

Rock Creek Mine Reclamation Plan – Amended

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1 INTRODUCTION

Alaska Gold Company (AGC) has prepared this Reclamation Plan to address reclamation and post-reclamation activities for the Rock Creek Mine located north of Nome, Alaska (Figure 1). This plan outlines the closure objectives, technical approach, and performance monitoring to demonstrate compliance with all regulatory and landowner obligations. This document is intended to replace and supersede the previous approved reclamation plan.

The original 2006 plan addressed reclamation at Rock Creek and Big Hurrah project areas – assuming full mining of both deposits. However, the Big Hurrah site is 100% patented land owned by Alaska Gold Company and no mined disturbance associated with this reclamation plan is planned for Big Hurrah. The site is stable in its current condition. Therefore, no reclamation is proposed for Big Hurrah. The Rock Creek site ownership remains private and the operator – Alaska Gold Company – is now a wholly owned subsidiary of Bering Straits Native Corporation.

This Reclamation Plan has been prepared to meet Alaska Department of Natural Resources (ADNR) mine reclamation requirements pursuant to Alaska Statutes (AS) Chapter 27.19 (AS 27.19) and the Alaska Administrative Code (11 AAC 97) as applicable to private land. AGC submits this plan to ADNR in accordance with AS 27.19.010, 11 AAC 97.100, and Reclamation Plan Approval (RPA) F20069578 and F20129578.

1.1 Purpose

AGC is committed to meeting its obligations under state regulations and leaseholder agreements with respect to the Rock Creek Mine. The intent of this Reclamation Plan is to stabilize disturbed land pursuant to 11 AAC 97. Certain areas would be recontoured, topsoiled, and seeded. Drainages would be established so as to minimize any active maintenance.

1.2 Reclamation Summary and Schedule

Reclamation activities focus on three major areas of the Rock Creek Mine site—the Main Pit, Tailings Storage Facility (TSF), and the mill area. Approximately 170 hectares (ha) of disturbed area would be affected by this plan, including facilities and structures. A limited portion of the disturbed area has already been reclaimed as part of Phase 1 closure.

AGC expects most plan components to be completed as expeditiously as possible over one or two field seasons – depending on field conditions.

Closure and reclamation activities would accomplish the following:

- Obtain all necessary permits and approvals prior to initiating reclamation tasks
- Remove water from the Main Pit
- Breach the haul road at causeway – reestablishing the natural course of Rock Creek – and Brynteson Gulch
- Backfill portion of Main Pit and lower the invert to establish a free draining condition
- Recontour reclamation areas
- Add topsoil and seed
- Rip, grade, and seed access roads that will not be used during post-closure activities
- Reduce channelized flow and establish diffuse overland flow to the extent practicable
- Implement post-closure monitoring procedures

1.3 Project Location and Land Status

The Rock Creek Mine is located on the Seward Peninsula along the west coast of Alaska north of Norton Sound and approximately 8 miles north of Nome in the Snake River watershed. The site is located within Sections 14, 15, 22, 23, 24, 25, and 26, Township 10 South, Range 34 West, Kateel River Meridian, within the Cape Nome Mining District (United States Geologic Survey [USGS] Quad Map Nome C-1).

The Rock Creek Mine occurs partly on patented mining claims owned 100% by AGC, a wholly owned subsidiary of Bering Straits Native Corporation (BSNC), and partly on land owned by the Sitnasuak Native Corporation (SNC). The project does not involve any public lands.

The Rock Creek Mine is road accessible via the state maintained Teller-Nome Highway and the local Glacier Creek Road, an all-weather gravel road.

The City of Nome (population 3,600) is situated on the Bering Sea coast and serves as the logistical and administrative center for this portion of western Alaska. Nome has twice daily commercial jet service from Anchorage and large container barge service from June through October. Nome is not connected to the interior Alaskan road system.

The nearest area to the Rock Creek Mine that is closed to mineral entry is the Bering Land Bridge National Preserve, which at its closest point is more than 96 km northeast.

1.4 Operator Information

1.4.1 Corporate Officer Completing Application

Name: Jerald Brown
Title: Vice President
Phone: (907) 443-5252
Email: jbrown@beringstraits.com

1.4.1 Corporate Officer and Designated Contact

Name: Jerald Brown
Title: Vice President
Phone: (907) 443-5252
Email: jbrown@beringstraits.com

1.4.2 Corporate Information

Business Name: Alaska Gold Company, LLC
Address: P.O. Box 640 Nome, AK 99762-0640
Phone: (907) 443-5272
President & CEO: Gail Schubert

Parent Company: Bering Straits Native Corporation
Address: 4600 Debar Road, Anchorage, AK 99508-3126
Phone: (907) 563-3788
President & CEO: Gail Schubert

1.4.3 Additional Land Owner Information

Business Name: Sitnasuak Native Corporation
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Phone: (907) 387-1200

1.4.4 Individuals to Receive Notices

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1.5 Existing Reclamation Plans

AGC developed a reclamation plan in 2006 during the initial development phase of the Rock Creek Project. The 2006 plan detailed reclamation and closure of the Rock

Creek Mine, and Big Hurrah project assuming both locations were mined to their originally planned extent. As noted above, AGC has not developed the Big Hurrah project and only a small portion of the original Rock Creek mine plan has been executed. Since 2008, AGC has operated the Rock Creek Mine according to the terms of an approved Temporary Closure Plan (TCP) dated April 26, 2010. AGC has already executed Phase 1 reclamation under DNR approval F20129578. Prior to initiating final reclamation (Phase 2), RPA F20069578 requires AGC to submit final reclamation plans to ADNR for review and approval. This March 2015 plan is intended to satisfy that requirement.

1.6 Regulatory Basis

This Reclamation Plan is prepared to meet ADNR reclamation requirements pursuant to AS 27.19 and 11 AAC 97 as applicable to private land.

Reclamation plan requirements apply to areas disturbed by the proposed mining operations, including any mining disturbance occurring on previously mined areas. The Rock Creek Mine is located on private lands. As such, it must comply with the reclamation standards set out in the Alaska mining laws and regulations, and meet criteria that include:

- AS 27.19, Reclamation Section, 27.19.050 Reclamation Standard: A mining operation shall be conducted in a manner that prevents unnecessary and undue degradation of land and water resources, and the mining operation shall be reclaimed as contemporaneously as practicable with the mining operation to leave the site in a stable condition.

Definitions:

- Unnecessary and undue degradation is defined to mean: Surface disturbance greater than would normally result when an activity is being accomplished by a prudent operator in usual, customary, and proficient operations of similar character and considering site specific conditions. It also includes: The failure to initiate and complete reasonable reclamation under the reclamation standard (above) or an approved reclamation plan under AS 27.19.030 (a).
- Stable condition is defined to mean: The rehabilitation, where feasible, of the physical environment of the site to a condition that allows for the re-establishment of renewable resources on the site within a reasonable period of time by natural processes [in accordance with the post-mining land use].

Project reclamation plans are subject to land reclamation standards under 11 AAC 97.200:

- A miner shall reclaim areas disturbed by a mining operation so that any surface that will not have a stream flowing over it is left in a stable condition.
 - Stable condition for the purposes of the Alaska State Statute

definition listed above and for the purposes of 11 AAC 97.200 means a condition that can reasonably be expected to return waterborne soil erosion to pre-mining levels within one year after the reclamation is completed, and that can be reasonably expected to achieve revegetation, where feasible, within 5 years without the need of fertilizers or reseeded.

- If not feasible due to low natural fertility of the mined site soils, or if the site lacks a natural seed source, the department (ADNR) recommends the miner fertilize and re-seed or replant the site with native vegetation to protect against soil erosion – but this is not required by statute.
 - Rehabilitation to allow for the reestablishment of renewable resources is not required if that reestablishment would be incompatible with the post-mining land use intended by the private land owner, but the miner should inform ADNR of the intended post-mining land use.
 - If topsoil disturbed is not promptly redistributed it should be segregated, protected from erosion and from contamination, and preserved in a condition suitable for later use.
 - If the natural composition, texture or porosity of the surface materials is not conducive to natural revegetation a miner should take measures to promote revegetation including redistribution of topsoil. If topsoil is not available then a miner shall apply fines or other suitable growing medium – but do not apply to surfaces likely to be exposed to annual flooding, unless the action is authorized in an approved reclamation plan and will not result in an unlawful point, or non-point-source discharge of pollutants.
 - Re-contouring shall be done in a manner conducive to natural revegetation or with the landowners' intended post-mining land use by backfilling, contouring and/or grading – miner need not restore original contours.
 - Shall re-stabilize the site to a condition that will retain sufficient moisture for natural revegetation or for the landowners' intended post-mining land use.
 - Pit walls, subsidence features, or quarry walls exempt if the steepness makes them impracticable to accomplish. Miner shall leave wall in a condition that it will not collapse nor allow loose rock that presents a safety hazard to fall from it.
- If a mining operation diverts a stream channel to the extent that the stream channel is no longer stable, a miner shall re-establish that stream channel in a stable location. A miner may not place a settling basin in the way of a re-established channel unless the fines will be removed and protected from erosion.
 - Regulations regarding the removal of buildings and infrastructure are

applicable only to state lands.

- Acid Rock Drainage – A miner shall reclaim a mined area that has the potential to generate acid rock drainage in a manner that prevents the generation of, or prevents the offsite discharge of, acid rock drainage.
- Material Sites – Material sites shall be reclaimed as contemporaneously as practicable with mining. Cell by cell development with contemporaneous reclamation is encouraged. However, if site conditions require that the entire material site be mined continuously, layer by layer, a miner shall reclaim the site as soon as possible after mining is completed. Reclamation may be postponed at the discretion of the Commissioner (ADNR), and with additional reclamation plan and bonding requirements, if reclamation is impracticable and/or to allow for future intermittent mining of the material site. If the primary use of the extracted materials is to assist another mining operation, the miner must include the reclamation plan for the material site as part of the reclamation plan for the primary mine.
- Stockpiles, located at mining sites, are to be located where they will not erode into a water body.
- Reclamation Plan Submittal – A reclamation plan must be submitted 45 days before the proposed start of the mine. The Commissioner will approve or disprove within 30 days after determination of completeness.
- Alternate Post-Mine Planning Use – The Commissioner may not propose an alternate post-mining land use if the land is on privately owned lands. The landowner may propose an alternate post-mining land use, but must include a description of the proposed alternate use in the reclamation plan.
- Posting – Must keep a copy of the approved reclamation plan on site until completion of the mining operation.

In addition, this reclamation plan is also subject to the general and project-specific stipulations contained in the approval of this plan.

2 PROJECT DESCRIPTION

The Rock Creek Mine is located approximately 8 miles north of Nome in the Snake River drainage on private lands owned by SNC (surface rights) and AGC (surface and sub-surface rights). Development activities at the Rock Creek Mine began in 2006 and were originally intended to include an open-pit mine, with two non-acid-generating development rock stockpiles, a gold recovery plant, and a paste TSF. After a brief period of operation in fall 2008, AGC ceased mining and milling operations at the Rock Creek Mine and entered temporary closure. Only one rock stockpile was constructed, and only a small portion of the Main Pit was excavated. Support facilities include the mill/gold recovery plant, maintenance shop, administration buildings, warehouse, WTP, and fuel storage locations.

2.1 Historic Mining

Limited mining began in the Nome area in 1865, while a gold strike on Anvil Creek in 1898 started the Nome Gold Rush, bringing tens of thousands of miners to the region. The discovery led to the construction of the Nome-Anvil railroad in 1900, which paralleled a portion of what is now the Glacier Creek Road. Claims were extensively staked along the Glacier Creek Road, with known mining activity in the proximity of Glacier Creek, Rock Creek, and Lindblom Creek. Historical artifacts of this turn-of-the-century mining activity still exist at the Rock Creek Mine site. A Cultural Resource Survey, reviewed by the State Historic Preservation Office (SHPO), concluded that none of the artifacts would be affected by activities at the Rock Creek Mine.

Continuous intermittent mining has existed along the Glacier Creek Highway, the Nome-Council Highway, and the Seward Peninsula over the last 100 years. Currently, there are four active placer-mining operations along Glacier Creek Road, and one active placer miner operation along the Nome-Council Highway.

2.1.1 Prior Land Use

The Snake River Valley, which is accessed by the Glacier Creek Road and a sled dog/snow-machine/all-terrain vehicle (ATV) trail, has a long-standing prior use as a subsistence hunting area. The area is particularly important for moose, but is also utilized for bear, caribou, and bird hunting. Musk oxen are also present in the area. Reindeer herding occurs on the Seward Peninsula and the herd at times grazes within the Snake River Valley. Fishing and berries are additional subsistence resources utilized by the local population.

There are approximately 10 to 15 recreational/hunting cabins located along the Glacier Creek Road. There is one year-round resident located at the confluence of the Snake River and Glacier Creek. There are remains of historic cabin sites within the Rock Creek Mine and Mill complex footprint, but no active cabin sites presently exist on the property.

All lands within the Rock Creek Mine footprint are private lands owned by AGC and Sitnasauk Native Corporation (SNC). The peripheral lands that are owned by BSNC and SNC are open for shareholder use for recreational and subsistence purposes. Public access to the Rock Creek Mine site is controlled.

2.1.2 Post-Mining Land Use

Following reclamation, BSNC and SNC propose commercial use of the Rock Creek mine area and facilities. Such uses could include (1) sale of mining equipment, (2)

material storage, (3) construction staging, (4) source of construction materials (e.g. steel), (5) material handling, (6) power infrastructure for Pilgrim Hot Springs Geothermal Power Project transmission/construction/operation, or (7) future mining (e.g. the stockpile has gold value and might be processed).

Such commercial land use is consistent with the AGC owned land parcel in Nome referred to as Satellite Field. That area was developed by the government as an airfield during World War II. It became a site for processing pavement, aggregate mining and staging, placer mining, material storage and staging, and other miscellaneous commercial purposes. Such a model could be applied to Rock Creek facilities.

2.2 Environmental Settling

The Rock Creek Mine site is bounded on the north and east by Mount Brynteson, to the west by the Snake River, and on the south by Glacier Creek. Elevation varies from 100 feet above mean sea level (amsl) to 650 feet amsl. The property is located within the Bering Straits Coastal Resource Services Area (CRSA) north of Norton Sound.

The Rock Creek Mine site lies within the Snake River catchments. The Snake River flows about 18 km below its confluence with Rock Creek to Norton Sound near Nome and has a 220 km² catchment area. The Rock Creek Mine site is situated on the eastern side of the Snake River valley. Three creeks, all tributary to Snake River, are in the immediate vicinity of the mine site (1) Lindblom Creek to the north, (2) Rock Creek in the middle, and (3) Glacier Creek to the south.

The climate and physiography create typical high latitude vegetation. Tundra, consisting of low lying shrubs, mosses, lichens, and grasses cover a majority of the region. Higher regions have areas of bedrock outcrop. Discontinuous permafrost has been documented in the mine area.

2.2.1 Climate

Prior to mine development, regional climate data were evaluated to estimate an extended monthly precipitation and temperature dataset for the Rock Creek Mine site. Precipitation frequency analysis was completed on the precipitation dataset to estimate average, and wet and dry values for various return periods.

The regional data utilized for this task were as follows:

- Daily precipitation and temperature data from the Nome Airport weather station from 1907 through 2003 (National Climatic Data Center)
- Daily precipitation data for 2005 from an onsite meteorological station

3 Temperature

The annual average temperature at the site, based on data collected as part of baseline data collection, was near freezing (0.6° C). The maximum and minimum hourly temperatures recorded during the time period were 29.5° C and -33.3° C, respectively. The site temperatures at lower elevations are expected to be similar to Nome, as the site is fairly close to Norton Sound.

Precipitation

Sources for precipitation data at the Rock Creek Mine site include the Oregon State Spatial Climate Analysis Service (SCAS), U.S. Weather Bureau Precipitation Atlases, and the Western Regional Climate Center. Based on the data available, the annual total precipitation at the Rock Creek Mine site is 19 inches.

The average total annual precipitation at Nome, based on data from the SCAS, U.S. Weather Bureau Precipitation Atlases, and the Western Regional Climate Center data, is 15.4 inches. The extreme wet and dry years, calculated based on the 57 years of available monthly data collected in Nome, are 26.9 inch and 7.4 inch of precipitation, respectively.

Precipitation occurs throughout the year with the wettest months (on average) occurring in July, August (wettest), and September. The least amount of precipitation, falling as snow, occurs in March, April, and May (driest). The moderating influence of the open water of Norton Sound is effective from early June to about the middle of November.

Overcast conditions are common during July and August. Temperatures generally remain well below freezing from the middle of November to the latter part of April. Snow begins to fall in September, but usually does not accumulate on the ground until the first part of November. The snow cover decreases rapidly in April and May, and normally disappears by the middle of June. Severe wind storms are common.

The precipitation record indicates wet periods from 1920 to 1925 (average of about 21.7 in/year) and 1942 to 1952 (average of about 19.7 in/year) and a dry period from 1960 to 1980 (average of about 12.6 in/year). Average Nome Airport precipitation from 1985 through 2005 was 17.4 inch.

3.1.1 Geologic Setting

Glacial, alluvial and tectonic processes shaped the eastern wall of the Snake River Valley, upon which the Rock Creek Mine site lies. The hydrogeology of the Rock Creek basin is controlled by the surficial and bedrock geology, the topographic

setting as well as the climate and hydrology. Steep slopes of local bedrock dominate the higher elevations. The surface topography quickly shallows over the 2.4 mile creek path, which ends on the alluvial valley fill of the Snake River.

Within the Rock Creek drainage the dominant bedrock is a well foliated, “wavy” banded, quartz-muscovite schist containing varying proportions of carbonate graphite/carbon and chlorite. Outcrops and near surface bedrock are highly weathered and fractured.

Regionally, shales, siltstones, marls, and limestone – shallow water continental shelf setting deposits – discontinuously overlie the schist.

Quaternary deposits include glacial, alluvial, and colluvial materials. The bottom of the Rock Creek valley holds a quaternary fill of predominately sand and gravel. West of the Rock Creek Mine site, the Snake River valley holds a quaternary alluvial fill. The remnants of abandoned and cutoff meanders are apparent on the valley floor. Alluvial fans from Lindblom, Rock, and Glacier Creeks overlie Snake River alluvium.

The Boulder Creek Fault strikes northwest directly above the main pit area, the Rock Creek Fault underlies the creek bed which runs through the pit and Sophies Gulch Fault, a low angle normal fault, can be seen in the surface topography at the southeast corner of the main pit. Three other high angle strike slip faults, all of which strike north, are the Anvil Fault, Brynteson Fault, and Upper Albion Creek Fault.

3.1.2 Permafrost

The Rock Creek Mine site is located near a regional boundary between continuous and discontinuous permafrost, with permafrost depths approaching approximately 330 feet in the Nome area. The surface zone of the permafrost horizon termed the “active layer” repeatedly thaws and freezes on an annual basis as the seasonal air temperatures changes. This zone generally consists of approximately 2 to 3 m at the Rock Creek Mine site.

3.1.3 Groundwater Hydrology

The estimated annual recharge in the Rock Creek basin is approximately 7.9 inch, based on rainfall, estimated evapotranspiration, and limited runoff measurements. The presence of permafrost over the catchment locally reduces groundwater recharge.

In general, groundwater recharge in sub-arctic discontinuous permafrost regions initiates as surface infiltration from snowmelt and rainfall and from uphill streams and surface water features which are perched on the permafrost. The infiltrated water may be transmitted downslope as shallow subsurface flow or percolate through gaps or

holes in the permafrost.

There is a significant quantity of groundwater moving downstream in the alluvium within the Rock Creek valley. The permeability of this alluvium was probably enhanced by dredging operations.

Recharge of groundwater in the Snake River alluvium occurs as (1) infiltration and percolation of direct precipitation, (2) upward seepage of groundwater in bedrock, and (3) lateral groundwater flow from tributary streams. Tributary alluvial fans (Rock Creek, Lindblom Creek, and Glacier Creek) transmit considerable water as a result of higher hydraulic conductivity and gradients than the underlying Snake River alluvium.

Bedrock drilling with an air rotary rig results in significant water returns, to full depth, in many of the drill holes. This indicates at least moderate bedrock permeability over a significant portion of the site.

3.1.4 Surface Water Hydrology

The Rock Creek catchment is approximately 1,285 acres in area.

Lindblom Creek has a smaller catchment than Rock Creek while Glacier Creek is larger, encompassing the entire east and south side of Mount Brynteson. All of these creeks are tributary to the Snake River.

The local discharge of groundwater into Rock Creek is apparent from the presence of winter base flow, artesian open drill holes, and from the chemistry of Rock Creek water. Another source of Rock Creek flow is a significant quantity of water that transmits down the slope as shallow subsurface flow, with visible seepage face in the banks of Rock Creek. These groundwater flow paths attenuate storm peaks.

3.1.5 Ecology

According to the U.S. Forest Service classification system, the Rock Creek Mine site is located within the Seward Peninsula Tundra – Meadow ecological sub region. The terrain is fairly hilly with broad and narrow valleys. Forested areas and trees are generally non-existent, although closed willow thickets exist in wetland areas.

On hill slopes and ridges, thin soils are formed over slightly weathered bedrock. Soils in the vicinity include Histic Pergelic Cryaquepts with loamy or gravelly textures. They tend to be poorly drained with a shallow permafrost table at a depth of 5.1 to 30 inch. Soils formed in moderately deep loamy sediment are underlain by very gravelly and stony material and support tundra vegetation.

Vegetation in the area consists mostly of tundra mat, sedges, shrubs, mosses, lichens,

willows, and in some places, cottonwoods. The Seward Peninsula is home to more than 170 species of birds, and small mammals including Arctic foxes, Alaskan hares, land otters, lynxes, and ground squirrels.

Prior to mining, approximately 682 acre of wetlands occurred within the project area. The type and distribution of wetlands within the project area reflect surrounding areas, most of which is undisturbed and in a natural state. Open sedge/shrub tundra wetland is the dominant vegetation community covering approximately 40% of the project area and comprising approximately 70% of all wetlands at the site. Other wetland communities, in descending order of abundance, include closed willow thicket wetlands, shrub/sedge tundra communities, and close-flooded willow thicket wetlands which lie along the perimeter of Rock Creek and its riverine habitat.

4 ENVIRONMENTAL PERMITS

4.1 Reclamation Plan

ADNR (Division of Mining, Land and Water) has issued RPA No. F20069578 and F20129578 for the Rock Creek Mine. The RPAs were issued in accordance with Alaska Statutes 27.19 (Reclamation) and 38.05 (Alaska Lands Act), and Alaska Administrative Code Title 11, Chapter 97 (Mining Reclamation).

4.2 Land Application Authorization

ADEC has issued an authorization to land apply pit water.

4.3 MULTI-SECTOR GENERAL PERMIT FOR STORMWATER DISCHARGES

AGC is currently permitted to discharge stormwater associated with industrial activities at the Rock Creek Mine site under the ADEC Multi-Sector General Permit (MSGP), tracking number AKR05DB98. The MSGP requires a facility to develop a storm water pollution prevention plan (SWPPP) that implements a series of structural and non-structural BMPs to minimize the potential for storm water to impact nearby surface waters. AGC obtained initial coverage for construction-related storm water discharges from the Rock Creek Mine site in 2005, including preparing a SWPPP in August 2006 based on the existing Plan of Operations. After the Rock Creek Mine site was placed into temporary closure status, AGC prepared a revised SWPPP in 2009 to address activities occurring under care and maintenance at the Rock Creek Mine site only. Additional revisions to the SWPPP were made in 2010, 2011, and 2012 to reflect ongoing activities at the Rock Creek Mine site.

Coverage under the MSGP is required until major land disturbing activities have ceased and disturbed areas have achieved final stabilization. From 2008 to 2012,

AGC significantly upgraded many of the Rock Creek Mine site's structural controls to effectively manage storm water and reduce solids loadings to Rock and Lindblom creeks. Additional land stabilization activities were completed during 2012, after which time AGC has achieved full stabilization of all disturbed areas covered by the MSGP.

Stormwater discharges from the Rock Creek Mine site into Rock Creek and Lindblom Creek; there are no storm water discharges to Glacier Creek. The Rock Creek Mine site SWPPP includes discharge, upstream, and downstream monitoring at eight locations in the Rock Creek and Lindblom Creek drainages. There are no effluent limitations in the MSGP that apply to these locations. However, the MSGP requires compliance with Alaska's water quality standards. The governing water quality standard for storm water discharges is the State's turbidity standard, which requires that stormwater discharges not cause downstream turbidity levels to be more than five Nephelometric Turbidity Units (NTUs) above background levels.

4.4 Underground Injection Control Permit

AGC is authorized to inject treated TSF water into the upper shallow bedrock aquifer near the mine under an EPA-administered Class V UIC permit. Class V wells are used to inject non-hazardous fluids underground into or above potential drinking water sources. AGC filed an application to authorize up to 15 Class V wells on August 5, 2007. EPA adopted the UIC permit effective January 15, 2008, although underground injection was not authorized to proceed until well integrity was sufficiently demonstrated and the proper completion reports filed with the agency. Thereafter, AGC requested a minor modification to the UIC permit to authorize the installation of an additional 15 injection wells. EPA concurred with the minor modification in August 2009. Presently, AGC is authorized to construct and operate up to 30 injection wells under terms of its UIC permit.

4.4.1 Regulatory Background

EPA has direct implementation responsibility in Alaska for the regulation of Class V injection wells through the UIC program (40 CFR 145), which is authorized by Part C of the Safe Drinking Water Act (SDWA). Class V injection wells are used for the disposal of fluids into aquifers that could serve as current or future underground sources of drinking water as defined at 40 CFR 144.3.

4.4.2 Compliance Requirements

AGC was not permitted to initiate underground injection to a well until its mechanical integrity had been demonstrated and proper completion reports filed. Treated water

injected may not exceed maximum effluent concentrations contained in the permit (UIC Permit Table 1). EPA must be notified of any permit non-compliance within 24 hours by phone or email, followed by written notice within seven working days. Quarterly and annual reports summarizing compliance activities for the period are submitted.

4.5 U.S. Army Corps of Engineers Section 404 Permit

The Rock Creek Mine site covers an area of approximately 1,300 acre across the Rock Creek, Lindblom Creek, Glacier Creek, and Snake River drainages. Prior to mining, wetlands comprised slightly more than 50% of the total project area (684 acre). To date, approximately 242 acre of wetlands have been impacted due to mine construction activities.

The U.S. Army Corps of Engineers (Corps) issued a Section 404 permit (POA-2006-742-M) to AGC on March 13, 2007, expiring on February 29, 2012. ADEC issued a Certificate of Reasonable Assurance for the proposed project on August 18, 2006, expiring on August 17, 2011. On February 13, 2012 permit authorization was extended through December 31, 2015. No additional impacts to wetlands requiring a 404 permit is contemplated in this reclamation plan.

4.5.1 Regulatory Background

Construction projects that may result in the discharge of dredge material to or placement of fill material in a Water of the U.S. must obtain discharge authorization under Section 404 of the Clean Water Act (CWA). The Rock Creek Mine site consists of excavation and fill activities within jurisdictional wetlands, thus requiring permit coverage from the Corps.

4.5.2 Scope of Permitted Activities

The Section 404 permit authorizes the discharge of fill materials at the Rock Creek Mine site for the following activities, which have disturbed a total of 242 acre to date:

- Rock storage
- Organic material storage
- Storm water diversion
- Water injection
- Tailings storage
- Access
- Plant site construction
- Reclamation

4.5.3 Closure and Reclamation

The Corps permit was issued on the assumption that reclamation at the Rock Creek Mine would occur following full development of the site. A final mitigation agreement was executed between the Corps and AGC that included all disturbance planned for Big Hurrah. No disturbance has occurred at Big Hurrah. Compensatory mitigation already executed along with fulfillment of this plan is adequate and no additional compensatory mitigation is required.

4.6 APDES Permit

On November 30, 2012 ADEC modified APDES Permit No. AK0053627 authorizing the discharge of treated water from the Main Pit while operating under temporary closure and final reclamation.

4.7 Air Quality Control Minor Permit

AGC holds authorization to discharge air emissions under Air Quality Control Minor Permits AQ0978MSS01, AQ0978MSS02, and AQ0978MG901. The permits address allowable emissions from processing operations, emergency generators, heating, and other emission sources associated with the mine (87 total sources). Compliance under the permits includes an annual estimate of assessable emissions and semi-annual operating reports.

No compliance issues have arisen under the air quality permit.

4.8 Temporary Water Use Permits

AGC holds temporary water use permits for Rock Creek and Big Hurrah. These permits address site activities including mine dewatering, mill processing, and the diversion of Rock Creek. The permits do not include reporting requirements. No specific requirements are listed for closure and reclamation.

4.9 Monitoring Program

The Nanuq Gold Project quarterly and annual environmental monitoring reports provide data on the ADEC/ADNR approved monitoring plan. Downgradient wells are sampled below the lower injection well field, the reclaimed recycle water pond, and tailings storage facility, which has been successfully reclaimed under Phase 1 reclamation.

4.10 Reporting

AGC is required to submit quarterly monitoring reports to ADEC summarizing all of the inspection and monitoring activities occurring during the reporting period. The 4th quarter report also serves as the annual report, which summarizes activities for the entire

calendar year. Reports for the 1st, 2nd, and 3rd quarters must be submitted no later than 60 days after the last day of the quarter, while the 4th quarter/annual report must be submitted by March 31st of the following year.

5 FACILITIES AND STRUCTURES

Existing buildings, facilities, and structures at the Rock Creek Mine site encompass several primary areas (Figure 2, Table 1).

Table 1. Site Components.

AREA	LOCATION
1	Plant Site and Stockpile
2	Main Pit and Walsh Pit
3	TSF and Diversion Channel #3
4	Injection Well Field and Diversion Channel #2
5	Explosives Storage Area and West Pit
6	Diversion Channel #1
7	Roads and Causeway

5.1 Plant Site and Stockpile – Area 1

Area 1 encompasses several smaller component areas, which would be decommissioned and reclaimed beginning in 2015 (Figure 2).

5.1.1 Administrative and Maintenance

Administrative buildings are composed of interconnected ATCO brand prefabricated structures. The truck shop (30.5 m x 10 m) includes three mobile equipment repair bays, offices, and warehouse. The central laydown area is adjacent to the Truck Shop, as well as fuel storage bladders and tanks.

5.1.2 Development Rock and Ore Stockpile

The development rock stockpile is located near the main plant site and the head of DC #2. To characterize these materials for reclamation, samples were collected of the fine (crushed) material for leachate analysis and characterization using the Meteoric Water Mobility Procedure (MWMP). Results of this testing show leachate from these materials would not degrade the quality of local water resources (Appendix A).

5.1.3 Mill and Processing Buildings

The mill and ore processing area consists of crushers on carriages, conveyors, ball mill, slurry pumps, screens, gravity separation machines, flotation cell, clean CIL leach equipment, mill building, carbon regeneration equipment and building space, twin

CAT backup generators, external plant backup generator, assay laboratory, flotation reagent structure with mix tanks and feed equipment, and electrical substation. These facilities have been cleaned of reagents and tailings under Phase 1 reclamation and are not a source of contamination. Shipping containers of hydrated lime and ferrous sulfate are located onsite. Hydrated lime and ferrous sulfate are stored on the private premises for purposes of use and/or sale.

5.1.4 Water Treatment Plant

The Rock Creek Mine WTP was commissioned on February 15, 2009 and is designed to remove metals from wastewater prior to disposal in the injection well field. Treatment is achieved through pH adjustment, chemical precipitation, oxidation, and ultra-filtration. The plant was placed into care and maintenance in fall 2012. Filters were removed for warm storage. The plant could be restarted should it be needed.

5.2 Pits – Area 2

Area 2 is comprised of the Main Pit and smaller Walsh Pit, located immediately east of the larger Main Pit (Figure 2).

5.3 Tailings Storage Facility and Diversion Channel #3 – Area 3

Area 3 comprises the TSF, TSF dam, DC #3, inert solid waste landfill, and several smaller facilities (Figure 2). The TSF was reclaimed under Phase 1 reclamation.

5.3.1 TSF Dam

Approximately 100,000 metric tons of paste tailings have been placed in the TSF, with an estimated volume of 85,000 m³.

5.3.2 Diversion Channel #3

DC #3 conveys storm water runoff around the TSF into Rock Creek.

5.3.3 Organic Stockpiles

Three organic stockpiles are maintained at Rock Creek. The total volume of organic material available for use during reclamation is approximately 1,200,000 m³.

5.3.4 Inert Solid Waste Landfill

AGC operated a small inert solid waste landfill located in the upslope area east of the TSF. This landfill was successfully covered and closed during Phase 1 reclamation.

5.4 Injection Well Field and Diversion Channel #2 – Area 4

5.4.1 Injection Well Field

The Rock Creek Mine injection well field (IWF) was developed and operated as authorized by UIC Permit No. AK-5X27-001-A, issued by EPA-Region 10 (Figure 2). Along with the Water Treatment Plant, the IWF has been in care and maintenance since fall 2012.

5.4.2 Diversion Channel #2

DC #2 conveys storm water runoff from the Rock Creek and Lindblom Creek watersheds around organic stockpile #1 into Lindblom Creek.

5.5 Explosive Magazines and West Pit – Area 5

5.5.1 Explosive Magazine Pads

Nine gravel storage pads for explosive magazines are located west of Rock Creek and the Main Pit (Figure 2).

5.5.2 West Pit

The West Pit was a small pit located west of the Main Pit and the Rock Creek channel. The pit was backfilled during Phase 1 reclamation and does not accumulate stormwater.

5.6 Diversion Channel #1 – Area 6

DC #1 conveys stormwater runoff from the upper portions of the Rock and Lindblom creek watersheds around the active mine site into Lindblom Creek. DC #1 includes an inline sedimentation basin near the channel's outlet to settle out sediment prior to discharge into Lindblom Creek (Figure 2).

In May 2010, AGC initiated modification of the channel, which resulted in separating the original channel into multiple sections. Rock and Albion Creeks now crosscut the diversion in their original locations. The culverts through the haul road causeway (Area 7) were not sized for this additional drainage area. Each year (excluding 2014) breakup formed a backwater upstream of the causeway.

5.7 Road and Causeways – Area 7

Over the course of the Rock Creek project, approximately 15 km of access roads and causeways have been constructed at the Rock Creek Mine site (Figure 2).

5.8 Organic Stockpile – Area 8

Organic stockpile #1 is located north of the main plant site and is the largest of

Rock Creek’s three organic stockpiles with approximately 460,000 m³ of stored material (Figure 2).

6 CLOSURE AND RECLAMATION METHODS

This section summarizes the Reclamation and Closure Plan for the Rock Creek Mine from its current condition. This section includes the major closure and reclamation goals, strategies and activities, reclamation schedule, and important material grading and soil cover quantities. Material quantity estimates are approximate. Grading plans should be considered nominal.

The objective is to minimize water ponding and runoff channelization. That is, maximize sheet flow. Graded surfaces would receive a minimum of 15 cm (six inches) soil cover from organic stockpiles, and be reseeded. Hard rock surfaces would receive 30 cm (1 foot) of organic stockpile material.

6.1 Closure and Reclamation Goals and Strategies

This Reclamation and Closure Plan is developed to achieve:

- Compliance with applicable water quality standards and permit requirements
- Compliance with ADNR regulations governing mine closure on private land
- Post-mining land use consistent with soil conservation and commercial use

Strategies and methods used to develop this Reclamation and Closure Plan include:

- Use on-site reclamation materials (e.g., stockpiled soil, rip rap), equipment, and facilities to the extent practical
- Re-grade slopes to 3H:1V maximum (site specific requirements vary)
- Reseed disturbed areas where desirable
- Convey surface water with minimum practicable channelization
- Monitor groundwater and surface water during the approved post-closure monitoring period

6.2 Reclamation Plan Overview and Schedule

A facility-by-facility summary of the Reclamation and Closure Plan is provided below. Site-wide reclamation should be achieved over one to two construction seasons – depending on field conditions – and would create a stable landform and retain facilities consistent with the post-mining commercial land use (Figure 3).

6.2.1 General Overview

To achieve the Reclamation and Closure Plan goals noted above, AGC plans to:

- Dewater and discharge water in the Main Pit

- Partially backfill the Main Pit with rock
- Cut an outflow channel between the main pit and Rock Creek
- Remove stormwater diversions
- Grade all stockpiles to 3:1 side slopes or less
- Cover areas with salvaged topsoil and seed areas as needed

6.2.2 Soil Cover and Revegetation

The final site grading would help stabilize slopes. Typical equipment used would include dozers, graders, loaders, and trucks. Following attainment of the final land forms, the stockpiled topsoil would be loaded and hauled to the graded areas. The placed soil would be spread at a minimum nominal thickness of 15 cm using graders or dozers.

Reseeding would be by hydroseeding or other means of broadcast seeding. Fertilizer is included in the cost estimate, but is not proposed on this site as the soil organic content is adequate to allow germination. By grading, topsoiling, seeding, and BMP construction per the SWPPP, the site will be in a stable condition – as contemplated in the reclamation standards of the reclamation law and discussed in section 1.6. Years of successful interim revegetation, including Phase 1 reclamation, suggest there will be no difficulty in achieving a stable landform consistent with the post-mining land use. Therefore, following application of seed and construction of final BMPs AGC would request full and final bond release .

In general, the primary emphasis of reclamation activities would focus on soil conservation through grading, seeding, and stormwater BMPs.

6.2.3 Proposed Closure Schedule

The target completion date for the closure and reclamation of the Rock Creek Mine is October 2015. A tentative closure schedule is presented in Table 2 below.

The pit would be pumped to the land application area starting as the pit thaws in June. Diversion grading would be accomplished in early to mid-June as breakup ends.

Table 2. Rock Creek Mine Closure Schedule – assuming .

Area	Dates
Pump out Main Pit	June 2015
Main Pit	June 2015 – August 2015
Causeway excavation	July 2015
TSF reclaim	July – August 2015
DC#3 reclaim	August – Sept 2015
DC#2 reclaim	June 2015
DC#1 reclaim	August 2015
Stockpile grading	June 2015
Organic 1 soil spreading	October 2015

Final grade organic 1 drainage	October 2015
Facility salvage	Ongoing
Road drainage modifications	October 2015

6.3 Area 1 – Plant Site and Development Rock Stockpile

Area 1 encompasses the main plant site including (see Figure 4):

- Process buildings (mill)
- Water Treatment Plant
- Truck shop
- Ore crushing facility
- Development Rock stockpile
- Fine material stockpile

Under this closure plan, limited grading of Area 1 would help

- Minimize water ponding
- Divert runoff from the mill building

The existing development rock stockpile would be graded so that no slope exceeded 3H:1V – largely by pushing the pile across the haul road and into the stormwater sedimentation pond along the east side of the haul road (Figure 4). This filled area would no longer pond water, which would instead be (1) directed to the south and a haul road breach at Brynteson Gulch, and (2) to the north around the corner of Organic Stockpile #1. The Brynteson Gulch breach would have side slopes of 3H:1V and bottom width of 4 meters. The bottom and side slopes – to 1 meter in height – would be armored. The stockpile area would then be topsoiled and seeded.

The main plant site mining and milling equipment would be salvaged. The 700 reagent tent and contents would be disassembled and salvaged for sale or buried in the pit. The remainder of site buildings would be sold and removed from the site or left in place for use by BSNC and/or SNC. If sold and removed, foundations would be left in place. Stockpiled rock would be graded down in-place to provide for free site drainage and reduce ponding.

Soil and fill materials within Area 1 would be visually inspected for spills. The type and extent of contamination, if any, would be determined. If necessary, remedial measures would be developed. Material that cannot be treated in-situ would be excavated and disposed of in the Nome solid waste landfill or other facilities certified to accept petroleum-contaminated or other specific types of wastes.

6.3.1 Crushing System

The crushing system – including crushers and conveyors – could be sold and if so would be moved off site by either the purchaser or AGC. Concrete foundations would be left in place.

6.3.2 Fuel Depot

Fuel contained in the fuel depot would be consumed by BSNC equipment.

6.4 Area 2 – Main Pit and Walsh Pit

Pit water would be pumped and the water land applied in accordance with ADEC authorization. The option exists to pump and treat pit water through the water treatment plant (if needed) for surface or sub-surface discharge. Pit water quality monitoring has shown pit water meets APDES permit limitations without treatment.

The Main Pit would be backfilled with roughly 130,000 cubic yards of rock excavated from the causeway (Figure 5). Should the pit invert not be reached with causeway backfill, a channel would be excavated to Rock Creek. That portion in fill would be armored if slope exceeds three percent (3%). In any event, this same reach would be over-excavated three feet and backfilled to grade with coarse material in an attempt to promote infiltration of pit drainage. The drainage thread through the pit would be underlain with coarse material to enhance infiltration of precipitation and reduce runoff.

The Walsh Pit, located east of the Main Pit, is approximately one-fourth the size of the Main Pit. Minor grading for drainage control would occur in the Walsh Pit and the area would be seeded.

6.5 Area 3 – TSF, Organic Stockpiles and Diversion Channel #3

TSF Phase 1 reclamation is complete (Figure 6). Some relatively minor grading of the tailings access road would be conducted to better route runoff into the former TSF basin. The DC#3 channel would be recontoured to limit channelization of runoff from the upper hillside. The temporary TSF diversion would be filled and leveled. At least one of the slopes of the five sedimentation ponds at the TSF would be graded to 3H:1V maximum slope to better facilitate wildlife access and egress. These stable ponds would be left as wildlife habitat. Remaining areas of bare bedrock, including the southern sediment pond area would receive topsoil and seed.

The lined tailings would be left in place and capped with three feet of fill, including at least 0.5 feet (15 cm) of organic stockpile material. That is, 2.5 feet of embankment material and 0.5 feet of organic stockpile material for a total of three feet of cover over tailings. First, the liner would be (1) perforated by hand tool or machine (e.g. punctured with sharpened dozer ripper or excavator teeth) on a spacing of no greater than 1 perforation per 25 square feet; or (2) cut, rolled, and salvaged for use elsewhere. The north wing of the former TSF embankment would be dozed out over the lined tailings (Figures 7.1 & 7.2). Organic material would be hauled from Organic #2 and/or #3 to achieve a total cover depth of three feet, which would then be seeded. BMPs would then be installed.

The thickener tank and any non-salvaged equipment and steel would be left in-place. There is no immediate plan for future use of the thickener, but the steel, pad, and equipment are valuable assets in the rural area that is Nome. It is the desire of the landowner(s) to retain these valuable assets for an as yet undefined future commercial or industrial use.

6.6 Area 4 – IWF, Land Application and Diversion Channel #2

The IWF is made up of the lower IWF, located north of organic stockpile #1 (Area 8), and the upper IWF, located northeast of the main plant area (Figure 8). The combined site consists of 31 active injection wells. Each well would be plugged with bentonite or cement grout from bottom to surface per ADEC guidance and consistent with EPA requirements. Surface casing would be excavated and removed and the site backfilled level with surrounding ground.

DC#2 measures approximately 823 m and runs northward conforming to the hillside topography until it reaches a settling pond prior to joining Lindblom Creek. The channel would be recontoured to blend with the surrounding topography. HDPE liners would be perforated and buried in place. Final grading would promote sheet flow runoff. The graded area may receive topsoil and seed.

6.7 Area 5 – Explosives Storage

The explosives storage magazines, their contents, and all appurtenant facilities were removed during Phase 1 reclamation. Access roads would be water bared to disperse runoff and avoid gully formation. The area may be topsoiled and seeded. These areas would be erosionally stable, meeting the goal of the reclamation plan.

6.8 Area 6 – Diversion Channel #1

The closure of DC#1 is scheduled in two phases to accommodate the seasonal characteristics of the surface water flow from Albion and Rock creeks (Figure 3). DC#1 South is approximately 1,220 m in length and extends along the northeastern portion of the mine site above the Main Pit. HDPE liners would be perforated and buried in place. Once the Main Pit reclamation is complete, the channel would be removed and contoured to blend with the surrounding topography. Channel contouring would be accomplished by using an excavator to pull fill side embankments into the channel. Final grading would promote sheet flow down the fall line. The area may be topsoiled and seeded.

The existing outfall to Lindblom Creek would remain in place and would serve to help armor the natural head cut that marks the upstream extent of the incised Lindblom Creek channel. The Rock Creek and Albion Creek armored crosscuts would be retained in their existing condition.

6.9 Area 7 – Causeway

The Rock Creek causeway reclamation would consist of breaching the causeway similar to the breach of the TSF and removing the culverts that currently convey Rock Creek underneath the road (Figure 9). The proposed side slopes of the causeway cut are 3:1. A loader being fed by a dozer above could be used to load a truck fleet. A ramp would be cut in the downstream causeway face to haul material to the pit. The culverts would be cut up and disposed of in the Main Pit or the Nome solid waste landfill. A drainage channel would be constructed to reconnect the existing upstream and downstream Rock Creek channel through the breached area.

Channel cross section would in general mimic the natural channel downstream of the cut. The channel would be trapezoidal with bottom width of 4 meters and 3:1 side slopes. Riprap would be placed on the bed and banks through the reclaimed reach and in a downstream energy dissipating apron with radius four times the channel width (16 meters). Banks would be riprapped two meters in elevation above the channel centerline, based on a 100 year 24 hour storm runoff calculated as 320 cfs (~9.1 cubic meters per second) – as calculated by Tetra Tech in the Phase 2 closure plan – which this plan now modifies (Figure 10). Using the Manning equation and channel roughness of 0.06 (straight boulder lined channel), the flow depth of the 100-yr 24-hr event is calculated as 0.9 meter. We have allowed 1.1 meter of riprap freeboard to account for entrance energy loss and associated water level rise.

The existing sediment ponds in the Rock Creek channel above the causeway would be backfilled with causeway material. Access roads would be left in place.

Other site culverts would be removed and replaced with low water crossings. In all cases, provisions would be made to control and limit channelized runoff to the extent practical.

6.10 Area 8 – Organic Stockpile #1

Organic #1 would supply topsoil for reclamation (Figure 11). Any remaining material would be contoured to roughly 3:1 side slopes and seeded as needed. The goal would be to promote sheet flow runoff from and over the site.

6.11 Soil Balance

Topsoil (aka organic stockpile material) would be applied to a depth of not less than 15 cm (6 inches) over those areas underlain by unconsolidated or backfilled material (Figure 12). Areas of rock cut would receive a minimum of 30 cm (1 foot) of topsoil. Excess topsoil is available and not all would be used in reclamation. The grading plan shows the three topsoil piles would be graded to maximum 3:1 side slopes and seeded. This would produce a stable landform and preserve the resource.

7 POST-CLOSURE MONITORING

The overriding goal of this Reclamation and Closure Plan is to stabilize the Rock Creek Mine site to facilitate the post-mining land use. No long-term monitoring is proposed for this purpose.

7.1 Water Quality Monitoring

An analysis of site monitoring data would be submitted to ADEC in the 2016 annual monitoring report. Based on work to date, it is anticipated these data would support a decision to discontinue further monitoring. Continued groundwater monitoring and/or modification of groundwater monitoring would be dependent on that analysis and requirements of 18 AAC 60.270.

7.2 Revegetation Monitoring Methods

Visual monitoring of revegetation would be conducted in the normal course of business. It is the goal of the reclamation plan to obtain an erosionally stable landform. The measures in this plan are intended to achieve that goal. Should site observations by AGC and BSNC land managers reveal erosional problems, it would be possible to consider appropriate response(s). Monthly visual inspections of the TSF area would be conducted for 60 months following bond release for major earthwork as required under 18 AAC 60.490(c).

7.3 Visual Monitoring

Monthly visual inspections of the TSF area would be conducted for 60 months following bond release for major earthwork. AGC would work with ADEC – as desired – to potentially shorten that time period. Incidental visual monitoring would be ongoing for as long as AGC owns the property.

8 Endorsement

The undersigned acknowledge and concur with this reclamation plan.

For Alaska Gold Company, LLC:



Its

President, 5/11/15 Date

For Bering Straits Native Corporation, Inc.:



Its

President & CEO, 5/11/15 Date

For Sitnasauk Native Corporation, Inc.:



Its

CEO, 5-8-15 Date

State of Alaska 3rd Judicial District

The foregoing instrument was acknowledged before me this 8th

Day of May, 2015, by Richard Strutz, the
CEO of Sitnasauk Native Corporation, an Alaska Corporation, on

behalf of said corporation.

Rachael Pope

Notary Public

Print Name Rachael Pope

Serial Number, if any: N/A

My commission expires:

8/7/15



State of Alaska 3rd Judicial District

The foregoing instrument was acknowledged before me this 11th

Day of May, 20 15, by Gail Schubert, the President of Alaska Gold Company, an Alaska Limited Liability

Company, on behalf of said corporation.

Rachael Pope

Notary Public

Print Name Rachael Pope

Serial Number, if any: 119980

My commission expires:

8/7/15



State of Alaska 3rd Judicial District

The foregoing instrument was acknowledged before me this 11th

Day of May, 2015, by Gail Schubert, the

President / CEO of Bering Straits Native Corporation, an Alaska Corporation,
on behalf of said corporation.

Rachael Pope

Notary Public

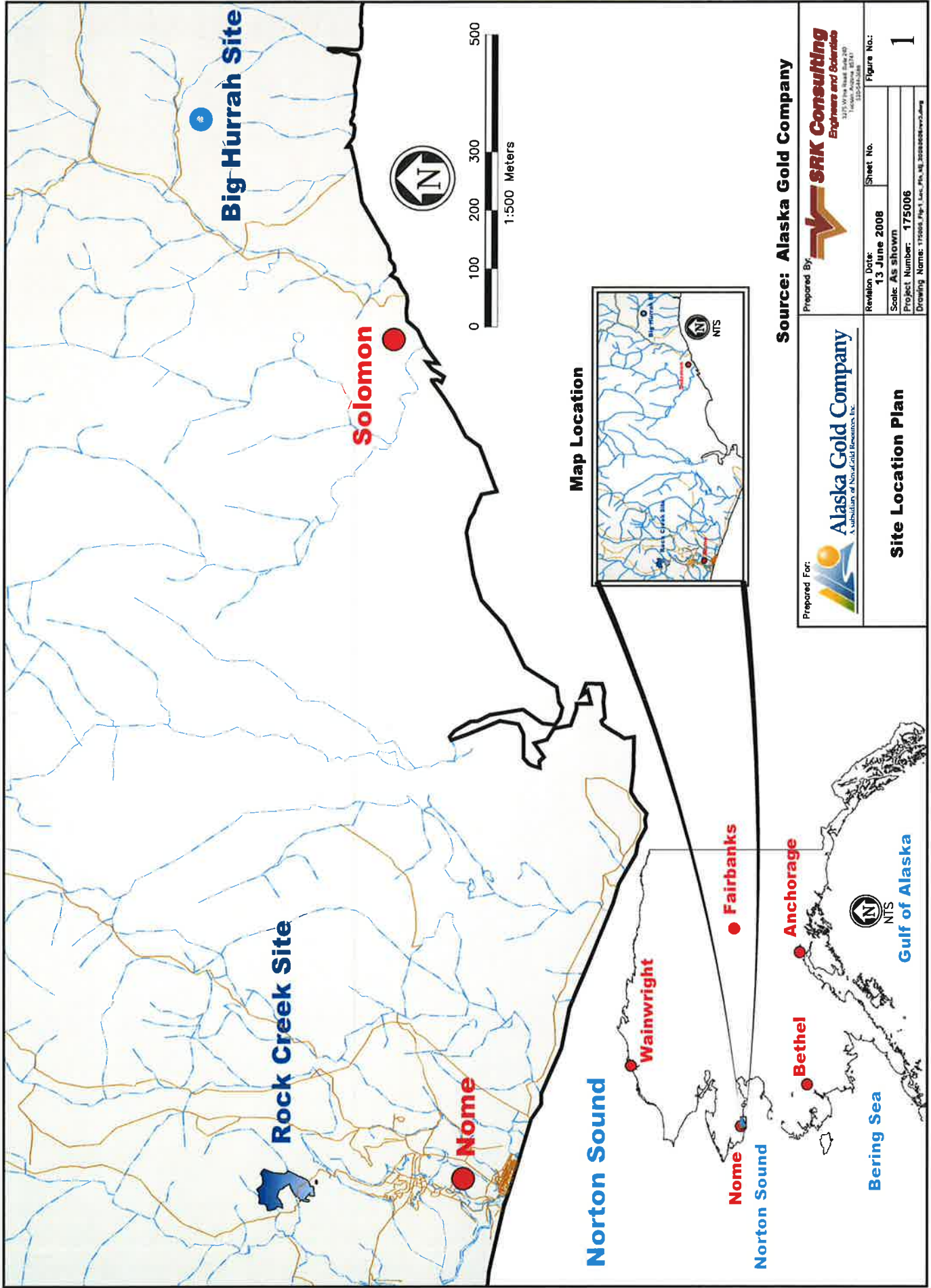
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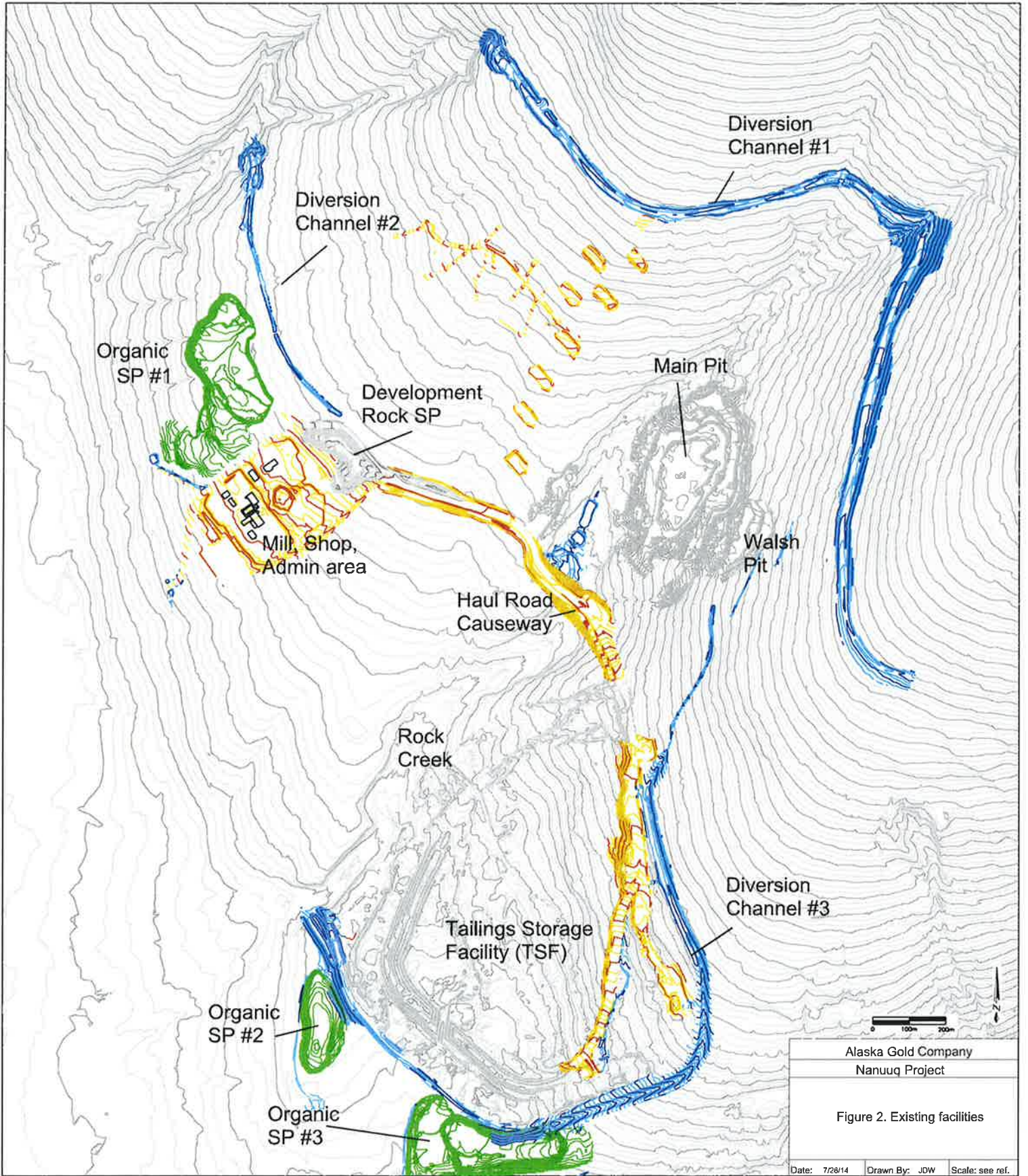
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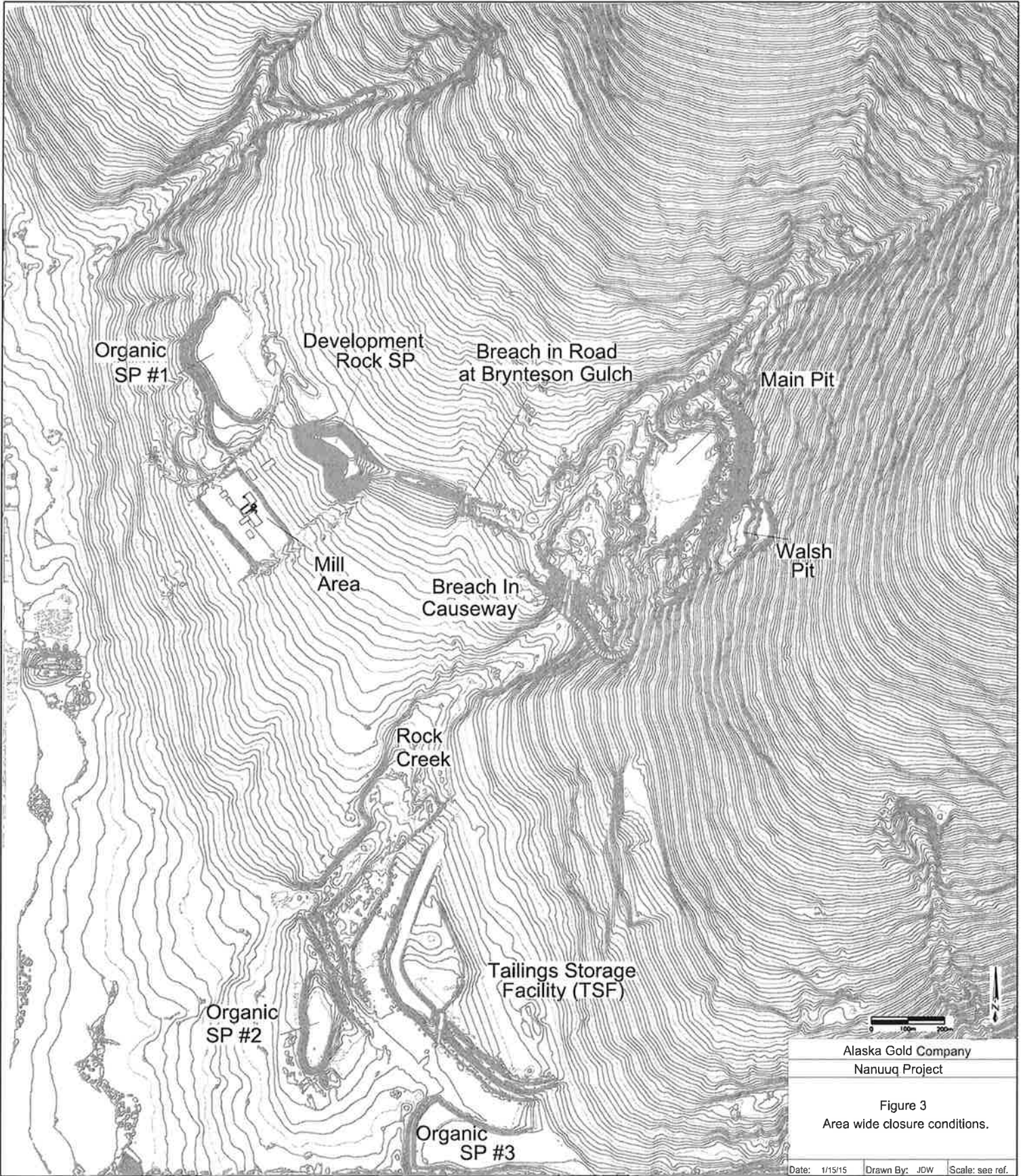
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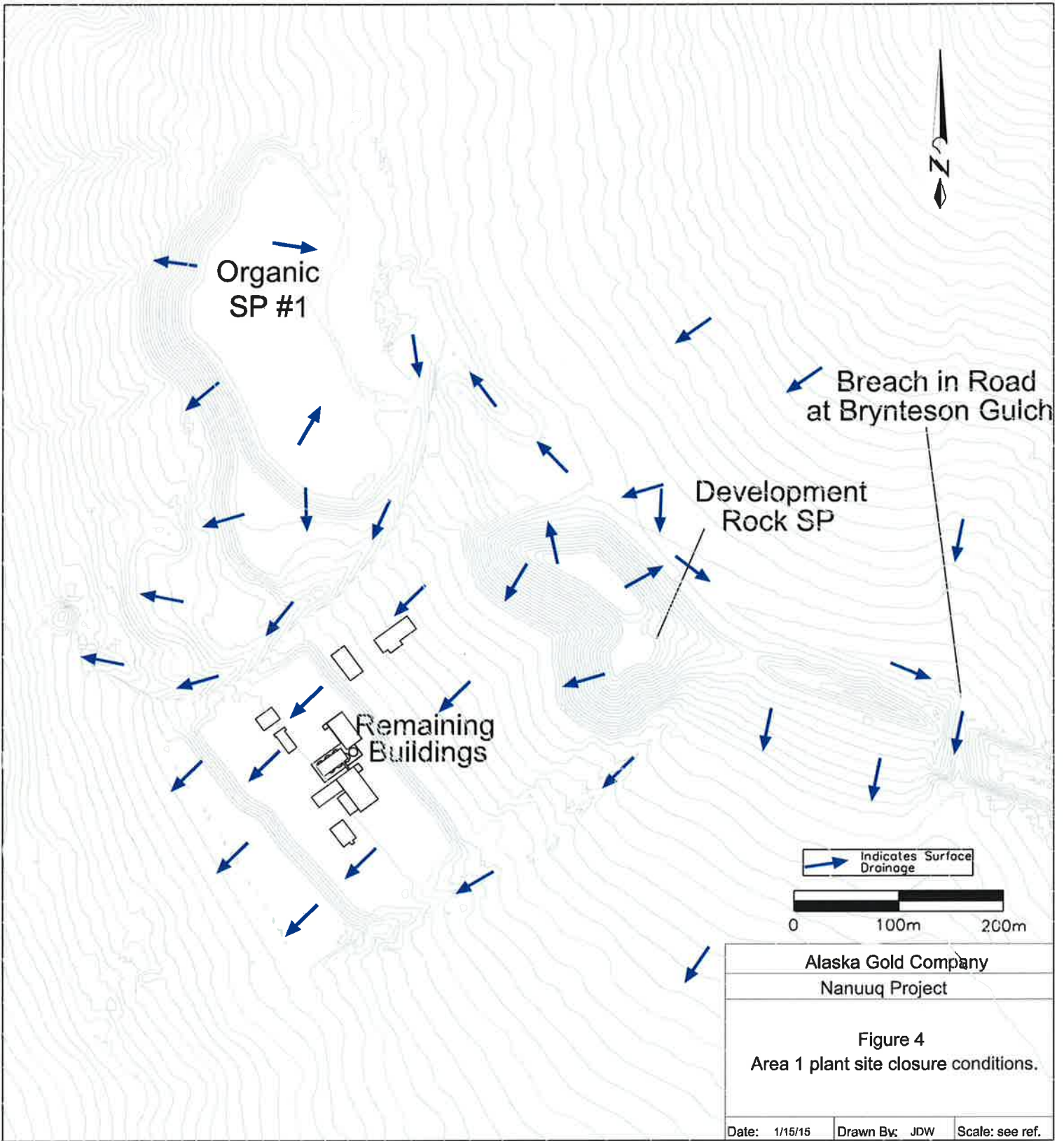


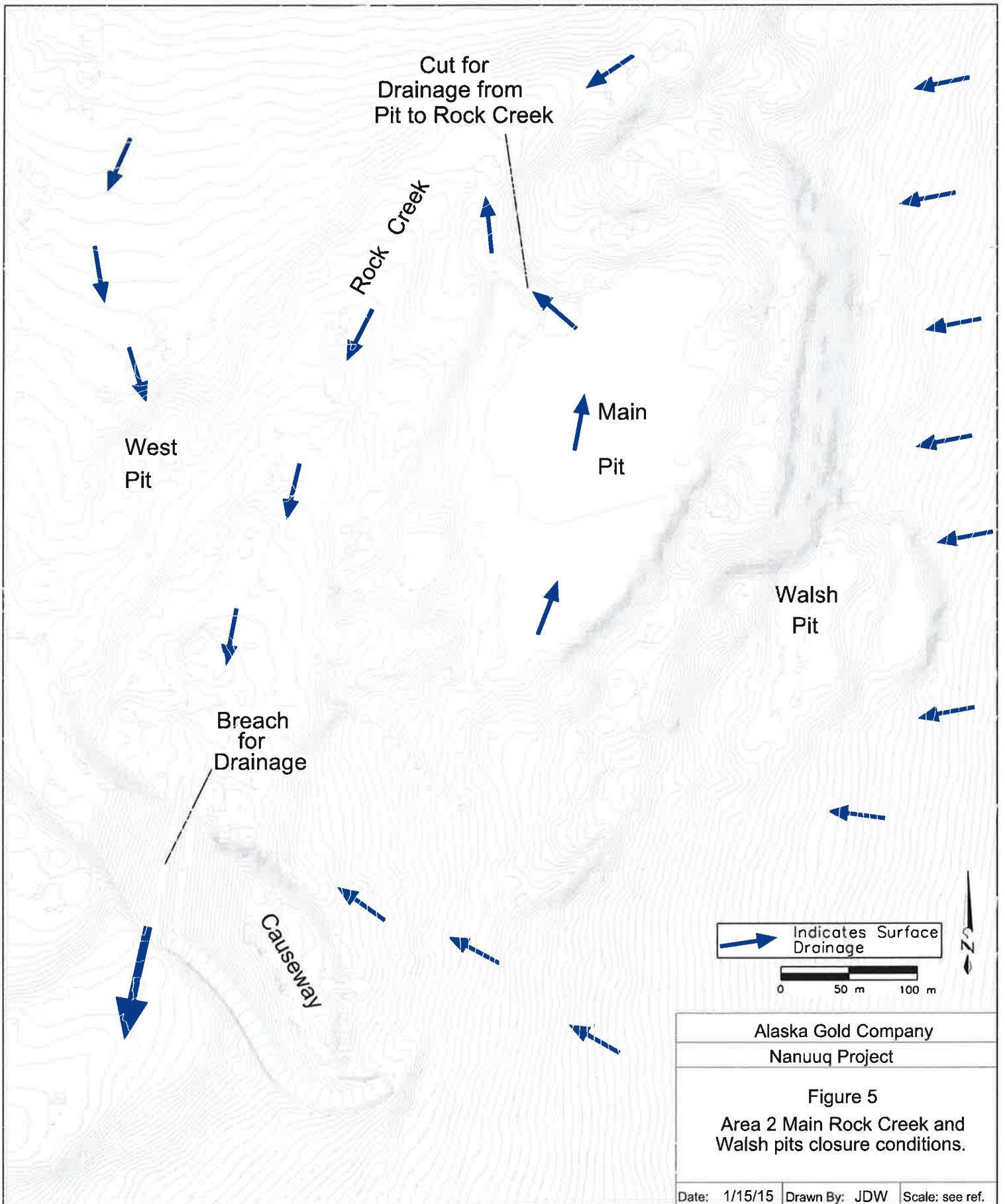
Figures



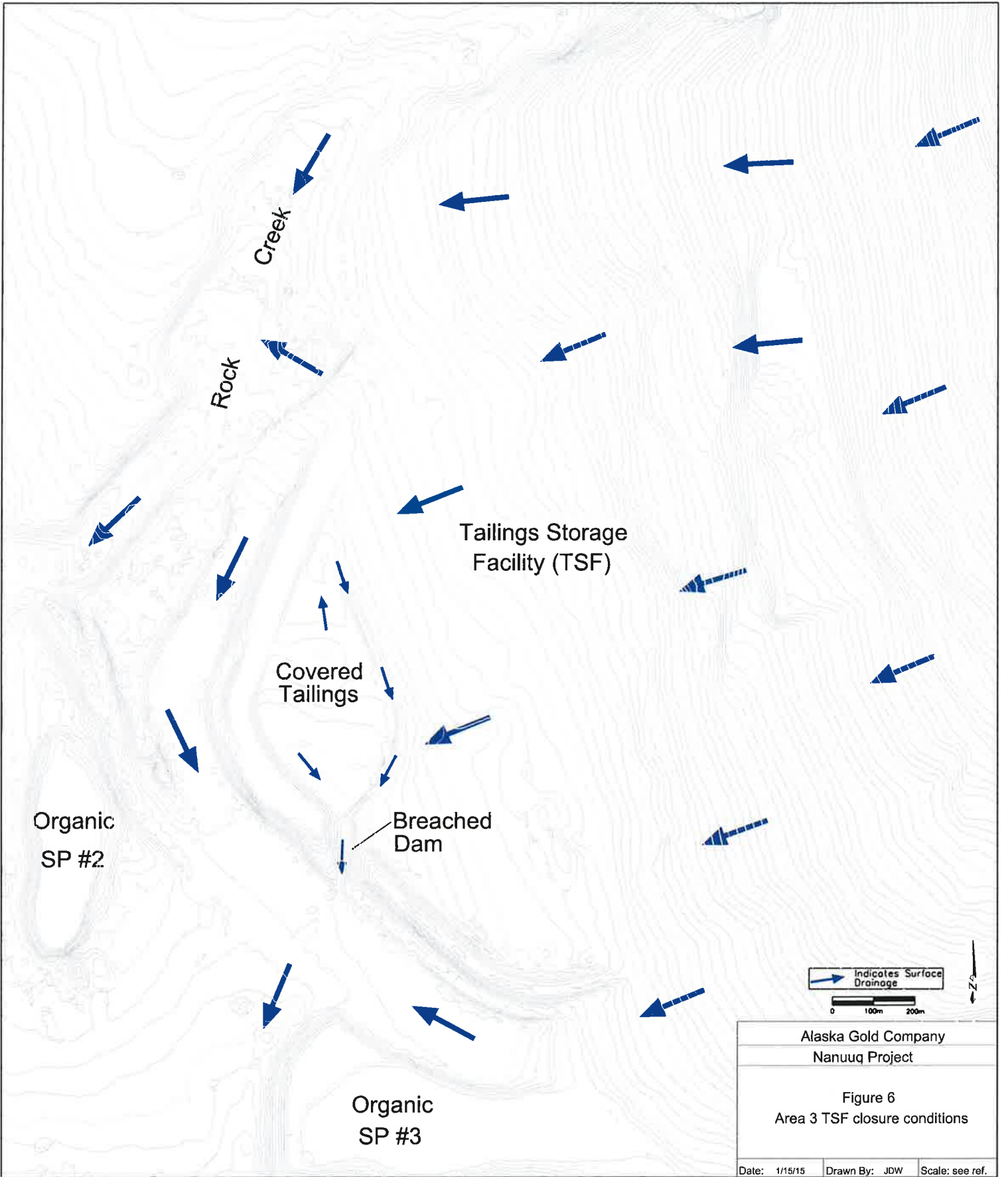


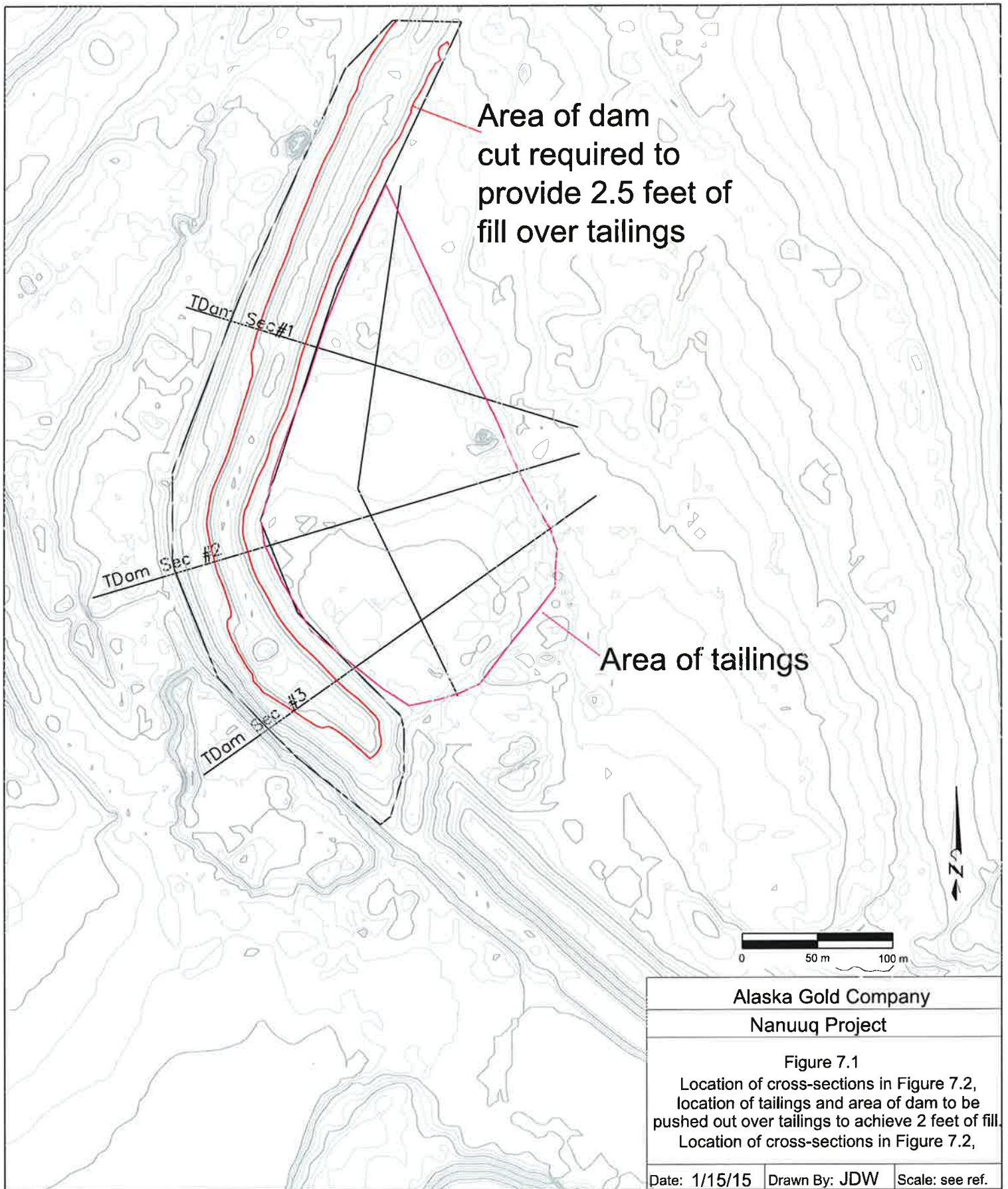


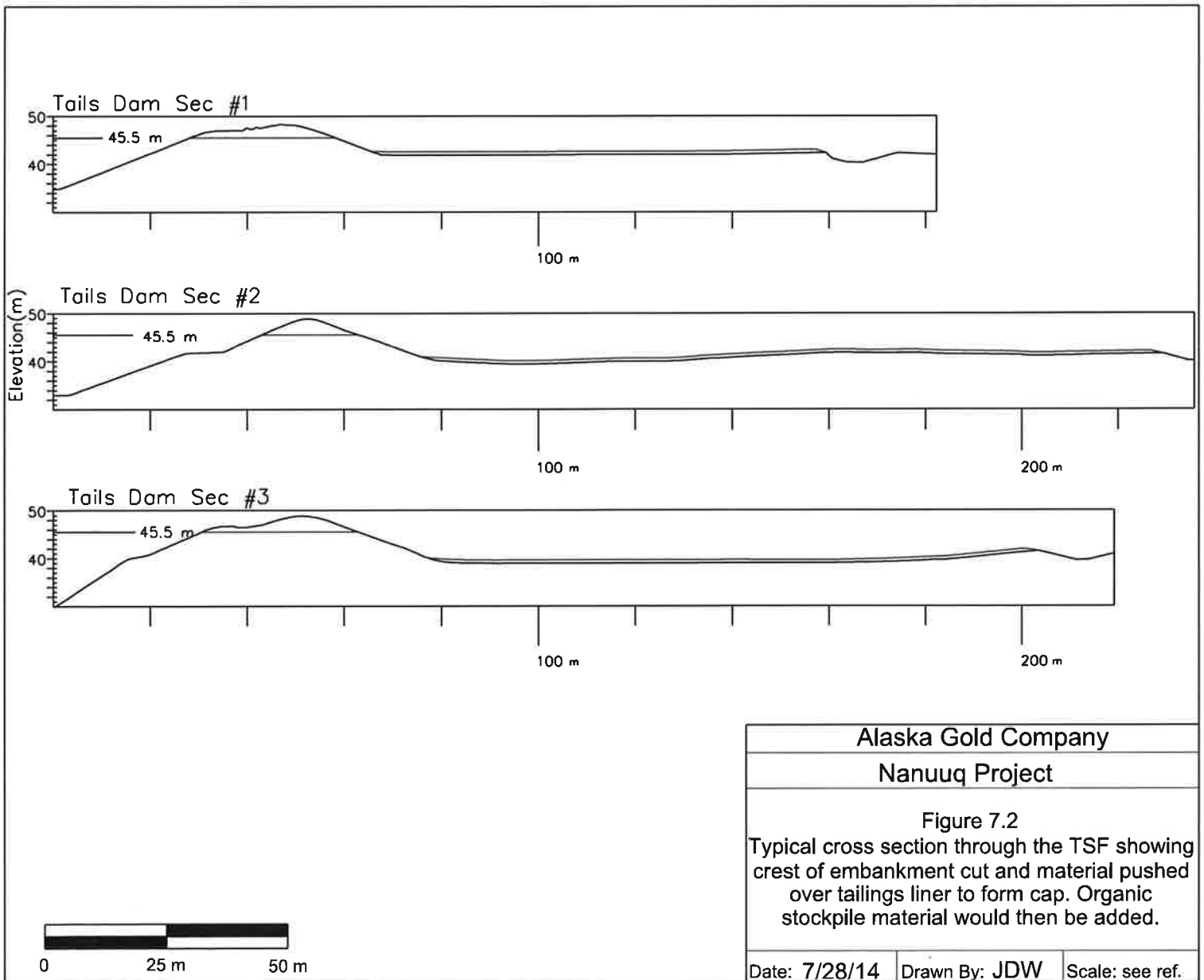




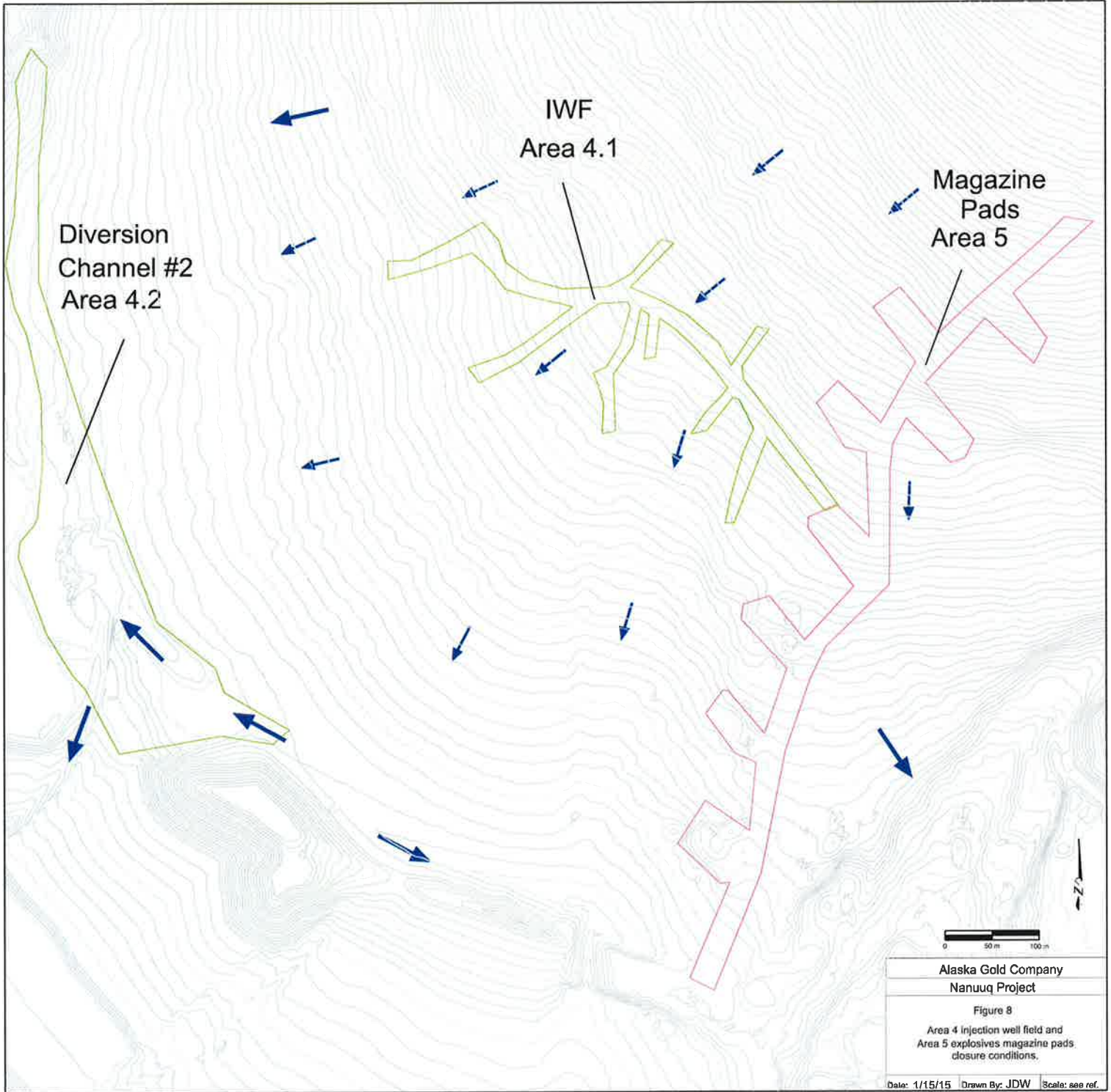
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Nanuq Project		
Figure 5		
Area 2 Main Rock Creek and Walsh pits closure conditions.		
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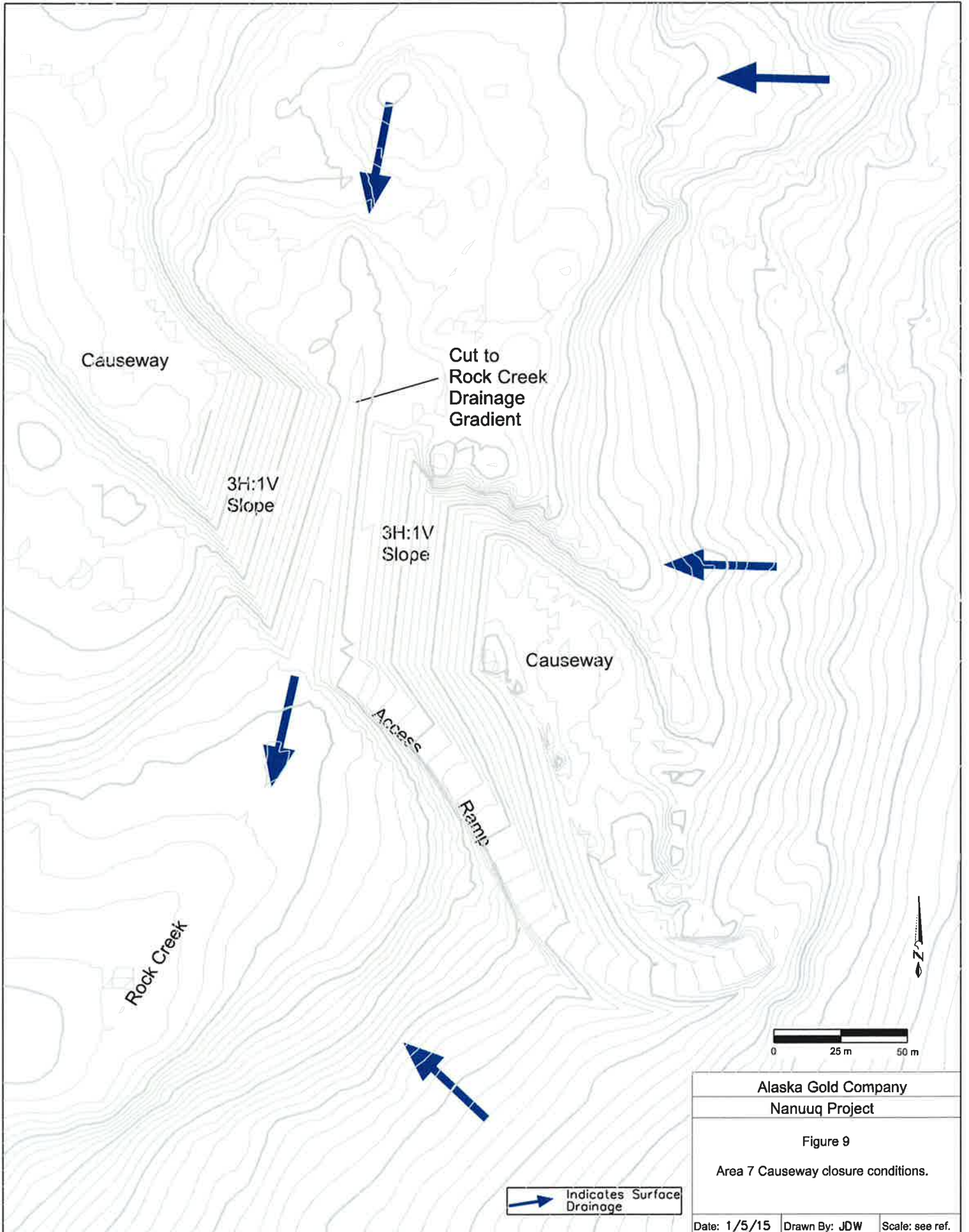


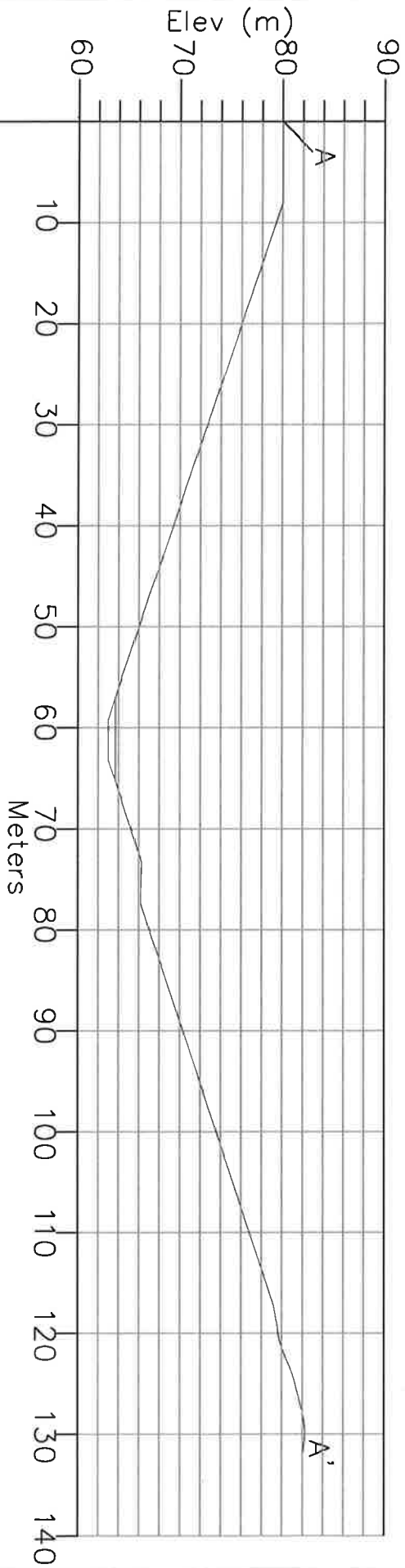




Alaska Gold Company		
Nanuuq Project		
Figure 7.2 Typical cross section through the TSF showing crest of embankment cut and material pushed over tailings liner to form cap. Organic stockpile material would then be added.		
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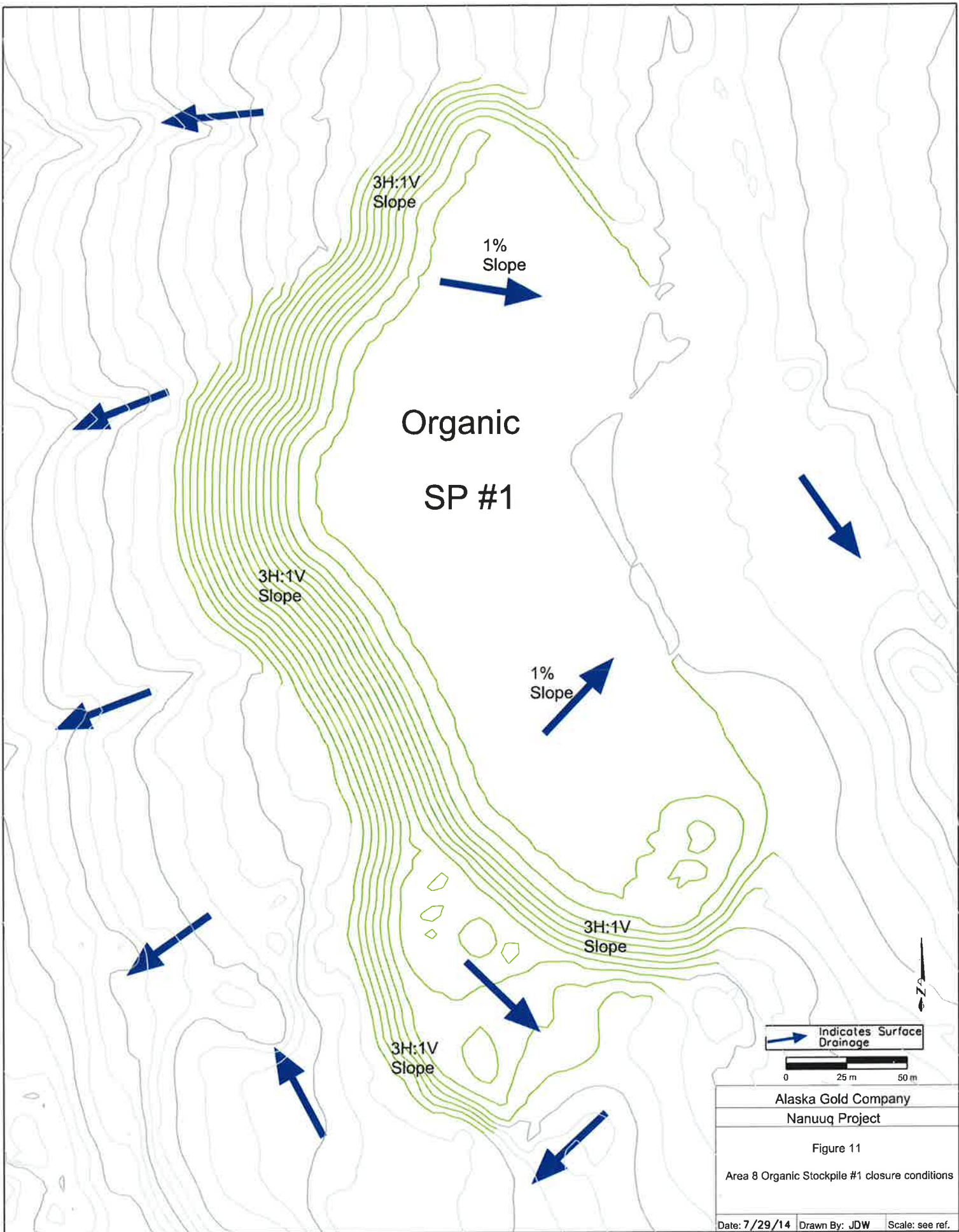
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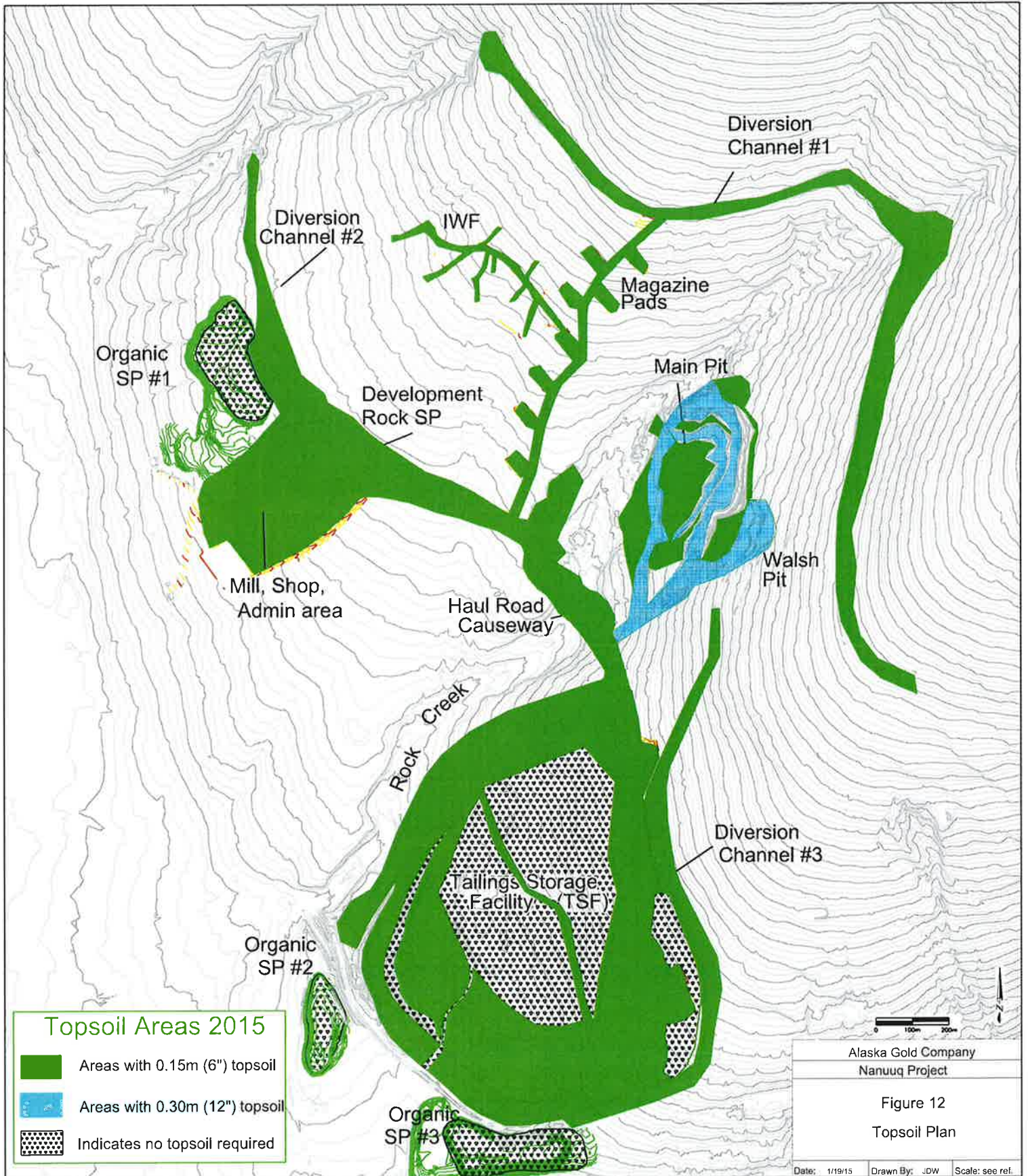
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Nanuqu Project

Figure 10

Cross section of reclaimed Rock Creek channel through the haul road causeway breach. Trapezoidal channel with 4-meter bottom width and 3H:1V side slopes. Red line marks 0.7 meter flow depth of 100-yr 24-hour flow of 320 cubic feet per second.

Date: 7/29/14 Drawn By: JDW Scale: see ref.





Topsoil Areas 2015

- Areas with 0.15m (6") topsoil
- Areas with 0.30m (12") topsoil
- Indicates no topsoil required

Alaska Gold Company
Nanuuq Project

Figure 12
Topsoil Plan

Date: 1/19/15 Drawn By: JDW Scale: see ref.

Appendix A



Alaska Gold Company LLC
A BSNC Company

NANUUQ GOLD PROJECT

Rock Creek Mine Rock Stockpile Potential Metal Leaching Evaluation Study Report



Submitted to:

Alaska
Department of
Natural
Resources

and

Alaska
Department of
Environmental
Conservation

Submitted by:

Alaska Gold
Company
P.O. Box 640
Nome, Alaska
99762

November 2014

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1 Introduction

Alaska Gold Company (AGC) proposes to modify the approved Rock Creek Mine Phase 2 closure plan. A major component of the intended changes is to reclaim the run-of-mine stockpile (formerly referred to as coarse ore stockpile) and fine ore stockpile in-place rather than remove the material to the Main Pit as backfill. Two conditions predicate this plan modification:

1. The material is not required as pit backfill
2. The material can be reclaimed in-place without generating unusual arsenic leaching and availability in local surface water and potential groundwater drinking source

The first is discussed in a revised closure plan document submitted to ADNR and ADEC and will not be mentioned again here. The second is the subject of this report.

2 Site Description

The nearest community to Rock Creek is the City of Nome, Alaska. Rock Creek Mine is located approximately ten miles northwest by all-weather road from Nome (Figure 1). The mine is located in the Snake River valley at latitude N 64.62 longitude W 165.43, immediately upstream of the Snake River confluence with Glacier Creek. Rock Creek itself is a left-hand tributary to Snake River – as is Glacier Creek. Both have been placer mined for gold in historic times.

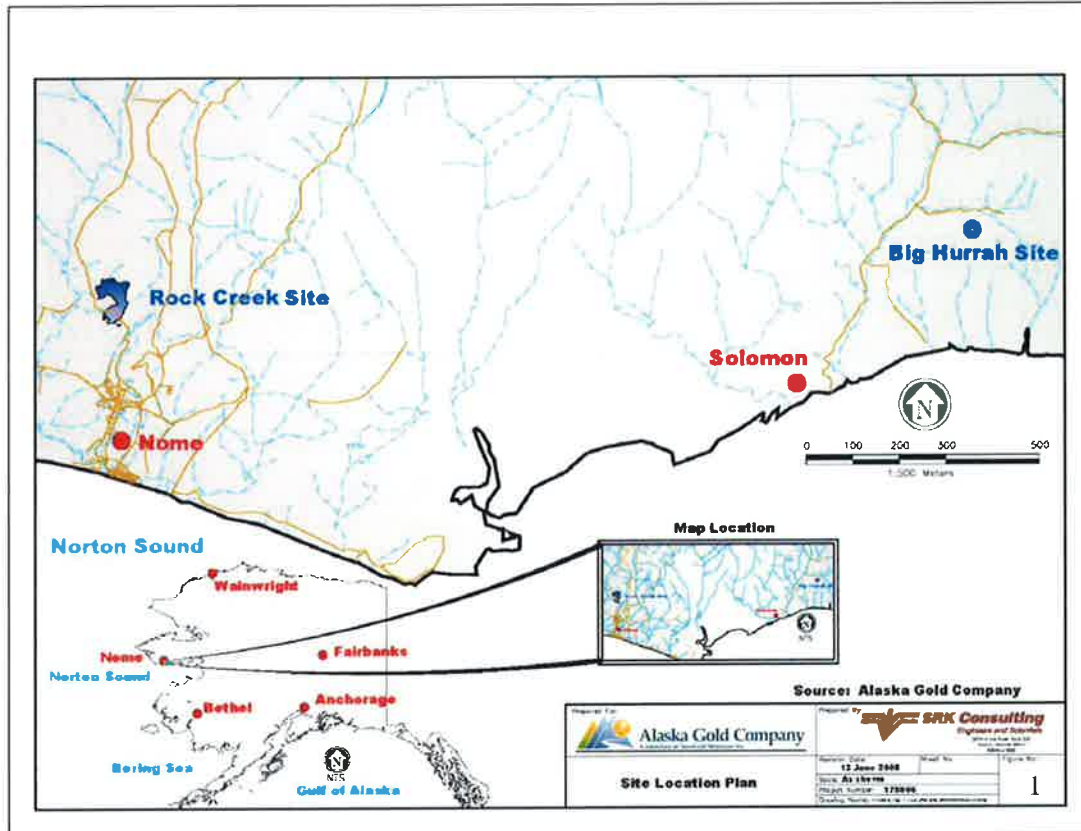


Figure 1. Nanuuq Gold Project locations.

The high monthly mean temperature in Nome occurs in July at 52.6 degrees Fahrenheit (F) and the monthly mean low occurs in February at 5.7 F. Mean annual precipitation is 16.56 inches with 68.1 inches of snowfall (ACRC 2011)

The property surface estate is held in part by Sitnasauk Native Corporation (SNC) and in part by Bering Straits Native Corporation (BSNC). The mineral estate is held exclusively by BSNC.

According to the work plan, soil samples were collected from the fine ore stockpile (Figure 2).

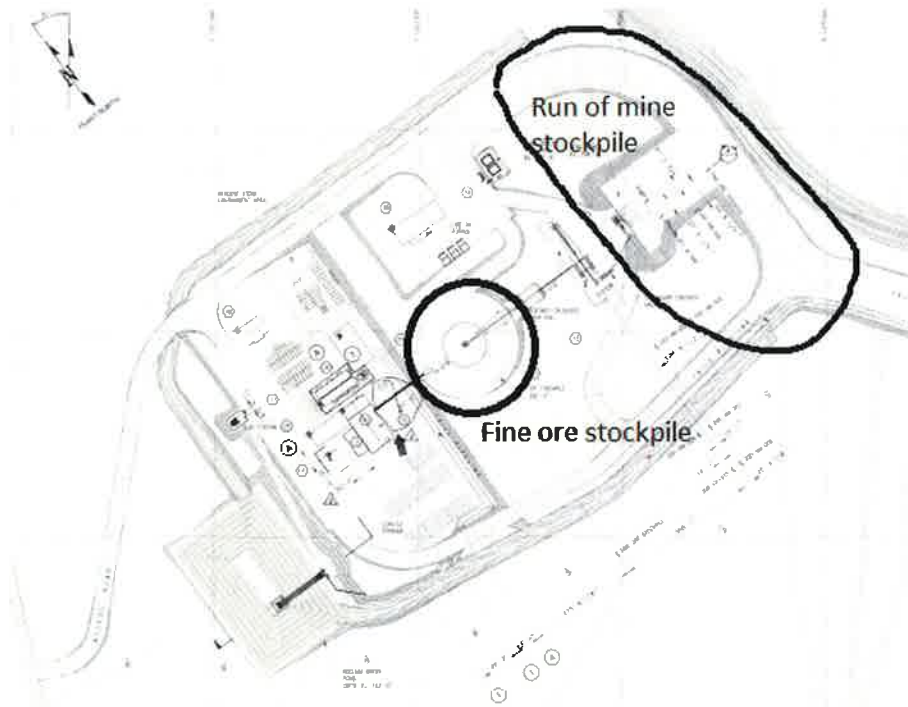


Figure 2. Fine ore stockpile and run of mine stockpile, located at Rock Creek facility, Nome, Alaska.

3 Previous Investigation

Baseline documents for the redevelopment of Rock Creek mine prepared by NovaGold, Inc. characterized the development rock and ore (as then assessed). The approved reclamation plan calls for these materials to be hauled to the existing pit as backfill. By contrast, Alaska Gold Company, LLC has requested these materials be graded to 3:1 maximum slope in-place, topsoiled, and seeded – hence the interest in further characterization.

Three samples of fine (crushed) ore stockpile (Figure 2) were collected and analyzed for meteoric water mobility on July 15, 2014. Six additional samples (including one duplicate) were collected for the same test on September 5, 2014. The approved study plan (Alaska Gold, 2014) contemplated a water sample of underflow from the fine ‘ore’ pile pan feeders, but due to low precipitation no underflow was observed from July through October 2014 and no sample could be collected.

It is our understanding that metal leaching potential from waste rock was identified as an issue of possible concern during initial Rock Creek Mine project permitting. No other aspect of waste/ore leaching was or is considered problematic.

During initial Rock Creek Mine permitting, both groundwater and rock geochemical evaluations were performed (Water Management Consultants, 2006a, b, c, d). These studies attempted to predict solution chemistry in the eventual flooded mine pit and rock piles. Past work was predictive. That is, drill core was examined and tested with intent to predict the chemistry of leachate from rock piles and the pit lake. The certainty of those predictions is not so much dependent on the analyses performed, but rather on whether those samples adequately represent the rock mass that would be left at closure.

This is no longer a predictive situation. The rock exists in situ and can be measured directly. Directly testing soil solution in the stockpile gives a measure of actual metal leaching – not a prediction. Kinetics are not an issue because this pile has been in place for six years (2008 thru 2014) and adequate time has elapsed for leaching reactions to occur.

Throughout the property, arsenic, iron, and manganese concentrations were [and are] near or above drinking water standards. Metal concentrations were highest near the pit and the mineralized rock of that area, reaching 1,360 µg/l dissolved arsenic.

Geochemical predictions were based on six general rock types:

- Overburden/soils
- Quartz-muscovite schist
- Graphitic quartz-muscovite schist
- Calcareous quartz-muscovite schist
- Calcareous schist
- Quartzitic graphite schist

The conclusion was that these rocks though reasonably distinct in hand specimen are sufficiently deformed that the rock mass is more or less homogenized. If this is the case in situ, it is much more so the further these materials flow through the mining and milling process. Rock samples were collected from the fine ore stockpile, which has undergone crushing and associated mixing.

Nova Gold tested the 100,000 tons of tailings emplaced in the TSF (AGC, 2012). Dissolved arsenic in tailing pore water ranged from 0.16 to 1.27 mg/l with an average of 0.69 mg/l (Table 3.4, AGC 2012). It was concluded that actual field measurements of tailing pore water chemistry support the predictive modeling studies. "...arsenic and antimony concentrations were lower than the values observed in the two humidity cell results (WMC, 2006)...".

4 Regulatory Framework

The Rock Creek Reclamation and Closure Plan has been prepared to meet ADNR reclamation requirements pursuant to AS 27.19 and 11 AAC 97 as applicable to private

land. AS 27.19.050 (Reclamation Standard) states “A mining operation shall be conducted in a manner that prevents unnecessary and undue degradation of land and water resources, and the mining operation shall be reclaimed as contemporaneously as practicable with the mining operation to leave the site in a stable condition.”.

Post reclamation groundwater quality that is consistent with pre-disturbance groundwater quality would meet this requirement.

5 Work Performed

Field samples were collected by contractor Frank Bergstrom of Amerikanuak, Inc. and Bering Straits Native Corporation (BSNC) employees Kevin Benke and Larry Pederson. Assistance was provided by AGC employee Nikolai Ivanoff. Frank Bergstrom mobilized on July 15, 2014 to collect three samples from the fine ore pile and obtain a water sample from the fine ore pile pan feeders, located within the conveyor access tunnel below the pile. The three fine ore samples were collected from 1 foot depth, bagged and shipped via cooler to SGS labs in Anchorage for transshipment to SGS Labs in Lakefield Ontario, Canada for meteoric water mobility procedure testing. Sampling sites were randomly distributed across the pile surface with no preference for the covered or uncovered portion of the pile.

These three samples were field labeled as shown below, and they are also referred to by the names listed at right according to the nomenclature of the approved study plan.

Field Labeling	Study Plan Reference Name
1 Fine Ore	RC01-SS-01
2 Fine Ore & 3 Fine Ore	RC01-SS-02

Sample ‘2 Fine Ore’ and ‘3 Fine Ore’ were composited at the laboratory due to inadequate sample mass. The resulting sample is referred to as RC01-SS-02.

During the July sample collection, no water was observed at the pan feeders and no water sample could be collected.

On September 5, 2014 Kevin Benke and Larry Pederson collected an additional six samples of fine ore from 1 foot depth (listed below) and again checked for water at the fine ore pile pan feeders. Sample RC01-SS-07 is a field duplicate of RC01-SS-06. Sampling sites were randomly distributed across the pile surface with no preference for the covered or uncovered portion of the pile.

Study Plan Reference Name

RC01-SS-03

RC01-SS-04

RC01-SS-05

RC01-SS-06

RC01-SS-07

RC01-SS-08

Once again, no water was observed at the fine ore pile pan feeders and a sample could not be collected.

5.1 Deviations from the Work Plan

The July samples were labeled prior to approval of the work plan and did not follow the nomenclature of the work plan. They have been referenced to the work plan nomenclature. Otherwise, work plan procedures for sample collection were followed.

Water samples could not be collected as described in the work plan due to an unusually dry late summer and fall. Checks were made at the proposed sample site until freeze-up. No further opportunities to collect water samples are anticipated this season.

6 Data Quality Review

Laboratory QA/QC data associated with the analysis of project samples were reviewed to evaluate the integrity of the analytical data generated during the two fine ore pile sampling events. Soil samples were analyzed by SGS in Lakefield, Ontario, Canada for total MWMP testing and analysis.

All sample containers in the sample cooler were received at the laboratory intact, with proper documentation. The wet soil matrix is not temperature sensitive. Holding times were met.

Out of 9 samples submitted, 1 field duplicate sample was collected. The frequency of field duplicate collection met the 10 percent (%) frequency requirements specified in the work plan. Sample RC01-SS-07 is a duplicate of RC01-SS-06. The relative percent differences (RPD) in these duplicate sample sets met the ADEC recommended limits of <50% in soil samples with the exception of silver, cadmium, chromium, copper, iron, and sodium. Since this duplicate was a separate sample from the same location, rather than a split, this is reasonable and acceptable variability.

All results are considered usable for project objectives. No results were rejected. The completeness for this project in regards to rock samples is 100%. As noted above in the

exceptions, the single water sample of fine ore pile underdrainage could not be collected. The completed ADEC laboratory checklists (ADEC 2010) for this project are attached to this report as Appendix A.

7 MWMP Results

The complete analytical reports for this project are provided in Appendix B.

Analytical results show that metals were detected in the solution from the MWMP. Detected metals are within or close to ranges measured in site monitoring wells over the life of the Rock Creek project.

8 Data Analysis

Most metal concentrations are within or near ranges of past monitoring well data for those same metals. A series of four figures are presented below to show average and standard deviation of the MWMP test results (fine ore) from the seven fine ore sample compared to the cumulative Rock Creek site monitoring well data.

Arsenic, iron, and manganese in MWMP results have a lower mean concentration than site monitoring wells, while strontium shows a slightly higher average concentration – compared to site monitoring wells (Figure 2). Data variability – as quantified by standard deviation – is lower for the rock sample results than the wells, which is reasonable given all wells are pooled.

Primary and secondary drinking water MCLs or Alaska drinking water quality standards for iron and manganese are shown as being exceeded for wells, but not the fine ore MWMP results. That is, site monitoring wells for these metals do not meet drinking water standards, but the fine ore does.

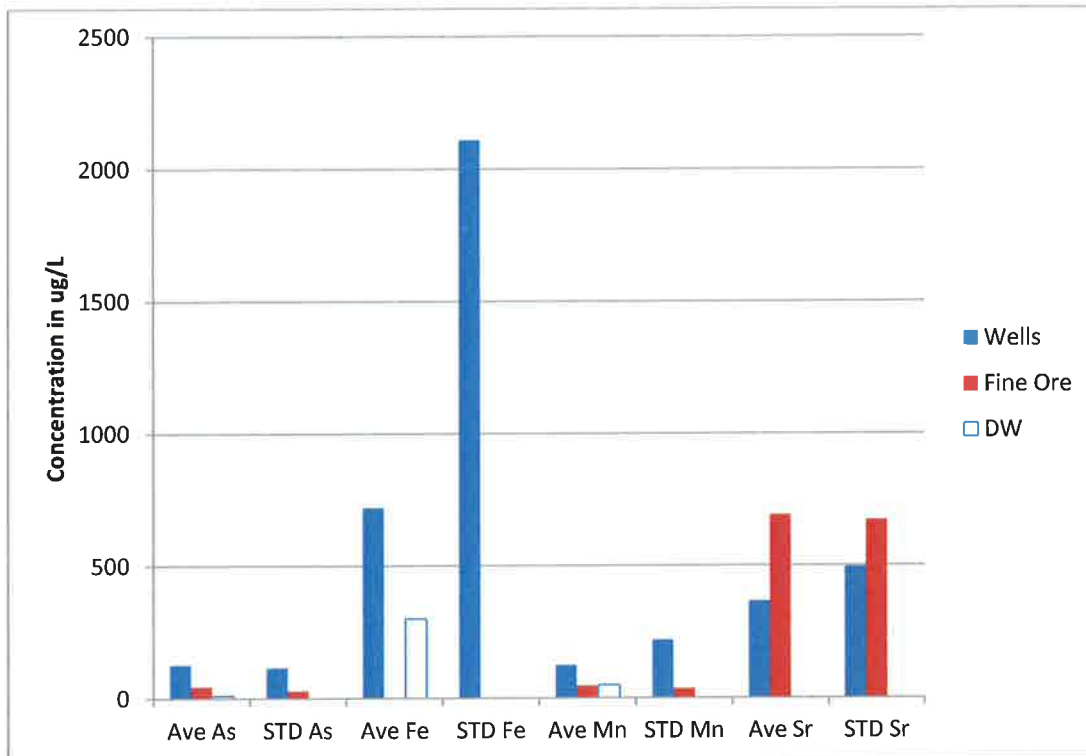


Figure 3. Mean and standard deviation of arsenic, iron, manganese, and strontium in MWMP results compared to site monitoring well data for the same metals.

These same data plotted as whisker diagrams show the data distributions as vertical bars of the mean, mean plus one standard deviation, and mean minus one standard deviation. Plotting the same data from Figure 3 as whisker diagrams graphically represents the overlap of monitoring well and rock sample MWMP information. These metals are either lower in the MWMP results or the distributions (Sr) overlap (Figure 4).

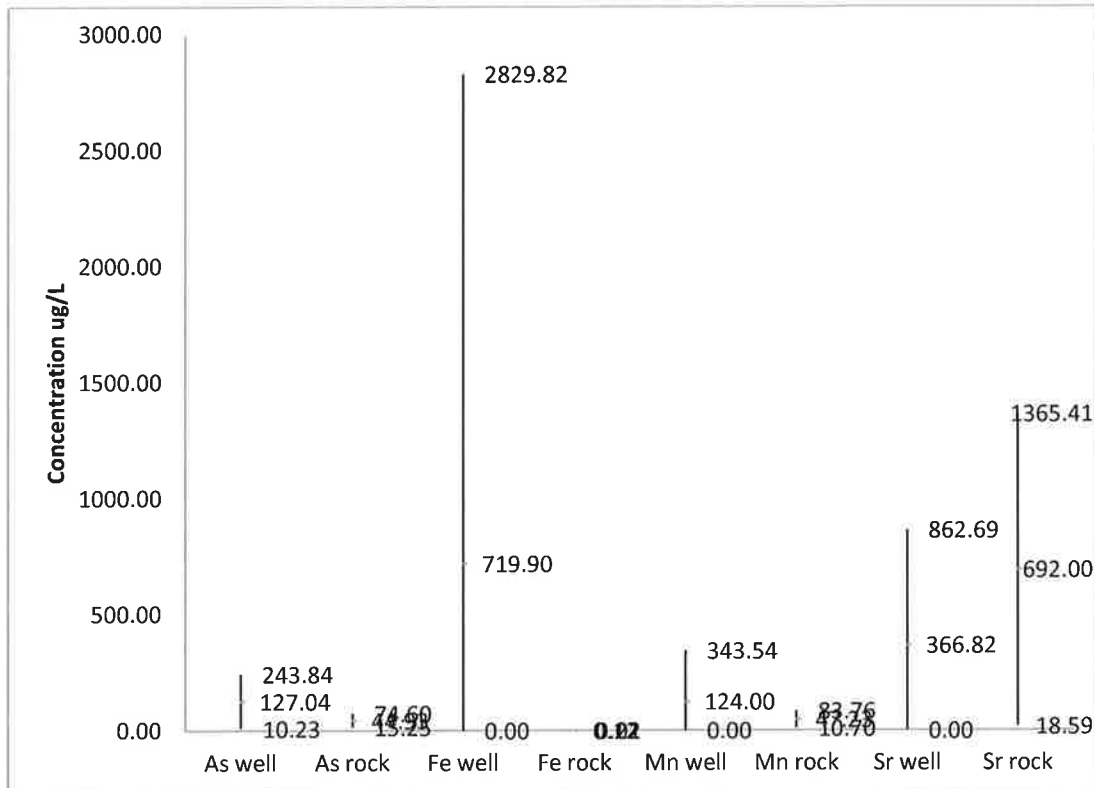


Figure 4. Mean metal concentrations plus and minus one standard deviation for arsenic, iron, manganese, and strontium from monitoring well and MWMP data.

Antimony average in MWMP results is above site well data and the DW standard. Site wells are – on average – below the drinking water standard, but as described by the standard deviation of those data, 32% (outside one standard deviation) of well sample results are also above the DW standard. Given the magnitude of the MWMP results it is reasonable to conclude no significant degradation of groundwater quality for this parameter is expected.

Cadmium and chromium in MWMP results are very low and well below water quality standards. Copper is higher – on average – in MWMP results than wells, but not beyond the range of well data when one standard deviation is added to the well mean. Copper in MWMP results is well under water quality standards.

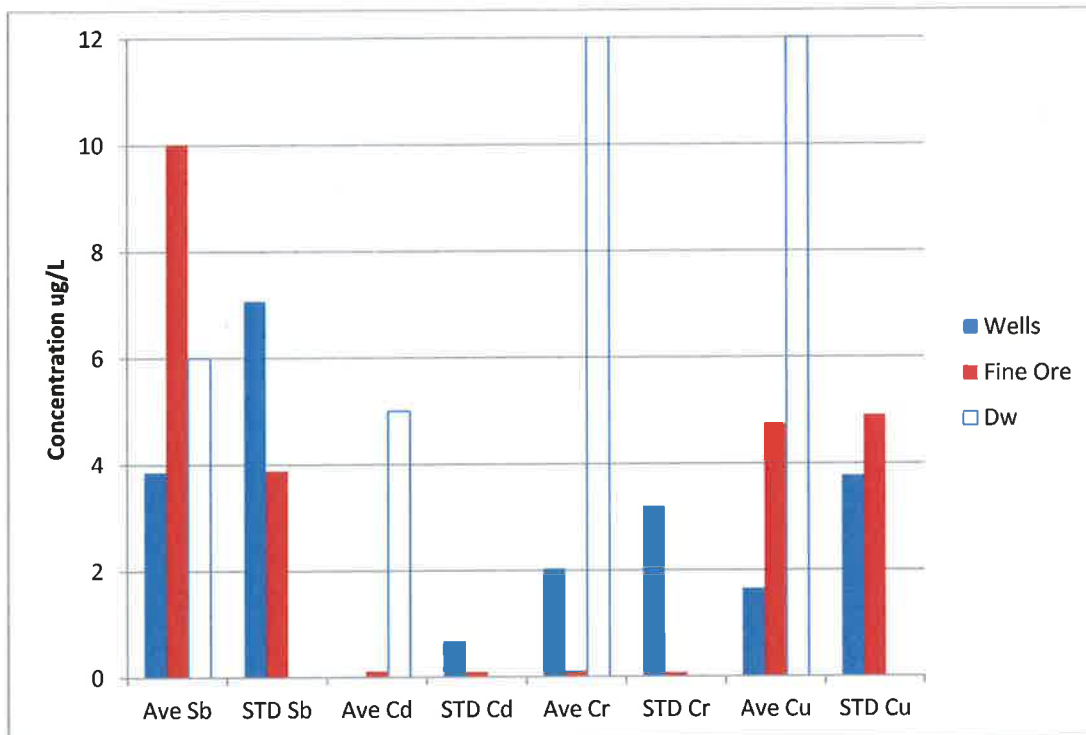


Figure 5. Mean and standard deviation of antimony, cadmium, chromium, and copper in MWMP results compared to site monitoring well data for the same metals.

The whisker diagram of the metals in Figure 5 shows the overlap of the distributions of MWMP data are below or largely within well data distributions (Figure 6).

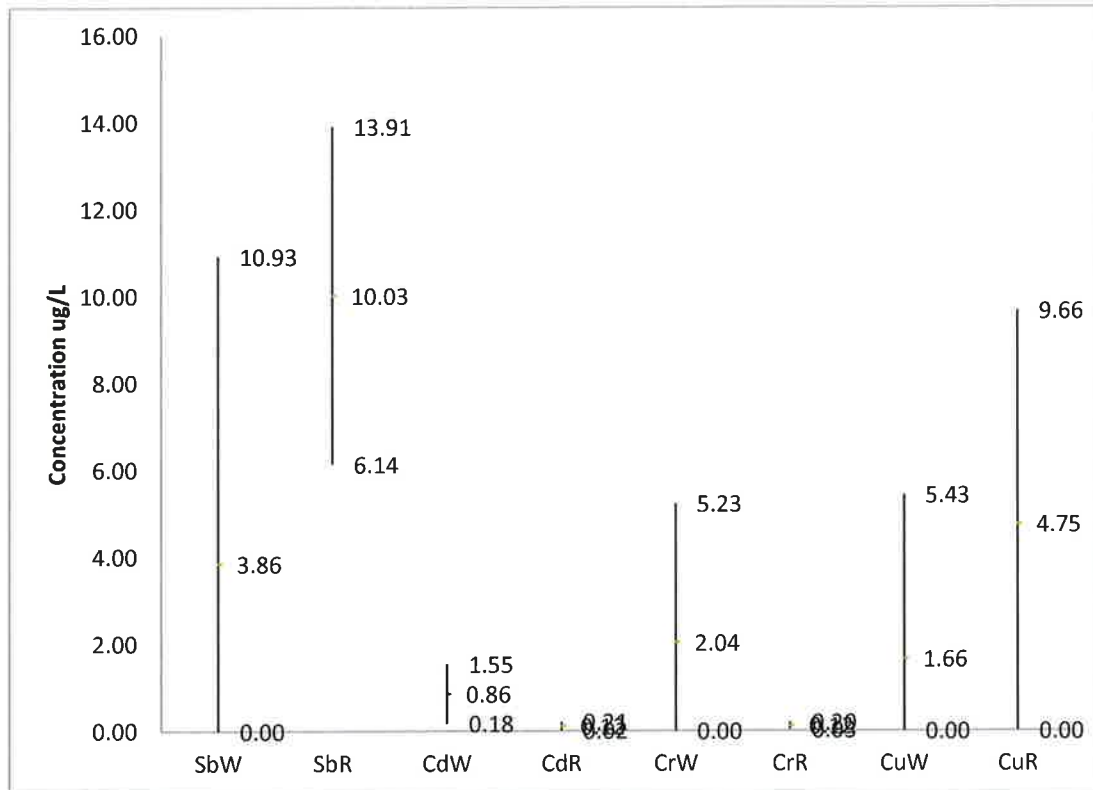


Figure 6. Mean metal concentrations plus and minus one standard deviation for antimony, cadmium, chromium, and copper from monitoring well and MWMP data.

Nickel is above well data average concentration; but again, the average MWMP result is well within the distribution of well data – as quantified by the well data standard deviation.

Lead and zinc in MWMP results are below well data and standards.

Selenium is present in detectable quantities in MWMP results, but generally not detected in well samples. MWMP results are below applicable water quality standards.

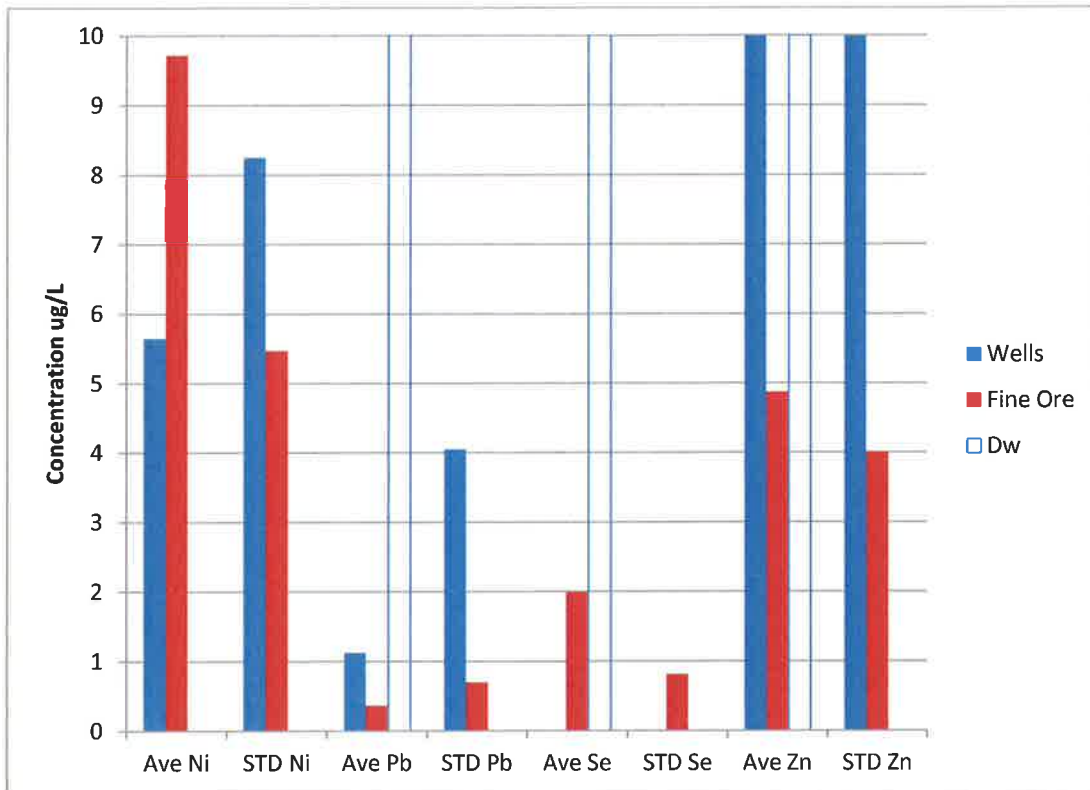


Figure 7. Mean and standard deviation of nickel, lead, selenium, and zinc in MWMP results compared to site monitoring well data for the same metals.

A whisker diagram of the metal data from Figure 7 shows overlap of the nickel, lead, and zinc distributions. Selenium is not detected in well data.

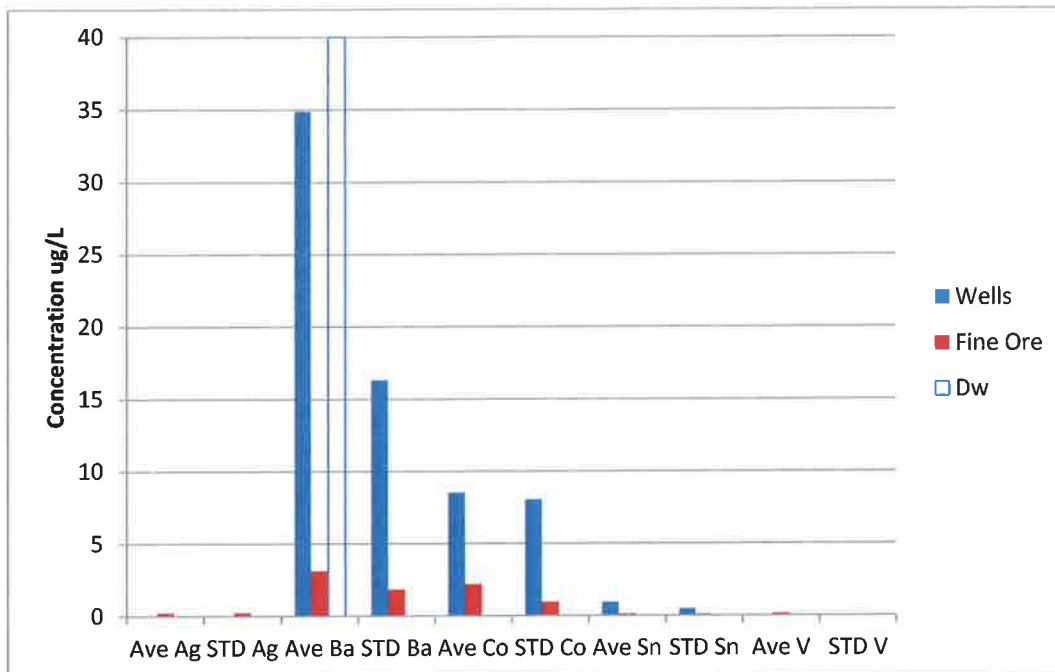


Figure 9. Mean and standard deviation of silver, barium, cobalt, tin, and vanadium in MWMP results compared to site monitoring well data for the same metals.

The whisker diagram shows the MWMP concentrations of metals of Figure 9 are below of within monitoring well sample data distributions with the exception of silver, which as noted above, does not exceed standards (Figure 10).

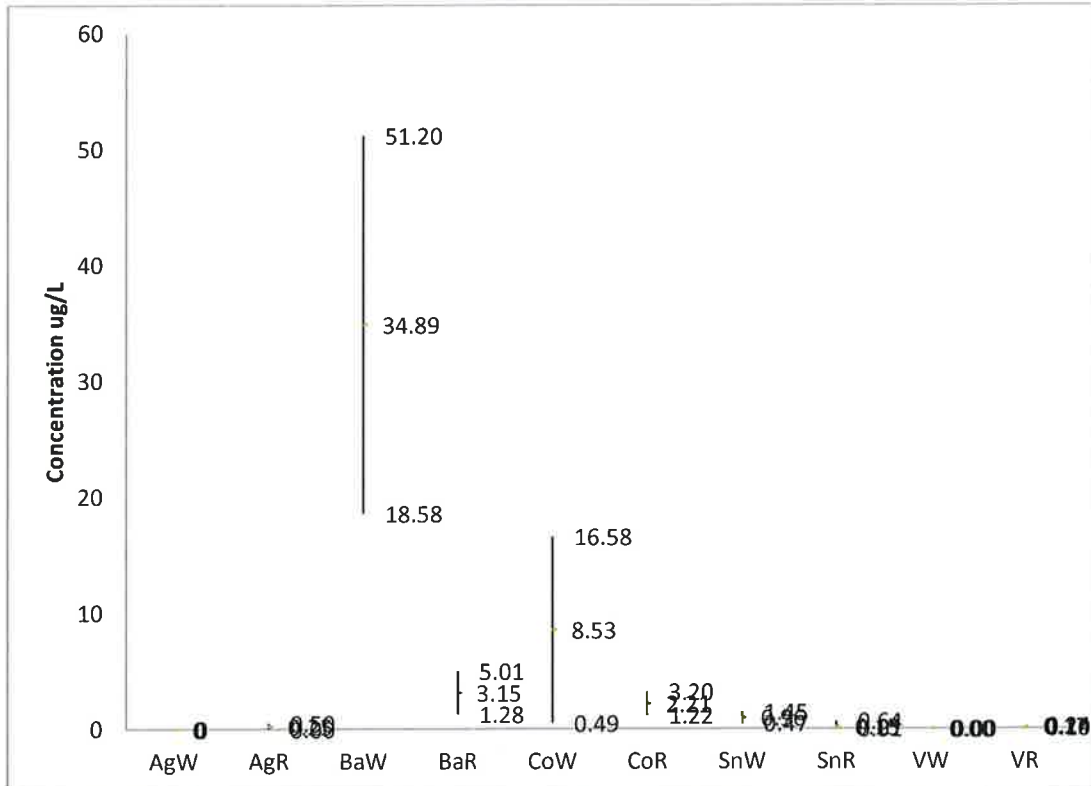


Figure 10. Mean metal concentrations plus and minus one standard deviation for silver, barium, cobalt, tin, and vanadium from monitoring well and MWMP data.

9 Conclusions and Recommendations

The primary objective of this investigation was to assess metal leaching potential in the Rock Creek Run-of-Mine stockpile. To accomplish this, the following tasks were performed.

- Collect near surface samples from seven locations on the fine ore stockpile for Meteoric Water Mobility Procedure Analysis - **completed**
- Sample underdrainage of fine ore stockpile at the pan feeders located in the conveyor tunnel beneath the stockpile - **could not be completed due to lack of rainfall**
- Compare above results to monitoring well data - **completed**
- Prepare a report documenting the findings of this investigation for submittal to ADEC and ADNR - **completed**

Results of the 2014 fine ore sampling and analysis at Rock Creek using MWMP show that – as a whole – reclamation of the run-of-mine ore pile and fine ore pile would not result in degradation of site water quality. While – on average – there could be slight parameter by parameter variations from existing site water quality, there are examples of higher and lower well concentrations for various metals. Rock pile leachate quality is

within the distribution of well water quality data and is not expected to degrade site groundwater quality.

Downgradient recycle water pond (RWP) monitoring well data are reported to ADNR and ADEC quarterly and no trend(s) suggestive of water quality degradation has been measured.

There is currently no groundwater use at the Rock Creek site and the areal extent of the reclaimed piles is small.

References

2006a, Water Management Consultants, Rock Creek Baseline Groundwater, Technical Memorandum from Brent Johnson and Kenneth Carroll to Doug Nicholson, March 27.

2006b, Water Management Consultants, Rock Creek Preliminary Pit Lake Geochemical Assessment, Technical Memorandum from Brent Johnson and Kenneth Carroll to Doug Nicholson, May 26.

2006c, Water Management Consultants, Tailings and Development Rock Storage Facilities Geochemical Modeling, Technical Memorandum from Brent Johnson and Kenneth Carroll to Doug Nicholson, March 27.

2006d, Water Management Consultants, Rock Creek Project – Preliminary Materials Geochemical Testing Update, Technical Memorandum from Brent Johnson and Kenneth Carroll to Doug Nicholson, May 26

2012, Alaska Gold Company, Rock Creek Paste Tailings Geochemical Characterization, June.

2010a, ADEC, Draft Field Sampling Guidance, May.

2010b, ADEC, Laboratory Data Review Checklist, Version 2.7, January.

2011, ACRC, Nome 1900 to present,
<http://climate.gi.alaska.edu/Climate/Location/West/Nome.html>

2014, July, Alaska Gold Company, LLC, Rock Creek Mine Stockpile Metal Leaching Evaluation Study.

Appendix A
ADEC Laboratory Data Review Checklists

Laboratory Data Review Checklist

Completed by: Frank Bergstrom

Title: Consultant Date: August 10, 2014

CS Report Name: Rock Creek Report Date: August 8, 2014

Consultant Firm: Alaska Gold, LLC

Laboratory Name: SGS Laboratory Report Number: 1143130

ADEC File Number: NA ADEC RecKey Number: NA

1. Laboratory

a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?

Yes No NA (Please explain.) Comments:

b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?

Yes No NA (Please explain) Comments:

2. Chain of Custody (COC)

a. COC information completed, signed, and dated (including released/received by)?

Yes No NA (Please explain) Comments:

b. Correct analyses requested?

Yes No NA (Please explain) Comments:

3. Laboratory Sample Receipt Documentation

a. Sample/cooler temperature documented and within range at receipt ($4^{\circ} \pm 2^{\circ}$ C)?

Yes No NA (Please explain) Comments:

soil matrix at ambient temp

b. Sample preservation acceptable - acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

Yes No NA (Please explain) Comments:

c. Sample condition documented - broken, leaking (Methanol), zero headspace (VOC vials)?

Yes No NA (Please explain) Comments:

d. If there were any discrepancies, were they documented? - For example, incorrect sample containers/preservation, sample temperature outside of acceptance range, insufficient or missing samples, etc.?

Yes No NA (Please explain) Comments:

no discrepancies

e. Data quality or usability affected? (Please explain)

Comments:

no

4. Case Narrative

a. Present and understandable?

Yes No NA (Please explain) Comments:

b. Discrepancies, errors or QC failures identified by the lab?

Yes No NA (Please explain) Comments:

c. Were all corrective actions documented?

Yes No NA (Please explain) Comments:

d. What is the effect on data quality/usability according to the case narrative?

Comments:

data usable

5. Samples Results

a. Correct analyses performed/reported as requested on COC?

- Yes No NA (Please explain)

Comments:

b. All applicable holding times met?

- Yes No NA (Please explain)

Comments:

c. All soils reported on a dry weight basis?

- Yes No NA (Please explain)

Comments:

d. Are the reported PQLs less than the Cleanup Level or the minimum required detection level for the project?

- Yes No NA (Please explain)

Comments:

e. Data quality or usability affected? (Please explain)

Comments:

na

6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?

- Yes No NA (Please explain)

Comments:

ii. All method blank results less than PQL?

- Yes No NA (Please explain)

Comments:

iii. If above PQL, what samples are affected?

Comments:

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes No NA (Please explain) Comments:

v. Data quality or usability affected? (Please explain)

Comments:

no

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics - One LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)

Yes No NA (Please explain) Comments:

ii. Metals/Inorganics - One LCS and one sample duplicate reported per matrix, analysis and 20 samples?

Yes No NA (Please explain) Comments:

iii. Accuracy - All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

Yes No NA (Please explain) Comments:

iv. Precision - All relative percent differences (RPD) reported and less than method or laboratory limits? And project specified DQOs, if applicable. RPD reported from LCS/LCSD, MS/DMSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

Yes No NA (Please explain) Comments:

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

vi. Do the affected samples(s) have data flags? If so, are the data flags clearly defined?

Yes No NA (Please explain) Comments:

vii. Data quality or usability affected? (Please explain)

Comments:

no

c. Surrogates - Organics Only

i. Are surrogate recoveries reported for organic analyses - field, QC and laboratory samples?

Yes No NA (Please explain) Comments:

ii. Accuracy - All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

Yes No NA (Please explain) Comments:

iii. Do the sample results with failed surrogate recoveries have data flags? If so, are the data flags clearly defined?

Yes No NA (Please explain) Comments:

iv. Data quality or usability affected? (Use the comment box to explain.)

Comments:

na

d. Trip Blank - Volatile analyses only (GRO, BTEX, Volatile Chlorinated Solvents, etc.): Water and Soil

i. One trip blank reported per matrix, analysis and for each cooler containing volatile samples? (If not, enter explanation below.)

Yes No NA (Please explain.) Comments:

ii. Is the cooler used to transport the trip blank and VOA samples clearly indicated on the COC? (If not, a comment explaining why must be entered below)

Yes No NA (Please explain.) Comments:

iii. All results less than PQL?

Yes No NA (Please explain.)

Comments:

iv. If above PQL, what samples are affected?

Comments:

na

v. Data quality or usability affected? (Please explain.)

Comments:

na

e. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples?

Yes No NA (Please explain.)

Comments:

ii. Submitted blind to lab?

Yes No NA (Please explain.)

Comments:

iii. Precision - All relative percent differences (RPD) less than specified DQOs?
(Recommended: 30% water, 50% soil)

$$RPD (\%) = \text{Absolute Value of: } \frac{(R_1 - R_2)}{((R_1 + R_2)/2)} \times 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Yes No NA (Please explain.)

Comments:

discussed in report

iv. Data quality or usability affected? (Use the comment box to explain why or why not.)

Yes No NA (Please explain.)

Comments:

individual metals outside repeatability of 50% considered estimates and used

f. Decontamination or Equipment Blank (if applicable)

Yes No NA (Please explain)

Comments:

i. All results less than PQL?

Yes No NA (Please explain)

Comments:

ii. If above PQL, what samples are affected?

Comments:

na

iii. Data quality or usability affected? (Please explain.)

Comments:

na

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Defined and appropriate?

Yes No NA (Please explain)

Comments:

Reset Form

Laboratory Data Review Checklist

Completed by:	Frank Bergstrom		
Title:	Consultant	Date:	October 30, 2014
CS Report Name:	Rock Creek	Report Date:	October 29, 2014
Consultant Firm:	Alaska Gold, LLC		
Laboratory Name:	SGS	Laboratory Report Number:	1144478
ADEC File Number:	NA	ADEC RecKey Number:	NA

1. Laboratory

a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?

Yes No NA (Please explain.) Comments:

b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?

Yes No NA (Please explain) Comments:

2. Chain of Custody (COC)

a. COC information completed, signed, and dated (including released/received by)?

Yes No NA (Please explain) Comments:

b. Correct analyses requested?

Yes No NA (Please explain) Comments:

3. Laboratory Sample Receipt Documentation

a. Sample/cooler temperature documented and within range at receipt ($4^{\circ} \pm 2^{\circ} \text{C}$)?

Yes No NA (Please explain) Comments:

soil matrix at ambient temp

b. Sample preservation acceptable - acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

Yes No NA (Please explain) Comments:

c. Sample condition documented - broken, leaking (Methanol), zero headspace (VOC vials)?

Yes No NA (Please explain) Comments:

d. If there were any discrepancies, were they documented? - For example, incorrect sample containers/preservation, sample temperature outside of acceptance range, insufficient or missing samples, etc.?

Yes No NA (Please explain) Comments:

no discrepancies

e. Data quality or usability affected? (Please explain)

Comments:

no

4. Case Narrative

a. Present and understandable?

Yes No NA (Please explain) Comments:

b. Discrepancies, errors or QC failures identified by the lab?

Yes No NA (Please explain) Comments:

c. Were all corrective actions documented?

Yes No NA (Please explain) Comments:

d. What is the effect on data quality/usability according to the case narrative?

Comments:

data usable

5. Samples Results

a. Correct analyses performed/reported as requested on COC?

- Yes No NA (Please explain)

Comments:

b. All applicable holding times met?

- Yes No NA (Please explain)

Comments:

c. All soils reported on a dry weight basis?

- Yes No NA (Please explain)

Comments:

d. Are the reported PQLs less than the Cleanup Level or the minimum required detection level for the project?

- Yes No NA (Please explain)

Comments:

e. Data quality or usability affected? (Please explain)

Comments:

na

6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?

- Yes No NA (Please explain)

Comments:

ii. All method blank results less than PQL?

- Yes No NA (Please explain)

Comments:

iii. If above PQL, what samples are affected?

Comments:

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes No NA (Please explain) Comments:

v. Data quality or usability affected? (Please explain)

Comments:

no

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics - One LCS/LCSD reported per matrix, analysis and 20 samples? (LCS/LCSD required per AK methods, LCS required per SW846)

Yes No NA (Please explain) Comments:

ii. Metals/Inorganics - One LCS and one sample duplicate reported per matrix, analysis and 20 samples?

Yes No NA (Please explain) Comments:

iii. Accuracy - All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

Yes No NA (Please explain) Comments:

iv. Precision - All relative percent differences (RPD) reported and less than method or laboratory limits? And project specified DQOs, if applicable. RPD reported from LCS/LCSD, MS/DMSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

Yes No NA (Please explain) Comments:

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

vi. Do the affected samples(s) have data flags? If so, are the data flags clearly defined?

Yes No NA (Please explain) Comments:

vii. Data quality or usability affected? (Please explain)

Comments:

no

c. Surrogates - Organics Only

i. Are surrogate recoveries reported for organic analyses - field, QC and laboratory samples?

Yes No NA (Please explain) Comments:

ii. Accuracy - All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

Yes No NA (Please explain) Comments:

iii. Do the sample results with failed surrogate recoveries have data flags? If so, are the data flags clearly defined?

Yes No NA (Please explain) Comments:

iv. Data quality or usability affected? (Use the comment box to explain.)

Comments:

na

d. Trip Blank - Volatile analyses only (GRO, BTEX, Volatile Chlorinated Solvents, etc.): Water and Soil

i. One trip blank reported per matrix, analysis and for each cooler containing volatile samples? (If not, enter explanation below.)

Yes No NA (Please explain.) Comments:

ii. Is the cooler used to transport the trip blank and VOA samples clearly indicated on the COC? (If not, a comment explaining why must be entered below)

Yes No NA (Please explain.) Comments:

iii. All results less than PQL?

Yes No NA (Please explain.)

Comments:

iv. If above PQL, what samples are affected?

Comments:

na

v. Data quality or usability affected? (Please explain.)

Comments:

na

e. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples?

Yes No NA (Please explain.)

Comments:

ii. Submitted blind to lab?

Yes No NA (Please explain.)

Comments:

iii. Precision - All relative percent differences (RPD) less than specified DQOs?
(Recommended: 30% water, 50% soil)

$$RPD (\%) = \text{Absolute Value of: } \frac{(R_1 - R_2)}{((R_1 + R_2)/2)} \times 100$$

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Yes No NA (Please explain.)

Comments:

discussed in report

iv. Data quality or usability affected? (Use the comment box to explain why or why not.)

Yes No NA (Please explain.)

Comments:

individual metals outside repeatability of 50% considered estimates and used

f. Decontamination or Equipment Blank (if applicable)

Yes No NA (Please explain)

Comments:

i. All results less than PQL?

Yes No NA (Please explain)

Comments:

ii. If above PQL, what samples are affected?

Comments:

na

iii. Data quality or usability affected? (Please explain.)

Comments:

na

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Defined and appropriate?

Yes No NA (Please explain)

Comments:

Reset Form

Appendix B
Laboratory Reports of Analysis



Laboratory Report of Analysis

To: Alaska Gold Company LLC
P.O. Box 640
Nome, AK 99762
907-321-3637

Report Number: **1144478**

Client Project: **Nanuaq Gold Project**

Dear Frank Bergstrom,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Stephen at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America Inc.

Alaska Division Technical Director

Stephen Ede

2014.10.09

15:08:11 -08'00'

Stephen Ede
Project Manager
Stephen.Ede@sgs.com

Date

Print Date: 10/09/2014 1:36 02PM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Member of SGS Group

Case Narrative

SGS Client: **Alaska Gold Company LLC**
SGS Project: **1144478**
Project Name/Site: **Nanuaq Gold Project**
Project Contact: **Frank Bergstrom**

Refer to sample receipt form for information on sample condition.

RC01-SS-03 (1144478001) PS

Meteoritic Water Mobility Procedure, Metals list, and LLHg were analyzed by SGS of Lakefield Ontario, Canada.

RC01-SS-04 (1144478002) PS

Meteoritic Water Mobility Procedure, Metals list, and LLHg were analyzed by SGS of Lakefield Ontario, Canada.

RC01-SS-05 (1144478003) PS

Meteoritic Water Mobility Procedure, Metals list, and LLHg were analyzed by SGS of Lakefield Ontario, Canada.

RC01-SS-06 (1144478004) PS

Meteoritic Water Mobility Procedure, Metals list, and LLHg were analyzed by SGS of Lakefield Ontario, Canada.

RC01-SS-07 (1144478005) PS

Meteoritic Water Mobility Procedure, Metals list, and LLHg were analyzed by SGS of Lakefield Ontario, Canada.

RC01-SS-08 (1144478006) PS

Meteoritic Water Mobility Procedure, Metals list, and LLHg were analyzed by SGS of Lakefield Ontario, Canada.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 10/09/2014 1:36:03PM

Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
RC01-SS-03	1144478001	09/05/2014	09/12/2014	Solid/Soil (Wet Weight)
RC01-SS-04	1144478002	09/05/2014	09/12/2014	Solid/Soil (Wet Weight)
RC01-SS-05	1144478003	09/05/2014	09/12/2014	Solid/Soil (Wet Weight)
RC01-SS-06	1144478004	09/05/2014	09/12/2014	Solid/Soil (Wet Weight)
RC01-SS-07	1144478005	09/05/2014	09/12/2014	Solid/Soil (Wet Weight)
RC01-SS-08	1144478006	09/05/2014	09/12/2014	Solid/Soil (Wet Weight)

Method

Method Description



SGS North America Inc. CHAIN OF CUSTODY RECORD

1144478



tionwide
• Maryland
• New York
• Indiana
• Kentucky
-sgs.com

1 CLIENT: Alaska Gold Company PHONE NO: _____

CONTACT: Frank Bergstrom PROJECT/ PWSID/ PERMIT#: _____

PROJECT NAME: Nanuy Project EMAIL: _____

REPORTS TO: Frank Bergstrom frank@gci.net QUOTE #: _____

INVOICE TO: Same P.O. #: _____

SGS Reference #: _____ page 1 of 1

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX/ MATRIX CODE	# CONTAINERS	SAMPLE TYPE C= COMP G= GRAB M= Multi Incremental Samples	Preservatives Used Analysis Required	REMARKS/ LOC ID
1A	RC01-SS-03	9/5/14	1033	Soil	1	G	MS/A	
2A	RC01-SS-04	1037	1040		1			
3A	RC01-SS-05	1040	1043		1			
4A	RC01-SS-06	1043	1046		1			
5A	RC01-SS-07	1046	1050		1			
6A	RC01-SS-08	1050			1			

4 DOD Project? YES NO Data Deliverable Requirements: Email to Frank Bergstrom

Requested Turnaround Time and/or Special Instructions: Standard TAT

Temperature Blank °C: _____ Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

5 Collected/Relinquished By: (1) [Signature] Date: 9/2/14 10:00 Received By: _____

Relinquished By: (2) _____ Date: _____ Received By: _____

Relinquished By: (3) _____ Date: _____ Received By: _____

Relinquished By: (4) _____ Date: 9/2/14 16:02 Received For Laboratory By: [Signature]

4 Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Requested Turnaround Time and/or Special Instructions: Standard TAT

Temperature Blank °C: _____ Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

(See attached Sample Receipt Form)



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>
1144478001-A	No Preservative Required	OK			
1144478002-A	No Preservative Required	OK			
1144478003-A	No Preservative Required	OK			
1144478004-A	No Preservative Required	OK			
1144478005-A	No Preservative Required	OK			
1144478006-A	No Preservative Required	OK			

Container Condition Glossary

OK - The container was received at an acceptable pH for the analysis requested.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.



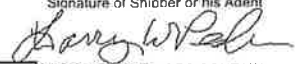
PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

BU - The container was received with headspace greater than 6mm.

027 OME 8806 5902

Coast Cooler

027-8806 5902

Shipper's Name and Address Alaska Gold Company 110 Front St Ste 300 Nome, AK 99762 USA Tel: 9074435272		Shipper's Account Number 27442479822 Customer's ID Number 8456		Not Negotiable Air Waybill Issued By  ALASKA AIRLINES & HORIZON AIR P.O. BOX 68900 SEATTLE, WA 98168 800-225-2752 ALASKACARGO.COM	
Consignee's Name and Address SGS North America Inc 200 W Potter Drive Anchorage, AK 99518 USA Tel: 9075622343		Consignee's Account Number 27400215947		Also notify Tel:	
Issuing Carrier's Agent and City Nome		Accounting Information Alaska Gold Company 110 Front St Ste 300 Nome, AK 99762 USA 1144478 		8456	
Agent's IATA Code Account No.		Airport of Departure (Addr. of First Carrier) and Requested Routing Nome		GoldStreak	
To By First Carrier ANC Alaska Airlines		To / By To / By		Currency USD PX	
Airport of Destination Anchorage		Flight/Date AS 152/12		Declared Value For Carriage NVD	
Handling Information NOA		Amount of Insurance XXX		Declared Value For Customs NCV	
No of Pieces 1		Gross Weight 70.0		Chargeable Weight 70.0	
Rate / Charge AS AGREED		Total AS AGREED		Nature and Quantity of Goods (Incl. Dimensions or Volume) SOIL SAMPLES Dims: 23 x 13 x14 x 1 GSX Volume: 2.422	
Prepaid AS AGREED		Weight Charge Collect		Other Charges MYC 12.60 SCC 2.00 XBC 0.00	
Valuation Charge		Tax		Shipper certifies that the particulars on the face hereof are correct and that insofar as any part of the consignment contains dangerous goods, such part is properly described by name and is in proper condition for carriage by air according to the applicable Dangerous Goods Regulations. I consent to the inspection of this cargo.	
Total Other Charges Due Agent		Total Other Charges Due Carrier		For: Alaska Gold Company Signature of Shipper or his Agent 	
Total Prepaid AS AGREED		Total Collect		THIS SHIPMENT DOES NOT CONTAIN DANGEROUS GOODS THIS SHIPMENT DOES CONTAIN DANGEROUS GOODS	
Executed On (Date) 12 Sep 2014 10:17		at (Place) Nome		Signature of Issuing Carrier or its Agent Alaska Airlines	

027-8806 5902

Alert Expeditors Inc.
DBA/Petroleum Courier Service

#349063

Citywide Delivery • 440-3351
8421 Flamingo Drive • Anchorage, Alaska 99502

Date 9.12.14
From AK Gold Company

To 5615

Collect <input type="checkbox"/>	Prepay <input type="checkbox"/> Account <input type="checkbox"/>	Advance Charges <input type="checkbox"/>
Job #	PO#	

<u>1 Cooler</u>	
<u>GSX - 8806 5902</u>	

1144478



Shipped Signature _____

Received By: [Signature] Total Charge _____



**SGS North America Inc.
CHAIN OF CUSTODY RECORD**

- Locations Nationwide**
- Alaska
 - New Jersey
 - North Carolina
 - West Virginia
 - Maryland
 - New York
 - Indiana
 - Kentucky

www.us.sgs.com

1. CLIENT: SGS - AK		SGS Reference: SGS Lakeland		Page ____ of ____
CONTACT: Julie Shumway (907) 562-2343		Additional Comments: All soils report out in dry weight unless otherwise requested.		
PHONE NO: (907) 562-2343				
PWSID/ PERMIT#: 1144478				
REPORTS TO: Julie Shumway E-MAIL: julie.shumway@sgs.com				
INVOICE TO: SGS				
QUOTE #: 1144478				
P.O. #: 1144478				
2 RESERVED for lab use	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX/ MATRIX
	RC01-SS-03	09/05/14	10:33	Soil
	RC01-SS-04	09/05/14	10:37	Soil
	RC01-SS-05	09/05/14	10:40	Soil
	RC01-SS-06	09/05/14	10:43	Soil
	RC01-SS-07	09/05/14	10:46	Soil
	RC01-SS-08	09/05/14	10:50	Soil
3				
5 Relinquished By: (1)		Date	Time	Received By:
		09/15/14		
Relinquished By: (2)		Date	Time	Received By:
Relinquished By: (3)		Date	Time	Received By:
Relinquished By: (4)		Date	Time	Received For Laboratory By:
4. DOD Project? YES NO				
Cooler ID: _____				
Requested Turnaround Time and/or Special Instructions: _____				
Data Deliverable Requirements: Level II + Excel EDD				
Temp Blank °C: _____		Chain of Custody Seal: (Circle)		
or Ambient []		INTACT BROKEN ABSENT		
(See attached Sample Receipt Form)				

http://www.sgs.com/terms_and_conditions.htm

[] 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
 [] 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557



SGS Canada Inc.
 P.O. Box 4300 - 185 Concession St.
 Lakefield - Ontario - K0L 2H0
 Phone: 705-652-2000 FAX: 705-652-6365

SGS Environmental Services Inc.
 Attn : Julie Shumway

200 W. Potter Drive
 Anchorage, AK
 99518, USA

Phone: (907) 562-2343
 Fax: (907) 561-5301

Meteoritic Water Mobility Procedure (MWMP)

09-October-2014

Date Rec.: 17 September 2014
 LR Report: CA12518-SEP14
 Reference: PO# 1144478

Copy: #1

CERTIFICATE OF ANALYSIS

Final Report

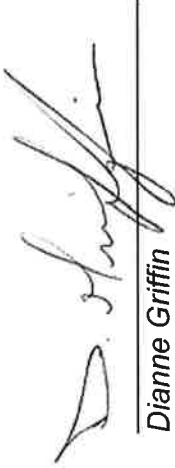
Analysis	1: Analysis Start Date	3: Analysis Approval Date	6: RL	6: QC - Blank	7: QC - STD % Recovery	7: QC - DUP % RPD	8: % RPD	9: 1144478001 RC01-SS-03	10: 1144478002 RC01-SS-04	11: 1144478003 RC01-SS-06	12: 1144478004 RC01-SS-06	13: 1144478006 RC01-SS-07	14: 1144478006 RC01-SS-08
Sample Date & Time								05-Sep-14 10:33	05-Sep-14 10:37	05-Sep-14 10:40	05-Sep-14 10:43	05-Sep-14 10:46	05-Sep-14 10:50
Sample weight [g]	30-Sep-14	03-Oct-14						3700	3900	3700	4500	5000	4000
Volume D.I. Water [mL]	30-Sep-14	03-Oct-14						3700	3900	3700	4500	5000	4000
Initial pH	30-Sep-14	03-Oct-14						5.79	5.83	5.82	5.83	5.84	5.83
Final pH	01-Oct-14	03-Oct-14						7.49	7.74	8.08	7.95	7.95	7.55
Volume Leachate [mL]	01-Oct-14	03-Oct-14						3072	3190	3402	4023	4419	3522
Mercury [mg/L]	08-Oct-14	09-Oct-14	0.00001	< 0.00001	110%	ND		< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Silver [mg/L]	06-Oct-14	07-Oct-14	0.00002	< 0.00002	93%	11%		0.00042	0.00038	0.000534	0.000547	0.000030	0.000319
Barium [mg/L]	06-Oct-14	07-Oct-14	0.00002	< 0.00002	95%	0%		0.00491	0.00105	0.00484	0.00103	0.00077	0.00435
Cobalt [mg/L]	06-Oct-14	07-Oct-14	0.00004	< 0.00004	96%	2%		0.00275	0.00141	0.00137	0.00153	0.00114	0.00324
Phosphorus [mg/L]	06-Oct-14	07-Oct-14	0.009	< 0.003	90%	5%		< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Antimony [mg/L]	06-Oct-14	07-Oct-14	0.0002	< 0.0002	98%	15%		0.0041	0.0142	0.0056	0.0126	0.0121	0.0142
Silicon [mg/L]	06-Oct-14	07-Oct-14	0.02	< 0.02	94%	2%		0.44	0.65	0.35	0.68	0.63	0.71
Strontium [mg/L]	06-Oct-14	07-Oct-14	0.00002	< 0.00002	96%	3%		2.30	0.839	0.327	0.472	0.422	2.36
Tin [mg/L]	06-Oct-14	07-Oct-14	0.00001	< 0.00001	95%	4%		0.00016	0.00016	0.00012	0.00006	0.00006	0.00006
Vanadium [mg/L]	06-Oct-14	07-Oct-14	0.00001	< 0.00001	92%	2%		0.00010	0.00015	0.00021	0.00017	0.00020	0.00012



SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - K0L 2H0
Phone: 705-652-2000 FAX: 705-652-6365

Meteoritic Water Mobility Procedure (MWMP)

LR Report : CA12518-SEP14



Dianne Griffin
Project Specialist



Laboratory Report of Analysis

To: Alaska Gold Company LLC
P.O Box 640
Nome, AK 99762
907-321-3637

Report Number: **1143130**

Client Project: **Nanuuq Gold**

Dear Frank Bergstrom,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Stephen at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America Inc.


Alaska Division Technical Director

Stephen Ede

2014.10.09

15:08:11 -08'00'

Stephen Ede
Project Manager
Stephen.Ede@sgs.com

Date

Print Date: 08/08/2014 2:14:57PM

SGS North America Inc. 200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Member of SGS Group

Case Narrative

SGS Client: **Alaska Gold Company LLC**

SGS Project: **1143130**

Project Name/Site: **Nanuuq Gold**

Project Contact: **Frank Bergstrom**

Refer to sample receipt form for information on sample condition.

1 Fine Ore (1143130004) PS

MWMP, Metals list and LLHg were analyzed by SGS of Lakefield Ontario, Canada.

2 and 3 Fine Ore (1143130005) PS

MWMP, Metals list and LLHg were analyzed by SGS of Lakefield Ontario, Canada.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 08/08/2014 2:14:58PM

Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. If you have any questions regarding this report, or if we can be of any other assistance, please contact your SGS Project Manager at 907-562-2343. All work is provided under SGS general terms and conditions (<http://www.sgs.com/terms_and_conditions.htm>), unless other written agreements have been accepted by both parties.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & UST-005 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020A, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035B, 6020, 7470A, 7471B, 8021B, 8082A, 8260B, 8270D, 8270D-SIM, 9040B, 9045C, 9056A, 9060A, AK101 and AK102/103). Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
B	Indicates the analyte is found in a blank associated with the sample.
CCV	Continuing Calibration Verification
CL	Control Limit
D	The analyte concentration is the result of a dilution.
DF	Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
F	Indicates value that is greater than or equal to the DL
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
JL	The analyte was positively identified, but the quantitation is a low estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
M	A matrix effect was present.
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
Q	QC parameter out of acceptance range.
R	Rejected
RPD	Relative Percent Difference
U	Indicates the analyte was analyzed for but not detected.

Note: Sample summaries which include a result for "Total Solids" have already been adjusted for moisture content. All DRO/RRO analyses are integrated per SOP.

Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
DC3-A	1143130001	07/15/2014	07/16/2014	Water (Surface, Eff., Ground)
DC3-B	1143130002	07/15/2014	07/16/2014	Water (Surface, Eff., Ground)
DC3-C	1143130003	07/15/2014	07/16/2014	Water (Surface, Eff., Ground)
1 Fine Ore	1143130004	07/15/2014	07/16/2014	Soil/Solid (dry weight)
2 and 3 Fine Ore	1143130005	07/15/2014	07/16/2014	Soil/Solid (dry weight)

<u>Method</u>	<u>Method Description</u>
SM21 2540D	Total Suspended Solids SM20 2540D
SM21 2130B	Turbidity Analysis



Detectable Results Summary

Client Sample ID: **DC3-A**
Lab Sample ID: 1143130001
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Turbidity	0.200	NTU

Client Sample ID: **DC3-B**
Lab Sample ID: 1143130002
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Turbidity	0.800	NTU

Client Sample ID: **DC3-C**
Lab Sample ID: 1143130003
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Turbidity	0.250	NTU



Results of **DC3-A**

Client Sample ID: **DC3-A**
Client Project ID: **Nanuuq Gold**
Lab Sample ID: 1143130001
Lab Project ID: 1143130

Collection Date: 07/15/14 12:55
Received Date: 07/16/14 08:14
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Turbidity	0.200	0.200	0.100	NTU	1		07/16/14 16:09

Batch Information

Analytical Batch: WAT10217
Analytical Method: SM21 2130B
Analyst: NLL
Analytical Date/Time: 07/16/14 16:09
Container ID: 1143130001-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	1.25 U	2.50	0.750	mg/L	1		07/21/14 10:59

Batch Information

Analytical Batch: STS4462
Analytical Method: SM21 2540D
Analyst: WLF
Analytical Date/Time: 07/21/14 10:59
Container ID: 1143130001-A

Print Date: 08/08/2014 2:15:03PM



Results of DC3-B

Client Sample ID: **DC3-B**
Client Project ID: **Nanuuq Gold**
Lab Sample ID: 1143130002
Lab Project ID: 1143130

Collection Date: 07/15/14 12:55
Received Date: 07/16/14 08:14
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Turbidity	0.800	0.200	0.100	NTU	1		07/16/14 16:09

Batch Information

Analytical Batch: WAT10217
Analytical Method: SM21 2130B
Analyst: NLL
Analytical Date/Time: 07/16/14 16:09
Container ID: 1143130002-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	1.25 U	2.50	0.750	mg/L	1		07/21/14 10:59

Batch Information

Analytical Batch: STS4462
Analytical Method: SM21 2540D
Analyst: WLF
Analytical Date/Time: 07/21/14 10:59
Container ID: 1143130002-A

Print Date: 08/08/2014 2:15:03PM



Results of DC3-C

Client Sample ID: **DC3-C**
Client Project ID: **Nanuq Gold**
Lab Sample ID: 1143130003
Lab Project ID: 1143130

Collection Date: 07/15/14 12:55
Received Date: 07/16/14 08:14
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Turbidity	0.250	0.200	0.100	NTU	1		07/16/14 16:09

Batch Information

Analytical Batch: WAT10217
Analytical Method: SM21 2130B
Analyst: NLL
Analytical Date/Time: 07/16/14 16:09
Container ID: 1143130003-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	1.25 U	2.50	0.750	mg/L	1		07/21/14 10:59

Batch Information

Analytical Batch: STS4462
Analytical Method: SM21 2540D
Analyst: WLF
Analytical Date/Time: 07/21/14 10:59
Container ID: 1143130003-A

Print Date: 08/08/2014 2:15:03PM



Method Blank

Blank ID: MB for HBN 1624341 [STS/4462]
Blank Lab ID: 1221428

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1143130001, 1143130002, 1143130003

Results by SM21 2540D

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Suspended Solids	0.250U	0.500	0.150	mg/L

Batch Information

Analytical Batch: STS4462
Analytical Method: SM21 2540D
Instrument:
Analyst: WLF
Analytical Date/Time: 7/21/2014 10:59:44AM

Print Date: 08/08/2014 2:15:04PM



Duplicate Sample Summary

Original Sample ID: 1148241001
Duplicate Sample ID: 1221431
QC for Samples:
1143130001, 1143130002, 1143130003

Analysis Date: 07/21/2014 10:59
Matrix: Water (Surface, Eff., Ground)

Results by SM21 2540D

<u>NAME</u>	<u>Original ()</u>	<u>Duplicate ()</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Total Suspended Solids	8.50	8.50	0.00	5.00

Batch Information

Analytical Batch: STS4462
Analytical Method: SM21 2540D
Instrument:
Analyst: WLF

Print Date: 08/08/2014 2:15:06PM

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200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1143130 [STS4462]
 Blank Spike Lab ID: 1221429
 Date Analyzed: 07/21/2014 10:59

Spike Duplicate ID: LCSD for HBN 1143130 [STS4462]
 Spike Duplicate Lab ID: 1221430
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1143130001, 1143130002, 1143130003

Results by SM21 2540D

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Suspended Solids	50	46.4	93	50	46.0	92	(75-125)	0.87	(< 5)

Batch Information

Analytical Batch: **STS4462**
 Analytical Method: **SM21 2540D**
 Instrument:
 Analyst: **WLF**

Prep Batch:
 Prep Method:
 Prep Date/Time:
 Spike Init Wt./Vol.: 50 mg/L Extract Vol: 1000 mL
 Dup Init Wt./Vol.: 50 mg/L Extract Vol: 1000 mL



Method Blank

Blank ID: MB for HBN 1624157 [WAT/10217]
Blank Lab ID: 1220680

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1143130001, 1143130002, 1143130003

Results by SM21 2130B

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Turbidity	0.100J	0.200	0.100	NTU

Batch Information

Analytical Batch: WAT10217
Analytical Method: SM21 2130B
Instrument: Turbidimeter
Analyst: NLL
Analytical Date/Time: 7/16/2014 4:09:00PM

Print Date: 08/08/2014 2:15:08PM



Duplicate Sample Summary

Original Sample ID: 1143130001
Duplicate Sample ID: 1220683
QC for Samples:
1143130001, 1143130002, 1143130003

Analysis Date: 07/16/2014 16:09
Matrix: Water (Surface, Eff., Ground)

Results by SM21 2130B

<u>NAME</u>	<u>Original (l)</u>	<u>Duplicate (l)</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Turbidity	0.200	0.200	0.00	20.00

Batch Information

Analytical Batch: WAT10217
Analytical Method: SM21 2130B
Instrument: Turbidimeter
Analyst: NLL

Print Date: 08/08/2014 2:15:10PM

SGS North America Inc.

200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Member of SGS Group



Blank Spike Summary

Blank Spike ID: LCS for HBN 1143130 [WAT10217]
Blank Spike Lab ID: 1220681
Date Analyzed: 07/16/2014 16:09

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1143130001, 1143130002, 1143130003

Results by SM21 2130B

Parameter	Blank Spike (NTU)			CL
	Spike	Result	Rec (%)	
Turbidity	10	11.0	110	(90-110)

Batch Information

Analytical Batch: **WAT10217**
Analytical Method: **SM21 2130B**
Instrument: **Turbidimeter**
Analyst: **NLL**

Prep Batch:
Prep Method:
Prep Date/Time:
Spike Init Wt./Vol.: 10 NTU Extract Vol: 1 mL
Dup Init Wt./Vol.: Extract Vol:

Print Date: 08/08/2014 2:15:11PM

1143130



Ede, Stephen (Anchorage)

From: Frank Bergstrom [frank.b@gci.net]
Sent: Friday, July 18, 2014 9:53 AM
To: Ede, Stephen (Anchorage)
Subject: RE: AK Gold - MWMP July - Verbal Quote
Attachments: Frank Bergstrom.vcf

Stephen,

Please proceed. I would combine the two smallest samples so you have enough material.

No need for total CN or ammonia. Residual blasting agent is not an issue. Is there some other reason for ammonia and cyanide?

Regards, Frank



From: Ede, Stephen (Anchorage) [mailto:Stephen.Ede@sgs.com]
Sent: Friday, July 18, 2014 8:16 AM
To: Frank Bergstrom
Subject: FW: AK Gold - MWMP July - Verbal Quote

Frank, Here are the quoted prices for the MWMP work requested. In general they request 8 lbs and one of the samples is slightly over 4 lbs which may be an issue. Let me know if you want to proceed.

Stephen C. Ede
Environmental Services – Alaska Division
Technical Director
SGS – North America Inc.
200 W. Potter Drive
Anchorage, AK 99518
Phone: +00 1 907 550-3204
E-mail: Stephen.ede@sgs.com

From: Shumway, Julie (Anchorage)
Sent: Thursday, July 17, 2014 3:39 PM
To: Ede, Stephen (Anchorage); Long, Alesha (Anchorage)
Subject: FW: AK Gold - MWMP July - Verbal Quote

Please note that prices do not include shipping to Lakefield, ON Canada or customs charges

Client Name: **Alaska Gold**
 Project: **MWMP**
 Contact: **Frank Bergstrom**
 Start Date: **July, 2015**
 Project Type: **Commercial**

*If project is DOD, a formal quote will be required.

TAT Requirements: **Standard**

Data Package Requirements:

<u>Analysis</u>	<u>Matrix</u>	<u>Sample #</u>	<u>Price</u>
MWMP	Gravel		\$550
Ammonia	Gravel		\$18
T. CN	Gravel		\$18

- **SGS North America provides all reports and deliverables online. This secure web portal, Engage, can be accessed at <https://engage.sgs.com/LabDS/Default.aspx>. Your SGS Project Manager can provide a free login to this site. Hardcopy and/or CDs can be provided upon request at a cost of \$100.00. Additional copies will be billed at \$50.00 each when requested at the same time.**
- When **RUSH** turnaround times are required, your **Project Manager needs to be notified** 5 working days in advance of sample delivery to verify laboratory capacity. Rush surcharges will apply.
- The proposal refers to a standard turnaround time of 10 working days. Waste analysis turnaround times may be longer due to matrix complications.
- This quote is based on SGS's QA/QC, detection limits and standard turn around times and deliverables (e.g., Level 1 or 2). For project specific requirements, including data deliverables, please request a formal quote with the submission of project specific documents.
- Please review SGS North America Inc. Terms and Conditions at http://www.sgs.com/terms_and_conditions.htm. Submission of samples indicates acceptance of these terms and conditions unless exceptions are agreed upon by both parties. SGS retains ownership and rights to all data provided to client prior to payment.

Please speak with your SGS Project Manager, Business Development or the General Manager with any questions.

Julie Shumway
 Alaska Division
 Business Development
 SGS North America Inc.
 200 West Potter Drive
 Anchorage, Alaska 99518
 Phone: (907) 562-2343
 Direct: (907) 550-3215



SGS North America Inc. CHAIN OF CUSTODY REC

- Locations Nationwide: Alaska, Maryland, New Jersey, North Carolina, Virginia, Indiana, Kentucky, www.us.sgs.com

1143130



1 CLIENT: Alaska Gold Company
CONTACT: Frank Bergstrom
PROJECT NAME: Nanuq Gold
REPORTS TO: Frank Bergstrom
INVOICE TO: Terrell Brown

Table with columns: RESERVED for lab use, SAMPLE IDENTIFICATION, DATE, TIME, MATRIX CODE. Rows include DC3-A, DC3-B, DC3-C, 1 Fine Ore, 2 Fine Ore, 3 Fine Ore.

Table with columns: # CONTAINERS, SAMPLE TYPE, PRESERVATIVES USED, ANALYSIS REQUIRED, REMARKS/LOC ID. Includes handwritten notes like 'Date 10/27/08' and 'TSS Turbidity'.

5 Collected/Relinquished By: (1) Frank Bergstrom
Relinquished By: (2)
Relinquished By: (3)
Relinquished By: (4)
Requested Turnaround Time and/or Special Instructions: Standard
Temperature Blank °C: 7.22/4/71



1143130



SAMPLE RECEIPT FORM

Review Criteria:	Condition:	Comments/Action Taken:
Were custody seals intact? Note # & location, if applicable. COC accompanied samples?	<input checked="" type="radio"/> Yes No N/A <input checked="" type="radio"/> Yes No N/A	
Temperature blank compliant* (i.e., 0-6°C after CF)? * Note: Exemption permitted for chilled samples collected less than 8 hours ago. Cooler ID: <u>1</u> @ <u>72</u> w/ Therm.ID: <u>71</u> Cooler ID: _____ @ _____ w/ Therm.ID: _____ Cooler ID: _____ @ _____ w/ Therm.ID: _____ Cooler ID: _____ @ _____ w/ Therm.ID: _____ Cooler ID: _____ @ _____ w/ Therm.ID: _____ Note: If non-compliant, use form FS-0029 to document affected samples/analyses. If samples are received without a temperature blank, the "cooler temperature" will be documented in lieu of the temperature blank & "COOLER TEMP" will be noted to the right. In cases where neither a temp blank nor cooler temp can be obtained, note "ambient" or "chilled." If temperature(s) <0°C, were all sample containers ice free?	Yes No N/A Yes No N/A	
Delivery method (specify all that apply): Client USPS <input checked="" type="radio"/> Alert Courier C&D Delivery AK Air Lynden Carfile ERA PenAir FedEx UPS NAC Other: → For WO# with airbills, was the WO# & airbill info recorded in the Front Counter eLog?	Note ABN/tracking # See Attached or N/A Yes No N/A	
→ For samples received with payment, note amount (\$) and cash / check / CC (circle one) or note: → For samples received in FBKS, ANCH staff will verify all criteria are reviewed.		N/A N/A
Were samples received within hold time? Note: Refer to form F-083 "Sample Guide" for hold time information. Do samples match COC* (i.e., sample IDs, dates/times collected)? * Note: Exemption permitted if times differ <1hr; in that case, use times on COC. Were analyses requested unambiguous?	<input checked="" type="radio"/> Yes No N/A <input checked="" type="radio"/> Yes No N/A <input checked="" type="radio"/> Yes No N/A	
Were samples in good condition (no leaks/cracks/breakage)? Packing material used (specify all that apply): Bubble Wrap Separate plastic bags Vermiculite Other:	<input checked="" type="radio"/> Yes No N/A	
Were all VOA vials free of headspace (i.e., bubbles ≤6 mm)? Were all soil VOAs field extracted with MeOH+BFB?	Yes No N/A Yes No N/A	
Were proper containers (type/mass/volume/preservative*) used? * Note: Exemption permitted for waters to be analyzed for metals. Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	<input checked="" type="radio"/> Yes No N/A Yes No N/A	
For special handling (e.g., "MI" or foreign soils, lab filter, limited volume, Ref Lab), were bottles/paperwork flagged (e.g., sticker)?	Yes No N/A	4A15A17G+ Ref Lab Samples are on hold
For preserved waters (other than VOA vials, LL-Mercury or microbiological analyses), was pH verified and compliant ? If pH was adjusted , were bottles flagged (i.e., stickers)?	Yes No N/A <input checked="" type="radio"/> Yes No N/A	
For RUSH/SHORT Hold Time , were COC/Bottles flagged accordingly? Was Rush/Short HT email sent, if applicable?	<input checked="" type="radio"/> Yes No N/A	Turbidity
For SITE-SPECIFIC QC , e.g. BMS/BMSD/BDUP, were containers / paperwork flagged accordingly?	Yes No N/A	
For any question answered "No," has the PM been notified and the problem resolved (or paperwork put in their bin)?	Yes No N/A	SRF Completed by: <u>EMF</u> PM = _____ N/A
Was PEER REVIEW of sample numbering/labeling completed ?	<input checked="" type="radio"/> Yes No N/A	Peer Reviewed by: <u>TLD</u> N/A
Additional notes (if applicable):		

Note to Client: Any "no" circled above indicates non-compliance with standard procedures and may impact data quality.



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>
1143130001-A	No Preservative Required	OK			
1143130002-A	No Preservative Required	OK			
1143130003-A	No Preservative Required	OK			
1143130004-A	No Preservative Required	OK			
1143130005-A	No Preservative Required	OK			
1143130006-A	No Preservative Required	OK			

Container Condition Glossary

OK - The container was received at an acceptable pH for the analysis requested.


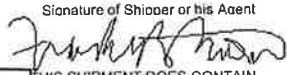
PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

BU - The container was received with headspace greater than 6mm.

027 OME 8806 0136

027-8806 0136

Shipper's Name and Address Alaska Gold Company 110 Front St Ste 300 Nome, AK 99762 USA Tel: 9074435272		Shipper's Account Number 27442479822 Customer's ID Number 8456		Not Negotiable Air Waybill Issued By  ALASKA AIRLINES & HORIZON AIR P.O. BOX 68900 SEATTLE, WA 98168 800-225-2752 ALASKACARGO.COM																												
Consignee's Name and Address SGS North America Inc 200 W Potter Drive Anchorage, AK 99518 USA Tel: 9075622343		Consignee's Account Number 27400215947		Also notify Tel:																												
Issuing Carrier's Agent and City Agent's IATA Code Account No.		Accounting Information Alaska Gold Company 110 Front St Ste 300 Nome, AK 99762 USA 8456																														
Airport of Departure (Addr. of First Carrier) and Requested Routing Nome		General Cargo																														
To By First Carrier ANC Alaska Airlines		To / By	To / By	Currency USD PX	WT/MAL <input checked="" type="checkbox"/>																											
Airport of Destination Anchorage		Flight/Date AS 155/15	Flight/Date	Amount of Insurance XXX	Other <input checked="" type="checkbox"/>																											
Declared Value For Carriage NVD				Declared Value For Customs NCV																												
Handling Information <div style="text-align: right;">SCI</div>																																
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:8%;">No of Pieces</th> <th style="width:10%;">Gross Weight</th> <th style="width:3%;">kg</th> <th style="width:3%;">lb</th> <th style="width:12%;">Commodity Item No.</th> <th style="width:10%;">Chargeable Weight</th> <th style="width:10%;">Rate / Charge</th> <th style="width:10%;">Total</th> <th style="width:34%;">Nature and Quantity of Goods (Incl. Dimensions or Volume)</th> </tr> </thead> <tbody> <tr> <td style="text-align:center;">1</td> <td style="text-align:center;">30.0</td> <td></td> <td style="text-align:center;">L</td> <td></td> <td style="text-align:center;">30.0</td> <td></td> <td style="text-align:center;">AS AGREED</td> <td style="text-align:center;">WATER SAMPLES Dims: 20 x 11 x14 x 1 GEN</td> </tr> <tr> <td style="text-align:center;">1</td> <td style="text-align:center;">30.0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align:center;">AS AGREED</td> <td style="text-align:center;">Volume: 1.782</td> </tr> </tbody> </table>						No of Pieces	Gross Weight	kg	lb	Commodity Item No.	Chargeable Weight	Rate / Charge	Total	Nature and Quantity of Goods (Incl. Dimensions or Volume)	1	30.0		L		30.0		AS AGREED	WATER SAMPLES Dims: 20 x 11 x14 x 1 GEN	1	30.0						AS AGREED	Volume: 1.782
No of Pieces	Gross Weight	kg	lb	Commodity Item No.	Chargeable Weight	Rate / Charge	Total	Nature and Quantity of Goods (Incl. Dimensions or Volume)																								
1	30.0		L		30.0		AS AGREED	WATER SAMPLES Dims: 20 x 11 x14 x 1 GEN																								
1	30.0						AS AGREED	Volume: 1.782																								
Prepaid AS AGREED		Weight Charge Collect		Other Charges MYC 5.40 SCC 2.00 XBC 0.00																												
Valuation Charge		Tax		Shipper certifies that the particulars on the face hereof are correct and that insofar as any part of the consignment contains dangerous goods, such part is properly described by name and is in proper condition for carriage by air according to the applicable Dangerous Goods Regulations. I consent to the inspection of this cargo.																												
Total Other Charges Due Agent		Total Other Charges Due Carrier		For: Alaska Gold Company Signature of Shipper or his Agent 																												
Total Prepaid AS AGREED		Total Collect		<input checked="" type="checkbox"/> THIS SHIPMENT DOES NOT CONTAIN DANGEROUS GOODS <input type="checkbox"/> THIS SHIPMENT DOES CONTAIN DANGEROUS GOODS																												
Executed On (Date) 15 Jul 2014 16:04		at (Place) Nome		Signature of Issuing Carrier or its Agent Alaska Airlines																												

027-8806 0136

Alert Expeditors Inc.
DBA/Petroleum Courier Service

#347321

Citywide Delivery • 440-3351
8421 Flamingo Drive • Anchorage, Alaska 99502

Date 7/16/14
From AK Gold

To 595

Collect Prepay Advance Charges
Account

Job # PO#

1 200br
8806 D136 GEN

1143130



Shipped Signature

Received By: [Signature] 7/16/14 0814 Total Charge



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1 CLIENT: SGS - AK		SGS Reference: SGS Lakefield						Page ____ of ____	
CONTACT: Julie Shumway		PHONE NO: (907) 562-2343		Additional Comments: All soils report out in dry weight unless otherwise requested.					
PROJECT NAME:	1143130	PWSID/PERMIT#:							
REPORTS TO:	Julie Shumway	E-MAIL:	Julie.Shumway@sgs.com						
INVOICE TO:		QUOTE #:							
		P.O. #:	1143130						
2 RESERVED for lab use	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX/MATRIX	MWD	MS	SGS lab #	Loc ID	REMARKS
	1 Fine Ore	07/15/14	1235	S			1143130004		
	2 Fine Ore	07/15/14	1235	S			1143130005		
5 Relinquished By: (1)	Date	07/18/14	Time	Received By:	4 DOD Project? YES NO		Data Deliverable Requirements: Level II report + Excel EDD		
Relinquished By: (2)	Date		Time	Received By:	Cooler ID:		Requested Turnaround Time and-or Special Instructions:		
Relinquished By: (3)	Date		Time	Received By:	Temp Blank °C:		Chain of Custody Seal: (Circle)		
Relinquished By: (4)	Date		Time	Received For Laboratory By:	or Ambient []		INTACT BROKEN ABSENT (See attached Sample Receipt Form)		

http://www.sgs.com/terms_and_conditions.htm

[] 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
[] 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557



Meteoritic Water Mobility Procedure (MWMP)

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2H0
Phone: 705-652-2000 FAX: 705-652-6365

08-August-2014

SGS Environmental Services Inc.
Attn : Julie Shumway

Date Rec. : 21 July 2014
LR Report: CA15287-JUL14
Reference: PO# 1143130

200 W. Potter Drive
Anchorage, AK
99518, USA

Copy: #1

Phone: (907) 562-2343
Fax:(907) 561-5301

CERTIFICATE OF ANALYSIS
Final Report

Table with columns: Analysis, 1: Analysis Start Date, 3: Analysis Approval Date, 5: RL, 6: QC - Blank, 7: QC - STD % Recovery, 8: QC - DUP % RPD, 9: 1143130004 1 Fine Ore, 10: 1143130005 2 Fine Ore. Rows include various chemical and physical parameters like pH, Alkalinity, and various metals.

OnLine LIMS

0000218420



Meteoric Water Mobility Procedure (MWMP)

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2H0
Phone: 705-652-2000 FAX: 705-652-6365

LR Report : CA15287-JUL14

Table with 9 columns: Analysis, 1: Analysis Start Date, 3: Analysis Approval Date, 5: RL, 6: QC - Blank, 7: QC - STD % Recovery, 8: QC - DUP % RPD, 9: 1143130004 1 Fine Ore, 10: 1143130005 2 Fine Ore. Rows include Nickel, Phosphorus, Lead, Antimony, Selenium, Silicon, Strontium, Tin, Thallium, Vanadium, and Zinc.

ND - Not Detected
NA - Not applicable

Handwritten signature of Patti Stark

Patti Stark
Project Specialist Environmental Services,
Analytical