2025 MINISTRY OF ENVIRONMENT & CLIMATE CHANGE
STRATEGY ANNUAL REPORT 100224

NEW AFTON MINE
NEW GOLD INC.

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newgold™ New Afton Mine

New Gold is now a part of Coeur Mining Inc.

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Executive Summary

The New Afton Mine (New Afton) is an underground hard rock block cave mine that began commercial production in July 2012. Nameplate capacity was achieved in September 2012. New Afton's reserves for Block 1 and 2 (Lift 1) have been depleted; Block 3 contains 4.45 million tonnes with grades of 0.59 g/t Au and 0.70% Cu and was nearing depletion at the end of 2025; and C-Zone is 29.63 million tonnes with grades of 0.63 g/t Au and 0.74% Cu. New Afton has a committed workforce of approximately 673 people (2025), with approximately 80% from the Kamloops region, 25% of whom identify as Indigenous, and 6% from the Tk'emlúps te Secwépemc and Skeetchestn Indian Band.

New Afton has Effluent Emission Permit 100224 under the *Environmental Management Act*. This report fulfills the annual reporting requirement of Permit 100224 and outlines mine operations, effluent discharges, and monitoring programs completed in compliance with Permit 100224.

Operationally, New Afton maintains a site with no operational contact water or effluent discharge from active facilities. Surface water runoff and groundwater seepage from the New Afton Tailings Storage Facility, Pothook Tailings Storage Facility, and concentrator building is captured in WMP containment ponds and/or the Afton Pit Tailings Storage Facility, either through natural flow paths or engineered works designed to capture and transport water to these facilities. Hydrogeological modelling indicates that seepage water from the western half of the Historic Afton Tailings Storage Facility and the northwest historical waste rock stockpile (inactive areas) are not within the Afton Pit Tailings Storage Facility capture zone. Seepage water from the northwestern portion of the HATSF drains to the NW WMP, and there may be seasonal runoff from the historical Northwest Waste Rock Pile. During freshet or high magnitude events it is possible for off-site flows from historical Afton East Slough to the north-east.

The average daily tailings discharge rate from the mill was 46,449 m^3, which is below the permit-authorized rate of discharge of 84,000 m^3 per day. New Afton disposes of all general and hazardous waste off-site through licensed contractors.

In 2025, New Afton reported four spills under the Environmental Management Act – Spill Reporting Regulation, a decrease from six spills in 2024. The first was 0.5 m^3 of process water released beside the ore concentrator during draining of the regrind vertimill in preparation of maintenance. The second was 0.2 m^3 of untreated sewage from a septic tank. The third was 0.4 m^3 of amended tailings and process water from a pipe connection at the tailings thickener. The fourth was 19 m^3 of thickened and amended tailings at the strainer tent near the tailings thickener. There was an additional by-pass of authorized works report, in which a tailings drainage pond overflowed into a secondary containment area. All incidents were reported and addressed with appropriate containment, cleanup, and corrective actions as per permit requirements.

Environmental monitoring, conducted consistent with EMA permit requirements, is managed through New Afton's *Environmental Management System,* which is ISO14001:2015 certified. Monitoring programs are in place for potential environmental impacts including groundwater and surface water. A supporting Quality Assurance/Quality Control program is also completed with duplicates and blanks collected which make up a minimum of 10% of samples collected. Quality Assurance and Quality Control results were within normal ranges and indicated no concerns with the sampling method.

Monitoring of surface water quality occurs at 25 designated locations, covering all surface water associated with the mine, including operational infrastructure such as underground mining areas, active and inactive TSFs, and associated WMPs. It also includes nearby receiving environment locations including creeks and sloughs. The water bodies surrounding the mine typically exhibit slightly basic circum-neutral, very hard water with elevated sulphate levels, comparable to background levels (KCC 2021). Surface water samples from receiving environments generally align with past assessments. Water Quality Reference Guideline exceedances at various locations consisted of ammonia, sulphate, chloride, aluminum, arsenic, boron, copper, manganese, molybdenum, selenium, strontium, and uranium. Notable findings include: low flow rates and several increasing trends in Alkali Creek, which is upgradient of New Afton; low water level (due to operational pumpback and HATSF dewatering) and new observed maximums at Northwest Water Management Pond SW23; regional drought conditions extending from 2023 into 2025; and, stable water quality concentrations in Cherry Creek.

Groundwater sampling methods were consistent with the *Groundwater Management Plan*, which was reviewed in 2025. The 2025 groundwater quality monitoring program consisted of monitoring the water levels in 39 wells and sampling 38 wells. Exceedances of Contaminated Site Regulation benchmarks were identified at 38 wells, and the parameters, in order of decreasing abundance are: molybdenum, sulphate, fluoride, manganese, chloride, uranium, selenium, ammonia, and arsenic. Notably, background concentrations of fluoride, molybdenum, and sulphate may exceed Contaminated Site Regulation concentrations, as discussed in the Groundwater Source Assessment Report. *The Groundwater Trigger Response Plan* (TRP) is protective of identifying off-site seepage for potential areas of environmental concern as defined in the GMP, and actions tied to the TRP are aimed at reducing uncertainty in the analyses. New monitoring wells are recommended in some areas west of the HATSF.

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List of Abbreviations and Units

Abbreviations for terminology used in this document are defined where they are first used. The following list will assist readers who may choose to review only portions of the document.

ACDC	Alkali Creek Diversion Channel
ACHS	Alkali Creek Hydrometric Station
APTSF	Afton Pit Tailings Storage Facility (formerly the Historic Afton Open Pit)
AL	aquatic life
ARD	Acid Rock Drainage
CSR	Contaminated Sites Regulation
CCME	Canadian Council of Ministers of the Environment
DOC	Dissolved Organic Carbon
DW	Drinking Water
EMA	Environmental Management Act
EMB	Environmental Monitoring Board
EOR	Engineer of Record
EPH	Extractable Petroleum Hydrocarbons
ENV	BC Ministry of Environment and Parks
ERA	Ecological Risk Assessment
FWAL	Freshwater Aquatic Life
GMP	Groundwater Management Plan
GWSA	Groundwater Source Assessment
HATSF	Historic Afton Tailings Storage Facility
IW	irrigation water
ITRB	Independent Tailings Review Board
LS	livestock
MCM	BC Ministry of Mining and Critical Minerals (formerly EMLI; formerly EMPR)
MDL	Method Detection Limit
MTS	Mavin Terra Solutions
NAM	New Afton Mine
NATSF	New Afton Tailings Storage Facility
NW WMP	Northwest Water Management Pond
NWWRP	Northwest Waste Rock Pile
PAG	Potentially Acid Generating
PHTSF	Pothook Tailings Storage Facility
PMA	Permitted Mine Area

POC	Parameter of Concern
Q	Quarter
QA/QC	Quality Assurance / Quality Control
RPD	Relative Percent Difference
SSN	Stk'emlúpsemc te Secwépemc Nation
SW WMP	Southwest Water Management Pond
TAT	Thickened and Amended Tailings
TDS	Total Dissolved Carbon
TOC	Total Organic Carbon
TRP	Trigger Response Plan
TSS	Total Suspended Solids
TSF	Tailings Storage Facility
UG	Underground
WQM	Water Quality Model
WQRG	Water Quality Reference Guidelines
WMP	Water Management Pond

Units

%	percent
dmt	dry metric tonnes
g/t	grams per tonne
g/s	grams per second
ha	hectares
K	hydraulic conductivity
kg	kilogram
kL	kilolitre
kt	kilotonne
L	litre
m	metre
masl	metres above sea level
mB	millibars
mbg	metres below ground
mbtoc	metres below top of casing
mg/kg	milligrams per kilogram
mm	milimeters
Mt	Metric tons

1. Introduction

1.1 New Afton Mine Overview

The New Afton Mine (New Afton; NAM) is an underground hard rock block cave that began commercial production in July, 2012. Nameplate production was achieved in September 2012. New Afton's reserves for Block 1 and 2 (Lift 1) and Block 3 (B3) have been depleted; the reserve for C-Zone is 36.2 million tonnes with grades of 0.74 g/t Au and 0.67% Cu. New Afton has a committed workforce of approximately 673 people (2025), with approximately 80% from the Kamloops region, 25.5% of whom identify as Indigenous, 5.6% of which are from the Tk'emlúps te Secwépemc and Skeetchestn Indian Bands.

New Afton occupies the site of the historical Afton Mine, an open pit that was operated by Afton Operating Corporation. Afton Operating Corporation (wholly owned subsidiary of Teck Corporation) commenced commercial production at the Afton open pit mine in late 1977. Mining continued at the Afton, Crescent, Pothook, and Ajax pits until the operation closed in 1997. New Afton is located approximately 350 km northeast of Vancouver, within the Thompson-Nicola Region of the South-central Interior of British Columbia. The property is 10 km from the regional hub of Kamloops (Figure 1-1) and is located within the traditional territory of the Stk'emlúpsemc te Secwépemc Nation (SSN).

New Gold's mineral tenures in the mine area comprise cell claims, legacy claims, and a mining lease. Mineral claims cover a total area of 18,410 ha, which includes the 902.3 ha mining lease. A portion of the property is an area historically included in the Agricultural Land Reserve.

The amount of land to be disturbed fell below the Reviewable Project Regulation threshold for new disturbance, thus, New Afton was reviewed and permitted as a major mine under the *Mines Act* (1996a). On October 30, 2007, the Chief Inspector of Mines issued *Mines Act* Permit M-229 *(Permit M-229)* authorizing construction of the NAM. The British Columbia Ministry of Environment & Parks[1] (ENV) issued Effluent Emission Permit 100224 *(Permit 100224) on* June 2, 2010, and Air Emissions Permit 100223 (Permit 100223) on June 3, 2010, both under the provision of the *Environmental Management Act*. This report fulfills the annual reporting requirement for Permit 100224 and outlines mine operations, effluent discharges, and monitoring programs completed in compliance with the July 16, 2025, version of Permit 100224. The report includes the annual status form for Permit 100224 (Appendix A). Reporting requirements for Permit 100223 is submitted under separate cover. Permit M-229 requires the submission of an Annual Reclamation Report, which will be submitted to the BC Ministry of Mining and Critical Minerals[2] (MCM) by March 31, 2026.

[1] Formerly the BC Ministry of Environment and Climate Change Strategy
[2] Formerly Ministry of Energy, Mines and Low Carbon Innovation (EMLI)

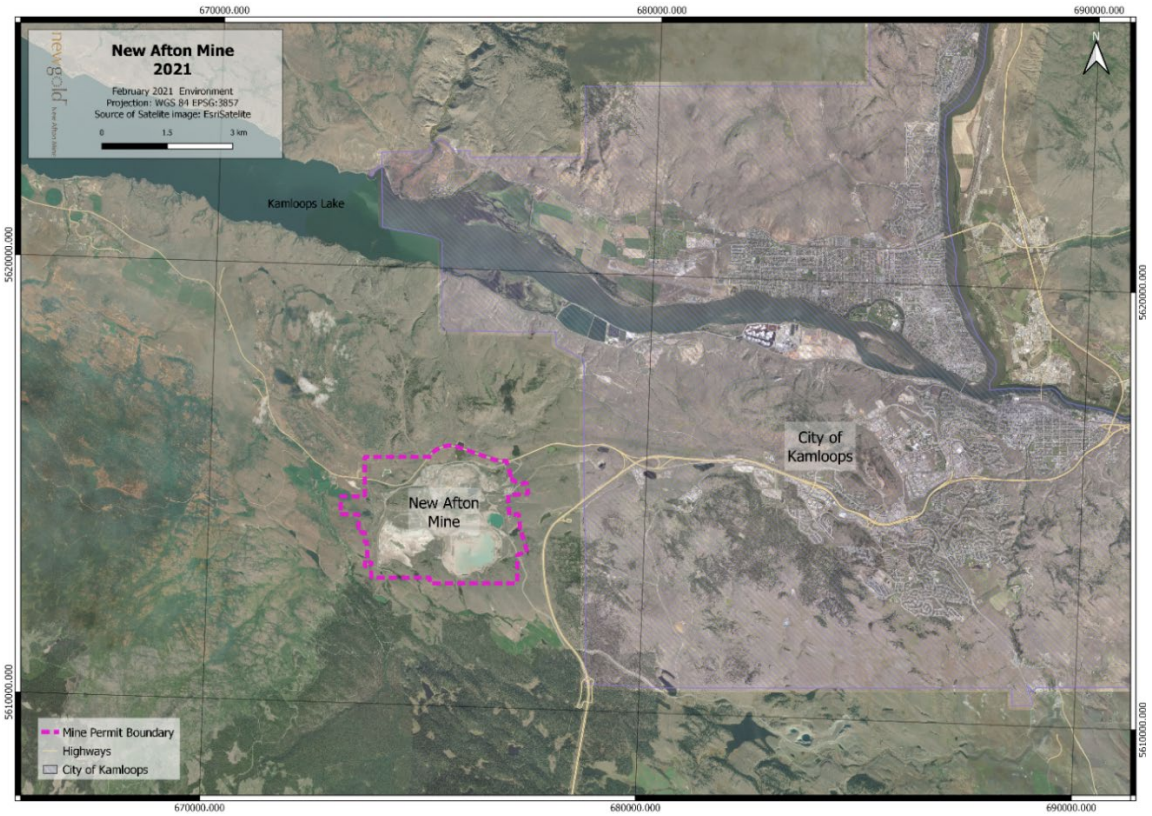


Figure 1-1: Location of New Afton Mine.

Several amendments have been made to the permits. The most recent amendments to the *Mines Act* Permit M-229 were made in 2023 to approve custom milling of Bull River Ore (October 3, 2023). The most recent amendment to Permit 100223 was to authorize a point source emissions discharge to air from the Thickened and Amended Tailings (TAT) Facility (December 22, 2022). The most recent amendment to Permit 100224 reflected minor changes to groundwater and surface water monitoring programs.

New Gold maintains a *Health, Safety, Environment and Corporate Social Responsibility Policy,* which guides the activities at each of the sites toward excellence in health, safety, environmental and sustainability management. New Afton also follows an *Environment and Social Responsibility Policy* (Appendix B) under which the Environmental Management System is formed with a series of best practice environmental management plans and a comprehensive environmental monitoring program to maintain compliance with relevant legislation and permits. *Environmental Management plans that* support Permit 100224 and/or fulfills permit requirements include:

- *Site Water Monitoring and Management Plan*
- *Spill Prevention and Response Plan*
- *Groundwater Management Plan*
- *Groundwater Trigger Response Plan*

- *Waste Management Plan*
- *Metal Leaching and Acid Rock Drainage Management Plan*
- *Quality Assurance Plan*

The *Environmental Management System* is certified under ISO 14001:2015, which is externally audited annually. Registration was originally obtained in May 2013, and certification to the 2015 standard was completed in December 2017. A full recertification audit was conducted in January 2024 and certification was maintained for the 2025 year via an annual surveillance audit was completed in October 2025. The site has adopted the *Towards Sustainable Mining Standards* as a member of the Mining Association of Canada. An external verification was completed in October 2024, in 2025 New Afton ensured continued verification with a self-assessment to evaluate each applicable protocol.

As per the July 30, 2021, Mine Plan, New Afton is currently scheduled to continue processing operations until approximately 2031, inclusive of C-Zone mining. Full scale closure activities, aside from progressive reclamation efforts, when possible, are expected to occur at the end of C-Zone mine life. New Afton maintains a Reclamation and Closure Plan with MCM (submitted November 1, 2024) which details the closure activities, performance monitoring objectives, and reclamation security amount.

1.1.1 Regional Precipitation

Total precipitation recorded in 2025 was 214.6 mm at Kamloops Airport and 238.13 mm at New Afton. Overall, the datasets show strong agreement, with notable differences occurring in July and November 2025.

The July discrepancy is primarily attributable to localized convective storm activity. Thunderstorms can produce highly variable precipitation over short distances, resulting in substantially different totals between monitoring locations. On July 19, Environment and Climate Change Canada recorded 6.5 mm of precipitation at Kamloops Airport, while New Afton recorded 26.75 mm during a one-hour period between 13:30 and 14:15. This represents a difference of 20.25 mm and largely accounts for the variance observed in the July totals. A secondary, smaller difference occurred on July 21, when New Afton recorded 3.1 mm of precipitation associated with a thunderstorm, whereas Environment and Climate Change Canada recorded a trace amount.

In 2025, regional precipitation levels were below the historical average during January, February, August, September, and October. Precipitation increased notably in June and July, representing the highest monthly totals of the year, and rose again in December to a comparable level. Moderately elevated precipitation was also observed in March and November relative to other months. As a result, the 2025 precipitation pattern indicates considerable intra-annual variability, characterized by extended periods of below-average rainfall, interrupted by short intervals of significantly higher precipitation. Overall, the trends between the two locations were consistent. Monthly precipitation totals for 2025 are presented in Figure 1-2.

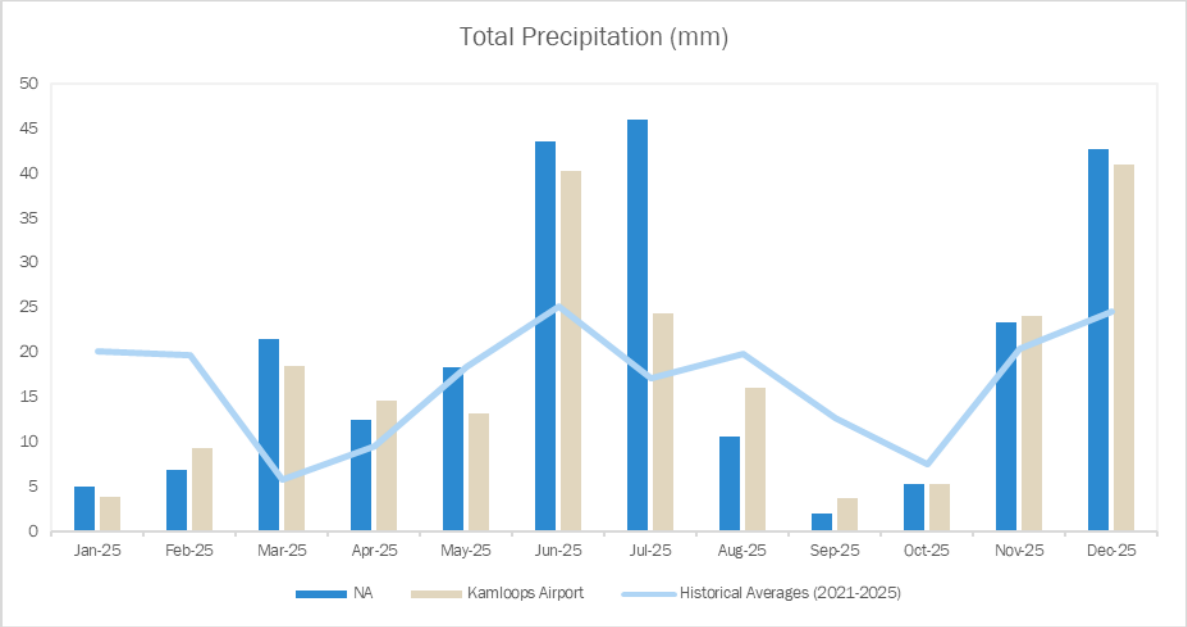


Figure 1-2: 2025 Total Monthly Precipitation Data Comparison to Historical Averages.

1.2 Effluent Emission Permit 100224

ENV issued *Permit 100224* on June 2, 2010, under the provision of the Environmental Management Act (EMA). This permit was reviewed in 2013 with a final minor amendment being issued on October 10, 2013. It was amended again on December 22, 2016, to incorporate the Historic Afton Tailings Storage Facility (HATSF) into the permit area, on June 30, 2021, to include approval of the Afton Pit Tailings Storage Facility (APTSF), and on July 16, 2025 with minor updates to the monitoring program and to standardize permit language. The current permit allows for two authorized point source discharges: the discharge of concentrator tailings and of sewage treatment plant effluent. The sewage treatment plant is not operational, and no effluent was discharged on-site in 2025.

Surface and groundwater monitoring locations are illustrated in Figure 1-3 and discussed in full later in the report. New Afton does not currently discharge effluent or operational mine contact water outside of the Permitted Mine Area (PMA). Surface water runoff and groundwater seepage from the New Afton Tailings Storage Facility (NATSF), Pothook Tailings Storage Facility (PHTSF), and concentrator building is captured in water management ponds, containment ponds, or the APTSF capture zone, either through natural flow paths or engineered works designed to capture and transport water to these facilities. Hydrogeological modelling indicates that seepage water from the western half of the HATSF and the northwest historical waste rock stockpile (inactive areas) are not within the APTSF capture zone. Visible flow from historical Afton areas, including seasonal surface water flow from East Slough to the northeast, seepage water from the northwestern portion of the HATSF to the Northwest Water Management Pond (NW WMP; SW23), and seasonal runoff from the slopes of the historical Northwest Waste Rock Pile (NWWRP) has been noted previously. None of these are active mining

areas. Groundwater elevations and inferred flow directions for overburden wells are shown in Figure 1-4.

Groundwater investigations, such as the groundwater numerical model and Water Quality Model (WQM; both updated in 2024) inform on potential non-point source discharges. The Groundwater Management Plan (GMP) provides surveillance of groundwater conditions and was updated at the end of 2023. In 2024, three new monitoring well locations were installed with monitoring well screens placed in overburden and bedrock. A list of the groundwater investigations completed at site is provided in Section 3.4 of this report. Figure 1-5 indicates the inferred APTSF capture zone based on the groundwater elevations. Figure 1-6 is a topographical map of surface water catchment boundaries, which indicates water collection points across the New Afton site resulting from both natural drainage and a series of engineered works designed to route water to select areas such as the site drainage pond and tailings storage facilities (TSFs). Figure 1-7 shows the regional drainage that New Afton is situated in.

In accordance with *Permit 100224 Section 2.4*, water was continuously recycled for processing to the maximum extent practical from the TSF and tailings thickener (Figure 1-8), which resulted in approximately 94% of water required for processing being recycled from an on-site source. In 2025, water from the NATSF was pumped to the PHTSF where 928,000 m^3 of water was recycled/reused. Other operational flows include: the underground mine workings are dewatered through the mine dewatering system (599,000 m^3); the sandy tailings portion of the HATSF is dewatered through five wells (58,000 m^3) and interception wells between the NATSF and mine (i.e., Tree Valley) pumped 94,000 m^3. In terms of fresh water, 861,000 m^3 was pumped from Kamloops Lake for use as domestic water (e.g., showers, toilets, etc.), firewater, and to supplement processing.

The average daily tailings discharge rate from the mill (includes tailings and water) was 46,449 m^3, which is below the permit authorized rate of discharge of 84,000 m^3 per day (*Permit 100224 Section 1.1*).

A comprehensive groundwater and surface water monitoring program was completed by New Afton In 2025, as per *Permit 100224 Section 4* and is discussed in detail in Sections 3.2 and 3.3 of this report. Permitted monitoring locations are illustrated in Figure 1-3. Tailings were placed in the NATSF and APTSF throughout the year, as per permit conditions; details are provided in Section 1.4. No sewage treatment or deposition/release occurred in 2025, as the sewage treatment plant has been off-line since September 2014 due to mechanical issues. All sewage is hauled to Kamloops via a qualified contractor.

Non-compliances with effluent *Permit 100224* in 2025, are listed in Section 2.2 and discussed in detail in the respective subsections of Sections 3.2 and 3.3.

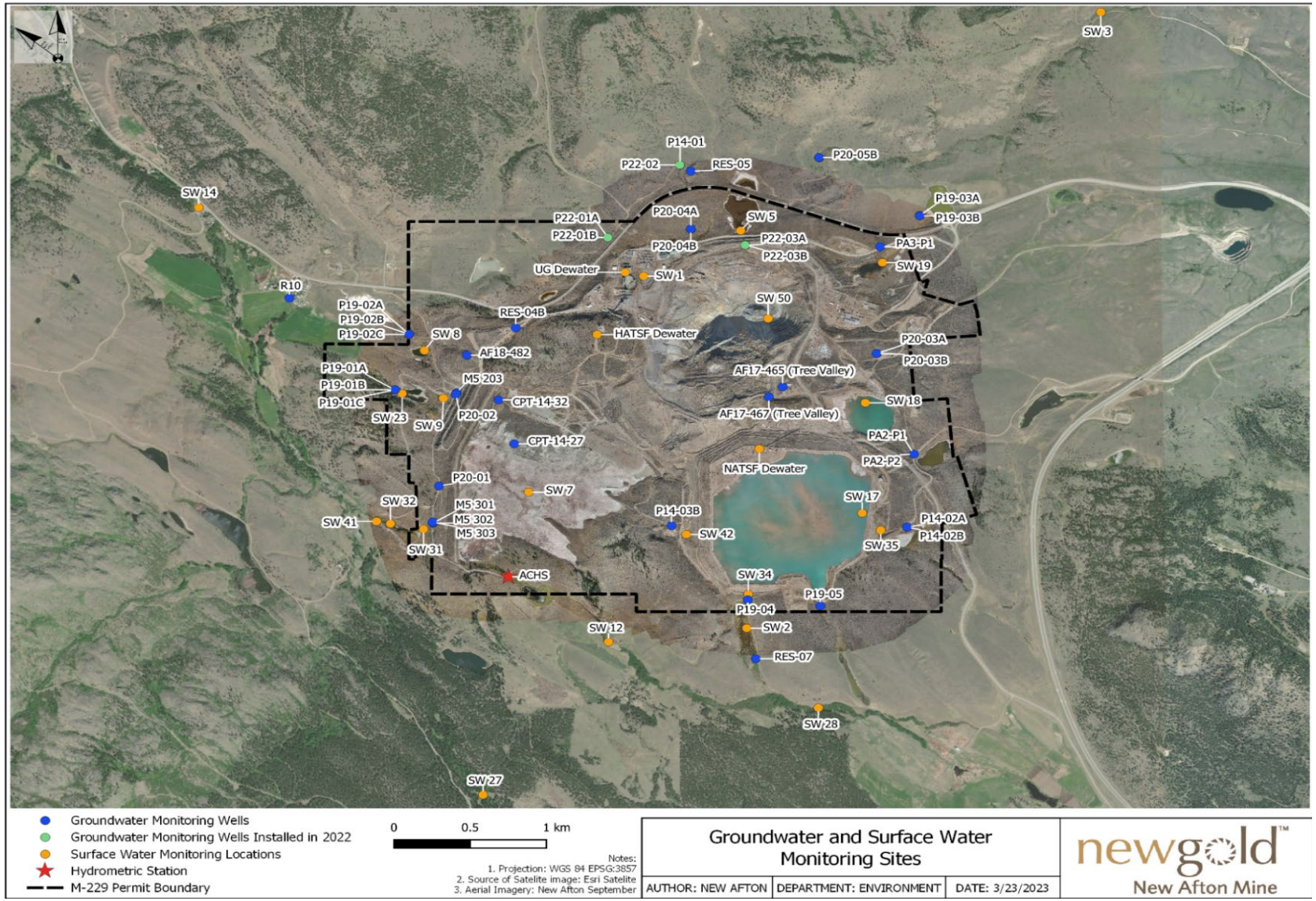


Figure 1-3: New Afton Mine Groundwater and Surface Water Monitoring Sites.

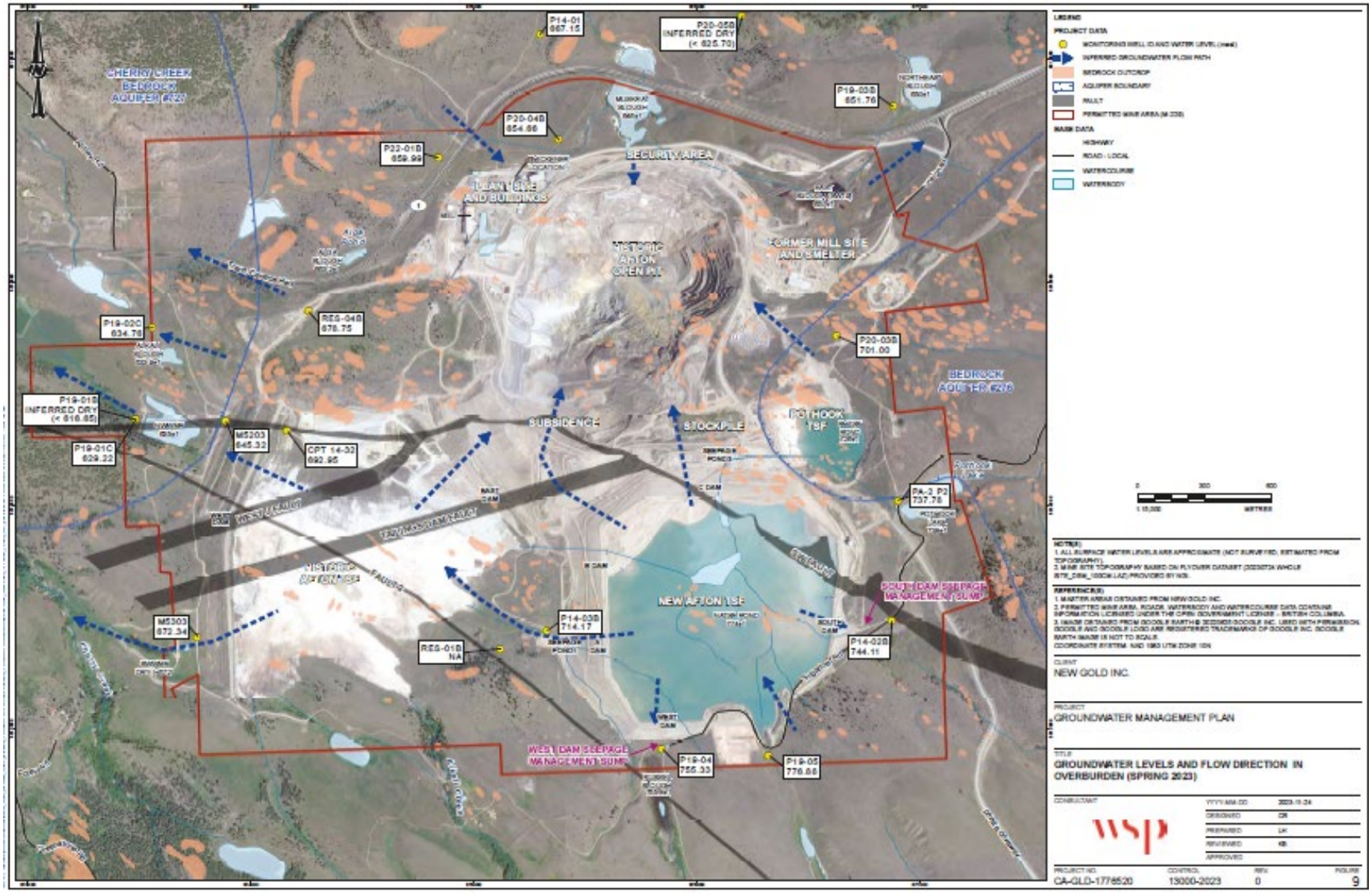


Figure 1-4: Groundwater Elevations and Approximated Flow Directions in Overburden.

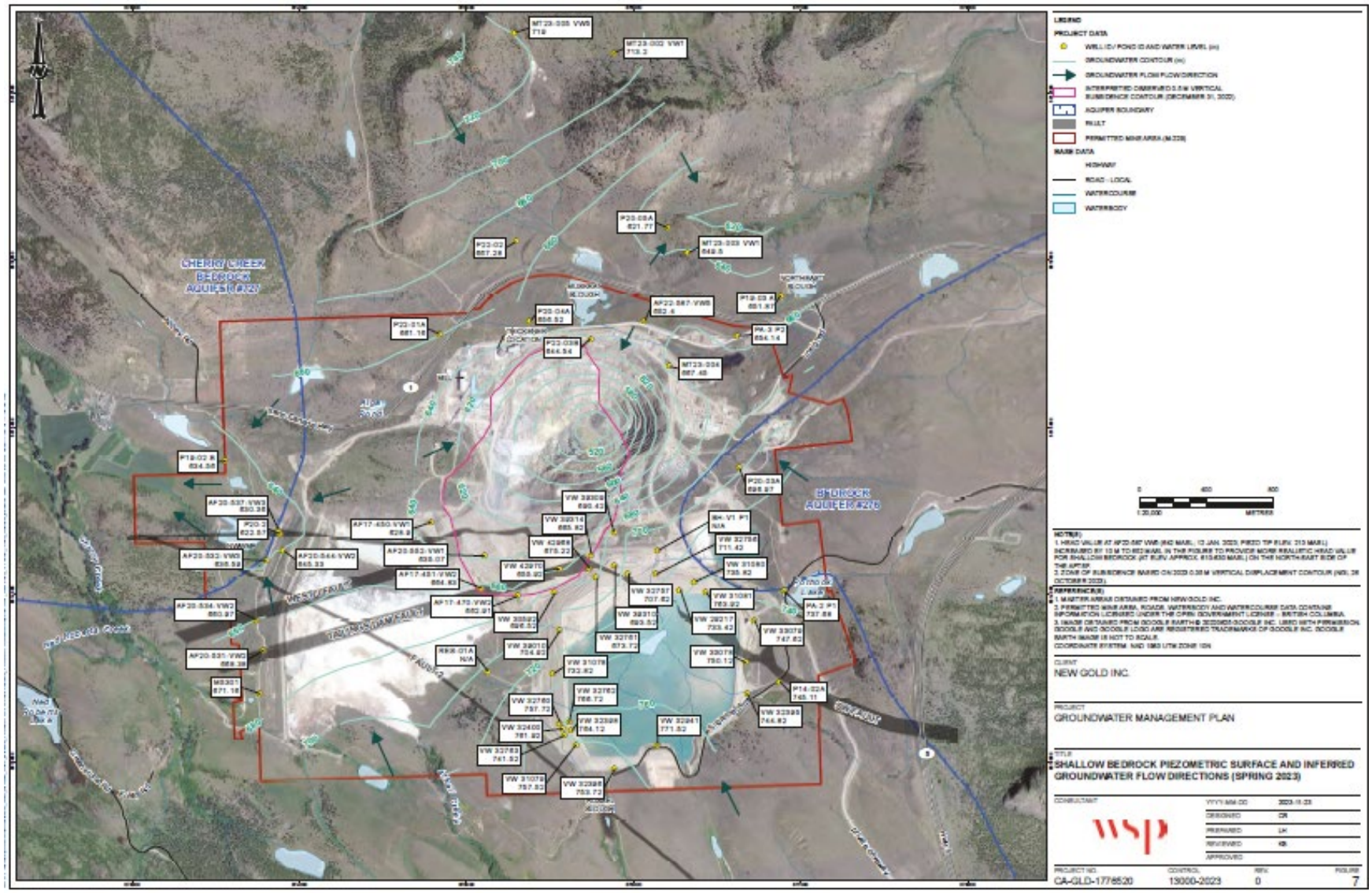


Figure 1-5: Groundwater Elevations and Inferred Equal Elevation Contours and Flow Directions.

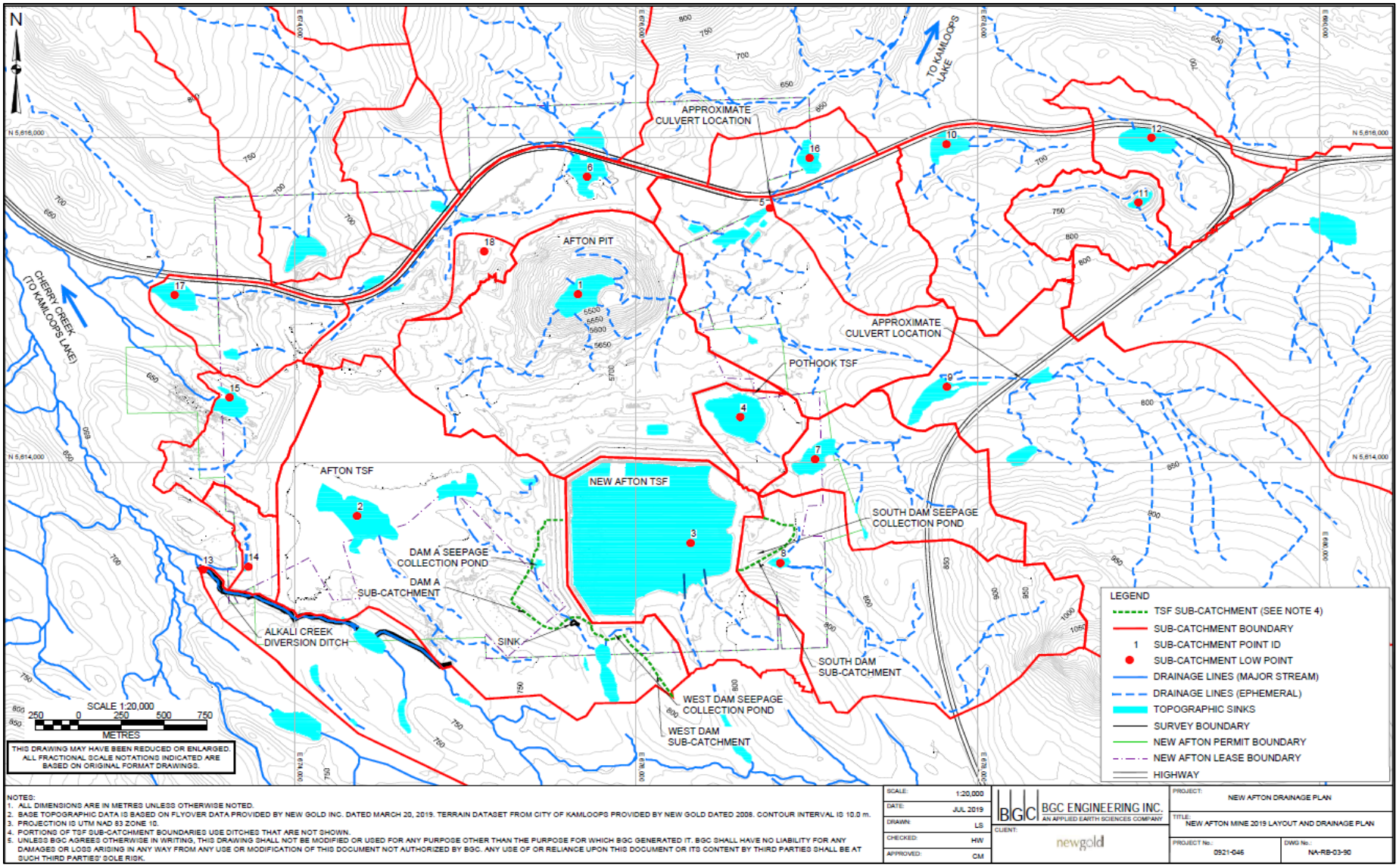


Figure 1-6: Surface Water Catchment Boundaries.

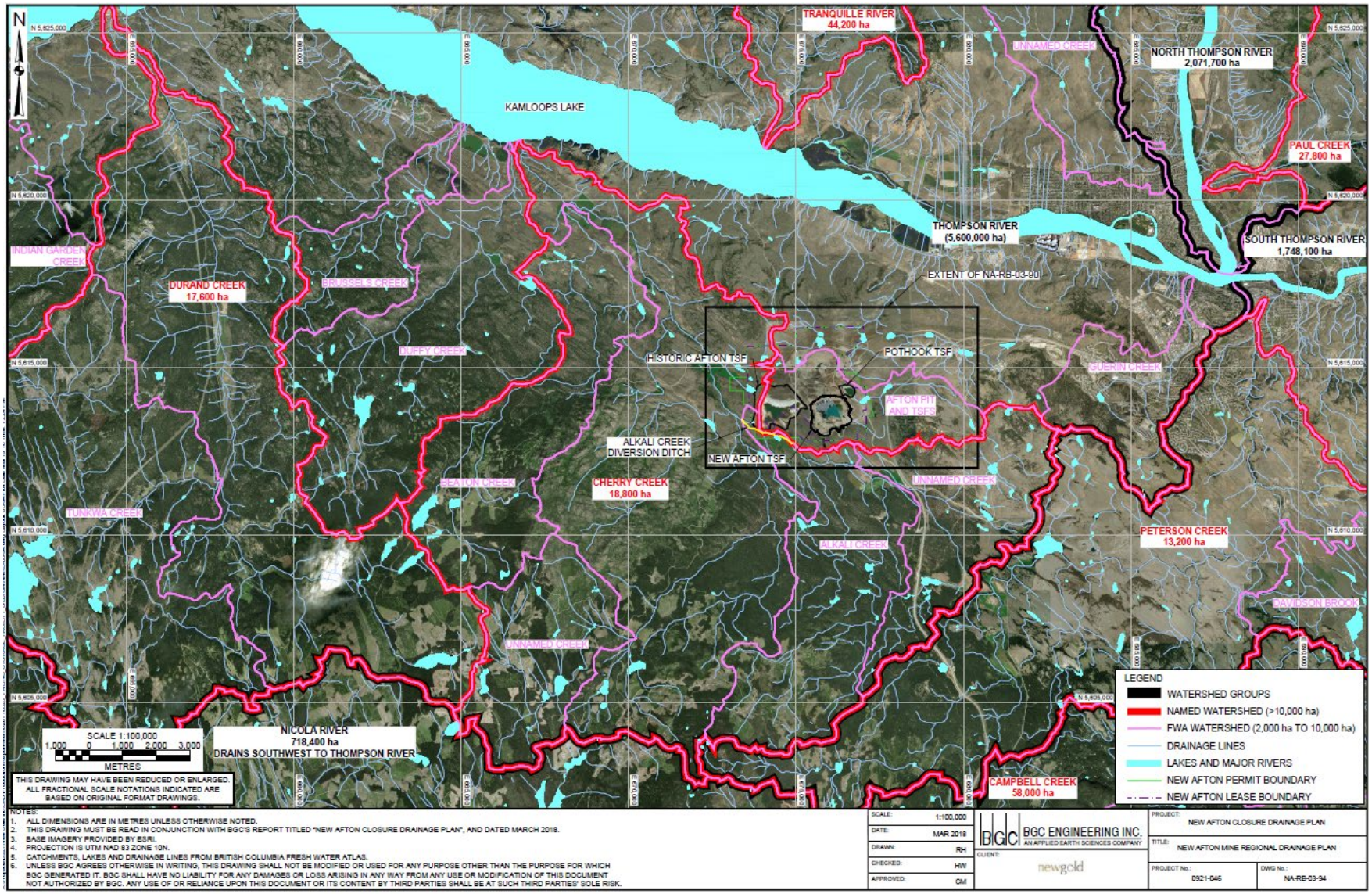


Figure 1-7: Regional Drainage Plan.

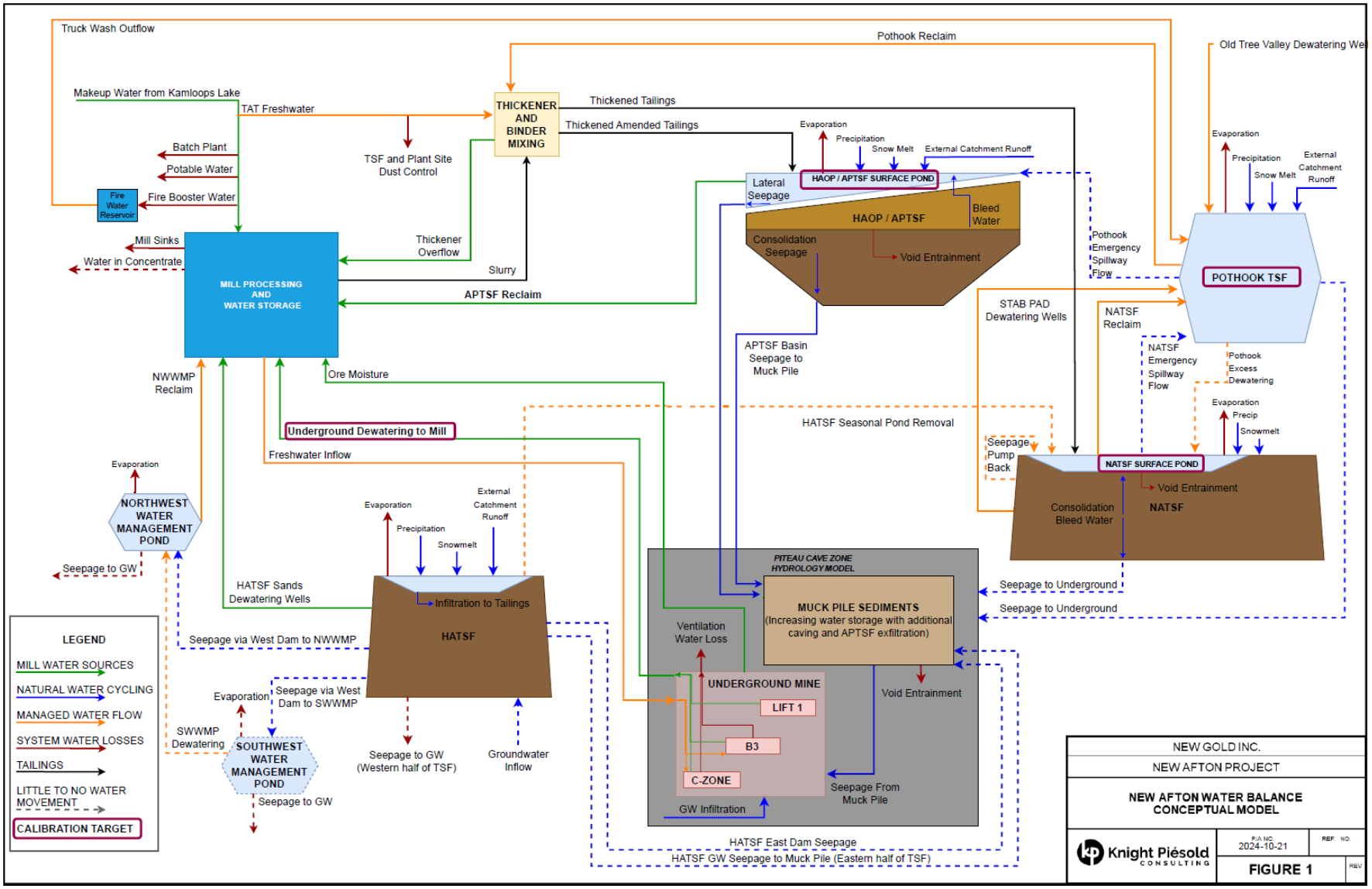


Figure 1-8: Conceptual Flow Schematic (KP, 2023).

1.3 Consumables and Waste Management

New Afton does not have a registered landfill and is not permitted to dispose of general or hazardous waste on-site, aside from authorized tailings and waste rock. Table 1-1 indicates the waste streams removed from site. Hazardous waste was disposed/recycled of by licensed disposal companies accordingly and manifests were populated and submitted to the ENV as required by the regulation. Hazardous waste is removed as adequate quantities are generated. There was no asbestos containing waste generated or stored on-site in 2025.

In 2025, waste management activities included both landfill disposal and several recycling streams. A total of approximately 703.75 t of material was sent to landfill, primarily driven by construction and demolition waste (651 t) and smaller quantities of operational waste and contaminated materials (47,106 kg combined). Recycling represented a significant component of the waste management program. Non-metal recyclable materials totaled approximately 255.7 t, largely consisting of wood (193 t), mixed recycling (32 t), and cardboard (11 t), along with 19,733 kg of additional materials such as batteries, plastics, and filters.

Ferrous metals accounted for 371 t of recycled material, mainly from general scrap metal, while non-ferrous metals including copper, brass, aluminum, and insulated wire totaled approximately 50,031 kg (50.0 t). Additional materials such as electric motors (221 kg) were also recovered for recycling. Some waste streams were tracked by units or volume, including OTR tires (46 units), totes (75 units), and 18,820 L of waste oil, and are therefore not included in the mass totals.

Overall, the data highlights substantial material recovery through recycling while identifying construction-related waste as the primary contributor to landfill disposal.

The milling reagent, explosive, and fuel usage for 2025 are detailed below in Table 1-2.

Table 1-1: Waste and Scrap Metal Removal 2025.

Item	Amount	Unit
To Landfill		
Waste	5.64	t
Construction and demolition	651	t
Contaminated soil (nonhazardous waste)	400	kg
Lead cupels	1,200	kg
Non-regulated liquids *	500	kg
Oily sludge (<3%)	1,700	kg
Hydraulic hoses	12,250	kg
Oily debris	400	kg
Grease	10,350	kg
Used antifreeze	190	kg
Non regulated material (waste plastic and debris)	240	kg
Contaminated waste oil/water*	5,350	kg

Item	Amount	Unit
Waste oily water*	900	kg
Non-BCUOMA plastics	174	kg
Waste oil debris - spill pads	40	kg
Waste oily debris	600	kg
Waste oily debris (Non BCUOMA Plastics)	812	kg
Waste oily debris greater than 3% Oil	11,100	kg
Waste oily water*	900	kg
Recycled (Non-Metal)		
Totes	75	Each
Batteries (dry cell and wet, filled with acid)	350	kg
Wood	193	t
Cardboard	11	t
Mixed recycling	32	t
OTR tires	46	Each
Aerosols	2,450	kg
Plastic drums	915	kg
Mixed fuel	190	kg
Waste oil (BCHWR) BCUOMA	18,820	L
Waste oil filters (BCHWR) BCUOMA	5,400	kg
Waste oily plastics BCUOMA	5,058	kg
Empty last contained - pallets	20	kg
Waste glycol	380	kg
Non regulated liquids*	4,970	kg
Recycled (Ferrous)		
General scrap	371	t
Stainless Steel	37	kg
Recycled (Non-ferrous)		
Copper #3	61	kg
Copper #1	5.4	kg
Copper > 60%	1,235	kg
Copper >30%	13,956	kg
Brass - irony (70%)	279	kg
Aluminum	35	kg
Insulated copper wire (50–65%)	2,425	kg
Shreddable tin	31,988	kg
Irony- aluminum	47	kg
Recycled (Others)		
Electric motors	221	kg

Table 1-2: Mine Consumables 2025.

Material Description	Quick lime, high calcium	Potassium Amyl Xanthate 85% minimum	Magnafloc 155 (Flocculant)	Polyfroth H28C (Frother)	Polyfroth Q82 (Frother)	Cement for TAT	Antiscalant (IPAC 1249A)	amex 0.5* (explosive)	amex 25 kg* (explosive)	Subtek Eclipse* (explosive)	sulfamex 0.45* (explosive)	sulfamex 25 kg* (explosive)	Diesel	Renewable Diesel	Bio Diesel	Gasoline	Propane	Natural gas	Electricity
Units	Mt	t	t	t	t	Mt	m^3	kg	kg	kg	kg	kg	m^3	m^3	m^3	m^3	m^3	GJ	GJ
Jan.	363	5.9	19.0	6.5	0	2,850	6.0	1667	104	56305	14250	1667	420.6	58.5	-	9.2	-	33,090.8	71,816.4
Feb.	220	6.8	26.0	8.1	0	2,279	4.0	1667	104	56305	14250	1667	246.3	146.0	-	10.0	6.2	4,198.8	66,391.4
Mar.	448	6.8	33.0	12.1	0	3,048	9.0	1667	104	56305	14250	1667	361.5	43.4	-	13.9	-	6,202.2	74,379.8
Apr.	323	5.9	14.1	7.6	0	1,731	4.0	1667	104	56305	14250	1667	395.8	41.0	18.1	7.2	3.9	880.0	64,752.3
May	438	6.8	23.9	9.7	0	2,801	6.0	1667	104	56305	14250	1667	177.2	179.3	12.9	8.0	1.2	5,139.4	77,331.0
Jun.	575	10.0	25.3	6.1	0	2,891	6.0	1667	104	56305	14250	1667	344.2	250.7	13.2	13.5	-	425.9	75,770.3
Jul.	350	9.3	23.2	2.1	0	973	5.0	1667	104	56305	14250	1667	176.4	280.0	15.9	7.3	2.2	270.0	71,269.5
Aug.	419	8.5	17.6	1.5	0	1,900	6.0	1667	104	56305	14250	1667	262.3	190.7	11.3	10.4	0.0	142.1	69,931.5
Sep.	299	5.9	23.3	0.22	8.0	2,303	9.0	1667	104	56305	14250	1667	139.1	188.5	8.5	7.1	0.0	466.8	69,519.0
Oct.	274	4.2	15.3	3.5	7.0	0	7.0	1667	104	56305	14250	1667	184.5	137.6	-	13.1	-	3,981.8	64,675.2
Nov.	240	5.1	15.3	0	2.7	45	5.0	1667	104	56305	14250	1667	136.4	136.4	-	6.4	5.2	7,128.9	71,584.3
Dec.	285	11.5	32.1	0	12.1	1,999	9.0	1667	104	56305	14250	1667	147.3	187.9	-	10.7	3.2	11,815.1	77,495.5
Total	**4,233**	**86.9**	**268.3**	**57.5**	**29.8**	**22,820**	**76.0**	**20000**	**1250**	**675655**	**171000**	**20000**	**2,991.6**	**1,840.0**	**80.0**	**116.7**	**21.9**	**73,741.8**	**854,916.2**

* explosive annual values are averaged over 12 months

1.4 Production

In 2025, New Afton processed 4,331 kt of ore (including custom milling), generated 37.5 kt of waste and generated 4,337 dry metric kt of tailings (Table 1-3). New Afton maintains a variable amount of ore on surface in the live pile which feeds the mill. Underground waste rock is placed in the APTSF or within the subsidence zone (0.5 m subsidence zone contour), as authorized by permit M-229. At the end of 2025, New Afton had 2.318 kt of ore on the live pile.

Table 1-3: Summary of 2025 Mine Production.

Material Description	Quantity (kt)
Processed Ore	4,444
Intermediate Grade Ore	0
Waste Rock	37.5
Tailings	4,337

1.4.1 Tailings Storage Facilities

There are currently four TSFs within the New Afton site. The NATSF, PHTSF, and APTSF were active through 2025, and the HATSF (acquired in 2017) is inactive, under care and maintenance.

An Independent Tailings Review Board (ITRB), established in 2015, held two meetings regarding New Afton in 2025. The ITRB reviews all aspects of tailings facility management including design, construction, operations and closure, and ensuring the facility is being operated to the highest level of management.

New Afton has implemented a comprehensive Tailings Management System in compliance with the Mining Association of Canada's Towards Sustainable Mining (TSM) Tailings Management Protocols. The TMS has achieved a AAA rating on all indicators, which is verified utilizing internal and external audits, as well as Mining Association of Canada appointed verification auditors. The Tailings Management System utilizes an in-house team of qualified dam safety inspectors and engineers, qualified Engineers of Record for all facilities, and coordination with other NAM departments to ensure a system of compliance and emergency response is in place for all TSF related activities.

Annual Facility Performance Reviews (previously Dam Safety Inspections) were completed for all TSFs in 2025, by applicable Engineers of Record (EOR) and are submitted to MCM under separate cover.

Active Tailings Storage Facilities

Tailings produced in the current mining operation are stored in the NATSF, PHTSF and APTSF. The NATSF is located approximately 1 km south from the APTSF. The NATSF partially overlies historic waste rock, which is lined with a geomembrane. Containment at the NATSF is provided by topography and five engineered dams, which have joined to form a single embankment. The PHTSF is located over the

historical Pothook pit, with bedrock topography and the Pothook Dam providing containment. The remaining capacity in the PHTSF is currently used for water management.

The APTSF is the newest TSF on site. The facility was approved as part of the B3 mining permit amendments. Deposition of thickened and amended tailings from the TAT facility (commissioned in April 2022) into the APTSF was initiated in 2022; in 2023 tailings deposition was transitioned from the NATSF to the APTSF. Since then, the APTSF was the primary TSF, however thickened tailings (both amended and non-amended) have been placed in the NATSF when required to support NATSF pond removal and APTSF surface access. The APTSF will not have any constructed dams as the containment will be provided by the pit walls.

Chris McKane (BGC Engineering Inc.) is the EOR for the NATSF and PHTSF, while Daniel Friedman of Knight Piesold (KP) is the EOR for the APTSF and HATSF.

A total of 4,337,054 dmt (dry metric tonnes) of tailings were sent to the NATSF and APTSF in 2025. Of this total, 852,903 dmt were deposited in the NATSF and 3,484,151 dmt in the APTSF. No tailings were deposited in the PHTSF in 2025.

Stabilization activities on the NATSF were initiated in 2021 to manage subsidence risk induced by B3 and C-Zone mining activities. Construction to date includes a trafficable pad on the tailings surface, installation of wick drains to promote consolidation and enhanced dewatering of the tailings, site investigations using a CPT rig and drilling-based sampling methods, and a 33 dewatering well system with discharge infrastructure to NATSF and PHTSF.

Works completed on the TSFs in 2025 included completion of the NATSF C-Zone Stabilization Crest Raise that started in 2024. These works included rock fil placement and liner extension to protect the filter sand in the dam core. To facilitate the construction and rockfill placement on the NATSF Dam, rockfill material was removed from the HATSF Subsidence Offset Berm and the newly established Pothook Borrow as a source of historic waste rock.

Historic Afton Tailings Storage Facility

The HATSF was acquired in 2017 and is under continued care and maintenance. Tailings were deposited into the facility from 1977 to 1997 by the former Afton Operating Corporation. Daniel Friedman of KP Ltd. is the active EOR for the HATSF; the original design was done by Klohn Leonoff Consultants Ltd.

The HATSF is comprised of two major impermeable water-retaining earth fill/rockfill embankments with engineered core, filter, and shell zones. The two embankments are referred to as the East Dam and West Dam. Both embankments have been constructed to a dam height of 706 m which is lower than their originally permitted ultimate height.

Construction of the HATSF tailings sands borrow and HATSF B3 stabilization construction was completed in 2021 which included a surcharge load, wick drains, and dewatering wells. Phase 2

stabilization work was initiated in 2022 and completed in 2023. This work was to further mitigate subsidence risks for the upcoming C-Zone mine cave. The works included a larger surcharge load, wick drains, and replacing the North Spillway with a spillway on the South, as the North one will be affected by subsidence.

There are two Water Management Ponds (WMPs) located downstream of the West Dam, referred to as the NW WMP and the Southwest Water Management Pond (SW WMP). The NW WMP is equipped with a seasonal water reclaim system that operates during the warmer months. The SW WMP does not have a fixed water reclaim system as no ponding has been observed in that area, a temporary pump-back system would be mobilized and implemented if material ponding was to occur.

The Alkali Creek Diversion Channel (ACDC) is a 1 km riprap-protected channel located to the south of the HATSF that diverts Alkali Creek around and west of the HATSF. It was initially constructed In the late 1970's and upgraded in 2014, by the prior owner, to pass the 1 in 200-year, 24-hour peak flow of 4.4 m^3/s.

Vibrating wire piezometers, survey monuments, prisms, and inclinometers are used to monitor the performance and stability of the dams. Standpipe piezometers are also used to monitor groundwater conditions downstream of the dam foundations and within select dam foundations.

The West Dam is classified as "Extreme" due to the number of residences and properties downstream of the structure that may be affected by a dam failure. The East Dam is classified as "Significant" due to the potential material migration resulting in a temporary mine closure.

2. Incidents

2.1 Spills

In 2025, New Afton reported four spills that met the criteria under the *Environmental Management Act – Spill Reporting Regulation*, which is consistent with the general trend of spills on site to date (Table 2-1). An overview of these spills is below, and reference information can be found in Appendix C, including the initial briefing and end-of-spill reports that were submitted to ENV. Of these four reportable spills, three were classified as bypasses of authorized works.

An additional fifth event was identified as a bypass of authorized works under EMA Permit 100224 but did not meet the reporting criteria under the Spill Reporting Regulation. This event involved a tailings drainage pond overflow caused by a valve failure, resulting in tailings being routed into a downstream drainage pond. As all material remained contained within site water management infrastructure, the event did not pose a risk to the receiving environment and was therefore not reportable. A bypass of authorized works notification was issued, with a 30-day non-compliance report provided to close the incident.

Table 2-1: Spills From 2013 to 2025.

Year	Reported Spills
2013	5
2014	14
2015	9
2016	1
2017	3
2018	1
2019	1
2020	2
2021	4
2022	6
2023	4
2024	6
2025	4

January 21, 2025, Process Water beside Ore Concentrator, DGIR 250266

On January 21, 2025, at 09:00, it was reported that a process water spill occurred next to the Ore Concentrator (Mill). This was reported as a bypass of authorized works under permit 100224. The source of the spill was process water released during the dumping and draining of media from the regrind vertimill while the mill was being prepared for maintenance. Further investigation revealed that a clogged sump line, which had not been cleared or inspected following its last use approximately nine

months prior, caused the sump pump to become overwhelmed, resulting in process water overtopping the sandbag berm and exiting through the best bay door of the mill. The spill was immediately reported to the shift supervisor and environmental department. The spill impacted an area of 30m^2 with a total spill volume of approximately 0.5 m^3 of process water. It did not flow into natural vegetation or waterways and was limited to concrete and already disturbed compact glacial till. There are no nearby creeks, rivers, or bodies of water, with no risk of off site migration.

Corrective actions following the incident included retraining the crew on the Standard Operating Procedure for dumping regrind material and making sure the crew is properly aware and trained on line clearing. Additionally, an actuator on the regrind dump door was installed to better control the flow in the future. All remedial actions were carried out within an appropriate timeline and met regulatory requirements.

Spill response actions included:

- The process water spilled was pumped back into the mill, and the contaminated soil was disposed into tailings storage facility.
- Enter work notification for installing an actuator on the regrind dump door (2025-01-31).
- Reporting the spill to ENV Spill Reporting hotline and submitting a written spill report (2025-01-21)
- Retrain the crew on the standard operating procedure for dumping regrind media, and making sure the crew is properly aware and trained on line cleaning (2025-02-07).

February 10, 2025, Untreated Sewage beside Emergency Services Building, DGIR 250535

On February 10, 2025, at 12:00, it was reported that an overflow of sewage had occurred next to the Emergency Services building. Approximately 0.2 m^3 of untreated sewage overflowed an underground tank. Upon investigation, it was found to be a septic tank, not a manhole and there is nowhere for the effluent to report to. The tank was on a biannual schedule for pumping out, however, there was no alarm for high level on this tank. The spill was limited to a concrete and gravel surface with no direct impact to natural vegetation or waterways. There are no nearby creeks, rivers, or bodies of water, and the area is not densely populated. The risk of off-site migration was not evident. The spill was reported to the Environmental Department and the BC Spill Reporting Hotline on February 10, 2025, and a written spill report was submitted. Kamloops Septic was contacted the same day to pump out the tank, and a work notification was created to install a high-level sensor to prevent recurrence.

Spill response actions included:

- Immediately informed the environmental department and called Kamloops Septic to pump out the septic tank through the manhole (2025-02-10).
- Investigating leak and deeming it to be a sewage leak. The Tailings & Surface General Supervisor was informed (2025-02-10).

- Kamloops Septic informed operators the septic tank isn't connected to other infrastructure. Work notification created to install a high-level sensor onto the tank (2025-02-10).
- Reporting the spill to ENV Spill Reporting hotline and submitting a written spill report (2025-02-10).
- Reporting the spill to the facilities supervisor to investigate (2025-02-10).

March 23, 2025, Process Water at Tailings Thickener, DGIR 251169

On March 23, 2025, at 09:10, it was reported that at the thickened amended tailings building there was a spill. This was reported as a bypass of authorized works under permit 100224. Following the spill, it was immediately reported. Shortly before 09:10, a mill operator team was assigned to test the underflow recirculation valve located near the thickener stairs tower. Two operators were located at the feed well to confirm discharge. Upon control room opening the valve, no discharge was found. Upon investigation, it was found that water and slurry were flowing through a separated pipe near the Tailings Thickener building. The Victaulic connection holding the two ends of the pipe together had come apart. The spill substance was a mix of amended tailings and process water and it was estimated that 0.4 m^3 of the mix was spilled.

The spill area is within an active work area and was limited to a concrete and gravel surface with no direct discharge to natural vegetation or waterways. There are no nearby creeks, rivers, or bodies of water, and the area is not densely populated. Given the industrial setting, the risk of off-site migration was minimal. Corrective actions included inspection and repair of the underflow recirculation line, removal of buildup within the pipe, adjustment or replacement of couplings, and implementation of improvements such as additional pip supports, installation of a cleanout port, and review of flushing procedures with associated crews. All corrective actions were completed within an appropriate timeline.

Spill response actions included:

- Hydrovac truck deployed to clean up spilled slurry and water from the site (2025-03-23).
- Informed the environmental department and reported spill to PEP hotline and First Nations (2025-03-23)
- Rappel crew contacted to inspect piping and provide job report with recommendations (2025-03-28)
- Spill area secured and recirculation valve locked out to prevent further discharge (2025-03-23).
- The underflow recirculation line was cleaned and inspected, with mud buildup removed and a failed coupling at the riser repaired. Other couplings were adjusted or replaced as needed, and the remainder of the line was found to be in good condition. To help prevent future issues, proper flushing procedures were reviewed, and improvements such as added pipe supports, a cleanout port, and potential replacement of the worn elbow were identified (2025-04-07).

July 1, 2025, Thickened Amended Tailings spill at In-line Strainer Tent, DGIR 252601

On July 1, 2025, at 09:15, it was reported that at the mill tailings in-line strainer tent there was a spill. This was reported as a bypass of authorized works under permit 100224. Following the spill, it was immediately reported. A leaking Victaulic coupling was identified during a routine inline strainer flush, and the control room was notified to switch to the standby strainer to isolate the affected line. During the line swap, the coupling failed completely, causing the pipe to separate and release tailings flow into the strainer tent and surrounding area. The operator contacted the control room to initiate an emergency stop and mitigate further risk. It was estimated that 19 m^3 of tailings was spilled. the areas affected was compact glacial till and a portion of the drainage ran immediately into the adjacent plant site drainage pond. The in-line strainer was purposely designed to be located immediately adjacent to the plant site drainage pond with the intent of mitigating spills to the environment. The pond has bentonite liner in place which captured a small portion of the spill. The area underneath the tent is composed of compacted till that is graded into the drainage pond. Tailings slurry spread approximately 10 meters outside the east end of the tent and was confined into a canal towards the drainage pond. A small portion of the spill spread through the south end of the tent, which is also compacted till. A hydrovac truck service was called immediately to clean the spill up. No waterways, flora, fauna and their habitats were affected.

A Taproot investigation was completed to determine root cause, and corrective actions were subsequently implemented, including updates to SAP PM procedures, technician sign-off requirements, QA/QC verification, Victaulic coupling audits, and supervisor notification requirements for out of spec joints. All corrective actions were completed or scheduled as appropriate.

Spill response actions included:

- A hydrovac truck was contacted to clean the spill up (2025-07-01).
- A Taproot investigation was initiated for root cause analysis and corrective actions were pursued. (2025-07-02).Spill was reported to the PEP hotline and First Nations (2025-07-01).
- The E&I Technician arrived and worked with the operators to close the intake and discharge valves to stop the spill. The knife gate valve was confirmed closed with positive pressure. The mine manager and millwright supervisor arrived shortly after (2025-07-01).
- The Victaulic connection failed and the operator notified staff through his radio (2025-07-01).

2.2 Compliance

An Annual Status Form was completed for Permit 100224 and is included in Appendix A. The Annual Status Form confirms general compliance with permit requirements; however, non-compliances and areas under review are outlined below, with details discussed in their respective sections of the report.

Inspection Records – Clause 2.4.5

Structures associated with the TSF, including collection and diversion infrastructure, are inspected regularly by a professional engineer in accordance with the TSF OMS Manual, and inspection records

for these structures are maintained. However, inspection records for other water management infrastructure across the site, such as general site ditches and non-TSF-associated runoff controls, though routinely inspected, have not been consistently documented. This gap has been identified and will be addressed through the finalization of a Water Management Infrastructure Operations, Maintenance, and Surveillance Manual in 2026.

Cumulative Effects Monitoring and Management Programs – Clause 3.7

New Afton has discussed their role in this permit clause with ENV several times, most recently in the second half of 2025 regarding the appropriate program or table to participate in. ENV concluded that the ENV chaired Thompson River Joint Monitoring Committee is not an appropriate fit. New Afton is standing by for direction from ENV on next steps.

Sampling

Samples specified in Permit 100224 that could not be collected in 2025 are listed in Table 2-2 for surface water and Table 2-3 for groundwater (see sections 3.2 and 3.3 below for further details on the monitoring locations).

Table 2-2: Surface Water Monitoring Program Non-Compliances With Permit 100224.

Surface Water Samples			
Site	**Number of Samples Required**	**Number of Samples Collected**	**Comments**
SW 7	4	2	The site was dry from Q3–Q4 (i.e., no water available to sample).
SW 14	12	10	The site was frozen to the ground in January and February (i.e., no water available to sample)
SW 27	4	2	The site was dry in Q1 and Q4 (i.e., no water available to sample).
SW 31	4	0	The site was dry year-round (i.e., no water available to sample).
SW 32	4	0	The site was dry year-round (i.e., no water available to sample).
SW 41	4	0	The site was dry from year-round (i.e., no water available to sample).
ACHS	12	3	Water was available from April to June. The site was dry for the remainder of the year (i.e., no water available to sample).
Surface Water Flow Measurement			
Site	**Required Frequency**	**Measurements Collected**	**Comments**
SW 12	Monthly	0	The water level and width of the stream make this site difficult to get adequate measurements. The flow is stagnant most of the year and freezes during the winter months.
SW 14	Monthly	9	The creek was frozen in January to March therefore no flow could be measured
SW 41	Monthly	0	There was no measurable flow during 2025.

Table 2-3: Groundwater Monitoring Program Non-Compliances With Permit 100224.

Groundwater Samples			
Site	**Number of Samples Required**	**Number of Samples Collected**	**Comments**
P19-01A	4	0	There was not enough water available in the well to collect samples.

The sewage treatment plant was not in operation in 2025. In September 2014, it was noted that the effluent tank was leaking, and the plant was taken out of operation. All sewage is hauled from site by a third party contractor for proper disposal.

3. Monitoring Programs

3.1 Quality Assurance

As per effluent *Permit 100224*, New Afton is required to maintain a Quality Assurance Plan on its environmental monitoring program for groundwater and surface water to assure the data collected and analyzed is valid and verifiable. The New Afton quality assurance program consists of travel blanks, duplicate samples, chain of custody forms, and laboratory quality control.

Travel blanks are those that are prefilled by the accredited laboratory, ALS Environmental, and are not opened throughout the field sampling exercise or shipping.

In 2025, 25 groundwater sample duplicates were collected compared to a total of 118 groundwater monitoring samples (i.e., 19%); 38 surface water duplicate samples, and 12 travel blanks were collected compared to a total of 139 monitoring samples (i.e., 36%).

All laboratory reports include a comprehensive Quality Assurance / Quality Control (QA/QC) section which includes a series of QC test results for each method and instrument. If QC results, or Relative Percent Difference (RPD) for duplicate samples, do not fall within pre-determined ranges or limits (data quality objectives), results are flagged, noted with a qualifier and a re-analysis is completed if possible. Unfavorable variance of inter-parameter results (i.e., ammonia – nitrogen, cation – anion, or total dissolved relationships) may also trigger a re-analysis. Samples are retained for a minimum of 30 days in case re-analysis is required. Each lab report includes a copy of the QC and duplicate results, a summary of which is provided in Appendix D.

Duplicate samples are collected with a corresponding sample to assess any potential variability between samples. Duplicate samples are analyzed and statistically compared using RPD.

$$RPD = \frac{Sample - Duplicate}{(Sample + Duplicate) * 0.5}\%$$

RPD indicates the effect that environmental heterogeneity, sampler handling, or laboratory error may have on sample results. For concentrations at or greater than five times the reported detection limit, the RPD was calculated for duplicate samples, and the acceptable RPD between samples was 20%. For concentrations below five times the method detection limit, the same criteria for laboratory duplicates/replicates were applied to field duplicates as an 'early warning' flag (i.e., the difference between the two duplicate values was calculated and the acceptable quality threshold was twice the reported detection limit value). ALS certificates of analysis for all surface water and groundwater duplicate samples are available on request.

3.1.1 QA/QC Results

Permit 100224 Section 4.4 requires a Quality Assurance Plan that outlines the site's approach to assure data is collected and analyzed are valid and verifiable. Duplicates are the preferred method of confirming sample integrity and are collected when water is available, otherwise blanks are submitted when water quantity is limited. All duplicate and blank results are included in Appendix D.

Test work from the analytical laboratory was reviewed and all data flags were checked. This review was to ensure that the lab was not making any significant errors as part of their QA/QC. A total of 48 flags were identified for surface water and 27 for groundwater, none of which identified any further action from New Afton (i.e., discarding results and resampling). A summary of these checks is included in Appendix D.

In accordance with the BC Field Sampling Manual Part A Quality Control and Quality Assurance, for results below five times the method detection limit, the difference between the duplicate values shall not exceed twice the reported detection limit. For concentrations at or greater that five times the detection limit, the relative percent difference shall not exceed 20%.

Surface water duplicate analysis indicated 8.8% (270 of 3072) of parameters from duplicates did not meet the above acceptable criteria for laboratory duplicates (i.e., the difference exceeded twice the detection limit, or the RPD was > 20%; Table 3-1).

Samples with ≥ 90% of parameters within acceptable criteria are considered acceptable by New Afton. As instructed by the BC Field Sampling Manual Part A Quality Control and Quality Assurance, samples with results outside of acceptable criteria must be evaluated to determine their impact upon the sample data. For surface water there were a total of 38 duplicate samples collected in 2025. Of those, four had all parameters meet the acceptable criteria, 19 within criteria and 15 with greater than 10% of the parameters exceed acceptable criteria. These sample results were reviewed and determined to have no impact on the sample data for those locations.

Table 3-1: Surface Water Duplicate Summary for 2025.

Site	# of Duplicate Samples	# of parameters per duplicate sample set	Number of parameters that don't meet acceptable criteria
SW 23	12	81	85
SW 27	2	81	2
SW 42	12	81	45
SW 9	12	81	138
TOTAL	**38**	-	**270**

Groundwater duplicate analysis indicated 1.7% (33 of 2000) of parameters from duplicates did not meet the above acceptable criteria for laboratory duplicates (i.e., the difference exceeded twice the detection limit, or the RPD was > 20%; Table 3-2).

For groundwater there were a total of 25 duplicate samples collected in 2025. Of those, 13 had all parameters meet the acceptable criteria; 12 had less than 10% of parameters not meet the acceptable criteria. Samples with ≥ 90% of parameters within acceptable criteria are considered acceptable by New Afton. As instructed by the BC Field Sampling Manual Part A Quality Control and Quality Assurance, samples with results outside of acceptable criteria must be evaluated to determine their impact upon the sample data. In 2025, all of the duplicate groundwater samples had <90% of parameters meet the acceptable criteria.

Table 3-2: Groundwater Duplicate Summary for 2025.

Site	No. of Duplicates	# of parameters per sample set	# of parameters that don't meet acceptable criteria
PA2-P1	2	80	3
P14-02A	1	80	4
P19-02A	3	80	0
P19-03A	2	80	2
P19-03B	1	80	4
P20-01	3	80	0
P20-02	3	80	6
P22-01A	4	80	0
M5203	2	80	5
M5 301	3	80	8
M5-302	1	80	1
TOTAL	**25**	**-**	**33**

Combined, the QA/QC results indicate confidence in the analytical methods/results for surface water and groundwater.

3.2 Surface Water Quality and Quantity

The area around the NAM has been exposed to mining activities since before the 1970's and through the operation and reclamation of the historical Afton Mine (1977–1998). The site was classified as a brownfield site during initial 2006 permitting to restart mining and processing activities as New Gold, since prior mining had substantially altered natural environmental conditions and an Environmental Assessment was determined not to be required. The climate at the NAM site is characterized as continental semi-arid to desert resulting from the Coastal Mountains to the west acting as barriers to moisture. The annual evaporation rate of 585 mm/year exceeds the annual precipitation rate of 293 mm/year (BGC 2020), producing an overall water deficit. The dry climate, coupled with the site's undulating topography, with elevation lows centered within catchments rather than along catchment boundaries, results in the pooling of surface water runoff and shallow groundwater discharge in enclosed sloughs. The primary outflux of water from the sloughs is evaporation, which concentrates the water in the sloughs, ultimately producing brine water and the accumulation of salt deposits along

the rims of the sloughs (KCC 2022). The NAM site contains several naturally occurring sloughs and operationally induced sloughs due to the unique topography and climate. The high evaporation rate (relative to precipitation) also impacts the surface water quality in facilities on the site and therefore must be considered during the interpretation of surface water quality.

New Afton maintains no effluent discharges of operational contact water from active operations to the receiving environment. Surface water runoff and groundwater seepage from the NATSF, PHTSF, and concentrator building is captured in WMPs, containment ponds, or are within the APTSF capture zone either through natural flow paths or engineered works designed to capture and transport water to these facilities. Hydrogeological modelling indicates that seepage water from the western half of the HATSF and the historical NWWRP, both considered inactive areas, are not within the APTSF capture zone (WSP 2024b). There are potential for off-site surface water flow paths from the historical Afton areas, including seasonal surface water overflow from East Slough to the northeast, runoff (and seepage water) from the northwestern portion of the HATSF to the NW WMP, runoff (and potentially seepage) from the HATSF to the SW WMP, and seasonal runoff from the NWWRP west of the NAM site. Surface water catchment boundaries are indicated in Figure 1-6.

This section describes the results from permit specific surface water monitoring locations including operational infrastructure water bodies and selected off-site water bodies. Permit 100224 lists 23 surface water sites to be sampled and analyzed. Permit M-229 lists an additional three required sampling sites. All 26 of the required surface monitoring sites are listed in the New Afton Site Water Management and Monitoring Plan (ENV-PLAN-G306) and are described in Table 3-3 and shown in Figure 3-1 below. Some of the permitted sites are directly influenced by historical mining activities prior to New Afton operations (i.e., SW 19 is directly below the historical sewage lagoons, the ore pile and the reclaim bunker that once fed the mill of the historical Afton mine; SW 7 lies on top of the HATSF; and SW 23 is a WMP below the HATSF).

Table 3-3: Surface Water Monitoring Locations.

Site #	EMS ID	Site Description	Sample Type	Sample Frequency	Sample Start Date
SW 1	E307645	Site Drainage Pond	Effluent	Quarterly	2011
SW 2	E292950	Russell Slough	Upstream	Bi-Annual	2008
SW 3	E292949	NE creek	Far field	Bi-annual	2012
SW 5	E323871	Muskrat slough	Runoff	Quarterly	2010
SW 7	E601013	HATSF	Effluent	Quarterly	2011
SW 8	E323873	Depression at base of historical Northwest waste rock dump	Seepage	Quarterly	2010
SW 9	E323891	Seepage at base of northern portion of the HATSF west dam	Seepage	Quarterly	2010
SW 50*	E323872	APTSF Impoundment	Effluent	Monthly	2025
SW 12	E600210	Alkali Creek above Cherry Creek	Upstream	Quarterly	2008
SW 14	E600178	Cherry Creek below Alkali Creek	Far field	Monthly	2008
SW 17	E272932	NATSF	Effluent	Monthly	2011
SW 18	E272923	Pothook Pit	Effluent	Monthly	2011
SW 19	E307966	East Slough	Receiving	Bi-Annual (EPH Quarterly)	2011
SW 23	E213063	HATSF NW WMP	Seepage	Quarterly	2012
SW 27	E600177	Cherry Creek above Alkali Creek	Upstream	Quarterly	2013
SW 28	E323892	Upstream Alkali Creek	Surface	Quarterly	2020
SW 31	E323894	HATSF Southwest WMP	Seepage	Quarterly	2016
SW 32	E323895	Large natural pond below HATSF West Dam	Surface	Quarterly	2016
SW 34	N/A	NATSF West Dam WMP	Surface	Quarterly	2017
SW 35	E323896	NATSF South Dam WMP	Surface	Quarterly	2017
SW 41	E323897	Terminus Pond of Alkali Creek Diversion Structure	Surface	Quarterly	2018
SW 42	E323898	NATSF WMP 1	Seepage	Quarterly	2019
UG Dewater	E323899	Underground Dewatering Pump Box	Dewater	Monthly	2018
HATSF Dewater	N/A	HATSF Dewatering Wells	Dewater	Quarterly	2019
NATSF Dewater	N/A	NATSF Dewatering Wells	Dewater	Quarterly	2023
ACHS	E323893	Alkali Creek Hydrometric Station	Surface	Monthly	2023

EPH = Extractable Petroleum Hydrocarbons
*the APTSF impoundment was previously labeled SW11 in Permit 100224, which referred to ponded water in the pit, however, SW50 represents supernatant of the APTSF tailings deposit.

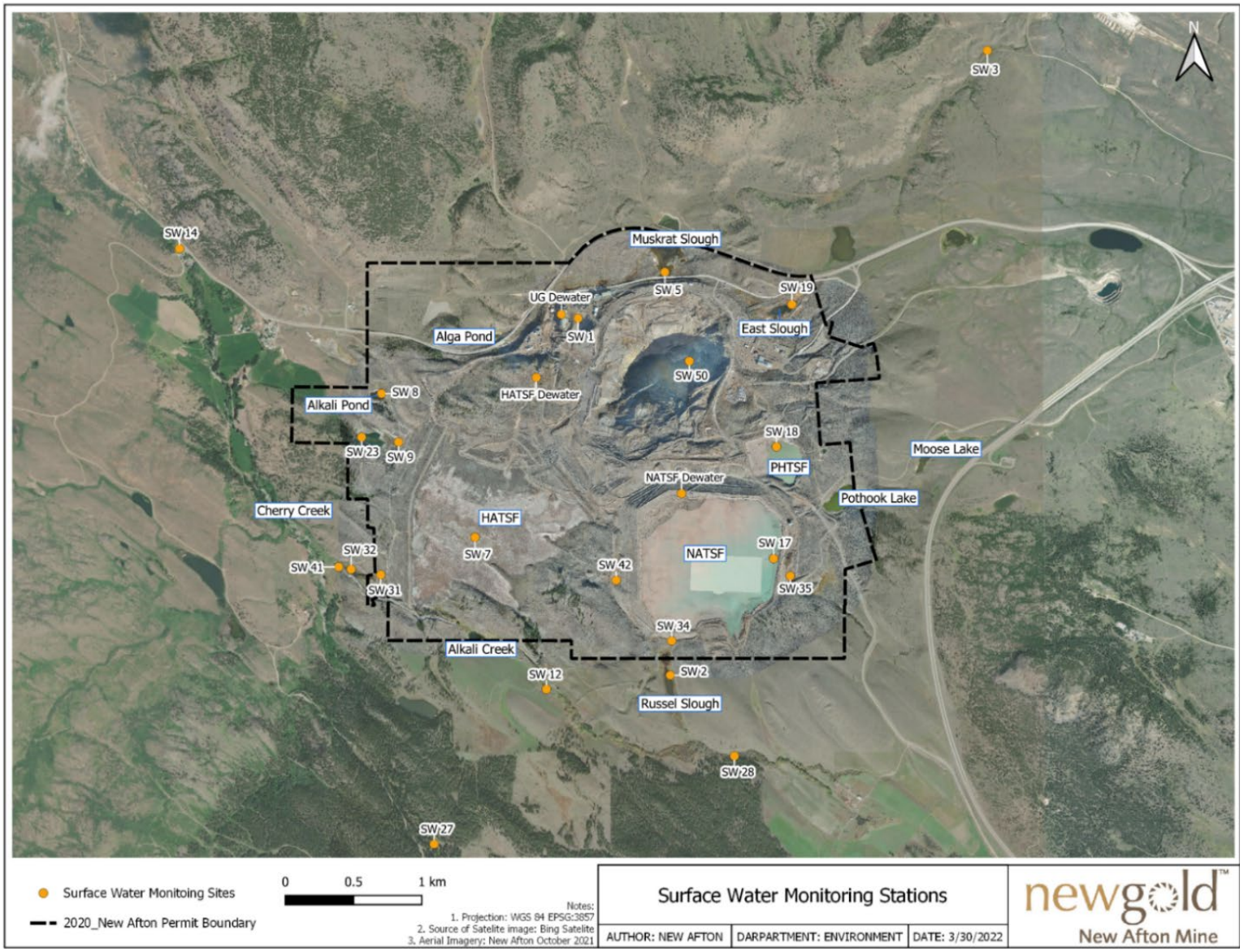


Figure 3-1: Surface Water Monitoring Locations.

3.2.1 Method

Surface water monitoring was completed as per internal standard procedure, ENV-PRCD-G310 *Surface Water Monitoring*, which meets the standard described in the BC Field Sampling Manual: Part E1 (ENV, 2024). Surface samples are collected as grab samples. As per *Permit 100224*, surface water samples are analyzed for general parameters, field parameters, and total and dissolved metals (Table 3-4). Parameters listed in *Permit 100224* are discussed in the below results section, data for any additional parameters analyzed is provided in Appendix E. ALS Environmental Services are utilized for all analytical work; they are accredited by the Canadian Association for Laboratory Accreditation Inc. Travel blanks and duplicate samples were also collected as part of the QA/QC program; these results are discussed in the QA/QC section above. Surface water is classified as operational water bodies or receiving environment water bodies and the water quality in the receiving environment is assessed based on relevant water quality guidelines and benchmarks.

Receiving Environment Water Quality Reference Guidelines and Benchmarks

Surface water from NAM is not discharged to the receiving environment, subsequently, there are no permit limits identified for effluent water quality. Surface water quality results for receiving environment stations (SW 2, SW 3, SW 5, SW 8, SW 12, SW 14, SW 19, SW 27, SW 28, SW 32, and SW 41) are compared to and plotted against the BC Water Quality Guidelines (WQG) for the Protection of Freshwater Aquatic Life (FWAL), livestock (LS), wildlife (WL), or irrigation (IR), whichever is most conservative, as a point of reference. The BC WQG guidelines provide standards for both maximum concentrations (short-term) and long-term concentrations where the long-term guidelines have lower threshold values. Parameters that do not have approved WQGs are compared against working water quality guidelines (i.e., benchmark guidelines) which are adopted from other environmental jurisdictions. For this report, the collective guidelines are referred to in general as Water Quality Reference Guidelines (WQRGs). Additionally, dissolved parameters at some surface water locations (i.e., operational sites) are compared to Contaminated Sites Regulation (CSR) Schedule 3.2 Generic Numerical Standards for Aquatic Life (AW), Livestock (LW) or Irrigation (IW) for discussion purposes only as the CSR standards are not applicable to operational surface water bodies on mine sites and are only used to identify parameters of interest in the facilities. Dissolved parameters are compared for the reason that the only pathway to the environment from the facilities to the receiving environment is through the ground.

Table 3-4 lists the permit parameters, WQGs, and WQRGs for receiving environment stations. The following is a list of relevant items related to WQRGs:

- Most of the guidelines are applicable to the total (T) concentration; however, some WQRGs are only applicable to the dissolved (D) fraction (cadmium, copper, lead, nickel, manganese, strontium, and zinc).
- For total mercury, the Canadian Council of Ministers of the Environment (CCME) guideline for the Protection of Aquatic Life was utilized instead of the BC Approved Water Quality Guideline.
- The chromium guideline is based of the more stringent Chromium (VI) WQRG.
- The Ammonia (as N) and dissolved nickel WQGs are temperature dependent, and the temperature assumed in the calculation of the guideline is 15°C.

- The nitrite (as N) guideline is chloride dependent and calculated using the 25th percentile concentration in Cherry Creek of 6 mg/L.
- Several of the WQGs are pH dependent including Ammonia (As N), dissolved copper, dissolved manganese, dissolved nickel and dissolved zinc. A pH of 8 is used for WQRGs.
- Several of the WQGs depend on the concentration of dissolved organic carbon (DOC), including dissolved copper, dissolved lead, dissolved nickel, and dissolved zinc. A DOC of 5 mg/L is used for the WQRG calculations.
- Several of the WQRGs are calculated based on the hardness of the water sampled, including the WQRGs for fluoride, sulphate, total aluminum, dissolved cadmium, dissolved copper, dissolved lead, dissolved manganese, dissolved nickel, total silver, and dissolved zinc. All hardness levels are measured in mg/L $CaCO_3$ with *very hard* ranging from 181–250 mg/L $CaCO_3$ and anything >250 mg/L $CaCO_3$ is beyond *very hard*. The hardness in some creeks exceeds 700 mg/L $CaCO_3$ and the hardness in Muskrat Slough averages 22,000 mg/L $CaCO_3$. The 25th percentile value of Russel Slough (slough with the lowest hardness value) is 830 mg/L as $CaCO_3$. Given that the waters at the NAM site are classified as beyond very hard, the WRQGs that are dependent on hardness can vary significantly. Exceedances of WQRG levels for hardness dependent parameters are based on a hardness of 250 mg/L $CaCO_3$. However, as surface waters regularly exceed 250 mg/L $CaCO_3$ at site, additional in text interpretation is provided if a hardness based parameter is exceeded.
- A hardness value of 250 mg/L $CaCO_3$ is used to calculate the dissolved nickel and dissolved copper as both WQRGs must be calculated using a Biotic Ligand Model (BLM).
- Sulphate, total aluminum, dissolved cadmium, dissolved copper, dissolved manganese, and dissolved zinc, have WQGs that are calculated based on a defined hardness range. The hardness parameter in the receiving environment at the NAM site can exceed the hardness range of the regulatory WQRG calculation for these parameters. For these parameters, the WQRG is no longer applicable at elevated hardness, and the WQRGs are simply considered benchmark guidelines. Nonetheless, the interpretation in the report uses a hardness value of 250 mg/L $CaCO_3$ to calculate the WQRG and additional discussion is provided in the text regarding any values that exceed the benchmark.

Surface water quality results were plotted against time and compared to the WQRGs as a point of reference; they're also provided in statistics tables with the WQRG exceedances indicated by bold font. These are provided in Appendix E

All laboratory pH samples exceed the lab recommended holding time of 0.25 hrs, field pH and other field parameters are taken via a handheld device, and data is presented in Appendix E.

Table 3-4: Surface Water Parameters and Water Quality Reference Guidelines.

Parameter	Fraction	Guideline	Water Use	WQG Type	Guideline Value (mg/L)	Reference Guideline (mg/L)
Non-Metals						
Alkalinity (as $CaCO_3$)	T	Benchmark	FWAL	Long-term	20[1]	20[A]
Ammonia Nitrogen	T	BC WQG	FWAL	Long-term chronic	0.365[B]	0.365[B]
		BC WQG	FWAL	Short-term Acute	1.9	
Calcium	D	Benchmark	LS	Long-term	1000	1000
Chloride	—	BC WQG	FWAL	Long-term chronic	150	150
		BC WQG	FWAL	Short-term Acute	600	
		BC WQG	LS/WL	N/A	600	
		BC WQG	Irrigation	N/A	100	
Conductivity	—	Benchmark	Irrigation	Long-term	crop dependent	—
Fluoride	T	BC WQG	FWAL	Short-term Acute	1.7[B]	1
		BC WQG	LS/WL	Long-term chronic	1	
		BC WQG	LS WL	Short-term Acute	1.5	
		BC WQG	IW	Long-term chronic	1	
		BC WQG	IW	Short-term Acute	2	
Hardness (as $CaCO_3$)	—	—	—	—	—	—
Nitrate (as N)	—	BC WQG	FWAL	Long-term chronic	3	3
		BC WQG	FWAL	Short-term acute	32.8	
		BC WQG	LS/WL	Short-term acute	100	
Nitrite (as N)	—	BC WQG	FWAL	Long-term chronic	0.02-0.20[C]	0.08[C]
	—	BC WQG	FWAL	Short-term acute	0.06-0.60[C]	
	—	BC WQG	LS/WL	Short-term acute	10	
Nitrogen	—	BC WQG	see nitrate, nitrite, and ammonia nitrogen			
Nitrogen, Total Kjeldahl	—	—	—	—	—	—

Parameter	Fraction	Guideline	Water Use	WQG Type	Guideline Value (mg/L)	Reference Guideline (mg/L)
pH	—	BC WQG	FWAL	—	6.5–9	—
	—	BC WQG	LS	—	5–9.5	
Phosphorus (P)	—	—	—	—	—	—
Orthophosphate	—	—	—	—	—	—
Organic Carbon (DOC & TOC)	T	BC WQG	FWAL/WL	—	long-term medium within 2-% of background median	—
	D	BC WQG	FWAL/WL	—		
Sodium	—	—	—	—	—	—
Sulphate* (SO4)	—	BC WQG	FWAL	Long-term aquatic	429[B]	429[B]
		BC WQG	LS	—	1000	
Total Dissolved Solids (TDS)	—	—	—	—	crop dependent	—
Total Suspended Solids (TSS)	—	BC WQG	All	—	change from background	—
Turbidity	—	BC WQG	All	—	change from background	—
Metals						
Aluminum* (Al)	T	BC WQG	FWAL	Long-term chronic	0.37[B]	0.37[B]
		BC WQG	LS/WL	Short-term Acute	5	
		BC WQG	Irrigation	Short-term Acute	5	
Antimony (Sb)	T	BC WQG	FWAL	Long-term chronic	0.074	0.074
		BC WQG	FWAL	Maximum	0.25	
Arsenic (As)	T	BC WQG	FWAL	Long-term chronic	0.005	0.005
		BC WQG	LS/WL	Maximum	0.025	
		BC WQG	IW	Maximum	0.1	
Barium (Ba)	T	Benchmark	FWAL	Long-term chronic	1	1
Beryllium (Be)	T	Benchmark	FWAL	Long-term chronic	0.00013	0.00013
		Benchmark	IR/LS	Long-term chronic	0.1	
Bismuth (Bi)	—	—	—	—	—	—

Parameter	Fraction	Guideline	Water Use	WQG Type	Guideline Value (mg/L)	Reference Guideline (mg/L)
Boron	T	BC WQG	FWAL	Long-term chronic	1.2	1.2
		BC WQG	LS/WL	Long-term chronic	5	
Cadmium* (Cd)	D	BC WQG	FWAL	Long-term chronic	0.00045[B]	0.00045 [B]
		BC WQG	FWAL	Short-term acute	0.00298 [B]	
Chromium (Cr)	T	Benchmark	FWAL	Long-term	0.0025	0.0025
		Benchmark	IW	Long-term	0.008	
		Benchmark	LS	Long-term	0.05	
Cobalt (Co)	D	BC WQG	FWAL	Long-term chronic	0.000745 [B]	0.004 [B]
Copper* (Cu)	D	BC BLM	FWAL	Long-term chronic	calculated	0.007
		BC BLM	FWAL	Short-term acute	calculated	
	T	BC WQG	LS / WL	Short-term acute	0.3	0.2
		BC WQG	IW	Short-term acute	0.2	
Iron (Fe)	D	BC WQG	FWAL	Short-term acute	0.35	0.35
	T	BC WQG	FWAL	Short-term acute	1	1
Lead (Pb)	D	BC WQG	FWAL	Long-term chronic	0.0058 [BD]	0.0058 [BD]
	T	BC WQG	LS/WL	Short-term acute	0.1	0.1
		BC WQG	IW	Short-term acute	0.2	
Lithium (Li)	T	BC WQG	IW	Long-term chronic	2.5	2.5
Magnesium (Mg)	T	—	—	—	—	—
Manganese* (Mn)	D	BC WQG	FWAL	Long-term chronic	0.215[BE]	0.215 [B]
		BC WQG	FWAL	Short-term acute	7.44 [BE]	
Mercury (Hg)	T	CCME	FWAL	Long-term chronic	0.000026	0.000026
		CCME	LS	—	0.003	
		BC WQG	LS	Short-term Acute	0.003	
		BC WQG	IW	Short-term Acute	0.002	

Parameter	Fraction	Guideline	Water Use	WQG Type	Guideline Value (mg/L)	Reference Guideline (mg/L)
Molybdenum (Mo)	T	BC WQG	FWAL	Long-term chronic	7.6	0.01
		BC WQG	FWAL	Short-term acute	46	
		BC WQG	LS (ruminant)	Long-term chronic	0.016	
		BC WQG	LS/WL (non-ruminant)	Long-term chronic	0.284	
		BC WQG	WL (ruminant)	Long-term chronic	0.034	
		BC WQG	IW (poorly drained soil)	Long-term chronic	0.01	
		BC WQG	IW (well-drained soil)	Long-term chronic	0.02	
		BC WQG	IW	Short-term Acute	0.05	
Nickel (Ni)	D	BC BLM	FWAL	Long-term chronic	0.005 [BDE]	0.005 [BDE]
		BC BLM	FWAL	Short-term acute	0.0742 [BDE]	
Selenium (Se)	T	BC WGQ	FWAL/WL	Long-term chronic	0.002	0.002
		BC WGQ	LS	Long-term chronic	0.03	
		BC WGQ	IW	Long-term chronic	0.01	
Silver (Ag)	T	BC WGQ	FWAL	Long-term chronic	0.00012	0.00012
Strontium (Sr)	D	Benchmark	FWAL	Long-term chronic	1.25	1.25
Thallium (Tl)	T	Benchmark	FWAL	Long-term chronic	0.00003	0.00003
Tin (Sn)	T	—	—	—	—	—
Uranium (U)	T	Benchmark	FWAL	Long-term chronic	0.0075	0.0075
		Benchmark	FWAL	Short-term acute	0.0165	
		Benchmark	IW	Long-term chronic	0.01	
		Benchmark	LS	Long-term chronic	0.2	

Parameter	Fraction	Guideline	Water Use	WQG Type	Guideline Value (mg/L)	Reference Guideline (mg/L)
Vanadium (V)	T	Benchmark	FWAL	Long-term chronic	0.06	0.06
		Benchmark	IW/LS	Long-term chronic	0.1	
Zinc* (Zn)	D	BC WQG	FWAL	Long-term chronic	0.026[BD]	0.026 [BD]
		BC WQG	FWAL	Short-term acute	0.124 [BDE]	
	T	BC WQG	LS	Long-term chronic	2	2
		BC WQG	IW	Long-term chronic	soil pH dependent	

A – 20 mg/L or 20% lower than background, whichever is higher
B – Hardness dependant: Guidelines presented are based on a hardness of 250 mg/L $CaCO_3$
C – chloride dependant
D – Dissolved Oxygen dependent: Guidelines presented are based on a DOC of 5 mg/L
E – pH dependent: Guidelines presented pH of 8 (Ammonia 8.5),
Temperature of 15°C
*Considered a benchmarks at elevated hardness values

Operational Water Quality Benchmarks

Monitoring stations where contact water is managed within an engineered structure (e.g., TSFs, WMPs, Plant Site Drainage Pond) are not compared to BC WQRGs but are instead compared to contact water quality predictions in the most recent WQM report (MTS, 2024), and where applicable dissolved concentrations are compared to generic CSR standards although they are not governed by CSR standards (provided simply as benchmark comparisons) during active operations.

Water quality monitoring at operational stations is completed to ensure that current data is available for process water chemistry as a source term for water quality modelling and can be referenced if unusual trends are noted adjacent to site.

Additional Considerations for Water Quality Analysis

Considerations for Slough Water Quality

As discussed in Section 3.2, the concentrations of surface water facilities are highly affected by evapo-concentration. This is largely due to the climate at the NAM site, which is characterized as continental semi-arid to desert, resulting from the Coastal Mountains to the west acting as barriers to moisture. The annual evaporation rate of 585 mm/year exceeds the annual precipitation rate of 293 mm/year (BGC 2020), producing an overall water deficit. The dry climate, coupled with the site's undulating topography, with elevation lows centered within catchments rather than along catchment boundaries, results in the pooling of surface water runoff and shallow groundwater discharge in enclosed sloughs. The primary outflux of water from the sloughs is evaporation. Water loss from the sloughs due to evaporation concentrates the parameters in the ponds and produces brine water and can result in the accumulation of salt deposits along the rims of the sloughs. The NAM site and down-gradient locations

contain several naturally occurring sloughs and operationally induced sloughs due to the unique topography and climate of the NAM site.

A slough assessment was conducted by KCC Geoconsulting (KCC 2022). The slough assessment identified the sloughs in the Kamloops area often contain elevated concentrations of sulphate and magnesium and/or sodium. The sulphate concentrations could greatly exceed CSR standards and could reach over 100,000 mg/L (KCC 2022). The Groundwater Source Assessment (MTS 2025) identified that the reason for the high sulphate concentrations was that the shallow groundwater was depleted in calcium. The lack of calcium means that calcite (calcium carbonate mineral) and gypsum (calcium sulphate mineral) do not limit alkalinity and sulphate in the water bodies. The slough assessment also identified that the maximum concentrations of several other parameters in regional sloughs were elevated above CSR standards, including chloride (1,920 mg/L), arsenic (0.11 mg/L), boron (166 mg/L), lithium (3 mg/L), molybdenum (0.422 mg/L) and uranium (0.131 mg/L), as several of these parameters are mobile at neutral pH and accumulate in the sloughs. Although not considered in the assessment, the water quality of strontium in the sloughs exceeded WQG-FWAL and reached 33 mg/L in one regional slough. The regionally observed concentrations in sloughs are considered in the interpretation of the water quality results.

Considerations for Contact Water Quality

The slough assessment also found that selenium was prevalent in sloughs adjacent to the mine site but was not elevated regionally. A background water quality assessment identified that sulphate and selenium were two parameters primarily associated with waste rock material and that selenium is likely a marker for waste rock (KCC 2021). Nitrate was also associated with waste rock seeps, likely related to the flushing of blasting residue from the rock but also potentially related to release via cation exchange of ammonium. The background water quality assessment identified that molybdenum and arsenic are associated with tailings pore water. Importantly, an Attenuation Report identified that arsenic may be attenuated along the flow path, and selenium may be attenuated in sloughs or along the groundwater flow path (MTS 2023). Therefore, the lack of selenium or arsenic in water does not eliminate the possibility the water is unrelated to contact water.

Considerations for Ecological Health

An Ecological Risk Assessment (ERA) was completed in 2021 (Borealis 2021) to address exceedances predicted by the B3 Zone WQM. The parameters arsenic, manganese, molybdenum, and selenium were considered in the ERA using the maximum predicted concentrations of 0.15 mg/L, 0.7 mg/L 0.36 mg/L and 0.12 mg/L, respectively. The results of the ERA found that arsenic, manganese, molybdenum, and selenium, at the defined concentrations, resulted in negligible risks to Mallart Ducks and Mule Deer. The ERA findings are considered in the interpretation of the 2025 water quality results.

3.2.2 Results

The following results section has been developed consistent with BC Ministry of Environment Technical Guidance 4, (BC ENV, 2016) for annual reporting under the EMA. This includes, but is not limited to:

- Sample results for surface water are presented in Appendix E as statistics tables including min, max, mean, median, standard deviation, Method Detection Limit (MDL), non-detects, sample size.
- Monitoring locations that have been grouped into receiving environment and operational infrastructure locations.
- Water quality results are compared to CSR Schedule 3.2 Water Standards (as benchmarks only) for operational facilities in Table 3-5 and Table 3-6.
- The reporting of WQRG exceedances at receiving environment locations. WQRGs include WQG-FWAL/WL/LS (including benchmarks which may not be applicable due to hardness exceeding the WQG hardness range). The WQRG exceedances are provided in Appendix E and flagged in the statistics tables with bold font.
- Graphs of parameter trends over time, provided in Appendix E, with relevant WQRGs for receiving environment stations included on the charts. Notable trends are discussed station-by-station below in this section.
- Copies of the ALS analytical reports are available upon request.

Operational Environment Surface Water Locations

Operational surface water locations include the Plant Site Drainage Pond (SW1), the NATSF (SW17), NATSF WMPs (SW34, SW35, SW42), NATSF Dewatering, the PHTSF (SW18), the HATSF (SW7), HATSF WMPs (SW9, SW23, SW 31), the APTSF (SW50, incorrectly identified as SW11 on Permit 100224), and UG Dewater. Details for each location are provided in the below subsections.

For operational facilities, parameters are benchmarked against the most conservative CSR Schedule 3.2 Water Standards. Table 3-5 and Table 3-6 compare the 2025 min, max, and average concentrations of each operational facility to the CSR Schedule 3.2 standards. Based on the 2025 concentrations, sulphate and molybdenum continue to be the most frequently enriched parameters relative to CSR standards in operational facility water. Consistent with the working assumptions for contact water, selenium regularly exceeded CSR standards in facilities capturing waste rock–influenced drainage (e.g., underground dewatering and seepage collection ponds), while arsenic frequently exceeded CSR benchmarks in process water.

Table 3-5: Non-Metal Parameter Concentrations (mg/L) in Operational Facilities Compared to the Most Conservative CSR Schedule 3.2 Benchmarks in 2025.

Non Metals		Ammonia Nitrogen	Calcium	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulphate
CSR 3.2 Guideline		3.7	1000	100	1	100	2	1000
HATSFDEWATER	Min	0.038	18.8	24.7	2.01	0.1	0.02	872
	Max	0.26	27.1	27.6	2.5	0.304	0.0462	1060
	Ave	0.1775	21.5	26.07	2.3064	0.1355	0.0229	966
NATSFDEWATER	Min	0.575	275	58	0.976	0.1	0.02	3100
	Max	0.747	320	66.2	1.17	0.25	0.05	3420
	Ave	0.6393	295	61.36	1.0155	0.2375	0.0475	3278
SW1	Min	0.963	365	94.4	BDL	5.59	0.845	4640
	Max	3.25	534	144	1.25	14.5	1.48	5540
	Ave	2.0008	441	117.6	1.0625	8.84	1.04875	5135
SW17	Min	0.0059	103	48.4	BDL	0.152	0.05	1980
	Max	0.219	584	180	1.77	0.516	0.369	8670
	Ave	0.0294	423	117.44	1.39667	0.264	0.08423	6160
SW18	Min	0.0404	341	75.5	BDL	0.25	0.05	3960
	Max	0.152	479	125	1.65	0.542	0.109	6470
	Ave	0.1034	400	100.99	1.2125	0.31133	0.05607	5351
SW23	Min	0.0198	156	15.8	0.4	0.1	0.02	1880
	Max	0.334	440	99.7	2	3.97	0.1	12000
	Ave	0.1144	283	46.83	0.98333	1.07075	0.05138	5651
SW34	Min	0.005	221	58.2	BDL	0.688	0.05	4250
	Max	0.0105	302	75.8	BDL	2.73	0.11	4790
	Ave	0.0061	280	67.7	BDL	1.13275	0.05793	4648
SW35	Min	0.005	357	64.6	0.433	0.849	0.02	4160
	Max	0.0198	422	81.6	BDL	1.43	0.0594	5110
	Ave	0.0086	384	69.03	0.94846	0.99818	0.04813	4365
SW42	Min	0.005	211	43	0.4	0.25	0.02	2700
	Max	0.0394	340	72.7	BDL	0.724	0.0558	4230
	Ave	0.0126	301	63.3	0.95	0.3305	0.04798	3703
SW50	Min	2.55	331	138	BDL	0.25	0.1	4930
	Max	5.95	456	187	BDL	0.81	0.918	6520
	Ave	3.575	420	166.5	BDL	0.41175	0.55025	5937.5
SW7	Min	0.0344	452	746	2.42	0.5	0.1	24000
	Max	0.122	527	943	2.97	1.13	0.1	29200
	Ave	0.0782	494	844.5	2.695	0.815	0.1	26600

Non Metals		Ammonia Nitrogen	Calcium	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulphate
SW9	Min	0.005	166	31.8	0.552	16.3	0.02	3020
	Max	0.0615	191	39	BDL	19.1	0.05	3690
	Ave	0.0119	178	34.91	0.94883	17.71667	0.045	3347
UGDEWATER	Min	0.418	305	95.3	BDL	1.82	0.216	3640
	Max	9.95	860	147	BDL	23.9	2.75	6280
	Ave	2.503	441	111.06	BDL	11.97417	1.05842	5350

Note: Exceedances of CSR 3.2 Guideline are indicated by red shading
BDL indicates concentrations “below detection limits”

Table 3-6: Metal Parameter Concentrations (mg/L) in Operational Facilities Compared to CSR Schedule 3.2 Standards (as Benchmarks) in 2025.

Metals		Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Lithium	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Uranium	Vanadium	Zinc
CSR 3.2 Guideline		5	0.09	0.025	10	0.0015	5	0.004	0.008	0.04	0.09	5	0.1	2.5	0.2	0.00025	0.01	0.2	0.02	0.015	0.003	0.01	0.1	2
MDL		0.001	0.0001	0.00003	0.0001	0.00002	0.005	0.000005	0.0005	0.0001	0.0002	0.01	0.00005	0.001	0.0001	0.000005	0.00005	0.0001	0.00005	0.00001	0.00001	0.00001	0.0005	0.001
HATSF DEWATER	Min	0.0043	0.00035	0.271	0.0118	0.00002	0.425	0.0000618	0.0005	0.00017	0.00205	0.02	0.00005	0.0076	0.0372	0.000005	0.444	0.00046	0.000334	0.00001	0.00001	0.000844	0.001	0.001
	Max	0.0064	0.00149	0.481	0.0146	0.00004	0.514	0.000165	0.001	0.0002	0.00583	0.021	0.0001	0.009	0.158	0.0000083	0.501	0.00071	0.00413	0.00002	0.00002	0.00178	0.00217	0.0088
	Ave	0.00493	0.00069	0.33664	0.01286	0.00004	0.48536	0.00009	0.00095	0.00020	0.00363	0.02009	0.00010	0.00827	0.09513	0.00001	0.46891	0.00055	0.00184	0.00002	0.00002	0.00111	0.00145	0.00259
NATSF DEWATER	Min	0.0042	0.0005	0.0296	0.00804	0.00004	0.356	0.000025	0.001	0.00089	0.00052	1.02	0.0001	0.0123	0.199	0.000005	0.175	0.00145	0.0001	0.00002	0.00002	0.000241	0.001	0.0058
	Max	0.0071	0.0016	0.0499	0.0118	0.0001	0.415	0.000075	0.0025	0.00166	0.001	1.56	0.00025	0.0139	0.263	0.000005	0.188	0.0025	0.00025	0.00005	0.00005	0.000611	0.0025	0.0122
	Ave	0.00545	0.000976	0.041475	0.009595	0.000095	0.378250	0.000045	0.002375	0.001265	0.000960	1.350000	0.000238	0.013217	0.235250	0.000005	0.181083	0.001832	0.000238	0.000048	0.000048	0.000462	0.002375	0.008558
SW1	Min	0.01	0.0176	0.0195	0.0212	0.0001	0.352	0.000045	0.0025	0.0005	0.0035	0.05	0.00025	0.01	0.001	0.000005	0.127	0.001	0.0169	0.00005	0.00005	0.000104	0.005	0.005
	Max	0.28	0.0389	0.0278	0.0477	0.0002	0.468	0.0000752	0.00518	0.001	0.00768	0.1	0.0005	0.0415	0.0625	0.0000053	0.34	0.00321	0.0445	0.0001	0.0001	0.00251	0.0791	0.01
	Ave	0.0806	0.0295	0.0246	0.0355	0.0002	0.4105	0.0001	0.0044	0.0009	0.0050	0.0875	0.0004	0.0258	0.0189	0.0000	0.2073	0.0016	0.0259	0.0001	0.0001	0.0012	0.0250	0.0088
SW17	Min	0.0067	0.00338	0.0158	0.00878	0.0001	0.281	0.00006	0.0025	0.0005	0.0119	0.05	0.00025	0.0077	0.00291	0.000005	0.29	0.00068	0.00154	0.00005	0.00005	0.00105	0.0025	0.005
	Max	0.171	0.0116	0.0445	0.0276	0.0002	1.14	0.0002	0.005	0.001	0.0469	0.21	0.0005	0.0317	0.0627	0.000012	0.519	0.005	0.0112	0.0001	0.0001	0.00776	0.005	0.01
	Ave	0.03388	0.00643	0.02879	0.01481	0.00017	0.77517	0.00011	0.00417	0.00083	0.02275	0.09608	0.00042	0.02174	0.01909	0.00001	0.38333	0.00266	0.00561	0.00008	0.00008	0.00301	0.00431	0.00845
SW18	Min	0.0069	0.00408	0.0192	0.0132	0.0001	0.519	0.00005	0.0025	0.0005	0.00788	0.05	0.00025	0.0154	0.0185	0.000005	0.278	0.00154	0.00288	0.00005	0.00005	0.00179	0.0025	0.005
	Max	0.0244	0.00558	0.0292	0.0178	0.0002	0.826	0.00014	0.005	0.001	0.0157	0.144	0.0005	0.023	0.0411	0.000005	0.381	0.005	0.00531	0.0001	0.0001	0.00229	0.005	0.01
	Ave	0.01359	0.00485	0.02337	0.01568	0.00014	0.64150	0.00009	0.00354	0.00071	0.01111	0.08000	0.00035	0.01835	0.02984	0.00001	0.32008	0.00209	0.00415	0.00007	0.00007	0.00198	0.00354	0.00708
SW23	Min	0.00234	0.00055	0.000921	0.01	0.00004	0.544	0.000025	0.001	0.000272	0.001	0.02	0.0001	0.0101	0.00368	0.000005	0.00631	0.00182	0.0093	0.00002	0.00002	0.00466	0.0025	0.002
	Max	0.01	0.00262	0.0114	0.0378	0.0002	3.19	0.00066	0.005	0.00102	0.0276	0.102	0.0005	0.0678	1.14	0.000005	2.55	0.00728	0.166	0.0001	0.0001	0.0712	0.0121	0.01
	Ave	0.00556	0.00104	0.00359	0.02188	0.00011	1.63517	0.00009	0.00267	0.00056	0.00410	0.06100	0.00027	0.03168	0.47172	0.00001	0.29611	0.00363	0.04838	0.00005	0.00005	0.01340	0.00508	0.00588
SW34	Min	0.005	0.00345	0.00958	0.0166	0.0001	1.63	0.000045	0.0025	0.0005	0.0334	0.05	0.00025	0.0232	0.0008	0.0000061	0.0723	0.00599	0.0116	0.00005	0.00005	0.0175	0.00812	0.005
	Max	0.0078	0.00435	0.0115	0.0279	0.0001	2.03	0.00007	0.0025	0.0005	0.0708	0.05	0.00025	0.0261	0.011	0.0000148	0.0859	0.00719	0.0198	0.00005	0.000057	0.0219	0.011	0.005
	Ave	0.00533	0.00398	0.01064	0.02102	0.00010	1.81250	0.00006	0.00250	0.00050	0.05536	0.05000	0.00025	0.02474	0.00415	0.00001	0.08072	0.00669	0.01532	0.00005	0.00005	0.01983	0.00948	0.00500
SW35	Min	0.0045	0.00089	0.00134	0.0141	0.00004	0.0001	0.000164	0.001	0.0002	0.015	0.029	0.0001	0.0175	0.00181	0.000005	0.0732	0.00312	0.0193	0.00002	0.00005	0.00855	0.0025	0.005
	Max	0.007	0.00122	0.00274	0.0214	0.0001	0.00025	0.000296	0.0025	0.0005	0.0686	0.061	0.00025	0.0204	0.0221	0.000005	0.0943	0.00445	0.0263	0.00005	0.00008	0.00998	0.00512	0.0071
	Ave	0.0053	0.0011	0.0021	0.0169	0.0001	0.0002	0.0002	0.0024	0.0005	0.0501	0.0491	0.0002	0.0187	0.0074	0.0000	0.0841	0.0038	0.0222	0.0000	0.0001	0.0092	0.0041	0.0053
SW42	Min	0.0028	0.0005	0.00264	0.0181	0.00004	1.25	0.000025	0.001	0.00027	0.00338	0.02	0.0001	0.0101	0.0017	0.000005	0.0369	0.00104	0.00768	0.00002	0.00002	0.00425	0.00194	0.002
	Max	0.156	0.00178	0.00483	0.0295	0.0001	2.09	0.0000425	0.0025	0.00075	0.0139	0.146	0.00025	0.0204	0.204	0.0000064	0.0775	0.00647	0.0134	0.00005	0.00005	0.0065	0.003	0.0205
	Ave	0.01779	0.00095	0.00362	0.02386	0.00009	1.76167	0.00003	0.00225	0.00049	0.00903	0.05550	0.00023	0.01668	0.06337	0.00001	0.05477	0.00222	0.00980	0.00005	0.00005	0.00569	0.00247	0.00736
SW50	Min	0.0128	0.00246	0.0166	0.00768	0.0002	0.05	0.00014	0.005	0.001	0.0238	0.1	0.0005	0.01	0.001	0.000005	0.514	0.001	0.0216	0.0001	0.0001	0.0001	0.0432	0.01
	Max	0.0709	0.00556	0.029	0.02	0.0002	0.0672	0.00018	0.00671	0.001	0.0431	0.102	0.0005	0.01	0.0126	0.000025	0.737	0.00169	0.0325	0.000647	0.0001	0.000456	0.0918	0.01
	Ave	0.03103	0.00388	0.02430	0.01410	0.00020	0.05610	0.00015	0.00543	0.00100	0.03393	0.10050	0.00050	0.01000	0.00437	0.00001	0.67050	0.00127	0.02850	0.00026	0.00010	0.00021	0.07095	0.01000
SW7	Min	0.05	0.025	0.0172	0.00902	0.001	1.63	0.0012	0.025	0.005	0.0775	0.5	0.0025	0.0729	0.0221	0.0000086	8.33	0.00909	0.0325	0.0005	0.0005	0.0521	0.025	0.05
	Max	0.05	0.0269	0.0226	0.0103	0.001	2.37	0.00154	0.025	0.005	0.078	0.5	0.0025	0.104	0.141	0.00000987	10.1	0.0105	0.0385	0.0005	0.0005	0.0576	0.025	0.05
	Ave	0.05	0.02595	0.0199	0.00966	0.001	2	0.00137	0.025	0.005	0.07775	0.5	0.0025	0.08845	0.08155	9.235E-06	9.215	0.009795	0.0355	0.0005	0.0005	0.05485	0.025	0.05
SW9	Min	0.002	0.00126	0.00534	0.0129	0.00004	0.603	0.00004	0.001	0.0002	0.0437	0.02	0.0001	0.015	0.00068	0.000005	0.0758	0.0028	0.175	0.00002	0.00002	0.00646	0.00208	0.002
	Max	0.0057	0.00136	0.00667	0.015	0.0001	0.715	0.000117	0.0025	0.0005	0.0612	0.05	0.00025	0.0176	0.00119	0.000017	0.0915	0.00396	0.219	0.00005	0.00005	0.00717	0.0025	0.005
	Ave	0.00481	0.00131	0.00595	0.01418	0.00010	0.66250	0.00007	0.00238	0.00048	0.05484	0.04750	0.00024	0.01606	0.00089	0.00001	0.07967	0.00345	0.19525	0.00005	0.00005	0.00682	0.00247	0.00475
UG DEWATER	Min	0.0107	0.0322	0.00915	0.019	0.0001	0.335	0.00004	0.0025	0.00095	0.00258	0.05	0.00025	0.033	0.0234	0.000005	0.0978	0.00113	0.00867	0.00005	0.00005	0.00169	0.0025	0.005
	Max	0.239	0.0501	0.054	0.0932	0.0002	0.646	0.000115	0.005	0.0015	0.0383	0.17	0.0005	0.0529	0.182	0.00005	0.139	0.00524	0.0357	0.0001	0.0001	0.00433	0.00563	0.01
	Ave	0.04518	0.04143	0.03954	0.03804	0.00018	0.45342	0.00006	0.00458	0.00104	0.02262	0.10592	0.00046	0.04538	0.10168	0.00001	0.11955	0.00352	0.02188	0.00009	0.00009	0.00315	0.00477	0.00917

Note: Exceedances of CSR 3.2 Guideline are indicated by red shading. Results below the MDL are presented as 0.5 times the MDL as per BC ENV Technical Guidance 4: Annual Reporting Under the EMA (2016)

Operational Water Quality Comparison to Water Quality Model (WQM) Predictions

The 2024 results from operational infrastructure surface water sites representative of tailings ponds (SW 17 and SW 18) and underground dewatering water were evaluated against the base-case operational water quality predictions developed for site operations as part of the 2024 Closure and Reclamation Plan Update (MTS, 2024). The NATSF pond was predicted to dry up in the WQM, consistent with the current observations. The WQM was updated in 2025 to assess the potential of East Extension mining and support permitting assessment; those results are not discussed here though may be integrated in the future if East Extension is authorized and work advanced.

Model validation was conducted using operational monitoring data that reflect dynamic and evolving site conditions, including ongoing underground development activities. As such, some variability between predicted and observed concentrations is anticipated. The WQM was developed using conservative assumptions so that predicted concentrations would represent conservative estimates of operational water quality. Closure and reclamation strategies were subsequently developed based on these predictions.

For most parameters evaluated in 2025, observed concentrations at operational facilities were lower than the corresponding predicted concentrations, indicating that the model generally overpredicted water quality conditions. Where predicted concentrations exceed observed concentrations, no updates to the WQM or its underlying assumptions are required.

Consistent with the validation approach applied in previous reporting periods, a parameter was considered underpredicted if the percent difference between the observed average concentration and the maximum predicted concentration exceeded 30%. Under this criterion, parameters identified as underpredicted are discussed in the text. Overall, the comparison between observed 2025 operational water quality results and model predictions indicates that the WQM remains conservative and appropriate for representing operational water quality conditions at the mine site.

UG Dewatering

The UG Dewatering represents all water from the underground workings that is collected and pumped to the Tailings Pump Box for reuse in processing. Sources of water to the underground mine include seepage from TSFs, fresh water sourced from Kamloops Lake and groundwater from both overburden and bedrock. When water levels in underground sumps reach a pre-determined elevation, the water is pumped to the Tailings Pump Box within the Mill, where samples are collected. Due to the multiple contributing water sources and the intermittent pumping schedule, UG Dewatering water is inherently variable in its chemical characteristics.

Deposition of TAT into the APTSF began on October 19, 2022. Changes in underground water chemistry are anticipated over time as water released from consolidation of tailings in the APTSF drains toward the underground workings, given the potential influence of ongoing TAT deposition. Permit 100224 requires monthly sampling of the UG Dewatering water. The UG Dewatering water was sampled 12 times in 2025.

In 2025, average parameter concentrations that were above CSR benchmarks in UG Dewater included ammonia, sulphate, and select dissolved metals, including arsenic, molybdenum, and selenium. Although total copper concentrations were above CSR benchmarks, dissolved copper were not. Elevated chloride concentrations relative to CSR benchmarks were also observed, but concentrations remained below the chloride WQRG (higher guideline than CSR benchmarks). Ammonia concentrations were consistent with inputs associated with underground blasting activities. Sulphate and dissolved metal concentrations are interpreted to reflect the combined influence of seepage inputs from surface facilities and geochemical reactions occurring within the underground environment. Selenium concentrations are consistent with sulphide oxidation processes occurring underground, as previously described in the WQM Report (MTS, 2024).

The parameters underpredicted compared to base-case WQM predictions included aluminum, barium, copper, iron, and uranium (Table 3-7), although the average ammonia concentration was also underpredicted. None of the parameters that exceeded CSR standards in the underground dewatering water were underpredicted (which the exception of ammonia based on average ammonia concentrations). In the mass-balance predictions (which did not assume thermodynamic equilibrium was achieved), only observed uranium concentrations exceeded the model predictions. Overall, the underground model node was conservatively represented by the WQM. Conservatism in the predictions is primarily attributable to the assumption of potential acid generating (PAG) source terms within the WQM, which assume elevated contributions of chromium, cobalt, manganese, and nickel to seepage water. No updates to the WQM or its underlying assumptions are required based on 2025 UG Dewatering results.

Table 3-7: Comparison of 2025 Water Quality Results for the UG Dewater to Water Quality Predictions for 2025 (MTS 2024).

Parameter	Unit	Recent Calibration Period (Solubility Controlled Base Case Predictions)			Observed Concentrations		
		P25	P50	P75	P50	Maximum	Underpredicted % Diff
		2025	2025	2025	2025	2025	2025
pH	pH	8	8	8.02	8.13	8.31	1
Alkalinity, Total (as CaCO3)	mg/L	44.2	44.5	46.3	334.5	467	86
Ammonia (as N)	mg/L	1.23	1.32	1.52	1.11	9.95	
Chloride	mg/L	201	218	224	109.5	147	
Fluoride	mg/L	3.25	3.32	3.35	1	1	
Nitrate (as N)	mg/L	6.34	6.95	7.8	10.98	23.9	*17*
Nitrite (as N)	mg/L	1.69	1.83	2.36	0.719	2.75	
Sulphate	mg/L	3980	4150	4370	5300	6280	13
Aluminum	mg/L	0.00302	0.00304	0.00313	0.02135	0.239	85
Antimony	mg/L	0.034	0.0366	0.0412	0.043	0.0501	
Arsenic	mg/L	0.144	0.148	0.176	0.044	0.054	
Barium	mg/L	0.019	0.0192	0.0192	0.03175	0.0932	*38*
Beryllium	mg/L	0.000805	0.00116	0.00128	0.0002	0.0002	
Bismuth	mg/L	0.00098	0.00132	0.00144	0.0005	0.0005	
Boron	mg/L	0.84	0.906	1.16	0.437	0.646	
Cadmium	mg/L	0.00107	0.0019	0.00227	0.00005 75	0.000115	
Calcium	mg/L	354	396	409	344	452	
Chromium	mg/L	0.0118	0.0162	0.0183	0.005	0.005	
Cobalt	mg/L	0.0706	0.106	0.118	0.001	0.0015	
Copper	mg/L	0.00745	0.00768	0.00775	0.0236	0.0383	67
Iron	mg/L	0.00019	0.000197	0.000199	0.1	0.17	100
Lead	mg/L	0.000416	0.00054	0.0006	0.0005	0.0005	
Lithium	mg/L	0.0697	0.0921	0.0997	0.04635	0.0529	
Magnesium	mg/L	182	233	246	224	270	
Manganese	mg/L	3.38	4.72	4.96	0.102	0.182	

Mercury	mg/L	0.0000384	0.0000416	0.0000469	0.000005	0.00005	
Molybdenum	mg/L	0.191	0.196	0.206	0.121	0.139	
Nickel	mg/L	0.212	0.322	0.364	0.00379	0.00524	
Potassium		84.1	92.9	101	48.15	58.2	
Selenium	mg/L	0.0236	0.026	0.0273	0.02135	0.0357	
Silver	mg/L	0.000127	0.000163	0.000177	0.0001	0.0001	
Sodium	mg/L	1160	1270	1320	1985	2380	23
Strontium	mg/L	6.57	7.82	8.51	9.83	11.4	*3*
Thallium	mg/L	0.000494	0.000739	0.000828	0.0001	0.0001	
Tin	mg/L	0.00699	0.00929	0.0109	0.001	0.001	
Uranium	mg/L	0.00142	0.00157	0.0017	0.00323	0.00433	46
Vanadium	mg/L	0.0259	0.0302	0.0323	0.005	0.00563	
Zinc	mg/L	0.0579	0.087	0.104	0.01	0.01	

Red shading indicates observed concentration is greater than predicted by concentrations by a percent difference of 30% for solubility controlled predictions.
Yellow shading indicates observed concentration is less than a 30% difference for mass balance predictions.

APTSF (SW50)

SW50 is sampled from the ponded water on top of the TAT in the APTSF. Tailings were initially deposited, on a trial bases, into the APTSF in October 2022 with regular deposition starting in 2023 and continuing to 2025. Water started ponding on the APTSF in July 2025, and an initial water sample was collected. As pump-back infrastructure was set up, regular monthly SW50 samples started being collected as of September 2025. SW50 (incorrectly listed as SW11 in Permit 100224) is required to be sampled monthly, in 2025 it was sampled five times based on water availability.

In 2025 ponded water on the APTSF surface began to be recovered. Volumes of 16,434 m^3, 17,500 m^3, and 7,392 m^3 were recovered in October, November, and December, respectively. Some water was recovered prior to October as the pumping system was being setup, but the specific volume was not recorded. The APTSF pond is in direct contact with the recently deposited tailings and is temporal in nature due to the pumping, drainage into the underground mine, and evaporation. Recovered water from the APTSF enters the mill circuit.

The parameters with averages that exceeded the CSR benchmarks in the APTSF pond in 2025 included chloride, sulphate, arsenic, molybdenum and selenium. The maximum ammonia concentration also exceeded CSR benchmarks. All of the aforementioned parameters are mobile at neutral pH and recirculate in the mill, and therefore these parameters are expected to be present at concentrations above CSR standards.

Plant Site Drainage Pond (SW1)

SW1 is the Plant Site Drainage Pond located immediately east of the Mill. This lined pond serves as a working storage pond for milling operations and collects runoff from the mill area, ore pile, adjacent laydowns, office and dry complexes. This pond is permitted for emergency mill circuit or tailings line dumps, if required, and the excess water is pumped to the Tailings Thickener. Hydraulic cannons are utilized to re-mobilize settled solids for pumping back to the mill. The sampling point is off the access walkway. SW1 is to be sampled quarterly in accordance with Permit 100224; in 2025, all four samples were collected. The ranges of 2025 parameter concentrations measured in the Plant Site Drainage Pond that exceeded CSR benchmarks are presented in Table 3-5 and Table 3-6.

Water quality at SW1 is strongly influenced by operational activities and recycled process water thus exhibits temporal variability that is not directly predictable by the Water Quality Model. In 2025, parameters that exceeded applicable CSR benchmarks at SW1 included sulphate, fluoride, and select dissolved metals, most notably arsenic, molybdenum and selenium.

Ammonia- and nitrogen-species-related exceedances observed in prior years were not identified in 2025. Concentrations of chloride, sulphate, arsenic, molybdenum, and selenium at SW1 were comparable to those measured in UG Dewatering water, reflecting the integration of underground water and recycled process water within the mill circuit.

Relative to historical conditions, concentrations of sulphate and dissolved molybdenum in 2025 remained within the range of variability observed since 2020, although peak concentrations were

observed for DOC, TOC, and dissolved molybdenum, potassium, sodium and vanadium. No consistent increasing trends were identified for any others these parameters during the 2025 monitoring period. Elevated concentrations were generally associated with individual sampling events rather than sustained changes in water quality.

Overall, water quality at SW1 in 2025 remained consistent with its role as an operational pond influenced by mill water management and recycled process flows. Observed exceedances were intermittent and are considered representative of operational conditions at the site.

NATSF Pond Water Quality (SW17)

The NATSF was the primary TSF at the NAM site until 2023. Prior to operations in 2011, the water from the Historic Afton Open Pit (now APTSF) was pumped to Pothook Pit (now PHTSF), then pumped to the HATSF for temporary storage until the NATSF was commissioned. Once the NATSF was operational in 2012, water was pumped from the HATSF into the NASTF. The NATSF began receiving tailings in July 2012 when the mill started production. In 2023 the primary tailings deposition location transitioned from the NATSF to the APTSF. In 2025, the NATSF was used for tailings deposition for approximately two months from October to December, and for brief periods in April, July, and September. Moving forward, tailings will continue to be primarily deposited into the APTSF while the NATSF is actively dewatered. Table 3-8 shows the 2025 monthly tailings deposition into the NATSF.

Prior to 2023, water in the NATSF was reclaimed from the ponded tailings supernatant to be used for mill processing. As of 2023 water from the NATSF was pumped to the PHTSF for storage then recycled from the PHTSF into the process water reclaim system. In 2025, approximately 1.07 Mm^3 of water was sent from the NATSF to the PHTSF.

The natural evaporation rate from the NATSF (dependant on pond surface area) ranges from 7 m^3/hour in the winter months, to 151 m^3/hour in July (BGC 2024). Tailings consolidation continued in 2025, with the tailings density increasing from 1.31 t/m^3 in November 2024 to 1.334 t/m^3 in September 2025, corresponding to the release of 0.594 Mm^3 of water from the tailings pores to the NATSF pond. The 2025 tailings throughput rate (NATSF and APTSF) was 11.9 kt/day and the observed water volumes in the NATSF in 2025, ranged from 0.60 Mm^3 to 0.03 Mm^3. Evaporator machines were used to reduce the NATSF pond volume in 2025. The calculated amount of water mechanically evaporated in 2025 based on a mass balance calculation was 335,445 m^3. The evaporators were operational between April 17, 2023 to October 30, 2023, then April 1, 2024 to October 18, 2024, the April 1, 2025 to August 12, 2025 when the NATSF was considered adequately dewatered. The evaporators are no longer in use.

Table 3-8: NATSF Tailings Disposal Volumes in 2025.

Month	NATSF (Dry metric tonnes)
January	0
February	0
March	0
April	20,565
May	0
June	0
July	181,285
August	0
September	5,867
October	236,498
November	324,449
December	84,239
Annual Total Tailings Disposal to NATSF	**852,903**

Historically the SW17 monitoring station sample was collected monthly from a spigot in the reclaim barge on a mainline coming from the pumps. The barge pumps were intermittently turned off during 2025 as the NATSF is being dewatered, therefore, most of the samples were surface grab samples from the barge deck. SW17 is sampled monthly in accordance with *Permit 100224*, and in 2025, all 12 samples were collected from the barge.

Parameters that were measured at concentrations above the CSR benchmarks in the NATSF pond (SW17) are presented in Table 3-5 and Table 3-6. The parameters that exceeded the benchmarks included chloride, fluoride, sulphate, and dissolved metals arsenic, and molybdenum.

The dissolved parameters for which an increasing trend was apparent in the observed water quality dataset included alkalinity, chloride, sulphate, boron, calcium, copper, magnesium molybdenum, nickel, potassium, sodium and strontium and uranium. In all cases, the WQM predicted increases for these parameters consistent with the impact of evapo-concentration of parameters in the pond, as the pond size diminishes with time. Overall, as evaporation of the pond continues, the concentrations in the pond are expected to continue to increase.

The parameters associated with blasting (nitrate and nitrite) decreased in concentrations relative to 2023, likely because the amount of process water (which contains underground dewatering water) is reduced relative to other inflow sources. Additionally, aluminum, antimony, barium, and selenium decreased in concentration in 2025. This is potentially related to the recirculation of NATSF pore water to the pond. The pore water is likely to contain water at solubility-controlled concentrations given the long residence time of this water. Further, the reducing environment of the pore water is thought to decrease selenium concentrations (MTS 2023, MTS 2024).

The WQM did not account for tailings deposition in 2025 and predicted that the pond would be dry between July and November. In reality, tailings were deposited into the NATSF, so this prediction was

not realized. Given this change in operational tailings management, concentrations for the NATSF model node are not presented or compared, as the observed predictions could reflect slurry water chemistry that was not considered in the model. As the WQM assumed the pond would be dry during the summer months, the WQM predictions tended to greatly exceed observed concentrations in 2025, as the influence of evapo-concentration on parameter concentrations was significant (increased concentrations by orders of magnitude above observed).

NATSF Dewatering

The NATSF is currently being dewatered via multiple dewatering wells on the NATSF Stabilization Pad to promote stabilization efforts. Monthly sampling of NATSF Dewatering water is collected from the dewatering mainline that is a composite sample of all the dewatering wells. Sampling of the NATSF dewatering water started in September 2023 when the dewatering project commissioning was completed/operational. In 2025, 12 samples were collected from the NATSF dewatering.

The ranges of 2025 parameter concentrations measured in the NATSF dewatering water that exceeded CSR benchmarks are presented in Table 3-5 and Table 3-6. Parameters in the NATSF dewatering water with concentrations that were above CSR benchmarks included sulphate, fluoride, and the dissolved metals arsenic, manganese and molybdenum. The sulphate and molybdenum concentrations were generally slightly lower than the pond concentrations, likely because the pond is actively undergoing evapo-concentration. Manganese was elevated above pond concentrations, potentially indicating the pore water is reducing as manganese can dissolve in reducing environments. Further, selenium was significantly lower than pond concentrations, consistent with the reduction of selenium in reducing environments (MTS 2023). Conversely, arsenic concentrations in the pore water were slightly higher than concentrations measured in the pond, potentially due to reductive dissolution of arsenic (MTS 2023).

The NATSF supernatant pond is measured monthly via flyovers and summarized in Table 3-9. Note that in 2025 the pond was largely removed and separated in multiple pools, and the elevation shown is applicable for the pool at the southern extent, closest to the most recent recovery intake location.

Table 3-9: Monthly NATSF Supernatant Pond Elevation (2025).

Month End	Pond Elevation (masl)
	New Afton UTM
Dec-24	772.333
Jan-25	772.220
Feb-25	772.124
Mar-25	771.999
Apr-25	771.895
May-25	771.458
Jun-25	771.028
Jul-25	771.022

Month End	Pond Elevation (masl)
	New Afton UTM
Aug-25	770.777
Sep-25	770.282
Oct-25	770.732
Nov-25	771.332
Dec-25	771.102

NATSF WMPs

A total of five WMPs (WMPs) are associated with the NATSF but only three actively contain water. The West Dam WMP (SW34), South Dam WMP (SW35) and WMP1 (SW42) all receive low volumes of seepage from the NATSF as well as surface runoff from the adjacent mine area including the waste rock dams. Upgrades to all three locations occurred in 2021 including the addition of flow meters to track the volume of water pumped, and sampling spigots for SW34 and SW35 to improve water monitoring collection processes. The capacity of WMP1 was increased, as recommended by BGC. This works supplemented the installation of weir plates that were installed in 2020 to measure volumes of water that were entering the pond.

The seepage collection ponds were not model validations nodes in the WQM and thus concentrations are not compared to predicted concentrations.

SW34

In 2025, parameters that were above CSR benchmarks at SW34 (Table 3-5 and Table 3-6) included sulphate, molybdenum, and uranium. Sulphate concentrations at SW34 were within the range those measured at the NATSF pond (SW17) and collected from waste rock seeps (MTS 2024), while concentrations of molybdenum and arsenic were generally lower than those observed at operational TSF pond locations. The water quality of SW34 was sampled 12 times in 2025.

Although the WQM does not explicitly predict concentrations in the NATSF WMPs, the magnitude and variability of concentrations observed at SW34 in 2025 are consistent with the conservative operational source-term predictions applied in the WQM for NATSF waste rock dams. Observed results do not indicate conditions outside the range anticipated by the WQM for site operations.

SW35

The water quality of SW35 was sampled 12 times in 2025. Water quality at SW35 reflects site operational influences and localized hydrologic variability. Results at this location are compared to applicable CSR benchmarks.

In 2025, parameters that exceeded applicable CSR benchmarks (Table 3-5 and Table 3-6) at SW35 included sulphate, and the dissolved parameters copper, molybdenum, uranium, and selenium. Peak

concentrations were also observed for dissolved iron; however, elevated results did not persist across consecutive sampling events.

Relative to recent years, concentrations of sulphate, molybdenum, and selenium at SW35 in 2025 remained generally stable and within the range of historical variability observed since 2020. No consistent increasing trends were identified for these parameters during the reporting period.

Overall, water quality at SW35 does not indicate a material change in water quality relative to previous years and likely represents water that has contacted the waste rock buttress of the NATSF.

SW42

The water quality of SW42 was sampled 12 times in 2025. Water quality at this location reflects site operational influences and localized hydrologic variability. Results at SW42 are compared to applicable CSR benchmarks (Table 3-5 and Table 3-6).

In 2025, parameters that exceeded applicable CSR benchmarks at SW42 included sulphate, manganese (one event) and molybdenum. All other monitored parameters remained below applicable benchmarks throughout the year.

Concentrations measured at SW42 in 2025 were comparable to ranges observed in recent years and remained within historical variability. No sustained upward trends were identified for parameters exhibiting exceedances, and elevated concentrations were generally associated with individual sampling events rather than progressive changes in water quality. Overall, observed exceedances did not indicate a material change in operational water quality relative to previous years.

PHTSF (SW18)

The historically mined Pothook Pit became a tailings storage facility (PHTSF) in June 2012. The facility does not currently receive tailings but receives water from the NATSF through the NATSF dewatering system. The PHTSF is used to store operational water and may periodically be topped up with water from Kamloops Lake; in 2025 it was topped up in October 2025. The PHTSF is actively dewatered to the process water reclaim system, which has historically resulted in low pond levels and soft tailings around the perimeter, limiting safe access to the supernatant for sampling. A reclaim pumping system with an integrated sampling port was installed in the first quarter of 2022 and fully commissioned in April 2022, allowing for routine sampling under normal operating conditions. The PHTSF supernatant pond is measured monthly via flyovers and summarized in Table 3-10.

Table 3-10: Monthly PHTSF Supernatant Pond Elevation (2025).

Month End	Pond Elevation (masl)
	Pothook UTM
Dec-24	725.999
Jan-25	725.943
Feb-25	725.873
Mar-25	725.973
Apr-25	725.931
May-25	726.050
Jun-25	725.990
Jul-25	725.919
Aug-25	725.907
Sep-25	725.641
Oct-25	726.013
Nov-25	725.622
Dec-25	724.632

Monitoring station SW18 is sampled monthly in accordance with Permit 100224. In 2025, all 12 scheduled samples were collected, including four samples collected as grab samples from the TSF during periods when the reclaim pumping system was not consistently operating.

Water quality predictions for the PHTSF developed as part of the WQM were evaluated against observed 2025 water quality results at SW18. Parameters that exceeded applicable CSR benchmarks are summarized in Table 3-11, which also presents the WQM validation outcomes for modelled parameters.

Observed concentrations of major ions and dissolved metals at SW18 exhibited temporal variability consistent with the hydraulic connection between the PHTSF and the NATSF and the influence of recycled process water. In 2025, parameters that exceeded CSR benchmarks at SW18 included sulphate, chloride (below WQRGs), fluoride, arsenic, and molybdenum. Peak concentrations were also observed for conductivity, hardness, TDS, chloride, sulphate, and dissolved molybdenum, potassium, sodium and strontium, likely reflecting pump back from water in the NATSF and increased evapo-concentration of pond water.

These exceedances were anticipated by the WQM, and for most parameters, predicted concentrations exceeded observed concentrations, indicating conservative model performance. The model node for the PHTSF pond received water from the NATSF for reclaim. The WQM did not account for tailings deposition in the NATSF during operations; however, tailings were deposited in the NATSF in 2025. As a result, some differences between model predictions and observed data are expected. Parameters in the PHTSF that were underpredicted by the WQM for the base case scenario included aluminum, boron, copper, iron, and manganese (only compared against P75 and not maximum predicted

concentration) and strontium. Importantly, aluminum and copper were not underpredicted in the mass balance base case run (when solubility constraints and thermodynamic equilibrium were not applied). None of the underpredicted parameters exceeded CSR standards. Overall, the WQM performed as intended; however, future scheduled updates should incorporate the observed tailings deposition schedule.

This conservatism in the WQM reflects recirculation of process water within the mill circuit and evaporative concentration within the pond. Selenium concentrations remained lower than predicted, reflecting attenuation processes that are not explicitly represented in the WQM. As documented previously, selenium reduction associated with tailings dewatering and geochemical attenuation is not incorporated into the model framework.

Overall, comparison of observed 2025 water quality results at SW18 with WQM predictions indicates that the model continues to conservatively represent PHTSF water quality conditions. Observed concentrations were consistent with predicted ranges, and no updates to the WQM or its underlying assumptions are required based on 2025 SW18 results.

Table 3-11: Comparison of 2025 Water Quality Results at PHTSF (SW 18) to Water Quality Predictions in 2024, (MTS 2024).

Parameter	Unit	Recent Calibration Period (Solubility Controlled Base Case Predictions)			2025 Observed Concentrations		
		P25	P50	P75	P50	Maximum	Underpredicted % Diff
		2025	2025	2025	2025	2025	2025
pH	pH	8.06	8.07	8.08	8.285	8.36	2
Alkalinity, Total (as CaCO3)	mg/L	49.7	50.9	52	155.5	183	66
Ammonia (as N)	mg/L	0.375	0.455	0.569	0.0938	0.152	
Fluoride	mg/L	3.15	3.33	3.64	1.195	1.65	
Nitrate (as N)	mg/L	3.22	3.63	4.21	0.2525	0.542	
Nitrite (as N)	mg/L	0.287	0.346	0.434	0.05	0.109	
Sulphate	mg/L	3310	3540	4070	5395	6470	11
Aluminum	mg/L	0.00329	0.00336	0.0034	0.0112	0.0244	69
Antimony	mg/L	0.0277	0.0336	0.0417	0.00492	0.00558	
Arsenic	mg/L	0.0511	0.0618	0.0785	0.02315	0.0292	
Barium	mg/L	0.0189	0.0199	0.0205	0.01585	0.0178	
Beryllium	mg/L	0.000106	0.000123	0.00013	0.0001	0.0002	
Bismuth	mg/L	0.00049	0.000543	0.000605	0.00025	0.0005	
Boron	mg/L	0.278	0.311	0.349	0.642	0.826	36
Cadmium	mg/L	0.0000813	0.0000883	0.0000986	0.00008	0.00014	
Calcium	mg/L	253	271	307	392	430	
Chromium	mg/L	0.000318	0.000359	0.000433	0.0025	0.005	74 DL

Parameter	Unit	Recent Calibration Period (Solubility Controlled Base Case Predictions)			2025 Observed Concentrations		
		P25	P50	P75	P50	Maximum	Underpredicted % Diff
		2025	2025	2025	2025	2025	2025
Cobalt	mg/L	0.000262	0.00029	0.000355	0.0005	0.001	
Copper	mg/L	0.00686	0.00699	0.00721	0.01085	0.0157	29
Iron	mg/L	0.00017	0.000174	0.000179	0.081	0.144	100
Lead	mg/L	0.0001	0.000115	0.000134	0.00025	0.0005	22 DL
Lithium	mg/L	0.0134	0.0151	0.0169	0.01795	0.023	
Magnesium	mg/L	156	169	190	138.5	182	
Manganese	mg/L	0.0149	0.0167	0.0189	0.0301	0.0411	
Mercury	mg/L	0.0000109	0.0000124	0.0000153	0.000005	0.000005	
Molybdenum	mg/L	0.256	0.307	0.378	0.3095	0.381	
Nickel	mg/L	0.00283	0.00326	0.00373	0.00182	0.005	
Potassium		224	240	271	114	151	
Selenium	mg/L	0.0335	0.0376	0.0434	0.004235	0.00531	
Silver	mg/L	0.0000176	0.0000189	0.0000214	0.00005	0.0001	*53 DL*
Sodium	mg/L	968	1090	1250	1855	2410	6
Strontium	mg/L	5.1	5.61	6.33	11.75	14.6	*39*
Thallium	mg/L	0.0000734	0.0000875	0.0000981	0.00005	0.0001	
Tin	mg/L	0.000735	0.000843	0.00121	0.0005	0.001	
Uranium	mg/L	0.00408	0.00439	0.00486	0.00193	0.00229	
Vanadium	mg/L	0.013	0.0157	0.0195	0.0025	0.005	
Zinc	mg/L	0.00719	0.00785	0.00874	0.005	0.01	

Red shading indicates observed concentration is greater than predicted by concentrations by a percent difference of 30% for solubility controlled predictions.
Yellow shading indicates observed concentration is less than a 30% difference for mass balance predictions.
DL indicates influenced by detection limits

HATSF Surface Water (SW7)

The HATSF is currently in care and maintenance and no tailings or contact water were discharged into it in 2025 (there is no authorization for this). Active source control measures are in place to help reduce the amount of water interacting with the facility (e.g., surface pond removal and tailings dewatering wells).

The HATSF comprises tailings deposited during historical Afton mining operations. The northern portion of the HATSF is predominantly composed of coarse tailings sands, which settled from the tailings slurry during deposition, while finer grained tailings migrated to the southern portion of the facility. In 2014, prior to New Gold ownership, freshet flows from Alkali Creek were diverted into the HATSF and subsequently pumped off in two batches in late 2014 and early 2015, resulting in the reduction of open surface water to localized ponding in the southern portion of the HATSF (SW7). Surface water accumulation at the HATSF is driven primarily by precipitation, with minimal surface runoff, as most of the catchment is diverted away from the facility via the ACDC. The presence of

saturated fine tailings surrounding the ponded water creates liquefaction hazards, which limit safe and consistent access for sample collection. In mid-2020, surface water at the HATSF was pumped down, further reducing the availability of ponded water and increasing exposure of tailings sands.

When accessible, surface water samples at SW7 are collected from the shoreline using a fibreglass pole, and winter samples are obtained using an ice auger. Permit 100224 requires quarterly water quality sampling at SW7, monthly water level monitoring, and annual water recovery volume reporting, as summarized in Table 3-12. Due to the limited persistence of surface water at the HATSF, water levels are generally negligible, with ponded water typically present for approximately one month per year during the snowmelt period (March and April). Due to the limited extent, the elevation / level of the pond is not recorded.

In 2025, only two surface water samples were collected at SW7, in March (Q1) and April (Q2). During the remaining quarters, the site was dry and no surface water was available for sample collection.

Where water was present in 2025, parameters that exceeded applicable CSR Water Standards (Table 3-5 and Table 3-6) at SW7 included chloride, fluoride, sulphate, and the dissolved metals molybdenum, selenium, and uranium, and the detection limit for chromium was greater than the guideline. Observed concentrations exhibited variability consistent with the episodic nature of ponded water at this location.

Relative to recent years, concentrations of sulphate, molybdenum, and selenium at SW7 in 2025 remained within the range of historical variability, based on the limited number of samples collected during periods when surface water was present.

Overall, surface water quality at SW7 in 2025 reflects localized, short-duration ponding conditions influenced by evaporation and limited water availability. The restricted sampling frequency is attributable to site conditions rather than changes in operational controls, and no new water quality concerns were identified based on the 2025 monitoring results.

HATSF Dewatering

Multiple HATSF Dewatering wells have been installed, starting in 2015, within the coarse sand portion (northern half) of the HATSF to facilitate dewatering. This water source was added to the groundwater sampling program in 2019. A sample valve was installed at the end of the dewatering line just before it enters the process water storage tank in late 2020, to obtain fully mixed composite samples. In October 2022, due to infrastructure upgrades, the HATSF Dewatering sample was temporarily collected from the HW13 kiosk. It was observed that these samples were not consistent with fully mixed composite samples, so when infrastructure upgrades were completed in 2023, a new sample valve was added on the dewatering line at the storage tank. As of September 2023, sampling resumed at the dewatering line to ensure a composite sample. Well 5 was reactivated and directed to the dewatering line in 2024. A total of 12 samples were taken in 2025, from HATSF Dewater.

In 2025, the parameters that were measured above CSR benchmarks included fluoride, arsenic, and molybdenum (Table 3-5 and Table 3-6). In contrast to other facilities, only the maximum sulphate

statistic exceeded the sulphate CSR benchmark, and at much lower concentrations than other facilities. The concentrations in the HATSF pore water tended to be less concentrated than the overlying pond water (SW 7), likely due to the lack of evapo-concentration and potential flushing with background groundwater as the HATSF is located in the former location of Hughes Lake. Arsenic concentrations in HATSF Dewatering composite sample increased as a function of reactivating Well 5; however, they remain within the range of the conservative case predictions (MTS 2024).

Table 3-12: Monthly Water Recovery Volumes in 2025, from HATSF Dewatering Wells.

Month	Days	Historic TSF Well (m^3)
Jan	31	6493
Feb	29	5615
Mar	31	5267
Apr	30	4464
May	31	4613
Jun	30	3246
Jul	31	5373
Aug	31	5066
Sep	30	4485
Oct	31	4687
Nov	30	4539
Dec	31	4499

HATSF WMPs

SW9

Monitoring station SW9 represents seepage originating from the northern portion of the HATSF West Dam and flowing toward downstream operational conveyance areas. As specified under Permit 100224, SW9 requires quarterly water quality sampling; in 2025 the station is sampled monthly for 12 samples.

Water quality results at SW9 were evaluated against applicable CSR 3.2 Water Standards (Table 3-5 and Table 3-6). In 2025, parameters that were above CSR benchmarks included sulphate, molybdenum, and selenium. Importantly, arsenic (associated with tailings pore water) was below CSR benchmarks. The water quality sampled at SW9 is likely representative of infiltration through waste rock rather than tailings pore water. Exceedances discussed in this section are based on the operational exceedance dataset used for interpretive purposes.

Elevated concentrations of sulphate, molybdenum, and selenium measured at SW9 in 2025 remained within the range of historical variability observed in 2024. No consistent increasing or decreasing trends were identified during the 2025 monitoring period relative to 2024; although, between 2017 and 2024 the water quality significantly changed (plots presented in Appendix E). Concentrations associated with waste rock (sulphate and selenium) increased and concentrations associated with

tailings (molybdenum) decreased. This likely reflects decreased inputs from tailings pore water relative to infiltration through waste rock.

SW23

The HATSF NW WMP (SW23) is located on the northwest end of the HATSF West Dam and to the southwest of the historical Northwest Waste Rock Pile. The NW WMP collects seepage from the HATSF and runoff from the West Dam (constructed of waste rock). A temporary pump-back system was installed in 2022 that pumped water from the HATSF NW WMP back into the process water circuit. In 2023 a more permanent pump system was used to pump water from the HATSF NW WMP to the process water circuit seasonally as required this system continues to be in use. There is a dam on the west side of the pond; samples are typically collected midway along the dam though from September to November 2025, samples were collected from the south side of the pond as there was no water at the west side. During the open water season, grab samples are taken from the shore; during the winter, a hole is augured approximately 2 m from the shore and a grab sample is collected. In 2025, 12 samples were collected at SW23.

Water quality results at SW23 are benchmarked against CSR 3.2 Water Standards for comparison purposes only (Table 3-5 and Table 3-6). In 2025, parameters with concentrations greater than CSR Water Standards included fluoride, sulphate, manganese, molybdenum, selenium and uranium. Exceedances discussed in this section are based on the operational exceedance dataset used for interpretive purposes.

New maximum concentrations were recorded for numerous parameters in 2025, including non mine-related parameters (i.e. chloride) and potentially mine-related parameters (i.e. selenium), with maximum concentrations being observed during summer months when the evapo-concentration effects are most pronounced. The peak sulphate and selenium concentrations were likely related to elevated loads sourced from waste rock (West Dam) relative to tailings seepage as the upgradient HATSF tailings are being dewatered. While many parameters show increasing variability in 2024 and 2025, the general trends are consistent with previous observations. Between 2017 and 2024 the water quality of the NW WMP shifted from water quality similar to tailings pore water quality to water quality similar to waste rock. Like previous years, peak sulphate concentrations were measured in August and likely reflected evapo-concentration of conservative parameters. Peak potassium and magnesium, calcium and sodium concentrations as well as dissolved arsenic concentrations were also observed during August. However, peak molybdenum and selenium, as well as peak nickel, lead and copper concentrations, corresponded to periods of ice cover in December, representing concentration of dissolved elements due to water loss from ice and potentially also redox driven increases due to limited oxygen exchange under ice, although this has yet to be confirmed.

SW31

The HATSF SW WMP (SW31) was designed and constructed by previous operators of the HATSF to collect seepage from the southern portion of the HATSF West Dam. The pond does not typically maintain standing water; however, the presence of green vegetation indicates subsurface moisture.

In 2025, SW31 was not sampled, as no surface water was present at the location during the monitoring period. Consequently, no water quality data were collected and no comparison to applicable CSR 3.2 Water Standards was conducted for SW31 in 2025.

The absence of surface water at SW31 reflects site conditions during the reporting period. No conclusions regarding water quality, exceedances, or trends can be drawn for this station for 2025.

Receiving Environment Surface Water Locations (Alkali Creek, Cherry Creek, and Other)

Receiving environment surface water monitoring was conducted at locations downstream of the NAM that are not part of the operational water management system and are intended to characterize water quality conditions in natural receiving waters. These locations include Alkali Creek and associated monitoring stations, as well as other downstream receiving environment sites.

Surface water quality results for receiving environment locations were evaluated against applicable BC WQRGs in Appendix E, and all of those noted exceedances are discussed in the text below. Monitoring locations are situated outside of the permitted mine operational footprint and are intended to assess downstream water quality conditions relative to background variability and guideline benchmarks. Results for individual receiving environment stations are presented and discussed below based on 2025 monitoring data only. All results and trend plots are available in Appendix E.

Alkali Creek

Alkali Creek is located south of the New Afton PMA and drains a large catchment that includes agricultural land and runoff from Highway 5. Alkali Creek is baseflow fed and flows from east to west. The Alkali Creek catchment does not directly contact mine infrastructure as Alkali Creek is diverted around the HATSF toward Cherry Creek via the ACDC (Figure 1-6). Seasonal drainage from an upgradient slough, Russel Slough (SW2), may overflow towards Alkali Creek during periods of elevated water levels. Alkali Creek itself contains three water quality monitoring stations which are prescribed in Permit 100224, and one hydrometric station. Water quality downgradient of the ACDC is measured in a terminus pond that recharges the ground and ultimately discharges towards Cherry Creek.

As reported in the 2024 Annual Report, observed increases in sulphate, chloride, and other conservative parameters were previously identified in Alkali Creek. The increasing trends observed in the water quality data prompted a focused investigation to evaluate the cause of the increase. Earlier assessments of water quality indicated that parameter concentrations and trends observed in Alkali Creek were similar at upgradient and downgradient monitoring locations, suggesting that the mine was unlikely the source of the observed increases (KCC 2021). Parameters identified upgradient of the mine included constituents commonly associated with evapo-concentration, such as boron, calcium, and sodium.

Following this work, additional Alkali Creek investigation was completed in April 2025 to further evaluate observed water quality conditions. The investigation included an assessment of seasonal flow conditions, comparison of upgradient and downgradient monitoring locations, and evaluation of spatial and temporal patterns in key parameters, supported by statistical and geochemical analyses.

The findings indicated that the flow in Alkali Creek significantly diminished, but that water quality characteristics observed in Alkali Creek were similar to background artesian groundwater quality, with similar parameter ranges and patterns identified at upgradient and downgradient locations.

SW2

SW2 (Russel Slough) is located upgradient and south of the NATSF, outside of the PMA, on land formerly owned by KGHM and currently managed by Sugarloaf Ranch. The site represents a natural wetland feature that receives inflow from an artesian groundwater source. Waterfowl utilize the area, and cattle have access to the slough during the open water period. SW2 periodically contributes to the Alkali Creek receiving environment monitoring network and does not directly contact mine infrastructure.

Permit 100224 requires bi-annual water quality sampling at SW2; however, this location was sampled eight times in 2025.

Water quality at SW2 reflects characteristics consistent with groundwater discharge from the underlying confined aquifer that feeds the slough. The groundwater quality is monitored in groundwater well Res-07. In 2025, hardness (reported as $CaCO_3$) ranged from 814 to 1,080 mg/L, and pH ranged from 7.95 to 8.64, indicating hard and slightly basic water conditions.

In 2025, exceedances of applicable BC WQRGs were identified for sulphate, ammonia (one event), arsenic, manganese (one event), and strontium (Appendix E).

The parameters that exceeded BC WQRGs at SW2 in 2025 did not exhibit a consistent increasing trend and remained within the range of historical variability observed at this location. Chloride is increasing with time; however, chloride concentrations remain well below WQRGs and can be attributed to the inflow from the artesian aquifer. Observed parameter concentrations were variable and consistent with receiving-environment conditions influenced by groundwater discharge and seasonal hydrologic variability. Based on the 2025 monitoring results, no mine-source attribution is inferred for water quality conditions observed at Russel Slough.

SW28

SW28 is located downstream of the NAM and outside of the permitted operational water management system, and forms part of the receiving environment surface water monitoring network Monitoring station SW28 was established in 2020 to support an investigation of water quality conditions in Alkali Creek following the 2019 Cherry Creek Water Quality Assessment, which identified increasing trends in select parameters that were not directly attributable to mine activities. The water quality data at SW28 were subsequently utilized in the NAM Water Quality Assessment Report (KCC 2021), which noted that similar increasing patterns for key parameters were observed at SW28 and in Alkali Creek downstream. Monitoring at an upstream location (SW46) identified that influences on Alkali Creek were occurring upstream of the mine footprint. As specified under Permit 100224, SW28 requires quarterly sampling; however, this location was sampled monthly (12 times) in 2025.

In 2025, water quality at SW28 was characterized by hard and slightly basic conditions. Total alkalinity (as $CaCO_3$) ranged from 300 to 628 mg/L, hardness (as $CaCO_3$) ranged between 741 mg/L and 1320 mg/L, and pH ranged from 7.89 to 8.58, based on the 2025 receiving-environment dataset.

Surface water quality results at SW28 were evaluated against applicable BC WQRGs (Appendix E). In 2025, exceedances of BC WQRGs were identified for ammonia (as N), chloride, nitrite (as N; one event) sulphate, aluminum (one event), arsenic, beryllium (one event – totals only), chromium (one event), copper (one event), iron (one event), manganese, mercury (totals only), selenium (one event), strontium and thallium (one event).

Consistent with findings from previous years, conductivity, TDS, sulphate, magnesium, sodium and strontium parameter concentrations are increasing with time. Peak concentrations were observed for several parameters including total aluminum, total and dissolved arsenic, total barium, total beryllium, total and dissolved copper, and total and dissolved manganese, and dissolved selenium. Importantly, as will be discussed in upcoming sections, the flow in Alkali Creek has decreased significantly since 2019. Peak concentrations were observed during the winter months, when flow in the creek was very low, and are primarily attributable to the inclusion of totals. The peak concentrations are not likely representative of increased loading but of decreased flow and possibly the inclusion of sediment.

SW12

Monitoring station SW12 is located along Alkali Creek south of the permitted work area, on land formerly owned by Roper Ranch and currently owned by New Afton. The sampling location is situated at a culvert opening beneath a ranch access road. Cattle have unrestricted access to the creek at this location, and non-mining land-use activities, including active ranching, may influence water quality conditions. SW12 forms part of the Alkali Creek receiving environment monitoring network and does not directly contact mine infrastructure.

As specified under Permit 100224, quarterly water quality sampling is required at SW12, and four samples were collected in 2025. Permit 100224 also requires monthly flow monitoring at this location. Flow data is collected at the Alkali Creek Hydrometric Station (ACHS), located less than 1 km downstream. Flow at the ACHS is considered representative of flow conditions at SW12, as there are no significant inputs or outputs between the two locations.

In 2025, water quality at SW12 was characterized as very hard (between 925 and 1170 mg/L $CaCO_3$) and the pH ranged between 7.94 and 8.34. Total alkalinity between 362 and 628 mg/L (as $CaCO_3$) was consistent with ranges observed at other Alkali Creek receiving-environment stations, based on the receiving-environment statistics dataset. Surface water quality results at SW12 in 2025 were evaluated against applicable BC WQRGs (Appendix E). Exceedances of the WQRGs were identified for sulphate, arsenic, manganese, selenium, and strontium.

Continued general increasing trends were observed for conductivity, hardness, TDS, chloride, sulphate, calcium, magnesium, potassium, sodium, strontium, and uranium, although some of the increasing trends fell within the range observed in 2024. Peaks were observed for alkalinity, nitrate,

phosphorus, dissolved and total arsenic, dissolved cobalt, total copper, dissolved manganese, total and dissolved selenium, and a new minimum was observed for pH. The 2025 results are consistent with previous trends identified in Alkali Creek. As the volume of flow is diminishing in the creek, concentrations are increasing likely due to a combination of evapo-concentration (either in a creek or water feeding the creek) and decreased flow (potentially from overland runoff).

ACHS

The Alkali Creek Hydrometric Station (ACHS) was established in 2019 and is located south of the HATSF. The station forms part of the Alkali Creek receiving environment monitoring network and does not directly contact mine infrastructure. ACHS provides hydrologic and water quality context for nearby Alkali Creek monitoring locations, including SW12 and SW28.

As per Permit 100224, ACHS is sampled monthly when water is present. In 2025, ACHS was sampled three times (April through June), as the station was dry for the remainder of the year (July through March). No flowing conditions were observed during 2025; when water was present, it occurred as pooled or stagnant water within the channel.

In 2025, water quality at ACHS was characterized by hard and slightly basic conditions, with hardness ranging from 1040 mg/L to 1990 mg/L (as $CaCO_3$), total alkalinity (as $CaCO_3$) ranging from 358 to 794 mg/L and pH values ranging from 8.31 to 8.45. These conditions are consistent with other Alkali Creek monitoring locations.

Surface water quality results at the ACHS were evaluated against applicable BC WQRGs (Appendix E). Parameters with concentrations consistently exceeding BC WQRGs in 2025 included sulphate and strontium. Arsenic, molybdenum and uranium exceeded BC WQRGs on isolated occasions. Chloride and manganese also exceeded applicable benchmarks in some samples.

Consistent with observations from previous years, the absence of sustained flow and the presence of stagnant pooled water during periods when ACHS contained water likely contributed to elevated concentrations through evapo-concentration. Peak concentrations were observed for several parameters including conductivity, hardness, Total Dissolved Solids (TDS), Total Organic Carbon (TOC), Total Suspended Solids (TSS), turbidity, alkalinity, chloride, phosphorus, sulphate, and total and dissolved arsenic, calcium, magnesium, molybdenum, potassium, sodium, strontium and uranium, and dissolved iron. A slight drop in pH was noted in 2025. Hydrologic conditions at ACHS were evaluated as part of the Alkali Creek Investigation initiated in March 2025, which considers spatial and temporal patterns across the Alkali Creek watershed.

The daily average discharge for ACHS from the Hydrometric Report (Appendix F) is presented in Figure 3-2.

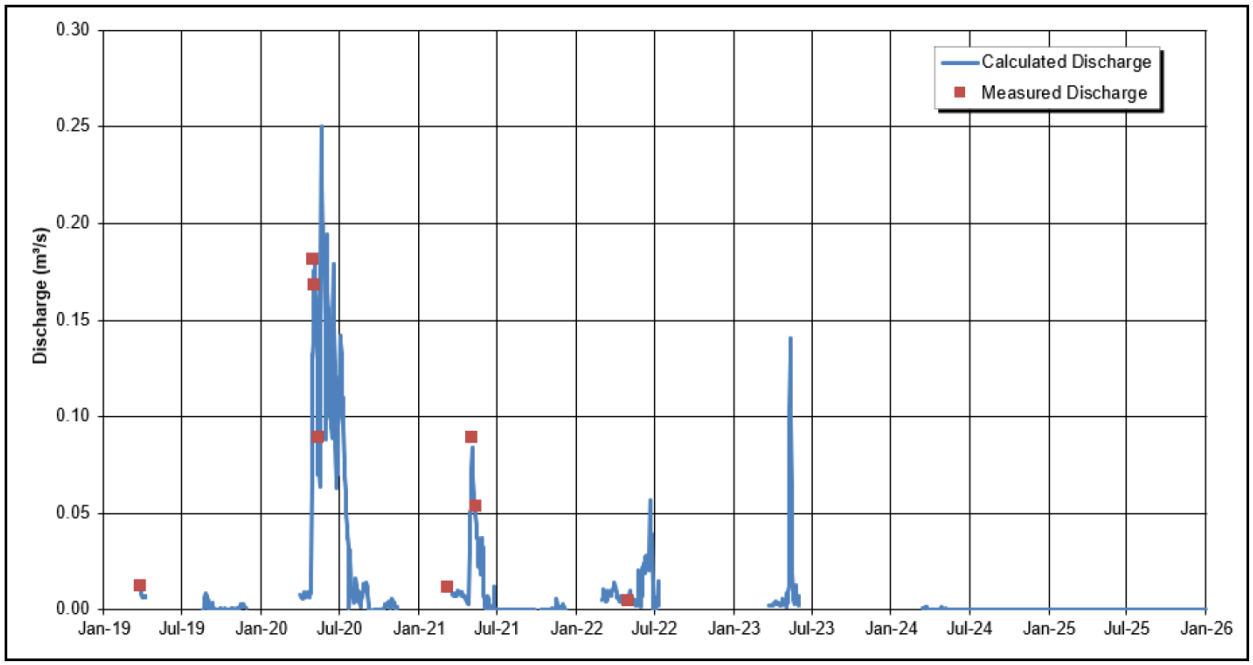


Figure 3-2: Alkali Diversion Daily Average Discharge Hydrograph (KP 2026).

SW41

The ACDC was constructed to divert non-contact surface water around the HATSF. The diversion system terminates at a pond, SW41, adjacent to slough SW32. Water from this terminus pond may enter Cherry Creek via infiltration pathways or, during high-flow events, through overland flow. As such, SW41 represents the downstream terminus of Alkali Creek within the receiving-environment monitoring network.

The SW41 flow measurement station was established in 2023 within the ACDC terminus pond and is co-located with the SW41 water quality monitoring location. The station is an instantaneous spot-flow measurement site. No measurable flow was observed at SW41 during 2025.

As per Permit 100224, SW41 requires quarterly water quality sampling when water is present. In 2025, SW41 was dry for the entire year, and therefore collection of surface water samples was not possible. Consequently, no water quality data were collected at SW41 in 2025, and no guideline comparisons were conducted for the current reporting period. As a result, no exceedances are reported for SW41 in 2025.

Alkali Creek Receiving-Environment Summary

Receiving environment surface water monitoring along Alkali Creek in 2025 included stations SW2, SW28, SW12, ACHS, and SW41. These stations collectively characterize upstream, mid-reach, and downstream water quality conditions outside the mine operational water management system. Results

from these locations were evaluated against applicable BC WQRG using the receiving-environment exceedance dataset, with exceedances summarized in the WQRG table in Appendix E.

Across the Alkali Creek monitoring network, water quality in 2025 was consistently characterized by hard and slightly basic conditions, with elevated alkalinity and pH values typical of regional groundwater-dominated systems. Increasing trends were observed for several parameters along Alkali Creek including conductivity, TDS, hardness, chloride, sulphate, calcium, magnesium, potassium and sodium. Additionally, several parameters exceeded BC WQRGs. An Alkali Creek Investigation was initiated in 2025 to assess the spatial and temporal water-quality patterns along Alkali Creek. The preliminary results identified that downstream locations, including SW41, tended to be consistent with upgradient conditions and that shifting water qualities may be attributed to changing groundwater conditions and potentially evapo-concentration of parameters. The results of the investigation are currently under review and will be considered in conjunction with work being done in the Cherry Creek and Alkali Creek areas in 2026. Much of the changing concentrations may be related to the lower flow conditions in the watercourse as exhibited in Figure 3-2.

Flow monitoring in Alkali Creek during 2025 was limited due to several dry sampling events along the creek and ACDC. Stations exhibited intermittent pooling, stagnant conditions, or extended dry periods. Where water was present, elevated concentrations are interpreted to reflect baseflow-dominated hydrology and evapo-concentration.

Cherry Creek (SW27, SW14)

Cherry Creek is a receiving-environment stream located west of the NAM that flows northwest toward Kamloops Lake. The creek is utilized by agricultural and residential users within the surrounding watershed. Cherry Creek receives inflow from Alkali Creek; however, constituent concentrations in Cherry Creek are generally lower than those observed in Alkali Creek, as streamflow in Cherry Creek typically exceeds Alkali Creek flow by approximately one order of magnitude, resulting in dilution of Alkali Creek inputs. A previous review and evaluation of water quality in Cherry Creek can be found in KCC 2020a.

There are no permitted surface water discharges from the mine site to Cherry Creek. Potential subsurface flow pathways from the HATSF and associated water management features, including areas influenced by the historical NWWRP and the West Dam, have been identified and are discussed separately. Interpretation of Cherry Creek water quality in this section is therefore based on receiving-environment monitoring data and observed spatial patterns.

Access to Cherry Creek monitoring locations is constrained by private property ownership, and flow conditions are seasonally variable. During summer and early fall, flow in Cherry Creek may be reduced or intermittent in some reaches, which can limit sample collection opportunities and influence observed concentrations.

SW27

Cherry Creek is monitored upstream of the NAM site and upstream of the confluence with Alkali Creek at monitoring station SW27, located outside the PMA. The station is situated approximately 6.5 km along the Greenstone Forest Service Road from Highway 1/97 and approximately 250 m along a side road. The channel at SW27 is characterized by cobble and gravel substrate with localized organic material beneath a moderately wooded mixed tree canopy. This setting contrasts with downstream reaches of Cherry Creek, which have reduced forest cover due to ranching activity and a transition to more open grassland. Cattle actively graze in the vicinity of the monitoring location.

Sampling at SW27 began in August 2013. As per Permit 100224, SW27 requires quarterly water quality sampling. In 2025, SW27 was sampled twice, as the creek was dry during the first and fourth quarters and water was not available for sampling during those periods.

In 2025, water quality at SW27 was characterized by moderately hard conditions (hardness ranged from 128-133 mg/L (as $CaCO_3$) and slightly basic pH, with total alkalinity (as $CaCO_3$) ranging from 116 to 128 mg/L and pH values ranging from 8.12 to 8.26, based on the receiving-environment statistics dataset.

Water quality results at SW27 were evaluated against applicable BC WQRGs using the receiving-environment exceedance dataset, with exceedances summarized in the WQRG table in Appendix E. Based on the 2025 dataset, an exceedance of BC WQRGs at SW27 were identified for molybdenum. The water quality at SW27 is not trending with time and peak concentrations were not observed in 2025.

Relative to downstream Cherry Creek monitoring locations, concentrations measured at SW27 remained lower and within the range of historical variability. As SW27 is located upgradient of both Alkali Creek and the NAM, the 2025 results indicate that water quality conditions at this location reflect upstream Cherry Creek catchment influences rather than mine-related inputs or baseflow related inputs. This is an important distinction in understanding the geochemical evolution of Cherry Creek along its flow path. It is important to note that cherry creek flows across several biogeoclimatic zones, initially in the Dry Cool Interior Douglas Fir (IDFdk) zone, which transitions to Interior Douglas Fir Very Hot Dry (IDFxh2), Nicola Very Dry Warm Bunchgrass (BGxw1), Thompson Very Dry Hot Ponderosa Pine (PPxh2) and Thompson Very Dry Hot Bunchgrass (BGxh2).

The daily average discharge for SW27 from the Hydrometric Report (Appendix E) is presented in Figure 3-3.

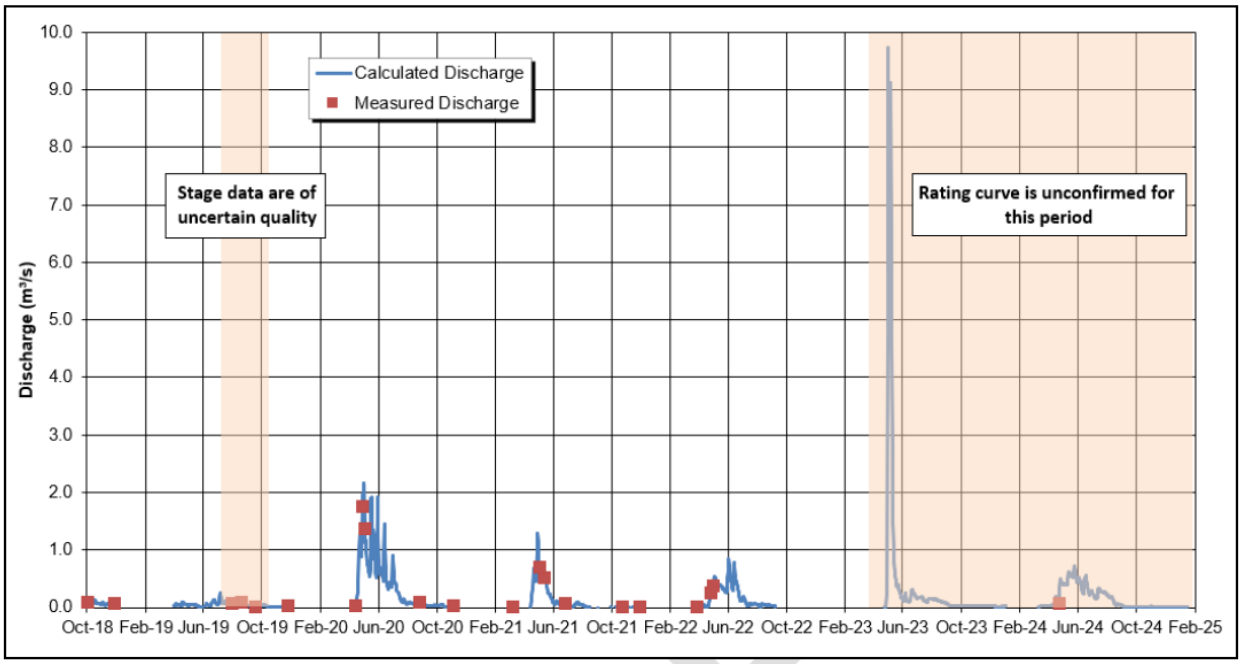


Figure 3-3: Cherry Creek Daily Average Discharge Hydrograph (KP 2026).

Note: while flow measurements were conducted in 2025, a backlog in the channel interrupted the stage-storage curve, resultantly, the discharge is not shown on this hydrograph.

SW14

The Cherry Creek downstream monitoring location SW14 is located at the Greenstone Forest Service Road bridge, approximately 2 km west of the NAM site along Highway 1/97, and outside the PMA. Cherry Creek does not intersect mine property and flows northward through agricultural land west of the mine site, including hay fields and areas of heavy cattle use. The monitoring location is down-gradient of a mobile home park, a closed service station, and several private residences where activities such as logging and farm equipment maintenance occur. SW14 is also located down-gradient of the NAM site and the ACDC.

In 2019, a major bridge upgrade was completed at this location, including stream bank stabilization using steel piles, riprap boulders, rock, and landscaping materials. Samples at SW14 are collected within an approximately 4 m buffer around the bridge, based on seasonal accessibility. Samples consist of free-flowing water within a broad gravel-bottomed reach with limited organic material.

As per Permit 100224, SW14 requires monthly water quality sampling when water is present. In 2025, SW14 was sampled 10 times; samples could not be collected in January and February due to frozen conditions.

In 2025, water quality at SW14 was characterized by very hard (230 – 366 mg/L as $CaCO_3$ and slightly basic conditions, with total alkalinity (as $CaCO_3$) ranging from approximately 213 to 294 mg/L and pH

values ranging from approximately 8.34 to 8.58. These conditions are consistent with historical observations at SW14 and with other Cherry Creek receiving-environment locations.

Surface water quality results at SW14 in 2025 were evaluated against applicable BC WQRGs using the receiving-environment exceedance dataset. The exceedances identified at SW14 are consistent with the upgradient location (SW27) and limited to molybdenum (WQRG table in Appendix E).

Relative to the upstream Cherry Creek station (SW27), concentrations at SW14 were higher for several parameters, consistent with the downstream influence of Alkali Creek inflows and mineralized zone inflows. However, concentrations remained within the range of historical variability for Cherry Creek. Seasonal patterns were evident, with higher concentrations generally observed during baseflow-dominated winter and early spring conditions and lower concentrations following spring freshet. Overall, the 2025 data indicate stable downstream Cherry Creek water quality conditions consistent with groundwater inputs, baseflow-dominated hydrology. Consistent with previous years, no increasing trends or peak concentrations are observed downstream of the NAM site in Cherry Creek at monitoring station SW14.

Flow monitoring at SW14 was initiated in 2021 following a Permit 100224 amendment. In September 2024, a water-level logger was installed to support continuous flow measurement, and a stage-discharge rating curve will be developed once sufficient data are available. Flow measurements were collected nine times during the 2025 open-water season and observed discharge rates were comparable to those measured in previous years. Flow data for SW14 are presented in the Hydrometric Report in Appendix F.

Other Receiving Surface Water

SW32

SW32 is a natural slough located west of the HATSF SW WMP. Historical observations indicate that some parameters in the pond exceeded WQRGs previously. The pond does not maintain a defined discharge point, and water volumes are typically very low or dry for most of the year. Low intermittent water availability has made sample collection challenging in the past. Due to its low volume and stagnant conditions when water is present, parameters within the pond are subject to evapo-concentration, particularly during summer months when evaporation rates are highest.

As per Permit 100224, SW32 requires quarterly water quality sampling and is checked and sampled monthly when water is present. In 2025, SW32 was dry for the entire monitoring period, and therefore collection of surface water samples was not possible. Consequently, no water quality data were collected at SW32 in 2025, and no comparison to applicable BC WQRGs was conducted for this reporting year. As no samples were collected, no exceedances are reported for SW32 in 2025.

Elevated selenium concentrations have been identified historically at SW32, which prompted a focused investigation to better understand potential sources and transport pathways. In response, a detailed site investigation was completed in March 2025. These analyses included review of regional geology, interpretation of historical and recent aerial imagery, digital elevation model comparisons

(1974 versus August 2024), and assessment of surface disturbance within the defined Area of Interest west of the HATSF. Geochemical samples were collected from the area surrounding the slough and upgradient infrastructure and groundwater in the vicinity was reviewed.

The investigation is on-going and determined that measurable surface disturbance is largely limited to existing infrastructure, including the ACDC, access roads, and portions of the HATSF footprint. The investigation further identified the presence of sulphides in a till sample collected adjacent to the slough and recommended the installation of groundwater wells upgradient and downgradient of the slough to further evaluate potential transport pathways (MTS 2024). The findings of the SW32 Investigation Technical Memorandum (MTS, March 2025), which documents and incorporates the analyses prepared by NAM personnel, are currently under internal review.

SW8

SW8 (Alkali Slough) is a natural pond that predates historical Afton mining operations and is located at the base of the historical Northwest Waste Rock Pile. The slough may receive episodic surface runoff from the NWWRP (historic waste rock) and potentially minor seepage from the HATSF. Alkali Slough has no defined surface water outlet, and water loss is dominated by evaporation, resulting in highly variable and concentrated water chemistry.

SW 8 is sampled quarterly in accordance with Permit 100224, and all four scheduled samples were collected in 2025.

Water quality at SW8 in 2025 was characterized by very high dissolved solids and major ion concentrations, consistent with an evaporation-dominated slough system. Based on the receiving-environment statistics dataset, hardness ranged from 5,490 to 10,200 mg/L (as $CaCO_3$), total alkalinity (as $CaCO_3$) ranged from approximately 957 to 1420 mg/L, while sulphate concentrations ranged from approximately 20,500 to greater than 58,200 mg/L. Elevated concentrations of sodium, magnesium, and chloride were also observed. These conditions are consistent with the development of sodium-alkaline and sulphate-rich brines through evapo-concentration of sodium-bicarbonate groundwater, which is depleted in calcium (MTS 2025).

Surface water quality results at SW8 were evaluated against applicable receiving environment BC WQRGs, recognizing that guideline applicability is limited for stagnant slough systems with brine-like chemistry. Exceedances identified at SW8 in 2025 are summarized in the WQRG table in Appendix E. Parameters exceeding applicable guidelines included chloride, arsenic, boron, chloride, molybdenum, selenium, strontium and uranium. Given the non-discharging nature of Alkali Slough and its brine-like chemistry, freshwater aquatic life guidelines are of limited applicability. Some hardness-dependent WQRGs are not applicable at this location, as hardness substantially exceeds guideline applicability thresholds. Additionally, due to the high brine concentrations in the slough, several analytes had minimum detection limits exceeding guideline values.

Peak concentrations were not observed in 2025 and continue to fall within the range of previously observed variability at this location.

Given its location at the base of the historical NWWRP, Alkali Slough may receive episodic surface runoff from waste rock materials during precipitation or snowmelt events. Parameters such as sulphate, selenium, and sodium, which are elevated at SW 8, are consistent with parameters previously observed in runoff and seepage associated with the NWWRP. However, direct seepage from the NWWRP is not routinely observed, and there is no defined surface discharge pathway to or from the slough. Consequently, potential contributions from the NWWRP are interpreted as intermittent and secondary to evapo-concentration processes that dominate water quality in Alkali Slough. Elevated arsenic and selenium concentrations measured at SW8 are also consistent with concentrations observed in regional sloughs and groundwater systems or were previously evaluated within the ERA.

In late 2025, a soil sampling program was completed at the NWWRP as part of a broader geochemical characterization initiative to improve understanding of material characteristics and potential source terms in the area. The program included rock sampling from ten test pits, with samples collected at three depth intervals in each test pit, totaling 30 samples. Analytical results from this work were not fully available at the time of preparation of this report, and no detailed geochemical interpretation has been completed to date, although preliminary results indicate that it is non potentially acid generating rock.

Overall, water quality at Alkali Slough continues to reflect a system dominated by evapo-concentration of groundwater and runoff inputs, with mixed natural and potential historical mining influences. The 2025 results do not indicate a new or accelerating trend relative to historical conditions. Continued monitoring remains appropriate to track long-term behaviour and potential groundwater interaction, with downgradient groundwater monitoring providing the primary mechanism for assessing potential off-site migration.

SW19

SW19 is a surface water quality monitoring station located in East Slough, northeast of the APTSF within the PMA. East Slough historically functioned as a stormwater storage pond for the Afton facilities, including the former mill, which was decommissioned in 2012/2013. The pond also historically served as a sediment collection area for the former mill live pile and is located downgradient of historical septic lagoons. East Slough continues to receive drainage from existing site roads and parking areas associated with the east facilities. Waterfowl utilize the pond during the open-water season.

Remnant ore surrounding the historical Afton ore reclaim structure previously drained to East Slough prior to removal of the reclaim structure in October 2014. As part of reclamation activities completed in late 2014, the ore reclaim structure was converted into an artificial bat habitat. Historic ore was excavated and disposed of in the NATSF, the ground surface was recontoured, and topsoil was imported from the south side of the site prior to seeding. Additional earthworks and seeding were completed upslope of the bat habitat in spring 2015. An overflow pipe is present in the eastern dam of the pond and may discharge to the northeast during periods of elevated seasonal water levels.

As required under Permit 100224, SW19 is sampled quarterly. In 2025, four water quality samples were collected, including analysis for extractable petroleum hydrocarbons (EPH) and methylmercury. EPH results are discussed in the operational infrastructure surface water section of this report.

Based on 2025 monitoring data, water quality at SW19 was characterized by very hard water conditions, with hardness (as $CaCO_3$) ranging from approximately 2,970 to 5,500 mg/L, and slightly basic conditions, with pH values ranging from 8.43 to 8.61. These values are within the range of historical variability previously observed at this location.

Exceedances identified at SW19 were evaluated against applicable BC WQRGs for the receiving environment and are summarized in the WQRG table in Appendix E. Parameters that exceeded applicable guidelines during 2025 included chloride, sulphate, arsenic, copper, molybdenum, selenium, strontium, and uranium. Several additional parameters were reported below analytical detection limits; however, method detection limits exceeded applicable guideline values.

Conductivity, hardness, DOC, TOC, pH chloride, boron, and molybdenum may be increasing with time, although the concentrations generally remain within historic variability and trends may be related to sampling frequency or location. Elevated concentrations relative to WQRGs reflect evapo-concentration processes typical of low-flow, closed-basin slough environments. Parameter concentrations remained within background slough concentrations, and arsenic, manganese, molybdenum, and selenium concentrations remained below levels previously evaluated in the ERA. Hardness-dependent sulphate and copper guideline values are not applicable at SW19 due to the very high hardness of the water. Sulphate concentrations measured in East Slough remained within the range reported for regional slough environments.

East Slough is zoned for industrial use and remains an area subject to progressive reclamation; therefore, water quality conditions are expected to improve as reclamation activities continue.

SW3

Northeast Creek (SW3) is located approximately 3 km northeast of the APTSF, on the downstream side of Highway 1/97. The monitoring station is located off New Afton property within an active grazing lease and is routinely accessed by cattle for watering. The sample location corresponds to an area where groundwater daylights and visible surface flow occurs. Due to limited and variable water availability, a shallow depression is periodically excavated to allow sufficient water depth for sample collection. Heavy cattle use occurs within the gully and at the sampling location during the spring, summer, and fall grazing periods.

As required under Permit 100224, SW3 is sampled bi-annually. In 2025, two water quality samples were collected.

Based on 2025 monitoring data, water quality at SW3 was characterized by hard water conditions, with hardness (as $CaCO_3$) ranging from approximately 1,270 to 1,460 mg/L, and slightly basic

conditions, with pH values ranging from 8.01 to 8.31. These values are consistent with historical conditions previously observed at this location.

Exceedances identified at SW3 were evaluated against applicable BC WQRG for the receiving environment and are summarized in the WQRG table in Appendix E. Parameters that exceeded applicable guidelines during 2025 included fluoride, sulphate; aluminum; chromium, iron, molybdenum, selenium and strontium. No increasing parameter trends or peaks in concentration were noted at SW3 in 2025.

Potential influences on water quality at SW3 include regional geological conditions and historical land disturbance. Comparative evaluation of water quality between SW3 and groundwater downgradient of the NAM site and upgradient of SW3 (PA3-P1, P24-01B, P19-03A/B) indicates selenium concentrations at SW3 are not consistent with discharge from upgradient mine-related surface water features. Selenium is typically released via sulphide oxidation, although it can be reduced along the groundwater flow path. The selenium exceedances at SW3 suggest a local source of selenium and sulphate. Although sulphate exceeds WQRGs, the WQG for sulphate is not applicable at the hardness ranged observed at SW3. Sulphide mineral exposures are prevalent in the region, including naturally exposed sulphides associated with highway rock cuts and regional geology. Sulphide oxidation unrelated to NAM operations is therefore considered a plausible contributing source to selenium observed in Northeast Creek.

SW5

Muskrat Slough (SW5) is located north of the APTSF and is intersected by the Trans-Canada Highway. The north and south portions of the slough are hydraulically connected by a culvert beneath the highway; the northern portion lies outside of the PMA. The slough may receive minor runoff from the historic waste rock deposited on the northern pit rim and from the highway corridor. As required under Permit 100224, SW5 is sampled quarterly; four samples were collected in 2025.

Based on 2025 monitoring data, water quality at SW5 was characterized by extremely hard water conditions, with hardness (as $CaCO_3$) ranging from approximately 9,570 to 42,600 mg/L, and neutral to slightly basic pH, ranging from approximately 8.52 to 8.69. Alkalinity (as $CaCO_3$) ranged between 395 mg/L and 1,270 mg/L. Water quality at this location is highly variable and is strongly influenced by evapo-concentration processes typical of closed-basin slough environments.

Exceedances identified at SW5 were evaluated against applicable BC WQRG for the receiving environment and are summarized in the WQRG table in Appendix E. Parameters that exceeded applicable guidelines during 2025 included ammonia, chloride, sulphate, arsenic, boron, copper, manganese, molybdenum, nickel, selenium, strontium, and uranium. However, when considered site specific parameters (pH, DOC, and hardness), sulphate, copper and manganese are not applicable and nickel does not exceed WQRGs. Several additional parameters were reported below analytical detection limits but the detection limits exceeded WQRGs.

The suite of parameters exceeding BC WQRGs in 2025 was consistent with previous years, and no new parameters were identified as exceeding BC WQRGs. Concentrations reflect continued brine development driven by evaporation, and magnitudes remained within the range of historical variability observed for Muskrat Slough.

Several parameters that exceeded BC WQRGs at SW5 are also commonly elevated in regional slough environments, including chloride, sulphate, arsenic, molybdenum, and uranium, indicating that evapo-concentration is the primary control on water quality. Although arsenic, selenium and molybdenum exceeded BC WQRGs in 2025, concentrations remained below levels previously evaluated in the ERA.

Continued monitoring at SW5 is intended to track water quality conditions under variable hydrologic conditions and to support ongoing assessment of receiving-environment water quality in the vicinity of the PMA.

Freshwater Aquatic Life Guideline Comparison

Surface water quality results for receiving environment stations are compared to BC WQG for the Protection of Freshwater Aquatic Life (FWAL), livestock (LS), wildlife (WL), or irrigation (IR), whichever is most conservative. The BC WQG guidelines provide standards for both maximum concentrations (short-term) and long-term concentrations where the long-term guidelines have lower threshold values. Parameters that do not have approved WQGs are compared against working water quality guidelines (i.e., benchmark guidelines) which are adopted from other environmental jurisdictions. For this report, the collective guidelines are referred to in general as WQRGs.

Exceedances of applicable BC WQRG identified during the 2025 monitoring period are summarized in Appendix E for the receiving environment surface water monitoring locations. Supporting statistical summaries, temporal distribution plots, and analytical datasets used to identify WQRG exceedances are also provided in Appendix E.

Site-specific discussions of WQRG exceedances and associated interpretation are provided in the preceding surface water results sections. Comparisons to CSR guidelines are not applied to receiving-environment surface water and are addressed separately for operational water and groundwater, where applicable.

Extractable Petroleum Hydrocarbons

Consistent with permit requirements, an Extractable Petroleum Hydrocarbons (EPH) analysis is conducted at SW1 and SW19 quarterly as per Permit 100224 requirements. Sources of hydrocarbons may be from surface or underground spills. All hydrocarbon spills are cleaned up; however, the mine dewatering system may capture residual hydrocarbons and pump them to the surface. It has been noted that the discharge from the mine dewatering system is often diverted directly to the Plant Site Drainage Pond (SW1), which could result in elevated EPH concentrations in SW1 samples.

Routine samples were collected in 2025 and synchronized with the monthly supernatant schedule. In 2025, four EPH samples were collected from SW1 and four from SW19. All 2025 results were below the CSR Schedule 3.2 water standard for any water use, including aquatic life, of 5 mg/L for EPH.

Table 3-13 provides statistics for EPH samples collected from each site from 2016 to 2025. Analytical results, included in Appendix E, indicate that a new maximum EPH concentration was observed for SW1, but no exceedances observed. The rest of the petroleum hydrocarbon results were within the historical range.

Table 3-13: EPH Statistics for SW1 and SW9 (2010–2025).

Descriptive Statistic		SW1		SW19	
		2010-2025	2025	2011-2025	2025
EPH (C10-C19) (mg/L)	Min	BDL	BDL	BDL	BDL
	Max	3.42	0.5	BDL	BDL
	Average	0.66	0.32	BDL	BDL
	Standard Deviation	0.62	0.12	BDL	BDL
	Count	49	4	98	4
	Non Detects	15	2	98	4
EPH (C19-C32) (mg/L)	Min	BDL	BDL	BDL	BDL
	Max	2.88	2.88	0.34	BDL
	Average	0.48	0.93	0.25	BDL
	Standard Deviation	0.51	1.30	0.01	BDL
	Count	49	4	98	4
	Non Detects	30	2	97	4

BDL = Below Detection Limit. Method detection limit varies, but is typically 0.25 mg/L

3.2.3 Summary

Water sampling in 2025 was completed in accordance with Permit 100224 requirements, with exceptions limited to locations where water was not present, as summarized in Table 2-2.

Based on the 2025 surface water monitoring exceedances summarized in Appendix E, exceedances of applicable WQRGs were identified at several receiving-environment locations downstream and upgradient of the NAM. Exceedances of WQRGs were observed at two locations downstream of the HATSF (SW 9 and SW 23), at Russel Slough (SW 2) upgradient of Alkali Creek, at multiple monitoring stations within Alkali Creek, at three on-site sloughs (SW 8, SW 5, and SW 19), and at the Northeast Creek monitoring station (SW3).

The parameters that exceeded WQRGs at more than one monitoring location included ammonia, sulphate, chloride, aluminum, arsenic, boron, chromium, copper, manganese, molybdenum, selenium, strontium, and uranium, although the WQGS for sulphate, copper and manganese do not apply to

station hardness values Parameters that exceeded WQRGs during more than one sampling event at individual stations included ammonia, sulphate, chloride, aluminum, arsenic, boron, copper, molybdenum, selenium, strontium, and uranium.

Sulphate and strontium were the only parameters that exceeded WQRGs at all monitoring stations where exceedances were observed

Across slough monitoring locations (SW 8, SW 5, and SW 19), exceedances most commonly involved parameters that are subject to evapo-concentration in neutral environments including sulphate, chloride, arsenic, molybdenum, selenium, strontium, and uranium.

Water quality conditions across sloughs adjacent to the NAM and within Alkali Creek were generally circum-neutral to slightly basic, beyond the very hard range, and characterized by elevated sulphate concentrations. Water quality in Cherry Creek remained circum-neutral to slightly basic and hard, with concentrations consistently lower than those measured in Alkali Creek due to substantially higher flow volumes.

Elevated sulphate concentrations remain a consistent feature across ponds and Alkali Creek. In ponded environments, elevated sulphate concentrations are primarily associated with evapo-concentration processes. The Groundwater Source Assessment identified that groundwater discharging to several sloughs is relatively depleted in calcium, resulting in sodium-sulphate water types controlled by mineral solubility and concentration processes. Sulphate concentrations observed in sloughs and Alkali Creek generally remain within the range reported for regional slough environments.

At Alkali Creek stations, concentrations of conservative parameters (sulphate and strontium) remain elevated relative to WQRGs and, at some locations, exhibit gradual increases through time. The flow in Alkali Creek is decreasing, indicating that the observed concentrations are not uniquely attributable to mine-related loading inputs. The patterns are consistent with modifications to baseflow contributions and evapo-concentration in upstream sloughs.

Water quality in Cherry Creek at the downstream compliance station (SW 14) did not exhibit increasing trends during 2025. Despite elevated concentrations in Alkali Creek, the substantially higher relative flow in Cherry Creek suggests the overall load contribution from Alkali Creek to Cherry Creek is stable.

Slough monitoring locations (SW8, SW5, and SW19) continue to exhibit highly variable concentrations driven primarily by low water volumes and evapo-concentration. While multiple parameters exceeded WQRGs at these locations, concentrations generally remain within historical ranges and within ranges reported for regional slough environments. Observed variability reflects hydrologic conditions rather than a progressive deterioration in water quality.

At Northeast Creek (SW3), exceedances of WQRGs, including selenium, were identified during 2025. As in previous years, selenium concentrations at this location exceed those measured in upgradient groundwater associated with the northeast area of the mine site, indicating that the observed water

quality is not consistent with known mine-related groundwater discharge. Localized geological exposures and non-mine-related sulphide oxidation remain the most plausible contributors.

Recommendations identified in the 2024 Annual Report were reviewed and addressed during 2025, with outcomes documented in memorandums in progress or in trackers in New Afton's EMS system.

Overall, while WQRG exceedances continue to be observed at several receiving-environment locations, these exceedances are largely attributable to site-specific geochemical processes, including evapo-concentration in low-flow or ponded environments and water–rock interaction. With the exception of Alkali Creek, concentrations are generally stable through time and remain within historical ranges, and the results do not indicate the emergence of new pathways or a worsening of existing conditions.

3.2.4 Recommendations

Recommendations and opportunities for improvement based on the 2025 monitoring data are to:

- Continue monitoring per the previously established schedules.
- Collect additional water level information at sloughs surrounding the mine site to better understand the hydrological and geochemical processes. Water levels in Muskrat Slough were lower in 2025, potentially as a result of regional drought, which is assumed to be a contributing factor in the recent increases of concentrations in Muskrat Slough (increased evapo-concentration effect).
- Work towards establishing site specific objectives for parameters which are elevated in the unique site setting (i.e. sulphate, molybdenum, fluoride, and strontium).
- A flow and load accretion study will be conducted for Cherry Creek, including the tributaries near the site.
- Conservatively increase focus on the Alkali Creek stations, as much of the trends may be related to lower flow conditions, and use data collected in 2026 to refine findings from studies in progress initiated in 2025.
    - Assess flows within Alkali Creek and include this within the flow and load accretion study for Cherry Creek.
    - A potential reason for increasing trends in Alkali Creek is discharge from the proximal flowing artesian wells (R11 and RES-07, outside the PMA); therefore, it is recommended that the responsible party (not New Gold) is engaged to prioritize efforts to seal the flowing artesian wells. Assessment will continue to determine if this impacts water quality in Alkali Creek.
- When water is present, samples should continue to be collected from an upgradient location, i.e. SW46.

3.3 Groundwater Quantity and Quality

This section presents groundwater quantity and quality data collected from 2006 to 2025 with a focus on the 2025 results. Multiple technical studies have reviewed and reported details on the site hydro-stratigraphy and groundwater flow including:

- *Permit Level Assessment for Tailings Storage Facility and Block Cave* (Piteau 2006)
- *Application for a Permit Approving the Mine Plan and Reclamation Program* (Rescan 2007)
- *Post Closure Drainage Plan* (BGC 2019)
- *Groundwater Quality Assessment (*KCC 2020b)
- *Water Quality Model Report* (MTS 2024)
- *(Background) Water Quality Assessment* (KCC 2021)
- Geophysical Investigation of New Afton Mine HATSF (Willowstick 2021)
- *Conceptual Site Model Update* (WSP 2024a)
- *Hydrogeological Isotope and Water Quality Assessment* (Golder 2021)
- *Numerical Groundwater Model Report* (WSP 2024b)
- *Groundwater Management Plan* (New Gold 2023)
- *New Afton 2024 Water Balance Model Update* (BGC 2024)
- *Groundwater Source Assessment Report* (GWSA; MTS 2025)

The WQM Report, Conceptual Site Model Report, and Numerical Model Report were updated in 2024, and combined these technical studies conclude and confirm stratigraphy comprises bedrock overlain by overburden materials. Overburden materials are modified in many areas due to historical mining operations and are composed mainly of dense glacial till (typically being less than 10 m thick) and mine waste rock (up to 90 m). Hydraulic conductivity of the overburden is highly variable with geometric mean of inflow testing in waste rock being 3×10^{-5} m/s, 3×10^{-8} m/s in glacial till, and ranges from 3×10^{-6} to 6×10^{-11} m/s in bedrock, decreasing with depth. Calibrated hydraulic conductivities determined in the numerical model (WSP 2024b) are shown in Table 3-14. Operational observation of groundwater inflow into the underground mine has been lower than initially modelled by Piteau (2006) and Golder Associates (2015). New Afton initiated increased assessment and monitoring of water inflow into the cave zone in 2021 and 2022, in advance of the TAT deposition into the APTSF which was initiated in 2022. New Afton maintains an internal operational water balance which is updated on a monthly basis and the water balance was last published by BGC in Fall 2024 (BGC 2024). As part of continued study to characterize the groundwater conditions at the site the Groundwater Source Assessment (GWSA) was completed in March 2025 and contains details on the water provenance, fate, and background conditions. In 2025 updates were made to the 100224 permit, integrating the sample schedule and TRP of the 2023 GMP into the permit

Table 3-14: Calibrated Hydrogeological Parameters (WSP 2024b).

Unit	Horizontal Hydraulic Conductivity (m/s)	Ratio of Vertical to Horizontal Hydraulic Conductivity (-)
Waste Rock	6×10^{-6}	1:1
Glacial Till	4×10^{-8} (*1×10^{-7} at elev. >800 masl*)	1:1
Pit Debris	1×10^{-5}	1:1

Unit		Horizontal Hydraulic Conductivity (m/s)	Ratio of Vertical to Horizontal Hydraulic Conductivity (-)
Drainage Channels		1×10^{-3}	1:1
HATSF Dam Filter Layer		8×10^{-5}	1:1
PTSF Tailings		6×10^{-7}	1:1
NATSF Tailings Zone 1		4×10^{-6}	1:4
NATSF Tailings Zone 2		4×10^{-7}	1:1.5
NATSF Tailings Zone 3		1×10^{-7}	1:4
TSFs Dam Seepage Cut-Off		5×10^{-8}	1:1
LLDPE geomembrane (NATSF)		1×10^{-13}	1:1
HATSF Sandy Tailings		1×10^{-5}	1:10
HATSF Transitional Tailings		1×10^{-7}	1:10
HATSF Tailings Slimes		1×10^{-8}	1:10
Unconsolidated Cherry Creek Aquifer		1×10^{-5}	1:1
Bedrock Cherry Creek Aquifer		1×10^{-7}	1:1
Confined Aquifer South of NATSF		1×10^{-5}	1:1
Bedrock	Volcanics (Nicola Group) (first 70 m)	2×10^{-8}	1:5
	Volcanics (Nicola Group) (below 70 m)	4×10^{-9}	1:1
	Sedimentary (Kamloops Group)	1×10^{-8}	1:10
	Intrusive (Battle Bluff Plutonic Complex)	5×10^{-8}	1:1
	Cherry Creek Andesite (Iron Mask Batholith)	3×10^{-9}	1:1
	Deep Bedrock (below 350 masl for all units)	2×10^{-10}	1:1
Fault Zones	SW Fault	2×10^{-7}	1:1
	West J–Fault	4×10^{-7}	1:1
	Tailings Dam Fault	4×10^{-6}	1:1
	Fault 2	1×10^{-5}	1:1
Damage Zone (and Cave)		30 × Hydraulic Conductivity of surrounding bedrock	According to the corresponding bedrock unit intersected by the damage zone

Groundwater monitoring wells have been installed in overburden and bedrock horizons within the mine site at various periods during, and prior to, the New Afton mining operations. Groundwater monitoring and sampling locations are listed in Table 3-15, are described below, and are indicated on Figure 1-3.

Groundwater flow directions for the overburden units are shown on Figure 1-4. Groundwater modelling data indicates that the APTSF continues to be identified as a groundwater sink, with groundwater flow vectors converging on the pit from distances at least one kilometre away in most directions (Figure 1-5). The entire active mine infrastructure is within this capture zone, except for the western half of the inactive HATSF and the historical NWWRP. The inferred pit capture zone derived from the hydrogeological model including particle tracking flow paths can be seen in the groundwater model report (WSP, 2024b).

Groundwater samples analyzed before New Afton operations indicated elevated concentrations of various parameters; the extent to which these concentrations reflect historical mining activities as opposed to naturally elevated background concentrations and localized mineralization is difficult to determine (KCC 2021). New Afton is located within the Iron Mask Batholith which has three producing mineral operations and 23 past producing deposits. Additionally, there are four developed prospects and 31 mineral occurrences. The NAM sits at the junction of two major alkalic porphyry trends within the Iron Mask Batholith, an E-W porphyry trend and a NW-SE porphyry trend. In the area immediately surrounding New Afton there are several developed and prospective mineral occurrences that have not been explored and therefore New Afton does not fully understand the subsurface extents of mineralization that may be a factor contributing to elevated concentrations of various parameters in the neighbouring groundwater.

General conclusions regarding groundwater include:

- Background concentrations of sulphate and molybdenum are greater than CSR guidelines, and fluoride is elevated above CSR guidelines in the deeper bedrock aquifer.

Sulphate and molybdenum are also associated with contact water (mine-affected water) at concentrations higher than background concentrations and fluoride is also elevated in the HATSF pore water.

- Concentrations of manganese above CSR guidelines have been identified in regional background groundwater.
- Chloride is associated with deeper bedrock groundwater.
- Elevated nitrate and ammonia concentrations have been associated with waste rock, PHTSF and NATSF.
- In general, the mine site groundwater is dominated by sodium (Na>Mg>Ca) and sulphate (SO_4>HCO_3>Cl) in both overburden and bedrock wells.

Additional items of relevant to the interpretation of groundwater monitoring results include the following:

- Water samples of seepage to the HATSF NW WMP and the HATSF pore water have different major ion signal. The water quality difference of the HATSF NW WMP relative to the HATSF water samples may be because the HATSF NW WMP receives groundwater inputs, surface runoff or seepage from the dam fill materials, and/or the water quality of the HATSF seepage is altered as it passes through the waste rock used to construct the HATSF dam.
- Arsenic is elevated and associated with tailings; however, the concentration of arsenic is significantly lower in wells down-gradient of the tailing's facilities, indicative of an arsenic attenuation mechanism.
- Selenium is associated with waste rock and NAM contact water; however, this parameter may be attenuated along groundwater flow paths.
- Water samples of seepage down gradient of the NATSF in the Tree Valley area (AF-17 wells) are a mixture of mine water (NATSF supernatant) and shallow groundwater (being the minority), with an increased proportion of mine water closest to the NATSF.

WSP continues to provide primary hydrogeological support and collaborated with MTS to complete an updated GMP that was last updated in December 2023 and reviewed in Q4 of 2025. The monitoring and sampling schedules for the GMP wells are included in Table 3-15. The results from the Trigger Response Plan (TRP) are discussed in Section 3.3.3.

Table 3-15: Monitoring Well Network Summary 2025.

Well Name	Purpose	Lithology Monitored	Typical Water Level Monitoring Frequency	Samples Collected	Sampling Method
Background Monitoring Wells					
P14-01	Background - North	Till	Monthly	Q2	Hydrasleeve
RES-05	Background - North	Bedrock	Monthly	Q2	Dedicated pump
RES-07	Background - South	Bedrock	Monthly	Q1, Q3	Flowing well
P19-05	Background - South	Till	Hourly	Q2	HydraSleeve
P20-05A	Background - North	Bedrock	Monthly	Q2	Dedicated pump
P20-05B[a]	Background - North	Till	Monthly	N/A (dry)	N/A (dry)
P22-01A	Northwest of APTSF	Bedrock	Hourly	Q1, Q2, Q3, Q4	Dedicated pump
P22-01B	Northwest of APTSF	Till	Hourly	Q1, Q2, Q3, Q4	HydraSleeve
P22-02	Background North of APTSF	Bedrock	Hourly	Q1, Q2, Q3, Q4	Dedicated pump
New Afton Mine Site					
PA-2 – P1	Upgradient – East of PHTSF / NATSF	Bedrock	Monthly	Q1, Q2, Q3, Q4	Dedicated pump
PA-2 – P2	Upgradient – East of PHTSF / NATSF	Till	Monthly	Q1, Q2, Q3, Q4	HydraSleeve
PA-3 – P1	Northeast	Bedrock	Monthly	Q1, Q2, Q3, Q4	Dedicated pump
Tree Valley (AF17-465/ AF17-467)	Down-gradient NATSF	Native sand & gravel	Continuously	Q4	Dedicated pump
P14-02A	Southeast - NATSF Upgradient	Bedrock	Monthly	Q2	Dedicated pump
P14-02B	Southeast - NATSF Upgradient	Native sand & gravel	Hourly	Q2	Dedicated pump
P14-03B	Down-gradient NATSF	Native sand & gravel	Hourly	Q1, Q2, Q3, Q4	Dedicated pump/ HydraSleeve
P19-01A	Down-gradient of HATSF NW WMP	Bedrock	Hourly	Low water - no sample	Dedicated Pump
P19-01B[b]	Down-gradient of HATSF NW WMP	Till	Monthly	n/a	N/A (dry)
P19-01C	Down-gradient of HATSF NW WMP	Till (shallow)	Hourly	Q1, Q2, Q3, Q4	HydraSleeve

Well Name	Purpose	Lithology Monitored	Typical Water Level Monitoring Frequency	Samples Collected	Sampling Method
P19-02A	Down-gradient of HATSF	Bedrock (deep)	Monthly	Q1, Q2, Q3, Q4	Dedicated pump
P19-02B	Down-gradient of HATSF	Bedrock (mid-level)	Hourly	Q1, Q2, Q3, Q4	Dedicated pump
P19-02C	Down-gradient of HATSF	Till	Hourly	Q1, Q2, Q3, Q4	HydraSleeve
P19-03A	Northeast of Site across Hwy1	Bedrock	Monthly	Q1, Q2	Dedicated pump
P19-03B	Northeast of Site across Hwy1	Till	Hourly	Q1, Q2, Q3, Q4	Hydrasleeve/ Dedicated pump
P19-04	South of NATSF	Till	Hourly	Q1, Q2, Q3, Q4	HydraSleeve
P20-01	HATSF – West Dam	Bedrock	Monthly	Q1, Q2, Q3, Q4	Dedicated pump
P20-02	SW Fault	Bedrock	Monthly	Q1, Q2, Q3, Q4	Dedicated pump
P20-03A	HATSF capture zone delineation	Bedrock	Monthly	Q2	Dedicated pump
P20-03B	HATSF capture zone delineation	Native sand & gravel	Monthly	Q2	Dedicated pump
P20-04A	Tailings thickener affects	Bedrock	Monthly	Q4	Dedicated pump
P20-04B	Tailings thickener affects	Till	Monthly	Q1, Q2, Q3, Q4	Dedicated pump
P22-03A	North wall of APTSF	Bedrock	Hourly	Q1, Q2, Q3, Q4	Dedicated pump
P22-03B	North wall of APTSF	Bedrock	Hourly	Q1, Q2, Q3, Q4	Dedicated pump
RES-04B	Historic NWWRP	Till	Monthly	Q1, Q2, Q3, Q4	Dedicated pump
AF18-482 [a]	Historic NWWRP	Waste rock/ Till	Monthly	dry	N/A (dry)
M5203	Dam Seepage - North	Unconsolidated Dam Foundation	Monthly	Q1, Q2, Q3, Q4	Dedicated pump
M5301	Dam Seepage - South	Bedrock	Monthly	Q2, Q3, Q4 (X2)	Dedicated pump
M5302	Dam Seepage - South	Bedrock	Monthly	Q1, Q2, Q3, Q4	Dedicated pump
M5303	Dam Seepage - South	Unconsolidated Dam Foundation	Monthly	Q1, Q2, Q3, Q4	HydraSleeve
CPT-14-27	Tailings porewater chemistry	Tailings	Monthly	Q1, Q2, Q3, Q4	Dedicated pump
CPT-14-32	Tailings porewater chemistry	Tailings	Monthly	Q1, Q2, Q3, Q4	Dedicated pump
Off-site Potable Water Wells					
Cherry Creek Trailer Park (R10)	Not applicable	unknown	Not monitored	Q1, Q3, Q4	Tap

Notes:
N/A = not applicable
[a] monitoring well has been dry since installation but is routinely monitored for water level and will be sampled if sufficient water is available.

Table 3-16: Groundwater Well Details (Groundwater Monitoring Plan, New Gold 2023).

Well Name	Diameter /Material	UTM East (m)	UTM North (m)	Ground Elevation (masl)	Total Depth (mbg)	Screen Interval (mbg)	Avg. Depth to water (mbg)	Formation Monitored	Hydraulic Conductivity (m/sec)
Background Monitoring Wells									
P14-01	52 mm/PVC	675297	5616111	670.314	18.3	15.3–18.3	4.2	Till	1×10^{-6}
RES-05	52 mm/PVC	675369	5616068	673.191	442.4	429.5–441.7	33.2	Bedrock	Not determined
RES-07	150 mm Steel	675921	5612475	757.587	-	-	-	Confined Sand and Gravel (?)	Not determined
P19-05	52 mm/PVC	676325	5612878	776.818	7.6	6.1–7.6	−0.12	Till	4×10^{-7}
P20-05A	52 mm/PVC	676207	5616195	639.809	60.2	48.0–60.2	19.7	Bedrock	1×10^{-7}
P20-05B	52 mm/PVC	676206	5616196	639.707	13.9	10.9–13.9	Dry	Till	Not determined
P22-01A	52 mm/PVC	674839	5615559	662.897	21.3	16.7–21.3	3.5	Bedrock	7×10^{-7}
P22-01B	52 mm/PVC	674841	5615558	663.016	9.1	6.1–9.1	5.4	Till	7×10^{-8}
P22-02	52 mm/PVC	675296	5616111	670.296	30.5	24.4–30.5	2.1	Bedrock	4×10^{-7}
New Afton Mine Site									
PA-2 – P1	52 mm/PVC	676901	5614023	741.813	45.0	43.9–45.0	5.6	Bedrock	2×10^{-9}
PA-2 – P2	52 mm/PVC	676901	5614023	741.813	6.6	5.8–6.6	4.2	Till	8×10^{-7}
PA-3 – P1	52 mm/PVC	676629	5615549	658.648	45.3	43.9–45.3	3.5	Bedrock	2×10^{-6}
AF17-465	150 mm/Steel	676023	5614495	715.033	25.7	21.2–23.7	19.2	Sand & Gravel	4×10^{-2}
AF17-467	150 mm/Steel	675936	5614413	719.01	23.8	19.2–21.8	17.9	Sand & Gravel	8×10^{-4}
P14-02A	52 mm/PVC	676875	5613480	750.092	71.6	56.6–71.6	10.6	Bedrock	4×10^{-10}
P14-02B	52 mm/PVC	676875	5613480	750.092	17.1	15.6–17.1	10.1	Sand & Gravel	9×10^{-5}
P14-03B	52 mm/PVC	675330	5613438	716.55	4.8	2.7–4.8	2.2	Sand & Gravel	9×10^{-5}
RES-04B	52 mm/PVC	674260	5614870	695.706	26.56	Not Determined	20.6	Till	Not determined
P19-01A	52 mm/PVC	673483	5614384	632.158	38.1	30.5–38.1	37.35	Bedrock	3×10^{-4}
P19-01B	52 mm/PVC	673485	5614385	632.181	15.2	12.2–15.2	dry	Till	Dry

Well Name	Diameter /Material	UTM East (m)	UTM North (m)	Ground Elevation (masl)	Total Depth (mbg)	Screen Interval (mbg)	Avg. Depth to water (mbg)	Formation Monitored	Hydraulic Conductivity (m/sec)
P19-01C	52 mm/PVC	673485	5614385	632.181	5.5	4.0–5.5	2.47	Till	6×10^{-7}
P19-02A	52 mm/PVC	673561	5614799	635.178	151.2	143.6–151.2	89.35	Bedrock	5×10^{-10}
P19-02B	52 mm/PVC	673561	5614799	635.178	26.2	20.1–26.2	0.60	Bedrock	1×10^{-8}
P19-02C	52 mm/PVC	673451	5614798	635.152	6.1	4.6–6.1	4.98	Till	3×10^{-10}
P19-03A	52 mm/PVC	676881	5615790	653.373	29.2	18.3–24.4	1.76	Bedrock	3×10^{-7}
P19-03B	52 mm/PVC	676881	5615788	653.347	8.9	5.9–8.9	1.66	Till	2×10^{-7}
P19-04	52 mm/PVC	675949	5612907	756.423	7.6	6.1–7.6	3.9	Till	4×10^{-6}
P20-01	152 mm/PVC	673797	5613683	700.814	65.5	47.2–65.5	31.4	Bedrock	7×10^{-6}
P20-02	52 mm/PVC	673884	5614365	653.57	84.4	72.2–84.4	29.7	Bedrock	5×10^{-7}
P20-03A	52 mm/PVC	676633	5614758	708.779	30.2	23.8–29.9	28.8[a]	Bedrock	2×10^{-9}
P20-03B	52 mm/PVC	676631	5614758	708.724	13.4	10.3–13.4	7.8	Sand & Gravel	2×10^{-4}
P20-04A	52 mm/PVC	675383	5615637	658.089	54.1	45.0–54.1	1.3	Bedrock	1×10^{-7}
P20-04B	52 mm/PVC	675382	5615639	658.131	8.2	6.7–8.2	3.3	Till	3×10^{-9}
P22-03A	52 mm/PVC	675747	5615533	666.653	250.0	234.2–249.4	59.8[a]	Bedrock	2×10^{-10}
P22-03B	52 mm/PVC	675743	5615532	666.548	59.7	53.6–59.7	19.6[a]	Bedrock	Not determined
AF18-482	52 mm/PVC	673946	5614656	698.185	27	18.5–22.9	20.65	Waste rock/till	Insufficient head
M5203	82 mm/PVC	673888	5614376	653.782	17.9	13.7–17.9	10.1	Dam Foundation	8×10^{-8}
M5301	82 mm/PVC	673767	5613406	685.32	24.9	22.2–24.9	13.2	Bedrock	4×10^{-9}
M5302	82 mm/PVC	673761	5613403	684.669	40.2	34.7–40.2	10.3	Bedrock	4×10^{-8}
M5303	82 mm/PVC	673762	5613411	685.16	30.6	28.9–30.6	12.0	Dam Foundation	2×10^{-7}
CPT-14-27	52 mm/PVC	674279	5614009	702.359	59.7	27–30	5.4	Tailings	Not determined
CPT-14-32	52 mm/PVC	674163	5614331	704.863	27.4	15.2–18.3	11.0	Tailings	Not determined

mbg – metres below grade
[a] has not stabilized since installation

3.3.1 Method

New Gold completed groundwater sampling throughout 2024 as per the *British Columbia Field Sampling Manual (BC ENV, 2013),* the GMP (New Gold, 2023), and internal environmental procedure *ENV-PRCD-G311 Groundwater Monitoring*. Prior to the commencement of well sampling, groundwater levels were recorded using graduated water level tape. Previously groundwater samples were collected using the inertial-lift technique (Waterra pump system). Between 2018–2021 sampling methodology was changed to a no-purge technique (HydraSleeve) with a few wells having dedicated double valve pumps installed (Solinst) to lower TSS and increase sample collection efficiency. From 2020–2021 samples were collected primarily using the Hydrasleeve system, except when a purge was required due to well conditions. In 2022 double valve pumps were installed in eight wells, and as of 2023, double valve pumps are the primary sample method with a few wells continuing to be sampled by HydraSleeve. The Tree Valley interception sample is taken the sample spigot on the well AF17-465 which is actively being pumped and has water available at the time of sampling (actively managed to intercept water seepage towards the mine). The wells and sampling methods, along with the timing of important changes in how groundwater level or quality is monitored is summarized in Table 3-17.

Table 3-17: Sampling Methods for Groundwater Monitoring Wells.

Well ID	Water Level Method	Diver Install Date	Sampling Method	Pump Install Date
AF17465/ (467)	N/A	N/A	Spigot	N/A
CPT 1427	Transducer	January 2021	Solinst Pump	Q2 2022
CPT 1432	Transducer	March 2019	Solinst Pump	Q2 2022
M5203	Transducer	May 2020	Solinst pump	Q3 2023
M5301	Transducer	April 2022	Solinst Pump	Q2 2022
M5302	Transducer	April 2022	Solinst pump	Q3 2023
M5303	Transducer	April 2022	HydraSleeve	N/A
P1401	Transducer	April 2022	HydraSleeve	N/A
P1402A	Transducer	April 2022	Solinst Pump	Q4 2020
P1402B	Transducer	July 2020	Solinst Pump	Q3 2022
P1403B	Transducer	March 2020	Solinst pump	Q3 2024 / Q3 2025 Hydrasleeve
P1901A	Transducer	April 2020	Solinst Pump	Q1 2021
P1901B	Manual	N/A	Dry	N/A
P1901C	Transducer	March 2020	HydraSleeve	N/A
P1902A	Transducer	April 2022	Solinst Pump	Q1 2021
P1902B	Transducer	March 2020	Bladder Pump	Q1 2022
P1902C	Transducer	March 2020	HydraSleeve	N/A
P1903A	Transducer	April 2022	Solinst Pump	Q1 2022
P1903B	Transducer	May 2020	HydraSleeve	N/A
P1904	Transducer	June 2021	HydraSleeve	N/A
P1905	Transducer	November 2021	HydraSleeve	N/A
P2001	Transducer	April 2022	Solinst Pump	Q3 2021, repaired Q4 2022

Well ID	Water Level Method	Diver Install Date	Sampling Method	Pump Install Date
P2002	Transducer	April 2022, reinstalled May 2022	Solinst Pump	Q4 2021, repaired Q3 2022
P2003A	Transducer	April 2022, reinstalled Dec 2022	Solinst Pump	Q2 2022
P2003B	Transducer	April 2022, reinstalled Dec 2022	Solinst pump	Q3 2023
P2004A	Transducer	April 2022	Solinst Pump	Q2 2022
P2004B	Transducer	April 2022	Solinst Pump	Q2 2022
P2005A	Transducer	April 2022	Solinst Pump	Q3 2022
P2005B	Manual	N/A	Dry	N/A
P2201A	Transducer	May 2022 reinstalled Jan 2023	Solinst Pump	Q4 2022
P2201B	Transducer	May 2022, reinstalled Jan 2023	HydraSleeve	N/A
P2202	Transducer	May 2022	Solinst Pump	Q3 2024
P2203A	Transducer	Dec 2022	Solinst Pump	Q2 2024
P2203B	Transducer	Dec 2022	Solinst Pump	Q1 2024
PA2P1	Transducer	May 2020	Solinst Pump	Q2 2021
PA2P2	Transducer	April 2021	HydraSleeve	N/A
PA3P1	Transducer	April 2022	Solinst Pump	Q2 2021
RES04B	Transducer	May 2020	Solinst Pump	Q2 2021
RES05	Transducer	March 2021	Solinst Pump	2014, replaced 2019
RES07	N/A	N/A	Spigot	N/A
R10	N/A	N/A	Spigot	N/A

Groundwater samples are collected as grab samples. Samples that require filtering are field filtered and samples that require preservatives are preserved in the office. Samples are transported in a cooler containing ice packs then stored in a fridge until shipped. Samples are shipped to ALS Laboratory within 48 hours of collection for analysis. The suite of parameters analyzed meets and exceeds those listed in effluent *Permit 100224*. Field measurements are made using a calibrated YSI pro-plus water quality meter with pH, conductivity, specific conductivity, ORP and temperature; lab pH is reported for final analysis. Data quality assurance is discussed above in the QA/QC section. Sampling frequency is consistent with the frequency defined in the GMP.

Private residential wells downstream of the mine site are also monitored to maintain relationships with neighbouring property owners. Results from Cherry Creek Trailer Park (R10) are included in this report but should be interpreted with caution given that New Gold did not install, develop, or maintain this well. Details on the private residential wells are also unknown, including stratigraphy (whether the wells are in bedrock or overburden), piping used, age of pressure tanks, outdoor faucets are typically sampled from and as close to the well as possible. Additionally, wells in the overburden aquifer may be affected by agricultural land use within the catchment. Given the distance to R10 from the site

(1.3 km) and the low permeability of bedrock and till, there is not expected to be any influence from the mine.

Consistent with *BC Ministry of Environment Technical Guidance 4, Version 1.3 (2016)*, results from groundwater analysis for parameters required by EMA Permit 100224, are compared to the BC CSR guidelines, Schedule 3.2 generic numerical water guidelines for aquatic life (AW), irrigation (IW) and livestock (LW) using the most conservative value, except when the most conservative value is hardness dependent, where the highest hardness dependent value is selected based on the high to extreme hardness observed at site, and background chloride is assumed to be >10 mg/L. Irrigation and livestock guidelines are used as these are the most likely land uses for groundwater in the area. As per the CSR Schedule 3.2 groundwater guidelines are applied against dissolved concentrations. In the case of the residential well (R10), the BC WQG for Drinking Water Sources (2020) was used. Parameters listed in the GMP are listed in Table 3-18 are discussed in the below results section.

Table 3-18: Groundwater Water Quality Parameters and Guidelines.

Parameter	CSR Guideline			Source Drinking Water Guideline* (mg/L)
	Fraction	mg/L	Type	
Non-Metals				
Total Suspended Solids	-	-	-	-
Total Organic Carbon	-	-	-	4.0
pH	-	-	-	-
Alkalinity	-	-	-	-
Conductivity	-	-	-	-
Sulphate	-	1000.0	Livestock	500
Phosphorus, Total	-	-	-	-
Nitrogen, Total	-	-	-	-
Ammonia	-	3.7	Aquatic Life	-
Nitrate (as N)	-	100	Livestock	10.0
Nitrite (as N)	-	10	Aquatic Life	1.0
Hardness	-	-	-	-
Turbidity	-	-	Dependent on background levels	-
Chloride		100	Irrigation	250
Fluoride		1.0	Irrigation/Livestock	1.5
Metals				
Aluminum (Al)	D	5.0	Irrigation/Livestock	9.5
Antimony (Sb)	D	0.09	Aquatic Life	0.0060
Arsenic (As)	D	0.025	Livestock	0.01
Barium (Ba)	D	10	Aquatic Life	-
Beryllium (Be)	D	0.0015	Aquatic Life	-
Boron (B)	D	5.0	Irrigation	5.0
Cadmium (Cd)	D	0.004	Aquatic Life	0.005

Parameter	CSR Guideline			Source Drinking Water Guideline* (mg/L)
	Fraction	mg/L	Type	
Calcium (Ca)	D	1000	Livestock	-
Chromium (Cr)	D	0.008	Irrigation	0.05
Cobalt (Co)	D	0.04	Aquatic Life	0.001
Copper (Cu)	D	0.09	Aquatic Life-	2.0
Iron (Fe)	D	5.0	Irrigation	0.3
Lead (Pb)	D	0.1	Livestock	0.005
Lithium (Li)	D	2.5	Irrigation	-
Magnesium (Mg)	D	-	-	-
Manganese (Mn)	D	0.2	Irrigation	0.12
Mercury (Hg)	D	0.00025	Aquatic Life-	0.088
Molybdenum (Mo)	D	0.01	Irrigation	0.25
Nickel (Ni)	D	0.2	Irrigation	0.08
Potassium (K)	D	-	-	-
Selenium (Se)	D	0.02	Irrigation	0.01
Silver (Ag)	D	0.015	Aquatic Life-	0.02
Sodium (Na)	D	-	-	-
Strontium	D	-	-	7.0
Tin (Sn)	D	-	-	-
Thallium (Tl)	D	0.003	Aquatic Life	-
Uranium (U)	D	0.01	Irrigation	0.02
Vanadium (V)	D	0.1	Irrigation/Livestock	-
Zinc (Zn)	D	2.0	Livestock	3.0

*Source Drinking Water Quality Guidelines for domestic / residential wells (total concentrations)

3.3.2 Results

The following results section has been developed consistent with *BC Ministry of Environment Technical Guidance 4* for annual reporting under the EMA. The results include, but are not limited to the following items:

- Results were compiled for 39 wells monitored and 38 wells sampled (water levels are not recorded at R10 and Res-07).
- Field water quality monitoring "field parameters" are included as Appendix G1.
- Groundwater levels were comparable to previous years:
    - A degree of seasonality in groundwater levels is observed at most overburden wells; and
    - Groundwater levels correspond with the conceptual model, with groundwater levels decreasing near facilities where dewatering occurs.
- Sample results for groundwater are presented in Appendix G2 as statistics tables including sample count, minimum, maximum, mean, and standard deviation.

- Sampling occurred as planned based on the monitoring and sample schedule provided in the GMP dated December 12, 2023. Exceptions to this plan included:
    - Groundwater field parameters for the Quarter (Q) 1 and Q2 are not available due to lag time in calibration off site.
    - P19-01A: insufficient water present to sample this well in 2025.
    - P14-03B – the Q1 & Q2 samples were collected with a Solinst pump, while Q3 & Q4 samples were collected using a Hydrasleeve.
    - M5-301: samples were increased to collected quarterly in Q2.
- Exceedances of the CSR Schedule 3.2 guidelines are provided in Appendix G3.
- Graphing of parameter trends over time are provided in Appendix G4, with the lowest applicable CSR guidelines illustrated by a red line on the charts for dissolved parameters (plots of total concentrations do not include the guideline illustration). Notable trends are discussed in the station-by-station discussion below in this section.
- Copies of the ALS analytical reports are available upon request.
- Groundwater level plots are included as Appendix G5.
- Findings from the groundwater TRP is presented in Section 3.3.3 and the TRP summary table is included as Appendix G6.

Groundwater Levels

Groundwater elevations are monitored at a selection of wells by referencing measurements to survey data to determine groundwater elevations. Variation in groundwater levels prior to 2012 is a function of sampling method which was standardised from 2012 onwards. A survey of groundwater well stick-up heights and ground elevations was last completed in July 2024 and groundwater level charts have been updated with that information. During 2025 all measured groundwater levels were similar to previous years. All new wells are surveyed in after installation, with a base record for ground height and standpipe height. Pressure transducers have also been installed in some wells to record hourly water levels. Groundwater elevations and inferred flow directions for overburden monitoring wells is shown on Figure 1-4, and groundwater elevations, inferred equal elevation contours and inferred flow directions for bedrock monitoring wells are shown on Figure 1-5. Groundwater elevations based on pressure transducer data at these wells for continuous groundwater level monitoring are summarized in Table 3-19 and shown as charts in Appendix G5.

The local well vertical hydraulic gradients (Table 3-20 and Table 3-21) at well nests were evaluated for data from April and September 2025, allowing for an assessment of seasonality in hydraulic gradients. The gradients were calculated based on the water levels measured in the overburden and bedrock wells and the midpoint of the screen elevation. The hydrographs and gradients indicate the following:

- Most of the hydrographs of the overburden wells (with extended datasets) responded to seasonality.
- While a degree of seasonality is measured in numerous monitoring wells, the overall groundwater flow regime appears to be consistent throughout the year.

- Typically, the largest ranges observed in the water level measurements are associated with drawdown and recovery associated with sampling events. This is evident at monitoring wells P19-04, M5-301, PA2-P1, P14-02A, P19-02A, P20-03A, RES-05 and P22-03B. Some data which do not represent equilibrated groundwater conditions are removed from continuous records.

The range in seasonal variation was less in 2024 and 2025, than in prior years, thought to be related to a decrease in fluctuation in surface water bodies.

- For P20-04A and P20-04B dry bedrock was logged between the two screen intervals, and the piezometric elevation of the bedrock well (656.5 masl) is higher than the overburden well (654.7 masl), indicating an upward hydraulic gradient. Both of these water levels are notably higher than muskrat slough, which had an elevation of around 644.4 masl in fall 2023, suggesting groundwater may be a water source to the slough.
- Groundwater elevations are either steady (flat or within a typical seasonal range) or decreasing across the site. P22-03A the groundwater level has been increasing related to the deposition of tailings in the APTSF.
- The water level within and adjacent to the HATSF is decreasing with time, including tailings pore water wells (CPT14-32 and CPT14-27), and the dam monitoring wells (M5 series and P20-01; this is a function of dewatering activities within the facility (reduction of ponded surface water and porewater dewatering wells). The groundwater level increased at P20-02 in 2025.
- The water level at RES-04B initially were decreasing prior to 2018, increased from 2018 until 2021 and has since decreased. This suggests a minimum threshold of precipitation is required to achieve recharge through the typically unsaturated historical waste rock in this area.
- Some monitoring wells located outside the site footprint and next to sloughs (i.e., P19-02B and P19-03B) have modest (<10 cm / year) decreases in water level, which may be related to regional trends in water availability (e.g., regional drought). Both of those monitoring locations typically have seasonal variability in the gradient magnitude, likely a function of the linkage between levels in sloughs and adjacent overburden. The data suggest that sloughs may be a source to groundwater in the spring (i.e., when their levels are high), and that groundwater may be a source to sloughs when the slough levels are lower. Notably P19-03B had less seasonal variation in 2025, indicating it may have had less recharge from the slough than it typically receives.

The monitoring well P19-01B has been dry since installation, which suggests that groundwater measured at P19-01C is in a perched lens within overburden. There is now insufficient water to sample in the lower bedrock well at this location (P19-01A).

Table 3-19: Summary of Groundwater Elevation Data, Grouped by Formation, for 2025.

Well ID	Period of Record (Transducer)		Groundwater Elevation (m asl) Summary Statistics								Formation	Trend?	Seasonal?
			Period of Record				2025						
	Start Date	End Date	Min	Max	Avg	Range	Min	Max	Avg	Range			
PA-2 P2	1 Mar 22	31-Dec-25	736.58	739.10	738.13	2.51	736.64	737.60	736.99	0.96	Overburden	Down	Yes
P14-01	6 Apr 22	31-Dec-25	667.29	667.50	667.39	0.20	667.31	667.49	667.43	0.18	Overburden	Flat	No
P14-02B	30 Jul 21	31-Dec-25	743.50	744.81	744.25	1.31	743.58	743.84	743.70	0.26	Overburden	Down	Yes
P14-03B	24 Mar 20	31-Dec-25	714.43	714.67	714.53	0.24	714.45	714.59	714.52	0.14	Overburden	Flat	No
RES-04B	13 May 20	31-Dec-25	676.78	680.67	678.84	3.89	676.93	677.51	677.21	0.58	Overburden	Down	No
P19-01C	24 Mar 20	31-Dec-25	628.68	629.91	629.10	1.23	628.40	628.76	628.57	0.36	Overburden	Down	Yes
P19-02C	24 Mar 20	31-Dec-25	632.68	636.26	634.37	3.59	633.43	634.31	633.94	0.88	Overburden	Flat	Yes
P19-03B	12 May 20	31-Dec-25	651.23	652.00	651.58	0.77	650.84	650.99	650.93	0.15	Overburden	Down	Yes
P19-04	2 Jun 21	31-Dec-25	754.92	755.95	755.38	1.03	754.92	755.62	755.41	0.70	Overburden	Flat	Yes
P19-05	1 Nov 21	31-Dec-25	776.07	777.24	776.85	1.17	776.63	776.94	776.79	0.31	Overburden	Flat	Yes
P20-03B	7 Apr 22	31-Dec-25	698.59	701.13	699.42	2.55	698.59	699.24	698.94	0.65	Overburden	Flat	Yes
P20-04B	15 Apr 22	31-Dec-25	652.98	655.01	654.81	2.03	654.65	654.92	654.76	0.27	Overburden	Flat	Yes
P22-01B	23 May 22	31-Dec-25	659.30	660.60	659.93	1.30	659.41	659.77	659.63	0.36	Overburden	TBD	Yes
CPT14-27	14 Jan 21	31-Dec-25	693.91	695.76	695.08	1.85	694.49	694.71	694.58	0.22	Tailings	Down	No
CPT14-32	18 Mar 19	31-Dec-25	693.17	693.98	693.63	0.81	692.12	692.47	692.29	0.35	Tailings	Down	No
M5-203	13 May 20	31-Dec-25	644.29	645.60	644.75	1.30	644.33	644.46	644.40	0.13	Dam Foundation	Down	Yes
M5-303	14 Apr 22	31-Dec-25	670.03	673.11	672.41	3.09	670.03	670.89	670.40	0.86	Dam Foundation	Down	Yes
M5-301	14 Apr 22	31-Dec-25	669.50	672.60	671.90	3.10	670.35	670.67	670.51	0.32	Bedrock	Down	Yes
M5-302	14 Apr 22	31-Dec-25	671.41	673.19	672.51	1.78	669.86	670.84	670.35	0.98	Bedrock	Down	Yes
PA-2 P1	1 Mar 22	31-Dec-25	732.27	741.54	738.18	9.27	736.37	737.10	736.85	0.73	Bedrock	Down	No
PA-3 P1	06 Apr 22	31-Dec-25	654.83	655.92	655.42	1.09	654.99	655.63	655.35	0.64	Bedrock	Flat	Yes
P14-02A	8 Apr 22	31-Dec-25	732.48	757.78	745.42	25.30	744.95	746.92	746.56	1.97	Bedrock	TBD	No
P14-03A	20 Apr 22	31-Dec-25	714.62	715.09	714.86	0.47	714.86	714.94	714.89	0.08	Bedrock	Flat	No
RES-05	31 Mar 21	31-Dec-25	624.41	637.73	631.29	13.33	631.40	637.35	634.88	5.95	Bedrock	TBD	No
P19-01A	24 Apr 20	31-Dec-25	594.59	595.14	594.83	0.55	594.67	594.75	594.69	0.08	Bedrock	Flat	No
P19-02A	20 Apr 22	31-Dec-25	626.29	633.11	630.17	6.82	628.28	631.41	630.10	3.13	Bedrock	Flat	No
P19-02B	24 Mar 20	31-Dec-25	632.22	634.91	634.91	2.69	633.38	634.13	633.79	0.75	Bedrock	Down	Yes
P19-03A	6 Apr 22	31-Dec-25	650.82	652.04	651.84	1.22	651.47	651.59	651.52	0.12	Bedrock	Flat	No
P20-01	12 Apr 22	31-Dec-25	666.53	668.60	668.27	2.07	666.53	667.18	666.84	0.65	Bedrock	Down	Yes

Well ID	Period of Record (Transducer)		Groundwater Elevation (m asl) Summary Statistics								Formation	Trend?	Seasonal?
			Period of Record				2025						
	Start Date	End Date	Min	Max	Avg	Range	Min	Max	Avg	Range			
P20-02	13 Apr 22	31-Dec-25	620.13	624.06	624.06	3.92	620.30	624.20	621.72	3.90	Bedrock	Down	Yes
P20-03A	6 Apr 22	31-Dec-25	694.77	700.05	697.35	5.28	696.24	699.10	698.46	2.87	Bedrock	Flat	No
P20-04A	15 Apr 22	31-Dec-25	656.45	656.94	656.84	0.49	656.45	656.82	656.55	0.37	Bedrock	TBD	Yes
P20-05A	6 Apr 22	31-Dec-25	619.90	622.13	620.75	2.23	619.90	620.36	620.17	0.45	Bedrock	Flat	Yes
P22-01A	23 May 22	31-Dec-25	660.61	661.78	661.49	1.18	661.15	661.57	661.39	0.42	Bedrock	TBD	Yes
P22-02	23 May 22	31-Dec-25	667.19	667.50	667.36	0.31	667.29	667.49	667.43	0.20	Bedrock	Flat	No
P22-03A	6 Dec 22	31-Dec-25	578.00	635.55	614.30	57.55	627.12	635.55	632.18	8.43	Bedrock	Up	Yes
P22-03B	7 Dec 22	31-Dec-25	629.75	650.24	639.78	20.49	637.41	641.33	639.53	3.93	Bedrock	Flat	No

Italicized groundwater well IDs indicate wells which may Not achieve equilibrium due to low transmissivity

Table 3-20: Summary of Local Hydraulic Gradients – Spring (April) 2025.

Monitoring Well ID	Ground Elevation	Stick-up	Mid-screen elevation	Groundwater Level	Groundwater Elevation	Vertical Gradient	Gradient Direction
	(m asl)	(m)	(m asl)	(m btoc)	(m asl)	m/m	-
PA-2 P1	741.36	1.25	696.91	5.21	737.02	-0.015	Down
PA-2 P2	741.36	1.32	735.16	5.24	737.60		
P14-02A	749.73	0.79	685.63	4.53	746.89	0.054	Up
P14-02B	749.73	1.08	742.87	6.83	743.80		
P19-01A	632.01	1.13	597.71	38.51	594.71	-1.146	Down
P19-01C	632.14	0.92	627.39	4.34	628.72		
P19-02B	635.06	1.10	611.91	1.85	634.07	-0.013	Down
P19-02C	635.15	1.00	630.05	1.68	634.31		
P19-03A	653.39	0.91	632.04	2.55	651.56	0.045	Up
P19-03B	653.50	0.87	646.10	3.16	650.92		
P20-03A	708.47	1.16	681.62	**12.22**	698.70	-0.026	Down
P20-03B	708.39	1.15	696.54	10.17	699.09		
P20-04A	657.91	1.07	608.36	2.39	656.48	0.043	Up
P20-04B	657.91	1.11	650.46	4.24	654.65		
P22-01A	662.73	1.11	643.73	2.29	661.49	0.153	Up
P22-01B	662.80	0.99	655.20	4.02	659.74		
P22-03A	666.51	1.21	424.71	**58.92**	629.43	-0.047	Down
P22-03B	666.49	1.12	609.84	**30.74**	**638.13**		

*Vertical gradients of less than 1% (0.01) are considered neutral
Italicized hydraulic gradients indicate wells with a significant unsaturated unit separating screen intervals
Bold and underlined groundwater levels and elevations indicate wells which may not achieve equilibrium due to low transmissivity.

Table 3-21: Summary of Local Hydraulic Gradients – Fall (September) 2025.

Monitoring Well ID	Ground Elevation	Stick-up	Mid-screen elevation	Groundwater Level	Groundwater Elevation	Vertical Gradient	Gradient Direction
	(m asl)	(m)	(m asl)	(m btoc)	(m asl)	m/m	-
PA-2 P1	741.36	1.25	696.91	5.47	736.68	-0.003	Down
PA-2 P2	741.36	1.32	735.16	5.48	736.79		
P14-02A	749.73	1.08	685.63	**4.66**	746.66	0.053	Up
P14-02B	749.73	1.08	742.87	6.83	743.61		
P19-01A	632.01	1.13	597.71	38.48	594.69	-1.136	Down
P19-01C	632.14	0.92	627.39	4.52	628.40		
P19-02B	635.06	1.10	611.91	2.49	633.45	0.001	Neutral
P19-02C	635.15	1.00	630.05	2.32	633.43		
P19-03A	653.39	0.91	632.04	2.41	651.48	0.042	Up
P19-03B	653.50	0.87	646.10	3.34	650.88		
P20-03A	708.47	1.16	681.62	**12.93**	698.00	-0.063	Down
P20-03B	708.39	1.15	696.54	9.91	698.95		
P20-04A	657.91	1.07	608.36	2.31	656.64	0.043	Up
P20-04B	657.91	1.11	650.46	4.11	654.82		
P22-01A	662.73	1.11	643.73	2.14	661.15	0.152	Up
P22-01B	662.80	0.99	655.20	3.93	659.41		
P22-03A	666.51	1.21	424.71	**49.97**	635.09	-0.016	Down
P22-03B	666.49	1.12	609.84	**32.38**	638.09		

*Vertical gradients of less than 1% (0.01) are considered neutral
Italicized hydraulic gradients indicate wells with a significant unsaturated unit separating screen intervals
Bold and underlined groundwater levels indicate wells which may not achieve equilibrium due to low transmissivity.

Groundwater Type Characterization

Piper plots have been created to characterize groundwater type as the plot groups total equivalent concentrations of the major ions in water. The piper plots have been grouped into groundwater wells installed in bedrock (Figure 3-4) and overburden wells (Figure 3-5). Major ion concentrations were based on the groundwater quality data collected in spring 2025. The Piper plots indicate that:

- The majority bedrock and overburden groundwater wells are dominated by sodium-sulphate type groundwater, with some exceptions, including:
- For groundwater in bedrock wells P20-01 and PA2-P1 is characterized by magnesium sulphate type groundwater.
- The bedrock P19-02A is characterized by sodium chloride-sulphate type groundwater, and chloride concentrations at this bedrock monitoring well is only exceeded at naturally occurring sloughs and not by any of the source areas on-site (i.e., elevated chloride in sloughs and at P19-02A is not related to site processes).
- The groundwater in overburden well P14-01 is characterized by bicarbonate type groundwater. This signal is consistent with the piezometric surface and groundwater flow nets presented in the GMP which indicate that this well receives groundwater from the northwest.

- The groundwater in overburden monitoring wells PA2-P2 and RES-04B is characterized by magnesium sulphate type groundwater. RES-04B is screened beneath historical waste rock and PA2-P2 is in an area with historical waste rock or fill sources.
- Overburden wells P19-04 and P19-05, located south of the mine and mineralized zone, are characterized by magnesium and a mix between sulphate and bicarbonate groundwater.
- Mixed sodium-magnesium sulphate groundwater is observed in monitoring wells P19-01C, P14-03B, and P20-03B.

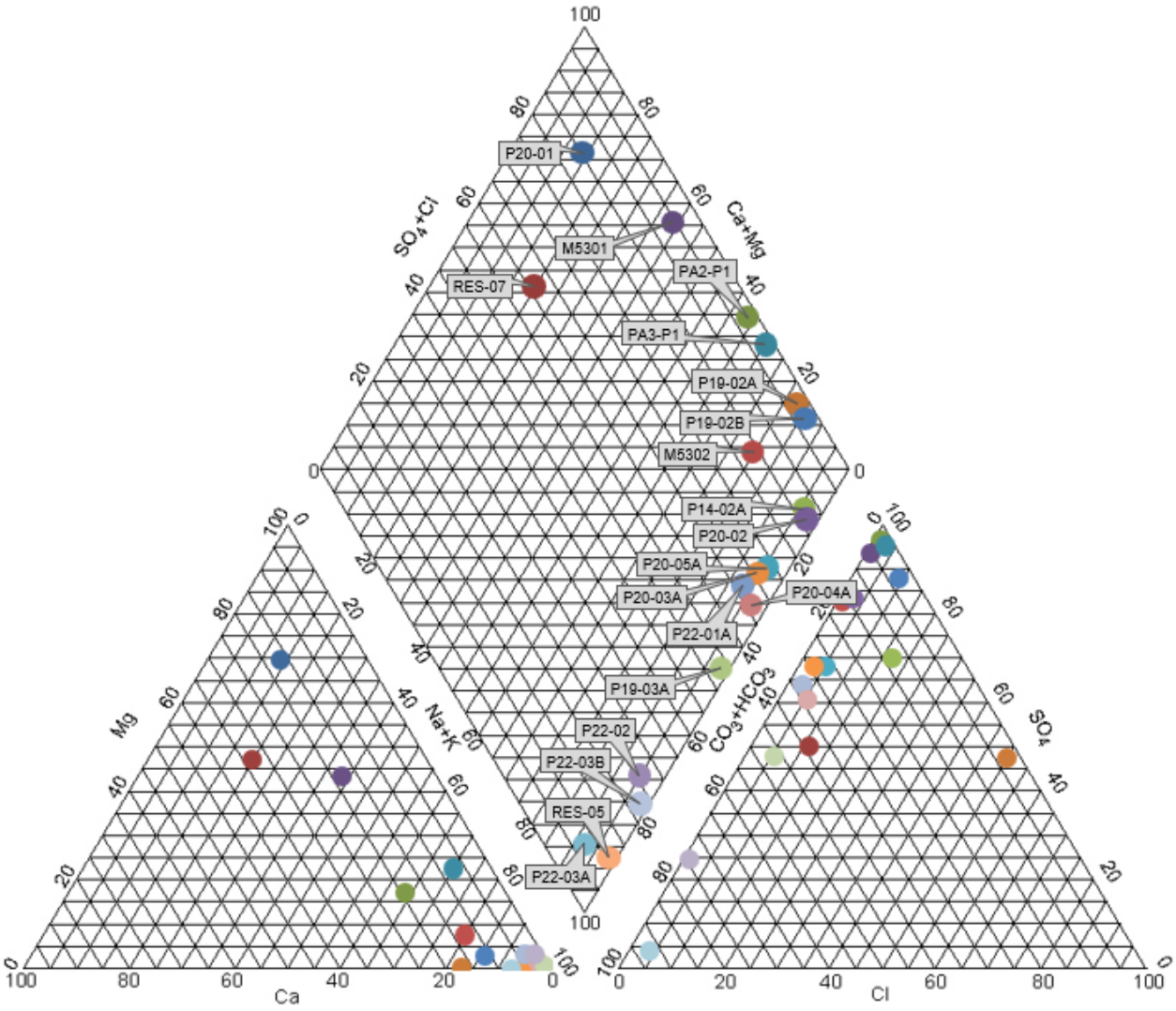


Figure 3-4: Piper plot for Bedrock Groundwater Monitoring Wells 2025 Water Quality Data.

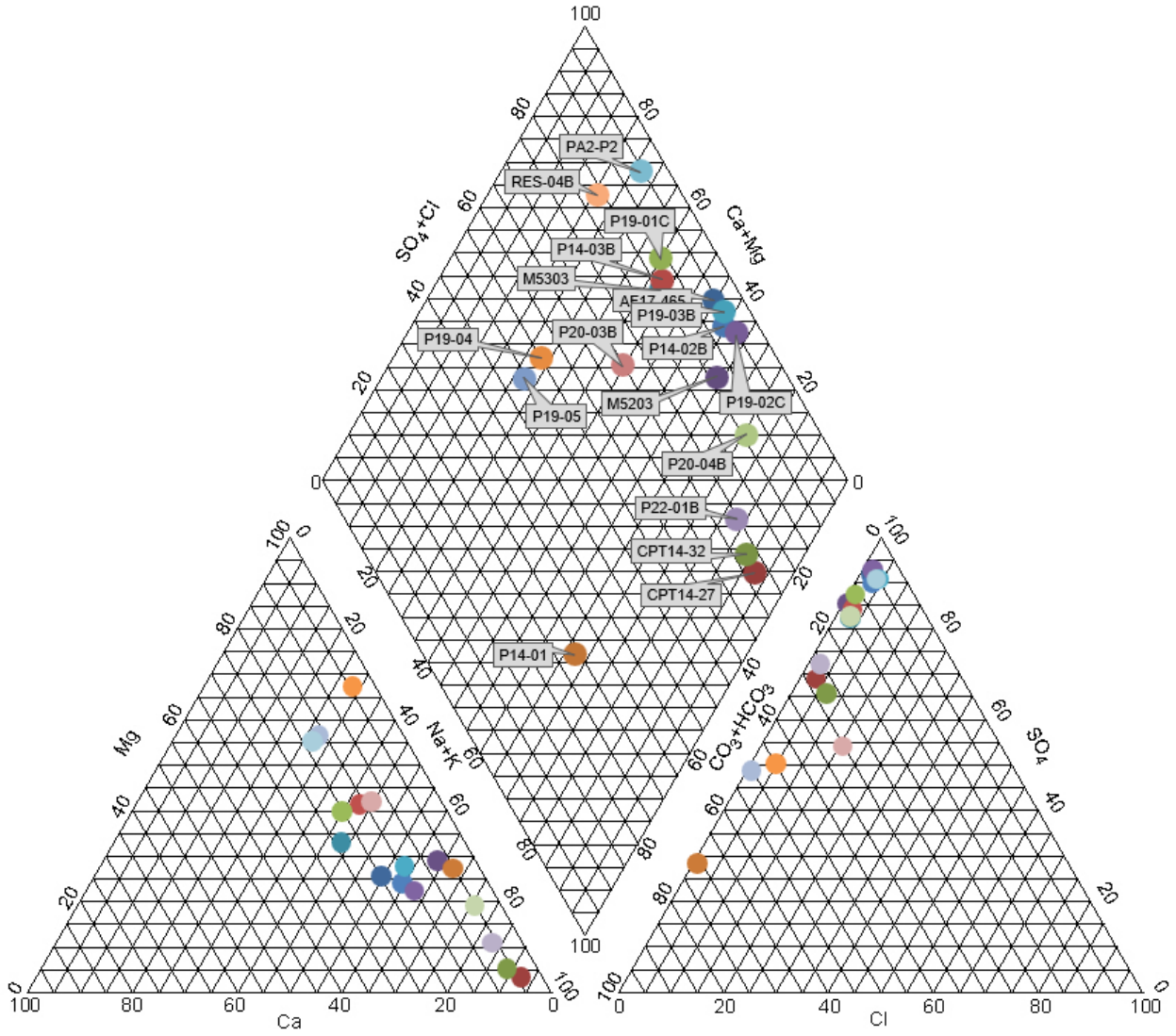


Figure 3-5: Piper plot for Overburden Groundwater Monitoring Wells 2025 Water Quality Data.

Well Specific Discussion

The sections below discuss the analysis of parameters required by EMA Permit 100224 for each groundwater monitoring well including identification of CSR numerical guideline exceedances as well increasing and decreasing trends in parameter concentrations with time (determined based on visual assessment of trend lines). As per the CSR Schedule 3.2 groundwater guidelines are compared to dissolved concentrations, therefore only dissolved parameters are discussed. Groundwater quality results are discussed in the context of background water quality; background wells are discussed in the GMP and the GWSA Report. Trends discussed in this section are visually identified, unless otherwise noted. Statistics tables, an exceedance summary, and trend plots of groundwater parameters are available in Appendix G.

Notably the guideline value for molybdenum was changed from 0.03 to 0.01 mg/L in 2024 and continuing into 2025, opting to compare with the guideline for unknown crop type.

M5 Wells

The M5 series of historical wells were incorporated into the scope of the GMP consistent with the acquisition of the HATSF in 2017. The M5 series wells are located along the HATSF West Dam for the purpose of monitoring westward seepage water at two locations, adjacent to the coarse tailings sand (M5-20x series) and fine tailings sand (M5-30x series) areas, respectively. This monitoring takes place within both overburden and bedrock lithologies. These monitoring wells were installed in 1976 (Klohn 1978) and borehole logs are unavailable.

M5-203

M5-203 is located at the north end of the HATSF west dam immediately upstream of SW23 and has been monitored since 2010. The well was completed into the dam foundation at a depth of 17.9 mbgs. Groundwater in the HATSF dam materials measured at M5 203 is at an elevation of about 644.5 masl and daylights at SW9 (~635 masl) where it enters the NW WMP where the water is captured and pumped back to be used on-site. In 2025 all the quarterly samples were completed plus duplicates in the Q1 and Q4; samples were collected with a dedicated Solinst double valve pump.

Concentrations greater than the CSR guideline occurred for sulphate, selenium and uranium in 2025. A number of parameters have increasing visual assessed trends including calcium / magnesium (and hardness by association), boron, potassium, silicon, sodium, strontium, sulphate, uranium, and nitrogen, with these trends typically beginning in 2017. Selenium had increased from 2017 to 2021 but has been steady since. Molybdenum is decreasing.

M5-301

M5-301 is located at the south end of the HATSF West Dam has been monitored since 2010; is completed into bedrock at a depth of 24.9 mbgs, it is immediately adjacent to the access road and is downstream of the fines portion of the HATSF. This location was sampled in Q2, Q3, and Q4.

Molybdenum and sulphate concentrations were greater than the CSR guideline during the 2025 groundwater quality monitoring program; molybdenum trended downward in 2025, and sulphate was higher than the historical range. Hardness (calcium and magnesium), manganese, potassium, sodium and strontium increased in 2025. Selenium has been sporadic at this location but was less than the guideline level in 2025. All other parameters fell within CSR schedule 3.2 guidelines and remain relatively consistent.

M5-302

M5-302 is located at the south end of the HATSF West Dam, is completed in bedrock at a depth of 40.2 mbg. It is immediately adjacent to the access road and located downstream of the fines portion of the HATSF and down gradient from M5-301. Quarterly samples were collected in 2025.

Molybdenum concentration was greater than the CSR guideline during 2025 and was within historical range. Manganese exceeded the CSR guideline in June, 2025. All other parameters fell within the CSR schedule 3.2 guidelines and remained relatively consistent.

M5-303

M5-303 is located at the south end of the HATSF West Dam and is completed within the unconsolidated dam foundation at a depth of 30.6 mbg. It is adjacent to M5-301 (down gradient, across the access road) and sits downstream of the fines portion of the HATSF. Quarterly samples were collected in 2025.

All parameter concentrations were below the CSR guidelines. Some parameters had a temporal increase in February 2025 but appear to be returning to their historical norms.

PA Wells

The PA wells were drilled in 2006 by Piteau Associates.

PA2-P1

PA2-P1 is located southeast and upstream of the PHTSF and is completed in bedrock at a total depth of 45.0 mbgs. In 2025, all quarterly plus duplicate samples in Q1 and Q4 were collected with a dedicated double valve Solinst pump.

Sulphate, molybdenum, and manganese concentrations were greater than the CSR guideline at PA2-P1 during 2025, which is consistent with previous years. All other parameters were within guidelines and relatively consistent.

PA2-P2

PA2-P2 is located southeast and upstream of the PHTSF, located 0.5 m from PA2-P1, and is completed in till to a total depth of 6.6 m with a screen 5.8 to 6.6 mbg. The groundwater elevation of PA2-P2 was around 737 masl in 2025, approximately 17 m above PHTSF (approximately 720 masl as of December 2023); PHTSF is not expected to influence PA2-P2 groundwater. In 2025 all the quarterly samples were collected with a Hydrasleeve. The well was redeveloped in August using a Waterra pump to remove silty sediment at the bottom of the well.

Chloride, molybdenum, sulphate, selenium, and uranium concentrations were greater than the CSR guideline in 2025, though each of them remaining within parameters observed in previous years and falling within historical norms. All other parameters were within guidelines and relatively consistent.

PA3-P1

PA3-P1 is located east of the main security gate, on the northeast side of site just north of SW 19 (East Slough) which is North of the historical Afton mill, ore stockpile, office complex, and historical sewage lagoons. It is completed in bedrock to 45.3 m with a screen at 43.9–45.3 mbg. Samples have been collected with the inertial lift method until 2019, due to high TSS the sampling method was trialed via

HydraSleeve in 2020, and then in the 2ndQ of 2021 a dedicated double valve Solinst pump was installed. The high recharge capabilities of this well continues to yield elevated TSS, though concentrations have improved since installation of the double valve Solinst pump sampling method. In 2025, it is noted the samples are grey stained water, varying alkaline smell, and visible turbidity range, yearly changes are normal for this well. The sample time is adjusted as needed, and longer/slower/more volume removed sample settings are also adjusted; review of laboratory results does not indicate anomalies.

In 2025, ammonia, chloride, manganese, molybdenum and sulphate concentrations were greater than the CSR guideline, however each of them remaining within historical norms and have no apparent trends. All other parameters were within guidelines and reasonably consistent.

RES Wells

The RES wells were installed in 2006 by Rescan.

RES-04B

RES-04B is located on the northwest portion of site within the historical NW waste rock pile, which is used as a storage area. The well is completed to 26.5 mbg and screened in till, immediately below waste rock from the historical Afton mine. In 2025, it is noted the visible water quality changes to slightly greyer turbid with minimal black flecks suspended in the first half of the year, then clear again. In 2025 the quarterly samples were collected with a dedicated Solinst pump.

Sulphate concentration continued to be greater than the CSR guideline in 2025 as it has in previous years. The concentration of sulphate has historically been variable at this well, increasing noticeably in 2018 and varying seasonally since. A similar seasonal variation is noted for numerous parameters, for example selenium, where concentrations are higher in the spring/summer if and when recharge reaches this well. This change in water quality is thought to be related to variation in the water table in the vicinity of this well; the increasing in sulphate and selenium concentrations in 2018 correlated with an increase in the water table from 675.84 to 678.03 between June and September 2018. All other parameters were within guideline concentrations.

RES-05

RES-05 is located north of the Trans-Canada Highway. This monitoring well was installed to provide regional background water quality in the deep bedrock aquifer. The well was completed into bedrock to a depth of 442.4 m and screened at 429.5 to 441.7 mbg. A dedicated double valve pump was installed by Golder Associates on May 23, 2012, to allow for effective sampling and improved water quality data for this deep well. The sample period is now annual with the sample being collected in Q2. This monitoring well does not achieve its equilibrium water level between sampling events, which can be observed on the hydrograph in Appendix G.

Similar to other background bedrock wells (P14-02A; P20-04A), both fluoride and molybdenum concentrations were greater than CSR guidelines in 2025. All other parameters were within guidelines and reasonably consistent.

RES-07

RES-07 is a flowing artesian well located south of the NATSF and adjacent to Russel slough (SW2). The well was installed by Rescan in 2006, it is believed to be about 40 m deep, the screen specifications are not known, but it is understood to be installed in a confined sand and gravel unit. The well is kept flowing at the request of Stk'emlúpsemc te Secwépemc Nation and the sample is taken directly from a spigot on the outflow line.

The dissolved manganese concentration was greater than the CSR guideline for both monitoring events. Chloride, manganese, magnesium (and therefore hardness), and strontium have modest increasing trends. All other parameters were within guidelines and reasonably consistent.

Tree Valley Interception Wells

The Tree Valley interception wells are two wells, AF17-465 and AF17-467 (formerly TVW4), between the NATSF and APTSF that intercept water before it enters the block cave. This water is a mix of natural groundwater (minority source) and seepage water (majority source) from the NATSF/PHTSF that combines into a line which pumps to PHTSF. In 2025 the annual sample of AF17 465 was completed in the 4th quarter.

Sulphate and molybdenum concentrations were greater than the guideline for the sampled collected in 2025, and the concentrations were within historical norms with no trends observed. Uranium and selenium appear to have decreasing trends. All other parameters remained relatively consistent within historical trends.

P14 Wells

P14-01

P14-01 is a shallow well installed north of the Trans-Canada Highway (i.e., the Northlands) with the intent of monitoring background water quality in overburden. The borehole was drilled to 21.3 mbg with a well screen from 15.2 to 18.3 mbg. The piezometric surface flow nets presented in the GMP indicate that this well does not receive water from the mine site and is therefore likely representative of background overburden water quality. In 2025 the annual sample was collected in the 2nd quarter with a Hydrasleeve.

Uranium and molybdenum concentrations were greater than the CSR guideline in 2025, and both were within their historical ranges. All other parameters fell within the CSR schedule 3.2 guidelines and remained relatively consistent within their historical norms.

P14-02 A and B

Wells P14-02A and P14-02B are nested monitoring wells southeast of the NATSF with the intent of monitoring upstream/background till (B) and bedrock (A) water. Double valve pumps were installed in P14-02A in Q4 2020 and in P14-02B in Q3 2022 to increase sample quality and consistency; a step change is observed in P14-02A monitoring data since the change in method in 2020. P14-02A was completed to 71.6 mbg and screened from 56.4 to 71.5 mbg in bedrock. P14-02B is completed to

17.68 screened from 15.5 to 17.1 mbg in a water-bearing sand and gravel till deposit. In 2025 the annual samples were collected in Q2.

Consistent with pervious years, P14-02A parameter concentrations were greater than CSR guidelines for chloride, fluoride, and molybdenum. Concentrations of fluoride and molybdenum are similar to those observed at other background bedrock wells (Res-05, P20-04A). Chloride has concentration has been greater than the CSR guideline at P14-02A since well installation, however, the chloride concentration in P14-02B remains consistently below CSR guidelines. Molybdenum concentration has been greater than the CSR guideline at P14-02A since a step change in sampling method in Q4 2020. Zinc decreased in 2024, in both wells after reaching new maximum concentrations in Q3 2023 (A-well) and Q4 2021, which may have been related to downhole equipment which has been removed.

At P14-02B manganese, molybdenum, and sulphate concentrations were greater than the CSR guidelines. Both manganese and sulphate have consistently exceeded the CSR guideline since installation, and though sulphate's levels remain relatively stable, manganese has been steadily increasing (at a low rate of about 0.1 mg/year) since the well was installed.

P14-03 A and B

P14-03A and P14-03B are two separate boreholes installed 1.5 m apart. These wells are west of the NATSF, downstream of Dam A, with the intent of providing surveillance for potential seepage from the NATSF. P14-03A was completed to 91.4 mbg. This well is monitored with a pressure transducer collecting hourly water level data.

P14-03B is completed to 5.0 mbg and is screened in the till from 2.7 to 4.9 mbg. In 2025 quarterly samples where completed with the Q1 and Q2 samples being collected with a double valve pump, and the Q3 and Q4 samples with a Hydrasleeve.

For P14-03B molybdenum and sulphate concentrations were greater than the CSR guidelines in 2025, consistent with the historical norms at this monitoring well. All other parameters were within guidelines and relatively consistent with time.

P19 Wells

The P19 series monitoring wells were completed in bedrock and till lithologies to further characterize potential off-site groundwater flow. In 2025, P19 03A/B & P19 05 were sampled annually and the, the rest remain on a quarterly schedule. Complete drilling records and completion details can be found within the GMP.

P19-01A

P19-01A is located immediately west and downgradient of the NW WMP (SW 23) and the HATSF. It is completed to 38.1 mbg with a 7.6 m screen placed within bedrock (bedrock begins at approximately 27.4 mbg). P19-01A had insufficient water to collect groundwater samples in 2025.

P19-01 B and C

P19-01B and P19-01C are nested monitoring wells with both PVC well casings in the same borehole. P19-01B is screened in a sandy interval within till and P19-01C is a shallow monitoring well screen in a weathered till and the fill-till interface. P19-01B/C are also down-gradient of the HATSF and SW 23 approximately 1.5 m northeast of P19-01A. P19-01B/C were drilled to a total depth of 15.2 mbg; P19-02B was screened from 12.2–15.2 mbg and P19-02C was screened from 4.0–5.5 mbg.

P19-01B has remained dry since installation and as such there is no water quality data available from this well. Four samples were collected with a HydraSleeve from P19-01C in 2025. P19-01C was redeveloped in August 2025.

Manganese and sulphate concentrations continued to exceed the CSR guideline in 2025, as in previous years, with sulphate remaining above guidelines for all four sample dates and manganese being above guideline in Q1, Q2, and Q3. Manganese follows a seasonal pattern and remains within its norm. Sulphate has a modest increasing trend, increasing from an average concentration of 2,870 mg/L in 2019 to 3,760 mg/L (on average) in 2025. Molybdenum was concentration was greater than the guideline in September 2025 but was within the historical norm for the remaining events. Strontium, hardness (calcium and magnesium) and total dissolved solids appears to be increasing. All other parameters remained relatively consistent.

P19-02 A and B

Wells P19-02A and B are nested monitoring wells with both PVC well casings in the same borehole; both monitoring wells are screened in bedrock. They are located northwest of the HATSF and west of the historical NWWRP to monitor groundwater conditions in bedrock at depth between the mine and domestic bedrock wells further west (+500 m) in the Cherry Creek community. The borehole was drilled to a total depth of 151.2 mbg; well P19-02A is screened from 143.6–151.2 mbg and B is screened from 20.1–26.2 mbg. P19-02A has a Solinst double valve pump, while P19-02B has a Solinst bladder pump.

At P19-02A and P19-02B, manganese, molybdenum, chloride and sulphate concentrations were consistently greater than the CSR guideline since well installation. At P19-02A fluoride concentration exceeded the CSR in one event. Manganese is increasing at P19-02B.

The chloride concentration measured at P19-02A is an order of magnitude higher than other groundwater and tailings facilities at the site, suggesting that the chloride concentration observed at P19-02A is not related to site activities, and that the groundwater flow path to this screen interval is not sourced from site.

P19-02C

P19-02C is located 1.5 m east of P19-02A/B, and this well was installed in the overburden layer to monitor the groundwater conditions downstream of the historical NWWRP but is notably downstream of an alkaline slough. The borehole was completed to 6.15 mbg with the screen placed at the top of

the bedrock layer between 4.5–6.1 mbg. The well was redeveloped in August 2025 and the quarterly samples were completed with a HydraSleeve

Sulphate, molybdenum and uranium concentrations were greater than their respective CSR guidelines in 2025. Selenium was greater than the CSR guideline for the Q3 and Q4 samples, potentially as a function of the well redevelopment, and it will continue to be monitored All other parameters remained relatively consistent or had downward trends and within the CSR guidelines.

P19-03A

P19-03A is located northeast of the APTSF, outside of the site boundary and adjacent to northeast slough, north of the Trans-Canada Highway. This well was installed to further delineate the APTSF groundwater capture zone to the northeast of the mine and monitor groundwater quality in bedrock near the northeast mine lease boundary. It was completed to a depth of 29.2 mbg then backfilled to the base of the water-bearing zone at 24.4 mbg with the screen 18.3–24.4 mbg. Two samples and two duplicates were collected with the dedicated double valve pump.

Fluoride and molybdenum concentrations have consistently exceeded the CSR guidelines since well installation and continued to do so through 2025. This is consistent with the background bedrock concentrations observed at other wells (P14-02A and RES-05). Sulphate appears to have a decreasing trend. All other parameters remained relatively consistent or had downward trends and concentrations within the CSR guidelines.

P19-03B

P19-03B is located 2.4 m south of P19-03A. The borehole was drilled to a total depth of 8.9 mbg with a 3.0 m screen installed from 5.9 to 8.9 mbg, screened just above the overburden-bedrock interface. This well is located adjacent to the northeast slough.

In 2025 four samples were collected with a change in method from Hydrasleeve in Q1 and Q2 to a dedicated double valve pump in Q3 and Q4.

Molybdenum and sulphate have concentration exceeded the CSR guidelines at P19-03B since well installation and their concentrations appear to be in the range of their historical norms. All other parameters remained relatively consistent and within the CSR guidelines.

Based on current water quality data, the piezometric flow nets, and ongoing assessments, the evidence suggests that P19-03A or P19-03B have not be affected by the NAM operations. However, these wells are located adjacent to Northeast slough which may receive periodic overflow from the slough.

P19-04

P19-04 is located immediately south of the NATSF between the West Dam and Russell Slough to monitor groundwater in till overburden that is upgradient of the NATSF. The borehole was drilled to a

total depth of 7.6 mbg with the 1.5 m well screen installed at 6.1–7.6 mbg. In 2025 the quarterly samples were collected with a Hydrasleeve.

Molybdenum and sulphate concentrations have been greater than the CSR guideline consistently since well installation and continued this pattern through 2025. Chloride concentrations reached a new maximum for this monitoring well, with concentrations greater than the guideline observed for Q2-Q4. Chloride is exhibiting a long-term increasing trend and is seasonally fluctuating. Chloride concentration is also increasing at RES-07 and correspondingly in Russel Slough (SW 2), but remain within the range of background groundwater as measured at P14-02A and background surface water as measured at SW 44. All other parameters remained relatively consistent.

P19-05

P19-05 is located to the east of monitoring well P19-04 between West Dam and South Dam to monitor groundwater in the till overburden upgradient of the NATSF. The borehole was drilled to a total depth of 7.6 mbg, with a 1.5 m well screen installed at 6.1–7.6 mbg. The static water level is consistently at or just above the ground surface and is subject to freezing. In 2025 the annual sample was collected in Q2 with Hydrasleeve.

Molybdenum concentration was greater than the CSR guideline but was within its historical range. The parameters which exhibited spikes in 2024 have returned to their typical concentrations. All other parameters remained relatively consistent.

P20 Wells

The P20 wells were installed in bedrock and till lithologies. The sample schedule for 2025 is a mix of annual and quarterly based on sample stability.

P20-01

P20-01 is located at the toe of the HATSF West Dam. The 6” well is completed to 67 mbg, with a long screen set from 47.2 to 65.5 mbg which targeted the T Fault. In 2025, quarterly samples were completed with a dedicated 1” Solinst double valve pump, including duplicate samples in Q1, Q2, and Q4.

Consistent with previous years, sulphate and manganese concentrations were greater than the CSR guidelines at this monitoring well. Potential Increasing trends in nitrite as N and nitrate as N may be occurring. An increasing trend is evident for selenium at P20-01, and 2024 was the first year in which the concentration was greater than the CSR guideline. Selenium is associated with waste rock and may indicate P20-01 is receiving seepage from the waste rock dam. Seepage from the dam would be consistent with the observed sulphate concentration.

P20-02

P20-02 is located between the HATSF and the NW WMP and is drilled to a depth of 85.24 mbg. The screen is placed in a known fault, the SW Fault. Notably the borehole passed through approximately

55 m of dry bedrock before the fault was encountered; M5-203 monitors flows in the dam foundation north of P20-02. In 2025 quarterly samples were completed with a dedicated double valve pump, including 3 duplicate samples in Q1, Q3, and Q4.

Fluoride and molybdenum concentrations are greater than the CSR guidelines, but both are within their historical norms for the well. Elevated fluoride is consistent with background observed in deeper groundwater wells (RES-05 and P14-02A); however, elevated fluoride is also associated with tailings pore water (CPT14-32). Dissolved arsenic may have a modest increasing trend, and conductivity is decreasing. No other significant increasing trends were identified in the P20-02 water quality dataset.

P20-03 A and B

P20-03A and P20-03B are located on the east side of the mine site between the PHTSF and historical smelter site. P20-03A is screened between 23.8–29.9 mbg in the bedrock unit and P20-03B is screened between 10.3–13.4 mbg in the native sand and gravel overburden. Both wells have dedicated double valve pumps and sampled annually in 2025.

The concentrations of fluoride and molybdenum at P20-03A were greater than CSR guidelines during the 2025 groundwater monitoring program. Fluoride and molybdenum CSR exceedances are commonly associated with bedrock water quality at the NAM site. For example, fluoride and molybdenum also exceed CSR guidelines at RES-05 and P14-02. The concentrations of total and dissolved molybdenum appear to be increasing at P20-03A. A number of parameters show decreasing trends, such as uranium, tin, potassium, nitrogen, magnesium, iron, hardness, and chromium. No other significant increasing trends were identified in the P20-03A water quality dataset.

The water quality measured in overburden at P20-03B differs from that of the bedrock. Chloride, and selenium concentrations were greater than CSR guidelines in 2025. Chloride appears to be increasing and sulphate appears to be sporadic at this monitoring well. No other significant parameter trends are observed at this well; however, the parameter concentrations were historically variable, but a new pump was installed in Q3 2023 which appears to be stabilizing the results.

P20-04 A and B

The P20-04 well nest is in the northern part of site, located between the mill/thickener/APTSF and the Trans-Canada Highway. P20-04A is drilled to 54.9 mbg and is screened in the bedrock unit between 45.0–54.1 mbg and monitors a water-bearing fracture intercepted at 44 mbg. P20-04B is drilled to 8.23 mbg and is screened between 6.7 and 8.2 mbg monitoring water in the overburden unit. Both wells have Solinst double valve pumps installed. For P20-04A the annual sample was collected in Q4, and P20-04B was sampled quarterly.

At P20-04A the concentration of fluoride and molybdenum are greater than the CSR guidelines consistent with other bedrock wells (RES-05 and P14-02A); although, the fluoride concentration is elevated at P20-04A relative to other bedrock wells. Molybdenum concentration may have an increasing trend. No other significant trends are observed for parameter concentrations at P20-04A.

At P20-04B, sulphate, molybdenum, and uranium concentrations were greater than the CSR guideline in 2025. Molybdenum appears to have increasing trend when viewed without context, but the concentration has been relatively stable since Q3 2022 when the pump was installed, and the concentration is similar to the bedrock well at this location, aligning with the vertical gradients discussed previously in the groundwater levels section. The other parameters which are greater than the CSR guideline remained relatively consistent with historical norms. Consistent with other well nests, the sulphate concentrations tended to be higher in the overburden aquifer than in the bedrock units in the same well nest. The remaining parameter concentration are less than the CSR guidelines and no significant increasing trends are noted.

P20-05 A and B

The P20-05 well nest is located north of the mine and the Trans-Canada Highway in a dry ravine which is the upper portion of the Northeast Creek drainage.

P20 05A was drilled to 61 mbg with a screen in the bedrock unit between 48.0–60.2 mbg. Based on current piezometric flow nets presented in the GMP there is a groundwater drainage divide located sub parallel to the Trans-Canada Highway, and this well receives groundwater from the northlands. In 2025 the annual sample was completed in Q2 with a dedicated double valve pump.

Sulphate, fluoride and molybdenum concentrations were greater than CSR guidelines at P20-05A. Magnesium (dissolved), and strontium concentrations have modest increasing trends. The previously noted detection of nitrite in Q3 2023 appears to have been anomalous.

P20-05B was drilled to 13.9 mbg with a screen placed between 10 and 13.9 mbg to monitor potential groundwater in the overburden formation. This well has remained dry to date and therefore there are no sample results.

P22 Wells

The P22 wells were installed in 2022 by Geotech Drilling and supervised by WSP (WSP, 2023). P22-01A and B, as well as P22-02 were completed in January of 2022 and P22-03A and B were completed over the period of October 4 to November 20, 2022.

P22-01 A and B

P22-01A and B were drilled with nominal 150 mm (6″) diameter casing. The wells are located northwest of the concentrator mill, on the North side of the Trans-Canada Hwy.

P22-01A was drilled to a total depth of 21.3 mbg, with a 4.6 m screen set at 16.7 - 21.3 mbg and placed in a siltstone/sandstone bedrock formation.

In 2025 P22-01A quarterly samples were collected with a dedicated Solinst double valve pump. Manganese and molybdenum concentrations were greater than the CSR guideline at P22-01A in 2025, consistent with previous years. Some parameters, including molybdenum, are showing decreasing concentrations.

P22-01B is located 1.5 m east of P22-01A, it was completed to a total depth of 9.1 mbg with a screen placed at 6.1 - 9.1 mbg. The screen interval intercepts a silt and clay formation and was terminated slightly above the top of the bedrock encountered in that borehole.

In 2025 P22-01B quarterly samples were completed with a hydrasleeve. The well was redeveloped in Q3 of 2025; the well was left to stabilize before placement of the hydrasleeve for the Q3 sample. Sulphate and molybdenum concentrations are greater than the CSR guideline for all samples collected from this well, and no trends are observed for these parameters. Total suspended solids and turbidity have been decreasing through time as the well has stabilized, and the redevelopment activities appear to have been effective.

P22-02

P22-02 is located north of the Trans-Canada highway west of P14-01 (overburden monitoring well) and RES-05 (deep bedrock monitoring well). The purpose is to monitor groundwater conditions in shallow bedrock and further delineate the APTSF groundwater capture zone. The stratigraphy intercepted in P22-02 consisted of 18.6 m of silty till overlying siltstone (bedrock). The well was completed to a total depth of 30.5 mbg with a 6.1 m screen at 24.4 to 30.5 mbg.

In 2025 quarterly samples were collected with a dedicated solinst double valve pump. The dissolved molybdenum concentration is greater than the CSR guideline since the well was installed. No significant trends are observed at this monitoring well.

P22-03 A and B

P22-03 is located at the north edge of the APTSF, placed to monitor groundwater conditions in bedrock beneath and next to the APTSF pit rim.

P22-03A is completed to an estimated 250 mbg depth with a 15.2 m screen set from 234.2 to 249.4 mbg.

In 2025 quarterly samples were collected at P22-03A. The dedicated double valve pump is set at 235 mbg, field observations indicate black tinged water. Concentrations of ammonia and molybdenum were greater than the CSR guideline, while chloride and fluoride were below the guideline after exceeding in 2024. Hardness appears to be dropping, while molybdenum may be increasing.

P22-03B is completed to a depth of 59.7 mbg with a 6.1 m screen set at 59.7 to 53.6 mbg.

In 2025 quarterly samples were completed with a dedicated solinst double valve pump. Field observations indicate black stained water. Fluoride and dissolved molybdenum concentrations were greater than the CSR guidelines, similar to 2024, and within the range of background concentrations observed at the site. Sulphate appears to be increasing at this location.

AF18-482

AF18-482 was installed in 2018 by Knight Piésold Ltd. as a monitoring well in the historical NWWRP north of the HATSF West Dam. It was drilled to a depth of 27 mbg and then sand packed up to a screen interval of 18.5–23.0 mbg in till and waste rock. The groundwater table was not encountered during drilling; AF18-482 is checked quarterly but has continued to stay dry in 2025.

CPT Wells

The CPT wells (originally referred to as SCPT; Seismic Cone Penetration Tests) were drilled within the HATSF in 2014, as part of the HATSF Site Investigation conducted by Knight Piésold to support ongoing stabilization studies. CPT-14-27 is within the transition between coarse and fine tailings slimes, and CPT-14-32 is within the coarse sand portion of the TSF. Both wells are in the portion of the HATSF that is believed to seep westward towards SW23 and potentially Cherry Creek.

At CPT 14–27 quarterly samples were collected in 2025 with a dedicated Solinst double valve pump. The results were consistent with historical sampling and concentrations of fluoride and molybdenum were greater than the CSR guideline. No significant trends have been noted for this well.

At CPT 14–32 quarterly samples were collected in 2025 with a dedicated Solinst double valve pump. The results were consistent with historical sampling and concentrations arsenic, molybdenum and fluoride were greater than CSR guideline. Hardness (and associated parameters) has a modest increasing trend. All other parameters remained relatively consistent and within the CSR guidelines.

P24 Wells

The P24 wells were installed in 2024 by Geotech Drilling under the supervision of Groundwater Solutions Inc. The wells were installed at the request of the Groundwater Task Force, a collaboration between SSN (represented by Groundwater Solutions) and NGI. The wells are located downgradient of former Afton Operating Corporation mine features, primarily the smelter site and the holding ponds. The wells were sampled quarterly in 2025 and are being considered for inclusion in the Groundwater Management Plan, but are showing considerable turbidity, indicating that the well development carried out was insufficient, and further well development should be conducted in 2026 to stabilize the parameters.

Cherry Creek Estates

'Cherry Creek Mobile Home Park Water System' is a licensed water treatment plant with Interior Health of BC. The sample called R10 is collected from the first tap on the raw water line after the pump/pressure tanks and before the chlorine treatment and filters. This was established in 2022 and is now the permanent monitoring location. The source water is stored in an open surface water pond.

There are samples from additional neighbouring residential wells have been collected regularly since 2013, though only R10 is formally reported on as per the GMP. Unlike the other groundwater sites, the R10 sample is compared to the BC Source Drinking Water Quality Guidelines for Total concentrations. Given the distance from mine infrastructure (1.3 km), the size of the pit capture zone,

and the conductivity of bedrock and overburden, it is unlikely that there is mine influence on residential wells in the Cherry Creek area.

In 2025 quarterly samples were collected.

Water quality trends at R10 remained consistent in 2025, and a degree of seasonality appears to be present for conservative ions (i.e., chloride which typically has its highest concentration in Q1, although the seasonality was less pronounced in 2025). Total organic carbon was greater than the guideline value of 4 mg/L in tow of the events, which has commonly been the case since the station was established. All other parameters were within the BC Source Drinking Water Quality Guidelines.

3.3.3 Groundwater Trigger Response Plan

The Groundwater TRP was incorporated into the latest version of the GMP. The TRP was developed with the objectives to:

- Identify preliminary signs of contact seepage (i.e., groundwater that has contacted mined material)
- Promote a response or remedial actions, should they be required to manage and mitigate the seepage

The TRP was reviewed during the review of the GMP in Q4 of 2025.

To evaluate contact seepage, the TRP defines and identifies indicator parameters and trigger levels:

- **Indicator parameters** are associated with NAM contact drainage (from the waste rock and tailings) at concentrations that exceed regional background concentrations, as identified by the background water quality assessment (KCC 2021): ammonia, nitrate, nitrite, sulphate, dissolved antimony, dissolved arsenic, dissolved molybdenum and dissolved selenium.
- **Trigger levels** are defined concentrations of each indicator parameter that initiates a response should the concentration of the indicator parameter measured in the TRP groundwater well exceed the Trigger Level. The Trigger Levels are staged, as follows:

Stage 1 Trigger Levels serve as an initial indication, or early warning, of increasing concentrations in the groundwater or surface water.
Stage 2 Trigger Levels may initiate an investigation of cause, assessment of risk, mitigation options assessment and mitigation actions.

The Stage 1 and Stage 2 Triggers Levels are presented in Table 3-22.

Table 3-22: Primary Parameter of Concern Water Quality Trigger Levels.

Parameter	Lowest Applicable CSR Guideline	Range in HA Waste Rock*	HATSF Porewater **	Range in NATSF (2012–2022 at SW17)	Range in Regional Sloughs***	Stage 1 Trigger Level	Stage 2 Trigger Level
Ammonia-Total as N	CSR-AW-F	0.01–0.4 mg/L	0.02–0.185 mg/L	0.0025–3.68 mg/L	0.0496 - 0.508 mg/L	80% of the CSR-AW-F	CSR-AW-F mg/L in conjunction with a trigger level exceedance of sulphate, dissolved arsenic, dissolved molybdenum or dissolved selenium
Nitrite - as N	1 mg/L (CSR-DW)	Non-detect–0.7 mg/L	0.05–0.002 mg/L	0.01–3.1 mg/L	Non-detect	0.8 mg/L	1.0 mg/L in conjunction with a trigger level exceedance of sulphate, dissolved arsenic, dissolved molybdenum or dissolved selenium
Nitrate - as N	10 mg/L	Non-detect–19 mg/L	0.07–0.17 mg/L	0.003–38.7 mg/L	Non-detect	8 mg/L	10 mg/L in conjunction with a trigger level exceedance of sulphate, dissolved arsenic, dissolved molybdenum or dissolved selenium
Sulphate	500 mg/L (CSR-DW) 1000 mg/L (CSF-LW)	731–6,520 mg/L	486–924 mg/L	534–5,210 mg/L	1,690–137,000 mg/L	*1000 mg/L*	*1000* mg/L in conjunction with a trigger level exceedance of one of the following: ammonia, dissolved arsenic, dissolved molybdenum, or dissolved selenium
Dissolved Antimony	0.006 mg/L (CSR-DW)	0.0002 - 0.0036 mg/L	0.0001 - 0.001 mg/L	0.004–0.04 mg/L	Non-detect	0.0048 mg/L	0.006 mg/L in conjunction with a trigger level exceedance of one of the following: ammonia, sulphate, dissolved arsenic, dissolved molybdenum, or dissolved selenium
Dissolved Arsenic	0.01 mg/L (CSR-DW)	0.001–0.009 mg/L	0.01–0.03 mg/L	0.008–0.05 mg/L	0.00477–0.11 mg/L	0.008 mg/L	0.01 mg/L in conjunction with a trigger level exceedance of one of the following: ammonia, sulphate, dissolved molybdenum, or dissolved selenium
Dissolved Molybdenum	0.03 mg/L (CSR-IW) 0.05 mg/L (CSR-LS)	0.004–0.036 mg/L	0.2–0.9 mg/L	0.5–0.34 mg/L	0.006–0.42 mg/L	*0.05 mg/L*	*0.05* mg/L in conjunction with a trigger level exceedance of one of the following: ammonia, sulphate, dissolved arsenic, or dissolved selenium
Dissolved Selenium	0.01 mg/L (CSR-DW)	0.003–0.3 mg/L	0.00005–0.0004 mg/L	0.01 - 0.06 mg/L	Non-detect–0.0012 mg/L	0.01 mg/L	0.01 mg/L in conjunction with a trigger level exceedance of one of the following: ammonia, sulphate, dissolved arsenic, or dissolved molybdenum.

Italics indicates parameter has been adjusted from the lowest applicable CSR value.
* Indicates range of concentrations in HA waste rock seeps, ** indicates range of concentrations in CPT-27 and CPT-24, and *** indicates range concentrations in regional sloughs (KCC 2021), 1 indicates 2022 range, grey indicates preliminary trigger unlikely to be associated with NAM drainage.
CSR – DW is the contaminated sites regulation for drinking water.

Table 3-24 includes the CSR guidelines (from the year that triggers were last updated) for comparison purposes, as well the range of concentrations observed in surface water bodies on-site and contact water sources including:

- Historic Afton (HA) waste rock
- Historic Afton tailings in the HATSF
- New Afton Tailings

The natural sources and process to groundwater around the NAM area must also be considered. The natural sources/process at the site includes the following:

- Sloughs (concentrations presented in Table 3-24): The sloughs form regionally in the Kamloops area due to the arid climate and undulating topography. Water (runoff and shallow groundwater discharge) pools within localized surface depressions. The primary mechanism responsible for the removal of water from the pools is evaporation which causes the ponded water to become progressively saline through evapo-concentration. Although the sloughs are typically considered zones of shallow groundwater discharge; any seasonal recharge of the shallow overburden aquifers by water contained within the sloughs would result in elevated concentrations in the shallow overburden.
- Cation exchange: Cation exchange at the NAM site refers to the replacement of sodium (loosely bound to clay minerals) for calcium. During this process sodium is released into the drainage water. This is an important process because dissolved sodium ultimately increases the amount of sulphate that can be dissolved in water by several orders of magnitude.
- Natural mineralization: The natural mineralogy at the NAM site tends to have higher concentrations of some of the indicator parameters. Therefore, prior to initiating remedial actions, the potential for the material to naturally release elevated concentrations of parameters must be considered. Contribution from natural mineralization can be assessed through the ongoing identification of background water quality, including in the GWSA Report (MTS 2025).

Background Water Quality – Sulphate and Molybdenum Concentrations Considerations

Sulphate and molybdenum were identified as elevated in the background assessment above CSR guidelines; however, these parameters are elevated in the NAM mine water relative to the background groundwater dataset (KCC 2021). A summary of the 2022 sulphate and molybdenum concentrations at the groundwater wells, potentially indicative of background groundwater concentrations, is provided in Table 3-23 (bedrock) and Table 3-24 (overburden) based on those values presented in the updated GMP.

The sulphate concentrations in the background bedrock groundwater tend to increase from southeast to northwest between 642 and 1,160 mg/L (and potentially higher west of the mine in P19-01 and P19-02 wells), and molybdenum concentrations range between 0.038 mg/L and 0.11 mg/L. The sulphate concentrations in the overburden range between 254 mg/L and 1,950 mg/L and the

molybdenum concentrations range between 0.01 mg/L and 0.11 mg/L. Sulphate concentrations in the overburden tended to be higher in locations adjacent to sloughs. Elevated sulphate and selenium in groundwater are a typical signature of waste rock-affected groundwater (KCC 2021); however, for all background overburden water quality samples, selenium was typically at or below the selenium MDL. Importantly, selenium may be attenuated at the site in reducing conditions or through co-precipitation with sulphate salts (MTS 2023). Additional information on background water quality is included in the *GWSA Report*.

Table 3-23: Working Bedrock Groundwater Quality Background Concentrations.

Monitoring Well	Isotope Analysis	Location and/or Source of Groundwater	Formation	2022 Sulphate (mg/L)	2022 Molybdenum (mg/L)	2022 Selenium (mg/L)
RES-05	Rain	Established: Deep groundwater	Kamloops Group	2.81–10.4	0.183–0.21	0.00026
RES-07	Rain	Established: Artesian	Nicola Formation	439–416	0.007–0.0074	0.00005–0.00005
P14-02A	Rain	Working: Upgradient (East) of NAM; Adjacent to Unnamed Slough	Iron Mask Batholith	692–704	0.1–0.11	0.0001–0.0002
PA1	NA	Established: Location of P14-02 in 2010 and 2011	Iron Mask Batholith	735	0.06	<MDL
P19-03A	Snow	Working: Adjacent to Northeast Slough; Former Mill Site	Kamloops Group	642–702	0.074–0.081	0.0001–0.0003
P20-04A	Snow	Working: Upgradient (north) of NAM; Current Mill Site	Kamloops Group	837–1,130	0.038 0.042	0.0007–0.00025
P20-03A	Snow	Working: East of NAM; Groundwater from east	Iron Mask Batholith	528–460	0.03–0.036	0.0005–0.0009
P20-05A	Rain	Working: Upgradient (north) of NAM; Potentially down-gradient of Muskrat Slough	Kamloops Group	1,110–1,160	0.1–0.101	0.00025–0.0008
P22-01A	NA	Working: Upgradient of the mine (north) and across Highway 1	Kamloops Group	918–958	0.015–0.026	0.0002–0.0004
P22-02	NA	Established: Upgradient of the mine (north) and across Highway 1	Kamloops Group	93–154	0.01–0.017	0.0001–0.0003

Table 3-24: Working Overburden Groundwater Quality Background Concentrations.

Monitoring Well	Isotope Analysis	Location and/or Source of Groundwater	2022 Sulphate (mg/L)	2022 Molybdenum (mg/L)	2022 Selenium (mg/L)
P19-04	Evaporation	Working: Upgradient (south) of NAM; Russel Slough	1,740–1,860	0.0977–0.11	0.00015–0.00025
P19-05	Rain	Established: Upgradient (South) of NAM	254–264	0.013–0.014	0.00008–0.00013
P14-02B	Snow	Working: Upgradient (East) of NAM; Adjacent to Unnamed Slough; Potential unidentified sources	1,910–1,950	0.011–0.013	0.0001–0.00025
P19-03B	Snow	Working: Adjacent to Northeast Slough; Former Mill Site	1,700–1,780	0.075–0.079	0.0001–0.00025
P14-01	Rain	Established: Upgradient (north) of NAM;	299–307	0.018–0.023	0.0001–0.0001
P22-01B	Unknown	Working: Upgradient of the mine (north) and across Highway 1	1,180–1,220	0.0135–0.014	0.0005–0.0001

Note: Selenium is typically at MDL.

Stage 1 Trigger Levels serve as an initial indication, or early warning, of increasing concentrations in the groundwater or surface water, these wells are flagged, and the water quality is reviewed but the Stage 1 exceedances does not automatically necessitate an action. Stage 1 Trigger Level exceedances were identified in 11 TRP monitoring wells. For Stage 1 wells the comparison of the concentrations to trigger levels of and trends are included in Appendix G. Actions may be undertaken at these wells as proactive environmental management, but that work is not discussed within this report. Additional information on these wells is included in the GWSA Report (MTS 2025).

Stage 2 Trigger Level exceedances were identified in 11 TRP wells (Table 3-25). Exceedances of Stage 2 Trigger Levels incites the Response mechanisms outlined in Section 12.5 of the GMP. For wells which classify as Stage 2, data analysis, well assessment, and recommendations are discussed below.

Many of the Class II and III wells had the GWSA as an action which investigated the occurrence and provenance of different waters at site, and their relationship with the natural environment and site. The GWSA was completed in March 2025 and informs on whether other potential recommended actions should be carried out at select wells where the trigger exceedances may be based on background concentrations unrelated to NAM activities. In addition to the GWSA the Hydrogeological Conceptual Site Model (WSP 2024a), Groundwater Numerical Model (WSP 2024b) and WQM (MTS 2024) were updated in 2024, which inform on the groundwater setting at site.

Table 3-25: Groundwater Trigger Response Plan Summary Table – Wells with Trigger Level Stage 2 Exceedances.

Site	Parameter	Trigger Level 1	Trigger Level 2	Lowest CSR Guideline	2025 Avg Conc.	Trend	Tarp Compliant	Actions Taken	Potential Recommended Actions
P19-02A	Ammonia (as N)	1.05	1.31	1.30	0.116	Decreasing	Trigger Level Stage 2 Exceeded	Groundwater Source Assessment	Continued monitoring and analysis
	Dissolved Antimony	0.0048	0.006	0.09	0.00050	No Trend		Attenuation study for selenium and arsenic	Update sulphate objectives to site-specific objectives.
	Dissolved Arsenic	0.008	0.01	0.025	0.00189	No Trend		Reviewed water levels	Update TRP molybdenum Trigger Levels for bedrock wells based on molybdenum in Res-05 and shallow background bedrock.
	Dissolved Molybdenum	0.05	0.05	0.03	**0.202**	No Trend		Picrite characterization	
	Nitrate (as N)	8	10	100	0.25	No Trend		Identification of chloride in deep fractures	
	Nitrite (as N)	0.8	1	2	0.050	No Trend		Reviewed hydraulic conductivity	
	Dissolved Selenium	0.01	0.01	0.02	0.0003	No Trend		Groundwater pathway assessment indicates unlikely to receive seepage from site	
	Sulphate	1000	1000	1000	**1575**	No Trend		CSM and Numerical Hydrogeological Model update	
P19-02B	Ammonia (as N)	1.05	1.31	1.30	**1.360**	No Trend	Trigger Level Stage 2 Exceeded	HATSF dewatering to reduce seepage	Continued monitoring and analysis on a quarterly basis
	Dissolved Antimony	0.0048	0.006	0.09	0.00050	Decreasing		Groundwater Source assessment	Sulphate isotope analysis
	Dissolved Arsenic	0.008	0.01	0.025	0.00378	Decreasing		Attenuation Study	Slough water level assessment
	Dissolved Molybdenum	0.05	0.05	0.03	**0.190**	Decreasing		Ammonia exceedance reviewed at measured pH (between 8-8.5)	Upgradient monitoring well installation
	Nitrate (as N)	8	10	100	0.25	No Trend		Removed March 7th, 2024, sulphate and chloride readings	Update sulphate/molybdenum objectives
	Nitrite (as N)	0.8	1	2	0.050	No Trend		NWWRP Sampling	Flow and Load Accretion Study
	Dissolved Selenium	0.01	0.01	0.02	0.0003	Decreasing			
	Sulphate	1000	1000	1000	**3035**	No Trend			

Site	Parameter	Trigger Level 1	Trigger Level 2	Lowest CSR Guideline	2025 Avg Conc.	Trend	Tarp Compliant	Actions Taken	Potential Recommended Actions
P20-01	Ammonia (as N)	1.05	1.31	1.30	0.005	Decreasing	Trigger Level Stage 2 Exceeded	Groundwater Source Assessment	Continued monitoring and analysis
	Dissolved Antimony	0.0048	0.006	0.09	0.00043	No Trend		Picrite characterization	Priority installation of a down-gradient Class 2 monitoring well to evaluate extent of plume.
	Dissolved Arsenic	0.008	0.01	0.025	0.00049	No Trend		HATSF dewatering to reduce seepage	SW32 Slough Assessment
	Dissolved Molybdenum	0.05	0.05	0.03	0.001	No Trend			
	Nitrate (as N)	8	10	100	1.89	Increasing			
	Nitrite (as N)	0.8	1	2	0.292	Increasing			
	Dissolved Selenium	0.01	0.01	0.02	**0.0248**	Increasing			
	Sulphate	1000	1000	1000	**5400**	No Trend			
P19-02C	Ammonia (as N)	1.05	1.31	1.30	0.019	No Trend	Trigger Level Stage 2 Exceeded	HATSF dewatering to reduce seepage	Continued monitoring and analysis
	Dissolved Antimony	0.0048	0.006	0.09	0.00076	Detection Limits		Groundwater Source Assessment	Slough water level assessment
	Dissolved Arsenic	0.008	0.01	0.025	0.00151	No Trend		Attenuation Study for arsenic and selenium	Install downgradient monitoring well and if permission is not granted, install upgradient monitoring well
	Dissolved Molybdenum	0.05	0.05	0.03	0.019	Decreasing		CSM and Numerical Hydrogeological Model update and groundwater pathway assessment	Update Sulphate Objective
	Nitrate (as N)	8	10	100	2.12	Decreasing		NWWRP Sampling	NWWRP Water Balance
	Nitrite (as N)	0.8	1	2	0.050	Detection Limits			Cherry Creek Flow Accretion Study
	Dissolved Selenium	0.01	0.01	0.02	**0.0152**	Decreasing			
	Sulphate	1000	1000	1000	**5680**	Increasing			
P19-03B	Ammonia (as N)	1.05	1.31	1.30	0.226	Increasing	Trigger Level Stage 2 Exceeded	Groundwater Source Assessment	Continued monitoring and analysis
	Dissolved Antimony	0.0048	0.006	0.09	0.00020	No Trend		Adjust trend assessment to 2021	Collect data for groundwater / surface water interaction review
	Dissolved Arsenic	0.008	0.01	0.025	0.00346	Increasing			Update sulphate/molybdenum objectives to site-specific objectives
	Dissolved Molybdenum	0.05	0.05	0.03	**0.075**	No Trend			
	Nitrate (as N)	8	10	100	0.11	No Trend			
	Nitrite (as N)	0.8	1	2	0.021	No Trend			
	Dissolved Selenium	0.01	0.01	0.02	0.0001	No Trend			
	Sulphate	1000	1000	1000	**1695**	Decreasing			

Site	Parameter	Trigger Level 1	Trigger Level 2	Lowest CSR Guideline	2025 Avg Conc.	Trend	Tarp Compliant	Actions Taken	Potential Recommended Actions
PA3-P1	Ammonia (as N)	1.05	1.31	1.30	**4.585**	Increasing	Trigger Level Stage 2 Exceeded	Groundwater Source Assessment	Continued monitoring and analysis
	Dissolved Antimony	0.0048	0.006	0.09	0.00200	No Trend		CSM and Numerical Hydrogeological Model update and groundwater pathway assessment	Replace location with P24 monitoring wells
	Dissolved Arsenic	0.008	0.01	0.025	0.00373	No Trend		Expansion of monitoring network with P24 wells near salt track and smelter site	
	Dissolved Molybdenum	0.05	0.05	0.03	0.012	Decreasing			
	Nitrate (as N)	8	10	100	0.50	No Trend			
	Nitrite (as N)	0.8	1	2	0.100	No Trend			
	Dissolved Selenium	0.01	0.01	0.02	0.0010	No Trend			
	Sulphate	1000	1000	1000	**12725**	No Trend			
P19-04	Ammonia (as N)	1.05	1.31	1.30	0.013	No trend	Trigger Level Stage 2 Exceeded	Comparison to SW 34 water quality	Continued monitoring and analysis
	Dissolved Antimony	0.0048	0.006	0.09	0.00024	No Trend		Attenuation Study for arsenic and selenium	Update sulphate/molybdenum objective
	Dissolved Arsenic	0.008	0.01	0.025	0.00117	No Trend		SW 34 NATSF West Dam pumped dry	
	Dissolved Molybdenum	0.05	0.05	0.03	**0.095**	Decreasing		CSM and Numerical Hydrogeological Model update and groundwater pathway assessment	
	Nitrate (as N)	8	10	100	0.14	No Trend		Completed Alkali Creek Assessment	
	Nitrite (as N)	0.8	1	2	0.028	No Trend		Redevelop well	
	Dissolved Selenium	0.01	0.01	0.02	0.0002	No trend			
	Sulphate	1000	1000	1000	**1625**	Decreasing			
PA2-P2	Ammonia (as N)	1.05	1.31	1.30	0.013	No Trend	Trigger Level Stage 2 Exceeded	Groundwater Source Assessment identified rock piles with sulfides	Continued monitoring and analysis
	Dissolved Antimony	0.0048	0.006	0.09	0.00050	No Trend		CSM and Numerical Hydrogeological Model update and groundwater pathway assessment	Potential source control of rock pile - integrate activities into RCP
	Dissolved Arsenic	0.008	0.01	0.025	0.00091	No Trend		Model indicates groundwater flow toward APTSF in operations and closure	
	Dissolved Molybdenum	0.05	0.05	0.03	0.013	Decreasing		Updated waste rock maps	
	Nitrate (as N)	8	10	100	0.25	No Trend			
	Nitrite (as N)	0.8	1	2	0.050	No Trend			
	Dissolved Selenium	0.01	0.01	0.02	**0.0400**	No Trend			
	Sulphate	1000	1000	1000	**4313**	Decreasing			

Site	Parameter	Trigger Level 1	Trigger Level 2	Lowest CSR Guideline	2025 Avg Conc.	Trend	Tarp Compliant	Actions Taken	Potential Recommended Actions
P20-03B	Ammonia (as N)	1.05	1.31	1.30	0.005	No Trend	Trigger Level Stage 2 Exceeded	Groundwater Source Assessment	Continued monitoring and analysis
	Dissolved Antimony	0.0048	0.006	0.09	0.00020	No Trend		Model indicates groundwater flow toward APTSF in operations and closure	Potential source control of rock pile - integrate activities into RCP
	Dissolved Arsenic	0.008	0.01	0.025	0.00043	Decreasing		Updated waste rock maps	
	Dissolved Molybdenum	0.05	0.05	0.03	0.005	Decreasing			
	Nitrate (as N)	8	10	100	**15.90**	No Trend			
	Nitrite (as N)	0.8	1	2	0.020	No Trend			
	Dissolved Selenium	0.01	0.01	0.02	**0.0892**	No Trend			
	Sulphate	1000	1000	1000	891	Decreasing			
P20-05A	Ammonia (as N)	1.05	1.31	1.30	0.874	Increasing	Trigger Level Stage 2 Exceeded	Groundwater Source Assessment	Continued monitoring and analysis
	Dissolved Antimony	0.0048	0.006	0.09	0.00050	No Trend			Update molybdenum objective
	Dissolved Arsenic	0.008	0.01	0.025	0.00248	Decreasing			Update sulphate objective
	Dissolved Molybdenum	0.05	0.05	0.03	**0.108**	No Trend			
	Nitrate (as N)	8	10	100	0.10	No Trend			
	Nitrite (as N)	0.8	1	2	0.020	No Trend			
	Dissolved Selenium	0.01	0.01	0.02	0.0003	Decreasing			
	Sulphate	1000	1000	1000	**1200**	Increasing			
M5-301	Ammonia (as N)	1.05	1.31	1.30	0.008	No Trend	Trigger Level Stage 2 Exceeded	Groundwater Source Assessment	Continued monitoring and analysis
	Dissolved Antimony	0.0048	0.006	0.09	0.00019	No Trend			Downgradient monitoring well
	Dissolved Arsenic	0.008	0.01	0.025	0.00142	No Trend			
	Dissolved Molybdenum	0.05	0.05	0.03	0.023	No Trend			
	Nitrate (as N)	8	10	100	0.82	No Trend			
	Nitrite (as N)	0.8	1	2	0.020	No Trend			
	Dissolved Selenium	0.01	0.01	0.02	**0.0122**	No Trend			
	Sulphate	1000	1000	1000	**2210**	No Trend			

Bold font indicates Trigger Level 2 exceeded.

Stage 2 Trigger Wells Evaluation and Discussion

The trigger level exceedances of all wells are documented and tracked (Appendix G6); however, only the TRP wells with Stage 2 exceedances are discussed herein as the actions associated with these wells are considered highest priority. The summary of those monitoring locations is included as Table 3-25.

P19-02A

P19-02A is a Class II well and has a Stage 2 TRP exceedance based on dissolved molybdenum and sulphate concentrations. This well is screened deep in bedrock and has a very low hydraulic conductivity. The well does not recover 2 m of head displacement for three months. The hydraulic conductivity measured at P19-02A is 5×10^{-10} m/s. Given the hydrogeological parameters associated with this well, it is unlikely this well is screened within a preferential flow pathway. The well screen is deep (143–151 mbg) and the gradient between this well and shallower wells in the same nest is relatively flat. The chloride concentrations in P19-02A also exceeded CSR guidelines; however, chloride occurrence at the site has been identified in deep seepage to the underground mine, and chloride in this well is higher than any other groundwater or tailings water at NAM site and thus unlikely to be sourced from NAM wastes. The GSWA (MTS 2025) documents that the molybdenum concentration here is the same as to background concentrations measured at deep monitoring well RES-05 (reached 0.214 mg/L in 2025). While this well has never reached a stabilized groundwater level, it appears to have an upward hydraulic gradient in relation to P19-02B.

Given the hydraulic conductivity, chloride concentration, trigger parameter concentrations alignment with background, and lack of flow pathway to the mine site (owing to the low hydraulic conductivity suggesting the water is not within a preferential flow pathway), it is assessed that this well is not likely indicative of seepage from NAM or off-site impacts. The frequency of monitoring should be reduced to once or twice annually when the GMP is next updated.

The recommended action for this well is continued monitoring and analysis. Other potential actions for this well are to update the molybdenum Trigger Level to concentrations measured in RES-05 for deep bedrock groundwater wells (and consider the results of ERA which considered molybdenum at 0.36 mg/L as having negligible risk to mule deer and Mallard Ducks) and to develop site-specific sulphate objectives.

P19-02B

P19-02B is a Class II well and has a Stage 2 TRP exceedance based on ammonia, dissolved molybdenum, and sulphate concentrations. P19-02B shows seasonal variation in its water level, and is located directly between two sloughs, so the groundwater should be considered in conjunction with the water quality from the slough (SW 8) since this well appears to be groundwater under the direct influence of surface water. Importantly, air photographs indicate the presence of salts within the sloughs in this area prior to NAM operations. This well nest is also located down gradient of the partially reclaimed historical NWWRP and potentially the HATSF.

The ammonia CSR guideline used to develop the Trigger Level was reviewed at the measured pH. The maximum measured pH in at P19-02B was 8.18. The ammonia Trigger Level was based on a pH greater than 8.5. At a pH of 8.18, the CSR guideline for ammonia (as N) is 3.7 mg/L. None of the water quality samples in 2025 exceeded the CSR guideline of ammonia at P19-02.

The molybdenum concentration at this well was within the range of background concentrations. The concentration in background well RES-05 was 0.214 mg/L. Therefore, it is recommended that the background concentrations are considered in evaluation of Trigger Level exceedances.

Given the potential conflation of background concentrations and seepage from evapo-concentrated sloughs it is recommended that a monitoring well nest be installed upgradient of 19-02, between SW8 and the NWWRP. The new monitoring wells should be sampled quarterly, and the sampling frequency of P19-02B should be reduced once one year's worth of correlating information is assessed. Development of site-specific sulphate water quality objectives will help to determine the risk to the environment associated with sulphate at this well.

P19-03B

P19-03B is a Class II well and has a Stage 2 TRP exceedance for sulphate and dissolved molybdenum concentrations. The isotope information for this well indicates that the water is likely sourced from snowfall (Golder 2021). The groundwater level fluctuates seasonally in this well, and shows a declining trend since 2020, which is also observed for surface water bodies around site, indicating this well may be groundwater under direct influence of surface water. The GWSA identifies that the sloughs may be influencing groundwater concentrations and that the sulphate and molybdenum concentrations are likely representative of background conditions in the area as the slough was present prior to mine operations with visible salt deposits. The molybdenum concentration is within the background concentrations measured at the site and are below background well RES-05 (0.214 mg/L). The sulphate concentration is an order of magnitude lower than the slough and thus can expected to be influenced by potentially seasonal recharge but also by advection.

The GMP recommends that the sampling frequency be reduced to annually for this well; however, the water levels should be monitored monthly, and they are currently monitored daily by the pressure transducer. The range in water levels observed in SW43 should be considered to aide in the determination of the relationship between groundwater and surface water around this slough; to support this, the water level in the slough should continue to be collected at least monthly. The development of a site-specific sulphate objective is also recommended as a potential action for this location.

PA3-P1

PA3-P1 is a Class II well and has a Stage 2 TRP exceedance for sulphate and ammonia concentrations. Sulphate is notably high at this bedrock monitoring well with an average concentration of 13,075 mg/L in 2024. As part of the trigger response for this well review of the water quality was conducted in the GWSA report and the data indicated that this well is showing a signal similar to the sloughs in the area (MTS 2025).

In response to the elevated sulphate concentrations observed at PA3-P1 a pair of wells was installed ~170 m to the east, nearby the culvert which passes under Highway 1. Laboratory results from the P24-01 well pair indicate that the concentrations observed in PA3-P1 are similar to the overburden unit. The sulphate concentration in bedrock was three orders of magnitude lower than what has been analyzed at PA3-P1. Hydraulic conductivity testing was also completed in the new monitoring wells, and the hydraulic conductivity of the overburden well was much closer to that observed at PA3-P1 than the bedrock well.

Based on the various lines of evidence collected during the well installation program it is possible that the PA3-P1 well is compromised (i.e., is a conduit for groundwater flow from overburden to bedrock) and is not representative of bedrock groundwater conditions, and that the source of sulphate in this well is thought to be from groundwater in the overburden unit.

It is recommended that that the PA3-P1 well be removed from the monitoring program and be replaced with a new monitoring well. Should the new monitoring well show a similar relationship to P24-01, then only P24-01 should be monitored and sampled.

P19-04

P19-04 is a Class II well and has a stage 2 TRP exceedance for dissolved molybdenum and sulphate.

In 2023 P19-04 generally showed instability in its water quality results when compared to other monitoring wells and an in response to the trigger exceedances and instability action of redeveloping the well was carried out in 2024, (the well was purged to dry multiple times). The monitoring results indicated that the previously variable parameters had stabilized in 2024.

Concentrations of molybdenum and sulphate are both decreasing as determined through Mann-Kendall analysis, and continued monitoring is recommended for P19-04. The risk associated with sulphate may be evaluated through the development of a sulphate objective.

PA2-P2

PA2-P2 is a Class II well and has a Stage 2 TRP exceedance for sulphate and selenium. The sulphate concentration has been decreasing here as determined by Mann-Kendall analysis (Table 3-25), and selenium concentrations have stabilized since showing greater variability from 2013 to 2018. The concentrations are not increasing and do not appear to be related to NAM operations.

As part of the trigger response for this well the GWSA study was complete, and the hydrogeological conceptual site model and numerical models were updated. The GWSA indicated that the selenium concentration at this well is thought to be related to runoff from waste rock, while the numerical model confirmed that groundwater flow paths from this area are toward the APTSF and within the capture zone of the APTSF (both during operations and in closure). The Ajax haul road, which is within 50 m of this well, is thought to be constructed using waste rock and may also be the source of selenium at this location. It is recommended that management of this waste rock should be included in the Reclamation and Closure Plan, and may be managed as part of progressive reclamation efforts.

P20-05A

P20-05A is a Class I well and classifies as a Stage 2 exceedance based on dissolved molybdenum and sulphate concentrations, but both fall within the range of background concentrations denoted in the GMP. The hydrogeological conceptual site model and numerical model were updated as part of the trigger response at this well and they do not show a flow path where NAM operations would be effecting this location, and therefore no additional actions are recommended beyond continued monitoring and analysis as described in the GMP.

M5-301

M5-301 is a Class I well and has a Stage 2 TRP exceedance based on dissolved selenium and sulphate concentrations. It is screened in bedrock at a depth of 24.9 mbgs, it is immediately adjacent to the access road and is downstream of the fines portion of the HATSF. 2025 represented a change from Stage 1 to Stage 2 trigger level, due to an increase in selenium concentration. While the selenium concentration was greater in 2025 than in 2024, it was within the historical range for this monitoring location. It is suspected that selenium concentration at this well may be a function of recharge through the dam, given that similar variation has been observed in 2014 and 2020. A downgradient monitoring well should be installed at this location.

P20-01

P20-01 is a Class I well and has a Stage 2 TRP exceedance based on dissolved selenium and sulphate concentrations. P20-01 is screened in bedrock between 47.2 to 65.6 mbg. The purpose of the P20-01 monitoring well is to monitor for potential seepage from the HATSF West Dam and Tailings through the bedrock flow system or the mapped fault. P20-01 is screened within a fault which is inferred to not extend beyond the Cherry Creek Tectonic Zone to the south-west of the NAM; although it has a minor influence on the flow direction (Golder, 2021). P20-01 is also located under the footprint of the West Dam which is an embankment constructed of waste rock. Notably the well screen is very long on this monitoring well (18.3 m in length)

In 2024 installation of a downgradient Class II well was recommended in this area. Efforts were made to install the monitoring well in 2025, but field surveys indicated high potential for archaeological resources in this area, and the archaeological impact assessment permit was not available to complete the assessment work to allow equipment to enter the area for well installation. The down gradient well is recommended to define the potential flow path from this well, with well screens placed in shallow overburden and in bedrock, and the well screen in bedrock should within the range of elevation of P20-01 (635 to 653 masl).

P19-02C

P19-02C is a Class I well and has a Stage 2 TRP exceedance based on selenium and sulphate concentrations. This well was installed in the overburden layer to monitor the groundwater conditions downstream of the historical NWWRP but is notably downstream of an alkaline slough. The well recently changed from Stage 1 to Stage 2 level as a function of selenium concentrations in Q3 and Q4 of 2025. The well was redeveloped in August 2025, and the recent spike in selenium concentration

may have been a function of redevelopment. The well should continue to be monitored and sampled in 2026.

P20-03B

P20-03B is a Class I well and has Stage 2 TRP exceedances for nitrate, sulphate, and selenium, and each of those indicator parameters have steady concentrations and have been steady since the well was installed in 2020. Nitrate and selenium are two parameters associated with waste rock. The borehole log for this hole indicates that waste rock is found at surface in this location, and the waste rock was deposited by Afton Operating Corp. The groundwater numerical flow model indicates that this location is within the groundwater capture zone of the APTSF during operations and closure. Based on the understanding of the source-pathway-receptor model for this location and the legacy waste rock deposited in the area it is recommended that management of this waste rock should be considered in the Reclamation and Closure Plan and may be managed as part of progressive reclamation.

3.3.4 Summary

Results from 2025 groundwater monitoring program sampling indicate the following:

- Water sampling was completed consistent with the permit requirements.
- Regionally, water is *basic circum-neutral*, beyond *very hard* and high in sulphate.
- 2025 groundwater levels are generally stable with some decreasing in elevation.
- P19-01A water level has decreased to a level where it cannot be sampled.
- Dedicated pumps have been very successful at reducing turbidity and suspended solids in samples, allowing for better identification of trends after pump installation. Groundwater trends should be considered in the context of changes in sampling methods denoted in Table 3-17.
- The groundwater monitoring network provides sufficient coverage to monitor the potential areas of environmental concern (as defined in the GMP).
- There are no indications of mine related influence on residential wells as measured at the Cherry Creek Estates treatment plant.
- Increasing trends for a number of parameters continues to be observed at M5-203. There are a number of water quality changes currently being observed proximal to the HATSF West Dam and flows out of the dam have decreased in conjunction.
- The increasing selenium trend at P20-01 continued in 2025.
- CSR exceedances were identified at 38 wells, and the parameters, in order of decreasing abundance are: molybdenum, sulphate, fluoride, manganese, chloride, uranium, selenium, ammonia, and arsenic.
- A high-level evaluation of the groundwater management plan indicates:
    - The GMP considers the potential areas of concern and the potential flow paths in relation to these areas and potential receptors.
    - The background conditions in the region are complex due to the varying geology (and its effect on groundwater conditions) and environmental effects on the surficial systems (e.g. evapo-concentration of sloughs), and arriving at a mutual understanding

the complex geochemical regime remains an area of importance to all stakeholders in the mining operation:

- The dissolved molybdenum trigger concentration may be too conservative by up to an order of magnitude based on the concentrations observed in bedrock (i.e., an average of 0.202 mg/L In 2024, at RES-05); and
- Sulphate is elevated in the region and the alkaline sloughs naturally have very high sulphate concentrations (i.e., ranging from 10,800 to 161,000 mg/L at SW 8 in 2024); therefore, trigger exceedances due to sulphate concentrations should be "taken with a grain of salt" for groundwater which interacts with the mineralized zone or shows direct influence from surface water (i.e., P19-02B).

- Actions are underway to enhance understanding of the groundwater system at the mine site, and a review of the GMP will be conducted in 2026.
- The groundwater TRP is protective of identifying off-site seepage for potential areas of environmental concern as defined in the GMP, and actions tied to the TRP are aimed at reducing uncertainty in the analyses.

3.3.5 Recommendations

The following recommendations are suggested for future groundwater monitoring:

- The groundwater monitoring program should be carried out as described in the GMP.
  - During the 2026 review of the GMP it should be considered if PA3-P1 be removed from the monitoring program and be replaced with P24-01A and P24-01B.
  - New monitoring wells P24-02A/B and P24-03A/B should be sampled quarterly to gain surveillance data and that data should inform whether the monitoring wells should be included in the GMP. These wells are not located downgradient of active site activities and are therefore not surveilling active operations. The wells remain turbid and may benefit from further well development.
- A monitoring well should be installed down-gradient of P20-01.
- A monitoring well should be installed down gradient of M5-301.
- A monitoring well pair (i.e., targeting overburden and shallow bedrock) should be installed upgradient of 19-02, between SW 8 and the NWWRP, to differentiate potential effects of the evapo-concentrated slough on groundwater quality.
- Continue to monitor P19-01A for water levels.
- Downhole equipment should be inspected annually for wear and tear or corrosion with pumps being pulled up, cleaned and inspected, replace tubing as needed.
- Concentrations of selenium which exceed the trigger values in the area of PA2 and P20-03 may be related to waste rock in the area and since the flow paths for these wells are toward the APTSF during operations and closure, the waste rock should be considered as part of the Reclamation and Closure Plan or progressive reclamation.

- The water level in slough SW43 should be recorded monthly as an elevation relative to sea level.
- Development of site-specific sulphate and molybdenum water quality objectives should be carried out as generic guidelines are not appropriate for the site.

Note that the recommendation of monitoring wells was included in the 2024 monitoring report. New Afton did not receive the archaeology and cultural heritage assessment for monitoring well locations within 2025, and wells were not advanced, therefore it is also recommended that this report be produced to allow New Afton to collaborate with SSN and install monitoring wells recommended under the trigger response plan and by the Groundwater Task Force.

4. Summary and Outlook for 2026

Several projects are in the works for 2026 as the mine advances mining of C-Zone, ongoing tailings thickening, amendment and deposition of tailings into the APTSF (primarily), and continued stabilization of the NATSF. New Afton will continue to engage as early as practicable with MCM, ENV and the Stk'emlúpsemc te Secwépemc Nation through the EMB on environmental management initiatives associated with Permit 100224. Monitoring specific recommendations for surface water and groundwater and air quality, planned actions for site environmental management in 2026 include the following actions:

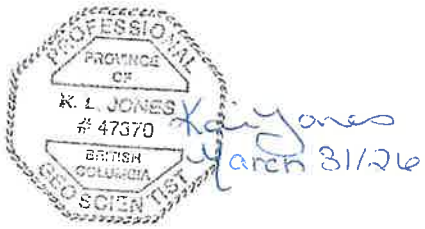
- Continued focus on early and proactive monitoring programs.
- Incorporate additional tools into the Environmental Quality Information System (EQuIS) database to improve functionality, data assessment and summary reporting.
- A review of the groundwater management plan and the trigger response plan will be conducted in 2026.
- Focus on maintaining awareness of environmental commitments and management plans.
- Continue to work on research projects with Thompson Rivers University as opportunity arises.
- Continued research and discussion with First Nations and regulators in terms of planning for mine closure.
- Maintain a robust Environmental Management System and continual improvement process.
- Maintain top level performance against Towards Sustainable Mining protocols.

5. Closing

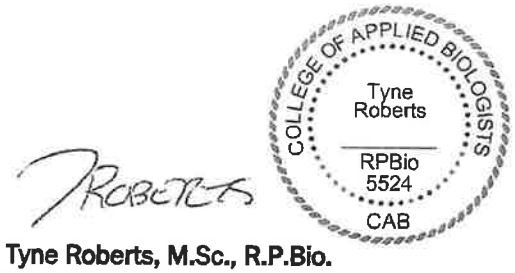
I trust the information meets the requirements set forth in Effluent Permit 100224 and Annual Reporting under Environmental Management Act, A User Guide to Annual Reporting Requirements for Mining Under the Environmental Management Act (2016).

If any further information is required, please contact me directly at 250-377-2700.

Respectfully submitted



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Appendix A: BC ENV Annual Status Report

Appendix B: New Afton Environment & Social Responsibility Policy

Appendix C: Reportable Spills and Non-Conformances

Appendix D: QA/QC Duplicate and Blank Data

Appendix E: Surface Water Monitoring Data

Appendix F: Hydrometric Monitoring Program

Appendix G: Groundwater Monitoring Data