

ANNUAL REPORT:
Ulu Gold Project
Exploration and Progressive Reclamation
20EN001
2BM-ULU2030

Kitikmeot Region, Nunavut

March 2021



TABLE OF CONTENTS

1	INTRODUCTON.....	1
1.1	PURPOSE.....	1
1.2	SITE LOCATION AND DESCRIPTION	1
1.3	PANDEMIC PREPAREDNESS & RESPONSE	1
1.4	LOGISTICS & ACCESS	3
2	AUTHORIZATIONS.....	3
3	2020 WORK PROGRAM	6
3.1	CONSTRUCTION, MODIFICATIONS AND MAINTENANCE	6
3.2	EXPLORATION ACTIVITIES	6
3.3	PROGRESSIVE RECLAMATION ACTIVITIES.....	6
3.3.1	Non-Hazardous Waste Management	7
3.3.2	Hazardous Waste Management	7
3.3.3	Vent Raise Monitoring	8
3.4	RECLAMATION SECURITY.....	8
3.4.1	Reclamation Research	8
3.4.2	Project Development Monitoring.....	10
3.4.3	Modifications to the Site Plan.....	11
3.5	WATER MANAGEMENT	11
3.6	SPILLS	11
3.7	WILDLIFE INTERACTIONS.....	12
3.8	QUARRY ACTIVITIES	12
3.9	ANNUAL INSPECTION ACTIVITIES AND BOARD/LANDOWNER REQUESTS	12
3.10	VISITORS AND OTHER LAND USERS	12
3.11	HERITAGE RESOURCES.....	13
4	INUIT EMPLOYEES AND NORTHERN SERVICE PROVIDERS.....	13
5	COMMUNITY CONSULTATIONS	13
6	MANAGEMENT PLANS	13
7	WORKPLAN FOR UPCOMING YEAR	14

LIST OF TABLES

Table 1. Authorizations and compliance summary for 2020 work program	4
Table 2. Waste backhauled from Ulu, 2020.....	7
Table 3. Location of Monitoring Program Results	11

LIST OF FIGURES

Figure 1. Location map and 2020 study area, Ulu Gold Projects.....	2
--------------------------------------------------------------------	---

LIST OF APPENDICES

Appendix A. NWB Standard Water Licence Report Form, 2BM-ULU2030	1
Appendix B. Compliance Assessment, 20EN001.....	1
Appendix C. Photos.....	1
Appendix D1. Monitoring Program Results: ULU-1	1
Appendix D2. Monitoring Program Results: ULU-4b	2
Appendix D3. Monitoring Program Results: ULU-7	3
Appendix D4. Monitoring Program Results: ULU-8	4
Appendix D5. Monitoring Program Results: ULU-9	5
Appendix D6. Monitoring Program Results: ULU-11	6

TABLE OF CONCORDANCE: Ulu Annual Reporting Requirements, by Authorization

Corresponding Authorization Item/Paragraph #	Term	Corresponding Report Section
<i>20EN001</i>		
4	4. The Proponent shall submit a comprehensive annual report with copies provided to the Nunavut Impact Review Board, by March 31st of each year of permitted activities beginning March 31, 2021. The annual report must contain at least the following information: a) A summary of activities undertaken for the year, including but not limited to:	1.1
4a	▪ a map showing the approximate location of drill sites;	Figure 1
	▪ a description of local hires, contracting opportunities and initiatives;	4
	▪ a map showing the location of the fuel cache(s);	Figure 1
	▪ flight altitudes, frequency of flights and flight routes;	1.4
	▪ site photos;	Appendix C
4b	▪ any reclamation work undertaken;	3.3
4b	A work plan for the following year, including any progressive reclamation work to be undertaken;	7
4c	A summary of community consultations undertaken throughout the year, providing copy of materials presented to community members, a description of issues and concerns raised, discussions with community members and advice offered to the company as well as any follow-up actions that were required or taken to resolve any concerns expressed about the project proposal;	5
4d	A log of instances in which community residents occupy or transit through the project area for the purpose of traditional land use or harvesting. This log should include the location and number of people encountered, activity being undertaken (e.g., berry picking, fishing, hunting, camping, etc.), date and time; and any mitigation measures or adaptive management undertaken to prevent disturbance;	3.10
4e	A discussion of issues related to wildlife and environmental monitoring, including the number of cease-work orders required as a result of proximity to caribou and any other wildlife;	3.7
4f	A brief summary of WMMP results as well as any mitigation actions that were undertaken. In addition, the Proponent shall maintain a record of wildlife observations while operating within the project area and include it as part of the summary report. The summary report based on wildlife observations should include the following:	3.7

	<p>1. Locations (i.e., latitude and longitude), species, number of animals, a description of the animal activity, and a description of the gender and age of animals if possible.</p> <p>2. Prior to conducting project activities, the Proponent should map the location of any sensitive wildlife sites such as denning sites, calving areas, caribou crossing sites, and raptor nests in the project area, and identify the timing of critical life history events (i.e., calving, mating, denning and nesting).</p> <p>3. Additionally, the Proponent should indicate potential impacts from the project, and ensure that operational activities are managed and modified to avoid impacts on wildlife and sensitive sites.</p>	
4g	An analysis of the effectiveness of mitigation measures for wildlife;	3.7
4h	Summary of any heritage sites encountered during the exploration activities, any followup action or reporting required as a result and how project activities were modified to mitigate impacts on the heritage sites;	3.11
4i	Summary of its knowledge of Inuit land use in/near the project area and explain how project activities were modified to mitigate impacts on Inuit land use; and	3.10
4j	A summary of how the Proponent has complied with conditions contained within this Screening Decision, and all conditions as required by other authorizations associated with the project proposal.	2 <i>Appendix B</i>
2BM-ULU2030		
B10	The Licensee shall file an Annual Report on the appurtenant undertaking with the Board no later than March 31 of the year following the calendar year being reported, which shall contain the following information:	1.1
B10a	tabular summaries and analysis of all data collected under the Monitoring Program in Part J;	3.5 Table 3 <i>Appendix D</i>
B10b	a summary of any construction work, modification and/or major maintenance work carried out on the facilities related to Water use and Waste deposit, including all associated structures, and an outline of any work anticipated for the next year;	3.1 7
B10c	results for samples collected on ore and waste rock as referred to in Part D, Item 15;	1.1
B10d	a list of unauthorized discharges and follow-up action taken;	3.6 <i>Appendix A</i>
B10e	updates or revisions to the Waste Management Plan, Spill Response Plan, Interim Closure and Reclamation Plan, and any other plans associated with the Licence. Revisions may be subject to Board approval;	6
B10f	any updates to the estimate of the restoration liability, as required under Part B, Item 5 and 6, based upon the results of the restoration research, project development monitoring, and any modifications to the site plan;	3.4
B10g	a brief description of follow-up action taken to address concerns detailed in inspection and compliance reports prepared by the Inspector;	3.9
B10h	report all artesian flow occurrences as required under Part F, Item 3;	3.2

B10i	a summary of hazardous materials shipped out, the treatment received, and the location of the approved treatment facility to which they were sent;	3.3.2 Table 2
B10j	a summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year;	3.3 7
B10k	a summary of any specific studies or reports requested by the Board, and a brief description of any future studies planned or proposed;	3.9
B10l	a public consultation/participation report describing consultation with local organizations and residents of the nearby communities, if any were conducted; and	5
B10m	any other details on Water use or Waste disposal requested by the Board by the 1st of November of the year being reported.	3.9

1 INTRODUCTION

1.1 PURPOSE

The purpose of this document is to fulfill annual reporting requirements pursuant to project authorizations for the Ulu Gold Project (Ulu), specifically the Nunavut Impact Review Board Screening Decision 20EN001 and Nunavut Water Board Water (NWB) Licence 2BM-ULU2030, and provide an outline of activities undertaken and reportable monitoring results. The NWB Annual Report Standard Form can be found in Appendix A along with supporting and additional information where required. Coordinated reporting for the both the NIRB and the NWB is provided for transparency and efficiency.

Blue Star acquired Ulu in early 2020; Ulu occurs contiguous to Blue Star's prior owned Hood River Gold Project (Hood River). Activities in 2020 were licenced by the Kitikmeot Inuit Association (KIA) under one licence, while there were two separate camps (Hood River and Ulu, respectively), each with a different water licence, and with mineral rights for each property held separately; Ulu activities were coordinated with works undertaken at Hood River. Hood River is discussed herein to inform an understanding of local site activities and program context.

Activities undertaken at Ulu were limited to exploration and progressive reclamation; mine operations have not resumed.

This report has been submitted on or before March 31, 2021.

1.2 SITE LOCATION AND DESCRIPTION

Land use was undertaken pursuant to KTL311C013, with all work occurring on Inuit Owned Lands parcel CO-20.

Exploration activities were undertaken based out of both camps, with drilling and prospecting occurring in a variety of areas as illustrated in Figure 1. Progressive reclamation of the Ulu mine site was undertaken based out of the Ulu camp. An archeological assessment was undertaken in drill target areas across both properties as well as at proposed future Ulu camp and potential rock quarry locations adjacent to Ulu. At the end of the season, the Hood River camp was demobilized. Both sites were accessed via the existing Ulu airstrip.

1.3 PANDEMIC PREPAREDNESS & RESPONSE

The occurrence of the COVID-19 pandemic influenced the scope and execution of Blue Star's field program in various ways including limits to number of personnel on site and the subsequent effects on program scope execution, and Blue Star's inability to access communities for local hires and public consultation. Despite these challenges, Blue Star had a successful, safe and compliant field program in 2020.

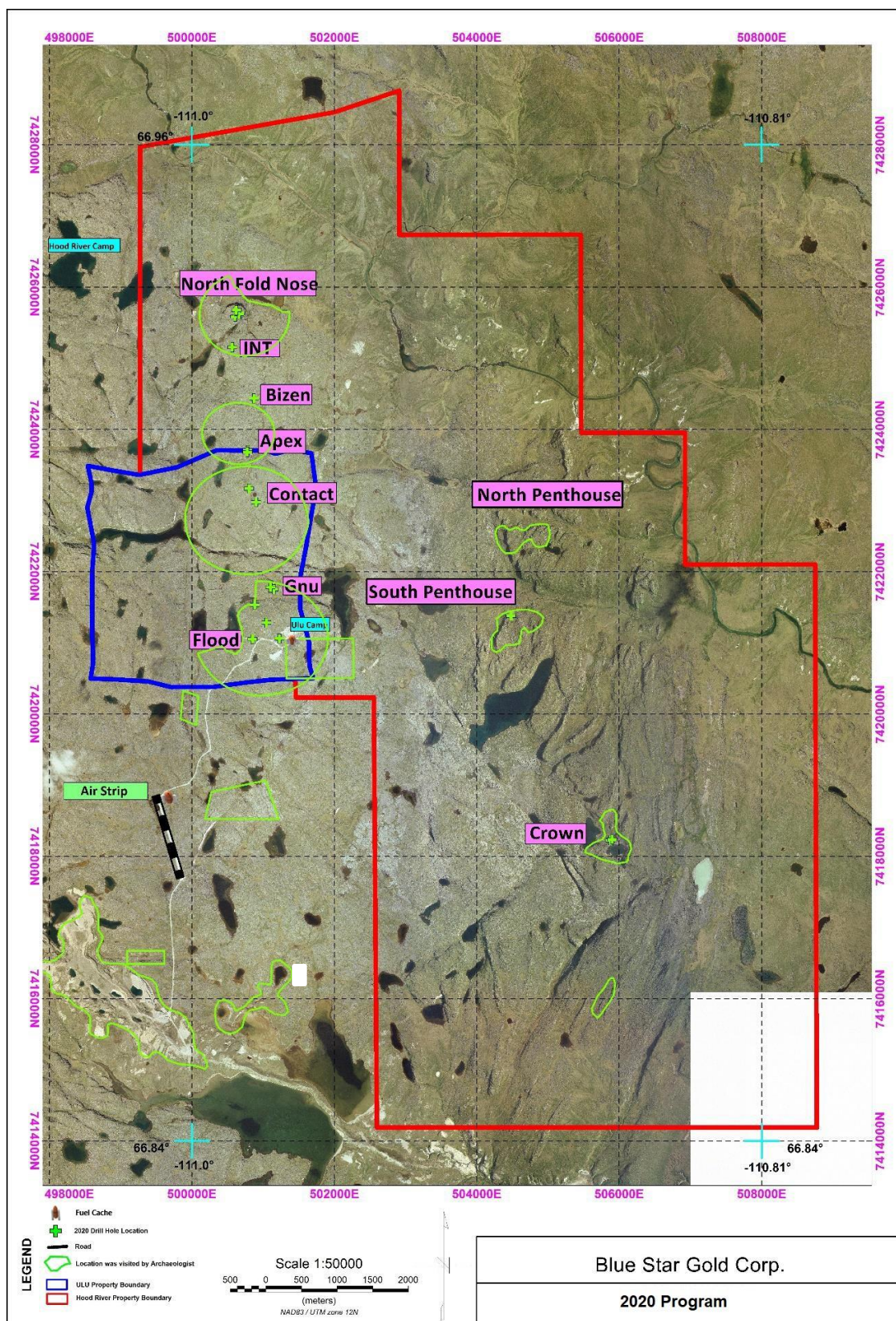


Figure 1. Location map and 2020 study area, Ulu Gold Projects

1.4 LOGISTICS & ACCESS

Crews and supplies accessed Ulu via fixed wing from Yellowknife to the Ulu airstrip weekly. Personnel and supplies arriving and departing by fixed wing were shuttled between the Hood River camp and the Ulu airstrip by helicopter as needed, and between the Ulu airstrip and Ulu camp by light duty vehicle.

Depending on weather and payload, fixed wing flights typically cruised at altitudes between 6,000 and 10,000 feet, or as dictated by safety and weather considerations, at the pilot's discretion.

Daily helicopter overflights of work areas were undertaken most mornings prior to the start of work or coincident with shift change to determine local wildlife presence and resulting subsequent flying heights. In the absence of wildlife, local low level flights occurred daily between camps and nearby drill sites to support the movement of people and supplies.

2 AUTHORIZATIONS

Current authorizations relating to the 2020 work program are listed in Table 1. Appendix B includes an assessment of compliance with 20EN001.

Table 1. Authorizations and compliance summary for 2020 work program

Item	Description	Scope	Issuing body	Compliance Summary
<i>Hood River</i>				
HoodRiver-001	Mineral Exploration Agreement	Subsurface mineral rights	Nunavut Tunngavik Inc. (NTI)	Work conducted. Reporting underway, due in June.
2BE-HRP1924	Water licence	Drilling and domestic water use and associated waste deposit, Hood River	Nunavut Water Board (NWB)	Drilling and domestic water use and waste deposit occurred. Annual reporting submitted. Activities in compliance with authorization.
19EA019	Screening Decision Report	Exploration, prospecting, mapping, sampling, camp establishment, fuel storage, access, baseline environment and heritage studies	Nunavut Impact Review Board (NIRB)	Activities undertaken all within scope of screening decision. Activities in compliance with authorization.
149067	Conformity determination	Exploration, prospecting, mapping, sampling, camp establishment, fuel storage, access, baseline environment and heritage studies	Nunavut Planning Commission (NPC)	-
<i>Ulu</i>				
KTCA20Q004	Quarry Permit Agreement	Quarrying of granular materials	KIA	Granular was quarried. Fees and royalties paid.
L-3563	Mining Lease	Subsurface mineral rights	Crown-Indigenous Relations and Northern Affairs (CIRNA)	Work conducted. Lease in good standing.
2BM-ULU2030	Water licence	Drilling and domestic water use and associated waste deposit, reclamation, bulk sampling, quarrying	NWB	Drilling and domestic water use and waste deposit occurred, along with reclamation and esker quarrying.

Item	Description	Scope	Issuing body	Compliance Summary
				Annual reporting herein. Activities in compliance with authorization.
20EN001	Screening Decision Report	Exploration, prospecting, mapping, sampling, camp establishment, fuel storage, access, baseline environment, and heritage studies, progressive reclamation, bulk sampling, quarrying, winter trail	NIRB	Activities undertaken all within scope of screening decision. Annual reporting herein Activities in compliance with authorization.
149269, 149305	Conformity determination	Exploration, prospecting, mapping, sampling, camp establishment, fuel storage, access, baseline environment, and heritage studies, progressive reclamation, bulk sampling, quarrying, winter trail	NPC	-
<i>Both Hood River & Ulu</i>				
KTL311C013	Land use licence	Exploration, camp operation, reclamation	KIA	Exploration, camp operation and reclamation undertaken. Annual reporting completed. Water and land use fees paid. Activities in compliance with authorization.
2020-10A	Nunavut Archaeologist Permit	Archaeological impact assessment	Government of Nunavut (GN)	Archaeological impact assessment completed. Reporting completed.

3 2020 WORK PROGRAM

Activities in 2020 involved operation of the existing Hood River camp, assessment, repair and operation of the newly acquired Ulu camp, assessment and maintenance of the Ulu surface fleet, diamond drilling, prospecting, an archaeological assessment, a geochemical assessment at Ulu, quarrying at Ulu, progressive reclamation of the Ulu site, airstrip maintenance, fuel caching (drums only), waste backhaul, and demobilization of the Hood River camp. Activities commenced on July 2, 2020 with the opening of the Hood River camp the same day and opening of the Ulu camp on July 3. Activities terminated on October 7, 2020 with the seasonal closure of the Ulu camp and demobilization of the Hood River camp. Details of the program are provided below with related photos provided in Appendix C.

Blackwater was incinerated, greywater was discharged to sumps, drinking water was withdrawn from West lake, and fuel caches were established and/or maintained. Cuttings from the core saw and splitter were discharged to the existing mine sump.

No sampling was undertaken pursuant to 2BM-ULU2030 Part D Item 15 as the Licensee is not currently in the process of resuming on site operations.

3.1 CONSTRUCTION, MODIFICATIONS AND MAINTENANCE

Upon accessing the Ulu camp on July 3 for the first time since its acquisition, the camp was found to be in very poor condition, damaged, largely uninhabitable and without a power supply. Blue Star rehabilitated parts of the Ulu camp and added five new temporary tents to provide adequate accommodations for the minimum workforce required to execute the 2020 program. Portions of the Ulu camp deemed safe for habitation were utilized from mid-July to early October. Primary and back-up power was installed. The Ulu camp remains on site and has been winterized.

In the event of COVID-19 symptoms or an outbreak, two isolation tents were established at Ulu. These tents remained in place for the duration of the field program and have since been decommissioned.

Blue Star had a Red Seal heavy duty equipment technician on site for the duration of the program to repair, maintain and assess the equipment assets. A substantial amount of work was undertaken, operability restored to many pieces of equipment, an organized supply of spares established, and a detailed asset inventory undertaken. All equipment was individually tarped for winter.

No modifications or construction of engineered infrastructure was undertaken.

3.2 EXPLORATION ACTIVITIES

The Exploration program included diamond drilling, core cutting and splitting, prospecting and sampling. Two diamond drills were utilized, drilling 7,624 m from 38 holes at 18 different set up locations. Cuttings and drill water were discharged to sumps adjacent to drill areas. Nearby watercourses were used as water sources. No artesian flows were encountered during drilling.

3.3 PROGRESSIVE RECLAMATION ACTIVITIES

Progressive reclamation was undertaken pursuant to the approved *Interim Closure and Reclamation Plan*. Because of the pandemic and the related limited personnel movements to and from site, the reclamation program scope undertaken was limited to site assessment, waste consolidation and

backhaul, and site preparation in advance of construction of engineered structures. Activities undertaken are detailed below.

3.3.1 Non-Hazardous Waste Management

Much of the solid waste on site was comingled by the previous operator. This was sorted, with useful goods recovered and segregated. Approximately 25% of the non-hazardous waste materials have been staged for disposal in the future non-hazardous waste landfill. All buildings were cleaned out, removing unnecessary items. One uninhabitable 20-person bunkhouse was partially demolished. The surface water line and sewage water lines were removed. Access routes into the landfill area were established to support commencement of waste placement in upcoming years. Heavy equipment previously thought to be waste was inventoried, assessed, and valued. A significant number of repairs to necessary and functional equipment were completed.

3.3.2 Hazardous Waste Management

Hazardous waste streams recovered across the Ulu site and from the comingled solid waste were segregated and backhauled to Kitikmeot Environmental Ltd. in Yellowknife, as listed in Table 2.

Table 2. Waste backhauled from Ulu, 2020

Item	UN#	Transport Vessel	Amount
Aerosols processable	UN1950	Pallet	1
	UN1950	Drum	1
Batteries-alkaline	N/A	Pallet	1
Batteries-lead acid	UN2794	Each	24
Batteries-non spillable	UN2800	Each	23
Flammable liquids-fuel	UN1993	Drum	29
Non regulated solids - hydraulic hoses	N/A	Drum	2
Non regulated scrap metal	N/A	Megabag	2
Non regulated solids-empty drums	N/A	Drum	83
Non regulated solids-general debris	N/A	Drum	2
Non regulated solids-incinerator ash	N/A	Drum	6
Non regulated solids-oil/fuel filters	N/A	Drum	3
Non regulated solids-oily debris	N/A	Megabag	7
	N/A	Drum	1
Non regulated solids-rags and absorbents	N/A	Drum	7
Paint	N/A	4 L	18
Soil contaminated with hydrocarbons	N/A	Drum	30
Waste leachate- Hydrocarbons, glycol, water, mix	N/R	Drum	36

A fuel cache containing aged fuel and oily waste was decommissioned. A preliminary assessment of the cache footprint indicated that any resulting contamination was localized.

Legacy contaminated soil was assessed and managed as follows:

- 6 m3 of soil recovered from the unlined/uncovered portion of the shop floor was shipped off site (see Table 2).
- Contaminated soil at the day tank area was excavated and relocated to the former main tank farm for interim storage.
- Contaminated soil stockpiled in the former fuel tank farm was separated into piles not more than 150 m3 and characterized, in preparation for treatment in the future onsite soil treatment facility and/or approved onsite beneficial reuse.

3.3.3 Vent Raise Monitoring

The existing cover on the vent raise was visually monitored throughout the season and found to be stable.

3.4 RECLAMATION SECURITY

Further to Part B Items 5 and 6 of 2AM-ULU2030, the Licensee is not currently planning to resume active operations or proceed to final closure, nor were there changes in operations, components and/or technology. Accordingly, no updates to the restoration liability estimate are provided.

Restoration research, project development monitoring, and any modifications to the site plan undertaken are discussed below. While some of these tasks were undertaken in whole or in part in 2020, results do not indicate a related update to the restoration liability is needed at this time.

3.4.1 Reclamation Research

As listed in Section 4.6 of the approved *Interim Closure and Reclamation Plan*, reclamation research includes three topics, each discussed in subsequent sections:

- Material suitability for landfill erosion covers;
- Rock quarry assessments;
- Ore and waste rock management.

Landfill Cover

Qualitative preliminary landfill cover assessment was undertaken through visual observation of the stability of existing materials historically placed around the Ulu site. Materials appeared stable with little to no evidence of erosion or other instability.

Rock Quarries

Four potential rock quarry sites were investigated for heritage resource potential and geochemical properties. Test results for one preferred rock quarry location indicate the source is not potentially acid generating (NPAG) and suitable for use.

Ore and Waste Rock Management

The existing liner in the mine sump was investigated and no indication failure was found. Accordingly, the liner was not replaced and approximately half of the ore stockpiled adjacent to the sump was relocated into the sump.

A study of metal leaching and acid rock drainage (MLARD) potential of legacy waste rock forming the base of the infrastructure pads was undertaken, pursuant to the approved *Interim Closure and Reclamation Plan* (Plan Appendix A). The study involved the following components:

- A grid-based sampling program involving excavation of 20 test pits in the infrastructure pads and related sampling, to determine the extent of potentially acid generating (PAG) rock using static test methods.
- Collection of samples (coarse and fine fractions) for particle size analysis (PSA) to determine proportion of most reactive fine material and for static testing of both fractions to determine carbonate and sulphide mineral depletion (or enrichment) to potentially infer reaction rates.
- Field fizz tests and rinse pH and conductivity testing to understand current conditions and the presence of carbonate minerals on weathering surfaces.
- Mineralogical testing to support geochemical data interpretation.
- Interpretation of seepage data to understand current conditions.
- Calculations to estimate delay to ARD.

Study outcomes are summarized as follows:

- Historic use of neutralization potential (NP) data rather than carbonate (TIC) to estimate ARD potential, as found in historical reports, likely led to an underestimation of the degree of potentially acid generating rock, and an overestimation of the delay to onset of ARD.
- Test pitting outcomes indicate:
 - Carbonates had been depleted and locally acidic conditions had developed in two test pits (one in the camp pad and one in the ore pad), in addition to material along the northwest edge of the ore pad containing oxidized rock.
 - The ore pad beneath where ore had been stockpiled from 1996 to 2018 contained oxidized rock however rinse pH was 7.4 (one test pit).
 - Unoxidized rock in the remaining 17 test pits had circum-neutral to alkaline rinse pH (pH 7.4 to 9.2) indicating that carbonates were effectively neutralizing the acid produced from sulphide oxidation.
 - Most samples from the test pits, in addition to historical samples representing the infrastructure pads, are classified as potentially acid generating.
 - The greatest degree of oxidation was observed in areas where the infrastructure pads had not been historically covered in esker sand (although not all uncovered areas were oxidized).
 - The fine material in the infrastructure pads will drive development of acidic weathering conditions and hence ARD.
- Seepage from the infrastructure pads and downgradient flows indicated:
 - pH in contact water seepage was lowest from the northwest part of the ore pad that contained oxidized rock and had historically not been covered in esker sand.
 - The esker sand may act as a thermally significant cover and help to limit warming in the underlying pads.
 - Current water quality would be expected to deteriorate if drainage became more acidic.
- Calculations to determine the timing to onset of ARD have been conducted and indicated that the delay to onset of ARD has been estimated at four years (from 2020) for the infrastructure pads. The ore pad is most likely to develop ARD first. It may take several more years for widespread acidic drainage to develop.

Accordingly, there is a need for further investigation, including the following:

- Determine the volume of material in the ore pad that drains towards the west.
- Conduct further mineralogy analysis to refine the calculation of delay to ARD from material in the pads that has been historically covered with esker sand and to better inform predictions of delay to widespread ARD (rather than initial onset of ARD);
 - The 2020 delay to ARD calculations are based on mineralogy samples collected from areas of the infrastructure pads that were not historically covered in esker sand and so may not be representative of site-wide conditions
 - The 2020 study results suggest that the esker sand cover present in some areas of the pads may provide some benefit in reducing weathering/oxidation rates, with covered areas having a longer delay to ARD than indicated by the calculations.
- Determine the beneficial extent of maintaining an esker sand cover on the infrastructure pads including understanding the degree of permafrost aggradation into the pads and measures that could be used to encourage permafrost aggradation into the pads.
- Compile all available historical seepage monitoring data from the infrastructure pads to examine long term trends and rates of change.
- Development of a testing program to determine site-specific lime/limestone application rates to inform suitability of *in situ* treatment to prevent ARD.

Measures to mitigate near-term impacts associated with ARD are provided for in 2BM-ULU2030 and the approved *Interim Water Management Plan*. Additional measures are being investigated for suitability and include:

- Relocation of material in the ore pad that drains towards the west into the East Lake catchment.
- *In situ* treatment through addition of neutralization capacity (lime/crushed limestone).
- Maintaining an esker sand cover on all the infrastructure pads to minimize temperature increases in the pads in the summer and hence reduce sulphide oxidation reaction rates.

Blue Star is currently scoping these studies and investigating related mitigation measures. The majority of the studies are expected to be undertaken in 2021, with a better understanding of the need for and suitability of mitigation measures available thereafter. Outcomes will be reported in the 2021 annual report.

Finally, Blue Star is planning to commence two monitoring programs in 2021 to inform a current and ongoing understanding of changing site conditions:

- **Seepage Monitoring Program** including early season seepage sampling to capture freshet conditions, enhanced QA/QC measures and seepage flow measurements;
- **Rinse pH Monitoring Program** including annual monitoring of rinse pH of fine fractions with spatial frequency based on past results as well as observed changing conditions on site (i.e. seepage pH).

3.4.2 Project Development Monitoring

Monitoring was carried out in accordance with Schedule J and is reported herein.

3.4.3 Modifications to the Site Plan

At the time of reporting, Modifications to the site plan are not anticipated. Should they be required, Modifications will proceed in accordance with Part G.

3.5 WATER MANAGEMENT

Water use occurred in accordance with 2BM-ULU2030, and occurred between July 9 and October 6. The Monitoring Program requires reporting of information tabulated in Table 3; Table 3 identifies where this information can be found herein.

Table 3. Location of Monitoring Program Results

Station ID	Station Description	Location of Monitoring Results
ULU-1	Water Intake at West Lake	Appendix D1
ULU-2	<i>Former sewage treatment plant effluent discharge. Inactive.</i>	<i>Not applicable</i>
ULU-3	<i>Former sewage treatment plant sludge. Inactive.</i>	<i>Not applicable</i>
ULU-4	<i>Minewater pumped from underground Mine Sump.</i>	<i>Not pumping from underground. Not applicable</i>
ULU-4b	Surface Retention Pond (mine sump).	Appendix D2
ULU-5	<i>Settling/neutralization Pond 1. Inactive, pond not constructed.</i>	<i>Not applicable</i>
ULU-6	<i>Settling/neutralization Pond 2. Inactive, pond not constructed.</i>	<i>Not applicable</i>
ULU-7	Runoff from the waste rock storage area.	Appendix D2
ULU-8	Runoff from the ore storage area.	Appendix D2
ULU-9	Outflow East Lake.	Appendix D2
ULU-10	<i>Ulu Lake inflow from East Lake. Inactive due to decommissioning of sewage treatment plant.</i>	<i>Not applicable</i>
ULU-11	Outflow Ulu Lake	Appendix D2
ULU-12	<i>Domestic water intake for new Ulu camp. Not installed, camp not yet constructed.</i>	<i>Not applicable</i>
ULU-13	<i>Soil treatment facility water holding pond. Not installed, facility not yet constructed.</i>	<i>Not applicable</i>
ULU-14	<i>Bulk fuel storage facility. Inactive due to decommissioning.</i>	<i>Not applicable</i>
ULU-15	<i>Landfill facility seepage. Inactive, facility not yet constructed.</i>	<i>Not applicable</i>
MW-1, -2, -3	<i>Soil treatment facility monitoring well. Not installed, facility not yet constructed.</i>	<i>Not applicable</i>

3.6 SPILLS

There were three unauthorized discharges in 2020. Details can be found in Appendix A. Spill reporting was undertaken, and all impacted land was cleaned up. Initial spill reports and follow-up reports were filed with the KIA and CIRNA.

3.7 WILDLIFE INTERACTIONS

Blue Star undertook all activities pursuant to its *Wildlife Protection Plan* (WPP), which was submitted in advance of undertaking any activities on site. The WPP considers wildlife use of the area including sensitive sites and timing of critical life history events and outlines potential impacts posed by project activities and mitigation measures. No orders to stop work were issued.

The mitigation measures contained in the WPP and implemented on site are considered to have been effective. The WPP has been updated to reflect the consolidation of the Hood River and Ulu projects as discussed in Section 6; an updated plan is provided with this annual report.

While there were no direct human-wildlife interactions, wildlife was observed throughout the program in and around Ulu infrastructure including Arctic hare, ground squirrels and a group of up to three caribou were observed in the area intermittently throughout the season. In late September, a grizzly bear was observed walking on one of the roads near Ulu camp and was subsequently deterred from the immediate camp area with the helicopter.

Due to COVID-related restrictions and a reduced workforce on site, wildlife monitoring duties were shared among project personnel. As mentioned in Section 1.4, daily aerial surveys of local work areas were undertaken on most days to determine if wildlife were visibly present in the work areas.

3.8 QUARRY ACTIVITIES

Potential hard rock quarry sites were investigated for geochemistry and archaeology. A preferred site was identified, but no rock quarrying was undertaken. The existing esker quarry was also assessed for ML/ARD. Test results for the esker quarry and the preferred rock quarry location indicate the sources are not potentially acid generating (NPAG) and suitable for use.

Esker quarrying was undertaken pursuant to KTCA20Q004 and in accordance with the approved Borrow and Quarry Management Plan. Royalties and land use fees have been paid.

3.9 ANNUAL INSPECTION ACTIVITIES AND BOARD/LANDOWNER REQUESTS

The Licensee is not aware of any inspections undertaken in 2020. No requests for studies from the NWB have been received.

3.10 VISITORS AND OTHER LAND USERS

Based on past dialogue with land users, Blue Star understands that current traditional land use in the Ulu area is limited. While situated approximately midway between Kugluktuk and Contwoyto Lake, dialogue with a land user this summer indicated that the preferred current and historical travel route between these places occurs to the west via Takijuq Lake.

Blue Star is aware of land users who live at Contwoyto Lake and Bathurst Inlet. We have been in touch to provide an activity update, advise when the workers are on site, share contact information and identify resources available in the event of an emergency response. We have provided coordinates for our fuel caches to a nearby land user and the KIA should there be a need to access fuel while the camp is closed. Together with the KIA and other organizations working in the area, we helped facilitate a land user's emergency access to fuel.

No visitors, residents or land users attended Ulu in 2020 while the camp was open.

3.11 HERITAGE RESOURCES

Blue Star's project archaeologist was on site in July to conduct an archaeological impact assessment of drill target areas, potential quarry areas and potential new Ulu camp sites. No sites were encountered.

4 INUIT EMPLOYEES AND NORTHERN SERVICE PROVIDERS

In 2020, Blue Star did not directly employ any Inuit or Northern residents due to the travel restrictions brought about by the COVID-19 pandemic and Blue Star's related inability to directly access Nunavut communities. Following discussion with the KIA and the Chief Public Health Officer, Blue Star was permitted to undertake its program in isolation of all Nunavut communities.

In recognition of the near-term acute food insecurity that some residents may face due to loss of direct employment by Blue Star, Blue Star provided its 2019 workers, all from Kugluktuk, monthly food vouchers for the duration of the field program, being four months. Blue Star further committed to work with the Hamlet of Kugluktuk (the Hamlet) to provide other Kugluktuk families who may be in need with food vouchers, altogether allocating an additional \$21,000 to families in need who may be facing food insecurity.

Throughout 2020, Blue Star was able to retain the services of 13 northern-based firms, seven of which were registered on either the Kitikmeot Qualified Business Registry or the NTI Inuit Firm Registry. Through these firms, Blue Star indirectly employed two *Nunavut Agreement* beneficiaries and 22 northern residents onsite at Ulu and Hood River.

5 COMMUNITY CONSULTATIONS

Public meetings were scheduled to be held in Kugluktuk and Cambridge Bay in March 2020, however these meetings were cancelled due to travel restrictions associated with the COVID-19 pandemic. Blue Star personnel travelled to Cambridge Bay in February and met informally with residents, business owners, land users and potential workers. Blue Star has reached out to the Burnside and Omingmak Hunters and Trappers Associations in Cambridge Bay, the Kugluktuk Agoniatit Association, the Akaitcho Government, the TliCh'o Government, the Government of Nunavut, the Government of Northwest Territories and various members of the public and land users expressing an interest to meet, as and when it is suitable and feasible given the pandemic. Engagement with the KIA and NTI Lands departments, the Hamlet of Kugluktuk, past workers, local land users and other members of the public has been ongoing throughout the year.

6 MANAGEMENT PLANS

Given Blue Star's pre-existing ownership of the adjacent Hood River Gold Project (2BE-HRP1924) and planned coordination of exploration and camp activities moving forward, Blue Star wishes to consolidate existing approved management plans to support operational efficiency and consistency at both the Hood River and Ulu projects. Consolidated plans include the following, and are included in annual report submissions pursuant to both Ulu and Hood River water licences:

- *Spill Response Plan;*
- *Interim Closure and Reclamation Plan;*
- *Waste Management Plan;*
- *Wildlife Protection Plan.*

Further, the *Waste Management Plan*, *Landfill Management Plan* and the *Soil Treatment Facility Management Plan* have been revised to address technical comments and recommendations received during the application review and are included in this submission.

7 WORKPLAN FOR UPCOMING YEAR

Scoping of the 2021 program is underway at the time of reporting. The program is expected to be focused on exploration and compliance related activities, with no resumptions of mining operations. Limited progressive reclamation may be undertaken including site preparation and material staging for the future landfill and soil treatment facility, and additional studies on the legacy waste rock on surface, as discussed in Section 3.4.1. Limited baseline environmental studies may be commenced and an archaeological impact assessment of drill target areas may be undertaken. An assessment of the local area may be undertaken to inform future new camp siting and airstrip improvements.

Construction, modification or maintenance activities may include the following:

- Camp expansion, to accommodate up to 40 persons and provide suitable isolation facilities;
- Installation of bulk fuel storage.

Appendix A. NWB Standard Water Licence Report Form, 2BM-ULU2030

Annual Report-2020
2BM-ULU2030

NWB Annual Report

Year being reported:

Select ▼

2020

License No: 2BM-UL2030

Issued Date: May 13, 2020

Expiry Date: May 12, 2030

Project Name: Ulu Gold Project

Licensee: Blue Star Gold Corp.

Mailing Address: 500-700 W. Pender St.
Vancouver, BC
V6C 1G8

Name of Company filing Annual Report (if different from Name of Licensee please clarify relationship between the two entities, if applicable):

General Background Information on the Project (*optional):

Blue Star acquired the Ulu project in early 2020 and carried out coordinated exploration program in 2020 out of both the Ulu and Hood River camps (licenced under 2BE-HRP1924).

Licence Requirements: the licensee must provide the following information in accordance with

Part C ▼ Item 1 ▼

A summary report of water use and waste disposal activities, including, but not limited to: methods of obtaining water; sewage and greywater management; drill waste management; solid and hazardous waste management.

Water Source(s):	West Lake (domestic), Various (drilling)	
Water Quantity:	60 m3/day	Quantity Allowable Domestic (cu.m)
	161.3 m3 total	Actual Quantity Used Domestic (cu.m)
	239 m3/day	Quantity Allowable Drilling (cu.m)
	2332 m3 total	Total Quantity Used Drilling (cu.m)

Waste Management and/or Disposal

- ☒ Solid Waste Disposal
- ☒ Sewage
- ☒ Drill Waste
- ☒ Greywater
- ☒ Hazardous
- ☒ Other:

See below

Additional Details:

Non-hazardous solid waste staging for disposal in future landfill, petroleum hydrocarbon contaminated soil sampling and staging for treatment in the future soil treatment facility.

A list of unauthorized discharges and a summary of follow-up actions taken.

Annual Report-2020
2BM-ULU2030

Spill No.: (as reported to the Spill Hot-line)

Date of Spill:

Date of Notification to an Inspector:

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Jug leaked within secondary containment. Secondary containment vessel was cracked, spilled fluid leaked out of containment through the crack to the ground beneath. Spill was contained, contaminated material excavated and packaged for

Spill No.: (as reported to the Spill Hot-line)

Date of Spill:

Date of Notification to an Inspector:

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

During vehicle maintenance, 12 L of hydraulic oil was released to the shop floor; this portion of the shop floor is unlined and composed of wood cribbing. Once detected, oil sorbent materials were applied to the spill area. Once the oil had been absorbed, the spent materials were placed in an appropriate container and backhauled to our hazardous waste receiver in Yellowknife for proper handling and disposal.

Spill No.: (as reported to the Spill Hot-line)

Date of Spill:

Date of Notification to an Inspector:

Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

A pool of liquid was observed under the loader during operator's morning equipment check prior to starting work. Once it was determined that there had been a release, the area of stained sand was excavated, < 0.05 m³. The sand was containerized for suitable treatment and disposal.

Revisions to the Spill Contingency Plan

Other: (see additional details)



Additional Details:

Refer to Section 6 of the Annual Report and attached consolidated Plan.

Revisions to the Abandonment and Restoration Plan

Other: (see additional details)



Additional Details:

Refer to Section 6 of the Annual Report and attached consolidated Plan.

Progressive Reclamation Work Undertaken

Additional Details (i.e., work completed and future works proposed)

Refer to Sections 3.3 and 7 of the Annual Report.

Results of the Monitoring Program including:

The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where sources of water are utilized;

Details attached



Additional Details:

The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where wastes associated with the licence are deposited;

Details attached



Additional Details:

Results of any additional sampling and/or analysis that was requested by an Inspector

No additional sampling requested by an Inspector or the Board



Additional Details: (date of request, analysis of results, data attached, etc)

Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.

No additional sampling requested by an Inspector or the Board



Additional Details: (Attached or provided below)

Any responses or follow-up actions on inspection/compliance reports

No inspection and/or compliance report issued by INAC



Additional Details: (Dates of Report, Follow-up by the Licensee)

Any additional comments or information for the Board to consider

Schedule J refers to sampling and analysis for chlorine. Blue Star believes this parameter should instead be chloride as per direction from the NWB to the past licensee on May 8, 2006. This communication has been included with the Annual Report for reference.

Date Submitted:

March 26, 2021

Submitted/Prepared by:

Sharleen Hamm

Contact Information:

Tel:

604-996-1110

Fax:

email: sharleen.hamm@bluestargold.ca

GPS Coordinates for water sources utilized

Source Description	Latitude			Longitude		
	Deg °	Min ,	Sec ,	Deg °	Min ,	Sec ,
West Lake	66	54	27	110	59	4
Runoff water accumulated in depression outside portal entrance	66	54	25	110	58	11
Lake north of West Lake	66	54	45	110	58	48
Lake near Contact zone	66	55	32	110	58	48

GPS Locations of areas of waste disposal

Location Description (type)	Latitude			Longitude		
	Deg °	Min ,	Sec ,	Deg °	Min ,	Sec ,
Camp sump	66	54	30	110	58	9.59
Core saw sump (existing mine sump)	66	54	25	110	58	3.45
Incinerator	66	54	28	110	58	6.81
Cuttings sump located +/- 20-30 m of drill set-up for hole BS-2020-ULU-001	66	54	26.61	134	58	50.01
Cuttings sump located +/- 20-30 m of drill set-up for holes BS-2020-ULU-002, -003	66	54	26.78	134	58	18.91
Cuttings sump located +/- 20-30 m of drill set-up for hole BS-2020-ULU-004	66	54	42.13	134	58	47.44
Cuttings sump located +/- 20-30 m of drill set-up for holes BS-2020-ULU-005, -006	66	54	33.99	134	58	34.04
Cuttings sump located +/- 20-30 m of drill set-up for holes BS-2020-ULU-007, 008	66	54	49.16	134	58	25.39
Cuttings sump located +/- 20-30 m of drill set-up for holes BS-2020-ULU-009, -010	66	54	50	134	58	29.09
Cuttings sump located +/- 20-30 m of drill set-up for hole BS-2020-ULU-011	66	55	34.86	134	58	53.98
Cuttings sump located +/- 20-30 m of drill set-up for hole BS-2020-ULU-012	66	55	28.69	134	58	45.76

From: David Hohnstein [Tech2@nwb.nunavut.ca]

Sent: Monday, May 08, 2006 11:17 AM

To: Dave Stevenson

Cc: Phyllis Beaulieu; Philippe di Pizzo

Subject: Re: SNP - Chlorine or Chloride?

Hello Dave,

It took me awhile to find it but if you look to the Decision that was handed down by the Board in 2000, there are two sections that refer to Chlorine, and none that include Chloride.

In looking at the first section, it is pretty clear that the intended parameter to be tested for was Chloride, in reference to drilling salts used in exploration. It is followed up in the Conclusions section where the parameters were to be added to the SNP monitoring. There was no reference in the Decision to monitoring for Chlorine based on other uses or issues at site or requests from intervenors. See below.

Section IV, Item F reads "... the Board notes that salts are used regularly as an additive in drilling in permafrost areas to prevent freezing and therefore has decided to include parameters (Conductivity, **Chlorine**, Sodium, and Calcium) in the SNP to assess effluent quality." and Section V, Item F reads " Surveillance Network Program: Add Conductivity, **Chlorine**, Sodium, and Calcium to evaluate water quality in consideration of drilling effluent at SNP Station 200-2 and 200-3... ".

As this item is only for "monitoring" purposes and not for compliance with respect to the water quality of the releases, this should not require anything substantial to get changed. You may use this email as reference to the confirmation to monitor for Chloride in place of the Chlorine (as indicated in the SNP) for stations 200-2 and 200-3. I will check to see if the NWB will need to issue an official "errata" to make the correction to the licence, and will follow up if necessary.

Regards,

Dave

----- Original Message -----

From: [Dave Stevenson](#)

To: [David Hohnstein-NWB](#)

Sent: Monday, May 08, 2006 11:27 AM

Subject: SNP - Chlorine or Chloride?

Dave:

Leslie Gomm and I were discussing what has to be analysed as part of your SNP at Ulu. We noticed in the License we are required to analyse for chlorine from the settling/neutralization ponds. Leslie is questioning whether this is a typo and if in fact it should be chloride? Please confirm. If chlorine is correct, where would it be coming from that would be of concern?

Regards,

David B. Stevenson, M.Sc., P.Geo.

Exploration Manager, Ulu

Wolfden Resources Inc.

309 Court Street South

Thunder Bay, Ontario

P7B 2Y1

TBay Tel: (807) 346-2762

TBay Fax: (807) 345-0284

Cell: (807) 624-6255

Ulu Tel: (416) 987-9167

Email: dave.stevenson@wolfdenresources.com

Appendix B. Compliance Assessment, 20EN001

Following a compliance assessment of terms and conditions as well as monitoring and reporting requirements associated with the Screening Decision, it was determined that Blue Star was in compliance with all requirements, except for those listed below. Note that some requirements did not apply in 2020 because activities were not undertaken, facilities not constructed, or conditions/features not encountered.

Authorization	Type of Item	#	Condition	Compliance Status	Blue Star Action/Commitment
20EN001	T&C	67	The Proponent shall clearly stake and flag pit and quarry boundaries so they remain visible to other land users.	Esker quarrying occurred in an existing disturbed area. Unknown if closing crew staked boundaries.	Investigate esker quarry boundaries during 2021 field program to confirm compliance status. If not staked and flagged, install staked and flags before the end of the field season.
20EN001	M&R	2	The Proponent shall submit an Abandonment and Restoration Plan to the Nunavut Impact Review Board, Crown-Indigenous Relations and Northern Affairs Canada and the Government of Nunavut- Department of Environment prior to undertaking activities in the potential development area. The Plan should include procedures for using native plant species for re-vegetation in order to eliminate risk of introducing invasive species to the area pursuant to the Wildlife Act.	Submitted to the NRB in March 2020, along with an application to renew and amend the water licence. Plan was approved pursuant to 2BM-ULU2030.	Approved and updated plan submitted to the NRB with 2020 annual report.

Appendix C. Photos



Photo 1. Ulu camp, July 2020



Photo 2. Ulu camp, with new sleepers, isolation tents, repaired mess tent and partially demolished sleeper wing.



Photo 3. Ulu waste staging area, portal and mine sump



Photo 4. Ulu landfill area, access routes established



Photo 5. Waste staging



Photo 6. Excavating contaminated soil from the unlined portion of Ulu shop floor



Photo 7. New Ulu camp fuel cache



Photo 8. Ulu airstrip fuel cache and laydown area



Photo 9. Reclaimed drill site

Appendix D1. Monitoring Program Results: ULU-1

Date	Total (m ³ /day)	Date	Total (m ³ /day)	Date	Total (m ³ /day)
9-Jul-20	1.32	13-Aug-20	1.727	17-Sep-20	1.554
10-Jul-20	1.32	14-Aug-20	3.182	18-Sep-20	1.867
11-Jul-20	1.32	15-Aug-20	1.846	19-Sep-20	1.836
12-Jul-20	1.32	16-Aug-20	1.591	20-Sep-20	2.288
13-Jul-20	1.32	17-Aug-20	2.046	21-Sep-20	2.681
14-Jul-20	1.32	18-Aug-20	1.591	22-Sep-20	1.976
15-Jul-20	1.32	19-Aug-20	1.591	23-Sep-20	2.020
16-Jul-20	1.32	20-Aug-20	1.364	24-Sep-20	2.097
17-Jul-20	1.32	21-Aug-20	1.591	25-Sep-20	2.226
18-Jul-20	1.32	22-Aug-20	1.591	26-Sep-20	2.166
19-Jul-20	1.32	23-Aug-20	1.591	27-Sep-20	2.523
20-Jul-20	1.32	24-Aug-20	1.818	28-Sep-20	2.504
21-Jul-20	1.32	25-Aug-20	1.591	29-Sep-20	3.042
22-Jul-20	1.32	26-Aug-20	1.546	30-Sep-20	2.706
23-Jul-20	1.32	27-Aug-20	1.591	1-Oct-20	1.832
24-Jul-20	1.32	28-Aug-20	1.158	2-Oct-20	1.780
25-Jul-20	1.32	29-Aug-20	2.144	3-Oct-20	2.117
26-Jul-20	1.32	30-Aug-20	1.649	4-Oct-20	1.789
27-Jul-20	1.32	31-Aug-20	2.222	5-Oct-20	2.132
28-Jul-20	1.32	1-Sep-20	2.802	6-Oct-20	0.892
29-Jul-20	1.32	2-Sep-20	2.156		
30-Jul-20	1.32	3-Sep-20	2.370		
31-Jul-20	1.32	4-Sep-20	2.340		
1-Aug-20	1.896	5-Sep-20	1.784		
2-Aug-20	1.591	6-Sep-20	2.189		
3-Aug-20	1.259	7-Sep-20	1.630		
4-Aug-20	1.318	8-Sep-20	2.479		
5-Aug-20	1.546	9-Sep-20	2.103		
6-Aug-20	1.818	10-Sep-20	2.272		
7-Aug-20	1.591	11-Sep-20	2.477		
8-Aug-20	1.682	12-Sep-20	2.594		
9-Aug-20	1.818	13-Sep-20	2.543		
10-Aug-20	1.591	14-Sep-20	2.202		
11-Aug-20	1.591	15-Sep-20	2.005		
12-Aug-20	1.591	16-Sep-20	2.243		

Appendix D2. Monitoring Program Results: ULU-4b

Date, 2020	Month	July	Aug	Sept
	Day	29		22
Station	Units	ULU-4b	ULU-4b	ULU-4b
Volume	m ³	No flow, standing water	Dry	Dry
T-Arsenic	mg/L	0.00208	-	-
T-Copper	mg/L	0.00525	-	-
T-Nickel	mg/L	0.00063	-	-
T-Mercury	mg/L	<0.0000050	-	-
T-Cadmium	mg/L	0.0000053	-	-
T-Lead	mg/L	0.000097	-	-
T-Zinc	mg/L	<0.0030	-	-
Total Suspended Solids	mg/L	<3.0	-	-
pH (field)		8.45	-	-
Conductivity (lab)	µS/cm	-	-	-
Conductivity (field)	µS/cm	400	-	-
Chlorine	mg/L	-	-	-
Sodium	mg/L	8.56	-	-
Calcium	mg/L	43.5	-	-
Alkalinity	mg/L	-	-	-
Chloride	mg/L	10.7 ¹	-	-
Sulphate	mg/L	-	-	-
Turbidity	NTU	-	-	-
TDS	mg/L	-	-	-
Ammonia	mg/L	-	-	-
Nitrate	mg/L	-	-	-
Nitrite	mg/L	-	-	-
Fecal coliforms	CFO/100mL	-	-	-

¹ Not previously reported.

Appendix D3. Monitoring Program Results: ULU-7

Date, 2020	Month	July	Aug	Sept
	Day	31	27	22
Station	Units	ULU-7	ULU-7	ULU-7
Volume	m ³	No flow, standing water	0.00003 ¹²	Dry
T-Arsenic	mg/L	0.00172 ²	0.00064	-
T-Copper	mg/L	0.00315 ²	0.00331	-
T-Nickel	mg/L	0.00156 ²	0.00359	-
T-Mercury	mg/L	<0.0000050 ²	<0.0000050	-
T-Cadmium	mg/L	0.000006 ²	0.0000726	-
T-Lead	mg/L	<0.000050 ²	0.000072	-
T-Zinc	mg/L	0.0056 ²	0.0058	-
Total Suspended Solids	mg/L	3.4 ²	<3.0	-
pH (field)			7.74	-
Conductivity (lab)	µS/cm	307 ²	557	-
Conductivity (field)	µS/cm	-	69	-
Chlorine	mg/L	-	-	-
Sodium	mg/L	6.33 ²	27.1	-
Calcium	mg/L	42.7 ²	62.4	-
Alkalinity	mg/L	59 ²	45.3	-
Chloride	mg/L	4.6 ²	55.1	-
Sulphate	mg/L	86.1 ²	154	-
Turbidity	NTU	-	-	-
TDS	mg/L	186 ²	375	-
Ammonia	mg/L	<0.0050 ²	0.116	-
Nitrate	mg/L	0.366 ²	2.74	-
Nitrite	mg/L	<0.010 ²	<0.010	-
Fecal coliforms	CFO/100mL	-	-	-

¹ Schedule J requires monthly volume to be reported (m³). As flow was generally limited, a flow rate is provided as m³/sec.

² Previously reported values were incorrect. Correct results are presented here.

Appendix D4. Monitoring Program Results: ULU-8

Date, 2020	Month	July	Aug	Aug	Sept
	Day	31	7	26	22
Station	Units	ULU-8	ULU-8	ULU-8	ULU-8
Volume	m ³	No flow, standing water	-	0	Dry
T-Arsenic	mg/L	0.00184	-	0.00175	-
T-Copper	mg/L	0.00315	-	0.00247	-
T-Nickel	mg/L	0.0106	-	0.0202	-
T-Mercury	mg/L	<0.0000050	-	<0.0000050	-
T-Cadmium	mg/L	0.000174	-	0.000525	-
T-Lead	mg/L	<0.000050	-	<0.000050	-
T-Zinc	mg/L	0.0976	-	0.171	-
Total Suspended Solids	mg/L	7.3	-	5.3	-
pH (field)		6.55	-	6.68	-
Conductivity (lab)	µS/cm	927	-	1390	-
Conductivity (field)	µS/cm	1050	-	1567	-
Chlorine	mg/L	-	-	-	-
Sodium	mg/L	-	-	-	-
Calcium	mg/L	-	-	-	-
Alkalinity	mg/L	39.4	34.9	-	-
Chloride	mg/L	91.7	67.2	219	-
Sulphate	mg/L	289	261	379	-
Turbidity	NTU	1.14	0.57	0.35	-
TDS	mg/L	585	515	1020	-
Ammonia	mg/L	2.43	1.92	1.58	-
Nitrate	mg/L	3.24	2.93	10.6	-
Nitrite	mg/L	0.029	0.029	0.059	-
Fecal coliforms	CFO/100mL	-	-	-	-

Appendix D5. Monitoring Program Results: ULU-9

Date, 2020	Month	July	Aug	Aug	Sept
	Day	-	2	27	22
Station	Units	ULU-9	ULU-9	ULU-9	ULU-9
Volume	m ³	Not sampled	-	-	-
T-Arsenic	mg/L		0.00034	0.00028	0.00029
T-Copper	mg/L		0.00303	0.00358	0.00202
T-Nickel	mg/L		0.00174	0.00149	0.00152
T-Mercury	mg/L		<0.0000050	<0.0000050	<0.0000050
T-Cadmium	mg/L		0.0000284	0.0000223	0.0000151
T-Lead	mg/L		<0.000050	<0.000050	<0.000050
T-Zinc	mg/L		0.0061	0.0061	0.0046
Total Suspended Solids	mg/L		<3.0	<3.0	<3.0
pH (field)			7.06	7.36	7.15
Conductivity (lab)	µS/cm		-	-	-
Conductivity (field)	µS/cm		-	-	-
Chlorine	mg/L		-	-	-
Sodium	mg/L		-	-	-
Calcium	mg/L		-	-	-
Alkalinity	mg/L		-	-	-
Chloride	mg/L		-	-	-
Sulphate	mg/L		-	-	-
Turbidity	NTU		-	-	-
TDS	mg/L		-	-	-
Ammonia	mg/L		-	-	-
Nitrate	mg/L		-	-	-
Nitrite	mg/L		-	-	-
Fecal coliforms	CFO/100mL		-	<1	<1

Appendix D6. Monitoring Program Results: ULU-11

Date, 2020	Month	July	Aug	Sept
	Day	29	27	22
Station	Units	ULU-11	ULU-11	ULU-11
Volume	m ³	No flow, standing water	-	-
T-Arsenic	mg/L	0.00012	0.00014	0.00011
T-Copper	mg/L	0.00635	0.00445	0.00296
T-Nickel	mg/L	0.0025	0.00238	0.00249
T-Mercury	mg/L	<0.0000050	<0.0000050	<0.0000050
T-Cadmium	mg/L	0.0000111	0.0000103	0.0000076
T-Lead	mg/L	<0.000050	<0.000050	<0.000050
T-Zinc	mg/L	0.0069	0.0053	0.0051
Total Suspended Solids	mg/L	<3.0	<3.0	<3.0
pH (field)		7.01	7.43	7.23
Conductivity (lab)	µS/cm	-	-	-
Conductivity (field)	µS/cm	-	-	-
Chlorine	mg/L	-	-	-
Sodium	mg/L	-	-	-
Calcium	mg/L	-	-	-
Alkalinity	mg/L	-	-	-
Chloride	mg/L	-	-	-
Sulphate	mg/L	-	-	-
Turbidity	NTU	-	-	-
TDS	mg/L	-	-	-
Ammonia	mg/L	-	-	-
Nitrate	mg/L	-	-	-
Nitrite	mg/L	-	-	-
Fecal coliforms	CFO/100mL	<1	<1	<1