July 9, 2026

Stasia Ferby
Project Assessment Director
BC Environmental Assessment Office
By Email: Stasia.Ferbey@gov.bc.ca

SUBJECT: Overall Final EAO Water Information Request Response Summary

Dear Ms. Ferbey:

Telkwa Mining Limited (Telkwa Mining) is pleased to provide an overall summary of our final EAO Water Information Request response summary and organization which proivdes the complete respoonse to the EAO water IR as follows:

ATTACHMENT A provides the January 29, 2026 that represents the Water Information that was approved for submission after discussions with the EAO and the line agencies of Ministry of Environment and Parks (MENV) and Minsitry of Mining and Critical Minerals (MMCM) on the September 15, 2026 EAO Water IR submission for review.

ATTACHMENT B provides the response to the follow up information requests from MENV on April 15, 2026.

ATTACHMENT C provides the response to the follow up information requests from MMCM on May 15, 2026.

ATTACHMENT D provides the response to the follow up information request 8 and 9 from MENVe on May 22, 2026.

ATTACHMENT E provides the response to the follow up Information request 8 from MENV and MMCM on June 25, 2026.

If you have any questions please do not hesitate to contact Dan Farmer at 604-220-5703 or dan.farmer@telkwa-mining.ca.

Sincerely,



Daniel J. Farmer
Project and Development Manager
Telkwa Mining Limited

Cc: Elise Matzanke, Project Assessment Officer, EAO, email: Elise.Matzanke@gov.bc.ca
Matt Scarr, Project Assessment Director, EAO, email: Matthew.Scarr@gov.bc.ca
Jessy Chaplin, Ecosystems Biologist, Telkwa Mining, email: Jessy.chaplin@telkwa-mining.ca
File

Attachments:

Attachment A: Telkwa Mining Response submitted January 29, 2206 to the Overall EAO Water IR issued by EAO to Telkwa Mining on November 23rd, 2022

Attachment B: Telkwa Mining Response to the follow up information requests from MENV on April 15, 2026

Attachment C: Telkwa Mining Response to the follow up information requests from MCMM on May 15, 2026

Attachment D: Telkwa Mining Response to the follow up information requests 8 and 9 from MENV on May 22, 2026

Attachment E: Telkwa Mining Response to the follow up information request 8 from MENV and MCMM on June 25, 2026

Attachment A: Telkwa Mining Response submitted January 29, 2206 to the Overall EAO Water IR issued by EAO to Telkwa Mining on November 23rd, 2022

Attachment B: Telkwa Mining Response to the follow up information requests from MENV on April 15, 2026

April 15, 2026

Stasia Ferby
Project Assessment Director
BC Environmental Assessment Office
By Email: Stasia.Ferbey@gov.bc.ca

SUBJECT: Response to follow-up Information Requests (IRs) from Ministry of Environment and Parks (MENV)

Dear Ms. Ferbey:

Telkwa Mining Limited (Telkwa Mining) is pleased to provide Attachment 1 for responses to the following information requests (IRs) provided by the Ministry of Environment for the Tenas Project's Water IR.

1. ***ENV - Rusto12-Feb-26 Appendix 8-Hydrogeology Technical Report Secton 6.7***
   Table 6-13 presents estimated seepage rates from various facilities using the modified liner designs. The two liner modifications appear to have little to no influence on seepage rates for most facilities, except for the EMP. Could you please clarify the reasons for the difference in seepage rates for this facility between the two liner designs.

2. ***ENV - Rusto12-Mar-26 Appendix 11-BAT Report Secton 6***
   The report states that the modified liners would be retained as a contingency option during permitting and the subsequent Operations Phase, should water quality predictions differ substantially from actual conditions observed during project development, and if monitoring results trend toward potential WQG exceedances in the future.
   However, this approach presents two potential challenges:
   1. *Once the ponds are constructed and operational, modifying their liners may be difficult, if not impractical.*
   2. *Given the long travel times associated with mine-affected groundwater reaching downstream waters, observable water quality impacts in the downstream waters may not materialize for many years—potentially decades—into the project life.*

   Please address these potential challenges and how they will be managed during the permitting process.

8. ***ENV - Anna Akkerman 17-Mar-26 Tenas Project Information Request Responses related to Surface Water Valued Component (Appendix 6) Section 5.24 and Attachment 18***
   The response related to ENV-511/ENV-519 is appreciated; however, I was looking for inflows and outflows categorized by pathway (e.g. seepage, runoff, precipitation etc.), which I acknowledge was not clearly defined in the R2 comment. Please provide annual water balance tables quantifying modeled inflows and outflows by pathway along with storage for major mine facilities under a range of climate conditions. [Information Request]

9. ***ENV - Anna Akkerman 17-Mar-26 Tenas Project Information Request Responses related to Surface Water Valued Component (Appendix 6) Section 5.7.4***
   Thank you for the response to ENV-296 and the updated information about the rainfall-runoff model in this document, the hydromet report and the WLBM report. Please provide flow duration curves showing the synthetic and rainfall-runoff modelled streamflow for Tenas-Hydro, Goathorn-Hydro, Bulkley River and Telkwa-Hydro. I would like to get a sense of the long-term distribution of streamflow from these two datasets along with the match between datasets from the rainfall-runoff model calibration based on both updated datasets. [Information Request]

12. ***ENV - Jason Marzinzik 17-Mar-26 "Tenas Project – Water and Load Balance Modeling Report (Updated 2025)" Appendix G***
    Some parameters well exceed guidelines in management ponds, particularly in the high source terms case (i.e., nitrite, nitrate exceed acute at peak, Se reaches 49 ug/L, sulphate reaches 850 mg/L). Closure concentrations are even higher. Please identify any exceedances of the acute BC WQG FAL modelled concentrations of effluent in Tables G-1 to G-9 of Appendix G.

13. ***ENV - Jason Marzinzik 17-Mar-26 "BC EAO EAC Application – Tenas Project***
    Section 4.0 Environmental Effects Assessment, Chapter 3 Surface Water Valued Component" 4.2.1 Fully Mixed Conditions
    Please identify where in Goathorn Creek the fully mixed concentrations of POCs in Table 4-2 represent.

14. ***ENV - Jason Marzinzik 17-Mar-26 "BC EAO EAC Application – Tenas Project Section 4.0 Environmental Effects Assessment, Chapter 3 Surface Water Valued Component" 4.3.1 Fully Mixed Conditions***
    Please identify where in Goathorn Creek the fully mixed concentrations of POCs in Table 4-4 represent.

If you have any questions please do not hesitate to contact Dan Farmer at 604-220-5703 or dan.farmer@telkwa-mining.ca.

Sincerely,



Daniel J. Farmer
Project and Development Manager
Telkwa Mining Limited

Cc: Elise Matzanke, Project Assessment Officer, EAO, email: Elise.Matzanke@gov.bc.ca
Matt Scarr, Project Assessment Director, EAO, email: Matthew.Scarr@gov.bc.ca
Jessy Chaplin, Ecosystems Biologist, Telkwa Mining, email: Jessy.chaplin@telkwa-mining.ca
File

Attachments:

Attachment 1: SRK response document to MENV Follow-up Information Requests related to Water

Attachment 1: SRK Response Document

srk consulting

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vancouver@srk.com
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FINAL

Memo

To	Dan Farmer	**Client**	Telkwa Mining Ltd
From	Celine Michiels, Nadine Shatilla	**Project**	CAPR002055
Cc	Samantha Barnes, Shauna Litke, Gregory Fagerlund	**Date**	April 13, 2026

Subject Information Request ENV (Ministry of Environment and Climate Change Strategy) – received on February 12, 2026

File name: CAPR002055_Memo_IR_Responses_ENV_FINAL_20260413.docx

1 Introduction

Additional information requests were received by Telkwa Mining Ltd. (TML) from ENV (Ministry of Environment and Climate Change Strategy) on the 3rd of February 2026. TML provided the comments to SRK Consulting (Canada) Inc. (SRK) by email.

This memo covers the response to information requests 1, 2, 8, 9, 12, 13 and 14. Responses for IR comment 1 and 2 were written by TML and reviewed by Gregory Fagerlund, PGeo, an associate with SRK. Responses to information requests 8, 9, 12, 13 and 14 were reviewed by Samantha Barnes, PEng as the QP.

2 IR 1 ENV – Rusto Martinka

2.1 IR Comment

Table 6-13 presents estimated seepage rates from various facilities using the modified liner designs. The two liner modifications appear to have little to no influence on seepage rates for most facilities, except for the EMP. Could you please clarify the reasons for the difference in seepage rates for this facility between the two liner designs.

2.2 Response

The liner designs for the two mitigations are identical for all facilities except the EMP. Under Mitigation 1, the EMP is assigned an Soil bentonite liner with a thickness of 0.56 m, whereas under Mitigation 2 it is assigned a Bituminous liner on top of a sol bentionite liner with a thickness of 0.30. The difference in estimated seepage rates observed for the EMP therefore reflects the difference in

liner specification between the two designs, while the absence of any difference for the other facilities is consistent with their liner designs remaining unchanged between the two mitigations.

3 IR 2 ENV – Rusto Martinka

3.1 IR Comment

The report states that the modified liners would be retained as a contingency option during permitting and the subsequent Operations Phase, should water quality predictions differ substantially from actual conditions observed during project development, and if monitoring results trend toward potential WQG exceedances in the future.

However, this approach presents two potential challenges:

1. Once the ponds are constructed and operational, modifying their liners may be difficult, if not impractical.
2. Given the long travel times associated with mine-affected groundwater reaching downstream waters, observable water quality impacts in the downstream waters may not materialize for many years—potentially decades—into the project life.

Please address these potential challenges and how they will be managed during the permitting process.

3.2 Response

Only a modified liner in the West Management Pond is retained as a contingency option in the BAT and during permitting, as this approach cannot be applied to the North and East Management Pond liners for reasons stated above. The West Management Pond liner is not installed until year 9 of the Operation phase, and by this time an understanding of seepage volumes and their parameter concentrations from the North Management Pond, which is completed in year 4 of the Operation phase, will have been established through piezometer monitoring near that pond and water quality monitoring within the pond itself. If these values are found to exceed modelled values and pose a risk of unacceptable effects in the downstream environment of Tenas Creek, the liner design for the WMP can be modified.

4 IR 8 ENV - Anna Akkerman

4.1 IR comment

The response related to ENV-511/ENV-519 is appreciated; however, I was looking for inflows and outflows categorized by pathway (e.g. seepage, runoff, precipitation etc.), which I acknowledge was not clearly defined in the R2 comment. Please provide annual water balance tables quantifying

modeled inflows and outflows by pathway along with storage for major mine facilities under a range of climate conditions. [Information Request]

4.2 Response

Annual water balance tables were developed for each facility (North, East and West management Ponds, Tenas Control pond and Open pit), discretized by types of inflows and outflows (seepage, runoffs, pumped flows, overflows, direct precipitation as well as evaporation), and shown for the 5th, 50th and 95th percentiles of each type of flows, when run under a variety of climate conditions in Goldsim with a WGEN run. These annual water balance tables can be found in Attachment 1.

5 IR 9 ENV - Anna Akkerman

5.1 IR comment

Thank you for the response to ENV-296 and the updated information about the rainfall-runoff model in this document, the hydromet report and the WLBM report. Please provide flow duration curves showing the synthetic and rainfall-runoff modelled streamflow for Tenas-Hydro, Goathorn-Hydro, Bulkley River and Telkwa-Hydro. I would like to get a sense of the long-term distribution of streamflow from these two datasets along with the match between datasets from the rainfall-runoff model calibration based on both updated datasets. [Information Request]

5.2 Response

The flow duration curves (FDCs) are shown below for locations requested above for the synthetic or observed time series, along with the results from each respective rainfall-runoff calibration models.

Tenas-Hydro B

Figure 5-1 below presents the FDC for Tenas-Hydro B, comparing synthetic discharge (Synthetic) and rainfall-runoff calibration model results (Simulated) over the same period. This comparison shows that the rainfall-runoff model are typically lower than the synthetic record, implying the water balance results are generally more conservative, in terms of under-reporting dilution capacity.

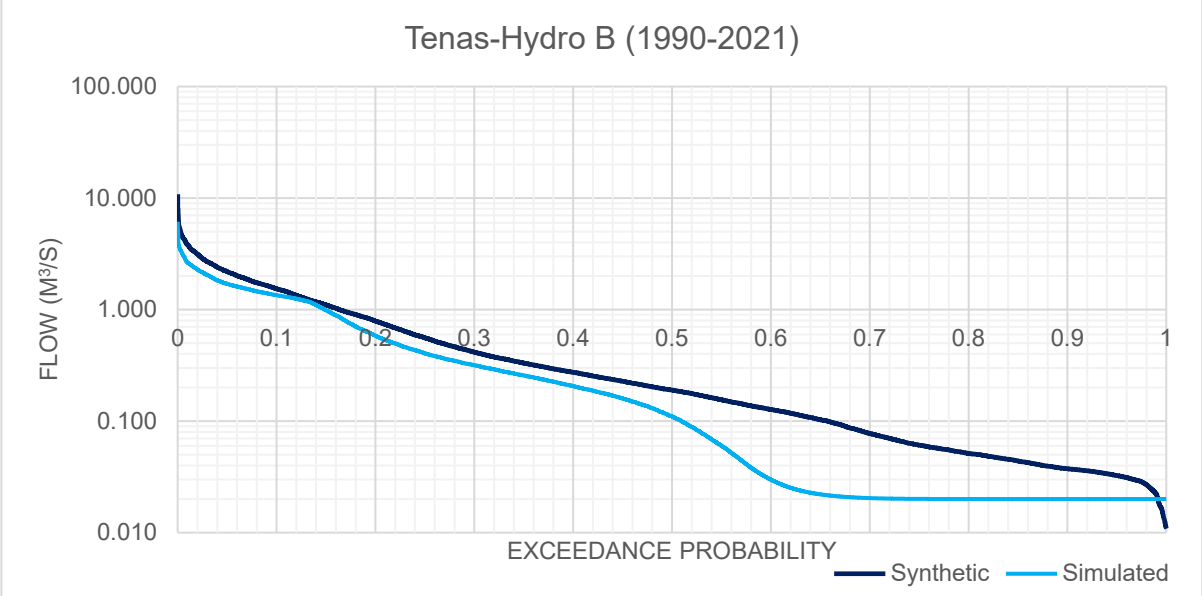


Figure 5-1: FDC for Tenas B-Hydro (1990-2021) comparing synthetic Tenas Creek flows with rainfall-runoff model results over the same period

The synthetic record estimated for Tenas-Hydro B (Synthetic) uses a series of seasonal regression equations based on discharge from the Goathorn Creek above the Telkwa WSC 08EE008 station. The baseflow value of 0.02 m^3/s is applied in the GoldSim model as a minimum flow rate as part of the rainfall-runoff model, which is why the FDC curve remains constant at this level. 7Q10 flows were calculated and applied in the GoldSim model for any modelling involving extreme low flow periods.

Goathorn-Hydro

The FDC for Goathorn-Hydro (Figure 5-2) displays the time series of discharge from WSC 08EE008 (Goathorn Creek near the Telkwa River) scaled to the Goathorn-Hydro catchment area (Synthetic) along with the model results (Simulated) over the same period.

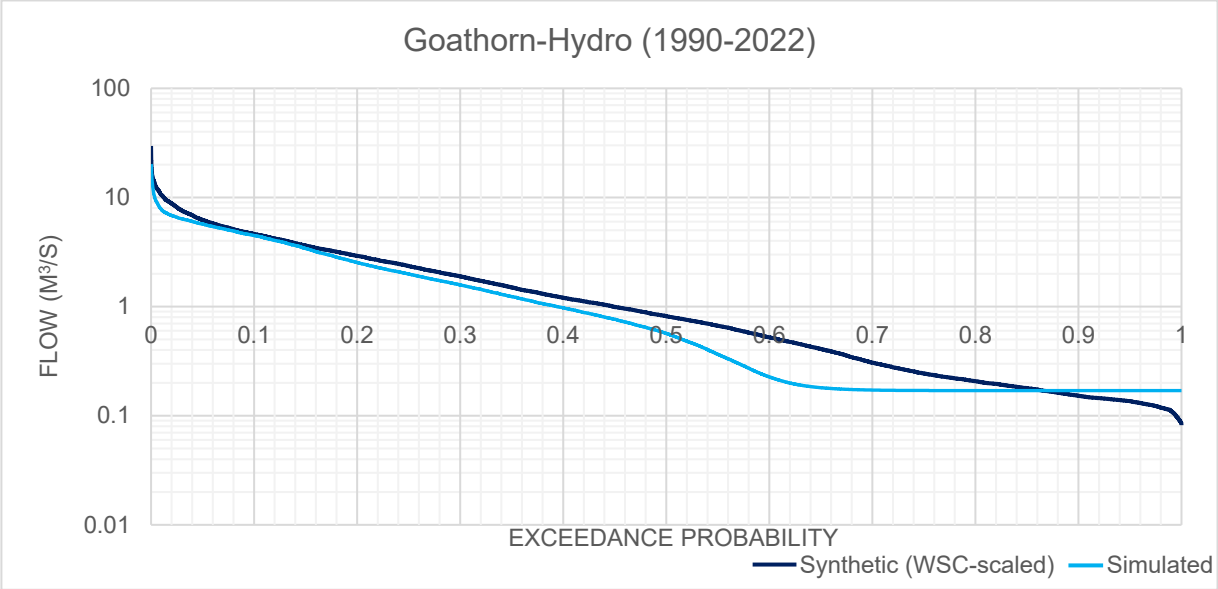


Figure 5-2. FDC for Goathorn-Hydro (1990-2021) comparing WSC flows scaled to Goathorn-Hydro catchment area (Synthetic) with rainfall-runoff model results (Simulated) over the same period.

The FDC shows conservatism for a large majority of flow values with values approaching the 0.17 m^3/s baseflow near to the 65% exceedance probability. The baseflow value of 0.17 m^3/s is applied in the GoldSim model as a fixed baseline minimum flow rate as part of the rainfall-runoff model, which is why the FDC curve remains constant at this level. This is intended to represent monthly average flow, coinciding with the reporting period of the model. This value was calculated as the 25th percentile of winter flows as defined by the water year (Section 3.1; SRK, 2026) and compared with a lower, more conservative value of 0.13 m^3/s, which intersected the 95% exceedance probability. The range of baseflow values was investigated in conjunction with groundwater model results, which produced values from 0.18 m^3/s to 0.21 m^3/s for model nodes within the Goathorn catchment. The baseflow value of 0.17 m^3/s was deemed most appropriate, and is shown in Figure 5-2 as a minimum flow rate as part of the rainfall-runoff model, which is why the FDC curve remains constant at this level. 7Q10 values were calculated and applied in the GoldSim model to consider more extreme low flow periods.

Bulkley River

Figure 5-3 shows the observed flow record (Observed) for WSC station Bulkley River Above Quick (08EE004) and the rainfall-runoff calibration model results (Simulated) for the same location over the same period. The model baseflow is 21.9 m^3/s as a minimum flow rate as part of the rainfall-runoff model, which is why the FDC curve remains constant at this level. 7Q10 values were calculated and applied in the GoldSim model to consider more extreme low flow periods.

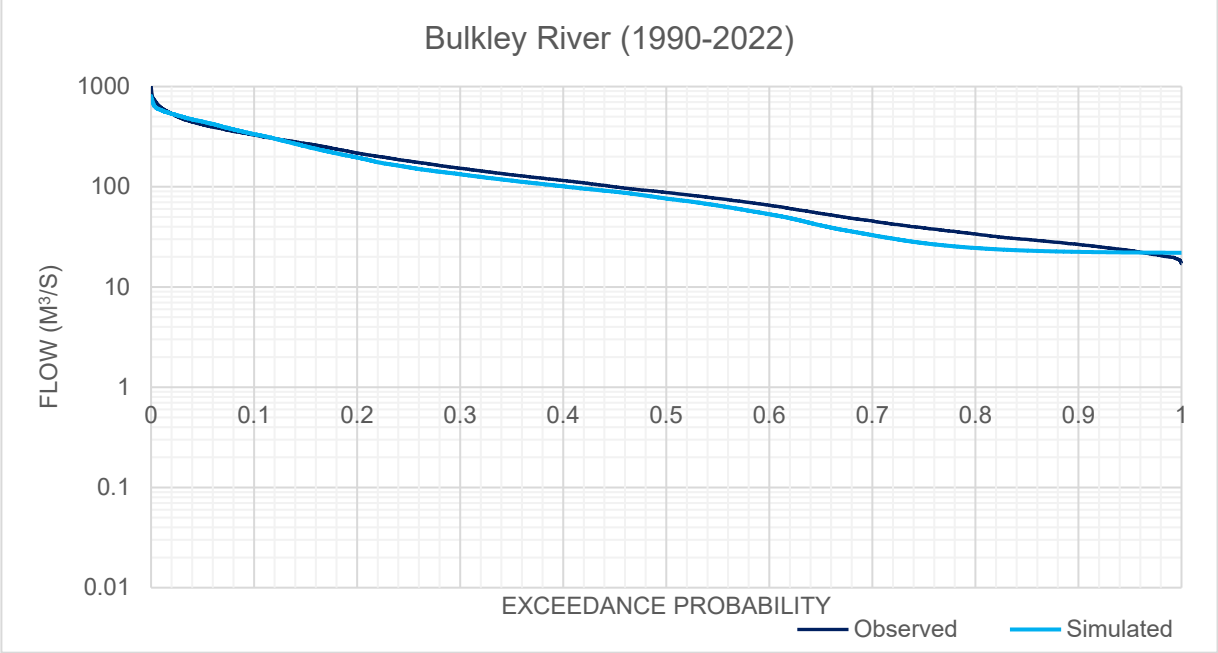


Figure 5-3. FDC for Bulkley River (1990-2022) comparing WSC (Observed)data with simulated discharge from rainfall-runoff model (Simulated) over the same period.

Telkwa-Hydro

Figure 5-4 displays the FDC of the daily synthetic time series of discharge for Telkwa-Hydro (Synthetic) developed using a regression between WSC station 08EE020 and continuous Project flows at the Project's Telkwa-Hydro station, along with the rainfall-runoff calibration model results (Simulated) for the same period. The model baseflow is 4 m^3/s, as a minimum flow rate as part of the rainfall-runoff model, which is why the FDC curve remains constant at this level. 7Q10 values were calculated and applied in the GoldSim model to consider more extreme low flow periods.

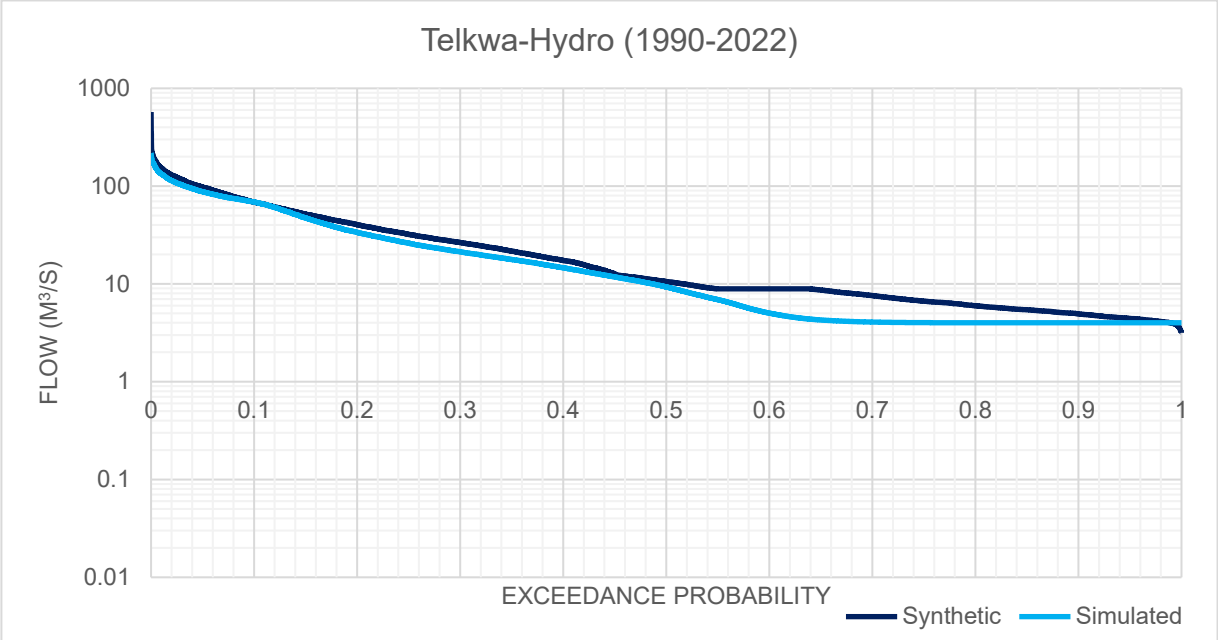


Figure 5-4. FDC for Telkwa-Hydro location (1990-2022) comparing synthetic time series (Synthetic) with rainfall-runoff model results (Simulated) over the same period.

6 IR 12 ENV - Jason Marzinzik

6.1 IR comment

Some parameters well exceed guidelines in management ponds, particularly in the high source terms case (i.e., nitrite, nitrate exceed acute at peak, Se reaches 49 ug/L, sulphate reaches 850 mg/L). Closure concentrations are even higher. Please identify any exceedances of the acute BC WQG FAL modelled concentrations of effluent in Tables G-1 to G-9 of Appendix G.

6.2 Response

Attachment 2 contains updated tables mentioned in IR comment with the corresponding acute water quality guidelines. Of note, Tenas Control Pond is decommissioned in closure, and tables G-4 and G-9 have been updated to reflect this (note that no closure results are displayed for TCP). In closure, the effluent to surface water discharge is from North Management Pond overflow to Goathorn Creek.

7 IR 13 and 14 ENV - Jason Marzinzik

7.1 IR comment

Please identify where in Goathorn Creek the fully mixed concentrations of POCs in Table 4-2 and Table 4-4 represent.

7.2 Response

Fully mixed conditions in Goathorn Creek can be found at prediction node WQSEA1, 100m after the confluence of the unnamed tributary where discharge is occurring. Attachment 3 shows where the prediction node is in Goathorn Creek.

Regards,
SRK Consulting (Canada) Inc.

Celine Michiels, PhD, MSc
Senior Consultant (Water Quality)

Nadine Shatilla, PhD, MSc
Senior Consultant (Hydrology)

Reviewed by

Gregory Fagerlund, MSc, PGeo (BC)
Principal Associate Consultant (Hydrogeology)

Samantha Barnes, PEng, MEng
Principal Consultant (Hydrotechnical Engineering)

EGBC Permit to Practice: 1003655

Attachments:

Attachment 1	ENV8: Annual Water Balance tables for Site Facilities (WGEN climate)
Attachment 2	ENV12: Streams Water Quality Results
Attachment 3	ENV13 and ENV14: Map of Prediction Node in Goathorn Creek

SRK Consulting (Canada) Inc. has prepared this document for Telkwa Mining Ltd, our client. Any use or decisions by which a third party makes of this document are the responsibility of such third parties. In no circumstance does SRK accept any consequential liability arising from commercial decisions or actions resulting from the use of this report by a third party.

The opinions expressed in this document have been based on the information available to SRK at the time of preparation. SRK has exercised all due care in reviewing information supplied by others for use on this project. While SRK has compared key supplied data with expected values, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data. SRK does not accept responsibility for any errors or omissions in the supplied information, except to the extent that SRK was hired to verify the data.

References

SRK Consulting (Canada) Inc (SRK), 2026. Tenas Project Information Request Responses Related to Surface Water Valued Component. Prepared for: Telkwa Mining Limited. January 2026.

Attachment 1 ENV8: Annual Water Balance tables for Site Facilities (WGEN climate)

Table 1-1: Annual Water Balance for the North Management Pond

	North Management Pond																				
	Storage			Inflows									Outflows								
Type of flows				Direct precipitation			Runoff flows			Pumped flows/overflow[1]			Evaporation			Groundwater seepage			Overflow+Pumped flows[2]		
Statistics	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95
Units	m3			m3/year			m3/year			m3/year			m3/year			m3/year			m3/year		
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	199,000	190,000	208,000	-	-	-	21,000	14,000	33,000	211,000	199,000	222,000	14,000	14,000	14,000	10,000	10,000	10,000	8,000	5,000	13,000
2023	641,000	632,000	651,000	90,000	70,000	114,000	56,000	35,000	81,000	548,000	507,000	605,000	146,000	146,000	147,000	54,000	54,000	54,000	52,000	-	115,000
2024	784,000	782,000	786,000	193,000	151,000	236,000	-	-	-	515,000	406,000	622,000	163,000	163,000	163,000	72,000	72,000	72,000	325,000	185,000	450,000
2025	784,000	782,000	787,000	208,000	163,000	257,000	-	-	-	504,000	409,000	598,000	163,000	163,000	163,000	72,000	72,000	72,000	477,000	350,000	603,000
2026	759,000	714,000	811,000	211,000	165,000	262,000	-	-	-	-	-	-	163,000	163,000	164,000	72,000	72,000	72,000	-	-	-
2027	757,000	699,000	794,000	205,000	169,000	255,000	-	-	-	-	-	-	129,000	129,000	129,000	72,000	72,000	72,000	6,000	-	36,000
2028	746,000	691,000	784,000	214,000	170,000	264,000	-	-	-	-	-	-	129,000	129,000	129,000	72,000	72,000	72,000	23,000	-	65,000
2029	740,000	695,000	776,000	209,000	166,000	254,000	-	-	-	-	-	-	129,000	129,000	129,000	72,000	72,000	72,000	14,000	-	44,000
2030	785,000	681,000	794,000	210,000	162,000	259,000	-	-	-	345,000	-	702,000	129,000	129,000	129,000	72,000	72,000	72,000	309,000	-	697,000
2031	760,000	725,000	791,000	208,000	169,000	257,000	-	-	-	357,000	227,000	519,000	129,000	129,000	129,000	72,000	72,000	72,000	389,000	226,000	577,000
2032	758,000	723,000	791,000	208,000	165,000	258,000	-	-	-	305,000	133,000	491,000	129,000	129,000	129,000	72,000	72,000	72,000	313,000	103,000	532,000
2033	762,000	723,000	791,000	216,000	172,000	271,000	-	-	-	330,000	155,000	547,000	129,000	129,000	129,000	72,000	72,000	72,000	341,000	151,000	584,000
2034	762,000	728,000	793,000	215,000	174,000	262,000	-	-	-	325,000	168,000	487,000	130,000	130,000	130,000	72,000	72,000	72,000	338,000	145,000	529,000
2035	761,000	717,000	792,000	212,000	162,000	264,000	-	-	-	300,000	155,000	460,000	130,000	130,000	130,000	72,000	72,000	72,000	311,000	121,000	512,000
2036	757,000	722,000	793,000	210,000	160,000	263,000	-	-	-	300,000	134,000	494,000	130,000	130,000	130,000	72,000	72,000	72,000	310,000	111,000	538,000
2037	765,000	726,000	792,000	219,000	171,000	261,000	-	-	-	294,000	113,000	494,000	130,000	130,000	130,000	72,000	72,000	72,000	303,000	81,000	531,000
2038	762,000	728,000	792,000	216,000	167,000	259,000	-	-	-	293,000	140,000	464,000	130,000	130,000	130,000	72,000	72,000	72,000	309,000	120,000	519,000
2039	762,000	727,000	792,000	215,000	169,000	268,000	-	-	-	283,000	138,000	425,000	130,000	130,000	130,000	72,000	72,000	72,000	296,000	127,000	483,000
2040	759,000	723,000	790,000	216,000	163,000	261,000	-	-	-	288,000	125,000	451,000	130,000	130,000	130,000	72,000	72,000	72,000	304,000	93,000	486,000
2041	760,000	729,000	792,000	215,000	171,000	253,000	-	-	-	262,000	133,000	426,000	131,000	131,000	131,000	72,000	72,000	72,000	273,000	110,000	480,000
2042	763,000	728,000	793,000	220,000	162,000	265,000	-	-	-	276,000	130,000	426,000	131,000	131,000	131,000	72,000	72,000	72,000	290,000	96,000	490,000
2043	791,000	761,000	794,000	215,000	169,000	253,000	-	-	-	592,000	164,000	956,000	131,000	131,000	131,000	72,000	72,000	72,000	576,000	137,000	994,000
2044	775,000	711,000	794,000	214,000	165,000	269,000	-	-	-	600,000	266,000	972,000	131,000	131,000	131,000	72,000	72,000	72,000	626,000	276,000	1,034,000
2045	790,000	737,000	794,000	219,000	170,000	266,000	-	-	-	794,000	397,000	1,133,000	131,000	131,000	131,000	72,000	72,000	72,000	796,000	342,000	1,183,000
2046	793,000	794,000	794,000	221,000	176,000	273,000	-	-	-	851,000	551,000	1,216,000	131,000	131,000	131,000	72,000	72,000	72,000	865,000	537,000	1,271,000
2047	793,000	794,000	794,000	221,000	180,000	264,000	-	-	-	849,000	545,000	1,186,000	131,000	131,000	131,000	72,000	72,000	72,000	867,000	513,000	1,242,000
2048	792,000	782,000	794,000	219,000	175,000	272,000	-	-	-	873,000	554,000	1,255,000	131,000	131,000	131,000	72,000	72,000	72,000	890,000	543,000	1,327,000
2049	792,000	794,000	794,000	225,000	184,000	272,000	-	-	-	899,000	563,000	1,331,000	131,000	131,000	131,000	72,000	72,000	72,000	919,000	550,000	1,394,000
2050	792,000	794,000	794,000	221,000	167,000	273,000	-	-	-	875,000	543,000	1,257,000	131,000	131,000	131,000	72,000	72,000	72,000	893,000	510,000	1,334,000
2051	793,000	794,000	794,000	225,000	171,000	276,000	-	-	-	889,000	592,000	1,261,000	132,000	132,000	132,000	72,000	72,000	72,000	909,000	566,000	1,327,000
2052	791,000	783,000	794,000	220,000	179,000	265,000	-	-	-	880,000	562,000	1,164,000	132,000	132,000	132,000	72,000	72,000	72,000	898,000	570,000	1,215,000
2053	793,000	794,000	794,000	223,000	180,000	267,000	-	-	-	890,000	562,000	1,214,000	132,000	132,000	132,000	72,000	72,000	72,000	906,000	552,000	1,275,000
2054	792,000	794,000	794,000	228,000	180,000	280,000	-	-	-	934,000	524,000	1,384,000	132,000	132,000	132,000	72,000	72,000	72,000	958,000	520,000	1,458,000
2055	792,000	794,000	794,000	219,000	172,000	272,000	-	-	-	870,000	594,000	1,274,000	132,000	132,000	132,000	72,000	72,000	72,000	885,000	578,000	1,335,000
2056	794,000	794,000	794,000	230,000	186,000	271,000	-	-	-	946,000	652,000	1,188,000	132,000	132,000	132,000	72,000	72,000	72,000	970,000	637,000	1,243,000
2057	793,000	794,000	794,000	224,000	177,000	277,000	-	-	-	924,000	592,000	1,324,000	132,000	132,000	132,000	72,000	72,000	72,000	944,000	573,000	1,403,000
2058	794,000	794,000	794,000	238,000	187,000	301,000	-	-	-	1,006,000	649,000	1,421,000	132,000	132,000	132,000	72,000	72,000	72,000	1,038,000	637,000	1,512,000
2059	792,000	794,000	794,000	222,000	173,000	274,000	-	-	-	926,000	645,000	1,285,000	133,000	133,000	133,000	72,000	72,000	72,000	945,000	630,000	1,341,000
2060	794,000	794,000	794,000	226,000	181,000	276,000	-	-	-	926,000	576,000	1,279,000	133,000	133,000	133,000	72,000	72,000	72,000	946,000	563,000	1,352,000
2061	792,000	794,000	794,000	227,000	178,000	279,000	-	-	-	944,000	627,000	1,300,000	133,000	133,000	133,000	72,000	72,000	72,000	967,000	620,000	1,367,000
2062	792,000	773,000	794,000	229,000	175,000	276,000	-	-	-	955,000	600,000	1,334,000	133,000	133,000	133,000	72,000	72,000	72,000	979,000	559,000	1,402,000
2063	794,000	794,000	794,000	231,000	177,000	280,000	-	-	-	959,000	561,000	1,336,000	133,000	133,000	133,000	72,000	72,000	72,000	983,000	531,000	1,397,000
2064	794,000	794,000	794,000	228,000	182,000	277,000	-	-	-	963,000	675,000	1,296,000	133,000	133,000	133,000	72,000	72,000	72,000	987,000	653,000	1,365,000
2065	793,000	794,000	794,000	229,000	174,000	285,000	-	-	-	975,000	550,000	1,396,000	133,000	133,000	133,000	72,000	72,000	72,000	999,000	512,000	1,467,000
2066	793,000	794,000	794,000	232,000	180,000	281,000	-	-	-	988,000	609,000	1,372,000	133,000	133,000	133,000	72,000	72,000	72,000	1,014,000	606,000	1,430,000
2067	792,000	794,000	794,000	234,000	183,000	278,000	-	-	-	1,012,000	663,000	1,373,000	133,000	133,000	133,000	72,000	72,000	72,000	1,042,000	649,000	1,447,000
2068	794,000	794,000	794,000	230,000	186,000	285,000	-	-	-	988,000	700,000	1,404,000	133,000	133,000	133,000	72,000	72,000	72,000	1,012,000	693,000	1,479,000
2069	792,000	794,000	794,000	233,000	189,000	282,000	-	-	-	999,000	664,000	1,415,000	133,000	133,000	133,000	72,000	72,000	72,000	1,029,000	652,000	1,486,000
2070	793,000	794,000	794,000	232,000	169,000	289,000	-	-	-	1,010,000	605,000	1,462,000	133,000	133,000	133,000	72,000	72,000	72,000	1,036,000	573,000	1,543,000
2071	793,000	794,000	794,000	233,000	184,000	276,000	-	-	-	1,007,000	679,000	1,339,000	133,000	133,000	133,000	72,000	72,000	72,000	1,034,000	670,000	1,403,000
2072	794,000	794,000	794,000	236,000	191,000	287,000	-	-	-	1,035,000	689,000	1,394,000	134,000	134,000	134,000	72,000	72,000	72,000	1,065,000	676,000	1,470,000
2073	793,000	794,000	794,000	232,000	180,000	289,000	-	-	-	1,006,000	620,000	1,453,000	134,000	134,000	134,000	72,000	72,000	72,000	1,033,000	609,000	1,537,000
2074	793,000	794,000	794,000	232,000	180,000	280,000	-	-	-	998,000	590,000	1,378,000	134,000	134,000	134,000	72,000	72,000	72,000	1,024,000	565,000	1,445,000
2075	793,000	794,000	794,000	232,000	185,000	302,000	-	-	-	1,017,000	679,000	1,547,000	134,000	134,000	134,000	72,000	72,000	72,000	1,042,000	657,000	1,641,000
2076	794,000	794,000	794,000	228,000	177,000	286,000	-	-	-	969,000	610,000	1,429,000	134,000	134,000	134,000	72,000	72,000	72,000	989,000	586,000	1,496,000
2077	793,000	794,000	794,000	233,000	187,000	281,000	-	-	-	980,000	635,000	1,332,000	135,000	135,000	135,000	72,000	72,000	72,000	1,006,000	607,000	1,398,000
2078	793,000	794,000	794,000	235,000	176,000	285,000	-	-	-	1,036,000	662,000	1,451,000	135,000	135,000	135,000	72,000	72,000	72,000	1,064,000	631,000	1,521,000
2079	794,000	794,000	794,000	235,000	187,000	289,000	-	-	-	1,021,000	662,000	1,480,000	135,000	135,000	135,000	72,000	72,000	72,000	1,048,000	648,000	1,568,000
2080	794,000	794,000	794,000	236,000	187,000	279,000	-	-	-	1,061,000	749,000	1,483,000	135,000	135,000	135,000	72,000	72,000	72,000	1,089,000	736,000	1,559,000
2081	793,000	794,000	794,000	240,000	190,000	300,000	-	-	-	1,067,000	666,000	1,546,000	136,000	136,000	136,000	72,000	72,000	72,000	1,100,000	647,000	1,652,000
2082	794,000	794,000	794,000	236,000	183,000	294,000	-	-	-	1,046,000	628,000	1,520,000	136,000	136,000	136,000	72,000	72,000	72,000	1,073,000	606,000	1,603,000
2083	794,000	794,000	794,000	242,000	183,000	298,000	-	-	-	1,090,000	672,000	1,538,000	136,000	136,000	136,000	72,000	72,000	72,000	1,124,000	644,000	1,627,000
2084	794,000	794,000	794,000	236,000	178,000	302,000	-	-	-	1,042,000	652,000	1,499,000	136,000	136,000	136,000	72,000	72,000	72,000	1,069,000	629,000	1,580,000
2085	794,000	794,000	794,000	243,000	196,000	303,000	-	-	-	1,105,000	707,000	1,583,000	136,000	136,000	136,000	72,000	72,000	72,000	1,140,000	695,000	1,667,000
2086	794,000	794,000	794,000	241,000	185,000	302,000	-	-	-	1,102,000	681,000	1,584,000	136,000	136,000	136,000	72,000	72,000	72,000	1,135,000	658,000	1,681,000
2087	794,000	794,000	794,000	246,000	191,000	314,000	-	-	-	1,120,000	743,000	1,663,000	136,000	136,000	136,000	72,000	72,000	72,000	1,158,000	720,000	1,763,000
2088	794,000	794,000	794,000	243,000	192,000	303,000	-	-	-	1,117,000	691,000	1,626,000	136,000	136,000	136,000	72,000	72,000	72,000	1,151,000	683,000	1,719,000
2089	794,000	794,000	794,000	241,000	197,000	296,000	-	-	-	1,089,000	726,000	1,564,000	137,000	137,000	137,000	72,000	72,000	72,000	1,121,000	712,000	1,651,000
2090	794,000	794,000	794,000	242,000	189,000	293,000	-	-	-	1,095,000	694,000	1,483,000	137,000	137,000	137,000	72,000	72,000	72,000	1,129,000	672,000	1,572,000
2091	794,000	794,000	794,000	241,000	193,000	295,000	-	-	-	1,100,000	753,000	1,565,000	137,000	137,000	137,000	72,000	72,000	72,000	1,132,000	739,000	1,659,000
2092	794,000	794,000	794,000	243,000	190,000	291,000	-	-	-	1,114,000	717,000	1,549,000	137,000	137,000	137,000	72,000	72,000	72,000	1,148,000	698,000	1,624,000
2093	794,000	794,000	794,000	234,000	190,000	293,000	-	-	-	1,056,000	722,000	1,490,000	137,000	137,000	137,000	72,000	72,000	72,000	1,082,000	719,000	1,568,000
2094	794,000	794,000	794,000	238,000	191,000	279,000	-	-	-	1,062,000	677,000	1,390,000	137,000	137,000	137,000	72,000	72,000	72,000	1,091,000	660,000	1,455,000
2095	793,000	794,000	794,000	233,000	185,000	279,000	-	-	-	1,037,000	707,000	1,387,000	137,000	137,000	137,000	72,000	72,000	72,000	1,061,000	703,000	1,463,000
2096	793,000	794,000	794,000	233,000	183,000	284,000	-	-	-	1,070,000	691,000	1,545,000	137,000	137,000	137,000	72,000	72,000	72,000	1,095,000	662,000	1,615,000
2097	793,000	794,000	794,000	230,000	176,000	280,000	-	-	-	1,014,000	608,000	1,431,000	137,000	137,000	137,000	72,000	72,000	72,000	1,035,000	579,000	1,495,000
2098	794,000	794,000	794,000	224,000	175,000	276,000	-	-	-	984,000	614,000	1,320,000	137,000	137,000	137,000	72,000	72,000	72,000	998,000	584,000	1,385,000
2099	793,000	794,000	794,000	224,000	176,000	272,000	-	-	-	970,000	571,000	1,355,000	137,000	137,000	137,000	72,000	72,000	72,000	987,000	552,000	1,420,000

Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Surface%20Water%20IR%20Responses/ITT_20260303/Annual_waterBalance_Telkwa_CAPR002055_20260323.xlsx?web=1

Notes:

Addition of PAG

Closure year

1 Pumped/overflow inflows includes pumped flows from open pit sump, any overflow or pumped flows from upstream Management Ponds, and pumping from TCP

2 Pumped/overflows outflows includes overflow from pond to donwstream reservoir, and any pumped flows (to other MPs or TCP). Overflows from NMP becomes the effluent discharge to the environment

Table 1-2: Annual Water Balance for the East Management Pond

	East Management Pond																				
	Storage			Inflows									Outflows								
Type of flows				Direct precipitation			Runoff flows			Pumped flows/overflow[1]			Evaporation			Groundwater seepage			Overflow+Pumped flows[2]		
Statistics	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95
Units	m3			m3/year			m3/year			m3/year			m3/year			m3/year			m3/year		
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2023	369,000	240,000	500,000	-	-	-	400,000	282,000	517,000	-	-	-	-	-	-	-	-	-	31,000	-	70,000
2024	598,000	586,000	630,000	120,000	92,000	152,000	351,000	248,000	494,000	464,000	416,000	520,000	124,000	123,000	125,000	12,000	12,000	12,000	569,000	396,000	727,000
2025	1,301,000	1,247,000	1,373,000	457,000	345,000	571,000	253,000	178,000	339,000	526,000	475,000	576,000	326,000	324,000	327,000	42,000	42,000	42,000	166,000	70,000	265,000
2026	2,004,000	1,950,000	2,050,000	701,000	548,000	870,000	210,000	159,000	272,000	686,000	584,000	813,000	442,000	440,000	445,000	70,000	70,000	70,000	381,000	130,000	655,000
2027	2,680,000	2,595,000	2,750,000	723,000	597,000	904,000	209,000	147,000	275,000	780,000	674,000	915,000	530,000	527,000	533,000	97,000	97,000	97,000	408,000	198,000	698,000
2028	3,158,000	2,977,000	3,402,000	778,000	619,000	961,000	218,000	153,000	280,000	483,000	385,000	612,000	582,000	580,000	585,000	126,000	126,000	126,000	295,000	175,000	390,000
2029	3,670,000	3,389,000	3,993,000	761,000	603,000	923,000	216,000	154,000	297,000	-	-	-	297,000	295,000	299,000	153,000	153,000	153,000	-	-	-
2030	3,519,000	3,501,000	3,523,000	763,000	590,000	941,000	217,000	154,000	288,000	-	-	-	619,000	619,000	619,000	167,000	167,000	167,000	345,000	-	702,000
2031	3,471,000	3,366,000	3,522,000	759,000	614,000	934,000	222,000	160,000	301,000	-	-	-	504,000	504,000	504,000	167,000	167,000	167,000	357,000	227,000	519,000
2032	3,468,000	3,380,000	3,523,000	757,000	600,000	937,000	217,000	163,000	277,000	-	-	-	505,000	505,000	505,000	168,000	168,000	168,000	305,000	133,000	491,000
2033	3,475,000	3,374,000	3,522,000	787,000	627,000	987,000	223,000	156,000	301,000	-	-	-	505,000	505,000	505,000	167,000	167,000	167,000	330,000	155,000	547,000
2034	3,472,000	3,381,000	3,523,000	784,000	632,000	953,000	211,000	146,000	282,000	-	-	-	506,000	506,000	506,000	167,000	167,000	167,000	325,000	168,000	487,000
2035	3,471,000	3,346,000	3,522,000	770,000	589,000	959,000	202,000	142,000	266,000	-	-	-	506,000	506,000	506,000	167,000	167,000	167,000	300,000	155,000	460,000
2036	3,460,000	3,365,000	3,523,000	763,000	584,000	959,000	201,000	152,000	259,000	-	-	-	507,000	507,000	507,000	168,000	168,000	168,000	300,000	134,000	494,000
2037	3,475,000	3,378,000	3,522,000	796,000	623,000	951,000	187,000	130,000	253,000	-	-	-	507,000	507,000	507,000	167,000	167,000	167,000	294,000	113,000	494,000
2038	3,476,000	3,381,000	3,523,000	784,000	607,000	941,000	184,000	128,000	248,000	-	-	-	508,000	508,000	508,000	167,000	167,000	167,000	293,000	140,000	464,000
2039	3,473,000	3,382,000	3,521,000	784,000	614,000	975,000	172,000	121,000	224,000	-	-	-	508,000	508,000	508,000	167,000	167,000	167,000	283,000	138,000	425,000
2040	3,464,000	3,356,000	3,521,000	786,000	595,000	951,000	170,000	125,000	235,000	-	-	-	509,000	509,000	509,000	168,000	168,000	168,000	288,000	125,000	451,000
2041	3,467,000	3,367,000	3,523,000	784,000	623,000	919,000	157,000	109,000	212,000	-	-	-	509,000	509,000	509,000	167,000	167,000	167,000	262,000	133,000	426,000
2042	3,474,000	3,369,000	3,523,000	800,000	589,000	963,000	160,000	113,000	210,000	-	-	-	510,000	510,000	510,000	167,000	167,000	167,000	276,000	130,000	426,000
2043	3,478,000	3,383,000	3,521,000	783,000	615,000	921,000	144,000	103,000	183,000	-	-	-	510,000	510,000	510,000	167,000	167,000	167,000	246,000	98,000	384,000
2044	3,460,000	3,316,000	3,521,000	779,000	601,000	979,000	146,000	102,000	186,000	-	-	-	511,000	511,000	511,000	168,000	168,000	168,000	264,000	91,000	440,000
2045	3,466,000	3,356,000	3,522,000	798,000	618,000	969,000	147,000	98,000	198,000	-	-	-	511,000	511,000	511,000	167,000	167,000	167,000	260,000	79,000	418,000
2046	3,472,000	3,384,000	3,521,000	805,000	640,000	994,000	146,000	102,000	191,000	-	-	-	511,000	511,000	511,000	167,000	167,000	167,000	266,000	104,000	442,000
2047	3,479,000	3,375,000	3,523,000	803,000	655,000	960,000	146,000	111,000	185,000	-	-	-	512,000	512,000	512,000	167,000	167,000	167,000	263,000	139,000	424,000
2048	3,466,000	3,330,000	3,523,000	798,000	636,000	989,000	151,000	103,000	200,000	-	-	-	512,000	512,000	512,000	168,000	168,000	168,000	281,000	134,000	450,000
2049	3,475,000	3,369,000	3,523,000	818,000	668,000	990,000	153,000	112,000	198,000	-	-	-	513,000	513,000	513,000	167,000	167,000	167,000	283,000	149,000	481,000
2050	3,474,000	3,372,000	3,523,000	805,000	608,000	993,000	150,000	110,000	193,000	-	-	-	513,000	513,000	513,000	167,000	167,000	167,000	275,000	114,000	432,000
2051	3,479,000	3,365,000	3,523,000	818,000	622,000	1,003,000	149,000	102,000	191,000	-	-	-	513,000	513,000	513,000	167,000	167,000	167,000	281,000	134,000	453,000
2052	3,473,000	3,363,000	3,521,000	801,000	650,000	966,000	151,000	111,000	197,000	-	-	-	514,000	514,000	514,000	168,000	168,000	168,000	277,000	127,000	419,000
2053	3,473,000	3,360,000	3,522,000	812,000	657,000	973,000	151,000	111,000	194,000	-	-	-	514,000	514,000	514,000	167,000	167,000	167,000	281,000	112,000	432,000
2054	3,480,000	3,362,000	3,523,000	830,000	656,000	1,018,000	158,000	110,000	198,000	-	-	-	515,000	515,000	515,000	167,000	167,000	167,000	299,000	124,000	511,000
2055	3,465,000	3,360,000	3,519,000	798,000	625,000	989,000	146,000	104,000	191,000	-	-	-	515,000	515,000	515,000	167,000	167,000	167,000	276,000	151,000	468,000
2056	3,480,000	3,369,000	3,523,000	837,000	678,000	987,000	160,000	121,000	203,000	-	-	-	516,000	516,000	516,000	168,000	168,000	168,000	298,000	147,000	419,000
2057	3,470,000	3,365,000	3,523,000	816,000	645,000	1,009,000	157,000	117,000	203,000	-	-	-	516,000	516,000	516,000	167,000	167,000	167,000	299,000	148,000	484,000
2058	3,489,000	3,394,000	3,523,000	865,000	681,000	1,095,000	164,000	115,000	218,000	-	-	-	517,000	517,000	517,000	167,000	167,000	167,000	327,000	147,000	524,000
2059	3,468,000	3,351,000	3,523,000	810,000	629,000	997,000	157,000	115,000	204,000	-	-	-	517,000	517,000	517,000	167,000	167,000	167,000	303,000	142,000	478,000
2060	3,476,000	3,379,000	3,522,000	824,000	660,000	1,004,000	158,000	116,000	211,000	-	-	-	518,000	518,000	518,000	168,000	168,000	168,000	289,000	118,000	451,000
2061	3,477,000	3,342,000	3,523,000	827,000	649,000	1,015,000	160,000	120,000	200,000	-	-	-	518,000	518,000	518,000	167,000	167,000	167,000	302,000	140,000	459,000
2062	3,476,000	3,329,000	3,523,000	833,000	636,000	1,004,000	158,000	120,000	201,000	-	-	-	518,000	518,000	518,000	167,000	167,000	167,000	307,000	151,000	494,000
2063	3,486,000	3,410,000	3,523,000	841,000	645,000	1,019,000	160,000	107,000	206,000	-	-	-	518,000	518,000	518,000	167,000	167,000	167,000	306,000	125,000	488,000
2064	3,483,000	3,391,000	3,523,000	831,000	663,000	1,008,000	161,000	124,000	206,000	-	-	-	518,000	518,000	518,000	168,000	168,000	168,000	310,000	190,000	469,000
2065	3,480,000	3,370,000	3,523,000	834,000	633,000	1,036,000	164,000	114,000	213,000	-	-	-	518,000	518,000	518,000	167,000	167,000	167,000	316,000	129,000	519,000
2066	3,483,000	3,395,000	3,523,000	843,000	655,000	1,022,000	164,000	117,000	218,000	-	-	-	518,000	518,000	518,000	167,000	167,000	167,000	318,000	154,000	516,000
2067	3,483,000	3,375,000	3,523,000	853,000	666,000	1,013,000	165,000	120,000	217,000	-	-	-	518,000	518,000	518,000	167,000	167,000	167,000	333,000	189,000	490,000
2068	3,476,000	3,380,000	3,523,000	836,000	677,000	1,039,000	164,000	116,000	212,000	-	-	-	518,000	518,000	518,000	168,000	168,000	168,000	320,000	193,000	512,000
2069	3,482,000	3,385,000	3,523,000	849,000	687,000	1,028,000	165,000	118,000	218,000	-	-	-	518,000	518,000	518,000	167,000	167,000	167,000	322,000	171,000	517,000
2070	3,482,000	3,365,000	3,523,000	845,000	615,000	1,053,000	168,000	119,000	223,000	-	-	-	519,000	519,000	519,000	167,000	167,000	167,000	327,000	131,000	552,000
2071	3,482,000	3,384,000	3,523,000	847,000	668,000	1,004,000	166,000	119,000	212,000	-	-	-	520,000	520,000	520,000	167,000	167,000	167,000	325,000	131,000	498,000
2072	3,487,000	3,404,000	3,522,000	858,000	696,000	1,045,000	172,000	120,000	221,000	-	-	-	521,000	521,000	521,000	168,000	168,000	168,000	335,000	174,000	501,000
2073	3,480,000	3,361,000	3,523,000	844,000	654,000	1,050,000	165,000	113,000	212,000	-	-	-	522,000	522,000	522,000	167,000	167,000	167,000	328,000	165,000	534,000
2074	3,490,000	3,399,000	3,523,000	845,000	655,000	1,018,000	169,000	125,000	217,000	-	-	-	523,000	523,000	523,000	167,000	167,000	167,000	314,000	96,000	493,000
2075	3,479,000	3,363,000	3,523,000	844,000	673,000	1,099,000	170,000	125,000	225,000	-	-	-	524,000	524,000	524,000	167,000	167,000	167,000	334,000	162,000	593,000
2076	3,482,000	3,382,000	3,523,000	828,000	643,000	1,040,000	169,000	116,000	235,000	-	-	-	525,000	525,000	525,000	168,000	168,000	168,000	301,000	127,000	507,000
2077	3,493,000	3,409,000	3,523,000	847,000	680,000	1,022,000	163,000	120,000	215,000	-	-	-	526,000	526,000	526,000	167,000	167,000	167,000	307,000	158,000	482,000
2078	3,486,000	3,356,000	3,523,000	855,000	640,000	1,038,000	171,000	125,000	218,000	-	-	-	527,000	527,000	527,000	167,000	167,000	167,000	339,000	180,000	542,000
2079	3,493,000	3,424,000	3,523,000	855,000	679,000	1,050,000	173,000	129,000	224,000	-	-	-	528,000	528,000	528,000	167,000	167,000	167,000	326,000	135,000	539,000
2080	3,485,000	3,370,000	3,523,000	858,000	682,000	1,016,000	180,000	139,000	235,000	-	-	-	528,000	528,000	528,000	168,000	168,000	168,000	349,000	213,000	538,000
2081	3,494,000	3,419,000	3,523,000	875,000	690,000	1,090,000	174,000	121,000	224,000	-	-	-	529,000	529,000	529,000	167,000	167,000	167,000	344,000	147,000	559,000
2082	3,491,000	3,390,000	3,523,000	859,000	666,000	1,069,000	174,000	129,000	226,000	-	-	-	529,000	529,000	529,000	167,000	167,000	167,000	339,000	141,000	563,000
2083	3,491,000	3,383,000	3,523,000	879,000	667,000	1,083,000	178,000	138,000	232,000	-	-	-	530,000	530,000	530,000	167,000	167,000	167,000	361,000	171,000	549,000
2084	3,488,000	3,391,000	3,523,000	857,000	647,000	1,100,000	172,000	125,000	227,000	-	-	-	530,000	530,000	530,000	168,000	168,000	168,000	335,000	144,000	559,000
2085	3,498,000	3,419,000	3,523,000	883,000	712,000	1,102,000	185,000	145,000	235,000	-	-	-	531,000	531,000	531,000	167,000	167,000	167,000	360,000	181,000	597,000
2086	3,492,000	3,397,000	3,523,000	877,000	673,000	1,100,000	179,000	131,000	233,000	-	-	-	531,000	531,000	531,000	167,000	167,000	167,000	364,000	165,000	585,000
2087	3,495,000	3,409,000	3,523,000	895,000	696,000	1,144,000	178,000	133,000	240,000	-	-	-	532,000	532,000	532,000	167,000	167,000	167,000	371,000	212,000	632,000
2088	3,493,000	3,387,000	3,523,000	885,000	697,000	1,103,000	183,000	130,000	236,000	-	-	-	532,000	532,000	532,000	168,000	168,000	168,000	369,000	175,000	613,000
2089	3,491,000	3,396,000	3,523,000	877,000	716,000	1,078,000	177,000	132,000	224,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	356,000	170,000	578,000
2090	3,500,000	3,413,000	3,523,000	882,000	687,000	1,065,000	180,000	137,000	223,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	353,000	183,000	525,000
2091	3,495,000	3,414,000	3,523,000	876,000	702,000	1,074,000	181,000	138,000	225,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	362,000	198,000	587,000
2092	3,504,000	3,432,000	3,523,000	883,000	692,000	1,058,000	187,000	142,000	240,000	-	-	-	533,000	533,000	533,000	168,000	168,000	168,000	361,000	185,000	572,000
2093	3,490,000	3,397,000	3,523,000	853,000	690,000	1,065,000	178,000	132,000	226,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	344,000	178,000	547,000
2094	3,495,000	3,416,000	3,523,000	865,000	694,000	1,017,000	179,000	130,000	225,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	339,000	164,000	512,000
2095	3,495,000	3,409,000	3,523,000	847,000	673,000	1,014,000	181,000	134,000	234,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	327,000	158,000	489,000
2096	3,485,000	3,384,000	3,523,000	848,000	667,000	1,033,000	189,000	138,000	253,000	-	-	-	533,000	533,000	533,000	168,000	168,000	168,000	346,000	171,000	576,000
2097	3,490,000	3,386,000	3,523,000	837,000	641,000	1,018,000	181,000	130,000	236,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	313,000	130,000	499,000
2098	3,483,000	3,371,000	3,523,000	816,000	638,000	1,006,000	179,000	131,000	230,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	301,000	122,000	471,000
2099	3,485,000	3,388,000	3,523,000	817,000	640,000	990,000	180,000	129,000	231,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	294,000	104,000	475,000

Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Surface%20Water%20IR%20Responses/ITT_20260303/Annual_waterBalance_Telkwa_CAPR002055_20260323.xlsx?web=1

Notes:

Addition of PAG

Closure year

1 Pumped/overflow inflows includes pumped flows from open pit sump, any overflow or pumped flows from upstream Management Ponds, and pumping from TCP

2 Pumped/overflows outflows includes overflow from pond to donwstream reservoir, and any pumped flows (to other MPs or TCP)

Table 1-3: Annual Water Balance for the West Management Pond

	West Management Pond																				
	Storage			Inflows									Outflows								
Type of flows				Direct precipitation			Runoff flows			Pumped flows/overflow[1]			Evaporation			Groundwater seepage			Overflow+Pumped flows[2]		
Statistics	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95
Units	m3			m3/year			m3/year			m3/year			m3/year			m3/year			m3/year		
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	397,000	312,000	483,000	48,000	36,000	59,000	6,000	5,000	8,000	355,000	278,000	432,000	12,000	10,000	14,000	-	-	-	-	-	-
2029	521,000	512,000	531,000	143,000	113,000	176,000	22,000	16,000	29,000	864,000	761,000	983,000	72,000	72,000	72,000	-	-	-	832,000	680,000	990,000
2030	968,000	963,000	973,000	193,000	149,000	238,000	31,000	22,000	42,000	915,000	776,000	1,056,000	119,000	119,000	120,000	11,000	11,000	11,000	564,000	370,000	740,000
2031	1,512,000	1,494,000	1,536,000	192,000	155,000	236,000	32,000	22,000	43,000	914,000	788,000	1,061,000	155,000	155,000	156,000	33,000	33,000	33,000	410,000	250,000	590,000
2032	2,007,000	1,988,000	2,033,000	192,000	152,000	237,000	31,000	23,000	40,000	915,000	793,000	1,083,000	183,000	183,000	183,000	55,000	55,000	55,000	414,000	240,000	610,000
2033	2,593,000	2,576,000	2,627,000	222,000	176,000	280,000	34,000	24,000	46,000	956,000	841,000	1,107,000	197,000	197,000	197,000	76,000	76,000	76,000	366,000	210,000	550,000
2034	3,251,000	3,223,000	3,299,000	266,000	214,000	323,000	39,000	28,000	49,000	956,000	872,000	1,078,000	251,000	251,000	252,000	98,000	98,000	98,000	270,000	140,000	410,000
2035	3,703,000	3,656,000	3,734,000	307,000	235,000	382,000	43,000	31,000	55,000	842,000	723,000	968,000	299,000	298,000	300,000	120,000	120,000	120,000	341,000	190,000	510,000
2036	4,148,000	4,087,000	4,199,000	348,000	266,000	438,000	49,000	37,000	61,000	813,000	707,000	954,000	361,000	360,000	361,000	142,000	142,000	142,000	286,000	140,000	470,000
2037	4,674,000	4,614,000	4,730,000	411,000	320,000	490,000	53,000	38,000	71,000	856,000	744,000	981,000	400,000	399,000	401,000	163,000	163,000	163,000	258,000	110,000	450,000
2038	5,130,000	5,047,000	5,178,000	450,000	348,000	541,000	58,000	41,000	75,000	826,000	684,000	965,000	437,000	436,000	438,000	185,000	185,000	185,000	287,000	130,000	460,000
2039	5,548,000	5,472,000	5,606,000	496,000	387,000	618,000	62,000	45,000	79,000	817,000	703,000	937,000	481,000	480,000	482,000	207,000	207,000	207,000	303,000	150,000	470,000
2040	6,068,000	6,003,000	6,151,000	543,000	410,000	656,000	68,000	53,000	90,000	914,000	792,000	1,079,000	506,000	506,000	507,000	229,000	229,000	229,000	307,000	120,000	500,000
2041	6,528,000	6,441,000	6,582,000	587,000	467,000	689,000	71,000	51,000	92,000	887,000	711,000	1,061,000	527,000	527,000	528,000	251,000	251,000	251,000	350,000	160,000	560,000
2042	7,004,000	6,912,000	7,069,000	646,000	476,000	778,000	80,000	58,000	100,000	928,000	778,000	1,098,000	548,000	547,000	548,000	272,000	272,000	272,000	403,000	180,000	630,000
2043	7,405,000	7,407,000	7,407,000	679,000	533,000	797,000	81,000	62,000	99,000	859,000	699,000	1,001,000	577,000	576,000	579,000	294,000	294,000	294,000	346,000	34,000	571,000
2044	7,393,000	7,317,000	7,407,000	698,000	538,000	877,000	108,000	75,000	139,000	343,000	304,000	386,000	575,000	575,000	575,000	300,000	300,000	300,000	336,000	149,000	531,000
2045	7,407,000	7,407,000	7,407,000	715,000	554,000	868,000	109,000	75,000	143,000	469,000	413,000	517,000	496,000	496,000	496,000	299,000	299,000	299,000	534,000	312,000	725,000
2046	7,407,000	7,407,000	7,407,000	721,000	573,000	891,000	108,000	76,000	145,000	481,000	436,000	525,000	476,000	476,000	476,000	299,000	299,000	299,000	585,000	402,000	781,000
2047	7,407,000	7,407,000	7,407,000	720,000	587,000	860,000	108,000	82,000	135,000	484,000	441,000	525,000	477,000	477,000	477,000	299,000	299,000	299,000	586,000	412,000	765,000
2048	7,407,000	7,407,000	7,407,000	715,000	570,000	886,000	112,000	76,000	148,000	493,000	442,000	543,000	477,000	477,000	477,000	300,000	300,000	300,000	593,000	411,000	819,000
2049	7,407,000	7,407,000	7,407,000	733,000	599,000	887,000	114,000	83,000	148,000	496,000	444,000	543,000	478,000	478,000	478,000	299,000	299,000	299,000	616,000	428,000	840,000
2050	7,407,000	7,407,000	7,407,000	721,000	545,000	890,000	111,000	83,000	143,000	496,000	453,000	540,000	478,000	478,000	478,000	299,000	299,000	299,000	601,000	392,000	817,000
2051	7,407,000	7,407,000	7,407,000	733,000	557,000	899,000	110,000	75,000	139,000	492,000	447,000	534,000	478,000	478,000	478,000	299,000	299,000	299,000	608,000	412,000	816,000
2052	7,406,000	7,407,000	7,407,000	718,000	583,000	865,000	113,000	82,000	141,000	500,000	456,000	546,000	479,000	479,000	479,000	300,000	300,000	300,000	603,000	425,000	774,000
2053	7,407,000	7,407,000	7,407,000	727,000	588,000	872,000	111,000	82,000	141,000	499,000	460,000	542,000	479,000	479,000	479,000	299,000	299,000	299,000	609,000	429,000	791,000
2054	7,407,000	7,407,000	7,407,000	744,000	588,000	913,000	116,000	82,000	150,000	503,000	457,000	547,000	480,000	480,000	480,000	299,000	299,000	299,000	634,000	418,000	868,000
2055	7,407,000	7,407,000	7,407,000	715,000	560,000	886,000	108,000	75,000	143,000	500,000	447,000	557,000	480,000	480,000	480,000	299,000	299,000	299,000	594,000	421,000	813,000
2056	7,407,000	7,407,000	7,407,000	750,000	607,000	884,000	119,000	90,000	145,000	510,000	466,000	559,000	481,000	481,000	481,000	300,000	300,000	300,000	648,000	465,000	808,000
2057	7,407,000	7,407,000	7,407,000	731,000	578,000	904,000	116,000	87,000	147,000	509,000	469,000	545,000	481,000	481,000	481,000	299,000	299,000	299,000	625,000	442,000	846,000
2058	7,407,000	7,407,000	7,407,000	776,000	610,000	981,000	121,000	86,000	161,000	513,000	467,000	556,000	482,000	482,000	482,000	299,000	299,000	299,000	679,000	477,000	905,000
2059	7,407,000	7,407,000	7,407,000	726,000	563,000	894,000	115,000	84,000	144,000	514,000	479,000	554,000	482,000	482,000	482,000	299,000	299,000	299,000	624,000	435,000	819,000
2060	7,407,000	7,407,000	7,407,000	739,000	591,000	900,000	117,000	86,000	149,000	514,000	464,000	559,000	482,000	482,000	482,000	300,000	300,000	300,000	637,000	443,000	846,000
2061	7,407,000	7,407,000	7,407,000	741,000	582,000	909,000	118,000	87,000	148,000	514,000	467,000	557,000	482,000	482,000	482,000	299,000	299,000	299,000	642,000	472,000	844,000
2062	7,407,000	7,407,000	7,407,000	746,000	570,000	900,000	117,000	92,000	143,000	517,000	472,000	557,000	482,000	482,000	482,000	299,000	299,000	299,000	648,000	425,000	845,000
2063	7,407,000	7,407,000	7,407,000	754,000	578,000	913,000	117,000	79,000	153,000	514,000	455,000	567,000	483,000	483,000	483,000	299,000	299,000	299,000	653,000	429,000	855,000
2064	7,407,000	7,407,000	7,407,000	745,000	594,000	903,000	119,000	92,000	150,000	522,000	485,000	565,000	483,000	483,000	483,000	300,000	300,000	300,000	653,000	470,000	839,000
2065	7,407,000	7,407,000	7,407,000	748,000	567,000	928,000	121,000	87,000	151,000	522,000	473,000	569,000	483,000	483,000	483,000	299,000	299,000	299,000	659,000	404,000	894,000
2066	7,407,000	7,407,000	7,407,000	755,000	587,000	916,000	120,000	82,000	153,000	527,000	478,000	577,000	483,000	483,000	483,000	299,000	299,000	299,000	670,000	444,000	862,000
2067	7,407,000	7,407,000	7,407,000	765,000	597,000	908,000	121,000	89,000	155,000	525,000	474,000	578,000	483,000	483,000	483,000	299,000	299,000	299,000	679,000	473,000	880,000
2068	7,407,000	7,407,000	7,407,000	749,000	607,000	931,000	121,000	86,000	155,000	531,000	491,000	578,000	483,000	483,000	483,000	300,000	300,000	300,000	668,000	494,000	896,000
2069	7,407,000	7,407,000	7,407,000	761,000	616,000	921,000	120,000	87,000	160,000	528,000	478,000	578,000	483,000	483,000	483,000	299,000	299,000	299,000	677,000	477,000	917,000
2070	7,407,000	7,407,000	7,407,000	757,000	551,000	944,000	123,000	91,000	162,000	535,000	486,000	586,000	484,000	484,000	484,000	299,000	299,000	299,000	683,000	444,000	910,000
2071	7,407,000	7,407,000	7,407,000	759,000	599,000	900,000	122,000	88,000	155,000	535,000	486,000	587,000	484,000	484,000	484,000	299,000	299,000	299,000	682,000	504,000	862,000
2072	7,407,000	7,407,000	7,407,000	769,000	624,000	937,000	125,000	91,000	160,000	541,000	491,000	594,000	485,000	485,000	485,000	300,000	300,000	300,000	700,000	501,000	898,000
2073	7,407,000	7,407,000	7,407,000	756,000	586,000	941,000	121,000	83,000	158,000	536,000	481,000	581,000	486,000	486,000	486,000	299,000	299,000	299,000	678,000	430,000	927,000
2074	7,407,000	7,407,000	7,407,000	757,000	587,000	913,000	124,000	92,000	156,000	540,000	495,000	591,000	487,000	487,000	487,000	299,000	299,000	299,000	684,000	475,000	881,000
2075	7,407,000	7,407,000	7,407,000	756,000	603,000	985,000	124,000	93,000	161,000	540,000	485,000	581,000	488,000	488,000	488,000	299,000	299,000	299,000	682,000	480,000	963,000
2076	7,407,000	7,407,000	7,407,000	742,000	576,000	932,000	123,000	85,000	167,000	542,000	486,000	597,000	489,000	489,000	489,000	300,000	300,000	300,000	669,000	439,000	921,000
2077	7,407,000	7,407,000	7,407,000	759,000	609,000	916,000	119,000	89,000	146,000	535,000	475,000	591,000	490,000	490,000	490,000	299,000	299,000	299,000	673,000	478,000	851,000
2078	7,407,000	7,407,000	7,407,000	766,000	573,000	930,000	125,000	94,000	158,000	546,000	502,000	583,000	491,000	491,000	491,000	299,000	299,000	299,000	696,000	469,000	910,000
2079	7,407,000	7,407,000	7,407,000	766,000	609,000	941,000	126,000	92,000	165,000	545,000	496,000	599,000	492,000	492,000	492,000	299,000	299,000	299,000	696,000	481,000	949,000
2080	7,407,000	7,407,000	7,407,000	769,000	611,000	910,000	129,000	102,000	165,000	556,000	506,000	610,000	492,000	492,000	492,000	300,000	300,000	300,000	712,000	513,000	924,000
2081	7,407,000	7,407,000	7,407,000	784,000	619,000	977,000	127,000	90,000	164,000	554,000	500,000	610,000	493,000	493,000	493,000	299,000	299,000	299,000	723,000	497,000	1,001,000
2082	7,407,000	7,407,000	7,407,000	770,000	597,000	958,000	126,000	93,000	166,000	554,000	501,000	610,000	493,000	493,000	493,000	299,000	299,000	299,000	707,000	491,000	962,000
2083	7,407,000	7,407,000	7,407,000	788,000	597,000	971,000	129,000	97,000	163,000	556,000	505,000	609,000	494,000	494,000	494,000	299,000	299,000	299,000	730,000	497,000	980,000
2084	7,407,000	7,407,000	7,407,000	768,000	580,000	986,000	126,000	91,000	167,000	557,000	518,000	600,000	494,000	494,000	494,000	300,000	300,000	300,000	707,000	479,000	938,000
2085	7,407,000	7,407,000	7,407,000	791,000	638,000	988,000	134,000	100,000	175,000	563,000	522,000	605,000	494,000	494,000	494,000	299,000	299,000	299,000	745,000	534,000	997,000
2086	7,407,000	7,407,000	7,407,000	786,000	603,000	986,000	129,000	94,000	169,000	567,000	519,000	625,000	495,000	495,000	495,000	299,000	299,000	299,000	738,000	486,000	993,000
2087	7,407,000	7,407,000	7,407,000	802,000	623,000	1,025,000	129,000	97,000	174,000	562,000	509,000	620,000	495,000	495,000	495,000	299,000	299,000	299,000	749,000	532,000	1,031,000
2088	7,407,000	7,407,000	7,407,000	793,000	625,000	989,000	132,000	95,000	170,000	569,000	511,000	620,000	496,000	496,000	496,000	300,000	300,000	300,000	747,000	514,000	1,004,000
2089	7,407,000	7,407,000	7,407,000	786,000	642,000	966,000	128,000	99,000	163,000	563,000	515,000	611,000	496,000	496,000	496,000	299,000	299,000	299,000	732,000	532,000	977,000
2090	7,407,000	7,407,000	7,407,000	790,000	616,000	954,000	131,000	97,000	160,000	566,000	518,000	616,000	496,000	496,000	496,000	299,000	299,000	299,000	742,000	504,000	952,000
2091	7,407,000	7,407,000	7,407,000	785,000	629,000	962,000	130,000	101,000	164,000	568,000	517,000	614,000	497,000	497,000	497,000	299,000	299,000	299,000	738,000	528,000	969,000
2092	7,407,000	7,407,000	7,407,000	791,000	620,000	948,000	134,000	99,000	177,000	574,000	530,000	624,000	497,000	497,000	497,000	300,000	300,000	300,000	753,000	535,000	981,000
2093	7,407,000	7,407,000	7,407,000	764,000	618,000	954,000	127,000	98,000	165,000	567,000	521,000	622,000	497,000	497,000	497,000	299,000	299,000	299,000	712,000	529,000	956,000
2094	7,407,000	7,407,000	7,407,000	775,000	622,000	911,000	128,000	95,000	159,000	566,000	513,000	608,000	497,000	497,000	497,000	299,000	299,000	299,000	723,000	524,000	886,000
2095	7,407,000	7,407,000	7,407,000	759,000	603,000	908,000	128,000	97,000	166,000	567,000	525,000	609,000	497,000	497,000	497,000	299,000	299,000	299,000	709,000	523,000	912,000
2096	7,407,000	7,407,000	7,407,000	760,000	598,000	926,000	134,000	100,000	174,000	577,000	528,000	630,000	497,000	497,000	497,000	300,000	300,000	300,000	724,000	504,000	988,000
2097	7,407,000	7,407,000	7,407,000	750,000	574,000	913,000	128,000	92,000	166,000	568,000	525,000	611,000	497,000	497,000	497,000	299,000	299,000	299,000	701,000	465,000	918,000
2098	7,407,000	7,407,000	7,407,000	731,000	571,000	902,000	127,000	93,000	160,000	570,000	526,000	613,000	497,000	497,000	497,000	299,000	299,000	299,000	683,000	476,000	871,000
2099	7,407,000	7,407,000	7,407,000	732,000	574,000	887,000	126,000	92,000	161,000	564,000	519,000	616,000	497,000	497,000	497,000	298,000	298,000	298,000	676,000	475,000	887,000

Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Surface%20Water%20IR%20Responses/ITT_20260303/Annual_waterBalance_Telkwa_CAPR002055_20260323.xlsx?web=1

Notes:

Addition of PAG

Closure year

1 Pumped/overflow inflows includes pumped flows from open pit sump or overflow from Pit backfill once in closure, any pumped flows from Management Ponds, and pumping from TCP

2 Pumped/overflows outflows includes overflow from pond to donwstream reservoir, and any pumped flows (to other MPs or TCP)

Table 1-4: Annual Water Balance for the Tenas Control Pond

	Tenas Control Pond																				
	Storage[1]			Inflows									Outflows								
Type of flows				Direct precipitation			Runoff flows[2]			Pumped flows/overflow[3]			Evaporation			Groundwater seepage			Overflow+Pumped flows[4]		
Statistics	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95
Units	m3			m3/year			m3/year			m3/year			m3/year			m3/year			m3/year		
2021	97,000	71,000	126,000	15,000	10,000	21,000	102,000	77,000	131,000	-	-	-	-	-	-	-	-	-	-	-	-
2022	128,000	47,000	257,000	57,000	42,000	75,000	538,000	409,000	666,000	224,000	171,000	284,000	29,000	21,000	38,000	13,000	13,000	13,000	651,000	498,000	779,000
2023	119,000	44,000	222,000	49,000	33,000	72,000	942,000	652,000	1,227,000	173,000	107,000	254,000	20,000	9,000	39,000	38,000	38,000	38,000	964,000	713,000	1,263,000
2024	420,000	107,000	738,000	115,000	70,000	163,000	705,000	513,000	968,000	812,000	555,000	1,059,000	95,000	77,000	106,000	51,000	51,000	51,000	1,096,000	894,000	1,456,000
2025	189,000	54,000	363,000	73,000	39,000	104,000	611,000	451,000	787,000	440,000	236,000	655,000	37,000	12,000	56,000	51,000	51,000	51,000	1,196,000	776,000	1,586,000
2026	214,000	119,000	367,000	57,000	37,000	81,000	543,000	410,000	685,000	501,000	226,000	812,000	26,000	14,000	43,000	51,000	51,000	51,000	941,000	645,000	1,280,000
2027	186,000	109,000	368,000	60,000	37,000	90,000	555,000	418,000	682,000	531,000	300,000	845,000	31,000	15,000	51,000	51,000	51,000	51,000	1,033,000	729,000	1,411,000
2028	139,000	111,000	179,000	63,000	40,000	94,000	533,000	393,000	661,000	441,000	301,000	576,000	31,000	17,000	52,000	51,000	51,000	51,000	947,000	695,000	1,262,000
2029	165,000	74,000	291,000	93,000	68,000	118,000	443,000	335,000	555,000	967,000	792,000	1,174,000	51,000	38,000	63,000	51,000	51,000	51,000	1,337,000	1,111,000	1,585,000
2030	500,000	135,000	836,000	65,000	45,000	92,000	492,000	378,000	626,000	995,000	475,000	1,502,000	31,000	18,000	50,000	51,000	51,000	51,000	1,088,000	792,000	1,480,000
2031	236,000	101,000	439,000	93,000	65,000	129,000	513,000	400,000	642,000	922,000	592,000	1,297,000	53,000	37,000	66,000	51,000	51,000	51,000	1,638,000	1,117,000	2,172,000
2032	239,000	119,000	498,000	76,000	47,000	109,000	523,000	430,000	649,000	849,000	518,000	1,251,000	44,000	22,000	59,000	51,000	51,000	51,000	1,296,000	865,000	1,755,000
2033	220,000	74,000	510,000	77,000	45,000	114,000	551,000	431,000	691,000	834,000	520,000	1,278,000	42,000	20,000	58,000	51,000	51,000	51,000	1,328,000	892,000	1,822,000
2034	195,000	87,000	389,000	71,000	43,000	107,000	566,000	449,000	692,000	734,000	406,000	1,087,000	37,000	20,000	56,000	51,000	51,000	51,000	1,246,000	833,000	1,689,000
2035	238,000	118,000	471,000	74,000	46,000	108,000	663,000	527,000	789,000	776,000	466,000	1,146,000	43,000	24,000	60,000	51,000	51,000	51,000	1,294,000	934,000	1,734,000
2036	211,000	102,000	470,000	79,000	48,000	115,000	666,000	537,000	817,000	722,000	360,000	1,137,000	46,000	28,000	61,000	51,000	51,000	51,000	1,314,000	860,000	1,777,000
2037	206,000	91,000	433,000	75,000	43,000	106,000	669,000	520,000	823,000	688,000	300,000	1,128,000	41,000	15,000	59,000	51,000	51,000	51,000	1,262,000	773,000	1,717,000
2038	222,000	118,000	547,000	76,000	44,000	113,000	667,000	524,000	803,000	723,000	351,000	1,126,000	43,000	22,000	63,000	51,000	51,000	51,000	1,274,000	839,000	1,773,000
2039	214,000	116,000	511,000	77,000	49,000	111,000	657,000	534,000	779,000	724,000	377,000	1,082,000	45,000	24,000	63,000	51,000	51,000	51,000	1,289,000	859,000	1,745,000
2040	179,000	59,000	416,000	78,000	42,000	108,000	664,000	513,000	800,000	739,000	339,000	1,150,000	45,000	20,000	61,000	51,000	51,000	51,000	1,338,000	814,000	1,780,000
2041	218,000	125,000	459,000	74,000	47,000	106,000	649,000	512,000	777,000	748,000	409,000	1,169,000	43,000	22,000	63,000	51,000	51,000	51,000	1,260,000	824,000	1,775,000
2042	207,000	117,000	464,000	82,000	48,000	116,000	670,000	525,000	791,000	824,000	402,000	1,234,000	50,000	25,000	66,000	51,000	51,000	51,000	1,403,000	862,000	1,932,000
2043	621,000	283,000	836,000	77,000	50,000	108,000	645,000	520,000	739,000	702,000	230,000	1,140,000	40,000	24,000	58,000	51,000	51,000	51,000	840,000	534,000	1,264,000
2044	190,000	108,000	450,000	99,000	64,000	133,000	276,000	215,000	342,000	626,000	276,000	1,034,000	52,000	33,000	64,000	-	-	-	1,325,000	738,000	1,801,000
2045	260,000	110,000	550,000	79,000	45,000	116,000	276,000	217,000	331,000	796,000	342,000	1,183,000	40,000	20,000	57,000	-	-	-	986,000	519,000	1,446,000
2046	292,000	128,000	576,000	88,000	58,000	123,000	278,000	223,000	341,000	865,000	537,000	1,271,000	46,000	27,000	58,000	-	-	-	1,099,000	678,000	1,518,000
2047	288,000	135,000	536,000	90,000	62,000	122,000	277,000	227,000	326,000	867,000	513,000	1,242,000	48,000	30,000	63,000	-	-	-	1,134,000	780,000	1,524,000
2048	-	-	-	74,000	43,000	105,000	276,000	222,000	339,000	859,000	522,000	1,299,000	43,000	26,000	55,000	-	-	-	1,394,000	942,000	1,922,000
2049	-	-	-	-	-	-	282,000	232,000	340,000	-	-	-	-	-	-	-	-	-	282,000	232,000	340,000
2050	-	-	-	-	-	-	277,000	212,000	339,000	-	-	-	-	-	-	-	-	-	277,000	212,000	339,000
2051	-	-	-	-	-	-	283,000	218,000	344,000	-	-	-	-	-	-	-	-	-	283,000	218,000	344,000
2052	-	-	-	-	-	-	277,000	225,000	328,000	-	-	-	-	-	-	-	-	-	277,000	225,000	328,000
2053	-	-	-	-	-	-	280,000	229,000	334,000	-	-	-	-	-	-	-	-	-	280,000	229,000	334,000
2054	-	-	-	-	-	-	287,000	228,000	350,000	-	-	-	-	-	-	-	-	-	287,000	228,000	350,000
2055	-	-	-	-	-	-	276,000	219,000	339,000	-	-	-	-	-	-	-	-	-	276,000	219,000	339,000
2056	-	-	-	-	-	-	289,000	236,000	337,000	-	-	-	-	-	-	-	-	-	289,000	236,000	337,000
2057	-	-	-	-	-	-	282,000	224,000	343,000	-	-	-	-	-	-	-	-	-	282,000	224,000	343,000
2058	-	-	-	-	-	-	300,000	241,000	372,000	-	-	-	-	-	-	-	-	-	300,000	241,000	372,000
2059	-	-	-	-	-	-	285,000	224,000	355,000	-	-	-	-	-	-	-	-	-	285,000	224,000	355,000
2060	-	-	-	-	-	-	294,000	241,000	358,000	-	-	-	-	-	-	-	-	-	294,000	241,000	358,000
2061	-	-	-	-	-	-	299,000	235,000	367,000	-	-	-	-	-	-	-	-	-	299,000	235,000	367,000
2062	-	-	-	-	-	-	303,000	236,000	366,000	-	-	-	-	-	-	-	-	-	303,000	236,000	366,000
2063	-	-	-	-	-	-	306,000	240,000	369,000	-	-	-	-	-	-	-	-	-	306,000	240,000	369,000
2064	-	-	-	-	-	-	304,000	249,000	364,000	-	-	-	-	-	-	-	-	-	304,000	249,000	364,000
2065	-	-	-	-	-	-	305,000	234,000	373,000	-	-	-	-	-	-	-	-	-	305,000	234,000	373,000
2066	-	-	-	-	-	-	308,000	243,000	370,000	-	-	-	-	-	-	-	-	-	308,000	243,000	370,000
2067	-	-	-	-	-	-	311,000	246,000	366,000	-	-	-	-	-	-	-	-	-	311,000	246,000	366,000
2068	-	-	-	-	-	-	305,000	252,000	376,000	-	-	-	-	-	-	-	-	-	305,000	252,000	376,000
2069	-	-	-	-	-	-	309,000	253,000	370,000	-	-	-	-	-	-	-	-	-	309,000	253,000	370,000
2070	-	-	-	-	-	-	309,000	237,000	379,000	-	-	-	-	-	-	-	-	-	309,000	237,000	379,000
2071	-	-	-	-	-	-	309,000	250,000	359,000	-	-	-	-	-	-	-	-	-	309,000	250,000	359,000
2072	-	-	-	-	-	-	313,000	260,000	377,000	-	-	-	-	-	-	-	-	-	313,000	260,000	377,000
2073	-	-	-	-	-	-	308,000	246,000	376,000	-	-	-	-	-	-	-	-	-	308,000	246,000	376,000
2074	-	-	-	-	-	-	309,000	245,000	369,000	-	-	-	-	-	-	-	-	-	309,000	245,000	369,000
2075	-	-	-	-	-	-	307,000	246,000	396,000	-	-	-	-	-	-	-	-	-	307,000	246,000	396,000
2076	-	-	-	-	-	-	302,000	242,000	371,000	-	-	-	-	-	-	-	-	-	302,000	242,000	371,000
2077	-	-	-	-	-	-	308,000	253,000	369,000	-	-	-	-	-	-	-	-	-	308,000	253,000	369,000
2078	-	-	-	-	-	-	313,000	239,000	375,000	-	-	-	-	-	-	-	-	-	313,000	239,000	375,000
2079	-	-	-	-	-	-	311,000	251,000	377,000	-	-	-	-	-	-	-	-	-	311,000	251,000	377,000
2080	-	-	-	-	-	-	313,000	251,000	369,000	-	-	-	-	-	-	-	-	-	313,000	251,000	369,000
2081	-	-	-	-	-	-	318,000	254,000	393,000	-	-	-	-	-	-	-	-	-	318,000	254,000	393,000
2082	-	-	-	-	-	-	314,000	249,000	381,000	-	-	-	-	-	-	-	-	-	314,000	249,000	381,000
2083	-	-	-	-	-	-	320,000	248,000	388,000	-	-	-	-	-	-	-	-	-	320,000	248,000	388,000
2084	-	-	-	-	-	-	313,000	248,000	391,000	-	-	-	-	-	-	-	-	-	313,000	248,000	391,000
2085	-	-	-	-	-	-	321,000	255,000	390,000	-	-	-	-	-	-	-	-	-	321,000	255,000	390,000
2086	-	-	-	-	-	-	321,000	254,000	394,000	-	-	-	-	-	-	-	-	-	321,000	254,000	394,000
2087	-	-	-	-	-	-	326,000	258,000	406,000	-	-	-	-	-	-	-	-	-	326,000	258,000	406,000
2088	-	-	-	-	-	-	324,000	260,000	400,000	-	-	-	-	-	-	-	-	-	324,000	260,000	400,000
2089	-	-	-	-	-	-	320,000	266,000	388,000	-	-	-	-	-	-	-	-	-	320,000	266,000	388,000
2090	-	-	-	-	-	-	322,000	260,000	386,000	-	-	-	-	-	-	-	-	-	322,000	260,000	386,000
2091	-	-	-	-	-	-	319,000	261,000	389,000	-	-	-	-	-	-	-	-	-	319,000	261,000	389,000
2092	-	-	-	-	-	-	322,000	262,000	386,000	-	-	-	-	-	-	-	-	-	322,000	262,000	386,000
2093	-	-	-	-	-	-	312,000	258,000	383,000	-	-	-	-	-	-	-	-	-	312,000	258,000	383,000
2094	-	-	-	-	-	-	316,000	260,000	367,000	-	-	-	-	-	-	-	-	-	316,000	260,000	367,000
2095	-	-	-	-	-	-	309,000	255,000	365,000	-	-	-	-	-	-	-	-	-	309,000	255,000	365,000
2096	-	-	-	-	-	-	310,000	249,000	371,000	-	-	-	-	-	-	-	-	-	310,000	249,000	371,000
2097	-	-	-	-	-	-	305,000	238,000	365,000	-	-	-	-	-	-	-	-	-	305,000	238,000	365,000
2098	-	-	-	-	-	-	299,000	238,000	364,000	-	-	-	-	-	-	-	-	-	299,000	238,000	364,000
2099	-	-	-	-	-	-	298,000	239,000	358,000	-	-	-	-	-	-	-	-	-	298,000	239,000	358,000

Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Surface%20Water%20IR%20Responses/ITT_20260303/Annual_waterBalance_Telkwa_CAPR002055_20260323.xlsx?web=1

Notes:

Closure year

1 Tenas Control Pond gets decommissioned in 2048 in Closure

2 Runoff flows to TCP include any seepage fromn the dams and buttresses for any MP and TCP

3 Pumped/overflow inflows includes pumped flows from open pit sump , any pumped flows from Management Ponds

4 Pumped/overflows outflows includes overflow from pond as effluent to receiving environment, and any pumped flows (to other MPs) as well as process water. Once decommissioned, inflows=outflows that are directly routed to Goathorn creek

Table 1-5: Annual Water Balance for the Open Pit Sump

	Open Pit sump																	
	Storage Pit sump			Inflows									Outflows					
Type of flows				Runoff flows[1]			Backfill seepage[2]			Groundwater seepage[2]			Evaporation in sump			Overflow+Pumped flows[3]		
Statistics	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95
Units	m3			m3/year			m3/year			m3/year			m3/year			m3/year		
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	60,000	60,000	60,000	150,000	118,000	189,000	-	-	-	29,000	29,000	29,000	9,000	9,000	9,000	78,000	49,000	112,000
2023	60,000	59,000	60,000	408,000	338,000	498,000	-	-	-	87,000	87,000	87,000	9,000	9,000	9,000	408,000	350,000	485,000
2024	60,000	60,000	60,000	543,000	418,000	682,000	-	-	-	133,000	133,000	133,000	9,000	9,000	9,000	600,000	496,000	711,000
2025	60,000	60,000	60,000	572,000	440,000	699,000	-	-	-	168,000	168,000	168,000	9,000	9,000	9,000	684,000	589,000	778,000
2026	60,000	60,000	60,000	605,000	468,000	728,000	-	-	-	202,000	202,000	202,000	9,000	9,000	9,000	778,000	678,000	877,000
2027	60,000	60,000	60,000	658,000	533,000	804,000	-	-	-	237,000	237,000	237,000	9,000	9,000	9,000	891,000	776,000	1,016,000
2028	60,000	60,000	60,000	724,000	578,000	886,000	-	-	-	273,000	273,000	273,000	9,000	9,000	9,000	982,000	863,000	1,116,000
2029	60,000	60,000	60,000	714,000	568,000	858,000	-	-	-	307,000	307,000	307,000	9,000	9,000	9,000	1,000,000	878,000	1,127,000
2030	60,000	60,000	60,000	719,000	564,000	891,000	-	-	-	320,000	320,000	320,000	9,000	9,000	9,000	1,032,000	885,000	1,186,000
2031	60,000	60,000	60,000	725,000	572,000	886,000	2,000	2,000	2,000	311,000	311,000	311,000	9,000	9,000	9,000	1,038,000	908,000	1,188,000
2032	60,000	60,000	60,000	725,000	588,000	895,000	4,000	4,000	4,000	303,000	303,000	303,000	9,000	9,000	9,000	1,036,000	908,000	1,196,000
2033	60,000	60,000	60,000	743,000	587,000	907,000	1,000	1,000	1,000	293,000	293,000	293,000	9,000	9,000	9,000	1,036,000	885,000	1,191,000
2034	60,000	60,000	60,000	716,000	587,000	850,000	3,000	3,000	3,000	284,000	284,000	284,000	9,000	9,000	9,000	997,000	884,000	1,129,000
2035	60,000	60,000	60,000	687,000	545,000	834,000	7,000	7,000	7,000	276,000	276,000	276,000	9,000	9,000	9,000	960,000	830,000	1,091,000
2036	60,000	60,000	60,000	679,000	546,000	838,000	12,000	12,000	12,000	267,000	267,000	267,000	9,000	9,000	9,000	946,000	823,000	1,090,000
2037	60,000	60,000	60,000	678,000	522,000	847,000	14,000	14,000	14,000	258,000	258,000	258,000	9,000	9,000	9,000	943,000	810,000	1,093,000
2038	60,000	60,000	60,000	678,000	515,000	830,000	28,000	28,000	28,000	249,000	249,000	249,000	9,000	9,000	9,000	940,000	792,000	1,073,000
2039	60,000	60,000	60,000	676,000	527,000	832,000	47,000	47,000	47,000	240,000	240,000	240,000	9,000	9,000	9,000	947,000	809,000	1,084,000
2040	60,000	60,000	60,000	704,000	542,000	900,000	81,000	81,000	81,000	232,000	232,000	232,000	9,000	9,000	9,000	992,000	841,000	1,165,000
2041	60,000	60,000	60,000	692,000	512,000	878,000	112,000	112,000	112,000	223,000	223,000	223,000	9,000	9,000	9,000	1,003,000	844,000	1,168,000
2042	60,000	60,000	60,000	732,000	532,000	915,000	129,000	129,000	129,000	214,000	214,000	214,000	9,000	9,000	9,000	1,056,000	872,000	1,238,000
2043	60,000	60,000	60,000	708,000	527,000	871,000	134,000	134,000	134,000	204,000	204,000	204,000	9,000	9,000	9,000	1,039,000	878,000	1,181,000
2044	-	-	-	218,000	151,000	281,073	137,000	137,000	137,000	138,000	138,000	138,000	-	-	-	343,000	304,000	386,000
2045	-	-	-	220,000	150,000	291,377	133,000	133,000	133,000	138,000	138,000	138,000	-	-	-	469,000	413,000	517,000
2046	-	-	-	219,000	153,000	294,363	129,000	129,000	129,000	138,000	138,000	138,000	-	-	-	481,000	436,000	525,000
2047	-	-	-	219,000	166,000	274,126	128,000	128,000	128,000	138,000	138,000	138,000	-	-	-	484,000	441,000	525,000
2048	-	-	-	227,000	153,000	300,292	130,000	130,000	130,000	138,000	138,000	138,000	-	-	-	493,000	442,000	543,000
2049	-	-	-	231,000	167,000	299,578	131,000	131,000	131,000	138,000	138,000	138,000	-	-	-	496,000	444,000	543,000
2050	-	-	-	224,000	168,000	290,788	133,000	133,000	133,000	138,000	138,000	138,000	-	-	-	496,000	453,000	540,000
2051	-	-	-	222,000	153,000	280,461	134,000	134,000	134,000	138,000	138,000	138,000	-	-	-	492,000	447,000	534,000
2052	-	-	-	228,000	167,000	286,334	135,000	135,000	135,000	138,000	138,000	138,000	-	-	-	500,000	456,000	546,000
2053	-	-	-	225,000	166,000	286,670	135,000	135,000	135,000	138,000	138,000	138,000	-	-	-	499,000	460,000	542,000
2054	-	-	-	235,000	165,000	303,487	136,000	136,000	136,000	138,000	138,000	138,000	-	-	-	503,000	457,000	547,000
2055	-	-	-	219,000	152,000	289,306	137,000	137,000	137,000	138,000	138,000	138,000	-	-	-	500,000	447,000	557,000
2056	-	-	-	240,000	182,000	294,208	138,000	138,000	138,000	138,000	138,000	138,000	-	-	-	510,000	466,000	559,000
2057	-	-	-	234,000	176,000	297,147	138,000	138,000	138,000	138,000	138,000	138,000	-	-	-	509,000	469,000	545,000
2058	-	-	-	244,000	173,000	327,086	138,000	138,000	138,000	138,000	138,000	138,000	-	-	-	513,000	467,000	556,000
2059	-	-	-	233,000	169,000	291,050	138,000	138,000	138,000	138,000	138,000	138,000	-	-	-	514,000	479,000	554,000
2060	-	-	-	236,000	174,000	302,682	140,000	140,000	140,000	138,000	138,000	138,000	-	-	-	514,000	464,000	559,000
2061	-	-	-	240,000	176,000	300,337	140,000	140,000	140,000	138,000	138,000	138,000	-	-	-	514,000	467,000	557,000
2062	-	-	-	237,000	185,000	290,736	141,000	141,000	141,000	138,000	138,000	138,000	-	-	-	517,000	472,000	557,000
2063	-	-	-	237,000	161,000	310,343	142,000	142,000	142,000	138,000	138,000	138,000	-	-	-	514,000	455,000	567,000
2064	-	-	-	241,000	186,000	303,410	143,000	143,000	143,000	138,000	138,000	138,000	-	-	-	522,000	485,000	565,000
2065	-	-	-	244,000	175,000	307,022	143,000	143,000	143,000	138,000	138,000	138,000	-	-	-	522,000	473,000	569,000
2066	-	-	-	243,000	166,000	310,047	145,000	145,000	145,000	138,000	138,000	138,000	-	-	-	527,000	478,000	577,000
2067	-	-	-	245,000	180,000	314,836	146,000	146,000	146,000	138,000	138,000	138,000	-	-	-	525,000	474,000	578,000
2068	-	-	-	245,000	174,000	315,348	148,000	148,000	148,000	138,000	138,000	138,000	-	-	-	531,000	491,000	578,000
2069	-	-	-	244,000	176,000	323,641	148,000	148,000	148,000	138,000	138,000	138,000	-	-	-	528,000	478,000	578,000
2070	-	-	-	250,000	184,000	327,945	149,000	149,000	149,000	138,000	138,000	138,000	-	-	-	535,000	486,000	586,000
2071	-	-	-	247,000	179,000	313,307	150,000	150,000	150,000	138,000	138,000	138,000	-	-	-	535,000	486,000	587,000
2072	-	-	-	253,000	183,000	325,191	152,000	152,000	152,000	138,000	138,000	138,000	-	-	-	541,000	491,000	594,000
2073	-	-	-	245,000	168,000	321,308	152,000	152,000	152,000	138,000	138,000	138,000	-	-	-	536,000	481,000	581,000
2074	-	-	-	250,000	184,000	315,591	153,000	153,000	153,000	138,000	138,000	138,000	-	-	-	540,000	495,000	591,000
2075	-	-	-	250,000	188,000	327,323	154,000	154,000	154,000	138,000	138,000	138,000	-	-	-	540,000	485,000	581,000
2076	-	-	-	250,000	172,000	339,040	155,000	155,000	155,000	138,000	138,000	138,000	-	-	-	542,000	486,000	597,000
2077	-	-	-	241,000	180,000	295,860	155,000	155,000	155,000	138,000	138,000	138,000	-	-	-	535,000	475,000	591,000
2078	-	-	-	252,000	190,000	319,348	156,000	156,000	156,000	138,000	138,000	138,000	-	-	-	546,000	502,000	583,000
2079	-	-	-	255,000	187,000	333,849	157,000	157,000	157,000	138,000	138,000	138,000	-	-	-	545,000	496,000	599,000
2080	-	-	-	262,000	206,000	334,985	159,000	159,000	159,000	138,000	138,000	138,000	-	-	-	556,000	506,000	610,000
2081	-	-	-	258,000	182,000	333,759	159,000	159,000	159,000	138,000	138,000	138,000	-	-	-	554,000	500,000	610,000
2082	-	-	-	255,000	188,000	336,147	160,000	160,000	160,000	138,000	138,000	138,000	-	-	-	554,000	501,000	610,000
2083	-	-	-	262,000	196,000	331,399	160,000	160,000	160,000	138,000	138,000	138,000	-	-	-	556,000	505,000	609,000
2084	-	-	-	255,000	184,000	338,926	162,000	162,000	162,000	138,000	138,000	138,000	-	-	-	557,000	518,000	600,000
2085	-	-	-	272,000	203,000	355,954	162,000	162,000	162,000	138,000	138,000	138,000	-	-	-	563,000	522,000	605,000
2086	-	-	-	262,000	190,000	342,214	163,000	163,000	163,000	138,000	138,000	138,000	-	-	-	567,000	519,000	625,000
2087	-	-	-	262,000	197,000	353,681	163,000	163,000	163,000	138,000	138,000	138,000	-	-	-	562,000	509,000	620,000
2088	-	-	-	267,000	193,000	345,147	165,000	165,000	165,000	138,000	138,000	138,000	-	-	-	569,000	511,000	620,000
2089	-	-	-	260,000	200,000	331,192	165,000	165,000	165,000	138,000	138,000	138,000	-	-	-	563,000	515,000	611,000
2090	-	-	-	266,000	196,000	324,832	165,000	165,000	165,000	138,000	138,000	138,000	-	-	-	566,000	518,000	616,000
2091	-	-	-	264,000	204,000	331,834	166,000	166,000	166,000	138,000	138,000	138,000	-	-	-	568,000	517,000	614,000
2092	-	-	-	272,000	200,000	358,405	168,000	168,000	168,000	138,000	138,000	138,000	-	-	-	574,000	530,000	624,000
2093	-	-	-	256,000	198,000	335,919	168,000	168,000	168,000	138,000	138,000	138,000	-	-	-	567,000	521,000	622,000
2094	-	-	-	260,000	192,000	319,850	169,000	169,000	169,000	138,000	138,000	138,000	-	-	-	566,000	513,000	608,000
2095	-	-	-	260,000	195,000	336,720	170,000	170,000	170,000	138,000	138,000	138,000	-	-	-	567,000	525,000	609,000
2096	-	-	-	271,000	203,000	354,058	171,000	171,000	171,000	138,000	138,000	138,000	-	-	-	577,000	528,000	630,000
2097	-	-	-	261,000	185,000	338,888	171,000	171,000	171,000	138,000	138,000	138,000	-	-	-	568,000	525,000	611,000
2098	-	-	-	258,000	188,000	325,293	172,000	172,000	172,000	138,000	138,000	138,000	-	-	-	570,000	526,000	613,000
2099	-	-	-	255,000	186,000	327,381	172,000	172,000	172,000	137,000	137,000	137,000	-	-	-	564,000	519,000	616,000

Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Surface%20Water%20IR%20Responses/ITT_20260303/Annual_waterBalance_Telkwa_CAPR002055_20260323.xlsx?web=1

Notes:

Addition of NAG Rock to Pit

Closure year

1 Runoff flows includes runoffs from natural, pit wall and backfill runoffs. They significantly decrease in closure as part of the covered backfill is re-routed to Four Creek

2 Backfill and groundwater seepage were considered constant under the WGEN run as they were modeled through different models by Okane and SRK (hydrogeology model), respectively

3 Water is pumped from the pit sump during operations, to be used as process water in the mill and the remainder is pumped to the active treatment pond (pond actively receiving PAG, namely NMP, EMP and WMP in order of activity). In closure, the pit sump is decommissioned and water from the pit reaches WMP by gravity

Attachment 2 ENV12: Streams Water Quality Results

Table G-1

Parameter	Units	Goathorn ACUTE WQG	Baseline in Goathorn Creek		North Management Pond															
					Operations								Closure							
					Final EAC Project Case (2024)				High Source terms (Alternative Case 2)				Final EAC Project Case (2024)				High Source terms (Alternative Case 2)			
			P50	P95	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter
Total Hardness	mg-$CaCO_3$/L		74	100	154	92	13	13	327	224	54	51	52	57	37	44	85	95	58	75
Alkalinity, total	mg CaCO3/L		54	85	280	240	28	35	720	630	120	130	310	360	180	240	540	620	280	380
Chloride	mg/L	600	0.25	0.50	2.8	3.3	0.31	0.43	11	9.4	1.8	1.9	2.3	3.0	1.8	2.5	2.6	3.4	2.0	2.7
Fluoride	mg/L	1.21	0.032	0.041	0.067	0.057	0.0047	0.0056	0.067	0.057	0.0047	0.0056	0.025	0.030	0.021	0.026	0.025	0.030	0.021	0.026
Ammonia, total	mg-N/L	6.14	0.0025	0.0070	0.27	0.41	0.078	0.11	1.1	1.6	0.31	0.42	0.071	0.12	0.035	0.049	0.18	0.34	0.072	0.10
Nitrate	mg/L	32.8	0.043	0.084	2.1	3.2	0.62	0.84	8.6	13	2.5	3.3	0.51	0.87	0.23	0.33	1.4	2.6	0.53	0.75
Nitrite	mg/L	0.06	0.00050	0.0020	0.049	0.073	0.014	0.019	0.20	0.29	0.057	0.077	0.012	0.020	0.0055	0.0077	0.032	0.060	0.012	0.017
Sulfate	mg/L		25	38	270	430	32	45	1300	1200	200	220	180	220	130	190	490	620	350	490
Aluminum, total	mg/L		0.034	0.66	0.38	0.38	0.30	0.30	0.39	0.39	0.30	0.30	0.39	0.39	0.38	0.38	0.39	0.39	0.38	0.38
Antimony, total	mg/L	0.25	0.000055	0.00013	0.00036	0.00034	0.000039	0.000051	0.0011	0.00097	0.00020	0.00021	0.00035	0.00043	0.00026	0.00036	0.00089	0.0011	0.00065	0.00090
Arsenic, total	mg/L		0.00020	0.00060	0.0012	0.00081	0.00051	0.00052	0.0020	0.0016	0.00071	0.00071	0.00084	0.00090	0.00075	0.00083	0.0013	0.0015	0.0011	0.0013
Barium, total	mg/L		0.059	0.071	0.086	0.062	0.012	0.012	0.099	0.076	0.014	0.015	0.024	0.025	0.022	0.023	0.024	0.026	0.022	0.024
Beryllium, total	mg/L		0.000050	0.00010	0.000093	0.000047	0.0000057	0.0000054	0.000093	0.000047	0.0000057	0.0000054	0.000014	0.000015	0.000013	0.000014	0.000014	0.000015	0.000013	0.000014
Boron, total	mg/L		0.0050	0.050	0.054	0.088	0.0066	0.0093	0.19	0.17	0.032	0.034	0.10	0.14	0.081	0.11	0.11	0.14	0.086	0.12
Cadmium, dissolved	mg/L	0.00043	0.0000075	0.000033	0.000087	0.00015	0.0000071	0.000012	0.00025	0.00033	0.000028	0.000035	0.0000039	0.0000051	0.0000030	0.0000040	0.000013	0.000016	0.0000098	0.000013
Chromium, total	mg/L		0.00020	0.00084	0.0012	0.0014	0.00100	0.0010	0.0016	0.0016	0.0011	0.0011	0.0013	0.0013	0.0013	0.0013	0.0014	0.0015	0.0014	0.0014
Cobalt, dissolved	mg/L		0.000050	0.00010	0.0044	0.0076	0.00049	0.00070	0.027	0.021	0.0041	0.0041	0.00057	0.00069	0.00038	0.00052	0.0017	0.0021	0.0011	0.0016
Copper, dissolved	mg/L	0.00567	0.0011	0.0036	0.0024	0.0017	0.00020	0.00022	0.0028	0.0027	0.00036	0.00041	0.0018	0.0022	0.0013	0.0017	0.0044	0.0050	0.0025	0.0034
Iron, total	mg/L	1	0.040	0.70	1.5	1.5	1.2	1.2	1.5	1.5	1.2	1.2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Iron, dissolved	mg/L	0.35	0.015	0.12	0.11	0.19	0.011	0.017	0.23	0.37	0.023	0.034	0.0062	0.0079	0.0052	0.0057	0.032	0.039	0.025	0.033
Lead, dissolved	mg/L		0.000025	0.000050	0.00049	0.00054	0.000057	0.000077	0.0018	0.0016	0.00031	0.00033	0.00050	0.00061	0.00033	0.00046	0.0015	0.0018	0.00097	0.0013
Manganese, total	mg/L	0.913	0.0036	0.029	0.088	0.16	0.029	0.033	0.41	0.39	0.077	0.080	0.029	0.029	0.028	0.029	0.033	0.035	0.031	0.033
Mercury, total	mg/L		0.0000025	0.0000052	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025
Molybdenum, total	mg-N/L	46	0.00048	0.00062	0.015	0.014	0.0017	0.0023	0.058	0.049	0.010	0.010	0.0062	0.0076	0.0045	0.0063	0.018	0.022	0.013	0.018
Nickel, dissolved	mg/L	0.0226	0.00025	0.00060	0.0071	0.012	0.00078	0.0011	0.039	0.032	0.0058	0.0059	0.0018	0.0022	0.0012	0.0017	0.0055	0.0067	0.0036	0.0049
Selenium, total	mg/L		0.000084	0.00020	0.0090	0.011	0.00098	0.0013	0.034	0.033	0.0060	0.0063	0.0065	0.0080	0.0042	0.0059	0.020	0.025	0.013	0.018
Strontium, total	mg/L		0.080	0.11	0.26	0.36	0.031	0.040	0.81	0.83	0.13	0.14	0.20	0.25	0.16	0.21	0.21	0.26	0.16	0.22
Silver, total	mg/L		0.0000050	0.000020	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050
Thallium, total	mg/L		0.0000050	0.000010	0.00011	0.00019	0.0000088	0.000014	0.00027	0.00039	0.000029	0.000039	0.000013	0.000016	0.000010	0.000014	0.000021	0.000026	0.000016	0.000022
Uranium, total	mg/L	0.0165	0.000056	0.00014	0.0019	0.0019	0.00022	0.00029	0.0068	0.0059	0.0012	0.0013	0.0020	0.0024	0.0015	0.0020	0.0053	0.0067	0.0038	0.0053
Zinc, dissolved	mg/L	0.0351	0.0013	0.0021	0.0099	0.017	0.0011	0.0015	0.045	0.041	0.0066	0.0068	0.0016	0.0018	0.0011	0.0015	0.0040	0.0048	0.0027	0.0036

Red highlights indicate value above WQG calculated for the receiving stream
Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Water Balance Modelling/Results/20250403_FEAC_2024/Results_MMPs_WaterQuality_EAModel_41_20260323_AcuteWQG.xlsm

Table G-2

Parameter	Units	East Management Pond																	
		Four Creek ACUTE WQG	Baseline in Four Creek		Operations								Closure							
					Final EAC Project Case (2024)				High Source terms (Alternative Case 2)				Final EAC Project Case (2024)				High Source terms (Alternative Case 2)			
			P50	P95	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter
Total Hardness	mg-$CaCO_3$/L		74	100	58	328	14	20	178	340	40	47	12	11	11	10	12	11	11	10
Alkalinity, total	mg CaCO3/L		54	85	150	320	28	40	400	470	89	110	9.2	7.7	7.8	7.3	9.2	7.7	7.8	7.3
Chloride	mg/L	600	0.25	0.50	1.9	2.4	0.36	0.48	6.4	7.3	1.4	1.6	0.031	0.027	0.027	0.025	0.031	0.027	0.027	0.025
Fluoride	mg/L	1.21	0.032	0.041	0.030	0.15	0.0058	0.0094	0.030	0.15	0.0058	0.0094	0.0046	0.0039	0.0039	0.0037	0.0046	0.0039	0.0039	0.0037
Ammonia, total	mg-N/L	6.14	0.0025	0.0070	0.39	0.59	0.099	0.13	1.6	2.4	0.39	0.53	0.00037	0.00034	0.00032	0.00030	0.00040	0.00041	0.00032	0.00031
Nitrate	mg/L	32.8	0.043	0.084	3.1	4.7	0.78	1.0	12	19	3.1	4.2	0.0043	0.0034	0.0035	0.0032	0.0043	0.0038	0.0035	0.0033
Nitrite	mg/L	0.06	0.00050	0.0020	0.071	0.11	0.018	0.024	0.29	0.43	0.071	0.096	0.00012	0.00011	0.00011	0.00010	0.00013	0.00012	0.00011	0.00010
Sulfate	mg/L		25	38	230	310	47	62	890	1000	180	210	0.82	0.68	0.69	0.64	0.82	0.68	0.69	0.64
Aluminum, total	mg/L		0.034	0.66	0.38	0.39	0.27	0.26	0.39	0.40	0.27	0.27	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Antimony, total	mg/L	0.25	0.000055	0.00013	0.00022	0.00027	0.000039	0.000053	0.00063	0.00070	0.00014	0.00016	0.0000081	0.0000073	0.0000073	0.0000070	0.0000081	0.0000073	0.0000073	0.0000070
Arsenic, total	mg/L		0.00020	0.00060	0.00066	0.0013	0.00047	0.00050	0.0013	0.0014	0.00060	0.00064	0.00055	0.00055	0.00055	0.00054	0.00055	0.00055	0.00055	0.00054
Barium, total	mg/L		0.059	0.071	0.039	0.23	0.012	0.017	0.048	0.23	0.015	0.019	0.013	0.012	0.012	0.012	0.013	0.012	0.012	0.012
Beryllium, total	mg/L		0.000050	0.00010	0.000033	0.00019	0.0000065	0.0000099	0.000033	0.00019	0.0000065	0.0000099	0.0000062	0.0000054	0.0000054	0.0000050	0.0000062	0.0000054	0.0000054	0.0000050
Boron, total	mg/L		0.0050	0.050	0.038	0.049	0.0072	0.0100	0.11	0.12	0.024	0.029	0.0016	0.0014	0.0014	0.0013	0.0016	0.0014	0.0014	0.0013
Cadmium, dissolved	mg/L	0.00043	0.0000075	0.000033	0.000064	0.000078	0.000013	0.000016	0.00016	0.00020	0.000034	0.000041	0.00000052	0.00000047	0.00000043	0.00000041	0.00000052	0.00000047	0.00000043	0.00000041
Chromium, total	mg/L		0.00020	0.00084	0.0013	0.0014	0.00089	0.00090	0.0017	0.0018	0.00097	0.00099	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012
Cobalt, dissolved	mg/L		0.000050	0.00010	0.0043	0.0064	0.00090	0.0011	0.019	0.022	0.0036	0.0040	0.000012	0.000011	0.000011	0.000010	0.000012	0.000011	0.000011	0.000010
Copper, dissolved	mg/L	0.00567	0.0011	0.0036	0.0012	0.0038	0.00023	0.00033	0.0018	0.0038	0.00038	0.00049	0.00014	0.00012	0.00012	0.00011	0.00014	0.00012	0.00012	0.00011
Iron, total	mg/L	1	0.040	0.70	1.5	1.6	1.1	1.1	1.6	1.7	1.1	1.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Iron, dissolved	mg/L	0.35	0.015	0.12	0.088	0.10	0.018	0.024	0.17	0.21	0.035	0.045	0.0025	0.0022	0.0021	0.0020	0.0025	0.0022	0.0021	0.0020
Lead, dissolved	mg/L		0.000025	0.000050	0.00033	0.00042	0.000056	0.000076	0.00099	0.0011	0.00022	0.00026	0.0000037	0.0000032	0.0000032	0.0000030	0.0000037	0.0000032	0.0000032	0.0000030
Manganese, total	mg/L	0.913	0.0036	0.029	0.097	0.13	0.034	0.038	0.30	0.36	0.073	0.081	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026
Mercury, total	mg/L		0.0000025	0.0000052	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025
Molybdenum, total	mg-N/L	46	0.00048	0.00062	0.0093	0.012	0.0016	0.0021	0.031	0.035	0.0069	0.0078	0.000061	0.000055	0.000056	0.000054	0.000061	0.000055	0.000056	0.000054
Nickel, dissolved	mg/L	0.0226	0.00025	0.00060	0.0060	0.0087	0.0013	0.0017	0.025	0.029	0.0050	0.0056	0.000037	0.000032	0.000032	0.000030	0.000037	0.000032	0.000032	0.000030
Selenium, total	mg/L		0.000084	0.00020	0.0060	0.0080	0.0012	0.0016	0.023	0.026	0.0048	0.0056	0.000013	0.000012	0.000012	0.000011	0.000013	0.000012	0.000012	0.000011
Strontium, total	mg/L		0.080	0.11	0.20	0.38	0.044	0.059	0.54	0.63	0.12	0.14	0.016	0.014	0.014	0.013	0.016	0.014	0.014	0.013
Silver, total	mg/L		0.0000050	0.000020	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050
Thallium, total	mg/L		0.0000050	0.000010	0.000080	0.000094	0.000016	0.000021	0.00018	0.00023	0.000039	0.000048	0.0000012	0.0000011	0.0000011	0.0000010	0.0000012	0.0000011	0.0000011	0.0000010
Uranium, total	mg/L	0.0165	0.000056	0.00014	0.0012	0.0015	0.00021	0.00029	0.0038	0.0044	0.00085	0.00099	0.000024	0.000022	0.000022	0.000021	0.000024	0.000022	0.000022	0.000021
Zinc, dissolved	mg/L	0.0351	0.0013	0.0021	0.0083	0.011	0.0017	0.0023	0.029	0.035	0.0059	0.0069	0.00019	0.00016	0.00016	0.00015	0.00019	0.00016	0.00016	0.00015

Red highlights indicate value above WQG calculated for the receiving stream
Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Water Balance Modelling/Results/20250403_FEAC_2024/Results_MMPs_WaterQuality_EAModel_41_20260323_AcuteWQG.xlsm

Table G-3

Parameter	Units	Tenas ACUTE WQG	Baseline in Tenas Creek		West Management Pond															
					Operations								Closure							
					Final EAC Project Case (2024)				High Source terms (Alternative Case 2)				Final EAC Project Case (2024)				High Source terms (Alternative Case 2)			
			P50	P95	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter
Total Hardness	mg-$CaCO_3$/L		74	100	63	65	20	23	268	186	62	60	82	72	58	56	144	125	93	95
Alkalinity, total	mg CaCO3/L		54	85	210	250	59	77	1100	980	520	450	560	480	310	330	970	830	510	530
Chloride	mg/L	600	0.25	0.50	3.9	4.7	1.1	1.5	14	12	6.6	6.0	4.0	4.3	3.2	3.5	4.4	4.7	3.6	3.8
Fluoride	mg/L	1.21	0.032	0.041	0.044	0.051	0.014	0.019	0.044	0.051	0.014	0.019	0.040	0.040	0.034	0.034	0.040	0.040	0.034	0.034
Ammonia, total	mg-N/L	6.14	0.0025	0.0070	0.54	0.61	0.18	0.27	1.7	2.2	0.65	0.97	0.11	0.15	0.063	0.068	0.28	0.40	0.13	0.14
Nitrate	mg/L	32.8	0.043	0.084	4.2	4.7	1.4	2.1	14	17	5.1	7.6	0.79	1.1	0.42	0.45	2.1	3.1	0.95	1.0
Nitrite	mg/L	0.06	0.00050	0.0020	0.097	0.11	0.033	0.048	0.32	0.39	0.12	0.18	0.019	0.025	0.0099	0.011	0.049	0.071	0.022	0.024
Sulfate	mg/L		25	38	300	370	120	160	1300	1200	620	620	330	310	240	260	810	820	640	690
Aluminum, total	mg/L		0.034	0.66	0.39	0.39	0.053	0.054	0.40	0.41	0.057	0.059	0.40	0.40	0.39	0.39	0.41	0.40	0.39	0.39
Antimony, total	mg/L	0.25	0.000055	0.00013	0.00042	0.00051	0.00011	0.00015	0.0017	0.0015	0.00084	0.00075	0.00063	0.00058	0.00046	0.00050	0.0015	0.0015	0.0012	0.0012
Arsenic, total	mg/L		0.00020	0.00060	0.00097	0.0010	0.00031	0.00035	0.0019	0.0017	0.0010	0.00095	0.0011	0.00100	0.00093	0.00094	0.0018	0.0017	0.0015	0.0015
Barium, total	mg/L		0.059	0.071	0.042	0.039	0.014	0.016	0.050	0.049	0.024	0.025	0.031	0.028	0.029	0.026	0.032	0.029	0.030	0.027
Beryllium, total	mg/L		0.000050	0.00010	0.000030	0.000026	0.0000099	0.000010	0.000030	0.000026	0.0000099	0.000010	0.000020	0.000017	0.000019	0.000016	0.000020	0.000017	0.000019	0.000016
Boron, total	mg/L		0.0050	0.050	0.14	0.17	0.034	0.043	0.28	0.27	0.14	0.13	0.18	0.20	0.15	0.16	0.19	0.20	0.15	0.16
Cadmium, dissolved	mg/L	0.00043	0.0000075	0.000033	0.000055	0.00010	0.000026	0.000039	0.00018	0.00023	0.000074	0.000094	0.0000067	0.0000064	0.0000052	0.0000054	0.000023	0.000020	0.000017	0.000018
Chromium, total	mg/L		0.00020	0.00084	0.0014	0.0015	0.00026	0.00029	0.0018	0.0019	0.00072	0.00067	0.0014	0.0014	0.0014	0.0014	0.0016	0.0015	0.0015	0.0015
Cobalt, dissolved	mg/L		0.000050	0.00010	0.0045	0.0067	0.0016	0.0023	0.023	0.022	0.0064	0.0070	0.00097	0.00091	0.00068	0.00073	0.0027	0.0028	0.0020	0.0022
Copper, dissolved	mg/L	0.00567	0.0011	0.0036	0.0017	0.0019	0.00043	0.00051	0.0036	0.0041	0.0012	0.0013	0.0032	0.0028	0.0022	0.0023	0.0078	0.0067	0.0044	0.0047
Iron, total	mg/L	1	0.040	0.70	1.5	1.5	0.34	0.35	1.6	1.7	0.37	0.40	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Iron, dissolved	mg/L	0.35	0.015	0.12	0.073	0.12	0.033	0.047	0.16	0.24	0.069	0.098	0.0087	0.0086	0.0077	0.0067	0.056	0.050	0.043	0.045
Lead, dissolved	mg/L		0.000025	0.000050	0.00044	0.00058	0.00012	0.00017	0.0030	0.0026	0.0013	0.0011	0.00083	0.00082	0.00059	0.00064	0.0024	0.0024	0.0017	0.0019
Manganese, total	mg/L	0.913	0.0036	0.029	0.084	0.13	0.035	0.049	0.34	0.34	0.083	0.11	0.031	0.031	0.030	0.030	0.038	0.038	0.035	0.036
Mercury, total	mg/L		0.0000025	0.0000052	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025
Molybdenum, total	mg-N/L	46	0.00048	0.00062	0.011	0.015	0.0034	0.0046	0.095	0.083	0.042	0.036	0.011	0.010	0.0082	0.0089	0.029	0.029	0.023	0.025
Nickel, dissolved	mg/L	0.0226	0.00025	0.00060	0.0059	0.0091	0.0024	0.0034	0.030	0.029	0.011	0.012	0.0031	0.0029	0.0022	0.0023	0.0087	0.0088	0.0064	0.0068
Selenium, total	mg/L		0.000084	0.00020	0.013	0.015	0.0038	0.0053	0.048	0.046	0.023	0.022	0.011	0.011	0.0076	0.0082	0.031	0.032	0.023	0.024
Strontium, total	mg/L		0.080	0.11	0.34	0.38	0.11	0.14	0.62	0.64	0.32	0.34	0.34	0.35	0.27	0.29	0.35	0.36	0.28	0.30
Silver, total	mg/L		0.0000050	0.000020	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050
Thallium, total	mg/L		0.0000050	0.000010	0.000077	0.00013	0.000034	0.000051	0.00020	0.00028	0.000084	0.00011	0.000023	0.000022	0.000018	0.000019	0.000035	0.000033	0.000028	0.000030
Uranium, total	mg/L	0.0165	0.000056	0.00014	0.0023	0.0030	0.00064	0.00084	0.011	0.0096	0.0053	0.0048	0.0036	0.0033	0.0026	0.0029	0.0087	0.0088	0.0069	0.0074
Zinc, dissolved	mg/L	0.0351	0.0013	0.0021	0.0073	0.012	0.0032	0.0046	0.035	0.034	0.012	0.014	0.0026	0.0023	0.0019	0.0020	0.0062	0.0061	0.0048	0.0049

Red highlights indicate value above WQG calculated for the receiving stream
Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Water Balance Modelling/Results/20250403_FEAC_2024/Results_MMPs_WaterQuality_EAModel_41_20260323_AcuteWQG.xlsm

Table G-4

Parameter	Units	Goathorn WQG	Tenas Control Pond									
			Baseline in Goathorn Creek		Operations							
					Final EAC Project Case (2024)				High Source terms (Alternative Case 2)			
			P50	P95	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter
Total Hardness	mg-$CaCO_3$/L		74	100	138	163	90	111	236	291	152	197
Alkalinity, total	mg CaCO3/L		54	85	500	560	270	350	820	1000	530	650
Chloride	mg/L	600	0.25	0.50	6.0	6.7	3.1	4.0	10	13	6.6	8.1
Fluoride	mg/L	1.21	0.032	0.041	0.071	0.15	0.046	0.082	0.071	0.15	0.046	0.082
Ammonia, total	mg-N/L	6.14	0.0025	0.0070	0.56	1.1	0.13	0.24	2.2	4.4	0.48	0.88
Nitrate	mg/L	32.8	0.043	0.084	4.3	8.6	0.96	1.7	17	34	3.7	6.8
Nitrite	mg/L	0.06	0.00050	0.0020	0.099	0.20	0.023	0.040	0.39	0.79	0.086	0.16
Sulfate	mg/L		25	38	410	420	220	260	770	850	520	590
Aluminum, total	mg/L		0.034	0.66	0.39	0.39	0.38	0.38	0.39	0.39	0.38	0.38
Antimony, total	mg/L	0.25	0.000055	0.00013	0.00073	0.00080	0.00038	0.00049	0.0012	0.0014	0.00079	0.00094
Arsenic, total	mg/L		0.00020	0.00060	0.0018	0.0018	0.0013	0.0014	0.0025	0.0027	0.0018	0.0020
Barium, total	mg/L		0.059	0.071	0.072	0.080	0.050	0.062	0.075	0.095	0.058	0.072
Beryllium, total	mg/L		0.000050	0.00010	0.000056	0.000061	0.000038	0.000044	0.000056	0.000061	0.000038	0.000044
Boron, total	mg/L		0.0050	0.050	0.11	0.13	0.063	0.080	0.19	0.23	0.13	0.15
Cadmium, dissolved	mg/L	0.00043	0.0000075	0.000033	0.000034	0.000030	0.000022	0.000022	0.00011	0.00010	0.000063	0.000062
Chromium, total	mg/L		0.00020	0.00084	0.0018	0.0020	0.0016	0.0017	0.0022	0.0024	0.0018	0.0020
Cobalt, dissolved	mg/L		0.000050	0.00010	0.0029	0.0029	0.0019	0.0021	0.012	0.011	0.0050	0.0050
Copper, dissolved	mg/L	0.00567	0.0011	0.0036	0.0015	0.0015	0.0011	0.0012	0.0019	0.0019	0.0015	0.0015
Iron, total	mg/L	1	0.040	0.70	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Iron, dissolved	mg/L	0.35	0.015	0.12	0.038	0.036	0.026	0.026	0.066	0.059	0.039	0.036
Lead, dissolved	mg/L		0.000025	0.000050	0.0011	0.0012	0.00057	0.00072	0.0020	0.0022	0.0012	0.0015
Manganese, total	mg/L	0.913	0.0036	0.029	0.063	0.061	0.047	0.049	0.19	0.18	0.089	0.090
Mercury, total	mg/L		0.0000025	0.0000052	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025
Molybdenum, total	mg-N/L	46	0.00048	0.00062	0.036	0.036	0.018	0.022	0.064	0.070	0.040	0.046
Nickel, dissolved	mg/L	0.0226	0.00025	0.00060	0.0060	0.0061	0.0037	0.0042	0.017	0.016	0.0091	0.0096
Selenium, total	mg/L		0.000084	0.00020	0.022	0.024	0.011	0.014	0.039	0.049	0.024	0.030
Strontium, total	mg/L		0.080	0.11	0.28	0.29	0.18	0.20	0.47	0.53	0.34	0.38
Silver, total	mg/L		0.0000050	0.000020	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050
Thallium, total	mg/L		0.0000050	0.000010	0.000050	0.000077	0.000034	0.000047	0.00013	0.00013	0.000078	0.000089
Uranium, total	mg/L	0.0165	0.000056	0.00014	0.0045	0.0048	0.0023	0.0028	0.0078	0.0093	0.0049	0.0060
Zinc, dissolved	mg/L	0.0351	0.0013	0.0021	0.0088	0.0099	0.0055	0.0066	0.021	0.019	0.012	0.014

Red highlights indicate value above WQG calculated for the receiving stream
Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Water Balance Modelling/Results/20250403_FEAC_2024/Results_MMPs_WaterQuality_EAModel_41_20260323_AcuteWQG.xlsm

Table G-5

Parameter	Units	Bulkley ACUTE WQG	Rail Infrastructure Sedimentation Pond									
			Baseline in Bulkley River		Operations							
					Final EAC Project Case (2024)				High Source terms (Alternative Case 2)			
			P50	P95	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter
Total Hardness	mg-$CaCO_3$/L		29	40	70	66	66	63	1518	1443	1468	1377
Alkalinity, total	mg CaCO3/L		28	36	1.8	1.7	1.7	1.7	41	38	39	38
Chloride	mg/L	600	0.25	0.78	0.080	0.074	0.077	0.073	2.3	2.1	2.2	2.1
Fluoride	mg/L	0.84	0.023	0.035								
Ammonia, total	mg-N/L	11.7	0.0050	0.017								
Nitrate	mg/L	32.8	0.013	0.041								
Nitrite	mg/L	0.06	0.0020	0.0050								
Sulfate	mg/L		4.0	5.0	68	64	66	63	1600	1500	1600	1500
Aluminum, total	mg/L		0.088	1.2	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Antimony, total	mg/L		0.000050	0.00010	0.0000034	0.0000032	0.0000033	0.0000031	0.00011	0.00011	0.00011	0.00010
Arsenic, total	mg/L		0.00021	0.00069	0.00051	0.00051	0.00051	0.00051	0.00062	0.00062	0.00062	0.00061
Barium, total	mg/L		0.026	0.035	0.012	0.012	0.012	0.012	0.14	0.13	0.14	0.13
Beryllium, total	mg/L		0.000050	0.00010								
Boron, total	mg/L		0.0050	0.010	0.0083	0.0078	0.0080	0.0076	0.18	0.17	0.18	0.17
Cadmium, dissolved	mg/L	1.64E-04	0.0000025	0.0000068	0.000091	0.000085	0.000087	0.000083	0.0021	0.0020	0.0020	0.0019
Chromium, total	mg/L		0.00020	0.0010	0.0012	0.0012	0.0012	0.0012	0.0016	0.0015	0.0015	0.0015
Cobalt, dissolved	mg/L		0.000050	0.00010	0.00080	0.00074	0.00077	0.00073	0.021	0.019	0.020	0.019
Copper, dissolved	mg/L	0.00383	0.00058	0.0016	0.00023	0.00021	0.00022	0.00021	0.0062	0.0057	0.0059	0.0056
Iron, total	mg/L	1	0.12	1.3	1.5	1.5	1.5	1.5	1.8	1.7	1.7	1.7
Iron, dissolved	mg/L	0.35	0.032	0.15	0.076	0.071	0.073	0.070	0.30	0.28	0.28	0.27
Lead, dissolved	mg/L		0.000025	0.000050	0.000046	0.000043	0.000044	0.000042	0.0010	0.00096	0.00098	0.00094
Manganese, total	mg/L	0.73	0.012	0.053	0.071	0.068	0.069	0.067	1.2	1.1	1.2	1.1
Mercury, total	mg/L		0.0000025	0.0000053	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025
Molybdenum, total	mg-N/L	46	0.00037	0.00052	0.00018	0.00017	0.00017	0.00016	0.0034	0.0032	0.0033	0.0032
Nickel, dissolved	mg/L	0.0115	0.00025	0.00073	0.0023	0.0021	0.0022	0.0021	0.048	0.045	0.046	0.044
Selenium, total	mg/L		0.000025	0.00020	0.00035	0.00032	0.00033	0.00032	0.0080	0.0074	0.0077	0.0073
Strontium, total	mg/L		0.042	0.060	0.072	0.067	0.069	0.066	1.5	1.4	1.4	1.4
Silver, total	mg/L		0.0000050	0.000020	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050
Thallium, total	mg/L		0.0000050	0.000013	0.00010	0.000096	0.000098	0.000094	0.0025	0.0024	0.0024	0.0023
Uranium, total	mg/L	0.0165	0.000035	0.000083	0.000031	0.000029	0.000030	0.000029	0.00047	0.00044	0.00045	0.00043
Zinc, dissolved	mg/L	0.0163	0.00075	0.0023	0.0034	0.0032	0.0033	0.0031	0.093	0.087	0.090	0.086

Red highlights indicate value above WQG calculated for the receiving stream
Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Water Balance Modelling/Results/20250403_FEAC_2024/Results_MMPs_WaterQuality_EAModel_41_20260323_AcuteWQG.xlsm

Table G-6

Parameter	Units	North Management Pond Void Space and Seepage Water Quality																	
		Goathorn WQG	Baseline in Goathorn Creek		Operations								Closure							
					Final EAC Project Case (2024)				High Source terms (Alternative Case 2)				Final EAC Project Case (2024)				High Source terms (Alternative Case 2)			
			P50	P95	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter
Total Hardness	mg-$CaCO_3$/L		74	100	89	85	31	31	224	222	113	113	42	42	34	34	74	74	58	58
Alkalinity, total	mg CaCO3/L		54	85	200	210	86	87	600	600	300	300	260	260	170	170	440	440	290	290
Chloride	mg/L	600	0.25	0.50	2.5	2.6	1.0	1.1	8.6	8.7	4.3	4.3	2.1	2.1	2.0	2.0	2.4	2.4	2.3	2.3
Fluoride	mg/L	1.21	0.032	0.041	0.044	0.043	0.017	0.017	0.044	0.043	0.017	0.017	0.023	0.023	0.022	0.022	0.023	0.023	0.022	0.022
Ammonia, total	mg-N/L	6.14	0.0025	0.0070	0.22	0.22	0.14	0.14	0.87	0.87	0.56	0.56	0.089	0.090	0.048	0.048	0.32	0.32	0.12	0.12
Nitrate	mg/L	32.8	0.043	0.084	1.7	1.7	1.1	1.1	6.8	6.8	4.4	4.4	0.68	0.69	0.33	0.34	2.5	2.5	0.90	0.91
Nitrite	mg/L	0.06	0.00050	0.0020	0.040	0.040	0.026	0.026	0.16	0.16	0.10	0.10	0.016	0.016	0.0078	0.0079	0.058	0.058	0.021	0.021
Sulfate	mg/L		25	38	270	280	110	120	970	980	480	490	170	170	140	140	460	460	390	390
Aluminum, total	mg/L		0.034	0.66	0.022	0.023	0.010	0.010	0.031	0.032	0.015	0.016	0.016	0.016	0.010	0.010	0.017	0.017	0.011	0.012
Antimony, total	mg/L	0.25	0.000055	0.00013	0.00028	0.00029	0.00012	0.00012	0.00091	0.00092	0.00045	0.00046	0.00031	0.00032	0.00027	0.00027	0.00082	0.00083	0.00069	0.00069
Arsenic, total	mg/L		0.00020	0.00060	0.00067	0.00065	0.00024	0.00024	0.0014	0.0014	0.00067	0.00068	0.00029	0.00029	0.00026	0.00026	0.00072	0.00073	0.00059	0.00059
Barium, total	mg/L		0.059	0.071	0.049	0.049	0.019	0.019	0.064	0.064	0.026	0.027	0.016	0.016	0.015	0.015	0.017	0.017	0.016	0.016
Beryllium, total	mg/L		0.000050	0.00010	0.000050	0.000046	0.000016	0.000016	0.000050	0.000046	0.000016	0.000016	0.000013	0.000013	0.000013	0.000013	0.000013	0.000013	0.000013	0.000013
Boron, total	mg/L		0.0050	0.050	0.049	0.051	0.021	0.022	0.16	0.16	0.077	0.078	0.097	0.097	0.088	0.088	0.10	0.10	0.094	0.095
Cadmium, dissolved	mg/L	0.000431	0.0000075	0.000033	0.000082	0.000083	0.000034	0.000034	0.00021	0.00021	0.000094	0.000095	0.0000093	0.0000094	0.0000044	0.0000045	0.000025	0.000026	0.000014	0.000014
Chromium, total	mg/L		0.00020	0.00084	0.00036	0.00037	0.00014	0.00015	0.00081	0.00081	0.00039	0.00040	0.00012	0.00012	0.00011	0.00011	0.00022	0.00022	0.00021	0.00021
Cobalt, dissolved	mg/L		0.000050	0.00010	0.0042	0.0045	0.0018	0.0019	0.019	0.019	0.0093	0.0094	0.00052	0.00053	0.00045	0.00046	0.0022	0.0023	0.0015	0.0015
Copper, dissolved	mg/L	0.00567	0.0011	0.0036	0.0014	0.0014	0.00057	0.00058	0.0021	0.0022	0.00097	0.00099	0.0016	0.0016	0.0013	0.0013	0.0037	0.0038	0.0025	0.0025
Iron, total	mg/L	1	0.040	0.70	0.11	0.11	0.045	0.045	0.21	0.21	0.089	0.090	0.014	0.014	0.0068	0.0068	0.032	0.032	0.029	0.029
Iron, dissolved	mg/L	0.35	0.015	0.12	0.11	0.11	0.045	0.045	0.21	0.21	0.089	0.090	0.014	0.014	0.0068	0.0068	0.032	0.032	0.029	0.029
Lead, dissolved	mg/L		0.000025	0.000050	0.00042	0.00044	0.00018	0.00019	0.0015	0.0015	0.00074	0.00075	0.00043	0.00043	0.00034	0.00034	0.0013	0.0013	0.0010	0.0010
Manganese, total	mg/L	0.913	0.0036	0.029	0.080	0.085	0.034	0.035	0.29	0.30	0.14	0.14	0.0087	0.0089	0.0038	0.0038	0.031	0.032	0.010	0.010
Mercury, total	mg/L		0.0000025	0.0000052	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025
Molybdenum, total	mg-N/L	46	0.00048	0.00062	0.012	0.013	0.0053	0.0054	0.046	0.046	0.023	0.024	0.0056	0.0056	0.0050	0.0050	0.017	0.017	0.015	0.015
Nickel, dissolved	mg/L	0.0226	0.00025	0.00060	0.0069	0.0073	0.0029	0.0030	0.028	0.028	0.014	0.014	0.0016	0.0016	0.0013	0.0013	0.0049	0.0050	0.0041	0.0041
Selenium, total	mg/L		0.000084	0.00020	0.0082	0.0087	0.0033	0.0034	0.029	0.029	0.014	0.015	0.0056	0.0056	0.0044	0.0044	0.017	0.018	0.013	0.013
Strontium, total	mg/L		0.080	0.11	0.25	0.26	0.099	0.10	0.66	0.66	0.31	0.32	0.18	0.18	0.17	0.17	0.19	0.19	0.18	0.18
Silver, total	mg/L		0.0000050	0.000020	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050
Thallium, total	mg/L		0.0000050	0.000010	0.00010	0.00010	0.000042	0.000043	0.00024	0.00024	0.00010	0.00011	0.000014	0.000014	0.000012	0.000013	0.000030	0.000030	0.000021	0.000021
Uranium, total	mg/L	0.0165	0.000056	0.00014	0.0015	0.0016	0.00066	0.00068	0.0056	0.0056	0.0028	0.0028	0.0018	0.0018	0.0015	0.0015	0.0049	0.0049	0.0041	0.0041
Zinc, dissolved	mg/L	0.0351	0.0013	0.0021	0.0097	0.010	0.0041	0.0042	0.033	0.034	0.016	0.016	0.0014	0.0014	0.0013	0.0013	0.0042	0.0042	0.0033	0.0033

Red highlights indicate value above WQG calculated for the receiving stream
Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Water Balance Modelling/Results/20250403_FEAC_2024/Results_MMPs_void_WaterQuality_EAModel_41_AcuteWQG_20260323.xlsm

Table G-7

Parameter	Units	East Management Pond Void Space and Seepage Water Quality																	
		Four Creek WQG	Baseline in Four Creek		Operations								Closure							
					Final EAC Project Case (2024)				High Source terms (Alternative Case 2)				Final EAC Project Case (2024)				High Source terms (Alternative Case 2)			
			P50	P95	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter
Total Hardness	mg-$CaCO_3$/L		123	172	47	47	19	18	132	135	85	83	13	13	9	9	50	51	21	21
Alkalinity, total	mg CaCO3/L		140	190	130	130	63	61	340	350	220	210	36	36	16	16	120	120	43	43
Chloride	mg/L	600	0.25	0.53	1.6	1.6	0.91	0.90	5.3	5.3	3.5	3.4	0.51	0.52	0.17	0.17	2.0	2.0	0.62	0.62
Fluoride	mg/L	1.42	0.053	0.070	0.027	0.027	0.011	0.010	0.027	0.027	0.011	0.010	0.0069	0.0069	0.0047	0.0047	0.0069	0.0069	0.0047	0.0047
Ammonia, total	mg-N/L	2.49	0.0025	0.011	0.28	0.28	0.19	0.19	1.1	1.1	0.74	0.74	0.12	0.12	0.037	0.037	0.47	0.48	0.15	0.15
Nitrate	mg/L	32.8	0.016	0.17	2.2	2.2	1.5	1.5	8.6	8.6	5.9	5.8	0.94	0.96	0.29	0.29	3.7	3.8	1.1	1.2
Nitrite	mg/L	0.06	0.00050	0.0010	0.050	0.050	0.034	0.034	0.20	0.20	0.13	0.13	0.022	0.022	0.0067	0.0067	0.086	0.088	0.026	0.027
Sulfate	mg/L		2.1	26	190	200	120	120	690	690	450	450	69	70	21	22	260	260	79	80
Aluminum, total	mg/L		0.081	1.1	0.017	0.017	0.0085	0.0082	0.026	0.027	0.014	0.014	0.0051	0.0052	0.0026	0.0026	0.0083	0.0084	0.0035	0.0036
Antimony, total	mg/L	0.25	0.000050	0.00011	0.00018	0.00018	0.000093	0.000092	0.00053	0.00053	0.00035	0.00034	0.000052	0.000053	0.000020	0.000020	0.00020	0.00020	0.000064	0.000064
Arsenic, total	mg/L		0.00067	0.0010	0.00037	0.00037	0.00016	0.00016	0.00080	0.00082	0.00049	0.00048	0.000097	0.000099	0.000054	0.000055	0.00028	0.00029	0.00011	0.00011
Barium, total	mg/L		0.078	0.13	0.031	0.032	0.012	0.012	0.040	0.041	0.018	0.018	0.0082	0.0083	0.0063	0.0063	0.012	0.012	0.0073	0.0074
Beryllium, total	mg/L		0.000050	0.00010	0.000026	0.000027	0.0000093	0.0000088	0.000026	0.000027	0.0000093	0.0000088	0.0000065	0.0000066	0.0000056	0.0000056	0.0000065	0.0000066	0.0000056	0.0000056
Boron, total	mg/L		0.011	0.020	0.032	0.033	0.017	0.017	0.092	0.093	0.060	0.060	0.0096	0.0098	0.0036	0.0036	0.034	0.034	0.011	0.011
Cadmium, dissolved	mg/L	0.00073	0.0000050	0.000011	0.000057	0.000058	0.000034	0.000033	0.00014	0.00014	0.000089	0.000087	0.000018	0.000019	0.0000059	0.0000060	0.000049	0.000050	0.000015	0.000015
Chromium, total	mg/L		0.00040	0.0015	0.00023	0.00023	0.00011	0.00011	0.00049	0.00050	0.00030	0.00030	0.000065	0.000066	0.000034	0.000035	0.00018	0.00018	0.000068	0.000069
Cobalt, dissolved	mg/L		0.000050	0.00014	0.0034	0.0034	0.0023	0.0022	0.014	0.014	0.0088	0.0088	0.0013	0.0013	0.00040	0.00040	0.0051	0.0052	0.0016	0.0016
Copper, dissolved	mg/L	0.0324	0.0011	0.0033	0.00094	0.00097	0.00042	0.00041	0.0015	0.0015	0.00078	0.00076	0.00027	0.00027	0.00016	0.00016	0.00046	0.00047	0.00022	0.00022
Iron, total	mg/L	1	0.078	0.78	0.077	0.079	0.044	0.043	0.15	0.15	0.089	0.087	0.025	0.025	0.0090	0.0090	0.049	0.050	0.016	0.017
Iron, dissolved	mg/L	0.35	0.015	0.35	0.077	0.079	0.044	0.043	0.15	0.15	0.089	0.087	0.025	0.025	0.0090	0.0090	0.049	0.050	0.016	0.017
Lead, dissolved	mg/L		0.000025	0.000075	0.00027	0.00027	0.00015	0.00014	0.00086	0.00087	0.00056	0.00055	0.000079	0.000081	0.000026	0.000027	0.00031	0.00032	0.000098	0.000098
Manganese, total	mg/L	1.089	0.0022	0.018	0.061	0.063	0.040	0.040	0.21	0.21	0.14	0.14	0.023	0.023	0.0071	0.0071	0.078	0.079	0.024	0.024
Mercury, total	mg/L		0.0000038	0.000012	0.0000038	0.0000038	0.0000038	0.0000038	0.0000038	0.0000038	0.0000038	0.0000038	0.0000038	0.0000038	0.0000038	0.0000038	0.0000038	0.0000038	0.0000038	0.0000038
Molybdenum, total	mg-N/L	46	0.00023	0.00040	0.0075	0.0076	0.0040	0.0040	0.026	0.026	0.017	0.017	0.0022	0.0022	0.00069	0.00069	0.0096	0.0098	0.0030	0.0030
Nickel, dissolved	mg/L	0.0454	0.00050	0.0011	0.0051	0.0052	0.0033	0.0032	0.019	0.019	0.012	0.012	0.0018	0.0019	0.00058	0.00059	0.0070	0.0072	0.0022	0.0022
Selenium, total	mg/L		0.000050	0.000095	0.0052	0.0052	0.0031	0.0031	0.019	0.019	0.012	0.012	0.0017	0.0018	0.00053	0.00054	0.0069	0.0071	0.0021	0.0021
Strontium, total	mg/L		0.17	0.24	0.17	0.17	0.093	0.091	0.43	0.43	0.28	0.28	0.055	0.055	0.024	0.024	0.16	0.17	0.057	0.058
Silver, total	mg/L		0.0000050	0.000021	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050
Thallium, total	mg/L		0.0000050	0.000010	0.000071	0.000073	0.000041	0.000041	0.00016	0.00016	0.00010	0.000100	0.000023	0.000023	0.0000077	0.0000078	0.000056	0.000057	0.000018	0.000018
Uranium, total	mg/L	0.0165	0.000099	0.00026	0.00096	0.00097	0.00053	0.00053	0.0032	0.0033	0.0021	0.0021	0.00029	0.00030	0.000096	0.000096	0.0012	0.0012	0.00037	0.00038
Zinc, dissolved	mg/L	0.0753	0.0010	0.0023	0.0071	0.0073	0.0043	0.0043	0.023	0.023	0.015	0.015	0.0025	0.0025	0.00086	0.00087	0.0084	0.0086	0.0027	0.0027

Red highlights indicate value above WQG calculated for the receiving stream

Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Water Balance Modelling/Results/20250403_FEAC_2024/Results_MMPs_void_WaterQuality_EAModel_41_AcuteWQG_20260323.xlsm

Table G-8

Parameter	Units	West Management Pond Void Space and Seepage Water Quality																	
		Tenas WQG	Baseline in Tenas Creek		Operations								Closure						
					Final EAC Project Case (2024)				High Source terms (Alternative Case 2)				Final EAC Project Case (2024)				High Source terms (Alternative Case 2)			
			P50	P95	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter
Total Hardness	mg-$CaCO_3$/L		75	101	36	36	13	13	203	199	62	62	60	60	47	46	117	117	90	90
Alkalinity, total	mg CaCO3/L		85	110	120	120	43	43	810	810	460	460	350	350	230	230	690	700	550	550
Chloride	mg/L	600	0.25	0.52	2.2	2.3	0.85	0.84	10	10	6.1	6.1	3.2	3.2	3.0	3.0	8.8	8.9	5.7	5.7
Fluoride	mg/L	1.22	0.031	0.045	0.029	0.029	0.011	0.011	0.029	0.029	0.011	0.011	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033
Ammonia, total	mg-N/L	3.9	0.0025	0.0085	0.37	0.37	0.19	0.18	1.3	1.3	0.70	0.70	0.35	0.35	0.17	0.17	1.2	1.2	0.55	0.55
Nitrate	mg/L	32.8	0.0050	0.060	2.9	2.9	1.4	1.4	10	10	5.5	5.5	2.7	2.7	1.3	1.3	9.6	9.7	4.3	4.3
Nitrite	mg/L	0.06	0.00050	0.0020	0.066	0.066	0.033	0.033	0.24	0.24	0.13	0.13	0.062	0.063	0.030	0.030	0.22	0.22	0.099	0.099
Sulfate	mg/L		2.6	7.3	230	230	120	120	1000	1000	620	620	250	250	240	240	880	890	740	740
Aluminum, total	mg/L		0.047	1.7	0.010	0.011	0.0046	0.0045	0.018	0.018	0.0079	0.0078	0.021	0.021	0.014	0.014	0.023	0.023	0.018	0.018
Antimony, total	mg/L	0.25	0.00012	0.00024	0.00022	0.00023	0.000078	0.000077	0.0012	0.0012	0.00072	0.00072	0.00046	0.00046	0.00039	0.00039	0.0012	0.0012	0.0012	0.0012
Arsenic, total	mg/L		0.00045	0.00089	0.00030	0.00030	0.00012	0.00011	0.0013	0.0013	0.00079	0.00078	0.00042	0.00042	0.00038	0.00038	0.0012	0.0012	0.0011	0.0011
Barium, total	mg/L		0.035	0.046	0.023	0.023	0.0092	0.0090	0.037	0.037	0.019	0.019	0.024	0.024	0.022	0.022	0.036	0.036	0.027	0.027
Beryllium, total	mg/L		0.000050	0.00010	0.000017	0.000017	0.0000061	0.0000060	0.000017	0.000017	0.0000061	0.0000060	0.000018	0.000018	0.000018	0.000018	0.000018	0.000018	0.000018	0.000018
Boron, total	mg/L		0.015	0.050	0.069	0.070	0.020	0.020	0.22	0.22	0.12	0.12	0.14	0.14	0.13	0.13	0.21	0.21	0.18	0.18
Cadmium, dissolved	mg/L	0.00044	0.0000025	0.0000057	0.000055	0.000056	0.000032	0.000032	0.00016	0.00016	0.000088	0.000088	0.000044	0.000045	0.000020	0.000021	0.00011	0.00011	0.000054	0.000054
Chromium, total	mg/L		0.00032	0.0018	0.00019	0.00020	0.000085	0.000084	0.00088	0.00088	0.00051	0.00051	0.00020	0.00020	0.00018	0.00018	0.00075	0.00075	0.00048	0.00049
Cobalt, dissolved	mg/L		0.000050	0.000050	0.0040	0.0042	0.0021	0.0021	0.019	0.020	0.0080	0.0081	0.0026	0.0026	0.0014	0.0014	0.0082	0.0083	0.0044	0.0044
Copper, dissolved	mg/L	0.00887	0.00091	0.0014	0.00081	0.00082	0.00029	0.00029	0.0021	0.0021	0.00088	0.00087	0.0023	0.0023	0.0017	0.0017	0.0050	0.0050	0.0034	0.0034
Iron, total	mg/L	1	0.043	0.25	0.063	0.063	0.038	0.038	0.13	0.13	0.079	0.079	0.056	0.057	0.026	0.026	0.12	0.12	0.074	0.074
Iron, dissolved	mg/L	0.35	0.015	0.015	0.063	0.063	0.038	0.038	0.13	0.13	0.079	0.079	0.056	0.057	0.026	0.026	0.12	0.12	0.074	0.074
Lead, dissolved	mg/L		0.000025	0.000025	0.00025	0.00025	0.00010	0.00010	0.0021	0.0021	0.0012	0.0012	0.00061	0.00061	0.00048	0.00048	0.0019	0.0019	0.0017	0.0017
Manganese, total	mg/L	0.935	0.0044	0.010	0.071	0.074	0.039	0.039	0.27	0.29	0.11	0.11	0.048	0.049	0.021	0.021	0.11	0.11	0.048	0.048
Mercury, total	mg/L		0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025
Molybdenum, total	mg-N/L	46	0.00012	0.00015	0.0069	0.0070	0.0027	0.0027	0.068	0.068	0.038	0.038	0.0085	0.0085	0.0079	0.0079	0.053	0.054	0.035	0.035
Nickel, dissolved	mg/L	0.0189	0.00025	0.00025	0.0054	0.0056	0.0030	0.0030	0.026	0.026	0.013	0.013	0.0041	0.0042	0.0029	0.0029	0.014	0.014	0.0094	0.0094
Selenium, total	mg/L		0.000052	0.000067	0.0078	0.0078	0.0033	0.0033	0.037	0.037	0.021	0.021	0.0083	0.0083	0.0076	0.0076	0.031	0.031	0.026	0.026
Strontium, total	mg/L		0.11	0.13	0.21	0.21	0.093	0.092	0.53	0.55	0.32	0.32	0.27	0.27	0.26	0.26	0.48	0.48	0.36	0.36
Silver, total	mg/L		0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050
Thallium, total	mg/L		0.0000050	0.0000050	0.000067	0.000067	0.000041	0.000041	0.00018	0.00018	0.00010	0.00010	0.000061	0.000062	0.000035	0.000035	0.00013	0.00013	0.000069	0.000069
Uranium, total	mg/L	0.0165	0.00012	0.00017	0.0013	0.0013	0.00045	0.00044	0.0080	0.0080	0.0046	0.0046	0.0027	0.0027	0.0022	0.0022	0.0075	0.0075	0.0072	0.0072
Zinc, dissolved	mg/L	0.0381	0.0010	0.0015	0.0068	0.0071	0.0039	0.0039	0.029	0.030	0.015	0.015	0.0055	0.0055	0.0033	0.0033	0.017	0.017	0.0093	0.0093

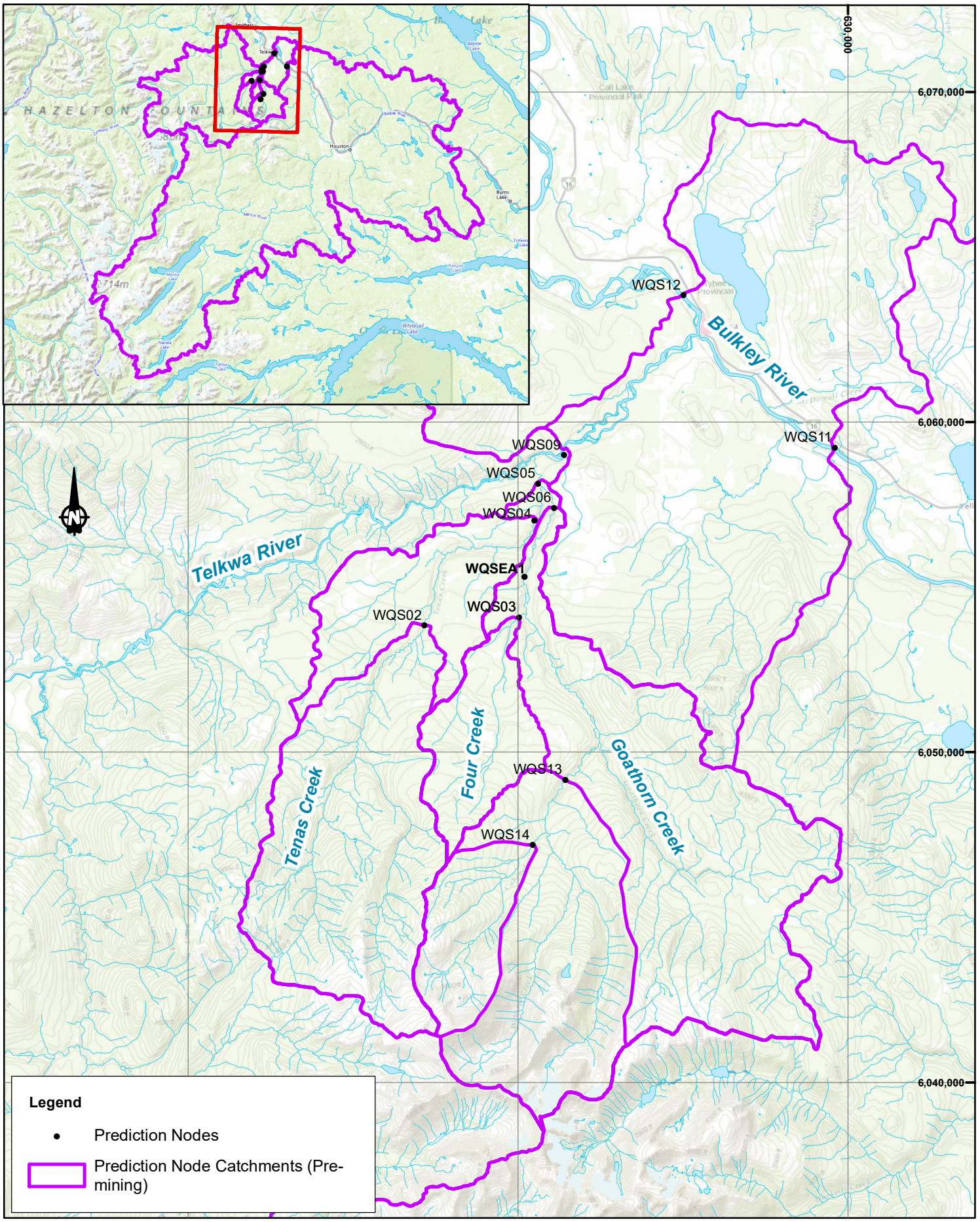
Red highlights indicate value above WQG calculated for the receiving stream
Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Water Balance Modelling/Results/20250403_FEAC_2024/Results_MMPs_void_WaterQuality_EAModel_41_AcuteWQG_20260323.xlsm

Table G-9

Parameter	Units	Tenas Control Pond Void Space and Seepage Water Quality											
		Goathorn WQG	Baseline in Goathorn Creek		Operations								
					Final EAC Project Case (2024)				High Source terms (Alternative Case 2)				
			P50	P95	Max Summer	Max Winter	Average Summer	Average Winter	Max Summer	Max Winter	Average Summer	Average Winter
Total Hardness	mg-$CaCO_3$/L		74	100	136	159	86	107	230	287	152	191
Alkalinity, total	mg CaCO3/L		54	85	500	560	270	350	820	1000	530	650
Chloride	mg/L	600	0.25	0.50	6.0	6.7	3.1	4.0	10	13	6.6	8.1
Fluoride	mg/L	1.21	0.032	0.041	0.071	0.15	0.046	0.082	0.071	0.15	0.046	0.082
Ammonia, total	mg-N/L	6.14	0.0025	0.0070	0.56	1.1	0.13	0.24	2.2	4.4	0.48	0.88
Nitrate	mg/L	32.8	0.043	0.084	4.3	8.6	0.96	1.7	17	34	3.7	6.8
Nitrite	mg/L	0.06	0.00050	0.0020	0.099	0.20	0.023	0.040	0.39	0.79	0.086	0.16
Sulfate	mg/L		25	38	410	420	220	260	770	850	520	590
Aluminum, total	mg/L		0.034	0.66	0.019	0.017	0.013	0.012	0.020	0.017	0.014	0.013
Antimony, total	mg/L	0.25	0.000055	0.00013	0.00072	0.00079	0.00038	0.00049	0.0012	0.0014	0.00078	0.00094
Arsenic, total	mg/L		0.00020	0.00060	0.0013	0.0013	0.00074	0.00088	0.0020	0.0022	0.0013	0.0015
Barium, total	mg/L		0.059	0.071	0.066	0.074	0.043	0.055	0.068	0.088	0.051	0.065
Beryllium, total	mg/L		0.000050	0.00010	0.000056	0.000061	0.000038	0.000044	0.000056	0.000061	0.000038	0.000044
Boron, total	mg/L		0.0050	0.050	0.11	0.13	0.063	0.080	0.19	0.23	0.13	0.15
Cadmium, dissolved	mg/L	0.00043	0.0000075	0.000033	0.000034	0.000030	0.000022	0.000022	0.00011	0.00010	0.000063	0.000062
Chromium, total	mg/L		0.00020	0.00084	0.00066	0.00078	0.00039	0.00051	0.00097	0.0012	0.00066	0.00082
Cobalt, dissolved	mg/L		0.000050	0.00010	0.0029	0.0029	0.0019	0.0021	0.012	0.011	0.0050	0.0050
Copper, dissolved	mg/L	0.00567	0.0011	0.0036	0.0015	0.0015	0.0011	0.0012	0.0019	0.0019	0.0015	0.0015
Iron, total	mg/L	1	0.040	0.70	0.038	0.036	0.026	0.026	0.066	0.059	0.039	0.036
Iron, dissolved	mg/L	0.35	0.015	0.12	0.038	0.036	0.026	0.026	0.066	0.059	0.039	0.036
Lead, dissolved	mg/L		0.000025	0.000050	0.0011	0.0012	0.00057	0.00072	0.0020	0.0022	0.0012	0.0015
Manganese, total	mg/L	0.913	0.0036	0.029	0.038	0.036	0.022	0.024	0.16	0.15	0.064	0.065
Mercury, total	mg/L		0.0000025	0.0000052	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025	0.0000025
Molybdenum, total	mg-N/L	46	0.00048	0.00062	0.036	0.036	0.018	0.022	0.064	0.070	0.040	0.046
Nickel, dissolved	mg/L	0.0226	0.00025	0.00060	0.0060	0.0061	0.0037	0.0042	0.017	0.016	0.0091	0.0096
Selenium, total	mg/L		0.000084	0.00020	0.022	0.024	0.011	0.014	0.039	0.049	0.024	0.030
Strontium, total	mg/L		0.080	0.11	0.28	0.28	0.18	0.20	0.47	0.53	0.34	0.38
Silver, total	mg/L		0.0000050	0.000020	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050	0.0000050
Thallium, total	mg/L		0.0000050	0.000010	0.000050	0.000077	0.000034	0.000047	0.00013	0.00013	0.000078	0.000089
Uranium, total	mg/L	0.0165	0.000056	0.00014	0.0044	0.0048	0.0022	0.0028	0.0078	0.0093	0.0049	0.0060
Zinc, dissolved	mg/L	0.0351	0.0013	0.0021	0.0088	0.0099	0.0055	0.0066	0.021	0.019	0.012	0.014

Red highlights indicate value above WQG calculated for the receiving stream
Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Water Balance Modelling/Results/20250403_FEAC_2024/Results_MMPs_void_WaterQuality_EAModel_41_AcuteWQG_20260323.xlsm

Attachment 3 ENV13 and ENV14: Map of Prediction Node in Goathorn Creek


HAZELTON MOUNTAINS
Telkwa
Houston
Burns Lake
Babine Lake
Call Lake Provincial Park
Tyhee Provincial
Bulkley River
Telkwa River
Tenas Creek
Four Creek
Goathorn Creek
WQS12
WQS11
WQS09
WQS05
WQS06
WQS04
WQSEA1
WQS03
WQS02
WQS13
WQS14
630,000
6,070,000
6,060,000
6,050,000
6,040,000
N
Legend
Prediction Nodes
Prediction Node Catchments (Pre-mining)
0
5
10
Kilometers
Coordinate System: NAD 1983 UTM Zone 9N
Projection: Transverse Mercator
Datum: North American 1983
Path: \\srk.ad\dfs\nalvan\Projects\01_SITES\Telkwa Coal\2CT025.005_Telkwa 2018 FS\040_AutoCAD\GIS\Prediction_nodes\WB_PN_Catchments_PreM_rev01_cog.mxd

Attachment C: Telkwa Mining Response to the follow up information requests from MCMM on May 15, 2026

May 15, 2026

Stasia Ferby
Project Assessment Director
BC Environmental Assessment Office
By Email: Stasia.Ferbey@gov.bc.ca

SUBJECT: Response to follow-up Information Requests (IRs) from Ministry of Mines and Critical Minerals (MMCM)

Dear Ms. Ferbey:

Telkwa Mining Limited (Telkwa Mining) is pleased to provide the below responses to the following information requests (IRs) provided by the MMCM for the Tenas Project's Water IR.

143 MCM Geoscience 03-Feb-26 App 16 Sect 2.5, Doc 20260131 EAO Water response, Appendix 1, Appendix 5, Appendix 1

Appendix 15 demonstrated how spatially expansive the PAG intervals are in each zone associated with drillholes. Material management based on an NPR of 2 shows that intervals of PAG material could be segregated or blended in a zone with non-PAG bulk average. The verification sampling of blastholes in the ML-ARD Management Plan proposes to manage PAG and Non-PAG material based on bulk composite average of NPR calculated within each 13 m benches which might be composed of blended non-PAG and PAG individual intervals from each material units. MCM understands that volume of PAG versus Non-PAG material considered in the WQM are based on assumptions that certain zones will be managed as PAG and other zones were demarcated as non-PAG and PAG polygons based on weighted NPR from drillhole samples. However, the PAG and non-PAG material will be managed based on composite samples sometimes indirectly blending PAG and non-PAG intervals within a 13 m benches around blasthole patterns. MCM understands that no additional mixing will occur to ensure homogeneity of the material beyond blasting and excavation. This will result in a segregated blend as opposed to a more homogeneous fully mixed blend. Consequently, stratigraphic zones with average weighted NPR = 2 are designated as non-PAG and this segregated blend of unsaturated rock could be placed as an embankment, pit fill or closure cover. Since it is an average, this implies that a maximum of half of the material from that unit could become acid generating at some point in the future. Although the overall drainage from that storage area may be pH-neutral due to mixing with the non-PAG portion of the unit or non-PAG material from another unit, the current Management Plan does not address the impact of segregated blending and the current source terms provided in App 5 and applied in App 1 do not account for a segregated blend of different units of non-PAG / PAG rock piles or covers that are exposed to allow advanced stage weathering and acidic hot-spots within the non-PAG pile. Considering Section 6 of the ML ARD Guidelines, please provide the following information: [EA QP Response Required]

> *1- Please discuss how the impact of segregated blending as opposed to a fully ""mixed blend"" was assessed in the application?*
>
> *2- What are the hydrological properties of the PAG intervals blended within a composite of Non-PAG intervals between the different material units (zones)? Discuss how differences between the physical properties of the material units may affect drainage and hydrological interactions within the non-PAG piles potentially creating preferential flow for acidic drainage.*
>
> *3- Was the onset of acidic hot spots in the non-PAG embankment, pit backfill or closure cover considered in the source term development and the WQM (app 1 and 5). If so, please explain how they were considered and discuss the impact on water quality results.*
>
> *4- If not already considered please provide sensitivity analysis in the WQM demonstrating how on-set of acidic hot spots within the non-PAG rock piles can impact water quality.*
>
> *5- Please discuss mitigation measures to prevent onset of acidic hot spots in the non-PAG rock piles or to mitigate their impact on water quality.*

Response - SRK

Please see **Attachment 1** for supplemental responses from SRK related to MMCM IR requests.

154c1 MCM Geoscience 03-Feb-26 App 16 Section 2.13, App 6 Section 5.1.2, App 1 Section 4.1.1

154c. 1- The response provided rationale for not providing the requested sensitivity analysis arguing that it is highly unlikely that the PAG material deposited in the management ponds will be in non-subaqueous conditions for longer than the predicted acidic lag time. This rationale is based on material placement schedule, contingency measures provided in the Water management design report, as well as water level predictions from the WLBM 2025. App 1 WLBM 2025 Section 4.1.1 provides the alternative case 3 which applies three consecutive 100-year dry precipitation conditions to the Project area. Please provide the following information:

a. Please justify why three consecutive year dry precipitation were chosen to evaluate the impact on the water cover levels? [EA QP Response Required]

b. In Figure 4-3, results were provided for the start of operations of the NMP and EMP, please evaluate the impact of extreme dry period for WMP during the years corresponding to the start of placement of PAG material in the WMP. [EA QP Response Required]

c. Results from Figure 4-3 shows that the water cover for EMP is below 0.5m in early operations and results from Figure 4-4 shows that the water cover for NMP is decreasing and reached a minimum of 0.5m before going up again in late operations. MCM expects that an evaluation of the need for additional contingencies will be provided during the MA/EMA Permitting should the project proceed to permitting. MCM expects that this will be determined by providing additional sensitivity scenario demonstrating how many consecutive dry years (100-year dry precipitation) would be needed for the water level to fall under the PAG level in all the management ponds during all phases of operations and closure. [Comment]

Response - SRK

Please see **Attachment 1** for supplemental responses from SRK releated to MMCM IR requests.

154c2 MCM Geoscience 03-Feb-26 App 6 Section 5.1.2, App 1 Section 4.1.1 and Section 3.4.1

154c. 2- The reviewer could not locate a backfill schedule with water levels demonstrating that all PAG material stored in the management pond will be flooded prior to onset of ARD during operations. Figure 4-1 shows that the water cover is below PAG level during the first 8 years in the WMP for project case. [QP Response Required]

a. Section 3.4.1 mentions that "Management Pond capacity and water cover thicknesses are calculated in the model based on stage-storage relationships developed from the final dam and open pit configuration of each facility (AppendixC)." The reviewer understands that the volume provided in Appendix C corresponds to the cumulative volume of PAG, NPAG and overburden material placed in the corresponding management ponds. Please clarify if the cumulative volume includes the volume of non-PAG needed for construction of the embankment and buttress for each Management Pond. If not, please provide individual stage-storage relationship for each type of materials including PAG, Non-PAG and overburden and provide stage-storage relationship for non-PAG and overburden needed for construction of the embankment in each Management Pond.

b. From the Stage-storage curves provided in 2a. for Non-PAG material for each management Ponds please demonstrate that there will be sufficient volume of Non-PAG material available for the construction of the embankment during operations based on excavation schedule.

c. Please provide a table showing period of time between deposition of PAG material in the Management Ponds and planned water cover including elevation of embankment of Non-Pag rock and availability of the volume of excavated non-Pag material during operations.

d. Demonstrate what is the proportion and duration of PAG material exposed in the Management Pond prior to flooding during all phases of operations.

Response – SRK/TML

a. The stage storage table volumes previously provided do not include volumes for the dams/buttresses or covers. See **Table 1** which provides the non-PAG material requirements based on the required dam elevation for each year to be above the water elevation submerging the PAG when structure is under construction. Unfortunately due to the sequence of construction for the management and control

ponds one cannnot simply use the fill curve elevation and the total of the material present at that elevation as it would overestimate the volume requirements as the structures are built in a sequence. **Table 2** provides further support information that is provided in response to part b. **Figure 1,** to help understand this, is a simplified diagram of how the dams/buttresses are built in stages versus one stage. If fill curves are still required for the management and control pond dams and buttresses, Telkwa Mining requests that a meeting be set up to review results.

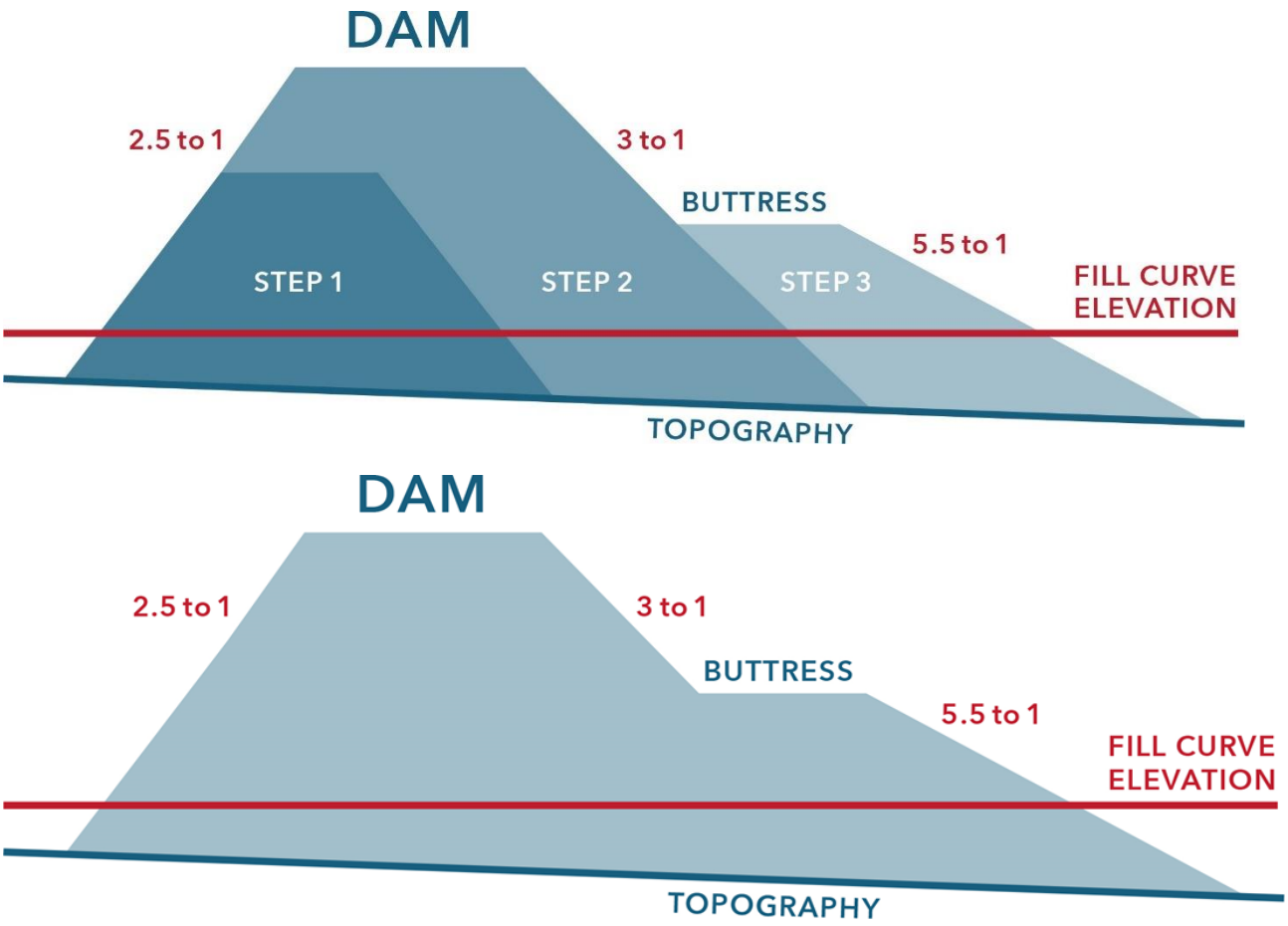


Figure 1: Dam/Buttresses Construction Sequence with Example Fill Curve Elevation versus Entire Structure

Table 1: Summary of non-PAG Volumes to Construct Dams and Buttresses at the Required Elevation for the Management and Control Ponds

Year	Total Dam & Buttresses with Volume void (m^3)	TCP Dam & Buttress Volume with void (m^3)	Modelled TCP Water Elevation (masl)	TCP Dam[1] Elevation (masl)	NMP Dam & Buttress Volume with Void (m^3)	NMP Dam[2] Elevation (masl)	Modelled NMP Water Elevation (masl)	EMP Dam & Buttress Volume with Void (m^3)	Modelled EMP Water Elevation (masl)	EMP Dam Elevation[3] (masl)	WMP Dam & Buttress Volume with Void (m^3)	Modelled WMP Water Elevation (masl)	WMP Dam Elevation[3] (masl)	TCP Dam & Buttress Cumulative Volume with Void (m^3)	NMP Dam & Buttress Cumulative Volume with Void (m^3)	EMP Dam & Buttress Cumulative Volume with Void (m^3)	WMP Dam & Buttress Cumulative Volume with Void (m^3)	Total Dam & Buttresses Cumulative Volume with Void (m^3)
-1	2,190,404	875,906	791.7	794.5	1,314,498	819.5	817.0	-	-	-	-	Active Mining	-	825,000	1,314,498	-	-	2,139,498
1	4,241,221	444,093	791.1	800	2,968,502	830	824.6	828,626	821.0	821.5	-	Active Mining	-	1,320,000	4,283,000	828,626	-	6,431,626
2	4,605,020	-	794.9	800	-	830	825.9	4,605,020	833.7	837.5	-	Active Mining	-	1,320,000	4,283,000	5,433,646	-	11,036,646
3	4,108,083	-	792.9	800	-	830	825.9	4,108,083	838.7	852	-	Active Mining	-	1,320,000	4,283,000	9,541,729	-	15,144,729
4	3,417,945	-	791.4	800	-	830	826.8	460,271	842.3	852	2,957,675	Active Mining	832	1,320,000	4,283,000	10,002,000	2,957,675	18,562,675
5	2,643,325	-	791.8	800	-	830	827.9	-	845.1	852	2,643,325	Active Mining	852	1,320,000	4,283,000	10,002,000	5,601,000	21,206,000
6	-	-	791.7	800	-	830	827.2	-	847.9	852	-	771.0	852	1,320,000	4,283,000	10,002,000	5,601,000	21,206,000
7	-	-	793.2	800	-	830	827.2	-	849.2	852	-	787.7	852	1,320,000	4,283,000	10,002,000	5,601,000	21,206,000
8	-	-	792.2	800	-	830	828.0	-	850.0	852	-	800.3	852	1,320,000	4,283,000	10,002,000	5,601,000	21,206,000
9	-	-	793.2	800	-	830	827.3	-	849.7	852	-	807.7	852	1,320,000	4,283,000	10,002,000	5,601,000	21,206,000
10	-	-	792.2	800	-	830	827.3	-	849.7	852	-	815.2	852	1,320,000	4,283,000	10,002,000	5,601,000	21,206,000
11	-	-	792.2	800	-	830	827.3	-	849.7	852	-	822.3	852	1,320,000	4,283,000	10,002,000	5,601,000	21,206,000
12	-	-	792.0	800	-	830	827.3	-	849.7	852	-	826.5	852	1,320,000	4,283,000	10,002,000	5,601,000	21,206,000
13	-	-	792.1	800	-	830	827.3	-	849.7	852	-	829.9	852	1,320,000	4,283,000	10,002,000	5,601,000	21,206,000
14	-	-	792.5	800	-	830	827.3	-	849.7	852	-	833.3	852	1,320,000	4,283,000	10,002,000	5,601,000	21,206,000
15	-	-	792.2	800	-	830	827.3	-	849.6	852	-	836.0	852	1,320,000	4,283,000	10,002,000	5,601,000	21,206,000
16	-	-	792.1	800	-	830	827.3	-	849.6	852	-	838.3	852	1,320,000	4,283,000	10,002,000	5,601,000	21,206,000
17	-	-	792.4	800	-	830	827.3	-	849.7	852	-	841.0	852	1,320,000	4,283,000	10,002,000	5,601,000	21,206,000
18	-	-	792.2	800	-	830	827.3	-	849.6	852	-	843.3	852	1,320,000	4,283,000	10,002,000	5,601,000	21,206,000
19	-	-	792.2	800	-	830	827.3	-	849.6	852	-	845.6	852	1,320,000	4,283,000	10,002,000	5,601,000	21,206,000
20	-	-	792.5	800	-	830	827.3	-	849.6	852	-	847.2	852	1,320,000	4,283,000	10,002,000	5,601,000	21,206,000
21	-	-	792.7	800	-	830	828.0	-	849.6	852	-	850.0	852	1,320,000	4,283,000	10,002,000	5,601,000	21,206,000
Total	**21,206,000**	**1,320,000**	793.5	**800**	**4,283,000**	**830**	828.0	**10,002,000**	849.6	**852**	**5,601,000**	850.0	**852**	**1,320,000**	**4,283,000**	**10,002,000**	**5,601,000**	**21,206,000**

Notes:
1: TCP spillway is at 797
2: NMP spillway is at 828
3: EMP and WMP spillways are at 850

If the fill curves are still required for these structures, Telkwa Mining requests a meeting with MMCM reviewers to present information priror to submission.

b. See **Table 1** above and **Table 2** below. **Table 1** shows non-PAG material requirements for various dam elevations by year in relation to modelled PAG and water levels based on the WLBM. **Table 2** shows a summary of PAG and non-PAG material movement and dam/buttress construction for both the SRK WLBM model and the mine plan and relationship to PAG, water, and dam elevations. Please note the PAG values in the SRK WLBM were slightly accelerated to be greater than the mine plan to provide an additonal level of conservatism regarding dam and water elevation requirements (i.e. PAG levels are higher in the SRK WLBM than what the mine plan would support to ensure there is an adequate water cover and non-PAG materials for dam/buttress construction). The stratigraphic sequence for the Project as illustrated by **Figure 2**, has overburden and/or Zone 1 mined prior to PAG materials being excavated in almost all areas of the pit except where these units have been eroded off. Therefore the mining rate of PAG and non-PAG materials can be adjusted during the mining process to ensure sufficient non-PAG material is produced to have the dam structures constructed prior to PAG being placed within them. Furthermore, there is contigency overburden volumes available outside of the pit but within the overall Project Area that could be excavated to cover any shortfalls in non-PAG material as the overburden zone is a thick overlying sequence for this Project versus other mine projects in BC as illustrated by **Figure 3**.

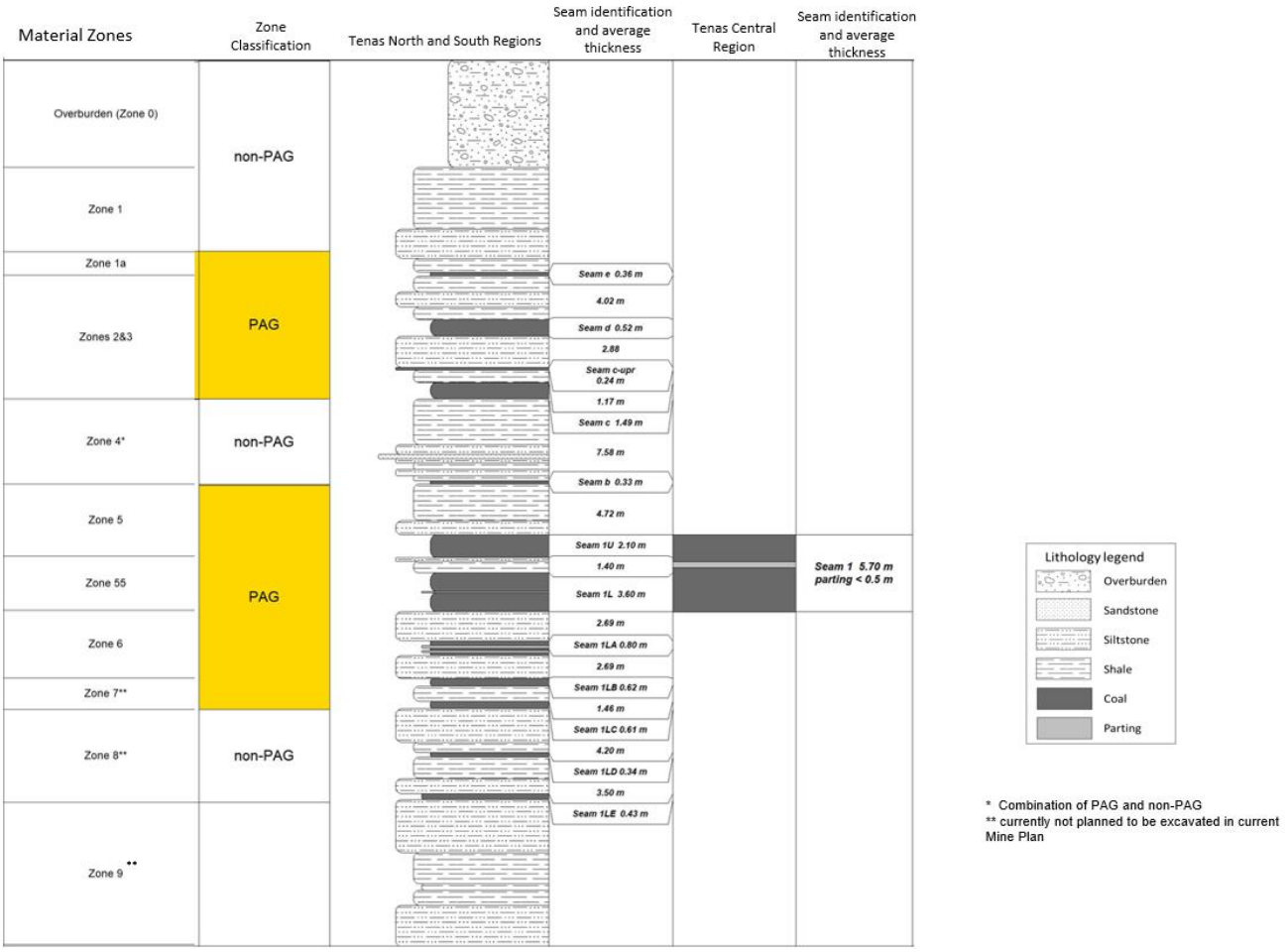


Figure 2: Stratigraphic Sequence for Material Zones for the Tenas Deposit

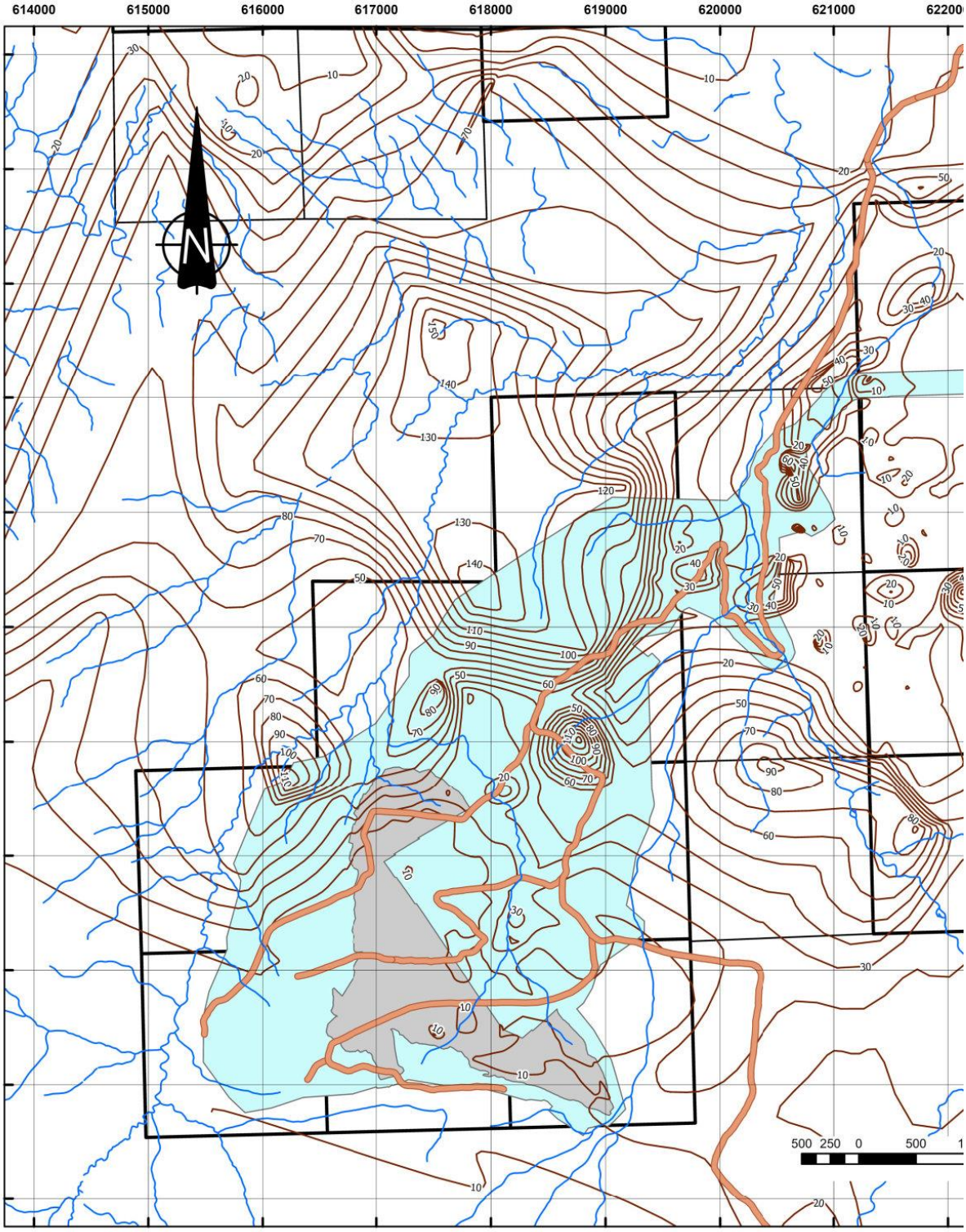


Figure 3: Overburden Thicknesses for the Tenas Deposit within the Open Pit and Project Area

Table 2: Summary of PAG and non-PAG material movement and dam/buttress construction

Material table								Tenas Control Pond (TCP)			North Management Pond (NMP)								East Management Pond (EMP)								West Management Pond (WMP)								
Year	Mined OVB Mine Plan	Mined NAG Mine Plan	Mined PAG Mine Plan	Produced Processed Rock (Coal Rejects)	Modelled Mined and Exposed PAG with void	Modelled Processed Rock (Coal Rejects) with void*	Exposure Timing Average / Maximum	Water in TCP (modelled[2])	NAG/OVB to TCP dams/buttresses with void[1] (cumul)	TCP Dam elevation	PAG to NMP with void (cumul)	CR to NMP with void (cumul)	PAG level in NMP (modelled[2])	Water level in NMP (modelled[2])	NAG+OVB to NMP Cover with void (cumul)	Total material and void space in NMP (cumul)	NMP Dam elevation	NAG/OVB to NMP dams/buttresses with void1 (cumul)	PAG to EMP with void (cumul)	CR to EMP with void (cumul)	PAG level in EMP (modelled)	Water level in EMP (modelled[2])	NAG+OVB to EMP Cover with void (cumul)	Total material and void space in EMP (cumul)	EMP Dam Elevation	NAG/OVB to EMP dams/buttresses with void[1] (cumul)	PAG to WMP with void (cumul)	CR to WMP with void (cumul)	PAG level in WMP (modelled)	Water level in WMP (modelled[2])	NAG+OVB to WMP Cover with void (cumul)	Total material and void space in WMP (cumul)	WMP Dam Elevation	NAG/OVB to WMP dams/buttresses with void[1] (cumul)	NAG/OVB Remaining for Backfill (cumul)
Units	BCM	BCM	BCM	BCM	m³	m³	Months	masl	m³	masl	m³	m³	masl	masl	m³	m³	masl	m³	m³	m³	masl	masl	m³	m³	masl	m³	m³	m³	masl	masl	m³	m³	masl	m³	BCM
-1	1,782,915	-	327,142	38,269	531,023	58,093	4.5 / 9	791.7	825,000	794.5	531,023	58,093	816.4	817.0	-	589,116	819.5	1,314,498	-	-	-	-	-	-		-	-	-	-	-	-	-	825**	-	-
1	2,014,288	1,442,292	1,214,012	160,156	1,659,731	185,627	6 / 12	791.1	1,320,000	800.0	2,190,754	243,720	824.1	824.6	-	2,434,474	830.0	4,282,997	-	-	-	-	-	-	821.5	828,626	-	-	-	-	-	-	825**	-	-
2	2,106,216	1,598,124	1,549,453	161,953	2,220,973	211,714	6 / 12	794.9			2,385,143	299,079	825.2	825.9	-	2,684,223	830.0	4,282,997	2,026,584	156,355	833.2	833.7	-	2,182,938	837.5	5,433,646	-	-	-	-	-	-	825**	-	-
3	2,972,797	450,433	1,711,526	143,684	2,413,688	169,403	6 / 12	792.9			2,385,143	299,079	825.2	825.9	308,867	2,993,090	830.0	4,282,997	4,440,271	325,758	838.1	838.7	-	4,766,029	852.0	9,541,729	-	-	-	-	-	-	825**	-	-
4	2,161,708	1,204,006	1,769,042	157,641	2,418,476	182,147	6 / 12	791.4			2,385,143	299,079	825.2	826.8	718,937	3,403,159	830.0	4,282,997	6,858,747	507,905	841.7	842.3	-	7,366,652	852.0	10,001,997	-	-	-	-	-	-	832.0	3,024,889	-
5	1,762,015	1,392,735	1,980,006	157,057	2,388,368	176,265	6 / 12	791.8			2,385,143	299,079	825.2	827.9	718,937				9,247,115	684,170	844.6	845.1	-	9,931,285	852.0	10,001,997	-	-	-	-	-	-	852.0	5,600,997	1,104,065
6	1,068,408	2,377,835	1,771,013	151,284	2,965,599	223,233	6 / 12	791.7			2,385,143	299,079	825.2	827.2	718,937				11,560,623	857,110	847.1	847.9	-	12,417,733	852.0	10,001,997	652,091	50,293	770.0	771.0	-	702,384	852.0	5,600,997	4,550,308
7	990,741	2,548,365	1,760,650	160,305	2,172,772	201,840	6 / 12	793.2			2,385,143	299,079	825.2	827.2	718,937				11,560,623	857,110	847.3	849.2	2,540,928	14,958,661	852.0	10,001,997	2,824,863	252,133	787.2	787.7	-	3,076,995			6,459,634
8	949,682	2,517,721	1,131,103	179,902	2,640,234	288,356	6 / 12	792.2			2,385,143	299,079	825.2	828.0	718,937				11,560,623	857,110	847.3	850.0	2,672,273	15,090,006			5,465,096	540,489	799.6	800.3	-	6,005,585			9,431,480
9	877,683	1,714,587	1,717,486	165,121	1,870,300	182,827	6 / 12	793.2			2,385,143	299,079	825.2	827.3	718,937				11,560,623	857,110	847.3	849.7	2,672,273	15,090,006			7,335,396	723,316	807.1	807.7	-	8,058,712			12,023,750
10	1,255,270	1,615,794	1,438,692	158,980	2,414,385	177,127	6 / 12	792.2			2,385,143	299,079	825.2	827.3	718,937				11,560,623	857,110	847.3	849.7	2,672,273	15,090,006			9,749,781	900,443	814.7	815.2	-	10,650,223			14,894,814
11	1,154,681	1,297,856	1,857,219	154,023	2,381,938	185,056	6 / 12	792.2			2,385,143	299,079	825.2	827.3	718,937				11,560,623	857,110	847.3	849.7	2,672,273	15,090,006			12,131,719	1,085,499	821.8	822.3	-	13,217,217			17,347,351
12	1,081,444	1,396,052	1,832,260	160,918	1,491,359	166,543	6 / 12	792.0			2,385,143	299,079	825.2	827.3	718,937				11,560,623	857,110	847.3	849.7	2,672,273	15,090,006			13,623,077	1,252,042	826.0	826.5	-	14,875,119			19,824,847
13	669,275	2,493,282	1,147,199	144,820	1,725,303	154,990	6 / 12	792.1			2,385,143	299,079	825.2	827.3	718,937				11,560,623	857,110	847.3	849.7	2,672,273	15,090,006			15,348,380	1,407,032	829.3	829.9	-	16,755,412			22,987,404
14	207,412	1,125,188	1,327,156	134,774	2,066,454	168,180	6 / 12	792.5			2,385,143	299,079	825.2	827.3	718,937				11,560,623	857,110	847.3	849.7	2,672,273	15,090,006			17,414,834	1,575,212	832.8	833.3	-	18,990,046			24,320,004
15	130,254	939,922	1,589,580	146,243	1,506,902	171,543	6 / 12	792.2			2,385,143	299,079	825.2	827.3	718,937				11,560,623	857,110	847.3	849.6	2,672,273	15,090,006			18,921,736	1,746,755	835.4	836.0	-	20,668,490			25,390,180
16	250,215	1,250,386	1,159,155	149,168	1,612,308	165,157	6 / 12	792.1			2,385,143	299,079	825.2	827.3	718,937				11,560,623	857,110	847.3	849.6	2,672,273	15,090,006			20,534,044	1,911,912	837.8	838.3	-	22,445,956			26,890,781
17	231,888	1,187,631	1,240,237	143,615	2,212,980	193,951	6 / 12	792.4			2,385,143	299,079	825.2	827.3	718,937				11,560,623	857,110	847.3	849.7	2,672,273	15,090,006			22,747,023	2,105,863	840.5	841.0	-	24,852,886			28,310,300
18	-	957,464	1,702,292	168,653	1,569,118	208,474	6 / 12	792.2			2,385,143	299,079	825.2	827.3	718,937				11,560,623	857,110	847.3	849.6	2,672,273	15,090,006			24,316,142	2,314,337	842.7	843.3	-	26,630,478			29,267,764
19	629,316	823,426	1,207,014	181,282	1,916,502	184,444	6 / 12	792.2			2,385,143	299,079	825.2	827.3	718,937				11,560,623	857,110	847.3	849.6	2,672,273	15,090,006			26,232,643	2,498,781	845.0	845.6	-	28,731,424			30,720,506
20	-	372,746	1,474,232	160,386	1,198,761	115,105	6 / 12	792.5			2,385,143	299,079	825.2	827.3	718,937				11,560,623	857,110	847.3	849.6	2,672,273	15,090,006			27,431,404	2,613,886	846.7	847.2	-	30,045,290			31,093,252
21	-	-	922,124	100,091	-	-	6 / 12	792.7			2,385,143	299,079	825.2	828.0	718,937				11,560,623	857,110	847.3	849.6	2,672,273	15,090,006			27,431,404	2,613,886	846.9	850.0	2,543,701	32,588,991			29,070,302***
TOTAL	22,296,208	28,705,845	31,828,593	3,278,326	41,377,171	3,770,075	-	793.5			2,385,143	299,079	825.0	828.0	718,937				11,560,623	857,110	847.3	849.6	2,672,273	15,090,006			27,431,404	2,613,886	846.9	850.0	2,543,701	32,588,991			29,070,302

Dam Constructed to full elevation of 800

Dam Constructed to full elevation of 830, PAG disposition and cover construction completed

Dam Constructed to full elevation of 852, PAG disposition and cover construction completed

Dam Construction to full elevation of 852

Notes

1 NAG and OVB added to dams and buttresses is not taken into account in the calculations of rock levels in the MPs

2 Water level in each respective pond was calculated in the WLB model based on the volume of rock placed in the pond as well as water used to fill the voids contained in the rocks.
Of note, Tenas Control Pond does not have rock in the pond, it is just water stored in it.
Of further note the water level in the management ponds is controlled by pumping with a max water cover set at 0.5m during PAG placment, this cover would be higher if pumping was set to be a higher number.

* Modelled numbers for PAG and Processed Rock were based on a slightly different timing than the mine production plan to ensure both the water level and dam levels were high enough

** 825 is the elevation that water is above the pit crest elevation and a dam is required for further water level increases

*** Rehandle from backfill into cover

c. See **Table 2** in response to part b. The duration of exposure for a PAG lift deposited in the management pond will be a maximum of 12 months and an average of 6 months prior to flooding in spring freshet of any given year. The stratigraphic sequence for the Project as illustrated by **Figure 1**, has overburden and/or Zone 1 mined prior to PAG materails being excavated in almost all areas of the pit except where these units have been eroded off. The mining rate of PAG and non-PAG materials can be adjusted during the mining process so that Telkwa Mining can meet its commitment of a maximum of 12 months and an average of 6 months of PAG exposed in a management ponds prior to being submerged.

d. See **Table 2** and the response for part c.

157 MCM Geoscience 03-Feb-26 App 6 Section 5.1.2 b.

1- The reviewer understands that a sensitivity analysis was developed to evaluate the impact of development of PAG leachate from the Pit wall if operations stops and the pit lake is not being dewatered and is allowed to develop. Sensitivity results show increase in concentration of metals in the receiving environment during low flow periods. In addition, if dewatering is initiated to restart operations the dewatering and discharge to the environment would need to be staged to coincide with high flow conditions and avoid impact to the receiving environment. Contingency measures would need to be applied to prevent impact to the receiving environment. Some contingency measures were included in the response provided including variable discharge rates, dilution from other pond or lime addition. Active water treatment was not included in the proposed contingencies however it is included in the BAP as the primary mitigation measure as needed. [Comment]

2- The proposed sensitivity analysis evaluated the impact of development of PAG leachate from the Pit wall if operations stops and the pit lake is not being dewatered and is allowed to develop. However, this does not demonstrate how the progressive exposure of PAG during operations may affect downstream water quality. It is understood that the impact of the development of PAG leachate from the Pit Walls exposed during operation was not evaluated in the 2025 WQM (App 1). The WQM assumes that the Pit walls will be covered with Non-PAG rock or overburden prior to onset of ARD. However, the reviewer could not locate a backfill schedule demonstrating that all pit walls will be covered prior to onset of ARD during operations. The backfilling and reclamation sequence provided in the WMP and mine plan shows that portions of the Phase 2 Pit wall rock may be exposed from year 1 and year 5 to year 21 of operations prior to full reclamation of this zone. [QP Response Required]

a. Please provide a table showing period of time between excavation zones of the Pit and planed cover with Non-PAG rock or overburden backfill.

b. Demonstrate what is the proportion and duration of PAG Wall rock exposed in the Open pit during all phases of operations.

c. Please provide sensitivity analyses considering impact of PAG wall rock during operations and discuss appropriate mitigation measures, if needed.

Response – SRK/TML

1. No response required

2. a. Please see **Table 3** below. The table illustrates the cumulative percentage of non-PAG, PAG, and overburden (non-PAG) zones covered in a given year using an NPR cut-off of 2.0 to 1. The year the material zones are exposed are the same as the year being presented with the volumes provided while the cumulative % covered is shown in the following years.

   For example for year 17 there is 2,917 m^2 of overburden, 8,083 m^2 of non-PAG, and 125,951 m^2 of PAG materials exposed by mining in the open pit. These exposed walls are completely covered in the following year.

At a high level, the Zone 6 unblasted material zone (footwall of the bottom most coal seam recovered) accounts for approximately 92% of PAG wall zones for any given year, with Zones 1a, 2, 3, 4PAG, 5, 55 and coal seams accounting for the remaining 8%. The non-PAG wall areas are composed of 95% Zone 1 and 5% Zone 4-non-PAG.

Table 3: Cumulative Percentage of Pit Surface Areas Covered by Year and Type (%) Using an NPR Cut-off of 2.0 to 1

			Cumulative Percentage of Exposed Pit Wall Covered by Year																					
Year Area Exposed	Exposed Area (m2)	Type	-1	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	Reclaim
Y-01	48,763	OVB	0%	0%	0%	0%	0%	13%	13%	13%	13%	13%	13%	13%	15%	29%	33%	41%	71%	76%	81%	84%	87%	88%	100%
	10,645	non-PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	19%	31%	45%	87%	97%	100%	100%	100%	100%	100%	100%	100%	100%
	130,554	PAG	0%	0%	0%	0%	0%	81%	81%	82%	85%	91%	94%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Y01	17,801	OVB	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	12%	41%	46%	51%	87%	95%	98%	100%	100%	100%	100%
	10,556	non-PAG	0%	0%	0%	0%	0%	0%	0%	0%	2%	33%	43%	56%	66%	88%	93%	98%	99%	100%	100%	100%	100%	100%	100%
	32,275	PAG	0%	0%	0%	0%	0%	0%	0%	43%	64%	79%	92%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Y02	102,276	OVB	0%	0%	0%	0%	0%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	100%
	218,950	PAG	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Y03	47,798	OVB	0%	0%	0%	0%	0%	0%	0%	0%	1%	17%	24%	51%	61%	87%	91%	93%	96%	97%	99%	100%	100%	100%	100%
	11,778	non-PAG	0%	0%	0%	0%	0%	0%	0%	0%	8%	39%	48%	59%	67%	85%	90%	94%	96%	99%	100%	100%	100%	100%	100%
	102,768	PAG	0%	0%	0%	0%	0%	0%	0%	77%	89%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Y04	48,240	OVB	0%	0%	0%	0%	0%	0%	0%	0%	1%	22%	28%	54%	61%	83%	86%	88%	94%	95%	97%	97%	98%	98%	100%
	6,830	non-PAG	0%	0%	0%	0%	0%	0%	0%	0%	1%	29%	40%	51%	61%	82%	87%	91%	94%	98%	100%	100%	100%	100%	100%
	113,051	PAG	0%	0%	0%	0%	0%	0%	0%	40%	77%	95%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Y05	44,407	OVB	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	5%	6%	8%	16%	17%	19%	21%	23%	24%	100%
	27,712	non-PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%	5%	11%	27%	31%	36%	39%	43%	48%	51%	54%	56%	100%
	249,781	PAG	0%	0%	0%	0%	0%	0%	0%	32%	36%	44%	50%	56%	64%	70%	76%	83%	87%	92%	95%	97%	99%	100%	100%
Y06	42,778	OVB	0%	0%	0%	0%	0%	0%	0%	0%	0%	29%	64%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	70%	100%
	26,467	non-PAG	0%	0%	0%	0%	0%	0%	0%	98%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	141,549	PAG	0%	0%	0%	0%	0%	0%	0%	29%	29%	48%	92%	93%	93%	93%	93%	93%	93%	93%	95%	97%	99%	100%	100%
Y07*	4,418	OVB	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	74%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	96,859	PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	49%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Y08*	1,208	OVB	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	46%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	41,946	PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	79%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Y09*	3,629	OVB	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	77,905	PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	44%	85%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Y10*	6,422	OVB	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	76%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	81,008	PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	56%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Y11	39,281	OVB	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	35,412	non-PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	17%	100%	100%	100%	100%	100%	100%	100%	100%	100%
	215,824	PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	55%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Y12	14,439	OVB	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	66%	88%	100%	100%	100%	100%	100%	100%	100%
	17,356	non-PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	63%	94%	100%	100%	100%	100%	100%	100%	100%
	163,526	PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	95%	100%	100%	100%	100%	100%	100%	100%	100%
Y13	2,606	OVB	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	97%	100%	100%	100%	100%	100%	100%
	3,400	non-PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	19%	100%	100%	100%	100%	100%	100%	100%
	55,938	PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	96%	100%	100%	100%	100%	100%	100%	100%
Y14	7,887	OVB	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	16%	34%	100%	100%	100%	100%	100%	100%
	6,093	non-PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	45%	100%	100%	100%	100%	100%	100%
	123,295	PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	41%	99%	100%	100%	100%	100%	100%	100%

			Cumulative Percentage of Exposed Pit Wall Covered by Year																				
Y15	5,051	OVB	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	34%	100%	100%	100%	100%	100%	100%
	3,053	non-PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%	100%
	70,715	PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	70%	100%	100%	100%	100%	100%	100%
Y16	4,639	OVB	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	80%	100%	100%	100%	100%	100%
	4,532	non-PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	96%	100%	100%	100%	100%	100%
	167,888	PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	100%	100%	100%	100%	100%	100%
Y17	2,917	OVB	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%
	8,083	non-PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	100%	100%	100%	100%	100%
	125,951	PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	100%	100%	100%	100%	100%
Y18	4,143	OVB	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	37%	37%	100%	100%	100%
	6,767	non-PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	70%	70%	100%	100%	100%
	144,640	PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	45%	45%	100%	100%	100%
Y19	4,121	OVB	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	76%	100%	100%
	8,028	non-PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%
	87,806	PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	84%	100%	100%
Y20	2,765	OVB	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	25%	100%	100%
	11,350	non-PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	69%	100%	100%
	94,239	PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	30%	100%	100%
Y21	109,182	PAG	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%

Notes: * During years 7 through 11 no non-PAG rock is newly exposed in the walls
PAG represents Zones 1a,2,3,4-PAG,5,55,6, and 7
Non-PAG represents Zones 1 and 4-non-PAG

2. b. See **Tables 4** and **5** below. The tables summarize the net cumulative exposed open pit wall areas and % of each type of material exposed after covering in any given year for overburden, non-PAG, and PAG material zones (1a, 2, 3, 4-PAG, 5, 55, 6, 7 and coal seams) using an NPR cut-off of 2.0 to 1.

Table 6 provides the maximum duration in years for the material zones exposed in that year to be covered either with non-PAG materials and/or water.

Telkwa Mining generated a series of 23 maps to illustrate how non-PAG (pale yellow), PAG (grey), overburden (brown) are exposed and then covered with backfill (green) and water (blue) over time. Please note that these figures only illustrate the open pit area and not the management and control pond structures. See **Figures 4 a-w.**

Table 4: Net Cumulative Exposed Pit Wall Areas by Year and Type (m^2) Using an NPR Cut-off of 2.0 to 1

Type	Y-01	Y01	Y02	Y03	Y04	Y05	Y06	Y07	Y08	Y09	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20	Y21	Reclaim
OVB	48,763	66,564	168,840	216,638	264,878	295,554	338,333	342,750	342,970	316,421	301,520	308,985	309,532	266,796	217,510	211,125	179,125	164,850	157,768	158,691	152,291	150,733	147,668
non-PAG-1	10,132	20,179	20,179	31,390	37,891	64,267	89,459	64,629	63,462	53,447	49,538	77,881	88,913	72,480	36,376	30,716	27,374	22,600	15,660	22,490	15,385	14,876	11,527
non-PAG-4	513	1,022	1,022	1,589	1,919	3,254	4,530	3,272	3,213	2,706	2,508	3,943	4,502	3,670	1,842	1,555	1,386	1,144	793	1,139	779	753	584
PAG–1a	836	1,043	2,445	3,104	3,828	3,346	4,253	3,206	2,992	2,944	2,550	3,039	3,358	2,583	1,610	1,270	1,450	684	639	1,146	543	1,214	-
PAG-2	966	1,204	2,824	3,584	4,420	3,864	4,911	3,702	3,455	3,400	2,945	3,509	3,878	2,983	1,859	1,467	1,674	790	738	1,323	627	1,402	-
PAG-3	1,130	1,409	3,305	4,194	5,173	4,522	5,747	4,332	4,044	3,978	3,446	4,107	4,538	3,491	2,175	1,717	1,959	925	864	1,548	734	1,640	-
PAG-Coal C	369	460	1,079	1,369	1,688	1,476	1,876	1,414	1,320	1,299	1,125	1,340	1,481	1,139	710	560	639	302	282	505	240	535	-
PAG-4	1,295	1,616	3,788	4,808	5,930	5,183	6,588	4,966	4,635	4,560	3,950	4,708	5,202	4,001	2,494	1,968	2,246	1,060	990	1,775	842	1,880	-
PAG-5	1,230	1,534	3,597	4,565	5,630	4,921	6,255	4,715	4,401	4,330	3,750	4,470	4,939	3,799	2,367	1,869	2,132	1,006	940	1,685	799	1,785	-
PAG-Coal 1U	418	522	1,223	1,552	1,914	1,673	2,127	1,603	1,496	1,472	1,275	1,520	1,679	1,292	805	635	725	342	320	573	272	607	-
PAG-55	183	229	536	680	839	733	932	703	656	645	559	666	736	566	353	278	318	150	140	251	119	266	-
PAG-Coal 1L	699	872	2,044	2,594	3,199	2,797	3,554	2,679	2,501	2,461	2,131	2,540	2,807	2,159	1,345	1,062	1,212	572	534	958	454	1,014	-
PAG-Coal 1	382	476	1,117	1,417	1,748	1,528	1,942	1,464	1,366	1,344	1,164	1,388	1,533	1,179	735	580	662	312	292	523	248	554	-
PAG-6 No Blast	120,705	150,546	352,978	447,993	552,515	482,971	613,841	462,701	431,893	424,927	368,049	438,641	484,703	372,829	232,340	183,378	209,232	98,761	92,261	165,368	78,415	175,182	-
PAG-6 Blast	514	641	1,503	1,907	2,352	2,056	2,613	1,970	1,839	1,809	1,567	1,867	2,063	1,587	989	781	891	420	393	704	334	746	-
PAG-7	1,827	2,278	5,342	6,780	8,362	7,310	9,290	7,003	6,537	6,431	5,570	6,639	7,336	5,643	3,516	2,775	3,167	1,495	1,396	2,503	1,187	2,651	-
Grand Total	**189,962**	**250,594**	**571,820**	**734,165**	**902,287**	**885,456**	**1,096,251**	**911,108**	**876,780**	**832,173**	**751,647**	**865,243**	**927,201**	**746,196**	**507,025**	**441,738**	**434,190**	**295,413**	**274,010**	**361,182**	**253,269**	**355,839**	**159,779**

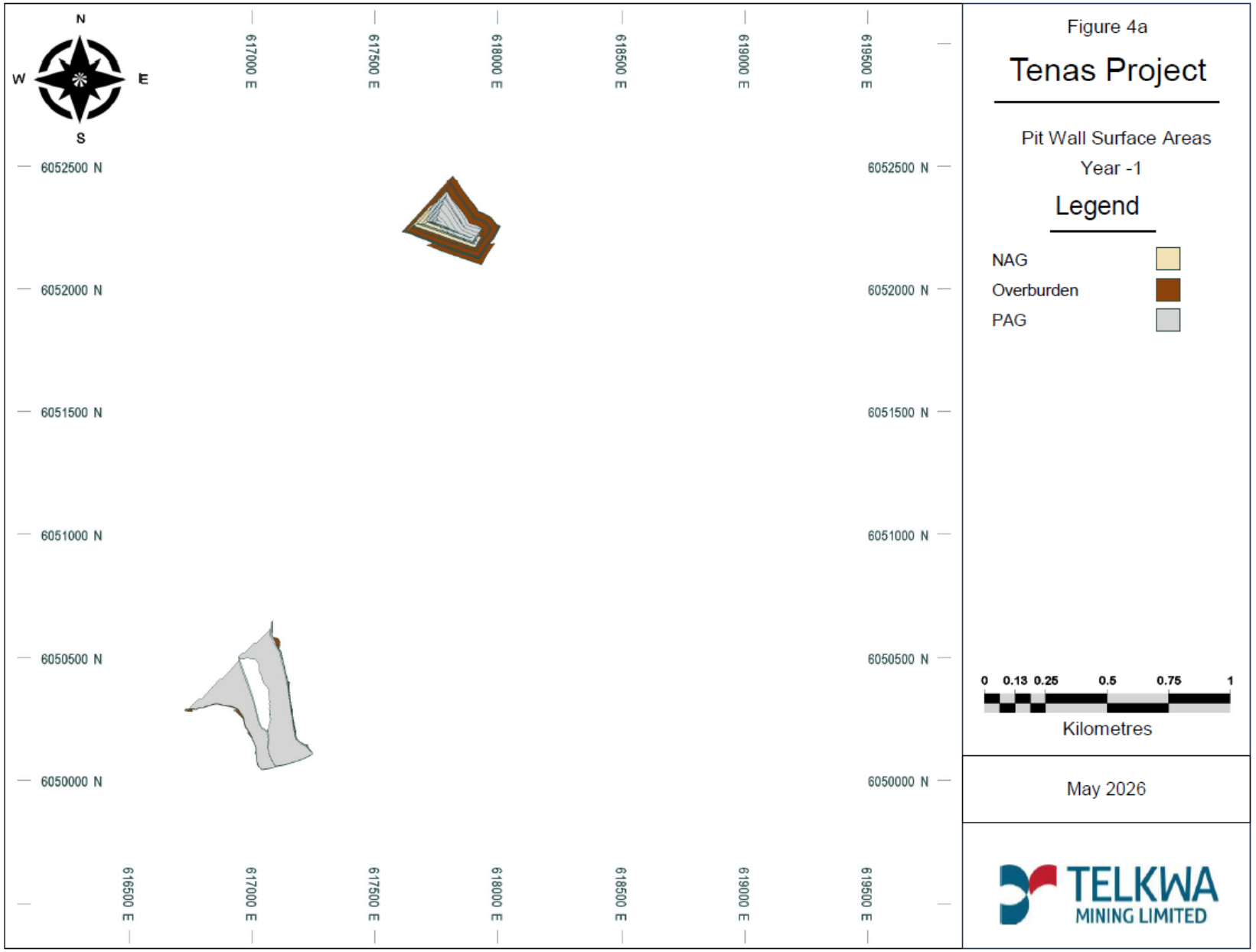
Table 5: Net Cumulative Exposed Pit Wall Proportion Areas (%) Using an NPR Cut-off of 2.0 to 1

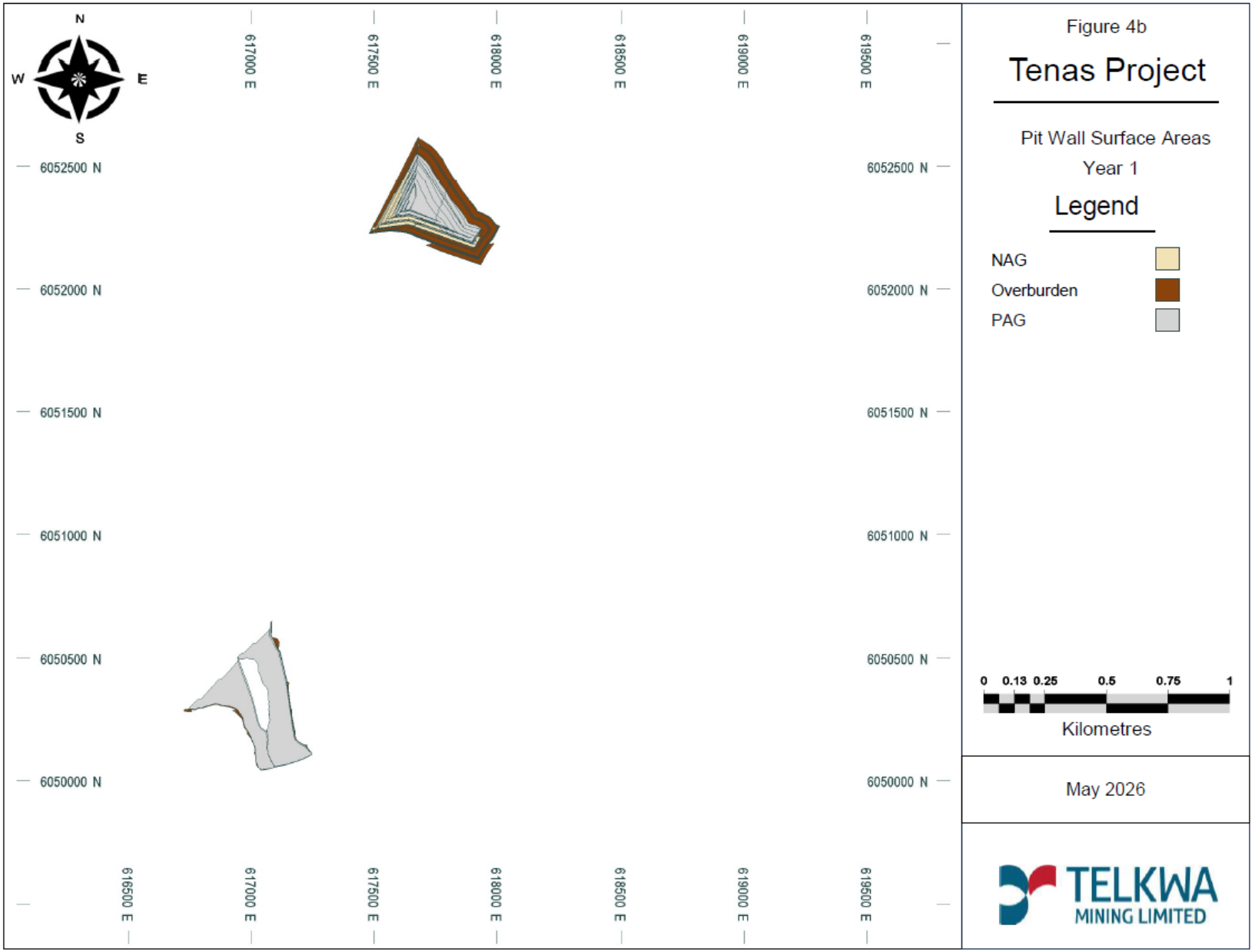
Type	Y-01	Y01	Y02	Y03	Y04	Y05	Y06	Y07	Y08	Y09	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20	Y21	Reclaim
OVB	26%	27%	30%	30%	29%	33%	31%	38%	39%	38%	40%	36%	33%	36%	43%	48%	41%	56%	58%	44%	60%	42%	92%
non-PAG (Zones 1 and 4)	5%	8%	4%	4%	4%	7%	8%	7%	7%	6%	7%	9%	10%	10%	7%	7%	6%	8%	6%	6%	6%	4%	7%
PAG–1a	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PAG-2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PAG-3	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PAG-Coal C	1%	1%	1%	1%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PAG-4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PAG-5	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	1%	0%	0%	0%	0%	1%	0%
PAG-Coal 1U	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%
PAG-55	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PAG-Coal 1L	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PAG-Coal 1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PAG-6 No Blast	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
PAG-6 Blast	64%	60%	62%	61%	61%	55%	56%	51%	49%	51%	49%	51%	52%	50%	46%	42%	48%	33%	34%	46%	31%	49%	0%
PAG-7	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Grand Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

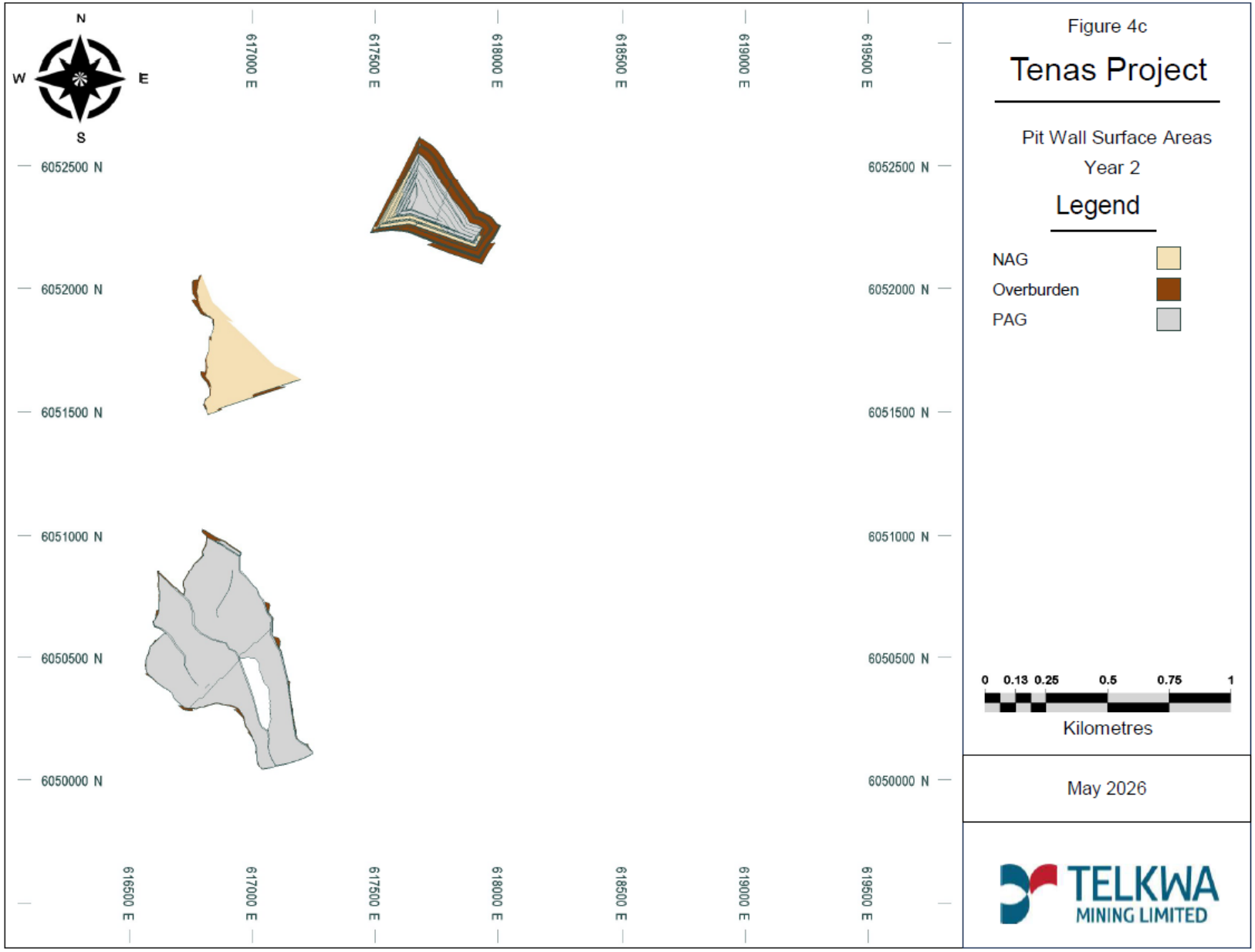
Table 6: Maximum Exposure Duration in Years of Pit Wall Surface Areas Exposed by Year and Type

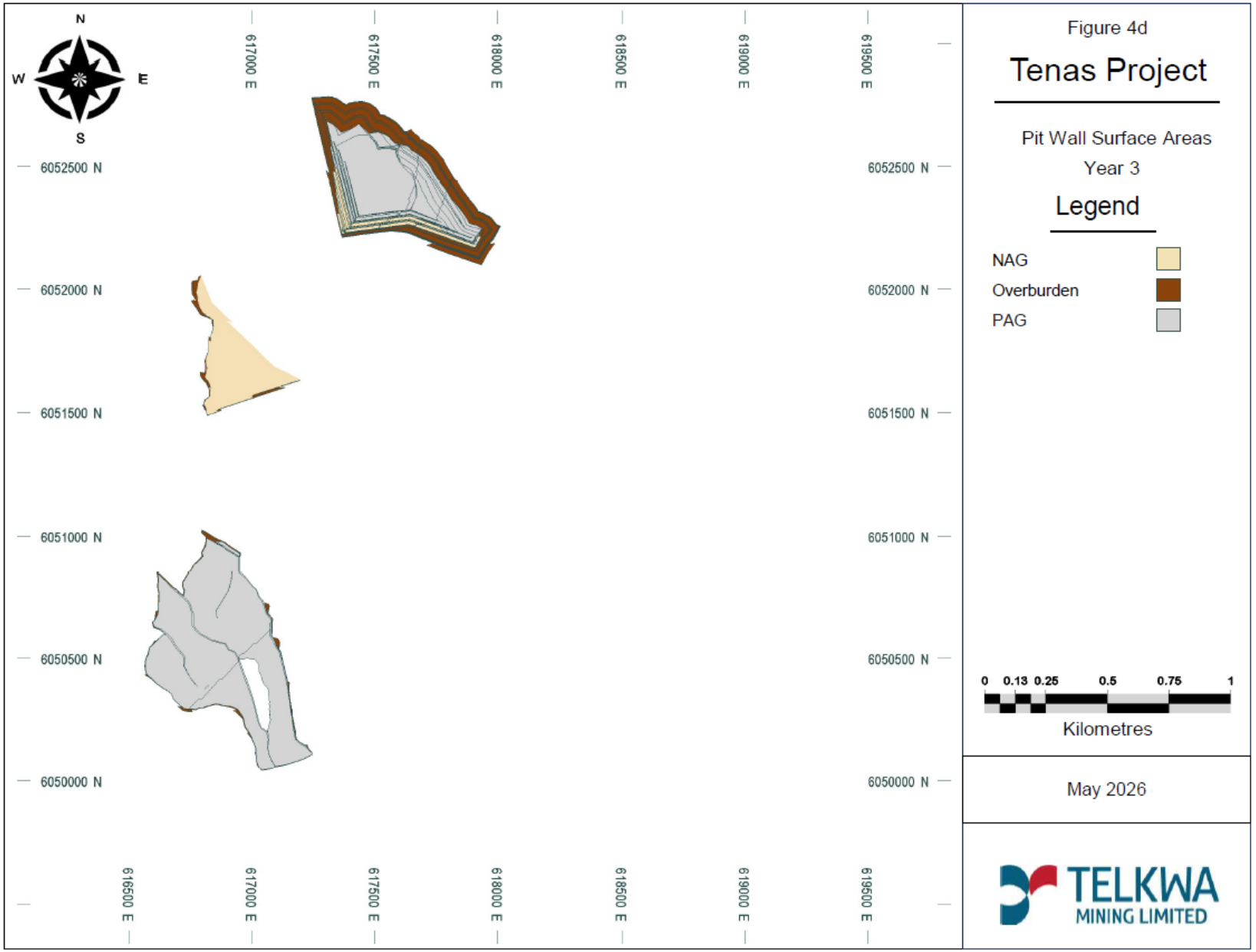
Type	Units	Y-01	Y01	Y02	Y03	Y04	Y05	Y06	Y07	Y08	Y09	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20	Y21	Reclamation[1]
OVB (non-PAG)	Years	22	19	20	17	18	17	16	5	5	5	4	3	4	4	3	2	2	1	2	3	2	-	-
non-PAG (Zones 1, and 4)[3]	Years	16	16	-	15	14	17	3	-	-	-	-	3	4	3	3	2	2	1	2	1	2	-	-
PAG (Zones 1a,2,3,4,PAG,5,55,6,7)[2]	Years	13	10	3	8	7	16	15	5	5	4	4	3	4	3	3	2	1	1	2	3	2	1	-
OVB (non-PAG)	m^2	48,763	17,801	102,276	47,798	48,240	44,407	42,778	4,418	1,208	3,629	6,422	39,281	14,439	2,606	7,887	5,051	4,639	2,917	4,143	4,121	2,765	-	-
non-PAG (Zones 1, and 4)[3]	m^2	10,645	10,556	-	11,778	6,830	27,712	26,467	-	-	-	-	35,412	17,356	3,400	6,093	3,053	4,532	8,083	6,767	8,028	11,350	-	-
PAG (Zones 1a,2,3,4,PAG,5,55,6,7)[2]	m^2	130,554	32,275	218,950	102,768	113,051	249,781	141,549	96,859	41,946	77,905	81,008	215,824	163,526	55,938	123,295	70,715	167,888	125,951	144,640	87,806	94,239	109,182	-

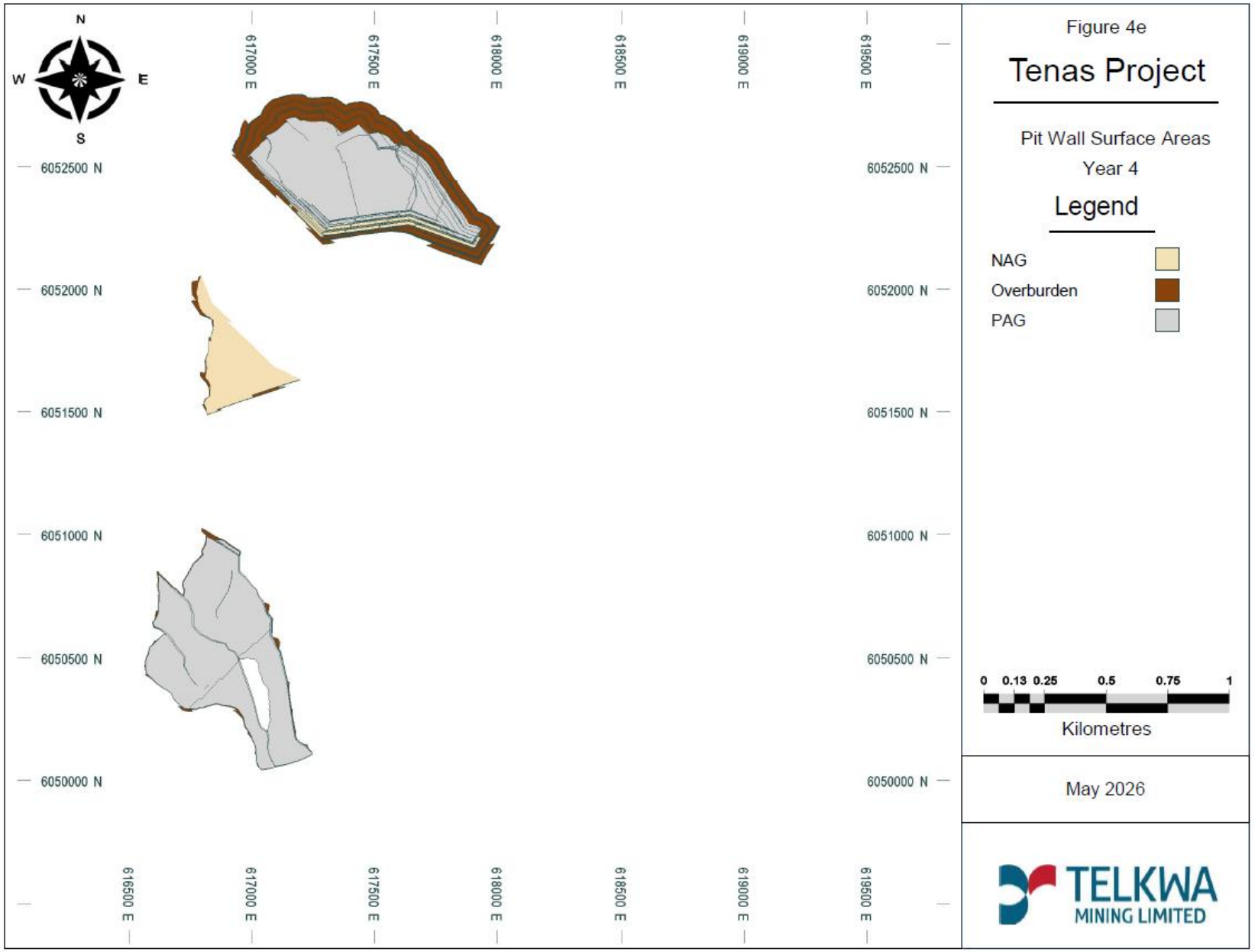
Notes: 1 Any remaining walls not covered by end of Operation phase are covered in the first year of Reclamation
2 PAG areas are comprised of the following zones of 1a, 2, 3, 4 PAG, 5, 55, 6, and 7
3 non-PAG areas are comprised of the following zones of 1 and 4 non-PAG

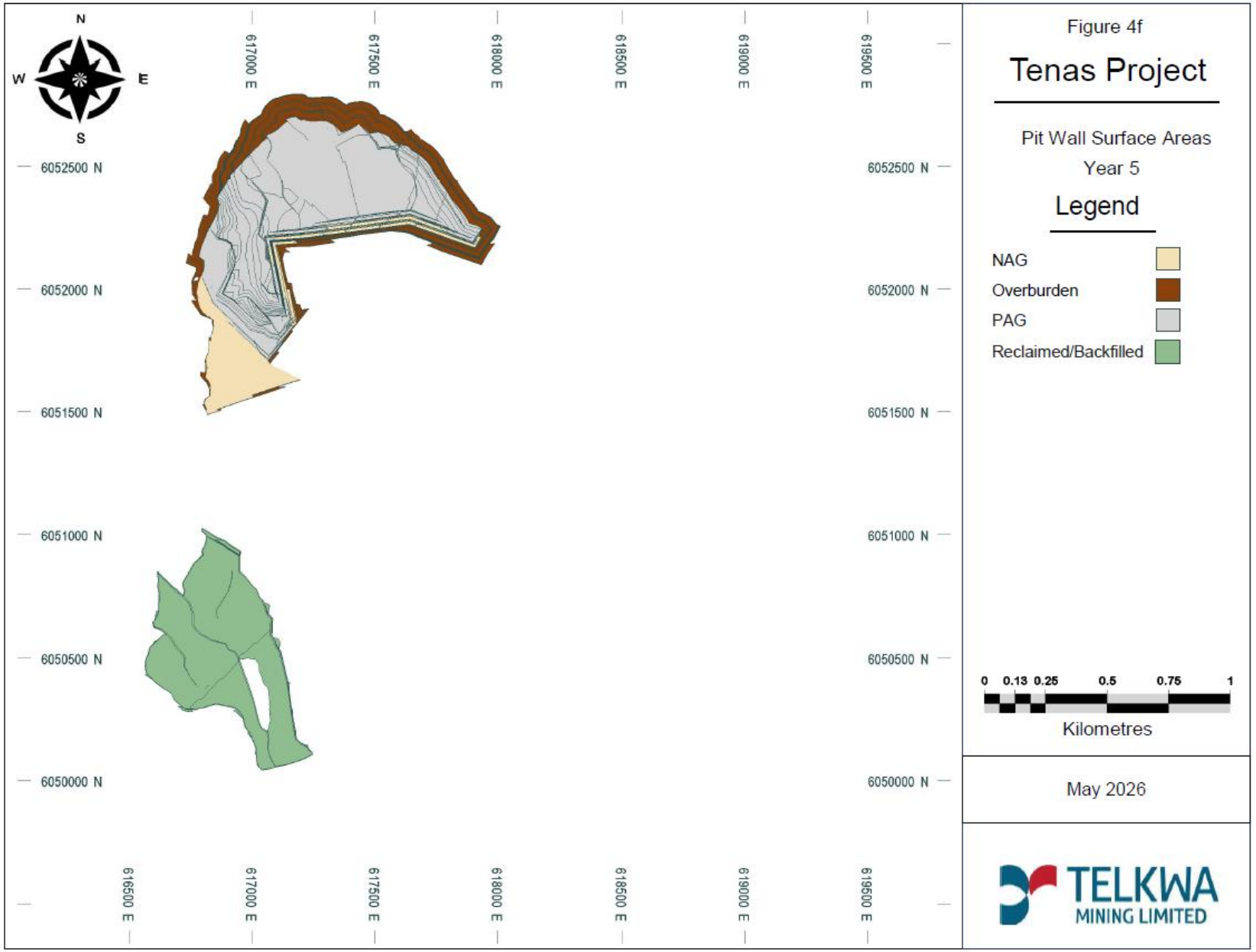

N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4a
Tenas Project
Pit Wall Surface Areas
Year -1
Legend
NAG
Overburden
PAG
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED

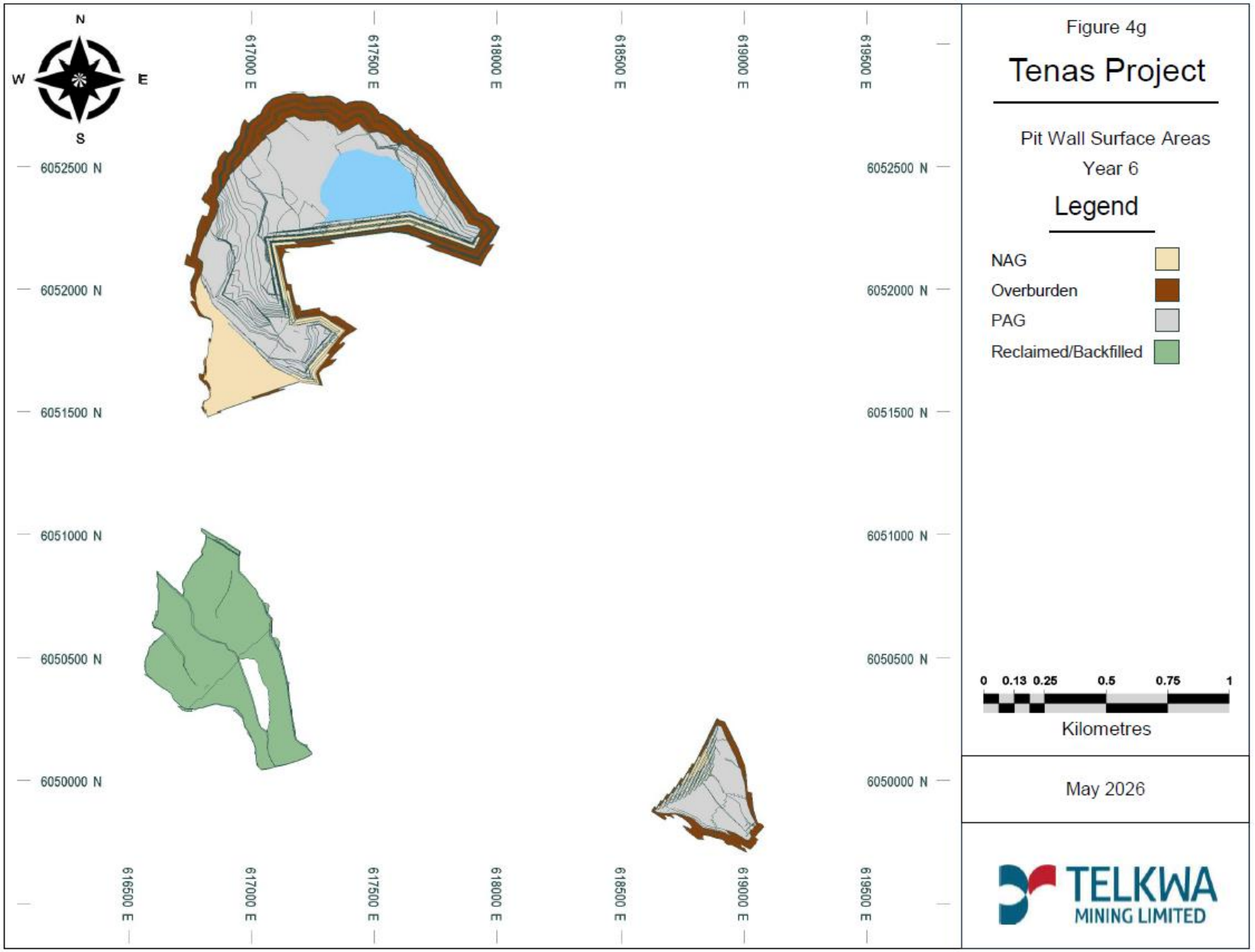

N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4b
Tenas Project
Pit Wall Surface Areas
Year 1
Legend
NAG
Overburden
PAG
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED

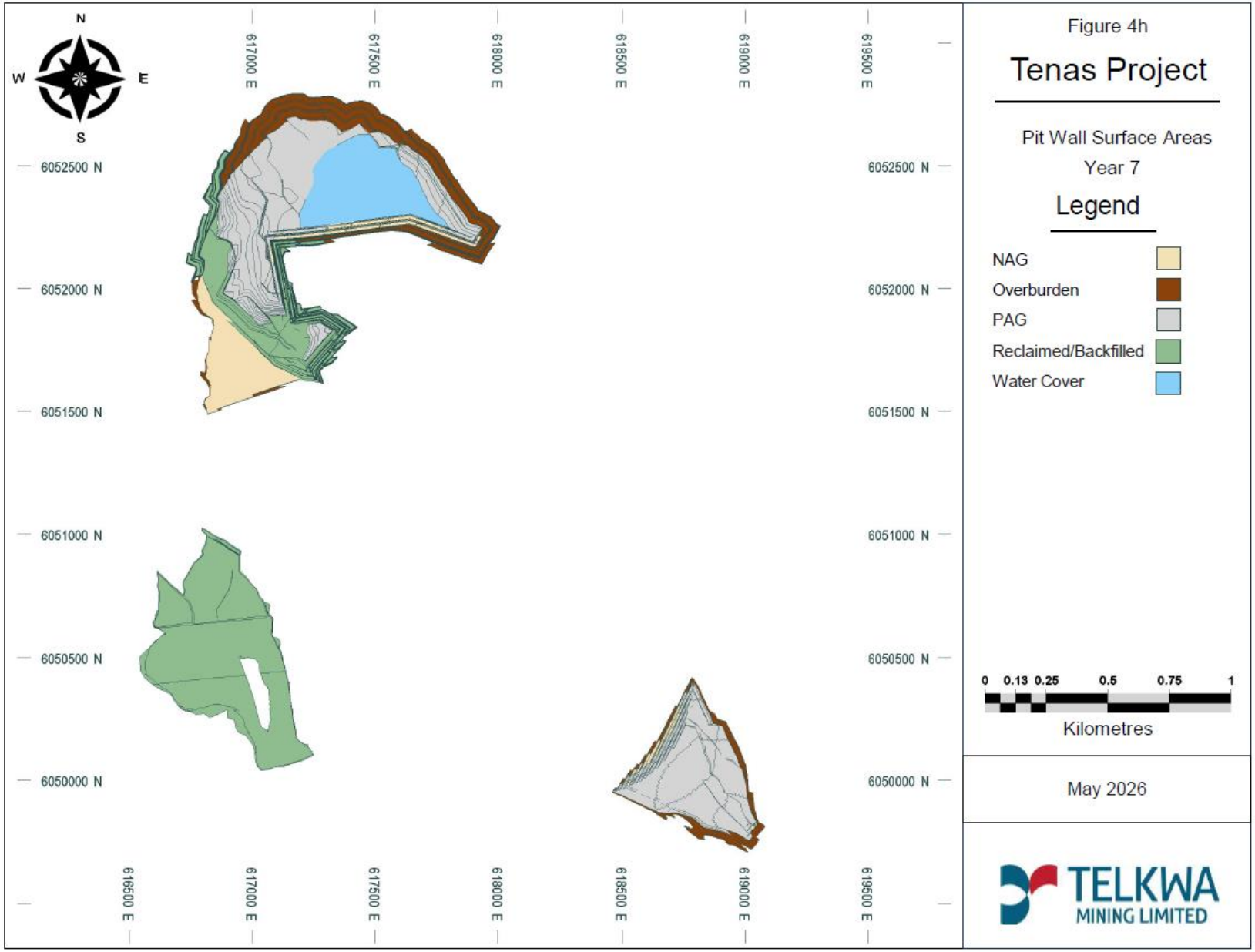

N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4c
Tenas Project
Pit Wall Surface Areas
Year 2
Legend
NAG
Overburden
PAG
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED

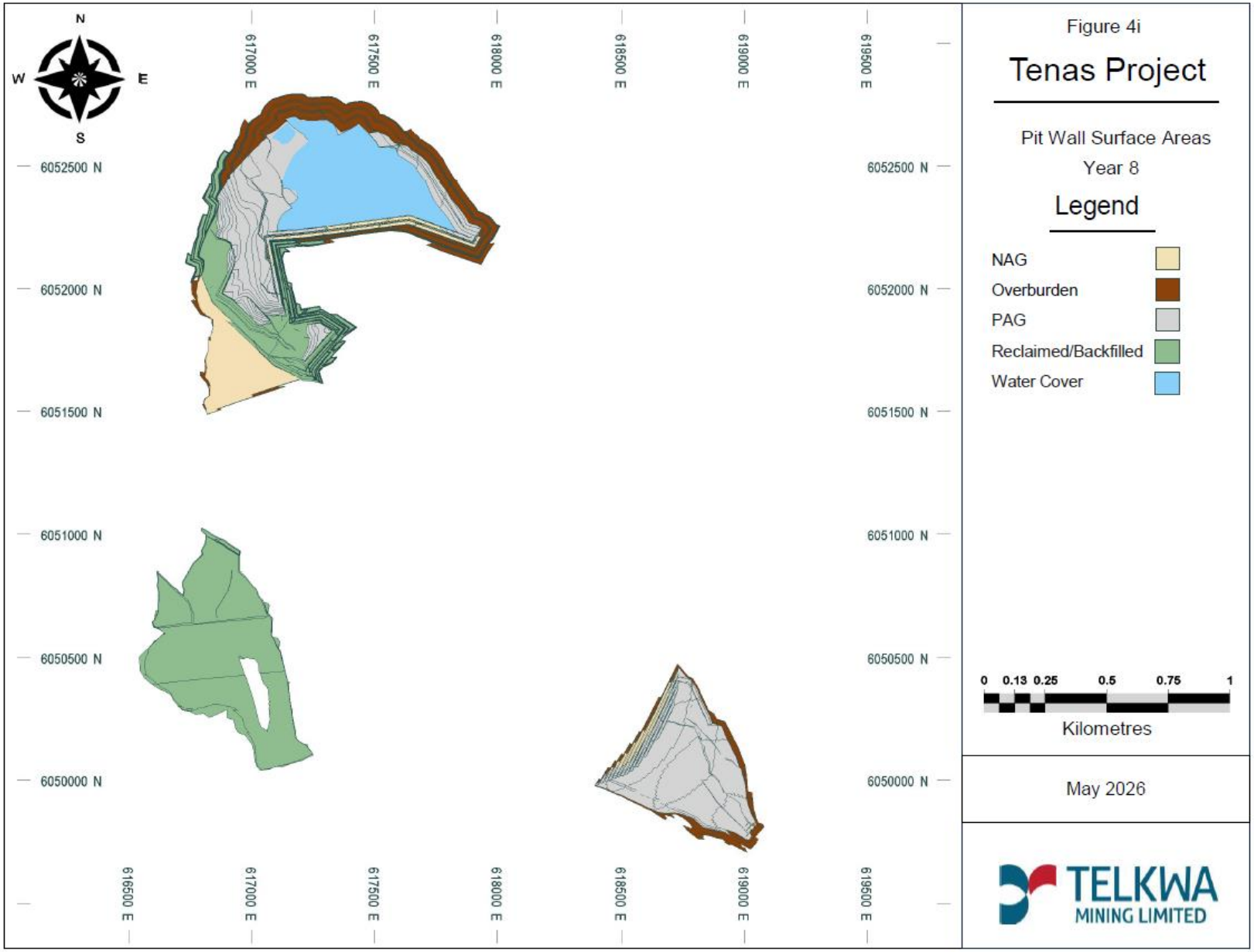

N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4d
Tenas Project
Pit Wall Surface Areas
Year 3
Legend
NAG
Overburden
PAG
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED

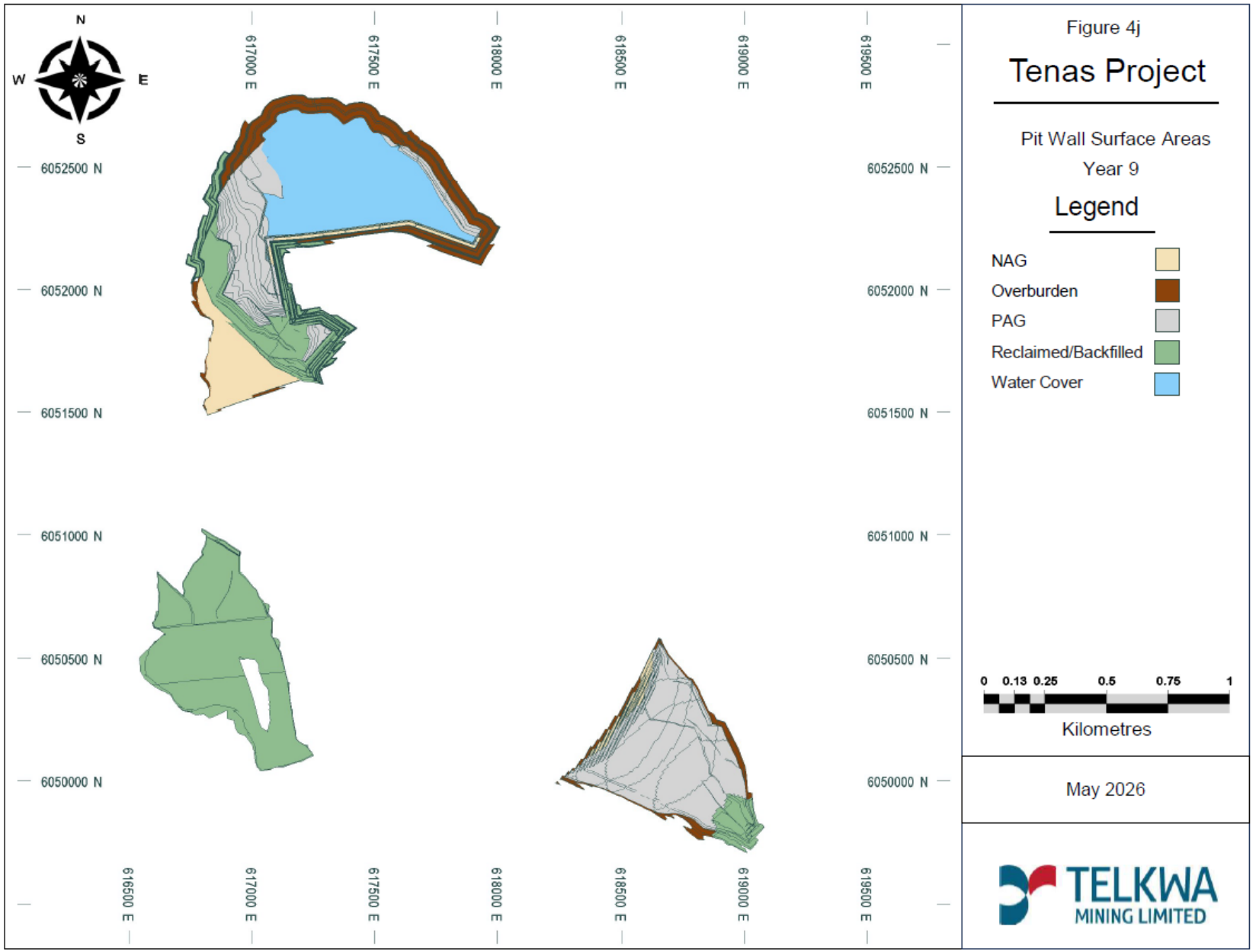

N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4e
Tenas Project
Pit Wall Surface Areas
Year 4
Legend
NAG
Overburden
PAG
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED

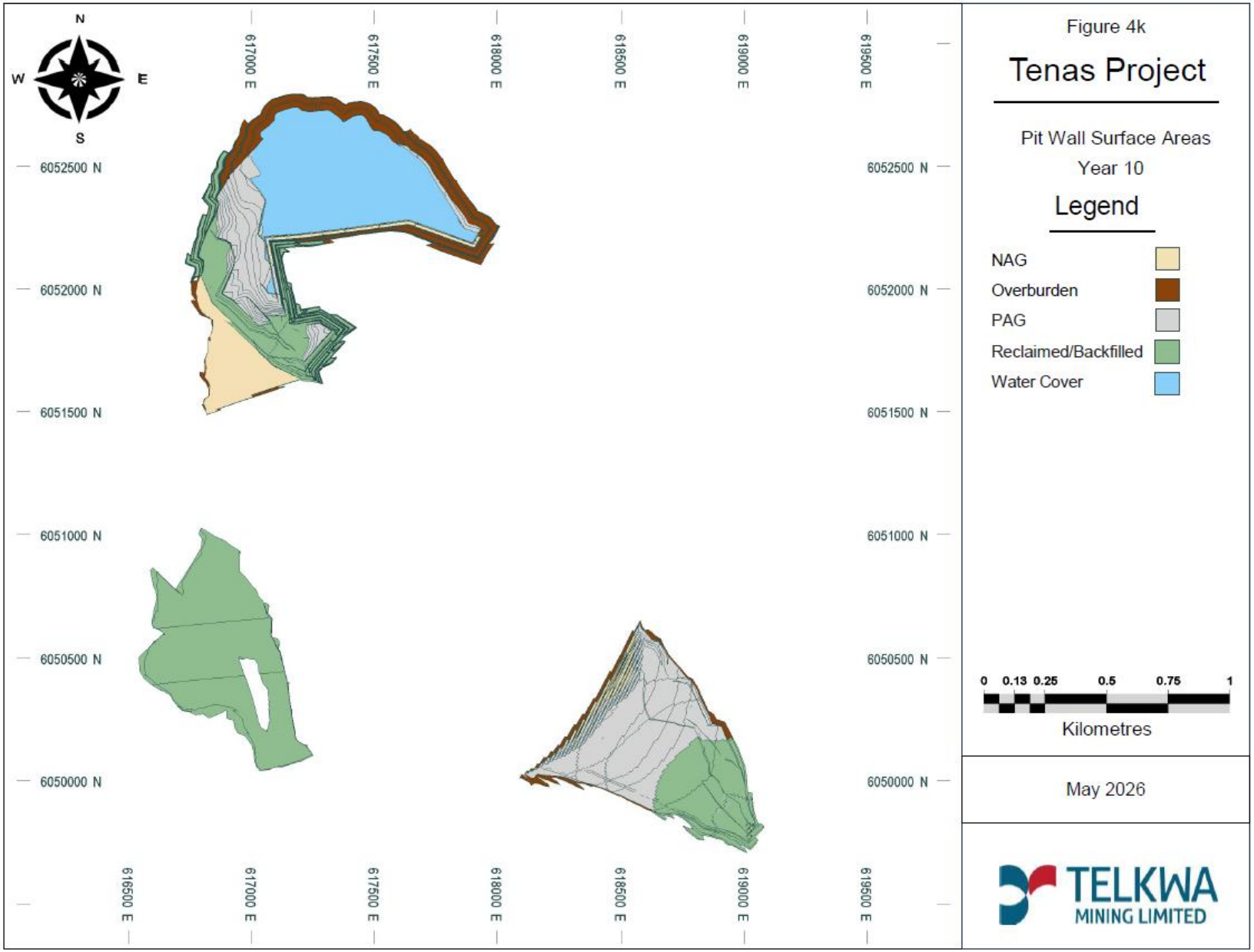

N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4f
Tenas Project
Pit Wall Surface Areas
Year 5
Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED

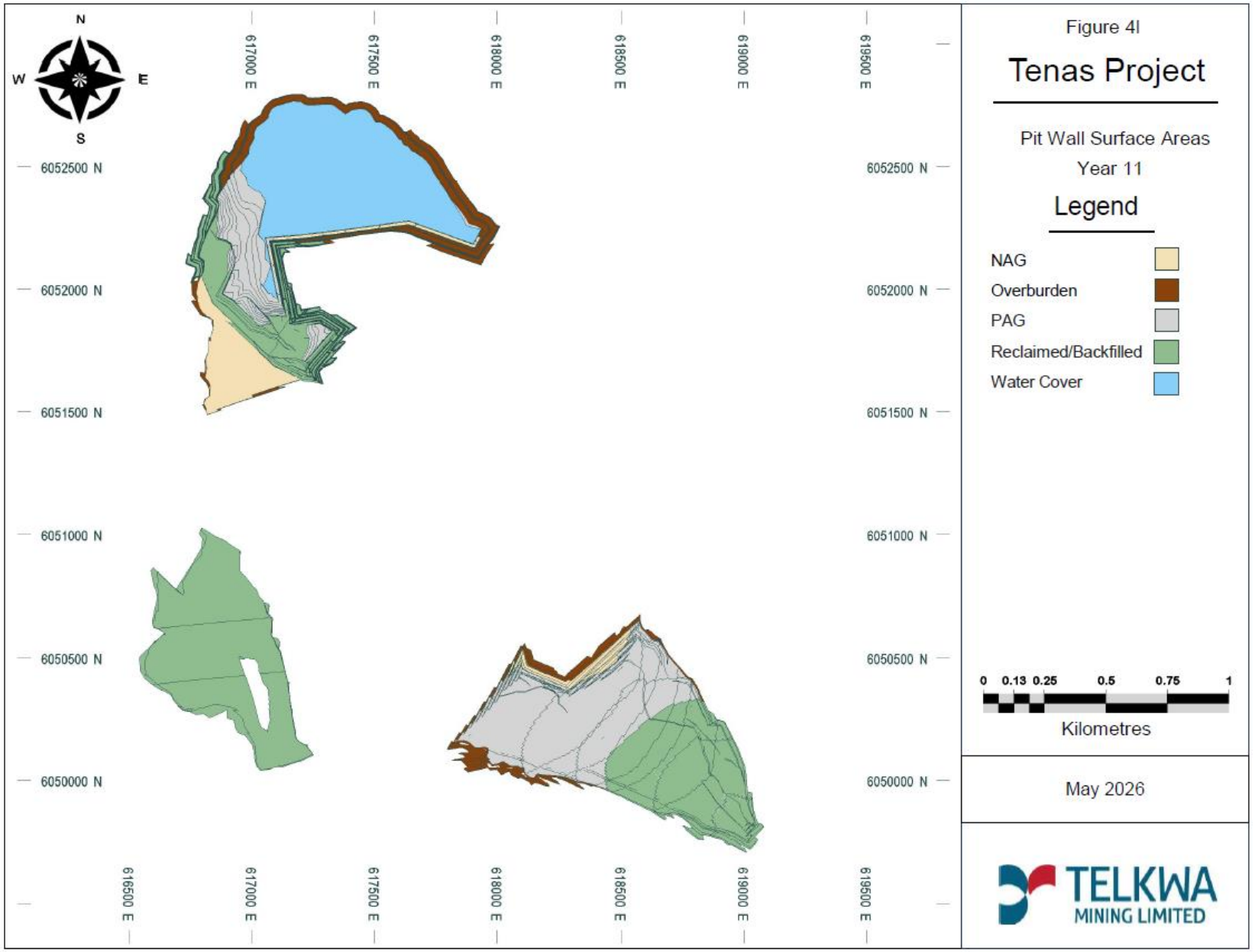

N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4g
Tenas Project
Pit Wall Surface Areas
Year 6
Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED

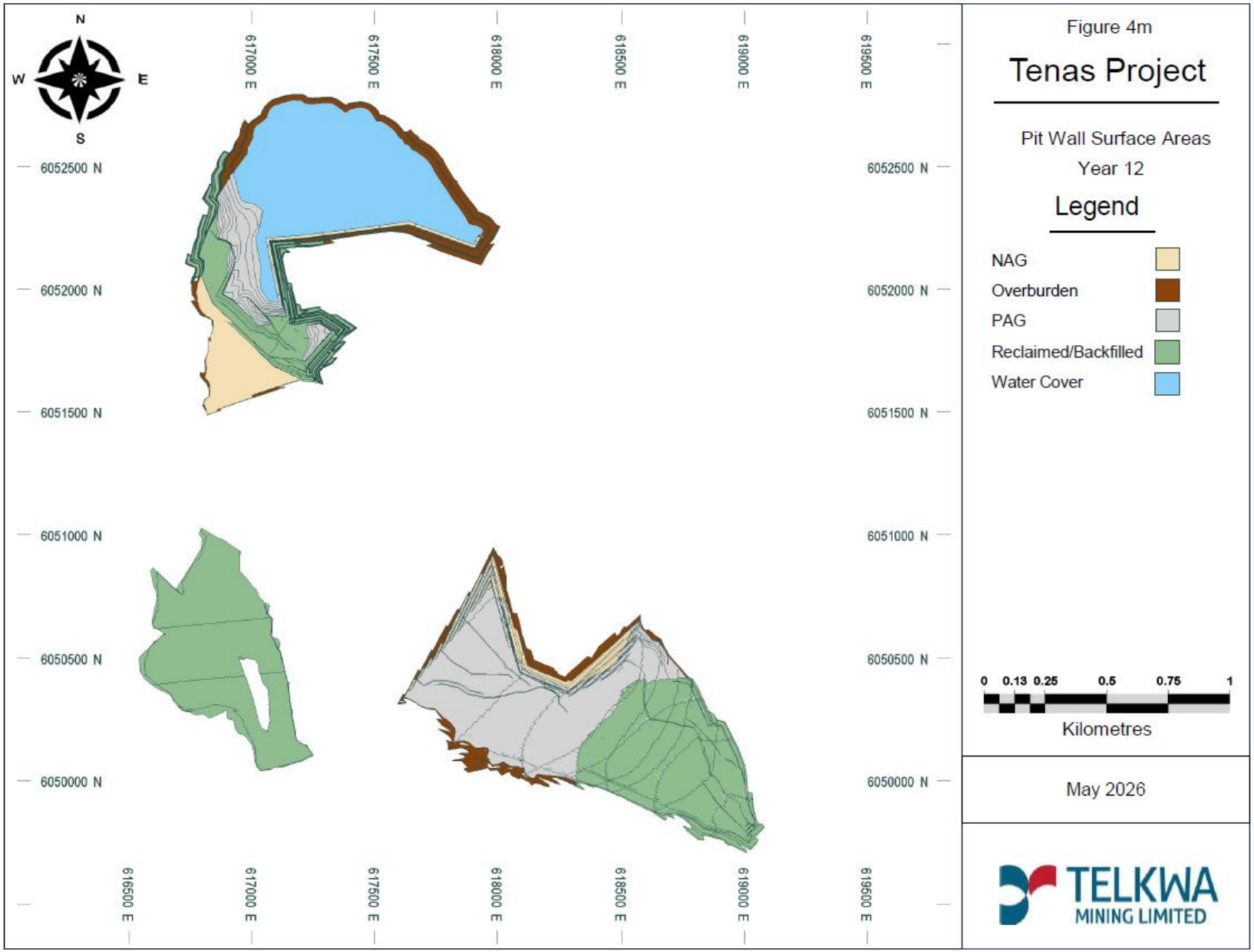

N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4h
Tenas Project
Pit Wall Surface Areas
Year 7
Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
Water Cover
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED

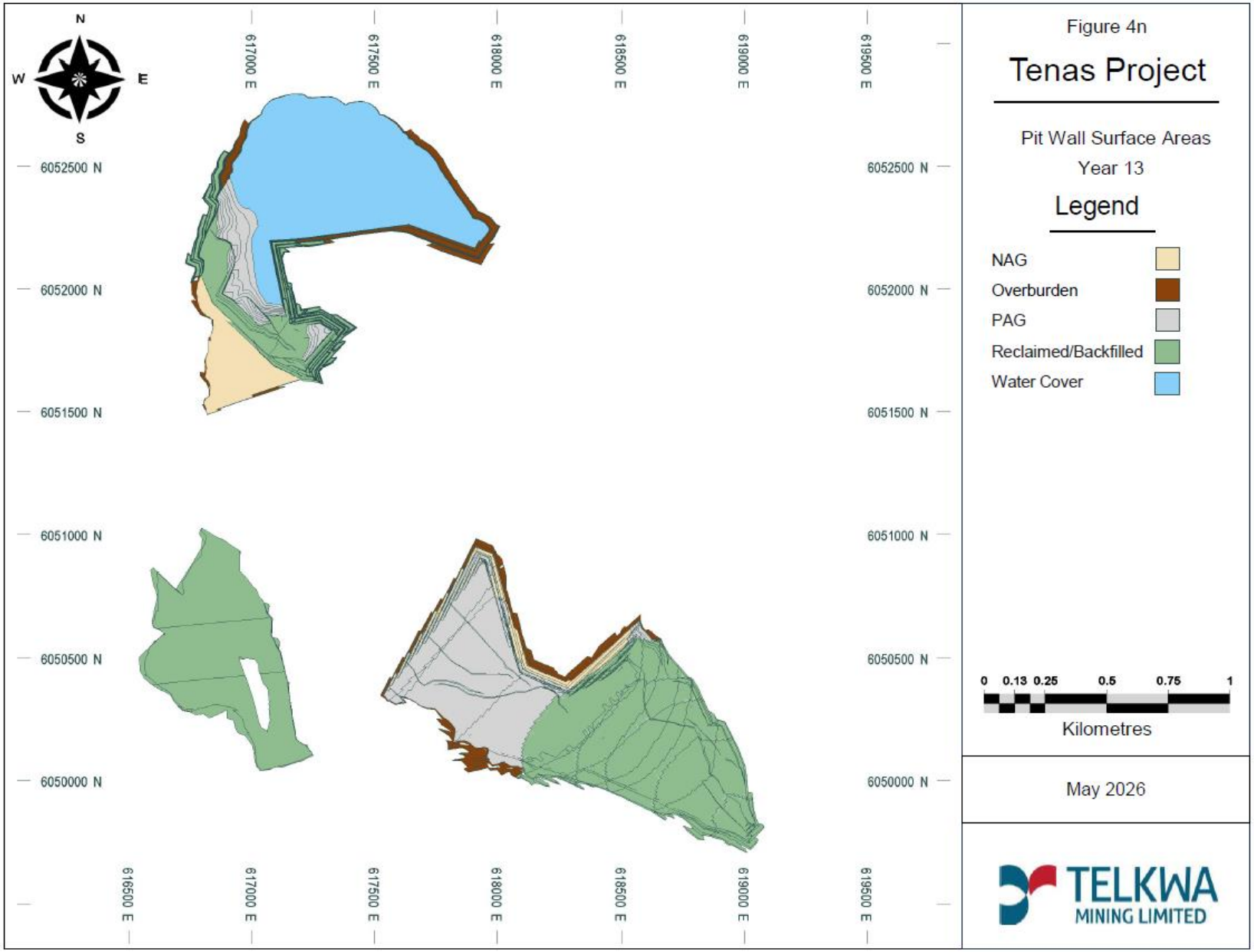

N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4i
Tenas Project
Pit Wall Surface Areas
Year 8
Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
Water Cover
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED

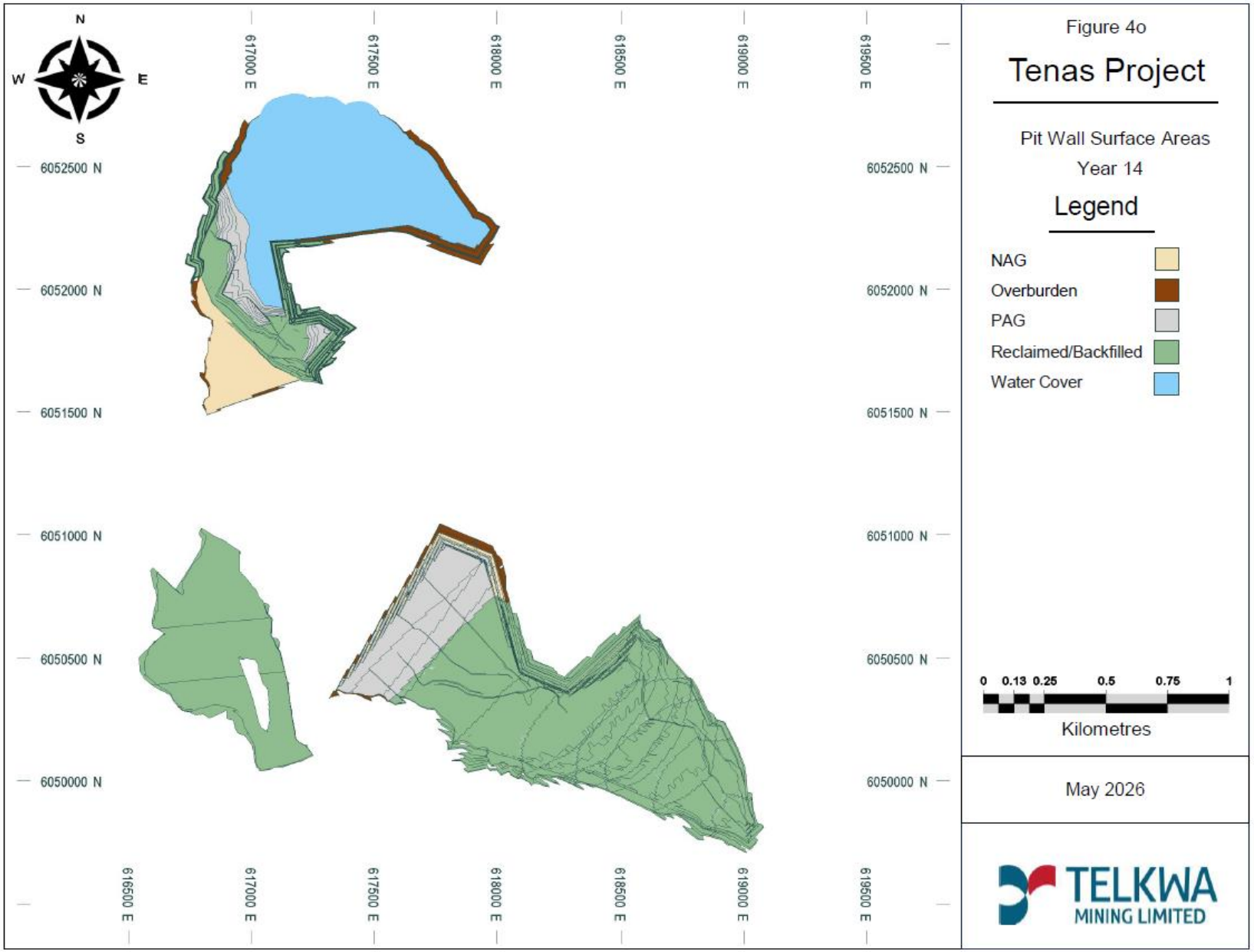

N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4j
Tenas Project
Pit Wall Surface Areas
Year 9
Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
Water Cover
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED

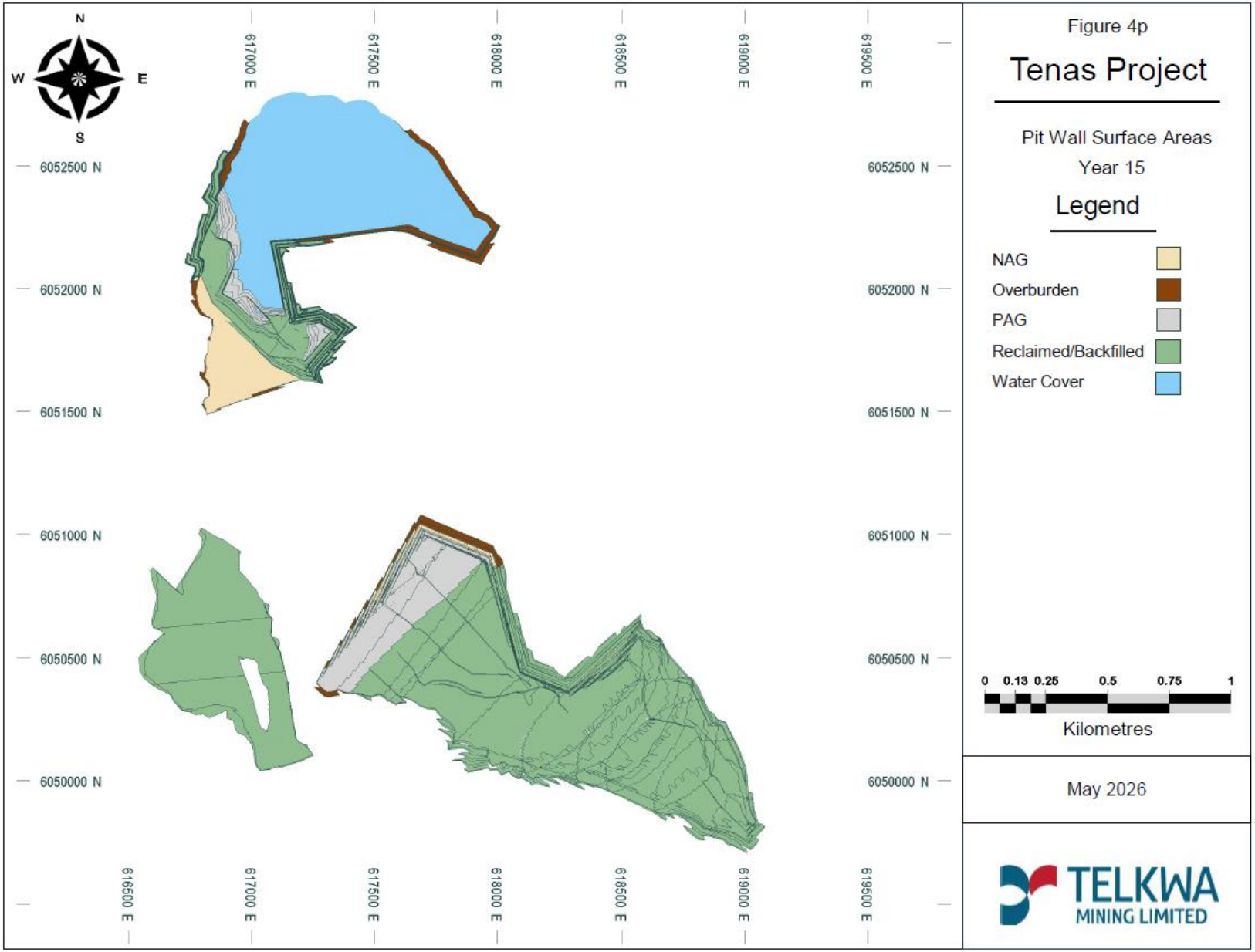

N
W
E
S
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
616500 E
Figure 4k
Tenas Project
Pit Wall Surface Areas
Year 10
Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
Water Cover
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED

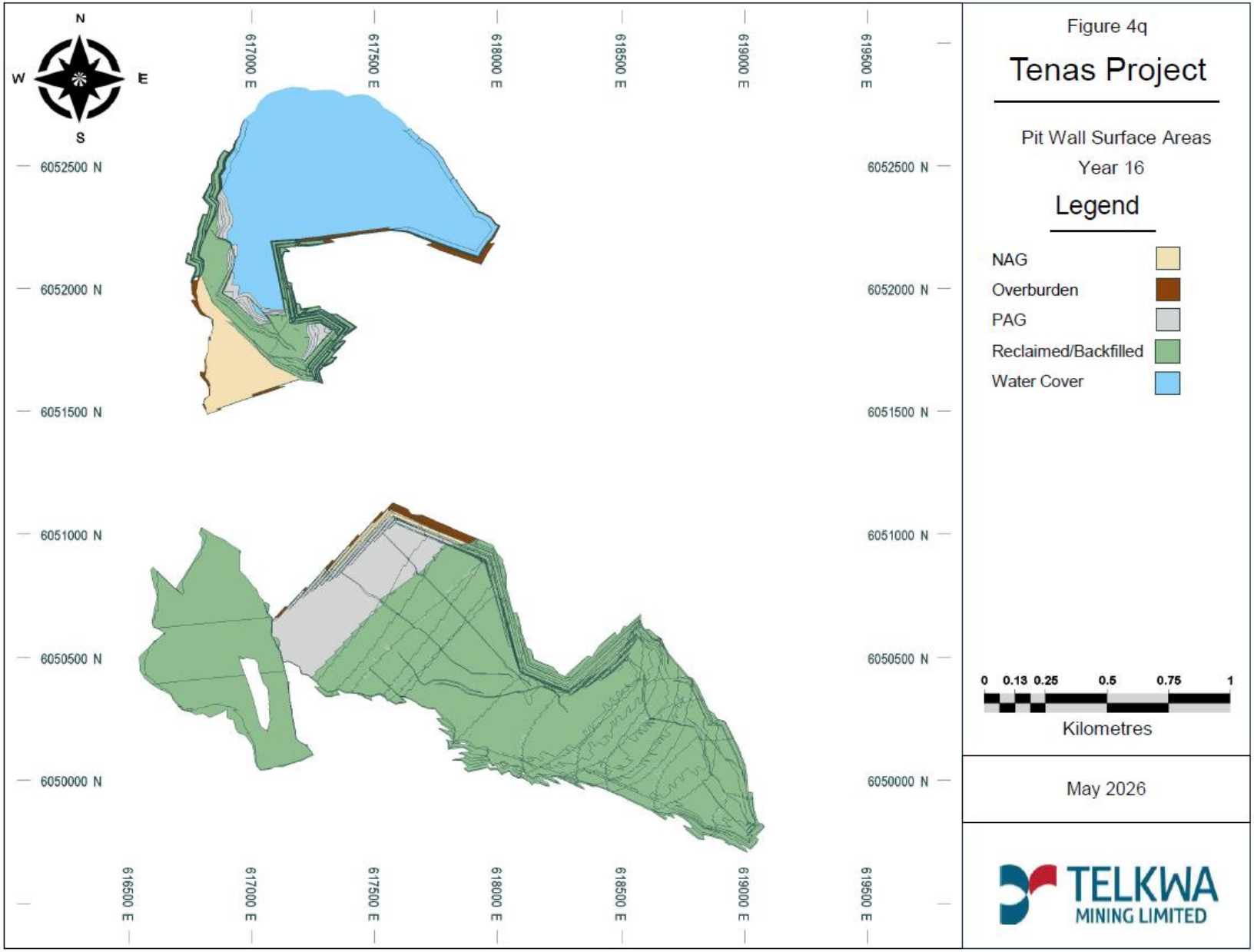

N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4I
Tenas Project
Pit Wall Surface Areas
Year 11
Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
Water Cover
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED

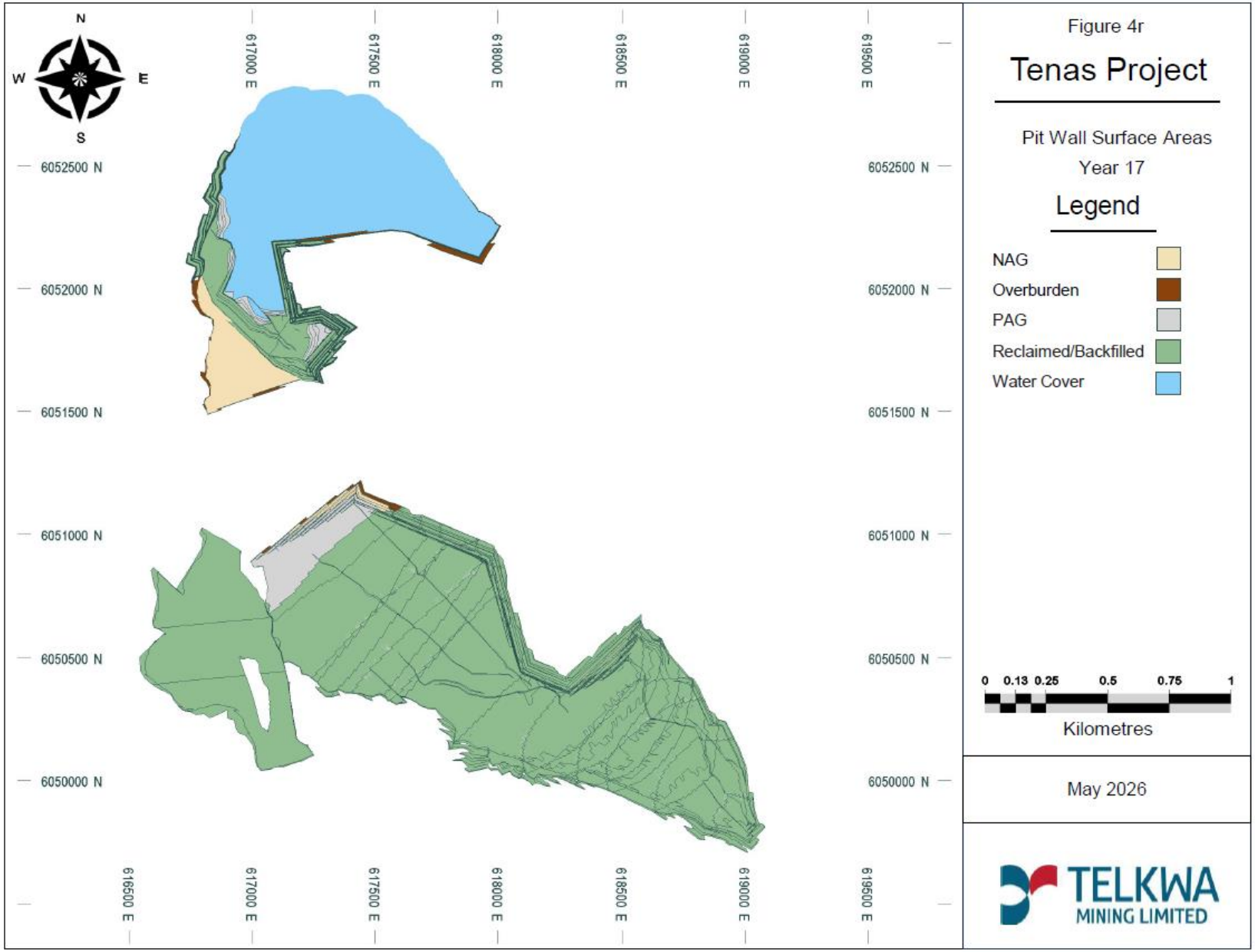

N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4m
Tenas Project
Pit Wall Surface Areas
Year 12
Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
Water Cover
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED

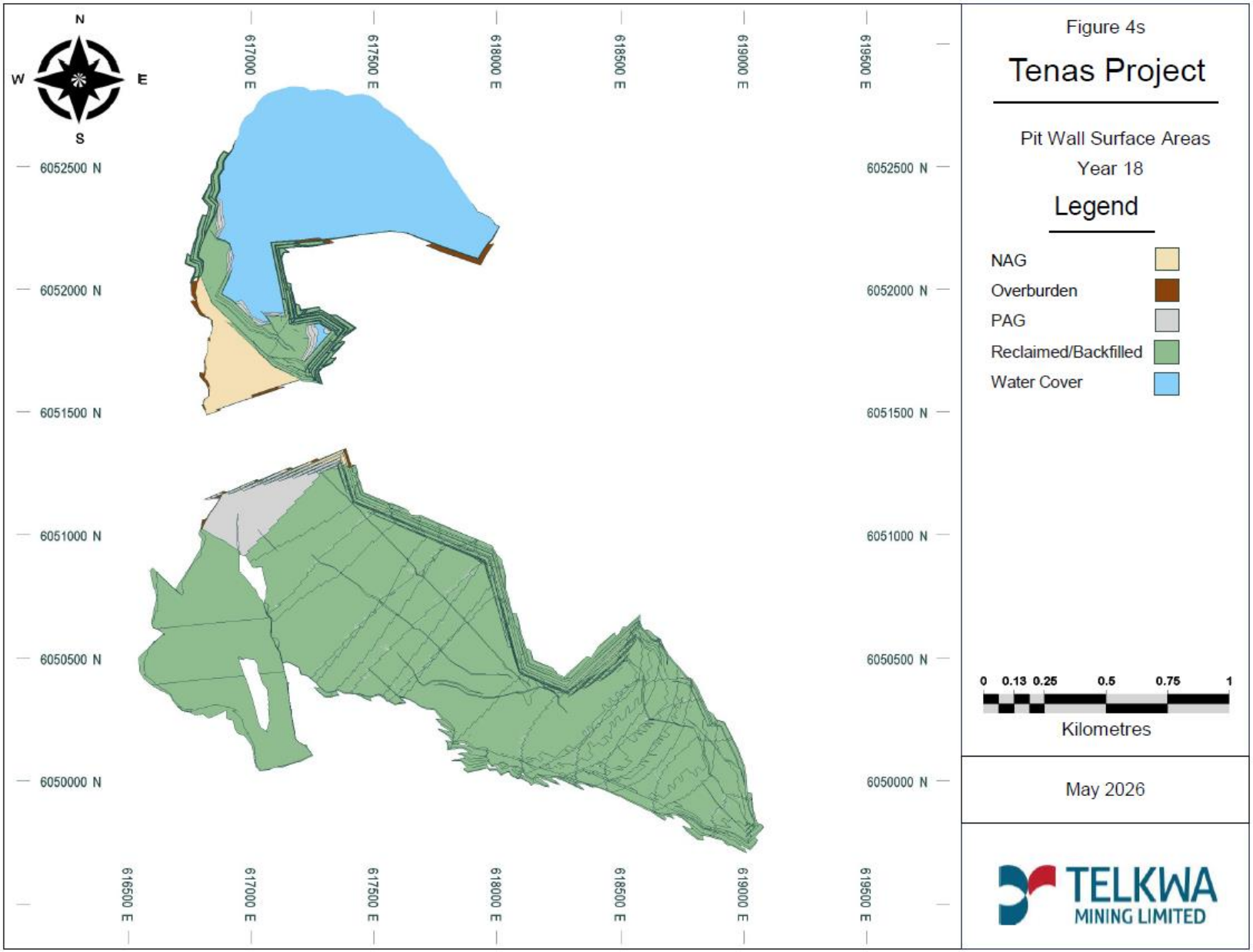

N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4n
Tenas Project
Pit Wall Surface Areas
Year 13
Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
Water Cover
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED

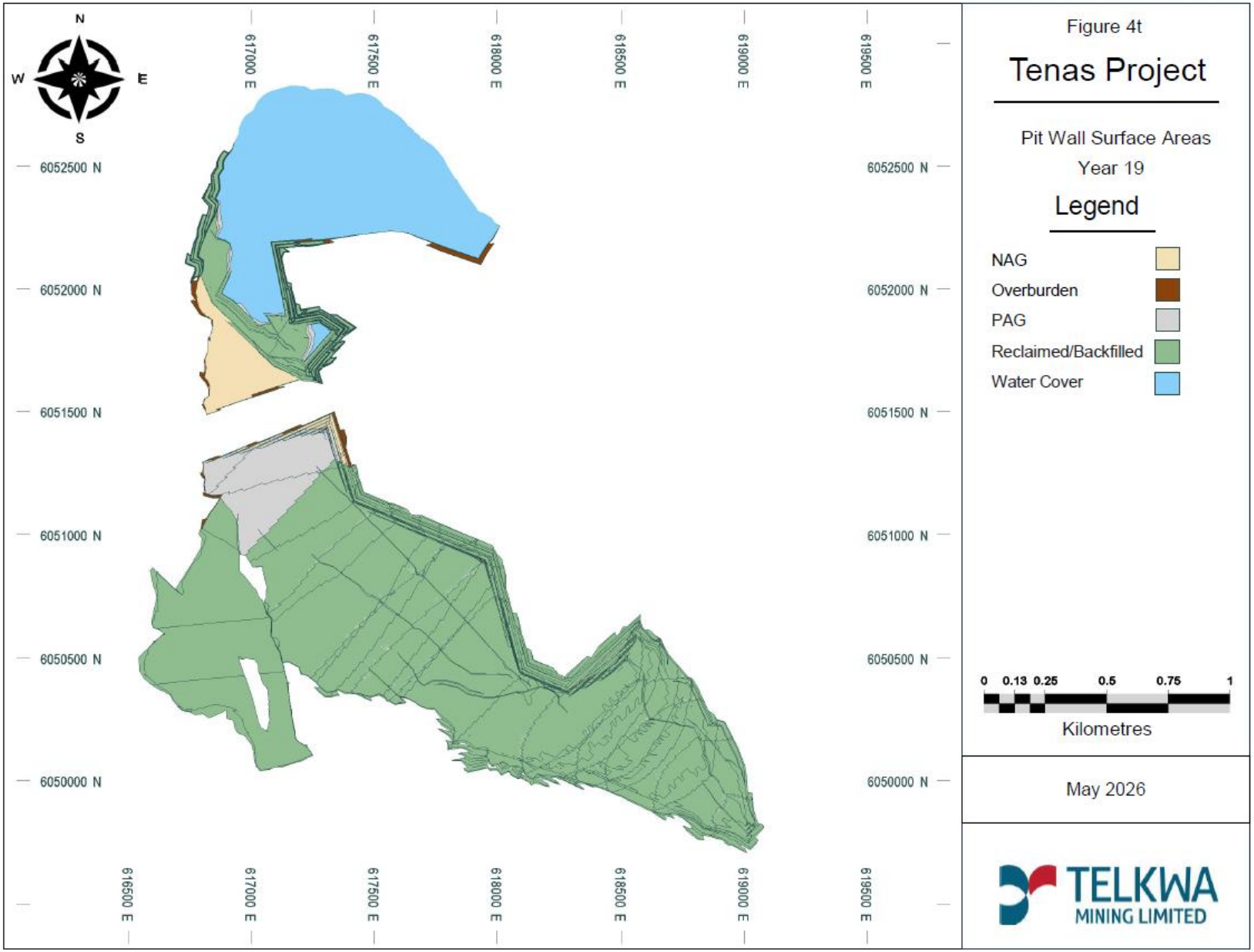

N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4o
Tenas Project
Pit Wall Surface Areas
Year 14
Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
Water Cover
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED

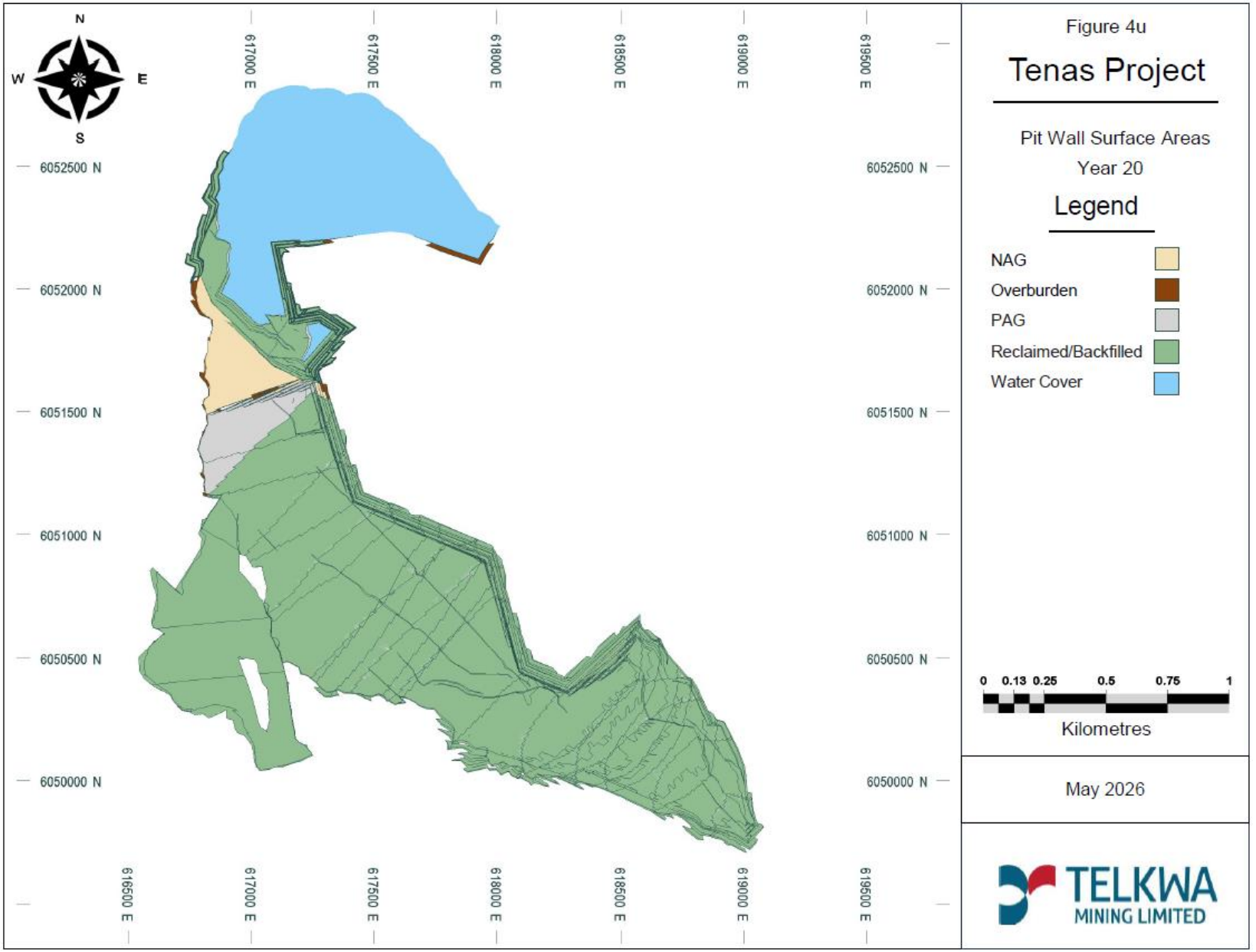

N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4p
Tenas Project
Pit Wall Surface Areas
Year 15
Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
Water Cover
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED

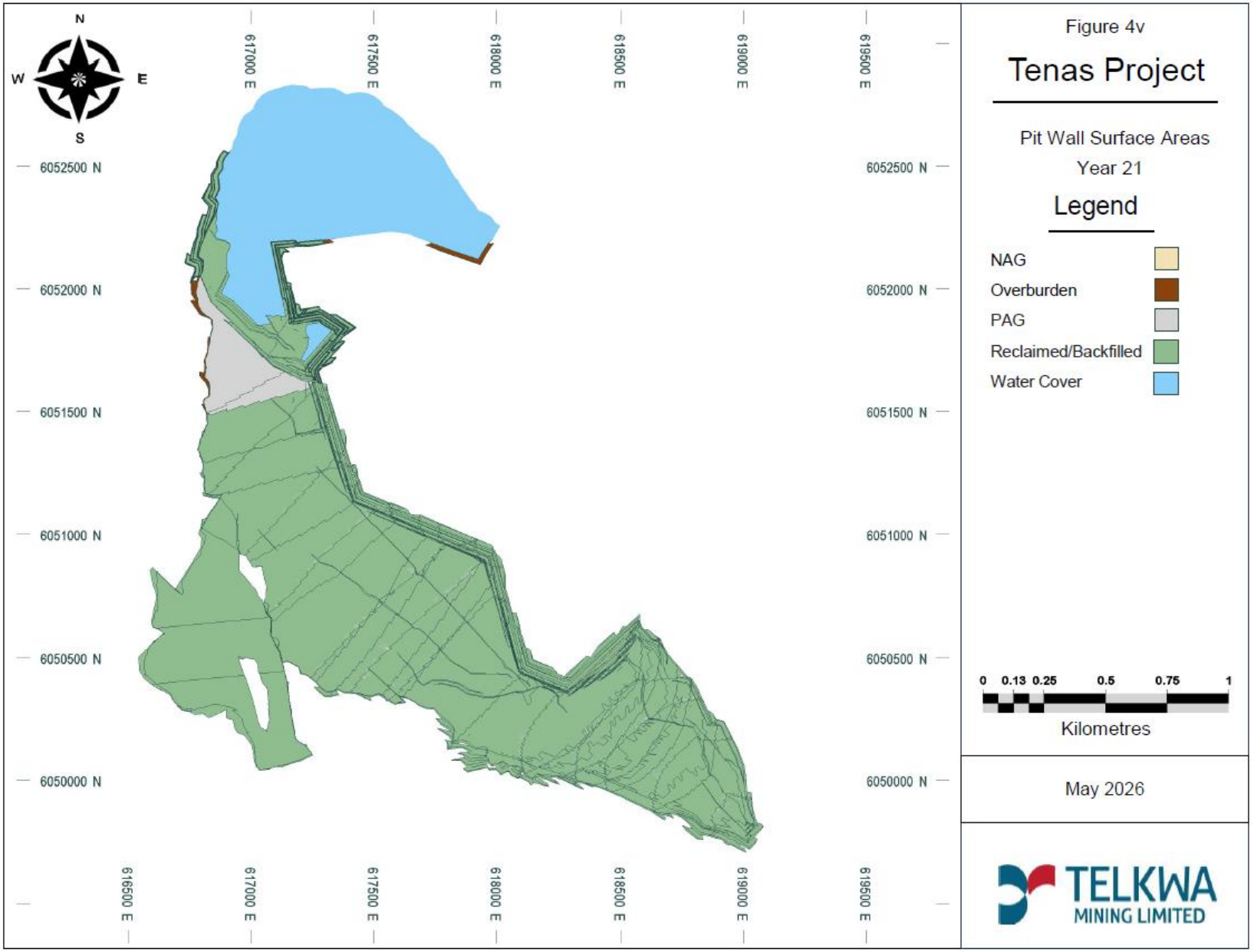

N
W
E
S
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
616500 E
Figure 4q
Tenas Project
Pit Wall Surface Areas
Year 16
Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
Water Cover
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED

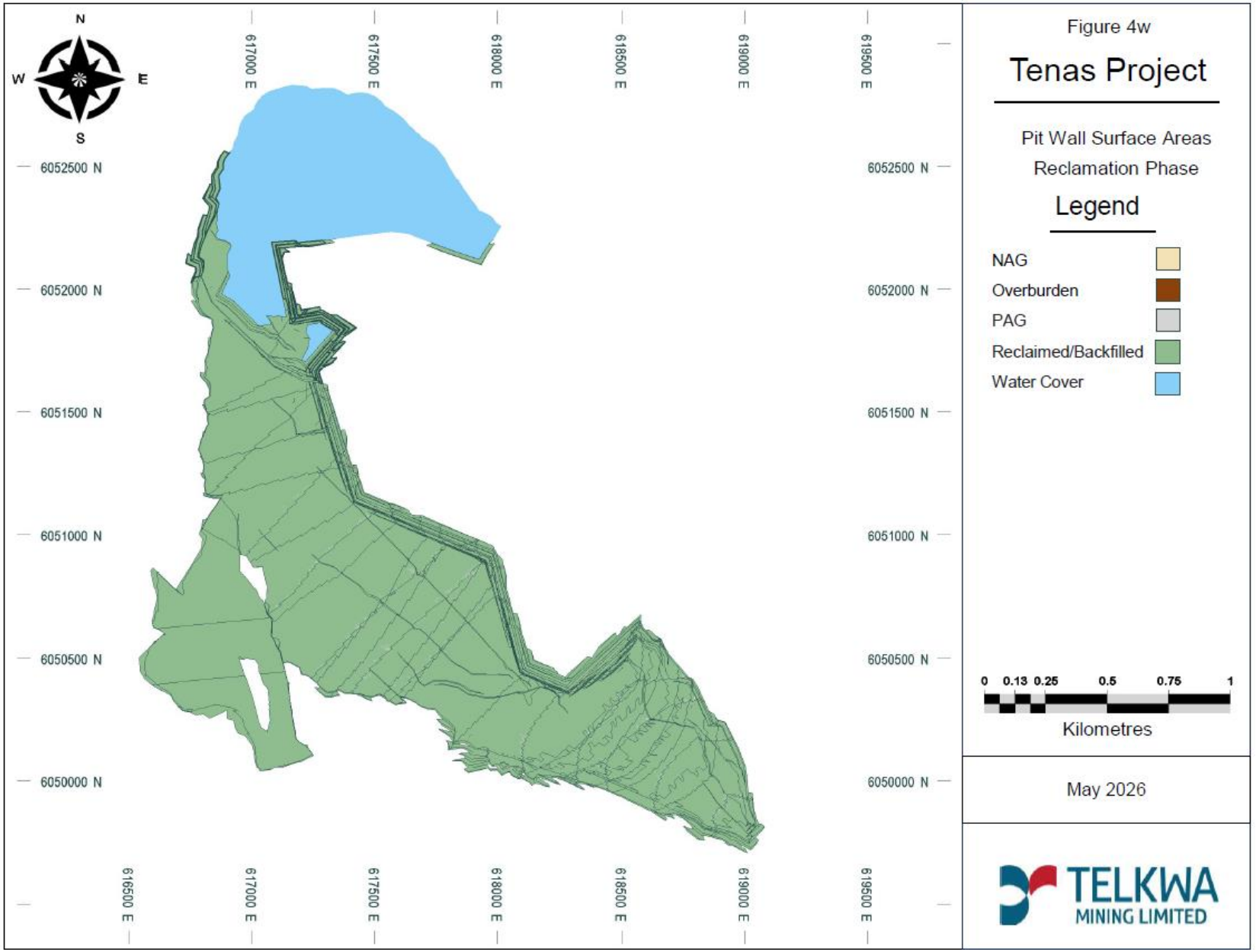

N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4r
Tenas Project
Pit Wall Surface Areas
Year 17
Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
Water Cover
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED


N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4s
Tenas Project
Pit Wall Surface Areas
Year 18
Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
Water Cover
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED


N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4t
Tenas Project
Pit Wall Surface Areas
Year 19
Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
Water Cover
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED


N
W
E
S
616500 E
617000 E
617500 E
618000 E
618500 E
619000 E
619500 E
6052500 N
6052000 N
6051500 N
6051000 N
6050500 N
6050000 N
Figure 4u
Tenas Project
Pit Wall Surface Areas
Year 20
Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
Water Cover
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA MINING LIMITED


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Figure 4v
Tenas Project
Pit Wall Surface Areas
Year 21
Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
Water Cover
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Kilometres
May 2026
TELKWA MINING LIMITED


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Figure 4w
Tenas Project
Pit Wall Surface Areas
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Legend
NAG
Overburden
PAG
Reclaimed/Backfilled
Water Cover
0 0.13 0.25 0.5 0.75 1
Kilometres
May 2026
TELKWA
MINING LIMITED

Based on the work completed by SRK (2024), **Table 7** shows the approximate lag time for material zones to become acid generating based on observed sulphide oxidation rates in humidity cell testing completed for the Project and their overall average bulk geochemical properties using an NPR cut-off of 2.0 to 1. Note these lag times are conservative values as they are not scaled for differences between laboratory and field temperature differences. Lag times would be longer under ambient conditions. In addition, the lag times presented in **Table 7** do not consider there are portions of these zones that have an NPR > 2.0 to 1 that will not become acid generating (i.e., they assume non-PAG rock in the PAG zones will also become acid generating).

Table 7: Lag Time for Material Zones to Become Acid Generating (Years) based on an NPR cut-off of 2.0 to 1

Material Zone	Average Lag Time (Years)
1	non-PAG
1a	5
2/3	5.5
4 PAG	4.2
4 non-PAG	non-PAG
5	8.4
55	13
6	13
7	12

Tables 8 and 9 provide the material zone areas and proportions exposed with the amount of wall area that is modelled to become acid generating. As summarized in **Tables 8** and **9** the wall areas that are acid generating account for approximately 1% of the total wall area exposed in any given year except for years 18, 19 and 20. Also note that these values are lower than calculated by SRK who used a more conservative methodology in the geochemical model provided in **Attachment 1** to account for acid generating wall area values. Based on the analysis completed in **Attachment 1** by SRK, the pit wall flows are not expected to be acid generating if the areas in **Table 8** and **9** were used in the sensitivity analysis.

Table 8: Net Cumulative Exposed Pit Wall Areas by Year and Type with the Area that May Become Acid Generating Using an NPR Cut-off of 2.0 to 1

Type	Y-01	Y01	Y02	Y03	Y04	Y05	Y06	Y07	Y08	Y09	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20	Y21	Reclaim
OVB	48,763	66,564	168,840	216,638	264,878	295,554	338,333	342,750	342,970	316,421	301,520	308,985	309,532	266,796	217,510	211,125	179,125	164,850	157,768	158,691	152,291	150,733	147,668
non-PAG (Zones 1 and 4)	10,645	21,201	21,201	32,979	39,809	67,522	93,989	67,901	66,676	56,153	52,046	81,825	93,414	76,150	38,218	32,271	28,760	23,744	16,453	23,629	16,164	15,630	12,110
PAG Neutral Wall Run-off	128,693	160,508	376,337	477,640	587,330	513,624	652,432	491,526	458,425	449,933	387,303	463,238	513,210	393,818	244,564	193,143	221,113	102,892	84,281	163,651	78,744	186,775	0
PAG Acid Generating Wall Run-off	1,861	2,321	5,443	6,908	10,269	8,757	11,497	8,930	8,709	9,666	10,778	11,195	11,043	9,432	6,734	5,198	5,192	3,927	15,508	15,211	6,070	2,701	0
Grand Total	**189,962**	**250,594**	**571,820**	**734,165**	**902,287**	**885,456**	**1,096,251**	**911,108**	**876,780**	**832,173**	**751,647**	**865,243**	**927,201**	**746,196**	**507,025**	**441,738**	**434,190**	**295,413**	**274,010**	**361,182**	**253,269**	**355,839**	**159,779**

Table 9: Net Cumulative Exposed Pit Wall Proportions by Year and Type with the Area that May Become Acid Generating Using an NPR Cut-off of 2.0 to 1

Type	Y-01	Y01	Y02	Y03	Y04	Y05	Y06	Y07	Y08	Y09	Y10	Y11	Y12	Y13	Y14	Y15	Y16	Y17	Y18	Y19	Y20	Y21	Reclaim
OVB	26%	27%	30%	30%	29%	33%	31%	38%	39%	38%	40%	36%	33%	36%	43%	48%	41%	56%	58%	44%	60%	42%	92%
non-PAG (Zones 1 and 4)	6%	8%	4%	4%	4%	8%	9%	7%	8%	7%	7%	9%	10%	10%	8%	7%	7%	8%	6%	7%	6%	4%	8%
PAG Neutral Wall Run-off	68%	64%	66%	65%	65%	58%	60%	54%	52%	54%	52%	54%	55%	53%	48%	44%	51%	35%	31%	45%	31%	52%	0%
PAG Acid Generating Wall Run-off	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	6%	4%	2%	1%	0%
Grand Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

2. c. See **Attachment 1** for supplemental responses from SRK releated to the MCM IR requests. The SRK memo provides the sensitvity analysis requested using information developed by a geochemcial model. This sensitivity analysis was based on modelled pit wall acid generating exposure areas that were larger than the modelled pit wall acid generating exposure areas provided in **Tables 8** and **9,** which are based on the areas modeled by year in **Figures 4 a-w** based on the mine plan. The geochemcial model is intentionally conservative, so that predicted concentrations will be higher would be measured during operations in the context of the modelled scenario. In summary, even under this conservative scenario (with the portions of the wall becoming acid generating), the pit sump is not predicted to be acidic and little change is expected in resultant parameter concentrations into the receiving environment.

164 MCM Geoscience 03-Feb-26 Appendix 16: Section 2.11-2

1- MCM understands from Table 2-3 provided in App 16 that the material needed for construction of the embankment is available in the North and south portions of the pit the same year it is needed for construction. The Table mentions that 4.9 M BCM of non-PAG and 13.6M BCM overburden are required for construction of embankment and buttresses. However, this volume is different from the volume presented in Table 1.13-2 of the original Application Part A Sect 1.0 (2022). This table shows that a total of 41M BCM material is needed for the construction of the NMP, EMP, and WMP Dam and Buttresses. Table 4-1 from App 4 (Updated source term Report) shows that a total of 18 Mt BCM of mine rock and overburden are needed for the buttresses and embankment. Please provide the following information: [EA QP Response Required]

a. Please explain the difference between the volumes provided in responses from the original Application Part A Sect 1.0 (2022), App 16 (2026), App 4 (2024).

b. Please clarify what are the volumes needed for each phases of the mine for construction of the embankment and buttresses and justify and confirm the volumes that were considered in the updated WQM (2025).

c. Please demonstrate on a yearly basis that there will be adequate quantities of non-PAG rock (using non-PAG zone quantities defined in the ML/ARD Management Plan) with suitable geotechnical characteristics available to construct the Management Pond embankments as per the defined construction plan.

d. Please explain why Section 4.2.1 of App 4 mentions that "The mine plan indicates that the buttresses will be constructed using overburden and mine rock sourced from Zones 1 and 4. Table 4-1 provides a summary of the cumulative mine rock and overburden volumes and tonnages associated with each of the model timeframes." However Table 4.1 reports cumulative volume from Zone 1 and Zone 2. Please explain the discrepancies between the Table 4.1 and Section 4.2.1 and discuss how this affects representativity of the volumes considered in the WQM (2025).

2- The reviewer also observed discrepancies between the volume of Non-PAG mine rock needed for Open Pit backfill and cover needed for progressive reclamation of the Open Pit provided in Table 3.1 of App-5 (Okane Report 2024) and the total volume of non-PAG available from the Mine Plan provided in App 13.6-B of the Application (2021) and also provided in the response to Comment 164 in App 16 Table 2-3 (i.e. 33 Mt from App 5 versus 29 MT from App 16 and 13.6).

a. Please discuss the differences between these volumes and impact on WQM results.

b. Please demonstrate on a yearly basis that there will be adequate quantities of non-PAG rock available (using non-PAG zone quantities defined in the ML/ARD Management Plan) with suitable geotechnical characteristics to construct the Management Pond embankments, buttresses, and Open Pit backfill and cover as per the defined Mine Plan.

3- See also comment # 154c-2

Response -TML

1a. There was an error in **Table 1.13-3** in the Tenas Project 2022 EAC Application. This table has been corrected below (see **Table 10** below) and matches the WLBM for the Final EAC Project Case (2024) provided in supplemental response in September 15, 2025.

Table 10: Revised Table 1.13-3 - Material Balance for the Tenas Project

Mining Phase	Tenas Control Pond Dam and Buttress (BCM)	North Mgt Pond Dam and Buttress (BCM)	East Mgt Pond Dam and Buttress (BCM)	West Mgt Pond Dam and Buttress (BCM)	North Mgt Pond PAG Material (BCM)	East Mgt Pond PAG Material (BCM)	West Mgt Pond PAG Material (BCM)	Backfilled non-PAG Material (BCM)	Capping non-PAG Material (BCM)	Total Material (BCM)
North (BCM)	848,621	2,913,179	8,119,126	4,523,501	235,104	7,998,941	-	-	-	24,638,472
Start (BCM)	251,379	555,947	-	-	1,580,284	-	-	-	-	2,387,610
Central North (BCM)	-	-	-	-	-	-	4,600,572	2,719,709	2,022,950	9,343,231
Central South (BCM)	-	-	-	-	-	-	9,074,611	14,858,750	571,711	24,505,072
South (BCM)	-	-	-	-	-	653,470	7,685,611	11,491,843	2,125,337	21,956,261
Processed Rock (BCM)	-	-	-	-	274,612	774,512	2,229,202	-	-	3,278,326
TOTAL (BCM)	**1,100,000**	**3,469,126**	**8,119,126**	**4,523,501**	**2,090,000**	**9,426,923**	**23,589,996**	**29,070,302**	**4,719,998**	**86,108,972**

The revised Table 2-3 that matches the WLBM for the Final EAC Project Case (2024) provided in supplmental response in September 15, 2025 is shown below in **Table 11**.

Table 11: Revised Table 2-3 - Material Balance for the Tenas Project from Appendix 16

Year	Material Volume Required for Embankments and Buttresses for management and control ponds (BCM)		Material Volume Required for Embankments only (BCM)		Source of Material		
	Zone 1 and 4 non-PAG	Overburden	Zone 1 and 4 non-PAG	Overburden	Location Phase	Zone 1 and 4 non-PAG	Overburden
-1	-	1,782,915	-	1,782,915	North	-	1,782,915
1	1,442,292	2,014,288	596,139	1,280,955	Start/North	1,442,292	2,014,288
2	1,598,124	2,106,216	1,114,129	2,106,216	Start/North	1,598,124	2,106,216
3	415,943	2,972,797	-	1,872,122	North	415,943	2,972,797
4	909,661	1,918,832	575,100	1,256,049	North	909,661	1,918,832
5	1,152,860	897,825	395,476	696,659	North	1,152,860	897,825
6	-	-	-	-	South	-	-
7	-	-	-	-	South	-	-
8	-	-	-	-	South	-	-
9	-	-	-	-	South	-	-
9 to 21	-	-	-	-	North and South Central	-	-
TOTAL	**5,518,880**	**11,692,873**	**2,680,844**	**8,994,916**		**5,518,880**	**11,692,873**
					Total Material Available		
					TOTAL PIT	**28,705,845**	**22,296,208**
					EXCESS of Available versus required	23,186,965	10,603,335
					% EXCESS	**420%**	**91%**

The Revised Table 1.13-2 that matches the WLBM for the Final EAC Project Case (2024) provided in supplemental response on September 15, 2025 is shown in **Table 12** below.

Table 12: Revised Table 1.13-2: Summary of Material Volumes for the Tenas Project

Material	Volume (million)	Tonnage (million)
Reclamation Materials (surface soils/ topsoil) (BCM)	2.26	
PAG Rock (BCM)	31.83	
Non-PAG Rock (BCM)	28.71	
Overburden (BCM) includes 0.55 million from the road	22.3	
In-pit rehandle (BCM)	0.83	
Run-of-mine Coal (tonnes at 5% moisture)		22.02
Processed Coal (tonnes at 10% moisture)		16.27
Processed Rock (m3)	3.28	

Appendix 13.6-B table summarizing mine production has been corrected to match the WLBM for the Final EAC Project Case (2024) provided on supplemental response in September 15, 2025 and is shown below in **Table 13**.

Table 13: Revised Appendix 13.6-B - Production Schedule for the Tenas Project used in the WLBM

Materials	Units	Year - 1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	TOTAL
OVB	BCM	1,782,915	2,014,288	2,106,216	2,972,797	2,161,708	1,762,015	1,068,408	990,741	949,682	877,683	1,255,270	1,154,681	1,081,444	669,275	207,412	130,254	250,215	231,888	-	629,316	-	-	**22,296,208**
NAG	BCM	-	1,442,292	1,598,124	450,433	1,204,006	1,392,735	2,377,835	2,548,365	2,517,721	1,714,587	1,615,794	1,297,856	1,396,052	2,493,282	1,125,188	939,922	1,250,386	1,187,631	957,464	823,426	372,746	-	**28,705,845**
PAG	BCM	325,773	1,334,422	1,430,412	1,711,526	1,769,042	1,980,006	1,771,013	1,760,650	1,131,103	1,717,486	1,438,692	1,857,219	1,832,260	1,147,199	1,327,156	1,589,580	1,159,155	1,240,237	1,702,292	1,207,014	1,474,232	922,124	**31,828,593**
NAG + OVB	BCM	1,782,915	3,456,580	3,704,340	3,423,230	3,365,714	3,154,750	3,446,243	3,539,106	3,467,403	2,592,270	2,871,064	2,452,537	2,477,496	3,162,557	1,332,600	1,070,176	1,500,601	1,419,519	957,464	1,452,742	372,746	-	**51,002,053**
Rehandle at 1%	BCM	21,087	47,910	51,348	51,348	51,348	51,348	52,173	52,998	45,985	43,098	43,098	43,098	43,098	43,098	26,598	26,598	26,598	26,598	26,598	26,598	18,470	9,221	**828,306**
C	tonnes	628	17,837	158,719	142,600	187,672	146,513	174,605	228,782	225,795	209,199	189,384	169,892	318,791	186,614	136,539	229,877	242,663	112,528	273,968	117,733	117,607	95,941	**3,683,887**
1U	tonnes	105,418	297,051	280,880	344,900	292,328	333,487	305,395	251,218	254,205	270,801	290,616	337,826	347,932	213,559	32,335	34,819	66,056	142,314	240,592	322,676	198,486	141,421	**5,104,315**
1L	tonnes	156,454	735,112	610,401	562,500	570,000	570,000	570,000	570,000	570,000	570,000	570,000	542,282	382,912	362,314	53,088	40,210	35,816	446,809	368,975	577,863	729,173	344,030	**9,937,939**
1	tonnes	-	-	-	-	-	-	-	-	-	-	-	-	365	287,513	828,038	745,094	705,465	348,349	166,465	31,728	4,734	171,713	**3,289,464**
ROM COAL (@5%)	tonnes	262,500	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	753,105	**22,015,605**
ROM Ash	%	23.6%	24.8%	25.0%	22.1%	24.3%	24.2%	23.4%	24.8%	27.8%	25.5%	24.5%	23.7%	24.8%	22.2%	20.4%	22.2%	22.7%	22.1%	25.9%	27.9%	24.9%	21.5%	**24.1%**
WASHED ROCK	BCM	38,268	160,154	161,949	143,683	157,640	157,056	151,283	160,305	179,902	165,121	158,980	154,023	160,918	144,820	134,774	146,243	149,168	143,615	168,653	181,282	160,386	100,103	**3,278,326**

The source terms determined for the Management Ponds (NMP, WMP, EMP) and Tenas Control Pond dams and buttresses in Table 4-1 is based on the material that is exposed to rain and snow melt (14.3 MBCM) versus the entire volume of these structrures (17.2 MBCM) as some of the dam structure is actually submerged underwater and is modelled to not contribute to overall parameter concentrations in the downstream environment.

Table 4-1 has been revised to match the WLBM for the Final EAC Project Case (2024) provided in supplemental response on September 15, 2025 that was used for the source term determination for the dams and buttresses, and is shown below in **Table 14**.

Table 14: Revised Table 4.1 from Appendix 4

	Cumulative Volume (BCM)				Cumulative Tonnage (Mt)		
Facility	**Mine Rock**			**Overburden**	**Mine Rock**		**Overburden**
Backfill	Zone 1	Zone 4	TOTAL	TOTAL	Zone 1	Zone 4	TOTAL
End of EMP	288,035	837,731	1,125,766	492,248	0.7	2.8	1.0
End of Operation Phase	13,603,995	6,873,854	20,477,849	8,592,453	35.1	17.5	16.7
Dams & Buttresses Exposed to Rainfall							
End of NMP	706,410	---	706,410	2,302,531	1.8	---	4.6
End of EMP	2,043,701	---	2,043,701	5,753,394	5.2	---	12.0
End of WMP	3,621,260	---	3,621,260	10,666,841	9.2	---	21.0

1b. Please see **Table 2** previously presented. The stratigraphic sequence for the Project as illustrated by **Figure 2**, has overburden and/or Zone 1 mined prior to PAG materials being excavated in almost all areas of the pit except where these units have been eroded off. Therefore the mining rate of PAG and non-PAG materials can be adjusted during the mining process so that Telkwa Mining can meet its commitment of a maximum of 12 months and an average of 6 months of PAG exposed in a management ponds prior to being submerged.

1c. Please see response to 1b above.

Based on the field work reports completed by SRK in 2018, 2019, and 2021 for the dam stability analysis in support of the EAC Application, all overburden materials and non-PAG rock was found to have suitable geotechnical characteristics for the construction of the management and control pond dams and butteresses. Additional characterization work will be carried out during the permitting process to provide

additional information on the materials used for the construction of these structures and the characteristics of the foundation for the detailed design phase.

1d. This was meant to refer to Zones 1 and 4, as there was an error in the Table 4-1 in Appendix 4. The revised table has been provided as part of the response to 1a in **Table 14**. The source terms for the Final EAC Project Case (2024) WLBM used Zones 1 and 4 not Zone 2 for non-PAG dam/buttress landforms.

2a. See **Attachment 2** from Okane Consultants for a response to this IR. In summary, the estimated metal loads from the non-PAG backfill are expected to be conservative as they are based on a slightly larger volume of non-PAG backfill then what is actually available in the mine plan. No update to the WLBM is required.

2b. Please see response to comment #164 1c. above.

3. Please see response to comment #154c-2 above.

174 MCM Geoscience 03-Feb-26 Appendix 16 Section 2.16

1- MCM understands that there are uncertainties related to the calcite precipitation evaluation performed in App 13.5-K (2021). The evaluation concluded that calcite precipitation will likely occur in the management ponds and from the seepage of mine components including the EMP, WMP, NMP, and Tenas Pond. Although, calcite precipitation is not expected to occur downstream of the project discharge at nodes in Four Creek (WQS03_DS) and Goathorn Creek (WQS06). The reviewer notes that the node for Goathorn Creek chosen for this evaluation was located more than 4.5 km downstream of the site. However, a new node WQSEA1 located closer to the discharge point was added to the WMP (2025). Please provide the following information:

> *a. In order to better understand the risks of calcite precipitation in the receiving environment, please provide an updated calcite precipitation evaluation applied to the new receiving environment node WQSEA1 to evaluate the potential for calcite potential at this location closer to the Mine site. [QP Response Required]*
>
> *b. Although there is no visible evidence of calcite precipitation occurring at these locations (TCL 2021, pers. comm.) despite baseline solutions being supersaturated with respect to calcite, please discuss the cumulative effect on calcite precipitation of additional concentrations of calcite from the mine site added to the baseline concentrations already supersaturated with respect to calcite. Would this have an effect on intensity and duration of maximum concentrations therefore potentially shifting the system to precipitate calcite in the receiving environment?*
>
> *c. The reviewer recommends that this evaluation should inform mitigation measures proposed for calcite precipitation management as part of the EA assessment. [Comment]*
>
> *d. The reviewer understands that calcite precipitation on the mine site is also a concern and the calcite prevention mitigation strategy for both on and off the mine site should be provided prior to the start of operations should the project proceed to permitting. [Comment]*

2- MCM understands that results from App 13.5-K evaluation indicated that "calcite management will be required during the construction, operation, and closure of the Project. TML did not provide a mitigation Plan to manage potential calcite precipitation in the EA application." However, they mentioned that "If calcite formation is identified as part of the operational monitoring program, TML will develop a mitigation plan that will be submitted to EMLI for approval." They also mentioned that the most likely mitigation strategy would be addition of antiscalant to site effluent. Considering that there is uncertainty related to the location of the node chosen for this evaluation as noted in Comment 1 and that baseline observations indicated that calcite is already supersaturated in the surface water, the reviewer recommends that evaluation of the risks should be included in the EA and that calcite prevention mitigation strategy for both the mine site and receiving environment should be provided prior to the start of operations should the project proceed to permitting. [Comment]

Response -SRK/TML

1a. and 1b. See **Attachment 1** for a supplemental response from SRK releated to the MMCM document.

1c., 1d., and 2. Based on the information provided in **Attachment 1**, calcite precipitation at WQSEA1 is unlikely to occur.

Reviewers from MMCM noted that there is uncertainty related to water quality models for greenfield projects. To address this uncertainty Telkwa Mining will monitor for the effects of calcite precipitation, and report results in the annual ML/ARD Management Plan, or Annual Reclamation Plan. If monitoring shows that calcite is precipitating in the downstream environment, and that the amount of calcite precipitated will cause measureable adverse impacts to aquatic receptors, a Trigger Action Response Plan will be developed.

Note that the monitoring is intended to detect calcite formation in the downstream environment and if it occurs to evaluate if the amount of calcite precipitated will cause measureable adverse impacts to aquatic receptors.

Closing

If you have any questions please do not hesitate to contact Dan Farmer at 604-220-5703 or dan.farmer@telkwa-mining.ca.

Sincerely,



Daniel J. Farmer
Project and Development Manager
Telkwa Mining Limited

Cc: Elise Matzanke, Project Assessment Officer, EAO, email: Elise.Matzanke@gov.bc.ca
Matt Scarr, Project Assessment Director, EAO, email: Matthew.Scarr@gov.bc.ca
Jessy Chaplin, Ecosystems Biologist, Telkwa Mining, email: Jessy.chaplin@telkwa-mining.ca
File

Attachments:

Attachment 1: SRK Response Document to MMCM Follow-up Information Requests Related to Water

Attachment 2: Okane Consultants Response Document to MMCM Follow-up Information Request Related to Water

Attachment 1: SRK Response Document to MMCM Follow-up Information Requests Related to Water

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FINAL

Memo

To	Dan Farmer	**Client**	Telkwa Mining Ltd
From	Celine Michiels, Michael Herrell (SRK)	**Project**	CAPR002055
Cc	Soren Jensen, Samantha Barnes, Shauna Litke, Stephen Day (SRK)	**Date**	May 14, 2026

Subject Information Requests (IRs) Response to MCM Geoscience

File name: CAPR002055_Memo_IR_Responses_MCM_FINAL_20260514.docx

1 Introduction

Additional Information Requests (IRs) were received by Telkwa Mining Ltd. (TML) on March 3, 2026 from BC Ministry of Mining and Critical Minerals (MCM) Geoscience. TML provided the comments to SRK Consulting (Canada) Inc. (SRK) by email.

This memo covers the response to IRs 143, 154c1, 154c2, 157, and 174. Reponses for IRs 143 and 174 were written by Michael Herrell, PGeo, as the Qualified Professional (QP) (reviewed by Stephen Day, PGeo) and responses for IRs 154c1 and 154c2 were written by Celine Michiels (reviewed by Samantha Barnes, PEng, as the QP). The response for 157 was written by Celine Michiels and reviewed by Michael Herrell, PGeo, as the QP.

2 IR 143

2.1 Comment – MCM Geoscience

Appendix 15 demonstrated how spatially expansive the PAG intervals are in each zone associated with drillholes. Material management based on an NPR of 2 shows that intervals of PAG material could be segregated or blended in a zone with non-PAG bulk average. The verification sampling of blastholes in the ML-ARD Management Plan proposes to manage PAG and Non-PAG material based on bulk composite average of NPR calculated within each 13 m benches which might be composed of blended non-PAG and PAG individual intervals from each material units. MCM understands that volume of PAG versus Non-PAG material considered in the WQM are based on assumptions that certain zones will be managed as PAG and other zones were demarcated as non-PAG and PAG polygons based on weighted NPR from drillhole samples. However, the PAG and non-PAG material will be managed based on composite samples sometimes indirectly blending PAG and non-PAG intervals within a 13 m benches around blasthole patterns. MCM understands that no additional mixing will occur to ensure homogeneity of the material beyond blasting and excavation. This will result in a segregated blend as

opposed to a more homogeneous fully mixed blend. Consequently, stratigraphic zones with average weighted NPR = 2 are designated as non-PAG and this segregated blend of unsaturated rock could be placed as an embankment, pit fill or closure cover. Since it is an average, this implies that a maximum of half of the material from that unit could become acid generating at some point in the future. Although the overall drainage from that storage area may be pH-neutral due to mixing with the non-PAG portion of the unit or non-PAG material from another unit, the current Management Plan does not address the impact of segregated blending and the current source terms provided in App 5 and applied in App 1 do not account for a segregated blend of different units of non-PAG / PAG rock piles or covers that are exposed to allow advanced stage weathering and acidic hot-spots within the non-PAG pile.
Considering Section 6 of the ML ARD Guidelines, please provide the following information: [EA QP Response Required]

1. Please discuss how the impact of segregated blending as opposed to a fully ""mixed blend"" was assessed in the application?
2. What are the hydrological properties of the PAG intervals blended within a composite of non-PAG intervals between the different material units (zones)? Discuss how differences between the physical properties of the material units may affect drainage and hydrological interactions within the non-PAG piles potentially creating preferential flow for acidic drainage.
3. Was the onset of acidic hot spots in the non-PAG embankment, pit backfill, or closure cover considered in the source term development and the WQM (app 1 and 5). If so, please explain how they were considered and discuss the impact on water quality results.
4. If not already considered, please provide sensitivity analysis in the WQM demonstrating how on-set of acidic hot spots within the non-PAG rock piles can impact water quality.
5. Please discuss mitigation measures to prevent onset of acidic hot spots in the non-PAG rock piles or to mitigate their impact on water quality.

2.2 Response

1. A segregated blend was not considered in the application only a fully “mixed blend” was considered based mining process. If drillhole composite samples are classified as non-PAG but may contain an interval of PAG rock, it is assumed that sufficient blending will occur with the non-PAG rock surrounding it during the excavating and handling processes on the storage pile so that local acidification will not occur. Part 5 of the response discusses additional mitigation to both prevent hotspots from occurring and to manage hotspots in the unlikely event they occur. Please note only Overburden, Zone 1, and Zone 4 are being treated as non-PAG in the EAC application’s mine plan and all other zones are assumed to be 100% PAG and submerged underwater. This reduces the likelihood of having PAG being misidentified in the blasthole composites as these two zones are primarily non-PAG material based on the exploration holes.
2. There are no differences in the hydrological properties of PAG and non-PAG rock, they are the same type of rock, and even the same lithology of mudstone most of the time. The rock only differs based on its geochemical properties in the stratigraphy. SRK does not expect preferential flows to occur as a result of different physical rock properties.

3. The conceptual model for non-PAG piles is that there is sufficient excess neutralization potential to prevent unidentified PAG rock in spots within a lift that are predominantly non-PAG rock to go acidic. Development of hot spots in the source term development and WQM were not considered. SRK (2024) indicates that non-PAG zones will include a component of PAG rock. Hot spots are not likely to occur for the following reasons:

    a. If the drill hole composite sample collected as part of the ML/ARD management plan (SRK 2025a) is classified as non-PAG, this means that the interval is mainly non-PAG and PAG rock is not detectable. This shows that sufficient blending of the PAG material in the non-PAG lifts is expected to occur through operational handling resulting in a non-PAG blend.

    b. Rock will be excavated from either 6 or 12 m benches and then dozed into 2 to 4 m lifts in non-PAG piles. This excavating and dozing processes will result in “naturally” blending of PAG and non-PAG rock. This will reduce the thickness of the nondetectable PAG rock packages in the non-PAG piles to levels that are not expected to go acidic.

    c. Post-depositional sampling and geochemical testing will be completed per the ML/ARD management plan (SRK 2025a). PAG rock identified in non-PAG backfill will re-handled and placed in the management ponds, if required via the risk assessment process.

    d. Oxygen modelling completed by Okane (2024) indicates the non-PAG backfill will transition to being suboxic within 12 to 13 years. Blending of PAG in non-PAG piles will only occur in Zones 1 and 4. The minimum time to the onset of acid generation of PAG rock in these zones is approximately 12 years (SRK 2024). At the operational scale, this estimate can be considered conservative since it does not account for excess alkalinity produced non-PAG material above and adjacent to the PAG in non-PAG piles. It is probable that PAG rock in the non-PAG piles will be oxygen limited providing an additional contingency for preventing hot spots from developing within the non-PAG landforms.

4. Although hotspot development is considered unlikely, a sensitivity analysis considering the development of hot spots in the non-PAG backfill was investigated by Okane Consulting (Okane) and SRK. The model indicated that the pH of the drainage from the backfill would remain alkaline even if hotspots were assumed to occur. The model was based on several conservative assumptions and following a detailed review of the model, it was determined that the model relied on too many non-evidence based assumptions (e.g., hotspot thickness and extent, hotspot geochemical properties and placement timing of the PAG material producing hotspots) to accurately predict future parameter concentrations and hence the model results were not considered reliable nor defensible. Following discussions with TML, SRK and Okane, that the development of hotspots in non-PAG stockpiles represented an unlikely scenario for the following reasons:

    a. TML has an extensive database of PAG and non-PAG samples which have been used to constrain PAG and non-PAG intervals. In areas where larger intervals of PAG rock might be present, TML will increase the blasthole sampling frequency to collect one composite sample per 6 meters so that smaller intervals of PAG rock are detected and managed appropriately.

    b. Only Zones 1 and 4, which are predominantly non-PAG will be targeted for backfill and construction reducing the likelihood of hotspots forming.

c. The ML/ARD management plan (SRK 2025a) included post-depositional sampling of non-PAG lifts (i.e., after blending of PAG rock into surrounding units has occurred)

d. Based on a semi-quantitative review of the exploration drillholes, TML calculated that there is roughly 100,000 m3 of PAG rock within Zone 1 that will be blended into surrounding non-PAG material. This represents a minor component (0.5%) of the total 21 MBCM of non-PAG rock in Zone 1.

e. The Okane (2024) oxygen consumption model predicts that the backfilled landform will go anoxic in approximately 12 to 13 years. Based on the bulk properties of Zones 1 and 4, the minimum lag time to the onset of acid generation is approximately 12 years, which as noted above is considered conservative since it does not account for excess alkalinity originating from non-PAG material above and adjacent to blended PAG rock. Since the transition to suboxia will occur over a period of time and not be instantaneous, it is likely if non-detectable PAG rock was not effectively blended in the non-PAG piles, they will become anoxic prior to hot spots forming. .

f. Trucks will be dispatched to multiple tip locations within a 12-hour shift limiting multiple loads of undetected PAG material being placed within one location and decreasing the likelihood of developing a hotspot.

5. The additional mitigation measures to prevent hot spots from occurring and manage hot spots if they do occur in non-PAG piles are as follows:

Prevention

a. As discussed in part 3 of the response to this IR, the mining method is expected to result in effective blending of PAG rock into surrounding non-PAG rock. Placement of the non-PAG material will be in a horizontal lifts with a maximum thickness of 4 m but could be redued to a maximum of thicknes of 2 m to the limit the size of any undectable PAG rock to a point that hotspots will not develop. Non-PAG rock will be pushed with a dozer and mining with an excavator/shovel which is expected to provide sufficient blending within a mined bench of 12 m to avoid the creation of hot spots within non-PAG piles.

b. Blasthole composite samples will be collected to initially classify rock as non-PAG or PAG. Post-depositional verification testing will also be completed to confirm that the rock classified as non-PAG in the blasthole composites results in a non-PAG mixture in non-PAG piles. During the permitting process, a risk review process will be conducted with regulatory agencies to decide if the blasthole composite thickness should be reduced to 6 meters and the number of blast holes sampled increased to every hole which would further reduce the likelihood of not detecting PAG intervals in non-PAG zones large enough to potentially causes hot spots within the non-PAG landform. The same process will be conducted for the post-depositional verification testing to decide if the grid pattern should be reduced which would further reduce the likelihood of not detecting PAG material on a non-PAG lift.

c. The efficacy of using a portable XRF (p-XRF) will be evaluated through a proof-of-concept study to determine a p-XRF can produce reliable results for identifying non-PAG and PAG rock. This would allow for additional higher frequency monitoring results to be collected for materials

as they are mined and placed to assist with PAG rock detection in non-PAG zones and follow-up management activities.

Management

a. Operational seepage water quality monitoring will be used to identify if acidification is occurring in non-PAG piles. Since most of the rock in the non-PAG piles is non-PAG, the transition to acidic drainage is expected to be a delayed and gradual process and trends in indicator parameters (e.g., pH, alkalinity, and some metals) can be used to identify if acidification is initiating. If monitoring indicates localized acidification could occur in non-PAG piles, additional study will be conducted to evaluate an appropriate mitigation strategy and additional testing and identification of hot spot materials via drilling.

b. All drainage from non-PAG piles is managed through site infrastructure. An active treatment plant will be provided as a backstop contingency during permitting in case additional treatment of water is required for discharge. This active treatment plant could treat acidic water from non-PAG landforms as it has an HDS lime treatment included in its process.

3 IR 154c1

3.1 Comment – MCM Geoscience

The response provided rationale for not providing the requested sensitivity analysis arguing that it is highly unlikely that the PAG material deposited in the management ponds will be in non-subaqueous conditions for longer than the predicted acidic lag time. This rationale is based on material placement schedule, contingency measures provided in the Water management design report, as well as water level predictions from the WLBM 2025. App 1 WLBM 2025 Section 4.1.1 provides the alternative case 3 which applies three consecutive 100-year dry precipitation conditions to the Project area. Please provide the following information:

a. Please justify why three consecutive year dry precipitation were chosen to evaluate the impact on the water cover levels? [EA QP Response Required]

b. In Figure 4-3, results were provided for the start of operations of the NMP and EMP, please evaluate the impact of extreme dry period for WMP during the years corresponding to the start of placement of PAG material in the WMP. [EA QP Response Required]

c. Results from Figure 4-3 shows that the water cover for EMP is below 0.5m in early operations and results from Figure 4-4 shows that the water cover for NMP is decreasing and reached a minimum of 0.5m before going up again in late operations. MCM expects that an evaluation of the need for additional contingencies will be provided during the MA/EMA Permitting should the project proceed to permitting. MCM expects that this will be determined by providing additional sensitivity scenario demonstrating how many consecutive dry years (100-year dry precipitation) would be needed for the water level to fall under the PAG level in all the management ponds during all phases of operations and closure. [Comment]

3.2 Response

a. Alternative cases with 3 consecutive dry years (1/100) are chosen to minimize water available on site during high water demand years in operations. The 1/100 dry year is chosen as it is very unlikely event based on the climate data for the Project and therefore helps to evaluate the resilience of site during low precipitation/flow years. Three years are run consecutively to observe the effect of a small snowpack in the next calendar year, and to observe how fast the system recovers.

b. SRK did not show results for three consecutive 1/100 dry years at the beginning of the WMP as there is enough seepage from the backfill being available to fill the void in the first three years of PAG placement in the WMP. The water level during this period did not change in the WMP with three consecutive dry-years between 2028 and 2030. This is because the backfill seepage is not impacted as drastically as other runoffs on site by dry-years as it accumulates and is released slowly over time. Therefore, SRK ran 3 consecutive 1/100 dry year instead during late operations (2041-2044, Years 19 to 22, Figure 4-4 in App 16, SRK 2025b) when the water demand to fill the void in PAG increases as mining activity increases as well. The result of this is high rate of PAG deposition in the West Management Pond and therefore a higher water demand to fill the voids in the PAG as they are deposited.

c. Figure 4-3 (App16, SRK 2025b) shows 3 consecutive 1/100 dry years in early operations (2022-2024). The West Management Pond (WMP) is not yet constructed at this time and therefore water level cannot be graphed. WMP comes online in Year 9 of Mining (2031). We have also assessed 1/100 dry year from 2041-2044, shown in Figure 4-4 (App 16, SRK 2025b) when the most amount of PAG is deposited in WMP. The water demand during those years is higher than at the beginning of PAG placement in WMP.

   The East Management Pond does not have PAG being placed in this facility until 2024 (Year 2 of mining). In figure 4-3, the water level seems to be below 0.5m because it does not have PAG in it yet nor has it been constructed (prior to 2024). The comment regarding an evaluation of the need for additional contingencies is noted and will be provided during the MA/EMA Permitting should the Project proceed to permitting.

4 IR 154c2

4.1 Comment – MCM Geoscience

The reviewer could not locate a backfill schedule with water levels demonstrating that all PAG material stored in the management pond will be flooded prior to onset of ARD during operations. Figure 4-1 shows that the water cover is below PAG level during the first 8 years in the WMP for project case. [QP Response Required]

a. Section 3.4.1 mentions that "Management Pond capacity and water cover thicknesses are calculated in the model based on stage-storage relationships developed from the final dam and open pit configuration of each facility (Appendix C)." The reviewer understands that the volume provided in Appendix C corresponds to the cumulative volume of PAG, NPAG and overburden material placed in the corresponding management ponds. Please clarify if the cumulative

volume includes the volume of non-PAG needed for construction of the embankment and buttress for each Management Pond. If not, please provide individual stage-storage relationship for each type of materials including PAG, Non-PAG and overburden and provide stage-storage relationship for non-PAG and overburden needed for construction of the embankment in each Management Pond.

b. From the Stage-storage curves provided in 2a. for non-PAG material for each management Ponds please demonstrate that there will be sufficient volume of non-PAG material available for the construction of the embankment during operations based on excavation schedule.

c. Please provide a table showing period of time between deposition of PAG material in the Management Ponds and planned water cover including elevation of embankment of non-Pag rock and availability of the volume of excavated non-Pag material during operations.

d. Demonstrate what is the proportion and duration of PAG material exposed in the Management Pond prior to flooding during all phases of operations.

4.2 Response

TML describes the justification of timing for the backfill as well as placement timing of PAG, NAG, and the allocation of construction material (NAG and OVB) to the dams and buttresses in their own response document, as this has been developed by Telkwa Mining. It is SRK's understanding that PAG excavated will be submerged within the active management pond within an average of 6 months of excavation from the open pit with no material being exposed for longer than 12 months which is supported by the modelling conducted for the Project. An alternative case was considered to show loadings if PAG was submerged with an average 12 months as a high source term case. Both cases are well before any calculated acid-onset for PAG, which has been estimated to be on average between 4 to 12 years depending on the zone of PAG considered.

A comment was also noted regarding figure 4-1 of App16 (SRK, 2025), showing water cover for WMP below PAG in the first 9 years of mining (2031). This is because PAG is not placed until Year 6 (2028) of mining. WMP starts accumulating water the years prior to the start of PAG placement within the mined out North phase of the open pit, which will be used in part to make sure that the placed PAG is under a water cover within the average of 6 months.

a. Appendix C from the Water and Load Balance Model report (App 16, SRK 2025b) represents the total volume capacity of the structure of the management ponds all the way to the dam crest that is available to place water, PAG material, as well as the cover made of NAG and OVB and surface soils. To clarify, these curves represent the available volume to store either water or mine waste materials, at a given elevation in the facility. They do not describe the volume of non-PAG material in the dam/buttress itself. See TML Cover letter for complete response with material table showing volume of material placed in dams and buttresses tabulated as levels (masl).

b. As stated in a), the construction material used for the embankment is not included in the cumulative volume found in the stage-storage curves of Appendix C. There is no stage-storage curve for the embankment material as it is part of the structure, and not part of the storage of the pond. We provide attached the revised stage-storage curve to show what level PAG material reaches in Attachment 1, as well as NAG and OVB in the dams and covers of the management

pond. The table in Attachment 1 shows the total volumes mined out of the Pit (PAG, Processed rock [coal reject/tailings], NAG, OVB) and where they are placed, either in the management ponds themselves, in the dams/buttresses of these structures (including Tenas Control Pond) or in the backfill of the open pit or the management pond covers for final reclamation and closure of these structures. These tables have been constructed based on inputs from both the TML (mine plan), and water balance model result (water levels and PAG levels).

Please see TML response for further explanation on stratigraphic sequences.

c. Telkwa Mining has committed to having a maximum of 12 months and an average of 6 months of PAG material exposed in a management pond. The modelling work completed by SRK supports this commitment.

   See Attachment 1 for PAG placement levels, dam levels, and water levels for each management pond. As shown, water levels are consistently above planned PAG elevations which is a simplification of the PAG placement and flooding process over a 12-month period as PAG material that is placed in June through March will not be fully covered with water until the end of spring freshet (April/May).

d. The entire lift of PAG will be exposed for a maximum of 12 months and an average of 6 months prior to flooding in spring freshet (April/May) of any given year. See Attachment 1 for PAG placement levels, dam levels, and water levels for each management pond.

5 IR 157

5.1 Comment – MCM Geoscience

1. The reviewer understands that a sensitivity analysis was developed to evaluate the impact of development of PAG leachate from the Pit wall if operations stops and the pit lake is not being dewatered and is allowed to develop. Sensitivity results show increase in concentration of metals in the receiving environment during low flow periods. In addition, if dewatering is initiated to restart operations the dewatering and discharge to the environment would need to be staged to coincide with high flow conditions and avoid impact to the receiving environment. Contingency measures would need to be applied to prevent impact to the receiving environment. Some contingency measures were included in the response provided including variable discharge rates, dilution from other pond or lime addition. Active water treatment was not included in the proposed contingencies however it is included in the BAP as the primary mitigation measure as needed. [Comment]
2. The proposed sensitivity analysis evaluated the impact of development of PAG leachate from the Pit wall if operations stops and the pit lake is not being dewatered and is allowed to develop. However, this does not demonstrate how the progressive exposure of PAG during operations may affect downstream water quality. It is understood that the impact of the development of PAG leachate from the Pit Walls exposed during operation was not evaluated in the 2025 WQM (App 1). The WQM assumes that the Pit walls will be covered with non-PAG rock or overburden prior to onset of ARD. However, the reviewer could not locate a backfill schedule demonstrating that all pit walls will be covered prior to onset of ARD during operations. The backfilling and reclamation sequence provided in the WMP, and mine plan shows that portions of the Phase 2 Pit wall rock

may be exposed from year 1 and year 5 to year 21 of operations prior to full reclamation of this zone. [QP Response Required]

a. Please provide a table showing period of time between excavation zones of the Pit and planed cover with non-Pag rock or overburden backfill.

b. Demonstrate what is the proportion and duration of PAG Wall rock exposed in the Open pit during all phases of operations.

c. Please provide sensitivity analyses considering impact of PAG wall rock during operations and discuss appropriate mitigation measures, if needed.

5.2 Response (1)

Comment is noted

5.3 Response (2)

a. and b. Response provided by TML.

c. A conservative sensitivity analysis was conducted considering the effect of PAG wall rock during operations that has the potential to go acidic prior to it be covered. Attachment 2 provides the completed modelling work related to this scenario. In summary, portions of the pit wall potentially becoming acidic are not modelled to have a measurable effect on the overall water quality being discharged from the site.

6 IR 174

6.1 Comment – MCM Geoscience

1. MCM understands that there are uncertainties related to the calcite precipitation evaluation performed in App 13.5-K (2021). The evaluation concluded that calcite precipitation will likely occur in the management ponds and from the seepage of mine components including the EMP, WMP, NMP, and Tenas Pond. Although, calcite precipitation is not expected to occur downstream of the project discharge at nodes in Four creek (WQS03_DS) and Goathorn Creek (WQS06). The reviewer notes that the node for Goathorn Creek chosen for this evaluation was located more than 4.5 km downstream of the site.

   However, a new node WQSEA1 located closer to the discharge point was added to the WMP (2025). Please provide the following information:

   a. In order to better understand the risks of calcite precipitation in the receiving environment, please provide an updated calcite precipitation evaluation applied to the new receiving environment node WQSEA1 to evaluate the potential for calcite potential at this location closer to the Mine site. [QP Response Required]

   b. Although there is no visible evidence of calcite precipitation occurring at these locations (TCL 2021, pers. comm.) despite baseline solutions being supersaturated with respect to calcite,

please discuss the cumulative effect on calcite precipitation of additional concentrations of calcite from the mine site added to the baseline concentrations already supersaturated with respect to calcite. Would this have an effect on intensity and duration of maximum concentrations therefore potentially shifting the system to precipitate calcite in the receiving environment?

c. The reviewer recommends that this evaluation should inform mitigation measures proposed for calcite precipitation management as part of the EA assessment. [Comment]

d. The reviewer understands that calcite precipitation on the mine site is also a concern and the calcite prevention mitigation strategy for both on and off the mine site should be provided prior to the start of operations should the project proceed to permitting. [Comment]

2. MCM understands that results from App 13.5-K evaluation indicated that ""calcite management will be required during the construction, operation, and closure of the Project. TML did not provide a mitigation Plan to manage potential calcite precipitation in the EA application. However, they mentioned that ""If calcite formation is identified as part of the operational monitoring program, TML will develop a mitigation plan that will be submitted to EMLI for approval."" They also mentioned that the most likely mitigation strategy would be addition of antiscalant to site effluent. Considering that there is uncertainty related to the location of the node chosen for this evaluation as noted in Comment 1 and that baseline observations indicated that calcite is already supersaturated in the surface water, the reviewer recommends that evaluation of the risks should be included in the EA and that calcite prevention mitigation strategy for both the mine site and receiving environment should be provided prior to the start of operations should the project proceed to permitting. [Comment]

6.2 Response

Responses to each question are provided below:

1.

a. Calcite saturation indices were derived using the methods outlined in SRK (2022) for predicted monthly surface water qualities at assessment location WQSEA1 (SRK 2025b). The reviewer is referred to SRK (2022) for additional details on calcite saturation index calculation methods. The site water quality model does not include predictions of pH. Therefore, calcite saturation indices were calculated for two assumed pH values: 8.0 and 8.5. These pH values are consistent with observed pHs in geochemical test work (e.g., HCTs and field barrels).

Figure 6-1 presents the calculated calcite saturation indices for monthly water quality predictions at assessment location WQSEA1. The range of calcite saturation indices under existing conditions at monitoring location WQ06S is also provided in Figure 6-1. This location was selected since it is considered representative of the baseline conditions and has the longest duration of monitoring results from surface water quality monitoring locations in Goathorn Creek.

The outcomes of the calcite precipitation evaluation at WQSEA1 are like the conclusions made in SRK (2022) for monitoring location WQS06 since the water quality predictions are similar at these two locations (i.e., the is limited additional dilution between these two locations. Calcite saturation indices

are predicted to be less than zero when a pH of 8.0 is assumed. This indicates that calcite is not favored to precipitate in this scenario. Calcite saturation indices are seasonally supersaturated (i.e., SI-$CaCO_3$ > 0) when a pH of 8.5 is assumed. This theoretically implies that calcite precipitation could occur. However, calcite precipitation is not observed to occur under existing conditions at WQS06 based on baseline water quality monitoring (TCL 2021, pers. comm.) even though calcite is calculated to be supersaturated at this location (Figure 6-1). The calcite saturation indices calculated at WQSEA1 in the pH8.5 scenario are seasonally higher than the maximum calcite saturation index (0.2) at WQS06. However, even higher calcite saturation indices occur in Four Creek at monitoring location WQS03DS (Figure 6-2) and calcite formation has not been visually observed to occur in this tributary. This observation indicates that a calcite saturation index greater than the predicted values at WQSEA1 is needed before calcite precipitation occurs.

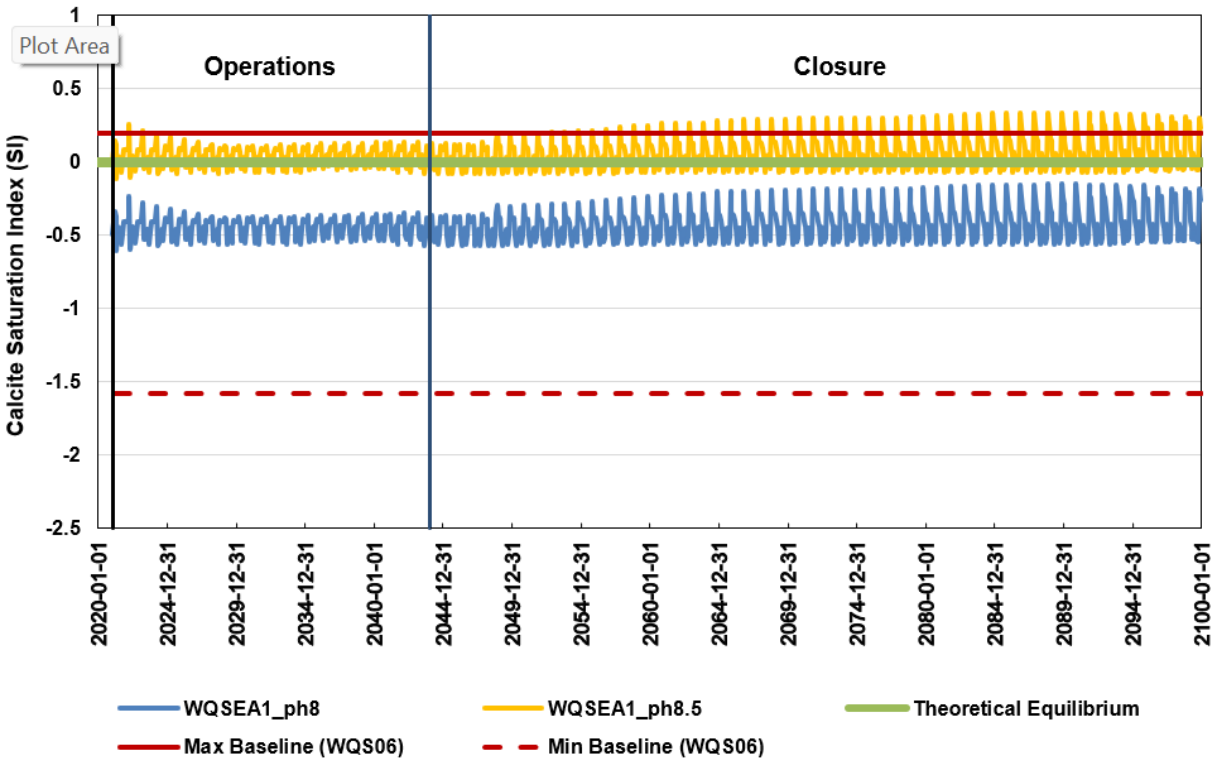


Figure 6-1. Predicted Calcite Saturation Indices at Assessment Location WQSEA1

Source: https://srk.sharepoint.com/sites/NACAPR002933/Internal/Task 700 MCM IR Calcite Evaluation/[MCM_IR_CaCO3_eval_CAPR002055_mkh_r0.xlsx

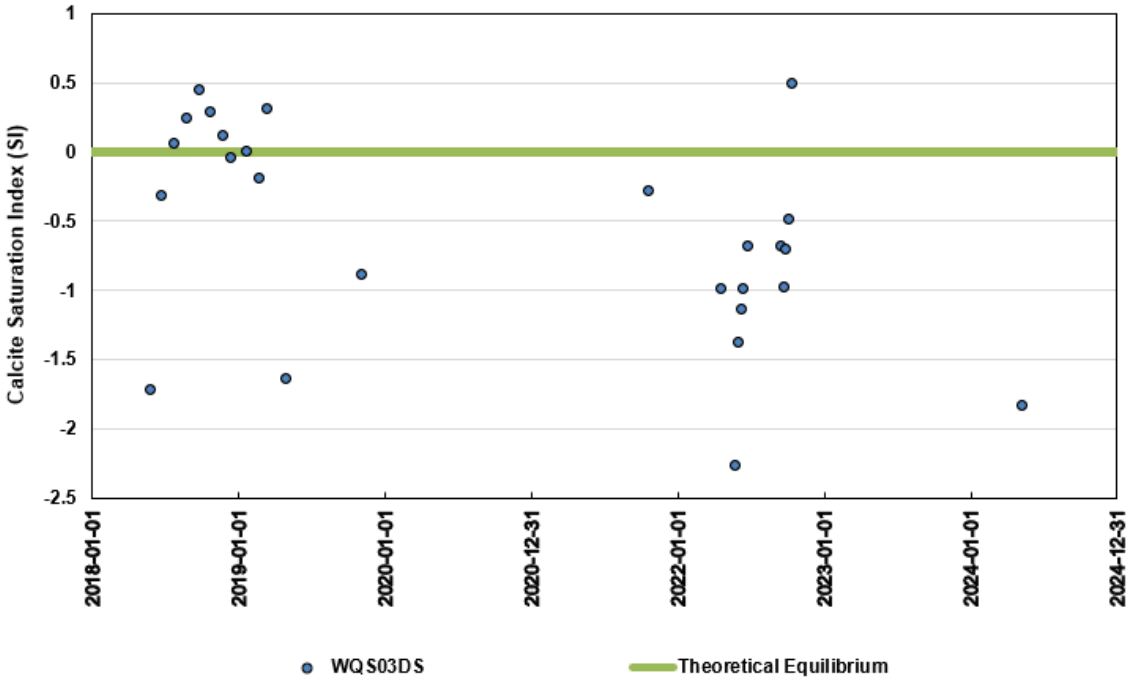


Figure 6-2. Predicted Calcite Saturation Indices at Monitoring Location WQS03DS

Source: https://srk.sharepoint.com/sites/NACAPR002933/Internal/Task 700 MCM IR Calcite Evaluation/[MCM_IR_CaCO3_eval_CAPR002055_mkh_r0.xlsx

b. Calcite saturation indices are a function of several parameters (e.g., pH, alkalinity, and gas exchange). If mining results in changes to these parameters result in higher calcite saturation indices than observed under baseline conditions, the likelihood for calcite to precipitate would increase. However, the evaluation provided in part a of this response considers changes to downstream water quality during operations and closure. This evaluation indicates that calcite precipitation is not likely downstream because calculated saturation indices for the predicted concentrations are lower in comparison to the saturation indices under existing conditions.

c. A calcite management plan will be developed as part of the permitting process. The plan will include where monitoring should occur, and the mitigation approach should calcite formation be detected. The most likely mitigation strategy will be treatment using antiscalant in discharge from the management ponds.

d. Comment is noted.

2. Comment is noted.

SRK Consulting (Canada) Inc.

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EGBC Permit to Practice: 1003655

Attachments:

Attachment 1	Material Tables (PAG, CR, NAG, OVB), water levels and PAG levels in management ponds
Attachment 2	IR 157 Memo Response

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References

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SRK 2024. Telkwa Coal – Tenas Project Geochemical Characterization Update. Prepared for Telkwa Mining Ltd. November 2024.

SRK 2025a. Tenas Project – Metal Leaching/Acid Rock Drainage Management Plan. Prepared for Telkwa Mining Limited. April 2025.

SRK 2025b. Tenas Project – Updated Water and Load Balance Modeling Report (2025) – prepared by SRK consulting (Canada) in September 2025 for Telkwa Mining Ltd.

TCL (Telkwa Coal Ltd.) 2021. Personal Communication. Email from Dan Farmer to Michael Herrell FW:Mgmt plan templates. June 4, 2021, 8:40 AM.

Attachment 1 Material Tables (PAG, CR, NAG, OVB), water levels and PAG levels in management ponds

Material tables allocating PAG, CR, NAG and OVB material to management ponds, dams/buttresses and backfill, as well as water levels and PAG levels in ponds.

Material tables: Mining of PAG, Coal reject, NAG and OVB volumes to corresponding management ponds and dams/buttresses.

		Material table			
	date	Mined OVB Mine Plan	Mined NAG Mine Plan	Mined and Exposed PAG (modelled)	Coal Rejects with void (modelled)[4]
	Units	BCM	BCM	BCM	m^3
	2021	-	-	-	-
-1	2022	1,782,915	-	408,479	58,093
1	2023	2,014,288	1,442,292	1,276,716	185,627
2	2024	2,106,216	1,598,124	1,708,441	211,714
3	2025	2,972,797	450,433	1,856,683	169,403
4	2026	2,161,708	1,204,006	1,860,366	182,147
5	2027	1,762,015	1,392,735	1,837,206	176,265
6	2028	1,068,408	2,377,835	2,281,230	223,233
7	2029	990,741	2,548,365	1,671,363	201,840
8	2030	949,682	2,517,721	2,030,949	288,356
9	2031	877,683	1,714,587	1,438,692	182,827
10	2032	1,255,270	1,615,794	1,857,219	177,127
11	2033	1,154,681	1,297,856	1,832,260	185,056
12	2034	1,081,444	1,396,052	1,147,199	166,543
13	2035	669,275	2,493,282	1,327,156	154,990
14	2036	207,412	1,125,188	1,589,580	168,180
15	2037	130,254	939,922	1,159,155	171,543
16	2038	250,215	1,250,386	1,240,237	165,157
17	2039	231,888	1,187,631	1,702,292	193,951
18	2040	-	957,464	1,207,014	208,474
19	2041	629,316	823,426	1,474,232	184,444
20	2042	-	372,746	922,124	115,105
21	2043	-	-	-	-
	2044	22,296,208	28,705,845	31,828,593	3,770,075

Notes

1 NAG and OVB added to dams and buttresses is not taken into account in the calcul

2 Water level in each respective pond was calculated in the WLB model based on the volume of rock placed in the pond as well as water used to fill the voids contained in the rocks (in PAG, NAG and OVB). The water levels vary slightly throughout the year.

Of note, Tenas Control Pond does not have rock in the pond, it is just water stored in it.

3 825 masl is the elevation that water spills over crest of mined out pit

4 CR volumes were provided as swell to SRK

Material tables: Mining of PAG, Coal reject, NAG and OVB volumes to corresponding management ponds and dams/buttresses.

Tenas Control Pond			North Management Pond								
Water in TCP (modelled[2])	TCP Dam elevation	NAG/OVB to TCVP dams/buttresses[1] (cumul)	PAG to NMP (cumul)	PAG to NMP with void (cumul)	CR to NMP with void (cumul)	NAG+OVB to NMP Cover with void (cumul)	Total rock and void space in NMP (cumul)	PAG level in NMP (modelled[2])	Water level in NMP (modelled[2])	NMP Dam elevation	NAG/OVB to NMP dams/buttresses[1] (cumul)
masl	masl	m3	BCM	m^3	m^3	m^3	m^3	masl	masl	masl	m3
		-	-				-	-	-	-	-
792	795	825,000	408,479	531,023	58,093	-	589,116	816	817	820	1,314,498
791	800	1,320,000	1,685,195	2,190,754	243,720	-	2,434,474	824	825	830	4,283,000
795	800	1,320,000	1,834,726	2,385,143	299,079	-	2,684,223	825	826	830	4,283,000
793	800	1,320,000	1,834,726	2,385,143	299,079	308,867	2,993,090	825	826	830	4,283,000
791	800	1,320,000	1,834,726	2,385,143	299,079	718,937	3,403,159	825	827	830	4,283,000
792	800	1,320,000	1,834,726	2,385,143	299,079	718,937	3,403,159	825	828	830	4,283,000
792	800	1,320,000	1,834,726	2,385,143	299,079	718,937	3,403,159	825	827	830	4,283,000
793	800	1,320,000	1,834,726	2,385,143	299,079	718,937	3,403,159	825	827	830	4,283,000
792	800	1,320,000	1,834,726	2,385,143	299,079	718,937	3,403,159	825	828	830	4,283,000
793	800	1,320,000	1,834,726	2,385,143	299,079	718,937	3,403,159	825	827	830	4,283,000
792	800	1,320,000	1,834,726	2,385,143	299,079	718,937	3,403,159	825	827	830	4,283,000
792	800	1,320,000	1,834,726	2,385,143	299,079	718,937	3,403,159	825	827	830	4,283,000
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792	800	1,320,000	1,834,726	2,385,143	299,079	718,937	3,403,159	825	827	830	4,283,000
792	800	1,320,000	1,834,726	2,385,143	299,079	718,937	3,403,159	825	827	830	4,283,000
792	800	1,320,000	1,834,726	2,385,143	299,079	718,937	3,403,159	825	827	830	4,283,000
793	800	1,320,000	1,834,726	2,385,143	299,079	718,937	3,403,159	825	827	830	4,283,000
793	800	1,320,000	1,834,726	2,385,143	299,079	718,937	3,403,159	825	828	830	4,283,000
794	800	1,320,000	1,834,726	2,385,143	299,079	718,937	3,403,159	825	828	830	4,283,000

Notes

lations 1 NAG and OVB added to dams and buttresses is not taken into account in the calculations of rock levels in the MPs

2 Water level in each respective pond was calculated in the WLB model based on the volume of rock placed in the pond as well as water used to fill the voids contained in the rocks (in PAG, NAG and OVB). The water levels vary slightly throughout the year.

Of note, Tenas Control Pond does not have rock in the pond, it is just water stored in it.

Material tables: Mining of PAG, Coal reject, NAG and OVB volumes to corresponding management ponds and dams/buttresses.

East Management Pond								
PAG to EMP (cumul)	PAG to EMP with void (cumul)	CR to EMP with void (cumul)	NAG+OVB to EMP Cover with void (cumul)	Total rock and void space in EMP (cumul)	PAG level in EMP (modelled)	Water level in EMP (modelled[2])	EMP Dam Elevation	NAG/OVB to EMP dams/buttresses[1] (cumul)
BCM	m^3	m^3	m^3	m^3	masl	masl	masl	m^3
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	822	828,626
1,558,910	2,026,584	156,355	-	2,182,938	833	834	838	5,433,647
3,415,593	4,440,271	325,758	-	4,766,029	838	839	852	9,541,729
5,275,959	6,858,747	507,905	-	7,366,652	842	842	852	10,002,000
7,113,165	9,247,115	684,170	-	9,931,285	845	845	852	10,002,000
8,892,787	11,560,623	857,110	-	12,417,733	847	848	852	10,002,000
8,892,787	11,560,623	857,110	2,540,928	14,958,661	847	849	852	10,002,000
8,892,787	11,560,623	857,110	2,672,273	15,090,006	847	850	852	10,002,000
8,892,787	11,560,623	857,110	2,672,273	15,090,006	847	850	852	10,002,000
8,892,787	11,560,623	857,110	2,672,273	15,090,006	847	850	852	10,002,000
8,892,787	11,560,623	857,110	2,672,273	15,090,006	847	850	852	10,002,000
8,892,787	11,560,623	857,110	2,672,273	15,090,006	847	850	852	10,002,000
8,892,787	11,560,623	857,110	2,672,273	15,090,006	847	850	852	10,002,000
8,892,787	11,560,623	857,110	2,672,273	15,090,006	847	850	852	10,002,000
8,892,787	11,560,623	857,110	2,672,273	15,090,006	847	850	852	10,002,000
8,892,787	11,560,623	857,110	2,672,273	15,090,006	847	850	852	10,002,000
8,892,787	11,560,623	857,110	2,672,273	15,090,006	847	850	852	10,002,000
8,892,787	11,560,623	857,110	2,672,273	15,090,006	847	850	852	10,002,000
8,892,787	11,560,623	857,110	2,672,273	15,090,006	847	850	852	10,002,000
8,892,787	11,560,623	857,110	2,672,273	15,090,006	847	850	852	10,002,000
8,892,787	11,560,623	857,110	2,672,273	15,090,006	847	850	852	10,002,000

Notes

1 NAG and OVB added to dams and buttresses is not taken into account in the calculations of rock levels in the MPs

2 Water level in each respective pond was calculated in the WLB model based on the volume of rock placed in the pond as well as water used to fill the voids contained in the rocks (in PAG, NAG and OVB). The water levels vary slightly throughout the year.

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Material tables: Mining of PAG, Coal reject, NAG and OVB volumes to corresponding management ponds and dams/buttresses.

West Management pond								
PAG to WMP (cumul)	PAG to WMP with void (cumul)	CR to WMP with void (cumul)	NAG+OVB to WMP Cover with void (cumul)	Total rock and void space in WMP (cumul)	PAG level in WMP (modelled)[3]	Water level in WMP (modelled[2])	WMP Dam Elevation[3]	NAG/OVB to WMP dams/buttresses[1] (cumul)
BCM	m^3	m^3	m^3	m^3	masl	masl	masl	m^3
-	-	-	-	-	-	-	825	-
-	-	-	-	-	-	-	825	-
-	-	-	-	-	-	-	825	-
-	-	-	-	-	-	-	825	-
-	-	-	-	-	-	-	825	-
-	-	-	-	-	-	-	832	3,024,889
-	-	-	-	-	-	-	852	5,601,000
501,608	652,091	50,293	-	702,384	770	771	852	5,601,000
2,172,971	2,824,863	252,133	-	3,076,995	787	788	852	5,601,000
4,203,920	5,465,096	540,489	-	6,005,585	800	800	852	5,601,000
5,642,612	7,335,396	723,316	-	8,058,712	807	808	852	5,601,000
7,499,831	9,749,781	900,443	-	10,650,223	815	815	852	5,601,000
9,332,091	12,131,719	1,085,499	-	13,217,217	822	822	852	5,601,000
10,479,290	13,623,077	1,252,042	-	14,875,119	826	827	852	5,601,000
11,806,446	15,348,380	1,407,032	-	16,755,412	829	830	852	5,601,000
13,396,026	17,414,834	1,575,212	-	18,990,046	833	833	852	5,601,000
14,555,181	18,921,736	1,746,755	-	20,668,490	835	836	852	5,601,000
15,795,418	20,534,044	1,911,912	-	22,445,956	838	838	852	5,601,000
17,497,710	22,747,023	2,105,863	-	24,852,886	841	841	852	5,601,000
18,704,724	24,316,142	2,314,337	-	26,630,478	843	843	852	5,601,000
20,178,956	26,232,643	2,498,781	-	28,731,424	845	846	852	5,601,000
21,101,080	27,431,404	2,613,886		30,045,290	847	847	852	5,601,000
21,101,080	27,431,404	2,613,886	2,543,701	32,588,991	847	850	852	5,601,000
21,101,080	27,431,404	2,613,886	2,543,701	32,588,991	847	850	852	5,601,000

Notes

1 NAG and OVB added to dams and buttresses is not taken into account in the calculations of rock levels in the MPs

2 Water level in each respective pond was calculated in the WLB model based on the volume of rock placed in the pond as well as water used to fill the voids contained in the rocks (in PAG, NAG and OVB). The water levels vary slightly throughout the year.

Of note, Tenas Control Pond does not have rock in the pond, it is just water stored in it.

3 825 masl is the elevation that water spills over crest of mined out pit

Attachment 2 IR 157 Memo Response

Pit wall and pit sump geochemical modelling

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FINAL

Memo

To	Dan Farmer	**Client**	Telkwa Mining Ltd
From	Celine Michiels and Michael Herrell (SRK)	**Project**	CAPR002055
Cc		**Date**	May 11, 2026

Subject Tenas Project – Response to Information Request MCM Geoscience – IR 157-2c

File name: CAPR002055_Memo_IR157_Responses_MCM_FINAL_20260511.docx

1 Introduction

Additional information requests were received by TML from MCM Geoscience on the 3rd of February 2026.

This memo provides a response to information request (IR) 157-2. Item 3 highlighted in green below. Items 1 and 2 of IR 157-2 are provided in a separate memo (TML, 2026). IR 157-2 states the following:

> *"The proposed sensitivity analysis evaluated the impact of development of PAG leachate from the Pit wall if operations stops and the pit lake is not being dewatered and is allowed to develop. However, this does not demonstrate how the progressive exposure of PAG during operations may affect downstream water quality. It is understood that the impact of the development of PAG leachate from the Pit Walls exposed during operation was not evaluated in the 2025 WQM (App 1). The WQM assumes that the Pit walls will be covered with Non-PAG rock or overburden prior to onset of ARD. However, the reviewer could not locate a backfill schedule demonstrating that all pit walls will be covered prior to onset of ARD during operations. The backfilling and reclamation sequence provided in the WMP and mine plan shows that portions of the Phase 2 Pit wall rock may be exposed from year 1 and year 5 to year 21 of operations prior to full reclamation of this zone. [QP Response Required]*
>
> 1. *Please provide a table showing period of time between excavation zones of the Pit and planed cover with Non-Pag rock or overburden backfill.*
> 2. *Demonstrate what is the proportion and duration of PAG Wall rock exposed in the Open pit during all phases of operations.*
> 3. *Please provide sensitivity analyses considering impact of PAG wall rock during operations and discuss appropriate mitigation measures, if needed."*

This memo provides the details of the geochemical model developed in response to item 3 to evaluate the impact of acid generating runoff from the open pit walls on the open pit sump water quality and discussion on effect to overall water quality being discharged from the Project. This model accounts for the different zones of rock exposed in the open pit walls, as well as the timing to acid onset for each zone. This memo provides the geochemical conceptual model, model inputs and assumptions, as well

as model results for the open pit wall runoff and open pit sump water quality water quality. Items 1 and 2 are addressed in SRK's and TML's cover memos.

2 Geochemical Conceptual Model

Mining of the Tenas Project will result in open pit walls that are exposed to atmospheric oxygen during operations and while TML has committed to cover the open pit walls as material is available and mining allows, some open pit walls that are composed of non-PAG material may remain exposed in perpetuity due to the geometry of the backfill and mine sequencing.

When exposed to oxygen, sulfides that are present in the open pit wall rock will oxidize according to reaction 1 (Rxn 1) producing sulfate, acidity, ferrous iron, and release of trace chalcophile elements.

$$FeS_{2\,(s)} + \frac{7}{2}O_{2\,(g)} + H_2O_{\,(l)} \leftrightarrow Fe^{2+}{}_{(aq)} + 2SO_4{}^{2-}{}_{(aq)} + 2H^{+}{}_{(aq)} \text{ (Rxn 1)}$$

Under oxidizing conditions, ferrous iron liberated during sulfide oxidation will subsequently oxidize to ferric iron in neutral pH producing additional acidity according to the following reaction:

$$Fe^{2+}{}_{(aq)} + \frac{1}{4}O_{2\,(g)} + 2\frac{1}{2}H_2O_{\,(l)} \leftrightarrow Fe(OH)_{3\,(s)} + 2H^{+}{}_{(aq)} \text{ (Rxn 2)}$$

Although oxidation of mine rock for the Tenas Project will release acidity, acidic conditions are not predicted to occur immediately since these materials also contain carbonate minerals that will neutralize the acid according to the following reactions:

$$CaCO_{3(s)} + H^{+}{}_{(aq)} \leftrightarrow HCO_3{}^{-}{}_{(aq)} + Ca^{2+}{}_{(aq)} \text{ (Rxn 3)}$$

$$CaCO_{3(s)} + 2H^{+}{}_{(aq)} \leftrightarrow H_2CO_{3(aq)} + Ca^{2+}{}_{(aq)} \text{ (Rxn 4)}$$

Depletion calculations (SRK 2024a) indicate that the lag times to acid generation are variable by zone type as summarized in Table 2-1 with a minimum onset time of approximately 4 years for Zone 4 to 13 years for Zones 6 and 7 using an NPR cut-off of 2.0 to 1. Once lag times are exceeded for specific zone types, the alkalinity (neutralizing potential) of the zone is consumed, and the wall rock drainage becomes acid-generating. Therefore, the pH of the drainage from the open pit walls will be a function of the proportion of exposed acid generating zones in the open pit walls and the available alkalinity in the remaining non-acid generating wall rock zones.

The drainage from the open pit walls will be mixed with non-PAG backfill combined with groundwater inflows, as well as natural runoff sources from areas outside of the open pit that are captured by the overall water management system for the Project. The pH of the mixed drainage will be a function of the blend of these sources.

Soluble oxidation products flushed from open pit wall zones by meteoric water will mix with other inflows (e.g., groundwater inflow, backfill seepage and natural runoffs) in the open pit sump. The backfill seepage is also assumed in this base case to produce alkaline conditions as it is mainly non-PAG rock and will be mixed in the open pit sump according to the water balance from the water and load balance model (SRK 2025a).

If the open pit sump remains alkaline after the blending of its respective sources from the open pit, groundwater, and backfill, several secondary mineral species will become supersaturated and

precipitate from solution. Sorption of other element species will also occur which can also limit concentrations of these constituents.

If the open pit sump becomes acid generating after the blending of its respective sources from the open pit, groundwater, and backfill, the solubility of several dissolved species (e.g., sulfate) will increase.

Mass will also be lost from the open pit sump through pumped flows.

Table 2-1: Lag Time to Acid Generation (Years) based on an NPR cut-off of 2.0 to 1

Zone	Average onset time (years)
1	Non-PAG
1a	5
2/3	5.5
4PAG	4.2
4 Non-PAG	Non-PAG
5	8.4
55	13
6	13
7	12
Coal Seams	1

Source : NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\Source_term_dev\Sourceterm_PAGPitWall_exposure_IR154_Round3_CCM_rev0.xlsx

3 Geochemical Model Development and Inputs for the Open pit Sump

A geochemical model was developed in the publicly available speciation and mass transfer code PHREEQC v.3 (Parkhurst and Appelo 1999) to evaluate yearly open pit wall runoff and open pit sump water quality during operations (i.e., 22 years).

The water and load balance for the open pit sump includes inputs for open pit wall runoff, groundwater inflows, and other upstream catchments such as non-contact runoff and backfill seepage. As mining progresses, flows to the open pit sump increase to a maximum of 1.13 Mm^3/year, which is then pumped out to the active management pond to flood PAG rock mined from the open pit.

In order to develop a geochemical model that reflects the timing to acid onset for exposed open pit wall, the acid generating source term was assigned to the proportion of the cumulative exposed surface area timeseries for each zone based on the initial exposure time and the respective average lag time to the onset of acid conditions for each zone (SRK 2024a).

This can be expressed by the following formula:

$$Prop_{acidic,j} = \frac{Area_{t_{ex}>t_{lag},j}}{Area_{ex,j}} \text{ (Eq 1.)}$$

Where: $Prop_{acid,j}$ is the proportion of the exposed wall area for zone j that is acidic

$Area_{t_{ex}>t_{lag},j}$ is the area of zone j that has been exposed longer than the acid onset lag time

$Area_{ex,j}$ is the total exposed area of zone j

Timeseries for the net cumulative exposed open pit wall zone's surface area is provided in Table 3-1 below. Table 2-1 provides the approximate lag timing for the individual PAG zones to become acid generating using an NPR cut-off of 2.0. These surface open pit wall values were used to estimate the amount of the wall zones that went acid generating prior to covering with non-PAG material (backfill or overburden) and these areas were then used to estimate the water quality of the open pit wall run off from the areas of wall that are acid generating and non-acid generating (Surface zone areas that became acid generating as a proportion of total pit wall surface areas are found in Table 3-2). Coal seams were conservatively assumed to be acid generating after only 1 year which was not based on humidity cell testing as they were not available. It is expected the lag time for coals seams in the wall to be greater than 1 year.

Please note that these values in Table 3-2 are conservative based on the modelled calculation comparing what was cumulatively exposed at any given year which overstates that actual amount that is acid generating.

Table 3-1: Yearly net cumulative exposed surface area (m^2) for each material zone of the open pit wall based on an NPR cut-off of 2.0 to 1

Plan Year	Date Year	Total Exposed Wall	Exposed Overburden	Exposed Zone 1	Exposed Zone 1a	Exposed Zone 2	Exposed Zone 3	Exposed Coal Seam C	Exposed Zone 4	Exposed Zone 5	Exposed Coal Seam 1U	Exposed Zone 55	Exposed Coal Seam 1L	Exposed Coal Seam 1	Exposed Zone 6	Exposed Zone 7
-1	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	2023	254,178	40,564	17,076	-	3,196	2,890	277	5,399	4,245	421	1,349	600	-	178,163	-
2	2024	508,356	81,128	34,151	-	6,392	5,780	554	10,798	8,489	841	2,697	1,200	-	356,326	-
3	2025	630,257	112,839	45,765	742	9,538	11,295	1,083	18,193	11,962	1,555	4,384	2,349	-	410,552	-
4	2026	752,158	144,551	57,378	1,484	12,684	16,810	1,611	25,588	15,435	2,269	6,070	3,498	-	464,778	-
5	2027	874,060	176,262	68,992	2,227	15,831	22,326	2,140	32,984	18,908	2,984	7,757	4,646	-	519,005	-
6	2028	995,961	207,974	80,605	2,969	18,977	27,841	2,668	40,379	22,381	3,698	9,443	5,795	-	573,231	-
7	2029	1,117,862	239,685	92,219	3,711	22,123	33,356	3,197	47,774	25,854	4,412	11,130	6,944	-	627,457	-
8	2030	1,048,277	249,802	101,393	4,050	17,855	25,102	3,469	36,043	21,475	5,002	8,597	7,659	24	563,197	4,608
9	2031	978,693	259,920	110,568	4,389	13,588	16,849	3,740	24,313	17,096	5,592	6,063	8,374	47	498,937	9,216
10	2032	909,108	270,037	119,742	4,728	9,320	8,595	4,012	12,582	12,717	6,183	3,530	9,089	71	434,677	13,824
11	2033	893,607	246,215	108,859	4,859	8,600	8,569	3,582	11,734	12,049	5,533	3,275	8,310	502	460,461	11,060
12	2034	878,106	222,392	97,975	4,990	7,881	8,544	3,151	10,887	11,382	4,883	3,020	7,530	933	486,245	8,295
13	2035	862,605	198,570	87,091	5,121	7,161	8,518	2,720	10,039	10,714	4,233	2,765	6,751	1,364	512,029	5,530
14	2036	847,105	174,747	76,208	5,252	6,441	8,492	2,290	9,191	10,046	3,583	2,510	5,972	1,795	537,813	2,765
15	2037	831,604	150,924	65,324	5,383	5,722	8,466	1,859	8,343	9,378	2,934	2,255	5,193	2,226	563,597	-
16	2038	700,134	130,281	57,057	4,486	4,768	7,055	1,549	6,953	7,815	2,445	1,879	4,327	1,855	469,664	-
17	2039	568,665	109,638	48,790	3,589	3,814	5,644	1,240	5,562	6,252	1,956	1,503	3,462	1,484	375,731	-
18	2040	437,195	88,995	40,523	2,692	2,861	4,233	930	4,172	4,689	1,467	1,127	2,596	1,113	281,799	-
19	2041	305,726	68,351	32,256	1,794	1,907	2,822	620	2,781	3,126	978	752	1,731	742	187,866	-
20	2042	174,256	47,708	23,989	897	954	1,411	310	1,391	1,563	489	376	865	371	93,933	-
21	2043	42,787	27,065	15,722	-	-	-	-	-	-	-	-	-	-	-	-

Notes: * Zone 7 is not mined by the EAC Open Pit but is exposed where Zone 6 is removed

Source : NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\Source_term_dev\Sourceterm_PAGPitWall_exposure_IR154_Round3_CCM_rev0.xlsx

Table 3-2: Surface areas that are acid generating acidic as a proportion of total pit wall surface areas for material zones using an NPR cut-off of 2.0 to 1

Plan Year	Date Year	Exposed Overburden	Exposed Zone 1	Exposed Zone 1a	Exposed Zone 2	Exposed Zone 3	Exposed Coal Seam C	Exposed Zone 4	Exposed Zone 5	Exposed Coal Seam 1U	Exposed Zone 55	Exposed Coal Seam 1L	Exposed Coal Seam 1	Exposed Zone 6	Exposed Zone 7
-1	2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1	2023	-	-	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0%	0.0%	0.6%	0.0%	0%	0%
2	2024	-	-	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0%	0.0%	0.2%	0.0%	0%	0%
3	2025	-	-	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0%	0.0%	0.4%	0.0%	0%	0%
4	2026	-	-	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0%	0.0%	0.5%	0.0%	0%	0%
5	2027	-	-	0.0%	0.0%	0.0%	0.2%	0.5%	0.0%	0%	0.0%	0.5%	0.0%	0%	0%
6	2028	-	-	0.0%	0.2%	0.1%	0.3%	1.0%	0.0%	0%	0.0%	0.6%	0.0%	0%	0%
7	2029	-	-	0.0%	0.4%	0.4%	0.3%	1.5%	0.0%	0%	0.0%	0.6%	0.0%	0%	0%
8	2030	-	-	0.1%	0.8%	0.8%	0.3%	2.3%	0.0%	0%	0.0%	0.7%	0.0%	0%	0%
9	2031	-	-	0.2%	1.1%	1.4%	0.4%	2.5%	0.3%	1%	0.0%	0.9%	0.0%	0%	0%
10	2032	-	-	0.2%	1.0%	0.9%	0.4%	1.4%	0.7%	1%	0.0%	1.0%	0.0%	0%	0%
11	2033	-	-	0.3%	1.0%	1.0%	0.4%	1.3%	1.2%	1%	0.0%	0.9%	0.1%	0%	0%
12	2034	-	-	0.4%	0.9%	1.0%	0.4%	1.2%	1.3%	1%	0.0%	0.9%	0.1%	0%	0%
13	2035	-	-	0.5%	0.8%	1.0%	0.3%	1.2%	1.2%	0%	0.0%	0.8%	0.2%	0%	0%
14	2036	-	-	0.5%	0.8%	1.0%	0.3%	1.1%	1.2%	0%	0.2%	0.7%	0.2%	2%	0%
15	2037	-	-	0.6%	0.7%	1.0%	0.2%	1.0%	1.1%	0%	0.3%	0.6%	0.3%	43%	0%
16	2038	-	-	0.6%	0.7%	1.0%	0.2%	1.0%	1.1%	0%	0.3%	0.6%	0.3%	59%	0%
17	2039	-	-	0.6%	0.7%	1.0%	0.2%	1.0%	1.1%	0%	0.3%	0.6%	0.3%	66%	0%
18	2040	-	-	0.6%	0.7%	1.0%	0.2%	1.0%	1.1%	0%	0.3%	0.6%	0.3%	64%	0%
19	2041	-	-	0.6%	0.6%	0.9%	0.2%	0.9%	1.0%	0%	0.2%	0.6%	0.2%	61%	0%
20	2042	-	-	0.5%	0.5%	0.8%	0.2%	0.8%	0.9%	0%	0.2%	0.5%	0.2%	54%	0%
21	2043	-	-	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0%	0.0%	0.0%	0.0%	0%	0%

Note: [1]. This column sums all surface wall zone areas that that are acid generating as a percentage of the total pit wall surface area

* Zone 7 is not mined by the EAC Open Pit but is exposed where Zone 6 is removedSource : NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\Source_term_dev\Sourceterm_PAGPitWall_exposure_IR154_Round3_CCM_rev0.xlsx

The geochemical model was developed to account for mixing of water flowing over the different zones of the open pit walls, as well as mixing with other sources such as the backfill seepage, groundwater inflows and natural runoffs. A yearly water balance for the different inflows and outflows from the open pit sump is provided in Attachment 1. The following assumptions were included in the water balance model to simulate these conditions:

- Catchment areas in the water balance model (SRK 2025a) were used to develop the natural runoff flows and open pit wall runoff flows
- Seepage volumes and concentrations from the backfill were estimated by Okane (Okane 2024)
- Groundwater inflows were developed based on prior groundwater modelling (SRK 2024b)
- Once the open pit sump is full, inflows were equal to outflows

The water quality model was set up using annual timesteps over the 22-year operations period. At each timestep, inflows to the open pit were assigned a source term water quality and mixed based on their relative proportions using Equation 2 (EQ2):

$$C_{sump} = \frac{V_{sump,t_i} \times C_{sump,t_i} + \sum_{i=1}^{n} Q_i \times C_i - C_{sump,t-1} \times Q_{out}}{V_{sump,t_{i+1}} - E_{sump,t_i}} \qquad \text{Eq 2}$$

Where:

- C_{sump}: predicted concentration in the open pit sump
- $V_{sump,\ ti}$: volume of the open pit sump at time i
- $V_{sump,\ ti+1}$: volume of the open pit sump at the subsequent timestep
- $E_{sump,\ ti}$: evaporation from the open pit sump at time i
- C_i: concentration of each inflow to the open pit sump at time i
- Q_i: inflow volume to the open pit sump from input source i
- $C_{sump,t-1}$: concentration of the open pit sump at the previous timestep
- Q_{out}: outflow from the open pit sump

Following mixing, supersaturated mineral phases were identified and selected for equilibration in the model based on commonly observed secondary mineral phases at mine sites (SRK 2024c). Sorption to ferrihydrite was considered using the default values of Dzombak and Morel (1990) which may limit parameters that form oxyanions (e.g. arsenic and selenium) and other trace elements from persisting in solution, should ferrihydrite precipitate in the open pit sump. The open pit sump was assumed to be fully mixed and in equilibrium with the atmosphere under oxidizing conditions. To account for this in the model, the redox potential (Eh) was fixed at 550 millivolts (pe=10). After each timestep, the solution was saved and brought forward to the next timestep as the input for existing lake chemistry.

Exposed wall rock surfaces will produce oxidative load that will be flushed by meteoric water. An annual wall drainage water quality was estimated by calculating the mass released from each stratigraphic zone using Equation 3:

$$C_{j,t} = \frac{L_j \times V_t \times \rho \times F_d}{Q_t} \quad \text{Eq 3}$$

- Where: $C_{j,t}$ is the concentration of parameter j at time t
- L_j is the scaled field barrel release rate of parameter j
- V_t is the cumulative volume of rock exposed along open pit walls at time t
- ρ is the rock density for each type of rock (overburden, non-PAG/PAG and coal seam)
- F_d is the fracture density estimated to be 10% for the open pit walls
- Q_t is the volume of water in contact with the open pit walls at time t prorated to the surface area of each zone

The predicted water qualities for each stratigraphic zone were subsequently mixed in their relative proportions determined based on the site wide water balance model. As noted above, SRK (2024a) indicates that PAG rock will produce acidity after neutralizing minerals have been consumed by acid produced through sulfide oxidation. The timing to onset of acidic conditions is dependent on the available neutralization potential and rock sulfide concentrations and is variable by zone (see SRK 2024a). In the wall rock runoff source term derivation, all PAG zones were assumed to become acidic based on Table 2-1 and equation 1. The predicted wall rock annual concentrations using Equation 2 were subsequently equilibrated using the geochemical modeling code PHREEQC to evaluate if the concentrations would be constrained through precipitation of secondary minerals and adsorption surfaces.

The model was further set up to calculate water quality for the following constituents:

- General Chemistry: pH, alkalinity.
- Major Ions: calcium, magnesium, sodium, potassium, sulfate, chloride.
- Trace Elements (dissolved): aluminum, antimony, arsenic, barium, boron, cadmium, chromium, cobalt, copper, iron, lead, lithium, manganese, mercury, molybdenum, nickel, phosphorus, selenium, strontium, thallium, tin, uranium, vanadium and zinc.

The following additional inputs and assumptions were included in the open pit sump geochemical model:

- A damaged rock zone depth of 2 m and a fracture frequency of 10% was used to calculate the reactive mass from blasted surfaces.
- A damaged rock zone depth of 0.1 m and a fracture frequency of 10% was used to calculate the reactive mass load from free dig areas.
- Water balance model flows recharging the open pit sump (i.e., natural runoffs, backfill seepage) were based on an average climate scenario (SRK 2025a).
- Background surface water quality for unimpacted catchments (SRK 2025a), were used to represent the quality of this source to the open pit sump.
- Backfill inflow and load (combined with groundwater seepage) were used from Okane's modelling (Okane 2024) based on detailed backfill model including reactive transport modelling of oxygen. Alkalinity for the backfill seepage was conservatively selected with a starting alkalinity as measured in groundwater samples (380 CaCO3 mg/L) and mixed with the backfill seepage load as it starts increasing in 2030 (Year 9 of the model, see Okane 2024). The resulting alkalinity was compared to HCT alkalinity results and confirmed to be within the same range.
- Load from talus on the open pit benches was not included in the model and will be limited during operations for safety reasons.

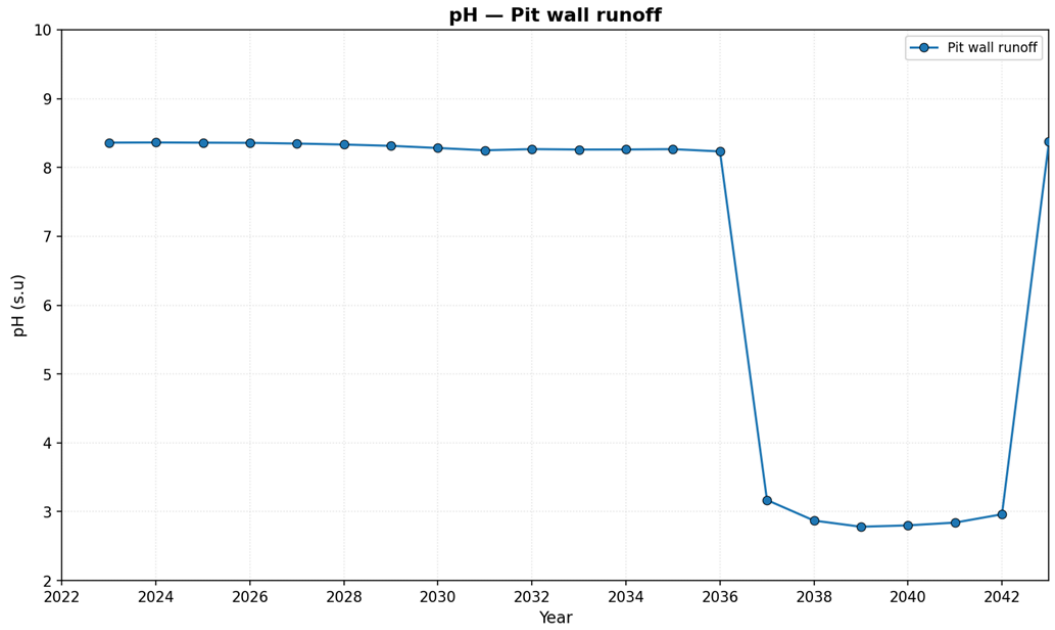
The fully-mixed equilibrated concentrations were modelled between 2022 and 2043 (22 years in total).

4 Open pit wall runoff and open pit sump water quality model results

4.1 Open pit wall runoff acidification

Figure 4-1 provides a timeseries of the mixed open pit wall drainage pH. Open pit wall runoff model results show that the combined open pit wall runoff becomes acidic (pH ~= 3) in year 16 of the model (2037) and remains acidic until the acidic open pit walls are covered by backfill and the construction of the WMP is completed (Figure 4-1). Some metals (e.g. Al, As, Cd, Co, Cr, Cu, Fe, Pb, Ni and Zn) also increase in the runoff of the open pit walls following the acidification of the open pit walls, with the highest concentrations occurring in year 17 (2038) of the model. This is due to the highest proportion of

acid generating open pit walls (70% of total pit wall surface area) being exposed in that year. Detailed annual water quality predictions for the open pit wall runoff are provided in Attachment 2. While the open pit wall runoff becomes acidic, this inflow is combined downstream in the open pit sump with other inflows containing excess alkalinity such as the backfill seepage, combined with the groundwater seepage to the open pit.



Source: NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\with_wqg

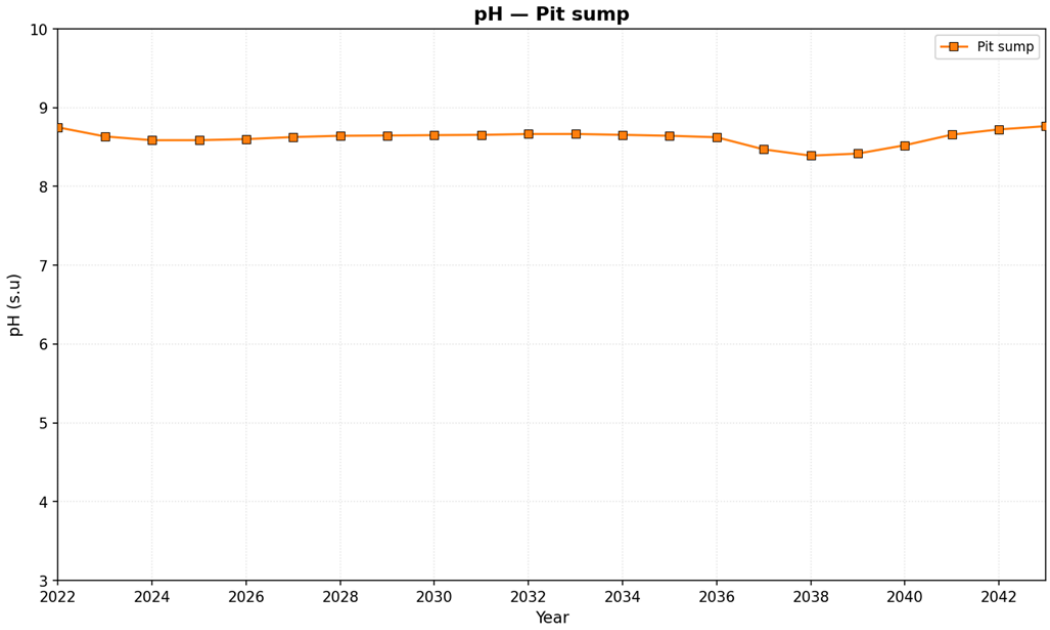
Figure 4-1:pH model results (PHREEQC) in combined open pit wall runoff over time

4.2 Open pit sump water quality model results

Figure 4-2 provides a timeseries plot of the modelled open pit sump pH. The open pit sump water quality shows that the open pit sump water does not become acidic during the 22 years modelled, despite the open pit wall runoff becoming acidic. No acidic open pit walls remain exposed in closure. Timeseries for open pit sump water quality predictions are provided in Attachment 2. Table 4-1 shows the model results for year 17 and year 22 of the model simulation (2038 and 2043). These results were selected to show the impact of the acidification of open pit walls (Y17) and the impact of backfill seepage (Y22) on the open pit sump water quality.

The pH is predicted to remain around 8.5 with a slight decrease (maximum decrease = 0.3 pH units) when the open pit wall runoff becomes acidic. As discussed in Section 4.1, the open pit walls are predicted to become acidic. The open pit sump is predicted to be alkaline because of excess alkalinity in seepage from the non-PAG rock backfill. Based on this observation, a sensitivity analysis was run assigning an alkalinity of 100 $CaCO_3$ mg/L to the backfill seepage, instead of using the predicted value which is greater than 380 $CaCO_3$ mg/L. An alkalinity of 100 mg $CaCO_3$/L was selected based on

observed concentrations in the Zone 1 HCT. Note, the alkalinity in the zone 1 field barrel ranged from 68 to 1,990 mg $CaCO_3$/L with an average of 1,175 mg $CaCO_3$/L. Assigning an alkalinity of 100 mg $CaCO_3$/L to the backfill seepage is therefore considered a conservative scenario. The open pit sump was predicted to be circumneutral to alkaline (minimum pH=7.7) in the sensitivity scenario.



Source: NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\with_wqg

Figure 4-2: Predicted Open pit Sump pH

The water quality model results from the open pit sump developed in this IR response are reported for year 17 (2038) and year 22 (2043) of the model and the Final EAC Project Case (2024) in Table 4-1.

Year 17 is the first year that overall wall run-off has an acidic pH and at the end of year 22 is when the overall wall run off is predicted to be alkaline after wall covering is completed.

While the acidification of the open pit walls does not result in the acidification of the open pit sump, slightly higher concentrations for specific metals are modelled to occur in the pit sump starting year 17. Metal concentrations are modeled. to stay slightly elevated even after the pit walls are covered by backfill and the net drainage from the open pit walls is alkaline due to increasing loads present in seepage from the backfill material. The table shows the resultant parameter concentrations in the open pit sump due to open pit wall runoff which only accounts for approximately 0.1% of the total load to the open pit sump and backfill seepage which accounts for the remaining 99.9% in year 22 of the model.

As can be seen in Table 4-1, some constituents concentrations are predicted to be lower (e.g., sulfate) and other constituents are predicted to be higher (e.g., aluminum) in the pit sump in the updated predictions compared to the EA water quality predictions. This occurs for the following two reasons:

- The pit wall source terms developed as part of the EA conservatively assumed that all of the rock in the damaged rock zone (i.e., the reactive mass did not consider a network of fractures) would contribute load to incident precipitation falling on the pit walls (SRK 2024). This assumption was updated in this IR response to include a 10% fracture frequency to better represent the conceptual model. This change will result in a decrease in the reactive mass and the load to the pit sump.
- The release rates used in the pit sump water quality modelling used updated barrel release rates which include an additional two years of monitoring data. The release rates were higher for some constituents (e.g., aluminum) which results in increases

Despite the above changes, as noted above, the pit wall only accounts for a small percentage of the total flow to the pit sump and the pit sump quality is dominated based on other inflows. The acidification of the pit wall in Year 17 results in constituent concentration increases of some constituents (e.g., nickel). However, the predicted concentrations for most constituents are generally within the same order of magnitude as the EA case. The overall outcomes of the acidification of the pit wall scenario are considered similar to the EA case.

Table 4-1: Open pit Sump Model Results in Years 17 (2038) and 22 (2043) with WLBM pit sump results as reference as well as the % open pit wall loadings to open pit sump-

Parameter	Unit	Pit sump model results (Y17)	WLBM results (Y17)	Pit sump model results (Y22)	WLBM results (Y22)	% pit wall loadings to pit sump (Y17) [1]	% pit wall loadings to pit sump (Y22) [1]
pH	pH unit	8.4	N/A	8.8	N/A	N/A	N/A
Alkalinity	CaCO3 mg/L	161	29	415	149	0.0	6.5
Chloride	mg/L	0.77	1.46	3.0	4.00	1.3	0.028
Sulfate	mg/L	36	66.4	169	230.5	15	0.083
Aluminum, Dissolved	mg/L	0.0060	0.0036	0.013	0.0089	0.00	6.5
Antimony, Dissolved	mg/L	0.000068	0.000122	0.00032	0.000416	1.2	0.038
Arsenic, Dissolved	mg/L	0.0000059	0.0001163	0.00036	0.0003348	8.3	0.027
Barium, Dissolved	mg/L	0.016	0.007	0.029	0.013	0.069	0.006
Boron, Dissolved	mg/L	0.033	0.064	0.13	0.182	0.58	0.027
Cadmium, Dissolved	mg/L	0.0000232	0.0000018	0.0000058	0.0000046	92	0.041
Chromium, Dissolved	mg/L	0.00013	0.00005	0.00015	0.00012	51	0.053
Cobalt, Dissolved	mg/L	0.0012	0.0003	0.00036	0.0005	87	0.045
Copper, Dissolved	mg/L	0.00026	0.00022	0.0017	0.00165	64	0.021
Iron, Dissolved	mg/L	0.0086	0.000033	0.0096	0.0057	98	0.036
Lead, Dissolved	mg/L	0.00000033	0.00003332	0.00025	0.00567715	9.4	0.015
Manganese, Dissolved	mg/L	0.000011	0.002053	0.0000011	0.002598	96	0.010
Mercury, Dissolved	mg/L	0.0000011	0.0000007	0.0000022	0.0000016	9.8	0.98
Molybdenum, Dissolved	mg/L	0.0010	0.0027	0.0057	0.0079	0.57	0.028
Nickel, Dissolved	mg/L	0.0024	0.0005	0.0011	0.0014	90	0.068
Selenium, Dissolved	mg/L	0.0025	0.0052	0.0041	0.0057	1.1	0.088
Strontium, Dissolved	mg/L	0.091	0.124	0.29	0.34	4.5	0.023
Thallium, Dissolved	mg/L	0.0000087	0.0000030	0.000043	0.0000081	1.4	0.0081
Uranium, Dissolved	mg/L	0.000041	0.000714	0.000043	0.002466	5.4	0.10
Zinc, Dissolved	mg/L	0.006161	0.000503	0.001035	0.001232	93.1	0.04

Source: NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\Source_term_dev\WLBM_PHREEQC_comparison_pitwall_ops_20260401_CCM.xlsx

Note: 1 pit wall loadings contribution to total load in pit sump is calculated for this geochemical model developed in this memo only

5 Monitoring and Mitigation Strategies

5.1 Monitoring Measures

TML will develop an adaptive management plan which includes the following monitoring strategies to identify acidic drainage and manage it if necessary. This monitoring strategy would be based on the ML/ARD management plan (SRK 2025b) as follows:

> *"Annual seep surveys will be conducted along the toe of mine rock storage areas during the freshet to identify any new seeps. Freshet provides the best opportunity to observe seepage. If new seeps are identified, water is collected and analyzed for pH, major ions, and dissolved trace elements. A specific seep survey sampling procedure with sample locations will be developed as seep locations are identified following placement of materials"*

Additional monitoring of seepage from the open pit walls could be conducted to understand actual wall conditions. If new seeps are identified, water can be collected and analyzed for pH, major ions, and dissolved trace elements. A specific seep survey sampling procedure with sample locations will be developed as seep locations are identified following the exposure of the open pit wall. This will be incorporated into the ML/ARD management plan during the permitting process if it is selected as a viable and reliable option.

Wall wash studies could be conducted to understand potential for water quality discharges from the walls. The wash water can be collected and analyzed for pH, major ions, and dissolved trace elements. A specific seep survey sampling procedure with sample locations will be developed as seep locations are identified following the exposure of the open pit wall. This will be incorporated into the ML/ARD management plan during the permitting process if it is selected as a viable and reliable option.

5.2 Mitigation Measures

A review of the mine plan will be conducted during permitting to determine if wall areas such as zone 6 could be covered sooner than what was provided in the EAC application even within the West Management Pond.

In addition to actively monitoring the seeps, and any other area where PAG material has been deposited (i.e. water contained in the management ponds), an active treatment plant will be provided as a contingency measure in case treatment of water is required for discharge. The proposed water treatment plant provided from the BAT process could treat acidic water from the open pit as it has an HDS lime treatment included in its process. During permitting a trigger action response plan will be developed for the implementation of the contingency measure based on monitoring.

Regards,
SRK Consulting (Canada) Inc.

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Attachments:

Attachment 1	Yearly water balance for geochemical model
Attachment 2	Water quality model results for open pit wall runoffs and open pit sump (geochemical model in PHREEQC)

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Attachment 1 Yearly water balance for geochemical model

Table A-1: Yearly water balance used for the geochemical model of the pit sump (from Final EAC project Case 2024, average climat

Year	Backfill and groundwater seepage	Natural runoff	Pit wall runoff	Evaporation from pit sump	Other Outflows from pit sump	Pit sump volume
	m3/yr	m3/yr	m3/yr	m3/yr	m3/yr	m3
2022	11,392	29,032	-	9,125	-	31,299
2023	56,772	140,736	61,213	9,131	237,068	43,821
2024	108,407	264,103	206,173	9,138	558,889	54,476
2025	147,529	307,961	319,785	9,144	760,607	60,000
2026	183,008	322,384	391,330	9,150	887,571	60,000
2027	217,859	262,527	463,614	9,157	934,844	60,000
2028	253,400	226,664	537,300	9,163	1,008,201	60,000
2029	287,494	219,547	610,630	9,170	1,108,501	60,000
2030	313,663	212,767	636,189	9,177	1,153,442	60,000
2031	315,493	204,990	594,214	9,187	1,105,510	60,000
2032	310,430	199,298	552,706	9,198	1,053,237	60,000
2033	299,664	204,123	525,346	9,208	1,019,925	60,000
2034	291,174	229,503	519,180	9,218	1,030,639	60,000
2035	284,659	258,532	513,089	9,228	1,047,052	60,000
2036	280,394	292,785	507,430	9,238	1,071,371	60,000
2037	276,647	332,510	500,896	9,249	1,100,805	60,000
2038	274,857	383,434	464,725	9,259	1,113,758	60,000
2039	280,729	446,685	387,115	9,269	1,105,261	60,000
2040	299,577	517,598	309,280	9,278	1,117,177	60,000
2041	322,438	576,154	230,641	9,285	1,119,948	60,000
2042	338,270	634,656	151,612	9,292	1,115,246	60,000
2043	340,302	703,829	72,142	9,299	1,106,974	60,000

Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Water%20Balance%20Modelling/Model/202309_Updated%20EA%20Case/PAG_Pitwall/Source_term_dev/Sourceterm_PAGPitWall_exposure_IR154_Round3_CCM_rev0.xlsx?web=1

Attachment 2 Water quality model results for open pit wall runoffs and open pit sump (geochemical model in PHREEQC)

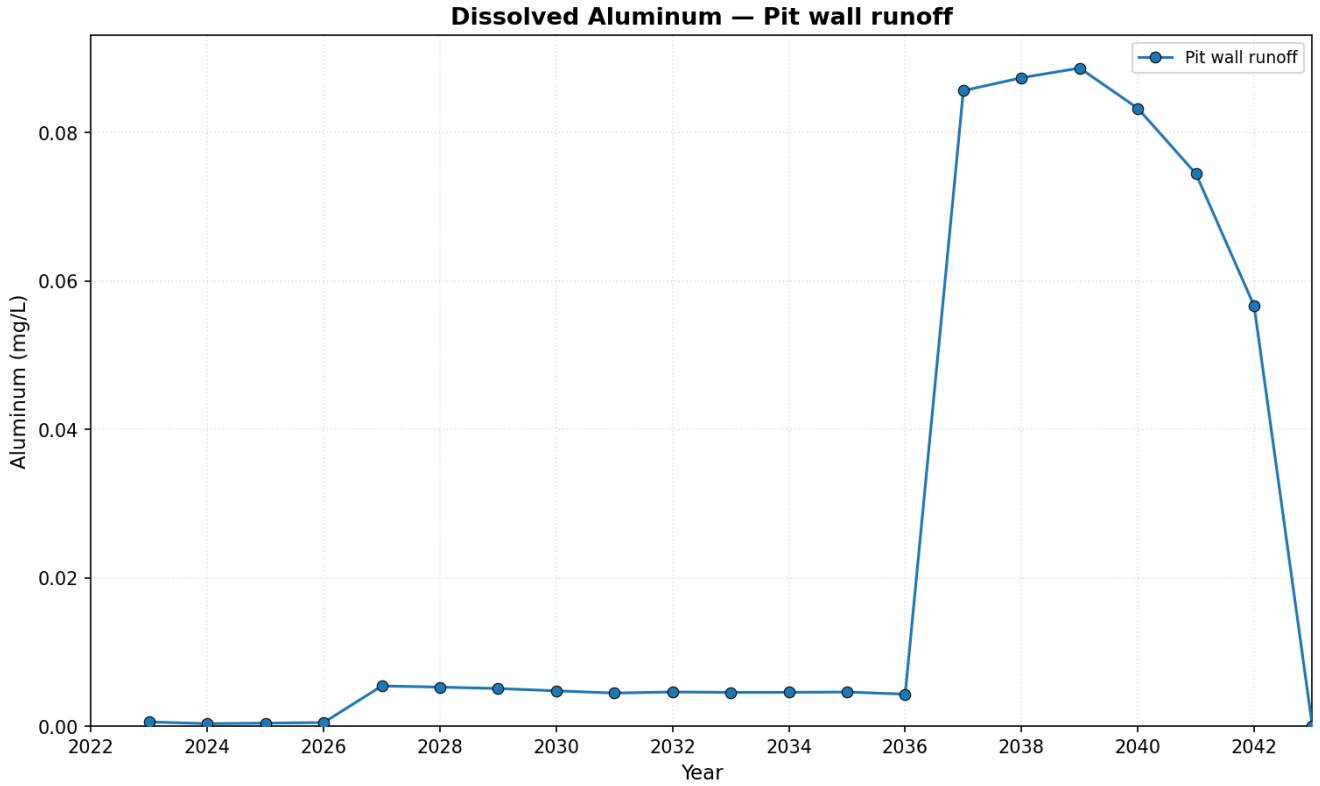
MCM Geoscience IR 1572c - Attachment 2

Water quality results for geochemical modelling of pit wall runoff and pit sump

April 15, 2026

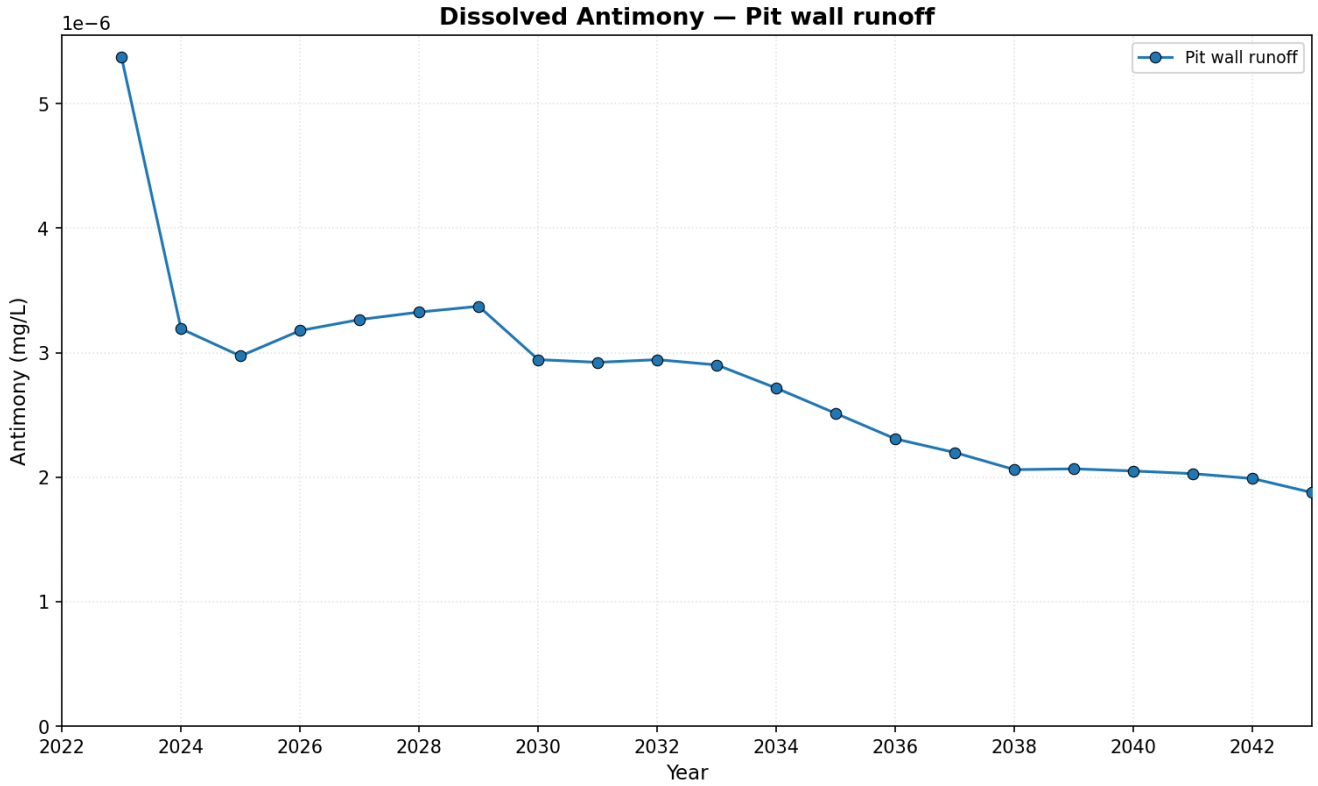
srk consulting

Dissolved Aluminum — Pit Wall Runoff



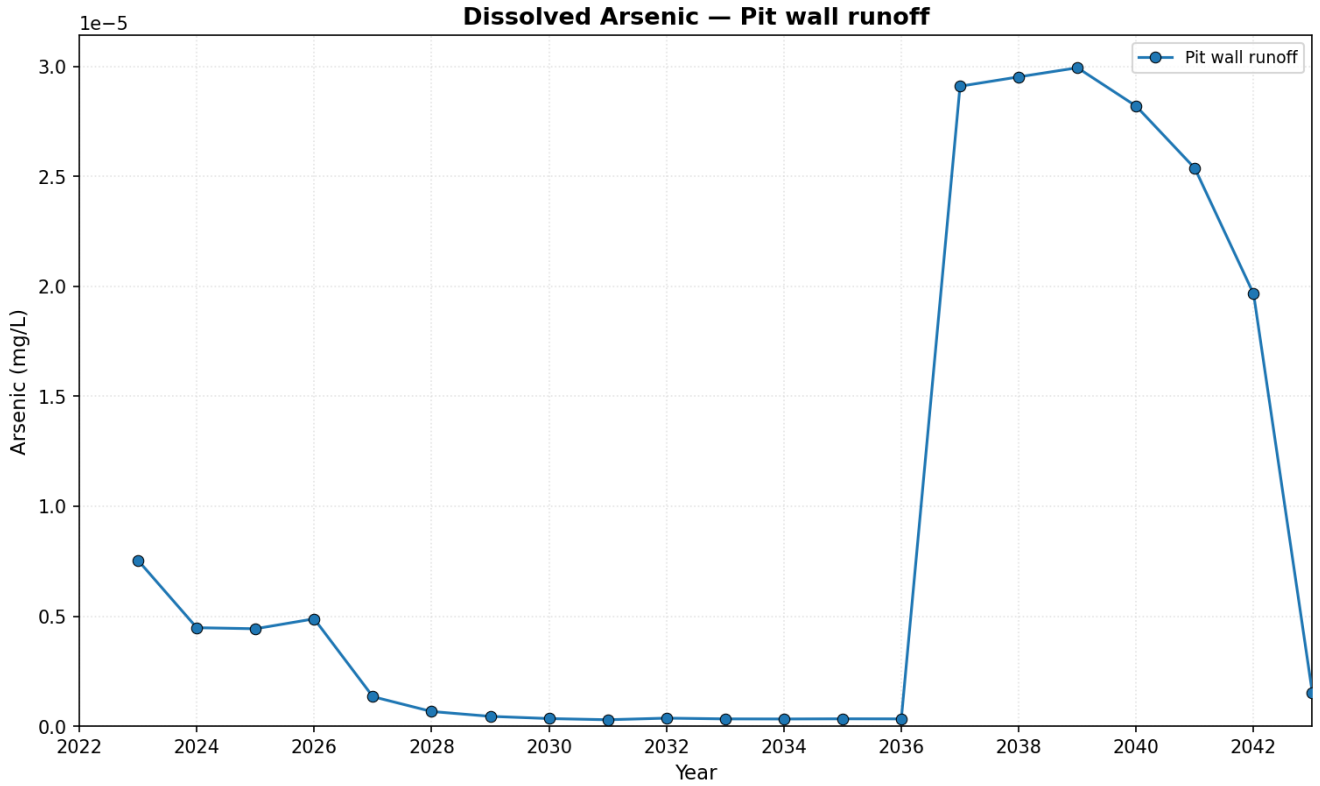
Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Aluminum_pit_wall.png

Dissolved Antimony — Pit Wall Runoff



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Antimony_pit_wall.png

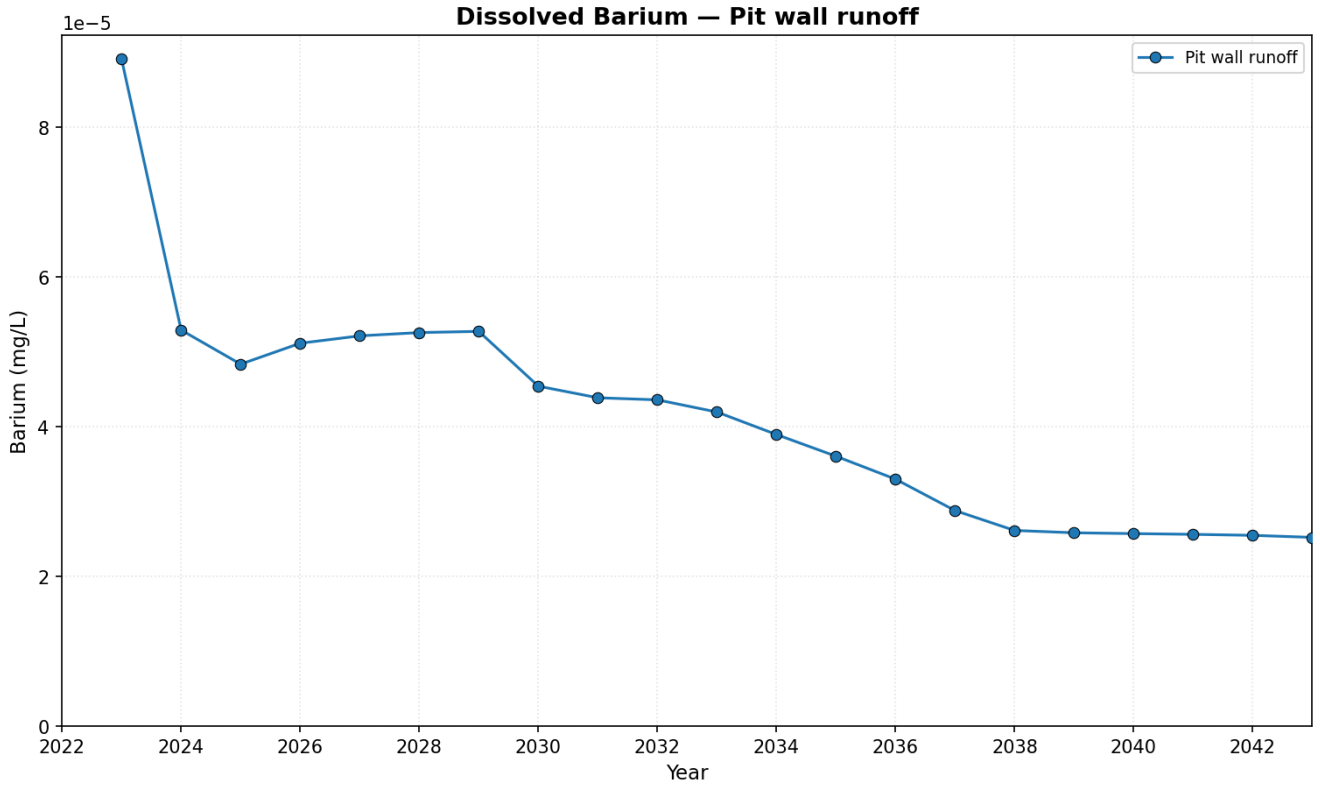
Dissolved Arsenic — Pit Wall Runoff



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Arsenic_pit_wall.png

srk consulting

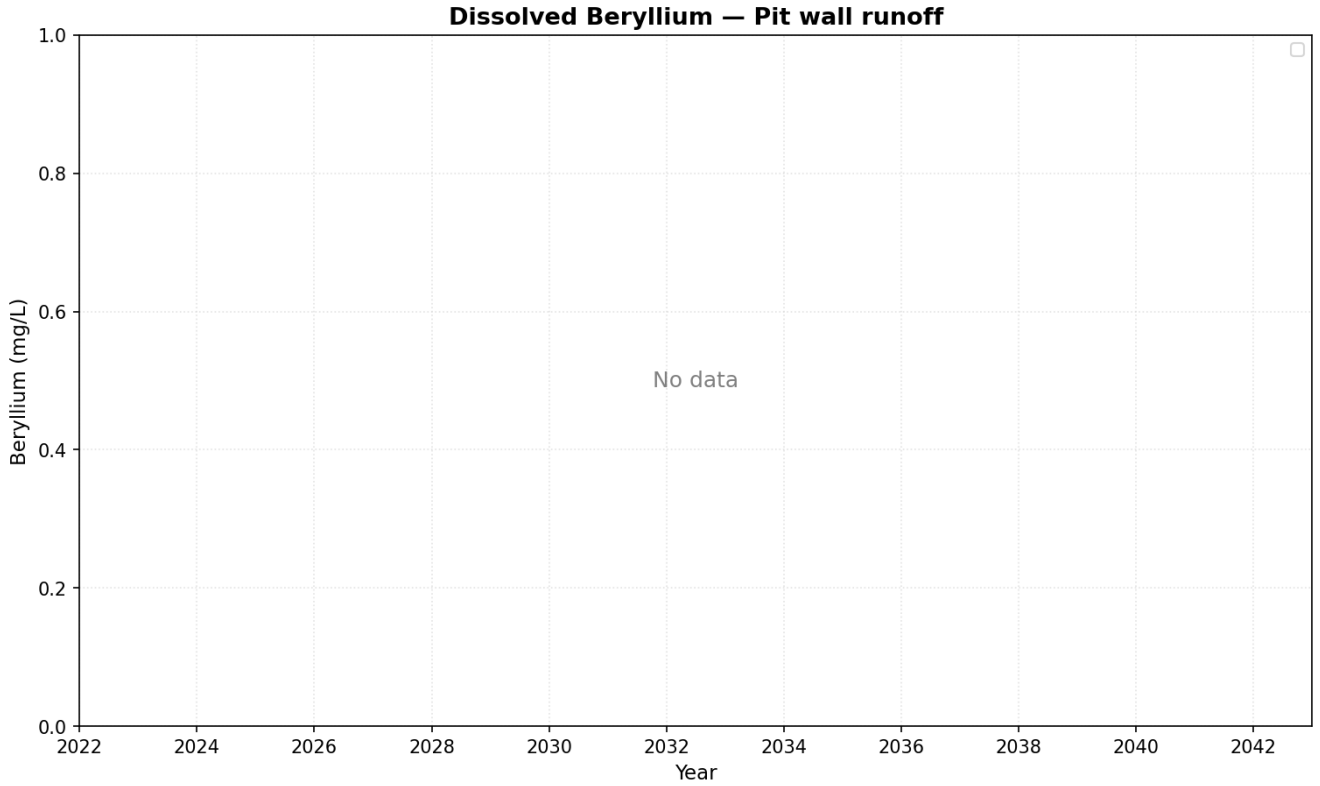
Dissolved Barium — Pit Wall Runoff



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Barium_pit_wall.png

srk consulting

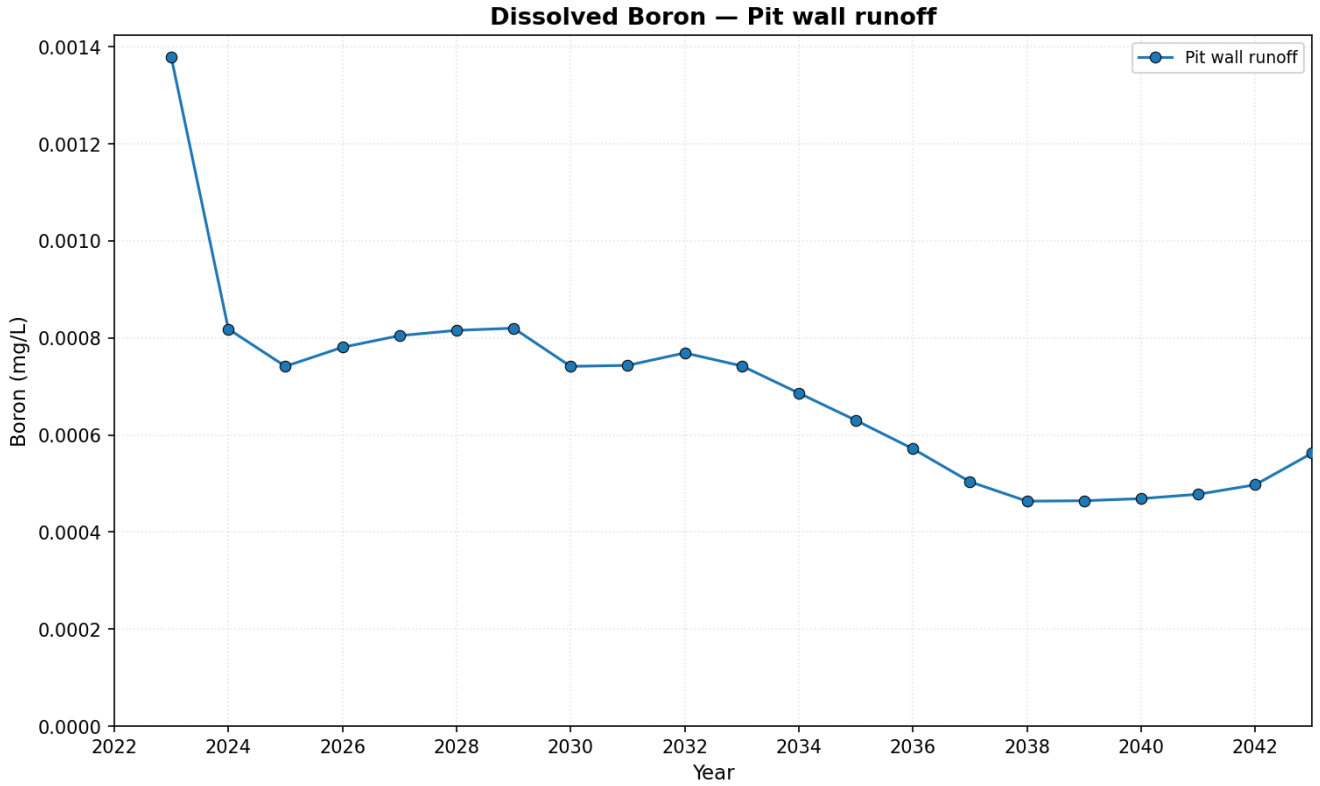
Dissolved Beryllium — Pit Wall Runoff



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Beryllium_pit_wall.png

srk consulting

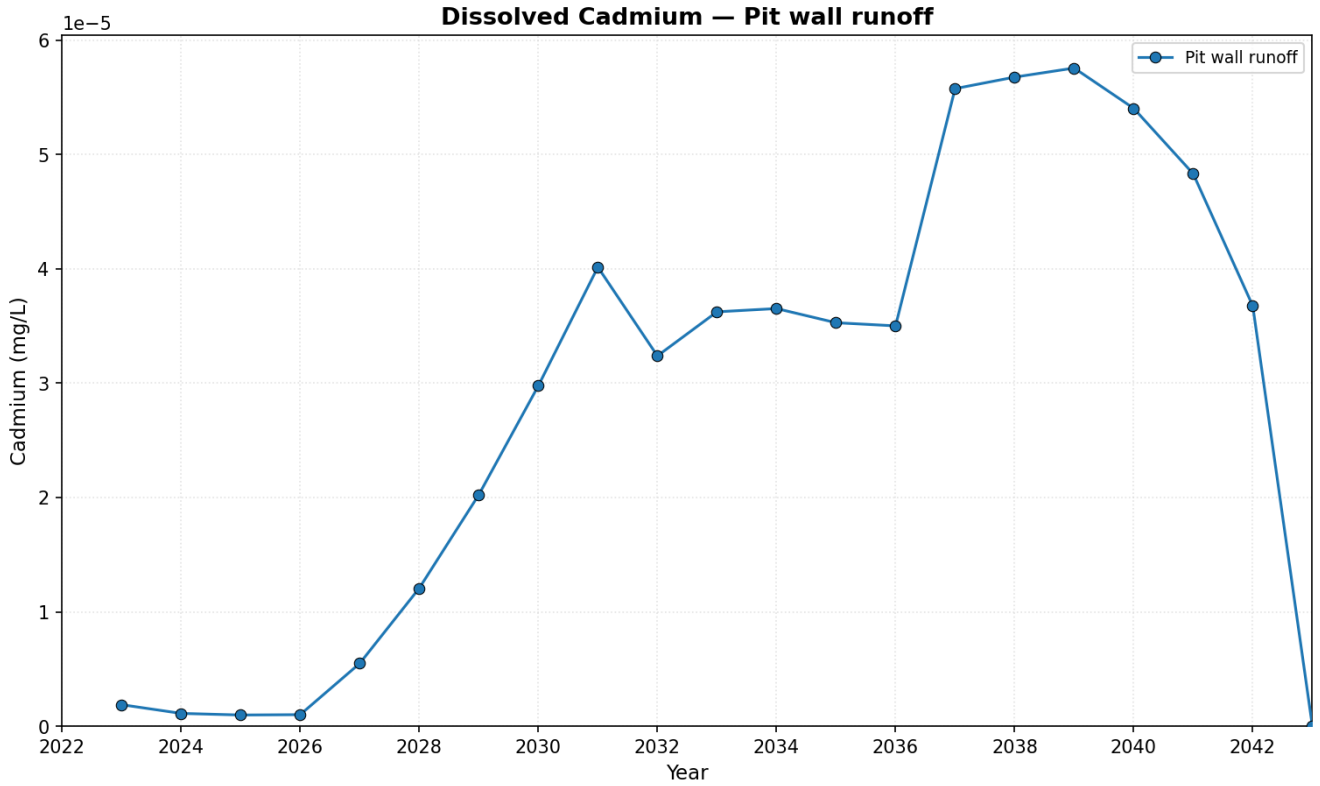
Dissolved Boron — Pit Wall Runoff



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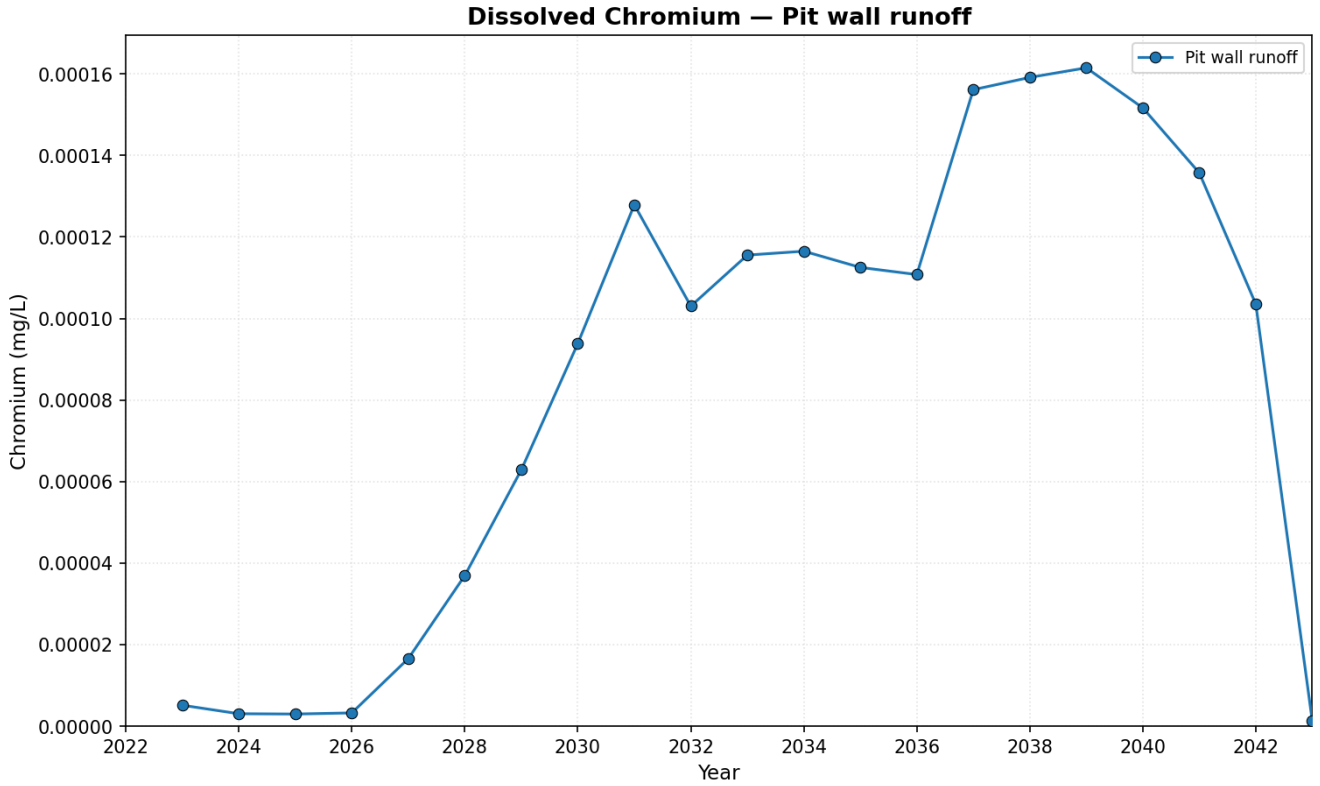
srk consulting

Dissolved Cadmium — Pit Wall Runoff



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Cadmium_pit_wall.png

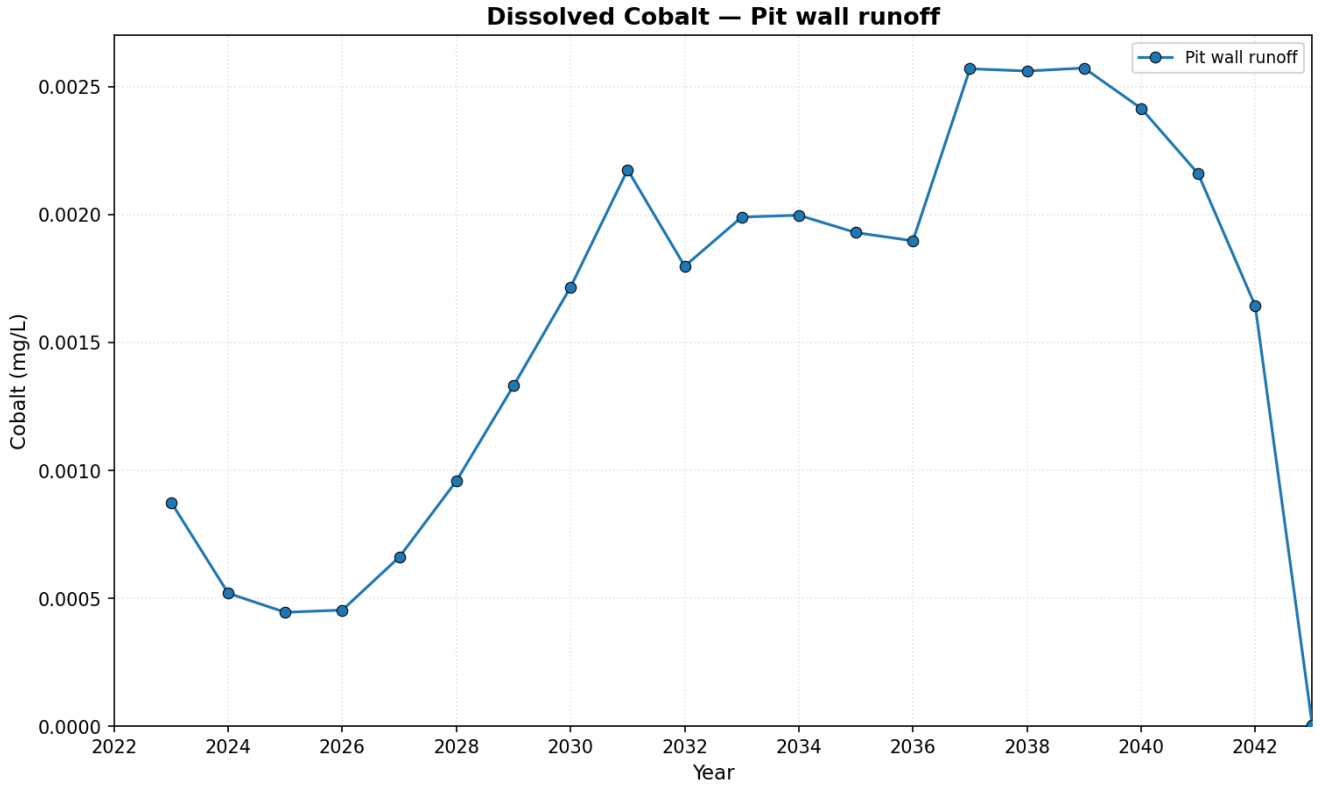
Dissolved Chromium — Pit Wall Runoff



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Chromium_pit_wall.png

srk consulting

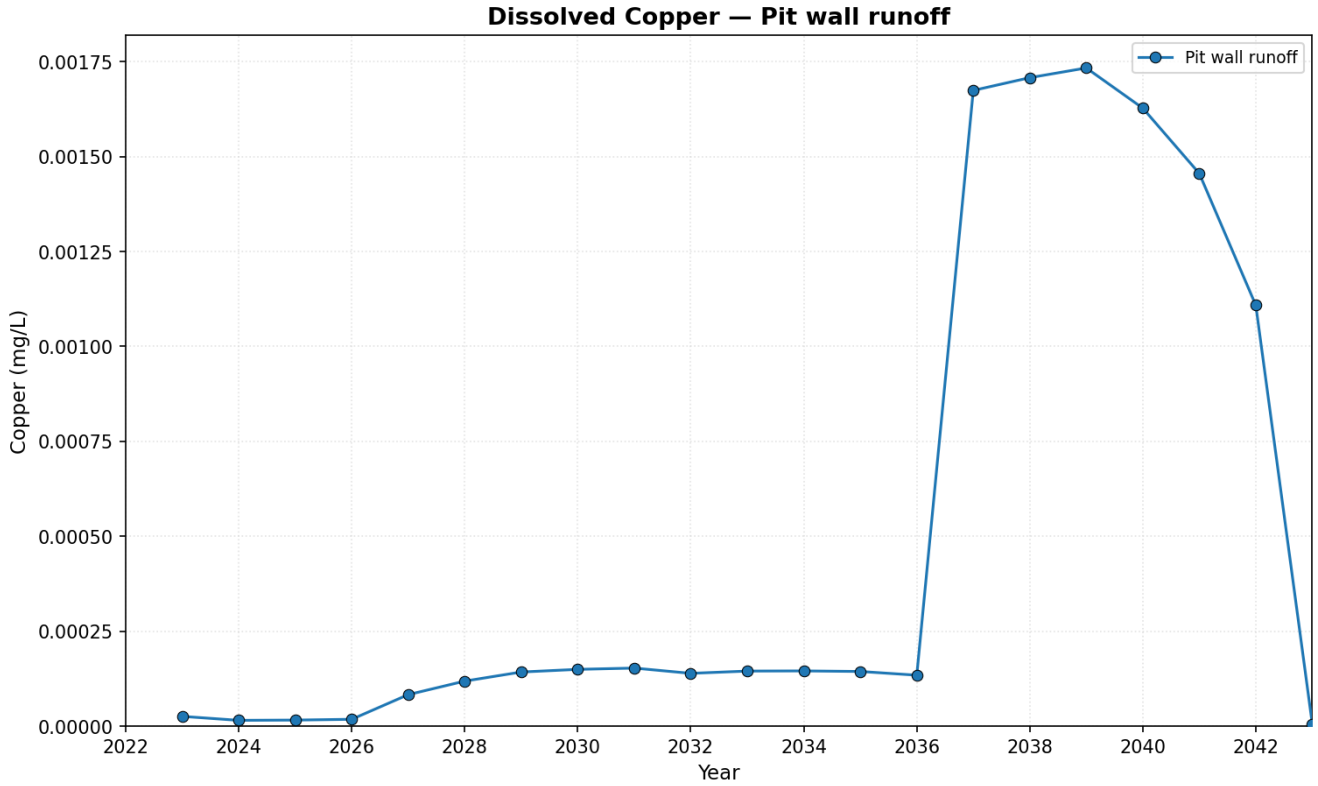
Dissolved Cobalt — Pit Wall Runoff



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Cobalt_pit_wall.png

srk consulting

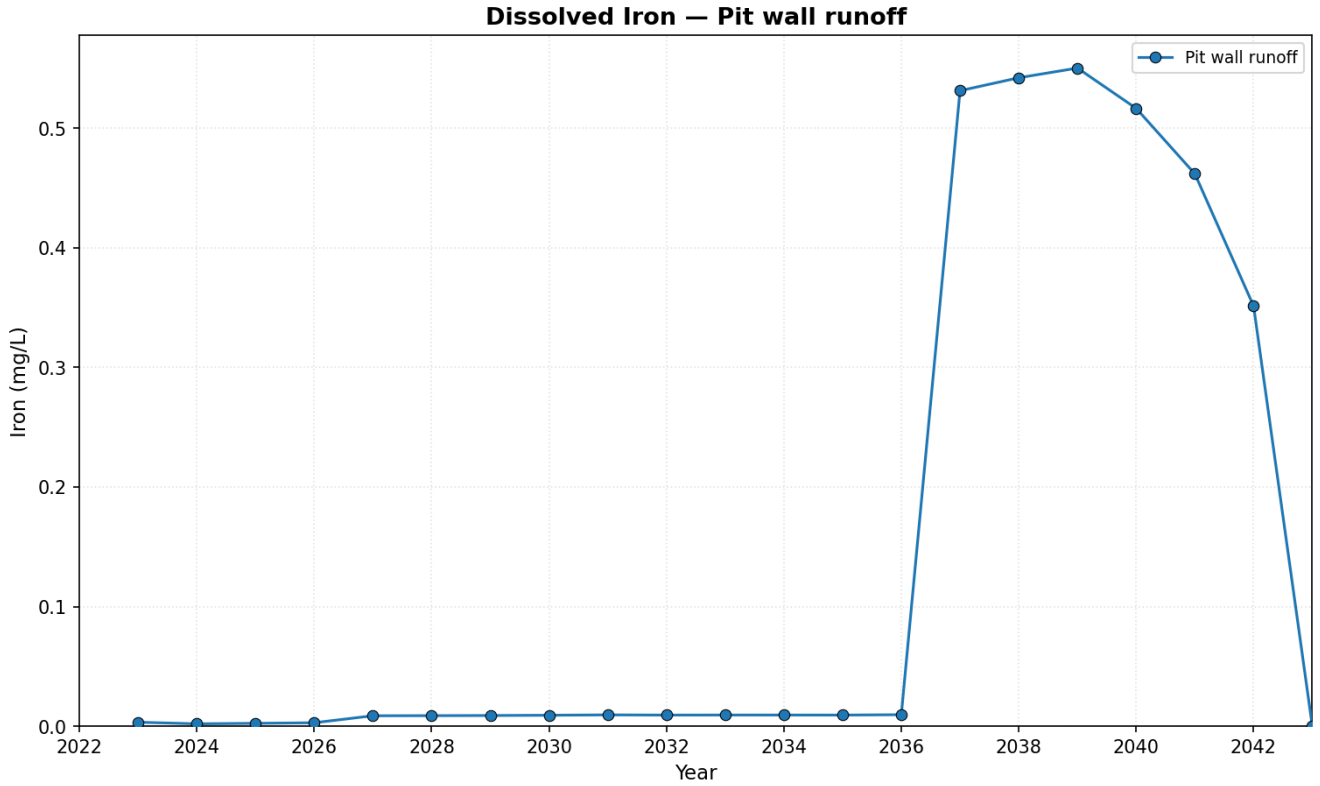
Dissolved Copper — Pit Wall Runoff



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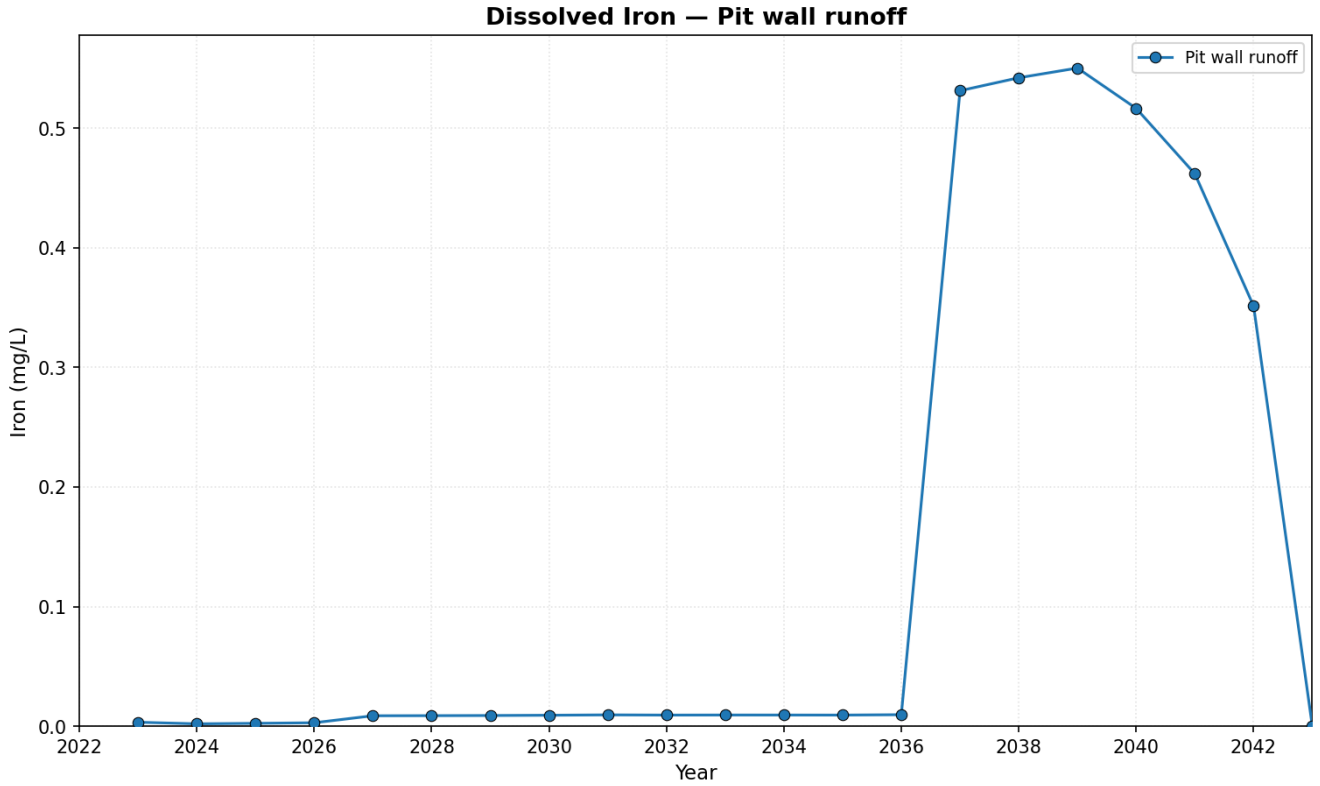
srk consulting

Dissolved Iron — Pit Wall Runoff



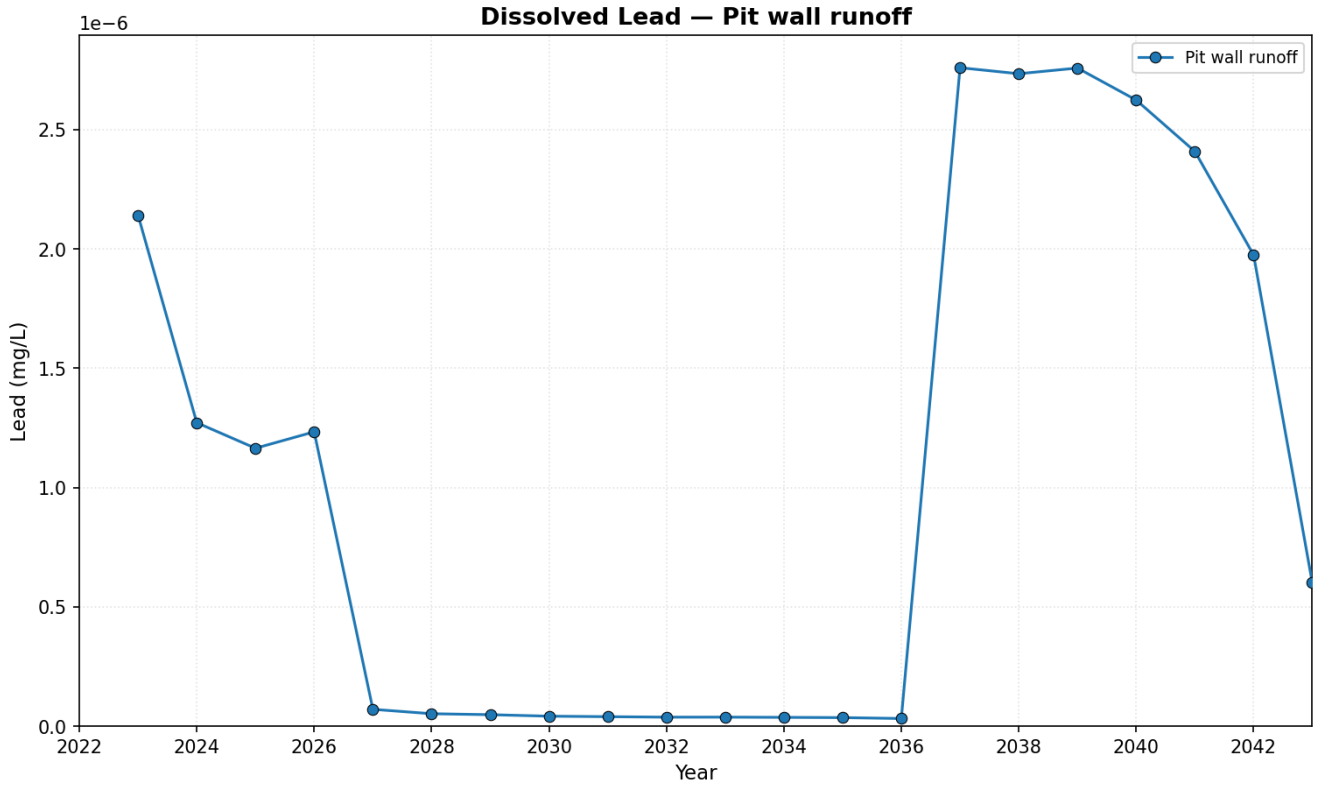
Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Iron_Dissolved_pit_wall.png

Total Iron — Pit Wall Runoff



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Iron_Total_pit_wall.png

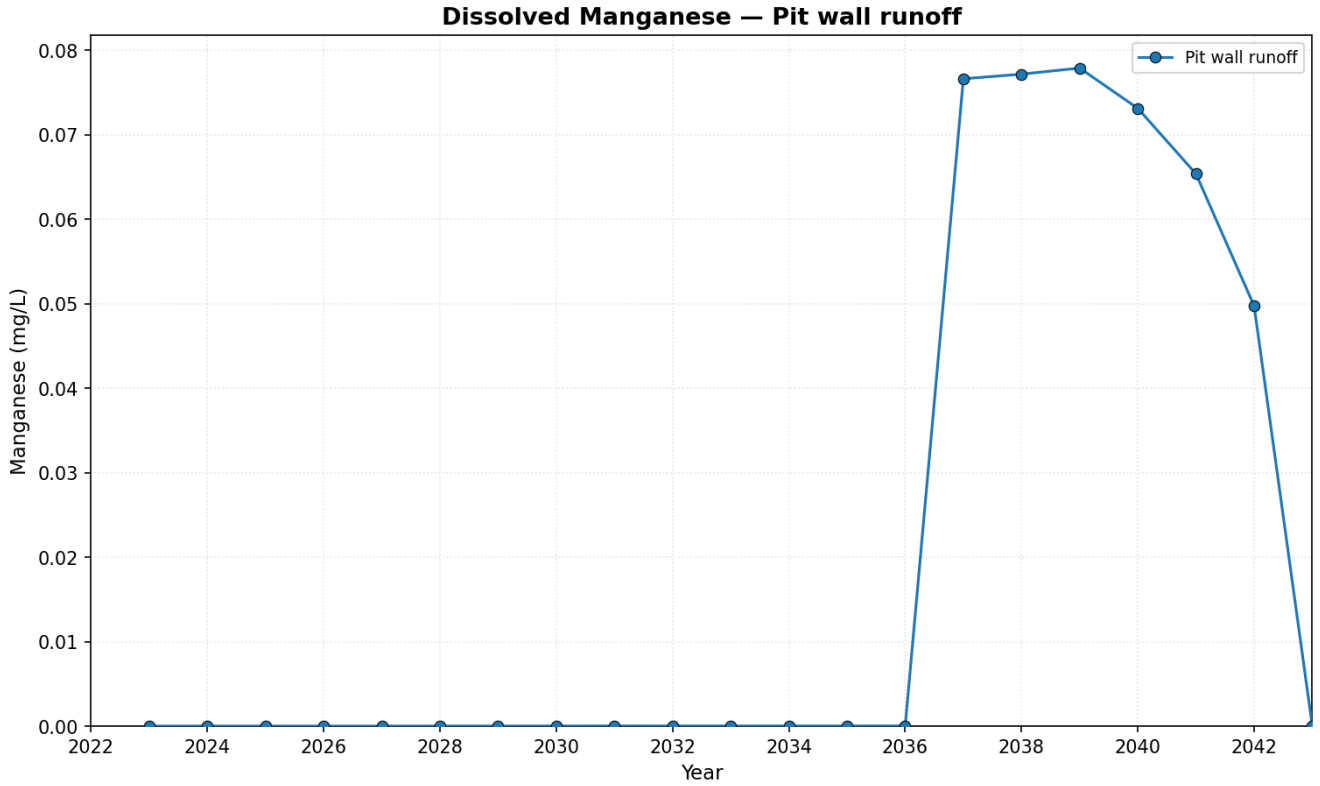
Dissolved Lead — Pit Wall Runoff



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Lead_pit_wall.png

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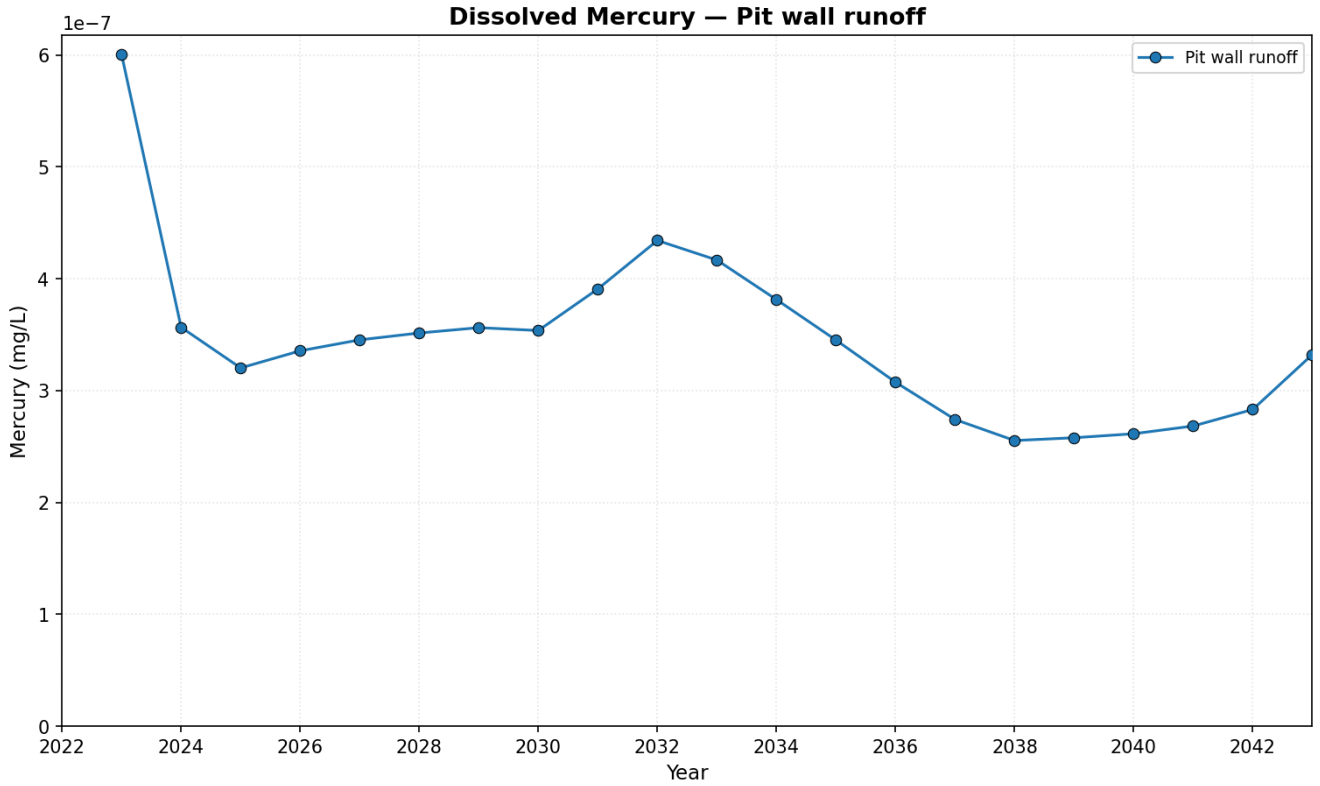
Dissolved Manganese — Pit Wall Runoff



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Manganese_pit_wall.png

srk consulting

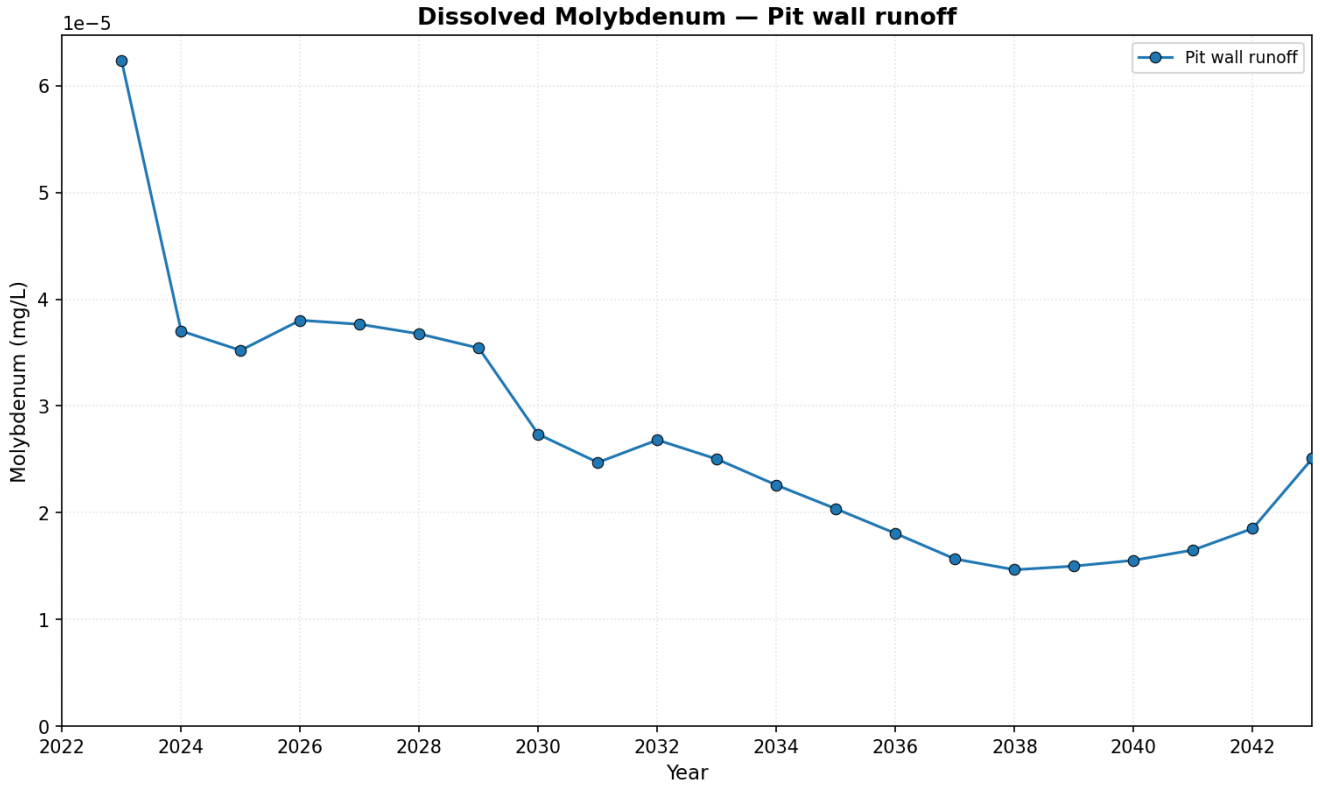
Dissolved Mercury — Pit Wall Runoff



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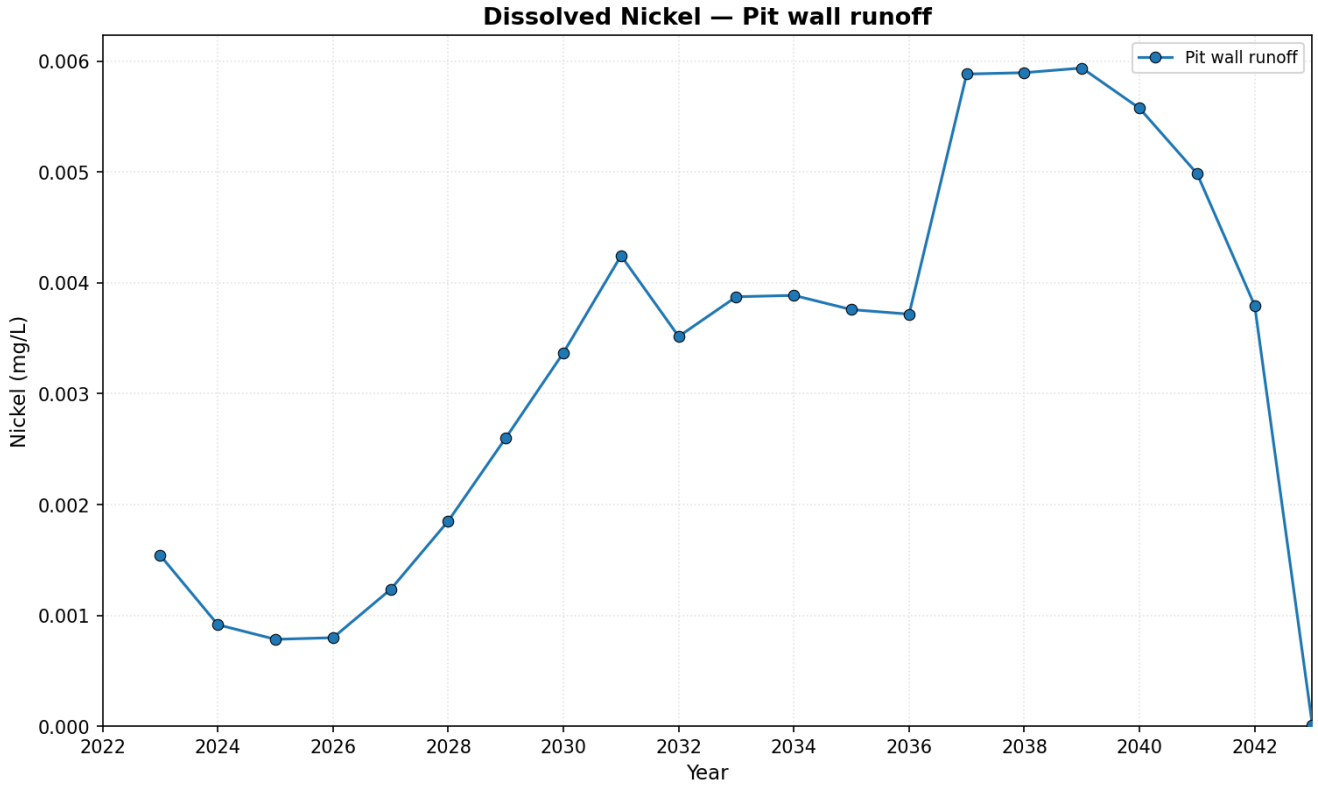
srk consulting

Dissolved Molybdenum — Pit Wall Runoff



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Molybdenum_pit_wall.png

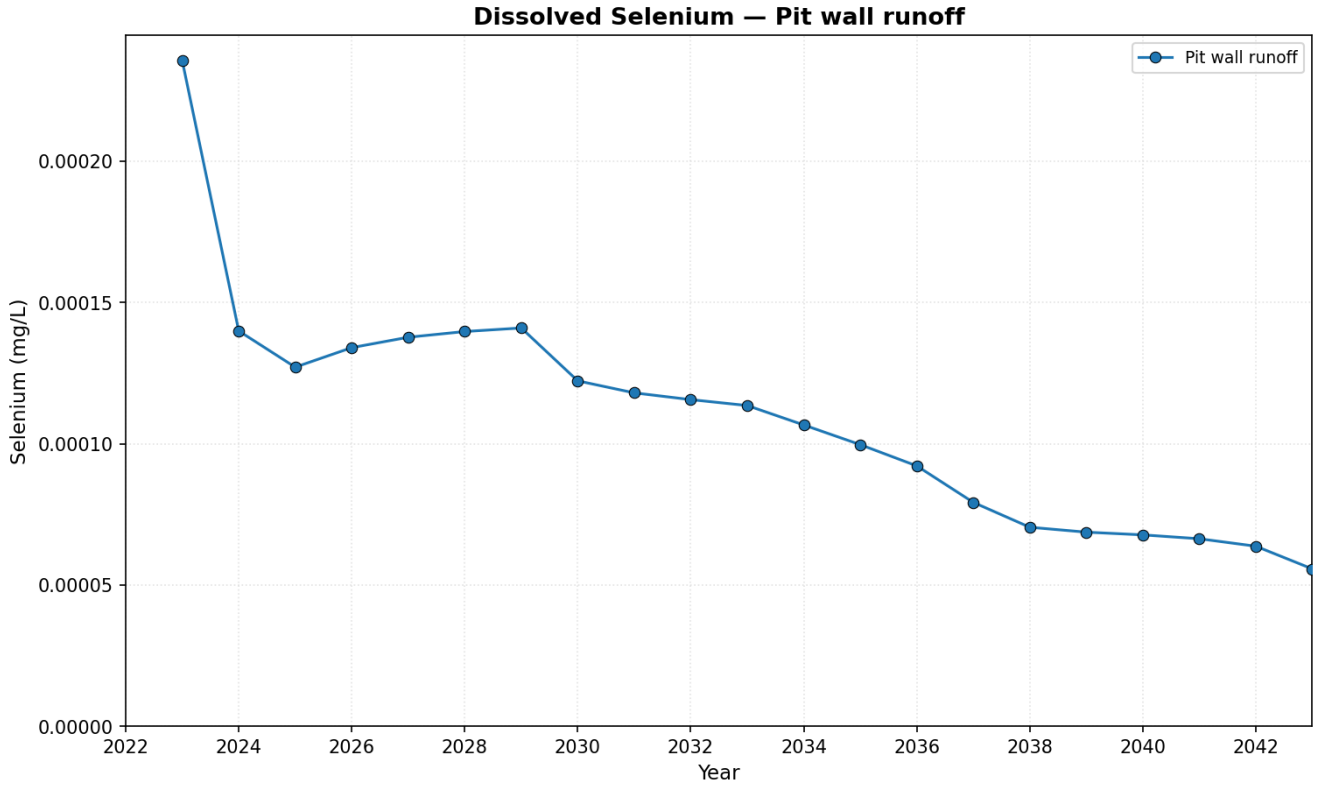
Dissolved Nickel — Pit Wall Runoff



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srk consulting

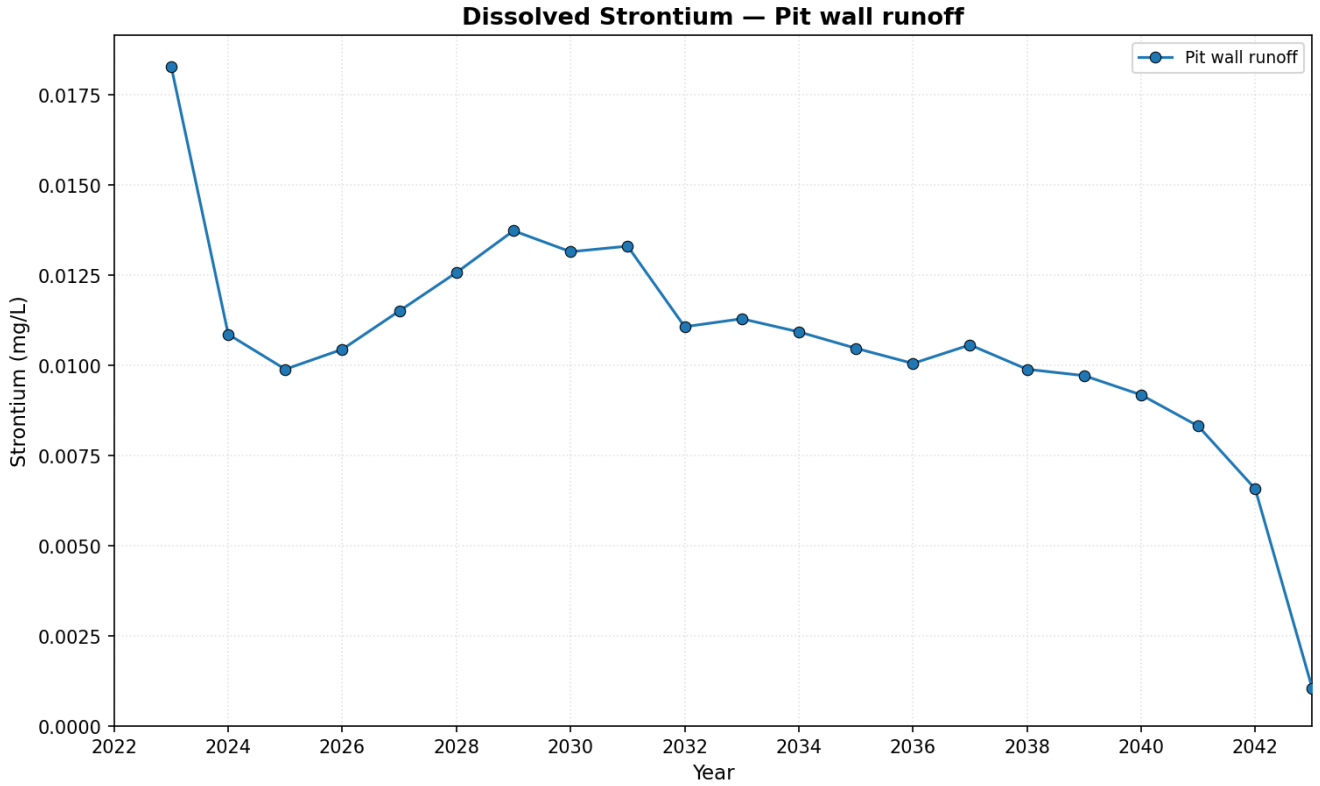
Dissolved Selenium — Pit Wall Runoff



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srk consulting

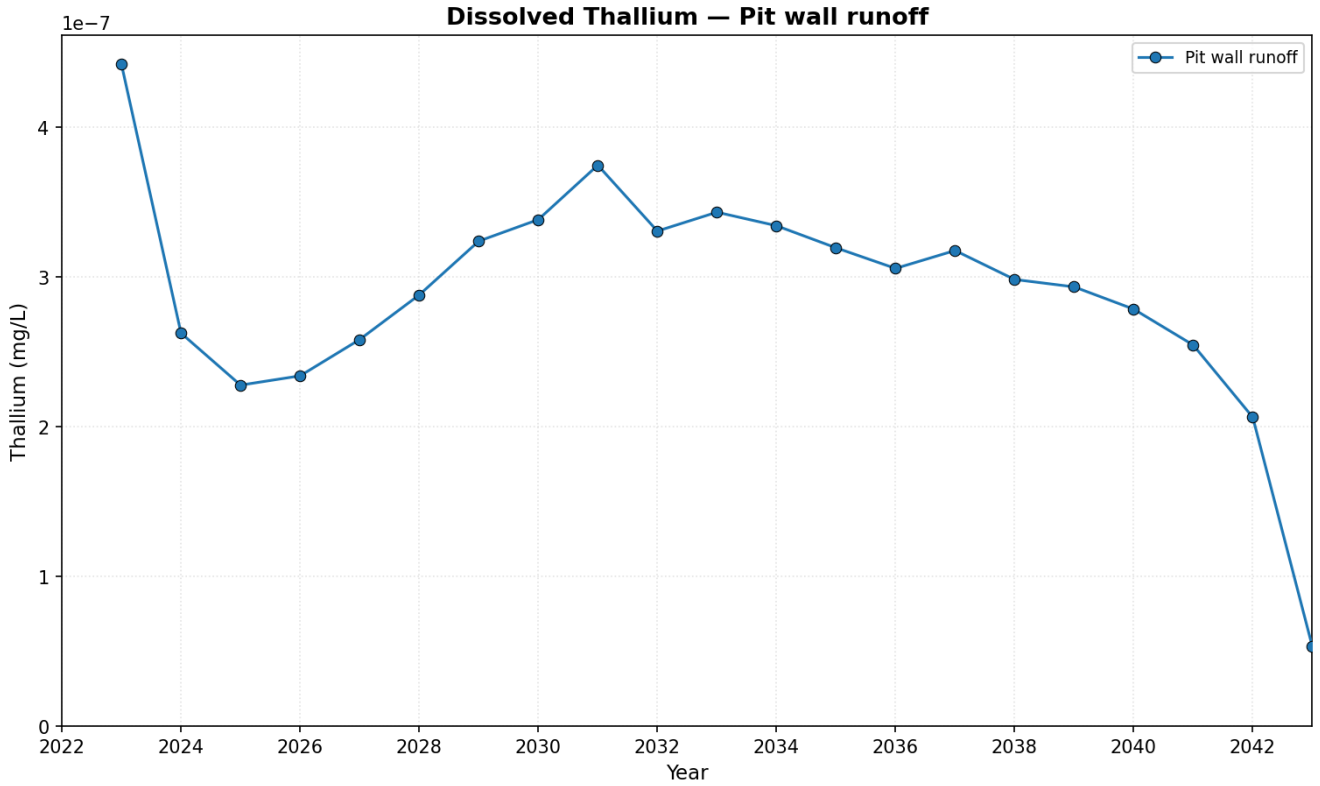
Dissolved Strontium — Pit Wall Runoff



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Strontium_pit_wall.png

srk consulting

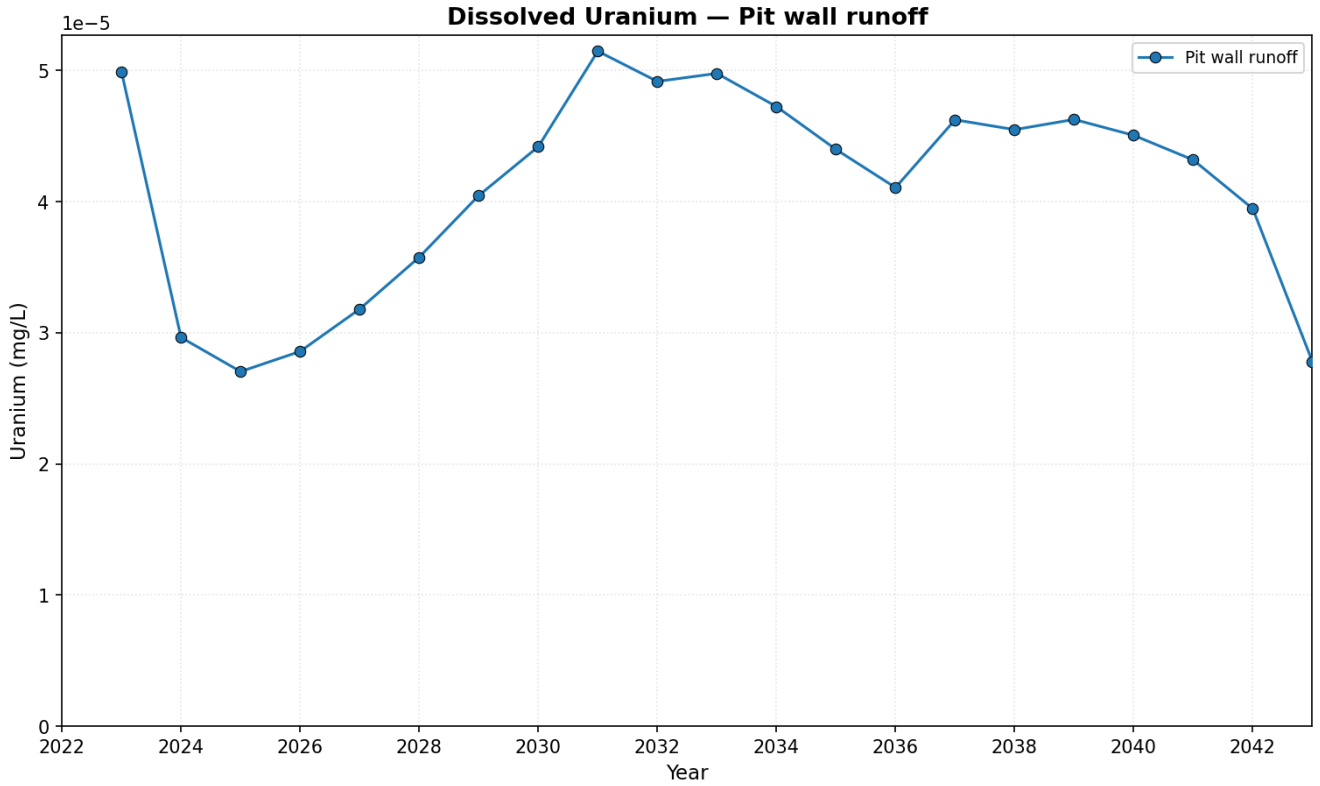
Dissolved Thallium — Pit Wall Runoff



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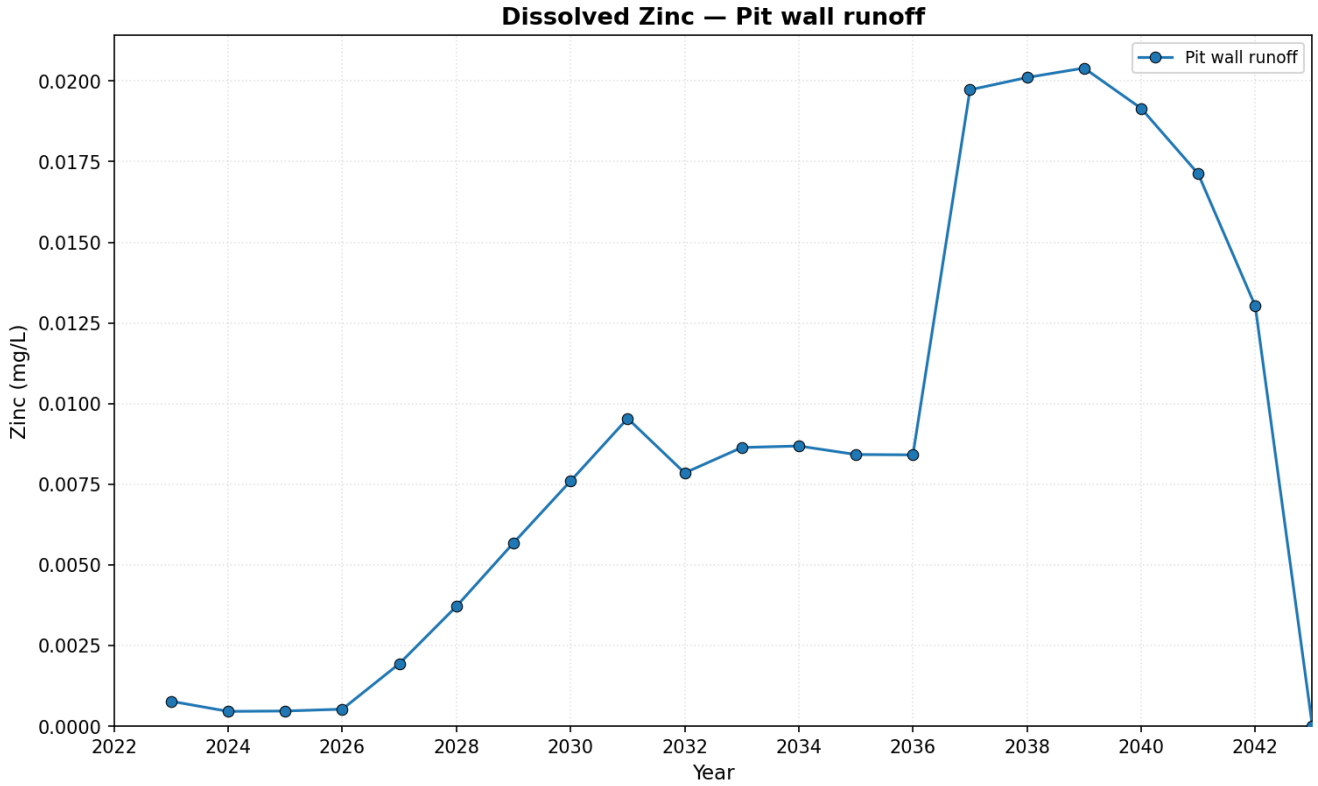
srk consulting

Dissolved Uranium — Pit Wall Runoff



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Uranium_pit_wall.png

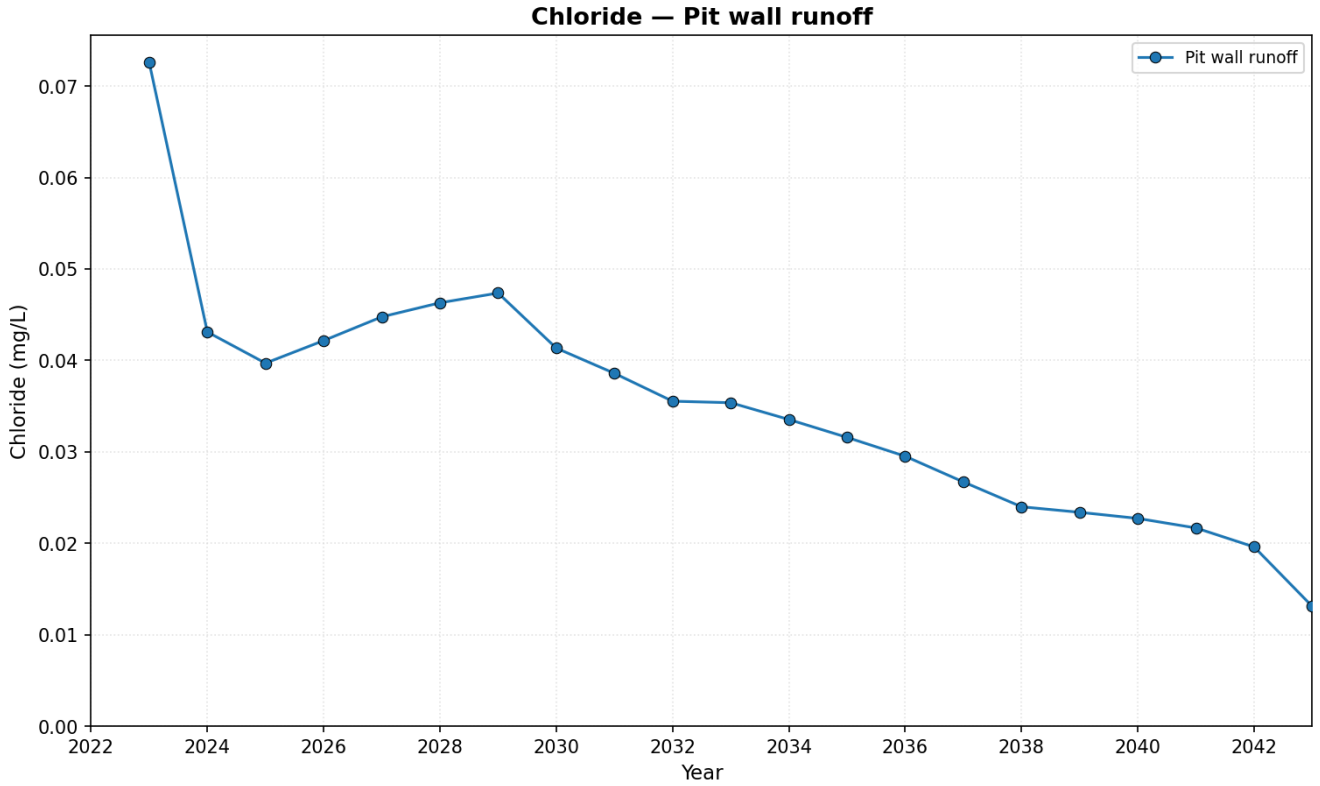
Dissolved Zinc — Pit Wall Runoff



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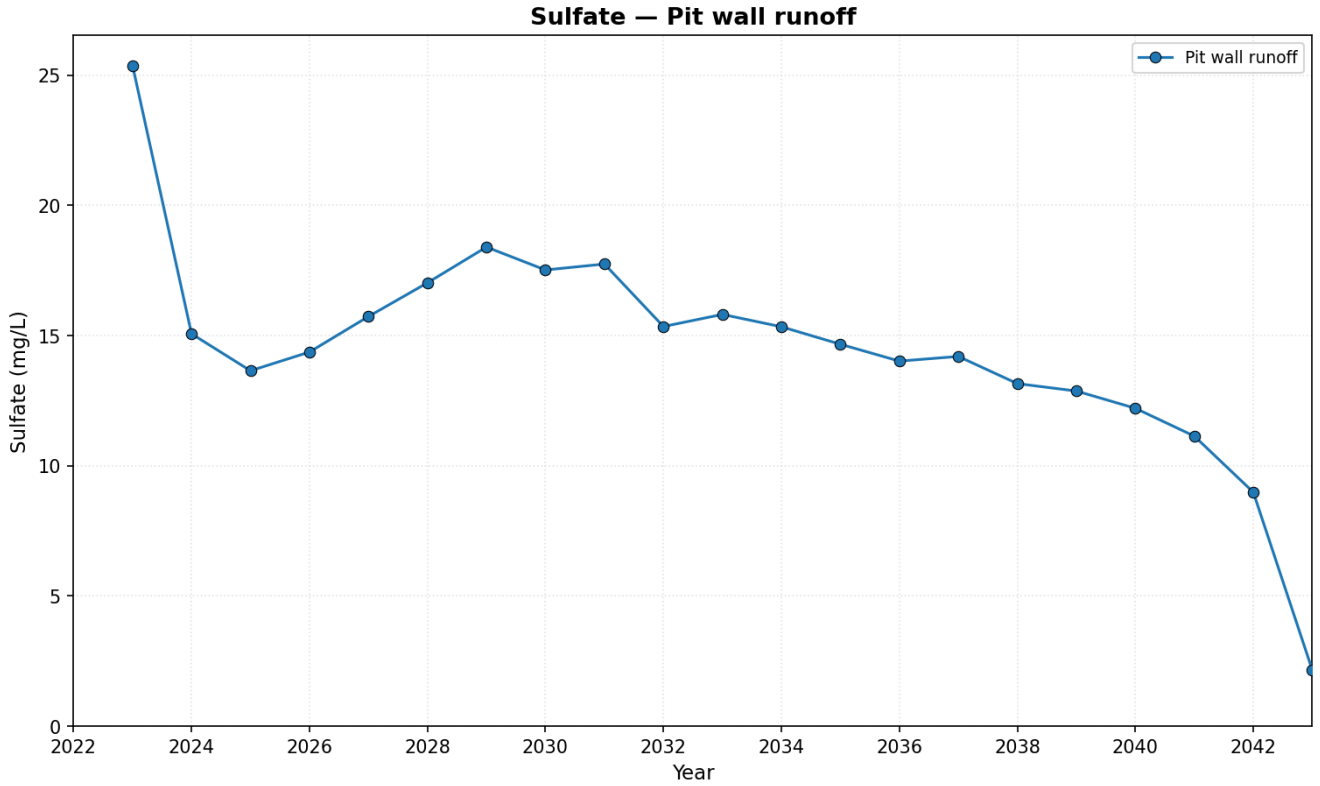
srk consulting

Chloride — Pit Wall Runoff



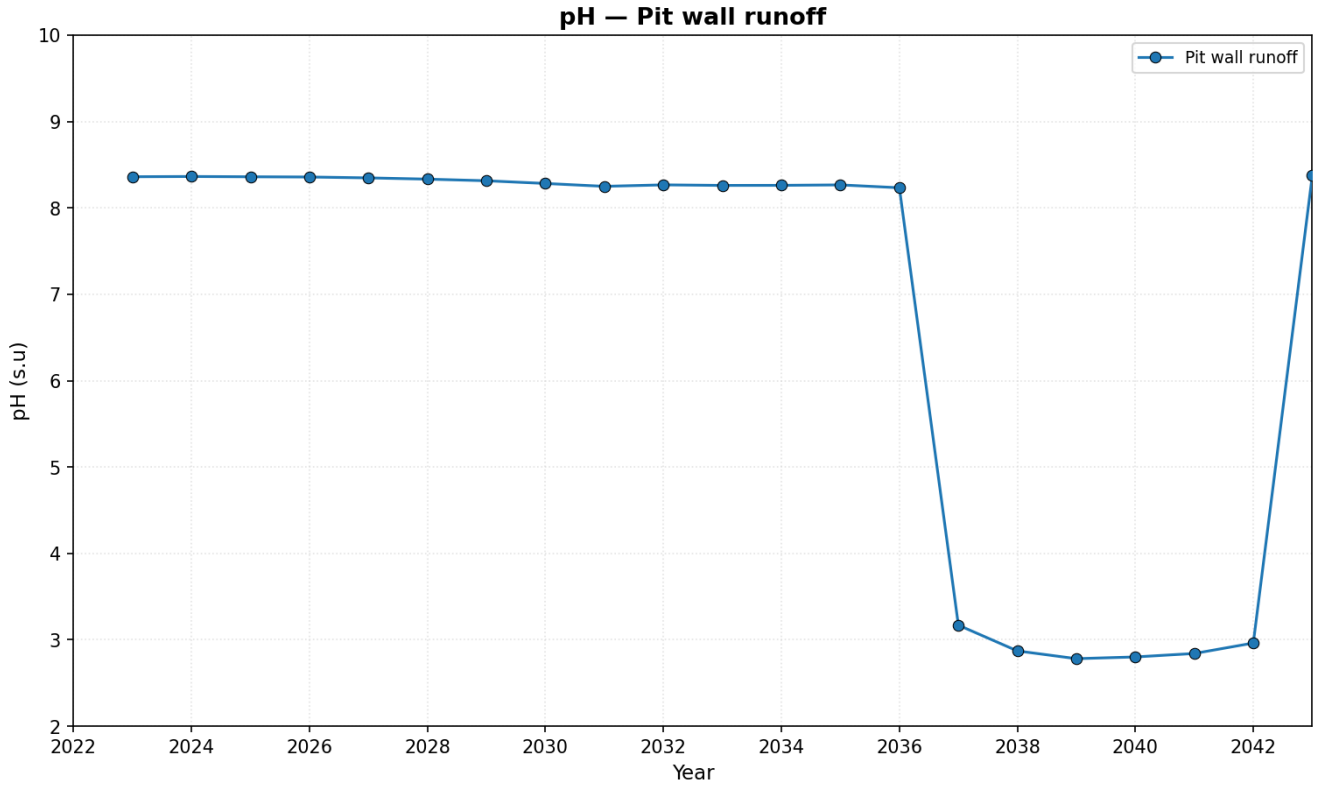
Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Chloride_pit_wall.png

Sulfate — Pit Wall Runoff



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Sulfate_pit_wall.png

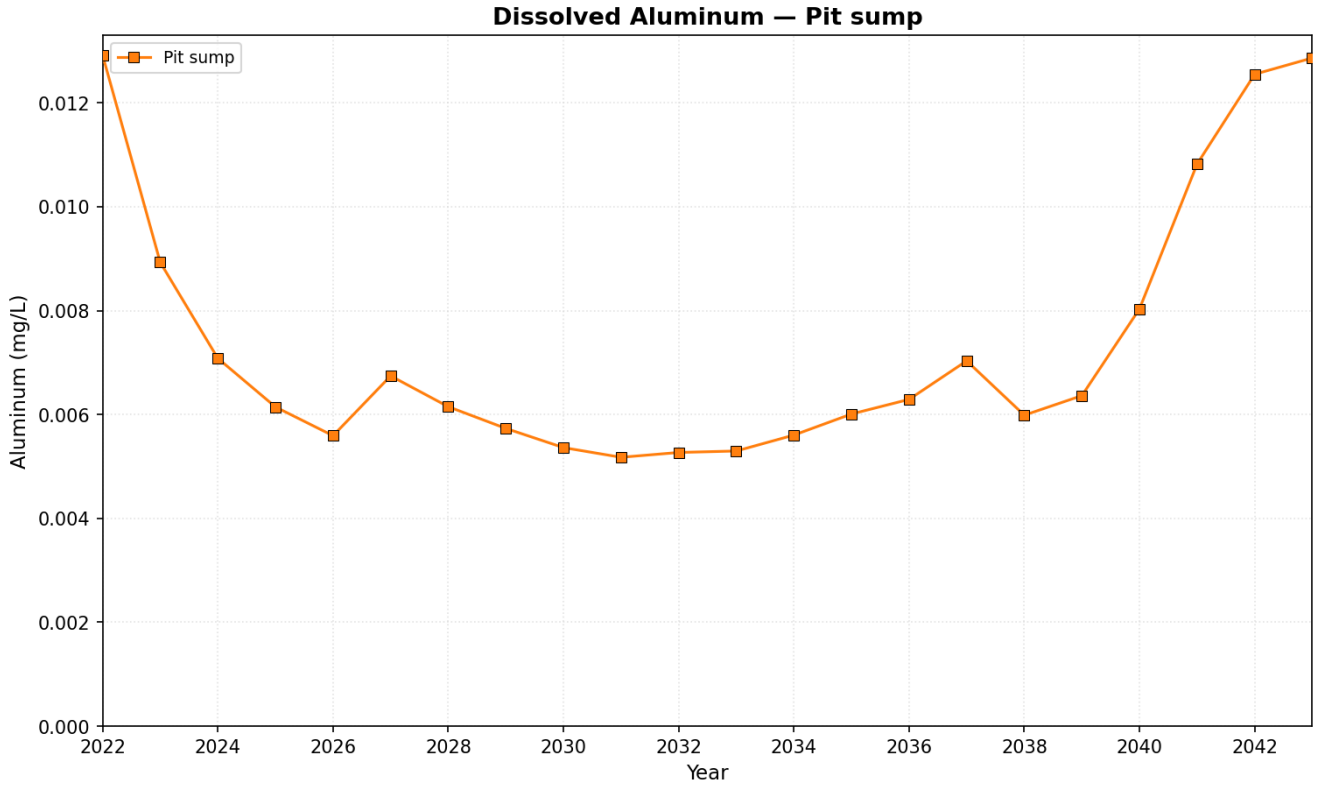
pH — Pit Wall Runoff



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\pH_pit_wall.png

srk consulting

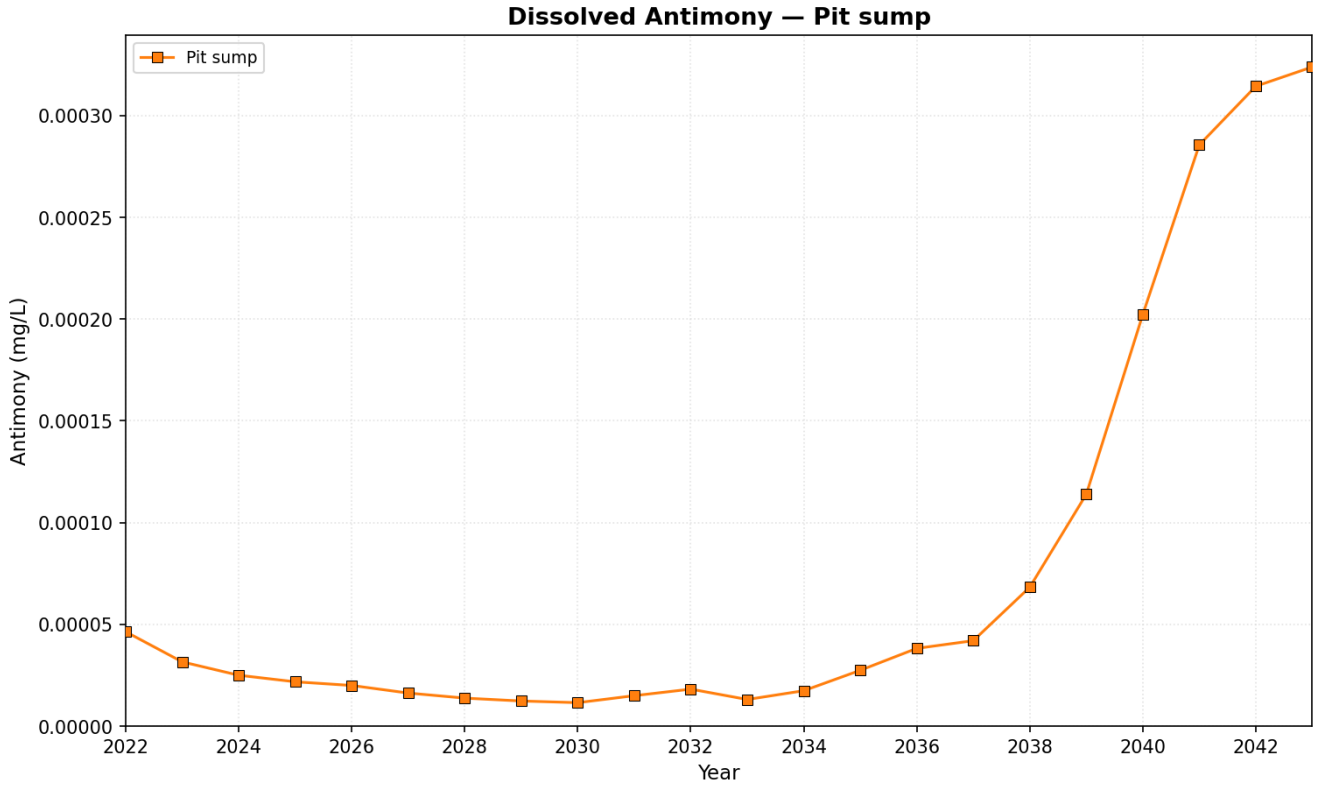
Dissolved Aluminum — Pit Sump



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Aluminum_pit_sump.png

srk consulting

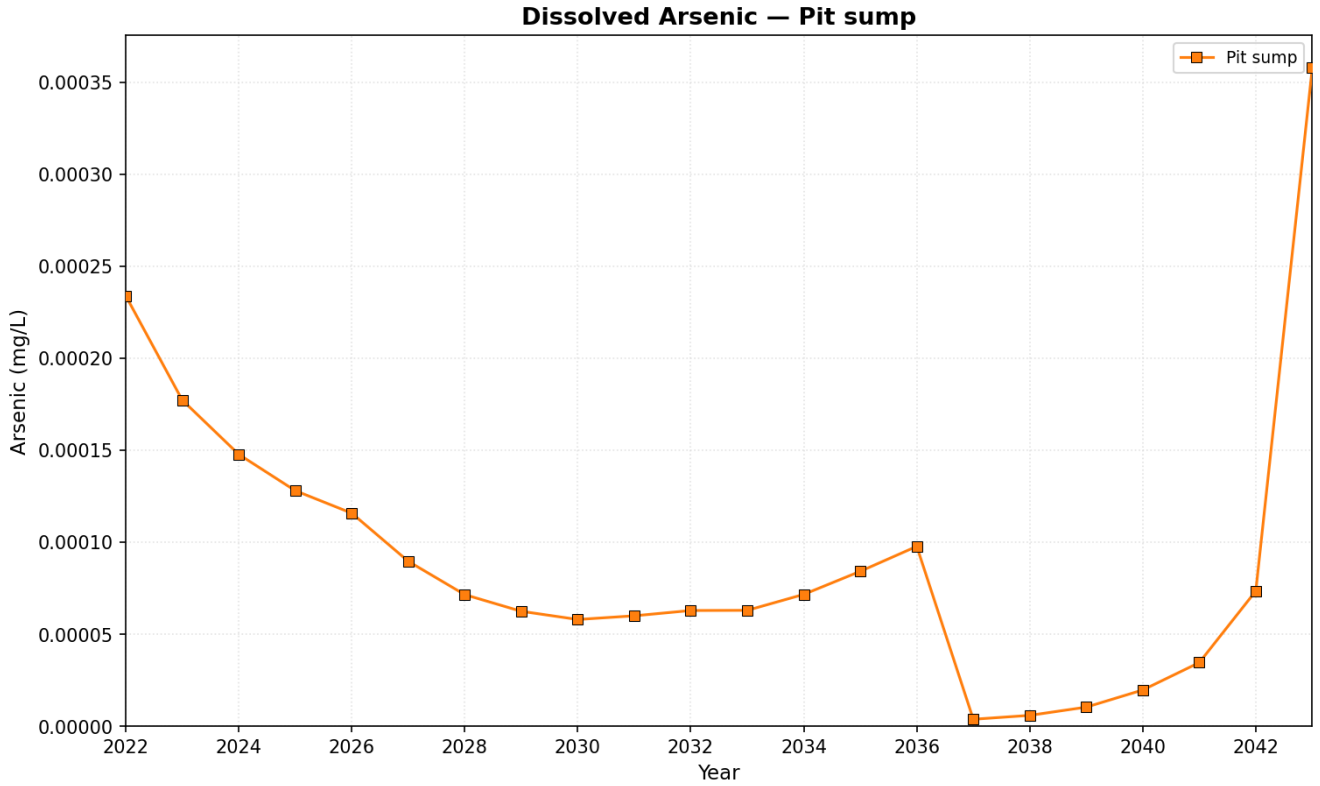
Dissolved Antimony — Pit Sump



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Antimony_pit_sump.png

srk consulting

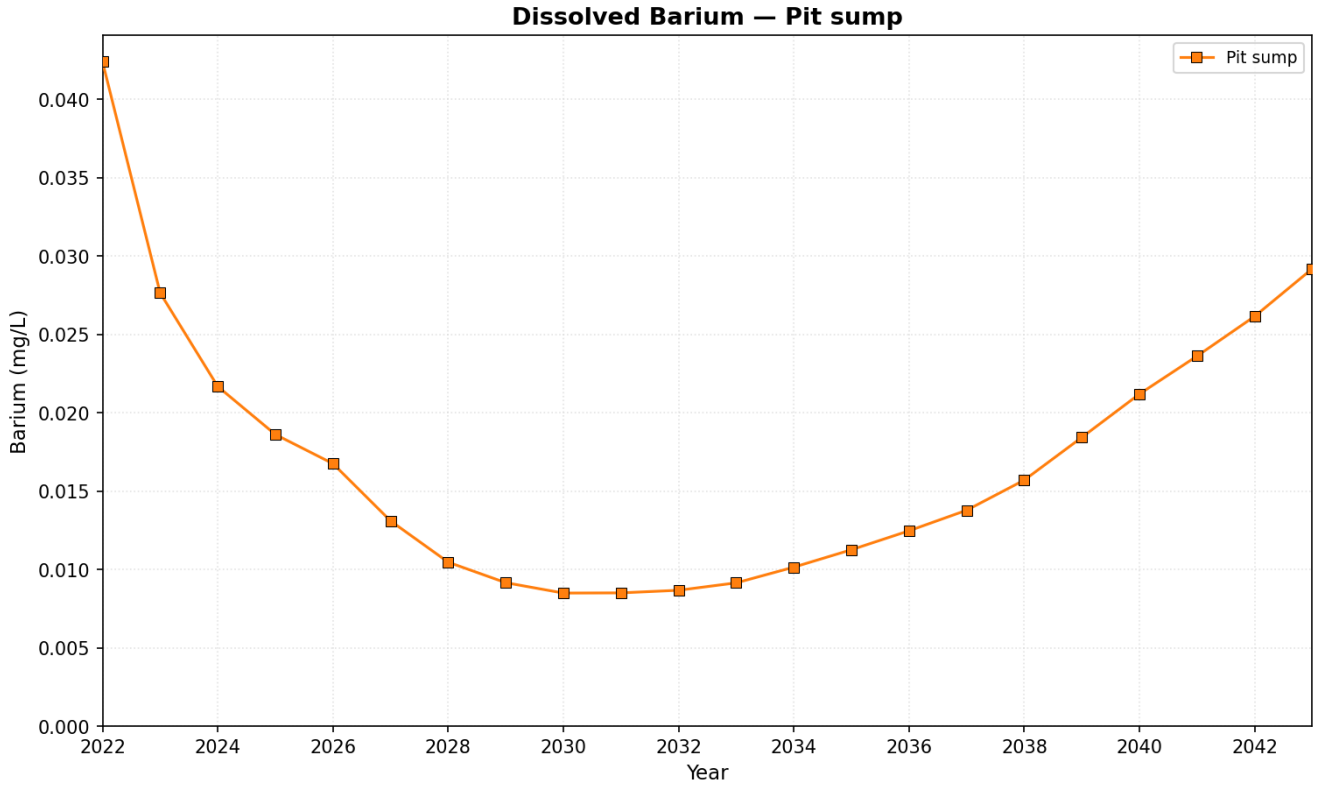
Dissolved Arsenic — Pit Sump



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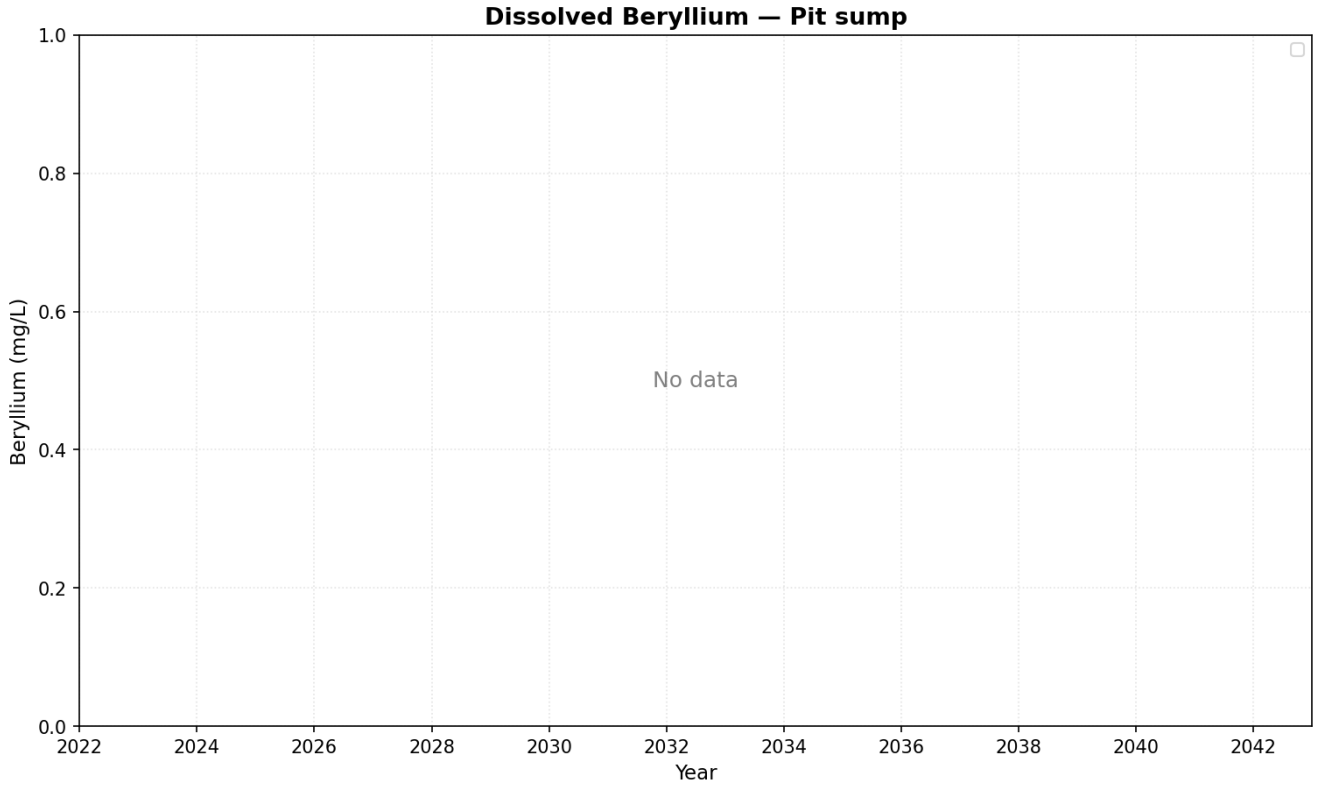
srk consulting

Dissolved Barium — Pit Sump



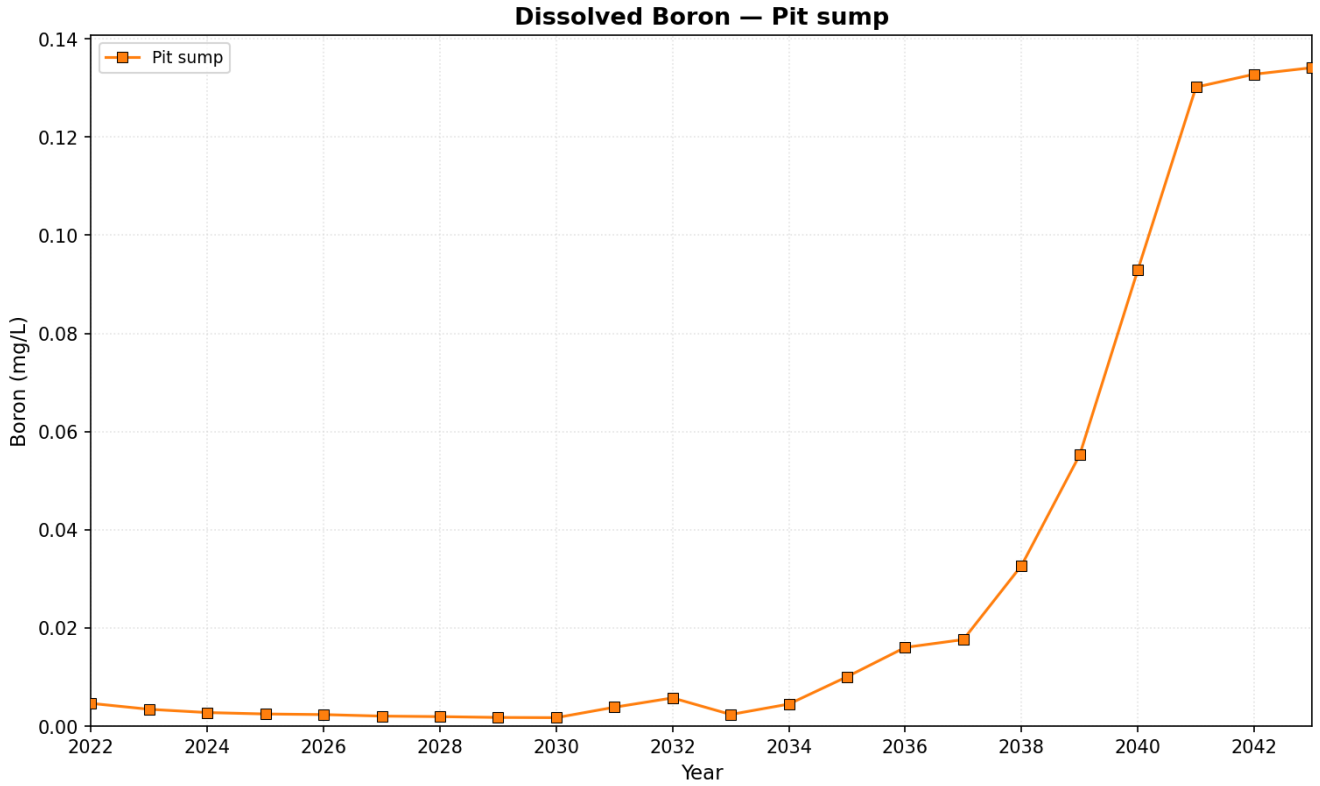
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Dissolved Beryllium — Pit Sump



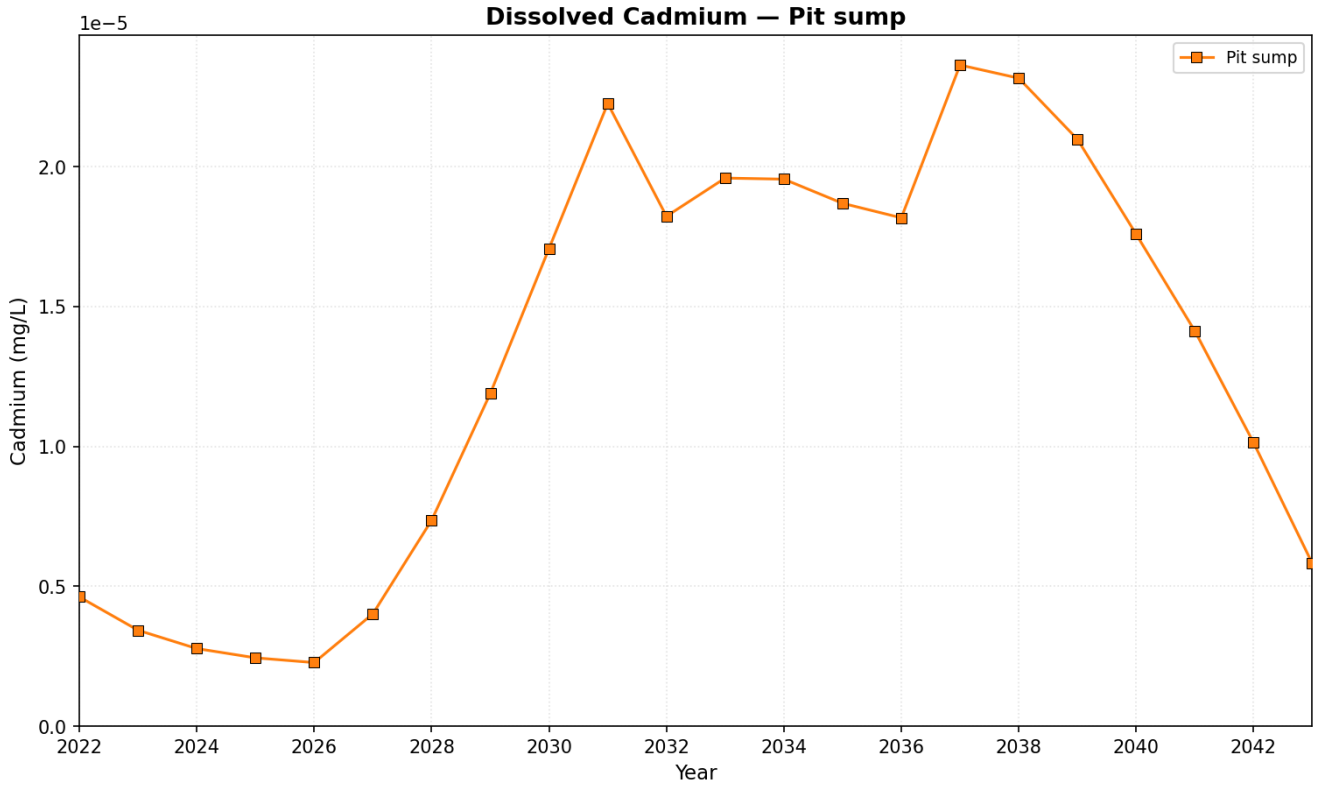
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Dissolved Boron — Pit Sump



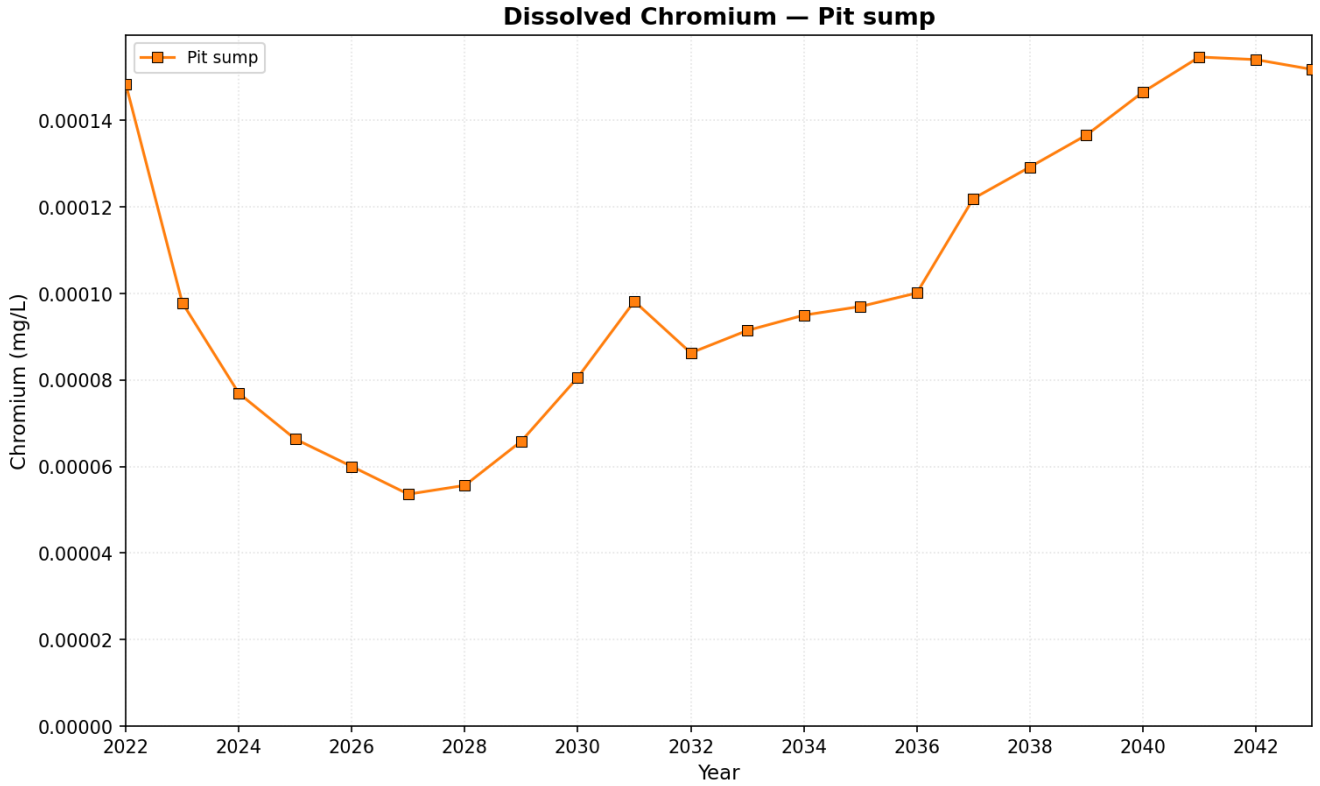
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Dissolved Cadmium — Pit Sump



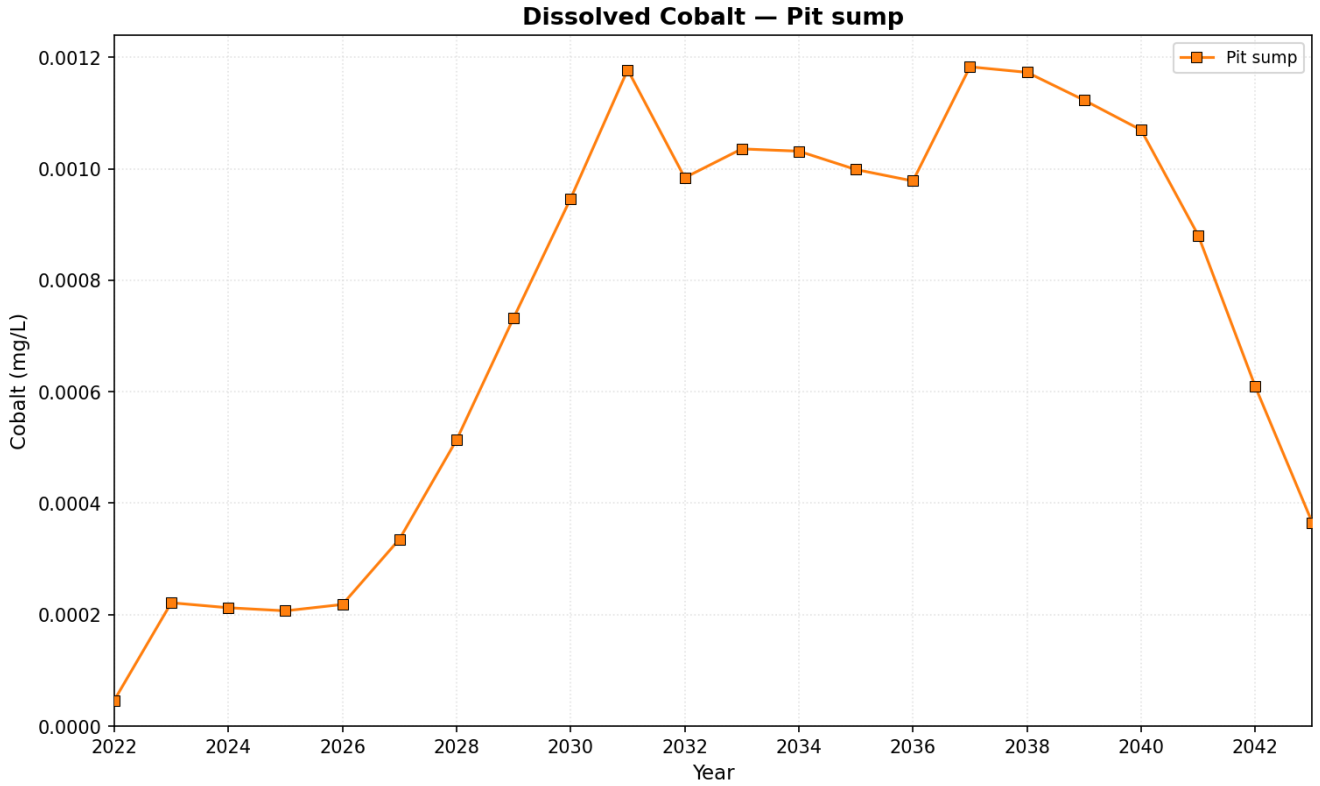
Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Cadmium_pit_sump.png

Dissolved Chromium — Pit Sump



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Chromium_pit_sump.png

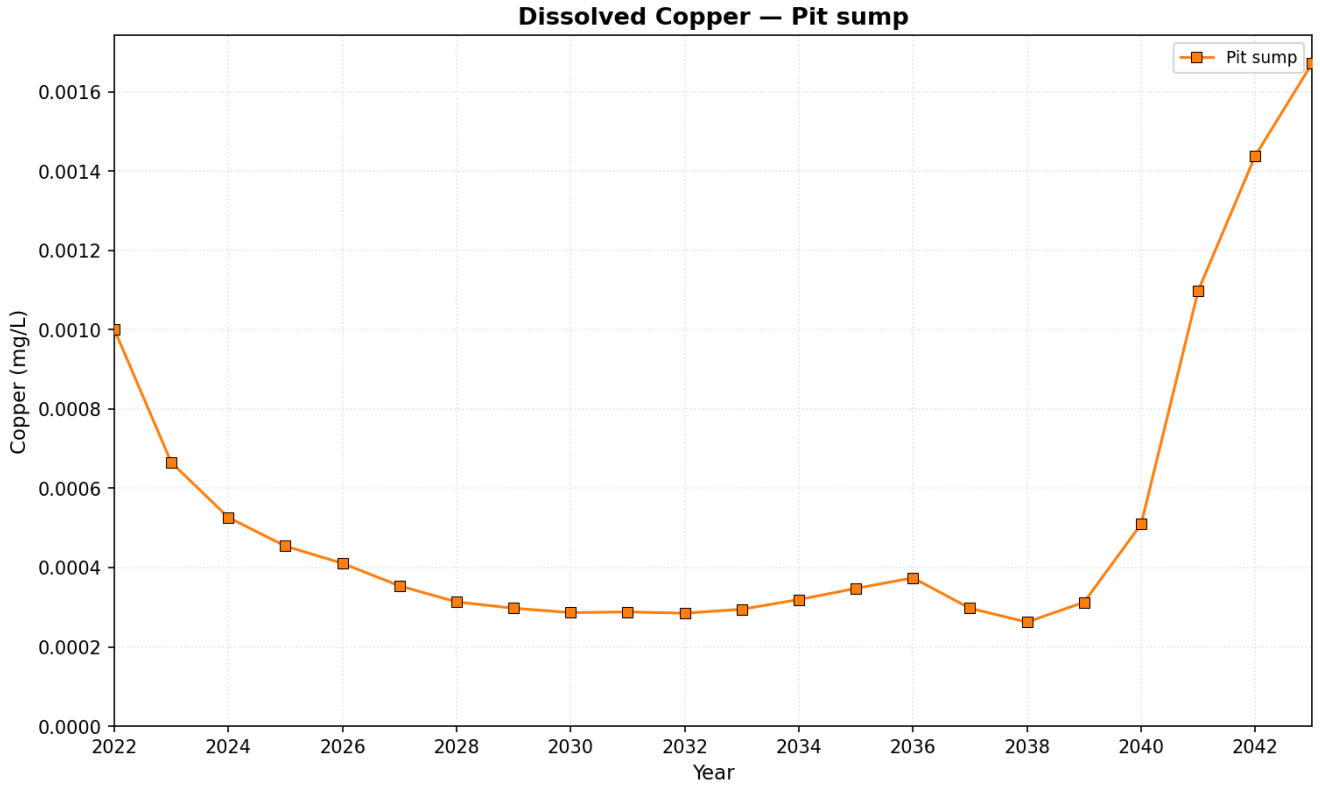
Dissolved Cobalt — Pit Sump



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Cobalt_pit_sump.png

srk consulting

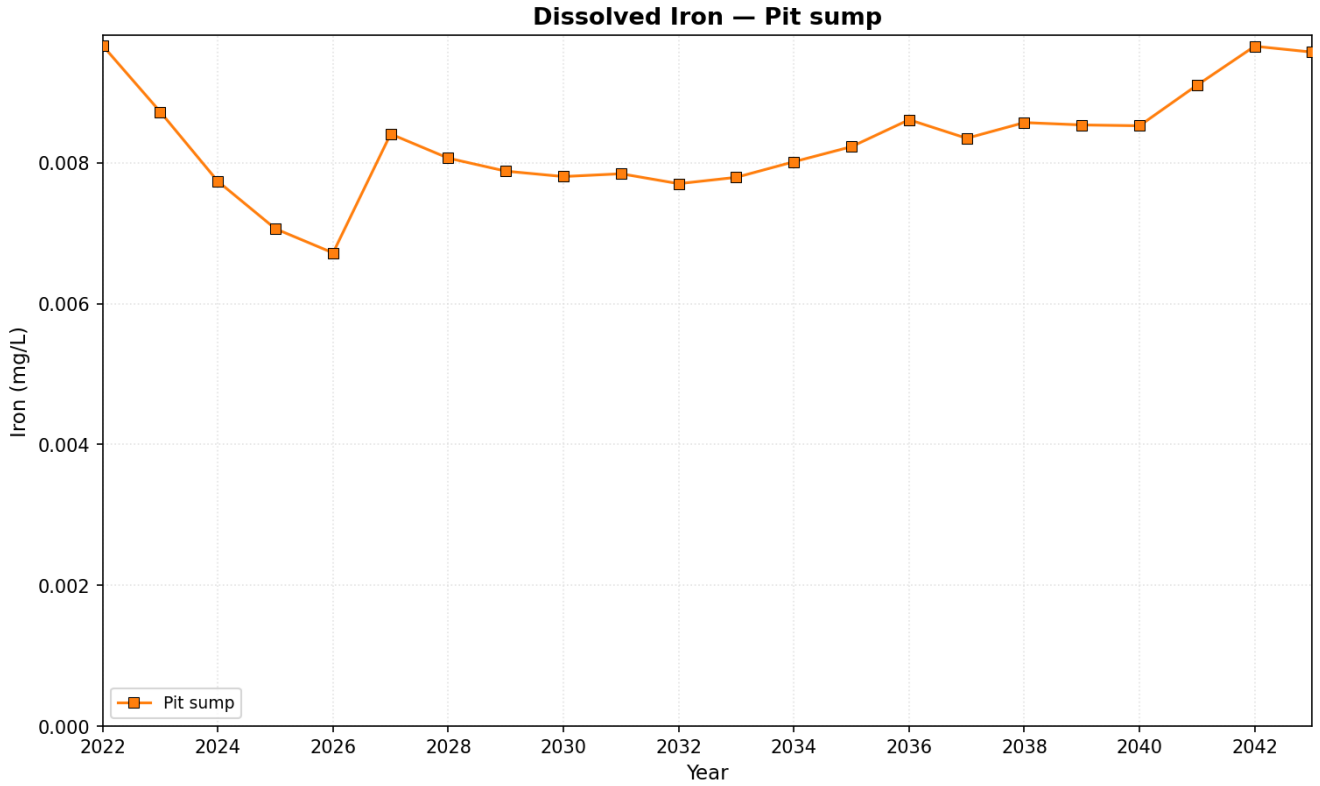
Dissolved Copper — Pit Sump



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Copper_pit_sump.png

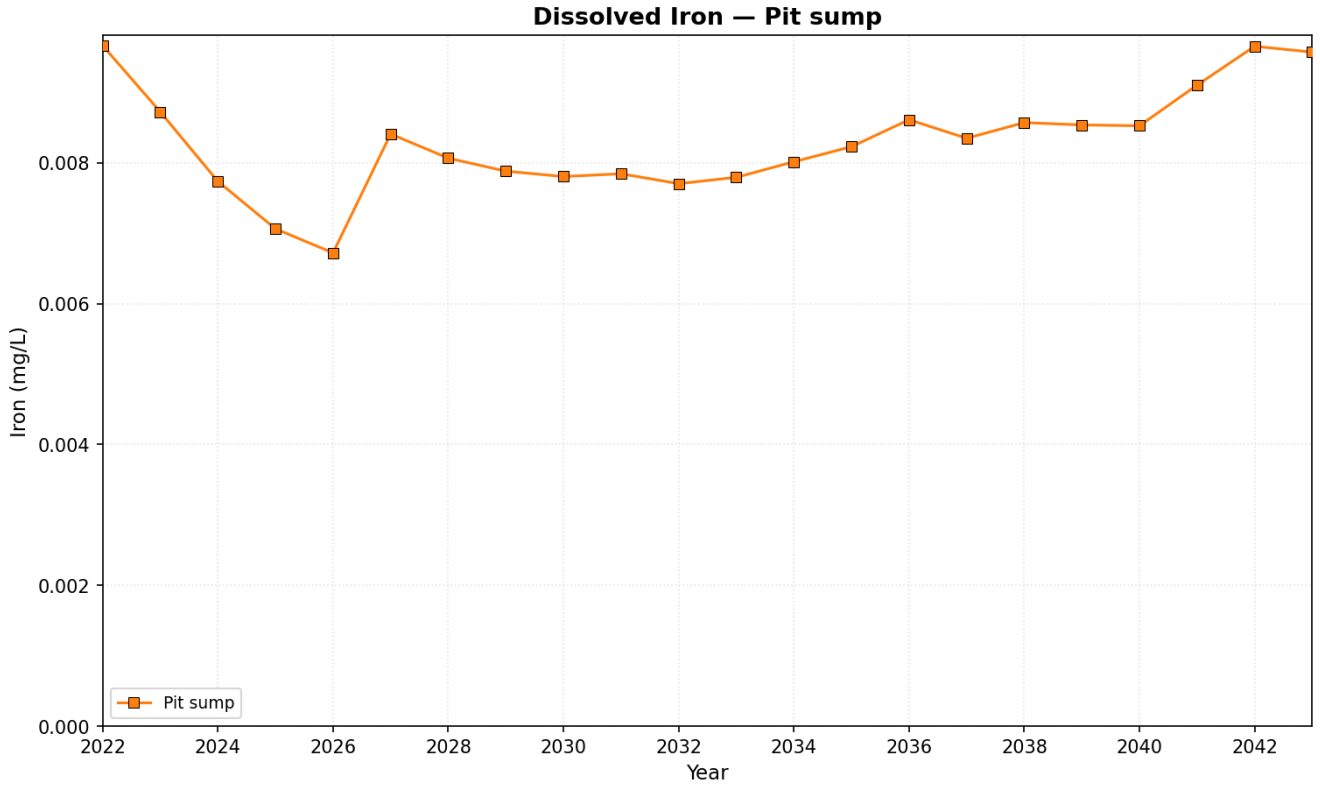
srk consulting

Dissolved Iron — Pit Sump



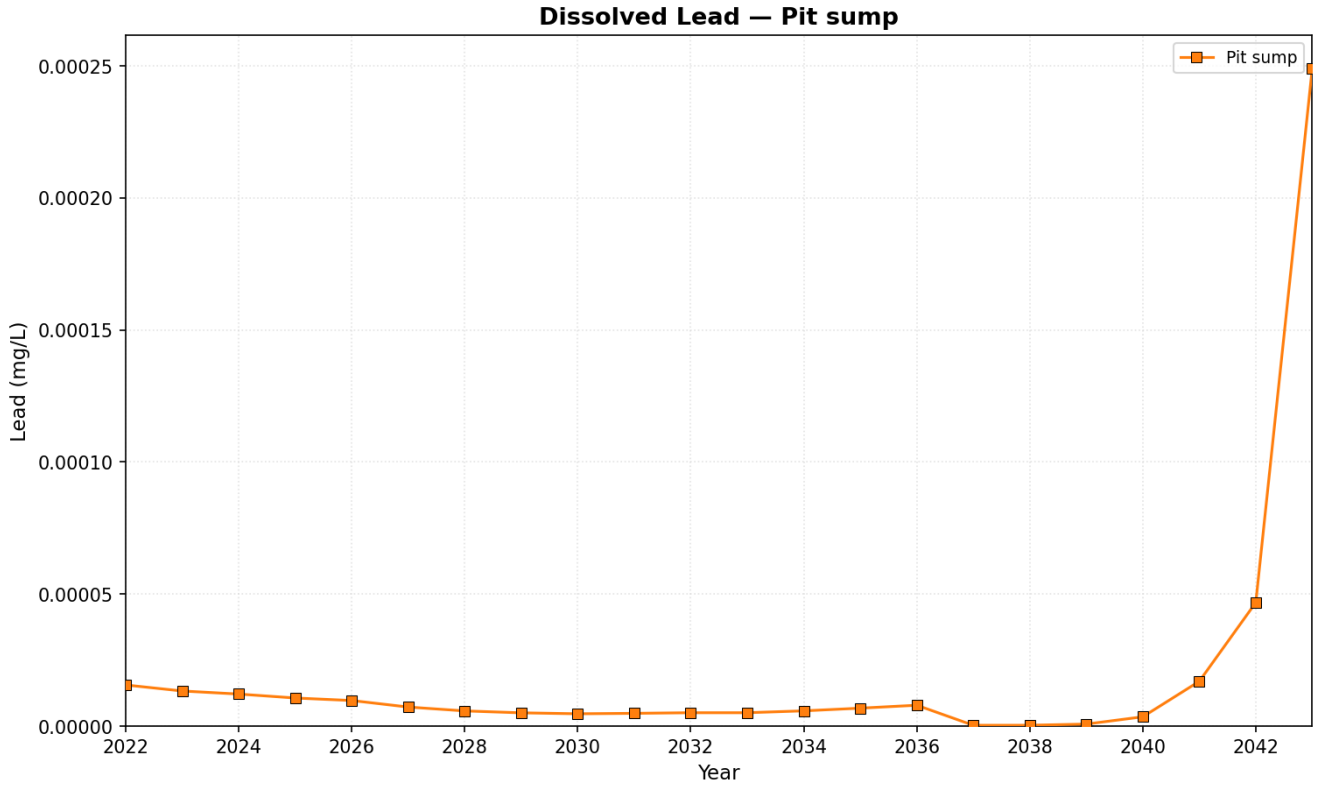
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Total Iron — Pit Sump



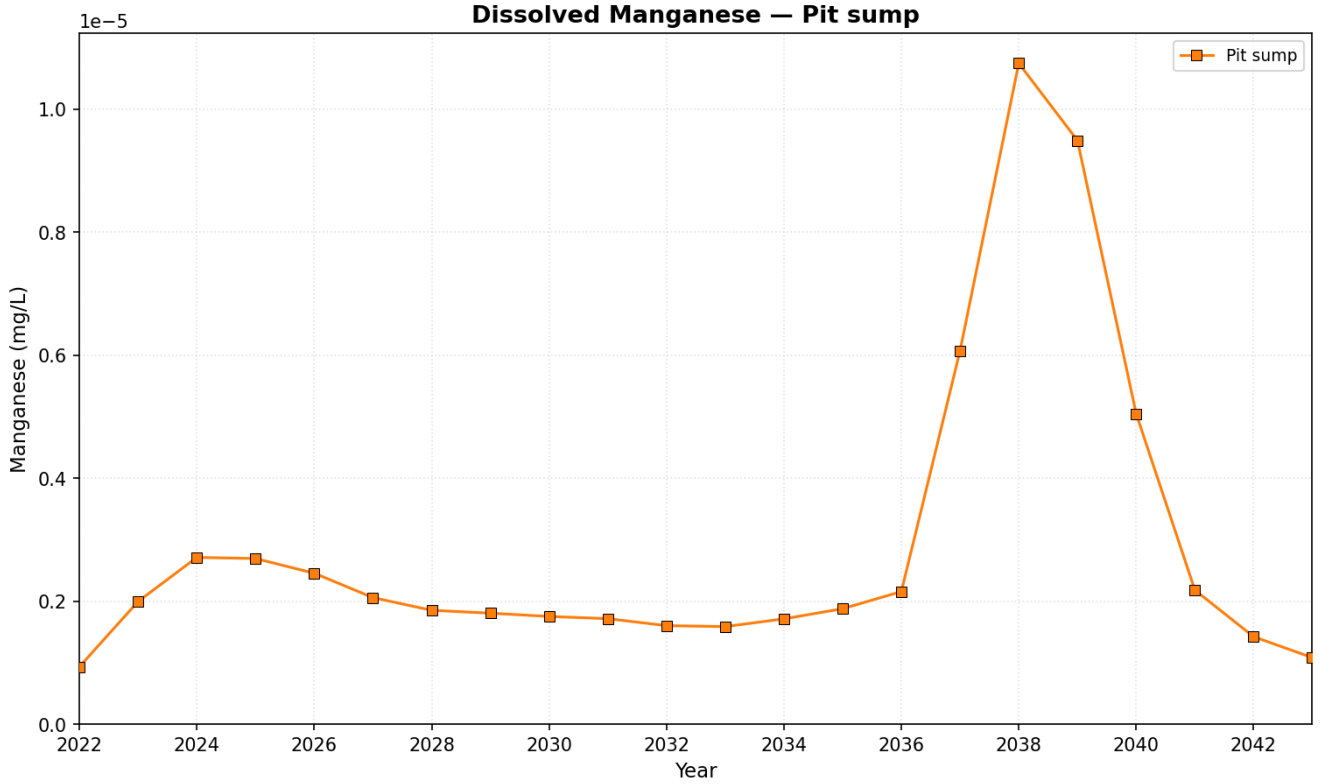
Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Iron_Total_pit_sump.png

Dissolved Lead — Pit Sump



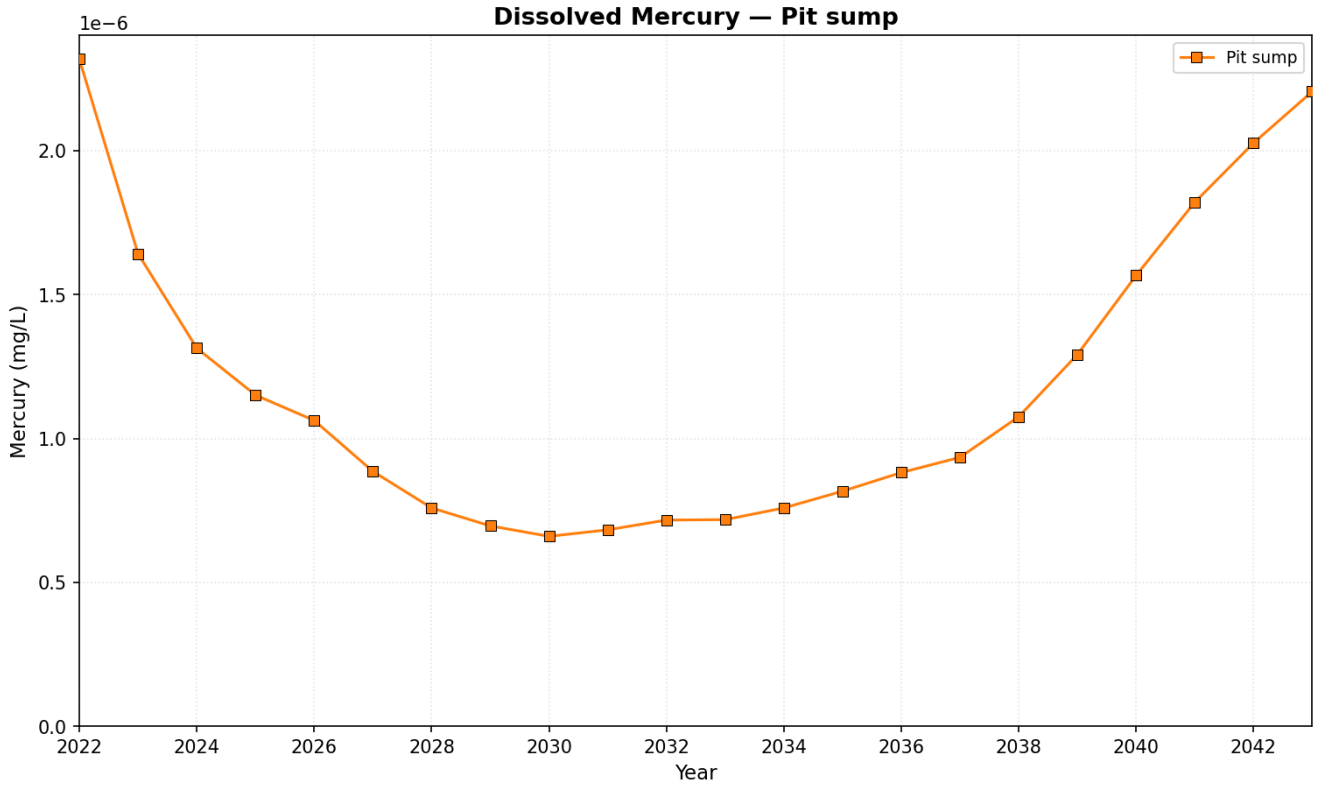
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Dissolved Manganese — Pit Sump



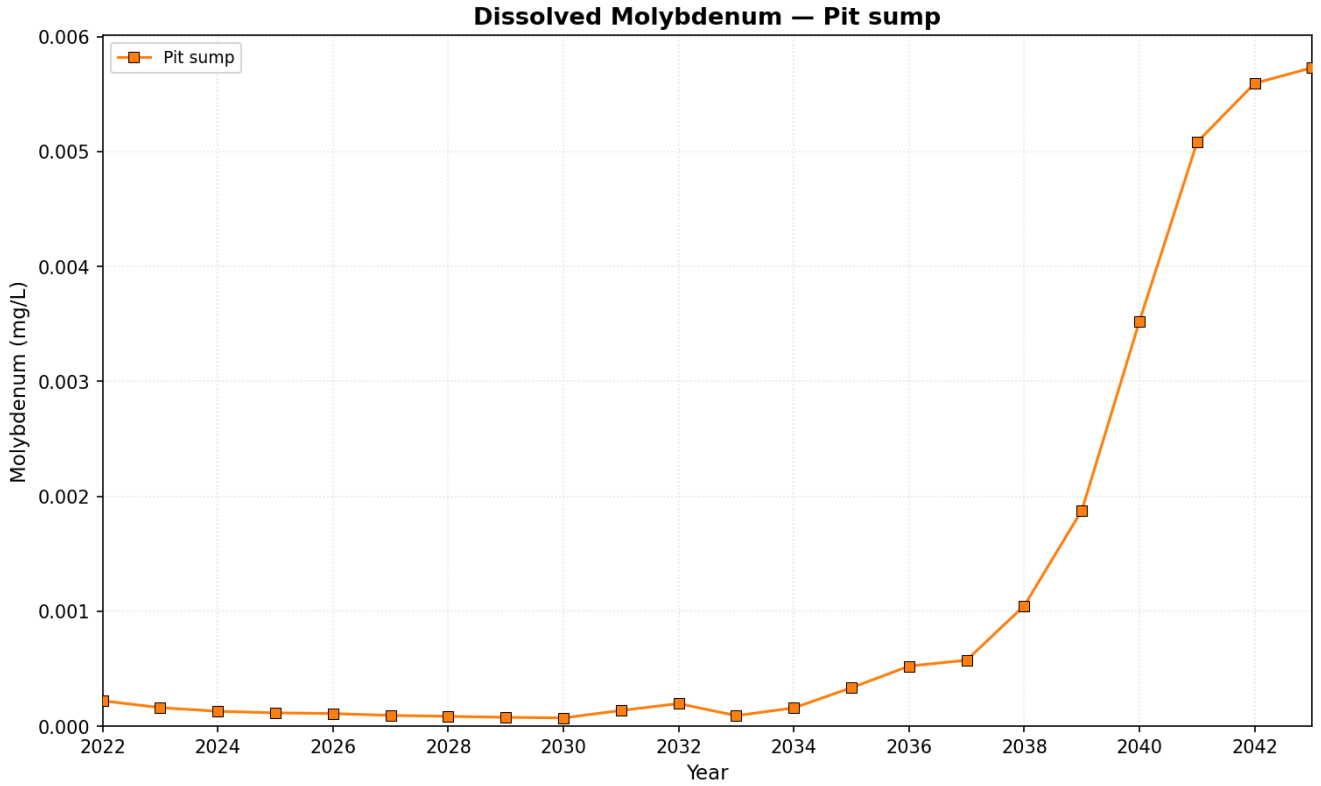
Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Manganese_pit_sump.png

Dissolved Mercury — Pit Sump



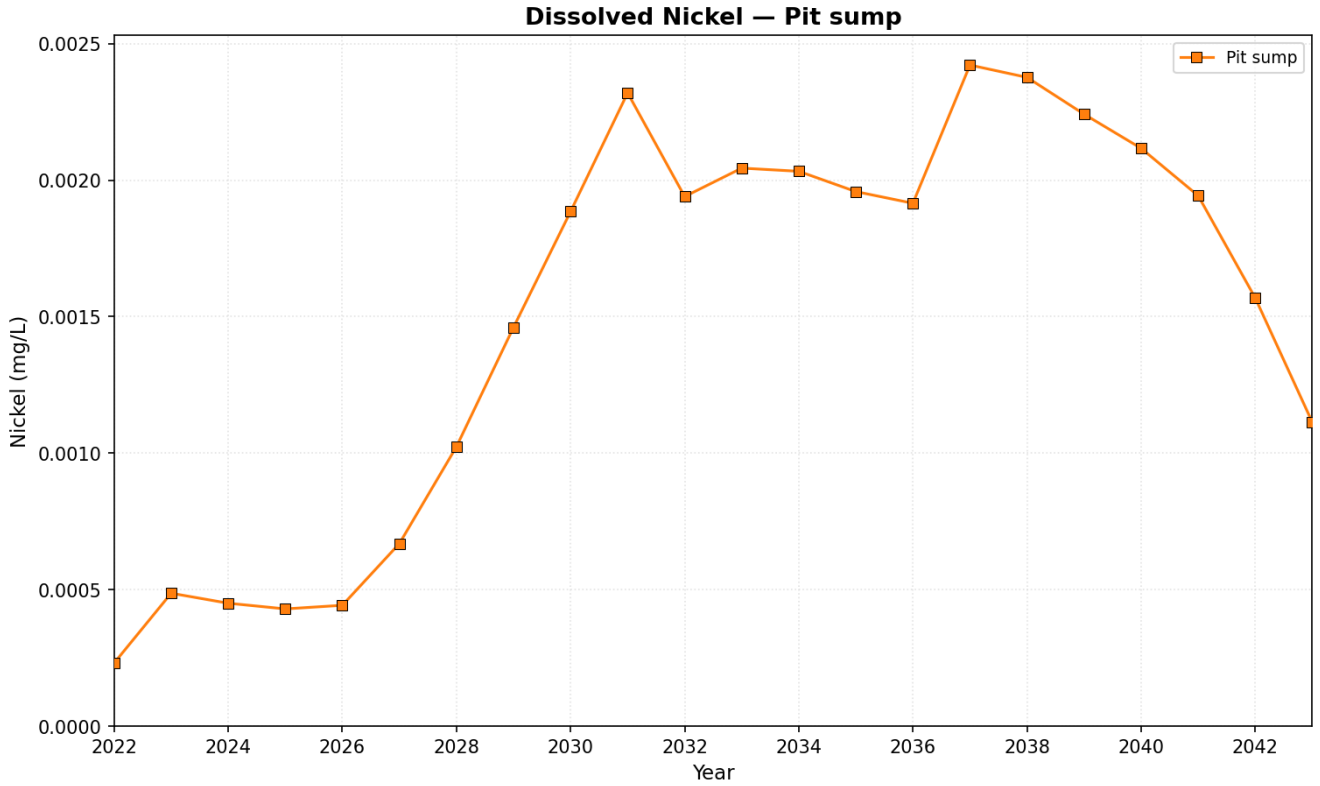
Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Mercury_pit_sump.png

Dissolved Molybdenum — Pit Sump



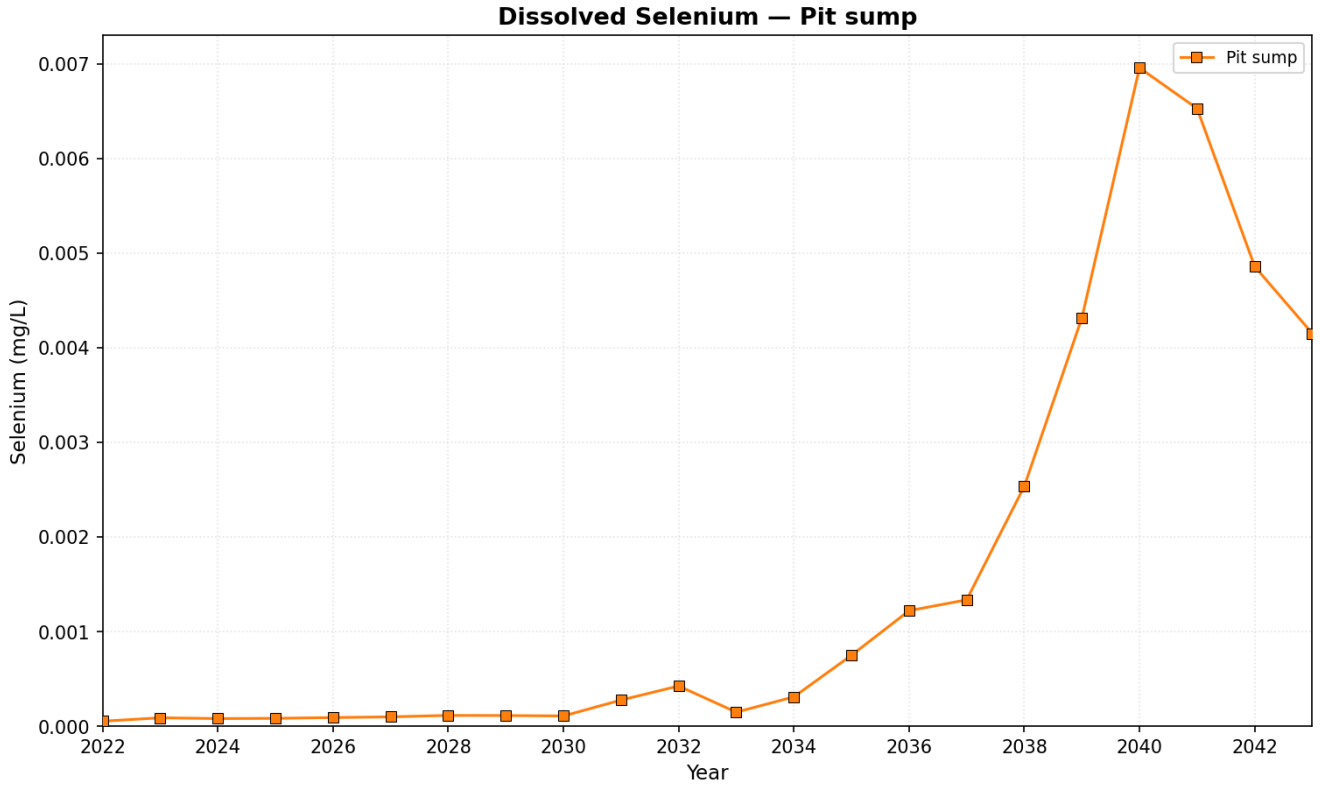
Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Molybdenum_pit_sump.png

Dissolved Nickel — Pit Sump



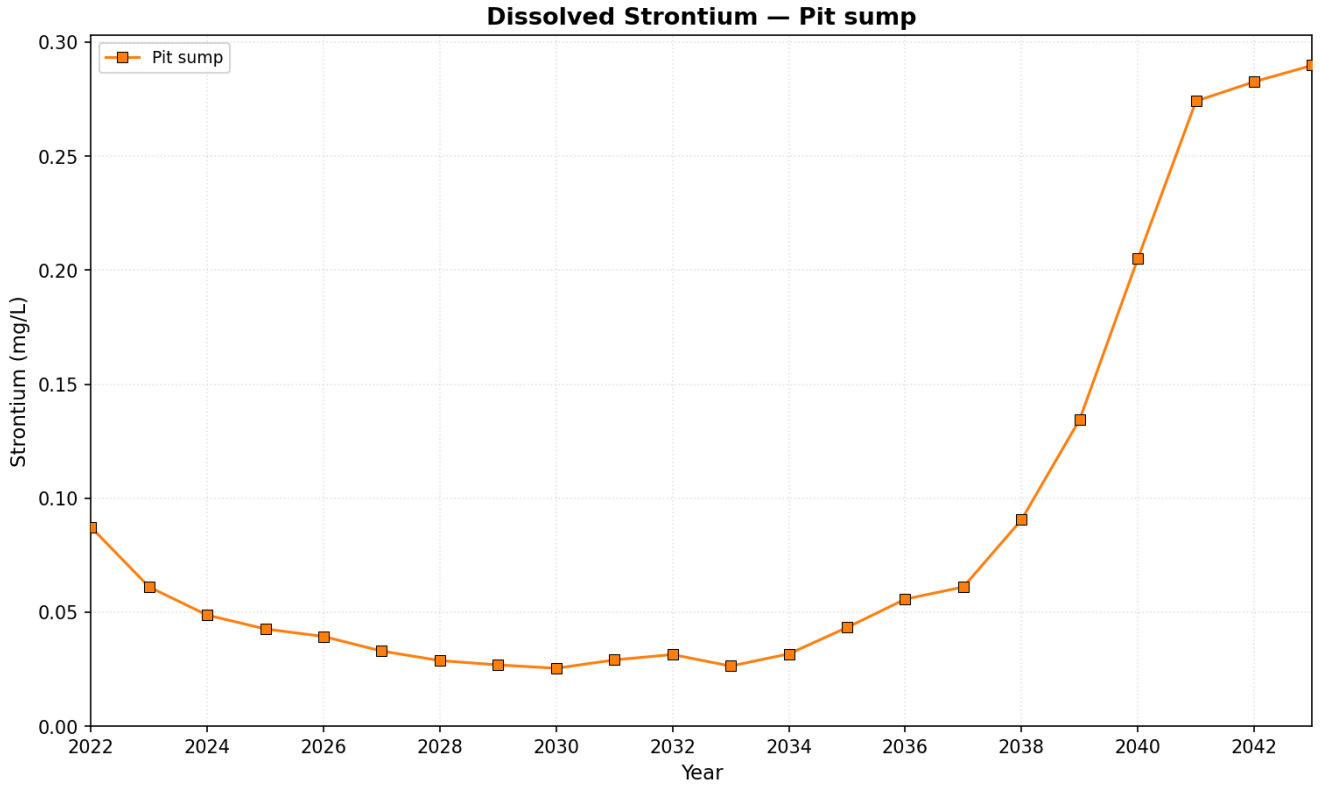
Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Nickel_pit_sump.png

Dissolved Selenium — Pit Sump



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Selenium_pit_sump.png

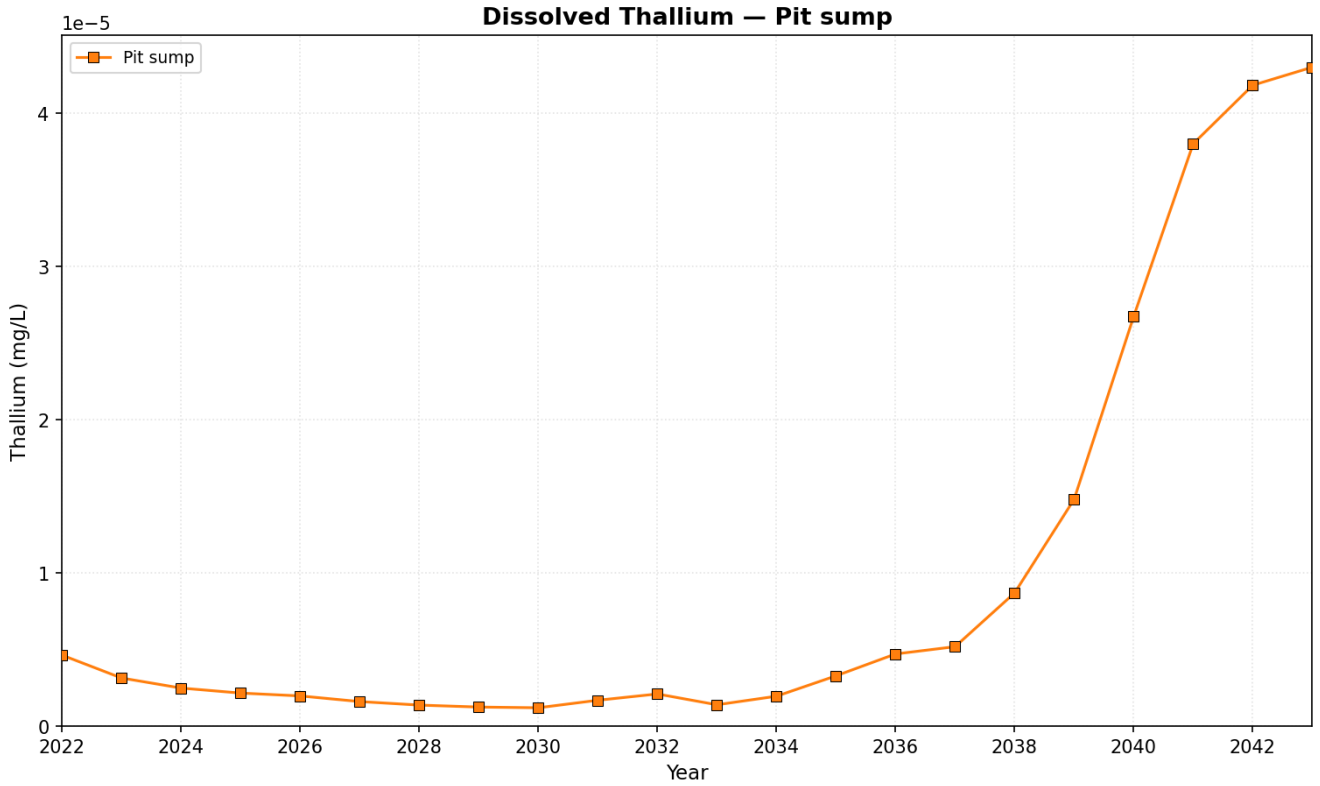
Dissolved Strontium — Pit Sump



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Strontium_pit_sump.png

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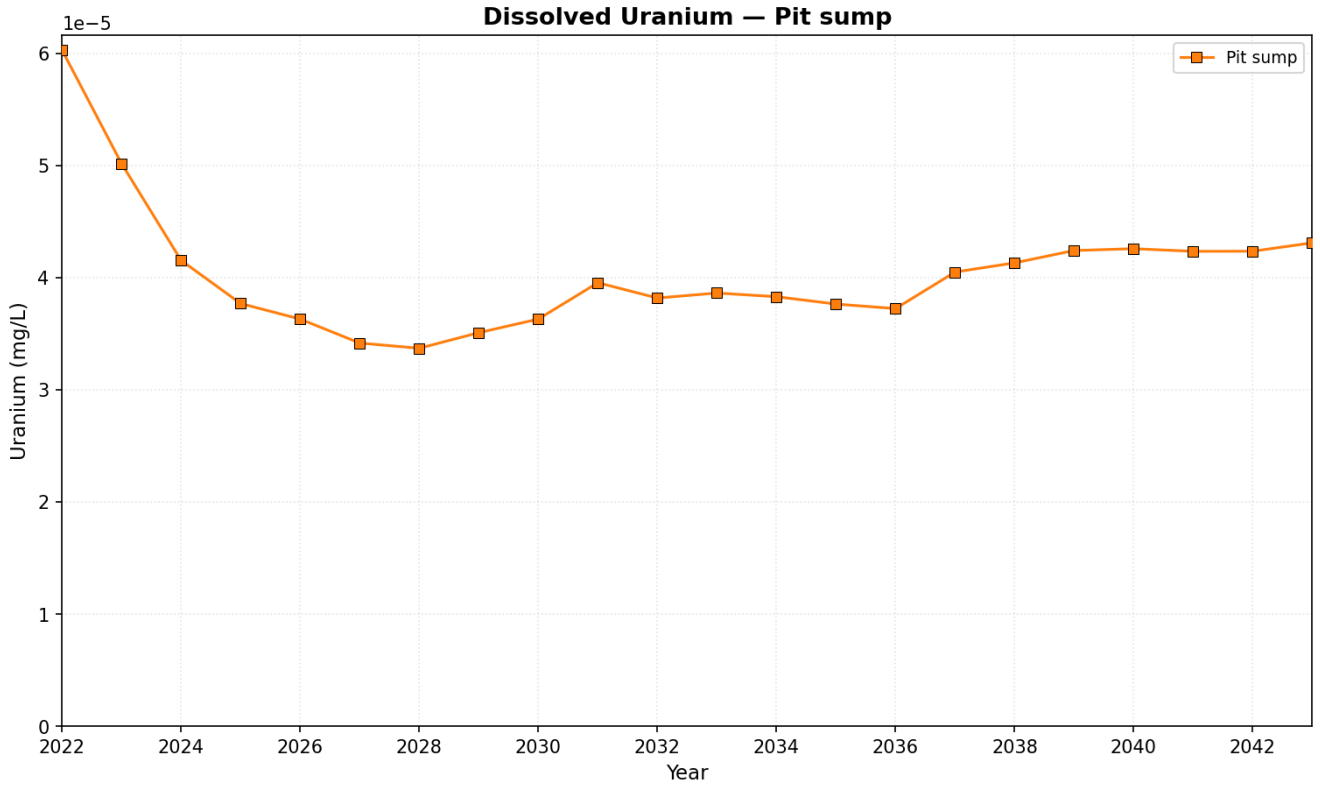
Dissolved Thallium — Pit Sump



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Thallium_pit_sump.png

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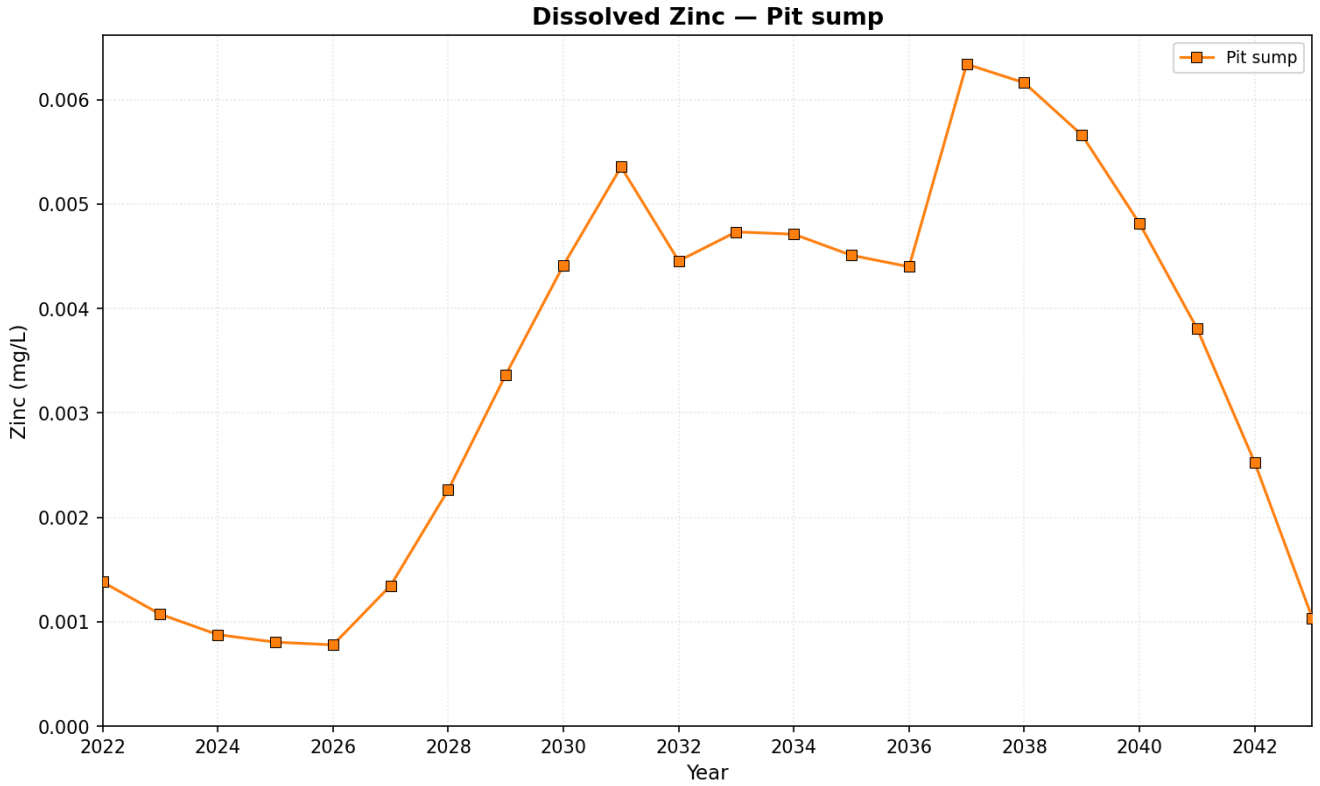
Dissolved Uranium — Pit Sump



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Uranium_pit_sump.png

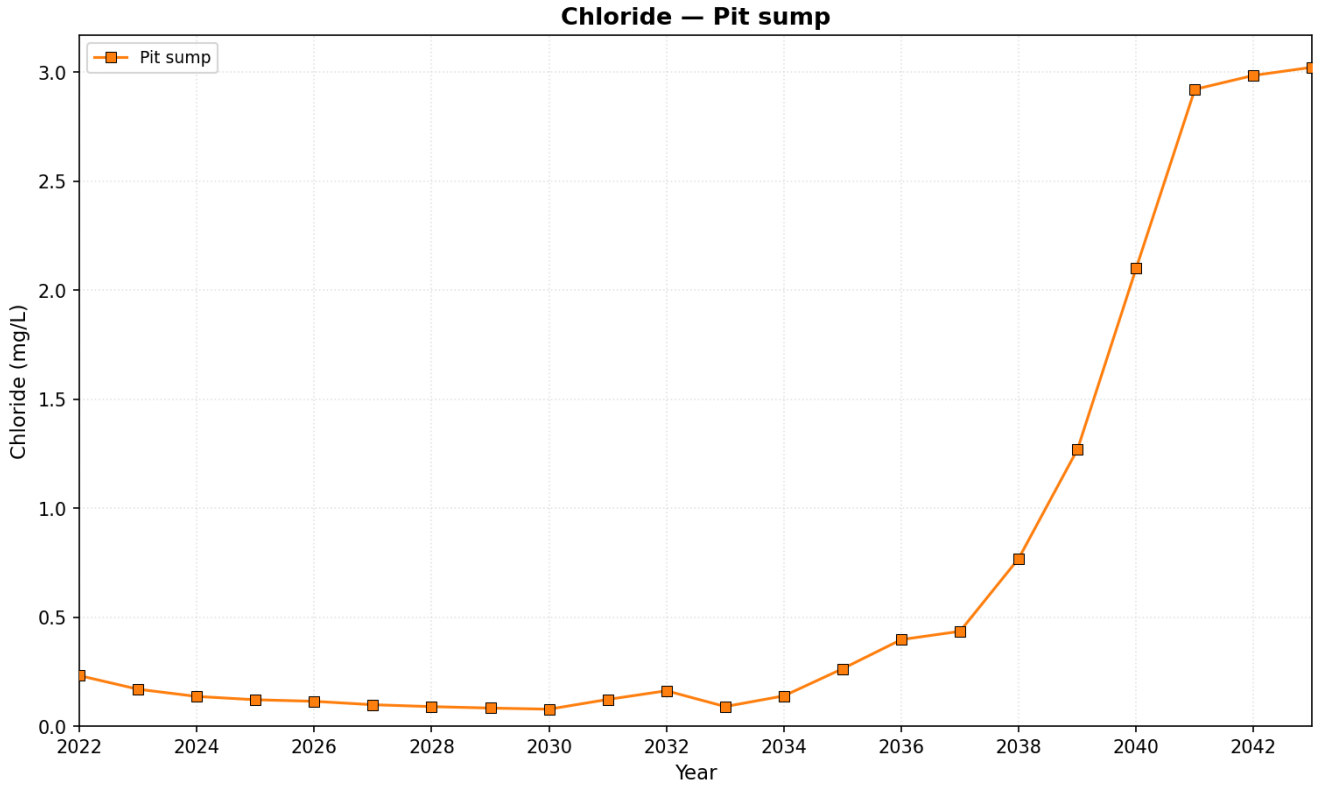
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Dissolved Zinc — Pit Sump



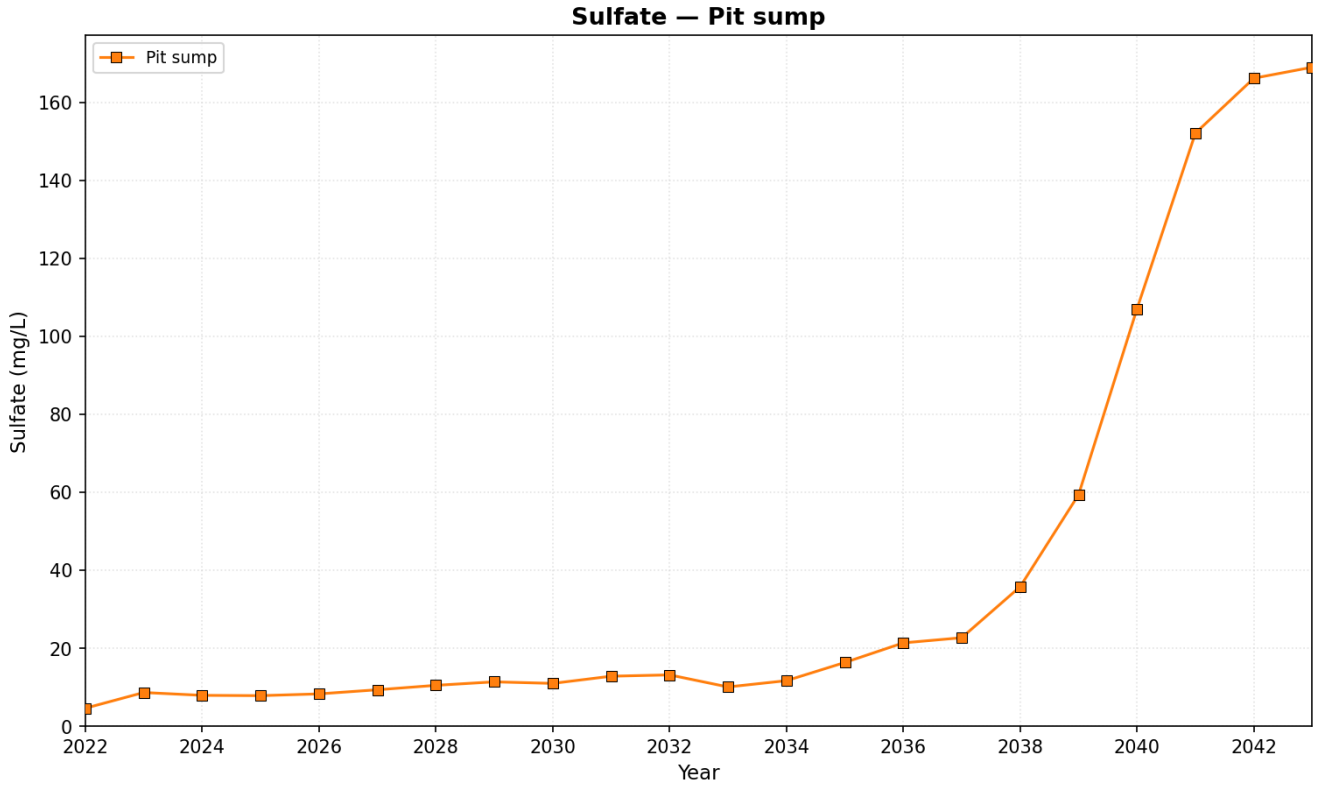
Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Zinc_pit_sump.png

Chloride — Pit Sump



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Chloride_pit_sump.png

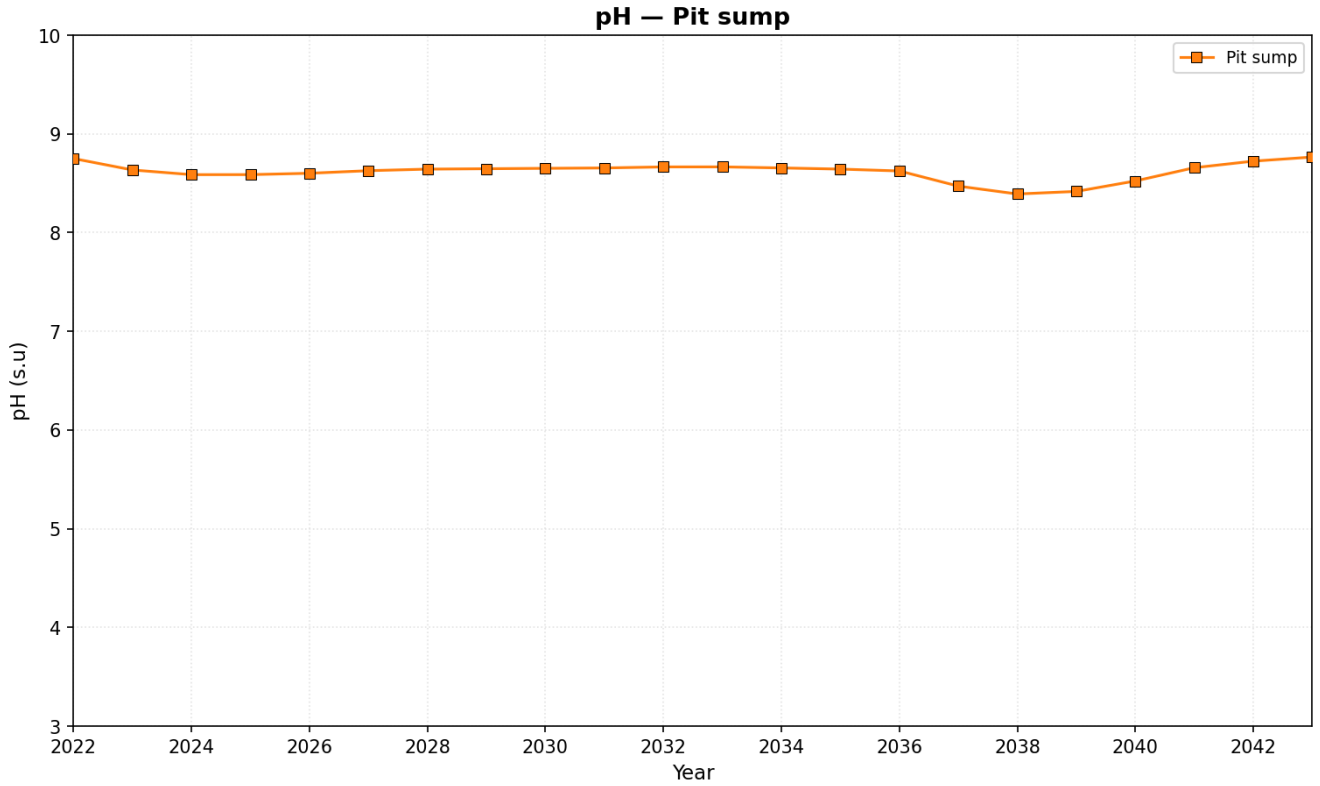
Sulfate — Pit Sump



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\Sulfate_pit_sump.png

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pH — Pit Sump



Source: \NA CAPR002055 Telkwa Project General EA Support - Internal\Water Balance Modelling\Model\202309_Updated EA Case\PAG_Pitwall\wq_plots\data_scale\pH_pit_sump.png

srk consulting

Attachment 2: Okane Consultants Response Document to MMCM Follow-up Information Request Related to Water

Calgary

Suite 700, 1000 7th Avenue SW
Calgary, AB T2P 5L5
Canada
www.okaneconsultants.com

Memorandum

To:	Dan Farmer – Project Manager, Telkwa Mining Limited
From:	Jared Robertson, Senior Geochemist
Our ref:	B-1288-224
Date:	April 8, 2026
Re:	**Tenas Coal Project – Information Requirements for Comment 2a**

Okane is providing a response to the below regulatory comment for the Tenas Coal Project. Okane previously completed source term development for the non-potentially acid generating (non-PAG) backfill for the Open Pit.

Reviewer Comment

Comment 2a

The reviewer also observed discrepancies between the volume of Non-PAG mine rock needed for Open Pit backfill and cover needed for progressive reclamation of the Open Pit provided in Table 3.1 of App-5 (Okane Report 2024) and the total volume of non-PAG available from the Mine Plan provided in App 13.6-B of the Application (2021) and also provided in the response to Comment 164 in App 16 Table 2-3 (i.e. 33 Mt from App 5 versus 29 MT from App 16 and 13.6).

a. Please discuss the differences between these volumes and impact on WQM results.

Response

Table 3-1 in App-5 (Okane Report 2024) is only summarizing the maximum volumes of material going to backfill and associated cover with this backfill, not for portions of the pit that did not have non-PAG rock placed on the open pit walls. Okane's model used approximately 33 Million Bank Cubic Meters (MBCM) of non-PAG mine rock as backfill in the Open Pit and 2.6 MBCM of overburden used as cover as provided in Table 3.1 of App-5. The 33 MBCM value was used as the potential largest volume of non-PAG mine rock that could be backfilled into the Open Pit, while 2.6 MBCM of overburden would be the largest amount of overburden required for covering the non-PAG rock material. If the non-PAG material is slightly reduced, the amount of cover material would also be slightly reduced.

Based on this information, the current model results are conservative when calculating the anticipated loads from the non-PAG rock backfill using 33 MBCM versus 29 MBCM. If the model was completed using reduced volumes of non-PAG rock (i.e., 29 MBCM), this would result in a reduction of annual loads for modelled parameters from the backfill contributing to the overall site WLBM. However, the reduction would be small in the modeled receiving waters to a point that it would not be a material difference.

It is not expected that source terms (which are concentrations of parameters at the end of the modelled timeframe) from a reduced volume of non-PAG rock (29 MBCM) would change compared to the current modelled results using the 33 MBCM of non-PAG rock. Although the size of the structure would become smaller as the amount of material is reduced, concentrations should stay very similar.

The material balance will be revisited during the permitting process based on the latest information and modelling and it is expected that values will change from what was provided in the EAC application. A new WLBM will also be provided to account for continued monitoring results from the barrels on site and additional drilling conducted since the EAC was submitted.

Sign off/Authentication

We trust information provided is satisfactory for your requirements. Please do not hesitate to contact the undersigned at jrobertson@okaneconsultants.com for further information or questions.

Prepared by:

Jared Robertson, Ph.D., P.Eng.
Senior Geochemist

Attachment D: Telkwa Mining Response to the follow up information requests 8 and 9 from MENV on May 22, 2026

May 22, 2026

Stasia Ferby
Project Assessment Director
BC Environmental Assessment Office
By Email: Stasia.Ferbey@gov.bc.ca

SUBJECT: Response to follow-up Information Requests (IRs) from Ministry of Environment and Parks (MENV) received on May 6, 2026

Dear Ms. Ferbey:

Telkwa Mining Limited (Telkwa Mining) is pleased to provide Attachment 1 for responses from SRK to the following information requests (IRs) provided by the Ministry of Environment for the Tenas Project's Water IR on May 6, 2026.

> ***IR 8 ENV – May 6, 2026 – IR 8 Response April 15, 2026***
> Thank you for the tables; however, the flow paths presented don't align with the flow schematics provided in previous WBWQM reporting (Figures 2.2 through 2.5). For example, void losses aren't present as a path for the management ponds, while coal processing demand and return from the CPP pond aren't presented (at least separately) for Tenas Pond. Further, "pumped flows/overflow" inputs do not seem to align with model schematics. For example, during Stage 1, the schematics show Open Pit Sump overflow directed to the NMP, but the values do not match. Please provide tables that include all the flow paths present in the model. [Information Request]

> ***IR 9 ENV – May 6, 2026 – IR 8 Response April 15, 2026***
> Thank you for the figures and explanations. It appears the rainfall-runoff model still underpredicts the median and range of flow conditions by a notable margin in Goathorn Creek and Tenas Creek when compared to the synthetic records, similar to the previous model. As I noted in IR 296, for Tenas Creek, at the 50th probability of exceedance, the modelled record is roughly 0.1 m3/s lower than the synthetic record, with an estimated MAD of 0.5 m3/s. At Goathorn Creek, the modeled record underpredicts the synthetic at the 50th by roughly 0.3 m3/s with a MAD of 1.7 m3/s. Both results appear unchanged in the revised model. At the node on Telkwa, the match between the modeled and synthetic is improved. At the EA stage, this level of model performance is appropriate to the stage of project development; however, if this project proceeds to permitting, model refinement or a detailed consideration of uncertainty will be required. [Comment]

TML RESPONSE

Please note that the revised dynamic model requested above for permitting will match the synthetic at the 50th closer but this may come at the expense of not matching low flows as closely as provided in the previous information requests.

> ***NEW IR ENV – May 6, 2026 – IR 8 Response April 15, 2026***
> Comparing the selected runoff coefficients for Goathorn Creek used in the 2022 model vs the 2024 model, the values from the 2024 model are much more varied, both temporally and in magnitude. For example, the selected values range from 1 in Feb, to 0.45 in March, to 0.91 in April before falling to ~0.23 for May and June before increasing to 0.76 in July. This sort of variation appears to represent an attempt to increase model fit to variable years of data without modelling a missing or poorly characterized hydrologic process, like summer snowmelt or variable freshet timing. A) Is there a physically based explanation for the highly variable runoff conditions in Goathorn Creek? B) Were these runoff coefficients held constant throughout the model? For example, were they adjusted to consider the impacts of increased temperature on runoff (timing of freshet, portion of fall rain/snow)? [Clarification]

If you have any questions please do not hesitate to contact Dan Farmer at 604-220-5703 or dan.farmer@telkwa-mining.ca.

Sincerely,



Daniel J. Farmer
Project and Development Manager
Telkwa Mining Limited

Cc: Elise Matzanke, Project Assessment Officer, EAO, email: Elise.Matzanke@gov.bc.ca
Matt Scarr, Project Assessment Director, EAO, email: Matthew.Scarr@gov.bc.ca
Jessy Chaplin, Ecosystems Biologist, Telkwa Mining, email: Jessy.chaplin@telkwa-mining.ca
File

Attachments:

Attachment 1: SRK response document to MENV Follow-up Information Request Two related to Water received on May 6, 2026

Attachment 1: SRK response document to MENV Follow-up Information Request Two related to Water received on May 6, 2026

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Canada

+1 604 681 4196 office
+1 778 508 3584 fax
vancouver@srk.com
www.srk.com

FINAL

Memo

To	Dan Farmer	**Client**	Telkwa Mining Ltd.
From	Celine Michiels, Nadine Shatilla	**Project**	CAPR002055
Cc	Samantha Barnes	**Date**	May 22, 2026

Subject ENV IR Round 2 – Response to Information Requests

File name: CAPR002055_ENV_IR_Memo_CCM_FINAL_20260522.docx

1 Introduction

This memo covers the information requests from ENV (Ministry of Environment and Parks) from the email received by TML on the 6th of May 2026.

2 IR 8 ENV

2.1 Comment

Thank you for the tables; however, the flow paths presented don't align with the flow schematics provided in previous WBWQM reporting (Figures 2.2 through 2.5). For example, void losses aren't present as a path for the management ponds, while coal processing demand and return from the CPP pond aren't presented (at least separately) for Tenas Pond. Further, "pumped flows/overflow" inputs do not seem to align with model schematics. For example, during Stage 1, the schematics show Open Pit Sump overflow directed to the NMP, but the values do not match. Please provide tables that include all the flow paths present in the model. [Information Request]

2.2 Response

We have updated the annual water tables to clarify the questions highlighted above. Of note:

- Void losses have been added to the table as they had been omitted previously. The water going to the voids was accounted for in the pumped inflows to the management ponds but no "outflows" was tabulated to balance out the inflows. This has now been added.
- CPP return was included previously in the pumped inflows to the TCP but has now its own column in the Tenas Control Pond table (Attachment 1 – Table1-4).
- The coal processing demand was part of the pumped outflows from the Open pit sump and is now in its own column (in Attachment 1 - Table 1-5).

- In Phase 1, the open pit sump pumps water both to the Coal processing plant and to NMP. This is now tabulated in different columns. The pumped inflows to NMP now match the pumped outflows from the pit sump as well as the pumped flows from the TCP to contribute to the void loss (as PAG is being added). As these results are generated from stochastic runs, the statistics generated for one outflow from one reservoir should be within the same order of magnitude of its corresponding inflow to another reservoir, but do not generally exactly match.

We have now also changed the following:

- A discharge to the receiving environment (surface water through spillway) from TCP was added in its separate column (in Attachment 1 – Table 1-4). In closure (post 2048, when TCP is decommissioned), this water is only the sum of the runoffs surrounding the TCP and would be mixed with the outflows from NMP.

3 IR 9 ENV

3.1 Comment

Thank you for the figures and explanations. It appears the rainfall-runoff model still underpredicts the median and range of flow conditions by a notable margin in Goathorn Creek and Tenas Creek when compared to the synthetic records, similar to the previous model. As I noted in IR 296, for Tenas Creek, at the 50th probability of exceedance, the modelled record is roughly 0.1 m3/s lower than the synthetic record, with an estimated MAD of 0.5 m3/s. At Goathorn Creek, the modeled record underpredicts the synthetic at the 50th by roughly 0.3 m3/s with a MAD of 1.7 m3/s. Both results appear unchanged in the revised model. At the node on Telkwa, the match between the modeled and synthetic is improved. At the EA stage, this level of model performance is appropriate to the stage of project development; however, if this project proceeds to permitting, model refinement or a detailed consideration of uncertainty will be required. [Comment]

3.2 Response

SRK acknowledges the comment. The monthly runoff coefficient models were developed with the intention of producing more conservative water quality results for the purpose of the EA. These models will be updated in the permitting stage and operations stage, incorporating more dynamic, process-based hydrological models for catchments with hydrometric stations as well as a representative Project area model that better represents freshet timing and magnitude, as well as the open water period.

4 New IR ENV

4.1 Comment

Comparing the selected runoff coefficients for Goathorn Creek used in the 2022 model vs the 2024 model, the values from the 2024 model are much more varied, both temporally and in magnitude. For example, the selected values range from 1 in Feb, to 0.45 in March, to 0.91 in April before falling to

~0.23 for May and June before increasing to 0.76 in July. This sort of variation appears to represent an attempt to increase model fit to variable years of data without modelling a missing or poorly characterized hydrologic process, like summer snowmelt or variable freshet timing.

A) Is there a physically based explanation for the highly variable runoff conditions in Goathorn Creek? B) Were these runoff coefficients held constant throughout the model? For example, were they adjusted to consider the impacts of increased temperature on runoff (timing of freshet, portion of fall rain/snow)? [Clarification]

4.2 Response

A) SRK acknowledges that the runoff coefficients within the individual catchment model for Goathorn Creek have a large variation. The monthly hydrological model relies on runoff coefficients to translate the proportion of effective precipitation that ends up as streamflow without explicitly modelling physical processes. The runoff coefficients were chosen to be conservative at a monthly timescale as a translation of the proportion of effective precipitation (in spring, this includes snowmelt) into runoff. The values were selected based on optimization across multiple years of paired effective precipitation and streamflow in GoldSim. The runoff coefficients did not represent freshet timing or magnitude particularly well as spring low flows were also considered given the monthly timestep and bundled into the monthly runoff coefficient. The lower flows within a given month across the time series were prioritized due to focus within the water and load balance model on water quality concentrations and capturing potential exceedances. The monthly runoff coefficient model does not take into account physical processes that vary due to soil moisture status, frozen ground, infiltration capacity of different materials across the catchment, changes to rainfall or snowmelt intensities and subsequent surface runoff, etc.

B) The runoff coefficients were held constant through the climate change periods with effects of increased air temperature and expected changes in precipitation phase. The effects of increasing air temperature were captured by the partitioning of total precipitation into rain and snow within the hydrology models, and within the snowmelt module as accumulated winter snowpack from snowfall and as snowmelt. The variability of runoff coefficients in future climate conditions is a limitation of the current model and will be evaluated in more detail in the permitting stage.

Partitioning of rain and snow was accomplished within the snow accumulation and ablation model (SNOW-17) developed by the National Weather Service River Forecast System, which uses inputs of daily average air temperature and precipitation. Rainfall and snowfall were linearly interpolated at 1.5°C between 100% snowfall and 0% rainfall, and at 5°C (0% snowfall and 100% rainfall). The main processes included in this model are dividing precipitation into rain or snow, accumulation of snowpack, energy exchange, heat deficit in the snowpack, ground melt and snowmelt as a snow water equivalent (SWE) (Anderson 2006). At the time of development, the project recorded snow depth at the Tenas Deposit Station but no snow surveys or continuous snow water equivalent. At this stage, the snowmelt model was validated using regional datasets including: (1) the SWE record at Tsai Creek and, (2) snow survey results from the Hudson Bay Mountain transect (SRK, 2022). Precipitation inputs for SNOW-17 were scaled to the mid-point elevation of each catchment using the PRISM elevation gradients. As the mean air temperature inputs varied with climate change, the impact on precipitation phase partitioning was modelled and less snowfall was accumulated with earlier melt.

Regards,
SRK Consulting (Canada) Inc.

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Celine Michiels, MSc, PhD
Senior Consultant (Water Quality)

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Nadine Shatilla, PhD
Senior Consultant (Water Resources)

Reviewed by

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
S. A. BARNES
48296

May 22/2026

Samantha Barnes, PEng
Principal Consultant

EGBC Permit to Practice: 1003655

Attachments:

Attachment 1 Annual water tables for NMP, EMP, WMP, TCP and Open Pit sump

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The opinions expressed in this document have been based on the information available to SRK at the time of preparation. SRK has exercised all due care in reviewing information supplied by others for use on this project. While SRK has compared key supplied data with expected values, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data. SRK does not accept responsibility for any errors or omissions in the supplied information, except to the extent that SRK was hired to verify the data.

Attachment 1 Annual water tables for NMP, EMP, WMP, TCP and Open Pit sump

Table 1-1: Annual Water Balance for the North Management Pond

	North Management Pond																							
	Water in reservoir (storage)[3]			Inflows									Outflows											
Type of flows				Direct precipitation			Runoff flows			Pumped flows/overflow[1]			Evaporation			Groundwater seepage			Overflow+Pumped flows[2]			Void losses		
Statistics	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95
Units	m3			m3/year			m3/year			m3/year			m3/year			m3/year			m3/year			m3/year		
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	191,000	198,000	208,000	-	-	-	13,000	22,000	31,000	199,000	211,000	225,000	14,000	14,000	14,000	10,000	10,000	10,000	5,000	8,000	16,000	104,000	104,000	104,000
2023	631,000	637,000	648,000	68,000	90,000	113,000	36,000	54,000	80,000	509,000	547,000	593,000	145,000	147,000	147,000	54,000	54,000	54,000	5,000	55,000	110,000	389,000	391,000	391,000
2024	782,000	784,000	786,000	162,000	200,000	241,000	-	-	-	460,000	531,000	622,000	163,000	163,000	163,000	72,000	72,000	72,000	235,000	345,000	475,000	100,000	100,000	100,000
2025	782,000	784,000	787,000	159,000	201,000	252,000	-	-	-	395,000	501,000	615,000	163,000	163,000	163,000	72,000	72,000	72,000	325,000	465,000	620,000	-	-	-
2026	709,000	753,000	805,000	161,000	205,000	257,000	-	-	-	-	-	-	163,000	163,000	164,000	72,000	72,000	72,000	-	-	-	-	-	-
2027	699,000	762,000	794,000	168,000	206,000	258,000	-	-	-	-	-	-	129,000	129,000	129,000	72,000	72,000	72,000	-	-	40,000	-	-	-
2028	692,000	748,000	782,000	169,000	209,000	261,000	-	-	-	-	-	-	129,000	129,000	129,000	72,000	72,000	72,000	-	17,000	60,000	-	-	-
2029	691,000	743,000	781,000	166,000	209,000	259,000	-	-	-	-	-	-	129,000	129,000	129,000	72,000	72,000	72,000	-	4,000	48,000	-	-	-
2030	794,000	794,000	794,000	171,000	210,000	246,000	-	-	-	85,000	324,000	678,000	129,000	129,000	129,000	72,000	72,000	72,000	13,000	269,000	689,000	-	-	-
2031	721,000	753,000	792,000	171,000	206,000	248,000	-	-	-	205,000	340,000	513,000	129,000	129,000	129,000	72,000	72,000	72,000	214,000	384,000	584,000	-	-	-
2032	722,000	755,000	791,000	166,000	211,000	263,000	-	-	-	163,000	303,000	517,000	129,000	129,000	129,000	72,000	72,000	72,000	134,000	314,000	569,000	-	-	-
2033	723,000	752,000	792,000	170,000	207,000	262,000	-	-	-	155,000	291,000	498,000	129,000	129,000	129,000	72,000	72,000	72,000	136,000	293,000	542,000	-	-	-
2034	725,000	758,000	791,000	168,000	210,000	260,000	-	-	-	117,000	298,000	497,000	130,000	130,000	130,000	72,000	72,000	72,000	85,000	311,000	533,000	-	-	-
2035	723,000	757,000	792,000	167,000	205,000	261,000	-	-	-	123,000	277,000	505,000	130,000	130,000	130,000	72,000	72,000	72,000	89,000	283,000	560,000	-	-	-
2036	724,000	755,000	791,000	156,000	219,000	270,000	-	-	-	168,000	304,000	492,000	130,000	130,000	130,000	72,000	72,000	72,000	162,000	308,000	538,000	-	-	-
2037	724,000	756,000	793,000	170,000	214,000	257,000	-	-	-	96,000	281,000	428,000	130,000	130,000	130,000	72,000	72,000	72,000	62,000	292,000	481,000	-	-	-
2038	717,000	754,000	791,000	169,000	209,000	257,000	-	-	-	119,000	277,000	478,000	130,000	130,000	130,000	72,000	72,000	72,000	86,000	288,000	519,000	-	-	-
2039	725,000	763,000	793,000	177,000	218,000	262,000	-	-	-	154,000	293,000	445,000	130,000	130,000	130,000	72,000	72,000	72,000	125,000	309,000	496,000	-	-	-
2040	731,000	758,000	793,000	170,000	216,000	270,000	-	-	-	120,000	268,000	465,000	130,000	130,000	130,000	72,000	72,000	72,000	101,000	288,000	513,000	-	-	-
2041	723,000	773,000	791,000	173,000	221,000	261,000	-	-	-	121,000	279,000	442,000	131,000	131,000	131,000	72,000	72,000	72,000	75,000	299,000	481,000	-	-	-
2042	733,000	762,000	793,000	178,000	220,000	273,000	-	-	-	164,000	306,000	463,000	131,000	131,000	131,000	72,000	72,000	72,000	146,000	334,000	519,000	-	-	-
2043	771,000	794,000	794,000	159,000	215,000	270,000	-	-	-	128,000	608,000	1,155,000	131,000	131,000	131,000	72,000	72,000	72,000	97,000	586,000	1,178,000	-	-	-
2044	718,000	794,000	794,000	175,000	222,000	268,000	-	-	-	330,000	609,000	896,000	131,000	131,000	131,000	72,000	72,000	72,000	343,000	637,000	957,000	-	-	-
2045	774,000	794,000	794,000	174,000	222,000	261,000	-	-	-	431,000	801,000	1,153,000	131,000	131,000	131,000	72,000	72,000	72,000	405,000	793,000	1,205,000	-	-	-
2046	787,000	794,000	794,000	181,000	221,000	275,000	-	-	-	496,000	837,000	1,218,000	131,000	131,000	131,000	72,000	72,000	72,000	483,000	857,000	1,291,000	-	-	-
2047	794,000	794,000	794,000	169,000	218,000	271,000	-	-	-	543,000	841,000	1,248,000	131,000	131,000	131,000	72,000	72,000	72,000	527,000	849,000	1,314,000	-	-	-
2048	794,000	794,000	794,000	172,000	220,000	275,000	-	-	-	538,000	866,000	1,319,000	131,000	131,000	131,000	72,000	72,000	72,000	507,000	882,000	1,388,000	-	-	-
2049	789,000	794,000	794,000	173,000	216,000	265,000	-	-	-	548,000	857,000	1,280,000	131,000	131,000	131,000	72,000	72,000	72,000	520,000	856,000	1,347,000	-	-	-
2050	791,000	794,000	794,000	182,000	218,000	265,000	-	-	-	568,000	834,000	1,178,000	131,000	131,000	131,000	72,000	72,000	72,000	556,000	849,000	1,241,000	-	-	-
2051	788,000	794,000	794,000	170,000	216,000	287,000	-	-	-	546,000	799,000	1,321,000	132,000	132,000	132,000	72,000	72,000	72,000	507,000	810,000	1,403,000	-	-	-
2052	794,000	794,000	794,000	179,000	223,000	272,000	-	-	-	573,000	864,000	1,253,000	132,000	132,000	132,000	72,000	72,000	72,000	554,000	887,000	1,321,000	-	-	-
2053	794,000	794,000	794,000	183,000	225,000	269,000	-	-	-	596,000	896,000	1,215,000	132,000	132,000	132,000	72,000	72,000	72,000	580,000	917,000	1,272,000	-	-	-
2054	793,000	794,000	794,000	172,000	225,000	271,000	-	-	-	585,000	902,000	1,198,000	132,000	132,000	132,000	72,000	72,000	72,000	564,000	928,000	1,270,000	-	-	-
2055	794,000	794,000	794,000	189,000	225,000	277,000	-	-	-	617,000	879,000	1,282,000	132,000	132,000	132,000	72,000	72,000	72,000	613,000	893,000	1,350,000	-	-	-
2056	794,000	794,000	794,000	171,000	221,000	270,000	-	-	-	565,000	896,000	1,266,000	132,000	132,000	132,000	72,000	72,000	72,000	533,000	906,000	1,329,000	-	-	-
2057	794,000	794,000	794,000	177,000	229,000	290,000	-	-	-	622,000	977,000	1,416,000	132,000	132,000	132,000	72,000	72,000	72,000	615,000	993,000	1,506,000	-	-	-
2058	794,000	794,000	794,000	184,000	223,000	275,000	-	-	-	583,000	884,000	1,262,000	132,000	132,000	132,000	72,000	72,000	72,000	572,000	895,000	1,325,000	-	-	-
2059	794,000	794,000	794,000	190,000	229,000	290,000	-	-	-	659,000	952,000	1,430,000	133,000	133,000	133,000	72,000	72,000	72,000	643,000	979,000	1,507,000	-	-	-
2060	794,000	794,000	794,000	182,000	220,000	289,000	-	-	-	639,000	925,000	1,420,000	133,000	133,000	133,000	72,000	72,000	72,000	627,000	936,000	1,512,000	-	-	-
2061	794,000	794,000	794,000	197,000	231,000	281,000	-	-	-	641,000	972,000	1,380,000	133,000	133,000	133,000	72,000	72,000	72,000	641,000	999,000	1,455,000	-	-	-
2062	794,000	794,000	794,000	177,000	227,000	290,000	-	-	-	603,000	960,000	1,398,000	133,000	133,000	133,000	72,000	72,000	72,000	586,000	994,000	1,478,000	-	-	-
2063	794,000	794,000	794,000	179,000	228,000	267,000	-	-	-	628,000	965,000	1,306,000	133,000	133,000	133,000	72,000	72,000	72,000	603,000	989,000	1,367,000	-	-	-
2064	794,000	794,000	794,000	178,000	224,000	273,000	-	-	-	564,000	914,000	1,316,000	133,000	133,000	133,000	72,000	72,000	72,000	544,000	930,000	1,375,000	-	-	-
2065	794,000	794,000	794,000	172,000	228,000	273,000	-	-	-	641,000	945,000	1,298,000	133,000	133,000	133,000	72,000	72,000	72,000	623,000	972,000	1,370,000	-	-	-
2066	794,000	794,000	794,000	178,000	226,000	275,000	-	-	-	613,000	925,000	1,287,000	133,000	133,000	133,000	72,000	72,000	72,000	588,000	940,000	1,361,000	-	-	-
2067	794,000	794,000	794,000	180,000	226,000	275,000	-	-	-	614,000	972,000	1,331,000	133,000	133,000	133,000	72,000	72,000	72,000	606,000	993,000	1,393,000	-	-	-
2068	794,000	794,000	794,000	170,000	227,000	284,000	-	-	-	620,000	927,000	1,338,000	133,000	133,000	133,000	72,000	72,000	72,000	607,000	953,000	1,427,000	-	-	-
2069	794,000	794,000	794,000	187,000	230,000	287,000	-	-	-	602,000	958,000	1,373,000	133,000	133,000	133,000	72,000	72,000	72,000	583,000	981,000	1,460,000	-	-	-
2070	794,000	794,000	794,000	175,000	233,000	284,000	-	-	-	602,000	986,000	1,436,000	133,000	133,000	133,000	72,000	72,000	72,000	595,000	1,016,000	1,511,000	-	-	-
2071	794,000	794,000	794,000	178,000	228,000	276,000	-	-	-	624,000	971,000	1,329,000	133,000	133,000	133,000	72,000	72,000	72,000	595,000	1,003,000	1,395,000	-	-	-
2072	794,000	794,000	794,000	193,000	232,000	302,000	-	-	-	695,000	1,013,000	1,536,000	134,000	134,000	134,000	72,000	72,000	72,000	681,000	1,051,000	1,640,000	-	-	-
2073	794,000	794,000	794,000	176,000	240,000	296,000	-	-	-	605,000	1,040,000	1,432,000	134,000	134,000	134,000	72,000	72,000	72,000	579,000	1,070,000	1,521,000	-	-	-
2074	794,000	794,000	794,000	190,000	227,000	290,000	-	-	-	663,000	997,000	1,407,000	134,000	134,000	134,000	72,000	72,000	72,000	654,000	1,018,000	1,491,000	-	-	-
2075	794,000	794,000	794,000	176,000	238,000	289,000	-	-	-	680,000	1,022,000	1,407,000	134,000	134,000	134,000	72,000	72,000	72,000	657,000	1,049,000	1,490,000	-	-	-
2076	794,000	794,000	794,000	188,000	234,000	294,000	-	-	-	718,000	1,044,000	1,508,000	134,000	134,000	134,000	72,000	72,000	72,000	714,000	1,061,000	1,590,000	-	-	-
2077	794,000	794,000	794,000	189,000	237,000	294,000	-	-	-	738,000	1,060,000	1,438,000	135,000	135,000	135,000	72,000	72,000	72,000	718,000	1,081,000	1,520,000	-	-	-
2078	794,000	794,000	794,000	181,000	230,000	290,000	-	-	-	665,000	984,000	1,369,000	135,000	135,000	135,000	72,000	72,000	72,000	639,000	984,000	1,444,000	-	-	-
2079	794,000	794,000	794,000	186,000	239,000	281,000	-	-	-	640,000	1,020,000	1,367,000	135,000	135,000	135,000	72,000	72,000	72,000	631,000	1,048,000	1,433,000	-	-	-
2080	794,000	794,000	794,000	178,000	235,000	291,000	-	-	-	649,000	1,041,000	1,501,000	135,000	135,000	135,000	72,000	72,000	72,000	620,000	1,072,000	1,574,000	-	-	-
2081	794,000	794,000	794,000	185,000	234,000	303,000	-	-	-	648,000	1,023,000	1,542,000	136,000	136,000	136,000	72,000	72,000	72,000	630,000	1,055,000	1,629,000	-	-	-
2082	794,000	794,000	794,000	194,000	235,000	296,000	-	-	-	761,000	1,019,000	1,536,000	136,000	136,000	136,000	72,000	72,000	72,000	750,000	1,043,000	1,615,000	-	-	-
2083	794,000	794,000	794,000	194,000	239,000	285,000	-	-	-	736,000	1,042,000	1,432,000	136,000	136,000	136,000	72,000	72,000	72,000	729,000	1,081,000	1,509,000	-	-	-
2084	794,000	794,000	794,000	186,000	234,000	291,000	-	-	-	676,000	1,037,000	1,433,000	136,000	136,000	136,000	72,000	72,000	72,000	661,000	1,064,000	1,504,000	-	-	-
2085	794,000	794,000	794,000	190,000	238,000	307,000	-	-	-	724,000	1,052,000	1,636,000	136,000	136,000	136,000	72,000	72,000	72,000	718,000	1,081,000	1,734,000	-	-	-
2086	794,000	794,000	794,000	188,000	244,000	305,000	-	-	-	693,000	1,102,000	1,606,000	136,000	136,000	136,000	72,000	72,000	72,000	673,000	1,139,000	1,704,000	-	-	-
2087	794,000	794,000	794,000	191,000	242,000	294,000	-	-	-	658,000	1,104,000	1,477,000	136,000	136,000	136,000	72,000	72,000	72,000	646,000	1,135,000	1,558,000	-	-	-
2088	794,000	794,000	794,000	203,000	246,000	306,000	-	-	-	820,000	1,136,000	1,615,000	136,000	136,000	136,000	72,000	72,000	72,000	824,000	1,171,000	1,709,000	-	-	-
2089	794,000	794,000	794,000	191,000	254,000	306,000	-	-	-	755,000	1,173,000	1,592,000	137,000	137,000	137,000	72,000	72,000	72,000	743,000	1,222,000	1,683,000	-	-	-
2090	794,000	794,000	794,000	203,000	243,000	301,000	-	-	-	780,000	1,114,000	1,578,000	137,000	137,000	137,000	72,000	72,000	72,000	776,000	1,148,000	1,673,000	-	-	-
2091	794,000	794,000	794,000	197,000	242,000	309,000	-	-	-	755,000	1,120,000	1,573,000	137,000	137,000	137,000	72,000	72,000	72,000	736,000	1,159,000	1,667,000	-	-	-
2092	794,000	794,000	794,000	195,000	241,000	297,000	-	-	-	749,000	1,088,000	1,560,000	137,000	137,000	137,000	72,000	72,000	72,000	740,000	1,134,000	1,644,000	-	-	-
2093	794,000	794,000	794,000	187,000	245,000	298,000	-	-	-	723,000	1,135,000	1,559,000	137,000	137,000	137,000	72,000	72,000	72,000	712,000	1,168,000	1,652,000	-	-	-
2094	794,000	794,000	794,000	182,000	244,000	296,000	-	-	-	653,000	1,100,000	1,458,000	137,000	137,000	137,000	72,000	72,000	72,000	613,000	1,137,000	1,536,000	-	-	-
2095	794,000	794,000	794,000	172,000	223,000	269,000	-	-	-	557,000	957,000	1,364,000	137,000	137,000	137,000	72,000	72,000	72,000	529,000	974,000	1,419,000	-	-	-
2096	794,000	794,000	794,000	186,000	230,000	285,000	-	-	-	695,000	1,010,000	1,464,000	137,000	137,000	137,000	72,000	72,000	72,000	672,000	1,039,000	1,535,000	-	-	-
2097	794,000	794,000	794,000	186,000	232,000	280,000	-	-	-	680,000	1,016,000	1,478,000	137,000	137,000	137,000	72,000	72,000	72,000	657,000	1,030,000	1,546,000	-	-	-
2098	794,000	794,000	794,000	190,000	235,000	284,000	-	-	-	720,000	1,046,000	1,484,000	137,000	137,000	137,000	72,000	72,000	72,000	715,000	1,076,000	1,551,000	-	-	-
2099	794,000	794,000	794,000	178,000	225,000	279,000	-	-	-	637,000	997,000	1,461,000	137,000	137,000	137,000	72,000	72,000	72,000	604,000	1,014,000	1,527,000	-	-	-

Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Surface%20Water%20IR%20Responses/ITT_20260303/Annual_waterBalance_Telkwa_CAPR002055_20260520.xlsx?web=1

Notes:

Addition of PAG

Closure year

1 Pumped/overflow inflows includes pumped flows from open pit sump, any overflow or pumped flows from upstream Management Ponds, and pumping from TCP

2 Pumped/overflows outflows includes overflow from pond to donwstream reservoir, and any pumped flows (to other MPs or TCP). Overflows from NMP becomes the effluent discharge to the environment in closure after 2028 (when Tenas Control Pond gets decommissioned)

3 Water stored in the ponds vary between realizations, but water levels in the ponds were always above PAG during PAG placement or were always above 1.5m above PAG after PAG placement was completed

Table 1-2: Annual Water Balance for the East Management Pond

	East Management Pond																							
	Water in reservoir (storage)[3]			Inflows									Outflows											
Type of flows				Direct precipitation			Runoff flows			Pumped flows/overflow[1]			Evaporation			Groundwater seepage			Overflow+Pumped flows[2]			Void losses		
Statistics	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95
Units	m3			m3/year			m3/year			m3/year			m3/year			m3/year			m3/year			m3/year		
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2023	213,000	372,000	503,000	-	-	-	273,000	389,000	532,000	-	-	-	-	-	-	-	-	-	-	22,000	65,000	-	-	-
2024	586,000	593,000	620,000	98,000	121,000	156,000	290,000	357,000	479,000	413,000	457,000	502,000	123,000	124,000	125,000	12,000	12,000	12,000	454,000	583,000	723,000	392,000	392,000	392,000
2025	1,254,000	1,298,000	1,367,000	352,000	440,000	570,000	173,000	239,000	337,000	486,000	529,000	589,000	324,000	325,000	327,000	42,000	42,000	42,000	55,000	145,000	265,000	539,000	539,000	539,000
2026	1,943,000	2,003,000	2,052,000	534,000	682,000	853,000	135,000	205,000	282,000	579,000	671,000	819,000	440,000	442,000	445,000	70,000	70,000	70,000	118,000	335,000	655,000	558,000	558,000	558,000
2027	2,589,000	2,683,000	2,744,000	594,000	729,000	913,000	156,000	218,000	276,000	693,000	785,000	902,000	528,000	530,000	533,000	97,000	97,000	97,000	220,000	405,000	718,000	620,000	620,000	620,000
2028	2,987,000	3,133,000	3,370,000	615,000	761,000	950,000	163,000	218,000	304,000	371,000	471,000	581,000	580,000	582,000	585,000	126,000	126,000	126,000	160,000	295,000	410,000	558,000	558,000	558,000
2029	3,434,000	3,668,000	4,004,000	602,000	761,000	943,000	158,000	222,000	319,000	-	-	-	295,000	297,000	299,000	153,000	153,000	153,000	-	-	-	129,000	129,000	129,000
2030	3,523,000	3,523,000	3,523,000	624,000	765,000	896,000	162,000	215,000	291,000	-	-	-	619,000	619,000	619,000	167,000	167,000	167,000	85,000	324,000	678,000	-	-	-
2031	3,362,000	3,497,000	3,523,000	620,000	748,000	903,000	154,000	212,000	277,000	-	-	-	504,000	504,000	504,000	167,000	167,000	167,000	205,000	340,000	513,000	-	-	-
2032	3,369,000	3,487,000	3,521,000	604,000	767,000	957,000	161,000	214,000	296,000	-	-	-	505,000	505,000	505,000	168,000	168,000	168,000	163,000	303,000	517,000	-	-	-
2033	3,369,000	3,487,000	3,523,000	619,000	754,000	953,000	155,000	214,000	269,000	-	-	-	505,000	505,000	505,000	167,000	167,000	167,000	155,000	291,000	498,000	-	-	-
2034	3,378,000	3,492,000	3,522,000	611,000	764,000	945,000	151,000	199,000	279,000	-	-	-	506,000	506,000	506,000	167,000	167,000	167,000	117,000	298,000	497,000	-	-	-
2035	3,361,000	3,495,000	3,522,000	606,000	746,000	948,000	144,000	195,000	269,000	-	-	-	506,000	506,000	506,000	167,000	167,000	167,000	123,000	277,000	505,000	-	-	-
2036	3,372,000	3,484,000	3,523,000	567,000	796,000	983,000	139,000	199,000	267,000	-	-	-	507,000	507,000	507,000	168,000	168,000	168,000	168,000	304,000	492,000	-	-	-
2037	3,369,000	3,488,000	3,522,000	619,000	780,000	937,000	128,000	181,000	254,000	-	-	-	507,000	507,000	507,000	167,000	167,000	167,000	96,000	281,000	428,000	-	-	-
2038	3,341,000	3,478,000	3,521,000	615,000	760,000	934,000	135,000	181,000	248,000	-	-	-	508,000	508,000	508,000	167,000	167,000	167,000	119,000	277,000	478,000	-	-	-
2039	3,374,000	3,498,000	3,523,000	643,000	793,000	953,000	131,000	179,000	243,000	-	-	-	508,000	508,000	508,000	167,000	167,000	167,000	154,000	293,000	445,000	-	-	-
2040	3,389,000	3,488,000	3,523,000	620,000	787,000	982,000	116,000	169,000	229,000	-	-	-	509,000	509,000	509,000	168,000	168,000	168,000	120,000	268,000	465,000	-	-	-
2041	3,359,000	3,502,000	3,520,000	628,000	803,000	950,000	117,000	161,000	212,000	-	-	-	509,000	509,000	509,000	167,000	167,000	167,000	121,000	279,000	442,000	-	-	-
2042	3,388,000	3,498,000	3,522,000	648,000	800,000	992,000	115,000	161,000	203,000	-	-	-	510,000	510,000	510,000	167,000	167,000	167,000	164,000	306,000	463,000	-	-	-
2043	3,343,000	3,483,000	3,522,000	580,000	782,000	981,000	104,000	144,000	196,000	-	-	-	510,000	510,000	510,000	167,000	167,000	167,000	99,000	259,000	429,000	-	-	-
2044	3,331,000	3,493,000	3,522,000	636,000	807,000	975,000	107,000	144,000	186,000	-	-	-	511,000	511,000	511,000	168,000	168,000	168,000	121,000	268,000	412,000	-	-	-
2045	3,371,000	3,488,000	3,520,000	633,000	806,000	950,000	107,000	142,000	188,000	-	-	-	511,000	511,000	511,000	167,000	167,000	167,000	93,000	266,000	420,000	-	-	-
2046	3,371,000	3,498,000	3,523,000	657,000	806,000	1,002,000	104,000	145,000	197,000	-	-	-	511,000	511,000	511,000	167,000	167,000	167,000	96,000	271,000	430,000	-	-	-
2047	3,360,000	3,496,000	3,523,000	614,000	793,000	986,000	102,000	143,000	182,000	-	-	-	512,000	512,000	512,000	167,000	167,000	167,000	122,000	252,000	451,000	-	-	-
2048	3,377,000	3,489,000	3,523,000	627,000	801,000	1,001,000	114,000	147,000	198,000	-	-	-	512,000	512,000	512,000	168,000	168,000	168,000	118,000	275,000	477,000	-	-	-
2049	3,350,000	3,484,000	3,522,000	628,000	786,000	965,000	104,000	145,000	188,000	-	-	-	513,000	513,000	513,000	167,000	167,000	167,000	121,000	257,000	460,000	-	-	-
2050	3,368,000	3,503,000	3,523,000	661,000	795,000	963,000	104,000	143,000	185,000	-	-	-	513,000	513,000	513,000	167,000	167,000	167,000	118,000	261,000	422,000	-	-	-
2051	3,362,000	3,483,000	3,523,000	620,000	786,000	1,044,000	110,000	148,000	200,000	-	-	-	513,000	513,000	513,000	167,000	167,000	167,000	120,000	269,000	488,000	-	-	-
2052	3,398,000	3,499,000	3,523,000	652,000	813,000	990,000	114,000	151,000	194,000	-	-	-	514,000	514,000	514,000	168,000	168,000	168,000	125,000	265,000	459,000	-	-	-
2053	3,371,000	3,504,000	3,522,000	665,000	820,000	978,000	115,000	147,000	186,000	-	-	-	514,000	514,000	514,000	167,000	167,000	167,000	138,000	286,000	432,000	-	-	-
2054	3,365,000	3,495,000	3,522,000	628,000	820,000	986,000	114,000	149,000	191,000	-	-	-	515,000	515,000	515,000	167,000	167,000	167,000	128,000	280,000	444,000	-	-	-
2055	3,388,000	3,508,000	3,523,000	689,000	820,000	1,009,000	113,000	151,000	201,000	-	-	-	515,000	515,000	515,000	167,000	167,000	167,000	142,000	276,000	475,000	-	-	-
2056	3,386,000	3,499,000	3,523,000	622,000	806,000	983,000	120,000	158,000	196,000	-	-	-	516,000	516,000	516,000	168,000	168,000	168,000	150,000	285,000	457,000	-	-	-
2057	3,356,000	3,502,000	3,522,000	645,000	833,000	1,055,000	110,000	164,000	205,000	-	-	-	516,000	516,000	516,000	167,000	167,000	167,000	160,000	314,000	514,000	-	-	-
2058	3,375,000	3,498,000	3,523,000	669,000	810,000	999,000	109,000	155,000	193,000	-	-	-	517,000	517,000	517,000	167,000	167,000	167,000	119,000	281,000	463,000	-	-	-
2059	3,381,000	3,502,000	3,523,000	692,000	833,000	1,056,000	117,000	160,000	220,000	-	-	-	517,000	517,000	517,000	167,000	167,000	167,000	163,000	299,000	529,000	-	-	-
2060	3,388,000	3,487,000	3,523,000	663,000	802,000	1,053,000	111,000	154,000	202,000	-	-	-	518,000	518,000	518,000	168,000	168,000	168,000	160,000	280,000	536,000	-	-	-
2061	3,390,000	3,508,000	3,522,000	717,000	839,000	1,022,000	124,000	165,000	203,000	-	-	-	518,000	518,000	518,000	167,000	167,000	167,000	134,000	308,000	514,000	-	-	-
2062	3,353,000	3,508,000	3,523,000	643,000	828,000	1,055,000	114,000	155,000	209,000	-	-	-	518,000	518,000	518,000	167,000	167,000	167,000	153,000	306,000	523,000	-	-	-
2063	3,386,000	3,493,000	3,523,000	651,000	830,000	970,000	120,000	159,000	214,000	-	-	-	518,000	518,000	518,000	167,000	167,000	167,000	136,000	309,000	464,000	-	-	-
2064	3,382,000	3,500,000	3,522,000	648,000	816,000	992,000	120,000	154,000	201,000	-	-	-	518,000	518,000	518,000	168,000	168,000	168,000	122,000	278,000	483,000	-	-	-
2065	3,359,000	3,504,000	3,523,000	628,000	830,000	994,000	120,000	159,000	211,000	-	-	-	518,000	518,000	518,000	167,000	167,000	167,000	142,000	310,000	484,000	-	-	-
2066	3,352,000	3,493,000	3,523,000	650,000	822,000	1,000,000	111,000	153,000	204,000	-	-	-	518,000	518,000	518,000	167,000	167,000	167,000	131,000	290,000	455,000	-	-	-
2067	3,366,000	3,506,000	3,523,000	656,000	824,000	1,002,000	116,000	165,000	212,000	-	-	-	518,000	518,000	518,000	167,000	167,000	167,000	150,000	305,000	485,000	-	-	-
2068	3,377,000	3,500,000	3,523,000	619,000	825,000	1,032,000	120,000	156,000	216,000	-	-	-	518,000	518,000	518,000	168,000	168,000	168,000	127,000	291,000	503,000	-	-	-
2069	3,375,000	3,506,000	3,523,000	680,000	837,000	1,045,000	113,000	158,000	210,000	-	-	-	518,000	518,000	518,000	167,000	167,000	167,000	135,000	305,000	490,000	-	-	-
2070	3,353,000	3,509,000	3,523,000	637,000	846,000	1,035,000	124,000	168,000	223,000	-	-	-	519,000	519,000	519,000	167,000	167,000	167,000	152,000	321,000	517,000	-	-	-
2071	3,363,000	3,505,000	3,523,000	647,000	830,000	1,004,000	125,000	160,000	202,000	-	-	-	520,000	520,000	520,000	167,000	167,000	167,000	156,000	307,000	486,000	-	-	-
2072	3,407,000	3,511,000	3,523,000	704,000	845,000	1,101,000	130,000	172,000	230,000	-	-	-	521,000	521,000	521,000	168,000	168,000	168,000	159,000	331,000	558,000	-	-	-
2073	3,379,000	3,512,000	3,523,000	641,000	874,000	1,079,000	121,000	167,000	218,000	-	-	-	522,000	522,000	522,000	167,000	167,000	167,000	153,000	334,000	549,000	-	-	-
2074	3,387,000	3,505,000	3,522,000	690,000	825,000	1,057,000	127,000	165,000	211,000	-	-	-	523,000	523,000	523,000	167,000	167,000	167,000	144,000	317,000	522,000	-	-	-
2075	3,357,000	3,509,000	3,523,000	641,000	864,000	1,052,000	126,000	172,000	220,000	-	-	-	524,000	524,000	524,000	167,000	167,000	167,000	207,000	324,000	495,000	-	-	-
2076	3,379,000	3,508,000	3,523,000	685,000	852,000	1,071,000	132,000	176,000	246,000	-	-	-	525,000	525,000	525,000	168,000	168,000	168,000	195,000	324,000	546,000	-	-	-
2077	3,389,000	3,509,000	3,523,000	686,000	863,000	1,071,000	133,000	175,000	217,000	-	-	-	526,000	526,000	526,000	167,000	167,000	167,000	190,000	339,000	516,000	-	-	-
2078	3,378,000	3,507,000	3,523,000	658,000	836,000	1,054,000	125,000	168,000	213,000	-	-	-	527,000	527,000	527,000	167,000	167,000	167,000	147,000	305,000	500,000	-	-	-
2079	3,387,000	3,510,000	3,523,000	678,000	869,000	1,024,000	125,000	166,000	223,000	-	-	-	528,000	528,000	528,000	167,000	167,000	167,000	164,000	329,000	491,000	-	-	-
2080	3,366,000	3,509,000	3,523,000	646,000	856,000	1,060,000	130,000	177,000	228,000	-	-	-	528,000	528,000	528,000	168,000	168,000	168,000	183,000	339,000	574,000	-	-	-
2081	3,389,000	3,511,000	3,523,000	673,000	852,000	1,102,000	123,000	177,000	234,000	-	-	-	529,000	529,000	529,000	167,000	167,000	167,000	157,000	330,000	564,000	-	-	-
2082	3,404,000	3,512,000	3,523,000	706,000	855,000	1,078,000	135,000	177,000	229,000	-	-	-	529,000	529,000	529,000	167,000	167,000	167,000	213,000	326,000	580,000	-	-	-
2083	3,413,000	3,511,000	3,523,000	706,000	871,000	1,035,000	142,000	172,000	214,000	-	-	-	530,000	530,000	530,000	167,000	167,000	167,000	186,000	334,000	531,000	-	-	-
2084	3,384,000	3,510,000	3,523,000	675,000	851,000	1,058,000	128,000	173,000	226,000	-	-	-	530,000	530,000	530,000	168,000	168,000	168,000	147,000	346,000	525,000	-	-	-
2085	3,376,000	3,513,000	3,523,000	693,000	865,000	1,115,000	135,000	181,000	241,000	-	-	-	531,000	531,000	531,000	167,000	167,000	167,000	181,000	333,000	607,000	-	-	-
2086	3,369,000	3,512,000	3,523,000	684,000	889,000	1,110,000	134,000	180,000	241,000	-	-	-	531,000	531,000	531,000	167,000	167,000	167,000	182,000	363,000	603,000	-	-	-
2087	3,416,000	3,515,000	3,523,000	695,000	882,000	1,072,000	122,000	177,000	230,000	-	-	-	532,000	532,000	532,000	167,000	167,000	167,000	170,000	352,000	541,000	-	-	-
2088	3,418,000	3,511,000	3,523,000	741,000	896,000	1,114,000	142,000	186,000	244,000	-	-	-	532,000	532,000	532,000	168,000	168,000	168,000	222,000	379,000	612,000	-	-	-
2089	3,408,000	3,515,000	3,523,000	695,000	923,000	1,115,000	145,000	183,000	231,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	207,000	403,000	603,000	-	-	-
2090	3,414,000	3,515,000	3,523,000	738,000	885,000	1,095,000	139,000	184,000	246,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	206,000	364,000	584,000	-	-	-
2091	3,399,000	3,513,000	3,523,000	716,000	879,000	1,125,000	136,000	180,000	230,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	190,000	359,000	602,000	-	-	-
2092	3,397,000	3,514,000	3,523,000	708,000	877,000	1,079,000	141,000	184,000	226,000	-	-	-	533,000	533,000	533,000	168,000	168,000	168,000	200,000	354,000	566,000	-	-	-
2093	3,395,000	3,512,000	3,523,000	682,000	891,000	1,085,000	143,000	185,000	240,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	194,000	378,000	570,000	-	-	-
2094	3,385,000	3,519,000	3,523,000	661,000	889,000	1,079,000	141,000	182,000	229,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	192,000	348,000	535,000	-	-	-
2095	3,373,000	3,505,000	3,523,000	627,000	812,000	981,000	124,000	175,000	221,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	108,000	291,000	481,000	-	-	-
2096	3,409,000	3,513,000	3,523,000	678,000	839,000	1,038,000	137,000	185,000	231,000	-	-	-	533,000	533,000	533,000	168,000	168,000	168,000	169,000	319,000	535,000	-	-	-
2097	3,386,000	3,512,000	3,523,000	677,000	843,000	1,019,000	138,000	181,000	237,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	158,000	320,000	544,000	-	-	-
2098	3,406,000	3,514,000	3,523,000	690,000	856,000	1,032,000	139,000	190,000	232,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	176,000	331,000	536,000	-	-	-
2099	3,409,000	3,516,000	3,523,000	647,000	817,000	1,017,000	139,000	181,000	237,000	-	-	-	533,000	533,000	533,000	167,000	167,000	167,000	175,000	299,000	526,000	-	-	-

Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Surface%20Water%20IR%20Responses/ITT_20260303/Annual_waterBalance_Telkwa_CAPR002055_20260520.xlsx?web=1

Notes:

Addition of PAG

Closure year

1 Pumped/overflow inflows includes pumped flows from open pit sump, any overflow or pumped flows from upstream Management Ponds, and pumping from TCP

2 Pumped/overflows outflows includes overflow from pond to donwstream reservoir, and any pumped flows (to other MPs or TCP)

3 Water stored in the ponds vary between realizations, but water levels in the ponds were always above PAG during PAG placement or were always above 1.5m above PAG after PAG placement was completed

Table 1-3: Annual Water Balance for the West Management Pond

	West Management Pond																							
	Water in reservoir (storage)[3]			Inflows									Outflows											
Type of flows				Direct precipitation			Runoff flows			Pumped flows/overflow[1]			Evaporation			Groundwater seepage			Overflow+Pumped flows[2]			Void losses		
Statistics	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95
Units	m3			m3/year			m3/year			m3/year			m3/year			m3/year			m3/year			m3/year		
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2025	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	316,000	387,000	483,000	37,000	47,000	59,000	5,000	6,000	8,000	283,000	347,000	430,000	10,000	12,000	14,000	-	-	-	-	-	-	-	-	-
2029	512,000	520,000	531,000	114,000	143,000	178,000	16,000	22,000	30,000	767,000	866,000	1,001,000	72,000	72,000	72,000	-	-	-	670,000	840,000	1,020,000	427,000	427,000	427,000
2030	963,000	968,000	973,000	158,000	194,000	227,000	23,000	31,000	41,000	793,000	919,000	1,044,000	119,000	119,000	120,000	11,000	11,000	11,000	410,000	570,000	720,000	371,000	371,000	371,000
2031	1,494,000	1,508,000	1,538,000	157,000	189,000	229,000	21,000	30,000	39,000	820,000	897,000	1,041,000	155,000	155,000	156,000	33,000	33,000	33,000	270,000	390,000	550,000	543,000	543,000	543,000
2032	1,987,000	2,006,000	2,026,000	153,000	194,000	242,000	22,000	31,000	42,000	797,000	927,000	1,074,000	183,000	183,000	183,000	55,000	55,000	55,000	260,000	420,000	610,000	459,000	459,000	459,000
2033	2,576,000	2,586,000	2,636,000	174,000	212,000	271,000	24,000	33,000	41,000	836,000	933,000	1,091,000	197,000	197,000	197,000	76,000	76,000	76,000	210,000	330,000	510,000	583,000	583,000	583,000
2034	3,223,000	3,249,000	3,296,000	207,000	260,000	321,000	28,000	36,000	50,000	840,000	960,000	1,075,000	251,000	251,000	252,000	98,000	98,000	98,000	120,000	250,000	420,000	577,000	577,000	577,000
2035	3,649,000	3,701,000	3,733,000	240,000	298,000	377,000	31,000	41,000	57,000	705,000	814,000	999,000	298,000	299,000	300,000	120,000	120,000	120,000	170,000	310,000	550,000	370,000	370,000	370,000
2036	4,082,000	4,157,000	4,200,000	258,000	363,000	448,000	34,000	48,000	63,000	706,000	837,000	993,000	360,000	361,000	361,000	142,000	142,000	142,000	130,000	310,000	510,000	421,000	421,000	421,000
2037	4,618,000	4,675,000	4,733,000	319,000	402,000	483,000	38,000	51,000	67,000	746,000	846,000	963,000	399,000	400,000	400,000	163,000	163,000	163,000	80,000	240,000	380,000	502,000	502,000	502,000
2038	5,042,000	5,127,000	5,177,000	353,000	436,000	535,000	44,000	56,000	75,000	700,000	811,000	947,000	436,000	437,000	438,000	185,000	185,000	185,000	120,000	260,000	460,000	374,000	374,000	374,000
2039	5,463,000	5,565,000	5,609,000	405,000	500,000	603,000	49,000	64,000	83,000	727,000	843,000	983,000	481,000	481,000	482,000	207,000	207,000	207,000	170,000	320,000	540,000	397,000	397,000	397,000
2040	6,004,000	6,086,000	6,145,000	429,000	544,000	676,000	49,000	68,000	87,000	782,000	895,000	1,066,000	506,000	506,000	507,000	229,000	229,000	229,000	110,000	300,000	490,000	539,000	539,000	539,000
2041	6,436,000	6,543,000	6,575,000	471,000	602,000	713,000	54,000	73,000	92,000	759,000	903,000	1,040,000	527,000	527,000	528,000	251,000	251,000	251,000	180,000	380,000	600,000	394,000	394,000	394,000
2042	6,918,000	7,013,000	7,066,000	522,000	646,000	803,000	61,000	81,000	103,000	779,000	932,000	1,109,000	547,000	548,000	548,000	272,000	272,000	272,000	220,000	410,000	660,000	470,000	470,000	470,000
2043	7,407,000	7,407,000	7,407,000	503,000	676,000	851,000	63,000	83,000	108,000	709,000	872,000	1,081,000	576,000	577,000	580,000	294,000	294,000	294,000	40,000	343,000	716,000	294,000	294,000	294,000
2044	7,326,000	7,407,000	7,407,000	570,000	723,000	873,000	79,000	108,000	136,000	301,000	342,000	381,000	575,000	575,000	575,000	300,000	300,000	300,000	196,000	346,000	529,000	1,000	1,000	1,000
2045	7,407,000	7,407,000	7,407,000	567,000	722,000	851,000	80,000	107,000	142,000	422,000	468,000	521,000	496,000	496,000	496,000	299,000	299,000	299,000	316,000	553,000	730,000	-	-	-
2046	7,407,000	7,407,000	7,407,000	589,000	722,000	898,000	75,000	110,000	147,000	437,000	483,000	530,000	476,000	476,000	476,000	299,000	299,000	299,000	404,000	587,000	806,000	-	-	-
2047	7,407,000	7,407,000	7,407,000	550,000	711,000	884,000	78,000	108,000	136,000	432,000	483,000	528,000	477,000	477,000	477,000	299,000	299,000	299,000	383,000	573,000	771,000	-	-	-
2048	7,407,000	7,407,000	7,407,000	562,000	718,000	897,000	83,000	109,000	148,000	438,000	489,000	548,000	477,000	477,000	477,000	300,000	300,000	300,000	385,000	594,000	838,000	-	-	-
2049	7,407,000	7,407,000	7,407,000	563,000	704,000	864,000	75,000	109,000	141,000	443,000	490,000	537,000	478,000	478,000	478,000	299,000	299,000	299,000	402,000	573,000	798,000	-	-	-
2050	7,407,000	7,407,000	7,407,000	593,000	712,000	863,000	78,000	107,000	138,000	438,000	493,000	531,000	478,000	478,000	478,000	299,000	299,000	299,000	426,000	595,000	779,000	-	-	-
2051	7,407,000	7,407,000	7,407,000	555,000	704,000	936,000	83,000	108,000	149,000	446,000	488,000	536,000	478,000	478,000	478,000	299,000	299,000	299,000	382,000	571,000	864,000	-	-	-
2052	7,407,000	7,407,000	7,407,000	585,000	728,000	888,000	84,000	110,000	142,000	459,000	497,000	549,000	479,000	479,000	479,000	300,000	300,000	300,000	458,000	609,000	803,000	-	-	-
2053	7,407,000	7,407,000	7,407,000	596,000	735,000	876,000	84,000	109,000	132,000	460,000	493,000	540,000	479,000	479,000	479,000	299,000	299,000	299,000	470,000	612,000	774,000	-	-	-
2054	7,407,000	7,407,000	7,407,000	562,000	735,000	883,000	84,000	113,000	139,000	463,000	499,000	544,000	480,000	480,000	480,000	299,000	299,000	299,000	410,000	605,000	789,000	-	-	-
2055	7,407,000	7,407,000	7,407,000	617,000	735,000	905,000	83,000	112,000	142,000	454,000	502,000	537,000	480,000	480,000	480,000	299,000	299,000	299,000	471,000	605,000	839,000	-	-	-
2056	7,407,000	7,407,000	7,407,000	557,000	722,000	881,000	88,000	114,000	141,000	465,000	508,000	550,000	481,000	481,000	481,000	300,000	300,000	300,000	416,000	621,000	811,000	-	-	-
2057	7,407,000	7,407,000	7,407,000	578,000	746,000	945,000	84,000	119,000	151,000	472,000	512,000	563,000	481,000	481,000	481,000	299,000	299,000	299,000	438,000	657,000	907,000	-	-	-
2058	7,407,000	7,407,000	7,407,000	600,000	726,000	896,000	81,000	115,000	142,000	460,000	510,000	549,000	482,000	482,000	482,000	299,000	299,000	299,000	420,000	609,000	812,000	-	-	-
2059	7,407,000	7,407,000	7,407,000	620,000	746,000	946,000	88,000	118,000	154,000	465,000	517,000	565,000	482,000	482,000	482,000	299,000	299,000	299,000	490,000	645,000	904,000	-	-	-
2060	7,407,000	7,407,000	7,407,000	594,000	718,000	943,000	82,000	115,000	148,000	465,000	517,000	569,000	482,000	482,000	482,000	300,000	300,000	300,000	454,000	617,000	884,000	-	-	-
2061	7,407,000	7,407,000	7,407,000	642,000	752,000	916,000	90,000	121,000	150,000	472,000	517,000	562,000	482,000	482,000	482,000	299,000	299,000	299,000	484,000	653,000	876,000	-	-	-
2062	7,407,000	7,407,000	7,407,000	577,000	742,000	945,000	85,000	116,000	149,000	473,000	512,000	566,000	482,000	482,000	482,000	299,000	299,000	299,000	431,000	652,000	889,000	-	-	-
2063	7,407,000	7,407,000	7,407,000	583,000	744,000	870,000	88,000	114,000	153,000	474,000	520,000	571,000	483,000	483,000	483,000	299,000	299,000	299,000	455,000	647,000	844,000	-	-	-
2064	7,407,000	7,407,000	7,407,000	580,000	731,000	889,000	87,000	114,000	150,000	470,000	516,000	570,000	483,000	483,000	483,000	300,000	300,000	300,000	439,000	637,000	833,000	-	-	-
2065	7,407,000	7,407,000	7,407,000	562,000	744,000	890,000	89,000	119,000	152,000	462,000	519,000	563,000	483,000	483,000	483,000	299,000	299,000	299,000	458,000	661,000	838,000	-	-	-
2066	7,407,000	7,407,000	7,407,000	582,000	736,000	896,000	84,000	115,000	145,000	465,000	516,000	563,000	483,000	483,000	483,000	299,000	299,000	299,000	438,000	626,000	838,000	-	-	-
2067	7,407,000	7,407,000	7,407,000	588,000	738,000	898,000	83,000	120,000	155,000	469,000	527,000	574,000	483,000	483,000	483,000	299,000	299,000	299,000	449,000	656,000	867,000	-	-	-
2068	7,407,000	7,407,000	7,407,000	555,000	739,000	925,000	88,000	114,000	157,000	476,000	523,000	580,000	483,000	483,000	483,000	300,000	300,000	300,000	448,000	635,000	851,000	-	-	-
2069	7,407,000	7,407,000	7,407,000	610,000	750,000	937,000	85,000	119,000	149,000	469,000	522,000	569,000	483,000	483,000	483,000	299,000	299,000	299,000	470,000	656,000	865,000	-	-	-
2070	7,407,000	7,407,000	7,407,000	571,000	759,000	927,000	85,000	120,000	161,000	489,000	528,000	579,000	484,000	484,000	484,000	299,000	299,000	299,000	430,000	681,000	898,000	-	-	-
2071	7,407,000	7,407,000	7,407,000	580,000	744,000	899,000	91,000	119,000	148,000	490,000	535,000	583,000	484,000	484,000	484,000	299,000	299,000	299,000	476,000	675,000	854,000	-	-	-
2072	7,407,000	7,407,000	7,407,000	631,000	757,000	986,000	97,000	125,000	163,000	491,000	536,000	587,000	485,000	485,000	485,000	300,000	300,000	300,000	526,000	691,000	964,000	-	-	-
2073	7,407,000	7,407,000	7,407,000	574,000	783,000	967,000	86,000	124,000	153,000	494,000	538,000	575,000	486,000	486,000	486,000	299,000	299,000	299,000	448,000	714,000	891,000	-	-	-
2074	7,407,000	7,407,000	7,407,000	619,000	739,000	947,000	94,000	117,000	148,000	494,000	541,000	575,000	487,000	487,000	487,000	299,000	299,000	299,000	488,000	676,000	905,000	-	-	-
2075	7,407,000	7,407,000	7,407,000	575,000	775,000	943,000	93,000	123,000	153,000	487,000	545,000	588,000	488,000	488,000	488,000	299,000	299,000	299,000	475,000	704,000	919,000	-	-	-
2076	7,407,000	7,407,000	7,407,000	613,000	763,000	960,000	100,000	129,000	173,000	504,000	550,000	607,000	489,000	489,000	489,000	300,000	300,000	300,000	516,000	704,000	984,000	-	-	-
2077	7,407,000	7,407,000	7,407,000	615,000	773,000	960,000	91,000	129,000	160,000	506,000	552,000	605,000	490,000	490,000	490,000	299,000	299,000	299,000	515,000	723,000	921,000	-	-	-
2078	7,407,000	7,407,000	7,407,000	589,000	749,000	944,000	94,000	122,000	152,000	500,000	547,000	591,000	491,000	491,000	491,000	299,000	299,000	299,000	478,000	672,000	883,000	-	-	-
2079	7,407,000	7,407,000	7,407,000	608,000	778,000	918,000	91,000	122,000	157,000	492,000	544,000	595,000	492,000	492,000	492,000	299,000	299,000	299,000	486,000	699,000	887,000	-	-	-
2080	7,407,000	7,407,000	7,407,000	579,000	767,000	950,000	95,000	128,000	166,000	507,000	553,000	602,000	492,000	492,000	492,000	300,000	300,000	300,000	452,000	710,000	951,000	-	-	-
2081	7,407,000	7,407,000	7,407,000	603,000	764,000	987,000	91,000	128,000	165,000	504,000	553,000	592,000	493,000	493,000	493,000	299,000	299,000	299,000	506,000	711,000	991,000	-	-	-
2082	7,407,000	7,407,000	7,407,000	633,000	766,000	966,000	100,000	126,000	163,000	501,000	558,000	597,000	493,000	493,000	493,000	299,000	299,000	299,000	541,000	696,000	943,000	-	-	-
2083	7,407,000	7,407,000	7,407,000	632,000	780,000	928,000	101,000	126,000	154,000	516,000	560,000	598,000	494,000	494,000	494,000	299,000	299,000	299,000	527,000	710,000	904,000	-	-	-
2084	7,407,000	7,407,000	7,407,000	605,000	763,000	948,000	94,000	126,000	163,000	513,000	559,000	609,000	494,000	494,000	494,000	300,000	300,000	300,000	497,000	699,000	932,000	-	-	-
2085	7,407,000	7,407,000	7,407,000	621,000	775,000	1,000,000	100,000	129,000	173,000	513,000	563,000	611,000	494,000	494,000	494,000	299,000	299,000	299,000	525,000	702,000	1,032,000	-	-	-
2086	7,407,000	7,407,000	7,407,000	613,000	796,000	994,000	98,000	131,000	171,000	517,000	569,000	612,000	495,000	495,000	495,000	299,000	299,000	299,000	522,000	750,000	1,000,000	-	-	-
2087	7,407,000	7,407,000	7,407,000	623,000	791,000	960,000	88,000	128,000	161,000	507,000	566,000	615,000	495,000	495,000	495,000	299,000	299,000	299,000	497,000	744,000	968,000	-	-	-
2088	7,407,000	7,407,000	7,407,000	664,000	803,000	998,000	104,000	136,000	171,000	520,000	572,000	627,000	496,000	496,000	496,000	300,000	300,000	300,000	583,000	765,000	1,001,000	-	-	-
2089	7,407,000	7,407,000	7,407,000	623,000	827,000	1,000,000	101,000	133,000	166,000	521,000	568,000	621,000	496,000	496,000	496,000	299,000	299,000	299,000	542,000	790,000	995,000	-	-	-
2090	7,407,000	7,407,000	7,407,000	661,000	793,000	981,000	96,000	132,000	173,000	521,000	572,000	631,000	496,000	496,000	496,000	299,000	299,000	299,000	568,000	749,000	1,004,000	-	-	-
2091	7,407,000	7,407,000	7,407,000	642,000	788,000	1,008,000	101,000	130,000	159,000	525,000	569,000	630,000	497,000	497,000	497,000	299,000	299,000	299,000	541,000	756,000	1,001,000	-	-	-
2092	7,407,000	7,407,000	7,407,000	634,000	786,000	967,000	105,000	130,000	169,000	535,000	575,000	619,000	497,000	497,000	497,000	300,000	300,000	300,000	561,000	736,000	1,003,000	-	-	-
2093	7,407,000	7,407,000	7,407,000	611,000	798,000	973,000	102,000	132,000	169,000	529,000	572,000	622,000	497,000	497,000	497,000	299,000	299,000	299,000	514,000	766,000	991,000	-	-	-
2094	7,407,000	7,407,000	7,407,000	592,000	797,000	967,000	101,000	133,000	164,000	527,000	570,000	621,000	497,000	497,000	497,000	299,000	299,000	299,000	504,000	744,000	945,000	-	-	-
2095	7,407,000	7,407,000	7,407,000	562,000	728,000	879,000	89,000	124,000	160,000	507,000	570,000	615,000	497,000	497,000	497,000	299,000	299,000	299,000	441,000	676,000	895,000	-	-	-
2096	7,407,000	7,407,000	7,407,000	607,000	752,000	930,000	102,000	128,000	162,000	523,000	568,000	613,000	497,000	497,000	497,000	300,000	300,000	300,000	500,000	704,000	936,000	-	-	-
2097	7,407,000	7,407,000	7,407,000	607,000	755,000	913,000	100,000	130,000	167,000	532,000	572,000	612,000	497,000	497,000	497,000	299,000	299,000	299,000	509,000	701,000	934,000	-	-	-
2098	7,407,000	7,407,000	7,407,000	618,000	767,000	925,000	97,000	130,000	166,000	522,000	569,000	618,000	497,000	497,000	497,000	299,000	299,000	299,000	538,000	726,000	961,000	-	-	-
2099	7,407,000	7,407,000	7,407,000	580,000	732,000	911,000	98,000	127,000	162,000	531,000	567,000	618,000	497,000	497,000	497,000	298,000	298,000	298,000	472,000	691,000	941,000	-	-	-

Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Surface%20Water%20IR%20Responses/ITT_20260303/Annual_waterBalance_Telkwa_CAPR002055_20260520.xlsx?web=1

Notes:

Addition of PAG

Closure year

1 Pumped/overflow inflows includes pumped flows from open pit sump or overflow from Pit backfill once in closure, any pumped flows from Management Ponds, and pumping from TCP

2 Pumped/overflows outflows includes overflow from pond to donwstream reservoir, and any pumped flows (to other MPs or TCP)

3 Water stored in the ponds vary between realizations, but water levels in the ponds were always above PAG during PAG placement or were always above 1.5m above PAG after PAG placement was completed

Table 1-4: Annual Water Balance for the Tenas Control Pond

	Tenas Control Pond																											
	Water in reservoir (storage)			Inflows													Outflows											
Type of flows				Direct precipitation			Runoff flows[2]			Pumped flows/overflow[3]			Plant pond return			Evaporation			Groundwater seepage			Pumped flows[4]			Surface discharge to Goathorn[4]		
Statistics	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95
Units	m3			m3/year			m3/year			m3/year			m3/year			m3/year			m3/year			m3/year			m3/year		
2021	70,000	97,000	130,000	9,000	16,000	22,000	74,000	102,000	135,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	49,000	143,000	283,000	42,000	58,000	78,000	419,000	546,000	737,000	26,000	49,000	69,000	132,000	178,000	239,000	22,000	29,000	40,000	13,000	13,000	13,000	144,000	171,000	207,000	345,000	474,000	651,000
2023	44,000	93,000	247,000	32,000	49,000	69,000	656,000	899,000	1,251,000	5,000	55,000	110,000	90,000	119,000	143,000	8,000	20,000	35,000	38,000	38,000	38,000	234,000	306,000	351,000	389,000	694,000	991,000
2024	255,000	464,000	735,000	93,000	121,000	158,000	605,000	725,000	942,000	548,000	727,000	941,000	100,000	120,000	148,000	86,000	98,000	106,000	51,000	51,000	51,000	234,000	351,000	450,000	552,000	718,000	1,095,000
2025	47,000	150,000	320,000	42,000	76,000	108,000	444,000	590,000	788,000	105,000	275,000	543,000	91,000	114,000	145,000	18,000	41,000	60,000	51,000	51,000	51,000	126,000	198,000	342,000	583,000	1,036,000	1,478,000
2026	114,000	175,000	360,000	34,000	53,000	82,000	368,000	530,000	702,000	118,000	335,000	655,000	90,000	116,000	153,000	12,000	23,000	44,000	51,000	51,000	51,000	-	90,000	153,000	450,000	814,000	1,235,000
2027	47,000	163,000	411,000	38,000	60,000	84,000	443,000	572,000	712,000	220,000	405,000	762,000	95,000	118,000	148,000	15,000	30,000	48,000	51,000	51,000	51,000	-	72,000	144,000	623,000	984,000	1,317,000
2028	109,000	135,000	193,000	40,000	60,000	89,000	415,000	535,000	671,000	160,000	320,000	452,000	100,000	123,000	155,000	17,000	30,000	55,000	51,000	51,000	51,000	-	27,000	99,000	621,000	894,000	1,266,000
2029	70,000	173,000	319,000	68,000	93,000	123,000	343,000	449,000	583,000	670,000	850,000	1,068,000	96,000	121,000	153,000	40,000	52,000	61,000	51,000	51,000	51,000	18,000	36,000	72,000	1,069,000	1,279,000	1,642,000
2030	188,000	520,000	836,000	50,000	64,000	99,000	402,000	494,000	599,000	507,000	859,000	1,349,000	100,000	122,000	151,000	22,000	29,000	51,000	51,000	51,000	51,000	36,000	63,000	90,000	798,000	980,000	1,502,000
2031	90,000	179,000	442,000	67,000	92,000	120,000	406,000	500,000	611,000	513,000	767,000	1,124,000	99,000	119,000	148,000	42,000	53,000	64,000	51,000	51,000	51,000	18,000	54,000	108,000	1,222,000	1,594,000	2,095,000
2032	116,000	197,000	500,000	48,000	74,000	112,000	446,000	524,000	634,000	448,000	730,000	1,149,000	101,000	122,000	150,000	24,000	45,000	59,000	51,000	51,000	51,000	18,000	54,000	108,000	820,000	1,220,000	1,682,000
2033	75,000	174,000	460,000	45,000	71,000	103,000	435,000	533,000	636,000	370,000	637,000	1,067,000	99,000	122,000	150,000	24,000	42,000	57,000	51,000	51,000	51,000	54,000	108,000	162,000	754,000	1,125,000	1,571,000
2034	58,000	171,000	393,000	39,000	63,000	107,000	436,000	542,000	676,000	250,000	563,000	954,000	99,000	120,000	152,000	15,000	34,000	59,000	51,000	51,000	51,000	72,000	144,000	234,000	531,000	994,000	1,605,000
2035	118,000	211,000	465,000	40,000	69,000	110,000	517,000	638,000	856,000	296,000	577,000	1,115,000	97,000	119,000	161,000	19,000	43,000	59,000	51,000	51,000	51,000	-	54,000	108,000	739,000	1,147,000	1,847,000
2036	107,000	163,000	519,000	53,000	80,000	119,000	500,000	673,000	831,000	305,000	637,000	1,003,000	90,000	127,000	160,000	29,000	48,000	65,000	51,000	51,000	51,000	-	45,000	135,000	849,000	1,265,000	1,844,000
2037	94,000	162,000	472,000	42,000	70,000	107,000	527,000	661,000	791,000	166,000	537,000	828,000	99,000	125,000	152,000	17,000	41,000	60,000	51,000	51,000	51,000	18,000	108,000	189,000	617,000	1,138,000	1,738,000
2038	106,000	164,000	369,000	40,000	68,000	106,000	534,000	636,000	795,000	259,000	554,000	980,000	100,000	121,000	154,000	19,000	43,000	59,000	51,000	51,000	51,000	-	63,000	162,000	694,000	1,140,000	1,774,000
2039	108,000	168,000	402,000	51,000	82,000	111,000	567,000	673,000	838,000	358,000	633,000	983,000	108,000	129,000	163,000	24,000	48,000	63,000	51,000	51,000	51,000	-	54,000	135,000	830,000	1,288,000	1,749,000
2040	99,000	160,000	400,000	40,000	75,000	110,000	515,000	660,000	812,000	246,000	578,000	993,000	97,000	126,000	159,000	16,000	46,000	64,000	51,000	51,000	51,000	-	90,000	207,000	614,000	1,199,000	1,848,000
2041	116,000	201,000	467,000	46,000	79,000	115,000	539,000	668,000	798,000	309,000	663,000	1,055,000	104,000	130,000	155,000	22,000	48,000	68,000	51,000	51,000	51,000	-	54,000	126,000	736,000	1,266,000	1,834,000
2042	120,000	163,000	537,000	57,000	86,000	127,000	559,000	672,000	831,000	400,000	741,000	1,160,000	108,000	131,000	166,000	28,000	52,000	70,000	51,000	51,000	51,000	-	36,000	126,000	942,000	1,416,000	1,985,000
2043	251,000	622,000	836,000	49,000	79,000	112,000	516,000	643,000	803,000	97,000	586,000	1,178,000	97,000	125,000	158,000	27,000	46,000	60,000	51,000	51,000	51,000	-	-	-	505,000	914,000	1,414,000
2044	108,000	160,000	392,000	68,000	104,000	133,000	228,000	285,000	339,000	343,000	637,000	957,000	-	-	1,000	35,000	54,000	64,000	-	-	-	-	-	-	849,000	1,392,000	1,754,000
2045	116,000	224,000	485,000	48,000	79,000	118,000	225,000	279,000	328,000	405,000	793,000	1,205,000	-	-	-	20,000	42,000	59,000	-	-	-	-	-	-	569,000	990,000	1,478,000
2046	120,000	269,000	558,000	57,000	88,000	122,000	228,000	279,000	344,000	483,000	857,000	1,291,000	-	-	-	28,000	48,000	59,000	-	-	-	-	-	-	711,000	1,104,000	1,502,000
2047	118,000	246,000	599,000	57,000	87,000	126,000	215,000	274,000	339,000	527,000	849,000	1,314,000	-	-	-	28,000	47,000	63,000	-	-	-	-	-	-	750,000	1,136,000	1,529,000
2048	-	-	-	40,000	75,000	113,000	219,000	277,000	344,000	495,000	861,000	1,320,000	-	-	-	23,000	44,000	55,000	-	-	-	-	-	-	912,000	1,378,000	1,928,000
2049	-	-	-	-	-	-	218,000	271,000	334,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	218,000	271,000	334,000
2050	-	-	-	-	-	-	231,000	273,000	327,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	231,000	273,000	327,000
2051	-	-	-	-	-	-	217,000	273,000	358,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	217,000	273,000	358,000
2052	-	-	-	-	-	-	229,000	280,000	339,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	229,000	280,000	339,000
2053	-	-	-	-	-	-	232,000	284,000	334,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	232,000	284,000	334,000
2054	-	-	-	-	-	-	219,000	283,000	336,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	219,000	283,000	336,000
2055	-	-	-	-	-	-	239,000	282,000	349,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	239,000	282,000	349,000
2056	-	-	-	-	-	-	220,000	280,000	338,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	220,000	280,000	338,000
2057	-	-	-	-	-	-	225,000	289,000	361,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	225,000	289,000	361,000
2058	-	-	-	-	-	-	230,000	281,000	342,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	230,000	281,000	342,000
2059	-	-	-	-	-	-	240,000	292,000	363,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240,000	292,000	363,000
2060	-	-	-	-	-	-	238,000	285,000	371,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	238,000	285,000	371,000
2061	-	-	-	-	-	-	256,000	301,000	370,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	256,000	301,000	370,000
2062	-	-	-	-	-	-	238,000	301,000	380,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	238,000	301,000	380,000
2063	-	-	-	-	-	-	242,000	304,000	353,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	242,000	304,000	353,000
2064	-	-	-	-	-	-	238,000	297,000	358,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	238,000	297,000	358,000
2065	-	-	-	-	-	-	235,000	305,000	357,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	235,000	305,000	357,000
2066	-	-	-	-	-	-	241,000	299,000	357,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	241,000	299,000	357,000
2067	-	-	-	-	-	-	246,000	302,000	364,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	246,000	302,000	364,000
2068	-	-	-	-	-	-	237,000	300,000	375,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	237,000	300,000	375,000
2069	-	-	-	-	-	-	254,000	302,000	375,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	254,000	302,000	375,000
2070	-	-	-	-	-	-	235,000	308,000	369,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	235,000	308,000	369,000
2071	-	-	-	-	-	-	241,000	307,000	364,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	241,000	307,000	364,000
2072	-	-	-	-	-	-	263,000	309,000	393,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	263,000	309,000	393,000
2073	-	-	-	-	-	-	239,000	318,000	379,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	239,000	318,000	379,000
2074	-	-	-	-	-	-	255,000	304,000	379,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	255,000	304,000	379,000
2075	-	-	-	-	-	-	237,000	315,000	380,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	237,000	315,000	380,000
2076	-	-	-	-	-	-	256,000	311,000	387,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	256,000	311,000	387,000
2077	-	-	-	-	-	-	257,000	314,000	384,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	257,000	314,000	384,000
2078	-	-	-	-	-	-	246,000	306,000	373,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	246,000	306,000	373,000
2079	-	-	-	-	-	-	253,000	317,000	368,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	253,000	317,000	368,000
2080	-	-	-	-	-	-	240,000	315,000	385,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	240,000	315,000	385,000
2081	-	-	-	-	-	-	250,000	312,000	397,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	250,000	312,000	397,000
2082	-	-	-	-	-	-	268,000	313,000	386,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	268,000	313,000	386,000
2083	-	-	-	-	-	-	260,000	317,000	375,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	260,000	317,000	375,000
2084	-	-	-	-	-	-	250,000	310,000	379,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	250,000	310,000	379,000
2085	-	-	-	-	-	-	256,000	313,000	401,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	256,000	313,000	401,000
2086	-	-	-	-	-	-	253,000	325,000	397,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	253,000	325,000	397,000
2087	-	-	-	-	-	-	254,000	322,000	384,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	254,000	322,000	384,000
2088	-	-	-	-	-	-	275,000	325,000	402,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	275,000	325,000	402,000
2089	-	-	-	-	-	-	261,000	332,000	402,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	261,000	332,000	402,000
2090	-	-	-	-	-	-	272,000	322,000	396,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	272,000	322,000	396,000
2091	-	-	-	-	-	-	263,000	321,000	406,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	263,000	321,000	406,000
2092	-	-	-	-	-	-	263,000	320,000	388,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	263,000	320,000	388,000
2093	-	-	-	-	-	-	255,000	325,000	392,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	255,000	325,000	392,000
2094	-	-	-	-	-	-	246,000	324,000	385,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	246,000	324,000	385,000
2095	-	-	-	-	-	-	233,000	296,000	354,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	233,000	296,000	354,000
2096	-	-	-	-	-	-	252,000	306,000	377,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	252,000	306,000	377,000
2097	-	-	-	-	-	-	253,000	305,000	365,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	253,000	305,000	365,000
2098	-	-	-	-	-	-	254,000	313,000	375,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	254,000	313,000	375,000
2099	-	-	-	-	-	-	238,000	301,000	370,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	238,000	301,000	370,000

Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Surface%20Water%20IR%20Responses/ITT_20260303/Annual_waterBalance_Telkwa_CAPR002055_20260520.xlsx?web=1

Notes:

Closure year

1 Tenas Control Pond gets decommissioned in 2048 in Closure

2 Runoff flows to TCP include any seepage fromn the dams and buttresses for any MP and TCP

3 Pumped/overflow inflows includes pumped flows from open pit sump , any pumped flows from Management Ponds

4 Pumped/overflows outflows includes any pumped flows (to other MPs). A separate column shows the discharge to Goathorn. Once decommissioned, inflows=outflows that are directly routed to Goathorn creek in addition to discharge from NMP

Table 1-5: Annual Water Balance for the Open Pit Sump

	Open Pit sump																				
	Water in reservoir (storage)			Inflows									Outflows								
Type of flows				Runoff flows[1]			Backfill seepage[2]			Groundwater seepage[2]			Evaporation in sump			Overflow+Pumped flows[3]			Coal Processing Plant water supply[4]		
Statistics	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95	P5	P50	P95
Units	m3			m3/year			m3/year			m3/year			m3/year			m3/year			m3/year		
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	60,000	60,000	60,000	115,000	152,000	191,000	-	-	-	29,000	29,000	29,000	9,000	9,000	9,000	49,000	80,000	113,000	-	-	-
2023	58,000	60,000	60,000	306,000	399,000	490,000	-	-	-	87,000	87,000	87,000	9,000	9,000	9,000	329,000	408,000	475,000	180,000	180,000	180,000
2024	60,000	60,000	60,000	468,000	556,000	704,000	-	-	-	133,000	133,000	133,000	9,000	9,000	9,000	537,000	614,000	718,000	180,000	180,000	180,000
2025	60,000	60,000	60,000	432,000	553,000	711,000	-	-	-	168,000	168,000	168,000	9,000	9,000	9,000	575,000	681,000	795,000	180,000	180,000	180,000
2026	60,000	60,000	60,000	442,000	587,000	769,000	-	-	-	202,000	202,000	202,000	9,000	9,000	9,000	647,000	765,000	891,000	180,000	180,000	180,000
2027	60,000	60,000	60,000	537,000	664,000	833,000	-	-	-	237,000	237,000	237,000	9,000	9,000	9,000	785,000	898,000	1,033,000	180,000	180,000	180,000
2028	60,000	60,000	60,000	597,000	719,000	898,000	-	-	-	273,000	273,000	273,000	9,000	9,000	9,000	863,000	979,000	1,123,000	180,000	180,000	180,000
2029	60,000	60,000	60,000	570,000	708,000	895,000	-	-	-	307,000	307,000	307,000	9,000	9,000	9,000	875,000	1,005,000	1,154,000	180,000	180,000	180,000
2030	60,000	60,000	60,000	594,000	722,000	871,000	-	-	-	320,000	320,000	320,000	9,000	9,000	9,000	927,000	1,036,000	1,159,000	180,000	180,000	180,000
2031	60,000	60,000	60,000	594,000	707,000	861,000	2,000	2,000	2,000	311,000	311,000	311,000	9,000	9,000	9,000	918,000	1,022,000	1,171,000	180,000	180,000	180,000
2032	60,000	60,000	60,000	597,000	726,000	892,000	4,000	4,000	4,000	303,000	303,000	303,000	9,000	9,000	9,000	909,000	1,037,000	1,185,000	180,000	180,000	180,000
2033	60,000	60,000	60,000	585,000	718,000	888,000	1,000	1,000	1,000	293,000	293,000	293,000	9,000	9,000	9,000	898,000	1,009,000	1,168,000	180,000	180,000	180,000
2034	60,000	60,000	60,000	568,000	689,000	854,000	3,000	3,000	3,000	284,000	284,000	284,000	9,000	9,000	9,000	852,000	976,000	1,127,000	180,000	180,000	180,000
2035	60,000	60,000	60,000	545,000	660,000	885,000	7,000	7,000	7,000	276,000	276,000	276,000	9,000	9,000	9,000	820,000	937,000	1,143,000	180,000	180,000	180,000
2036	60,000	60,000	60,000	496,000	689,000	864,000	12,000	12,000	12,000	267,000	267,000	267,000	9,000	9,000	9,000	796,000	963,000	1,113,000	180,000	180,000	180,000
2037	60,000	60,000	60,000	526,000	667,000	813,000	14,000	14,000	14,000	258,000	258,000	258,000	9,000	9,000	9,000	801,000	933,000	1,057,000	180,000	180,000	180,000
2038	60,000	60,000	60,000	522,000	644,000	827,000	28,000	28,000	28,000	249,000	249,000	249,000	9,000	9,000	9,000	801,000	909,000	1,068,000	180,000	180,000	180,000
2039	60,000	60,000	60,000	560,000	698,000	880,000	47,000	47,000	47,000	240,000	240,000	240,000	9,000	9,000	9,000	842,000	961,000	1,139,000	180,000	180,000	180,000
2040	60,000	60,000	60,000	522,000	702,000	885,000	81,000	81,000	81,000	232,000	232,000	232,000	9,000	9,000	9,000	828,000	992,000	1,146,000	180,000	180,000	180,000
2041	60,000	60,000	60,000	537,000	715,000	884,000	112,000	112,000	112,000	223,000	223,000	223,000	9,000	9,000	9,000	865,000	1,027,000	1,183,000	180,000	180,000	180,000
2042	60,000	60,000	60,000	568,000	741,000	950,000	129,000	129,000	129,000	214,000	214,000	214,000	9,000	9,000	9,000	910,000	1,067,000	1,239,000	180,000	180,000	180,000
2043	60,000	60,000	60,000	543,000	725,000	956,000	134,000	134,000	134,000	204,000	204,000	204,000	9,000	9,000	9,000	888,000	1,052,000	1,261,000	180,000	180,000	180,000
2044	-	-	-	158,000	218,000	275,257	137,000	137,000	137,000	138,000	138,000	138,000	-	-	-	302,000	342,000	381,000	-	-	-
2045	-	-	-	161,000	216,000	286,915	133,000	133,000	133,000	138,000	138,000	138,000	-	-	-	422,000	468,000	521,000	-	-	-
2046	-	-	-	152,000	223,000	297,937	129,000	129,000	129,000	138,000	138,000	138,000	-	-	-	437,000	483,000	530,000	-	-	-
2047	-	-	-	157,000	218,000	275,644	128,000	128,000	128,000	138,000	138,000	138,000	-	-	-	432,000	483,000	528,000	-	-	-
2048	-	-	-	167,000	219,000	300,517	130,000	130,000	130,000	138,000	138,000	138,000	-	-	-	438,000	489,000	548,000	-	-	-
2049	-	-	-	153,000	220,000	284,970	131,000	131,000	131,000	138,000	138,000	138,000	-	-	-	443,000	490,000	537,000	-	-	-
2050	-	-	-	157,000	217,000	280,786	133,000	133,000	133,000	138,000	138,000	138,000	-	-	-	438,000	493,000	531,000	-	-	-
2051	-	-	-	167,000	219,000	303,453	134,000	134,000	134,000	138,000	138,000	138,000	-	-	-	446,000	488,000	536,000	-	-	-
2052	-	-	-	171,000	222,000	287,961	135,000	135,000	135,000	138,000	138,000	138,000	-	-	-	459,000	497,000	549,000	-	-	-
2053	-	-	-	169,000	220,000	268,151	135,000	135,000	135,000	138,000	138,000	138,000	-	-	-	460,000	493,000	540,000	-	-	-
2054	-	-	-	170,000	228,000	282,445	136,000	136,000	136,000	138,000	138,000	138,000	-	-	-	463,000	499,000	544,000	-	-	-
2055	-	-	-	168,000	228,000	288,741	137,000	137,000	137,000	138,000	138,000	138,000	-	-	-	454,000	502,000	537,000	-	-	-
2056	-	-	-	178,000	232,000	285,849	138,000	138,000	138,000	138,000	138,000	138,000	-	-	-	465,000	508,000	550,000	-	-	-
2057	-	-	-	170,000	241,000	306,478	138,000	138,000	138,000	138,000	138,000	138,000	-	-	-	472,000	512,000	563,000	-	-	-
2058	-	-	-	163,000	232,000	287,757	138,000	138,000	138,000	138,000	138,000	138,000	-	-	-	460,000	510,000	549,000	-	-	-
2059	-	-	-	177,000	240,000	313,071	138,000	138,000	138,000	138,000	138,000	138,000	-	-	-	465,000	517,000	565,000	-	-	-
2060	-	-	-	166,000	233,000	298,940	140,000	140,000	140,000	138,000	138,000	138,000	-	-	-	465,000	517,000	569,000	-	-	-
2061	-	-	-	182,000	246,000	303,665	140,000	140,000	140,000	138,000	138,000	138,000	-	-	-	472,000	517,000	562,000	-	-	-
2062	-	-	-	171,000	235,000	302,734	141,000	141,000	141,000	138,000	138,000	138,000	-	-	-	473,000	512,000	566,000	-	-	-
2063	-	-	-	179,000	231,000	310,629	142,000	142,000	142,000	138,000	138,000	138,000	-	-	-	474,000	520,000	571,000	-	-	-
2064	-	-	-	176,000	231,000	304,778	143,000	143,000	143,000	138,000	138,000	138,000	-	-	-	470,000	516,000	570,000	-	-	-
2065	-	-	-	180,000	240,000	307,545	143,000	143,000	143,000	138,000	138,000	138,000	-	-	-	462,000	519,000	563,000	-	-	-
2066	-	-	-	171,000	233,000	294,897	145,000	145,000	145,000	138,000	138,000	138,000	-	-	-	465,000	516,000	563,000	-	-	-
2067	-	-	-	167,000	243,000	314,869	146,000	146,000	146,000	138,000	138,000	138,000	-	-	-	469,000	527,000	574,000	-	-	-
2068	-	-	-	178,000	231,000	319,172	148,000	148,000	148,000	138,000	138,000	138,000	-	-	-	476,000	523,000	580,000	-	-	-
2069	-	-	-	172,000	240,000	301,673	148,000	148,000	148,000	138,000	138,000	138,000	-	-	-	469,000	522,000	569,000	-	-	-
2070	-	-	-	172,000	243,000	325,726	149,000	149,000	149,000	138,000	138,000	138,000	-	-	-	489,000	528,000	579,000	-	-	-
2071	-	-	-	183,000	241,000	298,259	150,000	150,000	150,000	138,000	138,000	138,000	-	-	-	490,000	535,000	583,000	-	-	-
2072	-	-	-	196,000	253,000	330,769	152,000	152,000	152,000	138,000	138,000	138,000	-	-	-	491,000	536,000	587,000	-	-	-
2073	-	-	-	173,000	252,000	311,453	152,000	152,000	152,000	138,000	138,000	138,000	-	-	-	494,000	538,000	575,000	-	-	-
2074	-	-	-	191,000	237,000	299,590	153,000	153,000	153,000	138,000	138,000	138,000	-	-	-	494,000	541,000	575,000	-	-	-
2075	-	-	-	188,000	250,000	310,603	154,000	154,000	154,000	138,000	138,000	138,000	-	-	-	487,000	545,000	588,000	-	-	-
2076	-	-	-	202,000	262,000	352,015	155,000	155,000	155,000	138,000	138,000	138,000	-	-	-	504,000	550,000	607,000	-	-	-
2077	-	-	-	184,000	261,000	325,282	155,000	155,000	155,000	138,000	138,000	138,000	-	-	-	506,000	552,000	605,000	-	-	-
2078	-	-	-	190,000	248,000	308,865	156,000	156,000	156,000	138,000	138,000	138,000	-	-	-	500,000	547,000	591,000	-	-	-
2079	-	-	-	184,000	247,000	318,688	157,000	157,000	157,000	138,000	138,000	138,000	-	-	-	492,000	544,000	595,000	-	-	-
2080	-	-	-	193,000	259,000	337,609	159,000	159,000	159,000	138,000	138,000	138,000	-	-	-	507,000	553,000	602,000	-	-	-
2081	-	-	-	185,000	260,000	336,167	159,000	159,000	159,000	138,000	138,000	138,000	-	-	-	504,000	553,000	592,000	-	-	-
2082	-	-	-	202,000	255,000	331,705	160,000	160,000	160,000	138,000	138,000	138,000	-	-	-	501,000	558,000	597,000	-	-	-
2083	-	-	-	204,000	256,000	311,782	160,000	160,000	160,000	138,000	138,000	138,000	-	-	-	516,000	560,000	598,000	-	-	-
2084	-	-	-	189,000	256,000	330,778	162,000	162,000	162,000	138,000	138,000	138,000	-	-	-	513,000	559,000	609,000	-	-	-
2085	-	-	-	203,000	262,000	351,308	162,000	162,000	162,000	138,000	138,000	138,000	-	-	-	513,000	563,000	611,000	-	-	-
2086	-	-	-	197,000	265,000	347,660	163,000	163,000	163,000	138,000	138,000	138,000	-	-	-	517,000	569,000	612,000	-	-	-
2087	-	-	-	176,000	259,000	327,618	163,000	163,000	163,000	138,000	138,000	138,000	-	-	-	507,000	566,000	615,000	-	-	-
2088	-	-	-	210,000	277,000	347,742	165,000	165,000	165,000	138,000	138,000	138,000	-	-	-	520,000	572,000	627,000	-	-	-
2089	-	-	-	204,000	270,000	337,561	165,000	165,000	165,000	138,000	138,000	138,000	-	-	-	521,000	568,000	621,000	-	-	-
2090	-	-	-	194,000	267,000	350,729	165,000	165,000	165,000	138,000	138,000	138,000	-	-	-	521,000	572,000	631,000	-	-	-
2091	-	-	-	204,000	262,000	323,741	166,000	166,000	166,000	138,000	138,000	138,000	-	-	-	525,000	569,000	630,000	-	-	-
2092	-	-	-	211,000	262,000	342,280	168,000	168,000	168,000	138,000	138,000	138,000	-	-	-	535,000	575,000	619,000	-	-	-
2093	-	-	-	207,000	269,000	343,944	168,000	168,000	168,000	138,000	138,000	138,000	-	-	-	529,000	572,000	622,000	-	-	-
2094	-	-	-	203,000	270,000	332,130	169,000	169,000	169,000	138,000	138,000	138,000	-	-	-	527,000	570,000	621,000	-	-	-
2095	-	-	-	181,000	253,000	324,646	170,000	170,000	170,000	138,000	138,000	138,000	-	-	-	507,000	570,000	615,000	-	-	-
2096	-	-	-	207,000	258,000	328,401	171,000	171,000	171,000	138,000	138,000	138,000	-	-	-	523,000	568,000	613,000	-	-	-
2097	-	-	-	202,000	263,000	337,242	171,000	171,000	171,000	138,000	138,000	138,000	-	-	-	532,000	572,000	612,000	-	-	-
2098	-	-	-	196,000	263,000	336,724	172,000	172,000	172,000	138,000	138,000	138,000	-	-	-	522,000	569,000	618,000	-	-	-
2099	-	-	-	198,000	257,000	329,445	172,000	172,000	172,000	137,000	137,000	137,000	-	-	-	531,000	567,000	618,000	-	-	-

Source: https://srk.sharepoint.com/sites/NACAPR002055/Internal/Surface%20Water%20IR%20Responses/ITT_20260303/Annual_waterBalance_Telkwa_CAPR002055_20260520.xlsx?web=1

Notes:

Addition of NAG Rock to Pit

Closure year

1 Runoff flows includes runoffs from natural, pit wall and backfill runoffs. They significantly decrease in closure as part of the covered backfill is re-routed to Four Creek

2 Backfill and groundwater seepage were considered constant under the WGEN run as they were modeled through different models by Okane and SRK (hydrogeology model), respectively

3 Water is pumped from the pit sump during operations, to be used as process water in the mill and the remainder is pumped to the active treatment pond (pond actively receiving PAG, namely NMP, EMP and WMP in order of activity). In closure, the pit sump is decommissioned and water from the pit reaches WMP by gravity

4 Water supply to the pond outflow is a sink in the model.

Attachment E: Telkwa Mining Response to the follow up information request 8 from MENV and MCMM on June 25, 2026

July 9, 2026

Stasia Ferby
Project Assessment Director
BC Environmental Assessment Office
By Email: Stasia.Ferbey@gov.bc.ca

SUBJECT: Overall Final EAO Water Information Request Response Summary

Dear Ms. Ferbey:

Telkwa Mining Limited (Telkwa Mining) is pleased to provide an overall summary of our final EAO Water Information Request response summary and organization which proivdes the complete respoonse to the EAO water IR as follows:

ENV Comment IR8 Jun 11, 2026 based on Telkwa Mining May 26, 2026 Response:

The remaining comment, IR8 (previously IR 511 & 519), requests tables for the five major ponds (EMP, WMP, NMP, TCP, and the open pit) summarizing inflows and outflows. The intent is to compare the relative magnitude of inputs and outputs and assess whether there are any notable uncertainties relevant to MCM. Given that a key mitigation measure is the planned water cover on these ponds, MCM Geoscience is particularly interested in identifying any potential concerns.
While I received a table in the previous round and an updated version in this round, I am having difficulty reconciling values across the tables and with the flow schematics. A couple specific issues:

- When comparing outflows from the open pit to pumped inflows to NMP/EMP/WMP, the values do not typically align (average difference of ~70,000 m3/yr, or nearly 10% of average annual open pit dewatering, difference ranges from ~-374,000 m3/yr to 180,000 m3/yr).
- Similarly, outflows from NMP/EMP/WMP do not consistently match inflows to TCP (average difference of ~70,000 m3/yr, roughly 12% of average annual TCP inflows, difference ranges from ~-44,000 m3/yr to 195,000 m3/yr).

In addition, when comparing the May 22 tables with those from April 20, many values differ, which may indicate a model convergence issue, as only 100 realizations were run. This could explain some of the inconsistencies; while the underlying climate inputs should be similar between runs, it is possible that distributions along individual flow paths differ enough to produce widely varying P50 values. On the other hand, this are the same flow paths (outflow from one pond = inflow to another), so the values should be quite similar. Regardless, the current presentation is making it difficult to build confidence in or fully understand the model results and provide an assessment to MCM.

MCM comment IR 8 June 11, 2026 based on Telkwa Mining May 26, 2026 Response:

MCM understands that ENV reviewer Comment IR 8 requested information on flow paths and estimates presented for the management ponds. They mention uncertainties regarding which flow paths dominate water in the management ponds and how uncertain those estimates are. The main mitigation measure presented in the EA relies on the capacity to maintain the PAG waste rock in subaqueous conditions in the Management Ponds. MCM therefore understands that unless we can ascertain which flow paths are dominating water management of the ponds, it is difficult to assess the uncertainty of the estimates used in the WBWQM and how the results of the sensitivity meaningfully change the results. In order to evaluate the risks associated with implementation of this mitigation measure and to assess the uncertainty of the response provided to this MCM comment 154c1, a response to ENV comment IR 8 should be provided as part of the EA.
MCM is interested in better understand how the QP accounted for inflows and outflows and discuss inconsistencies with the flow schematics and previous versions of the flow balance. Ultimately, MCM would like to understand how these uncertainties affect the sensitivity analysis to maintain cover in the water management ponds for PAG waste rock.

Telkwa Mining held a meeting on June 18, 2026 with MENV, MMCM, and EAO to reivew further clarified resposne to this information request and the response provided in the meeting addressed the information that was being requested.

Three files were developed and provided in Appendicies 1 through 3 attached contain the P5, P50, P90 realizations, Appendix 4 contains the percentile realization selection justification, while Appendix 5 contains the revised flow diagrams for conceptual water balance model.

If you have any questions please do not hesitate to contact Dan Farmer at 604-220-5703 or dan.farmer@telkwa-mining.ca.

Sincerely,



Daniel J. Farmer
Project and Development Manager
Telkwa Mining Limited

Cc: Elise Matzanke, Project Assessment Officer, EAO, email: Elise.Matzanke@gov.bc.ca
Matt Scarr, Project Assessment Director, EAO, email: Matthew.Scarr@gov.bc.ca
Jessy Chaplin, Ecosystems Biologist, Telkwa Mining, email: Jessy.chaplin@telkwa-mining.ca
File

Attachments:

Attachment 1: P5 Water Model Balance Results

Attachment 2: P50 Water Model Balance Results

Attachment 3: P95 Water Model Balance Results

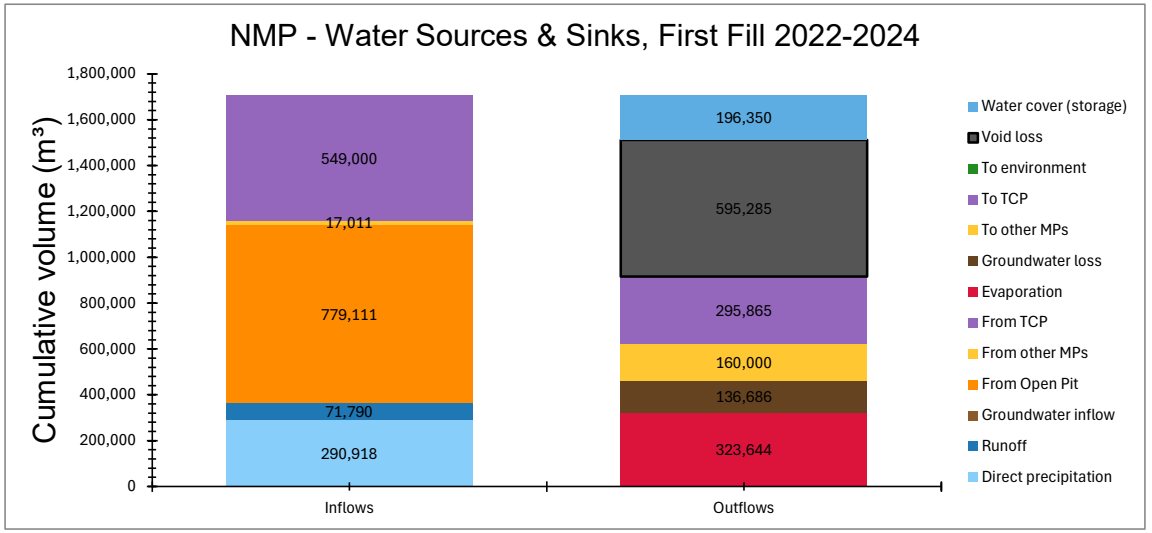
Attachment 4: Justification of the Selection of Realizations for P5 and P95 Water Model Balance Results

Attachment 5: Revised Flow Diagrams for the Project

Attachment 1: P5 Water Model Balance Results

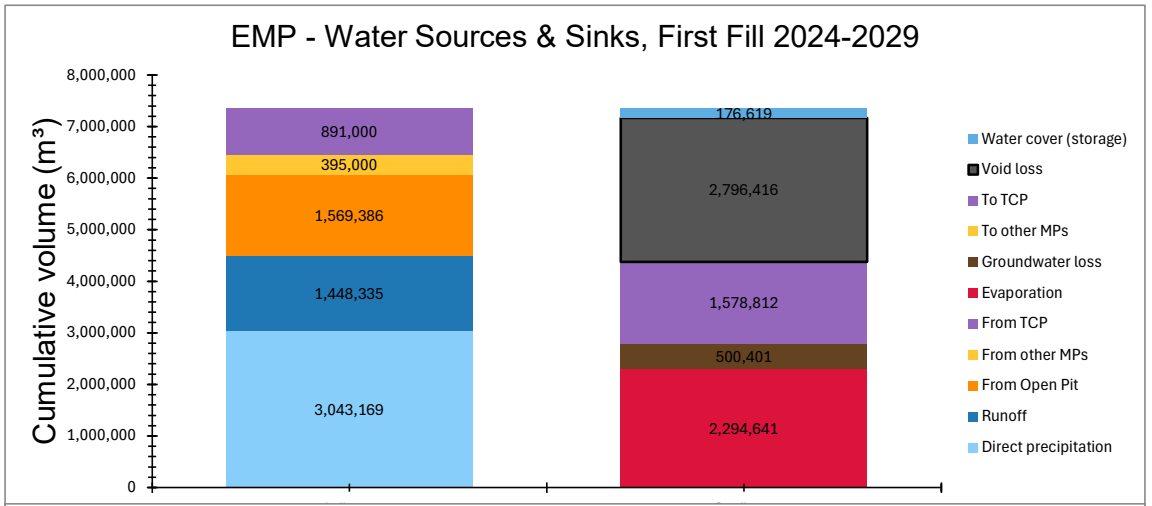
NMP - first fill 2022-2024

Flow group	Inflows	Outflows
Direct precipitation	290918.4	0
Runoff	71789.76226	0
Groundwater inflow	0	0
From Open Pit	779110.78	0
From other MPs	17011.4	0
From TCP	549000	0
Evaporation	0	323644.36
Groundwater loss	0	136686.006
To other MPs	0	160000
To TCP	0	295864.874
To environment	0	0
Void loss	0	595285.1
Water cover (storage)	0	196350
Total inflows	1707830.342	
Total outflows	1707830.34	
Residual (in - out)	0.002263	
Residual %	1.32507E-09	(of inflows)



EMP - first fill 2024-2029

Flow group	Inflows	Outflows
Direct precipitation	3043168.7	0
Runoff	1448334.5	0
From Open Pit	1569386.2	0
From other MPs	395000	0
From TCP	891000	0
Evaporation	0	2294640.8
Groundwater loss	0	500401.02
To other MPs	0	0
To TCP	0	1578812.4
Void loss	0	2796416.3
Water cover (storage)	0	176618.9
Total inflows	7346889.4	
Total outflows	7346889.42	
Residual (in - out)	-0.02	
Residual %	-2.72224E-09	(of inflows)



WMP - first fill 2029-2043

Flow group	Inflows	Outflows
Direct precipitation	5643519	0
Runoff	733987.98	0
Groundwater inflow	356376.109	0
From Open Pit	11949691.1	0
From other MPs	0	0
From TCP	1287000	0
Evaporation	0	5113726.14
Groundwater loss	0	2136978.47
To other MPs	0	217690.5
To TCP	0	5400000
Void loss	0	6721443.6
Water cover (storage)	0	379930.4
Total inflows	19970574.19	
Total outflows	19969769.11	
Residual (in - out)	805.079	
Residual %	4.03133E-05	(of inflows)

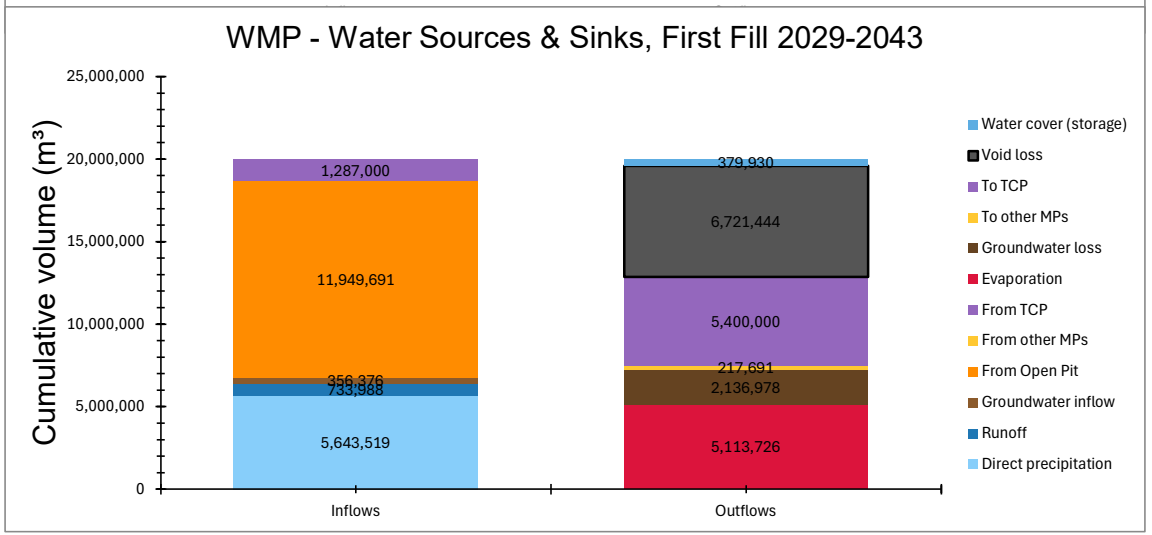


Table 1: NMP water balance - 5th percentile stochastic run

Year	Reservoir							Inflows								Outflows							
	Water cover (end of year)	ΔStorage (water cover)	Void loss (cumul) - part of outflows	Total inflows	Total outflows	Water balance	Comment on imbalance	Direct precipitation NMP	GW to NMP	NMP runoff inflows	Pump Open Pit to NMP	Pump TCP to NMP	EMP overflow to NMP	WMP overflow to NMP	Pump from EMP to NMP	Evap from NMP	VoidLoss NMP	GW Loss NMP	Overflow NMP To TCP	Overflow NMP To ENV	Pump NMP to EMP	Pump NMP to WMP	Pump NMP to TCP
Unit:	m3							m3								m3							
2021	10	10	-	-	-	-10	Reservoir comes online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	94,476	94,466	104,248	229,107	134,151	490		-	-	16,974	32,132	180,000	-	-	-	14,047	104,248	9,991	-	-	-	-	5,865
2023	136,771	42,295	495,659	704,936	662,205	436	Small delay in the model in the transfer of water from one reservoir (water cover) to the rock reservoir (void loss)	99,432	-	54,811	254,682	279,000	-	-	17,011	146,567	391,411	54,227	-	-	-	-	70,000
2024	196,360	59,589	595,285	773,787	715,124	-926		191,487	-	4	492,296	90,000	-	-	-	163,030	99,626	72,468	-	-	160,000	-	220,000
2025	196,740	380	595,285	525,740	525,360	0		156,789	-	0	368,951	-	-	-	-	163,090	-	72,270	-	-	235,000	-	55,000
2026	167,669	-29,072	595,285	206,562	235,634	0		206,562	-	0	-	-	-	-	-	163,364	-	72,270	-	-	-	-	-
2027	145,655	-22,013	595,285	179,025	201,038	0		179,025	-	0	-	-	-	-	-	128,768	-	72,270	-	-	-	-	-
2028	127,878	-17,777	595,285	183,551	201,328	0		183,551	-	0	-	-	-	-	-	128,860	-	72,468	-	-	-	-	-
2029	93,521	-34,358	595,285	166,864	201,222	0		166,864	-	0	-	-	-	-	-	128,952	-	72,270	-	-	-	-	-
2030	100,218	6,697	595,285	208,023	201,326	0		204,753	-	0	-	-	3,270	-	-	129,056	-	72,270	-	-	-	-	-
2031	122,968	22,750	595,285	479,203	456,453	0		159,442	-	0	-	-	319,761	-	-	129,199	-	72,270	254,984	-	-	-	-
2032	132,902	9,934	595,285	314,790	304,856	0		187,207	-	0	-	-	127,583	-	-	129,342	-	72,468	103,045	-	-	-	-
2033	161,657	28,755	595,285	355,686	326,932	-0		200,614	-	0	-	-	155,072	-	-	129,485	-	72,270	125,177	-	-	-	-
2034	170,356	8,700	595,285	661,238	652,539	-0		248,177	-	0	-	-	413,061	-	-	129,628	-	72,270	450,641	-	-	-	-
2035	158,053	-12,303	595,285	480,476	492,780	0		196,986	-	0	-	-	283,490	-	-	129,771	-	72,270	290,739	-	-	-	-
2036	151,000	-7,053	595,285	333,916	340,969	0		188,235	-	0	-	-	145,681	-	-	129,914	-	72,468	138,587	-	-	-	-
2037	168,735	17,735	595,285	502,910	485,175	0		223,982	-	0	-	-	278,928	-	-	130,057	-	72,270	282,848	-	-	-	-
2038	169,634	900	595,285	567,579	566,680	0		234,980	-	0	-	-	332,600	-	-	130,200	-	72,270	364,210	-	-	-	-
2039	142,151	-27,483	595,285	630,924	658,407	-0		215,737	-	0	-	-	415,187	-	-	130,343	-	72,270	455,795	-	-	-	-
2040	150,076	7,926	595,285	530,866	522,940	0		232,557	-	0	-	-	298,309	-	-	130,470	-	72,468	320,002	-	-	-	-
2041	167,005	16,928	595,285	547,121	530,193	0		237,251	-	0	-	-	309,869	-	-	130,571	-	72,270	327,351	-	-	-	-
2042	202,858	35,853	595,285	557,534	521,681	0		236,548	-	0	-	-	320,986	-	-	130,672	-	72,270	318,738	-	-	-	-
2043	204,263	1,406	595,285	570,054	568,648	0		185,649	-	0	-	-	166,714	217,691	-	130,773	-	72,270	365,605	-	-	-	-
2044	204,263	-	595,285	718,462	718,462	0		208,055	-	0	-	-	196,652	313,756	-	130,875	-	72,468	515,120	-	-	-	-
2045	204,263	-	595,285	935,168	935,168	-0		194,726	-	0	-	-	257,123	483,319	-	130,976	-	72,270	731,923	-	-	-	-
2046	204,263	-	595,285	858,542	858,542	0		213,383	-	0	-	-	146,712	498,447	-	131,077	-	72,270	655,195	-	-	-	-
2047	204,263	-	595,285	1,529,781	1,529,782	-0		281,112	-	0	-	-	499,169	749,501	-	131,178	-	72,270	1,326,334	-	-	-	-
2048	204,263	-	595,285	1,500,346	1,500,347	-0		269,659	-	0	-	-	452,310	778,377	-	131,279	-	72,468	1,255,463	41,137	-	-	-
2049	204,263	-	595,285	1,573,831	1,573,831	0		265,613	-	0	-	-	487,256	820,963	-	131,380	-	72,270	-	1,370,181	-	-	-
2050	204,263	-	595,285	1,204,318	1,204,318	-0		231,182	-	0	-	-	309,314	663,821	-	131,496	-	72,270	-	1,000,552	-	-	-
2051	204,263	-	595,285	1,278,918	1,278,917	0		236,095	-	0	-	-	359,603	683,220	-	131,618	-	72,270	-	1,075,029	-	-	-
2052	204,263	-	595,285	1,280,677	1,280,677	-0		244,242	-	0	-	-	345,311	691,124	-	131,741	-	72,468	-	1,076,468	-	-	-
2053	204,263	-	595,285	1,118,699	1,118,699	-0		229,069	-	0	-	-	283,992	605,637	-	131,864	-	72,270	-	914,565	-	-	-
2054	204,263	-	595,285	1,299,402	1,299,402	0		238,678	-	0	-	-	358,072	702,652	-	131,987	-	72,270	-	1,095,145	-	-	-
2055	204,263	-	595,285	1,169,522	1,169,522	0		234,024	-	0	-	-	323,073	612,425	-	132,110	-	72,270	-	965,142	-	-	-
2056	204,263	-	595,285	1,137,415	1,137,415	0		228,057	-	0	-	-	283,310	626,048	-	132,233	-	72,468	-	932,714	-	-	-
2057	204,263	-	595,285	736,174	736,174	0		161,583	-	0	-	-	197,037	377,554	-	132,355	-	72,270	-	531,549	-	-	-
2058	204,263	-	595,285	1,081,756	1,081,756	0		235,146	-	0	-	-	186,773	659,837	-	132,478	-	72,270	-	877,008	-	-	-
2059	204,263	-	595,285	1,347,937	1,347,938	-0		256,506	-	0	-	-	391,662	699,769	-	132,601	-	72,270	-	1,143,067	-	-	-
2060	204,263	-	595,285	1,336,727	1,336,727	-0		243,513	-	0	-	-	381,364	711,850	-	132,675	-	72,468	-	1,131,584	-	-	-
2061	204,263	-	595,285	1,262,858	1,262,858	-0		228,013	-	0	-	-	342,989	691,856	-	132,699	-	72,270	-	1,057,889	-	-	-
2062	204,263	-	595,285	1,033,524	1,033,524	0		208,583	-	0	-	-	240,817	584,124	-	132,723	-	72,270	-	828,531	-	-	-
2063	204,263	-	595,285	960,003	960,003	0		198,800	-	0	-	-	227,433	533,770	-	132,747	-	72,270	-	754,986	-	-	-
2064	204,263	-	595,285	1,585,113	1,585,113	0		273,126	-	0	-	-	469,991	841,996	-	132,771	-	72,468	-	1,379,874	-	-	-
2065	204,263	-	595,285	1,459,061	1,459,062	-0		250,408	-	0	-	-	414,651	794,003	-	132,795	-	72,270	-	1,253,997	-	-	-
2066	204,263	-	595,285	1,427,924	1,427,923	0		256,870	-	0	-	-	406,281	764,772	-	132,818	-	72,270	-	1,222,835	-	-	-
2067	204,263	-	595,285	1,186,359	1,186,359	-0		208,312	-	0	-	-	330,957	647,090	-	132,842	-	72,270	-	981,247	-	-	-
2068	204,263	-	595,285	1,049,341	1,049,341	0		208,097	-	0	-	-	252,291	588,953	-	132,866	-	72,468	-	844,007	-	-	-
2069	204,263	-	595,285	1,214,937	1,214,937	-0		241,074	-	0	-	-	264,884	708,979	-	132,890	-	72,270	-	1,009,777	-	-	-
2070	204,263	-	595,285	1,206,185	1,206,184	0		227,347	-	0	-	-	337,298	641,540	-	133,018	-	72,270	-	1,000,896	-	-	-
2071	204,263	-	595,285	883,308	883,308	0		191,088	-	0	-	-	181,783	510,437	-	133,265	-	72,270	-	677,773	-	-	-
2072	204,263	-	595,285	924,178	924,178	0		190,204	-	0	-	-	217,956	516,017	-	133,511	-	72,468	-	718,198	-	-	-
2073	204,263	-	595,285	955,073	955,073	-0		202,142	-	0	-	-	190,269	562,662	-	133,758	-	72,270	-	749,045	-	-	-
2074	204,263	-	595,285	1,730,656	1,730,657	-0		302,363	-	0	-	-	473,066	955,228	-	134,004	-	72,270	-	1,524,383	-	-	-
2075	204,263	-	595,285	894,637	894,637	0		176,028	-	0	-	-	233,063	485,546	-	134,250	-	72,270	-	688,117	-	-	-
2076	204,263	-	595,285	1,484,816	1,484,816	0		275,265	-	0	-	-	362,229	847,321	-	134,497	-	72,468	-	1,277,851	-	-	-
2077	204,263	-	595,285	1,427,100	1,427,100	0		242,763	-	0	-	-	418,188	766,149	-	134,743	-	72,270	-	1,220,087	-	-	-
2078	204,263	-	595,285	1,216,502	1,216,502	0		235,187	-	0	-	-	282,140	699,175	-	134,989	-	72,270	-	1,009,243	-	-	-
2079	204,263	-	595,285	1,911,605	1,911,605	-0		305,396	-	0	-	-	609,688	996,520	-	135,235	-	72,270	-	1,704,100	-	-	-
2080	204,263	-	595,285	1,587,538	1,587,538	-0		280,070	-	0	-	-	483,767	823,701	-	135,427	-	72,468	-	1,379,643	-	-	-
2081	204,263	-	595,285	1,131,378	1,131,378	0		223,534	-	0	-	-	286,777	621,066	-	135,547	-	72,270	-	923,561	-	-	-
2082	204,263	-	595,285	1,140,543	1,140,543	0		223,569	-	0	-	-	284,970	632,005	-	135,666	-	72,270	-	932,607	-	-	-
2083	204,263	-	595,285	976,459	976,459	0		192,242	-	0	-	-	237,136	547,082	-	135,786	-	72,270	-	768,403	-	-	-
2084	204,263	-	595,285	1,238,135	1,238,135	-0		225,745	-	0	-	-	304,842	707,548	-	135,906	-	72,468	-	1,029,761	-	-	-
2085	204,263	-	595,285	1,185,160	1,185,160	0		227,263	-	0	-	-	274,501	683,395	-	136,026	-	72,270	-	976,864	-	-	-
2086	204,263	-	595,285	1,660,840	1,660,839	0		283,200	-	0	-	-	501,334	876,306	-	136,145	-	72,270	-	1,452,424	-	-	-
2087	204,263	-	595,285	1,045,574	1,045,574	-0		205,939	-	0	-	-	243,590	596,044	-	136,265	-	72,270	-	837,039	-	-	-
2088	204,263	-	595,285	1,571,227	1,571,227	0		267,880	-	0	-	-	451,452	851,896	-	136,385	-	72,468	-	1,362,374	-	-	-
2089	204,263	-	595,285	1,556,760	1,556,760	-0		265,983	-	0	-	-	459,123	831,654	-	136,505	-	72,270	-	1,347,985	-	-	-
2090	204,263	-	595,285	1,527,350	1,527,350	-0		265,215	-	0	-	-	443,373	818,761	-	136,587	-	72,270	-	1,318,493	-	-	-
2091	204,263	-	595,285	1,328,781	1,328,781	0		244,613	-	0	-	-	354,894	729,274	-	136,604	-	72,270	-	1,119,907	-	-	-
2092	204,263	-	595,285	1,265,570	1,265,571	-0		241,775	-	0	-	-	321,630	702,166	-	136,621	-	72,468	-	1,056,482	-	-	-
2093	204,263	-	595,285	1,340,246	1,340,246	0		235,681	-	0	-	-	370,603	733,961	-	136,638	-	72,270	-	1,131,338	-	-	-
2094	204,263	-	595,285	1,188,310	1,188,310	0		224,924	-	0	-	-	288,576	674,811	-	136,654	-	72,270	-	979,386	-	-	-
2095	204,263	-	595,285	1,519,106	1,519,106	0		243,510	-	0	-	-	434,285	841,311	-	136,671	-	72,270	-	1,310,165	-	-	-
2096	204,263	-	595,285	1,537,148	1,537,148	-0		257,285	-	0	-	-	451,670	828,193	-	136,688	-	72,468	-	1,327,992	-	-	-
2097	204,263	-	595,285	1,187,210	1,187,210	0		211,072	-	0	-	-	321,047	655,091	-	136,705	-	72,270	-	978,235	-	-	-
2098	204,263	-	595,285	1,488,972	1,488,972	0		264,876	-	0	-	-	389,657	834,439	-	136,722	-	72,270	-	1,279,980	-	-	-
2099	204,263	-	595,285	1,845,823	1,845,823	0		296,024	-	0	-	-	583,492	966,307	-	136,739	-	72,072	-	1,637,012	-	-	-

Addition of PAG to management pond (void loss)

Decommissioning of Tenas Pond. NMP becomes the most downstream reservoir in addition to water channeled from the dams and buttresses and a few other catchments (see table for TCP)

Table 2: EMP water balance - 5th percentile stochastic run

Year	Reservoir							Inflows					Outflows						
	Water cover (end of year)	ΔStorage (water cover)	Void loss (cumul) - part of outflows	Total inflows	Total outflows	Water balance	Comment on imbalance	Direct precipitation EMP	EMP runoff inflow	Pump OpenPit to EMP	Pump from NMP to EMP	Pump from TCP to EMP	Evap EMP	VoidLoss EMP	GW Loss EMP	Overflow EMP to NMP	Pump EMP to TCP	Pump EMP to WMP	Pump EMP to NMP
Unit:	m3							m3					m3						
2021	-	-	-	-	-	0		-	-	-	-	-	-	-	-	-	-	-	-
2022	10	10	-	-	-	-10	Reservoir comes online	-	-	-	-	-	-	-	-	-	-	-	-
2023	413,261	413,251	-	430,262	17,011	0		-	430,262	-	-	-	-	-	-	-	-	-	17,011
2024	206,436	- 206,825	394,071	1,022,789	1,229,614	0		110,115	464,674	-	160,000	288,000	124,271	394,071	12,459	-	698,812	-	-
2025	298,162	91,726	932,296	1,051,764	960,038	0	Small delay in the model in the transfer of water from one reservoir (water cover) to the rock reservoir (void loss)	339,828	134,935	-	235,000	342,000	324,963	538,225	41,850	-	55,000	-	-
2026	446,625	148,463	1,490,233	1,476,652	1,328,189	0		685,017	152,570	495,065	-	144,000	440,579	557,936	69,673	-	260,000	-	-
2027	575,821	129,197	2,111,328	1,605,031	1,475,834	0		632,985	230,192	651,854	-	90,000	527,242	621,096	97,497	-	230,000	-	-
2028	354,100	- 221,722	2,668,730	1,377,909	1,599,630	0		667,975	260,466	422,467	-	27,000	581,527	557,401	125,702	-	335,000	-	-
2029	589,880	235,780	2,796,416	812,746	576,966	0		607,248	205,497	-	-	-	296,059	127,687	153,220	-	-	-	-
2030	743,377	153,497	2,796,416	942,757	789,260	0		745,133	197,624	-	-	-	618,820	-	167,170	3,270	-	-	-
2031	551,265	- 192,112	2,796,416	798,856	990,968	0		580,237	218,620	-	-	-	504,037	-	167,170	319,761	-	-	-
2032	617,112	65,847	2,796,416	865,653	799,807	0		681,279	184,375	-	-	-	504,596	-	167,628	127,583	-	-	-
2033	690,985	73,874	2,796,416	901,269	827,395	0		730,069	171,200	-	-	-	505,153	-	167,170	155,072	-	-	-
2034	729,611	38,625	2,796,416	1,124,567	1,085,941	0		903,160	221,407	-	-	-	505,710	-	167,170	413,061	-	-	-
2035	648,119	- 81,492	2,796,416	875,436	956,927	0		716,868	158,568	-	-	-	506,267	-	167,170	283,490	-	-	-
2036	672,193	24,074	2,796,416	844,209	820,135	0		685,021	159,188	-	-	-	506,826	-	167,628	145,681	-	-	-
2037	695,352	23,159	2,796,416	976,640	953,482	0		815,109	161,532	-	-	-	507,383	-	167,170	278,928	-	-	-
2038	691,217	- 4,135	2,796,416	1,003,575	1,007,710	0		855,132	148,443	-	-	-	507,941	-	167,170	332,600	-	-	-
2039	587,949	- 103,268	2,796,416	987,587	1,090,855	0		785,104	202,484	-	-	-	508,498	-	167,170	415,187	-	-	-
2040	648,744	60,795	2,796,416	1,035,728	974,933	0		846,314	189,414	-	-	-	508,995	-	167,628	298,309	-	-	-
2041	717,573	68,829	2,796,416	1,055,258	986,429	0		863,399	191,859	-	-	-	509,390	-	167,170	309,869	-	-	-
2042	742,555	24,982	2,796,416	1,022,922	997,940	0		860,838	162,084	-	-	-	509,784	-	167,170	320,986	-	-	-
2043	693,061	- 49,494	2,796,416	794,568	844,062	0		675,610	118,958	-	-	-	510,178	-	167,170	166,714	-	-	-
2044	735,937	42,877	2,796,416	917,731	874,854	0		757,147	160,584	-	-	-	510,574	-	167,628	196,652	-	-	-
2045	673,339	- 62,598	2,796,416	872,663	935,261	0		708,642	164,021	-	-	-	510,968	-	167,170	257,123	-	-	-
2046	739,430	66,091	2,796,416	891,335	825,244	0		776,536	114,799	-	-	-	511,363	-	167,170	146,712	-	-	-
2047	728,281	- 11,149	2,796,416	1,166,946	1,178,096	0		1,023,014	143,932	-	-	-	511,757	-	167,170	499,169	-	-	-
2048	742,841	14,560	2,796,416	1,146,651	1,132,090	0		981,338	165,313	-	-	-	512,152	-	167,628	452,310	-	-	-
2049	736,093	- 6,748	2,796,416	1,160,225	1,166,972	0		966,611	193,614	-	-	-	512,547	-	167,170	487,256	-	-	-
2050	741,076	4,982	2,796,416	994,465	989,483	0		841,313	153,152	-	-	-	512,999	-	167,170	309,314	-	-	-
2051	718,545	- 22,530	2,796,416	1,017,721	1,040,251	0		859,190	158,531	-	-	-	513,478	-	167,170	359,603	-	-	-
2052	724,168	5,623	2,796,416	1,032,519	1,026,897	0		888,839	143,680	-	-	-	513,958	-	167,628	345,311	-	-	-
2053	743,377	19,209	2,796,416	984,808	965,599	0		833,623	151,185	-	-	-	514,437	-	167,170	283,992	-	-	-
2054	740,819	- 2,557	2,796,416	1,037,600	1,040,157	0		868,592	169,008	-	-	-	514,916	-	167,170	358,072	-	-	-
2055	723,311	- 17,509	2,796,416	988,129	1,005,638	0		851,653	136,477	-	-	-	515,395	-	167,170	323,073	-	-	-
2056	732,615	9,304	2,796,416	976,117	966,813	0		829,940	146,176	-	-	-	515,875	-	167,628	283,310	-	-	-
2057	576,735	- 155,880	2,796,416	724,680	880,560	0		588,029	136,651	-	-	-	516,354	-	167,170	197,037	-	-	-
2058	740,636	163,901	2,796,416	1,034,677	870,775	0		855,737	178,940	-	-	-	516,833	-	167,170	186,773	-	-	-
2059	727,489	- 13,147	2,796,416	1,062,996	1,076,143	0		933,472	129,524	-	-	-	517,311	-	167,170	391,662	-	-	-
2060	728,326	837	2,796,416	1,067,430	1,066,593	0		886,185	181,246	-	-	-	517,601	-	167,628	381,364	-	-	-
2061	725,297	- 3,029	2,796,416	1,024,825	1,027,854	0		829,778	195,047	-	-	-	517,694	-	167,170	342,989	-	-	-
2062	739,748	14,451	2,796,416	940,226	925,774	0		759,071	181,155	-	-	-	517,787	-	167,170	240,817	-	-	-
2063	703,502	- 36,246	2,796,416	876,238	912,484	0		723,467	152,771	-	-	-	517,881	-	167,170	227,433	-	-	-
2064	734,592	31,090	2,796,416	1,186,683	1,155,593	0		993,955	192,728	-	-	-	517,974	-	167,628	469,991	-	-	-
2065	737,069	2,477	2,796,416	1,102,365	1,099,888	0		911,278	191,086	-	-	-	518,067	-	167,170	414,651	-	-	-
2066	739,370	2,301	2,796,416	1,093,912	1,091,611	0		934,796	159,116	-	-	-	518,160	-	167,170	406,281	-	-	-
2067	665,499	- 73,871	2,796,416	942,510	1,016,380	0		758,083	184,427	-	-	-	518,253	-	167,170	330,957	-	-	-
2068	636,472	- 29,027	2,796,416	909,238	938,265	0		757,300	151,938	-	-	-	518,346	-	167,628	252,291	-	-	-
2069	729,123	92,652	2,796,416	1,043,145	950,493	0		877,312	165,833	-	-	-	518,439	-	167,170	264,884	-	-	-
2070	682,325	- 46,799	2,796,416	976,609	1,023,408	0		827,354	149,255	-	-	-	518,940	-	167,170	337,298	-	-	-
2071	671,692	- 10,633	2,796,416	858,221	868,854	0		695,402	162,819	-	-	-	519,901	-	167,170	181,783	-	-	-
2072	604,015	- 67,677	2,796,416	838,771	906,448	0		692,185	146,586	-	-	-	520,864	-	167,628	217,956	-	-	-
2073	614,336	10,321	2,796,416	889,584	879,263	0		735,630	153,954	-	-	-	521,824	-	167,170	190,269	-	-	-
2074	743,377	129,040	2,796,416	1,292,060	1,163,021	0		1,100,350	191,710	-	-	-	522,785	-	167,170	473,066	-	-	-
2075	609,707	- 133,670	2,796,416	790,308	923,978	0		640,597	149,712	-	-	-	523,745	-	167,170	233,063	-	-	-
2076	734,398	124,691	2,796,416	1,179,256	1,054,565	0		1,001,738	177,518	-	-	-	524,708	-	167,628	362,229	-	-	-
2077	688,263	- 46,134	2,796,416	1,064,892	1,111,026	0		883,459	181,433	-	-	-	525,669	-	167,170	418,188	-	-	-
2078	728,488	40,224	2,796,416	1,016,163	975,939	0		855,885	160,278	-	-	-	526,629	-	167,170	282,140	-	-	-
2079	740,722	12,235	2,796,416	1,316,683	1,304,448	1		1,111,391	205,292	-	-	-	527,590	-	167,170	609,688	-	-	-
2080	740,775	53	2,796,416	1,179,786	1,179,734	-1		1,019,224	160,562	-	-	-	528,339	-	167,628	483,767	-	-	-
2081	743,377	2,602	2,796,416	985,356	982,754	0		813,480	171,875	-	-	-	528,807	-	167,170	286,777	-	-	-
2082	743,377	-	2,796,416	981,413	981,413	0		813,605	167,808	-	-	-	529,274	-	167,170	284,970	-	-	-
2083	660,332	- 83,045	2,796,416	851,001	934,046	0		699,601	151,401	-	-	-	529,741	-	167,170	237,136	-	-	-
2084	688,696	28,364	2,796,416	1,031,044	1,002,679	0		821,524	209,520	-	-	-	530,209	-	167,628	304,842	-	-	-
2085	721,973	33,277	2,796,416	1,005,624	972,347	0		827,051	178,573	-	-	-	530,676	-	167,170	274,501	-	-	-
2086	739,544	17,571	2,796,416	1,217,218	1,199,647	0		1,030,615	186,603	-	-	-	531,143	-	167,170	501,334	-	-	-
2087	705,659	- 33,885	2,796,416	908,486	942,371	0		749,449	159,037	-	-	-	531,610	-	167,170	243,590	-	-	-
2088	730,209	24,550	2,796,416	1,175,709	1,151,158	0		974,862	200,847	-	-	-	532,079	-	167,628	451,452	-	-	-
2089	722,350	- 7,859	2,796,416	1,150,979	1,158,838	0		967,959	183,020	-	-	-	532,546	-	167,170	459,123	-	-	-
2090	729,021	6,671	2,796,416	1,150,081	1,143,410	0		965,164	184,917	-	-	-	532,867	-	167,170	443,373	-	-	-
2091	721,031	- 7,990	2,796,416	1,047,007	1,054,997	0		890,188	156,819	-	-	-	532,933	-	167,170	354,894	-	-	-
2092	737,405	16,374	2,796,416	1,038,631	1,022,257	0		879,861	158,770	-	-	-	532,999	-	167,628	321,630	-	-	-
2093	729,641	- 7,763	2,796,416	1,063,076	1,070,839	0		857,685	205,390	-	-	-	533,066	-	167,170	370,603	-	-	-
2094	743,377	13,735	2,796,416	1,002,613	988,877	0		818,537	184,076	-	-	-	533,132	-	167,170	288,576	-	-	-
2095	725,795	- 17,582	2,796,416	1,117,071	1,134,653	0		886,176	230,895	-	-	-	533,198	-	167,170	434,285	-	-	-
2096	739,567	13,772	2,796,416	1,166,334	1,152,562	0		936,307	230,027	-	-	-	533,264	-	167,628	451,670	-	-	-
2097	654,460	- 85,106	2,796,416	936,441	1,021,547	0		768,127	168,314	-	-	-	533,330	-	167,170	321,047	-	-	-
2098	730,123	75,663	2,796,416	1,165,886	1,090,224	0		963,929	201,957	-	-	-	533,397	-	167,170	389,657	-	-	-
2099	743,377	13,254	2,796,416	1,296,920	1,283,666	0		1,077,282	219,638	-	-	-	533,463	-	166,712	583,492	-	-	-

Addition of PAG to management pond (void loss)

Table 3: WMP water balance - 5th percentile stochastic run

Year	Reservoir						
	Water cover (end of year)	ΔStorage (water cover)	Void loss (cumul) - part of outflows	Total inflows	Total outflows	Water balance	Comment on imbalance
Unit:	m3						
2021	-	-	-	-	-	0	
2022	-	-	-	-	-	0	
2023	-	-	-	-	-	0	
2024	-	-	-	-	-	0	
2025	-	-	-	-	-	0	
2026	-	-	-	-	-	0	
2027	10	10	-	-	-	-10	Reservoir comes online
2028	356,040	356,030	-	368,162	12,131	0	
2029	90,989	- 265,051	426,694	925,119	1,188,702	1468	Small delay in the model in the transfer of water from one reservoir (water cover) to the rock reservoir (void loss)
2030	165,560	74,571	797,933	1,095,069	1,021,375	-877	
2031	166,402	842	1,340,703	1,032,356	1,030,616	898	
2032	208,221	41,819	1,800,012	1,048,761	1,007,177	-235	
2033	203,545	- 4,676	2,383,356	1,172,160	1,176,491	345	
2034	318,633	115,088	2,960,822	1,421,763	1,306,692	-17	
2035	343,356	24,723	3,330,517	1,072,839	1,048,687	-571	
2036	390,712	47,356	3,751,735	1,151,044	1,103,549	140	
2037	366,918	- 23,793	4,253,622	1,322,239	1,345,808	224	
2038	480,657	113,739	4,627,479	1,379,627	1,266,240	-352	
2039	470,545	- 10,112	5,024,243	1,544,598	1,554,646	64	
2040	443,482	- 27,064	5,563,633	1,698,712	1,725,388	388	
2041	578,858	135,377	5,957,408	1,807,307	1,672,327	-397	
2042	636,500	57,642	6,427,118	1,817,545	1,759,693	210	
2043	735,971	99,471	6,721,444	1,481,435	1,382,446	-482	
2044	735,971	-	6,722,249	1,188,088	1,188,893	-805	
2045	735,971	-	6,722,249	1,278,201	1,278,201	0	
2046	735,971	-	6,722,249	1,273,827	1,273,827	0	
2047	735,971	-	6,722,249	1,525,248	1,525,248	0	
2048	735,971	-	6,722,249	1,555,312	1,555,312	0	
2049	735,971	-	6,722,249	1,597,447	1,597,447	0	
2050	735,971	-	6,722,249	1,440,726	1,440,726	0	
2051	735,971	-	6,722,249	1,460,571	1,460,571	0	
2052	735,971	-	6,722,249	1,469,742	1,469,742	0	
2053	735,971	-	6,722,249	1,383,883	1,383,883	0	
2054	735,971	-	6,722,249	1,481,344	1,481,344	0	
2055	735,971	-	6,722,249	1,391,563	1,391,563	0	
2056	735,971	-	6,722,249	1,406,452	1,406,452	0	
2057	735,971	-	6,722,249	1,157,586	1,157,586	0	
2058	735,971	-	6,722,249	1,440,316	1,440,316	0	
2059	735,971	-	6,722,249	1,480,694	1,480,694	0	
2060	735,971	-	6,722,249	1,493,864	1,493,864	0	
2061	735,971	-	6,722,249	1,473,137	1,473,137	0	
2062	735,971	-	6,722,249	1,365,492	1,365,492	0	
2063	735,971	-	6,722,249	1,315,225	1,315,225	0	
2064	735,971	-	6,722,249	1,624,356	1,624,356	0	
2065	735,971	-	6,722,249	1,575,631	1,575,631	0	
2066	735,971	-	6,722,249	1,546,487	1,546,487	0	
2067	735,971	-	6,722,249	1,428,891	1,428,892	0	
2068	735,971	-	6,722,249	1,371,660	1,371,660	0	
2069	735,971	-	6,722,249	1,490,953	1,490,953	0	
2070	735,971	-	6,722,249	1,423,981	1,423,981	0	
2071	735,971	-	6,722,249	1,293,773	1,293,773	0	
2072	735,971	-	6,722,249	1,301,070	1,301,070	0	
2073	735,971	-	6,722,249	1,347,791	1,347,791	0	
2074	735,971	-	6,722,249	1,741,252	1,741,252	0	
2075	735,971	-	6,722,249	1,272,465	1,272,465	0	
2076	735,971	-	6,722,249	1,635,957	1,635,957	0	
2077	735,971	-	6,722,249	1,554,860	1,554,860	0	
2078	735,971	-	6,722,249	1,488,782	1,488,782	0	
2079	735,971	-	6,722,249	1,787,022	1,787,022	0	
2080	735,971	-	6,722,249	1,615,721	1,615,721	0	
2081	735,971	-	6,722,249	1,412,702	1,412,702	0	
2082	735,971	-	6,722,249	1,424,076	1,424,076	0	
2083	735,971	-	6,722,249	1,339,588	1,339,588	0	
2084	735,971	-	6,722,249	1,501,311	1,501,311	0	
2085	735,971	-	6,722,249	1,476,774	1,476,774	0	
2086	735,971	-	6,722,249	1,670,120	1,670,120	0	
2087	735,971	-	6,722,249	1,390,294	1,390,294	0	
2088	735,971	-	6,722,249	1,647,401	1,647,401	0	
2089	735,971	-	6,722,249	1,626,775	1,626,775	0	
2090	735,971	-	6,722,249	1,614,182	1,614,182	0	
2091	735,971	-	6,722,249	1,524,757	1,524,757	0	
2092	735,971	-	6,722,249	1,498,530	1,498,530	0	
2093	735,971	-	6,722,249	1,529,568	1,529,568	0	
2094	735,971	-	6,722,249	1,470,479	1,470,479	0	
2095	735,971	-	6,722,249	1,637,042	1,637,042	0	
2096	735,971	-	6,722,249	1,624,804	1,624,804	0	
2097	735,971	-	6,722,249	1,450,946	1,450,946	0	
2098	735,971	-	6,722,249	1,630,356	1,630,356	0	
2099	735,971	-	6,722,249	1,761,467	1,761,467	0	

Year	Inflows								Outflows				
	Direct precipitation WMP	GW to WMP	WMP runoff inflows	Pump OpenPit to WMP	Open Pit seepage to WMP	Pump from EMP to WMP	Pump from NMP to WMP	Pump from TCP to WMP	Evap WMP	VoidLoss WMP	GW Loss WMP	Overflow WMP to NMP	Pump WMP to TCP
Unit:	m3								m3				
2021	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	-	-	-	-	-	-	-	-
2025	-	-	-	-	-	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	39,059	-	6,335	322,768	-	-	-	-	12,131	-	-	-	-
2029	109,416	-	20,367	741,336	-	-	-	54,000	72,009	426,694	-	-	690,000
2030	188,570	1,811	27,439	814,248	-	-	-	63,000	119,273	371,240	10,862	-	520,000
2031	146,840	5,444	30,956	723,116	-	-	-	126,000	155,200	542,769	32,647	-	300,000
2032	172,411	9,107	26,948	768,295	-	-	-	72,000	183,258	459,309	54,611	-	310,000
2033	204,887	12,720	27,409	783,144	-	-	-	144,000	196,870	583,345	76,276	-	320,000
2034	306,833	16,353	40,968	895,609	-	-	-	162,000	251,166	577,465	98,060	-	380,000
2035	284,467	19,986	33,715	716,671	-	-	-	18,000	299,147	369,695	119,845	-	260,000
2036	313,191	23,689	40,901	674,263	-	-	-	99,000	360,284	421,218	142,048	-	180,000
2037	418,663	27,262	45,313	732,002	-	-	-	99,000	400,447	501,888	163,474	-	280,000
2038	489,919	30,895	49,017	737,796	-	-	-	72,000	437,125	373,857	185,259	-	270,000
2039	494,322	34,528	72,834	825,914	-	-	-	117,000	480,839	396,764	207,043	-	470,000
2040	582,310	38,270	77,598	892,533	-	-	-	108,000	506,514	539,389	229,485	-	450,000
2041	645,719	41,804	86,755	961,030	-	-	-	72,000	527,880	393,776	250,672	-	500,000
2042	698,159	45,437	84,231	908,718	-	-	-	81,000	547,527	469,710	272,457	-	470,000
2043	587,813	49,070	69,538	775,015	-	-	-	-	576,189	294,326	294,241	217,691	-
2044	678,501	49,959	112,468	-	347,160	-	-	-	574,578	805	299,754	313,756	-
2045	635,035	49,823	111,557	-	481,787	-	-	-	495,947	-	298,935	483,319	-
2046	695,876	49,823	85,016	-	443,112	-	-	-	476,445	-	298,935	498,447	-
2047	916,752	49,823	98,359	-	460,314	-	-	-	476,813	-	298,935	749,501	-
2048	879,405	49,959	127,804	-	498,144	-	-	-	477,181	-	299,754	778,377	-
2049	866,208	49,823	140,551	-	540,866	-	-	-	477,549	-	298,935	820,963	-
2050	753,924	49,823	116,740	-	520,239	-	-	-	477,970	-	298,935	663,821	-
2051	769,945	49,823	121,733	-	519,071	-	-	-	478,416	-	298,935	683,220	-
2052	796,514	49,959	110,969	-	512,300	-	-	-	478,864	-	299,754	691,124	-
2053	747,033	49,823	110,513	-	476,514	-	-	-	479,310	-	298,935	605,637	-
2054	778,370	49,823	123,052	-	530,099	-	-	-	479,757	-	298,935	702,652	-
2055	763,190	49,823	99,692	-	478,859	-	-	-	480,203	-	298,935	612,425	-
2056	743,733	49,959	111,895	-	500,866	-	-	-	480,651	-	299,754	626,048	-
2057	526,950	49,823	91,945	-	488,869	-	-	-	481,097	-	298,935	377,554	-
2058	766,850	49,823	129,438	-	494,206	-	-	-	481,543	-	298,935	659,837	-
2059	836,511	49,823	97,648	-	496,713	-	-	-	481,990	-	298,935	699,769	-
2060	794,135	49,959	124,004	-	525,766	-	-	-	482,260	-	299,754	711,850	-
2061	743,587	49,823	135,896	-	543,831	-	-	-	482,346	-	298,935	691,856	-
2062	680,225	49,823	121,140	-	514,305	-	-	-	482,433	-	298,935	584,124	-
2063	648,319	49,823	100,193	-	516,890	-	-	-	482,520	-	298,935	533,770	-
2064	890,711	49,959	148,787	-	534,899	-	-	-	482,606	-	299,754	841,996	-
2065	816,622	49,823	145,193	-	563,993	-	-	-	482,693	-	298,935	794,003	-
2066	837,698	49,823	119,947	-	539,020	-	-	-	482,780	-	298,935	764,772	-
2067	679,339	49,823	133,954	-	565,775	-	-	-	482,866	-	298,935	647,090	-
2068	678,638	49,959	111,846	-	531,216	-	-	-	482,953	-	299,754	588,953	-
2069	786,184	49,823	128,151	-	526,796	-	-	-	483,040	-	298,935	708,979	-
2070	741,416	49,823	113,261	-	519,482	-	-	-	483,506	-	298,935	641,540	-
2071	623,169	49,823	107,586	-	513,195	-	-	-	484,401	-	298,935	510,437	-
2072	620,287	49,959	108,493	-	522,331	-	-	-	485,299	-	299,754	516,017	-
2073	659,219	49,823	116,500	-	522,250	-	-	-	486,194	-	298,935	562,662	-
2074	986,055	49,823	150,278	-	555,096	-	-	-	487,089	-	298,935	955,228	-
2075	574,057	49,823	112,387	-	536,199	-	-	-	487,984	-	298,935	485,546	-
2076	897,685	49,959	136,776	-	551,537	-	-	-	488,882	-	299,754	847,321	-
2077	791,692	49,823	131,375	-	581,971	-	-	-	489,777	-	298,935	766,149	-
2078	766,983	49,823	124,150	-	547,827	-	-	-	490,672	-	298,935	699,175	-
2079	995,949	49,823	156,306	-	584,945	-	-	-	491,567	-	298,935	996,520	-
2080	913,356	49,959	119,008	-	533,398	-	-	-	492,266	-	299,754	823,701	-
2081	728,983	49,823	113,071	-	520,826	-	-	-	492,701	-	298,935	621,066	-
2082	729,095	49,823	106,939	-	538,220	-	-	-	493,136	-	298,935	632,005	-
2083	626,932	49,823	117,584	-	545,250	-	-	-	493,572	-	298,935	547,082	-
2084	736,191	49,959	138,426	-	576,735	-	-	-	494,008	-	299,754	707,548	-
2085	741,144	49,823	128,192	-	557,615	-	-	-	494,444	-	298,935	683,395	-
2086	923,563	49,823	138,214	-	558,520	-	-	-	494,879	-	298,935	876,306	-
2087	671,603	49,823	118,463	-	550,406	-	-	-	495,314	-	298,935	596,044	-
2088	873,601	49,959	136,397	-	587,444	-	-	-	495,751	-	299,754	851,896	-
2089	867,416	49,823	133,974	-	575,563	-	-	-	496,186	-	298,935	831,654	-
2090	864,911	49,823	136,142	-	563,306	-	-	-	496,486	-	298,935	818,761	-
2091	797,723	49,823	115,658	-	561,553	-	-	-	496,548	-	298,935	729,274	-
2092	788,468	49,959	122,343	-	537,759	-	-	-	496,610	-	299,754	702,166	-
2093	768,596	49,823	134,453	-	576,696	-	-	-	496,672	-	298,935	733,961	-
2094	733,514	49,823	129,007	-	558,136	-	-	-	496,734	-	298,935	674,811	-
2095	794,128	49,823	156,026	-	637,066	-	-	-	496,796	-	298,935	841,311	-
2096	839,051	49,959	151,146	-	584,648	-	-	-	496,858	-	299,754	828,193	-
2097	688,340	49,823	124,081	-	588,702	-	-	-	496,920	-	298,935	655,091	-
2098	863,804	49,823	136,047	-	580,682	-	-	-	496,982	-	298,935	834,439	-
2099	965,383	49,686	155,735	-	590,664	-	-	-	497,044	-	298,116	966,307	-

Addition of PAG to management pond (void loss)

Table 4: TCP water balance - 5th percentile stochastic run

Year	Reservoir						Inflows								Outflows							
	TCP reservoir (end of year)	ΔStorage (water cover)	Total inflows	Total outflows	Water balance	Comment on imbalance	Direct Precipitation TCP	TCP runoff inflows	Seepage Dam and Buttresses to TCP	PlantPond overflow to TCP	Overflow from NMP TCP	Pump from EMP to TCP	Pump from WMP to TCP	Pump from OpenPit to TCP	Evap TCP	GW Loss TCP	Pump TCP to ENV	Process water pump from TCP	TCP pump to NMP	Pump from TCP to EMP	Pump from TCP to WMP	TCP runoff outflows to ENV
Unit:	m3						m3								m3							
2021	86,008	86,008	86,007	-	-1		12,869	60,647	12,490	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	100,042	14,035	652,736	638,702	0		49,239	378,818	27,104	158,791	5,865	-	-	32,919	25,944	12,757	411,000	-	189,000	-	-	-
2023	158,553	58,510	1,075,837	1,017,327	0		47,948	801,554	21,543	134,792	70,000	-	-	-	14,956	38,343	694,028	-	270,000	-	-	-
2024	342,358	183,806	1,956,906	1,773,099	0		123,659	742,340	42,726	129,368	220,000	698,812	-	-	97,209	51,240	1,246,650	-	90,000	288,000	-	-
2025	46,766	- 295,593	554,266	849,859	0		31,352	296,625	37,486	78,804	55,000	55,000	-	-	15,403	51,100	441,355	-	-	342,000	-	-
2026	116,168	69,402	791,555	722,153	0		36,267	354,653	33,426	107,209	-	260,000	-	-	11,383	51,100	515,671	-	-	144,000	-	-
2027	158,477	42,309	916,183	873,873	0		41,871	516,588	13,754	113,969	-	230,000	-	-	19,799	51,100	712,975	-	-	90,000	-	-
2028	126,319	- 32,158	989,427	1,021,585	0		52,464	484,640	2,209	115,113	-	335,000	-	-	30,876	51,240	912,469	-	-	27,000	-	-
2029	71,475	- 54,844	1,259,224	1,314,069	0		78,614	385,121	352	105,137	-	-	690,000	-	51,179	51,100	1,157,790	-	-	-	54,000	-
2030	255,758	184,284	1,097,200	912,916	0		46,546	415,510	57	115,088	-	-	520,000	-	17,675	51,100	781,142	-	-	-	63,000	-
2031	153,413	- 102,345	1,111,751	1,214,096	0		57,646	396,144	9	102,968	254,984	-	300,000	-	39,713	51,100	997,283	-	-	-	126,000	-
2032	169,243	15,830	979,976	964,146	0		51,097	403,805	4,497	107,531	103,045	-	310,000	-	25,658	51,240	815,248	-	-	-	72,000	-
2033	80,330	- 88,913	1,038,732	1,127,645	0		53,528	411,959	17,050	111,018	125,177	-	320,000	-	26,225	51,100	906,320	-	-	-	144,000	-
2034	192,300	111,970	1,582,542	1,470,572	0		79,018	508,228	23,471	141,184	450,641	-	380,000	-	39,152	51,100	1,218,320	-	-	-	162,000	-
2035	121,291	- 71,009	1,221,071	1,292,080	0		73,384	465,414	23,580	107,954	290,739	-	260,000	-	47,481	51,100	1,175,499	-	-	-	18,000	-
2036	124,191	2,901	969,280	966,379	0		45,894	467,459	28,871	108,468	138,587	-	180,000	-	20,807	51,240	795,332	-	-	-	99,000	-
2037	101,762	- 22,430	1,307,506	1,329,935	0		63,159	510,862	48,949	121,689	282,848	-	280,000	-	33,515	51,100	1,146,320	-	-	-	99,000	-
2038	124,885	23,123	1,397,338	1,374,215	0		65,208	518,640	54,105	125,175	364,210	-	270,000	-	36,753	51,100	1,214,362	-	-	-	72,000	-
2039	119,858	- 5,027	1,772,186	1,777,213	0		87,700	568,334	54,072	136,287	455,795	-	470,000	-	54,402	51,100	1,554,711	-	-	-	117,000	-
2040	101,803	- 18,054	1,637,784	1,655,839	-1		89,392	582,548	54,349	141,494	320,002	-	450,000	-	54,525	51,240	1,442,074	-	-	-	108,000	-
2041	159,788	57,985	1,711,386	1,653,401	0		87,131	597,089	53,802	146,014	327,351	-	500,000	-	56,742	51,100	1,473,559	-	-	-	72,000	-
2042	443,263	283,475	1,628,305	1,344,831	0		84,553	565,240	50,343	139,431	318,738	-	470,000	-	45,821	51,100	1,166,910	-	-	-	81,000	-
2043	501,783	58,520	1,046,288	987,768	0		76,147	449,412	47,006	108,119	365,605	-	-	-	44,824	51,100	891,845	-	-	-	-	-
2044	199,909	- 301,875	820,805	1,122,680	0		82,723	206,159	15,713	1,091	515,120	-	-	-	46,048	-	1,076,632	-	-	-	-	-
2045	186,750	- 13,159	1,002,388	1,015,547	0		73,280	185,649	11,537	-	731,923	-	-	-	43,547	-	972,000	-	-	-	-	-
2046	330,440	143,690	931,363	787,674	0		62,566	203,150	10,453	-	655,195	-	-	-	25,674	-	762,000	-	-	-	-	-
2047	396,850	66,411	1,745,597	1,679,186	0		137,764	268,139	13,361	-	1,326,334	-	-	-	70,154	-	1,609,032	-	-	-	-	-
2048	-	- 396,850	1,628,313	2,019,588	5575	Small delay in fully emptying the reservoir in 2048	103,163	256,058	13,630	-	1,255,463	-	-	-	51,699	-	1,967,889	-	-	-	-	-
2049	-	-	268,363	268,363	0		44	254,011	14,309	-	-	-	-	-	-	-	-	-	-	-	-	268,363
2050	-	-	233,189	233,189	0		38	220,182	12,969	-	-	-	-	-	-	-	-	-	-	-	-	233,189
2051	-	-	237,643	237,643	0		39	225,229	12,375	-	-	-	-	-	-	-	-	-	-	-	-	237,643
2052	-	-	245,308	245,308	0		40	232,809	12,459	-	-	-	-	-	-	-	-	-	-	-	-	245,308
2053	-	-	225,900	225,900	0		38	214,115	11,748	-	-	-	-	-	-	-	-	-	-	-	-	225,900
2054	-	-	244,212	244,212	0		39	231,392	12,781	-	-	-	-	-	-	-	-	-	-	-	-	244,212
2055	-	-	235,105	235,105	0		39	222,784	12,282	-	-	-	-	-	-	-	-	-	-	-	-	235,105
2056	-	-	229,728	229,728	0		38	217,876	11,814	-	-	-	-	-	-	-	-	-	-	-	-	229,728
2057	-	-	164,108	164,108	0		27	153,949	10,132	-	-	-	-	-	-	-	-	-	-	-	-	164,108
2058	-	-	234,497	234,497	0		39	223,907	10,551	-	-	-	-	-	-	-	-	-	-	-	-	234,497
2059	-	-	257,577	257,577	0		42	244,747	12,788	-	-	-	-	-	-	-	-	-	-	-	-	257,577
2060	-	-	245,468	245,468	0		40	232,085	13,343	-	-	-	-	-	-	-	-	-	-	-	-	245,468
2061	-	-	230,006	230,006	0		38	217,315	12,653	-	-	-	-	-	-	-	-	-	-	-	-	230,006
2062	-	-	216,203	216,203	0		34	197,761	18,408	-	-	-	-	-	-	-	-	-	-	-	-	216,203
2063	-	-	213,426	213,426	0		33	190,507	22,886	-	-	-	-	-	-	-	-	-	-	-	-	213,426
2064	-	-	286,257	286,257	0		45	260,257	25,956	-	-	-	-	-	-	-	-	-	-	-	-	286,257
2065	-	-	265,681	265,681	0		41	238,567	27,072	-	-	-	-	-	-	-	-	-	-	-	-	265,681
2066	-	-	272,413	272,413	0		42	244,745	27,625	-	-	-	-	-	-	-	-	-	-	-	-	272,413
2067	-	-	225,390	225,390	0		34	198,672	26,684	-	-	-	-	-	-	-	-	-	-	-	-	225,390
2068	-	-	221,872	221,872	0		34	198,406	23,432	-	-	-	-	-	-	-	-	-	-	-	-	221,872
2069	-	-	253,797	253,797	0		40	229,754	24,003	-	-	-	-	-	-	-	-	-	-	-	-	253,797
2070	-	-	241,519	241,519	0		38	216,540	24,941	-	-	-	-	-	-	-	-	-	-	-	-	241,519
2071	-	-	204,730	204,730	0		32	182,218	22,480	-	-	-	-	-	-	-	-	-	-	-	-	204,730
2072	-	-	203,327	203,327	0		31	181,328	21,967	-	-	-	-	-	-	-	-	-	-	-	-	203,327
2073	-	-	214,883	214,883	0		33	192,655	22,195	-	-	-	-	-	-	-	-	-	-	-	-	214,883
2074	-	-	312,489	312,489	0		50	283,871	28,568	-	-	-	-	-	-	-	-	-	-	-	-	312,489
2075	-	-	195,100	195,100	0		29	171,740	23,331	-	-	-	-	-	-	-	-	-	-	-	-	195,100
2076	-	-	288,030	288,030	0		45	262,621	25,363	-	-	-	-	-	-	-	-	-	-	-	-	288,030
2077	-	-	261,167	261,167	0		40	231,427	29,700	-	-	-	-	-	-	-	-	-	-	-	-	261,167
2078	-	-	249,755	249,755	0		39	224,144	25,572	-	-	-	-	-	-	-	-	-	-	-	-	249,755
2079	-	-	321,486	321,486	0		50	290,560	30,876	-	-	-	-	-	-	-	-	-	-	-	-	321,486
2080	-	-	296,140	296,140	0		46	267,052	29,042	-	-	-	-	-	-	-	-	-	-	-	-	296,140
2081	-	-	233,774	233,774	0		37	207,805	25,932	-	-	-	-	-	-	-	-	-	-	-	-	233,774
2082	-	-	241,095	241,095	0		37	215,523	25,536	-	-	-	-	-	-	-	-	-	-	-	-	241,095
2083	-	-	210,615	210,615	0		32	185,707	24,877	-	-	-	-	-	-	-	-	-	-	-	-	210,615
2084	-	-	239,684	239,684	0		37	215,838	23,809	-	-	-	-	-	-	-	-	-	-	-	-	239,684
2085	-	-	240,980	240,980	0		37	216,598	24,345	-	-	-	-	-	-	-	-	-	-	-	-	240,980
2086	-	-	298,085	298,085	0		47	269,650	28,388	-	-	-	-	-	-	-	-	-	-	-	-	298,085
2087	-	-	221,044	221,044	0		34	196,282	24,728	-	-	-	-	-	-	-	-	-	-	-	-	221,044
2088	-	-	283,588	283,588	0		44	255,558	27,985	-	-	-	-	-	-	-	-	-	-	-	-	283,588
2089	-	-	283,007	283,007	0		44	253,511	29,452	-	-	-	-	-	-	-	-	-	-	-	-	283,007
2090	-	-	281,174	281,174	0		44	252,762	28,368	-	-	-	-	-	-	-	-	-	-	-	-	281,174
2091	-	-	260,442	260,442	0		40	233,140	27,261	-	-	-	-	-	-	-	-	-	-	-	-	260,442
2092	-	-	256,760	256,760	0		40	230,309	26,412	-	-	-	-	-	-	-	-	-	-	-	-	256,760
2093	-	-	250,697	250,697	0		39	224,734	25,925	-	-	-	-	-	-	-	-	-	-	-	-	250,697
2094	-	-	233,231	233,231	0		37	208,031	25,163	-	-	-	-	-	-	-	-	-	-	-	-	233,231
2095	-	-	265,765	265,765	0		40	238,264	27,461	-	-	-	-	-	-	-	-	-	-	-	-	265,765
2096	-	-	270,901	270,901	0		42	245,139	25,719	-	-	-	-	-	-	-	-	-	-	-	-	270,901
2097	-	-	223,867	223,867	0		35	197,881	25,951	-	-	-	-	-	-	-	-	-	-	-	-	223,867
2098	-	-	282,126	282,126	0		44	255,958	26,124	-	-	-	-	-	-	-	-	-	-	-	-	282,126
2099	-	-	309,818	309,818	0		49	280,458	29,312	-	-	-	-	-	-	-	-	-	-	-	-	309,818

Decommissioning of Tenas Pond. NMP becomes the most downstream reservoir in addition to water channeled from the dams and buttresses and a few other catchments (see table for TCP)

Table 5: Open Pit water balance - 5th percentile stochastic run

Year	Reservoir					
	Open Pit sump reservoir (end of year)	ΔStorage (water cover)	Total inflows	Total outflows	Water balance	Comments
Unit:	m3					
2021	-	-	-	-	0	
2022	60,000	60,000	134,176	74,176	0	
2023	60,000	-	443,758	443,758	0	
2024	60,000	-	681,872	681,872	0	
2025	60,000	-	558,040	558,040	0	
2026	60,000	-	684,160	684,160	0	
2027	60,000	-	840,956	840,956	0	
2028	60,000	-	934,836	934,837	0	
2029	60,000	-	930,451	930,451	0	
2030	60,000	-	1,003,371	1,003,371	0	
2031	60,000	-	912,249	912,249	0	
2032	60,000	-	957,931	957,931	0	
2033	60,000	-	972,297	972,297	0	
2034	60,000	-	1,084,772	1,084,772	0	
2035	60,000	-	905,845	905,844	0	
2036	60,000	-	863,939	863,939	0	
2037	60,000	-	921,196	921,196	0	
2038	60,000	-	927,000	927,000	0	
2039	60,000	-	1,015,128	1,015,128	0	
2040	60,000	-	1,082,249	1,082,249	0	
2041	60,000	-	1,150,260	1,150,260	0	
2042	60,000	-	1,097,956	1,097,956	0	
2043	60,000	-	964,259	964,259	0	
2044			347,527	347,527	0	inflows= outflows, no more pit sump in closure
2045			481,787	481,787	0	
2046			443,112	443,112	0	
2047			460,314	460,314	0	
2048			498,144	498,144	0	
2049			540,866	540,866	0	
2050			520,239	520,239	0	
2051			519,071	519,071	0	
2052			512,300	512,300	0	
2053			476,514	476,514	0	
2054			530,099	530,099	0	
2055			478,859	478,859	0	
2056			500,866	500,866	0	
2057			488,869	488,869	0	
2058			494,206	494,206	0	
2059			496,713	496,713	0	
2060			525,766	525,766	0	
2061			543,831	543,831	0	
2062			514,305	514,305	0	
2063			516,890	516,890	0	
2064			534,899	534,899	0	
2065			563,993	563,993	0	
2066			539,020	539,020	0	
2067			565,775	565,775	0	
2068			531,216	531,216	0	
2069			526,796	526,796	0	
2070			519,482	519,482	0	
2071			513,195	513,195	0	
2072			522,331	522,331	0	
2073			522,250	522,250	0	
2074			555,096	555,096	0	
2075			536,199	536,199	0	
2076			551,537	551,537	0	
2077			581,971	581,971	0	
2078			547,827	547,827	0	
2079			584,945	584,945	0	
2080			533,398	533,398	0	
2081			520,826	520,826	0	
2082			538,220	538,220	0	
2083			545,250	545,250	0	
2084			576,735	576,735	0	
2085			557,615	557,615	0	
2086			558,520	558,520	0	
2087			550,406	550,406	0	
2088			587,444	587,444	0	
2089			575,563	575,563	0	
2090			563,306	563,306	0	
2091			561,553	561,553	0	
2092			537,759	537,759	0	
2093			576,696	576,696	0	
2094			558,136	558,136	0	
2095			637,066	637,066	0	
2096			584,648	584,648	0	
2097			588,702	588,702	0	
2098			580,682	580,682	0	
2099			590,664	590,664	0	

Year	Inflows - operations					Outflows - operations						Inflows=Outflows - closure			
	Combined Seepage backfill[1]	Pit wall and backfill runoff inflows[2]	Natural catchment runoff[3]	Backfill infiltration[3]	GW to OpenPit[3]	Evap sump	Process plant from OpenPit	OpenPit pump to TCP	OpenPit pump to NMP	OpenPit pump to EMP	OpenPit pump to WMP	Combined Backfill seepage to WMP - closure[4]	Pit wall, backfill, and natural catchment runoff[3]	Backfill infiltration[3]	GW to OpenPit[3]
Unit:	m3					m3						m3			
2021	-	-	-	-	-	-	-	-	-	-	-				
2022	26,596	107,580	27,589	-	28,850	9,125	-	32,919	32,132	-	-				
2023	149,639	294,120	156,614	26	86,709	9,131	179,945	-	254,682	-	-				
2024	378,210	303,662	318,069	44	133,366	9,138	180,438	-	492,296	-	-				
2025	341,737	216,303	149,735	82	167,743	9,144	179,945	-	368,951	-	-				
2026	379,193	304,967	209,132	127	202,438	9,150	179,945	-	-	495,065	-				
2027	458,281	382,675	259,978	158	237,132	9,157	179,945	-	-	651,854	-				
2028	486,452	448,385	216,202	294	272,619	9,163	180,438	-	-	422,467	322,768				
2029	491,267	439,184	183,452	269	306,616	9,170	179,945	-	-	-	741,336				
2030	465,197	538,174	146,997	354	319,616	9,177	179,945	-	-	-	814,248				
2031	472,490	439,759	149,185	2,280	310,802	9,187	179,945	-	-	-	723,116				
2032	430,174	527,757	113,038	3,624	302,803	9,198	180,438	-	-	-	768,295				
2033	410,328	561,969	101,214	603	293,150	9,208	179,945	-	-	-	783,144				
2034	411,827	672,945	137,641	2,577	284,336	9,218	179,945	-	-	-	895,609				
2035	403,307	502,537	104,103	7,234	275,522	9,228	179,945	-	-	-	716,671				
2036	395,992	467,947	119,301	12,335	267,427	9,238	180,438	-	-	-	674,263				
2037	397,391	523,805	121,766	13,741	257,870	9,249	179,945	-	-	-	732,002				
2038	397,330	529,670	123,118	27,615	249,056	9,259	179,945	-	-	-	737,796				
2039	450,031	565,097	186,812	47,150	240,242	9,269	179,945	-	-	-	825,914				
2040	483,629	598,620	188,695	80,704	232,050	9,278	180,438	-	-	-	892,533				
2041	519,887	630,373	203,773	111,943	222,590	9,285	179,945	-	-	-	961,030				
2042	508,053	589,903	187,366	129,112	213,776	9,292	179,945	-	-	-	908,718				
2043	502,234	462,026	149,478	133,917	204,413	9,299	179,945	-	-	-	775,015				
2044												347,527	224,265	136,897	137,945
2045												481,787	225,847	133,393	137,569
2046												443,112	171,819	128,577	137,569
2047												460,314	198,997	128,047	137,569
2048												498,144	259,212	130,104	137,945
2049												540,866	284,757	131,166	137,569
2050												520,239	236,454	132,778	137,569
2051												519,071	246,605	133,920	137,569
2052												512,300	224,690	135,357	137,945
2053												476,514	224,699	135,079	137,569
2054												530,099	248,328	135,741	137,569
2055												478,859	201,738	136,549	137,569
2056												500,866	226,470	137,933	137,945
2057												488,869	185,931	137,859	137,569
2058												494,206	262,373	138,140	137,569
2059												496,713	197,527	138,408	137,569
2060												525,766	251,182	139,813	137,945
2061												543,831	275,477	139,777	137,569
2062												514,305	245,654	140,619	137,569
2063												516,890	202,471	141,524	137,569
2064												534,899	301,664	143,108	137,945
2065												563,993	294,370	143,354	137,569
2066												539,020	242,991	144,527	137,569
2067												565,775	271,403	145,687	137,569
2068												531,216	226,346	147,609	137,945
2069												526,796	259,685	148,005	137,569
2070												519,482	229,379	149,283	137,569
2071												513,195	217,811	150,459	137,569
2072												522,331	219,497	152,239	137,945
2073												522,250	235,850	152,233	137,569
2074												555,096	305,835	153,166	137,569
2075												536,199	226,548	153,933	137,569
2076												551,537	277,223	155,339	137,945
2077												581,971	266,134	155,291	137,569
2078												547,827	251,480	156,172	137,569
2079												584,945	317,145	157,187	137,569
2080												533,398	240,953	158,810	137,945
2081												520,826	230,180	158,771	137,569
2082												538,220	216,001	159,732	137,569
2083												545,250	237,584	160,329	137,569
2084												576,735	280,441	161,980	137,945
2085												557,615	259,722	161,804	137,569
2086												558,520	280,289	162,699	137,569
2087												550,406	239,856	163,407	137,569
2088												587,444	276,459	164,924	137,945
2089												575,563	271,562	164,686	137,569
2090												563,306	275,913	165,383	137,569
2091												561,553	234,192	166,231	137,569
2092												537,759	247,939	167,952	137,945
2093												576,696	272,462	168,103	137,569
2094												558,136	262,899	169,047	137,569
2095												637,066	315,039	169,741	137,569
2096												584,648	306,611	171,268	137,945
2097												588,702	252,249	171,035	137,569
2098												580,682	275,014	171,751	137,569
2099												590,664	316,315	171,905	137,192

Addition of PAG to management pond (void loss)

Captured in the inflow as "Backfill seepage"

Informative flow only, part of another flow in the same table, and therefore not accounted in the overall water balance calculations in this file

1 Combined backfill seepage (infiltration in backfill, groundwater inflows and natural catcment upstream of the backfill) is delayed by 5 days when combined as one flow to mimic overall seepage from the backfill

2 no delay for the runoff (pit wall and backfill as it is collected downstream of the backfill

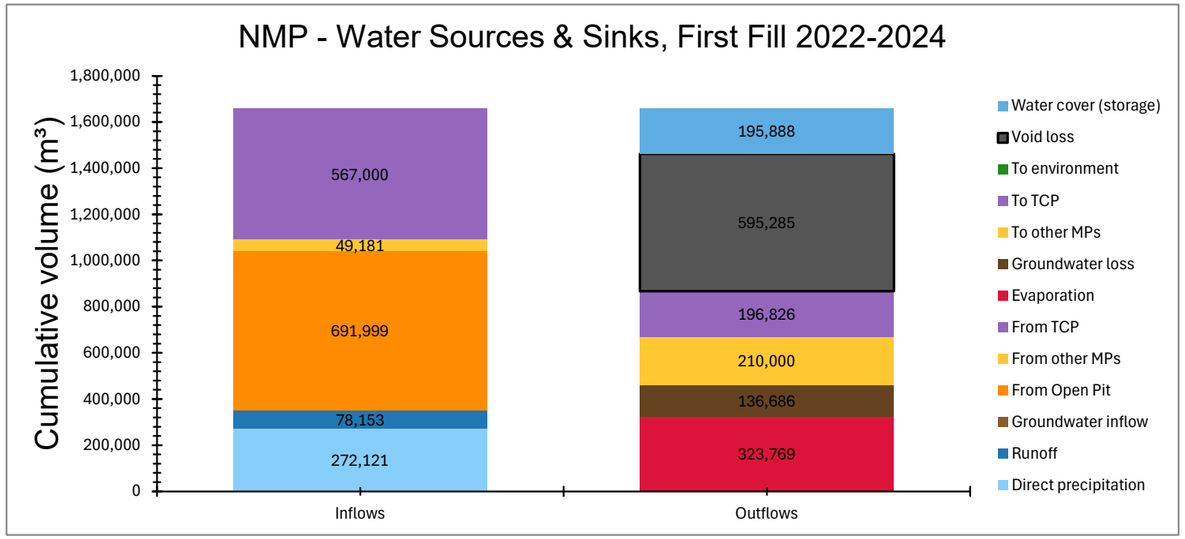
3 Individual flows as part of the combined backfill seepage - not delayed, and therefore does not entirely adds up to the same amount as the combined flow annually. These are shown to show the relative contirbution of each flow to the backfill seepage

4 Overall seepage out of the Open Pit decreases in closure as part of the covered backfill runoffs are diverted to Four Creek (as they are then unimpacted catchments)

Attachment 2: P50 Water Model Balance Results

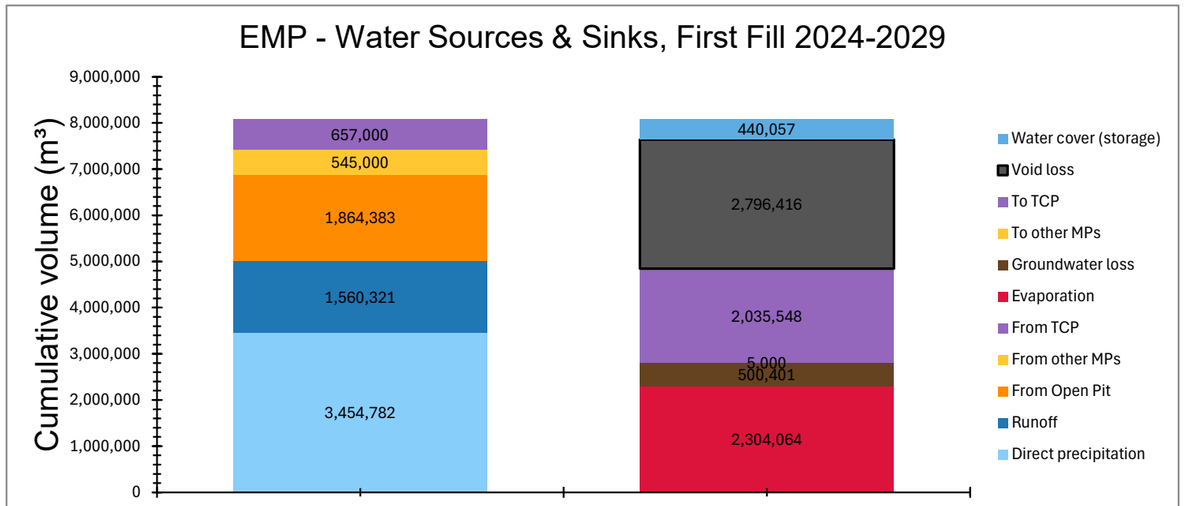
NMP - first fill 2022-2024

Flow group	Inflows	Outflows
Direct precipitation	272121.22	0
Runoff	78153.43342	0
Groundwater inflow	0	0
From Open Pit	691998.59	0
From other MPs	49181.46	0
From TCP	567000	0
Evaporation	0	323769.26
Groundwater loss	0	136686.006
To other MPs	0	210000
To TCP	0	196826.077
To environment	0	0
Void loss	0	595285.1
Water cover (storage)	0	195888.1
Total inflows	1658454.703	
Total outflows	1658454.543	
Residual (in - out)	0.160417	
Residual %	9.67268E-08	(of inflows)



EMP - first fill 2024-2029

Flow group	Inflows	Outflows
Direct precipitation	3454781.8	0
Runoff	1560321.1	0
From Open Pit	1864382.7	0
From other MPs	545000	0
From TCP	657000	0
Evaporation	0	2304063.6
Groundwater loss	0	500401.02
To other MPs	0	5000
To TCP	0	2035548.2
Void loss	0	2796416.2
Water cover (storage)	0	440056.6
Total inflows	8081485.6	
Total outflows	8081485.62	
Residual (in - out)	-0.02	
Residual %	-2.47479E-09	(of inflows)



WMP - first fill 2029-2043

Flow group	Inflows	Outflows
Direct precipitation	5605959.9	0
Runoff	843490.3	0
Groundwater inflow	356376.109	0
From Open Pit	12936682.3	0
From other MPs	0	0
From TCP	1008000	0
Evaporation	0	5118146.75
Groundwater loss	0	2136978.47
To other MPs	0	360766.6
To TCP	0	6020000
Void loss	0	6721443.6
Water cover (storage)	0	392368.1
Total inflows	20750508.61	
Total outflows	20749703.52	
Residual (in - out)	805.089	
Residual %	3.87985E-05	(of inflows)

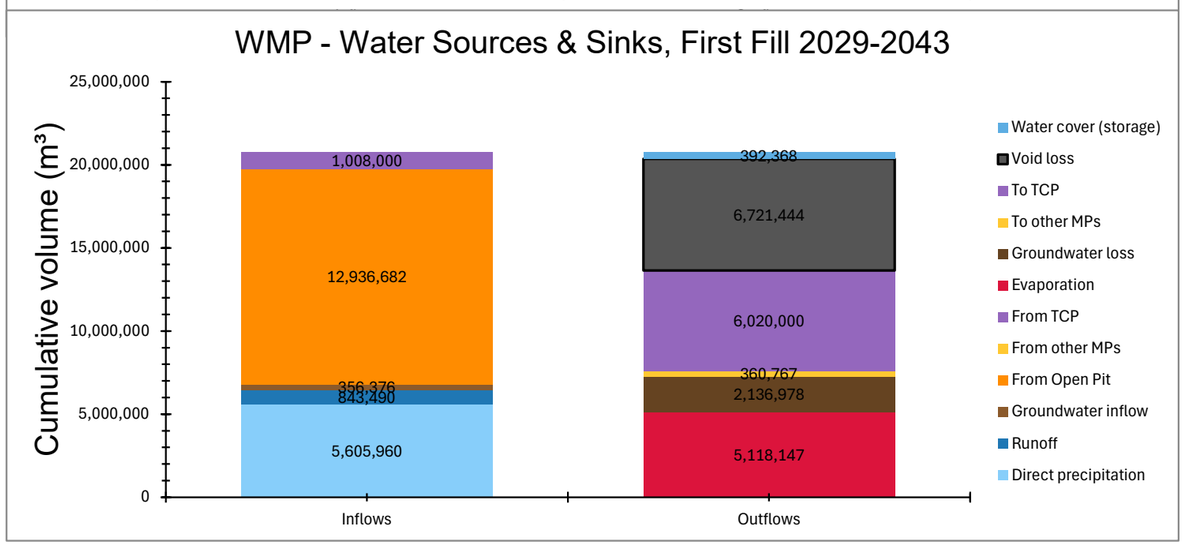


Table 1: NMP water balance - average climate run

Year	Reservoir						
	Water cover (end of year)	ΔStorage (water cover)	Void loss (cumul) - part of outflows	Total inflows	Total outflows	Water balance	Comment on imbalance
Unit:	m3						
2021	10	10	-	-	-	-10	Reservoir comes online
2022	102,538	102,528	104,248	238,140	135,122	490	
2023	140,398	37,860	495,659	690,693	652,398	436	Small delay in the model in the transfer of water from one reservoir (water cover) to the rock reservoir (void loss)
2024	195,898	55,500	595,285	729,622	675,047	-926	
2025	195,044	-854	595,285	739,554	740,408	0	
2026	165,087	-29,957	595,285	205,719	235,676	0	
2027	170,673	5,586	595,285	206,624	201,038	0	
2028	144,295	-26,378	595,285	207,721	234,099	0	
2029	143,860	-436	595,285	208,532	208,967	0	
2030	204,263	60,404	595,285	486,163	425,759	0	
2031	152,143	-52,120	595,285	638,347	690,467	0	
2032	152,410	267	595,285	539,392	539,126	0	
2033	152,718	308	595,285	536,013	535,705	0	
2034	152,859	142	595,285	538,955	538,813	0	
2035	152,602	-257	595,285	531,343	531,600	0	
2036	151,891	-711	595,285	525,348	526,060	0	
2037	151,069	-822	595,285	520,612	521,434	0	
2038	150,236	-832	595,285	514,583	515,416	0	
2039	149,530	-707	595,285	507,981	508,687	0	
2040	148,697	-832	595,285	507,973	508,805	0	
2041	148,249	-448	595,285	499,376	499,824	0	
2042	148,651	402	595,285	495,065	494,663	0	
2043	204,263	55,613	595,285	849,703	794,090	0	
2044	167,696	-36,568	595,285	869,353	905,921	0	
2045	204,263	36,568	595,285	1,076,592	1,040,024	0	
2046	204,263	-	595,285	1,118,179	1,118,179	0	
2047	204,263	-	595,285	1,124,940	1,124,940	0	
2048	204,263	-	595,285	1,143,366	1,143,366	0	
2049	204,263	-	595,285	1,140,582	1,140,582	0	
2050	204,263	-	595,285	1,148,654	1,148,654	0	
2051	204,263	-	595,285	1,161,016	1,161,016	0	
2052	204,263	-	595,285	1,173,000	1,173,000	0	
2053	204,263	-	595,285	1,177,218	1,177,218	0	
2054	204,263	-	595,285	1,189,135	1,189,135	0	
2055	204,263	-	595,285	1,197,116	1,197,116	0	
2056	204,263	-	595,285	1,208,699	1,208,700	0	
2057	204,263	-	595,285	1,217,534	1,217,534	0	
2058	204,263	-	595,285	1,224,527	1,224,527	0	
2059	204,263	-	595,285	1,234,649	1,234,649	0	
2060	204,263	-	595,285	1,245,060	1,245,060	0	
2061	204,263	-	595,285	1,247,192	1,247,192	0	
2062	204,263	-	595,285	1,252,212	1,252,212	0	
2063	204,263	-	595,285	1,257,211	1,257,211	0	
2064	204,263	-	595,285	1,269,830	1,269,830	0	
2065	204,263	-	595,285	1,271,349	1,271,349	0	
2066	204,263	-	595,285	1,274,882	1,274,882	0	
2067	204,263	-	595,285	1,283,792	1,283,791	0	
2068	204,263	-	595,285	1,293,187	1,293,187	0	
2069	204,263	-	595,285	1,294,910	1,294,910	0	
2070	204,263	-	595,285	1,311,261	1,311,261	0	
2071	204,263	-	595,285	1,308,077	1,308,077	0	
2072	204,263	-	595,285	1,313,189	1,313,189	0	
2073	204,263	-	595,285	1,316,842	1,316,842	0	
2074	204,263	-	595,285	1,319,750	1,319,750	0	
2075	204,263	-	595,285	1,321,340	1,321,340	0	
2076	204,263	-	595,285	1,327,830	1,327,831	0	
2077	204,263	-	595,285	1,329,085	1,329,085	0	
2078	204,263	-	595,285	1,334,589	1,334,589	0	
2079	204,263	-	595,285	1,341,705	1,341,706	0	
2080	204,263	-	595,285	1,347,357	1,347,357	0	
2081	204,263	-	595,285	1,354,520	1,354,520	0	
2082	204,263	-	595,285	1,364,234	1,364,234	0	
2083	204,263	-	595,285	1,372,888	1,372,888	0	
2084	204,263	-	595,285	1,385,102	1,385,102	0	
2085	204,263	-	595,285	1,391,141	1,391,141	0	
2086	204,263	-	595,285	1,401,736	1,401,736	0	
2087	204,263	-	595,285	1,411,694	1,411,694	0	
2088	204,263	-	595,285	1,428,171	1,428,171	0	
2089	204,263	-	595,285	1,436,826	1,436,827	0	
2090	204,263	-	595,285	1,443,477	1,443,477	0	
2091	204,263	-	595,285	1,427,785	1,427,785	0	
2092	204,263	-	595,285	1,412,773	1,412,774	1	
2093	204,263	-	595,285	1,398,187	1,398,187	0	
2094	204,263	-	595,285	1,380,156	1,380,156	0	
2095	204,263	-	595,285	1,383,458	1,383,458	0	
2096	204,263	-	595,285	1,357,884	1,357,884	0	
2097	204,263	-	595,285	1,310,713	1,310,713	0	
2098	204,263	-	595,285	1,301,654	1,301,654	0	
2099	204,263	-	595,285	1,265,242	1,265,243	1	

Year	Inflows								Outflows							
	Direct precipitation NMP	GW to NMP	NMP runoff inflows	Pump Open Pit to NMP	Pump TCP to NMP	EMP overflow to NMP	WMP overflow to NMP	Pump from EMP to NMP	Evap from NMP	VoidLoss NMP	GW Loss NMP	Overflow NMP To TCP	Overflow NMP To ENV	Pump NMP to EMP	Pump NMP to WMP	Pump NMP to TCP
Unit:	m3								m3							
2021	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	12,628	18,512	207,000	-	-	-	14,057	104,248	9,991	-	-	-	-	6,826
2023	78,900	-	65,523	232,089	270,000	-	-	44,181	146,760	391,411	54,227	-	-	-	-	60,000
2024	193,222	-	3	441,397	90,000	-	-	5,000	162,953	99,626	72,468	-	-	210,000	-	130,000
2025	204,815	-	0	534,739	-	-	-	-	163,138	-	72,270	-	-	335,000	-	170,000
2026	205,719	-	0	-	-	-	-	-	163,406	-	72,270	-	-	-	-	-
2027	206,624	-	0	-	-	-	-	-	128,768	-	72,270	-	-	-	-	-
2028	207,721	-	0	-	-	-	-	-	128,860	-	72,468	32,771	-	-	-	-
2029	208,532	-	0	-	-	-	-	-	128,952	-	72,270	7,745	-	-	-	-
2030	209,237	-	0	-	-	276,926	-	-	129,056	-	72,270	224,433	-	-	-	-
2031	209,698	-	0	-	-	428,649	-	-	129,199	-	72,270	488,998	-	-	-	-
2032	210,402	-	0	-	-	328,990	-	-	129,342	-	72,468	337,315	-	-	-	-
2033	210,824	-	0	-	-	325,188	-	-	129,485	-	72,270	333,950	-	-	-	-
2034	211,324	-	0	-	-	327,631	-	-	129,628	-	72,270	336,915	-	-	-	-
2035	211,869	-	0	-	-	319,474	-	-	129,771	-	72,270	329,559	-	-	-	-
2036	212,575	-	0	-	-	312,774	-	-	129,914	-	72,468	323,678	-	-	-	-
2037	213,008	-	0	-	-	307,604	-	-	130,057	-	72,270	319,107	-	-	-	-
2038	213,521	-	0	-	-	301,062	-	-	130,200	-	72,270	312,946	-	-	-	-
2039	214,071	-	0	-	-	293,910	-	-	130,343	-	72,270	306,074	-	-	-	-
2040	214,825	-	0	-	-	293,148	-	-	130,470	-	72,468	305,867	-	-	-	-
2041	215,358	-	0	-	-	284,017	-	-	130,571	-	72,270	296,983	-	-	-	-
2042	215,951	-	0	-	-	279,115	-	-	130,672	-	72,270	291,721	-	-	-	-
2043	216,551	-	0	-	-	272,386	360,767	-	130,773	-	72,270	591,047	-	-	-	-
2044	217,336	-	0	-	-	268,216	383,801	-	130,875	-	72,468	702,578	-	-	-	-
2045	217,780	-	0	-	-	271,055	587,756	-	130,976	-	72,270	836,778	-	-	-	-
2046	218,368	-	0	-	-	273,691	626,120	-	131,077	-	72,270	914,833	-	-	-	-
2047	218,983	-	0	-	-	275,470	630,486	-	131,178	-	72,270	921,492	-	-	-	-
2048	221,543	-	0	-	-	278,004	643,818	-	131,279	-	72,468	926,889	12,730	-	-	-
2049	220,250	-	0	-	-	279,373	640,959	-	131,380	-	72,270	-	936,933	-	-	-
2050	220,777	-	0	-	-	282,029	645,848	-	131,496	-	72,270	-	944,888	-	-	-
2051	221,416	-	0	-	-	287,801	651,800	-	131,618	-	72,270	-	957,128	-	-	-
2052	222,200	-	0	-	-	290,966	659,834	-	131,741	-	72,468	-	968,791	-	-	-
2053	222,722	-	0	-	-	290,996	663,500	-	131,864	-	72,270	-	973,083	-	-	-
2054	223,299	-	0	-	-	297,319	668,518	-	131,987	-	72,270	-	984,878	-	-	-
2055	223,931	-	0	-	-	299,076	674,109	-	132,110	-	72,270	-	992,736	-	-	-
2056	224,723	-	0	-	-	302,003	681,973	-	132,233	-	72,468	-	1,003,999	-	-	-
2057	225,245	-	0	-	-	306,589	685,700	-	132,355	-	72,270	-	1,012,909	-	-	-
2058	225,821	-	0	-	-	308,123	690,583	-	132,478	-	72,270	-	1,019,779	-	-	-
2059	226,436	-	0	-	-	312,577	695,636	-	132,601	-	72,270	-	1,029,778	-	-	-
2060	226,970	-	0	-	-	315,826	702,263	-	132,675	-	72,468	-	1,039,917	-	-	-
2061	227,146	-	0	-	-	316,444	703,602	-	132,699	-	72,270	-	1,042,223	-	-	-
2062	227,417	-	0	-	-	318,126	706,669	-	132,723	-	72,270	-	1,047,219	-	-	-
2063	227,725	-	0	-	-	319,233	710,253	-	132,747	-	72,270	-	1,052,194	-	-	-
2064	228,182	-	0	-	-	325,295	716,353	-	132,771	-	72,468	-	1,064,591	-	-	-
2065	228,396	-	0	-	-	324,736	718,216	-	132,795	-	72,270	-	1,066,284	-	-	-
2066	228,653	-	0	-	-	324,647	721,582	-	132,818	-	72,270	-	1,069,794	-	-	-
2067	228,961	-	0	-	-	329,741	725,090	-	132,842	-	72,270	-	1,078,679	-	-	-
2068	229,470	-	0	-	-	331,770	731,947	-	132,866	-	72,468	-	1,087,853	-	-	-
2069	229,750	-	0	-	-	330,776	734,384	-	132,890	-	72,270	-	1,089,750	-	-	-
2070	232,041	-	0	-	-	332,796	746,425	-	133,018	-	72,270	-	1,105,973	-	-	-
2071	230,784	-	0	-	-	335,580	741,713	-	133,265	-	72,270	-	1,102,542	-	-	-
2072	231,409	-	0	-	-	337,141	744,640	-	133,511	-	72,468	-	1,107,210	-	-	-
2073	231,758	-	0	-	-	340,050	745,033	-	133,758	-	72,270	-	1,110,814	-	-	-
2074	232,182	-	0	-	-	341,179	746,389	-	134,004	-	72,270	-	1,113,476	-	-	-
2075	232,678	-	0	-	-	340,859	747,803	-	134,250	-	72,270	-	1,114,820	-	-	-
2076	233,331	-	0	-	-	343,619	750,881	-	134,497	-	72,468	-	1,120,866	-	-	-
2077	233,702	-	0	-	-	344,473	750,910	-	134,743	-	72,270	-	1,122,072	-	-	-
2078	234,053	-	0	-	-	348,631	751,905	-	134,989	-	72,270	-	1,127,330	-	-	-
2079	234,528	-	0	-	-	353,673	753,504	-	135,235	-	72,270	-	1,134,201	-	-	-
2080	235,387	-	0	-	-	354,316	757,654	-	135,427	-	72,468	-	1,139,462	-	-	-
2081	236,265	-	0	-	-	357,366	760,889	-	135,547	-	72,270	-	1,146,703	-	-	-
2082	237,211	-	0	-	-	361,731	765,292	-	135,666	-	72,270	-	1,156,298	-	-	-
2083	238,217	-	0	-	-	364,893	769,778	-	135,786	-	72,270	-	1,164,832	-	-	-
2084	239,363	-	0	-	-	369,746	775,994	-	135,906	-	72,468	-	1,176,728	-	-	-
2085	240,227	-	0	-	-	371,659	779,254	-	136,026	-	72,270	-	1,182,845	-	-	-
2086	241,167	-	0	-	-	377,351	783,218	-	136,145	-	72,270	-	1,193,321	-	-	-
2087	242,181	-	0	-	-	381,589	787,925	-	136,265	-	72,270	-	1,203,159	-	-	-
2088	243,333	-	0	-	-	390,641	794,198	-	136,385	-	72,468	-	1,219,318	-	-	-
2089	244,262	-	0	-	-	394,892	797,673	-	136,505	-	72,270	-	1,228,052	-	-	-
2090	244,613	-	0	-	-	399,414	799,451	-	136,587	-	72,270	-	1,234,620	-	-	-
2091	242,709	-	0	-	-	392,368	792,707	-	136,604	-	72,270	-	1,218,911	-	-	-
2092	240,927	-	0	-	-	386,912	784,933	-	136,621	-	72,468	-	1,203,685	-	-	-
2093	239,571	-	0	-	-	381,433	777,183	-	136,638	-	72,270	-	1,189,279	-	-	-
2094	237,610	-	0	-	-	375,249	767,297	-	136,654	-	72,270	-	1,171,232	-	-	-
2095	237,960	-	0	-	-	378,455	767,043	-	136,671	-	72,270	-	1,174,517	-	-	-
2096	235,516	-	0	-	-	367,312	755,057	-	136,688	-	72,468	-	1,148,728	-	-	-
2097	230,974	-	0	-	-	347,861	731,878	-	136,705	-	72,270	-	1,101,738	-	-	-
2098	230,317	-	0	-	-	343,875	727,462	-	136,722	-	72,270	-	1,092,662	-	-	-
2099	226,719	-	0	-	-	328,061	710,462	-	136,739	-	72,072	-	1,056,432	-	-	-

Addition of PAG to management pond (void loss)

Decommissioning of Tenas Pond. NMP becomes the most downstream reservoir in addition to water channeled from the dams and buttresses and a few other catchments (see table for TCP)

Table 2: EMP water balance - average climate run

Year	Reservoir						
	Water cover (end of year)	ΔStorage (water cover)	Void loss (cumul) - part of outflows	Total inflows	Total outflows	Water balance	Comment on imbalance
Unit:	m3						
2021	-	-	-	-	-	0	
2022	10	10	-	-	-	-10	Reservoir comes online
2023	374,039	374,029	-	418,210	44,181	0	
2024	208,130	-165,909	391,853	959,722	1,123,412	2219	
2025	339,335	131,205	930,690	1,227,393	1,096,800	-612	Small delay in the model in the transfer of water from one reservoir (water cover) to the rock reservoir (void loss)
2026	485,430	146,095	1,488,711	1,566,926	1,420,916	-85	
2027	489,683	4,253	2,109,135	1,774,219	1,769,295	671	
2028	400,245	-89,438	2,667,235	1,561,403	1,651,539	-699	
2029	814,095	413,850	2,796,416	991,823	579,467	-1495	
2030	743,377	-70,719	2,796,416	992,198	1,062,916	0	
2031	641,549	-101,827	2,796,416	998,029	1,099,856	0	
2032	638,987	-2,562	2,796,416	998,651	1,001,214	0	
2033	646,364	7,377	2,796,416	1,004,888	997,511	0	
2034	642,465	-3,899	2,796,416	996,612	1,000,511	0	
2035	638,695	-3,771	2,796,416	989,140	992,911	0	
2036	639,410	715	2,796,416	987,943	987,228	0	
2037	637,315	-2,095	2,796,416	980,062	982,157	0	
2038	634,560	-2,756	2,796,416	973,417	976,173	0	
2039	637,906	3,346	2,796,416	972,924	969,578	0	
2040	634,367	-3,539	2,796,416	966,232	969,771	0	
2041	633,510	-857	2,796,416	959,720	960,577	0	
2042	631,077	-2,434	2,796,416	953,635	956,069	0	
2043	628,956	-2,121	2,796,416	947,613	949,734	0	
2044	631,666	2,711	2,796,416	949,129	946,418	0	
2045	633,231	1,565	2,796,416	950,758	949,193	0	
2046	633,880	650	2,796,416	952,873	952,224	0	
2047	634,783	903	2,796,416	955,300	954,397	0	
2048	642,416	7,633	2,796,416	965,417	957,785	0	
2049	644,013	1,597	2,796,416	960,687	959,090	0	
2050	648,166	4,153	2,796,416	966,351	962,198	0	
2051	648,207	42	2,796,416	968,490	968,448	0	
2052	647,709	-499	2,796,416	972,054	972,552	0	
2053	652,221	4,513	2,796,416	977,116	972,603	0	
2054	652,024	-198	2,796,416	979,207	979,404	0	
2055	652,390	367	2,796,416	982,007	981,641	0	
2056	656,082	3,691	2,796,416	989,197	985,506	0	
2057	655,907	-175	2,796,416	989,938	990,113	0	
2058	659,132	3,225	2,796,416	995,351	992,125	0	
2059	659,628	495	2,796,416	997,554	997,059	0	
2060	660,418	790	2,796,416	1,001,846	1,001,056	0	
2061	661,290	872	2,796,416	1,002,180	1,001,308	0	
2062	661,443	153	2,796,416	1,003,237	1,003,083	0	
2063	665,250	3,807	2,796,416	1,008,091	1,004,284	0	
2064	664,632	-618	2,796,416	1,010,279	1,010,897	0	
2065	664,231	-401	2,796,416	1,009,572	1,009,973	0	
2066	668,366	4,135	2,796,416	1,014,112	1,009,977	0	
2067	668,005	-361	2,796,416	1,014,803	1,015,164	0	
2068	667,181	-824	2,796,416	1,016,921	1,017,744	0	
2069	668,683	1,502	2,796,416	1,017,887	1,016,385	0	
2070	678,645	9,961	2,796,416	1,028,867	1,018,906	0	
2071	679,833	1,188	2,796,416	1,023,838	1,022,650	0	
2072	684,147	4,315	2,796,416	1,029,947	1,025,632	0	
2073	685,911	1,764	2,796,416	1,030,808	1,029,045	0	
2074	686,749	837	2,796,416	1,031,971	1,031,133	0	
2075	688,800	2,052	2,796,416	1,033,825	1,031,774	0	
2076	691,900	3,100	2,796,416	1,039,055	1,035,955	0	
2077	697,200	5,300	2,796,416	1,042,611	1,037,311	0	
2078	702,838	5,638	2,796,416	1,048,068	1,042,430	0	
2079	702,988	150	2,796,416	1,048,583	1,048,433	0	
2080	707,285	4,297	2,796,416	1,054,581	1,050,284	0	
2081	712,135	4,850	2,796,416	1,058,193	1,053,342	0	
2082	715,860	3,725	2,796,416	1,061,900	1,058,175	0	
2083	719,961	4,101	2,796,416	1,065,905	1,061,804	0	
2084	723,110	3,149	2,796,416	1,070,732	1,067,583	0	
2085	727,809	4,699	2,796,416	1,074,204	1,069,506	0	
2086	732,498	4,689	2,796,416	1,080,353	1,075,664	0	
2087	736,676	4,179	2,796,416	1,084,548	1,080,369	0	
2088	737,376	699	2,796,416	1,091,047	1,090,348	0	
2089	737,438	62	2,796,416	1,094,670	1,094,608	0	
2090	737,649	211	2,796,416	1,099,661	1,099,451	0	
2091	737,835	186	2,796,416	1,092,658	1,092,472	0	
2092	738,014	179	2,796,416	1,087,719	1,087,540	0	
2093	738,160	146	2,796,416	1,081,814	1,081,669	0	
2094	738,347	186	2,796,416	1,075,738	1,075,551	0	
2095	738,776	429	2,796,416	1,079,252	1,078,823	0	
2096	738,936	160	2,796,416	1,068,364	1,068,204	0	
2097	739,069	133	2,796,416	1,048,494	1,048,362	0	
2098	739,287	218	2,796,416	1,044,660	1,044,442	0	
2099	739,787	500	2,796,416	1,028,736	1,028,236	0	

Year	Inflows					Outflows						
	Direct precipitation EMP	EMP runoff inflow	Pump OpenPit to EMP	Pump from NMP to EMP	Pump from TCP to EMP	Evap EMP	VoidLoss EMP	GW Loss EMP	Overflow EMP to NMP	Pump EMP to TCP	Pump EMP to WMP	Pump EMP to NMP
Unit:	m3					m3						
2021	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-	-
2023	-	418,210	-	-	-	-	-	-	-	-	-	44,181
2024	106,741	381,981	-	210,000	261,000	123,552	391,853	12,459	-	590,548	-	5,000
2025	424,696	269,697	-	335,000	198,000	326,113	538,837	41,850	-	190,000	-	-
2026	681,073	218,644	613,210	-	54,000	443,221	558,021	69,673	-	350,000	-	-
2027	727,455	228,967	745,797	-	72,000	531,374	620,425	97,497	-	520,000	-	-
2028	755,934	228,093	505,377	-	72,000	582,738	558,100	125,702	-	385,000	-	-
2029	758,883	232,940	-	-	-	297,066	129,181	153,220	-	-	-	-
2030	761,450	230,747	-	-	-	618,820	-	167,170	276,926	-	-	-
2031	763,127	234,901	-	-	-	504,037	-	167,170	428,649	-	-	-
2032	765,690	232,962	-	-	-	504,596	-	167,628	328,990	-	-	-
2033	767,227	237,661	-	-	-	505,153	-	167,170	325,188	-	-	-
2034	769,045	227,568	-	-	-	505,710	-	167,170	327,631	-	-	-
2035	771,030	218,111	-	-	-	506,267	-	167,170	319,474	-	-	-
2036	773,596	214,347	-	-	-	506,826	-	167,628	312,774	-	-	-
2037	775,173	204,889	-	-	-	507,383	-	167,170	307,604	-	-	-
2038	777,040	196,378	-	-	-	507,941	-	167,170	301,062	-	-	-
2039	779,041	193,883	-	-	-	508,498	-	167,170	293,910	-	-	-
2040	781,786	184,446	-	-	-	508,995	-	167,628	293,148	-	-	-
2041	783,727	175,993	-	-	-	509,390	-	167,170	284,017	-	-	-
2042	785,882	167,753	-	-	-	509,784	-	167,170	279,115	-	-	-
2043	788,066	159,547	-	-	-	510,178	-	167,170	272,386	-	-	-
2044	790,924	158,204	-	-	-	510,574	-	167,628	268,216	-	-	-
2045	792,541	158,217	-	-	-	510,968	-	167,170	271,055	-	-	-
2046	794,679	158,194	-	-	-	511,363	-	167,170	273,691	-	-	-
2047	796,918	158,381	-	-	-	511,757	-	167,170	275,470	-	-	-
2048	806,235	159,182	-	-	-	512,152	-	167,628	278,004	-	-	-
2049	801,528	159,159	-	-	-	512,547	-	167,170	279,373	-	-	-
2050	803,445	162,906	-	-	-	512,999	-	167,170	282,029	-	-	-
2051	805,770	162,720	-	-	-	513,478	-	167,170	287,801	-	-	-
2052	808,623	163,430	-	-	-	513,958	-	167,628	290,966	-	-	-
2053	810,523	166,592	-	-	-	514,437	-	167,170	290,996	-	-	-
2054	812,622	166,584	-	-	-	514,916	-	167,170	297,319	-	-	-
2055	814,925	167,083	-	-	-	515,395	-	167,170	299,076	-	-	-
2056	817,807	171,390	-	-	-	515,875	-	167,628	302,003	-	-	-
2057	819,707	170,231	-	-	-	516,354	-	167,170	306,589	-	-	-
2058	821,801	173,549	-	-	-	516,833	-	167,170	308,123	-	-	-
2059	824,040	173,514	-	-	-	517,311	-	167,170	312,577	-	-	-
2060	825,984	175,861	-	-	-	517,601	-	167,628	315,826	-	-	-
2061	826,626	175,555	-	-	-	517,694	-	167,170	316,444	-	-	-
2062	827,611	175,626	-	-	-	517,787	-	167,170	318,126	-	-	-
2063	828,729	179,361	-	-	-	517,881	-	167,170	319,233	-	-	-
2064	830,393	179,885	-	-	-	517,974	-	167,628	325,295	-	-	-
2065	831,174	178,398	-	-	-	518,067	-	167,170	324,736	-	-	-
2066	832,109	182,004	-	-	-	518,160	-	167,170	324,647	-	-	-
2067	833,228	181,575	-	-	-	518,253	-	167,170	329,741	-	-	-
2068	835,082	181,839	-	-	-	518,346	-	167,628	331,770	-	-	-
2069	836,100	181,787	-	-	-	518,439	-	167,170	330,776	-	-	-
2070	844,436	184,431	-	-	-	518,940	-	167,170	332,796	-	-	-
2071	839,865	183,974	-	-	-	519,901	-	167,170	335,580	-	-	-
2072	842,136	187,811	-	-	-	520,864	-	167,628	337,141	-	-	-
2073	843,409	187,399	-	-	-	521,824	-	167,170	340,050	-	-	-
2074	844,951	187,020	-	-	-	522,785	-	167,170	341,179	-	-	-
2075	846,755	187,071	-	-	-	523,745	-	167,170	340,859	-	-	-
2076	849,133	189,922	-	-	-	524,708	-	167,628	343,619	-	-	-
2077	850,484	192,128	-	-	-	525,669	-	167,170	344,473	-	-	-
2078	851,760	196,308	-	-	-	526,629	-	167,170	348,631	-	-	-
2079	853,488	195,095	-	-	-	527,590	-	167,170	353,673	-	-	-
2080	856,614	197,967	-	-	-	528,339	-	167,628	354,316	-	-	-
2081	859,810	198,382	-	-	-	528,807	-	167,170	357,366	-	-	-
2082	863,253	198,647	-	-	-	529,274	-	167,170	361,731	-	-	-
2083	866,913	198,992	-	-	-	529,741	-	167,170	364,893	-	-	-
2084	871,083	199,649	-	-	-	530,209	-	167,628	369,746	-	-	-
2085	874,229	199,976	-	-	-	530,676	-	167,170	371,659	-	-	-
2086	877,649	202,704	-	-	-	531,143	-	167,170	377,351	-	-	-
2087	881,337	203,210	-	-	-	531,610	-	167,170	381,589	-	-	-
2088	885,530	205,517	-	-	-	532,079	-	167,628	390,641	-	-	-
2089	888,911	205,760	-	-	-	532,546	-	167,170	394,892	-	-	-
2090	890,189	209,473	-	-	-	532,867	-	167,170	399,414	-	-	-
2091	883,261	209,397	-	-	-	532,933	-	167,170	392,368	-	-	-
2092	876,777	210,942	-	-	-	532,999	-	167,628	386,912	-	-	-
2093	871,840	209,974	-	-	-	533,066	-	167,170	381,433	-	-	-
2094	864,704	211,033	-	-	-	533,132	-	167,170	375,249	-	-	-
2095	865,979	213,273	-	-	-	533,198	-	167,170	378,455	-	-	-
2096	857,082	211,282	-	-	-	533,264	-	167,628	367,312	-	-	-
2097	840,554	207,940	-	-	-	533,330	-	167,170	347,861	-	-	-
2098	838,163	206,497	-	-	-	533,397	-	167,170	343,875	-	-	-
2099	825,069	203,667	-	-	-	533,463	-	166,712	328,061	-	-	-

Addition of PAG to management pond (void loss)

Table 3: WMP water balance - average climate run

Year	Reservoir							Inflows								Outflows				
	Water cover (end of year)	ΔStorage (water cover)	Void loss (cumul) - part of outflows	Total inflows	Total outflows	Water balance	Comment on imbalance	Direct precipitation WMP	GW to WMP	WMP runoff inflows	Pump OpenPit to WMP	Open Pit seepage to WMP	Pump from EMP to WMP	Pump from NMP to WMP	Pump from TCP to WMP	Evap WMP	VoidLoss WMP	GW Loss WMP	Overflow WMP to NMP	Pump WMP to TCP
Unit:	m3							m3								m3				
2021	-	-	-	-	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-
2025	-	-	-	-	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-
2027	10	10	-	-	-	-10	Reservoir comes online	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	343,603	343,593	-	356,615	13,023	0		40,793	-	5,994	309,828	-	-	-	-	13,023	-	-	-	-
2029	94,813	- 248,789	426,694	1,061,426	1,308,747	1468	Small delay in the model in the transfer of water from one reservoir (water cover) to the rock reservoir (void loss)	136,832	-	23,290	847,304	-	-	-	54,000	72,053	426,694	-	-	810,000
2030	167,821	73,008	797,933	1,143,581	1,071,451	-877		192,699	1,811	35,049	878,022	-	-	-	36,000	119,349	371,240	10,862	-	570,000
2031	168,061	240	1,340,703	1,171,993	1,170,855	898		193,124	5,444	35,293	884,131	-	-	-	54,000	155,438	542,769	32,647	-	440,000
2032	189,048	20,987	1,800,012	1,177,973	1,157,221	-235		193,772	9,107	35,693	885,400	-	-	-	54,000	183,301	459,309	54,611	-	460,000
2033	200,536	11,488	2,383,356	1,228,326	1,216,493	345		213,153	12,720	37,630	865,823	-	-	-	99,000	196,873	583,345	76,276	-	360,000
2034	263,490	62,954	2,960,822	1,269,871	1,206,933	-17		258,607	16,353	42,892	835,019	-	-	-	117,000	251,408	577,465	98,060	-	280,000
2035	356,163	92,673	3,330,517	1,241,101	1,148,999	-571		304,324	19,986	48,228	814,563	-	-	-	54,000	299,459	369,695	119,845	-	360,000
2036	347,678	- 8,485	3,751,735	1,266,000	1,274,345	140		350,642	23,689	53,848	801,821	-	-	-	36,000	361,080	421,218	142,048	-	350,000
2037	365,627	17,949	4,253,622	1,413,634	1,395,460	224		396,681	27,262	59,105	795,586	-	-	-	135,000	400,099	501,888	163,474	-	330,000
2038	433,799	68,172	4,627,479	1,394,391	1,326,571	-352		443,042	30,895	64,621	801,833	-	-	-	54,000	437,456	373,857	185,259	-	330,000
2039	435,103	1,303	5,024,243	1,476,384	1,475,017	64		489,706	34,528	70,193	827,958	-	-	-	54,000	481,210	396,764	207,043	-	390,000
2040	448,130	13,027	5,563,633	1,678,564	1,665,149	388		537,240	38,270	76,137	873,917	-	-	-	153,000	506,275	539,389	229,485	-	390,000
2041	491,657	43,528	5,957,408	1,665,111	1,621,980	-397		584,405	41,804	81,478	912,424	-	-	-	45,000	527,533	393,776	250,672	-	450,000
2042	471,558	- 20,099	6,427,118	1,770,396	1,790,285	210		631,954	45,437	87,161	942,844	-	-	-	63,000	548,119	469,710	272,457	-	500,000
2043	735,971	264,413	6,721,444	1,791,759	1,527,829	-483		679,779	49,070	92,874	970,037	-	-	-	-	578,495	294,326	294,241	360,767	-
2044	735,971	-	6,722,249	1,258,133	1,258,938	-805		708,770	49,959	123,259	-	376,145	-	-	-	574,578	805	299,754	383,801	-
2045	735,971	-	6,722,249	1,382,638	1,382,638	0		710,219	49,823	123,401	-	499,197	-	-	-	495,947	-	298,935	587,756	-
2046	735,971	-	6,722,249	1,401,500	1,401,500	0		712,134	49,823	124,072	-	515,472	-	-	-	476,445	-	298,935	626,120	-
2047	735,971	-	6,722,249	1,406,234	1,406,234	0		714,141	49,823	124,727	-	517,544	-	-	-	476,813	-	298,935	630,486	-
2048	735,971	-	6,722,249	1,420,753	1,420,753	0		722,490	49,959	126,511	-	521,793	-	-	-	477,181	-	299,754	643,818	-
2049	735,971	-	6,722,249	1,417,443	1,417,443	0		718,272	49,823	126,157	-	523,191	-	-	-	477,549	-	298,935	640,959	-
2050	735,971	-	6,722,249	1,422,753	1,422,753	0		719,990	49,823	126,892	-	526,048	-	-	-	477,970	-	298,935	645,848	-
2051	735,971	-	6,722,249	1,429,151	1,429,151	0		722,073	49,823	127,952	-	529,304	-	-	-	478,416	-	298,935	651,800	-
2052	735,971	-	6,722,249	1,438,452	1,438,452	0		724,630	49,959	129,585	-	534,278	-	-	-	478,864	-	299,754	659,834	-
2053	735,971	-	6,722,249	1,441,745	1,441,745	0		726,333	49,823	130,123	-	535,466	-	-	-	479,310	-	298,935	663,500	-
2054	735,971	-	6,722,249	1,447,210	1,447,210	0		728,214	49,823	131,183	-	537,991	-	-	-	479,757	-	298,935	668,518	-
2055	735,971	-	6,722,249	1,453,247	1,453,247	0		730,277	49,823	132,260	-	540,888	-	-	-	480,203	-	298,935	674,109	-
2056	735,971	-	6,722,249	1,462,378	1,462,378	0		732,860	49,959	133,905	-	545,655	-	-	-	480,651	-	299,754	681,973	-
2057	735,971	-	6,722,249	1,465,732	1,465,732	0		734,563	49,823	134,418	-	546,928	-	-	-	481,097	-	298,935	685,700	-
2058	735,971	-	6,722,249	1,471,061	1,471,061	0		736,439	49,823	135,480	-	549,319	-	-	-	481,543	-	298,935	690,583	-
2059	735,971	-	6,722,249	1,476,560	1,476,560	0		738,446	49,823	136,555	-	551,737	-	-	-	481,990	-	298,935	695,636	-
2060	735,971	-	6,722,249	1,484,277	1,484,277	0		740,188	49,959	138,005	-	556,125	-	-	-	482,260	-	299,754	702,263	-
2061	735,971	-	6,722,249	1,484,883	1,484,883	0		740,763	49,823	137,927	-	556,371	-	-	-	482,346	-	298,935	703,602	-
2062	735,971	-	6,722,249	1,488,037	1,488,037	0		741,646	49,823	138,502	-	558,067	-	-	-	482,433	-	298,935	706,669	-
2063	735,971	-	6,722,249	1,491,708	1,491,708	0		742,648	49,823	139,119	-	560,119	-	-	-	482,520	-	298,935	710,253	-
2064	735,971	-	6,722,249	1,498,713	1,498,713	0		744,139	49,959	140,351	-	564,264	-	-	-	482,606	-	299,754	716,353	-
2065	735,971	-	6,722,249	1,499,844	1,499,844	0		744,839	49,823	140,398	-	564,785	-	-	-	482,693	-	298,935	718,216	-
2066	735,971	-	6,722,249	1,503,297	1,503,297	0		745,676	49,823	140,994	-	566,803	-	-	-	482,780	-	298,935	721,582	-
2067	735,971	-	6,722,249	1,506,891	1,506,891	0		746,680	49,823	141,439	-	568,950	-	-	-	482,866	-	298,935	725,090	-
2068	735,971	-	6,722,249	1,514,654	1,514,654	0		748,341	49,959	142,828	-	573,526	-	-	-	482,953	-	299,754	731,947	-
2069	735,971	-	6,722,249	1,516,358	1,516,358	0		749,253	49,823	142,946	-	574,337	-	-	-	483,040	-	298,935	734,384	-
2070	735,971	-	6,722,249	1,528,866	1,528,866	0		756,723	49,823	144,929	-	577,391	-	-	-	483,506	-	298,935	746,425	-
2071	735,971	-	6,722,249	1,525,049	1,525,049	0		752,627	49,823	143,716	-	578,884	-	-	-	484,401	-	298,935	741,713	-
2072	735,971	-	6,722,249	1,529,693	1,529,693	0		754,662	49,959	143,949	-	581,123	-	-	-	485,299	-	299,754	744,640	-
2073	735,971	-	6,722,249	1,530,162	1,530,162	0		755,803	49,823	143,815	-	580,721	-	-	-	486,194	-	298,935	745,033	-
2074	735,971	-	6,722,249	1,532,413	1,532,413	0		757,185	49,823	143,810	-	581,596	-	-	-	487,089	-	298,935	746,389	-
2075	735,971	-	6,722,249	1,534,723	1,534,723	0		758,801	49,823	143,784	-	582,315	-	-	-	487,984	-	298,935	747,803	-
2076	735,971	-	6,722,249	1,539,516	1,539,516	0		760,932	49,959	144,073	-	584,553	-	-	-	488,882	-	299,754	750,881	-
2077	735,971	-	6,722,249	1,539,622	1,539,622	0		762,143	49,823	143,852	-	583,805	-	-	-	489,777	-	298,935	750,910	-
2078	735,971	-	6,722,249	1,541,512	1,541,512	0		763,287	49,823	143,839	-	584,563	-	-	-	490,672	-	298,935	751,905	-
2079	735,971	-	6,722,249	1,544,006	1,544,006	0		764,835	49,823	143,847	-	585,502	-	-	-	491,567	-	298,935	753,504	-
2080	735,971	-	6,722,249	1,549,674	1,549,674	0		767,636	49,959	144,152	-	587,927	-	-	-	492,266	-	299,754	757,654	-
2081	735,971	-	6,722,249	1,552,525	1,552,525	0		770,500	49,823	144,309	-	587,894	-	-	-	492,701	-	298,935	760,889	-
2082	735,971	-	6,722,249	1,557,364	1,557,363	0		773,586	49,823	144,623	-	589,332	-	-	-	493,136	-	298,935	765,292	-
2083	735,971	-	6,722,249	1,562,285	1,562,285	0		776,865	49,823	144,931	-	590,666	-	-	-	493,572	-	298,935	769,778	-
2084	735,971	-	6,722,249	1,569,756	1,569,756	0		780,602	49,959	145,520	-	593,675	-	-	-	494,008	-	299,754	775,994	-
2085	735,971	-	6,722,249	1,572,633	1,572,633	0		783,421	49,823	145,649	-	593,740	-	-	-	494,444	-	298,935	779,254	-
2086	735,971	-	6,722,249	1,577,032	1,577,032	0		786,486	49,823	145,860	-	594,864	-	-	-	494,879	-	298,935	783,218	-
2087	735,971	-	6,722,249	1,582,174	1,582,174	0		789,791	49,823	146,226	-	596,334	-	-	-	495,314	-	298,935	787,925	-
2088	735,971	-	6,722,249	1,589,703	1,589,703	0		793,548	49,959	146,836	-	599,360	-	-	-	495,751	-	299,754	794,198	-
2089	735,971	-	6,722,249	1,592,794	1,592,794	0		796,578	49,823	147,015	-	599,379	-	-	-	496,186	-	298,935	797,673	-
2090	735,971	-	6,722,249	1,594,871	1,594,871	0		797,723	49,823	147,247	-	600,079	-	-	-	496,486	-	298,935	799,451	-
2091	735,971	-	6,722,249	1,588,190	1,588,190	0		791,515	49,823	146,437	-	600,415	-	-	-	496,548	-	298,935	792,707	-
2092	735,971	-	6,722,249	1,581,297	1,581,297	0		785,705	49,959	145,373	-	600,261	-	-	-	496,610	-	299,754	784,933	-
2093	735,971	-	6,722,249	1,572,790	1,572,790	0		781,280	49,823	144,453	-	597,234	-	-	-	496,672	-	298,935	777,183	-
2094	735,971	-	6,722,249	1,562,965	1,562,965	0		774,886	49,823	142,988	-	595,269	-	-	-	496,734	-	298,935	767,297	-
2095	735,971	-	6,722,249	1,562,774	1,562,774	0		776,029	49,823	143,269	-	593,654	-	-	-	496,796	-	298,935	767,043	-
2096	735,971	-	6,722,249	1,551,669	1,551,669	0		768,056	49,959	141,032	-	592,622	-	-	-	496,858	-	299,754	755,057	-
2097	735,971	-	6,722,249	1,527,733	1,527,733	0		753,245	49,823	137,239	-	587,427	-	-	-	496,920	-	298,935	731,878	-
2098	735,971	-	6,722,249	1,523,379	1,523,379	0		751,102	49,823	137,525	-	584,929	-	-	-	496,982	-	298,935	727,462	-
2099	735,971	-	6,722,249	1,505,622	1,505,622	0		739,368	49,686	134,831	-	581,737	-	-	-	497,044	-	298,116	710,462	-

Addition of PAG to management pond (void loss)

Table 4: TCP water balance - average climate run

Year	Reservoir						Inflows								Outflows							
	TCP reservoir (end of year)	ΔStorage (water cover)	Total inflows	Total outflows	Water balance	Comment on imbalance	Direct Precipitation TCP	TCP runoff inflows	Seepage Dam and Buttresses to TCP	PlantPond overflow to TCP	Overflow from NMP TCP	Pump from EMP to TCP	Pump from WMP to TCP	Pump from OpenPit to TCP	Evap TCP	GW Loss TCP	Pump TCP to ENV	Process water pump from TCP	TCP pump to NMP	Pump from TCP to EMP	Pump from TCP to WMP	TCP runoff outflows to ENV
Unit:	m3						m3								m3							
2021	81,972	81,972	81,972	-	0		12,570	56,891	12,511	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	45,764	-36,208	736,489	772,698	0		65,626	421,072	30,582	164,949	6,826	-	-	47,435	33,940	12,757	519,000	-	207,000	-	-	-
2023	44,275	-1,489	1,098,264	1,099,753	0		57,461	836,697	22,166	121,940	60,000	-	-	-	23,067	38,343	768,344	-	270,000	-	-	-
2024	337,897	293,623	1,644,648	1,351,026	0		128,791	631,534	43,012	120,763	130,000	590,548	-	-	102,651	51,240	846,135	-	90,000	261,000	-	-
2025	62,473	-275,425	1,151,743	1,427,167	0		91,060	539,039	39,930	121,715	170,000	190,000	-	-	47,283	51,100	1,130,784	-	-	198,000	-	-
2026	111,752	49,279	1,050,517	1,001,237	0		56,294	486,094	35,121	123,007	-	350,000	-	-	25,395	51,100	870,743	-	-	54,000	-	-
2027	108,982	-2,770	1,253,552	1,256,322	0		64,752	531,225	13,266	124,309	-	520,000	-	-	32,711	51,100	1,100,511	-	-	72,000	-	-
2028	108,286	-696	1,118,975	1,119,671	0		63,058	510,123	2,131	125,893	32,771	385,000	-	-	29,688	51,240	966,743	-	-	72,000	-	-
2029	70,404	-37,882	1,488,495	1,526,377	0		105,182	438,295	340	126,933	7,745	-	810,000	-	58,782	51,100	1,362,495	-	-	-	54,000	-
2030	350,431	280,028	1,455,504	1,175,476	0		67,999	465,006	55	128,012	224,433	-	570,000	-	36,288	51,100	1,052,088	-	-	-	36,000	-
2031	92,198	-258,233	1,641,689	1,899,922	0		104,433	471,966	7,745	128,546	488,998	-	440,000	-	54,102	51,100	1,740,720	-	-	-	54,000	-
2032	111,009	18,810	1,510,428	1,491,618	0		84,430	480,324	18,956	129,403	337,315	-	460,000	-	48,256	51,240	1,338,122	-	-	-	54,000	-
2033	77,070	-33,938	1,412,494	1,446,433	0		82,619	484,159	22,046	129,721	333,950	-	360,000	-	47,592	51,100	1,239,741	-	-	-	108,000	-
2034	81,659	4,589	1,343,525	1,338,936	0		78,242	485,535	32,568	130,264	336,915	-	280,000	-	43,873	51,100	1,135,963	-	-	-	108,000	-
2035	116,787	35,127	1,511,848	1,476,721	1		83,013	557,085	51,345	130,846	329,559	-	360,000	-	50,056	51,100	1,321,565	-	-	-	54,000	-
2036	115,961	-826	1,503,944	1,504,769	0		88,014	558,262	52,271	131,719	323,678	-	350,000	-	51,094	51,240	1,366,435	-	-	-	36,000	-
2037	81,036	-34,924	1,473,107	1,508,032	0		82,900	556,912	52,149	132,039	319,107	-	330,000	-	49,411	51,100	1,272,521	-	-	-	135,000	-
2038	119,994	38,957	1,465,434	1,426,477	0		81,398	556,719	51,761	132,610	312,946	-	330,000	-	49,449	51,100	1,271,928	-	-	-	54,000	-
2039	117,259	-2,734	1,524,345	1,527,079	0		87,239	556,544	51,295	133,192	306,074	-	390,000	-	52,444	51,100	1,369,535	-	-	-	54,000	-
2040	79,578	-37,681	1,522,323	1,560,004	0		83,731	557,770	50,861	134,095	305,867	-	390,000	-	49,646	51,240	1,306,118	-	-	-	153,000	-
2041	117,240	37,662	1,573,539	1,535,878	-1		85,671	556,179	50,330	134,377	296,983	-	450,000	-	53,440	51,100	1,386,338	-	-	-	45,000	-
2042	121,568	4,328	1,622,128	1,617,800	0		89,812	555,801	49,871	134,923	291,721	-	500,000	-	55,710	51,100	1,447,990	-	-	-	63,000	-
2043	516,913	395,345	1,411,710	1,016,365	0		80,461	555,351	49,394	135,457	591,047	-	-	-	43,283	51,100	921,982	-	-	-	-	-
2044	105,085	-411,829	1,038,419	1,450,248	0		112,965	207,440	15,369	67	702,578	-	-	-	52,059	-	1,398,189	-	-	-	-	-
2045	144,070	38,985	1,144,336	1,105,351	0		88,009	207,560	11,988	-	836,778	-	-	-	46,351	-	1,059,000	-	-	-	-	-
2046	147,573	3,503	1,231,989	1,228,486	0		97,555	208,120	11,481	-	914,833	-	-	-	53,227	-	1,175,259	-	-	-	-	-
2047	147,187	-386	1,239,393	1,239,778	0		97,768	208,707	11,426	-	921,492	-	-	-	51,069	-	1,188,709	-	-	-	-	-
2048	-	-147,187	1,236,113	1,382,345	955	Small delay in fully emptying the reservoir in 2048	86,597	211,147	11,480	-	926,889	-	-	-	48,050	-	1,334,295	-	-	-	-	-
2049	-	-	221,440	222,395	-955		36	209,914	11,490	-	-	-	-	-	-	-	955	-	-	-	-	221,440
2050	-	-	221,960	221,960	0		36	210,416	11,507	-	-	-	-	-	-	-	-	-	-	-	-	221,960
2051	-	-	222,597	222,597	0		37	211,025	11,536	-	-	-	-	-	-	-	-	-	-	-	-	222,597
2052	-	-	223,392	223,392	0		37	211,772	11,583	-	-	-	-	-	-	-	-	-	-	-	-	223,392
2053	-	-	223,905	223,905	0		37	212,270	11,598	-	-	-	-	-	-	-	-	-	-	-	-	223,905
2054	-	-	224,492	224,492	0		37	212,820	11,635	-	-	-	-	-	-	-	-	-	-	-	-	224,492
2055	-	-	225,128	225,128	0		37	213,422	11,669	-	-	-	-	-	-	-	-	-	-	-	-	225,128
2056	-	-	225,926	225,926	0		37	214,177	11,711	-	-	-	-	-	-	-	-	-	-	-	-	225,926
2057	-	-	226,443	226,443	0		37	214,675	11,731	-	-	-	-	-	-	-	-	-	-	-	-	226,443
2058	-	-	227,027	227,027	0		37	215,223	11,767	-	-	-	-	-	-	-	-	-	-	-	-	227,027
2059	-	-	227,643	227,643	0		37	215,810	11,796	-	-	-	-	-	-	-	-	-	-	-	-	227,643
2060	-	-	235,177	235,177	0		37	216,319	18,821	-	-	-	-	-	-	-	-	-	-	-	-	235,177
2061	-	-	240,298	240,298	0		37	216,487	23,774	-	-	-	-	-	-	-	-	-	-	-	-	240,298
2062	-	-	241,503	241,503	0		38	216,745	24,721	-	-	-	-	-	-	-	-	-	-	-	-	241,503
2063	-	-	241,976	241,976	0		38	217,038	24,901	-	-	-	-	-	-	-	-	-	-	-	-	241,976
2064	-	-	242,496	242,496	0		38	217,474	24,985	-	-	-	-	-	-	-	-	-	-	-	-	242,496
2065	-	-	242,706	242,706	0		38	217,678	24,990	-	-	-	-	-	-	-	-	-	-	-	-	242,706
2066	-	-	242,984	242,984	0		38	217,923	25,023	-	-	-	-	-	-	-	-	-	-	-	-	242,984
2067	-	-	243,314	243,314	0		38	218,216	25,060	-	-	-	-	-	-	-	-	-	-	-	-	243,314
2068	-	-	243,865	243,865	0		38	218,701	25,126	-	-	-	-	-	-	-	-	-	-	-	-	243,865
2069	-	-	244,133	244,133	0		38	218,967	25,129	-	-	-	-	-	-	-	-	-	-	-	-	244,133
2070	-	-	246,412	246,412	0		38	221,149	25,225	-	-	-	-	-	-	-	-	-	-	-	-	246,412
2071	-	-	245,257	245,257	0		38	219,952	25,267	-	-	-	-	-	-	-	-	-	-	-	-	245,257
2072	-	-	245,902	245,902	0		38	220,547	25,317	-	-	-	-	-	-	-	-	-	-	-	-	245,902
2073	-	-	246,253	246,253	0		38	220,881	25,334	-	-	-	-	-	-	-	-	-	-	-	-	246,253
2074	-	-	246,712	246,712	0		38	221,284	25,389	-	-	-	-	-	-	-	-	-	-	-	-	246,712
2075	-	-	247,230	247,230	0		38	221,756	25,436	-	-	-	-	-	-	-	-	-	-	-	-	247,230
2076	-	-	247,935	247,935	0		38	222,378	25,519	-	-	-	-	-	-	-	-	-	-	-	-	247,935
2077	-	-	248,300	248,300	0		39	222,731	25,531	-	-	-	-	-	-	-	-	-	-	-	-	248,300
2078	-	-	248,694	248,694	0		39	223,065	25,590	-	-	-	-	-	-	-	-	-	-	-	-	248,694
2079	-	-	249,194	249,194	0		39	223,517	25,638	-	-	-	-	-	-	-	-	-	-	-	-	249,194
2080	-	-	250,099	250,099	0		39	224,338	25,722	-	-	-	-	-	-	-	-	-	-	-	-	250,099
2081	-	-	250,997	250,997	0		39	225,176	25,782	-	-	-	-	-	-	-	-	-	-	-	-	250,997
2082	-	-	252,010	252,010	0		39	226,077	25,893	-	-	-	-	-	-	-	-	-	-	-	-	252,010
2083	-	-	253,074	253,074	0		39	227,036	25,999	-	-	-	-	-	-	-	-	-	-	-	-	253,074
2084	-	-	254,305	254,305	0		39	228,128	26,138	-	-	-	-	-	-	-	-	-	-	-	-	254,305
2085	-	-	255,205	255,205	0		40	228,952	26,214	-	-	-	-	-	-	-	-	-	-	-	-	255,205
2086	-	-	256,207	256,207	0		40	229,847	26,320	-	-	-	-	-	-	-	-	-	-	-	-	256,207
2087	-	-	257,287	257,287	0		40	230,813	26,433	-	-	-	-	-	-	-	-	-	-	-	-	257,287
2088	-	-	258,523	258,523	0		40	231,911	26,572	-	-	-	-	-	-	-	-	-	-	-	-	258,523
2089	-	-	259,485	259,485	0		40	232,797	26,648	-	-	-	-	-	-	-	-	-	-	-	-	259,485
2090	-	-	259,873	259,873	0		40	233,127	26,706	-	-	-	-	-	-	-	-	-	-	-	-	259,873
2091	-	-	257,971	257,971	0		40	231,313	26,618	-	-	-	-	-	-	-	-	-	-	-	-	257,971
2092	-	-	256,087	256,087	0		40	229,615	26,433	-	-	-	-	-	-	-	-	-	-	-	-	256,087
2093	-	-	254,547	254,547	0		40	228,314	26,194	-	-	-	-	-	-	-	-	-	-	-	-	254,547
2094	-	-	252,471	252,471	0		39	226,445	25,987	-	-	-	-	-	-	-	-	-	-	-	-	252,471
2095	-	-	252,625	252,625	0		39	226,771	25,815	-	-	-	-	-	-	-	-	-	-	-	-	252,625
2096	-	-	250,143	250,143	0		39	224,447	25,657	-	-	-	-	-	-	-	-	-	-	-	-	250,143
2097	-	-	245,516	245,516	0		38	220,127	25,351	-	-	-	-	-	-	-	-	-	-	-	-	245,516
2098	-	-	244,631	244,631	0		38	219,478	25,115	-	-	-	-	-	-	-	-	-	-	-	-	244,631
2099	-	-	240,893	240,893	0		37	216,040	24,816	-	-	-	-	-	-	-	-	-	-	-	-	240,893

Decommissioning of Tenas Pond. NMP becomes the most downstream reservoir in addition to water channeled from the dams and buttresses and a few other catchments (see table for TCP)

Table 5: Open Pit water balance - average climate run

Year	Reservoir					
	Open Pit sump reservoir (end of year)	ΔStorage (water cover)	Total inflows	Total outflows	Water balance	Comments
Unit:	m3					
2021	-	-	-	-	0	
2022	60,000	60,000	135,072	75,072	0	
2023	60,000	-	421,165	421,165	0	
2024	60,000	-	630,973	630,973	0	
2025	60,000	-	723,828	723,828	0	
2026	60,000	-	802,305	802,305	0	
2027	60,000	-	934,899	934,898	0	
2028	60,000	-	1,004,806	1,004,806	0	
2029	60,000	-	1,036,419	1,036,419	0	
2030	60,000	-	1,067,144	1,067,144	0	
2031	60,000	-	1,073,264	1,073,264	0	
2032	60,000	-	1,075,036	1,075,036	0	
2033	60,000	-	1,054,976	1,054,976	0	
2034	60,000	-	1,024,182	1,024,182	0	
2035	60,000	-	1,003,736	1,003,736	0	
2036	60,000	-	991,498	991,498	0	
2037	60,000	-	984,779	984,779	0	
2038	60,000	-	991,037	991,037	0	
2039	60,000	-	1,017,172	1,017,172	0	
2040	60,000	-	1,063,633	1,063,633	0	
2041	60,000	-	1,101,654	1,101,654	0	
2042	60,000	-	1,132,081	1,132,081	0	
2043	60,000	-	1,159,281	1,159,281	0	
2044			376,512	376,512	0	inflows= outflows, no more pit sump in closure
2045			499,197	499,197	0	
2046			515,472	515,472	0	
2047			517,544	517,544	0	
2048			521,793	521,793	0	
2049			523,191	523,191	0	
2050			526,048	526,048	0	
2051			529,304	529,304	0	
2052			534,278	534,278	0	
2053			535,466	535,466	0	
2054			537,991	537,991	0	
2055			540,888	540,888	0	
2056			545,655	545,655	0	
2057			546,928	546,928	0	
2058			549,319	549,319	0	
2059			551,737	551,737	0	
2060			556,125	556,125	0	
2061			556,371	556,371	0	
2062			558,067	558,067	0	
2063			560,119	560,119	0	
2064			564,264	564,264	0	
2065			564,785	564,785	0	
2066			566,803	566,803	0	
2067			568,950	568,950	0	
2068			573,526	573,526	0	
2069			574,337	574,337	0	
2070			577,391	577,391	0	
2071			578,884	578,884	0	
2072			581,123	581,123	0	
2073			580,721	580,721	0	
2074			581,596	581,596	0	
2075			582,315	582,315	0	
2076			584,553	584,553	0	
2077			583,805	583,805	0	
2078			584,563	584,563	0	
2079			585,502	585,502	0	
2080			587,927	587,927	0	
2081			587,894	587,894	0	
2082			589,332	589,332	0	
2083			590,666	590,666	0	
2084			593,675	593,675	0	
2085			593,740	593,740	0	
2086			594,864	594,864	0	
2087			596,334	596,334	0	
2088			599,360	599,360	0	
2089			599,379	599,379	0	
2090			600,079	600,079	0	
2091			600,415	600,415	0	
2092			600,261	600,261	0	
2093			597,234	597,234	0	
2094			595,269	595,269	0	
2095			593,654	593,654	0	
2096			592,622	592,622	0	
2097			587,427	587,427	0	
2098			584,929	584,929	0	
2099			581,737	581,737	0	

Year	Inflows - operations					Outflows - operations						Inflows=Outflows - closure			
	Combined Seepage backfill[1]	Pit wall and backfill runoff inflows[2]	Natural catchment runoff[3]	Backfill infiltration[3]	GW to OpenPit[3]	Evap sump	Process plant from OpenPit	OpenPit pump to TCP	OpenPit pump to NMP	OpenPit pump to EMP	OpenPit pump to WMP	Combined Backfill seepage to WMP - closure[4]	Pit wall, backfill, and natural catchment runoff[3]	Backfill infiltration[3]	GW to OpenPit[3]
Unit:	m3					m3						m3			
2021	-	-	-	-	-	-	-	-	-	-	-				
2022	29,105	105,968	29,032	-	28,850	9,125	-	47,435	18,512	-	-				
2023	156,124	265,041	140,736	26	86,709	9,131	179,945	-	232,089	-	-				
2024	326,391	304,582	264,103	44	133,366	9,138	180,438	-	441,397	-	-				
2025	433,085	290,744	307,961	82	167,743	9,144	179,945	-	534,739	-	-				
2026	499,271	303,034	322,384	127	202,438	9,150	179,945	-	-	613,210	-				
2027	499,771	435,127	262,527	158	237,132	9,157	179,945	-	-	745,797	-				
2028	492,662	512,145	223,127	294	272,619	9,163	180,438	-	-	505,377	309,828				
2029	502,159	534,260	206,423	269	306,616	9,170	179,945	-	-	-	847,304				
2030	510,255	556,889	189,450	354	319,616	9,177	179,945	-	-	-	878,022				
2031	493,411	579,853	170,360	2,280	310,802	9,187	179,945	-	-	-	884,131				
2032	469,648	605,388	151,602	3,624	302,803	9,198	180,438	-	-	-	885,400				
2033	444,479	610,497	140,362	603	293,150	9,208	179,945	-	-	-	865,823				
2034	436,414	587,769	146,596	2,577	284,336	9,218	179,945	-	-	-	835,019				
2035	435,294	568,443	152,965	7,234	275,522	9,228	179,945	-	-	-	814,563				
2036	437,867	553,631	160,100	12,335	267,427	9,238	180,438	-	-	-	801,821				
2037	440,118	544,662	165,976	13,741	257,870	9,249	179,945	-	-	-	795,586				
2038	444,831	546,206	172,575	27,615	249,056	9,259	179,945	-	-	-	801,833				
2039	457,340	559,832	179,235	47,150	240,242	9,269	179,945	-	-	-	827,958				
2040	483,511	580,122	186,801	80,704	232,050	9,278	180,438	-	-	-	873,917				
2041	512,447	589,207	192,627	111,943	222,590	9,285	179,945	-	-	-	912,424				
2042	534,826	597,255	199,327	129,112	213,776	9,292	179,945	-	-	-	942,844				
2043	543,554	615,728	206,030	133,917	204,413	9,299	179,945	-	-	-	970,037				
2044												376,512	249,554	136,897	137,945
2045												499,197	250,024	133,393	137,569
2046												515,472	251,389	128,577	137,569
2047												517,544	252,729	128,047	137,569
2048												521,793	256,357	130,104	137,945
2049												523,191	255,645	131,166	137,569
2050												526,048	257,141	132,778	137,569
2051												529,304	259,302	133,920	137,569
2052												534,278	262,620	135,357	137,945
2053												535,466	263,719	135,079	137,569
2054												537,991	265,877	135,741	137,569
2055												540,888	268,071	136,549	137,569
2056												545,655	271,417	137,933	137,945
2057												546,928	272,473	137,859	137,569
2058												549,319	274,638	138,140	137,569
2059												551,737	276,824	138,408	137,569
2060												556,125	279,778	139,813	137,945
2061												556,371	279,628	139,777	137,569
2062												558,067	280,799	140,619	137,569
2063												560,119	282,056	141,524	137,569
2064												564,264	284,560	143,108	137,945
2065												564,785	284,662	143,354	137,569
2066												566,803	285,876	144,527	137,569
2067												568,950	286,783	145,687	137,569
2068												573,526	289,612	147,609	137,945
2069												574,337	289,862	148,005	137,569
2070												577,391	293,908	149,283	137,569
2071												578,884	291,443	150,459	137,569
2072												581,123	291,912	152,239	137,945
2073												580,721	291,648	152,233	137,569
2074												581,596	291,640	153,166	137,569
2075												582,315	291,589	153,933	137,569
2076												584,553	292,177	155,339	137,945
2077												583,805	291,734	155,291	137,569
2078												584,563	291,711	156,172	137,569
2079												585,502	291,734	157,187	137,569
2080												587,927	292,351	158,810	137,945
2081												587,894	292,676	158,771	137,569
2082												589,332	293,317	159,732	137,569
2083												590,666	293,949	160,329	137,569
2084												593,675	295,147	161,980	137,945
2085												593,740	295,421	161,804	137,569
2086												594,864	295,856	162,699	137,569
2087												596,334	296,609	163,407	137,569
2088												599,360	297,846	164,924	137,945
2089												599,379	298,221	164,686	137,569
2090												600,079	298,694	165,383	137,569
2091												600,415	297,054	166,231	137,569
2092												600,261	294,889	167,952	137,945
2093												597,234	293,031	168,103	137,569
2094												595,269	290,063	169,047	137,569
2095												593,654	290,632	169,741	137,569
2096												592,622	286,086	171,268	137,945
2097												587,427	278,390	171,035	137,569
2098												584,929	278,974	171,751	137,569
2099												581,737	273,491	171,905	137,192

Addition of PAG to management pond (void loss)

Captured in the inflow as "Backfill seepage"

Informative flow only, part of another flow in the same table, and therefore not accounted in the overall water balance calculations in this file

1 Combined backfill seepage (infiltration in backfill, groundwater inflows and natural catcment upstream of the backfill) is delayed by 5 days when combined as one flow to mimic overall seepage from the backfill

2 no delay for the runoff (pit wall and backfill as it is collected downstream of the backfill

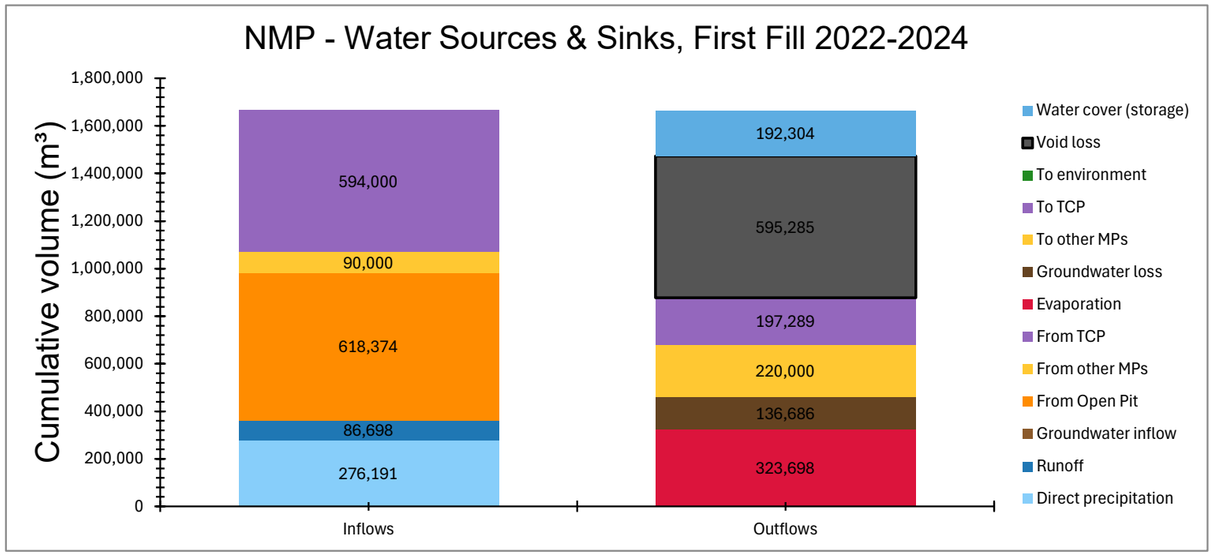
3 Individual flows as part of the combined backfill seepage - not delayed, and therefore does not entirely adds up to the same amount as the combined flow annually. These are shown to show the relative contirbution of each flow to the backfill seepage

4 Overall seepage out of the Open Pit decreases in closure as part of the covered backfill runoffs are diverted to Four Creek (as they are then unimpacted catchments)

Attachment 3: P95 Water Model Balance Results

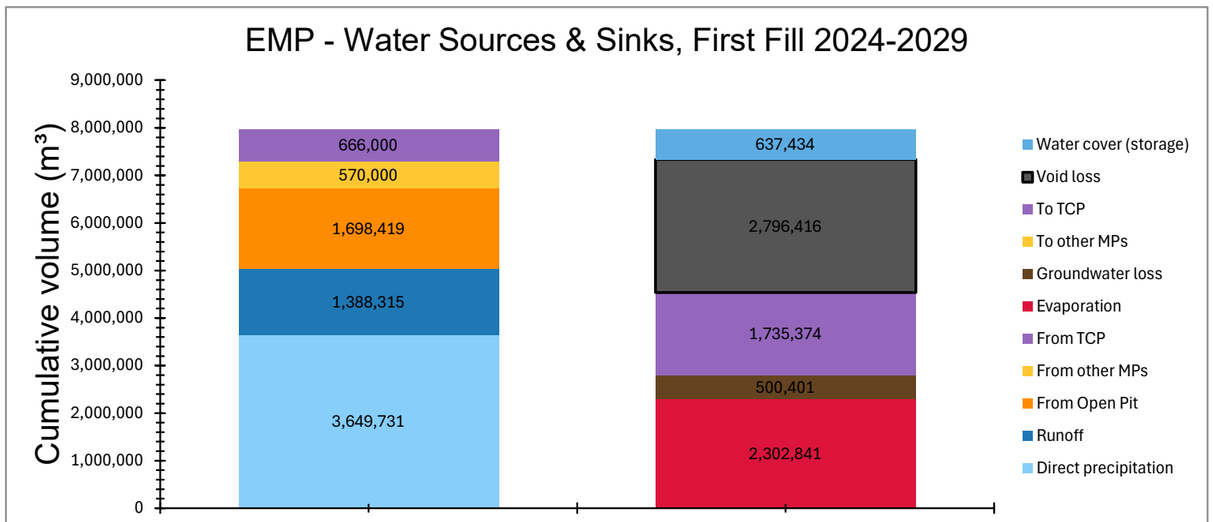
NMP - first fill 2022-2024

Flow group	Inflows	Outflows
Direct precipitation	276190.96	0
Runoff	86698.3288	0
Groundwater inflow	0	0
From Open Pit	618373.68	0
From other MPs	90000	0
From TCP	594000	0
Evaporation	0	323698.16
Groundwater loss	0	136686.006
To other MPs	0	220000
To TCP	0	197289.352
To environment	0	0
Void loss	0	595285.1
Water cover (storage)	0	192304.4
Total inflows	1665262.969	
Total outflows	1665263.018	
Residual (in - out)	-0.049197	
Residual %	-2.95431E-08	(of inflows)



EMP - first fill 2024-2029

Flow group	Inflows	Outflows
Direct precipitation	3649731.3	0
Runoff	1388315.1	0
From Open Pit	1698419.2	0
From other MPs	570000	0
From TCP	666000	0
Evaporation	0	2302841
Groundwater loss	0	500401.02
To other MPs	0	0
To TCP	0	1735373.7
Void loss	0	2796416.3
Water cover (storage)	0	637433.9
Total inflows	7972465.6	
Total outflows	7972465.92	
Residual (in - out)	-0.319999999	
Residual %	-4.01381E-08	(of inflows)



WMP - first fill 2029-2043

Flow group	Inflows	Outflows
Direct precipitation	6052650.7	0
Runoff	803941.2	0
Groundwater inflow	356376.109	0
From Open Pit	12766559	0
From other MPs	0	0
From TCP	846000	0
Evaporation	0	5116610.01
Groundwater loss	0	2136978.47
To other MPs	0	608865.7
To TCP	0	5870000
Void loss	0	6721443.6
Water cover (storage)	0	370823.7
Total inflows	20825527.01	
Total outflows	20824721.48	
Residual (in - out)	805.529	
Residual %	3.86799E-05	(of inflows)

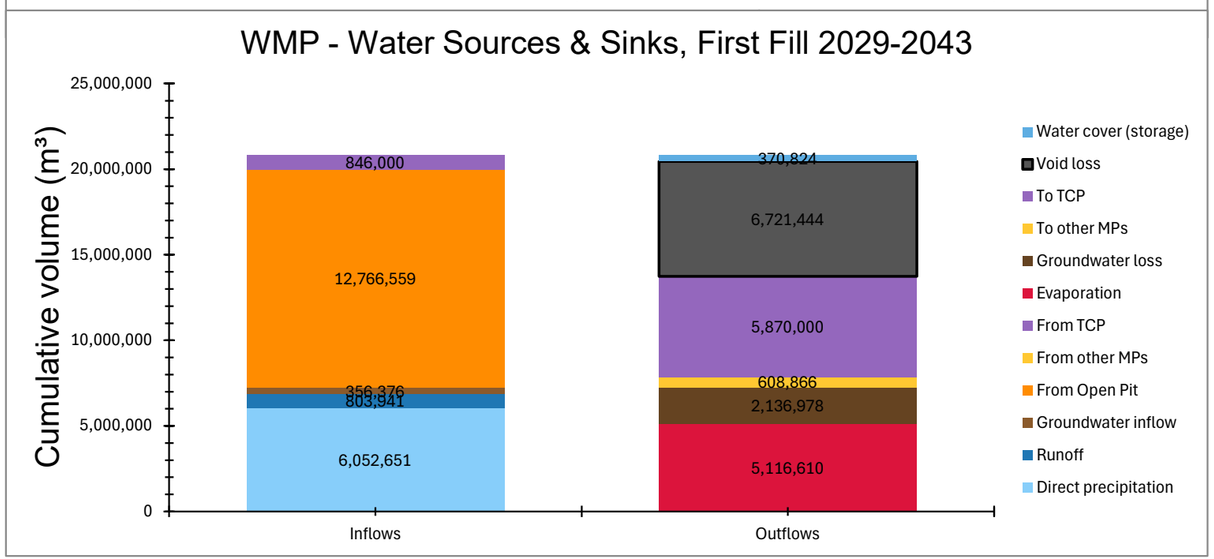


Table 1: NMP water balance - 95th percentile stochastic run

Year	Reservoir							Inflows								Outflows							
	Water cover (end of year)	ΔStorage (water cover)	Void loss (cumul) - part of outflows	Total inflows	Total outflows	Water balance	Comment on imbalance	Direct precipitation NMP	GW to NMP	NMP runoff inflows	Pump Open Pit to NMP	Pump TCP to NMP	EMP overflow to NMP	WMP overflow to NMP	Pump from EMP to NMP	Evap from NMP	VoidLoss NMP	GW Loss NMP	Overflow NMP To TCP	Overflow NMP To ENV	Pump NMP to EMP	Pump NMP to WMP	Pump NMP to TCP
Unit:	m3							m3								m3							
2021	10	10	-	-	-	-10	Reservoir comes online	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	89,632	89,622	104,248	225,702	135,590	490		-	-	35,430	55,271	135,000	-	-	-	14,062	104,248	9,991	-	-	-	-	7,289
2023	145,879	56,247	495,659	698,885	642,202	436	Small delay in the model in the transfer of water from one reservoir (water cover) to the rock reservoir (void loss)	64,992	-	51,265	168,628	324,000	-	-	90,000	146,564	391,411	54,227	-	-	-	-	50,000
2024	192,314	46,435	595,285	740,676	695,167	-926		211,199	-	3	394,474	135,000	-	-	-	163,073	99,626	72,468	-	-	220,000	-	140,000
2025	196,564	4,249	595,285	774,736	770,487	0		244,284	-	0	530,452	-	-	-	-	163,217	-	72,270	-	-	350,000	-	185,000
2026	174,895	-21,669	595,285	213,905	235,574	0		213,905	-	0	-	-	-	-	-	163,304	-	72,270	-	-	-	-	-
2027	198,327	23,432	595,285	224,471	201,038	0		224,471	-	0	-	-	-	-	-	128,768	-	72,270	-	-	-	-	-
2028	150,781	-47,546	595,285	172,534	220,080	-0		172,534	-	0	-	-	-	-	-	128,860	-	72,468	18,752	-	-	-	-
2029	173,276	22,496	595,285	236,187	213,691	0		236,187	-	0	-	-	-	-	-	128,952	-	72,270	12,469	-	-	-	-
2030	204,263	30,987	595,285	537,901	506,914	0		213,359	-	0	-	-	324,542	-	-	129,056	-	72,270	305,588	-	-	-	-
2031	158,918	-45,346	595,285	430,937	476,283	0		182,238	-	0	-	-	248,699	-	-	129,199	-	72,270	274,814	-	-	-	-
2032	162,827	3,909	595,285	389,931	386,021	0		191,930	-	0	-	-	198,000	-	-	129,342	-	72,468	184,211	-	-	-	-
2033	191,732	28,906	595,285	441,281	412,376	0		214,463	-	0	-	-	226,818	-	-	129,485	-	72,270	210,621	-	-	-	-
2034	139,242	-52,491	595,285	383,485	435,975	-0		169,113	-	0	-	-	214,372	-	-	129,628	-	72,270	234,077	-	-	-	-
2035	190,895	51,653	595,285	433,068	381,414	0		220,421	-	0	-	-	212,646	-	-	129,771	-	72,270	179,373	-	-	-	-
2036	199,115	8,220	595,285	765,283	757,063	0		258,762	-	0	-	-	506,521	-	-	129,914	-	72,468	554,681	-	-	-	-
2037	167,137	-31,978	595,285	436,074	468,052	0		195,897	-	0	-	-	240,176	-	-	130,057	-	72,270	265,725	-	-	-	-
2038	198,315	31,178	595,285	731,371	700,194	0		259,872	-	0	-	-	471,499	-	-	130,200	-	72,270	497,724	-	-	-	-
2039	191,980	-6,334	595,285	503,776	510,111	0		223,783	-	0	-	-	279,994	-	-	130,343	-	72,270	307,498	-	-	-	-
2040	162,381	-29,600	595,285	693,593	723,192	0		245,494	-	0	-	-	448,098	-	-	130,470	-	72,468	520,254	-	-	-	-
2041	148,822	-13,559	595,285	668,353	681,912	-0		230,996	-	0	-	-	437,357	-	-	130,571	-	72,270	479,071	-	-	-	-
2042	169,123	20,301	595,285	519,765	499,464	0		231,111	-	0	-	-	288,654	-	-	130,672	-	72,270	296,522	-	-	-	-
2043	204,263	35,141	595,285	1,270,605	1,235,464	-0		260,705	-	0	-	-	401,034	608,866	-	130,773	-	72,270	1,032,421	-	-	-	-
2044	204,263	-	595,285	953,940	953,940	-0		232,504	-	0	-	-	321,410	400,026	-	130,875	-	72,468	750,598	-	-	-	-
2045	204,263	-	595,285	1,048,522	1,048,522	0		217,901	-	0	-	-	282,119	548,502	-	130,976	-	72,270	845,276	-	-	-	-
2046	204,263	-	595,285	1,267,182	1,267,182	0		228,095	-	0	-	-	353,816	685,271	-	131,077	-	72,270	1,063,835	-	-	-	-
2047	204,263	-	595,285	889,963	889,963	0		193,596	-	0	-	-	190,769	505,597	-	131,178	-	72,270	686,515	-	-	-	-
2048	204,263	-	595,285	1,065,804	1,065,804	-0		214,248	-	0	-	-	267,120	584,436	-	131,279	-	72,468	850,745	11,312	-	-	-
2049	204,263	-	595,285	1,267,075	1,267,075	0		253,656	-	0	-	-	318,319	695,100	-	131,380	-	72,270	-	1,063,425	-	-	-
2050	204,263	-	595,285	1,156,890	1,156,890	0		228,307	-	0	-	-	321,804	606,780	-	131,496	-	72,270	-	953,125	-	-	-
2051	204,263	-	595,285	1,140,754	1,140,754	0		211,953	-	0	-	-	334,704	594,097	-	131,618	-	72,270	-	936,866	-	-	-
2052	204,263	-	595,285	868,910	868,910	0		219,676	-	0	-	-	129,041	520,193	-	131,741	-	72,468	-	664,701	-	-	-
2053	204,263	-	595,285	1,206,010	1,206,010	-0		217,488	-	0	-	-	364,223	624,298	-	131,864	-	72,270	-	1,001,876	-	-	-
2054	204,263	-	595,285	1,285,304	1,285,304	0		243,333	-	0	-	-	312,448	729,523	-	131,987	-	72,270	-	1,081,047	-	-	-
2055	204,263	-	595,285	1,253,224	1,253,224	0		224,485	-	0	-	-	363,108	665,631	-	132,110	-	72,270	-	1,048,844	-	-	-
2056	204,263	-	595,285	1,305,306	1,305,307	-0		247,243	-	0	-	-	328,311	729,752	-	132,233	-	72,468	-	1,100,606	-	-	-
2057	204,263	-	595,285	1,100,819	1,100,819	0		231,282	-	0	-	-	301,108	568,429	-	132,355	-	72,270	-	896,194	-	-	-
2058	204,263	-	595,285	1,453,306	1,453,306	0		263,194	-	0	-	-	415,118	774,994	-	132,478	-	72,270	-	1,248,558	-	-	-
2059	204,263	-	595,285	1,158,029	1,158,029	0		225,493	-	0	-	-	286,296	646,240	-	132,601	-	72,270	-	953,158	-	-	-
2060	204,263	-	595,285	1,218,550	1,218,550	0		221,005	-	0	-	-	386,466	611,080	-	132,675	-	72,468	-	1,013,407	-	-	-
2061	204,263	-	595,285	1,196,479	1,196,479	0		252,627	-	0	-	-	261,608	682,244	-	132,699	-	72,270	-	991,510	-	-	-
2062	204,263	-	595,285	1,216,251	1,216,251	-0		231,471	-	0	-	-	320,513	664,267	-	132,723	-	72,270	-	1,011,258	-	-	-
2063	204,263	-	595,285	837,111	837,111	0		187,519	-	0	-	-	211,145	438,447	-	132,747	-	72,270	-	632,094	-	-	-
2064	204,263	-	595,285	972,930	972,930	0		217,506	-	0	-	-	191,273	564,151	-	132,771	-	72,468	-	767,691	-	-	-
2065	204,263	-	595,285	1,290,250	1,290,251	-0		238,139	-	0	-	-	322,155	729,957	-	132,795	-	72,270	-	1,085,186	-	-	-
2066	204,263	-	595,285	1,472,027	1,472,027	-0		250,964	-	0	-	-	447,656	773,407	-	132,818	-	72,270	-	1,266,939	-	-	-
2067	204,263	-	595,285	1,525,000	1,525,000	-0		269,997	-	0	-	-	429,627	825,376	-	132,842	-	72,270	-	1,319,888	-	-	-
2068	204,263	-	595,285	1,279,298	1,279,297	0		227,817	-	0	-	-	339,420	712,061	-	132,866	-	72,468	-	1,073,963	-	-	-
2069	204,263	-	595,285	1,414,175	1,414,175	0		234,109	-	0	-	-	458,521	721,545	-	132,890	-	72,270	-	1,209,015	-	-	-
2070	204,263	-	595,285	1,262,375	1,262,375	0		242,804	-	0	-	-	261,768	757,804	-	133,018	-	72,270	-	1,057,087	-	-	-
2071	204,263	-	595,285	915,193	915,193	0		185,237	-	0	-	-	219,674	510,282	-	133,265	-	72,270	-	709,658	-	-	-
2072	204,263	-	595,285	1,283,326	1,283,325	0		257,095	-	0	-	-	309,434	716,796	-	133,511	-	72,468	-	1,077,346	-	-	-
2073	204,263	-	595,285	1,186,943	1,186,943	0		219,614	-	0	-	-	364,365	602,964	-	133,758	-	72,270	-	980,915	-	-	-
2074	204,263	-	595,285	1,550,083	1,550,083	-0		273,068	-	0	-	-	399,561	877,454	-	134,004	-	72,270	-	1,343,809	-	-	-
2075	204,263	-	595,285	830,317	830,317	0		184,712	-	0	-	-	146,254	499,352	-	134,250	-	72,270	-	623,798	-	-	-
2076	204,263	-	595,285	1,001,477	1,001,477	0		213,211	-	0	-	-	218,721	569,546	-	134,497	-	72,468	-	794,512	-	-	-
2077	204,263	-	595,285	885,818	885,818	0		178,572	-	0	-	-	242,597	464,649	-	134,743	-	72,270	-	678,805	-	-	-
2078	204,263	-	595,285	1,105,462	1,105,462	0		221,423	-	0	-	-	210,439	673,600	-	134,989	-	72,270	-	898,203	-	-	-
2079	170,909	-33,354	595,285	1,248,334	1,281,689	-0		201,671	-	0	-	-	427,849	618,814	-	135,235	-	72,270	-	1,074,184	-	-	-
2080	204,263	33,354	595,285	1,473,089	1,439,735	-0		272,177	-	0	-	-	290,219	910,693	-	135,427	-	72,468	-	1,231,840	-	-	-
2081	204,263	-	595,285	1,630,835	1,630,835	-0		271,097	-	0	-	-	491,224	868,514	-	135,547	-	72,270	-	1,423,018	-	-	-
2082	204,263	-	595,285	976,881	976,881	0		212,048	-	0	-	-	202,408	562,426	-	135,666	-	72,270	-	768,945	-	-	-
2083	204,263	-	595,285	1,616,488	1,616,488	-0		277,466	-	0	-	-	477,412	861,611	-	135,786	-	72,270	-	1,408,432	-	-	-
2084	204,263	-	595,285	1,040,038	1,040,038	0		207,632	-	0	-	-	244,938	587,468	-	135,906	-	72,468	-	831,664	-	-	-
2085	204,263	-	595,285	1,120,690	1,120,690	0		220,287	-	0	-	-	262,691	637,712	-	136,026	-	72,270	-	912,394	-	-	-
2086	204,263	-	595,285	1,618,595	1,618,595	-0		269,490	-	0	-	-	470,559	878,547	-	136,145	-	72,270	-	1,410,180	-	-	-
2087	204,263	-	595,285	2,023,164	2,023,164	-0		305,114	-	0	-	-	672,173	1,045,877	-	136,265	-	72,270	-	1,814,629	-	-	-
2088	204,263	-	595,285	1,123,582	1,123,582	0		220,300	-	0	-	-	253,659	649,623	-	136,385	-	72,468	-	914,729	-	-	-
2089	204,263	-	595,285	1,366,795	1,366,795	0		240,490	-	0	-	-	377,589	748,715	-	136,505	-	72,270	-	1,158,020	-	-	-
2090	204,263	-	595,285	1,339,673	1,339,673	0		244,410	-	0	-	-	356,783	738,480	-	136,587	-	72,270	-	1,130,816	-	-	-
2091	204,263	-	595,285	1,214,106	1,214,106	0		223,501	-	0	-	-	301,258	689,347	-	136,604	-	72,270	-	1,005,232	-	-	-
2092	204,263	-	595,285	1,523,769	1,523,770	-0		251,092	-	0	-	-	442,040	830,637	-	136,621	-	72,468	-	1,314,681	-	-	-
2093	204,263	-	595,285	956,444	956,444	-0		191,982	-	0	-	-	217,343	547,119	-	136,638	-	72,270	-	747,536	-	-	-
2094	204,263	-	595,285	1,823,197	1,823,197	-0		315,354	-	0	-	-	555,909	951,934	-	136,654	-	72,270	-	1,614,273	-	-	-
2095	204,263	-	595,285	1,358,655	1,358,655	-1		234,878	-	0	-	-	399,125	724,651	-	136,671	-	72,270	-	1,149,714	-	-	-
2096	204,263	-	595,285	1,745,633	1,745,633	-0		294,382	-	0	-	-	493,438	957,813	-	136,688	-	72,468	-	1,536,477	-	-	-
2097	204,263	-	595,285	1,456,883	1,456,884	-0		260,659	-	0	-	-	410,416	785,809	-	136,705	-	72,270	-	1,247,909	-	-	-
2098	204,263	-	595,285	1,508,794	1,508,794	0		254,741	-	0	-	-	437,938	816,115	-	136,722	-	72,270	-	1,299,802	-	-	-
2099	204,263	-	595,285	841,514	841,514	0		185,101	-	0	-	-	134,127	522,286	-	136,739	-	72,072	-	632,704	-	-	-

Addition of PAG to management pond (void loss)

Decommissioning of Tenas Pond. NMP becomes the most downstream reservoir in addition to water channeled from the dams and buttresses and a few other catchments (see table for TCP)

Table 2: EMP water balance - 95th percentile stochastic run

Year	Reservoir						
	Water cover (end of year)	ΔStorage (water cover)	Void loss (cumul) - part of outflows	Total inflows	Total outflows	Water balance	Comment on imbalance
Unit:	m3						
2021	10	10	-	-	-	-10	
2022	10	-	-	-	-	0	Reservoir comes online
2023	247,177	247,167	-	337,167	90,000	0	
2024	201,090	- 46,087	394,071	884,890	930,977	0	
2025	368,372	167,282	932,296	1,263,576	1,096,295	0	Small delay in the model in the transfer of water from one reservoir (water cover) to the rock reservoir (void loss)
2026	492,722	124,351	1,490,233	1,585,282	1,460,931	0	
2027	616,615	123,893	2,111,328	1,914,372	1,790,479	0	
2028	353,258	- 263,358	2,668,730	1,215,426	1,478,784	0	
2029	884,611	531,353	2,796,416	1,108,919	577,566	0	
2030	743,377	- 141,234	2,796,416	969,298	1,110,532	0	
2031	682,904	- 60,473	2,796,416	859,433	919,906	0	
2032	685,796	2,892	2,796,416	873,116	870,224	0	
2033	720,369	34,573	2,796,416	933,714	899,141	0	
2034	623,060	- 97,309	2,796,416	789,944	887,252	0	
2035	722,606	99,546	2,796,416	985,630	886,084	0	
2036	734,158	11,551	2,796,416	1,192,526	1,180,975	0	
2037	714,663	- 19,495	2,796,416	895,235	914,730	0	
2038	734,007	19,345	2,796,416	1,165,954	1,146,610	0	
2039	729,971	- 4,037	2,796,416	951,625	955,661	0	
2040	696,994	- 32,977	2,796,416	1,091,745	1,124,722	0	
2041	651,573	- 45,421	2,796,416	1,068,496	1,113,917	0	
2042	710,463	58,890	2,796,416	1,024,499	965,608	0	
2043	734,816	24,353	2,796,416	1,102,736	1,078,383	0	
2044	734,734	- 82	2,796,416	999,530	999,612	0	
2045	723,055	- 11,680	2,796,416	948,577	960,257	0	
2046	709,548	- 13,507	2,796,416	1,018,841	1,032,348	0	
2047	679,843	- 29,705	2,796,416	839,991	869,696	0	
2048	660,603	- 19,240	2,796,416	927,660	946,900	0	
2049	736,518	75,915	2,796,416	1,073,950	998,036	0	
2050	712,470	- 24,048	2,796,416	977,924	1,001,973	0	
2051	634,724	- 77,746	2,796,416	937,606	1,015,352	0	
2052	738,116	103,392	2,796,416	914,019	810,626	0	
2053	647,805	- 90,311	2,796,416	955,519	1,045,830	0	
2054	733,835	86,030	2,796,416	1,080,563	994,533	0	
2055	674,480	- 59,355	2,796,416	986,318	1,045,673	0	
2056	720,815	46,336	2,796,416	1,058,149	1,011,813	0	
2057	700,994	- 19,822	2,796,416	964,810	984,631	0	
2058	735,099	34,105	2,796,416	1,133,226	1,099,120	0	
2059	739,351	4,252	2,796,416	975,030	970,778	0	
2060	619,187	- 120,165	2,796,416	951,531	1,071,695	0	
2061	727,620	108,433	2,796,416	1,054,906	946,473	0	
2062	729,994	2,374	2,796,416	1,007,844	1,005,470	0	
2063	624,405	- 105,590	2,796,416	790,606	896,195	0	
2064	673,769	49,364	2,796,416	926,239	876,875	0	
2065	727,040	53,271	2,796,416	1,060,663	1,007,392	0	
2066	685,418	- 41,622	2,796,416	1,091,364	1,132,986	0	
2067	743,377	57,959	2,796,416	1,173,008	1,115,050	0	
2068	731,476	- 11,901	2,796,416	1,013,493	1,025,394	0	
2069	607,312	- 124,164	2,796,416	1,019,966	1,144,131	0	
2070	743,377	136,065	2,796,416	1,083,943	947,878	0	
2071	658,584	- 84,793	2,796,416	821,951	906,744	0	
2072	741,881	83,297	2,796,416	1,081,223	997,926	0	
2073	622,793	- 119,088	2,796,416	934,271	1,053,359	0	
2074	743,377	120,584	2,796,416	1,210,099	1,089,516	0	
2075	726,470	- 16,907	2,796,416	820,262	837,169	0	
2076	731,004	4,534	2,796,416	915,591	911,057	0	
2077	608,769	- 122,236	2,796,416	813,200	935,436	0	
2078	705,823	97,054	2,796,416	1,001,293	904,239	0	
2079	505,979	- 199,845	2,796,416	922,764	1,122,609	0	
2080	732,972	226,993	2,796,416	1,213,179	986,186	0	
2081	722,697	- 10,275	2,796,416	1,176,926	1,187,200	0	
2082	717,047	- 5,650	2,796,416	893,202	898,851	0	
2083	734,884	17,837	2,796,416	1,192,159	1,174,322	1	
2084	717,817	- 17,067	2,796,416	925,708	942,775	0	
2085	720,967	3,150	2,796,416	963,687	960,537	0	
2086	741,043	20,076	2,796,416	1,188,948	1,168,872	0	
2087	743,377	2,334	2,796,416	1,373,288	1,370,953	1	
2088	743,078	- 299	2,796,416	953,067	953,366	0	
2089	720,877	- 22,201	2,796,416	1,055,104	1,077,305	0	
2090	740,933	20,056	2,796,416	1,076,876	1,056,820	0	
2091	743,377	2,444	2,796,416	1,003,805	1,001,361	0	
2092	742,137	- 1,240	2,796,416	1,141,427	1,142,667	0	
2093	659,965	- 82,172	2,796,416	835,406	917,578	0	
2094	728,040	68,075	2,796,416	1,324,286	1,256,211	0	
2095	651,507	- 76,533	2,796,416	1,022,960	1,099,493	0	
2096	728,956	77,449	2,796,416	1,271,780	1,194,331	0	
2097	738,647	9,691	2,796,416	1,120,607	1,110,916	0	
2098	743,377	4,729	2,796,416	1,143,234	1,138,505	0	
2099	729,603	- 13,774	2,796,416	820,529	834,302	0	

Year	Inflows					Outflows						
	Direct precipitation EMP	EMP runoff inflow	Pump OpenPit to EMP	Pump from NMP to EMP	Pump from TCP to EMP	Evap EMP	VoidLoss EMP	GW Loss EMP	Overflow EMP to NMP	Pump EMP to TCP	Pump EMP to WMP	Pump EMP to NMP
Unit:	m3					m3						
2021	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	-	-	-	-	-	-	-
2023	-	337,167	-	-	-	-	-	-	-	-	-	90,000
2024	125,699	269,191	-	220,000	270,000	124,072	394,071	12,459	-	400,374	-	-
2025	533,635	235,942	-	350,000	144,000	326,220	538,225	41,850	-	190,000	-	-
2026	710,193	164,816	548,272	-	162,000	443,321	557,936	69,673	-	390,000	-	-
2027	792,798	266,166	765,409	-	90,000	531,887	621,096	97,497	-	540,000	-	-
2028	627,882	202,806	384,739	-	-	580,681	557,401	125,702	-	215,000	-	-
2029	859,525	249,395	-	-	-	296,660	127,687	153,220	-	-	-	-
2030	776,452	192,846	-	-	-	618,820	-	167,170	324,542	-	-	-
2031	663,196	196,237	-	-	-	504,037	-	167,170	248,699	-	-	-
2032	698,467	174,649	-	-	-	504,596	-	167,628	198,000	-	-	-
2033	780,470	153,244	-	-	-	505,153	-	167,170	226,818	-	-	-
2034	615,430	174,513	-	-	-	505,710	-	167,170	214,372	-	-	-
2035	802,151	183,479	-	-	-	506,267	-	167,170	212,646	-	-	-
2036	941,682	250,844	-	-	-	506,826	-	167,628	506,521	-	-	-
2037	712,904	182,330	-	-	-	507,383	-	167,170	240,176	-	-	-
2038	945,720	220,234	-	-	-	507,941	-	167,170	471,499	-	-	-
2039	814,385	137,240	-	-	-	508,498	-	167,170	279,994	-	-	-
2040	893,396	198,348	-	-	-	508,995	-	167,628	448,098	-	-	-
2041	840,634	227,862	-	-	-	509,390	-	167,170	437,357	-	-	-
2042	841,053	183,446	-	-	-	509,784	-	167,170	288,654	-	-	-
2043	948,750	153,986	-	-	-	510,178	-	167,170	401,034	-	-	-
2044	846,124	153,406	-	-	-	510,574	-	167,628	321,410	-	-	-
2045	792,979	155,598	-	-	-	510,968	-	167,170	282,119	-	-	-
2046	830,077	188,764	-	-	-	511,363	-	167,170	353,816	-	-	-
2047	704,530	135,462	-	-	-	511,757	-	167,170	190,769	-	-	-
2048	779,686	147,974	-	-	-	512,152	-	167,628	267,120	-	-	-
2049	923,098	150,852	-	-	-	512,547	-	167,170	318,319	-	-	-
2050	830,849	147,075	-	-	-	512,999	-	167,170	321,804	-	-	-
2051	771,335	166,271	-	-	-	513,478	-	167,170	334,704	-	-	-
2052	799,441	114,578	-	-	-	513,958	-	167,628	129,041	-	-	-
2053	791,479	164,041	-	-	-	514,437	-	167,170	364,223	-	-	-
2054	885,530	195,033	-	-	-	514,916	-	167,170	312,448	-	-	-
2055	816,940	169,378	-	-	-	515,395	-	167,170	363,108	-	-	-
2056	899,762	158,387	-	-	-	515,875	-	167,628	328,311	-	-	-
2057	841,676	123,133	-	-	-	516,354	-	167,170	301,108	-	-	-
2058	957,810	175,416	-	-	-	516,833	-	167,170	415,118	-	-	-
2059	820,608	154,422	-	-	-	517,311	-	167,170	286,296	-	-	-
2060	804,276	147,254	-	-	-	517,601	-	167,628	386,466	-	-	-
2061	919,352	135,554	-	-	-	517,694	-	167,170	261,608	-	-	-
2062	842,364	165,480	-	-	-	517,787	-	167,170	320,513	-	-	-
2063	682,415	108,191	-	-	-	517,881	-	167,170	211,145	-	-	-
2064	791,542	134,697	-	-	-	517,974	-	167,628	191,273	-	-	-
2065	866,628	194,035	-	-	-	518,067	-	167,170	322,155	-	-	-
2066	913,302	178,063	-	-	-	518,160	-	167,170	447,656	-	-	-
2067	982,566	190,442	-	-	-	518,253	-	167,170	429,627	-	-	-
2068	829,065	184,429	-	-	-	518,346	-	167,628	339,420	-	-	-
2069	851,964	168,002	-	-	-	518,439	-	167,170	458,521	-	-	-
2070	883,608	200,335	-	-	-	518,940	-	167,170	261,768	-	-	-
2071	674,110	147,841	-	-	-	519,901	-	167,170	219,674	-	-	-
2072	935,613	145,610	-	-	-	520,864	-	167,628	309,434	-	-	-
2073	799,214	135,058	-	-	-	521,824	-	167,170	364,365	-	-	-
2074	993,741	216,359	-	-	-	522,785	-	167,170	399,561	-	-	-
2075	672,198	148,064	-	-	-	523,745	-	167,170	146,254	-	-	-
2076	775,911	139,680	-	-	-	524,708	-	167,628	218,721	-	-	-
2077	649,856	163,345	-	-	-	525,669	-	167,170	242,597	-	-	-
2078	805,797	195,496	-	-	-	526,629	-	167,170	210,439	-	-	-
2079	733,917	188,847	-	-	-	527,590	-	167,170	427,849	-	-	-
2080	990,501	222,679	-	-	-	528,339	-	167,628	290,219	-	-	-
2081	986,569	190,357	-	-	-	528,807	-	167,170	491,224	-	-	-
2082	771,679	121,523	-	-	-	529,274	-	167,170	202,408	-	-	-
2083	1,009,747	182,412	-	-	-	529,741	-	167,170	477,412	-	-	-
2084	755,608	170,100	-	-	-	530,209	-	167,628	244,938	-	-	-
2085	801,665	162,022	-	-	-	530,676	-	167,170	262,691	-	-	-
2086	980,721	208,227	-	-	-	531,143	-	167,170	470,559	-	-	-
2087	1,110,364	262,924	-	-	-	531,610	-	167,170	672,173	-	-	-
2088	801,711	151,356	-	-	-	532,079	-	167,628	253,659	-	-	-
2089	875,187	179,917	-	-	-	532,546	-	167,170	377,589	-	-	-
2090	889,450	187,427	-	-	-	532,867	-	167,170	356,783	-	-	-
2091	813,359	190,446	-	-	-	532,933	-	167,170	301,258	-	-	-
2092	913,768	227,659	-	-	-	532,999	-	167,628	442,040	-	-	-
2093	698,656	136,751	-	-	-	533,066	-	167,170	217,343	-	-	-
2094	1,147,630	176,656	-	-	-	533,132	-	167,170	555,909	-	-	-
2095	854,763	168,197	-	-	-	533,198	-	167,170	399,125	-	-	-
2096	1,071,306	200,474	-	-	-	533,264	-	167,628	493,438	-	-	-
2097	948,583	172,025	-	-	-	533,330	-	167,170	410,416	-	-	-
2098	927,046	216,189	-	-	-	533,397	-	167,170	437,938	-	-	-
2099	673,614	146,915	-	-	-	533,463	-	166,712	134,127	-	-	-

Addition of PAG to management pond (void loss)

Table 3: WMP water balance - 95th percentile stochastic run

Year	Reservoir							Inflows								Outflows				
	Water cover (end of year)	ΔStorage (water cover)	Void loss (cumul) - part of outflows	Total inflows	Total outflows	Water balance	Comment on imbalance	Direct precipitation WMP	GW to WMP	WMP runoff inflows	Pump OpenPit to WMP	Open Pit seepage to WMP	Pump from EMP to WMP	Pump from NMP to WMP	Pump from TCP to WMP	Evap WMP	VoidLoss WMP	GW Loss WMP	Overflow WMP to NMP	Pump WMP to TCP
Unit:	m3							m3								m3				
2021	-	-	-	-	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-
2022	-	-	-	-	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-
2023	-	-	-	-	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-
2024	-	-	-	-	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-
2025	-	-	-	-	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-
2026	-	-	-	-	-	0		-	-	-	-	-	-	-	-	-	-	-	-	-
2027	10	10	-	-	-	-10	Reservoir comes online	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	365,147	365,137	-	376,322	11,185	0		38,898	-	5,483	331,941	-	-	-	-	11,185	-	-	-	-
2029	95,984	- 269,163	426,694	1,111,063	1,378,758	1468	Small delay in the model in the transfer of water from one reservoir (water cover) to the rock reservoir (void loss)	159,849	-	25,596	907,619	-	-	-	18,000	72,065	426,694	-	-	880,000
2030	171,186	75,202	797,933	1,145,823	1,071,497	-877		196,496	1,811	27,232	848,284	-	-	-	72,000	119,395	371,240	10,862	-	570,000
2031	177,826	6,640	1,340,703	1,028,298	1,020,760	898		167,834	5,444	29,232	771,787	-	-	-	54,000	155,344	542,769	32,647	-	290,000
2032	200,334	22,508	1,800,012	1,039,382	1,017,109	-235		176,760	9,107	26,192	791,322	-	-	-	36,000	183,189	459,309	54,611	-	320,000
2033	203,670	3,335	2,383,356	1,180,124	1,176,444	345		220,508	12,720	24,695	805,201	-	-	-	117,000	196,823	583,345	76,276	-	320,000
2034	276,017	72,347	2,960,822	1,148,671	1,076,341	-17		208,400	16,353	34,080	682,837	-	-	-	207,000	250,815	577,465	98,060	-	150,000
2035	358,600	82,584	3,330,517	1,220,824	1,138,811	-571		318,937	19,986	40,337	787,564	-	-	-	54,000	299,271	369,695	119,845	-	350,000
2036	430,281	71,681	3,751,735	1,456,107	1,384,287	140		432,665	23,689	59,511	886,242	-	-	-	54,000	361,021	421,218	142,048	-	460,000
2037	436,063	5,782	4,253,622	1,261,106	1,255,100	224		368,080	27,262	51,058	724,706	-	-	-	90,000	399,738	501,888	163,474	-	190,000
2038	529,889	93,826	4,627,479	1,560,403	1,466,930	-352		544,656	30,895	70,326	896,526	-	-	-	18,000	437,815	373,857	185,259	-	470,000
2039	549,084	19,195	5,024,243	1,403,758	1,384,499	64		516,021	34,528	53,460	736,750	-	-	-	63,000	480,692	396,764	207,043	-	300,000
2040	465,498	- 83,586	5,563,633	1,622,215	1,705,414	388		615,189	38,270	74,919	884,837	-	-	-	9,000	506,540	539,389	229,485	-	430,000
2041	558,729	93,231	5,957,408	1,874,864	1,782,030	-397		627,015	41,804	101,898	1,077,148	-	-	-	27,000	527,582	393,776	250,672	-	610,000
2042	603,697	44,968	6,427,118	1,865,171	1,819,993	210		678,180	45,437	94,739	1,019,815	-	-	-	27,000	547,827	469,710	272,457	-	530,000
2043	735,971	132,273	6,721,444	1,907,717	1,775,926	-483		822,059	49,070	90,665	945,923	-	-	-	-	578,493	294,326	294,241	608,866	-
2044	735,971	-	6,722,249	1,274,358	1,275,163	-805		758,236	49,959	117,218	-	348,945	-	-	-	574,578	805	299,754	400,026	-
2045	735,971	-	6,722,249	1,343,384	1,343,384	0		710,611	49,823	104,927	-	478,023	-	-	-	495,947	-	298,935	548,502	-
2046	735,971	-	6,722,249	1,460,651	1,460,651	0		743,856	49,823	139,356	-	527,617	-	-	-	476,445	-	298,935	685,271	-
2047	735,971	-	6,722,249	1,281,345	1,281,345	0		631,349	49,823	105,632	-	494,542	-	-	-	476,813	-	298,935	505,597	-
2048	735,971	-	6,722,249	1,361,371	1,361,371	0		698,699	49,959	111,665	-	501,048	-	-	-	477,181	-	299,754	584,436	-
2049	735,971	-	6,722,249	1,471,584	1,471,584	0		827,215	49,823	109,990	-	484,557	-	-	-	477,549	-	298,935	695,100	-
2050	735,971	-	6,722,249	1,383,684	1,383,685	0		744,548	49,823	107,512	-	481,802	-	-	-	477,970	-	298,935	606,780	-
2051	735,971	-	6,722,249	1,371,449	1,371,449	0		691,215	49,823	116,894	-	513,517	-	-	-	478,416	-	298,935	594,097	-
2052	735,971	-	6,722,249	1,298,811	1,298,811	0		716,401	49,959	85,949	-	446,502	-	-	-	478,864	-	299,754	520,193	-
2053	735,971	-	6,722,249	1,402,543	1,402,543	0		709,266	49,823	124,762	-	518,693	-	-	-	479,310	-	298,935	624,298	-
2054	735,971	-	6,722,249	1,508,215	1,508,215	0		793,549	49,823	136,508	-	528,336	-	-	-	479,757	-	298,935	729,523	-
2055	735,971	-	6,722,249	1,444,769	1,444,768	0		732,083	49,823	125,665	-	537,197	-	-	-	480,203	-	298,935	665,631	-
2056	735,971	-	6,722,249	1,510,157	1,510,157	0		806,303	49,959	121,496	-	532,400	-	-	-	480,651	-	299,754	729,752	-
2057	735,971	-	6,722,249	1,348,461	1,348,461	0		754,250	49,823	85,991	-	458,397	-	-	-	481,097	-	298,935	568,429	-
2058	735,971	-	6,722,249	1,555,472	1,555,472	0		858,320	49,823	130,250	-	517,080	-	-	-	481,543	-	298,935	774,994	-
2059	735,971	-	6,722,249	1,427,165	1,427,164	0		735,370	49,823	117,113	-	524,859	-	-	-	481,990	-	298,935	646,240	-
2060	735,971	-	6,722,249	1,393,093	1,393,093	0		720,735	49,959	110,841	-	511,558	-	-	-	482,260	-	299,754	611,080	-
2061	735,971	-	6,722,249	1,463,525	1,463,525	0		823,858	49,823	102,752	-	487,093	-	-	-	482,346	-	298,935	682,244	-
2062	735,971	-	6,722,249	1,445,635	1,445,635	0		754,867	49,823	123,661	-	517,285	-	-	-	482,433	-	298,935	664,267	-
2063	735,971	-	6,722,249	1,219,902	1,219,902	0		611,531	49,823	83,811	-	474,737	-	-	-	482,520	-	298,935	438,447	-
2064	735,971	-	6,722,249	1,346,511	1,346,511	0		709,323	49,959	103,665	-	483,564	-	-	-	482,606	-	299,754	564,151	-
2065	735,971	-	6,722,249	1,511,585	1,511,585	0		776,610	49,823	142,700	-	542,453	-	-	-	482,693	-	298,935	729,957	-
2066	735,971	-	6,722,249	1,555,122	1,555,122	0		818,436	49,823	132,759	-	554,104	-	-	-	482,780	-	298,935	773,407	-
2067	735,971	-	6,722,249	1,607,177	1,607,178	0		880,506	49,823	141,045	-	535,805	-	-	-	482,866	-	298,935	825,376	-
2068	735,971	-	6,722,249	1,494,768	1,494,768	0		742,948	49,959	132,539	-	569,322	-	-	-	482,953	-	299,754	712,061	-
2069	735,971	-	6,722,249	1,503,519	1,503,519	0		763,470	49,823	129,387	-	560,840	-	-	-	483,040	-	298,935	721,545	-
2070	735,971	-	6,722,249	1,540,245	1,540,245	0		791,826	49,823	147,301	-	551,295	-	-	-	483,506	-	298,935	757,804	-
2071	735,971	-	6,722,249	1,293,618	1,293,618	0		604,090	49,823	101,234	-	538,472	-	-	-	484,401	-	298,935	510,282	-
2072	735,971	-	6,722,249	1,501,849	1,501,849	0		838,430	49,959	111,472	-	501,989	-	-	-	485,299	-	299,754	716,796	-
2073	735,971	-	6,722,249	1,388,093	1,388,093	0		716,198	49,823	103,968	-	518,104	-	-	-	486,194	-	298,935	602,964	-
2074	735,971	-	6,722,249	1,663,478	1,663,478	0		890,519	49,823	160,979	-	562,157	-	-	-	487,089	-	298,935	877,454	-
2075	735,971	-	6,722,249	1,286,272	1,286,272	0		602,376	49,823	98,177	-	535,897	-	-	-	487,984	-	298,935	499,352	-
2076	735,971	-	6,722,249	1,358,181	1,358,181	0		695,316	49,959	104,322	-	508,585	-	-	-	488,882	-	299,754	569,546	-
2077	735,971	-	6,722,249	1,253,360	1,253,360	0		582,354	49,823	107,459	-	513,724	-	-	-	489,777	-	298,935	464,649	-
2078	735,971	-	6,722,249	1,463,207	1,463,207	0		722,098	49,823	141,161	-	550,125	-	-	-	490,672	-	298,935	673,600	-
2079	735,971	-	6,722,249	1,409,316	1,409,316	0		657,684	49,823	130,194	-	571,616	-	-	-	491,567	-	298,935	618,814	-
2080	735,971	-	6,722,249	1,702,713	1,702,713	0		887,616	49,959	162,403	-	602,735	-	-	-	492,266	-	299,754	910,693	-
2081	735,971	-	6,722,249	1,660,150	1,660,150	0		884,092	49,823	140,710	-	585,525	-	-	-	492,701	-	298,935	868,514	-
2082	735,971	-	6,722,249	1,354,498	1,354,498	0		691,523	49,823	91,801	-	521,351	-	-	-	493,136	-	298,935	562,426	-
2083	735,971	-	6,722,249	1,654,117	1,654,117	0		904,863	49,823	143,012	-	556,421	-	-	-	493,572	-	298,935	861,611	-
2084	735,971	-	6,722,249	1,381,231	1,381,231	0		677,122	49,959	113,208	-	540,941	-	-	-	494,008	-	299,754	587,468	-
2085	735,971	-	6,722,249	1,431,090	1,431,090	0		718,394	49,823	117,502	-	545,372	-	-	-	494,444	-	298,935	637,712	-
2086	735,971	-	6,722,249	1,672,361	1,672,361	0		878,852	49,823	160,937	-	582,750	-	-	-	494,879	-	298,935	878,547	-
2087	735,971	-	6,722,249	1,840,127	1,840,126	0		995,028	49,823	174,104	-	621,172	-	-	-	495,314	-	298,935	1,045,877	-
2088	735,971	-	6,722,249	1,445,128	1,445,128	0		718,436	49,959	105,930	-	570,802	-	-	-	495,751	-	299,754	649,623	-
2089	735,971	-	6,722,249	1,543,837	1,543,837	0		784,280	49,823	135,894	-	573,840	-	-	-	496,186	-	298,935	748,715	-
2090	735,971	-	6,722,249	1,533,901	1,533,901	0		797,061	49,823	134,269	-	552,748	-	-	-	496,486	-	298,935	738,480	-
2091	735,971	-	6,722,249	1,484,829	1,484,830	0		728,874	49,823	125,675	-	580,457	-	-	-	496,548	-	298,935	689,347	-
2092	735,971	-	6,722,249	1,627,001	1,627,001	0		818,854	49,959	158,222	-	599,967	-	-	-	496,610	-	299,754	830,637	-
2093	735,971	-	6,722,249	1,342,726	1,342,726	0		626,085	49,823	100,407	-	566,412	-	-	-	496,672	-	298,935	547,119	-
2094	735,971	-	6,722,249	1,747,603	1,747,602	0		1,028,424	49,823	128,034	-	541,322	-	-	-	496,734	-	298,935	951,934	-
2095	735,971	-	6,722,249	1,520,382	1,520,382	0		765,978	49,823	132,369	-	572,212	-	-	-	496,796	-	298,935	724,651	-
2096	735,971	-	6,722,249	1,754,425	1,754,425	0		960,028	49,959	146,902	-	597,536	-	-	-	496,858	-	299,754	957,813	-
2097	735,971	-	6,722,249	1,581,664	1,581,664	0		850,052	49,823	122,102	-	559,687	-	-	-	496,920	-	298,935	785,809	-
2098	735,971	-	6,722,249	1,612,032	1,612,032	0		830,752	49,823	156,625	-	574,832	-	-	-	496,982	-	298,935	816,115	-
2099	735,971	-	6,722,249	1,317,446	1,317,446	0		603,644	49,686	95,433	-	568,682	-	-	-	497,044	-	298,116	522,286	-

Addition of PAG to management pond (void loss)

Table 4: TCP water balance - 95th percentile stochastic run

Year	Reservoir						Inflows								Outflows							
	TCP reservoir (end of year)	ΔStorage (water cover)	Total inflows	Total outflows	Water balance	Comment on imbalance	Direct Precipitation TCP	TCP runoff inflows	Seepage Dam and Buttresses to TCP	PlantPond overflow to TCP	Overflow from NMP TCP	Pump from EMP to TCP	Pump from WMP to TCP	Pump from OpenPit to TCP	Evap TCP	GW Loss TCP	Pump TCP to ENV	Process water pump from TCP	TCP pump to NMP	Pump from TCP to EMP	Pump from TCP to WMP	TCP runoff outflows to ENV
Unit:	m3						m3								m3							
2021	84,369	84,369	84,369	-	-1		14,243	56,957	13,168	-	-	-	-	-	-	-	-	-	-	-	-	-
2022	293,700	209,331	846,289	636,958	0		63,906	464,006	33,183	219,294	7,289	-	-	58,611	24,201	12,757	465,000	-	135,000	-	-	-
2023	41,788	-251,912	904,370	1,156,282	0		54,513	679,427	22,159	98,270	50,000	-	-	-	25,595	38,343	768,344	-	324,000	-	-	-
2024	180,828	139,040	1,229,206	1,090,166	0		85,837	444,020	46,571	112,404	140,000	400,374	-	-	72,926	51,240	552,000	-	135,000	279,000	-	-
2025	196,699	15,871	1,111,877	1,096,006	0		59,345	499,287	46,031	132,214	185,000	190,000	-	-	22,532	51,100	887,374	-	-	135,000	-	-
2026	118,980	-77,719	953,170	1,030,890	0		43,232	369,395	38,999	111,544	-	390,000	-	-	19,047	51,100	798,743	-	-	162,000	-	-
2027	261,357	142,377	1,332,620	1,190,243	0		61,015	579,692	15,319	136,594	-	540,000	-	-	31,412	51,100	1,017,731	-	-	90,000	-	-
2028	126,354	-135,003	832,877	967,879	0		56,812	435,362	2,461	104,490	18,752	215,000	-	-	33,897	51,240	882,743	-	-	-	-	-
2029	170,294	43,939	1,611,024	1,567,085	0		111,110	466,294	393	140,758	12,469	-	880,000	-	56,295	51,100	1,441,690	-	-	-	18,000	-
2030	610,881	440,587	1,490,462	1,049,875	0		63,409	422,845	10,514	118,107	305,588	-	570,000	-	26,729	51,100	900,047	-	-	-	72,000	-
2031	188,598	-422,283	1,183,875	1,606,158	0		83,289	408,475	18,296	109,002	274,814	-	290,000	-	57,214	51,100	1,443,844	-	-	-	54,000	-
2032	186,235	-2,363	1,098,054	1,100,417	0		61,757	403,958	19,850	108,279	184,211	-	320,000	-	34,309	51,240	978,868	-	-	-	36,000	-
2033	208,798	22,562	1,129,999	1,107,437	0		56,633	408,848	21,666	112,232	210,621	-	320,000	-	27,291	51,100	912,047	-	-	-	117,000	-
2034	87,146	-121,652	956,604	1,078,256	0		50,101	396,671	22,859	102,895	234,077	-	150,000	-	28,360	51,100	791,796	-	-	-	207,000	-
2035	177,993	90,847	1,282,039	1,191,192	0		63,177	527,658	37,439	124,392	179,373	-	350,000	-	32,236	51,100	1,053,856	-	-	-	54,000	-
2036	655,050	477,056	1,957,373	1,480,316	1		97,468	637,645	53,541	154,038	554,681	-	460,000	-	50,602	51,240	1,324,474	-	-	-	54,000	-
2037	183,682	-471,368	1,215,818	1,687,186	0		88,103	499,918	54,687	117,385	265,725	-	190,000	-	51,412	51,100	1,494,674	-	-	-	90,000	-
2038	603,013	419,331	1,906,981	1,487,650	0		97,947	631,245	56,144	153,922	497,724	-	470,000	-	51,473	51,100	1,367,077	-	-	-	18,000	-
2039	213,871	-389,142	1,395,743	1,784,885	0		105,993	503,402	57,493	121,357	307,498	-	300,000	-	64,236	51,100	1,606,549	-	-	-	63,000	-
2040	130,293	-83,578	1,856,758	1,940,336	0		116,522	586,915	59,474	143,593	520,254	-	430,000	-	63,685	51,240	1,816,411	-	-	-	9,000	-
2041	168,461	38,168	2,046,641	2,008,474	0		104,558	641,155	55,763	156,096	479,071	-	610,000	-	58,639	51,100	1,871,735	-	-	-	27,000	-
2042	167,166	-1,295	1,715,034	1,716,329	-1		95,127	595,256	52,419	145,710	296,522	-	530,000	-	52,159	51,100	1,586,070	-	-	-	27,000	-
2043	836,404	669,239	1,935,348	1,266,109	0		104,666	593,873	55,662	148,727	1,032,421	-	-	-	49,641	51,100	1,165,368	-	-	-	-	-
2044	282,834	-553,570	1,103,779	1,657,350	0		113,274	221,989	17,837	82	750,598	-	-	-	52,375	-	1,604,975	-	-	-	-	-
2045	347,278	64,445	1,145,115	1,080,670	0		79,542	207,727	12,570	-	845,276	-	-	-	45,670	-	1,035,000	-	-	-	-	-
2046	265,228	-82,051	1,392,968	1,475,019	0		99,528	217,388	12,217	-	1,063,835	-	-	-	45,775	-	1,429,244	-	-	-	-	-
2047	251,294	-13,934	955,998	969,932	0		74,242	184,499	10,743	-	686,515	-	-	-	39,932	-	930,000	-	-	-	-	-
2048	-	-251,294	1,146,674	1,397,078	890	Small delay in fully emptying the reservoir in 2048	80,431	204,211	11,287	-	850,745	-	-	-	45,851	-	1,351,227	-	-	-	-	-
2049	-	-	253,729	253,729	0		42	241,668	12,019	-	-	-	-	-	-	-	-	-	-	-	-	253,729
2050	-	-	229,957	229,957	0		38	217,666	12,253	-	-	-	-	-	-	-	-	-	-	-	-	229,957
2051	-	-	213,834	213,834	0		35	201,996	11,803	-	-	-	-	-	-	-	-	-	-	-	-	213,834
2052	-	-	220,030	220,030	0		36	209,242	10,753	-	-	-	-	-	-	-	-	-	-	-	-	220,030
2053	-	-	219,305	219,305	0		36	207,427	11,842	-	-	-	-	-	-	-	-	-	-	-	-	219,305
2054	-	-	243,762	243,762	0		40	231,872	11,850	-	-	-	-	-	-	-	-	-	-	-	-	243,762
2055	-	-	226,257	226,257	0		37	213,957	12,263	-	-	-	-	-	-	-	-	-	-	-	-	226,257
2056	-	-	248,233	248,233	0		41	235,488	12,704	-	-	-	-	-	-	-	-	-	-	-	-	248,233
2057	-	-	232,653	232,653	0		38	220,607	12,007	-	-	-	-	-	-	-	-	-	-	-	-	232,653
2058	-	-	270,125	270,125	0		43	250,787	19,295	-	-	-	-	-	-	-	-	-	-	-	-	270,125
2059	-	-	237,876	237,876	0		37	212,860	24,979	-	-	-	-	-	-	-	-	-	-	-	-	237,876
2060	-	-	237,780	237,780	0		36	212,751	24,993	-	-	-	-	-	-	-	-	-	-	-	-	237,780
2061	-	-	266,640	266,640	0		42	240,769	25,830	-	-	-	-	-	-	-	-	-	-	-	-	266,640
2062	-	-	246,872	246,872	0		38	220,605	26,228	-	-	-	-	-	-	-	-	-	-	-	-	246,872
2063	-	-	201,619	201,619	0		31	178,727	22,860	-	-	-	-	-	-	-	-	-	-	-	-	201,619
2064	-	-	230,208	230,208	0		36	207,299	22,873	-	-	-	-	-	-	-	-	-	-	-	-	230,208
2065	-	-	252,220	252,220	0		39	226,960	25,221	-	-	-	-	-	-	-	-	-	-	-	-	252,220
2066	-	-	265,627	265,627	0		41	238,556	27,030	-	-	-	-	-	-	-	-	-	-	-	-	265,627
2067	-	-	279,856	279,856	0		45	252,737	27,074	-	-	-	-	-	-	-	-	-	-	-	-	279,856
2068	-	-	248,935	248,935	0		38	222,329	26,568	-	-	-	-	-	-	-	-	-	-	-	-	248,935
2069	-	-	248,322	248,322	0		39	220,987	27,297	-	-	-	-	-	-	-	-	-	-	-	-	248,322
2070	-	-	255,811	255,811	0		40	231,335	24,437	-	-	-	-	-	-	-	-	-	-	-	-	255,811
2071	-	-	201,668	201,668	0		31	178,773	22,864	-	-	-	-	-	-	-	-	-	-	-	-	201,668
2072	-	-	269,636	269,636	0		42	244,386	25,207	-	-	-	-	-	-	-	-	-	-	-	-	269,636
2073	-	-	236,495	236,495	0		36	209,898	26,561	-	-	-	-	-	-	-	-	-	-	-	-	236,495
2074	-	-	283,213	283,213	0		45	256,603	26,565	-	-	-	-	-	-	-	-	-	-	-	-	283,213
2075	-	-	203,658	203,658	0		30	179,739	23,888	-	-	-	-	-	-	-	-	-	-	-	-	203,658
2076	-	-	226,214	226,214	0		35	203,199	22,980	-	-	-	-	-	-	-	-	-	-	-	-	226,214
2077	-	-	192,172	192,172	0		29	170,096	22,047	-	-	-	-	-	-	-	-	-	-	-	-	192,172
2078	-	-	232,961	232,961	0		37	211,061	21,863	-	-	-	-	-	-	-	-	-	-	-	-	232,961
2079	-	-	215,870	215,870	0		33	192,120	23,717	-	-	-	-	-	-	-	-	-	-	-	-	215,870
2080	-	-	285,285	285,285	0		45	259,544	25,696	-	-	-	-	-	-	-	-	-	-	-	-	285,285
2081	-	-	288,115	288,115	0		45	258,399	29,671	-	-	-	-	-	-	-	-	-	-	-	-	288,115
2082	-	-	227,383	227,383	0		35	202,106	25,242	-	-	-	-	-	-	-	-	-	-	-	-	227,383
2083	-	-	292,592	292,592	0		46	264,381	28,166	-	-	-	-	-	-	-	-	-	-	-	-	292,592
2084	-	-	223,069	223,069	0		34	197,938	25,097	-	-	-	-	-	-	-	-	-	-	-	-	223,069
2085	-	-	234,049	234,049	0		36	209,963	24,049	-	-	-	-	-	-	-	-	-	-	-	-	234,049
2086	-	-	283,682	283,682	0		44	256,397	27,240	-	-	-	-	-	-	-	-	-	-	-	-	283,682
2087	-	-	318,872	318,872	0		50	288,479	30,342	-	-	-	-	-	-	-	-	-	-	-	-	318,872
2088	-	-	238,972	238,972	0		36	211,418	27,518	-	-	-	-	-	-	-	-	-	-	-	-	238,972
2089	-	-	250,756	250,756	0		40	223,786	26,930	-	-	-	-	-	-	-	-	-	-	-	-	250,756
2090	-	-	264,419	264,419	0		40	239,180	25,199	-	-	-	-	-	-	-	-	-	-	-	-	264,419
2091	-	-	236,774	236,774	0		37	210,087	26,651	-	-	-	-	-	-	-	-	-	-	-	-	236,774
2092	-	-	268,458	268,458	0		41	242,011	26,406	-	-	-	-	-	-	-	-	-	-	-	-	268,458
2093	-	-	208,071	208,071	0		32	183,682	24,357	-	-	-	-	-	-	-	-	-	-	-	-	208,071
2094	-	-	329,245	329,245	0		52	300,552	28,641	-	-	-	-	-	-	-	-	-	-	-	-	329,245
2095	-	-	253,135	253,135	0		39	223,806	29,291	-	-	-	-	-	-	-	-	-	-	-	-	253,135
2096	-	-	310,173	310,173	0		49	280,613	29,512	-	-	-	-	-	-	-	-	-	-	-	-	310,173
2097	-	-	276,911	276,911	0		43	248,156	28,712	-	-	-	-	-	-	-	-	-	-	-	-	276,911
2098	-	-	264,249	264,249	0		42	236,751	27,457	-	-	-	-	-	-	-	-	-	-	-	-	264,249
2099	-	-	207,053	207,053	0		31	182,466	24,557	-	-	-	-	-	-	-	-	-	-	-	-	207,053

Decommissioning of Tenas Pond. NMP becomes the most downstream reservoir in addition to water channeled from the dams and buttresses and a few other catchments (see table for TCP)

Table 5: Open Pit water balance - 95th percentile stochastic run

Year	Reservoir						Inflows - operations					Outflows - operations						Inflows=Outflows - closure			
	Open Pit sump reservoir (end of year)	ΔStorage (water cover)	Total inflows	Total outflows	Water balance	Comments	Combined Seepage backfill[1]	Pit wall and backfill runoff inflows[2]	Natural catchment runoff[3]	Backfill infiltration[3]	GW to OpenPit[3]	Evap sump	Process plant from OpenPit	OpenPit pump to TCP	OpenPit pump to NMP	OpenPit pump to EMP	OpenPit pump to WMP	Combined Backfill seepage to WMP - closure[4]	Pit wall, backfill, and natural catchment runoff[3]	Backfill infiltration[3]	GW to OpenPit[3]
Unit:	m3						m3					m3						m3			
2021	-	-	-	-	0		-	-	-	-	-	-	-	-	-	-	-				
2022	60,000	60,000	183,007	123,007	0		28,137	154,870	37,285	-	28,850	9,125	-	58,611	55,271	-	-				
2023	59,512	- 488	357,217	357,704	0		146,025	211,192	116,971	26	86,709	9,131	179,945	-	168,628	-	-				
2024	60,000	488	584,537	584,050	0		255,734	328,803	177,897	44	133,366	9,138	180,438	-	394,474	-	-				
2025	60,000	-	719,541	719,541	0		381,505	338,036	279,784	82	167,743	9,144	179,945	-	530,452	-	-				
2026	60,000	-	737,368	737,368	0		420,023	317,344	219,124	127	202,438	9,150	179,945	-	-	548,272	-				
2027	60,000	-	954,511	954,511	0		482,064	472,447	286,093	158	237,132	9,157	179,945	-	-	765,409	-				
2028	60,000	-	906,281	906,281	0		481,170	425,110	187,835	294	272,619	9,163	180,438	-	-	384,739	331,941				
2029	60,000	-	1,096,733	1,096,733	0		497,158	599,575	217,635	269	306,616	9,170	179,945	-	-	-	907,619				
2030	60,000	-	1,037,406	1,037,406	0		479,186	558,220	145,578	354	319,616	9,177	179,945	-	-	-	848,284				
2031	60,000	-	960,919	960,919	0		464,168	496,751	139,814	2,280	310,802	9,187	179,945	-	-	-	771,787				
2032	60,000	-	980,957	980,957	0		435,934	545,023	110,335	3,624	302,803	9,198	180,438	-	-	-	791,322				
2033	60,000	-	994,354	994,354	0		398,113	596,241	90,498	603	293,150	9,208	179,945	-	-	-	805,201				
2034	60,000	-	872,000	872,000	0		402,744	469,255	116,087	2,577	284,336	9,218	179,945	-	-	-	682,837				
2035	60,000	-	976,737	976,737	0		405,825	570,912	125,330	7,234	275,522	9,228	179,945	-	-	-	787,564				
2036	60,000	-	1,075,918	1,075,918	0		424,145	651,773	174,024	12,335	267,427	9,238	180,438	-	-	-	886,242				
2037	60,000	-	913,900	913,900	0		427,673	486,227	141,596	13,741	257,870	9,249	179,945	-	-	-	724,706				
2038	60,000	-	1,085,730	1,085,729	0		443,988	641,741	183,892	27,615	249,056	9,259	179,945	-	-	-	896,526				
2039	60,000	-	925,964	925,964	0		427,640	498,324	128,806	47,150	240,242	9,269	179,945	-	-	-	736,750				
2040	60,000	-	1,074,553	1,074,553	0		472,656	601,897	179,219	80,704	232,050	9,278	180,438	-	-	-	884,837				
2041	60,000	-	1,266,378	1,266,378	0		551,557	714,822	246,305	111,943	222,590	9,285	179,945	-	-	-	1,077,148				
2042	60,000	-	1,209,052	1,209,052	0		558,353	650,699	216,827	129,112	213,776	9,292	179,945	-	-	-	1,019,815				
2043	60,000	-	1,135,168	1,135,168	0		532,009	603,159	192,508	133,917	204,413	9,299	179,945	-	-	-	945,923				
2044			349,312	349,312	0	inflows= outflows, no more pit sump in closure												349,312	237,136	136,897	137,945
2045			478,023	478,023	0													478,023	212,403	133,393	137,569
2046			527,617	527,617	0													527,617	282,449	128,577	137,569
2047			494,542	494,542	0													494,542	213,757	128,047	137,569
2048			501,048	501,048	0													501,048	226,118	130,104	137,945
2049			484,557	484,557	0													484,557	222,762	131,166	137,569
2050			481,802	481,802	0													481,802	217,608	132,778	137,569
2051			513,517	513,517	0													513,517	236,726	133,920	137,569
2052			446,502	446,502	0													446,502	173,846	135,357	137,945
2053			518,693	518,693	0													518,693	252,733	135,079	137,569
2054			528,336	528,336	0													528,336	276,639	135,741	137,569
2055			537,197	537,197	0													537,197	254,581	136,549	137,569
2056			532,400	532,400	0													532,400	246,134	137,933	137,945
2057			458,397	458,397	0													458,397	173,669	137,859	137,569
2058			517,080	517,080	0													517,080	263,953	138,140	137,569
2059			524,859	524,859	0													524,859	237,662	138,408	137,569
2060			511,558	511,558	0													511,558	223,854	139,813	137,945
2061			487,093	487,093	0													487,093	207,962	139,777	137,569
2062			517,285	517,285	0													517,285	250,590	140,619	137,569
2063			474,737	474,737	0													474,737	169,358	141,524	137,569
2064			483,564	483,564	0													483,564	209,834	143,108	137,945
2065			542,453	542,453	0													542,453	289,274	143,354	137,569
2066			554,104	554,104	0													554,104	269,210	144,527	137,569
2067			535,805	535,805	0													535,805	286,997	145,687	137,569
2068			569,322	569,322	0													569,322	267,384	147,609	137,945
2069			560,840	560,840	0													560,840	262,681	148,005	137,569
2070			551,295	551,295	0													551,295	298,705	149,283	137,569
2071			538,472	538,472	0													538,472	204,244	150,459	137,569
2072			501,989	501,989	0													501,989	225,853	152,239	137,945
2073			518,104	518,104	0													518,104	210,260	152,233	137,569
2074			562,157	562,157	0													562,157	327,491	153,166	137,569
2075			535,897	535,897	0													535,897	197,848	153,933	137,569
2076			508,585	508,585	0													508,585	211,120	155,339	137,945
2077			513,724	513,724	0													513,724	217,487	155,291	137,569
2078			550,125	550,125	0													550,125	286,218	156,172	137,569
2079			571,616	571,616	0													571,616	263,775	157,187	137,569
2080			602,735	602,735	0													602,735	329,394	158,810	137,945
2081			585,525	585,525	0													585,525	285,222	158,771	137,569
2082			521,351	521,351	0													521,351	185,601	159,732	137,569
2083			556,421	556,421	0													556,421	289,965	160,329	137,569
2084			540,941	540,941	0													540,941	229,274	161,980	137,945
2085			545,372	545,372	0													545,372	237,992	161,804	137,569
2086			582,750	582,750	0													582,750	326,608	162,699	137,569
2087			621,172	621,172	0													621,172	353,906	163,407	137,569
2088			570,802	570,802	0													570,802	214,131	164,924	137,945
2089			573,840	573,840	0													573,840	276,690	164,686	137,569
2090			552,748	552,748	0													552,748	270,793	165,383	137,569
2091			580,457	580,457	0													580,457	255,370	166,231	137,569
2092			599,967	599,967	0													599,967	320,278	167,952	137,945
2093			566,412	566,412	0													566,412	203,082	168,103	137,569
2094			541,322	541,322	0													541,322	259,391	169,047	137,569
2095			572,212	572,212	0													572,212	268,261	169,741	137,569
2096			597,536	597,536	0													597,536	297,897	171,268	137,945
2097			559,687	559,687	0													559,687	247,582	171,035	137,569
2098			574,832	574,832	0													574,832	319,119	171,751	137,569
2099			568,682	568,682	0													568,682	191,659	171,905	137,192

Addition of PAG to management pond (void loss)

Captured in the inflow as "Backfill seepage"

Informative flow only, part of another flow in the same table, and therefore not accounted in the overall water balance calculations in this file

1 Combined backfill seepage (infiltration in backfill, groundwater inflows and natural catcment upstream of the backfill) is delayed by 5 days when combined as one flow to mimic overall seepage from the backfill

2 no delay for the runoff (pit wall and backfill as it is collected downstream of the backfill

3 Individual flows as part of the combined backfill seepage - not delayed, and therefore does not entirely adds up to the same amount as the combined flow annually. These are shown to show the relative contirbution of each flow to the backfill seepage

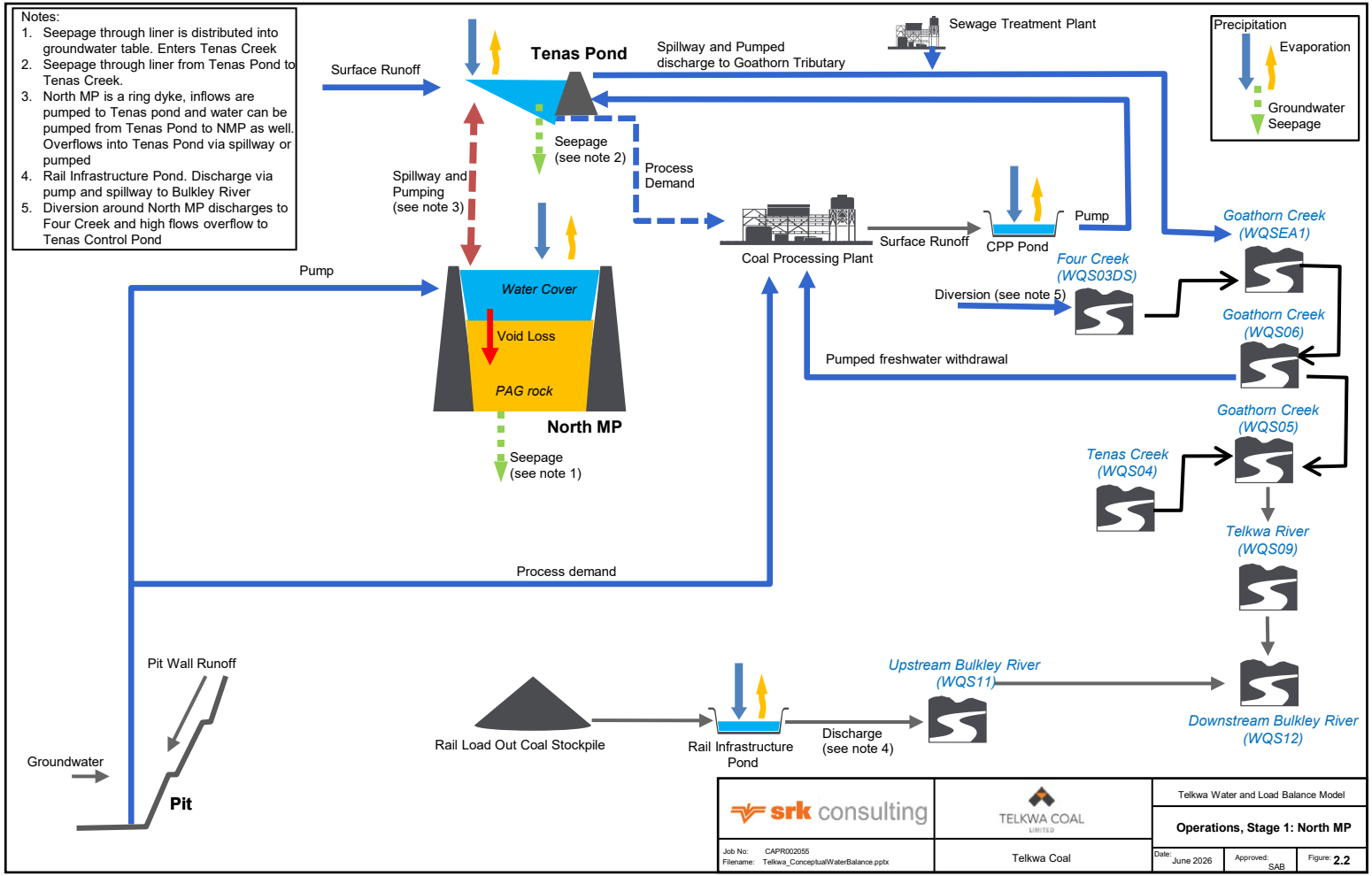
4 Overall seepage out of the Open Pit decreases in closure as part of the covered backfill runoffs are diverted to Four Creek (as they are then unimpacted catchments)

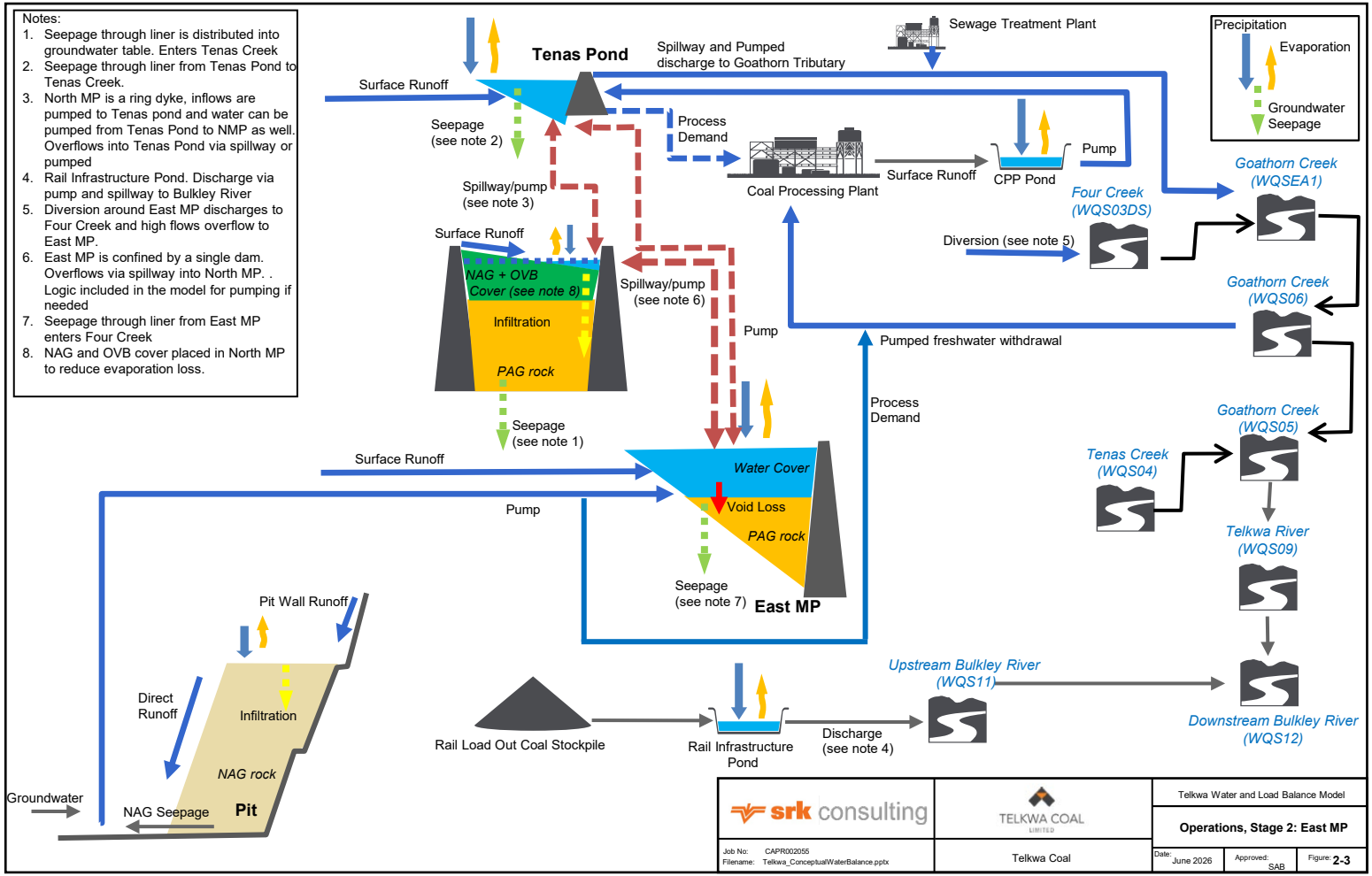
Attachment 4: Justification of the Selection of Realizations for P5 and P95 Water Model Balance Results

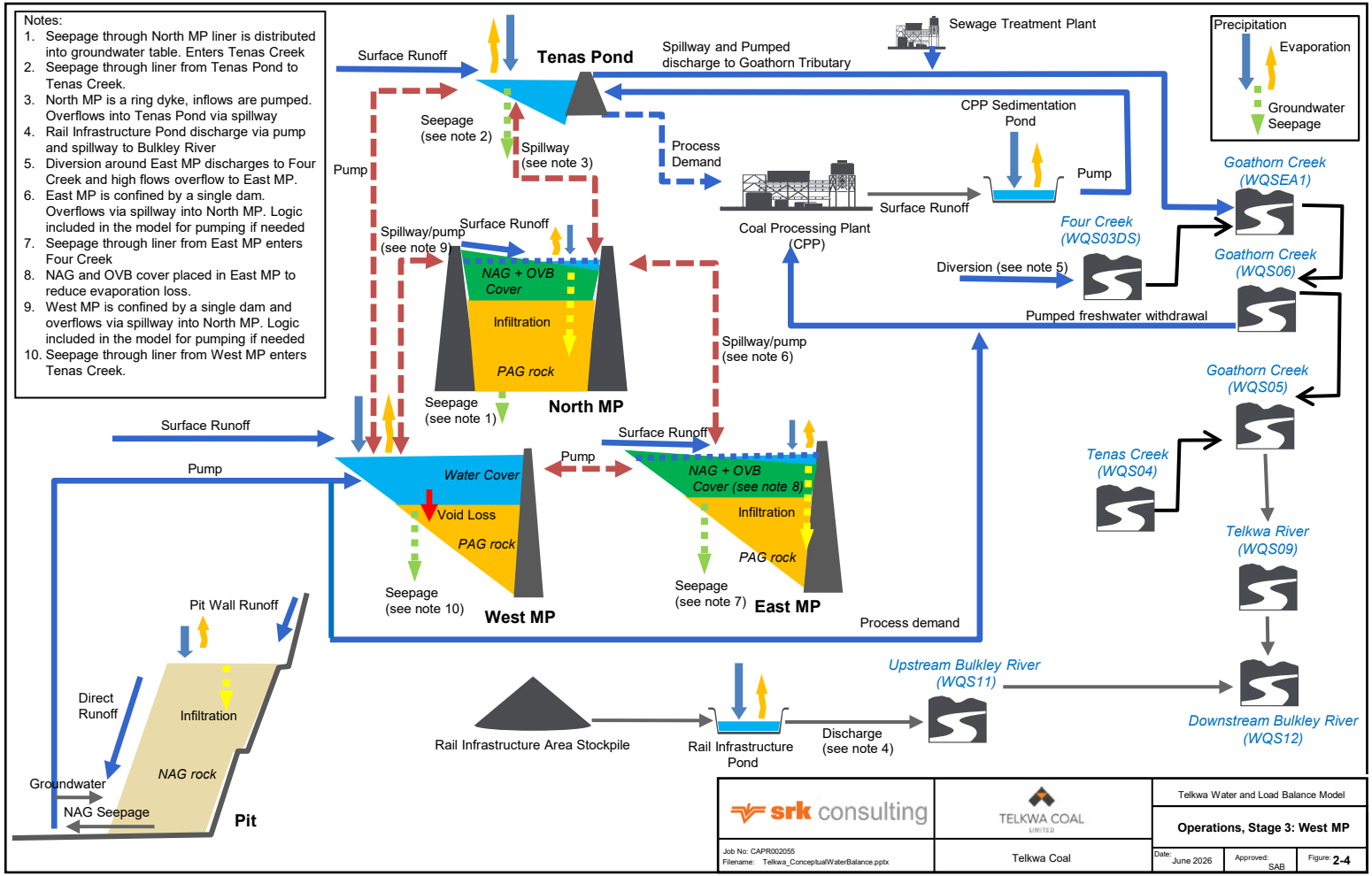
Justification for 5th percentile realization pick:	P5 (dry) realization selection — basis The dry-condition realization is selected on excess water (precipitation minus evaporation) for the project, summed over 2027–2043, taking the 5th percentile across the 100 stochastic realizations and selecting the realization whose total is closest to that value. The selected realization is R#98. Excess water is used as the selection variable — rather than water cover directly — because the water cover over the PAG is actively managed by pumping. Ranking on cover would conflate the natural hydrologic driver with the operational (pumping) response and could select a realization that is healthy overall but takes a single brief dip. Ranking on low excess water isolates the underlying dry-precipitation condition, yielding a realization that is genuinely dry across the period. The 2027–2043 window is used to focus the selection on the operational period of interest. The resulting water cover under this dry realization is presented (see chart) as a consequence of the selected dry hydrology under the planned pumping regime, demonstrating that cover is established and maintained even under a 1-in-20 dry condition. Because a single real realization is carried forward (rather than an assembled percentile table), the water balance remains internally mass-conserving.
Justification for 95th percentile realization pick:	The P95 realization is selected on total excess precipitation (precipitation − evaporation) over the entire mine life period (22 years), and is used to characterize discharge volume under sustained wetter-than-normal conditions. The selected realization is R#73 Justification: - The wet case is not a governing stressor for the PAG facility — abundant water is protective of the water-cover objective. It is presented as a sensitivity ("what if conditions are generally wetter"), not as a design case. - A whole-period accumulation window is appropriate because the intent is to depict broadly, persistently wetter conditions rather than a clustered peak event. A critical-duration window would instead isolate a flood/peak-storage event, which is not the claim being made.

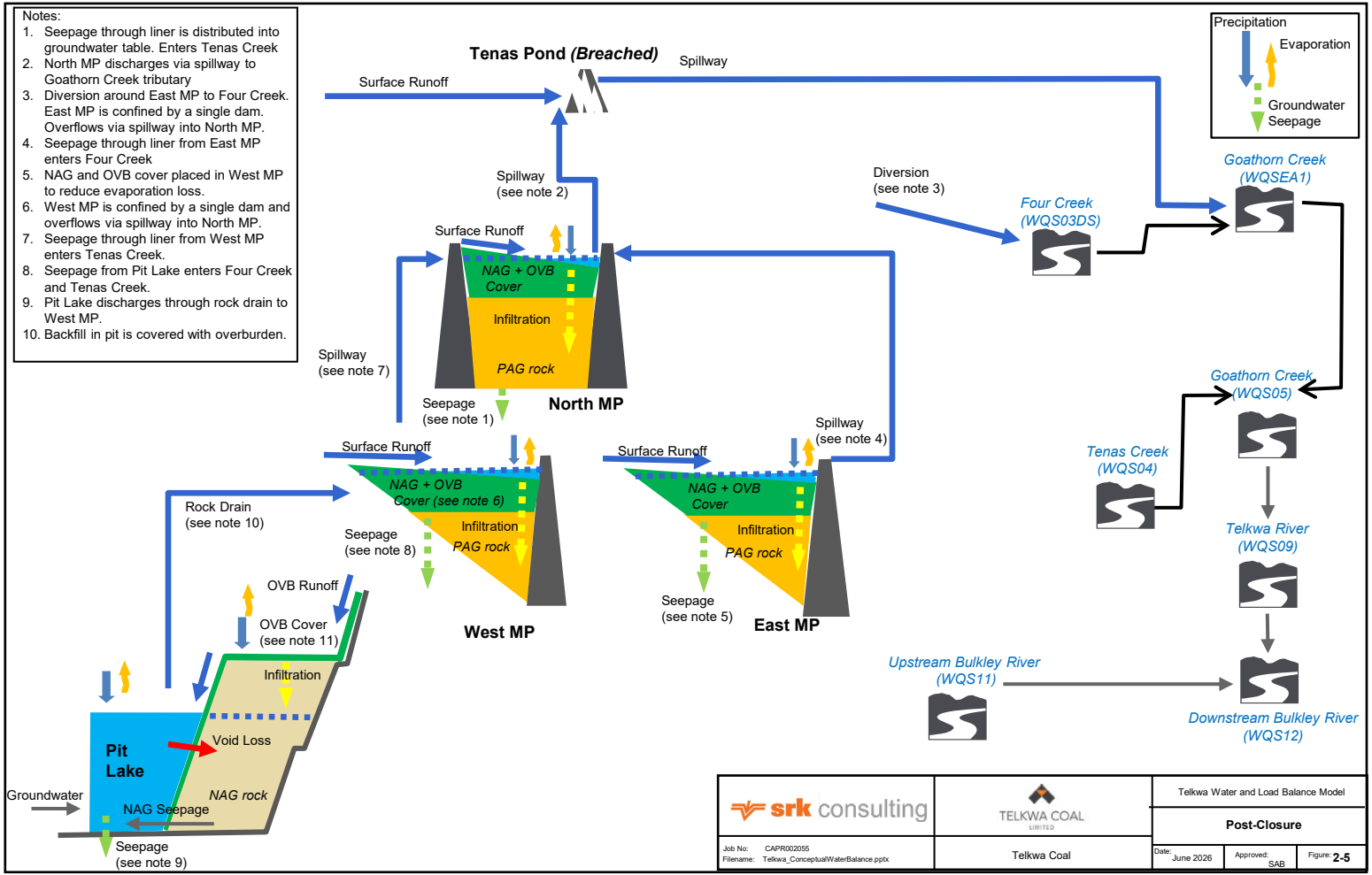
Attachment 5: Revised Flow Diagrams for the Project

Water Balance Conceptual Flow Diagram


Notes:
1. Seepage through liner is distributed into groundwater table. Enters Tenas Creek
2. Seepage through liner from Tenas Pond to Tenas Creek.
3. North MP is a ring dyke, inflows are pumped to Tenas pond and water can be pumped from Tenas Pond to NMP as well. Overflows into Tenas Pond via spillway or pumped
4. Rail Infrastructure Pond. Discharge via pump and spillway to Bulkley River
5. Diversion around North MP discharges to Four Creek and high flows overflow to Tenas Control Pond
Precipitation
Evaporation
Groundwater Seepage
Surface Runoff
Tenas Pond
Spillway and Pumped discharge to Goathorn Tributary
Sewage Treatment Plant
Seepage (see note 2)
Process Demand
Spillway and Pumping (see note 3)
Coal Processing Plant
Surface Runoff
CPP Pond
Pump
Goathorn Creek (WQSEA1)
Four Creek (WQS03DS)
Diversion (see note 5)
Goathorn Creek (WQS06)
Pumped freshwater withdrawal
Goathorn Creek (WQS05)
Tenas Creek (WQS04)
Telkwa River (WQS09)
Pump
Water Cover
Void Loss
PAG rock
North MP
Seepage (see note 1)
Process demand
Pit Wall Runoff
Groundwater
Pit
Rail Load Out Coal Stockpile
Rail Infrastructure Pond
Discharge (see note 4)
Upstream Bulkley River (WQS11)
Downstream Bulkley River (WQS12)
srk consulting
TELKWA COAL LIMITED
Telkwa Water and Load Balance Model
Operations, Stage 1: North MP
Job No: CAPR002055
Filename: Telkwa_ConceptualWaterBalance.pptx
Telkwa Coal
Date: June 2026
Approved: SAB
Figure: 2.2


Notes:
1. Seepage through liner is distributed into groundwater table. Enters Tenas Creek
2. Seepage through liner from Tenas Pond to Tenas Creek.
3. North MP is a ring dyke, inflows are pumped to Tenas pond and water can be pumped from Tenas Pond to NMP as well. Overflows into Tenas Pond via spillway or pumped
4. Rail Infrastructure Pond. Discharge via pump and spillway to Bulkley River
5. Diversion around East MP discharges to Four Creek and high flows overflow to East MP.
6. East MP is confined by a single dam. Overflows via spillway into North MP. . Logic included in the model for pumping if needed
7. Seepage through liner from East MP enters Four Creek
8. NAG and OVB cover placed in North MP to reduce evaporation loss.
Tenas Pond
Spillway and Pumped discharge to Goathorn Tributary
Sewage Treatment Plant
Precipitation
Evaporation
Groundwater Seepage
Surface Runoff
Seepage (see note 2)
Process Demand
Coal Processing Plant
Surface Runoff
CPP Pond
Pump
Goathorn Creek (WQSEA1)
Four Creek (WQS03DS)
Spillway/pump (see note 3)
Surface Runoff
NAG + OVB Cover (see note 8)
Infiltration
PAG rock
Spillway/pump (see note 6)
Diversion (see note 5)
Goathorn Creek (WQS06)
Pump
Pumped freshwater withdrawal
Seepage (see note 1)
Process Demand
Goathorn Creek (WQS05)
Surface Runoff
Water Cover
Void Loss
PAG rock
Tenas Creek (WQS04)
Pump
Telkwa River (WQS09)
Seepage (see note 7)
East MP
Pit Wall Runoff
Direct Runoff
Infiltration
NAG rock
Groundwater
NAG Seepage
Pit
Rail Load Out Coal Stockpile
Rail Infrastructure Pond
Discharge (see note 4)
Upstream Bulkley River (WQS11)
Downstream Bulkley River (WQS12)
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Job No: CAPR002055
Filename: Telkwa_ConceptualWaterBalance.pptx
TELKWA COAL LIMITED
Telkwa Coal
Telkwa Water and Load Balance Model
Operations, Stage 2: East MP
Date: June 2026
Approved: SAB
Figure: 2-3


Notes:
1. Seepage through North MP liner is distributed into groundwater table. Enters Tenas Creek
2. Seepage through liner from Tenas Pond to Tenas Creek.
3. North MP is a ring dyke, inflows are pumped. Overflows into Tenas Pond via spillway
4. Rail Infrastructure Pond discharge via pump and spillway to Bulkley River
5. Diversion around East MP discharges to Four Creek and high flows overflow to East MP.
6. East MP is confined by a single dam. Overflows via spillway into North MP. Logic included in the model for pumping if needed
7. Seepage through liner from East MP enters Four Creek
8. NAG and OVB cover placed in East MP to reduce evaporation loss.
9. West MP is confined by a single dam and overflows via spillway into North MP. Logic included in the model for pumping if needed
10. Seepage through liner from West MP enters Tenas Creek.
Precipitation
Evaporation
Groundwater Seepage
Surface Runoff
Tenas Pond
Spillway and Pumped discharge to Goathorn Tributary
Sewage Treatment Plant
Seepage (see note 2)
Spillway (see note 3)
Pump
Process Demand
CPP Sedimentation Pond
Pump
Surface Runoff
Coal Processing Plant (CPP)
Goathorn Creek (WQSEA1)
Four Creek (WQS03DS)
Diversion (see note 5)
Goathorn Creek (WQS06)
Pumped freshwater withdrawal
Spillway/pump (see note 9)
Surface Runoff
NAG + OVB Cover
Infiltration
PAG rock
Seepage (see note 1)
North MP
Spillway/pump (see note 6)
Goathorn Creek (WQS05)
Surface Runoff
Pump
Water Cover
Void Loss
PAG rock
Seepage (see note 10)
West MP
Surface Runoff
Pump
NAG + OVB Cover (see note 8)
Infiltration
PAG rock
Seepage (see note 7)
East MP
Tenas Creek (WQS04)
Telkwa River (WQS09)
Process demand
Pit Wall Runoff
Direct Runoff
Infiltration
NAG rock
Groundwater
NAG Seepage
Pit
Rail Infrastructure Area Stockpile
Rail Infrastructure Pond
Discharge (see note 4)
Upstream Bulkley River (WQS11)
Downstream Bulkley River (WQS12)
srk consulting
Job No: CAPR002055
Filename: Telkwa_ConceptualWaterBalance.pptx
TELKWA COAL LIMITED
Telkwa Coal
Telkwa Water and Load Balance Model
Operations, Stage 3: West MP
Date: June 2026
Approved: SAB
Figure: 2-4


Notes:
1. Seepage through liner is distributed into groundwater table. Enters Tenas Creek
2. North MP discharges via spillway to Goathorn Creek tributary
3. Diversion around East MP to Four Creek. East MP is confined by a single dam. Overflows via spillway into North MP.
4. Seepage through liner from East MP enters Four Creek
5. NAG and OVB cover placed in West MP to reduce evaporation loss.
6. West MP is confined by a single dam and overflows via spillway into North MP.
7. Seepage through liner from West MP enters Tenas Creek.
8. Seepage from Pit Lake enters Four Creek and Tenas Creek.
9. Pit Lake discharges through rock drain to West MP.
10. Backfill in pit is covered with overburden.
Precipitation
Evaporation
Groundwater Seepage
Tenas Pond (Breached)
Spillway
Surface Runoff
Spillway (see note 2)
Diversion (see note 3)
Four Creek (WQS03DS)
Goathorn Creek (WQSEA1)
Surface Runoff
NAG + OVB Cover
Infiltration
PAG rock
Spillway (see note 7)
Seepage (see note 1)
North MP
Goathorn Creek (WQS05)
Tenas Creek (WQS04)
Telkwa River (WQS09)
Surface Runoff
Spillway (see note 4)
NAG + OVB Cover (see note 6)
Infiltration
PAG rock
Seepage (see note 8)
West MP
Surface Runoff
NAG + OVB Cover
Infiltration
PAG rock
Seepage (see note 5)
East MP
Rock Drain (see note 10)
OVB Runoff
OVB Cover (see note 11)
Infiltration
Void Loss
Pit Lake
Groundwater
NAG rock
NAG Seepage
Seepage (see note 9)
Upstream Bulkley River (WQS11)
Downstream Bulkley River (WQS12)
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TELKWA COAL LIMITED
Telkwa Water and Load Balance Model
Post-Closure
Job No: CAPR002055
Filename: Telkwa_ConceptualWaterBalance.pptx
Telkwa Coal
Date: June 2026
Approved: SAB
Figure: 2-5