

Table E.6.4: Water Quality Results for Water Licence Monitoring Location - WRF-EAST

Monitoring Station			MS-08-EAST-INFLOW	MS-08-EAST-US1	MS-08-EAST-US2	MS-08-EAST-INFLOW	MS-08-EAST-US1	MS-08-EAST-US2	MS-08-EAST-INFLOW	MS-08-EAST-US1	MS-08-EAST-INFLOW	MS-08-EAST-US1
ALS Laboratory Work Order			BF2500108	BF2500108	BF2500108	BF2500134	BF2500134	BF2500134	BF2500151	BF2500151	BF2500175	BF2500175
Sample Date & Time			2025-06-27 10:55	2025-06-27 11:05	2025-06-27 11:15	2025-07-04 09:05	2025-07-04 09:20	2025-07-04 09:35	2025-07-11 09:40	2025-07-11 10:10	2025-07-18 10:25	2025-07-18 10:50
Analyte	Units	Criteria ¹										
pH, Field	pH units	-	7.57	7.23	7.52	7.57	7.36	7.49	7.34	7.47	7.79	7.73
Specific Conductivity, Field	us/cm	-	167.3	273.2	2.5	186.1	155	74	17.8	154.7	769	794
Temperature, Field	deg C	-	2.7	1.8	2.4	2	0	1.3	1.2	0.1	5.2	3.9
Turbidity, Field	NTU	-	275.61	41.3	36.38	186.39	150	60.69	176.14	3383	222.12	645.14
Visible Sheen, Field	None	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Conductivity, Lab	us/cm	-	168	275	71.3	193	304	73.8	174	176	716	764
Total Dissolved Solids	mg/L	-	120	180	53	125	206	64	112	108	519	524
Total Suspended Solids	mg/L	-	751	29.9	20.9	156	267	75.6	3400	5100	188	722
Turbidity, Lab	NTU	-	305	35.5	36.1	143	137	50.9	4000	4000	226	974
pH, Lab	pH units	-	6.76	6.84	6.73	7.39	7.23	7.18	7.57	7.68	7.62	7.57
Total Ammonia	mg/L	-	0.311	0.663	0.07	0.229	0.449	0.0988	0.186	0.215	1.5	1.19
Aluminum, total	mg/L	-	22.4	1.6	1.45	7.25	6.65	3.42	116	188	9.78	31.4
Antimony, total	mg/L	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Arsenic, total	mg/L	0.48	0.00115	< 0.001	< 0.001	< 0.001	0.00118	< 0.001	0.00601	0.0081	0.00116	0.0027
Barium, total	mg/L	-	0.146	0.0105	0.00929	0.0434	0.0407	0.0228	0.769	1.47	0.0665	0.194
Beryllium, total	mg/L	-	0.000891	< 0.0002	< 0.0002	0.000293	0.000293	< 0.0002	0.00433	0.00737	0.000435	0.00133
Bismuth, total	mg/L	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.00294	0.00561	< 0.0005	0.00104
Boron, total	mg/L	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Cadmium, total	mg/L	-	0.000228	0.000268	< 0.00005	0.000098	0.000214	< 0.00005	0.000525	0.000857	0.000148	0.000444
Calcium, total	mg/L	-	6.85	8.15	2.71	7.21	10.9	3.35	13.8	20.5	26.2	29.2
Cesium, total	mg/L	-	0.00152	< 0.0001	< 0.0001	0.000501	0.000605	0.000226	0.00704	0.0124	0.000581	0.00193
Chromium, total	mg/L	-	0.032	< 0.005	< 0.005	0.0134	0.0161	0.00631	0.187	0.292	0.018	0.0598
Cobalt, total	mg/L	-	0.0141	0.00194	0.00103	0.00533	0.00536	0.00234	0.0754	0.127	0.00819	0.0235
Copper, total	mg/L	0.48	0.0486	< 0.005	< 0.005	0.0172	0.0113	< 0.005	0.18	0.307	0.0156	0.0488
Iron, total	mg/L	-	35.7	2.43	2.2	11	9.53	5.25	158	245	15.2	48.5
Lead, total	mg/L	0.16	0.00985	0.000954	0.000768	0.00447	0.00444	0.00159	0.045	0.0728	0.00469	0.0144
Lithium, total	mg/L	-	0.0186	< 0.01	< 0.01	0.0118	0.0133	< 0.01	0.146	0.248	0.0136	0.0424
Magnesium, total	mg/L	-	34.9	24	6	21.8	32.4	7.84	114	181	70.8	95.1
Manganese, total	mg/L	-	0.487	0.158	0.0444	0.207	0.253	0.0896	2.38	4.47	0.339	0.827
Mercury, total	mg/L	-	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Molybdenum, total	mg/L	-	0.00214	0.00317	0.00152	0.00202	0.0024	0.00153	0.00188	0.00247	0.00675	0.00401
Nickel, total	mg/L	0.8	0.038	< 0.005	< 0.005	0.0134	0.0159	0.00677	0.198	0.315	0.021	0.066
Phosphorus (P), total	mg/L	-	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.39	2.57	< 0.5	< 0.5
Potassium, total	mg/L	-	8.64	2.58	1.84	3.98	4.09	2.32	35.6	73.8	6.73	11.8
Rubidium, total	mg/L	-	0.0456	0.00404	0.00312	0.0144	0.0171	0.00581	0.218	0.401	0.0197	0.0552
Selenium, total	mg/L	-	0.000696	0.000609	< 0.0005	0.000637	0.000818	< 0.0005	0.000984	0.00101	0.00281	0.00217
Silicon, total	mg/L	-	29.8	3	2.7	11.3	11.5	5.34	85.1	113	15.3	32.6
Silver, total	mg/L	-	0.000147	< 0.0001	< 0.0001	< 0.0001	0.000219	< 0.0001	0.000643	0.00138	< 0.0001	0.000213
Sodium, total	mg/L	-	1.06	1.72	< 0.5	1.21	2.02	< 0.5	1.41	2.16	4.28	4.66
Strontium, total	mg/L	-	0.0128	0.0167	0.00488	0.0133	0.0218	0.00569	0.0283	0.046	0.0461	0.0506
Sulfur, total	mg/L	-	12.9	24.4	< 5	16.1	27.4	5.3	12.2	13.4	65.3	70.2
Tellurium, total	mg/L	-	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Thallium, total	mg/L	-	0.0003	< 0.0001	< 0.0001	< 0.0001	0.000122	< 0.0001	0.00135	0.0025	0.00012	0.00037
Thorium, total	mg/L	-	0.0049	< 0.001	< 0.001	0.0022	0.00346	0.00116	0.0257	0.0387	0.0025	0.00822
Tin, total	mg/L	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.00107	0.00102	< 0.001	< 0.001
Titanium, total	mg/L	-	1	0.0482	0.0439	0.287	0.32	0.119	3.07	3.55	0.326	1.05
Tungsten, total	mg/L	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Uranium, total	mg/L	-	0.00409	0.0024	0.000712	0.00245	0.00326	0.00112	0.0172	0.0259	0.00594	0.0116
Vanadium, total	mg/L	-	0.0276	< 0.005	< 0.005	0.0093	0.0111	< 0.005	0.101	0.139	0.0126	0.037
Zinc, total	mg/L	0.8	0.0477	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	0.255	0.44	< 0.03	0.078
Zirconium, total	mg/L	-	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.00205	< 0.002	< 0.002	< 0.002

Table E.6.4: Water Quality Results for Water Licence Monitoring Location - WRF-EAST

Monitoring Station			MS-08-EAST-INFLOW	MS-08-EAST-US1	MS-08-EAST-US2	MS-08-EAST-INFLOW	MS-08-EAST-US1	MS-08-EAST-US2	MS-08-EAST-INFLOW	MS-08-EAST-US1	MS-08-EAST-INFLOW	MS-08-EAST-US1
ALS Laboratory Work Order			BF2500108	BF2500108	BF2500108	BF2500134	BF2500134	BF2500134	BF2500151	BF2500151	BF2500175	BF2500175
Sample Date & Time			2025-06-27 10:55	2025-06-27 11:05	2025-06-27 11:15	2025-07-04 09:05	2025-07-04 09:20	2025-07-04 09:35	2025-07-11 09:40	2025-07-11 10:10	2025-07-18 10:25	2025-07-18 10:50
Analyte	Units	Criteria ¹										
Aluminum, dissolved	mg/L	-	-	-	-	0.0227	0.0042	0.0084	-	-	-	-
Antimony, dissolved	mg/L	-	-	-	-	< 0.0001	< 0.0001	< 0.0001	-	-	-	-
Arsenic, dissolved	mg/L	-	-	-	-	< 0.0001	< 0.0001	< 0.0001	-	-	-	-
Barium, dissolved	mg/L	-	-	-	-	0.00448	0.00452	0.0022	-	-	-	-
Beryllium, dissolved	mg/L	-	-	-	-	< 0.00002	< 0.00002	< 0.00002	-	-	-	-
Bismuth, dissolved	mg/L	-	-	-	-	< 0.00005	< 0.00005	< 0.00005	-	-	-	-
Boron, dissolved	mg/L	-	-	-	-	< 0.01	< 0.01	< 0.01	-	-	-	-
Cadmium, dissolved	mg/L	-	-	-	-	0.0000387	0.000111	0.000018	-	-	-	-
Calcium, dissolved	mg/L	-	-	-	-	7.22	10	3.07	-	-	-	-
Cesium, dissolved	mg/L	-	-	-	-	< 0.00001	< 0.00001	< 0.00001	-	-	-	-
Chromium, dissolved	mg/L	-	-	-	-	< 0.0005	< 0.0005	< 0.0005	-	-	-	-
Cobalt, dissolved	mg/L	-	-	-	-	0.00049	0.00069	0.00013	-	-	-	-
Copper, dissolved	mg/L	-	-	-	-	0.00049	0.00048	< 0.0002	-	-	-	-
Iron, dissolved	mg/L	-	-	-	-	0.023	0.01	< 0.01	-	-	-	-
Lead, dissolved	mg/L	-	-	-	-	< 0.00005	< 0.00005	< 0.00005	-	-	-	-
Lithium, dissolved	mg/L	-	-	-	-	0.002	0.0023	0.0014	-	-	-	-
Magnesium, dissolved	mg/L	-	-	-	-	17.4	30.6	6.05	-	-	-	-
Manganese, dissolved	mg/L	-	-	-	-	0.0601	0.116	0.0271	-	-	-	-
Molybdenum, dissolved	mg/L	-	-	-	-	0.00208	0.0026	0.00164	-	-	-	-
Nickel, dissolved	mg/L	-	-	-	-	< 0.0005	< 0.0005	< 0.0005	-	-	-	-
Phosphorus (P), dissolved	mg/L	-	-	-	-	< 0.05	< 0.05	< 0.05	-	-	-	-
Potassium, dissolved	mg/L	-	-	-	-	2.04	2.22	1.49	-	-	-	-
Rubidium, dissolved	mg/L	-	-	-	-	0.00169	0.00198	0.00109	-	-	-	-
Selenium, dissolved	mg/L	-	-	-	-	0.000774	0.000874	0.000278	-	-	-	-
Silicon, dissolved	mg/L	-	-	-	-	0.577	0.546	0.369	-	-	-	-
Silver, dissolved	mg/L	-	-	-	-	< 0.00001	< 0.00001	< 0.00001	-	-	-	-
Sodium, dissolved	mg/L	-	-	-	-	1.27	2.17	0.475	-	-	-	-
Strontium, dissolved	mg/L	-	-	-	-	0.0118	0.0185	0.0048	-	-	-	-
Sulfur, dissolved	mg/L	-	-	-	-	16.8	30.4	5.75	-	-	-	-
Tellurium, dissolved	mg/L	-	-	-	-	< 0.0002	< 0.0002	< 0.0002	-	-	-	-
Thallium, dissolved	mg/L	-	-	-	-	< 0.00001	< 0.00001	< 0.00001	-	-	-	-
Thorium, dissolved	mg/L	-	-	-	-	< 0.0001	< 0.0001	< 0.0001	-	-	-	-
Tin, dissolved	mg/L	-	-	-	-	< 0.0001	< 0.0001	< 0.0001	-	-	-	-
Titanium, dissolved	mg/L	-	-	-	-	0.00055	< 0.0003	< 0.0003	-	-	-	-
Tungsten, dissolved	mg/L	-	-	-	-	< 0.0001	< 0.0001	< 0.0001	-	-	-	-
Uranium, dissolved	mg/L	-	-	-	-	0.000334	0.000874	0.000215	-	-	-	-
Vanadium, dissolved	mg/L	-	-	-	-	< 0.0005	< 0.0005	< 0.0005	-	-	-	-
Zinc, dissolved	mg/L	-	-	-	-	0.0022	< 0.001	< 0.001	-	-	-	-
Zirconium, dissolved	mg/L	-	-	-	-	< 0.0003	< 0.0003	< 0.0003	-	-	-	-

Notes:
Reference: Waste Rock Facility QAQC Monitoring Plan (BIM-5200-PLA-0034)
¹Table A1 - WRF Water Quality Lower Action Level and Water Licence/MDMER Limits

Table E.6.4: Water Quality Results for Water Licence Monitoring Location - WRF-EAST

Monitoring Station			MS-08-EAST-US1	MS-08-EAST-INFLOW	MS-08-EAST-INFLOW	MS-08-EAST-US1	MS-08-EAST-US1	MS-08-EAST-INFLOW	MS-08-EAST-INFLOW	MS-08-EAST-US1	MS-08-EAST-INFLOW	MS-08-EAST-US1
ALS Laboratory Work Order			BF2500190	BF2500190	BF2500227	BF2500227	BF2500250	BF2500250	BF2500261	BF2500261	BF2500276	BF2500276
Sample Date & Time			2025-07-23 09:40	2025-07-23 09:55	2025-08-01 10:40	2025-08-01 11:05	2025-08-09 11:50	2025-08-09 12:05	2025-08-14 08:55	2025-08-14 09:10	2025-08-20 10:25	2025-08-20 10:45
Analyte	Units	Criteria ¹										
pH, Field	pH units	-	7.83	7.96	8.05	8.06	8.03	8.03	8.76	8.3	8.1	7.88
Specific Conductivity, Field	us/cm	-	1029	811	927	1212	964	443.9	945	1059	911	1004
Temperature, Field	deg C	-	5.5	5.5	9.5	9.4	2.7	3	2.2	3.2	0.7	0.3
Turbidity, Field	NTU	-	37.22	38.14	1.76	2.16	1516.86	108.56	0.58	1.88	17.25	922.39
Visible Sheen, Field	None	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Conductivity, Lab	us/cm	-	1020	810	884	1140	981	1280	986	1100	898	989
Total Dissolved Solids	mg/L	-	774	591	599	834	679	673	687	773	646	710
Total Suspended Solids	mg/L	-	60.5	26.7	2.8	3.2	1240	31.8	1.2	3.3	11.9	807
Turbidity, Lab	NTU	-	44	39.2	1.07	1.64	2060	39.3	0.37	1.02	8.77	455
pH, Lab	pH units	-	7.81	7.81	7.98	7.95	7.79	7.83	8.33	7.9	8.03	7.82
Total Ammonia	mg/L	-	0.674	0.686	0.01	0.0365	0.344	0.55	0.0115	0.0104	0.0059	0.0295
Aluminum, total	mg/L	-	1.58	1.24	0.0502	0.0807	69.3	0.323	< 0.03	0.055	0.546	46.1
Antimony, total	mg/L	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0001	< 0.001
Arsenic, total	mg/L	0.48	0.00029	0.00022	< 0.0001	< 0.0001	0.00407	< 0.001	< 0.001	< 0.001	0.00011	0.00385
Barium, total	mg/L	-	0.0326	0.0274	0.0248	0.0303	0.464	0.0261	0.0266	0.0328	0.0275	0.298
Beryllium, total	mg/L	-	0.000072	0.00006	< 0.00002	< 0.00002	0.0026	< 0.0002	< 0.0002	< 0.0002	0.000025	0.0018
Bismuth, total	mg/L	-	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.00198	< 0.0005	< 0.0005	< 0.0005	< 0.00005	0.00101
Boron, total	mg/L	-	0.024	0.025	0.023	0.022	< 0.1	< 0.1	< 0.1	< 0.1	0.014	< 0.1
Cadmium, total	mg/L	-	0.0000989	0.0000474	0.0000278	0.0000559	0.000423	0.000058	< 0.00005	< 0.00005	0.00002	0.000152
Calcium, total	mg/L	-	50.8	39.7	56	72.9	53	54.6	68.7	79.3	63.9	72.2
Cesium, total	mg/L	-	0.000106	0.000081	< 0.00001	0.000011	0.00447	< 0.0001	< 0.0001	< 0.0001	0.000046	0.00262
Chromium, total	mg/L	-	0.00338	0.00265	< 0.0005	< 0.0005	0.139	< 0.005	< 0.005	< 0.005	0.0012	0.0632
Cobalt, total	mg/L	-	0.00348	0.0031	0.002	0.00255	0.0472	0.00594	0.00208	0.00225	0.0021	0.0321
Copper, total	mg/L	0.48	0.00293	0.00283	0.00139	0.00084	0.0944	< 0.005	< 0.005	< 0.005	0.00185	0.0576
Iron, total	mg/L	-	2.53	1.94	0.06	0.134	104	0.522	< 0.1	< 0.1	0.856	67.5
Lead, total	mg/L	0.16	0.000718	0.000546	< 0.00005	0.000052	0.0223	< 0.0005	< 0.0005	< 0.0005	0.000329	0.0171
Lithium, total	mg/L	-	0.0074	0.0063	0.0049	0.0059	0.0912	< 0.01	< 0.01	< 0.01	0.0035	0.0596
Magnesium, total	mg/L	-	98.6	78.1	81.2	110	159	151	79.4	90.4	75.3	121
Manganese, total	mg/L	-	0.112	0.106	0.0335	0.0268	1.52	0.961	0.0226	0.0124	0.0275	0.746
Mercury, total	mg/L	-	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Molybdenum, total	mg/L	-	0.00613	0.00602	0.00528	0.00572	0.00356	0.00687	0.00445	0.00422	0.00398	0.00367
Nickel, total	mg/L	0.8	0.0035	0.00313	0.00102	0.00088	0.129	< 0.005	< 0.005	< 0.005	0.00188	0.0829
Phosphorus (P), total	mg/L	-	0.067	< 0.05	< 0.05	< 0.05	0.785	< 0.5	< 0.5	< 0.5	< 0.05	< 0.5
Potassium, total	mg/L	-	6.55	6.17	6.22	6.52	28.2	5.6	5.98	5.45	6.13	18.5
Rubidium, total	mg/L	-	0.00804	0.00635	0.00443	0.00514	0.133	0.00457	0.0056	0.00499	0.0065	0.0738
Selenium, total	mg/L	-	0.00348	0.00445	0.00468	0.00409	0.00326	0.00727	0.00465	0.00361	0.00414	0.00395
Silicon, total	mg/L	-	3.8	3.33	1.68	1.78	71.6	2.09	1.56	1.91	2.13	51.3
Silver, total	mg/L	-	< 0.00001	< 0.00001	< 0.00001	< 0.00001	0.000415	< 0.0001	< 0.0001	< 0.0001	< 0.00001	0.000234
Sodium, total	mg/L	-	7.07	5.38	5.11	7.14	6.41	6.6	4.84	5.94	4.75	5.59
Strontium, total	mg/L	-	0.0615	0.0519	0.0539	0.0711	0.0721	0.0733	0.0638	0.0719	0.0585	0.0788
Sulfur, total	mg/L	-	114	85.7	94.2	126	101	161	95.6	113	91	109
Tellurium, total	mg/L	-	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.0002	< 0.002
Thallium, total	mg/L	-	0.00004	0.000031	0.000016	0.000018	0.000836	< 0.0001	< 0.0001	< 0.0001	0.000022	0.000524
Thorium, total	mg/L	-	0.00058	0.00032	< 0.0001	< 0.0001	0.0151	< 0.001	< 0.001	< 0.001	0.00015	0.00934
Tin, total	mg/L	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.00109	< 0.001	< 0.001	< 0.001	< 0.0001	< 0.001
Titanium, total	mg/L	-	0.0623	0.046	0.00126	0.00304	2.79	0.0121	< 0.003	< 0.003	0.024	1.52
Tungsten, total	mg/L	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0001	< 0.001
Uranium, total	mg/L	-	0.0069	0.00441	0.00462	0.0071	0.0129	0.00318	0.00648	0.00727	0.00639	0.0123
Vanadium, total	mg/L	-	0.00237	0.00176	< 0.0005	< 0.0005	0.0889	< 0.005	< 0.005	< 0.005	0.00084	0.0498
Zinc, total	mg/L	0.8	0.0037	< 0.003	< 0.003	< 0.003	0.16	< 0.03	< 0.03	< 0.03	0.0086	0.0811
Zirconium, total	mg/L	-	0.00061	0.00052	< 0.0002	< 0.0002	0.00245	< 0.002	< 0.002	< 0.002	0.00025	0.00279

Table E.6.4: Water Quality Results for Water Licence Monitoring Location - WRF-EAST

Monitoring Station			MS-08-EAST-US1	MS-08-EAST-INFLOW	MS-08-EAST-INFLOW	MS-08-EAST-US1	MS-08-EAST-US1	MS-08-EAST-INFLOW	MS-08-EAST-INFLOW	MS-08-EAST-US1	MS-08-EAST-INFLOW	MS-08-EAST-US1
ALS Laboratory Work Order			BF2500190	BF2500190	BF2500227	BF2500227	BF2500250	BF2500250	BF2500261	BF2500261	BF2500276	BF2500276
Sample Date & Time			2025-07-23 09:40	2025-07-23 09:55	2025-08-01 10:40	2025-08-01 11:05	2025-08-09 11:50	2025-08-09 12:05	2025-08-14 08:55	2025-08-14 09:10	2025-08-20 10:25	2025-08-20 10:45
Analyte	Units	Criteria ¹										
Aluminum, dissolved	mg/L	-	-	-	0.0472	0.0532	-	-	-	-	-	-
Antimony, dissolved	mg/L	-	-	-	< 0.0001	< 0.0001	-	-	-	-	-	-
Arsenic, dissolved	mg/L	-	-	-	< 0.0001	< 0.0001	-	-	-	-	-	-
Barium, dissolved	mg/L	-	-	-	0.0263	0.0321	-	-	-	-	-	-
Beryllium, dissolved	mg/L	-	-	-	< 0.00002	< 0.00002	-	-	-	-	-	-
Bismuth, dissolved	mg/L	-	-	-	< 0.00005	< 0.00005	-	-	-	-	-	-
Boron, dissolved	mg/L	-	-	-	0.022	0.022	-	-	-	-	-	-
Cadmium, dissolved	mg/L	-	-	-	0.000025	0.0000567	-	-	-	-	-	-
Calcium, dissolved	mg/L	-	-	-	52.3	69.5	-	-	-	-	-	-
Cesium, dissolved	mg/L	-	-	-	< 0.00001	0.00001	-	-	-	-	-	-
Chromium, dissolved	mg/L	-	-	-	< 0.0005	< 0.0005	-	-	-	-	-	-
Cobalt, dissolved	mg/L	-	-	-	0.00202	0.00258	-	-	-	-	-	-
Copper, dissolved	mg/L	-	-	-	0.00137	0.00084	-	-	-	-	-	-
Iron, dissolved	mg/L	-	-	-	0.045	0.078	-	-	-	-	-	-
Lead, dissolved	mg/L	-	-	-	< 0.00005	< 0.00005	-	-	-	-	-	-
Lithium, dissolved	mg/L	-	-	-	0.0053	0.0064	-	-	-	-	-	-
Magnesium, dissolved	mg/L	-	-	-	77.6	107	-	-	-	-	-	-
Manganese, dissolved	mg/L	-	-	-	0.033	0.0267	-	-	-	-	-	-
Molybdenum, dissolved	mg/L	-	-	-	0.00544	0.00599	-	-	-	-	-	-
Nickel, dissolved	mg/L	-	-	-	0.00091	0.00084	-	-	-	-	-	-
Phosphorus (P), dissolved	mg/L	-	-	-	< 0.05	< 0.05	-	-	-	-	-	-
Potassium, dissolved	mg/L	-	-	-	6.3	6.71	-	-	-	-	-	-
Rubidium, dissolved	mg/L	-	-	-	0.00456	0.00538	-	-	-	-	-	-
Selenium, dissolved	mg/L	-	-	-	0.0055	0.00468	-	-	-	-	-	-
Silicon, dissolved	mg/L	-	-	-	1.69	1.82	-	-	-	-	-	-
Silver, dissolved	mg/L	-	-	-	< 0.00001	< 0.00001	-	-	-	-	-	-
Sodium, dissolved	mg/L	-	-	-	5.01	7.15	-	-	-	-	-	-
Strontium, dissolved	mg/L	-	-	-	0.056	0.0733	-	-	-	-	-	-
Sulfur, dissolved	mg/L	-	-	-	93.5	129	-	-	-	-	-	-
Tellurium, dissolved	mg/L	-	-	-	< 0.0002	< 0.0002	-	-	-	-	-	-
Thallium, dissolved	mg/L	-	-	-	0.000017	0.00002	-	-	-	-	-	-
Thorium, dissolved	mg/L	-	-	-	< 0.0001	< 0.0001	-	-	-	-	-	-
Tin, dissolved	mg/L	-	-	-	< 0.0001	< 0.0001	-	-	-	-	-	-
Titanium, dissolved	mg/L	-	-	-	< 0.0015	< 0.0024	-	-	-	-	-	-
Tungsten, dissolved	mg/L	-	-	-	< 0.0001	< 0.0001	-	-	-	-	-	-
Uranium, dissolved	mg/L	-	-	-	0.00466	0.00721	-	-	-	-	-	-
Vanadium, dissolved	mg/L	-	-	-	< 0.0005	< 0.0005	-	-	-	-	-	-
Zinc, dissolved	mg/L	-	-	-	< 0.001	< 0.001	-	-	-	-	-	-
Zirconium, dissolved	mg/L	-	-	-	< 0.0003	< 0.0003	-	-	-	-	-	-

Notes:
Reference: Waste Rock Facility QAQC Monitoring Plan (BIM-5200-PLA-0034)
¹Table A1 - WRF Water Quality Lower Action Level and Water Licence/MDMER Limits

Table E.6.5: Water Quality Results for Water Licence Monitoring Location - WRF-WEST

Monitoring Station			MS-08-WEST-INFLOW	MS-08-WEST-US1	MS-08-WEST-US2	MS-08-WEST-INFLOW	MS-08-WEST-US1	MS-08-WEST-US2	MS-08-WEST-INFLOW	MS-08-WEST-US1	MS-08-WEST-US2
ALS Laboratory Work Order			BF2500042	BF2500042	BF2500042	BF2500108	BF2500108	BF2500108	BF2500134	BF2500134	BF2500134
Sample Date & Time			2025-06-06 10:45	2025-06-06 11:00	2025-06-06 11:10	2025-06-27 09:55	2025-06-27 10:15	2025-06-27 10:30	2025-07-04 10:00	2025-07-04 10:15	2025-07-04 10:30
Analyte	Units	Criteria ¹									
pH, Field	pH units	-	7.78	7.09	7.29	7.18	7.4	7.6	7.09	7.49	7.69
Specific Conductivity, Field	us/cm	-	69.2	294.9	99.4	418.1	545	115	495.5	544	389.5
Temperature, Field	deg C	-	3	0	0	7.3	5.3	4.1	3.9	3.2	5.4
Turbidity, Field	NTU	-	89.18	60.9	60.52	55.49	131.2	45.64	13.5	6.76	5.86
Visible Sheen, Field	None	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Conductivity, Lab	us/cm	-	65.6	296	107	436	559	222	833	947	380
Total Dissolved Solids	mg/L	-	64	200	92	287	397	148	609	703	253
Total Suspended Solids	mg/L	-	6.3	14.9	21	20.1	85.6	24.5	6	45.4	33.1
Turbidity, Lab	NTU	-	88.2	57	73.4	43.5	129	40.5	4.97	12.1	3.35
pH, Lab	pH units	-	6.63	6.94	6.98	7.1	7.22	7.21	7.57	7.63	7.71
Total Ammonia	mg/L	-	0.0556	0.306	0.151	0.199	0.34	0.174	0.0197	0.354	0.189
Aluminum, total	mg/L	-	1.78	1.58	2.4	1.11	4.42	1.32	0.192	1.3	0.188
Antimony, total	mg/L	-	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.0001	< 0.001	< 0.0001
Arsenic, total	mg/L	0.48	0.00056	0.00026	0.00033	< 0.001	0.00105	< 0.001	0.0001	< 0.001	< 0.0001
Barium, total	mg/L	-	0.00431	0.0104	0.0146	0.0118	0.0233	0.0126	0.0157	0.0229	0.0171
Beryllium, total	mg/L	-	0.000071	0.000086	0.000126	< 0.0002	0.000205	< 0.0002	< 0.00002	< 0.0002	< 0.00002
Bismuth, total	mg/L	-	< 0.00005	0.000079	0.000134	< 0.0005	< 0.0005	< 0.0005	< 0.00005	< 0.0005	< 0.00005
Boron, total	mg/L	-	< 0.01	0.013	0.01	< 0.1	< 0.1	< 0.1	0.024	< 0.1	0.016
Cadmium, total	mg/L	-	0.0000075	0.0000303	0.0000241	< 0.00005	< 0.00005	< 0.00005	0.000027	0.000051	< 0.000005
Calcium, total	mg/L	-	1.45	9.08	4.85	13.5	16.9	11	33.2	34	24.3
Cesium, total	mg/L	-	0.000062	0.00009	0.000134	< 0.0001	0.000188	< 0.0001	< 0.00001	< 0.0001	0.000016
Chromium, total	mg/L	-	0.00572	0.00346	0.00494	< 0.005	0.0131	< 0.005	0.0008	< 0.005	0.00084
Cobalt, total	mg/L	-	0.00189	0.0028	0.00198	0.00383	0.00618	0.00142	0.00294	0.0049	0.00078
Copper, total	mg/L	0.48	0.00294	0.00472	0.00682	0.00572	0.00904	< 0.005	0.0014	< 0.005	0.00088
Iron, total	mg/L	-	3.11	2.33	3.47	7.67	2.11	7.67	0.335	2.08	0.286
Lead, total	mg/L	0.16	0.000556	0.000924	0.00142	< 0.0005	0.00203	0.000714	0.00006	0.000622	0.000111
Lithium, total	mg/L	-	0.0048	0.0059	0.0058	< 0.01	< 0.01	< 0.01	0.0056	< 0.01	0.0033
Magnesium, total	mg/L	-	8.16	29.5	9.94	44.2	60.4	16.9	86.3	102	28.8
Manganese, total	mg/L	-	0.0549	0.289	0.11	0.367	0.561	0.118	0.48	0.729	0.0101
Mercury, total	mg/L	-	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Molybdenum, total	mg/L	-	0.00179	0.00485	0.00558	0.00343	0.00395	0.00481	0.00446	0.00506	0.00424
Nickel, total	mg/L	0.8	0.00687	0.00563	0.00495	0.00805	0.0168	< 0.005	0.00361	0.0075	0.00095
Phosphorus (P), total	mg/L	-	< 0.05	< 0.05	< 0.05	< 0.5	< 0.5	< 0.5	< 0.05	< 0.5	< 0.05
Potassium, total	mg/L	-	1.11	2.81	2.77	2.92	3.97	2.89	4.21	4.84	2.99
Rubidium, total	mg/L	-	0.00199	0.0039	0.00458	0.00342	0.00712	0.0035	0.00339	0.00505	0.00303
Selenium, total	mg/L	-	0.000747	0.00165	0.000575	0.00277	0.00315	0.00154	0.00637	0.00627	0.00286
Silicon, total	mg/L	-	3.6	3.16	4.23	3.06	7.98	2.77	1.85	3.44	1.5
Silver, total	mg/L	-	0.000012	0.000012	0.000017	< 0.0001	< 0.0001	< 0.0001	< 0.00001	< 0.0001	< 0.00001
Sodium, total	mg/L	-	0.495	1.3	0.736	1.75	2.36	0.873	3.61	4.37	1.53
Strontium, total	mg/L	-	0.00374	0.016	0.0112	0.0185	0.0245	0.013	0.04	0.0444	0.0229
Sulfur, total	mg/L	-	4.77	33.4	7.66	45.2	57.6	16	101	119	28.7
Tellurium, total	mg/L	-	< 0.0002	< 0.0002	< 0.0002	< 0.002	< 0.002	< 0.002	< 0.0002	< 0.002	< 0.0002
Thallium, total	mg/L	-	0.000012	0.00002	0.000025	< 0.0001	< 0.0001	< 0.0001	0.000012	< 0.0001	0.00001
Thorium, total	mg/L	-	0.00037	0.00044	0.00064	< 0.001	0.00104	< 0.001	< 0.0001	< 0.001	< 0.0001
Tin, total	mg/L	-	< 0.0001	< 0.0001	0.00011	< 0.001	< 0.001	< 0.001	< 0.0001	< 0.001	< 0.0001
Titanium, total	mg/L	-	0.0241	0.0389	0.0625	0.0204	0.108	0.0323	0.00279	0.049	0.00686
Tungsten, total	mg/L	-	< 0.0001	0.00246	0.0048	< 0.001	< 0.001	< 0.001	< 0.0001	< 0.001	< 0.0001
Uranium, total	mg/L	-	0.000164	0.000531	0.0007	0.000638	0.00123	0.00076	0.00137	0.00145	0.00096
Vanadium, total	mg/L	-	0.00192	0.00199	0.00311	< 0.005	0.00572	< 0.005	< 0.0005	< 0.005	< 0.0005
Zinc, total	mg/L	0.8	0.0032	0.0039	0.0061	< 0.03	< 0.03	< 0.03	< 0.003	< 0.03	< 0.003
Zirconium, total	mg/L	-	0.00051	0.00047	0.00054	< 0.002	< 0.002	< 0.002	< 0.0002	< 0.002	< 0.0002

Table E.6.5: Water Quality Results for Water Licence Monitoring Location - WRF-WEST

Monitoring Station			MS-08-WEST-INFLOW	MS-08-WEST-US1	MS-08-WEST-US2	MS-08-WEST-INFLOW	MS-08-WEST-US1	MS-08-WEST-US2	MS-08-WEST-INFLOW	MS-08-WEST-US1	MS-08-WEST-US2
ALS Laboratory Work Order			BF2500042	BF2500042	BF2500042	BF2500108	BF2500108	BF2500108	BF2500134	BF2500134	BF2500134
Sample Date & Time			2025-06-06 10:45	2025-06-06 11:00	2025-06-06 11:10	2025-06-27 09:55	2025-06-27 10:15	2025-06-27 10:30	2025-07-04 10:00	2025-07-04 10:15	2025-07-04 10:30
Analyte	Units	Criteria ¹									
Aluminum, dissolved	mg/L	-	0.0094	0.0055	0.0132	-	-	-	0.0052	0.0036	0.0036
Antimony, dissolved	mg/L	-	< 0.0001	< 0.0001	0.00011	-	-	-	< 0.0001	< 0.0001	< 0.0001
Arsenic, dissolved	mg/L	-	< 0.0001	< 0.0001	< 0.0001	-	-	-	< 0.0001	< 0.0001	< 0.0001
Barium, dissolved	mg/L	-	0.00108	0.00422	0.00312	-	-	-	0.0151	0.0172	0.0161
Beryllium, dissolved	mg/L	-	< 0.00002	< 0.00002	< 0.00002	-	-	-	< 0.00002	< 0.00002	< 0.00002
Bismuth, dissolved	mg/L	-	< 0.00005	< 0.00005	< 0.00005	-	-	-	< 0.00005	< 0.00005	< 0.00005
Boron, dissolved	mg/L	-	< 0.01	0.012	< 0.01	-	-	-	0.024	0.025	0.016
Cadmium, dissolved	mg/L	-	< 0.000005	0.0000192	0.0000129	-	-	-	0.0000248	0.0000317	< 0.000005
Calcium, dissolved	mg/L	-	1.39	8.16	4.6	-	-	-	32.5	35.5	23.9
Cesium, dissolved	mg/L	-	< 0.00001	< 0.00001	< 0.00001	-	-	-	< 0.00001	< 0.00001	< 0.00001
Chromium, dissolved	mg/L	-	< 0.0005	< 0.0005	< 0.0005	-	-	-	< 0.0005	< 0.0005	< 0.0005
Cobalt, dissolved	mg/L	-	0.00011	0.0016	0.00033	-	-	-	0.00276	0.00412	0.00066
Copper, dissolved	mg/L	-	< 0.0002	0.00039	0.0003	-	-	-	0.00098	0.00062	0.00036
Iron, dissolved	mg/L	-	0.013	< 0.01	0.014	-	-	-	0.012	0.017	< 0.01
Lead, dissolved	mg/L	-	< 0.00005	< 0.00005	< 0.00005	-	-	-	< 0.00005	< 0.00005	< 0.00005
Lithium, dissolved	mg/L	-	0.0015	0.0036	0.0026	-	-	-	0.0055	0.0058	0.0028
Magnesium, dissolved	mg/L	-	5.56	27.1	7.55	-	-	-	98.1	114	31.9
Manganese, dissolved	mg/L	-	0.0106	0.254	0.0632	-	-	-	0.491	0.78	0.00428
Molybdenum, dissolved	mg/L	-	0.00227	0.00515	0.00598	-	-	-	0.00457	0.00526	0.00431
Nickel, dissolved	mg/L	-	< 0.0005	0.00228	< 0.0005	-	-	-	0.00276	0.00432	< 0.0005
Phosphorus (P), dissolved	mg/L	-	< 0.05	< 0.05	< 0.05	-	-	-	< 0.05	< 0.05	< 0.05
Potassium, dissolved	mg/L	-	0.948	2.58	2.39	-	-	-	4.83	5.12	3.4
Rubidium, dissolved	mg/L	-	0.00063	0.00183	0.00142	-	-	-	0.00322	0.00382	0.00274
Selenium, dissolved	mg/L	-	0.000951	0.00208	0.000752	-	-	-	0.00721	0.00812	0.0033
Silicon, dissolved	mg/L	-	0.599	0.767	0.642	-	-	-	1.61	1.6	1.26
Silver, dissolved	mg/L	-	< 0.00001	< 0.00001	< 0.00001	-	-	-	< 0.00001	< 0.00001	< 0.00001
Sodium, dissolved	mg/L	-	0.479	1.26	0.725	-	-	-	4.16	4.89	1.74
Strontium, dissolved	mg/L	-	0.00346	0.0154	0.0102	-	-	-	0.0397	0.0459	0.023
Sulfur, dissolved	mg/L	-	4.91	34.9	8.36	-	-	-	111	128	30.2
Tellurium, dissolved	mg/L	-	< 0.0002	< 0.0002	< 0.0002	-	-	-	< 0.0002	< 0.0002	< 0.0002
Thallium, dissolved	mg/L	-	< 0.00001	< 0.00001	< 0.00001	-	-	-	0.000011	0.000015	< 0.00001
Thorium, dissolved	mg/L	-	< 0.0001	< 0.0001	< 0.0001	-	-	-	< 0.0001	< 0.0001	< 0.0001
Tin, dissolved	mg/L	-	< 0.0001	< 0.0001	< 0.0001	-	-	-	< 0.0001	< 0.0001	< 0.0001
Titanium, dissolved	mg/L	-	< 0.0003	< 0.0003	< 0.0003	-	-	-	< 0.0003	< 0.0003	< 0.0003
Tungsten, dissolved	mg/L	-	< 0.0001	0.00295	0.00657	-	-	-	< 0.0001	< 0.0001	< 0.0001
Uranium, dissolved	mg/L	-	0.000013	0.000206	0.000175	-	-	-	0.00126	0.00117	0.000863
Vanadium, dissolved	mg/L	-	< 0.0005	< 0.0005	< 0.0005	-	-	-	< 0.0005	< 0.0005	< 0.0005
Zinc, dissolved	mg/L	-	< 0.001	< 0.001	< 0.001	-	-	-	< 0.001	< 0.001	< 0.001
Zirconium, dissolved	mg/L	-	< 0.0003	< 0.0003	< 0.0003	-	-	-	< 0.0003	< 0.0003	< 0.0003

Notes:
Reference: Waste Rock Facility QAQC Monitoring Plan (BIM-5200-PLA-0034)
¹Table A1 - WRF Water Quality Lower Action Level and Water Licence/MDMER Limits

Table E.6.5: Water Quality Results for Water Licence Monitoring Location - WRF-WEST

Monitoring Station			MS-08-WEST-US2	MS-08-WEST-US1	MS-08-WEST-INFLOW	MS-08-WEST-INFLOW	MS-08-WEST-US1	MS-08-WEST-US2	MS-08-WEST-INFLOW	MS-08-WEST-US1	MS-08-WEST-INFLOW
ALS Laboratory Work Order			BF2500151	BF2500151	BF2500151	BF2500175	BF2500175	BF2500175	BF2500190	BF2500190	BF2500227
Sample Date & Time			2025-07-11 11:15	2025-07-11 11:50	2025-07-11 12:35	2025-07-18 09:15	2025-07-18 09:40	2025-07-18 10:00	2025-07-23 11:35	2025-07-23 11:55	2025-08-01 09:10
Analyte	Units	Criteria ¹									
pH, Field	pH units	-	7.63	7.56	7.45	7.08	7.57	7.83	7.54	7.65	7.63
Specific Conductivity, Field	us/cm	-	189.8	311.8	346.5	1307	1417	528	1394	1532	1446
Temperature, Field	deg C	-	1.2	1.6	1.5	4.3	3.6	3.2	5	4.6	8.2
Turbidity, Field	NTU	-	339.26	377.64	289.71	10.68	7.15	5.26	9.35	10.33	4.34
Visible Sheen, Field	None	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Conductivity, Lab	us/cm	-	208	342	363	1200	1300	488	1380	1540	1370
Total Dissolved Solids	mg/L	-	146	232	233	913	1010	323	1120	1250	1080
Total Suspended Solids	mg/L	-	229	249	150	10.1	11.2	7.4	7.5	20.9	1.6
Turbidity, Lab	NTU	-	301	285	284	13.2	9.95	5.92	11.9	15.9	3.78
pH, Lab	pH units	-	7.61	7.56	7.53	7.5	7.52	7.7	7.56	7.56	7.63
Total Ammonia	mg/L	-	0.163	0.234	0.176	1.51	1.83	0.705	1.11	2.04	0.125
Aluminum, total	mg/L	-	11.2	11.8	8.76	0.332	0.313	0.179	0.338	0.324	0.0802
Antimony, total	mg/L	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001
Arsenic, total	mg/L	0.48	0.0018	0.00184	0.00157	< 0.001	0.00012	0.0001	< 0.001	< 0.001	< 0.001
Barium, total	mg/L	-	0.0495	0.0543	0.0309	0.0205	0.0206	0.0172	0.0256	0.0264	0.0293
Beryllium, total	mg/L	-	0.000467	0.000468	0.000386	< 0.0002	< 0.00002	< 0.00002	< 0.0002	< 0.0002	< 0.0002
Bismuth, total	mg/L	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00005	< 0.00005	< 0.0005	< 0.0005	< 0.0005
Boron, total	mg/L	-	< 0.1	< 0.1	< 0.1	< 0.1	0.032	0.02	< 0.1	< 0.1	< 0.1
Cadmium, total	mg/L	-	0.000073	0.000053	< 0.00005	0.00007	0.0000814	0.0000161	0.000086	0.000099	< 0.00005
Calcium, total	mg/L	-	9.08	11.7	11.2	36.9	39.8	23.6	50.1	54.5	64
Cesium, total	mg/L	-	0.000512	0.000568	0.000302	< 0.0001	0.000035	0.000016	< 0.0001	< 0.0001	< 0.0001
Chromium, total	mg/L	-	0.0291	0.032	0.0247	< 0.005	0.00107	0.00069	< 0.005	< 0.005	< 0.005
Cobalt, total	mg/L	-	0.00915	0.0102	0.0106	0.00755	0.00837	0.00112	0.011	0.0138	0.00617
Copper, total	mg/L	0.48	0.0229	0.0242	0.0297	0.00579	0.00233	0.00091	< 0.005	0.00644	< 0.005
Iron, total	mg/L	-	18.4	19.7	14.8	0.567	0.522	0.27	0.699	1	0.139
Lead, total	mg/L	0.16	0.0062	0.00587	0.0036	< 0.0005	0.000146	0.000132	< 0.0005	< 0.0005	< 0.0005
Lithium, total	mg/L	-	0.0123	0.0136	0.0106	< 0.01	0.0104	0.0038	< 0.01	< 0.01	< 0.01
Magnesium, total	mg/L	-	27.4	43.8	41.8	132	144	39.2	161	178	164
Manganese, total	mg/L	-	0.274	0.355	0.444	1.36	1.72	0.187	1.63	2.01	0.958
Mercury, total	mg/L	-	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Molybdenum, total	mg/L	-	0.00286	0.00333	0.0027	0.00753	0.00805	0.00971	0.00622	0.00675	0.00554
Nickel, total	mg/L	0.8	0.031	0.0329	0.0317	0.00809	0.00794	0.00149	0.00736	0.00893	< 0.005
Phosphorus (P), total	mg/L	-	< 0.5	< 0.5	< 0.5	< 0.5	< 0.05	< 0.05	< 0.5	< 0.5	< 0.5
Potassium, total	mg/L	-	4.11	4.71	3.69	5.34	5.82	4.24	6.11	6.49	5.75
Rubidium, total	mg/L	-	0.0174	0.0181	0.00999	0.00565	0.00603	0.00364	0.00594	0.00594	0.00516
Selenium, total	mg/L	-	0.00152	0.00239	0.00236	0.00821	0.00885	0.0039	0.0101	0.0102	0.00913
Silicon, total	mg/L	-	18	18.4	14.9	2.15	2.16	1.64	2.22	2.14	1.61
Silver, total	mg/L	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00001	< 0.00001	< 0.0001	< 0.0001	< 0.0001
Sodium, total	mg/L	-	0.66	1.32	2.46	5.31	6.23	2.12	7.49	8.31	7.2
Strontium, total	mg/L	-	0.0122	0.0183	0.017	0.0674	0.0742	0.0371	0.0791	0.0885	0.077
Sulfur, total	mg/L	-	12.1	25.9	27.3	150	180	43.1	183	207	171
Tellurium, total	mg/L	-	< 0.002	< 0.002	< 0.002	< 0.002	< 0.0002	< 0.0002	< 0.002	< 0.002	< 0.002
Thallium, total	mg/L	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.00003	0.000014	< 0.0001	< 0.0001	< 0.0001
Thorium, total	mg/L	-	0.0029	0.00306	0.00207	< 0.001	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001
Tin, total	mg/L	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001
Titanium, total	mg/L	-	0.308	0.327	0.174	0.0064	0.00954	0.00744	< 0.009	< 0.0093	< 0.003
Tungsten, total	mg/L	-	< 0.001	< 0.001	< 0.001	< 0.001	0.00031	0.00103	< 0.001	< 0.001	< 0.001
Uranium, total	mg/L	-	0.00236	0.00226	0.00154	0.00204	0.00203	0.00237	0.00216	0.00231	0.00262
Vanadium, total	mg/L	-	0.0142	0.015	0.00984	< 0.005	< 0.0005	< 0.0005	< 0.005	< 0.005	< 0.005
Zinc, total	mg/L	0.8	< 0.03	< 0.03	< 0.03	< 0.03	< 0.003	< 0.003	< 0.03	< 0.03	< 0.03
Zirconium, total	mg/L	-	< 0.002	< 0.002	< 0.002	< 0.002	< 0.0002	< 0.0002	< 0.002	< 0.002	< 0.002

Table E.6.5: Water Quality Results for Water Licence Monitoring Location - WRF-WEST

Monitoring Station			MS-08-WEST-US2	MS-08-WEST-US1	MS-08-WEST-INFLOW	MS-08-WEST-INFLOW	MS-08-WEST-US1	MS-08-WEST-US2	MS-08-WEST-INFLOW	MS-08-WEST-US1	MS-08-WEST-INFLOW
ALS Laboratory Work Order			BF2500151	BF2500151	BF2500151	BF2500175	BF2500175	BF2500175	BF2500190	BF2500190	BF2500227
Sample Date & Time			2025-07-11 11:15	2025-07-11 11:50	2025-07-11 12:35	2025-07-18 09:15	2025-07-18 09:40	2025-07-18 10:00	2025-07-23 11:35	2025-07-23 11:55	2025-08-01 09:10
Analyte	Units	Criteria ¹									
Aluminum, dissolved	mg/L	-	-	-	-	-	-	-	-	-	0.0482
Antimony, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.001
Arsenic, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.001
Barium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	0.0297
Beryllium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.0002
Bismuth, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.0005
Boron, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.1
Cadmium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.00005
Calcium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	58.9
Cesium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.0001
Chromium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.005
Cobalt, dissolved	mg/L	-	-	-	-	-	-	-	-	-	0.00614
Copper, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.002
Iron, dissolved	mg/L	-	-	-	-	-	-	-	-	-	0.102
Lead, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.0005
Lithium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.01
Magnesium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	151
Manganese, dissolved	mg/L	-	-	-	-	-	-	-	-	-	0.928
Molybdenum, dissolved	mg/L	-	-	-	-	-	-	-	-	-	0.00555
Nickel, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.005
Phosphorus (P), dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.5
Potassium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	5.73
Rubidium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	0.00463
Selenium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	0.0103
Silicon, dissolved	mg/L	-	-	-	-	-	-	-	-	-	1.56
Silver, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.0001
Sodium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	7.08
Strontium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	0.0766
Sulfur, dissolved	mg/L	-	-	-	-	-	-	-	-	-	169
Tellurium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.002
Thallium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.0001
Thorium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.001
Tin, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.001
Titanium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.003
Tungsten, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.001
Uranium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	0.00272
Vanadium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.005
Zinc, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.01
Zirconium, dissolved	mg/L	-	-	-	-	-	-	-	-	-	< 0.003

Notes:

Reference: Waste Rock Facility QAQC Monitoring Plan (BIM-5200-PLA-0034)

¹Table A1 - WRF Water Quality Lower Action Level and Water Licence/MDMER Limits

Table E.6.5: Water Quality Results for Water Licence Monitoring Location - WRF-WEST

Monitoring Station			MS-08-WEST-US1	MS-08-WEST-US2	MS-08-WEST-INFLOW	MS-08-WEST-US1	MS-08-WEST-INFLOW	MS-08-WEST-US1	MS-08-WEST-US2	MS-08-WEST-INFLOW	MS-08-WEST-US1	MS-08-WEST-US2
ALS Laboratory Work Order			BF2500227	BF2500227	BF2500250	BF2500250	BF2500261	BF2500261	BF2500261	BF2500276	BF2500276	BF2500276
Sample Date & Time			2025-08-01 09:35	2025-08-01 10:05	2025-08-09 11:15	2025-08-09 12:20	2025-08-14 10:20	2025-08-14 10:55	2025-08-14 11:20	2025-08-20 09:35	2025-08-20 09:45	2025-08-20 10:05
Analyte	Units	Criteria ¹										
pH, Field	pH units	-	7.89	8.03	7.88	7.99	7.7	8.04	8.11	7.09	7.43	-
Specific Conductivity, Field	us/cm	-	1637	660	1284	1315	1602	1698	662	1661	1736	-
Temperature, Field	deg C	-	5.8	5.9	1.7	2.2	2.4	2.8	2	1	0.3	-
Turbidity, Field	NTU	-	2.51	2.41	2.12	5.61	1.92	2.39	3.35	3.63	3.97	-
Visible Sheen, Field	None	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	-
Conductivity, Lab	us/cm	-	1510	604	918	1330	1660	1760	674	1620	1680	586
Total Dissolved Solids	mg/L	-	1220	396	1010	1020	1300	1380	446	1340	1410	391
Total Suspended Solids	mg/L	-	1.4	13.3	4.2	3	2.2	1.5	30.3	4.2	6.4	12.9
Turbidity, Lab	NTU	-	2.41	1.81	3.18	4.33	1.2	0.95	1.27	2.51	3.01	4.65
pH, Lab	pH units	-	7.74	7.86	7.66	7.75	7.54	7.76	7.86	7.54	7.75	7.86
Total Ammonia	mg/L	-	0.883	0.21	0.308	0.891	0.111	0.818	0.0091	0.0639	0.616	< 0.005
Aluminum, total	mg/L	-	0.0643	0.374	2.07	0.156	0.0967	0.0982	0.217	0.103	0.219	0.216
Antimony, total	mg/L	-	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0001
Arsenic, total	mg/L	0.48	< 0.0001	0.00012	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.00012
Barium, total	mg/L	-	0.0308	0.0269	0.0341	0.0246	0.0306	0.0299	0.0286	0.0315	0.0324	0.025
Beryllium, total	mg/L	-	< 0.00002	< 0.00002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.00002
Bismuth, total	mg/L	-	< 0.00005	0.000327	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00005
Boron, total	mg/L	-	0.032	0.022	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.014
Cadmium, total	mg/L	-	0.0000477	0.0000072	0.000052	0.000065	0.00005	0.000064	< 0.00005	< 0.00005	0.000061	< 0.000005
Calcium, total	mg/L	-	69.4	39.6	52.2	55.3	71.1	76.3	45.7	73.2	73.4	39.6
Cesium, total	mg/L	-	0.000017	0.000034	0.00012	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.00002
Chromium, total	mg/L	-	< 0.0005	0.00126	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00081
Cobalt, total	mg/L	-	0.0071	0.00135	0.0033	0.00621	0.00706	0.00803	0.00117	0.00693	0.00802	0.00105
Copper, total	mg/L	0.48	0.00163	0.00129	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00111
Iron, total	mg/L	-	0.142	0.582	3.06	0.267	0.196	0.198	0.325	0.21	0.437	0.31
Lead, total	mg/L	0.16	< 0.00005	0.000292	0.000637	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.000161
Lithium, total	mg/L	-	0.008	0.0043	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.0025
Magnesium, total	mg/L	-	176	52.7	93	157	183	197	55.8	186	192	46.8
Manganese, total	mg/L	-	1.3	0.0302	0.149	1.11	1.04	1.28	0.0169	0.921	1.08	0.0143
Mercury, total	mg/L	-	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Molybdenum, total	mg/L	-	0.00631	0.00557	0.00508	0.00774	0.00597	0.00637	0.00515	0.00537	0.00604	0.00462
Nickel, total	mg/L	0.8	0.00497	0.0014	0.0052	0.00527	0.00512	0.00527	< 0.005	< 0.005	0.00511	0.00082
Phosphorus (P), total	mg/L	-	< 0.05	0.057	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.05
Potassium, total	mg/L	-	6.03	4.31	6.29	5.74	5.98	6.22	3.94	6.06	5.97	3.81
Rubidium, total	mg/L	-	0.0051	0.00383	0.008	0.00435	0.00452	0.00501	0.00296	0.00482	0.00477	0.00274
Selenium, total	mg/L	-	0.0105	0.00527	0.00484	0.00801	0.0102	0.0103	0.0053	0.0102	0.0102	0.00453
Silicon, total	mg/L	-	1.83	2.23	4.6	1.98	1.67	1.87	1.94	1.58	1.88	1.77
Silver, total	mg/L	-	< 0.00001	< 0.00001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.00001
Sodium, total	mg/L	-	8.3	2.78	5.29	7.13	9.02	9.92	2.73	8.99	9.39	2.36
Strontium, total	mg/L	-	0.0873	0.0418	0.0551	0.0823	0.0944	0.1	0.0442	0.0959	0.1	0.039
Sulfur, total	mg/L	-	212	51	99.8	168	203	217	59	206	212	50.2
Tellurium, total	mg/L	-	< 0.0002	< 0.0002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.0002
Thallium, total	mg/L	-	0.00002	0.000015	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.00001
Thorium, total	mg/L	-	< 0.0001	0.00024	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0001
Tin, total	mg/L	-	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0001
Titanium, total	mg/L	-	0.00124	0.0272	0.0741	0.00377	< 0.003	0.00311	0.016	< 0.003	< 0.0078	0.0097
Tungsten, total	mg/L	-	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0001
Uranium, total	mg/L	-	0.00265	0.00183	0.00515	0.00318	0.00375	0.00384	0.00304	0.004	0.00399	0.00277
Vanadium, total	mg/L	-	< 0.0005	0.00101	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0005
Zinc, total	mg/L	0.8	< 0.003	< 0.003	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.003
Zirconium, total	mg/L	-	< 0.0002	< 0.0002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.0002

Table E.6.5: Water Quality Results for Water Licence Monitoring Location - WRF-WEST

Monitoring Station			MS-08-WEST-US1	MS-08-WEST-US2	MS-08-WEST-INFLOW	MS-08-WEST-US1	MS-08-WEST-INFLOW	MS-08-WEST-US1	MS-08-WEST-US2	MS-08-WEST-INFLOW	MS-08-WEST-US1	MS-08-WEST-US2
ALS Laboratory Work Order			BF2500227	BF2500227	BF2500250	BF2500250	BF2500261	BF2500261	BF2500261	BF2500276	BF2500276	BF2500276
Sample Date & Time			2025-08-01 09:35	2025-08-01 10:05	2025-08-09 11:15	2025-08-09 12:20	2025-08-14 10:20	2025-08-14 10:55	2025-08-14 11:20	2025-08-20 09:35	2025-08-20 09:45	2025-08-20 10:05
Analyte	Units	Criteria ¹										
Aluminum, dissolved	mg/L	-	0.0455	0.114	-	-	-	-	-	-	-	-
Antimony, dissolved	mg/L	-	< 0.001	< 0.0001	-	-	-	-	-	-	-	-
Arsenic, dissolved	mg/L	-	< 0.001	< 0.0001	-	-	-	-	-	-	-	-
Barium, dissolved	mg/L	-	0.0333	0.0266	-	-	-	-	-	-	-	-
Beryllium, dissolved	mg/L	-	< 0.0002	< 0.00002	-	-	-	-	-	-	-	-
Bismuth, dissolved	mg/L	-	< 0.0005	< 0.00005	-	-	-	-	-	-	-	-
Boron, dissolved	mg/L	-	< 0.1	0.02	-	-	-	-	-	-	-	-
Cadmium, dissolved	mg/L	-	0.000052	0.0000063	-	-	-	-	-	-	-	-
Calcium, dissolved	mg/L	-	67.1	35.8	-	-	-	-	-	-	-	-
Cesium, dissolved	mg/L	-	< 0.0001	0.000014	-	-	-	-	-	-	-	-
Chromium, dissolved	mg/L	-	< 0.005	< 0.0005	-	-	-	-	-	-	-	-
Cobalt, dissolved	mg/L	-	0.00763	0.00118	-	-	-	-	-	-	-	-
Copper, dissolved	mg/L	-	< 0.002	0.00083	-	-	-	-	-	-	-	-
Iron, dissolved	mg/L	-	< 0.1	0.164	-	-	-	-	-	-	-	-
Lead, dissolved	mg/L	-	< 0.0005	0.000139	-	-	-	-	-	-	-	-
Lithium, dissolved	mg/L	-	< 0.01	0.0044	-	-	-	-	-	-	-	-
Magnesium, dissolved	mg/L	-	173	49.2	-	-	-	-	-	-	-	-
Manganese, dissolved	mg/L	-	1.26	0.0211	-	-	-	-	-	-	-	-
Molybdenum, dissolved	mg/L	-	0.00658	0.00566	-	-	-	-	-	-	-	-
Nickel, dissolved	mg/L	-	0.00517	0.00074	-	-	-	-	-	-	-	-
Phosphorus (P), dissolved	mg/L	-	< 0.5	< 0.05	-	-	-	-	-	-	-	-
Potassium, dissolved	mg/L	-	6.14	4.2	-	-	-	-	-	-	-	-
Rubidium, dissolved	mg/L	-	0.00476	0.00334	-	-	-	-	-	-	-	-
Selenium, dissolved	mg/L	-	0.0103	0.00611	-	-	-	-	-	-	-	-
Silicon, dissolved	mg/L	-	1.81	1.78	-	-	-	-	-	-	-	-
Silver, dissolved	mg/L	-	< 0.0001	< 0.00001	-	-	-	-	-	-	-	-
Sodium, dissolved	mg/L	-	8.27	2.68	-	-	-	-	-	-	-	-
Strontium, dissolved	mg/L	-	0.0892	0.0419	-	-	-	-	-	-	-	-
Sulfur, dissolved	mg/L	-	199	51.1	-	-	-	-	-	-	-	-
Tellurium, dissolved	mg/L	-	< 0.002	< 0.0002	-	-	-	-	-	-	-	-
Thallium, dissolved	mg/L	-	< 0.0001	0.000013	-	-	-	-	-	-	-	-
Thorium, dissolved	mg/L	-	< 0.001	< 0.0001	-	-	-	-	-	-	-	-
Tin, dissolved	mg/L	-	< 0.001	< 0.0001	-	-	-	-	-	-	-	-
Titanium, dissolved	mg/L	-	< 0.003	0.00881	-	-	-	-	-	-	-	-
Tungsten, dissolved	mg/L	-	< 0.001	< 0.0001	-	-	-	-	-	-	-	-
Uranium, dissolved	mg/L	-	0.00279	0.00188	-	-	-	-	-	-	-	-
Vanadium, dissolved	mg/L	-	< 0.005	< 0.0005	-	-	-	-	-	-	-	-
Zinc, dissolved	mg/L	-	< 0.01	< 0.001	-	-	-	-	-	-	-	-
Zirconium, dissolved	mg/L	-	< 0.003	< 0.0003	-	-	-	-	-	-	-	-

Notes:
Reference: Waste Rock Facility QAQC Monitoring Plan (BIM-5200-PLA-0034)
¹Table A1 - WRF Water Quality Lower Action Level and Water Licence/MDMER Limits

Table E.6.6: Water Quality Results for Water Licence Monitoring Location - WRF-SEEPS

Monitoring Station			MS-WRF-25-01	MS-WRF-25-02	MS-WRF-25-03	MS-WRF-25-04	MS-WRF-25-05	MS-WRF-25-06	MS-WRF-25-07	MS-WRF-25-08	MS-WRF-25-09
ALS Laboratory Work Order			BF2500135	BF2500135	BF2500135	BF2500135	BF2500135	BF2500135	BF2500135	BF2500135	BF2500135
Sample Date & Time			2025-07-04 11:05	2025-07-04 14:20	2025-07-04 14:30	2025-07-04 14:50	2025-07-04 15:05	2025-07-04 15:20	2025-07-04 15:45	2025-07-04 15:55	2025-07-04 16:15
Analyte	Units	Criteria ¹									
pH, Field	pH units	-	7.72	7.3	7.29	6.99	7.33	7.42	7.29	7.42	7.48
Specific Conductivity, Field	us/cm	-	277.2	120.4	222.1	698	811	432.6	1031	1358	640
Temperature, Field	deg C	-	1.4	3.9	2.7	5.6	3.9	2.4	5.8	4.9	4.9
Turbidity, Field	NTU	-	11.05	227.52	120	5.29	11.9	6.05	230	21.3	269.8
Visible Sheen, Field	None	-	-	-	-	-	-	-	-	-	-
Conductivity, Lab	us/cm	-	288	372	379	708	807	434	1020	1330	1270
Total Alkalinity	mg/L	-	-	-	-	-	-	-	-	-	-
Hardness	mg/L	-	-	-	-	-	-	-	-	-	-
Total Dissolved Solids	mg/L	-	195	240	259	489	374	279	781	1060	1020
Total Suspended Solids	mg/L	-	88.1	1200	336	47.5	5.4	36.1	474	82.6	318
Turbidity, Lab	NTU	-	11.1	311	111	11.8	0.77	3.59	105	21.5	107
pH, Lab	pH units	-	7.53	7.64	7.33	7.33	7.61	7.55	7.42	7.36	7.2
Total Ammonia	mg/L	-	0.326	2.08	2.15	1.18	0.0985	0.201	0.278	1.24	0.616
Chloride	mg/L	-	-	-	-	-	-	-	-	-	-
Fluoride	mg/L	-	-	-	-	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	-	-	-	-	-	-	-	-	-	-
Nitrate	mg/L	-	-	-	-	-	-	-	-	-	-
Nitrite	mg/L	-	-	-	-	-	-	-	-	-	-
Phosphorus, Nutrient	mg/L	-	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	-	-	-	-	-
Phenols	mg/L	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon	mg/L	-	-	-	-	-	-	-	-	-	-
Total Organic Carbon	mg/L	-	-	-	-	-	-	-	-	-	-
Aluminum, total	mg/L	-	2.37	10	39.6	1.26	0.0486	0.935	15.3	2.48	4.63
Antimony, total	mg/L	-	< 0.001	< 0.001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001
Arsenic, total	mg/L	0.48	< 0.001	0.00194	0.00368	0.00026	< 0.0001	0.00021	0.00235	< 0.001	0.00101
Barium, total	mg/L	-	0.0127	0.0503	0.136	0.0172	0.0195	0.0078	0.091	0.0221	0.0338
Beryllium, total	mg/L	-	< 0.0002	0.000446	0.00186	0.000054	< 0.00002	0.000035	0.000637	< 0.0002	0.000202
Bismuth, total	mg/L	-	< 0.0005	< 0.0005	0.00182	< 0.00005	< 0.00005	< 0.00005	0.000792	< 0.0005	< 0.0005
Boron, total	mg/L	-	< 0.1	< 0.1	< 0.1	0.024	0.021	0.017	< 0.1	< 0.1	< 0.1
Cadmium, total	mg/L	-	< 0.00005	< 0.00005	0.000159	0.0000129	< 0.000005	< 0.000005	0.000088	0.000103	< 0.00005
Calcium, total	mg/L	-	12.3	15.7	15.3	20.5	20.7	10.1	26.6	33.6	29.4
Cesium, total	mg/L	-	< 0.0001	0.000467	0.00164	0.000061	< 0.00001	0.000041	0.000571	0.000114	0.000192
Chromium, total	mg/L	-	0.0121	0.0565	0.199	0.00535	< 0.0005	0.00363	0.0614	0.00593	0.0138
Cobalt, total	mg/L	-	0.00391	0.00899	0.0386	0.004	0.00103	0.00185	0.0182	0.0121	0.00706
Copper, total	mg/L	0.48	< 0.005	0.0346	0.138	0.00378	0.00051	0.00256	0.0477	< 0.005	0.00744
Iron, total	mg/L	-	4.53	15.7	62.3	2.37	0.073	1.71	25.7	4.22	8.19
Lead, total	mg/L	0.16	0.000611	0.00426	0.0142	0.000386	< 0.00005	0.000233	0.0056	0.00058	0.00148
Lithium, total	mg/L	-	< 0.01	< 0.01	0.0376	0.0044	0.0018	0.0029	0.0176	< 0.01	< 0.01
Magnesium, total	mg/L	-	25.9	38.6	70.7	70.8	52.5	44.7	124	168	159
Manganese, total	mg/L	-	0.11	0.295	1.39	0.103	0.00244	0.049	0.691	2.23	1.1
Mercury, total	mg/L	-	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Molybdenum, total	mg/L	-	0.00376	0.00559	0.00183	0.0035	0.00539	0.00482	0.00339	0.00582	0.00471
Nickel, total	mg/L	0.8	0.0103	0.0366	0.123	0.00649	0.00052	0.00344	0.0488	0.0188	0.0141
Phosphorus (P), total	mg/L	-	< 0.5	< 0.5	0.694	< 0.05	< 0.05	0.056	0.725	< 0.5	< 0.5
Potassium, total	mg/L	-	3.07	5.57	7.64	4.26	3.52	3.06	10.1	6.31	7.33
Rubidium, total	mg/L	-	0.00396	0.0183	0.0488	0.00696	0.00193	0.00327	0.025	0.00795	0.0105
Selenium, total	mg/L	-	0.00194	0.00197	0.00118	0.00593	0.0137	0.0121	0.0102	0.0107	0.0111
Silicon, total	mg/L	-	4.16	16.3	39.3	4.21	1.22	3.26	22.3	5.15	7.85
Silver, total	mg/L	-	< 0.0001	< 0.0001	0.00045	< 0.00001	< 0.00001	< 0.00001	0.00011	< 0.0001	< 0.0001
Sodium, total	mg/L	-	1.27	2.89	2.08	4.72	2.51	2.76	4.95	6.1	5.74
Strontium, total	mg/L	-	0.0174	0.0281	0.0272	0.0372	0.0309	0.0176	0.0668	0.0673	0.0714
Sulfur, total	mg/L	-	22.2	7.94	< 5	23.1	21	26.6	114	205	188
Tellurium, total	mg/L	-	< 0.002	< 0.002	< 0.002	< 0.0002	< 0.0002	< 0.0002	< 0.002	< 0.002	< 0.002
Thallium, total	mg/L	-	< 0.0001	0.000127	0.000369	0.000034	< 0.00001	0.000021	0.000204	< 0.0001	< 0.0001
Thorium, total	mg/L	-	< 0.001	0.00166	0.00398	0.00015	< 0.0001	0.00014	0.00309	< 0.001	< 0.001
Tin, total	mg/L	-	< 0.001	< 0.001	0.00127	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001
Titanium, total	mg/L	-	0.0484	0.289	0.981	0.0299	< 0.0021	0.0265	0.467	0.0625	0.118
Tungsten, total	mg/L	-	< 0.001	< 0.001	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001
Uranium, total	mg/L	-	0.000554	0.00536	0.00336	0.000904	0.000409	0.00033	0.00162	0.00106	0.0013
Vanadium, total	mg/L	-	< 0.005	0.0186	0.0647	0.00204	< 0.0005	0.00141	0.0198	< 0.005	0.00532
Zinc, total	mg/L	0.8	< 0.03	< 0.03	0.0814	0.0034	< 0.003	< 0.003	0.0364	< 0.03	< 0.03
Zirconium, total	mg/L	-	< 0.002	< 0.002	< 0.002	0.00032	< 0.0002	0.00023	< 0.002	< 0.002	< 0.002

Notes:
Reference: Waste Rock Facility QAQC Monitoring Plan (BIM-5200-PLA-0034)
¹Table A1 - WRF Water Quality Lower Action Level and Water Licence/MDMER Limits

Table E.6.6: Water Quality Results for Water Licence Monitoring Location - WRF-SEEPS

Monitoring Station			MS-WRF-25-10	MS-WRF-25-11	MS-WRF-25-12	MS-WRF-25-13	MS-WRF-25-14	MS-WRF-25-15	MS-WRF-25-16	MS-WRF-25-17	MS-WRF-25-18
ALS Laboratory Work Order			BF2500135	BF2500135	BF2500173	BF2500173	BF2500173	BF2500173	BF2500173	BF2500173	BF2500173
Sample Date & Time			2025-07-05 11:00	2025-07-05 11:15	2025-07-17 10:15	2025-07-17 10:30	2025-07-17 10:40	2025-07-17 10:50	2025-07-17 11:00	2025-07-17 11:15	2025-07-17 11:25
Analyte	Units	Criteria ¹									
pH, Field	pH units	-	7.7	6.98	7.75	7.96	7.78	7.77	7.77	7.67	7.66
Specific Conductivity, Field	us/cm	-	195.7	135.8	383.1	639	345.9	582	592	1006	895
Temperature, Field	deg C	-	5.1	2	4.6	1.5	1.5	1.4	0.9	0.9	1.5
Turbidity, Field	NTU	-	94.88	83.15	84.96	101.73	120.45	153.11	153.44	41.12	72.28
Visible Sheen, Field	None	-	-	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Conductivity, Lab	us/cm	-	191	137	365	603	326	551	561	950	846
Total Alkalinity	mg/L	-	-	-	-	-	-	-	-	-	-
Hardness	mg/L	-	-	-	-	-	-	-	-	-	-
Total Dissolved Solids	mg/L	-	128	91	218	358	186	316	307	664	566
Total Suspended Solids	mg/L	-	136	136	83.6	173	190	310	387	104	225
Turbidity, Lab	NTU	-	64.9	76.4	71.8	113	132	222	194	49.6	100
pH, Lab	pH units	-	6.95	7.38	7.62	7.74	7.69	7.66	7.67	7.52	7.5
Total Ammonia	mg/L	-	0.134	0.209	0.277	5.11	0.73	3.98	3.97	2.78	2.45
Chloride	mg/L	-	-	-	-	-	-	-	-	-	-
Fluoride	mg/L	-	-	-	-	-	-	-	-	-	-
Total Kjeldahl Nitrogen	mg/L	-	-	-	-	-	-	-	-	-	-
Nitrate	mg/L	-	-	-	-	-	-	-	-	-	-
Nitrite	mg/L	-	-	-	-	-	-	-	-	-	-
Phosphorus, Nutrient	mg/L	-	-	-	-	-	-	-	-	-	-
Sulfate	mg/L	-	-	-	-	-	-	-	-	-	-
Phenols	mg/L	-	-	-	-	-	-	-	-	-	-
Dissolved Organic Carbon	mg/L	-	-	-	-	-	-	-	-	-	-
Total Organic Carbon	mg/L	-	-	-	-	-	-	-	-	-	-
Aluminum, total	mg/L	-	3.56	3.8	3.6	6.98	7.01	9.98	13.4	3.21	3.82
Antimony, total	mg/L	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Arsenic, total	mg/L	0.48	< 0.001	< 0.001	< 0.001	0.00108	< 0.001	0.00132	0.00137	< 0.001	< 0.001
Barium, total	mg/L	-	0.0255	0.026	0.0446	0.0532	0.0473	0.0464	0.0767	0.0339	0.0343
Beryllium, total	mg/L	-	0.000233	< 0.0002	< 0.0002	0.000322	0.000316	0.000419	0.000584	< 0.0002	< 0.0002
Bismuth, total	mg/L	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Boron, total	mg/L	-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Cadmium, total	mg/L	-	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	0.000185	0.000068
Calcium, total	mg/L	-	7.84	5.86	8.92	18.2	9.15	13.4	13.8	28.1	24
Cesium, total	mg/L	-	0.000344	0.000414	0.000265	0.000439	0.00061	0.000455	0.000891	0.000199	0.000288
Chromium, total	mg/L	-	0.0112	0.0125	0.0125	0.0196	0.0136	0.0172	0.0222	0.0069	0.00879
Cobalt, total	mg/L	-	0.00483	0.00346	0.00366	0.00836	0.00628	0.00874	0.0111	0.0043	0.00439
Copper, total	mg/L	0.48	0.0154	0.00745	0.00762	0.0193	0.0125	0.0185	0.0197	0.00669	0.00786
Iron, total	mg/L	-	7.05	5.78	5.71	11.4	10.9	17.3	22.1	5.35	6.03
Lead, total	mg/L	0.16	0.00213	0.00254	0.000951	0.00189	0.0026	0.00433	0.00576	0.00156	0.00198
Lithium, total	mg/L	-	< 0.01	< 0.01	< 0.01	0.0128	< 0.01	0.0127	0.0181	< 0.01	< 0.01
Magnesium, total	mg/L	-	18.1	14	39.1	56.6	35.2	60	60.4	98	87
Manganese, total	mg/L	-	0.276	0.116	0.143	0.24	0.22	0.339	0.394	0.385	0.402
Mercury, total	mg/L	-	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Molybdenum, total	mg/L	-	0.00188	0.00254	0.0231	0.0146	0.0123	0.00975	0.00752	0.0124	0.0124
Nickel, total	mg/L	0.8	0.0111	0.00915	0.00735	0.0158	0.0113	0.0188	0.0228	0.00666	0.00817
Phosphorus (P), total	mg/L	-	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Potassium, total	mg/L	-	3.15	3.01	5.88	7.79	4.93	5.54	6.79	8.49	7.58
Rubidium, total	mg/L	-	0.00966	0.011	0.00752	0.0165	0.0152	0.0168	0.027	0.0107	0.0122
Selenium, total	mg/L	-	0.00116	0.00135	0.00548	0.00305	0.00322	0.00546	0.00498	0.00222	0.00241
Silicon, total	mg/L	-	5.86	6.37	6.66	11.5	11.5	16.2	20.2	5.93	7.16
Silver, total	mg/L	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Sodium, total	mg/L	-	0.991	1.02	1.88	6.44	3.02	1.88	4.12	7.09	6.22
Strontium, total	mg/L	-	0.0128	0.0107	0.032	0.0498	0.022	0.0361	0.0353	0.0856	0.0743
Sulfur, total	mg/L	-	18.4	7.44	29.9	28.2	15.4	32.3	31.3	99.5	85.6
Tellurium, total	mg/L	-	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Thallium, total	mg/L	-	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.000152	< 0.0001	< 0.0001
Thorium, total	mg/L	-	0.00184	0.0018	< 0.001	0.00183	0.00208	0.00323	0.00345	< 0.001	0.00121
Tin, total	mg/L	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Titanium, total	mg/L	-	0.146	0.184	0.139	0.254	0.294	0.256	0.48	0.102	0.161
Tungsten, total	mg/L	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Uranium, total	mg/L	-	0.000891	0.000794	0.00121	0.00611	0.00304	0.00466	0.0051	0.00842	0.00513
Vanadium, total	mg/L	-	0.00586	0.00641	< 0.005	0.00906	0.00926	0.01	0.0145	< 0.005	0.00571
Zinc, total	mg/L	0.8	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Zirconium, total	mg/L	-	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.00526	0.00212	< 0.002	< 0.002

Notes:
Reference: Waste Rock Facility QAQC Monitoring Plan (BIM-5200-PLA-0034)
¹Table A1 - WRF Water Quality Lower Action Level and Water Licence/MDMER Limits

Table E.6.6: Water Quality Results for Water Licence Monitoring Location - WRF-SEEPS

Monitoring Station			MS-WRF-25-19	MS-WRF-25-20	MS-WRF-25-21	MS-WRF-25-01	MS-WRF-25-22	MS-WRF-25-23	MS-WRF-25-07	MS-WRF-25-08	MS-WRF-25-24
ALS Laboratory Work Order			BF2500173	BF2500173	BF2500173	BF2500272	BF2500272	BF2500272	BF2500272	BF2500272	BF2500272
Sample Date & Time			2025-07-17 11:40	2025-07-17 12:20	2025-07-17 12:30	2025-08-19 08:50	2025-08-19 09:10	2025-08-19 09:45	2025-08-19 10:05	2025-08-19 10:30	2025-08-19 10:55
Analyte	Units	Criteria ¹									
pH, Field	pH units	-	7.64	7.74	7.68	7.1	7.23	7.6	7.38	7.35	7.37
Specific Conductivity, Field	us/cm	-	820	1519	935	270.1	581	575	1495	1443	3240
Temperature, Field	deg C	-	1.6	2.4	2.3	3.3	1.3	1.6	2.1	2	1.5
Turbidity, Field	NTU	-	102.05	29.64	22.56	0.51	-0.45	10.33	18.91	15.68	3.15
Visible Sheen, Field	None	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Conductivity, Lab	us/cm	-	776	1470	877	-	-	-	-	-	-
Total Alkalinity	mg/L	-	-	-	-	66.8	64.9	93.3	33.6	41.3	43.7
Hardness	mg/L	-	-	-	-	278	280	1080	1900	1880	1940
Total Dissolved Solids	mg/L	-	511	1000	576	383	375	1720	2800	2860	2970
Total Suspended Solids	mg/L	-	181	40	50	< 1	< 1	12.2	25.5	103	5.8
Turbidity, Lab	NTU	-	117	21.8	33.8	0.44	0.23	6.27	4.92	13.7	1.66
pH, Lab	pH units	-	7.49	7.56	7.47	7.63	7.75	7.77	7.34	7.44	7.45
Total Ammonia	mg/L	-	2.2	2.88	2.55	0.126	0.0177	5.47	3.94	3.03	3.23
Chloride	mg/L	-	-	-	-	2.75	2.87	22.4	54.6	58.3	63.5
Fluoride	mg/L	-	-	-	-	0.07	0.078	< 0.1	< 0.1	0.123	0.121
Total Kjeldahl Nitrogen	mg/L	-	-	-	-	0.628	1.25	7.74	6.93	5.73	6.11
Nitrate	mg/L	-	-	-	-	15.1	17.2	137	140	125	133
Nitrite	mg/L	-	-	-	-	0.025	0.013	0.354	0.255	0.275	0.244
Phosphorus, Nutrient	mg/L	-	-	-	-	0.0066	0.0025	0.0112	0.0485	0.0446	0.0041
Sulfate	mg/L	-	-	-	-	156	153	506	1290	1260	1350
Phenols	mg/L	-	-	-	-	< 0.001	< 0.001	0.0011	0.0011	0.0016	0.0016
Dissolved Organic Carbon	mg/L	-	-	-	-	0.51	0.53	3.34	2.7	3.08	3.27
Total Organic Carbon	mg/L	-	-	-	-	1.32	1.26	4.25	3.2	3.52	3.45
Aluminum, total	mg/L	-	6.17	1.05	1.26	0.0475	0.0107	0.298	2.37	1.97	0.153
Antimony, total	mg/L	-	< 0.001	< 0.001	< 0.001	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Arsenic, total	mg/L	0.48	0.00124	< 0.001	< 0.001	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Barium, total	mg/L	-	0.0366	0.0153	0.0136	0.0157	0.0154	0.0153	0.0284	0.027	0.0203
Beryllium, total	mg/L	-	0.000245	< 0.0002	< 0.0002	< 0.00002	< 0.00002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Bismuth, total	mg/L	-	< 0.0005	< 0.0005	< 0.0005	< 0.00005	< 0.00005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Boron, total	mg/L	-	< 0.1	< 0.1	< 0.1	0.024	0.023	< 0.1	< 0.1	< 0.1	< 0.1
Cadmium, total	mg/L	-	0.000074	0.00126	0.000541	0.0000074	0.0000081	< 0.00005	< 0.00005	0.000227	0.000228
Calcium, total	mg/L	-	25.4	38.2	26.1	31.7	31.3	101	78	93.5	99.2
Cesium, total	mg/L	-	0.00036	0.000137	< 0.0001	< 0.00001	< 0.00001	< 0.0001	< 0.0001	0.000111	< 0.0001
Chromium, total	mg/L	-	0.0114	< 0.005	< 0.005	< 0.0005	< 0.0005	< 0.005	0.0104	0.00584	< 0.005
Cobalt, total	mg/L	-	0.00669	0.00578	0.00424	0.00071	0.00073	0.0105	0.0164	0.0267	0.025
Copper, total	mg/L	0.48	0.00982	0.00502	0.00533	< 0.0005	< 0.0005	< 0.005	0.00629	0.00616	< 0.005
Iron, total	mg/L	-	10.4	1.96	2.32	0.078	0.018	0.623	4.82	3.82	0.405
Lead, total	mg/L	0.16	0.00222	0.00664	0.0105	< 0.00005	< 0.00005	< 0.0005	0.000512	< 0.0005	< 0.0005
Lithium, total	mg/L	-	< 0.01	< 0.01	< 0.01	0.004	0.0033	< 0.01	0.026	< 0.01	< 0.01
Magnesium, total	mg/L	-	77.3	160	88.4	48.3	49	202	415	401	412
Manganese, total	mg/L	-	0.378	0.601	1.56	0.00796	0.00192	0.283	3.35	4.96	4.87
Mercury, total	mg/L	-	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Molybdenum, total	mg/L	-	0.0085	0.0113	0.0101	0.00664	0.00726	0.00355	0.00334	0.0117	0.0131
Nickel, total	mg/L	0.8	0.015	< 0.005	0.0065	0.00064	< 0.0005	< 0.005	0.0179	0.0256	0.0208
Phosphorus (P), total	mg/L	-	< 0.5	< 0.5	< 0.5	< 0.05	< 0.05	< 0.5	< 0.5	< 0.5	< 0.5
Potassium, total	mg/L	-	7.17	7.45	6.65	4.3	4.49	3.61	8.81	11.1	11.3
Rubidium, total	mg/L	-	0.0139	0.0101	0.00692	0.00256	0.00222	0.00559	0.00884	0.0108	0.00981
Selenium, total	mg/L	-	0.00271	0.00312	0.00204	0.00373	0.00376	0.0154	0.0194	0.0177	0.0185
Silicon, total	mg/L	-	11	3.23	3.52	1.5	1.45	3.06	5.32	4.86	2.54
Silver, total	mg/L	-	< 0.0001	< 0.0001	< 0.0001	< 0.00001	< 0.00001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Sodium, total	mg/L	-	5.6	13.4	3.96	2.44	2.48	9.45	20.9	20.3	21.2
Strontium, total	mg/L	-	0.0661	0.0968	0.0601	0.0402	0.04	0.143	0.201	0.223	0.235
Sulfur, total	mg/L	-	72.2	149	102	55.6	54.4	173	444	453	474
Tellurium, total	mg/L	-	< 0.002	< 0.002	< 0.002	< 0.0002	< 0.0002	< 0.002	< 0.002	< 0.002	< 0.002
Thallium, total	mg/L	-	< 0.0001	< 0.0001	< 0.0001	< 0.00001	< 0.00001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Thorium, total	mg/L	-	0.00203	< 0.001	< 0.001	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Tin, total	mg/L	-	< 0.001	< 0.001	< 0.001	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Titanium, total	mg/L	-	0.207	0.0405	0.0219	< 0.0012	< 0.0003	0.00563	< 0.042	< 0.039	< 0.003
Tungsten, total	mg/L	-	< 0.001	< 0.001	< 0.001	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Uranium, total	mg/L	-	0.00521	0.0124	0.00808	0.00234	0.00287	0.0136	0.000541	0.0056	0.00648
Vanadium, total	mg/L	-	0.00714	< 0.005	< 0.005	< 0.0005	< 0.0005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc, total	mg/L	0.8	< 0.03	< 0.03	< 0.03	< 0.003	< 0.003	< 0.03	< 0.03	< 0.03	< 0.03
Zirconium, total	mg/L	-	< 0.002	< 0.002	< 0.002	< 0.0002	< 0.0002	< 0.002	< 0.002	< 0.002	< 0.002
Aluminum, dissolved	mg/L	-	-	-	-	0.0014	0.0016	< 0.01	< 0.01	< 0.01	< 0.01
Antimony, dissolved	mg/L	-	-	-	-	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Arsenic, dissolved	mg/L	-	-	-	-	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Barium, dissolved	mg/L	-	-	-	-	0.015	0.0151	0.0138	0.0231	0.019	0.0206
Beryllium, dissolved	mg/L	-	-	-	-	< 0.00002	< 0.00002	< 0.0002	< 0.0002	< 0.0002	< 0.0002

Table E.6.6: Water Quality Results for Water Licence Monitoring Location - WRF-SEEPS

Monitoring Station			MS-WRF-25-19	MS-WRF-25-20	MS-WRF-25-21	MS-WRF-25-01	MS-WRF-25-22	MS-WRF-25-23	MS-WRF-25-07	MS-WRF-25-08	MS-WRF-25-24
ALS Laboratory Work Order			BF2500173	BF2500173	BF2500173	BF2500272	BF2500272	BF2500272	BF2500272	BF2500272	BF2500272
Sample Date & Time			2025-07-17 11:40	2025-07-17 12:20	2025-07-17 12:30	2025-08-19 08:50	2025-08-19 09:10	2025-08-19 09:45	2025-08-19 10:05	2025-08-19 10:30	2025-08-19 10:55
Analyte	Units	Criteria ¹									
Bismuth, dissolved	mg/L	-	-	-	-	< 0.00005	< 0.00005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Boron, dissolved	mg/L	-	-	-	-	0.023	0.023	< 0.1	< 0.1	< 0.1	< 0.1
Cadmium, dissolved	mg/L	-	-	-	-	0.0000064	0.0000074	< 0.00005	< 0.00005	0.000232	0.000254
Calcium, dissolved	mg/L	-	-	-	-	29.4	29.3	94.1	73.1	93.6	98.1
Cesium, dissolved	mg/L	-	-	-	-	< 0.00001	< 0.00001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium, dissolved	mg/L	-	-	-	-	< 0.0005	< 0.0005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt, dissolved	mg/L	-	-	-	-	0.00062	0.00069	0.0103	0.0127	0.0257	0.0252
Copper, dissolved	mg/L	-	-	-	-	0.00028	0.00029	< 0.002	< 0.002	0.00261	0.00561
Iron, dissolved	mg/L	-	-	-	-	< 0.01	< 0.01	< 0.1	0.106	0.135	0.142
Lead, dissolved	mg/L	-	-	-	-	< 0.00005	< 0.00005	< 0.0005	< 0.0005	< 0.0005	0.000644
Lithium, dissolved	mg/L	-	-	-	-	0.0044	0.0037	< 0.01	0.0236	< 0.01	< 0.01
Magnesium, dissolved	mg/L	-	-	-	-	46.2	46.8	196	390	396	420
Manganese, dissolved	mg/L	-	-	-	-	0.00159	0.00061	0.264	2.99	4.73	4.91
Mercury, dissolved	mg/L	-	-	-	-	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Molybdenum, dissolved	mg/L	-	-	-	-	0.00631	0.00694	0.00396	0.00318	0.0129	0.0144
Nickel, dissolved	mg/L	-	-	-	-	< 0.0005	< 0.0005	< 0.005	0.0051	0.0206	0.0197
Phosphorus (P), dissolved	mg/L	-	-	-	-	< 0.05	< 0.05	< 0.5	< 0.5	< 0.5	< 0.5
Potassium, dissolved	mg/L	-	-	-	-	4.13	4.32	3.41	8.1	10.8	11.2
Rubidium, dissolved	mg/L	-	-	-	-	0.00243	0.00199	0.00581	0.00689	0.00924	0.00935
Selenium, dissolved	mg/L	-	-	-	-	0.0036	0.00365	0.0151	0.0201	0.0185	0.0198
Silicon, dissolved	mg/L	-	-	-	-	1.38	1.4	2.59	2.21	2.47	2.39
Silver, dissolved	mg/L	-	-	-	-	< 0.00001	< 0.00001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Sodium, dissolved	mg/L	-	-	-	-	2.26	2.36	9.17	19.8	19.6	20.5
Strontium, dissolved	mg/L	-	-	-	-	0.0363	0.0379	0.136	0.191	0.225	0.236
Sulfur, dissolved	mg/L	-	-	-	-	54.7	53	175	467	482	501
Tellurium, dissolved	mg/L	-	-	-	-	< 0.0002	< 0.0002	< 0.002	< 0.002	< 0.002	< 0.002
Thallium, dissolved	mg/L	-	-	-	-	< 0.00001	< 0.00001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Thorium, dissolved	mg/L	-	-	-	-	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Tin, dissolved	mg/L	-	-	-	-	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Titanium, dissolved	mg/L	-	-	-	-	< 0.0003	< 0.0003	< 0.003	< 0.003	< 0.003	< 0.003
Tungsten, dissolved	mg/L	-	-	-	-	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Notes:	mg/L	-	-	-	-	0.00222	0.00273	0.0131	0.000364	0.00536	0.00657
Vanadium, dissolved	mg/L	-	-	-	-	< 0.0005	< 0.0005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc, dissolved	mg/L	-	-	-	-	< 0.001	< 0.001	< 0.01	< 0.01	< 0.01	< 0.01
Zirconium, dissolved	mg/L	-	-	-	-	< 0.0003	< 0.0003	< 0.003	< 0.003	< 0.003	< 0.003

Notes:
Reference: Waste Rock Facility QAQC Monitoring Plan (BIM-5200-PLA-0034)
¹Table A1 - WRF Water Quality Lower Action Level and Water Licence/MDMER Limits

Table E.6.6: Water Quality Results for Water Licence Monitoring Location - WRF-SEEPS

Monitoring Station			MS-WRF-25-25	MS-WRF-25-26	MS-WRF-25-19	MS-WRF-25-27	MS-WRF-25-28	MS-WRF-25-29	MS-WRF-25-30	MS-WRF-25-21
ALS Laboratory Work Order			BF2500272	BF2500272	BF2500272	BF2500272	BF2500272	BF2500272	BF2500272	BF2500272
Sample Date & Time			2025-08-19 11:10	2025-08-19 12:25	2025-08-19 13:35	2025-08-19 14:00	2025-08-19 14:15	2025-08-19 14:30	2025-08-19 14:45	2025-08-19 15:00
Analyte	Units	Criteria ¹								
pH, Field	pH units	-	7.34	7.92	7.27	7.67	7.31	7.41	7.39	7.3
Specific Conductivity, Field	us/cm	-	3238	352.4	1324	281.7	2253	2383	2140	2141
Temperature, Field	deg C	-	2.2	5.8	6.2	4.3	5.2	4	3.4	2.7
Turbidity, Field	NTU	-	7.34	7.46	5.69	0.18	1.03	-0.33	1.26	0.99
Visible Sheen, Field	None	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Conductivity, Lab	us/cm	-	-	-	-	-	-	-	-	-
Total Alkalinity	mg/L	-	60.2	27	31.6	39.3	66.9	58.6	54.7	57.3
Hardness	mg/L	-	1920	137	723	120	1230	1320	1220	1220
Total Dissolved Solids	mg/L	-	2990	228	1060	175	1770	1970	1890	1870
Total Suspended Solids	mg/L	-	11.7	6.2	23.8	< 1	2.3	< 1	12.5	9.7
Turbidity, Lab	NTU	-	3.57	4.48	9.88	1.18	0.24	0.3	3.67	1.22
pH, Lab	pH units	-	7.4	7.81	7.62	7.93	7.91	7.62	7.46	7.43
Total Ammonia	mg/L	-	4.1	0.0078	0.0258	< 0.005	0.126	0.452	1.34	1.68
Chloride	mg/L	-	76	0.64	16.1	1.57	74.3	96	21	22
Fluoride	mg/L	-	< 0.1	0.153	0.117	0.084	< 0.1	0.102	0.102	0.101
Total Kjeldahl Nitrogen	mg/L	-	3.8	0.252	0.34	0.225	10.7	14.9	3.43	3.78
Nitrate	mg/L	-	161	2.15	40.4	4.17	99.7	115	78.9	80.2
Nitrite	mg/L	-	0.286	< 0.01	< 0.05	< 0.01	< 0.05	0.234	0.19	0.149
Phosphorus, Nutrient	mg/L	-	0.0111	0.0176	0.0087	0.0026	0.0037	0.0032	0.0072	0.0059
Sulfate	mg/L	-	1220	109	528	72.6	673	734	861	873
Phenols	mg/L	-	0.0017	< 0.001	0.001	< 0.001	0.0014	0.0012	0.0014	0.0011
Dissolved Organic Carbon	mg/L	-	4	< 0.5	1.18	< 0.5	1.64	2.47	1.72	1.83
Total Organic Carbon	mg/L	-	3.86	1.17	1.4	0.87	2.39	3.17	2.32	2.31
Aluminum, total	mg/L	-	0.282	0.42	0.1	0.0172	0.0457	< 0.03	0.321	0.111
Antimony, total	mg/L	-	< 0.001	< 0.0001	< 0.001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Arsenic, total	mg/L	0.48	< 0.001	0.00012	< 0.001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Barium, total	mg/L	-	0.0382	0.00973	0.0216	0.00956	0.0347	0.0278	0.0268	0.028
Beryllium, total	mg/L	-	< 0.0002	0.00003	< 0.0002	< 0.00002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Bismuth, total	mg/L	-	< 0.0005	< 0.00005	< 0.0005	< 0.00005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Boron, total	mg/L	-	< 0.1	0.033	< 0.1	0.016	< 0.1	< 0.1	< 0.1	< 0.1
Cadmium, total	mg/L	-	0.000156	0.000008	< 0.00005	< 0.000005	0.00036	0.000533	0.00156	0.0014
Calcium, total	mg/L	-	119	11.2	55.3	12.3	93.8	85.1	93.4	95.1
Cesium, total	mg/L	-	< 0.0001	0.000042	< 0.0001	< 0.00001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium, total	mg/L	-	< 0.005	0.00064	< 0.005	< 0.0005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt, total	mg/L	-	0.0152	0.0005	0.00321	0.00037	0.00539	0.00599	0.00766	0.0074
Copper, total	mg/L	0.48	< 0.005	0.00152	< 0.005	< 0.0005	< 0.005	< 0.005	0.0434	< 0.005
Iron, total	mg/L	-	0.524	0.707	0.175	0.022	0.12	< 0.1	0.661	0.277
Lead, total	mg/L	0.16	< 0.0005	0.000341	< 0.0005	< 0.00005	< 0.0005	< 0.0005	0.0309	0.00146
Lithium, total	mg/L	-	< 0.01	0.006	< 0.01	0.0018	< 0.01	< 0.01	< 0.01	< 0.01
Magnesium, total	mg/L	-	393	26.5	142	21.7	243	270	240	239
Manganese, total	mg/L	-	0.999	0.023	0.338	0.00089	0.0632	0.0926	2.52	2.42
Mercury, total	mg/L	-	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Molybdenum, total	mg/L	-	0.0256	0.00452	0.00702	0.00782	0.0109	0.0131	0.0127	0.0121
Nickel, total	mg/L	0.8	< 0.005	0.00155	< 0.005	< 0.0005	< 0.005	< 0.005	0.0067	< 0.005
Phosphorus (P), total	mg/L	-	< 0.5	< 0.05	< 0.5	< 0.05	< 0.5	< 0.5	< 0.5	< 0.5
Potassium, total	mg/L	-	10.4	7.44	10.7	3.75	9.55	9.75	12.8	12.3
Rubidium, total	mg/L	-	0.00973	0.00418	0.00395	0.00159	0.00719	0.0076	0.00797	0.00753
Selenium, total	mg/L	-	0.0154	0.00172	0.014	0.00247	0.00613	0.00541	0.00748	0.00757
Silicon, total	mg/L	-	2.28	2.4	2.03	1.39	1.67	1.97	2.63	2.29
Silver, total	mg/L	-	< 0.0001	< 0.00001	< 0.0001	< 0.00001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Sodium, total	mg/L	-	25.3	1.12	5.73	0.925	18.5	21.4	10.3	10.6
Strontium, total	mg/L	-	0.261	0.0186	0.106	0.0219	0.169	0.181	0.225	0.214
Sulfur, total	mg/L	-	419	38	182	24.8	249	258	300	299
Tellurium, total	mg/L	-	< 0.002	< 0.0002	< 0.002	< 0.0002	< 0.002	< 0.002	< 0.002	< 0.002
Thallium, total	mg/L	-	< 0.0001	0.000021	< 0.0001	< 0.00001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Thorium, total	mg/L	-	< 0.001	0.00015	< 0.001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Tin, total	mg/L	-	< 0.001	< 0.0001	< 0.001	< 0.0001	< 0.001	< 0.001	0.00624	< 0.001
Titanium, total	mg/L	-	< 0.0045	0.018	< 0.0036	< 0.0006	< 0.003	< 0.003	< 0.0081	< 0.003
Tungsten, total	mg/L	-	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Uranium, total	mg/L	-	0.0272	0.00632	0.00392	0.000709	0.0197	0.0217	0.0313	0.0274
Vanadium, total	mg/L	-	< 0.005	0.00074	< 0.005	< 0.0005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc, total	mg/L	0.8	< 0.03	< 0.003	< 0.03	< 0.003	< 0.03	< 0.03	0.26	< 0.03
Zirconium, total	mg/L	-	< 0.002	0.0003	< 0.002	< 0.0002	< 0.002	< 0.002	< 0.002	< 0.002
Aluminum, dissolved	mg/L	-	< 0.01	0.0039	< 0.01	0.003	< 0.01	< 0.01	< 0.01	< 0.01
Antimony, dissolved	mg/L	-	< 0.001	< 0.0001	< 0.001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Arsenic, dissolved	mg/L	-	< 0.001	< 0.0001	< 0.001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Barium, dissolved	mg/L	-	0.037	0.00659	0.0209	0.00925	0.0339	0.0274	0.0256	0.0281
Beryllium, dissolved	mg/L	-	< 0.0002	< 0.00002	< 0.0002	< 0.00002	< 0.0002	< 0.0002	< 0.0002	< 0.0002

Table E.6.6: Water Quality Results for Water Licence Monitoring Location - WRF-SEEPS

Monitoring Station			MS-WRF-25-25	MS-WRF-25-26	MS-WRF-25-19	MS-WRF-25-27	MS-WRF-25-28	MS-WRF-25-29	MS-WRF-25-30	MS-WRF-25-21
ALS Laboratory Work Order			BF2500272	BF2500272	BF2500272	BF2500272	BF2500272	BF2500272	BF2500272	BF2500272
Sample Date & Time			2025-08-19 11:10	2025-08-19 12:25	2025-08-19 13:35	2025-08-19 14:00	2025-08-19 14:15	2025-08-19 14:30	2025-08-19 14:45	2025-08-19 15:00
Analyte	Units	Criteria ¹								
Bismuth, dissolved	mg/L	-	< 0.0005	< 0.00005	< 0.0005	< 0.00005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Boron, dissolved	mg/L	-	< 0.1	0.032	< 0.1	0.016	< 0.1	< 0.1	< 0.1	< 0.1
Cadmium, dissolved	mg/L	-	0.000121	< 0.000005	< 0.00005	< 0.000005	0.000336	0.000537	0.00137	0.00116
Calcium, dissolved	mg/L	-	117	10.9	55.2	11.8	91.2	85.8	94	95.4
Cesium, dissolved	mg/L	-	< 0.0001	< 0.00001	< 0.0001	< 0.00001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Chromium, dissolved	mg/L	-	< 0.005	< 0.0005	< 0.005	< 0.0005	< 0.005	< 0.005	< 0.005	< 0.005
Cobalt, dissolved	mg/L	-	0.0146	0.0001	0.00326	0.00037	0.00574	0.00608	0.00743	0.00741
Copper, dissolved	mg/L	-	< 0.002	0.00035	< 0.002	< 0.0002	< 0.002	< 0.002	< 0.002	< 0.002
Iron, dissolved	mg/L	-	0.152	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	< 0.1	< 0.1
Lead, dissolved	mg/L	-	< 0.0005	< 0.00005	< 0.0005	< 0.00005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Lithium, dissolved	mg/L	-	< 0.01	0.006	< 0.01	0.0018	< 0.01	< 0.01	< 0.01	< 0.01
Magnesium, dissolved	mg/L	-	389	26.3	143	20.7	246	267	239	238
Manganese, dissolved	mg/L	-	0.956	0.0044	0.33	0.00068	0.0613	0.0914	2.52	2.16
Mercury, dissolved	mg/L	-	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Molybdenum, dissolved	mg/L	-	0.0246	0.0044	0.00706	0.00728	0.0111	0.0132	0.0127	0.0124
Nickel, dissolved	mg/L	-	< 0.005	0.00079	< 0.005	< 0.0005	< 0.005	< 0.005	< 0.005	< 0.005
Phosphorus (P), dissolved	mg/L	-	< 0.5	< 0.05	< 0.5	< 0.05	< 0.5	< 0.5	< 0.5	< 0.5
Potassium, dissolved	mg/L	-	10.4	6.9	10.6	3.61	9.46	9.46	12.7	11.6
Rubidium, dissolved	mg/L	-	0.00935	0.00316	0.00344	0.00145	0.00694	0.00654	0.0073	0.00704
Selenium, dissolved	mg/L	-	0.014	0.00154	0.0148	0.00224	0.00632	0.00614	0.00752	0.00803
Silicon, dissolved	mg/L	-	2.07	1.85	1.88	1.3	1.64	1.89	2.24	2.24
Silver, dissolved	mg/L	-	< 0.0001	< 0.00001	< 0.0001	< 0.00001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Sodium, dissolved	mg/L	-	24.6	1.1	5.8	0.904	18	21.6	10.4	10.7
Strontium, dissolved	mg/L	-	0.25	0.0177	0.103	0.0201	0.165	0.178	0.22	0.205
Sulfur, dissolved	mg/L	-	427	38.1	193	24.1	264	265	321	331
Tellurium, dissolved	mg/L	-	< 0.002	< 0.0002	< 0.002	< 0.0002	< 0.002	< 0.002	< 0.002	< 0.002
Thallium, dissolved	mg/L	-	< 0.0001	0.000013	< 0.0001	< 0.00001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Thorium, dissolved	mg/L	-	< 0.001	< 0.0001	< 0.001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Tin, dissolved	mg/L	-	< 0.001	< 0.0001	< 0.001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Titanium, dissolved	mg/L	-	< 0.003	< 0.0003	< 0.003	< 0.0003	< 0.003	< 0.003	< 0.003	< 0.003
Tungsten, dissolved	mg/L	-	< 0.001	< 0.0001	< 0.001	< 0.0001	< 0.001	< 0.001	< 0.001	< 0.001
Notes:	mg/L	-	0.025	0.00486	0.00379	0.000666	0.0199	0.0219	0.032	0.0272
Vanadium, dissolved	mg/L	-	< 0.005	< 0.0005	< 0.005	< 0.0005	< 0.005	< 0.005	< 0.005	< 0.005
Zinc, dissolved	mg/L	-	< 0.01	< 0.001	< 0.01	< 0.001	< 0.01	< 0.01	< 0.01	< 0.01
Zirconium, dissolved	mg/L	-	< 0.003	< 0.0003	< 0.003	< 0.0003	< 0.003	< 0.003	< 0.003	< 0.003

Notes:
Reference: Waste Rock Facility QAQC Monitoring Plan (BIM-5200-PLA-0034)
¹Table A1 - WRF Water Quality Lower Action Level and Water Licence/MDMER Limits

Table E.6.7: Water Quality Results for Water Licence Monitoring Location - WRF WQ Monitoring

Monitoring Station			MS-WRF-WQ-21-2	MS-WRF-WQ-22-3	MS-WRF-WQ-22-2	MS-WRF-WQ-21-1	MS-WRF-WQ-21-1	MS-WRF-WQ-21-2
ALS Laboratory Work Order			BF2500152	BF2500152	BF2500152	BF2500152	BF2500191	BF2500259
Sample Date & Time			2025-07-11 10:05	2025-07-11 10:35	2025-07-11 12:35	2025-07-11 14:05	2025-07-23 10:10	2025-08-14 09:30
Analyte	Units	Criteria ¹						
pH, Field	pH units	-	7.49	7.46	7.53	7.35	8.06	7.93
Specific Conductivity, Field	us/cm	-	168.4	819	293.6	162.5	210.4	1292
Temperature, Field	deg C	-	0.5	0.3	1.2	0.5	2.6	3
Turbidity, Field	NTU	-	481.38	118.78	58.8	38.93	14.51	29.86
Visible Sheen, Field	None	-	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen	No Visible Sheen
Conductivity, Lab	us/cm	-	179	841	307	171	209	1290
Total Dissolved Solids	mg/L	-	135	569	203	102	138	996
Total Suspended Solids	mg/L	-	280	115	56	23.9	6.6	54.8
Turbidity, Lab	NTU	-	360	112	74.8	37.8	15.1	17.3
pH, Lab	pH units	-	7.42	7.56	7.39	7.47	7.38	7.71
Total Ammonia	mg/L	-	0.0831	0.917	0.0887	0.0198	0.0063	0.921
Total Kjeldahl Nitrogen	mg/L	-	0.391	1.34	0.404	0.095	-	0.986
Nitrate	mg/L	-	3.93	30.8	7.51	0.837	-	64.2
Nitrite	mg/L	-	< 0.01	0.087	0.014	< 0.01	-	0.103
Phosphorus, Nutrient	mg/L	-	0.244	0.0912	0.0517	0.0364	-	0.0217
Phenols	mg/L	-	-	-	-	-	-	0.0014
Dissolved Organic Carbon	mg/L	-	1.73	2.15	1.31	0.93	-	2.17
Total Organic Carbon	mg/L	-	< 5	2.58	1.35	0.87	-	2.78
Aluminum, total	mg/L	-	16	4.65	3.49	1.96	0.567	1.53
Antimony, total	mg/L	-	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001
Arsenic, total	mg/L	0.48	0.0021	0.00096	0.00068	0.00029	< 0.0001	< 0.001
Barium, total	mg/L	-	0.0651	0.016	0.0134	0.0137	0.00811	0.0254
Beryllium, total	mg/L	-	0.00088	0.000196	0.000144	0.000111	0.000037	< 0.0002
Bismuth, total	mg/L	-	0.000656	0.000094	< 0.00005	< 0.00005	< 0.00005	< 0.0005
Boron, total	mg/L	-	< 0.1	0.035	0.034	0.019	0.02	< 0.1
Cadmium, total	mg/L	-	0.000127	0.000496	0.0000134	0.0000172	0.0000113	< 0.00005
Calcium, total	mg/L	-	5.47	22.6	4.13	6.1	7.48	49.8
Cesium, total	mg/L	-	0.000731	0.000156	0.000075	0.000141	0.000042	< 0.0001
Chromium, total	mg/L	-	0.0358	0.0108	0.0122	0.00245	0.00086	< 0.005
Cobalt, total	mg/L	-	0.0115	0.00782	0.00372	0.00119	0.0005	0.0042
Copper, total	mg/L	0.48	0.0465	0.00784	0.0042	0.00471	0.00162	< 0.005
Iron, total	mg/L	-	27.4	9.56	6.42	2.85	0.77	2.69
Lead, total	mg/L	0.16	0.0103	0.00528	0.000636	0.00234	0.000498	0.000692
Lithium, total	mg/L	-	0.0227	0.0106	0.0078	0.0047	0.0052	< 0.01
Magnesium, total	mg/L	-	29.6	92.1	34.9	15	18	134
Manganese, total	mg/L	-	0.359	0.396	0.0909	0.09	0.0574	0.199
Mercury, total	mg/L	-	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Molybdenum, total	mg/L	-	0.00337	0.0124	0.00268	0.00318	0.00271	0.0118
Nickel, total	mg/L	0.8	0.0319	0.0172	0.0109	0.00293	0.00149	< 0.005
Phosphorus (P), total	mg/L	-	< 0.5	0.086	0.059	0.06	< 0.05	< 0.5
Potassium, total	mg/L	-	6.12	4.04	3.24	4.85	4.89	8.29
Rubidium, total	mg/L	-	0.0185	0.00794	0.00448	0.00617	0.00311	0.00549
Selenium, total	mg/L	-	0.00191	0.00269	0.00335	0.000738	0.00102	0.0083
Silicon, total	mg/L	-	22	9	6.23	4.58	2.31	3.93
Silver, total	mg/L	-	0.000124	0.000029	0.00001	0.00002	0.000032	< 0.0001
Sodium, total	mg/L	-	1.16	6.7	0.943	0.484	0.7	10.1
Strontium, total	mg/L	-	0.0132	0.0468	0.0188	0.0108	0.0103	0.0946
Sulfur, total	mg/L	-	11.9	79.5	30.4	16.8	24.8	127
Tellurium, total	mg/L	-	< 0.002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.002
Thallium, total	mg/L	-	0.000102	0.000038	0.000018	0.000028	0.000017	< 0.0001
Thorium, total	mg/L	-	0.00368	0.00112	0.00041	0.00074	0.00015	< 0.001
Tin, total	mg/L	-	< 0.001	0.00012	< 0.0001	< 0.0001	< 0.0001	< 0.001
Titanium, total	mg/L	-	0.341	0.086	0.0502	0.0827	0.0212	0.0389
Tungsten, total	mg/L	-	< 0.001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.001
Uranium, total	mg/L	-	0.00464	0.0131	0.000364	0.00572	0.00193	0.00274
Vanadium, total	mg/L	-	0.0174	0.00502	0.00368	0.00247	0.00082	< 0.005
Zinc, total	mg/L	0.8	0.0418	0.0158	0.0052	0.0041	< 0.003	< 0.03
Zirconium, total	mg/L	-	< 0.002	0.00137	0.00066	0.00176	0.00057	< 0.002

Table E.6.7: Water Quality Results for Water Licence Monitoring Location - WRF WQ Monitoring

Monitoring Station			MS-WRF-WQ-21-2	MS-WRF-WQ-22-3	MS-WRF-WQ-22-2	MS-WRF-WQ-21-1	MS-WRF-WQ-21-1	MS-WRF-WQ-21-2
ALS Laboratory Work Order			BF2500152	BF2500152	BF2500152	BF2500152	BF2500191	BF2500259
Sample Date & Time			2025-07-11 10:05	2025-07-11 10:35	2025-07-11 12:35	2025-07-11 14:05	2025-07-23 10:10	2025-08-14 09:30
Analyte	Units	Criteria ¹						
Aluminum, dissolved	mg/L	-	-	-	-	-	0.0029	-
Antimony, dissolved	mg/L	-	-	-	-	-	< 0.0001	-
Arsenic, dissolved	mg/L	-	-	-	-	-	< 0.0001	-
Barium, dissolved	mg/L	-	-	-	-	-	0.00451	-
Beryllium, dissolved	mg/L	-	-	-	-	-	< 0.00002	-
Bismuth, dissolved	mg/L	-	-	-	-	-	< 0.00005	-
Boron, dissolved	mg/L	-	-	-	-	-	0.017	-
Cadmium, dissolved	mg/L	-	-	-	-	-	0.0000078	-
Calcium, dissolved	mg/L	-	-	-	-	-	7.18	-
Cesium, dissolved	mg/L	-	-	-	-	-	< 0.00001	-
Chromium, dissolved	mg/L	-	-	-	-	-	< 0.0005	-
Cobalt, dissolved	mg/L	-	-	-	-	-	0.00017	-
Copper, dissolved	mg/L	-	-	-	-	-	< 0.0002	-
Iron, dissolved	mg/L	-	-	-	-	-	< 0.01	-
Lead, dissolved	mg/L	-	-	-	-	-	< 0.00005	-
Lithium, dissolved	mg/L	-	-	-	-	-	0.0045	-
Magnesium, dissolved	mg/L	-	-	-	-	-	16.9	-
Manganese, dissolved	mg/L	-	-	-	-	-	0.0436	-
Molybdenum, dissolved	mg/L	-	-	-	-	-	0.00276	-
Nickel, dissolved	mg/L	-	-	-	-	-	0.00091	-
Phosphorus (P), dissolved	mg/L	-	-	-	-	-	< 0.05	-
Potassium, dissolved	mg/L	-	-	-	-	-	4.5	-
Rubidium, dissolved	mg/L	-	-	-	-	-	0.00197	-
Selenium, dissolved	mg/L	-	-	-	-	-	0.00108	-
Silicon, dissolved	mg/L	-	-	-	-	-	1.42	-
Silver, dissolved	mg/L	-	-	-	-	-	< 0.00001	-
Sodium, dissolved	mg/L	-	-	-	-	-	0.657	-
Strontium, dissolved	mg/L	-	-	-	-	-	0.0103	-
Sulfur, dissolved	mg/L	-	-	-	-	-	23.2	-
Tellurium, dissolved	mg/L	-	-	-	-	-	< 0.0002	-
Thallium, dissolved	mg/L	-	-	-	-	-	0.000011	-
Thorium, dissolved	mg/L	-	-	-	-	-	< 0.0001	-
Tin, dissolved	mg/L	-	-	-	-	-	< 0.0001	-
Titanium, dissolved	mg/L	-	-	-	-	-	< 0.0003	-
Tungsten, dissolved	mg/L	-	-	-	-	-	< 0.0001	-
Uranium, dissolved	mg/L	-	-	-	-	-	0.0015	-
Vanadium, dissolved	mg/L	-	-	-	-	-	< 0.0005	-
Zinc, dissolved	mg/L	-	-	-	-	-	< 0.001	-
Zirconium, dissolved	mg/L	-	-	-	-	-	< 0.0003	-

Notes:
Reference: Waste Rock Facility QAQC Monitoring Plan (BIM-5200-PLA-0034)
¹Table A1 - WRF Water Quality Lower Action Level and Water Licence/MDMER Limits