

Diavik Diamond Mines (2012) Inc.
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Mason Mantla, Chair
Wek'èezhii Land and Water Board
PO Box 32
Wekweèti, NT X0E 1W0
Canada

January 31, 2025

Dear Mr. Mantla,

RE: Water Licence W2015L2-0001 Monthly SNP Report – December 2024

General

Please find enclosed the December 2024 Surveillance Network Program (SNP) Report for Diavik Diamond Mines (2012) Inc. (DDMI). Figure 1 shows the locations of active SNP sample stations on site. Table 1a shows the dates SNP stations were sampled during the month and provides rationale for stations with missing samples or missing parameter results, if applicable. Table 1b shows suspended SNP stations in the reporting month, including rationale for suspension, if applicable.

Sampling of the effluent discharge from the North Inlet Water Treatment Plant (NIWTP) occurred every 6 days at stations 1645-18 and 1645-18B during the month. All results available were below the maximum grab and maximum average W2015L2-0001 effluent quality criteria (EQC) (Table 3 and graphs).

Sampling of the NIWTP effluent mixing zone at stations 1645-19A, 1645-19B2, and 1645-19C occurred on 28 December. Results are presented in Table 4.

The Processed Kimberlite Containment Facility (PKCF) interception wells, 1645-77 and 1645-80 were sampled once during the month. Station 1645-16 did not have water reporting to it in December and could not be sampled. Station 1645-78 did not have seepage reporting to it in December and could not be sampled. Station 1645-79 remained frozen and could not be sampled. Sample results are presented in Table 6.

A154 and A418 underground dewatering stations (1645-75 and 1645-75B) were sampled twice during the month. The A21 dewatering station (1645-51) was sampled three (3) times during the month. Sample results are presented in Table 6.

Clarifier sludge from NIWTP Plant 1 (1645-85A/B) and Plant 2 (1645-86A/B) were sampled twice during the month. Sample results are presented in Table 6.

Water from the A418 Barge (1645-88) was collected twice during the month. Sample results are presented in Table 6.

One (1) spill was recorded in the Underground Mine during the month. Fraction 3 hydrocarbons were detected in water (<0.10 – 12 mg/L) from the Underground Mine (1645-75 and 1645-75B) and were <0.24–9.3 mg/L in sludge from the NIWTP clarifiers (1645-85A/B and 1645-86A/B) (Table 6). Total petroleum hydrocarbons (TPH) (C6 – C50) were below detection limits in the effluent of the NIWTP throughout the month (Table 3).

Petroleum Hydrocarbon (PHC) F3 concentrations from each clarifier are slightly aligned with each other, while there is no relationship between the concentration of hydrocarbons in water from the underground and the NIWTP clarifier sludge. Diavik continues to collect monthly samples for PHC analysis of sludge from the NIWTP and water from the underground mine. PHC F3 concentrations from June 2014 until December 2024 are displayed in Figure 2.

Annex 1, Part A, Condition 2 reporting requirements for SNP Station 1645-51 (A21 water pumped to North Inlet) are provided in Attachment 1.

Annex 1, Part A, Condition 3 reporting requirements for SNP Station 1645-88 (A418 barge) are provided in Attachment 2.

Results

Water Sampling and Analysis Results

1. Sampling dates of SNP stations and rationales for any non-sampling events of SNP stations are provided in Table 1a. Table 1b outlines suspended SNP stations in the reporting month, including rationale for their suspension, if applicable.
2. Table 2 includes daily and monthly total phosphorus loading to Lac de Gras from the NIWTP.
3. Table 3 provides NIWTP effluent to Lac de Gras data for the month.
4. Table 4 provides effluent mixing zone in Lac de Gras analytical data.
5. Table 5 provides effluent mixing zone in Lac de Gras bioprofile data.
6. Table 6 provides results for non-discharge SNP Stations.
7. Table 7 summarizes spills that occurred at mine site during the month.
8. Table 8 summarizes onsite project activities.
9. Table 9 summarizes annual raw water use to date.
10. Table 10 summarizes QA/QC results for the month.
11. Attachment 1 provides Annex 1, Part A, Condition 2 reporting requirements for SNP Station 1645-51 (A21 water pumped to North Inlet).
12. Attachment 2 provides Annex 1, Part A, Condition 3 reporting requirements for SNP Station 1645-88 (A418 barge)

QA/QC Review

Table 10 shows the QA/QC performance for the month. During the reported period, one (1) duplicate sample (1645-13), one (1) field blank, and one (1) trip blank were collected during the month. No QA/QC results were outside RPD or required follow up in December. Results of QA/QC are presented in Table 10.

QA/QC November Follow-Up

Reanalysis requests were not required for any QA/QC samples in November.

Flow and Volume Measurements

1. Table 2 provides a breakdown of flow and volume measurements required under Part G of the water licence. Geo-technicians noted no unusual flow rates in the PKCF interception wells during the month.
2. Table 2 provides a breakdown of ore and waste rock material moved for the month from the Underground and Surface Operations.
3. Table 2 provides flow volumes for water within the A154/A418 decline, as well as water use for the cement batch and backfill plants (reuse of treated NIWTP water). **814,498 m³** of flow was recorded from the underground during the month. **18,900 m³** was recorded for use at the batch and backfill plants.
4. Table 2 provides flow volumes for water from the A154, A418, and A21 open pits.
5. Volumes of water used for drills/other uses and dust management are outlined in Table 2. The volume of water moved from collection ponds to the PKCF and North Inlet during the month is provided in Table 2.
6. North Inlet Elevation: average of **415.62m** above sea level (asl) for the month (Table 2).

Spill Summary

There were five (5) surface spills reported during the month. There was one (1) externally reportable spill in December. The spill information is presented in Table 7.

Project Update

Table 8 outlines the status of various infrastructure construction projects and other project activities at the Diavik mine site.

Raw Water Usage

Table 9 shows cumulative operational Lac de Gras water use during the year. At the end of the reporting period 78% of the operational licence limit (Part D, Condition 1) was used.

Please note that an error was made on Table 9 in the October SNP report for Process Plant raw water usage. That report stated that 132,570m³ was used, when in fact only 40,444m³ was used. This value has

been corrected on table 9 of the December SNP report and has resulted in the percent usage of the operational licence limit being lower than listed in the November SNP report.

A21 Waste Rock Management

In December 2024, 4,077 tonnes of waste rock was mined from A21 underground development and operationally classified as Type III and taken to the WRSA-NCRP and/or used as underground cement rock fill.

In late January 2024 underground development neared a known major fault. Based on experience from the A21 open pit and out of an abundance of caution, DDMI began operationally classifying all waste rock from A21 underground development as Type III while development was passing through this faulted zone. Waste rock sample results received from this area have been below the Type II sulphur percentage (0.04 wt%S). All material from December was proactively classified as Type III and taken to the Waste Rock Storage Area – North Country Rock Pile (WRSA-NCRP) Life of Mine (LOM) region or used as underground cement rock fill.

DDMI believes that there is no impact to DDMI's ability to store Type II/III material in the LOM region of the WRSA-NCRP. There are no plans to propose any changes to sampling methodologies or material disposal locations.

DDMI continues to adhere to the requirements of the Waste Rock Management Plan and identifies and segregates Type II/III.

To date, DDMI has analyzed 1,125 (38 in 2024) A21 waste rock samples for total sulphur and the mean sulphur content is 0.011 wt%S (0.013 wt%S in 2024).

Closure

If you have any questions regarding the attached submission, please contact the undersigned or Kyla Gray (kyla.gray@riotinto.com; 867-445-4922).

Yours sincerely,

Mark Nelson
Superintendent, Environment & Closure
Cross shift: Nicole Goodman

CC: Marie-Eve Cyr, WLWB
Anneli Jokela, WLWB
Joseph Heron, GNWT-ECC Lands Inspector

John McCullum, EMAB
Allison McCabe, EMAB

Diavik Surveillance Network Program (SNP) Active Stations 2024



Active SNP Stations

- Active Sump (2)
- Collection Pond (10)
- Diffuser (3)
- Groundwater Well (1)
- A418 Pool (1)
- PKC Pond (1)
- PKC Well (4)
- STP Effluent (1)
- Surface Runoff Station (2)
- Underground Dewatering (2)

Active NIWTP stations

- NIWTP Clarifier Sludge (4)
- NIWTP Effluent (2)
- NIWTP Influent (1)

Diavik Diamond Mines (2012) Inc.
Environment Department
Lac de Gras, Northwest Territories

Created: November 2024

Satellite Image (50cm Resolution)
Acquired 2024-July-22

Coordinate System: NAD 1983 UTM Zone 12N
Projection: Transverse Mercator
Datum: North American 1983

RioTinto
Diavik

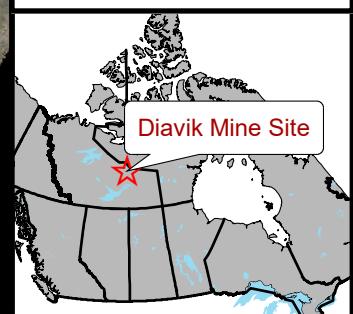


Figure 2. PHC F3 Concentrations in UG Dewatering and NIWTP Clarifiers

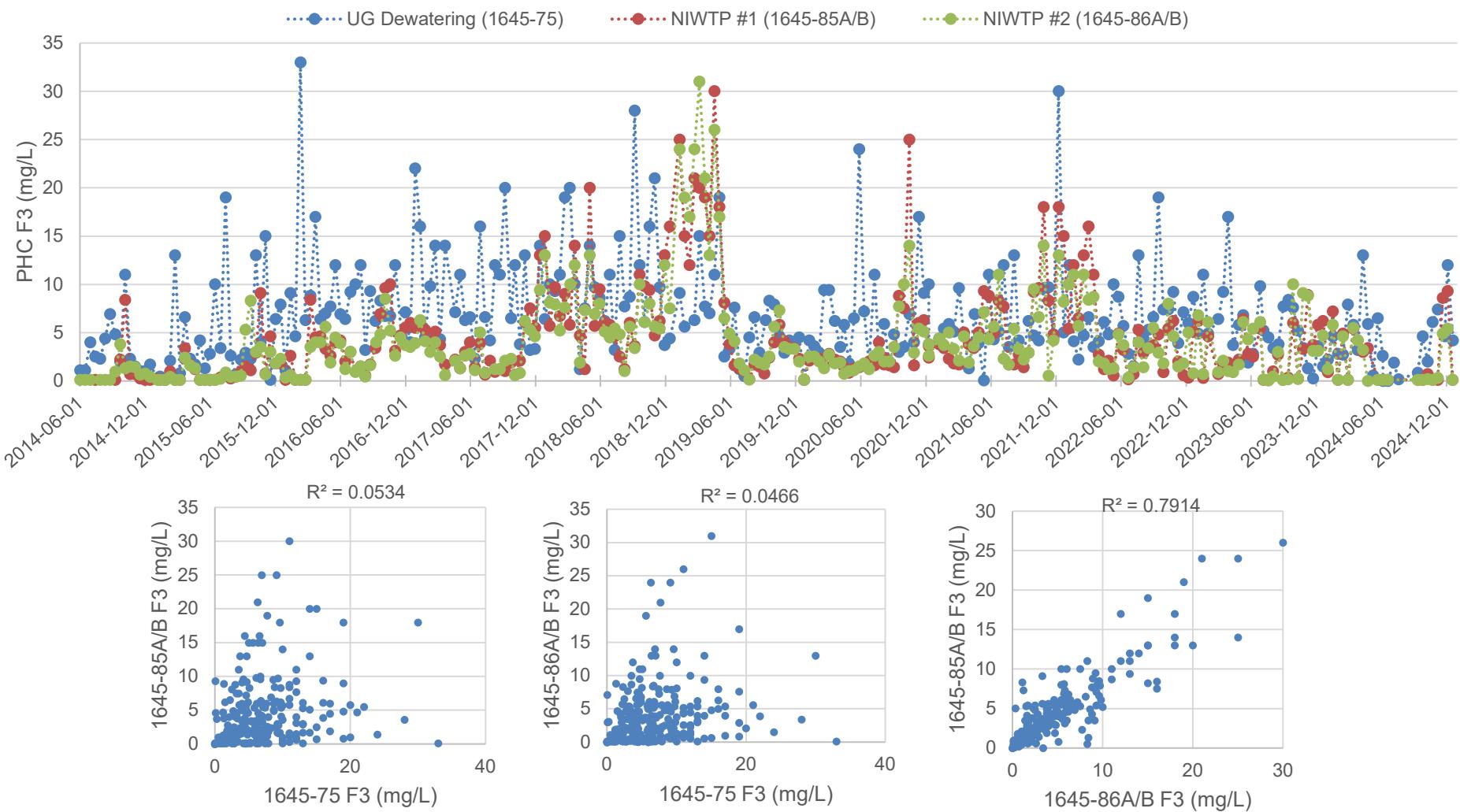


Table 1a: Rationale for Non-Sampling Events**December, 2024**

Date	Stations Sampled	Stations Not Sampled	Missed Parameters	Rationale
December 1, 2024	1645-51 (Bi-Weekly)			
December 2, 2024				
December 3, 2024	1645-11 (Annually)			
December 4, 2024	1645-75/75B (Bi-Weekly) 1645-85B/86B (Bi-Weekly)			
December 5, 2024				
December 6, 2024	1645-13/18/18B (6 Day)			
December 7, 2024				
December 8, 2024				
December 9, 2024	1645-77/80 (Monthly) 1645-88 (Bi-Weekly)	1645-16/78/79		1645-16 had no water reporting to it, 1645-78 remains off, 1645-79 remains frozen
December 10, 2024				
December 11, 2024				
December 12, 2024	1645-13/18/18B (6 Day)			
December 13, 2024				
December 14, 2024				
December 15, 2024	1645-51 (BiWeekly)			
December 16, 2024				
December 17, 2024				
December 18, 2024	1645-13/18/18B (6 Day) 1645-75/75B (Bi-Weekly) 1645-85A/86A (Bi-Weekly)			
December 19, 2024				
December 20, 2024				
December 21, 2024				
December 22, 2024				
December 23, 2024	1645-88 (Bi-Weekly)			
December 24, 2024	1645-13/18/18B (6 Day)			
December 25, 2024				
December 26, 2024				
December 27, 2024				
December 28, 2024	1645-19A/19B2/19C (Monthly)			
December 29, 2024	1645-51 (Bi-Weekly)			
December 30, 2024	1645-13/18/18B (6 Day)			
December 31, 2024				

Table 1b: Suspended SNP Stations

SNP Stations	Rationale	Comments

Table 2: Project Site Daily/Monthly SNP Volumes

December, 2024

RioTinto

Date	North Inlet Elevation	Potable Water Usage	Sludge Generated STP	STP Water Discharged to A418 ¹	NIWTP Water Discharged to Lac de Gras	Phosphorus Loading to Lac de Gras	A154 Pit Water	A418 Pit Water	A154 Depressurization System Water	A418 Depressurization System Water	Underground Decline A418/A154	Underground C9105 Pump Station	A21 Water to North Inlet	Batch & Backfill Plants (reuse of treated water from NIWTP)	Collection Ponds to Lac de Gras	Collection Ponds to North Inlet	Collection Ponds to Process Plant	PKCF Interception Well Water to North Inlet	PKCF Interception Well Water to PKCF ²	Flow from PKCF Northwest Decant to North Inlet	Raw Water Usage Dust Management	Raw Water Used for Other (Drills,etc)	A418 PKMW Reclaim	Kimberlite Ore Processed ³	North Inlet Recycled Water ⁴	Process Plant Raw Water Usage	Coarse Processed Kimberlite Hauled to PKCF	Fine Processed Kimberlite Discharged to A418									
	Surveyed meters above sea level (masl)	Metered m ³	Metered m ³	Metered m ³	Metered m ³	Calculated kg	Metered m ³	Metered m ³	Estimated m ³	Estimated m ³	Metered m ³	Metered m ³	Metered m ³	Metered m ³	Metered m ³	Metered m ³	Metered m ³	Metered m ³	Metered m ³	Metered m ³	Metered m ³	Metered metric ton	Metered m ³	Metered m ³	Metered metric ton												
	Site Services																				Mining Group										Processing Plant						
December 1, 2024	416.08	203	5	197	54,362	2.2	24	0	213	247	7,267	22,200	10,810	668	0	0	0	0	6	0	2	7,897	276	3,000	2,676	6,198	250	38									
December 2, 2024	415.95	223	5	199	52,611	2.1	215	90	203	248	6,928	21,704	10,438	651	0	0	0	0	7	0	0	8,589	138	2,030	2,705	5,350	71	0									
December 3, 2024	415.90	258	4	240	49,649	2.0	677	932	201	249	6,559	20,712	10,947	546	0	0	0	0	6	0	2	7,560	4,280	4,673	2,707	8,110	1,150	2,559									
December 4, 2024	415.94	194	4	178	48,139	1.8	2,120	67	207	250	4,985	22,144	11,132	591	0	0	0	0	6	0	2	4,947	6,476	5,677	2,986	9,055	2,058	4,647									
December 5, 2024	415.85	200	4	190	53,223	1.9	616	106	199	251	6,955	22,096	10,670	681	0	0	0	0	6	0	2	4,969	4,982	5,861	2,714	9,356	1,581	4,081									
December 6, 2024	415.70	166	4	187	52,290	1.9	578	150	201	252	6,934	22,344	10,703	687	0	0	0	0	6	0	2	6,280	0	4,809	577	5,962	0	0									
December 7, 2024	415.71	214	4	173	53,797	1.9	969	37	200	253	7,209	20,000	10,594	691	0	0	0	0	6	0	2	4,971	3,001	5,280	1,678	7,726	1,132	1,626									
December 8, 2024	415.74	193	4	166	49,831	1.8	1,171	0	195	254	7,026	20,448	10,986	656	0	0	0	0	7	0	2	7,359	4,567	5,805	2,657	9,221	1,587	3,143									
December 9, 2024	415.78	137	4	171	35,326	1.3	989	794	193	255	6,540	18,356	10,968	513	0	0	0	0	5	0	0	8,691	5,610	5,346	2,644	8,637	2,238	4,360									
December 10, 2024	415.88	230	5	171	48,347	1.4	1,241	291	195	256	8,569	24,164	11,093	673	0	0	0	0	7	0	0	8,623	5,637	5,529	2,648	8,738	1,881	4,159									
December 11, 2024	415.76	179	5	170	49,559	1.5	837	0	194	257	7,233	20,704	10,876	517	0	0	0	0	6	0	0	8,636	4,885	5,690	2,676	8,948	1,659	3,653									
December 12, 2024	415.59	216	5	200	45,195	1.3	672	0	189	258	7,484	20,432	10,555	547	0	0	0	0	3	0	0	8,726	4,993	5,880	2,707	9,243	1,591	3,997									
December 13, 2024	415.46	216	5	182	48,850	1.5	1,143	0	189	259	7,200	20,784	10,917	593	0	0	0	0	7	0	0	8,714	4,771	5,744	2,633	9,030	1,636	3,939									
December 14, 2024	415.63	174	6	173	48,872	1.5	953	115	189	260	6,976	20,672	11,567	616	0	0	0	0	7	0	0	8,723	5,105	5,694	2,698	8,912	1,873	3,958									
December 15, 2024	415.69	175	6	161	45,265	1.4	585	119	182	261	6,828	19,912	10,556	662	0	0	0	0	7	0	0	8,711	184	4,932	2,471	8,025	455	142									
December 16, 2024	415.67	169	6	163	48,353	0.8	360	107	188	262	7,336	20,840	11,420	619	0	0	0	0	7	0	0	8,693	276	4,730	2,792	8,036	196	0									
December 17, 2024	415.66	233	6	212	38,761	0.7	395	0	184	263	7,096	20,864	11,320	646	0	0	0	0	7	0	0	8,667	2,523	4,400	2,783	7,922	696	1,187									
December 18, 2024	415.64	215	6	209	43,749	0.8	402	63	183	264	7,178	20,760	11,212	516	0	0	0	0	7	0	0	8,651	5,673	5,795	2,606	8,999	2,345	4,339									
December 19, 2024	415.67	238	6	200	46,578	0.8	440	0	187	265	6,932	19,928	11,313	672	0	0	0	0	7	0	0	8,656	2,718	5,375	1,936	8,152	1,987	1,858									
December 20, 2024	415.58	189	6	181	46,932	0.8	409	95	177	266	7,168	11,412	626	0	0	0	0	6	0	0	8,672	0	2,760	2,561	5,863	294	0										
December 21, 2024	415.48	210	7	196	47,771	0.8	758	389	182	267	7,182	20,216	11,065	572	0	0	0	0	6	0	0	7,908	276	2,915	2,753	6,276	749	40									
December 22, 2024	415.46	217	6	221	47,533	0.7	689	262	181	268	7,234	20,400	11,397	589	0	0	0	0	7	0	0	4,746	5,388	5,925	2,890	9,397	1,926	4,243									
December 23, 2024	41																																				

Table 3: Effluent Discharge to Lac de Gras

Rio Tinto W2015L2-0001 Discharge Criteria	December 2024			1645-18						1645-18B					
	NIWTP - Discharge to LDG	W.L. Criteria	Reported Units	30-Dec-24	24-Dec-24	18-Dec-24	12-Dec-24	6-Dec-24	30-Dec-24	24-Dec-24	18-Dec-24	13-Dec-24	6-Dec-24		
Ammonia (N)	12	mg/L	1.3	1.2	1.2	1.1	1.1	1.3	1.3	1.2	1.1	1.1			
Nitrite (N)	2	mg/L	0.11	0.15	0.23	0.22	0.26	0.13	0.21	0.26	0.26	0.26			
pH	6.0-8.4	pH	7.59	7.49	8.05	7.07	7.88	7.60	7.49	7.51	7.13	7.47			
Total Suspended Solids (TSS)	25	mg/L	1.5	<1.0	1.1	1.7	2.9	1.9	<1.0	2.0	1.6	1.2			
Turbidity	15	NTU	2.4	<0.10	<0.10	<0.10	0.18	4.0	<0.10	<0.10	<0.10	<0.10	0.10		
Zinc (Zn) - Total	20	ug/L	<1.0	0.32	0.20	0.29	<1.0	<1.0	0.30	0.56	0.40	0.41			
Arsenic (As) - Total	100	ug/L	1.28	1.21	1.48	1.24	1.68	0.977	0.928	1.25	1.20	1.43			
Cadmium (Cd) - Total	3	ug/L	0.0074	0.0072	0.0080	0.0099	0.0128	0.0084	0.0113	0.0090	0.0118	0.0119			
Chromium (Cr) - Total	40	ug/L	1.37	1.47	1.73	1.09	1.14	1.13	1.36	1.85	1.14	1.03			
Copper (Cu) - Total	40	ug/L	0.24	0.267	0.289	0.258	0.28	0.23	0.253	0.331	0.296	0.494			
Lead (Pb) - Total	20	ug/L	<0.020	0.0055	0.0073	0.0137	0.020	<0.020	0.0117	0.0100	0.0185	0.0283			
Nickel (Ni) - Total	100	ug/L	5.91	6.79	11.1	14.6	17.8	5.47	6.43	11.3	13.7	18.7			
Aluminum (Al) - Total	3000	ug/L	438	328	395	447	556	411	463	804	549	459			
C6-C50 Hydrocarbons Calculated	5	mg/L	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26			

 Data exceeds water licences maximum grab concentration

 Warning data point exceeds the water licences maximum average threshold

Table 3: Effluent Discharge to Lac de Gras

Table 3: Effluent Discharge to Lac de Gras

Rio Tinto Total Metals by CRC-ICPMS	December 2024			1645-18						1645-18B					
	NIWTP - Discharge to LDG	W.L. Criteria	Reported Units	30-Dec-24	24-Dec-24	18-Dec-24	12-Dec-24	6-Dec-24	30-Dec-24	24-Dec-24	18-Dec-24	13-Dec-24	6-Dec-24		
	Antimony (Sb) - Total		ug/L	0.965	0.947	1.06	0.802	0.670	0.871	0.906	1.08	0.810	0.651		
	Barium (Ba) - Total		ug/L	121	122	151	131	121	113	124	161	128	123		
	Beryllium (Be) - Total		ug/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
	Bismuth (Bi) - Total		ug/L	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
	Boron (B) - Total		ug/L	42	47.1	51.3	43.3	44	39	46.8	50.7	41.1	41.0		
	Calcium (Ca) - Total		mg/L	49.9	48.7	59.8	48.5	52.5	45.8	47.8	61.5	48.4	49.9		
	Cobalt (Co) - Total		ug/L	0.126	0.152	0.247	0.440	0.663	0.117	0.148	0.243	0.388	0.707		
	Iron (Fe) - Total		ug/L	13.5	7.9	8.5	9.0	19.3	8.1	17.7	11.7	9.0	7.9		
	Lithium (Li) - Total		ug/L	12.0	13.2	14.7	14.2	12.7	11.0	13.5	14.3	14.0	12.3		
	Magnesium (Mg) - Total		mg/L	13.6	12.3	16.3	15.2	15.8	12.9	12.2	16.7	15.0	15.5		
	Manganese (Mn) - Total		ug/L	25.4	30.7	44.4	49.0	54.8	23.7	30.9	45.5	46.4	56.1		
	Mercury (Hg) - Total		ug/L	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	<0.0019	
	Molybdenum (Mo) - Total		ug/L	53.4	52.5	62.1	47.6	44.3	49.1	51.8	65.7	48.3	45.3		
	Potassium (K) - Total		mg/L	28.5	27.6	33.4	25.2	26.6	26.4	27.6	35.2	25.3	24.8		
	Selenium (Se) - Total		ug/L	0.160	0.162	0.192	0.158	0.157	0.153	0.149	0.197	0.154	0.161		
	Silicon (Si) - Total		ug/L	5260	5160	5770	4930	4950	4850	5130	6120	5050	4780		
	Silver (Ag) - Total		ug/L	<0.010	<0.0050	<0.0050	<0.0050	<0.010	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
	Sodium (Na) - Total		mg/L	92.6	77.4	89.0	81.4	75.8	85.4	77.0	91.3	80.7	75.0		
	Strontium (Sr) - Total		ug/L	1160	993	1450	1230	1140	1070	988	1520	1210	1120		
	Sulphur (S) - Total		mg/L	48.1	47.6	57.3	48.0	48.4	44.8	50.6	62.9	48.2	44.4		
	Thallium (Tl) - Total		ug/L	0.0039	0.0075	0.0098	0.0107	0.0119	0.0048	0.0072	0.0101	0.0104	0.0113		
	Tin (Sn) - Total		ug/L	<0.20	<0.010	<0.010	<0.010	<0.20	<0.20	<0.010	<0.010	<0.010	<0.010	<0.010	
	Titanium (Ti) - Total		ug/L	<2.0	0.99	<0.50	<0.50	<2.0	<2.0	<0.50	<0.50	0.95	<0.50		
	Uranium (U) - Total		ug/L	2.15	2.34	2.60	2.24	3.70	1.40	0.731	0.764	1.84	3.68		
	Vanadium (V) - Total		ug/L	1.54	1.38	1.67	1.20	1.30	1.25	0.926	1.29	1.24	1.27		
	Zirconium (Zr) - Total		ug/L	<0.10	<0.050	<0.050	<0.050	<0.10	<0.10	<0.050	<0.050	<0.050	<0.050	<0.050	

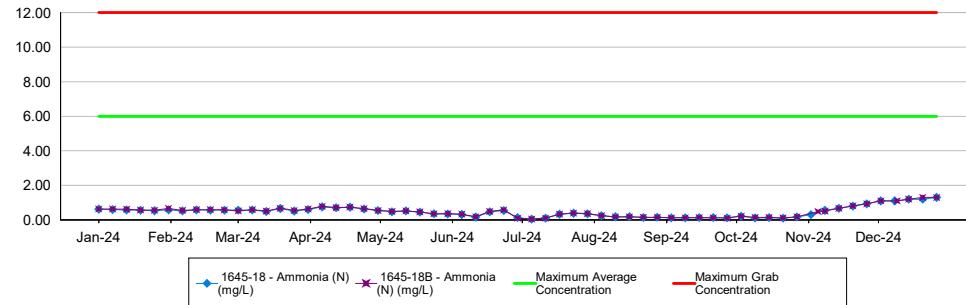
Table 3: Effluent Discharge to Lac de Gras

Dissolved Metals by CRC-ICPMS	December 2024		1645-18	1645-18 B
	NIWTP - Discharge to LDG	W.L. Criteria	Reported Units	
Aluminum (Al) - Dissolved		ug/L	53.2	21.8
Antimony (Sb) - Dissolved		ug/L	0.912	0.894
Arsenic (As) - Dissolved		ug/L	0.999	0.665
Barium (Ba) - Dissolved		ug/L	119	122
Beryllium (Be) - Dissolved		ug/L	<0.010	<0.010
Bismuth (Bi) - Dissolved		ug/L	<0.0050	<0.0050
Boron (B) - Dissolved		ug/L	45.8	45.7
Cadmium (Cd) - Dissolved		ug/L	0.0096	0.0151
Calcium (Ca) - Dissolved		mg/L	48.7	48.8
Chromium (Cr) - Dissolved		ug/L	1.30	1.31
Cobalt (Co) - Dissolved		ug/L	0.133	0.129
Copper (Cu) - Dissolved		ug/L	0.248	0.254
Iron (Fe) - Dissolved		ug/L	<1.0	<1.0
Lead (Pb) - Dissolved		ug/L	<0.0050	<0.0050
Lithium (Li) - Dissolved		ug/L	12.7	12.9
Magnesium (Mg) - Dissolved		mg/L	12.0	12.1
Manganese (Mn) - Dissolved		ug/L	29.0	30.8
Mercury (Hg) - Dissolved		ug/L	<0.0019	<0.0019
Molybdenum (Mo) - Dissolved		ug/L	51.4	51.5
Nickel (Ni) - Dissolved		ug/L	6.22	6.51
Potassium (K) - Dissolved		mg/L	27.1	27.5
Selenium (Se) - Dissolved		ug/L	0.125	0.159
Silicon (Si) - Dissolved		ug/L	4900	5060
Silver (Ag) - Dissolved		ug/L	<0.0050	<0.0050
Sodium (Na) - Dissolved		mg/L	75.5	76.9
Strontium (Sr) - Dissolved		ug/L	982	998
Sulphur (S) - Dissolved		mg/L	49.0	50.4
Thallium (Tl) - Dissolved		ug/L	0.0057	0.0066
Tin (Sn) - Dissolved		ug/L	<0.010	<0.010
Titanium (Ti) - Dissolved		ug/L	<0.50	<0.50
Uranium (U) - Dissolved		ug/L	2.18	0.577
Vanadium (V) - Dissolved		ug/L	1.32	0.976
Zinc (Zn) - Dissolved		ug/L	<0.10	0.25
Zirconium (Zr) - Dissolved		ug/L	<0.050	<0.050

Table 3: Effluent Discharge to Lac de Gras

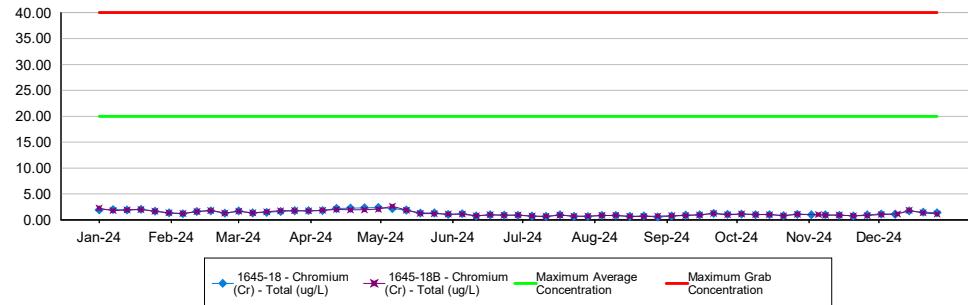
1645-18 / 1645-18B - Ammonia (N) Concentration

Concentration (mg/L)



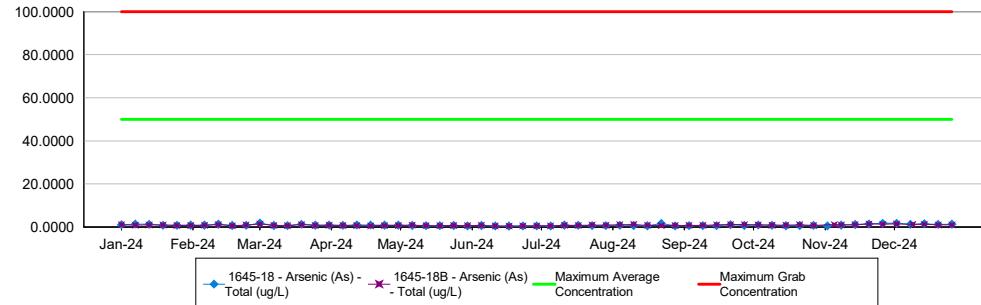
1645-18 / 1645-18B - Chromium (Cr) - Total Concentration

Concentration (ug/L)



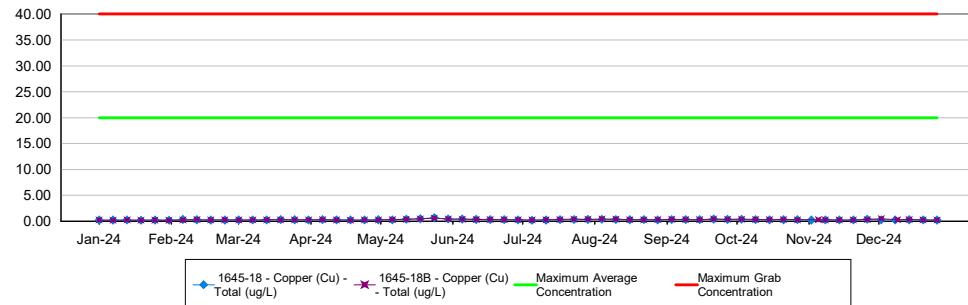
1645-18 / 1645-18B - Arsenic (As) - Total Concentration

Concentration (ug/L)



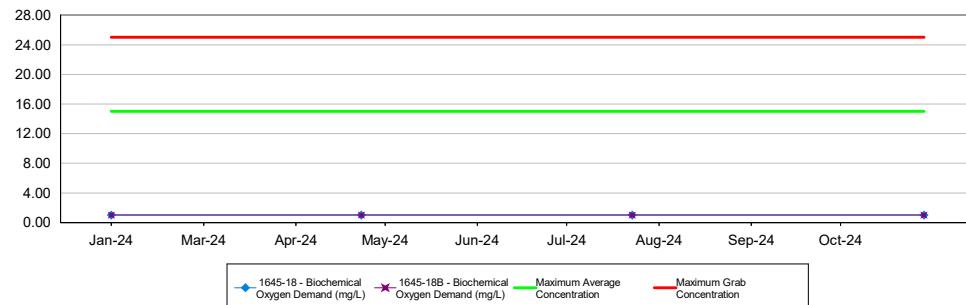
1645-18 / 1645-18B - Copper (Cu) - Total Concentration

Concentration (ug/L)



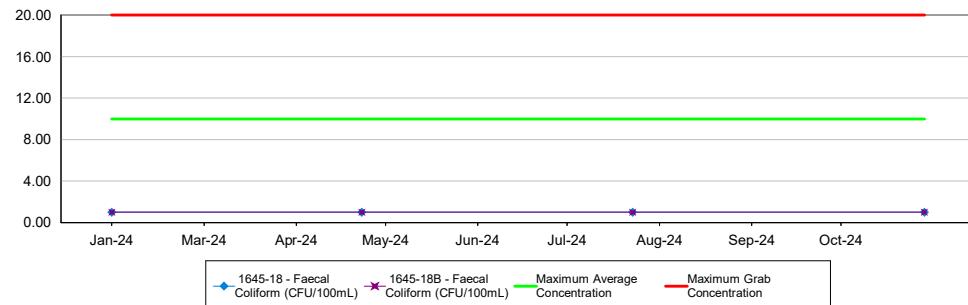
1645-18 / 1645-18B - Biochemical Oxygen Demand Concentration

Concentration (mg/L)



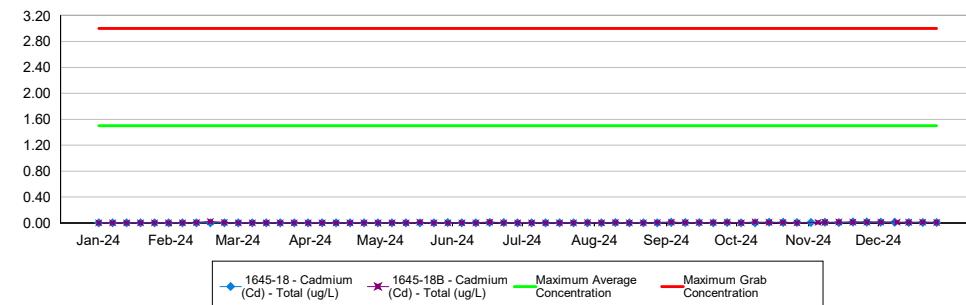
1645-18 / 1645-18B - Faecal Coliform Concentration

Concentration (CFU/100ml)



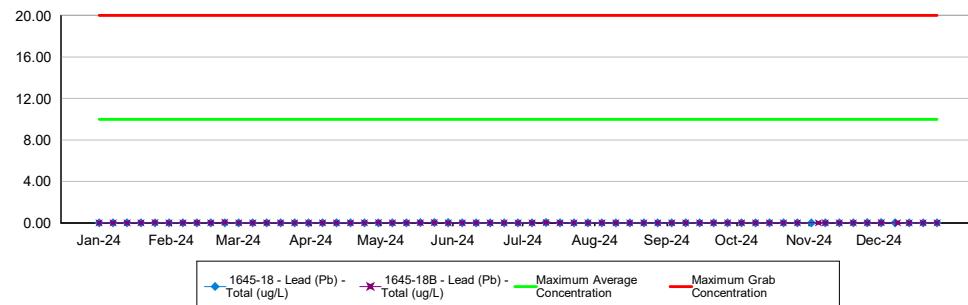
1645-18 / 1645-18B - Cadmium (Cd) - Total Concentration

Concentration (ug/L)

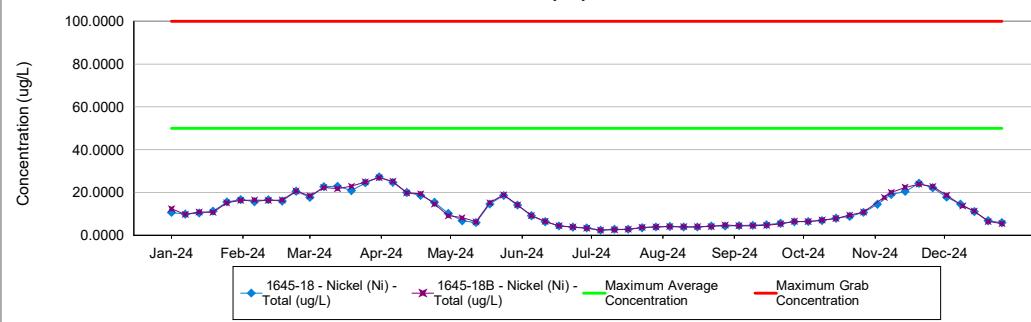


1645-18 / 1645-18B - Lead (Pb) - Total Concentration

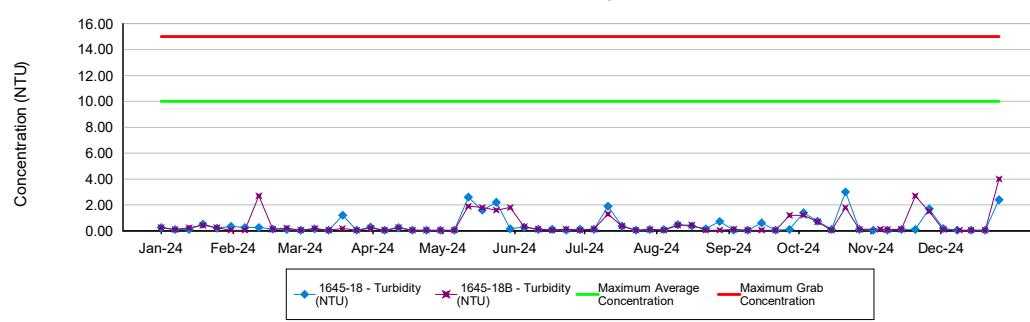
Concentration (ug/L)



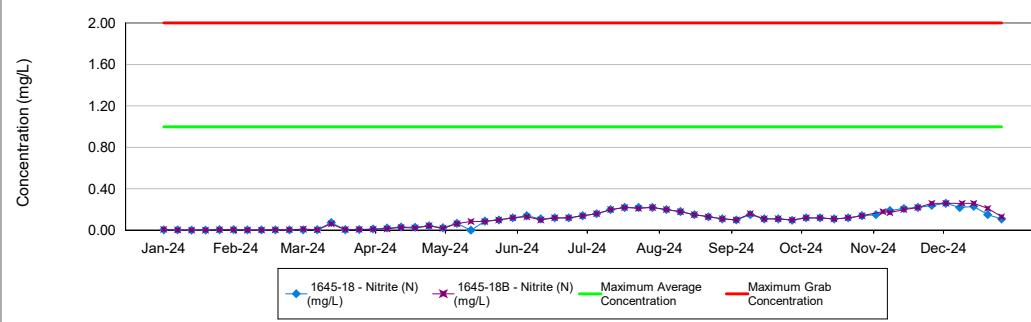
1645-18 / 1645-18B - Nickel (Ni) - Total Concentration



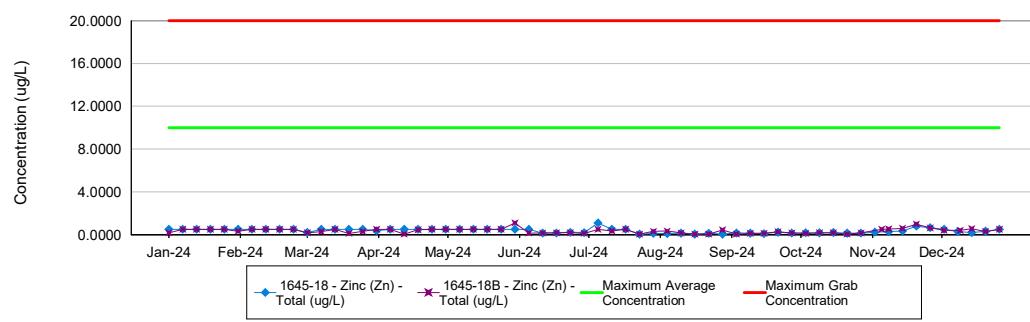
1645-18 / 1645-18B - Turbidity Concentration



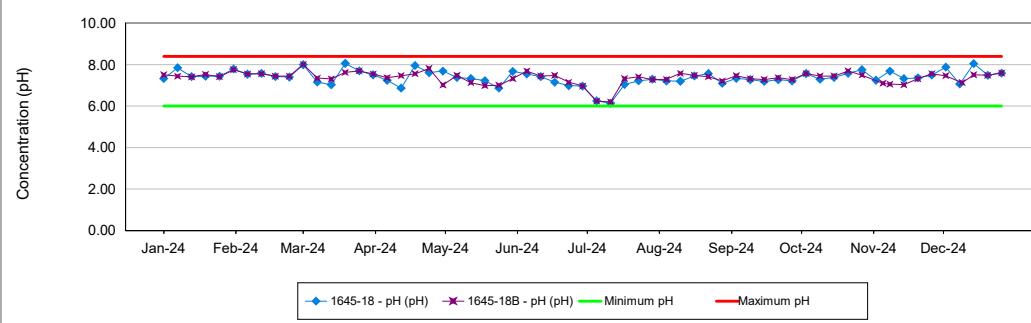
1645-18 / 1645-18B - Nitrite (N) Concentration



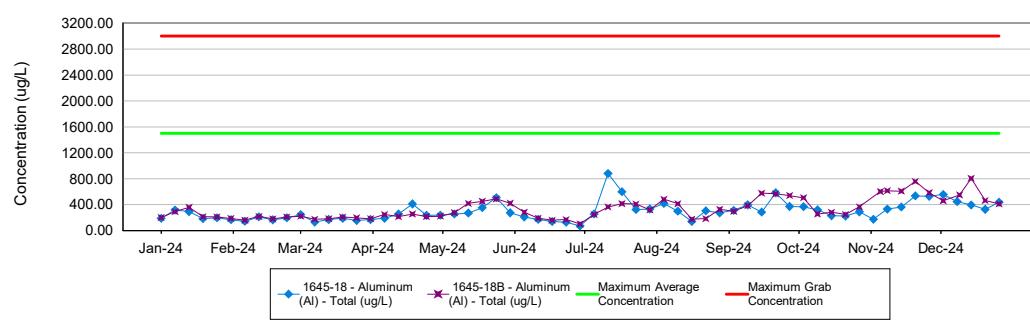
1645-18 / 1645-18B - Zinc (Zn) - Total Concentration



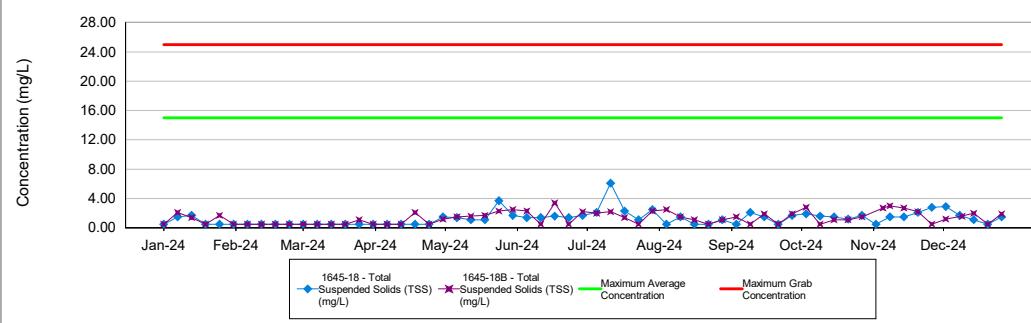
1645-18 / 1645-18B - pH Concentration



1645-18 / 1645-18B - Aluminum (Al) - Total Concentration



1645-18 / 1645-18B - Total Suspended Solids (TSS) Concentration



1645-18 / 1645-18B - C6-C50 Hydrocarbons Calculated Concentration

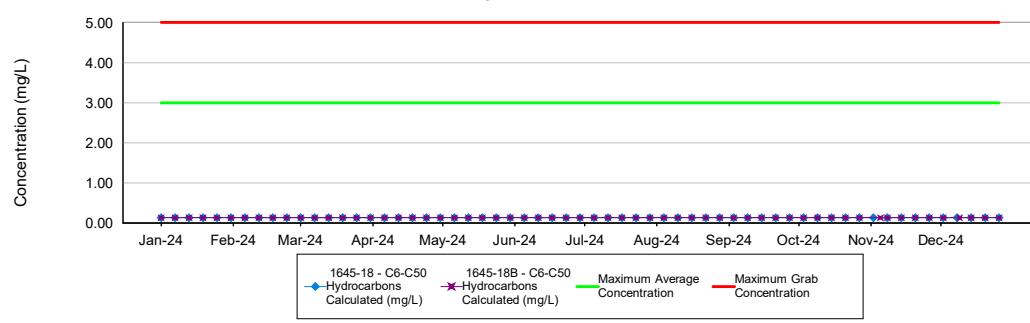


Table 4: Lac de Gras Effluent Mixing Zone

Water License RioTinto	December 2024																
	Sample Depth (metres below surface)			2	5	10	15	20	2	5	10	15	20	2			
	LDG - Diffusor Stations	W.L. Criteria	Reported Units	28-Dec-24													
Water License RioTinto	Aluminum (Al) - Total	ug/L	3.09	16.6	17.5	22.9	24.0	2.25	8.79	22.0	23.1	22.6	10.5	22.8	22.8	23.4	
	Ammonia (N)	mg/L	0.027	0.077	0.078	0.088	0.092	0.030	0.043	0.085	0.090	0.091	0.055	0.092	0.097	0.097	
	Arsenic (As) - Total	ug/L	0.257	0.270	0.311	0.285	0.303	0.285	0.285	0.293	0.291	0.289	0.295	0.283	0.298	0.300	
	Cadmium (Cd) - Total	ug/L	<0.0050	<0.0050	<0.0050	0.0056	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
	Chromium (Cr) - Total	ug/L	<0.050	0.096	0.080	0.108	0.110	<0.050	<0.050	0.070	0.096	0.112	0.057	0.084	0.109	0.098	
	Copper (Cu) - Total	ug/L	0.599	0.594	0.788	0.646	0.685	0.666	0.579	0.608	0.595	0.597	0.690	0.607	0.612	0.613	
	Lead (Pb) - Total	ug/L	<0.0050	<0.0050	0.0122	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0065	<0.0050	<0.0050	<0.0050	
	Nickel (Ni) - Total	ug/L	0.723	0.959	1.13	1.11	1.08	0.738	0.785	1.08	1.09	1.09	0.897	1.12	1.10	1.09	
	Nitrite (N)	mg/L	0.0013	0.0077	0.0095	0.012	0.011	0.0013	0.0046	0.012	0.012	0.011	0.0056	0.011	0.012	0.012	
	pH	pH	5.87	6.03	6.04	6.05	6.01	5.98	5.99	6.06	6.03	6.02	5.94	6.02	6.04	5.95	
	Total Suspended Solids (TSS)	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<0.97	<1.0	<1.0	<0.99	<1.0	<0.99	<0.99	<1.0	<0.99
	Turbidity	NTU	<0.10	<0.10	2.5	1.5	1.5	<0.10	<0.10	1.5	1.8	<0.10	<0.10	0.11	1.4	<0.10	
	Zinc (Zn) - Total	ug/L	1.09	0.25	2.10	0.65	0.45	0.55	0.32	0.23	0.24	0.15	0.88	0.26	0.17	0.20	

Table 4: Lac de Gras Effluent Mixing Zone

RioTinto		December 2024																
		Sample Depth (metres below surface)			2	5	10	15	20	2	5	10	15	20	2	5	10	15
		LDG - Diffusor Stations		W.L Criteria	Reported Units	28-Dec-24	1645-19A-2	1645-19A-5	1645-19A-10	1645-19A-15	1645-19A-20	1645-19B2-2	1645-19B2-5	1645-19B2-10	1645-19B2-15	1645-19B2-20	1645-19C-2	1645-19C-5
An-ions	Fluoride (F)		mg/L	0.024	0.029	0.028	0.030	0.033	0.056	0.024	0.029	0.030	0.029	0.017	0.029	0.031	0.039	
	Bicarbonate (HCO3)		mg/L	8.99	9.98	9.98	11.8	12.2	8.86	9.62	11.4	12.8	11.5	10.1	12.2	12.2	11.6	
	Carbonate (CO3)		mg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	Hydroxide (OH)		mg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	Chloride (Cl) - Dissolved		mg/L	5.4	10	11	13	13	5.5	6.9	12	13	13	8.5	13	13	13	
	Sulphate (SO4) - Dissolved		mg/L	5.4	10	12	13	13	5.3	6.5	13	14	13	8.4	14	13	13	
	Total Organic Carbon (TOC)		mg/L	2.4	2.2	2.4	2.3	2.2	2.6	2.3	2.4	2.3	2.2	2.3	2.3	2.3	2.4	
	Dissolved Organic Carbon (C)		mg/L	2.6	2.4	2.5	2.4	2.4	2.6	2.5	2.4	2.3	2.4	2.4	2.5	2.5	2.4	
	Nitrate (N)		mg/L	0.048	0.24	0.29	0.35	0.35	0.045	0.13	0.32	0.35	0.36	0.17	0.35	0.35	0.35	
	Orthophosphate (PO4-P)		mg/L	0.0017	<0.0010	<0.0010	0.0017	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	
Physical Properties	Total Kjeldahl Nitrogen (TKN) - (Ca)		mg/L	0.19	0.28	0.26	0.28	0.27	0.20	0.21	0.29	0.23	0.28	0.21	0.25	0.28	0.31	
	Nitrate plus Nitrite (N)		mg/L	0.050	0.25	0.30	0.36	0.36	0.046	0.14	0.34	0.37	0.37	0.18	0.36	0.36	0.36	
	Nitrogen (N) - Total		mg/L	0.24	0.53	0.56	0.64	0.63	0.25	0.34	0.63	0.60	0.65	0.39	0.61	0.64	0.68	
	Phosphorus (P) - Total		mg/L	0.0044	0.0028	<0.0020	0.0027	<0.0020	0.0038	0.0021	0.0024	0.0030	0.0021	0.0033	<0.0020	0.0023	<0.0020	
	Phosphorus (P) - Dissolved (TDP)		mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	
	Acidity (pH 4.5)		mg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	Acidity (pH 8.3)		mg/L	2.0	2.2	2.5	2.4	1.6	2.0	2.0	2.2	2.7	2.1	3.0	2.4	2.1	4.6	
	Alkalinity (Total as CaCO3) - Total		mg/L	7.37	8.18	8.18	9.71	10.0	7.26	7.89	9.36	10.5	9.44	8.29	9.97	10.0	9.47	
	Alkalinity (PP as CaCO3)		mg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	Total Dissolved Solids (TDS)		mg/L	24.4	38.0	55.2	60.8	51.2	25.2	31.2	55.2	59.6	49.2	49.2	56.4	60.0	58.0	
Hardness (as CACO3) - Total	Hardness (as CACO3) - Total		mg/L	11.4	18.0	18.8	20.8	20.7	12.3	13.8	20.3	21.0	20.6	15.7	20.7	20.5	21.1	
	Hardness (as CaCO3) - Dissolved		mg/L	11.9	18.6	19.1	21.2	21.4	12.3	13.9	20.4	21.2	21.3	15.9	21.2	21.3	21.2	

Table 4: Lac de Gras Effluent Mixing Zone

Table 4: Lac de Gras Effluent Mixing Zone

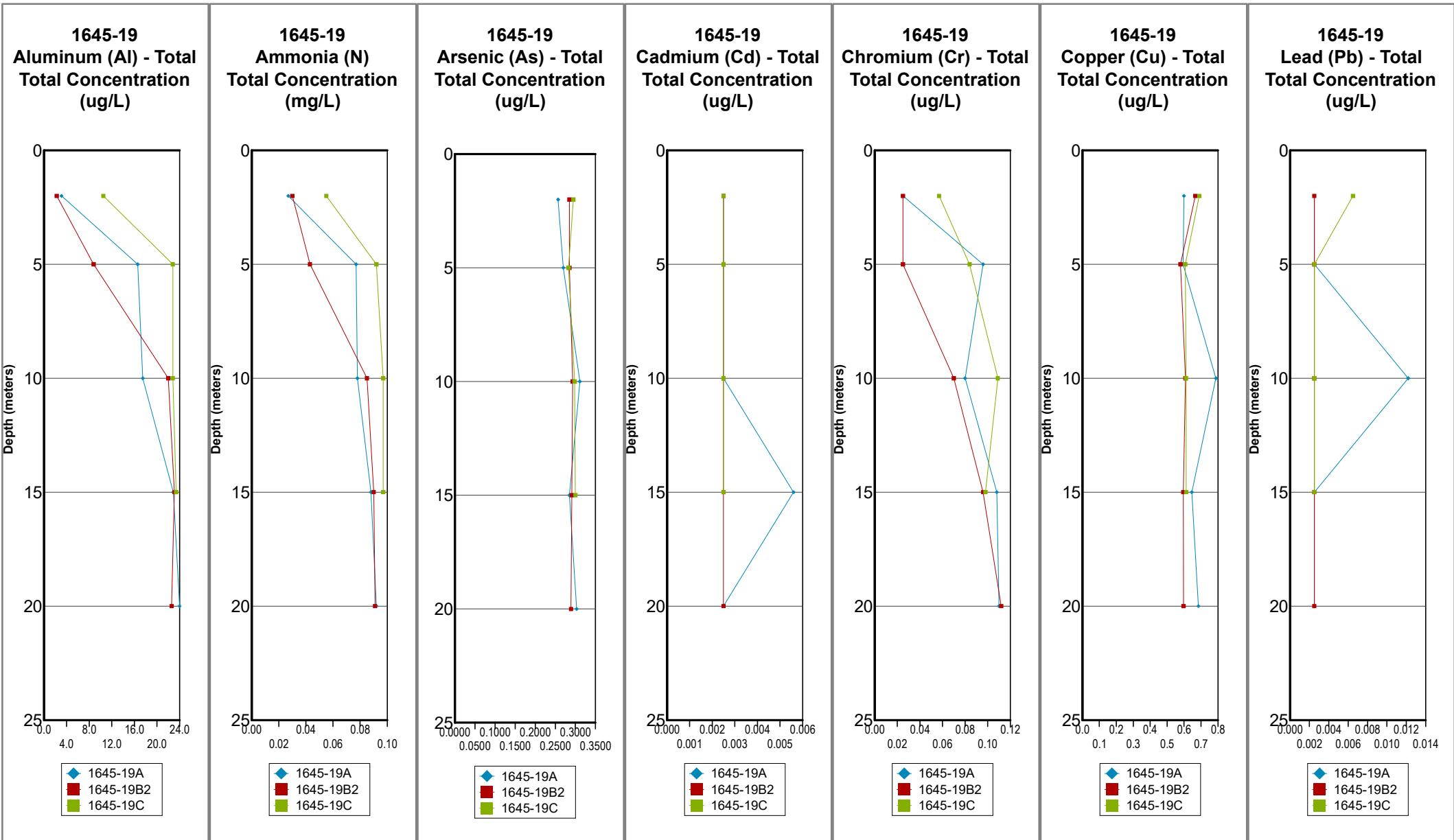


Table 4: Lac de Gras Effluent Mixing Zone

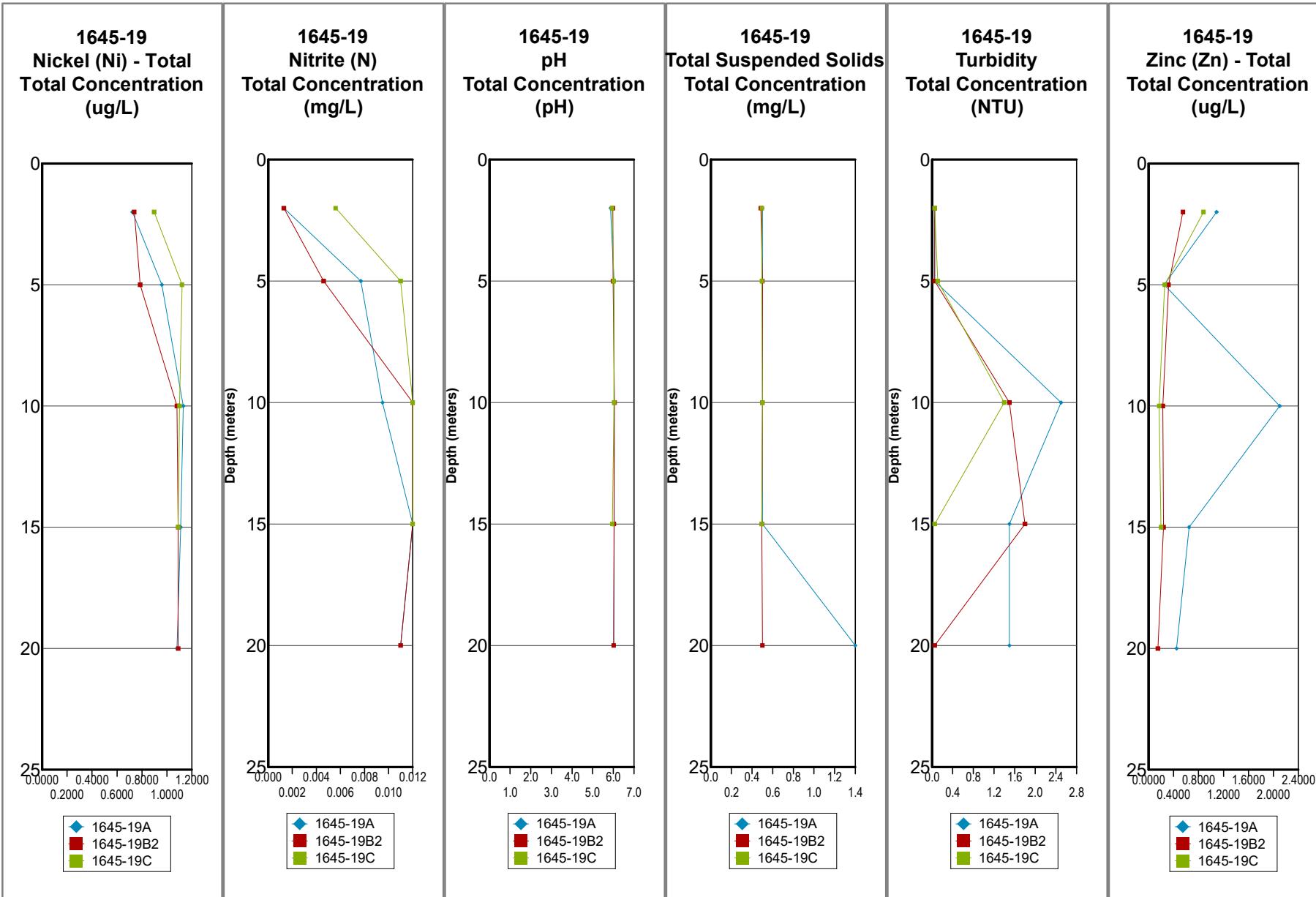


Table 5: Lac de Gras Mixing Zone Bioprofile

RioTinto

December 2024							
HydroLab Bioprofile - LDG - Diffuser Stations		Depth Below Surface	pH	Dissolved Oxygen - Field	Turbidity	Conductivity	Temperature
Station ID	meters	pH	mg/L	NTU	us/cm	°C	
1645-19A	20.0	6.59	14.68	0.40	245.8	0.4	
	18.0	6.58	14.72	0.41	247.0	0.4	
	16.0	6.54	14.74	0.40	247.2	0.4	
	14.0	6.48	14.73	0.42	244.3	0.4	
	12.0	6.42	14.62	0.47	234.9	0.4	
	10.0	6.34	14.46	0.43	226.5	0.4	
	8.0	6.29	14.26	0.42	208.2	0.4	
	6.0	6.27	13.88	0.43	145.7	0.4	
	4.0	6.24	14.02	0.44	113.5	0.4	
	2.0	6.19	14.31	0.45	116.9	0.3	
1645-19B2	20.0	6.72	14.81	0.34	246.9	0.4	
	18.0	6.72	14.86	0.34	247.6	0.4	
	16.0	6.7	14.84	0.36	246.8	0.4	
	14.0	6.69	14.86	0.36	245.8	0.4	
	12.0	6.67	14.9	0.36	243.1	0.4	
	10.0	6.66	14.94	0.37	239.6	0.4	
	8.0	6.63	14.75	0.38	225	0.4	
	6.0	6.65	14.43	0.39	176.7	0.4	
	4.0	6.73	14.5	0.41	124.5	0.5	
	2.0	6.85	15.13	0.38	122.9	0.3	
1645-19C	20.0	6.81	14.90	0.26	248.5	0.4	
	18.0	6.81	14.94	0.26	248.9	0.4	
	16.0	6.81	14.93	0.27	246.7	0.4	
	14.0	6.79	14.98	0.29	245.8	0.4	
	12.0	6.79	15.02	0.29	245.3	0.4	
	10.0	6.79	15.02	0.31	244.2	0.4	
	8.0	6.79	15.02	0.31	240.5	0.4	
	6.0	6.81	15.01	0.32	228.4	0.3	
	4.0	6.82	14.95	0.33	220.9	0.3	
	2.0	6.93	14.90	0.33	179.1	0.3	

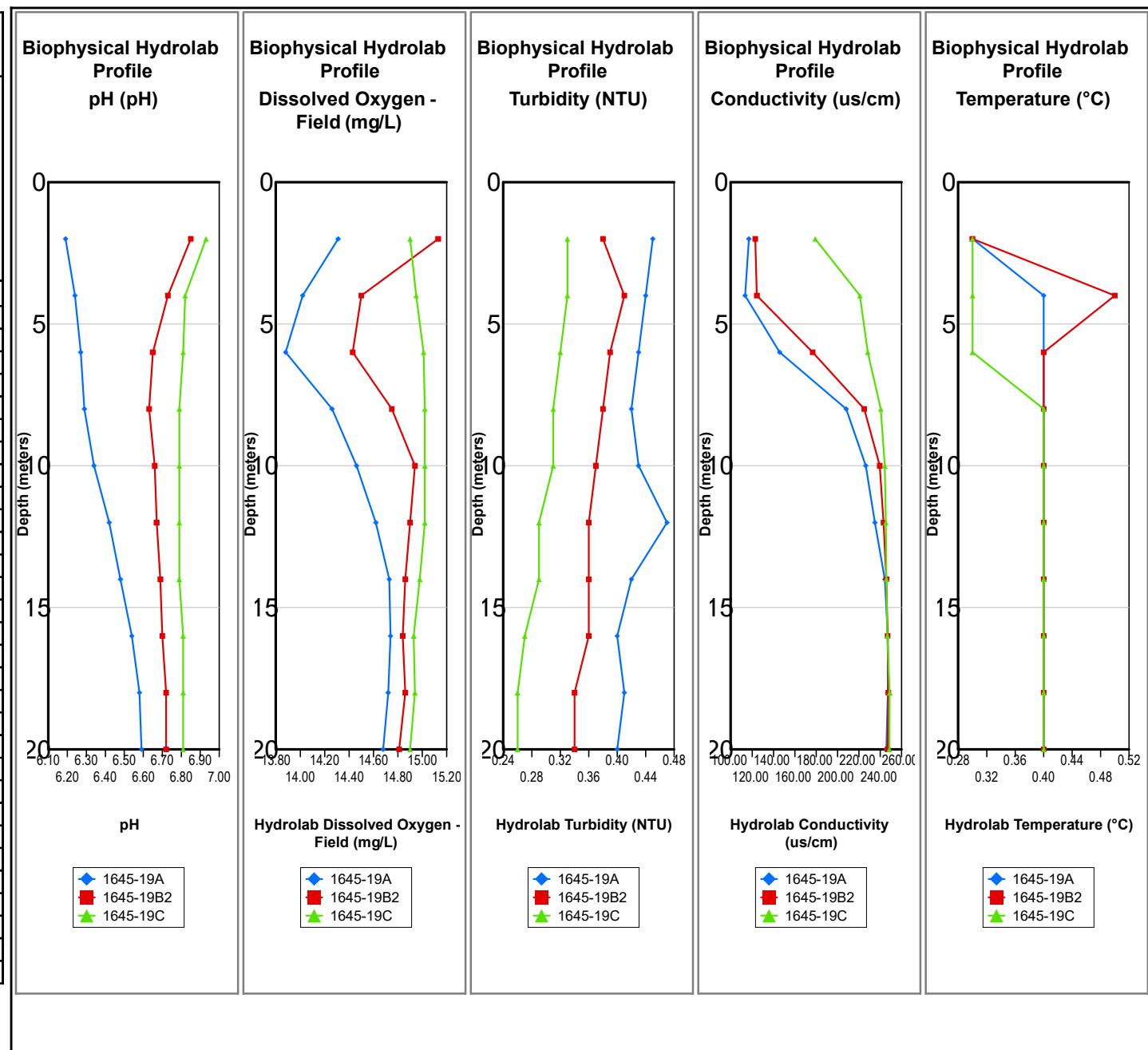


Table 6: Non Discharge SNP Stations

W2015L2-0001 Discharge Criteria

			23-Dec-24	9-Dec-24
Aluminum (Al) - Total	ug/L	7.3	11.5	
Ammonia (N)	mg/L	4.5	4.5	
Arsenic (As) - Total	ug/L	2.38	2.35	
Biochemical Oxygen Demand	mg/L			
C6-C50 Hydrocarbons Calculated	mg/L	<0.26	<0.26	
Cadmium (Cd) - Total	ug/L	0.033	0.029	
Chromium (Cr) - Total	ug/L	0.60	0.76	
Copper (Cu) - Total	ug/L	<0.25	<0.25	
Faecal Coliform	CFU/100mL			
Lead (Pb) - Total	ug/L	<0.025	<0.025	
Nickel (Ni) - Total	ug/L	2.84	3.71	
Nitrite (N)	mg/L	1.2	1.3	
pH	pH	8.60	9.36	
Total Suspended Solids (TSS)	mg/L	<1.0	<1.0	
Turbidity	NTU	<0.10	<0.10	
Zinc (Zn) - Total	ug/L	0.61	<0.50	

1645-88	
23-Dec-24	
9-Dec-24	

Table 6: Non Discharge SNP Stations

		December 2024																		
		Non-Discharge SNP Stations, incl. Collection Ponds		W.L Criteria	Reported Units	3-Dec-24	30-Dec-24	1645-11	1645-13	1645-24	18-Dec-24	12-Dec-24	6-Dec-24	29-Dec-24	1645-51	1645-75	1645-75B	1645-77	1645-80	1645-88
Nutrients	Dissolved Organic Carbon (C)		mg/L			1.6											3.7	1.9	2.3	1.6
	Nitrate (N)		mg/L	4.5	5.5	5.4	5.5	5.6	5.8	1.2	3.2	5.0	6.0	8.7	0.74	1.1	23	42	15	15
	Nitrate plus Nitrite (N)		mg/L	4.5	5.6	5.5	5.7	5.8	6.0	1.2	3.3	5.1	6.4	9.3	0.76	1.2	23	42	16	16
	Nitrogen (N) - Total		mg/L	6.5	7.0	6.9	6.9	6.7	6.7	2.2	3.1	8.4	8.7	15	1.0	1.7	28	45	20	20
	Orthophosphate (PO4-P)		mg/L	0.033	0.19	0.19	0.18	0.18	0.18	0.20	0.20	0.15	0.12	0.18	0.36	0.32	0.013	<0.0010	0.0017	0.0016
	Phosphorus (P) - Dissolved (TDP)		mg/L	0.0568	0.179	0.176	0.164	0.168	0.166	0.192	0.185	0.142	0.111	0.182	0.338	0.299	0.0107	<0.0020	<0.0020	0.0042
	Phosphorus (P) - Total		mg/L	0.378	0.174	0.180	0.173	0.174	0.177	0.359	0.351	1.68	2.63	2.79	0.500	0.429	0.0140	0.0033	0.0029	0.0052
	Total Organic Carbon (TOC)		mg/L			1.3											3.4	2.2	2.3	2.4
	Acidity (pH 4.5)		mg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	Acidity (pH 8.3)		mg/L	9.7	<1.0	<1.0	<1.0	1.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.9	2.5	14.7	6.5	<1.0	<1.0
Physical Properties	Alkalinity (PP as CaCO3)		mg/L	<0.50	<0.50	<0.50	6.71	<0.50	<0.50	<0.50	<0.50	<0.50	61.8	9.04	<0.50	<0.50	<0.50	<0.50	18.1	15.0
	Alkalinity (Total as CaCO3) - Total		mg/L	39.8	64.0	60.8	63.0	60.7	59.9	66.0	74.2	65.7	81.5	112	45.7	44.6	90.0	36.2	33.4	31.2
	Hardness (as CaCO3) - Dissolved		mg/L			174				109	42.9	129	141	183	166	178	768	564	239	284
	Hardness (as CACO3) - Total		mg/L		180	172	180	184	197	217	43.1	878	1030	1230	197	157	708	512	227	254
	Total Dissolved Solids (TDS)		mg/L	232	483	483	496	487	486	226	209	260	408	448	474	501	1980	1470	967	982

Table 6: Non Discharge SNP Stations

Rio Tinto		December 2024															
		Non-Discharge SNP Stations, incl. Collection Ponds		W.L. Criteria	Reported Units	3-Dec-24	30-Dec-24	1645-11	1645-13	1645-51	1645-75	1645-75B	1645-77	1645-80	1645-85A	1645-85B	1645-86A
Anions	Bicarbonate (HCO3)	mg/L	48.6	78.0	74.2	60.5	74.1	73.1	80.5	90.5	80.2	<0.50	115	55.7	54.5	110	44.2
	Carbonate (CO3)	mg/L	<0.50	<0.50	<0.50	8.06	<0.50	<0.50	<0.50	<0.50	<0.50	23.7	10.9	<0.50	<0.50	<0.50	<0.50
	Chloride (Cl) - Dissolved	mg/L	81	130	140	140	140	140	76	67	68	84	74	220	210	140	110
	Fluoride (F)	mg/L	<0.010	0.203	0.206	0.176	0.193	0.152	0.273	0.244	0.219	0.203	0.196	0.115	0.129	0.060	0.052
	Hydroxide (OH)	mg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	14.3	<0.50	<0.50	<0.50	<0.50	<0.50
	Sulphate (SO4) - Dissolved	mg/L	19	130	130	130	130	110	20	23	28	85	88	34	59	1100	790
	Benzene	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	Ethylbenzene	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
	F1 (C6-C10 Hydrocarbons)	ug/L	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<1000	<1000
	F1 (C6-C10) - BTEX	ug/L	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<1000	<1000
CCME Hydrocarbons	F2 (C10-C16 Hydrocarbons)	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.44	0.55	<0.10	<0.10	<0.35	0.57
	F3 (C16-C34 Hydrocarbons)	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	1.3	<0.10	1.8	4.2	12	<0.10	<0.10	<0.35	9.3
	F4 (C34-C50 Hydrocarbons)	mg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.34	<0.20	<0.20	0.35	2.1	<0.20	<0.20	<0.69	1.3
	Oil and Grease	mg/L	<1.0														
	Toluene	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<4.0	<4.0
	Xylenes (Total)	ug/L	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<5.7	<0.57

		1645-88	
		23-Dec-24	9-Dec-24
Bicarbonate (HCO3)	mg/L	<0.50	1.46
Carbonate (CO3)	mg/L	18.3	18.0
Chloride (Cl) - Dissolved	mg/L	94	95
Fluoride (F)	mg/L	0.284	0.231
Hydroxide (OH)	mg/L	0.97	<0.50
Sulphate (SO4) - Dissolved	mg/L	440	440
Benzene	ug/L	<0.40	<0.40
Ethylbenzene	ug/L	<0.40	<0.40
F1 (C6-C10 Hydrocarbons)	ug/L	<100	<100
F1 (C6-C10) - BTEX	ug/L	<100	<100
F2 (C10-C16 Hydrocarbons)	mg/L	<0.10	<0.10
F3 (C16-C34 Hydrocarbons)	mg/L	<0.10	<0.10
F4 (C34-C50 Hydrocarbons)	mg/L	<0.20	<0.20
Oil and Grease	mg/L		
Toluene	ug/L	<0.40	<0.40
Xylenes (Total)	ug/L	<0.57	<0.57

Table 7: Spill Summary December, 2024

RioTinto

Enablon Incident Number	Spill Date	DDMI Dept. / Contractor	Material /Product Spilled	Spill Volume (L)	Area of Spill (m ²)	Internal or Gov't Record	Equipment Type	Equipment Number	Incident Description	Spill Location Designation	Spill Location (Specific)	Easting	Northing
Surface Spills													
2526316407_58281	2024-12-01	DDMI - IS & T	Oil - Diesel	1	1	Internal	Light Vehicles Surface	274	Light vehicle backed over a small berm on the side of the road leading to damage to the fuel pump.	Pit A418	390 bench pump shack	536444	7152409
3906475971_60568	2024-12-15	DDMI - Surface Mining	Oil - Hydraulic	60	10	Internal	Haul Trucks Surface	793	When 793 haul truck dumped a load of type 3 waste at the backfill ROM, the right-side lift cylinder failed resulting in the release 60L of hydraulic oil.	Backfill Plant	Backfill ROM	535097	7152704
4008570456_60805	2024-12-17	DDMI - Infras - Proj - Pow - Projects	Oil - Hydraulic	10	2	Internal	Other Misc	PML007	Hydraulic hose failure on PML007.	Airport	ARF building	533381	7153875
129935911_61366	2024-12-19	DDMI - Infras - Proj - Pow - Site Maintenance	Oil - Diesel	1688	95	External	Fuel Truck	551	Diesel leak from fuel truck.	Ponds	Pond 7 Dam	531965	7151467
4263682299_61179	2024-12-21	DDMI - Surface Mining	Gasoline	50	10	Internal	Loaders and Forklifts	906	Fuel drain on loader contacted large rock while sanding pit roads, knocking it off causing spill.	Pit A154	154 pad	536888	7153116
UG Spills													
	2024-12-09	DDMI Underground	hydraulic oil	25		Internal	Simba	295	Blown hydraulic hose, cleaned with spill pads	D9000-155	Work area		

Projects

Snow clearing on PKC.

CPK placement in Region 50 and 510-L.

Clean up of Pond 2 area.

Infill of Pond 2.

Placement of geotextile for completion of Pond 7 breach.

Geotechnical

Inspection and monitoring of the A154, A418 and A21 Pits.

Inspection and monitoring of the A154, A418 and A21 Dikes.

Inspection and monitoring of the North Inlet Dikes and site Runoff Collection Pond System.

Inspection and monitoring of the Processed Kimberlite Containment Facility.

Track Processed Kimberlite production rates.

Inspection and monitoring of the Processed Kimberlite to A418 PK to Mine Workings (A418 PK-MW) pipelines.

Track and project future A418 PK-MW pool water levels based on projected Process Plant outputs.

Monitoring of instrumentation for PKCF rock fill cover closure trials.

Inspections, drone flights and monitoring of the A418 PK to Mine Workings deposition.

Monitoring and maintenance of PKCF seepage wells.

Tracking of A418, A154, and A21 seepage and depressurization responses.

Track and report PKCF seepage pumping, Runoff Collection Pond pumping, A154, A418 & A21 Dikes seepage pumping, A418 and A21 Pit Depressurization pumping, and A21 Pit and Underground dewatering pumping data.

Supervision and coordination for A21 dewatering to underground infrastructure.

Optimization of monitoring infrastructure to align with revised TARP and closure requirements.

Geotechnical Inspections of NCRP, NCTP, SCRP, MUDX/JJM Pile, and Dump 12.

Ris assessment for 2025 monitoring plan scope and coverage.

Installation and Operation of A154, A418, and A21 Pit Slope Stability Radar systems.

Operation of Deep Blue well 6.

Table 9: 2024 Raw Water Usage - W2015L2-0001
Part D, Item 2B

RioTinto

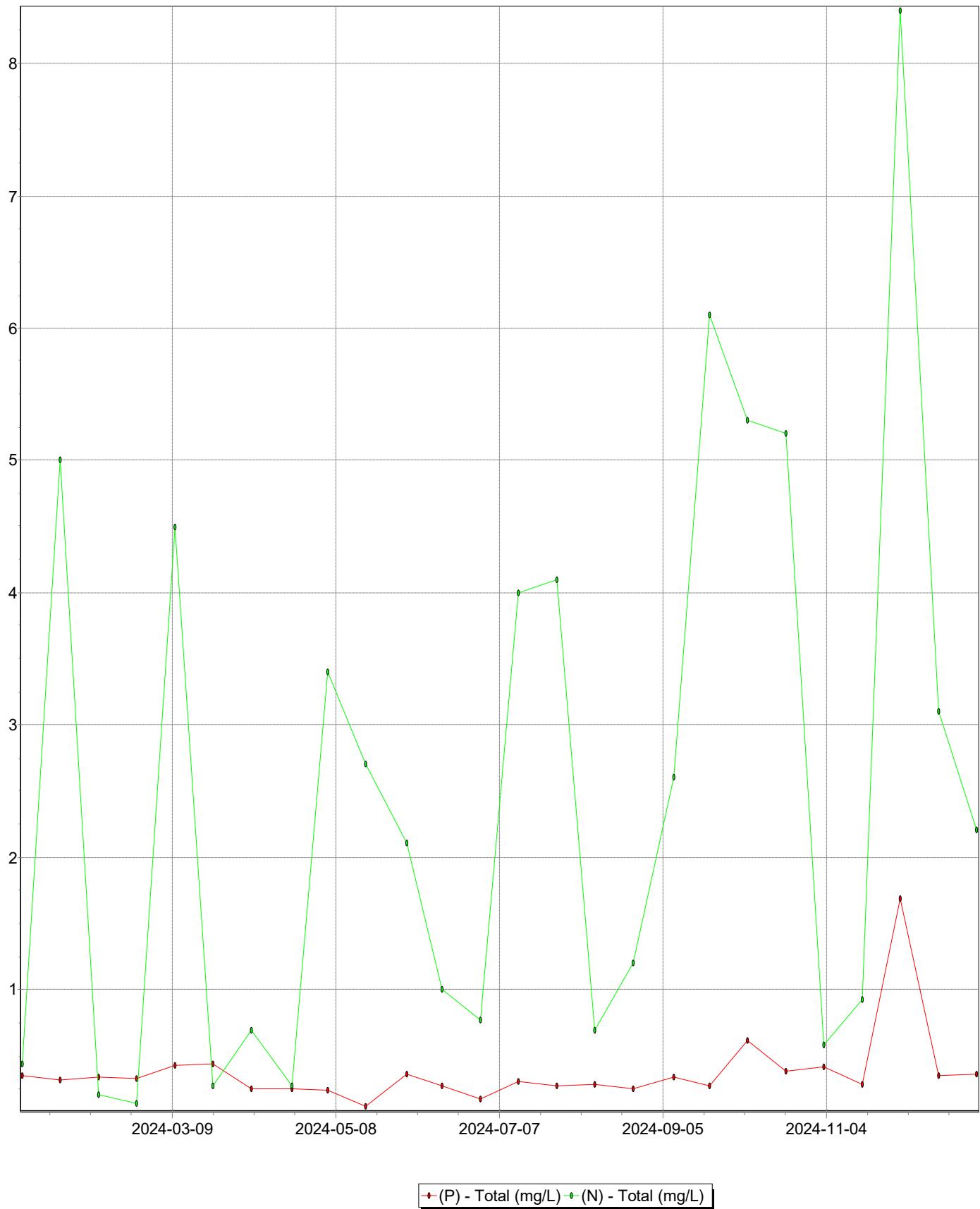
Month	Potable Water (m ³)	Drills / Others (m ³)	Process Plant (m ³)	Site Dust Management (m ³)	TOTAL (m ³)
January	6,501	10	66,444	-	72,955
February	5,995	5	76,220	-	82,220
March	6,443	14	67,091	-	73,548
April	6,153	34	61,873	-	68,060
May	6,367	9	67,013	274	73,663
June	6,142	10	83,457	29,673	119,282
July	6,530	-	97,352	27,869	131,751
August	6,958	-	74,723	10,221	91,903
September	6,181	-	70,908	207	77,295
October	7,332	-	40,444	-	47,776
November	6,631	3	71,515	-	78,149
December	6,128	11	77,940	-	84,079
TOTAL (m³)	77,361	96	854,979	68,245	1,000,681
WATER LICENCE ALLOWED ANNUAL RAW WATER USAGE (m ³) = 1,280,000					
RAW WATER RESIDUAL (m ³) = 279,319					
PERCENTAGE RESIDUAL = 22%					

Attachment 1

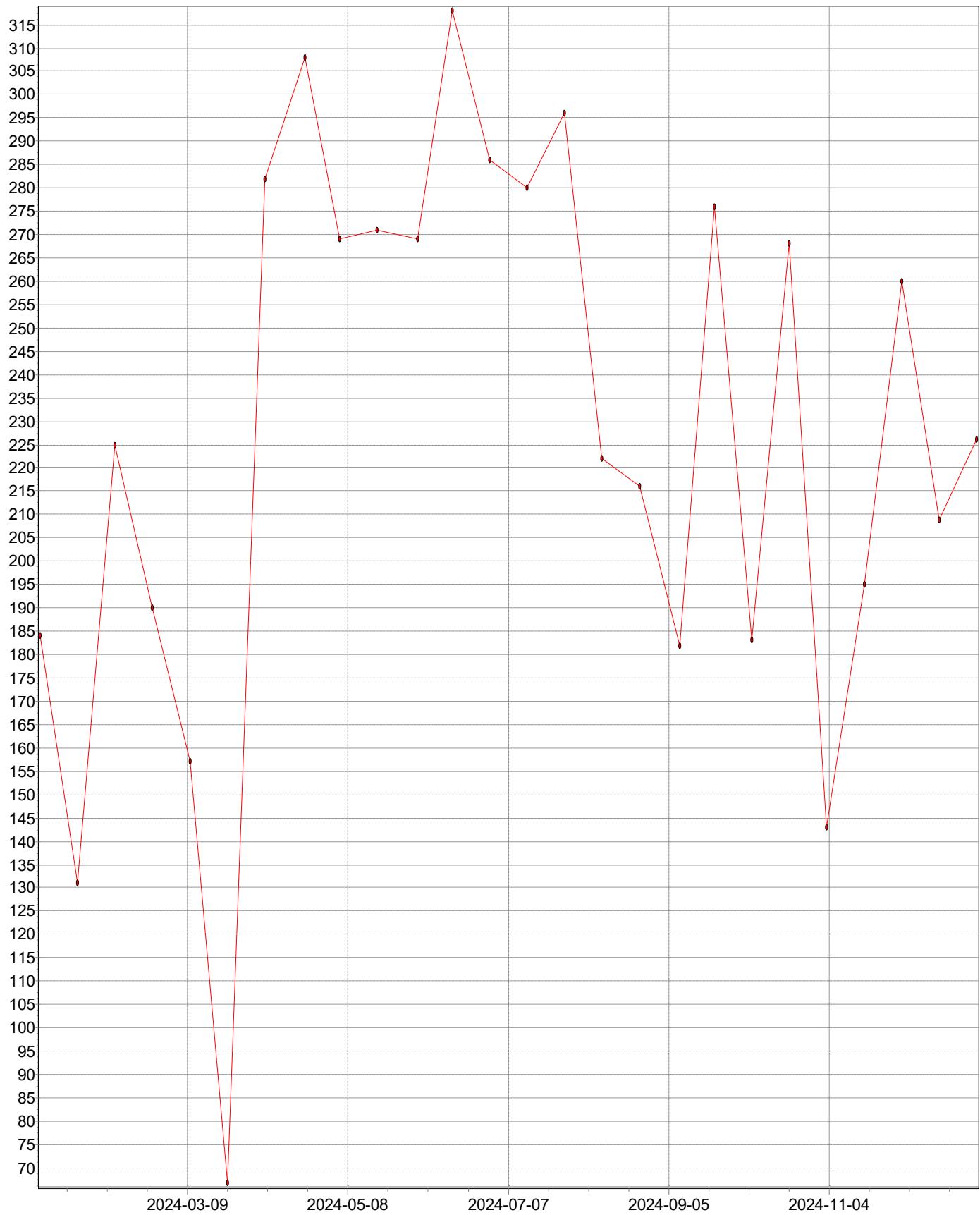
1645-51 Pumping Volumes to North Inlet



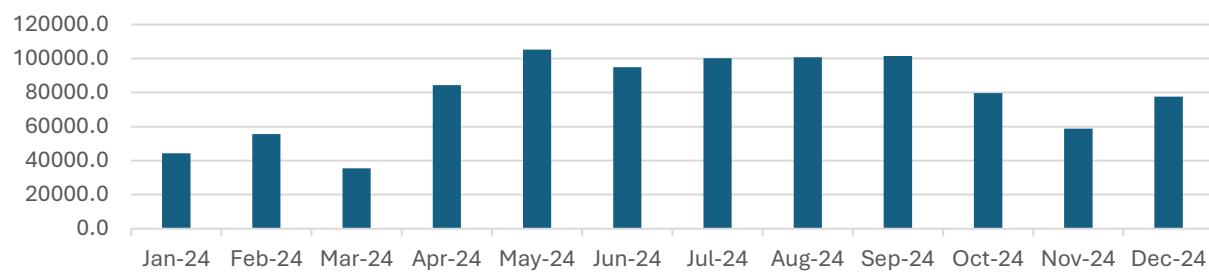
Time Series Graph of SNP-A: 1645-51, Maxxam



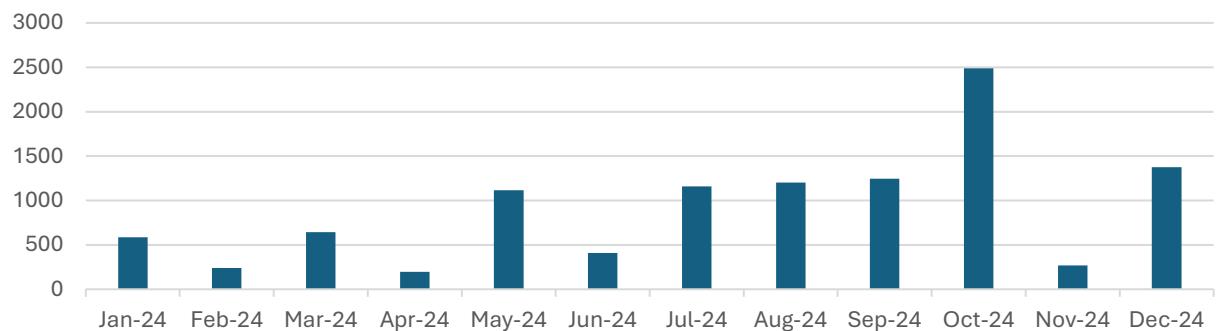
Time Series Graph of SNP-A: 1645-51, Maxxam, (TDS) (mg/L)



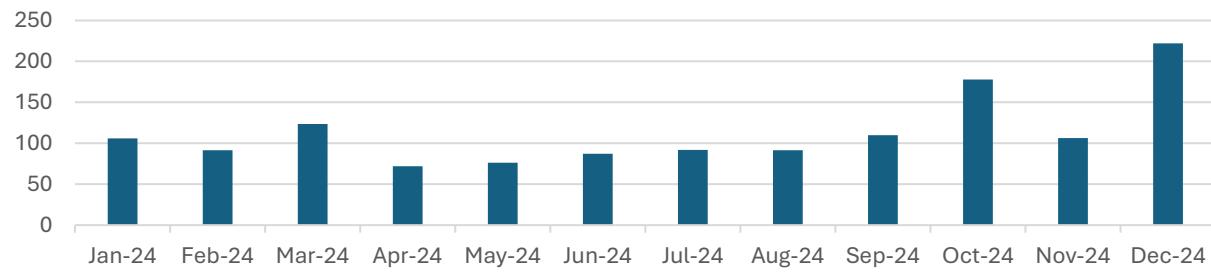
1645-51 Monthly Loadings of Total Dissolved Solids to North Inlet (kg)



1645-51 Monthly Total Nitrogen Loadings to North Inlet (kg)



1645-51 Monthly Total Phosphorus Loadings to North Inlet (kg)



Attachment 2

1645-88 Water Quality vs PKMW Modelling – to November 2024 RioTinto

	SAMPLE SIZE	5th PERCENTILE	MEDIAN	95th PERCENTILE	Model*
Sodium (Na) - Total (mg/L)	5	112.000	121.000	126.000	95.000
Fluoride (F) (mg/L)	5	0.235	0.260	0.281	0.075
Ammonia (N) (mg/L)	5	4.320	4.500	4.500	1.700
Nitrate (N) (mg/L)	5	14.000	14.000	15.000	12.000
Nitrite (N) (mg/L)	5	0.904	1.300	1.580	1.900
Aluminum (Al) - Total (ug/L)	5	8.140	17.200	25.100	4.700
Antimony (Sb) - Total (ug/L)	5	3.822	3.950	4.128	4.300
Arsenic (As) - Total (ug/L)	5	2.294	2.380	2.552	4.400
Barium (Ba) - Total (ug/L)	5	123.000	129.000	153.000	49.000
Boron (B) - Total (ug/L)	5	67.440	73.000	83.400	63.000
Cadmium (Cd) - Total (ug/L)	5	0.028	0.029	0.032	0.420
Calcium (Ca) - Total (mg/L)	5	65.140	70.600	75.740	0.630
Chloride (Cl) - Dissolved (mg/L)	5	92.400	94.000	95.800	101.000
Magnesium (Mg) - Total (mg/L)	5	16.300	18.900	20.240	0.430
Chromium (Cr) - Total (ug/L)	5	0.552	0.760	1.345	0.027
Copper (Cu) - Total (ug/L)	5	0.125	0.281	0.516	3.100
Iron (Fe) - Total (ug/L)	5	29.200	62.800	116.080	1.800
Lead (Pb) - Total (ug/L)	5	0.013	0.028	0.049	0.360
Manganese (Mn) - Total (ug/L)	5	1.408	1.970	3.634	2.700
Molybdenum (Mo) - Total (ug/L)	5	191.600	196.000	201.200	190.000
Nickel (Ni) - Total (ug/L)	5	3.014	4.100	6.554	3.300
Silicon (Si) - Total (ug/L)	5	1898.000	1940.000	2300.000	780.000
Silver (Ag) - Total (ug/L)	5	0.003	0.013	0.013	0.018
Selenium (Se) - Total (ug/L)	5	0.586	0.630	1.296	0.410
Sulphate (SO4) - Dissolved (mg/L)	5	440.000	500.000	518.000	175.000
Strontium (Sr) - Total (ug/L)	5	1440.000	1540.000	1848.000	530.000
Thallium (Tl) - Total (ug/L)	5	0.005	0.005	0.009	0.036
Tin (Sn) - Total (ug/L)	5	0.010	0.025	0.025	0.130
Uranium (U) - Total (ug/L)	5	0.053	0.068	0.090	0.025
Zinc (Zn) - Total (ug/L)	5	0.250	0.390	0.634	4.100
Total Dissolved Solids (TDS) (mg/L)	4	969.250	983.500	1023.250	534.000

Source: MP5 Imports

* Table 7 in Section 5.9 of Processed Kimberlite Management Plan, Version 7.1