Appendix 13

Meadowbank Water Management Plan Version 12

AGNICO EAGLE

MEADOWBANK GOLD MINE

2023 WATER MANAGEMENT PLAN

MARCH 2024

VERSION 12

EXECUTIVE SUMMARY

Agnico Eagle Mines Ltd. Meadowbank Division (Agnico) is operating the Meadowbank Gold Mine (the Mine), located on Inuit-owned surface lands in the Kivalliq region approximately 70 km north of the Hamlet of Baker Lake, Nunavut. The mine is subject to the terms and conditions of both the Project Certificate issued in accordance with the Nunavut Land Claims Agreement Article 12.5.12 on December 30, 2006, and the Nunavut Water Board Water Licence No. 2AM-MEA1530 issued in May 2020.

The Water Management Plan is updated on a yearly basis as required by the Nunavut Water Board Water License 2AM-MEA1530. This document presents an updated version of the Water Management Plan 2022 and provides a revised site-wide Water Balance. Recommendations obtained during the 2022 Meadowbank Annual Report Review have been included in the 2023 Water Management Plan.

The 2023 Water Management Plan includes the 2023 Water Quality Forecast Update (Appendix C), the 2024 Freshet Action Plan (Appendix D) and the 2024 Ammonia Management Plan (Appendix E). The Freshet Action Plan details the RSF seepage issue at ST-16 and the Assay Road seepage as well as providing revised monitoring.

This water management plan update considers changes in the observed natural pit water inflows, updated tailings deposition parameters, mine and milling life schedule and production rate, tailings management strategy, and pit backfilling strategy.

The significant updates to this plan are:

- Update of water balance and water quality forecast model as per latest tailings deposition plan (including in-pit deposition)
- Update of quantitative water-related objectives/targets as per the TSM (Towards Sustainable Mining) Water Stewardship Protocol

The water management objectives are to keep the different water types separated to the extent practical; to control and minimize contact water; minimize freshwater usage to the extent practical; meet discharge criteria before any site contact water is released to the downstream environment; achieve a reduction in freshwater intake per tonne mined and ensure no events of non-compliance related to freshwater withdrawal criteria and effluent loading limits. The water balance update is based on these objectives, and quantitative targets have been added to the plan to help Operations track progress of actions taken to achieve these targets and help identify corrective actions to be implemented.

The revised Water Balance determines the demand and storage requirements of water over the life of the mine. The storage strategies and required transfers are presented. Closure related elements remain at a conceptual stage and will be further detailed in the Interim Closure and Reclamation Plan (ICRP) update until their designs are presented in the Final Mine Closure and

Reclamation Plan to be submitted prior to final closure in accordance with the current Type A Water License.

The freshwater reduction per tonne milled objective is achieved by reclaiming contact water from the tailings deposition area while transferring water from the active deposition area to the inactive pit. Pit E was the main area for tailings deposition in 2023 and will continue to be in 2024. A volume of tailings was also deposited in the South Cell in August and September 2023 to improve the landforms for closure purposes. For the remainder of mill operations, reclaim water is planned to be pumped from the in-pit. The current concept for Portage and Goose area flooding at closure is to remove as much water as possible from each pit by using a water treatment plant (WTP) and to reflood the area using a combination of passive and active water inflow (from Third Portage Lake). This is a conservative assumption that will be revised in the Interim Closure and Reclamation Plan (ICRP) and Final Closure and Reclamation Plan (FCRP) as further data become available on the water treatment design for the in-pit water. Different flooding sequence concepts are being looked at for the reflooding of the Portage and Goose Area to ensure the closure objectives will be met. The final elevation of the reflooding will be the elevation of Third Portage Lake which is around 133.6 masl based on available data. The Goose Dike and South Camp Dike will be breached to allow reconnection of the area with Third Portage Lake when the closure objectives for pit flooding will have been achieved. The dikes shall not be breached until the water quality in the re-flooded area meets CCME Water Quality Guidelines for the Protection of Aquatic Life, baseline concentrations, or appropriate site-specific water quality objectives, as per the Water License.

The flooding of the Vault Pit area will involve a combination of passive flooding (runoff) and active flooding at closure using water from Wally Lake. The final elevation of the reflooding will be 139.9 masl for Phaser and Vault Lake. The Vault Dike will be breached to allow reconnection of the area with Wally Lake when the closure objectives for pit flooding will be achieved, as per Portage and Goose Pits. BB Phaser Pit and Phaser Lake will be flooded exclusively from their watershed run off inflows until the target elevation of Wally Lake is reached.

A water quality forecasting model update is included in this report. The report identifies certain contaminants of concern which may require removal by treatment for the pit water quality to meet water quality objectives. Based on the forecasted concentrations at the end of in-pit deposition, the new water treatment plant required at closure should be designed to treat and manage the following parameters of concern for aluminium, arsenic, cadmium, copper, mercury, nickel, total dissolved solids (TDS), total ammonia, pH, total suspended solids (TSS), and potentially low concentration of total cyanide. Treatment options for the pit water are being assessed as per the schedule outlined in the Meadowbank Water Quality Forecasting Update Technical Note rev. 00 (AtkinsRéalis, 2024). An update on the water treatment concept and pit flooding strategy will be provided in the next ICRP update and the final design will be submitted as part of the FCRP.

DOCUMENT CONTROL

Version	Date (YM)	Section	Page	Revision
1	March 2014	ALL	-	Revision for the 2012 Water Management Plan (by SNC) according to the updated LOM and water mgmt strategies
2	March 2015	ALL	-	Revision for the 2013 Water Management Plan (by Agnico) according to the updated LOM and water mgmt strategies
3	October 2015	ALL	-	Update of sections according to Water License renewal conditions
4	March 2016	ALL	-	Revision of the 2014 Water Management Plan (by Agnico) according to the updated LOM and water mgmt strategies
5	March 2017	ALL	-	Revision of the 2015 Water Management Plan (by Agnico) according to the updated LOM and water mgmt strategies
6	March 2018	ALL	-	Revision of the 2016 Water Management Plan (by Agnico) according to the updated LOM and water mgmt strategies
7	March 2019	ALL	-	Revision of the 2017 Water Management Plan (by Agnico) according to the updated LOM and water mgmt strategies
8	March 2020	ALL	-	Revision of the 2018 Water Management Plan (by Agnico) according to the updated LOM and water mgmt strategies
9	April 2021	ALL	-	Revision of the 2019 Water Management Plan (by Agnico) according to the updated LOM and water mgmt strategies
10	April 2022	ALL	-	Revision of the 2020 Water Management Plan (by Agnico) according to the updated LOM and water mgmt strategies. Addition of quantitative water management targets
11	March 2023	Section 3.1, 3.4, 4	-	Section 3.1 water management targets, Section 3.4 pit flooding profiles, Section 4 water quality forecast update
12	March 2024	ALL	-	Revision of the 2023 Water Management Plan (by Agnico) according to the updated LOM and water mgmt strategies. 2.1.1 Climate: updated maximum wind gust recorded. Table 3.1: Added target 2024 for water objectives. 3.3.6 Goose pit: Updated water management strategy information. 3.3.9. Mill seepage collection system: Added information on Assay Road Seep South.

				Figure 3.2: RSF seepage area: Changed figure. 3.3.12 Central Dike Seepage: Updated information. 3.4.1 Portage and Goose Area Flooding: Updated information. Table 3.2 and 3.3L: Updated according to the Water balance. Section 4 Water quality forecast: Updated information and add note for ongoing work. Appendix A : Added a note on reported values

Approved by: 

Eric Haley – Environment & Critical Infrastructure Superintendent

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

APPENDICES

Appendix A: 2023 Water Balance Update

Appendix B: Water Management Schematic Flow Sheets

Appendix C: 2023 Meadowbank Water Quality Forecasting Update

Appendix D: 2024 Freshet Action Plan

Appendix E: 2024 Ammonia Management Plan

1 INTRODUCTION

Agnico Eagle Mines Ltd. (Agnico) has been operating the Meadowbank Gold Mine since 2008, officially beginning production in 2010. The mine is located approximately 70km north of the Hamlet of Baker Lake, Nunavut. The mine is subject to the terms and conditions of both the Project Certificate issued in accordance with the Nunavut Land Claims Agreement Article 12.5.12 on December 30, 2006, and the Nunavut Water Board Water License No. 2AM-MEA1530 issued on May 2020.

This document presents an updated version of the Water Management Plan 2022 and provides a revised site-wide water balance that determines the demand and storage requirements of water over the life of the mine (LOM). The storage strategies and required transfers are presented. Closure related elements based on the Meadowbank Interim Closure and Reclamation Plan remain at a conceptual stage and will be further detailed in the Final Mine Closure and Reclamation Plan to be submitted prior to final closure in accordance with the current Type A Water License.

This water management plan update considers changes in the observed natural pit water inflows, updated tailings deposition parameters, mine and milling life schedule and production rate, tailings management strategy, and pit backfilling strategy.

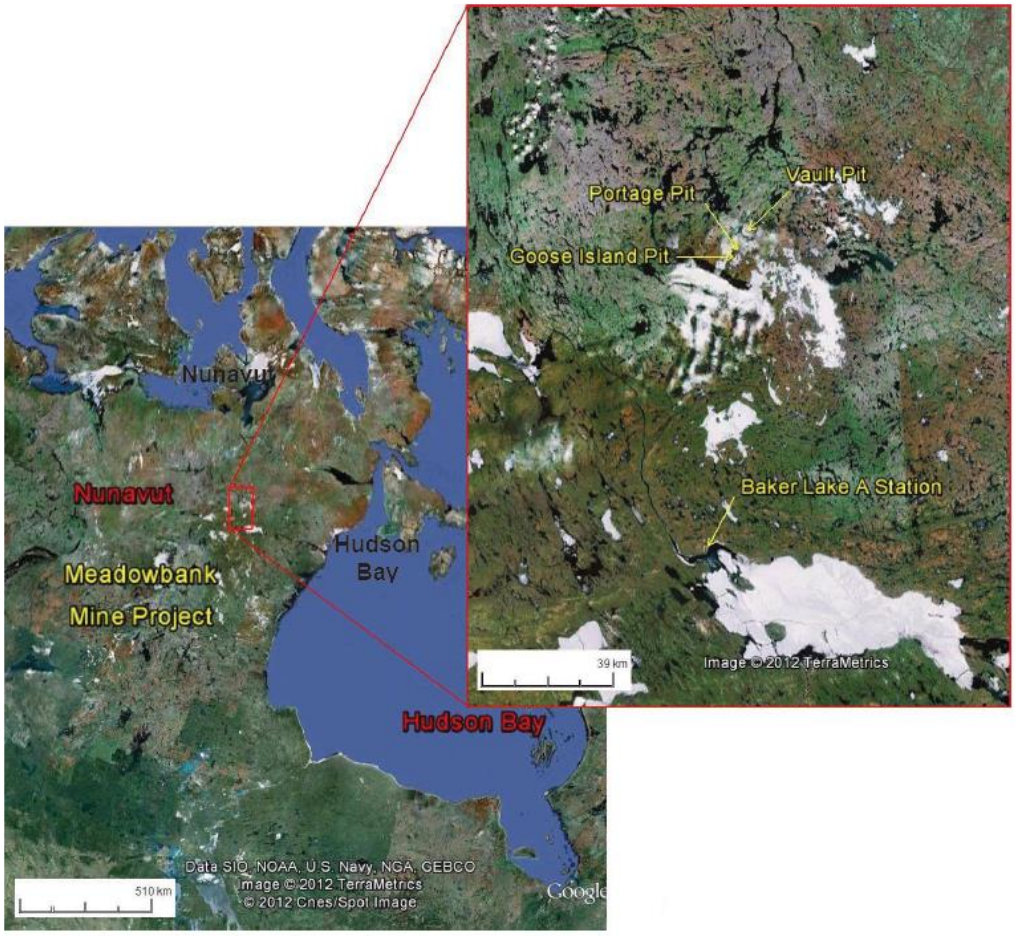
The significant updates to this plan are:

- Update of water balance and water quality forecast model as per latest tailings deposition plan (including in-pit deposition)
- Updates of quantitative water-related objectives/targets as per the TSM (Towards Sustainable Mining) Water Stewardship Protocol

2 BACKGROUND INFORMATION

2.1 SITE CONDITIONS

The location of the Meadowbank mine site is shown below in Figure 2.1. A close-up is also provided to show the location of the Baker Lake A Station used to obtain meteorological data.



Source: Google Earth Pro, 2012

Figure 2.1: Meadowbank mine location

2.1.1 Climate

The Meadowbank mine is located within a low Arctic Eco climate described as one of the coldest and driest regions of Canada. Arctic winter conditions occur from October through May, with

temperatures ranging from +5°C to -40°C. Summer temperatures range from -5°C to +25°C with isolated rainfall increasing through September (Table 2-1).

Table 2-1: Estimated average monthly climate data – Baker Lake

Month	Max. Air Temp. (°C)	Min. Air Temp. (°C)	Rainfall (mm)	Snowfall (mm)	Total Precip. (mm)	Lake Evap. (mm)	Min. Relative Humidity (%)	Max. Relative Humidity (%)	Wind Speed (km/h)	Soil Temp. (°C)
January	-29.1	-35.5	0	6.9	6.9	0	67.1	75.9	16.3	-25.5
February	-27.8	-35.2	0	6.0	6.1	0	66.6	76.5	16.0	-28.1
March	-22.3	-30.5	0.0	9.2	9.2	0	68.4	81.4	16.9	-24.9
April	-13.3	-22.5	0.4	13.6	14.0	0	71.3	90.1	17.3	-18.1
May	-3.1	-9.9	5.2	7.7	12.8	0	75.7	97.2	18.9	-8.0
June	7.6	0.0	18.6	3.1	21.7	8.8	62.6	97.2	16.4	2.0
July	16.8	7.2	38.6	0.0	38.6	99.2	47.5	94.3	15.1	10.5
August	13.3	6.4	42.8	0.6	43.4	100.4	59.2	97.7	18.4	9.3
September	5.7	0.9	35.2	6.7	41.9	39.5	70.8	98.6	19.3	3.6
October	-5.0	-10.6	6.5	22.6	29.1	0.1	83.1	97.4	21.4	-2.8
November	-14.8	-22.0	0.2	16.2	16.4	0	80.6	91.1	17.9	-11.7
December	-23.3	-29.9	0	9.4	9.5	0	73.3	82.7	17.7	-19.9

Note: Data from Baker Lake A station is available from 1946 to 2011. During this period, the data quality is good, with the exception of years 1946 to 1949, and 1993, which were removed from the compilation.

The long-term mean annual air temperature for Meadowbank is estimated to be approximately -11.1°C. Air temperatures in the Meadowbank area are, on average, about 0.6°C cooler than Baker Lake air temperatures, and extreme temperatures tend to be larger in magnitude. This climatic difference is thought to be the effect of a moderating maritime influence at Baker Lake.

The prevailing winds at Meadowbank for both the winter and summer months are from the northwest. A maximum daily wind gust of 117 km/h was recorded on November 22nd, 2023. Light to moderate snowfall is accompanied by variable winds up to 70 km/h, creating large, deep drifts and occasional whiteout conditions. Skies tend to be more overcast in winter than in summer.

Table 2-1 presents monthly rainfall, snowfall, and total precipitation values for the mine site. August is the wettest month, with a total precipitation of 43.4 mm, and February is the driest month, with a total precipitation of 6.1 mm. During an average year, the total precipitation is 249.6 mm, split between 147.5 mm of rainfall and 102.1 mm of snowfall precipitation.

2.1.2 Faults

Two main faults are inferred in the Portage deposit area and included in the groundwater model (Golder, 2011) used to estimate groundwater inflows and brackish water upwelling to the pits during mine life. These are the Bay Zone Fault and the Second Portage Fault shown in Figure 2.2 by bright blue lines.

The Second Portage fault trends to the northwest under Central Dike and the Tailings Storage Facilities (TSF), roughly parallel to the orientation of Second Portage Lake. This fault is a potential pathway for the Central Dike Seepage.

The Bay Zone Fault trends from South to North and crosses Third Portage Lake, Goose Pit and Portage Pit. This fault is a potential pathway for water infiltration from Third Portage Lake into Goose Pit.

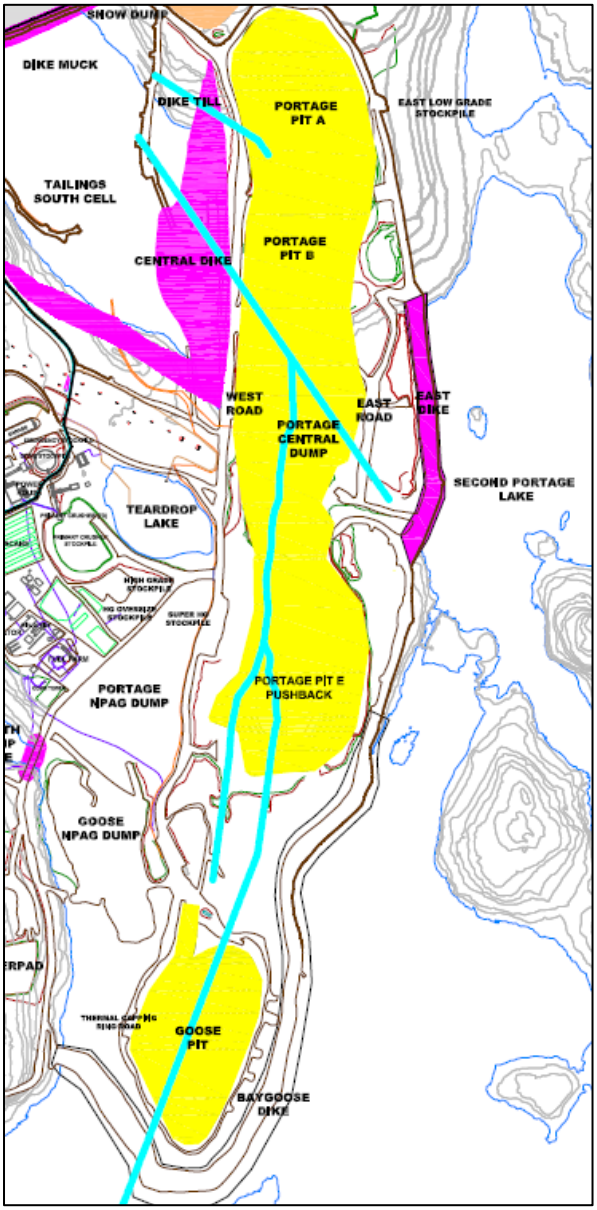


Figure 2.2: Portage Pit area – fault location

2.1.3 Permafrost

The Meadowbank Gold Mine is in an area of continuous permafrost. Lake ice thicknesses of between 1.5 m and 2.5 m have been encountered during geotechnical investigations performed mid to late spring. Taliks (areas of permanently unfrozen ground) could be expected where water depth is and/or has been greater than about 2 to 2.5 m. Based on thermal studies and measurements of ground temperatures (Golder, 2003), the depth of permafrost at site is

estimated to be in the order of 450 to 550 m, depending on proximity to lakes. The depth of the active layer ranges from about 1 to 1.5 m based on depth of overburden, vegetation and organics, and proximity to lakes.

Based on ground conductivity surveys and compilation of regional data, the ground ice content is expected to be low. Locally on land, ice lenses and ice wedges are present, as indicated by ground conductivity, and by permafrost features such as frost mounds. These areas of local ground ice are generally associated with low-lying areas of poor drainage.

2.1.4 Hydrology

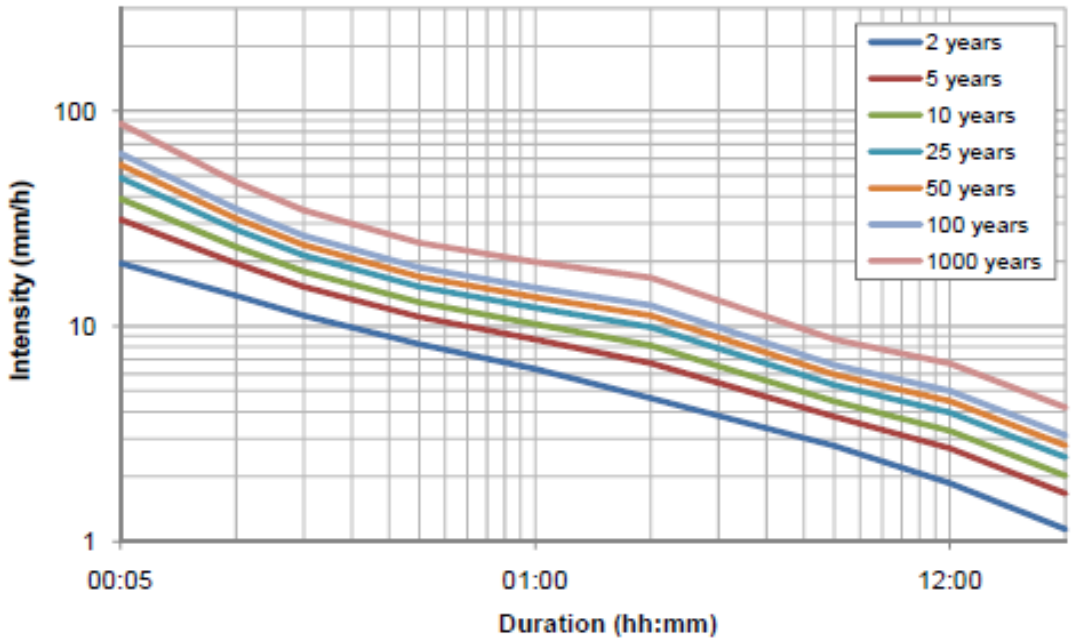
As shown above in Table 2-1, the Baker Lake A meteorological station was used to tabulate the monthly precipitation data. Using this data, SNC-Lavalin completed a Log-Pearson 3 probability distribution to determine the annual precipitation for different return periods. The results of this statistical analysis are presented in Table 2-2.

Table 2-2: Total annual precipitation for varying return periods

Return Period (years)	Precipitation (mm)
2	246
5	295
10	322
20	345
100	391

Source: SNC-Lavalin 2012 Water Management Plan (SNC, 2013)

Intensity duration frequency curves (IDF) computed by SNC-Lavalin (SNC, 2013) from the Baker Lake A meteorological station are presented in Figure 2.3. These IDF curves are for precipitations of short duration (5min-24hrs) based on data between 1987 and 2006.



Source: SNC-Lavalin Water Management Plan 2013 (SNC,2013)

Figure 2.3: Baker Lake A meteorological IDF curves

The beginning of freshet (spring period) varies from year to year however it has been observed that the winter snow accumulation (October to May) usually begins to melt at the beginning of June and continues throughout the month.

2.2 MINING OPERATION DESCRIPTION

The Meadowbank Gold Mine consists of several gold-bearing deposits within close proximity to one another. The three main deposits are Vault (Vault, Phaser and BB Phaser), Portage (South, Center and North Portage deposits), and Goose. Mining of these pits is completed, and no mining activity was done since 2019 at the Meadowbank site.

The South Portage deposit is located on a peninsula and extends northward under Second Portage Lake (2PL) and southward under Third Portage Lake (3PL). The North Portage deposit is located on the northern shore of 2PL. The South, Center and North Portage deposits are mined as a single pit, termed the Portage Pit, which extends approximately 2 km in a north-south direction. Portage Pit is isolated from the Second Portage Lake by the East Dike built in 2008-2009 and the Bay-Goose Dike (Pit E) built from 2009 to 2011.

The Goose deposit lies approximately 1 km to the south of the Portage deposit, and beneath 3PL. The pit is isolated from the Second Portage Lake and the Third Portage Lake by the Bay-Goose Dike and the South Camp Dike constructed in 2009-2010.

The Vault deposit is located adjacent to Vault Lake, approximately 6 km north of the Portage deposits. The deposit is isolated from the Wally Lake by the Vault Dike built in 2013.

2.2.1 Portage Pit Area

The Portage area located between the Third Portage Lake (3PL) and Second Portage Lake (2PL) contains most of the infrastructure of the Meadowbank mine site including but not limited to the Portage Rock Storage Facility (RSF), the North and South Tailings Storage Facilities (NC & SC TSF), the mill, the camp, and the Stormwater Management Pond. The East Dike was constructed to isolate the north portion of the Portage Pit from the 2PL. Subsequent renaming of the pits led to the nomenclature for each pit (A, B, C, D and E). Mining activities in the Portage area ended in October 2019. Figure 2.4 presents the evolution of the Portage Pit and Figure 2.5 shows the Portage Pit Area and surrounding infrastructures.

Inflow of water into the bottom benches of Pit C and D has been observed before these pits were backfilled. Several areas of these pits are in an inferred talik area and cross a regional fault (Golder, 2009). The water inflow is thus likely a combination of ground and surface water. Pits A and B are in the permafrost and a minimal amount of water has been observed historically. Some water inflow is observed from the Pit E south wall since 2015. This inflow is mixed with other water sources at the bottom of Pit E.

On May 17th, 2019, Agnico received approval of amendment No.3 to the Meadowbank Type A water license 2AM-MEA1526 which permitted in-pit tailings disposal to take place within the Portage Pit. First, tailings were deposited in Goose pit, between July 2019 and August 2020. Since August 2020, tailings have been deposited in Pit E. An updated Tailings Deposition Plan has been prepared for the 2023 revision of the Water Management Plan. The updated deposition plan is presented in the 2023 version of the Meadowbank Mine Waste Rock and Tailings Management Plan. The latest life of mine exercise presents milling operations until 2026. For more information regarding in-pit tailings disposal please refer to the Waste Rock & Tailings Management Plan.

2.2.1.1 Tailings Storage Facility

The Tailings Storage Facility (TSF) is located with the Portage Pit Area and consists of the South Cell and the North Cell. These cells are delimited by tailings retaining dikes that were progressively built as capacity was required. More detailed information on the TSF can be found in the Meadowbank Waste Rock and Tailings Management Plan.

Stormwater Dike, constructed in 2009-2010, is an internal dike (El. 150m) that divides the TSF in the North and South Cell.

The peripheral structures of the North Cell are SD1, SD2, RF1 and RF2 built to El. 150 m from 2009 to 2010. In 2018, a North Cell Internal Structure (NCIS) was built in the northern part of the North

Cell over the existing tailings (variable El. from 152 to 154 m) to increase the tailings storage capacity.

The peripheral structures of the South Cell are SD3, SD4, SD5 and Central Dike built to El. 145 m from 2012 to 2018.

The diversion ditches (East and West), located around the perimeter of the North Cell TSF and the Portage RSF, are designed to collect the non-contact water runoff from the surrounding watershed. The ditches are divided in two sections – the west and east sections, to divert non-contact water respectively to Third Portage Lake and to NP2 Lake. On the west end of the diversion ditches, an Interception Sump was constructed in 2014-2015. The objective of the interception sump is to collect runoff water from the west section of the diversion ditches and to retain it until the total suspended solids in the water have reached the criteria allowing discharge to the environment.

As part of the construction of the NCIS, a ditch was built during the summer of 2018 in the rockfill capping located downstream of the NCIS, but within the TSF footprint, to avoid ponding of water against the structure. One sump was also built in a natural topographic low point at the north area of the cell and upstream of RF2, within the tailings footprint areas.

A volume of tailings was deposited in the South Cell during August and September 2023 to improve the landforms for closure purposes.

2.2.1.2 Stormwater Management Pond

The Stormwater Management Pond (SMP) is a small, shallow, and fishless, water body adjacent to Portage Pit (Figure 2.5). Treated sewage effluent is discharged to this pond as well as water containing hydrocarbon products. The pond also collects freshet flows within its catchment area, including most of the Primary Crusher area.

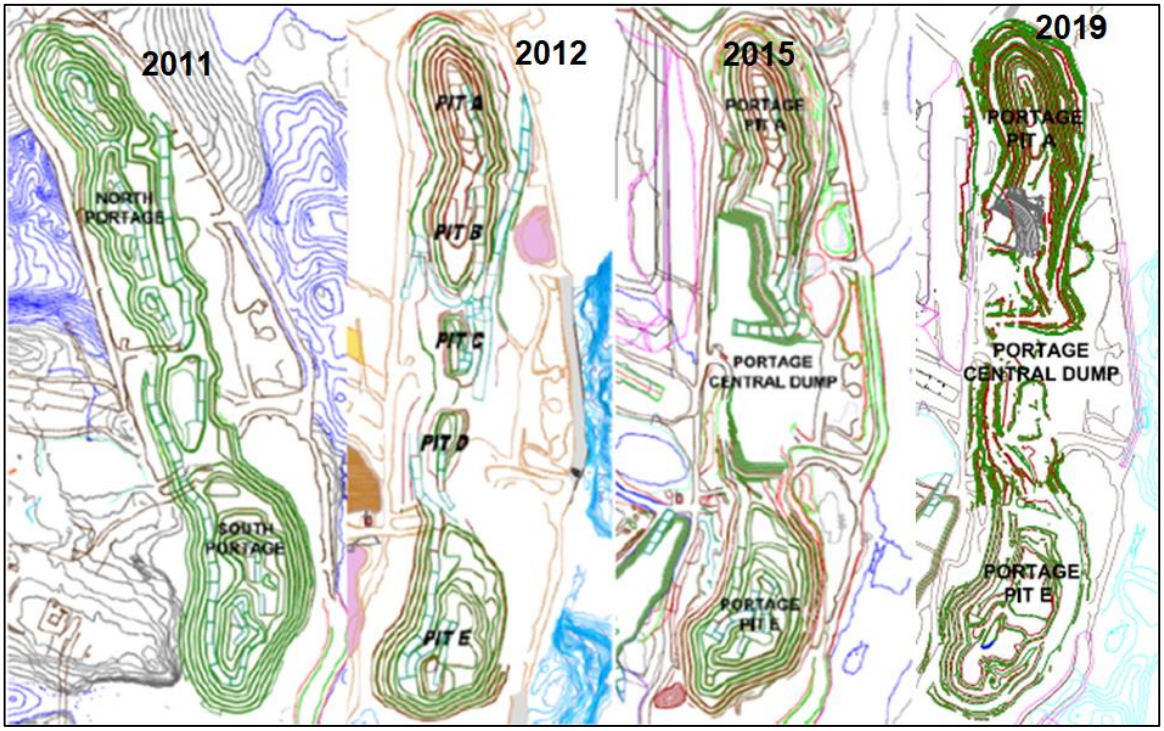


Figure 2.4: Portage Pit terminology

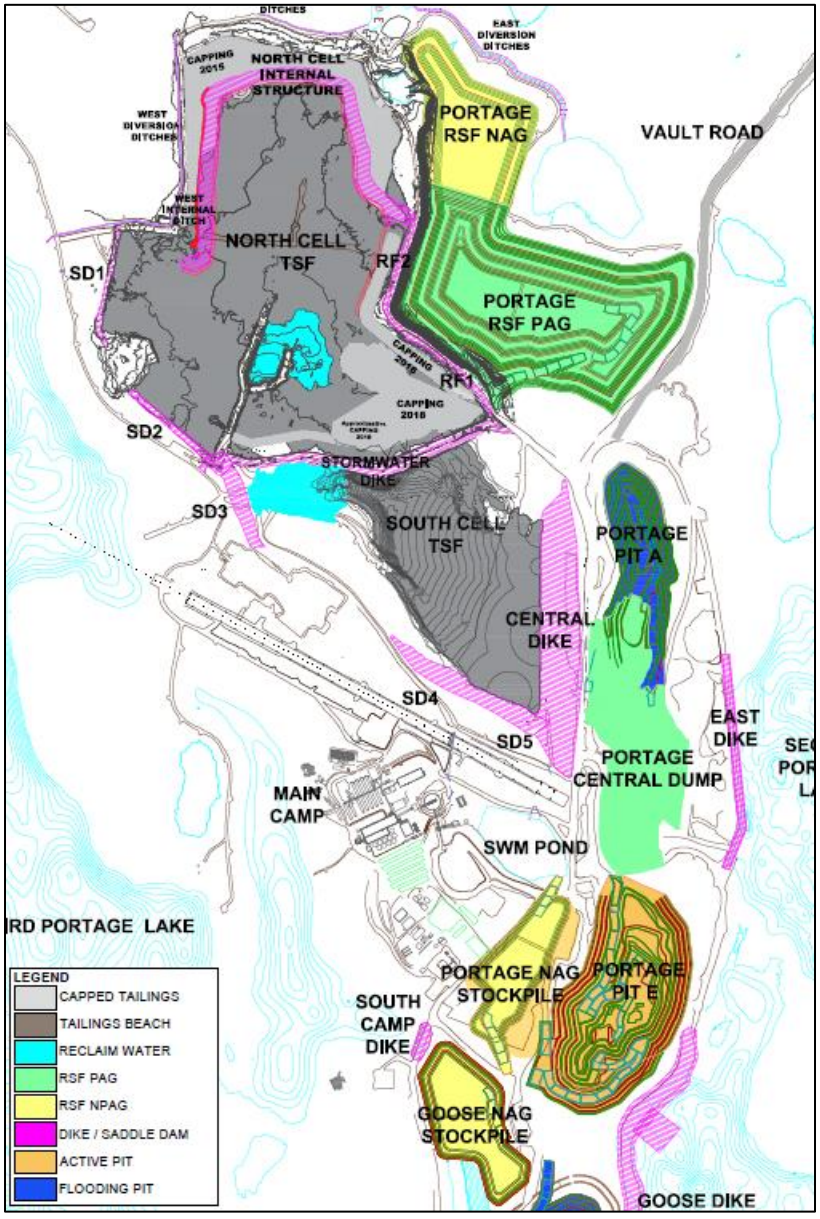


Figure 2.5: Portage Pit area map

2.2.2 Goose Pit Area

The Goose Pit area is located within the dewatered portion of 3PL. Mining in Goose Pit began in 2012 and was completed in April 2015. On May 17th, 2019, Agnico received approval of amendment No.3 to the Meadowbank Type A water license 2AM-MEA1526 which permitted in-pit tailings disposal to take place within the Goose Pit. The Goose Pit area and surrounding infrastructures are illustrated in Figure 2.6. For more information regarding in-pit tailings disposal please refer to the Waste Rock & Tailings Management Plan.

The majority of Goose Pit is located within a talik zone. Historically, the main water inflow into Goose Pit has been observed from the fractured quartzite rock formation located in the South and West wall. No major water inflow has been observed from the eastern wall associated with the iron formation type rock with small volcanic lenses. Between the quartzite and iron formation, there is a large band of ultramafic rock (soapstone).

Since mining was completed in 2015, pumping of water out of the pit has ceased and the inflows are collected in the pit as part of the natural flooding process. As mentioned above, from July 5th, 2019, to August 19th, 2020, tailings have also been deposited in the Goose pit. Water is transferred between Goose Pit and Pit A as required.

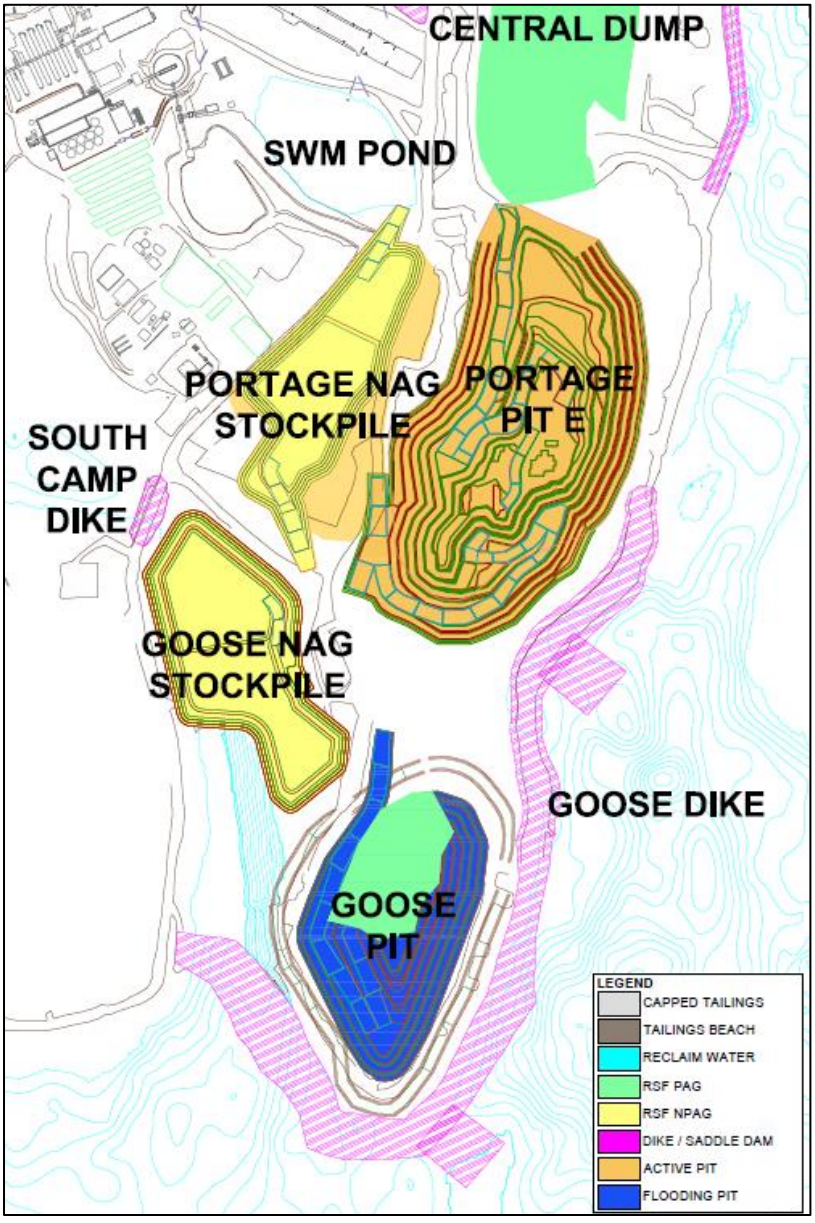


Figure 2.6: Goose Pit area map

2.2.3 Vault Pit Area

The infrastructure of the Vault Pit area includes the Vault RSF, ore and marginal pads, Vault Dike, Vault Pit, Phaser Pit, BB Phaser Pit, Vault attenuation pond and the emergency shelter. Figure 2.7 illustrates the Vault Pit area and surrounding infrastructure.

The Vault Pit, which is located under the former Vault Lake, required the construction of Vault Dike to isolate the mining area from Wally Lake and allow dewatering. Dewatering was undertaken in 2013 and 2014. This allowed for mining of Vault Pit and the creation of the Vault Attenuation Pond (ATP).

The Vault Pit began pre-mining operations in 2013 with active mining started in 2014 and completed in March 2019. The dewatering of Phaser Lake occurred during summer 2016 in preparation for mining activity in Phaser Pit and BB Phaser Pit. Phaser Pit mining activities were completed in October 2018. BB Phaser mining began in early 2018 and was completed in June 2019.

The Vault Attenuation Pond is comprised of four internal ponds named Pond A, B C & D. These ponds promote natural settling of the suspended solids. Water levels of these ponds are measured by surveying with a GPS at the location indicated by the red crosses on Figure 2.7.

Most of the water migrating into the pits of the Vault area has been observed to be runoff from the surrounding area during the freshet period. A localized water venue from the East wall of Vault Pit was historically above the 109 masl catch bench. During mining operations this inflow was collected in a sump located at the toe of the wall and then pumped into the Vault Attenuation Pond.

Water pumped from Vault Pit during mining operations was directed to the Vault Attenuation Pond (ATP). When required, the water was discharged into Wally Lake in accordance with the Water License and the MDMER. Agnico monitors the water quality of the Vault Attenuation Pond and discharge at sampling locations ST-25 and ST-10 respectively in accordance with the Water License. Water treatment for TSS has not been required to meet MDMER and Water license criteria prior to discharging in Wally Lake.

Since mining operations in Vault area are completed, there is no more active water management in that area. Passive reflooding is ongoing until active reflooding will begin during closure. As a result, no further discharges to Wally Lake are planned.

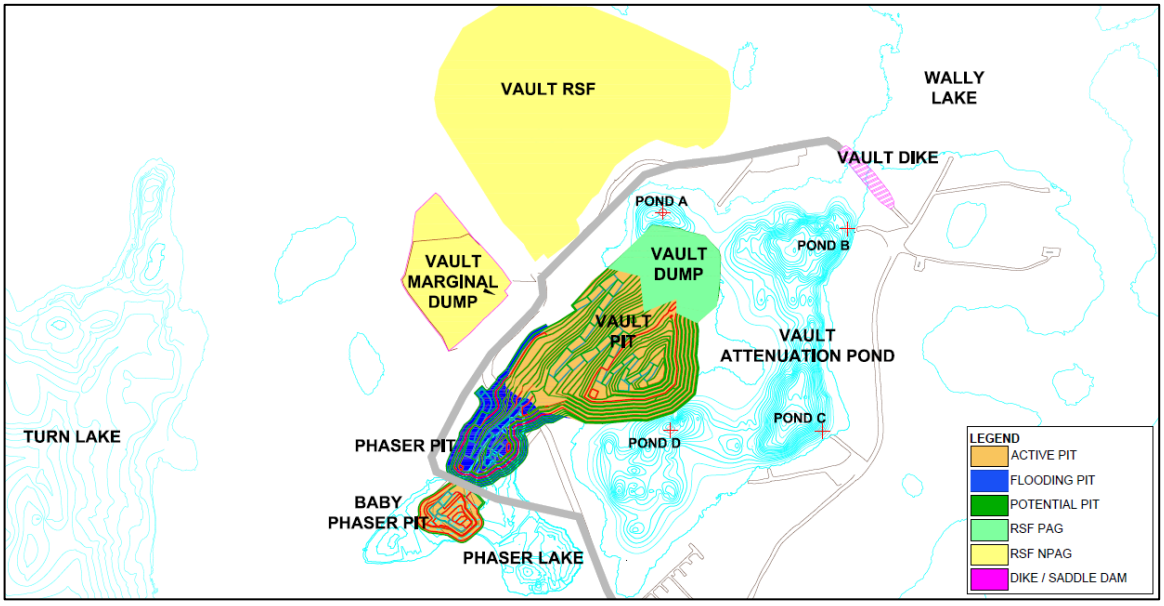


Figure 2.7: Vault Pit area map

2.3 LIFE OF MINE DESCRIPTION

The life-of-mine (LOM) is summarized in Table 3.1 of the 2023 Whale Tail Project Waste Rock Management Plan. The Meadowbank Process Plant will be operational until 2026.

3 WATER MANAGEMENT PLAN AND WATER BALANCE

3.1 WATER MANAGEMENT OBJECTIVES AND TARGETS

The water management objectives for the Meadowbank Site are:

- Keep the different water types (i.e. contact, non-contact, and freshwater) separated to the extent practical
- Control and minimize contact water through diversion and containment.
- Minimize freshwater usage by reclaiming the contact water to the extent practical
- Meet discharge criteria before any site contact water is released to the downstream environment.
- Reduction in freshwater intake per ton mined.
- No events of non-compliance.
    - Regulatory/Water License water quality criteria (effluent loading limits);
    - Regulatory/Water License freshwater withdrawal criteria.

The water management targets are summarized in Table 3-1. These targets are aligned with the water objectives of the Meadowbank Complex and go beyond the Water License limits. These targets strive to minimize risk, conserve freshwater, and minimize water usage. The 2024 targets assume continued improvements in the amount of reclaim water withdrawn from the pits to reuse in the Mill which will also decrease the amount of freshwater used per ton processed and increase the amount of water in recirculation. Targets are set to ensure continuous effort is made to improve water management and to encourage all groups to find and pursue opportunities to reduce freshwater consumption.

Table 3-1: 2024 Targeted water hourly consumption per month – for Mill and Camp usage

WATER OBJECTIVE	TARGET 2023	TARGET 2024
Fresh Water Withdrawn from 3PL (Mill and Camp)	865,000 m^3	900 000 m^3
Contact Water Withdrawn from Pit (reclaim water to Mill)	3,470,000 m^3	3,300,000 m^3
Freshwater per ton processed	0.20 m^3/t	0.20 m^3/t
Water discharge (treated)	0 m^3	0 m^3
Water discharge (fresh) – East Dike to 2PL	70,000 m^3	35,000 m^3
Water in recirculation (water recycled / total water use)	80.0%	80.0%

3.2 WATER MANAGEMENT STRATEGY

To achieve the above water management objectives and targets the following key strategies are implemented in the Water Management Plan.

- Two levels of catchment disturbance have been defined for the area, namely undisturbed and disturbed. Areas that have been disturbed as part of the mine development are considered disturbed catchments, while the areas left unaffected are considered undisturbed catchments.
- For mine water management, runoff from undisturbed areas is considered non-contact water, while runoff from disturbed catchment areas is considered contact water. Surface water that is diverted around the mine facilities, or groundwater that does not emerge into a mine facility, is considered non-contact water. Any non-contact water that mixes with contact water becomes contact water.
- Conveyance and storage of contact water is controlled by channels, piping, and containment structures such as sumps and ponds. Sumps are installed in low points surrounding pits, the WRSF, and the TSF. Contact water is diverted in various sumps and water collection ponds and is conveyed to the TSF or the in-pit area.
- Contact water stored in the in-pit is reclaimed for the milling process.
- East Dike seepage is discharged into Second Portage Lake (when discharge criteria is met) or otherwise sent to the in-pit area.
- The collected water in the Meadowbank area will be treated prior to discharge if the water quality does not meet the discharge criteria established in the Water License 2AM-MEA1530.
- Non-treated effluent from the Vault Attenuation Pond can be discharged in Wally Lake if discharge criteria established in the Water License 2AM-MEA1530 are met.
- Non-contact water is intercepted and directed away from disturbed areas by means of natural catchment boundaries and/or diversion structures or pumping systems and will be allowed to flow or to be discharged to the neighboring waterbodies.
- As per the Water License 2AM-MEA1530, (Part E, Condition 10) Agnico will conduct weekly inspections of all water management structures during periods of flow. This is part of the Freshet Action Plan (Appendix D).

3.3 WATER MANAGEMENT SYSTEM AND WATER BALANCE

The water management system includes the following components below. Additional water management system components can be put in place if required to adapt effectively to the site conditions and meet the water management objectives and targets.

The water management system includes the following components:

- Tailings Storage Facility (North Cell and South Cell) and associated dikes (SD1, SD2, SD3, SD4, SD5, Stormwater Dike, Central Dike, NCIS)
- In-pit tailings disposal area (Portage Pit and Goose Pit)
- Four water retention dikes (East Dike, Bay-Goose Dike, South Camp Dike, Vault Dike)
- Water diversion channel around the North Cell of the TSF (East and West Diversion)
- Seepage Management System (Mill Seepage, Central Dike Seepage, East Dike Seepage)
- Stormwater Management Pond
- Sump for WRSF and TSF contact water management
- Reclaim system to the Process Plant
- Freshwater intake and pump system
- Culverts
- Sewage treatment plant (STP)
- Pipelines and associated pump systems
- Potable WTP

As per the requirements of Water License 2AM-MEA1530 (Part E, condition 7) the Water Management Plan includes a yearly updated Water Balance according to the water management strategy and the applicable LOM.

The Water Balance is presented in Appendix A of this report. In this Water Management Plan version, revisions/modifications were made to the Water Balance for optimization purposes including:

- Fresh water consumption revision;
- Total daily mill water requirements;
- Reclaimed water volumes;
- Updated tailings deposition plan showing the deposition calendar for In-Pit Tailings Disposal;
- Water treatment and reflooding sequence and volumes updated as per the latest flooding strategy;
- Update to the seepage section.

3.3.1 Fresh Water from Third Portage Lake

Fresh water from Third Portage Lake is pumped from a freshwater barge. The two primary consumers of fresh water are the mill and the camp. The amount pumped from the barge is tracked in the water balance and reported in the Annual Report as per the requirement of the Type A Water License. The freshwater withdrawal limit for Third Portage Lake as per the Type A Water License is 4,935,000 m^3 per year, including use for pit reflooding.

The freshwater consumed at the process plant is used as part of the milling process and is then discharged in the Portage Pit or TSF as slurry with the tailings. Depending on the time of year, 35% – 75% of the total water volume discharged into the pits is available to be recirculated back to the process plant.

The fresh water used in the camp includes laundry facilities, cleaning, cooking, and drinking water consumption. Most of the camp fresh water is returned as sewage treatment effluent to the Stormwater Management Pond, which ultimately is transferred to the TSF or Portage Pit.

3.3.2 Tailings Deposition Strategy and Reclaim Water

The water management objective related to tailings deposition is to minimize the freshwater per tonne processed while maximizing the water in recirculation. This is achieved by reclaiming contact water from the tailings deposition area. More information on the tailings deposition plan can be found in the waste rock and tailings management plan.

For the remainder of mill operations, reclaim water will continue to come from the in-pit disposal pits Pit A and Pit E.

3.3.3 North Cell

Water inflows in the North Cell include runoff, water from tailings deposition, and water transfers from various sumps as needed (Western Interception Sump, WEP, SD1-2, NCIS, ST-16). As per the design specifications, the level of the North Cell reclaim pond must be maintained with a two-meter freeboard with the peripheral water retaining structures, which are at 150.0 masl elevation. Therefore, the pond must respect an elevation of 148.0 masl. This strategy requires transfers from the North Cell to the South Cell generally from May to October. Following landform cover placement over the TSF and until the water quality closure objectives of the TSF are achieved, the runoff water from the North and South Cells will be collected and directed to the pits. Details on the water management for the TSF at closure are available in the Meadowbank Interim Closure and Reclamation Plan and will be further presented in the Final Mine Closure and Reclamation Plan (FCRP).

Runoff water (non-contact water) from the surrounding North Cell TSF watershed area is captured in the diversion ditches located north of the North Cell TSF. Water from the Western Diversion Ditch is conveyed to the Western Interception Sump. From there, it is pumped into the North Cell

or redirected to Third Portage Lake via the West Diversion Ditch if water quality meets the required criteria.

3.3.4 South Cell

The water management strategy is to keep the water level at a minimum.

Water inflows in the South Cell include runoff, water from tailings deposition, and water transfers from the North Cell, and various sumps (SD3-4-5). As per the design specifications, the level of the South Cell reclaim pond must maintain a two-meter freeboard with the peripheral impermeable structures, which are at 145.0 masl elevation. Therefore, the pond must respect an elevation of 143.0 masl. Water is transferred from the South Cell to Pit A and water transfers are planned to comply with the freeboard requirement and to minimize water accumulation. Water management strategies within the Water Balance reflect the tailings deposition plan presented in the 2023 Mine Waste and Tailings Management Plan (Agnico, 2024).

Until the closure objectives of the cell are achieved, the strategy is to transfer the water accumulating in the South Cell to the open pits. The water transfers are included in the pit flooding process. Details on the water management for the TSF at closure are available in the Meadowbank Interim Closure and Reclamation Plan and will be further presented in the FCRP.

3.3.5 Portage Pit

The Portage Pit is part of the in-pit tailings disposal facility. The water management strategy is to maximize the reclaim to the mill to maximize tailings storage capacity.

As part of the closure concept and to achieve the closure objectives, Portage Pit water will be treated, discharged in Third Portage Lake and the pit will be reflooded. The pit flooding strategy and sequence will continue to be refined until the FCRP submission based on the Water Quality Forecast completed each year (Appendix C).

The Portage Pit inflow is modelled based on measured onsite data including the Central Dike seepage water, Goose Pit transfer, pit wall inflow, runoff water, groundwater, and a contribution from the East Dike seepage water (which is pumped back to Second Portage Lake when discharge criteria are met).

It is likely that the water inflow is filling up the porosity voids of the Portage Central Dump to some extent (former Pit C and Pit D).

3.3.6 Goose Pit

Goose Pit is part of the in-pit tailings disposal facility. The water management strategy is to transfer water between Goose Pit and Portage Pit to meet requirements for the deposition plan.

As part of the closure concept and to achieve the closure objectives, Goose Pit water will be treated, discharged in Third Portage Lake and the pit will be reflooded. The pit flooding strategy

and sequence will continue to be refined until the FCRP submission based on the Water Quality Forecast completed each year (Appendix C).

The Goose Pit inflow is modelled based on measured onsite data including pit wall inflow, runoff water, Pit A transfer and groundwater. It was historically observed that the pit inflow diminishes during the winter due to the freezing of the pit walls.

3.3.7 Vault Pits Area

No active water management is currently occurring in the Vault Area. The current strategy to manage water is to let the area flood passively until the beginning of closure. There is the possibility of discharging water to Wally Lake using the approved discharge, but this is not currently needed as per the water balance.

As part of the closure concept and to achieve the closure objectives, Vault area will be reflooded. The pit flooding strategy and sequence will continue to be refined until the FCRP submission based on the Water Quality Forecast completed each year (Appendix C).

The Vault area natural inflow is modelled based on measured onsite data including pit inflow and runoff water.

3.3.8 Stormwater Management Pond

The Stormwater Management Pond inflow includes treated sewage effluent, runoff, and transfers from trucks containing hydrocarbon contaminated water. The pond water is transferred as required to either the South Cell or the Portage Area.

3.3.9 Mill Seepage Collection System

In November 2013, Agnico observed seepage discharging west of the access road in front of the Assay Lab shown on Figure 3.1. The source was determined to be a leak from internal containment structures within the mill. Third Portage Lake (3PL), approximately 200 m to the west, was identified as a possible sensitive receptor. Remedial measures were undertaken immediately, and this included construction of an impermeable interception/collection trench downstream of the seepage flow path. A comprehensive monitoring system was implemented which included installation of monitoring wells, a recovery well (MW 203) and a water sampling program. Repairs (sealing) were completed within the mill (containment structures) in 2014 to eliminate the source of contaminants.

On December 15th, 2023, Agnico observed water inflow within the Assay Road Seep South retention berm. An investigation was undertaken to identify potential sources of the water, to date the exact source of the water inflow has not been identified but no water inflow has been observed since December 26th, 2023. The water inflow was contained within the existing water management infrastructure that was built in 2014. Monitoring of the area is still ongoing.

Seepage collected in the trench and recovery well is pumped back to the mill to be used as process water. The pumping occurs in the warmer months beginning when freshet starts. The recovery well is pumped year-round when water is available.

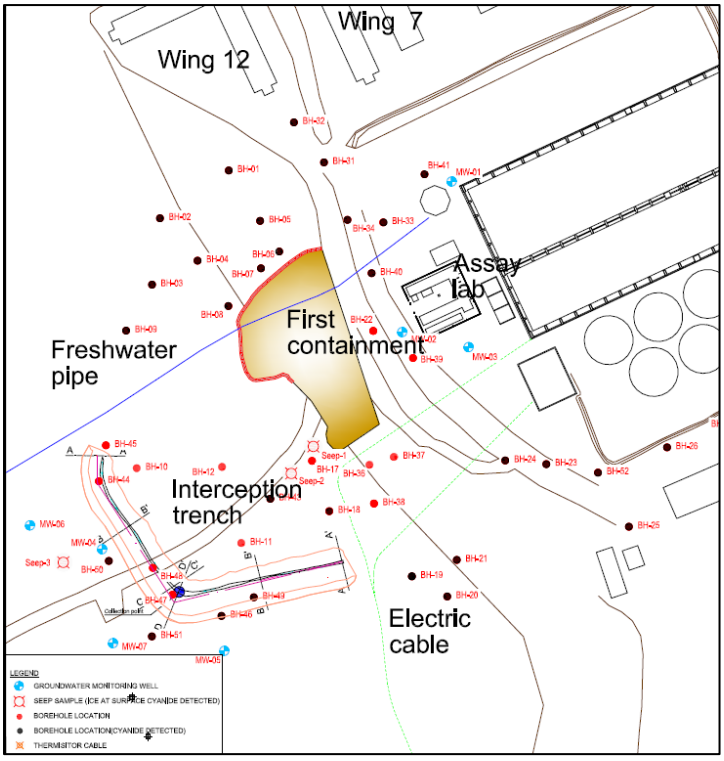


Figure 3.1: Mill seepage area

3.3.10 Portage RSF Water Management

The Portage Rock Storage Facility water management system consists of three sumps located behind the Portage waste dump to collect contact water (WEP-1, WEP-2, and ST-16). The location of these sumps is indicated on Figure 3.2. Water collected from WEP-1 and WEP-2 is pumped to the ST-16 sump and then transferred to either North Cell or pit A.

Low contaminant levels are still observed by the sampling program. The Freshet Action Plan (Appendix D) presents more information on the history, long term monitoring plan, and remedial actions for this location.

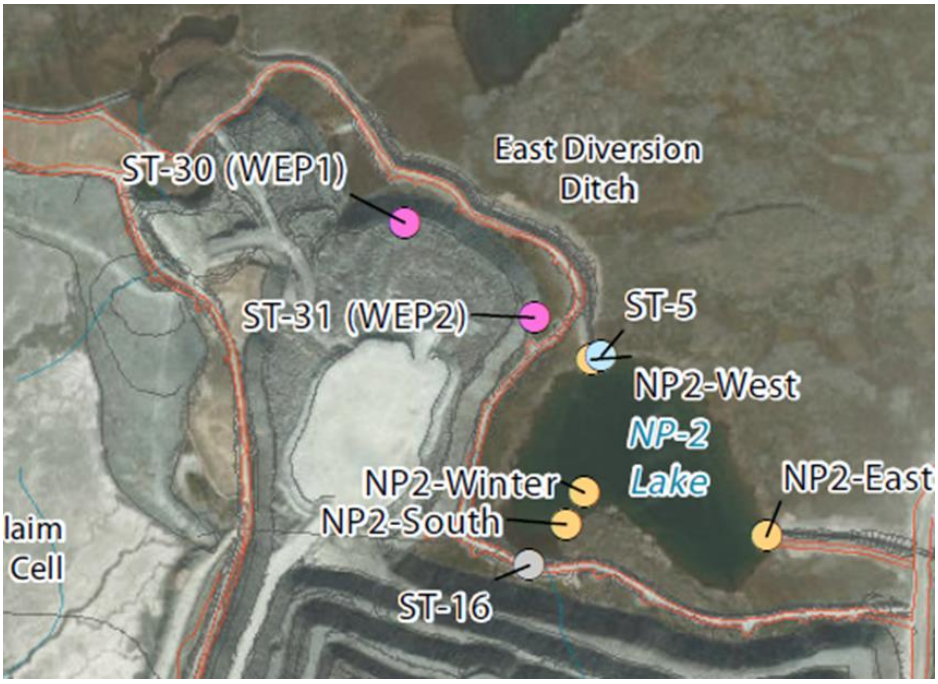


Figure 3.2: RSF seepage area

3.3.11 East Dike Seepage Collection

The East Dike seepage system collects the East Dike seepage from Second Portage Lake (2PL). The seepage is collected in two pumping stations (as illustrated in Figure 3.3) and is discharged, as a combined flow, through a diffuser, to 2PL (in accordance with the Water License and the MDMER criteria). When the discharge does not meet the discharge criteria (mainly because of TSS level), the seepage water is pumped to the Portage Pit area (usually at freshet and after large precipitation events in summer) specifically in the Portage Central Waste Rock area, where the water flows in the rock backfill pores towards Pit B and Pit E.

At closure, this seepage water will be an inflow contributing to the natural pit reflooding process.

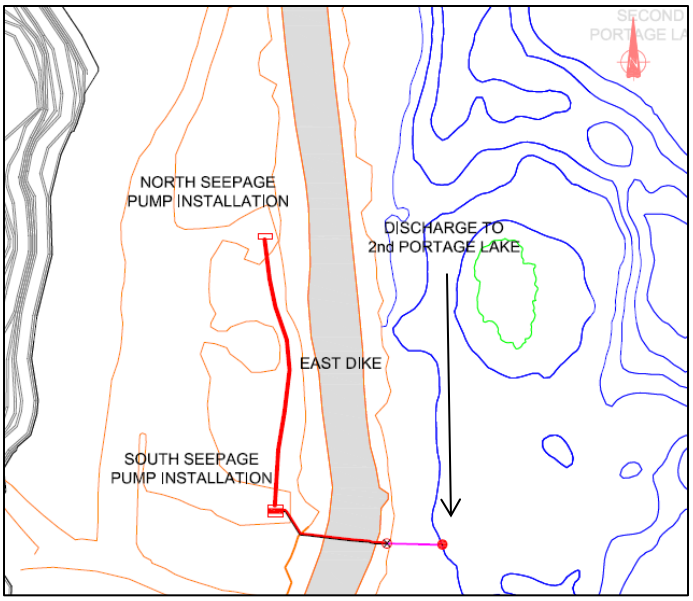


Figure 3.3: East Dike pumping system

3.3.12 Central Dike Seepage

The Central Dike downstream area collects the Central Dike seepage. The source of that seepage includes water from the TSF and a regional component. The water from Central Dike downstream is pumped to either the in-pit area or the TSF (as illustrated in Figure 3.4) as to maintain the downstream seepage collection pond level within the operational levels specified in the OMS Manual.

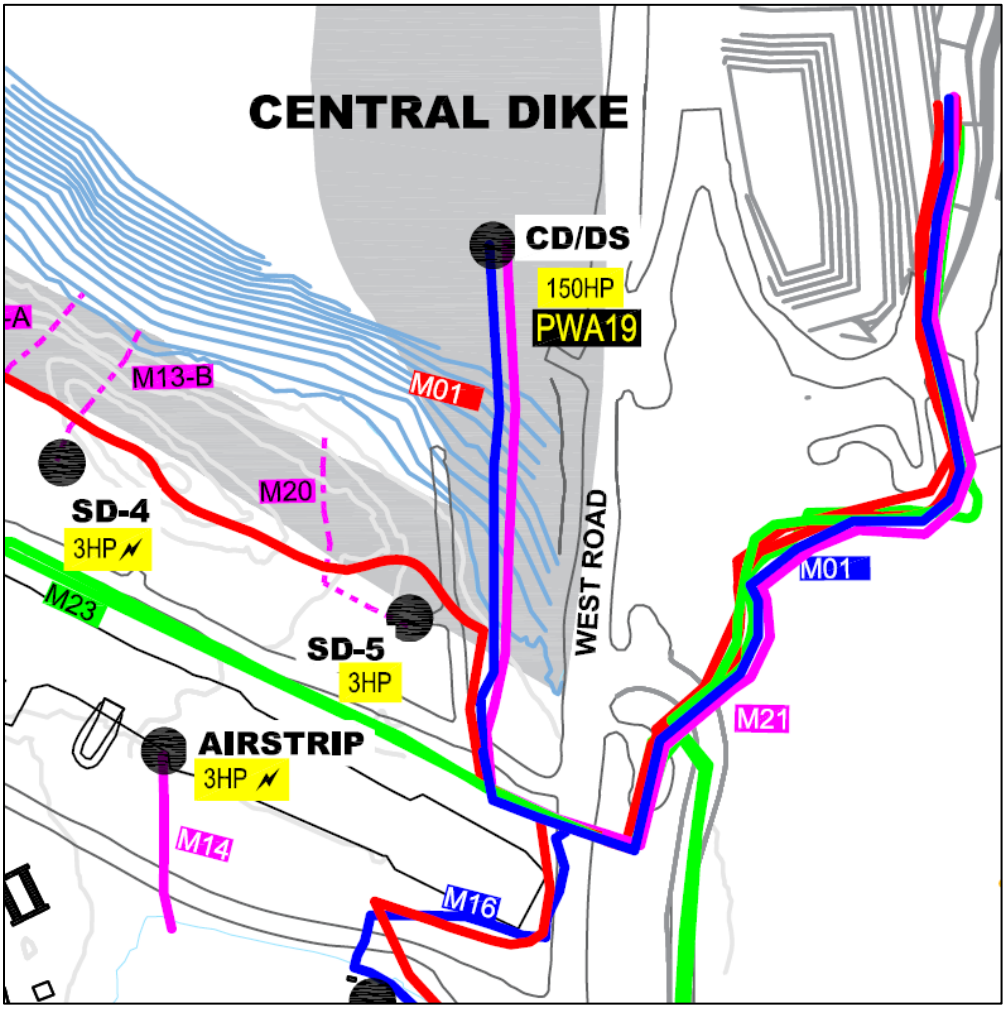


Figure 3.4: Central Dike seepage pumping system

3.4 PIT FLOODING – CLOSURE CONCEPT

This section presents the pit flooding concept for closure. As per the water License requirement, Agnico will provide at least 30 days' notice to the Nunavut Water Board and Inspector prior to starting the flooding of each pit from water obtained from Third Portage Lake and Wally Lake.

As prescribed in the Nunavut Water Board Water License No. 2AM-MEA1530 (Part E, Conditions 1 and 2), the use of water from Third Portage Lake, for all purposes, including flooding of the pits, shall not exceed […] a maximum of 4,935,000 m^3 starting in 2018 through to the expiry of the License 2AM-MEA1530. The use of water from Wally Lake shall not exceed a total 4,185,000 m^3 per year starting in 2018 through the expiry of the License 2AM-MEA1530.

The reflooding concept for the Vault area includes passive flooding until the beginning of closure and then active flooding using water from Wally Lake.

The reflooding concept of the Portage and Goose area includes management of water from tailings deposition activity, water treatment, passive flooding, water transfers between the pits, and active flooding from Third Portage Lake. More details on the in-pit water treatment strategy and design, including the discharge location and assimilative capability of the receiver is required to advance the Portage Area flooding concept. The assimilative capacity of Third Portage Lake will be assessed with the objective of maintaining baseline or guideline/protective water quality in the lake.

Updates on the pit flooding concept will be provided in the next update of the ICRP and the final in-pit water treatment and pit flooding strategy will be submitted as part of the FCRP.

3.4.1 Portage and Goose Area Flooding

The Portage and Goose area will be connected as one waterbody when the pit water level reaches approximately elevation 131.0 masl). Figure 3.5 shows a concept of the the extent of the flooded area at closure.

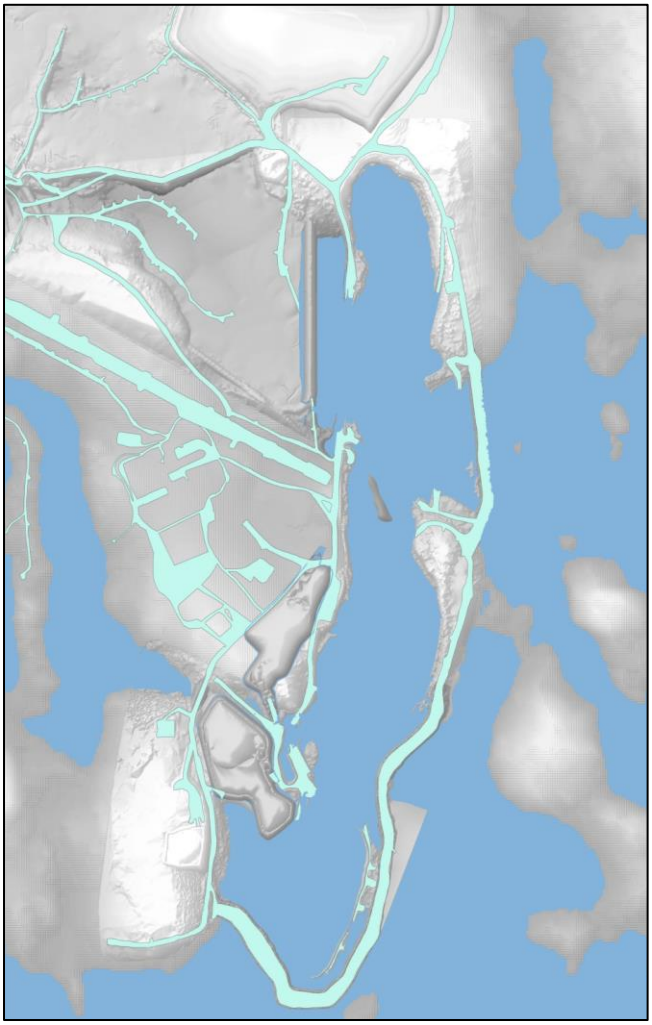


Figure 3.5: Flooded Portage and Goose area at closure

The current concept for Portage and Goose pits flooding at closure is to treat reclaim water from each pit by using a water treatment plant (WTP) and to discharge the treated water in Third Portage Lake. The pits area will then be reflooded using a combination of passive and active water inflow (from Third Portage Lake). This is a conservative assumption that will be revised in the ICRP and FCRP as further data becomes available on the water treatment design for the in-pit water. Different flooding sequence concepts are being looked at for the reflooding of the Portage and Goose Area to ensure the closure objectives will be met. The flooding sequence will be informed by the water treatment strategy that is being established. The location of the discharge, type of treatment, water quality and discharge criteria of the effluent, as well as yearly volume of water to be discharged are being assessed as part of the design of the closure strategy and will impact the pit reflooding strategy. Some of the work associated with the water quality forecast and water treatment plan design is presented in the Meadowbank Water Quality Forecasting Update Technical Note rev. 00 completed by AtkinsRéalis (AtkinsRealis, 2024). An update on the pit

flooding concept will be provided in the next ICRP update and the final design will be submitted as part of the FCRP.

Agnico is committed to update the Water Quality Forecast Model using up to date data on a yearly basis and to use this model to inform on the water treatment design and re-flooding sequence.

The final elevation of the reflooding will be the elevation of Third Portage Lake which is around 133.7 masl based on available data. The Bay-Goose Dike and South Camp Dike will be breached to allow reconnection of the area with Third Portage Lake once the closure water quality objectives for pit flooding will have been achieved, as per the condition of the Water License 2AM-MEA1530, part E, item 7. The dikes shall not be breached until the water quality in the re-flooded area meets CCME Water Quality Guidelines for the Protection of Aquatic Life, baseline concentrations, or appropriate site-specific water quality objectives, as per the Water License. It is not planned to breach East Dike and reconnect the area with Second Portage Lake as per the current closure concept, to maintain the water level difference between Second and Third Portage Lake.

Details of the complete mechanical flooding system will be available in the Final Closure and Reclamation Plan and is currently involving syphon systems. Table 3-2 shows the main volumes for the Portage and Goose Area flooding concept.

Pit Flooding Profile – Portage and Goose Area				
Year	Treated Water Volume (m^3)	Natural Inflow Water Volume (m^3)	Active Flooding Water Volume (m^3)	Volume of water in Pit (at end of year)
2027		898 643	0	19 962 196.00
2028	756 019	898 643	0	21 582 111.00
2029	2 999 424	836 407	0	21 032 780.00
2030	2 999 424	836 407	0	20 163 767.00
2031	2 999 424	836 407	0	19 240 753.00
2032	3 007 642	836 407	0	18 336 521.00
2033	2 999 424	836 407	0	17 440 508.00
2034	2 999 424	836 407	0	16 544 494.00
2035	2 999 424	836 407	0	15 648 480.00
2036	3 007 642	836 407	0	14 744 248.00
2037	2 999 424	836 407	0	14 024 171.00
2038	3 167 146	836 407	4 935 000	12 960 435.00
2039	0	836 407	4 935 000	19 980 845.00
2040	0	836 407	2 841 723	27 037 255.00
2041	0	836 407	0	31 982 388.00
2042	0	836 407	0	34 085 799.00
2043	0	836 407	0	36 189 209.00
2044	0	836 407	0	38 292 619.00
Total	**30 934 417**	**15 179 798**	**12 711 723**	**38 292 619.00**

Table 3-2: Portage and Goose Area flooding profile

3.4.2 Vault Area Flooding

The Vault Pit area is composed of many basins in the former lake (Vault Atteunation Pond) and two pits that are all linked together (Vault Pit and Phaser Pit). The flooding of the Vault Pit area will involve a combination of passive flooding (runoff) and active flooding using water from Wally Lake (while respecting the Water License limit). The concept for the reflooding system is currently including a syphon system. Table 3-3 shows the main assumptions and data for the Vault Area flooding concept.

The final elevation of the reflooding will be 139.9 masl for Phaser and Vault Lake. The Vault Dike will be breached to allow reconnection of the area with Wally Lake when the closure water quality objectives for pit flooding will have been achieved, as per the condition of the Water License 2AM-MEA1530, part E, item 7. The dikes shall not be breached until the water quality in the re-flooded area meets CCME Water Quality Guidelines for the Protection of Aquatic Life, baseline concentrations, or appropriate site-specific water quality objectives, as per the Water License.

BB Phaser Pit and Phaser Lake will be flooded exclusively from their watershed run off inflows until the target elevation of Wally is reached.

Table 3-3: Vault Area flooding profile

Pit Flooding Profile – Vault Area (Vault, Phaser, and BB Phaser Pits)				
Year	Treated Water Volume (m^3)	Natural Inflow Water Volume (m^3)	Active Flooding Water Volume (m^3)	Volume of water in Pit (at end of year)
2024	0	542 442	0	1 834 712
2025	0	542 442	314 194	1 989 592
2026	0	542 442	0	2 144 471
2027	0	542 442	0	2 299 351
2028	0	542 442	0	2 454 230
2029	0	542 442	0	2 780 579
2030	0	542 442	0	3 106 928
2031	0	542 442	0	3 433 277
2032	0	542 442	0	3 759 626
2033	0	542 442	0	4 085 975
2034	0	542 442	0	6 590 778
2035	0	542 442	0	10 762 247
2036	0	542 442	0	14 933 717
2037	0	542 442	0	19 105 186
2038	0	542 442	0	23 105 186
2039	0	542 442	0	27 105 186
2040	0	542 442	0	30 438 520
Total	**0**	**9 221 514**	**314 194**	**159 929 561**

4 MEADOWBANK WATER QUALITY FORECASTING UPDATE

An updated water quality forecast report is presented in Appendix C. That update is a continuation of a series of yearly water quality modelling updates, which began in 2012, and will continue until mine closure, as per the Water License part E item 7. The purposes of the report are to identify, through a mass balance approach, the contaminants of concern during the pit flooding process, and to inform water treatment design and requirements for closure activities. This update builds on the work of previous years as new monitoring data is available. Forecasted model values of the prior years are compared with the actual sample results from the following years for model accuracy purposes.

The latest water quality forecast identified that treatment may be required for aluminium, arsenic, cadmium, copper, mercury, nickel, total dissolved solids (TDS), total ammonia, pH, total suspended solids (TSS), and potentially low concentration of total cyanide as the pit water quality may exceed water quality objectives, based on the completely mixed assumption. For the Vault area, ammonia and nitrate are the parameters of concern, but no actual or forecasted concentration exceeds the Type A Water License discharge requirements for this area.

As the afore mentioned parameters may be of concern, treatment options for the pit water are being assessed as per the schedule outlined in the Meadowbank Water Quality Forecasting Update Technical Note rev. 00 (AtkinsRéalis, 2024). Updates on the pit flooding and water treatment strategy will be provided in the next ICRP update and the final design will be submitted as part of the FCRP.

As part of the ongoing work on the water treatment concept, a sampling program was performed in the fall of 2023 to sample pit water from various locations and depths within the pits including near the tailings/water interface. Tailings pore water sampling was also completed. It is planned to continue this sampling program in 2024 so that results can be used in future water quality forecast work.

Agnico is committed to implementing the following strategy related to the water quality forecast:

1. Continue the current monthly monitoring program of all inflows and outflows of the North and South Cells TSF Pond for cyanide, a complete total and dissolved metal scan, ammonia, nitrate, fluoride, chloride, sulphates, total dissolved solids (TDS) and total suspended solids (TSS). This will provide an indication of the runoff quality that accumulated in these ponds following the end of tailings deposition in these areas.
2. Considering that deposition of the tailings is now occurring in the pits, regularly monitor pit water quality (Portage and Goose), when the site can be safely accessed, and analyze for cyanide, total and dissolved metals, ammonia, nitrate, chloride, fluoride, sulphates, total dissolved solids (TDS), and total suspended solids (TSS). This information will be useful in developing and calibrating a water quality forecast model of the pit water quality based on loadings from the mill effluent, surface runoff, and possible pit

seepages. Consider measuring the conductivity of water in the pits at different depths to detect if there is any stratification occurring in the pit lakes.

3. Once Portage and Goose Pits are hydraulically connected, it is recommended to sample the water at different points in the pit area to evaluate the mixing efficiency over the entire area. The samples should be taken at different depths over the entire area of the flooded pits before and after the filling season.
4. Continue to sample and analyze, as per the Water License requirement, water from the Vault Pit, Vault Attenuation Pond, Phaser Pit, and Phaser Attenuation Pond.
5. Continue bench scale water treatment tests to evaluate the contaminant removal efficiency using treatment approaches such as lime neutralization, coagulation/flocculation with aluminum sulphate or ferric sulphate, and coagulation/flocculation with proprietary coagulants designed for metal removal, as well as alternative treatment options such as biological treatment for ammonia.

Alternatives water quality modelling methodologies are actively being assessed to further refine the understanding and forecasting of water quality on site. In addition, studies are on going to define the most optimal water management strategies to improve water quality on site for closure.

5 REFERENCES

1. Agnico (2024) – 2023 Mine Waste and Tailings Management Plan
2. Environment Canada (2011a) - National Climate Data and Information Archive, http://climat.meteo.gc.ca/advanceSearch/searchHistoricData_f.html.
14. Nunavut Water Board, Water Licence NO: 2AM-MEA0815, June 9, 2008, to May 3, 2015.
3. Golder Associates Ltd. (Golder), 2003. Report on Permafrost Thermal Regime Baseline Studies, Meadowbank Project. December 18, 2003.
4. Golder (2009) – Meadowbank Gold Project Updated Water Management Plan. Golder Associates Limited. July 2009.
5. SNC (2013) – Water Management Plan 2012. SNC Lavalin. March 2013.
6. AtkinsRéalis (2024) – Meadowbank Water Quality Forecasting Update for the 2023 Water Management Plan. March 2024.

APPENDIX A – 2023 WATER BALANCE UPDATE

Note: Reported values for October, November and December are estimated based on historical values, due to time constraint to produce the water balance for the end of the year 2023.

	Month	Nbr days	Fresh Water 3rd Portage Lake					Fresh Water 3rd Porta	Water Transfer							Water Transfer	Reclaim Tailings Water							Reclaim Water
											Enter 1 for the origin			Enter 1 for the destination					Enter 1 for the origin					
raw inflow			Fresh Water Flow (m^3/h)	Total Fresh Water Volume (m^3) x	Total Camp Water Volume (m^3)	Total Mill Fresh Water Volume (m^3)	Fresh water per tons (m^3/t)		Transfer flow (m^3/h)	Total Reclaim Water Volume (m3)	GOOSE	PIT A	PIT E	GOOSE	PIT A	PIT E		Reclaim Water Flow (m^3/h)	Total Reclaim Water Volume (m^3)	NC	SC	PIT E	PIT A	Reclaim water per tons (m^3/t)	
2013 AVERAGES & TOTALS			**181**	**1 587 409**	**34675**	**1 552 734**	**0.37**											**261**	**2 286 400**					**0.56**	
2014 AVERAGES & TOTALS			**125**	**1 098 373**	**34675**	**1 063 698**	**0.26**											**279**	**2 447 002**					**0.59**	
2015 AVERAGES & TOTALS			**93**	**812 285**	**34675**	**777 610**	**0.20**											**313**	**2 743 821**					**0.68**	
2016 AVERAGES & TOTALS			**65**	**572 843**	**40532**	**539 482**	**0.14**											**328**	**2 880 483**					**0.72**	
2017 AVERAGES & TOTALS			**55**	**477 383**	**42100**	**448 817**	**0.12**											**339**	**2 972 495**					**0.77**	
2018 AVERAGES & TOTALS			**114**	**988 132**	**39944**	**948 188**	**0.29**											**249**	**2 191 390**					**0.67**	
2019 AVERAGES & TOTALS			**255**	**2 226 927**	**40222**	**2 186 705**	**0.80**											**69**	**606 807**					**0.24**	
2020 AVERAGES & TOTALS			**238**	**2 086 286**	**33637**	**2 052 649**	**0.79**			**1 376 334**									**1 367 816**					**0.41**	
2021 AVERAGES & TOTALS			**123**	**1 079 342**	**31461**	**1 053 471**	**0.20**			**670 758**									**2 735 553**					**0.78**	
2022 AVERAGES & TOTALS			**115**	**993 806**	**35823**	**957 983**	**0.26**												**2 888 010**	**0.804**	**1.004**			**0.78**	
Q1	January-23	31	72	53 462	3288	50 174	0.15		152	112 802			1		1			379	281 692			1	0	0.81	
	February-23	28	88	58 818	2944	55 874	0.18		235	158 175			1		1			370	248 962			1	0	0.76	
	March-23	31	88	65 387	2980	62 407	0.19		218	162 309			1		1			383	285 244			1	0	0.83	
Q2	April-23	30	89	64 077	3131	60 946	0.21		221	159 090			1		1			400	287 931			1	0	0.96	
	May-23	31	69	51 171	3024	48 147	0.28		175	130 514			1		1			360	268 126			1	0	1.47	
	June-23	30	103	74 060	3003	71 057	0.20		105	75 786			1		1			425	306 018			0.35	0.65	0.84	
Q3	July-23	31	127	94 371	3066	91 305	0.26		162	120 598			1		1			422	313 608			0	1	0.87	
	August-23	31	159	118 099	2983	115 116	0.32		110	81 613			1		1			395	294 203			0	1	0.81	
	September-23	30	118	84 801	2902	81 899	0.24		78	56 360			1		1			418	301 079			0.294	0.706	0.85	
Q4	October-23	31	91	68 070	2836	65 234	0.22		195	145 371			1		1			378	281 544			1	0	0.90	
	November-23	30	99	70 979	2957	68 022	0.22		182	130 811			1		1			341	245 475			1	0	0.76	
	December-23	31	93	69 460	2894	66 566	0.23		195	145 115			1		1			384	285 346			1	0	0.95	
2023 AVERAGES & TOTALS			**100**	**872 754**	**36008**	**836 746**	**0.22**												**3 399 228**					**0.90**	
Q1	January-24	31	97	72 156	2945	69 211	0.20		160	119 040			1		1			390	290 042			1	0	0.80	
	February-24	29	97	67 344	2755	64 589	0.20		160	111 360			1		1			389	270 723			1	0	0.80	
	March-24	31	97	72 156	2945	69 211	0.20		160	119 040			1		1			390	290 067			1	0	0.80	
Q2	April-24	30	84	60 588	2850	57 738	0.20		160	115 200			1		1			338	243 564			1	0	0.80	
	May-24	31	92	68 124	2945	65 179	0.20		160	119 040			1		1			368	273 858			1	0	0.80	
	June-24	30	97	69 740	2850	66 890	0.20		160	115 200			1		1			389	280 355			1	0	0.80	
Q3	July-24	31	97	72 156	2945	69 211	0.20		160	119 040			1		1			390	290 067			1	0	0.80	
	August-24	31	94	70 020	2945	67 075	0.20		160	119 040			1		1			378	281 480			1	0	0.80	
	September-24	30	97	69 740	2850	66 890	0.20		160	115 200			1		1			389	280 355			1	0	0.80	
Q4	October-24	31	82	61 132	2945	58 187	0.20		160	119 040			1		1			330	245 751			1	0	0.80	
	November-24	30	91	65 708	2850	62 858	0.20		160	115 200			1		1			367	264 146			1	0	0.80	
	December-24	31	97	72 156	2945	69 211	0.20		160	119 040			1		1			390	290 067			1	0	0.80	
2024 AVERAGES & TOTALS			**93**	**821 020**	**34770**	**786 250**	**0.20**												**3 300 475**					**0.80**	
Q1	January-25	31	99	73 391	2945	70 446	0.20		160	119 040			1		1			397	295 007			1	0	0.80	
	February-25	28	102	68 475	2660	65 815	0.20		160	107 520			1		1			410	275 269			1	0	0.80	
	March-25	31	99	73 391	2945	70 446	0.20		160	119 040			1		1			397	295 033			1	0	0.80	
Q2	April-25	30	85	61 210	2850	58 360	0.20		160	115 200			1		1			342	246 063			1	0	0.80	
	May-25	31	93	69 359	2945	66 414	0.20		160	119 040			1		1			375	278 824			1	0	0.80	
	June-25	30	99	70 956	2850	68 106	0.20		160	115 200			1		1			396	285 243			1	0	0.80	
Q3	July-25	31	99	73 391	2945	70 446	0.20		160	119 040			1		1			397	295 033			1	0	0.80	
	August-25	31	96	71 248	2945	68 303	0.20		160	119 040			1		1			385	286 417			1	0	0.80	
	September-25	30	99	70 956	2850	68 106	0.20		160	115 200			1		1			396	285 243			1	0	0.80	
Q4	October-25	31	83	61 758	2945	58 813	0.20		160	119 040			1		1			334	248 269			1	0	0.80	
	November-25	30	93	66 924	2850	64 074	0.20		160	115 200			1		1			374	269 034			1	0	0.80	
	December-25	31	99	73 391	2945	70 446	0.20		160	119 040			1		1			397	295 033			1	0	0.80	
2025 AVERAGES & TOTALS			**95**	**834 451**	**34675**	**799 776**	**0.20**												**3 354 466**					**0.80**	
Q1	January-26	31	98	72 898	2945	69 953	0.20		160	119040								394	293 025			1	0	0.80	
	February-26	28	108	72 898	2660	70 238	0.20		160	107520								436	293 051			0	1	0.80	
	March-26	31	98	72 898	2945	69 953	0.20		160	119040								394	293 051			0	1	0.80	

Q2	April-26	30	95	68 143	2850	65 293	0.20	160	115200							380	273 937			0	1	0.80
	May-26	31	92	68 143	2945	65 198	0.20	160	119040							368	273 937			0	1	0.80
	June-26	30	95	68 143	2850	65 293	0.20	160	115200							380	273 937			0	1	0.80
Q3	July-26	31	98	72 834	2945	69 889	0.20	160	119040							394	292 791			0	1	0.80
	August-26	31	98	72 834	2945	69 889	0.20	160	119040							394	292 791			0	1	0.80
	September-26	30	101	72 834	2850	69 984	0.20	160	115200							407	292 791			0	1	0.80
Q4	October-26	31	92	68 326	2945	65 381	0.20	160	119040							369	274 672			0	1	0.80
	November-26	30	95	68 326	2850	65 476	0.20	160	115200							381	274 672			0	1	0.80
	December-26	31	92	68 326	2945	65 381	0.20	160	119040							369	274 672			0	1	0.80
2026 AVERAGES & TOTALS			**97**	**846 605**	**34675**	**811 930**	**0**										**3 403 328**					
Q1	January-27	31	98	72 898	2945	69 953	0.20	160	119040							392	291 593			0	1	0.80
	February-27	28	108	72 898	2660	70 238	0.20	160	107520							434	291 593			0	1	0.80
	March-27	31	98	72 898	2945	69 953	0.20	160	119040							392	291 593			0	1	0.80
Q2	April-27	30	95	68 143	2850	65 293	0.20	160	115200							379	272 574			0	1	0.80
	May-27	31	92	68 143	2945	65 198	0.20	160	119040							366	272 574			0	1	0.80
	June-27	30	95	68 143	2850	65 293	0.20	160	115200							379	272 574			0	1	0.80
Q3	July-27	31	98	72 834	2945	69 889	0.20	160	119040							392	291 334			0	1	0.80
	August-27	31	98	72 834	2945	69 889	0.20	160	119040							392	291 334			0	1	0.80
	September-27	30	101	72 834	2850	69 984	0.20	160	115200							405	291 334			0	1	0.80
Q4	October-27	31	92	68 326	2945	65 381	0.20	160	119040							367	273 306			0	1	0.80
	November-27	30	95	68 326	2850	65 476	0.20	160	115200							380	273 306			0	1	0.80
	December-27	31	92	68 326	2945	65 381	0.20	160	119040							367	273 306			0	1	0.80
2027 AVERAGES & TOTALS			**97**	**846 605**	**34675**	**811 930**																
Q1	January-28	31	98	72 898	2945	69 953	0.20	160	119040							392	291 593			0	1	0.80
	February-28	29	105	72 898	2755	70 143	0.20	160	111360							419	291 593			0	1	0.80
	March-28	31	98	72 898	2945	69 953	0.20	160	119040							392	291 593			0	1	0.80
Q2	April-28	30	95	68 143	2850	65 293	0.20	160	115200							379	272 574			0	1	0.80
	May-28	31	92	68 143	2945	65 198	0.20	160	119040							366	272 574			0	1	0.80
	June-28	30	95	68 143	2850	65 293	0.20	160	115200							379	272 574			0	1	0.80
Q3	July-28	31	4	2 945	2945	0		160	119040							0	0					0.80
	August-28	31	4	2 945	2945	0		50	37200	1		1				0	0					0.80
	September-28	30	4	2 850	2850	0		50	36000	1		1				0	0					0.80
Q4	October-28	31	4	2 945	2945	0		50	37200	1		1				0	0					0.80
	November-28	30	4	2 850	2850	0		50	36000	1		1				0	0					0.80
	December-28	31	4	2 945	2945	0		50	37200	1		1				0	0					0.80
2028 AVERAGES & TOTALS			**50**	**440 605**	**34770**	**405 835**										**194**	**1 692 502**					
Q1	January-29	31	4	2 945	2945	0		200	148800	0	1	1				0	0					
	February-29	28	4	2 660	2660	0		200	134400	0	1	1				0	0					
	March-29	31	4	2 945	2945	0		200	148800	0	1	1				0	0					
Q2	April-29	30	4	2 850	2850	0		200	144000	1	1	1				0	0					
	May-29	31	4	2 945	2945	0		200	148800	1	1	1				0	0					
	June-29	30	4	2 850	2850	0		200	144000	1	1	1				0	0					
Q3	July-29	31	4	2 945	2945	0		200	148800	1	1	1				0	0					
	August-29	31	4	2 945	2945	0		200	148800	1	1	1				0	0					
	September-29	30	4	2 850	2850	0		200	144000	1	1	1				0	0					
Q4	October-29	31	4	2 945	2945	0		200	148800	1	1	1				0	0					
	November-29	30	4	2 850	2850	0		200	144000	1	1	1				0	0					
	December-29	31	4	2 945	2945	0		200	148800	1	1	1				0	0					
2029 AVERAGES & TOTALS			**4**	**34 675**	**34675**	**0**										**0**	**0**					
Q1	January-30	31	4	2 945	2945	0		250	186000	1	1	1				0	0					
	February-30	28	4	2 660	2660	0		250	168000	1	1	1				0	0					
	March-30	31	4	2 945	2945	0		250	186000	1	1	1				0	0					
Q2	April-30	30	4	2 850	2850	0		250	180000	1	1	1				0	0					
	May-30	31	4	2 945	2945	0		250	186000	1	1	1				0	0					
	June-30	30	4	2 850	2850	0		250	180000	1	1	1				0	0					
Q3	July-30	31	4	2 945	2945	0		250	186000	1	1	1				0	0					
	August-30	31	4	2 945	2945	0		250	186000	1	1	1				0	0					
	September-30	30	4	2 850	2850	0		250	180000	1	1	1				0	0					
	October-30	31	4	2 945	2945	0		250	186000	1	1	1				0	0					

Q4	November-30	30	4	2 850	2850	0		250	180000		1	1	1			0	0						
	December-30	31	4	2 945	2945	0		250	186000		1	1	1			0	0						
2030 AVERAGES & TOTALS			**4**	**34 675**	**34675**	**0**										**0**	**0**						
	January-31	31	4	2 945	2945	0		250	186000		0	1	1			0	0						
Q1	February-31	28	4	2 660	2660	0		250	168000		0	1	1			0	0						
	March-31	31	4	2 945	2945	0		250	186000		0	1	1			0	0						
	April-31	30	4	2 850	2850	0		250	180000		0	1	1			0	0						
Q2	May-31	31	4	2 945	2945	0		250	186000		0	1	1			0	0						
	June-31	30	4	2 850	2850	0		250	180000		0	1	1			0	0						
	July-31	31	4	2 945	2945	0		250	186000		0	1	1			0	0						
Q3	August-31	31	4	2 945	2945	0		250	186000		0	1	1			0	0						
	September-31	30	4	2 850	2850	0		250	180000		0	1	1			0	0						
	October-31	31	4	2 945	2945	0		250	186000		0	1	1			0	0						
Q4	November-31	30	4	2 850	2850	0		250	180000		0	1	1			0	0						
	December-31	31	4	2 945	2945	0		250	186 000		0.35	0.65	1			0	0						
2031 AVERAGES & TOTALS			**4**	**34 675**	**34675**	**0**										**0**	**0**						
	January-32	31	4	2 945	2945	0		250	186 000		0.35	0.65	1			0	0						
Q1	February-32	29	4	2 755	2755	0		250	174 000		0.35	0.65	1			0	0						
	March-32	31	4	2 945	2945	0		250	186 000		0.35	0.65	1			0	0						
	April-32	30	4	2 850	2850	0		250	180 000		0.35	0.65	1			0	0						
Q2	May-32	31	4	2 945	2945	0		250	186 000		0.35	0.65	1			0	0						
	June-32	30	4	2 850	2850	0		250	180 000		0.35	0.65	1			0	0						
	July-32	31	4	2 945	2945	0		250	186 000		0.35	0.65	1			0	0						
Q3	August-32	31	4	2 945	2945	0		250	186 000		0.35	0.65	1			0	0						
	September-32	30	4	2 850	2850	0		250	180 000		0.35	0.65	1			0	0						
	October-32	31	4	2 945	2945	0		250	186 000		0.35	0.65	1			0	0						
Q4	November-32	30	4	2 850	2850	0		250	180 000		0.35	0.65	1			0	0						
	December-32	31	4	2 945	2945	0		250	186 000		0.35	0.65	1			0	0						
2032 AVERAGES & TOTALS			**4**	**34 770**	**34770**	**0**										**0**	**0**						
	January-33	31	4	2 945	2945	0		250	186000		0	1	1			0	0						
Q1	February-33	28	4	2 660	2660	0		250	168000		0	1	1			0	0						
	March-33	31	4	2 945	2945	0		120	89280		1		1			0	0						
	April-33	30	4	2 850	2850	0		120	86400		1		1			0	0						
Q2	May-33	31	4	2 945	2945	0		120	89280		1		1			0	0						
	June-33	30	4	2 850	2850	0		120	86400		1		1			0	0						
	July-33	31	4	2 945	2945	0		120	89280		1		1			0	0						
Q3	August-33	31	4	2 945	2945	0		120	89280		1		1			0	0						
	September-33	30	4	2 850	2850	0		120	86400		1		1			0	0						
	October-33	31	4	2 945	2945	0		120	89280		1		1			0	0						
Q4	November-33	30	4	2 850	2850	0		120	86400		1		1			0	0						
	December-33	31	4	2 945	2945	0		120	89280		1		1			0	0						
2033 AVERAGES & TOTALS			**4**	**34 675**	**34675**	**0**										**0**	**0**						
	January-34	31	4	2 945	2945	0		100	74400		1		1			0	0						
Q1	February-34	28	4	2 660	2660	0		100	67200		1		1			0	0						
	March-34	31	4	2 945	2945	0		100	74400		1		1			0	0						
	April-34	30	4	2 850	2850	0		100	72000		1		1			0	0						
Q2	May-34	31	4	2 945	2945	0		100	74400		1		1			0	0						
	June-34	30	4	2 850	2850	0		100	72000		1		1			0	0						
	July-34	31	4	2 945	2945	0		100	74400		1		1			0	0						
Q3	August-34	31	4	2 945	2945	0		100	74400		1		1			0	0						
	September-34	30	4	2 850	2850	0		100	72000		1		1			0	0						
	October-34	31	4	2 945	2945	0		100	74400		1		1			0	0						
Q4	November-34	30	4	2 850	2850	0		100	72000		1		1			0	0						
	December-34	31	4	2 945	2945	0		100	74400		1		1			0	0						
2034 AVERAGES & TOTALS			**4**	**34 675**	**34675**	**0**										**0**	**0**						
	January-35	31	4	2 945	2945	0		100	74 400		1		1			0	0						
Q1	February-35	28	4	2 660	2660	0		100	67 200		1		1			0	0						
	March-35	31	4	2 945	2945	0		100	74 400		1		1			0	0						
	April-35	30	4	2 850	2850	0		100	72 000		1		1			0	0						

Q2	May-35	31	4	2 945	2945	0		100	74 400		1		1			0	0						
	June-35	30	4	2 850	2850	0		100	72 000		1		1			0	0						
	July-35	31	4	2 945	2945	0		100	74 400		1		1			0	0						
Q3	August-35	31	4	2 945	2945	0		100	74 400		1		1			0	0						
	September-35	30	4	2 850	2850	0		100	72 000		1		1			0	0						
	October-35	31	4	2 945	2945	0		100	74 400		1		1			0	0						
Q4	November-35	30	4	2 850	2850	0		100	72 000		1		1			0	0						
	December-35	31	4	2 945	2945	0		100	74 400		1		1			0	0						
2035 AVERAGES & TOTALS			**4**	**34 675**	**34675**	**0**										**0**	**0**						
	January-36	31	4	2 945	2945	0		100	74 400		1		1			0	0						
Q1	February-36	29	4	2 755	2755	0		100	69 600		1		1			0	0						
	March-36	31	4	2 945	2945	0		100	74 400		1		1			0	0						
	April-36	30	4	2 850	2850	0		100	72 000		1		1			0	0						
Q2	May-36	31	4	2 945	2945	0		100	74 400		1		1			0	0						
	June-36	30	4	2 850	2850	0										0	0						
	July-36	31	4	2 945	2945	0										0	0						
Q3	August-36	31	4	2 945	2945	0										0	0						
	September-36	30	4	2 850	2850	0										0	0						
	October-36	31	4	2 945	2945	0										0	0						
Q4	November-36	30	4	2 850	2850	0										0	0						
	December-36	31	4	2 945	2945	0										0	0						
2036 AVERAGES & TOTALS			**4**	**34 770**	**34770**	**0**										**0**	**0**						
	January-37	31	4	2 945	2945	0										0	0						
Q1	February-37	28	4	2 660	2660	0										0	0						
	March-37	31	4	2 945	2945	0										0	0						
	April-37	30	4	2 850	2850	0										0	0						
Q2	May-37	31	4	2 945	2945	0										0	0						
	June-37	30	4	2 850	2850	0										0	0						
	July-37	31	4	2 945	2945	0										0	0						
Q3	August-37	31	4	2 945	2945	0										0	0						
	September-37	30	4	2 850	2850	0										0	0						
	October-37	31	4	2 945	2945	0										0	0						
Q4	November-37	30	4	2 850	2850	0										0	0						
	December-37	31	4	2 945	2945	0										0	0						
2037 AVERAGES & TOTALS			**4**	**34 675**	**34675**	**0**										**0**	**0**						
	January-38	31	4	2 945	2945	0										0	0						
Q1	February-38	28	4	2 660	2660	0										0	0						
	March-38	31	4	2 945	2945	0										0	0						
	April-38	30	4	2 850	2850	0										0	0						
Q2	May-38	31	4	2 945	2945	0										0	0						
	June-38	30	4	2 850	2850	0										0	0						
	July-38	31	4	2 945	2945	0										0	0						
Q3	August-38	31	4	2 945	2945	0										0	0						
	September-38	30	4	2 850	2850	0										0	0						
	October-38	31	4	2 945	2945	0										0	0						
Q4	November-38	30	4	2 850	2850	0										0	0						
	December-38	31	4	2 945	2945	0										0	0						
2038 AVERAGES & TOTALS			**4**	**34 675**	**34675**	**0**										**0**	**0**						
	January-39	31	4	2 945	2945	0										0	0						
Q1	February-39	28	4	2 660	2660	0										0	0						
	March-39	31	4	2 945	2945	0										0	0						
	April-39	30	4	2 850	2850	0										0	0						
Q2	May-39	31	4	2 945	2945	0										0	0						
	June-39	30	4	2 850	2850	0										0	0						
	July-39	31	4	2 945	2945	0										0	0						
Q3	August-39	31	4	2 945	2945	0										0	0						
	September-39	30	4	2 850	2850	0										0	0						
	October-39	31	4	2 945	2945	0										0	0						
Q4	November-39	30	4	2 850	2850	0										0	0						

	December-39	31	4	2 945	2945	0												0	0						
2039 AVERAGES & TOTALS			**4**	**34 675**	**34675**	**0**												**0**	**0**						
	January-40	31	4	2 945	2945	0												0	0						
Q1	February-40	29	4	2 755	2755	0												0	0						
	March-40	31	4	2 945	2945	0												0	0						
	April-40	30	4	2 850	2850	0												0	0						
Q2	May-40	31	4	2 945	2945	0												0	0						
	June-40	30	4	2 850	2850	0												0	0						
	July-40	31	4	2 945	2945	0												0	0						
Q3	August-40	31	4	2 945	2945	0												0	0						
	September-40	30	4	2 850	2850	0												0	0						
	October-40	31	4	2 945	2945	0												0	0						
Q4	November-40	30	4	2 850	2850	0												0	0						
	December-40	31	4	2 945	2945	0												0	0						
2040 AVERAGES & TOTALS			**4**	**34 770**	**34770**	**0**												**0**	**0**						
	January-41	31	4	2 945	2945	0												0	0						
Q1	February-41	28	4	2 660	2660	0												0	0						
	March-41	31	4	2 945	2945	0												0	0						
	April-41	30	4	2 850	2850	0												0	0						
Q2	May-41	31	4	2 945	2945	0												0	0						
	June-41	30	4	2 850	2850	0												0	0						
	July-41	31	4	2 945	2945	0												0	0						
Q3	August-41	31	4	2 945	2945	0												0	0						
	September-41	30	4	2 850	2850	0												0	0						
	October-41	31	4	2 945	2945	0												0	0						
Q4	November-41	30	4	2 850	2850	0												0	0						
	December-41	31	4	2 945	2945	0												0	0						
2041 AVERAGES & TOTALS			**4**	**34 675**	**34675**	**0**												**0**	**0**						
	January-42	31	4	2 945	2945	0												0	0						
Q1	February-42	28	4	2 660	2660	0												0	0						
	March-42	31	4	2 945	2945	0												0	0						
	April-42	30	4	2 850	2850	0												0	0						
Q2	May-42	31	4	2 945	2945	0												0	0						
	June-42	30	4	2 850	2850	0												0	0						
	July-42	31	4	2 945	2945	0												0	0						
Q3	August-42	31	4	2 945	2945	0												0	0						
	September-42	30	4	2 850	2850	0												0	0						
	October-42	31	4	2 945	2945	0												0	0						
Q4	November-42	30	4	2 850	2850	0												0	0						
	December-42	31	4	2 945	2945	0												0	0						
2042 AVERAGES & TOTALS			**4**	**34 675**	**34675**	**0**												**0**	**0**						
	January-43	31	4	2 945	2945	0												0	0						
Q1	February-43	28	4	2 660	2660	0												0	0						
	March-43	31	4	2 945	2945	0												0	0						
	April-43	30	4	2 850	2850	0												0	0						
Q2	May-43	31	4	2 945	2945	0												0	0						
	June-43	30	4	2 850	2850	0												0	0						
	July-43	31	4	2 945	2945	0												0	0						
Q3	August-43	31	4	2 945	2945	0												0	0						
	September-43	30	4	2 850	2850	0												0	0						
	October-43	31	4	2 945	2945	0												0	0						
Q4	November-43	30	4	2 850	2850	0												0	0						
	December-43	31	4	2 945	2945	0												0	0						
2043 AVERAGES & TOTALS			**4**	**34 675**	**34675**	**0**												**0**	**0**						
	January-44	31	4	2 945	2945	0												0	0						
Q1	February-44	29	4	2 755	2755	0												0	0						
	March-44	31	4	2 945	2945	0												0	0						
	April-44	30	4	2 850	2850	0												0	0						
Q2	May-44	31	4	2 945	2945	0												0	0						

	June-44	30	4	2 850	2850	0												0	0						
Q3	July-44	31	4	2 945	2945	0												0	0						
	August-44	31	4	2 945	2945	0												0	0						
	September-44	30	4	2 850	2850	0												0	0						
Q4	October-44	31	4	2 945	2945	0												0	0						
	November-44	30	4	2 850	2850	0												0	0						
	December-44	31	4	2 945	2945	0												0	0						
2044 AVERAGES & TOTALS			**4**	**34 770**	**34770**	**0**												**0**	**0**						
Q1	January-45	31	4	2 945	2945	0												0	0						
	February-45	28	4	2 660	2660	0												0	0						
	March-45	31	4	2 945	2945	0												0	0						
Q2	April-45	30	4	2 850	2850	0												0	0						
	May-45	31	4	2 945	2945	0												0	0						
	June-45	30	4	2 850	2850	0												0	0						
Q3	July-45	31	4	2 945	2945	0												0	0						
	August-45	31	4	2 945	2945	0												0	0						
	September-45	30	4	2 850	2850	0												0	0						
Q4	October-45	31	4	2 945	2945	0												0	0						
	November-45	30	4	2 850	2850	0												0	0						
	December-45	31	4	2 945	2945	0												0	0						
2045 AVERAGES & TOTALS			**4**	**34 675**	**34675**	**0**												**0**	**0**						

Mill												North Cell										
Mill Throughput (t)	Moisture content (%)	Water Content (m^3) x	Mill Process Water (m^3)	Enter 1 for the destination: NC	SC	GOOSE	PIT E	PIT A	Total water consumption (m^3/h)	Mill Throughput cumulative (t)	Total water per tons (m^3/t)	Runoff Volume (m^3)	Total Free Water Volume (m^3)	Total Ice Volume (m^3)	Total Pond Volume (Ice + Water) (m^3)	Tailings Deposited (t)	Cummulative Tailings Deposited (m^3)	Cummulative Volume (Tailings + Pond) (m^3)	Volume Available Remaining (m^3)	Flat Geometry Cell Elevation (m)	TSF Deposition Plan Ice Elevation (m)	Surveyed Ice elevation (m)
4 142 842	**1.14%**	**47 083**	**3 886 217**						**442**		**0.94**	**159832**				**4 142 842**						
4 120 164	**0.90%**	**37 075**	**3 547 775**						**405**		**0.86**	**177594**				**3 650 809**						
4 030 158	**0.99%**	**37 135**	**3 559 646**						**406**		**0.89**	**82885**				**1 292 685**						
3 992 396	**0.99%**	**37 991**	**3 457 956**						**393**		**0.87**	**9289**				**0**						
3 853 027	**0.99%**	**34 438**	**3 455 750**						**396**		**0.90**	**148 451**				**0**						
3 264 050	**0.00%**	**39 441**	**3 179 019**						**365**		**0.97**	**148451**				**474 746**						
2 750 145	**2.10%**	**57 567**	**2 851 079**						**324**		**1.09**	**148451**				**603 632**						
2 602 828	**1.19%**	**36 099**	**3 455 892**						**393**		**1.64**	**148451**				**0**						
3 570 525	**1.20%**	**42 837**	**3 831 861**						**437**		**1.09**	**148451**				**515 737**						
3 788 703	**1.43%**	**42 061**	**3 888 054**						**446**		**1.05**	**148451**				**0**						
348 343	1.63%	5 853	337 719				1		450	42 012 594	0.96	0	117 017	143 021	260 038	0	15 239 920	15 499 958	292 157	149.796		
325 867	1.75%	5 146	309 982				1		458	42 338 461	0.94	0	117 017	143 021	260 038	0	15 239 920	15 499 958	292 157	149.796		
345 469	1.51%	5 195	352 846				1		471	42 683 930	1.01	0	117 017	143 021	260 038	0	15 239 920	15 499 958	292 157	149.796		
298 713	14.60%	4 481	353 358				1		489	42 982 643	1.18	0	117 017	143 021	260 038	0	15 239 920	15 499 958	292 157	149.796		
182 698	1.36%	2 510	318 783				1		429	43 165 341	1.75	0	53 889	65 865	119 754	0	15 239 920	15 359 674	432 441	149.698		
363 441	1.48%	5 418	382 493				1		528	43 528 782	1.05	77826	185 972	0	185 972	0	15 239 920	15 425 892	366 223	149.745		
358 560	0.97%	3 483	408 396				1		548	43 887 342	1.14	20794	218 460	0	218 460	0	15 239 920	15 458 380	333 735	149.767		
364 730	0.87%	3 279	412 598		0.1679		0.8321		554	44 252 072	1.13	56114	270 968	0	270 968	0	15 239 920	15 510 888	281 227	149.804		
353 573	1.07%	3 829	386 807		0.7186		0.2814		536	44 605 645	1.09	26452	268 539	0	268 539	0	15 239 920	15 508 459	283 656	149.802		
313 279	1.04%	3 258	350 036				1		470	44 918 923	1.12	0	218 488	44 750	263 238	0	15 239 920	15 503 158	288 957	149.798		
323 782	1.16%	3 756	317 253				1		440	45 242 705	0.98	0	110 560	152 678	263 238	0	15 239 920	15 503 158	288 957	149.798		
301 066	1.80%	5 419	357 331				1		477	45 543 771	1.18	0	92 133	171 105	263 238	0	15 239 920	15 503 158	288 957	149.798		
3 879 520	**2.44%**	**51 627**	**4 287 601**						**488**		**1.13**	**181187**				**0**						
360 780	1.36%	4 907	364 159				1		487	45 904 551	1.00	0	118 457	144 781	263 238	0	15 239 920	15 503 158	288 957	149.798		
336 720	1.06%	3 569	338 881				1		486	46 241 271	1.00	0	118 457	144 781	263 238	0	15 239 920	15 503 158	288 957	149.798		
360 780	1.20%	4 329	363 607				1		487	46 602 051	1.00	0	118 457	144 781	263 238	0	15 239 920	15 503 158	288 957	149.798		
302 940	0.85%	2 575	303 877				1		422	46 904 991	1.00	0	118 457	144 781	263 238	0	15 239 920	15 503 158	288 957	149.798		
340 620	0.91%	3 100	342 137				1		460	47 245 611	1.00	0	119 134	145 609	264 743	0	15 239 920	15 504 663	287 452	149.800		
348 700	2.50%	8 718	355 962				1		486	47 594 311	1.00	77826	354 604	0	354 604	0	15 239 920	15 594 524	197 591	149.862		
360 780	2.20%	7 937	367 215				1		487	47 955 091	1.00	20794	390 219	0	390 219	0	15 239 920	15 630 139	161 976	149.887		
350 100	1.20%	4 201	352 757	1					472	48 305 191	1.00	56114	281 903	0	281 903	350 100	15 464 343	15 746 247	45 868	149.968		
348 700	1.40%	4 882	352 127				1		486	48 653 891	1.00	26452	312 991	0	312 991	0	15 464 343	15 777 334	14 781	149.990		
305 660	1.48%	4 524	308 461				1		412	48 959 551	1.00	0	80 006	16 387	96 393	0	15 464 343	15 560 736	231 379	149.839		
328 540	1.48%	4 862	331 867				1		458	49 288 091	1.00	0	40 485	55 908	96 393	0	15 464 343	15 560 736	231 379	149.839		
360 780	1.48%	5 340	364 618				1		487	49 648 871	1.00	0	33 738	62 656	96 393	0	15 464 343	15 560 736	231 379	149.839		
4 105 100	**1.43%**	**58 943**	**4 145 668**						**469**		**1.00**	**181187**			**166 845**	**350 100**						
366 956	1.36%	4 991	370 443				1		495	50 015 827	1.00	0	43 377	53 016	96 393	0	15 464 343	15 560 736	231 379	149.839		
342 374	1.06%	3 629	344 713				1		512	50 358 201	1.00	0	43 377	53 016	96 393	0	15 464 343	15 560 736	231 379	149.839		
366 956	1.20%	4 403	369 882				1		495	50 725 157	1.00	0	43 377	53 016	96 393	0	15 464 343	15 560 736	231 379	149.839		
306 048	0.85%	2 601	307 024				1		427	51 031 205	1.00	0	43 377	53 016	96 393	0	15 464 343	15 560 736	231 379	149.839		
346 796	0.91%	3 156	348 394				1		468	51 378 001	1.00	0	44 054	53 844	97 898	0	15 464 343	15 562 241	229 874	149.840		
354 780	2.50%	8 870	362 219				1		495	51 732 781	1.00	77826	187 759	0	187 759	0	15 464 343	15 652 102	140 013	149.902		
366 956	2.20%	8 073	373 552				1		495	52 099 737	1.00	20794	223 374	0	223 374	0	15 464 343	15 687 717	104 398	149.927		
356 240	1.20%	4 275	358 995		1				481	52 455 977	1.00	56114	281 903	0	281 903	0	15 464 343	15 746 246	45 869	149.968		
354 780	1.40%	4 967	358 316				1		495	52 810 757	1.00	26452	312 991	0	312 991	0	15 464 343	15 777 334	14 781	149.990		
308 792	1.48%	4 570	311 652				1		417	53 119 549	1.00	0	80 006	16 387	96 393	0	15 464 343	15 560 736	231 379	149.839		
334 620	1.48%	4 952	338 061				1		467	53 454 169	1.00	0	40 485	55 908	96 393	0	15 464 343	15 560 736	231 379	149.839		
366 956	1.48%	5 431	370 910				1		495	53 821 125	1.00	0	33 737	62 655	96 393	0	15 464 343	15 560 736	231 379	149.839		
4 172 254	**1.43%**	**59 918**	**4 214 160**						**478**		**1.00**	**181187**				**0**						
364 492	1.36%	4 957	367 936				1		492	54 185 616	1.00	0	43 377	53 016	96 393	0	15 464 343	15 560 736	231 379	149.839		
364 492	1.06%	3 864	367 153				1		545	54 550 108	1.00	0	43 377	53 016	96 393	0	15 464 343	15 560 736	231 379	149.839		
364 492	1.20%	4 374	367 379				1		492	54 914 600	1.00	0	43 377	53 016	96 393	0	15 464 343	15 560 736	231 379	149.839		
340 717	0.85%	2 896	342 126				1		475	55 255 317	1.00	0	43 377	53 016	96 393	0	15 464 343	15 560 736	231 379	149.839		
340 717	0.91%	3 101	342 236				1		460	55 596 034	1.00	0	44 054	53 844	97 898	0	15 464 343	15 562 241	229 874	149.840		
340 717	2.50%	8 518	347 748				1		475	55 936 752	1.00	77826	187 759	0	187 759	0	15 464 343	15 652 102	140 013	149.902		
364 168	2.20%	8 012	370 691				1		491	56 300 920	1.00	20794	223 373	0	223 373	0	15 464 343	15 687 716	104 399	149.927		
364 168	1.20%	4 370	367 050				1		491	56 665 088	1.00	56114	281 902	0	281 902	0	15 464 343	15 746 246	45 869	149.968		
364 168	1.40%	5 098	367 873				1		508	57 029 256	1.00	26452	312 990	0	312 990	0	15 464 343	15 777 333	14 782	149.990		
341 632	1.48%	5 056	345 110				1		461	57 370 888	1.00	0	80 006	16 387	96 392	0	15 464 343	15 560 735	231 380	149.839		
341 632	1.48%	5 056	345 205				1		476	57 712 520	1.00	0	40 485	55 907	96 392	0	15 464 343	15 560 735	231 380	149.839		
341 632	1.48%	5 056	345 110				1		461	58 054 152	1.00	0	33 737	62 655	96 392	0	15 464 343	15 560 735	231 380	149.839		

4 233 027	**1.43%**	**60 358**	**4 275 616**						**486**		**1.00**	**181187**				**0**						
364 492	1.36%	4 957	366 504					1	490	58 418 643	1.00	0	43 376	53 016	96 392	0	15 464 343	15 560 735	231 380	149.839		
364 492	1.06%	3 864	365 695					1	542	58 783 135	1.00	0	43 376	53 016	96 392	0	15 464 343	15 560 735	231 380	149.839		
364 492	1.20%	4 374	365 921					1	490	59 147 627	1.00	0	43 376	53 016	96 392	0	15 464 343	15 560 735	231 380	149.839		
340 717	0.85%	2 896	340 763					1	473	59 488 344	1.00	0	43 376	53 016	96 392	0	15 464 343	15 560 735	231 380	149.839		
340 717	0.91%	3 101	340 873					1	458	59 829 061	1.00	0	44 054	53 843	97 897	0	15 464 343	15 562 240	229 875	149.840		
340 717	2.50%	8 518	346 385					1	473	60 169 779	1.00	77826	187 758	0	187 758	0	15 464 343	15 652 101	140 014	149.902		
364 168	2.20%	8 012	369 235					1	489	60 533 947	1.00	20794	223 373	0	223 373	0	15 464 343	15 687 716	104 399	149.927		
364 168	1.20%	4 370	365 593					1	489	60 898 115	1.00	56114	281 902	0	281 902	0	15 464 343	15 746 245	45 870	149.968		
364 168	1.40%	5 098	366 416					1	506	61 262 283	1.00	26452	312 990	0	312 990	0	15 464 343	15 777 333	14 782	149.990		
341 632	1.48%	5 056	343 743					1	459	61 603 915	1.00	0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
341 632	1.48%	5 056	343 838					1	474	61 945 547	1.00	0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
341 632	1.48%	5 056	343 743					1	459	62 287 179	1.00	0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
4 233 027	**1.43%**	**60 358**	**4 258 710**									**181187**				**0**						
364 492	1.36%	4 957	366 504					1	490	62 651 670	1.00	0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
364 492	1.06%	3 864	365 600					1	524	63 016 162	1.00	0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
364 492	1.20%	4 374	365 921					1	490	63 380 654	1.00	0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
340 717	0.85%	2 896	340 763					1	473	63 721 371	1.00	0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
340 717	0.91%	3 101	340 873					1	458	64 062 088	1.00	0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
340 717	2.50%	8 518	346 385					1	473	64 402 806	1.00	77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	2.20%	0	0						0	64 402 806	0.80	20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	1.20%	0	0						0	64 402 806	0.80	56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	1.40%	0	0						0	64 402 806	0.80	26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	1.48%	0	0						0	64 402 806	0.80	0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	1.48%	0	0						0	64 402 806	0.80	0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	1.48%	0	0						0	64 402 806	0.80	0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
2 115 627	**0.00%**	**27 709**	**2 126 046**							**767 651 585**		**181187**				**0**						
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	**0.00%**	**0**	**0**							**0**		**181187**			**0**	**0**						
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	**0.00%**	**0**	**0**							**0**		**181187**				**0**						
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	**0.00%**	**0**	**0**							**0**		**181187**				**0**						
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		

0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	**0.00%**	**0**	**0**							**0**		**181187**				**0**						
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	**0.00%**	**0**	**0**							**0**		**181187**				**0**						
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	**0.00%**	**0**	**0**							**0**		**181187**				**0**						
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	**0.00%**	**0**	**0**							**0**		**181187**				**0**						
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	**0.00%**	**0**	**0**							**0**		**181187**				**0**						
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		

0	0.00%	0	0							0		77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		181187				0						
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		181187				0						
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		181187				0						
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		181187				0						
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		181187				0						
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		

0	0.00%	0	0							0		26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	**0.00%**	**0**	**0**							**0**		**181187**				**0**						
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	**0.00%**	**0**	**0**							**0**		**181187**				**0**						
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	**0.00%**	**0**	**0**							**0**		**181187**				**0**						
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		77826	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		20794	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		56114	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		26452	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	0.00%	0	0							0		0	0	0	0	0	15 464 343	15 464 343	327 772	149.771		
0	**0.00%**	**0**	**0**							**0**		**181187**				**0**						

South Cell						South Cell	Portage Pit								Portage Pit
Total Pond Volume (Ice + Water) (m^3)	Tailings Deposited (t)	Cummulative Tailings Deposited (m^3)	Cummulative Volume (Tailings + Pond) (m^3)	Volume Available Remaining (m^3)	Flat Geometry Cell Elevation (m)		Portage Inflow (m^3)	Enter 1 for the discharge location				Volume Pumped from 3rd Portage (m^3)	Cummulative Volume (m^3)	Volume Available Remaining (m^3)	Water Elevation (m)
								NC	SC	Goose	Portage				
	0						**676 706**					**0**			
	467 197						**165 877**					**0**			
	2 737 473						**136627**					**0**			
	3 992 396						**132359**					**0**			
	3 853 027						**341192**					**0**			
	2 789 304						**2424**					**0**			
	786 010						**289269**					**0**			
	0						**696360**					**0**			
	0						**2082707**					**0**			
	0						**228210**					**0**			
702 985	0	11 172 268	11 875 253	4 357 266	143.283		4278				1		14 183 178	23 892 349	97.35
702 985	0	11 172 268	11 875 253	4 357 266	143.283		3864				1		14 417 677	23 657 851	97.90
702 985	0	11 172 268	11 875 253	4 357 266	143.283		4278				1		14 663 442	23 412 086	98.47
702 985	0	11 172 268	11 875 253	4 357 266	143.283		4140				1		14 935 617	23 139 911	99.09
962 910	0	11 172 268	12 135 178	4 097 341	143.712		4278				1		15 388 778	22 686 750	100.13
1 051 008	0	11 172 268	12 223 276	4 009 243	143.857		104772				1		16 041 501	22 034 027	101.60
1 115 944	0	11 172 268	12 288 212	3 944 307	143.964		14341				1		16 295 341	21 780 187	102.16
1 268 961	61 224	11 211 514	12 480 475	3 752 044	144.271		20587				1		16 468 646	21 606 882	102.55
1 229 046	254 078	11 374 384	12 603 430	3 629 089	144.467		54976				1		16 860 178	21 215 349	103.41
1 251 004	0	11 374 384	12 625 388	3 607 131	144.502		4278				1		16 886 535	21 188 993	103.47
1 251 004	0	11 374 384	12 625 388	3 607 131	144.502		4140				1		17 130 875	20 944 652	104.01
0	0	11 374 384	11 374 383	4 858 136	142.458		4278				1		17 277 849	20 797 679	104.33
	315 301						**228210**					**0**			
0	0	11 374 384	11 374 383	4 858 136	142.458		4278				1		17 441 637	20 633 891	104.68
0	0	11 374 384	11 374 383	4 858 136	142.458		3864				1		17 587 841	20 487 686	105.00
0	0	11 374 384	11 374 383	4 858 136	142.458		4278				1		17 748 764	20 326 764	105.35
0	0	11 374 384	11 374 383	4 858 136	142.458		4140				1		17 885 729	20 189 799	105.64
0	0	11 374 384	11 374 383	4 858 136	142.458		4278				1		18 105 539	19 969 989	106.11
0	0	11 374 384	11 374 383	4 858 136	142.458		104772				1		18 779 083	19 296 445	107.53
0	0	11 374 384	11 374 383	4 858 136	142.458		14341				1		19 185 800	18 889 728	108.37
0	0	11 374 384	11 374 383	4 858 136	142.458		20587				1		19 479 299	18 596 228	108.97
0	0	11 374 384	11 374 383	4 858 136	142.458		54976				1		19 821 502	18 254 026	109.63
0	0	11 374 384	11 374 383	4 858 136	142.458		4278				1		20 286 384	17 789 144	110.51
0	0	11 374 384	11 374 383	4 858 136	142.458		4140				1		20 459 553	17 615 975	110.83
0	0	11 374 384	11 374 383	4 858 136	142.458		4278				1		20 621 933	17 453 595	111.13
	0						**228210**					**0**			
0	0	11 374 384	11 374 383	4 858 136	142.458		4278				1		20 788 034	17 287 494	111.43
0	0	11 374 384	11 374 383	4 858 136	142.458		3864				1		20 936 396	17 139 131	111.70
0	0	11 374 384	11 374 383	4 858 136	142.458		4278				1		21 099 627	16 975 901	112.00
0	0	11 374 384	11 374 383	4 858 136	142.458		4140				1		21 237 748	16 837 780	112.25

0	0	11 374 384	11 374 383	4 858 136	142.458	4278				1		21 459 856	16 615 672	112.64
0	0	11 374 384	11 374 383	4 858 136	142.458	104772				1		22 135 713	15 939 815	113.84
0	0	11 374 384	11 374 383	4 858 136	142.458	14341				1		22 544 770	15 530 758	114.56
0	356 240	11 602 743	11 602 742	4 629 777	142.834	20587				1		22 669 776	15 405 752	114.78
0	0	11 602 743	11 602 742	4 629 777	142.834	54976				1		23 014 257	15 061 271	115.37
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		23 480 314	14 595 214	116.17
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		23 655 764	14 419 764	116.47
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		23 820 460	14 255 068	116.75
	356 240					**228210**					**0**			
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		23 985 638	14 089 890	117.02
0	0	11 602 743	11 602 742	4 629 777	142.834	3864				1		24 142 250	13 933 278	117.29
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		24 304 559	13 770 969	117.56
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		24 455 572	13 619 956	117.81
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		24 675 418	13 400 110	118.17
0	0	11 602 743	11 602 742	4 629 777	142.834	104772				1		25 345 925	12 729 603	119.27
0	0	11 602 743	11 602 742	4 629 777	142.834	14341				1		25 753 926	12 321 602	119.93
0	0	11 602 743	11 602 742	4 629 777	142.834	20587				1		26 110 696	11 964 831	120.49
0	0	11 602 743	11 602 742	4 629 777	142.834	54976				1		26 458 695	11 616 833	121.04
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		26 937 071	11 138 457	121.79
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		27 115 151	10 960 377	122.06
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		27 270 348	10 805 180	122.30
	0					**228210**					**0**			
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		27 436 213	10 639 314	122.55
0	0	11 602 743	11 602 742	4 629 777	142.834	3864				1		27 593 525	10 482 003	122.79
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		27 756 534	10 318 994	123.04
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		27 908 201	10 167 327	123.27
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		28 128 701	9 946 827	123.59
0	0	11 602 743	11 602 742	4 629 777	142.834	104772				1		28 799 862	9 275 666	124.58
0	0	11 602 743	11 602 742	4 629 777	142.834	14341				1		29 208 562	8 866 966	125.17
0	0	11 602 743	11 602 742	4 629 777	142.834	20587				1		29 566 032	8 509 496	125.67
0	0	11 602 743	11 602 742	4 629 777	142.834	54976				1		29 914 730	8 160 798	126.15
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		30 490 154	7 585 374	126.91
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		30 668 890	7 406 638	127.01
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		30 824 743	7 250 785	127.02
	0					**228210**					**0**			
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		30 877 064	7 198 463	127.02
0	0	11 602 743	11 602 742	4 629 777	142.834	3864				1		30 920 782	7 154 746	127.02
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		30 970 248	7 105 280	127.03
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		31 015 777	7 059 751	127.03
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		31 131 644	6 943 884	127.04
0	0	11 602 743	11 602 742	4 629 777	142.834	104772				1		31 786 529	6 288 999	127.08
0	0	11 602 743	11 602 742	4 629 777	142.834	14341				1		32 093 703	5 981 825	127.10
0	0	11 602 743	11 602 742	4 629 777	142.834	20587				1		32 243 266	5 832 262	127.11
0	0	11 602 743	11 602 742	4 629 777	142.834	54976				1		32 356 360	5 719 168	127.12
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		32 417 393	5 658 135	127.12
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		32 432 800	5 642 728	127.13

0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		32 424 173	5 651 355	127.13
	0					228210					0			
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		32 305 567	5 769 961	127.12
0	0	11 602 743	11 602 742	4 629 777	142.834	3864				1		32 193 227	5 882 301	127.11
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		32 072 068	6 003 460	127.10
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		31 953 867	6 121 661	127.10
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		31 888 604	6 186 924	127.09
0	0	11 602 743	11 602 742	4 629 777	142.834	104772				1		32 008 157	6 067 371	127.10
0	0	11 602 743	11 602 742	4 629 777	142.834	14341				1		31 967 268	6 108 260	127.10
0	0	11 602 743	11 602 742	4 629 777	142.834	20587				1		32 005 231	6 070 297	127.10
0	0	11 602 743	11 602 742	4 629 777	142.834	54976				1		32 010 325	6 065 203	127.10
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		31 959 758	6 115 770	127.10
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		31 867 165	6 208 363	127.09
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		31 746 938	6 328 590	127.08
	0					228210					0			
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		31 591 132	6 484 396	127.07
0	0	11 602 743	11 602 742	4 629 777	142.834	3864				1		31 445 192	6 630 336	127.06
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		31 286 833	6 788 695	127.05
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		31 132 632	6 942 896	127.04
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		31 030 169	7 045 359	127.03
0	0	11 602 743	11 602 742	4 629 777	142.834	104772				1		31 113 722	6 961 806	127.04
0	0	11 602 743	11 602 742	4 629 777	142.834	14341				1		31 035 633	7 039 895	127.03
0	0	11 602 743	11 602 742	4 629 777	142.834	20587				1		31 036 396	7 039 132	127.03
0	0	11 602 743	11 602 742	4 629 777	142.834	54976				1		31 005 490	7 070 038	127.03
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		30 917 723	7 157 805	127.03
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		30 789 130	7 286 398	127.02
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		30 631 703	7 443 825	127.01
	0					228210					0			
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		30 475 897	7 599 631	126.93
0	0	11 602 743	11 602 742	4 629 777	142.834	3864				1		30 329 957	7 745 571	126.74
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		30 171 598	7 903 930	126.53
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		30 017 397	8 058 131	126.32
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		29 914 934	8 160 594	126.18
0	0	11 602 743	11 602 742	4 629 777	142.834	104772				1		29 998 487	8 077 041	126.30
0	0	11 602 743	11 602 742	4 629 777	142.834	14341				1		29 920 398	8 155 130	126.19
0	0	11 602 743	11 602 742	4 629 777	142.834	20587				1		29 921 161	8 154 367	126.19
0	0	11 602 743	11 602 742	4 629 777	142.834	54976				1		29 890 255	8 185 273	126.15
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		29 802 488	8 273 040	126.03
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		29 673 895	8 401 633	125.85
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		29 516 468	8 559 060	125.64
	0					228210					0			
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		29 360 662	8 714 866	125.42
0	0	11 602 743	11 602 742	4 629 777	142.834	3864				1		29 208 722	8 866 806	125.20
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		29 050 363	9 025 165	124.98
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		28 896 162	9 179 366	124.75
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		28 793 699	9 281 829	124.61

0	0	11 602 743	11 602 742	4 629 777	142.834	104772				1		28 877 252	9 198 276	124.73
0	0	11 602 743	11 602 742	4 629 777	142.834	14341				1		28 799 163	9 276 365	124.61
0	0	11 602 743	11 602 742	4 629 777	142.834	20587				1		28 799 926	9 275 602	124.61
0	0	11 602 743	11 602 742	4 629 777	142.834	54976				1		28 769 020	9 306 508	124.57
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		28 681 253	9 394 275	124.44
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		28 552 660	9 522 868	124.25
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		28 395 233	9 680 295	124.02
	0					**228210**					**0**			
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		28 239 427	9 836 101	123.79
0	0	11 602 743	11 602 742	4 629 777	142.834	3864				1		28 093 487	9 982 041	123.58
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		28 031 848	10 043 680	123.49
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		27 986 211	10 089 317	123.42
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		27 998 352	10 077 176	123.44
0	0	11 602 743	11 602 742	4 629 777	142.834	104772				1		28 414 766	9 660 762	124.05
0	0	11 602 743	11 602 742	4 629 777	142.834	14341				1		28 593 739	9 481 789	124.31
0	0	11 602 743	11 602 742	4 629 777	142.834	20587				1		28 800 175	9 275 353	124.61
0	0	11 602 743	11 602 742	4 629 777	142.834	54976				1		28 930 480	9 145 048	124.80
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		28 957 129	9 118 398	124.84
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		28 937 100	9 138 427	124.81
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		28 891 357	9 184 171	124.75
	0					**228210**					**0**			
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		28 862 115	9 213 413	124.70
0	0	11 602 743	11 602 742	4 629 777	142.834	3864				1		28 831 939	9 243 589	124.66
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		28 800 144	9 275 384	124.61
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		28 768 907	9 306 621	124.57
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		28 795 928	9 279 600	124.61
0	0	11 602 743	11 602 742	4 629 777	142.834	104772				1		29 226 742	8 848 786	125.23
0	0	11 602 743	11 602 742	4 629 777	142.834	14341				1		29 420 595	8 654 933	125.50
0	0	11 602 743	11 602 742	4 629 777	142.834	20587				1		29 641 911	8 433 617	125.81
0	0	11 602 743	11 602 742	4 629 777	142.834	54976				1		29 786 616	8 288 912	126.01
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		29 828 146	8 247 382	126.07
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		29 822 517	8 253 011	126.06
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		29 791 653	8 283 874	126.02
	0					**228210**					**0**			
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		29 762 411	8 313 116	125.98
0	0	11 602 743	11 602 742	4 629 777	142.834	3864				1		29 732 235	8 343 292	125.94
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		29 700 440	8 375 088	125.89
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		29 669 203	8 406 325	125.85
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		29 696 224	8 379 304	125.89
0	0	11 602 743	11 602 742	4 629 777	142.834	104772				1		30 127 038	7 948 490	126.47
0	0	11 602 743	11 602 742	4 629 777	142.834	14341				1		30 320 891	7 754 637	126.72
0	0	11 602 743	11 602 742	4 629 777	142.834	20587				1		30 542 207	7 533 321	127.00
0	0	11 602 743	11 602 742	4 629 777	142.834	54976				1		30 686 912	7 388 616	127.01
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		30 728 442	7 347 086	127.01
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		30 722 813	7 352 715	127.01
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		30 691 950	7 383 578	127.01

	0					228210					0			
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		30 662 708	7 412 820	127.01
0	0	11 602 743	11 602 742	4 629 777	142.834	3864				1		30 630 132	7 445 396	127.01
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		30 598 336	7 477 191	127.00
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		30 567 099	7 508 428	127.00
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		30 466 500	7 609 028	126.91
0	0	11 602 743	11 602 742	4 629 777	142.834	104772				1		30 722 785	7 352 743	127.01
0	0	11 602 743	11 602 742	4 629 777	142.834	14341				1		30 736 293	7 339 235	127.01
0	0	11 602 743	11 602 742	4 629 777	142.834	20587				1		30 777 263	7 298 264	127.02
0	0	11 602 743	11 602 742	4 629 777	142.834	54976				1		30 747 440	7 328 088	127.01
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		30 608 624	7 466 903	127.01
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		30 428 467	7 647 061	126.86
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		30 217 259	7 858 269	126.59
	0					228210					0			
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		30 007 671	8 067 857	126.31
0	0	11 602 743	11 602 742	4 629 777	142.834	3864				1		29 814 602	8 260 926	126.05
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		29 602 461	8 473 066	125.76
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		29 396 696	8 678 831	125.47
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		29 243 372	8 832 156	125.25
0	0	11 602 743	11 602 742	4 629 777	142.834	104772				1		29 499 657	8 575 870	125.61
0	0	11 602 743	11 602 742	4 629 777	142.834	14341				1		29 513 165	8 562 363	125.63
0	0	11 602 743	11 602 742	4 629 777	142.834	20587				1		29 554 136	8 521 392	125.69
0	0	11 602 743	11 602 742	4 629 777	142.834	54976				1		29 524 312	8 551 216	125.65
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		29 385 497	8 690 031	125.45
0	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		29 205 339	8 870 188	125.20
0	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		28 994 131	9 081 397	124.89
	0					228210					0			
-1	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		28 784 543	9 290 985	124.56
-1	0	11 602 743	11 602 742	4 629 777	142.834	3864				1		28 591 474	9 484 054	124.27
-1	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		28 379 334	9 696 194	123.96
-1	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		28 173 569	9 901 959	123.66
-1	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		28 017 324	10 058 204	123.43
-1	0	11 602 743	11 602 742	4 629 777	142.834	104772				1		28 049 313	10 026 215	123.48
-1	0	11 602 743	11 602 742	4 629 777	142.834	14341				1		27 417 442	10 658 086	122.52
-1	0	11 602 743	11 602 742	4 629 777	142.834	20587				1		26 864 423	11 211 104	121.67
-1	0	11 602 743	11 602 742	4 629 777	142.834	54976				1		26 781 953	11 293 574	121.54
-1	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		26 640 405	11 435 123	121.32
-1	0	11 602 743	11 602 742	4 629 777	142.834	4140				1		26 460 248	11 615 280	121.04
-1	0	11 602 743	11 602 742	4 629 777	142.834	4278				1		26 249 039	11 826 489	120.71
	0					228210					0			
-1	0	11 602 743	11 602 741	4 629 778	142.834	4278				1		26 039 451	12 036 077	120.38
-1	0	11 602 743	11 602 741	4 629 778	142.834	3864				1		25 846 382	12 229 145	120.07
-1	0	11 602 743	11 602 741	4 629 778	142.834	4278				1		25 634 242	12 441 286	119.73
-1	0	11 602 743	11 602 741	4 629 778	142.834	4140				1		25 428 477	12 647 051	119.40
-1	0	11 602 743	11 602 741	4 629 778	142.834	4278				1		25 272 232	12 803 296	119.15
-1	0	11 602 743	11 602 741	4 629 778	142.834	104772				1		25 304 221	12 771 307	119.20

-1	0	11 602 743	11 602 741	4 629 778	142.834	14341				1		25 172 350	12 903 178	118.99	
-1	0	11 602 743	11 602 741	4 629 778	142.834	20587				1		25 119 332	12 956 196	118.90	
-1	0	11 602 743	11 602 741	4 629 778	142.834	54976				1		25 036 862	13 038 666	118.77	
-1	0	11 602 743	11 602 741	4 629 778	142.834	4278				1		24 895 313	13 180 215	118.53	
-1	0	11 602 743	11 602 741	4 629 778	142.834	4140				1		24 715 156	13 360 372	118.24	
-1	0	11 602 743	11 602 741	4 629 778	142.834	4278				1		24 503 947	13 571 581	117.89	
	0					**228210**					**0**				
-2	0	11 602 743	11 602 741	4 629 778	142.834	4278				1		24 294 360	13 781 168	117.54	
-2	0	11 602 743	11 602 741	4 629 778	142.834	3864				1		24 093 073	13 982 455	117.20	
-2	0	11 602 743	11 602 741	4 629 778	142.834	4278				1		23 880 932	14 194 595	116.85	
-2	0	11 602 743	11 602 741	4 629 778	142.834	4140				1		23 675 167	14 400 361	116.50	
-2	0	11 602 743	11 602 741	4 629 778	142.834	4278				1		23 518 923	14 556 605	116.24	
-2	0	11 602 743	11 602 741	4 629 778	142.834	104772				1		23 550 912	14 524 616	116.29	
-2	0	11 602 743	11 602 741	4 629 778	142.834	14341				1		23 544 425	14 531 103	116.28	
-2	0	11 602 743	11 602 741	4 629 778	142.834	20587				1		24 645 024	13 430 503	118.12	
-2	0	11 602 743	11 602 741	4 629 778	142.834	54976				1		25 306 244	12 769 284	119.20	
-2	0	11 602 743	11 602 741	4 629 778	142.834	4278				1		25 852 555	12 222 973	120.08	
-2	0	11 602 743	11 602 741	4 629 778	142.834	4140				1		26 349 489	11 726 039	120.87	
-2	0	11 602 743	11 602 741	4 629 778	142.834	4278				1		26 823 407	11 252 121	121.61	
	0					**228210**					**0**				
-2	0	11 602 743	11 602 740	4 629 779	142.834	4278				1		27 298 946	10 776 582	122.34	
-2	0	11 602 743	11 602 740	4 629 779	142.834	3864				1		27 766 533	10 308 995	123.05	
-2	0	11 602 743	11 602 740	4 629 779	142.834	4278				1		28 239 519	9 836 009	123.76	
-2	0	11 602 743	11 602 740	4 629 779	142.834	4140				1		28 710 662	9 364 865	124.45	
-2	0	11 602 743	11 602 740	4 629 779	142.834	4278				1		29 242 646	8 832 881	125.21	
-2	0	11 602 743	11 602 740	4 629 779	142.834	104772				1		30 217 426	7 858 102	126.56	
-2	0	11 602 743	11 602 740	4 629 779	142.834	14341				1		30 927 171	7 148 357	127.02	
-2	0	11 602 743	11 602 740	4 629 779	142.834	20587				1		31 683 435	6 392 093	127.08	
-2	0	11 602 743	11 602 740	4 629 779	142.834	54976				1		32 344 654	5 730 874	127.12	
-2	0	11 602 743	11 602 740	4 629 779	142.834	4278				1		32 871 834	5 203 694	127.16	
-2	0	11 602 743	11 602 740	4 629 779	142.834	4140				1		33 349 455	4 726 073	127.19	
-2	0	11 602 743	11 602 740	4 629 779	142.834	4278				1		33 804 242	4 271 286	127.22	
	0					**228210**					**0**				
-3	0	11 602 743	11 602 740	4 629 779	142.834	4278				1		34 260 650	3 814 878	127.25	
-3	0	11 602 743	11 602 740	4 629 779	142.834	3864				1		34 708 924	3 366 604	127.28	
-3	0	11 602 743	11 602 740	4 629 779	142.834	4278				1		35 181 910	2 893 618	127.31	
-3	0	11 602 743	11 602 740	4 629 779	142.834	4140				1		35 653 054	2 422 474	127.34	
-3	0	11 602 743	11 602 740	4 629 779	142.834	4278				1		36 185 038	1 890 490	127.38	
-3	0	11 602 743	11 602 740	4 629 779	142.834	104772				1		37 159 817	915 711	127.44	
-3	0	11 602 743	11 602 740	4 629 779	142.834	14341				1		37 869 562	205 965	127.49	
-3	0	11 602 743	11 602 740	4 629 779	142.834	20587				1		38 625 826	-550 298	128.11	
-3	0	11 602 743	11 602 740	4 629 779	142.834	54976				1		38 875 808	-800 280	128.36	
-3	0	11 602 743	11 602 740	4 629 779	142.834	4278				1		39 010 869	-935 341	128.49	
-3	0	11 602 743	11 602 740	4 629 779	142.834	4140				1		39 096 553	-1 021 025	128.57	
-3	0	11 602 743	11 602 740	4 629 779	142.834	4278				1		39 159 221	-1 083 693	128.63	
	0					**228210**					**0**				

-3	0	11 602 743	11 602 740	4 629 779	142.834	4278				1		39 223 510	-1 147 982	128.70
-3	0	11 602 743	11 602 740	4 629 779	142.834	3864				1		39 279 847	-1 204 319	128.75
-3	0	11 602 743	11 602 740	4 629 779	142.834	4278				1		39 341 583	-1 266 055	128.81
-3	0	11 602 743	11 602 740	4 629 779	142.834	4140				1		39 401 477	-1 325 949	128.87
-3	0	11 602 743	11 602 740	4 629 779	142.834	4278				1		39 522 210	-1 446 683	128.98
-3	0	11 602 743	11 602 740	4 629 779	142.834	104772				1		40 085 740	-2 010 212	129.50
-3	0	11 602 743	11 602 740	4 629 779	142.834	14341				1		40 384 235	-2 308 708	129.77
-3	0	11 602 743	11 602 740	4 629 779	142.834	20587				1		40 729 249	-2 653 721	130.07
-3	0	11 602 743	11 602 740	4 629 779	142.834	54976				1		40 979 218	-2 903 690	130.29
-3	0	11 602 743	11 602 740	4 629 779	142.834	4278				1		41 114 279	-3 038 751	130.40
-3	0	11 602 743	11 602 740	4 629 779	142.834	4140				1		41 199 963	-3 124 435	130.47
-3	0	11 602 743	11 602 740	4 629 779	142.834	4278				1		41 262 631	-3 187 103	130.53
	0					**228210**					**0**			
-4	0	11 602 743	11 602 739	4 629 780	142.834	4278				1		41 326 920	-3 251 392	130.58
-4	0	11 602 743	11 602 739	4 629 780	142.834	3864				1		41 383 257	-3 307 729	130.63
-4	0	11 602 743	11 602 739	4 629 780	142.834	4278				1		41 444 993	-3 369 465	130.68
-4	0	11 602 743	11 602 739	4 629 780	142.834	4140				1		41 504 887	-3 429 359	130.73
-4	0	11 602 743	11 602 739	4 629 780	142.834	4278				1		41 625 621	-3 550 093	130.82
-4	0	11 602 743	11 602 739	4 629 780	142.834	104772				1		42 189 150	-4 113 623	131.28
-4	0	11 602 743	11 602 739	4 629 780	142.834	14341				1		42 487 646	-4 412 118	131.52
-4	0	11 602 743	11 602 739	4 629 780	142.834	20587				1		42 832 659	-4 757 131	131.78
-4	0	11 602 743	11 602 739	4 629 780	142.834	54976				1		43 082 628	-5 007 101	131.98
-4	0	11 602 743	11 602 739	4 629 780	142.834	4278				1		43 217 689	-5 142 161	132.08
-4	0	11 602 743	11 602 739	4 629 780	142.834	4140				1		43 303 373	-5 227 845	132.15
-4	0	11 602 743	11 602 739	4 629 780	142.834	4278				1		43 366 041	-5 290 513	132.19
	0					**228210**					**0**			
-4	0	11 602 743	11 602 739	4 629 780	142.834	4278				1		43 430 330	-5 354 802	132.24
-4	0	11 602 743	11 602 739	4 629 780	142.834	3864				1		43 486 667	-5 411 139	132.29
-4	0	11 602 743	11 602 739	4 629 780	142.834	4278				1		43 548 403	-5 472 875	132.33
-4	0	11 602 743	11 602 739	4 629 780	142.834	4140				1		43 608 297	-5 532 769	132.38
-4	0	11 602 743	11 602 739	4 629 780	142.834	4278				1		43 729 031	-5 653 503	132.47
-4	0	11 602 743	11 602 739	4 629 780	142.834	104772				1		44 292 561	-6 217 033	132.89
-4	0	11 602 743	11 602 739	4 629 780	142.834	14341				1		44 591 056	-6 515 528	133.10
-4	0	11 602 743	11 602 739	4 629 780	142.834	20587				1		44 936 069	-6 860 541	133.35
-4	0	11 602 743	11 602 739	4 629 780	142.834	54976				1		45 186 039	-7 110 511	133.60
-4	0	11 602 743	11 602 739	4 629 780	142.834	0				1		45 186 039	-7 110 511	133.53
-4	0	11 602 743	11 602 739	4 629 780	142.834	0				1		45 186 039	-7 110 511	133.53
-4	0	11 602 743	11 602 739	4 629 780	142.834	0				1		45 186 039	-7 110 511	133.53
	0					**215514**					**0**			

Pit A															Pit A
Pit A Inflow (m^3)	Enter 1 for the discharge location		INFLOW	OUTFLOW	All Pit A inflows Except Pit E	Total Pond Volume (Ice + Water) (m^3)	Tailings Deposited (t)	Cummulative Tailings Deposited (m^3)	Cummulative Volume (m^3)	Volume Available Remaining (m^3)	Water Elevation (m)	Surveyed Water Elevation (m)	Pit A Error (m3)	Overflow to pit E Via Central Dump	
	Pit A	Pit E													
x															
0															
0															
0															
0															
0															
0															
212679															
410360				0											
695168															
119054															
2 480	1	0	169 311	35 836	133 475	5 310 166	0	0	5 310 166	15 309 240	92.43	92.43	40 000	35836	
2 240	1	0	243 219	42 510	200 709	5 510 875	0	0	5 510 875	15 108 531	93.72	93.72	69 240	42510	
2 480	1	0	263 709	52 545	211 164	5 722 039	0	0	5 722 039	14 897 367	95.05	95.05	85 000	52545	
2 400	1	0	377 521	63 103	314 418	6 036 457	0	0	6 036 457	14 582 949	96.99	96.99	205 000	63103	
2 480	1	0	492 278	78 824	458 327	6 494 784	0	0	6 494 784	14 124 622	99.74	99.75	123 000	78824	
53 245	1	0	439 078	300 652	168 271	6 663 055	0	0	6 663 055	13 956 351	100.73	100.65	89 155	101740	
7 564	1	0	231 548	423 762	-183 882	6 479 173	0	0	6 479 173	14 140 233	99.65	100.20	35 668	110154	
10 720	1	0	121 359	395 163	-262 885	6 216 288	0	0	6 216 288	14 403 118	98.08	99.63	-50 919	100960	
28 085	1	0	574 587	300 238	280 946	6 497 234	0	0	6 497 234	14 122 171	99.76	99.76	241 525	87816	
2 480	1	0	176 105	101 863	76 804	6 574 039	0	0	6 574 039	14 045 367	100.21	99.79	200 000	101 863	
2 400	1	0	236 424	105 703	130 721	6 704 760	0	0	6 704 760	13 914 646	100.98	100.39	-15 000	105 703	
2 480	1	0	171 890	112 239	59 651	6 764 411	0	0	6 764 411	13 854 995	101.33	101.55	-1 251 004	112 239	
119054													**-228 335**	**673 487**	
2 480	1	0	147 436	115 222	32 214	6 796 625	0	0	6 796 625	13 822 781	101.51			115 222	
2 240	1	0	131 796	116 832	14 964	6 811 589	0	0	6 811 589	13 807 817	101.60			116 832	
2 480	1	0	144 883	117 581	27 302	6 838 891	0	0	6 838 891	13 780 515	101.76			117 581	
2 400	1	0	139 259	118 946	20 313	6 859 204	0	0	6 859 204	13 760 201	101.88			118 946	
2 480	1	0	211 817	119 961	91 856	6 951 060	0	0	6 951 060	13 668 346	102.41			119 961	
53 245	1	0	590 715	124 554	481 488	7 432 548	0	0	7 432 548	13 186 857	105.12			124 554	
7 564	1	0	359 558	148 629	235 194	7 667 743	0	0	7 667 743	12 951 663	106.40			148 629	
10 720	1	0	678 211	160 388	523 764	8 191 507	0	0	8 191 507	12 427 899	109.13			160 388	
28 085	1	0	295 970	186 577	114 755	8 306 262	0	0	8 306 262	12 313 144	109.67			186 577	
2 480	1	0	466 535	192 314	276 680	8 582 942	0	0	8 582 942	12 036 464	110.94			192 314	
2 400	1	0	164 867	206 148	-41 281	8 541 661	0	0	8 541 661	12 077 745	110.75			206 148	
2 480	1	0	145 815	204 084	-58 269	8 483 391	0	0	8 483 391	12 136 014	110.49			204 084	
119054				0	**1 718 980**										
2 480	1	0	147 436	201 171	-53 735	8 429 657	0	0	8 429 657	12 189 749	110.24			201 171	
2 240	1	0	127 956	198 484	-70 528	8 359 129	0	0	8 359 129	12 260 277	109.92			198 484	
2 480	1	0	144 883	194 958	-50 075	8 309 054	0	0	8 309 054	12 310 352	109.69			194 958	
2 400	1	0	139 259	192 454	-53 195	8 255 859	0	0	8 255 859	12 363 547	109.44			192 454	
2 480	1	0	211 817	189 794	22 023	8 277 882	0	0	8 277 882	12 341 524	109.54			189 794	
53 245	1	0	590 715	190 895	415 147	8 693 029	0	0	8 693 029	11 926 377	111.43			190 895	

7 564	1	0	359 558	211 653	172 170	8 865 199	0	0	8 865 199	11 754 207	112.19			211 653
10 720	1	0	514 654	220 261	300 335	9 165 534	0	0	9 165 534	11 453 872	113.51			220 261
28 085	1	0	295 970	235 278	66 054	9 231 588	0	0	9 231 588	11 387 818	113.79			235 278
2 480	1	0	466 535	238 581	230 413	9 462 002	0	0	9 462 002	11 157 404	114.79			238 581
2 400	1	0	164 867	250 101	-85 234	9 376 767	0	0	9 376 767	11 242 639	114.42			250 101
2 480	1	0	145 815	245 840	-100 025	9 276 743	0	0	9 276 743	11 342 663	113.99			245 840
119054				0	**793 351**									
2 480	1	0	28 396	0	28 396	9 305 139	0	0	9 305 139	11 314 267	114.11			
2 240	1	0	20 436	293 051	-272 615	9 032 523	0	0	9 032 523	11 586 882	112.93			
2 480	1	0	25 843	293 051	-267 208	8 765 315	0	0	8 765 315	11 854 091	111.75			
2 400	1	0	24 059	273 937	-249 878	8 515 437	0	0	8 515 437	12 103 968	110.63			
2 480	1	0	92 777	273 937	-181 160	8 334 278	0	0	8 334 278	12 285 128	109.80			
53 245	1	0	475 515	273 937	216 906	8 551 184	0	0	8 551 184	12 068 222	110.79			
7 564	1	0	240 518	292 791	-28 008	8 523 175	0	0	8 523 175	12 096 231	110.67			
10 720	1	0	206 414	292 791	-80 435	8 442 740	0	0	8 442 740	12 176 665	110.30			
28 085	1	0	180 770	292 791	-106 659	8 336 081	0	0	8 336 081	12 283 325	109.81			
2 480	1	0	347 495	274 672	75 282	8 411 363	0	0	8 411 363	12 208 043	110.16			
2 400	1	0	49 667	274 672	-225 005	8 186 358	0	0	8 186 358	12 433 048	109.10			
2 480	1	0	26 775	274 672	-247 897	7 938 461	0	0	7 938 461	12 680 945	107.84			
119054					**-1 338 282**									
2 480	1	0	218 978	291 593	-72 615	7 865 845	364 492	236 683	8 102 528	12 516 878	108.69			
2 240	1	0	210 598	291 593	-80 996	7 784 850	364 492	473 366	8 258 215	12 361 190	109.45			
2 480	1	0	216 122	291 593	-75 472	7 709 378	364 492	710 049	8 419 427	12 199 979	110.20			
2 400	1	0	201 256	272 574	-71 318	7 638 060	340 717	931 294	8 569 354	12 050 052	110.87			
2 480	1	0	270 031	272 574	-2 543	7 635 517	340 717	1 152 539	8 788 056	11 831 350	111.85			
53 245	1	0	655 635	272 574	398 389	8 033 906	340 717	1 373 784	9 407 690	11 211 716	114.55			
7 564	1	0	432 520	291 334	165 450	8 199 357	364 168	1 610 256	9 809 613	10 809 793	116.26			
10 720	1	0	396 522	291 334	111 130	8 310 487	364 168	1 846 729	10 157 216	10 462 190	117.71			
28 085	1	0	371 306	291 334	85 334	8 395 821	364 168	2 083 202	10 479 023	10 140 383	119.04			
2 480	1	0	622 633	273 306	351 787	8 747 608	341 632	2 305 041	11 052 649	9 566 757	121.35			
2 400	1	0	228 463	273 306	-44 843	8 702 765	341 632	2 526 880	11 229 645	9 389 761	122.05			
2 480	1	0	205 521	273 306	-67 784	8 634 981	341 632	2 748 719	11 383 700	9 235 706	122.66			
					696 520									
2 480	1	0	218 978	291 593	-72 615	8 562 365	364 492	2 871 858	11 434 223	9 185 183	122.86			
2 240	1	0	210 548	291 593	-81 045	8 481 320	364 492	2 994 997	11 476 317	9 143 089	123.02			
2 480	1	0	216 122	291 593	-75 472	8 405 849	364 492	3 118 136	11 523 985	9 095 421	123.21			
2 400	1	0	201 256	272 574	-71 318	8 334 531	340 717	3 233 243	11 567 774	9 051 632	123.38			
2 480	1	0	271 536	272 574	-1 038	8 333 493	340 717	3 348 350	11 681 843	8 937 563	123.82			
53 245	0	1	692 251	272 574	435 005	8 768 498	340 717	3 463 458	12 231 956	8 387 450	125.92			
7 564	0	1	268 568	0	292 833	9 061 331	0	3 463 458	12 524 789	8 094 617	126.98			
10 720	0	1	160 234	37 200	128 976	9 190 307	0	3 463 458	12 653 765	7 965 641	127.44			
28 085	0	1	88 756	36 000	58 118	9 248 425	0	3 463 458	12 711 883	7 907 523	127.64			
2 480	0	1	91 496	37 200	56 755	9 305 180	0	3 463 458	12 768 638	7 850 768	127.83			
2 400	0	1	47 267	36 000	11 267	9 316 447	0	3 463 458	12 779 905	7 839 501	127.87			
2 480	0	1	24 295	37 200	-12 905	9 303 542	0	3 463 458	12 767 000	7 852 406	127.83			
119054					**668 561**									
2 480	0	1	25 916	37 200	-11 284	9 292 258	0	3 463 458	12 755 716	7 863 690	127.79			
2 240	0	1	18 196	33 600	-15 404	9 276 854	0	3 463 458	12 740 312	7 879 094	127.73			
2 480	0	1	23 363	37 200	-13 837	9 263 017	0	3 463 458	12 726 475	7 892 931	127.69			

2 400	0	1	21 659	72 000	-50 341	9 212 676	0	3 463 458	12 676 134	7 943 272	127.51			
2 480	0	1	79 259	74 400	4 859	9 217 535	0	3 463 458	12 680 993	7 938 413	127.53			
53 245	0	1	143 453	72 000	86 781	9 304 316	0	3 463 458	12 767 774	7 851 632	127.83			
7 564	0	1	69 305	74 400	19 170	9 323 486	0	3 463 458	12 786 944	7 832 462	127.89			
10 720	0	1	160 234	74 400	91 776	9 415 262	0	3 463 458	12 878 720	7 740 686	128.08			
28 085	0	1	88 756	72 000	22 118	9 437 380	0	3 463 458	12 900 838	7 718 568	128.11			
2 480	0	1	91 496	74 400	19 555	9 456 935	0	3 463 458	12 920 393	7 699 013	128.14			
2 400	0	1	47 267	72 000	-24 733	9 432 202	0	3 463 458	12 895 660	7 723 746	128.11			
2 480	0	1	24 295	74 400	-50 105	9 382 097	0	3 463 458	12 845 555	7 773 851	128.04			
119054														
2 480	0	1	25 916	93 000	-67 084	9 315 013	0	3 463 458	12 778 471	7 840 935	127.87			
2 240	0	1	18 196	84 000	-65 804	9 249 209	0	3 463 458	12 712 667	7 906 739	127.64			
2 480	0	1	23 363	93 000	-69 637	9 179 572	0	3 463 458	12 643 030	7 976 376	127.40			
2 400	0	1	21 659	90 000	-68 341	9 111 231	0	3 463 458	12 574 689	8 044 717	127.16			
2 480	0	1	79 259	93 000	-13 741	9 097 490	0	3 463 458	12 560 948	8 058 458	127.11			
53 245	0	1	143 453	90 000	68 781	9 166 271	0	3 463 458	12 629 729	7 989 677	127.35			
7 564	0	1	69 305	93 000	570	9 166 841	0	3 463 458	12 630 299	7 989 107	127.35			
10 720	0	1	160 234	93 000	73 176	9 240 017	0	3 463 458	12 703 475	7 915 931	127.61			
28 085	0	1	88 756	90 000	4 118	9 244 135	0	3 463 458	12 707 593	7 911 813	127.62			
2 480	0	1	91 496	93 000	955	9 245 090	0	3 463 458	12 708 548	7 910 858	127.63			
2 400	0	1	47 267	90 000	-42 733	9 202 357	0	3 463 458	12 665 815	7 953 591	127.48			
2 480	0	1	24 295	93 000	-68 705	9 133 652	0	3 463 458	12 597 110	8 022 296	127.24			
119054														
2 480	0	1	25 916	65 100	-39 184	9 094 468	0	3 463 458	12 557 926	8 061 480	127.10			
2 240	0	1	18 196	58 800	-40 604	9 053 864	0	3 463 458	12 517 322	8 102 084	126.95			
2 480	0	1	23 363	65 100	-41 737	9 012 127	0	3 463 458	12 475 585	8 143 821	126.81			
2 400	0	1	21 659	63 000	-41 341	8 970 786	0	3 463 458	12 434 244	8 185 162	126.66			
2 480	0	1	79 259	65 100	14 159	8 984 945	0	3 463 458	12 448 403	8 171 003	126.71			
53 245	0	1	143 453	63 000	95 781	9 080 726	0	3 463 458	12 544 184	8 075 222	127.05			
7 564	0	1	69 305	65 100	28 470	9 109 196	0	3 463 458	12 572 654	8 046 752	127.15			
10 720	0	1	160 234	65 100	101 076	9 210 272	0	3 463 458	12 673 730	7 945 676	127.51			
28 085	0	1	88 756	63 000	31 118	9 241 390	0	3 463 458	12 704 848	7 914 558	127.61			
2 480	0	1	91 496	65 100	28 855	9 270 245	0	3 463 458	12 733 703	7 885 703	127.71			
2 400	0	1	47 267	63 000	-15 733	9 254 512	0	3 463 458	12 717 970	7 901 436	127.66			
2 480	0	1	24 295	65 100	-40 805	9 213 707	0	3 463 458	12 677 165	7 942 241	127.52			
119054														
2 480	0	1	25 916	65 100	-39 184	9 174 523	0	3 463 458	12 637 981	7 981 425	127.38			
2 240	0	1	18 196	60 900	-42 704	9 131 819	0	3 463 458	12 595 277	8 024 129	127.23			
2 480	0	1	23 363	65 100	-41 737	9 090 082	0	3 463 458	12 553 540	8 065 866	127.08			
2 400	0	1	21 659	63 000	-41 341	9 048 741	0	3 463 458	12 512 199	8 107 207	126.94			
2 480	0	1	79 259	65 100	14 159	9 062 900	0	3 463 458	12 526 358	8 093 048	126.99			
53 245	0	1	143 453	63 000	95 781	9 158 681	0	3 463 458	12 622 139	7 997 267	127.32			
7 564	0	1	69 305	65 100	28 470	9 187 151	0	3 463 458	12 650 609	7 968 797	127.42			
10 720	0	1	160 234	65 100	101 076	9 288 227	0	3 463 458	12 751 685	7 867 721	127.77			
28 085	0	1	88 756	63 000	31 118	9 319 345	0	3 463 458	12 782 803	7 836 603	127.88			
2 480	0	1	91 496	65 100	28 855	9 348 200	0	3 463 458	12 811 658	7 807 748	**127.98**			
2 400	0	1	47 267	63 000	-15 733	9 332 467	0	3 463 458	12 795 925	7 823 481	127.93			
2 480	0	1	24 295	65 100	-40 805	9 291 662	0	3 463 458	12 755 120	7 864 286	127.79			
119054														

2 480	0	1	25 916	65 100	-39 184	9 252 478	0	3 463 458	12 715 936	7 903 470	127.65			
2 240	0	1	18 196	65 687	-47 491	9 204 987	0	3 463 458	12 668 444	7 950 961	127.49			
2 480	0	1	23 363	89 280	-65 917	9 139 070	0	3 463 458	12 602 527	8 016 878	127.26			
2 400	0	1	21 659	86 400	-64 741	9 074 329	0	3 463 458	12 537 786	8 081 619	127.03			
2 480	0	1	79 259	89 280	-10 021	9 064 308	0	3 463 458	12 527 765	8 091 640	126.99			
53 245	0	1	143 453	86 400	72 381	9 136 689	0	3 463 458	12 600 146	8 019 259	127.25			
7 564	0	1	69 305	89 280	4 290	9 140 979	0	3 463 458	12 604 436	8 014 969	127.26			
10 720	0	1	160 234	89 280	76 896	9 217 875	0	3 463 458	12 681 332	7 938 073	127.53			
28 085	0	1	88 756	86 400	7 718	9 225 593	0	3 463 458	12 689 050	7 930 355	127.56			
2 480	0	1	91 496	89 280	4 675	9 230 268	0	3 463 458	12 693 725	7 925 680	127.57			
2 400	0	1	47 267	86 400	-39 133	9 191 135	0	3 463 458	12 654 592	7 964 813	127.44			
2 480	0	1	24 295	89 280	-64 985	9 126 150	0	3 463 458	12 589 607	8 029 798	127.21			
119054														
2 480	0	1	25 916	74 400	-48 484	9 077 666	0	3 463 458	12 541 123	8 078 282	127.04			
2 240	0	1	18 196	67 200	-49 004	9 028 662	0	3 463 458	12 492 119	8 127 286	126.86			
2 480	0	1	23 363	74 400	-51 037	8 977 625	0	3 463 458	12 441 082	8 178 323	126.68			
2 400	0	1	21 659	72 000	-50 341	8 927 284	0	3 463 458	12 390 741	8 228 664	126.50			
2 480	0	1	79 259	74 400	4 859	8 932 143	0	3 463 458	12 395 600	8 223 805	126.52			
53 245	0	1	143 453	72 000	86 781	9 018 924	0	3 463 458	12 482 381	8 137 024	126.83			
7 564	0	1	69 305	74 400	19 170	9 038 094	0	3 463 458	12 501 551	8 117 854	126.90			
10 720	0	1	160 234	74 400	91 776	9 129 870	0	3 463 458	12 593 327	8 026 078	127.22			
28 085	0	1	88 756	72 000	22 118	9 151 988	0	3 463 458	12 615 445	8 003 960	127.30			
2 480	0	1	91 496	74 400	19 555	9 171 543	0	3 463 458	12 635 000	7 984 405	127.37			
2 400	0	1	47 267	72 000	-24 733	9 146 810	0	3 463 458	12 610 267	8 009 138	127.28			
2 480	0	1	24 295	74 400	-50 105	9 096 705	0	3 463 458	12 560 162	8 059 243	127.11			
119054														
2 480	0	1	25 916	74 400	-48 484	9 048 221	0	3 463 458	12 511 678	8 107 727	126.93			
2 240	0	1	18 196	67 200	-49 004	8 999 217	0	3 463 458	12 462 674	8 156 731	126.76			
2 480	0	1	23 363	74 400	-51 037	8 948 180	0	3 463 458	12 411 637	8 207 768	126.58			
2 400	0	1	21 659	72 000	-50 341	8 897 839	0	3 463 458	12 361 296	8 258 109	126.39			
2 480	0	1	79 259	74 400	4 859	8 902 698	0	3 463 458	12 366 155	8 253 250	126.41			
53 245	0	1	143 453	72 000	86 781	8 989 479	0	3 463 458	12 452 936	8 166 469	126.72			
7 564	0	1	69 305	74 400	19 170	9 008 649	0	3 463 458	12 472 106	8 147 299	126.79			
10 720	0	1	160 234	74 400	91 776	9 100 425	0	3 463 458	12 563 882	8 055 523	127.12			
28 085	0	1	88 756	72 000	22 118	9 122 543	0	3 463 458	12 586 000	8 033 405	127.20			
2 480	0	1	91 496	74 400	19 555	9 142 098	0	3 463 458	12 605 555	8 013 850	127.27			
2 400	0	1	47 267	72 000	-24 733	9 117 365	0	3 463 458	12 580 822	8 038 583	127.18			
2 480	0	1	24 295	74 400	-50 105	9 067 260	0	3 463 458	12 530 717	8 088 688	127.00			
119054						**14 005 553**								
2 480	0	1	25 916	74 400	-48 484	9 018 776	0	3 463 458	12 482 233	8 137 172	126.83			
2 240	0	1	18 196	69 600	-51 404	8 967 372	0	3 463 458	12 430 829	8 188 576	126.64			
2 480	0	1	23 363	74 400	-51 037	8 916 335	0	3 463 458	12 379 792	8 239 613	126.46			
2 400	0	1	21 659	72 000	-50 341	8 865 994	0	3 463 458	12 329 451	8 289 954	126.28			
2 480	0	1	79 259	74 400	-122 762	8 743 232	0	3 463 458	12 206 690	8 412 716	125.82			
53 245	0	1	143 453	0	-87 747	8 655 485	0	3 463 458	12 118 943	8 500 463	125.49			
7 564	0	1	69 305	0	-161 176	8 494 309	0	3 463 458	11 957 767	8 661 639	124.88			
10 720	0	1	160 234	0	-88 570	8 405 740	0	3 463 458	11 869 197	8 750 208	124.54			
28 085	0	1	88 756	0	-152 410	8 253 330	0	3 463 458	11 716 787	8 902 618	123.95			
2 480	0	1	91 496	0	-160 791	8 092 539	0	3 463 458	11 555 997	9 063 409	123.33			

2 400	0	1	47 267	0	-199 261	7 893 278	0	3 463 458	11 356 736	9 262 670	122.55			
2 480	0	1	24 295	0	-230 451	7 662 828	0	3 463 458	11 126 285	9 493 121	121.64			
119054														
2 480	0	1	25 916	0	-228 830	7 433 998	0	3 463 458	10 897 456	9 721 950	120.73			
2 240	0	1	18 196	0	-211 897	7 222 101	0	3 463 458	10 685 559	9 933 847	119.88			
2 480	0	1	23 363	0	-231 383	6 990 719	0	3 463 458	10 454 176	10 165 230	118.94			
2 400	0	1	21 659	0	-224 869	6 765 850	0	3 463 458	10 229 307	10 390 099	118.01			
2 480	0	1	79 259	0	-175 487	6 590 363	0	3 463 458	10 053 821	10 565 585	117.28			
53 245	0	1	143 453	0	-87 747	6 502 616	0	3 463 458	9 966 074	10 653 332	116.92			
7 564	0	1	69 305	0	-161 176	6 341 440	0	3 463 458	9 804 898	10 814 508	116.24			
10 720	0	1	160 234	0	-88 570	6 252 871	0	3 463 458	9 716 328	10 903 077	115.87			
28 085	0	1	88 756	0	-152 410	6 100 461	0	3 463 458	9 563 918	11 055 487	115.22			
2 480	0	1	91 496	0	-160 791	5 939 670	0	3 463 458	9 403 128	11 216 278	114.53			
2 400	0	1	47 267	0	-199 261	5 740 409	0	3 463 458	9 203 867	11 415 539	113.67			
2 480	0	1	24 295	0	-230 451	5 509 959	0	3 463 458	8 973 416	11 645 990	112.67			
119054														
2 480	0	1	25 916	0	-228 830	5 281 129	0	3 463 458	8 744 587	11 874 819	111.66			
2 240	0	1	18 196	0	-211 897	5 069 232	0	3 463 458	8 532 690	12 086 716	110.71			
2 480	0	1	23 363	0	-231 383	4 837 850	0	3 463 458	8 301 307	12 318 099	109.65			
2 400	0	1	21 659	0	-224 869	4 612 981	0	3 463 458	8 076 438	12 542 968	108.55			
2 480	0	1	79 259	0	-175 487	4 437 494	0	3 463 458	7 900 952	12 718 454	107.64			
53 245	0	1	143 453	0	-87 747	4 349 747	0	3 463 458	7 813 205	12 806 201	107.17			
7 564	0	1	69 305	0	-161 176	4 188 571	0	3 463 458	7 652 029	12 967 377	106.31			
10 720	0	1	160 234	0	-88 570	4 100 002	0	3 463 458	7 563 459	13 055 946	105.83			
28 085	0	1	88 756	0	-152 410	3 947 592	0	3 463 458	7 411 049	13 208 356	105.00			
2 480	0	1	91 496	0	-160 791	3 786 801	0	3 463 458	7 250 259	13 369 147	104.10			
2 400	0	1	47 267	0	-199 261	3 587 540	0	3 463 458	7 050 998	13 568 408	102.98			
2 480	0	1	24 295	0	-230 451	3 357 090	0	3 463 458	6 820 547	13 798 859	101.65			
119054														
2 480	0	1	25 916	0	-228 830	3 128 260	0	3 463 458	6 591 718	14 027 688	100.31			
2 240	0	1	18 196	0	-211 897	2 916 363	0	3 463 458	6 379 821	14 239 585	99.06			
2 480	0	1	23 363	0	-231 383	2 684 981	0	3 463 458	6 148 438	14 470 968	97.67			
2 400	0	1	21 659	0	-224 869	2 460 112	0	3 463 458	5 923 569	14 695 837	96.30			
2 480	0	1	79 259	0	-175 487	2 284 625	0	3 463 458	5 748 083	14 871 323	95.21			
53 245	0	1	143 453	0	-87 747	2 196 878	0	3 463 458	5 660 336	14 959 070	94.66			
7 564	0	1	69 305	0	-161 176	2 035 702	0	3 463 458	5 499 160	15 120 246	93.65			
10 720	0	1	160 234	0	-88 570	1 947 133	0	3 463 458	5 410 590	15 208 815	93.08			
28 085	0	1	88 756	0	-152 410	1 794 723	0	3 463 458	5 258 180	15 361 225	92.09			
2 480	0	1	91 496	0	-160 791	1 633 932	0	3 463 458	5 097 390	15 522 016	91.04			
2 400	0	1	47 267	0	-199 261	1 434 671	0	3 463 458	4 898 129	15 721 277	89.71			
2 480	0	1	24 295	0	-230 451	1 204 221	0	3 463 458	4 667 678	15 951 728	88.11			
119054														
2 480	0	1	25 916	0	-228 830	975 391	0	3 463 458	4 438 849	16 180 557	86.33			
2 240	0	1	18 196	0	-220 114	755 277	0	3 463 458	4 218 734	16 400 672	84.54			
2 480	0	1	23 363	0	-231 383	523 894	0	3 463 458	3 987 352	16 632 054	82.60			
2 400	0	1	21 659	0	-224 869	299 025	0	3 463 458	3 762 483	16 856 923	80.65			
2 480	0	1	79 259	0	-175 487	123 538	0	3 463 458	3 586 996	17 032 410	79.09			
53 245	0	1	143 453	0	-87 747	35 791	0	3 463 458	3 499 249	17 120 157	78.30			
7 564	0	1	69 305	0	-35 791	0	0	3 463 458	3 463 458	17 155 948	77.97			

10 720	1	0	1 035 493	0	1 041 435	1 041 435	0	3 463 458	4 504 893	16 114 513	86.86			
28 085	1	0	595 702	0	601 064	1 642 499	0	3 463 458	5 105 957	15 513 449	91.10			
2 480	1	0	522 923	0	525 382	2 167 881	0	3 463 458	5 631 338	14 988 067	94.48			
2 400	1	0	475 881	0	475 881	2 643 762	0	3 463 458	6 107 219	14 512 186	97.42			
2 480	1	0	452 989	0	452 989	3 096 751	0	3 463 458	6 560 208	14 059 198	100.13			
119054														
2 480	1	0	454 610	0	454 610	3 551 361	0	3 463 458	7 014 818	13 604 588	102.77			
2 240	1	0	446 650	0	446 650	3 998 011	0	3 463 458	7 461 468	13 157 938	105.28			
2 480	1	0	452 057	0	452 057	4 450 067	0	3 463 458	7 913 525	12 705 881	107.71			
2 400	1	0	450 273	0	450 273	4 900 340	0	3 463 458	8 363 798	12 255 608	109.94			
2 480	1	0	510 873	0	510 873	5 411 213	0	3 463 458	8 874 671	11 744 735	112.23			
53 245	1	0	847 209	0	862 537	6 273 750	0	3 463 458	9 737 208	10 882 198	115.96			
7 564	1	0	648 461	0	672 726	6 946 476	0	3 463 458	10 409 934	10 209 472	118.76			
10 720	1	0	691 157	0	697 099	7 643 576	0	3 463 458	11 107 033	9 512 373	121.57			
28 085	1	0	595 702	0	601 064	8 244 639	0	3 463 458	11 708 097	8 911 309	123.92			
2 480	1	0	524 721	0	527 180	8 771 819	0	3 463 458	12 235 277	8 384 129	125.93			
2 400	1	0	477 621	0	477 621	9 249 440	0	3 463 458	12 712 898	7 906 508	127.64			
2 480	1	0	454 787	0	454 787	9 704 227	0	3 463 458	13 167 685	7 451 721	128.48			
119054														
2 480	1	0	456 408	0	456 408	10 160 635	0	3 463 458	13 624 092	6 995 313	129.11			
2 240	1	0	448 274	0	448 274	10 608 909	0	3 463 458	14 072 366	6 547 039	129.73			
2 480	1	0	453 855	0	472 986	11 081 895	0	3 463 458	14 545 352	6 074 054	130.38			
2 400	1	0	452 013	0	471 144	11 553 039	0	3 463 458	15 016 496	5 602 910	131.03			
2 480	1	0	512 671	0	531 984	12 085 023	0	3 463 458	15 548 480	5 070 926	131.76			
53 245	1	0	898 736	0	974 780	13 059 802	0	3 463 458	16 523 260	4 096 146	133.10			
7 564	1	0	655 238	0	709 745	13 769 547	0	3 463 458	17 233 005	3 386 401	134.08			
10 720	1	0	701 024	0	756 263	14 525 811	0	3 463 458	17 989 268	2 630 138	135.12			
28 085	1	0	211 355	0	249 982	14 775 793	0	3 463 458	18 239 251	2 380 155	135.46			
2 480	1	0	113 471	0	135 061	14 910 854	0	3 463 458	18 374 312	2 245 094	135.65			
2 400	1	0	66 371	0	85 684	14 996 538	0	3 463 458	18 459 995	2 159 410	135.77			
2 480	1	0	43 537	0	62 668	15 059 206	0	3 463 458	18 522 663	2 096 742	135.85			
119054														
2 480	1	0	45 158	0	64 289	15 123 495	0	3 463 458	18 586 952	2 032 454	135.94			
2 240	1	0	37 024	0	56 337	15 179 832	0	3 463 458	18 643 289	1 976 117	136.02			
2 480	1	0	42 605	0	61 736	15 241 568	0	3 463 458	18 705 025	1 914 381	136.10			
2 400	1	0	40 763	0	59 894	15 301 461	0	3 463 458	18 764 919	1 854 487	136.18			
2 480	1	0	101 421	0	120 734	15 422 195	0	3 463 458	18 885 653	1 733 753	136.35			
53 245	1	0	487 486	0	563 530	15 985 725	0	3 463 458	19 449 183	1 170 223	137.13			
7 564	1	0	243 988	0	298 495	16 284 220	0	3 463 458	19 747 678	871 728	137.54			
10 720	1	0	289 774	0	345 013	16 629 234	0	3 463 458	20 092 691	526 715	138.01			
28 085	1	0	211 343	0	249 970	16 879 203	0	3 463 458	20 342 661	276 745	138.36			
2 480	1	0	113 471	0	135 061	17 014 264	0	3 463 458	20 477 722	141 684	138.54			
2 400	1	0	66 371	0	85 684	17 099 948	0	3 463 458	20 563 406	56 000	138.66			
2 480	1	0	43 537	0	62 668	17 162 616	0	3 463 458	20 626 074	-6 668	138.75			
119054														
2 480	1	0	45 158	0	64 289	17 226 905	0	3 463 458	20 690 363	-70 957	138.83			
2 240	1	0	37 024	0	56 337	17 283 242	0	3 463 458	20 746 699	-127 294	138.91			
2 480	1	0	42 605	0	61 736	17 344 978	0	3 463 458	20 808 435	-189 030	139.00			
2 400	1	0	40 763	0	59 894	17 404 872	0	3 463 458	20 868 329	-248 923	139.08			

2 480	1	0	101 421	0	120 734	17 525 606	0	3 463 458	20 989 063	-369 657	139.25			
53 245	1	0	487 486	0	563 530	18 089 135	0	3 463 458	21 552 593	-933 187	140.02			
7 564	1	0	243 988	0	298 495	18 387 630	0	3 463 458	21 851 088	-1 231 682	140.43			
10 720	1	0	289 774	0	345 013	18 732 644	0	3 463 458	22 196 101	-1 576 696	140.91			
28 085	1	0	211 343	0	249 970	18 982 613	0	3 463 458	22 446 071	-1 826 665	141.25			
2 480	1	0	113 471	0	135 061	19 117 674	0	3 463 458	22 581 132	-1 961 726	141.44			
2 400	1	0	66 371	0	85 684	19 203 358	0	3 463 458	22 666 816	-2 047 410	141.55			
2 480	1	0	43 537	0	62 668	19 266 026	0	3 463 458	22 729 484	-2 110 078	141.64			
119054														
2 480	1	0	45 158	0	64 289	19 330 315	0	3 463 458	22 793 773	-2 174 367	141.73			
2 240	1	0	37 024	0	56 337	19 386 652	0	3 463 458	22 850 110	-2 230 704	141.81			
2 480	1	0	42 605	0	61 736	19 448 388	0	3 463 458	22 911 846	-2 292 440	141.89			
2 400	1	0	40 763	0	59 894	19 508 282	0	3 463 458	22 971 739	-2 352 334	141.97			
2 480	1	0	101 421	0	120 734	19 629 016	0	3 463 458	23 092 473	-2 473 068	142.14			
53 245	1	0	487 486	0	563 530	20 192 546	0	3 463 458	23 656 003	-3 036 597	142.92			
7 564	1	0	243 988	0	298 495	20 491 041	0	3 463 458	23 954 498	-3 335 092	143.33			
10 720	1	0	289 774	0	345 013	20 836 054	0	3 463 458	24 299 512	-3 680 106	143.80			
28 085	1	0	211 343	0	249 970	21 086 024	0	3 463 458	24 549 481	-3 930 075	144.15			
						21 086 024	0	3 463 458	24 549 481	-3 930 075	144.15			
						21 086 024	0	3 463 458	24 549 481	-3 930 075	144.15			
						21 086 024	0	3 463 458	24 549 481	-3 930 075	144.15			
111694														

Pit E																	Pit E
Pit E Inflow (m^3)	Enter 1 for the discharge location		INFLOW	OUTFLOW	All Pit E inflows Except Pit A	Total Pond Volume (Ice + Water) (m^3)	Tailings Deposited (t)	Cummulative Tailings Deposited (m^3)	Cummulative Volume (m^3)	Water Elevation (m)	Planned Tailing Elevation (m)	Surveyed Water Elevation (m)	Pit E Error (m3)	Overflow Towards Pit A Via Central Dump	Outflow to Pit A above 128	Overflow Towards Goose above 131	
	Pit A	Pit E															
x																	
0																	
0																	
0																	
0																	
0																	
0																	
76590																	
286000			0	0										0	0		
1387539			0	0	0									0	0		
109156														0	0		
1 798	0	1	231 248	394 494	-163 246	3 200 409	348 343	5 672 604	8 873 013	85.77	68.35	85.99	18 000	0	0		
1 624	0	1	229 324	407 137	-177 813	3 022 596	325 867	5 884 206	8 906 802	85.93	69.62	86.03	24 000	0	0		
1 798	0	1	257 823	447 553	-189 730	2 832 866	345 469	6 108 537	8 941 402	86.10	70.92	86.20	20 000	0	0		
1 740	0	1	210 809	447 021	-236 212	2 596 653	298 713	6 302 506	8 899 160	85.90	72.02	86.00	-38 000	0	0		
1 798	0	1	274 839	398 640	-123 801	2 472 853	182 698	6 421 141	8 893 994	85.87	72.68	85.97	22 000	0	0		
51 527	0	1	431 344	182 892	248 451	2 721 304	363 441	6 657 142	9 378 446	88.18	73.99	88.36	62 000	0	0		
6 777	0	1	325 489	120 598	204 891	2 926 195	358 560	6 889 973	9 816 168	90.15	75.25	90.23	-36 000	0	0		
9 867	0	1	320 721	81 613	239 108	3 165 302	303 506	7 087 055	10 252 357	92.02	76.29	92.12	1 000	0	0		
26 891	0	1	190 995	145 016	45 979	3 211 281	99 495	7 151 663	10 362 944	92.49	76.63	92.72	-12 000	0	0		
1 798	0	1	173 039	426 915	-253 876	2 957 406	313 279	7 355 090	10 312 496	92.27	77.69	92.54	-130 000	0	0		
1 740	0	1	279 658	376 286	-96 628	2 860 777	323 782	7 565 338	10 426 115	92.75	78.77	92.99	0	0	0		
1 798	0	1	322 286	430 461	-108 175	2 752 602	301 066	7 760 835	10 513 438	93.12	79.76	93.32	15 000	0	0		
109156													**-54 000**	0	0		
1 798	0	1	306 383	409 082	-102 699	2 649 903	360 780	7 995 108	10 645 011	93.67	80.93			0	0		
1 624	0	1	294 675	382 083	-87 408	2 562 495	336 720	8 213 758	10 776 252	94.21	82.00			0	0		
1 798	0	1	308 455	409 107	-100 653	2 461 842	360 780	8 448 030	10 909 873	94.77	83.12			0	0		
1 740	0	1	278 702	358 764	-80 062	2 381 780	302 940	8 644 745	11 026 525	95.24	84.06			0	0		
1 798	0	1	299 671	392 898	-93 228	2 288 553	340 620	8 865 926	11 154 479	95.77	85.09			0	0		
51 527	0	1	361 182	395 555	-34 373	2 254 179	348 700	9 092 355	11 346 534	96.55	86.13			0	0		
6 777	0	1	346 358	409 107	-62 750	2 191 430	360 780	9 326 628	11 518 058	97.24	86.93			0	0		
9 867	0	1	170 255	400 520	-230 265	1 961 165	0	9 326 628	11 287 792	96.31	86.93			0	0		
26 891	0	1	396 573	395 555	1 019	1 962 183	348 700	9 553 056	11 515 240	97.23	87.56			0	0		
1 798	0	1	354 512	364 791	-10 278	1 951 905	305 660	9 751 537	11 703 442	97.99	88.11			0	0		
1 740	0	1	380 459	379 346	1 113	1 953 018	328 540	9 964 874	11 917 892	98.84	88.70			0	0		
1 798	0	1	395 483	409 107	-13 624	1 939 394	360 780	10 199 147	12 138 541	99.72	89.35			0	0		
109156														0	0		
1 798	0	1	395 599	414 047	-18 447	1 920 947	366 956	10 437 430	12 358 377	100.58	90.01			0	0		
1 624	0	1	379 359	382 789	-3 430	1 917 517	342 374	10 659 751	12 577 268	101.44	90.63			0	0		
1 798	0	1	389 094	414 073	-24 978	1 892 539	366 956	10 898 034	12 790 573	102.27	91.29			0	0		
1 740	0	1	353 846	361 263	-7 416	1 885 122	306 048	11 096 767	12 981 889	103.01	91.84			0	0		
1 798	0	1	372 757	397 864	-25 107	1 860 015	346 796	11 321 959	13 181 974	103.78	92.46			0	0		
51 527	0	1	430 776	400 443	30 333	1 890 348	354 780	11 552 335	13 442 684	104.77	93.10			0	0		
6 777	0	1	412 677	414 073	-1 396	1 888 952	366 956	11 790 618	13 679 571	105.67	93.77			0	0		
9 867	0	1	230 128	405 457	-175 329	1 713 624	0	11 790 618	13 504 242	105.01	93.77			0	0		
26 891	0	1	448 493	400 443	48 050	1 761 674	354 780	12 020 995	13 782 669	106.06	94.40			0	0		
1 798	0	1	402 438	367 309	35 129	1 796 803	308 792	12 221 509	14 018 312	106.94	94.96			0	0		
1 740	0	1	427 633	384 234	43 398	1 840 201	334 620	12 438 795	14 278 996	107.91	95.56			0	0		
1 798	0	1	440 511	414 073	26 438	1 866 639	366 956	12 677 078	14 543 717	108.88	96.23			0	0		

109156													0	0	
1 798	0	1	193 125	293 025	-99 901	1 766 738	364 492	12 913 761	14 680 500	109.37	96.88		0	0	
1 624	0	1	192 544	0	192 544	1 959 282	364 492	13 150 444	15 109 726	110.88	97.54		0	0	
1 798	0	1	192 835	0	192 835	2 152 117	364 492	13 387 127	15 539 244	112.34	98.20		0	0	
1 740	0	1	179 646	0	179 646	2 331 763	340 717	13 608 372	15 940 135	113.69	98.81		0	0	
1 798	0	1	179 761	0	179 761	2 511 523	340 717	13 829 617	16 341 140	115.01	99.42		0	0	
51 527	0	1	232 356	0	232 356	2 743 879	340 717	14 050 862	16 794 741	116.50	100.04		0	0	
6 777	0	1	199 537	0	199 537	2 943 416	364 168	14 287 335	17 230 750	117.90	100.70		0	0	
9 867	0	1	200 733	0	200 733	3 144 149	364 168	14 523 807	17 667 956	119.29	101.35		0	0	
26 891	0	1	218 185	0	218 185	3 362 334	364 168	14 760 280	18 122 614	120.72	87.39		0	0	
1 798	0	1	181 255	0	181 255	3 543 589	341 632	14 982 119	18 525 708	121.97	87.99		0	0	
1 740	0	1	181 246	0	181 246	3 724 835	341 632	15 203 958	18 928 793	123.20	88.57		0	0	
1 798	0	1	181 255	0	181 255	3 906 090	341 632	15 425 797	19 331 887	124.41	89.14		0	0	
109156															
1 798	0	1	1 798	0	1 798	3 907 888	0	15 425 797	19 333 685	124.41	89.14		0	0	
1 624	0	1	1 624	0	1 624	3 909 512	0	15 425 797	19 335 309	124.42	89.14		0	0	
1 798	0	1	1 798	0	1 798	3 911 310	0	15 425 797	19 337 107	124.43	89.14		0	0	
1 740	0	1	1 740	0	1 740	3 913 050	0	15 425 797	19 338 847	124.43	89.14		0	0	
1 798	0	1	1 798	0	1 798	3 914 848	0	15 425 797	19 340 645	124.44	89.14		0	0	
51 527	0	1	51 527	0	51 527	3 966 375	0	15 425 797	19 392 172	124.59	89.14		0	0	
6 777	0	1	6 777	0	6 777	3 973 152	0	15 425 797	19 398 949	124.61	89.14		0	0	
9 867	0	1	9 867	0	9 867	3 983 019	0	15 425 797	19 408 816	124.64	89.14		0	0	
26 891	0	1	26 891	0	26 891	4 009 910	0	15 425 797	19 435 707	124.71	89.14		0	0	
1 798	0	1	1 798	0	1 798	4 011 708	0	15 425 797	19 437 505	124.72	89.14		0	0	
1 740	0	1	1 740	0	1 740	4 013 448	0	15 425 797	19 439 245	124.73	89.14		0	0	
1 798	0	1	1 798	0	1 798	4 015 246	0	15 425 797	19 441 043	124.73	89.14		0	0	
109156															
1 798	0	1	1 798	0	1 798	4 017 044	0	15 425 797	19 442 841	124.74	89.14		0	0	
1 624	0	1	1 624	0	1 624	4 018 668	0	15 425 797	19 444 465	124.74	89.14		0	0	
1 798	0	1	1 798	0	1 798	4 020 466	0	15 425 797	19 446 263	124.75	89.14		0	0	
1 740	0	1	1 740	0	1 740	4 022 206	0	15 425 797	19 448 003	124.75	89.14		0	0	
1 798	0	1	1 798	0	1 798	4 024 004	0	15 425 797	19 449 801	124.76	89.14		0	0	
51 527	0	1	104 772	0	104 772	4 128 776	0	15 425 797	19 554 573	125.06	89.14		0	0	
6 777	0	1	14 341	0	14 341	4 143 117	0	15 425 797	19 568 914	125.10	89.14				
9 867	0	1	20 587	0	20 587	4 163 704	0	15 425 797	19 589 501	125.16	89.14				
26 891	0	1	54 976	0	54 976	4 218 680	0	15 425 797	19 644 477	125.32	89.14				
1 798	0	1	4 278	0	4 278	4 222 958	0	15 425 797	19 648 755	125.33	89.14				
1 740	0	1	4 140	0	4 140	4 227 098	0	15 425 797	19 652 895	125.34	89.14				
1 798	0	1	4 278	0	4 278	4 231 376	0	15 425 797	19 657 173	125.36	89.14				
109156															
1 798	0	1	4 278	111 600	-107 322	4 124 054	0	15 425 797	19 549 851	125.05					
1 624	0	1	3 864	100 800	-96 936	4 027 118	0	15 425 797	19 452 915	124.77					
1 798	0	1	4 278	111 600	-107 322	3 919 796	0	15 425 797	19 345 593	124.45					
1 740	0	1	4 140	72 000	-67 860	3 851 936	0	15 425 797	19 277 733	124.25					
1 798	0	1	4 278	74 400	-70 122	3 781 814	0	15 425 797	19 207 611	124.04					
51 527	0	1	104 772	72 000	32 772	3 814 586	0	15 425 797	19 240 383	124.14					
6 777	0	1	14 341	74 400	-60 059	3 754 527	0	15 425 797	19 180 324	123.96					
9 867	0	1	20 587	74 400	-53 813	3 700 714	0	15 425 797	19 126 511	123.80					
26 891	0	1	54 976	72 000	-17 024	3 683 690	0	15 425 797	19 109 487	123.75					
1 798	0	1	4 278	74 400	-70 122	3 613 568	0	15 425 797	19 039 365	123.54					
1 740	0	1	4 140	72 000	-67 860	3 545 708	0	15 425 797	18 971 505	123.33					
1 798	0	1	4 278	74 400	-70 122	3 475 586	0	15 425 797	18 901 383	123.12					
109156															
1 798	0	1	4 278	93 000	-88 722	3 386 864	0	15 425 797	18 812 661	122.85					
1 624	0	1	3 864	84 000	-80 136	3 306 728	0	15 425 797	18 732 525	122.61					

1 798	0	1	4 278	93 000	-88 722	3 218 006	0	15 425 797	18 643 803	122.34						
1 740	0	1	4 140	90 000	-85 860	3 132 146	0	15 425 797	18 557 943	122.07						
1 798	0	1	4 278	93 000	-88 722	3 043 424	0	15 425 797	18 469 221	121.80						
51 527	0	1	104 772	90 000	14 772	3 058 196	0	15 425 797	18 483 993	121.85						
6 777	0	1	14 341	93 000	-78 659	2 979 537	0	15 425 797	18 405 334	121.60						
9 867	0	1	20 587	93 000	-72 413	2 907 124	0	15 425 797	18 332 921	121.38						
26 891	0	1	54 976	90 000	-35 024	2 872 100	0	15 425 797	18 297 897	121.27						
1 798	0	1	4 278	93 000	-88 722	2 783 378	0	15 425 797	18 209 175	120.99						
1 740	0	1	4 140	90 000	-85 860	2 697 518	0	15 425 797	18 123 315	120.73						
1 798	0	1	4 278	93 000	-88 722	2 608 796	0	15 425 797	18 034 593	120.45						
109156					**-866 790**											
1 798	0	1	4 278	120 900	-116 622	2 492 174	0	15 425 797	17 917 971	120.08						
1 624	0	1	3 864	109 200	-105 336	2 386 838	0	15 425 797	17 812 635	119.75						
1 798	0	1	4 278	120 900	-116 622	2 270 216	0	15 425 797	17 696 013	119.38						
1 740	0	1	4 140	117 000	-112 860	2 157 356	0	15 425 797	17 583 153	119.03						
1 798	0	1	4 278	120 900	-116 622	2 040 734	0	15 425 797	17 466 531	118.65						
51 527	0	1	104 772	117 000	-12 228	2 028 506	0	15 425 797	17 454 303	118.62						
6 777	0	1	14 341	120 900	-106 559	1 921 947	0	15 425 797	17 347 744	118.28						
9 867	0	1	20 587	120 900	-100 313	1 821 634	0	15 425 797	17 247 431	117.95						
26 891	0	1	54 976	117 000	-62 024	1 759 610	0	15 425 797	17 185 407	117.76						
1 798	0	1	4 278	120 900	-116 622	1 642 988	0	15 425 797	17 068 785	117.38						
1 740	0	1	4 140	117 000	-112 860	1 530 128	0	15 425 797	16 955 925	117.02						
1 798	0	1	4 278	120 900	-116 622	1 413 506	0	15 425 797	16 839 303	116.64						
109156					**-1 195 290**											
1 798	0	1	4 278	120 900	-116 622	1 296 884	0	15 425 797	16 722 681	116.26						
1 624	0	1	3 864	113 100	-109 236	1 187 648	0	15 425 797	16 613 445	115.91						
1 798	0	1	4 278	120 900	-116 622	1 071 026	0	15 425 797	16 496 823	115.52						
1 740	0	1	4 140	117 000	-112 860	958 166	0	15 425 797	16 383 963	115.15						
1 798	0	1	4 278	120 900	-116 622	841 544	0	15 425 797	16 267 341	114.77						
51 527	0	1	104 772	117 000	-12 228	829 316	0	15 425 797	16 255 113	114.73						
6 777	0	1	14 341	120 900	-106 559	722 757	0	15 425 797	16 148 554	114.38						
9 867	0	1	20 587	120 900	-100 313	622 444	0	15 425 797	16 048 241	114.05						
26 891	0	1	54 976	117 000	-62 024	560 420	0	15 425 797	15 986 217	113.84						
1 798	0	1	4 278	120 900	-116 622	443 798	0	15 425 797	15 869 595	113.45						
1 740	0	1	4 140	117 000	-112 860	330 938	0	15 425 797	15 756 735	113.08						
1 798	0	1	4 278	120 900	-116 622	214 316	0	15 425 797	15 640 113	112.68						
109156					**-1 199 190**											
1 798	0	1	4 278	120 900	-116 622	97 694	0	15 425 797	15 523 491	112.29						
1 624	0	1	3 864	102 313	-98 449	-755	0	15 425 797	15 425 042	111.96						
1 798	0	1	4 278	0	4 278	3 523	0	15 425 797	15 429 320	111.97						
1 740	0	1	19 104	0	19 104	22 627	0	15 425 797	15 448 424	112.04						
1 798	0	1	22 162	0	22 162	44 789	0	15 425 797	15 470 586	112.11						
51 527	0	1	344 033	0	344 033	388 822	0	15 425 797	15 814 619	113.27						
6 777	0	1	174 683	0	174 683	563 505	0	15 425 797	15 989 302	113.85						
9 867	0	1	129 540	0	129 540	693 045	0	15 425 797	16 118 842	114.28						
26 891	0	1	122 587	0	122 587	815 632	0	15 425 797	16 241 429	114.69						
1 798	0	1	21 975	0	21 975	837 607	0	15 425 797	16 263 404	114.76						
1 740	0	1	19 104	0	19 104	856 711	0	15 425 797	16 282 508	114.82						
1 798	0	1	19 242	0	19 242	875 953	0	15 425 797	16 301 750	114.88						
109156																
1 798	0	1	19 242	0	19 242	895 195	0	15 425 797	16 320 992	114.95						
1 624	0	1	18 828	0	18 828	914 023	0	15 425 797	16 339 820	115.01						
1 798	0	1	19 242	0	19 242	933 265	0	15 425 797	16 359 062	115.07						
1 740	0	1	19 104	0	19 104	952 369	0	15 425 797	16 378 166	115.14						
1 798	0	1	22 162	0	22 162	974 530	0	15 425 797	16 400 327	115.21						

51 527	0	1	344 033	0	344 033	1 318 563	0	15 425 797	16 744 360	116.33						
6 777	0	1	174 683	0	174 683	1 493 246	0	15 425 797	16 919 043	116.90						
9 867	0	1	129 540	0	129 540	1 622 787	0	15 425 797	17 048 584	117.32						
26 891	0	1	122 587	0	122 587	1 745 373	0	15 425 797	17 171 170	117.71						
1 798	0	1	21 975	0	21 975	1 767 348	0	15 425 797	17 193 145	117.78						
1 740	0	1	19 104	0	19 104	1 786 452	0	15 425 797	17 212 249	117.84						
1 798	0	1	19 242	0	19 242	1 805 694	0	15 425 797	17 231 491	117.90						
109156																
1 798	0	1	19 242	0	19 242	1 824 936	0	15 425 797	17 250 733	117.97						
1 624	0	1	18 828	0	18 828	1 843 764	0	15 425 797	17 269 561	118.03						
1 798	0	1	19 242	0	19 242	1 863 006	0	15 425 797	17 288 803	118.09						
1 740	0	1	19 104	0	19 104	1 882 110	0	15 425 797	17 307 907	118.15						
1 798	0	1	22 162	0	22 162	1 904 272	0	15 425 797	17 330 069	118.22						
51 527	0	1	344 033	0	344 033	2 248 304	0	15 425 797	17 674 101	119.31						
6 777	0	1	174 683	0	174 683	2 422 988	0	15 425 797	17 848 785	119.86						
9 867	0	1	129 540	0	129 540	2 552 528	0	15 425 797	17 978 325	120.27						
26 891	0	1	122 587	0	122 587	2 675 114	0	15 425 797	18 100 911	120.66						
1 798	0	1	21 975	0	21 975	2 697 089	0	15 425 797	18 122 886	120.72						
1 740	0	1	19 104	0	19 104	2 716 193	0	15 425 797	18 141 990	120.78						
1 798	0	1	19 242	0	19 242	2 735 435	0	15 425 797	18 161 232	120.84						
109156																
1 798	0	1	19 242	0	19 242	2 754 677	0	15 425 797	18 180 474	120.90						
1 624	0	1	18 828	0	18 828	2 773 505	0	15 425 797	18 199 302	120.96						
1 798	0	1	19 242	0	19 242	2 792 747	0	15 425 797	18 218 544	121.02						
1 740	0	1	19 104	0	19 104	2 811 851	0	15 425 797	18 237 648	121.08						
1 798	0	1	22 162	0	22 162	2 834 013	0	15 425 797	18 259 810	121.15						
51 527	0	1	344 033	0	344 033	3 178 046	0	15 425 797	18 603 843	122.21						
6 777	0	1	174 683	0	174 683	3 352 729	0	15 425 797	18 778 526	122.75						
9 867	0	1	129 540	0	129 540	3 482 269	0	15 425 797	18 908 066	123.14						
26 891	0	1	122 587	0	122 587	3 604 856	0	15 425 797	19 030 653	123.51						
1 798	0	1	21 975	0	21 975	3 626 830	0	15 425 797	19 052 627	123.58						
1 740	0	1	19 104	0	19 104	3 645 934	0	15 425 797	19 071 731	123.64						
1 798	0	1	19 242	0	19 242	3 665 176	0	15 425 797	19 090 973	123.69						
109156																
1 798	0	1	19 242	0	19 242	3 684 418	0	15 425 797	19 110 215	123.75						
1 624	0	1	18 828	0	18 828	3 703 246	0	15 425 797	19 129 043	123.81						
1 798	0	1	19 242	0	19 242	3 722 488	0	15 425 797	19 148 285	123.86						
1 740	0	1	19 104	0	19 104	3 741 592	0	15 425 797	19 167 389	123.92						
1 798	0	1	22 162	0	22 162	3 763 754	0	15 425 797	19 189 551	123.99						
51 527	0	1	344 033	0	344 033	4 107 787	0	15 425 797	19 533 584	125.00						
6 777	0	1	174 683	0	174 683	4 282 470	0	15 425 797	19 708 267	125.50						
9 867	0	1	129 540	0	129 540	4 412 010	0	15 425 797	19 837 807	125.87						
26 891	0	1	122 587	0	122 587	4 534 597	0	15 425 797	19 960 394	126.22						
1 798	0	1	21 975	0	21 975	4 556 572	0	15 425 797	19 982 369	126.28						
1 740	0	1	19 104	0	19 104	4 575 676	0	15 425 797	20 001 473	126.33						
1 798	0	1	19 242	0	19 242	4 594 918	0	15 425 797	20 020 715	126.38						
109156																
1 798	0	1	19 242	0	19 242	4 614 159	0	15 425 797	20 039 956	126.44						
1 624	0	1	18 828	0	18 828	4 632 987	0	15 425 797	20 058 784	126.49						
1 798	0	1	19 242	0	19 242	4 652 229	0	15 425 797	20 078 026	126.54						
1 740	0	1	19 104	0	19 104	4 671 333	0	15 425 797	20 097 130	126.59						
1 798	0	1	19 242	0	19 242	4 690 575	0	15 425 797	20 116 372	126.65						
51 527	0	1	119 736	0	119 736	4 810 311	0	15 425 797	20 236 108	126.97						
6 777	0	1	-470 695	0	-470 695	4 339 616	0	15 425 797	19 765 413	125.67						
9 867	0	1	-464 449	0	-464 449	3 875 167	0	15 425 797	19 300 964	124.32						

26 891	0	1	69 940	0	69 940	3 945 107	0	15 425 797	19 370 904	124.52						
1 798	0	1	19 242	0	19 242	3 964 349	0	15 425 797	19 390 146	124.58						
1 740	0	1	19 104	0	19 104	3 983 453	0	15 425 797	19 409 250	124.64						
1 798	0	1	19 242	0	19 242	4 002 695	0	15 425 797	19 428 492	124.69						
109156																
1 798	0	1	19 242	0	19 242	4 021 937	0	15 425 797	19 447 734	124.75						
1 624	0	1	18 828	0	18 828	4 040 765	0	15 425 797	19 466 562	124.81						
1 798	0	1	19 242	0	19 242	4 060 007	0	15 425 797	19 485 804	124.86						
1 740	0	1	19 104	0	19 104	4 079 110	0	15 425 797	19 504 907	124.92						
1 798	0	1	19 242	0	19 242	4 098 352	0	15 425 797	19 524 149	124.97						
51 527	0	1	119 736	0	119 736	4 218 088	0	15 425 797	19 643 885	125.32						
6 777	0	1	29 305	0	29 305	4 247 393	0	15 425 797	19 673 190	125.40						
9 867	0	1	35 551	0	35 551	4 282 944	0	15 425 797	19 708 741	125.51						
26 891	0	1	69 940	0	69 940	4 352 884	0	15 425 797	19 778 681	125.70						
1 798	0	1	19 242	0	19 242	4 372 126	0	15 425 797	19 797 923	125.76						
1 740	0	1	19 104	0	19 104	4 391 230	0	15 425 797	19 817 027	125.81						
1 798	0	1	19 242	0	19 242	4 410 472	0	15 425 797	19 836 269	125.87						
109156																
1 798	0	1	19 242	0	19 242	4 429 714	0	15 425 797	19 855 511	125.92						
1 624	0	1	18 828	0	18 828	4 448 542	0	15 425 797	19 874 339	125.98						
1 798	0	1	19 242	0	19 242	4 467 784	0	15 425 797	19 893 581	126.03						
1 740	0	1	19 104	0	19 104	4 486 888	0	15 425 797	19 912 685	126.08						
1 798	0	1	19 242	0	19 242	4 506 130	0	15 425 797	19 931 927	126.14						
51 527	0	1	119 736	0	119 736	4 625 865	0	15 425 797	20 051 662	126.47						
6 777	0	1	29 305	0	29 305	4 655 170	0	15 425 797	20 080 967	126.55						
9 867	0	1	59 164	0	59 164	4 714 334	0	15 425 797	20 140 131	126.71						
26 891	0	1	60 156	0	60 156	4 774 490	0	15 425 797	20 200 287	126.88						
1 798	0	1	20 929	0	20 929	4 795 419	0	15 425 797	20 221 216	126.93						
1 740	0	1	21 053	0	21 053	4 816 472	0	15 425 797	20 242 269	126.99						
1 798	0	1	20 929	0	20 929	4 837 401	0	15 425 797	20 263 198	127.05						
109156																
1 798	0	1	20 929	0	20 929	4 858 330	0	15 425 797	20 284 127	127.10						
1 624	0	1	20 937	0	20 937	4 879 267	0	15 425 797	20 305 064	127.16						
1 798	0	1	20 929	0	20 929	4 900 196	0	15 425 797	20 325 993	127.22						
1 740	0	1	20 871	0	20 871	4 921 067	0	15 425 797	20 346 864	127.27						
1 798	0	1	21 111	0	21 111	4 942 178	0	15 425 797	20 367 975	127.33						
51 527	0	1	112 243	0	112 243	5 054 421	0	15 425 797	20 480 218	127.63						
6 777	0	1	37 019	0	37 019	5 091 440	0	15 425 797	20 517 237	127.73						
9 867	0	1	59 164	0	59 164	5 150 604	0	15 425 797	20 576 401	127.89						
26 891	0	1	60 156	0	60 156	5 210 760	0	15 425 797	20 636 557	128.02						
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 740	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
109156																
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 624	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 740	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
51 527	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
6 777	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
9 867	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
26 891	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 740	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						

1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
109156																
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 624	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 740	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
51 527	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
6 777	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
9 867	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
26 891	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 740	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
109156																
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 624	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 740	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
51 527	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
6 777	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
9 867	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
26 891	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 740	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
109156																
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 624	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 740	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
1 798	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
51 527	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
6 777	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
9 867	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
26 891	1	0	0	0	0	5 210 760	0	15 425 797	20 636 557	128.02						
						5 210 760	0	15 425 797	20 636 557	128.02						
						5 210 760	0	15 425 797	20 636 557	128.02						
						5 210 760	0	15 425 797	20 636 557	128.02						
103820																

Goose Pit														Goose Pit
Goose Inflow (m^3)	Enter 1 for the discharge location				Total Pond Volume (Ice + Water) (m^3)	Tailings Deposited (t)	Cummulative Tailings Deposited (m^3)	Cummulative Volume (m^3)	Volume Available Remaining (m^3)	Water Elevation (m)	Planned Tailing Elevation (m)	Modeled Tailing Elevation (m)	Surveyed Water Elevation (m)	
	NC	SC	Goose	Portage										
x														
344 994														
307 769														
383 800														
375 300														
464 019														
89 963														
327 114														
389 350														
199 289														
253 500														
27 218			1		3 357 995	0	1 773 921	5 131 916	2 742 356	113.22	89.87		113.14	
24 584			1		3 382 579	0	1 773 921	5 156 500	2 717 772	113.43	89.87		113.24	
27 218			1		3 409 797	0	1 773 921	5 183 718	2 690 554	113.65	89.87		113.35	
26 340			1		3 436 137	0	1 773 921	5 210 058	2 664 214	113.87	89.87		113.44	
27 218			1		3 463 355	0	1 773 921	5 237 276	2 636 996	114.09	89.87		113.96	
65 316			1		3 528 671	0	1 773 921	5 302 592	2 571 680	114.62	89.87		114.26	
31 116			1		3 559 787	0	1 773 921	5 333 708	2 540 564	114.87	89.87		114.41	
33 535			1		3 593 322	0	1 773 921	5 367 243	2 507 029	115.15	89.87		114.58	
46 029			1		3 751 874	0	1 773 921	5 525 795	2 348 477	116.42	89.87		115.42	
27 218			1		4 042 334	0	1 773 921	5 816 255	2 058 017	118.71	89.87			
26 340			1		3 997 728	0	1 773 921	5 771 649	2 102 623	118.36	89.87			
27 218			1		4 024 946	0	1 773 921	5 798 867	2 075 405	118.58	89.87			
389 350														
27 218			1		4 052 164	0	1 773 921	5 826 085	2 048 187	118.79	89.87			
24 584			1		4 076 748	0	1 773 921	5 850 669	2 023 603	118.98	89.87			
27 218			1		4 103 966	0	1 773 921	5 877 887	1 996 385	119.19	89.87			
26 340			1		4 130 306	0	1 773 921	5 904 227	1 970 045	119.39	89.87			
27 218			1		4 157 524	0	1 773 921	5 931 445	1 942 827	119.60	89.87			
65 316			1		4 222 840	0	1 773 921	5 996 761	1 877 511	120.10	89.87			
31 116			1		4 253 956	0	1 773 921	6 027 877	1 846 395	120.33	89.87			
33 535			1		4 287 491	0	1 773 921	6 061 412	1 812 860	120.59	89.87			
46 029			1		4 333 520	0	1 773 921	6 107 441	1 766 831	120.93	89.87			
27 218			1		4 360 738	0	1 773 921	6 134 659	1 739 613	121.13	89.87			

26 340			1		4 387 078	0	1 773 921	6 160 999	1 713 273	121.33	89.87		
27 218			1		4 414 296	0	1 773 921	6 188 217	1 686 055	121.53	89.87		
389 350													
27 218			1		4 441 514	0	1 773 921	6 215 435	1 658 837	121.73	89.87		
24 584			1		4 466 098	0	1 773 921	6 240 019	1 634 253	121.91	89.87		
27 218			1		4 493 316	0	1 773 921	6 267 237	1 607 035	122.10	89.87		
26 340			1		4 519 656	0	1 773 921	6 293 577	1 580 695	122.29	89.87		
27 218			1		4 546 874	0	1 773 921	6 320 795	1 553 477	122.49	89.87		
65 316			1		4 612 190	0	1 773 921	6 386 111	1 488 161	122.95	89.87		
31 116			1		4 643 306	0	1 773 921	6 417 227	1 457 045	123.17	89.87		
33 535			1		4 676 841	0	1 773 921	6 450 762	1 423 510	123.41	89.87		
46 029			1		4 722 870	0	1 773 921	6 496 791	1 377 481	123.73	89.87		
27 218			1		4 750 088	0	1 773 921	6 524 009	1 350 263	123.91	89.87		
26 340			1		4 776 428	0	1 773 921	6 550 349	1 323 923	124.09	89.87		
27 218			1		4 803 646	0	1 773 921	6 577 567	1 296 705	124.28	89.87		
389 350													
27 218			1		4 830 864	0	1 773 921	6 604 785	1 269 487	124.47	89.87		
24 584			1		4 855 448	0	1 773 921	6 629 369	1 244 903	124.63	89.87		
27 218			1		4 882 666	0	1 773 921	6 656 587	1 217 685	124.82	89.87		
26 340			1		4 909 006	0	1 773 921	6 682 927	1 191 345	124.99	89.87		
27 218			1		4 936 224	0	1 773 921	6 710 145	1 164 127	125.17	89.87		
65 316			1		5 001 540	0	1 773 921	6 775 461	1 098 811	125.60	89.87		
31 116			1		5 032 656	0	1 773 921	6 806 577	1 067 695	125.79	89.87		
33 535			1		5 066 191	0	1 773 921	6 840 112	1 034 160	126.00	89.87		
46 029			1		5 112 220	0	1 773 921	6 886 141	988 131	126.27	89.87		
27 218			1		5 139 438	0	1 773 921	6 913 359	960 913	126.42	89.87		
26 340			1		5 165 778	0	1 773 921	6 939 699	934 573	126.57	89.87		
27 218			1		5 192 996	0	1 773 921	6 966 917	907 355	126.73	89.87		
389 350													
27 218			1		5 220 214	0	1 773 921	6 994 135	880 137	126.88	89.87		
24 584			1		5 244 798	0	1 773 921	7 018 719	855 553	127.01	89.87		
27 218			1		5 272 016	0	1 773 921	7 045 937	828 335	127.16	89.87		
26 340			1		5 298 356	0	1 773 921	7 072 277	801 995	127.30	89.87		
27 218			1		5 325 574	0	1 773 921	7 099 495	774 777	127.44	89.87		
65 316			1		5 390 890	0	1 773 921	7 164 811	709 461	127.78	89.87		
31 116			1		5 422 006	0	1 773 921	7 195 927	678 345	127.94	89.87		
33 535			1		5 455 541	0	1 773 921	7 229 462	644 810	128.11	89.87		
46 029			1		5 501 570	0	1 773 921	7 275 491	598 781	128.33	89.87		
27 218			1		5 528 788	0	1 773 921	7 302 709	571 563	128.47	89.87		
26 340			1		5 555 128	0	1 773 921	7 329 049	545 223	128.59	89.87		

27 218			1		5 582 346	0	1 773 921	7 356 267	518 005	128.72	89.87		
389 350													
27 218			1		5 609 564	0	1 773 921	7 383 485	490 787	128.85			
24 584			1		5 634 148	0	1 773 921	7 408 069	466 203	128.96			
27 218			1		5 661 366	0	1 773 921	7 435 287	438 985	129.09			
26 340			1		5 687 706	0	1 773 921	7 461 627	412 645	129.21			
27 218			1		5 714 924	0	1 773 921	7 488 845	385 427	129.33			
65 316			1		5 780 240	0	1 773 921	7 554 161	320 111	129.63			
31 116			1		5 683 983	0	1 773 921	7 457 904	416 368	129.19			
33 535			1		5 721 335	0	1 773 921	7 495 256	379 016	129.36			
46 029			1		5 775 117	0	1 773 921	7 549 038	325 234	129.60			
27 218			1		5 749 083	0	1 773 921	7 523 004	351 268	129.49			
26 340			1		5 688 159	0	1 773 921	7 462 080	412 192	129.21			
27 218			1		5 625 204	0	1 773 921	7 399 125	475 147	128.92			
389 350													
27 218			1		5 546 476	0	1 773 921	7 320 397	553 875	128.55			
24 584			1		5 475 368	0	1 773 921	7 249 289	624 983	128.20			
27 218			1		5 396 640	0	1 773 921	7 170 561	703 711	127.81			
26 340			1		5 320 452	0	1 773 921	7 094 373	779 899	127.41			
27 218			1		5 254 267	0	1 773 921	7 028 188	846 084	127.06			
65 316			1		5 585 733	0	1 773 921	7 359 654	514 618	128.74			
31 116			1		5 710 167	0	1 773 921	7 484 088	390 184	129.31			
33 535			1		5 731 746	0	1 773 921	7 505 667	368 605	129.41			
46 029			1		5 770 263	0	1 773 921	7 544 184	330 088	129.58			
27 218			1		5 728 457	0	1 773 921	7 502 378	371 894	129.39			
26 340			1		5 652 269	0	1 773 921	7 426 190	448 082	129.05			
27 218			1		5 573 541	0	1 773 921	7 347 462	526 810	128.68			
389 350													
19 131			1		5 523 926	0	1 773 921	7 297 847	576 425	128.44			
19 313			1		5 481 147	0	1 773 921	7 255 068	619 204	128.23			
19 131			1		5 431 532	0	1 773 921	7 205 453	668 819	127.99			
19 131			1		5 384 135	0	1 773 921	7 158 056	716 216	127.74			
19 313			1		5 337 622	0	1 773 921	7 111 543	762 729	127.51			
60 716			1		5 556 107	0	1 773 921	7 330 028	544 244	128.60			
30 242			1		5 662 982	0	1 773 921	7 436 903	437 369	129.10			
49 297			1		5 737 523	0	1 773 921	7 511 444	362 828	129.44			
33 265			1		5 756 906	0	1 773 921	7 530 827	343 445	129.52			
19 131			1		5 710 025	0	1 773 921	7 483 946	390 326	129.31			
19 313			1		5 662 810	0	1 773 921	7 436 731	437 541	129.10			
19 131			1		5 613 195	0	1 773 921	7 387 116	487 156	128.87			

327 114												
19 131			1		5 563 580	0	1 773 921	7 337 501	536 771	128.63		
19 313			1		5 520 801	0	1 773 921	7 294 722	579 550	128.43		
19 131			1		5 471 186	0	1 773 921	7 245 107	629 165	128.18		
19 131			1		5 423 789	0	1 773 921	7 197 710	676 562	127.95		
19 313			1		5 377 276	0	1 773 921	7 151 197	723 075	127.71		
60 716			1		5 595 761	0	1 773 921	7 369 682	504 590	128.78		
30 242			1		5 702 636	0	1 773 921	7 476 557	397 715	129.28		
49 297			1		5 777 177	0	1 773 921	7 551 098	323 174	129.61		
33 265			1		5 796 560	0	1 773 921	7 570 481	303 791	129.70		
19 131			1		5 749 679	0	1 773 921	7 523 600	350 672	129.49		
19 313			1		5 702 464	0	1 773 921	7 476 385	397 887	129.28		
19 131			1		5 652 849	0	1 773 921	7 426 770	447 502	129.05		
327 114												
19 131			1		5 603 234	0	1 773 921	7 377 155	497 117	128.82		
19 313			1		5 558 237	0	1 773 921	7 332 158	542 114	128.61		
19 131			1		5 508 622	0	1 773 921	7 282 543	591 729	128.37		
19 131			1		5 461 225	0	1 773 921	7 235 146	639 126	128.13		
19 313			1		5 414 713	0	1 773 921	7 188 634	685 638	127.90		
60 716			1		5 633 198	0	1 773 921	7 407 119	467 153	128.96		
30 242			1		5 740 072	0	1 773 921	7 513 993	360 279	129.45		
49 297			1		5 814 613	0	1 773 921	7 588 534	285 738	129.78		
33 265			1		5 833 997	0	1 773 921	7 607 918	266 354	129.86		
19 131			1		5 787 115	0	1 773 921	7 561 036	313 236	129.66		
19 313			1		5 739 900	0	1 773 921	7 513 821	360 451	129.45		
19 131			1		5 690 285	0	1 773 921	7 464 206	410 066	129.22		
327 114												
19 131			1		5 640 671	0	1 773 921	7 414 592	459 680	129.00		
19 313			1		5 597 891	0	1 773 921	7 371 812	502 460	128.79		
19 131			1		5 451 556	0	1 773 921	7 225 477	648 795	128.09		
19 131			1		5 310 559	0	1 773 921	7 084 480	789 792	127.36		
19 313			1		5 164 407	0	1 773 921	6 938 328	935 944	126.57		
60 716			1		5 064 995	0	1 773 921	6 838 916	1 035 356	125.99		
30 242			1		4 929 771	0	1 773 921	6 703 692	1 170 580	125.13		
49 297			1		4 813 603	0	1 773 921	6 587 524	1 286 748	124.35		
33 265			1		4 686 740	0	1 773 921	6 460 661	1 413 611	123.48		
19 131			1		4 540 405	0	1 773 921	6 314 326	1 559 946	122.44		
19 313			1		4 399 590	0	1 773 921	6 173 511	1 700 761	121.42		
19 131			1		4 253 255	0	1 773 921	6 027 176	1 847 096	120.33		
327 114												

19 131			1		4 092 041	0	1 773 921	5 865 962	2 008 310	119.10			
19 313			1		3 948 461	0	1 773 921	5 722 382	2 151 890	117.98			
19 131			1		3 787 246	0	1 773 921	5 561 167	2 313 105	116.70			
19 131			1		3 631 849	0	1 773 921	5 405 770	2 468 502	115.46			
19 313			1		3 470 817	0	1 773 921	5 244 738	2 629 534	114.15			
60 716			1		3 357 005	0	1 773 921	5 130 926	2 743 346	113.22			
30 242			1		3 206 901	0	1 773 921	4 980 822	2 893 450	111.97			
49 297			1		3 075 853	0	1 773 921	4 849 774	3 024 498	110.87			
33 265			1		2 934 590	0	1 773 921	4 708 511	3 165 761	109.64			
19 131			1		2 773 375	0	1 773 921	4 547 296	3 326 976	108.14			
19 313			1		2 618 160	0	1 773 921	4 392 081	3 482 191	106.65			
19 131			1		2 456 945	0	1 773 921	4 230 866	3 643 406	105.07			
327 114													
19 131			1		2 295 731	0	1 773 921	4 069 652	3 804 620	103.46			
19 313			1		2 152 151	0	1 773 921	3 926 072	3 948 200	102.01			
19 131			1		1 990 936	0	1 773 921	3 764 857	4 109 415	100.35			
19 131			1		1 835 539	0	1 773 921	3 609 460	4 264 812	98.72			
19 313			1		1 674 507	0	1 773 921	3 448 428	4 425 844	97.01			
60 716			1		1 560 695	0	1 773 921	3 334 616	4 539 656	95.77			
30 242			1		1 410 591	0	1 773 921	3 184 512	4 689 760	94.12			
49 297			1		1 279 543	0	1 773 921	3 053 464	4 820 808	92.66			
33 265			1		1 138 280	0	1 773 921	2 912 201	4 962 071	91.04			
19 131			1		977 065	0	1 773 921	2 750 986	5 123 286	89.14			
19 313			1		821 850	0	1 773 921	2 595 771	5 278 501	87.17			
19 131			1		660 635	0	1 773 921	2 434 556	5 439 716	84.99			
327 114													
19 131			1		499 421	0	1 773 921	2 273 342	5 600 930	82.72			
19 313			1		350 023	0	1 773 921	2 123 944	5 750 328	80.55			
19 131			1		188 809	0	1 773 921	1 962 730	5 911 542	78.12			
19 131			1		33 412	0	1 773 921	1 807 333	6 066 939	75.68			
19 313			1		0	0	1 773 921	1 773 921	6 100 351	75.14			
60 716			1		60 716	0	1 773 921	1 834 637	6 039 635	76.12			
30 242			1		90 958	0	1 773 921	1 864 879	6 009 393	76.60			
49 297			1		140 255	0	1 773 921	1 914 176	5 960 096	77.37			
33 265			1		173 520	0	1 773 921	1 947 441	5 926 831	77.88			
19 131			1		192 651	0	1 773 921	1 966 572	5 907 700	78.18			
19 313			1		211 964	0	1 773 921	1 985 885	5 888 387	78.47			
19 131			1		231 095	0	1 773 921	2 005 016	5 869 256	78.76			
327 114													
19 131			1		250 226	0	1 773 921	2 024 147	5 850 125	79.05			

19 313			1		269 539	0	1 773 921	2 043 460	5 830 812	79.35		
19 131			1		288 670	0	1 773 921	2 062 591	5 811 681	79.63		
19 131			1		307 801	0	1 773 921	2 081 722	5 792 550	79.92		
19 313			1		327 114	0	1 773 921	2 101 035	5 773 237	80.21		
60 716			1		387 830	0	1 773 921	2 161 751	5 712 521	81.11		
30 242			1		418 072	0	1 773 921	2 191 993	5 682 279	81.55		
49 297			1		467 369	0	1 773 921	2 241 290	5 632 982	82.26		
33 265			1		500 634	0	1 773 921	2 274 555	5 599 717	82.74		
19 131			1		519 765	0	1 773 921	2 293 686	5 580 586	83.02		
19 313			1		539 078	0	1 773 921	2 312 999	5 561 273	83.29		
19 131			1		558 209	0	1 773 921	2 332 130	5 542 142	83.56		
327 114												
19 131			1		577 340	0	1 773 921	2 351 261	5 523 011	83.83		
19 313			1		596 653	0	1 773 921	2 370 574	5 503 698	84.10		
19 131			1		615 784	0	1 773 921	2 389 705	5 484 567	84.37		
19 131			1		634 915	0	1 773 921	2 408 836	5 465 436	84.64		
19 313			1		657 148	0	1 773 921	2 431 069	5 443 203	84.94		
60 716			1		942 161	0	1 773 921	2 716 082	5 158 190	88.72		
30 242			1		1 617 781	0	1 773 921	3 391 702	4 482 570	96.39		
49 297			1		2 261 067	0	1 773 921	4 034 988	3 839 284	103.11		
33 265			1		2 346 979	0	1 773 921	4 120 900	3 753 372	103.98		
19 131			1		2 368 843	0	1 773 921	4 142 764	3 731 508	104.20		
19 313			1		2 388 156	0	1 773 921	4 162 077	3 712 195	104.39		
19 131			1		2 407 287	0	1 773 921	4 181 208	3 693 064	104.58		
327 114												
19 131			1		2 426 418	0	1 773 921	4 200 339	3 673 933	104.77		
19 313			1		2 445 731	0	1 773 921	4 219 652	3 654 620	104.96		
19 131			1		2 464 862	0	1 773 921	4 238 783	3 635 489	105.15		
19 131			1		2 483 993	0	1 773 921	4 257 914	3 616 358	105.34		
19 313			1		2 506 226	0	1 773 921	4 280 147	3 594 125	105.56		
60 716			1		2 791 239	0	1 773 921	4 565 160	3 309 112	108.31		
30 242			1		2 966 859	0	1 773 921	4 740 780	3 133 492	109.92		
49 297			1		3 110 145	0	1 773 921	4 884 066	2 990 206	111.16		
33 265			1		3 196 057	0	1 773 921	4 969 978	2 904 294	111.88		
19 131			1		3 217 921	0	1 773 921	4 991 842	2 882 430	112.06		
19 313			1		3 237 234	0	1 773 921	5 011 155	2 863 117	112.22		
19 131			1		3 256 365	0	1 773 921	5 030 286	2 843 986	112.38		
327 114												
19 131			1		3 275 496	0	1 773 921	5 049 417	2 824 855	112.54		
19 313			1		3 294 809	0	1 773 921	5 068 730	2 805 542	112.70		

19 131			1		3 313 940	0	1 773 921	5 087 861	2 786 411	112.86			
19 131			1		3 333 071	0	1 773 921	5 106 992	2 767 280	113.02			
19 313			1		4 115 304	0	1 773 921	5 889 225	1 985 047	119.28			
60 716			1		5 160 317	0	1 773 921	6 934 238	940 034	126.54			
30 242			1		6 095 937	0	1 773 921	7 869 858	4 414	130.98			
49 297				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
33 265				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 313				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
327 114													
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 313				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 313				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
60 716				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
30 242				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
49 297				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
33 265				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 313				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
327 114													
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 313				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 313				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
60 716				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
30 242				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
49 297				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
33 265				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 313				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
327 114													
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 313				1	6 100 351	0	1 773 921	7 874 272	0	131.00			
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00			

19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
19 313				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
60 716				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
30 242				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
49 297				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
33 265				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
19 313				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
327 114												
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
19 313				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
19 313				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
60 716				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
30 242				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
49 297				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
33 265				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
19 313				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
327 114												
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
19 313				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
19 131				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
19 313				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
60 716				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
30 242				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
49 297				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
33 265				1	6 100 351	0	1 773 921	7 874 272	0	131.00		
					6 100 351	0	1 773 921	7 874 272	0	131.00		
					6 100 351	0	1 773 921	7 874 272	0	131.00		
					6 100 351	0	1 773 921	7 874 272	0	131.00		
269 539												

Water Transfers																				
NC to SC (m^3)	SC to NC (m^3)	Tear Drop Lake to SC (m^3)	Tear Drop Lake to NC (m^3)	Tear Drop Lake to Goose (m^3)	Tear Drop Lake to CD Seepage (m^3)	SC to Pit A (m^3)	Goose to Pit A (m^3)	Goose to Pit E (m^3)	Landfill to SC (m3)	Central Dike D/S pond to Pit E (m^3)	Goose to SC (m^3)	China sump to SC (m^3)	SD1-2, NC-A-B-C-D-E to NC (m^3)	Waste rock seep (ST16) to NC (m^3)	Waste rock seep (ST16) to Pit A (m^3)	SD3-4-5 to SC (m^3)	Central Dike D/S pond to Pit A (m^3)	Central Dike D/S pond to SC (m^3)	SC to Central Dike D/S pond (m^3)	SC Vol correction (m3)
						x				x							x			
0	**507 144**	**0**	**0**	**0**		**0**					**0**									
0	**0**	**10 342**	**26 242**	**0**		**0**					**0**	**0**								
1 085 614	**0**	**53 394**	**0**	**0**		**0**					**-50 431**	**171 214**	**15 569**	**19 236**				**2 904 219**	**2 572 663**	**242 577**
342 538	**0**	**46 338**	**0**	**0**		**0**					**0**	**120 052**	**23 586**	**26 340**		**34 927**				**385 353**
238 762	**0**	**71 433**	**0**	**32 461**		**0**					**-332 177**	**193 556**	**16 250**	**50 553**		**45 638**		**4 366 869**	**4 623 032**	**-256 163**
534 054	**0**	**70 152**	**0**	**0**		**0**					**0**	**113 643**	**46 745**	**34 550**		**28 163**				
848 851	**0**	**61 489**	**0**	**0**	**20 492**	**0**	**615 600**	**0**		**0**	**-358 156**	**128 037**	**103 916**	**68 893**		**73 769**		**754 347**	**2 294 063**	**-171 040**
258 123	**0**	**0**	**0**	**0**	**0**	**253 452**	**1 376 334**	**0**	**0**	**237 631**	**0**	**150 783**	**12 087**	**14 246**		**19 042**	**447 910**	**54 734**	**121 160**	**0**
463 598	**0**	**0**	**0**	**0**	**0**	**294 781**	**416 907**	**0**		**33 024**	**0**	**270 043**	**19 713**	**25 391**		**36 161**	**857 194**	**0**	**0**	**0**
499 627	**0**	**0**	**0**	**0**	**22 907**	**267 309**	**0**	**0**	**28 486**	**0**	**0**	**66 699**	**73 000**	**61 579**		**16 528**	**510 579**	**13 852**	**0**	**0**
0																	*14 029*			
0																	*13 564*			
0																	*13 920*			
0																	*11 031*			
194 582		*11 369*				**124 030**			4 614			*129 044*	54 298		*44 873*	*44 346*	*112 254*			
56 788					*16 380*	**91 823**			*11 322*			*42 185*	45 180		*29 845*	*26 717*	*112 689*			
4 934									*15 962*			*6 840*	16 628		*8 332*	*25 735*	*67 718*			
26 743					*20 492*				*31 511*			*0*	23 136		*10 919*	*27 324*	*59 453*			
35 476						**251 809**	**-112 523**						6 596		*6 598*	*15 342*	*109 331*			
9 683	*0*						**-263 242**		0	0		*7 759*	*4 382*		*2 563*	*4 516*	*91 496*			
0	*0*						**70 946**		0	0			*0*		*0*	*0*	*47 267*			
0	*0*					**1 251 004**	**0**		0	0			*0*		*0*	*0*	*24 295*			
328 206	**0**	**11 369**	**0**	**0**	**36 872**	**1 718 666**	**-304 819**	**0**	**63 409**	**0**	**0**	**185 828**	**150 220**		**103 130**	**143 980**	**677 047**	**0**	**0**	**0**
						0	**0**	**0**				0	0		0	0	25 916			
						0	**0**	**0**				0	0		0	0	18 196			
						0	**0**	**0**				0	0		0	0	23 363			
						0	**0**	**0**				0	0		0	0	21 659			
					33 280	11 038	**0**	**0**				9 623	1 505		0	1 415	45 979			
					16 380	278 817	**0**	**0**				144 381	12 035		15 328	91 527	127 073			
						163 649	**0**	**0**				53 885	14 820		24 265	98 299	69 305			
352 757					20 492	388 217	**0**	**0**				0	2 415		5 942	4 522	139 742			
						63 929	**0**	**0**				42 370	4 636		5 362	6 975	88 756			
219 057						253 519	**0**	**0**				34 188	2 459		2 459	274	91 496			
						0	**0**	**0**				0	0		0	0	47 267			
						0	**0**	**0**				0	0		0	0	24 295			
571 814	**0**	**0**	**0**	**0**	**70 152**	**1 159 168**	**0**	**0**		**0**	**0**	**284 447**	**37 870**		**53 356**	**203 012**	**723 047**	**0**	**0**	**0**
						0	**0**	**0**				0	0		0	0	25 916			
						0	**0**	**0**				0	0		0	0	18 196			
						0	**0**	**0**				0	0		0	0	23 363			
						0	**0**	**0**				0	0		0	0	21 659			
					33 280	11 038	**0**	**0**				9 623	1 505		0	1 415	45 979			
					16 380	278 817	**0**	**0**				144 381	12 035		15 328	91 527	127 073			
						163 649	**0**	**0**				53 885	14 820		24 265	98 299	69 305			
					20 492	224 660	**0**	**0**				0	2 415		5 942	4 522	139 742			
						63 929	**0**	**0**				42 370	4 636		5 362	6 975	88 756			
219 057						253 519	**0**	**0**				34 188	2 459		2 459	274	91 496			
						0	**0**	**0**				0	0		0	0	47 267			
						0	**0**	**0**				0	0		0	0	24 295			
219 057	**0**	**0**	**0**	**0**	**70 152**	**995 612**	**0**	**0**		**0**	**0**	**284 447**	**37 870**		**53 356**	**203 012**	**723 047**	**0**	**0**	**0**
						0	**0**	**0**				0	0		0	0	25 916			
						0	**0**	**0**				0	0		0	0	18 196			
						0	**0**	**0**				0	0		0	0	23 363			
						0	**0**	**0**				0	0		0	0	21 659			
					33 280	11 038	**0**	**0**				9 623	1 505		0	1 415	45 979			
					16 380	278 817	**0**	**0**				144 381	12 035		15 328	91 527	127 073			
						163 649	**0**	**0**				53 885	14 820		24 265	98 299	69 305			

					20 492	35 460	0	0				0	2 415		5 942	4 522	139 742			
						63 929	0	0				42 370	4 636		5 362	6 975	88 756			
219 057						253 519	0	0				34 188	2 459		2 459	274	91 496			
						0	0	0				0	0		0	0	47 267			
						0	0	0				0	0		0	0	24 295			
219 057	**0**	**0**	**0**	**0**	**70 152**	**806 412**	**0**	**0**		**0**	**0**	**284 447**	**37 870**		**53 356**	**203 012**		**0**	**0**	**0**
						0	0	0				0	0		0	0	25 916			
						0	0	0				0	0		0	0	18 196			
						0	0	0				0	0		0	0	23 363			
						0	0	0				0	0		0	0	21 659			
					33 280	11 038	0	0				9 623	1 505		0	1 415	45 979			
					16 380	278 817	0	0				144 381	12 035		15 328	91 527	127 073			
						163 649	0	0				53 885	14 820		24 265	98 299	69 305			
					20 492	35 460	0	0				0	2 415		5 942	4 522	139 742			
						63 929	0	0				42 370	4 636		5 362	6 975	88 756			
315 449						349 911	0	0				34 188	2 459		2 459	274	91 496			
						0	0	0				0	0		0	0	47 267			
						0	0	0				0	0		0	0	24 295			
315 449	**0**	**0**	**0**	**0**	**70 152**	**902 804**	**0**	**0**		**0**	**0**	**284 447**	**37 870**		**53 356**	**203 012**		**0**	**0**	**0**
0						0	0					0	0		0	0	25 916			
0						0	0					0	0		0	0	18 196			
0						0	0					0	0		0	0	23 363			
0						0	0					0	0		0	0	21 659			
1 505					33 280	12 543	0					9 623	1 505		0	1 415	45 979			
89 861					16 380	368 678	0					144 381	12 035		15 328	91 527	127 073			
35 614						199 263	0					53 885	14 820		24 265	98 299	69 305			
58 529					20 492	0	0				-93 989	0	2 415		5 942	4 522	139 742			
31 088						0	0				-95 017	42 370	4 636		5 362	6 975	88 756			
2 459						0	0				-36 921	34 188	2 459		2 459	274	91 496			
0						0	0				0	0	0		0	0	47 267			
0						0	0				0	0	0		0	0	24 295			
219 057	**0**	**0**	**0**	**0**	**70 152**	**580 484**	**0**	**0**	**0**	**0**	**-225 927**	**284 447**	**37 870**	**0**	**53 356**	**203 012**	**723 047**	**0**	**0**	**0**
0						0	0					0	0		0	0	25 916			
0						0	0					0	0		0	0	18 196			
0						0	0					0	0		0	0	23 363			
0						0	0					0	0		0	0	21 659			
1 505					33 280	0	0				-12 543	9 623	1 505		0	1 415	45 979			
89 861					16 380	0	0				-368 678	144 381	12 035		15 328	91 527	127 073			
35 614						0	0				-199 263	53 885	14 820		24 265	98 299	69 305			
58 529					20 492	0	0				-93 989	0	2 415		5 942	4 522	139 742			
31 088						0	0				-95 017	42 370	4 636		5 362	6 975	88 756			
2 459						0	0				-36 921	34 188	2 459		2 459	274	91 496			
0						0	0				0	0	0		0	0	47 267			
0						0	0				0	0	0		0	0	24 295			
219 057	**0**	**0**	**0**	**0**	**70 152**	**0**	**0**	**0**		**0**	**-806 411**	**284 447**	**37 870**		**53 356**	**203 012**		**0**	**0**	**0**
0						0	0						0		0	0	25 916			
0						0	0						0		0	0	18 196			
0						0	0						0		0	0	23 363			
0						0	0						0		0	0	21 659			
1 505					33 280	0	0				-2 920		1 505		0	1 415	45 979			
89 861					16 380	0	0				-224 297		12 035		15 328	91 527	127 073			
35 614						0	0				-145 378		14 820		24 265	98 299	69 305			
58 529					20 492	0	0				-93 989		2 415		5 942	4 522	139 742			
31 088						0	0				-52 647		4 636		5 362	6 975	88 756			
2 459						0	0				-2 733		2 459		2 459	274	91 496			
0						0	0				0		0		0	0	47 267			
0						0	0				0		0		0	0	24 295			
219 057	**0**	**0**	**0**	**0**	**70 152**	**0**	**0**	**0**		**0**	**-521 964**	**0**	**37 870**		**53 356**	**203 012**		**0**	**0**	**0**
0						0	0	0					0		0	0	25 916			
0						0	0	0					0		0	0	18 196			
0						0	0	0					0		0	0	23 363			
0						0	0	0					0		0	0	21 659			
1 505					33 280	0	0	0			-2 920		1 505		0	1 415	45 979			

89 861					16 380	0	**0**	**0**			-224 297		12 035		15 328	91 527	127 073			
35 614						0	**0**	**0**			-145 378		14 820		24 265	98 299	69 305			
58 529					20 492	0	**0**	**0**			-93 989		2 415		5 942	4 522	139 742			
31 088						0	**0**	**0**			-52 647		4 636		5 362	6 975	88 756			
2 459						0	**0**	**0**			-2 733		2 459		2 459	274	91 496			
0						0	**0**	**0**			0		0		0	0	47 267			
0						0	**0**	**0**			0		0		0	0	24 295			
219 057	**0**	**0**	**0**	**0**	**70 152**	**0**	**0**	**0**		**0**	**-521 964**	**0**	**37 870**		**53 356**	**203 012**		**0**	**0**	**0**
0						0	**0**	**0**					0		0	0	25 916			
0						0	**0**	**0**					0		0	0	18 196			
0						0	**0**	**0**					0		0	0	23 363			
0						0	**0**	**0**					0		0	0	21 659			
1 505					33 280	0	**0**	**0**			-2 920		1 505		0	1 415	45 979			
89 861					16 380	0	**0**	**0**			-224 297		12 035		15 328	91 527	127 073			
35 614						0	**0**	**0**			-145 378		14 820		24 265	98 299	69 305			
58 529					20 492	0	**0**	**0**			-93 989		2 415		5 942	4 522	139 742			
31 088						0	**0**	**0**			-52 647		4 636		5 362	6 975	88 756			
2 459						0	**0**	**0**			-2 733		2 459		2 459	274	91 496			
0						0	**0**	**0**			0		0		0	0	47 267			
0						0	**0**	**0**			0		0		0	0	24 295			
219 057	**0**	**0**	**0**	**0**	**70 152**	**0**	**0**	**0**		**0**	**-521 964**	**0**	**37 870**		**53 356**	**203 012**		**0**	**0**	**0**
0						0	**0**	**0**					0		0	0	25 916			
0						0	**0**	**0**					0		0	0	18 196			
0						0	**0**	**0**					0		0	0	23 363			
0						0	**0**	**0**					0		0	0	21 659			
1 505					33 280	0	**0**	**2 920**			-2 920		1 505		0	1 415	45 979			
89 861					16 380	0	**0**	**224 297**			-224 297		12 035		15 328	91 527	127 073			
35 614						0	**0**	**145 378**			-145 378		14 820		24 265	98 299	69 305			
58 529					20 492	0	**0**	**93 989**			-93 989		2 415		5 942	4 522	139 742			
31 088						0	**0**	**52 647**			-52 647		4 636		5 362	6 975	88 756			
2 459						0	**0**	**2 733**			-2 733		2 459		2 459	274	91 496			
0						0	**0**	**0**			0		0		0	0	47 267			
0						0	**0**	**0**			0		0		0	0	24 295			
219 057	**0**	**0**	**0**	**0**	**70 152**	**0**	**0**	**521 964**		**0**	**-521 964**	**0**	**37 870**		**53 356**	**203 012**		**0**	**0**	**0**
0						0	**0**	**0**					0		0	0	25 916			
0						0	**0**	**0**					0		0	0	18 196			
0						0	**0**	**0**					0		0	0	23 363			
0						0	**0**	**0**					0		0	0	21 659			
1 505					33 280	0	**0**	**2 920**			-2 920		1 505		0	1 415	45 979			
89 861					16 380	0	**0**	**224 297**			-224 297		12 035		15 328	91 527	127 073			
35 614						0	**0**	**145 378**			-145 378		14 820		24 265	98 299	69 305			
58 529					20 492	0	**0**	**93 989**			-93 989		2 415		5 942	4 522	139 742			
31 088						0	**0**	**52 647**			-52 647		4 636		5 362	6 975	88 756			
2 459						0	**0**	**2 733**			-2 733		2 459		2 459	274	91 496			
0						0	**0**	**0**			0		0		0	0	47 267			
0						0	**0**	**0**			0		0		0	0	24 295			
219 057	**0**	**0**	**0**	**0**	**70 152**	**0**	**0**	**521 964**		**0**	**-521 964**	**0**	**37 870**		**53 356**	**203 012**		**0**	**0**	**0**
0						0	**0**	**0**					0		0	0	25 916			
0						0	**0**	**0**					0		0	0	18 196			
0						0	**0**	**0**					0		0	0	23 363			
0						0	**0**	**0**					0		0	0	21 659			
1 505					33 280	0	**0**	**2 920**			-2 920		1 505		0	1 415	45 979			
89 861					16 380	0	**0**	**224 297**			-224 297		12 035		15 328	91 527	127 073			
35 614						0	**0**	**145 378**			-145 378		14 820		24 265	98 299	69 305			
58 529					20 492	0	**0**	**93 989**			-93 989		2 415		5 942	4 522	139 742			
31 088						0	**0**	**52 647**			-52 647		4 636		5 362	6 975	88 756			
2 459						0	**0**	**2 733**			-2 733		2 459		2 459	274	91 496			
0						0	**0**	**0**			0		0		0	0	47 267			
0						0	**0**	**0**			0		0		0	0	24 295			
219 057	**0**	**0**	**0**	**0**	**70 152**	**0**	**0**	**521 964**		**0**	**-521 964**	**0**	**37 870**		**53 356**	**203 012**		**0**	**0**	**0**
0						0	**0**	**0**					0		0	0	25 916			
0						0	**0**	**0**					0		0	0	18 196			
0						0	**0**	**0**					0		0	0	23 363			

0						0	**0**	**0**					0		0	0	21 659			
1 505					33 280	0	**0**	**2 920**			-2 920		1 505		0	1 415	45 979			
89 861					16 380	0	**0**	**224 297**			-224 297		12 035		15 328	91 527	127 073			
35 614						0	**0**	**145 378**			-145 378		14 820		24 265	98 299	69 305			
58 529					20 492	0	**0**	**93 989**			-93 989		2 415		5 942	4 522	139 742			
31 088						0	**0**	**52 647**			-52 647		4 636		5 362	6 975	88 756			
2 459						0	**0**	**2 733**			-2 733		2 459		2 459	274	91 496			
0						0	**0**	**0**			0		0		0	0	47 267			
0						0	**0**	**0**			0		0		0	0	24 295			
219 057	**0**	**0**	**0**	**0**	**70 152**	**0**	**0**	**521 964**		**0**	**-521 964**	**0**	**37 870**		**53 356**	**203 012**		**0**	**0**	**0**
0						0	**0**	**0**					0		0	0	25 916			
0						0	**0**	**0**					0		0	0	18 196			
0						0	**0**	**0**					0		0	0	23 363			
0						0	**0**	**0**					0		0	0	21 659			
1 505					33 280	0	**0**	**2 920**			-2 920		1 505		0	1 415	45 979			
89 861					16 380	0	**0**	**224 297**			-224 297		12 035		15 328	91 527	127 073			
35 614						0	**0**	**145 378**			-145 378		14 820		24 265	98 299	69 305			
58 529					20 492	0	**0**	**93 989**			-93 989		2 415		5 942	4 522	139 742			
31 088						0	**0**	**52 647**			-52 647		4 636		5 362	6 975	88 756			
2 459						0	**0**	**2 733**			-2 733		2 459		2 459	274	91 496			
0						0	**0**	**0**			0		0		0	0	47 267			
0						0	**0**	**0**			0		0		0	0	24 295			
219 057	**0**	**0**	**0**	**0**	**70 152**	**0**	**0**	**521 964**		**0**	**-521 964**	**0**	**37 870**		**53 356**	**203 012**		**0**	**0**	**0**
0						0	**0**						0		0	0	25 916			
0						0	**0**						0		0	0	18 196			
0						0	**0**						0		0	0	23 363			
0						0	**0**						0		0	0	21 659			
1 505					33 280	0	**0**				-2 920		1 505		0	1 415	45 979			
89 861					16 380	0	**0**				-224 297		12 035		15 328	91 527	127 073			
35 614						0	**0**	**-500 000**			-145 378		14 820		24 265	98 299	69 305			
58 529					20 492	0	**0**	**-500 000**			-93 989		2 415		5 942	4 522	139 742			
31 088						0	**0**				-52 647		4 636		5 362	6 975	88 756			
2 459						0	**0**				-2 733		2 459		2 459	274	91 496			
0						0	**0**				0		0		0	0	47 267			
0						0	**0**				0		0		0	0	24 295			
181 187	**0**	**0**	**0**	**0**	**70 152**	**0**					**-521 964**									
0						0	**0**						0		0	0	25 916			
0						0	**0**						0		0	0	18 196			
0						0	**0**						0		0	0	23 363			
0						0	**0**						0		0	0	21 659			
1 505					33 280	0	**0**				-2 920		1 505		0	1 415	45 979			
89 861					16 380	0	**0**				-224 297		12 035		15 328	91 527	127 073			
35 614						0	**0**				-145 378		14 820		24 265	98 299	69 305			
58 529					20 492	0	**0**				-93 989		2 415		5 942	4 522	139 742			
31 088						0	**0**				-52 647		4 636		5 362	6 975	88 756			
2 459						0	**0**				-2 733		2 459		2 459	274	91 496			
0						0	**0**				0		0		0	0	47 267			
0						0	**0**				0		0		0	0	24 295			
181 187	**0**	**0**	**0**	**0**	**70 152**	**0**					**-521 964**									
0						0	**0**						0		0	0	25 916			
0						0	**0**						0		0	0	18 196			
0						0	**0**						0		0	0	23 363			
0						0	**0**						0		0	0	21 659			
1 505					33 280	0	**0**				-2 920		1 505		0	1 415	45 979			
89 861					16 380	0	**0**				-224 297		12 035		15 328	91 527	127 073			
35 614						0	**0**				-145 378		14 820		24 265	98 299	69 305			
58 529					20 492	93 989	**0**	**0**					2 415		5 942	4 522	139 742			
31 088						52 647	**0**	**0**					4 636		5 362	6 975	88 756			
2 459						2 733	**0**	**0**					2 459		2 459	274	91 496			
0						0	**0**	**0**					0		0	0	47 267			
0						0	**0**	**0**					0		0	0	24 295			
181 187	**0**	**0**	**0**	**0**	**70 152**	**149 369**					**-372 595**									
0						0	**0**	**0**					0		0	0	25 916			

0						0	**0**	**0**					0		0	0	18 196			
0						0	**0**	**0**					0		0	0	23 363			
0						0	**0**	**0**					0		0	0	21 659			
1 505					33 280	2 920	**0**	**0**					1 505		0	1 415	45 979			
89 861					16 380	224 297	**0**	**0**					12 035		15 328	91 527	127 073			
35 614						145 378	**0**	**0**					14 820		24 265	98 299	69 305			
58 529					20 492	93 989	**0**	**0**					2 415		5 942	4 522	139 742			
31 088						52 647	**0**	**0**					4 636		5 362	6 975	88 756			
2 459						2 733	**0**	**0**					2 459		2 459	274	91 496			
0						0	**0**	**0**					0		0	0	47 267			
0						0	**0**	**0**					0		0	0	24 295			
181 187	**0**	**0**	**0**	**0**	**70 152**	**521 964**					**0**									
0						0	**0**	**0**					0		0	0	25 916			
0						0	**0**	**0**					0		0	0	18 196			
0						0	**0**	**0**					0		0	0	23 363			
0						0	**0**	**0**					0		0	0	21 659			
1 505					33 280	2 920	**0**	**0**					1 505		0	1 415	45 979			
89 861					16 380	224 297	**0**	**0**					12 035		15 328	91 527	127 073			
35 614						145 378	**0**	**0**					14 820		24 265	98 299	69 305			
58 529					20 492	93 989	**0**	**0**					2 415		5 942	4 522	139 742			
31 088						52 647	**0**	**0**					4 636		5 362	6 975	88 756			
2 459						2 733	**0**	**0**					2 459		2 459	274	91 496			
0						0	**0**	**0**					0		0	0	47 267			
0						0	**0**	**0**					0		0	0	24 295			
181 187	**0**	**0**	**0**	**0**	**70 152**	**521 964**					**0**									
0						0	**0**	**0**					0		0	0	25 916			
0						0	**0**	**0**					0		0	0	18 196			
0						0	**0**	**0**					0		0	0	23 363			
0						0	**0**	**0**					0		0	0	21 659			
1 505					33 280	2 920	**0**	**0**					1 505		0	1 415	45 979			
89 861					16 380	224 297	**0**	**0**					12 035		15 328	91 527	127 073			
35 614						145 378	**0**	**0**					14 820		24 265	98 299	69 305			
58 529					20 492	93 989	**0**	**0**					2 415		5 942	4 522	139 742			
31 088						52 647	**0**	**0**					4 636		5 362	6 975	88 756			
2 459						2 733	**0**	**0**					2 459		2 459	274	91 496			
0						0	**0**	**0**					0		0	0	47 267			
0						0	**0**	**0**					0		0	0	24 295			
181 187	**0**	**0**	**0**	**0**	**70 152**	**521 964**					**0**									
0						0	**0**	**0**					0		0	0	25 916			
0						0	**0**	**0**					0		0	0	18 196			
0						0	**0**	**0**					0		0	0	23 363			
0						0	**0**	**0**					0		0	0	21 659			
1 505					33 280	2 920	**0**	**0**					1 505		0	1 415	45 979			
89 861					16 380	224 297	**0**	**0**					12 035		15 328	91 527	127 073			
35 614						145 378	**0**	**0**					14 820		24 265	98 299	69 305			
58 529					20 492	93 989	**0**	**0**					2 415		5 942	4 522	139 742			
31 088						52 647	**0**	**0**					4 636		5 362	6 975	88 756			
2 459						2 733	**0**	**0**					2 459		2 459	274	91 496			
0						0	**0**	**0**					0		0	0	47 267			
0						0	**0**	**0**					0		0	0	24 295			
181 187	**0**	**0**	**0**	**0**	**70 152**	**521 964**					**0**									
0						0	**0**	**0**					0		0	0	25 916			
0						0	**0**	**0**					0		0	0	18 196			
0						0	**0**	**0**					0		0	0	23 363			
0						0	**0**	**0**					0		0	0	21 659			
1 505					33 280	2 920	**0**	**0**					1 505		0	1 415	45 979			
89 861					16 380	224 297	**0**	**0**					12 035		15 328	91 527	127 073			
35 614						145 378	**0**	**0**					14 820		24 265	98 299	69 305			
58 529					20 492	93 989	**0**	**0**					2 415		5 942	4 522	139 742			
31 088						52 647	**0**	**0**					4 636		5 362	6 975	88 756			
2 459						2 733	0	0					2 459		2 459	274	91 496			
0						0	0	0					0		0	0	47 267			
0						0	0	0					0		0	0	24 295			

181 187	0	0	0	0	70 152	521 964					0									

\\CAMBFS01\Groups\Engineering\05-Geotechnic\05-WaterManagement\2023\02 - Water Balance\12- December\Water Balance - 2024_ELOM - Water level forecast\Water Balance - 2024_ELOM - Water level forecast

Closure												Parameters								
Pit A Treatment (m3)	Cumulative Pit A Treatment (m^3)	Pit E Treatment (m3)	Cumulative Pit E Treatment (m^3)	Goose Pit Treatment (m3)	Cumulative Goose Pit (m^3)	Cumulative Treatment (m^3)	Pit A flooding (m^3)	Pit E Flooding (m^3)	Goose Pit Flooding (m^3)	Flooding Volume (m^3)	Cumulative Portage and Goose Flooding (m^3)	Ice Thickness (m)	NC Ice Ratio (%)	SC Ice Ratio (%)	NC Tailings Dry Density	SC Tailings Dry Density	IPD In Situ Density	NC Tailings water/ice entrampment (%)	SC Tailings water/ice entrampment (%)	IPD Tailings water entrapment (%)
																1.48				
															1.28	1.49				
																1.43			39%	
																1.33		68%	38%	
																1.25		61%	55%	48%
																1.26			48%	48%
																1.26			48%	48%
																1.26		48%	48%	48%
																1.26		57%	57%	48%
												1.10	55%	39%	1.08	1.05	1.54	64%	65%	48%
												1.30	55%	42%	1.08	1.05	1.54	64%	65%	48%
												1.60	55%	62%	1.08	1.05	1.54	64%	65%	48%
												1.70	55%	66%	1.08	1.05	1.54	64%	65%	48%
												0.00	55%	0%	1.08	1.31	1.54	64%	56%	48%
												0.00	0%	0%	1.56	1.56	1.54	47%	47%	48%
												0.00	0%	0%	1.56	1.56	1.54	47%	47%	48%
												0.00	0%	0%	1.56	1.56	1.54	47%	47%	48%
												0.00	0%	0%	1.56	1.56	1.54	47%	47%	48%
												0.20	17%	7%	1.32	1.31	1.54	55%	56%	48%
												0.50	58%	19%	1.08	1.05	1.54	64%	65%	48%
												0.80	65%	37%	1.08	1.05	1.54	64%	65%	48%
																1.26			57%	48%
												1.10	55%	55%	1.08	1.05	1.54	64%	65%	48%
												1.30	55%	55%	1.08	1.05	1.54	64%	65%	48%
												1.60	55%	55%	1.08	1.05	1.54	64%	65%	48%
												1.70	55%	55%	1.08	1.05	1.54	64%	65%	48%
												0.00	55%	55%	1.08	1.31	1.54	64%	56%	48%
												0.00	0%	55%	1.56	1.56	1.54	47%	47%	48%
												0.00	0%	55%	1.56	1.56	1.54	47%	47%	48%
												0.00	0%	55%	1.56	1.56	1.54	47%	47%	48%
												0.00	0%	55%	1.56	1.56	1.54	47%	47%	48%
												0.20	17%	55%	1.32	1.31	1.54	55%	56%	48%
												0.50	58%	55%	1.08	1.05	1.54	64%	65%	48%
												0.80	65%	55%	1.08	1.05	1.54	64%	65%	48%
																1.26			57%	48%
												1.10	55%	55%	1.08	1.05	1.54	64%	65%	48%
												1.30	55%	55%	1.08	1.05	1.54	64%	65%	48%
												1.60	55%	55%	1.08	1.05	1.54	64%	65%	48%
												1.70	55%	55%	1.08	1.05	1.54	64%	65%	48%
												0.00	55%	55%	1.08	1.31	1.54	64%	56%	48%
												0.00	0%	55%	1.56	1.56	1.54	47%	47%	48%
												0.00	0%	55%	1.56	1.56	1.54	47%	47%	48%
												0.00	0%	55%	1.56	1.56	1.54	47%	47%	48%
												0.00	0%	55%	1.56	1.56	1.54	47%	47%	48%
												0.20	17%	55%	1.32	1.31	1.54	55%	56%	48%
												0.50	58%	55%	1.08	1.05	1.54	64%	65%	48%
												0.80	65%	55%	1.08	1.05	1.54	64%	65%	48%
																1.26			57%	48%
												1.10	55%	55%	1.08	1.05	1.54	64%	65%	48%
												1.30	55%	55%	1.08	1.05	1.54	64%	65%	48%
												1.60	55%	55%	1.08	1.05	1.54	64%	65%	48%
												1.70	55%	55%	1.08	1.05	1.54	64%	65%	48%
												0.00	55%	55%	1.08	1.31	1.54	64%	56%	48%
												0.00	0%	55%	1.56	1.56	1.54	47%	47%	48%
												0.00	0%	55%	1.56	1.56	1.54	47%	47%	48%
												0.00	0%	55%	1.56	1.56	1.54	47%	47%	48%
												0.00	0%	55%	1.56	1.56	1.54	47%	47%	48%
												0.20	17%	55%	1.32	1.31	1.54	55%	56%	48%
												0.50	58%	55%	1.08	1.05	1.54	64%	65%	48%
												0.80	65%	55%	1.08	1.05	1.54	64%	65%	48%
																1.26			57%	48%

	0		0		0	0				0	0	1.10	55%	55%	1.08	1.05	1.54	90%	65%	48%
	0		0		0	0				0	0	1.30	55%	55%	1.08	1.05	1.54	90%	65%	48%
	0		0		0	0				0	0	1.60	55%	55%	1.08	1.05	1.54	90%	65%	48%
	0		0		0	0				0	0	1.70	55%	55%	1.08	1.05	1.54	90%	65%	48%
	0		0		0	0				0	0	0.00	55%	55%	1.08	1.31	1.54	90%	40%	48%
	0		0		0	0				0	0	0.00	0%	55%	1.56	1.56	1.54	30%	25%	48%
	0		0		0	0				0	0	0.00	0%	55%	1.56	1.56	1.54	30%	25%	48%
	0		0		0	0				0	0	0.00	0%	55%	1.56	1.56	1.54	30%	25%	48%
	0		0		0	0				0	0	0.00	0%	55%	1.56	1.56	1.54	30%	25%	48%
	0		0		0	0				0	0	0.20	17%	55%	1.32	1.31	1.54	75%	40%	48%
	0		0		0	0				0	0	0.50	58%	55%	1.08	1.05	1.54	80%	65%	48%
	0		0		0	0				0	0	0.80	65%	55%	1.08	1.05	1.54	90%	65%	48%
	0		**0**		**0**	**0**				**0**	**0**					**1.26**				**48%**
	0	0	0		0	0				0	0	1.10	55%	55%	1.08	1.05	2.96	90%	65%	48%
	0		0		0	0				0	0	1.30	55%	55%	1.08	1.05	2.96	90%	65%	48%
	0		0		0	0				0	0	1.60	55%	55%	1.08	1.05	2.96	90%	65%	48%
	0		0		0	0				0	0	1.70	55%	55%	1.08	1.05	2.96	90%	65%	48%
	0		0		0	0				0	0	0.00	55%	55%	1.08	1.31	2.96	90%	40%	48%
	0		0		0	0				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	25%	48%
	0		0	127 373	127 373	127 373				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	25%	48%
	0		0	127 373	254 746	254 746				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	25%	48%
	0		0	123 264	378 010	378 010				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	25%	48%
	0		0	127 373	505 382	505 382				0	0	0.20	17%	55%	1.32	1.31	2.96	75%	40%	48%
	0		0	123 264	628 646	628 646				0	0	0.50	58%	55%	1.08	1.05	2.96	80%	65%	48%
	0		0	127 373	756 019	756 019				0	0	0.80	65%	55%	1.08	1.05	2.96	90%	65%	48%
0	**0**	**0**	**0**	**756 019**	**756 019**		**0**	**0**	**0**	**0**	**0**					**1.26**				**48%**
	0		0	254 746	1 010 765	1 010 765				0	0	1.10	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	230 093	1 240 858	1 240 858				0	0	1.30	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	254 746	1 495 603	1 495 603				0	0	1.60	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	246 528	1 742 131	1 742 131				0	0	1.70	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	254 746	1 996 877	1 996 877				0	0	0.00	55%	55%	1.08	1.31	2.96	90%	40%	40%
	0		0	246 528	2 243 405	2 243 405				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	2 498 150	2 498 150				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	2 752 896	2 752 896				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	246 528	2 999 424	2 999 424				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	3 254 170	3 254 170				0	0	0.20	17%	55%	1.32	1.31	2.96	75%	40%	40%
	0		0	246 528	3 500 698	3 500 698				0	0	0.50	58%	55%	1.08	1.05	2.96	80%	46%	65%
	0		0	254 746	3 755 443	3 755 443				0	0	0.80	65%	55%	1.08	1.05	2.96	90%	46%	65%
0	**0**	**0**	**0**	**2 999 424**	**3 755 443**		**0**	**0**	**0**	**0**	**0**					**1.26**				**48%**
	0		0	254 746	4 010 189	4 010 189				0	0	1.10	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	230 093	4 240 282	4 240 282				0	0	1.30	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	254 746	4 495 027	4 495 027				0	0	1.60	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	246 528	4 741 555	4 741 555				0	0	1.70	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	254 746	4 996 301	4 996 301				0	0	0.00	55%	55%	1.08	1.31	2.96	90%	40%	40%
	0		0	246 528	5 242 829	5 242 829				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	5 497 574	5 497 574				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	5 752 320	5 752 320				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	246 528	5 998 848	5 998 848				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	6 253 594	6 253 594				0	0	0.20	17%	55%	1.32	1.31	2.96	75%	40%	40%
	0		0	246 528	6 500 122	6 500 122				0	0	0.50	58%	55%	1.08	1.05	2.96	80%	46%	65%
	0		0	254 746	6 754 867	6 754 867				0	0	0.80	65%	55%	1.08	1.05	2.96	90%	46%	65%
0	**0**	**0**	**0**	**2 999 424**	**6 754 867**		**0**	**0**	**0**	**0**	**0**					**1.26**				**48%**
	0		0	254 746	7 009 613	7 009 613				0	0	1.10	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	230 093	7 239 706	7 239 706				0	0	1.30	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	254 746	7 494 451	7 494 451				0	0	1.60	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	246 528	7 740 979	7 740 979				0	0	1.70	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	254 746	7 995 725	7 995 725				0	0	0.00	55%	55%	1.08	1.31	2.96	90%	40%	40%
	0		0	246 528	8 242 253	8 242 253				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	8 496 998	8 496 998				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	8 751 744	8 751 744				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	246 528	8 998 272	8 998 272				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	9 253 018	9 253 018				0	0	0.20	17%	55%	1.32	1.31	2.96	75%	40%	40%
	0		0	246 528	9 499 546	9 499 546				0	0	0.50	58%	55%	1.08	1.05	2.96	80%	46%	65%
	0		0	254 746	9 754 291	9 754 291				0	0	0.80	65%	55%	1.08	1.05	2.96	90%	46%	65%
	0		**0**	**2 999 424**	**9 754 291**		**0**	**0**	**0**	**0**	**0**					**1.26**				**48%**
	0		0	254 746	10 009 037	10 009 037				0	0	1.10	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	238 310	10 247 347	10 247 347				0	0	1.30	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	254 746	10 502 093	10 502 093				0	0	1.60	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	246 528	10 748 621	10 748 621				0	0	1.70	55%	55%	1.08	1.05	2.96	90%	46%	65%

	0		0	254 746	11 003 366	11 003 366				0	0	0.00	55%	55%	1.08	1.31	2.96	90%	40%	40%
	0		0	246 528	11 249 894	11 249 894				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	11 504 640	11 504 640				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	11 759 386	11 759 386				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	246 528	12 005 914	12 005 914				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	12 260 659	12 260 659				0	0	0.20	17%	55%	1.32	1.31	2.96	75%	40%	40%
	0		0	246 528	12 507 187	12 507 187				0	0	0.50	58%	55%	1.08	1.05	2.96	80%	46%	65%
	0		0	254 746	12 761 933	12 761 933				0	0	0.80	65%	55%	1.08	1.05	2.96	90%	46%	65%
	0		**0**	**3 007 642**	**12 761 933**		**0**	**0**	**0**	**0**	**0**					**1.26**				**48%**
	0		0	254 746	13 016 678	13 016 678				0	0	1.10	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	230 093	13 246 771	13 246 771				0	0	1.30	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	254 746	13 501 517	13 501 517				0	0	1.60	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	246 528	13 748 045	13 748 045				0	0	1.70	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	254 746	14 002 790	14 002 790				0	0	0.00	55%	55%	1.08	1.31	2.96	90%	40%	40%
	0		0	246 528	14 249 318	14 249 318				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	14 504 064	14 504 064				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	14 758 810	14 758 810				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	246 528	15 005 338	15 005 338				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	15 260 083	15 260 083				0	0	0.20	17%	55%	1.32	1.31	2.96	75%	40%	40%
	0		0	246 528	15 506 611	15 506 611				0	0	0.50	58%	55%	1.08	1.05	2.96	80%	46%	65%
	0		0	254 746	15 761 357	15 761 357				0	0	0.80	65%	55%	1.08	1.05	2.96	90%	46%	65%
																1.26				**48%**
	0		0	254 746	16 016 102	16 016 102				0	0	1.10	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	230 093	16 246 195	16 246 195				0	0	1.30	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	254 746	16 500 941	16 500 941				0	0	1.60	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	246 528	16 747 469	16 747 469				0	0	1.70	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	254 746	17 002 214	17 002 214				0	0	0.00	55%	55%	1.08	1.31	2.96	90%	40%	40%
	0		0	246 528	17 248 742	17 248 742				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	17 503 488	17 503 488				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	17 758 234	17 758 234				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	246 528	18 004 762	18 004 762				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	18 259 507	18 259 507				0	0	0.20	17%	55%	1.32	1.31	2.96	75%	40%	40%
	0		0	246 528	18 506 035	18 506 035				0	0	0.50	58%	55%	1.08	1.05	2.96	80%	46%	65%
	0		0	254 746	18 760 781	18 760 781				0	0	0.80	65%	55%	1.08	1.05	2.96	90%	46%	65%
																1.26				**48%**
	0		0	254 746	19 015 526	19 015 526				0	0	1.10	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	230 093	19 245 619	19 245 619				0	0	1.30	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	254 746	19 500 365	19 500 365				0	0	1.60	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	246 528	19 746 893	19 746 893				0	0	1.70	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	254 746	20 001 638	20 001 638				0	0	0.00	55%	55%	1.08	1.31	2.96	90%	40%	40%
	0		0	246 528	20 248 166	20 248 166				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	20 502 912	20 502 912				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	20 757 658	20 757 658				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	246 528	21 004 186	21 004 186				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	0		0	254 746	21 258 931	21 258 931				0	0	0.20	17%	55%	1.32	1.31	2.96	75%	40%	40%
	0		0	246 528	21 505 459	21 505 459				0	0	0.50	58%	55%	1.08	1.05	2.96	80%	46%	65%
	0		0	254 746	21 760 205	21 760 205				0	0	0.80	65%	55%	1.08	1.05	2.96	90%	46%	65%
																1.26				**48%**
	0		0	254 746	22 014 950	22 014 950				0	0	1.10	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	238 310	22 253 261	22 253 261				0	0	1.30	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	254 746	22 508 006	22 508 006				0	0	1.60	55%	55%	1.08	1.05	2.96	90%	46%	65%
	0		0	246 528	22 754 534	22 754 534				0	0	1.70	55%	55%	1.08	1.05	2.96	90%	46%	65%
127 621	127 621		0	127 125	22 881 659	23 009 280				0	0	0.00	55%	55%	1.08	1.31	2.96	90%	40%	40%
246 528	374 149		0		22 881 659	23 255 808				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
254 746	628 894		0		22 881 659	23 510 554				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
254 746	883 640		0		22 881 659	23 765 299				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
246 528	1 130 168		0		22 881 659	24 011 827				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
254 746	1 384 914		0		22 881 659	24 266 573				0	0	0.20	17%	55%	1.32	1.31	2.96	75%	40%	40%
246 528	1 631 442		0		22 881 659	24 513 101				0	0	0.50	58%	55%	1.08	1.05	2.96	80%	46%	65%
254 746	1 886 187		0		22 881 659	24 767 846				0	0	0.80	65%	55%	1.08	1.05	2.96	90%	46%	65%
																1.26				**48%**
254 746	2 140 933		0		22 881 659	25 022 592				0	0	1.10	55%	55%	1.08	1.05	2.96	90%	46%	65%
230 093	2 371 026		0		22 881 659	25 252 685				0	0	1.30	55%	55%	1.08	1.05	2.96	90%	46%	65%
254 746	2 625 771		0		22 881 659	25 507 430				0	0	1.60	55%	55%	1.08	1.05	2.96	90%	46%	65%
246 528	2 872 299		0		22 881 659	25 753 958				0	0	1.70	55%	55%	1.08	1.05	2.96	90%	46%	65%
254 746	3 127 045		0		22 881 659	26 008 704				0	0	0.00	55%	55%	1.08	1.31	2.96	90%	40%	40%
246 528	3 373 573		0		22 881 659	26 255 232				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
254 746	3 628 318		0		22 881 659	26 509 978				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
254 746	3 883 064		0		22 881 659	26 764 723				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%

246 528	4 129 592		0		22 881 659	27 011 251				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
254 746	4 384 338		0		22 881 659	27 265 997				0	0	0.20	17%	55%	1.32	1.31	2.96	75%	40%	40%
246 528	4 630 866		0		22 881 659	27 512 525				0	0	0.50	58%	55%	1.08	1.05	2.96	80%	46%	65%
254 746	4 885 611		0		22 881 659	27 767 270				0	0	0.80	65%	55%	1.08	1.05	2.96	90%	46%	65%
																1.26				48%
254 746	5 140 357		0		22 881 659	28 022 016				0	0	1.10	55%	55%	1.08	1.05	2.96	90%	46%	65%
230 093	5 370 450		0		22 881 659	28 252 109				0	0	1.30	55%	55%	1.08	1.05	2.96	90%	46%	65%
254 746	5 625 195		0		22 881 659	28 506 854				0	0	1.60	55%	55%	1.08	1.05	2.96	90%	46%	65%
246 528	5 871 723		0		22 881 659	28 753 382				0	0	1.70	55%	55%	1.08	1.05	2.96	90%	46%	65%
254 746	6 126 469		0		22 881 659	29 008 128				0	0	0.00	55%	55%	1.08	1.31	2.96	90%	40%	40%
246 528	6 372 997		0		22 881 659	29 254 656				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
254 746	6 627 742		0		22 881 659	29 509 402				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
254 746	6 882 488		0		22 881 659	29 764 147				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
246 528	7 129 016		0		22 881 659	30 010 675				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
254 746	7 383 762		0		22 881 659	30 265 421				0	0	0.20	17%	55%	1.32	1.31	2.96	75%	40%	40%
246 528	7 630 290		0		22 881 659	30 511 949				0	0	0.50	58%	55%	1.08	1.05	2.96	80%	46%	65%
254 746	7 885 035		0		22 881 659	30 766 694				0	0	0.80	65%	55%	1.08	1.05	2.96	90%	46%	65%
																1.26				48%
254 746	8 139 781		0		22 881 659	31 021 440				0	0	1.10	55%	55%	1.08	1.05	2.96	90%	46%	65%
230 093	8 369 874		0		22 881 659	31 251 533				0	0	1.30	55%	55%	1.08	1.05	2.96	90%	46%	65%
254 746	8 624 619		0		22 881 659	31 506 278				0	0	1.60	55%	55%	1.08	1.05	2.96	90%	46%	65%
246 528	8 871 147		0		22 881 659	31 752 806				0	0	1.70	55%	55%	1.08	1.05	2.96	90%	46%	65%
254 746	9 125 893		0		22 881 659	32 007 552				0	0	0.00	55%	55%	1.08	1.31	2.96	90%	40%	40%
246 528	9 372 421		0		22 881 659	32 254 080				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
254 746	9 627 166		0		22 881 659	32 508 826				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
254 746	9 881 912		0		22 881 659	32 763 571				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
246 528	10 128 440		0		22 881 659	33 010 099				0	0	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
254 746	10 383 186		0		22 881 659	33 264 845				0	0	0.20	17%	55%	1.32	1.31	2.96	75%	40%	40%
246 528	10 629 714		0		22 881 659	33 511 373				0	0	0.50	58%	55%	1.08	1.05	2.96	80%	46%	65%
254 746	10 884 459		0		22 881 659	33 766 118				0	0	0.80	65%	55%	1.08	1.05	2.96	90%	46%	65%
																1.26				48%
254 746	11 139 205		0		22 881 659	34 020 864				0	0	1.10	55%	55%	1.08	1.05	2.96	90%	46%	65%
238 310	11 377 515		0		22 881 659	34 259 174				0	0	1.30	55%	55%	1.08	1.05	2.96	90%	46%	65%
254 746	11 632 261		0		22 881 659	34 513 920				0	0	1.60	55%	55%	1.08	1.05	2.96	90%	46%	65%
246 528	11 878 789		0		22 881 659	34 760 448				0	0	1.70	55%	55%	1.08	1.05	2.96	90%	46%	65%
254 746	12 133 534		0		22 881 659	35 015 194			760 000	760 000	760 000	0.00	55%	55%	1.08	1.31	2.96	90%	40%	40%
246 528	12 380 062		0		22 881 659	35 261 722			760 000	760 000	1 520 000	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
129 361	12 509 424		0		22 881 659	35 391 083			760 000	760 000	2 280 000	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083	755 586		4 414	760 000	3 040 000	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	3 451 250	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	3 862 500	0.20	17%	55%	1.32	1.31	2.96	75%	40%	40%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	4 273 750	0.50	58%	55%	1.08	1.05	2.96	80%	46%	65%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	4 685 000	0.80	65%	55%	1.08	1.05	2.96	90%	46%	65%
										4 685 000						1.26				48%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	5 096 250	1.10	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	5 507 500	1.30	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	5 918 750	1.60	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	6 330 000	1.70	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	6 741 250	0.00	55%	55%	1.08	1.31	2.96	90%	40%	40%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	7 152 500	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	7 563 750	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	7 975 000	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083	411 250	0		411 250	8 386 250	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	8 797 500	0.20	17%	55%	1.32	1.31	2.96	75%	40%	40%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	9 208 750	0.50	58%	55%	1.08	1.05	2.96	80%	46%	65%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	9 620 000	0.80	65%	55%	1.08	1.05	2.96	90%	46%	65%
										4 935 000						1.26				48%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	10 031 250	1.10	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	10 442 500	1.30	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	10 853 750	1.60	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	11 265 000	1.70	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	11 676 250	0.00	55%	55%	1.08	1.31	2.96	90%	40%	40%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	12 087 500	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	12 498 750	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083	411 250			411 250	12 910 000	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083	13			13	12 910 013	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.20	17%	55%	1.32	1.31	2.96	75%	40%	40%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.50	58%	55%	1.08	1.05	2.96	80%	46%	65%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.80	65%	55%	1.08	1.05	2.96	90%	46%	65%

\\CAMBFS01\Groups\Engineering\05-Geotechnic\05-WaterManagement\2023\02 - Water Balance\12- December\Water Balance - 2024_ELOM - Water level forecast\Water Balance - 2024_ELOM - Water level forecast

3 years monitoring

										3 290 013						1.26				48%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	1.10	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	1.30	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	1.60	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	1.70	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.00	55%	55%	1.08	1.31	2.96	90%	40%	40%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.20	17%	55%	1.32	1.31	2.96	75%	40%	40%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.50	58%	55%	1.08	1.05	2.96	80%	46%	65%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.80	65%	55%	1.08	1.05	2.96	90%	46%	65%
																1.26				48%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	1.10	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	1.30	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	1.60	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	1.70	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.00	55%	55%	1.08	1.31	2.96	90%	40%	40%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.20	17%	55%	1.32	1.31	2.96	75%	40%	40%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.50	58%	55%	1.08	1.05	2.96	80%	46%	65%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.80	65%	55%	1.08	1.05	2.96	90%	46%	65%
																1.26				48%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	1.10	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	1.30	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	1.60	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	1.70	55%	55%	1.08	1.05	2.96	90%	46%	65%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.00	55%	55%	1.08	1.31	2.96	90%	40%	40%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.00	0%	55%	1.56	1.56	2.96	30%	32%	25%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.20	17%	55%	1.32	1.31	2.96	75%	40%	40%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.50	58%	55%	1.08	1.05	2.96	80%	46%	65%
	12 509 424		0		22 881 659	35 391 083				0	12 910 013	0.80	65%	55%	1.08	1.05	2.96	90%	46%	65%
																1.26				48%

East Dike Seepage					East Dike Seepage	Vault Pit					Vault Pit	Phaser Pit									Phaser Pit	Vault ATP		Vault ATP
Volume pumped	Discharge location			Volume pumped 2PL		Vault Pit Inflow (m^3)	Enter 1 for the discharge location		Volume Pumped from Wally (m^3)	Cummulative Volume (m^3)		Phaser Pit Inflow (m^3)	Enter 1 for the discharge location				Volume Pumped from Wally (m^3)	Cummulative Volume (m^3)	Volume Available Remaining (m^3)	Water Elevation (m)		Vault ATP Inflow (m^3)	Cummulative Volume (m^3)	
	2PL	Pit E	Pit A				Vault Pit	Vault ATP					Vault Pit	Phaser Pit	Phaser Lake	Vault ATP								
x				-x																				
36 537				0		0			0			0					0					0		
207 466				141 392		101 617			0			0					0					123 925		
208 047				169 585		111 336			0			0					0					631 435		
179 567				179 548		54 964			0			0					0					-31 131		
194 954				99 731		149 876			0			173 290					0					74 702		
213 221				155 869		116 338			0			137 172					0					67 302		
151 208				21 482		154 880			0			171 470					0					216 100		
162 967				89 497		154 880			0			171 470					0					216 100		
134 165				34 440		154 880			0			171 470					0					216 100		
193 904				22 336		154 880			0			171 470					0					216 100		
8 619	1	0	0	8 619		0	1			619 518		0		1				685 878	219 560	132.8		0	1 493 939	
7 548	1	0	0	7 548		0	1			619 518		0		1				685 878	219 560	132.8		0	1 493 939	
7 466	1	0	0	7 466		0	1			619 518		0		1				685 878	219 560	132.8		0	1 493 939	
5 108	0.9561	0.043	0	4 884		0	1			619 518		0		1				685 878	219 560	132.8		0	1 493 939	
6 450	0	1	0	0		0	1		0	619 518		0		1				685 878	219 560	132.8		0	1 493 939	
17 180	0	1	0	0		66 526	1		0	686 044		73 652		1				759 530	145 908	134.8		118 708	1 612 647	
32 192	0	1	0	0		17 775	1		0	703 820		19 679		1				779 210	126 229	135.3		6 053	1 618 700	
30 357	0	1	0	0		47 967	1		0	751 786		53 105		1				832 314	73 124	136.8		60 667	1 679 367	
31 688	0	1	0	0		22 611	1		0	774 398		25 033		1				857 348	48 091	137.7		30 672	1 710 039	
17 359	0	1	0	0		0	1		0	774 398		0		1				857 348	48 091	137.7		0	1 710 040	
7 243	0	1	0	0		0	1		0	774 398		0		1				857 348	48 091	137.7		0	1 710 040	
7 437	0	1	0	0		0	1			774 398		0		1				857 348	48 091	137.7		0	1 710 040	
178 648				28 517		154 880			0			171 470					0					216 100		
8 928	1			8 928		0	1			774 398		0		1				857 348	48 091	137.7		0	1 710 040	
8 352	1			8 352		0	1			774 398		0		1				857 348	48 091	137.7		0	1 710 040	
8 928	1			8 928		0	1			774 398		0		1				857 348	48 091	137.7		0	1 710 040	
8 640	1			8 640		0	1		0	774 398		0		1				857 348	48 091	137.7		0	1 710 040	
8 928	1			8 928		0	1		0	774 398		0		1				857 348	48 091	137.7		0	1 710 040	
8 640	1			8 640		66 526	1		0	840 924		73 652		0.65	0.35			905 435	3	140.0		118 708	1 828 748	
8 928	1			8 928		17 775	1		0	858 699		19 679			1			905 435	3	140.0		6 053	1 834 801	
8 928	1			8 928		47 967	1		0	906 666		53 105			1			905 435	3	140.0		60 667	1 895 468	
8 640	1			8 640		22 611	1		0	929 277		25 033			1			905 435	3	140.0		30 672	1 926 140	
8 928	1			8 928		0	1		0	929 277		0			1			905 435	3	140.0		0	1 926 140	
8 640	1			8 640		0	1		0	929 277		0			1			905 435	3	140.0		0	1 926 140	
8 928	1			8 928		0	1			929 277		0			1			905 435	3	140.0		0	1 926 140	
105 408				105 408		154 880			0			171 470					0					216 100		
8 928	1			8 928		0	1			929 277		0			1			905 435	3	140.0		0	1 926 140	
8 064	1			8 064		0	1			929 277		0			1			905 435	3	140.0		0	1 926 140	
8 928	1			8 928		0	1			929 277		0			1			905 435	3	140.0		0	1 926 140	
8 640	1			8 640		0	1			929 277		0			1			905 435	3	140.0		0	1 926 140	
8 928	1			8 928		0	1			929 277		0			1			905 435	3	140.0		0	1 926 140	
8 640	1			8 640		66 526	1			995 803		73 652			1			905 435	3	140.0		118 708	2 044 848	
8 928	1			8 928		17 775	1			1 013 579		19 679			1			905 435	3	140.0		6 053	2 050 901	
8 928	1			8 928		47 967	1			1 061 545		53 105			1			905 435	3	140.0		60 667	2 111 568	
8 640	1			8 640		22 611	1			1 084 157		25 033			1			905 435	3	140.0		30 672	2 456 434	
8 928	1			8 928		0	1			1 084 157		0			1			905 435	3	140.0		0	2 456 434	
8 640	1			8 640		0	1			1 084 157		0			1			905 435	3	140.0		0	2 456 434	
8 928	1			8 928		0	1			1 084 157		0			1			905 435	3	140.0		0	2 456 434	
105 120				105 120		154 880			0			171 470					0					216 100		
8 928	1			8 928		0	1			1 084 157		0			1			905 435	3	140.0		0	2 456 434	
8 064	1			8 064		0	1			1 084 157		0			1			905 435	3	140.0		0	2 456 434	
8 928	1			8 928		0	1			1 084 157		0			1			905 435	3	140.0		0	2 456 434	
8 640	1			8 640		0	1			1 084 157		0			1			905 435	3	140.0		0	2 456 434	
8 928	1			8 928		0	1			1 084 157		0			1			905 435	3	140.0		0	2 456 434	
8 640	1			8 640		66 526	1			1 150 683		73 652			1			905 435	3	140.0		118 708	2 575 142	
8 928	1			8 928		17 775	1			1 168 458		19 679			1			905 435	3	140.0		6 053	2 581 195	
8 928	1			8 928		47 967	1			1 216 425		53 105			1			905 435	3	140.0		60 667	2 641 862	
8 640	1			8 640		22 611	1			1 239 036		25 033			1			905 435	3	140.0		30 672	2 672 534	

8 928	1			8 928		0	1			1 239 036		0			1			905 435	3	140.0		0	2 672 534	
8 640	1			8 640		0	1			1 239 036		0			1			905 435	3	140.0		0	2 672 534	
8 928	1			8 928		0	1			1 239 036		0			1			905 435	3	140.0		0	2 672 534	
105 120				105 120		154 880			0			171 470					0					216 100		
8 928	1			8 928		0	1			1 239 036		0			1			905 435	3	140.0		0	2 672 534	
8 064	1			8 064		0	1			1 239 036		0			1			905 435	3	140.0		0	2 672 534	
8 928	1			8 928		0	1			1 239 036		0			1			905 435	3	140.0		0	2 672 534	
8 928	1			8 640		0	1			1 239 036		0			1			905 435	3	140.0		0	2 672 534	
8 928	1			8 928		0	1			1 239 036		0			1			905 435	3	140.0		0	2 672 534	
8 640	1			8 640		66 526	1			1 305 562		73 652			0.71	0.29		905 435	3	140.0		118 708	2 812 793	
8 928	1			8 928		17 775	1			1 323 338		19 679				1		905 435	3	140.0		6 053	2 838 525	
8 928	1			8 928		47 967	1			1 371 304		53 105				1		905 435	3	140.0		60 667	2 952 297	
8 640	1			8 640		22 611	1			1 393 916		25 033				1		905 435	3	140.0		30 672	3 008 002	
8 928	1			8 928		0	1			1 393 916		0				1		905 435	3	140.0		0	3 008 002	
8 640	1			8 640		0	1			1 393 916		0				1		905 435	3	140.0		0	3 008 002	
8 928	1			8 928		0	1			1 393 916		0				1		905 435	3	140.0		0	3 008 002	
105 120				105 120		154 880			0			171 470					0					216 100		
8 928	1			8 928		0	1			1 393 916		0				1		905 435	3	140.0		0	3 008 002	
8 352	1			8 352		0	1			1 393 916		0				1		905 435	3	140.0		0	3 008 002	
8 928	1			8 928		0	1			1 393 916		0				1		905 435	3	140.0		0	3 008 002	
8 640	1			8 640		0	1			1 393 916		0				1		905 435	3	140.0		0	3 008 002	
8 928	1			8 928		0	1			1 393 916		0				1		905 435	3	140.0		0	3 008 002	
8 640	1			8 640		66 526	1			1 460 442		73 652				1		905 435	3	140.0		118 708	3 200 363	
8 928	1			8 928		17 775	1			1 478 217		19 679				1		905 435	3	140.0		6 053	3 226 095	
8 928	1			8 928		47 967	1			1 526 184		53 105				1		905 435	3	140.0		60 667	3 339 867	
8 640	1			8 640		22 611	1			1 548 795		25 033				1		905 435	3	140.0		30 672	3 395 572	
8 928	1			8 928		0	1			1 548 795		0				1		905 435	3	140.0		0	3 395 572	
8 640	1			8 640		0	1			1 548 795		0				1		905 435	3	140.0		0	3 395 572	
8 928	1			8 928		0	1			1 548 795		0				1		905 435	3	140.0		0	3 395 572	
105 408				105 408		154 880			0			171 470					0					216 100		
14 964	1			14 964		0	1			1 548 795		0	1					905 435	3	140.0		0	3 395 572	
14 964	1			14 964		0	1			1 548 795		0	1					905 435	3	140.0		0	3 395 572	
14 964	1			14 964		0	1			1 548 795		0	1					905 435	3	140.0		0	3 395 572	
14 964	1			14 964		0	1			1 548 795		0	1					905 435	3	140.0		0	3 395 572	
14 964	1			14 964		0	1			1 548 795		0	1					905 435	3	140.0			3 395 572	
14 964	1			14 964		66 526	1			1 688 974		73 652	1					905 435	3	140.0			3 395 572	
14 964	1			14 964		17 775	1			1 726 428		19 679	1					905 435	3	140.0			3 395 572	
14 964	1			14 964		47 967	1			1 827 500		53 105	1					905 435	3	140.0			3 395 572	
14 964	1			14 964		22 611	1			1 875 144		25 033	1					905 435	3	140.0			3 395 572	
14 964	1			14 964		0	1			1 875 144		0	1					905 435	3	140.0			3 395 572	
14 964	1			14 964		0	1			1 875 144		0	1					905 435	3	140.0			3 395 572	
14 964	1			14 964		0	1			1 875 144		0	1					905 435	3	140.0		0	3 395 572	
179 567				179 567		154 880			0			171 470					0					0		
14 964	1			14 964		0	1			1 875 144		0	1					905 435	3	140.0		0	3 395 572	
14 964	1			14 964		0	1			1 875 144		0	1					905 435	3	140.0		0	3 395 572	
14 964	1			14 964		0	1			1 875 144		0	1					905 435	3	140.0		0	3 395 572	
14 964	1			14 964		0	1			1 875 144		0	1					905 435	3	140.0		0	3 395 572	
14 964	1			14 964		0	1			1 875 144		0	1					905 435	3	140.0		0	3 395 572	
14 964	1			14 964		66 526	1			2 015 323		73 652	1					905 435	3	140.0			3 395 572	
14 964	1			14 964		17 775	1			2 052 777		19 679	1					905 435	3	140.0			3 395 572	
14 964	1			14 964		47 967	1			2 153 849		53 105	1					905 435	3	140.0			3 395 572	
14 964	1			14 964		22 611	1			2 201 493		25 033	1					905 435	3	140.0			3 395 572	
14 964	1			14 964		0	1			2 201 493		0	1					905 435	3	140.0		0	3 395 573	
14 964	1			14 964		0	1			2 201 493		0	1					905 435	3	140.0		0	3 395 573	
14 964	1			14 964		0	1			2 201 493		0	1					905 435	3	140.0		0	3 395 573	
179 567				179 567		154 880			0			171 470					0					0		
14 964	1			14 964		0	1			2 201 493		0	1					905 435	3	140.0		0	3 395 573	
14 964	1			14 964		0	1			2 201 493		0	1					905 435	3	140.0		0	3 395 573	
14 964	1			14 964		0	1			2 201 493		0	1					905 435	3	140.0		0	3 395 573	
14 964	1			14 964		0	1			2 201 493		0	1					905 435	3	140.0		0	3 395 573	
14 964	1			14 964		0	1			2 201 493		0	1					905 435	3	140.0			3 395 573	
14 964	1			14 964		66 526	1			2 341 672		73 652	1					905 435	3	140.0			3 395 573	
14 964	1			14 964		17 775	1			2 379 126		19 679	1					905 435	3	140.0			3 395 573	
14 964	1			14 964		47 967	1			2 480 198		53 105	1					905 435	3	140.0			3 395 573	
14 964	1			14 964		22 611	1			2 527 842		25 033	1					905 435	3	140.0			3 395 573	

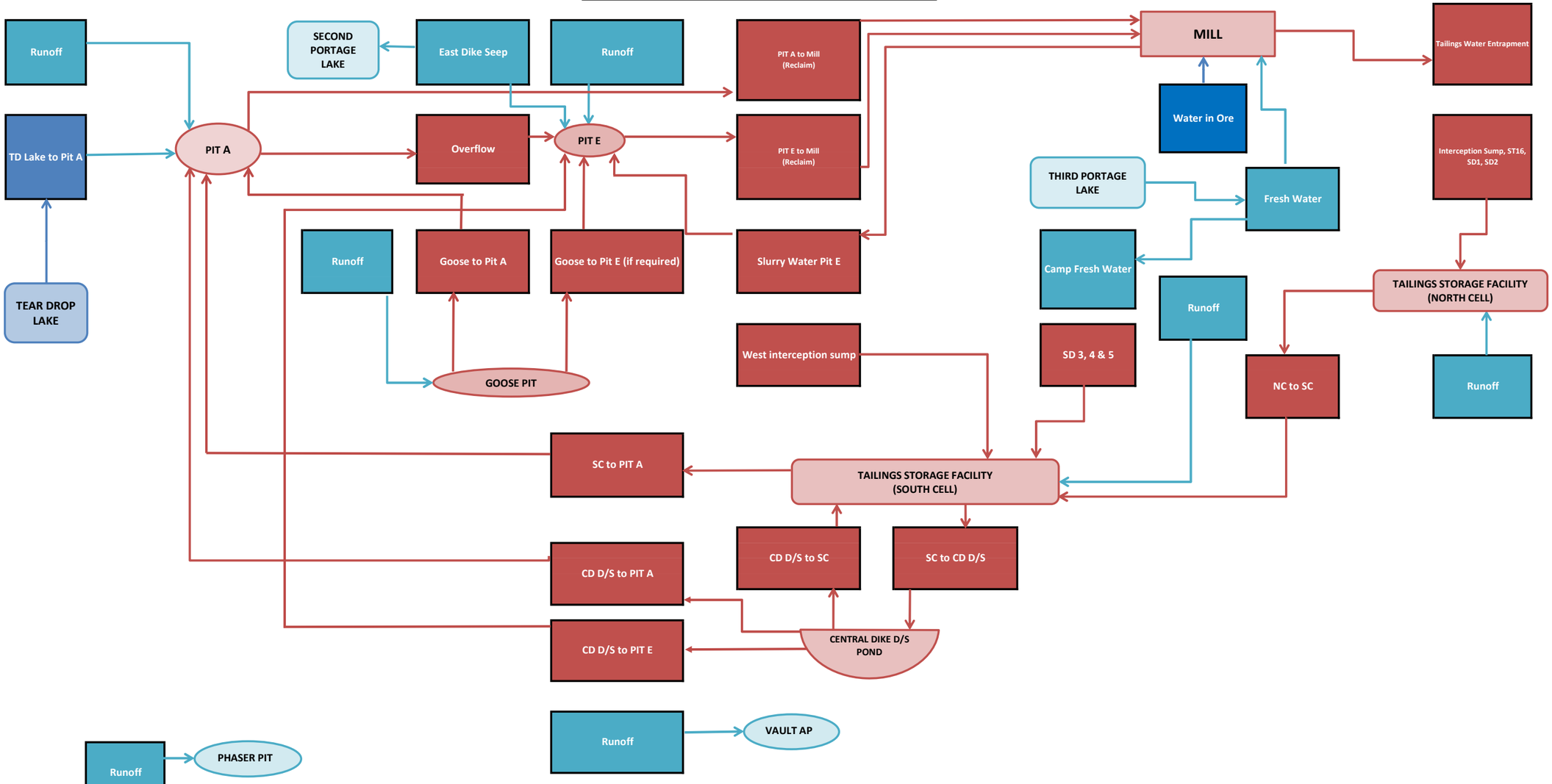
14 964	1			14 964		0	1			2 527 842		0	1					905 435	3	140.0			3 395 573	
14 964	1			14 964		0	1			2 527 842		0	1					905 435	3	140.0		0	3 395 573	
14 964	1			14 964		0	1			2 527 842		0	1					905 435	3	140.0		0	3 395 573	
179 567				**179 567**		**154 880**			**0**			**171 470**					**0**					**0**		
14 964	1			14 964		0	1			2 527 842		0	1					905 435	3	140.0		0	3 395 573	
14 964	1			14 964		0	1			2 527 842		0	1					905 435	3	140.0		0	3 395 573	
14 964	1			14 964		0	1			2 527 842		0	1					905 435	3	140.0		0	3 395 573	
14 964	1			14 964		0	1			2 527 842		0	1					905 435	3	140.0		0	3 395 573	
14 964	1			14 964		0	1			2 527 842		0	1					905 435	3	140.0			3 395 573	
14 964	1			14 964		66 526	1			2 668 021		73 652	1					905 435	3	140.0			3 395 573	
14 964	1			14 964		17 775	1			2 705 475		19 679	1					905 435	3	140.0			3 395 573	
14 964	1			14 964		47 967	1			2 806 547		53 105	1					905 435	3	140.0			3 395 573	
14 964	1			14 964		22 611	1			2 854 191		25 033	1					905 435	3	140.0			3 395 573	
14 964	1			14 964		0	1			2 854 191		0	1					905 435	3	140.0			3 395 573	
14 964	1			14 964		0	1			2 854 191		0	1					905 435	3	140.0		0	3 395 573	
14 964	1			14 964		0	1			2 854 191		0	1					905 435	3	140.0		0	3 395 573	
179 567				**179 567**		**154 880**			**0**			**171 470**					**0**					**0**		
14 964	1			14 964		0	1			2 854 191		0	1					905 435	3	140.0		0	3 395 573	
14 964	1			14 964		0	1			2 854 191		0	1					905 435	3	140.0		0	3 395 573	
14 964	1			14 964		0	1			2 854 191		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		0	1			2 854 191		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		0	1			2 854 191		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		66 526	1			2 994 370		73 652	1					905 435	3	140.0			3 395 573	
14 964		1		0		17 775	1			3 031 824		19 679	1					905 435	3	140.0			3 395 573	
14 964		1		0		47 967	1			3 132 896		53 105	1					905 435	3	140.0			3 395 573	
14 964		1		0		22 611	1			3 180 540		25 033	1					905 435	3	140.0			3 395 573	
14 964		1		0		0	1			3 180 540		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		0	1			3 180 540		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		0	1			3 180 540		0	1					905 435	3	140.0		0	3 395 573	
179 567				**44 892**		**154 880**			**0**			**171 470**					**0**					**0**		
14 964		1		0		0	1			3 180 540		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		0	1			3 180 540		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		0	1			3 180 540		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		0	1			3 180 540		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		0	1			3 180 540		0	1					905 435	3	140.0			3 395 573	
14 964		1		0		333 333	1			3 587 526		73 652	1					905 435	3	140.0			3 395 573	
14 964		1		0		333 333	1			3 940 538		19 679	1					905 435	3	140.0			3 395 573	
14 964		1		0		333 333	1			4 326 976		53 105	1					905 435	3	140.0			3 395 573	
14 964		1		0		333 333	1			4 685 343		25 033	1					905 435	3	140.0			3 395 573	
14 964		1		0		333 333	1			5 018 676		0	1					905 435	3	140.0			3 395 573	
14 964		1		0		333 333	1			5 352 010		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		333 333	1			5 685 343		0	1					905 435	3	140.0		0	3 395 573	
179 567				**0**		**2 333 333**			**0**			**171 470**					**0**					**0**		
14 964		1		0		333 333	1			6 018 676		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		333 333	1			6 352 010		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		333 333	1			6 685 343		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		333 333	1			7 018 676		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		333 333	1			7 352 010		0	1					905 435	3	140.0			3 395 573	
14 964		1		0		333 333	1			7 758 995		73 652	1					905 435	3	140.0			3 395 573	
14 964		1		0		333 333	1			8 112 008		19 679	1					905 435	3	140.0			3 395 573	
14 964		1		0		333 333	1			8 498 446		53 105	1					905 435	3	140.0			3 395 573	
14 964		1		0		333 333	1			8 856 812		25 033	1					905 435	3	140.0			3 395 573	
14 964		1		0		333 333	1			9 190 146		0	1					905 435	3	140.0			3 395 573	
14 964		1		0		333 333	1			9 523 479		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		333 333	1			9 856 812		0	1					905 435	3	140.0		0	3 395 573	
179 567				**0**		**4 000 000**			**0**			**171 470**					**0**					**0**		
14 964		1		0		333 333	1			10 190 146		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		333 333	1			10 523 479		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		333 333	1			10 856 812		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		333 333	1			11 190 146		0	1					905 435	3	140.0		0	3 395 573	
14 964		1		0		333 333	1			11 523 479		0	1					905 435	3	140.0			3 395 573	
14 964		1		0		333 333	1			11 930 465		73 652	1					905 435	3	140.0			3 395 573	
14 964		1		0		333 333	1			12 283 477		19 679	1					905 435	3	140.0			3 395 573	
14 964		1		0		333 333	1			12 669 915		53 105	1					905 435	3	140.0			3 395 573	
14 964		1		0		333 333	1			13 028 282		25 033	1					905 435	3	140.0			3 395 573	

14 964		1		0	333 333	1			13 361 615	0	1					905 435	3	140.0		3 395 573
14 964		1		0	333 333	1			13 694 949	0	1					905 435	3	140.0	0	3 395 573
14 964		1		0	333 333	1			14 028 282	0	1					905 435	3	140.0	0	3 395 573
179 567				**0**	**4 000 000**			**0**		**171 470**					**0**				**0**	
14 964		1		0	333 333	1			14 361 615	0	1					905 435	3	140.0	0	3 395 573
14 964		1		0	333 333	1			14 694 949	0	1					905 435	3	140.0	0	3 395 573
14 964		1		0	333 333	1			15 028 282	0	1					905 435	3	140.0	0	3 395 573
14 964		1		0	333 333	1			15 361 615	0	1					905 435	3	140.0	0	3 395 573
14 964		1		0	333 333	1			15 694 949	0	1					905 435	3	140.0		3 395 573
14 964		1		0	333 333	1			16 101 934	73 652	1					905 435	3	140.0		3 395 573
14 964		1		0	333 333	1			16 454 947	19 679	1					905 435	3	140.0		3 395 573
14 964		1		0	333 333	1			16 841 385	53 105	1					905 435	3	140.0		3 395 573
14 964		1		0	333 333	1			17 199 751	25 033	1					905 435	3	140.0		3 395 573
14 964		1		0	333 333	1			17 533 085	0	1					905 435	3	140.0		3 395 573
14 964		1		0	333 333	1			17 866 418	0	1					905 435	3	140.0	0	3 395 573
14 964		1		0	333 333	1			18 199 751	0	1					905 435	3	140.0	0	3 395 573
179 567				**0**	**4 000 000**			**0**		**171 470**					**0**				**0**	
14 964		1		0	333 333	1			18 533 085	0				1		905 435	3	140.0	0	3 062 239
14 964		1		0	333 333	1			18 866 418	0				1		905 435	3	140.0	0	2 728 906
14 964		1		0	333 333	1			19 199 751	0				1		905 435	3	140.0	0	2 395 572
14 964		1		0	333 333	1			19 533 085	0				1		905 435	3	140.0	0	2 062 239
14 964		1		0	333 333	1			19 866 418	0				1		905 435	3	140.0	0	1 728 906
14 964		1		0	333 333	1			20 199 751	73 652				1		905 435	3	140.0	118 708	1 395 572
14 964		1		0	333 333	1			20 533 085	19 679				1		905 435	3	140.0	6 053	1 062 239
14 964		1		0	333 333	1			20 866 418	53 105				1		905 435	3	140.0	60 667	728 906
14 964		1		0	333 333	1			21 199 751	25 033				1		905 435	3	140.0	30 672	395 572
14 964		1		0	333 333	1			21 533 085	0				1		905 435	3	140.0	0	62 239
14 964		1		0	333 333	1			21 866 418	0				1		905 435	3	140.0	0	-271 094
14 964		1		0	333 333	1			22 199 751	0				1		905 435	3	140.0	0	-604 427
179 567				**0**	**4 000 000**			**0**		**171 470**					**0**				**216 100**	
14 964		1		0	333 333	1			22 533 085	0				1		905 435	3	140.0	0	3 062 239
14 964		1		0	333 333	1			22 866 418	0				1		905 435	3	140.0	0	2 728 906
14 964		1		0	333 333	1			23 199 751	0				1		905 435	3	140.0	0	2 395 572
14 964		1		0	333 333	1			23 533 085	0				1		905 435	3	140.0	0	2 062 239
14 964		1		0	333 333	1			23 866 418	0				1		905 435	3	140.0	0	1 728 906
14 964		1		0	333 333	1			24 199 751	73 652				1		905 435	3	140.0	118 708	1 395 572
14 964		1		0	333 333	1			24 533 085	19 679				1		905 435	3	140.0	6 053	1 062 239
14 964		1		0	333 333	1			24 866 418	53 105				1		905 435	3	140.0	60 667	728 906
14 964		1		0	333 333	1			25 199 751	25 033				1		905 435	3	140.0	30 672	395 572
14 964		1		0	333 333	1			25 533 085	0				1		905 435	3	140.0	0	62 239
14 964		1		0	333 333	1			25 866 418	0				1		905 435	3	140.0	0	-271 094
14 964		1		0	333 333	1			26 199 751	0				1		905 435	3	140.0	0	-604 427
179 567				**0**	**4 000 000**			**0**		**171 470**					**0**				**216 100**	
14 964		1		0	333 333	1			26 533 085	0				1		905 435	3	140.0	0	3 062 239
14 964		1		0	333 333	1			26 866 418	0				1		905 435	3	140.0	0	2 728 906
14 964		1		0	333 333	1			27 199 751	0				1		905 435	3	140.0	0	2 395 573
14 964		1		0	333 333	1			27 533 085	0				1		905 435	3	140.0	0	2 062 239
14 964		1		0	333 333	1			27 866 418	0				1		905 435	3	140.0	0	1 728 906
14 964		1		0	333 333	1			28 199 751	73 652				1		905 435	3	140.0	118 708	1 395 573
14 964		1		0	333 333	1			28 533 085	19 679				1		905 435	3	140.0	6 053	1 062 239
14 964			1	0	333 333	1			28 866 418	53 105				1		905 435	3	140.0	60 667	728 906
14 964			1	0	333 333	1			29 199 751	25 033				1		905 435	3	140.0	30 672	395 573
14 964			1	0	333 333	1			29 533 085	0				1		905 435	3	140.0	0	62 239
14 964			1	0	0	1			29 533 085	0				1		905 435	3	140.0	0	62 239
14 964			1	0	0	1			29 533 085	0				1		905 435	3	140.0	0	62 239
179 567				**0**	**3 333 333**			**0**		**171 470**					**0**				**216 100**	
14 964			1	0	333 333	1			29 866 418	0				1		905 435	3	140.0	0	3 062 239
14 964			1	0	333 333	1			30 199 751	0				1		905 435	3	140.0	0	2 728 906
14 964			1	0	333 333	1			30 533 085	0				1		905 435	3	140.0	0	2 395 573
14 964			1	0	333 333	1			30 866 418	0				1		905 435	3	140.0	0	2 062 239
14 964			1	0	333 333	1			31 199 751	0				1		905 435	3	140.0	0	1 728 906
14 964			1	0	333 333	1			31 533 085	73 652				1		905 435	3	140.0	118 708	1 395 573
14 964			1	0	333 333	1			31 866 418	19 679				1		905 435	3	140.0	6 053	1 062 239
14 964			1	0	333 333	1			32 199 751	53 105				1		905 435	3	140.0	60 667	728 906
14 964			1	0	333 333	1			32 533 085	25 033				1		905 435	3	140.0	30 672	395 573

14 964			1	0	333 333	1			32 866 418		0				1		905 435	3	140.0		0	62 239
14 964			1	0	0	1			32 866 418		0				1		905 435	3	140.0		0	62 239
14 964			1	0	0	1			32 866 418		0				1		905 435	3	140.0		0	62 239
179 567				**0**	**3 333 333**			**0**			**171 470**					**0**					**216 100**	
14 964			1	0	333 333	1			33 199 751		0				1		905 435	3	140.0		0	3 062 239
14 964			1	0	333 333	1			33 533 085		0				1		905 435	3	140.0		0	2 728 906
14 964			1	0	333 333	1			33 866 418		0				1		905 435	3	140.0		0	2 395 573
14 964			1	0	333 333	1			34 199 751		0				1		905 435	3	140.0		0	2 062 239
14 964			1	0	333 333	1			34 533 085		0				1		905 435	3	140.0		0	1 728 906
14 964			1	0	333 333	1			34 866 418		73 652				1		905 435	3	140.0		118 708	1 395 573
14 964			1	0	333 333	1			35 199 751		19 679				1		905 435	3	140.0		6 053	1 062 239
14 964			1	0	333 333	1			35 533 085		53 105				1		905 435	3	140.0		60 667	728 906
14 964			1	0	333 333	1			35 866 418		25 033				1		905 435	3	140.0		30 672	395 573
14 964			1	0	333 333	1			36 199 751		0				1		905 435	3	140.0		0	62 239
14 964			1	0	0	1			36 199 751		0				1		905 435	3	140.0		0	62 239
14 964			1	0	0	1			36 199 751		0				1		905 435	3	140.0		0	62 239
179 567				**0**	**3 333 333**			**0**			**171 470**					**0**					**216 100**	
14 964			1	0	333 333	1			36 533 085		0				1		905 435	3	140.0		0	3 062 239
14 964			1	0	333 333	1			36 866 418		0				1		905 435	3	140.0		0	2 728 906
14 964			1	0	333 333	1			37 199 751		0				1		905 435	3	140.0		0	2 395 573
14 964			1	0	333 333	1			37 533 085		0				1		905 435	3	140.0		0	2 062 239
14 964			1	0	333 333	1			37 866 418		0				1		905 435	3	140.0		0	1 728 906
14 964			1	0	333 333	1			38 199 751		73 652				1		905 435	3	140.0		118 708	1 395 573
14 964			1	0	333 333	1			38 533 085		19 679				1		905 435	3	140.0		6 053	1 062 239
14 964			1	0	333 333	1			38 866 418		53 105				1		905 435	3	140.0		60 667	728 906
14 964			1	0	333 333	1			39 199 751		25 033				1		905 435	3	140.0		30 672	395 573
14 964			1	0	333 333	1			39 533 085		0				1		905 435	3	140.0		0	62 240
14 964			1	0	0	1			39 533 085		0				1		905 435	3	140.0		0	62 240
14 964			1	0	0	1			39 533 085		0				1		905 435	3	140.0		0	62 240
179 567				**0**	**3 333 333**			**0**			**171 470**					**0**					**216 100**	
14 964			1	0	333 333	1			39 866 418		0				1		905 435	3	140.0		0	3 062 239
14 964			1	0	333 333	1			40 199 751		0				1		905 435	3	140.0		0	2 728 906
14 964			1	0	333 333	1			40 533 085		0				1		905 435	3	140.0		0	2 395 573
14 964			1	0	333 333	1			40 866 418		0				1		905 435	3	140.0		0	2 062 239
14 964			1	0	333 333	1			41 199 751		0				1		905 435	3	140.0		0	1 728 906
14 964			1	0	333 333	1			41 533 085		73 652				1		905 435	3	140.0		118 708	1 395 573
14 964			1	0	333 333	1			41 866 418		19 679				1		905 435	3	140.0		6 053	1 062 239
14 964			1	0	333 333	1			42 199 751		53 105				1		905 435	3	140.0		60 667	728 906
14 964			1	0	333 333	1			42 533 085		25 033				1		905 435	3	140.0		30 672	395 573
14 964			1	0	333 333	1			42 866 418		0				1		905 435	3	140.0		0	62 240
14 964			1	0	0	1			42 866 418		0				1		905 435	3	140.0		0	62 240
14 964			1	0	0	1			42 866 418		0				1		905 435	3	140.0		0	62 240
179 567				**0**	**3 333 333**			**0**			**171 470**					**0**					**216 100**	
14 964			1	0	333 333	1			43 199 751		0				1		905 435	3	140.0		0	3 062 239
14 964			1	0	333 333	1			43 533 085		0				1		905 435	3	140.0		0	2 728 906
14 964			1	0	333 333	1			43 866 418		0				1		905 435	3	140.0		0	2 395 573
14 964			1	0	333 333	1			44 199 751		0				1		905 435	3	140.0		0	2 062 239
14 964			1	0	333 333	1			44 533 085		0				1		905 435	3	140.0		0	1 728 906
14 964			1	0	333 333	1			44 866 418		73 652				1		905 435	3	140.0		118 708	1 395 573
14 964			1	0	333 333	1			45 199 751		19 679				1		905 435	3	140.0		6 053	1 062 239
14 964			1	0	333 333	1			45 533 085		53 105				1		905 435	3	140.0		60 667	728 906
14 964			1	0	333 333	1			45 866 418		25 033				1		905 435	3	140.0		30 672	395 573
				0	333 333	1			46 199 751		0				1		905 435	3	140.0		0	62 240
				0	0	1			46 199 751		0				1		905 435	3	140.0		0	62 240
				0	0	1			46 199 751		0				1		905 435	3	140.0		0	62 240
134 675				**0**	**3 333 333**			**0**			**171 470**					**0**					**216 100**	

APPENDIX B – WATER MANAGEMENT SCHEMATIC FLOWSHEETS

General Water Movement - 2021 to 2023

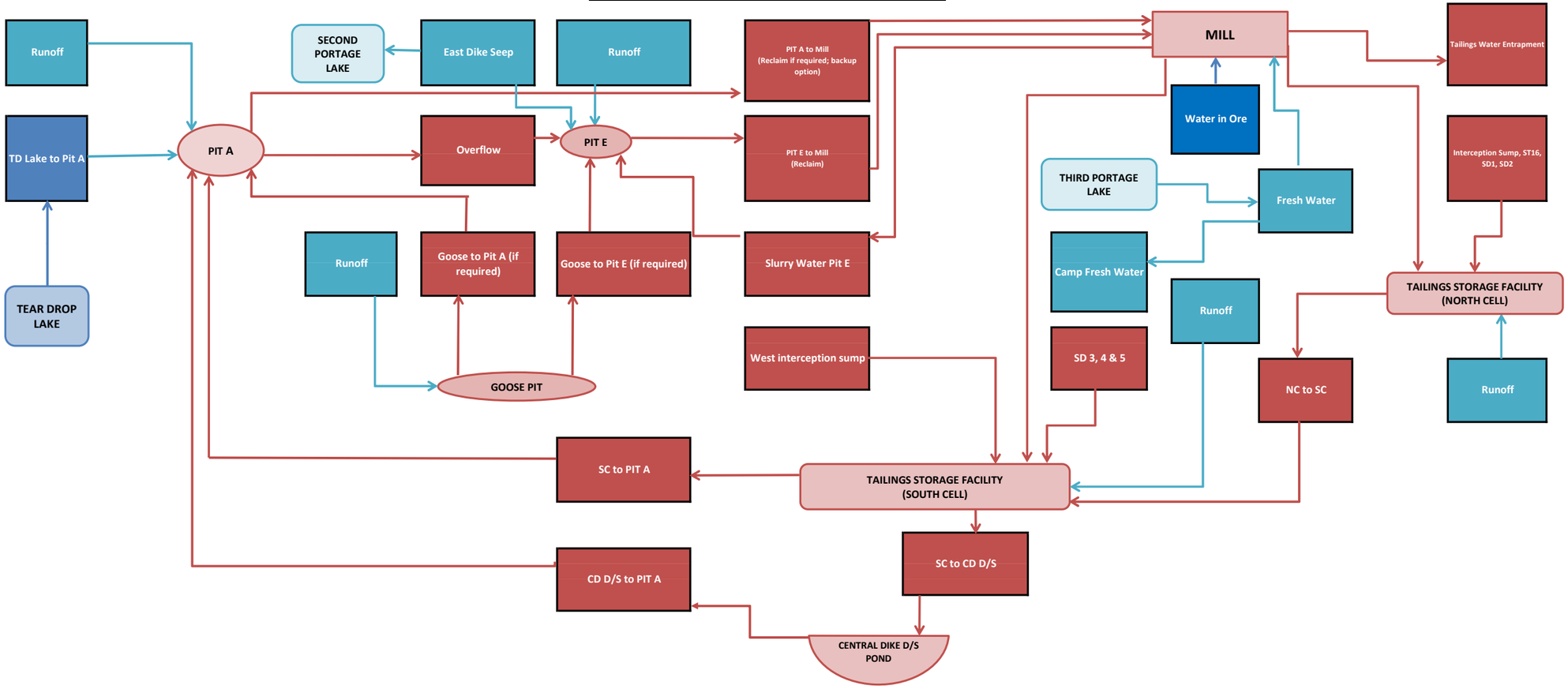


Legend

- Fresh water
- Contact water
- Mill contaminated water

*Small water transfers are not shown on this drawing, refer to water balance tables for detailed water movement.

General Water Movement - 2024 to 2027

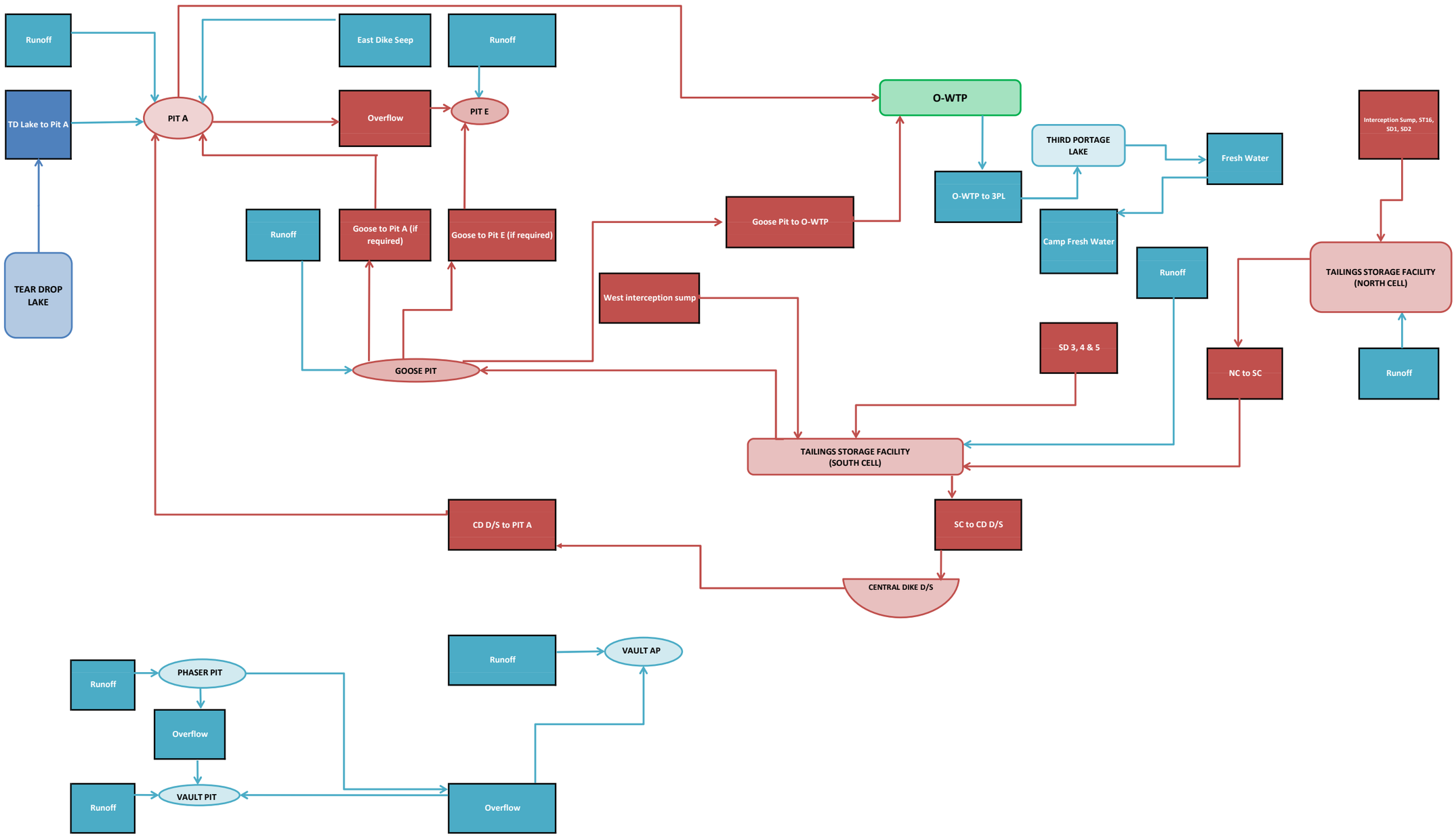


Legend

- Fresh water
- Contact water
- Mill contaminated water

*Small water transfers are not shown on this drawing, refer to water balance tables for detailed water movement.

General Water Movement - 2028 to 2036

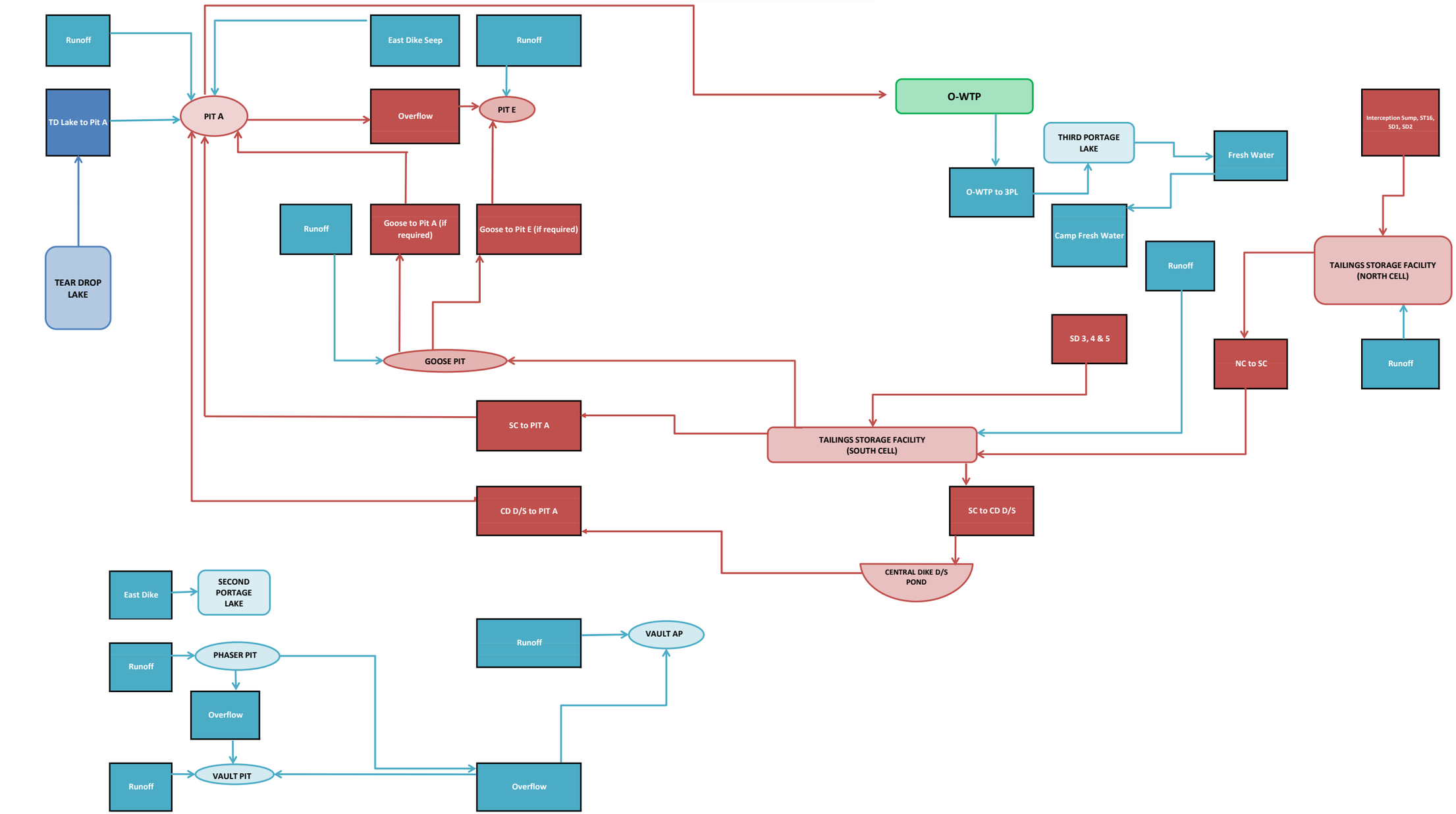


Legend

- Fresh water
- Contact water
- Mill contaminated water

*Small water transfers are not shown on this drawing, refer to water balance tables for detailed water movement.

General Water Movement - 2037 to 2038

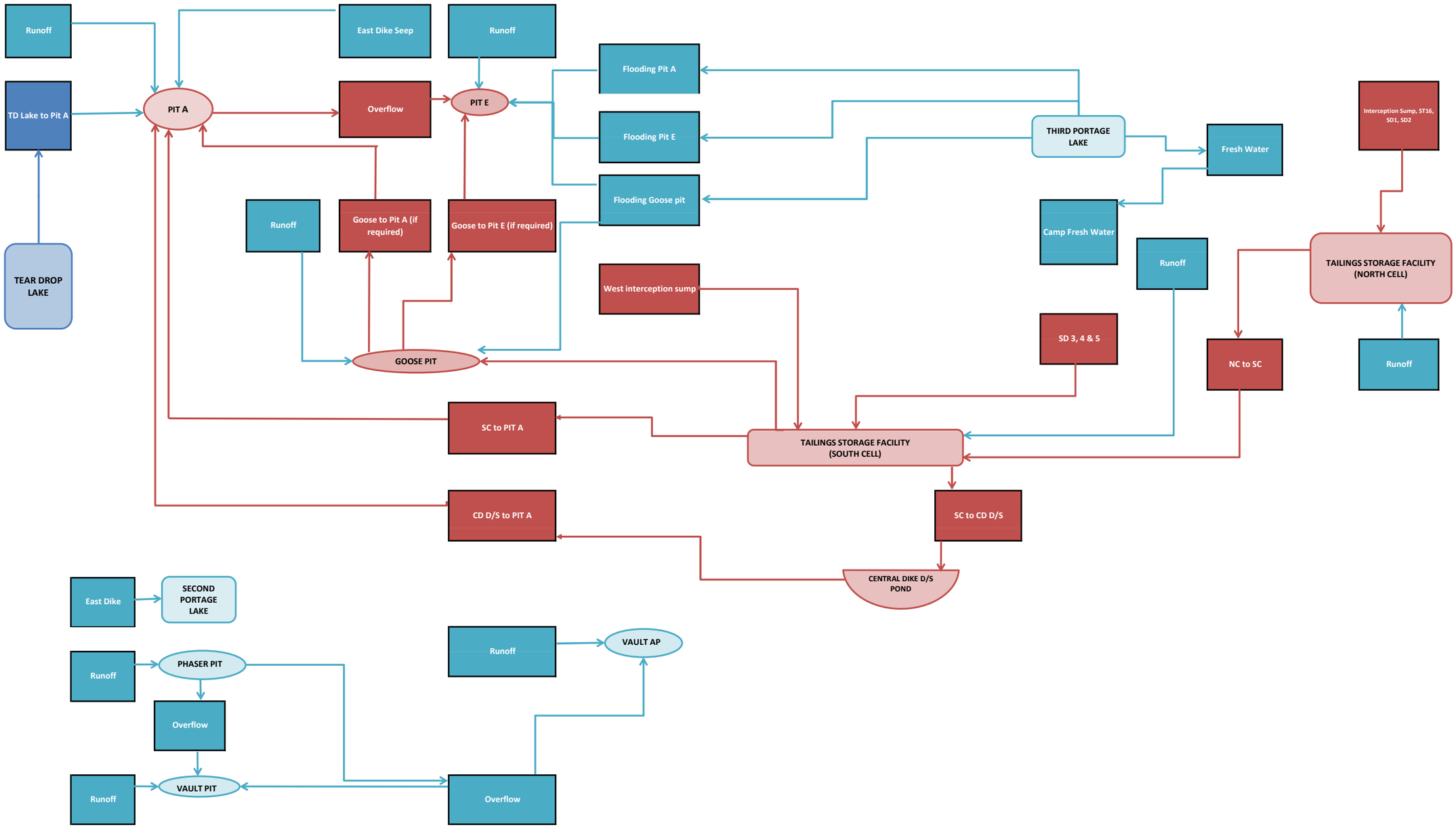


Legend

- Fresh water
- Contact water
- Mill contaminated water

*Small water transfers are not shown on this drawing, refer to water balance tables for detailed water movement.

General Water Movement - 2039 to 2044

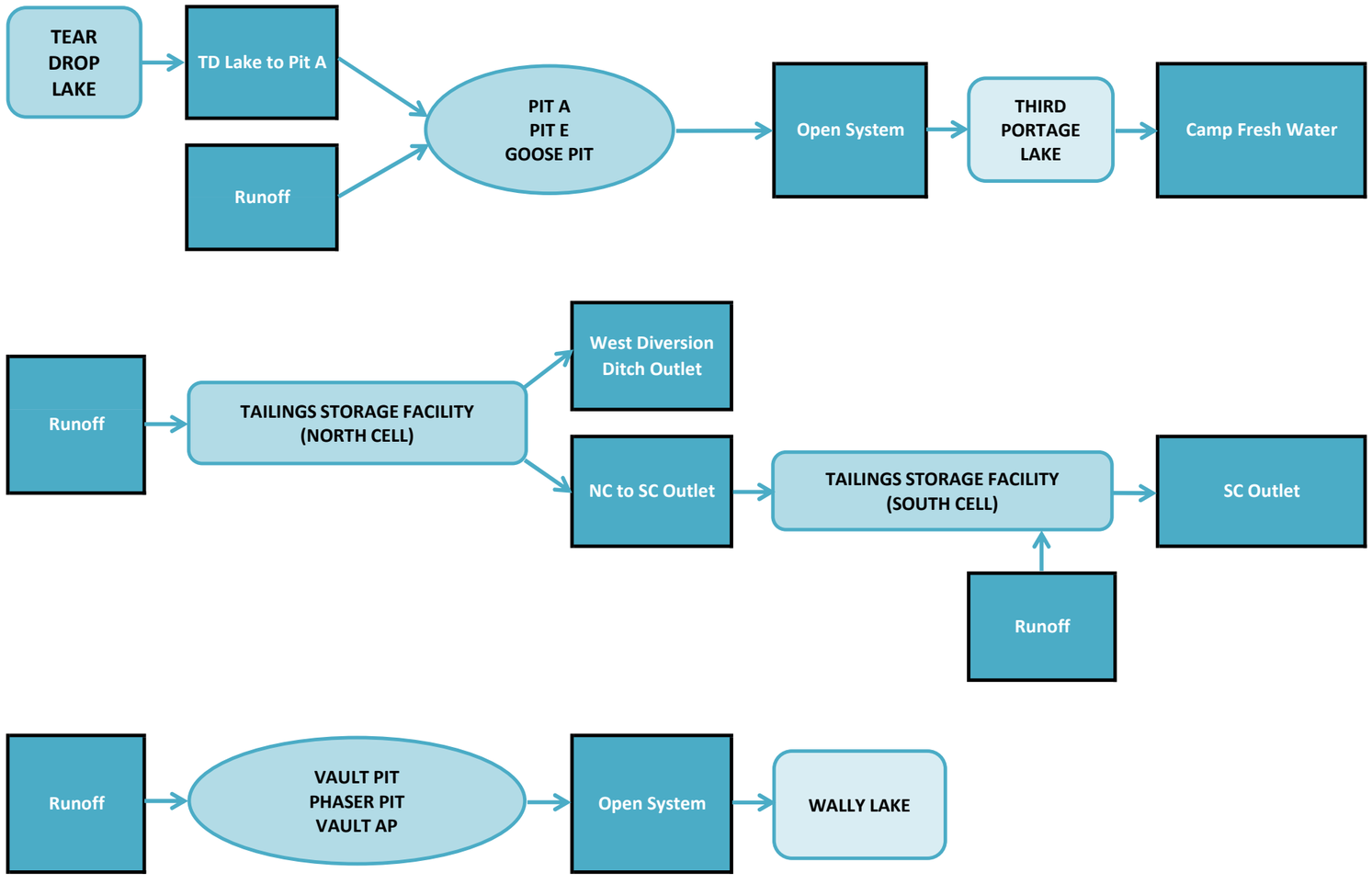


Legend

- Fresh water
- Contact water
- Mill contaminated water

*Small water transfers are not shown on this drawing, refer to water balance tables for detailed water movement.

General Water Movement - Post-Closure



Legend

- Fresh water
- Contact water
- Mill contaminated water

*Small water transfers are not shown on this drawing, refer to water balance tables for detailed water movement.

APPENDIX C – 2023 MEADOWBANK WATER QUALITY FORECASTING UPDATE

AtkinsRéalis	TECHNICAL NOTE Meadowbank Water Quality Forecasting Update for the 2023 Water Management Plan		
	Document No :	**Rev.**	**Date :**
	699141-1000-40ER-0001	00	March 26, 2024

Title of document: **MEADOWBANK WATER QUALITY FORECASTING UPDATE FOR THE 2023 WATER MANAGEMENT PLAN**

Client: **AGNICO EAGLE MINES**

Project: **MEADOWBANK GOLD PROJECT**

Prepared by:
(under ICS[1])
Rachid Amrou, M.Sc.
#OIQ: 5095767

Revised by:
Anh-Long Nguyen, Eng., M.Sc.
#OIQ: 122858, #NAPEG: L2716

Approved by:
Anh-Long Nguyen, Eng., M.Sc.
#OIQ: 122858, #NAPEG: L2716

[1] ICS: Immediate control and supervision.
In terms of supervising the engineering activities and supervision of people who are not engineers or junior engineers, the Ordre des ingénieurs du Québec uses a term often used in its regulation: Immediate control and supervision (ICS). In other words, an engineer must be involved in a continuous and active manner throughout the reserved tasks entrusted to him, and not just before or after.

Notice to Reader

This report has been prepared and the work referred to in this report has been undertaken by AtkinsRéalis Canada Inc. (AtkinsRéalis), for the exclusive use of Agnico Eagle Mines, who has been party to the development of the scope of work and understands its limitations. The methodology, findings, conclusions and recommendations in this report are based solely upon the scope of work and subject to the time and budgetary considerations described in the proposal and/or contract pursuant to which this report was issued. Any use, reliance on, or decision made by a third party based on this report is the sole responsibility of such third party. AtkinsRéalis accepts no liability or responsibility for any damages that may be suffered or incurred by any third party as a result of the use of, reliance on, or any decision made based on this report.

The findings, conclusions and recommendations in this report (i) have been developed in a manner consistent with the level of skill normally exercised by professionals currently practicing under similar conditions in the area, and (ii) reflect AtkinsRéalis' best judgment based on information available at the time of preparation of this report. No other warranties, either expressed or implied, are made with respect to the professional services provided to Agnico Eagle Mines or the findings, conclusions and recommendations contained in this report. The findings and conclusions contained in this report are valid only as of the date of this report and may be based, in part, upon information provided by others. If any of the information is inaccurate, new information is discovered or project parameters change, modifications to this report may be necessary.

This report must be read as a whole, as sections taken out of context may be misleading. If discrepancies occur between the preliminary (draft) and final version of this report, it is the final version that takes precedence. Nothing in this report is intended to constitute or provide a legal opinion.

The contents of this report are confidential and proprietary. Other than by Agnico Eagle Mines, copying or distribution of this report or use of or reliance on the information contained herein, in whole or in part, is not permitted without the express written permission of Agnico Eagle Mines and AtkinsRéalis.

List of Revisions

#	Prep.	Rev.	App.	Date	Pages	Remarks
PA	RA	ALN	ALN	Mar. 4, 2024	All	Issue for internal comments
PB	RA	ALN	ALN	Mar. 8, 2024	All	Issue for client's comments
00	RA	ALN	ALN	Mar. 26, 2024	All	Final

Table of contents

List of tables

List of figures

1.0 Introduction

1.1 Mandate

AtkinsRéalis was mandated by Agnico Eagle Mines (Agnico) to review and update the water quality forecasting model developed in 2012 and updated yearly using the Water Balance reported in the 2023 Water Management Report and Plan (2023 WMP) to be submitted in March 2024 for Agnico.

1.2 Study Objectives and Content

This Technical Note presents the water quality forecast model updated for the Meadowbank Gold Project, based on the Water Balance 2023 (WB 2023) of Agnico (latest revision provided on January 18th, 2024). The WB 2023 was developed according to the updated Life of Mine (LOM) (Meadowbank 2023 Waste Management Plan) and to the mine development sequence provided by Agnico and summarized in **Table 1-1**. The updated water quality forecast model applies to the North and South Cell Tailings Storage Facility (TSF) Reclaim Ponds, Portage and Goose Pits, and Vault Pit.

The objective of this Technical Note is to forecast the concentration of the selected parameters of concern within the North and South Cell TSF Reclaim Ponds and the Portage and Goose Pits until closure, verify last year's assumptions and results, update the model, if necessary, and develop recommendations and assess water treatment requirements.

For the Vault Pit, no treatment is planned during the re-flooding of the pit since there is no tailings disposal facility at the Vault site. The Vault Attenuation Pond only receives mine pit runoff water and fresh water. This will be confirmed through regular monitoring required by the Type A Water Licence 2AM-MEA1530. The first modelling of the Vault area was realized in 2016, based on the 2014 and 2015 data, and updated on a yearly basis using sampling data collected for that year. For this year's report, the measurements taken in 2023 for this monitoring campaign were analyzed and are presented in **Section 5.0**.

1.3 Water Balance

The Water Balance 2023 (WB 2023) was developed by Agnico (Agnico 2024). The water balance examined the water transfers required for the water management infrastructure during the active LOM under average hydrologic conditions.

The WB 2023 was based on the revised mining schedule presented in **Table 1-1** below for Meadowbank and Vault areas.

Table 1-1: Water Management Phases (Based on Meadowbank 2023 Waste Management Plan)

ACTIVITY	UPDATED START DATE[1]	UPDATED END DATE[1]
Pits Mining		
Portage Pit	January 2010	June 2019
North (Pit A)	January 2010	June 2018
Central (Pit B, C D)	January 2010	April 2013
South (Pit E)	January 2010	June 2019
Goose Pit	April 2012	May 2015
Vault Pit	January 2014	September 2018
Phaser and BB Phaser Pit	July 2018	September 2018
Whale Tail Project Pits (and underground)	July 2019	December 2025
Tailings Storage Facility Operations		
North Cell	January 2010	June 2026
South Cell	November 2014	June 2026
Goose Pit (in pit tailings deposition)	July 2019	August 2020
Portage (in pit tailings deposition)	August 2020	June 2026
Rock Storage Facility (RSF) Operations		
Portage RSF	January 2009	October 2019
Vault RSF	January 2014	September 2018
Attenuation/Reclaim Pond Water Management		
Attenuation Pond (South Cell)[2]	January 2009	November 2014
Attenuation/Phaser Ponds Vault Lake	January 2014	September 2018
Other Key Activities		
Mill Operations	January 2010	June 2026
Dewatering of Vault Lake	June 2013	July 2014
Dewatering of Phaser Lake	July 2016	October 2016
Flooding of Vault Pit[4]	June 2019	August 2040
Flooding of Phaser and BB Phaser Pits[4]	-	-
Reclaim Water Treatment[5, 6] – Goose Pit	July 2028	January- 2031
Reclaim Water Treament[5,6] – Portage Pit	January 2031	December 2038
North and South Cell TSF Cover Construction	January 2026	December 2027
Flooding of Portage and Goose Pits[3, 5]	January 2031	July 2041
Breaching of dikes[5]	n/a	August 2041 only if water criteria are met

Notes:

1. *Periods are given from the beginning of the starting month to the end of the ending month.*
2. *After November 2014, the Reclaim Pond is relocated to the South Cell TSF. After this date, there is no Attenuation Pond.*
3. *Artificial flooding only with a combination of pumps and siphons, natural run-off inflow as part of re-flooding not accounted for in this table.*
4. *Vault and Phaser pits and lakes are expected to will mostly be flooded passively (run-offs) due to the small flooding volume required to re-establish the initial elevation combined with its large watershed.*
5. *Tentative dates. Water treatment at Meadowbank may be required to meet approved effluent criteria and to allow cover construction if deemed necessary. Schedule will be modified if required based on monitoring and water quality results. The closure schedule for the overall project is based on the preliminary closure methods and strategies discussed in the Meadowbank ICRP. It is anticipated that the schedule will be refined throughout the project life as the designs are advanced, and as the closure methods and strategies are further developed.*
6. *In-pit tailings cover may be required in Goose and Portage Pits based on monitoring results and feasibility assessment.*

2.0 Review of Water Balance and Water Quality Data for 2023

2.1 Documents Reviewed

A review of the available water balance and water quality data measured in 2023 was undertaken by AtkinsRéalis and compiled with previous data measured since 2012. This includes a review of the following documents:

- WB 2023 based on the Meadowbank 2023 Waste Management Plan.
- Water quality chemical analysis results from the Portage Area for 2023. The chemical analysis results of interest for this Technical Note are presented in **Section 8.0** of the 2023 Annual Report and were integrated in the data previously obtained, specifically:
  - North Cell TSF Reclaim Pond (ST-21) from January 2014 to October 2023;
  - South Cell TSF Reclaim Pond (ST-21) (former South Cell TSF Attenuation Pond ST-18) from June 2014 to October 2023;
  - Mill effluent metal and cyanide concentrations from January 2013 to November 2023;
  - Monthly grab samples of Mill Effluent taken in 2023;
  - Portage North Pit (ST-17, Pit A) from May 2015 to November 2023 and for Portage South Pit (ST-19, Pit E) from November 2014 to November 2023;
  - Goose Pit (samples taken in the sump pit and in the lake, ST-20) from March 2014 to October 2023;
  - Central Dike seepages collected in the downstream collection pond (ST-S-5) sampled in 2023;
  - East Dike (ST-1) seepage and Saddle Dam 3 (ST-32) sump sampled in 2023;
  - Saddle Dam 1 downstream sump (ST-S-2) and Portage Rock Storage Facility seepage (RSF) (ST-16) sampled from 2015 to 2023;
  - Results of shake flask extraction (SFE) tests conducted in 2023 on the tailings.
- Water quality chemical analysis results for the Vault Area for 2023, specifically:
  - Vault Pit lake (ST-26);
  - Vault RSF (ST-24);
  - Vault Attenuation Pond (ST-25);
  - Phaser Pit (ST-41);
  - Phaser Attenuation Pond (ST-43).

It is important to remember that the review of the Meadowbank water quality data was undertaken to gain a better understanding of the water quality in the Portage Area, particularly as it affects the TSF Reclaim Ponds and the tailings in-pit deposition, and to provide a basis for the development and update of the water quality forecast mass balance model.

An analysis of the Vault water quality data was undertaken to gain a better understanding of the water quality in this area.

2.2 Updates to the Water Balance

The initial WB was developed in 2012. It has been updated on a yearly basis based on actual water transfers conducted on site, field survey of the different pond levels and updates to the LOM. **Table 2-1** summarizes the main differences between the WB from 2012 to 2023.

The WB 2023 integrates the extension of the LOM of Meadowbank Mine through the construction and operation of the Whale Tail Pit, a satellite deposit located on the Whale Tail property, and by continuing mine operations and milling at Meadowbank. It also integrates in-pit deposition of tailings in Goose and Portage Pits.

Table 2-1: Updates to the Water Balance

WB YEAR	FORECASTED END OF DEPOSITION	MAIN DIFFERENCES
2012	February 2018	Initial WB model based on the 2012 WMP. Tailings' deposition started in the North Cell TSF and continued until March 2015, and was then transferred to the South Cell TSF until February 2018. Reclaim Water was then transferred to the pits. It was anticipated that there would be approximately 6 Mm^3 of non-contact water already accumulated in each pit at that time.
2013	September 2017	In this WB, the LOM included the deposition of tailings in North and South Cell TSF in 2014 and 2015. Deposition in the North Cell TSF was planned to end in October 2015 and to continue in the South Cell TSF until September 2017. Furthermore, it was anticipated that South Cell TSF Reclaim Water would be transferred as of 2015 to the pits when there would be very little water in the pits. This was done while tailings deposition in South Cell TSF was ongoing. Runoff water will then be allowed to flow into the pit and mix with the South Cell Reclaim Water.
2014	September 2017	In this WB, tailings were deposited in the North and South Cell TSF in 2014 and 2015. Deposition in the South Cell TSF started in November 2014. Deposition in the North Cell TSF was planned to end in September 2015 and to continue in the South Cell TSF. Based on the volume of Reclaim Water in the North Cell TSF and South Cell TSF Ponds, it was anticipated that South Cell Reclaim Water would be transferred to Portage Pit starting August 2017. No Reclaim Water was to be transferred to Goose Pit. Furthermore, the percentage of tailings water/ice entrapment was also updated in 2014 WMP to better reflect what was currently observed on site.
2015	September 2018	From January to July 2015, tailings were deposited in the South Cell TSF. Deposition in the North Cell TSF continued from July to October 2015. As of October 2015, the deposition of

WB YEAR	FORECASTED END OF DEPOSITION	MAIN DIFFERENCES
		tailings continued only in the South Cell TSF until the end of the LOM. The LOM was extended compared to WB 2014, where tailings deposition was planned to end in September 2017. The transfer of Reclaim Water to the Portage Pit was postponed for one year due to the longer LOM and was planned to start in September 2018. No Reclaim Water will be transferred to Goose Pit other than the 50,431 m^3 transferred from the Central Dike Downstream Pond (CDDP), which has a similar water quality than the South Cell Reclaim Pond. Those transfers were proposed by the Meadowbank Dike Review Board (MDRB) to further assess the Central Dike seepage (ST-S-5) that was identified that same year.
2016	September 2018	The tailings deposition and water transfer schedule are similar to the WB 2015. Water in sumps from Saddle Dam 3-4-5 was added as a new input to the South Cell TSF Reclaim Pond. Furthermore, the transfer of seepages and runoff water from the North Cell interception sump, RSF and Saddle Dam 1 to the North Cell TSF continued past 2018 until closure. Portage and Goose Pit filling rates were also adjusted in this WB.
2017	September 2018	The tailings deposition and water transfer schedule are similar to the WB 2016. The actual volumes of water transferred and of tailings deposited in 2017 were entered into the model. About 332,177 m^3 of pond water was transferred to Goose Pit from the CDDP between August and October 2017 to reduce the hydraulic gradient between the South Cell and ST-S-5. This strategy was presented to the MDRB as part of an action plan on Central Dike. The updated water balance does not plan for any other pond water transfer during tailings deposition in 2018. Portage and Goose Pit flooding rates were also adjusted. A different percentage of tailings water/ice entrapment for North and South Cell TSF was also used in the WB 2017 to better characterize the difference of ice entrapment cover between the two, partly due to the continuing water inflow from the mill effluent in the South Cell TSF.
2018	December 2021	The tailings deposition and water transfer schedule were extended until December 2021. Tailings will be deposited in the North Cell and South Cell TSF. The additional tailings come from the continuation of the milling of ore produced from the Whale Tail Pit at the Whale Tail site. The actual volumes of water transferred and of tailings deposited in 2018 were entered into the model. In 2018, no Reclaim Water was transferred from CDDP or South Cell TSF to Goose Pit. In the Vault area, there was no discharge to Wally Lake as well.
2019	July 2022	The tailings deposition and water transfer schedule were extended until July 2022. Tailings were deposited in the South Cell TSF and North Cell until April 2019 and July 2019, respectively. Tailings were then deposited in Goose and Portage pits. In-pit deposition started in Goose Pit in July 2019. The additional tailings came from the continuation of the milling of ore produced from the Whale Tail pit operation.

WB YEAR	FORECASTED END OF DEPOSITION	MAIN DIFFERENCES
		The actual volumes of water transferred and of tailings deposited in 2019 were integrated into the model. In 2019, Reclaim Water was transferred from South Cell TSF Reclaim Pond to Goose Pit. Reclaim Water from CDDP was transferred back to SC Reclaim Pond or to Portage North Pit (Pit A). In the Vault area, there was no discharge to Wally Lake in 2019. Natural pit flooding was allowed to begin in the Vault area.
2020	June 2026	The tailings deposition and water transfer schedule were extended until June 2026. In-pit deposition occurred in Goose Pit from July 2019 until August 2020. In-pit deposition continued in Portage Pit starting in August 2020 and is projected to end in June 2026. The additional tailings come from the continuation of the milling of ore produced from the Whale Tail Pit, IVR Pit and underground mine operation at the Whale Tail site. The actual volumes and quantity of water transferred and of tailings deposited in 2020 were integrated into the model. In 2020, Reclaim Water was transferred from South Cell TSF Reclaim Pond to Portage Pit. Reclaim Water from CDDP was transferred back to SC Reclaim Pond or to Portage South Pit (Pit E). Reclaim Water was pumped from South Cell TSF and Portage North Pit (Pit A) to the mill. In the Vault area, natural pit flooding was allowed to continue. Following in-pit deposition, the Interim Closure and Reclamation Plan (ICRP) includes the treatment of the Reclaim Water in Portage and Goose Pits. The treated effluent shall be discharged to Third Portage Lake. Once treatment is completed, if necessary, cover construction over the tailings in the pits will begin, followed by re-flooding of the pits with natural runoff and water transfer from Third Portage Lake. Note that the cover requirement will be reviewed based on monitoring results and the feasibility of building the cover will be evaluated and updated in the closure plan.
2021	December 2026	The tailings deposition and water transfer schedule were extended until December 2026. In-pit deposition occurred in Goose Pit from July 2019 until August 2020. In-pit deposition continued in Portage Pit starting in August 2020 and is projected to end in December 2026. The additional tailings come from the continuation of the milling of ore produced from the Whale Tail Pit, IVR Pit and underground mine operation at the Whale Tail site. In 2021, tailings were deposited in the North Cell TSF in July and August. The actual volumes and quantity of water transferred and of tailings deposited in 2021 were integrated into the model. In 2021, Reclaim Water was transferred from South Cell (SC) TSF Reclaim Pond to Portage North Pit (A). Reclaim Water from CDDP was transferred back to SC Reclaim Pond or to Portage North Pit (Pit A). Reclaim Water was pumped from Portage South Pit (Pit E) to the mill and to Portage North Pit (Pit A). In the Vault area, natural pit flooding was allowed to continue.

WB YEAR	FORECASTED END OF DEPOSITION	MAIN DIFFERENCES
		Following in-pit deposition, the ICRP includes the treatment of the Reclaim Water in Portage and Goose Pits. The treated effluent shall be discharged to Third Portage Lake. Once treatment is completed, if necessary, cover construction over the tailings in the pits will begin, followed by re-flooding of the pits with natural runoff and water transfer from Third Portage Lake. Note that the cover requirement will be reviewed based on monitoring results and the feasibility of building the cover will be evaluated and updated in the closure plan.
2022	December 2026	The tailings deposition and water transfer schedule are still forecasted to continue until December 2026. The actual volumes and quantity of water transferred and of tailings deposited in 2022 were integrated into the model. In 2022, Reclaim Water was transferred from South Cell (SC) TSF Reclaim Pond to Portage North Pit (A). Reclaim Water from CDDP was transferred back to SC Reclaim Pond or to Portage North Pit (Pit A). Reclaim Water was pumped mainly from Portage South Pit (Pit E) to the mill. Water was also transferred from Portage South Pit (Pit E) to Portage North Pit (Pit A). In the Vault area, natural pit flooding was allowed to continue. There are no changes to the current closure plan. At closure, if necessary, Reclaim Water in Portage and Goose Pits shall be treated and discharged to Third Portage Lake. Once treatment is completed, if necessary, cover construction over the tailings in the pits will begin, followed by re-flooding of the pits with natural runoff and water transfer from Third Portage Lake. Note that the cover requirement will be reviewed based on monitoring results and the feasibility of building the cover will be evaluated and updated in the closure plan.
2023	June 2026	The tailings deposition and water transfer schedule are forecasted to continue until June 2026. The actual volumes and quantity of water transferred and of tailings deposited in 2023 were integrated into the model. Since 2022, Reclaim Water was transferred from South Cell (SC) TSF Reclaim Pond to Portage North Pit (A). Reclaim Water from CDDP was transferred back to SC Reclaim Pond or to Portage North Pit (Pit A). Reclaim Water was pumped mainly from Portage South Pit (Pit E) and Portage North Pit (Pit A) to the mill. Water was also transferred from Portage North Pit (Pit A) to Goose Pit in 2023. In the Vault area, natural pit flooding was allowed to continue. There are no changes to the current closure plan. At closure, if necessary, Reclaim Water in Portage and Goose Pits shall be treated and discharged to Third Portage Lake. Once treatment is completed, if necessary, cover construction over the tailings in the pits will begin, followed by re-flooding of the pits with natural runoff and water transfer from Third Portage Lake. Note that the cover requirement will be reviewed based on monitoring results and the feasibility of building the cover will be evaluated and updated in the closure plan.

2.3 Parameters of Concern

A review of the chemical analysis for water samples collected in the North Cell (Station ST-21-N now transferred to the South Cell) and South Cell TSF Reclaim Ponds (Station ST-21-S) and in Portage and Goose Pits (ST-17/19 and ST-20) was undertaken by AtkinsRéalis to identify contaminants that could be above the discharge criteria as stipulated in the Metal and Diamond Mining Effluent Regulations (MDMER), the Canadian Council of Ministers of the Environment (CCME) guidelines and the Water Licence, Part F.

In the current LOM, Reclaim Water collected from the North Cell and South Cell TSF and the CDDP is currently transferred to Portage Pit until the end of in-pit deposition. The Reclaim Water is then pumped back to the mill for re-use. There is no discharge of Reclaim Water to the environment during operations. At closure, the Reclaim Water stored in Portage and Goose Pits shall be treated and discharged to the environment. The pits will then be reflooded with natural runoff and water transfer from Third Portage Lake.

For the purpose of this analysis, the following parameters of concern, which are listed in the Water Licence, shall be reviewed, specifically:

- Total Cyanide
- Total Aluminum
- Total Arsenic
- Total Cadmium
- Total Nickel
- Total Zinc
- Total dissolved solids
- Total Aluminum
- Total Mercury
- Chloride
- Total Ammonia
- Nitrate

Furthermore, the water quality review from past studies also identified the following parameters in the Reclaim Water that should be monitored since they could represent a potential long-term contamination risk:

- Total Iron
- Total Selenium
- Fluoride
- Sulphate

It is understood that the MDMER and the Water Licence criteria apply to mining effluents discharged to the environment and are as such not applicable to the North Cell, South Cell TSF Reclaim Ponds and Portage and Goose Pits since no effluent is discharged from these areas to the environment during operations. However, the MDMER, the Water Licence criteria, as well as the CCME guidelines are used as a guide to identify potential parameters of concern at the start of closure activities.

It should be noted that the parameters of concern were only determined based on the chemical analyses provided by Agnico. **Table 2-2** presents the MDMER, the Water Licence 2AM-MEA1530 at ST-9 (Nunavut Water Board Licence, 2020) discharge criteria and the CCME discharge guidelines for the parameters of concern. For the water

quality forecast report, the British Columbia guidelines for sulphate for the protection of aquatic life were used as a benchmark for reference only. However, final site-specific closure limits will be developed through review of the closure plan by regulatory agencies.

Table 2-2: Discharge Criteria and CCME Guidelines for the Parameters Evaluated

PARAMETER	DISCHARGE CRITERIA & WATER QUALITY GUIDELINES		
	MDMER[1]	Water Licence[2] (Part F)	CCME[3] (Issue Date)
Cyanide (CN)	0.5 mg/L (as total CN)	0.5 mg/L (as total CN)	0.005 mg/L (as free CN) (1987)
Aluminum (Al)	*no criteria*	1.5 mg/L	0.16 mg/L[8] (2021)
Arsenic (As)	0.3 mg/L	0.3 mg/L	0.005 mg/L (1997)
Cadmium (Cd)	*no criteria*	0.002 mg/L	0.00004 mg/L[9] (2014)
Copper (Cu)	0.3 mg/L	0.1 mg/L	0.002 mg/L[4] (1987)
Iron (Fe)	*no criteria*	no criteria	0.3 mg/L (1987)
Lead (Pb)	0.1 mg/L	0.1 mg/L	0.001 mg/L[9] (1987)
Mercury (Hg)	*no criteria*	0.0004 mg/L	0.000026 mg/L (2003)
Nickel (Ni)	0.5 mg/L	0.2 mg/L	0.025 mg/L[9] (1987)
Selenium (Se)	*no criteria*	no criteria	0.001 mg/L (1987)
Zinc (Zn)	0.5 mg/L	0.4 mg/L	0.013 mg/L[9] (2018)
Total Ammonia (NH_3)	*no criteria*	16 mg N/L	1.83 mg N/L[5] (2001)
Un-ionized ammonia	0.5 mg N/L	n/a	0.019 mg N/L (2001)
Nitrate (NO_3)	*no criteria*	20 mg N/L	2.94 mg N/L[7] (2012)
Total Dissolved Solids	*no criteria*	1,400 mg/L	*no criteria*
Chloride (Cl)	*no criteria*	1,000 mg/L	120 mg/L[6] (2011)
Sulphate (SO4)	*no criteria*	no criteria	128 mg/L[10] (2013)
Fluoride (F)	*no criteria*	no criteria	0.12 mg/L (2002)

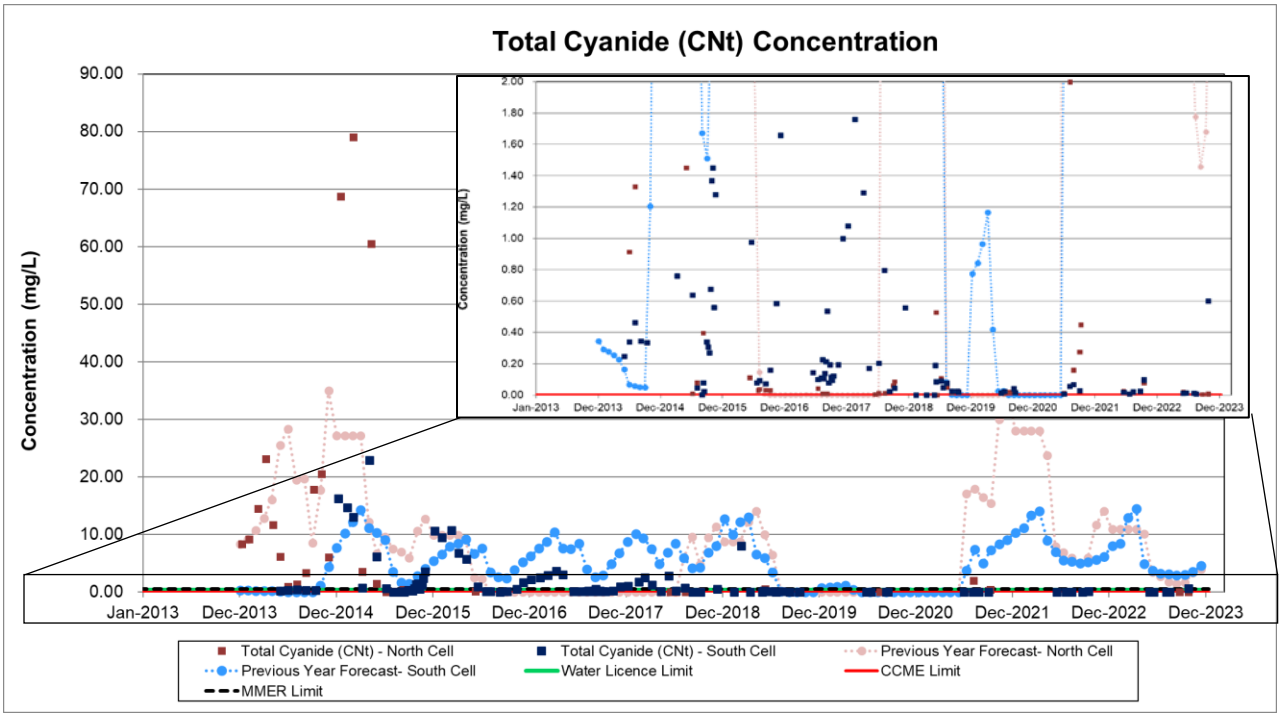
Notes:

1. *Current MDMER criteria (as of December 2021) corresponding to the maximum average monthly concentration (schedule 4, table 2).*
2. *Water Licence (Part F) criteria for Third Portage Lake (ST-9) corresponding to the maximum average concentration (2020).*
3. *CCME criteria as per the Water Quality Guidelines for the Protection of Aquatic Life for freshwater and long-term exposure. Criteria referenced from www.ccme.ca in 2021.*
4. *The copper discharge criterion depends on hardness. A Third Portage Lake hardness level is approx. 12 mg/L as $CaCO_3$. For hardness between 0 to 82 mg/L $CaCO_3$, the copper limit is set at 2 µg/L.*
5. *The ammonia concentration limit depends on temperature and pH (an increase in temperatures and pH leads to a more stringent ammonia concentration limit). In this case, 2.22 mg/L of NH_3, or 1.83 mg N/L, was determined based on an average pH of 7.5 in Third Portage Lake and a maximum measured temperature of approx. 15°C.*
6. *This is the long-term chloride concentration limit. The short-term concentration limit is 640 mg/L.*
7. *This is the long-term nitrate concentration limit (13 mg/L as NO_3). The short-term concentration limit is 550 mg/L.*
8. *Aluminum criterion in fresh water is calculated using the equation described in Appendix B of the Federal Environmental Quality Guidelines (FWQG). The FWQG equation is valid between hardness 10 and 430 mg/L, pH 6 and 8.7, and dissolved organic carbon (DOC) 0.08 and 12.3 mg/L. The Al criterion is calculated based on the Third Portage Lake water quality (hardness of 12 mg/L $CaCO_3$, pH 7.09 and DOC 1.47 mg/).*
9. *Cadmium, lead, nickel, and zinc discharge criteria depend on hardness. Third Portage Lake hardness level is approx. 12 mg/L as $CaCO_3$. For hardness between 0 to 17 mg/L $CaCO_3$, the limit is set at 0.04 µg/L for cadmium. For hardness between 0 to 60 mg/L $CaCO_3$, the limit is set at 0.001 mg/L for lead and 0.025 mg/L for nickel. For hardness of 12 mg/L as $CaCO_3$, the limit for zinc is 0.013 mg/L.*
10. *Threshold value for sulphate based on BC Environment guidelines for the protection of aquatic life for very soft water (0-30 mg/L) (April 2013).*

2.4 North and South Cell TSF Reclaim Ponds

At the start of operations, tailings were deposited in the North and South Cell TSF. Reclaim Water was collected in the North and South Cell TSF Reclaim Ponds and transferred back to the mill for re-use. Since 2019, tailings are no longer deposited constantly in these cells and the contact water collected in these areas is transferred to Portage Pit. In 2021, tailings were deposited in the North Cell TSF in July and August. In 2023, no tailings were deposited in the North Cell TSF, while 293,227 tons of tailings were deposited in the South Cell TSF.

Figure 2-1 to **Figure 2-3** present the concentration of the parameters of concern measured in the North and South Cell TSF Reclaim Ponds from January 2013 to December 2023. Also shown in these figures are the forecasted concentrations from the Water Quality Forecasting Update based on the planned water transfers described in the 2022 Water Management Plan (SNC-Lavalin, 2023). For the metal parameters, total concentration values are shown in the figures in this year's report since the discharge criteria and CCME water quality guidelines are based on total concentration measurements.


Total Cyanide (CNt) Concentration
Concentration (mg/L)
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
Jan-2013
Dec-2013
Dec-2014
Dec-2015
Dec-2016
Dec-2017
Dec-2018
Dec-2019
Dec-2020
Dec-2021
Dec-2022
Dec-2023
Total Cyanide (CNt) - North Cell
Total Cyanide (CNt) - South Cell
Previous Year Forecast- North Cell
Previous Year Forecast- South Cell
Water Licence Limit
CCME Limit
MMER Limit

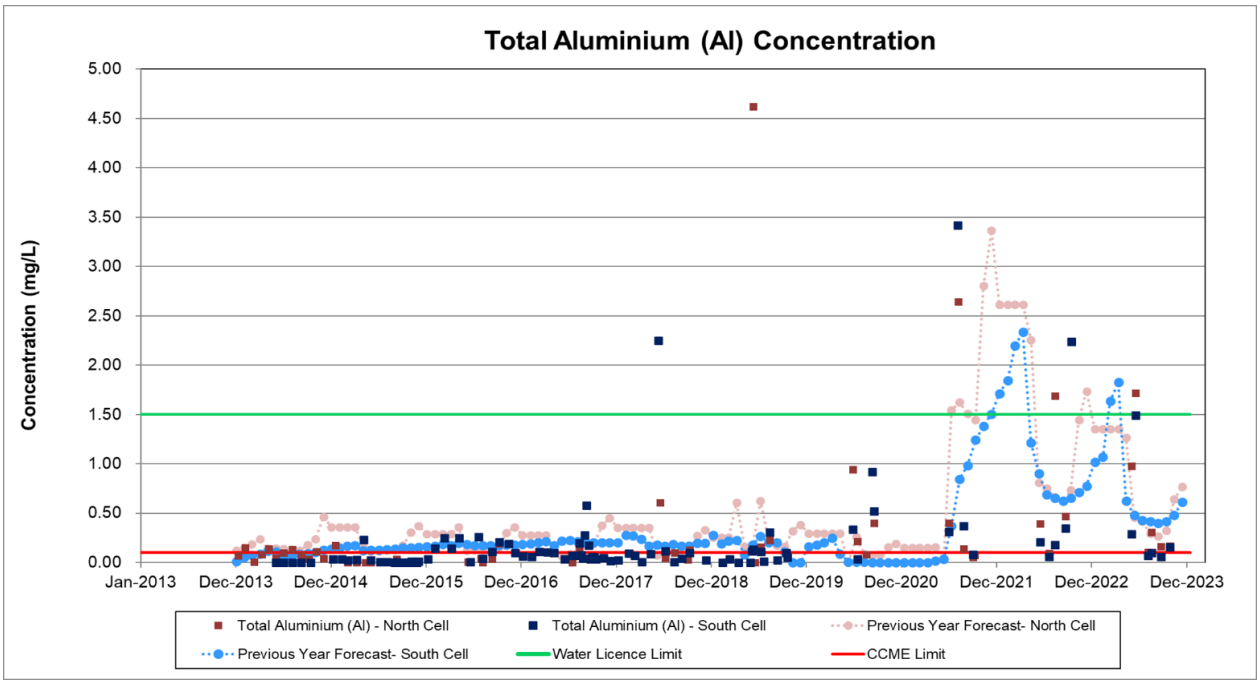
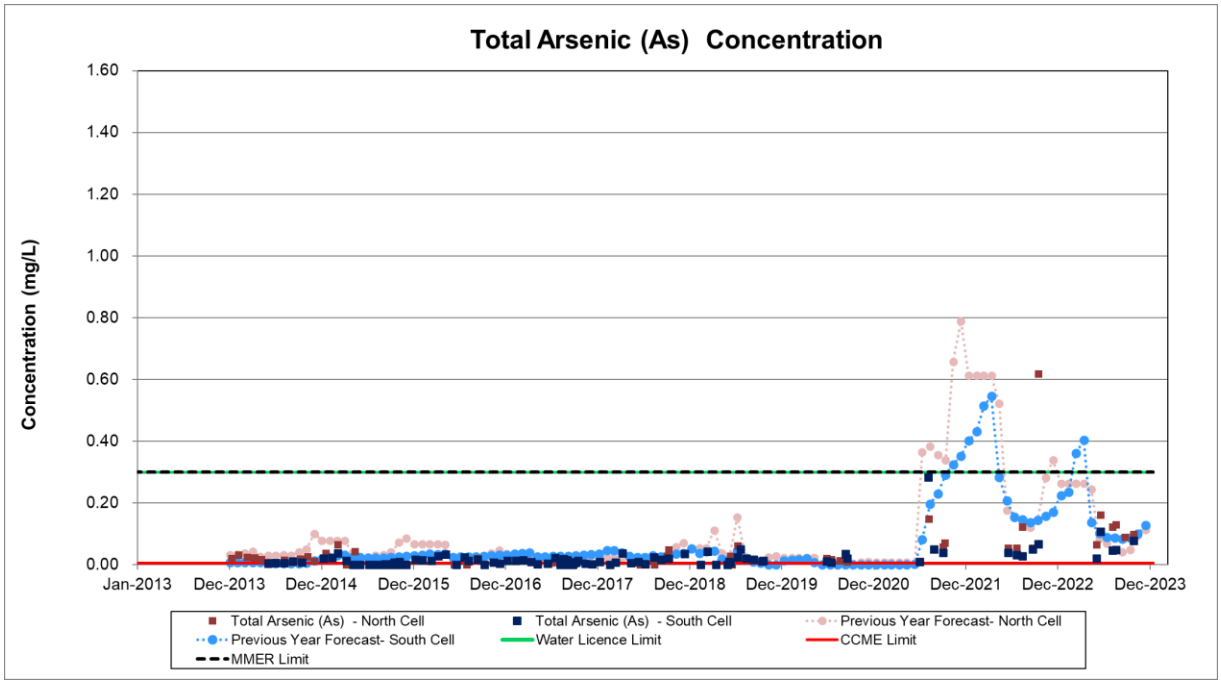

Total Aluminium (Al) Concentration
Concentration (mg/L)
5.00
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
Jan-2013
Dec-2013
Dec-2014
Dec-2015
Dec-2016
Dec-2017
Dec-2018
Dec-2019
Dec-2020
Dec-2021
Dec-2022
Dec-2023
Total Aluminium (Al) - North Cell
Total Aluminium (Al) - South Cell
Previous Year Forecast- North Cell
Previous Year Forecast- South Cell
Water Licence Limit
CCME Limit

Figure 2-1: Concentrations North and South Cell TSF Reclaim Ponds – Total Cyanide & Metals



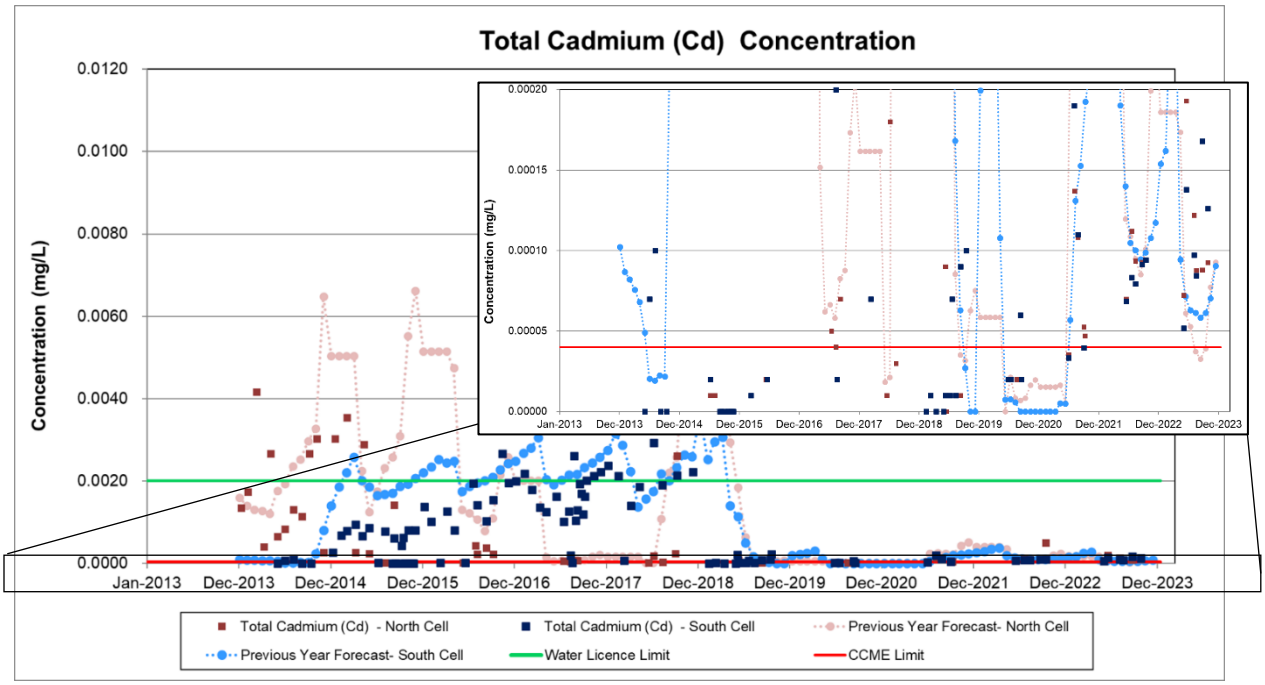
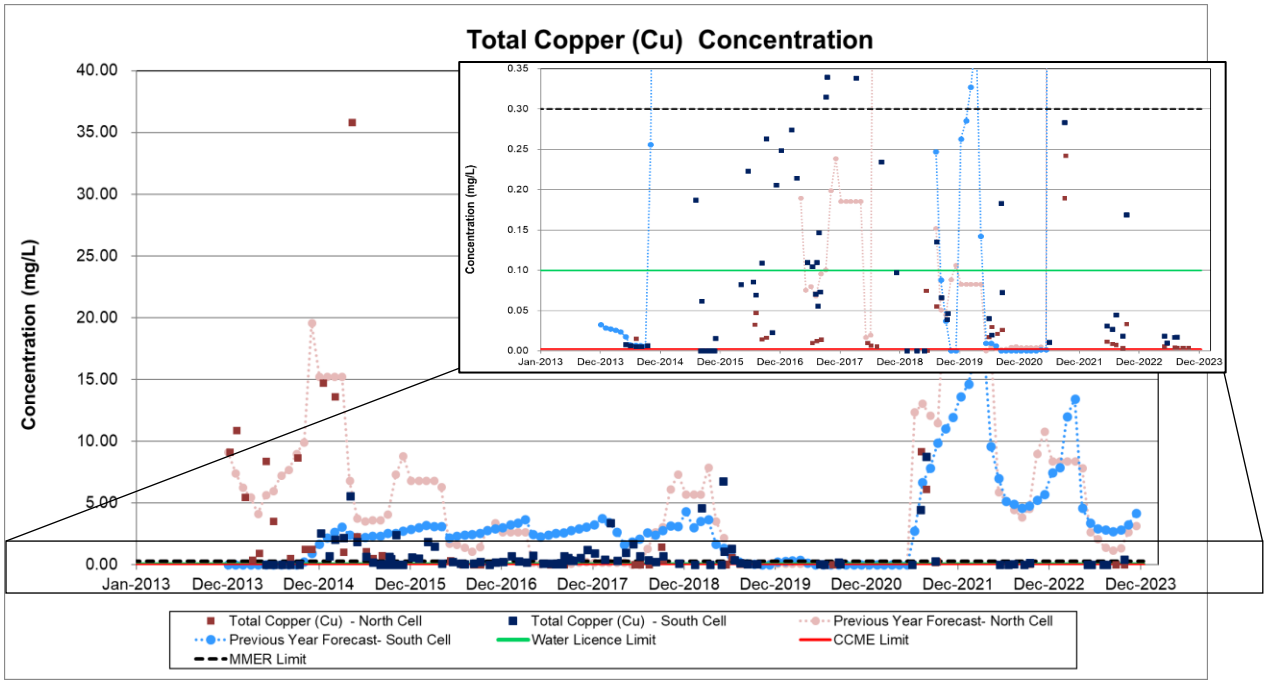


Figure 2-1: (continued) Concentrations North and South Cell TSF Reclaim Ponds – Total Cyanide & Metals



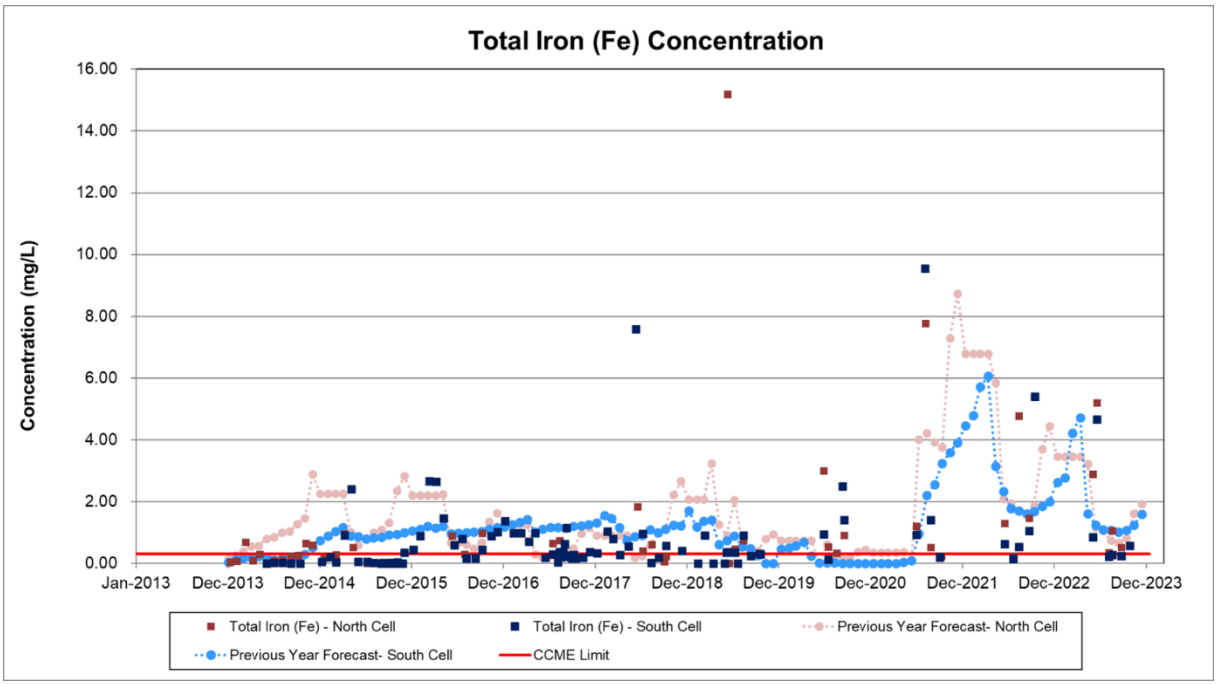
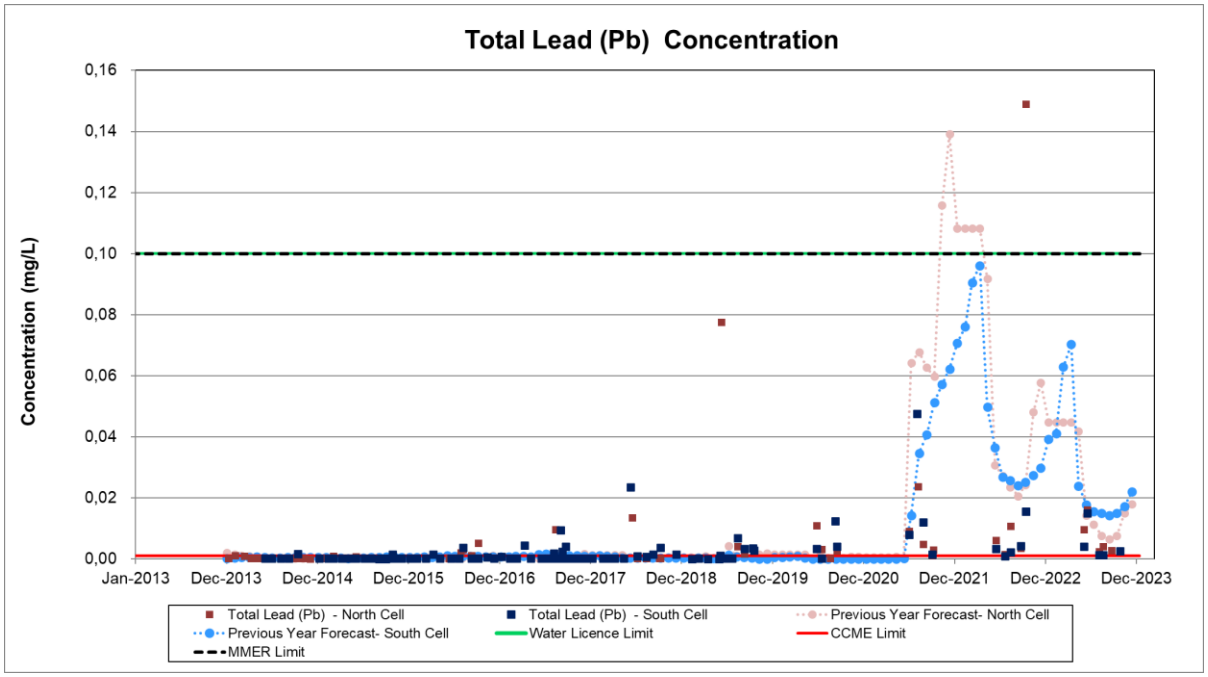


Figure 2-1: (continued) Concentrations North and South Cell TSF Reclaim Ponds – Total Cyanide & Metals



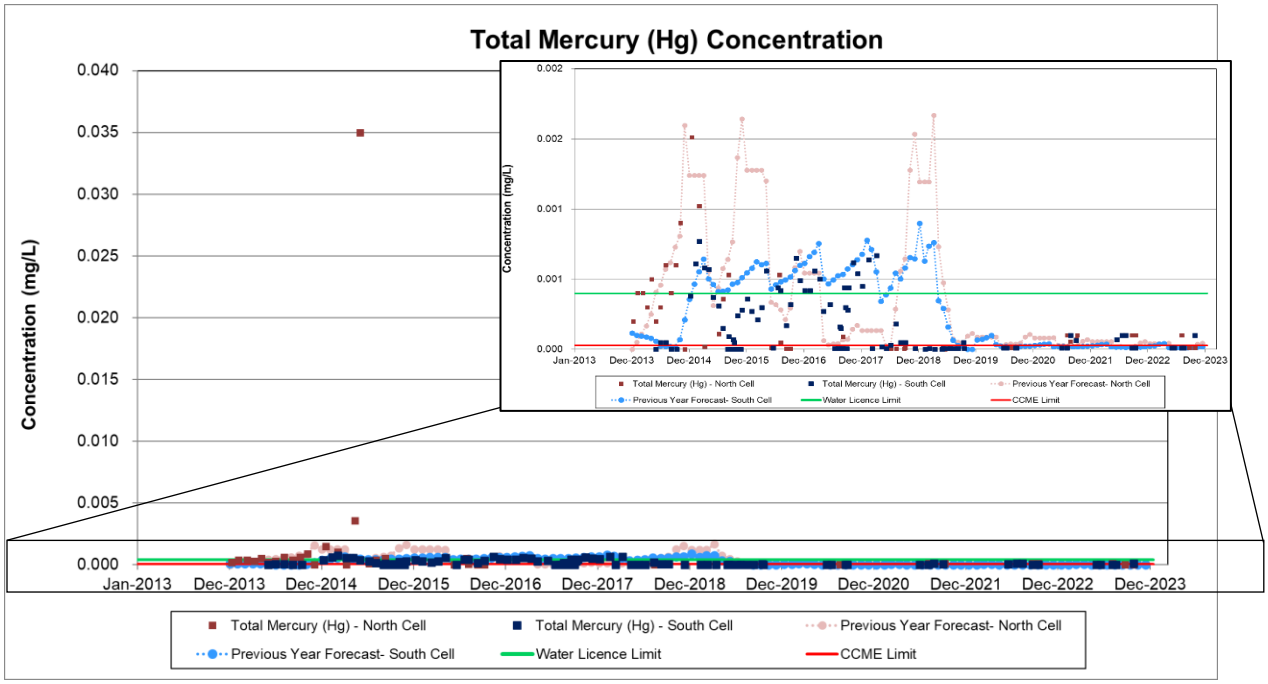
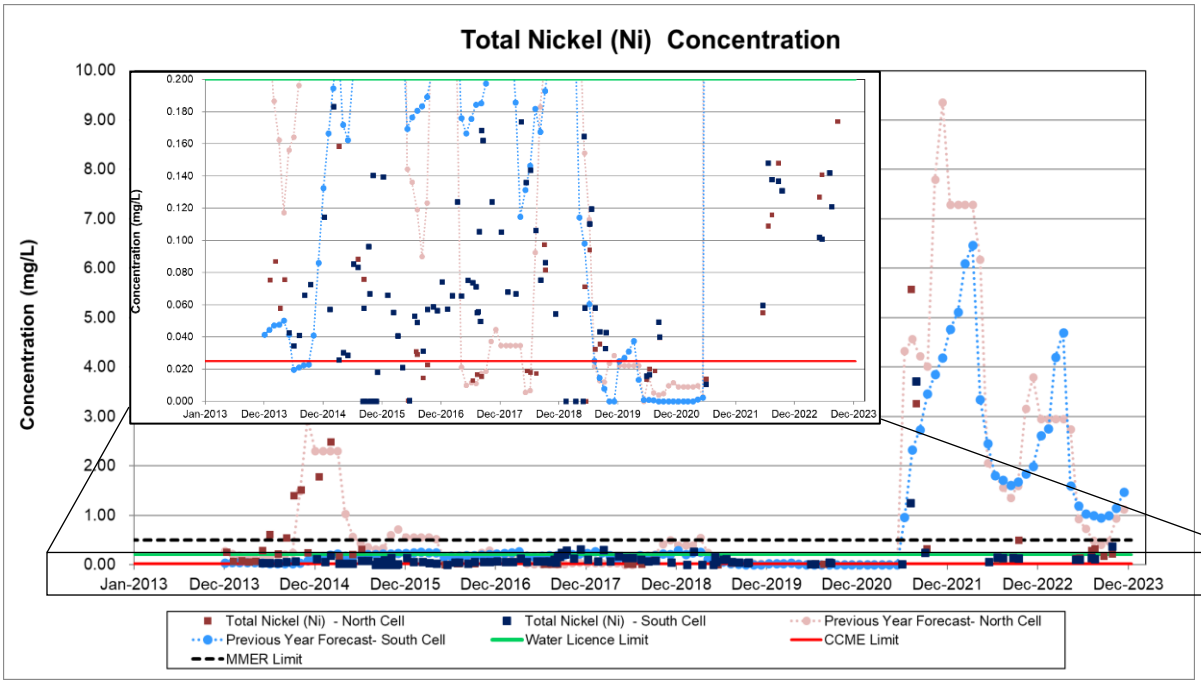


Figure 2-1: (continued) Concentrations North and South Cell TSF Reclaim Ponds – Total Cyanide & Metals



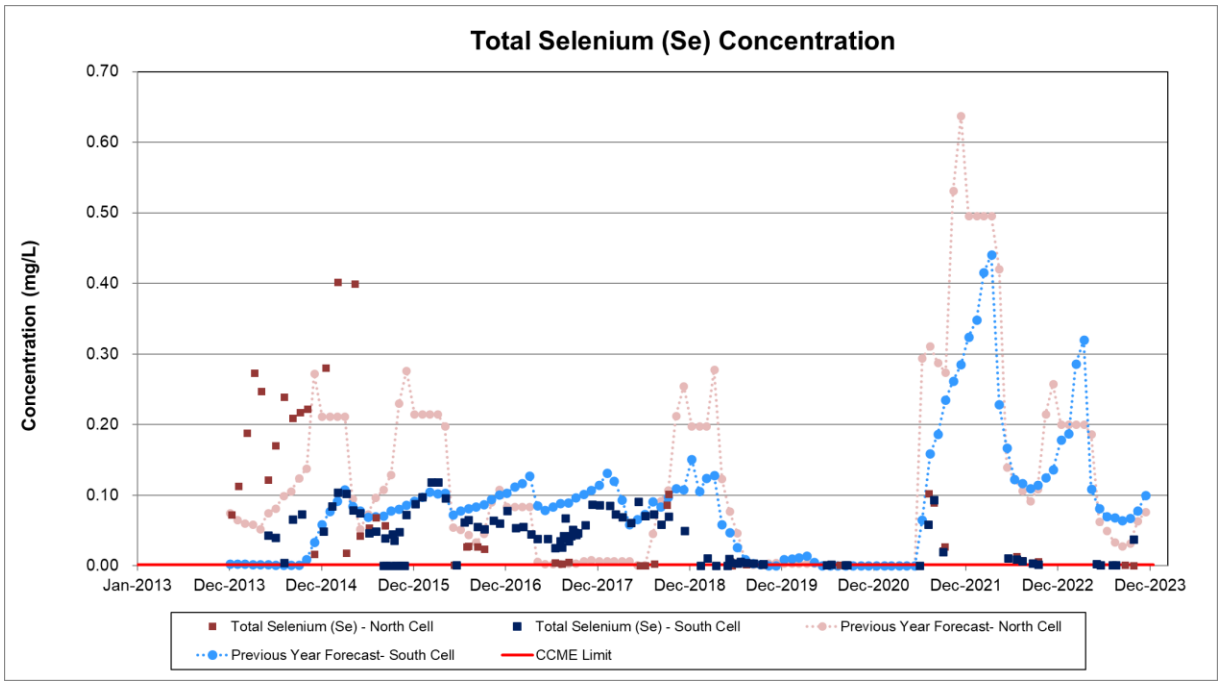


Figure 2-1: (continued) Concentrations North and South Cell TSF Reclaim Ponds – Total Cyanide & Metals

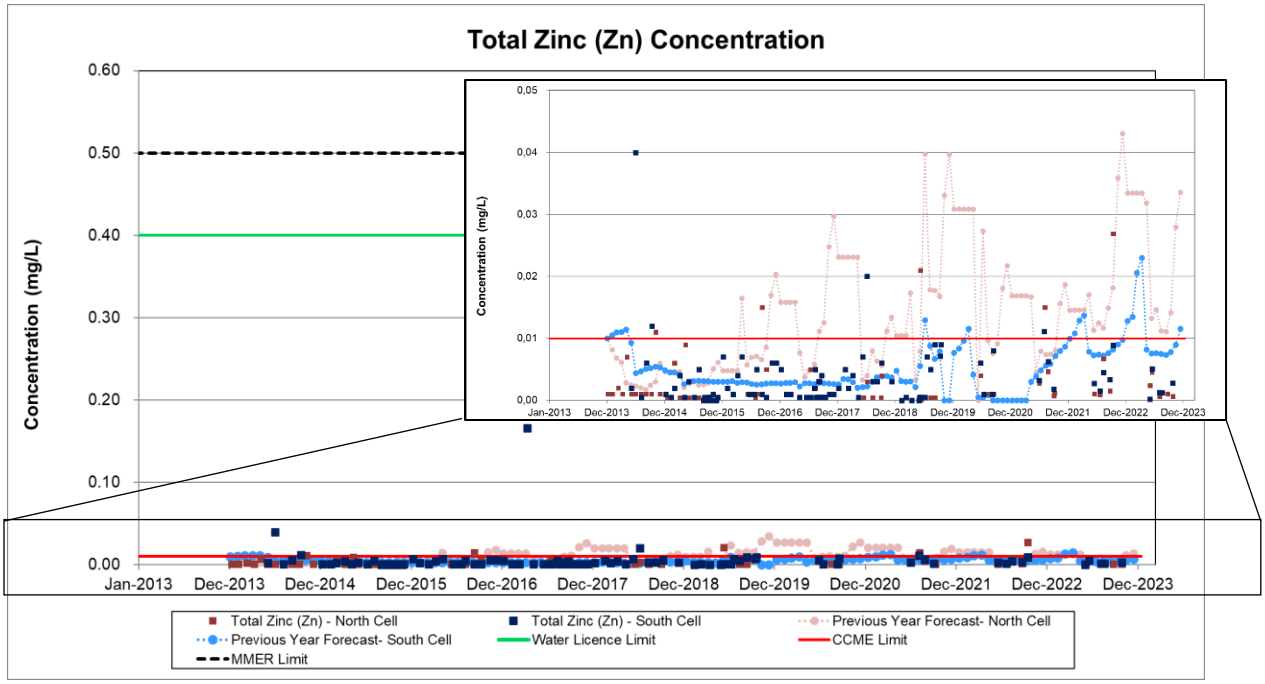


Figure 2-1: (continued) Concentrations North and South Cell TSF Reclaim Ponds – Total Cyanide & Metals

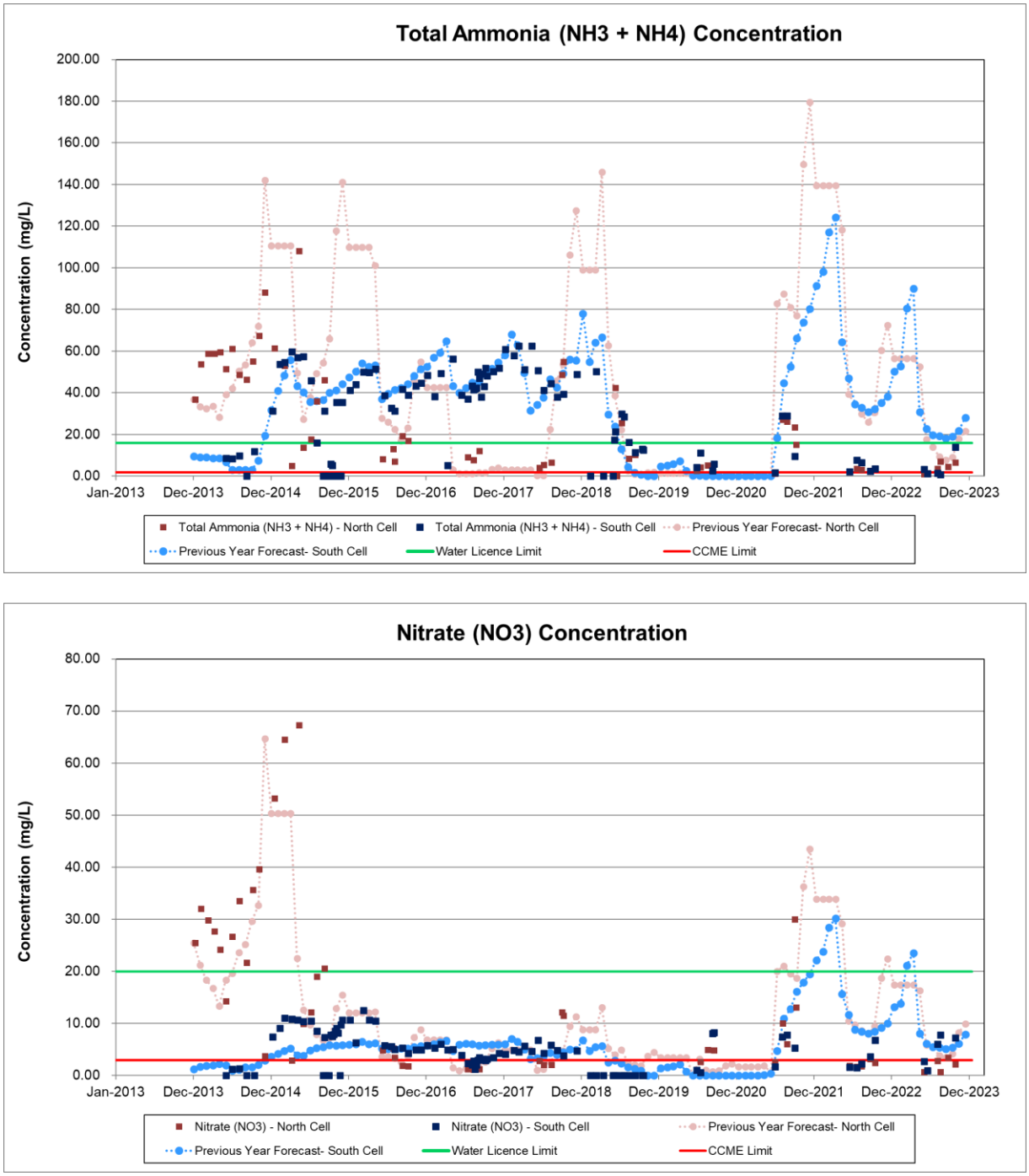


Figure 2-2: Concentrations North and South Cell TSF Reclaim Ponds – Ammonia & Nitrate

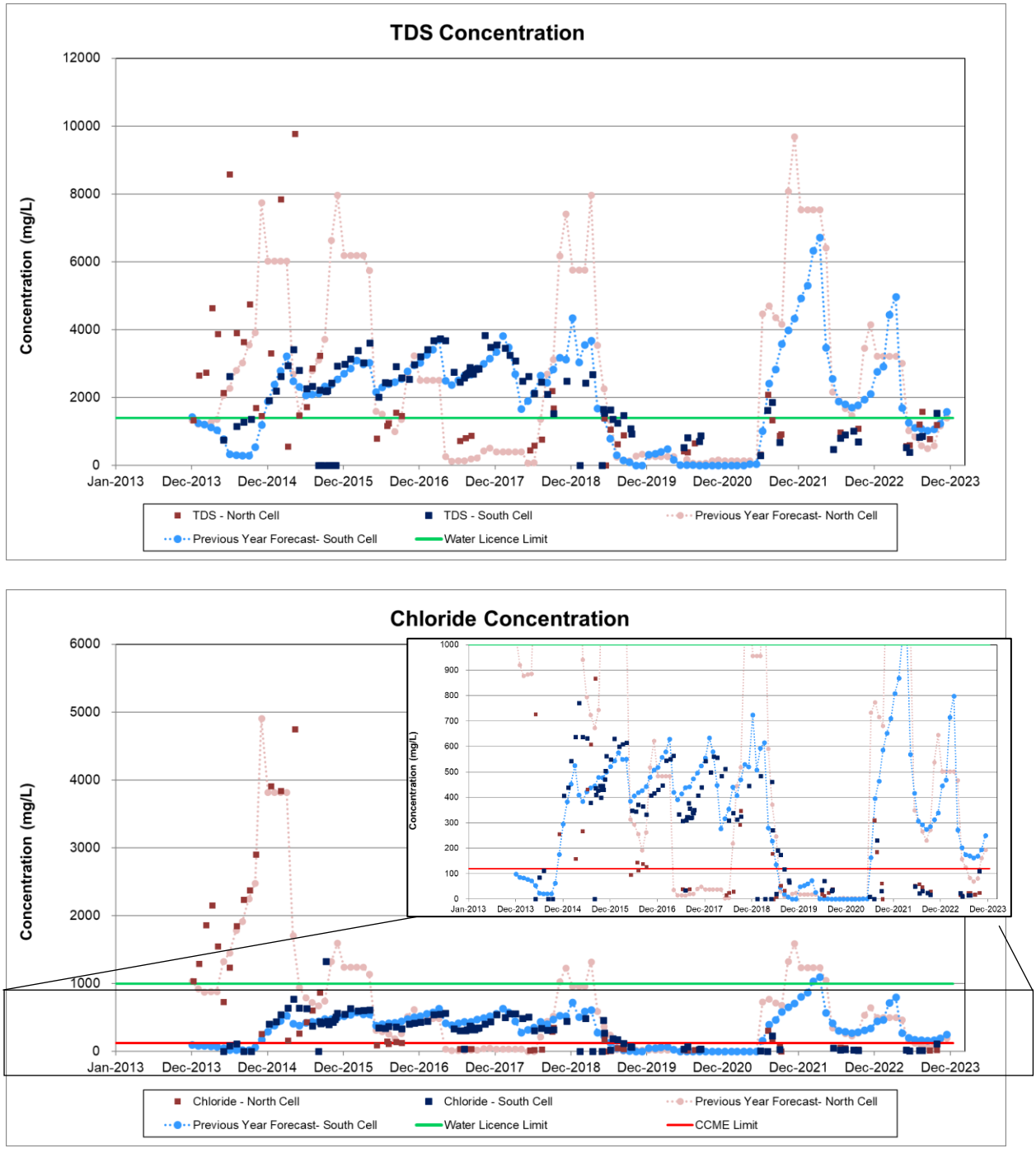


Figure 2-3: Concentrations North and South Cell TSF Reclaim Ponds – TDS & Anions

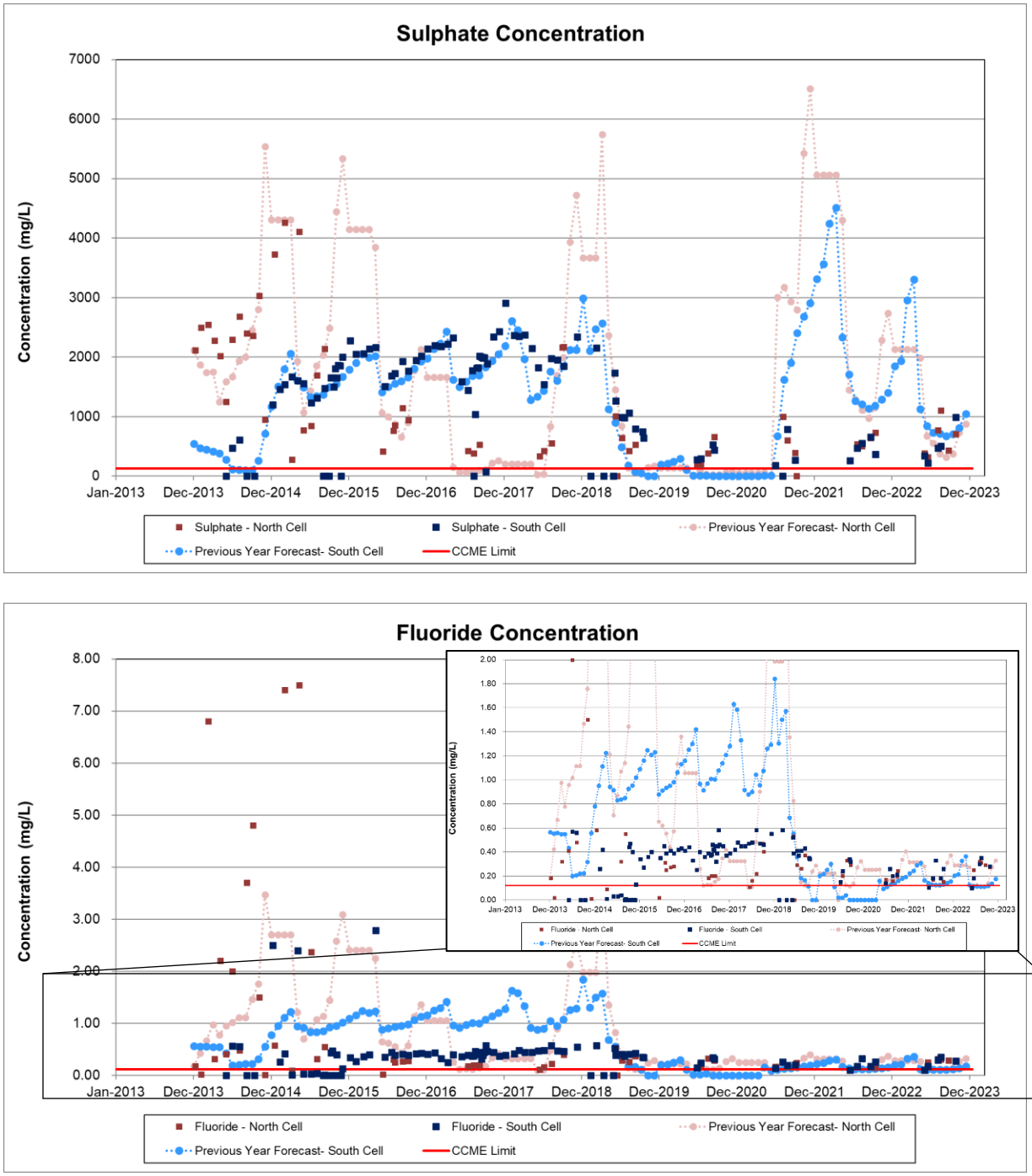


Figure 2-3: (continued) Concentrations North and South Cell TSF Reclaim Ponds – TDS & Anions

Table 2-3 summarizes the observations that can be made based on the measured values and forecasted concentrations as shown in **Figure 2-3**. For some parameters, the graphs observations have been divided into North Cell TSF Reclaim Pond (NC) and South Cell TSF Reclaim Pond (SC). The forecasted values are based on the previous model (SNC-Lavalin, 2023).

Table 2-3: Observations from Measured and Forecasted Concentrations in NC and SC TSF Reclaim Ponds

PARAMETER	MEASURED VALUES OBSERVATIONS	FORECASTED VALUES OBSERVATIONS
Total Cyanide (CN)	**NC & SC:** Since the end of deposition of tailings in NC and SC in 2019, the CN concentrations are very low. For comparison purposes only, concentrations were below MDMER and Water Licence criterion for all the analyzed samples. The concentrations are generally above the CCME limit. However, tailings were deposited in 2021 in NC, and the CN concentration did increase slightly in NC and SC compared to 2020. No deposition occurred in 2022 and CN concentration decreased. In 2023, limited deposition of tailings occurred in SC, but CN concentration remains low.	**NC& SC:** In 2019, as there was no tailings deposition in both North Cell (after April) and South Cell (after August) between 2019 and 2020, cyanide volatizes in the summer and its concentration slowly reduces in the cell with time. This was confirmed with the monitored data. In 2021, tailings were deposited in the NC, which was not included in the previous year's forecast. In 2022, it was forecasted that the concentration would decrease in both cells, with a slight increase at the end of the year in the NC. The forecasted values were above the measured values indicating that the forecast model is conservative. In 2023, forecasted concentrations decreased in both cells, with a slight increase at the end of the year in both cells. The forecasted values were above the measured values indicating that the forecast model is conservative.
Total Metals (general)	See specific parameters for details.	The current forecasting model was based on a mass balance using the water balance around the site and does not consider possible geochemical reactions that could help precipitate the metals out of the water column phase at equilibrium. For this reason, some of the forecasted values can be higher than the measured values. Furthermore, for both NC and SC: Deposition of tailings in 2021 in the NC was accounted for in the forecast. Forecasted concentration indicated an increase in concentration in 2021 in both cells followed by a decrease in 2022 and 2023. The measured values generally followed this trend. See specific parameters for additional details.

PARAMETER	MEASURED VALUES OBSERVATIONS	FORECASTED VALUES OBSERVATIONS
Total Aluminum	**NC & SC:** Measured concentrations decreased in 2022 compared to previous years since no tailings deposition occurred at this location. However, there were some peak concentrations that were higher than the Water Licence discharge criterion. Measured concentrations continued to decrease in 2023. However, some values slightly increased towards the end of the year. Almost all concentrations are below the Water Licence discharge criterion.	**NC & SC:** Prior to the deposition of tailings in NC, the measured values were higher than the forecasted values. This indicates that natural runoff into the NC and SC were carrying suspended solids that contain metal particulates. The forecasted model integrated the tailings deposition in the NC in 2021. Forecasted concentration indicated an increase in concentration in 2021 in both cells followed by a decrease in 2022 and 2023. The measured values generally followed this trend.
Total Arsenic	**NC & SC:** Measured concentrations were in the same range/trend as last year. In general for 2023, concentrations decreased compared to 2022 and were above CCME limits and lower than the Water Licence discharge criterion.	See notes on Total Metals.
Total Cadmium	**NC & SC:** Measured concentrations were relatively low. For comparison purposes only, all the collected samples showed concentrations below the Water Licence criterion and slightly above the CCME limit.	**NC & SC:** Forecasted concentration was expected to be close to the CCME limit.
Total Copper	**NC & SC:** Measured concentrations decreased in 2022 compared to previous years. This was expected since no tailings were deposited in the NC. In 2023, measured concentrations continued to decrease. Concentrations were near the CCME limit, but remained below the Water Licence discharge criterion.	See notes on Total Metals.
Total Iron	**NC & SC:** Measured concentrations decreased in 2022 and 2023 between January and June compared to previous years. In July and August concentrations started to increase slightly, coinciding with runoff season. In 2023, 50% of concentrations exceeded the CCME limit, while the remaining concentrations were below or near the CCME limit.	Forecasted concentration was expected to be approaching the CCME limit. In the summer period, certain measured values were higher.

PARAMETER	MEASURED VALUES OBSERVATIONS	FORECASTED VALUES OBSERVATIONS
Total Lead	**NC & SC:** Measured concentrations increased in 2022 during the summer months. This increase could be due to runoff scouring the surface of the tailings. Nevertheless, measured concentrations decreased in 2023. However, concentrations were lower than the Water Licence discharge criterion, but above the CCME limit.	**NC & SC:** Forecasted concentrations were expected to be close to the CCME limit. The deposition of tailings in the NC in 2021 led to an increase in concentrations that are above the CCME limit but below the Water Licence discharge criterion. This trend continued in 2022. However, in 2023, forecasted concentrations were expected to decrease and to be close to the CCME limit, but below the Water Licence discharge criterion.
Total Mercury	**NC & SC:** Measured concentrations in 2022 are similar compared to previous years. This was due to the deposition of tailings in NC in July and August of 2021. Measured concentrations in 2023 are similar to values measured in the previous year. However, all concentrations were lower than the Water Licence discharge criterion, but almost all of them were below or close to the CCME limit.	**NC & SC:** Forecasted concentrations were expected to be close to the CCME limit. Despite the deposition of tailings in both cells, the forecasted concentrations in 2023 remained close to the CCME limit.
Total Nickel	**NC & SC:** Measured concentrations decreased in 2022 compared to 2021 since no deposition was going in the NC. Compared to 2022, measured concentrations increased slightly in 2023. In 2022, all concentrations were between the CCME limit and Water Licence discharge criterion. In 2023, almost all concentrations were between the CCME limit and Water Licence discharge criterion, but lower than the MDMER limit.	See notes on Total Metals.
Total Selenium	**NC & SC:** Measured concentrations decreased in 2022 compared to 2021. A possible geochemical reaction may contribute to a decrease in the concentration of selenium. As in 2022, measured concentrations continued to decrease more in 2023. Almost all concentrations were below the CCME limit.	See notes on Total Metals.

PARAMETER	MEASURED VALUES OBSERVATIONS	FORECASTED VALUES OBSERVATIONS
Total Zinc	**NC & SC:** Concentration values in 2023 were similar when compared to previous years. All concentrations remain below the Water Licence criterion and the CCME limit.	**NC & SC:** Forecasted concentration was expected to be close to the CCME limit. In 2021, despite the deposition of tailings in the NC, the forecasted concentrations remained below the CCME limit for SC and above the same limit for NC after August. Compared to 2022, in 2023, almost all forecasted concentrations were expected to be below the CCME limit for both cells.
Total Ammonia	**NC & SC:** Measured concentrations decreased in 2022 compared to 2021. However, they continued to decrease until the midpoint of 2023, then increased until the end of the year. This was due to the deposition of tailings in August and September 2023 in SC. Concentrations were lower than the Water Licence criterion but, slightly above CCME limit.	**NC & SC:** Forecasted concentrations in 2023 were expected to decrease initially and then increase slightly. Generally, the forecasted concentrations of NC are still below the Water Licence criterion and close to the CCME limit. However, the forecasted concentrations of SC were above the Water Licence criterion and close to the CCME limit. Measured values were below this forecast.
Nitrate	**NC & SC:** As in 2022, measured concentrations increased in 2023. This was due to the deposition of tailings in August and September 2023 in SC. Concentrations were lower than the Water Licence criterion for both cells, and close to the CCME limit for NC.	**NC & SC:** Compared to 2022, forecasted concentrations in 2023 were expected to increase slightly but remained below the Water Licence criterion and close to the CCME limit.
TDS	**NC & SC:** Measured concentrations increased slightly in 2023 compared to 2022. Most of the concentrations were below the Water Licence criterion.	**NC & SC:** Forecasted concentrations in 2023 were expected to decrease until the midpoint of the year, followed by a slight increase until the end of the year. Most of the measured values for SC were below the forecasted values. However, most of the measured values for NC were slightly above the forecasted values.
Chloride	The primary source of chloride found in the TSF Reclaim Ponds was most likely from the use of calcium chloride in the winter months as an anti-freeze solution on the ore and a dust suppressant in the Mill dome. **NC & SC:** Despite the deposition of tailings in the NC in 2021, the concentrations decreased slightly in 2022 compared to 2021 and remained below the water license criteria and the CCME limit. In 2023, concentrations remained generally stable for NC. Towards the end of the year, there was a slight increase observed for SC. Measured values were below the Water License criterion and the CCME limit.	**NC & SC:** Generally, forecasted concentrations in 2023 were expected to decrease more than in 2022 and were expected to range between the CCME limit and the Water Licence criterion. Measured values were below the forecasted values.

PARAMETER	MEASURED VALUES OBSERVATIONS	FORECASTED VALUES OBSERVATIONS
Sulphate	**NC & SC:** As in 2022, measured concentrations slightly increased in 2023. This was due to the deposition of tailings in July and August in 2023. Concentrations were generally higher than the adopted limit for this criterion.	**NC & SC:** As in 2022, forecasted concentrations in 2023 were expected to decrease more and to be slightly above the BC Environmental limit for this parameter. Measured values were below the forecasted values.
Fluoride	**NC & SC:** Fluoride concentrations were more or less constant and low during the year, despite the deposition of tailings in the NC in 2021. For comparison purposes only, the concentrations were generally slightly above the CCME limit.	**NC & SC:** Forecasted concentrations in 2023 were expected to increase until the midpoint of the year, followed by a slight decrease until the end of the year while remaining close to the CCME limit. The forecasted values trended approximately with the measured data.

2.5 Portage and Goose Pits

In 2020, in-pit tailings deposition continued in Goose Pit from January to August 2020 and was then transferred to South Portage Pit (Pit E).

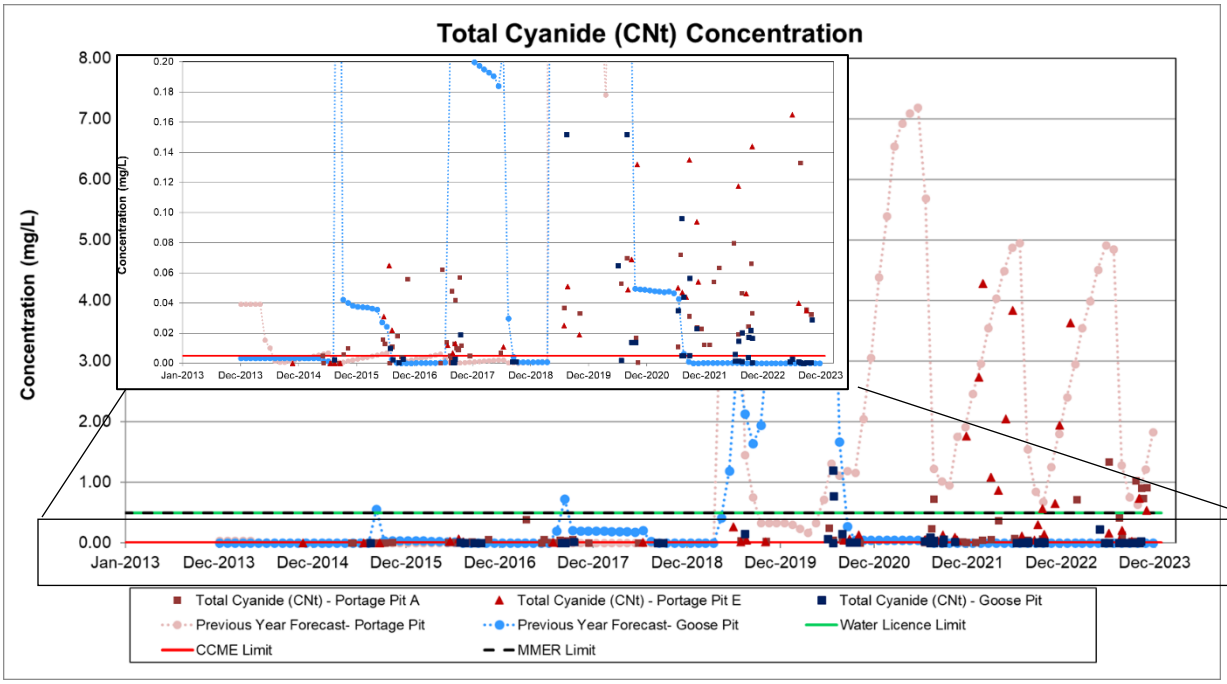
In Goose Pit, Reclaim Water and natural runoff from its sub-catchment area were allowed to accumulate in the pit. Water was then transferred to Portage North (Pit A) between May to September 2020 and in May and June 2021. There was no water transfer in 2022. In 2023, about 439,935 m^3 of reclaim water from Portage North (Pit A) was transferred to Goose Pit.

In Portage Pit E, Reclaim Water (as of August 2020) and natural runoff from its sub-catchment area also accumulated in the pit. No water transfer occurred in 2020. Water was transferred to Portage North Pit (Pit A) from October to December 2021, between January to December 2022, and between January to December 2023. Reclaim water was also pumped from Pit E to the Mill.

North Portage Pit (Pit A) continues to receive its natural runoff from its sub-catchment area, as well as water transfer from East Dike Seepage, South Cell TSF, CDDP, Portage Pit E, and Storm Water Management Pond. Water from Pit A was also pumped to the Mill to be reused as Reclaim Water intermittently: from June 2020 to the end of 2021; from January to April 2022 and July to October 2022; and from June to September 2023.

Water quality analysis of samples taken from the pit lakes formed in Portage Pit A (ST-17) and Pit E (ST-19), and in Goose Pit (ST-20) in 2023 are tabulated in Section 8.0 of AEM's 2023 Annual Report.

Figure 2-4 to **Figure 2-6** present the concentration of the parameters of concern measured in the Portage and Goose Pits from 2013 to 2023. Based on the graphs shown in **Figure 2-4** to **Figure 2-6**, observations from measured and forecasted concentrations in Portage and Goose Pits are summarized in **Table 2-4**.To facilitate the reading, Portage Pit has been abbreviated as PP and Goose Pit as GP.



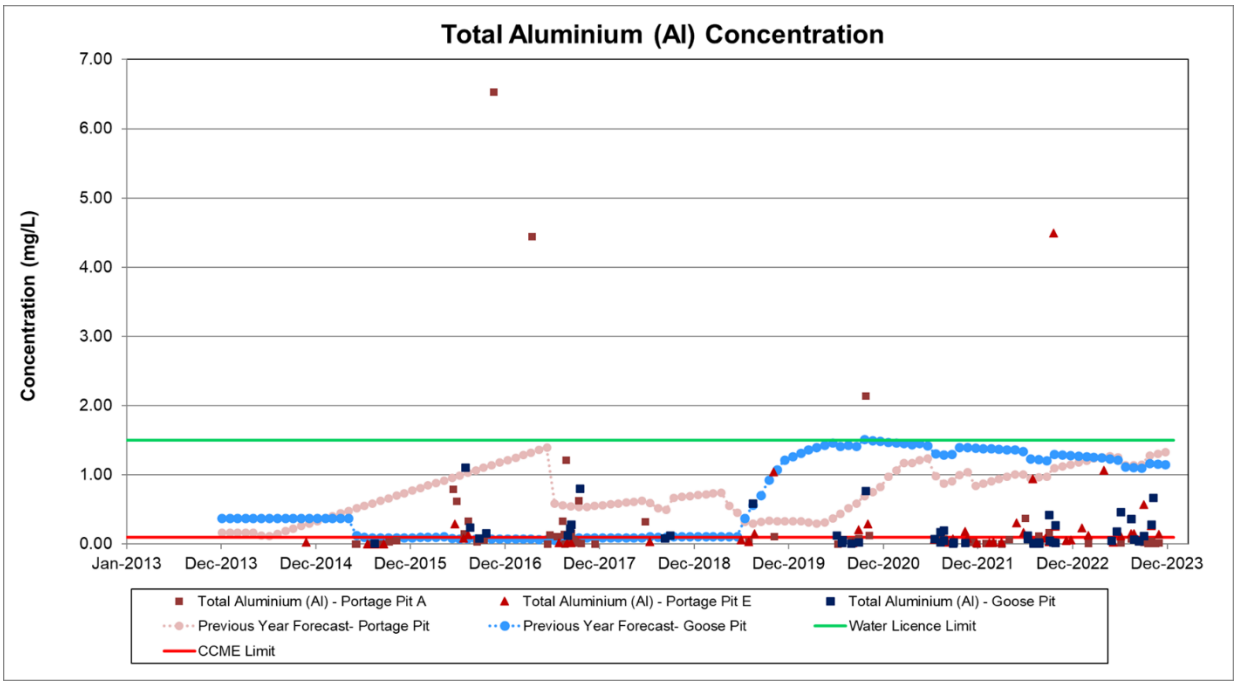
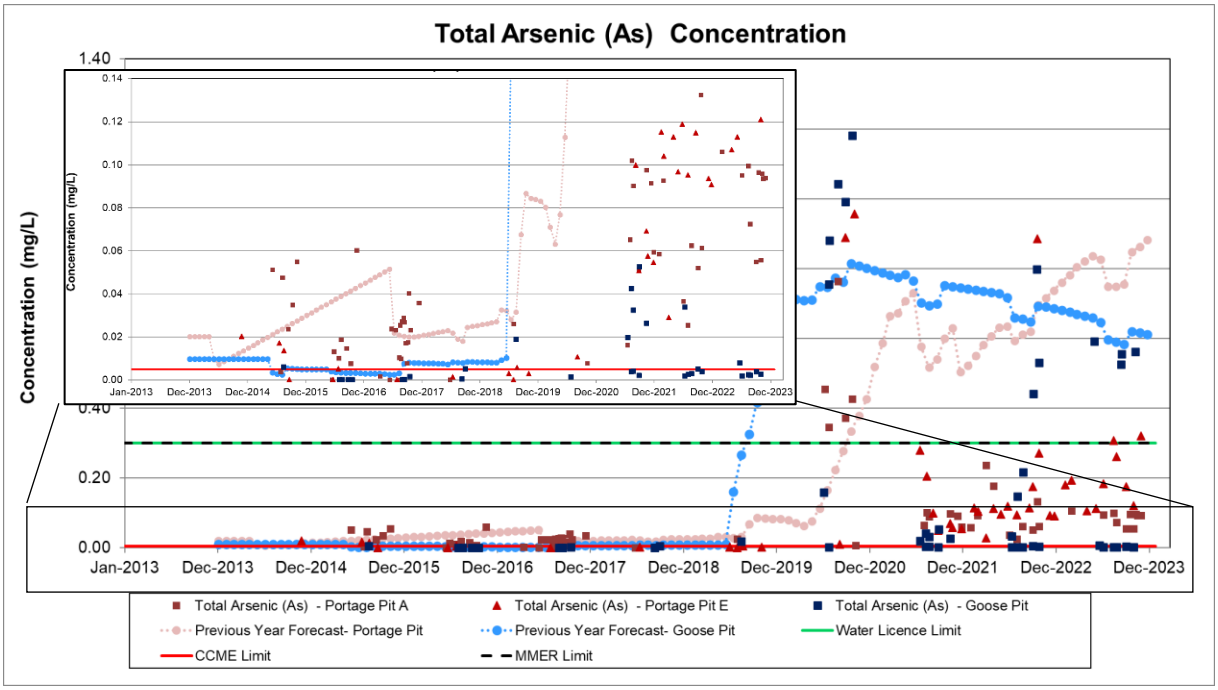


Figure 2-4: Concentrations Portage Pit and Goose Pit – Total Cyanide & Metals



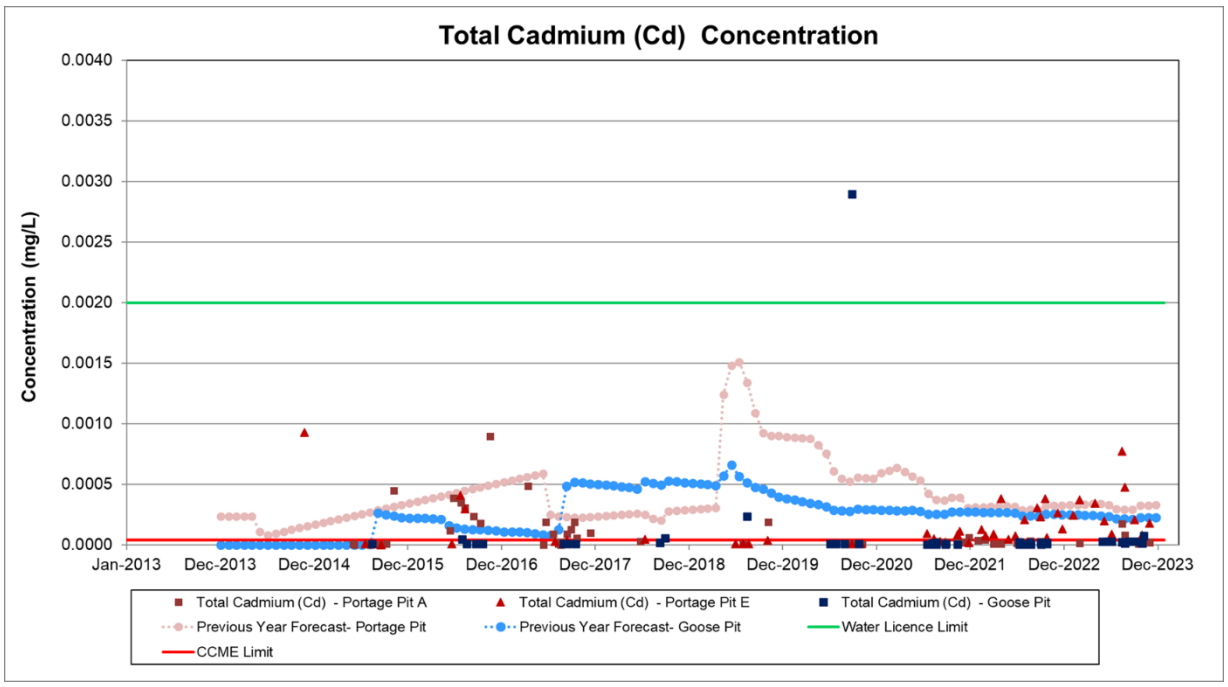


Figure 2-4: (continued) Concentrations Portage Pit and Goose Pit – Total Cyanide & Metals

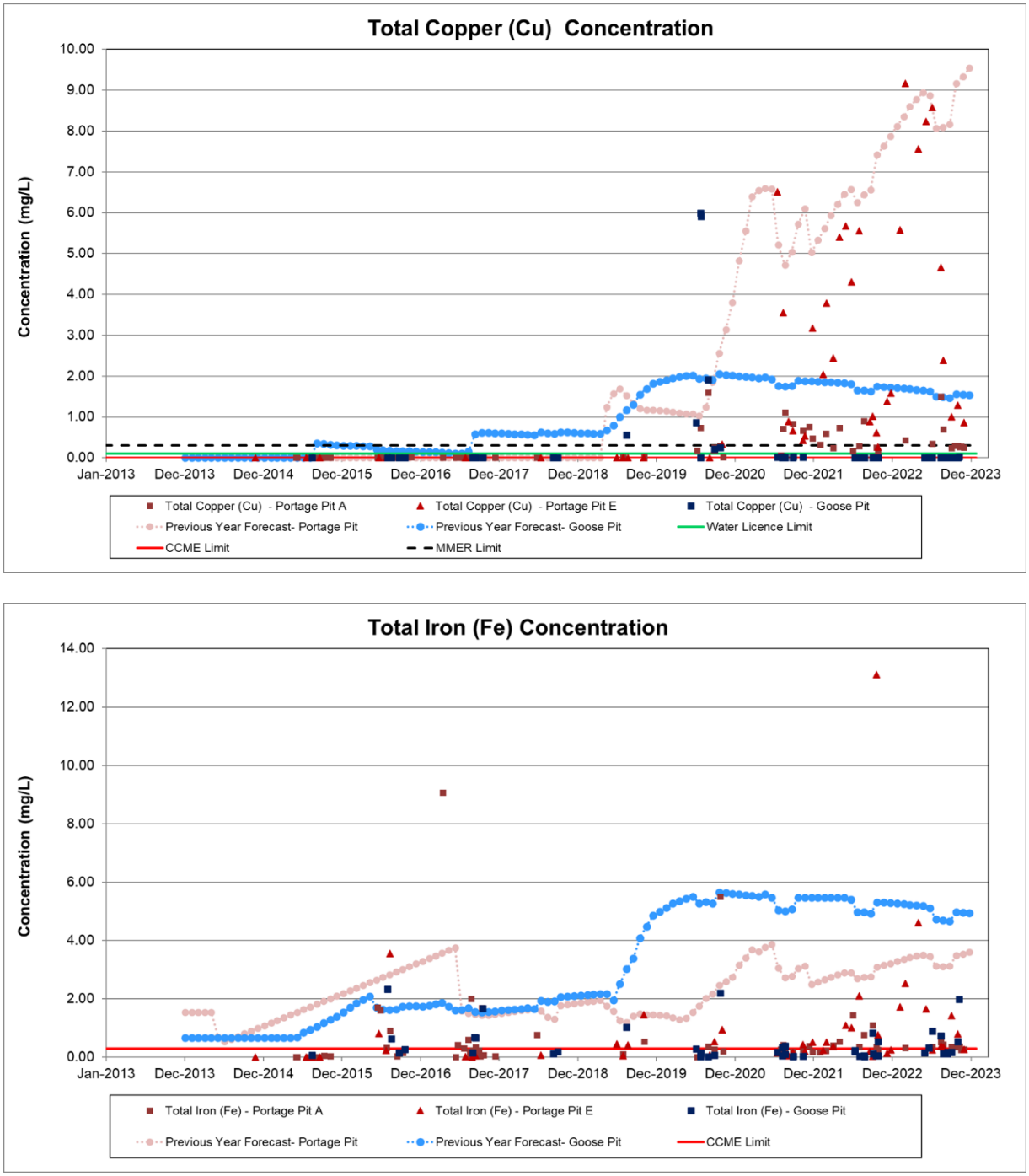
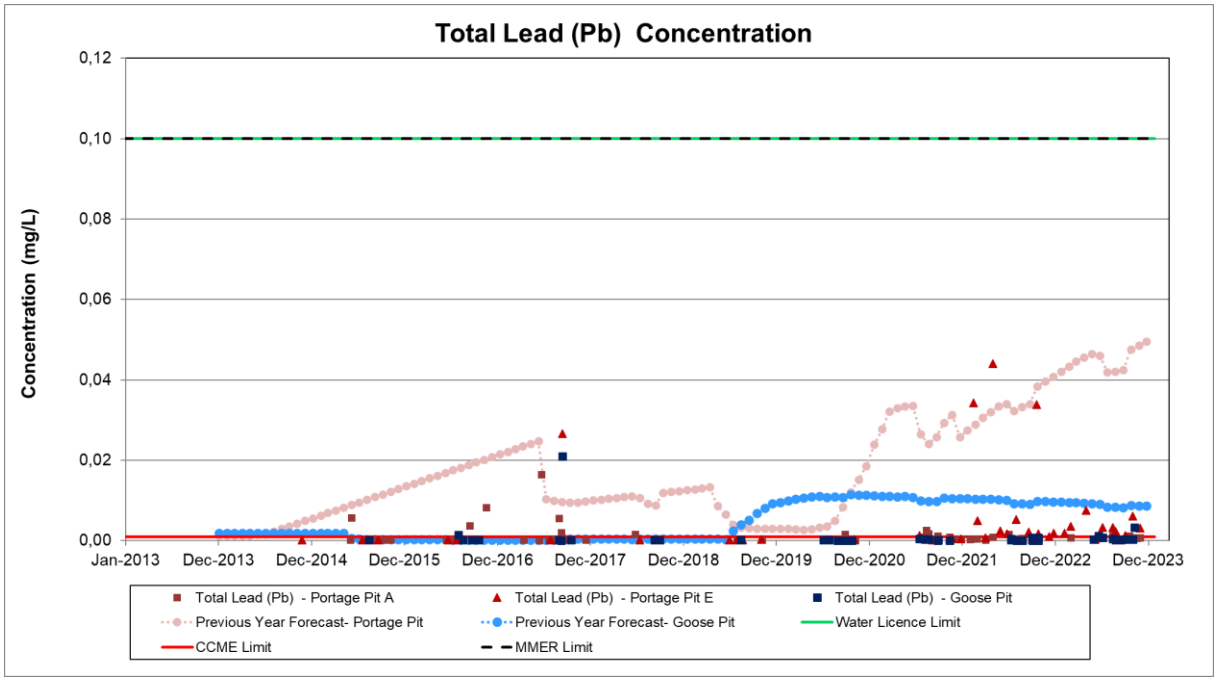


Figure 2-4: (continued) Concentrations Portage Pit and Goose Pit – Total Cyanide & Metals



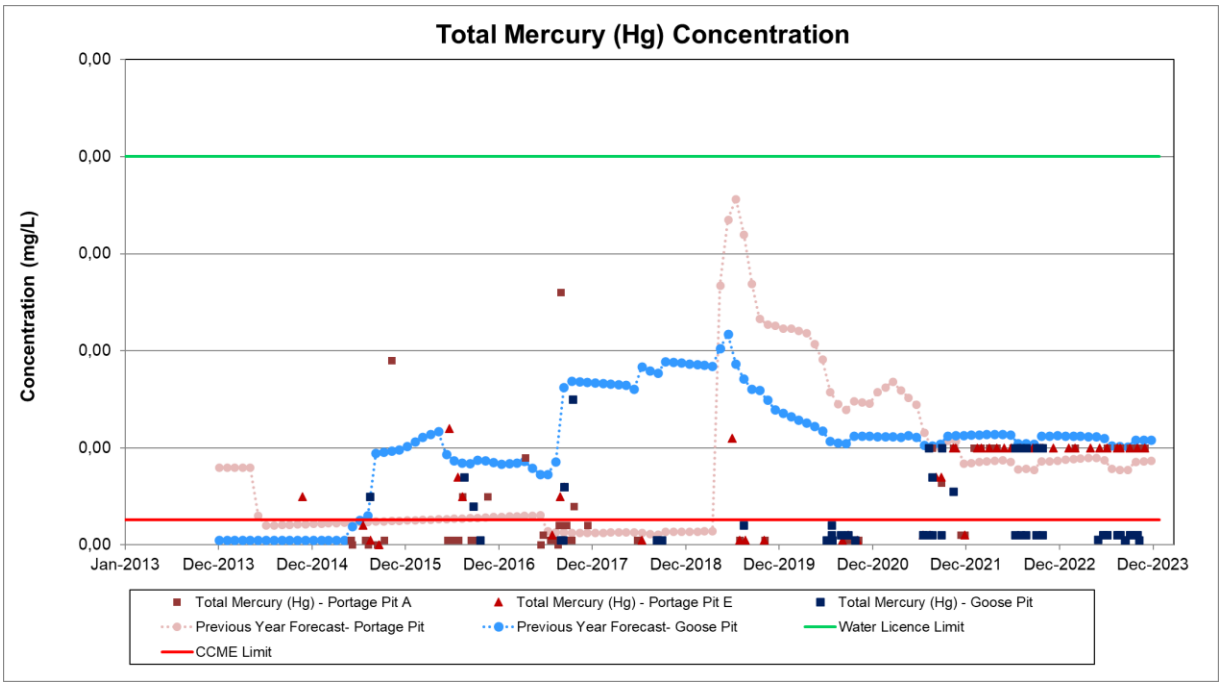
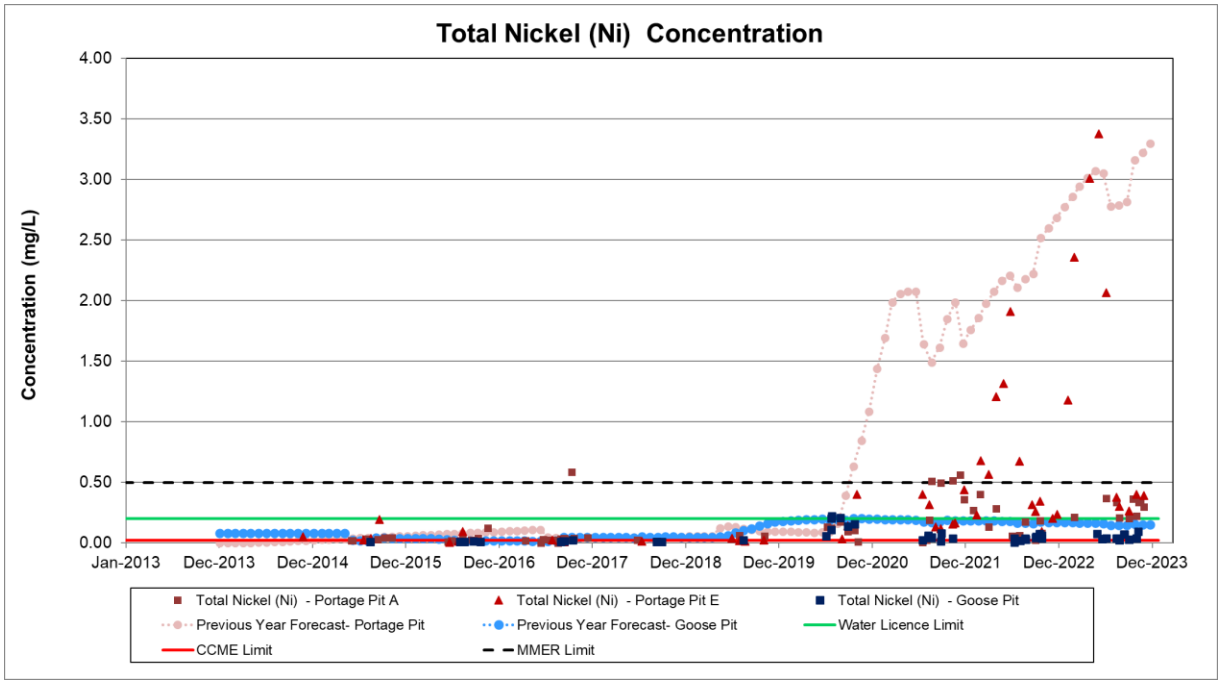


Figure 2-4: (continued) Concentrations Portage Pit and Goose Pit – Total Cyanide & Metals



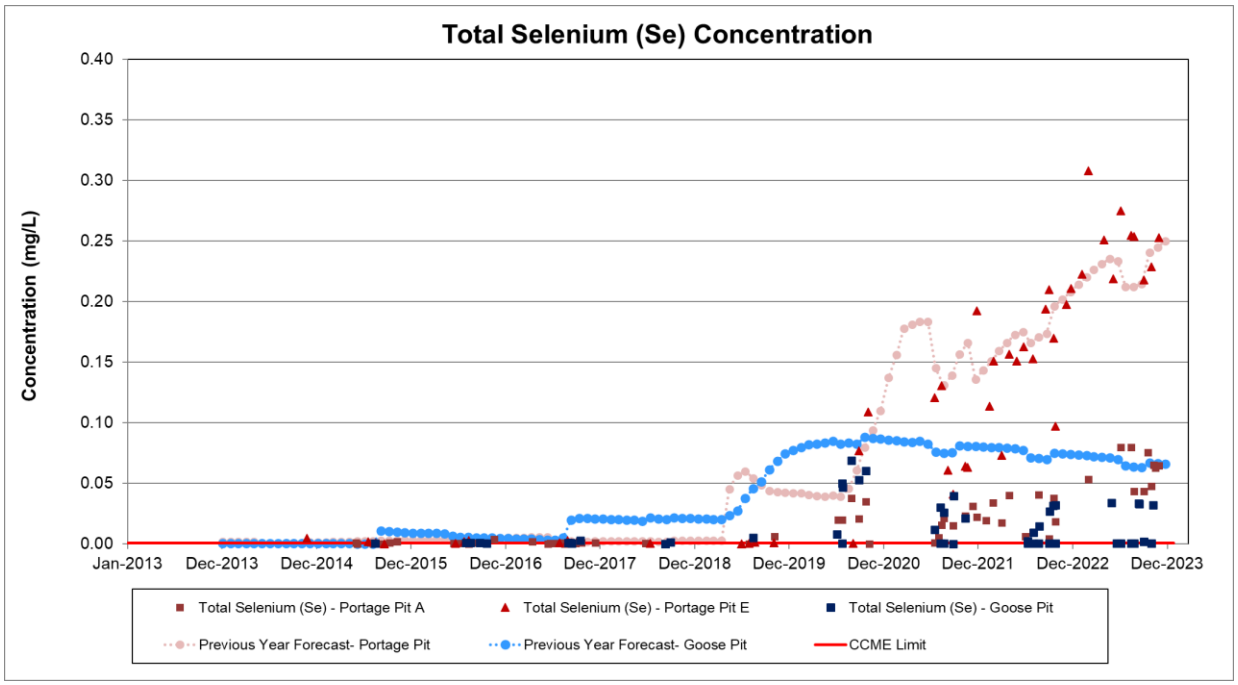


Figure 2-4: (continued) Concentrations Portage Pit and Goose Pit – Total Cyanide & Metals

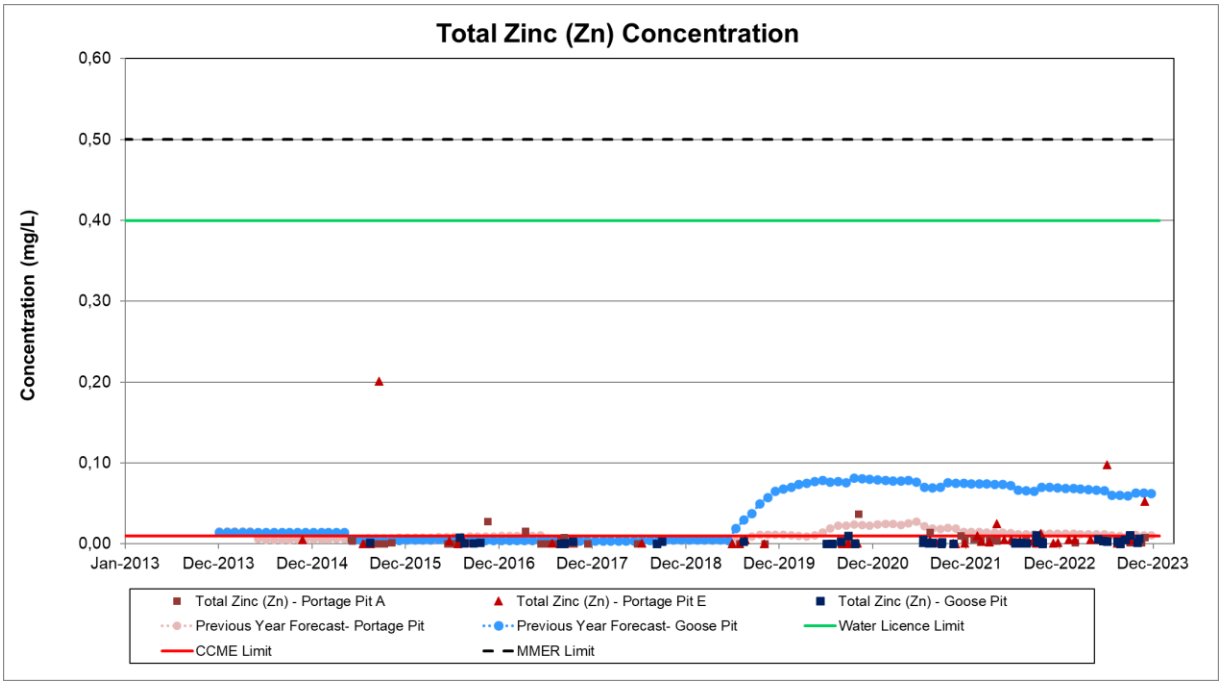


Figure 2-4: (continued) Concentrations Portage Pit and Goose Pit – Total Cyanide & Metals

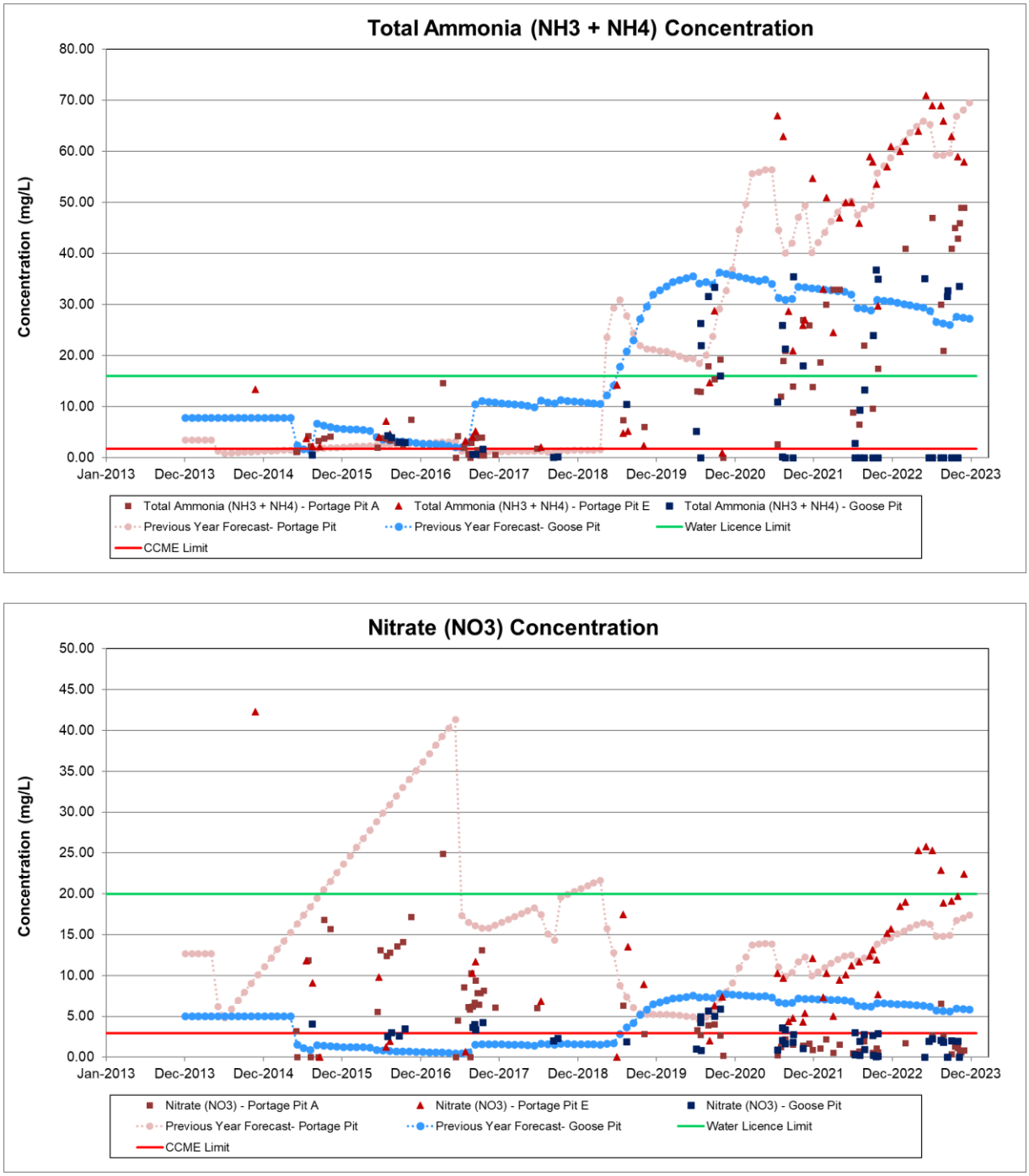


Figure 2-5: Concentrations Portage Pit and Goose Pit – Ammonia & Nitrate

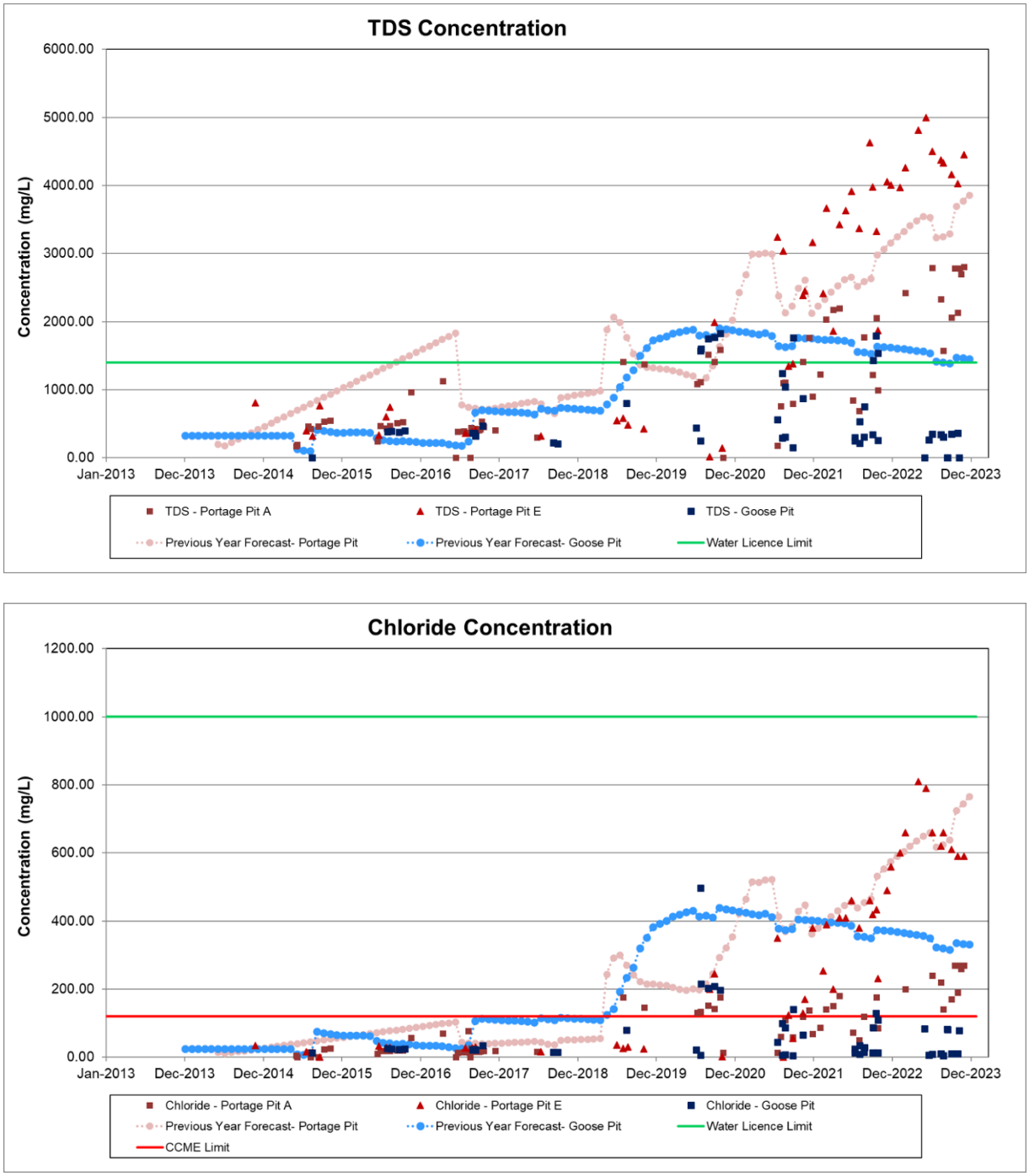
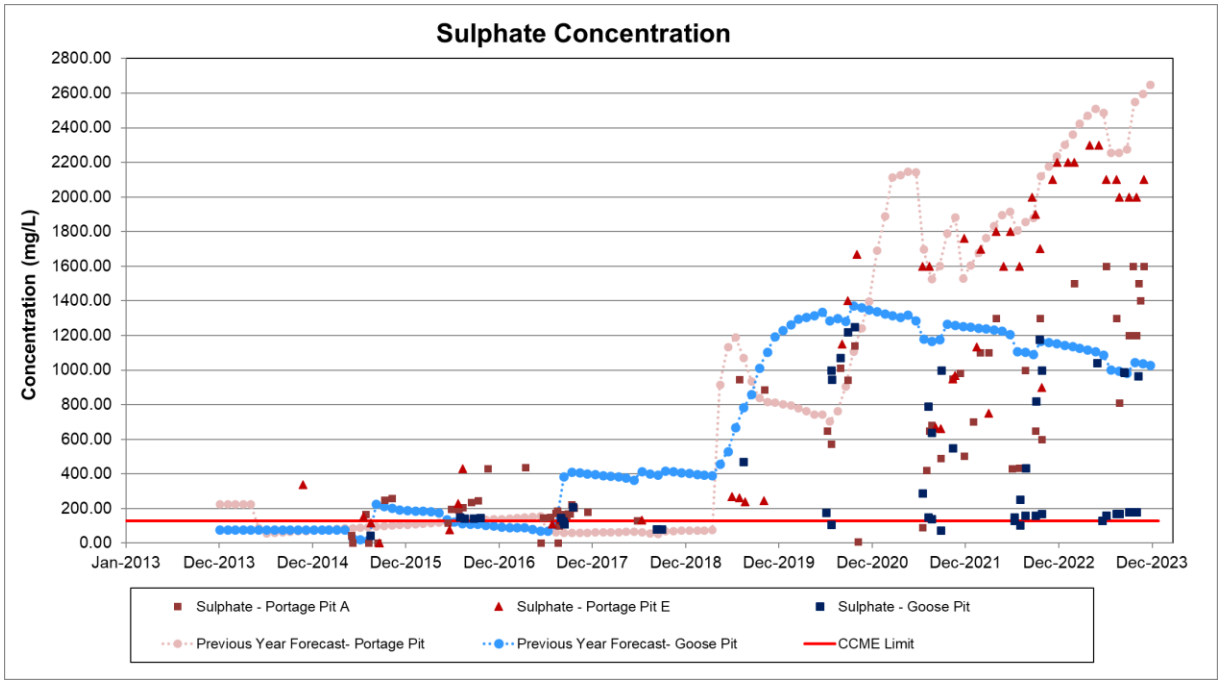


Figure 2-6: Concentrations Portage Pit and Goose Pit – TDS & Anions



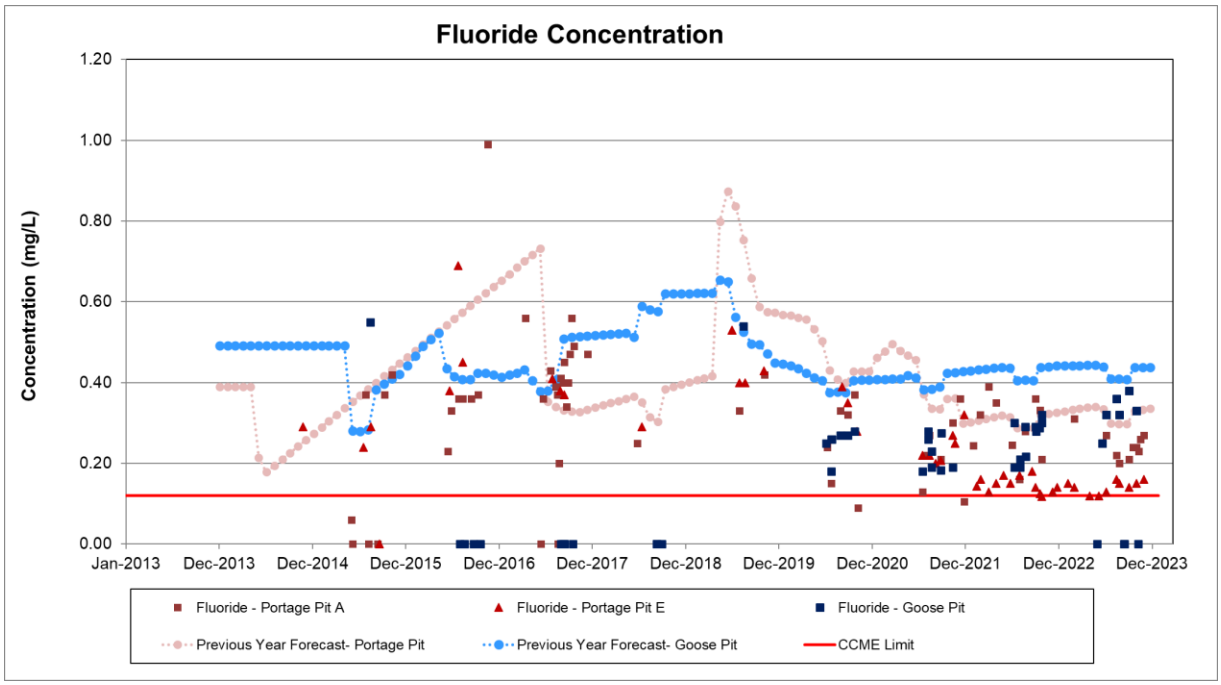


Figure 2-6: (continued) Concentrations Portage Pit and Goose Pit – TDS & Anions

Table 2-4: Observations from Measured and Forecasted Concentrations in Portage and Goose Pits

PARAMETER	MEASURED VALUES OBSERVATIONS	FORECASTED VALUES OBSERVATIONS
Total cyanide	**PP:** Measured values continued to increase in 2022 since deposition of tailings started in PP Pit E. For comparison purposes only, the measured concentrations of Pit E and Pit A were generally below Water Licence and MDMER limits during the summer months and increased above these limits in winter. The concentrations remained above the CCME limit. In 2023, measured values of Pit A decreased. However, the measured concentrations of Pit E continued to increase, albeit slightly compared to the previous year. Measured concentrations were below 2 mg/L, and generally, below the Water Licence and MDMER limits for Pit E, while exceeding these limits in autumn for Pit A. The concentrations remained above the CCME limit. **GP:** Measured concentrations were very low since no deposition occurred in this pit. For comparison purposes only, the measured concentrations were below MDMER and Water Licence limits and were slightly above the CCME limit. In 2023, with the exception of one concentration (~0,03 mg/L), the trend of measured concentrations was similar to that of 2022.	**PP:** The forecast model predicted an increase in total cyanide values since tailings deposition started in this pit. In 2022, the measured concentrations were higher than the forecasted values. However, in 2023, the forecasted values were higher than the measured concentrations. **GP:** Forecasted values for 2022 and 2023 were lower than measured concentrations, suggesting that the model slightly overestimated the impact of natural degradation occurring in the pit lake, but the concentration remains low (< 0.02 mg/L). Forecasted values for PP are expected to be above the Water Licence limits, and below the limits for GP.
Total Aluminum	**PP:** In 2022, measured values were similar to those in 2021. For comparison purposes only, all values were below the Water Licence limit and were slightly above the CCME limit. The transfer of Reclaim Water to Pit A from Pit E and the deposition of tailings in Pit E did not contribute to increase the concentration for this parameter. In 2023, measured concentrations of both Pit E and Pit A were below the Water Licence limit and slightly above and close to the CCME limit for Pit E. **GP:** Measured values decreased slightly until summer 2023 and then increased in the fall. For comparison purposes only, the concentrations were generally below the Water Licence limit and slightly above and close to the CCME limit.	**PP & GP:** The forecasted concentrations were generally higher than the measured concentrations and continued to increase slightly for PP and to decrease slightly for GP, suggesting that the load for this constituent assumed in the model is conservative. The lower measured concentration could also be explained by a good settling of suspended particles in these pits. Forecasted concentrations were expected to be lower than the Water Licence limit.

PARAMETER	MEASURED VALUES OBSERVATIONS	FORECASTED VALUES OBSERVATIONS
Total Arsenic	**PP:** Measured concentrations in 2023 are relatively lower compared to last year's data. For comparison purposes only, most of the measured values were below MDMER and Water Licence limits but remained above the CCME limit. **GP:** As of 2022, measured concentrations increased after the summer. Concentrations increased from 0,005 to approximately 0,55 mg/L. For comparison purposes only, 40% of concentrations were slightly above the MDMER and Water Licence limits, but the majority were below these limits and close to the CCME limit.	**PP:** As of 2022, forecasted values of 2023 indicated a slight increase in concentrations during tailings deposition, which was observed based on the measured data. However, the forecasted values are higher than the measured values, which suggest that the load assumed for this constituent in the model is conservative. Furthermore, the model assumes a constant loading for this constituent from the mill effluent over time and does not consider any variability in mill effluent chemistry over the year, resulting in a conservative assessment. Also, the model considers that the solid fraction associated with Arsenic remains in suspension, again resulting in a conservative assessment. **GP:** As of 2022, forecasted values indicated a slight decrease until the summer in 2023, followed by an increase in autumn. This trend was observed based on the measured data. The forecasted values are higher than the measured values, which suggest that the load assumed for this constituent in the model is conservative.
Total Cadmium	**PP:** Measured concentrations were generally below the detection limit. For comparison purposes only, the concentrations were below the limits for Pit A. For Pit E, measured values were below the Water Licence limit and generally slightly above the CCME limit. Concentrations values decreased. **GP:** Measured concentrations were generally below the detection limit and demonstrate a slight decrease. For comparison purposes only, the concentrations were generally below the limits.	**PP and GP:** In general, forecasted values were higher than the measured ones, which suggest that the load assumed for this constituent in the model is conservative. Based on measured data, forecasted values continued to decrease slightly.

PARAMETER	MEASURED VALUES OBSERVATIONS	FORECASTED VALUES OBSERVATIONS
Total Copper	**PP:** In contrast to 2022, measured concentrations decreased for both Pits in 2023, which could be due to a better settling of the Cu in the pits or a lower use of Cu in the mill. For comparison purpose only, values were higher than the MDMER and Water Licence limits. **GP:** Measured concentrations in 2023 remain low since no tailings deposition took place in this pit. For comparison purposes only, measured values were lower than the MDMER and Water Licence limits and slightly above and close to the CCME limit.	**PP:** Forecasted values indicated a decrease in concentrations until summer and an increase starting in the fall. The measured values did follow this trend in winter, but decreased in the summer months. Most measured values remain below the forecasted values, suggesting that the load for this constituent assumed in the model is conservative. The lower measured concentration could also be explained by a good settling of suspended particles in these pits. **GP:** Forecasted values indicated a decrease in concentration. The measured values do follow this trend, but remain well below the forecasted values, suggesting that the load for this constituent assumed in the model is conservative. The lower measured concentration could also be explained by a good settling of suspended particles in these pits.
Total Iron	**PP:** Measured concentrations were relatively low in 2023. However, almost all of these concentrations were above the CCME limit. **GP:** Measured concentrations were generally low until summer 2023 and increased in the fall. For comparison purposes only, 50% of values were below or close to the CCME limit.	**PP & GP:** Forecasted values were much higher than the measured values, suggesting that the load for this constituent assumed in the model is conservative. The lower measured concentration could also be explained by a good settling of suspended particles in these pits.
Total Lead	**PP & GP:** Measured concentrations in 2023 were relatively low. For comparison purposes only, most values of Pit A and Goose Pit were below the Water Licence limit and close to the CCME limit. However, most values of Pit E were slightly above the CCME limit.	**PP & GP:** Forecasted values were generally higher than the measured values, suggesting that the load for this constituent assumed in the model is conservative. The lower measured concentration could also be explained by a good settling of suspended particles in these pits.
Total Mercury	**PP:** Measured concentrations were at the detection limit for 2023. For comparison purposes only, concentration values were below the Water Licence discharge criterion and slightly above the CCME limit. **GP:** Measured concentrations were generally at the detection limit for 2023 and showed a similar trend. For comparison purposes only, all values were below limits.	**PP & GP:** Concentrations were forecasted to remain below the Water Licence discharge criterion. Forecasted concentrations values were higher than the measured values, suggesting that the load for this constituent assumed in the model is conservative. The lower measured concentration could also be explained by a good settling of suspended particles in these pits.

PARAMETER	MEASURED VALUES OBSERVATIONS	FORECASTED VALUES OBSERVATIONS
Total Nickel	**PP:** Measured concentrations decreased until the summer 2023, then increased in autumn, which was expected since deposition of tailings continued in these pits. For comparison purposes only, except for some concentrations of Pit E, which were exceeding the MMER limit, all measurements of both Pits were below the MMER limit and most of them were above the Water Licence and CCME limits. **GP:** Measured concentrations in 2023 were generally similar compared to last year. This was expected since no deposition took place in this pit. For comparison purposes only, measured concentrations were below the Water Licence limit and slightly above the CCME limit.	**PP:** Forecasted values indicated an increase in concentration as tailings deposition continued in this pit. In 2023, one of the measured values was higher than the forecasted value. Since the model assumes a constant load for this constituent to the pit, it does not consider any variability of the mill effluent water chemistry over the year. **GP:** Forecasted values were slightly higher than the measured values, suggesting that the load for this constituent assumed in the model is conservative. The lower measured concentration could also be explained by a good settling of suspended particles in these pits.
Total Selenium	**PP:** Measured concentrations decreased during the summer 2023, then increased in autumn, due to tailings deposition. For comparison purposes only, the measured values were above the CCME limit. **GP:** Compared to 2022, measured concentrations in 2023 decreased during the summer and increased in the fall. For comparison purposes only, 40% of measured values were slightly above the CCME limit.	**PP:** Forecasted values projected a similar trend of measured data. Some of the measured values were higher than the forecasted values. Since the model assumes a constant load for this constituent to the pit, it does not consider the variability of the mill effluent water chemistry over the year. **GP:** Forecasted values projected a decrease in concentration and were generally higher than measured ones, suggesting that the load for this constituent assumed in the model is conservative.
Total Zinc	**PP & GP:** Measured concentrations in both pits were low in 2023. For comparison purposes only, measured values remained below Water Licence limits and were generally below or close to the CCME limit. Concentrations values decreased during the summer then increased in autumn.	**PP & GP:** Forecasted concentrations in the previous model projected an increasing trend for PP this year due to the deposition of tailings. In GP, the model projected a slight decreasing trend. The measured values are much lower than the forecasted values, suggesting that the load for this constituent assumed in the model is conservative.

PARAMETER	MEASURED VALUES OBSERVATIONS	FORECASTED VALUES OBSERVATIONS
Total Ammonia	**PP:** In Pit A, measured concentrations in 2023 decreased slightly during the summer, then increased due to the transfer of Reclaim Water from Pit E. In Pit E, measured data increased during the year due to tailings deposition in this pit. For comparison purposes only, all of the measured concentrations exceeded the Water Licence criterion. **GP:** Measured concentrations in 2023 were relatively similar compared to the last year. Concentrations varied during the season, with a lower concentration measured at the start of the summer and then increasing in the fall. For comparison purposes only, in general, most measurements were below the Water Licence criterion early in the summer and then were above it in the fall.	**PP:** Forecasted concentrations in the previous model projected a generally increasing trend this year due to the deposition of tailings in Pit E. The measured values reflect this trend. However, some measured values of Pit E are higher than the forecasted values. Since the model assumes a constant load for this constituent to the pit, it does not consider any variability of the mill effluent water chemistry over the year. **GP:** Forecasted concentrations projected a continuing decreasing trend. This was observed based on the measured values. Almost all of the measured values were lower than the forecasted values except for some samples, suggesting that the load for this constituent assumed in the model is conservative.
Nitrate	**PP:** During the summer 2023, measured concentrations continued to increase due to tailings deposition in the Pits. Most of the measured concentrations were above the Water Licence criterion for Pit E and below the CCME limit for Pit A. **GP:** Measured concentrations in 2023 were relatively similar compared to last year. For comparison purposes only, most of the measurements were below the Water Licence criterion and the CCME limit.	**PP:** Forecasted concentrations in the previous model projected an increasing trend this year due to the deposition of tailings. The measured values reflect this trend. However, measured values in Pit E are higher than the forecasted values. **GP:** Forecasted concentrations projected a slight decreasing trend. This was observed based on the measured values. The measured values were lower than the forecasted values.
TDS	**PP:** During the summer 2023, measured concentrations increased due to tailings deposition in Pit E. However, in Pit A, measured values decreased during the summer, then increased in the fall following the transfer of water from Pit E. For comparison purposes only, measured concentrations were above the Water Licence criterion. **GP:** Compared to the previous year, measured values in 2023 decreased and were below the Water Licence criterion.	**PP:** Forecasted concentrations in the previous model projected an increasing trend this year due to the deposition of tailings. The measured values reflect this trend. Since the model assumes a constant load for this constituent to the pit, it does not consider any variability of the mill effluent water chemistry over the year. Measured values in both pits were higher than the forecasted values. **GP:** Compared to the previous year, forecasted concentrations projected a decreasing trend. This observation was based on the measured values. The measured values were much lower than the forecasted values, suggesting that the load for this constituent assumed in the model is conservative.

PARAMETER	MEASURED VALUES OBSERVATIONS	FORECASTED VALUES OBSERVATIONS
Chloride	**PP:** In Pit E, measured concentrations in 2023 increased slightly during winter due to tailings deposition in the Pit. Then, measured values decreased during the summer and in autumn. Conversely, in Pit A, the trend of measured values was opposite of that observed in Pit E. Measured concentrations were lower than the Water Licence criterion but remained above or close to the CCME limit. **GP:** Measured concentrations in 2023 are generally lower than for previous years and relatively similar compared to the previous year. For comparison purposes only, measured concentrations were below the Water Licence criterion and the CCME limit.	**PP:** Forecasted concentrations in the previous model projected an increasing trend this year due to the deposition of tailings. The measured values reflect this trend. Some measured values of Pit E are higher than the forecasted values. **GP:** Compared to the three previous years, forecasted concentration projected a continuing decreasing trend. This was observed based on the measured values. The measured values were lower than the forecasted values, suggesting that the load for this constituent assumed in the model is conservative.
Sulphate	**PP:** Compared to the previous year, measured concentrations in 2023 increased due to tailings deposition in Pit E. Generally, three trends were observed for both Pits. Measured values increased during winter and fall and decreased during the summer. For comparison purposes only, measured values were higher than the threshold value for sulphate based on BC Environment guidelines for the protection of aquatic life for very soft water. **GP:** Measured concentrations in 2023 are relatively similar in comparison to the concentrations of the previous year. For comparison purposes only, measured values were slightly above or close to the threshold value for sulphate based on BC Environment guidelines for the protection of aquatic life for very soft water.	**PP:** Forecasted concentrations in the previous model projected an increasing trend this year due to the deposition of tailings. The measured values reflect this trend. **GP:** Forecasted concentrations projected a decreasing trend. This was observed based on the measured values. Some measured values were much lower than the forecasted values, while others were close to the forecasted values, suggesting that the load for this constituent assumed in the model is conservative.
Fluoride	**PP & GP:** Measured concentrations were generally lower than 0.4 mg/L. For comparison purposes only, the measured values of Pit E were close to the CCME limit. However, in Pit A and Goose Pit, the measured concentrations were above the CCME limit.	**PP and GP:** Forecasted values were higher than the measured values, suggesting that the load for this constituent assumed in the model is conservative.

2.6 Mill Effluent

2.6.1 Mill Effluent Measurements

A review of the chemical analysis for the Mill Effluent was undertaken by AtkinsRéalis to identify the impact of the Mill Effluent water quality on the water quality observed in the North and South Cell TSF Reclaim Ponds as well as in both Portage and Goose pits. The Mill Effluent is tested twice daily for gold (solid and dissolved), iron (dissolved), copper (dissolved) and cyanide (CN-WAD) using the on-site lab, which is not accredited for environmental water quality chemical analysis. These chemical analyses were provided to AtkinsRéalis between January 2013 and November 2023.

Figure 2-7 shows the monthly average dissolved metal concentrations and cyanide (CN-WAD) in the Mill Effluent sampled at the final tailings sampling point 360-SA-008 for the last six (6) years. This figure illustrates the following:

- Dissolved iron and copper concentrations were present in the Mill Effluent. Thus, the main source of iron and copper in the Reclaim Water comes from the Mill Effluent.
- There is a relationship between copper and cyanide concentrations in the Mill Effluent. The two trends behaved similarly in 2021, less so in 2022. However, in 2023, this similar trend was not observed. A very low concentration of CN-WAD was generally associated with less cyanide (average of 1.9 mg/L) required to extract the gold in certain ore types, resulting in less copper catalyst (average of 8.2 mg/l) required in the cyanide destruction.

Compared to the values of 2017, the peaks observed in 2018, 2019, 2020, 2021 and 2022 for copper and CN-WAD were generally higher, as shown in **Figure 2-7**. This figure also shows that the concentrations measured in 2021 were still the highest compared to the other years. Compared to the previous years, the peak of copper decreased to less than 13 mg/L and the measured concentrations of CN-WAD were very low.

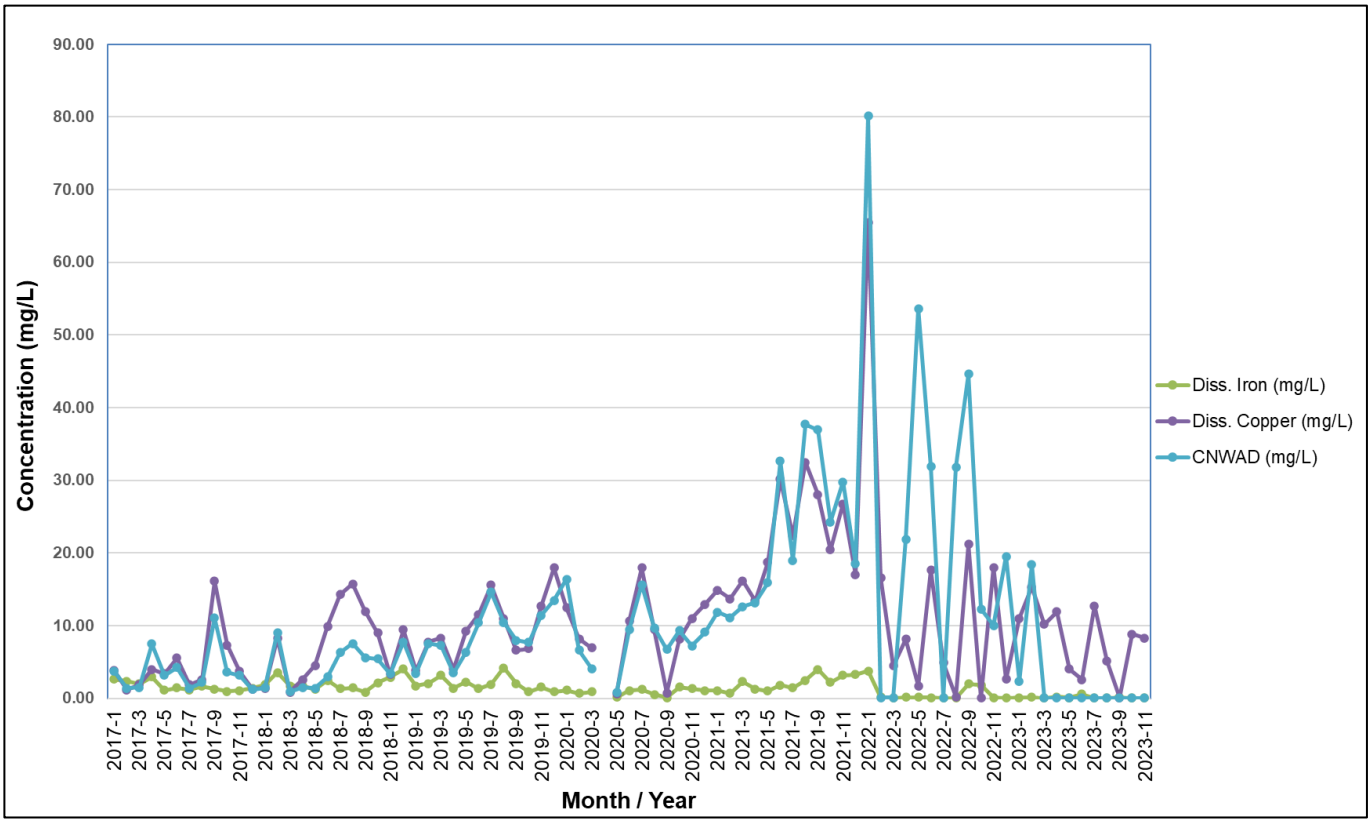


Figure 2-7: Mill Effluent Monthly Average 2017 to 2023: Iron, Copper and Cyanide (CN-WAD)

2.6.2 Additional Mill Effluent Water Quality Results

Agnico analyzed the water fraction of Mill Effluent after cyanide destruction on a monthly basis to obtain representative data of the tailings water being discharged to the Portage Pit in 2023. The water quality analysis was completed by an external accredited laboratory. Parameters of concern are plotted on **Figure 2-8** and **Figure 2-9**.

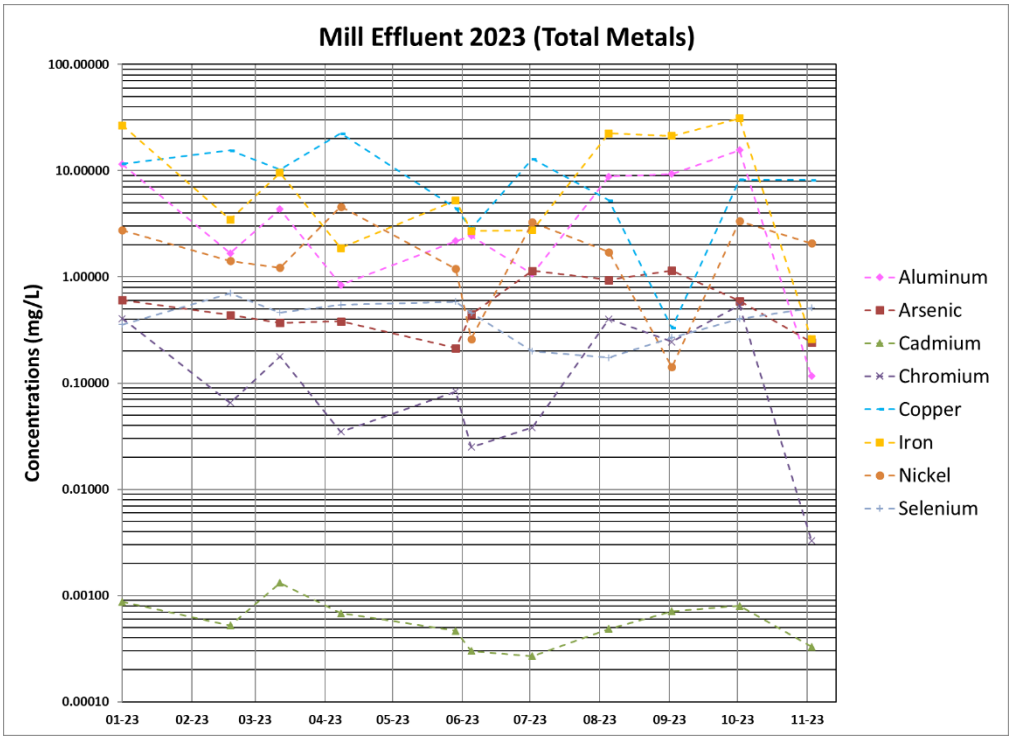


Figure 2-8: Mill Effluent Concentrations Sampled in 2023 – Total Metals

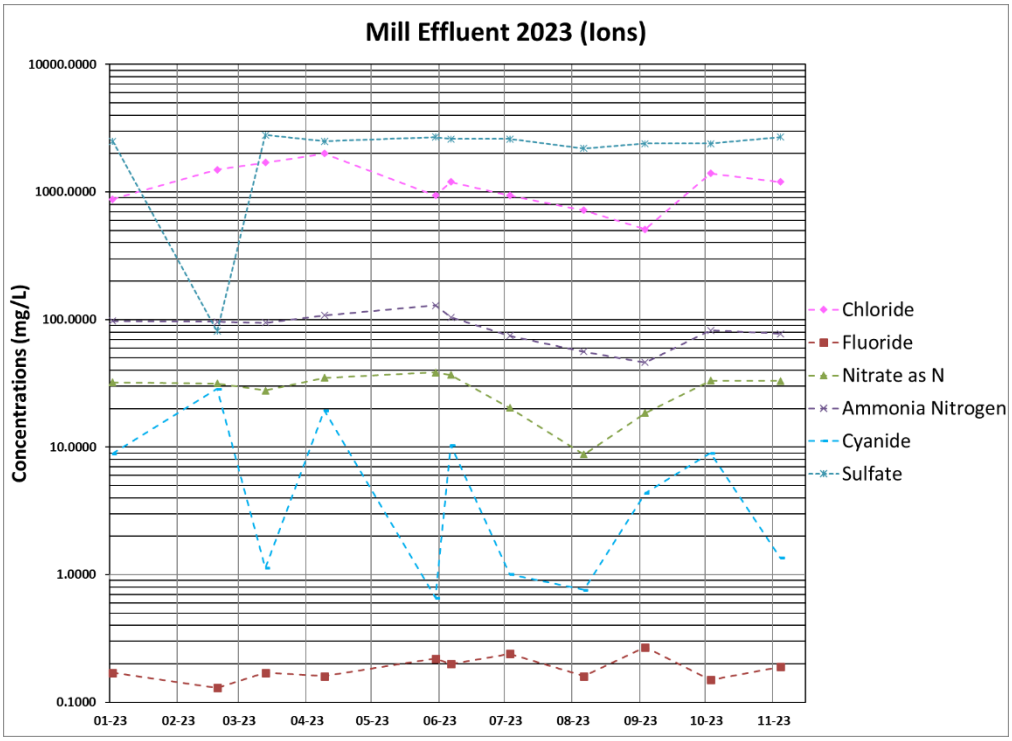


Figure 2-9: Mill Effluent Concentrations Sampled in 2023 – Major Ions

Samples of Mill Effluent were taken and analyzed throughout the year to compare the concentration of key parameters.

Table 2-5 compares the yearly average Mill Effluent samples between 2015 and 2023 for some parameters of concern.

Since 2020, only ore from the Whale Tail pit was processed at the Mill. When comparing with the measured values taken from 2022 to 2023, the measured concentrations are mostly similar, except for cyanide, copper, and nickel, which were low and aluminum, cadmium, chromium, iron, ammonia, and nitrate, which were higher.

In 2023, as in 2022, the measured data confirmed some of the differences observed in the measurements taken in 2019 regarding the Mill Effluent quality produced when processing Portage/Vault ore versus Whale Tail ore:

- Aluminum, copper, iron, ammonia, nitrate, and chloride were slightly higher to one order of magnitude higher on the Mill Effluent when processing Whale Tail ore;
- Arsenic, cadmium, selenium, and chromium were one to two orders of magnitude higher in the Mill Effluent when processing Whale Tail ore;
- Cyanide and nickel concentrations were similar when processing both types of ores; and

- Fluoride was about 30% lower with the Whale Tail ore.

Table 2-5: Mill Effluent Concentrations Sampled from 2015 to 2023

PARAMETER	Average 2015	Average 2016	Average 2017	Average 2018	Average 2019 w/o Whale Tail	Average 2019 Whale Tail only	Average 2020 Whale Tail only	Average 2021 Whale Tail only	Average 2022 Whale Tail only	Average 2023 Whale Tail only
Total Cyanide (CNt)	18.2	9.3	20.4	6.2	11.7	11.8	24.6	23.8	37.4	7.78
Total Aluminum (Al)	0.629	0.326	1.541	2.2	0.394	109.5**	1.73	0.59	2.32	5.26
Total Arsenic (As)	0.036	0.026	0.018	0.025	0.034	9.0**	0.72	0.93	0.46	0.59
Total Cadmium (Cd)	0.0020	0.0003	0.0072	0.0004	0.0002	0.0035	0.017	0.0003	0.0004	0.001
Total Chromium (Cr)	0.002	0.001	0.009	0.005	0.002	3.5	0.654	0.026	0.090	0.18
Total Copper (Cu)	11.0	3.6	5.3	0.161	3.925	9.1**	6.4	8.3	18.92	9.25
Total Iron (Fe)	5.9	2.8	6.9	6.5	5.6	401.7**	5.6	1.9	6.05	11.57
Total Nickel (Ni)	0.423	0.024	0.982	0.026	2.7	7.7	2.8	6.8	6.62	1.99
Total Selenium (Se)	0.131	0.166	0.076	0.131	0.007	0.143	0.144	0.189	0.30	0.42
Ammonia (NH_3-NH_4)	127	105	79	84	64	75	65	60	74.4	87.76
Nitrate (NO_3)	15.9	13.3	12.7	8.9	10.0	12.9	9.2	12.0	20.01	28.69
Chloride (Cl)	775	558	630	515	660	767	411	861	1247	1180.91
Fluoride (F)	0.545	0.645	0.335	0.680	0.565	0.297	0.28	0.20	0.18	0.19

Note:
*** Samples taken in 2019 when treating Whale Tail ore contained much higher suspended solids compared to the following years.*

2.7 Central Dike Downstream Pond

2.7.1 General

From December 2015 to April 2019, Agnico has been depositing tailings into the South Cell (formerly Attenuation Pond) as per their water management plan. As expected, the operating water level in the South Cell increased as tailings' deposition progressed in the South Cell. Due in part to the higher hydraulic gradient, seepage flows were being observed downstream of Central Dike, located to the east of the South Cell TSF. The water was accumulating at the base of Central Dike and being mixed with snowmelt runoff water and possible underground water resurgence. In order to compensate for this unexpected accumulation, Agnico recirculated the accumulated water downstream of Central Dike back to the South Cell Reclaim Pond from 2015 to 2019 to control the pond of water accumulated at the base of Central Dike to an elevation of 115 masl, per the action plan on the Central Dike. Some seepage water accumulated downstream was also transferred to Goose and Portage Pits in 2019.

Since 2020, no continuous tailings deposition was occurring in the SC TSF. Only natural runoff coming from the NC TSF and SC TSF catchment area was collected in the SC Reclaim Pond and transferred to North Portage Pit (i.e., Pit A). In 2021, tailings were deposited in the NC and the resulting Reclaim Water was transferred to the SC TSF and eventually to Portage Pit A. In 2023, tailings were deposited in SC. Water accumulation downstream of the Central Dike was still observed from 2020 to 2023 and was transferred to Portage Pit A.

In September 2015, approximately 50,431 m^3 of pond water was transferred to Goose Pit as part of the water management plan around the Central Dike Downstream Pond (CDDP). This steady state test proved the 1:1 ratio used in the water balance, meaning that if the D/S pond was recirculated, there was globally no net loss of water in the South Cell. As of 2016, Agnico continued to recirculate the accumulated water downstream of Central Dike back to the South Cell TSF Reclaim Pond in order to maintain a constant water elevation at approximately 115 masl in the downstream pond. Water from the CDDP was also transferred to either Goose Pit, South Portage Pit (Pit E) or North Portage Pit (A):

- Between August and October 2017, about 332,177 m^3 of pond water was transferred to Goose Pit from the CDDP.
- In 2018, no reclaim water was transferred from CDDP to Goose Pit.
- Between May and November of 2019, water downstream of Central Dike was discharged to the Portage Pit (i.e., North Portage Pit [Pit A]). Additionally, 358,156 m^3 of reclaim water were transferred from the CDDP to Goose Pit between May and July 2019.
- Between February and June of 2020, water from the CDDP was discharged to the South Portage Pit (Pit E). From July to December of 2020, water was then discharged to North Portage Pit (Pit A).
- As of 2021, water from CDDP was discharged mainly to Portage Pit A.

Water samples from the CDDP were routinely collected during the year (sampling point ST-S-5) as per the Water Licence requirement.

2.7.2 Water Balance

Table 2-6 presents the estimated monthly inflows and outflows around the CDDP for 2023 based on:

- the seepage volume from the South Cell TSF to the CDDP estimated by Agnico;
- the total volume pumped back to the South Cell TSF;
- the total volume transferred to Portage Pits (Pit A and Pit E).

The volume of seepage estimated in 2023 from South Cell TSF to CDDP was about 25% higher compared to the previous year and approximately 24% lower compared to 2021. This increase in 2023 was expected since some tailings were deposited in the South Cell, which increased the volume of Reclaim Water stored in the South Cell TSF Reclaim Pond. In 2023, no volume of water was transferred from CDDP to South Cell TSF.

Table 2-6: Estimated Monthly Inflows and Outflows to Central Dike D/S Pond for 2023

Date	Estimated Seepage Flow from South Cell TSF to Central Dike D/S Pond	Volume of Water Transferred from Central Dike D/S Pond to South Cell TSF	Volume of Water Transferred from Central Dike D/S Pond to Goose Pit or Portage Pit (Pit A or Pit E)
	m^3/month	m^3/month	m^3/month
Jan-23	14,029	0	14,029
Feb-23	13,564	0	13,564
Mar-23	13,920	0	13,920
Apr-23	11,031	0	11,031
May-23	112,254	0	112,254
Jun-23	112,254	0	112,254
Jul-23	67,718	0	67,718
Aug-23	59,453	0	59,453
Sep-23	109,331	0	109,331
Oct-23	91,496	0	91,496
Nov-23	47,267	0	47,267
Dec-23	24,295	0	24,295
Total 2023	677,047	0	677,047
Total 2022	510,579	13,852	510,579
Total 2021	890,218	0	890,218
Total 2020	702,031	54,734	685,541
		739,915	
Total 2019	**2,294,063**	**754,347**	**1,368,676**
		2,123,023	
Total 2018	**2,171,246**	**2,300,416**	
Total 2017	**4,636,032**	**4,366,869**	**332,177**

2.7.3 Water Quality

The water analysis taken from the CDDP is tabulated and presented in Section 8.0 of the 2023 Annual Report. **Table 2-7** summarizes the data for key parameters of concern and compares the measurements to the average values measured in the South Cell TSF Reclaim Pond in 2023.

The data confirms that one of the main inflows to the CDDP was from the South Cell TSF Reclaim Pond. The water in the CDDP has detectable concentrations of all the key parameters of concern found in the South Cell TSF Reclaim Pond.

The average measured values in the South Cell TSF were higher than the values measured in the CDDP for all parameters but not for total arsenic, iron, ammonia, chloride, fluoride, and sulphate.

The lower concentration detected for these parameters in the CDDP may indicate that either some of the parameters were subject to a natural degradation process, precipitating out of solution in the Central Dike D/S Pond or were being reduced through anaerobic microbial reaction as the water seeps through the Central Dike. Furthermore, under anaerobic condition, iron reducing bacteria could be reducing the ferric oxide in the soil to a soluble ferrous hydroxide, thus increasing the total iron concentration in the Central Dike D/S Pond.

The higher concentration measured in the pond for parameters such as total arsenic, ammonia, chloride, sulphate, and fluoride could originate from the pore water in the tailings flowing towards the pond.

Table 2-7: Water Quality in Central Dike D/S Pond for 2023

PARAMETER	Central Dike Downstream Pond (ST-S-5) (mg/L)			South Cell TSF Reclaim Pond (ST-21-S) (mg/L)		
	Min	Mean	Max	Min	Mean	Max
Total Cyanide (CNt)	0.006	0.040	0.077	0.007	0.130	0.603
Aluminum (Al)	0.006	0.044	0.154	0.069	0.421	1.490
Arsenic (As)	0.047	0.096	0.138	0.021	0.060	0.108
Cadmium (Cd)	0.00001	0.00004	0.00017	0.0000519	0.00010	0.00014
Chromium (Cr)	0.00045	0.0020	0.0050	0.0018	0.0154	0.0551
Copper (Cu)	0.0004	0.0010	0.0025	0.0010	0.0974	0.421
Iron (Fe)	1.350	2.186	2.910	0.225	1.3182	4.660
Nickel (Ni)	0.0020	0.00808	0.01761	0.101	0.168	0.374
Selenium (Se)	0.00018	0.00048	0.00141	0.0009	0.0086	0.0375
Total Ammonia-Nitrogen (mg N/L)	14.0	20.0	23.0	0.8	4.1	14.0
Nitrate (NO_3) (mg N/L)	0.1000	0.311	0.970	0.960	4.948	7.80
Chloride (Cl)	70	131	190	11	34	110
Fluoride (F)	0.330	0.469	0.530	0.100	0.242	0.350
Sulphate (SO_4)	770	1191	1400	220	504	990

2.8 Ammonia Loading to Environment at Meadowbank

Ammonia that is found in the TSF Reclaim Water at Meadowbank originates mainly from the hydrolysis of cyanate which is the by-product produced following cyanide destruction. To a lesser extent, ammonia also comes from un-reacted ammonium nitrate-based explosive used in Portage, Goose and Vault pits and from the treated effluent from the mine site sewage treatment plant, which is discharged to the Stormwater Management Pond. This latter is pumped twice yearly to the South Cell TSF.

In 2023:

- Approximately 1,683,638 m^3 of pond water from the South Cell TSF Reclaim Pond were transferred to North Portage Pit (Pit A). The average concentration measured in 2023 in the SC TSF Reclaim Pond was approximately 4.1 mg N/L. Thus, using this average concentration value of ammonia, the total load of ammonia transferred to Portage Pit A in 2023 is evaluated at approximately 6,896 kg of ammonia (expressed as N).
- Approximately 677,047 m^3 of pond water from the Central Dike D/S Pond were transferred to North Portage Pit (Pit A). The average concentration measured was approximately 20 mg N/L. Thus, using this average concentration value of ammonia, the total load of ammonia transferred to the North Portage Pit in 2023 is evaluated at approximately 13,541 kg of ammonia (expressed as N). This additional load of ammonia in the North Portage Pit is taken into account in this year's forecasting model.
- Approximately 3,653,292 m^3 of Reclaim Water is transferred with the tailings in South Portage Pit (Pit E). Approximately 48% of this volume is entrapped in the pore water of the tailings, leaving 1,899,712 m^3 in the pit. The average concentration measured in the mill effluent was approximately 87.76 mg N/L, resulting in a total load evaluated at approximately 165,841 kg of ammonia (expressed as N).

This additional load of ammonia to Portage Pit A and Pit E is considered in this year's forecasting model.

3.0 Updated Mass Balance Model

3.1 Description

The water quality updated mass balance model presented in this Technical Note was developed to help forecast trends in water quality in the Portage Area of Meadowbank for different parameters of interest. The starting date for the model was arbitrarily set for January 2014 in order to keep in-line with the previous models.

For this year, the end date of the model is set at the end of pit reflooding, which is projected to be in July 2041. Per the Meadowbank ICRP 2019 update, the Reclaim Water stored in the pits shall be treated and discharged to Third Portage Lake. Once the cover will be installed on the tailings if deemed required, pit flooding will commence with natural runoff and transfer of water from Third Portage Lake.

The main objectives for this year's model are to:

- Forecast the Reclaim Water quality at the end of in-pit deposition to help define the water treatment system that shall be required at the start of closure;
- Forecast the water quality following pit reflooding.

This mass balance model was based on the following:

- Flows and volumes provided in the Water Balance – 2023-IPD Plan (Agnico 2023);
- Assumptions presented below in **Section 3.2**;
- Chemical analyses for ST-21 (North and South Cell TSF Reclaim Pond) (2014-2023);
- Chemical analyses for Third Portage Lake (2015);
- Chemical analyses for the Mill Effluent (samples taken in 2023);
- Chemical analyses for Portage North Pit (ST-17, Pit A) and Portage South Pit (ST-19, Pit E) (from 2013 to 2023);
- Chemical analysis for Goose Pit (samples taken in the sump pit and in the lake, ST-20) (from 2013 to 2023);
- East Dike (ST-1) seepage and Saddle Dam 3 (ST-32) sumps sampled in 2023;
- Stormwater management pond water sampled in 2018;
- Saddle Dam 1 seepage (ST-S-2) and Portage RSF runoff (ST-16) (2015 to 2023);
- Portage Pit A and Pit E seepage water quality sampled from 2017 to 2020 and Goose Pit seepage water quality sampled from 2017 to 2019.

Furthermore, this year's water quality forecast mass balance model will also include the following changes:

- Deposition of Whale Tail pit tailings in Goose Pit (2019) and Portage Pit E;
- End of tailings deposition projected for June 2026.

3.2 Assumptions

Table 3-1 summarizes the assumptions used in the development of the water quality forecast model for the Meadowbank site.

Table 3-1: Water Quality Forecast Model Assumptions

PARAMETERS	ASSUMPTIONS
Water quality forecast model	▪ Mass balance model. ▪ Assume completely mixed system. ▪ Ponds to model: North and South Cell TSF Reclaim Pond, Goose Pit and North Portage Pit (Pit A) and South Portage Pit (Pit E). ▪ Portage Pit E and Pit A are hydraulically connected through the waste rock deposited between both pits. For simplification of the model, the parameters are assumed to be inert: they do not degrade or react with other elements in the system, with the exception of cyanide.
Model time period	▪ Start: January 2014. ▪ End: July 2041 (projected end date of pit reflooding).
Input Source Terms: **Mill Effluent / Pore Water**	▪ Mill Effluent is the main source terms for metal contaminants, cyanide, sulphate, chloride, ammonia and nitrate in the Reclaim Pond. ▪ Mill Effluent quality is assumed to be constant over time for all parameters. ▫ Assumed two different types of Mill Effluent quality: – One when Portage/Vault ore is processed: 2014 to June 2019; – One when Whale Tail ore is processed: July 2019 to June 2026. ▫ From 2015 to June 2019, the average Mill Effluent quality measured for that year was considered in the model, based on the processing of Portage/Vault ore. ▫ From July 2019 to the end of the model, the average Mill Effluent quality measured for that year was considered in the model, based on the processing of Whale Tail ore. Adjustment factors were applied for certain parameters so that the forecasted values followed a similar trend to that of the measured values. ▪ As of April 2021, consider additional brine (i.e., chloride and TDS) loading the pore water contained in the underground ore mined at the Whale Tail site. ▪ At closure, the pore water released from tailings consolidations is expected to be very low since consolidation occurs rapidly during operation. In the model, the volume of reclaim water released from the tailings due to consolidation is taken into account each month when tailings are actively deposited in the NC and SC TSF and in the pits.

PARAMETERS	ASSUMPTIONS
Other Input Source Terms	▪ The following source terms are considered in the model, based on measured water quality data: ▫ Mill effluent; ▫ Portage Pit E and Pit A transfer; ▫ Goose Pit transfer; ▫ Stormwater Management Pond; ▫ Portage RSF; ▫ Saddle Dam 1 sump; ▫ Saddle Dam 3 sump; ▫ East Dike seepage. ▪ Precipitation runoff loading: ▫ Assumed negligible loading and to have similar water characteristics as Third Portage Lake water. ▪ Assumed constant water quality for each stream.
Input Source Terms: **Pit seepage loading**	▪ Seepage flow considered into Goose Pit and Portage Pit based on the hydrogeological modelling results conducted for the in-pit deposition project (SNC-Lavalin, 2018b). ▪ Seepage quality based on the average water quality measured from the seepages sampled in the pits. ▪ Assumed constant water quality for each seepage stream.
Input Source Terms: **North and South Cell TSF after Closure**	▪ Assumed that the water accumulated in closed North and South Cell TSF is transferred to Portage Pit and will have a water quality similar to non-contact runoff water once closure work is completed.
Cyanide modelling	▪ The total cyanide in the TSF Reclaim Pond is comprised of free cyanide and metal-cyanide complexes (weak and strong metal cyanide complexes). As per discussions with Agnico, most of the iron and metal-cyanide complexes are precipitated in the mill. However, since the reaction is not complete or perfect, some dissolved iron- and metal-cyanide complexes are expected to remain in the Mill Effluent. Therefore, it was assumed that 10% of the total cyanide concentration was bound as strong iron-cyanide complexes, and that another 10% of the total cyanide concentration was present as weak metal-cyanide complexes (cyanide bound with copper, zinc, and nickel). The balance is presented as free cyanide (i.e., HCN and CN-). This agrees with values observed at other gold mine tailings sites (Simovic, 1984). These same proportions are assumed to apply to the cyanide at the Mill Effluent. ▪ For this model, natural cyanide degradation is only considered for the summer months.

PARAMETERS	ASSUMPTIONS
Water treatment	▪ For this analysis, it is assumed that no treatment will take place at the North or South Cell TSF Reclaim Pond or at the Portage or Goose Pits during in-pit deposition. ▪ During the closure, Reclaim Water will be pumped to a water treatment plant and discharged to the environment. ▪ Projected water treatment period of the Reclaim Water in the pits: ▫ Portage Pits: January 2031 to December 2038; ▫ Goose Pit: July 2028 to January 2031. ▪ Water treatment to be done to meet approved effluent criteria and to allow cover construction if deemed necessary. ▪ The closure schedule for the overall Project is based on the preliminary closure methods and strategies discussed in the Meadowbank ICRP. Schedule may be modified based on monitoring and water quality results. ▪ It is anticipated that the schedule will be refined throughout the Project life as the designs are advanced, and the closure methods and strategies are further developed.
Pit reflooding	▪ Pits shall be reflooded by natural runoff from the site and active transfer of water from Third Portage Lake. ▪ Period of pit reflooding: January 2039 to July 2041.

3.3 Limitations

The limitations of the Meadowbank water quality mass balance model and ensuing results and conclusions presented in this Technical Note are listed below:

1. In order to simplify the model, the mass balance model assumes that the pond and pits are completely mixed systems. Consequently, the results from this model provide an indication of the concentrations in the ponds and pits and should not be considered as an absolute value at this time. Future monitoring results both for flows and water quality will provide for a better indication of concentrations of contaminants.
2. The mass balance model is based on the water quality analysis results provided by Agnico.
3. The model does make some allowances for the impact that changes in the TSF will have on the TSF Reclaim Pond water quality over time (i.e., water body surface area on natural cyanide degradation in the summer months, free water volume in the pond on the forecasted concentration measurements).
4. The model is based on a monthly time step and the resulting concentrations provided represent monthly values.
5. It should be noted at this point that the model should be used to evaluate at a high level the impact of Mill Effluent on the future water quality in the North and South Cell TSF Reclaim Pond and Portage and Goose Pits. The model provides only an order of magnitude forecast of the concentration trends in these areas.
6. Furthermore, this model is intended as a mass balance model for the Portage Area and should be updated and calibrated on a yearly basis as additional water quality data, pond volumes, and flows in the Portage Area become available. Refer to **Section 6.2** for recommendations on improving the mass balance.

3.4 Input Parameters

3.4.1 General

The mass balance model for the Meadowbank site was developed originally in 2012 to forecast the long-term concentration of cyanide, copper, iron, ammonia, nitrate and chloride in the North and South Cell TSF Reclaim Pond and in Portage and Goose Pits. Since 2015, the report also evaluated a broader selection of parameters: alkalinity, hardness, aluminum, silver, arsenic, barium, cadmium, chromium, manganese, mercury, molybdenum, nickel, lead, selenium, zinc, fluoride, sulphate and total dissolved solids (TDS).

The mass balance model is based on the assumptions presented in **Section 3.2** and on the following input parameters:

- Mill effluent concentration (refer to **Section 3.4.2** for more details);
- SFE leaching test results conducted in 2019 on tailings from ores from Vault and Portage Pit and test results conducted in 2023 from ores from Whale Tail Pit (concentration in the liquid portion) were used to compute the loading coming from the leaching of the tailings.
- Initial concentration in the North and South Cells TSF Reclaim Pond;
- Initial concentration in the Portage and Goose Pits;
- Runoff from the Portage RSF;
- Sumps from Saddle Dam 1 (ST-S-2), Saddle Dam 3 (ST-32) and East Dike seepage (ST-8);
- Runoff water quality similar to Third Portage Lake;
- Stormwater Management Pond concentration used to compute the influent loading to the TSF Reclaim Pond;
- Goose Pit and Portage Pit seepage estimated water flow and water quality data; and
- Agnico 2023 Water Balance which defines all of the input and output flows in the North and South Cell TSF, CDDP, Portage Pit and Goose Pit.

3.4.2 Mill Effluent Concentration

The Mill Effluent concentrations considered for the input parameters of the mass balance are divided into three types:

- Type 1: Based on the ore produced from Portage/Goose/Vault pits for model years between 2014 and June 2019. For each model year, the characteristics of the Mill Effluent are based on the yearly average measured concentrations for samples taken for that year. The average concentrations considered in the model between 2015 and 2019 are presented in **Table 2-5**.
- Type 2: Based on the ore produced from Whale Tail pit as of 2019. For each model year, the characteristics of the Mill Effluent are based on the yearly average measured concentrations for samples taken that year. The average concentrations considered in the model between 2019 and 2023 are also presented in **Table 2-5**.
- Type 3: For the future modelling years from 2023 to 2026, the same adjusted Mill Effluent quality considered for the model year 2023 was used.

Please note the items below on the parameters used for the Mill Effluent when processing Meadowbank Mine site ore for the updated water quality forecast model based on the 2023 WMP:

- Mill Effluent adjustment factors:
  - Adjustment factors were applied to some constituents measured in the Mill Effluent to obtain forecasted concentrations that are in the same order of magnitude as the measured values.
- Ammonia, Chloride, Sulphate and TDS are present in the Mill Effluent due to the following processes in the mill:
  - Ammonia is present due to the hydrolysis of cyanate to ammonia. The concentration of cyanate is proportional to the concentration of cyanide removed in the cyanide destruction system;
  - Chloride is present due to the continued use of calcium chloride as a dust suppressant in the mill and crusher;
  - Sulphates are present due to the oxidation of sulphide produced in the ore; and
  - The overall TDS of the Mill Effluent will continue to increase due to the increase in ammonia, chloride, and sulphate.
- Copper, Nitrate, Total Cyanide and Chloride in the North Cell:
  - Higher concentrations of the listed parameters were considered for the Mill Effluent when tailings were deposited in the North Cell TSF in 2014. These values were selected based on the measured values from the North Cell TSF Reclaim Pond.

Table 3-2 presents the adjusted Mill Effluent concentration considered in the model from July 2019 to the end of the LOM.

Table 3-2: Mill Effluent Concentration Selected for Mass Balance Model from July 2019 to end of LOM

Parameters (mg/L)	Model Year 2019	Model Year 2020	Model Year 2021	Model Year 2022	Model Year 2023-2026
Alkalinity	77	86	68	83	78
Hardness	1658	1511	1392	1750	1940
Total Dissolved Solids (TDS)	3460	3544	5908	6809	8084
Aluminum (Al)	1.0953	1.7270	0.5684	2.3224	5.2596
Silver (Ag)	0.0018	0.0024	0.0080	0.0033	0.0028
Arsenic (As)	2.7020	0.3619	0.4670	0.2333	0.2962
Barium (Ba)	0.6147	0.0987	0.1219	0.1378	0.1299
Cadmium (Cd)	0.0035	0.0170	0.0003	0.0004	0.0006
Chromium (Cr)	0.3496	0.6540	0.0261	0.0901	0.1833
Copper (Cu)	9.1487	6.3693	8.2979	18.9212	9.2593
Iron (Fe)	4.0173	2.7862	0.9676	3.0234	5.7881
Manganese (Mn)	0.2910	0.2351	0.1064	0.2118	0.4082
Mercury (Hg)	0.00001	0.00001	0.00002	0.00001	0.00011
Molybdenum (Mo)	0.0972	1.0134	0.1244	0.1260	0.1498
Nickel (Ni)	7.6640	2.8217	6.8443	6.6183	1.9984
Lead (Pb)	0.8460	0.0205	0.0075	0.0245	0.0541
Selenium (Se)	0.1432	0.1436	0.1886	0.2983	0.4240
Strontium (Sr)	1.3833	1.5081	1.9413	3.4075	4.1745
Thallium (Tl)	0.00183	0.00005	0.00002	0.00004	0.00009
Uranium (U)	0.0381	0.0563	0.0252	0.0298	0.0414
Zinc (Zn)	0.2723	0.1431	0.0041	0.0082	0.0186
Chloride	767	411	646	935	886
Fluoride (F)	0.30	0.28	0.20	0.18	0.19
Sulphate (SO_4)	2185	1800	1967	2958	2316
Total Cyanide (CNt)	12	25	24	37	35
Total Ammonia (NH_3-NH_4)	75	65	60	112	123
Nitrate (NO_3)	13	9	12	28	46

Notes:

Grey highlighted cells indicate values that were increased with an adjustment factor to obtain forecasted concentrations that are in the same order of magnitude as the measured values.

Green highlighted cells indicate values that were decreased with an adjustment factor to obtain forecasted concentrations that are in the same order of magnitude as the measured values.

3.4.3 Concentrations Used in the Model

As noted previously, the mass balance model arbitrarily begins in January 2014 to fit the previous models. The initial concentrations selected for the following streams are based on the following:

- North Cell TSF Reclaim Pond corresponds to the January 8th, 2014 chemical analysis results from station ST-21.
- Concentrations selected for the South Cell TSF Reclaim Pond (former Attenuation Pond) correspond to the twelve (12) months (2014) average concentrations' results from station ST-18 (current Attenuation Pond). When there was no or little data available, the average values from 2010 to 2014 were used. In general, the concentrations observed in the Attenuation Pond had little variation from one month to the other.
- The initial concentrations of all parameters in the Portage and Goose Pits were assumed to be the average of 2013. For Portage Pit, the average concentrations measured in 2013 in Pit E (ST-19) were used. For Goose Pit, the average concentrations measured in 2013 in the Goose Pit sump (ST-20) were used.

For the other water inputs, the water quality was based on the following:

- Runoff from the Portage RSF is based on the average concentration measured in 2015 to 2023 at sampling station ST-16.
- Saddle Dam 1 sump that is transferred to the North Cell is based on the average concentration measured from 2015 to 2023 at sampling station ST-S-2.
- Saddle Dam 3 sump that is transferred to the South Cell is based on the average concentration measured from 2016 to 2023 at sampling station ST-32.
- East dike seepage quality is based on the average concentrations measured in 2015 to 2023 at sampling stations ST-8 and ST-S-1.
- Stormwater Management Pond quality is based on the value measured in July 2018.
- Surface runoff water is assumed to be of similar quality to that of Third Portage Lake. The water quality for Third Portage Lake is based on the average concentration obtained in summer 2015 in the East Basin.

The average leaching rate inferred from the results obtained from the SFE Leach Tests conducted on the tailings produced from Portage and Vault ore bodies in 2019 were used to account for possible leaching of contaminants from the tailings. The SFE Leach Tests conducted on the tailings produced from the Whale Tail ore bodies in 2023 were used to account for possible leaching of contaminants from this type of tailings.

Table 3-3 summarizes the leaching rates used in the model while **Table 3-4** summarizes the water quality characteristics for various input source streams used in the water quality forecast model based on total metals. Measurements that are higher than CCME guidelines for Protection of Aquatic Life are also highlighted in **Table 3-4**, which are used for comparison purposes only.

Table 3-3: Leaching Rate Used in Water Quality Forecast Model

PARAMETERS	UNITS	LEACHING OF TAILS FROM PORTAGE/VAULT (kg/ton)	LEACHING OF TAILS FROM WHALE TAIL PIT (kg/ton)	LEACHING OF TAILS FROM WHALE TAIL PIT (kg/ton)
		From SFE Leach Test- Avg 2019 tests	From SFE Leach Test- Avg 2022 tests	From SFE Leach Test- Avg 2023 tests
Alkalinity	mg $CaCO_3$/L	3.90E-02	2.57E-02	4.02E-02
Hardness	mg $CaCO_3$/L	1.89E-01	2.23E-01	2.58E-01
Total Dissolved Solids (TDS)	mg/L	0 (1)	0 (1)	0 (1)
Total Aluminum (Al)	mg/L	8.67E-05	6.25E-05	4.59E-05
Total Silver (Ag)	mg/L	2.50E-08	2.02E-07	1.85E-07
Total Arsenic (As)	mg/L	1.26E-05	6.76E-04	3.22E-04
Total Barium (Ba)	mg/L	1.13E-05	3.99E-05	4.03E-05
Total Cadmium (Cd)	mg/L	0 (1)	6.07E-08	6.15E-08
Total Chromium (Cr)	mg/L	1.20E-04	1.83E-07	9.00E-08
Total Copper (Cu)	mg/L	1.54E-06	2.79E-06	2.15E-05
Total Iron (Fe)	mg/L	1.34E-04	1.55E-04	1.20E-04
Total Manganese (Mn)	mg/L	1.57E-05	1.25E-05	6.98E-05
Total Mercury (Hg)	mg/L	6.67E-09	5.00E-09	5.45E-09
Total Molybdenum (Mo)	mg/L	4.63E-05	4.11E-05	3.38E-05
Total Nickel (Ni)	mg/L	1.13E-06	1.58E-05	6.07E-05
Total Lead (Pb)	mg/L	6.67E-08	1.33E-07	1.48E-07
Total Selenium (Se)	mg/L	1.43E-06	2.39E-05	2.20E-05
Total Strontium (Sr)	mg/L	2.44E-04	4.50E-04	5.35E-04
Total Thallium (Tl)	mg/L	9.00E-09	6.68E-09	1.09E-08
Total Uranium (U)	mg/L	9.30E-07	2.86E-07	6.78E-07
Total Zinc (Zn)	mg/L	1.00E-06	1.00E-06	1.18E-06
Chloride	mg/L	0 (1)	0 (1)	0 (1)
Fluoride (F)	mg/L	3.40E-04	1.63E-04	1.63E-04
Sulphate (SO_4)	mg SO_4/L	2.30E-01	2.94E-01	3.26E-01
Total Cyanide (CNt)	mg/L	0 (1)	0 (1)	0 (1)
Total Ammonia (NH_3 + NH_4)	mg N/L	3.10E-03	3.89E-03	3.89E-03
Nitrate (NO_3)	mg N/L	3.00E-04	1.53E-03	1.53E-03

Note:

1. No data available. Assume negligible.

Table 3-4: Input Source Stream Concentrations used in the Water Quality Forecast Model

PARAMETERS	UNITS	RECLAIM ST-21 NORTH CELL	ATTEN. POND / SOUTH CELL	PORTAGE RSF TO NORTH CELL	SADDLE DAM 1 SUMP TO NORTH CELL	SADDLE DAM 3 SUMP TO SOUTH CELL	EAST DIKE SEEPAGE TO PORTAGE	STORM WATER MGMT POND	THIRD PORTAGE LAKE	PORTAGE PIT ST-19	GOOSE PIT ST-20	CCME GUIDELINES	WATER LICENCE MEADOWBANK MAX. AVG. CONC.
		Initial condition for model January-08-14	Initial condition for model Average 2014	Average 2015 to 2023 sampled at ST-16	Average 2015 to 2023 sampled at ST-S-2	Average 2016 to 2023 sampled at ST-32	Average 2015 to 2023 sampled at ST-8 and ST-S-1	July 2018	Average-East Basin Summer 2015	Initial Condition for Model Average 2013	Initial Condition for Model Average 2013	Long Term Based on 3PL quality	Part F of License
Alkalinity	mg $CaCO_3$/L	135	106	68	55	132	36	129	9.1	72.2	129.8	n/a	n/a
Hardness	mg $CaCO_3$/L	1329	362	143	268	220	79	134	12	274	130	n/a	n/a
Total Dissolved Solids (TDS)	mg/L	1329	1437	215	374	343	131	293	22	320	326	n/a	1400
Total Aluminum (Al)	mg/L	0.119[1]	0.010[1]	0.295	0.537	1.876	0.04416	0.229	0.0075	0.1720	0.3708	0.16[7]	1.5
Total Silver (Ag)	mg/L	0.0001[1]	0.0001[1]	0.0001	0.0001	0.0001	0.00099	0.0001	0.000005	0.00005	0.00005	0.00025	n/a
Total Arsenic (As)	mg/L	0.032[1]	0.008[1]	0.022	0.024	0.024	0.00107	0.004	0.0005	0.0202	0.0099	0.005	0.3
Total Barium (Ba)	mg/L	0.094[1]	0.051[1]	0.016	0.032	0.060	0.16151	0.020	0.0037	0.0110	0.0219	n/a	n/a
Total Cadmium (Cd)	mg/L	0.00160	0.00010	0.00003	0.00004	0.00004	0.00023	0.00001	0.000003	0.000240	0.000000	0.00004	0.002
Total Chromium (Cr)	mg/L	0.0008	0[4]	0.003	0.006	0.017	0.02259	0.002	0.0001	0.0027	0.0026	0.001	n/a
Total Copper (Cu)	mg/L	9.135	0.033[1]	0.014	0.007	0.017	0.00129	0.003	0.0006	0.0042	0.0069	0.002	0.1
Total Iron (Fe)	mg/L	0.140[1]	0.047[1]	0.763	1.246	3.869	0.62951	0.880	0.017	1.5	0.7	0.3	n/a

PARAMETERS	UNITS	RECLAIM ST-21 NORTH CELL	ATTEN. POND / SOUTH CELL	PORTAGE RSF TO NORTH CELL	SADDLE DAM 1 SUMP TO NORTH CELL	SADDLE DAM 3 SUMP TO SOUTH CELL	EAST DIKE SEEPAGE TO PORTAGE	STORM WATER MGMT POND	THIRD PORTAGE LAKE	PORTAGE PIT ST-19	GOOSE PIT ST-20	CCME GUIDELINES	WATER LICENCE MEADOWBANK MAX. AVG. CONC.
		Initial condition for model January-08-14	Initial condition for model Average 2014	Average 2015 to 2023 sampled at ST-16	Average 2015 to 2023 sampled at ST-S-2	Average 2016 to 2023 sampled at ST-32	Average 2015 to 2023 sampled at ST-8 and ST-S-1	July 2018	Average-East Basin Summer 2015	Initial Condition for Model Average 2013	Initial Condition for Model Average 2013	Long Term Based on 3PL quality	Part F of License
Total Manganese (Mn)	mg/L	0.065[1]	2.898[1]	0.801	0.187	0.583	0.09390	0.410	0.002	0.257	0.108	***0.23***	***n/a***
Total Mercury (Hg)	mg/L	0.000000	0.000117	0.010263	0.000097	0.000016	0.00001	0.000005	0.000003	0.000080	0.000005	***0.000026***	***0.0004***
Total Molybdenum (Mo)	mg/L	0.596[1]	0.026[1]	0.014	0.011	0.007	0.03057	0.004	0.0002	0.0664	0.0082	***0.073***	***n/a***
Total Nickel (Ni)	mg/L	0.277[1]	0.041[1]	0.017	0.034	0.073	0.00092	0.011	0.00059	0.00394	0.07973	***0.025***	***0.2***
Total Lead (Pb)	mg/L	0.002[2]	0.000[1]	0.001	0.003	0.004	0.00051	0.0002	0.00003	0.00131	0.00192	***0.001***	***0.1***
Total Selenium (Se)	mg/L	0.075[1]	0.003[1]	0.001	0.001	0.001	0.00260	0.003	0.00003	0.00183	0.00080	***0.001***	***n/a***
Total Strontium (Sr)	mg/L	0.743[3]	0[4]	0.151	0[4]	0[4]	0[4]	0.29	0.0132	0[4]	0[4]	***n/a***	***n/a***
Total Thallium (Tl)	mg/L	0.005[3]	0[4]	0.001	0.001	0[4]	0.00070	0.0004	0.000005	0.0020	0.0016	***0.0008***	***n/a***
Total Uranium (U)	mg/L	0.010[3]	0[4]	0.005	0[4]	0[4]	[4]	0.002	0.000049	0[4]	0[4]	***0.015***	***n/a***
Total Zinc (Zn)	mg/L	0.010[1]	0.010[1]	0.004	0.088	0.017	0.00353	0.005	0.002	0.016	0.015	***0.01***	***0.4***
Chloride	mg/L	1035	98	5	7	15	7.83739	52	0.793	26.117	24.978	***120***	***1000***
Fluoride (F)	mg/L	0.180	0.565	0.184	0.193	0.292	0.12146	0.860	0.0793	0.3900	0.4922	***0.12***	***n/a***
Sulphate (SO_4)	mg SO_4/L	2115	542	65	212	126	9.44783	30	5	224	77	***128***[5]	***n/a***

PARAMETERS	UNITS	RECLAIM ST-21 NORTH CELL	ATTEN. POND / SOUTH CELL	PORTAGE RSF TO NORTH CELL	SADDLE DAM 1 SUMP TO NORTH CELL	SADDLE DAM 3 SUMP TO SOUTH CELL	EAST DIKE SEEPAGE TO PORTAGE	STORM WATER MGMT POND	THIRD PORTAGE LAKE	PORTAGE PIT ST-19	GOOSE PIT ST-20	CCME GUIDELINES	WATER LICENCE MEADOWBANK MAX. AVG. CONC.
		Initial condition for model January-08-14	Initial condition for model Average 2014	Average 2015 to 2023 sampled at ST-16	Average 2015 to 2023 sampled at ST-S-2	Average 2016 to 2023 sampled at ST-32	Average 2015 to 2023 sampled at ST-8 and ST-S-1	July 2018	Average-East Basin Summer 2015	Initial Condition for Model Average 2013	Initial Condition for Model Average 2013	Long Term Based on 3PL quality	Part F of License
Total Cyanide (CNt)	mg/L	8	0.346	0.002	0.010	0.012	0.0025	0.002	0.0005	0.0393	0.0033	***0.005***	***0.5***
Total Ammonia ($NH_3 + NH_4$)	mg N/L	37	10	0.216	0.362	1.852	0.30490	1.320	0.015	3.6	7.9	***1.83***	***16***
Nitrate (NO_3)	mg N/L	26	1	4	7	10	0.28322	0.06	0.0331	12.7	5.1	***2.94***[6]	***20***

Notes:

1. *No total concentration value measured. Estimated using dissolved concentration value divided by the ratio of dissolved/total concentration values from sample taken on July 1, 2014 from the North Cell.*
2. *Used dissolved concentration value when the value is higher than the total concentration measured.*
3. *No data available for sample taken on January 8, 2014. Used data sampled on July 1, 2014.*
4. *No data. Assume negligible.*
5. *Threshold value for sulphate based on BC Environment guidelines for the protection of aquatic life for very soft water (0-30 mg/L) (April 2013).*
6. *Value based on the threshold concentration for classification of an oligotrophic lake in terms of nutrient concentrations (Nurnberg 1996).*
7. *Aluminum criterion in fresh water is calculated using the equation described in Appendix B of the Federal Environmental Quality Guidelines (FWQG).*
8. *Pink cells indicate values higher than CCME Guidelines (Long Term), or other criterion, based on Third Portage Lake water quality. Provided as a guide to help identify potential parameters of concern.*

3.5 Cyanide Decay

The water quality model developed during this study takes natural cyanide degradation into account: the most important mechanism in the natural degradation of cyanide is the volatilization of hydrogen cyanide (HCN). In fact, tests carried out on tailings in Canada found that volatilization of HCN accounted for 90% of cyanide removed from solution in a tailing's impoundment (Botz and Mudder, 2000). Oxidation of cyanide ions (CN-) to orthocyanate (OCN) with atmospheric oxygen is possible but extremely slow when compared to HCN volatilization. Similarly, the probability of microbial degradation of cyanide to carbon dioxide, ammonia, nitrite, and nitrate is low due to the limited presence of microorganisms and low nutrient levels in tailings water.

Cyanide volatilization can be summarized as a two (2) step process presented in **Figure 3-1** below:

- First, metal-cyanide complexes dissociate to free cyanide (HCN and CN-) based on a first-order decay constant (k1). Note that: (1) equilibrium between HCN and CN- is based on pH; (2) a first order decay constant signifies that the final concentration (Cf) can be estimated as Cf=Cie-kt, where k is the first order decay constant.
- It is then followed by HCN volatilization based on a first-order decay constant (kv).
- Both decay constants k1 and kv depend on the presence of UV light (sun) and air (wind), and water temperature and pH. The volatilization decay constant, kv, also depends on the surface area to volume ratio of the pond.

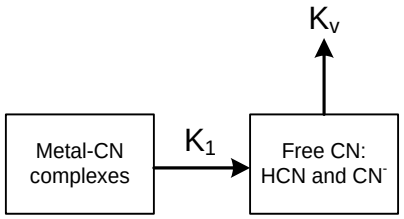


Figure 3-1: Cyanide Volatilization Process

Since both constants depend to a great extent on temperature, UV light and air, separate constants were determined for summer (May to October) and winter (November to April) conditions. The decay constants were based on laboratory values recorded by Simovic (1984). The assumptions made for the development of the cyanide decay constants were the following:

- Summer conditions: An average water temperature of 10 °C, presence of air and UV light. Furthermore, since metal-CN dissociation and HCN volatilization by air and UV is particularly important in the summer months, the decay constant factors in the physical property of the tailing's impoundment, represented by the open surface area to volume ratio. Multiplying the decay constant by this ratio takes into account the accelerated reaction due to a large exposed surface area of the Reclaim Pond.
- Winter conditions: No natural cyanide degradation occurs.

- The pH in the Reclaim Pond is maintained constant at 8.0, which means that most (94%) of the free cyanide will be present as HCN. Note that as the pH decreases, the proportion of free cyanide as HCN increases, which increases cyanide degradation through volatilization.

As stated in **Section 3.2**, it was assumed that 10% of the total cyanide concentration was bound as iron-cyanide complexes, another 10% as metal (copper, nickel and zinc) cyanide complexes, and 80% as free cyanide. This agrees with values observed at other gold mine tailings impoundments.

It should be noted that these decay constants (referred to as k0) were established based on an hourly time step and were not deemed reliable for longer time periods (i.e., months). Therefore, the summer and winter decay constants obtained based on volatilization conditions and assumptions were calibrated to represent more accurately and conservatively the expected cyanide concentrations on a monthly time step.

Table 3-5 presents the assumptions and cyanide decay constants used in the water quality model.

Table 3-5: Natural Cyanide Degradation – Assumptions and Constants

DECAY CONSTANT	DESCRIPTION	WINTER CONDITIONS			SUMMER CONDITIONS		
		Conditions	k_0	Calibrated value (k)	Conditions	k_0	Calibrated value (k)
K_1	Metal-CN dissociation	4° No air No UV	n/a	n/a	10° Air (wind) UV (sunlight)	0.01443/ hr	2.11/month
K_V	HCN volatilization		n/a	n/a		2.382 cm/hr	58.0 m/month

3.6 Portage and Goose Pit Groundwater Seepage Loading

Loadings from groundwater seepages to Portage and Goose Pits shall be estimated based on the following information:

- In the hydrogeological modelling of the groundwater flow in Goose Pit and Portage Pit, the seepage flow entering each pit was estimated at: 196 m^3/day in Portage Pit and 423 m^3/day in Goose Pit (AtkinsRéalis 2018b). This seepage flow is assumed to be constant over the modelling period;
- The average concentration measured from samples taken of the pit seepages in each pit between 2017 and 2019 shall be used to estimate the loadings to each pit assuming a constant seepage flow rate.

Table 3-6 presents the average concentration considered for seepages reporting to Goose Pit and Portage Pit in the water quality forecast model.

Table 3-6: Pit Seepage Water Quality Considered in the Model

Parameters	Units	Portage Pit Seepage	Goose Pit Seepage
		Average Data from 2017-2020	Average Data from 2017-2019
Alkalinity	mg CaCO3/L	69.8	80.3
Hardness	mg CaCO3/L	523	81
Total Dissolved Solids (TDS)	mg/L	813	175
Total Aluminum (Al)	mg/L	0.63	0.127
Total Silver (Ag)	mg/L	0.0000355	0.00005
Total Arsenic (As)	mg/L	0.0217	0.0022
Total Barium (Ba)	mg/L	0.0318	0.0417
Total Cadmium (Cd)	mg/L	0.000251	0.000013
Total Chromium (Cr)	mg/L	0.0002	0.0001
Total Copper (Cu)	mg/L	0.0011	0.0020
Total Iron (Fe)	mg/L	1.6	5.1
Total Manganese (Mn)	mg/L	0.357	0.043
Total Mercury (Hg)	mg/L	0.000005	0.000171
Total Molybdenum (Mo)	mg/L	0.0801	0.0093
Total Nickel (Ni)	mg/L	0.05101	0.00682
Total Lead (Pb)	mg/L	0.0114	0.00015
Total Selenium (Se)	mg/L	0.00257	0.00071
Total Strontium (Sr)	mg/L	0.74650	0.22333
Total Thallium (Tl)	mg/L	0.00023	0.00035
Total Uranium (U)	mg/L	0.06960	0.00333
Total Zinc (Zn)	mg/L	0.003	0.007
Chloride (Cl)	mg/L	45.5	16.2
Fluoride (F)	mg/L	0.2720	0.8333
Sulphate (SO_4)	mg SO_4/L	48	0
Total Cyanide (CN_t)	mg/L	0.0119	0.0023
Total Ammonia (NH_3 + NH_4)	mg N/L	1.1	0.3
Nitrate (NO_3)	mg N/L	17.9	0.1

4.0 Water Quality Forecast Results

4.1 Results

The results of the mass balance model around the North and South Cell TSF Reclaim Ponds, Portage and Goose Pits are presented in **Figure 4-1** to **Figure 4-17** for the following parameters of concern that were identified in **Section 2.3**.

1. Total Cyanide
2. Total Aluminum
3. Total Arsenic
4. Total Cadmium
5. Total Copper
6. Total Iron
7. Total Lead
8. Total Mercury
9. Total Nickel
10. Total Selenium
11. Total Zinc
12. Total Ammonia
13. Nitrate
14. Total dissolved solids
15. Chloride
16. Sulphate
17. Fluoride

The graphs show the forecasted monthly concentrations of the parameters from 2014 to the end of in-pit tailings deposition in 2026 for the North and South Cell TSF Reclaim Ponds, and until the end of pit reflooding in 2041 for Portage and Goose Pits. A total of two (2) graphs are presented per parameter: the first shows the forecasted concentrations in the North and South Cells TSF Reclaim Ponds and the second shows the forecasted concentrations in the Portage and Goose Pits.

For comparison purposes only, the Water Licence, MDMER and CCME limits (refer to **Table 2-1**) were also included in the figures, where applicable.

Again, it is important to remember that the results presented in the figures in **Section 4.0** of this report are based on the input parameters presented in **Section 3.0**. These results must be reviewed while keeping in mind the assumptions and limitations described in **Sections 3.2** and **3.3**. It is also important to note that the results from this model assume that treatment of the Reclaim Pond effluent shall be undertaken following the end of in-pit deposition and that the treated water shall be discharged to the environment.

4.2 Discussions

4.2.1 Key Dates

The mass balance model presented in this Technical Note is based on the WB 2023. The following key dates are important to keep in mind while reviewing the forecasted concentration data presented in **Figure 4-1** to **Figure 4-17**:

- November 2014: The former Attenuation Pond becomes the South Cell and TSF Reclaim Pond;
- May 2015: Start of natural re-flooding of Goose Pit with surface runoff water only;
- September 2015: Transfer of 50,431 m^3 of CDDP water to Goose Pit;
- October 2015: End of deposition in the North Cell TSF;
- July 2017: Allow runoff water and ground water to accumulate in the North Portage Pit (Pit A);
- August to October 2017: Approximately 332,177 m^3 of pond water is transferred from CDDP to Goose Pit;
- August to October 2018: Deposition in North and South Cell TSF;
- April 2019: Deposition end in South Cell TSF;
- April to July 2019: Deposition resumes in North Cell TSF;
- May to July 2019: Approximately 358,156 m^3 of pond water is transferred from CDDP to Goose Pit;
- July 2019: End of processing ore from Portage/Goose/Vault pits at the mill. Start of processing of ore from Whale Tail;
- July 2019: Start of deposition of tailings from Whale Tail Pit;
- July 2019 to August 2020: Deposition of tailings in Goose Pit;
- August 2020 to June 2026: Deposition of tailings in Portage Pit E;
- Reclaim Water from Portage Pit E is returned to the mill or transferred to Portage Pit A;
- Reclaim Water from Portage Pit A is also returned to the mill or transferred to Portage Pit E or Goose Pit;
- Reclaim Water from Goose Pit is transferred to Portage Pit A;
- Allow East Dike Seepage to discharge to Second Portage Lake as long as discharge criteria are met. If not, East Dike Seepage is transferred to Portage Pit A or Pit E;
- July 2020: Start of water transfer from South Cell TSF Reclaim Pond to Portage Pit A;
- As of 2020: North Cell TSF Reclaim Pond is almost completely empty. The pond is maintained empty in the subsequent years by transferring the accumulated runoff water to the South Cell TSF Reclaim Pond;
- September 2020: South Cell TSF Reclaim Pond is almost completely empty. The pond is maintained empty in the subsequent years by transferring the accumulated runoff water to Portage Pit A;
- April 2021: Start of processing at the mill of some ore that comes from the underground mine at Whale Tail. Only a fraction of the ore shall come from the underground mine while the balance shall come from the pit operation at Whale Tail;
- June 2026: End of in-pit tailings deposition;
- July 2026 Start of closure activities;

- July 2028 to December 2038: Treatment of Reclaim Water in Portage and Goose Pits. Water treatment to be done to meet approved effluent criteria and to allow cover construction if deemed necessary. The closure schedule for the overall Project is based on the preliminary closure methods and strategies discussed in the Meadowbank ICRP. It is anticipated that the schedule will be refined throughout the Project life as the designs are advanced, and the closure methods and strategies are further developed;
- January 2039 to July 2041: Active pit reflooding of Portage and Goose Pits;
- August 2041: End of closure (only if water criteria are met).

4.2.2 Forecasted Concentrations in the North and South Cell TSF Reclaim Pond

The forecasted concentrations in the North and South Cell TSF Reclaim Pond are presented in **Figure 4-1** to **Figure 4-17**.

Based on the model for forecasting concentrations in the North and South Cell TSF Reclaim Pond, the following notes and observations can be made:

1. For the metal parameters, the fluctuations observed from 2014 to 2019 and from 2021 to 2023 are primarily due to seasonal variability (runoff from nearby areas, snow and ice melt, temperature, etc.). Furthermore, the forecasted concentrations are generally more conservative than the field measurements.
2. Natural degradation of cyanide during summer plays a significant role in reducing the measured concentration of total cyanide in the TSF Reclaim Ponds and it is considered in the forecasting model. The forecasted concentrations are generally more conservative than the field measurements, in particular the ones from 2014 to 2016 and from 2021 to 2023.
3. For ammonia, it is important to note that:
    a. The mass balance model developed here does not include seasonal variability (sunlight, microbial or algae degradation of ammonia, etc.); and
    b. Ammonia concentrations can vary significantly depending on temperature, pH, sunlight, algae activity, etc. Ammonia concentrations may be lower in the summer and higher in the winter. The forecasted concentrations in the South Cell TSF Reclaim Pond between 2014 and 2019 are more conservative than the measured values. From 2021 to 2023, ammonia concentrations decreased compared to previous years and the forecasted concentrations are more conservative than the measured values.
4. Similarly, for nitrate, it is important to remember that:
    a. The mass balance model developed here does not include seasonal variability; and
    b. Ammonia decomposes to nitrate; therefore, nitrate concentrations can vary significantly depending on temperature, pH, sunlight, algae activity, etc. Nitrate concentrations may be lower in the summer and higher in the winter. The forecasted values from 2014 to 2019 and from 2021 to 2023 are in the same range as the measured values in both cells Cell. From 2016 to 2019, nitrate concentrations decreased compared to previous years. Forecasted values are more conservative than the measured values.

5. Guidelines:

a. For comparison purposes, the forecasted concentrations in the North and South Cells TSF Reclaim Ponds for almost all the parameters are above the Water Licence discharge criteria when tailings depositions were occurring in this area, except for aluminum, arsenic (from 2014 to mid-2021), cadmium (from 2018 to mid-2024), lead, zinc, nitrate (from 2014 to mid-2024) and chloride (from 2016 to 2028). Following the end of tailings deposition, the forecasted values drop below the Water Licence limits.

b. For comparison purposes, almost all forecasted concentrations in the North and South Cells TSF Reclaim Ponds for the parameters of concern are also above the CCME guidelines for the protection of aquatic life during tailings depositions. Following deposition, the forecasted concentration drops close to or below the CCME guidelines.

c. However, it is important to note that no water in the TSF Reclaim Pond during tailings deposition is discharged to the environment. Thus, the Water Licence discharge criteria are not applicable but are rather used as a comparison herein. Also, the dikes around Portage and Goose Pits will only be breached if the water quality in those pits meets the selected discharge closure criteria.

4.2.3 Forecasted Concentration in Portage and Goose Pits

Table 4-1 presents the forecasted concentration of all parameters for Portage and Goose Pits at the end of in-pit deposition (IPD) projected to be in June 2026 and at the end of pit reflooding projected to be in July 2041.

Based on the model for forecasting of the concentrations in Portage and Goose Pits, the following notes and observations can be made:

1. The water quality forecast considers the extension of the Life of Mine at Meadowbank which adds the processing of ore body coming from the Whale Tail Pit, IVR Pit and the underground mine at the Whale Tail site. The ore body from Whale Tail Pit has a different geochemical behavior when compared to the Portage/Goose/Vault ore bodies. It has a higher potential to leach certain metals, such as arsenic, copper, and nickel.
2. The forecasted concentrations at the end of in-pit deposition are compared to the current Water Licence discharge criteria since the Reclaim Water shall be treated and discharged to the environment prior to pit reflooding. The following observations can be made for each of the parameters of concern:

a. Total Cyanide	Forecasted total concentration is projected to be higher than the Water Licence limit in Portage Pit E and Pit A and lower than this limit in Goose Pit.
b. Total Aluminum	Forecasted total concentration is projected to be higher than the Water Licence limit in Portage Pit E and Pit A and lower than this limit in Goose Pits.
c. Total Arsenic	Forecasted total concentration is projected to be higher than the Water Licence limit at the end of IPD in Portage and Goose Pits. The main source terms for this constituent are from the mill effluent and the pit seepages reporting to the pits.
d. Total Cadmium	Forecasted total concentration is projected to be higher than the Water Licence limit in Portage Pits and close to this limit in Goose Pit.

e. Total Copper	Forecasted total concentration is projected to be higher than the Water Licence limit at the end of IPD in Portage and Goose Pits. The main source terms for this constituent are from the mill effluent and the pit seepages reporting to the pits.
f. Total Iron	Elevated forecasted total concentration is projected in Portage Pit and Goose Pit. The main source terms for this constituent are from the mill effluent, surface runoff and the pit seepages reporting to the pits.
g. Total Lead	Forecasted total concentration is projected to be close to the Water Licence limit in Goose Pit at the end of deposition and lower than this limit in Portage Pits.
h. Total Mercury	Forecasted total concentration is projected to be lower than the Water Licence limit in Goose Pit and in Portage Pits.
i. Total Nickel	Forecasted total concentration is projected to be higher than the Water Licence limit at the end of IPD in Portage and Goose Pits. The main source term for this constituent is from the mill effluent reporting to the pits.
j. Total Selenium	There is no specific Water Licence limit for this constituent. However, total forecasted concentration remains higher than the CCME guidelines in Portage and Goose Pits. An increase is observed once IPD has started, suggesting that the main source term for this constituent is from the mill effluent reporting to the pits.
k. Total Zinc	Forecasted total concentration is projected to be lower than the Water Licence limit in Portage and Goose Pits.
l. Total Ammonia	Ammonia forecasted concentrations are higher than the Water Licence limit in Portage and Goose Pits at the end of IPD. A higher load of ammonia is forecasted in the pits due to the additional ammonia load coming from the mill effluent reporting to the pits (i.e., from cyanate hydrolysis).
m. Nitrate	Forecasted total concentration is projected to be higher than the Water Licence limit in Portage Pit E and lower than this limit in Goose Pit and Portage Pit A.
n. Total Dissolved Solids	Higher forecasted total concentration than the Water Licence limit is projected in Portage Pit E since tailings deposition is mainly occurring in this pit from 2019 to 2027. For Portage Pit A, reclaim water transferred from Pit E as well as natural runoff are allowed to accumulate in the pit, explaining the decrease in concentration. In that same period, for Goose Pit, natural runoff is allowed to accumulate in the pit, explaining the decrease in concentration.

o. Chloride	Forecasted concentration in Portage Pit at the end of IPD is projected to be higher than the Water Licence limit for this constituent. However, the forecasted value in Goose Pit is projected to be lower than this limit. Since 2019, the sulphate forecasted concentrations are compared against a threshold value based on BC Environment guidelines for the protection of aquatic life for very soft water (0-30 mg/L) (April 2013). There is no specific Water Licence limit for this constituent.
p. Sulphate	Forecasted concentration in Portage Pit and Goose Pit was projected to be higher than this guideline. An increase in sulphate concentration is observed once IPD has started, suggesting that the main load for this constituent comes from the mill effluent. Concentration of sulphate is expected to increase in Portage Pits (Pit A and E) due to continued deposition of tailings and decrease in Goose Pit due to water transfer to Portage Pit A.
q. Fluoride	There is no specific Water Licence limit for this constituent. However, total forecasted concentration remains higher than the CCME guidelines in Portage and Goose Pits. The fluoride load to the pits comes from the mill effluent and from pit seepages.

3. Based on the forecasted concentrations at the end of IPD, the new water treatment plant required at closure should be designed to treat and manage the following parameters of concern: **aluminum, arsenic, cadmium copper, mercury, nickel, lead, chloride, nitrate, TDS, total ammonia, and total cyanide.** The new water treatment plant should also be designed to meet **pH** and **total suspended solids** requirements.
4. The assimilative capacity of Third Portage Lake will be assessed with the objective of maintaining a baseline or guideline/protective water quality in the lake. Treated effluent discharge water criteria will be assessed based on this objective.
5. Water quality forecast at the end of pit reflooding:
    a. Pit reflooding shall begin once the Reclaim Water has been treated and discharged to the environment. Pit reflooding shall be done via natural reflooding and active transfer of water from Third Portage Lake.

It is important to note that once the water elevation in the pits reaches a level above 131 m, both Portage and Goose Pits will be hydraulically connected. For this reason, only the forecasted concentrations in the mixed Portage and Goose Pits are considered in the model.

    b. As shown in **Table 4-1**, when assuming complete mixing of both pits, most of the parameters are below the CCME guidelines. However, some total metals and elements such as aluminum, silver, arsenic, cadmium, chromium, nickel, lead, selenium, total nitrogen and total ammonia were above or close to these guidelines. As for copper and mercury concentrations, they are higher than the Water Licence limit.
    c. Total copper is higher than the Water Licence limit but is expected to be lower once the particulates are allowed to settle out in the pits.

d. For comparative purposes only, the total nitrogen equivalent concentration (i.e., sum of ammonia and nitrate) is higher than the threshold concentration for classification of an oligotrophic lake (i.e., a lake characterized by a low accumulation of dissolved nutrient salts, supporting but a sparse growth of algae and other organisms, and having a high oxygen content owing to the low organic content) in terms of nutrient concentration (Nurnberg 1996). However, the mass balance model does not consider any natural nitrogen degradation cycle that could occur over the summer months.

In summary, the forecasted values presented in this section provide an indication of the type of effluent that shall be managed and treated at the end of in-pit deposition and following pit reflooding. This information can be used to initiate the assessment of the type of water treatment system required for closure and initiate planning for water treatability testing. All of the parameters listed in **Table 4-1** shall be monitored in the pits and used to re-evaluate next year's water quality forecast model.

4.2.4 Comparison of Forecasted Values

As of 2019, in-pit tailings deposition has started in Goose Pit and Portage Pit instead of the North and South Cell TSF. For this reason, comparison of the model results shall focus on the trends forecasted in Portage and Goose Pits.

Chloride and sulphate shall be used to compare the model results since these constituents are likely to accumulate over time in the reclaim water and not precipitate out of solutions.

Figure 4-18 and **Figure 4-19** compare the forecasted value based on the Water Balance (WB) 2019, WB 2020, WB 2021, WB 2022, and WB 2023. Measured values for chloride and sulphate sampled in the pits are also presented.

Based on these figures, the following notes and observations can be made:

- The water quality forecast model based on WB 2019 overestimated the forecasted concentration for chloride in Goose and Portage Pits. The WB from 2020 to 2023 models and the current model correct the forecast to be more in line with the measured values.
- The water quality forecast model based on WB 2019 underestimated the forecasted concentration for sulphate in Goose and Portage Pits. The WB from 2020 to 2023 models and the current model correct the forecast to be more in line with the measured values.

The site Water Balance and Water Quality Forecast model will continue to be updated on a yearly basis, using the actual volumes and measured concentrations to calibrate the models.

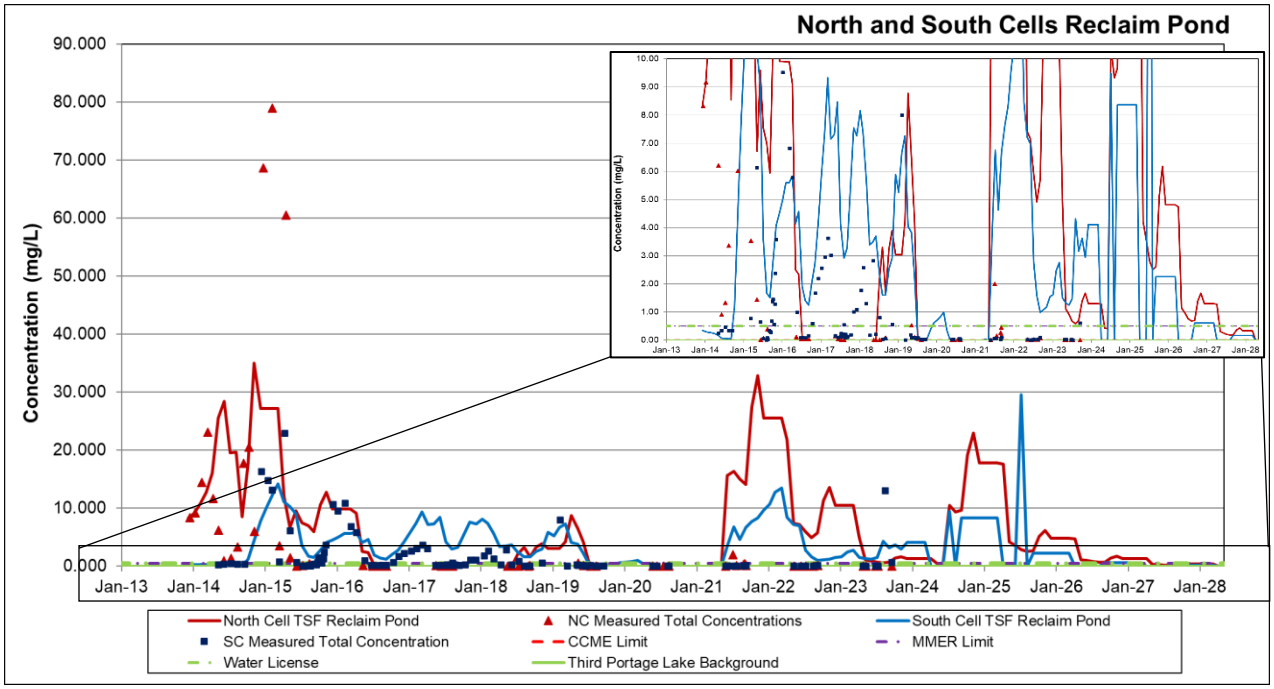
Table 4-1: Summary of Forecasted Concentrations at the End of Deposition and After Pit Reflooding

					END OF DEPOSITION (JUN. 2026)					END OF PIT FLOODING (JUL. 2041)
PARAMETERS	UNITS	WATER LICENCE at ST-9 (3)	CCME GUIDELINES	3rd PORTAGE LAKE	NORTH CELL	SOUTH CELL	PORTAGE PIT E	PORTAGE PIT A	GOOSE PIT	PORTAGE AND /GOOSE PITS (MIXED PITS)
pH (assumed)	---	---	---	---	---	---	---	---	---	---
Alkalinity	mg $CaCO_3$/L	n/a	n/a	9.1	18	113	166	193	62	16
Hardness	mg $CaCO_3$/L	n/a	n/a	12.05	136	188	2801	1288	670	85
Total Dissolved Solids (TDS)	mg/L	1400	n/a	22.1	370	293	7682	3634	1598	237
Total Aluminum (Al)	mg/L	1.5	0.10	0.0075	0.263	1.589	4.446	1.890	0.626	0.153
Total Silver (Ag)	mg/L	n/a	0.00025	0.000005	0.00012	0.00009	0.00288	0.00188	0.00152	0.00012
Total Arsenic (As)	mg/L	0.3	0.005	0.0005	0.017	0.020	0.770	0.346	0.511	0.010
Total Barium (Ba)	mg/L	n/a	n/a	0.0037	0.012	0.052	0.180	0.097	0.139	0.013
Total Cadmium (Cd)	mg/L	0.002	0.00004	0.000003	0.00003	0.00004	0.00076	0.00065	0.00306	0.00003
Total Chromium (Cr)	mg/L	n/a	0.001	0.0001	0.00706	0.01471	0.15613	0.07339	0.16174	0.00518
Total Copper (Cu)	mg/L	0.1	0.002	0.0006	0.322	0.014	8.021	3.941	3.063	0.229
Total Iron (Fe)	mg/L	n/a	0.30	0.0173	0.392	3.28	5.16	2.73	2.73	0.26
Total Manganese (Mn)	mg/L	n/a	0.23	0.0016	0.043	0.493	0.631	0.809	0.117	0.066
Total Mercury (Hg)	mg/L	0.0004	0.000026	0.000003	0.00003	0.000014	0.000183	0.000300	0.000075	0.000123
Total Molybdenum (Mo)	mg/L	n/a	0.073	0.0002	0.007	0.006	0.190	0.106	0.205	0.006
Total Nickel (Ni)	mg/L	0.2	0.025	0.0006	0.081	0.062	2.058	1.538	1.912	0.072
Total Lead (Pb)	mg/L	0.1	0.001	0.00003	0.002	0.00356	0.048	0.025	0.144	0.0015
Total Selenium (Se)	mg/L	n/a	0.001	0.00003	0.01479	0.0011	0.3826	0.1457	0.0591	0.0090

					END OF DEPOSITION (JUN. 2026)					END OF PIT FLOODING (JUL. 2041)
PARAMETERS	**UNITS**	**WATER LICENCE at ST-9 (3)**	**CCME GUIDELINES**	**3rd PORTAGE LAKE**	**NORTH CELL**	**SOUTH CELL**	**PORTAGE PIT E**	**PORTAGE PIT A**	**GOOSE PIT**	**PORTAGE AND /GOOSE PITS (MIXED PITS)**
Total Strontium (Sr)	mg/L	n/a	n/a	0.0132	0.155	0.002	4.294	1.694	0.749	0.113
Total Thallium (Ti)	mg/L	n/a	0.0008	0.000005	0.00014	0.000001	0.00012	0.00013	0.00042	0.00005
Total Uranium (U)	mg/L	n/a	0.015	0.000049	0.001	0.00001	0.0417	0.0377	0.0225	0.0011
Total Zinc (Zn)	mg/L	0.4	0.010	0.0015	0.015	0.014	0.024	0.026	0.073	0.003
Chloride	mg/L	1000	120	0.7925	45	13	1242	484	258	34
Fluoride (F)	mg/L	n/a	0.12	0.07925	0.094	0.26	0.46	0.31	0.41	0.10
Sulphate (SO_4)	mg SO_4/L	n/a	128[2]	5.1	117	107	2646	1721	822	63
Total Cyanide (CNt)	mg/L	0.5	0.005	0.0005	1.14	0.01	22.45	2.01	0.00009	0.00002
Total Ammonia	mg N/L	16.0	1.83	0.0145	4	2	114	66	29	2.7
Nitrate (NO_3)	mg N/L	20.0	2.94	0.03305	3	9	41	17	5	1.3
Total N equivalent	mg N/L	n/a	0.35[1]	0.04755	7	10	155	83	34	4.1

Notes:

1. *Value based on the threshold concentration for the classification of an oligotrophic lake in terms of nutrient concentrations (Nurnberg 1996).*
2. *Threshold value for sulphate based on BC Environment guidelines for the protection of aquatic life for very soft water (0-30 mg/L) (April 2013).*
3. *Mass balance forecasted concentration higher than current Water Licence limits at ST-9. For comparison purposes only.*
4. *Mass balance forecasted concentration higher than CCME limits. For comparison purposes only.*



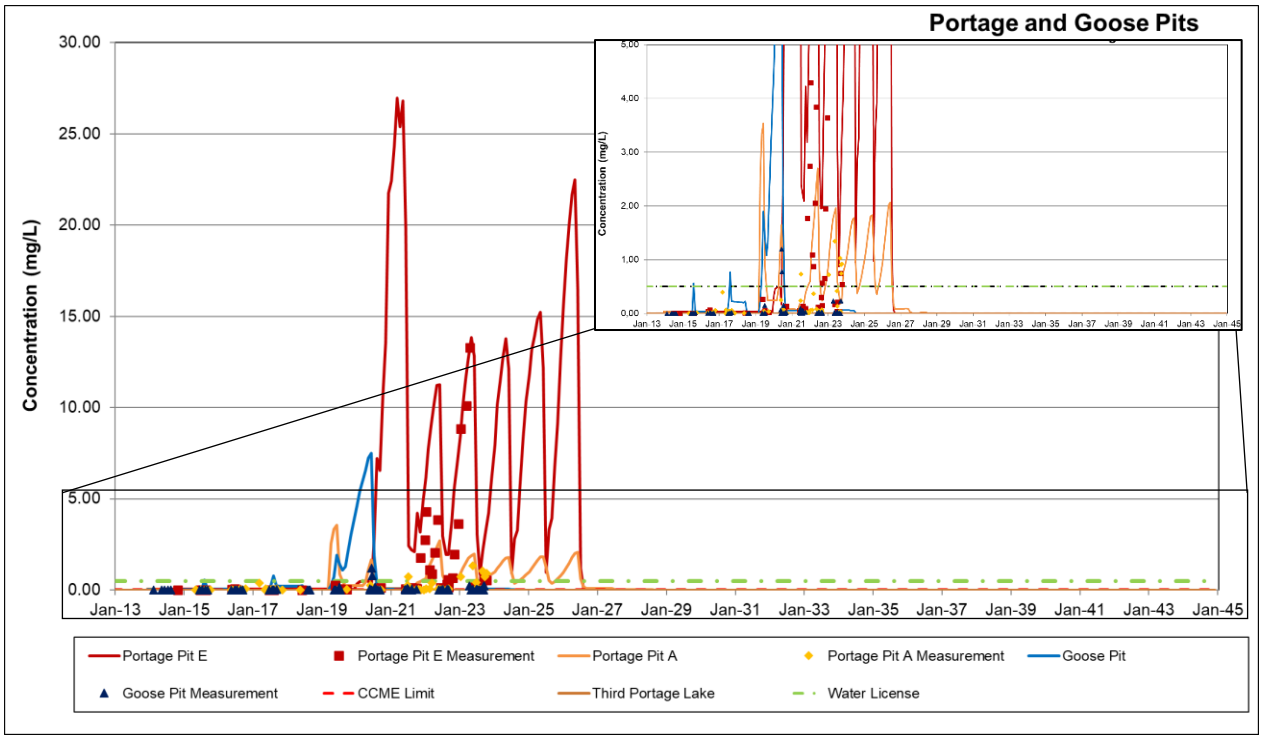
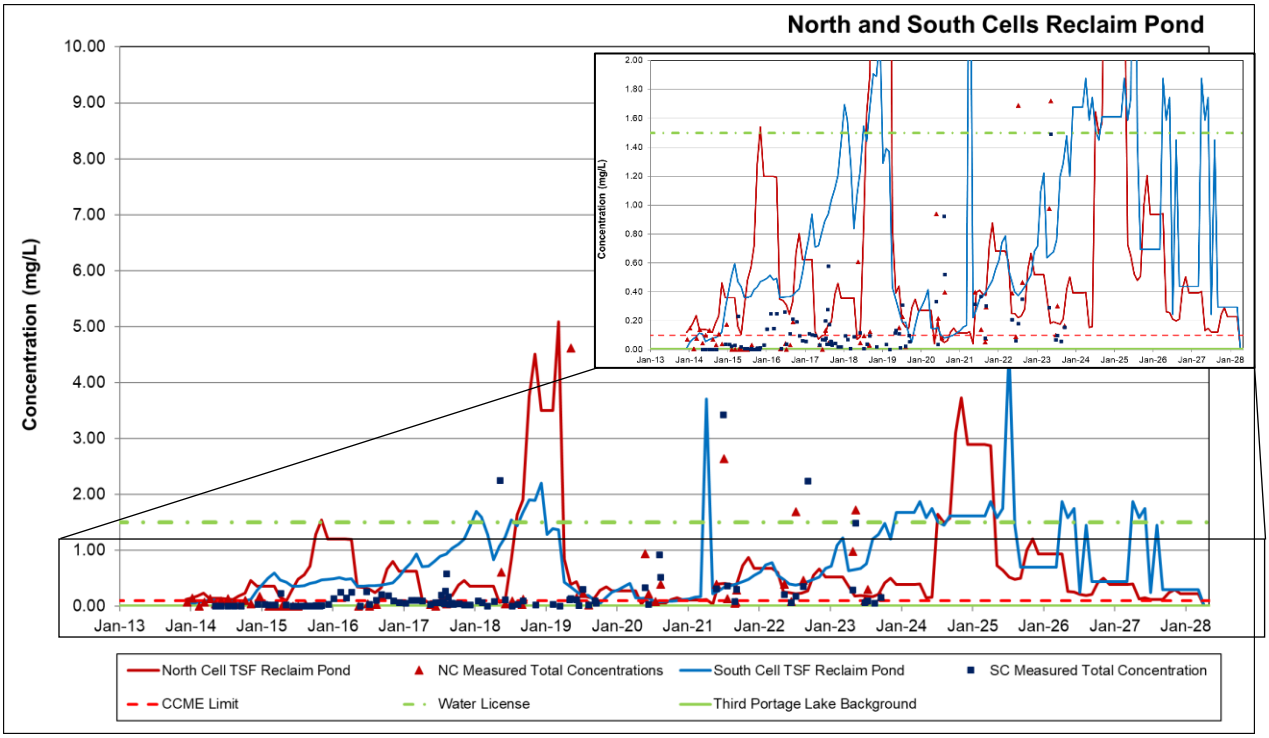


Figure 4-1: Total Cyanide Forecasted Concentration



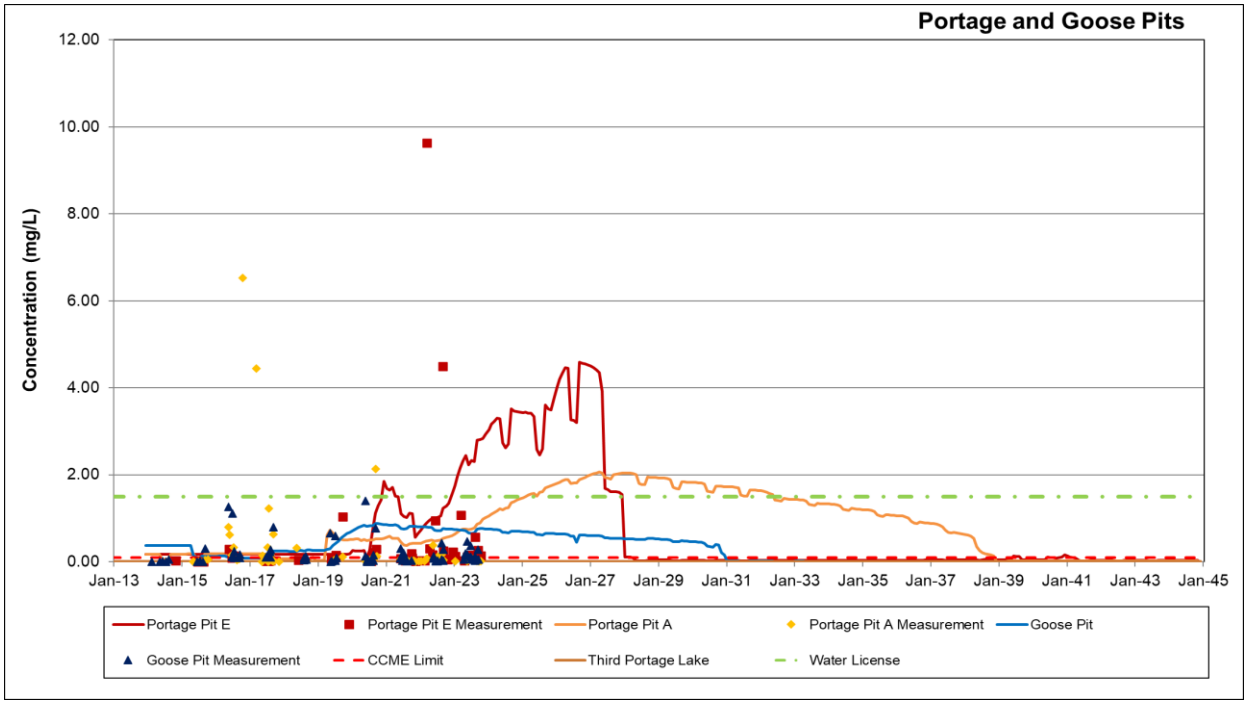
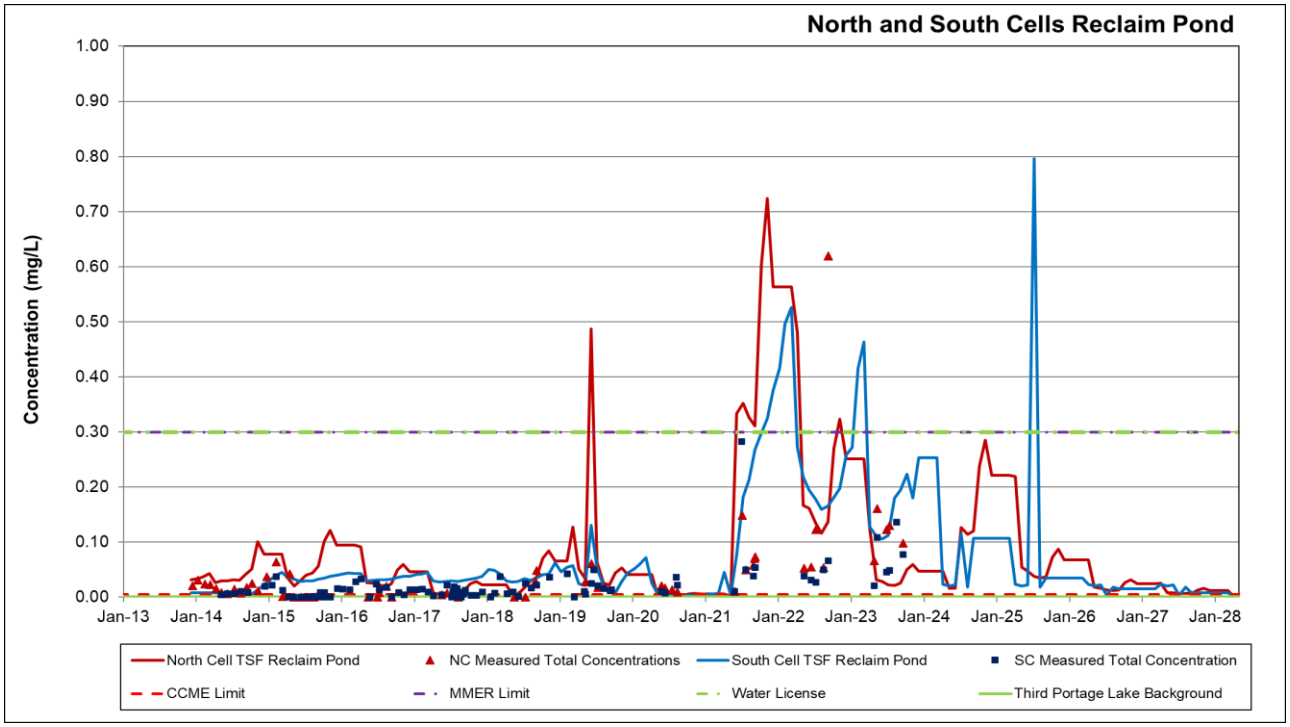


Figure 4-2: Total Aluminum Forecasted Concentration



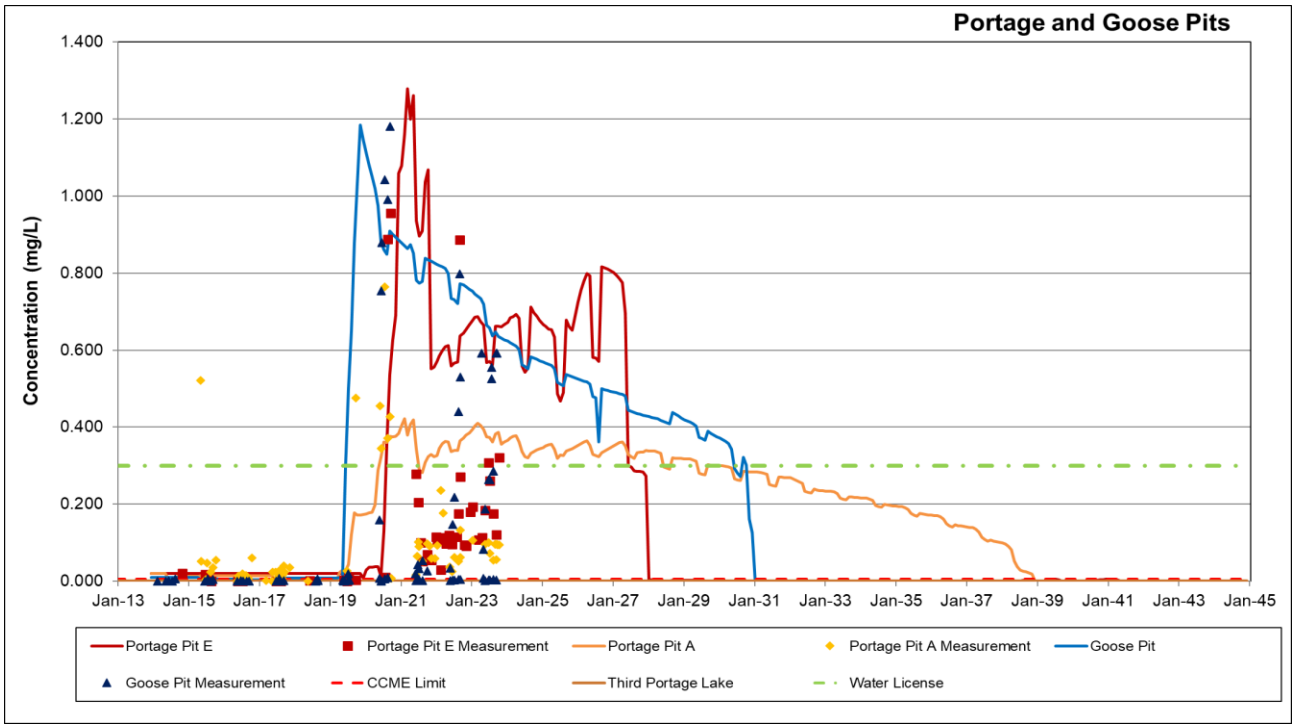
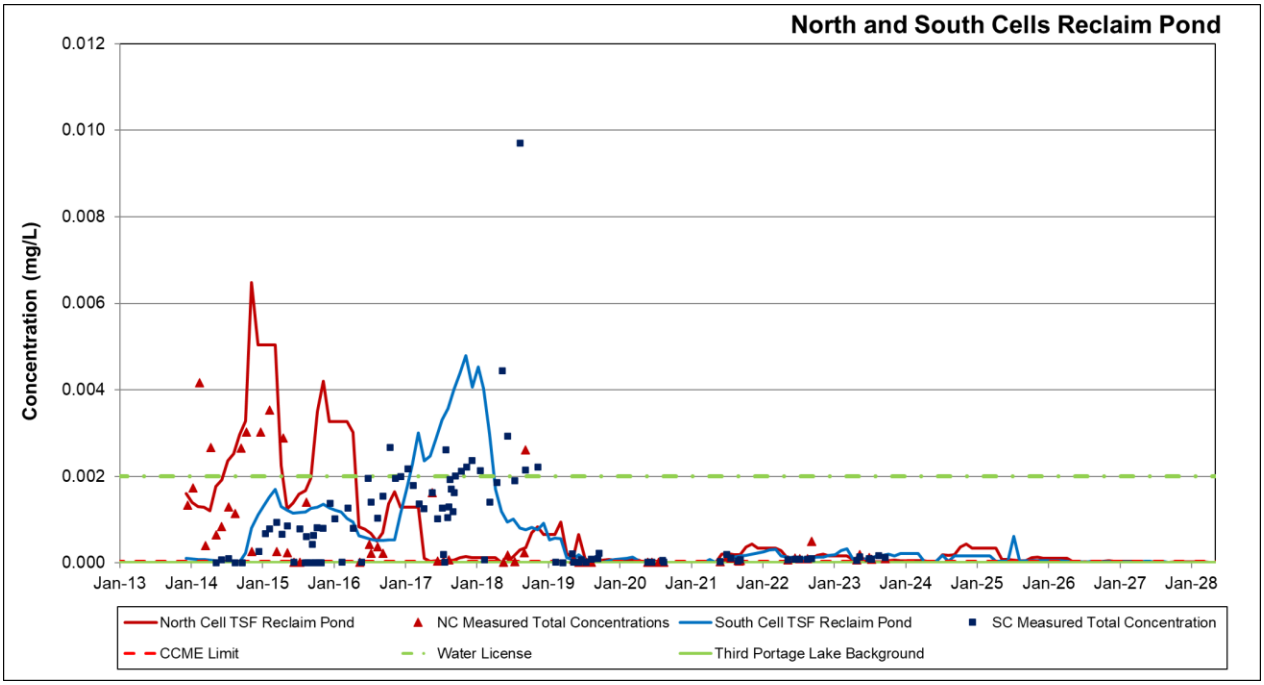


Figure 4-3: Total Arsenic Forecasted Concentration



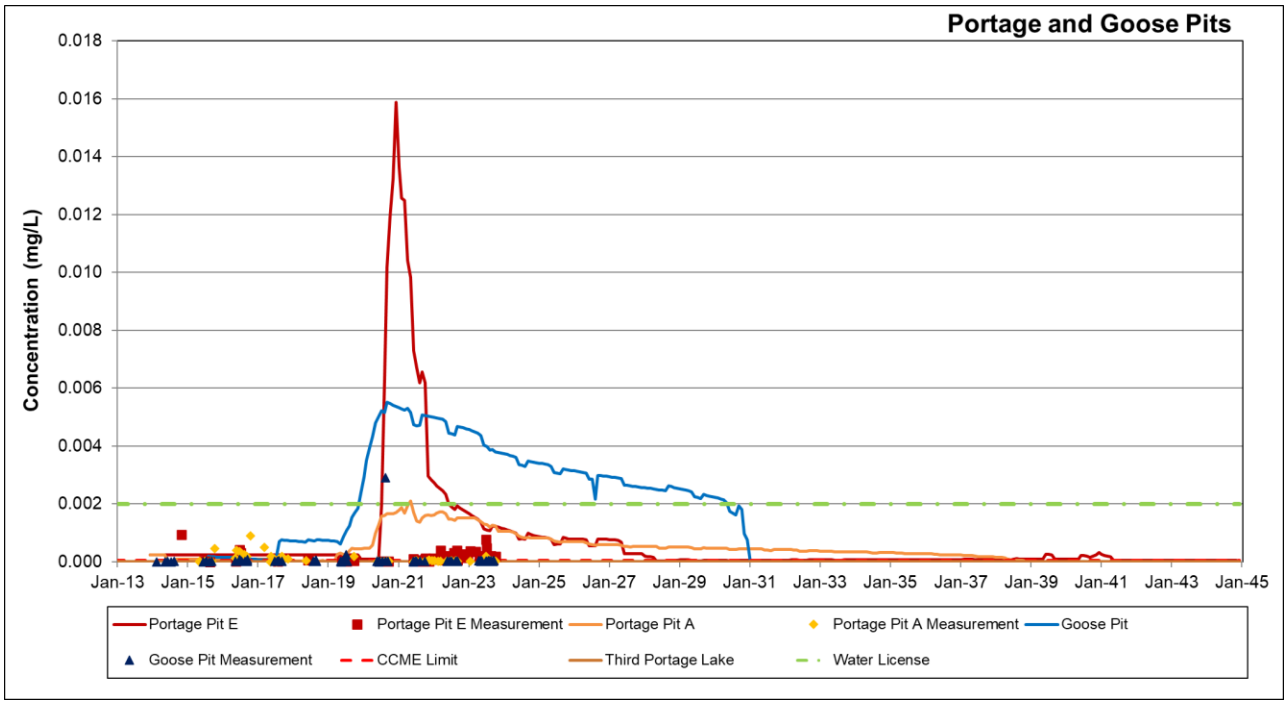
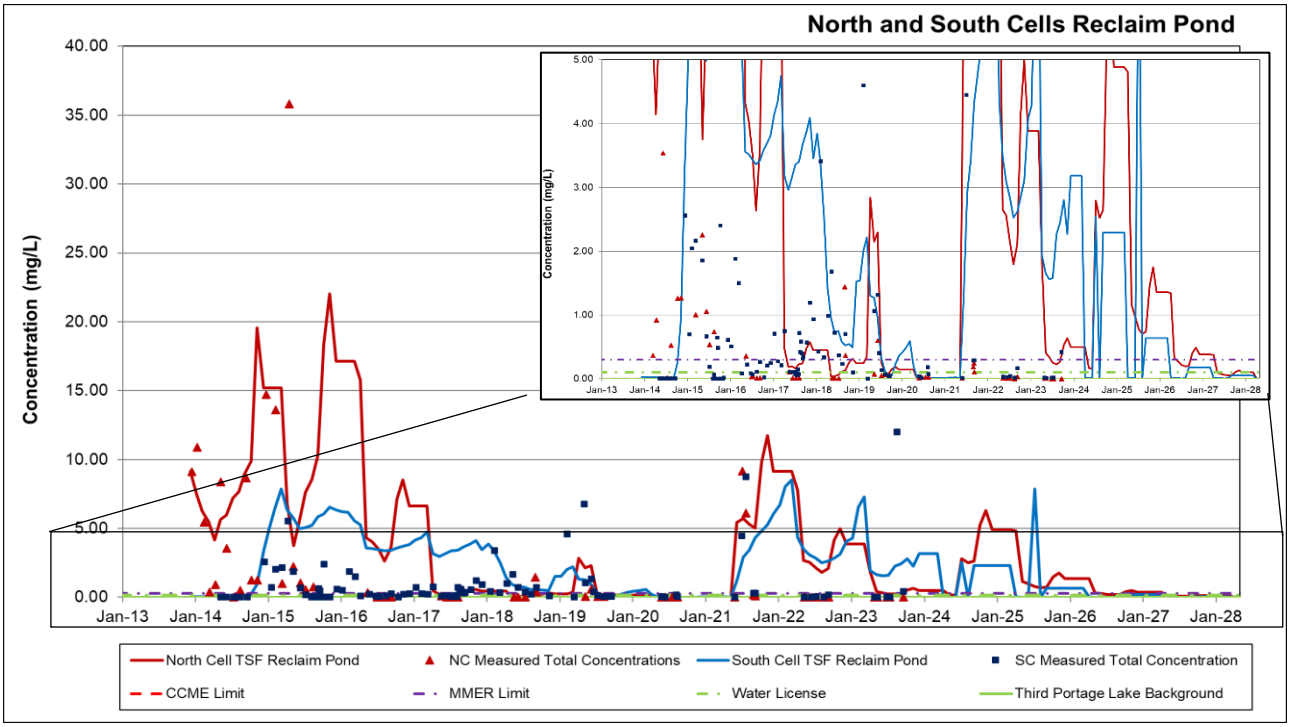


Figure 4-4: Total Cadmium Forecasted Concentration



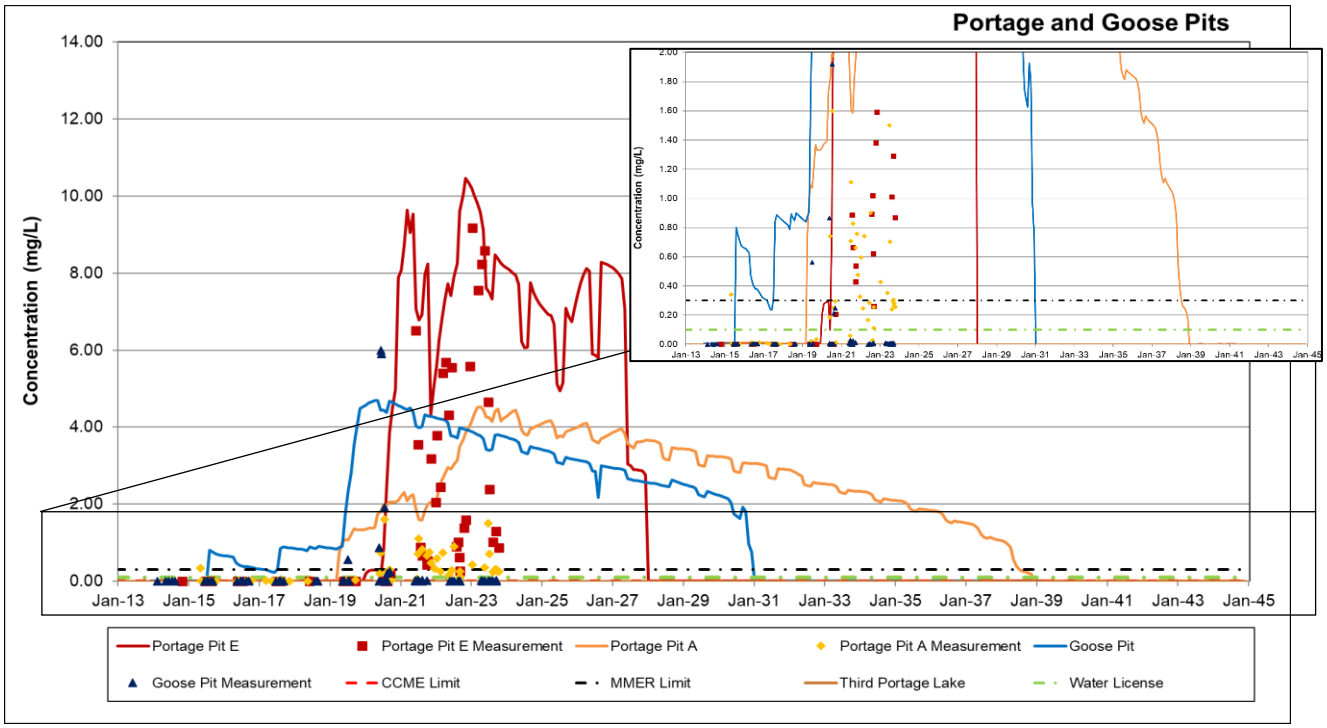


Figure 4-5: Total Copper Forecasted Concentration

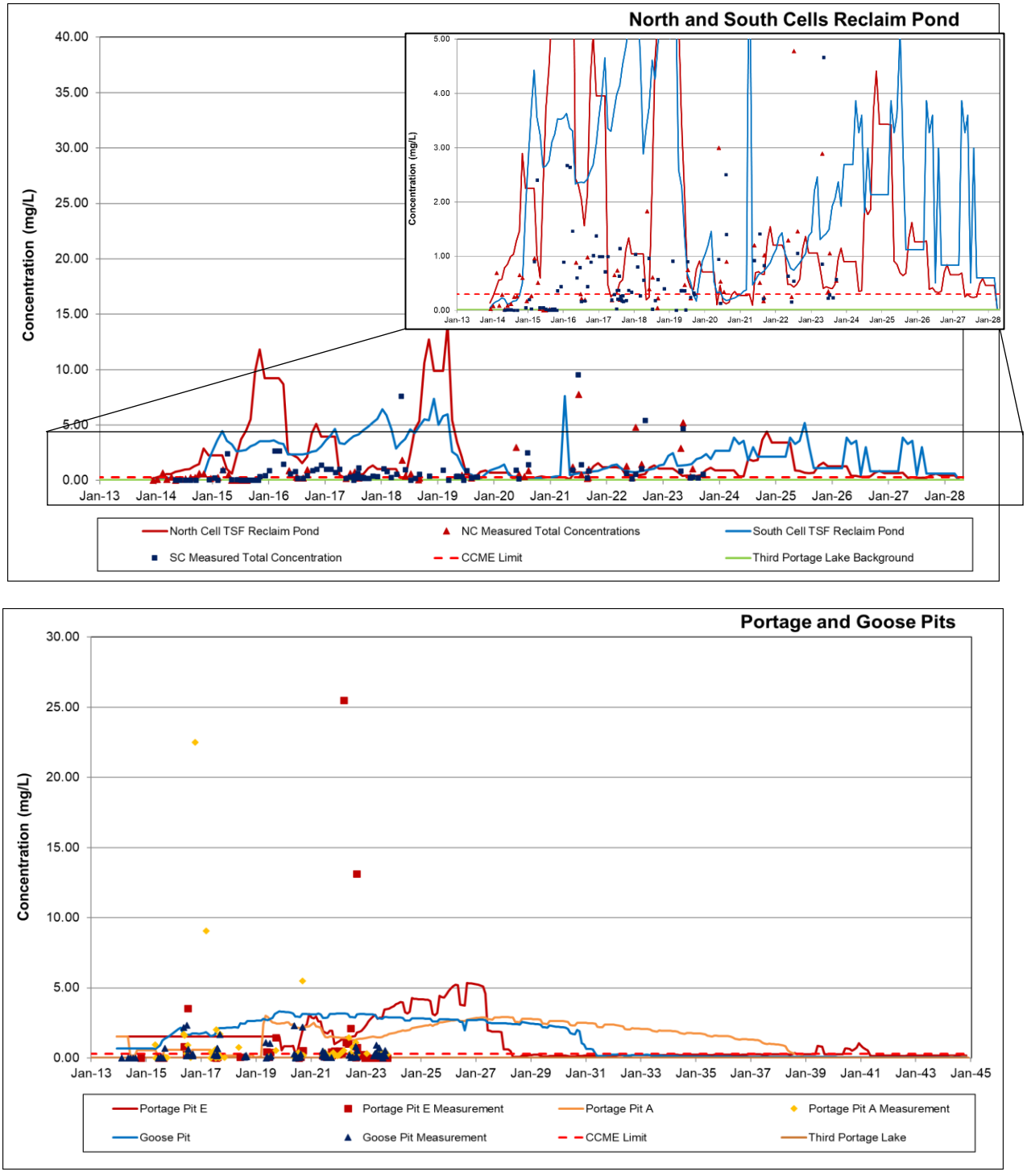
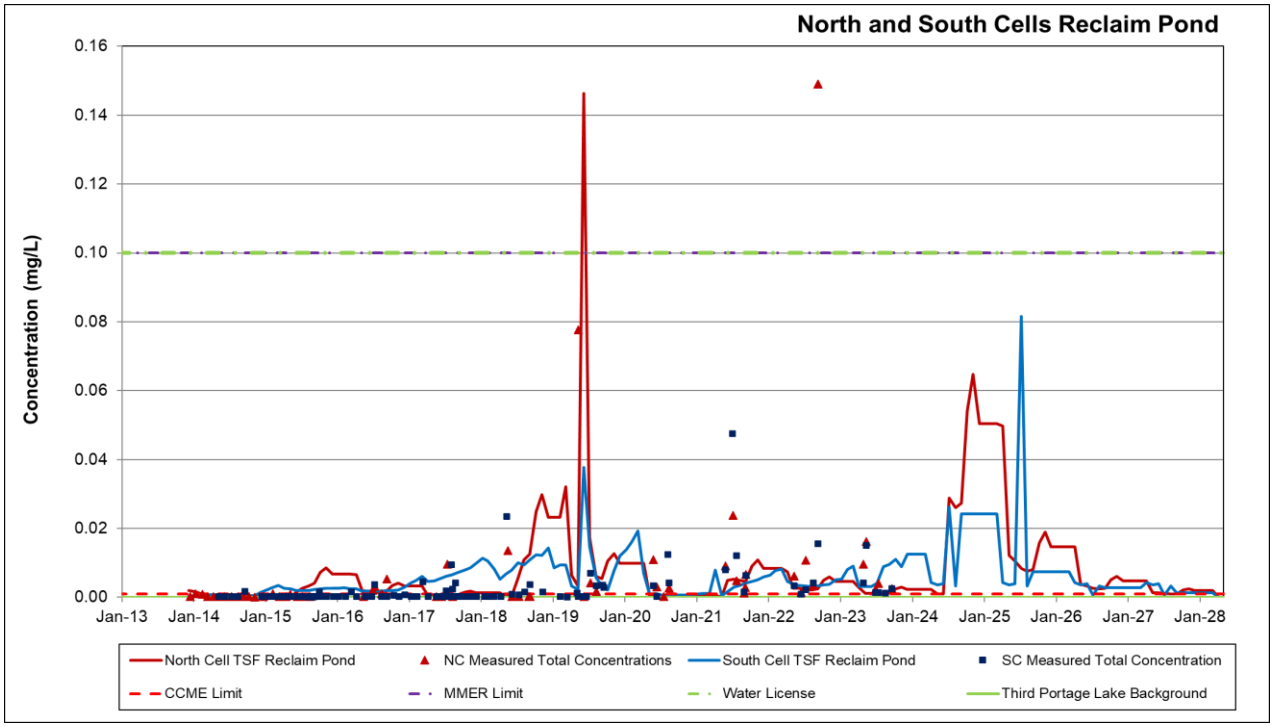


Figure 4-6: Total Iron Forecasted Concentration



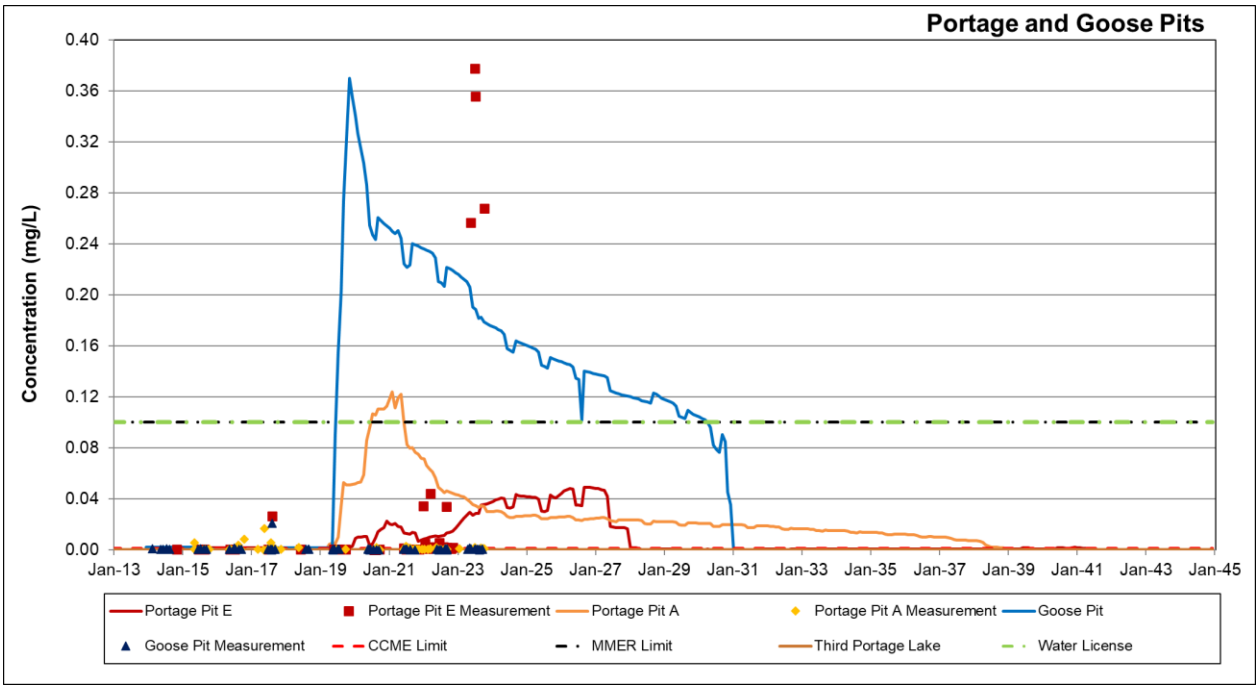
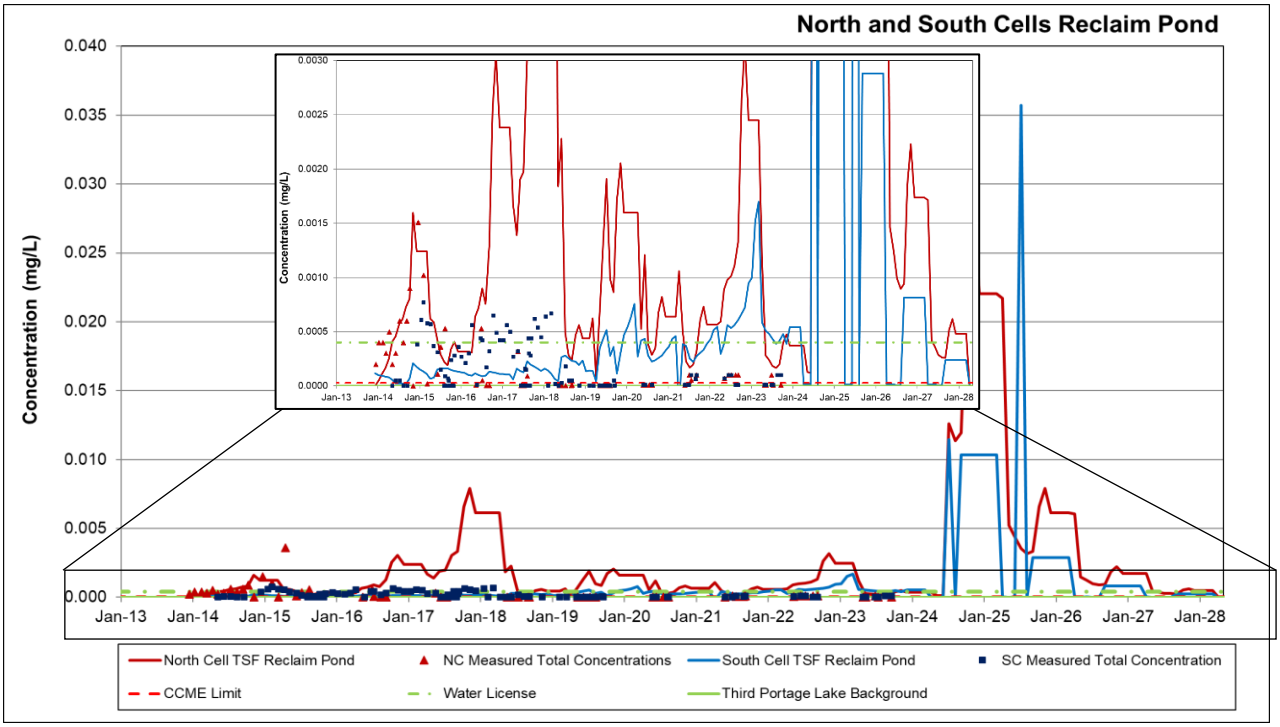


Figure 4-7: Total Lead Forecasted Concentration



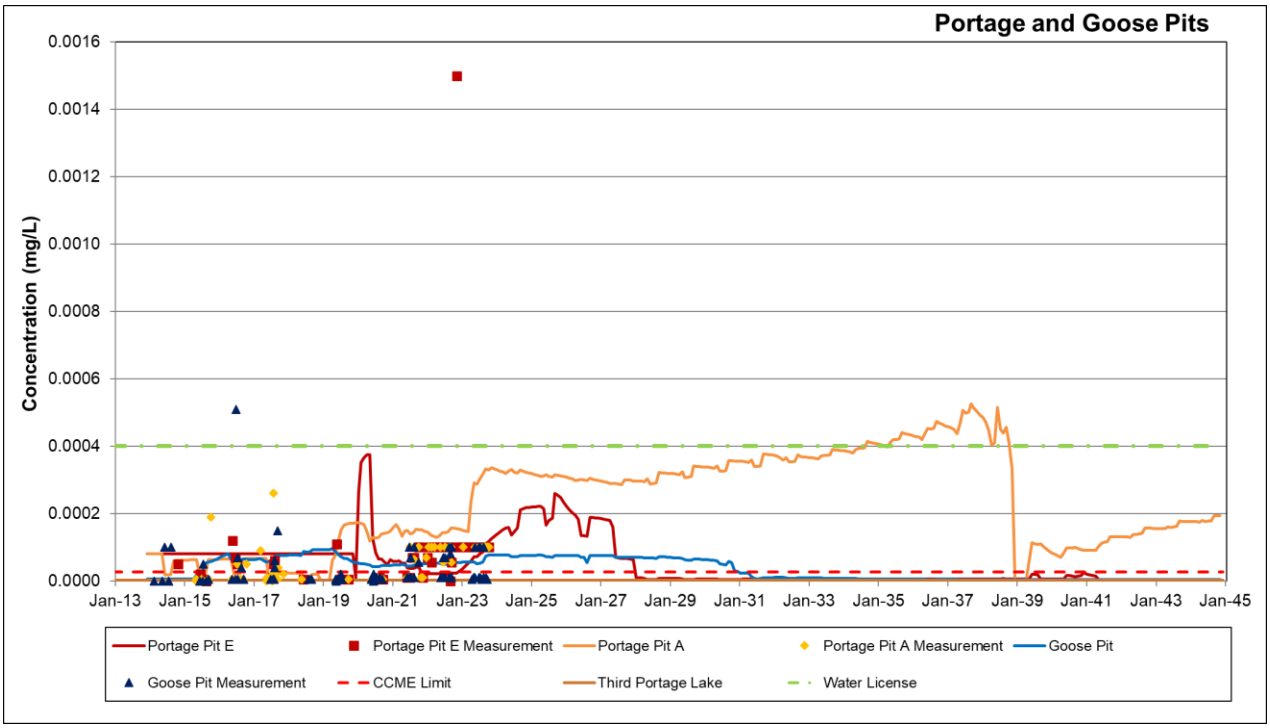
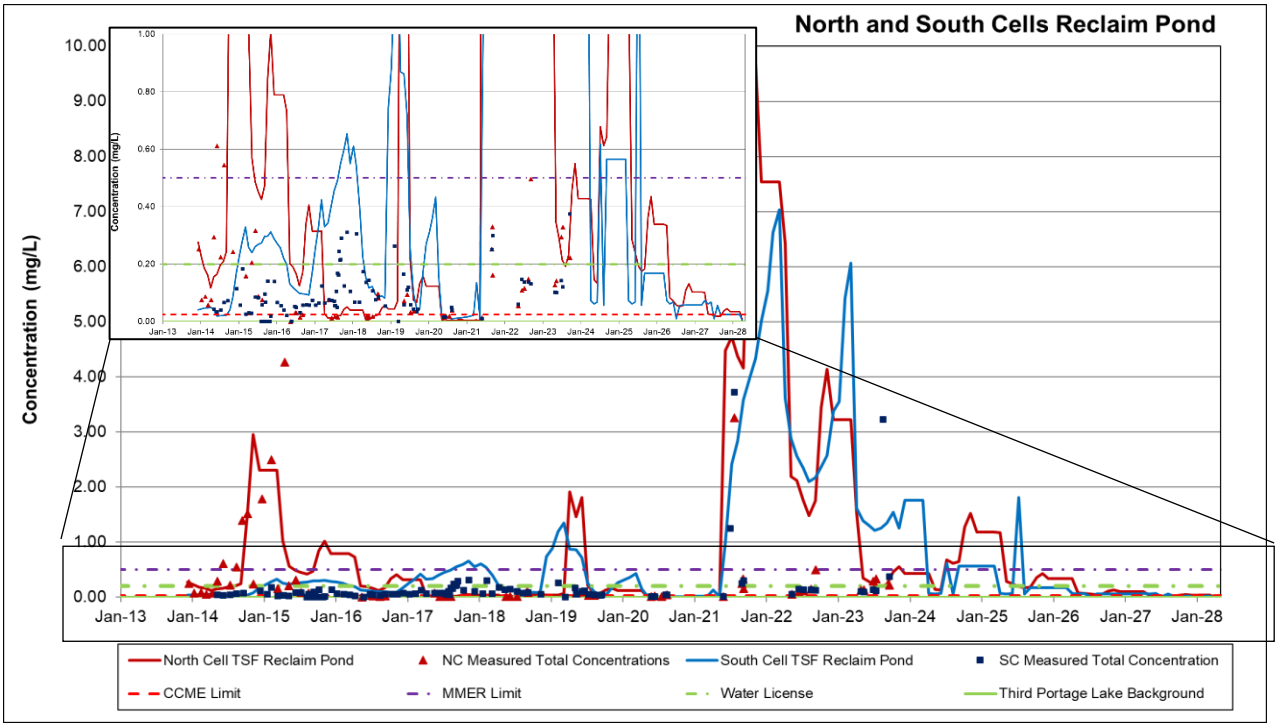


Figure 4-8: Total Mercury Forecasted Concentration



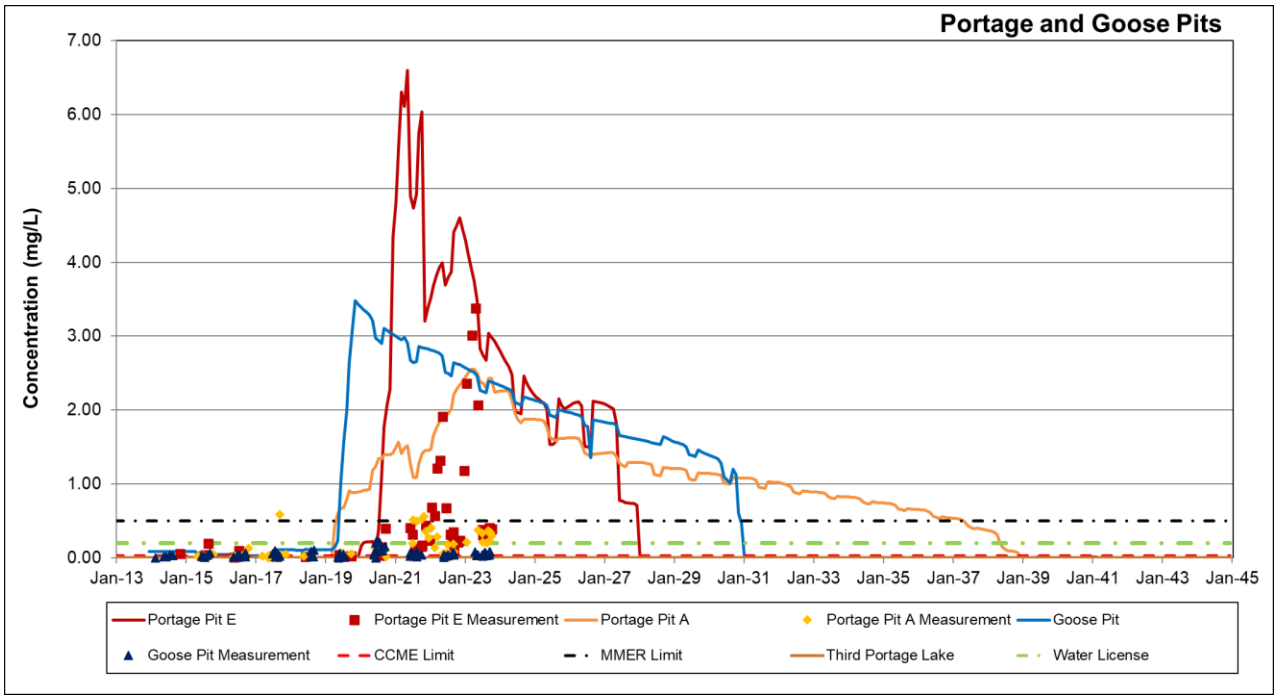
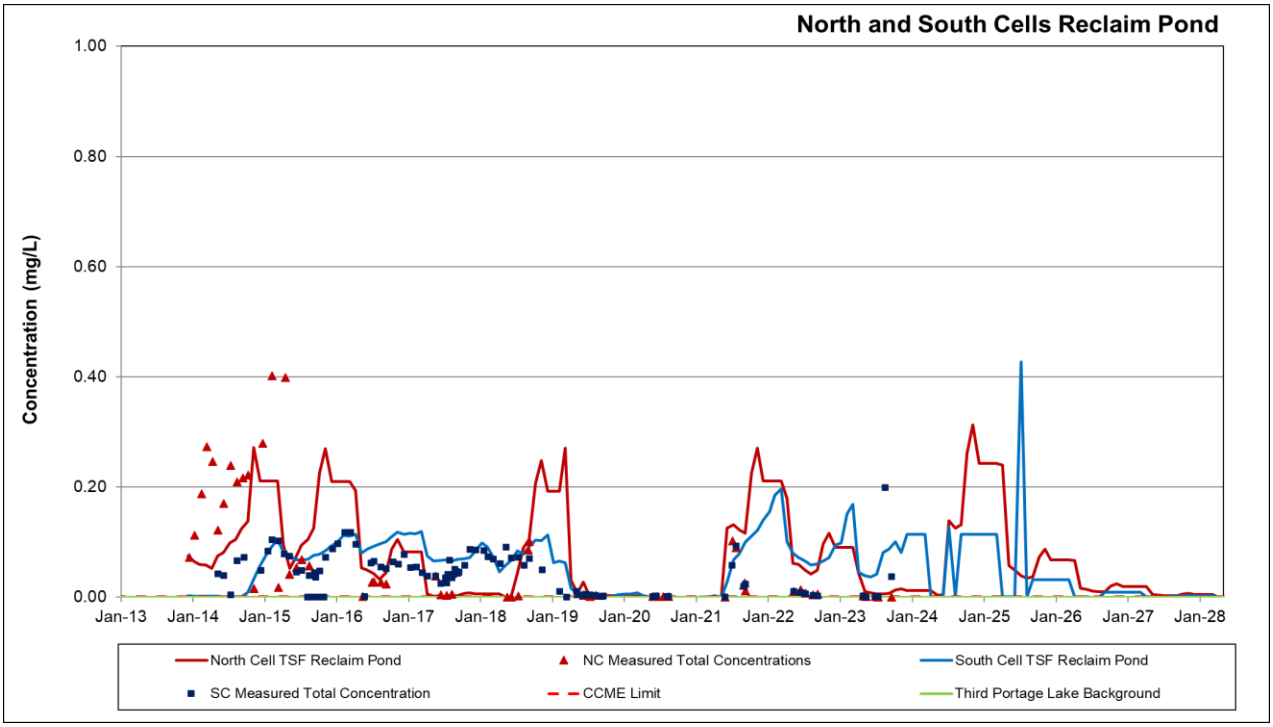


Figure 4-9: Total Nickel Forecasted Concentration



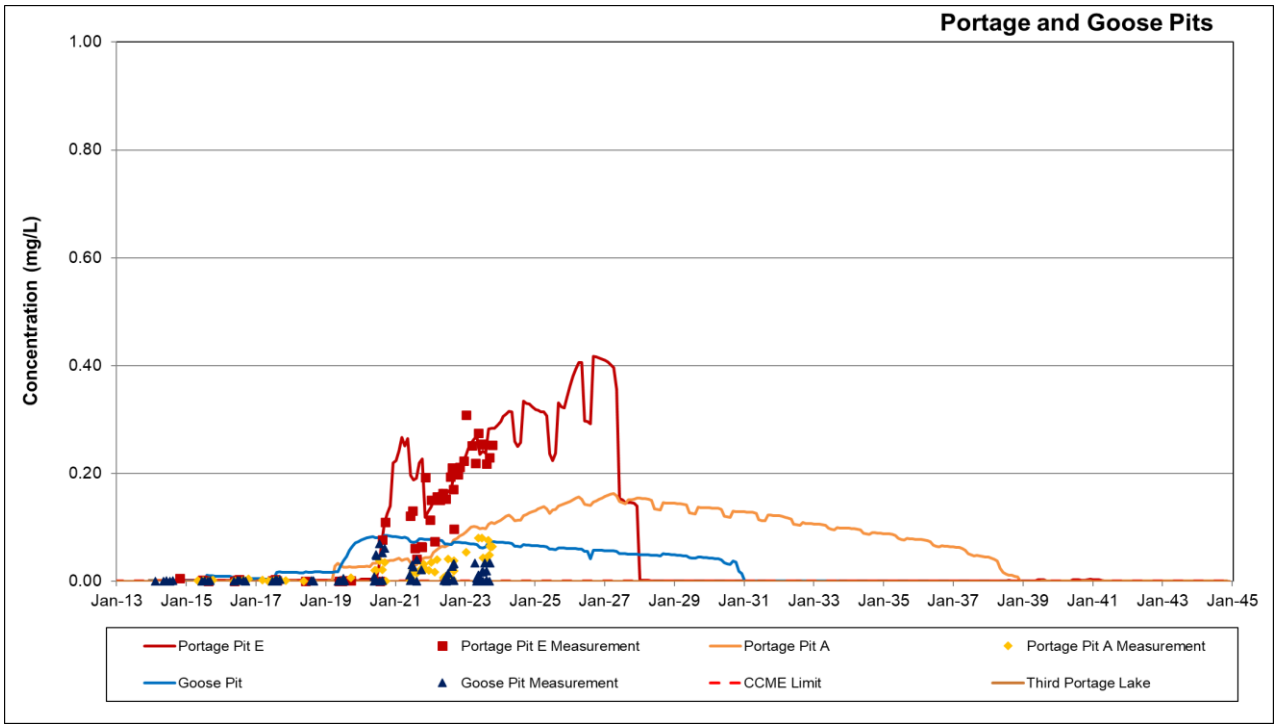
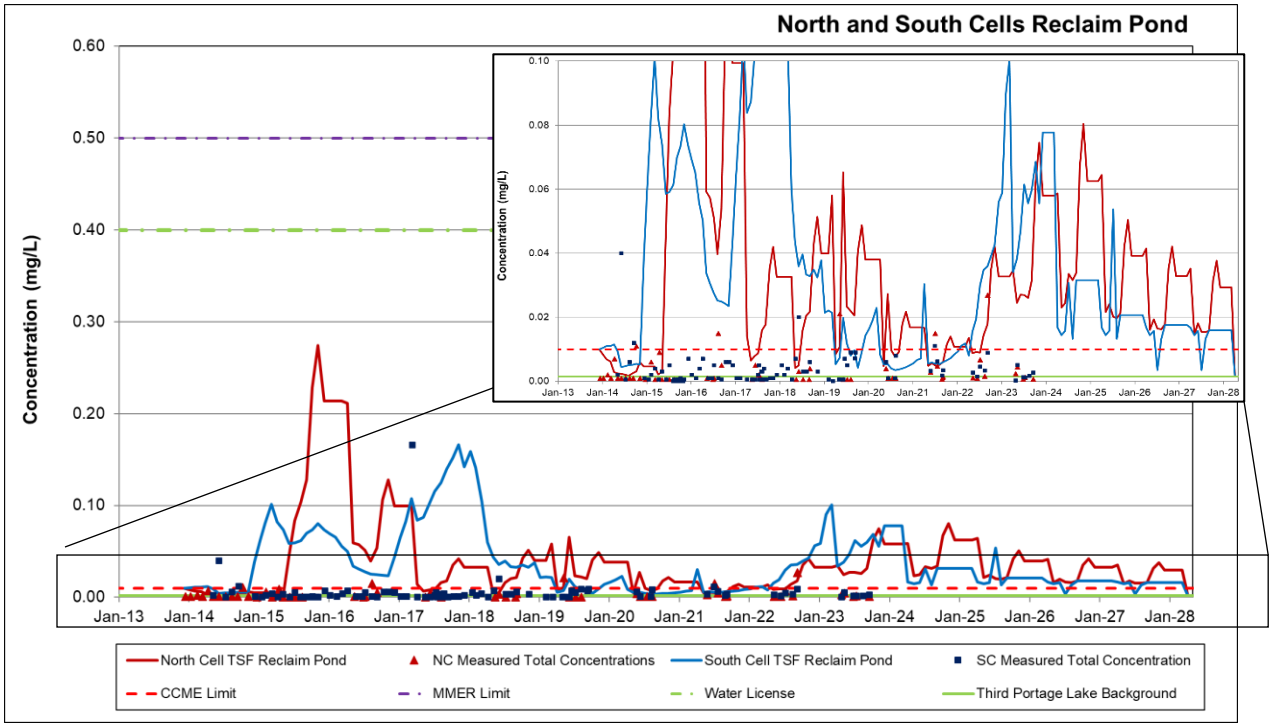


Figure 4-10: Total Selenium Forecasted Concentration



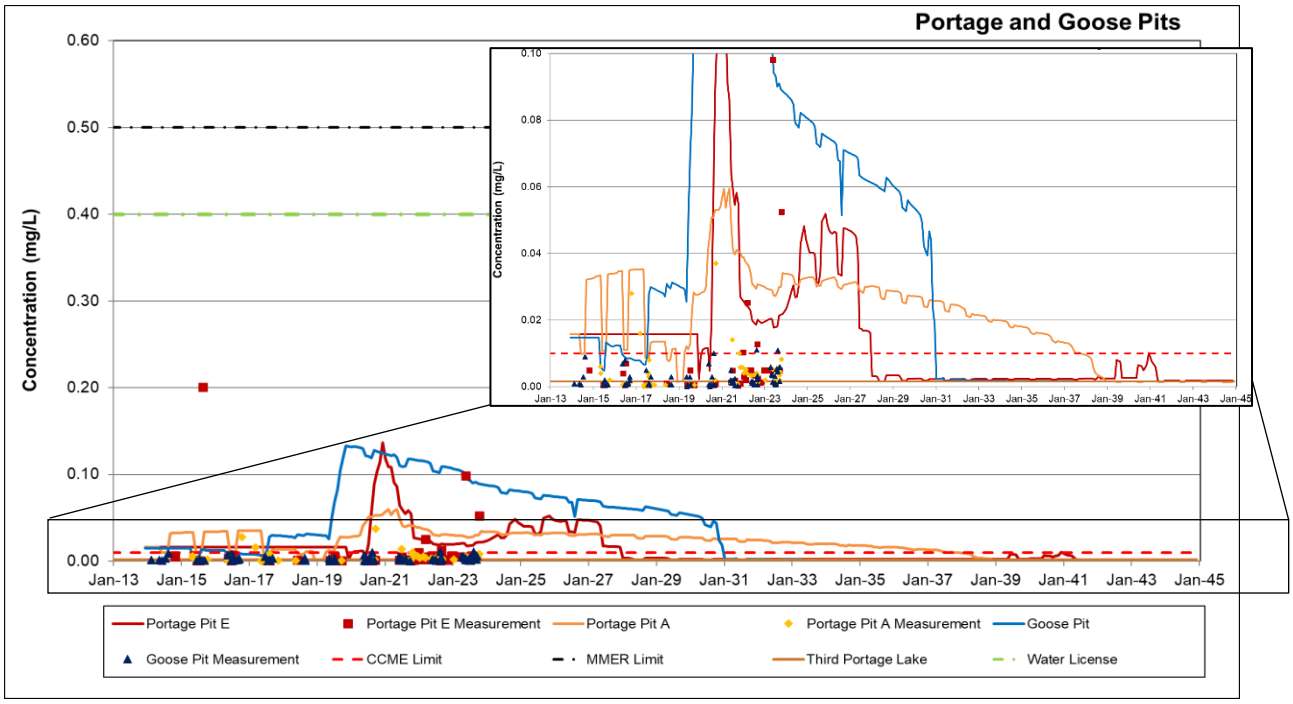
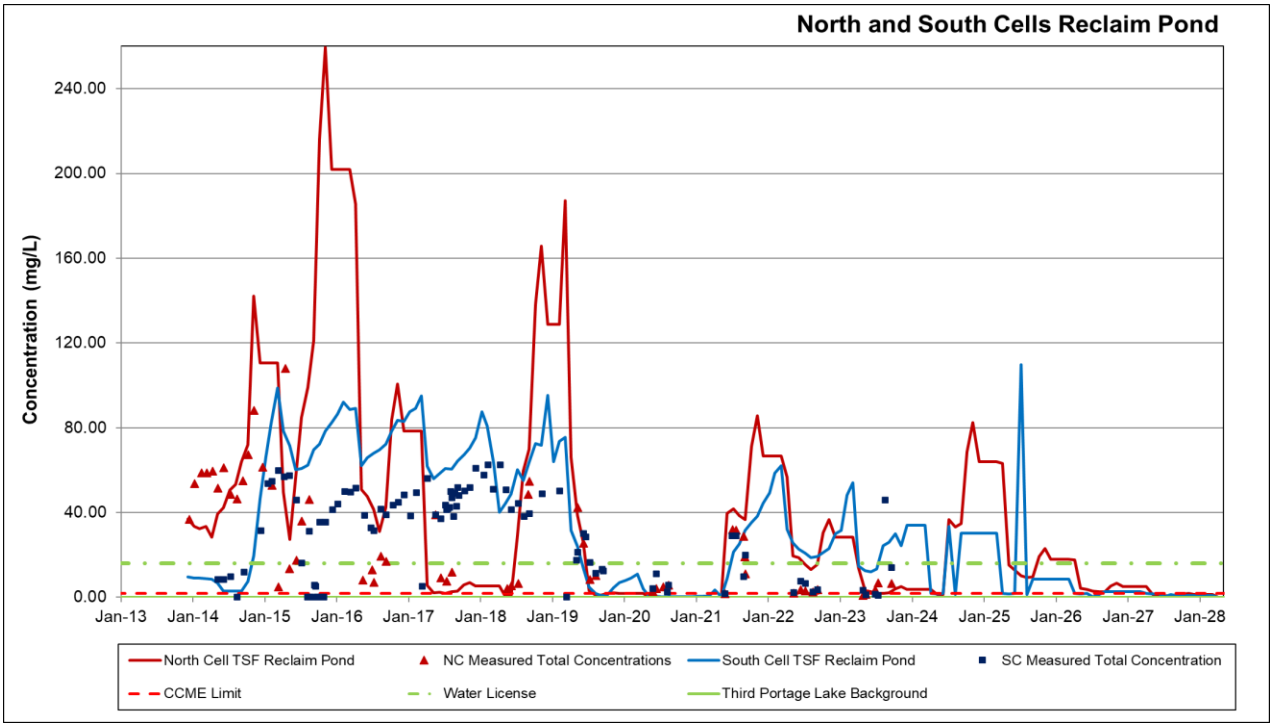


Figure 4-11: Total Zinc Forecasted Concentration



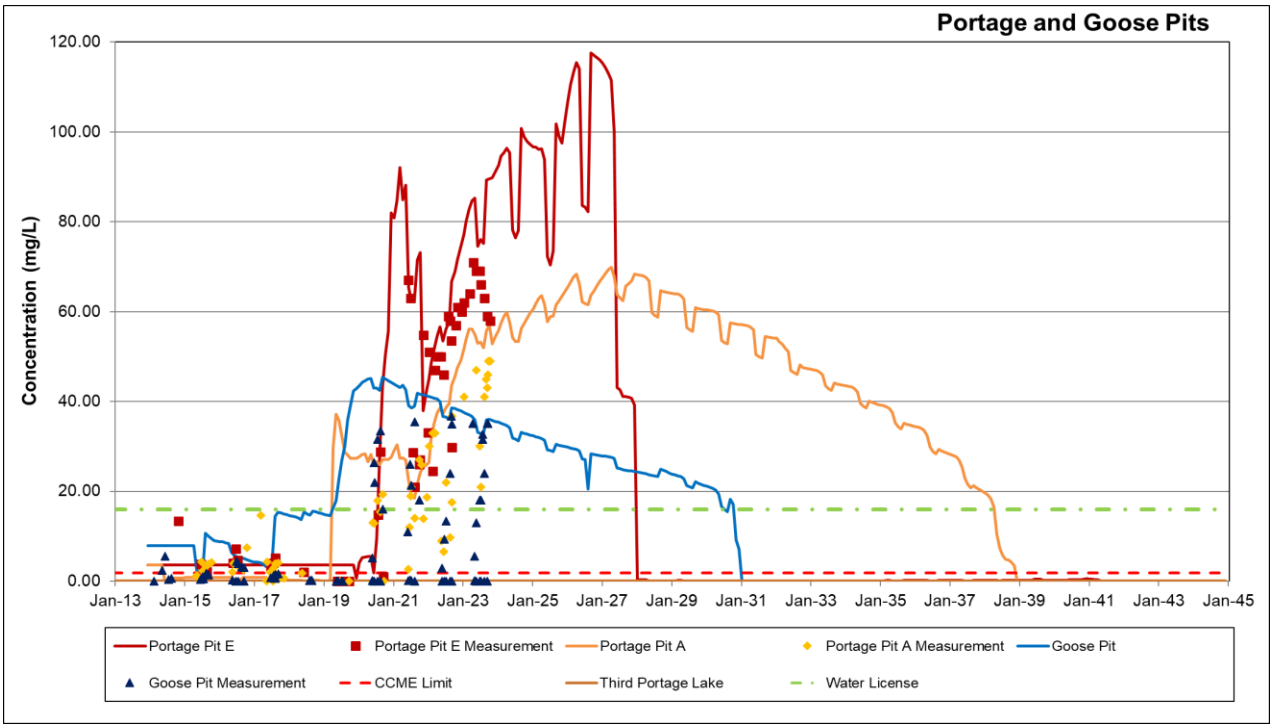
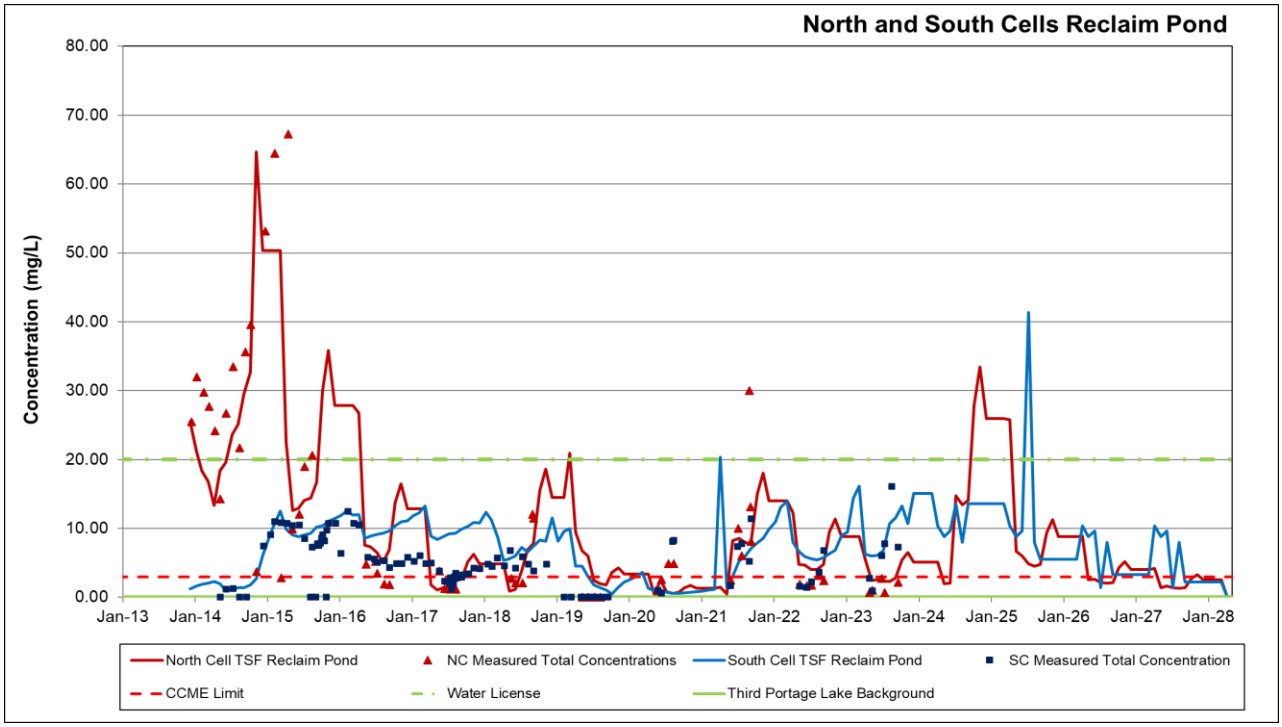


Figure 4-12: Total Ammonia Forecasted Concentration



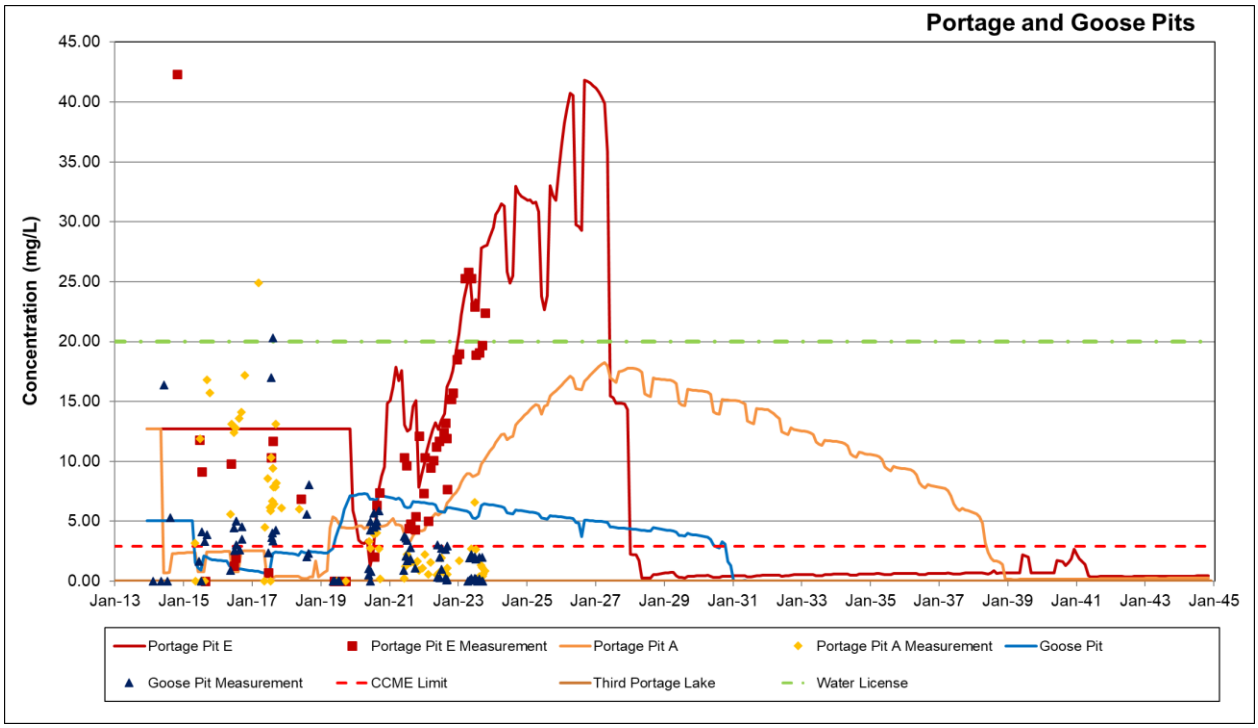


Figure 4-13: Nitrate Forecasted Concentration

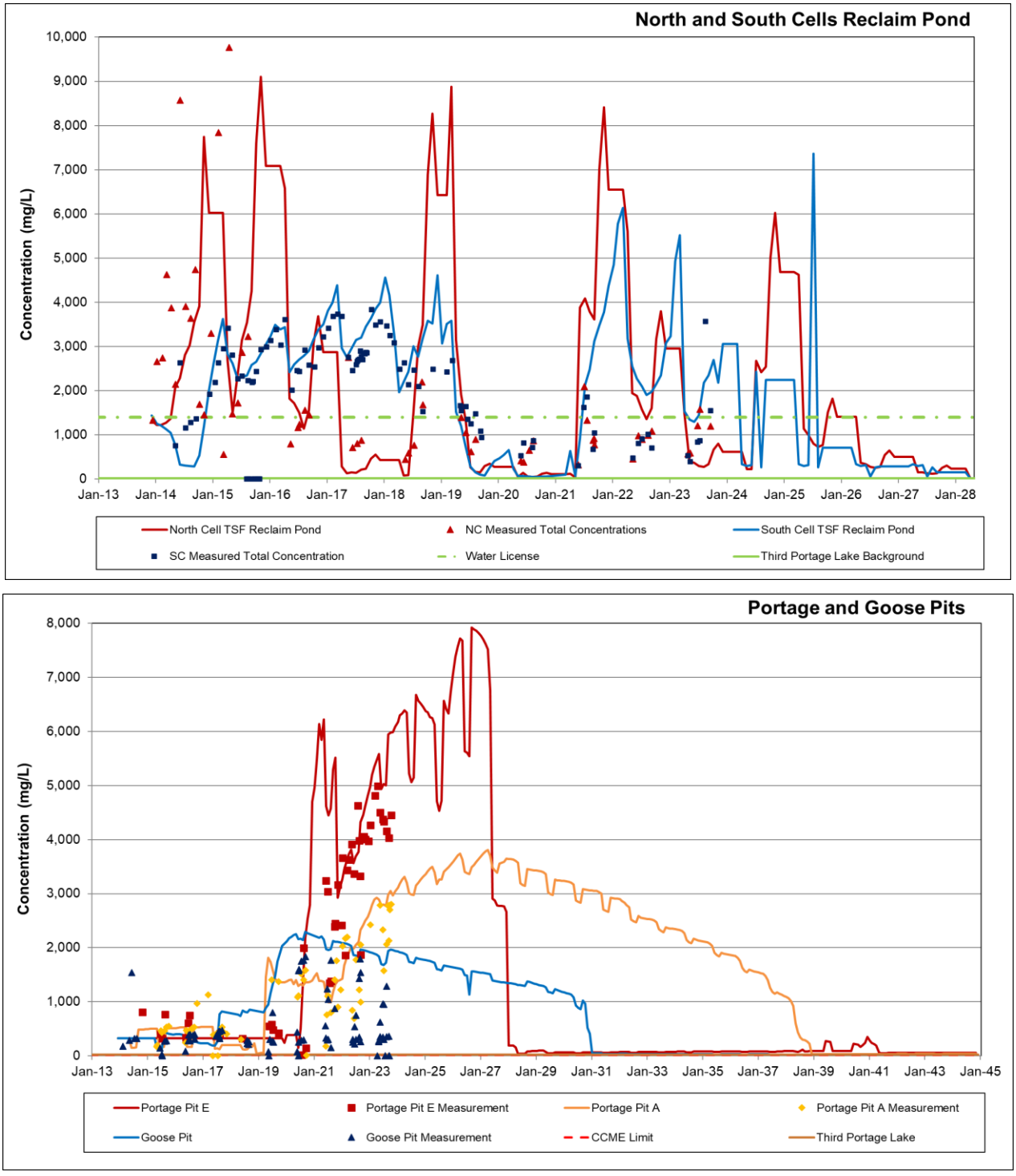
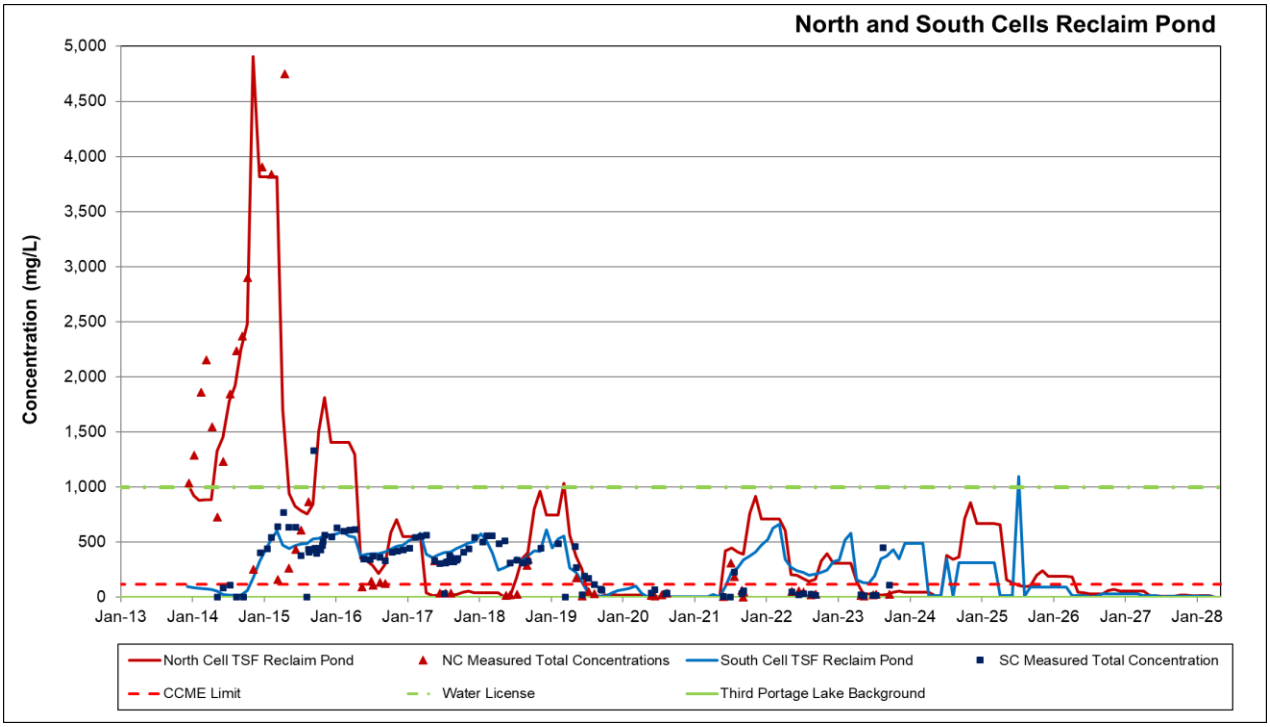


Figure 4-14: Total Dissolved Solids Forecasted Concentration



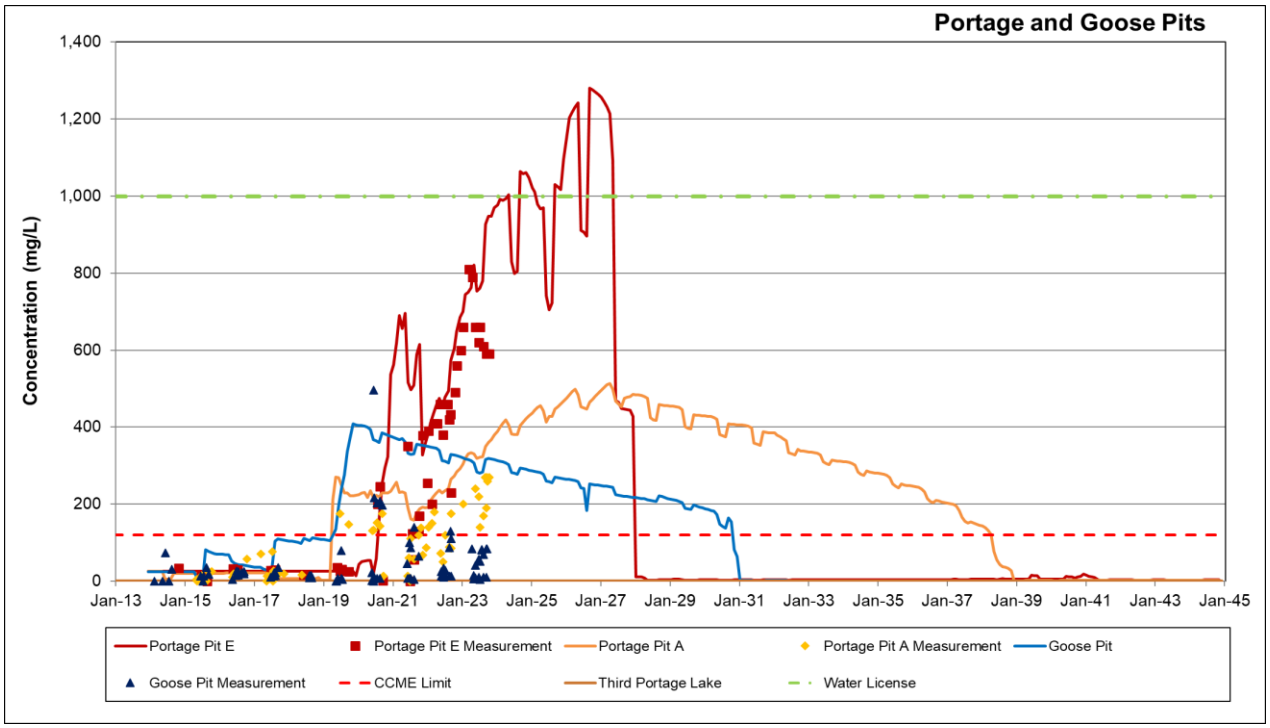
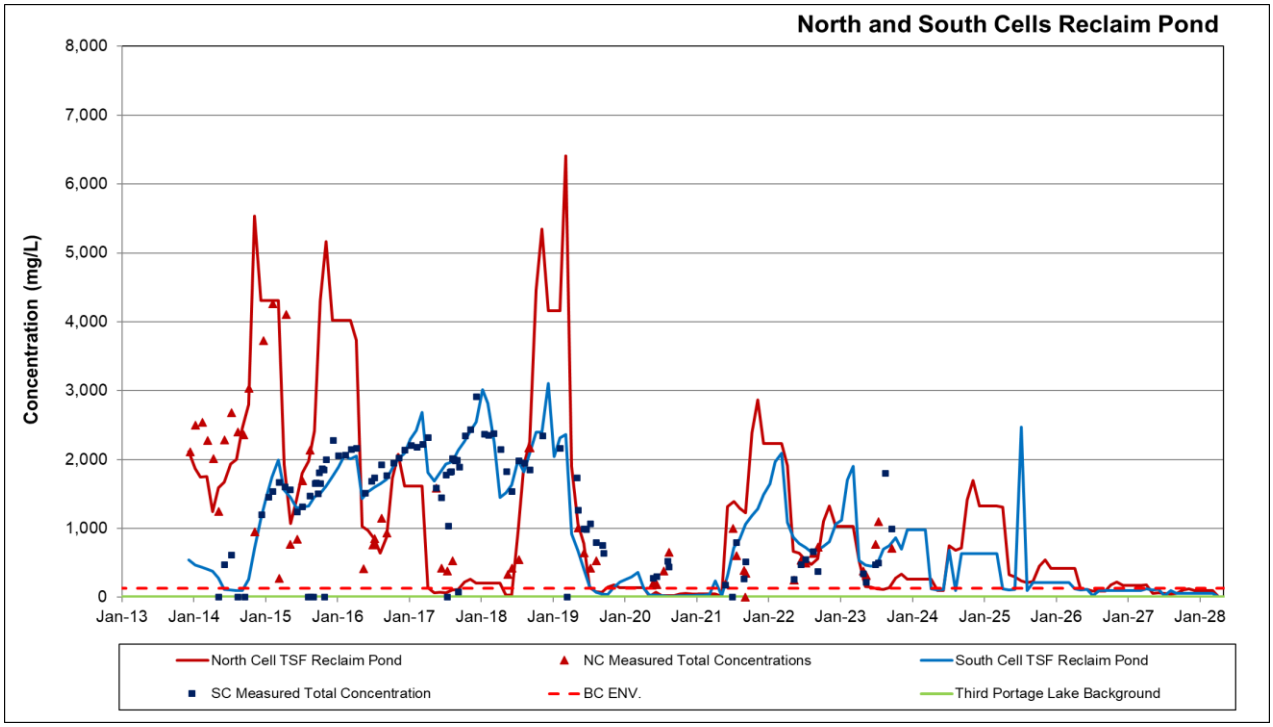


Figure 4-15: Chloride Forecasted Concentration



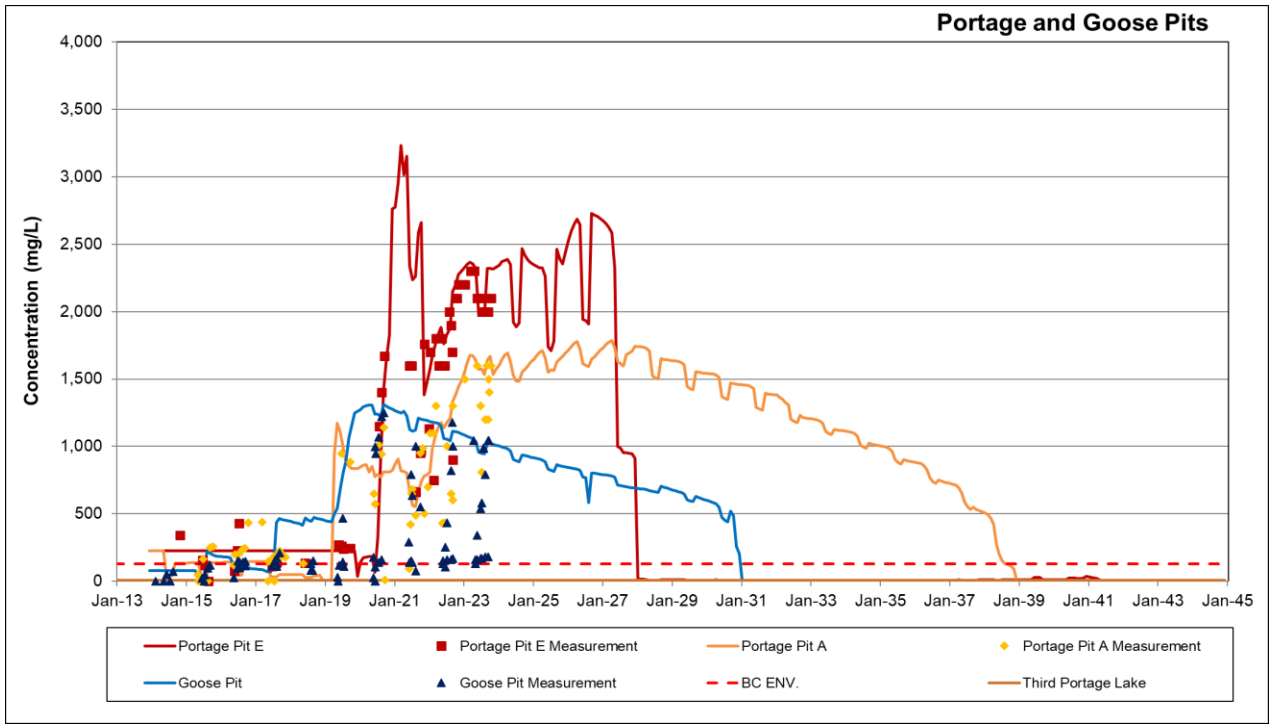
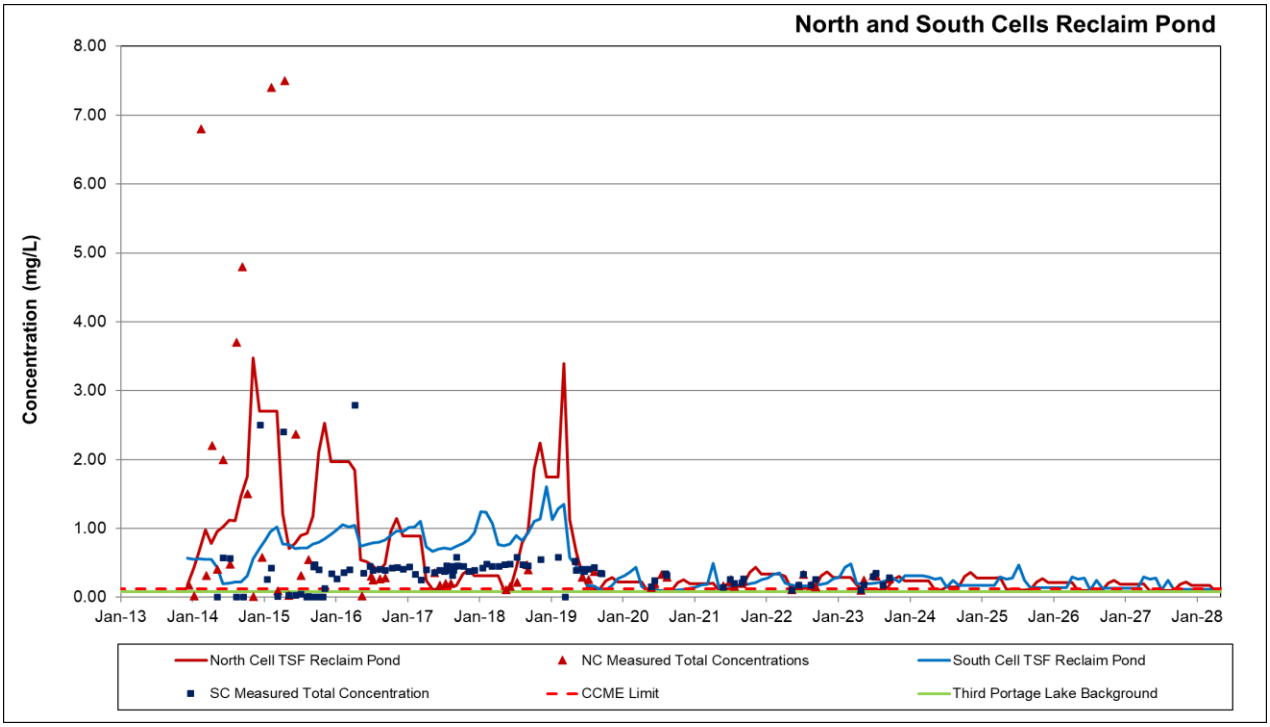


Figure 4-16: Sulphate Forecasted Concentration



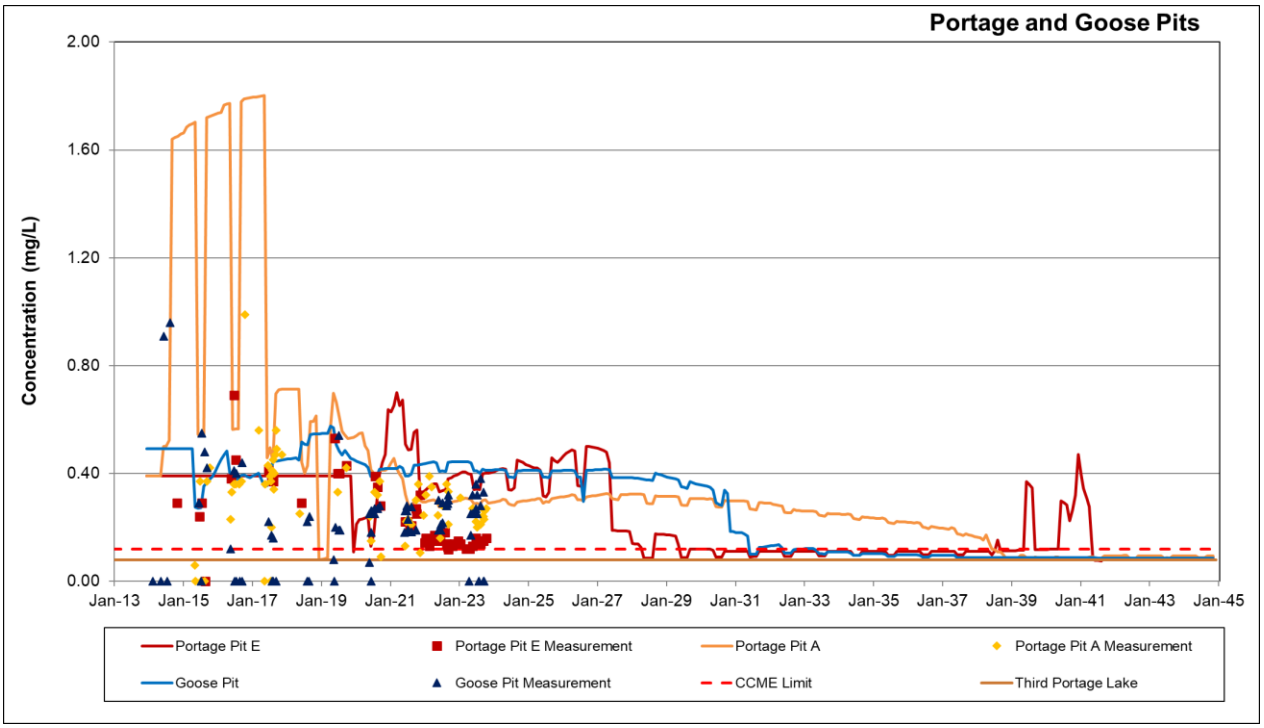


Figure 4-17: Fluoride Forecasted Concentration

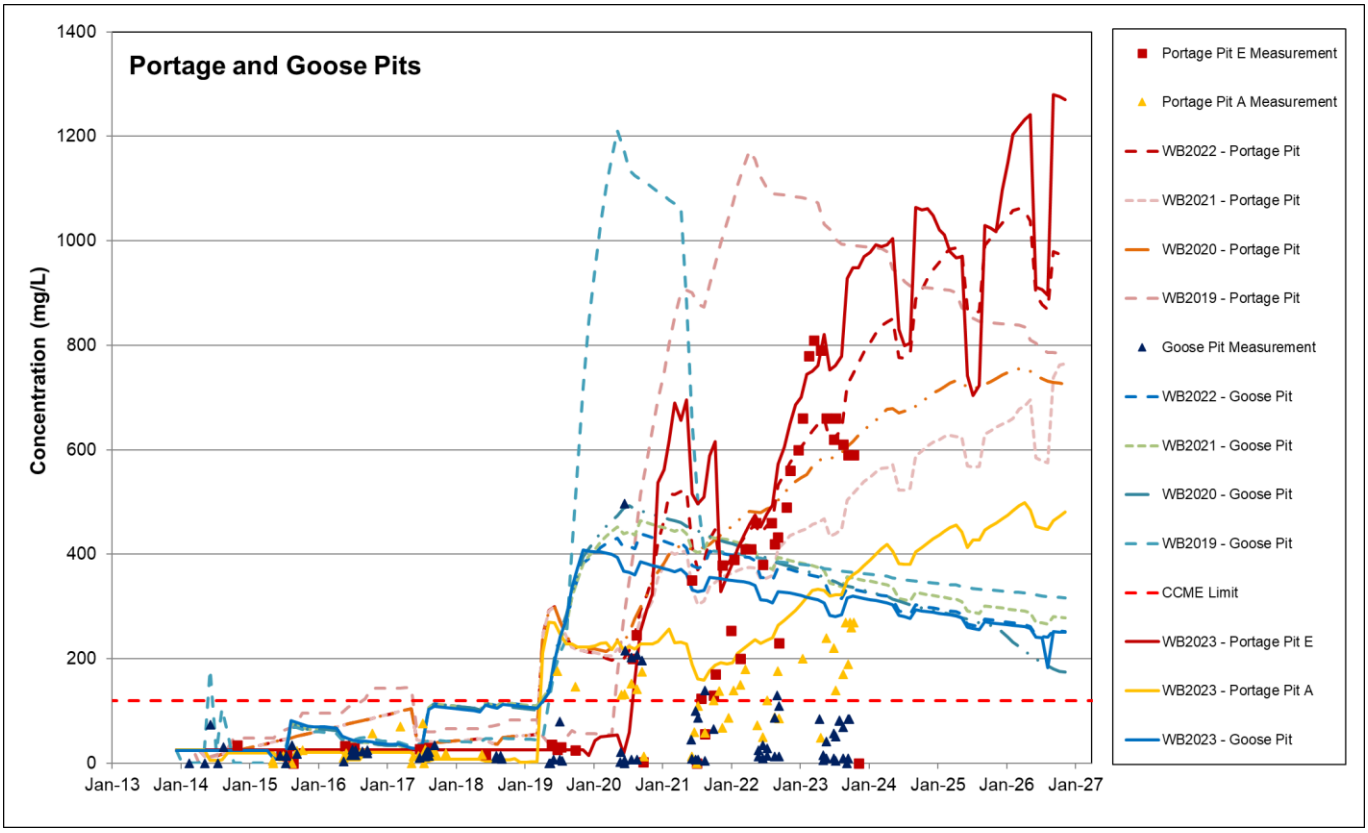


Figure 4-18: Comparison of Forecasted Chloride Concentration in Portage and Goose Pits

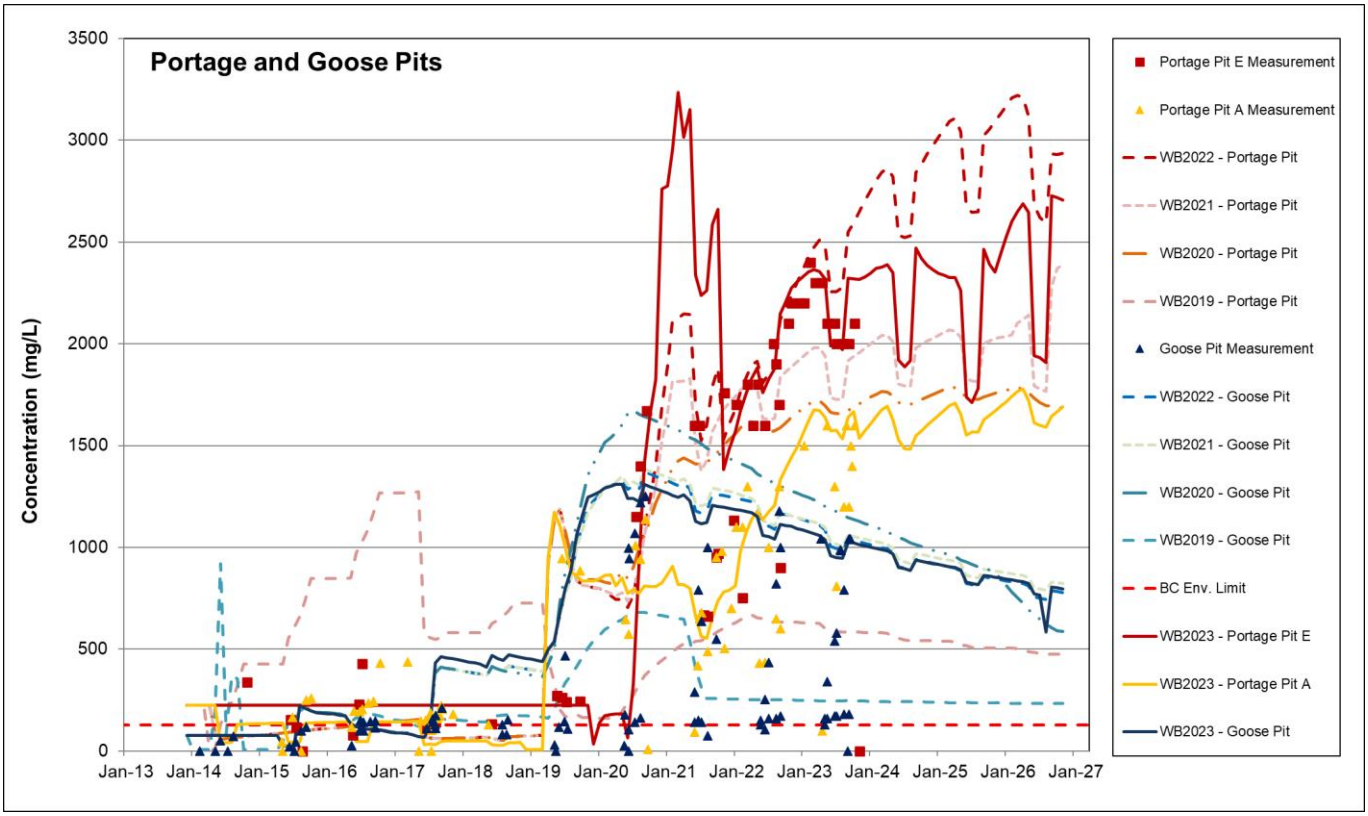


Figure 4-19: Comparison of Forecasted Sulphate Concentration in Portage and Goose Pits

4.2.5 Sensitivy Analysis

The water quality forecast model provides a high-level evaluation of the impact of Mill Effluent on the future water quality in the North and South Cell TSF Reclaim Pond and Portage and Goose Pits. The model provides only an order of magnitude forecast of the concentration trends in these areas.

For demonstration purposes only, a sensitivity analysis was conducted on Total Arsenic, Copper and Nickel in Portage Pit E for year 2023 to 2026 (end of deposition). A water quality forecast for each of these parameters was evaluated assuming a Mill Effluent concentration equal to the 25th and 95th percentile of the water quality data sampled in 2023. The following figures compare the forecasted concentration against the results based on the 25th and 95th percentile data.

It is important to note that every year, the water quality forecast input parameters are adjusted to match the measured values sampled on site in North and South Cell TSF and Portage and Goose Pits.

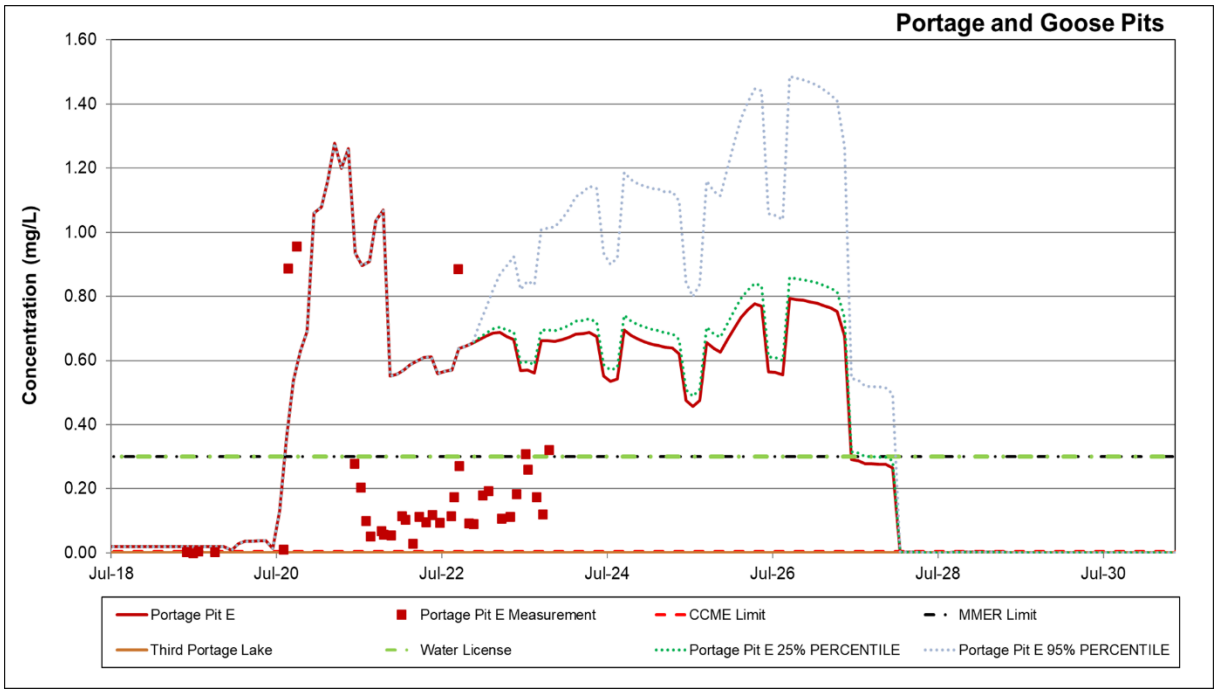


Figure 4-20: Sensitivity Analysis - Total Arsenic Forecasted Concentration in Portage Pit E

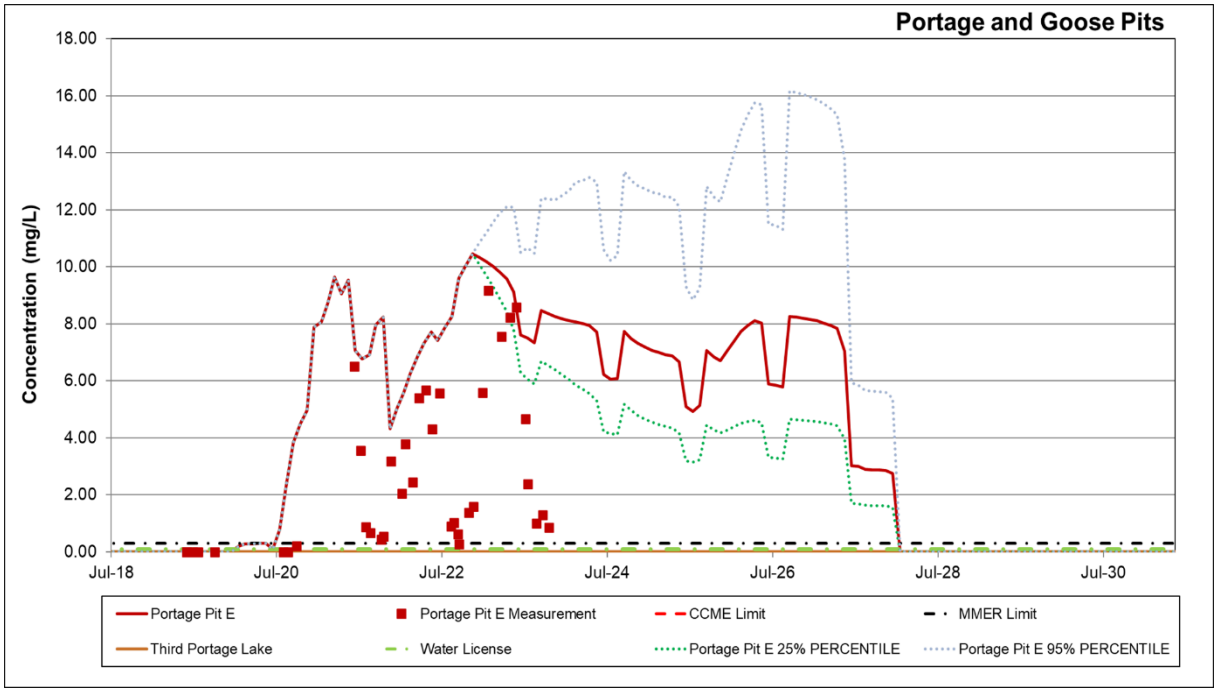


Figure 4-21: Sensitivity Analysis - Total Copper Forecasted Concentration in Portage Pit E

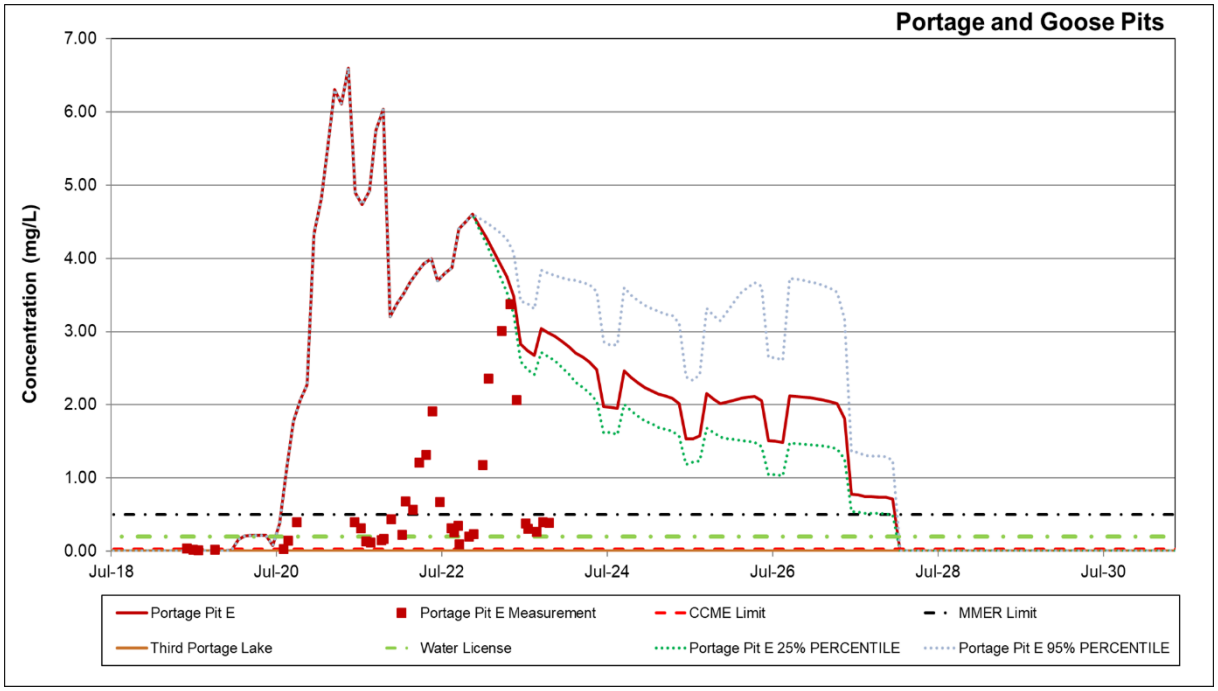


Figure 4-22: Sensitivity Analysis - Total Nickel Forecasted Concentration in Portage Pit E

4.3 Water Treatment Requirements

Based on the results of the water quality forecast mass balance presented in **Section 4.2**, following the end of in-pit tailings deposition, the reclaim water will need to be treated and discharged to Third Portage Lake to be in line with the ICRP updated in 2019. The assimilative capacity of Third Portage Lake will be assessed with the objective of maintaining a baseline or guideline/protective water quality in the lake. Treated effluent discharge water criteria will be assessed based on this objective. Based on the water quality forecast results, treatment may be required for the following parameters:

- Total metals, such as aluminum, arsenic, cadmium, copper, mercury, nickel, and lead.
- Total ammonia.
- Total cyanide.
- Total Dissolved Solids (TDS).
- Chloride and nitrate.

The water treatment plant will be designed to treat the specific parameters of concern and could consist of one or a combination of the following treatment approaches:

- If high metal concentrations persist, such as copper, nickel, and aluminum, they can be removed through the following process:
    - Hydroxide precipitation: Caustic soda (NaOH) or lime can be added to the effluent to increase the pH to 9, causing the formation of metal hydroxide precipitates, which settle out. The different treatment options that may be considered to implement the precipitation of heavy metals are listed below.
- A water treatment plant (WTP) will need to be installed close to Portage Pit, and it will be designed for metal precipitation with the addition of lime or caustic dosing system. The water from Portage Pit can be pumped to the WTP for treatment, with the treated water discharged to TPL via a diffuser.
- Treatment *in situ* at Portage Pit (i.e., batch lime treatment).
- A pH adjustment of the treated water will be required prior to its release.

If required, additional pre-treatment steps can be added, depending on the actual water quality to be treated, such as an oxidation step to help oxidize any metal complexes, or post-treatment such as media filter for final polishing, such as:

- Organosulfide precipitation: Organosulfide product can precipitate heavy metal into sulfide solids and with the aid of a typical coagulation/flocculation process, these precipitates can settle out from the water. It should be noted that this process may be combined with caustic/lime precipitation.
- Ion exchange: The heavy metal contaminants in form of cations can also be removed by ion exchange resin (IX). Prior to IX process, raw water needs to be filtered to remove suspended solids which may cause resin fouling.
- Membrane separation: Heavy metals can be removed by membrane techniques including nanofiltration and reverse osmosis. Prior to the membrane process, raw water needs to present very low suspended solids and turbidity and thus multimedia filtration or microfiltration is required.

- If arsenic concentrations are an issue, one of the most efficient techniques to reduce them is a coagulation-clarification/filtration process in order to co-precipitate the arsenic using an iron-based coagulant, such as ferric sulphate, to form a ferric-arsenate precipitate.
- For total dissolved salts, such as chloride and sulphate, membrane separation such as nanofiltration or reverse osmosis can be applied, if necessary.
- For total ammonia present in the Reclaim Water, more active treatment solutions could be implemented, such as:
    - Biological treatment (i.e., nitrification);
    - Ion exchange removal using zeolite;
    - Precipitation of ammonia using ettringite precipitation; or
    - A pH adjustment of the treated water near neutral pH, to ensure that most of the ammonia present is in the form of ammonium (NH_4^+) instead of un-ionized ammonia (NH_3).
- Sludge generated from the treatment process could be thickened and/or dewatered and stored in the North Cell or South Cell tailings storage facilities and capped with NPAG rockfill at closure.

A high-level closure water treatment strategy for the Meadowbank site was developed with the objectives of identifying conceptual treatment options to meet possible closure discharge criteria, identifying activities required for the development and implementation of the closure water treatment system, and establishing a preliminary schedule to develop and implement the closure water treatment system. The results of this study were presented in the technical note “Meadowbank Closure Water Treatment Strategy”, document 679254-7000-4KER-0001 (SNC Lavalin 2021). Studies are on going to assess water management strategies including water treatment option for closure. The results of these studies will be presented in the next versions of the Closure and Reclamation Plan.

5.0 Vault Water Quality Forecasting

5.1 Review of Water Quality Data

5.1.1 Review of Water Quality Discharged to Environment

A compilation of actual measured water quality data from the Vault Area sampled in 2023 was performed. The Vault Area includes Vault Pit (ST-26), Vault Attenuation Pond (ST-25), Vault Waste Rock Storage Facility (ST-24), Phaser Pit (ST-41), Phaser Attenuation Pond (ST-43), Discharge to Wally Lake and Exposure Area in Wally Lake. The average and maximum for each parameter monitored for the Meadowbank Water Quality Forecast Model are presented in **Table 5-1**. Total metals were used in this analysis. For measured values that were below the detection limit, a value equal to half of the detection limit was considered in the analysis.

The yellow cells represent the concentrations that are higher than CCME guidelines for Protection of Aquatic Life, which are used for comparison purposes only. The water discharged to Wally Lake is governed by the Water Licence and the MDMER requirements. Any parameters measured at the discharge to Wally Lake (ST-10) that have concentrations above the Water Licence discharge criteria would be highlighted in red, which is not the case based on the samples taken in 2023.

In 2023, no water was discharged to Wally Lake. All the water was contained within the Vault Attenuation Pond and surrounding pits. No sample collected was above Water Licence criteria. Furthermore, the concentrations of metals and chloride in the water sampled in the Vault Pit, the Vault Attenuation Pond, the Vault Waste Rock Storage Facility (WRSF), the Phaser Pits, and the Phaser Attenuation Pond are relatively low compared to the Water Licence requirements.

Some elements were above CCME limits in the water sampled in the Vault Pit, the Vault Waste Rock Storage Facility, the Phaser Pits, and the Phaser Attenuation Pond. More precisely the average and the maximum values of the elements were above CCME limits:

- Total aluminum: Maximum values in the Vault WRSF and in Phaser Pit (ST-41) were slightly higher than the CCME limit;
- Dissolved aluminum: Maximum value in the Phaser Pit (ST-41) is slightly higher than the CCME limit;
- Total chromium: Maximum values in the Vault Pit and in the Phaser Pit (ST-41) were slightly higher than the CCME limit;
- Total copper: Average and maximum values were higher than the CCME limit in Vault WRSF, Phaser Pit (ST-41), and Phaser Attenuation Pond;
- Total lead: Maximum value in the Vault Pit is slightly above the CCME limit;
- Fluoride: Maximum value is slightly higher than the CCME limit in Phaser Pit (ST-41).

As in 2022, in 2023 ammonia nitrogen in Vault Pit and Phaser Pit and in Vault and Phaser Attenuation Ponds was below the CCME limit, as were nitrate concentrations.

5.1.2 Ammonia Loading to the Environment

In 2023, no water was discharged to Wally Lake. Thus, for 2023, there is no ammonia loading discharged to the environment.

Table 5-1: Average and Maximum Concentrations Measured in the Vault Area for 2023

Parameters	Units	Vault Pit (ST-26)		Vault Attenuation Pond (ST-25)		Vault Waste Rock Storage Facility (ST-24)		Phaser Pits (ST-41/42)		Phaser Attenuation Pond (ST-43)		Discharge to Wally Lake (ST-10)	*CCME Guidelines*	*Water License Vault, Max. Avg. Conc. Part F of License*
		Avg. 2023	Max. 2023	Avg. 2023	Max. 2023	Avg. 2023	Max. 2023	Avg. 2023	Max. 2023	Avg. 2023	Max. 2023	No Discharge in 2023		
Alkalinity	mg $CaCO_3$/L	43.50	53.00	29.00	31.00	47.83	64.00	40.67	55.00	32.00	42.00		*n/a*	*n/a*
Hardness	mg $CaCO_3$/L	95.73	118.00	59.54	61.60	107.62	156.00	77.75	105.00	64.17	82.20		*n/a*	*n/a*
Total Aluminum (Al)	mg/L	0.05660	0.09590	0.01716	0.02460	0.06060	0.17000	0.05848	0.13800	0.03908	0.09090		*0.1*	*1.5*
Dissolved Aluminum (Al)	mg/L	0.01722	0.02890	0.00000	0.00000	0.00000	0.00000	0.03975	0.13700	0.01531	0.02630		*0.1*	*1*
Total Silver (Ag)	mg/L	0.00001	0.00004	0.00002	0.00002	0.00002	0.00002	0.00001	0.00001	0.00001	0.00001		*0.00025*	*n/a*
Total Arsenic (As)	mg/L	0.00274	0.00331	0.00045	0.00051	0.00185	0.00228	0.00157	0.00183	0.00070	0.00084		*0.005*	*0.1*
Total Barium (Ba)	mg/L	0.01221	0.01360	0.01148	0.01280	0.01027	0.01330	0.01349	0.01860	0.01148	0.01410		*n/a*	*n/a*
Total Cadmium (Cd)	mg/L	0.00001	0.00002	0.00001	0.00001	0.00002	0.00002	0.00001	0.00002	0.00002	0.00003		*0.00004*	*0.002*
Total Chromium (Cr)	mg/L	0.00085	0.00349	0.00100	0.00100	0.00100	0.00100	0.00039	0.00134	0.00023	0.00070		*0.001*	*n/a*
Total Copper (Cu)	mg/L	0.00134	0.00168	0.00152	0.00164	0.00273	0.00296	0.00352	0.00608	0.00283	0.00335		*0.002*	*0.1*
Total Iron (Fe)	mg/L	0.09872	0.19900	0.02040	0.03800	0.10733	0.29700	0.10115	0.23800	0.15217	0.23100		*0.3*	*n/a*
Total Manganese (Mn)	mg/L	0.01186	0.02100	0.00466	0.00990	0.01240	0.02900	0.00749	0.02290	0.01372	0.03130		*n/a*	*n/a*
Total Mercury (Hg)	mg/L	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001		*0.000026*	*0.004*
Total Molybdenum (Mo)	mg/L	0.02009	0.02740	0.00360	0.00400	0.01723	0.02490	0.00768	0.01050	0.00161	0.00199		*0.073*	*n/a*
Total Nickel (Ni)	mg/L	0.00462	0.01610	0.00150	0.00220	0.00212	0.00300	0.00340	0.00704	0.00327	0.00514		*0.025*	*0.2*
Total Lead (Pb)	mg/L	0.00061	0.00197	0.00020	0.00020	0.00024	0.00036	0.00029	0.00075	0.00015	0.00026		*0.0010*	*0.1*
Total Selenium (Se)	mg/L	0.00022	0.00028	0.00010	0.00010	0.00025	0.00037	0.00014	0.00021	0.00007	0.00009		*0.0010*	*n/a*
Total Thallium (Ti)	mg/L	0.00001	0.00002	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001		*0.0008*	*n/a*
Total Zinc	mg/L	0.00144	0.00328	0.00500	0.00500	0.00500	0.00500	0.00093	0.00169	0.00221	0.00413		*0.03*	*0.2*
Ammonia (unionized NH_3)	mg N/L	-	-	-	-	-	-	-	-	-	-		*0.016*	*n/a*
Total Ammonia Nitrogen (NH_3-NH_4)	mg N/L	0.05317	0.06900	0.05100	0.05500	0.06167	0.12000	0.05000	0.05000	0.05050	0.05300		*1.83*	*20*
Chloride	mg/L	5.83333	8.40000	1.90000	3.10000	1.31667	2.10000	2.30000	3.80000	2.78333	4.40000		*120*	*500*
Fluoride (F)	mg/L	0.10167	0.11000	0.10400	0.11000	0.10333	0.11000	0.11000	0.13000	0.10333	0.11000		*0.12*	*n/a*

Parameters	Units	Vault Pit (ST-26)		Vault Attenuation Pond (ST-25)		Vault Waste Rock Storage Facility (ST-24)		Phaser Pits (ST-41/42)		Phaser Attenuation Pond (ST-43)		Discharge to Wally Lake (ST-10)	*CCME Guidelines*	*Water License Vault, Max. Avg. Conc.*
		Avg. 2023	Max. 2023	Avg. 2023	Max. 2023	Avg. 2023	Max. 2023	Avg. 2023	Max. 2023	Avg. 2023	Max. 2023	No Discharge in 2023		*Part F of License*
Nitrate (NO_3)	mg N/L	1.03167	1.47000	0.11600	0.18000	0.76500	1.05000	0.60500	0.86000	0.11667	0.15000		*2.94*	*50*
Total Cyanide (CNt)	mg/L	0.00050	0.00051	0.00050	0.00050	0.00051	0.00054	0.00051	0.00058	0.00050	0.00050		*0.005*	*n/a*
Sulphate (SO_4)	mg SO_4/L	49.00	61.00	40.80	41.00	69.17	100.00	36.17	51.00	34.17	41.00		*128*[1]	*n/a*
Total dissolved solids	mg/L	124.17	175.00	91.00	105.00	160.00	220.00	109.17	150.00	99.17	135.00		*n/a*	*1400*

Notes:

Measured concentration higher than Water License requirement.

Measured concentration higher than CCME guidelines. Value highlighted for comparison purposes only.

1. *Threshold value for sulfate based on BC Environment guideline for the protection of aquatic life for very soft water (0-30 mg/L) (April 2013).*

5.2 Vault Water Quality Forecast

5.2.1 Model Description

A mass balance model was developed to assess the water quality forecast trends in the Vault Attenuation Pond (ATP) for ammonia and nitrate. The starting date for the model was set for June 2014.

5.2.2 Assumptions

The assumptions used in the development of the mass balance model for the Vault ATP of Meadowbank were the following:

1. The Vault ATP is a combination of Pond A, B, C and D. The model does not take into consideration the transfers between Pond A, B, C and D, only transfers inside and outside the Vault Attenuation Pond.
2. The model considers water transfers to the Vault ATP from Vault Pit, Phaser Pit, Phaser Lake, and runoff from its catchment area.
3. The model does not take into consideration the variations of volume due to ice (no free volume, as well as ice ratio and water/ice entrapment).
4. The water quality from Vault Pit, Phaser Pit, and Phaser Lake is based on the yearly average measured values and is assumed to be constant over a given year for ammonia and nitrate.
5. The water mass balance is performed around the Vault ATP. The volume of water transferred out of the Vault ATP to the water treatment plant or Wally Lake is assumed to be completely discharged to the lake.
6. It is assumed that the primary source of ammonia and nitrate loading is from Vault Pit and Phaser Pit. All other inflow contaminant concentrations (Phaser Lake, runoffs, etc.) are assumed to have a negligible impact on ammonia and nitrate loadings.
7. For simplification of the model, ponds and pits are assumed to be completely mixed systems.
8. For simplification of the model, the parameters are assumed to be inert: they do not degrade or react with other elements in the system.
9. For this analysis, it is assumed that the water treatment plant between the Attenuation Pond and Wally Lake does not reduce the concentration of ammonia and nitrate.

5.2.3 Input to Model

The mass balance model is based on the assumptions above and on the following water quality sampled at:

- Vault Pit (ST-23 / ST-26);
- Phaser Pit (ST-41);
- Phaser Lake (ST-43);
- Vault Attenuation Pond (ST-25);
- Final Effluent to Wally Lake (ST-10).

The initial concentration of parameters in the Vault Attenuation Pond is assumed to be the average of 2014-2015 measurements (i.e., ammonia = 2.2 mg N/L; nitrate = 4.7 mg N/L).

Table 5-2 presents the average concentrations used to estimate the loadings from Vault Pit and Phaser Pit to Vault ATP. Transfer of runoff from the Vault Pit area occurred from 2014 to 2018, while runoff transfer from Phaser Pit occurred from 2017 to 2018. As of 2019, surface runoff was allowed to accumulate in the pits.

Table 5-2: Average Concentrations to Estimate Loading to Vault ATP

Year	General Basis	Vault Pit		Phaser Pit	
		Ammonia (mg N/L)	Nitrate (mg N/L)	Ammonia (mg N/L)	Nitrate (mg N/L)
2014	Avg. 2014-15 measured data	18	46	--	--
2015		18	46	--	--
2016	Average 2016 measured data	5	20	--	--
2017	Average 2017 measured data	3.8	4.2	4	30*
2018	Average 2018 measured data	3.1	4.9	7.96	15.8
2019	Average 2019 measured data	1.2	7.5	1.75	3.3
2020	Average 2020 measured data	0.15	2.2	0.06	1.5
2021	Average 2021 measured data	0.07	1.5	0.05	1.1
2022	Average 2022 measured data	0.07	1.4	0.05	0.7
2023	Average 2023 measured data	0.06	1.0	0.05	0.6

Notes:

** Value adjusted so that the forecasted value in Vault ATP is similar to the monitored data.*

Measurements taken at the final effluent to Wally Lake and in the Vault Attenuation Pond (ATP) were used to compare the forecasted results.

5.2.4 Forecasting Results

5.2.4.1 Ammonia

Ammonia concentrations sampled in Vault Pit and Phaser Pit are elevated because of the use of ammonium-nitrate explosives during the mining process. **Figure 5-1** presents the concentrations monitored in Vault Pit, Phaser Pit, Vault Attenuation Pond and at the final effluent to Wally Lake.

Two monitored values in Vault Pit exceeded the Water Licence limit in 2014 and 2015 and all values measured from 2016 to 2023 were below the limit. For Phaser Pit, there was one value higher than the limit in 2018. All of the samples taken in the Vault Attenuation Pond (ATP) and the final effluent towards Wally Lake were below the Water Licence discharge requirements. From 2020 to 2023, all ammonia concentrations were below the CCME Guidelines.

When forecasting the concentration of the water in the Vault ATP until closure, the forecasted concentration of ammonia reached a peak of about 3.7 mg-N/L in 2015 and then decreased to a concentration below 1 mg-N/L before closure.

Agnico is required to meet the criteria for discharge to Wally Lake as stated in the Type A Water Licence, which is set at 20 mg N/L. No exceedance occurred and is foreseen with the current Vault water quality forecasting model.

Figure 5-2 shows the forecasted concentration, the monthly loadings, and the cumulative loadings of ammonia in the treated effluent discharged to Wally Lake. As in previous years, forecasted and measured values in Vault ATP continue to decrease.

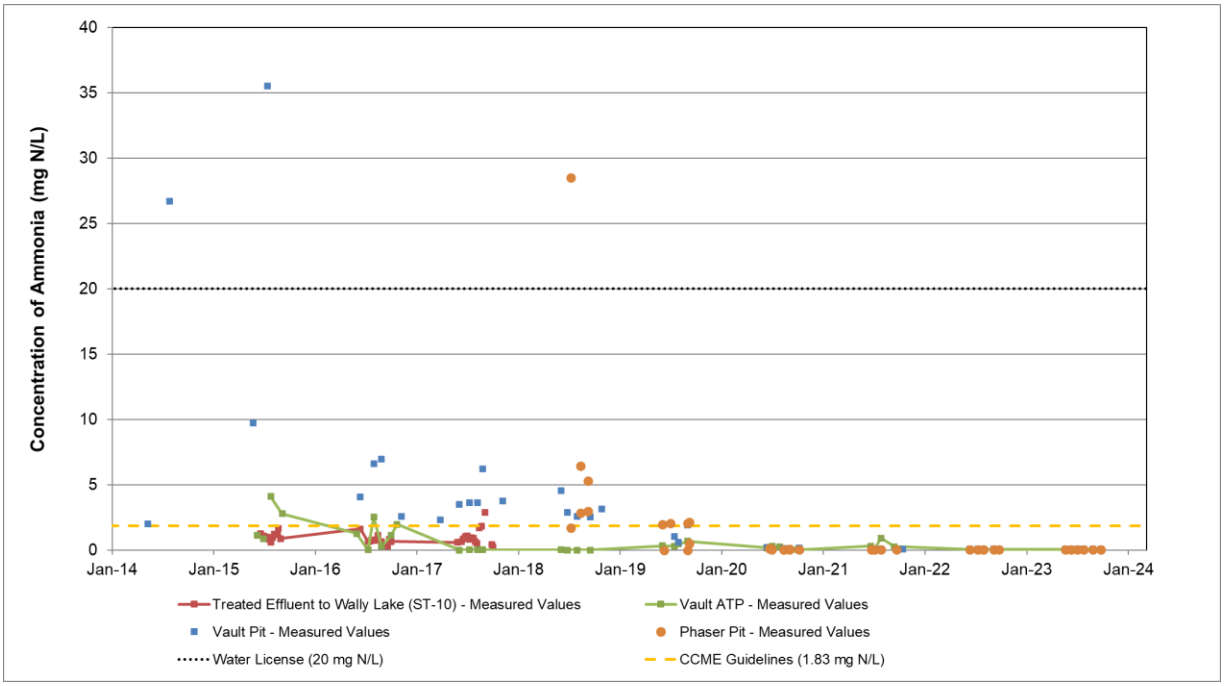


Figure 5-1: Measured Ammonia Concentration in Vault Area

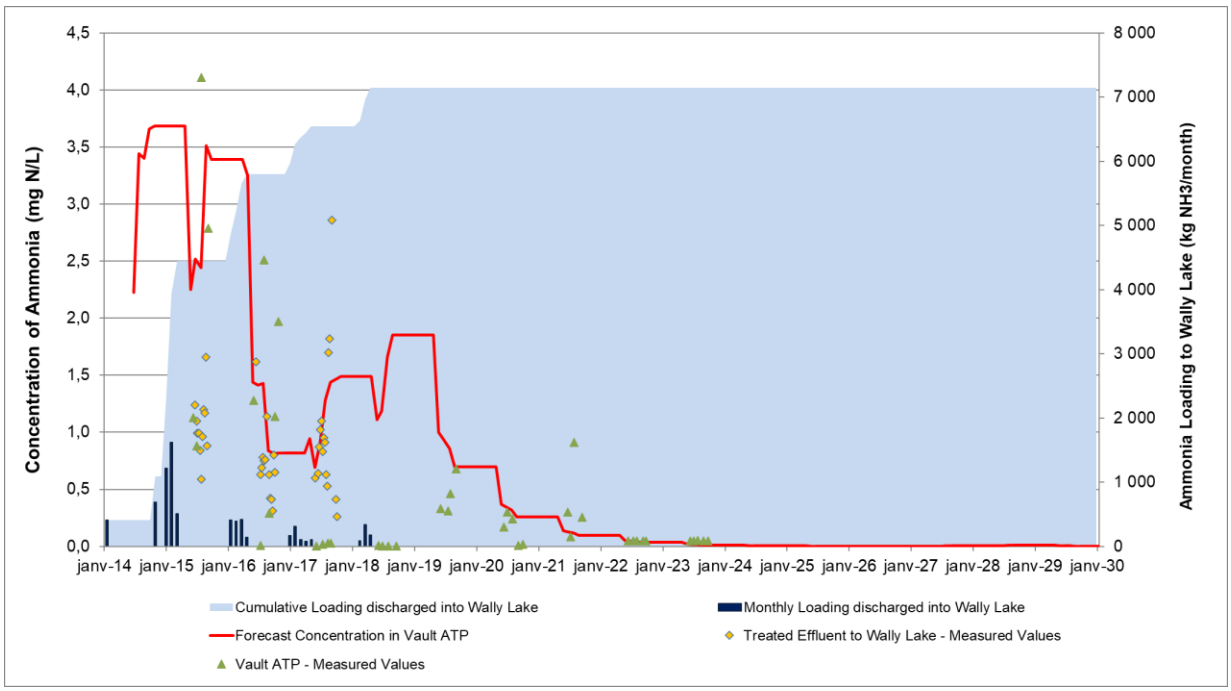


Figure 5-2: Forecasted Ammonia Concentration in Vault Area

5.2.4.2 Nitrate

Nitrate concentrations sampled in the Vault Pit and Phaser Pit are also found to be elevated because of the use of ammonium-nitrate explosives for the pit development. **Figure 5-3** presents the concentrations monitored in Vault Pit, Phaser Pit, Vault Attenuation Pond, and at the final effluent towards Wally Lake.

Measured nitrate concentrations in the Vault Pit and Phaser Pit were below the Water Licence limit of 50 mg N/L. The monitored values in Vault Attenuation Pond and in the final effluent are also well below the Water Licence requirements.

The forecasted trend of nitrate concentration in the effluent discharged to Wally Lake until closure is similar to that for ammonia. There is a rise of nitrate to about 8.6 mg-N/L in 2015, and then a decrease to a concentration of approximately 1 mg-N/L before closure. Since the Water Licence discharge limit for nitrate is 50 mg N/L, no exceedance is foreseen.

Figure 5-4 shows the forecasted concentration, the forecasted monthly loadings, and the cumulative loadings of nitrate in the treated effluent discharged to Wally Lake.

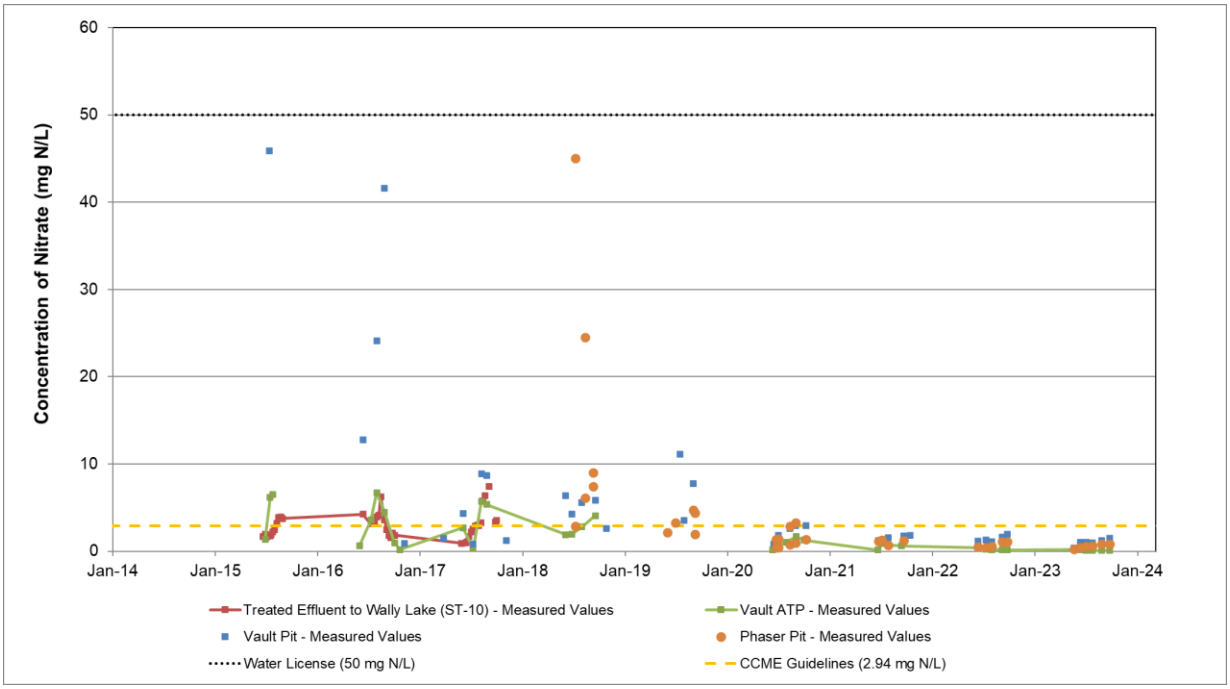


Figure 5-3: Measured Nitrate Concentration in Vault Area

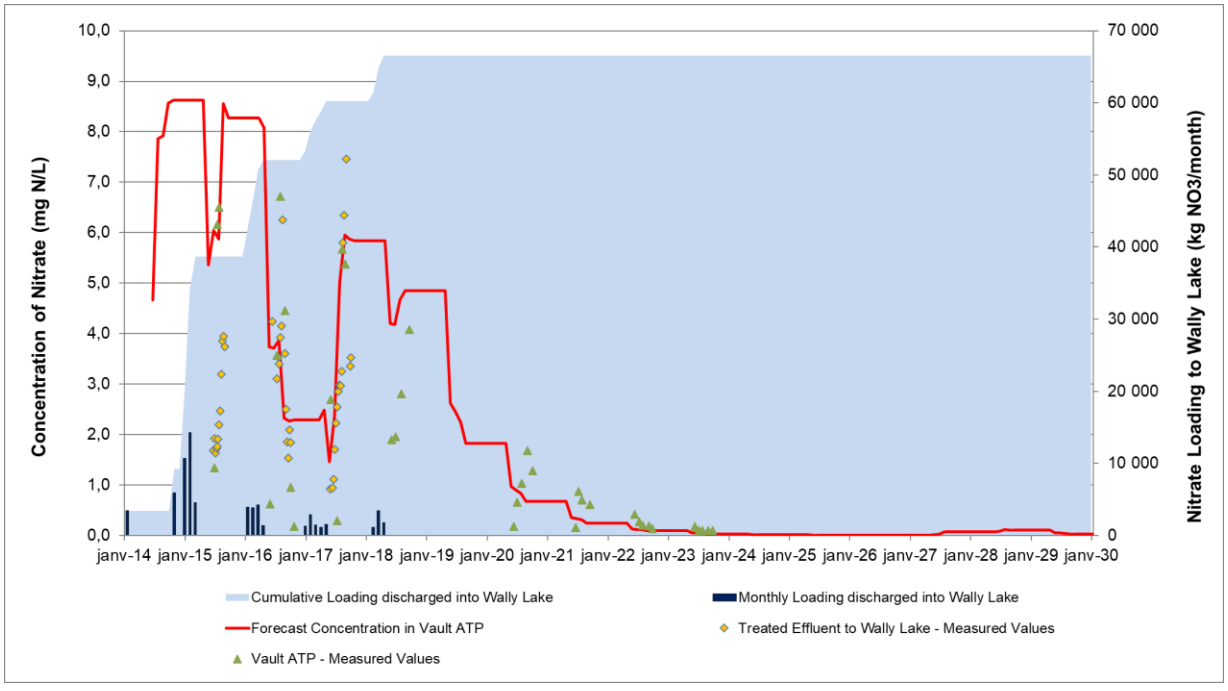


Figure 5-4: Forecasted Nitrate Concentration in Vault Area

5.2.4.3 Final Remarks

In conclusion, the forecasted concentrations of ammonia and nitrate in the Vault ATP are expected to remain below the discharge requirements as defined in the Type A Water Licence. The primary source of ammonia and nitrate in the water comes from the use of an ammonium-nitrate based explosive in the development of the Vault Pit and Phaser Pit. Note that the model results are quite conservative when compared to the monitored data since the end of mining operations at Vault and Phaser pits.

6.0 Conclusion

It is important to understand the limitations of the mass balance model and of this Technical Note. The limitations are presented in **Section 3.3** and are briefly summarized below:

- In order to simplify the model, the mass balance model assumes the following:
  - Ponds and pits are completely mixed systems;
  - No change in the water quality of the Mill Effluent;
  - A monthly time step.
- The mass balance model is based on a set of water quality analysis results provided by Agnico:
  - Water quality data collected at the surface of the North and South Cell TSF Reclaim Pond;
  - Water quality data available for the Mill Effluent;
  - Water quality data of various inflows and outflows of the North and South Cell TSF Reclaim Ponds;
  - Water quality data collected in Goose and Portage Pits;
  - Water quality data collected from pit seepages.

6.1 Results Summary and Treatment

This year's water quality forecast model ends at the end of in-pit deposition projected for June 2026 and at the end of pit reflooding projected for July 2041 based on the WB 2023. At the end of in-pit deposition, Reclaim Water stored in Goose Pit and Portage Pit shall then be treated and discharged to Third Portage Lake during closure. For the purpose of this study, parameters of concern were identified using the current Water Licence limits. However, final site-specific treated effluent discharge limits for closure will be developed through review of the closure plan by regulatory agencies.

Based on the results of the water quality forecast mass balance presented in **Section 4.2**, the following parameters of concern were detected at the end of deposition:

- Total Aluminum (in Portage Pit E and Pit A)
- **Total Arsenic** (all pits)
- Total Cadmium (in Goose Pit, close to Water Licence limit)
- **Total Copper** (all pits)
- **Total Nickel** (all pits)
- Total Lead (in Goose Pit, slightly higher than Water Licence limit)
- Chloride (in Portage Pit E only)
- **Total Dissolved Solids** (in all pits)
- **Total Ammonia** (in all pits)
- Nitrate (in Portage Pit E only)
- Total Cyanide (in Portage Pit E and Pit A)

Among the parameters listed above, five (5) parameters were identified in this year's water quality forecast report (bolded values). The increasing trend observed in Goose Pit and Portage Pit can be mainly attributed to the following:

- As of 2019, tailings are now being deposited in Goose Pit and Portage Pit. Reclaim water is allowed to accumulate in the pits and is pumped back to the mill for re-use.
- As of 2019, the main ore body processed at the Meadowbank site originates from the Whale Tail Pit ore body. The ore body from Whale Tail Pit has a different geochemical behavior than the ore extracted from Portage/Goose/Vault pits. This leads to higher forecasted concentrations of certain elements at the end of in-pit deposition, such as arsenic.
- The water quality forecast model was also adjusted based on the mill effluent sampled from 2019 to 2023. The quality of the mill effluent varies from year to year. The mill effluent is the main source terms for the identified parameters of concern.

Water treatment shall be undertaken at the end of in-pit tailings deposition. A potential treatment option for the removal of the metals in Reclaim Water prior to discharge is caustic or lime precipitation, while ammonia could be removed by ion exchange using a zeolite media. Coagulation with ferric sulphate could be used to co-precipitate the arsenic as a ferric arsenate precipitate. Additional treatment steps could be considered once the actual nature of the water to treat is known, such as the addition of an oxidation step to help oxidize metal complexes, additional polishing steps, like filtration or membrane treatment, and/or the addition of a biological treatment step to treat for ammonia. Studies are on going to assess water management strategies including water treatment option for closure. The results of these studies will be presented in the next versions of the Closure and Reclamation Plan.

Pit reflooding shall take place following the treatment of the Reclaim Water. The pits shall be reflooded with a combination of natural runoff and active transfer of water from Third Portage Lake. The forecasted water quality concentrations at the end of pit flooding are projected to be lower than the CCME limits. Note that the dikes will only be breached if the water quality within them meets the selected water quality criteria as per the water license requirement.

As for the Vault area, in 2023, the entire area is undergoing natural reflooding. No discharge to Wally Lake was reported in 2023. All the water sampled in the area did not exceed any of the Water Licence discharge limits. For comparison purposes only, copper concentrations were slightly higher than CCME guidelines. Ammonia and nitrate continue to show a decreasing trend as natural reflooding is progressing over time.

6.2 Recommendations

In order to improve the accuracy of the model so that it can better forecast the concentration of certain parameters in the Reclaim Ponds or Portage and Goose Pits, the following studies, tests and monitoring are recommended:

1. Continue the current monthly monitoring program of all inflows and outflows of the North and South Cells TSF Ponds for cyanide, a complete total and dissolved metal scan, ammonia, nitrate, fluoride, chloride, sulphates, TDS and TSS. This will provide an indication of the runoff quality that is accumulated in these ponds following the end of tailings deposition in these areas.
2. Considering that deposition of the tailings is now occurring in the pits, continue regularly monitor pit water quality (Portage and Goose) when the site can be safely accessed, and analyze for cyanide, total and dissolved metals, ammonia, nitrate, chloride, fluoride, sulphates, TDS and TSS. This information will be useful in developing and calibrating a water quality forecast model of the pit water quality based on loadings from the mill effluent, surface runoff and possible pit seepages. Continue measuring the conductivity of water in the pits at different depths to detect if there is any stratification occurring in the pit lakes.
3. Once Portage and Goose Pits are hydraulically connected, it is recommended to sample the water at different points in the pit area in order to evaluate the mixing efficiency over the entire area. The samples should be taken at different depths over the entire area of the flooded pits before and after the filling season.
4. Continue to sample and analyze, as per the Water Licence requirement, water from the Vault Pit, Vault Attenuation Pond, Phaser Pit, and Phaser Attenuation Pond.
5. Continue bench scale water treatment test to evaluate the contaminant removal efficiency using treatment approaches such as lime neutralization, coagulation/flocculation with aluminum sulphate or ferric sulphate, and coagulation/flocculation with proprietary coagulants designed for metal removal, as well as alternative treatment options such as biological treatment for ammonia.

7.0 References

Agnico (2024). Water Balance for 2023 Water Management Plan sent January 18, 2024, based on Meadowbank 2023 Waste Management Plan.

Botz, M. and Mudder, T. (2000). Modeling of Natural Cyanide Attenuation in Tailings Impoundments. Mineral and Metallurgical Processing, Vol. 17, No. 4, pp. 228-233. November 2000.

CCME. Water Quality Guidelines for the Protection of Aquatic Life. Canadian Environmental Quality Guidelines Summary Table. <http://st-ts.ccme.ca/?chems=all&chapters=1>. Accessed on February 2016.

Nunavut Water Board Licence (2015). Water Licence No: 2AM-MEA1525. Agnico-Eagle Mines Ltd. July 2015.

AtkinsRéalis (2021). Meadowbank Closure Water Treatment Strategy. Document No. 679254-7000-4KER-0001, Rev. 00, March 2021.

AtkinsRéalis (2022). Meadowbank Water Quality Forecasting Update for the 2021 Water Management Plan. Document No. 688202-1000-40ER-0001, Rev. 00, March 2022.

AtkinsRéalis (2023). Meadowbank Water Quality Forecasting Update for the 2022 Water Management Plan. Document No. 693776-1000-40ER-0001, Rev. 00, March 2023.

APPENDIX D – 2024 FRESHET ACTION PLAN

AGNICO EAGLE

MEADOWBANK COMPLEX

MEADOWBANK FRESHET ACTION PLAN

MARCH 2024

VERSION 12

1. EXECUTIVE SUMMARY

The purpose of this Freshet Action Plan is to identify areas of concern around the Meadowbank mine site and the AWAR that need to be managed in an organized and timely manner during the annual freshet period to prevent adverse environmental and operational impacts. The Plan outlines specified actions that will be taken by Agnico to manage and mitigate areas where environmental incidents could occur, as well as addressing historical incidents, specifically seepage on the north-east side of the Portage Waste Rock Storage area, known as sampling location ST-16 (2013) and seepage from the mill (inside) containment structures through the Assay Road southwest of the mill (Mill Seepage - 2013). Any future incidents that have the potential to affect off site water or land will be added and would include any specific mitigation and monitoring actions.

The freshet period is initiated during the annual snow and ice melt, around mid-May. During this period excess water is created and must be managed through additional pumping and management practices at vulnerable areas around the site. Mitigation techniques, timeframes and specified roles and responsibilities are outlined in this document for each area of concern.

The main areas of concern are the excavated pits (Pit A, Pit E, Goose Pit and Vault Pit), the North and South Cell TSF surrounding infrastructures (East and West diversion ditches, Northwest corner of the North Cell TSF, Saddle Dam 1 corner, Saddle Dam 2 sump, Saddle Dam 3 sump, Saddle Dam 4-5 downstream, Central Dike downstream pond (ST-S-5), Stormwater Dike), the areas around the Portage Waste Rock Storage Facility (RSF) (the northern portions of the NAG waste rock extension, the two collection ponds known as WEP1 and WEP2), Vault Road culverts, Vault Waste Rock Storage Facility, AWAR culverts near the site and along the road to Baker Lake, RSF – ST-16 Seepage, and the Assay Road (Mill) Seepage.

It is important for all water management and associated infrastructure to be in good working order and adequate to manage the expected water flows associated with the freshet period; this includes but is not limited to pumps, ditch, culvert and sump maintenance, critical piping system installation and inspection, as well as adequate resource allocation for preparative work. A concise summary of the 2024 preparation works and roles and responsibilities are presented in the attached Appendix 1 (2024 Freshet Action Plan Procedures). Appendix 1 will be updated yearly to reflect changes in conditions at the Meadowbank site. Appendix 2 contains diagrams depicting the areas of concern and incident response locations.

DOCUMENT CONTROL

Revision				Pages Revised	Remarks
#	Prep.	Rev.	Date		
01	Agnico	Internal	April 2014	All	
02	Agnico	Internal	May 2015	All	Comprehensive update from 2014 Plan
03	Agnico	Internal	October 2015	All	Comprehensive update from May 2015 Plan
04	Agnico	Internal	March 2016	All	2016 Comprehensive review
05	Agnico	Internal	March 2017	All	Comprehensive update from May 2016 Plan
06	Agnico	Internal	March 2018	All	Comprehensive update from 2017 Plan
07	Agnico	Internal	March 2019	All	Comprehensive update from 2018 Plan
08	Agnico	Internal	March 2020	All	Comprehensive update from 2019 Plan
09	Agnico	Internal	March 2021	All	Comprehensive update from 2020 Plan
10	Agnico	Internal	March 2022	All	Comprehensive update from 2021 Plan
11	Agnico	Internal	March 2023	3	2.1.3 Water transfers into Pit A were added
				2	Figure 2-1, Figure 2-2, Figure 2-3, Figure 2-4, Figure 2-6, Figure 2-7 were updated
				15	Section 2.9 was added
				Appendix 1	Section 2.9 was added
				Appendix 3	Snow management map was updated
				Appendix 4	Freshet flowchart and plan view was updated
12	Agnico	Internal	March 2024	8	Section 2.3.1.1 was updated
				11	Section 2.3.1.5 was updated
				15	Section 2.8 was updated
				15	Section 2.10 and Figure 2-10 were added
				Appendix 1	Section 2.10 was added
				Appendix 3	Snow management map was updated
				Appendix 4	Freshet flowchart and plan view were updated

Prepared By: Meadowbank Environment

Approved by:

Eric Haley, Environment and Critical Infrastructure Superintendent

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF APPENDIX

1. INTRODUCTION

The purpose of this Freshet Action Plan is to ensure that Agnico can address and manage excess water associated with the freshet season at the Meadowbank site in a manner to minimize environmental risks, and to ensure Agnico has implemented specific management and mitigation measures in response to environmental incidents with potential for offsite impacts to water or land.

The freshet season is loosely defined as starting approximately May 15th and in some cases, actions and mitigation measures can extend into early fall when freezing re-occurs. There are many areas around the site that are vulnerable to excess water; the goal is to identify these areas and develop a clear plan with defined roles and responsibilities (amongst Agnico Eagle Departments), and to manage the freshet flows.

In addition, several guiding principles are applicable to the formation of this plan. The highest priority principles are:

1) to ensure that the health and safety of Agnico employees is protected, especially with respect to mining operations when excess water is present;
2) to ensure that mine contact water from runoff or seepage is managed to prevent adverse environmental impacts; and
3) to ensure the site is in compliance with the Nunavut Water Board (NWB) License, Part D, Item 19 and Part E, Item 10.

The plan will identify the areas of concern and discuss the potential risks as well as mitigation measures necessary to address the identified issues. Appendix 1 contains the actual defined 2023 procedures, the roles and responsibilities and associated timelines. Agnico's intent is to update the Procedural Appendix on a yearly basis. For example, there may be additional mitigation measures for a defined problem area or, in some cases, a previously defined issue may be permanently rectified.

The main areas of concern are:

- IPD pits and Vault area Pits;
- Area around the Portage Waste Rock Storage Facility (RSF) including the northern portions of the NAG waste rock extension, which include the collection ponds known as WEP 1 and WEP 2;
- Vault Waste Rock Storage Facility;
- North and South Cell TSF surrounding areas:
    - East and West diversion ditches;
    - Northwest corner of the North Cell TSF;
    - Saddle Dam 1 corner;
    - Saddle Dam 2 sump;
    - Saddle Dam 3 sump;
    - Saddle Dam 4-5 downstream;
    - North Cell Internal Structure
- East Dike Seepage
- Vault Road culverts;
- Stormwater Management Pond;

- Fuel Tank Farms;
- AWAR culverts near the site and along the road to Baker Lake;
- RSF – ST-16 Seepage;
- Assay Road (Mill) Seepage;
- Central Dike Seepage.
- Monitoring Station at KM87 (ST-44)
- Baker Lake Marshalling Facilities

Each area identified above will be discussed in detail below. All areas of concern are considered priorities based on the guiding principles.

2 AREAS OF CONCERN

2.1 IPD Pits, Vault Pits

All active ramps, and ditches must be cleared of all ice and snow before May in order to access the shoreline of the filling pits. All pumps must be checked and serviced to be in working order prior to May. In addition, a check must be completed confirming that all piping systems starting from the different pits are in working order (leak free).

2.1.1 *Goose Pit*

Mining in Goose Pit was completed in 2015. Tailings deposition began in July 2019. Water transfers from Goose Pit towards either Pit E or Pit A will be performed as required, as part of the deposition plan and water balance exercise. Water accumulating in the surface area around Goose Pit (Bay Goose Dike ring road, NPAG stockpile, Goose sump) will be pumped to Goose Pit as required.

2.1.2 *Pit E*

Mining in Pit E was completed in 2019. Tailings deposition began in August 2020. Runoff water accumulated at the Pit E crest will be pumped into Pit E as required. The Pit E3 ramp requires proper trenching and snow clearing to ensure safe condition for the planned operations of the tailing deposition and mill reclaim systems. Water accumulating in the pit is either transferred to Pit A or reclaimed for the mill process.

2.1.3 *Pit A*

Mining in Pit A was completed in 2018. The pit is now part of the in-pit deposition plan. The Pit A ramp requires proper trenching and snow clearing to ensure safe operations of the tailing deposition and mill reclaim systems.

Water from the South Cell, Central Dike seepage, East Dike Seepage (depending on water quality) and Stormwater Pond will be directed to Portage Pit A during freshet, where as accumulating water in Pit A will be reclaimed for mill process, as required.

2.1.4 *Vault & Phaser Pits*

Mining activities were completed in the Vault area (including Phaser and BB Phaser) in 2019. No further discharge to Wally Lake are expected. As a result of all mining activity of Vault area being completed, passive pit reflooding has begun, with natural runoff being the only inflow. No active water management is planned in that area at freshet. For safety concern the area is restricted. Procedures are in place to safely access the area for sampling purposes.

Figure 2-1: View of Vault area and the surrounding area

2.2 Waste Rock Storage Area

2.2.1 *Portage RSF*

The Portage Rock Storage Facility (RSF) will require weekly inspections around the perimeter beginning as soon as the freshet starts until freeze up to identify any seepage. As will be noted in the following section, seepage was identified in 2013 at location ST-16. In the event that additional seepage is observed from the RSF, it must be reported to the Environment Department and samples must be taken to determine the water quality and source. A mitigation plan will be prepared and implemented if necessary.

Active pumping at the Portage RSF towards the North Cell and Pit A is planned at ST-16 (Section 2.2.1.1), WEP1 (Section 2.3.1.2), and WEP 2 (Section 2.3.1.2).

2.2.1.1 ST-16 Seepage

In July 2013, a seepage from the Rock Storage Facility (RSF) was noted (see ST-16 on Figure 2-3). The seepage contained elevated copper, nickel, ammonia and cyanide. It was determined through investigation that the likely source of the contaminants was reclaim water from the North Cell TSF. Further details and discussion can be found in the Agnico Annual Report (Section 8.5.3.1.7).

Water ponding in ST-16 will be pumped to the North Cell Tailings Storage facility and Portage Pit A. Daily inspections will be undertaken in May until freshet is complete and after rain events to ensure water remains contained within ST-16. Water levels in ST-16 must remain below the till plug. Once the lake or seep area are ice free, the sample monitoring program will commence. If samples detect any concerns or elevated levels, Agnico will review the monitoring plan immediately, including downstream lakes. Pumped volumes will be documented and daily inspections of the area will be undertaken. In addition, snow will be removed from the ditches and culvert at the outlet of NP- 2 to NP-1 Lake to ensure freshet flows do not back up and overflow into the ST-16 seep location and that the north watershed non-contact runoff flows freely through to NP-1 Lake and further downstream (Dogleg Lake).

In the event that seepage water flows through the rockfill road reaching NP-2 Lake, the Environmental Department will notify authorities.

Figure 2-2. View ST-16 station and surrounding area.

2.2.1.2 Waste Extension Pool (WEP) sumps

WEP1 and WEP2 sumps were constructed in September 2015 to manage water around the northeast side of the RSF to ensure all water ponding is transferred to the North Cell TSF (see Figure 2-3). The WEP1 and WEP 2 sumps were replaced in 2016 with the WEP collection system. Water collected at WEP1 and WEP2 will be pumped to ST-16. Daily inspections will be undertaken in May until freshet is complete and after rain events to ensure water remains contained within

WEP1 and WEP2 and does not enter the East Diversion Ditch. Both sumps WEP1 (ST-30) and WEP2 (ST-31) will be sampled as per the monitoring plan.

2.2.1.3 North Portion of NAG Waste Rock Expansion

The northwestern area of the RSF, which consists entirely of NAG material, extends towards the East Diversion ditch as shown in Figure 2-3. Runoff from this area, while not anticipated to be contaminated, could, if significant, discharge to NP-2 lake after crossing the tundra. The Environmental Department will conduct daily visual inspections during freshet. Sample monitoring will be undertaken when water is observed in order to determine water quality. Contaminated water must be kept from reaching NP-2 Lake; and if required, water will be pumped or diverted.

2.2.2 *Vault RSF*

The Vault RSF requires monitoring during the freshet period to ensure adequate water management. Weekly inspections around the RSF perimeter will be conducted to identify any seepage as soon as the freshet starts. In the event that seepage is observed, the Environment Department must be notified and samples taken to determine water quality. The sample monitoring will be in accordance with the Water License requirements. No water quality issues are anticipated as primary drainage is towards the Vault Pit and the waste rock stored in the RSF is primarily NAG. No active pumping system is planned for that area.

2.3 North and South Cell Tailings Storage Facility

Water management around both the North and South Cell Tailings Storage Facility (TSF) is required to maintain integrity of the tailings management infrastructure and to prevent any adverse environmental impacts. Water from the North Cell will be transferred to the South Cell which will then be pumped toward Portage Pit A. This section describes the infrastructure in place to control runoff water and reduce possible impact on both the tailings storage facility and the receiving environment. Tailings were last discharged in the North Cell in 2021, while tailings were last discharged in the South Cell in 2023.

2.3.1 *Diversion Ditches*

The East and West Diversion ditches were constructed in 2012 around the North Cell TSF and the Portage RSF. The diversion ditches are designed to redirect the fresh water from the northern area watershed away from the tailings pond and RSF and direct it to Second and Third Portage Lakes. As seen in Figure 2-3, five zones associated with the diversion ditches have been identified where actions will be taken during or before freshet:

1. AWAR culvert – Discharge to Third Portage Lake (ST-6);
2. West Diversion Ditch elbow;
3. Northwest corner of North Cell TSF;
4. East Diversion Ditch Outlet to NP-2 Lake (ST-5);
5. Vault road culvert – NP-2 Lake exit to NP-1 Lake.

Figure 2-3: Location of the areas of interest for the 2023 Freshet Action Plan

2.3.1.1 AWAR culvert – discharge to Third Portage Lake

Ditch outflows are important to ensure proper flow of freshet drainage. The culvert under the AWAR (Figure 2-3) is a critical section of the West Diversion Ditch. Snow removal must be performed to avoid ponding and damage to the ditch/trench structure as well as to maintain the integrity of the AWAR which, in turn, is critical to transportation at the Meadowbank mine site. Figure 2-4 illustrates this culvert. Snow and/or ice must be removed on each side of the culvert to allow water to flow through to prevent upstream ponding prior to freshet to prevent any back up in the West Diversion ditch. If not completed, this could increase water levels upstream in the ditch causing problems discussed in Section 2.3.1.2. The culvert may need to be steamed if blocked by ice. Before starting the cleaning operation, it is important to ensure that the electrical cable (5kV) location has been visually identified.

Figure 2-4: West diversion ditch area of interest

Daily inspections will be conducted starting in May until Freshet is complete and after rain events. Sample monitoring will commence when open water is present in accordance with the Water License (ST-6). Sampling frequency of ST-6 may be increased if TSS results are near 30 mg/L (grab) and 15 mg/L (monthly average), or visually elevated. If a discharge of TSS occurs, the Environment Department will notify ECCC and NWB.

2.3.1.2 West Diversion Ditch Elbow

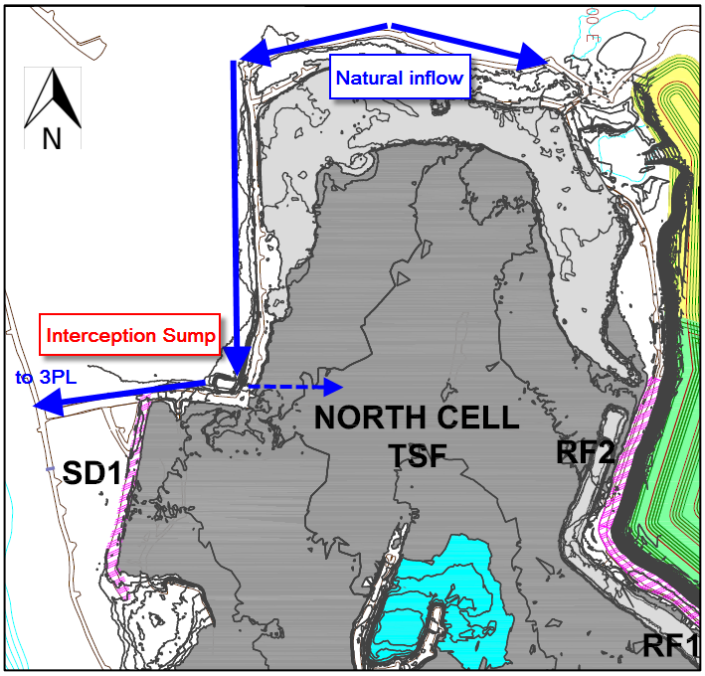
One of the deepest sections of the West Diversion ditch is located in the corner next to the Saddle Dam 1– see Figure 2-4 and Figure 2-5. In early May of each year, Agnico will remove the snow accumulation to allow the water to flow freely, preventing the water upstream from increasing in level and hydraulic head pressure. In addition, large flows can scour the ditch system causing sediment migration through the ditches which could impact Third Portage Lake.

As a precaution, Agnico constructed an interception sump located at the west diversion ditch elbow location in 2014. The sump has a capacity of 3,000 m³. These measures will prevent any

contaminated water from reaching Third Portage Lake. This sump will also act as a settling pond to prevent water with elevated TSS from reaching Third Portage Lake.

Daily inspections will be conducted from May until freshet is complete and after rain events. Sample monitoring will also be conducted. It is planned to let natural overflow to Third Portage Lake, if results are compliant. A pump will be installed preventively and ready to operate.

Figure 2-5. View of the Interception Sump in relation to the Diversion Ditches



2.3.1.3 Northwest Corner of North Cell TSF

The construction access road at the Northwest corner of the North Cell TSF (see Figure 2-4) was vulnerable to damage from the freshet water flow from the northern watershed (see watercourse flow in Figure 2-5 denoted by blue line). The start of the West Diversion ditch is also located in this area and is designed to collect the freshet. Ponding is limited in this area once the freshet is done.

Agnico will continue to monitor and conduct visual inspections of this area in May until freshet is complete and after rain events.

2.3.1.4 East Diversion ditch outlet to NP-2 Lake

This area of the East Diversion ditch, see Figure 2-6, acts as the outflow of the North part of the East Diversion ditch into NP-2 Lake. This outlet must be cleared of obstructions – snow and ice – in early May to promote drainage through the ditch and into NP-2 Lake. The presence of ice blocks could be mitigated using the steam machine to melt away the obstruction. Daily inspections will be conducted starting in May until freshet is complete and after rain events. Sample monitoring will be conducted monthly during open water in accordance with the Water License (location ST-5). Sampling frequency of ST-5 may be increased if TSS results are near 30 mg/L (grab) and 15 mg/L (monthly average), or visually elevated. Turbidity barriers have been installed at the ditch outlet into

NP-2 in 2013 to mitigate elevated TSS. If a discharge of TSS occurs, the Environmental Department will notify ECCC and NWB (CIRNAC water Inspector).

Figure 2-6: View of the East Diversion ditch outlet into NP-2 Lake

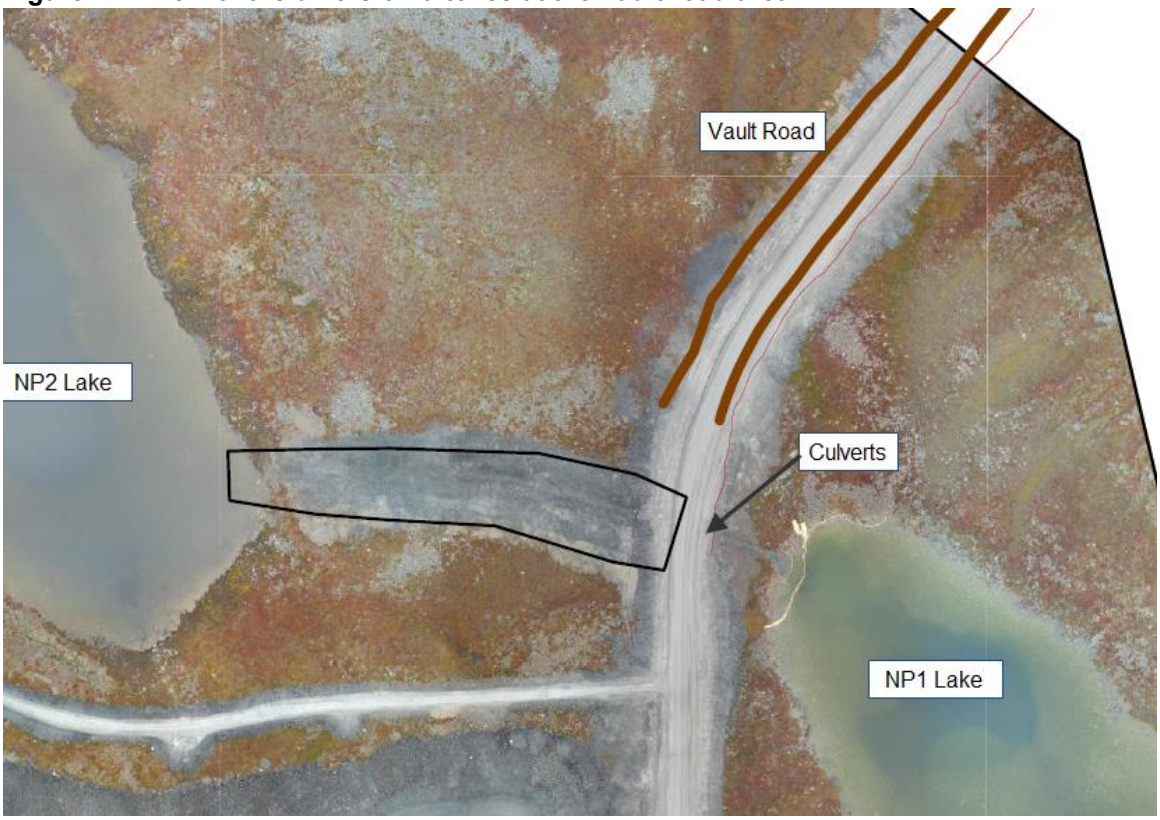
2.3.1.5 NP-2 Outlet, Vault Road Culvert and NP1

This area of the East Diversion ditch acts as the outflow of NP-2 Lake through the Vault Road culvert (see Figure 2-3). The culvert connects the East Diversion ditch from Lake NP-2 to NP-1. Snow and ice must be removed from the culvert area, including upstream at the exit of NP-2 Lake, in early May, to ensure that the outlet of NP-2 flows freely to NP-1 and ultimately to Dogleg Lake. Back up could cause an upstream water raise in Lake NP-2, which could cause overflow into the RSF ST-16 sump. First, snow from the ditch between NP1 and the road (1) will be removed in early May. Next, the culvert will be steamed, if necessary, to remove any ice/snow. If needed snow/ice around the outlet of NP2 Lake (4) would be removed to allow free flow of melt water. Daily inspections will commence in May until freshet is complete and after rain events. TSS sample monitoring will be conducted monthly and as needed for turbidity. Sampling frequency may be increased if TSS results are near 30 mg/L (grab) and 15 mg/L (monthly average), or visually

elevated. If a discharge of TSS occurs, the Environmental Department will notify ECCC and NWB (CIRNAC Water Inspector).

A snow management plan has been implemented, ensuring no large accumulations of stored snow in this area, to minimize runoff.

Figure 2-7: View of the diversion ditches at the Vault road area



2.3.2 Tailings and Dewatering Dikes

2.3.2.1 Saddle Dam 1

This peripheral dike of the North Cell TSF is required for tailings containment. Daily inspections, starting May until water freezes, will be required for Saddle Dam 1 (SD1) to ensure that runoff water does not pool against the toe of the dike due to low topography. A pumping station located along the toe of the dike is installed to pump water in the North Cell. This pumping station must be operational once water is observed at the toe to pump the water to the TSF. The pumping system will be checked in early May to ensure proper operation. Monthly sampling will be conducted at this station (ST-S-2) during open water conditions in accordance with the Water License.

2.3.2.2 Saddle Dam 2

This peripheral dike is located South of SD1, is required for tailings containment. Historically, this structure has not had any issues with water pooling at the toe, therefore monthly inspections starting May until water freezes will be required for Saddle Dam 2 (SD2) to ensure that water does

not pool against the toe of the dike. If water is observed at the toe it will be pumped back in the North Cell and a water sample could be taken.

2.3.2.3 Saddle Dam 3

This peripheral dike of the South Cell was built in 2015 for water and tailings containment. A permanent sump was established in 2017 at a low spot that facilitates water management at freshet. The downstream area of the SD3 embankment will be pumped to the South Cell TSF to avoid water ponding against the structure. This pumping station must be operational once water is observed at the toe to pump the water to the TSF. The pumping system will be checked in early May to ensure proper operation. Monthly sampling will be conducted at this station (ST-32) during open water conditions in accordance with the Water License.

2.3.2.4 Saddle Dam 4-5

Since their initial construction in 2015, ponding in the downstream area is minimal. Localized pooling ponds are sometimes present during the freshet period and will be pumped into the South Cell TSF footprint on their upstream side.

2.3.2.5 North Cell Internal Structure (NCIS)

This internal structure was built as an upstream raise in the North Cell in 2018 and allowed for increased tailings storage capacity. Additional sump (NC-A, NC-B, NC-C, NC-D, NC-E) were implemented within the footprint of the North Cell in strategic point at the downstream of this structure to ensure proper water management. Water reporting to these sumps is pumped in the North Cell to reach the main water management station in the North Cell.

2.3.2.6 Central Dike

Central Dike seepage, monitoring station ST-S-5, is located at the downstream area of the Central Dike embankment, a peripheral structure of the South Cell used for tailings retention. A permanent pumping system is in place to manage the seeping water beneath the dike by keeping the downstream pond at a constant elevation. More details to be found in the Meadowbank Water Management Plan. Water in this sump is pumped to Portage Pit A. Weekly inspections of the area will be held by environment. Environment department will also conduct monthly sample as per the Water License.

2.3.2.7 Stormwater Dike

The Stormwater dike separates the North Cell from the South Cell, and is required for tailings containment. A small pump is installed on the Western edge of the dike to collect water and pump it in the North Cell. This will prevent pooling of water against the toe of the dike. The pumping system will be installed and checked in early May to ensure proper operation.

2.3.2.8 East Dike

The water quality of the East Dike seepage is monitored throughout the year. When the criteria for discharge are met the water is send to Second Portage lake, otherwise it is sent to the Portage Pits. Historically, at freshet, the water quality of the East Dike seepage does not meet TSS requirement.

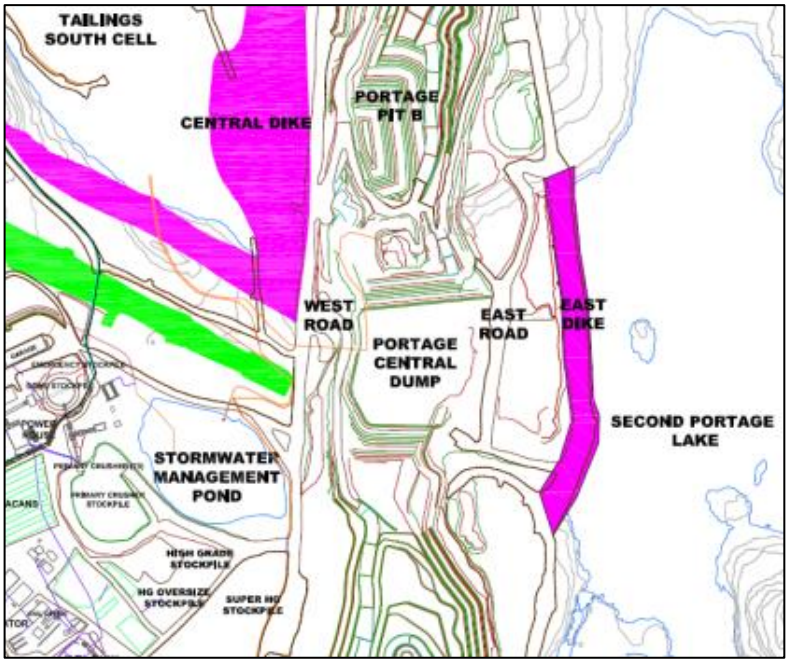
2.4 Vault Road Culvert

The Vault road crosses over a connection between two water bodies, Turn Lake and Drill Tail Lake, at approximately km 113. Beginning in May, until freshet is complete and after rain events, it will be important to complete daily inspections. In the case that excessive TSS is observed, samples will be taken and analyzed. In the case, where the TSS levels go beyond 30 mg/L (grab) and 15 mg/L (monthly average), a report will be made to the ECCC and NWB (CIRNAC Water Inspector). Turbidity barriers will be installed as a mitigation measure if needed.

2.5 Stormwater Management Pond

The Stormwater Management Pond (SWMP) is a small shallow and fishless water body that can be seen in Figure 2-8 adjacent to Portage Pit. Treated sewage is discharged into this pond before being transferred to one of the tailing storage facility. The quantity of water transferred each year is recorded. Weekly inspections in the spring and fall are undertaken to determine the commencement of pumping.

Figure 2-8: Portage Pit area with the Stormwater Management Pond



2.6 Bulk Fuel Storage Facilities

2.6.1 Meadowbank Tank Farm

Snow and ice accumulation within the fuel tank farm must be adequately managed to prevent overflow to the environment and/or damage to the fuel handling systems. The Energy and Infrastructure Department will advise the Environmental Department of their intent to pump the containment area once ice/snow begins to melt. Water samples will be taken in accordance with the Water License to ensure compliance prior to its release. A notice must be provided to the Inspector 10 days prior to this pumping activity. Once sample results have been obtained, the Environmental Department will advise the Energy and Infrastructure Department if pumping can

begin. If sample results permit, the pumping may begin; to direct water to the tundra/ground in a way to prevent erosion. In the event that the water sample results do not meet discharge criteria the water shall be sent to the Stormwater Management Pond.

2.6.2 Baker Lake Tank Farms

Snow and ice accumulation within the fuel tank farms at Baker Lake must be adequately managed to prevent overflow to the environment and/or damage to the fuel handling systems. The Energy and Infrastructure Department will advise the Environmental Department of their intent to pump the containment area once ice/snow begins to melt. Water samples will be taken in accordance with the Water License to ensure compliance prior to its release. A notice must be provided to the Inspector 10 days prior to this pumping activity. Once sample results have been obtained, the Environmental Department will advise the Energy and Infrastructure Department if pumping can begin. If sample results permit, water can be directed to the tundra but the flow rate shall be such to avoid erosion or damage to the tundra. Environmental inspection of the setup is required prior to starting the discharge. In the event that the water sample results do not meet discharge criteria the water cannot be pumped to the tundra. If this occurs the water will be pumped to a tanker and transported to the Meadowbank site to be disposed of in the TSF or placed in containers for shipment south as hazmat.

2.7 AWAR Culverts on the Baker Lake Portion

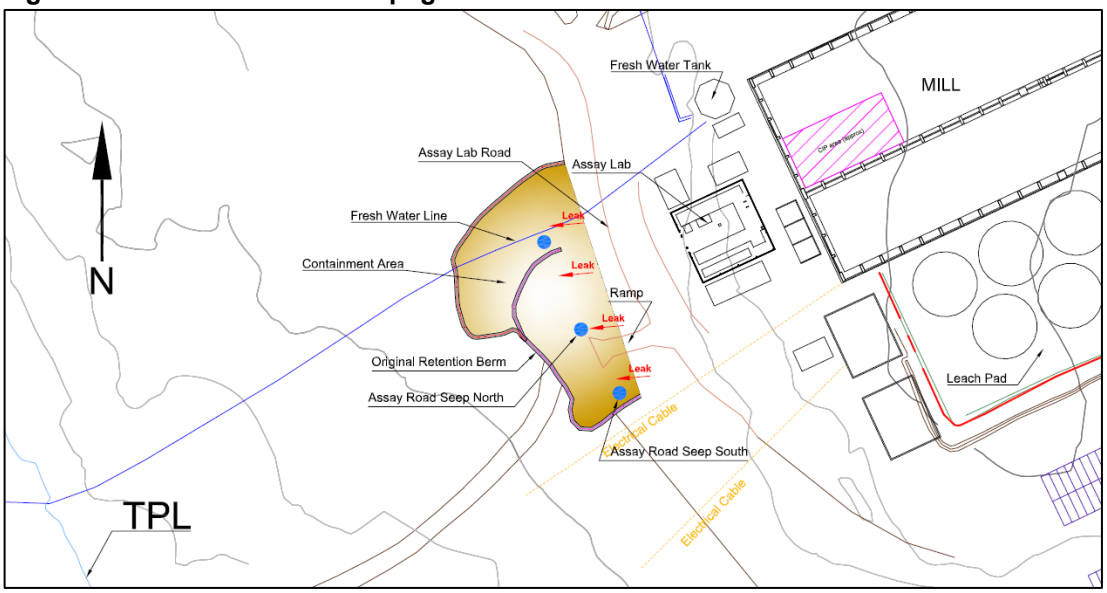
Weekly inspections will be undertaken starting in May at all culverts along the AWAR to ensure that water during freshet is flowing freely and no erosion is occurring. If elevated TSS/Turbidity levels are observed, sampling will occur and the results assessed. Turbidity barrier will be installed if required. The Energy and Infrastructure department will also be advised if severe erosion/scouring is observed. In addition, snow and ice removal may be required to allow the water to flow as per design specifications. Inspections will be performed during the freshet period by the Environment department.

2.8 Mill Seepage

In November 2013, Agnico observed seepage containing cyanide and copper at a location west of the access road in front of the Assay Lab (see Figure 2-9). An investigation determined the source was several containments areas within the mill. Repairs to seal all the mill sumps and containment areas were completed in 2014 thus stopping the source of the seep. An interception/collection trench between the mill and TPL was built in 2014. The seepage appears to have been effectively contained and the source area has been repaired. Additional information and discussion surrounding previous sample results are available in the Annual Report in Section 8.5.8.1.6.

On December 15 2023, Agnico observed water inflow within the Assay Road Seep South retention berm. An investigation was undertaken to identify potential sources of the water, to date the exact source of the water inflow has not been identified but no water inflow has been observed since December 26 2023. The water inflow was contained within the existing water management infrastructure that was built in 2014.

Figure 2-9. View of the mill seepage area and initial retention berm construction



As soon as the trench, monitoring wells and Third Portage Lake are unfrozen a comprehensive monitoring program is implemented. Regular inspections will be conducted of the pumping, collection systems and perimeter area and the pumped volumes will continue to be recorded.

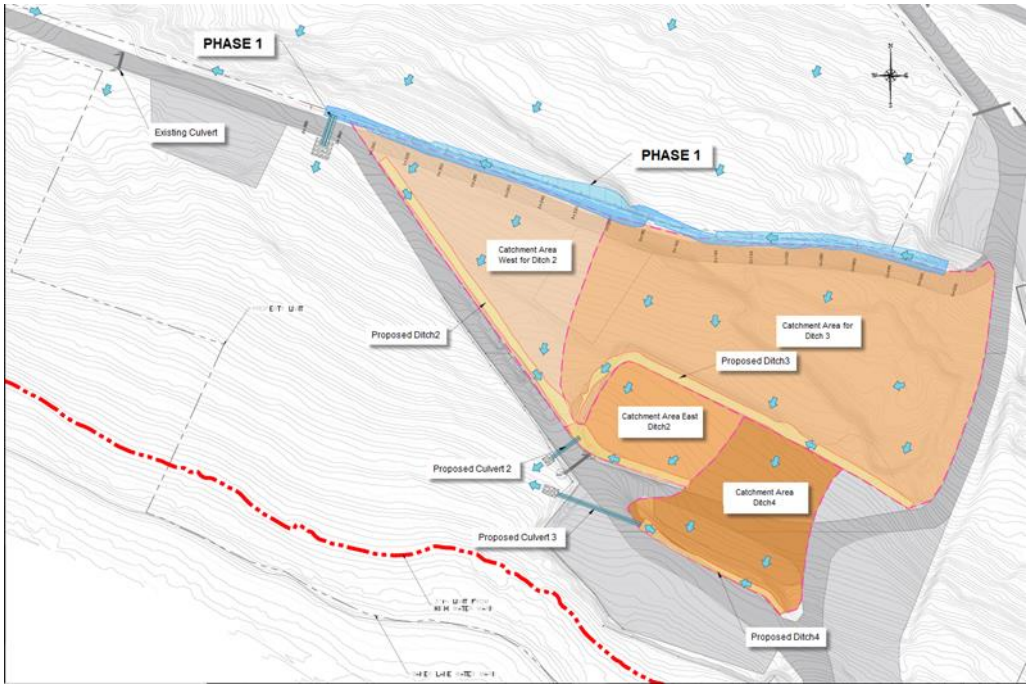
2.9 Monitoring Station at KM87 (ST-44)

In November 2022, a tractor trailer overturned at kilometer 87 on the AWAR resulting in a spill of diesel fuel. A downstream monitoring location, ST-44, will be sampled weekly during freshet and the results assessed. Additional internal sampling points may be identified during the monitoring. Routine visual inspections of the partially excavated contamination zone and collection sump(s) will occur. The inspections will include petroleum testing of any ponding water using test strips and PID. In the event of a positive result for petroleum or the presence of a visible sheen the collection sump(s) will be monitored daily, and contaminated water collected and sent to the Stormwater Management Pond or TSF.

2.10 Baker Lake Marshalling Facilities

In June 2022, a turbid flow of water was observed travelling through the Agnico Eagle facilities towards Baker Lake, resulting in a plume of total suspended solids (TSS) along the shore. Agnico Eagle received authorization to build a water diversion ditch in March of 2023 and construction of the first phase was completed in Fall 2023. Snow management practices at the marshalling facilities are in place to ensure manage snow melt reports to the diversion ditch. Weekly inspections will be undertaken starting in May of the Baker Lake Marshalling Facilities and the new water diversion ditch structure to ensure that water during freshet is being collected and flowing to the intended location. If elevated TSS/Turbidity levels are observed, sampling will occur and the results assessed. Turbidity barrier will be installed downstream of the diversion ditch outlet if required.

Figure 2-10. Design stages for the Water Management Improvement at Baker Lake Design Report



3. SNOW MANAGEMENT

The snow management procedure developed internally in 2015 and updated annually is illustrated in Appendix 3. Temporary snow storage dumps and snow accumulation areas of concern are identified on the map.

APPENDIX 1

2024 Freshet Action Plan Procedure

Section	Area of Concern	Role/Action	Responsibilities	Dates
2.1	**IPD Pits, Vault Pit and Pit Walls**			
2.1	IPD Pits, Vault Pit and Pit Walls – General	1) Clean all ice, mud and snow on all ramps, etc.	E&I	Before May
2.1.1	**Goose Pit**			
2.1.1	Goose Pit	1) Ensure pipes and pumps are serviced and ready to operate. 2) Give guidance as to when and where (Pit E or Pit A) water is to be pumped.	E&I ENV	Early May Early May
2.1.2	**Pit E**			
2.1.2	Pit E	1) Runoff water accumulated in ponds GP-4 and GP-5 will be pumped into Goose pit or Pit E;	E&I	During Freshet Early May
2.1.2	**Pit A**			
2.1.2	Pit A	1) Ensure pipes and pumps are serviced and ready to operate.	E&I	Early May
2.1.3	**Vault Pit Area**			

2.1.3 Vault & Phaser Pits	1) No further action in this area during the freshet period as mining is complete in Goose Pit. Water and/or ice will remain as part of the pit reflooding activity.	ENV	N/A
2.2 WASTE ROCK STORAGE FACILITY			
2.2.1 Portage RSF Inspection	1) Weekly inspection around the RSF perimeter to identify any seepage.	ENV	May - as soon as freshet starts until freeze up
	2) If seepage observed notify Eng and Env Department AND sample for CN and Water License Parameters – ST-16.	ENV	May - as soon as freshet starts until freeze up
2.2.1.1 ST-16	1) Check Piping from pump to discharge area at North Cell TSF.	ENV and E&I	Early May
	2) If the snow accumulation is judged to be too great, then snow must be removed.	ENV to coordinate with E&I	Early May
	3) Perform daily inspections or inspections as required, and keep records.	ENV	May - as soon as freshet starts until freeze
	4) Notify Eng. Dept and E&I when water present and pumping can start. **Water level to be maintained, as a minimum, below the till plug elevation. Water should not pond against the Till plug for extended**	ENV	May/early June - as soon as free water present and ice has melted until freeze

	5) **time periods - i.e. < 2 - 3 hours. For emergencies the water truck can be requested. Start pumping.**		
	6) Any seepage through rockfill road to NP-2 must immediately be reported to Env Dept and authorities.	ENV and E&I	May/early June - as soon as water is present until freeze
2.2.1.2 Waste Extension Pool sumps	1) Snow removal to allow free water flow.	ENV to coordinate with E&I	Early May
	2) Perform daily inspections or inspections as required, and keep records.	ENV	May - until Freshet complete and after rain events
	3) Sample monthly during open water as per Water License ST-30 (WEP1) and ST-31(WEP2)	ENV	May - until Freshet complete and after rain events
2.2.1.3 North portion of NAG Waste Rock Expansion	1) Perform daily inspections or inspections as required, and keep records.	ENV	May - until Freshet complete and after rain events
	2) Sample for ST-S-XX when water observed; sample upstream (background) in diversion ditch for same parameters and compare results (rush analysis). If results indicate potential for impact, i.e. results are > background, meet with engineering and determine necessity of ditching	ENV	May - as soon as freshet starts until freeze up

	3) Prevent **contaminated** contact water from reaching NP-2.	ENV	May - as soon as freshet starts until freeze up
2.2.2 Vault RSF Inspection	1) Weekly inspection around the RSF perimeter to identify any seepage.	ENV	May - as soon as freshet starts until freeze up
	2) If seepage observed notify Eng and Env Department AND sample for Water License Parameters – ST-24.	ENV	May - as soon as freshet starts until freeze up
2.3	**NORTH AND SOUTH CELL TAILINGS STORAGE FACILITY**		
2.3.1	**Diversion Ditch**		
2.3.1.1	AWAR Culvert - West Diversion ditch exit to TPL	1) Snow and/or ice must be removed with an excavator on each side of the culvert to allow water flow.	ENV to coordinate with E&I	Before May 20
		2) If needed, steam to free any ice blockage.	ENV to coordinate with E&I	Before May 20
		3) Before starting snow clearing operation, make sure the electrical cable location has been visually identified in the field.	ENV to coordinate with E&I	Before May 20
		4) Perform daily inspections or inspections as required, and keep records.	ENV	May - until Freshet complete and after rain events

		5) ST-6 sampling as per Water License and TSF weekly inspection (keep record).	ENV	Monthly as soon as freshet starts (open water) and continue until freeze
		6) Increase frequency of ST-6 sampling if TSS near 30 mg/L (grab) and 15 mg/L (monthly average), or visually elevated. Any extra samples to external lab.	ENV	TSS result dependent
		7) Have turbidity and silt barriers in place at TPL (2) and maintain.	ENV	May - before freshet starts and until water freezes
		8) Report any discharge of TSS to ECCC/NWB (grab > 30 mg/L).	ENV	May - as soon as freshet starts and until water freezes
2.3.1.2	West Diversion Ditch elbow near SD1	1) Snow and/or ice must be removed with an excavator to allow water flow and prevent ponding upstream.	ENV to coordinate with E&I	Early May
		2) Perform daily inspections or inspections as required, and keep records.	ENV	May - until Freshet complete and after rain events

		3) Sample for TSS monthly (external Lab) and as needed for Turbidity	ENV	May - until Freshet complete and after rain events
2.3.1.3	Northwest corner of North Cell TSF (West Diversion ditch)	1) Perform daily inspections or inspections as required, and keep records.	ENV	May - until Freshet complete and after rain events
2.3.1.4	East Diversion ditch outlet to NP-2 Lake	1) Snow and/or ice must be removed with an excavator on each side of the culvert to allow water flow.	ENV to coordinate with E&I	Early May
		2) If needed, steam to free any ice blockage.	ENV to coordinate with E&I	Before May 20
		3) Perform daily inspections or inspections as required, and keep records.	ENV	May - until Freshet complete and after rain events
		4) ST-5 sampling as per Water License and TSF Weekly inspection (keep record).	ENV	Monthly as soon as freshet starts and until water freezes
		5) Increase frequency of ST-5 sampling if TSS near 30 mg/L (grab) and 15 mg/L (monthly average). Extra samples to external lab if necessary.	ENV	TSS result dependent

		6) Install turbidity barriers in NP-2, if needed, and maintain.	ENV	May - before freshet starts and until freeze up or water clears
		7) Report any discharge of TSS to ECCC/NWB (if grab > 30 mg/L).	ENV	May - as soon as freshet starts and until water freezes
2.3.1.5	East Diversion Ditch - NP2 Outlet and Vault Road culvert.	1) Snow and/or ice must be removed with an excavator on each side of the culvert and upstream at the exit of NP-2 Lake to allow water flow.	ENV to coordinate with E&I	Early May
		2) If needed, steam culvert to free any ice/snow blockage.	ENV to coordinate with E&I	Before May 20
		3) Daily inspection - keep record.	ENV	May - until Freshet complete and after rain events
		4) Install turbidity barriers in NP-1, if needed, and maintain.	ENV	May - before freshet starts and until freeze
		5) Sample for TSS monthly (external lab) and as needed for Turbidity. Increase frequency of sampling if TSS near 30 mg/L (grab) and 15 mg/L (monthly average). Multi Lab for any increased sampling frequency.	ENV	May - until Freshet complete and after rain events

		6) Report any discharge of TSS to ECCCO/NWB (if grab > 30 mg/L).	ENV	May - as soon as freshet starts and until water freezes
2.3.2	**TSF Dikes**			
2.3.2.1	Saddle Dam 1	1) Inspect pumping system	E&I	Early May
		2) Perform daily inspections or inspections as required, and keep records.	ENV and E&I	May and until water freezes
		3) Start pumping to TSF when water observed. Keep volume pumped out.	ENV and E&I	May until water freezes
		4) ST-S-2 sampling as per Water License.	ENV	Monthly as soon as freshet starts and until water freezes
2.3.2.2	Saddle Dam 2	1) Prepare pumping system	E&I	Early May
		2) Weekly Inspection - keep record.	ENV	May and until water freezes
		3) Start pumping to TSF when water observed. Keep volume pumped out.	ENV and E&I	May until water freezes
2.3.2.3	Saddle Dam 3	1) Inspect pumping system	E&I	Early May

		2) Perform daily inspections or inspections as required, and keep records.	GENV and E&I	May and until water freezes
		3) Start pumping to TSF when water observed. Keep volume pumped out.	ENV and E&I	After May and until water freezes
		4) ST-32 sampling as per Water License.	ENV	Monthly as soon as freshet starts and until water freezes
2.3.2.4	Saddle Dam 4-5	1) Prepare pumping system	E&I	Early May
		2) Monthly Inspection - keep record.	ENV	May until water freezes
		3) Start pumping to TSF when water observed. Keep volume pumped out.	ENV and E&I	May until water freezes
2.3.2.5	North Cell Internal Structure	1) Prepare pumping system	E&I	Early May
		2) Weekly Inspection - keep record.	ENV	May and until water freezes
		3) Start pumping to TSF when water observed. Keep volume pumped out.	ENV and E&I	May until water freezes
2.3.2.6	Central Dike ST-S-5	1) Pump water to the South Cell TSF - volumes documented.	E&I and ENV	All year round

		2) Daily inspection of pumping, collection systems, bermed areas and perimeter area – keep record.	E&I & ENV	All year round
2.3.2.7	Stormwater Dike	1) Prepare pumping system	E&I	Early May
		2) Weekly Inspection - keep record.	ENV	May and until water freezes
		3) Start pumping to TSF when water observed. Keep volume pumped out.	ENV and E&I	May until water freezes
2.3.2.8	East Dike	1) Monitor East dike water quality & coordinate with E&I to stop SPL discharge	ENV & E&I	All year long
2.4	**VAULT ROAD CULVERT**			
2.4	Vault road culvert from Turn Lake to Drill Trail Lake (~km 2 on Vault road)	1) Perform daily inspections or inspections as required, and keep records.	ENV	May - until Freshet complete and after rain events
		2) Install turbidity barriers, if needed (elevated TSS observed), and maintain	ENV	May - until freshet complete and after rain events
		3) Sample monitoring for TSS, if excess turbidity observed - use external lab.	ENV	May - until freshet complete and after rain events

		4) Report any discharge of TSS to Drill Tail to ECCC/NWB (if grab > 30 mg/L).	ENV	May - until freshet complete and after rain events
2.5	**STORMWATER MANAGEMENT POND**			
2.5	Stormwater Management Pond	1) Pump Stormwater to applicable TSF in Spring/Fall - pumped volume must be kept.	E&I and ENV	When required in Spring and/or Fall
2.6	**FUEL TANK FARMS**			
2.6.1 Meadowbank Tank Farm		1) E&I Dept to advise Env Dept in advance of intent to pump once ice melts in containment area.	E&I and ENV	As required during summer
		2) Sample water in accordance with Water License to ensure compliance with limits prior to release.	ENV	As required during summer
		3) Provide notice to Inspector 10 days prior to pumping.	ENV	As required during summer
		4) Advise Energy and Infrastructure Dept if pumping can begin based on sample results.	ENV	As required during summer

		5) Pump to tundra/ground or Stormwater Mgmt Pond (note pumping to Stormwater Mgmt Pond does not require compliance with limits - at Meadowbank only). **NOTE: The water cannot be pumped out to the tundra if it does not meet the Water License criteria.**	E&I	Following ENV. Authorization & inspection
2.6.2	Baker Lake Tank Farms	1) E&I Dept to advise Env Dept in advance of intent to pump once ice melts in containment area.	E&I and ENV	As required during summer
		2) Sample water in accordance with Water License to ensure compliance with limits prior to release.	ENV	As required during summer
		3) Provide notice to Inspector 10 days prior to pumping.	ENV	As required during summer
		4) Advise Energy and Infrastructure Dept if pumping can begin based on sample results.	ENV	As required during summer
		5) Once approval given by Env Dept, E&I Dept can pump to tundra but must avoid erosion during pumping, i.e., low flow, the volume must also be determined by E&I Dept personnel. **NOTE: The water cannot be pumped out to the tundra if it does not meet the Water License criteria. Any wastewater unsuitable for discharge will be transported back to Meadowbank for disposal in the TSF or shipped south for disposal.**	E&I Dept ENV	Following ENV. Authorization & Inspection

2.7	**AWAR CULVERTS ON THE BAKER LAKE PORTION**			
2.7	AWAR Culverts on the Baker Lake Portion	1) Weekly inspection of culverts along AWAR to Baker Lake.	ENV	May
		2) Sample for TSS and Turbidity if elevated TSS observed.	ENV	May - until freeze
		3) Notify E&I Dept if severe erosion/scouring observed - for repair action.	ENV	May - until freeze
		4) Install turbidity barriers if required.	ENV	May - until freeze
2.8	**Mill Seepage**			
2.8	Mill Seepage	1) Pump water from the trench to the mill - volumes documented.	ENV and E&I	Start May/early June when water present until freeze
		2) Daily inspection of pumping, collection systems, bermed areas and perimeter area – keep record. **For emergencies the water truck can be requested.**	ENV	Start May/early June when water present until freeze
2.9	**Monitoring Station at KM87 (ST-44)**			

2.9 Monitoring Station at KM87 (ST-44)	1) Weekly sampling of downstream monitoring station ST-44	ENV	Start of May/early June when water present until freeze
	2) Pumping and removal of contaminated/contact water	E&I	As required during the summer
	3) Visual Inspection and testing of collection sump and contaminated area (Every second day)	ENV	Start of May/early June when water present until freeze or until location is deemed remediated
	4) Monthly soil sampling of spill location	ENV	Start of thaw until snow cover or until results are compliant
2.10	**Baker Lake Marshalling Facilities**		
2.10 Baker Lake Marshalling Facilities	1) Weekly inspection of Baker Lake Marshalling Facilities	ENV	May - until freeze
	2) Sample for TSS and Turbidity if elevated TSS observed.	ENV	May - until freeze
	3) Install turbidity barriers downstream of the diversion ditch outlet, if needed (elevated TSS observed), and maintain	ENV	May - until freeze

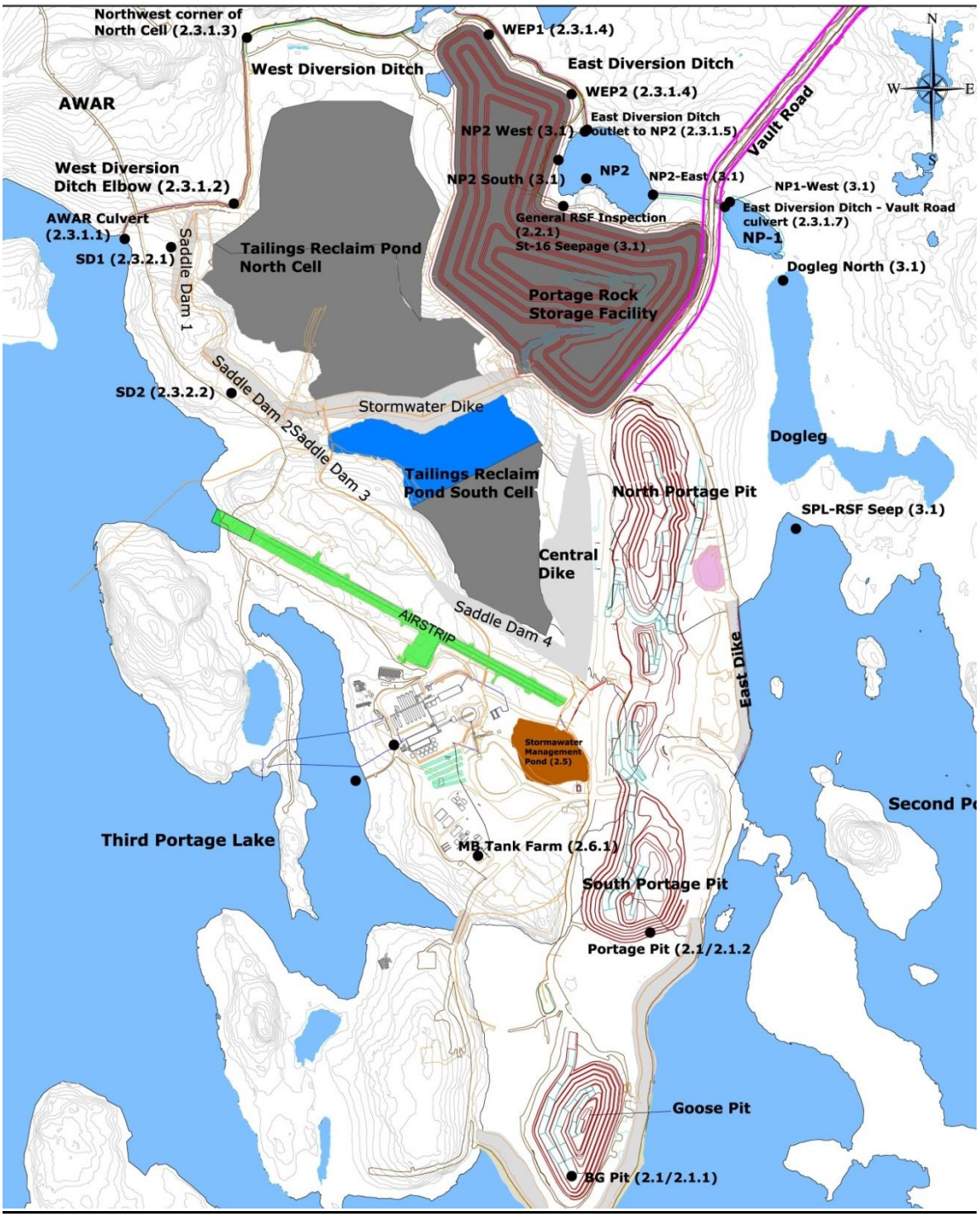
AGNICO EAGLE
MEADOWBANK

APPENDIX 2

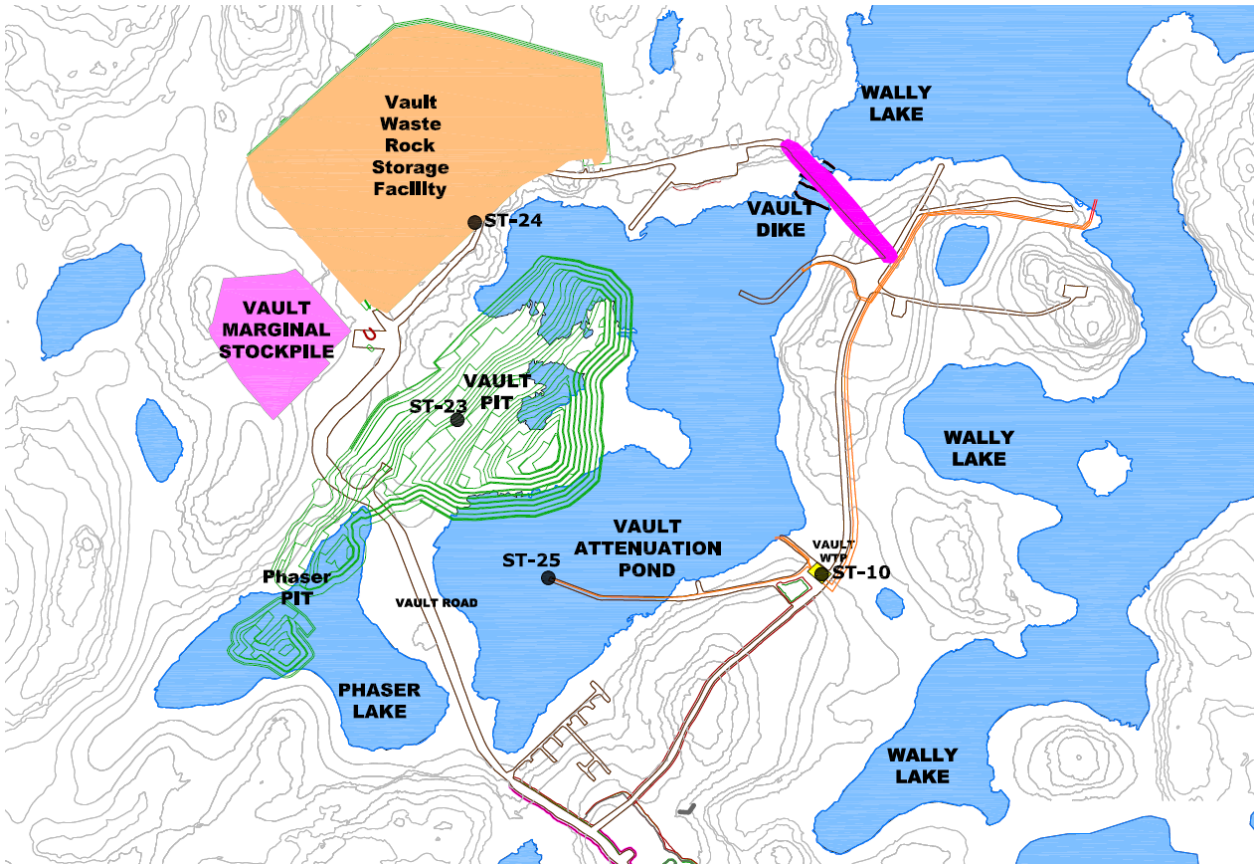
2024 Monitoring Locations and Areas of Concern for the Freshet Action

AGNICO EAGLE
MEADOWBANK

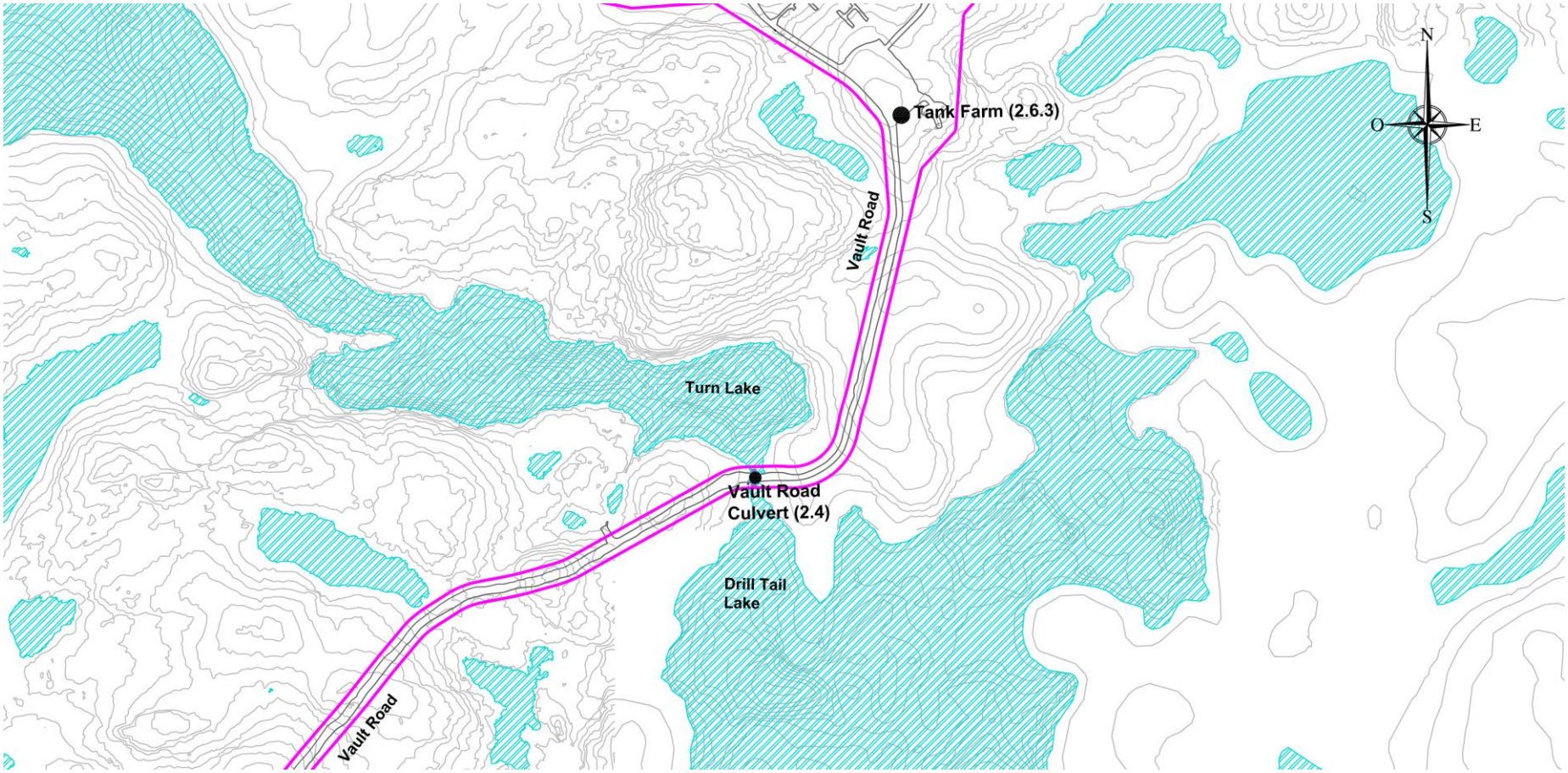
Meadowbank Areas of Concern and Monitoring Locations



Vault areas of concern



Vault Road areas of concern



AGNICO EAGLE
MEADOWBANK

APPENDIX 3

2023-2024 Snow management