Water Pond Sump 1 (ST2-S1), Doris Contact Water Pond Sump 2 (ST2-S2), Doris Contact Water Pond Sump 3 (ST2-S3), Landfarm (ST-4), Doris Tank Farm Sump (ST-5), sumps from the Roberts Bay Bulk Fuel Storage Facility (ST-6a and ST-6b) and Madrid North Contact Water Pond (MMS-1). Results of water quality samples collected from ST-1 are summarized in Table D1 - 2.

Table D1 - 1. Doris Sedimentation Pond (ST-1) Monthly Discharge Volumes, 2025

Month	Monthly Volume (m^3)	Cumulative Volume (m^3)*
May	7,686	7,686
June	20,017	27,703
July	14,223	41,926
August	14,659	56,585
September	12,483	69,068
October	9,783	78,851
Total Volume		**78,851**

** Values rounded to nearest whole cubic metre.*
Volumes presented includes water from transferred from ST-2, ST2-S1, ST2-S2, ST2-S3, ST-4, ST- 5, ST-6a, ST-6b and MMS-1

ST-2 Doris Contact Water Pond

The Doris Contact Water Pond was built and became operational in 2011. The pond was active from May through October 2025, during which water quality samples were collected in June, July, and August 2025. Samples from the Doris Contact Water Pond (ST-2) were manually collected from a depth of 0.25 m below the water surface. All water from the Doris Contact Water Pond was directed to the Doris Sedimentation Pond (ST-1). Results of the 2025 water quality samples are presented in Table D1 - 3.

ST-3 Doris Non-Hazardous Landfill Sump

This station remains inactive as the Doris Non-Hazardous Landfill Sump (ST-3) has not been constructed.

ST-4 Landfarm

On June 6, 2025, a total of 84 m^3 of water from the Landfarm (ST-4) was transferred to the Doris Sedimentation Pond (ST-1). Water collected in the ST-1 is subsequently pumped to the TIA.

Table D1 - 2. Water Quality Monitoring Program Results for ST-1, 2025

Sample ID		ST-1	ST-1	ST-1
ALS ID		YL2500411-001	YL2500562-001	EO2506974-001
Date Sampled		5/21/2024	7/8/2025	8/6/2025
Parameter	Units			
pH	pH	7.92	8.03	8.00
Total Suspended Solids	mg/L	3.3	6.2	20.5
Chloride (Cl)	mg/L	256	670	1790
Cyanide, Total	mg/L	0.0212	0.0080	0.0369
Ammonia, Total (as N)	mg/L	0.733	1.62	7.09
Nitrate (as N)	mg/L	7.38	16.8	42.6
Nitrite (as N)	mg/L	0.110	0.284	0.571
Sulfate (SO4)	mg/L	158	239	320
Aluminum (Al)-Total	mg/L	0.201	0.238	0.0984
Antimony (Sb)-Total	mg/L	0.00034	0.00038	0.00272
Arsenic (As)-Total	mg/L	0.00245	0.00212	0.0835
Barium (Ba)-Total	mg/L	0.0151	0.0320	0.0954
Beryllium (Be)-Total	mg/L	<0.000020	<0.000020	<0.000100
Boron (B)-Total	mg/L	0.172	0.277	0.484
Cadmium (Cd)-Total	mg/L	0.0000312	0.0000762	0.0000935
Calcium (Ca)-Total	mg/L	110	195	643
Chromium (Cr)-Total	mg/L	0.00068	0.00135	<0.00250
Cobalt (Co)-Total	mg/L	0.00356	0.00296	0.0139
Copper (Cu)-Total	mg/L	0.0120	0.00898	0.00685
Iron (Fe)-Total	mg/L	0.510	0.644	0.249
Lead (Pb)-Total	mg/L	0.000254	0.000125	<0.000250
Lithium (Li)-Total	mg/L	0.0089	0.0137	0.0194
Magnesium (Mg)-Total	mg/L	28.0	58.8	98.4
Manganese (Mn)-Total	mg/L	0.208	0.310	0.361
Mercury (Hg)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00337	0.00440	0.00968
Nickel (Ni)-Total	mg/L	0.00231	0.00332	0.244
Potassium (K)-Total	mg/L	8.67	15.3	34.2
Selenium (Se)-Total	mg/L	0.00118	0.00188	0.00244
Silver (Ag)-Total	mg/L	0.000078	0.000035	<0.000050
Sodium (Na)-Total	mg/L	117	270	507
Thallium (Tl)-Total	mg/L	<0.000010	0.000010	<0.000050
Tin (Sn)-Total	mg/L	<0.00010	0.00041	<0.00050
Titanium (Ti)-Total	mg/L	0.00542	0.00875	0.00254
Uranium (U)-Total	mg/L	0.00037	0.000884	0.00407

Sample ID		ST-1	ST-1	ST-1
ALS ID		YL2500411-001	YL2500562-001	EO2506974-001
Date Sampled		5/21/2024	7/8/2025	8/6/2025
Parameter	Units			
Vanadium (V)-Total	mg/L	0.000727	0.00116	<0.00250
Zinc (Zn)-Total	mg/L	0.00106	0.0480	0.0381
Alkalinity, Total (as CaCO3)	mg/L	0.0374	106	112
Oil and Grease	mg/L	<5.0	<5.0	<5.0
Oil And Grease (Visible Sheen)		Present	Absent	Absent

Table D1 - 3. Water Quality Monitoring Program Results for ST-2, 2025

Sample ID		ST-2	ST-2	ST-2	ST-2
ALS ID		EO2504571-001	EO2504571-005	YL2500562-002	EO2506974-002
Date Sampled		6/4/2025	6/5/2025	7/8/2025	8/6/2025
Parameter	Units				
pH	pH	7.98	8.01	8.04	8.15
Total Suspended Solids	mg/L	3.1	4.5	<3.0	<3.0
Chloride (Cl)	mg/L	182	172	601	398
Cyanide, Total	mg/L	0.0376	0.0383	0.0946	0.260
Ammonia, Total (as N)	mg/L	0.316	0.304	0.994	0.498
Nitrate (as N)	mg/L	3.94	4.32	16.6	13.5
Nitrite (as N)	mg/L	0.0758	0.0729	0.370	0.273
Sulfate (SO4)	mg/L	106	110	329	301
Aluminum (Al)-Total	mg/L	0.0906	0.116	0.0234	0.0205
Antimony (Sb)-Total	mg/L	0.00033	0.00032	0.00047	0.00046
Arsenic (As)-Total	mg/L	0.00146	0.00166	0.00138	0.00140
Barium (Ba)-Total	mg/L	0.0102	0.0103	0.0290	0.0208
Beryllium (Be)-Total	mg/L	<0.000020	<0.000020	<0.000020	<0.000040
Boron (B)-Total	mg/L	0.106	0.108	0.336	0.346
Cadmium (Cd)-Total	mg/L	0.0000330	0.0000286	0.0000566	0.0000468
Calcium (Ca)-Total	mg/L	75.5	75.0	213	178
Chromium (Cr)-Total	mg/L	<0.00050	0.00059	<0.00050	<0.00100
Cobalt (Co)-Total	mg/L	0.00262	0.00268	0.00582	0.00443
Copper (Cu)-Total	mg/L	0.00823	0.00977	0.00852	0.00809
Iron (Fe)-Total	mg/L	0.153	0.214	0.206	0.253
Lead (Pb)-Total	mg/L	0.000068	0.000114	<0.000050	<0.000100
Lithium (Li)-Total	mg/L	0.0067	0.0068	0.0215	0.0182
Magnesium (Mg)-Total	mg/L	18.5	18.0	59.7	46.9
Manganese (Mn)-Total	mg/L	0.129	0.133	0.350	0.346
Mercury (Hg)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00268	0.00258	0.00546	0.00482
Nickel (Ni)-Total	mg/L	0.00152	0.00135	0.00247	0.00235
Potassium (K)-Total	mg/L	5.54	5.55	16.3	14.6

Sample ID		ST-2	ST-2	ST-2	ST-2
ALS ID		EO2504571-001	EO2504571-005	YL2500562-002	EO2506974-002
Date Sampled		6/4/2025	6/5/2025	7/8/2025	8/6/2025
Parameter	**Units**				
Selenium (Se)-Total	mg/L	0.000825	0.000838	0.00300	0.00266
Silver (Ag)-Total	mg/L	0.000119	0.000095	0.000085	0.000055
Sodium (Na)-Total	mg/L	78.0	74.9	237	194
Thallium (Tl)-Total	mg/L	<0.000010	<0.000010	<0.000010	<0.000020
Tin (Sn)-Total	mg/L	<0.00010	<0.00010	<0.00010	<0.00020
Titanium (Ti)-Total	mg/L	0.00334	0.00504	0.00076	0.00065
Uranium (U)-Total	mg/L	0.000655	0.000664	0.00150	0.00134
Vanadium (V)-Total	mg/L	0.00076	0.00095	0.00073	<0.00100
Zinc (Zn)-Total	mg/L	0.0044	0.0032	0.0035	<0.0060
Alkalinity, Total (as CaCO3)	mg/L	77.7	76.6	98.1	121
Oil and Grease	mg/L	<5.0	<5.0	<5.0	<5.0
Oil And Grease (Visible Sheen)		Absent	Absent	Absent	Absent

Note:
Effluent quality limits listed under Part F Item 18(a) are not applicable as water accumulating in this facility is transferred to the Doris Sedimentation Pond.

ST-5 Doris Plant Site Fuel Storage and Containment

Water from the Doris Tank Farm (ST-5) was sampled in May 2025. Results of this sampling are presented in Table D1 - 4. In 2025, a total of 467 m^3 of water was transferred to the Sedimentation Pond (ST-1).

ST-6a Roberts Bay Bulk Fuel Storage Facility

Water from the Roberts Bay 5 ML Tank Farm (ST-6a) was sampled in May and June 2025. The sample collected on May 21, 2025 did not meet the discharge criterion for "Oil and Grease," as specified in Part F, Item 18(b). All subsequent samples met the applicable discharge criteria, and the results are summarized in Table D1-6. However, no water from this location was discharged to the tundra or transported to the TIA in 2025.

ST-6b Roberts Bay Bulk Fuel Storage Facility

Water from the Roberts Bay four 5 ML tank farm (ST-6b) was sampled in May and June 2025. Results from the May sample met discharge criteria, as outlined in Part F Item 18(b) of the license, and presented in Table D1 - 6. In 2025, a total of 1,606 m^3 of water was transferred to the Sedimentation Pond (ST-1).

Table D1 - 4. Water Quality Monitoring Program Results for ST-5, 2025

	Sample ID	ST-5	ST-5^
	ALS ID	EO2504032-001	EO2504032-002
	Date Sampled	5/21/2025	5/21/2025
Parameter	Units		
pH	pH	8.02	8.02
Total Suspended Solids	mg/L	7.0	7.0
Benzene	mg/L	<0.00050	<0.00050
Toluene	mg/L	0.00170	0.00170
Ethylbenzene	mg/L	0.00965	0.00965
Oil and Grease	mg/L	2180	2180
Oil And Grease (Visible Sheen)		Absent	Absent
Lead (Pb)-Total	mg/L	0.000524	0.000524

^Indicates duplicate sample

Note:
Effluent quality limits listed under Part F Item 18(b) are not applicable as water accumulating in this facility is transferred to the Doris Sedimentation Pond.

Table D1 - 5. Water Quality Monitoring Program Results for ST-6a, 2025

Sample ID		ST-6A	ST-6A^	ST-6A	ST-6A	Part F Item 18 (b)	
ALS ID		EO2504039-001	EO2504039-002	EO2504223-001	EO2505136-001	Maximum Authorized Monthly Mean Concentration (mg/L)	Maximum Authorized Concentration in a Grab Sample (mg/L)
Date Sampled		5/21/2025	5/21/2025	5/28/2025	6/18/2025		
Parameter	Units						
pH	pH	7.66	7.75	8.15	8.17	6.0-9.5	6.0-9.5
Total Suspended Solids	mg/L	14.2	17.4	3.6	<3.0	50.0	100.0
Benzene	mg/L	0.00110	0.00120	<0.00050	<0.00050	0.37	0.37
Toluene	mg/L	0.00662	0.00662	<0.00050	<0.00050	0.002	0.002
Ethylbenzene	mg/L	0.00452	0.00461	<0.00050	<0.00050	0.09	0.09
Oil and Grease	mg/L	**21.7**	**16.3**	<5.0	<5.0	5	10
Oil And Grease (Visible Sheen)		Absent	Absent	Absent	Absent	No Visible Sheen	No Visible Sheen
Lead (Pb)-Total	mg/L	0.000156	0.000185	<0.000050	<0.000050	0.2	0.4

^Indicates duplicate sample

Bold indicates exceedance of part F Item 18(b) maximum *grab* concentration

Table D1 - 6. Water Quality Monitoring Program Results for ST-6b, 2025

Sample ID		ST-6B	ST-6B^	ST-6B	ST-6B	Part F Item 18 (b)	
ALS ID		EO2504040-001	EO2504040-002	EO2504228-001		Maximum Authorized Monthly Mean Concentration (mg/L)	Maximum Authorized Concentration in a Grab Sample (mg/L)
Date Sampled		5/21/2025	5/21/2025	5/28/2025	6/18/2025		
Parameter	Units						
pH	pH	8.19	8.26	8.30	8.23	6.0-9.5	6.0-9.5
Total Suspended Solids	mg/L	578	563	32.0	171	50.0	100.0
Benzene	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.37	0.37
Toluene	mg/L	0.00074	0.00071	<0.00050	<0.00050	0.002	0.002
Ethylbenzene	mg/L	0.00167	0.00149	<0.00050	<0.00050	0.09	0.09
Oil and Grease	mg/L	<5.0	<5.0	<5.0	<5.0	5	10
Oil And Grease (Visible Sheen)		Absent	Absent	Absent	Absent	No Visible Sheen	No Visible Sheen
Lead (Pb)-Total	mg/L	0.00457	0.00412	0.000241	0.00164	0.2	0.4

^Indicates duplicate sample

Effluent quality limits listed under Part F Item 18(b) are not applicable as water accumulating in this facility is transferred to the Doris Sedimentation Pond.

ST-7 and ST-7a/MMS-4b Freshwater Usage from Doris and Windy Lakes

Table D1 - 7 provides the volumes of water usage at the Doris and Madrid project areas as required under Part E, Item 1 of water license 2AM-DOH1335. The water extraction pump for Doris operations is located off the northwest shoreline of Doris Lake and the sampling station ST-7 is located within the Doris Lake pumphouse. In 2025, water from Doris Lake was not used for domestic consumption; all water for domestic consumption was obtained from Windy Lake at ST-7a (also referred to as MMS-4b in this license and equivalent to location HOP-1 of the Regional Exploration License 2BE-HOP2232). Water for dust suppression in 2025 was obtained from Doris and Windy Lake. Water for the 2025 winter track was primarily sourced from Patch Lake. Table D1 - 7 summarizes the freshwater volumes used from the approved lake sources.

Results of sampling at Doris Lake (ST-7) is provided in Table D1 - 8 and

Table D1 - 9. Table D1 - 10 and Table D1 - 11 provide the results of water quality sampling for monitoring station ST-7a/MMS-4b/HOP-1 at Windy Lake in compliance with the requirements set out in Schedule I of water license 2AM-DOH1335.

ST-8 Discharge from Sewage Treatment Plant Bio-membrane

The Sewage Treatment Plant (STP) at Doris Camp is made up of two sewage treatment plant modules. Each plant has the capacity to treat wastewater for up to 180 person. Both units were utilized throughout 2025 to treat all domestic wastewater generated by the site.

Treated effluent samples were collected from the combined effluent holding tank of these two modules (ST-8) in 2025 to test the quality of the effluent to be discharged to the tundra, in accordance with Part F, Item 5(b) of the License. In-plant sampling facilitates year-round compliance evaluation of plant performance.

All effluent quality samples collected in 2025 met the applicable discharge criteria. A laboratory error was identified in the May 21, 2025 sample however, upon re-analysis of Total Suspended Solids (TSS), the results were confirmed to be compliant. All effluent quality monitoring results for ST-8 are provided in Table D1 - 12 and Table D1 - 13.

Treated effluent volumes released from ST-8 are metered daily and summary volumes reported in the monthly monitoring reports. In 2025 all treated effluent from ST-8 was discharged to the tundra west of the facility laydown areas (13W 432933 7559057) as approved by the Inspector. The monthly volumes of effluent discharged are presented in Table D1 - 14.

The sludge produced at the sewage treatment plant is sent to the TIA for disposal. The volume of sludge produced in 2025 is presented in

Table D1 - 15.

ST-9 Runoff from Sewage Treatment Plant Discharge

In consultation with the Inspector during the 2009 inspection tour, the ST-9 sampling location was established (13W 430807 7559282). This point is east of Glenn Lake and down slope from the ST-8 tundra discharge location. Sampling was conducted at ST-9 in June, July, and September 2025 in accordance with Schedule I of 2AM-DOH1335. The station is frozen during the remainder of the year. There are no water quality criteria specified in the license for this monitoring station. Table D1 - 16 provides results of the 2025 seasonal monitoring.

Table D1 - 7. Doris North Water Usage in 2025

Month	Windy Lake (ST-7a)				Doris Lake (ST-7)				Patch Lake	Total Usage
	Domestic Water*	Industrial Usage**i	Winter track	Dust Suppression	Domestic Water*	Industrial Usage**	Dust Suppression	Winter Track	Winter Track	
January	963	125	0	0	0	0	0	0	9,401	10,489
February	1,110	107	9	0	0	0	0	0	5,317	6,542
March	1,138	200	0	0	0	0	0	0	0	1,339
April	1,239	301	0	0	0	0	0	0	0	1,540
May	1,464	295	0	0	0	0	0	0	0	1,759
June	1,294	145	0	0	0	0	608	0	0	2,047
July	1,337	17	0	178	0	0	616	0	0	2,148
August	1,750	2	0	0	0	0	72	0	0	1,824
September	1,764	0	0	14	0	5	0	0	0	1,783
October	2,075	49	0	0	0	0	0	0	0	2,123
November	1,884	55	0	0	0	0	0	0	0	1,939
December	1,549	0	0	0	0	0	0	0	0	1,549
Annual Total	17,567	1,296	9	192	0	5	1,290	0	**14,719**	**35,078**
	19,055				**1,295**					
Annual Allowance	***43,800***				***1,930,000***				***60,000***	***2,033,800***

Note:
All values rounded to nearest whole cubic metre.
** As permitted by water licenses 2BE-HOP2232 and 2AM-DOH1335 Part E Item 1 and Part I Item 5(a)(b).*
*** Includes industrial uses such as underground drilling, core processing, milling, concrete batching, etc.*

Table D1 - 8. Water Sampling Monitoring Program Results for ST-7, January to May 2025

Sample ID		ST-7	ST-7	ST-7	ST-7	ST-7	ST-7
ALS ID		YL2500054-001	EO2501479-001	YL2500153-001	EO2503085-001	EO2503836-001	YL2500275-001
Date Sampled		1/31/2025	2/25/2025	3/20/2025	4/22/2025	5/14/2025	5/14/2025
Parameter	**Units**						
pH	pH	7.65	7.20	7.46	7.22	7.35	7.80
Total Suspended Solids	mg/L	<3.0	<3.0	<3.0	<3.0	<3.0	6.3
Chloride (Cl)	mg/L		58.6	60.1	60.7	61.8	62.3
Cyanide, Free	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cyanide, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ammonia, Total (as N)	mg/L	0.0659	0.0288	0.0744	0.0308	0.0095	0.0161
Nitrate (as N)	mg/L	0.0096	0.169	0.0201	0.0722	0.0656	0.137
Nitrite (as N)	mg/L	<0.0010	0.0014	<0.0010	<0.0010	<0.0010	<0.0010
Orthophosphate-Dissolved (as P)	mg/L	0.0015	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus (P)-Total	mg/L	0.0243	0.0206	0.0230	0.0251	0.0269	0.0286
Aluminum (Al)-Total	mg/L	0.0262	0.0284	0.0210	0.0173	0.0180	0.0171
Arsenic (As)-Total	mg/L	0.00033	0.00022	0.00035	0.00031	0.00036	0.00031
Cadmium (Cd)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Calcium (Ca)-Total	mg/L	9.24	9.00	9.38	9.38	9.52	9.45
Chromium (Cr)-Total	mg/L	<0.00050	<0.00050	<0.00050	0.00070	<0.00050	<0.00050
Copper (Cu)-Total	mg/L	0.00187	0.00319	0.00203	0.00220	0.00806	0.00435
Iron (Fe)-Total	mg/L	0.099	1.03	0.673	4.62	4.30	0.212
Lead (Pb)-Total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	0.000673	0.00102
Mercury (Hg)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000269	0.000211	0.000263	0.000253	0.000260	0.000292
Nickel (Ni)-Total	mg/L	0.00062	0.00098	0.00065	0.00082	0.00094	0.00073
Selenium (Se)-Total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	0.000060	0.000086
Silver (Ag)-Total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thallium (Tl)-Total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Zinc (Zn)-Total	mg/L	<0.0030	0.0054	<0.0030	0.0057	0.0065	0.0037
Oil and Grease	mg/L		<5.0	<5.0	<5.0	<5.0	<5.0
Oil And Grease (Visible Sheen)			Absent	Absent	Absent	Absent	Absent

Sample ID		ST-7	ST-7	ST-7	ST-7	ST-7	ST-7
ALS ID		YL2500054-001	EO2501479-001	YL2500153-001	EO2503085-001	EO2503836-001	YL2500275-001
Date Sampled		1/31/2025	2/25/2025	3/20/2025	4/22/2025	5/14/2025	5/14/2025
Parameter	**Units**						
Chlorophyll-a	ug	0.00281					

^ *Indicates duplicate sample.*

Table D1 - 9. Water Sampling Monitoring Program Results for ST-7, June to December 2025

Sample ID		ST-7	ST-7	ST-7^	ST-7	ST-7	ST-7
ALS ID		EO2504579-001	EO2505396-001	EO2505396-002	EO2506422-001	EO2506422-002	YL2501210-001
Date Sampled		6/4/2025	6/25/2025	6/25/2025	7/21/2025	10/8/2025	11/5/2025
Parameter	**Units**						
pH	pH	7.60	7.40	7.53	7.80	7.58	7.77
Total Suspended Solids	mg/L	15.8	7.9	9.1	7.1	6.8	7.5
Chloride (Cl)	mg/L	61.5			51.0	52.1	
Cyanide, Free	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cyanide, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ammonia, Total (as N)	mg/L	0.0440	0.0089	0.0068	0.0113	0.0068	<0.0050
Nitrate (as N)	mg/L	0.279	<0.0050	<0.0050	0.0191	<0.0050	<0.0050
Nitrite (as N)	mg/L	0.0045	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Orthophosphate-Dissolved (as P)	mg/L	0.0067	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus (P)-Total	mg/L	0.0077	0.0290	0.0286	0.0153	0.0358	0.0308
Aluminum (Al)-Total	mg/L	0.0034	0.117	0.120	0.0495	0.0860	0.0503
Arsenic (As)-Total	mg/L	0.00022	0.00031	0.00034	0.00030	0.00031	0.00028
Cadmium (Cd)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Calcium (Ca)-Total	mg/L	8.96	8.18	8.23	7.48	8.20	7.88
Chromium (Cr)-Total	mg/L	<0.00050	0.00055	<0.00050	<0.00050	<0.00050	<0.00050
Copper (Cu)-Total	mg/L	0.00284	0.00519	0.00557	0.00178	0.00196	0.00787
Iron (Fe)-Total	mg/L	5.89	0.691	2.32	1.63	0.319	0.118
Lead (Pb)-Total	mg/L	<0.000050	0.000482	0.000304	<0.000050	0.000053	0.00103
Mercury (Hg)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050

Sample ID		ST-7	ST-7	ST-7^	ST-7	ST-7	ST-7
ALS ID		EO2504579-001	EO2505396-001	EO2505396-002	EO2506422-001	EO2506422-002	YL2501210-001
Date Sampled		6/4/2025	6/25/2025	6/25/2025	7/21/2025	10/8/2025	11/5/2025
Parameter	**Units**						
Molybdenum (Mo)-Total	mg/L	0.000174	0.000223	0.000230	0.000223	0.000268	0.000255
Nickel (Ni)-Total	mg/L	0.00196	0.00097	0.00096	0.00064	0.00070	0.00071
Selenium (Se)-Total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Silver (Ag)-Total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thallium (Tl)-Total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Zinc (Zn)-Total	mg/L	0.0098	0.0083	0.0049	<0.0030	<0.0030	0.0037
Oil and Grease	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Oil And Grease (Visible Sheen)		Absent	Absent	Absent	Absent	Absent	Absent
Chlorophyll-a	ug						

^ *Indicates duplicate sample.*

Table D1 - 10. Water Sampling Monitoring Program Results for ST-7a/MMS-4b (HOP-1), January to June 2025

	Sample ID	ST-7A	ST-7A	ST-7A	ST-7A	ST-7A
	ALS ID	YL2500057-001	YL2500057-001	YL2500155-001	EO2503785-001	EO2505401-001
	Date Sampled	1/31/2025	1/31/2025	3/20/2025	5/14/2025	6/25/2025
Parameter	Units					
pH	pH	7.94	7.94	7.81	7.89	7.68
Total Suspended Solids	mg/L	113	<3.0	<3.0	<3.0	<3.0
Chloride (Cl)	mg/L	<3.0	113	116	113	59.6
Cyanide, Free	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cyanide, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ammonia, Total (as N)	mg/L	0.169	0.169	0.0151	<0.0050	0.0126
Nitrate (as N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrite (as N)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Orthophosphate-Dissolved (as P)	mg/L	0.0014	0.0014	<0.0010	<0.0010	<0.0010
Phosphorus (P)-Total	mg/L	0.0049	0.0049	0.0048	0.0038	0.0053
Aluminum (Al)-Total	mg/L	0.0595	0.0595	0.0659	0.0403	0.0360
Arsenic (As)-Total	mg/L	0.00033	0.00033	0.00028	0.00031	0.00019
Cadmium (Cd)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Calcium (Ca)-Total	mg/L	14.5	14.5	16.1	15.5	9.11
Chromium (Cr)-Total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper (Cu)-Total	mg/L	0.00149	0.00149	0.00134	0.00151	0.00080
Iron (Fe)-Total	mg/L	0.347	0.347	0.048	0.048	0.034
Lead (Pb)-Total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Mercury (Hg)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	0.0000101	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000792	0.000792	0.000828	0.000739	0.000418
Nickel (Ni)-Total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Selenium (Se)-Total	mg/L	0.000050	0.000050	<0.000050	<0.000050	<0.000050
Silver (Ag)-Total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thallium (Tl)-Total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Zinc (Zn)-Total	mg/L	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Biochemical Oxygen Demand (BOD5)	mg/L	3.0	3.0	4.0	<2.0	<2.0
Fecal Coliforms	MPN/100mL	<1.0	<1.0	<1.0	<1.0	<1

	Sample ID	ST-7A	ST-7A	ST-7A	ST-7A	ST-7A
	ALS ID	YL2500057-001	YL2500057-001	YL2500155-001	EO2503785-001	EO2505401-001
	Date Sampled	1/31/2025	1/31/2025	3/20/2025	5/14/2025	6/25/2025
Parameter	**Units**					
Oil and Grease	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0
Oil And Grease (Visible Sheen)		Absent	Absent	Absent	Absent	Absent

^ *Indicates duplicate sample*

Table D1 - 11. Water Sampling Monitoring Program Results for ST-7a/MMS-4b (HOP-1), July to December 2025

	Sample ID	ST-7A	ST-7A	ST-7A	ST-7A	ST-7A	ST-7A
	ALS ID	YL2500744-001	YL2501053-001	EO2509274-001	EO2509814-001	EO2510837-001	EO2511594-001
	Date Sampled	8/6/2025	9/24/2025	10/7/2025	10/22/2025	11/26/2025	12/24/2025
Parameter	Units						
pH	pH	7.98	7.94	7.58	8.21	7.81	7.87
Total Suspended Solids	mg/L	11.8	<3.0	<3.0	<3.0	<3.0	<3.0
Chloride (Cl)	mg/L	95.5		97.6	96.5	108	106
Cyanide, Free	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cyanide, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ammonia, Total (as N)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate (as N)	mg/L	<0.0050	0.0223	<0.0050	<0.0050	<0.0050	0.0058
Nitrite (as N)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0021	0.0025
Orthophosphate-Dissolved (as P)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Phosphorus (P)-Total	mg/L	0.0088	0.0040	0.0057	0.0040	0.0047	0.0159
Aluminum (Al)-Total	mg/L	0.147	0.0642	0.0487	0.0596	0.0199	0.0172
Arsenic (As)-Total	mg/L	0.00030	0.00025	0.00024	0.00028	0.00024	0.00033
Cadmium (Cd)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000337
Calcium (Ca)-Total	mg/L	13.3	14.5	14.3	13.5	13.0	15.6
Chromium (Cr)-Total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00052
Copper (Cu)-Total	mg/L	0.00123	0.00112	0.00124	0.00128	0.00116	0.00172
Iron (Fe)-Total	mg/L	0.167	0.073	0.079	0.073	0.084	0.134
Lead (Pb)-Total	mg/L	0.000071	<0.000050	<0.000050	<0.000050	<0.000050	0.000855
Mercury (Hg)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.000688	0.000685	0.000736	0.000665	0.000692	0.000816
Nickel (Ni)-Total	mg/L	<0.00050	<0.00050	0.00066	<0.00050	<0.00050	0.00089
Selenium (Se)-Total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000181
Silver (Ag)-Total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thallium (Tl)-Total	mg/L	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000483
Zinc (Zn)-Total	mg/L	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.0054
Biochemical Oxygen Demand (BOD5)	mg/L	3.0	3.0	<2.0	<2.0	<2.0	<2.0

	Sample ID	ST-7A	ST-7A	ST-7A	ST-7A	ST-7A	ST-7A
	ALS ID	YL2500744-001	YL2501053-001	EO2509274-001	EO2509814-001	EO2510837-001	EO2511594-001
	Date Sampled	8/6/2025	9/24/2025	10/7/2025	10/22/2025	11/26/2025	12/24/2025
Parameter	**Units**						
Fecal Coliforms	MPN/100mL	1.0	<1.0	<1	<1	<1	<1
Oil and Grease	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Oil And Grease (Visible Sheen)		Present	Present	Absent	Absent	Absent	Absent

Table D1 - 12. Water Sampling Monitoring Program Results for ST-8, January to May 2025

Sample ID		ST-8	ST-8	ST-8	ST-8^	ST-8	ST-8	ST-8	ST-8 Re-run bottle 1	ST-8 Re-run bottle 2	Part F Item 5(b)	
ALS ID		YL2500 05639-001	YL2500 056-001	EO2501 477-001	EO2501 477-002	YL2500 154-001	EO2503 086-001	EO2504 030-001	EO2504 030-002	EO2504 030-003	Max Average Conc. (mg/L)	Max Conc. of Any Grab Sample (mg/L)
Date Sampled		1/31/2025	1/31/2025	2/25/2025	2/25/2025	3/20/2025	4/23/2025	5/21/2025	5/21/2025	5/21/2025		
Parameter	**Units**											
pH	pH	7.58	7.58	7.60	7.64	7.87	7.47	7.53			6.0-9.5	6.0-9.5
Total Suspended Solids	mg/L	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	**116**	66.8	<3.0	100	100
Biochemical Oxygen Demand (BOD5)	mg/L	3	3.0	2.3	2.1	7.0	<2.0	<2.0			80	160
Fecal Coliforms	CFU/100 mL	<1.0	<1.0			<1.0	<1	<10			10,000	10,000
Oil and Grease	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0			5	10
Oil And Grease (Visible Sheen)		Absent	Absent	Absent	Absent	Absent	Absent	Absent			No Visible Sheen	No Visible Sheen

^ *Indicates duplicate sample*
Bold indicates exceedance of part F Item 5(b) maximum grab concentration

Table D1 - 13. Water Sampling Monitoring Program Results for ST-8, June to December 2025

Sample ID		ST-8	ST-8	ST-8	ST-8	ST-8	ST-8	ST-8	ST-8	ST-8^	Part F Item 5(b)	
ALS ID		EO2504570-001	EO2505395-001	EO2506434-001	YL2500748-001	EO2508227-001	EO2509277-001	EO2510277-001	EO2511104-001	EO2511104-002	Max Average Concentration (mg/L)	Max Concentration of Any Grab Sample (mg/L)
Date Sampled		6/4/2025	6/25/2025	7/21/2025	8/6/2025	9/10/2025	10/7/2025	11/5/2025	12/2/2025	12/2/2025		
Parameter	**Units**											
pH	pH	7.39	7.67	8.24	7.93	7.81	7.78	8.01	7.43	7.48	6.0-9.5	6.0-9.5
Total Suspended Solids	mg/L	<3.0	<3.0	<3.0	3.1	8.8	6.0	5.8	8.6	5.2	100	100
Biochemical Oxygen Demand (BOD_5)	mg/L	4.7	<2.0	13.9	8.0	10.7	3.5	52.0	34.1	28.8	80	160
Fecal Coliforms	CFU/100 mL	<1	<1	<1	<1	<1	<10	<10	<1	1	10,000	10,000
Oil and Grease	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5	10
Oil And Grease (Visible Sheen)		Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	No Visible Sheen	No Visible Sheen

^ *Indicates duplicate sample*
Bold indicates exceedance of part F Item 5(b) maximum grab concentration

Table D1 - 14. Treated Effluent Released from the Doris Sewage Treatment Plant (ST-8), 2025

Month	Monthly Volume (m^3)	Cumulative Volume (m^3)
January	788	788
February	913	1,701
March	984	2,685
April	1,035	3,720
May	1,196	4,916
June	1214	6,130
July	1,339	7,469
August	1,466	8,935
September	1,622	10,557
October	1,616	12,173
November	1,868	14,041
December	1284	15,325
Total Volume of Treated Effluent Released 2025 (m^3)		**15,325**

Values rounded to nearest whole cubic metre.

Table D1 - 15. Volume of Sludge Removed from the Doris Sewage Treatment Plant, 2025

Month	Monthly Volume (m^3)	Cumulative Volume (m^3)
January	9.6	9.6
February	29.2	38.8
March	22.7	61.5
April	28.2	89.7
May	37.3	127.0
June	34.6	161.6
July	38.8	200.4
August	45.8	246.2
September	54.1	300.3
October	52.4	352.7
November	38.4	391.1
December	33.0	424.1
Total Volume of Sludge Produced in 2025 (m^3)		**424.1**

All sewage sludge reported to the TIA for disposal

Table D1 - 16. Water Quality Monitoring Program Results for ST-9, 2025

	Sample ID	ST-9	ST-9	ST-9^	ST-9
	Lab ID	EO2505395-002	EO2506434-002	EO2506434-003	EO2508227-002
	Date Sampled	6/25/2025	7/21/2025	7/21/2025	9/10/2025
Parameter	**Units**				
pH	pH	7.83	8.35	8.37	7.75
Total Suspended Solids	mg/L	<3.0	4.9	3.7	5.8
Biochemical Oxygen Demand (BOD5)	mg/L	<2.0	<2.0	<2.0	<2.0
Fecal Coliforms	MPN/100mL	<1.0	7	3	1
Oil and Grease	mg/L	<5.0	<5.0	<5.0	<5.0
Oil And Grease (Visible Sheen)		Absent	Absent	Absent	Absent

^ *Indicates duplicate sample*

ST-11 Reagent and Cyanide Storage Containment Area Sump

This facility was constructed and first used in 2017. The storage area is a lined berm area divided into two cells to allow separation of different chemical products. Each cell has a water collection sump to facilitate water management (ST-11a and ST-11b). The ST-11b station was decommissioned in 2020 and the ST-11a was decommissioned in 2022.

Hydrology Monitoring – Doris Lake Water Level and Ice Thickness (ST-12) and Doris Creek Flow (TL-2)

Lake level monitoring in Doris Lake (ST-12) and stream flow monitoring in Doris Creek (TL-2) was conducted in 2025 as outlined in Schedule I of the license. Stations were visited throughout the open water season to perform water level surveys and manual discharge measurements.

Doris Lake Station (ST-12)

The Doris Lake-2 monitoring station operates year-round. In 2025, data was collected from January 1st through to December 31st , as summarized in Table D1 - 17. In September of 2017, the Doris Lake monitoring location was relocated to the north to facilitate the installation of two year-round pressure transducers and to avoid potential interactions with mine construction. The -re-located station was named Doris Lake-2 (13W 433547 7558601). The station consists of two Solinst Leveloggers installed at depths of approximately 7 metres to monitor lake level year-round. The Leveloggers are coupled with a Solinst Barologger, located at Doris Camp, to compensate for changes in atmospheric pressure. In addition, MX-2001 pressure transducers have built in barometric pressure are used to internally compensate water level data measurements. Both Leveloggers and Barologger record a pressure readings every 15 minutes.

Doris Creek Flow (TL-2)

The Doris Creek streamflow monitoring station TL-2 (UTM 13W 434059 7559504) was reactivated in June 2025 following winter deactivation. The station consists of an Onset MX-2001 unvented pressure transducer installed on the streambed in a weighted assembly, recording water level data at 15-minute intervals. The station operated during the open-water season until September 2025, when it was deactivated for winter conditions. Because the station was installed in June and removed in September, mean daily water levels and corresponding flow rates were estimated for periods when monitoring data were unavailable. Monitoring results are summarized in Table D1-18.

Table D1 - 17. Summary of Doris Lake Mean Daily Water Levels, in Metres above Sea Level (masl), 2025

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	21.822	21.895	21.919	21.905	21.889	22.446	21.967	21.716	21.633	21.665	21.694	21.674
2	21.828	21.893	21.915	21.901	21.888	22.432	21.953	21.717	21.626	21.668	21.694	21.676
3	21.831	21.897	21.911	21.900	21.885	22.416	21.945	21.711	21.628	21.671	21.696	21.680
4	21.834	21.892	21.908	21.899	21.885	22.392	21.933	21.705	21.632	21.671	21.702	21.674
5	21.838	21.903	21.906	21.897	21.888	22.366	21.926	21.697	21.633	21.674	21.699	21.674
6	21.837	21.899	21.908	21.896	21.885	22.336	21.914	21.691	21.632	21.672	21.699	21.678
7	21.837	21.902	21.912	21.892	21.882	22.305	21.904	21.685	21.633	21.675	21.699	21.678
8	21.838	21.910	21.912	21.894	21.883	22.276	21.894	21.686	21.635	21.675	21.698	21.680
9	21.849	21.908	21.912	21.895	21.883	22.251	21.882	21.679	21.637	21.681	21.692	21.685
10	21.852	21.905	21.911	21.897	21.880	22.229	21.871	21.676	21.635	21.687	21.688	21.686
11	21.850	21.910	21.905	21.895	21.880	22.208	21.866	21.672	21.639	21.691	21.684	21.680
12	21.840	21.921	21.909	21.898	21.878	22.189	21.846	21.666	21.646	21.694	21.684	21.682
13	21.847	21.921	21.914	21.899	21.879	22.170	21.834	21.661	21.640	21.699	21.685	21.677
14	21.851	21.913	21.916	21.900	21.880	22.151	21.822	21.659	21.635	21.698	21.683	21.682
15	21.857	21.919	21.918	21.901	21.878	22.135	21.810	21.656	21.643	21.701	21.679	21.686
16	21.872	21.916	21.917	21.900	21.875	22.121	21.802	21.651	21.645	21.700	21.671	21.689
17	21.875	21.912	21.918	21.894	21.875	22.108	21.794	21.648	21.648	21.699	21.675	21.686
18	21.879	21.910	21.908	21.888	21.875	22.094	21.788	21.646	21.665	21.702	21.670	21.682
19	21.881	21.908	21.907	21.895	21.873	22.081	21.784	21.643	21.649	21.705	21.666	21.680
20	21.879	21.912	21.911	21.897	21.875	22.067	21.777	21.642	21.657	21.707	21.666	21.687
21	21.881	21.913	21.915	21.896	21.874	22.054	21.772	21.639	21.658	21.706	21.666	21.677
22	21.874	21.917	21.914	21.897	21.878	22.041	21.764	21.636	21.656	21.708	21.663	21.669
23	21.879	21.917	21.913	21.897	21.902	22.029	21.757	21.632	21.656	21.714	21.662	21.669
24	21.891	21.919	21.912	21.897	21.947	22.019	21.754	21.631	21.656	21.711	21.663	21.669
25	21.896	21.917	21.916	21.898	21.981	22.008	21.747	21.630	21.662	21.709	21.664	21.671
26	21.893	21.926	21.911	21.894	22.014	21.996	21.742	21.624	21.660	21.708	21.662	21.678
27	21.904	21.924	21.908	21.893	22.093	21.985	21.738	21.623	21.656	21.709	21.663	21.680
28	21.905	21.920	21.904	21.892	22.223	21.978	21.733	21.630	21.653	21.709	21.669	21.682
29	21.903		21.912	21.894	22.353	21.977	21.730	21.638	21.659	21.705	21.670	21.682
30	21.901		21.912	21.892	22.409	21.971	21.726	21.636	21.676	21.699	21.667	21.681
31	21.899		21.908		22.440		21.720	21.633		21.696		21.679
Mean	**21.865**	**21.911**	**21.912**	**21.896**	**21.959**	**22.161**	**21.822**	**21.660**	**21.646**	**21.694**	**21.679**	**21.679**
Max	**21.905**	**21.926**	**21.919**	**21.905**	**22.440**	**22.446**	**21.967**	**21.717**	**21.676**	**21.714**	**21.702**	**21.689**
Min	**21.822**	**21.892**	**21.904**	**21.888**	**21.873**	**21.971**	**21.720**	**21.623**	**21.626**	**21.665**	**21.662**	**21.669**

Estimated and modelled values are italicized.

Table D1 - 18. Summary of Doris Creek (TL-2) Daily Flow Rate, in Cubic Metres per Second (m^3/s), 2025

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	*3.472*	1.414	0.357	0.157	*0.232*	*0.029*	-
2	-	-	-	-	-	*3.410*	1.355	0.344	*0.143*	*0.239*	*0.020*	-
3	-	-	-	-	-	*3.342*	1.314	0.335	*0.148*	*0.244*	*0.014*	-
4	-	-	-	-	-	*3.238*	1.241	0.324	*0.158*	*0.244*	*0.010*	-
5	-	-	-	-	-	*3.124*	1.186	0.309	*0.158*	*0.251*	-	-
6	-	-	-	-	-	*2.993*	1.141	0.284	*0.157*	*0.248*	-	-
7	-	-	-	-	-	*2.858*	1.100	0.282	*0.160*	*0.255*	-	-
8	-	-	-	-	-	*2.729*	1.068	0.273	*0.164*	*0.253*	-	-
9	-	-	-	-	-	*2.622*	1.007	0.268	*0.167*	*0.268*	-	-
10	-	-	-	-	-	*2.527*	0.909	0.258	*0.163*	*0.281*	-	-
11	-	-	-	-	-	*2.436*	0.884	0.253	*0.172*	*0.290*	-	-
12	-	-	-	-	-	*2.352*	0.798	0.238	*0.187*	*0.298*	-	-
13	-	-	-	-	-	*2.269*	0.747	0.221	*0.175*	*0.307*	-	-
14	-	-	-	-	-	*2.186*	0.694	0.217	*0.164*	*0.306*	-	-
15	-	-	-	-	-	*2.114*	0.654	0.211	*0.182*	*0.312*	-	-
16	-	-	-	-	-	*2.055*	0.624	0.202	*0.186*	*0.309*	-	-
17	-	-	-	-	-	*2.000*	0.592	0.188	*0.192*	*0.309*	-	-
18	-	-	-	-	-	*1.936*	0.562	0.183	*0.231*	*0.315*	-	-
19	-	-	-	-	-	*1.880*	0.550	0.181	*0.196*	*0.321*	-	-
20	-	-	-	-	-	1.806	0.541	0.173	*0.212*	*0.325*	-	-
21	-	-	-	-	-	1.780	0.523	0.169	*0.216*	*0.324*	-	-
22	-	-	-	-	-	1.720	0.492	0.167	*0.210*	*0.328*	-	-
23	-	-	-	-	-	1.664	0.466	0.166	*0.211*	*0.341*	-	-
24	-	-	-	-	-	1.607	0.453	0.158	*0.210*	*0.335*	-	-
25	-	-	-	-	-	1.557	0.433	0.150	*0.225*	*0.331*	-	-
26	-	-	-	-	-	1.515	0.431	0.167	*0.220*	*0.249*	-	-
27	-	-	-	-	*0.100*	1.462	0.422	0.135	*0.211*	*0.174*	-	-
28	-	-	-	-	*0.620*	1.436	0.403	0.144	*0.205*	*0.122*	-	-
29	-		-	-	*3.066*	1.446	0.397	0.173	*0.216*	*0.085*	-	-
30	-		-	-	*3.314*	1.436	0.385	0.172	*0.256*	*0.060*	-	-
31	-		-		*3.449*		0.359	0.151		*0.042*		-
Mean	**0.000**	**0.000**	**0.000**	**0.000**	**2.110**	**2.232**	**0.747**	**0.221**	**0.188**	**0.258**	**0.018**	**0.000**
Max	**0.000**	**0.000**	**0.000**	**0.000**	**3.449**	**3.472**	**1.414**	**0.357**	**0.256**	**0.341**	**0.029**	**0.000**
Min	**0.000**	**0.000**	**0.000**	**0.000**	**0.100**	**1.436**	**0.359**	**0.135**	**0.143**	**0.042**	**0.010**	**0.000**

Estimated and modelled values are italicized.

TL-1 TIA Monitoring

This section presents the results of monitoring of the Tailings Impoundment Area (TIA) as per the applicable sections of Part F (Conditions Applying to Waste Deposit and Waste Management), Part I (Conditions Applying to General and Aquatic Effects Monitoring) and Schedule I of the water license.

Table D1 - 19 provides the volume of water discharged from the TIA to Roberts Bay in 2025. Water quality sampling and Acute Lethality testing was conducted as outlined in the Metal and Diamond Mining Effluent Regulations; no exceedance of the discharge criteria occurred.

Tailings deposition into the TIA remained suspended in 2025. Reclaim water was not utilized to support the mill in 2025, as the site was under care and maintenance.

Water quality samples were collected at the TIA Reclaim Pipeline monitoring station TL-1 from January to December, both from a sample port on the reclaim pump and from a sample port in the Effluent Water Treatment Plant that was commissioned in 2023. Sampling results are provided in Table D1 - 20 and Table D1 – 21.

Table D1 - 19. Volume of Water Pumped from TIA to Roberts Bay, 2025

Month	Number of Days of Discharge	Discharge Volume (m^3)	Exceedances of Discharge Criteria*
January	31	215,991	0
February	28	191,761	0
March	31	212,843	0
April	30	213,351	0
May	31	203,102	0
June	30	208,829	0
July	28	183,933	0
August	30	178,257	0
September	30	173,857	0
October	25	151,389	0
November	30	153,069	0
December	31	0	0
Annual Cumulative	**355**	**2,086,382**	**0**

** Discharge criteria as outlined in Metal and Diamond Mining Effluent Regulations.*
Acute Lethality testing conducted as per Part F Item 22 and Part I Item 14.

TL-5, TL6 and TL7a/b Tailings Monitoring

Mill operations were shut down on October 5 2021, with the final closure of the mill taking place on March 13, 2022. As a result, no tailings were generated in 2025 and stations TL-5, TL-6 and TL-7a/b remained inactive in 2025.

TL-11 Underground Seepage Monitoring

Visual inspections were conducted of all safely accessible backfilled underground stopes in October and December 2025 to identify seepage (TL-11) from the stopes. Samples were taken where seepage was observed and presented in Table D1 – 22.

Table D1 - 20. Water Quality in the Tailings Impoundment Area (TL-1), January to June 2025

Sample ID		TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1^	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1
ALS ID		EO2500117-001	EO2500318-001	EO2500519-001	EO2500712-001	EO2500895-001	EO2501102-001	EO2501273-002	EO2501473-001	EO2501660-001	EO2501899-001	EO2502077-001	EO2502212-001	EO2502426-001	EO2502699-001	EO2502924-001	EO2503077-001	EO2503529-001	EO2503787-001	EO2504026-001	EO2504221-001	EO2504581-001	EO2504820-001	EO2505144-001	EO2505400-001
Date Sampled		1/7/2025	1/14/2025	1/21/2025	1/28/2025	2/4/2025	2/11/2025	2/18/2025	2/25/2025	3/4/2025	3/12/2025	3/19/2025	3/26/2025	4/2/2025	4/9/2025	4/16/2025	4/23/2025	5/7/2025	5/14/2025	5/21/2025	5/28/2025	6/4/2025	6/11/2025	6/18/2025	6/25/2025
Parameter	Unit																								
pH	pH	7.65	7.66	7.59	7.65	7.64	7.52	7.57	7.48	7.58	7.44	7.69	7.41	7.59	7.68	7.29	7.47	7.74	7.47	7.40	7.93	8.22	7.38	7.45	8.06
Total Suspended Solids	mg/L	49.2	47.9	<2.0	<2.0	42.9	<2.0	<2.0	<2.0	36.5	2.10	<2.0	<2.0	54.3	<2.0	<2.0	<2.0	18.0	<2.0	<2.0	<2.0	<3.0	<2.0	2.9	7.4
Total Dissolved Solids	mg/L	4090	3910			3980				4160				4480				4780				4480			
Chloride (Cl)	mg/L	2000	1990			2090				2400				2320				2370				2460			
Cyanide, Free	mg/L	<0.0050	<0.0050			<0.0050				<0.0050				<0.0050				<0.0050				<0.0050			
Cyanide, Total	mg/L	<0.0200	0.0066	0.0075	0.0079	0.0084	0.0084	0.0097	0.0106	0.0092	0.0096	0.0102	0.0116	0.0123	0.0126	0.0140	0.0148	0.0156	0.0153	0.0163	<0.0200	0.0176	0.0172	0.0180	0.0114
Ammonia, Total (as N)	mg/L	0.374	0.385	0.409	0.388	0.383	0.387	0.361	0.350	0.346	0.310	0.294	0.287	0.268	0.262	0.219	0.190	0.0852	0.0458	0.0306	0.0439	0.0650	0.0429	0.0258	0.0263
Nitrate (as N)	mg/L	0.726	0.732			0.858				0.951				0.948				1.12				1.04			
Nitrite (as N)	mg/L	0.0306	0.0214			0.0782				0.0240				0.0474				0.0148				0.0131			
Orthophosphate-Dissolved (as P)	mg/L	0.0155	0.0241			0.0363				0.0466				0.0514				0.0500							
Phosphorus (P)-Total	mg/L	0.0431	0.0513	<0.250	<0.250	0.0602	<0.250	<0.250	<0.250	0.0713	<0.250	<0.25	<0.250	0.0804	<0.250	<0.250	<0.250	"0.0839							
<0.250"	<0.250	<0.250	0.676	0.0667	<0.250	<0.250	<0.250																		
Aluminum (Al)-Total	mg/L	0.160	0.172	0.123	0.0912	0.0848	0.0695	0.0589	0.0477	0.0473	0.0502	0.0452	0.0430	0.0414	0.0592	0.0500	0.0405	0.0349	0.0307	0.0447	0.0421	0.101	0.104	0.115	0.154
Arsenic (As)-Total	mg/L	0.00225	0.00228	0.00225	0.00248	0.00241	0.00220	0.00229	0.00232	0.00227	0.00259	0.00234	0.00239	0.00227	0.00248	0.00235	0.00228	0.00229	0.00236	0.00295	0.00222	0.00244	0.00244	0.00209	0.00196
Cadmium (Cd)-Total	mg/L	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000500	<0.0000250	<0.000025	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000500	<0.0000250	<0.0000250	<0.0000250	<0.0000250
Calcium (Ca)-Total	mg/L	169	172	170	180	186	176	187	182	178	203	200	194	203	189	181	184	207	190	221	186	192	187	172	131
Chromium (Cr)-Total	mg/L	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00500	<0.00250	<0.0025	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00500	<0.00250	<0.00250	<0.00250	<0.00250
Copper (Cu)-Total	mg/L	0.0118	0.0119	0.0120	0.0126	0.0121	0.0111	0.0114	0.0117	0.0116	0.0136	0.0113	0.0122	0.0116	0.0122	0.0130	0.0144	0.0126	0.0123	0.0146	0.0120	0.0125	0.0143	0.0112	0.00940
Iron (Fe)-Total	mg/L	0.381	0.386	0.325	0.326	0.304	0.276	0.278	0.291	0.336	0.311	0.265	0.280	0.276	0.300	0.309	0.317	0.301	0.339	0.439	0.384	0.610	0.550	0.536	0.493
Lead (Pb)-Total	mg/L	0.000252	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000500	<0.000250	<0.00025	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000500	<0.000250	<0.000250	<0.000250	<0.000250
Magnesium (Mg)-Total	mg/L	125	128	127	130	133	123	129	132	139	152	127	137	140	139	138	134	151	156	181	133	156	150	131	104
Mercury (Hg)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00410	0.00409	0.00395	0.00418	0.00421	0.00430	0.00407	0.00425	0.00408	0.00448	0.00390	0.00396	0.00395	0.00404	0.00419	0.00392	0.00432	0.00365	0.00418	0.00371	0.00387	0.00373	0.00314	0.00257
Nickel (Ni)-Total	mg/L	0.00486	0.00613	0.00560	0.00718	0.00656	0.00615	0.00627	0.00624	0.00682	0.00713	0.00584	0.00626	0.00628	0.00694	0.00644	0.00628	0.00691	0.00670	0.00755	<0.00500	0.00674	0.00604	0.00611	0.00527
Potassium (K)-Total	mg/L	42.8	40.9	41.8	44.6	42.8	40.7	42.1	46.2	44.4	51.4	42.2	47.6	46.9	47.4	46.1	46.1	49.4	44.6	55.9	46.5	51.0	49.2	41.4	32.1
Selenium (Se)-Total	mg/L	0.000273	<0.000250	<0.000250	<0.000250	0.000272	<0.000250	0.000258	0.000269	<0.000500	0.000281	<0.00025	0.000276	<0.000250	0.000260	0.000288	0.000277	0.000280	0.000327	0.000407	<0.000500	<0.000250	<0.000250	<0.000250	<0.000250

Sample ID		TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1^	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1
ALS ID		EO2500117-001	EO2500318-001	EO2500519-001	EO2500712-001	EO2500895-001	EO2501102-001	EO2501273-002	EO2501473-001	EO2501660-001	EO2501899-001	EO2502077-001	EO2502212-001	EO2502426-001	EO2502699-001	EO2502924-001	EO2503077-001	EO2503529-001	EO2503787-001	EO2504026-001	EO2504221-001	EO2504581-001	EO2504820-001	EO2505144-001	EO2505400-001
Date Sampled		1/7/2025	1/14/2025	1/21/2025	1/28/2025	2/4/2025	2/11/2025	2/18/2025	2/25/2025	3/4/2025	3/12/2025	3/19/2025	3/26/2025	4/2/2025	4/9/2025	4/16/2025	4/23/2025	5/7/2025	5/14/2025	5/21/2025	5/28/2025	6/4/2025	6/11/2025	6/18/2025	6/25/2025
Parameter	Unit																								
Silver (Ag)-Total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00100	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00100	<0.00050	<0.00050	<0.00050	<0.00050
Sodium (Na)-Total	mg/L	1110	1130	1100	1210	1170	1120	1140	1240	1300	1370	1210	1220	1150	1280	1230	1260	1370	1340	1620	1170	1380	1320	1180	860
Thallium (Tl)-Total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00100	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00100	<0.00050	<0.00050	<0.00050	<0.00050
Zinc (Zn)-Total	mg/L	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0300	<0.0150	<0.015	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0300	<0.0150	<0.0150	<0.0150	<0.0150
Fecal Coliforms	MPN/100 mL	<1	<1			<1				<1				<1				<1				<1			
Oil and Grease	mg/L	<5.0	<5.0			<5.0				<5.0				<5.0				<5.0				<5.0			
Oil And Grease (Visible Sheen)		Absent	Absent			Absent				Absent				Absent				Absent				Absent			
Benzene	mg/L	<0.00050	<0.00050			<0.00050				<0.00050				<0.00050				<0.00050				<0.00050			
Toluene	mg/L	<0.00050	<0.00050			<0.00050				<0.00050				<0.00050				<0.00050				<0.00050			
Ethylbenzene	mg/L	<0.00050	<0.00050			<0.00050				<0.00050				<0.00050				<0.00050				<0.00050			
Dissolved Oxygen	mg/L																								
Redox Potential	mV					224.7	168.1	270.8	277.6	254.4	212.7	234.3	218.7	238.2	247	255.3	303.5						213	159.5	164.2
Biochemical Oxygen Demand (BOD5)	mg/L		<2.0																						

^ *Indicates duplicate sample.*

Table D1 - 21. Water Quality in the Tailings Impoundment Area (TL-1), July to December 2025

Sample ID		TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	T-L1	TL-1	TL-1	T-L1	TL-1^	TL-1
ALS ID		EO2505602-001	EO2505911-001	EO2506092-001	EO2506412-001	EO2506735-001	EO2506975-001	EO2507130-001	EO2507467-001	EO2507714-002	EO2507714-001	EO2507934-001	EO2508219-001	EO2508468-001	EO2508728-001	EO2508898-001	EO2509279-001	EO2509712-001	EO2510063-001	EO2510274-001	EO2510514-001	EO2510514-002	EO2510668-001
Date Sampled		7/2/2025	7/9/2025	7/16/2025	7/23/2025	7/30/2025	8/6/2025	8/13/2025	8/20/2025	8/27/2025	8/27/2025	9/3/2025	9/10/2025	9/17/2025	9/24/2025	10/1/2025	10/8/2025	10/22/2025	10/29/2025	11/5/2025	11/12/2025	11/12/2025	11/19/2025
Parameter	**Unit**																						
pH	pH	8.09	8.31	8.08	8.17	8.36	8.24	8.14	8.18	8.27	8.32	8.18	8.26	8.23	8.13	8.05	8.05	8.10	8.20	8.17	7.96	7.96	7.98
Total Suspended Solids	mg/L	10.4	11.0	9.6	7.5	6.6	11.7	3.9	4.5	5.0	5.2	15.4	13.8	10.7	4.0	9.7	5.6	5.0	4.1	12.0	3.1	2.7	2.9
Total Dissolved Solids	mg/L	4620					2660					2760		2840			2760			2830			
Chloride (Cl)	mg/L	2460					1340					1360		1400			1410			1490			
Cyanide, Free	mg/L	<0.0050					<0.0050					<0.0050		<0.0050			<0.0050			<0.0050			
Cyanide, Total	mg/L	0.0215	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ammonia, Total (as N)	mg/L	0.0891	0.0094	0.0161	0.0104	0.0091	0.0105	<0.0050	<0.0050	<0.0050	<0.0050	0.0082	0.0126	0.0169	0.0122	0.0332	0.0122	0.0282	0.0102	0.0147	0.0326	0.0368	0.0562
Nitrate (as N)	mg/L	0.970					0.105					0.0779		0.0512			0.352			0.170			
Nitrite (as N)	mg/L	0.0109					<0.0050					0.0057		0.0087			0.0375			0.0453			
Orthophosphate-Dissolved (as P)	mg/L	0.0099					<0.0010					<0.0010		<0.0010			<0.0010			<0.0010			
Phosphorus (P)-Total	mg/L	0.0996	<0.250	<0.250	<0.250	<0.250	0.0615	<0.250	<0.250	<0.250	<0.250	0.0875	<0.250	0.0605	<0.250	<0.250	0.0566	<0.250	<0.250	0.0493	<0.250	<0.250	<0.250
Aluminum (Al)-Total	mg/L	0.112	0.188	0.162	0.0851	0.0537	0.0812	0.0403	0.114	0.0768	0.0727	0.0817	0.0588	0.0462	0.0718	0.0689	0.0424	0.0486	0.0490	0.0369	0.0311	0.0354	0.0277
Arsenic (As)-Total	mg/L	0.00272	0.00194	0.00186	0.00200	0.00203	0.00215	0.00207	0.00234	0.00325	0.00286	0.00235	0.00232	0.00261	0.00253	0.00196	0.00211	0.00194	0.00199	0.00192	0.00183	0.00197	0.00201
Cadmium (Cd)-Total	mg/L	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250	<0.0000250
Calcium (Ca)-Total	mg/L	226	79.7	116	116	116	126	124	118	158	141	118	127	146	149	114	139	114	125	121	110	108	136
Chromium (Cr)-Total	mg/L	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250	<0.00250
Copper (Cu)-Total	mg/L	0.0155	0.00854	0.00937	0.0103	0.00879	0.00896	0.00758	0.00744	0.0129	0.0120	0.00899	0.00812	0.0110	0.0104	0.00911	0.00845	0.00856	0.00910	0.00913	0.00880	0.00910	0.00940
Iron (Fe)-Total	mg/L	0.576	0.462	0.397	0.304	0.234	0.332	0.211	0.290	0.464	0.417	0.313	0.248	0.219	0.310	0.300	0.183	0.178	0.174	0.160	0.145	0.151	0.138
Lead (Pb)-Total	mg/L	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	0.000315	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250
Magnesium (Mg)-Total	mg/L	181	61.6	93.5	91.1	94.7	94.3	88.8	88.0	127	112	94.7	90.8	107	114	86.4	97.8	90.9	94.1	98.6	93.0	93.4	99.4
Mercury (Hg)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00407	0.00184	0.00245	0.00231	0.00256	0.00256	0.00252	0.00229	0.00312	0.00278	0.00277	0.00234	0.00282	0.00279	0.00217	0.00251	0.00251	0.00265	0.00257	0.00237	0.00235	0.00279
Nickel (Ni)-Total	mg/L	0.00812	0.00403	0.00446	0.00321	0.00451	0.00477	0.00449	0.00445	0.00520	0.00444	0.00457	0.00483	0.00599	0.00478	0.00446	0.00561	0.00456	0.00488	0.00489	0.00485	0.00495	0.00526
Potassium (K)-Total	mg/L	61.5	18.0	28.2	28.0	28.9	29.5	26.8	26.9	36.1	32.1	28.6	27.7	32.4	32.5	25.9	28.9	29.4	29.2	32.0	28.6	29.8	31.1
Selenium (Se)-Total	mg/L	0.000306	<0.000250	0.000319	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	0.000267	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250	<0.000250
Silver (Ag)-Total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Sodium (Na)-Total	mg/L	1630	493	814	805	793	815	754	795	955	843	822	817	879	895	766	871	759	895	790	804	816	878
Thallium (Tl)-Total	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050

Sample ID		TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	TL-1	T-L1	TL-1^	TL-1
ALS ID		EO2505602-001	EO2505911-001	EO2506092-001	EO2506412-001	EO2506735-001	EO2506975-001	EO2507130-001	EO2507467-001	EO2507714-002	EO2507714-001	EO2507934-001	EO2508219-001	EO2508468-001	EO2508728-001	EO2508898-001	EO2509279-001	EO2509712-001	EO2510063-001	EO2510274-001	EO2510514-001	EO2510514-002	EO2510668-001
Date Sampled		7/2/2025	7/9/2025	7/16/2025	7/23/2025	7/30/2025	8/6/2025	8/13/2025	8/20/2025	8/27/2025	8/27/2025	9/3/2025	9/10/2025	9/17/2025	9/24/2025	10/1/2025	10/8/2025	10/22/2025	10/29/2025	11/5/2025	11/12/2025	11/12/2025	11/19/2025
Parameter	Unit																						
Zinc (Zn)-Total	mg/L	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150	<0.0150
Fecal Coliforms	MPN/100mL	<1					1					1		<1			<1			<1			
Oil and Grease	mg/L	<5.0					<5.0					<5.0		<5.0			<5.0			6.4			
Oil And Grease (Visible Sheen)		Absent					Absent					Absent		Absent			Absent			Absent			
Benzene	mg/L	<0.00050					<0.00050					<0.00050		<0.00050			<0.00050			<0.00050			
Toluene	mg/L	<0.00050					<0.00050					<0.00050		<0.00050			<0.00050			<0.00050			
Ethylbenzene	mg/L	<0.00050					<0.00050					<0.00050		<0.00050			<0.00050			<0.00050			
Dissolved Oxygen	mg/L																						
Redox Potential	mV	226	167.2	202.1	220.8		96.3	242	201.6	172	172						237.6	235	158.4	258.4	258.3	258.3	
Biochemical Oxygen Demand (BOD5)	mg/L																						

^ *Indicates duplicate sample*

Table D1 - 22. Seepage from Underground Backfilled Stopes (TL-11), 2025

Sample ID		TL-11^	TL-11	TL-11	TL-11	TL-11	TL-11	TL-11^
ALS ID		YL2501092-003	YL2501092-001	YL2501092-002	YL2501092-004	EO2510840-003	EO2510840-001	EO2510840-002
Date Sampled		10/1/2025	10/1/2025	10/1/2025	10/1/2025	11/26/2025	11/26/2025	11/26/2025
Parameter	Unit							
Acidity, Total	mg/L	<2.0	<2.0	<2.0	6.0	3.9	4.1	4.3
Alkalinity, Total as CaCO3	mg/L	230	182	229	257	184	190	197
Aluminum	mg/L	<0.0050	0.0090	<0.0050	<0.0100	<0.0100	<0.0100	<0.0100
Ammonia Nitrogen	mg/L	0.395	0.0332	0.392	0.633	0.289	0.258	0.276
Antimony	mg/L	<0.00050	0.00105	<0.00050	<0.00100	<0.00100	<0.00100	<0.00100
Arsenic	mg/L	0.00919	0.00458	0.00926	0.00135	0.00316	0.00383	0.00404
Barium	mg/L	0.0330	0.0275	0.0313	0.0275	0.0310	0.0290	0.0288
Beryllium	mg/L	<0.000100	<0.000100	<0.000100	<0.000200	<0.000200	<0.000200	<0.000200
Bismuth	mg/L	<0.000250	<0.000250	<0.000250	<0.000500	<0.000500	<0.000500	<0.000500
Boron	mg/L	1.06	0.710	1.04	1.74	1.46	1.34	1.27
Cadmium	mg/L	<0.0000250	<0.0000250	<0.0000250	0.000192	<0.0000500	<0.0000500	<0.0000500
Calcium	mg/L	89.8	103	92.9	294	132	123	112
Cesium	mg/L	0.000206	0.000097	0.000193	0.000159	0.000412	0.000147	0.000159
Chloride	mg/L	1900	1480	1950	5120	3750	2750	2560
Chromium	mg/L	<0.00250	<0.00250	<0.00250	<0.00500	<0.00500	<0.00500	<0.00500
Cobalt	mg/L	0.00187	0.00657	0.00196	0.00842	0.00104	0.00460	0.00406
Conductivity	uS/cm	6720	5290	6640	14800	11100	8530	7990
Conductivity, field measured	uS/cm	5758.9	7034.5	7034.5	15077			

Sample ID		TL-11^	TL-11	TL-11	TL-11	TL-11	TL-11	TL-11^
ALS ID		YL2501092-003	YL2501092-001	YL2501092-002	YL2501092-004	EO2510840-003	EO2510840-001	EO2510840-002
Date Sampled		10/1/2025	10/1/2025	10/1/2025	10/1/2025	11/26/2025	11/26/2025	11/26/2025
Parameter	Unit							
Copper	mg/L	0.00217	0.00677	0.00213	0.0132	<0.00200	0.00873	0.00830
Cyanide (total)	mg/L	0.0089	0.0414	0.0071	0.0123	0.0059	0.0127	0.0176
Cyanide (free)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Field Salinity	PSU	3.07	3.81	3.81	8.62			
Hardness, Calcium Carbonate	mg/L	834	714	841	2310			
Iron	mg/L	<0.050	0.052	<0.050	<0.100	<0.100	<0.100	<0.100
Lead	mg/L	<0.000250	<0.000250	<0.000250	<0.000500	<0.000500	<0.000500	<0.000500
Lithium	mg/L	0.0292	0.0217	0.0297	0.0565	0.0374	0.0317	0.0297
Magnesium	mg/L	148	111	148	382	208	170	160
Manganese	mg/L	0.0724	0.139	0.0699	0.386	0.351	0.210	0.205
Mercury	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum	mg/L	0.00496	0.00282	0.00494	0.00303	0.00641	0.00459	0.00406
Nickel	mg/L	<0.00250	0.00581	<0.00250	0.0221	<0.00500	0.0119	0.00836
Nitrate as N	mg/L	0.840	1.94	0.965	7.44	0.785	0.789	0.802
Nitrite as N	mg/L	<0.0500	<0.0500	<0.0500	0.510	0.180	0.124	0.125
Oxidation Reduction Potential, field measured	RmV	259	258.5	258.5	278.9			
pH	pH units	8.27	8.21	8.27	8.12	8.07	8.06	8.09
pH, field measured	pH units	7.51	7.51	7.51	7.28			
Phosphorus	mg/L	<0.250	<0.250	<0.250	<0.500	<0.500	<0.500	<0.500
Potassium	mg/L	43.9	33.7	42.6	86.8	69.0	54.7	51.4
Rubidium	mg/L	0.0186	0.0157	0.0183	0.0365	0.0360	0.0216	0.0210
Selenium	mg/L	<0.000250	0.000378	<0.000250	0.00193	<0.000500	<0.000500	<0.000500
Silicon	mg/L	3.90	2.72	3.90	3.21	3.47	3.40	3.52
Silver	mg/L	<0.000050	<0.000050	<0.000050	0.000159	<0.000100	<0.000100	<0.000100
Sodium	mg/L	1080	811	1060	2530	1950	1480	1370
Strontium	mg/L	1.19	0.941	1.17	2.98	1.80	1.66	1.46
Sulfate	mg/L	250	255	272	880	424	348	329
Sulfur	mg/L	105	104	103	323	150	131	120
Tellurium	mg/L	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200	<0.00200	<0.00200
Temperature, field measured	deg c	6.26	7.32	7.32	6.88			
Thallium	mg/L	<0.000050	<0.000050	<0.000050	<0.000100	<0.000100	<0.000100	<0.000100
Thorium	mg/L	<0.00050	<0.00050	<0.00050	<0.00100	<0.00100	<0.00100	<0.00100
Tin	mg/L	<0.00050	<0.00050	<0.00050	<0.00100	<0.00100	<0.00100	<0.00100
Titanium	mg/L	<0.00150	<0.00150	<0.00150	<0.00300	<0.00300	<0.00300	<0.00300
Total Dissolved Solids	mg/L	3750	2870	3890	9720	7160	4950	4630
Total Suspended Solids	mg/L	12.8	30.2	14.4	27.6	50.1	27.9	39.9
Tungsten	mg/L	<0.00050	<0.00050	<0.00050	<0.00100	<0.00100	<0.00100	<0.00100
Uranium	mg/L	0.000863	0.000743	0.000871	0.000328	0.000299	0.000444	0.000515
Vanadium	mg/L	<0.00250	<0.00250	<0.00250	<0.00500	<0.00500	<0.00500	<0.00500
Zinc	mg/L	0.0090	0.0106	0.0097	0.0281	<0.0100	0.0102	<0.0100
Zirconium	mg/L	<0.00100	<0.00100	<0.00100	<0.00200	<0.00300	<0.00300	<0.00300

^ *Indicates duplicate sample*

TL-12 Monitoring of Underground Dewatering

Dewatering of the Doris underground workings continued in 2025. Table D1 - 23 provides the dewatering volumes for the Doris mine in 2025. Water quality samples were collected weekly and submitted for laboratory analysis as outlined in Schedule I of the water license. Results of this sampling is provided in Table D1 - 24 through Table D1 - 30.

Table D1 - 23. Doris Underground Mine Dewatering, 2025

Month	Monthly Volume (m^3)*	Cumulative Volume (m^3)*
January	54,321	54,321
February	54,968	109,289
March	61,681	170,970
April	48,834	219,804
May	53,937	273,741
June	58,267	332,008
July	47,726	379,734
August	51,031	430,765
September	49,755	480,520
October	52,293	532,813
November	1,611	534,424
December	53,656	588,080
Total (m^3)		**588,080**

** Values rounded to nearest whole cubic metre.*

Table D1 - 24. Water Sampling Monitoring Program Results for TL-12A, January to March 2025

Sample ID		TL-12A	TL-12A	TL-12A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A^	TL12-A	TL12-A	TL12-A
ALS ID		EO2500319-001	EO2500515-001	EO2500714-001	EO2500893-001	EO2501101-001	EO2501275-001	EO2501470-001	EO2501657-001	EO2501657-002	EO2501901-001	EO2502073-001	EO2502214-001
Date Sampled		1/14/2025	1/21/2025	1/28/2025	2/4/2025	2/11/2025	2/18/2025	2/25/2025	3/4/2025	3/4/2025	3/12/2025	3/19/2025	3/26/2025
Parameter	Units												
Conductivity	uS/cm	16200				17600				16300	16300		
Total Suspended Solids	mg/L	10.7	12.4	6.9	8.2	9.4	13.4	13.8	17.0	5.8	6.1	19.6	7.43
Total Dissolved Solids	mg/L	10500	10200	10000	11100	11400	10000	11400	9430	10800	10900	10700	9260
Chloride (Cl)	mg/L	6510	5960	6720	5730	6240	6040	6550	5970	6540	6560	6690	5520
Bromide (Br)	mg/L	23.1				19.8				25.9	26.5		
Fluoride (F)	mg/L	<0.400				<0.400				<0.400	<0.400		
Cyanide, Total	mg/L	<0.0200	<0.0050	<0.0050	<0.0050	<0.0050	<0.0200	<0.0050	0.0052	<0.0050	<0.0050	<0.0050	<0.0050
Cyanide, WAD	mg/L	<0.0200				<0.0050				<0.0050	<0.0050		
Ammonia, Total (as N)	mg/L	0.663	0.642	0.642	0.811	0.668	1.28	0.572	1.38	0.765	0.762	0.908	0.777
Nitrate (as N)	mg/L	1.54	1.31	1.58	1.85	1.68	3.67	2.47	5.20	2.30	2.47	3.56	3.62
Nitrite (as N)	mg/L	0.0657	0.104	0.136	0.0941	0.0863	0.0847	0.0426	0.0795	0.0915	0.109	0.112	0.172
Sulfate (SO4)	mg/L	656				626				665	678		
Aluminum (Al)-Total	mg/L	0.432	0.359	0.302	0.273	0.212	0.602	0.744	0.599	0.242	0.222	0.708	0.196
Antimony (Sb)-Total	mg/L	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200	<0.00100	<0.0010
Arsenic (As)-Total	mg/L	0.00153	0.00213	0.00115	0.00129	0.00142	0.00161	0.00148	0.00200	<0.00200	<0.00200	0.00142	0.00125
Barium (Ba)-Total	mg/L	0.0379	0.0396	0.0383	0.0387	0.0420	0.0350	0.0363	0.0323	0.0358	0.0361	0.0354	0.0341
Beryllium (Be)-Total	mg/L	<0.000200	<0.00200	<0.00100	<0.00100	<0.000200	<0.00100	<0.00100	<0.000200	<0.000400	<0.000400	<0.00100	<0.0010

Sample ID		TL-12A	TL-12A	TL-12A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A^	TL12-A	TL12-A	TL12-A
ALS ID		EO2500319-001	EO2500515-001	EO2500714-001	EO2500893-001	EO2501101-001	EO2501275-001	EO2501470-001	EO2501657-001	EO2501657-002	EO2501901-001	EO2502073-001	EO2502214-001
Date Sampled		1/14/2025	1/21/2025	1/28/2025	2/4/2025	2/11/2025	2/18/2025	2/25/2025	3/4/2025	3/4/2025	3/12/2025	3/19/2025	3/26/2025
Parameter	Units												
Bismuth (Bi)-Total	mg/L	<0.000500	<0.00100	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.00100	<0.00100	<0.000500	<0.00050
Boron (B)-Total	mg/L	1.85	1.94	1.78	1.89	2.30	1.91	1.89	1.52	1.88	1.87	1.78	1.62
Cadmium (Cd)-Total	mg/L	<0.0000500	<0.000100	<0.0000500	<0.0000500	<0.0000500	0.0000752	0.0000689	0.0000716	<0.000100	<0.000100	0.0000538	0.0000668
Calcium (Ca)-Total	mg/L	419	406	409	400	470	425	457	367	388	378	421	382
Cesium (Cs)-Total	mg/L	0.000516	0.000562	0.000507	0.000518	0.000567	0.000673	0.000686	0.000508	0.000566	0.000550	0.000553	0.000518
Chromium (Cr)-Total	mg/L	<0.00500	<0.0100	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.0100	<0.0100	<0.00500	<0.0050
Cobalt (Co)-Total	mg/L	0.00230	0.00216	0.00212	0.00254	0.00301	0.00504	0.00468	0.00502	0.00259	0.00250	0.00413	0.00413
Copper (Cu)-Total	mg/L	0.00688	<0.0100	0.00566	0.00846	0.00580	0.00864	0.00977	0.0120	<0.0100	<0.0100	0.0110	0.00838
Iron (Fe)-Total	mg/L	1.75	2.34	1.23	1.33	1.23	2.18	2.42	2.12	1.39	1.36	2.26	0.932
Lead (Pb)-Total	mg/L	<0.000500	<0.00100	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.00100	<0.00100	0.000699	<0.00050
Lithium (Li)-Total	mg/L	0.0620	0.0676	0.0617	0.0590	0.0690	0.0601	0.0676	0.0602	0.0626	0.0625	0.0628	0.0597
Magnesium (Mg)-Total	mg/L	335	340	326	314	361	322	366	268	338	330	322	291
Manganese (Mn)-Total	mg/L	0.700	0.734	0.684	0.744	0.801	0.806	0.955	0.700	0.738	0.727	0.794	0.670
Mercury (Hg)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00276	0.00245	0.00268	0.00256	0.00316	0.00282	0.00265	0.00271	0.00263	0.00283	0.00263	0.00272
Nickel (Ni)-Total	mg/L	<0.00500	<0.0100	<0.00500	<0.00500	<0.00500	0.00629	0.00644	0.00646	<0.0100	<0.0100	0.00568	<0.0050
Phosphorus (P)-Total	mg/L	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<1.00	<0.500	<0.50
Potassium (K)-Total	mg/L	86.6	84.8	88.8	88.0	96.7	83.9	95.2	76.0	89.6	88.5	91.5	79.1

Sample ID		TL-12A	TL-12A	TL-12A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A^	TL12-A	TL12-A	TL12-A
ALS ID		EO2500319-001	EO2500515-001	EO2500714-001	EO2500893-001	EO2501101-001	EO2501275-001	EO2501470-001	EO2501657-001	EO2501657-002	EO2501901-001	EO2502073-001	EO2502214-001
Date Sampled		1/14/2025	1/21/2025	1/28/2025	2/4/2025	2/11/2025	2/18/2025	2/25/2025	3/4/2025	3/4/2025	3/12/2025	3/19/2025	3/26/2025
Parameter	Units												
Rubidium (Rb)-Total	mg/L	0.0466	0.0473	0.0475	0.0478	0.0532	0.0463	0.0537	0.0424	0.0507	0.0480	0.0443	0.0445
Selenium (Se)-Total	mg/L	<0.000500	<0.00100	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.00100	<0.00100	<0.000500	<0.00050
Silicon (Si)-Total	mg/L	4.60	4.55	4.35	4.51	4.99	5.02	5.20	4.38	4.53	4.58	5.28	4.07
Silver (Ag)-Total	mg/L	<0.000100	<0.000200	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000200	<0.000200	<0.000100	<0.00010
Sodium (Na)-Total	mg/L	2890	3020	2950	2760	3170	2900	3070	2560	3140	3100	2930	2680
Strontium (Sr)-Total	mg/L	5.28	5.19	5.36	5.09	6.13	5.28	5.41	4.56	5.31	5.38	5.32	4.78
Tellurium (Te)-Total	mg/L	<0.00200	<0.00400	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<0.00200	<0.0020
Thallium (Tl)-Total	mg/L	<0.000100	<0.000200	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000200	<0.000200	<0.000100	<0.00010
Thorium (Th)-Total	mg/L	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200	<0.00100	<0.0010
Tin (Sn)-Total	mg/L	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200	<0.00200	<0.00100	<0.0010
Titanium (Ti)-Total	mg/L	0.00997	0.0135	0.00679	0.00781	0.0102	0.0238	0.0218	0.0175	0.00669	<0.00600	0.0206	0.00704
Tungsten (W)-Total	mg/L	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100	<0.00100	0.00127	<0.00100	<0.00200	<0.00200	<0.00100	0.00108
Uranium (U)-Total	mg/L	0.000229	0.000307	0.000220	0.000234	0.000259	0.000224	0.000209	0.000219	0.000209	0.000204	0.000208	0.000218
Vanadium (V)-Total	mg/L	<0.00500	<0.0100	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.0100	<0.0100	<0.00500	<0.0050
Zinc (Zn)-Total	mg/L	0.0349	<0.0600	0.0317	0.105	0.0831	0.622	0.243	0.836	0.188	0.208	0.563	0.860
Zirconium (Zr)-Total	mg/L	<0.00200	<0.00400	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<0.00200	<0.0020
Alkalinity, Total (as CaCO3)	mg/L	184				215				188	188		

^ *Indicates duplicate sample*

Table D1 - 25. Water Sampling Monitoring Program Results for TL-12A, April to May 2025

Sample ID		TL12-A	TL12-A^	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A
ALS ID		EO2502425-001	EO2502425-002	EO2502692-001	EO2502923-001	EO2503079-001	EO2503294-001	EO2503531-001	EO2503789-001	EO2504024-001	EO2504222-001
Date Sampled		4/2/2025	4/2/2025	4/9/2025	4/16/2025	4/23/2025	4/30/2025	5/7/2025	5/14/2025	5/21/2025	5/28/2025
Parameter	Units										
pH	pH	7.97	7.97	8.00	7.77	7.93	8.08	8.00	7.83	7.83	8.13
Conductivity	uS/cm	16400	16700					16400	16000		14200
Total Suspended Solids	mg/L	4.7	5.5	2.7	2.6	5.5	6.6	4.6	5.8	9.7	8.5
Total Dissolved Solids	mg/L	11000	11300	11600	11200	11200	11200	11600	11500	10900	9110
Chloride (Cl)	mg/L	5740	5730	6100	5920	6560	6500	6030	5830	6280	4790
Bromide (Br)	mg/L	18.6	19.0					22.2			
Fluoride (F)	mg/L	<0.400	<0.400					<0.400			
Cyanide, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0200	<0.0050
Cyanide, WAD	mg/L	<0.0050	<0.0050					<0.0050			
Ammonia, Total (as N)	mg/L	0.735	0.717	0.653	0.604	0.659	0.594	0.617	0.700	0.638	0.778
Nitrate (as N)	mg/L	1.88	1.89	1.72	1.94	1.52	1.70	1.49	1.47	1.85	3.00
Nitrite (as N)	mg/L	0.100	0.104	0.103	0.152	0.0802	0.0674	0.108	0.0865	0.0613	0.0690
Sulfate (SO4)	mg/L	570	564					584			
Aluminum (Al)-Total	mg/L	0.124	0.113	0.112	0.0697	0.110	0.135	0.107	0.119	0.334	0.328
Antimony (Sb)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200
Arsenic (As)-Total	mg/L	0.00106	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	0.00124	<0.00200
Barium (Ba)-Total	mg/L	0.0353	0.0350	0.0381	0.0355	0.0357	0.0394	0.0345	0.0354	0.0366	0.0288
Beryllium (Be)-Total	mg/L	<0.000200	<0.000200	<0.00100	<0.00100	<0.00100	<0.00200	<0.000200	<0.00200	<0.00100	<0.00200
Bismuth (Bi)-Total	mg/L	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.00100	<0.000500	<0.00100	<0.000500	<0.00100
Boron (B)-Total	mg/L	1.91	1.77	1.86	2.11	1.76	1.89	1.73	1.91	1.94	1.32
Cadmium (Cd)-Total	mg/L	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.000100	<0.0000500	<0.000100	<0.0000500	0.000123
Calcium (Ca)-Total	mg/L	388	376	428	428	376	408	409	387	388	312
Cesium (Cs)-Total	mg/L	0.000489	0.000481	0.000544	0.000522	0.000542	0.000447	0.000536	0.000479	0.000524	0.000476
Chromium (Cr)-Total	mg/L	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.0100	<0.00500	<0.0100	<0.00500	<0.0100
Cobalt (Co)-Total	mg/L	0.00236	0.00243	0.00201	0.00196	0.00164	0.00233	0.00198	<0.00200	0.00196	0.00845
Copper (Cu)-Total	mg/L	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.0100	<0.00500	<0.0100	<0.00500	<0.0100

Sample ID		TL12-A	TL12-A^	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A
ALS ID		EO2502425-001	EO2502425-002	EO2502692-001	EO2502923-001	EO2503079-001	EO2503294-001	EO2503531-001	EO2503789-001	EO2504024-001	EO2504222-001
Date Sampled		4/2/2025	4/2/2025	4/9/2025	4/16/2025	4/23/2025	4/30/2025	5/7/2025	5/14/2025	5/21/2025	5/28/2025
Parameter	Units										
Iron (Fe)-Total	mg/L	0.749	0.773	0.843	0.679	0.769	0.894	0.787	0.905	1.50	1.27
Lead (Pb)-Total	mg/L	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.00100	<0.000500	<0.00100	<0.000500	<0.00100
Lithium (Li)-Total	mg/L	0.0614	0.0568	0.0671	0.0672	0.0559	0.0702	0.0605	0.0607	0.0668	0.0471
Magnesium (Mg)-Total	mg/L	309	310	328	309	311	384	332	340	322	241
Manganese (Mn)-Total	mg/L	0.674	0.672	0.742	0.699	0.711	0.750	0.710	0.678	0.733	0.704
Mercury (Hg)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00254	0.00248	0.00255	0.00269	0.00246	0.00601	0.00238	0.00250	0.00250	0.00227
Nickel (Ni)-Total	mg/L	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.0100	<0.00500	<0.0100	<0.00500	<0.0100
Phosphorus (P)-Total	mg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<1.00	<0.500	1.31
Potassium (K)-Total	mg/L	87.2	84.0	90.6	85.1	87.1	93.1	87.4	80.6	85.7	68.5
Rubidium (Rb)-Total	mg/L	0.0457	0.0434	0.0491	0.0477	0.0495	0.0476	0.0487	0.0457	0.0484	0.0372
Selenium (Se)-Total	mg/L	<0.000500	<0.000500	<0.000500	0.000881	<0.000500	<0.00100	<0.000500	<0.00100	<0.000500	<0.00100
Silicon (Si)-Total	mg/L	4.12	4.07	4.65	4.06	4.19	4.54	4.20	4.02	4.54	3.78
Silver (Ag)-Total	mg/L	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000200	<0.000100	<0.000200	<0.000100	<0.000200
Sodium (Na)-Total	mg/L	2570	2530	3080	2920	2820	3030	3050	2910	3010	2080
Strontium (Sr)-Total	mg/L	5.07	4.84	5.35	5.47	4.92	4.64	5.24	5.02	4.84	3.60
Tellurium (Te)-Total	mg/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00200	<0.00400
Thallium (Tl)-Total	mg/L	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000200	<0.000100	<0.000200	<0.000100	<0.000200
Thorium (Th)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200
Tin (Sn)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200
Titanium (Ti)-Total	mg/L	0.00305	0.00493	<0.00300	<0.00300	<0.00300	<0.00600	<0.00300	<0.00600	0.00798	0.00762
Tungsten (W)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00200	<0.00100	<0.00200
Uranium (U)-Total	mg/L	0.000238	0.000246	0.000233	0.000228	0.000250	0.000308	0.000232	0.000261	0.000243	0.000210
Vanadium (V)-Total	mg/L	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.0100	<0.00500	<0.0100	<0.00500	<0.0100
Zinc (Zn)-Total	mg/L	0.0540	0.0525	0.0401	0.0379	0.0331	<0.0600	0.0395	<0.0600	0.0404	<0.0600
Zirconium (Zr)-Total	mg/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00400	<0.00200	<0.00400
Alkalinity, Total (as CaCO3)	mg/L	196	193					198			

^ *Indicates duplicate sample*

Table D1 - 26. Water Sampling Monitoring Program Results for TL-12A, June to August 2025

Sample ID		TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A
ALS ID		EO2504577-001	EO2504828-001	EO2505147-001	EO2505397-001	EO2505618-001	EO2505910-001	EO2506093-001	EO2506436-001	EO2506736-001	EO2506976-001	EO2507132-001	EO2507464-001	EO2507715-001
Date Sampled		6/4/2025	6/11/2025	6/18/2025	6/25/2025	7/2/2025	7/9/2025	7/16/2025	7/23/2025	7/30/2025	8/6/2025	8/13/2025	8/20/2025	8/27/2025
Parameter	**Units**													
pH	pH	8.18	8.16	8.15	8.07	8.18	8.00	8.15	8.19	7.78	8.14	7.84	8.01	7.97
Conductivity	uS/cm	15000	13200	13100	13000	15800		16000			16900			13900
Total Suspended Solids	mg/L	34.2	8.9	17.7	3.2	<2.0	2.7	12.5	31.8	13.4	34.6	11.5	4.0	3.9
Total Dissolved Solids	mg/L	8500	10100	10500	10300	10300	11200	12200	10400	12700	11100	11500	12100	10600
Chloride (Cl)	mg/L	3050	4840	5300	4940	5580	6920	5850	5580	7880	5580	5660	6350	5600
Bromide (Br)	mg/L	10.7				25.7					22.8			
Fluoride (F)	mg/L	<0.400				<0.400					0.487			
Cyanide, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cyanide, WAD	mg/L	<0.0050				<0.0050					<0.0050			
Ammonia, Total (as N)	mg/L	0.568	0.740	0.559	0.559	0.555	0.552	0.573	0.624	0.420	0.463	0.549	0.494	0.460
Nitrate (as N)	mg/L	1.38	2.75	2.14	1.44	1.87	1.73	1.96	1.68	1.77	1.75	1.98	1.65	1.61
Nitrite (as N)	mg/L	<0.0200	0.151	0.273	<0.0200	0.207	0.0698	0.227	0.0615	0.112	0.0662	0.0705	0.122	0.0935
Sulfate (SO4)	mg/L	521				566					540			
Aluminum (Al)-Total	mg/L	0.649	0.267	0.583	0.0986	0.212	0.0562	0.366	1.06	0.475		0.458	0.113	0.124
Antimony (Sb)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100		<0.00100	<0.00200	<0.00200
Arsenic (As)-Total	mg/L	0.00147	0.00124	0.00199	<0.00100	0.00101	<0.00100	0.00152	0.00306	0.00165		0.00115	<0.00200	<0.00200
Barium (Ba)-Total	mg/L	0.0325	0.0311	0.0347	0.0315	0.0320	0.0323	0.0371	0.0402	0.0388		0.0348	0.0360	0.0471
Beryllium (Be)-Total	mg/L	<0.000200	<0.00100	<0.00100	<0.00100	<0.000200	<0.00100	<0.00100	<0.00100	<0.00100		<0.00100	<0.00200	<0.00200
Bismuth (Bi)-Total	mg/L	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500		<0.000500	<0.00100	<0.00100
Boron (B)-Total	mg/L	1.85	1.47	1.72	1.67	1.76	1.59	1.75	1.94	2.39		1.83	1.85	2.32
Cadmium (Cd)-Total	mg/L	0.0000614	0.0000822	0.0000536	<0.0000500	<0.0000500	<0.0000500	0.0000570	0.0000524	<0.0000500		<0.0000500	<0.000100	<0.000100

Sample ID		TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A
ALS ID		EO2504577-001	EO2504828-001	EO2505147-001	EO2505397-001	EO2505618-001	EO2505910-001	EO2506093-001	EO2506436-001	EO2506736-001	EO2506976-001	EO2507132-001	EO2507464-001	EO2507715-001
Date Sampled		6/4/2025	6/11/2025	6/18/2025	6/25/2025	7/2/2025	7/9/2025	7/16/2025	7/23/2025	7/30/2025	8/6/2025	8/13/2025	8/20/2025	8/27/2025
Parameter	**Units**													
Calcium (Ca)-Total	mg/L	353	331	360	351	385	401	386	414	486		424	397	481
Cesium (Cs)-Total	mg/L	0.000475	0.000424	0.000500	0.000483	0.000484	0.000488	0.000531	0.000612	0.000942		0.000456	0.000526	0.000584
Chromium (Cr)-Total	mg/L	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500		<0.00500	<0.0100	<0.0100
Cobalt (Co)-Total	mg/L	0.00584	0.00668	0.00502	0.00372	0.00371	0.00256	0.00320	0.00403	0.00296		0.00302	<0.00200	0.00288
Copper (Cu)-Total	mg/L	0.0100	0.00826	0.0112	0.00509	0.00583	<0.00500	0.00678	0.0143	0.00806		0.00856	<0.0100	<0.0100
Iron (Fe)-Total	mg/L	2.08	1.08	2.23	0.701	0.980	0.593	1.59	3.70	1.68		1.64	0.934	0.909
Lead (Pb)-Total	mg/L	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	0.000620	<0.000500		<0.000500	<0.00100	<0.00100
Lithium (Li)-Total	mg/L	0.0537	0.0526	0.0580	0.0556	0.0569	0.0580	0.0644	0.0694	0.0743		0.0614	0.0722	0.0784
Magnesium (Mg)-Total	mg/L	310	283	308	307	330	326	308	342	434		329	324	434
Manganese (Mn)-Total	mg/L	0.789	0.705	0.722	0.642	0.732	0.683	0.694	0.791	1.11		0.710	0.684	0.834
Mercury (Hg)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00210	0.00234	0.00232	0.00227	0.00234	0.00251	0.00246	0.00275	0.00271		0.00270	0.00248	0.00322
Nickel (Ni)-Total	mg/L	0.00624	0.00656	0.00656	0.00530	0.00528	<0.00500	<0.00500	<0.00500	<0.00500		<0.00500	<0.0100	<0.0100
Phosphorus (P)-Total	mg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500		<0.500	<1.00	<1.00
Potassium (K)-Total	mg/L	81.6	78.7	84.7	81.4	92.4	86.1	83.7	90.3	110		85.5	83.8	104
Rubidium (Rb)-Total	mg/L	0.0416	0.0392	0.0424	0.0415	0.0445	0.0452	0.0485	0.0505	0.0588		0.0437	0.0452	0.0541
Selenium (Se)-Total	mg/L	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500		<0.000500	<0.00100	<0.00100
Silicon (Si)-Total	mg/L	4.90	4.17	5.01	3.98	4.58	4.21	4.56	5.69	5.69		4.70	4.39	5.50
Silver (Ag)-Total	mg/L	<0.000200	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100		<0.000100	<0.000200	<0.000200
Sodium (Na)-Total	mg/L	2700	2450	2780	2580	2920	2960	2850	3070	3710		2840	2990	3320
Strontium (Sr)-Total	mg/L	4.09	3.84	4.29	4.37	4.95	5.10	4.69	5.38	5.79		5.18	4.94	6.23
Tellurium (Te)-Total	mg/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200		<0.00200	<0.00400	<0.00400

Sample ID		TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A
ALS ID		EO2504577-001	EO2504828-001	EO2505147-001	EO2505397-001	EO2505618-001	EO2505910-001	EO2506093-001	EO2506436-001	EO2506736-001	EO2506976-001	EO2507132-001	EO2507464-001	EO2507715-001
Date Sampled		6/4/2025	6/11/2025	6/18/2025	6/25/2025	7/2/2025	7/9/2025	7/16/2025	7/23/2025	7/30/2025	8/6/2025	8/13/2025	8/20/2025	8/27/2025
Parameter	Units													
Thallium (Tl)-Total	mg/L	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100		<0.000100	<0.000200	<0.000200
Thorium (Th)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100		<0.00100	<0.00200	<0.00200
Tin (Sn)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100		<0.00100	<0.00200	<0.00200
Titanium (Ti)-Total	mg/L	0.0170	0.00684	0.0142	<0.00300	0.00355	<0.00300	0.00751	0.0283	0.0122		0.0107	<0.00600	<0.00600
Tungsten (W)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100		<0.00100	<0.00200	<0.00200
Uranium (U)-Total	mg/L	0.000224	0.000209	0.000213	0.000223	0.000228	0.000235	0.000241	0.000271	0.000276		0.000239	0.000228	0.000299
Vanadium (V)-Total	mg/L	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00664	<0.00500		<0.00500	<0.0100	<0.0100
Zinc (Zn)-Total	mg/L	0.0541	0.0510	0.0514	0.0383	0.0415	0.0308	0.0377	0.0479	0.0590		0.0358	<0.0600	<0.0600
Zirconium (Zr)-Total	mg/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200		<0.00200	<0.00400	<0.00400
Alkalinity, Total (as CaCO3)	mg/L	179				200					196			

Table D1 - 27. Water Sampling Monitoring Program Results for TL-12A, September to November 2025

Sample ID		TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A
ALS ID		EO2507941-001	EO2508228-001	EO2508469-001	EO2508726-001	EO2508894-001	EO2509276-001	EO2509480-001	EO2509708-001	EO2510062-001	EO2510271-001	EO2510513-001	EO2510669-001
Date Sampled		9/3/2025	9/10/2025	9/17/2025	9/24/2025	10/1/2025	10/8/2025	10/15/2025	10/22/2025	10/29/2025	11/5/2025	11/12/2025	11/19/2025
Parameter	Units	Results											
pH	pH	8.02	7.91	8.15	8.16	8.00	7.84	7.88	7.98	8.11	8.06	8.03	7.91
Conductivity	uS/cm	14100			15200	15300	15400		15600		16300		
Total Suspended Solids	mg/L	7.8	14.3	2.9	24.2	8.4	13.7	20.1	6.5	6.1	<2.0	5.3	46.8
Total Dissolved Solids	mg/L	11300	12100	8760	9790	12000	9730	10900	11500	10400	10700	9870	10300
Chloride (Cl)	mg/L	5400	29200	5640	5570	5800	5600	5420	6790	5800	5510	5270	4890
Bromide (Br)	mg/L	22.8					21.6				20.9		
Fluoride (F)	mg/L	<0.400					0.230				<0.200		

Sample ID		TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A
ALS ID		EO2507941-001	EO2508228-001	EO2508469-001	EO2508726-001	EO2508894-001	EO2509276-001	EO2509480-001	EO2509708-001	EO2510062-001	EO2510271-001	EO2510513-001	EO2510669-001
Date Sampled		9/3/2025	9/10/2025	9/17/2025	9/24/2025	10/1/2025	10/8/2025	10/15/2025	10/22/2025	10/29/2025	11/5/2025	11/12/2025	11/19/2025
Parameter	Units	Results											
Cyanide, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	<0.0050	<0.0050
Cyanide, WAD	mg/L	<0.0050					<0.0050				<0.0050		
Ammonia, Total (as N)	mg/L	0.448	0.395	0.492	0.397	0.440	0.445	0.531	0.461	0.434	0.485	0.456	0.418
Nitrate (as N)	mg/L	2.11	8.12	1.54	2.32	2.37	1.97	2.55	1.72	2.14	1.80	1.95	1.58
Nitrite (as N)	mg/L	0.0839	0.394	0.0972	0.166	0.0758	0.155	0.191	0.0818	0.0773	0.159	0.162	0.130
Sulfate (SO4)	mg/L	550					552				528		
Aluminum (Al)-Total	mg/L	0.234	0.496	0.108	0.866	0.312	0.190	0.438	0.128	0.165	0.124	0.229	1.02
Antimony (Sb)-Total	mg/L	<0.00200	<0.00200	<0.00200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100	<0.00100
Arsenic (As)-Total	mg/L	<0.00200	<0.00200	<0.00200	0.00164	0.00152	0.00106	0.00193	<0.00200	0.00125	0.00105	<0.00100	0.00366
Barium (Ba)-Total	mg/L	0.0366	0.0352	0.0369	0.0297	0.0417	0.0329	0.0324	0.0335	0.0325	0.0363	0.0352	0.0323
Beryllium (Be)-Total	mg/L	<0.000400	<0.00200	<0.00200	<0.00100	<0.00100	<0.000200	<0.00100	<0.00200	<0.00100	<0.000200	<0.000200	<0.000200
Bismuth (Bi)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.000500	<0.000500	<0.000500	<0.000500	<0.00100	<0.000500	<0.000500	<0.000500	<0.000500
Boron (B)-Total	mg/L	2.05	1.98	1.74	1.70	2.19	1.79	1.82	1.63	1.81	1.64	1.58	1.64
Cadmium (Cd)-Total	mg/L	<0.000100	<0.000100	<0.000100	<0.0000500	0.0000592	<0.0000500	0.0000547	<0.000100	<0.0000500	<0.0000500	<0.0000500	<0.0000500
Calcium (Ca)-Total	mg/L	354	412	381	325	453	420	363	367	362	346	308	356
Cesium (Cs)-Total	mg/L	0.000404	0.000577	0.000488	0.000431	0.000643	0.000543	0.000466	0.000471	0.000593	0.000522	0.000454	0.000490
Chromium (Cr)-Total	mg/L	<0.0100	<0.0100	<0.0100	<0.00500	<0.00500	<0.00500	<0.00500	<0.0100	<0.00500	<0.00500	<0.00500	<0.00500
Cobalt (Co)-Total	mg/L	0.00398	0.00338	<0.00200	0.00395	0.00532	0.00304	0.00487	<0.00200	0.00430	0.00271	0.00329	0.00359
Copper (Cu)-Total	mg/L	<0.0100	<0.0100	<0.0100	0.00814	0.00889	0.00600	0.00903	<0.0100	0.00534	<0.00500	<0.00500	0.0129
Iron (Fe)-Total	mg/L	1.15	1.72	0.786	2.56	1.44	0.952	3.06	0.820	0.869	0.792	1.00	5.06
Lead (Pb)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.000500	<0.000500	<0.000500	<0.000500	<0.00100	<0.000500	<0.000500	<0.000500	0.000754
Lithium (Li)-Total	mg/L	0.0620	0.0671	0.0590	0.0567	0.0705	0.0557	0.0583	0.0547	0.0601	0.0576	0.0527	0.0575
Magnesium (Mg)-Total	mg/L	316	351	322	286	386	343	315	312	323	321	298	306
Manganese (Mn)-Total	mg/L	0.707	0.876	0.689	0.618	0.935	0.718	0.714	0.611	0.719	0.665	0.654	0.640
Mercury (Hg)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050

Sample ID		TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A
ALS ID		EO2507941-001	EO2508228-001	EO2508469-001	EO2508726-001	EO2508894-001	EO2509276-001	EO2509480-001	EO2509708-001	EO2510062-001	EO2510271-001	EO2510513-001	EO2510669-001
Date Sampled		9/3/2025	9/10/2025	9/17/2025	9/24/2025	10/1/2025	10/8/2025	10/15/2025	10/22/2025	10/29/2025	11/5/2025	11/12/2025	11/19/2025
Parameter	Units	Results											
Molybdenum (Mo)-Total	mg/L	0.00219	0.00166	0.00224	0.00237	0.00264	0.00246	0.00238	0.00225	0.00261	0.00259	0.00268	0.00258
Nickel (Ni)-Total	mg/L	<0.0100	<0.0100	<0.0100	0.00573	0.00659	0.00566	0.00675	<0.0100	0.00594	<0.00500	0.00506	0.00595
Phosphorus (P)-Total	mg/L	<1.00	<1.00	<1.00	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500	<0.500	<0.500	<0.500
Potassium (K)-Total	mg/L	81.4	84.1	81.9	77.7	96.5	87.4	82.4	80.0	85.5	86.8	83.8	80.1
Rubidium (Rb)-Total	mg/L	0.0439	0.0496	0.0458	0.0393	0.0552	0.0434	0.0422	0.0423	0.0465	0.0457	0.0432	0.0426
Selenium (Se)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.000500	<0.000500	<0.000500	<0.000500	<0.00100	<0.000500	<0.000500	<0.000500	<0.000500
Silicon (Si)-Total	mg/L	4.37	4.80	4.37	5.15	5.17	4.39	4.58	4.06	4.67	4.38	4.54	5.99
Silver (Ag)-Total	mg/L	<0.000200	<0.000200	<0.000200	<0.000100	<0.000100	<0.000100	<0.000100	<0.000200	<0.000100	<0.000100	<0.000100	<0.000100
Sodium (Na)-Total	mg/L	2810	3170	2690	2410	3500	3110	2570	2700	3130	2620	2670	2740
Strontium (Sr)-Total	mg/L	4.64	4.96	4.96	4.20	5.52	4.86	4.57	4.53	4.46	4.36	3.94	4.51
Tellurium (Te)-Total	mg/L	<0.00400	<0.00400	<0.00400	<0.00200	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00200	<0.00200	<0.00200
Thallium (Tl)-Total	mg/L	<0.000200	<0.000200	<0.000200	<0.000100	<0.000100	<0.000100	<0.000100	<0.000200	<0.000100	<0.000100	<0.000100	<0.000100
Thorium (Th)-Total	mg/L	<0.00200	<0.00200	<0.00200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100	<0.00100
Tin (Sn)-Total	mg/L	<0.00200	<0.00200	<0.00200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100	<0.00100
Titanium (Ti)-Total	mg/L	0.00608	0.0149	<0.00600	0.0238	0.00883	0.00418	0.00905	<0.00600	0.00454	<0.00300	0.00564	0.0265
Tungsten (W)-Total	mg/L	<0.00200	<0.00200	<0.00200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00200	<0.00100	<0.00100	<0.00100	<0.00100
Uranium (U)-Total	mg/L	0.000212	<0.000200	0.000246	0.000216	0.000261	0.000258	0.000257	0.000210	0.000216	0.000222	0.000238	0.000227
Vanadium (V)-Total	mg/L	<0.0100	<0.0100	<0.0100	<0.00500	<0.00500	<0.00500	<0.00500	<0.0100	<0.00500	<0.00500	<0.00500	<0.00500
Zinc (Zn)-Total	mg/L	<0.0600	<0.0600	<0.0600	0.0361	0.0538	0.0357	0.0512	<0.0600	0.0330	0.0307	0.0378	0.0404
Zirconium (Zr)-Total	mg/L	<0.00400	<0.00400	<0.00400	<0.00200	<0.00200	<0.00200	<0.00200	<0.00400	<0.00200	<0.00200	<0.00200	<0.00200
Alkalinity, Total (as CaCO3)	mg/L	190					196				191		

Table D1 - 28 Water Sampling Monitoring Program Results for TL-12A, December 2025

	Sample ID	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A
	ALS ID	EO2511100-001	EO2511284-001	EO2511455-001	EO2511593-001	EO2600001-001
	Date Sampled	12/3/2025	12/10/2025	12/17/2025	12/24/2025	12/31/2025
Parameter	Units					
pH	pH	7.92	7.85	7.78	7.93	7.90
Conductivity	uS/cm	15300				
Total Suspended Solids	mg/L	6.3	8.1	8.5	4.7	3.9
Total Dissolved Solids	mg/L	11100	10000	10900	10300	10800
Chloride (Cl)	mg/L	5430	5560	5500	5330	4690
Bromide (Br)	mg/L	19.4				
Fluoride (F)	mg/L	<0.400				
Cyanide, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cyanide, WAD	mg/L	<0.0050				
Ammonia, Total (as N)	mg/L	0.458	0.512	0.499	0.465	3.72
Nitrate (as N)	mg/L	1.43	1.44	1.76	1.45	5.80
Nitrite (as N)	mg/L	0.177	0.343	0.491	0.264	0.499
Sulfate (SO4)	mg/L	573				
Aluminum (Al)-Total	mg/L	0.164	0.220	0.264	0.173	0.138
Antimony (Sb)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Arsenic (As)-Total	mg/L	0.00117	0.00139	0.00131	0.00108	0.00116
Barium (Ba)-Total	mg/L	0.0342	0.0348	0.0349	0.0360	0.0347
Beryllium (Be)-Total	mg/L	<0.000200	<0.000200	<0.000200	<0.00100	<0.000200
Bismuth (Bi)-Total	mg/L	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Boron (B)-Total	mg/L	1.88	1.59	1.79	1.75	1.65
Cadmium (Cd)-Total	mg/L	<0.0000500	<0.0000500	<0.0000500	<0.0000500	0.0000513
Calcium (Ca)-Total	mg/L	384	350	359	405	361
Cesium (Cs)-Total	mg/L	0.000536	0.000482	0.000491	0.000543	0.000597
Chromium (Cr)-Total	mg/L	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Cobalt (Co)-Total	mg/L	0.00177	0.00186	0.00219	0.00186	0.00358
Copper (Cu)-Total	mg/L	<0.00500	0.00586	0.00508	<0.00500	0.00523
Iron (Fe)-Total	mg/L	0.986	1.05	1.20	0.912	0.764

	Sample ID	TL12-A	TL12-A	TL12-A	TL12-A	TL12-A
	ALS ID	EO2511100-001	EO2511284-001	EO2511455-001	EO2511593-001	EO2600001-001
	Date Sampled	12/3/2025	12/10/2025	12/17/2025	12/24/2025	12/31/2025
Parameter	Units					
Lead (Pb)-Total	mg/L	<0.000500	0.000728	<0.000500	<0.000500	<0.000500
Lithium (Li)-Total	mg/L	0.0612	0.0540	0.0582	0.0621	0.0509
Magnesium (Mg)-Total	mg/L	340	320	330	342	335
Manganese (Mn)-Total	mg/L	0.698	0.638	0.641	0.701	0.713
Mercury (Hg)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00315	0.00266	0.00248	0.00274	0.00326
Nickel (Ni)-Total	mg/L	<0.00500	<0.00500	<0.00500	<0.00500	0.00572
Phosphorus (P)-Total	mg/L	<0.500	<0.500	<0.500	<0.500	<0.500
Potassium (K)-Total	mg/L	95.7	87.0	89.7	93.9	91.5
Rubidium (Rb)-Total	mg/L	0.0455	0.0449	0.0451	0.0467	0.0492
Selenium (Se)-Total	mg/L	<0.000500	<0.000500	<0.000500	<0.000500	0.000560
Silicon (Si)-Total	mg/L	5.01	4.28	4.65	4.87	4.46
Silver (Ag)-Total	mg/L	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100
Sodium (Na)-Total	mg/L	3050	2820	2970	2990	3020
Strontium (Sr)-Total	mg/L	4.65	4.26	4.45	4.84	4.19
Tellurium (Te)-Total	mg/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200
Thallium (Tl)-Total	mg/L	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100
Thorium (Th)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Tin (Sn)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Titanium (Ti)-Total	mg/L	0.00353	0.00570	0.00617	0.00347	0.00353
Tungsten (W)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	0.00125
Uranium (U)-Total	mg/L	0.000212	0.000257	0.000225	0.000244	0.000248
Vanadium (V)-Total	mg/L	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Zinc (Zn)-Total	mg/L	<0.0300	0.0301	<0.0300	0.0324	0.105
Zirconium (Zr)-Total	mg/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200
Alkalinity, Total (as CaCO3)	mg/L	188				

Table D1 - 29 Water Sampling Monitoring Program Results for TL-12B, May to September 2025

Sample ID		TL-12B	TL12-B	TL12-B	TL12-B	TL12-B	TL12-B	TL12-B
ALS ID		EO2504226-001	EO2504583-001	EO2504825-001	EO2505142-001	EO2506094-001	EO2506437-001	EO2507943-001
Date Sampled		5/28/2025	6/4/2025	6/11/2025	6/18/2025	7/16/2025	7/23/2025	9/3/2025
Parameter	Unit							
pH	pH units	8.01	8.19	8.12	8.14	8.13	8.25	7.95
Turbidity	NTU	0.73	0.56	0.52	0.64	0.92	2.12	0.23
Hardness, Calcium and Magnesium	mg/L	1810	2190	2230	2020	2350	2530	2060
Total Dissolved Solids	mg/L	9090	8680	10100	10400	12100	10400	11100
Total Suspended Solids	mg/L	<2.0	<2.0	<2.0	2.1	2.3	2.9	<2.0
Chloride (Cl)	mg/L	5260	5370	4910	5160	<0.0050	<0.0050	5330
Cyanide, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	5860	5670	<0.0050
Ammonia, Total (as N)	mg/L	0.760	0.550	0.872	0.549	0.587	0.842	0.434
Un-ionized Ammonia (as N), calculated	mg/L	0.0033	0.0036	0.0047	0.0036	0.0048	0.0071	0.0025
Nitrate (as N)	mg/L	3.28	1.94	3.14	2.12	1.69	1.80	2.06
Nitrite (as N)	mg/L	0.0941	0.110	0.156	0.124	0.245	0.0740	0.0843
Phosphorus (P)-Total	mg/L	1.36	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Phosphorus (P)-Dissolved	mg/L	<1.00		<0.500	<1.00	<1.00	<0.500	
Aluminum (Al)-Total	mg/L	0.297	0.333	0.264	0.210	0.316	0.412	0.167
Antimony (Sb)-Total	mg/L	<0.00200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Arsenic (As)-Total	mg/L	<0.00200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Barium (Ba)-Total	mg/L	0.0274	0.0297	0.0342	0.0319	0.0314	0.0394	0.0306
Beryllium (Be)-Total	mg/L	<0.00200	<0.000200	<0.00100	<0.00100	<0.00100	<0.00100	<0.000200
Bismuth (Bi)-Total	mg/L	<0.00100	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Boron (B)-Total	mg/L	1.36	1.67	1.50	1.67	1.64	1.99	1.99
Cadmium (Cd)-Total	mg/L	<0.000100	0.0000525	0.000139	<0.0000500	<0.0000500	0.0000647	<0.0000500
Calcium (Ca)-Total	mg/L	326	353	357	353	406	420	345
Cesium (Cs)-Total	mg/L	0.000426	0.000492	0.000455	0.000450	0.000526	0.000649	0.000456
Chromium (Cr)-Total	mg/L	<0.0100	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Cobalt (Co)-Total	mg/L	0.00770	0.00460	0.00754	0.00390	0.00269	0.00294	0.00352

Sample ID		TL-12B	TL12-B	TL12-B	TL12-B	TL12-B	TL12-B	TL12-B
ALS ID		EO2504226-001	EO2504583-001	EO2504825-001	EO2505142-001	EO2506094-001	EO2506437-001	EO2507943-001
Date Sampled		5/28/2025	6/4/2025	6/11/2025	6/18/2025	7/16/2025	7/23/2025	9/3/2025
Parameter	Unit							
Copper (Cu)-Total	mg/L	<0.0100	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Iron (Fe)-Total	mg/L	<0.200	<0.100	<0.100	<0.100	<0.100	0.137	<0.100
Lead (Pb)-Total	mg/L	<0.00100	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Lithium (Li)-Total	mg/L	0.0488	0.0552	0.0544	0.0541	0.0643	0.0704	0.0651
Magnesium (Mg)-Total	mg/L	243	318	326	277	324	360	290
Manganese (Mn)-Total	mg/L	0.693	0.764	0.788	0.630	0.690	0.772	0.670
Mercury (Hg)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00213	0.00211	0.00239	0.00223	0.00272	0.00246	0.00227
Nickel (Ni)-Total	mg/L	<0.0100	0.00523	0.00746	0.00523	<0.00500	<0.00500	<0.00500
Potassium (K)-Total	mg/L	66.7	84.7	86.0	76.4	90.3	95.4	81.1
Rubidium (Rb)-Total	mg/L	0.0379	0.0412	0.0460	0.0403	0.0466	0.0506	0.0416
Selenium (Se)-Total	mg/L	<0.00100	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Silicon (Si)-Total	mg/L	3.08	3.77	4.01	3.59	3.89	4.07	3.69
Silver (Ag)-Total	mg/L	<0.000200	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100
Sodium (Na)-Total	mg/L	2090	2810	2700	2540	3010	3230	2680
Strontium (Sr)-Total	mg/L	3.71	4.09	4.09	4.10	4.97	5.47	4.14
Sulfur (S)-Total	mg/L	177	203	219	183	198	219	198
Tellurium (Te)-Total	mg/L	<0.00400	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200
Thallium (Tl)-Total	mg/L	<0.000200	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100
Thorium (Th)-Total	mg/L	<0.00200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Tin (Sn)-Total	mg/L	<0.00200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Titanium (Ti)-Total	mg/L	<0.00600	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300
Tungsten (W)-Total	mg/L	<0.00200	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Uranium (U)-Total	mg/L	<0.000200	0.000156	0.000215	0.000186	0.000182	0.000237	0.000191
Vanadium (V)-Total	mg/L	<0.0100	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Zinc (Zn)-Total	mg/L	<0.0600	0.0322	0.0393	<0.0300	<0.0300	0.0326	0.0301
Zirconium (Zr)-Total	mg/L	<0.00400	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200

Table D1 - 30. Water Sampling Monitoring Program Results for TL-12B, November to December 2025

Sample ID		TL12-B	TL12-B	TL12-B	TL12-B	TL12-B	TL12-B
ALS ID		EO2510839-001	EO2511113-001	EO2511288-001	EO2511456-001	EO2511592-001	EO2600002-001
Date Sampled		11/26/2025	12/3/2025	12/10/2025	12/17/2025	12/24/2025	12/31/2025
Parameter	Unit						
pH	pH units	7.74	7.76	7.71	7.70	7.83	7.85
Turbidity	NTU	0.80	0.56	0.49	0.62	1.73	0.67
Hardness, Calcium and Magnesium	mg/L		2290			2310	
Total Dissolved Solids	mg/L	11300	10900	10900	10500	10200	10900
Total Suspended Solids	mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloride (Cl)	mg/L	6090	5390	5640	5440	5320	5400
Cyanide, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Ammonia, Total (as N)	mg/L	0.437	0.461	0.493	0.487	0.443	3.69
Un-ionized Ammonia (as N), calculated	mg/L	0.0036	0.0033	0.0039	0.0036	0.0041	0.0229
Nitrate (as N)	mg/L	1.21	1.29	1.38	1.39	1.38	6.13
Nitrite (as N)	mg/L	0.129	0.0874	0.147	0.225	0.273	0.478
Phosphorus (P)-Total	mg/L	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
Phosphorus (P)-Dissolved	mg/L	<0.500		<0.500	<0.500	<0.500	<0.500
Aluminum (Al)-Total	mg/L	0.378	0.284	0.211	0.229	0.265	0.281
Antimony (Sb)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Arsenic (As)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Barium (Ba)-Total	mg/L	0.0330	0.0328	0.0331	0.0340	0.0375	0.0319
Beryllium (Be)-Total	mg/L	<0.000200	<0.000200	<0.000200	<0.000200	<0.00100	<0.000200
Bismuth (Bi)-Total	mg/L	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Boron (B)-Total	mg/L	1.80	1.83	1.65	1.87	1.70	1.70
Cadmium (Cd)-Total	mg/L	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500	<0.0000500
Calcium (Ca)-Total	mg/L	370	383	349	366	385	370
Cesium (Cs)-Total	mg/L	0.000617	0.000522	0.000490	0.000490	0.000534	0.000580
Chromium (Cr)-Total	mg/L	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Cobalt (Co)-Total	mg/L	0.00140	0.00153	0.00163	0.00181	0.00161	0.00329

Sample ID		TL12-B	TL12-B	TL12-B	TL12-B	TL12-B	TL12-B
ALS ID		EO2510839-001	EO2511113-001	EO2511288-001	EO2511456-001	EO2511592-001	EO2600002-001
Date Sampled		11/26/2025	12/3/2025	12/10/2025	12/17/2025	12/24/2025	12/31/2025
Parameter	Unit						
Copper (Cu)-Total	mg/L	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Iron (Fe)-Total	mg/L	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Lead (Pb)-Total	mg/L	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Lithium (Li)-Total	mg/L	0.0572	0.0579	0.0544	0.0596	0.0606	0.0547
Magnesium (Mg)-Total	mg/L	343	323	330	328	327	330
Manganese (Mn)-Total	mg/L	0.713	0.663	0.628	0.623	0.680	0.702
Mercury (Hg)-Total	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total	mg/L	0.00247	0.00304	0.00273	0.00266	0.00274	0.00319
Nickel (Ni)-Total	mg/L	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	0.00528
Potassium (K)-Total	mg/L	88.4	88.7	91.1	90.2	90.1	90.1
Rubidium (Rb)-Total	mg/L	0.0466	0.0465	0.0444	0.0434	0.0447	0.0467
Selenium (Se)-Total	mg/L	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	0.000527
Silicon (Si)-Total	mg/L	4.14	4.30	3.84	3.91	4.19	4.18
Silver (Ag)-Total	mg/L	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100
Sodium (Na)-Total	mg/L	2990	2930	2870	2980	2880	2980
Strontium (Sr)-Total	mg/L	4.32	4.74	4.30	4.43	4.68	4.37
Sulfur (S)-Total	mg/L	226	216	202	208	205	228
Tellurium (Te)-Total	mg/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200
Thallium (Tl)-Total	mg/L	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100
Thorium (Th)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Tin (Sn)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Titanium (Ti)-Total	mg/L	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300	<0.00300
Tungsten (W)-Total	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	0.00118
Uranium (U)-Total	mg/L	0.000202	0.000215	0.000251	0.000205	0.000202	0.000235
Vanadium (V)-Total	mg/L	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Zinc (Zn)-Total	mg/L	<0.0300	<0.0300	<0.0300	<0.0300	<0.0300	0.0590
Zirconium (Zr)-Total	mg/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200

MMS-1 Madrid Sump 1

The Madrid Sump 1 (MMS-1) was constructed in 2019 to support the commencement of mining activities at the Madid North site. The pond incorporates a rockfill berm with a geomembrane liner anchored to bedrock to capture contact water runoff from the Madrid North Waste Rock storage pad. Collected contact water is either discharged to the tundra if it meets the water quality criteria as specified in Part F, Item 18(a) of the licence, or transferred by water truck to the Doris Sedimentation Pond or the TIA. In 2025, 408 m^3 of water was transferred to the Doris Sedimentation Pond from this facility.

Table D1 - 31. Madrid Sump 1 Dewatering, 2025

Month	Monthly Volume (m^3)*	Cumulative Volume (m^3)*
June	268	268
July	140	408
Total (m^3)		**408**

** Values rounded to nearest whole cubic metre.*

MMS-6 Brine Mixing Facility

No samples were collected in 2024 from the brine mixing tank (MMS-6) located at the Madrid North Portal entrance as it was demobilized in 2021 and was not reinstalled in 2025.

Appendix D.2. 2BE-HOP2232

SUMMARY OF MONITORING INFORMATION

This section summarizes the 2025 monitoring results required under Part J of 2BE-HOP2232.

The camp water treatment and wastewater treatment facility (WWTF) permitted under this license were not operational in 2025, therefore no sampling was conducted at monitoring stations HOP-2 (WWTF discharge), or HOP-3 (point of entry of WWTF discharge to Windy Lake).

During 2025, domestic water for Doris Camp was sourced from Windy Lake, and the raw water intake station ST-7a/MMS-4b (HOP-1) was sampled in accordance with Water Licence 2AM-DOH1335. Results are provided in Table D1-11 and Table D1-12 (Appendix D.1).

The Landfarm at Windy Camp (HOP-4) was dismantled in 2008, so no sampling was conducted at this monitoring station.

No sampling occurred at monitoring stations HOP-7A, HOP-7B and HOP-7D (Quarries A, B and D) during 2025 because no discharge occurred from these locations.

Similarly, no sampling occurred at HOP-8 ((Effluent from new Bulk Fuel Storage Facility located at the new Windy Camp), as that facility is yet to be constructed.

Under-ice water quality sampling was conducted from January (pre-drill) and May (post-drill) for on-ice surface exploration drilling as outlined in Part F Item 7 and Part J Item 7 of the license. Results are presented in Table D2 - 22 to Table D2 – 3.

Quantities of Water Utilized for Camp, Drilling and Other Purposes

Water used from Windy Lake for domestic, industrial, winter track and surface drilling purposes at Doris Camp was reported under monitoring station ST-7a/MMS-4b (station HOP-1 under this license) of water license 2AM-DOH1335. All surface exploration water consumption from Windy Lake was declared under 2BE-HOP2232. For the ST-7a/MMS-4b (HOP-1) water use see Table D1-11 in Appendix D.1 of this report.

A total of 16,975 m^3 of water was taken from proximal sources to drilling targets, taken from Windy Lake, Doris Lake and Patch Lake, supporting surface exploration in 2025. Water volumes used under license 2BE-HOP2232 are presented in Table D2 - 1.

Table D2 - 1. Volume of Water Utilized for Drilling Purposes, 2025

Date	Regional Drill Water Usage Total (m^3)	Cumulative Total Usage (m^3)
January	5,210	5,210
February	5,296	10,506
March	878	11,384
April	636	12,020
May	604	12,624

Date	Regional Drill Water Usage Total (m^3)	Cumulative Total Usage (m^3)
June	582	13,206
July	1,806	15,012
August	531	15,543
September	422	15,965
October	459	16,424
November	484	16,908
December	67	16,975
Total	**16,975**	**16,975**

Note: Values rounded to nearest whole cubic metre.

Quantity of Effluent Discharged

In 2025, water quality sampling and management was not required at HOP-7A, B or D (quarries A, B and D) as no discharge of water occurred from these areas.

Volume of Sludge Removed from Sewage Disposal Facility

No sludge was removed from the Windy Camp WWTF in 2025, as the facility remained non-operational and the camp was closed.

Table D2 - 2. Water Quality Monitoring Program Results for Pre-drill, Under-ice Water Quality Samples, 2025

	Sample ID	Zone A	Zone B	Zone C
	ALS ID	YL2500053-001	YL2500053-002	YL2500053-003
	Date Sampled	1/11/2024	1/11/2024	1/11/2024
Parameter	Units			
pH	pH	7.55	7.60	7.65
Conductivity	uS/cm	420	399	396
Total Suspended Solids	mg/L	<3.0	<3.0	<3.0
Aluminum (Al)-Dissolved	mg/L	0.0239	0.0234	0.0301
Antimony (Sb)-Dissolved	mg/L	<0.00010	<0.00010	<0.00010
Arsenic (As)-Dissolved	mg/L	0.00032	0.00033	0.00032
Barium (Ba)-Dissolved	mg/L	0.00378	0.00360	0.00360
Beryllium (Be)-Dissolved	mg/L	<0.000020	<0.000020	<0.000020
Cadmium (Cd)-Dissolved	mg/L	<0.0000050	<0.0000050	<0.0000050
Chromium (Cr)-Dissolved	mg/L	<0.00050	<0.00050	<0.00050
Copper (Cu)-Dissolved	mg/L	0.00162	0.00157	0.00157
Iron (Fe)-Dissolved	mg/L	0.020	0.017	0.017
Lead (Pb)-Dissolved	mg/L	<0.000050	<0.000050	<0.000050
Lithium (Li)-Dissolved	mg/L	0.0056	0.0054	0.0054
Manganese (Mn)-Dissolved	mg/L	0.00623	0.00485	0.00091
Mercury (Hg) - Dissolved	mg/L	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000429	0.000408	0.000384
Nickel (Ni)-Dissolved	mg/L	0.00093	0.00085	0.00087
Selenium (Se)-Dissolved	mg/L	0.000063	0.000064	0.000064
Strontium (Sr)-Dissolved	mg/L	0.0656	0.0631	0.0627
Thallium (Tl) - Dissolved	mg/L	<0.000010	<0.000010	<0.000010
Tin (Sn)-Dissolved	mg/L	<0.00010	<0.00010	<0.00010
Titanium (Ti) - Dissolved	mg/L	<0.00030	<0.00030	<0.00030
Uranium (U) - Dissolved	mg/L	0.000087	0.000090	0.000083
Vanadium (V) - Dissolved	mg/L	<0.00050	<0.00050	<0.00050
Zinc (Zn) - Dissolved	mg/L	0.0033	0.0020	<0.0010
Oil & grease (gravimetric)	mg/L	<5.0	<5.0	<5.0
Oil & grease (visible sheen)		Absent	Absent	Absent

Table D2 - 3. Water Quality Monitoring Program Results for Post-drill, Under-ice Water Quality Samples, 2025

	Sample ID	Zone A	Zone B	Zone C
	ALS ID	EO2503533-001	EO2503533-002	EO2503533-003
	Date Sampled	07-May-2025	07-May-2025	07-May-2025
Parameter	Units			
pH	pH	7.46	7.34	7.51
Conductivity	uS/cm	427	446	404
Total Suspended Solids	mg/L	<3.0	<3.0	<3.0
Aluminum (Al)-Dissolved	mg/L	0.158	0.162	0.194
Antimony (Sb)-Dissolved	mg/L	<0.00010	<0.00010	<0.00010
Arsenic (As)-Dissolved	mg/L	0.00037	0.00038	0.00035
Barium (Ba)-Dissolved	mg/L	0.00533	0.00546	0.00557
Beryllium (Be)-Dissolved	mg/L	<0.000020	<0.000020	<0.000020
Cadmium (Cd)-Dissolved	mg/L	<0.0000050	<0.0000050	<0.0000050
Chromium (Cr)-Dissolved	mg/L	0.00104	0.00054	0.00064
Copper (Cu)-Dissolved	mg/L	0.00205	0.00197	0.00196
Iron (Fe)-Dissolved	mg/L	0.103	0.116	0.096
Lead (Pb)-Dissolved	mg/L	0.000062	0.000056	0.000084
Lithium (Li)-Dissolved	mg/L	0.0063	0.0067	0.0060
Manganese (Mn)-Dissolved	mg/L	0.00498	0.00516	0.00461
Mercury (Hg) - Dissolved	mg/L	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved	mg/L	0.000440	0.000419	0.000406
Nickel (Ni)-Dissolved	mg/L	0.00139	0.00128	0.00117
Selenium (Se)-Dissolved	mg/L	0.000057	0.000059	<0.000050
Strontium (Sr)-Dissolved	mg/L	0.0716	0.0759	0.0671
Thallium (Tl) - Dissolved	mg/L	<0.000010	<0.000010	<0.000010
Tin (Sn)-Dissolved	mg/L	<0.00010	<0.00010	0.00010
Titanium (Ti) - Dissolved	mg/L	0.00296	0.00280	0.00335
Uranium (U) - Dissolved	mg/L	0.000099	0.000094	0.000090
Vanadium (V) - Dissolved	mg/L	<0.00050	<0.00050	<0.00050
Zinc (Zn) - Dissolved	mg/L	<0.0030	<0.0030	<0.0030
Oil & grease (gravimetric)	mg/L	<5.0	<5.0	<5.0
Oil & grease (visible sheen)		Absent	Absent	Absent

Results of Toxicity Testing

The camp is closed and no effluent was discharged (the WWTF has been removed; HOP-3).

Hydrology Monitoring – Windy Lake Water Level

Windy Lake water level monitoring was conducted in 2025 as outlined in Part J Item 9 of the license. In 2019, the station was relocated to the north end of Windy Lake (13W 431404 7554948) to facilitate discharge measurements of the Windy Lake outflow and water level monitoring as outlined in the Hope Bay Aquatic Effects Monitoring Plan. The water level station was reactivated on June after being deactivated during the winter. The station uses an Onset MX-2001 vented pressure transducer with water level readings recorded every 15 minutes. The station operated throughout the open water season and was demobilized in September. As stations were installed in June and removed in September, mean daily water levels were estimated when station data were unavailable. Mean daily water levels (measured and modelled) in meters above sea level and are shown in Table D2 - 4.

Table D2 - 4. Summary of Windy Lake Outflow Mean Daily Water Levels, in Metres above Sea Level (masl), 2025

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.466*	18.367	18.274	18.255	*18.261*	*18.273*	*18.273*
2	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.464*	18.365	18.272	*18.248*	*18.262*	*18.273*	*18.273*
3	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.461*	18.363	18.272	*18.249*	*18.263*	*18.273*	*18.273*
4	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.457*	18.360	18.270	*18.250*	*18.263*	*18.273*	*18.273*
5	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.452*	18.357	18.270	*18.250*	*18.264*	*18.273*	*18.273*
6	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.446*	18.354	18.262	*18.250*	*18.263*	*18.273*	*18.273*
7	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.440*	18.353	18.261	*18.250*	*18.264*	*18.273*	*18.273*
8	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.435*	18.351	18.263	*18.251*	*18.264*	*18.273*	*18.273*
9	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.430*	18.345	18.260	*18.252*	*18.266*	*18.273*	*18.273*
10	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.425*	18.340	18.257	*18.251*	*18.268*	*18.273*	*18.273*
11	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.421*	18.337	18.256	*18.252*	*18.269*	*18.273*	*18.273*
12	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.417*	18.328	18.252	*18.255*	*18.270*	*18.273*	*18.273*
13	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.413*	18.325	18.251	*18.253*	*18.271*	*18.273*	*18.273*
14	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.409*	18.318	18.251	*18.251*	*18.271*	*18.273*	*18.273*
15	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.405*	18.312	18.251	*18.254*	*18.272*	*18.273*	*18.273*
16	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.402*	18.309	18.247	*18.255*	*18.272*	*18.273*	*18.273*
17	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.399*	18.305	18.246	*18.255*	*18.271*	*18.273*	*18.273*
18	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.396*	18.303	18.245	*18.261*	*18.272*	*18.273*	*18.273*
19	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.393*	18.301	18.246	*18.256*	*18.273*	*18.273*	*18.273*
20	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.389*	18.302	18.245	*18.258*	*18.274*	*18.273*	*18.273*
21	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.387*	18.298	18.245	*18.259*	*18.273*	*18.273*	*18.273*
22	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	*18.384*	18.293	18.247	*18.258*	*18.274*	*18.273*	*18.273*
23	*18.385*	*18.385*	*18.385*	*18.385*	*18.385*	18.365	18.291	18.245	*18.258*	*18.275*	*18.273*	*18.273*
24	*18.385*	*18.385*	*18.385*	*18.385*	*18.396*	18.366	18.289	18.243	*18.258*	*18.275*	*18.273*	*18.273*
25	*18.385*	*18.385*	*18.385*	*18.385*	*18.406*	18.365	18.289	18.244	*18.260*	*18.274*	*18.273*	*18.273*
26	*18.385*	*18.385*	*18.385*	*18.385*	*18.417*	18.366	18.289	18.245	*18.260*	*18.273*	*18.273*	*18.273*
27	*18.385*	*18.385*	*18.385*	*18.385*	*18.428*	18.362	18.286	18.247	*18.258*	*18.273*	*18.273*	*18.273*
28	*18.385*	*18.385*	*18.385*	*18.385*	*18.439*	18.362	18.283	18.252	*18.257*	*18.273*	*18.273*	*18.273*
29	*18.385*		*18.385*	*18.385*	*18.449*	18.368	18.282	18.262	*18.259*	*18.273*	*18.273*	*18.273*
30	*18.385*		*18.385*	*18.385*	*18.460*	18.368	18.279	18.260	*18.265*	*18.273*	*18.273*	*18.273*
31	*18.385*		*18.385*		*18.465*		18.275	18.256		*18.273*		*18.273*
Mean	**18.385**	**18.385**	**18.385**	**18.385**	**18.397**	**18.407**	**18.318**	**18.255**	**18.255**	**18.270**	**18.273**	**18.273**
Max	**18.385**	**18.385**	**18.385**	**18.385**	**18.465**	**18.466**	**18.367**	**18.274**	**18.265**	**18.275**	**18.273**	**18.273**
Min	**18.385**	**18.385**	**18.385**	**18.385**	**18.385**	**18.362**	**18.275**	**18.243**	**18.248**	**18.261**	**18.273**	**18.273**

Estimated and modelled values are italicized.

Appendix D.3. 2BB-MAE1727

SUMMARY OF MONITORING INFORMATION

The following summarizes the results of sampling undertaken as part of the monitoring program detailed in Part J of 2BB-MAE1727.

Water withdrawals from MAE-01 (Madrid North Windy Lake Freshwater intake) and MAE-02 (Madrid South Patch Lake Freshwater intake) are presented in Table D3-1. No water was withdrawn from MAE-03 (Freshwater intake at other lakes) under this license. No waste was deposited under this license in 2025.

Table D3 - 1 Madrid Water Usage, 2025

Month	Windy Lake (MAE-01)		Patch Lake (MAE-02)		Total Usage
	Domestic Water (m^3)	Industrial Usage (m^3)	Domestic Water (m^3)	Industrial Usage (m^3)	
January	0	124	0	5,349	5,473
February	0	102	0	5,987	6,089
March	0	127	0	0	127
April	0	0	0	0	0
May	0	293	0	0	293
June	0	145	0	0	145
July	0	17	0	0	17
August	0	2	0	0	2
September	0	11	0	0	11
October	0	49	0	0	49
November	0	55	0	0	55
December	0	0	0	0	0
Annual Total	0	925	0	11,336	12,261
Annual Allowance					**108,000**

No discharge occurred and no monitoring was conducted at MAE-04 (Madrid North Pollution Control Pond Water), MAE-05 (Madrid South Pollution Control Pond No.1) or MAE-06 (Madrid South Pollution Control Pond No.2) as these facilities have not been constructed.

Similarly, the Fuel Storage Areas and Transfer Stations at Madrid North (MAE-07 and MAE-08) and Madrid South (MAE-09 and MAE-10) have also not yet been constructed. No water quality monitoring was conducted and no discharge occurred at these sampling locations.

Quarrying activities also did not occur at Quarry G (MAE-11), Quarry H (MAE-12) or Quarry I (MAE-13) in 2025. As a result, no sampling or discharge monitoring was required for these monitoring locations in 2025.

In addition, no sampling was conducted at the lakes located immediately downgradient of Madrid North and Madrid South Contact Water Ponds (MAE-14, Windy Lake; MAE-15, Patch Lake; MAE-16, Wolverine Lake).

On-ice surface exploration was conducted in the license area in 2025, and the required under-ice water quality sampling outlined in Part F Item 12 is reported under Water Licence 2BE-HOP2232 license. All sample results for pre- and post-drill under-ice samples can be found in Appendix D.2 in Table D2 - 2 and Table D.2 - 3.

Appendix D.4. 2BB-BOS1727

TABULAR SUMMARY OF MONITORING INFORMATION

The following tables summarize the results of sampling undertaken in 2025 as part of the monitoring program detailed in Part J of license 2BB-BOS1727.

Boston Camp was not operational in 2025 and has remained closed since August 2022. The camp may be reopened in the future to support planned exploration activities. No water was withdrawn for domestic use from Aimaokatalok (Spyder) Lake (BOS-1a). No water was withdrawn from Stickleback Lake (BOS-1b) for domestic use, surface drilling, or any other purpose. As a result, no water quality samples were collected at BOS-1a or BOS-1b in 2025.

Water quality results from the Contact Water Pond (BOS-2) met the criteria outlined in Part D, Item 6 of the water licence. Based on these results, a total volume of 3 m³ of contact water was discharged in August, in accordance with Part D, Item 8. Water quality samples were collected at BOS-2 in June 2025 prior to discharge, and the corresponding analytical results are presented in Table D4 - 2.

The Sewage Treatment Facility (BOS-3) was inactive and no samples were taken at this location in 2025. No effluent quality sampling was conducted at BOS-4 (the point of discharge to Aimaokatalok/Spyder Lake), as no treated effluent was released from the facility.

Sampling results for the Bulk Fuel Storage Facility (BOS-5) and the Portal Decline (BOS-9) are presented in Table D4 - 3 and Table D4 – 3, respectively. Water quality results for BOS-5 did not meet the criteria outlined in Part D, Item 19 of the Water Licence and therefore, no discharge occurred from this location. Water quality results for BOS-9 met the criteria specified in Part D, Item 6 of the Water Licence, and a total of 17 m³ of water was discharged to the tundra in August.

Dewatering of the Landfarm Treatment Area (LTA; BOS-6) was not required in 2025 Reclamation of the Boston LTA began in 2017, when contaminated soils were excavated and stockpiled in mega-bags for future disposal. In March 2019, the contaminated soil was transported to Doris Camp via a winter track and disposed of underground in the Doris Mine, as approved under the Hope Bay Mine Hazardous Waste Management Plan. The Boston LTA was decommissioned in 2019, and no additional materials will be placed in this facility. Hydrocarbon-contaminated materials generated during any future activities at Boston will be packaged for backhaul to Doris until a new LTA is constructed.

No landfill exists at Boston and the status of monitoring station BOS-7 is inactive.

Underground mining activities were not conducted at Boston in 2025. No mine water was pumped from underground, and no water quality monitoring was performed at the underground mine water sumps (BOS-10). On-ice exploration drilling did not occur within the licence area in 2025 therefore, the water quality sampling required under Part F, Item 6, and Part J, Item 15 was not applicable.

Table D4 - 2 Water Quality Monitoring Program for Boston Containment Pond (BOS-2) Effluent, 2025

Sample ID		BOS-2	Part D Item 6	
Lab ID		EO2505412-001	Maximum Average Concentration (mg/L)	Maximum Concentration in Any Grab Sample (mg/L)
Date Sampled		6/23/2025		
Parameter	Units			
Conductivity	uS/cm	186		
Hardness (as CaCO3)	mg/L	81.1		
pH	pH	8.20	6.5-9.0	
Total Suspended Solids	mg/L	5.4	15	30
Alkalinity, Total (as CaCO3)	mg/L	74.2		
Chloride (Cl)	mg/L	4.11		
Nitrate (as N)	mg/L	<0.0050	130	260
Nitrite (as N)	mg/L	<0.0010		
Sulfate (SO4)	mg/L	19.3		
Aluminum (Al)-Total	mg/L	0.0698		
Antimony (Sb)-Total	mg/L	0.00044		
Arsenic (As)-Total	mg/L	0.0261	0.050	0.10
Barium (Ba)-Total	mg/L	0.00302		
Beryllium (Be)-Total	mg/L	<0.000100		
Boron (B)-Total	mg/L	0.014		
Cadmium (Cd)-Total	mg/L	0.0000087		
Calcium (Ca)-Total	mg/L	22.8		
Chromium (Cr)-Total	mg/L	<0.00050		
Cobalt (Co)-Total	mg/L	0.00224		
Copper (Cu)-Total	mg/L	0.00923	0.02	0.04
Iron (Fe)-Total	mg/L	0.146		
Lead (Pb)-Total	mg/L	0.000342	0.01	0.02
Lithium (Li)-Total	mg/L	0.0010		
Magnesium (Mg)-Total	mg/L	5.87		
Manganese (Mn)-Total	mg/L	0.00819		
Mercury (Hg)-Total	mg/L	<0.0000050		
Molybdenum (Mo)-Total	mg/L	0.000334		
Nickel (Ni)-Total	mg/L	0.00916	0.25	0.5
Potassium (K)-Total	mg/L	1.61		
Selenium (Se)-Total	mg/L	0.000101		
Silver (Ag)-Total	mg/L	0.000016		
Sodium (Na)-Total	mg/L	8.77		
Strontium (Sr)-Total	mg/L	0.115		
Thallium (Tl)-Total	mg/L	0.000018		
Tin (Sn)-Total	mg/L	0.00023		

Sample ID		BOS-2	Part D Item 6	
Lab ID		EO2505412-001	Maximum Average Concentration (mg/L)	Maximum Concentration in Any Grab Sample (mg/L)
Date Sampled		6/23/2025		
Parameter	Units			
Titanium (Ti)-Total	mg/L	<0.00030		
Uranium (U)-Total	mg/L	0.000026		
Vanadium (V)-Total	mg/L	<0.00050		
Zinc (Zn)-Total	mg/L	0.0178	0.3	0.6
Oil and Grease	mg/L	<5.0	5	10
Oil And Grease (Visible Sheen)		Absent	No visible sheen	No visible sheen
Benzene	mg/L	<0.00050		
Ethylbenzene	mg/L	<0.00050		
Methyl t-butyl ether (MTBE)	mg/L	<0.00050		
Styrene	mg/L	<0.00050		
Toluene	mg/L	<0.00050		
Xylenes	mg/L	<0.00075		
Acenaphthene	mg/L	<0.000010		
Acenaphthylene	mg/L	<0.000010		
Acridine	mg/L	<0.000010		
Anthracene	mg/L	<0.000010		
Benz(a)anthracene	mg/L	<0.000010		
Benzo(a)pyrene	mg/L	<0.0000050		
Benzo(b+j+k)fluoranthene	mg/L	<0.000015		
Benzo(g,h,i)perylene	mg/L	<0.000010		
Benzo(k)fluoranthene	mg/L	<0.000010		
Chrysene	mg/L	<0.000010		
Dibenz(a,h)anthracene	mg/L	<0.0000050		
Fluoranthene	mg/L	<0.000010		
Fluorene	mg/L	<0.000010		
Indeno(1,2,3-c,d)pyrene	mg/L	<0.000010		
Naphthalene	mg/L	<0.000050		
Phenanthrene	mg/L	<0.000020		
Pyrene	mg/L	<0.000010		
Quinoline	mg/L	<0.000050		
Biological Oxygen Demand (BOD5)	mg/L	3.6	80	80
Fecal Coliforms	CFU/100ml	<1	10,000	10,000

^ *Indicates duplicate sample.*
Bold indicates exceedance of Part D Item 6 Grab Concentration.

Table D4 - 3 Water Quality Monitoring Program for Bulk Fuel Storage Facility (BOS-5), 2025

Sample ID		BOS-5	BOS-5	Part D Item 19
Lab ID		EO2505402-001	EO2506737-001	Maximum Concentration in Any Grab Sample
Date Sampled		23-06-2025	27-07-2025	
Parameter	Units			
Conductivity	uS/cm	935	1160	
Hardness (as CaCO3)	mg/L	533	637	
pH	pH Units	7.67	7.51	6.5-9.0
Total Suspended Solids	mg/L	<3.0	<3.0	15
Alkalinity, Total (as CaCO3)	mg/L	39.6	46.3	
Nitrate (as N)	mg/L	<0.0050	<0.0250	
Nitrite (as N)	mg/L	<0.0010	<0.0050	
Chloride (Cl)	mg/L	7.99	12.8	
Sulfate (SO4)	mg/L	480	607	
Aluminum (Al)-Total	mg/L	0.0242	0.0101	
Antimony (Sb)-Total	mg/L	0.00312	0.00240	
Arsenic (As)-Total	mg/L	**0.139**	**0.0886**	0.05
Barium (Ba)-Total	mg/L	0.00577	0.00795	
Beryllium (Be)-Total	mg/L	<0.000100	<0.000100	
Boron (B)-Total	mg/L	0.091	0.130	
Cadmium (Cd)-Total	mg/L	0.0000724	0.0000417	
Calcium (Ca)-Total	mg/L	125	146	
Chromium (Cr)-Total	mg/L	<0.00050	<0.00050	
Cobalt (Co)-Total	mg/L	0.00637	0.00506	
Copper (Cu)-Total	mg/L	0.00487	0.00343	0.04
Iron (Fe)-Total	mg/L	0.550	0.200	
Lead (Pb)-Total	mg/L	**0.0157**	0.00935	0.01
Lithium (Li)-Total	mg/L	0.0060	0.0080	
Magnesium (Mg)-Total	mg/L	53.7	66.1	
Manganese (Mn)-Total	mg/L	0.0114	0.00690	
Mercury (Hg)-Total	mg/L	<0.0000050	<0.0000050	
Molybdenum (Mo)-Total	mg/L	0.00143	0.00154	
Nickel (Ni)-Total	mg/L	0.0890	0.108	0.5
Potassium (K)-Total	mg/L	4.45	5.92	
Selenium (Se)-Total	mg/L	0.000274	0.000202	
Silver (Ag)-Total	mg/L	0.000011	<0.000010	
Sodium (Na)-Total	mg/L	8.20	10.2	
Strontium (Sr)-Total	mg/L	0.261	0.321	
Thallium (Tl)-Total	mg/L	<0.000010	<0.000010	
Tin (Sn)-Total	mg/L	<0.00010	<0.00010	
Titanium (Ti)-Total	mg/L	<0.00030	<0.00030	
Uranium (U)-Total	mg/L	0.000044	0.000028	

Sample ID		BOS-5	BOS-5	Part D Item 19
Lab ID		EO2505402-001	EO2506737-001	Maximum Concentration in Any Grab Sample
Date Sampled		23-06-2025	27-07-2025	
Parameter	Units			
Vanadium (V)-Total	mg/L	<0.00050	<0.00050	
Zinc (Zn)-Total	mg/L	0.0036	<0.0030	0.6
Oil and Grease	mg/L	<5.0	<5.0	15
Oil And Grease (Visible Sheen)		Absent	Absent	No visible sheen
Benzene	mg/L	<0.00050	<0.00050	0.37
Ethylbenzene	mg/L	<0.00050	<0.00050	0.91
Methyl t-butyl ether (MTBE)	mg/L	<0.00050	<0.00050	
Styrene	mg/L	<0.00050	<0.00050	
Toluene	mg/L	<0.00050	<0.00050	0.002
Xylenes, Total	mg/L	<0.00075	<0.00075	
Acenaphthene	mg/L	<0.000010	<0.000010	
Acenaphthylene	mg/L	<0.000010	<0.000010	
Acridine	mg/L	<0.000010	<0.000010	
Anthracene	mg/L	<0.000010	<0.000010	
Benz(a)anthracene	mg/L	<0.000010	<0.000010	
Benzo(a)pyrene	mg/L	<0.0000050	<0.0000050	
Benzo(b+j+k)fluoranthene	mg/L	<0.000015	<0.000015	
Benzo(g,h,i)perylene	mg/L	<0.000010	<0.000010	
Benzo(k)fluoranthene	mg/L	<0.000010	<0.000010	
Chrysene	mg/L	<0.000010	<0.000010	
Dibenz(a,h)anthracene	mg/L	<0.0000050	<0.0000050	
Fluoranthene	mg/L	<0.000010	<0.000010	
Fluorene	mg/L	<0.000010	<0.000010	
Indeno(1,2,3-c,d)pyrene	mg/L	<0.000010	<0.000010	
Naphthalene	mg/L	<0.000050	<0.000050	
Phenanthrene	mg/L	<0.000020	<0.000020	
Pyrene	mg/L	<0.000010	<0.000010	
Quinoline	mg/L	<0.000050	<0.000050	

^ *Indicates duplicate sample.*
Bold indicates exceedance of Part D Item 19 Grab Concentration.

Table D4 - 4 Water Quality Monitoring Program for Portal Decline (BOS-9) Effluent, June 2025

Sample ID		BOS-9	BOS-9^	Part D Item 6	
Lab ID		EO2505394-001	EO2505394-002	Maximum Average Concentration (mg/L)	Maximum Concentration in Any Grab Sample (mg/L)
Date Sampled		23-06-2025	23-06-2025		
Parameter	Units				
Conductivity	uS/cm	250	248		

Sample ID		BOS-9	BOS-9^	Part D Item 6	
Lab ID		EO2505394-001	EO2505394-002	Maximum Average Concentration (mg/L)	Maximum Concentration in Any Grab Sample (mg/L)
Date Sampled		23-06-2025	23-06-2025		
Parameter	Units				
pH	pH	7.65	7.62	6.5-9.0	
Total Suspended Solids	mg/L	<3.0	<3.0	15	30
Ammonia, Total (as N)	mg/L	0.0078	0.0128		
Chloride (Cl)	mg/L	24.1	23.5		
Nitrate (as N)	mg/L	0.204	0.186	130	260
Sulfate (SO4)	mg/L	52.6	51.7		
Aluminum (Al)-Total	mg/L	0.0048	0.0049		
Antimony (Sb)-Total	mg/L	0.00078	0.00074		
Arsenic (As)-Total	mg/L	0.0253	0.0249	0.050	0.10
Barium (Ba)-Total	mg/L	0.00301	0.00293		
Beryllium (Be)-Total	mg/L	<0.000020	<0.000020		
Boron (B)-Total	mg/L	0.028	0.026		
Cadmium (Cd)-Total	mg/L	0.0000051	<0.0000050		
Calcium (Ca)-Total	mg/L	21.4	19.9		
Chromium (Cr)-Total	mg/L	<0.00050	<0.00050		
Cobalt (Co)-Total	mg/L	0.00923	0.00893		
Copper (Cu)-Total	mg/L	0.00290	0.00267	0.02	0.04
Iron (Fe)-Total	mg/L	0.014	0.014		
Lead (Pb)-Total	mg/L	<0.000050	<0.000050	0.01	0.02
Lithium (Li)-Total	mg/L	0.0030	0.0028		
Magnesium (Mg)-Total	mg/L	10.1	9.86		
Manganese (Mn)-Total	mg/L	0.0201	0.0192		
Molybdenum (Mo)-Total	mg/L	0.000281	0.000255		
Nickel (Ni)-Total	mg/L	0.0443	0.0430	0.25	0.5
Potassium (K)-Total	mg/L	1.64	1.59		
Selenium (Se)-Total	mg/L	0.000220	0.000211		
Silver (Ag)-Total	mg/L	<0.000010	<0.000010		
Sodium (Na)-Total	mg/L	11.8	11.1		
Thallium (Tl)-Total	mg/L	<0.000010	<0.000010		
Tin (Sn)-Total	mg/L	<0.00010	<0.00010		
Titanium (Ti)-Total	mg/L	<0.00030	<0.00030		
Uranium (U)-Total	mg/L	0.000408	0.000394		
Vanadium (V)-Total	mg/L	<0.00050	<0.00050		
Zinc (Zn)-Total	mg/L	0.0283	0.0267	0.3	0.6
Oil and Grease	mg/L	<5.0	<5.0	5	10
Oil And Grease (Visible Sheen)		Absent	Absent	No visible sheen	No visible sheen

^ *Indicates duplicate sample.*
Bold indicates exceedance of Part D Item 6 Grab Concentration.