

YMEP (21-043) REPORT

describing

ROCK GEOCHEMICAL SAMPLING, AIRBORNE GEOPHYSICS & HAND TRENCHING

performed between August 8th – August 30th, 2021

on the

PIKE WARDEN PROPERTY

WARDEN	1-4	YE96672-YE96675
WARDEN	5-13	YE96905-YE96913
PIKE	1-7	YE96665-YE96671
PIKE	8-9	YE96676-YE796677
PIKE	10-22	YE96892-YE96904
PIKE	23-26	YE96914-YE96917
PIKE	27-172	YF92051-YF92196

Mapsheet NTS 105 D/3

Latitude 60°5'N; Longitude 135°23'W

located in the

Whitehorse Mining District
Yukon Territory

prepared by

Ryan Burke, B.Sc., G.I.T.

January 2022

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INTRODUCTION

The Pike Warden property is located in southwestern Yukon, Canada and covers occurrences of low-to-intermediate sulfidation polymetallic quartz veins. Extensive Eocene-aged, NE-to-EW-trending basalt, andesite, and flow-banded rhyolite dykes occur near high-grade vein-hosted Au-Ag mineralization, similar to Whitehorse Gold Corp.'s (WHG) Skukum Creek deposit located 6-km to the north, which contains ~249k gold equivalent ounces in the indicated category and ~107k gold equivalent ounces in the inferred category (Naas, 2020).

This comprehensive report describes the results of a grassroots exploration program conducted by Ryan Burke, Charlie Pike, Luke Carlos & Shane Carlos between August 8th and August 20th, 2021. In addition, a 395 line-km airborne geophysical survey was performed on the entirety of the claimblock. This report also includes summary of results from the 2019 and 2020 field programs.

The author supervised the program and interpreted all data in this report. A Statement of Qualifications appears in Appendix I. A Statement of Expenditures appears in Appendix II. The results of the geophysical survey can be found in Appendix III.

PROPERTY LOCATION, CLAIM DATA AND ACCESS

The property consists of 185 quartz claims covering approximately 37 km² located 70 km south southwest of the Yukon's capital city of Whitehorse and 27 km west of the community of Carcross. The claims are located at latitude 60°5'N and longitude 135°23'W on mapsheet NTS 105D/03 (Figure 1) and are located within the Traditional Territories of the Carcross Tagish First Nation.

Access to and from the claims is directly from Whitehorse via helicopter. A helicopter staging area lies 13 km north of the property along the Annie Lake Road, a gravel-topped four-season access road. The staging area is a 70 km drive from Whitehorse via truck and can be used to mobilize additional equipment/personnel to and from the claim block. Fieldwork in 2021 was completed from a temporary tent camp located on the southern portion of the PIKE 21 claim.

North of the Pike Warden property is WHG's Skukum Gold Project. WHG is a gold exploration and development company that is focused on its Skukum Gold Project in the Whitehorse Mining District, approximately 55 km (a one-hour drive) south of Whitehorse, Yukon. The project consists of 1,051 mineral claims, covering approximately 170 km², that includes the past-producing Mt. Skukum gold mine and the advanced stage Skukum Creek and Goddell Gully deposits. The outline of the Pike Warden property and WHG's property are outlined in Figure 2.

The Pike Warden claims are registered in the Whitehorse Mining Recorder in the name of Ryan Burke. Specifics regarding claim registration and status are tabulated below:

Table 1: Claim Registration Information

Claim Name	Claim Number	Grant #	Owner	Expiry Date
PIKE	1 to 7	YE96665-YE96671	Ryan Burke - 100%	2030-01-05
PIKE	8 to 9	YE96676-YE96677	Ryan Burke - 100%	2030-01-05
PIKE	10 to 22	YE96892-YE96904	Ryan Burke - 100%	2030-01-05
PIKE	23 to 26	YE96914-YE96917	Ryan Burke - 100%	2030-01-05
PIKE	27 to 72	YF92051-YF92096	Ryan Burke - 100%	2027-01-05
PIKE	73 to 76	YF92097-YF92100	Ryan Burke - 100%	2024-01-05
PIKE	77 to 90	YF92101-YF92114	Ryan Burke - 100%	2027-01-05
PIKE	91 to 98	YF92115-YF92122	Ryan Burke - 100%	2025-01-05
PIKE	99 to 101	YF92123-YF92125	Ryan Burke - 100%	2026-01-05
PIKE	102	YF92126	Ryan Burke - 100%	2024-01-05
PIKE	103	YF92127	Ryan Burke - 100%	2027-01-05
PIKE	104 to 115	YF92128-YF92139	Ryan Burke - 100%	2024-01-05
PIKE	116	YF92140	Ryan Burke - 100%	2026-01-05
PIKE	117	YF92141	Ryan Burke - 100%	2024-01-05
PIKE	118	YF92142	Ryan Burke - 100%	2026-01-05
PIKE	119	YF92143	Ryan Burke - 100%	2024-01-05
PIKE	120	YF92144	Ryan Burke - 100%	2026-01-05
PIKE	121 to 172	YF29145-YF92196	Ryan Burke - 100%	2024-01-05
WARDEN	1 to 4	YE96672-YE96675	Ryan Burke - 100%	2030-01-05
WARDEN	5 to 13	YE96905-YE96913	Ryan Burke - 100%	2030-01-05



Legend

Outboard

- YA Yakutat
- CG Chugach

Insular

- WR Wrangellia
- AX Alexander
- KS Kluane schist
- TU Taku

N Alaska

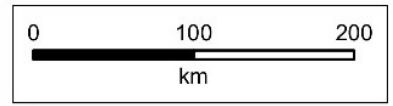
- AA Arctic Alaska

Intermontane

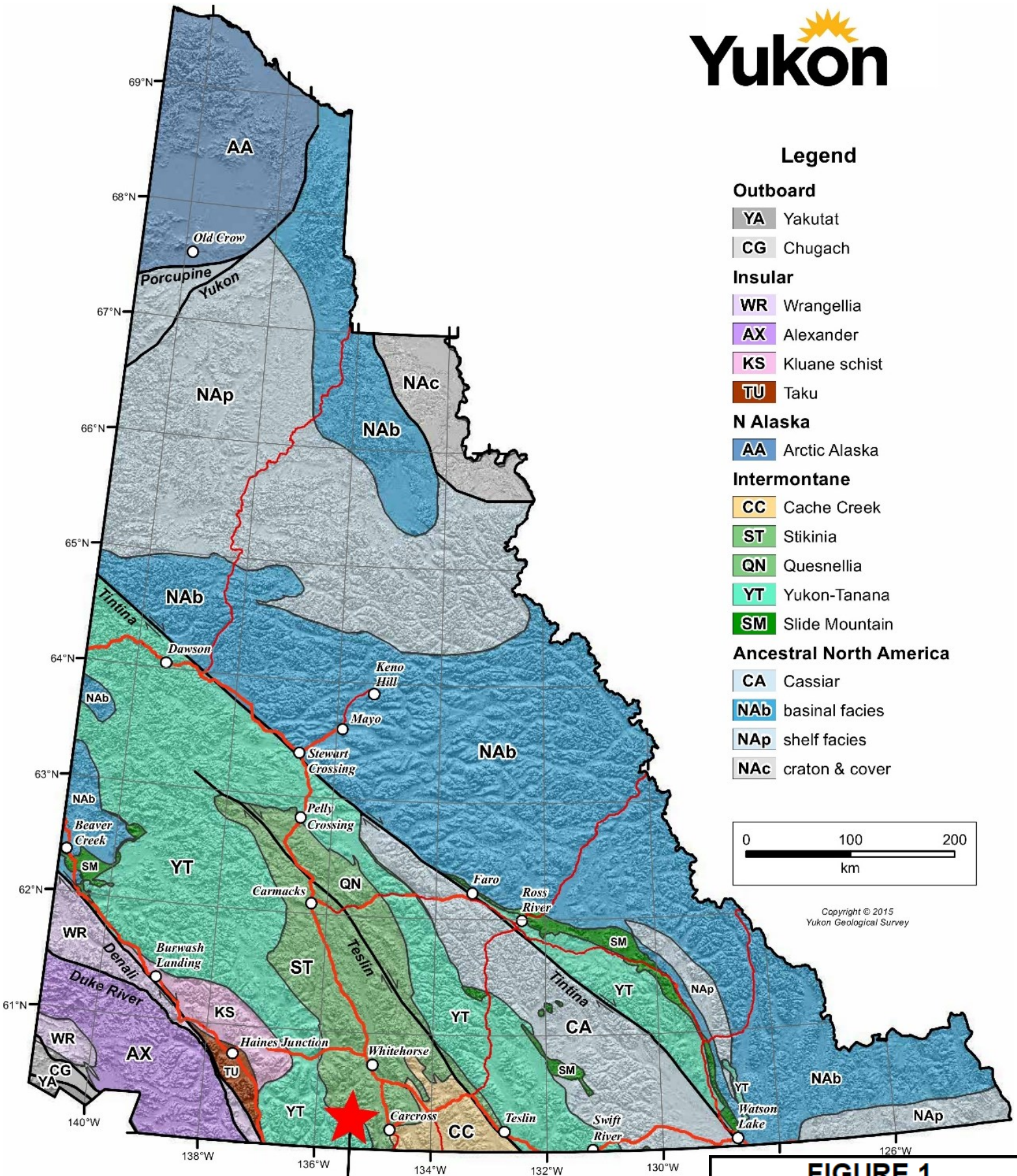
- CC Cache Creek
- ST Stikinia
- QN Quesnellia
- YT Yukon-Tanana
- SM Slide Mountain

Ancestral North America

- CA Cassiar
- NAb basinal facies
- NAp shelf facies
- NAc craton & cover

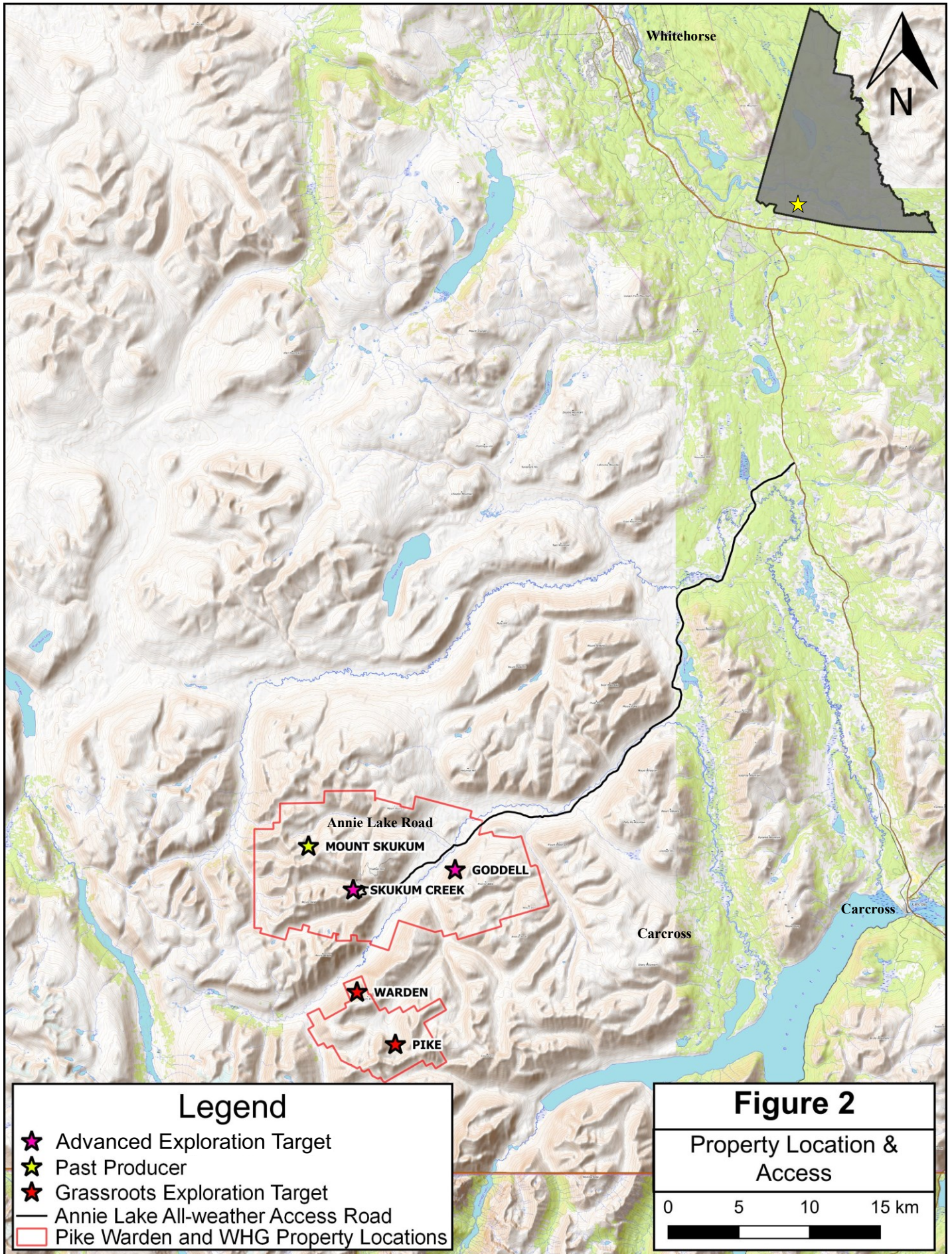


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Yukon Geological Survey



Warden/Pike

FIGURE 1
Regional Location of Warden and Pike Properties



GEOMORPHOLOGY

The climate in the area is variable with hot summers; truncated, mild and short fall and spring seasons and long, cold, dark winters. Snow can fall during any month of the year.

Topography in the area consists of flat, glacially scoured alpine ridges and precipitous cirques with steep slopes that extend up from broad, open, gentle valley bottoms. Permanent snowfields exist on northern facing ridges of most ridges and mountains in the area. Valley floors lie around 1500 m and summits vary in height up to 2200 m. The property sits above treeline, which is around 1450 m.

REGIONAL GEOLOGY

The regional geological setting of the project area is described in detail in Hart and Radloff (1990) from which the following information is summarized:

The property is located within the Intermontane belt of the Canadian Cordillera. Oldest rocks in the area comprise domains and screens of Paleozoic gneiss, assigned to the Nisling Terrane by Hart and Radloff (1990), and Jurassic andesitic volcanic and siliciclastic sedimentary rocks of the Stikine Terrane and Whitehorse Trough overlap assemblage.

Stratigraphic and contact relationships are commonly obscured by the many intrusions associated with the Coast Plutonic Complex. Strata of the Jurassic Whitehorse trough are affected by a series of open to tight, northwest trending folds that probably formed in Upper Jurassic to Lower Cretaceous time, approximately coeval with activity of the Skeena Fold Belt to the south in British Columbia. The folds are superimposed on earlier, probably pre-Triassic, metamorphic fabrics and the northwest trending Tally-Ho shear zone, a major Late Triassic shear zone that is developed approximately 15 kilometres to the east of the project area (Naas, 2007).

Mesozoic plutonic rocks, which underlie much of the project area, separate the Jurassic units and Nisling Assemblage into isolated domains and screens. The most abundant rock types in the region comprise metaluminous Cretaceous intrusions of the Coast Plutonic Complex, which are subdivided into several plutonic suites by Hart and Radloff (1990). The dominant Cretaceous suites in the project area include the Mt. McIntyre plutonic suite (96 to 119 Ma), comprising the Mt. Ward granite and Carbon Hill quartz monzonite, and the Whitehorse plutonic suite (116 to 119 Ma), locally represented by the Mt. McNeil granodiorite pluton. Isolated accumulations of mid to late-Cretaceous volcanic rocks of intermediate composition of the Mt. Nansen Group are present regionally and are approximately coeval with the Coast Plutonic Complex.

Pre-Tertiary rock types in the region are unconformably overlain by at least four Late Paleocene to Early Eocene volcanic complexes that form the Skukum Group, and are intruded by numerous associated rhyolite and andesite dykes. In the project area, these are the youngest exposed rocks and are represented by the Early Eocene Mount Skukum volcanic complex (MSVC) and the Bennett Lake volcanic complex (BLVC). Both these volcanic complexes mark the northern limit of the Sloko Volcanic Province, which extends south into British Columbia.

Late Cretaceous and Early Paleocene brittle dextral displacement associated with widespread dextral displacement throughout the Cordillera is related to reactivation of the Triassic Tally-Ho shear zone. This phase of displacement formed a brittle fault system, termed the Llewellyn fault by Hart and Radloff (1990), which exploited parts of the earlier Tally-Ho structure. Subsidiary faults generated during this tectonic episode may subsequently have been remobilized during Eocene volcanic activity to locally form caldera-bounding structures; these may also have acted as permeable structural sites for the formation of the late-volcanic vein deposits hosted by faults and shear zones in the area (Naas, 2007).

The MSVC comprises a bimodal sequence of subaerial volcanic and volcanoclastic rocks with a total thickness that locally exceeds 800 metres, and an areal extent of approximately 200 km². Exposures of the complex adjacent to the Skukum Creek deposit are composed mainly of massive to poorly bedded, plagioclase porphyritic andesitic flows and tuff (McDonald et al, 1990, Naas, 2007). Rocks of the MSVC are locally separated from pre-Tertiary rock types by east- to northeast-trending, curved faults such as the Berney Creek fault and Wheaton lineament that may have been active synchronously with volcanism and which potentially form caldera-bounding structures (Hart and Radloff, 1990). These structures are host to or control probable synvolcanic vein and shear zone hosted Au-Ag mineralization in the district (Naas, 2007).

Separated from the MSVC by the Wheaton River, the BLVC is located 10 km south of the MSVC and is a 19-by-30 km volcanic centre composed of two fault-bounded, nested cauldrons. Each cauldron represents a resurgent cycle of cataclysmic pyroclastic eruptions. Each cycle contributed ~2000 m of rhyo-dacitic ash-flow tuffs and breccias with lesser rhyolite and andesite flows to the cauldron fill. A change from acid to intermediate volcanism during each eruptive cycle represents the tapping of a vertically zoned magma chamber (Lambert, 1974).

The BLVC is bounded by a series of arcuate rhyolite dykes that together form a roughly subelliptical arc around the periphery of the complex along a caldera-bounding structure, hereafter referred to as the “ring dyke”. The ring dyke likely formed during caldera collapse. The dykes are nearly vertical, pinch and swell, and range from 100 to 300 metres wide. Many other leucocratic granite, rhyolite and dacite dykes are closely related spatially to the ring dyke by virtue of having intruded along the ring fracture system (Lambert, 1974).

A simplified regional geology map including the property boundary and regional claimholders is presented below (Figure 3). The MSVC is located in the northern portion of the map, while the northern portion of the BLVC and ring dyke are in the southern half of the map. In addition, the location of three notable deposits within the MSVC are labelled and described in more detail in the following section of this report.

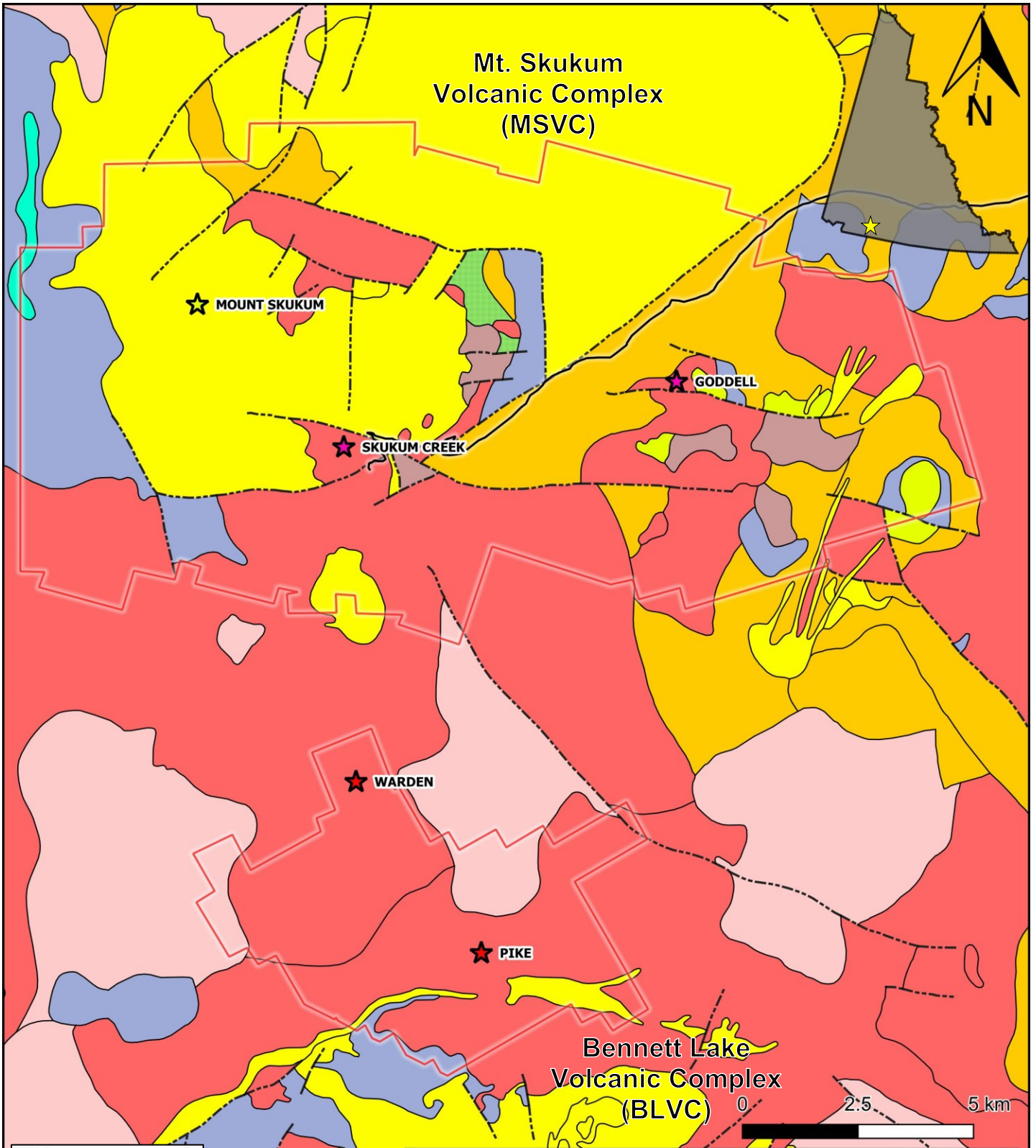


Figure 3

Legend

- ★ Greenfields
- ★ Past Producer
- ★ Grassroots
- Annie Lake Road

1:50,000 Bedrock Geology

- 50 Ma Eocene volcanics - intermediate to felsic dykes
- 64 Ma Paleogene felsic intrusives
- 112-105 Ma Cretaceous intrusives; mafic to intermediate
- 110 Ma Andesitic volcanics
- 178 Ma Jurassic-aged hbl syenite
- 400+ Ma Devonian quartzite
- 400+ Ma Devonian marble & calc-silicate schist

REGIONAL EXPLORATION & ASSOCIATED DEPOSITS

There are records of exploration within the MSVC and BLVC dating from the early 1900's, with multiple adits having been driven into a number of areas throughout the region. However, the area received the majority of its exploration work following the discovery of the Mt. Skukum deposit in 1981. Mt. Skukum was fast-tracked into production following its discovery, producing ~77,790 oz. of gold between 1986-1988 from 233,400 tonnes of ore (Naas and Rodger, 1999).

Following this discovery-turned-mine, a flurry of focused regional exploration of the MSVC and the BLVC occurred between 1981 and 1989. During this period, two other significant discoveries were made, the Goddell Gully and Skukum Creek deposits (Table 2).

The closure of Mt. Skukum in 1988 along with depressed metal prices at the time resulted in exploration effectively ceasing in the area. Additional promising discoveries were made in the 1988 and received limited to no follow-up due to these external factors. The MSVC and the BLVC are immensely underexplored volcanic complexes that host significant potential for new discoveries.

Since August 2020, WHG have been aggressively exploring their project, having spent \$15 million dollars and diamond drill 18,000 m in 2021. Their goal is to increase current resources and bring the historical Skukum Gold camp back into production, with the Skukum Creek deposit being the highest priority target for development. The Pike Warden property's proximal location and similar geology to the Skukum Creek deposit makes it an attractive exploration target. The mineral resources listed below are taken from Naas, 2020, which is the most up to date technical report on the project.

Table 2: Significant Regional Discoveries

Project Name	Status	NI 43-101 Mineral Resource
Mt. Skukum	Past Producing Mine	Yes
Goddell Gully	Advanced Project	Yes
Skukum Creek	Advanced Project	Yes

Mt. Skukum Deposit Mineral Resource (using a 3.0 g/t AuEQ cut-off grade):

Class	Tonnes	Au (g/t)	Ag (g/t)	AuEQ (g/t)	Contained oz Au	Contained oz Ag	Contained oz AuEQ
Inferred	90,100	9.28	12.9	9.43	26,882	37,368	27,308

At Mt. Skukum, gold and silver occur in three separate quartz-calcite vein zones along sub-parallel faults. The largest, most easterly and thoroughly explored zone is the Cirque zone which is 200 m long, 80 m deep and averages 5 m thick. It is a cluster of veins associated with a flexure in the Main Zone Fault. The Main Zone Fault is a 20 to 30 m wide structure containing numerous felsic to andesitic dykes and bounded by stockwork veins (each 0.1 to 3.0 m wide). The fault strikes 030° to 050°, dips steeply southeast and has been traced on surface for a length of 1.5 km.

Goddell Deposit Mineral Resource (using a 3.0 g/t Au cut-off grade):							
Class	Tonnes	Au (g/t)	Ag (g/t)	AuEQ (g/t)	Contained oz Au	Contained oz Ag	Contained oz AuEQ
Indicated	329,700	8.13	-	8.13	86,210	-	86,210
Inferred	483,900	7.13	-	7.13	110,867	-	110,867

Goddell Gully contains gold and silver mineralization within a 35-m wide east-to-southeast trending fault zone of black augen cataclasite and brecciated quartz monzonite over a strike length of at least 500 m. The fault zone forms a prominent gossanous lineament that has been traced for 4.8-km on surface. Mineralized zones are crudely tabular, moderate to steeply north dipping and possibly westerly plunging and may in part be localized along minor north dipping splays off the main Goddell fault. Stibnite is commonly the main sulphide phase and is typically accompanied by minor amounts of pyrite, sphalerite and traces of galena.

Skukum Creek Deposit Mineral Resource (using a 3.0 g/t AuEQ cut-off grade):							
Class	Tonnes	Au (g/t)	Ag (g/t)	AuEQ (g/t)	Contained oz Au	Contained oz Ag	Contained oz AuEQ
Indicated	1,001,300	5.85	166.4	7.75	188,334	5,355,478	249,401
Inferred	537,000	4.99	108.3	6.22	86,124	1,869,065	107,415

Skukum Creek is a polymetallic vein deposit contained within northeast trending faults and shear zones. The deposit is hosted along veins and vein breccias developed along the margin of Eocene-aged andesitic to flow-banded rhyolite dykes within the mid-Cretaceous Mt. McNeil granodiorite. Mineralized veins consist of quartz or quartz-rhyolite breccia containing 20-40% sulphides, which include pyrite, arsenopyrite, sphalerite, galena, minor chalcopryrite, pyrargyrite, pyrrhotite and bornite, and traces of argentite, tetrahedrite, gold and electrum. The veins cut rhyolite dykes which intrude propylitically altered granodiorite. The ore zones range from 1 to 22-m wide. Gouge, granodiorite, and rhyolite breccia occur in both the hanging wall and footwall of the veins.

Skukum Creek is comprised of a number of anastomosing shears, with the two main zones being the Kuhn and Rainbow zones. The Kuhn zone is 444-m long and has a vertical extent of 385 m. It narrows to the southwest as the fault splay changes direction and merges with the east west-trending, 10-km long Berney Creek Fault. The Rainbow zone is 660-m long and has a vertical extent of 618-m, with an average width of 1.2-m.

An in-depth review of historical exploration activities around Mt. Skukum is available in WHG's 2020 NI 43-101 Technical Report on the Mt. Skukum Project (Simpson, 2020)

PIKE WARDEN EXPLORATION HISTORY

On the Pike Warden property, there are three historical mineral occurrences discovered during regional prospecting in 1988.

First, Skukum Exploration Inc. discovered three separate vein systems within the northwest facing cirque of Mount Ward 6 km south of the Skukum Creek deposit. The vein discoveries are described below:

The Confession vein is described as:

A 10 cm wide, vuggy, milky white, euhedral quartz vein with massive euhedral galena, massive chalcopyrite and minor pyrite and malachite staining within granodiorite. The vein is traceable for 150 m along strike. Historical assays from this vein are up to **10.64 g/t Au, 378 g/t Ag, 3.98% Pb and 0.66% Cu.**

The Repent vein system is described as:

Bull white and honey coloured quartz veins in granodiorite with chlorite selvages and blebs of pyrite and chalcopyrite. Veins pinch and swell from 1 to 30 cm. Phyllic and propylitic alteration of the granodiorite one meter wide, envelopes the veins. Historical assays are up to **2.23 g/t Au.**

The Squeaker veins are described as:

A series of small parallel quartz veins up to 30 centimetres wide with fine grained pyrite, minor galena and minor chalcopyrite. The veins can be traced for around 200 metres and possibly as much as 400 metres. Historical assays are up to **19.67 g/t Au, 157.38 g/t Ag, 1.09 % Pb and 1.47% Cu.** (Wilkins and MacKinnon, 1988)

Second, prospecting 2 km south of Mt. Ward a vein within granodiorite (Cu-North) Showing was discovered grading 5.58% Cu and 0.76 g/t Au.

Third, prospecting 5.5 km south of Mt. Ward near the headwaters of Crozier Creek resulted in the discovery of the ERT Zone, a quartz-arsenic-sulfosalt breccia zone. The ERT Zone consists of a sulphide breccia with disseminated and occasionally massive pyrite, arsenopyrite, chalcopyrite, sphalerite, galena, and possible stibnite. The zone is currently exposed over 30 m with an unknown strike length. High-grade grade assays of up to 5,675 g/t Ag and 5.8 g/t Au were obtained from grab samples within the zone (Wilkins & Mackinnon, 1988).

In 1989, the ERT Zone was followed up with three parallel trenches dug in an EW-direction. Trench TR89-1 returned **1.46 g/t Au, 307 g/t Ag over 6.6m.** TR89-2 returned **0.68 g/t Au and 139 g/t Ag over 1.5m.** TR89-3 returned **0.54 g/t Au and 346 g/t Ag over 4.7m.**

In 1997, Bernie Kreft and Chuck Downie of Eagle Plains Resources spent three days prospecting at the ERT Zone. Their work resulted in an additional quartz sulfide breccia zone discovered 50-m SW of the ERT Zone, named the TRE Zone. Individual grab samples from the TRE Zone returned values of 8,890 g/t Ag while re-sampling of the ERT Zone returned peak values of 4.42 g/t Au. (Kreft, 1998).

A silver-arsenic talus fines anomaly extends 280 m SW of the ERT Zone, which could represent a more subtle expression of the ERT Zone underneath talus cover. Additionally, a 176.5 g/t Ag soil sample was collected ~170 m SE of the ERT Zone. Anomalous As-Ag geochemistry extending 450 m from the main zone demonstrates the size potential, which remains underexplored.

PIKE WARDEN PROPERTY GEOLOGY

Although only the northern edge of the BLVC is present on the Pike Warden property, the volcanic complex plays an integrally important role in the observed mineralization on the property. It is important for the reader to understand the evolution of the BLVC in order to fully understand the mineralization on Pike Warden. All information provided below is taken from Lambert's 1974 GSC Bulletin titled, "The Bennett Lake Cauldron Subsidence Complex, British Columbia and

Yukon Territory”, a fantastic publication that deserves recognition for its exceptional and thorough review of the BLVC. Key findings are summarized below:

The Bennett Lake Volcanic Complex is part of the Sloko volcanic province, which in the study area consists mainly of rhyolite to dacite ash-flow tuffs and breccias with subordinate rhyolite, dacite and andesite lavas. The following account summarizes the interpretation of the complex and Figure 4 A-I depicts the main stages of the volcanic and structural evolution (modified from Lambert, 1974).

The early Tertiary was a time of passive, high-level intrusion of salic, calc-alkalic magma along the eastern margin of the Coast Mountains. Regional tumescence above a high-level magma chamber distended the overlying granitic rocks and generated concentric and radial fractures. The magma chamber developed a cupola along one side of the concentric fracture system (Fig. 4A). With the initial emplacement of the magma, temperature and pressure gradients were established in the magma chamber. Water and alkalis diffused in the magma and they gradually collected and became concentrated in the upper and outer parts of the cupola, the regions of lowest pressure and temperature. The top of the magma chamber thus became enriched in Si, K, and water and other volatiles and a host of minor elements including Pb and Cu (?), whereas the lower parts of the magma became increasingly richer in Ca, Mg, Al and Sr. This transfer of constituents (probably aided by crystal accumulation in deeper levels) produced a vertically zoned magma chamber with rhyolitic liquid at the top and andesitic liquid in lower parts.

When gas-charged magma moved into the ring-fracture zones, mainly along the northern and eastern margins of the present complex, the sudden release of gases shattered and brecciated the surrounding granitic rocks. With breaching of the overlying rocks, the gases escaped and carried the brecciated rock upward to form intrusive breccias, some of which reached the surface to form breccia flows. The explosions which followed skimmed the gas-charged magma from the top of the chamber and erupted it at the surface to form a rapid succession of voluminous pyroclastic flows (Fig. 4B). There were three episodes of eruption consisting of several ash flows, many of which were directed south- and southwestward. Quiet effusion of lavas interrupted the last two eruptive episodes. Evacuation of the upper part of the magma chamber by the previous eruptions was followed by caldera collapse (Fig. 4C). A large, intact, oval block subsided along the ring-fracture system. Concomitant with the major subsidence an arcuate graben with a horst at its eastern end formed along the northeastern part of the caldera floor. Subsidence began before the previous volcanic activity ceased; fluidized rock-falls avalanched down from the growing caldera walls and locally mixed with erupting ash flows. The over-all collapse probably took place as a series of subsidences, following each of the three eruptive episodes. Pyroclastic cones, built above the ring-fracture system were partly destroyed during caldera collapse. Eruptions from vents along the northeast caldera wall deposited ash flows and lavas which almost filled the arcuate graben.

Further sinking of the cauldron blocks probably followed these graben-filling eruptions, and magma varying from dacite to andesite rose along the bounding fractures, locally escaping to the surface as lava flows. During a subsequent period of general volcanic and structural quiescence, avalanches from the unstable caldera walls deposited piles and sheets (up to 200 m thick) of granitic rubble on the caldera floor (Fig. 4D).

Towards the end of this period of erosion streams issuing from southern highlands deposited alluvial fans above the landslide rubble. Diffusion of volatiles and alkalis in the magma chamber again produced vertical compositional zonation and build-up of vapour pressure in the upper regions. Restoration of pressure in the magma chamber may have caused arching of the roof rocks and generation of the inner ring-fracture system. A series of explosive eruptions from vents along the inner ring fracture system deposited a pile of voluminous ash flows with total thicknesses up to 700 metres (Fig. 4E).

Southeast of Partridge Lake the ash flows first filled in troughs of the very irregular, block-faulted granitic terrain then formed flat-lying sheets. Shocks related to these eruptions set off landslides which avalanched down from the southeast caldera walls. A second episode of caldera collapse took place along the inner ring fracture system (Fig. 4F). A subcircular block settled progressively downwards (probably following successive voluminous ash-flow eruptions) to form a series of arcuate steps along the northern side. Avalanches from the gradually rising, unstable, inner caldera walls began intermittently during the early stages of caldera collapse, which overlapped the last events of ash-flow eruption. The bulk of epiclastic caldera fill was deposited after cauldron subsidence. It consisted of thick sheets of granitic avalanche rubble on the caldera floor, and thick wedges of volcanic-granitic fragment rubble, scree and talus in local depressions along the western caldera rim.

Gradual build-up of magma pressure in the underlying chamber possibly reopened some of the previous fractures along which magma escaped to produce a variety of eruptive products (Fig. 4G). The eruptive series began with the effusion of lavas (andesite to dacite in the southern and eastern parts of the area, but rhyolite in the northern parts) followed by alternating eruption of rhyolite lavas and ash flows. In effect, these effusions degassed and released the pressure in the magma chamber. Rhyolite and dacite dykes sealed fissures along the inner ring-fracture. Ash and dust settled in several lakes which formed in depressions in the irregular topography dominated by landslide, lava and ash-flow deposits. A final upsurge of the magma (which by this time was probably a crystal-liquid mush) beneath the inner cauldron block arched the roof of the magma chamber into a broad dome (Fig. 4H).

The accompanying radial faults and a major northeast-trending graben disjointed the dome into a mosaic of radially dipping segments. Magma leaking along concentric and radial fractures erupted as ash- and lava-flows from several vents along the western and southern parts of the complex. Domes formed at the surface in some of these centres. The partly crystalline rhyolite magma intruded along peripheral ring fractures, which opened up during the resurgent doming, to form a large ring dyke. Some of the magma reached the surface and formed domes along the northern part of the complex. Hydrothermal alteration of volcanic units near the most recent eruptive centres suggests that fumarolic activity prevailed during the dying stages of the volcano.

In summary, this complex underwent two resurgent-cauldron cycles. During both a central block subsided essentially intact whereas the margins settled in a series of arcuate steps with progressively lower elevations towards the centre. Ash flows and avalanches accompanied the early stages of subsidence of the inner caldera block. Probably only slight arching of the cauldron block took place at the end of the first cycle in contrast to the pronounced resurgent doming of the second cycle. Within each cycle the volume of erupted pyroclastic material decreased sharply

following the early cataclysmic eruptions. The total volume of volcanic and sedimentary material preserved within the cauldron subsidence complex is estimated to be about 420 km².

The gradual compositional change of eruptive products from salic to mafic with time is interpreted as successive tapping of a vertically zoned magma chamber during each eruptive cycle. Potassium-argon dates of volcanic rocks indicate that the complex is of mid-Eocene age and that the two resurgent cauldron cycles may have taken place within a time span of less than one million years.

The following points summarize the major stages in the structural evolution of the BLVC.

- I. Regional tumescence above a high-level magma chamber generated concentric and radial fractures
- II. Shattering and brecciation of granitic rocks along the northern and eastern parts of the ring-fracture system by subterranean explosions and explosive volcanic eruptions
- III. Emplacement of the first cycle of voluminous ash flows
- IV. Caldera collapse with subsidence of a large, intact oval block along the ring-fracture system. Concomitant with the major subsidence an arcuate graben with a horst at its eastern end fanned along the northeastern part of the caldera floor. An arcuate granite body may have been emplaced along the northeastern side of the complex at this time
- V. Post-collapse effusion of ash flows and lavas
- VI. Period of erosion with caving and avalanching from unstable caldera walls; formation of lakes
- VII. Arching of the subsided caldera block and formation of the inner ring-fracture system
- VIII. Emplacement of the second cycle of voluminous ash flows
- IX. Caldera collapse with progressive subsidence to form a series of arcuate steps along the northern side, while the south-central block subsided intact
- X. Period of erosion with caving and avalanching from caldera walls; formation of lakes
- XI. Post-collapse effusion of ash flows and lavas
- XII. Resurgent doming with formation of prominent radial faults, a longitudinal graben and segmentation of the caldera block into radially dipping blocks
- XIII. Emplacement of ring dyke
- XIV. Fumarolic activity (structural and volcanic quiescence)

The accompanying figures are modified from Lambert's 1974 report. The relative location of the Pike Warden property is denoted by a yellow star, overlain atop the original figures.

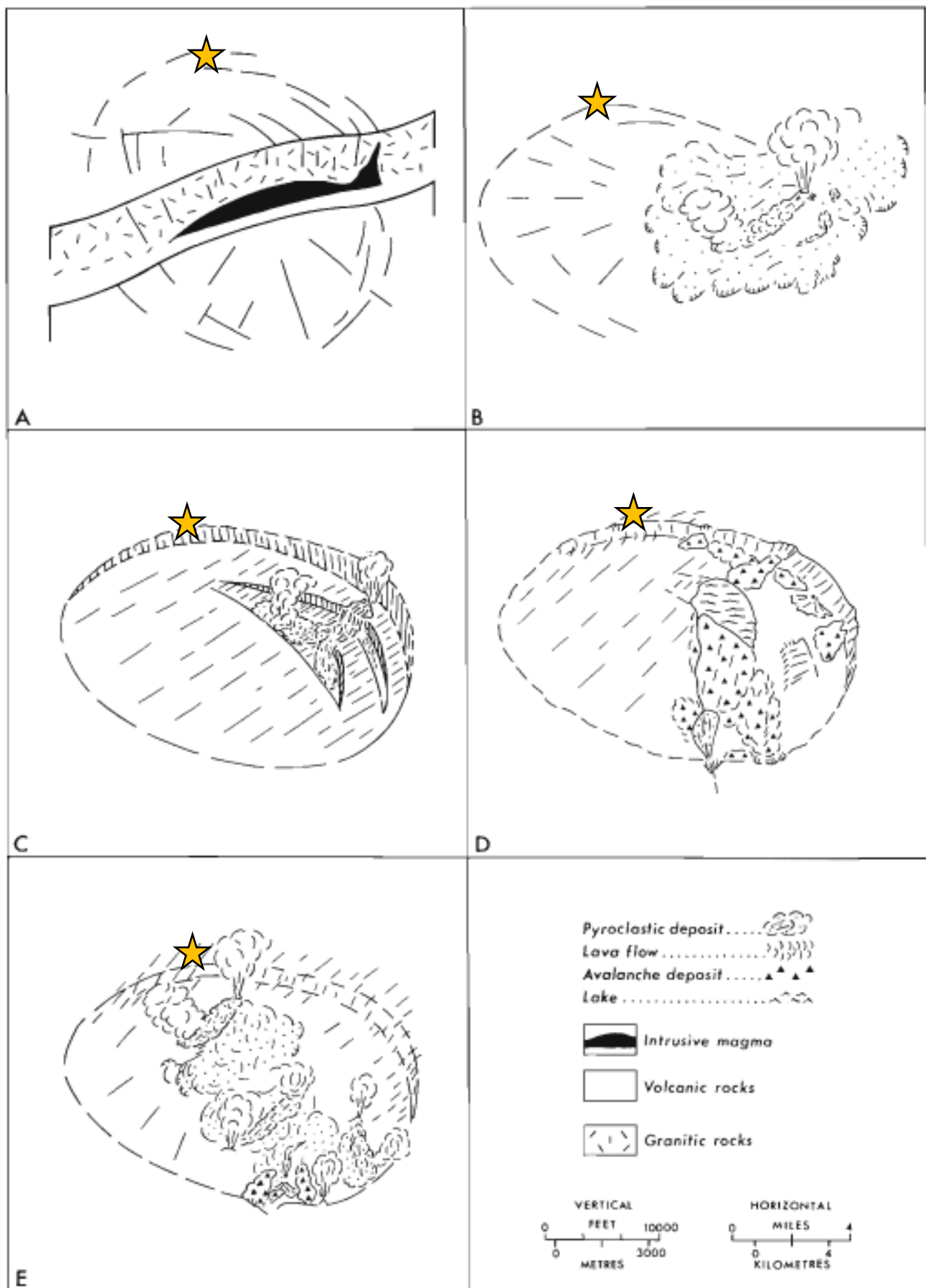


FIGURE 4 Sketches showing the main stages in the evolution of the Bennett Lake cauldron subsidence complex. A, Regional tumescence. B, First cycle major ash-flow eruptions. C, Caldera collapse and post-subsidence volcanism. D, Epiclastic caldera fill. E, Second cycle major ash-flow eruptions. North is toward the top of each sketch.

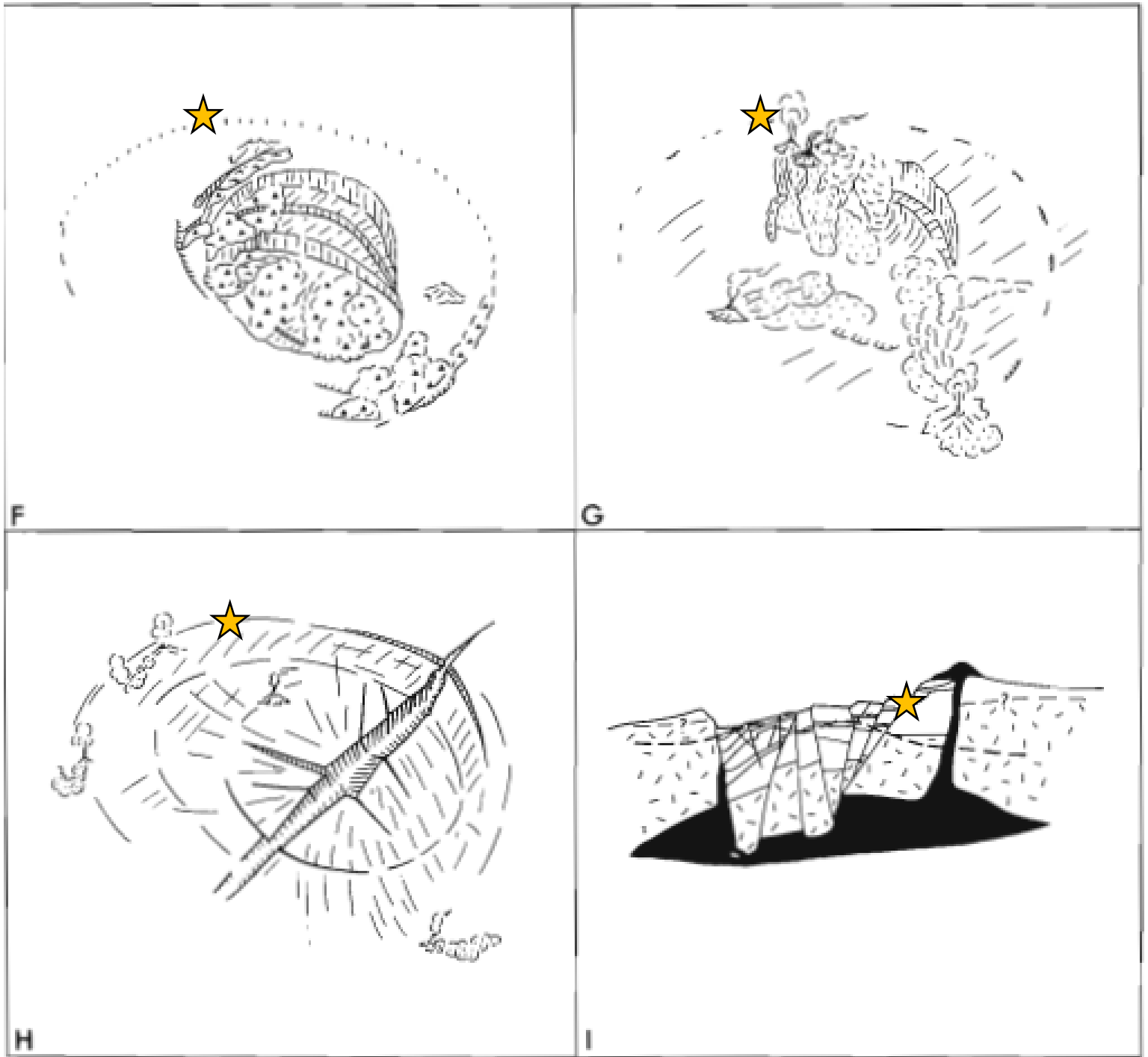


FIGURE 4 Cont'd F, Caldera collapse and sedimentary fill. G, Post-subsidence volcanism. H, Resurgent doming. I, Resorted northeast-southwest (right to left) cross-section showing emplacement of the ring dyke and present level of erosion (dashed line).

Lambert mapped ten distinct eruptive centres which lie along the ring-fracture systems of both the inner and outer cauldrons of the BLVC, with eruptions taking place along fissures and pipe-shaped conduits (Figure 5, modified from Lambert, 1974).

There are two features located south of the Pike Warden property boundary on Category “A” Carcross Tagish First Nations land (i.e. First Nation owns surface and subsurface rights indefinitely). These features likely play an important role in the mineralization observed to date on the Pike Warden property.

The first feature is the 3-km wide “Eruptive Centre X”, located 1 km southeast of the Pike property (Figure 5, modified from Lambert, 1974). Lambert describes “X” as consisting of an array of tuff, ignimbrite, rhyolite and dacite dykes, sills and necks. He also postulates that fumarolic activity likely persisted from the time of intrusion of the early rhyolite sills to the close of the volcanic activity of the BLVC.

The second feature is referred to as the “hinge zone” by Lambert and is illustrated in plan view in Figure 6 (modified from Lambert, 1974). Section A-A’ across the hinge zone is illustrated in Figure 7 A/B (modified from Lambert, 1974) with the relative location of Pike Warden denoted by a yellow star. The importance of the hinge zone is described below.

Brecciation and caldera collapse is controlled by the shape of the magma chamber. Explosive eruptions within the BLVC and the accompanying brecciation likely migrated along the ring fracture zone. The net result after evacuation of the upper part of the magma would be a larger cavity and a thinner crustal block above the cupola than above other parts of the magma chamber (Fig. 7A). During subsidence the roof of the cauldron would begin to sag most easily along the relatively incoherent, brecciated northeastern side and it would tend to flap downwards like a giant hinge (Fig. 7B). Subsidence would also take place along the southwestern and southern sides but it would not be as great because the cauldron is shallower in this part of the magma chamber.

The hinge zone acted as a northeast-trending inflection point for the episodic subsidence of the complex, where maximum differential displacement and subsidence occurred along the northern edge of the BLVC. On the Pike Warden property, two large NE-trending structures occur along strike of the hinge zone mapped by Lambert in 1974. These structures likely represent an extension of the hinge zone onto the Pike Warden property. The hinge zone likely acted as a conduit for hydrothermal fluids during the continued volcanic activity post caldera collapse. Mineralization found to date on the property is concentrated along this NE-trending structural corridor, particularly where it intersects concentric caldera-bounding structures and block faults that developed during earlier stages of the evolution of the complex.

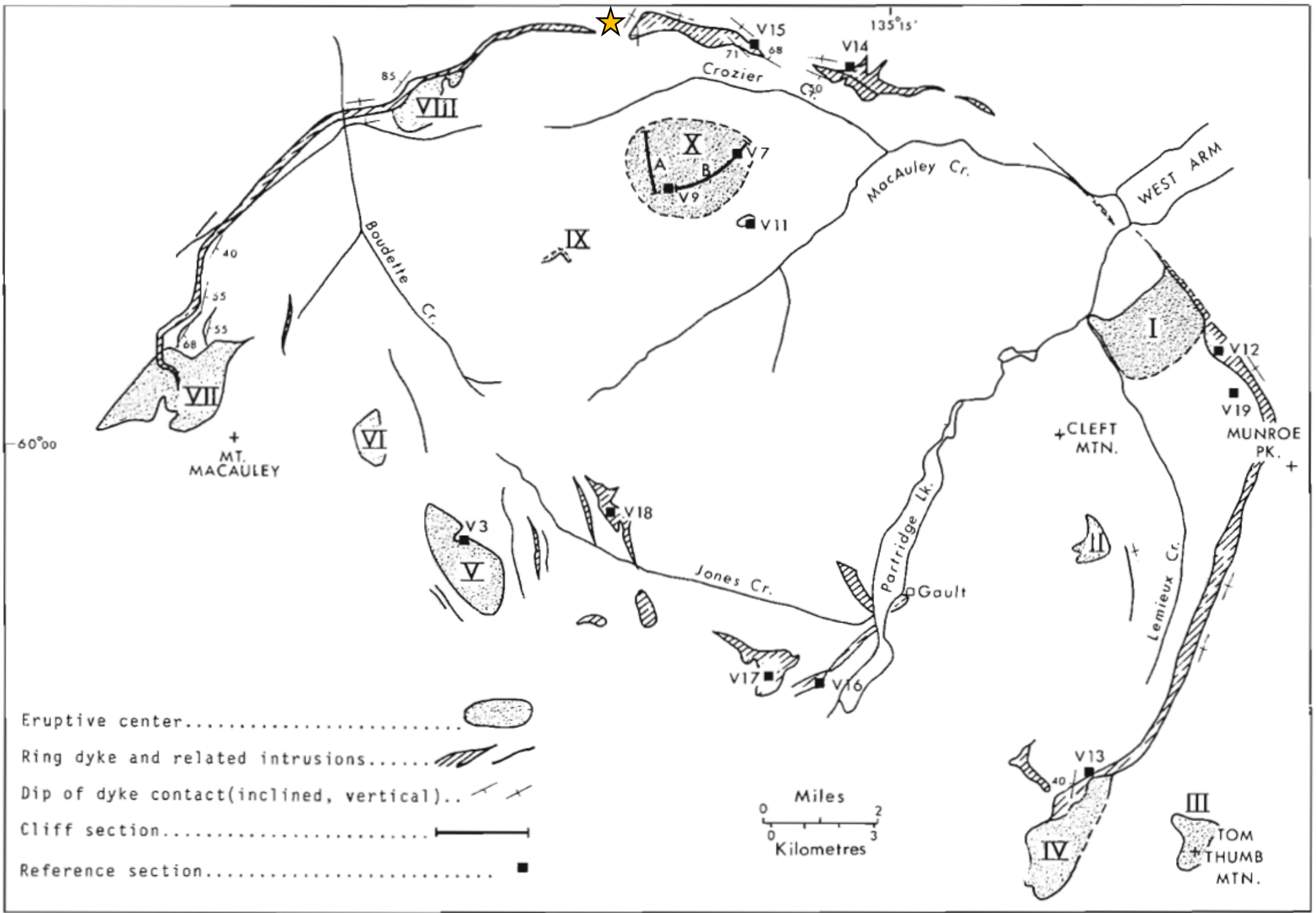


FIGURE 5 Location of eruptive centres and distribution and attitude of the ring dyke and related ring-fracture intrusions.

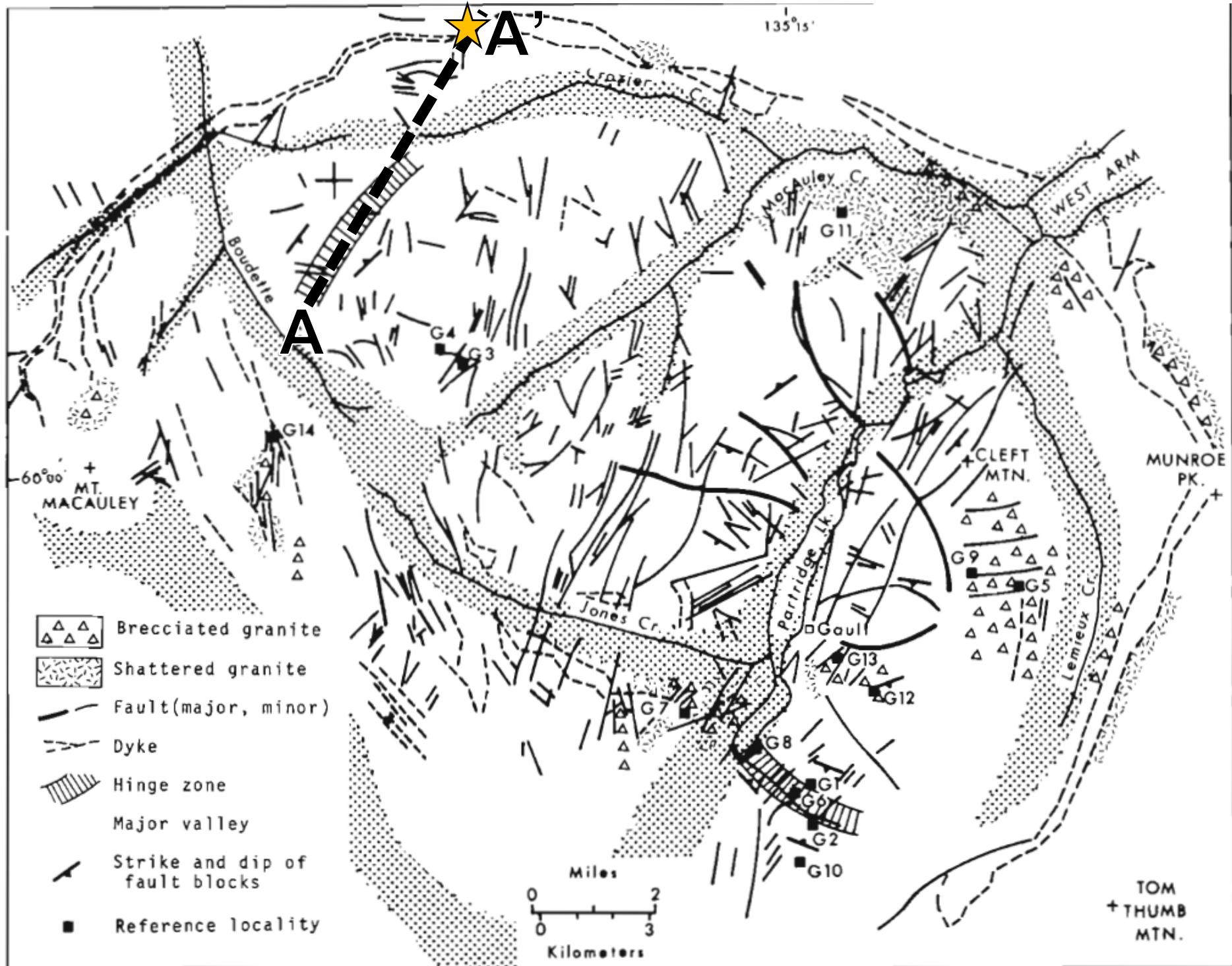


FIGURE 6 Faults, dykes, areas of shattered and brecciated granitic rocks and major valleys of the Bennett Lake complex (reference localities reproduced from Fig. 7)

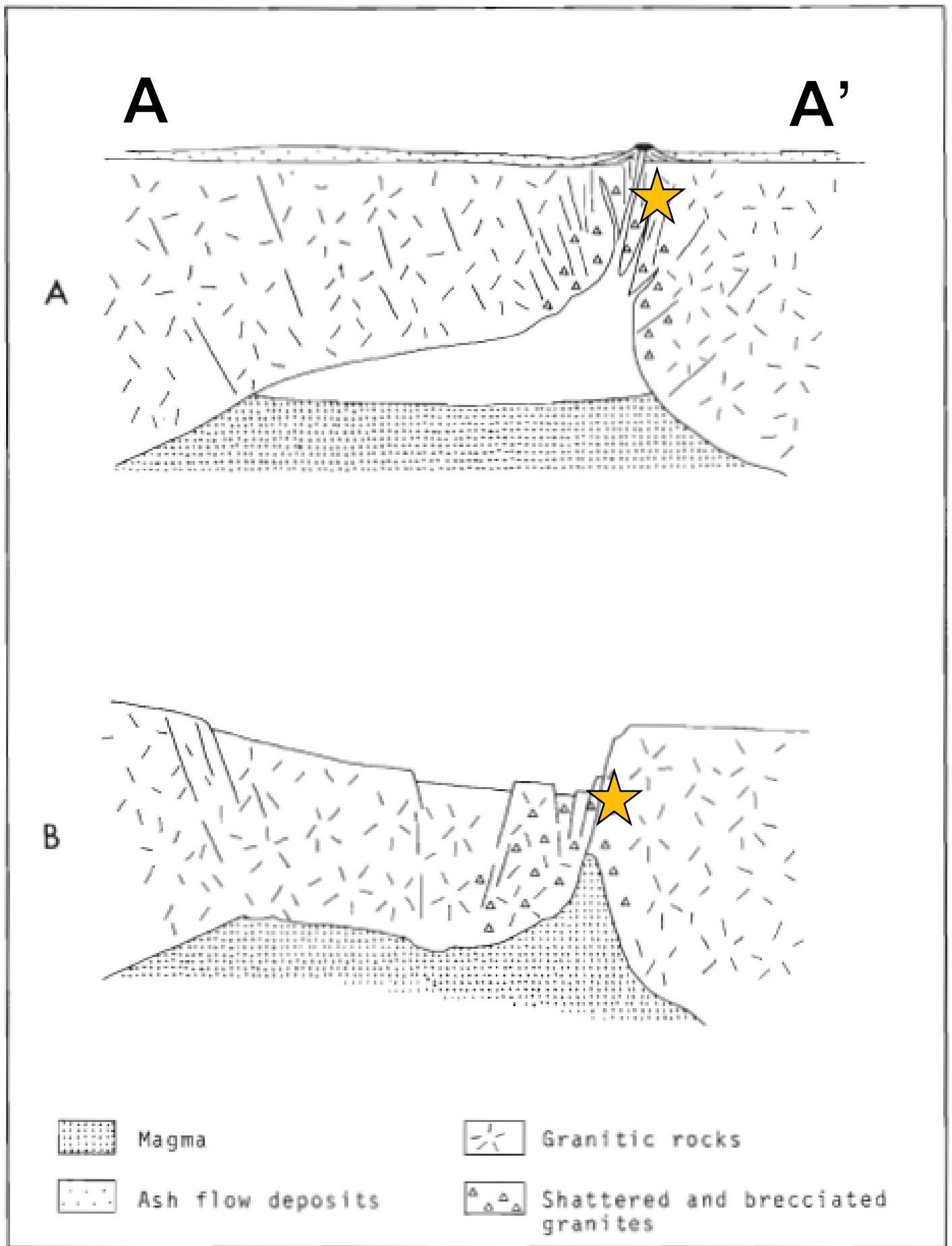


FIGURE 7 Mechanism of cauldron subsidence along the outer ring fractures of the Bennett Lake complex. A, Evacuation of magma from the cupola leaving an asymmetrical cauldron. B, Subsidence of the cauldron roof.

The dominant lithology on the Pike Warden property is a magnetic biotite-hornblende granodiorite. Pervasive chlorite and epidote-pyrite alteration in stringer veinlets and on fracture surfaces are common. Hornblende and biotite have been at least partially replaced by greenish chlorite in even the freshest samples. This unit is likely the Mt. McNeil granodiorite, the same host rock of the Skukum Creek deposit.

Geological mapping within Mt Ward's NW-facing cirque has successfully delineated three 2-5 m wide, north-northeast trending rhyolite dykes and small rhyolite plugs outcropping for approximately 700 m. These dykes and plugs intrude biotite-hornblende granodiorite. Numerous prominent structures are identifiable within the cirque and are likely related to the historical vein mineralization documented in this area.

On the southern portion of the property, there are numerous basalt, andesite and rhyolite dykes that vary in width from 1 to 30 m that crosscut granodiorite. There are fine-grained basaltic dykes with pervasive chloritization of mafics, rusty pale green to dark grey andesitic to dacitic dykes, and mauve to tan brown, heavily fractured, weakly pyritized, fine-grained massive and flow-banded rhyolite dykes. These dykes occur sporadically throughout the property, increasing in density with proximity to the ring dyke.

The ring dyke outcrops prominently on the southern portion of the Pike property and is a buff to rusty cream, blocky weathered, weak to moderately pyritic quartz feldspar porphyry volcanic dyke, varying in thickness from 100 to 300 m. A small isolated raft of limonitic quartzite to quartzite breccia sharply contacts the ring dyke in the southwest portion of the property.

PIKE WARDEN MINERALIZATION

Work in 2019, 2020 and 2021 has resulted in the discovery of significant mineralization over a widespread area, with individual rock samples returning peak values of **48.1 g/t Au, 11,270 g/t Ag, 7.49% Cu, 59.6% Pb, 0.50% Zn, 1.66% Mo, >0.20% Sb and >0.20% Bi**. A timeline of work history and discovery of showings is presented below.

In 2019, the property encompassed 13 claims (Pike 1-9 and Warden 1-4).

In 2019, a two person, 9-day exploration program resulted in the collection of 48 till samples, 49 rock samples and preliminary 1:5,000 scale geological mapping on the Pike 1-9 claims. On the Warden 1-4 claims, 40 till samples at 100-m spacings were collected on the plateau of Mt. Ward.

In 2019, prospecting on the Pike 1-9 claims resulted in a 391 ppb Au contour soil anomaly as well as the discovery of a 40-cm wide quartz-malachite-chalcopyrite-molybdenum outcropping near the southern edge of the claim block which returned peak values of 7.49% Cu and 138 g/t Ag.

In 2019, till sampling on the Warden 1-4 claims resulted in a 150-by-100 m, four sample gold geochemical anomaly (>10 ppb Au) is present on the southwestern edge of the sample grid.

In 2020, the property was expanded to 39 claims (Pike 1-26 and Warden 1-13).

In 2020, a three person, 10-day exploration program resulted in the collection of 251 till samples, 95 rock samples, a ground magnetic survey and continued 1:5,000 scale geological mapping over the Pike 1-26 claims. In addition, drone surveying was completed over the south-central portion of the property by Venessa Bennett of Drone North. This work resulted in the discovery of the Bonanza, Silver Train, Silver Saddle, and Upper Saddle showings.

In 2020, a half-day of prospecting by a two-man team was performed on the Warden 1-13 claims, resulting in the collection of 42 rock samples. In addition, a drone survey was performed over the block. Notable results of 2020 exploration on Warden 1-13 include four grab samples that returned anomalous values. The remaining samples returned background values for elements of interest. Two vein float samples collected downslope (west) of the historical location of the Squeaker vein returned 463 ppm Cu, 79 ppm Mo, 2.2 g/t Ag, as well as 7.8 g/t Ag. Two grab samples collected south of the historical location of the Squeaker vein returned 63 ppb Au and 80 ppb Au (Figure 7).

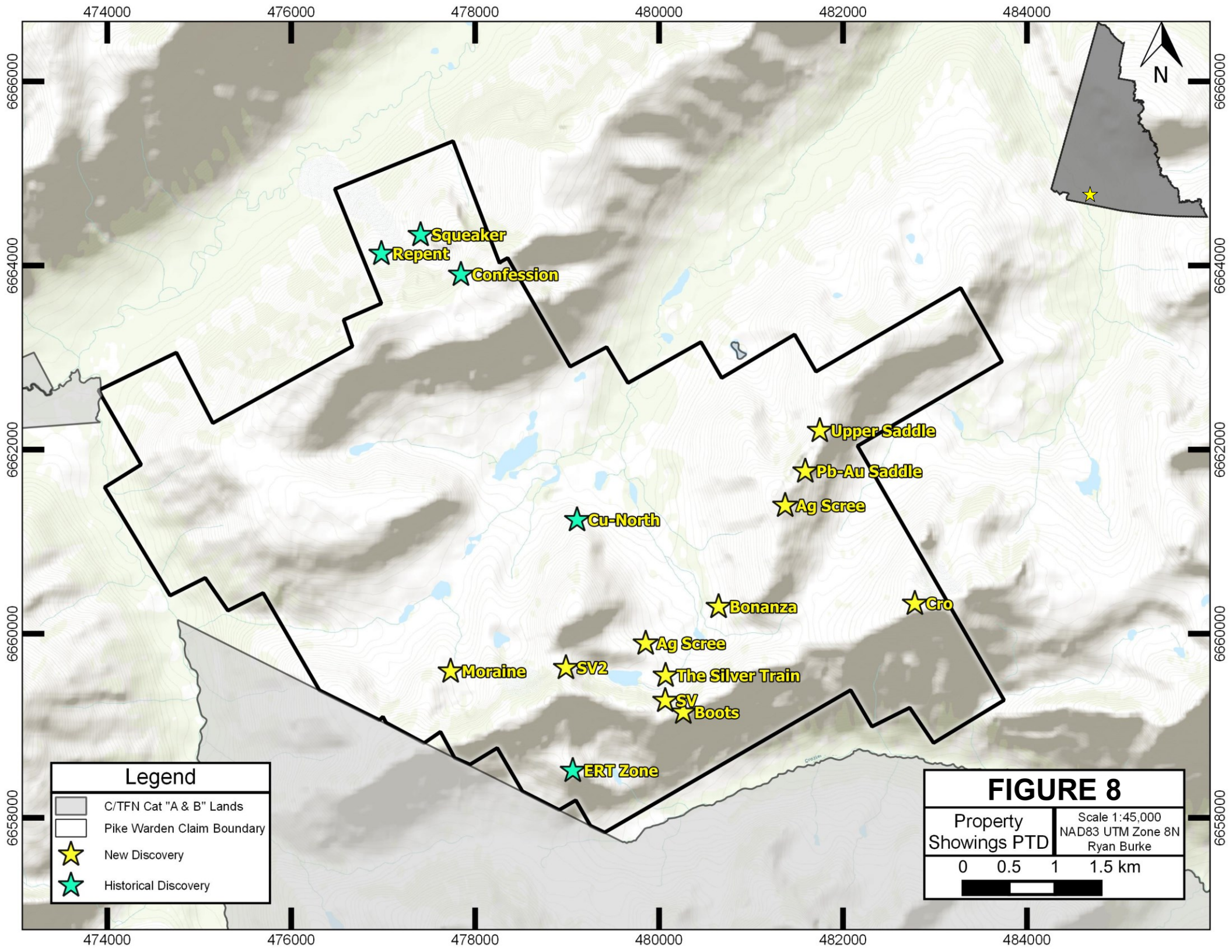
In 2021, the property was expanded again to 185 claims (Warden 1-13 and Pike 1-172).

In 2021, no work was performed on the Warden 1-13 claims. The Confession, Repent, and Squeaker veins have yet to be relocated due to limited fieldwork in the area - successful relocation of the historical showings remains a priority for future work.

Instead, focus was placed on the Pike 1-172 claims to follow-up on the showings discovered in 2020. A four person, 8-day exploration program resulted in the collection of 299 rock samples and continued 1:5,000 scale geological mapping on the Pike 1-172 claims. In addition, a 395-line km airborne geophysical survey was conducted over the entirety of the claim block. Methodology and results of the airborne geophysical survey can be found in Appendix A.

Results of 2021 work resulted in new mineralization being found at the historical ERT Zone as well as the Bonanza, Silver Train, Ag Scree and Upper Saddle showings. Work also resulted in the discovery of the SV, SV2, Moraine, Cro and Lead-Gold Saddle showings. All of the current showings on the property are listed and described below, with their year of discovery and follow-up listed beside the showing

Figure 8 is a map that illustrates the location of each of these showings on the Pike Warden property.



Legend

- C/TFN Cat "A & B" Lands
- Pike Warden Claim Boundary
- New Discovery
- Historical Discovery

FIGURE 8

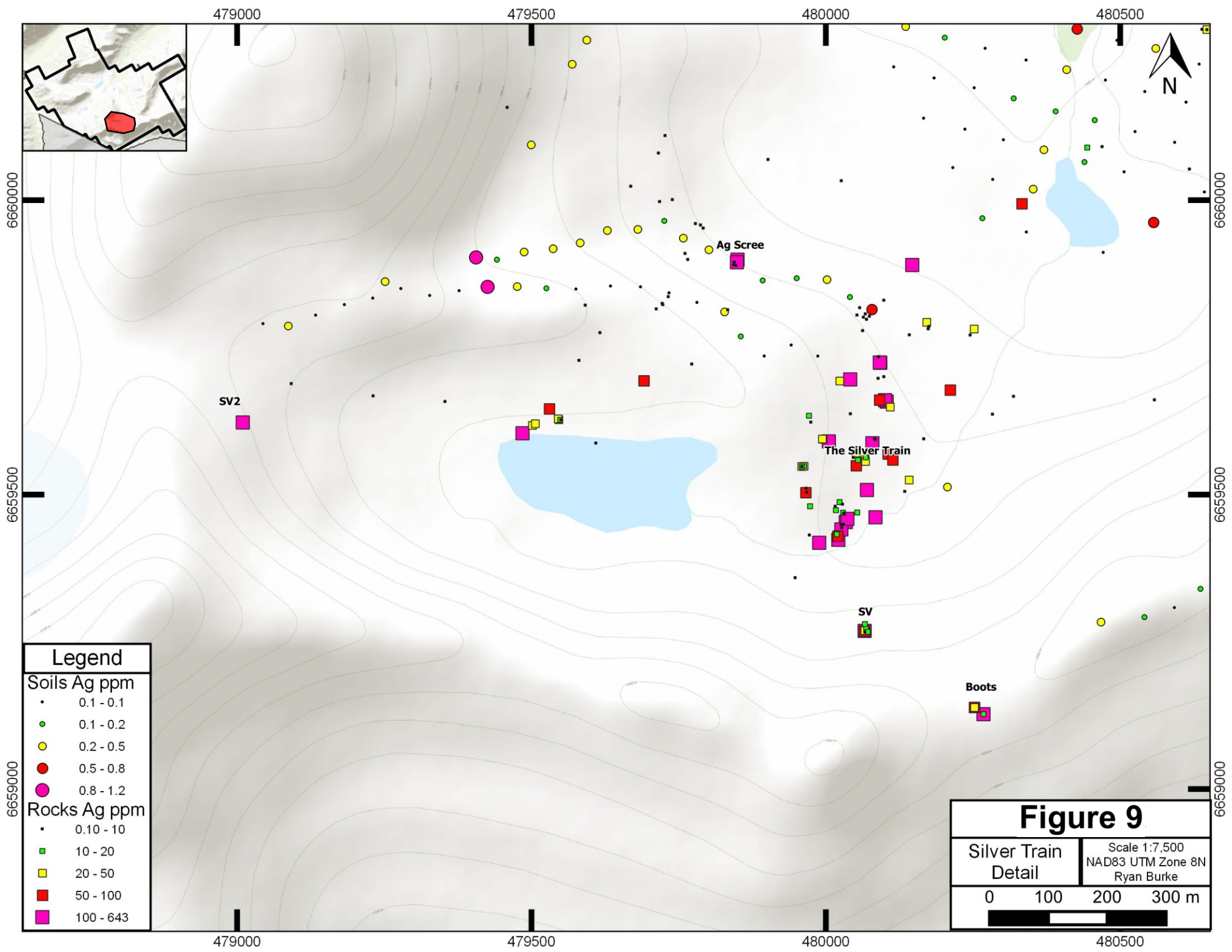
Property Showings PTD	Scale 1:45,000 NAD83 UTM Zone 8N Ryan Burke
0 0.5 1 1.5 km	

Silver Train (2020 & 2021)

This zone is approximately 800-by-750 m. To date, 104 rock samples have been collected in this area. Sixteen (15%) return values in excess of 100 g/t Ag. Peak values for this area are **5.35% Cu, 1.66% Mo, 493 g/t Ag, 0.60 g/t Au and 0.07% Pb**. Thirty-five (34%) of samples collected contain values in excess of 0.10% Mo, concentrated over a 500-by-300 m area. Figures 9 and 10 illustrate Ag and Mo values in rocks collected PTD over the Silver Train.

The zone is comprised of an abundance of oxidized quartz vein float, ranging in size from fist-sized to 1 m³ within a boulder field of blocky granodiorite and smaller blocky fragments of buff tan to cream-brown quartz-feldspar porphyry (QFP) float. There are sporadic outcrop exposures of brecciated granodiorite containing subrounded to subangular dyke, quartzite and granitic breccia fragments within a moderately welded greenish-gray tuff west of the main mineralized zone. This likely represents a large-scale structure associated with observed mineralization. Within the main zone, there is a 70-m exposure of N to NE-trending QFP that has a greenish groundmass and pinkish dusting of feldspars, likely hematite or K-feldspar alteration. Approximately 170 m east of this is a small 80m² area containing very siliceous and intensely hematite-stained granodiorite fragments. The entire area has sporadic outcrop exposures of fresh basalt dykes, andesite porphyry dykes, and rhyolite dykes that range in size from 1-3 m wide and typically trend 045 to 090 with moderate to steep dips to the south. There are localized areas of subangular granodiorite breccia healed by quartz-carbonate. These samples do not typically grade, yet are indicative of structure and hydrothermal activity in the area.

Subcrop measurements of veins in the area generally trend between 215 to 270 with dips of 50. There are only a few measurements of low confidence. Trenching may be required in combination with detailed mapping in order to determine reliable strikes and dips of mineralized veins in the area.

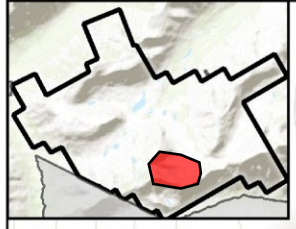


479000

479500

480000

480500



6660000

6660000

6659500

6659500

6659000

6659000

SV2

Ag Scree

The Silver Train

SV

Boots

Legend	
Soils Ag ppm	
•	0.1 - 0.1
•	0.1 - 0.2
•	0.2 - 0.5
•	0.5 - 0.8
•	0.8 - 1.2
Rocks Ag ppm	
•	0.10 - 10
■	10 - 20
■	20 - 50
■	50 - 100
■	100 - 643

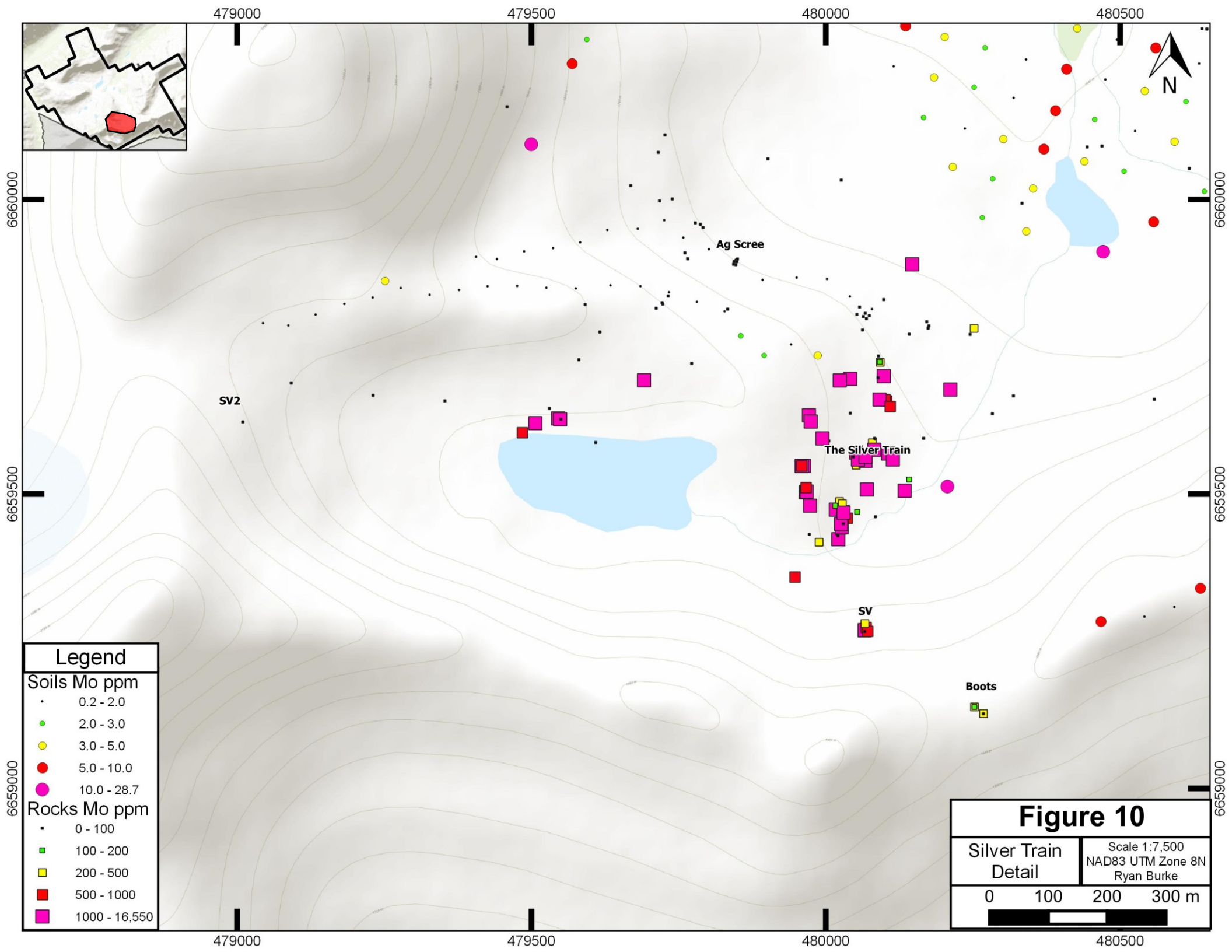
Figure 9	
Silver Train Detail	Scale 1:7,500 NAD83 UTM Zone 8N Ryan Burke
0	100 200 300 m

479000

479500

480000

480500



Confession, Repent & Squeaker (1988)

Refer to “Pike Warden Exploration History” for details regarding this showing.

Cu-North (1988)

Refer to “Pike Warden Exploration History” for details regarding this showing.

ERT Zone (2021 Work Results)

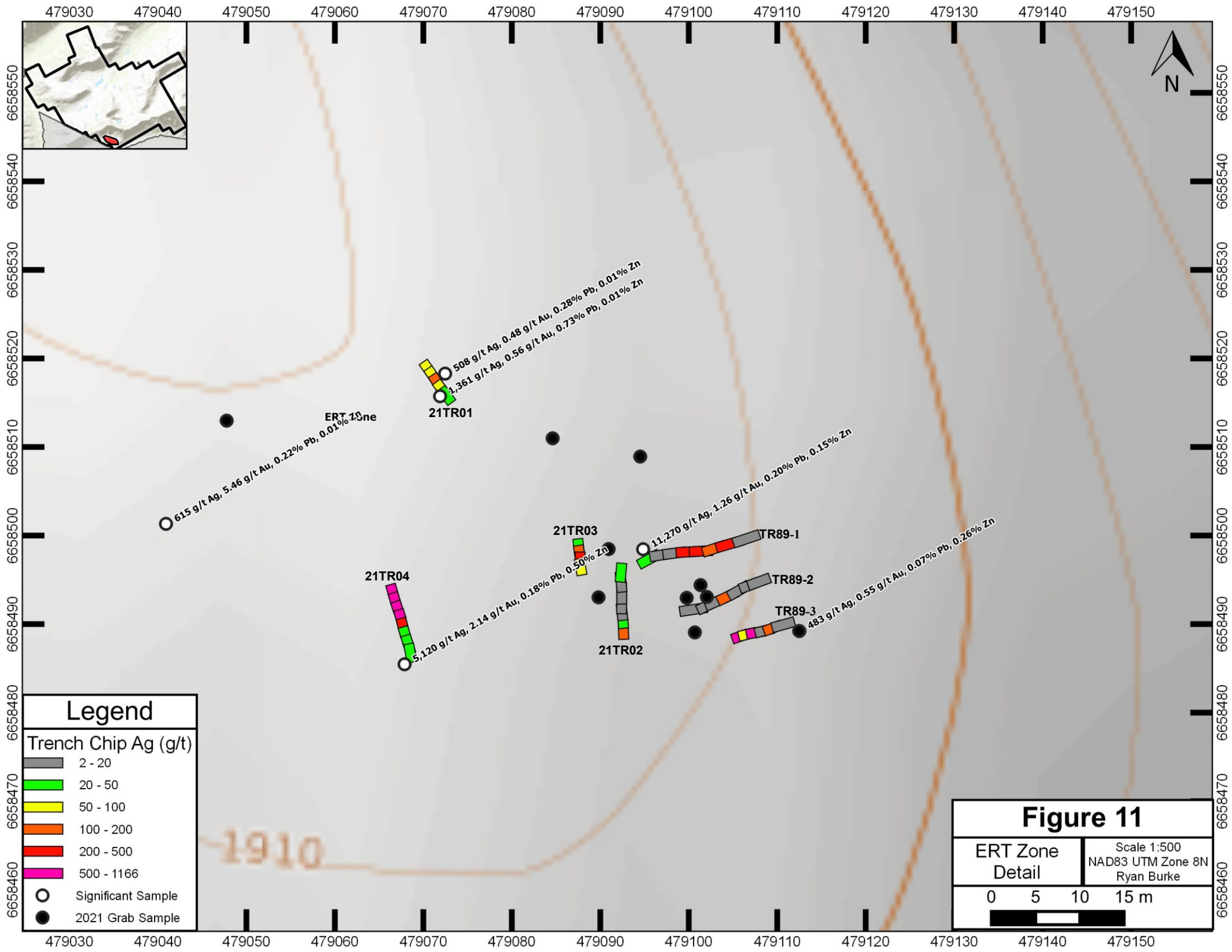
Located ~1.5 km southwest of the Silver Train, this zone had remained unexplored since 1997. In August 2021, one half-day with a four-person team was spent relocating the three historical EW-trending trenches (TR89-1,2,3) as well as trenching in newly discovered areas of mineralization nearby. Four trenches were dug in a NS orientation and chip sampled (21TR01-04). All of the trenches were successful in intersecting high-grade Ag, Au, Pb and Zn mineralization. Seventeen grab samples were also collected around the historical workings as well as in new areas. Trench results are tabulated below, as well as highlighted grab samples from 2021 work.

Table 3: Significant ERT Zone Trench Results (1988 and 2021)

Trench ID	From (m)	To (m)	Interval (m)	Ag g/t	Au g/t	Pb (%)	Zn (%)
21TR04	0	8	8.0	486	0.29	0.13	0.07
including	0	5	5.0	761	0.40	0.20	0.11
and	0	2	2.0	1140	0.67	0.28	0.18
21TR03	0	3	3.0	159	0.13	0.05	0.05
21TR01	0	4	3.6	90	0.06	0.04	0.03
21TR02	0	2	2.2	85	0.04	0.02	0.03
TR89-1	5	11	6.6	307	1.46	0.09	0.10
TR89-2	5	6	1.4	139	0.68	0.05	0.18
TR89-3	0	5	4.7	346	0.54	0.04	0.09

Table 4: Significant ERT Zone Rock Samples (2021)

Sample ID	Ag (g/t)	Au (g/t)	Cu (%)	Pb (%)	Zn (%)	Sb
3852711	11,270.00	1.26	0.39	1.98	0.15	>2000
3852713	5,120.00	2.14	0.24	1.77	0.50	>2000
3852758	1,361.00	0.56	0.03	0.73	0.01	852.20
3852851	615.00	5.46	0.04	0.22	0.01	55.70
3852757	508.00	0.48	0.02	0.28	0.01	244.60
3852763	483.00	0.55	0.03	0.07	0.26	346.90
3852764	472.00	0.30	0.02	0.07	0.16	330.10
3852853	276.00	0.08	0.01	0.03	0.01	160.50
3852765	83.50	0.12	0.00	0.02	0.02	47.90
3852859	55.90	0.06	0.02	0.01	0.00	14.00
3852701	54.20	0.07	0.01	0.03	0.07	10.60
3852762	43.10	0.03	0.00	0.01	0.01	25.90
3852761	30.20	0.04	0.01	0.01	0.00	22.10
3852710	24.40	0.01	0.01	0.01	0.02	4.10
3852756	23.10	0.03	0.01	0.01	0.01	12.90
3852854	13.10	0.30	0.00	0.01	0.01	20.00
3852852	12.30	0.74	0.00	0.01	0.00	23.70
3852760	9.60	0.07	0.00	0.01	0.01	15.30
3852759	4.10	0.00	0.01	0.00	0.00	2.70



SV (2021) & Boots (2019)

Located 160 m south of the Silver Train, this zone consists of a 20-m wide exposure of malachite-stained granodiorite with a small series of 2-40 cm thick chalcopyrite-moly quartz veins. In 2021, chip sampling of granodiorite returned **0.64% Cu, 32.4 g/t Ag, 0.12 g/t Au and 0.10% Mo over 2m**. A 20-cm chip sample of vein returned peak values of **0.39% Cu, 185 g/t Ag, 0.73 g/t Au and 0.42% Mo**. The SV zone potentially links to the Boots Showing, a 090/64 trending 40-cm wide quartz malachite vein 200-m SE. A chip sample across this vein returned **0.91% Cu, 27 g/t Ag and 91 ppm Mo** in 2019.

Photo 1 illustrates samples taken in 2021 across the SV Showing, view looking south. Red lines are interpreted traces of veins, while yellow stars denote sample locations.

SV2 (2021)

Located 1 km west of the Silver Train, this showing consists of two, 2-m space bull quartz veins exposed for 30 m with small sheeted veinlet stringers between them. The veins are developed within quartzite/quartzite breccia along its northern contact with the QFP ring dyke. The vein trends 230/50. A chip sample across one 30-cm wide vein returned **177 g/t Ag, 0.13 g/t Au and 0.22% Pb**. The other vein remains unsampled.

Photo 2 shows the sampled vein on the right-hand side with a sample tag lying on it. There are small stringers between, and 2 m below is the lower vein. Only the vein on the right was sampled in 2021.

PHOTO 1

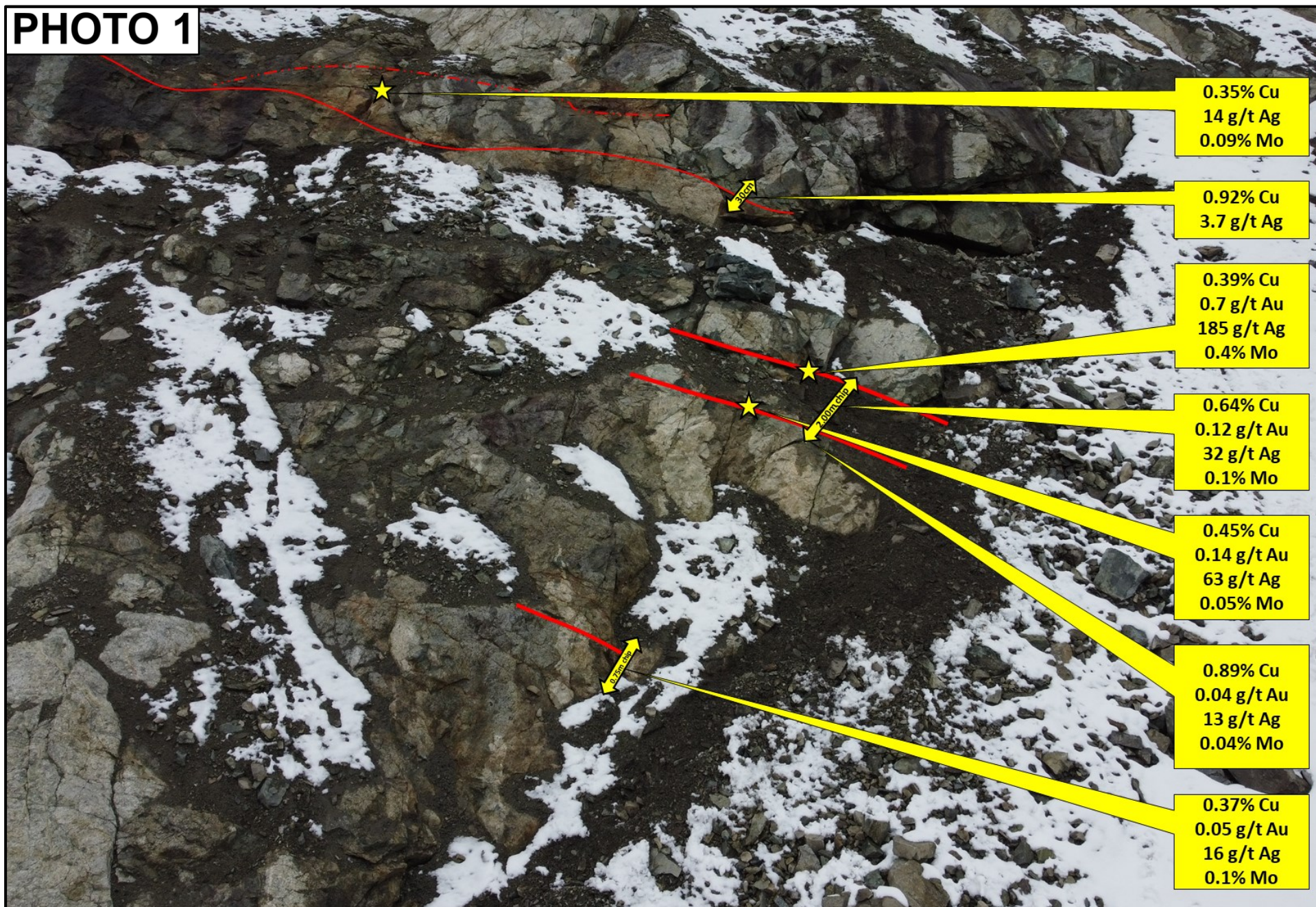


PHOTO 2

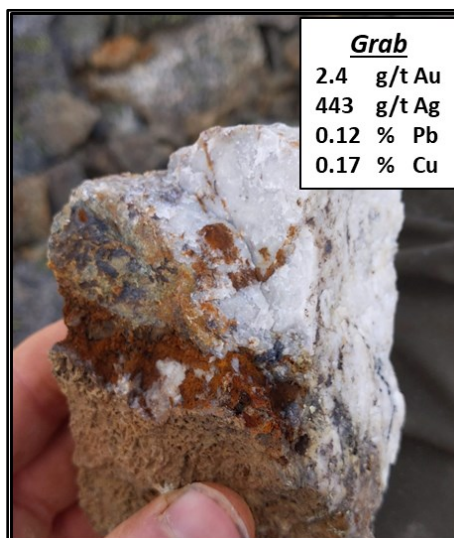
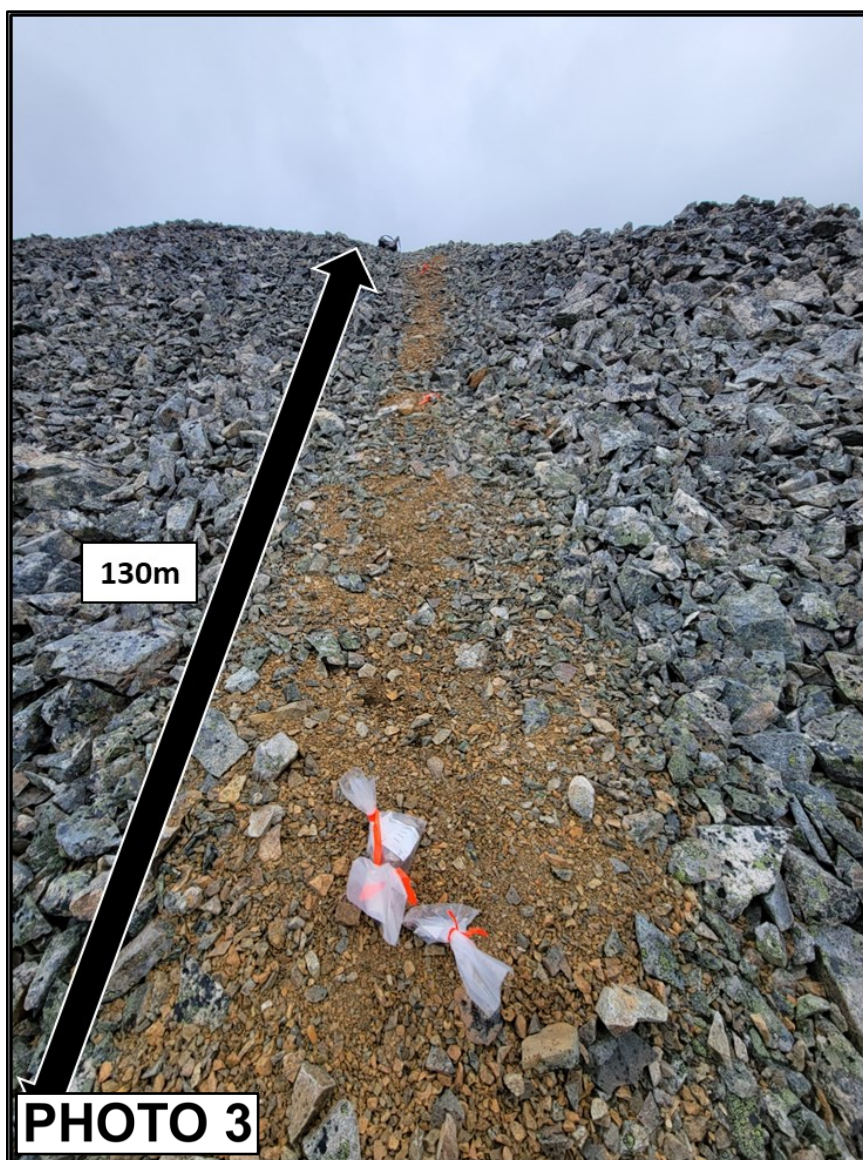


Moraine (2021)

Located 2.4 km west of the Silver Train is a float train of very siliceous, manganese-stained quartzite and quartzite breccias. Of the thirteen samples collected in this area, one sample returned **81.4 g/t Ag and 0.15% Pb**.

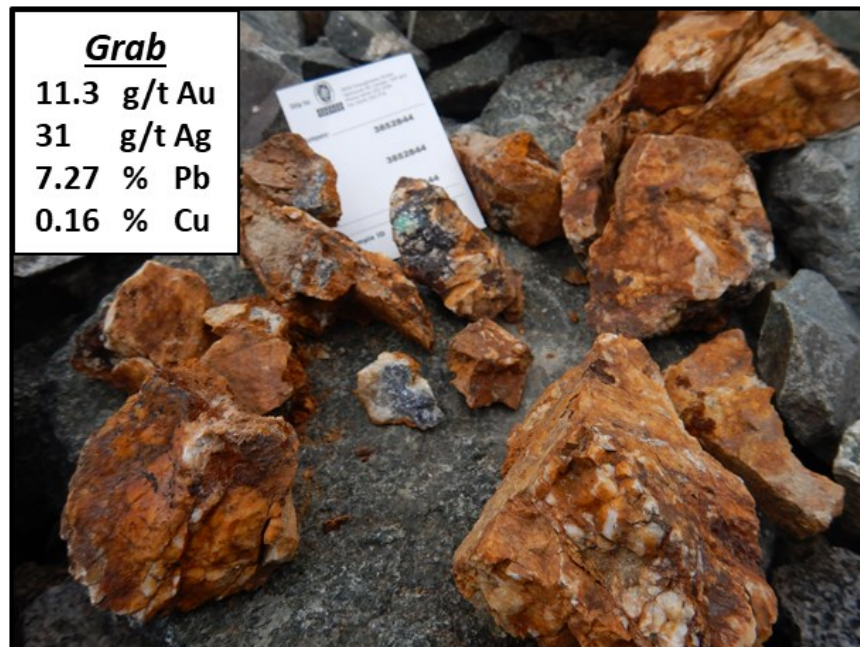
Upper Saddle (2020 & 2021)

Located 3 km northeast of the Silver Train is an EW-trending, oxidized, recessively weathered saddle of within granodiorite cutting across a NS-trending ridgeline. There is intense epidote-chlorite alteration as well as moderate to strong potassic alteration nearby. Within this saddle, there is a 30-m long float train of anomalous Au, Ag, Pb, Zn oxidized quartz vein material. In 2020, a sample returned **2.4 g/t Au, 443 g/t Ag, 0.12% Pb and 0.17% Cu**. In 2021, a sample 10 m west returned **1.82 g/t Au, 821 g/t Ag, 0.22% Pb and 0.14% Cu**. The weathered saddle extends beyond the known zone of mineralization and remains open. Photo 3 is a picture looking west at the Upper Saddle.



Lead-Gold Saddle (2021)

Located 2.5 km northeast of the Silver Train, this area is comprised of three coarse-grained euhedral quartz vein containing semi-massive interstitial galena along the northern margin of a prominent talus fan. All three samples returned high-grade Au, Pb, Ag and strong Cu values with peak values of **44.5 g/t Au, 59.6% Pb, 491 g/t Ag and 0.16% Cu**. This area has only been prospected briefly and is a high priority target for follow-up work.



Ag-Scree (2020 & 2021)

This showing contains two anomalous zones, 2 km apart from each other, along a prospective northeast trending structure. The first occurrence, discovered in 2020 lies 400 m north of the Silver Train and consists of a banded quartz-epidote-galena vein which returned **1.37 g/t Au, 643 g/t Ag and 1.93% Pb**. A large northeast trending lineament runs across the valley, up the slope and onto a NS ridge, where atop, strikingly similar quartz-epidote-galena vein material was found that returned **3.63% Pb, 10 g/t Ag and 0.10 g/t Au**.

Follow-up sampling in 2021 atop the ridge have returned peak values of **2.32 g/t Au, 110 g/t Ag, 0.61% Cu, 18.33% Pb, 0.35% Zn, and 59.6 ppm Mo**. This structure remains underexplored and open along strike. Photo 5 illustrates the similar vein material found 2 km apart.

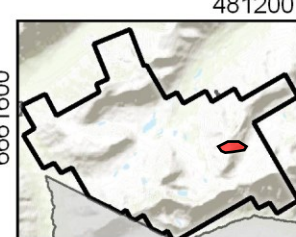
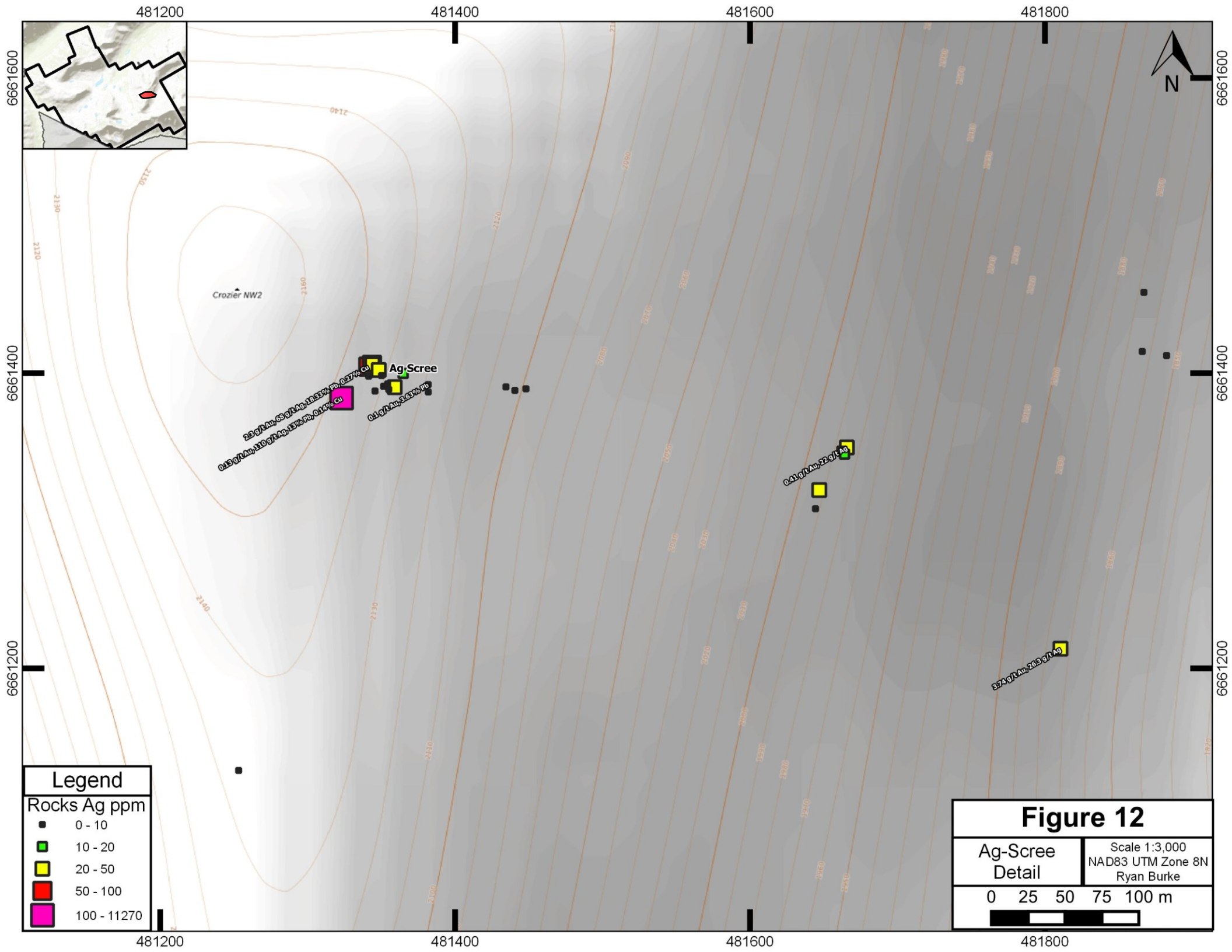
PHOTO 5



643 g/t Ag, 1.37 g/t Au, 1.93 % Pb, 0.2 % Cu



3.63% Pb, 10 g/t Ag, 0.10 g/t Au, 1.6 ppm Bi



Legend	
Rocks Ag ppm	
●	0 - 10
■	10 - 20
■	20 - 50
■	50 - 100
■	100 - 11270

Figure 12	
Ag-Screen Detail	Scale 1:3,000 NAD83 UTM Zone 8N Ryan Burke
0 25 50 75 100 m	

Bonanza (2020 & 2021)

This showing is 800 m northeast of the Silver Train. In 2020, a semi-massive quartz sulphide breccia vein float sample returned **48.1 g/t Au and 47.6 g/t Ag**. Directly upslope (~50-100 m) of this sample is a 5-10 m wide flow-banded rhyolite dyke, outcropping for roughly 60 m which intrudes along granodiorite within a prominent, recessively weathered 700-m long NE-trending structural lineament. The granodiorite above and below the dyke is bleached and displays moderate propylitic and argillic alteration. Talus cover obscures parts of the recessive feature and likely partially covers mineralization.

Follow-up in 2021 identified additional high-grade gold samples within the recessively weathered lineament obscured by granodiorite talus cover. Three samples collected along 40 m of this lineament returned **30.2 g/t Au and 4.5 g/t Ag, 16.8 g/t Au and 8.6 g/t Ag, and 8.6 g/t Au and 2.5 g/t Ag**. Photos 6 and 7 are pictures of the high-grade vein material.

In total, there are four flow-banded rhyolite dykes within the area. First, the westernmost dyke is 3-m thick and trends 010/10. This dyke has been tracked along strike for 300 m. The second 3 m wide dyke trends 220/90 and is exposed sporadically over 400 m with a potential 700 m strike length. This is the dyke currently believed to be sourcing the high-grade gold veins discovered in 2020/2021. The third dyke is 3 m wide and trends 225/88. Along strike 350m NE of this dyke is a sample along the ridge that returned **0.38 g/t Au and 18.6 g/t Ag**. Lastly, the fourth dyke is 3 m wide and trends 235/70. A 5-cm chip sample of quartz vein material taken from the upper contact of the dyke with overlying granodiorite returned **0.42 g/t Au and 2.3 g/t Ag**.

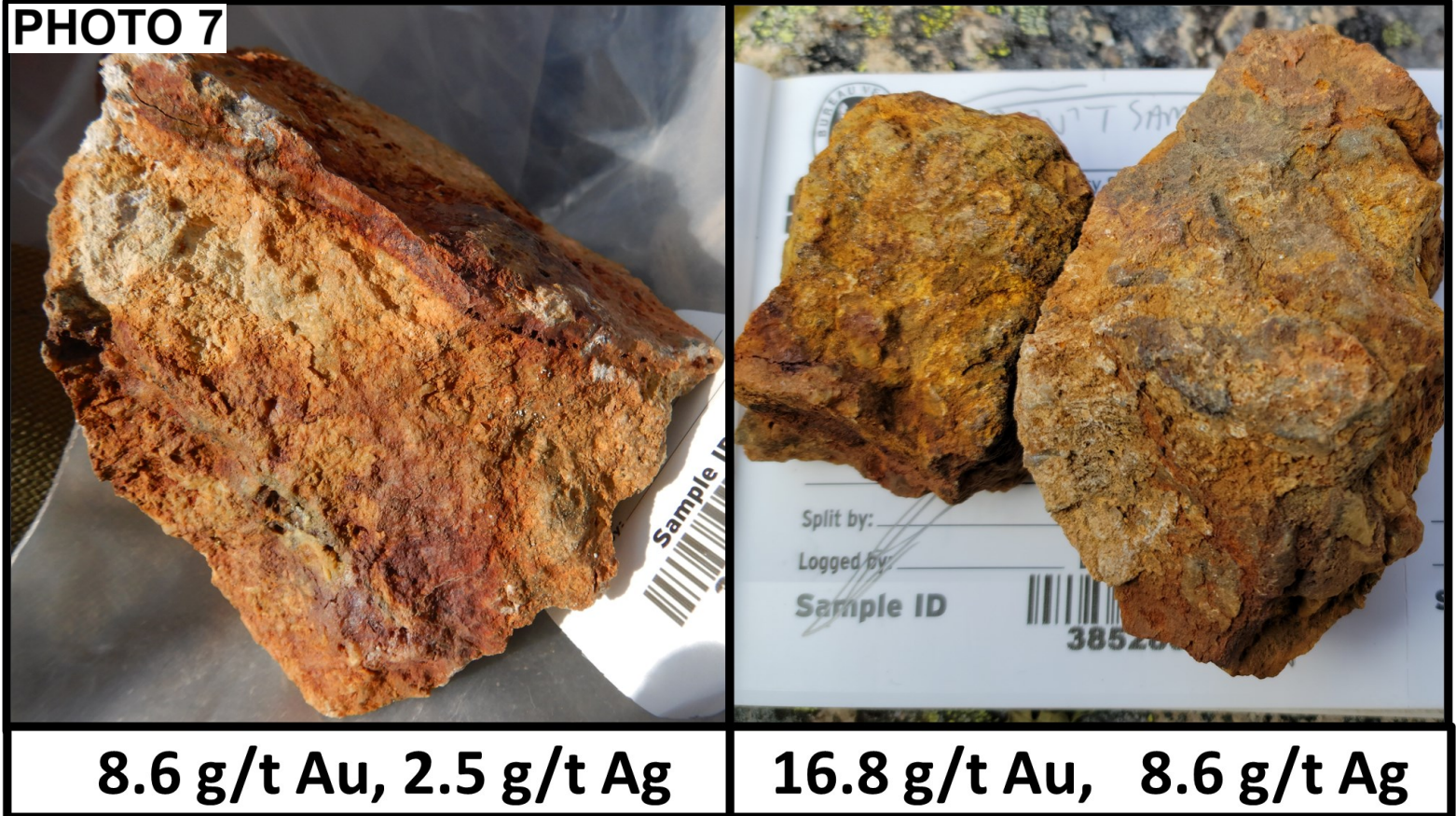
PHOTO 6



30.2 g/t Au, 4.5 g/t Ag

48.1 g/t Au, 47.6 g/t Ag

PHOTO 7



8.6 g/t Au, 2.5 g/t Ag

16.8 g/t Au, 8.6 g/t Ag

Cro (2021)

Located 2.8 km east of the Silver Train, this area contains two separate anomalous vein float/subcrop samples 150 m apart from each other.

The first is an EW-trending quartz vein float train that has been tracked for 90m along the ridgeline. An outcrop vein sample of 5-cm wide vein material within the float train returned **0.95 g/t Au, 19.7 g/t Ag, 0.18% Cu and 21.3 ppm Mo**. An adjacent wallrock sample returned **1.55 g/t Au, 23.3 g/t Ag, 0.26% Cu and 206 ppm Mo**.

The second, located 150 m SW of the first, is a 60 cm clay altered, gouged chip sample within a 225/40 trending saddle that returned values of **1.43 g/t Au, 0.8 g/t Ag, 11.9 ppm Cu and 3.6 ppm Mo**.

DISCUSSION & CONCLUSIONS

Mineralization at the Pike Warden property is spatially associated with the caldera-bounding ring dyke of the BLVC, two major northeast-trending structures, and dykes on the property. Mineralization tends to be concentrated near the intersection of NE and EW-trending structures. High silver, gold, copper, molybdenum and lead values in quartz veins suggest an intermediate sulfidation setting of mineralization. At the Silver Train, elevated copper and molybdenum values along with quartz-carbonate breccias, heterolithic intrusive breccias and pervasive epidote-pyrite alteration within granodiorite suggest potential for a buried porphyry system at depth.

The structurally controlled, polymetallic, vein-hosted mineralization discovered on the Pike Warden property is similar to the Skukum Creek deposit located 10 km north. Veining is associated with northeast-trending flow-banded rhyolite dykes, monolithic and heterolithic phreatomagmatic breccias and semi-brittle shear zones within Mt. McNeil granodiorite, typically developed along dyke contacts (Naas and Simpson, 2013). The Bonanza showing is similar in many respects, and is a potential analogue to Skukum Creek due the occurrence of high-grade vein float spatially associated with northeast-trending flow-banded rhyolite dykes.

Additional work is warranted in order to fully evaluate Pike Warden's geological potential. Encouraging early-stage work has demonstrated that the property has notable mineral endowment and further discoveries remain to be found, not only on the property, but throughout the entire region.

WORK RECOMMENDATIONS

The following is recommended for future work on the Pike 1-172 claims:

Focused follow-up on all of the showings described and shown in Figure 8

Particular focus in prospecting and hand-trenching the Lead-Gold Saddle, Bonanza, and the ERT Zone.

Detailed interpretation of airborne geophysical data in order to generate additional prospecting targets for 2022

The following is recommended for future work on Warden 1-13 claims:

Relocate and re-sample the Repent, Squeaker, and Confession vein systems within the cirque; continue to prospect along prominent structures identified in drone imagery.

Contingent upon positive results from further work, a preliminary 1,000 m rotary air blast (RAB) drilling program on the most prospective targets is recommended.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Ryan Burke", is displayed on a light green rectangular background.

Ryan Burke, B.Sc., G.I.T.

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YGS

<https://mapservices.gov.yk.ca/GeoYukon/>

2022

APPENDIX I
STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Ryan Burke, geologist in training, with business and residential addresses in Whitehorse, Yukon Territory, do hereby certify that:

1. I graduated in 2018 from Memorial University of Newfoundland and Labrador with a B.Sc. (Hons.) in Geological Sciences.
2. I am currently registered as a Geoscientist In Training (G.I.T.) with Professional Engineers & Geoscientists Newfoundland & Labrador (PEGNL).
3. I have worked every summer since 2010 in a role related to the mineral exploration industry within the Yukon.
4. I have participated in this field program and personally interpreted all data resulting from this work.

A handwritten signature in black ink on a light green rectangular background. The signature is written in a cursive style and reads "Ryan Burke".

Ryan Burke, B.Sc., G.I.T.

APPENDIX II
STATEMENT OF EXPENDITURES

Statement of Expenditures

Helicopter & Air Transport Costs	\$3,707.76
Assay Costs	\$8,597.11
Camp Costs	\$3,200.00
Total Wages Paid	\$15,775.00
Truck/Mileage Costs	\$594.88
Airborne Geophysical Survey	\$32,550.00
Miscellaneous Costs (Equipment Rental & WCB Coverage, etc..)	\$858.00
Report Writing Costs	\$3,500.00
<hr/>	
TOTAL EXPENDITURES	\$68,782.75

APPENDIX III

AIRBORNE GEOPHYSICAL SURVEY METHODOLOGY & RESULTS

AIRBORNE GEOPHYSICAL SURVEY REPORT



Pike-Warden Survey Block Carcross, Yukon

Precision GeoSurveys Inc.

www.precisiongeosurveys.com
Hangar 42 Langley Airport
21330 - 56th Ave., Langley, BC
Canada V2Y 0E5
604-484-9402

Jenny Poon, B.Sc., P.Geo.
August 2021
Job# 21178

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- Warden - Ternary Image (TI)

Introduction

This report outlines the geophysical survey operations and data processing procedures taken during the high resolution helicopter-borne gradient magnetic, VLF electromagnetic, and radiometric survey flown over the Pike-Warden survey block for Ryan Burke. The survey block is located in southern Yukon (Figure 1) and it was flown on July 8 and July 9, 2021.

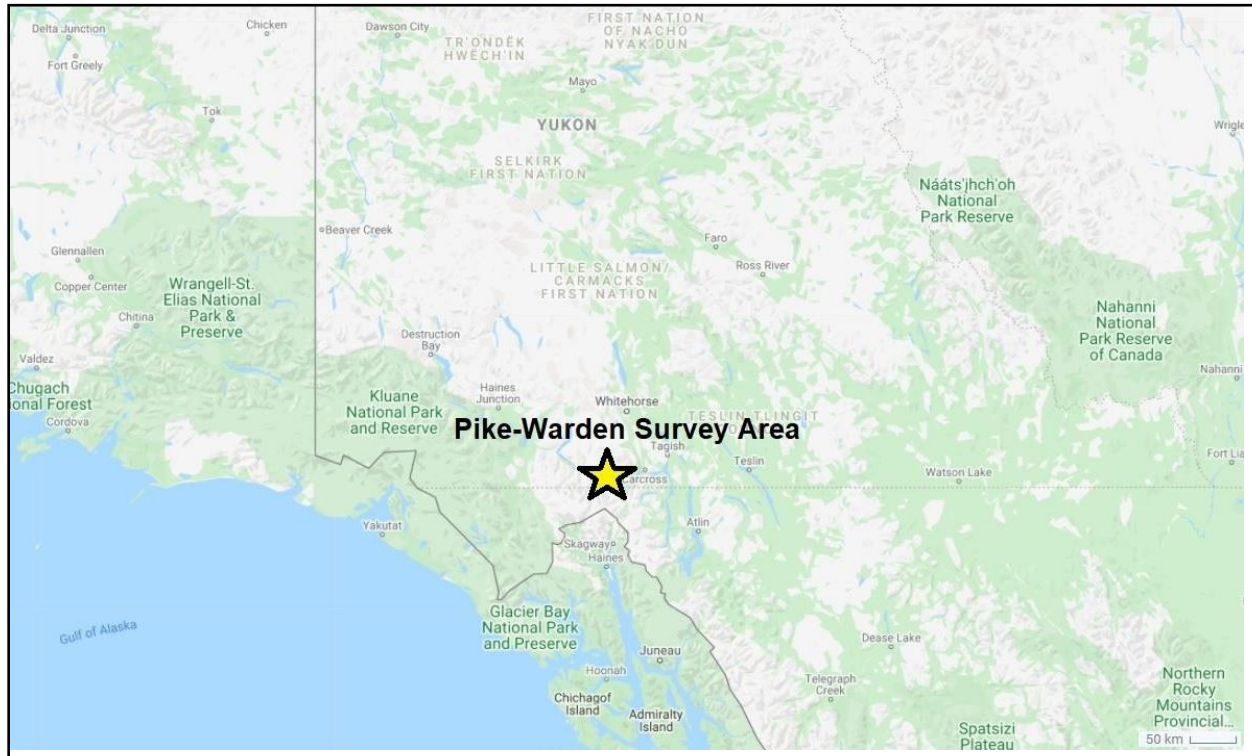


Figure 1: Pike-Warden survey area located in southern Yukon.

Survey Area

The Pike-Warden survey block is centered 71 km southwest of Whitehorse and 38 km west of Carcross, Yukon (Figure 2).

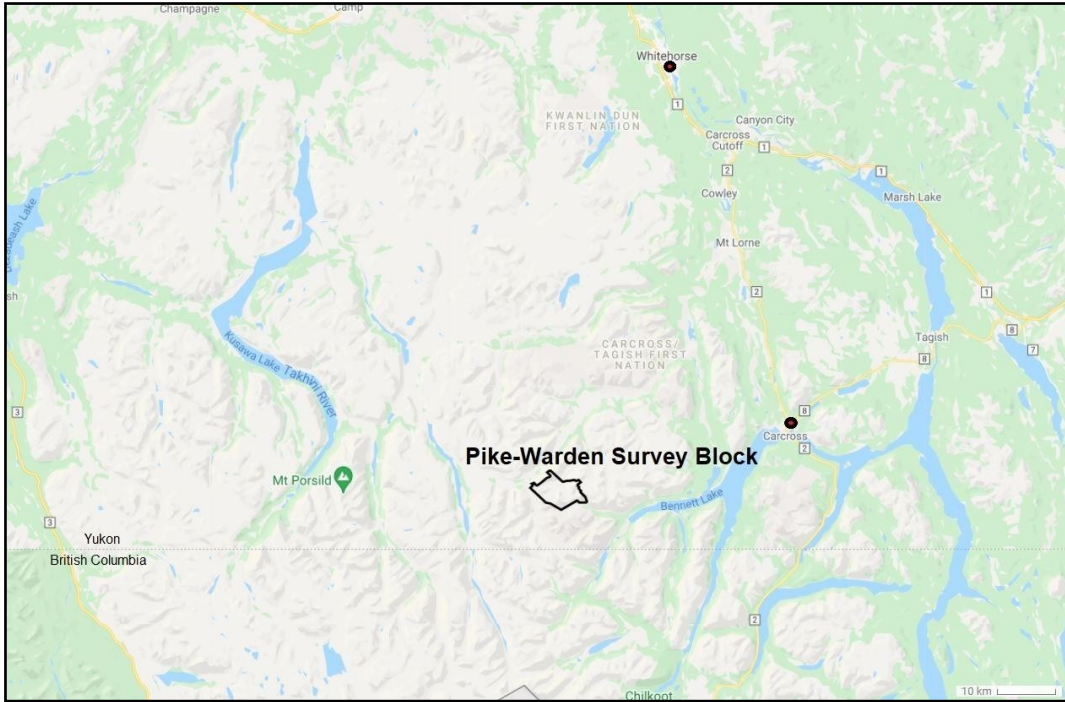


Figure 2: Pike-Warden survey block southwest of Whitehorse and west of Carcross, Yukon.

The Pike-Warden survey block was flown at 100 m line spacing at a heading of 135°/315°; tielines were flown at 1000 m spacing at a heading of 045°/225° (Figures 3 and 4).

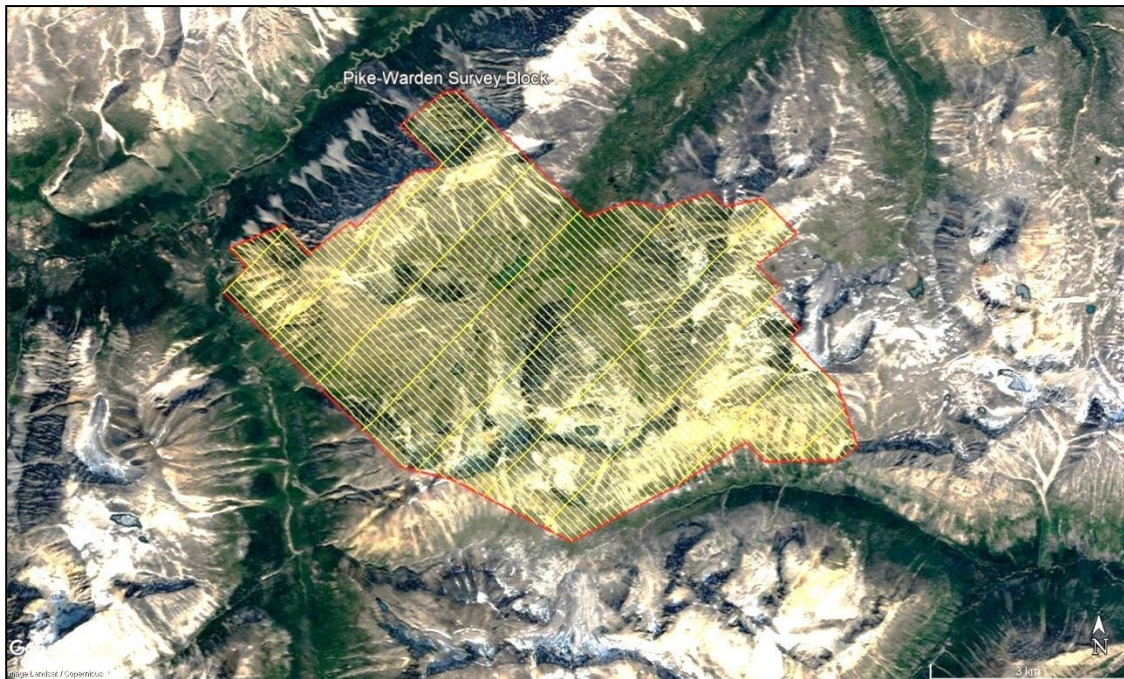


Figure 3: Plan View - Pike-Warden survey block with actual flight lines in yellow and survey block boundary in red.

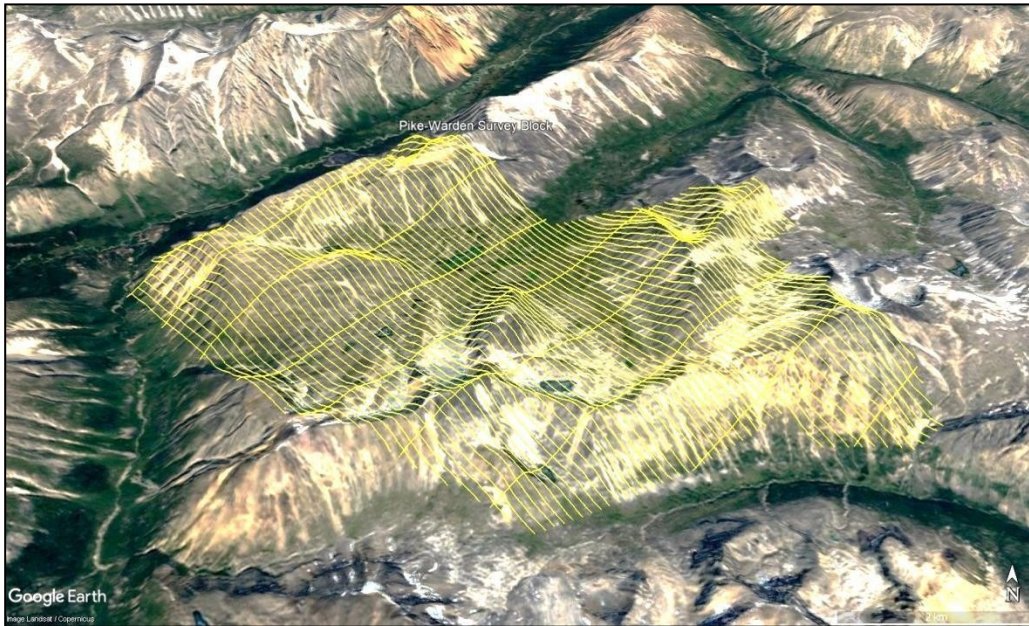


Figure 4: Terrain View - Pike-Warden survey block with actual flight lines displayed in yellow.

Survey Specifications

The geodetic system used for the geophysical survey was WGS 84 in UTM Zone 8N. A total of 395 line km was flown over an area of 35.9 km² (Table 1). Polygon coordinates for the Pike-Warden survey block are specified in Appendix A.

Survey Block	Area (km ²)	Line Type	No. of Lines Planned	No. of Lines Completed	Line Spacing (m)	Line Orientation (UTM grid)	Total Planned Line km	Total Actual km Flown
Pike-Warden	35.9	Survey	68	68	100	135°/315°	358	358
		Tie	9	9	1000	045°/225°	37	37
		Total:	77	77			395	395

Table 1: Survey flight line specifications for Pike-Warden survey block.

Geophysical Data

Geophysical data are collected in a variety of ways and are used for many purposes including aiding in the determination of geology, mineral deposits, oil and gas deposits, geotechnical investigations, contaminated land sites, and UXO (unexploded ordnance) detection.

For the purposes of this survey, airborne gradient magnetic, VLF-EM, and radiometric data were collected to serve in geological mapping and exploration for mineral deposits.

Magnetic Data

Magnetic surveying is the most common airborne geophysical technology used for both mineral and hydrocarbon exploration. Aeromagnetic surveys measure and record the total intensity of the magnetic field at the magnetometer sensor, which is a combination of the desired geomagnetic field as well as influences from the constantly varying solar wind and the aircraft's magnetic field. By subtracting temporal and aircraft magnetic effects, the resulting aeromagnetic maps show the spatial distribution and relative abundance of magnetic minerals - most commonly the iron oxide mineral magnetite - in the upper levels of Earth's crust, which in turn are related to lithology, structure, and alteration of bedrock. Survey specifications, instrumentation, and interpretation procedures depend on the objectives of the survey. Magnetic surveys are typically performed for:

Geological Mapping - to aid in mapping lithology, structure, and alteration.

Depth to Basement Mapping - for exploration in sedimentary basins or mineralization associated with the basement surface.

2.1.1 Gradient Magnetic Data

In addition to high resolution total magnetic field data, horizontal magnetic gradient data were collected by using a triple magnetic gradient boom with 3 axis compensation. Direct measurement of the magnetic gradient has the following benefits:

Enhanced definition of near-surface anomalies.

Emphasis on short wavelength spatial components of magnetic anomalies from horizontal variations of the gradients.

Attenuation of long wavelength spatial components associated with regional trends and large scale anomalies.

Reduction of high frequency temporal variations in the Earth's magnetic field due to micro-pulsations.

Immunity to temporal magnetic fluctuations.

Reduction of aircraft/sensor movement errors.

VLF-EM Data

Electromagnetic (EM) surveys measure the Earth's response to EM energy as variations in subsurface electrical conductivity and resistivity. Very Low Frequency (VLF) surveys are a type of

EM technology that respond to EM waves in the range of 11 to 77 kHz. VLF measurements are passive and therefore do not interfere with other geophysical sensors.

VLF transmitters are used for military communications and are located remote from the survey site. VLF source (primary) fields are effectively planar and parallel to the ground. The primary field induces current in long linear conductors that strike in the direction of the transmitter. These currents produce vertical secondary magnetic fields. Conductors are detected by the presence of this anomalous vertical component of the secondary field, whose strength depends not only on conductivity, but also on the orientation of the conductors with respect to the source fields.

Measuring signals from two or more VLF transmitters in perpendicular directions can be beneficial in determining the location and geometry of conductors; however, this is not always possible due to the fixed direction to transmitters and unreliable schedules. Total field strength and vertical quadrature can be measured to provide estimates of relative conductivity and apparent phase. Conductivity can be related to subsurface conductors including graphite, sulfide mineralization, clay alteration, cultural objects, and ground water.

Radiometric Data

Radiometric surveys are used to determine either the absolute or relative concentrations of the naturally occurring radioelements uranium (U), thorium (Th), and potassium (K) in surface rocks and soils using radioactive emanations. Gamma radiation is utilized due to its greater penetration depth compared with alpha and beta radiation. Radiometric data are useful for mapping lithology, alteration, and structure as well as providing insights into weathering. For example, individual radioelements follow very different pathways of evolution during alteration of rocks, natural radioactivity of igneous rocks generally increases with SiO₂ content, and clay minerals tend to fix the natural radioelements.

Gamma rays are electromagnetic waves with frequencies between 10¹⁹ and 10²¹ Hz emitted spontaneously from an atomic nucleus during radioactive decay, in packets referred to as photons. The energy E transported by a photon is related to the wavelength λ or frequency ν by the formula:

$$E = h\nu = hc/\lambda$$

where: c is the velocity of light

h is Planck's constant (6.626 x 10⁻³⁴ joule)

All detectable gamma radiation from Earth materials comes from the natural decay products of three primary radioelements: U, Th, and K. Each individual nuclear species (element) emits gamma rays at one or more specific energies, as shown in Figure 5. Of these elements, only potassium (⁴⁰K) emits

gamma energy directly, at 1.46 MeV. Uranium (^{238}U) and thorium (^{232}Th) emit gamma rays through their respective decay series; ^{214}Bi at 1.76 MeV for uranium and ^{208}Tl at 2.61 MeV for thorium. Accordingly, the ^{214}Bi and ^{208}Tl measurements are considered equivalents for uranium (eU) and thorium (eTh), as the daughter products will be in equilibrium under most natural conditions.

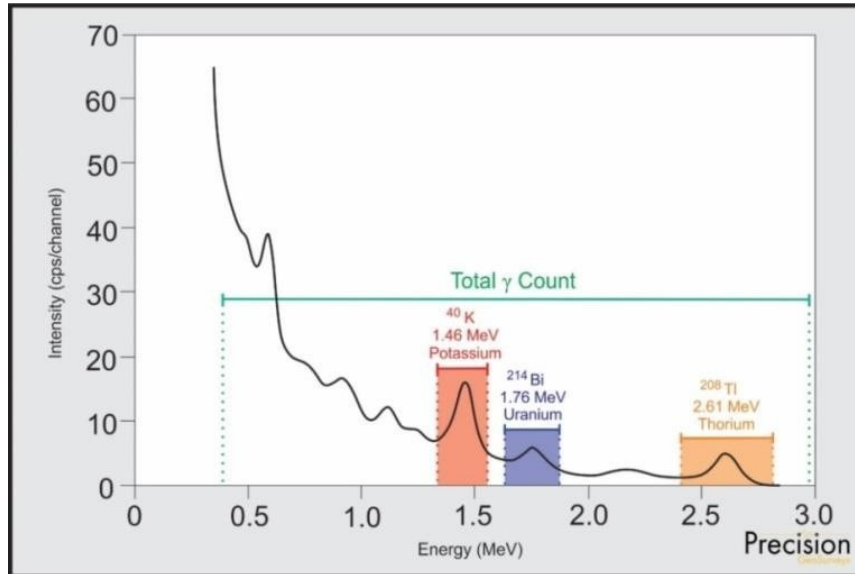


Figure 5: Typical natural gamma spectrum showing the three spectral windows (^{40}K 1.37-1.57 MeV, ^{214}Bi 1.66-1.86 MeV, ^{208}Tl 2.41-2.81 MeV) and total count (0.40-2.81 MeV) window.

Aircraft and Equipment

All geophysical and subsidiary equipment were carefully installed on an aircraft by Precision GeoSurveys to collect gradient magnetic, VLF-EM, and radiometric data.

Aircraft

Precision GeoSurveys flew the survey using an Airbus AS350 helicopter, registration C-GSVY.

Geophysical Equipment

The survey aircraft (Figure 6) was equipped with a data acquisition system, GPS navigation system, pilot guidance unit (PGU), laser altimeter, triple magnetic gradient boom system, fluxgate magnetometer, a VLF-EM receiver, gamma ray spectrometer, barometer, and temperature/humidity probe. Magnetic base stations were used to record temporal magnetic variations. Technical specifications for the geophysical equipment are provided in Appendix B.



Figure 6: Survey helicopter equipped with three magnetic sensors for gradient magnetic data acquisition, VLF-EM system, and gamma spectrometer.

IMPAC

The Integrated Multi-Parameter Acquisition Console (IMPAC) (Figure 7), manufactured by Nuvia Dynamics Inc. (previously Pico Envirotec Inc.), is the main computer used in integrated data recording, data synchronizing, providing real-time quality control data for the geophysical operator display, and the generation of navigation information for the pilot and operator display systems.



Figure 7: IMPAC data acquisition system.

IMPAC uses the Microsoft Windows operating system and geophysical parameters are based on Nuvia's Airborne Geophysical Information System (AGIS) software. Depending on survey specifications, information such as magnetic field, electromagnetic response, total gamma count, counts of various radioelements (K, U, Th, etc.), cosmic radiation, barometric pressure, atmospheric humidity, temperature, aircraft attitude, navigation parameters, VLF-EM response, and GPS status can all be monitored on the AGIS on-board display (Figure 8).

While in flight, raw magnetic response, magnetic fourth difference, compensated and uncompensated data, VLF-EM response, radiometric spectra, aircraft position, survey altitude, cross track error, and other parameters are recorded (depending on sensor configuration) and can be viewed by the geophysical operator for immediate QC (quality control). Additional software allows for post or real time magnetic compensation and VLF-EM calibration.

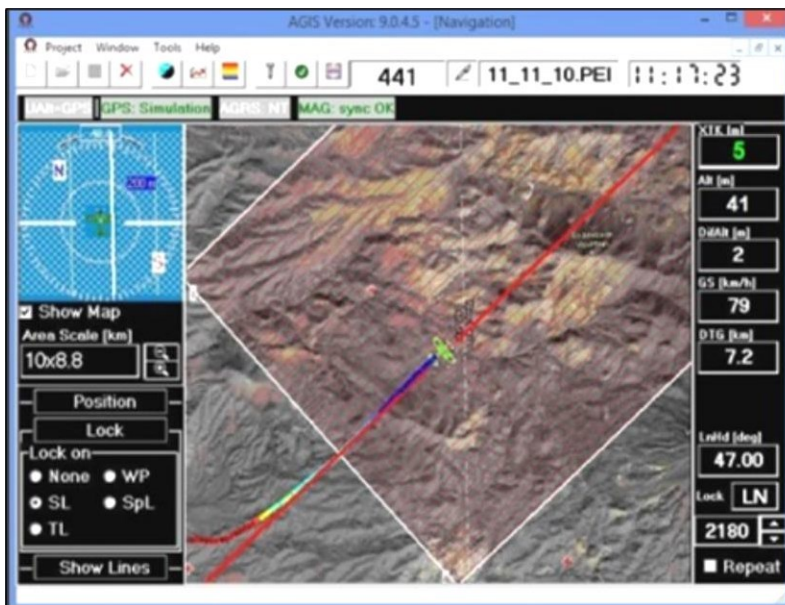


Figure 8: AGIS operator display showing real time flight line recording and navigation parameters. Additional windows display real-time geophysical data to operator.

GPS Navigation System

A Hemisphere R330 GPS receiver (Figure 9) and a Novatel GPS antenna on the tail of the aircraft integrated with the AGIS navigation system and pilot display (PGU) provide accurate navigational information and position control. The R330 GPS receiver supports fast updates at a rate of up to 20 Hz (20 times per second); delivering sub-meter positioning accuracy in three dimensions. It receives GNSS (GPS/GLONASS) L1 and L2 signals.

The receiver supports differential correction methods including L-Band, RTK, SBAS, and Beacon. The R330 employs innovative Hemisphere GPS Eclipse SureTrack technology, which allows it to model the phase on satellites that the airborne unit is currently tracking. With SureTrack technology, dropouts are reduced and speed of the signal reacquisitions is increased; enhancing accurate positioning when base corrections are not available.

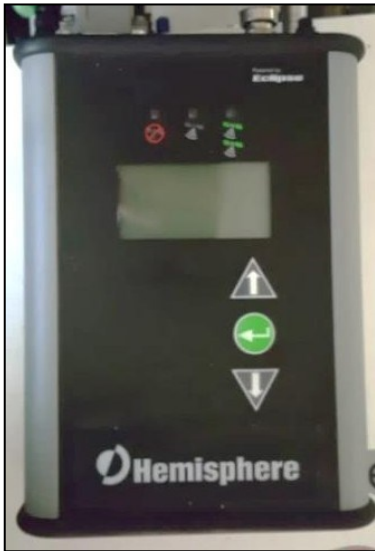


Figure 9: Hemisphere R330 GPS receiver.

Pilot Guidance Unit

Steering and elevation (ground clearance) information is continuously provided to the pilot by the Pilot Guidance Unit (PGU). The graphical display is mounted on top of the aircraft's instrument panel, remotely from the data acquisition system. The PGU is the primary navigation aid (Figure 10) to assist the pilot in keeping the aircraft on the planned flight path, heading, speed, and at the desired ground clearance.

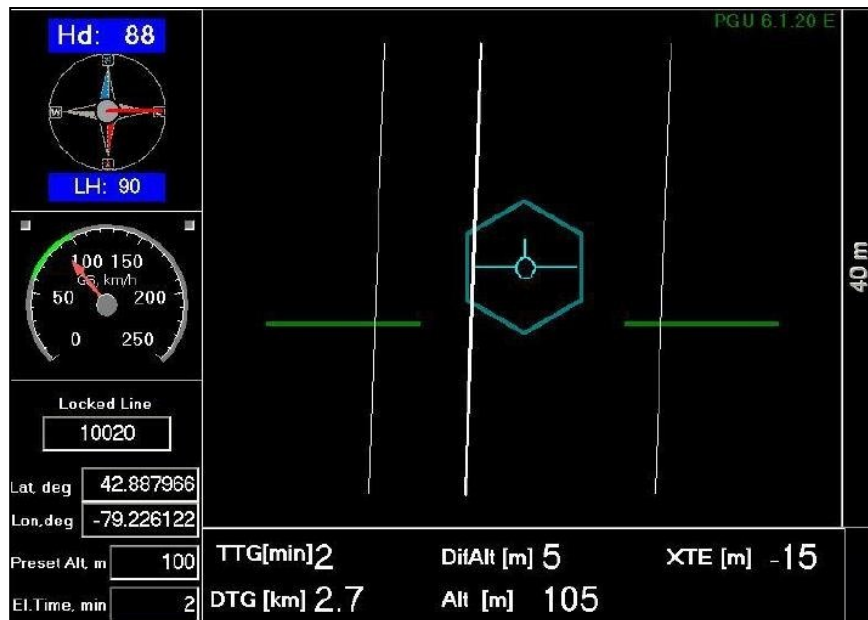


Figure 10: PGU screen displaying navigation information.

PGU information is displayed on a full VGA 600 x 800 pixel 7 inch (17.8 cm) LCD display. The CPU for the PGU is contained in a PC-104 console and uses Microsoft Windows operating system control, with input from the GPS antenna on the aircraft, laser altimeter, and AGIS.

Laser Altimeter

Terrain clearance is measured by an Opti-Logic RS800 Rangefinder laser altimeter (Figure 11) attached to the belly of the forward magnetometer boom. The RS800 laser is a time-of-flight sensor that measures distance by a rapidly modulated and collimated laser beam that creates a dot on the target surface. The maximum range of the laser altimeter is 700 m off natural surfaces with accuracy of ± 1 m on 1 x 1 m diffuse target with 50% ($\pm 20\%$) reflectivity. Within the sensor unit, reflected signal light is collected by the lens and focused onto a photodiode. Through serial communications and digital outputs, ground clearance data are transmitted to an RS-232 compatible port and recorded and displayed by the AGIS and PGU at 10 Hz in meters.

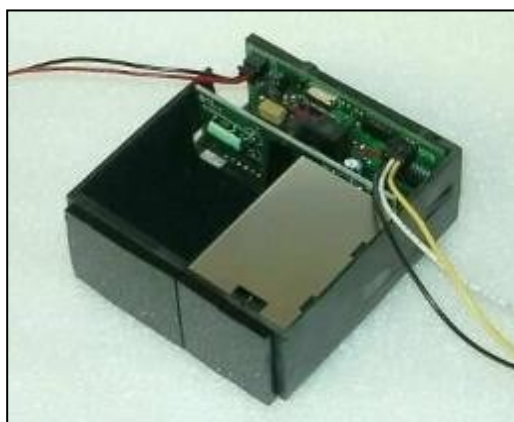


Figure 11: Opti-Logic RS800 Rangefinder laser altimeter.

Magnetic Gradiometer

The primary geophysical technology used on this survey was a magnetic gradiometer system (Figure 12). Three widely-spaced split-beam cesium vapor magnetometers mounted in a non-magnetic and non-conductive triple boom configuration provide total magnetic intensity as well as magnetic gradient in the cross-line (X or lateral or transverse) and in-line (Y or longitudinal) directions (Table 2). The magnetometer sensors were orientated 45 degrees from vertical to couple with local magnetic field at the Pike-Warden survey area.



Figure 12: View of triple magnetic boom system.

Magnetometer	Model	Serial No.	Gradient Direction	Separation (m)
Mag 1	Geometrics G-822A	75656	X or Cross-line	11.5
Mag 2	Scintrex CS-3	612211	Total Field and In-line	7.3
Mag 3	Scintrex CS-3	2106649	X or Cross-line	11.5

Table 2: Magnetometer details. Cross-line gradient measured between Mag 1 and Mag 3.

Fluxgate Magnetometer

As the survey helicopter flies along a survey line, small attitude changes (pitch, roll, and yaw) are measured by a triaxial fluxgate magnetometer (Figure 13). The fluxgate consists of three magnetic sensors, X, Y, and Z, operating independently and simultaneously. Each sensor has an analog output corresponding to the directional component of the ambient magnetic field along its axis. Response of the sensors is proportional to the cosine of the angle between the applied field and the sensor’s sensitive axis.

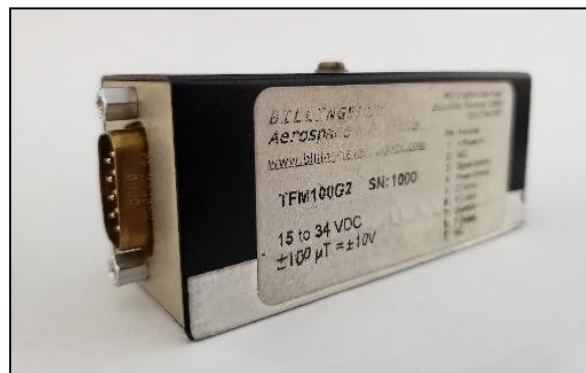


Figure 13: Billingsley TFM100G2 triaxial fluxgate magnetometer.

Magnetic Base Station

Temporal variations of Earth's magnetic field, particularly diurnal, were monitored and recorded by two GEM GSM-19T base station magnetometers. They were operated at all times while airborne data were being collected. The base stations were located in an area with low magnetic gradient, away from electric power transmission lines and moving ferrous objects, such as motor vehicles, that could affect the survey data integrity.

The GEM GSM-19T magnetometer (Figure 14) with integrated GPS time synchronization uses proton precession technology with absolute accuracy of ± 0.20 nT and sensitivity of 0.15 nT at 1 Hz. Base station magnetic data were recorded on internal solid-state memory and downloaded onto a field laptop computer using a serial cable and GEMLink 5.4 software. Profile plots of the base station readings were generated, updated, and reviewed at the end of each survey day.



Figure 14: GEM GSM-19T proton precession magnetometer.

VLF-EM System

Electromagnetic fields radiated from VLF transmitter stations ranging from 15 to 25 kHz frequencies are received with a Herz Totem-2A system (Figure 15). The system can be configured to receive two VLF transmitting stations simultaneously and the parameters normally measured are the change in the total field and the vertical quadrature components. The Herz Totem-2A system includes a sensor comprised of three mutually orthogonal air-cored coils and a pre-amplifier which is placed inside the forward triple magnetic boom system to minimize interference from EM fields generated by the helicopter.



Figure 15: Herz Totem-2A VLF console and sensor (air-cored coils).

Spectrometer

Gamma radiation data were collected by an Advanced Gamma Ray Spectrometer (AGRS-5) manufactured by Nuvia Dynamics. The AGRS is an intelligent, self-calibrating, fully integrated gamma detection system (Figure 16) containing five thallium-activated synthetic sodium iodide crystals; 16.8 litres (four crystals of 4.2 litres each) downward-looking and 4.2 litres upward- looking (one crystal of 4.2 litres), with user-selectable 256, 512, or 1024 channel output at 1 Hz sampling rate. The downward-looking crystals are designed to measure gamma rays from below the aircraft. The upward-looking crystal is mounted directly on top of the four downward- looking crystals to measure cosmic and solar gamma radiation originating from above the surveyaircraft and is shielded from terrestrial radiation by the downward-looking crystals. The AGRS system is installed in the rear passenger cabin of the helicopter away from the fuel tank to minimize variable gamma attenuation from fluctuating fuel levels.



Figure 16: AGRS-5 gamma spectrometer system with five detectors (four down, one up).

Survey Operations

The Pike-Warden geophysical survey was flown on July 8 and July 9, 2021 with occasional high winds. The experience of the pilot ensured that data quality objectives were met, and that safety of

the flight crew was never compromised given the potential risks involved in airborne geophysical surveying. Field processing and quality control checks were performed daily.

Operations Base and Crew

The base of operation for the Pike-Warden survey was at Whitehorse Gold’s Mt. Skukum camp, Yukon, north of the survey block.

Precision’s geophysical crew consisted of three members (Table 3):

Crew Member	Position
Harmen Keyser, P.Geo.	Helicopter pilot
Ryan Snow	Geophysical technician and helicopter mechanic
Jenny Poon, B.Sc., P.Geo.	Geophysicist – data processor, mapping, and reporting (off-site)

Table 3: List of survey crew members.

Magnetic Base Station Specifications

Changes in the Earth’s magnetic field over time, such as diurnal variations, magnetic pulsations, and geomagnetic storms, were measured and recorded by two stationary GEM GSM-19T proton precession magnetometers. The magnetic base stations were installed north of the survey block (Table 4; Figures 17 and 18) in an area of low magnetic noise away from metallic items such as ferromagnetic objects, vehicles, and power lines that could affect the base stations and ultimately the survey data.

Station Name	Easting/Northing	Latitude/Longitude	Datum/Projection
GEM 5 S/N 1094678	482418 m E 6675888 m N	60° 13' 9.84" N 135° 19' 2.34" W	WGS 84, Zone 8N
GEM 6 S/N 5087249	482428 m E 6675888 m N	60° 13' 9.84" N 135° 19' 1.70" W	WGS 84, Zone 8N

Table 4: Magnetic base station locations.

Magnetic readings were reviewed at regular intervals to ensure that no airborne data were collected during periods of high magnetic activity (in excess of 10 nT from a linear chord of length five minutes).

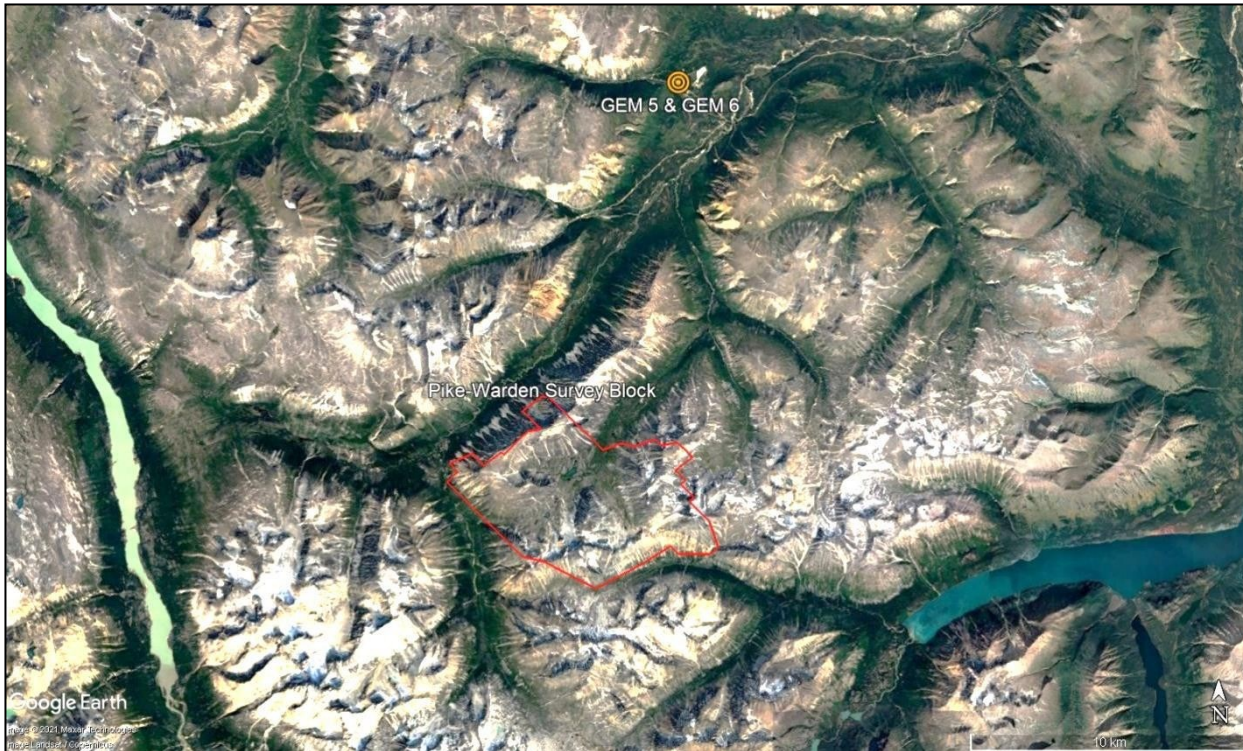


Figure 17: Location of GEM 5 and GEM 6 magnetic base stations north of the survey block.



Figure 18: GEM 5 (L) and GEM 6 (R) magnetic base stations.

VLF-EM Transmitter Stations

The Herz Totem-2A system is capable of simultaneously receiving frequencies from two VLF transmitters. The two stations used were Seattle, Washington and LaMoure, North Dakota (Table 5 and Figure 19).

Station	Location	Frequency (kHz)	Bearing (true)	Approximate distance (km)
NLK	Seattle (Jim Creek), Washington	24.8	141°	1570
NML	La Moure, North Dakota	25.2	106°	2845

Table 5: VLF transmitter stations used for Pike-Warden survey.

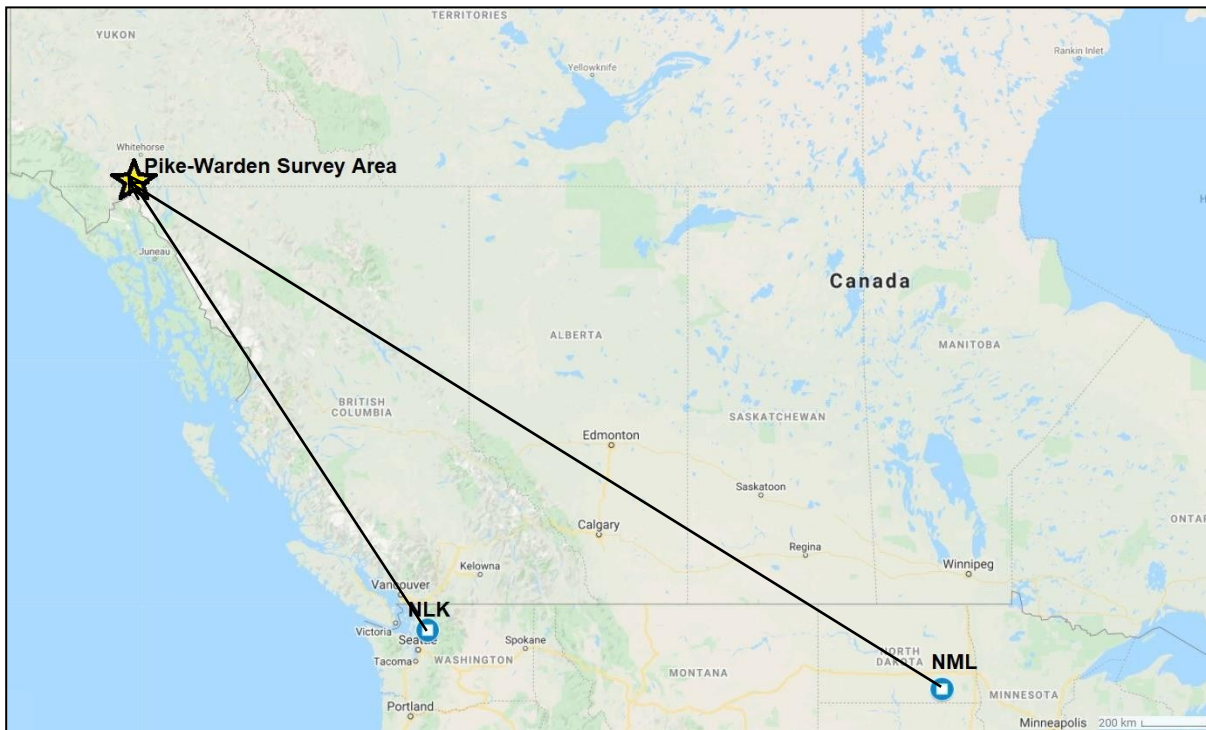


Figure 19: NML and NLK VLF transmitter stations relative to Pike-Warden survey block.

Field Processing and Quality Control

Survey data were transferred from the aircraft’s data acquisition system onto a USB memory stick and copied onto a field data processing laptop on a flight-by-flight basis. The raw data files in PEI binary data format were converted into Geosoft GDB database format. Using Geosoft Oasis Montaj 9.9.1, the data were inspected to ensure compliance with contract specifications (Table 6; Figures 20 to 22).

Parameter	Specification	Tolerance
Position	Line Spacing	Flight line deviation within 8 m L/R from ideal flight path. No exceedance for more than 1 km.
	Height	Nominal flight height of 50 m above ground level (AGL) with tolerance of ± 10 m. No exceedance for more than 1 km, provided deviation is not due to tall trees, topography, mitigation of wildlife/livestock harassment, cultural features, or other obstacles beyond the pilot's control.
	GPS	GPS signals from four or more satellites must be received at all times, except where signal loss is due to topography. No exceedance for more than 1 km.
Magnetics	Temporal/Diurnal Variations	Non-linear temporal magnetic variations within 10 nT of a linear chord of length 5 minutes.
	Normalized 4 th Difference	Magnetic data within 0.01 nT peak to peak. No exceedance for distances greater than 1 km or more, provided noise is not due to geological or cultural features.
VLF-EM	Transmitter station schedule	Collected at best effort. Survey will not stop if a suitable VLF signal was not available.
Radiometrics	Moisture Conditions	No delays shall be incurred due to unfavourable radiometric survey conditions.

Table 6: Contract survey specifications.

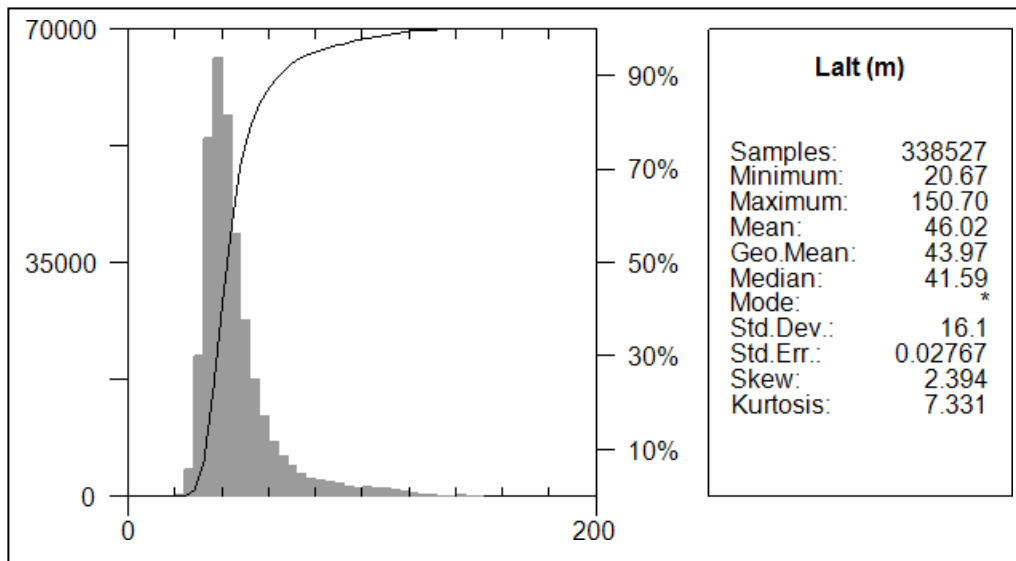


Figure 20: Histogram showing survey elevation vertically above ground.

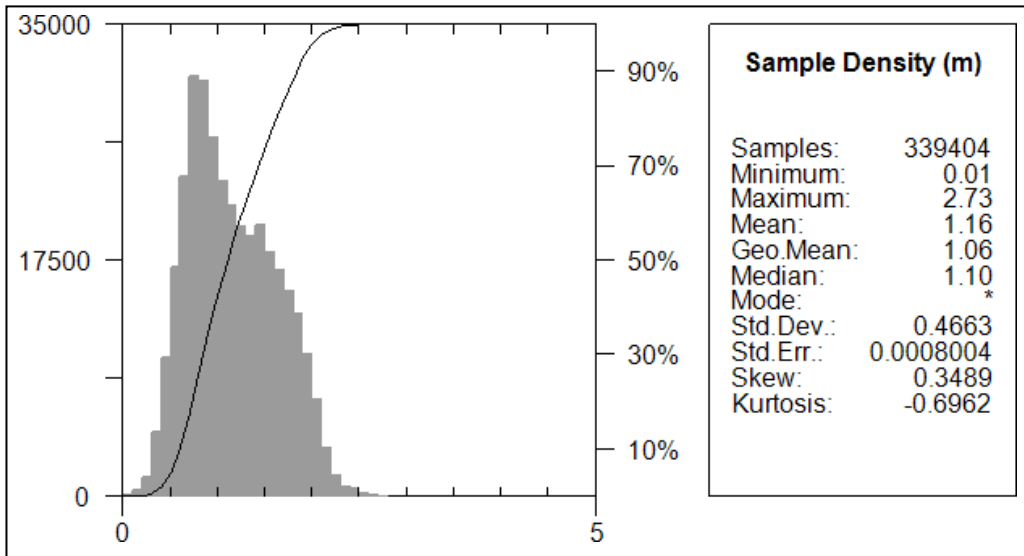


Figure 21: Histogram showing magnetic sample density. Horizontal distance in meters between adjacent measurement locations; magnetic sample frequency 20 Hz.

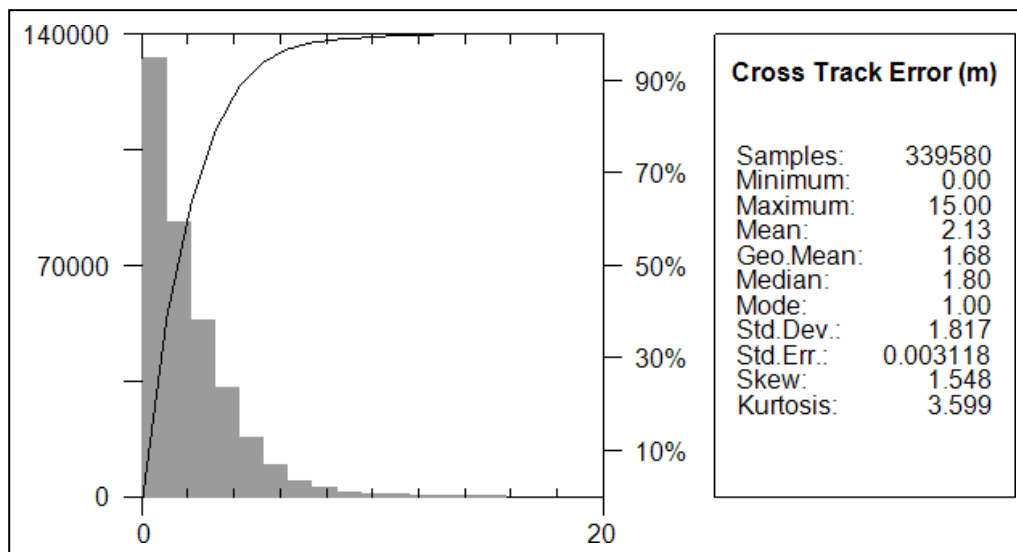


Figure 22: Histogram showing cross track error of survey helicopter.

Data Acquisition Equipment Checks

Equipment tests and calibrations were conducted for the laser altimeter, magnetometers, VLF- EM system, and spectrometer at the start of the survey to ensure compliance with contract specifications and to deliver high quality airborne geophysical data. A lag test was conducted for all sensors. For the airborne magnetometers, compensation and heading error test flights were flown. There were three tests conducted for the gamma spectrometer: calibration pad test, cosmic flight test, and altitude correction and sensitivity test.

Laser Altimeter Calibration

The Opti-Logic RS800 laser altimeter used on the survey helicopter was tested and calibrated in accordance with manufacturer’s instructions prior to starting the survey. This ensured that heights reported by the laser were accurate within the normal survey operating range.

Lag Test

A lag test was performed to determine the difference in time the digital reading was recorded for the magnetometers, VLF-EM system, spectrometer, and laser altimeter with the position fix timethat the fiducial of the reading was obtained by the GPS system resulting from a combination of system lag and different locations of the various sensors and the GPS antenna. The test was flown in reciprocal headings over identifiable features at survey speed and height to isolate position changes. The resulting data (Table 7) were used to correct for time and position.

Instrument	Source	Lag Fiducial	Correction (sec)
Mag 1	Logging machinery	7	0.35
Mag 2	Logging machinery	9	0.45
Mag 3	Logging machinery	7	0.35
Laser	Sharp gully	18	0.90
VLF-EM	Railroad tracks	17	0.85
Spectrometer	Lake edge	17	0.85

Table 7: Survey lag correction values. Magnetic and VLF-EM data at 20 Hz; laser altimeter and spectrometer were resampled to 20 Hz.

Magnetometer Tests

The magnetometers were tested and calibrated with a series of dedicated flights specifically for removing instrument offset errors and undesired effects of aircraft movement, speed, and heading direction.

Compensation Flight Test

During aeromagnetic surveying, a small but significant amount of noise is introduced to the magnetic data by the aircraft itself, as the magnetometers are within the aircraft’s magnetic field. Changes in aircraft attitude combined with the permanent magnetization of certain ferrous aircraft parts contribute to this noise. The aircraft was degaussed using proprietary technology prior to starting the survey and the remaining magnetic noise was removed by a process called magnetic compensation.

Airborne Geophysical Survey Report

A magnetic compensation flight was completed for this survey. The process consists of a series of prescribed maneuvers ($\pm 10^\circ$ roll, $\pm 10^\circ$ pitch, and $\pm 10^\circ$ yaw) where the aircraft flies in the four orthogonal headings required ($045^\circ/135^\circ/225^\circ/315^\circ$ in the case of this survey) at a sufficient altitude (typically $> 2,500$ m AGL) in an area of low magnetic gradient where Earth's magnetic field becomes nearly uniform at the scale of the compensation flights. In each heading direction, three specified roll, pitch, and yaw maneuvers (total 36) are performed by the pilot at constant elevation so that any magnetic variation recorded by the airborne magnetometers can be attributed to aircraft movement. These maneuvers are determined by the airborne fluxgate magnetometer and provide the data that are required to calculate the necessary parameters for compensating the magnetic data for each of the three magnetometers to remove aircraft noise from survey data. Compensation flight test results are summarized in Tables 8 to 10.

Pre-Compensation (nT)					Post-Compensation (nT)				
Heading	Roll	Pitch	Yaw	Total	Heading	Roll	Pitch	Yaw	Total
045°	0.5976	0.3395	0.2616	1.1987	045°	0.2143	0.2338	0.1970	0.6451
135°	0.6981	0.3316	0.4253	1.4550	135°	0.1658	0.1725	0.2073	0.5456
225°	0.7153	0.3296	0.3764	1.4213	225°	0.2798	0.1893	0.2488	0.7179
315°	1.1820	0.4533	0.3866	2.0219	315°	0.2562	0.3160	0.2943	0.8665
FOM = 6.0969					FOM = 2.7751				

Table 8: Results of compensation flight for Mag 1.

Pre-Compensation (nT)					Post-Compensation (nT)				
Heading	Roll	Pitch	Yaw	Total	Heading	Roll	Pitch	Yaw	Total
045°	0.3701	0.8095	0.2482	1.4278	045°	0.1263	0.1571	0.1333	0.4167
135°	0.2485	0.3621	0.3224	0.9330	135°	0.1527	0.1602	0.1878	0.5007
225°	0.2181	0.2045	0.1793	0.6019	225°	0.1609	0.1140	0.1453	0.4202
315°	0.2301	0.4445	0.2367	0.9113	315°	0.1284	0.1335	0.1117	0.3736
FOM = 3.8740					FOM = 1.7112				

Table 9: Results of compensation flight for Mag 2.

Pre-Compensation (nT)					Post-Compensation (nT)				
Heading	Roll	Pitch	Yaw	Total	Heading	Roll	Pitch	Yaw	Total
045°	1.0061	0.5827	0.2417	1.8305	045°	0.2610	0.2322	0.2055	0.6987
135°	0.5463	0.4365	0.3126	1.2954	135°	0.1692	0.1856	0.2186	0.5734
225°	0.8991	0.3936	0.5421	1.8348	225°	0.3132	0.2122	0.2674	0.7928
315°	1.4428	0.5618	0.4275	2.4321	315°	0.2768	0.3529	0.2987	0.9284
FOM = 7.3928					FOM = 2.9933				

Table 10: Results of compensation flight for Mag 3.

Heading Correction Test

To determine heading errors and other offsets, a cloverleaf pattern flight test was conducted at high altitude to minimize the effect of natural magnetic gradient. The cloverleaf test was flown in the same orthogonal headings as the survey and tie lines (045°/135°/225°/315° in the case of this survey) at >2500 m AGL in an area with low magnetic gradient. For all four directions of the cloverleaf test the survey helicopter must pass over the same point, at the same elevation, with the aircraft in straight and level flight. The difference in magnetic values obtained in reciprocal headings is the heading error. Heading correction values derived from the test flight for each of the magnetometers are summarized in Table 11.

Heading	Mag 1 Heading Correction (nT)	Mag 2 Heading Correction (nT)	Mag 3 Heading Correction (nT)
045°	-10.2675	-3.49	-19.2775
135°	-19.4475	0.05	-16.6875
225°	12.7925	-0.41	14.6225
315°	16.9225	3.85	21.3425
Total:	0.0000	0.0000	0.0000

Table 11: Magnetic sensor heading corrections.

Gamma-ray Spectrometer Tests and Calibrations

Calibration and testing of the AGRS-5 airborne gamma-ray spectrometry system was carried out prior to starting the survey. Spectrometer calibration involved three tests which enabled the conversion of airborne data to ground concentration of natural radioactive elements. These tests were the calibration pad test, cosmic flight test, and the altitude correction and sensitivity test. Procedures were generally in accordance with IAEA technical report series No. 323, *Airborne Gamma Ray Spectrometer Surveying*, and AGSO Record 1995/60, *A Guide to the Technical Specifications for Airborne Gamma-Ray Surveys*.

Calibration Pad Test

The calibration pad test was conducted using Geological Survey of Canada (GSC) portable calibration pads. The pads are slabs of concrete containing known concentrations of the natural radioelements K, Th, and U and are used to simulate ideal geological sources of radiation. The measurements collected from the calibration pad test were used to determine Compton scattering and Grasty backscatter (spectral overlap between element windows) coefficients.

Cosmic Flight Test

While the background source of gamma radiation from the aircraft itself is essentially constant, the amount of signal detected from ground sources varies with ground clearance. As the height of the aircraft increases, the distance between the ground and the spectrometer crystals increases, and the proportion of cosmic radiation in each spectral window increases exponentially. The cosmic flight test is conducted to determine the aircraft's background attenuation coefficients for the detector crystal packs and the cosmic coefficients. The pilot is required to fly over the same low gamma source location (such as a large lake) repeatedly in opposite directions at 4000, 5000, 6000, 7000, and 8000 feet (1220, 1520, 1830, 2130, and 2440 m) above ground, for approximately two minutes each, to collect gamma data used to determine the amount of non-terrestrial signal present in the total gamma signal.

Altitude Correction and Sensitivity Test

The altitude and sensitivity test is similar to the cosmic flight test but is conducted at lower elevations. The aircraft is required to fly over the same location at 30, 40, 50, 70, and 90 m above ground, for two minutes each. As the distance between the gamma detectors on the aircraft and the radioactive ground source increases, the source signature exponentially degrades. As a result, this test is used to determine the altitude attenuation coefficients and the radio-element sensitivity of the airborne spectrometer system.

Data Processing

After all data were collected, several procedures were undertaken to ensure that the data met a high standard of quality. Magnetic, VLF-EM, and radiometric data recorded by the AGIS were converted into Geosoft or ASCII file formats using Nuvia Dynamics software. Further processing (Figure 23) was carried out using Geosoft Oasis Montaj 9.9.1 geophysical processing software along with proprietary processing algorithms.

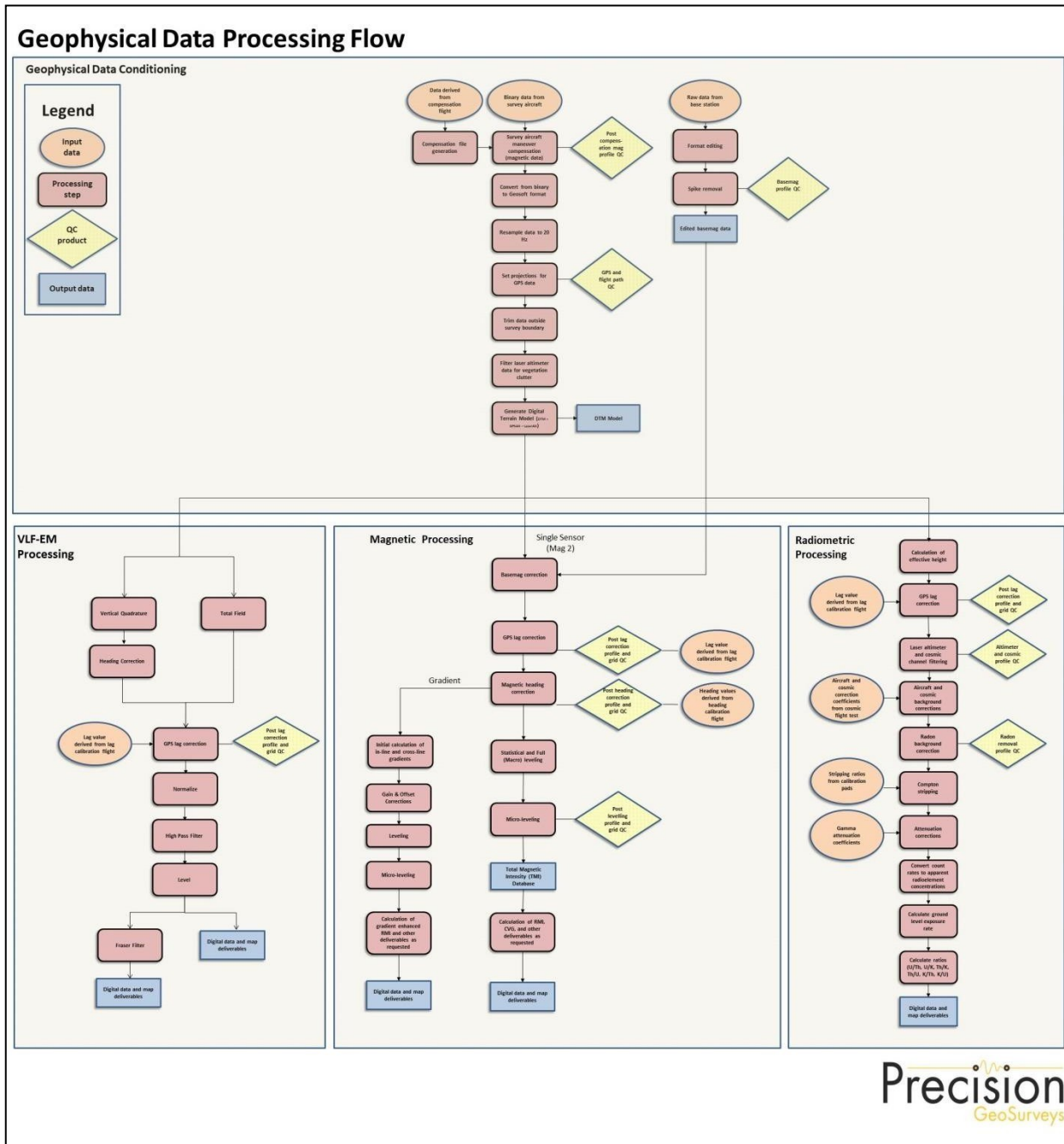


Figure 23: Magnetic, VLF-EM, and radiometric data processing flow.

Position Corrections

In order to collect high resolution geophysical data, the location at which the data were collected and recorded accurately.

Lag Correction

A correction for lag error was applied to the geophysical data recorded at each individual sensor to compensate for the combination of lag in the recording system and the sensing instrument flying in a different location from the GPS antenna, as determined during the lag test. Validity of the lag corrections was confirmed by the absence of grid corrugations in adjoining reciprocal lines.

Flight Height and Digital Terrain Model

Laser altimeters are unable to provide valid data over glassy water or fog which dissipate the laser so that a “zero” reading is obtained. In these cases, estimates of correct height are inserted manually. Dense vegetation generates high frequency variations from leaf and branch reflections. A Rolling Statistics filter is applied to the lag corrected (0.90 seconds lag) laser altimeter data to remove vegetation clutter followed by a Low Pass filter to smooth out the laser altimeter profile to eliminate isolated high frequency noise and generate a surface closely corresponding to the actual ground profile.

As the GPS antenna is on the tail of the helicopter, altitude data were corrected by subtracting 3.1 m to place measured heights in the same plane as the laser altimeter. A Digital Terrain Model (DTM) was determined by subtracting the laser altimeter data from the filtered GPS altimeter data defined by the WGS 84 ellipsoidal height. DTM accuracy is affected by the attitude of the aircraft, slope of the ground, sample density, and satellite geometry. Small inconsistencies in recorded flight height at the intersection points of survey lines and tie lines resulted in small spatial variabilities in the digital terrain model. Conventional leveling and micro-leveling were applied to correct for these variations and a fully leveled digital terrain model was generated.

Magnetic Processing

Magnetic data from each individual sensor were corrected for temporal variations (including diurnal) and lag. The data were examined for magnetic noise and spikes, which were removed as required. Survey and tie line data of the resulting total magnetic field were leveled and the background magnetic field, International Geomagnetic Reference Field (IGRF) of the Earth was removed to

derive the residual magnetic field. Magnetic gradients in the X and Y axes were determined to provide cross-line and in-line gradients, respectively.

Temporal Variation Correction

The intensity of Earth's magnetic field varies with location and time. The time variable, known as diurnal or more correctly temporal variation, is removed from the recorded airborne data to provide the desired magnetic field at a specified location. Magnetic data from base station GEM 5 were used for correcting the airborne magnetic survey data, and GEM 6 data were retained for backup. The data were edited, plotted, and merged into a Geosoft database (.GDB) on a daily basis.

Base station measurements were averaged to establish a magnetic reference datum of 56369.94 nT. Magnetic deviations relative to the reference datum were used to calculate the observed variations of the Earth's magnetic field during the time it took to complete the survey. The airborne magnetic data were then corrected for temporal variations by subtracting the base station deviations from the data collected on the aircraft, effectively removing the effects of diurnal and other temporal variations.

Heading Correction

For each survey heading, changes in the apparent magnetic field due to instrumental heading error are measured and recorded. These values are used to construct a heading table (.TBL) file. For the entire dataset, the overall average magnetic field value was calculated. For each of the four headings, the averages were calculated and then compared to the overall average to determine four values which were used to correct heading and offset errors in each flight direction for each magnetometer.

Leveling and Micro-leveling

Small inconsistencies in flight height and line orientation result in small spatial variabilities in magnetic intensity measured at the intersection points of survey lines and tie lines. Using the initial Total Magnetic Intensity (TMI) data from Mag 2, data from survey and tie lines were leveled to each other. Two types of leveling were applied to the corrected data: conventional leveling and micro-leveling. There were two components to conventional leveling: statistical leveling to level tie lines and full leveling to level survey lines. The statistical leveling method corrected the SL/TL intersection errors that follow a specific pattern or trend. Through the error channel, an algorithm calculated a least-squares trend line and derived a trend error curve, which was then added to the channel to be leveled. The second component was full leveling. This adjusted the magnetic value of the survey lines so that all lines matched the trended tie lines at each intersection point.

Following statistical and full leveling, micro-leveling was applied to the corrected conventional leveled data. This iterative grid-based process removed low amplitude components of flight line noise that still remained in the data after tie line and survey line leveling and resulted in fully leveled TMI data.

IGRF Removal

The International Geomagnetic Reference Field (IGRF) model is the empirical representation of Earth’s dynamic magnetic field (main core field without external sources) collected and disseminated from satellite data and from magnetic observatories around the world. The IGRF has historically been revised and updated every five years by a group of modellers associated with the International Association of Geomagnetism and Aeronomy (IAGA).

The leveled Residual Magnetic Intensity (RMI) was calculated by taking the difference between the 13th generation IGRF (IGRF-13, released in December 2019) and the leveled Total Magnetic Intensity (TMI) to create a more valid model of individual near-surface magnetic anomalies. This model is independent of time to allow for other magnetic data (previous or future) to be more easily incorporated into each survey database.

Magnetic Gradient

When magnetic values are obtained simultaneously from two or more sensors at a fixed separation, gradient of the magnetic field can be measured. Dividing the difference in magnetic values between the sensors by the distance between the sensors yields the magnetic gradient. The units are commonly reported as nT/m and, by convention, positive magnetic polarity is defined as to the north and east, and negative to the south and west. For vertical gradient, positive is defined as downwards. The sensors and the separations that were used to determine the various gradients are listed in Table 12.

Direction	Sensors	Separation (m)
Lateral (X)	Mag 1 and Mag 3	11.5
Longitudinal (Y)	Sequential TMI values (Mag 2)	1.16*

Table 12: Magnetic sensor relationship used to calculate magnetic gradients. Total magnetic intensity (TMI) was determined from Mag 2, and successive values of the TMI were used to determine the longitudinal (Y axis) gradient.

*average separation between sequential TMI values shown; actual value varied according to aircraft speed.

Horizontal Gradients

Horizontal magnetic gradients were determined in the in-line (Y axis) and cross-line (X axis) directions. Gradients were calculated with respect to the magnetometer array with units provided as nT/m.

In-line gradient (ILG) is determined from successive magnetic values of Mag 2 referenced to the distance between data points in accordance with the following formula:

$$ILG = \frac{a(i + 1) - a(i - 1)}{d(i + 1) + d(i - 1)}$$

where: a is the total magnetic intensity of Mag 2

d is the distance between measurements

i is the record number for the location

Cross-line gradient (XLG) was measured directly by dividing the difference between Mag 1 and Mag 3 by the sensor separation in accordance with the following formula:

$$XLG = \frac{\text{Mag 1} - \text{Mag 3}}{d_x}$$

where: d_x is the transverse sensor separation, 11.5 m

Gain corrections were applied to the initial cross-line gradient. If the ratio of the TMI between Mag 1 and Mag 3 does not equal one, a gain correction needs to be applied to account for instrument error and asymmetric magnetic fields. The mean of the ratio between the TMI values for Mag 1 and Mag 3 for each line was calculated and applied to each Mag 3 value along the line. The cross line gradient was then re-calculated from the gain-corrected Mag 3 values.

Offset corrections were then applied to the cross-line gradient to reduce line-to-line errors (striping) in the gradient grid. The resulting data were then micro-leveled to remove any remaining striping.

Total Horizontal Gradient (HG) is the magnitude of the combined in-line and cross-line gradients. It is used to estimate contact locations of magnetic bodies at shallow depths, reveal anomaly textures, and highlight anomaly-pattern discontinuities.

Horizontal Gradient (HG) is calculated as:

$$HG(x, y) = \sqrt{ILG^2 + XLG^2}$$

where: *ILG* is the in-line gradient

XLG is the cross-line gradient

Calculation of Vertical Gradient

Calculated Vertical Gradient (CVG) is the first order vertical derivative of the leveled Residual Magnetic Intensity (RMI) data determined from Mag 2. It is the vertical rate of change in the magnetic field per unit distance (m). The vertical gradient is used to enhance shorter wavelength signals; therefore, edges of magnetic anomalies are highlighted, and deep geologic sources in the data are suppressed.

The filter, *L*, used to produce the n^{th} vertical derivative is described by:

$$L(r) = r^n$$

where: *r* is the radial component in the wavenumber domain

Gradient Enhanced Magnetic Intensity

Using the measured gradients (in-line and cross-line directions), the initial enhanced TotalMagnetic Intensity (TMIge) was generated. A Butterworth high-pass filter was applied to this initial enhanced TMI to extract the short wavelength signals and a low-pass filter was applied to the measured TMI to extract the long wavelength signals. These wavelengths are then summed together to generate the final enhanced Total Magnetic Intensity. By subtracting the IGRF, the gradient enhanced Residual Magnetic Intensity (RMIge) was generated.

Gradient Enhanced Reduction to Magnetic Pole

Gradient enhanced Reduced to Magnetic Pole (RTPge) data were determined from the gradient enhanced Residual Magnetic Intensity (RMIge) data. The RTP filter was applied in the Fourier domain and rotates the observed magnetic inclination and declination field to what the field would look like at the north magnetic pole, to allow observation of magnetic trends and patterns independent of magnetic inclination and declination.

Inclination and declination were calculated by using the specific date, July 9, 2021. The derived values were used in the following formula:

$$RTP(\theta) = \frac{[\sin(I) - I \cdot \cos(I) \cdot \cos(D - \theta)]^2}{[\sin^2(I \frac{I_a}{a}) + \cos^2(I_a) \cdot \cos^2(D - \theta)] - [\sin^2(I) + \cos^2(I) \cdot \cos^2(D - \theta)]}$$

where: I is geomagnetic inclination in ° from horizontal

D is geomagnetic declination in ° azimuth from magnetic north

I_a is the inclination for amplitude correction (never less than I). Default is

$\pm 20^\circ$. If $|I_a|$ is specified to be less than $|I|$, it is set to I

VLF-EM Processing

Total field strength and vertical quadrature VLF-EM data were acquired. The data were lagged and then normalized to the mean of all the survey lines. Then the data were leveled and a 2D high pass filter was applied to the gridded data to isolate low frequency noise and generate a decorrugated and clean data set. A Fraser filter on the vertical quadrature data convert maximum gradients to peaks so that positive anomalies correspond with ground conductors. Lastly, a directional correction was applied to the Fraser filtered vertical quadrature data to remove the remaining line errors.

Radiometric Processing

Radiometric surveys map gamma rays from the concentration of radioelements at or near Earth's surface; typically up to 1 m below surface. Before airborne radiometric data are processed, the spectrometer system is calibrated with the calibration pad test, cosmic flight test, and altitude correction and sensitivity test. Once calibration of the system was completed, radiometric data were processed by windowing the full 256 channel spectrum to create individual channels for U, Th, K, and total count (TC).

Potassium (^{40}K) is measured directly at 1.461 MeV, and is reported as %K. Secular equilibrium in the decay chains of uranium (^{238}U determined from the radon daughter ^{214}Bi and thorium ^{232}Th determined from ^{208}Tl) is assumed and the ground concentration results are reported as equivalent uranium (eU, ppm) and equivalent thorium (eTh, ppm). Total gamma count (TC) data (energy range from 0.41 to 2.81 MeV) is reported in dose rate (nGy/hr).

Radiometric processing generally followed the procedures provided by the International Atomic Energy Agency (IAEA) report 1363, *Guidelines for Radioelement Mapping using Gamma Ray Spectrometry Data*.

Calculation of Effective Height

Effective height (h_{ef}) in meters was determined using laser/radar altimeter, temperature, and pressure data, according to the formula below:

$$h_{ef} = h * \frac{273.15}{T + 273.15} * \frac{P}{1013.25}$$

where: h is observed laser/radar altitude in meters

T is measured air temperature in degrees Celsius

P is barometric pressure in millibars

Aircraft and Cosmic Background Corrections

Aircraft background and cosmic stripping corrections are applied to total gamma count and all three individual radioelements using the following formula:

$$C_{ac} = a_c + b_c * C_{osf}$$

where: C_{ac} is the background and cosmic corrected channel

a_c is the aircraft background for this channel

b_c is the cosmic stripping coefficient for this channel

C_{osf} is the filtered cosmic channel

Radon Background Correction

Atmospheric radon can influence the gamma response of airborne radiometric data. The upward-looking detector provides directional sensitivity and the ability to discriminate between radiation from the atmosphere and radiation from the ground, to allow the removal of atmospheric radon effects from the downward-looking detectors.

Radon contribution to the uranium window of the “downward” uranium window is given by:

$$U_r = \frac{u - a_1U - a_2T + a_2b_t - b_u}{a_u - a_1 - a_2a_t}$$

where: U_r is radon background in the “downward” U window

u is count rate in the “upward” U window

U is count rate in the “downward” U window

T is count rate in the “downward” Th window

$a_1, a_2, a_u, a_t, b_u,$ and b_t are constants derived by calibration

Compton Stripping

Spectral overlap corrections are applied to potassium, uranium, and thorium as part of the Compton stripping process. This is done by using the stripping ratios that have been calculated for the spectrometer by prior calibration.

For each of the stripping ratios α , β , and γ , height corrections at STP are made by using the following formulas:

$$\alpha_h = \alpha + h_{ef} * 0.00049$$

$$\beta_h = \beta + h_{ef} * 0.00065$$

$$\gamma_h = \gamma + h_{ef} * 0.00069$$

where: α, β , and γ are the Compton stripping coefficients

$\alpha_h, \beta_h,$ and γ_h are the height-corrected Compton stripping coefficients

h_{ef} is the effective height above ground in metres at STP Stripping corrections are then

carried out using the following formulas:

$$Th_c = Th_{bc}(1 - g\beta_h) + U_{bc}(b\gamma_h - a) + K_{bc}(ag - b)/A$$

$$U_c = Th_{bc}(g\beta_h - \alpha_h) + U_{bc}(1 - b\beta_h) + K_{bc}(b\alpha_h - g)/A$$

$$K_c = [Th_{bc}(\alpha_h\gamma_h - \beta_h) + U_{bc}(a\beta_h - \gamma_h) + K_{bc}(1 - a\alpha_h)]/A$$

where: U_c , $T h_c$, and K_c are stripping-corrected uranium, thorium, and potassium

α_h , β_h , and γ_h are height-corrected Compton stripping coefficients

U_{bc} , $T h_{bc}$, and K_{bc} are background corrected uranium, thorium, and potassium

a is the spectral ratio Th/U

b is the spectral ratio Th/K

g is the spectral ratio U/K

$A = 1 - g \gamma_h - (\alpha_h - g \beta_h) - b(\beta_h - \alpha_h \gamma_h)$ is the backscatter correction

Attenuation Corrections

Total count, potassium, uranium, and thorium data are then corrected to a nominal survey altitude (corrected to remove vegetation clutter from radar/laser altimeter data); in this case the nominal survey height was 40 m AGL. This is done according to the equation:

$$C_a = C * e^{\mu(h_{ef}-h_0)}$$

where: C_a is the output altitude-corrected channel

C is the input channel

μ is the attenuation correction for that channel

h_{ef} is the effective altitude

h_0 is the nominal survey altitude used as datum

Conversion to Apparent Radioelement Concentrations

With all corrections applied to the radiometric data, the final step is to convert the corrected potassium (^{40}K), uranium (from ^{214}Bi), and thorium (from ^{212}Tl) to apparent radioelement concentrations using the following formula:

$$eE = C_{cor}/S$$

where: eE is the element concentration of K (%) and equivalent element concentrations of U (ppm) & Th (ppm)

S is the experimentally determined sensitivity

C_{cor} is the fully corrected channel

Conversion of total count to natural exposure rate (Grasty et al, 1984) is determined by using the following formula:

$$\text{Natural Exposure} = [(1.505 * K) + (0.625 * eU) + (0.31 * eTh)]$$

where: Natural Exposure is in $\mu\text{R/hr}$

K is the concentration of potassium (%)

eU is the equivalent concentration of uranium (ppm)

eTh is the equivalent concentration of thorium (ppm)

Radiometric Ratios

Common radiometric ratios (U/Th, Th/K, U/K, and their inverses) were calculated using the guidelines of the IAEA. Due to statistical uncertainties in the individual radioelement measurements, care was taken during ratio calculation in order to obtain statistically significant values. The following guidelines were used to determine the ratios:

For each concentration, the lowest corrected count rate is determined.

Element concentrations of adjacent points on either side of each data point are summed until they exceed a pre-determined threshold value.

The ratios are calculated using the accumulated sums.

With these guidelines, errors associated with the calculated ratios are minimized and comparable for all data points.

Ternary Radioelement Image Map

Ternary images are a graphic representation of the relative proportion of the radioelement concentrations of %K, eTh, and eU components in proportion to the respective colours red (magenta), green, and blue (cyan). Since each distinct colour is used to represent each ternary ratio on the map, zones with similar ratios will be represented by a unique colour. This distinct relationship between colour and ternary ratio allows the map to show surficial radioelement concentration and distribution. Dark and light colours indicate high and low values for all three radionuclides, respectively. Areas of low radioactivity, and consequently low signal to noise ratios, can be masked and are shaded in white. Because the ternary image is a three-way ratio,

topographic and physiographic effects are suppressed and a visualization of the relative concentrations of the individual radioelements are presented to help discriminate between different zones of lithology and alteration.

Deliverables

Pike-Warden survey block data are presented as digital databases, grids, maps, and a logistics report.

Digital Data

Digital files have been provided in three formats:

GDB file for use in Geosoft Oasis Montaj,
XYZ file,
CSV Excel comma separated file.

Full descriptions of the digital data and contents are included in Appendix C.

7.1.1 Grids

The digital data were represented as grids as listed below:

Digital Terrain Model (DTM)
Total Magnetic Intensity (TMI)
Residual Magnetic Intensity (RMI) – removal of IGRF from TMI
In-Line Gradient (ILG)
Cross-Line Gradient (XLG)
Horizontal Gradient (HG) – total magnitude of the horizontal gradients (in-line and cross-line)
Calculated Vertical Gradient (CVG)
Gradient enhanced Total Magnetic Intensity (TMIge)
Gradient enhanced Residual Magnetic Intensity (RMIge) – subtraction of IGRF
Gradient enhanced Reduced to Magnetic Pole (RTPge) – reduced to magnetic pole of RMIge
NML Total Field (NML_TF) – Total Field tuned to NML transmitter station
NML Vert Quad (NML_VQ) – Vertical Quadrature tuned to NML transmitter station
NLK Total Field (NLK_TF) – Total Field tuned to NLK transmitter station
NLK Vert Quad (NLK_VQ) – Vertical Quadrature tuned to NLK transmitter station
Potassium – Percentage (%K)
Thorium – Equivalent Concentration (eTh)
Uranium – Equivalent Concentration (eU)

Total Count (TC)
Total Count – Exposure Rate (TCexp)
Potassium over Thorium Ratio (%K/eTh)
Potassium over Uranium Ratio (%K/eU)
Uranium over Thorium Ratio (eU/eTh)
Uranium over Potassium Ratio (eU/%K)
Thorium over Potassium Ratio (eTh/%K)
Thorium over Uranium Ratio (eTh/eU)
Ternary Image (TI)

Digital magnetic, VLF-EM, and radiometric data were gridded and displayed using the following Geosoft parameters:

Gridding method: minimum curvature
Grid cell size: 25 m
Low-pass desampling factor: 2
Tolerance: 0.001
% pass tolerance: 99.99
Maximum iterations: 100

The gradient and gradient enhanced magnetic grids were drawn with a wet-look colour shade and all other magnetic, VLF-EM, and radiometric grids were drawn with a histogram-equalized colour shade. All maps were shaded with the sun illumination inclination at 0° and declination at 000°. DTM grid was drawn with a linear topographic colour scale.

KMZ

Gridded digital data were exported into .KMZ files which can be displayed using Google Earth. The grids can be draped onto topography and rendered to give a 3D view.

Maps

Digital maps were created for the Pike-Warden survey block. The following map products were prepared:

Overview Maps (colour images with elevation contour lines and topographic features):

Actual flight lines
DTM

Magnetic Maps (colour images with elevation contour lines):

TMI, with actual flight lines and topographic features

TMI
RMI
ILG
XLG
HG
CVG

Gradient Enhanced Magnetic Maps (colour images with elevation contour lines):

TMIge
RMIge
RTPge

VLF-EM Maps (colour images with elevation contour lines):

NML_TF
NML_VQ
NLK_TF
NLK_VQ

Radiometric Maps (colour images with elevation contour lines):

%K – Percentage
eTh – Equivalent Concentration
eU – Equivalent Concentration
TC
TCexp – Exposure Rate
%K/eTh Ratio
%K/eU Ratio
eU/eTh Ratio
eU/%K Ratio
eTh/%K Ratio
eTh/eU Ratio
Ternary Image

All survey maps were prepared in WGS 84 in UTM Zone 8N.

Report

A .PDF copy of the logistics report is included along with digital data and maps. The report provides information on acquisition, processing, and presentation of the Pike-Warden survey block data.

8.0 Conclusions and Recommendations

The Pike-Warden survey resulted in the collection of 395 line km of high resolution gradient magnetic, VLF-EM, and radiometric data over one survey block. The data have been processed and plotted on maps as a representation of the magnetic, radiometric, and conductive features of the survey area.

Geophysical data processing, particularly leveling and data interpolation routines, may tend to smooth the original data so that resolution is reduced. In addition, gridding algorithms are not always able to properly calculate grids where flight height between adjacent flight lines varied due to cultural obstacles or steep terrain, where geological structures are acute to flight lines, where line spacing exceeds the size of the causative anomaly, or near grid margins as in “edge effects.” Therefore, subtle geophysical features in gridded and derivative-enhanced products or near the survey margins may introduce artifacts and must be evaluated with discretion.

The airborne geophysical data were acquired to map the geophysical characteristics of the survey area, which are in turn related to the distribution of magnetic minerals, radioactive elements, and shallow conductor in the Earth. Magnetic patterns correspond to the concentration and distribution of magnetite and other magnetic minerals in the subsurface. Radiometric data are influenced by topographic features and surficial effects, and ratios can be used to evaluate the near-surface radioelement geochemistry of the survey area. When magnetic, VLF-EM, and radiometric data are integrated into a single-pass airborne survey, they provide complementary information that serves as a durable geophysical framework. Therefore, the geophysical data will be useful in mapping lithology, structure, and alteration, which will benefit mineral exploration initiatives and geological studies.

Geophysical data are rarely a direct indication of mineral deposits and therefore interpretation and careful integration with existing and new geological, geochemical, and other geophysical data are recommended to maximize value from the survey investment.

Respectfully submitted,
Precision GeoSurveys Inc.

Jenny Poon, P.Geo.
August 2021

Pike-Warden Survey Block Polygon Coordinates – WGS 84 Zone 8N

Latitude (deg N)	Longitude (deg W)	Easting (m)	Northing (m)
60.09115	135.46656	474048	6661654
60.09463	135.46005	474413	6662039
60.09730	135.46492	474144	6662338
60.10048	135.44979	474988	6662687
60.09644	135.44328	475347	6662234
60.10090	135.43149	476006	6662727
60.10008	135.43009	476083	6662635
60.10767	135.41445	476958	6663474
60.10826	135.40615	477420	6663537
60.11415	135.41788	476772	6664197
60.11867	135.40579	477447	6664697
60.11877	135.40146	477688	6664706
60.10164	135.36622	479636	6662787
60.10367	135.35460	480283	6663010
60.10312	135.34820	480639	6662946
60.10258	135.34704	480703	6662886
60.10492	135.33264	481505	6663143
60.10300	135.32812	481755	6662928
60.10403	135.31833	482300	6663040
60.09935	135.30854	482842	6662516
60.09502	135.31956	482227	6662036
60.09188	135.31313	482583	6661685
60.09060	135.31605	482420	6661543
60.08634	135.30770	482882	6661067
60.08506	135.31051	482725	6660925
60.07858	135.29764	483438	6660200
60.07028	135.29197	483749	6659274
60.06824	135.29724	483455	6659048
60.06814	135.31757	482323	6659042
60.07075	135.32293	482026	6659334
60.06504	135.34097	481019	6658704
60.05714	135.37086	479350	6657833
60.06564	135.40356	477535	6658790
60.06747	135.41833	476714	6658999
60.09115	135.46636	474059	6661654

Equipment Specifications

GEM GSM-19T Proton Precession Magnetometer (Magnetic Base Station)
Hemisphere R330 GPS Receiver
Opti-Logic RS800 Rangefinder Laser Altimeter
Scintrex CS-3 Survey Magnetometer
Geometrics G-822A Survey Magnetometer
Billingsley TFM100G2 Ultra Miniature Triaxial Fluxgate Magnetometer
Herz Totem-2A VLF-EM System
Setra Model 276 Barometric Pressure
Rotronic HygroClip HC-S3 Relative Humidity and Temperature Probe
Nuvia Dynamics Advanced Gamma-Ray Spectrometer (AGRS-5)
Nuvia Dynamics IMPAC data recorder system (for navigation and geophysical data acquisition)

GEM GSM-19T Proton Precession Magnetometer (Magnetic Base Station)

Sensitivity	0.15 nT @ 1 Hz
Resolution	0.01 nT (gamma), magnetic field and gradient
Absolute Accuracy	±0.2 nT @ 1 Hz
Operating Range	20,000 nT to 120,000 nT
Gradient Tolerance	Over 7,000 nT/m
Operating Ranges	Temperature: -40°C to +50°C Battery Voltage: 10.0 V minimum to 15 V maximum Humidity: up to 90% relative, non-condensing
Storage Temperature	-50°C to +50°C
Dimensions	Console: 223 x 69 x 40 mm Sensor Staff: 4 x 450 mm sections Sensor: 170 x 71 mm dia. Weight: console 2.1 kg, sensor and staff assembly 2.2 kg
Integrated GPS	Yes

Hemisphere R330 GPS Receiver

GPS Sensor	Receiver Type	L1 and L2 RTK with carrier phase	
	Channels	12 L1CA GPS 12 L1P GPS 12 L2P GPS 12 L2C GPS 12 L1 GLONASS (with subscription code) 12 L2 GLONASS (with subscription code) 3 SBAS or 3 additional L1CA GPS	
	Update Rate	10 Hz standard, 20 Hz available	
	Cold Start Time	<60 s	
	Warm Start Time 1	30 s (valid ephemeris)	
	Warm Start Time 2	30 s (almanac and RTC)	
	Hot Start Time	10 s typical (valid ephemeris and RTC)	
	Reacquisition	<1 s	
	Differential Options	SBAS, Autonomous, External RTCM, RTK, OmniSTAR (HP/XP)	
	Horizontal Accuracy		RMS (67%)
RTK ^{1,2}		10 mm + 1 ppm	20 mm + 2 ppm
OmniSTAR HP ^{1,3}		0.1 m	0.2 m
SBAS (WAAS) ¹		0.3 m	0.6 m
Autonomous, no SA ¹		1.2 m	2.5 m
L-Band Sensor	Channel	Single channel	
	Frequency Range	1530 MHz to 1560 MHz	
	Satellite Selection	Manual or Automatic (based on location)	
	Startup and Satellite Reacquisition Time	15 seconds typical	
Communications	Serial Ports	2 full duplex RS232	
	Baud Rates	4800 – 115200	
	USB Ports	1 Communications, 1 Flash Drive data storage	
	Correction I/O Protocol	Hemisphere GPS proprietary, RTCM v2.3 (DGPS), RTCM v3 (RTK), CMR, CMR+NMEA 0183, Hemisphere GPS binary	
	Timing Output	1 PPS (HCMOS, active high, rising edge sync, 10 kΩ, 10 pF load)	
	Event Marker Input	HCMOS, active low, falling edge sync, 10kΩ	
Environmental	Operating Temperature	-40°C to +70°C	
	Storage Temperature	-40°C to +85°C	
	Humidity	95% non-condensing	
Power GPS Sensor	Input Voltage Range	8 to 36 VDC	
	Consumption, RTK	<3.5 W (0.30 A @ 12 VDC typical)	
	Consumption, OmniSTAR	<4.3 W (0.36 A @ 12 VDC typical)	

¹ Depends on multipath environment, number of satellites in view, satellite geometry and ionospheric activity.

² Depends also on baseline length.

³ Requires a subscription from OmniSTAR.

Opti-Logic RS800 Rangefinder Laser Altimeter

Accuracy	±1 m on 1x1 m ² diffuse target with 50% reflectivity, up to 700 m
Resolution	0.2 m
Communication Protocol	RS232-8, N, 1 ASCII characters
Baud Rate	19200
Data Raw Counts	~200 Hz
Data Calibrated Range	~10 Hz
Data Rate	~200 Hz raw counts for un-calibrated operation; ~10 Hz for calibrated operation (averaging algorithm seeks 8 good readings)
Calibrated Range Units	Feet, Meters, Yards
Laser	Class I (eye-safe), 905 nm ± 10 nm
Power	7 - 9 VDC conditioned required, current draw at full power (~ 1.8 W)
Laser Wavelength	RS100 905 nm ± 10 nm
Laser Divergence	Vertical axis – 3.5 mrad half-angle divergence; Horizontal axis – 1 mrad half-angle divergence; (approximate beam “footprint” at 100 m is 35 cmx 5 cm)
Dimensions	32 x 78 x 84 mm (lens face cross section is 32 x 78 mm)
Weight	<227 g (8 oz)
Casing	RS100/RS400/RS800 units are supplied as OEM modules consisting of an open chassis containing optics and circuit boards. Custom housings can be designed and built on request.

Scintrex CS-3 Magnetometer

Operating Principal	Self-oscillating split-beam Cesium Vapor (non-radioactive ¹³³ Cs)
Operating Range	15,000 nT to 105,000 nT
Gradient Tolerance	40,000 nT/m
Operating Zones	15° to 75° and 105° to 165°
Hemisphere Switching	Electronic control actuated by the control voltage levels (TTL/CMOS) Automatic Manual
Sensitivity	0.0006 nT √Hz rms
Noise Envelope	Typically 0.002 nT peak to peak, 0.1 to 1 Hz bandwidth
Heading Error	±0.20 nT (inside the optical axis to the field direction angle range 15° to 75° and 105° to 165°)
Absolute Accuracy	<2.5 nT throughout range
Output	Continuous signal at the Larmor frequency which is proportional to the magnetic field (proportionality constant 3.49857 Hz/nT) sine wave signal amplitude modulated on the powersupply voltage Square wave signal at the I/O connector, TTL/CMOS compatible
Information Bandwidth	Only limited by the magnetometer processor used
Sensor Head	Diameter: 63 mm (2.5") Length: 160 mm (6.3") Weight: 1.15 kg (2.6 lb)
Sensor Electronics	Diameter: 63 mm (2.5") Length: 350 mm (13.8") Weight: 1.5 kg (3.3 lb)
Cable, Sensor to Sensor Electronics	3 m (9' 8"), lengths up to 5 m (16' 4") available
Operating Temperature	-40°C to +50°C
Humidity	Up to 100%, splash proof
Supply Power	24 to 35 VDC
Supply Current	Approx. 1.5 A at start up, decreasing to 0.5 A at 20°C
Power Up Time	Less than 15 minutes at -30°C

Geometrics G-822A Magnetometer

Operating Principal	Self-oscillating split-beam Cesium Vapor (non-radioactive ¹³³ Cs)
Operating Range	20,000 nT to 100,000 nT
Operating Zones	Earth's field vector should be at an angle greater than 6° from the sensor's equator and greater than 6° away from the sensor's long axis.
Hemisphere Switching	Automatic
Sensitivity	<0.0005 nT √Hz rms.
Noise Envelope	Typically 0.002 nT peak to peak at a 0.1 second sample rate (90% of all readings falling within the peak to peak envelope) using a 822A super-counter
Heading Error	<0.15 nT over entire 360° polar and equatorial spin
Absolute Accuracy	Better than 3 nT throughout range
Output	Cycle of Larmor frequency = 3.498572 Hz/nT, RS-232 data at 9600 baud, concatenated data streams from up to 6 sensors
Sensor Head	Diameter: 60.32 mm (2.375") Length: 158.75 mm (6.25") Weight: 680 g (24 oz)
Sensor Electronics	Diameter: 63.5 mm (2.5") Length: 279.4 mm (11") Weight: 680 g (24 oz)
Cable, Sensor to Electronics	Standard: 2.77 m (109") Cable length can be increased by 1.10 m (43") for a total length of 3.87 m (152")
Cable, Sensor Electronics to Counter	Standard: 10 m (33') Cable length can be increased up to 50 m (164')
Operating Temperature	-35°C to +50°C (-30°F to +122°F)
Storage Temperature	-45°C to +70°C (-48°F to +158°F)
Altitude	Up to 9,000 m (30,000 ft)
Water Tight	Sealed for up to 0.9 m (2 ft) water depth
Supply Power	24 to 35 VDC, 0.75 amp at turn-on and 0.5 amp thereafter

Billingsley TFM100G2 Ultra Miniature Triaxial Fluxgate Magnetometer

Axial Alignment	Orthogonality better than $\pm 1^\circ$
Input Voltage Options	15 to 34 VDC @ 30 mA
Field Measurement Range Options	$\pm 100 \mu\text{T} = \pm 10 \text{ V}$
Accuracy	$\pm 0.75\%$ of full scale (0.5% typical)
Linearity	$\pm 0.015\%$ of full scale
Sensitivity	100 $\mu\text{V/nT}$
Scale Factor Temperature Shift	0.007% full scale/ $^\circ\text{C}$
Noise	$\leq 12 \text{ pT rms}/\sqrt{\text{Hz}}$ @ 1 Hz
Output Ripple	3 mV peak to peak @ 2 nd harmonic
Analog Output at Zero Field	$\pm 0.025 \text{ V}$
Zero Shift with Temperature	$\pm 0.6 \text{ nT}/^\circ\text{C}$
Susceptibility to Perming	$\pm 8 \text{ nT}$ shift with $\pm 5 \text{ Gs}$ applied
Output Impedance	$332 \Omega \pm 5\%$
Frequency Response	3 dB @ $> 500 \text{ Hz}$ (to $> 4 \text{ kHz}$ wide band)
Over Load Recovery	$\pm 5 \text{ Gs}$ slew $< 2 \text{ ms}$
Random Vibration	$> 20 \text{ G rms}$ 20 Hz to 2 kHz
Temperature Range	-55°C to $+85^\circ\text{C}$
Acceleration	$> 60 \text{ G}$
Weight	100 g
Size	3.51 cm x 3.23 cm x 8.26 cm
Connector	Chassis mounted 9 pin male "D" type

Herz Totem-2A VLF-EM System

Primary Source	Magnetic field component radiated from VLF radio transmitters (one or two simultaneously)
Frequency Range	15 kHz – 25 kHz (standard) 10 kHz – 30 kHz (optional)
Sensitivity Range	130 mV m to 100 m V m at 20 kHz, 3 dB down at 14kHz and 24 kHz
VLF Signal Bandpass	-3 dB at ±80Hz; < 4% variation at ±50Hz
Adjacent Channel Rejection	300 – 800 Hz: 20 – 32 dB 800 – 1500 Hz: 32 – 40 dB >1500 Hz: 40 dB (for < 2% noise envelop)
Out of Band Rejection	10 kHz – 2.5 kHz: 5×10^{-4} Am – 5×10^{-1} Am; < 2.5 kHz rising at 12 dB octave 30 kHz – 60 kHz: 5×10^{-4} Am – 8×10^{-3} Am; < 60 kHz rising at 6 dB octave
Output Filter	Time constant 1 sec for 0% - 50% or 10% - 90%, noise bandwidth 0.3 Hz
Internal Noise	1.3 mV m rms (ambient noise will exceed this)
Inputs	Power: 23 – 32 VDC 0.5 A, fused
Dimensions and Weight	Console: 480 x 45 x 340 mm (19 x 1.75 x 13.4inches) 3.8 kg (8.3 lb)

Setra Model 276 Barometric Pressure

Performance	Accuracy RSS ¹ (at constant temp)	±0.25% FS ²
	Non-Linearity (BSFL)	±0.22% FS
	Hysteresis	0.05% FS
	Non-Repeatability	0.05% FS
	Thermal Effects ³	Compensated range: 0°C to +55°C (+30°F to +130°F) Zero shift (over compensated range): 1% FS Span shift (over compensated range): 1% FS
	Resolution	Infinite, limited only by output noise level (0.0005% FS)
	Time Constant	10 msec to reach 90% final output with step function pressure input
	Long Term Stability	0.25% FS / 6 months
Environmental	Temperature	Operating ⁴ : -18°C to +79°C (0°F to +175°F) Storage: -55°C to +121°C (-65°F to +250°F)
	Vibration	2 g from 5 Hz to 500 Hz
	Shock	50 g (Operating, 1/2 sine 10 ms)
	Acceleration	10 g
Electrical	Circuit	3-Wire ⁵ (Exc, Out, Com)
	Power Consumption	0.20 W (24 VDC)
	Output Impedance	5 Ω
	Output Noise	<200 μV RMS (0 to 100 Hz)

¹ RSS of non-linearity, hysteresis, and non-repeatability.

² FS = 300 mb for 800 - 1100 mb range; 500 for 600 - 1100 mb range; and 20 PSI for 0 to 20 PSIA.

³ Units calibrated at nominal 70°F. Maximum thermal error computed from this datum.

⁴ Operating temperature limits of the electronics only. Pressure media temperatures may be considerable higher or lower.

⁵ The separate leads for +EXC, -EXC, +Out, -Out are commoned internally. The shield is connected to the case. For best performance, either the -Exc or -Out should be connected to the case. Unit is calibrated at the factory with -Exc connected to the case. The insulation resistance between all signal leads are tied together and case ground is 100 Ω minimum at 25 VDC.

Rotronic HygroClip HC-S3 Relative Humidity and Temperature Probe

Relative Humidity	Operating Range	0 to 100% RH
	Accuracy at 23°C	±1.5% RH
	Output	0 – 1 VDC
	Typical Long-Term Stability	Better than ±1% RH per year
Temperature	Measurement Range	-40°C to +60°C
	Temperature Accuracy	-30°C to +60°C ±0.2°C -50°C to +60°C ±0.6°C (worst case)
	Output	0 – 1 VDC
Power	Supply Voltage	3.5 to 50 VDC (typically powered by data logger's 12 VDC supply)
	Current Consumption	<4 mA
Dimensions	Diameter	1.53 cm (0.60")
	Length	16.8 cm (6.6")
	Housing Material	Polycarbonate

Nuvia Dynamics Advanced Gamma-Ray Spectrometer (AGRS-5)

Crystal Volume	Four 4.2 L NaI(Tl) synthetic downward-looking and one 4.2 L NaI(Tl) upward-looking crystals. Total volume of 21 L
Resolution	256/512/1024 channels
Data Handling	Individual detector processing and calibration
Energy Resolution	< 9% (@ 662 keV)
Differential Non-linearity	< 0.1%
Integral Non-linearity	< 0.01%
Gain Stabilization	Automatic multi-peak on natural radioisotopes
Calibration	Automatic using natural background radiation
Dynamic Input Range	250,000 cps (counts/sec) per detector
Baseline Restoration	Digital Individual Pulse Baseline Restoration (IPBR). The baseline is established for each individual pulse for maximum pulse height accuracy
Sampling Rate	0.1 – 10 secs user defined
Pulse Shaping	Digital Pulse Shaping
Power	9 to 40 VDC, 15 W
Detector Power	3 W per detector
Operating Temperature	-20°C up to +50°C
Downward Shielding	6 mm thick lead plate is used for downward-shielding
Upward Shielding	RayShield® non-radioactive shielding on downward-looking crystals
Spectra	20 keV to 3 MeV (plus cosmic)
System Stabilization	Cold start-up: less than 40 secs on the ground
GPS Connectivity	Time and position synchronization; additional add-on
Weight	~115 kg

Nuvia Dynamics IMPAC data recorder system

(for navigation and geophysical data acquisition)

Functions	Integrated Multi-Parameter Airborne Console (IMPAC) with integrated dual Global Positioning System Receiver (GPS) and all necessary navigation guidance software. Inputs for geophysical sensors - portable gamma ray spectrometer GRS-10/AGRS, MMS4/MMS8 Magnetometer, Herz Totem-2A EM, A/D converter, temperature/humidity probe, barometric pressure probe, and laser/radar altimeter. Output for the multi-parameter PGU (Pilot Guidance Unit)
Display	Monitor display 600 x 800 pixels; customized keypad and operator keyboard. Multi-screen options for real-time viewing of all data inputs, fiducial points, flight line tracking, and GPS channels by operator
Navigation	Pilot/operator navigation guidance. Software supports preplanned survey flight plan, along survey lines, way-points, preplanned drape profile surfaces
Data Sampling	Sensor dependent
Data Synchronization	Synchronized to GPS position. Supports dual GPS
Data File	PEI Binary data format
Storage	80 GB
Software	DataView: Allows fast data verification and conversion of PEI binary data to Geosoft GBN or ASCII formats MAGConv: For survey preparation, calibration and conversion of maps, and survey plot after data acquisition MAGComp: For calculation of magnetic compensation coefficients AGRS/GRS10 Calibration: High voltage adjustment, linearity correction coefficients calculation, and communication test support AGIS: Real time data acquisition and navigation system. Displays chart/spectrum view in real-time for fast data Quality Control (QC)
Electrical	Multiple ethernet connections, RS232 serial ports, USB ports, and 16-bit differential analog input channels. It can support up to 4 magnetometer sensors
Power Requirement	24 VDC

Digital File Descriptions

Magnetic and VLF-EM Database
Radiometric Database
Geosoft Grids
Maps

Magnetic and VLF-EM Database:

Abbreviations used in the GDB/XYZ/CSV files are listed below:

CHANNEL	UNITS	DESCRIPTION
X_WGS84	m	UTM Easting – WGS84 Zone 8N
Y_WGS84	m	UTM Northing – WGS84 Zone 8N
Lat_deg	Decimal degree	Latitude – WGS84
Lon_deg	Decimal degree	Longitude – WGS84
Date	yyyy/mm/dd	Dates of the survey flight(s) – Local
FLT		Flight number(s)
LineNo		Line numbers
STL		Number of satellite(s)
GPSfix		1 = non-differential 2 = WAAS/SBAS differential
Heading	degree	Heading of the aircraft
GPStime	HH:MM:SS	GPS time (UTC)
Geos_m	m	Geoidal separation
XTE_m	m	Cross track error
Galt	m	GPS height – WGS84 Zone 8N (ASL)
Lalt	m	Laser altimeter readings (AGL)
DTM	m	Digital Terrain Model
Sample_Density	m	Horizontal distance in meters between adjacent measurement locations; sample frequency is 20 Hz
Speed_km_hr	km/hr	Ground speed of aircraft in km/hr
basemag	nT	Base station temporal variation data
IGRF	nT	International Geomagnetic Reference Field, IGRF-13
Declin	Decimal degree	Calculated declination of magnetic field
Inclin	Decimal degree	Calculated inclination of magnetic field
XFg_Step	step	X - fluxgate
YFg_Step	step	Y - fluxgate
ZFg_Step	step	Z - fluxgate
Mag1_Head	nT	Mag 1 – Diurnal, lag, and heading corrected
Mag2_Head	nT	Mag 2 – Diurnal, lag, and heading corrected
Mag3_Head	nT	Mag 3 – Diurnal, lag, and heading corrected
TMI	nT	Total Magnetic Intensity (Mag 2)
RMI	nT	Residual Magnetic Intensity (Mag 2)
ILG	nT/m	In-Line Gradient (Mag 2)
XLG	nT/m	Cross-Line Gradient (Mag 1 and Mag 3)
HG	nT/m	Total horizontal gradient (in-line and cross-line)
TMIge	nT	Gradient enhanced Total Magnetic Intensity
RMIge	nT	Gradient enhanced Residual Magnetic Intensity
NML_TF		NML(LaMoure) Total field VLF-EM
NML_VQ		NML(LaMoure) Vertical Quadrature VLF-EM
NLK_TF		NLK (Jim Creek) Total field VLF-EM
NLK_VQ		NLK (Jim Creek) Vertical Quadrature VLF-EM

Radiometric Database:

Abbreviations used in the GDB/XYZ/CSV files are listed below:

CHANNEL	UNITS	DESCRIPTION
X_WGS84	m	UTM Easting – WGS84 Zone 8N
Y_WGS84	m	UTM Northing – WGS84 Zone 8N
Lat_deg	Decimal degree	Latitude – WGS84
Lon_deg	Decimal degree	Longitude – WGS84
Date	yyyy/mm/dd	Date of the survey flight(s) – Local
FLT		Flight number(s)
LineNo		Line numbers
STL		Number of satellite(s)
GPStime	HH:MM:SS	GPS time (UTC)
Geos_m	m	Geoidal separation
GPSFix		1 = non-differential 2 = WAAS/SBAS differential
Heading	degree	Heading of the aircraft
XTE_m	m	Cross track error
Galt	m	GPS height – WGS84 Zone 8N (ASL)
Lalt	m	Laser altimeter height (AGL)
DTM	m	Digital Terrain Model
Sample_Density	m	Horizontal distance in metres between adjacent measurement locations; sample frequency is 20 Hz
Speed_km_hr	km/hr	Ground speed of aircraft in km/hr
BaroSTP_kPa	kPa	Barometric altitude (pressure and temperature corrected)
Temp_degC	°C	Air temperature
Press_kPa	kPa	Atmospheric pressure
COSFILT	counts/sec	Spectrometer – Filtered Cosmic
UPUFILT	counts/sec	Spectrometer – Filtered Upward Uranium
Kcor	%	Concentration in Percentage - Potassium
Thcor	ppm	Equivalent Concentration - Thorium
Ucor	ppm	Equivalent Concentration - Uranium
TCcor	nGy/hour	Total Count
TCexp	µR/hour	Exposure Rate
KThratio		Spectrometer – %K/eTh ratio
KUratio		Spectrometer – %K/eU ratio
ThKratio		Spectrometer – eTh/%K ratio
ThUratio		Spectrometer – eTh/eU ratio
UKratio		Spectrometer – eU/%K ratio
UThratio		Spectrometer – eU/eTh ratio

Grids:

Pike-Warden, WGS 84 Zone 8N, cell size at 25 m

FILE NAME	DESCRIPTION
21178_Pike_Warden_DTM_25m.grd	Digital Terrain Model gridded at 25 m cell size
21178_Pike_Warden_TMI_25m.grd	Total Magnetic Intensity gridded at 25 m cell size
21178_Pike_Warden_RMI_25m.grd	Residual Magnetic Intensity gridded at 25 m cell size
21178_Pike_Warden_ILG_25m.grd	Measured In-Line Gradient (Mag 1 and Mag 2) gridded at 25 m cell size
21178_Pike_Warden_XLG_25m.grd	Measured Cross-Line Gradient (Mag 1 and Mag 2) gridded at 25 m cell size
21178_Pike_Warden_HG_25m.grd	Total Horizontal Gradient (in-line and cross-line) gridded at 25 m cell size
21178_Pike_Warden_CVG_25m.grd	Calculated Vertical Gradient of RMI gridded at 25 m cell size
21178_Pike_Warden_TMIge_25m.grd	Gradient enhanced Total Magnetic Intensity (in-line and cross-line gradients) gridded at 25 m cell size
21178_Pike_Warden_RMIge_25m.grd	Gradient enhanced Residual Magnetic Intensity (in-line and cross-line gradients) gridded at 25 m cell size
21178_Pike_Warden_RTPge_25m.grd	Gradient enhanced Reduced to Magnetic Pole of RMIge gridded at 25 m cell size
21178_Pike_Warden_NML_TF_25m.grd	VLF-EM NML (LaMoure) Total Field gridded at 25 m cell size
21178_Pike_Warden_NML_VQ_25m.grd	VLF-EM NML (LaMoure) Vertical Quadrature gridded at 25 m cell size
21178_Pike_Warden_NLK_TF_25m.grd	VLF-EM NLK (Jim Creek) Total Field gridded at 25 m cell size
21178_Pike_Warden_NLK_VQ_25m.grd	VLF-EM NLK (Jim Creek) Vertical Quadrature gridded at 25 m cell size
21178_Pike_Warden_K_25m	Potassium (%K) – in percentage gridded at 25 m cell size
21178_Pike_Warden_eTh_25m	Thorium (eTh) – equivalent concentration gridded at 25 m cell size
21178_Pike_Warden_eU_25m	Uranium (eU) – equivalent concentration gridded at 25 m cell size
21178_Pike_Warden_TC_25m	Total Count (TC) gridded at 25 m cell size
21178_Pike_Warden_TCexp_25m	Total Count (TCexp) – exposure rate gridded at 25 m cell size
21178_Pike_Warden_KThRatio_25m	Potassium over Thorium ratio (%K/eTh) gridded at 25 m cell size
21178_Pike_Warden_KURatio_25m	Potassium over Uranium ratio (%K/eU) gridded at 25 m cell size
21178_Pike_Warden_UTHRatio_25m	Uranium over Thorium ratio (eU/eTh) gridded at 25 m cell size
21178_Pike_Warden_UKRatio_25m	Uranium over Potassium ratio (eU/%K) gridded at 25 m cell size
21178_Pike_Warden_ThKRatio_25m	Thorium over Potassium ratio (eTh/%K) gridded at 25 m cell size
21178_Pike_Warden_ThURatio_25m	Thorium over Uranium ratio (eTh/eU) gridded at 25 m cell size

*Grids are exported as Geotiffs (.tiff)

Maps:

Pike-Warden, WGS 84 Zone 8N (jpegs, pdfs, and georeferenced pdf)

Plate Number	Plate Name	FILE NAME	DESCRIPTION
1	FL	21178_Pike_Warden_ActualFlightLines	Plotted actual flown flight lines
2	DTM	21178_Pike_Warden_DTM_25m	Digital Terrain Model gridded at 25 m cell size
3	TMI_wFL	21178_Pike_Warden_TMI_wFL_25m	Total Magnetic Intensity gridded at 25 m cell size with actual flown flight lines
4	TMI	21178_Pike_Warden_TMI_25m	Total Magnetic Intensity gridded at 25 m cell size
5	RMI	21178_Pike_Warden_RMI_25m	Residual Magnetic Intensity gridded at 25 m cell size
6	ILG	21178_Pike_Warden_ILG_25m	Measured In-Line Gradient gridded at 25 m cell size
7	XLG	21178_Pike_Warden_XLG_25m	Measured Cross-Line Gradient gridded at 25 m cell size
8	HG	21178_Pike_Warden_HG_25m	Total Horizontal Gradient gridded at 25 m cell size
9	CVG	21178_Pike_Warden_CVG_25m	Calculated Vertical Gradient of RMI gridded at 25 m cell size
10	TMIge	21178_Pike_Warden_TMIge_25m	Gradient enhanced Total Magnetic Intensity gridded at 25 m cell size
11	RMIge	21178_Pike_Warden_RMIge_25m	Gradient enhanced Residual Magnetic Intensity gridded at 25 m cell size
12	RTPge	21178_Pike_Warden_RTPge_25m	Gradient enhanced Reduced to Magnetic Pole of RMIge gridded at 25 m cell size
13	NML_TF	21178_Pike_Warden_NML_TF_25m.grd	VLF-EM NML (LaMoure) Total Field gridded at 25 m cell size
14	NML_VQ	21178_Pike_Warden_NML_VQ_25m.grd	VLF-EM NML (LaMoure) Vertical Quadrature gridded at 25 m cell size
15	NLK_TF	21178_Pike_Warden_NLK_TF_25m.grd	VLF-EM NLK (Jim Creek) Total Field gridded at 25 m cell size
16	NLK_VQ	21178_Pike_Warden_NLK_VQ_25m.grd	VLF-EM NLK (Jim Creek) Vertical Quadrature gridded at 25 m cell size
17	%K	21178_Pike_Warden_K_25m	Potassium (%K) – in percentage gridded at 25 m cell size
18	eTh	21178_Pike_Warden_eTh_25m	Thorium (eTh) – equivalent concentration gridded at 25 m cell size
19	eU	21178_Pike_Warden_eU_25m	Uranium (eU) – equivalent concentration gridded at 25 m cell size
20	TC	21178_Pike_Warden_TC_25m	Total Count (TC) gridded at 25 m cell size
21	TCexp	21178_Pike_Warden_TCexp_25m	Total Count (TCexp) – exposure rate gridded at 25 m cell size
22	%K/eTh	21178_Pike_Warden_KThRatio_25m	Potassium over Thorium ratio (%K/eTh) gridded at 25 m cell size
23	%K/eU	21178_Pike_Warden_KURatio_25m	Potassium over Uranium ratio (%K/eU) gridded at 25 m cell size
24	eU/eTh	21178_Pike_Warden_UThRatio_25m	Uranium over Thorium ratio (eU/eTh) gridded at 25 m cell size

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25	eU/%K	21178_Pike_Warden_UKRatio_25m	Uranium over Potassium ratio (eU/%K) gridded at 25 m cell size
26	eTh/%K	21178_Pike_Warden_ThKRatio_25m	Thorium over Potassium ratio (eTh/%K) gridded at 25 m cell size
27	eTh/eU	21178_Pike_Warden_ThURatio_25m	Thorium over Uranium ratio (eTh/eU) gridded at 25 m cell size
28	TI	21178_Pike_Warden_TernaryImage_25m	Ternary ratio of all three elements (%K, eTh, eU) gridded at 25 m cell size

Pike-Warden Survey Block

- Plate 1: Pike-Warden - Actual Flight Lines (FL)
- Plate 2: Pike-Warden - Digital Terrain Model (DTM)
- Plate 3: Pike-Warden - Total Magnetic Intensity with Actual Flight Lines (TMI_wFL)
- Plate 4: Pike-Warden - Total Magnetic Intensity (TMI)
- Plate 5: Pike-Warden - Residual Magnetic Intensity (RMI)
- Plate 6: Pike-Warden - In-Line Gradient (ILG)
- Plate 7: Pike-Warden - Cross-Line Gradient (XLG)
- Plate 8: Pike-Warden - Horizontal Gradient (HG)
- Plate 9: Pike-Warden - Calculated Vertical Gradient (CVG) of RMI
- Plate 10: Pike-Warden - Gradient Enhanced Total Magnetic Intensity (TMIge)
- Plate 11: Pike-Warden - Gradient Enhanced Residual Magnetic Intensity (RMIge)
- Plate 12: Pike-Warden - Gradient Enhanced Reduced to Magnetic Pole (RTPge) of RMIge
- Plate 13: Pike-Warden - NML Total Field (NML_TF)
- Plate 14: Pike-Warden - NML Vertical Quadrature (NML_VQ)
- Plate 15: Pike-Warden - NLK Total Field (NLK_TF)
- Plate 16: Pike-Warden - NLK Vertical Quadrature (NLK_VQ)
- Plate 17: Pike-Warden - Potassium - Percentage (%K)
- Plate 18: Pike-Warden - Thorium - Equivalent Concentration (eTh)
- Plate 19: Pike-Warden - Uranium - Equivalent Concentration (eU)
- Plate 20: Pike-Warden - Total Count (TC)
- Plate 21: Pike-Warden - Total Count - Exposure Rate (TCexp)
- Plate 22: Pike-Warden - Potassium over Thorium Ratio (%K/eTh)
- Plate 23: Pike-Warden - Potassium over Uranium Ratio (%K/eU)
- Plate 24: Pike-Warden - Uranium over Thorium Ratio (eU/eTh)
- Plate 25: Pike-Warden - Uranium over Potassium Ratio (eU/%K)
- Plate 26: Pike-Warden - Thorium over Potassium Ratio (eTh/%K)
- Plate 27: Pike-Warden - Thorium over Uranium Ratio (eTh/eU)
- Plate 28: Pike-Warden - Ternary Image (TI)

APPENDIX IV

GEOCHEMICAL SAMPLE HANDLING AND ANALYTICAL PROCEDURES

SAMPLE HANDLING AND ANALYTICAL PROCEDURES

All rock and till samples collected during the 2021 program were sorted into rice bags and sealed with a plastic zap strap on the Pike property. Samples were brought to Whitehorse by field personnel.

All samples were delivered by truck to Bureau Veritas Laboratories (BV) in Whitehorse, Yukon.

Rock Geochemical Samples

All rock sample sites in 2021 were marked with flagging tape labelled with the sample number. The location of each sample was determined using a handheld GPS unit. All samples sent for shipment were bagged in a plastic ore bag with an individually pre-numbered sample tag placed in each bag.

The rock samples were processed and prepared at BV in Whitehorse, Yukon where they were dried and fine crushed to -2 mm. A 250 g split was then pulverized to 75 micron, and then shipped to BV Labs in Vancouver, British Columbia. A portion of this material was digested in aqua regia before being analyzed for 36 elements by the inductively coupled plasma-mass spectrometry technique (AQ201). Overlimit samples were reanalyzed using ICP-ES for silver, copper, and molybdenum using the AQ370 technique.

Overlimit AQ370 samples for silver were re-assayed using the FA530 technique, overlimit AQ370 lead samples were re-assayed using the GC817 technique.

Trench samples were collected by digging down to subcrop/outcrop with hand tools (mattock, pick and shovel). Tape measure was used to measure sample intervals. Continuous chip samples were collected along each specified interval along the inside edge of each trench (i.e. the edge which is dug furthest into the slope), put into sample bags with respective tag and sent to BV labs in Whitehorse along with rock geochemical samples.

APPENDIX V

2021 CERTIFICATES OF ANALYSIS



BUREAU VERITAS MINERAL LABORATORIES
Canada

Bureau Veritas Commodities Canada Ltd.

www.bvna.com/mining-laboratory-serv

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Client: **Ryan Burke**
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Submitted By: Ryan Burke Canada-
Receiving Lab: Whitehorse August 31,
Received: 2021

Analysis Start: October 06, 2021

Report Date: October 25, 2021

Page: 1 of 6

CERTIFICATE OF ANALYSIS

WHI21000449.1

CLIENT JOB INFORMATION

Project: Shipment PIKE
ID:
P.O. Number Number
of Samples: 138

SAMPLE DISPOSAL

IMM-PLP Return immediately after analysis
PICKUP-RJT Client to Pickup Rejects

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PRP70-250	138	Crush, split and pulverize 250 g rock to 200 mesh			WHI
AQ201	138	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN
SHP01	138	Per sample shipping charges for branch shipments			VAN
AQ370	19	1:1:1 Aqua Regia Digestion ICP-ES Finish	1	Completed	VAN
FA530	17	Lead collection fire assay 30G fusion - Grav finish	30	Completed	VAN

ADDITIONAL COMMENTS

Bureau Veritas does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To:





Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Project: PIKE
Report Date: October 25, 2021

Page: 2 of 6 Part: 1 of 3

CERTIFICATE OF ANALYSIS

WHI21000449.1

Method	Analyte	Unit	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
				Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
MDL	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
3852551	Rock	0.88	9.3	21.3	3.1	17	0.6	7.6	1.6	102	1.26	4.1	1.1	0.7	3.5	6	0.1	0.4	0.2	65	0.26	
3852552	Rock	1.54	2.3	87.7	13.0	47	1.5	23.1	8.3	482	4.14	10.5	1.0	2.3	3.3	13	<0.1	1.3	0.1	110	0.60	
3852553	Rock	0.70	1.7	2.3	8.8	65	0.1	2.9	6.0	1073	2.69	2.6	1.5	<0.5	7.1	56	0.1	<0.1	0.2	24	3.10	
3852554	Rock	0.56	0.7	20.9	9.6	88	0.2	14.9	21.9	1203	4.75	1.5	0.6	1.1	3.7	96	0.3	0.1	<0.1	102	3.62	
3852555	Rock	0.51	2.1	7.2	7.4	23	<0.1	3.2	5.2	819	1.76	0.7	0.1	12.5	1.0	21	0.2	0.2	<0.1	14	0.34	
3852556	Rock	0.38	82.7	5.5	2.3	9	0.2	4.8	6.1	79	0.83	0.6	<0.1	<0.5	1.1	10	0.1	<0.1	1.3	6	0.17	
3852557	Rock	0.38	1.2	11.8	4.7	47	0.2	10.2	32.9	403	3.56	0.8	0.7	0.9	4.9	28	<0.1	<0.1	4.3	71	0.65	
3852559	Rock	0.35	16.0	56.1	51.8	11	1.9	3.1	3.6	43	1.74	0.6	0.2	19.1	1.0	17	0.1	<0.1	1.7	3	0.02	
3852560	Rock	0.30	48.1	34.5	58.1	14	2.7	3.5	7.3	40	1.83	1.3	0.3	39.5	0.9	23	0.3	<0.1	2.8	3	0.01	
3852561	Rock	0.83	13.6	96.9	95.2	13	2.1	4.2	6.9	153	1.75	1.2	0.4	20.5	2.2	20	0.6	<0.1	2.2	3	0.42	
3852562	Rock	0.86	2.8	1273.8	>10000	255	18.2	1.9	0.6	55	0.72	<0.5	1.1	33.0	0.4	3	6.1	5.4	2.9	2	0.04	
3852563	Rock	0.42	1.9	40.3	>10000	21	8.8	1.5	1.2	38	0.54	<0.5	1.3	42.2	0.2	3	3.4	1.7	4.3	3	0.02	
3852564	Rock	1.05	1.9	261.8	>10000	260	24.6	2.6	0.6	205	0.88	<0.5	0.6	97.3	0.2	18	13.9	4.3	0.3	2	0.71	
3852565	Rock	0.62	8.8	2032.2	>10000	3548	41.8	3.8	2.2	77	1.03	<0.5	4.1	317.2	0.2	11	96.7	14.9	0.7	2	0.03	
3852566	Rock	0.63	15.6	6076.2	>10000	2823	59.9	5.7	3.4	94	1.65	<0.5	12.9	676.0	0.3	15	61.4	1.8	2.4	6	0.05	
3852567	Rock	0.61	59.6	2672.1	>10000	3239	67.9	7.6	5.5	203	1.94	<0.5	38.1	2323.7	1.9	69	63.3	4.4	1.0	17	0.24	
3852568	Rock	0.83	7.8	30.0	1943.2	51	1.3	24.8	38.0	214	5.11	1.0	1.0	9.6	6.3	29	0.2	0.1	37.3	39	0.38	
3852569	Rock	0.91	1.8	18.0	1517.4	31	36.3	10.2	7.9	809	1.87	<0.5	1.1	34.8	0.7	107	1.7	<0.1	279.9	9	6.55	
3852570	Rock	0.75	0.2	3.5	28.5	9	0.1	1.9	2.8	4611	0.92	0.7	0.5	<0.5	0.2	553	0.2	<0.1	0.6	6	35.55	
3852571	Rock	0.83	4.1	107.3	73.5	757	1.1	4.6	5.5	516	1.51	13.7	<0.1	10.4	0.2	98	15.2	<0.1	2.1	21	4.97	
3852572	Rock	0.74	1.4	38.2	64.5	47	7.6	3.3	0.8	501	0.86	6.3	0.4	2.6	0.8	6	1.2	0.5	4.3	7	0.18	
3852573	Rock	0.91	1004.7	5567.0	130.1	49	58.0	3.2	5.4	222	1.89	3.0	1.5	37.6	3.1	32	3.1	6.3	43.8	25	0.54	
3852574	Rock	0.37	5.3	46.4	29.0	96	0.5	20.1	10.7	682	2.53	17.1	1.6	<0.5	4.4	81	0.7	0.2	0.4	90	1.26	
3852575	Rock	0.88	17.1	556.4	44.4	6	87.3	1.6	0.7	43	1.78	2.3	0.6	43.9	0.7	5	<0.1	0.5	192.7	8	0.06	
3852576	Rock	1.05	2.5	59.2	312.8	167	41.7	3.9	0.6	228	0.84	21.9	0.3	22.3	0.5	4	1.7	11.3	0.9	7	0.02	
3852577	Rock	1.00	694.1	839.5	466.7	7	>100	1.6	0.7	33	1.78	2.1	0.8	85.1	0.4	10	2.9	1.8	977.7	5	0.07	
3852578	Rock	0.47	3.7	13.7	16.7	76	2.0	19.5	14.7	646	4.02	0.9	0.8	<0.5	2.6	157	0.2	0.1	4.3	89	1.61	
3852579	Rock	3.35	977.3	3655.6	21.3	46	15.9	5.5	9.6	330	2.48	<0.5	14.2	56.3	16.5	34	1.4	0.1	154.2	58	0.44	
3852580	Rock	4.60	1034.1	6419.8	42.5	72	32.4	11.4	8.9	333	2.44	<0.5	3.8	120.3	6.3	81	2.1	0.6	1322.8	30	0.44	
3852581	Rock	1.41	>2000	3936.3	196.2	44	>100	2.1	3.2	51	6.24	<0.5	3.0	732.1	3.5	30	5.5	2.4	>2000	25	0.11	

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Bureau Veritas Commodities Canada Ltd.

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Project: PIKE
Report Date: October 25, 2021

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CERTIFICATE OF ANALYSIS

WHI21000449.1

Method Analyte Unit MDL	AQ201 P %	AQ201 La ppm	AQ201 Cr ppm	AQ201 Mg %	AQ201 Ba ppm	AQ201 Ti %	AQ201 B ppm	AQ201 Al %	AQ201 Na %	AQ201 K %	AQ201 W ppm	AQ201 Hg ppm	AQ201 Sc ppm	AQ201 Ti ppm	AQ201 S %	AQ201 Ga ppm	AQ201 Se ppm	AQ201 Te ppm	AQ370 Mo %	AQ370 Cu %																			
																					0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2	0.001	0.001
3852551	Rock	0.124	7	29	0.32	368	0.022	<1	0.47	0.011	0.13	0.4	<0.01	1.3	<0.1	0.32	3	7.1	<0.2																				
3852552	Rock	0.114	6	65	1.55	63	0.188	<1	1.53	0.016	0.07	0.6	<0.01	7.4	<0.1	1.74	8	8.4	0.2																				
3852553	Rock	0.045	20	5	0.22	422	0.001	<1	0.64	0.002	0.17	<0.1	<0.01	6.8	<0.1	<0.05	3	<0.5	<0.2																				
3852554	Rock	0.148	26	29	2.22	105	0.009	<1	2.53	0.031	0.22	<0.1	<0.01	9.7	<0.1	0.33	9	<0.5	<0.2																				
3852555	Rock	0.017	3	9	0.56	49	0.007	<1	0.56	0.008	0.05	0.3	<0.01	1.3	<0.1	0.08	2	<0.5	<0.2																				
3852556	Rock	0.008	2	11	0.13	27	0.005	<1	0.20	0.006	0.02	<0.1	<0.01	0.4	<0.1	0.18	<1	<0.5	0.4																				
3852557	Rock	0.120	11	5	1.28	79	0.164	<1	1.44	0.051	0.12	8.3	<0.01	5.6	<0.1	0.94	6	<0.5	1.6																				
3852559	Rock	0.006	2	9	0.01	124	0.002	<1	0.13	0.001	0.07	0.2	<0.01	<0.1	<0.1	0.57	<1	<0.5	0.4																				
3852560	Rock	0.003	3	6	0.01	132	0.001	<1	0.13	0.002	0.06	<0.1	<0.01	<0.1	<0.1	0.53	<1	0.5	0.5																				
3852561	Rock	0.006	11	7	0.01	54	<0.001	<1	0.15	<0.001	0.10	<0.1	<0.01	<0.1	<0.1	1.16	<1	<0.5	0.4																				
3852562	Rock	0.004	<1	7	0.05	17	0.002	<1	0.07	0.001	0.01	<0.1	0.02	<0.1	<0.1	0.59	<1	3.5	1.4	<0.001	0.121																		
3852563	Rock	0.003	<1	4	0.04	16	0.001	<1	0.10	<0.001	0.02	<0.1	<0.01	<0.1	<0.1	0.41	<1	5.3	1.6	<0.001	0.005																		
3852564	Rock	0.002	2	7	0.07	5	<0.001	<1	0.07	0.001	<0.01	0.5	<0.01	0.2	<0.1	0.66	<1	<0.5	0.3	<0.001	0.028																		
3852565	Rock	0.007	<1	8	0.09	23	0.002	<1	0.10	0.001	0.01	0.1	0.05	0.2	<0.1	1.71	<1	6.2	2.1	<0.001	0.197																		
3852566	Rock	0.016	1	13	0.23	40	0.003	<1	0.26	0.001	0.02	<0.1	0.09	0.4	<0.1	0.74	<1	5.8	4.8	0.001	0.588																		
3852567	Rock	0.124	7	17	0.72	84	0.004	<1	0.93	0.003	0.16	<0.1	0.12	2.1	<0.1	0.42	2	12.8	3.6	0.006	0.267																		
3852568	Rock	0.074	10	13	0.80	35	0.139	<1	0.95	0.053	0.10	11.5	<0.01	1.7	<0.1	3.64	3	1.3	10.5																				
3852569	Rock	0.011	14	11	0.58	17	<0.001	<1	0.14	0.002	0.04	1.0	0.13	0.9	<0.1	0.77	<1	0.8	9.3																				
3852570	Rock	0.001	14	<1	0.63	40	<0.001	<1	0.08	0.001	<0.01	<0.1	<0.01	1.4	<0.1	<0.05	<1	0.8	<0.2																				
3852571	Rock	0.004	1	14	1.12	10	0.002	<1	0.94	0.001	0.03	0.1	0.01	1.7	<0.1	0.21	3	<0.5	<0.2																				
3852572	Rock	0.006	2	7	0.17	25	0.005	<1	0.31	0.001	0.05	0.1	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2																				
3852573	Rock	0.007	3	9	0.24	25	0.054	<1	0.66	0.019	0.03	3.5	0.02	1.5	<0.1	0.12	2	4.0	1.3																				
3852574	Rock	0.101	15	23	1.57	124	0.041	<1	2.02	0.114	0.09	0.2	<0.01	3.8	<0.1	<0.05	7	<0.5	<0.2																				
3852575	Rock	0.002	<1	8	0.02	3	0.008	<1	0.09	0.002	<0.01	0.4	<0.01	0.3	<0.1	<0.05	1	2.8	9.3																				
3852576	Rock	0.008	2	8	0.14	5	0.002	<1	0.14	0.001	<0.01	<0.1	<0.01	0.2	<0.1	0.10	<1	1.8	<0.2																				
3852577	Rock	0.001	<1	8	<0.01	3	0.006	<1	0.06	0.001	<0.01	>100	<0.01	0.2	<0.1	0.12	<1	48.4	25.0																				
3852578	Rock	0.156	20	73	1.82	211	0.149	<1	2.56	0.301	0.07	0.3	<0.01	3.3	<0.1	<0.05	9	<0.5	<0.2																				
3852579	Rock	0.048	23	14	0.89	86	0.122	<1	1.10	0.041	0.13	>100	<0.01	4.2	<0.1	0.26	5	4.4	2.0																				
3852580	Rock	0.045	9	13	0.76	84	0.090	<1	1.08	0.046	0.08	1.0	0.02	3.0	<0.1	0.10	4	9.2	4.1																				
3852581	Rock	0.016	3	6	0.03	84	0.031	<1	0.24	0.041	0.05	2.1	0.04	1.0	<0.1	0.22	1	53.4	13.1	0.415	0.386																		

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Project: PIKE
Report Date: October 25, 2021

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CERTIFICATE OF ANALYSIS

WHI21000449.1

Method	Analyte	AQ370	FA530
		Pb	Ag
Unit		%	ppm
MDL		0.01	20
3852551	Rock		
3852552	Rock		
3852553	Rock		
3852554	Rock		
3852555	Rock		
3852556	Rock		
3852557	Rock		
3852559	Rock		
3852560	Rock		
3852561	Rock		
3852562	Rock	2.86	
3852563	Rock	2.89	
3852564	Rock	3.82	
3852565	Rock	>4	
3852566	Rock	3.60	
3852567	Rock	>4	
3852568	Rock		
3852569	Rock		
3852570	Rock		
3852571	Rock		
3852572	Rock		
3852573	Rock		
3852574	Rock		
3852575	Rock		
3852576	Rock		
3852577	Rock		472
3852578	Rock		
3852579	Rock		
3852580	Rock		
3852581	Rock	0.03	185

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CERTIFICATE OF ANALYSIS

WHI21000449.1

Method	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01	
3852582	Rock	1.48	540.9	4542.6	75.6	31	63.2	5.6	5.7	142	1.94	<0.5	7.7	138.6	1.7	53	1.1	0.7	>2000	13	0.29
3852583	Rock	0.44	874.8	3481.6	17.3	31	14.3	1.8	2.1	53	2.18	<0.5	3.1	13.8	1.1	14	1.0	0.2	82.2	9	0.08
3852584	Rock	1.67	14.1	9201.1	9.0	96	3.7	5.4	13.6	503	2.36	0.9	7.9	2.1	8.0	75	1.3	0.2	14.5	48	0.58
3852585	Rock	1.90	4.7	17.1	72.0	40	42.2	2.6	18.5	299	4.04	2.5	0.5	49.1	5.8	27	0.2	0.3	49.5	23	0.69
3852586	Rock	1.05	1.6	30.8	122.3	7	22.0	2.8	16.2	33	2.66	0.6	0.3	405.5	13.4	7	<0.1	0.1	22.8	2	0.04
3852587	Rock	0.35	3.6	27.7	10.5	42	0.6	26.4	29.2	1250	3.04	1.5	0.3	8.9	1.3	272	0.3	0.2	1.7	23	6.08
3852588	Rock	0.35	15.4	98.7	5.2	5	1.9	8.8	4.1	63	1.91	2.9	0.6	7.3	0.3	6	<0.1	0.2	1.2	2	0.02
3852589	Rock	1.04	3.2	2142.8	9.0	56	12.0	14.1	12.8	936	3.32	1.5	1.5	33.8	4.0	91	0.8	1.0	1.3	10	4.76
3852590	Rock	1.00	2.0	146.9	11.0	41	1.4	8.3	11.4	806	2.74	49.5	1.5	67.2	1.3	69	0.6	1.2	0.7	5	3.44
3852591	Rock	0.23	1.9	66.1	13.9	106	0.3	8.8	11.2	1537	4.21	2.9	1.4	3.3	3.2	12	0.6	0.2	1.1	27	0.12
3852592	Rock	0.33	4.1	26.6	103.3	30	3.0	6.0	9.0	376	2.76	1.2	0.7	19.7	2.7	12	0.2	0.2	8.4	14	0.15
3852593	Rock	0.71	2.0	56.6	22.5	40	2.5	8.7	13.1	951	2.57	9.1	2.1	9.0	2.6	21	0.4	0.3	2.1	25	0.05
3852594	Rock	0.56	1.7	524.8	33.9	22	>100	4.9	6.8	264	4.40	3.2	0.7	886.3	1.8	19	0.3	1.1	1.4	18	0.03
3852595	Rock	0.82	2.0	206.2	40.8	25	>100	5.3	5.1	430	4.24	3.5	0.4	144.4	1.6	3	0.4	1.4	1.4	51	0.03
3852596	Rock	0.78	1.5	1362.3	2178.3	242	>100	30.3	9.3	799	2.88	2.0	0.8	1815.9	1.2	6	1.8	0.8	4.7	73	0.10
3852597	Rock	0.60	1.4	12.3	17.0	65	1.4	10.6	13.1	1762	3.98	0.8	1.7	4.3	4.5	88	0.5	0.2	0.2	25	5.61
3852651	Rock	1.12	1.8	11.0	7.9	74	0.8	2.1	14.4	1402	4.40	0.6	1.1	15.9	5.7	177	0.2	<0.1	0.1	71	5.13
3852652	Rock	1.43	1.7	6.7	10.0	11	0.6	2.4	2.1	137	0.80	12.5	0.2	631.1	1.1	7	0.1	0.8	0.4	2	0.16
3852653	Rock	0.52	1.8	12.7	4.1	17	0.3	6.2	1.2	121	0.44	0.9	0.2	1.7	0.8	6	<0.1	<0.1	0.1	9	0.14
3852654	Rock	0.64	3.1	4.6	5.0	4	0.3	1.2	0.2	29	0.26	<0.5	<0.1	0.5	0.1	<1	<0.1	<0.1	0.6	4	<0.01
3852655	Rock	2.05	1.3	5.4	2.2	11	<0.1	2.1	0.4	70	0.28	<0.5	<0.1	1.9	0.2	1	<0.1	<0.1	<0.1	3	0.04
3852656	Rock	0.92	5.2	22.0	13.7	17	1.8	4.3	1.0	80	0.57	21.6	0.3	4.6	0.3	2	<0.1	0.9	0.2	5	0.01
3852657	Rock	1.25	2.7	67.5	2.1	13	0.3	14.3	2.4	78	0.79	2.7	0.2	2.6	0.8	1	0.1	0.2	<0.1	3	0.11
3852658	Rock	1.13	>2000	2226.5	31.0	11	35.8	2.4	3.7	96	3.07	<0.5	1.7	21.0	3.7	34	1.2	1.6	55.3	22	0.36
3852659	Rock	0.70	7.3	9.7	149.4	5	0.2	1.2	0.4	34	0.42	0.6	0.4	26.8	0.1	7	<0.1	0.2	0.2	1	<0.01
3852660	Rock	1.23	8.4	15.6	151.0	24	17.1	4.4	26.5	28	2.89	<0.5	0.4	290.2	15.4	12	0.2	<0.1	20.5	3	0.03
3852661	Rock	0.91	12.3	7.0	79.8	12	16.5	4.1	16.3	38	2.00	<0.5	0.4	128.1	12.8	9	<0.1	<0.1	24.7	3	0.04
3852662	Rock	0.86	16.3	64.0	6.6	5	1.9	6.9	4.3	46	1.71	1.9	0.7	15.4	0.9	15	<0.1	0.3	0.8	1	<0.01
3852663	Rock	1.37	1.4	5.9	4.2	40	0.2	6.7	4.6	553	1.88	21.4	0.8	26.5	3.2	8	0.7	0.3	0.1	7	0.91
3852664	Rock	0.71	2.0	120.6	69.6	23	41.4	3.8	2.6	224	3.51	2.6	0.3	72.2	1.6	2	0.2	1.4	0.9	29	0.02

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Project: PIKE
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CERTIFICATE OF ANALYSIS

WHI21000449.1

Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu		
Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	%
MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	0.001	0.001		
3852582	Rock	0.013	3	8	0.23	27	0.034	<1	0.46	0.019	0.03	1.8	<0.01	1.0	<0.1	<0.05	2	21.7	16.1			
3852583	Rock	0.004	1	7	0.03	104	0.006	<1	0.12	0.002	0.01	68.3	<0.01	0.3	<0.1	0.24	<1	4.4	0.6			
3852584	Rock	0.055	16	10	1.17	64	0.091	<1	1.43	0.036	0.10	1.3	<0.01	4.0	<0.1	<0.05	6	0.7	<0.2			
3852585	Rock	0.080	13	5	0.54	52	0.004	2	0.89	0.031	0.22	6.0	<0.01	2.3	<0.1	1.86	3	1.4	20.3			
3852586	Rock	0.020	14	6	0.03	38	0.001	2	0.27	0.049	0.16	0.1	<0.01	0.5	<0.1	2.06	<1	0.7	7.9			
3852587	Rock	0.017	5	16	1.26	92	0.002	1	1.19	0.002	0.07	0.4	<0.01	4.2	<0.1	0.65	3	<0.5	<0.2			
3852588	Rock	0.002	1	6	<0.01	236	0.001	<1	0.02	0.001	<0.01	1.2	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2			
3852589	Rock	0.039	8	7	0.41	758	0.001	2	0.42	0.014	0.17	0.2	<0.01	4.7	<0.1	0.19	<1	<0.5	<0.2			
3852590	Rock	0.006	1	7	0.06	1458	<0.001	2	0.10	0.003	0.07	0.1	<0.01	1.9	<0.1	0.07	<1	<0.5	<0.2			
3852591	Rock	0.074	12	8	0.09	331	0.001	2	0.50	0.006	0.23	0.1	0.07	3.2	<0.1	<0.05	<1	<0.5	<0.2			
3852592	Rock	0.077	9	8	0.04	122	0.001	<1	0.34	0.013	0.17	0.2	0.01	1.7	<0.1	<0.05	<1	<0.5	0.2			
3852593	Rock	0.039	8	8	0.05	736	0.001	2	0.35	0.005	0.16	0.3	<0.01	1.8	<0.1	<0.05	<1	<0.5	<0.2			
3852594	Rock	0.018	4	8	0.03	480	0.002	<1	0.19	0.003	0.10	13.4	0.03	0.9	<0.1	0.06	<1	<0.5	<0.2			
3852595	Rock	0.016	5	10	0.04	104	0.009	2	0.21	0.003	0.11	19.9	<0.01	1.3	<0.1	<0.05	<1	<0.5	<0.2			
3852596	Rock	0.051	7	27	0.52	68	0.002	2	0.81	0.003	0.11	0.3	0.29	4.0	<0.1	<0.05	2	<0.5	<0.2			
3852597	Rock	0.036	10	7	0.13	1834	<0.001	2	0.37	0.009	0.23	<0.1	<0.01	4.1	<0.1	0.05	<1	<0.5	<0.2			
3852651	Rock	0.123	7	7	2.05	185	0.081	2	2.50	0.016	0.60	3.2	<0.01	6.3	0.2	0.35	6	<0.5	<0.2			
3852652	Rock	0.001	<1	7	0.05	25	<0.001	1	0.15	0.003	0.04	0.1	<0.01	0.2	<0.1	0.06	<1	<0.5	<0.2			
3852653	Rock	0.027	2	13	0.13	21	0.002	<1	0.22	0.018	0.04	<0.1	<0.01	0.4	<0.1	<0.05	<1	<0.5	<0.2			
3852654	Rock	<0.001	<1	7	<0.01	2	<0.001	<1	<0.01	0.002	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2			
3852655	Rock	0.001	<1	6	0.03	9	<0.001	<1	0.03	0.001	<0.01	0.6	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2			
3852656	Rock	0.006	<1	9	0.07	6	<0.001	<1	0.10	0.002	0.01	<0.1	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2			
3852657	Rock	0.002	3	11	0.02	3	<0.001	<1	0.03	0.002	<0.01	0.1	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2			
3852658	Rock	0.011	3	7	0.20	26	0.069	<1	0.64	0.041	0.04	3.8	0.02	1.4	<0.1	0.25	3	5.5	8.4	0.262	0.217	
3852659	Rock	0.004	<1	7	<0.01	16	<0.001	<1	0.04	0.003	0.02	0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2			
3852660	Rock	0.021	18	6	0.03	29	<0.001	1	0.30	0.047	0.17	0.1	<0.01	0.4	<0.1	2.18	<1	1.1	6.0			
3852661	Rock	0.020	16	8	0.04	80	0.001	<1	0.23	0.050	0.14	0.1	<0.01	0.4	<0.1	1.36	<1	<0.5	10.1			
3852662	Rock	0.002	1	5	<0.01	595	<0.001	<1	0.02	0.001	<0.01	1.2	<0.01	<0.1	<0.1	<0.05	<1	0.5	<0.2			
3852663	Rock	0.018	6	9	0.19	79	<0.001	1	0.35	0.003	0.17	0.1	<0.01	1.7	<0.1	<0.05	<1	<0.5	<0.2			
3852664	Rock	0.009	3	7	0.05	49	0.003	<1	0.16	0.003	0.06	10.9	<0.01	0.8	<0.1	<0.05	<1	<0.5	<0.2			

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Bureau Veritas Commodities Canada Ltd.

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PHONE (604) 253-3158

Client: **Ryan Burke**
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: October 25, 2021

Page: 3 of 6 Part: 3 of 3

CERTIFICATE OF ANALYSIS

WHI21000449.1

Method	Analyte	AQ370	FA530
		Pb	Ag
Unit		%	ppm
MDL		0.01	20
3852582	Rock		
3852583	Rock		
3852584	Rock		
3852585	Rock		
3852586	Rock		
3852587	Rock		
3852588	Rock		
3852589	Rock		
3852590	Rock		
3852591	Rock		
3852592	Rock		
3852593	Rock		
3852594	Rock		351
3852595	Rock		177
3852596	Rock		821
3852597	Rock		
3852651	Rock		
3852652	Rock		
3852653	Rock		
3852654	Rock		
3852655	Rock		
3852656	Rock		
3852657	Rock		
3852658	Rock	<0.01	
3852659	Rock		
3852660	Rock		
3852661	Rock		
3852662	Rock		
3852663	Rock		
3852664	Rock		

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CERTIFICATE OF ANALYSIS

WHI21000449.1

Method	Analyte	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Unit		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
MDL		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01	
3852665	Rock	1.41	1.4	367.9	17.8	24	22.8	6.1	6.2	540	2.29	3.9	0.5	29.7	1.8	3	0.4	0.5	0.4	17	0.04	
3852666	Rock	0.52	1.8	20.8	3.6	7	2.5	1.6	0.3	38	0.76	9.3	0.1	172.8	1.1	2	<0.1	<0.1	0.2	2	<0.01	
3852701	Rock	0.84	4.2	90.7	282.4	699	54.2	40.2	14.8	1546	3.77	786.8	0.8	70.7	3.4	90	11.7	10.6	0.2	62	1.06	
3852702	Rock	2.11	2.4	124.5	307.8	248	>100	42.8	12.5	1130	2.80	362.4	0.6	34.6	2.7	109	4.6	10.8	0.2	71	1.52	
3852703	Rock	2.42	3.1	63.6	135.3	349	43.9	46.3	11.7	1265	3.02	1153.6	0.9	35.9	3.4	92	6.2	15.8	0.2	53	1.23	
3852704	Rock	1.65	2.6	24.4	24.5	102	7.6	23.4	7.7	981	2.36	649.5	0.6	31.7	5.6	84	1.0	9.3	<0.1	31	1.33	
3852705	Rock	3.11	3.8	46.3	35.8	51	12.8	20.5	7.3	559	2.27	1264.1	0.7	39.8	3.8	44	0.7	13.4	<0.1	35	0.57	
3852706	Rock	2.22	3.9	102.3	71.7	109	17.5	26.4	9.2	519	2.54	1098.7	0.8	54.6	3.9	41	2.2	11.6	0.2	47	0.47	
3852707	Rock	1.04	1.2	85.2	176.3	133	15.3	34.2	14.0	819	3.22	1172.1	0.4	99.8	3.5	74	1.9	10.0	0.2	89	1.13	
3852708	Rock	1.97	3.6	19.6	86.1	132	25.5	17.1	5.6	535	2.03	836.9	0.7	55.0	2.9	41	2.7	15.5	0.3	24	0.33	
3852709	Rock	1.03	9.1	23.0	95.3	82	39.6	20.7	5.6	818	2.45	345.4	1.6	16.1	3.0	54	1.2	21.0	0.6	57	0.62	
3852710	Rock	1.33	3.8	76.3	90.6	220	24.4	50.5	14.3	1099	3.04	353.5	1.4	11.4	4.2	151	3.5	4.1	0.2	96	2.06	
3852711	Rock	0.91	1.5	3903.0	>10000	1467	>100	16.8	3.3	467	1.74	4328.0	0.1	1258.1	0.9	42	87.0	>2000	0.7	10	0.68	
3852712	Rock	0.45	4.5	192.0	58.7	26	26.9	3.8	17.6	216	3.61	12.5	1.1	4.3	3.3	96	0.2	17.8	0.2	51	1.01	
3852713	Rock	2.14	1.4	2401.1	>10000	4998	>100	4.8	0.7	148	1.97	>10000	0.2	2142.1	1.5	9	150.6	>2000	0.7	7	0.07	
3852714	Rock	0.95	1.0	28.7	42.6	45	10.9	6.5	6.4	1209	2.27	31.0	<0.1	6.7	0.2	203	0.6	8.0	<0.1	24	7.75	
3852715	Rock	1.19	0.9	31.6	35.0	65	7.6	10.4	23.2	1832	3.91	19.1	0.1	79.4	1.3	394	0.8	5.2	<0.1	49	9.25	
3852716	Rock	0.34	0.6	16.0	4.9	41	0.9	10.7	7.6	863	2.27	2.1	0.7	1.3	4.4	165	0.1	0.8	<0.1	50	8.65	
3852717	Rock	1.20	0.7	92.6	11.3	32	1.9	6.3	7.1	1807	3.75	4.2	<0.1	53.2	0.7	444	0.6	1.5	<0.1	38	13.45	
3852718	Rock	0.62	0.9	12.3	7.2	20	1.0	3.6	2.2	621	1.03	2.7	<0.1	4.6	0.3	109	0.3	0.9	<0.1	8	3.22	
3852719	Rock	1.36	2.1	14.7	17.8	23	2.3	5.4	9.8	805	1.87	4.9	1.1	421.4	8.1	30	0.3	1.8	1.0	6	1.19	
3852720	Rock	0.77	1.7	10.8	5.3	17	0.7	3.5	2.6	125	0.90	1.3	0.2	28.7	1.3	17	<0.1	0.6	<0.1	13	0.37	
3852721	Rock	1.55	1.3	38.9	9.6	86	0.5	13.1	17.2	595	4.24	1.2	2.0	0.9	4.5	59	0.2	0.4	<0.1	104	0.97	
3852722	Rock	0.85	1.3	5.3	4.3	14	0.4	3.0	14.6	271	1.24	0.8	0.3	1.1	1.0	243	<0.1	0.3	0.8	14	6.68	
3852723	Rock	1.45	2.0	16.3	10.3	72	0.3	38.6	17.6	1774	4.16	0.6	1.1	<0.5	2.4	389	0.2	0.3	0.1	72	7.96	
3852724	Rock	0.77	1.7	5.6	11.8	18	0.3	2.4	1.5	270	0.63	0.6	0.4	<0.5	1.2	3	0.1	0.1	0.3	4	0.06	
3852725	Rock	0.92	412.4	1879.3	12.8	29	33.4	3.0	6.3	79	3.25	2.0	3.7	40.8	6.1	68	0.9	6.0	60.6	28	0.31	
3852726	Rock	0.46	54.5	593.3	63.3	14	4.2	2.1	0.9	73	0.62	0.7	4.4	13.7	0.7	12	0.2	0.3	3.2	3	0.09	
3852727	Rock	0.16	>2000	6254.7	675.2	14	>100	2.5	0.5	52	2.97	3.9	0.9	60.0	0.5	8	15.4	2.8	1642.6	3	0.02	
3852728	Rock	0.33	>2000	>10000	15.7	19	38.4	1.7	1.6	39	5.14	1.1	1.9	21.9	0.8	2	7.5	0.5	38.1	3	<0.01	

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BUREAU VERITAS MINERAL LABORATORIES
Canada

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Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: Ryan Burke
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: October 25, 2021

Page: 4 of 6 Part: 2 of 3

CERTIFICATE OF ANALYSIS

WHI21000449.1

Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370	
Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu	
Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	
MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	0.001	0.001	
3852665	Rock	0.021	4	8	0.03	147	0.003	1	0.21	0.003	0.13	3.4	<0.01	1.3	<0.1	<0.05	<1	<0.5	<0.2		
3852666	Rock	0.003	6	7	<0.01	66	<0.001	<1	0.14	0.004	0.09	0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
3852701	Rock	0.115	7	54	1.58	54	0.186	2	1.61	0.008	0.31	1.7	<0.01	6.3	0.3	0.23	5	0.8	<0.2		
3852702	Rock	0.108	7	53	1.53	37	0.118	2	1.52	0.013	0.16	0.7	<0.01	5.4	0.2	0.21	5	0.9	<0.2		
3852703	Rock	0.097	7	45	1.30	47	0.176	3	1.48	0.014	0.26	2.1	0.01	5.3	0.2	0.45	5	0.8	<0.2		
3852704	Rock	0.051	9	23	1.20	39	0.065	3	1.25	0.014	0.20	0.7	<0.01	3.2	0.1	0.18	4	<0.5	<0.2		
3852705	Rock	0.078	7	27	0.71	37	0.109	2	0.89	0.006	0.20	1.3	<0.01	3.2	0.1	0.70	2	1.3	<0.2		
3852706	Rock	0.089	8	35	0.85	39	0.158	2	1.11	0.015	0.17	2.3	<0.01	3.9	0.1	0.88	4	1.2	<0.2		
3852707	Rock	0.091	8	56	1.55	36	0.135	1	1.64	0.032	0.09	1.2	<0.01	7.0	0.1	0.66	6	1.3	<0.2		
3852708	Rock	0.075	7	24	0.57	41	0.082	3	0.74	0.007	0.19	1.2	<0.01	2.5	0.1	0.43	2	1.1	<0.2		
3852709	Rock	0.113	8	42	0.93	37	0.181	2	1.12	0.003	0.18	2.4	<0.01	4.1	0.1	0.20	3	1.5	<0.2		
3852710	Rock	0.112	8	64	1.83	53	0.169	2	1.67	0.056	0.33	1.4	<0.01	5.8	0.5	1.15	6	0.8	<0.2		
3852711	Rock	0.008	1	13	0.24	14	0.002	2	0.29	0.002	0.02	<0.1	0.03	0.8	<0.1	1.31	1	40.1	0.3	<0.001	0.398
3852712	Rock	0.110	10	7	0.70	93	0.104	1	1.81	0.195	0.07	0.2	<0.01	3.0	<0.1	1.06	4	5.0	0.4		
3852713	Rock	0.007	1	11	0.09	23	0.029	1	0.23	0.001	0.08	0.5	0.03	0.6	0.1	1.61	1	20.2	<0.2	<0.001	0.246
3852714	Rock	0.010	2	5	0.98	17	0.003	<1	0.94	0.001	0.02	0.2	<0.01	2.4	<0.1	0.06	3	<0.5	<0.2		
3852715	Rock	0.062	7	5	1.91	125	0.008	1	2.15	0.005	0.20	0.7	<0.01	4.7	<0.1	0.19	5	<0.5	<0.2		
3852716	Rock	0.093	11	15	0.93	96	0.003	<1	1.24	0.031	0.18	<0.1	<0.01	2.7	<0.1	0.08	4	<0.5	<0.2		
3852717	Rock	0.011	3	4	1.19	30	0.005	<1	0.97	0.002	0.04	0.3	<0.01	6.4	<0.1	0.06	3	<0.5	<0.2		
3852718	Rock	0.011	2	7	0.41	38	0.001	<1	0.42	0.002	0.02	0.6	<0.01	0.8	<0.1	<0.05	1	<0.5	<0.2		
3852719	Rock	0.036	14	9	0.38	84	0.002	<1	0.37	0.025	0.17	0.1	<0.01	1.1	<0.1	0.77	1	<0.5	<0.2		
3852720	Rock	0.026	5	9	0.17	58	0.003	<1	0.28	0.021	0.03	<0.1	<0.01	1.1	<0.1	0.06	1	<0.5	<0.2		
3852721	Rock	0.199	22	29	0.95	87	0.013	<1	2.16	0.021	0.12	<0.1	<0.01	13.9	<0.1	0.06	7	<0.5	<0.2		
3852722	Rock	0.029	6	7	0.27	24	0.008	<1	0.30	0.008	0.03	<0.1	<0.01	0.8	<0.1	0.32	1	<0.5	<0.2		
3852723	Rock	0.078	18	38	2.98	78	0.002	<1	0.74	0.007	0.05	0.3	<0.01	7.5	<0.1	<0.05	2	<0.5	<0.2		
3852724	Rock	0.006	3	9	0.04	26	<0.001	<1	0.17	0.001	0.07	<0.1	<0.01	0.4	<0.1	<0.05	<1	<0.5	<0.2		
3852725	Rock	0.027	9	12	0.20	42	0.123	<1	0.45	0.020	0.11	1.5	0.05	3.1	<0.1	0.07	3	8.2	1.2		
3852726	Rock	0.001	<1	10	0.02	3	<0.001	<1	0.09	0.002	<0.01	96.4	0.02	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
3852727	Rock	0.002	<1	15	<0.01	195	<0.001	<1	0.07	0.001	0.03	3.7	0.02	0.2	<0.1	0.69	<1	19.6	15.0	0.615	0.654
3852728	Rock	0.002	<1	9	<0.01	48	<0.001	<1	0.07	0.002	0.02	9.6	0.04	0.4	<0.1	2.53	<1	31.9	5.2	0.301	2.531

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Project: PIKE
Report Date: October 25, 2021

Page: 4 of 6 Part: 3 of 3

CERTIFICATE OF ANALYSIS

WHI21000449.1

Method	Analyte	AQ370	FA530
		Pb	Ag
Unit		%	ppm
MDL		0.01	20
3852665	Rock		
3852666	Rock		
3852701	Rock		
3852702	Rock		114
3852703	Rock		
3852704	Rock		
3852705	Rock		
3852706	Rock		
3852707	Rock		
3852708	Rock		
3852709	Rock		
3852710	Rock		
3852711	Rock	1.98	>10000
3852712	Rock		
3852713	Rock	1.77	5120
3852714	Rock		
3852715	Rock		
3852716	Rock		
3852717	Rock		
3852718	Rock		
3852719	Rock		
3852720	Rock		
3852721	Rock		
3852722	Rock		
3852723	Rock		
3852724	Rock		
3852725	Rock		
3852726	Rock		
3852727	Rock	0.07	124
3852728	Rock	<0.01	

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CERTIFICATE OF ANALYSIS

WHI21000449.1

Method	Analyte	Unit	MDL	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	
				Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
				kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
				0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	
3852729	Rock			0.70	24.8	41.8	9.8	41	0.9	2.9	4.8	794	2.16	3.6	1.2	<0.5	3.9	15	0.6	2.8	5.9	10	0.54
3852730	Rock			0.54	1413.1	6289.8	140.2	9	36.4	1.6	0.9	42	3.13	1.2	0.7	12.8	1.0	4	4.8	1.0	338.5	2	<0.01
3852731	Rock			0.25	236.8	>10000	9.2	9	58.2	1.8	0.8	45	3.47	0.8	0.1	23.7	0.3	2	0.6	0.7	90.9	<1	0.01
3852732	Rock			0.42	>2000	174.1	4.9	9	1.1	1.7	0.4	71	0.46	0.9	1.3	0.6	0.6	2	4.4	0.2	4.1	2	0.04
3852733	Rock			0.80	1041.0	519.3	273.0	13	14.9	2.2	1.3	99	0.70	1.4	0.4	7.3	0.2	2	2.2	1.2	33.5	3	0.01
3852734	Rock			0.60	461.3	128.1	40.4	8	1.6	1.4	0.5	59	0.40	0.9	0.1	<0.5	<0.1	2	0.9	0.4	4.4	1	0.02
3852735	Rock			0.66	482.6	654.9	25.4	7	14.8	1.5	0.4	41	1.05	0.8	0.2	10.9	0.1	2	1.4	0.4	27.7	2	0.09
3852736	Rock			0.41	133.3	71.2	7.6	9	0.6	3.2	0.9	113	0.47	<0.5	0.2	<0.5	0.2	3	0.4	0.1	1.2	1	0.08
3852737	Rock			0.50	1395.0	2376.3	19.7	8	16.3	1.7	0.4	45	1.10	<0.5	0.2	5.7	0.2	4	4.3	0.5	22.2	1	0.03
3852738	Rock			0.77	953.9	61.7	2.3	5	0.3	1.6	0.2	35	0.38	<0.5	0.4	<0.5	<0.1	2	2.5	<0.1	0.6	<1	0.02
3852739	Rock			0.40	>2000	1313.0	149.2	21	60.2	2.4	2.9	59	1.69	4.6	1.1	19.5	0.9	13	31.7	1.0	1125.5	7	0.07
3852740	Rock			1.23	174.2	4507.7	257.5	96	42.8	1.2	1.4	709	0.80	<0.5	0.3	5.0	0.6	25	18.0	0.3	287.8	<1	3.81
3852741	Rock			1.65	1942.7	2498.4	55.6	30	21.9	1.6	0.9	200	0.81	0.6	0.3	19.0	0.1	7	6.8	1.0	270.0	<1	0.74
3852742	Rock			0.41	15.4	>10000	42.5	19	>100	4.4	9.7	67	5.02	6.7	<0.1	67.7	0.4	4	1.1	0.7	210.2	3	0.02
3852743	Rock			0.40	>2000	81.7	88.0	6	2.1	1.3	0.3	34	0.35	<0.5	0.7	1.1	0.1	3	6.0	0.1	6.6	9	0.04
3852744	Rock			0.97	6.4	95.5	7.7	21	3.0	7.7	3.2	895	2.50	34.3	0.2	25.6	0.8	3	0.1	1.8	1.9	12	0.03
3852745	Rock			1.81	16.9	108.6	9.4	94	1.7	99.5	21.0	916	4.20	38.5	1.5	5.2	5.4	38	0.3	4.9	1.0	177	2.29
3852746	Rock			1.29	8.1	116.7	11.1	80	2.4	99.2	20.0	971	3.76	41.4	2.1	5.6	7.0	25	0.3	6.0	0.6	172	1.79
3852747	Rock			1.08	12.0	59.7	4.3	29	0.6	13.3	2.6	221	1.92	8.8	2.3	<0.5	3.6	8	0.4	0.9	0.6	117	0.34
3852748	Rock			1.23	8.1	109.5	3.5	25	0.7	37.8	6.7	390	2.71	5.4	1.4	1.2	2.8	30	<0.1	0.8	0.8	135	0.56
3852749	Rock			0.69	4.4	14.5	11.8	12	1.4	1.5	0.5	66	1.06	48.8	1.0	17.0	7.3	6	<0.1	3.3	0.4	2	0.07
3852750	Rock			1.45	3.5	87.4	5.0	164	0.6	19.3	6.3	>10000	2.52	9.2	0.7	<0.5	1.2	19	1.2	0.8	0.7	11	1.16
3852751	Rock			1.89	4.5	49.5	331.6	206	61.7	34.3	16.4	1939	2.95	1417.2	1.4	62.1	3.3	16	4.5	17.6	0.5	45	0.24
3852752	Rock			2.06	3.7	64.5	349.7	219	82.7	26.2	11.2	1429	2.75	1196.4	1.6	51.0	3.2	22	4.1	24.3	0.4	44	0.27
3852753	Rock			1.84	4.4	83.2	369.6	337	>100	25.2	10.2	1698	2.37	958.4	1.1	56.7	3.0	18	6.0	51.1	0.4	38	0.20
3852754	Rock			2.48	5.4	101.5	404.4	257	>100	32.9	9.3	1116	3.20	1017.7	1.5	53.2	3.8	26	3.3	51.1	0.6	57	0.31
3852755	Rock			2.03	4.8	59.7	162.9	201	32.4	25.7	7.7	1051	2.78	647.4	1.3	28.3	3.8	23	2.1	20.0	0.4	49	0.26
3852756	Rock			0.60	2.3	90.2	73.8	142	23.1	24.7	10.9	1030	4.20	771.6	3.0	28.7	4.9	32	2.7	12.9	0.4	67	0.49
3852757	Rock			1.04	4.4	152.7	2798.6	106	>100	4.3	0.6	164	1.37	5395.4	0.4	483.8	1.0	14	5.3	244.6	1.1	10	0.03
3852758	Rock			1.34	3.7	258.5	7319.8	118	>100	4.0	0.6	130	1.87	4693.0	0.5	558.1	1.0	28	1.5	852.2	2.5	14	0.03



CERTIFICATE OF ANALYSIS

WHI21000449.1

Table with columns: Method, Analyte, Unit, MDL, and 20 elements (P, La, Cr, Mg, Ba, Ti, B, Al, Na, K, W, Hg, Sc, Tl, S, Ga, Se, Te, Mo, Cu) with their respective values for each sample ID (3852729 to 3852758).



Bureau Veritas Commodities Canada Ltd.

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Project: PIKE
Report Date: October 25, 2021

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CERTIFICATE OF ANALYSIS

WHI21000449.1

Method	AQ370	FA530
Analyte	Pb	Ag
Unit	%	ppm
MDL	0.01	20
3852729	Rock	
3852730	Rock	
3852731	Rock	<0.01
3852732	Rock	<0.01
3852733	Rock	
3852734	Rock	
3852735	Rock	
3852736	Rock	
3852737	Rock	
3852738	Rock	
3852739	Rock	0.01
3852740	Rock	
3852741	Rock	
3852742	Rock	<0.01 173
3852743	Rock	<0.01
3852744	Rock	
3852745	Rock	
3852746	Rock	
3852747	Rock	
3852748	Rock	
3852749	Rock	
3852750	Rock	
3852751	Rock	
3852752	Rock	
3852753	Rock	115
3852754	Rock	100
3852755	Rock	
3852756	Rock	
3852757	Rock	508
3852758	Rock	1361

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this



Bureau Veritas Commodities Canada Ltd.

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CERTIFICATE OF ANALYSIS

WHI21000449.1

Method	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca		
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01	0.01	
3852759	Rock	0.34	2.4	59.2	42.8	41	4.1	22.4	7.8	243	1.41	47.7	0.4	4.4	5.0	9	0.7	2.7	0.6	37	0.27	
3852760	Rock	0.26	1.9	49.5	52.8	63	9.6	23.7	14.4	674	4.79	974.8	0.4	67.2	5.1	26	0.4	15.3	0.4	65	0.31	
3852761	Rock	0.67	3.7	52.4	146.1	47	30.2	15.1	8.1	399	2.19	2128.1	0.6	39.2	2.6	27	0.7	22.1	0.2	22	0.24	
3852762	Rock	1.15	3.1	48.0	78.9	117	43.1	22.4	7.4	479	2.23	1505.2	0.7	25.7	2.6	36	2.3	25.9	0.2	26	0.40	
3852763	Rock	0.95	3.1	297.8	679.7	2648	>100	23.9	7.2	548	2.36	6948.6	0.3	553.6	1.4	55	58.2	346.9	0.3	16	0.63	
3852764	Rock	1.63	2.7	222.6	708.7	1599	>100	9.3	2.4	140	1.11	4131.5	0.2	295.3	0.7	9	38.2	330.1	0.2	7	0.07	
3852765	Rock	1.17	3.5	40.4	217.6	183	83.5	5.2	1.5	95	1.43	1780.2	0.2	122.7	1.5	17	3.7	47.9	0.2	7	0.10	
3852766	Rock	0.89	1.5	39.2	4.7	24	1.0	2.7	2.7	2179	2.22	10.2	0.2	23.4	0.9	263	0.2	0.6	<0.1	13	8.83	
3852767	Rock	1.23	0.7	24.1	3.5	64	0.3	13.7	35.7	1335	4.05	4.9	0.2	5.6	0.8	186	0.2	0.2	<0.1	52	7.31	
3852768	Rock	1.57	0.8	22.6	4.0	40	0.2	9.6	10.8	600	3.08	1.6	0.3	1.9	1.8	114	0.1	0.1	0.2	63	2.62	
3852769	Rock	1.86	2.5	8.7	2.1	16	0.2	10.9	21.9	541	1.63	2.6	0.3	1.7	0.6	151	<0.1	0.2	0.5	11	3.44	
3852770	Rock	1.33	31.0	14.4	11.0	78	0.4	3.7	9.4	914	2.43	4.1	0.3	4.7	1.4	89	0.9	1.3	0.3	14	2.33	
3852771	Rock	1.39	2.3	27.6	3.5	16	1.4	6.0	2.2	147	0.75	11.0	0.1	2.9	1.0	12	0.2	0.6	<0.1	5	0.48	
3852772	Rock	1.39	5.5	6.2	14.0	31	0.3	3.3	4.2	482	1.57	1.6	0.9	1.9	6.5	67	0.4	1.5	0.1	11	1.58	
3852773	Rock	0.25	1707.2	1723.1	64.9	8	18.2	2.0	1.5	42	0.94	0.7	0.7	3.4	0.6	15	4.5	0.1	23.6	7	0.03	
3852774	Rock	0.19	389.3	3757.3	147.5	22	>100	3.2	1.9	96	5.80	<0.5	0.3	38.8	0.8	7	1.0	1.7	207.9	9	<0.01	
3852775	Rock	0.69	>2000	429.9	27.6	7	3.9	2.1	0.8	89	0.59	<0.5	1.6	1.5	0.8	5	6.6	0.4	4.4	13	0.03	
3852776	Rock	0.72	>2000	15.9	511.0	7	4.6	2.1	0.8	76	0.48	1.0	0.4	9.9	1.2	15	8.8	0.2	9.2	13	0.04	



Bureau Veritas Commodities Canada Ltd.

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Project: PIKE
Report Date: October 25, 2021

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CERTIFICATE OF ANALYSIS

WHI21000449.1

Method	Analyte	Unit	MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370	
				P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu
				%	ppm	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
				0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2	0.001	0.001	
3852759	Rock			0.034	12	31	0.97	44	0.012	<1	0.82	0.015	0.07	0.1	<0.01	2.7	<0.1	0.06	4	<0.5	<0.2		
3852760	Rock			0.140	9	51	1.12	42	0.142	2	1.26	0.023	0.20	1.7	<0.01	8.0	<0.1	1.60	5	2.1	<0.2		
3852761	Rock			0.059	5	22	0.45	30	0.109	4	0.70	0.003	0.27	2.5	<0.01	2.7	0.2	0.78	2	2.0	<0.2		
3852762	Rock			0.070	6	23	0.58	33	0.114	3	0.83	0.006	0.25	2.4	<0.01	3.0	0.2	0.81	2	1.4	<0.2		
3852763	Rock			0.044	3	20	0.35	29	0.051	2	0.47	0.002	0.17	0.9	0.01	1.9	0.1	1.58	2	2.3	<0.2		
3852764	Rock			0.019	2	13	0.10	13	0.021	2	0.19	0.001	0.07	0.5	<0.01	0.7	<0.1	0.59	<1	1.9	<0.2		
3852765	Rock			0.033	4	11	0.13	29	0.050	2	0.32	0.004	0.17	1.3	<0.01	0.9	0.1	0.43	1	1.5	<0.2		
3852766	Rock			0.010	5	7	0.66	49	0.001	<1	0.45	0.006	0.06	0.2	<0.01	1.4	<0.1	<0.05	2	<0.5	<0.2		
3852767	Rock			0.098	5	4	2.00	143	0.006	<1	2.58	0.007	0.30	0.1	<0.01	4.9	<0.1	0.31	6	<0.5	<0.2		
3852768	Rock			0.083	11	7	1.29	150	0.006	1	1.56	0.031	0.20	<0.1	<0.01	6.0	<0.1	<0.05	5	<0.5	<0.2		
3852769	Rock			0.002	4	9	1.55	22	<0.001	<1	0.04	0.003	<0.01	0.1	<0.01	0.8	<0.1	<0.05	<1	<0.5	<0.2		
3852770	Rock			0.012	6	5	0.57	52	0.027	2	0.74	0.007	0.02	1.1	<0.01	1.3	<0.1	0.11	3	<0.5	<0.2		
3852771	Rock			0.019	4	13	0.19	16	0.002	<1	0.18	0.001	0.02	0.1	<0.01	0.4	<0.1	<0.05	<1	<0.5	<0.2		
3852772	Rock			0.021	10	7	0.64	59	0.001	3	0.84	0.003	0.19	0.1	<0.01	1.9	<0.1	<0.05	2	<0.5	<0.2		
3852773	Rock			0.001	2	9	0.02	217	<0.001	<1	0.06	0.001	0.02	0.4	<0.01	0.1	<0.1	0.18	<1	1.6	0.5		
3852774	Rock			0.003	1	12	<0.01	468	<0.001	<1	0.09	<0.001	0.01	0.2	0.01	1.3	<0.1	0.18	<1	20.3	3.9		
3852775	Rock			0.002	2	10	<0.01	206	<0.001	1	0.08	0.002	0.06	0.1	<0.01	0.2	<0.1	0.26	<1	3.9	0.2	0.388	0.039
3852776	Rock			0.003	5	9	<0.01	582	<0.001	<1	0.06	0.001	0.04	1.2	0.02	0.2	<0.1	0.19	<1	2.9	1.1	0.370	0.001



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CERTIFICATE OF ANALYSIS

WHI21000449.1

Method	Analyte	AQ370	FA530
		Pb	Ag
Unit		%	ppm
MDL		0.01	20
3852759	Rock		
3852760	Rock		
3852761	Rock		
3852762	Rock		
3852763	Rock		483
3852764	Rock		472
3852765	Rock		
3852766	Rock		
3852767	Rock		
3852768	Rock		
3852769	Rock		
3852770	Rock		
3852771	Rock		
3852772	Rock		
3852773	Rock		
3852774	Rock		223
3852775	Rock	<0.01	
3852776	Rock	0.05	



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QUALITY CONTROL REPORT

WHI21000449.1

MethodAnalyte	Unit	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
MDL		Wgt kg	Moppm	Cuppm	Pbppm	Zn ppm	Agppm	Nippm	Coppm	Mn ppm	Fe %0.01	Asppm	U Au ppb	Thppm	Srppm	Cdppm	Sbppm	Bippm	V ppm	Ca %0.01	
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.5	0.5	0.1	1	0.1	0.1	0.1	0.1	1	1	
Pulp Duplicates																					
3852575	Rock	0.88	17.1	556.4	44.4	6	87.3	1.6	0.7	43	1.78	2.3	0.6	43.9	0.7	5	<0.1	0.5	192.7	8	0.06
REP 3852575	QC		18.1	558.7	45.7	6	86.8	1.6	0.7	43	1.80	2.8	0.6	17.7	0.7	5	<0.1	0.5	205.5	8	0.06
3852596	Rock	0.78	1.5	1362.3	2178.3	242	>100	30.3	9.3	799	2.88	2.0	0.8	1815.9	1.2	6	1.8	0.8	4.7	73	0.10
REP 3852596	QC																				
3852663	Rock	1.37	1.4	5.9	4.2	40	0.2	6.7	4.6	553	1.88	21.4	0.8	26.5	3.2	8	0.7	0.3	0.1	7	0.91
REP 3852663	QC		1.5	5.9	4.5	40	0.2	6.7	4.5	559	1.91	23.4	0.9	25.4	3.6	8	0.7	0.3	0.1	8	0.92
3852731	Rock	0.25	236.8	>10000	9.2	9	58.2	1.8	0.8	45	3.47	0.8	0.1	23.7	0.3	2	0.6	0.7	90.9	<1	0.01
REP 3852731	QC																				
3852732	Rock	0.42	>2000	174.1	4.9	9	1.1	1.7	0.4	71	0.46	0.9	1.3	0.6	0.6	2	4.4	0.2	4.1	2	0.04
REP 3852732	QC		>2000	178.5	5.5	10	1.1	1.7	0.4	69	0.47	0.7	1.3	1.2	0.6	2	4.6	0.3	4.3	2	0.04
3852767	Rock	1.23	0.7	24.1	3.5	64	0.3	13.7	35.7	1335	4.05	4.9	0.2	5.6	0.8	186	0.2	0.2	<0.1	52	7.31
REP 3852767	QC		0.6	24.5	3.3	63	0.2	13.0	35.5	1329	4.05	3.8	0.2	4.7	0.7	178	0.3	0.2	<0.1	53	7.21
Core Reject Duplicates																					
3852552	Rock	1.54	2.3	87.7	13.0	47	1.5	23.1	8.3	482	4.14	10.5	1.0	2.3	3.3	13	<0.1	1.3	0.1	110	0.60
DUP 3852552	QC		2.4	86.7	12.9	45	1.5	23.3	8.2	478	4.12	10.3	1.0	3.0	3.2	13	<0.1	1.4	0.1	109	0.60
3852708	Rock	1.97	3.6	19.6	86.1	132	25.5	17.1	5.6	535	2.03	836.9	0.7	55.0	2.9	41	2.7	15.5	0.3	24	0.33
DUP 3852708	QC		3.2	15.9	82.7	132	25.4	16.7	5.4	534	1.98	837.7	0.7	58.7	2.8	40	2.8	14.8	0.3	24	0.32
3852776	Rock	0.72	>2000	15.9	511.0	7	4.6	2.1	0.8	76	0.48	1.0	0.4	9.9	1.2	15	8.8	0.2	9.2	13	0.04
DUP 3852776	QC		>2000	12.3	504.6	4	4.4	1.9	0.8	82	0.49	<0.5	0.5	8.7	1.2	14	8.6	0.2	8.9	13	0.04
Reference Materials																					
STD AGPROOF	Standard																				
STD AGPROOF	Standard																				
STD AGPROOF	Standard																				
STD BVGEO01	Standard		11.7	4618.7	189.8	1862	2.5	160.2	27.2	753	3.83	123.3	3.9	221.4	17.4	64	6.3	3.2	25.8	67	1.40
STD BVGEO01	Standard		10.7	4419.0	182.3	1763	2.6	161.0	24.8	736	3.67	126.9	3.8	211.2	15.8	60	6.6	3.0	24.9	73	1.36
STD CDN-ME-9A	Standard																				
STD CDN-ME-14A	Standard																				
STD CDN-ME-9A	Standard																				



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QUALITY CONTROL REPORT

WHI21000449.1

MethodAnalyte	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
Unit	P	Lppm	Crppm	Mg	Bppm	Ti	B	Al	Na	K	W	Hg	ppm	Scppm	Tippm	S	Gppm	Seppm	Teppm	Mo	C	
MDL	%0.001	1	1	%0.01	1	%0.001	ppm	%0.01	%0.001	%0.01	ppm0.1	0.01	0.1	0.1	%0.05	1	0.5	0.2	%0.001	%0.001		
							1															
Pulp Duplicates																						
3852575	Rock	0.002	<1	8	0.02	3	0.008	<1	0.09	0.002	<0.01	0.4	<0.01	0.3	<0.1	<0.05	1	2.8	9.3			
REP 3852575	QC	0.001	<1	8	0.02	3	0.008	<1	0.09	0.002	<0.01	0.4	<0.01	0.3	<0.1	<0.05	1	3.7	9.0			
3852596	Rock	0.051	7	27	0.52	68	0.002	2	0.81	0.003	0.11	0.3	0.29	4.0	<0.1	<0.05	2	<0.5	<0.2			
REP 3852596	QC																					
3852663	Rock	0.018	6	9	0.19	79	<0.001	1	0.35	0.003	0.17	0.1	<0.01	1.7	<0.1	<0.05	<1	<0.5	<0.2			
REP 3852663	QC	0.017	7	9	0.19	85	<0.001	1	0.36	0.003	0.17	0.1	<0.01	1.8	<0.1	<0.05	<1	<0.5	<0.2			
3852731	Rock	0.002	<1	9	<0.01	97	<0.001	<1	0.04	<0.001	0.02	0.6	<0.01	0.2	<0.1	1.41	<1	23.2	5.3	0.025	1.58	
REP 3852731	QC																			0.025	1.59	
3852732	Rock	0.001	2	9	<0.01	74	<0.001	<1	0.05	<0.001	0.03	0.4	<0.01	0.2	<0.1	0.20	<1	1.4	<0.2	0.330	0.01	
REP 3852732	QC	<0.001	2	9	<0.01	76	<0.001	<1	0.05	<0.001	0.03	0.4	<0.01	0.2	<0.1	0.21	<1	1.6	<0.2			
3852767	Rock	0.098	5	4	2.00	143	0.006	<1	2.58	0.007	0.30	0.1	<0.01	4.9	<0.1	0.31	6	<0.5	<0.2			
REP 3852767	QC	0.096	5	4	1.97	138	0.005	1	2.49	0.006	0.30	0.1	<0.01	4.6	<0.1	0.31	6	<0.5	<0.2			
Core Reject Duplicates																						
3852552	Rock	0.114	6	65	1.55	63	0.188	<1	1.53	0.016	0.07	0.6	<0.01	7.4	<0.1	1.74	8	8.4	0.2			
DUP 3852552	QC	0.113	6	66	1.55	67	0.189	<1	1.55	0.017	0.07	0.6	<0.01	7.6	<0.1	1.75	8	7.5	<0.2			
3852708	Rock	0.075	7	24	0.57	41	0.082	3	0.74	0.007	0.19	1.2	<0.01	2.5	0.1	0.43	2	1.1	<0.2			
DUP 3852708	QC	0.074	6	22	0.57	39	0.080	2	0.72	0.006	0.18	1.1	<0.01	2.4	0.1	0.42	2	0.9	<0.2			
3852776	Rock	0.003	5	9	<0.01	582	<0.001	<1	0.06	0.001	0.04	1.2	0.02	0.2	<0.1	0.19	<1	2.9	1.1	0.370	0.00	
DUP 3852776	QC	0.003	4	9	<0.01	552	<0.001	<1	0.06	0.001	0.04	1.3	0.02	0.2	<0.1	0.19	<1	2.5	1.0	0.369	0.00	
Reference Materials																						
STD AGPROOF	Standard																					
STD AGPROOF	Standard																					
STD AGPROOF	Standard																					
STD BVGEO01	Standard	0.071	28	199	1.35	238	0.243	5	2.44	0.199	0.90	4.9	0.09	6.5	0.7	0.70	8	4.7	1.0			
STD BVGEO01	Standard	0.073	27	185	1.33	202	0.219	4	2.34	0.204	0.88	4.5	0.10	6.6	0.6	0.65	8	4.3	1.0			
STD CDN-ME-9A	Standard																			<0.001	0.66	
STD CDN-ME-14A	Standard																			0.002	1.22	
STD CDN-ME-9A	Standard																			<0.001	0.66	



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60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: October 25, 2021

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QUALITY CONTROL REPORT

WHI21000449.1

Method	Analyte	AQ370	FA530
Unit		Pb	Ag
MDL		%	ppm
		0.01	20
Pulp Duplicates			
3852575	Rock		
REP 3852575	QC		
3852596	Rock		821
REP 3852596	QC		833
3852663	Rock		
REP 3852663	QC		
3852731	Rock	<0.01	
REP 3852731	QC	<0.01	
3852732	Rock	<0.01	
REP 3852732	QC		
3852767	Rock		
REP 3852767	QC		
Core Reject Duplicates			
3852552	Rock		
DUP 3852552	QC		
3852708	Rock		
DUP 3852708	QC		
3852776	Rock	0.05	
DUP 3852776	QC	0.05	
Reference Materials			
STD AGPROOF	Standard		97
STD AGPROOF	Standard		99
STD AGPROOF	Standard		99
STD BVGEO01	Standard		
STD BVGEO01	Standard		
STD CDN-ME-9A	Standard	<0.01	
STD CDN-ME-14A	Standard	0.50	
STD CDN-ME-9A	Standard	<0.01	



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QUALITY CONTROL REPORT

WHI21000449.1

		WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		Wgt	Mo	Cu	Pb Zn	Ag	Ni	Co Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	C		
		kg	ppm	ppm	ppm ppm	ppm	ppm	ppm ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
		0.01	0.1	0.1	0.1 1	0.1	0.1	0.1 1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.0		
STD CDN-ME-14A	Standard																				
STD DS11	Standard		15.8	147.7	142.9	345	1.8	82.2	14.0	1066	3.16	45.3	2.8	69.0	9.4	74	2.0	8.3	12.0	49	1.1
STD DS11	Standard		15.2	142.2	138.2	319	1.6	75.5	13.2	1002	3.10	43.4	2.6	74.3	8.8	65	2.4	8.6	11.4	50	1.0
STD OREAS262	Standard		0.7	123.0	57.1	157	0.4	65.0	28.7	547	3.26	36.0	1.2	54.7	11.1	37	0.6	4.0	1.0	23	2.9
STD OREAS262	Standard		0.7	111.6	56.6	148	0.5	63.4	26.8	540	3.16	36.2	1.3	49.9	9.5	37	0.6	3.9	1.0	22	2.9
STD OREAS262	Standard		0.6	111.9	55.6	149	0.5	62.1	27.0	542	3.20	37.7	1.2	53.6	9.7	35	0.6	3.7	1.0	22	3.0
STD OREAS262	Standard		0.7	114.8	56.3	145	0.5	62.9	28.0	530	3.27	38.1	1.2	68.8	9.2	36	0.6	6.2	1.1	22	2.9
STD OXQ132	Standard																				
STD OXQ132	Standard																				
STD OXQ132	Standard																				
STD OXQ132	Standard																				
STD OXQ132	Standard																				
STD BVGEO01 Expected			11.2	4415	187	1741	2.53	163	25	733	3.7	121	3.77	219	14.4	55	6.5	3.39	25.6	73	1.321
STD DS11 Expected			14.6	149	138	345	1.71	77.7	14.2	1055	3.1	42.8	2.59	79	7.65	67.3	2.37	8.74	12.2	50	1.06
STD OREAS262 Expected			0.68	118	56	154	0.45	62	26.9	530	3.284	35.8	1.22	65	9.33	36	0.61	5.06	1.03	22.5	2.9
STD CDN-ME-9A Expected																					
STD CDN-ME-14A Expected																					
STD AGPROOF Expected																					
STD OXQ132 Expected																					
BLK	Blank		0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.0
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.0
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.0
BLK	Blank		<0.1	0.2	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.0
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				



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Project: PIKE
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QUALITY CONTROL REPORT

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		AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu		
		%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	%
		0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	0.001	0.001		
STD CDN-ME-14A	Standard																					0.002	1.23
STD DS11	Standard	0.068	20	61	0.87	381	0.100	6	1.19	0.077	0.41	3.0	0.29	3.4	5.1	0.28	5	2.8	4.5				
STD DS11	Standard	0.068	19	58	0.83	365	0.092	8	1.18	0.076	0.40	2.9	0.24	3.4	5.0	0.28	5	1.8	4.6				
STD OREAS262	Standard	0.039	18	46	1.17	251	0.003	4	1.37	0.067	0.33	0.2	0.17	3.4	0.4	0.26	4	<0.5	<0.2				
STD OREAS262	Standard	0.039	17	44	1.16	250	0.003	2	1.35	0.067	0.32	0.1	0.18	3.4	0.4	0.25	4	<0.5	<0.2				
STD OREAS262	Standard	0.041	17	44	1.17	246	0.003	5	1.36	0.068	0.32	0.2	0.16	3.2	0.5	0.26	4	0.6	0.2				
STD OREAS262	Standard	0.038	18	45	1.17	258	0.003	4	1.39	0.069	0.32	0.2	0.15	3.4	0.5	0.26	4	<0.5	0.2				
STD OXQ132	Standard																						
STD OXQ132	Standard																						
STD OXQ132	Standard																						
STD OXQ132	Standard																						
STD OXQ132	Standard																						
STD BVGEO01 Expected		0.0727	25.9	187	1.2963	260	0.233	3.8	2.347	0.1924	0.89	5.3	0.1	5.97	0.62	0.6655	7.37	4.84	1.02				
STD DS11 Expected		0.0701	18.6	61.5	0.85	385	0.0976		1.1795	0.0762	0.4	2.9	0.26	3.4	4.9	0.2835	5.1	2.2	4.56				
STD OREAS262 Expected		0.04	15.9	41.7	1.17	248	0.0027	4	1.3	0.071	0.312	0.2	0.17	3.24	0.47	0.253	4.1	0.4	0.23				
STD CDN-ME-9A Expected																					0.00033	0.65	
STD CDN-ME-14A Expected																					0.0015	1.24	
STD AGPROOF Expected																							
STD OXQ132 Expected																							
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2				
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2				
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2				
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2				
BLK	Blank																				<0.001	<0.001	
BLK	Blank																				<0.001	<0.001	
BLK	Blank																						
BLK	Blank																						
BLK	Blank																						

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this



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60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: October 25, 2021

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QUALITY CONTROL REPORT

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		AQ370	FA530
		Pb	Ag
		%	ppm
		0.01	20
STD CDN-ME-14A	Standard	0.50	
STD DS11	Standard		
STD DS11	Standard		
STD OREAS262	Standard		
STD OREAS262	Standard		
STD OREAS262	Standard		
STD OREAS262	Standard		
STD OXQ132	Standard		131
STD OXQ132	Standard		128
STD OXQ132	Standard		130
STD OXQ132	Standard		133
STD OXQ132	Standard		116
STD OXQ132	Standard		135
STD BVGEO01	Expected		
STD DS11	Expected		
STD OREAS262	Expected		
STD CDN-ME-9A	Expected	0.003	
STD CDN-ME-14A	Expected	0.488	
STD AGPROOF	Expected		96
STD OXQ132	Expected		128.5
BLK	Blank		
BLK	Blank		
BLK	Blank		
BLK	Blank		
BLK	Blank	<0.01	
BLK	Blank		<20
BLK	Blank	<0.01	
BLK	Blank		<20
BLK	Blank		<20

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QUALITY CONTROL REPORT

WHI21000449.1

		WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		Wgt	Mo	Cuppm	Pbppm	Zn ppm	Agppm	Nippm	Coppm	Mn	Fe	Asppm	U Au	ppb	Thppm	Srppm	Cdppm	Sbppm	Bippm	V	Ca
		kg	ppm	0.1	0.1	1	0.1	0.1	0.1	ppm	%0.01	0.5	ppm0.1	0.5	0.1	1	0.1	0.1	0.1	ppm	%0.01
		0.01	0.1							1										1	
Prep Wash																					
ROCK-WHI	Prep Blank		1.7	5.2	1.4	31	<0.1	2.1	3.5	475	1.83	1.1	0.5	1.2	2.6	22	<0.1	0.1	<0.1	22	0.56
ROCK-WHI	Prep Blank		1.6	4.7	1.9	28	<0.1	1.7	3.4	447	1.79	1.0	0.5	<0.5	2.6	21	<0.1	<0.1	<0.1	22	0.56



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Project: PIKE
Report Date: October 25, 2021

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QUALITY CONTROL REPORT

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		AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
		P	Lappm	Crppm	Mg	Bappm	Ti	B	Al	Na	K	W	Hg	ppm	Scppm	Tippm	S	Gappm	Seppm	Teppm	Mo	Cu
Prep Wash		%0.001	1	1	%0.01	1	%0.001	ppm	%0.01	%0.001	%0.01	ppm	0.1	0.01	0.1	0.1	%0.05	1	0.5	0.2	%0.001	%0.001
ROCK-WHI		0.040	7	8	0.47	54	0.081	<1	0.78	0.074	0.08	0.1	<0.01	2.7	<0.1	<0.05	4	<0.5	<0.2			
ROCK-WHI		0.039	7	7	0.44	48	0.084	1	0.78	0.079	0.08	<0.1	<0.01	2.7	<0.1	<0.05	4	<0.5	<0.2			



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QUALITY CONTROL REPORT

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		AQ370	FA530
		Pb	Ag
		%	ppm
		0.01	20
Prep Wash			
ROCK-WHI	Prep Blank		
ROCK-WHI	Prep Blank		



Bureau Veritas Commodities Canada Ltd.

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Submitted By: Ryan Burke Canada-
Receiving Lab: Whitehorse August 31,
Received: 2021

Analysis Start: October 06, 2021

Report Date: November 08, 2021

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CERTIFICATE OF ANALYSIS

WHI21000449.2

CLIENT JOB INFORMATION

Project: PIKE
Shipment ID:
P.O. Number Number
of Samples: 138
Procedure Code
PRP70-250
AQ201
SHP01

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
	138	Crush, split and pulverize 250 g rock to 200 mesh			WHI
	138	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN
	138	Per sample shipping charges for branch shipments			VAN
AQ370	19	1:1:1 Aqua Regia Digestion ICP-ES Finish	1	Completed	VAN
FA530	17	Lead collection fire assay 30G fusion - Grav finish	30	Completed	VAN
FA501	1	Fire Assay on CON Samples	2	Completed	VAN
GC817	2	Lead Assay by Classical Titration	0.5	Completed	VAN

SAMPLE DISPOSAL

IMM-PLP Return immediately after analysis
PICKUP-RJT Client to Pickup Rejects

ADDITIONAL COMMENTS

Version 2 : FA501-Ag and GC817-Pb included.

Invoice To: Ryan Burke
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3
Canada

CC: Michael Burke


SOFIA DEVOTA
XRF Manager



Bureau Veritas Commodities Canada Ltd.

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PHONE (604) 253-3158

Project: PIKE
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CERTIFICATE OF ANALYSIS

WHI21000449.2

Method	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01	
3852551	Rock	0.88	9.3	21.3	3.1	17	0.6	7.6	1.6	102	1.26	4.1	1.1	0.7	3.5	6	0.1	0.4	0.2	65	0.26
3852552	Rock	1.54	2.3	87.7	13.0	47	1.5	23.1	8.3	482	4.14	10.5	1.0	2.3	3.3	13	<0.1	1.3	0.1	110	0.60
3852553	Rock	0.70	1.7	2.3	8.8	65	0.1	2.9	6.0	1073	2.69	2.6	1.5	<0.5	7.1	56	0.1	<0.1	0.2	24	3.10
3852554	Rock	0.56	0.7	20.9	9.6	88	0.2	14.9	21.9	1203	4.75	1.5	0.6	1.1	3.7	96	0.3	0.1	<0.1	102	3.62
3852555	Rock	0.51	2.1	7.2	7.4	23	<0.1	3.2	5.2	819	1.76	0.7	0.1	12.5	1.0	21	0.2	0.2	<0.1	14	0.34
3852556	Rock	0.38	82.7	5.5	2.3	9	0.2	4.8	6.1	79	0.83	0.6	<0.1	<0.5	1.1	10	0.1	<0.1	1.3	6	0.17
3852557	Rock	0.38	1.2	11.8	4.7	47	0.2	10.2	32.9	403	3.56	0.8	0.7	0.9	4.9	28	<0.1	<0.1	4.3	71	0.65
3852559	Rock	0.35	16.0	56.1	51.8	11	1.9	3.1	3.6	43	1.74	0.6	0.2	19.1	1.0	17	0.1	<0.1	1.7	3	0.02
3852560	Rock	0.30	48.1	34.5	58.1	14	2.7	3.5	7.3	40	1.83	1.3	0.3	39.5	0.9	23	0.3	<0.1	2.8	3	0.01
3852561	Rock	0.83	13.6	96.9	95.2	13	2.1	4.2	6.9	153	1.75	1.2	0.4	20.5	2.2	20	0.6	<0.1	2.2	3	0.42
3852562	Rock	0.86	2.8	1273.8	>10000	255	18.2	1.9	0.6	55	0.72	<0.5	1.1	33.0	0.4	3	6.1	5.4	2.9	2	0.04
3852563	Rock	0.42	1.9	40.3	>10000	21	8.8	1.5	1.2	38	0.54	<0.5	1.3	42.2	0.2	3	3.4	1.7	4.3	3	0.02
3852564	Rock	1.05	1.9	261.8	>10000	260	24.6	2.6	0.6	205	0.88	<0.5	0.6	97.3	0.2	18	13.9	4.3	0.3	2	0.71
3852565	Rock	0.62	8.8	2032.2	>10000	3548	41.8	3.8	2.2	77	1.03	<0.5	4.1	317.2	0.2	11	96.7	14.9	0.7	2	0.03
3852566	Rock	0.63	15.6	6076.2	>10000	2823	59.9	5.7	3.4	94	1.65	<0.5	12.9	676.0	0.3	15	61.4	1.8	2.4	6	0.05
3852567	Rock	0.61	59.6	2672.1	>10000	3239	67.9	7.6	5.5	203	1.94	<0.5	38.1	2323.7	1.9	69	63.3	4.4	1.0	17	0.24
3852568	Rock	0.83	7.8	30.0	1943.2	51	1.3	24.8	38.0	214	5.11	1.0	1.0	9.6	6.3	29	0.2	0.1	37.3	39	0.38
3852569	Rock	0.91	1.8	18.0	1517.4	31	36.3	10.2	7.9	809	1.87	<0.5	1.1	34.8	0.7	107	1.7	<0.1	279.9	9	6.55
3852570	Rock	0.75	0.2	3.5	28.5	9	0.1	1.9	2.8	4611	0.92	0.7	0.5	<0.5	0.2	553	0.2	<0.1	0.6	6	35.55
3852571	Rock	0.83	4.1	107.3	73.5	757	1.1	4.6	5.5	516	1.51	13.7	<0.1	10.4	0.2	98	15.2	<0.1	2.1	21	4.97
3852572	Rock	0.74	1.4	38.2	64.5	47	7.6	3.3	0.8	501	0.86	6.3	0.4	2.6	0.8	6	1.2	0.5	4.3	7	0.18
3852573	Rock	0.91	1004.7	5567.0	130.1	49	58.0	3.2	5.4	222	1.89	3.0	1.5	37.6	3.1	32	3.1	6.3	43.8	25	0.54
3852574	Rock	0.37	5.3	46.4	29.0	96	0.5	20.1	10.7	682	2.53	17.1	1.6	<0.5	4.4	81	0.7	0.2	0.4	90	1.26
3852575	Rock	0.88	17.1	556.4	44.4	6	87.3	1.6	0.7	43	1.78	2.3	0.6	43.9	0.7	5	<0.1	0.5	192.7	8	0.06
3852576	Rock	1.05	2.5	59.2	312.8	167	41.7	3.9	0.6	228	0.84	21.9	0.3	22.3	0.5	4	1.7	11.3	0.9	7	0.02
3852577	Rock	1.00	694.1	839.5	466.7	7	>100	1.6	0.7	33	1.78	2.1	0.8	85.1	0.4	10	2.9	1.8	977.7	5	0.07
3852578	Rock	0.47	3.7	13.7	16.7	76	2.0	19.5	14.7	646	4.02	0.9	0.8	<0.5	2.6	157	0.2	0.1	4.3	89	1.61
3852579	Rock	3.35	977.3	3655.6	21.3	46	15.9	5.5	9.6	330	2.48	<0.5	14.2	56.3	16.5	34	1.4	0.1	154.2	58	0.44
3852580	Rock	4.60	1034.1	6419.8	42.5	72	32.4	11.4	8.9	333	2.44	<0.5	3.8	120.3	6.3	81	2.1	0.6	1322.8	30	0.44
3852581	Rock	1.41	>2000	3936.3	196.2	44	>100	2.1	3.2	51	6.24	<0.5	3.0	732.1	3.5	30	5.5	2.4	>2000	25	0.11

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Bureau Veritas Commodities Canada Ltd.

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PHONE (604) 253-3158

Project: PIKE
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CERTIFICATE OF ANALYSIS

WHI21000449.2

Method	Analyte	Unit	MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370	
				P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu
				%	ppm	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	%	%	%	
3852551	Rock			0.124	7	29	0.32	368	0.022	<1	0.47	0.011	0.13	0.4	<0.01	1.3	<0.1	0.32	3	7.1	<0.2		
3852552	Rock			0.114	6	65	1.55	63	0.188	<1	1.53	0.016	0.07	0.6	<0.01	7.4	<0.1	1.74	8	8.4	0.2		
3852553	Rock			0.045	20	5	0.22	422	0.001	<1	0.64	0.002	0.17	<0.1	<0.01	6.8	<0.1	<0.05	3	<0.5	<0.2		
3852554	Rock			0.148	26	29	2.22	105	0.009	<1	2.53	0.031	0.22	<0.1	<0.01	9.7	<0.1	0.33	9	<0.5	<0.2		
3852555	Rock			0.017	3	9	0.56	49	0.007	<1	0.56	0.008	0.05	0.3	<0.01	1.3	<0.1	0.08	2	<0.5	<0.2		
3852556	Rock			0.008	2	11	0.13	27	0.005	<1	0.20	0.006	0.02	<0.1	<0.01	0.4	<0.1	0.18	<1	<0.5	0.4		
3852557	Rock			0.120	11	5	1.28	79	0.164	<1	1.44	0.051	0.12	8.3	<0.01	5.6	<0.1	0.94	6	<0.5	1.6		
3852559	Rock			0.006	2	9	0.01	124	0.002	<1	0.13	0.001	0.07	0.2	<0.01	<0.1	<0.1	0.57	<1	<0.5	0.4		
3852560	Rock			0.003	3	6	0.01	132	0.001	<1	0.13	0.002	0.06	<0.1	<0.01	<0.1	<0.1	0.53	<1	0.5	0.5		
3852561	Rock			0.006	11	7	0.01	54	<0.001	<1	0.15	<0.001	0.10	<0.1	<0.01	<0.1	<0.1	1.16	<1	<0.5	0.4		
3852562	Rock			0.004	<1	7	0.05	17	0.002	<1	0.07	0.001	0.01	<0.1	0.02	<0.1	<0.1	0.59	<1	3.5	1.4	<0.001	0.121
3852563	Rock			0.003	<1	4	0.04	16	0.001	<1	0.10	<0.001	0.02	<0.1	<0.01	<0.1	<0.1	0.41	<1	5.3	1.6	<0.001	0.005
3852564	Rock			0.002	2	7	0.07	5	<0.001	<1	0.07	0.001	<0.01	0.5	<0.01	0.2	<0.1	0.66	<1	<0.5	0.3	<0.001	0.028
3852565	Rock			0.007	<1	8	0.09	23	0.002	<1	0.10	0.001	0.01	0.1	0.05	0.2	<0.1	1.71	<1	6.2	2.1	<0.001	0.197
3852566	Rock			0.016	1	13	0.23	40	0.003	<1	0.26	0.001	0.02	<0.1	0.09	0.4	<0.1	0.74	<1	5.8	4.8	0.001	0.588
3852567	Rock			0.124	7	17	0.72	84	0.004	<1	0.93	0.003	0.16	<0.1	0.12	2.1	<0.1	0.42	2	12.8	3.6	0.006	0.267
3852568	Rock			0.074	10	13	0.80	35	0.139	<1	0.95	0.053	0.10	11.5	<0.01	1.7	<0.1	3.64	3	1.3	10.5		
3852569	Rock			0.011	14	11	0.58	17	<0.001	<1	0.14	0.002	0.04	1.0	0.13	0.9	<0.1	0.77	<1	0.8	9.3		
3852570	Rock			0.001	14	<1	0.63	40	<0.001	<1	0.08	0.001	<0.01	<0.1	<0.01	1.4	<0.1	<0.05	<1	0.8	<0.2		
3852571	Rock			0.004	1	14	1.12	10	0.002	<1	0.94	0.001	0.03	0.1	0.01	1.7	<0.1	0.21	3	<0.5	<0.2		
3852572	Rock			0.006	2	7	0.17	25	0.005	<1	0.31	0.001	0.05	0.1	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2		
3852573	Rock			0.007	3	9	0.24	25	0.054	<1	0.66	0.019	0.03	3.5	0.02	1.5	<0.1	0.12	2	4.0	1.3		
3852574	Rock			0.101	15	23	1.57	124	0.041	<1	2.02	0.114	0.09	0.2	<0.01	3.8	<0.1	<0.05	7	<0.5	<0.2		
3852575	Rock			0.002	<1	8	0.02	3	0.008	<1	0.09	0.002	<0.01	0.4	<0.01	0.3	<0.1	<0.05	1	2.8	9.3		
3852576	Rock			0.008	2	8	0.14	5	0.002	<1	0.14	0.001	<0.01	<0.1	<0.01	0.2	<0.1	0.10	<1	1.8	<0.2		
3852577	Rock			0.001	<1	8	<0.01	3	0.006	<1	0.06	0.001	<0.01	>100	<0.01	0.2	<0.1	0.12	<1	48.4	25.0		
3852578	Rock			0.156	20	73	1.82	211	0.149	<1	2.56	0.301	0.07	0.3	<0.01	3.3	<0.1	<0.05	9	<0.5	<0.2		
3852579	Rock			0.048	23	14	0.89	86	0.122	<1	1.10	0.041	0.13	>100	<0.01	4.2	<0.1	0.26	5	4.4	2.0		
3852580	Rock			0.045	9	13	0.76	84	0.090	<1	1.08	0.046	0.08	1.0	0.02	3.0	<0.1	0.10	4	9.2	4.1		
3852581	Rock			0.016	3	6	0.03	84	0.031	<1	0.24	0.041	0.05	2.1	0.04	1.0	<0.1	0.22	1	53.4	13.1	0.415	0.386



Bureau Veritas Commodities Canada Ltd.

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Client: **Ryan Burke**
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: November 08, 2021

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CERTIFICATE OF ANALYSIS

WHI21000449.2

Method	AQ370	FA530	FA501	GC817
Analyte	Pb	Ag	Ag	Pb
Unit	%	ppm	%	%
MDL	0.01	20	0.001	2
3852551	Rock			
3852552	Rock			
3852553	Rock			
3852554	Rock			
3852555	Rock			
3852556	Rock			
3852557	Rock			
3852559	Rock			
3852560	Rock			
3852561	Rock			
3852562	Rock	2.86		
3852563	Rock	2.89		
3852564	Rock	3.82		
3852565	Rock	>4		8.74
3852566	Rock	3.60		
3852567	Rock	>4		18.33
3852568	Rock			
3852569	Rock			
3852570	Rock			
3852571	Rock			
3852572	Rock			
3852573	Rock			
3852574	Rock			
3852575	Rock			
3852576	Rock			
3852577	Rock	472		
3852578	Rock			
3852579	Rock			
3852580	Rock			
3852581	Rock	0.03	185	

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CERTIFICATE OF ANALYSIS

WHI21000449.2

Method	Analyte	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Unit		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
MDL		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01	
3852582	Rock	1.48	540.9	4542.6	75.6	31	63.2	5.6	5.7	142	1.94	<0.5	7.7	138.6	1.7	53	1.1	0.7	>2000	13	0.29	
3852583	Rock	0.44	874.8	3481.6	17.3	31	14.3	1.8	2.1	53	2.18	<0.5	3.1	13.8	1.1	14	1.0	0.2	82.2	9	0.08	
3852584	Rock	1.67	14.1	9201.1	9.0	96	3.7	5.4	13.6	503	2.36	0.9	7.9	2.1	8.0	75	1.3	0.2	14.5	48	0.58	
3852585	Rock	1.90	4.7	17.1	72.0	40	42.2	2.6	18.5	299	4.04	2.5	0.5	49.1	5.8	27	0.2	0.3	49.5	23	0.69	
3852586	Rock	1.05	1.6	30.8	122.3	7	22.0	2.8	16.2	33	2.66	0.6	0.3	405.5	13.4	7	<0.1	0.1	22.8	2	0.04	
3852587	Rock	0.35	3.6	27.7	10.5	42	0.6	26.4	29.2	1250	3.04	1.5	0.3	8.9	1.3	272	0.3	0.2	1.7	23	6.08	
3852588	Rock	0.35	15.4	98.7	5.2	5	1.9	8.8	4.1	63	1.91	2.9	0.6	7.3	0.3	6	<0.1	0.2	1.2	2	0.02	
3852589	Rock	1.04	3.2	2142.8	9.0	56	12.0	14.1	12.8	936	3.32	1.5	1.5	33.8	4.0	91	0.8	1.0	1.3	10	4.76	
3852590	Rock	1.00	2.0	146.9	11.0	41	1.4	8.3	11.4	806	2.74	49.5	1.5	67.2	1.3	69	0.6	1.2	0.7	5	3.44	
3852591	Rock	0.23	1.9	66.1	13.9	106	0.3	8.8	11.2	1537	4.21	2.9	1.4	3.3	3.2	12	0.6	0.2	1.1	27	0.12	
3852592	Rock	0.33	4.1	26.6	103.3	30	3.0	6.0	9.0	376	2.76	1.2	0.7	19.7	2.7	12	0.2	0.2	8.4	14	0.15	
3852593	Rock	0.71	2.0	56.6	22.5	40	2.5	8.7	13.1	951	2.57	9.1	2.1	9.0	2.6	21	0.4	0.3	2.1	25	0.05	
3852594	Rock	0.56	1.7	524.8	33.9	22	>100	4.9	6.8	264	4.40	3.2	0.7	886.3	1.8	19	0.3	1.1	1.4	18	0.03	
3852595	Rock	0.82	2.0	206.2	40.8	25	>100	5.3	5.1	430	4.24	3.5	0.4	144.4	1.6	3	0.4	1.4	1.4	51	0.03	
3852596	Rock	0.78	1.5	1362.3	2178.3	242	>100	30.3	9.3	799	2.88	2.0	0.8	1815.9	1.2	6	1.8	0.8	4.7	73	0.10	
3852597	Rock	0.60	1.4	12.3	17.0	65	1.4	10.6	13.1	1762	3.98	0.8	1.7	4.3	4.5	88	0.5	0.2	0.2	25	5.61	
3852651	Rock	1.12	1.8	11.0	7.9	74	0.8	2.1	14.4	1402	4.40	0.6	1.1	15.9	5.7	177	0.2	<0.1	0.1	71	5.13	
3852652	Rock	1.43	1.7	6.7	10.0	11	0.6	2.4	2.1	137	0.80	12.5	0.2	631.1	1.1	7	0.1	0.8	0.4	2	0.16	
3852653	Rock	0.52	1.8	12.7	4.1	17	0.3	6.2	1.2	121	0.44	0.9	0.2	1.7	0.8	6	<0.1	<0.1	0.1	9	0.14	
3852654	Rock	0.64	3.1	4.6	5.0	4	0.3	1.2	0.2	29	0.26	<0.5	<0.1	0.5	0.1	<1	<0.1	<0.1	0.6	4	<0.01	
3852655	Rock	2.05	1.3	5.4	2.2	11	<0.1	2.1	0.4	70	0.28	<0.5	<0.1	1.9	0.2	1	<0.1	<0.1	<0.1	3	0.04	
3852656	Rock	0.92	5.2	22.0	13.7	17	1.8	4.3	1.0	80	0.57	21.6	0.3	4.6	0.3	2	<0.1	0.9	0.2	5	0.01	
3852657	Rock	1.25	2.7	67.5	2.1	13	0.3	14.3	2.4	78	0.79	2.7	0.2	2.6	0.8	1	0.1	0.2	<0.1	3	0.11	
3852658	Rock	1.13	>2000	2226.5	31.0	11	35.8	2.4	3.7	96	3.07	<0.5	1.7	21.0	3.7	34	1.2	1.6	55.3	22	0.36	
3852659	Rock	0.70	7.3	9.7	149.4	5	0.2	1.2	0.4	34	0.42	0.6	0.4	26.8	0.1	7	<0.1	0.2	0.2	1	<0.01	
3852660	Rock	1.23	8.4	15.6	151.0	24	17.1	4.4	26.5	28	2.89	<0.5	0.4	290.2	15.4	12	0.2	<0.1	20.5	3	0.03	
3852661	Rock	0.91	12.3	7.0	79.8	12	16.5	4.1	16.3	38	2.00	<0.5	0.4	128.1	12.8	9	<0.1	<0.1	24.7	3	0.04	
3852662	Rock	0.86	16.3	64.0	6.6	5	1.9	6.9	4.3	46	1.71	1.9	0.7	15.4	0.9	15	<0.1	0.3	0.8	1	<0.01	
3852663	Rock	1.37	1.4	5.9	4.2	40	0.2	6.7	4.6	553	1.88	21.4	0.8	26.5	3.2	8	0.7	0.3	0.1	7	0.91	
3852664	Rock	0.71	2.0	120.6	69.6	23	41.4	3.8	2.6	224	3.51	2.6	0.3	72.2	1.6	2	0.2	1.4	0.9	29	0.02	

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Bureau Veritas Commodities Canada Ltd.

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Project: PIKE
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CERTIFICATE OF ANALYSIS

WHI21000449.2

Method Analyte Unit MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu	
	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	
3852582	Rock	0.013	3	8	0.23	27	0.034	<1	0.46	0.019	0.03	1.8	<0.01	1.0	<0.1	<0.05	2	21.7	16.1		
3852583	Rock	0.004	1	7	0.03	104	0.006	<1	0.12	0.002	0.01	68.3	<0.01	0.3	<0.1	0.24	<1	4.4	0.6		
3852584	Rock	0.055	16	10	1.17	64	0.091	<1	1.43	0.036	0.10	1.3	<0.01	4.0	<0.1	<0.05	6	0.7	<0.2		
3852585	Rock	0.080	13	5	0.54	52	0.004	2	0.89	0.031	0.22	6.0	<0.01	2.3	<0.1	1.86	3	1.4	20.3		
3852586	Rock	0.020	14	6	0.03	38	0.001	2	0.27	0.049	0.16	0.1	<0.01	0.5	<0.1	2.06	<1	0.7	7.9		
3852587	Rock	0.017	5	16	1.26	92	0.002	1	1.19	0.002	0.07	0.4	<0.01	4.2	<0.1	0.65	3	<0.5	<0.2		
3852588	Rock	0.002	1	6	<0.01	236	0.001	<1	0.02	0.001	<0.01	1.2	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
3852589	Rock	0.039	8	7	0.41	758	0.001	2	0.42	0.014	0.17	0.2	<0.01	4.7	<0.1	0.19	<1	<0.5	<0.2		
3852590	Rock	0.006	1	7	0.06	1458	<0.001	2	0.10	0.003	0.07	0.1	<0.01	1.9	<0.1	0.07	<1	<0.5	<0.2		
3852591	Rock	0.074	12	8	0.09	331	0.001	2	0.50	0.006	0.23	0.1	0.07	3.2	<0.1	<0.05	<1	<0.5	<0.2		
3852592	Rock	0.077	9	8	0.04	122	0.001	<1	0.34	0.013	0.17	0.2	0.01	1.7	<0.1	<0.05	<1	<0.5	0.2		
3852593	Rock	0.039	8	8	0.05	736	0.001	2	0.35	0.005	0.16	0.3	<0.01	1.8	<0.1	<0.05	<1	<0.5	<0.2		
3852594	Rock	0.018	4	8	0.03	480	0.002	<1	0.19	0.003	0.10	13.4	0.03	0.9	<0.1	0.06	<1	<0.5	<0.2		
3852595	Rock	0.016	5	10	0.04	104	0.009	2	0.21	0.003	0.11	19.9	<0.01	1.3	<0.1	<0.05	<1	<0.5	<0.2		
3852596	Rock	0.051	7	27	0.52	68	0.002	2	0.81	0.003	0.11	0.3	0.29	4.0	<0.1	<0.05	2	<0.5	<0.2		
3852597	Rock	0.036	10	7	0.13	1834	<0.001	2	0.37	0.009	0.23	<0.1	<0.01	4.1	<0.1	0.05	<1	<0.5	<0.2		
3852651	Rock	0.123	7	7	2.05	185	0.081	2	2.50	0.016	0.60	3.2	<0.01	6.3	0.2	0.35	6	<0.5	<0.2		
3852652	Rock	0.001	<1	7	0.05	25	<0.001	1	0.15	0.003	0.04	0.1	<0.01	0.2	<0.1	0.06	<1	<0.5	<0.2		
3852653	Rock	0.027	2	13	0.13	21	0.002	<1	0.22	0.018	0.04	<0.1	<0.01	0.4	<0.1	<0.05	<1	<0.5	<0.2		
3852654	Rock	<0.001	<1	7	<0.01	2	<0.001	<1	<0.01	0.002	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
3852655	Rock	0.001	<1	6	0.03	9	<0.001	<1	0.03	0.001	<0.01	0.6	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
3852656	Rock	0.006	<1	9	0.07	6	<0.001	<1	0.10	0.002	0.01	<0.1	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2		
3852657	Rock	0.002	3	11	0.02	3	<0.001	<1	0.03	0.002	<0.01	0.1	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2		
3852658	Rock	0.011	3	7	0.20	26	0.069	<1	0.64	0.041	0.04	3.8	0.02	1.4	<0.1	0.25	3	5.5	8.4	0.262	0.217
3852659	Rock	0.004	<1	7	<0.01	16	<0.001	<1	0.04	0.003	0.02	0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
3852660	Rock	0.021	18	6	0.03	29	<0.001	1	0.30	0.047	0.17	0.1	<0.01	0.4	<0.1	2.18	<1	1.1	6.0		
3852661	Rock	0.020	16	8	0.04	80	0.001	<1	0.23	0.050	0.14	0.1	<0.01	0.4	<0.1	1.36	<1	<0.5	10.1		
3852662	Rock	0.002	1	5	<0.01	595	<0.001	<1	0.02	0.001	<0.01	1.2	<0.01	<0.1	<0.1	<0.05	<1	0.5	<0.2		
3852663	Rock	0.018	6	9	0.19	79	<0.001	1	0.35	0.003	0.17	0.1	<0.01	1.7	<0.1	<0.05	<1	<0.5	<0.2		
3852664	Rock	0.009	3	7	0.05	49	0.003	<1	0.16	0.003	0.06	10.9	<0.01	0.8	<0.1	<0.05	<1	<0.5	<0.2		

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Bureau Veritas Commodities Canada Ltd.

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Project: PIKE
Report Date: November 08, 2021

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CERTIFICATE OF ANALYSIS

WHI21000449.2

Method	Analyte	AQ370	FA530	FA501	GC817
		Pb	Ag	Ag	Pb
Unit		%	ppm	%	%
MDL		0.01	20	0.001	2
3852582	Rock				
3852583	Rock				
3852584	Rock				
3852585	Rock				
3852586	Rock				
3852587	Rock				
3852588	Rock				
3852589	Rock				
3852590	Rock				
3852591	Rock				
3852592	Rock				
3852593	Rock				
3852594	Rock		351		
3852595	Rock		177		
3852596	Rock		821		
3852597	Rock				
3852651	Rock				
3852652	Rock				
3852653	Rock				
3852654	Rock				
3852655	Rock				
3852656	Rock				
3852657	Rock				
3852658	Rock		<0.01		
3852659	Rock				
3852660	Rock				
3852661	Rock				
3852662	Rock				
3852663	Rock				
3852664	Rock				

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CERTIFICATE OF ANALYSIS

WHI21000449.2

Method	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01	
3852665	Rock	1.41	1.4	367.9	17.8	24	22.8	6.1	6.2	540	2.29	3.9	0.5	29.7	1.8	3	0.4	0.5	0.4	17	0.04
3852666	Rock	0.52	1.8	20.8	3.6	7	2.5	1.6	0.3	38	0.76	9.3	0.1	172.8	1.1	2	<0.1	<0.1	0.2	2	<0.01
3852701	Rock	0.84	4.2	90.7	282.4	699	54.2	40.2	14.8	1546	3.77	786.8	0.8	70.7	3.4	90	11.7	10.6	0.2	62	1.06
3852702	Rock	2.11	2.4	124.5	307.8	248	>100	42.8	12.5	1130	2.80	362.4	0.6	34.6	2.7	109	4.6	10.8	0.2	71	1.52
3852703	Rock	2.42	3.1	63.6	135.3	349	43.9	46.3	11.7	1265	3.02	1153.6	0.9	35.9	3.4	92	6.2	15.8	0.2	53	1.23
3852704	Rock	1.65	2.6	24.4	24.5	102	7.6	23.4	7.7	981	2.36	649.5	0.6	31.7	5.6	84	1.0	9.3	<0.1	31	1.33
3852705	Rock	3.11	3.8	46.3	35.8	51	12.8	20.5	7.3	559	2.27	1264.1	0.7	39.8	3.8	44	0.7	13.4	<0.1	35	0.57
3852706	Rock	2.22	3.9	102.3	71.7	109	17.5	26.4	9.2	519	2.54	1098.7	0.8	54.6	3.9	41	2.2	11.6	0.2	47	0.47
3852707	Rock	1.04	1.2	85.2	176.3	133	15.3	34.2	14.0	819	3.22	1172.1	0.4	99.8	3.5	74	1.9	10.0	0.2	89	1.13
3852708	Rock	1.97	3.6	19.6	86.1	132	25.5	17.1	5.6	535	2.03	836.9	0.7	55.0	2.9	41	2.7	15.5	0.3	24	0.33
3852709	Rock	1.03	9.1	23.0	95.3	82	39.6	20.7	5.6	818	2.45	345.4	1.6	16.1	3.0	54	1.2	21.0	0.6	57	0.62
3852710	Rock	1.33	3.8	76.3	90.6	220	24.4	50.5	14.3	1099	3.04	353.5	1.4	11.4	4.2	151	3.5	4.1	0.2	96	2.06
3852711	Rock	0.91	1.5	3903.0	>10000	1467	>100	16.8	3.3	467	1.74	4328.0	0.1	1258.1	0.9	42	87.0	>2000	0.7	10	0.68
3852712	Rock	0.45	4.5	192.0	58.7	26	26.9	3.8	17.6	216	3.61	12.5	1.1	4.3	3.3	96	0.2	17.8	0.2	51	1.01
3852713	Rock	2.14	1.4	2401.1	>10000	4998	>100	4.8	0.7	148	1.97	>10000	0.2	2142.1	1.5	9	150.6	>2000	0.7	7	0.07
3852714	Rock	0.95	1.0	28.7	42.6	45	10.9	6.5	6.4	1209	2.27	31.0	<0.1	6.7	0.2	203	0.6	8.0	<0.1	24	7.75
3852715	Rock	1.19	0.9	31.6	35.0	65	7.6	10.4	23.2	1832	3.91	19.1	0.1	79.4	1.3	394	0.8	5.2	<0.1	49	9.25
3852716	Rock	0.34	0.6	16.0	4.9	41	0.9	10.7	7.6	863	2.27	2.1	0.7	1.3	4.4	165	0.1	0.8	<0.1	50	8.65
3852717	Rock	1.20	0.7	92.6	11.3	32	1.9	6.3	7.1	1807	3.75	4.2	<0.1	53.2	0.7	444	0.6	1.5	<0.1	38	13.45
3852718	Rock	0.62	0.9	12.3	7.2	20	1.0	3.6	2.2	621	1.03	2.7	<0.1	4.6	0.3	109	0.3	0.9	<0.1	8	3.22
3852719	Rock	1.36	2.1	14.7	17.8	23	2.3	5.4	9.8	805	1.87	4.9	1.1	421.4	8.1	30	0.3	1.8	1.0	6	1.19
3852720	Rock	0.77	1.7	10.8	5.3	17	0.7	3.5	2.6	125	0.90	1.3	0.2	28.7	1.3	17	<0.1	0.6	<0.1	13	0.37
3852721	Rock	1.55	1.3	38.9	9.6	86	0.5	13.1	17.2	595	4.24	1.2	2.0	0.9	4.5	59	0.2	0.4	<0.1	104	0.97
3852722	Rock	0.85	1.3	5.3	4.3	14	0.4	3.0	14.6	271	1.24	0.8	0.3	1.1	1.0	243	<0.1	0.3	0.8	14	6.68
3852723	Rock	1.45	2.0	16.3	10.3	72	0.3	38.6	17.6	1774	4.16	0.6	1.1	<0.5	2.4	389	0.2	0.3	0.1	72	7.96
3852724	Rock	0.77	1.7	5.6	11.8	18	0.3	2.4	1.5	270	0.63	0.6	0.4	<0.5	1.2	3	0.1	0.1	0.3	4	0.06
3852725	Rock	0.92	412.4	1879.3	12.8	29	33.4	3.0	6.3	79	3.25	2.0	3.7	40.8	6.1	68	0.9	6.0	60.6	28	0.31
3852726	Rock	0.46	54.5	593.3	63.3	14	4.2	2.1	0.9	73	0.62	0.7	4.4	13.7	0.7	12	0.2	0.3	3.2	3	0.09
3852727	Rock	0.16	>2000	6254.7	675.2	14	>100	2.5	0.5	52	2.97	3.9	0.9	60.0	0.5	8	15.4	2.8	1642.6	3	0.02
3852728	Rock	0.33	>2000	>10000	15.7	19	38.4	1.7	1.6	39	5.14	1.1	1.9	21.9	0.8	2	7.5	0.5	38.1	3	<0.01

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CERTIFICATE OF ANALYSIS

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Method	Analyte	Unit	MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370	
				P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu
				%	ppm	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	
				0.001	1	1	0.01	1	0.001	1	0.01	0.01	0.01	0.01	0.01	0.05	1	0.5	0.2	0.001	0.001		
3852665	Rock			0.021	4	8	0.03	147	0.003	1	0.21	0.003	0.13	3.4	<0.01	1.3	<0.1	<0.05	<1	<0.5	<0.2		
3852666	Rock			0.003	6	7	<0.01	66	<0.001	<1	0.14	0.004	0.09	0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
3852701	Rock			0.115	7	54	1.58	54	0.186	2	1.61	0.008	0.31	1.7	<0.01	6.3	0.3	0.23	5	0.8	<0.2		
3852702	Rock			0.108	7	53	1.53	37	0.118	2	1.52	0.013	0.16	0.7	<0.01	5.4	0.2	0.21	5	0.9	<0.2		
3852703	Rock			0.097	7	45	1.30	47	0.176	3	1.48	0.014	0.26	2.1	0.01	5.3	0.2	0.45	5	0.8	<0.2		
3852704	Rock			0.051	9	23	1.20	39	0.065	3	1.25	0.014	0.20	0.7	<0.01	3.2	0.1	0.18	4	<0.5	<0.2		
3852705	Rock			0.078	7	27	0.71	37	0.109	2	0.89	0.006	0.20	1.3	<0.01	3.2	0.1	0.70	2	1.3	<0.2		
3852706	Rock			0.089	8	35	0.85	39	0.158	2	1.11	0.015	0.17	2.3	<0.01	3.9	0.1	0.88	4	1.2	<0.2		
3852707	Rock			0.091	8	56	1.55	36	0.135	1	1.64	0.032	0.09	1.2	<0.01	7.0	0.1	0.66	6	1.3	<0.2		
3852708	Rock			0.075	7	24	0.57	41	0.082	3	0.74	0.007	0.19	1.2	<0.01	2.5	0.1	0.43	2	1.1	<0.2		
3852709	Rock			0.113	8	42	0.93	37	0.181	2	1.12	0.003	0.18	2.4	<0.01	4.1	0.1	0.20	3	1.5	<0.2		
3852710	Rock			0.112	8	64	1.83	53	0.169	2	1.67	0.056	0.33	1.4	<0.01	5.8	0.5	1.15	6	0.8	<0.2		
3852711	Rock			0.008	1	13	0.24	14	0.002	2	0.29	0.002	0.02	<0.1	0.03	0.8	<0.1	1.31	1	40.1	0.3	<0.001	0.398
3852712	Rock			0.110	10	7	0.70	93	0.104	1	1.81	0.195	0.07	0.2	<0.01	3.0	<0.1	1.06	4	5.0	0.4		
3852713	Rock			0.007	1	11	0.09	23	0.029	1	0.23	0.001	0.08	0.5	0.03	0.6	0.1	1.61	1	20.2	<0.2	<0.001	0.246
3852714	Rock			0.010	2	5	0.98	17	0.003	<1	0.94	0.001	0.02	0.2	<0.01	2.4	<0.1	0.06	3	<0.5	<0.2		
3852715	Rock			0.062	7	5	1.91	125	0.008	1	2.15	0.005	0.20	0.7	<0.01	4.7	<0.1	0.19	5	<0.5	<0.2		
3852716	Rock			0.093	11	15	0.93	96	0.003	<1	1.24	0.031	0.18	<0.1	<0.01	2.7	<0.1	0.08	4	<0.5	<0.2		
3852717	Rock			0.011	3	4	1.19	30	0.005	<1	0.97	0.002	0.04	0.3	<0.01	6.4	<0.1	0.06	3	<0.5	<0.2		
3852718	Rock			0.011	2	7	0.41	38	0.001	<1	0.42	0.002	0.02	0.6	<0.01	0.8	<0.1	<0.05	1	<0.5	<0.2		
3852719	Rock			0.036	14	9	0.38	84	0.002	<1	0.37	0.025	0.17	0.1	<0.01	1.1	<0.1	0.77	1	<0.5	<0.2		
3852720	Rock			0.026	5	9	0.17	58	0.003	<1	0.28	0.021	0.03	<0.1	<0.01	1.1	<0.1	0.06	1	<0.5	<0.2		
3852721	Rock			0.199	22	29	0.95	87	0.013	<1	2.16	0.021	0.12	<0.1	<0.01	13.9	<0.1	0.06	7	<0.5	<0.2		
3852722	Rock			0.029	6	7	0.27	24	0.008	<1	0.30	0.008	0.03	<0.1	<0.01	0.8	<0.1	0.32	1	<0.5	<0.2		
3852723	Rock			0.078	18	38	2.98	78	0.002	<1	0.74	0.007	0.05	0.3	<0.01	7.5	<0.1	<0.05	2	<0.5	<0.2		
3852724	Rock			0.006	3	9	0.04	26	<0.001	<1	0.17	0.001	0.07	<0.1	<0.01	0.4	<0.1	<0.05	<1	<0.5	<0.2		
3852725	Rock			0.027	9	12	0.20	42	0.123	<1	0.45	0.020	0.11	1.5	0.05	3.1	<0.1	0.07	3	8.2	1.2		
3852726	Rock			0.001	<1	10	0.02	3	<0.001	<1	0.09	0.002	<0.01	96.4	0.02	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
3852727	Rock			0.002	<1	15	<0.01	195	<0.001	<1	0.07	0.001	0.03	3.7	0.02	0.2	<0.1	0.69	<1	19.6	15.0	0.615	0.654
3852728	Rock			0.002	<1	9	<0.01	48	<0.001	<1	0.07	0.002	0.02	9.6	0.04	0.4	<0.1	2.53	<1	31.9	5.2	0.301	2.531



Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

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Client: **Ryan Burke**
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: November 08, 2021

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CERTIFICATE OF ANALYSIS

WHI21000449.2

Method	AQ370	FA530	FA501	GC817
Analyte	Pb	Ag	Ag	Pb
Unit	%	ppm	%	%
MDL	0.01	20	0.001	2
3852665	Rock			
3852666	Rock			
3852701	Rock			
3852702	Rock	114		
3852703	Rock			
3852704	Rock			
3852705	Rock			
3852706	Rock			
3852707	Rock			
3852708	Rock			
3852709	Rock			
3852710	Rock			
3852711	Rock	1.98	>10000	1.127
3852712	Rock			
3852713	Rock	1.77	5120	
3852714	Rock			
3852715	Rock			
3852716	Rock			
3852717	Rock			
3852718	Rock			
3852719	Rock			
3852720	Rock			
3852721	Rock			
3852722	Rock			
3852723	Rock			
3852724	Rock			
3852725	Rock			
3852726	Rock			
3852727	Rock	0.07	124	
3852728	Rock	<0.01		

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Project: PIKE
Report Date: November 08, 2021

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CERTIFICATE OF ANALYSIS

WHI21000449.2

Method	Analyte	Unit	MDL	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
				Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
3852729	Rock	0.70	24.8	41.8	9.8	41	0.9	2.9	4.8	794	2.16	3.6	1.2	<0.5	3.9	15	0.6	2.8	5.9	10	0.54	
3852730	Rock	0.54	1413.1	6289.8	140.2	9	36.4	1.6	0.9	42	3.13	1.2	0.7	12.8	1.0	4	4.8	1.0	338.5	2	<0.01	
3852731	Rock	0.25	236.8	>10000	9.2	9	58.2	1.8	0.8	45	3.47	0.8	0.1	23.7	0.3	2	0.6	0.7	90.9	<1	0.01	
3852732	Rock	0.42	>2000	174.1	4.9	9	1.1	1.7	0.4	71	0.46	0.9	1.3	0.6	0.6	2	4.4	0.2	4.1	2	0.04	
3852733	Rock	0.80	1041.0	519.3	273.0	13	14.9	2.2	1.3	99	0.70	1.4	0.4	7.3	0.2	2	2.2	1.2	33.5	3	0.01	
3852734	Rock	0.60	461.3	128.1	40.4	8	1.6	1.4	0.5	59	0.40	0.9	0.1	<0.5	<0.1	2	0.9	0.4	4.4	1	0.02	
3852735	Rock	0.66	482.6	654.9	25.4	7	14.8	1.5	0.4	41	1.05	0.8	0.2	10.9	0.1	2	1.4	0.4	27.7	2	0.09	
3852736	Rock	0.41	133.3	71.2	7.6	9	0.6	3.2	0.9	113	0.47	<0.5	0.2	<0.5	0.2	3	0.4	0.1	1.2	1	0.08	
3852737	Rock	0.50	1395.0	2376.3	19.7	8	16.3	1.7	0.4	45	1.10	<0.5	0.2	5.7	0.2	4	4.3	0.5	22.2	1	0.03	
3852738	Rock	0.77	953.9	61.7	2.3	5	0.3	1.6	0.2	35	0.38	<0.5	0.4	<0.5	<0.1	2	2.5	<0.1	0.6	<1	0.02	
3852739	Rock	0.40	>2000	1313.0	149.2	21	60.2	2.4	2.9	59	1.69	4.6	1.1	19.5	0.9	13	31.7	1.0	1125.5	7	0.07	
3852740	Rock	1.23	174.2	4507.7	257.5	96	42.8	1.2	1.4	709	0.80	<0.5	0.3	5.0	0.6	25	18.0	0.3	287.8	<1	3.81	
3852741	Rock	1.65	1942.7	2498.4	55.6	30	21.9	1.6	0.9	200	0.81	0.6	0.3	19.0	0.1	7	6.8	1.0	270.0	<1	0.74	
3852742	Rock	0.41	15.4	>10000	42.5	19	>100	4.4	9.7	67	5.02	6.7	<0.1	67.7	0.4	4	1.1	0.7	210.2	3	0.02	
3852743	Rock	0.40	>2000	81.7	88.0	6	2.1	1.3	0.3	34	0.35	<0.5	0.7	1.1	0.1	3	6.0	0.1	6.6	9	0.04	
3852744	Rock	0.97	6.4	95.5	7.7	21	3.0	7.7	3.2	895	2.50	34.3	0.2	25.6	0.8	3	0.1	1.8	1.9	12	0.03	
3852745	Rock	1.81	16.9	108.6	9.4	94	1.7	99.5	21.0	916	4.20	38.5	1.5	5.2	5.4	38	0.3	4.9	1.0	177	2.29	
3852746	Rock	1.29	8.1	116.7	11.1	80	2.4	99.2	20.0	971	3.76	41.4	2.1	5.6	7.0	25	0.3	6.0	0.6	172	1.79	
3852747	Rock	1.08	12.0	59.7	4.3	29	0.6	13.3	2.6	221	1.92	8.8	2.3	<0.5	3.6	8	0.4	0.9	0.6	117	0.34	
3852748	Rock	1.23	8.1	109.5	3.5	25	0.7	37.8	6.7	390	2.71	5.4	1.4	1.2	2.8	30	<0.1	0.8	0.8	135	0.56	
3852749	Rock	0.69	4.4	14.5	11.8	12	1.4	1.5	0.5	66	1.06	48.8	1.0	17.0	7.3	6	<0.1	3.3	0.4	2	0.07	
3852750	Rock	1.45	3.5	87.4	5.0	164	0.6	19.3	6.3	>10000	2.52	9.2	0.7	<0.5	1.2	19	1.2	0.8	0.7	11	1.16	
3852751	Rock	1.89	4.5	49.5	331.6	206	61.7	34.3	16.4	1939	2.95	1417.2	1.4	62.1	3.3	16	4.5	17.6	0.5	45	0.24	
3852752	Rock	2.06	3.7	64.5	349.7	219	82.7	26.2	11.2	1429	2.75	1196.4	1.6	51.0	3.2	22	4.1	24.3	0.4	44	0.27	
3852753	Rock	1.84	4.4	83.2	369.6	337	>100	25.2	10.2	1698	2.37	958.4	1.1	56.7	3.0	18	6.0	51.1	0.4	38	0.20	
3852754	Rock	2.48	5.4	101.5	404.4	257	>100	32.9	9.3	1116	3.20	1017.7	1.5	53.2	3.8	26	3.3	51.1	0.6	57	0.31	
3852755	Rock	2.03	4.8	59.7	162.9	201	32.4	25.7	7.7	1051	2.78	647.4	1.3	28.3	3.8	23	2.1	20.0	0.4	49	0.26	
3852756	Rock	0.60	2.3	90.2	73.8	142	23.1	24.7	10.9	1030	4.20	771.6	3.0	28.7	4.9	32	2.7	12.9	0.4	67	0.49	
3852757	Rock	1.04	4.4	152.7	2798.6	106	>100	4.3	0.6	164	1.37	5395.4	0.4	483.8	1.0	14	5.3	244.6	1.1	10	0.03	
3852758	Rock	1.34	3.7	258.5	7319.8	118	>100	4.0	0.6	130	1.87	4693.0	0.5	558.1	1.0	28	1.5	852.2	2.5	14	0.03	

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

CERTIFICATE OF ANALYSIS **WHI21000449.2**

Method	Analyte	Unit	MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370	
				P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu
				%	ppm	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	
3852729	Rock			0.016	12	8	0.79	81	0.001	3	0.90	0.002	0.10	0.7	<0.01	1.0	<0.1	<0.05	2	<0.5	<0.2		
3852730	Rock			0.002	<1	9	<0.01	238	<0.001	<1	0.05	<0.001	0.02	2.6	0.01	0.2	<0.1	0.58	<1	14.0	4.2		
3852731	Rock			0.002	<1	9	<0.01	97	<0.001	<1	0.04	<0.001	0.02	0.6	<0.01	0.2	<0.1	1.41	<1	23.2	5.3	0.025	1.588
3852732	Rock			0.001	2	9	<0.01	74	<0.001	<1	0.05	<0.001	0.03	0.4	<0.01	0.2	<0.1	0.20	<1	1.4	<0.2	0.330	0.018
3852733	Rock			0.001	<1	8	<0.01	62	<0.001	<1	0.06	<0.001	0.02	1.0	<0.01	0.5	<0.1	0.10	<1	3.4	1.1		
3852734	Rock			<0.001	1	6	<0.01	124	<0.001	<1	0.06	0.001	0.03	0.2	<0.01	0.3	<0.1	<0.05	<1	0.5	<0.2		
3852735	Rock			0.002	<1	5	<0.01	32	<0.001	<1	0.04	<0.001	0.02	0.6	<0.01	0.1	<0.1	0.05	<1	1.1	0.4		
3852736	Rock			0.002	4	8	0.02	67	<0.001	<1	0.09	0.001	0.05	0.2	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2		
3852737	Rock			<0.001	<1	9	<0.01	194	<0.001	<1	0.04	<0.001	0.03	0.1	<0.01	0.2	<0.1	0.27	<1	3.3	0.6		
3852738	Rock			<0.001	<1	9	<0.01	2	<0.001	<1	<0.01	<0.001	<0.01	0.4	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
3852739	Rock			0.003	3	9	<0.01	170	<0.001	<1	0.05	0.001	0.02	1.5	0.07	0.1	<0.1	1.04	<1	19.8	4.6	1.655	0.132
3852740	Rock			0.002	6	6	<0.01	10	<0.001	<1	0.05	<0.001	<0.01	18.4	0.01	0.1	<0.1	0.27	<1	6.8	0.7		
3852741	Rock			<0.001	2	9	<0.01	4	<0.001	<1	0.02	<0.001	<0.01	0.6	<0.01	<0.1	<0.1	0.27	<1	5.7	1.4		
3852742	Rock			<0.001	<1	7	<0.01	30	<0.001	<1	0.06	<0.001	0.01	1.5	0.01	0.2	<0.1	2.87	<1	31.1	2.4	0.003	3.033
3852743	Rock			<0.001	<1	7	<0.01	3	<0.001	2	<0.01	0.001	<0.01	5.1	<0.01	0.2	<0.1	0.14	<1	2.4	<0.2	0.292	0.007
3852744	Rock			0.013	1	10	0.02	34	0.009	<1	0.08	<0.001	<0.01	0.4	<0.01	0.5	<0.1	1.57	<1	3.0	0.3		
3852745	Rock			0.155	12	120	2.35	113	0.205	1	2.36	0.053	0.10	0.9	<0.01	7.1	0.2	1.09	11	3.1	<0.2		
3852746	Rock			0.136	13	71	1.75	85	0.142	1	1.74	0.029	0.07	0.9	<0.01	6.1	0.1	1.52	8	3.5	<0.2		
3852747	Rock			0.111	6	42	0.76	154	0.072	<1	0.74	0.004	0.09	0.6	<0.01	3.1	<0.1	0.75	5	6.7	0.2		
3852748	Rock			0.135	5	41	0.35	116	0.059	1	0.50	0.017	0.04	0.2	<0.01	2.3	<0.1	0.90	3	12.1	0.3		
3852749	Rock			0.008	14	5	0.07	43	0.001	1	0.25	0.053	0.12	0.2	<0.01	0.6	<0.1	0.30	1	0.7	<0.2		
3852750	Rock			0.012	1	5	0.22	14	0.006	<1	0.26	0.003	<0.01	0.2	<0.01	0.6	<0.1	0.71	2	1.0	<0.2		
3852751	Rock			0.099	10	31	1.06	47	0.109	2	1.28	0.003	0.21	2.0	<0.01	4.3	0.2	<0.05	4	0.5	<0.2		
3852752	Rock			0.099	9	30	0.94	45	0.103	2	1.21	0.005	0.18	1.7	<0.01	3.8	0.2	<0.05	4	<0.5	<0.2		
3852753	Rock			0.078	7	30	0.94	40	0.093	3	1.07	0.003	0.19	1.6	<0.01	3.7	0.2	<0.05	3	<0.5	<0.2		
3852754	Rock			0.112	12	43	1.20	45	0.125	2	1.52	0.005	0.19	1.5	<0.01	4.4	0.1	<0.05	5	0.6	<0.2		
3852755	Rock			0.094	13	34	1.09	47	0.098	2	1.43	0.011	0.18	1.2	<0.01	3.7	0.1	<0.05	4	<0.5	<0.2		
3852756	Rock			0.170	12	20	1.14	58	0.154	2	1.38	0.018	0.19	2.6	<0.01	6.1	0.2	2.01	6	2.1	<0.2		
3852757	Rock			0.023	3	14	0.16	33	0.015	<1	0.23	0.001	0.05	0.3	<0.01	1.2	<0.1	0.16	1	4.0	<0.2		
3852758	Rock			0.022	3	15	0.19	28	0.034	<1	0.31	0.002	0.07	0.5	0.01	1.4	0.1	0.23	1	13.2	<0.2		

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Client: **Ryan Burke**
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Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: November 08, 2021

Page: 5 of 6 Part: 3 of 3

CERTIFICATE OF ANALYSIS

WHI21000449.2

Method	AQ370	FA530	FA501	GC817
Analyte	Pb	Ag	Ag	Pb
Unit	%	ppm	%	%
MDL	0.01	20	0.001	2
3852729	Rock			
3852730	Rock			
3852731	Rock	<0.01		
3852732	Rock	<0.01		
3852733	Rock			
3852734	Rock			
3852735	Rock			
3852736	Rock			
3852737	Rock			
3852738	Rock			
3852739	Rock	0.01		
3852740	Rock			
3852741	Rock			
3852742	Rock	<0.01	173	
3852743	Rock	<0.01		
3852744	Rock			
3852745	Rock			
3852746	Rock			
3852747	Rock			
3852748	Rock			
3852749	Rock			
3852750	Rock			
3852751	Rock			
3852752	Rock			
3852753	Rock	115		
3852754	Rock	100		
3852755	Rock			
3852756	Rock			
3852757	Rock	508		
3852758	Rock	1361		

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CERTIFICATE OF ANALYSIS

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Method	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca		
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01	0.01	0.01
3852759	Rock	0.34	2.4	59.2	42.8	41	4.1	22.4	7.8	243	1.41	47.7	0.4	4.4	5.0	9	0.7	2.7	0.6	37	0.27	
3852760	Rock	0.26	1.9	49.5	52.8	63	9.6	23.7	14.4	674	4.79	974.8	0.4	67.2	5.1	26	0.4	15.3	0.4	65	0.31	
3852761	Rock	0.67	3.7	52.4	146.1	47	30.2	15.1	8.1	399	2.19	2128.1	0.6	39.2	2.6	27	0.7	22.1	0.2	22	0.24	
3852762	Rock	1.15	3.1	48.0	78.9	117	43.1	22.4	7.4	479	2.23	1505.2	0.7	25.7	2.6	36	2.3	25.9	0.2	26	0.40	
3852763	Rock	0.95	3.1	297.8	679.7	2648	>100	23.9	7.2	548	2.36	6948.6	0.3	553.6	1.4	55	58.2	346.9	0.3	16	0.63	
3852764	Rock	1.63	2.7	222.6	708.7	1599	>100	9.3	2.4	140	1.11	4131.5	0.2	295.3	0.7	9	38.2	330.1	0.2	7	0.07	
3852765	Rock	1.17	3.5	40.4	217.6	183	83.5	5.2	1.5	95	1.43	1780.2	0.2	122.7	1.5	17	3.7	47.9	0.2	7	0.10	
3852766	Rock	0.89	1.5	39.2	4.7	24	1.0	2.7	2.7	2179	2.22	10.2	0.2	23.4	0.9	263	0.2	0.6	<0.1	13	8.83	
3852767	Rock	1.23	0.7	24.1	3.5	64	0.3	13.7	35.7	1335	4.05	4.9	0.2	5.6	0.8	186	0.2	0.2	<0.1	52	7.31	
3852768	Rock	1.57	0.8	22.6	4.0	40	0.2	9.6	10.8	600	3.08	1.6	0.3	1.9	1.8	114	0.1	0.1	0.2	63	2.62	
3852769	Rock	1.86	2.5	8.7	2.1	16	0.2	10.9	21.9	541	1.63	2.6	0.3	1.7	0.6	151	<0.1	0.2	0.5	11	3.44	
3852770	Rock	1.33	31.0	14.4	11.0	78	0.4	3.7	9.4	914	2.43	4.1	0.3	4.7	1.4	89	0.9	1.3	0.3	14	2.33	
3852771	Rock	1.39	2.3	27.6	3.5	16	1.4	6.0	2.2	147	0.75	11.0	0.1	2.9	1.0	12	0.2	0.6	<0.1	5	0.48	
3852772	Rock	1.39	5.5	6.2	14.0	31	0.3	3.3	4.2	482	1.57	1.6	0.9	1.9	6.5	67	0.4	1.5	0.1	11	1.58	
3852773	Rock	0.25	1707.2	1723.1	64.9	8	18.2	2.0	1.5	42	0.94	0.7	0.7	3.4	0.6	15	4.5	0.1	23.6	7	0.03	
3852774	Rock	0.19	389.3	3757.3	147.5	22	>100	3.2	1.9	96	5.80	<0.5	0.3	38.8	0.8	7	1.0	1.7	207.9	9	<0.01	
3852775	Rock	0.69	>2000	429.9	27.6	7	3.9	2.1	0.8	89	0.59	<0.5	1.6	1.5	0.8	5	6.6	0.4	4.4	13	0.03	
3852776	Rock	0.72	>2000	15.9	511.0	7	4.6	2.1	0.8	76	0.48	1.0	0.4	9.9	1.2	15	8.8	0.2	9.2	13	0.04	



Bureau Veritas Commodities Canada Ltd.

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CERTIFICATE OF ANALYSIS

WHI21000449.2

Method	Analyte	Unit	MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201		
				P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu			
				%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	%	%
3852759	Rock	0.034	12	31	0.97	44	0.012	<1	0.82	0.015	0.07	0.1	<0.01	2.7	<0.1	0.06	4	<0.5	<0.2							
3852760	Rock	0.140	9	51	1.12	42	0.142	2	1.26	0.023	0.20	1.7	<0.01	8.0	<0.1	1.60	5	2.1	<0.2							
3852761	Rock	0.059	5	22	0.45	30	0.109	4	0.70	0.003	0.27	2.5	<0.01	2.7	0.2	0.78	2	2.0	<0.2							
3852762	Rock	0.070	6	23	0.58	33	0.114	3	0.83	0.006	0.25	2.4	<0.01	3.0	0.2	0.81	2	1.4	<0.2							
3852763	Rock	0.044	3	20	0.35	29	0.051	2	0.47	0.002	0.17	0.9	0.01	1.9	0.1	1.58	2	2.3	<0.2							
3852764	Rock	0.019	2	13	0.10	13	0.021	2	0.19	0.001	0.07	0.5	<0.01	0.7	<0.1	0.59	<1	1.9	<0.2							
3852765	Rock	0.033	4	11	0.13	29	0.050	2	0.32	0.004	0.17	1.3	<0.01	0.9	0.1	0.43	1	1.5	<0.2							
3852766	Rock	0.010	5	7	0.66	49	0.001	<1	0.45	0.006	0.06	0.2	<0.01	1.4	<0.1	<0.05	2	<0.5	<0.2							
3852767	Rock	0.098	5	4	2.00	143	0.006	<1	2.58	0.007	0.30	0.1	<0.01	4.9	<0.1	0.31	6	<0.5	<0.2							
3852768	Rock	0.083	11	7	1.29	150	0.006	1	1.56	0.031	0.20	<0.1	<0.01	6.0	<0.1	<0.05	5	<0.5	<0.2							
3852769	Rock	0.002	4	9	1.55	22	<0.001	<1	0.04	0.003	<0.01	0.1	<0.01	0.8	<0.1	<0.05	<1	<0.5	<0.2							
3852770	Rock	0.012	6	5	0.57	52	0.027	2	0.74	0.007	0.02	1.1	<0.01	1.3	<0.1	0.11	3	<0.5	<0.2							
3852771	Rock	0.019	4	13	0.19	16	0.002	<1	0.18	0.001	0.02	0.1	<0.01	0.4	<0.1	<0.05	<1	<0.5	<0.2							
3852772	Rock	0.021	10	7	0.64	59	0.001	3	0.84	0.003	0.19	0.1	<0.01	1.9	<0.1	<0.05	2	<0.5	<0.2							
3852773	Rock	0.001	2	9	0.02	217	<0.001	<1	0.06	0.001	0.02	0.4	<0.01	0.1	<0.1	0.18	<1	1.6	0.5							
3852774	Rock	0.003	1	12	<0.01	468	<0.001	<1	0.09	<0.001	0.01	0.2	0.01	1.3	<0.1	0.18	<1	20.3	3.9							
3852775	Rock	0.002	2	10	<0.01	206	<0.001	1	0.08	0.002	0.06	0.1	<0.01	0.2	<0.1	0.26	<1	3.9	0.2	0.388	0.039					
3852776	Rock	0.003	5	9	<0.01	582	<0.001	<1	0.06	0.001	0.04	1.2	0.02	0.2	<0.1	0.19	<1	2.9	1.1	0.370	0.001					



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Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: November 08, 2021

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CERTIFICATE OF ANALYSIS

WHI21000449.2

Method	AQ370	FA530	FA501	GC817
Analyte	Pb	Ag	Ag	Pb
Unit	%	ppm	%	%
MDL	0.01	20	0.001	2
3852759	Rock			
3852760	Rock			
3852761	Rock			
3852762	Rock			
3852763	Rock	483		
3852764	Rock	472		
3852765	Rock			
3852766	Rock			
3852767	Rock			
3852768	Rock			
3852769	Rock			
3852770	Rock			
3852771	Rock			
3852772	Rock			
3852773	Rock			
3852774	Rock	223		
3852775	Rock	<0.01		
3852776	Rock	0.05		



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QUALITY CONTROL REPORT

WHI21000449.2

MethodAnalyte	Unit	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
MDL		Wgt kg	Moppm	Cuppm	Pbppm	Zn ppm	Agppm	Nippm	Coppm	Mn ppm	Fe %0.01	Asppm	U ppm	Au ppb	Thppm	Srppm	Cdppm	Sbppm	Bippm	V ppm	Ca %0.01
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.5	0.5	0.1	1	0.1	0.1	0.1	0.1	0.1	1	1
Pulp Duplicates																					
3852575	Rock	0.88	17.1	556.4	44.4	6	87.3	1.6	0.7	43	1.78	2.3	0.6	43.9	0.7	5	<0.1	0.5	192.7	8	0.06
REP 3852575	QC		18.1	558.7	45.7	6	86.8	1.6	0.7	43	1.80	2.8	0.6	17.7	0.7	5	<0.1	0.5	205.5	8	0.06
3852596	Rock	0.78	1.5	1362.3	2178.3	242	>100	30.3	9.3	799	2.88	2.0	0.8	1815.9	1.2	6	1.8	0.8	4.7	73	0.10
REP 3852596	QC																				
3852663	Rock	1.37	1.4	5.9	4.2	40	0.2	6.7	4.6	553	1.88	21.4	0.8	26.5	3.2	8	0.7	0.3	0.1	7	0.91
REP 3852663	QC		1.5	5.9	4.5	40	0.2	6.7	4.5	559	1.91	23.4	0.9	25.4	3.6	8	0.7	0.3	0.1	8	0.92
3852711	Rock	0.91	1.5	3903.0	>10000	1467	>100	16.8	3.3	467	1.74	4328.0	0.1	1258.1	0.9	42	87.0	>2000	0.7	10	0.68
REP 3852711	QC																				
3852731	Rock	0.25	236.8	>10000	9.2	9	58.2	1.8	0.8	45	3.47	0.8	0.1	23.7	0.3	2	0.6	0.7	90.9	<1	0.01
REP 3852731	QC																				
3852732	Rock	0.42	>2000	174.1	4.9	9	1.1	1.7	0.4	71	0.46	0.9	1.3	0.6	0.6	2	4.4	0.2	4.1	2	0.04
REP 3852732	QC		>2000	178.5	5.5	10	1.1	1.7	0.4	69	0.47	0.7	1.3	1.2	0.6	2	4.6	0.3	4.3	2	0.04
3852767	Rock	1.23	0.7	24.1	3.5	64	0.3	13.7	35.7	1335	4.05	4.9	0.2	5.6	0.8	186	0.2	0.2	<0.1	52	7.31
REP 3852767	QC		0.6	24.5	3.3	63	0.2	13.0	35.5	1329	4.05	3.8	0.2	4.7	0.7	178	0.3	0.2	<0.1	53	7.21
Core Reject Duplicates																					
3852552	Rock	1.54	2.3	87.7	13.0	47	1.5	23.1	8.3	482	4.14	10.5	1.0	2.3	3.3	13	<0.1	1.3	0.1	110	0.60
DUP 3852552	QC		2.4	86.7	12.9	45	1.5	23.3	8.2	478	4.12	10.3	1.0	3.0	3.2	13	<0.1	1.4	0.1	109	0.60
3852708	Rock	1.97	3.6	19.6	86.1	132	25.5	17.1	5.6	535	2.03	836.9	0.7	55.0	2.9	41	2.7	15.5	0.3	24	0.33
DUP 3852708	QC		3.2	15.9	82.7	132	25.4	16.7	5.4	534	1.98	837.7	0.7	58.7	2.8	40	2.8	14.8	0.3	24	0.32
3852776	Rock	0.72	>2000	15.9	511.0	7	4.6	2.1	0.8	76	0.48	1.0	0.4	9.9	1.2	15	8.8	0.2	9.2	13	0.04
DUP 3852776	QC		>2000	12.3	504.6	4	4.4	1.9	0.8	82	0.49	<0.5	0.5	8.7	1.2	14	8.6	0.2	8.9	13	0.04
Reference Materials																					
STD AGPROOF	Standard																				
STD AGPROOF	Standard																				
STD AGPROOF	Standard																				
STD AGPROOF	Standard																				
STD BVGEO01	Standard		11.7	4618.7	189.8	1862	2.5	160.2	27.2	753	3.83	123.3	3.9	221.4	17.4	64	6.3	3.2	25.8	67	1.40
STD BVGEO01	Standard		10.7	4419.0	182.3	1763	2.6	161.0	24.8	736	3.67	126.9	3.8	211.2	15.8	60	6.6	3.0	24.9	73	1.36



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QUALITY CONTROL REPORT

WHI21000449.2

MethodAnalyte	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
Unit	P	Lppm	Crppm	Mg	Bppm	Ti	B	Al	Na	K	W	Hg	ppm	Scppm	Tippm	S	Gppm	Seppm	Teppm	Mo	Cu
MDL	%0.001	1	1	%0.01	1	%0.001	ppm	%0.01	%0.001	%0.01	ppm0.1	0.01	0.1	0.1	%0.05	1	0.5	0.2	%0.001	%0.001	
Pulp Duplicates							1														
3852575 Rock	0.002	<1	8	0.02	3	0.008	<1	0.09	0.002	<0.01	0.4	<0.01	0.3	<0.1	<0.05	1	2.8	9.3			
REP 3852575 QC	0.001	<1	8	0.02	3	0.008	<1	0.09	0.002	<0.01	0.4	<0.01	0.3	<0.1	<0.05	1	3.7	9.0			
3852596 Rock	0.051	7	27	0.52	68	0.002	2	0.81	0.003	0.11	0.3	0.29	4.0	<0.1	<0.05	2	<0.5	<0.2			
REP 3852596 QC																					
3852663 Rock	0.018	6	9	0.19	79	<0.001	1	0.35	0.003	0.17	0.1	<0.01	1.7	<0.1	<0.05	<1	<0.5	<0.2			
REP 3852663 QC	0.017	7	9	0.19	85	<0.001	1	0.36	0.003	0.17	0.1	<0.01	1.8	<0.1	<0.05	<1	<0.5	<0.2			
3852711 Rock	0.008	1	13	0.24	14	0.002	2	0.29	0.002	0.02	<0.1	0.03	0.8	<0.1	1.31	1	40.1	0.3	<0.001	0.398	
REP 3852711 QC																					
3852731 Rock	0.002	<1	9	<0.01	97	<0.001	<1	0.04	<0.001	0.02	0.6	<0.01	0.2	<0.1	1.41	<1	23.2	5.3	0.025	1.588	
REP 3852731 QC																			0.025	1.594	
3852732 Rock	0.001	2	9	<0.01	74	<0.001	<1	0.05	<0.001	0.03	0.4	<0.01	0.2	<0.1	0.20	<1	1.4	<0.2	0.330	0.018	
REP 3852732 QC	<0.001	2	9	<0.01	76	<0.001	<1	0.05	<0.001	0.03	0.4	<0.01	0.2	<0.1	0.21	<1	1.6	<0.2			
3852767 Rock	0.098	5	4	2.00	143	0.006	<1	2.58	0.007	0.30	0.1	<0.01	4.9	<0.1	0.31	6	<0.5	<0.2			
REP 3852767 QC	0.096	5	4	1.97	138	0.005	1	2.49	0.006	0.30	0.1	<0.01	4.6	<0.1	0.31	6	<0.5	<0.2			
Core Reject Duplicates																					
3852552 Rock	0.114	6	65	1.55	63	0.188	<1	1.53	0.016	0.07	0.6	<0.01	7.4	<0.1	1.74	8	8.4	0.2			
DUP 3852552 QC	0.113	6	66	1.55	67	0.189	<1	1.55	0.017	0.07	0.6	<0.01	7.6	<0.1	1.75	8	7.5	<0.2			
3852708 Rock	0.075	7	24	0.57	41	0.082	3	0.74	0.007	0.19	1.2	<0.01	2.5	0.1	0.43	2	1.1	<0.2			
DUP 3852708 QC	0.074	6	22	0.57	39	0.080	2	0.72	0.006	0.18	1.1	<0.01	2.4	0.1	0.42	2	0.9	<0.2			
3852776 Rock	0.003	5	9	<0.01	582	<0.001	<1	0.06	0.001	0.04	1.2	0.02	0.2	<0.1	0.19	<1	2.9	1.1	0.370	0.001	
DUP 3852776 QC	0.003	4	9	<0.01	552	<0.001	<1	0.06	0.001	0.04	1.3	0.02	0.2	<0.1	0.19	<1	2.5	1.0	0.369	0.001	
Reference Materials																					
STD AGPROOF Standard																					
STD AGPROOF Standard																					
STD AGPROOF Standard																					
STD AGPROOF Standard																					
STD BVGE001 Standard	0.071	28	199	1.35	238	0.243	5	2.44	0.199	0.90	4.9	0.09	6.5	0.7	0.70	8	4.7	1.0			
STD BVGE001 Standard	0.073	27	185	1.33	202	0.219	4	2.34	0.204	0.88	4.5	0.10	6.6	0.6	0.65	8	4.3	1.0			



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Project: PIKE
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QUALITY CONTROL REPORT

WHI21000449.2

Method	Analyte	AQ370	FA530	FA501	GC817
Unit		Pb	Agppm	Ag	Pb
MDL		%0.01	20	%0.001	%2
Pulp Duplicates					
3852575	Rock				
REP 3852575	QC				
3852596	Rock		821		
REP 3852596	QC		833		
3852663	Rock				
REP 3852663	QC				
3852711	Rock	1.98	>10000	1.127	
REP 3852711	QC	1.093			
3852731	Rock	<0.01			
REP 3852731	QC	<0.01			
3852732	Rock	<0.01			
REP 3852732	QC				
3852767	Rock				
REP 3852767	QC				
Core Reject Duplicates					
3852552	Rock				
DUP 3852552	QC				
3852708	Rock				
DUP 3852708	QC				
3852776	Rock	0.05			
DUP 3852776	QC	0.05			
Reference Materials					
STD AGPROOF	Standard		97		
STD AGPROOF	Standard		99		
STD AGPROOF	Standard		99		
STD AGPROOF	Standard	0.010			
STD BVGE001	Standard				
STD BVGE001	Standard				



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QUALITY CONTROL REPORT

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WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	
Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Cr			
kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01	0.01	0.01	
STD CDN-ME-9A	Standard																					
STD CDN-ME-14A	Standard																					
STD CDN-ME-9A	Standard																					
STD CDN-ME-14A	Standard																					
STD CPB-2	Standard																					
STD CPB-3	Standard																					
STD DS11	Standard	15.8	147.7	142.9	345	1.8	82.2	14.0	1066	3.16	45.3	2.8	69.0	9.4	74	2.0	8.3	12.0	49	1.10		
STD DS11	Standard	15.2	142.2	138.2	319	1.6	75.5	13.2	1002	3.10	43.4	2.6	74.3	8.8	65	2.4	8.6	11.4	50	1.05		
STD OREAS262	Standard	0.7	123.0	57.1	157	0.4	65.0	28.7	547	3.26	36.0	1.2	54.7	11.1	37	0.6	4.0	1.0	23	2.98		
STD OREAS262	Standard	0.7	111.6	56.6	148	0.5	63.4	26.8	540	3.16	36.2	1.3	49.9	9.5	37	0.6	3.9	1.0	22	2.98		
STD OREAS262	Standard	0.6	111.9	55.6	149	0.5	62.1	27.0	542	3.20	37.7	1.2	53.6	9.7	35	0.6	3.7	1.0	22	3.00		
STD OREAS262	Standard	0.7	114.8	56.3	145	0.5	62.9	28.0	530	3.27	38.1	1.2	68.8	9.2	36	0.6	6.2	1.1	22	2.97		
STD OXQ132	Standard																					
STD OXQ132	Standard																					
STD OXQ132	Standard																					
STD OXQ132	Standard																					
STD OXQ132	Standard																					
STD OXQ132	Standard																					
STD BVGEO01 Expected		11.2	4415	187	1741	2.53	163	25	733	3.7	121	3.77	219	14.4	55	6.5	3.39	25.6	73	1.3219		
STD DS11 Expected		14.6	149	138	345	1.71	77.7	14.2	1055	3.1	42.8	2.59	79	7.65	67.3	2.37	8.74	12.2	50	1.063		
STD OREAS262 Expected		0.68	118	56	154	0.45	62	26.9	530	3.284	35.8	1.22	65	9.33	36	0.61	5.06	1.03	22.5	2.98		
STD CDN-ME-9A Expected																						
STD CDN-ME-14A Expected																						
STD CPB-2 Expected																						
STD CPB-3 Expected																						
STD AGPROOF Expected																						
STD OXQ132 Expected																						
BLK	Blank	0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01		



Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

QUALITY CONTROL REPORT

WHI21000449.2

		AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
		P	La Cr	Mg Ba	Ti B	Al	Na	K	W	Hg	Sc Tl	S	Ga Se	Te	Mo	Cu				
		%	ppm ppm	% ppm	% ppm	%	%	%	ppm	ppm	ppm ppm	%	ppm ppm	ppm	%	%				
		0.001	1 1	0.01 1	0.001 1	0.01	0.001	0.01	0.1	0.01	0.1 0.1	0.05	1 0.5	0.2	0.001	0.001				
STD CDN-ME-9A	Standard																		<0.001	0.663
STD CDN-ME-14A	Standard																		0.002	1.220
STD CDN-ME-9A	Standard																		<0.001	0.664
STD CDN-ME-14A	Standard																		0.002	1.232
STD CPB-2	Standard																			
STD CPB-3	Standard																			
STD DS11	Standard	0.068	20 61	0.87 381	0.100 0.001	6 1.19	0.077 0.41	3.0 0.29	3.4 5.1	0.28 5 2.8	4.5									
STD DS11	Standard	0.068	19 58	0.83 365	0.092 0.001	8 1.18	0.076 0.40	2.9 0.24	3.4 5.0	0.28 5 1.8	4.6									
STD OREAS262	Standard	0.039	18 46	1.17 251	0.003 0.003	4 1.37	0.067 0.33	0.2 0.17	3.4 0.4	0.26 4 <0.5	<0.2									
STD OREAS262	Standard	0.039	17 44	1.16 250	0.003 0.003	2 1.35	0.067 0.32	0.1 0.18	3.4 0.4	0.25 4 <0.5	<0.2									
STD OREAS262	Standard	0.041	17 44	1.17 246	0.003 0.003	5 1.36	0.068 0.32	0.2 0.16	3.2 0.5	0.26 4 0.6	0.2									
STD OREAS262	Standard	0.038	18 45	1.17 258	0.003 0.003	4 1.39	0.069 0.32	0.2 0.15	3.4 0.5	0.26 4 <0.5	0.2									
STD OXQ132	Standard																			
STD OXQ132	Standard																			
STD OXQ132	Standard																			
STD OXQ132	Standard																			
STD OXQ132	Standard																			
STD OXQ132	Standard																			
STD BVGEO01 Expected		0.0727	25.9 187	1.2963 260	0.233 0.001	3.8 2.347	0.1924 0.89	5.3 0.1	5.97 0.62	0.6655 7.37	4.84 1.02									
STD DS11 Expected		0.0701	18.6 61.5	0.85 385	0.0976 0.001	1.1795 0.0762	0.4	2.9 0.26	3.4 4.9	0.2835 5.1	2.2 4.56									
STD OREAS262 Expected		0.04	15.9 41.7	1.17 248	0.0027 0.003	4 1.3	0.071 0.312	0.2 0.17	3.24 0.47	0.253 4.1	0.4 0.23									
STD CDN-ME-9A Expected																			0.00033	0.654
STD CDN-ME-14A Expected																			0.0015	1.24
STD CPB-2 Expected																				
STD CPB-3 Expected																				
STD AGPROOF Expected																				
STD OXQ132 Expected																				
BLK	Blank	<0.001	<1 <1	<0.01 <1	<0.001 <1	<1 <0.01	<0.001 <0.01	<0.1 <0.01	<0.1 <0.01	<0.1 <0.1	<0.1 <0.1	<0.05 <1	<0.5 <0.2							



Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Ryan Burke**
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: November 08, 2021

Page: 2 of 3 **Part:** 3 of 3

QUALITY CONTROL REPORT

WHI21000449.2

		AQ370	FA530	FA501	GC817
		Pb	Ag	Ag	Pb
		%	ppm	%	%
		0.01	20	0.001	2
STD CDN-ME-9A	Standard	<0.01			
STD CDN-ME-14A	Standard	0.50			
STD CDN-ME-9A	Standard	<0.01			
STD CDN-ME-14A	Standard	0.50			
STD CPB-2	Standard				63.19
STD CPB-3	Standard				58.02
STD DS11	Standard				
STD DS11	Standard				
STD OREAS262	Standard				
STD OREAS262	Standard				
STD OREAS262	Standard				
STD OREAS262	Standard				
STD OXQ132	Standard		131		
STD OXQ132	Standard		128		
STD OXQ132	Standard		130		
STD OXQ132	Standard		133		
STD OXQ132	Standard		116		
STD OXQ132	Standard		135		
STD OXQ132	Standard	0.011			
STD BVGEO01 Expected					
STD DS11 Expected					
STD OREAS262 Expected					
STD CDN-ME-9A Expected		0.003			
STD CDN-ME-14A Expected		0.488			
STD CPB-2 Expected					63.52
STD CPB-3 Expected					57.94
STD AGPROOF Expected			960.0096		
STD OXQ132 Expected			128.50.01285		
BLK	Blank				



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Project: PIKE
Report Date: November 08, 2021

Page: 3 of 3 Part: 1 of 3

QUALITY CONTROL REPORT

WHI21000449.2

		WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01
BLK	Blank		<0.1	0.2	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
Prep Wash																					
ROCK-WHI	Prep Blank		1.7	5.2	1.4	31	<0.1	2.1	3.5	475	1.83	1.1	0.5	1.2	2.6	22	<0.1	0.1	<0.1	22	0.56
ROCK-WHI	Prep Blank		1.6	4.7	1.9	28	<0.1	1.7	3.4	447	1.79	1.0	0.5	<0.5	2.6	21	<0.1	<0.1	<0.1	22	0.56



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QUALITY CONTROL REPORT

WHI21000449.2

		AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu
		%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%
		0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	0.001	0.001
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2		
BLK	Blank																			<0.001	<0.001
BLK	Blank																			<0.001	<0.001
BLK	Blank																				
BLK	Blank																				
BLK	Blank																				
Prep Wash																					
ROCK-WHI	Prep Blank	0.040	7	8	0.47	54	0.081	<1	0.78	0.074	0.08	0.1	<0.01	2.7	<0.1	<0.05	4	<0.5	<0.2		
ROCK-WHI	Prep Blank	0.039	7	7	0.44	48	0.084	1	0.78	0.079	0.08	<0.1	<0.01	2.7	<0.1	<0.05	4	<0.5	<0.2		



BUREAU VERITAS MINERAL LABORATORIES
Canada

Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Ryan Burke**
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Project: Report Date: PIKE
November 08, 2021

Page: 3 of 3 Part: 3 of 3

QUALITY CONTROL REPORT

WHI21000449.2

		AQ370	FA530	FA501	GC817
		Pb	Ag	Ag	Pb
		%	ppm	%	%
		0.01	20	0.001	2
BLK	Blank				
BLK	Blank				
BLK	Blank				
BLK	Blank	<0.01			
BLK	Blank		<20		
BLK	Blank	<0.01			
BLK	Blank		<20		
BLK	Blank		<20		
BLK	Blank	<0.001			
Prep Wash					
ROCK-WHI	Prep Blank				
ROCK-WHI	Prep Blank				



BUREAU VERITAS MINERAL LABORATORIES
Canada

www.bvna.com/mining-laboratory-serv

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Client: **Ryan Burke**
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Submitted By: Ryan Burke Canada-
Receiving Lab: Whitehorse August 31,
Received: 2021

Analysis Start: October 05, 2021

Report Date: October 19, 2021

Page: 1 of 6

CERTIFICATE OF ANALYSIS

WHI21000450.1

CLIENT JOB INFORMATION

Project: Shipment PIKE
ID:
P.O. Number Number
of Samples: 138

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PRP70-250	138	Crush, split and pulverize 250 g rock to 200 mesh			WHI
AQ201	138	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN
SHP01	138	Per sample shipping charges for branch shipments			VAN
AQ370	9	1:1:1 Aqua Regia Digestion ICP-ES Finish	1	Completed	VAN
FA530	14	Lead collection fire assay 30G fusion - Grav finish	30	Completed	VAN

SAMPLE DISPOSAL

IMM-PLP Return immediately after analysis
PICKUP-RJT Client to Pickup Rejects

ADDITIONAL COMMENTS

Bureau Veritas does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Ryan Burke
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3
Canada

CC: Michael Burke





Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Project: PIKE
Report Date: October 19, 2021

Page: 2 of 6 Part: 1 of 3

CERTIFICATE OF ANALYSIS

WHI21000450.1

Method	Analyte	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Unit	Unit	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
MDL	MDL	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01	
3852777	Rock	0.93	56.2	1901.1	20.9	10	17.7	1.7	0.9	88	1.13	0.7	0.2	5.5	0.5	4	0.3	<0.1	138.2	3	0.22	
3852778	Rock	0.16	81.8	5589.4	88.2	17	69.5	2.8	1.7	62	2.05	1.0	<0.1	36.6	0.7	2	0.9	0.2	934.5	11	0.02	
3852779	Rock	0.43	>2000	634.3	92.4	5	15.7	1.8	0.3	35	0.88	2.0	0.9	5.2	0.2	13	2.1	0.2	119.8	2	0.05	
3852780	Rock	0.95	726.6	826.0	37.6	8	6.5	1.5	0.2	39	0.48	<0.5	0.3	3.5	0.2	2	0.6	0.8	65.5	<1	0.05	
3852781	Rock	1.17	>2000	359.3	27.6	7	5.5	1.3	0.2	29	0.52	1.6	0.3	2.3	0.1	2	1.4	0.7	42.7	1	0.02	
3852782	Rock	1.76	1961.1	1853.4	40.0	10	13.0	1.5	0.7	63	0.62	0.7	0.4	3.1	0.2	2	1.6	0.2	194.5	1	0.09	
3852783	Rock	1.44	1537.5	4861.2	414.4	17	40.1	1.5	0.8	82	1.09	0.7	0.5	7.9	0.2	4	2.3	0.3	551.7	1	0.21	
3852784	Rock	3.27	982.8	1516.1	21.8	9	4.6	1.3	0.6	100	0.40	1.2	0.2	2.4	0.1	4	1.2	0.1	71.3	<1	0.38	
3852785	Rock	1.74	25.6	100.4	15.9	61	0.9	31.0	7.5	377	3.28	10.1	3.0	<0.5	3.5	24	0.5	1.3	4.5	112	0.52	
3852786	Rock	0.72	5.1	10.4	2.4	18	0.1	2.3	0.9	3107	2.48	1.7	0.8	<0.5	0.8	966	0.2	0.1	0.5	24	29.47	
3852787	Rock	0.56	7.1	80.8	1457.9	291	81.4	85.7	9.1	570	4.41	376.1	0.8	15.9	5.6	18	5.6	5.8	2.8	41	0.38	
3852788	Rock	1.06	11.1	165.4	5.2	283	0.6	54.9	10.6	965	5.04	5.0	6.2	4.2	3.0	67	2.5	1.4	0.3	60	3.10	
3852789	Rock	1.54	4.4	220.2	9.0	101	1.2	33.2	30.4	392	4.94	<0.5	2.3	1.6	10.8	470	0.3	0.7	0.5	115	2.66	
3852790	Rock	0.47	2.9	29.7	5.6	23	0.7	19.7	4.7	280	2.49	7.4	2.0	<0.5	1.8	73	<0.1	0.5	0.4	43	0.79	
3852791	Rock	1.71	2.1	54.6	14.1	11	8.6	3.8	3.8	698	2.07	526.0	0.8	87.2	4.4	28	0.1	3.0	0.5	4	0.94	
3852792	Rock	1.08	5.9	16.2	28.5	135	0.1	3.6	1.6	211	2.24	2.1	2.3	1.1	6.2	9	0.7	<0.1	0.3	16	0.04	
3852793	Rock	1.03	43.3	20.2	6.5	18	0.5	3.1	14.2	464	1.90	2.9	0.3	38.1	1.1	54	<0.1	<0.1	2.0	20	2.62	
3852794	Rock	0.33	5.2	1428.6	>10000	21	>100	2.4	0.4	94	0.71	<0.5	1.6	128.8	0.5	23	23.2	77.2	10.2	2	0.02	
3852795	Rock	0.40	2.0	9.5	280.3	42	0.3	2.4	0.7	217	0.54	1.0	<0.1	3.5	0.1	4	0.6	0.1	0.2	2	0.10	
3852796	Rock	1.12	3.3	4507.1	>10000	48	29.1	8.4	2.5	90	1.85	1.4	2.6	149.6	0.5	9	6.2	6.1	4.6	6	0.03	
3852797	Rock	1.17	2.9	16.9	287.3	99	2.4	2.9	1.0	143	0.83	62.4	0.2	4.7	1.1	9	1.4	2.4	0.3	4	0.08	
3852798	Rock	0.63	1.7	16.5	408.9	62	0.4	2.9	0.7	126	0.69	<0.5	0.4	4.9	0.2	4	0.8	0.1	0.4	3	0.02	
3852799	Rock	1.33	2.0	5.2	176.8	92	0.2	4.5	1.3	288	1.06	<0.5	0.2	3.7	0.3	9	1.4	<0.1	0.3	5	0.05	
3852800	Rock	0.71	1.5	14.4	4068.0	43	1.3	2.6	0.8	178	0.57	<0.5	0.2	5.3	0.2	3	2.2	0.6	0.1	2	0.04	
3852801	Rock	0.56	5.6	7.3	17.7	33	<0.1	37.4	11.2	386	1.96	<0.5	0.4	0.7	2.4	170	<0.1	<0.1	0.1	45	2.49	
3852802	Rock	0.68	2.6	9.4	28.9	28	0.1	4.9	6.4	503	1.76	0.8	1.2	1.8	3.0	69	<0.1	<0.1	0.3	22	1.82	
3852803	Rock	0.25	38.5	974.0	13.7	31	8.6	44.0	137.1	235	10.99	1.3	0.7	16842.4	4.2	18	0.2	<0.1	66.5	30	0.47	
3852804	Rock	0.16	2.4	7.8	28.0	32	0.1	2.7	3.5	403	1.21	0.7	1.2	19.1	5.3	87	<0.1	<0.1	0.4	8	1.48	
3852805	Rock	0.93	1.4	33.3	4.5	24	0.3	7.3	8.9	1247	1.79	2.6	0.5	182.1	1.3	162	0.2	<0.1	1.1	27	5.95	
3852806	Rock	0.63	62.3	28.3	13.9	20	0.6	11.6	110.8	318	3.48	1.3	0.4	54.8	2.8	46	<0.1	<0.1	1.4	13	1.73	



Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

CERTIFICATE OF ANALYSIS

WHI21000450.1

Method Analyte Unit MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu	
	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	
3852777	Rock	0.002	<1	8	<0.01	51	0.001	1	0.04	0.003	<0.01	1.6	<0.01	0.2	<0.1	0.17	<1	3.8	1.2		
3852778	Rock	<0.001	<1	14	0.01	81	0.003	<1	0.03	0.003	<0.01	15.2	0.04	0.2	<0.1	0.52	<1	23.5	9.5		
3852779	Rock	<0.001	<1	9	<0.01	111	0.001	<1	0.02	0.001	<0.01	9.8	<0.01	<0.1	<0.1	0.25	<1	4.5	0.9	0.502	0.059
3852780	Rock	<0.001	<1	9	<0.01	10	<0.001	1	0.01	<0.001	<0.01	0.4	<0.01	<0.1	<0.1	0.05	<1	1.6	0.6		
3852781	Rock	<0.001	<1	7	<0.01	11	<0.001	<1	0.01	<0.001	<0.01	0.6	<0.01	<0.1	<0.1	0.21	<1	2.8	0.4	0.341	0.032
3852782	Rock	<0.001	1	7	<0.01	26	<0.001	<1	0.03	0.001	<0.01	0.5	<0.01	<0.1	<0.1	0.22	<1	4.5	0.9		
3852783	Rock	<0.001	<1	7	<0.01	50	<0.001	<1	0.03	<0.001	<0.01	0.7	<0.01	0.1	<0.1	0.44	<1	12.3	2.7		
3852784	Rock	<0.001	<1	6	<0.01	7	<0.001	<1	0.02	<0.001	<0.01	0.4	<0.01	<0.1	<0.1	0.10	<1	2.0	0.3		
3852785	Rock	0.156	11	43	0.43	78	0.082	<1	0.75	0.003	0.05	0.9	<0.01	3.5	<0.1	1.17	4	4.3	<0.2		
3852786	Rock	0.003	12	2	3.55	470	<0.001	<1	0.10	0.003	0.05	<0.1	<0.01	3.3	<0.1	<0.05	<1	<0.5	<0.2		
3852787	Rock	0.079	15	28	0.52	48	0.136	1	0.96	0.005	0.28	1.8	<0.01	2.8	0.2	3.37	4	8.2	0.4		
3852788	Rock	0.555	15	23	0.15	70	0.065	1	2.52	0.006	0.08	0.4	<0.01	1.4	<0.1	0.89	15	8.2	<0.2		
3852789	Rock	0.655	73	11	1.52	87	0.096	<1	2.73	0.285	0.05	0.4	<0.01	2.2	<0.1	1.79	8	16.4	<0.2		
3852790	Rock	0.106	9	73	0.45	227	0.307	<1	0.50	0.048	0.10	0.7	<0.01	2.4	0.1	0.54	4	2.1	<0.2		
3852791	Rock	0.016	7	6	0.14	65	0.003	1	0.39	0.003	0.18	0.1	0.02	0.5	<0.1	0.98	1	1.4	<0.2		
3852792	Rock	0.004	23	6	0.02	2066	<0.001	<1	0.33	0.001	0.09	<0.1	<0.01	2.7	<0.1	<0.05	1	<0.5	<0.2		
3852793	Rock	0.009	5	6	0.95	144	<0.001	<1	0.19	0.004	0.03	<0.1	0.03	1.2	<0.1	0.59	<1	<0.5	<0.2		
3852794	Rock	0.002	<1	10	0.11	77	0.002	<1	0.13	0.002	0.01	<0.1	<0.01	0.1	<0.1	1.95	<1	9.7	6.4	<0.001	0.142
3852795	Rock	<0.001	<1	8	0.16	17	0.002	<1	0.12	0.002	<0.01	<0.1	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2		
3852796	Rock	0.015	<1	13	0.13	53	0.010	<1	0.14	0.002	0.03	0.1	<0.01	0.4	<0.1	2.11	<1	1.7	1.4	<0.001	0.455
3852797	Rock	0.007	3	11	0.24	63	0.015	<1	0.28	0.006	0.04	0.2	<0.01	0.4	<0.1	0.07	1	<0.5	<0.2		
3852798	Rock	0.003	<1	7	0.18	4	0.002	<1	0.16	0.002	0.01	<0.1	<0.01	0.3	<0.1	<0.05	<1	<0.5	<0.2		
3852799	Rock	0.003	<1	9	0.38	8	0.005	<1	0.34	0.002	0.02	<0.1	<0.01	0.6	<0.1	<0.05	2	<0.5	<0.2		
3852800	Rock	0.002	<1	8	0.16	7	0.002	<1	0.12	0.002	<0.01	0.2	<0.01	0.2	<0.1	0.06	<1	<0.5	0.2		
3852801	Rock	0.013	9	43	1.04	35	<0.001	<1	0.31	0.008	0.03	<0.1	<0.01	3.6	<0.1	0.06	<1	<0.5	<0.2		
3852802	Rock	0.051	16	8	0.19	112	<0.001	<1	0.49	0.024	0.22	<0.1	0.01	1.2	<0.1	<0.05	1	<0.5	<0.2		
3852803	Rock	0.026	7	13	0.18	5	0.001	<1	0.30	0.007	0.09	0.2	4.67	2.4	<0.1	8.41	<1	3.5	27.1		
3852804	Rock	0.002	13	9	0.61	42	0.002	<1	0.44	0.004	0.03	0.3	0.05	0.4	<0.1	<0.05	1	<0.5	<0.2		
3852805	Rock	0.040	8	5	1.39	86	0.001	<1	0.48	0.007	0.23	<0.1	0.02	2.7	<0.1	0.25	1	<0.5	<0.2		
3852806	Rock	0.018	6	6	0.21	43	0.001	<1	0.32	0.012	0.14	0.4	0.01	0.7	<0.1	2.65	1	1.0	<0.2		

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Client: **Ryan Burke**
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Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: October 19, 2021

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CERTIFICATE OF ANALYSIS

WHI21000450.1

Method	Analyte	AQ370	FA530
		Pb	Ag
Unit		%	ppm
MDL		0.01	20
3852777	Rock		
3852778	Rock		
3852779	Rock	<0.01	
3852780	Rock		
3852781	Rock	<0.01	
3852782	Rock		
3852783	Rock		
3852784	Rock		
3852785	Rock		
3852786	Rock		
3852787	Rock		
3852788	Rock		
3852789	Rock		
3852790	Rock		
3852791	Rock		
3852792	Rock		
3852793	Rock		
3852794	Rock	>4	110
3852795	Rock		
3852796	Rock	>4	
3852797	Rock		
3852798	Rock		
3852799	Rock		
3852800	Rock		
3852801	Rock		
3852802	Rock		
3852803	Rock		
3852804	Rock		
3852805	Rock		
3852806	Rock		

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Project: PIKE
Report Date: October 19, 2021

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CERTIFICATE OF ANALYSIS

WHI21000450.1

Method	Analyte	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Unit		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
MDL		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.1	
3852807	Rock	0.29	513.6	49.0	10.8	9	1.6	3.5	39.8	44	1.99	1.6	1.5	461.2	1.8	25	0.2	<0.1	9.1	11	0.10	
3852808	Rock	0.55	70.6	19.8	11.8	22	0.4	4.7	29.2	366	1.53	1.1	0.4	51.5	2.0	28	<0.1	<0.1	0.7	18	2.31	
3852809	Rock	0.41	3.0	6.5	42.8	190	0.1	2.8	1.6	767	1.52	<0.5	1.6	3.9	5.7	74	1.0	<0.1	0.3	5	4.39	
3852810	Rock	0.24	184.9	93.9	9.5	32	0.9	14.7	55.7	807	3.99	6.4	1.8	33.0	2.8	55	0.3	0.2	3.9	34	2.13	
3852811	Rock	0.69	682.3	75.6	1.2	4	0.9	3.7	22.0	35	2.75	4.0	0.1	6.1	0.3	2	0.8	<0.1	3.0	2	0.02	
3852812	Rock	0.50	5.1	8.1	10.5	37	0.1	6.1	3.8	380	1.41	5.1	0.9	2.0	6.1	54	0.3	0.3	0.3	21	1.71	
3852813	Rock	0.61	2.0	14.7	14.8	63	0.4	24.0	13.7	1476	3.49	2.2	1.6	40.5	5.0	178	0.2	<0.1	0.9	53	10.50	
3852814	Rock	0.59	1.8	82.1	6.2	15	2.5	9.4	18.2	128	3.31	2.0	1.2	8633.3	5.4	22	<0.1	<0.1	8.6	16	0.80	
3852815	Rock	1.40	1.4	26.5	21.1	75	0.2	6.8	14.5	753	3.13	2.5	1.3	4.1	4.2	119	1.0	0.9	0.1	77	1.95	
3852816	Rock	0.94	1.4	25.6	52.6	48	0.3	3.8	8.5	893	2.17	5.6	1.2	3.9	4.8	62	0.9	1.3	0.1	16	3.32	
3852817	Rock	2.95	1.0	19.3	30.5	48	0.3	6.1	8.9	418	1.86	1.9	1.5	4.5	6.5	46	0.6	0.9	0.2	33	0.84	
3852818	Rock	2.94	348.1	8947.7	20.9	87	12.8	9.4	11.9	419	2.49	<0.5	4.8	41.6	6.0	57	1.1	0.3	545.8	51	0.54	
3852819	Rock	0.59	4.0	32.7	27.2	104	0.1	27.5	8.0	606	2.31	26.7	0.8	<0.5	3.6	22	0.6	0.4	1.6	58	0.53	
3852820	Rock	0.44	2.9	37.8	9.8	65	0.2	16.9	9.4	604	3.42	9.1	2.0	1.5	3.8	31	<0.1	0.3	2.1	27	0.52	
3852821	Rock	0.89	107.9	133.4	10.0	123	0.6	32.3	30.9	699	6.85	0.7	0.5	46.2	3.2	45	0.4	0.1	0.4	69	1.00	
3852822	Rock	0.63	4.7	25.0	8.2	83	0.3	11.3	6.7	517	3.18	2.5	1.6	5.8	5.2	35	0.3	0.1	0.6	37	0.70	
3852823	Rock	4.70	5.8	62.5	2160.3	190	>100	6.5	1.8	309	2.12	107.9	1.3	125.7	1.5	8	0.5	6.6	2.4	18	0.11	
3852824	Rock	0.46	0.9	13.3	27.0	95	2.5	70.8	15.5	511	2.26	2.2	0.8	3.9	4.4	95	0.5	0.5	0.2	47	1.17	
3852825	Rock	0.54	56.8	9950.2	48.3	25	>100	2.8	5.0	112	3.18	<0.5	1.2	33.7	2.2	26	0.8	0.3	409.8	16	0.21	
3852826	Rock	0.89	8.3	66.1	68.2	11	5.9	1.5	2.2	83	1.67	4.9	0.8	541.3	1.0	14	<0.1	<0.1	149.3	18	0.08	
3852827	Rock	1.24	3.0	18.6	11.4	40	0.8	5.0	8.2	427	2.52	<0.5	2.7	78.4	8.2	42	0.1	<0.1	21.4	74	0.39	
3852828	Rock	1.09	2.6	5.3	14.2	17	0.9	1.1	0.2	33	0.83	70.3	1.4	23.1	6.0	2	<0.1	0.1	0.5	6	<0.01	
3852829	Rock	0.85	2.8	5.7	16.0	29	0.4	0.9	0.1	33	0.89	104.4	1.6	42.5	8.3	3	<0.1	0.2	0.3	<1	<0.01	
3852830	Rock	0.56	400.0	27.5	15.7	10	0.7	1.3	1.8	47	0.51	2.8	2.4	5.0	14.4	8	0.5	0.4	1.6	<1	0.03	
3852831	Rock	0.76	1.9	5.3	12.9	55	0.2	2.9	6.7	806	2.49	0.7	1.3	1.2	5.4	125	0.2	<0.1	0.2	28	5.03	
3852832	Rock	1.81	1.9	8.8	18.7	59	0.5	2.8	1.3	151	1.20	0.7	1.3	1.5	7.1	6	0.2	0.1	0.5	8	0.05	
3852833	Rock	1.58	0.9	7.1	5.7	72	0.1	16.3	11.7	729	3.05	0.8	0.7	2.0	4.3	29	<0.1	0.2	0.1	66	0.52	
3852834	Rock	2.26	0.9	11.0	2.5	13	0.1	3.9	4.8	235	0.95	<0.5	0.2	1.1	2.1	11	<0.1	<0.1	0.2	13	0.36	
3852835	Rock	1.81	1.1	9.2	4.1	63	<0.1	13.7	10.4	597	3.04	<0.5	0.9	1.3	4.2	41	<0.1	0.1	<0.1	60	0.81	
3852836	Rock	1.08	1.0	5.6	1.8	8	<0.1	1.8	1.6	185	0.58	<0.5	0.1	<0.5	1.0	3	<0.1	<0.1	0.1	8	0.04	

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Project: PIKE
Report Date: October 19, 2021

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CERTIFICATE OF ANALYSIS

WHI21000450.1

Method	Analyte	Unit	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
			P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu	
MDL			%	ppm	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	%	%	%
3852807	Rock		0.030	9	6	0.03	84	<0.001	<1	0.32	0.009	0.11	0.2	0.05	1.3	<0.1	0.86	1	<0.5	1.1			
3852808	Rock		0.019	9	8	0.18	48	0.002	<1	0.21	0.007	0.07	0.1	<0.01	1.0	<0.1	0.18	<1	<0.5	0.2			
3852809	Rock		0.001	22	4	1.58	24	0.007	<1	0.23	0.049	0.05	1.3	<0.01	0.5	<0.1	0.10	<1	<0.5	<0.2			
3852810	Rock		0.072	23	9	0.61	72	0.003	2	1.10	0.022	0.12	0.5	0.04	1.7	<0.1	0.28	5	0.8	0.5			
3852811	Rock		0.002	<1	6	<0.01	9	<0.001	3	0.03	0.003	0.01	1.9	<0.01	<0.1	<0.1	1.34	<1	1.2	0.4			
3852812	Rock		0.004	21	6	0.68	41	0.002	2	0.32	0.007	0.15	0.2	0.01	1.3	<0.1	<0.05	2	<0.5	<0.2			
3852813	Rock		0.067	25	12	1.86	111	0.009	<1	1.24	0.016	0.18	<0.1	<0.01	5.8	<0.1	<0.05	4	<0.5	<0.2			
3852814	Rock		0.045	19	5	0.31	47	0.001	2	0.36	0.024	0.17	0.1	0.18	0.8	<0.1	2.55	1	<0.5	3.5			
3852815	Rock		0.140	16	9	1.05	81	0.220	3	2.02	0.036	0.12	1.8	<0.01	6.0	<0.1	<0.05	8	<0.5	<0.2			
3852816	Rock		0.015	8	8	0.93	40	0.006	1	1.28	0.003	0.08	10.8	<0.01	1.7	<0.1	0.25	3	<0.5	<0.2			
3852817	Rock		0.082	12	9	0.73	63	0.097	2	1.39	0.017	0.22	1.2	<0.01	2.6	<0.1	<0.05	4	<0.5	<0.2			
3852818	Rock		0.067	9	14	1.05	82	0.135	<1	1.24	0.040	0.07	2.0	<0.01	4.1	<0.1	0.27	5	5.2	2.2			
3852819	Rock		0.068	12	63	1.05	47	0.107	1	1.27	0.040	0.02	0.3	<0.01	5.1	<0.1	<0.05	8	<0.5	<0.2			
3852820	Rock		0.086	9	31	0.86	153	0.126	<1	1.45	0.070	0.10	0.6	<0.01	5.9	<0.1	0.07	7	<0.5	<0.2			
3852821	Rock		0.028	12	9	1.26	348	0.003	<1	2.26	0.003	0.18	5.1	<0.01	8.2	<0.1	0.29	11	<0.5	<0.2			
3852822	Rock		0.090	13	20	0.67	111	0.192	1	1.11	0.109	0.19	0.5	<0.01	6.3	0.2	0.74	6	<0.5	<0.2			
3852823	Rock		0.022	4	17	0.34	25	0.013	<1	0.54	0.007	0.04	0.2	<0.01	1.0	<0.1	0.09	2	21.2	1.1			
3852824	Rock		0.099	10	119	1.67	66	0.075	1	1.68	0.032	0.10	0.3	<0.01	5.3	<0.1	<0.05	5	<0.5	<0.2			
3852825	Rock		0.014	2	7	0.22	31	0.005	<1	0.43	0.008	0.04	0.4	0.02	1.2	<0.1	1.12	2	24.7	3.4			
3852826	Rock		0.007	2	7	0.12	45	0.019	1	0.42	0.043	0.07	44.2	<0.01	0.7	<0.1	0.07	2	<0.5	10.1			
3852827	Rock		0.052	14	12	0.84	139	0.131	<1	1.58	0.132	0.82	31.9	<0.01	3.1	0.5	0.27	6	<0.5	1.9			
3852828	Rock		0.003	22	6	0.01	14	<0.001	<1	0.27	0.004	0.19	2.1	<0.01	0.1	<0.1	<0.05	<1	<0.5	0.5			
3852829	Rock		0.001	12	5	<0.01	91	<0.001	2	0.31	0.003	0.28	0.2	<0.01	0.2	<0.1	0.19	<1	<0.5	<0.2			
3852830	Rock		0.001	8	5	0.03	137	<0.001	<1	0.22	0.026	0.14	0.1	<0.01	<0.1	<0.1	0.10	<1	<0.5	<0.2			
3852831	Rock		0.006	23	5	1.31	49	0.004	<1	0.31	0.032	0.07	0.4	<0.01	1.2	<0.1	<0.05	1	<0.5	<0.2			
3852832	Rock		0.007	14	6	0.03	32	0.009	1	0.34	0.055	0.13	1.1	<0.01	0.9	<0.1	0.08	1	<0.5	<0.2			
3852833	Rock		0.102	22	19	1.02	71	0.013	2	1.59	0.042	0.14	<0.1	<0.01	5.8	<0.1	<0.05	7	<0.5	<0.2			
3852834	Rock		0.015	9	6	0.14	22	0.002	<1	0.28	0.027	0.05	<0.1	<0.01	0.8	<0.1	0.08	1	<0.5	<0.2			
3852835	Rock		0.109	18	24	1.17	88	0.052	1	1.48	0.054	0.13	<0.1	<0.01	4.9	<0.1	<0.05	6	<0.5	<0.2			
3852836	Rock		0.008	3	5	0.07	14	0.001	<1	0.18	0.014	0.03	<0.1	<0.01	0.6	<0.1	<0.05	<1	<0.5	<0.2			

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Ryan Burke**
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: October 19, 2021

Page: 3 of 6 Part: 3 of 3

CERTIFICATE OF ANALYSIS

WHI21000450.1

Method	Analyte	AQ370	FA530
		Pb	Ag
Unit		%	ppm
MDL		0.01	20
3852807	Rock		
3852808	Rock		
3852809	Rock		
3852810	Rock		
3852811	Rock		
3852812	Rock		
3852813	Rock		
3852814	Rock		
3852815	Rock		
3852816	Rock		
3852817	Rock		
3852818	Rock		
3852819	Rock		
3852820	Rock		
3852821	Rock		
3852822	Rock		
3852823	Rock		177
3852824	Rock		
3852825	Rock		154
3852826	Rock		
3852827	Rock		
3852828	Rock		
3852829	Rock		
3852830	Rock		
3852831	Rock		
3852832	Rock		
3852833	Rock		
3852834	Rock		
3852835	Rock		
3852836	Rock		

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Project: PIKE
Report Date: October 19, 2021

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CERTIFICATE OF ANALYSIS

WHI21000450.1

Method	Analyte	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Unit		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
MDL		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.1	
3852837	Rock	3.67	30.0	4.7	3.4	67	<0.1	73.3	20.1	717	3.66	<0.5	1.1	0.7	3.0	95	<0.1	<0.1	0.1	90	2.33	
3852838	Rock	0.71	3.4	14.3	2.4	23	0.3	8.8	38.9	321	2.63	1.0	0.4	21.3	1.8	23	<0.1	<0.1	0.7	18	1.61	
3852839	Rock	1.33	1.7	9.0	3.1	27	0.1	4.1	5.9	454	1.89	1.4	0.9	3.2	3.5	51	<0.1	<0.1	0.3	28	2.36	
3852840	Rock	0.38	0.8	10.6	11.6	166	0.1	13.9	22.1	914	4.39	0.5	1.6	1.8	3.8	136	0.5	0.1	0.2	54	2.99	
3852841	Rock	0.56	10.8	147.5	1.7	4	0.4	3.2	13.5	61	1.78	1.5	4.1	2.0	0.8	19	<0.1	<0.1	0.5	6	0.05	
3852842	Rock	0.55	3.9	173.7	>10000	4	15.8	1.3	0.6	27	0.85	<0.5	2.0	216.4	0.5	7	1.3	0.5	16.5	2	0.01	
3852843	Rock	0.21	2.4	16.1	65.5	10	1.4	5.3	19.9	224	1.63	2.7	1.3	18.7	11.5	34	<0.1	<0.1	2.4	3	0.39	
3852844	Rock	0.84	528.5	1639.3	>10000	6	31.3	2.9	0.8	36	3.65	<0.5	17.3	11306.2	0.6	15	3.0	2.6	4.6	5	<0.01	
3852845	Rock	1.31	18.3	37.4	28.8	6	1.1	5.3	21.2	67	1.24	0.7	0.8	20.8	5.0	9	<0.1	<0.1	2.4	3	0.03	
3852846	Rock	0.98	77.0	436.5	>10000	6	75.0	2.3	1.0	36	2.79	1.0	7.9	37718.0	1.7	11	3.8	18.9	3.8	2	<0.01	
3852847	Rock	1.01	2.6	11.0	129.7	68	0.8	5.2	14.6	460	4.48	0.6	0.9	25.6	4.5	54	<0.1	0.1	6.7	60	0.86	
3852848	Rock	0.44	5.8	23.1	200.8	27	1.3	4.6	8.8	580	4.09	2.4	1.2	52.0	6.9	122	0.1	0.3	4.6	28	2.32	
3852849	Rock	0.76	1.5	7.8	21.8	5	0.4	1.2	4.4	39	1.13	0.7	4.2	23.8	22.5	7	<0.1	0.1	0.5	1	0.05	
3852850	Rock	1.29	1.5	8.3	35.8	60	0.2	11.9	9.8	1468	4.04	0.7	1.1	9.3	5.0	215	0.5	<0.1	0.1	21	5.68	
3852851	Rock	0.77	3.2	365.2	2182.4	130	>100	2.6	5.7	458	4.43	>10000	1.2	5455.3	6.2	28	7.3	55.7	2.3	11	0.23	
3852852	Rock	0.66	4.0	34.7	106.7	22	12.3	4.0	4.1	586	3.65	>10000	0.5	739.5	3.3	35	0.4	23.7	0.4	9	0.32	
3852853	Rock	1.28	5.7	95.3	295.9	108	>100	4.3	1.6	176	1.65	3207.9	0.6	84.0	2.8	14	2.9	160.5	0.3	9	0.08	
3852854	Rock	0.77	3.0	27.9	95.9	135	13.1	17.6	7.7	648	1.78	9728.6	0.7	303.0	2.4	39	2.5	20.0	0.2	18	0.65	
3852855	Rock	1.44	2.0	69.5	187.9	224	70.1	38.4	12.2	1335	2.92	2279.7	0.8	128.8	4.6	57	5.5	8.7	0.2	39	0.43	
3852856	Rock	1.46	2.0	274.1	1282.9	870	>100	50.7	14.0	1595	3.21	2028.4	0.6	108.7	3.7	52	20.0	86.4	0.2	50	0.72	
3852857	Rock	1.44	1.0	115.1	356.4	640	>100	42.2	16.5	1658	3.91	2977.8	0.6	174.6	3.2	44	14.3	25.3	0.2	74	0.49	
3852858	Rock	1.72	1.6	42.3	84.6	204	42.8	17.2	12.4	1052	2.94	1402.2	1.0	88.8	7.6	29	2.4	11.3	<0.1	32	0.43	
3852859	Rock	0.90	2.9	189.3	93.7	45	55.9	6.2	1.7	175	4.64	365.4	0.3	56.5	2.8	9	0.4	14.0	0.8	33	0.06	
3852860	Rock	6.10	5.2	281.0	3097.6	1585	>100	21.3	8.5	1036	3.55	>10000	1.3	925.8	3.9	46	68.1	434.2	0.4	34	0.27	
3852861	Rock	4.09	4.9	375.6	2538.8	1930	>100	8.3	4.0	572	1.58	5659.0	0.8	407.0	1.4	32	51.7	522.4	0.1	14	0.33	
3852862	Rock	2.46	3.9	272.0	2323.8	1115	>100	8.6	4.8	592	1.52	4190.9	0.7	302.5	1.6	28	36.1	441.0	0.3	19	0.15	
3852863	Rock	3.58	4.7	204.4	1530.1	635	>100	11.0	4.5	530	1.71	4777.3	0.9	270.6	1.6	25	21.3	297.3	0.4	18	0.20	
3852864	Rock	3.72	5.7	119.8	477.0	296	>100	10.2	5.5	457	1.62	2626.5	0.8	106.3	1.7	20	9.6	158.3	0.3	19	0.18	
3852865	Rock	2.85	5.6	33.8	104.1	164	33.0	22.5	11.3	868	2.06	667.7	0.9	23.3	3.2	24	2.0	25.6	0.2	31	0.26	
3852866	Rock	3.19	3.3	44.0	24.5	76	20.7	25.1	10.0	974	2.09	805.1	1.0	47.9	5.1	23	1.2	14.2	0.1	30	0.21	

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BUREAU VERITAS MINERAL LABORATORIES
Canada

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Client: **Ryan Burke**
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: October 19, 2021

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CERTIFICATE OF ANALYSIS

WHI21000450.1

Method	Analyte	Unit	MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370	
				P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu
				%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%
3852837	Rock		0.049	13	163	2.80	39	0.004	<1	1.57	0.015	0.04	<0.1	<0.01	8.5	<0.1	<0.05	5	<0.5	<0.2			
3852838	Rock		0.031	7	6	0.28	78	0.001	1	0.45	0.017	0.18	0.1	<0.01	1.2	<0.1	1.57	1	<0.5	<0.2			
3852839	Rock		0.049	20	9	0.47	88	0.001	<1	0.51	0.029	0.18	<0.1	<0.01	1.4	<0.1	0.09	2	<0.5	<0.2			
3852840	Rock		0.139	11	14	1.54	302	0.006	2	1.36	0.024	0.31	<0.1	<0.01	5.8	0.1	0.20	3	<0.5	<0.2			
3852841	Rock		0.007	2	6	0.04	11	0.004	<1	0.13	0.004	0.02	0.2	<0.01	0.6	<0.1	0.58	<1	<0.5	<0.2			
3852842	Rock		0.002	<1	6	0.01	18	<0.001	1	0.09	0.003	0.05	<0.1	<0.01	<0.1	<0.1	0.20	<1	<0.5	0.4	<0.001	0.018	
3852843	Rock		0.017	13	7	0.13	336	<0.001	2	0.37	0.026	0.16	<0.1	<0.01	0.3	<0.1	0.44	<1	<0.5	0.5			
3852844	Rock		0.002	1	7	<0.01	10	<0.001	<1	0.06	0.002	<0.01	0.3	0.02	0.1	<0.1	0.45	<1	8.4	7.1	0.057	0.168	
3852845	Rock		0.010	10	8	0.05	94	<0.001	2	0.24	0.030	0.11	<0.1	<0.01	0.6	<0.1	0.22	<1	<0.5	<0.2			
3852846	Rock		0.002	<1	10	<0.01	8	<0.001	1	0.05	0.002	0.02	0.3	0.02	0.5	<0.1	0.41	<1	0.6	1.6	0.007	0.040	
3852847	Rock		0.261	12	6	1.58	37	0.193	1	1.61	0.052	0.09	0.4	<0.01	2.8	<0.1	2.30	6	1.3	0.7			
3852848	Rock		0.068	12	7	0.35	198	0.098	<1	0.74	0.039	0.13	0.2	<0.01	1.6	<0.1	0.54	4	0.7	0.4			
3852849	Rock		0.005	8	5	0.02	90	0.001	1	0.18	0.059	0.12	<0.1	<0.01	0.6	<0.1	0.68	<1	<0.5	<0.2			
3852850	Rock		0.068	8	6	1.37	184	0.002	<1	0.68	0.022	0.20	<0.1	<0.01	4.3	<0.1	0.09	2	<0.5	<0.2			
3852851	Rock		0.042	6	5	0.41	72	0.053	1	0.84	0.020	0.14	1.0	0.04	0.7	0.2	1.84	3	28.1	0.5			
3852852	Rock		0.026	4	8	0.58	20	0.044	2	0.94	0.004	0.11	0.6	<0.01	0.7	0.2	1.62	3	4.5	0.4			
3852853	Rock		0.045	6	11	0.14	31	0.004	2	0.32	0.002	0.16	0.3	<0.01	0.8	0.1	0.35	1	1.6	<0.2			
3852854	Rock		0.030	3	16	0.45	15	0.049	2	0.54	0.004	0.08	0.9	0.02	1.3	0.2	0.73	1	2.3	<0.2			
3852855	Rock		0.098	17	35	1.00	47	0.004	3	1.31	0.005	0.29	<0.1	0.01	4.7	0.2	0.08	4	0.6	<0.2			
3852856	Rock		0.095	15	46	1.32	34	0.005	2	1.48	0.006	0.18	<0.1	<0.01	4.9	0.2	0.14	5	1.3	<0.2			
3852857	Rock		0.122	18	46	1.75	49	0.031	2	2.26	0.017	0.25	<0.1	<0.01	6.9	0.2	0.06	8	0.5	<0.2			
3852858	Rock		0.101	20	14	1.05	54	0.008	3	1.58	0.014	0.29	<0.1	<0.01	3.4	0.2	0.18	5	0.8	<0.2			
3852859	Rock		0.032	5	14	0.42	42	0.002	1	0.47	0.005	0.10	<0.1	0.02	0.8	<0.1	<0.05	3	2.0	<0.2			
3852860	Rock		0.078	10	29	0.76	152	0.109	3	1.08	0.011	0.22	2.0	0.02	4.1	0.4	0.48	4	3.6	<0.2			
3852861	Rock		0.036	3	14	0.26	17	0.039	1	0.40	0.002	0.11	0.7	0.02	1.3	<0.1	0.53	2	5.0	<0.2			
3852862	Rock		0.038	4	16	0.37	20	0.042	1	0.45	0.003	0.09	0.6	0.01	1.5	<0.1	0.33	2	5.2	<0.2			
3852863	Rock		0.058	4	19	0.35	20	0.055	2	0.46	0.002	0.11	0.9	<0.01	1.6	<0.1	0.50	1	3.3	<0.2			
3852864	Rock		0.053	4	18	0.35	23	0.058	2	0.47	0.002	0.12	1.0	<0.01	1.6	<0.1	0.27	1	1.2	<0.2			
3852865	Rock		0.082	6	27	0.77	35	0.089	2	0.82	0.003	0.16	1.3	<0.01	3.1	0.1	0.10	2	0.9	<0.2			
3852866	Rock		0.070	9	27	0.87	47	0.085	2	0.97	0.004	0.23	1.0	<0.01	4.0	0.1	<0.05	2	0.7	<0.2			

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Project: PIKE
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CERTIFICATE OF ANALYSIS

WHI21000450.1

Method	AQ370	FA530
Analyte	Pb	Ag
Unit	%	ppm
MDL	0.01	20
3852837	Rock	
3852838	Rock	
3852839	Rock	
3852840	Rock	
3852841	Rock	
3852842	Rock	1.26
3852843	Rock	
3852844	Rock	>4
3852845	Rock	
3852846	Rock	>4
3852847	Rock	
3852848	Rock	
3852849	Rock	
3852850	Rock	
3852851	Rock	615
3852852	Rock	
3852853	Rock	276
3852854	Rock	
3852855	Rock	
3852856	Rock	403
3852857	Rock	120
3852858	Rock	
3852859	Rock	
3852860	Rock	1113
3852861	Rock	1166
3852862	Rock	683
3852863	Rock	552
3852864	Rock	293
3852865	Rock	
3852866	Rock	

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CERTIFICATE OF ANALYSIS

WHI21000450.1

Method	Analyte	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Unit		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
MDL		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01	
3852867	Rock	2.61	2.2	45.5	95.0	194	28.6	18.0	7.6	1263	2.03	3017.5	0.8	266.7	5.7	24	12.1	20.4	<0.1	22	0.28	
3852868	Rock	0.46	0.8	16.1	6.2	80	0.5	2.4	19.8	671	4.88	29.4	0.4	4.3	1.5	74	0.1	0.4	<0.1	105	1.53	
3852869	Rock	0.74	165.7	20.6	8.1	32	1.1	9.4	35.3	700	3.01	12.3	0.8	460.9	1.3	104	0.3	0.2	1.9	27	4.23	
3852870	Rock	0.56	3.9	20.2	1067.5	12	36.5	3.9	3.9	199	1.33	9.4	0.3	97.9	4.5	18	0.2	0.3	83.5	7	0.29	
3852871	Rock	0.56	60.1	1461.7	9.0	17	2.4	6.8	13.8	156	1.60	11.7	0.7	140.2	4.1	28	0.1	0.3	4.3	33	1.17	
3852872	Rock	1.05	1.8	55.7	8.7	47	0.7	7.0	13.2	478	2.69	5.7	1.7	168.5	9.6	29	0.1	0.1	0.7	67	0.56	
3852873	Rock	0.28	129.0	33.9	14.1	14	2.2	3.3	13.8	90	4.51	9.3	1.7	190.3	2.0	5	<0.1	0.1	5.7	17	0.03	
3852874	Rock	0.61	2.2	4.4	18.0	35	0.4	0.9	0.3	36	0.84	13.1	1.9	5.3	7.9	3	<0.1	0.2	0.4	2	0.02	
3852875	Rock	0.97	2.0	4.0	23.4	79	0.3	2.1	2.6	446	1.29	7.7	1.2	6.0	7.3	77	0.5	0.1	0.3	5	2.80	
3852876	Rock	0.34	1.0	19.4	6.1	62	0.2	10.6	7.9	403	4.57	2.6	0.6	2.1	3.9	55	<0.1	<0.1	0.5	82	0.74	
3852877	Rock	0.35	93.8	5811.2	26.9	50	29.0	6.4	9.9	408	3.31	1.0	1.3	5.7	4.7	131	0.4	0.7	315.6	50	1.14	
3852878	Rock	0.56	924.7	6474.4	238.1	57	>100	2.8	8.8	64	9.85	17.5	0.5	18.5	2.8	7	2.5	0.5	441.8	53	0.01	
3852879	Rock	0.20	1203.5	2691.4	37.3	39	64.1	5.0	15.5	117	6.96	15.3	1.5	7.1	3.0	8	1.3	0.4	61.8	56	0.03	
3852880	Rock	0.38	1966.3	4573.6	299.0	8	19.0	1.6	0.6	39	1.57	3.2	0.8	43.2	0.9	14	1.2	0.7	35.5	4	0.02	
3852881	Rock	0.38	>2000	2563.8	131.0	24	>100	2.5	3.7	50	4.56	26.0	0.6	22.0	1.5	7	3.2	0.4	289.8	44	0.04	
3852882	Rock	0.55	>2000	3383.8	471.9	7	65.1	2.3	1.5	41	4.08	<0.5	1.0	14.2	1.0	6	3.2	0.2	192.2	8	0.04	
3852883	Rock	0.54	161.3	517.9	82.5	7	12.4	1.6	0.9	77	0.75	<0.5	0.5	5.3	0.7	1	0.3	0.1	189.7	3	0.01	
3852884	Rock	0.81	858.4	3259.5	29.0	53	5.8	4.3	9.0	302	2.03	3.4	5.4	0.9	6.0	41	0.8	0.2	5.9	29	0.44	
3852885	Rock	0.93	1141.6	224.9	12.8	5	0.9	1.4	0.2	32	0.42	<0.5	0.1	2.4	0.3	<1	0.3	0.1	11.6	<1	<0.01	
3852886	Rock	0.76	5.0	56.6	7.9	53	1.2	16.4	5.4	184	3.74	3.6	0.9	6.7	2.2	18	<0.1	0.3	0.6	29	<0.01	
3852887	Rock	0.82	8.3	6.4	15.0	23	0.4	1.2	0.3	37	0.91	98.5	1.7	26.2	10.9	2	<0.1	0.1	0.4	2	<0.01	
3852888	Rock	0.57	3.5	6.7	5.0	5	<0.1	1.3	0.8	78	0.48	0.9	1.7	<0.5	7.5	12	<0.1	<0.1	0.2	6	0.09	
3852889	Rock	0.67	3.9	24.7	9.1	30	0.4	4.8	10.9	377	2.76	3.0	2.7	2.9	11.5	41	<0.1	<0.1	0.8	83	0.64	
3852890	Rock	0.91	9.8	77.6	4.4	48	0.3	22.4	24.2	518	4.63	0.8	0.9	10.7	5.9	61	<0.1	<0.1	2.3	110	0.94	
3852891	Rock	0.94	8.3	81.2	5.0	4	0.9	2.4	4.1	39	2.10	10.8	1.3	403.1	1.0	2	<0.1	0.2	168.4	3	0.01	
3852892	Rock	0.46	2.3	26.5	7.1	38	0.2	7.2	12.4	391	2.64	1.5	3.0	1.6	12.2	47	<0.1	<0.1	1.0	62	0.53	
3852893	Rock	0.12	6.1	7370.3	40.9	12	27.0	4.6	3.6	177	1.97	0.7	0.4	529.2	4.2	3	1.2	0.1	4.3	3	0.03	
3852894	Rock	0.36	57.7	1711.4	5.8	16	4.2	6.4	23.4	272	2.21	0.8	1.2	1393.1	5.0	51	0.2	<0.1	6.7	16	1.94	
3852895	Rock	2.38	48.2	73.2	10.5	12	1.0	8.1	15.4	38	2.70	2.6	0.6	271.6	4.8	10	<0.1	<0.1	2.2	16	0.06	
3852896	Rock	1.08	2.1	168.0	5.6	19	4.5	15.0	27.7	227	3.92	0.7	1.0	30238.9	7.0	40	0.1	<0.1	15.1	18	1.33	

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Bureau Veritas Commodities Canada Ltd.

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PHONE (604) 253-3158

Project: PIKE
Report Date: October 19, 2021

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CERTIFICATE OF ANALYSIS

WHI21000450.1

Method	Analyte	Unit	MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370	
				P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu
				%	ppm	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	%	
3852867	Rock			0.063	10	17	0.94	45	0.080	2	1.03	0.006	0.19	1.1	<0.01	2.7	0.1	0.07	2	0.6	<0.2		
3852868	Rock			0.253	14	4	2.12	159	0.129	<1	2.15	0.063	0.12	0.1	<0.01	5.1	<0.1	0.17	8	<0.5	<0.2		
3852869	Rock			0.017	7	5	0.57	66	<0.001	<1	0.31	0.006	0.12	1.1	<0.01	1.6	<0.1	1.03	1	<0.5	0.3		
3852870	Rock			0.015	18	12	0.15	101	0.003	<1	0.45	0.009	0.17	0.1	<0.01	0.5	<0.1	0.13	2	2.5	2.9		
3852871	Rock			0.049	4	11	0.41	97	<0.001	<1	0.42	0.004	0.14	<0.1	0.01	2.4	<0.1	0.78	1	<0.5	0.7		
3852872	Rock			0.089	32	21	0.37	93	0.007	<1	1.41	0.021	0.13	<0.1	<0.01	9.2	<0.1	<0.05	4	<0.5	<0.2		
3852873	Rock			0.008	2	5	0.02	20	<0.001	<1	0.24	0.002	0.04	<0.1	0.04	0.9	<0.1	0.09	1	1.1	2.9		
3852874	Rock			<0.001	18	5	<0.01	7	0.008	<1	0.22	0.080	0.11	0.3	<0.01	0.3	<0.1	0.10	1	<0.5	<0.2		
3852875	Rock			0.002	18	4	1.11	10	0.002	<1	0.26	0.030	0.16	0.2	<0.01	0.5	<0.1	0.13	1	<0.5	<0.2		
3852876	Rock			0.176	11	22	1.61	113	0.245	<1	1.77	0.057	0.09	0.2	<0.01	1.9	<0.1	0.40	7	<0.5	<0.2		
3852877	Rock			0.047	7	10	0.55	97	0.012	<1	1.41	0.018	0.04	0.1	0.02	3.0	<0.1	0.56	5	6.3	2.5		
3852878	Rock			0.005	<1	8	0.02	150	0.002	<1	0.11	0.002	0.02	13.5	0.08	0.2	<0.1	0.75	2	20.5	4.4		
3852879	Rock			0.003	2	8	0.11	251	<0.001	<1	0.32	0.008	0.03	14.8	0.02	0.6	<0.1	0.20	2	6.2	1.0		
3852880	Rock			0.004	3	9	<0.01	165	<0.001	1	0.10	0.001	0.06	29.7	0.01	0.5	<0.1	0.51	<1	7.6	3.6		
3852881	Rock			0.006	1	7	0.04	93	0.002	<1	0.15	0.002	0.02	8.8	0.05	0.5	<0.1	0.73	2	15.7	2.7	0.896	0.252
3852882	Rock			0.007	<1	8	0.03	151	<0.001	<1	0.16	0.001	0.02	2.6	0.04	0.3	<0.1	0.40	<1	17.5	5.3	0.388	0.328
3852883	Rock			0.004	2	9	<0.01	33	<0.001	1	0.10	0.002	0.04	0.4	<0.01	0.2	<0.1	0.06	<1	3.3	1.4		
3852884	Rock			0.028	5	11	0.66	29	0.083	<1	0.87	0.042	0.06	0.7	<0.01	2.5	<0.1	0.16	4	1.3	0.2		
3852885	Rock			<0.001	<1	9	<0.01	2	<0.001	<1	<0.01	<0.001	<0.01	7.1	<0.01	<0.1	<0.1	0.09	<1	1.0	<0.2		
3852886	Rock			0.032	9	18	0.02	91	0.002	<1	0.26	0.003	0.12	0.1	<0.01	1.9	<0.1	0.23	1	1.7	<0.2		
3852887	Rock			0.004	37	7	<0.01	17	<0.001	<1	0.33	0.003	0.25	0.2	<0.01	0.4	<0.1	<0.05	<1	<0.5	<0.2		
3852888	Rock			0.001	2	7	0.04	96	0.001	<1	0.25	0.038	0.15	<0.1	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2		
3852889	Rock			0.058	15	13	0.87	69	0.199	1	1.53	0.155	0.33	3.4	<0.01	3.9	0.2	0.39	6	<0.5	<0.2		
3852890	Rock			0.093	6	81	1.26	131	0.210	<1	2.50	0.209	0.63	0.8	<0.01	6.8	0.3	0.58	9	<0.5	0.2		
3852891	Rock			0.002	<1	12	0.04	13	0.005	<1	0.06	0.002	0.02	4.4	<0.01	<0.1	<0.1	0.65	<1	<0.5	3.9		
3852892	Rock			0.052	20	17	0.83	69	0.154	<1	1.51	0.158	0.50	0.5	<0.01	4.6	0.3	0.34	6	<0.5	<0.2		
3852893	Rock			0.009	5	22	0.02	78	0.001	<1	0.22	0.005	0.14	0.3	0.02	0.2	<0.1	0.73	<1	0.7	<0.2		
3852894	Rock			0.026	11	9	0.80	87	0.001	1	0.33	0.008	0.11	0.2	0.01	1.0	<0.1	1.06	<1	0.7	2.5		
3852895	Rock			0.033	10	5	0.03	46	<0.001	<1	0.39	0.006	0.22	0.2	0.07	0.6	<0.1	1.75	1	0.7	0.3		
3852896	Rock			0.055	22	6	0.52	40	0.002	<1	0.39	0.029	0.19	0.1	0.78	1.5	<0.1	3.11	<1	1.1	7.1		



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Project: PIKE
Report Date: October 19, 2021

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CERTIFICATE OF ANALYSIS

WHI21000450.1

Method	Analyte	AQ370	FA530
		Pb	Ag
Unit		%	ppm
MDL		0.01	20
3852867	Rock		
3852868	Rock		
3852869	Rock		
3852870	Rock		
3852871	Rock		
3852872	Rock		
3852873	Rock		
3852874	Rock		
3852875	Rock		
3852876	Rock		
3852877	Rock		
3852878	Rock		359
3852879	Rock		
3852880	Rock		
3852881	Rock	0.02	100
3852882	Rock	0.05	
3852883	Rock		
3852884	Rock		
3852885	Rock		
3852886	Rock		
3852887	Rock		
3852888	Rock		
3852889	Rock		
3852890	Rock		
3852891	Rock		
3852892	Rock		
3852893	Rock		
3852894	Rock		
3852895	Rock		
3852896	Rock		

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CERTIFICATE OF ANALYSIS

WHI21000450.1

Method	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01	
3852897	Rock	0.57	364.9	34.4	9.3	28	1.1	4.6	15.5	369	2.24	1.0	0.8	202.3	2.4	64	0.2	<0.1	6.5	47	2.18
3852898	Rock	0.48	181.9	7.6	6.4	17	0.4	3.6	9.4	301	1.22	<0.5	0.4	76.6	0.9	68	<0.1	<0.1	2.4	11	2.21
3852899	Rock	0.70	36.2	129.9	10.1	38	0.6	4.7	11.6	821	3.15	1.6	0.8	82.1	1.0	178	<0.1	<0.1	2.7	47	8.66
3852900	Rock	0.89	117.0	20.2	11.5	26	1.0	4.8	13.1	508	2.77	1.2	0.4	94.5	0.8	48	0.1	<0.1	5.3	34	2.24
3852901	Rock	1.16	2.9	29.3	22.7	55	0.3	15.3	12.5	775	3.31	1.9	1.9	5.9	7.7	134	<0.1	<0.1	0.6	66	2.21
3852902	Rock	0.61	3.8	238.8	4.2	4	2.1	42.5	30.8	42	2.85	14.0	1.4	7.8	1.4	1	<0.1	0.2	0.4	5	<0.01
3852903	Rock	0.61	8.1	136.1	1.9	4	0.6	5.5	4.8	36	3.08	0.9	0.3	2.8	1.0	49	<0.1	<0.1	0.4	4	0.03
3852904	Rock	0.73	12.2	36.3	3.6	5	0.6	2.7	2.5	27	1.27	9.7	0.1	4.5	1.7	3	<0.1	<0.1	0.5	1	<0.01
3852905	Rock	1.51	28.2	66.4	3.4	13	1.2	9.0	1.8	41	2.44	2.6	0.2	7.5	5.1	6	<0.1	<0.1	0.6	5	0.02
3852906	Rock	0.60	256.7	132.9	24.6	9	2.7	19.6	99.6	53	15.74	<0.5	0.8	23.3	2.8	3	0.1	<0.1	98.7	10	0.01
3852907	Rock	1.07	10.3	118.1	7224.7	4	10.4	1.3	0.3	27	1.76	0.8	2.8	3763.4	1.3	1	1.3	4.4	1.1	1	<0.01
3852908	Rock	1.35	3.1	11.9	44.2	75	0.7	6.2	12.7	499	4.20	<0.5	0.8	8.5	4.6	58	<0.1	0.2	8.5	68	0.84
3852909	Rock	0.63	304.0	581.6	40.0	42	3.9	6.7	56.1	253	5.80	403.5	6.1	9.1	27.9	12	0.7	1.8	0.4	10	0.25
3852910	Rock	0.45	729.8	33.6	9.3	22	0.7	33.3	5.8	147	2.93	2.2	0.4	23.4	1.7	6	0.1	<0.1	3.5	28	0.03
3852911	Rock	0.60	25.2	6.0	25.1	4	0.6	1.1	4.6	21	1.17	1.2	0.3	50.8	2.3	3	<0.1	<0.1	1.1	<1	<0.01
3852912	Rock	0.91	3.7	13.9	15.6	163	0.4	7.6	9.3	1755	3.56	2.3	9.6	4.8	11.2	32	0.9	<0.1	0.3	58	0.74
3852913	Rock	1.21	1.4	9.2	9.6	46	<0.1	29.9	14.9	1260	3.31	<0.5	0.3	1.8	2.2	478	0.2	<0.1	<0.1	49	7.25
3852914	Rock	0.77	3.4	27.0	4.2	5	1.0	2.4	1.5	45	0.94	4.7	0.3	53.5	0.4	2	<0.1	<0.1	0.9	3	0.02



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CERTIFICATE OF ANALYSIS

WHI21000450.1

Method	Analyte	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu	
Unit		%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	%	%
MDL		0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2	0.001	0.001		
3852897	Rock	0.033	9	8	0.53	189	<0.001	<1	0.40	0.005	0.07	0.1	0.05	4.3	<0.1	0.42	1	<0.5	0.8			
3852898	Rock	0.002	5	6	0.65	275	<0.001	<1	0.11	0.002	0.03	0.1	<0.01	0.8	<0.1	0.21	<1	<0.5	0.3			
3852899	Rock	0.037	8	5	4.03	136	0.001	<1	0.38	0.014	0.07	<0.1	<0.01	3.1	<0.1	0.58	1	<0.5	<0.2			
3852900	Rock	0.010	7	10	0.61	101	<0.001	<1	0.27	0.004	0.04	<0.1	0.06	2.0	<0.1	1.00	<1	<0.5	0.7			
3852901	Rock	0.108	29	21	0.60	133	0.005	<1	0.97	0.018	0.14	0.2	<0.01	6.3	<0.1	0.06	3	<0.5	<0.2			
3852902	Rock	0.003	1	10	0.05	17	<0.001	<1	0.13	0.001	0.02	0.6	<0.01	0.2	<0.1	0.63	<1	1.2	<0.2			
3852903	Rock	0.017	1	7	0.03	21	0.012	<1	0.08	0.006	0.03	0.1	<0.01	0.2	<0.1	0.56	<1	1.0	<0.2			
3852904	Rock	0.003	7	7	<0.01	130	0.001	<1	0.07	0.005	0.06	0.4	<0.01	0.1	<0.1	0.22	<1	0.6	<0.2			
3852905	Rock	0.009	13	9	0.04	141	0.002	<1	0.23	0.036	0.12	3.0	<0.01	0.2	<0.1	0.20	<1	1.2	<0.2			
3852906	Rock	0.011	1	8	0.09	4	0.004	<1	0.19	0.012	0.04	3.0	<0.01	0.7	<0.1	>10	<1	7.6	0.8			
3852907	Rock	0.002	1	8	<0.01	19	<0.001	<1	0.08	0.008	0.05	<0.1	<0.01	0.2	<0.1	0.07	<1	<0.5	1.7			
3852908	Rock	0.226	14	7	1.61	46	0.232	<1	1.69	0.059	0.10	3.5	<0.01	4.0	<0.1	1.66	6	1.2	1.1			
3852909	Rock	0.028	22	8	0.33	30	0.010	<1	1.05	0.039	0.14	0.1	<0.01	2.5	0.2	3.43	4	2.3	<0.2			
3852910	Rock	0.026	4	40	0.40	61	0.008	<1	0.44	0.020	0.05	1.7	<0.01	1.5	<0.1	0.34	3	<0.5	0.8			
3852911	Rock	0.002	4	6	<0.01	54	<0.001	<1	0.16	0.054	0.13	0.2	<0.01	0.2	<0.1	0.52	<1	<0.5	0.4			
3852912	Rock	0.135	145	15	0.24	316	0.002	<1	2.41	0.008	0.11	0.1	<0.01	11.3	<0.1	<0.05	9	<0.5	<0.2			
3852913	Rock	0.050	12	24	2.14	99	0.002	<1	1.91	0.008	0.16	<0.1	<0.01	3.8	<0.1	<0.05	5	<0.5	<0.2			
3852914	Rock	0.004	1	7	0.01	14	0.001	<1	0.04	0.003	<0.01	0.2	<0.01	0.1	<0.1	<0.05	<1	<0.5	<0.2			

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CERTIFICATE OF ANALYSIS

WHI21000450.1

Method	Analyte	AQ370	FA530
		Pb	Ag
Unit		%	ppm
MDL		0.01	20
3852897	Rock		
3852898	Rock		
3852899	Rock		
3852900	Rock		
3852901	Rock		
3852902	Rock		
3852903	Rock		
3852904	Rock		
3852905	Rock		
3852906	Rock		
3852907	Rock		
3852908	Rock		
3852909	Rock		
3852910	Rock		
3852911	Rock		
3852912	Rock		
3852913	Rock		
3852914	Rock		



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Report Date: October 19, 2021

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MethodAnalyte		WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Unit	MDL	Wgt kg	Moppm	Cuppm	Pbppm	Zn ppm	Agppm	Nippm	Coppm	Mn ppm	Fe %0.01	Asppm	UAu ppm	ppb	Thppm	Srppm	Cdppm	Sbppm	Bippm	V ppm	Ca %0.01
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.5	0.5	0.1	1	0.1	0.1	0.1	0.1	0.1	1	1
Pulp Duplicates																					
3852778	Rock	0.16	81.8	5589.4	88.2	17	69.5	2.8	1.7	62	2.05	1.0	<0.1	36.6	0.7	2	0.9	0.2	934.5	11	0.02
REP 3852778	QC		81.5	5619.4	88.6	17	69.8	2.9	1.7	62	2.06	1.1	<0.1	41.4	0.5	2	1.1	0.2	922.5	11	0.02
3852781	Rock	1.17	>2000	359.3	27.6	7	5.5	1.3	0.2	29	0.52	1.6	0.3	2.3	0.1	2	1.4	0.7	42.7	1	0.02
REP 3852781	QC																				
3852811	Rock	0.69	682.3	75.6	1.2	4	0.9	3.7	22.0	35	2.75	4.0	0.1	6.1	0.3	2	0.8	<0.1	3.0	2	0.02
REP 3852811	QC		655.2	73.3	1.2	3	0.9	3.6	21.2	34	2.67	4.1	0.1	8.0	0.2	2	0.8	<0.1	2.8	2	0.02
3852846	Rock	0.98	77.0	436.5	>10000	6	75.0	2.3	1.0	36	2.79	1.0	7.9	37718.0	1.7	11	3.8	18.9	3.8	2	<0.01
REP 3852846	QC		76.9	446.3	>10000	5	76.6	2.2	1.0	35	2.83	1.1	8.0	44542.4	1.1	11	4.0	18.9	4.0	2	<0.01
3852863	Rock	3.58	4.7	204.4	1530.1	635	>100	11.0	4.5	530	1.71	4777.3	0.9	270.6	1.6	25	21.3	297.3	0.4	18	0.20
REP 3852863	QC																				
3852881	Rock	0.38	>2000	2563.8	131.0	24	>100	2.5	3.7	50	4.56	26.0	0.6	22.0	1.5	7	3.2	0.4	289.8	44	0.04
REP 3852881	QC		>2000	2595.9	123.4	23	>100	2.5	3.8	50	4.52	24.7	0.6	31.2	1.2	7	2.8	0.3	275.9	44	0.04
Core Reject Duplicates																					
3852791	Rock	1.71	2.1	54.6	14.1	11	8.6	3.8	3.8	698	2.07	526.0	0.8	87.2	4.4	28	0.1	3.0	0.5	4	0.94
DUP 3852791	QC		1.7	50.7	13.8	10	8.1	3.6	3.6	686	1.99	507.8	0.7	79.4	4.6	27	<0.1	2.9	0.4	4	0.93
3852825	Rock	0.54	56.8	9950.2	48.3	25	>100	2.8	5.0	112	3.18	<0.5	1.2	33.7	2.2	26	0.8	0.3	409.8	16	0.21
DUP 3852825	QC		50.6	>10000	49.1	23	>100	2.7	5.2	119	3.30	<0.5	1.0	19.1	2.4	28	0.8	0.2	411.6	18	0.23
3852859	Rock	0.90	2.9	189.3	93.7	45	55.9	6.2	1.7	175	4.64	365.4	0.3	56.5	2.8	9	0.4	14.0	0.8	33	0.06
DUP 3852859	QC		2.6	193.2	98.3	46	57.1	6.1	1.7	172	4.68	372.8	0.3	56.8	2.5	9	0.3	13.8	0.8	34	0.06
Reference Materials																					
STD AGPROOF	Standard																				
STD BVGEO01	Standard		11.9	4416.2	197.5	1738	2.6	167.4	26.5	728	3.75	123.3	4.0	218.1	17.1	61	6.6	2.8	25.8	75	1.34
STD BVGEO01	Standard		10.6	4437.9	194.7	1585	2.7	159.8	23.7	721	3.60	120.1	4.1	232.1	16.1	59	6.4	3.8	25.6	77	1.32
STD CDN-ME-9A	Standard																				
STD CDN-ME-14A	Standard																				
STD DS11	Standard		15.9	155.3	134.0	356	1.7	81.3	13.9	1038	3.19	43.7	2.7	65.8	9.2	71	2.4	7.6	11.7	51	1.06
STD DS11	Standard		16.2	150.6	142.0	346	1.7	84.7	14.3	1056	3.20	46.2	2.7	78.7	9.3	71	2.4	8.0	11.7	51	1.09
STD OREAS262	Standard		0.6	122.2	56.8	151	0.4	63.9	27.4	540	3.30	34.7	1.3	54.3	10.7	36	0.6	4.1	1.0	22	2.95



MethodAnalyte		AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ37
Unit		P	Lappm	Crppm	Mg	Bappm	Ti	B	Al	Na	K	W	Hg	ppm	Scppm	Tippm	S	Gappm	Seppm	Teppm	Mo	C
MDL	%0.001	1	1	%0.01	1	%0.001	ppm	%0.01	%0.001	%0.01	ppm0.1	0.01	0.1	0.1	%0.05	1	0.5	0.2	%0.001	%0.001		
1																						
Pulp Duplicates																						
3852778	Rock	<0.001	<1	14	0.01	81	0.003	<1	0.03	0.003	<0.01	15.2	0.04	0.2	<0.1	0.52	<1	23.5	9.5			
REP 3852778	QC	0.001	<1	14	0.01	81	0.003	<1	0.04	0.003	<0.01	14.7	0.05	0.2	<0.1	0.53	<1	23.6	9.3			
3852781	Rock	<0.001	<1	7	<0.01	11	<0.001	<1	0.01	<0.001	<0.01	0.6	<0.01	<0.1	<0.1	0.21	<1	2.8	0.4	0.341	0.03	
REP 3852781	QC																			0.345	0.03	
3852811	Rock	0.002	<1	6	<0.01	9	<0.001	3	0.03	0.003	0.01	1.9	<0.01	<0.1	<0.1	1.34	<1	1.2	0.4			
REP 3852811	QC	0.002	<1	6	<0.01	9	<0.001	1	0.03	0.003	0.01	1.8	<0.01	<0.1	<0.1	1.30	<1	0.8	0.4			
3852846	Rock	0.002	<1	10	<0.01	8	<0.001	1	0.05	0.002	0.02	0.3	0.02	0.5	<0.1	0.41	<1	0.6	1.6	0.007	0.04	
REP 3852846	QC	0.003	<1	9	<0.01	8	<0.001	2	0.05	0.003	0.02	0.3	0.02	0.5	<0.1	0.42	<1	<0.5	1.9			
3852863	Rock	0.058	4	19	0.35	20	0.055	2	0.46	0.002	0.11	0.9	<0.01	1.6	<0.1	0.50	1	3.3	<0.2			
REP 3852863	QC																					
3852881	Rock	0.006	1	7	0.04	93	0.002	<1	0.15	0.002	0.02	8.8	0.05	0.5	<0.1	0.73	2	15.7	2.7	0.896	0.25	
REP 3852881	QC	0.006	1	7	0.03	89	0.001	<1	0.15	0.002	0.02	8.1	0.05	0.3	<0.1	0.73	2	13.6	2.4			
Core Reject Duplicates																						
3852791	Rock	0.016	7	6	0.14	65	0.003	1	0.39	0.003	0.18	0.1	0.02	0.5	<0.1	0.98	1	1.4	<0.2			
DUP 3852791	QC	0.015	8	6	0.13	48	0.003	1	0.41	0.003	0.19	0.1	0.01	0.5	<0.1	0.95	1	1.4	<0.2			
3852825	Rock	0.014	2	7	0.22	31	0.005	<1	0.43	0.008	0.04	0.4	0.02	1.2	<0.1	1.12	2	24.7	3.4			
DUP 3852825	QC	0.015	2	8	0.24	33	0.005	<1	0.47	0.009	0.04	0.4	0.02	1.2	<0.1	1.16	2	25.6	3.2	0.005	1.05	
3852859	Rock	0.032	5	14	0.42	42	0.002	1	0.47	0.005	0.10	<0.1	0.02	0.8	<0.1	<0.05	3	2.0	<0.2			
DUP 3852859	QC	0.031	5	13	0.42	42	0.002	1	0.47	0.005	0.10	<0.1	0.02	0.9	<0.1	<0.05	3	1.7	<0.2			
Reference Materials																						
STD AGPROOF	Standard																					
STD BVGEO01	Standard	0.073	28	200	1.35	222	0.240	3	2.35	0.199	0.90	4.6	0.09	6.4	0.6	0.68	7	4.2	0.8			
STD BVGEO01	Standard	0.070	27	177	1.30	276	0.220	5	2.32	0.201	0.82	5.5	0.11	5.7	0.6	0.68	8	4.4	1.0			
STD CDN-ME-9A	Standard																					
STD CDN-ME-14A	Standard																					
STD DS11	Standard	0.071	20	63	0.86	358	0.102	7	1.21	0.079	0.41	2.8	0.24	3.5	4.6	0.29	5	2.3	4.4			
STD DS11	Standard	0.073	20	62	0.86	374	0.099	9	1.21	0.077	0.41	3.0	0.24	3.7	5.0	0.29	5	2.4	4.5			
STD OREAS262	Standard	0.039	17	44	1.20	237	0.003	4	1.39	0.070	0.32	0.1	0.16	3.5	0.4	0.27	4	<0.5	0.2			



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Client: **Ryan Burke**
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Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: October 19, 2021

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Part: 3 of 3

QUALITY CONTROL REPORT WH121000450_1

Method	Analyte	AQ370	FA530
Unit		Pb	Ag
MDL		%	ppm
		0.01	20
Pulp Duplicates			
3852778	Rock		
REP 3852778	QC		
3852781	Rock	<0.01	
REP 3852781	QC	<0.01	
3852811	Rock		
REP 3852811	QC		
3852846	Rock	>4	
REP 3852846	QC		
3852863	Rock		552
REP 3852863	QC		548
3852881	Rock	0.02	100
REP 3852881	QC		
Core Reject Duplicates			
3852791	Rock		
DUP 3852791	QC		
3852825	Rock		154
DUP 3852825	QC	0.01	154
3852859	Rock		
DUP 3852859	QC		
Reference Materials			
STD AGPROOF	Standard		99
STD BVGEO01	Standard		
STD BVGEO01	Standard		
STD CDN-ME-9A	Standard	<0.01	
STD CDN-ME-14A	Standard	0.50	
STD DS11	Standard		
STD DS11	Standard		
STD OREAS262	Standard		

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QUALITY CONTROL REPORT

WHI21000450_1

		WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01
STD OREAS262	Standard		0.6	113.6	57.6	148	0.5	64.9	28.0	544	3.29	36.0	1.3	55.7	10.9	34	0.6	3.8	1.0	22	2.97
STD OREAS262	Standard		0.8	116.1	58.0	150	0.5	65.8	27.8	541	3.29	36.7	1.2	54.2	10.3	36	0.6	4.1	1.0	22	2.99
STD OREAS262	Standard		0.7	113.0	59.0	150	0.5	62.4	26.9	536	3.17	37.4	1.3	73.0	10.0	36	0.7	6.3	1.1	23	2.94
STD OXQ132	Standard																				
STD OXQ132	Standard																				
STD DS11 Expected			14.6	149	138	345	1.71	77.7	14.2	1055	3.1	42.8	2.59	79	7.65	67.3	2.37	8.74	12.2	50	1.063
STD BVGEO01 Expected			11.2	4415	187	1741	2.53	163	25	733	3.7	121	3.77	219	14.4	55	6.5	3.39	25.6	73	1.3219
STD OREAS262 Expected			0.68	118	56	154	0.45	62	26.9	530	3.284	35.8	1.22	65	9.33	36	0.61	5.06	1.03	22.5	2.98
STD CDN-ME-9A Expected																					
STD CDN-ME-14A Expected																					
STD AGPROOF Expected																					
STD OXQ132 Expected																					
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	0.2	<1	<0.1	<0.1	<0.1	<1	<0.01
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01
BLK	Blank		<0.1	<0.1	0.2	<1	<0.1	<0.1	<0.1	<1	<0.01	1.4	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01
BLK	Blank		<0.1	<0.1	0.3	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01
BLK	Blank																				
BLK	Blank																				
Prep Wash																					
ROCK-WHI	Prep Blank		2.4	5.3	1.3	30	<0.1	2.1	3.6	464	1.89	0.8	0.5	0.9	2.7	21	<0.1	<0.1	<0.1	23	0.57
ROCK-WHI	Prep Blank		1.7	5.7	1.3	32	<0.1	1.9	3.6	505	1.92	0.7	0.5	0.6	3.0	20	<0.1	<0.1	<0.1	24	0.57



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Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: October 19, 2021

Page: 2 of 2 **Part:** 2 of 3

QUALITY CONTROL REPORT WHI21000450_1

		AQ201	AQ201AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
		P	La Cr	Mg Ba		Ti B		Al	Na	K	W	Hg	Sc Ti	S	Ga	Se	Te	Mo	Cu			
		%	ppm ppm	% ppm		% ppm		%	%	%	ppm	ppm	ppm ppm	%	ppm	ppm	ppm	%	%			%
		0.001	1 1	0.01 1	0.001 1		0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	0.001	0.001			
STD OREAS262	Standard	0.038	17 46	1.20 254	0.003	4	1.39	0.070	0.32	0.2	0.17	3.4	0.5	0.27	4	0.5	0.2					
STD OREAS262	Standard	0.041	17 44	1.19 248	0.003	4	1.38	0.070	0.32	0.2	0.14	3.3	0.5	0.27	4	<0.5	<0.2					
STD OREAS262	Standard	0.037	18 44	1.17 261	0.003	4	1.38	0.068	0.31	0.3	0.17	3.3	0.5	0.27	4	<0.5	0.2					
STD OXQ132	Standard																					
STD OXQ132	Standard																					
STD DS11 Expected		0.0701	18.6 61.5	0.85 385	0.0976		1.1795	0.0762	0.4	2.9	0.26	3.4	4.9	0.2835	5.1	2.2	4.56					
STD BVGEO01 Expected		0.0727	25.9 187	1.2963 260	0.233	3.8	2.347	0.1924	0.89	5.3	0.1	5.97	0.62	0.6655	7.37	4.84	1.02					
STD OREAS262 Expected		0.04	15.9 41.7	1.17 248	0.0027	4	1.3	0.071	0.312	0.2	0.17	3.24	0.47	0.253	4.1	0.4	0.23					
STD CDN-ME-9A Expected																				0.00033	0.654	
STD CDN-ME-14A Expected																				0.0015	1.24	
STD AGPROOF Expected																						
STD OXQ132 Expected																						
BLK	Blank	<0.001	<1 <1	<0.01 <1	<0.001 <1	<1	<0.01 <0.001	<0.01 <1	<0.01 <0.001	<0.01 <0.1	<0.01 <0.01	<0.1 <0.1	<0.1 <0.1	<0.05 <0.05	<1 <1	<0.5 <0.2						
BLK	Blank	<0.001	<1 <1	<0.01 <1	<0.001 <1	<1	<0.01 <0.001	<0.01 <1	<0.01 <0.001	<0.01 <0.1	<0.01 <0.01	<0.1 <0.1	<0.1 <0.1	<0.05 <0.05	<1 <1	<0.5 <0.2						
BLK	Blank	<0.001	<1 <1	<0.01 <1	<0.001 <1	<1	<0.01 <0.001	<0.01 <1	<0.01 <0.001	<0.01 <0.1	<0.01 <0.01	<0.1 <0.1	<0.1 <0.1	<0.05 <0.05	<1 <1	<0.5 <0.2						
BLK	Blank	<0.001	<1 <1	<0.01 <1	<0.001 <1	<1	<0.01 <0.001	<0.01 <1	<0.01 <0.001	<0.01 <0.1	<0.01 <0.01	<0.1 <0.1	<0.1 <0.1	<0.05 <0.05	<1 <1	<0.5 <0.2						
BLK	Blank																			<0.001	<0.001	
BLK	Blank																					
Prep Wash																						
ROCK-WHI	Prep Blank	0.043	8 11	0.44 61	0.090	2	0.77	0.085	0.09	0.1	<0.01	3.0	<0.1	<0.05	4	<0.5	<0.2					
ROCK-WHI	Prep Blank	0.042	7 8	0.48 56	0.094	2	0.81	0.086	0.09	0.1	<0.01	2.9	<0.1	<0.05	4	<0.5	<0.2					

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this



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Client: Ryan Burke
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Project: Report Date: PIKE
October 19, 2021

Page: 2 of 2 Part: 3 of 3

QUALITY CONTROL REPORT

WHI21000450.1

		AQ370	FA530
		Pb	Ag
		%	ppm
		0.01	20
STD OREAS262	Standard		
STD OREAS262	Standard		
STD OREAS262	Standard		
STD OXQ132	Standard		131
STD OXQ132	Standard		130
STD DS11 Expected			
STD BVGEO01 Expected			
STD OREAS262 Expected			
STD CDN-ME-9A Expected		0.003	
STD CDN-ME-14A Expected		0.488	
STD AGPROOF Expected			96
STD OXQ132 Expected			128.5
BLK	Blank		
BLK	Blank		
BLK	Blank		
BLK	Blank		
BLK	Blank	<0.01	
BLK	Blank		<20
Prep Wash			
ROCK-WHI	Prep Blank		
ROCK-WHI	Prep Blank		



Bureau Veritas Commodities Canada Ltd.

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Client: **Ryan Burke**
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Submitted By: Ryan Burke Canada-
Receiving Lab: Whitehorse August 31,
Received: 2021

Analysis Start: October 05, 2021

Report Date: November 08, 2021

Page: 1 of 6

CERTIFICATE OF ANALYSIS

WHI21000450.2

CLIENT JOB INFORMATION

Project: Shipment PIKE
ID:
P.O. Number Number
of Samples: 138

SAMPLE DISPOSAL

IMM-PLP Return immediately after analysis
PICKUP-RJT Client to Pickup Rejects

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PRP70-250	138	Crush, split and pulverize 250 g rock to 200 mesh			WHI
AQ201	138	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN
SHP01	138	Per sample shipping charges for branch shipments			VAN
AQ370	9	1:1:1 Aqua Regia Digestion ICP-ES Finish	1	Completed	VAN
FA530	14	Lead collection fire assay 30G fusion - Grav finish	30	Completed	VAN
GC817	4	Lead Assay by Classical Titration	0.5	Completed	VAN

ADDITIONAL COMMENTS

Version 2 : GC817-Pb included.

Bureau Veritas does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

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CC: Michael Burke


SOFIA DEVOTA
XRF Manager



Bureau Veritas Commodities Canada Ltd.

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Project: PIKE
Report Date: November 08, 2021

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CERTIFICATE OF ANALYSIS

WHI21000450.2

Method	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca		
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	1	0.01	0.01
3852777	Rock	0.93	56.2	1901.1	20.9	10	17.7	1.7	0.9	88	1.13	0.7	0.2	5.5	0.5	4	0.3	<0.1	138.2	3	0.22	
3852778	Rock	0.16	81.8	5589.4	88.2	17	69.5	2.8	1.7	62	2.05	1.0	<0.1	36.6	0.7	2	0.9	0.2	934.5	11	0.02	
3852779	Rock	0.43	>2000	634.3	92.4	5	15.7	1.8	0.3	35	0.88	2.0	0.9	5.2	0.2	13	2.1	0.2	119.8	2	0.05	
3852780	Rock	0.95	726.6	826.0	37.6	8	6.5	1.5	0.2	39	0.48	<0.5	0.3	3.5	0.2	2	0.6	0.8	65.5	<1	0.05	
3852781	Rock	1.17	>2000	359.3	27.6	7	5.5	1.3	0.2	29	0.52	1.6	0.3	2.3	0.1	2	1.4	0.7	42.7	1	0.02	
3852782	Rock	1.76	1961.1	1853.4	40.0	10	13.0	1.5	0.7	63	0.62	0.7	0.4	3.1	0.2	2	1.6	0.2	194.5	1	0.09	
3852783	Rock	1.44	1537.5	4861.2	414.4	17	40.1	1.5	0.8	82	1.09	0.7	0.5	7.9	0.2	4	2.3	0.3	551.7	1	0.21	
3852784	Rock	3.27	982.8	1516.1	21.8	9	4.6	1.3	0.6	100	0.40	1.2	0.2	2.4	0.1	4	1.2	0.1	71.3	<1	0.38	
3852785	Rock	1.74	25.6	100.4	15.9	61	0.9	31.0	7.5	377	3.28	10.1	3.0	<0.5	3.5	24	0.5	1.3	4.5	112	0.52	
3852786	Rock	0.72	5.1	10.4	2.4	18	0.1	2.3	0.9	3107	2.48	1.7	0.8	<0.5	0.8	966	0.2	0.1	0.5	24	29.47	
3852787	Rock	0.56	7.1	80.8	1457.9	291	81.4	85.7	9.1	570	4.41	376.1	0.8	15.9	5.6	18	5.6	5.8	2.8	41	0.38	
3852788	Rock	1.06	11.1	165.4	5.2	283	0.6	54.9	10.6	965	5.04	5.0	6.2	4.2	3.0	67	2.5	1.4	0.3	60	3.10	
3852789	Rock	1.54	4.4	220.2	9.0	101	1.2	33.2	30.4	392	4.94	<0.5	2.3	1.6	10.8	470	0.3	0.7	0.5	115	2.66	
3852790	Rock	0.47	2.9	29.7	5.6	23	0.7	19.7	4.7	280	2.49	7.4	2.0	<0.5	1.8	73	<0.1	0.5	0.4	43	0.79	
3852791	Rock	1.71	2.1	54.6	14.1	11	8.6	3.8	3.8	698	2.07	526.0	0.8	87.2	4.4	28	0.1	3.0	0.5	4	0.94	
3852792	Rock	1.08	5.9	16.2	28.5	135	0.1	3.6	1.6	211	2.24	2.1	2.3	1.1	6.2	9	0.7	<0.1	0.3	16	0.04	
3852793	Rock	1.03	43.3	20.2	6.5	18	0.5	3.1	14.2	464	1.90	2.9	0.3	38.1	1.1	54	<0.1	<0.1	2.0	20	2.62	
3852794	Rock	0.33	5.2	1428.6	>10000	21	>100	2.4	0.4	94	0.71	<0.5	1.6	128.8	0.5	23	23.2	77.2	10.2	2	0.02	
3852795	Rock	0.40	2.0	9.5	280.3	42	0.3	2.4	0.7	217	0.54	1.0	<0.1	3.5	0.1	4	0.6	0.1	0.2	2	0.10	
3852796	Rock	1.12	3.3	4507.1	>10000	48	29.1	8.4	2.5	90	1.85	1.4	2.6	149.6	0.5	9	6.2	6.1	4.6	6	0.03	
3852797	Rock	1.17	2.9	16.9	287.3	99	2.4	2.9	1.0	143	0.83	62.4	0.2	4.7	1.1	9	1.4	2.4	0.3	4	0.08	
3852798	Rock	0.63	1.7	16.5	408.9	62	0.4	2.9	0.7	126	0.69	<0.5	0.4	4.9	0.2	4	0.8	0.1	0.4	3	0.02	
3852799	Rock	1.33	2.0	5.2	176.8	92	0.2	4.5	1.3	288	1.06	<0.5	0.2	3.7	0.3	9	1.4	<0.1	0.3	5	0.05	
3852800	Rock	0.71	1.5	14.4	4068.0	43	1.3	2.6	0.8	178	0.57	<0.5	0.2	5.3	0.2	3	2.2	0.6	0.1	2	0.04	
3852801	Rock	0.56	5.6	7.3	17.7	33	<0.1	37.4	11.2	386	1.96	<0.5	0.4	0.7	2.4	170	<0.1	<0.1	0.1	45	2.49	
3852802	Rock	0.68	2.6	9.4	28.9	28	0.1	4.9	6.4	503	1.76	0.8	1.2	1.8	3.0	69	<0.1	<0.1	0.3	22	1.82	
3852803	Rock	0.25	38.5	974.0	13.7	31	8.6	44.0	137.1	235	10.99	1.3	0.7	16842.4	4.2	18	0.2	<0.1	66.5	30	0.47	
3852804	Rock	0.16	2.4	7.8	28.0	32	0.1	2.7	3.5	403	1.21	0.7	1.2	19.1	5.3	87	<0.1	<0.1	0.4	8	1.48	
3852805	Rock	0.93	1.4	33.3	4.5	24	0.3	7.3	8.9	1247	1.79	2.6	0.5	182.1	1.3	162	0.2	<0.1	1.1	27	5.95	
3852806	Rock	0.63	62.3	28.3	13.9	20	0.6	11.6	110.8	318	3.48	1.3	0.4	54.8	2.8	46	<0.1	<0.1	1.4	13	1.73	

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this



Bureau Veritas Commodities Canada Ltd.

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CERTIFICATE OF ANALYSIS

WHI21000450.2

Method	Analyte	AQ																			
		AQ201 P	AQ201 La	AQ201 Cr	AQ201 Mg	AQ201 Ba	AQ201 Ti	AQ201 B	AQ201 Al	AQ201 Na	AQ201 K	AQ201 W	AQ201 Hg	AQ201 Sc	AQ201 Tl	AQ201 S	AQ201 Ga	AQ201 Se	AQ201 Te	AQ370 Mo	AQ370 Cu
Unit		%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%
MDL		0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2	0.001	0.001	
3852777	Rock	0.002	<1	8	<0.01	51	0.001	1	0.04	0.003	<0.01	1.6	<0.01	0.2	<0.1	0.17	<1	3.8	1.2		
3852778	Rock	<0.001	<1	14	0.01	81	0.003	<1	0.03	0.003	<0.01	15.2	0.04	0.2	<0.1	0.52	<1	23.5	9.5		
3852779	Rock	<0.001	<1	9	<0.01	111	0.001	<1	0.02	0.001	<0.01	9.8	<0.01	<0.1	<0.1	0.25	<1	4.5	0.9	0.502	0.059
3852780	Rock	<0.001	<1	9	<0.01	10	<0.001	1	0.01	<0.001	<0.01	0.4	<0.01	<0.1	<0.1	0.05	<1	1.6	0.6		
3852781	Rock	<0.001	<1	7	<0.01	11	<0.001	<1	0.01	<0.001	<0.01	0.6	<0.01	<0.1	<0.1	0.21	<1	2.8	0.4	0.341	0.032
3852782	Rock	<0.001	1	7	<0.01	26	<0.001	<1	0.03	0.001	<0.01	0.5	<0.01	<0.1	<0.1	0.22	<1	4.5	0.9		
3852783	Rock	<0.001	<1	7	<0.01	50	<0.001	<1	0.03	<0.001	<0.01	0.7	<0.01	0.1	<0.1	0.44	<1	12.3	2.7		
3852784	Rock	<0.001	<1	6	<0.01	7	<0.001	<1	0.02	<0.001	<0.01	0.4	<0.01	<0.1	<0.1	0.10	<1	2.0	0.3		
3852785	Rock	0.156	11	43	0.43	78	0.082	<1	0.75	0.003	0.05	0.9	<0.01	3.5	<0.1	1.17	4	4.3	<0.2		
3852786	Rock	0.003	12	2	3.55	470	<0.001	<1	0.10	0.003	0.05	<0.1	<0.01	3.3	<0.1	<0.05	<1	<0.5	<0.2		
3852787	Rock	0.079	15	28	0.52	48	0.136	1	0.96	0.005	0.28	1.8	<0.01	2.8	0.2	3.37	4	8.2	0.4		
3852788	Rock	0.555	15	23	0.15	70	0.065	1	2.52	0.006	0.08	0.4	<0.01	1.4	<0.1	0.89	15	8.2	<0.2		
3852789	Rock	0.655	73	11	1.52	87	0.096	<1	2.73	0.285	0.05	0.4	<0.01	2.2	<0.1	1.79	8	16.4	<0.2		
3852790	Rock	0.106	9	73	0.45	227	0.307	<1	0.50	0.048	0.10	0.7	<0.01	2.4	0.1	0.54	4	2.1	<0.2		
3852791	Rock	0.016	7	6	0.14	65	0.003	1	0.39	0.003	0.18	0.1	0.02	0.5	<0.1	0.98	1	1.4	<0.2		
3852792	Rock	0.004	23	6	0.02	2066	<0.001	<1	0.33	0.001	0.09	<0.1	<0.01	2.7	<0.1	<0.05	1	<0.5	<0.2		
3852793	Rock	0.009	5	6	0.95	144	<0.001	<1	0.19	0.004	0.03	<0.1	0.03	1.2	<0.1	0.59	<1	<0.5	<0.2		
3852794	Rock	0.002	<1	10	0.11	77	0.002	<1	0.13	0.002	0.01	<0.1	<0.01	0.1	<0.1	1.95	<1	9.7	6.4	<0.001	0.142
3852795	Rock	<0.001	<1	8	0.16	17	0.002	<1	0.12	0.002	<0.01	<0.1	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2		
3852796	Rock	0.015	<1	13	0.13	53	0.010	<1	0.14	0.002	0.03	0.1	<0.01	0.4	<0.1	2.11	<1	1.7	1.4	<0.001	0.455
3852797	Rock	0.007	3	11	0.24	63	0.015	<1	0.28	0.006	0.04	0.2	<0.01	0.4	<0.1	0.07	1	<0.5	<0.2		
3852798	Rock	0.003	<1	7	0.18	4	0.002	<1	0.16	0.002	0.01	<0.1	<0.01	0.3	<0.1	<0.05	<1	<0.5	<0.2		
3852799	Rock	0.003	<1	9	0.38	8	0.005	<1	0.34	0.002	0.02	<0.1	<0.01	0.6	<0.1	<0.05	2	<0.5	<0.2		
3852800	Rock	0.002	<1	8	0.16	7	0.002	<1	0.12	0.002	<0.01	0.2	<0.01	0.2	<0.1	0.06	<1	<0.5	0.2		
3852801	Rock	0.013	9	43	1.04	35	<0.001	<1	0.31	0.008	0.03	<0.1	<0.01	3.6	<0.1	0.06	<1	<0.5	<0.2		
3852802	Rock	0.051	16	8	0.19	112	<0.001	<1	0.49	0.024	0.22	<0.1	0.01	1.2	<0.1	<0.05	1	<0.5	<0.2		
3852803	Rock	0.026	7	13	0.18	5	0.001	<1	0.30	0.007	0.09	0.2	4.67	2.4	<0.1	8.41	<1	3.5	27.1		
3852804	Rock	0.002	13	9	0.61	42	0.002	<1	0.44	0.004	0.03	0.3	0.05	0.4	<0.1	<0.05	1	<0.5	<0.2		
3852805	Rock	0.040	8	5	1.39	86	0.001	<1	0.48	0.007	0.23	<0.1	0.02	2.7	<0.1	0.25	1	<0.5	<0.2		
3852806	Rock	0.018	6	6	0.21	43	0.001	<1	0.32	0.012	0.14	0.4	0.01	0.7	<0.1	2.65	1	1.0	<0.2		



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Project: PIKE
Report Date: November 08, 2021

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CERTIFICATE OF ANALYSIS

WHI21000450.2

Method	AQ370	FA530	GC817
Analyte	Pb	Ag	Pb
Unit	%	ppm	%
MDL	0.01	20	2
3852777	Rock		
3852778	Rock		
3852779	Rock	<0.01	
3852780	Rock		
3852781	Rock	<0.01	
3852782	Rock		
3852783	Rock		
3852784	Rock		
3852785	Rock		
3852786	Rock		
3852787	Rock		
3852788	Rock		
3852789	Rock		
3852790	Rock		
3852791	Rock		
3852792	Rock		
3852793	Rock		
3852794	Rock	>4	110 13.00
3852795	Rock		
3852796	Rock	>4	6.77
3852797	Rock		
3852798	Rock		
3852799	Rock		
3852800	Rock		
3852801	Rock		
3852802	Rock		
3852803	Rock		
3852804	Rock		
3852805	Rock		
3852806	Rock		

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this



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CERTIFICATE OF ANALYSIS

WHI21000450.2

Method	Analyte	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Unit		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
MDL		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.1	
3852807	Rock	0.29	513.6	49.0	10.8	9	1.6	3.5	39.8	44	1.99	1.6	1.5	461.2	1.8	25	0.2	<0.1	9.1	11	0.10	
3852808	Rock	0.55	70.6	19.8	11.8	22	0.4	4.7	29.2	366	1.53	1.1	0.4	51.5	2.0	28	<0.1	<0.1	0.7	18	2.31	
3852809	Rock	0.41	3.0	6.5	42.8	190	0.1	2.8	1.6	767	1.52	<0.5	1.6	3.9	5.7	74	1.0	<0.1	0.3	5	4.39	
3852810	Rock	0.24	184.9	93.9	9.5	32	0.9	14.7	55.7	807	3.99	6.4	1.8	33.0	2.8	55	0.3	0.2	3.9	34	2.13	
3852811	Rock	0.69	682.3	75.6	1.2	4	0.9	3.7	22.0	35	2.75	4.0	0.1	6.1	0.3	2	0.8	<0.1	3.0	2	0.02	
3852812	Rock	0.50	5.1	8.1	10.5	37	0.1	6.1	3.8	380	1.41	5.1	0.9	2.0	6.1	54	0.3	0.3	0.3	21	1.71	
3852813	Rock	0.61	2.0	14.7	14.8	63	0.4	24.0	13.7	1476	3.49	2.2	1.6	40.5	5.0	178	0.2	<0.1	0.9	53	10.50	
3852814	Rock	0.59	1.8	82.1	6.2	15	2.5	9.4	18.2	128	3.31	2.0	1.2	8633.3	5.4	22	<0.1	<0.1	8.6	16	0.80	
3852815	Rock	1.40	1.4	26.5	21.1	75	0.2	6.8	14.5	753	3.13	2.5	1.3	4.1	4.2	119	1.0	0.9	0.1	77	1.95	
3852816	Rock	0.94	1.4	25.6	52.6	48	0.3	3.8	8.5	893	2.17	5.6	1.2	3.9	4.8	62	0.9	1.3	0.1	16	3.32	
3852817	Rock	2.95	1.0	19.3	30.5	48	0.3	6.1	8.9	418	1.86	1.9	1.5	4.5	6.5	46	0.6	0.9	0.2	33	0.84	
3852818	Rock	2.94	348.1	8947.7	20.9	87	12.8	9.4	11.9	419	2.49	<0.5	4.8	41.6	6.0	57	1.1	0.3	545.8	51	0.54	
3852819	Rock	0.59	4.0	32.7	27.2	104	0.1	27.5	8.0	606	2.31	26.7	0.8	<0.5	3.6	22	0.6	0.4	1.6	58	0.53	
3852820	Rock	0.44	2.9	37.8	9.8	65	0.2	16.9	9.4	604	3.42	9.1	2.0	1.5	3.8	31	<0.1	0.3	2.1	27	0.52	
3852821	Rock	0.89	107.9	133.4	10.0	123	0.6	32.3	30.9	699	6.85	0.7	0.5	46.2	3.2	45	0.4	0.1	0.4	69	1.00	
3852822	Rock	0.63	4.7	25.0	8.2	83	0.3	11.3	6.7	517	3.18	2.5	1.6	5.8	5.2	35	0.3	0.1	0.6	37	0.70	
3852823	Rock	4.70	5.8	62.5	2160.3	190	>100	6.5	1.8	309	2.12	107.9	1.3	125.7	1.5	8	0.5	6.6	2.4	18	0.11	
3852824	Rock	0.46	0.9	13.3	27.0	95	2.5	70.8	15.5	511	2.26	2.2	0.8	3.9	4.4	95	0.5	0.5	0.2	47	1.17	
3852825	Rock	0.54	56.8	9950.2	48.3	25	>100	2.8	5.0	112	3.18	<0.5	1.2	33.7	2.2	26	0.8	0.3	409.8	16	0.21	
3852826	Rock	0.89	8.3	66.1	68.2	11	5.9	1.5	2.2	83	1.67	4.9	0.8	541.3	1.0	14	<0.1	<0.1	149.3	18	0.08	
3852827	Rock	1.24	3.0	18.6	11.4	40	0.8	5.0	8.2	427	2.52	<0.5	2.7	78.4	8.2	42	0.1	<0.1	21.4	74	0.39	
3852828	Rock	1.09	2.6	5.3	14.2	17	0.9	1.1	0.2	33	0.83	70.3	1.4	23.1	6.0	2	<0.1	0.1	0.5	6	<0.01	
3852829	Rock	0.85	2.8	5.7	16.0	29	0.4	0.9	0.1	33	0.89	104.4	1.6	42.5	8.3	3	<0.1	0.2	0.3	<1	<0.01	
3852830	Rock	0.56	400.0	27.5	15.7	10	0.7	1.3	1.8	47	0.51	2.8	2.4	5.0	14.4	8	0.5	0.4	1.6	<1	0.03	
3852831	Rock	0.76	1.9	5.3	12.9	55	0.2	2.9	6.7	806	2.49	0.7	1.3	1.2	5.4	125	0.2	<0.1	0.2	28	5.03	
3852832	Rock	1.81	1.9	8.8	18.7	59	0.5	2.8	1.3	151	1.20	0.7	1.3	1.5	7.1	6	0.2	0.1	0.5	8	0.05	
3852833	Rock	1.58	0.9	7.1	5.7	72	0.1	16.3	11.7	729	3.05	0.8	0.7	2.0	4.3	29	<0.1	0.2	0.1	66	0.52	
3852834	Rock	2.26	0.9	11.0	2.5	13	0.1	3.9	4.8	235	0.95	<0.5	0.2	1.1	2.1	11	<0.1	<0.1	0.2	13	0.36	
3852835	Rock	1.81	1.1	9.2	4.1	63	<0.1	13.7	10.4	597	3.04	<0.5	0.9	1.3	4.2	41	<0.1	0.1	<0.1	60	0.81	
3852836	Rock	1.08	1.0	5.6	1.8	8	<0.1	1.8	1.6	185	0.58	<0.5	0.1	<0.5	1.0	3	<0.1	<0.1	0.1	8	0.04	

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Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: November 08, 2021

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CERTIFICATE OF ANALYSIS

WHI21000450.2

Method	Analyte	AQ201		AQ201		AQ201		AQ201		AQ201		AQ201		AQ201		AQ201		AQ201		AQ201		AQ370		AQ370	
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu				
Unit		%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	%	ppm	%		
MDL		0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.01	0.1	0.01	0.05	1	0.5	0.2	0.001	0.001					
3852807	Rock	0.030	9	6	0.03	84	<0.001	<1	0.32	0.009	0.11	0.2	0.05	1.3	<0.1	0.86	1	<0.5	1.1						
3852808	Rock	0.019	9	8	0.18	48	0.002	<1	0.21	0.007	0.07	0.1	<0.01	1.0	<0.1	0.18	<1	<0.5	0.2						
3852809	Rock	0.001	22	4	1.58	24	0.007	<1	0.23	0.049	0.05	1.3	<0.01	0.5	<0.1	0.10	<1	<0.5	<0.2						
3852810	Rock	0.072	23	9	0.61	72	0.003	2	1.10	0.022	0.12	0.5	0.04	1.7	<0.1	0.28	5	0.8	0.5						
3852811	Rock	0.002	<1	6	<0.01	9	<0.001	3	0.03	0.003	0.01	1.9	<0.01	<0.1	<0.1	1.34	<1	1.2	0.4						
3852812	Rock	0.004	21	6	0.68	41	0.002	2	0.32	0.007	0.15	0.2	0.01	1.3	<0.1	<0.05	2	<0.5	<0.2						
3852813	Rock	0.067	25	12	1.86	111	0.009	<1	1.24	0.016	0.18	<0.1	<0.01	5.8	<0.1	<0.05	4	<0.5	<0.2						
3852814	Rock	0.045	19	5	0.31	47	0.001	2	0.36	0.024	0.17	0.1	0.18	0.8	<0.1	2.55	1	<0.5	3.5						
3852815	Rock	0.140	16	9	1.05	81	0.220	3	2.02	0.036	0.12	1.8	<0.01	6.0	<0.1	<0.05	8	<0.5	<0.2						
3852816	Rock	0.015	8	8	0.93	40	0.006	1	1.28	0.003	0.08	10.8	<0.01	1.7	<0.1	0.25	3	<0.5	<0.2						
3852817	Rock	0.082	12	9	0.73	63	0.097	2	1.39	0.017	0.22	1.2	<0.01	2.6	<0.1	<0.05	4	<0.5	<0.2						
3852818	Rock	0.067	9	14	1.05	82	0.135	<1	1.24	0.040	0.07	2.0	<0.01	4.1	<0.1	0.27	5	5.2	2.2						
3852819	Rock	0.068	12	63	1.05	47	0.107	1	1.27	0.040	0.02	0.3	<0.01	5.1	<0.1	<0.05	8	<0.5	<0.2						
3852820	Rock	0.086	9	31	0.86	153	0.126	<1	1.45	0.070	0.10	0.6	<0.01	5.9	<0.1	0.07	7	<0.5	<0.2						
3852821	Rock	0.028	12	9	1.26	348	0.003	<1	2.26	0.003	0.18	5.1	<0.01	8.2	<0.1	0.29	11	<0.5	<0.2						
3852822	Rock	0.090	13	20	0.67	111	0.192	1	1.11	0.109	0.19	0.5	<0.01	6.3	0.2	0.74	6	<0.5	<0.2						
3852823	Rock	0.022	4	17	0.34	25	0.013	<1	0.54	0.007	0.04	0.2	<0.01	1.0	<0.1	0.09	2	21.2	1.1						
3852824	Rock	0.099	10	119	1.67	66	0.075	1	1.68	0.032	0.10	0.3	<0.01	5.3	<0.1	<0.05	5	<0.5	<0.2						
3852825	Rock	0.014	2	7	0.22	31	0.005	<1	0.43	0.008	0.04	0.4	0.02	1.2	<0.1	1.12	2	24.7	3.4						
3852826	Rock	0.007	2	7	0.12	45	0.019	1	0.42	0.043	0.07	44.2	<0.01	0.7	<0.1	0.07	2	<0.5	10.1						
3852827	Rock	0.052	14	12	0.84	139	0.131	<1	1.58	0.132	0.82	31.9	<0.01	3.1	0.5	0.27	6	<0.5	1.9						
3852828	Rock	0.003	22	6	0.01	14	<0.001	<1	0.27	0.004	0.19	2.1	<0.01	0.1	<0.1	<0.05	<1	<0.5	0.5						
3852829	Rock	0.001	12	5	<0.01	91	<0.001	2	0.31	0.003	0.28	0.2	<0.01	0.2	<0.1	0.19	<1	<0.5	<0.2						
3852830	Rock	0.001	8	5	0.03	137	<0.001	<1	0.22	0.026	0.14	0.1	<0.01	<0.1	<0.1	0.10	<1	<0.5	<0.2						
3852831	Rock	0.006	23	5	1.31	49	0.004	<1	0.31	0.032	0.07	0.4	<0.01	1.2	<0.1	<0.05	1	<0.5	<0.2						
3852832	Rock	0.007	14	6	0.03	32	0.009	1	0.34	0.055	0.13	1.1	<0.01	0.9	<0.1	0.08	1	<0.5	<0.2						
3852833	Rock	0.102	22	19	1.02	71	0.013	2	1.59	0.042	0.14	<0.1	<0.01	5.8	<0.1	<0.05	7	<0.5	<0.2						
3852834	Rock	0.015	9	6	0.14	22	0.002	<1	0.28	0.027	0.05	<0.1	<0.01	0.8	<0.1	0.08	1	<0.5	<0.2						
3852835	Rock	0.109	18	24	1.17	88	0.052	1	1.48	0.054	0.13	<0.1	<0.01	4.9	<0.1	<0.05	6	<0.5	<0.2						
3852836	Rock	0.008	3	5	0.07	14	0.001	<1	0.18	0.014	0.03	<0.1	<0.01	0.6	<0.1	<0.05	<1	<0.5	<0.2						

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Project: PIKE
Report Date: November 08, 2021

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CERTIFICATE OF ANALYSIS

WHI21000450.2

Method	Analyte	AQ370	FA530	GC817
		Pb	Ag	Pb
Unit		%	ppm	%
MDL		0.01	20	2
3852807	Rock			
3852808	Rock			
3852809	Rock			
3852810	Rock			
3852811	Rock			
3852812	Rock			
3852813	Rock			
3852814	Rock			
3852815	Rock			
3852816	Rock			
3852817	Rock			
3852818	Rock			
3852819	Rock			
3852820	Rock			
3852821	Rock			
3852822	Rock			
3852823	Rock	177		
3852824	Rock			
3852825	Rock	154		
3852826	Rock			
3852827	Rock			
3852828	Rock			
3852829	Rock			
3852830	Rock			
3852831	Rock			
3852832	Rock			
3852833	Rock			
3852834	Rock			
3852835	Rock			
3852836	Rock			

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CERTIFICATE OF ANALYSIS

WHI21000450.2

Method	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01	
3852837	Rock	3.67	30.0	4.7	3.4	67	<0.1	73.3	20.1	717	3.66	<0.5	1.1	0.7	3.0	95	<0.1	<0.1	0.1	90	2.33
3852838	Rock	0.71	3.4	14.3	2.4	23	0.3	8.8	38.9	321	2.63	1.0	0.4	21.3	1.8	23	<0.1	<0.1	0.7	18	1.61
3852839	Rock	1.33	1.7	9.0	3.1	27	0.1	4.1	5.9	454	1.89	1.4	0.9	3.2	3.5	51	<0.1	<0.1	0.3	28	2.36
3852840	Rock	0.38	0.8	10.6	11.6	166	0.1	13.9	22.1	914	4.39	0.5	1.6	1.8	3.8	136	0.5	0.1	0.2	54	2.99
3852841	Rock	0.56	10.8	147.5	1.7	4	0.4	3.2	13.5	61	1.78	1.5	4.1	2.0	0.8	19	<0.1	<0.1	0.5	6	0.05
3852842	Rock	0.55	3.9	173.7	>10000	4	15.8	1.3	0.6	27	0.85	<0.5	2.0	216.4	0.5	7	1.3	0.5	16.5	2	0.01
3852843	Rock	0.21	2.4	16.1	65.5	10	1.4	5.3	19.9	224	1.63	2.7	1.3	18.7	11.5	34	<0.1	<0.1	2.4	3	0.39
3852844	Rock	0.84	528.5	1639.3	>10000	6	31.3	2.9	0.8	36	3.65	<0.5	17.3	11306.2	0.6	15	3.0	2.6	4.6	5	<0.01
3852845	Rock	1.31	18.3	37.4	28.8	6	1.1	5.3	21.2	67	1.24	0.7	0.8	20.8	5.0	9	<0.1	<0.1	2.4	3	0.03
3852846	Rock	0.98	77.0	436.5	>10000	6	75.0	2.3	1.0	36	2.79	1.0	7.9	37718.0	1.7	11	3.8	18.9	3.8	2	<0.01
3852847	Rock	1.01	2.6	11.0	129.7	68	0.8	5.2	14.6	460	4.48	0.6	0.9	25.6	4.5	54	<0.1	0.1	6.7	60	0.86
3852848	Rock	0.44	5.8	23.1	200.8	27	1.3	4.6	8.8	580	4.09	2.4	1.2	52.0	6.9	122	0.1	0.3	4.6	28	2.32
3852849	Rock	0.76	1.5	7.8	21.8	5	0.4	1.2	4.4	39	1.13	0.7	4.2	23.8	22.5	7	<0.1	0.1	0.5	1	0.05
3852850	Rock	1.29	1.5	8.3	35.8	60	0.2	11.9	9.8	1468	4.04	0.7	1.1	9.3	5.0	215	0.5	<0.1	0.1	21	5.68
3852851	Rock	0.77	3.2	365.2	2182.4	130	>100	2.6	5.7	458	4.43	>10000	1.2	5455.3	6.2	28	7.3	55.7	2.3	11	0.23
3852852	Rock	0.66	4.0	34.7	106.7	22	12.3	4.0	4.1	586	3.65	>10000	0.5	739.5	3.3	35	0.4	23.7	0.4	9	0.32
3852853	Rock	1.28	5.7	95.3	295.9	108	>100	4.3	1.6	176	1.65	3207.9	0.6	84.0	2.8	14	2.9	160.5	0.3	9	0.08
3852854	Rock	0.77	3.0	27.9	95.9	135	13.1	17.6	7.7	648	1.78	9728.6	0.7	303.0	2.4	39	2.5	20.0	0.2	18	0.65
3852855	Rock	1.44	2.0	69.5	187.9	224	70.1	38.4	12.2	1335	2.92	2279.7	0.8	128.8	4.6	57	5.5	8.7	0.2	39	0.43
3852856	Rock	1.46	2.0	274.1	1282.9	870	>100	50.7	14.0	1595	3.21	2028.4	0.6	108.7	3.7	52	20.0	86.4	0.2	50	0.72
3852857	Rock	1.44	1.0	115.1	356.4	640	>100	42.2	16.5	1658	3.91	2977.8	0.6	174.6	3.2	44	14.3	25.3	0.2	74	0.49
3852858	Rock	1.72	1.6	42.3	84.6	204	42.8	17.2	12.4	1052	2.94	1402.2	1.0	88.8	7.6	29	2.4	11.3	<0.1	32	0.43
3852859	Rock	0.90	2.9	189.3	93.7	45	55.9	6.2	1.7	175	4.64	365.4	0.3	56.5	2.8	9	0.4	14.0	0.8	33	0.06
3852860	Rock	6.10	5.2	281.0	3097.6	1585	>100	21.3	8.5	1036	3.55	>10000	1.3	925.8	3.9	46	68.1	434.2	0.4	34	0.27
3852861	Rock	4.09	4.9	375.6	2538.8	1930	>100	8.3	4.0	572	1.58	5659.0	0.8	407.0	1.4	32	51.7	522.4	0.1	14	0.33
3852862	Rock	2.46	3.9	272.0	2323.8	1115	>100	8.6	4.8	592	1.52	4190.9	0.7	302.5	1.6	28	36.1	441.0	0.3	19	0.15
3852863	Rock	3.58	4.7	204.4	1530.1	635	>100	11.0	4.5	530	1.71	4777.3	0.9	270.6	1.6	25	21.3	297.3	0.4	18	0.20
3852864	Rock	3.72	5.7	119.8	477.0	296	>100	10.2	5.5	457	1.62	2626.5	0.8	106.3	1.7	20	9.6	158.3	0.3	19	0.18
3852865	Rock	2.85	5.6	33.8	104.1	164	33.0	22.5	11.3	868	2.06	667.7	0.9	23.3	3.2	24	2.0	25.6	0.2	31	0.26
3852866	Rock	3.19	3.3	44.0	24.5	76	20.7	25.1	10.0	974	2.09	805.1	1.0	47.9	5.1	23	1.2	14.2	0.1	30	0.21

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Project: PIKE
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CERTIFICATE OF ANALYSIS

WHI21000450.2

Method Analyte Unit MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu	
	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	
3852837	Rock	0.049	13	163	2.80	39	0.004	<1	1.57	0.015	0.04	<0.1	<0.01	8.5	<0.1	<0.05	5	<0.5	<0.2		
3852838	Rock	0.031	7	6	0.28	78	0.001	1	0.45	0.017	0.18	0.1	<0.01	1.2	<0.1	1.57	1	<0.5	<0.2		
3852839	Rock	0.049	20	9	0.47	88	0.001	<1	0.51	0.029	0.18	<0.1	<0.01	1.4	<0.1	0.09	2	<0.5	<0.2		
3852840	Rock	0.139	11	14	1.54	302	0.006	2	1.36	0.024	0.31	<0.1	<0.01	5.8	0.1	0.20	3	<0.5	<0.2		
3852841	Rock	0.007	2	6	0.04	11	0.004	<1	0.13	0.004	0.02	0.2	<0.01	0.6	<0.1	0.58	<1	<0.5	<0.2		
3852842	Rock	0.002	<1	6	0.01	18	<0.001	1	0.09	0.003	0.05	<0.1	<0.01	<0.1	<0.1	0.20	<1	<0.5	0.4	<0.001	0.018
3852843	Rock	0.017	13	7	0.13	336	<0.001	2	0.37	0.026	0.16	<0.1	<0.01	0.3	<0.1	0.44	<1	<0.5	0.5		
3852844	Rock	0.002	1	7	<0.01	10	<0.001	<1	0.06	0.002	<0.01	0.3	0.02	0.1	<0.1	0.45	<1	8.4	7.1	0.057	0.168
3852845	Rock	0.010	10	8	0.05	94	<0.001	2	0.24	0.030	0.11	<0.1	<0.01	0.6	<0.1	0.22	<1	<0.5	<0.2		
3852846	Rock	0.002	<1	10	<0.01	8	<0.001	1	0.05	0.002	0.02	0.3	0.02	0.5	<0.1	0.41	<1	0.6	1.6	0.007	0.040
3852847	Rock	0.261	12	6	1.58	37	0.193	1	1.61	0.052	0.09	0.4	<0.01	2.8	<0.1	2.30	6	1.3	0.7		
3852848	Rock	0.068	12	7	0.35	198	0.098	<1	0.74	0.039	0.13	0.2	<0.01	1.6	<0.1	0.54	4	0.7	0.4		
3852849	Rock	0.005	8	5	0.02	90	0.001	1	0.18	0.059	0.12	<0.1	<0.01	0.6	<0.1	0.68	<1	<0.5	<0.2		
3852850	Rock	0.068	8	6	1.37	184	0.002	<1	0.68	0.022	0.20	<0.1	<0.01	4.3	<0.1	0.09	2	<0.5	<0.2		
3852851	Rock	0.042	6	5	0.41	72	0.053	1	0.84	0.020	0.14	1.0	0.04	0.7	0.2	1.84	3	28.1	0.5		
3852852	Rock	0.026	4	8	0.58	20	0.044	2	0.94	0.004	0.11	0.6	<0.01	0.7	0.2	1.62	3	4.5	0.4		
3852853	Rock	0.045	6	11	0.14	31	0.004	2	0.32	0.002	0.16	0.3	<0.01	0.8	0.1	0.35	1	1.6	<0.2		
3852854	Rock	0.030	3	16	0.45	15	0.049	2	0.54	0.004	0.08	0.9	0.02	1.3	0.2	0.73	1	2.3	<0.2		
3852855	Rock	0.098	17	35	1.00	47	0.004	3	1.31	0.005	0.29	<0.1	0.01	4.7	0.2	0.08	4	0.6	<0.2		
3852856	Rock	0.095	15	46	1.32	34	0.005	2	1.48	0.006	0.18	<0.1	<0.01	4.9	0.2	0.14	5	1.3	<0.2		
3852857	Rock	0.122	18	46	1.75	49	0.031	2	2.26	0.017	0.25	<0.1	<0.01	6.9	0.2	0.06	8	0.5	<0.2		
3852858	Rock	0.101	20	14	1.05	54	0.008	3	1.58	0.014	0.29	<0.1	<0.01	3.4	0.2	0.18	5	0.8	<0.2		
3852859	Rock	0.032	5	14	0.42	42	0.002	1	0.47	0.005	0.10	<0.1	0.02	0.8	<0.1	<0.05	3	2.0	<0.2		
3852860	Rock	0.078	10	29	0.76	152	0.109	3	1.08	0.011	0.22	2.0	0.02	4.1	0.4	0.48	4	3.6	<0.2		
3852861	Rock	0.036	3	14	0.26	17	0.039	1	0.40	0.002	0.11	0.7	0.02	1.3	<0.1	0.53	2	5.0	<0.2		
3852862	Rock	0.038	4	16	0.37	20	0.042	1	0.45	0.003	0.09	0.6	0.01	1.5	<0.1	0.33	2	5.2	<0.2		
3852863	Rock	0.058	4	19	0.35	20	0.055	2	0.46	0.002	0.11	0.9	<0.01	1.6	<0.1	0.50	1	3.3	<0.2		
3852864	Rock	0.053	4	18	0.35	23	0.058	2	0.47	0.002	0.12	1.0	<0.01	1.6	<0.1	0.27	1	1.2	<0.2		
3852865	Rock	0.082	6	27	0.77	35	0.089	2	0.82	0.003	0.16	1.3	<0.01	3.1	0.1	0.10	2	0.9	<0.2		
3852866	Rock	0.070	9	27	0.87	47	0.085	2	0.97	0.004	0.23	1.0	<0.01	4.0	0.1	<0.05	2	0.7	<0.2		

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Client: **Ryan Burke**
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: November 08, 2021

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CERTIFICATE OF ANALYSIS

WHI21000450.2

Method	AQ370	FA530	GC817
Analyte	Pb	Ag	Pb
Unit	%	ppm	%
MDL	0.01	20	2
3852837	Rock		
3852838	Rock		
3852839	Rock		
3852840	Rock		
3852841	Rock		
3852842	Rock	1.26	
3852843	Rock		
3852844	Rock	>4	7.27
3852845	Rock		
3852846	Rock	>4	4.65
3852847	Rock		
3852848	Rock		
3852849	Rock		
3852850	Rock		
3852851	Rock	615	
3852852	Rock		
3852853	Rock	276	
3852854	Rock		
3852855	Rock		
3852856	Rock	403	
3852857	Rock	120	
3852858	Rock		
3852859	Rock		
3852860	Rock	1113	
3852861	Rock	1166	
3852862	Rock	683	
3852863	Rock	552	
3852864	Rock	293	
3852865	Rock		
3852866	Rock		

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Project: PIKE
Report Date: November 08, 2021

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CERTIFICATE OF ANALYSIS

WHI21000450.2

Method	Analyte	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Unit		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
MDL		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01	
3852867	Rock	2.61	2.2	45.5	95.0	194	28.6	18.0	7.6	1263	2.03	3017.5	0.8	266.7	5.7	24	12.1	20.4	<0.1	22	0.28	
3852868	Rock	0.46	0.8	16.1	6.2	80	0.5	2.4	19.8	671	4.88	29.4	0.4	4.3	1.5	74	0.1	0.4	<0.1	105	1.53	
3852869	Rock	0.74	165.7	20.6	8.1	32	1.1	9.4	35.3	700	3.01	12.3	0.8	460.9	1.3	104	0.3	0.2	1.9	27	4.23	
3852870	Rock	0.56	3.9	20.2	1067.5	12	36.5	3.9	3.9	199	1.33	9.4	0.3	97.9	4.5	18	0.2	0.3	83.5	7	0.29	
3852871	Rock	0.56	60.1	1461.7	9.0	17	2.4	6.8	13.8	156	1.60	11.7	0.7	140.2	4.1	28	0.1	0.3	4.3	33	1.17	
3852872	Rock	1.05	1.8	55.7	8.7	47	0.7	7.0	13.2	478	2.69	5.7	1.7	168.5	9.6	29	0.1	0.1	0.7	67	0.56	
3852873	Rock	0.28	129.0	33.9	14.1	14	2.2	3.3	13.8	90	4.51	9.3	1.7	190.3	2.0	5	<0.1	0.1	5.7	17	0.03	
3852874	Rock	0.61	2.2	4.4	18.0	35	0.4	0.9	0.3	36	0.84	13.1	1.9	5.3	7.9	3	<0.1	0.2	0.4	2	0.02	
3852875	Rock	0.97	2.0	4.0	23.4	79	0.3	2.1	2.6	446	1.29	7.7	1.2	6.0	7.3	77	0.5	0.1	0.3	5	2.80	
3852876	Rock	0.34	1.0	19.4	6.1	62	0.2	10.6	7.9	403	4.57	2.6	0.6	2.1	3.9	55	<0.1	<0.1	0.5	82	0.74	
3852877	Rock	0.35	93.8	5811.2	26.9	50	29.0	6.4	9.9	408	3.31	1.0	1.3	5.7	4.7	131	0.4	0.7	315.6	50	1.14	
3852878	Rock	0.56	924.7	6474.4	238.1	57	>100	2.8	8.8	64	9.85	17.5	0.5	18.5	2.8	7	2.5	0.5	441.8	53	0.01	
3852879	Rock	0.20	1203.5	2691.4	37.3	39	64.1	5.0	15.5	117	6.96	15.3	1.5	7.1	3.0	8	1.3	0.4	61.8	56	0.03	
3852880	Rock	0.38	1966.3	4573.6	299.0	8	19.0	1.6	0.6	39	1.57	3.2	0.8	43.2	0.9	14	1.2	0.7	35.5	4	0.02	
3852881	Rock	0.38	>2000	2563.8	131.0	24	>100	2.5	3.7	50	4.56	26.0	0.6	22.0	1.5	7	3.2	0.4	289.8	44	0.04	
3852882	Rock	0.55	>2000	3383.8	471.9	7	65.1	2.3	1.5	41	4.08	<0.5	1.0	14.2	1.0	6	3.2	0.2	192.2	8	0.04	
3852883	Rock	0.54	161.3	517.9	82.5	7	12.4	1.6	0.9	77	0.75	<0.5	0.5	5.3	0.7	1	0.3	0.1	189.7	3	0.01	
3852884	Rock	0.81	858.4	3259.5	29.0	53	5.8	4.3	9.0	302	2.03	3.4	5.4	0.9	6.0	41	0.8	0.2	5.9	29	0.44	
3852885	Rock	0.93	1141.6	224.9	12.8	5	0.9	1.4	0.2	32	0.42	<0.5	0.1	2.4	0.3	<1	0.3	0.1	11.6	<1	<0.01	
3852886	Rock	0.76	5.0	56.6	7.9	53	1.2	16.4	5.4	184	3.74	3.6	0.9	6.7	2.2	18	<0.1	0.3	0.6	29	<0.01	
3852887	Rock	0.82	8.3	6.4	15.0	23	0.4	1.2	0.3	37	0.91	98.5	1.7	26.2	10.9	2	<0.1	0.1	0.4	2	<0.01	
3852888	Rock	0.57	3.5	6.7	5.0	5	<0.1	1.3	0.8	78	0.48	0.9	1.7	<0.5	7.5	12	<0.1	<0.1	0.2	6	0.09	
3852889	Rock	0.67	3.9	24.7	9.1	30	0.4	4.8	10.9	377	2.76	3.0	2.7	2.9	11.5	41	<0.1	<0.1	0.8	83	0.64	
3852890	Rock	0.91	9.8	77.6	4.4	48	0.3	22.4	24.2	518	4.63	0.8	0.9	10.7	5.9	61	<0.1	<0.1	2.3	110	0.94	
3852891	Rock	0.94	8.3	81.2	5.0	4	0.9	2.4	4.1	39	2.10	10.8	1.3	403.1	1.0	2	<0.1	0.2	168.4	3	0.01	
3852892	Rock	0.46	2.3	26.5	7.1	38	0.2	7.2	12.4	391	2.64	1.5	3.0	1.6	12.2	47	<0.1	<0.1	1.0	62	0.53	
3852893	Rock	0.12	6.1	7370.3	40.9	12	27.0	4.6	3.6	177	1.97	0.7	0.4	529.2	4.2	3	1.2	0.1	4.3	3	0.03	
3852894	Rock	0.36	57.7	1711.4	5.8	16	4.2	6.4	23.4	272	2.21	0.8	1.2	1393.1	5.0	51	0.2	<0.1	6.7	16	1.94	
3852895	Rock	2.38	48.2	73.2	10.5	12	1.0	8.1	15.4	38	2.70	2.6	0.6	271.6	4.8	10	<0.1	<0.1	2.2	16	0.06	
3852896	Rock	1.08	2.1	168.0	5.6	19	4.5	15.0	27.7	227	3.92	0.7	1.0	30238.9	7.0	40	0.1	<0.1	15.1	18	1.33	

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

CERTIFICATE OF ANALYSIS

WHI21000450.2

Method Analyte Unit MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo	Cu	
	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%	
3852867	Rock	0.063	10	17	0.94	45	0.080	2	1.03	0.006	0.19	1.1	<0.01	2.7	0.1	0.07	2	0.6	<0.2		
3852868	Rock	0.253	14	4	2.12	159	0.129	<1	2.15	0.063	0.12	0.1	<0.01	5.1	<0.1	0.17	8	<0.5	<0.2		
3852869	Rock	0.017	7	5	0.57	66	<0.001	<1	0.31	0.006	0.12	1.1	<0.01	1.6	<0.1	1.03	1	<0.5	0.3		
3852870	Rock	0.015	18	12	0.15	101	0.003	<1	0.45	0.009	0.17	0.1	<0.01	0.5	<0.1	0.13	2	2.5	2.9		
3852871	Rock	0.049	4	11	0.41	97	<0.001	<1	0.42	0.004	0.14	<0.1	0.01	2.4	<0.1	0.78	1	<0.5	0.7		
3852872	Rock	0.089	32	21	0.37	93	0.007	<1	1.41	0.021	0.13	<0.1	<0.01	9.2	<0.1	<0.05	4	<0.5	<0.2		
3852873	Rock	0.008	2	5	0.02	20	<0.001	<1	0.24	0.002	0.04	<0.1	0.04	0.9	<0.1	0.09	1	1.1	2.9		
3852874	Rock	<0.001	18	5	<0.01	7	0.008	<1	0.22	0.080	0.11	0.3	<0.01	0.3	<0.1	0.10	1	<0.5	<0.2		
3852875	Rock	0.002	18	4	1.11	10	0.002	<1	0.26	0.030	0.16	0.2	<0.01	0.5	<0.1	0.13	1	<0.5	<0.2		
3852876	Rock	0.176	11	22	1.61	113	0.245	<1	1.77	0.057	0.09	0.2	<0.01	1.9	<0.1	0.40	7	<0.5	<0.2		
3852877	Rock	0.047	7	10	0.55	97	0.012	<1	1.41	0.018	0.04	0.1	0.02	3.0	<0.1	0.56	5	6.3	2.5		
3852878	Rock	0.005	<1	8	0.02	150	0.002	<1	0.11	0.002	0.02	13.5	0.08	0.2	<0.1	0.75	2	20.5	4.4		
3852879	Rock	0.003	2	8	0.11	251	<0.001	<1	0.32	0.008	0.03	14.8	0.02	0.6	<0.1	0.20	2	6.2	1.0		
3852880	Rock	0.004	3	9	<0.01	165	<0.001	1	0.10	0.001	0.06	29.7	0.01	0.5	<0.1	0.51	<1	7.6	3.6		
3852881	Rock	0.006	1	7	0.04	93	0.002	<1	0.15	0.002	0.02	8.8	0.05	0.5	<0.1	0.73	2	15.7	2.7	0.896	0.252
3852882	Rock	0.007	<1	8	0.03	151	<0.001	<1	0.16	0.001	0.02	2.6	0.04	0.3	<0.1	0.40	<1	17.5	5.3	0.388	0.328
3852883	Rock	0.004	2	9	<0.01	33	<0.001	1	0.10	0.002	0.04	0.4	<0.01	0.2	<0.1	0.06	<1	3.3	1.4		
3852884	Rock	0.028	5	11	0.66	29	0.083	<1	0.87	0.042	0.06	0.7	<0.01	2.5	<0.1	0.16	4	1.3	0.2		
3852885	Rock	<0.001	<1	9	<0.01	2	<0.001	<1	<0.01	<0.001	<0.01	7.1	<0.01	<0.1	<0.1	0.09	<1	1.0	<0.2		
3852886	Rock	0.032	9	18	0.02	91	0.002	<1	0.26	0.003	0.12	0.1	<0.01	1.9	<0.1	0.23	1	1.7	<0.2		
3852887	Rock	0.004	37	7	<0.01	17	<0.001	<1	0.33	0.003	0.25	0.2	<0.01	0.4	<0.1	<0.05	<1	<0.5	<0.2		
3852888	Rock	0.001	2	7	0.04	96	0.001	<1	0.25	0.038	0.15	<0.1	<0.01	0.2	<0.1	<0.05	<1	<0.5	<0.2		
3852889	Rock	0.058	15	13	0.87	69	0.199	1	1.53	0.155	0.33	3.4	<0.01	3.9	0.2	0.39	6	<0.5	<0.2		
3852890	Rock	0.093	6	81	1.26	131	0.210	<1	2.50	0.209	0.63	0.8	<0.01	6.8	0.3	0.58	9	<0.5	0.2		
3852891	Rock	0.002	<1	12	0.04	13	0.005	<1	0.06	0.002	0.02	4.4	<0.01	<0.1	<0.1	0.65	<1	<0.5	3.9		
3852892	Rock	0.052	20	17	0.83	69	0.154	<1	1.51	0.158	0.50	0.5	<0.01	4.6	0.3	0.34	6	<0.5	<0.2		
3852893	Rock	0.009	5	22	0.02	78	0.001	<1	0.22	0.005	0.14	0.3	0.02	0.2	<0.1	0.73	<1	0.7	<0.2		
3852894	Rock	0.026	11	9	0.80	87	0.001	1	0.33	0.008	0.11	0.2	0.01	1.0	<0.1	1.06	<1	0.7	2.5		
3852895	Rock	0.033	10	5	0.03	46	<0.001	<1	0.39	0.006	0.22	0.2	0.07	0.6	<0.1	1.75	1	0.7	0.3		
3852896	Rock	0.055	22	6	0.52	40	0.002	<1	0.39	0.029	0.19	0.1	0.78	1.5	<0.1	3.11	<1	1.1	7.1		

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Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: November 08, 2021

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CERTIFICATE OF ANALYSIS

WHI21000450.2

	Method	AQ370	FA530	GC817
	Analyte	Pb	Ag	Pb
	Unit	%	ppm	%
	MDL	0.01	20	2
3852867	Rock			
3852868	Rock			
3852869	Rock			
3852870	Rock			
3852871	Rock			
3852872	Rock			
3852873	Rock			
3852874	Rock			
3852875	Rock			
3852876	Rock			
3852877	Rock			
3852878	Rock	359		
3852879	Rock			
3852880	Rock			
3852881	Rock	0.02	100	
3852882	Rock	0.05		
3852883	Rock			
3852884	Rock			
3852885	Rock			
3852886	Rock			
3852887	Rock			
3852888	Rock			
3852889	Rock			
3852890	Rock			
3852891	Rock			
3852892	Rock			
3852893	Rock			
3852894	Rock			
3852895	Rock			
3852896	Rock			

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Project: PIKE
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CERTIFICATE OF ANALYSIS

WHI21000450.2

Method	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01	
3852897	Rock	0.57	364.9	34.4	9.3	28	1.1	4.6	15.5	369	2.24	1.0	0.8	202.3	2.4	64	0.2	<0.1	6.5	47	2.18
3852898	Rock	0.48	181.9	7.6	6.4	17	0.4	3.6	9.4	301	1.22	<0.5	0.4	76.6	0.9	68	<0.1	<0.1	2.4	11	2.21
3852899	Rock	0.70	36.2	129.9	10.1	38	0.6	4.7	11.6	821	3.15	1.6	0.8	82.1	1.0	178	<0.1	<0.1	2.7	47	8.66
3852900	Rock	0.89	117.0	20.2	11.5	26	1.0	4.8	13.1	508	2.77	1.2	0.4	94.5	0.8	48	0.1	<0.1	5.3	34	2.24
3852901	Rock	1.16	2.9	29.3	22.7	55	0.3	15.3	12.5	775	3.31	1.9	1.9	5.9	7.7	134	<0.1	<0.1	0.6	66	2.21
3852902	Rock	0.61	3.8	238.8	4.2	4	2.1	42.5	30.8	42	2.85	14.0	1.4	7.8	1.4	1	<0.1	0.2	0.4	5	<0.01
3852903	Rock	0.61	8.1	136.1	1.9	4	0.6	5.5	4.8	36	3.08	0.9	0.3	2.8	1.0	49	<0.1	<0.1	0.4	4	0.03
3852904	Rock	0.73	12.2	36.3	3.6	5	0.6	2.7	2.5	27	1.27	9.7	0.1	4.5	1.7	3	<0.1	<0.1	0.5	1	<0.01
3852905	Rock	1.51	28.2	66.4	3.4	13	1.2	9.0	1.8	41	2.44	2.6	0.2	7.5	5.1	6	<0.1	<0.1	0.6	5	0.02
3852906	Rock	0.60	256.7	132.9	24.6	9	2.7	19.6	99.6	53	15.74	<0.5	0.8	23.3	2.8	3	0.1	<0.1	98.7	10	0.01
3852907	Rock	1.07	10.3	118.1	7224.7	4	10.4	1.3	0.3	27	1.76	0.8	2.8	3763.4	1.3	1	1.3	4.4	1.1	1	<0.01
3852908	Rock	1.35	3.1	11.9	44.2	75	0.7	6.2	12.7	499	4.20	<0.5	0.8	8.5	4.6	58	<0.1	0.2	8.5	68	0.84
3852909	Rock	0.63	304.0	581.6	40.0	42	3.9	6.7	56.1	253	5.80	403.5	6.1	9.1	27.9	12	0.7	1.8	0.4	10	0.25
3852910	Rock	0.45	729.8	33.6	9.3	22	0.7	33.3	5.8	147	2.93	2.2	0.4	23.4	1.7	6	0.1	<0.1	3.5	28	0.03
3852911	Rock	0.60	25.2	6.0	25.1	4	0.6	1.1	4.6	21	1.17	1.2	0.3	50.8	2.3	3	<0.1	<0.1	1.1	<1	<0.01
3852912	Rock	0.91	3.7	13.9	15.6	163	0.4	7.6	9.3	1755	3.56	2.3	9.6	4.8	11.2	32	0.9	<0.1	0.3	58	0.74
3852913	Rock	1.21	1.4	9.2	9.6	46	<0.1	29.9	14.9	1260	3.31	<0.5	0.3	1.8	2.2	478	0.2	<0.1	<0.1	49	7.25
3852914	Rock	0.77	3.4	27.0	4.2	5	1.0	2.4	1.5	45	0.94	4.7	0.3	53.5	0.4	2	<0.1	<0.1	0.9	3	0.02



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CERTIFICATE OF ANALYSIS

WHI21000450.2

Method	Analyte	Unit	MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
				P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo
				%	ppm	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	%
3852897	Rock			0.033	9	8	0.53	189	<0.001	<1	0.40	0.005	0.07	0.1	0.05	4.3	<0.1	0.42	1	<0.5	0.8	
3852898	Rock			0.002	5	6	0.65	275	<0.001	<1	0.11	0.002	0.03	0.1	<0.01	0.8	<0.1	0.21	<1	<0.5	0.3	
3852899	Rock			0.037	8	5	4.03	136	0.001	<1	0.38	0.014	0.07	<0.1	<0.01	3.1	<0.1	0.58	1	<0.5	<0.2	
3852900	Rock			0.010	7	10	0.61	101	<0.001	<1	0.27	0.004	0.04	<0.1	0.06	2.0	<0.1	1.00	<1	<0.5	0.7	
3852901	Rock			0.108	29	21	0.60	133	0.005	<1	0.97	0.018	0.14	0.2	<0.01	6.3	<0.1	0.06	3	<0.5	<0.2	
3852902	Rock			0.003	1	10	0.05	17	<0.001	<1	0.13	0.001	0.02	0.6	<0.01	0.2	<0.1	0.63	<1	1.2	<0.2	
3852903	Rock			0.017	1	7	0.03	21	0.012	<1	0.08	0.006	0.03	0.1	<0.01	0.2	<0.1	0.56	<1	1.0	<0.2	
3852904	Rock			0.003	7	7	<0.01	130	0.001	<1	0.07	0.005	0.06	0.4	<0.01	0.1	<0.1	0.22	<1	0.6	<0.2	
3852905	Rock			0.009	13	9	0.04	141	0.002	<1	0.23	0.036	0.12	3.0	<0.01	0.2	<0.1	0.20	<1	1.2	<0.2	
3852906	Rock			0.011	1	8	0.09	4	0.004	<1	0.19	0.012	0.04	3.0	<0.01	0.7	<0.1	>10	<1	7.6	0.8	
3852907	Rock			0.002	1	8	<0.01	19	<0.001	<1	0.08	0.008	0.05	<0.1	<0.01	0.2	<0.1	0.07	<1	<0.5	1.7	
3852908	Rock			0.226	14	7	1.61	46	0.232	<1	1.69	0.059	0.10	3.5	<0.01	4.0	<0.1	1.66	6	1.2	1.1	
3852909	Rock			0.028	22	8	0.33	30	0.010	<1	1.05	0.039	0.14	0.1	<0.01	2.5	0.2	3.43	4	2.3	<0.2	
3852910	Rock			0.026	4	40	0.40	61	0.008	<1	0.44	0.020	0.05	1.7	<0.01	1.5	<0.1	0.34	3	<0.5	0.8	
3852911	Rock			0.002	4	6	<0.01	54	<0.001	<1	0.16	0.054	0.13	0.2	<0.01	0.2	<0.1	0.52	<1	<0.5	0.4	
3852912	Rock			0.135	145	15	0.24	316	0.002	<1	2.41	0.008	0.11	0.1	<0.01	11.3	<0.1	<0.05	9	<0.5	<0.2	
3852913	Rock			0.050	12	24	2.14	99	0.002	<1	1.91	0.008	0.16	<0.1	<0.01	3.8	<0.1	<0.05	5	<0.5	<0.2	
3852914	Rock			0.004	1	7	0.01	14	0.001	<1	0.04	0.003	<0.01	0.2	<0.01	0.1	<0.1	<0.05	<1	<0.5	<0.2	



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Project: PIKE
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CERTIFICATE OF ANALYSIS

WHI21000450.2

Method	Analyte	AQ370	FA530	GC817
		Pb	Ag	Pb
Unit		%	ppm	%
MDL		0.01	20	2
3852897	Rock			
3852898	Rock			
3852899	Rock			
3852900	Rock			
3852901	Rock			
3852902	Rock			
3852903	Rock			
3852904	Rock			
3852905	Rock			
3852906	Rock			
3852907	Rock			
3852908	Rock			
3852909	Rock			
3852910	Rock			
3852911	Rock			
3852912	Rock			
3852913	Rock			
3852914	Rock			



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MethodAnalyte		WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Unit	MDL	Wgt kg	Moppm	Cuppm	Pbppm	Zn ppm	Agppm	Nippm	Coppm	Mn ppm	Fe %0.01	Asppm	UAu ppm	ppb	Thppm	Srppm	Cdppm	Sbppm	Bippm	V ppm	Ca %0.01
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.5	0.5	0.1	1	0.1	0.1	0.1	0.1	0.1	1	1
Pulp Duplicates																					
3852778	Rock	0.16	81.8	5589.4	88.2	17	69.5	2.8	1.7	62	2.05	1.0	<0.1	36.6	0.7	2	0.9	0.2	934.5	11	0.02
REP 3852778	QC		81.5	5619.4	88.6	17	69.8	2.9	1.7	62	2.06	1.1	<0.1	41.4	0.5	2	1.1	0.2	922.5	11	0.02
3852781	Rock	1.17	>2000	359.3	27.6	7	5.5	1.3	0.2	29	0.52	1.6	0.3	2.3	0.1	2	1.4	0.7	42.7	1	0.02
REP 3852781	QC																				
3852811	Rock	0.69	682.3	75.6	1.2	4	0.9	3.7	22.0	35	2.75	4.0	0.1	6.1	0.3	2	0.8	<0.1	3.0	2	0.02
REP 3852811	QC		655.2	73.3	1.2	3	0.9	3.6	21.2	34	2.67	4.1	0.1	8.0	0.2	2	0.8	<0.1	2.8	2	0.02
3852846	Rock	0.98	77.0	436.5	>10000	6	75.0	2.3	1.0	36	2.79	1.0	7.9	37718.0	1.7	11	3.8	18.9	3.8	2	<0.01
REP 3852846	QC		76.9	446.3	>10000	5	76.6	2.2	1.0	35	2.83	1.1	8.0	44542.4	1.1	11	4.0	18.9	4.0	2	<0.01
3852863	Rock	3.58	4.7	204.4	1530.1	635	>100	11.0	4.5	530	1.71	4777.3	0.9	270.6	1.6	25	21.3	297.3	0.4	18	0.20
REP 3852863	QC																				
3852881	Rock	0.38	>2000	2563.8	131.0	24	>100	2.5	3.7	50	4.56	26.0	0.6	22.0	1.5	7	3.2	0.4	289.8	44	0.04
REP 3852881	QC		>2000	2595.9	123.4	23	>100	2.5	3.8	50	4.52	24.7	0.6	31.2	1.2	7	2.8	0.3	275.9	44	0.04
Core Reject Duplicates																					
3852791	Rock	1.71	2.1	54.6	14.1	11	8.6	3.8	3.8	698	2.07	526.0	0.8	87.2	4.4	28	0.1	3.0	0.5	4	0.94
DUP 3852791	QC		1.7	50.7	13.8	10	8.1	3.6	3.6	686	1.99	507.8	0.7	79.4	4.6	27	<0.1	2.9	0.4	4	0.93
3852825	Rock	0.54	56.8	9950.2	48.3	25	>100	2.8	5.0	112	3.18	<0.5	1.2	33.7	2.2	26	0.8	0.3	409.8	16	0.21
DUP 3852825	QC		50.6	>10000	49.1	23	>100	2.7	5.2	119	3.30	<0.5	1.0	19.1	2.4	28	0.8	0.2	411.6	18	0.23
3852859	Rock	0.90	2.9	189.3	93.7	45	55.9	6.2	1.7	175	4.64	365.4	0.3	56.5	2.8	9	0.4	14.0	0.8	33	0.06
DUP 3852859	QC		2.6	193.2	98.3	46	57.1	6.1	1.7	172	4.68	372.8	0.3	56.8	2.5	9	0.3	13.8	0.8	34	0.06
Reference Materials																					
STD AGPROOF	Standard																				
STD BVGEO01	Standard		11.9	4416.2	197.5	1738	2.6	167.4	26.5	728	3.75	123.3	4.0	218.1	17.1	61	6.6	2.8	25.8	75	1.34
STD BVGEO01	Standard		10.6	4437.9	194.7	1585	2.7	159.8	23.7	721	3.60	120.1	4.1	232.1	16.1	59	6.4	3.8	25.6	77	1.32
STD CDN-ME-9A	Standard																				
STD CDN-ME-14A	Standard																				
STD CPB-2	Standard																				
STD CPB-3	Standard																				
STD DS11	Standard		15.9	155.3	134.0	356	1.7	81.3	13.9	1038	3.19	43.7	2.7	65.8	9.2	71	2.4	7.6	11.7	51	1.08



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MethodAnalyte		AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ37
Unit		P	Lappm	Crppm	Mg	Bappm	Ti	B	Al	Na	K	W Hg	ppm	Scppm	Tippm	S	Gappm	Seppm	Teppm	Mo	C
MDL		%0.001	1	1	%0.01	1	%0.001	ppm	%0.01	%0.001	%0.01	ppm0.1	0.01	0.1	0.1	%0.05	1	0.5	0.2	%0.001	%0.001
1																					
Pulp Duplicates																					
3852778	Rock	<0.001	<1	14	0.01	81	0.003	<1	0.03	0.003	<0.01	15.2	0.04	0.2	<0.1	0.52	<1	23.5	9.5		
REP 3852778	QC	0.001	<1	14	0.01	81	0.003	<1	0.04	0.003	<0.01	14.7	0.05	0.2	<0.1	0.53	<1	23.6	9.3		
3852781	Rock	<0.001	<1	7	<0.01	11	<0.001	<1	0.01	<0.001	<0.01	0.6	<0.01	<0.1	<0.1	0.21	<1	2.8	0.4	0.341	0.03
REP 3852781	QC																			0.345	0.03
3852811	Rock	0.002	<1	6	<0.01	9	<0.001	3	0.03	0.003	0.01	1.9	<0.01	<0.1	<0.1	1.34	<1	1.2	0.4		
REP 3852811	QC	0.002	<1	6	<0.01	9	<0.001	1	0.03	0.003	0.01	1.8	<0.01	<0.1	<0.1	1.30	<1	0.8	0.4		
3852846	Rock	0.002	<1	10	<0.01	8	<0.001	1	0.05	0.002	0.02	0.3	0.02	0.5	<0.1	0.41	<1	0.6	1.6	0.007	0.04
REP 3852846	QC	0.003	<1	9	<0.01	8	<0.001	2	0.05	0.003	0.02	0.3	0.02	0.5	<0.1	0.42	<1	<0.5	1.9		
3852863	Rock	0.058	4	19	0.35	20	0.055	2	0.46	0.002	0.11	0.9	<0.01	1.6	<0.1	0.50	1	3.3	<0.2		
REP 3852863	QC																				
3852881	Rock	0.006	1	7	0.04	93	0.002	<1	0.15	0.002	0.02	8.8	0.05	0.5	<0.1	0.73	2	15.7	2.7	0.896	0.25
REP 3852881	QC	0.006	1	7	0.03	89	0.001	<1	0.15	0.002	0.02	8.1	0.05	0.3	<0.1	0.73	2	13.6	2.4		
Core Reject Duplicates																					
3852791	Rock	0.016	7	6	0.14	65	0.003	1	0.39	0.003	0.18	0.1	0.02	0.5	<0.1	0.98	1	1.4	<0.2		
DUP 3852791	QC	0.015	8	6	0.13	48	0.003	1	0.41	0.003	0.19	0.1	0.01	0.5	<0.1	0.95	1	1.4	<0.2		
3852825	Rock	0.014	2	7	0.22	31	0.005	<1	0.43	0.008	0.04	0.4	0.02	1.2	<0.1	1.12	2	24.7	3.4		
DUP 3852825	QC	0.015	2	8	0.24	33	0.005	<1	0.47	0.009	0.04	0.4	0.02	1.2	<0.1	1.16	2	25.6	3.2	0.005	1.05
3852859	Rock	0.032	5	14	0.42	42	0.002	1	0.47	0.005	0.10	<0.1	0.02	0.8	<0.1	<0.05	3	2.0	<0.2		
DUP 3852859	QC	0.031	5	13	0.42	42	0.002	1	0.47	0.005	0.10	<0.1	0.02	0.9	<0.1	<0.05	3	1.7	<0.2		
Reference Materials																					
STD AGPROOF	Standard																				
STD BVGEO01	Standard	0.073	28	200	1.35	222	0.240	3	2.35	0.199	0.90	4.6	0.09	6.4	0.6	0.68	7	4.2	0.8		
STD BVGEO01	Standard	0.070	27	177	1.30	276	0.220	5	2.32	0.201	0.82	5.5	0.11	5.7	0.6	0.68	8	4.4	1.0		
STD CDN-ME-9A	Standard																				
STD CDN-ME-14A	Standard																				
STD CPB-2	Standard																				
STD CPB-3	Standard																				
STD DS11	Standard	0.071	20	63	0.86	358	0.102	7	1.21	0.079	0.41	2.8	0.24	3.5	4.6	0.29	5	2.3	4.4		



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QUALITY CONTROL REPORT WH121000450 2

Method	Analyte	AQ370	FA530	GC817
Unit	Pb	Agppm	Pb	Pb
MDL	%0.01	20	%2	%2
Pulp Duplicates				
3852778	Rock			
REP 3852778	QC			
3852781	Rock	<0.01		
REP 3852781	QC	<0.01		
3852811	Rock			
REP 3852811	QC			
3852846	Rock	>4		4.65
REP 3852846	QC			
3852863	Rock	552		
REP 3852863	QC	548		
3852881	Rock	0.02	100	
REP 3852881	QC			
Core Reject Duplicates				
3852791	Rock			
DUP 3852791	QC			
3852825	Rock	154		
DUP 3852825	QC	0.01	154	
3852859	Rock			
DUP 3852859	QC			
Reference Materials				
STD AGPROOF	Standard	99		
STD BVGEO01	Standard			
STD BVGEO01	Standard			
STD CDN-ME-9A	Standard	<0.01		
STD CDN-ME-14A	Standard	0.50		
STD CPB-2	Standard			63.19
STD CPB-3	Standard			58.02
STD DS11	Standard			



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		WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		Wgt	Mo	Cu	Pb Zn	Ag	Ni	Co Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca		
		kg	ppm	ppm	ppm ppm	ppm	ppm	ppm ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
		0.01	0.1	0.1	0.1 1	0.1	0.1	0.1 1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01	0.01	
STD DS11	Standard		16.2	150.6	142.0 346	1.7	84.7	14.3 1056	3.20	46.2	2.7	78.7	9.3	71	2.4	8.0	11.7	51	1.09		
STD OREAS262	Standard		0.6	122.2	56.8 151	0.4	63.9	27.4 540	3.30	34.7	1.3	54.3	10.7	36	0.6	4.1	1.0	22	2.98		
STD OREAS262	Standard		0.6	113.6	57.6 148	0.5	64.9	28.0 544	3.29	36.0	1.3	55.7	10.9	34	0.6	3.8	1.0	22	2.97		
STD OREAS262	Standard		0.8	116.1	58.0 150	0.5	65.8	27.8 541	3.29	36.7	1.2	54.2	10.3	36	0.6	4.1	1.0	22	2.99		
STD OREAS262	Standard		0.7	113.0	59.0 150	0.5	62.4	26.9 536	3.17	37.4	1.3	73.0	10.0	36	0.7	6.3	1.1	23	2.94		
STD OXQ132	Standard																				
STD OXQ132	Standard																				
STD DS11 Expected			14.6	149	138 345	1.71	77.7	14.2 1055	3.1	42.8	2.59	79	7.65	67.3	2.37	8.74	12.2	50	1.063		
STD BVGEO01 Expected			11.2	4415	187 1741	2.53	163	25 733	3.7	121	3.77	219	14.4	55	6.5	3.39	25.6	73	1.3219		
STD OREAS262 Expected			0.68	118	56 154	0.45	62	26.9 530	3.284	35.8	1.22	65	9.33	36	0.61	5.06	1.03	22.5	2.98		
STD CDN-ME-9A Expected																					
STD CDN-ME-14A Expected																					
STD AGPROOF Expected																					
STD OXQ132 Expected																					
STD CPB-2 Expected																					
STD CPB-3 Expected																					
BLK	Blank		<0.1	<0.1	<0.1 <1	<0.1	<0.1	<0.1 <1	<0.01	<0.5	<0.1	<0.5	0.2	<1	<0.1	<0.1	<0.1	<1	<0.01		
BLK	Blank		<0.1	<0.1	<0.1 <1	<0.1	<0.1	<0.1 <1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01		
BLK	Blank		<0.1	<0.1	0.2 <1	<0.1	<0.1	<0.1 <1	<0.01	1.4	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01		
BLK	Blank		<0.1	<0.1	0.3 <1	<0.1	<0.1	<0.1 <1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01		
BLK	Blank																				
BLK	Blank																				
Prep Wash																					
ROCK-WHI	Prep Blank		2.4	5.3	1.3 30	<0.1	2.1	3.6 464	1.89	0.8	0.5	0.9	2.7	21	<0.1	<0.1	<0.1	23	0.57		
ROCK-WHI	Prep Blank		1.7	5.7	1.3 32	<0.1	1.9	3.6 505	1.92	0.7	0.5	0.6	3.0	20	<0.1	<0.1	<0.1	24	0.57		



Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Project: PIKE
Report Date: November 08, 2021

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QUALITY CONTROL REPORT WHI21000450 2

		AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		P	La Cr	Mg Ba	Ti B	Al	Na	K	W	Hg	Sc Ti	S	Ga	Se	Te	Mo	Cu				
		%	ppm ppm	% ppm	% ppm	%	%	%	ppm	ppm	ppm ppm	%	ppm	ppm	ppm	%	%				
		0.001	1 1	0.01 1	0.001 1	0.01	0.001	0.01	0.1	0.01	0.1 0.1	0.05	1	0.5	0.2	0.001	0.001				
STD DS11	Standard	0.073	20 62	0.86 374	0.099	9	1.21	0.077	0.41	3.0	0.24	3.7	5.0	0.29	5	2.4	4.5				
STD OREAS262	Standard	0.039	17 44	1.20 237	0.003	4	1.39	0.070	0.32	0.1	0.16	3.5	0.4	0.27	4	<0.5	0.2				
STD OREAS262	Standard	0.038	17 46	1.20 254	0.003	4	1.39	0.070	0.32	0.2	0.17	3.4	0.5	0.27	4	0.5	0.2				
STD OREAS262	Standard	0.041	17 44	1.19 248	0.003	4	1.38	0.070	0.32	0.2	0.14	3.3	0.5	0.27	4	<0.5	<0.2				
STD OREAS262	Standard	0.037	18 44	1.17 261	0.003	4	1.38	0.068	0.31	0.3	0.17	3.3	0.5	0.27	4	<0.5	0.2				
STD OXQ132	Standard																				
STD OXQ132	Standard																				
STD DS11 Expected		0.0701	18.6 61.5	0.85 385	0.0976		1.1795	0.0762	0.4	2.9	0.26	3.4	4.9	0.2835	5.1	2.2	4.56				
STD BVGE001 Expected		0.0727	25.9 187	1.2963 260	0.233	3.8	2.347	0.1924	0.89	5.3	0.1	5.97	0.62	0.6655	7.37	4.84	1.02				
STD OREAS262 Expected		0.04	15.9 41.7	1.17 248	0.0027	4	1.3	0.071	0.312	0.2	0.17	3.24	0.47	0.253	4.1	0.4	0.23				
STD CDN-ME-9A Expected																					
STD CDN-ME-14A Expected																					
STD AGPROOF Expected																					
STD OXQ132 Expected																					
STD CPB-2 Expected																					
STD CPB-3 Expected																					
BLK	Blank	<0.001	<1 <1	<0.01 <1	<0.001 <1	<1	<0.01 <0.001	<0.01 <0.001	<0.01 <0.01	<0.1 <0.01	<0.01 <0.01	<0.1 <0.1	<0.1 <0.1	<0.05 <0.05	<1 <1	<0.5 <0.2					
BLK	Blank	<0.001	<1 <1	<0.01 <1	<0.001 <1	<1	<0.01 <0.001	<0.01 <0.001	<0.01 <0.01	<0.1 <0.01	<0.01 <0.01	<0.1 <0.1	<0.1 <0.1	<0.05 <0.05	<1 <1	<0.5 <0.2					
BLK	Blank	<0.001	<1 <1	<0.01 <1	<0.001 <1	<1	<0.01 <0.001	<0.01 <0.001	<0.01 <0.01	<0.1 <0.01	<0.01 <0.01	<0.1 <0.1	<0.1 <0.1	<0.05 <0.05	<1 <1	<0.5 <0.2					
BLK	Blank	<0.001	<1 <1	<0.01 <1	<0.001 <1	<1	<0.01 <0.001	<0.01 <0.001	<0.01 <0.01	<0.1 <0.01	<0.01 <0.01	<0.1 <0.1	<0.1 <0.1	<0.05 <0.05	<1 <1	<0.5 <0.2					
BLK	Blank																				
BLK	Blank																				
Prep Wash																					
ROCK-WHI	Prep Blank	0.043	8 11	0.44 61	0.090	2	0.77	0.085	0.09	0.1	<0.01	3.0	<0.1	<0.05	4	<0.5	<0.2				
ROCK-WHI	Prep Blank	0.042	7 8	0.48 56	0.094	2	0.81	0.086	0.09	0.1	<0.01	2.9	<0.1	<0.05	4	<0.5	<0.2				



Bureau Veritas Commodities Canada Ltd.
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Client: Ryan Burke
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Project: Report Date: PIKE
November 08, 2021

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QUALITY CONTROL REPORT

WHI21000450.2

		AQ370	FA530	GC817
		Pb	Ag	Pb
		%	ppm	%
		0.01	20	2
STD DS11	Standard			
STD OREAS262	Standard			
STD OREAS262	Standard			
STD OREAS262	Standard			
STD OREAS262	Standard			
STD OXQ132	Standard	131		
STD OXQ132	Standard	130		
STD DS11 Expected				
STD BVGEO01 Expected				
STD OREAS262 Expected				
STD CDN-ME-9A Expected		0.003		
STD CDN-ME-14A Expected		0.488		
STD AGPROOF Expected		96		
STD OXQ132 Expected		128.5		
STD CPB-2 Expected				63.52
STD CPB-3 Expected				57.94
BLK	Blank			
BLK	Blank			
BLK	Blank			
BLK	Blank			
BLK	Blank	<0.01		
BLK	Blank	<20		
Prep Wash				
ROCK-WHI	Prep Blank			
ROCK-WHI	Prep Blank			



BUREAU VERITAS MINERAL LABORATORIES
Canada

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Client: **Ryan Burke**
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Submitted By: Ryan Burke Canada-
Receiving Lab: Whitehorse August 31,
Received: 2021

Analysis Start: October 08, 2021

Report Date: October 25, 2021

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CERTIFICATE OF ANALYSIS

WHI21000451.1

CLIENT JOB INFORMATION

Project: Shipment PIKE
ID:
P.O. Number Number
of Samples: 23

SAMPLE DISPOSAL

IMM-PLP Return immediately after analysis
PICKUP-RJT Client to Pickup Rejects

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PRP70-250	23	Crush, split and pulverize 250 g rock to 200 mesh			WHI
AQ201	23	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN
SHP01	23	Per sample shipping charges for branch shipments			VAN
AQ370	2	1:1:1 Aqua Regia Digestion ICP-ES Finish	1	Completed	VAN
FA530	1	Lead collection fire assay 30G fusion - Grav finish	30	Completed	VAN

ADDITIONAL COMMENTS

Bureau Veritas does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Ryan Burke
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3
Canada

CC: Michael Burke





Bureau Veritas Commodities Canada Ltd.

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PHONE (604) 253-3158

Project: PIKE
Report Date: October 25, 2021

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CERTIFICATE OF ANALYSIS

WHI21000451.1

Method	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca		
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	1	1	0.01
3852915	Rock	1.31	2.8	30.1	8.7	66	<0.1	5.9	10.5	902	3.22	<0.5	1.3	0.7	7.6	32	0.1	<0.1	<0.1	53	0.92	
3852916	Rock	0.88	2.0	101.5	5.0	6	0.8	2.1	2.5	254	0.65	0.8	0.3	13.7	1.1	69	0.1	<0.1	1.0	5	1.18	
3852917	Rock	0.83	16.9	351.8	67.9	10	16.2	8.5	92.5	83	6.64	1.7	0.5	363.9	0.8	14	<0.1	<0.1	25.3	9	0.03	
3852918	Rock	1.52	1.9	2405.2	24.4	24	7.4	7.6	6.0	389	1.81	1.3	1.4	450.1	1.4	82	0.2	<0.1	3.0	12	0.75	
3852919	Rock	0.87	1.0	108.2	2.6	35	0.4	7.6	7.7	152	2.10	<0.5	0.5	14.1	4.0	9	<0.1	<0.1	0.2	22	0.18	
3852920	Rock	1.52	1.5	49.4	4.7	22	0.2	3.9	3.9	383	1.31	<0.5	0.3	27.7	2.1	27	0.2	<0.1	0.2	13	0.64	
3853001	Rock	2.73	894.8	61.1	5.7	9	1.4	11.5	9.4	78	2.18	0.6	0.9	23.9	3.5	6	<0.1	<0.1	0.6	3	0.07	
3853002	Rock	1.68	3.6	246.5	744.4	3	26.3	1.2	0.5	28	0.91	7.3	0.4	3738.6	<0.1	1	<0.1	0.3	12.6	1	<0.01	
3853003	Rock	0.57	>2000	120.8	698.9	12	4.1	3.8	11.8	353	3.78	2.3	12.6	37.5	1.2	23	<0.1	0.6	5.9	12	0.13	
3853004	Rock	0.92	5.6	28.5	9.8	72	0.2	7.9	10.9	619	3.00	<0.5	2.1	20.6	6.9	62	0.2	0.4	0.1	60	0.71	
3853005	Rock	0.98	13.0	19.2	7.4	61	<0.1	23.0	15.6	1148	3.78	0.5	0.7	10.7	3.7	94	0.1	0.2	<0.1	76	2.76	
3853006	Rock	1.81	1.4	32.0	8.9	45	0.2	7.0	9.5	633	2.73	<0.5	1.7	13.3	3.7	83	0.1	<0.1	0.2	40	2.18	
3853007	Rock	2.41	3.6	11.9	10.2	43	0.8	6.4	9.8	870	2.78	1.7	6.8	1434.3	2.9	363	0.1	<0.1	0.1	30	6.02	
3853008	Rock	0.64	1.2	29.5	5.6	46	0.9	16.4	14.7	924	3.60	<0.5	2.4	208.8	6.2	163	0.3	<0.1	0.2	48	8.73	
3853009	Rock	1.91	21.3	1751.7	36.3	8	19.7	5.9	8.5	174	1.69	1.6	0.3	953.8	2.0	23	0.2	<0.1	21.5	8	0.42	
3853010	Rock	1.12	206.0	2583.4	49.4	9	23.3	6.7	18.1	260	2.20	1.4	1.3	1546.9	4.0	27	0.4	0.1	23.2	11	0.48	
3853011	Rock	0.70	2.3	76.2	9.4	33	0.9	6.2	7.2	731	1.99	<0.5	1.4	124.2	8.2	115	0.3	<0.1	1.0	25	2.95	
3853012	Rock	1.15	2.1	182.3	8.0	16	1.3	8.6	22.8	188	3.42	0.7	0.3	38.5	2.4	18	<0.1	<0.1	1.4	14	0.27	
3853013	Rock	1.48	761.8	158.8	7.2	16	1.4	13.9	45.3	176	3.52	5.1	0.2	95.3	0.8	19	<0.1	<0.1	1.7	13	0.45	
3853014	Rock	1.50	2.4	12.1	17.7	14	3.3	5.3	12.8	214	1.22	0.9	0.2	53.0	1.4	22	0.1	<0.1	6.5	11	0.20	
3853015	Rock	3.57	4.2	5.9	59.4	41	0.1	0.6	0.3	94	0.61	<0.5	1.7	2.7	3.9	7	<0.1	<0.1	0.1	<1	0.04	
3853016	Rock	1.34	108.3	5.8	3.5	19	0.2	9.0	27.8	250	2.08	2.0	0.3	4.2	1.3	126	<0.1	0.1	2.4	48	1.20	
3853017	Rock	1.38	5.4	1400.3	>10000	6	>100	1.1	0.4	12	0.41	<0.5	1.4	4294.8	<0.1	41	140.5	308.3	1.1	<1	<0.01	



Bureau Veritas Commodities Canada Ltd.

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CERTIFICATE OF ANALYSIS

WHI21000451.1

Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo			
Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	%	%
MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	0.001	0.01	0.01	0.01
3852915	Rock	0.098	34	6	0.29	296	0.002	1	0.88	0.025	0.13	<0.1	<0.01	5.1	<0.1	<0.05	3	<0.5	<0.2			
3852916	Rock	0.012	8	9	0.06	1600	<0.001	1	0.24	0.008	0.16	0.1	<0.01	0.4	<0.1	0.08	<1	<0.5	<0.2			
3852917	Rock	0.014	4	5	0.09	12	<0.001	<1	0.28	0.006	0.11	0.3	<0.01	0.5	<0.1	3.70	1	3.2	1.3			
3852918	Rock	0.012	15	7	0.27	1110	<0.001	1	0.64	0.011	0.17	<0.1	<0.01	1.3	<0.1	0.18	2	<0.5	<0.2			
3852919	Rock	0.068	13	6	0.37	164	<0.001	2	1.02	0.023	0.28	<0.1	<0.01	2.1	<0.1	<0.05	3	<0.5	<0.2			
3852920	Rock	0.029	16	8	0.31	178	<0.001	1	0.66	0.008	0.19	<0.1	<0.01	0.8	<0.1	<0.05	2	<0.5	<0.2			
3853001	Rock	0.008	7	4	0.06	203	<0.001	<1	0.18	0.021	0.08	0.5	<0.01	0.1	<0.1	0.74	<1	1.3	0.4			
3853002	Rock	0.002	<1	5	<0.01	6	<0.001	<1	0.03	0.003	0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2			
3853003	Rock	0.014	6	4	0.10	45	0.013	<1	0.47	0.003	0.07	1.2	<0.01	0.3	0.4	<0.05	3	0.6	1.1	0.459	0.07	
3853004	Rock	0.103	36	10	0.97	93	0.004	<1	2.02	0.032	0.11	0.2	<0.01	7.1	<0.1	<0.05	8	<0.5	<0.2			
3853005	Rock	0.109	23	30	0.72	94	0.009	<1	1.50	0.022	0.13	<0.1	<0.01	6.7	<0.1	<0.05	5	<0.5	<0.2			
3853006	Rock	0.098	25	9	0.91	527	0.001	<1	0.97	0.035	0.23	<0.1	<0.01	3.5	<0.1	<0.05	3	<0.5	<0.2			
3853007	Rock	0.068	20	4	2.63	283	<0.001	<1	0.69	0.031	0.17	<0.1	<0.01	2.6	<0.1	<0.05	2	<0.5	<0.2			
3853008	Rock	0.071	24	20	0.92	96	<0.001	<1	1.32	0.021	0.20	<0.1	<0.01	4.3	<0.1	<0.05	4	<0.5	<0.2			
3853009	Rock	0.017	8	5	0.16	176	<0.001	<1	0.41	0.006	0.20	0.1	<0.01	0.4	<0.1	0.74	1	0.8	1.5			
3853010	Rock	0.023	7	8	0.21	87	<0.001	1	0.54	0.008	0.24	0.2	<0.01	0.7	<0.1	0.98	2	0.9	1.5			
3853011	Rock	0.061	22	8	0.75	363	0.001	<1	1.13	0.029	0.20	<0.1	<0.01	3.0	<0.1	0.07	3	<0.5	<0.2			
3853012	Rock	0.012	7	5	0.22	51	<0.001	<1	0.44	0.007	0.09	1.3	<0.01	0.9	<0.1	1.64	2	1.1	<0.2			
3853013	Rock	0.009	4	5	0.20	49	0.001	<1	0.42	0.004	0.09	1.6	<0.01	1.0	<0.1	2.09	2	1.8	<0.2			
3853014	Rock	0.007	10	7	0.21	368	<0.001	<1	0.45	0.004	0.16	<0.1	<0.01	0.4	<0.1	<0.05	1	<0.5	<0.2			
3853015	Rock	0.003	13	3	0.01	1381	<0.001	<1	0.47	0.002	0.08	<0.1	<0.01	0.4	<0.1	<0.05	1	<0.5	<0.2			
3853016	Rock	0.068	6	12	0.66	16	0.092	<1	0.84	0.011	0.03	0.3	<0.01	2.0	<0.1	0.62	3	<0.5	0.4			
3853017	Rock	<0.001	<1	2	<0.01	7	<0.001	<1	<0.01	<0.001	<0.01	<0.1	0.07	<0.1	<0.1	8.58	<1	2.2	2.2	<0.001	>4	



Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: **Ryan Burke**
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: October 25, 2021

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CERTIFICATE OF ANALYSIS

WHI21000451.1

Method	FA530
Analyte	Ag
Unit	ppm
MDL	20
3852915	Rock
3852916	Rock
3852917	Rock
3852918	Rock
3852919	Rock
3852920	Rock
3853001	Rock
3853002	Rock
3853003	Rock
3853004	Rock
3853005	Rock
3853006	Rock
3853007	Rock
3853008	Rock
3853009	Rock
3853010	Rock
3853011	Rock
3853012	Rock
3853013	Rock
3853014	Rock
3853015	Rock
3853016	Rock
3853017	Rock
	491



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Project: PIKE
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MethodAnalyte		WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201		
Unit	MDL	Wgt kg	Moppm	Cuppm	Pbppm	Zn ppm	Agppm	Nippm	Coppm	Mn ppm	Fe	Asppm	U	Au	ppb	Thppm	Srppm	Cdppm	Sbppm	Bippm	V	Ca	
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	%0.01	0.5	ppm0.1	0.5		0.1	1	0.1	0.1	0.1	0.1	ppm%0.01	1
Pulp Duplicates																							
3852920	Rock	1.52	1.5	49.4	4.7	22	0.2	3.9	3.9	383	1.31	<0.5	0.3	27.7	2.1	27	0.2	<0.1	0.2	13	0.64		
REP 3852920	QC		1.4	45.5	4.6	20	0.2	3.7	3.8	380	1.29	<0.5	0.3	50.7	2.1	26	0.2	<0.1	0.2	14	0.64		
Reference Materials																							
STD AGPROOF	Standard																						
STD CDN-ME-9A	Standard																						
STD CDN-ME-14A	Standard																						
STD DS11	Standard		14.5	148.6	125.6	340	1.6	80.3	14.5	1026	3.19	40.1	2.4	83.6	7.4	69	2.2	8.1	10.9	52	1.07		
STD OREAS262	Standard		0.6	114.4	52.5	150	0.4	63.6	28.2	537	3.28	33.8	1.1	66.4	8.4	35	0.6	5.4	0.9	23	2.92		
STD OXQ132	Standard																						
STD OXQ132	Standard																						
STD DS11 Expected			14.6	149	138	345	1.71	77.7	14.2	1055	3.1	42.8	2.59	79	7.65	67.3	2.37	8.74	12.2	50	1.063		
STD OREAS262 Expected			0.68	118	56	154	0.45	62	26.9	530	3.284	35.8	1.22	65	9.33	36	0.61	5.06	1.03	22.5	2.98		
STD CDN-ME-9A Expected																							
STD CDN-ME-14A Expected																							
STD AGPROOF Expected																							
STD OXQ132 Expected																							
BLK	Blank		<0.1	0.3	0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01		
BLK	Blank																						
BLK	Blank																						
Prep Wash																							
ROCK-WHI	Prep Blank		1.8	4.5	1.2	30	<0.1	1.3	3.4	488	1.79	0.9	0.4	<0.5	2.0	17	<0.1	<0.1	<0.1	24	0.53		
ROCK-WHI	Prep Blank		7.1	4.8	2.2	26	<0.1	1.3	3.1	432	1.67	0.9	0.4	<0.5	1.8	17	<0.1	<0.1	<0.1	21	0.49		



Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Project: PIKE
Report Date: October 25, 2021

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MethodAnalyte		AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370	
Unit		P	Lappm	Crppm	Mg	Bappm	Ti	B	Al	Na	K	W	Hg	ppm	Scppm	Tippm	S	Gappm	Seppm	Teppm	Mo	Pl
MDL		%0.001	1	1	%0.01	1	%0.001	ppm	%0.01	%0.001	%0.01	ppm	0.1	0.01	0.1	0.1	%0.05	1	0.5	0.2	%0.001	%0.01
1																						
Pulp Duplicates																						
3852920	Rock	0.029	16	8	0.31	178	<0.001	1	0.66	0.008	0.19	<0.1	<0.01	0.8	<0.1	<0.05	2	<0.5	<0.2			
REP 3852920	QC	0.028	15	7	0.31	173	<0.001	1	0.65	0.007	0.19	<0.1	<0.01	0.8	<0.1	<0.05	2	<0.5	<0.2			
Reference Materials																						
STD AGPROOF	Standard																					
STD CDN-ME-9A	Standard																					
STD CDN-ME-14A	Standard																					
STD DS11	Standard	0.070	18	61	0.84	366	0.096	7	1.21	0.077	0.41	2.8	0.23	3.2	5.0	0.28	5	2.2	4.7			
STD OREAS262	Standard	0.039	18	45	1.17	241	0.003	4	1.43	0.068	0.34	0.2	0.14	3.1	0.5	0.25	4	<0.5	0.2			
STD OXQ132	Standard																					
STD OXQ132	Standard																					
STD DS11 Expected		0.0701	18.6	61.5	0.85	385	0.0976		1.1795	0.0762	0.4	2.9	0.26	3.4	4.9	0.2835	5.1	2.2	4.56			
STD OREAS262 Expected		0.04	15.9	41.7	1.17	248	0.0027	4	1.3	0.071	0.312	0.2	0.17	3.24	0.47	0.253	4.1	0.4	0.23			
STD CDN-ME-9A Expected																						
STD CDN-ME-14A Expected																						
STD AGPROOF Expected																						
STD OXQ132 Expected																						
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2			
BLK	Blank																					
BLK	Blank																					
BLK	Blank																					
Prep Wash																						
ROCK-WHI	Prep Blank	0.040	6	5	0.47	41	0.081	2	0.75	0.064	0.07	<0.1	<0.01	2.7	<0.1	<0.05	4	<0.5	<0.2			
ROCK-WHI	Prep Blank	0.038	6	7	0.40	41	0.070	2	0.66	0.066	0.07	<0.1	<0.01	2.2	<0.1	<0.05	3	<0.5	<0.2			



Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Client: Ryan Burke
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Project: Report Date: PIKE
October 25, 2021

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QUALITY CONTROL REPORT

WHI21000451.1

Method	Analyte	Unit	FA530
MDL			Agppm
			20
Pulp Duplicates			
3852920	Rock		
REP 3852920	QC		
Reference Materials			
STD AGPROOF	Standard		99
STD CDN-ME-9A	Standard		
STD CDN-ME-14A	Standard		
STD DS11	Standard		
STD OREAS262	Standard		
STD OXQ132	Standard		148
STD OXQ132	Standard		134
STD DS11 Expected			
STD OREAS262 Expected			
STD CDN-ME-9A Expected			
STD CDN-ME-14A Expected			
STD AGPROOF Expected			96
STD OXQ132 Expected			128.5
BLK	Blank		
BLK	Blank		
BLK	Blank		<20
Prep Wash			
ROCK-WHI	Prep Blank		
ROCK-WHI	Prep Blank		



Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Client: **Ryan Burke**
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Submitted By: Ryan Burke Canada-
Receiving Lab: Whitehorse August 31,
Received: 2021

Analysis Start: October 08, 2021

Report Date: November 08, 2021

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CERTIFICATE OF ANALYSIS

WHI21000451.2

CLIENT JOB INFORMATION

Project: Shipment PIKE
ID:
P.O. Number Number
of Samples: 23

SAMPLE DISPOSAL

IMM-PLP Return immediately after analysis
PICKUP-RJT Client to Pickup Rejects

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PRP70-250	23	Crush, split and pulverize 250 g rock to 200 mesh			WHI
AQ201	23	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN
SHP01	23	Per sample shipping charges for branch shipments			VAN
AQ370	2	1:1:1 Aqua Regia Digestion ICP-ES Finish	1	Completed	VAN
FA530	1	Lead collection fire assay 30G fusion - Grav finish	30	Completed	VAN
GC817	1	Lead Assay by Classical Titration	0.5	Completed	VAN

ADDITIONAL COMMENTS

Version 2 : GC817-Pb included.

Bureau Veritas does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Ryan Burke
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3
Canada

CC: Michael Burke


SOFIA DEVOTA
XRF Manager



Bureau Veritas Commodities Canada Ltd.

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Project: PIKE
Report Date: November 08, 2021

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CERTIFICATE OF ANALYSIS

WHI21000451.2

Method	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm		
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01	
3852915	Rock	1.31	2.8	30.1	8.7	66	<0.1	5.9	10.5	902	3.22	<0.5	1.3	0.7	7.6	32	0.1	<0.1	<0.1	53	0.92
3852916	Rock	0.88	2.0	101.5	5.0	6	0.8	2.1	2.5	254	0.65	0.8	0.3	13.7	1.1	69	0.1	<0.1	1.0	5	1.18
3852917	Rock	0.83	16.9	351.8	67.9	10	16.2	8.5	92.5	83	6.64	1.7	0.5	363.9	0.8	14	<0.1	<0.1	25.3	9	0.03
3852918	Rock	1.52	1.9	2405.2	24.4	24	7.4	7.6	6.0	389	1.81	1.3	1.4	450.1	1.4	82	0.2	<0.1	3.0	12	0.75
3852919	Rock	0.87	1.0	108.2	2.6	35	0.4	7.6	7.7	152	2.10	<0.5	0.5	14.1	4.0	9	<0.1	<0.1	0.2	22	0.18
3852920	Rock	1.52	1.5	49.4	4.7	22	0.2	3.9	3.9	383	1.31	<0.5	0.3	27.7	2.1	27	0.2	<0.1	0.2	13	0.64
3853001	Rock	2.73	894.8	61.1	5.7	9	1.4	11.5	9.4	78	2.18	0.6	0.9	23.9	3.5	6	<0.1	<0.1	0.6	3	0.07
3853002	Rock	1.68	3.6	246.5	744.4	3	26.3	1.2	0.5	28	0.91	7.3	0.4	3738.6	<0.1	1	<0.1	0.3	12.6	1	<0.01
3853003	Rock	0.57	>2000	120.8	698.9	12	4.1	3.8	11.8	353	3.78	2.3	12.6	37.5	1.2	23	<0.1	0.6	5.9	12	0.13
3853004	Rock	0.92	5.6	28.5	9.8	72	0.2	7.9	10.9	619	3.00	<0.5	2.1	20.6	6.9	62	0.2	0.4	0.1	60	0.71
3853005	Rock	0.98	13.0	19.2	7.4	61	<0.1	23.0	15.6	1148	3.78	0.5	0.7	10.7	3.7	94	0.1	0.2	<0.1	76	2.76
3853006	Rock	1.81	1.4	32.0	8.9	45	0.2	7.0	9.5	633	2.73	<0.5	1.7	13.3	3.7	83	0.1	<0.1	0.2	40	2.18
3853007	Rock	2.41	3.6	11.9	10.2	43	0.8	6.4	9.8	870	2.78	1.7	6.8	1434.3	2.9	363	0.1	<0.1	0.1	30	6.02
3853008	Rock	0.64	1.2	29.5	5.6	46	0.9	16.4	14.7	924	3.60	<0.5	2.4	208.8	6.2	163	0.3	<0.1	0.2	48	8.73
3853009	Rock	1.91	21.3	1751.7	36.3	8	19.7	5.9	8.5	174	1.69	1.6	0.3	953.8	2.0	23	0.2	<0.1	21.5	8	0.42
3853010	Rock	1.12	206.0	2583.4	49.4	9	23.3	6.7	18.1	260	2.20	1.4	1.3	1546.9	4.0	27	0.4	0.1	23.2	11	0.48
3853011	Rock	0.70	2.3	76.2	9.4	33	0.9	6.2	7.2	731	1.99	<0.5	1.4	124.2	8.2	115	0.3	<0.1	1.0	25	2.95
3853012	Rock	1.15	2.1	182.3	8.0	16	1.3	8.6	22.8	188	3.42	0.7	0.3	38.5	2.4	18	<0.1	<0.1	1.4	14	0.27
3853013	Rock	1.48	761.8	158.8	7.2	16	1.4	13.9	45.3	176	3.52	5.1	0.2	95.3	0.8	19	<0.1	<0.1	1.7	13	0.45
3853014	Rock	1.50	2.4	12.1	17.7	14	3.3	5.3	12.8	214	1.22	0.9	0.2	53.0	1.4	22	0.1	<0.1	6.5	11	0.20
3853015	Rock	3.57	4.2	5.9	59.4	41	0.1	0.6	0.3	94	0.61	<0.5	1.7	2.7	3.9	7	<0.1	<0.1	0.1	<1	0.04
3853016	Rock	1.34	108.3	5.8	3.5	19	0.2	9.0	27.8	250	2.08	2.0	0.3	4.2	1.3	126	<0.1	0.1	2.4	48	1.20
3853017	Rock	1.38	5.4	1400.3	>10000	6	>100	1.1	0.4	12	0.41	<0.5	1.4	4294.8	<0.1	41	140.5	308.3	1.1	<1	<0.01



Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

Project: PIKE
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CERTIFICATE OF ANALYSIS

WHI21000451.2

Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
Analyte	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Mo				
Unit	%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	%	%	%
MDL	0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	0.001	0.01	0.01	0.01	0.01
3852915	Rock	0.098	34	6	0.29	296	0.002	1	0.88	0.025	0.13	<0.1	<0.01	5.1	<0.1	<0.05	3	<0.5	<0.2				
3852916	Rock	0.012	8	9	0.06	1600	<0.001	1	0.24	0.008	0.16	0.1	<0.01	0.4	<0.1	0.08	<1	<0.5	<0.2				
3852917	Rock	0.014	4	5	0.09	12	<0.001	<1	0.28	0.006	0.11	0.3	<0.01	0.5	<0.1	3.70	1	3.2	1.3				
3852918	Rock	0.012	15	7	0.27	1110	<0.001	1	0.64	0.011	0.17	<0.1	<0.01	1.3	<0.1	0.18	2	<0.5	<0.2				
3852919	Rock	0.068	13	6	0.37	164	<0.001	2	1.02	0.023	0.28	<0.1	<0.01	2.1	<0.1	<0.05	3	<0.5	<0.2				
3852920	Rock	0.029	16	8	0.31	178	<0.001	1	0.66	0.008	0.19	<0.1	<0.01	0.8	<0.1	<0.05	2	<0.5	<0.2				
3853001	Rock	0.008	7	4	0.06	203	<0.001	<1	0.18	0.021	0.08	0.5	<0.01	0.1	<0.1	0.74	<1	1.3	0.4				
3853002	Rock	0.002	<1	5	<0.01	6	<0.001	<1	0.03	0.003	0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2				
3853003	Rock	0.014	6	4	0.10	45	0.013	<1	0.47	0.003	0.07	1.2	<0.01	0.3	0.4	<0.05	3	0.6	1.1	0.459	0.07		
3853004	Rock	0.103	36	10	0.97	93	0.004	<1	2.02	0.032	0.11	0.2	<0.01	7.1	<0.1	<0.05	8	<0.5	<0.2				
3853005	Rock	0.109	23	30	0.72	94	0.009	<1	1.50	0.022	0.13	<0.1	<0.01	6.7	<0.1	<0.05	5	<0.5	<0.2				
3853006	Rock	0.098	25	9	0.91	527	0.001	<1	0.97	0.035	0.23	<0.1	<0.01	3.5	<0.1	<0.05	3	<0.5	<0.2				
3853007	Rock	0.068	20	4	2.63	283	<0.001	<1	0.69	0.031	0.17	<0.1	<0.01	2.6	<0.1	<0.05	2	<0.5	<0.2				
3853008	Rock	0.071	24	20	0.92	96	<0.001	<1	1.32	0.021	0.20	<0.1	<0.01	4.3	<0.1	<0.05	4	<0.5	<0.2				
3853009	Rock	0.017	8	5	0.16	176	<0.001	<1	0.41	0.006	0.20	0.1	<0.01	0.4	<0.1	0.74	1	0.8	1.5				
3853010	Rock	0.023	7	8	0.21	87	<0.001	1	0.54	0.008	0.24	0.2	<0.01	0.7	<0.1	0.98	2	0.9	1.5				
3853011	Rock	0.061	22	8	0.75	363	0.001	<1	1.13	0.029	0.20	<0.1	<0.01	3.0	<0.1	0.07	3	<0.5	<0.2				
3853012	Rock	0.012	7	5	0.22	51	<0.001	<1	0.44	0.007	0.09	1.3	<0.01	0.9	<0.1	1.64	2	1.1	<0.2				
3853013	Rock	0.009	4	5	0.20	49	0.001	<1	0.42	0.004	0.09	1.6	<0.01	1.0	<0.1	2.09	2	1.8	<0.2				
3853014	Rock	0.007	10	7	0.21	368	<0.001	<1	0.45	0.004	0.16	<0.1	<0.01	0.4	<0.1	<0.05	1	<0.5	<0.2				
3853015	Rock	0.003	13	3	0.01	1381	<0.001	<1	0.47	0.002	0.08	<0.1	<0.01	0.4	<0.1	<0.05	1	<0.5	<0.2				
3853016	Rock	0.068	6	12	0.66	16	0.092	<1	0.84	0.011	0.03	0.3	<0.01	2.0	<0.1	0.62	3	<0.5	0.4				
3853017	Rock	<0.001	<1	2	<0.01	7	<0.001	<1	<0.01	<0.001	<0.01	<0.1	0.07	<0.1	<0.1	8.58	<1	2.2	2.2	<0.001	>4		



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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Client: **Ryan Burke**
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: November 08, 2021

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CERTIFICATE OF ANALYSIS

WHI21000451.2

Method	Analyte	FA530	GC817
		Ag	Pb
Unit		ppm	%
MDL		20	2
3852915	Rock		
3852916	Rock		
3852917	Rock		
3852918	Rock		
3852919	Rock		
3852920	Rock		
3853001	Rock		
3853002	Rock		
3853003	Rock		
3853004	Rock		
3853005	Rock		
3853006	Rock		
3853007	Rock		
3853008	Rock		
3853009	Rock		
3853010	Rock		
3853011	Rock		
3853012	Rock		
3853013	Rock		
3853014	Rock		
3853015	Rock		
3853016	Rock		
3853017	Rock	491	59.56

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this



Bureau Veritas Commodities Canada Ltd.
9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada
PHONE (604) 253-3158

MethodAnalyte		WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	
Unit	MDL	Wgt kg	Moppm	Cuppm	Pbppm	Zn ppm	Agppm	Nippm	Coppm	Mn ppm	Fe	Asppm	U	Au	ppb	Thppm	Srppm	Cdppm	Sbppm	Bippm	V	Ca
		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	%0.01	0.5	ppm0.1	0.5	0.1	1	0.1	0.1	0.1	0.1	ppm%0.01	1
Pulp Duplicates																						
3852920	Rock	1.52	1.5	49.4	4.7	22	0.2	3.9	3.9	383	1.31	<0.5	0.3	27.7	2.1	27	0.2	<0.1	0.2	13	0.64	
REP 3852920	QC		1.4	45.5	4.6	20	0.2	3.7	3.8	380	1.29	<0.5	0.3	50.7	2.1	26	0.2	<0.1	0.2	14	0.64	
Reference Materials																						
STD AGPROOF	Standard																					
STD CDN-ME-9A	Standard																					
STD CDN-ME-14A	Standard																					
STD CPB-2	Standard																					
STD CPB-3	Standard																					
STD DS11	Standard		14.5	148.6	125.6	340	1.6	80.3	14.5	1026	3.19	40.1	2.4	83.6	7.4	69	2.2	8.1	10.9	52	1.07	
STD OREAS262	Standard		0.6	114.4	52.5	150	0.4	63.6	28.2	537	3.28	33.8	1.1	66.4	8.4	35	0.6	5.4	0.9	23	2.92	
STD OXQ132	Standard																					
STD OXQ132	Standard																					
STD DS11 Expected			14.6	149	138	345	1.71	77.7	14.2	1055	3.1	42.8	2.59	79	7.65	67.3	2.37	8.74	12.2	50	1.063	
STD OREAS262 Expected			0.68	118	56	154	0.45	62	26.9	530	3.284	35.8	1.22	65	9.33	36	0.61	5.06	1.03	22.5	2.98	
STD CDN-ME-9A Expected																						
STD CDN-ME-14A Expected																						
STD AGPROOF Expected																						
STD OXQ132 Expected																						
STD CPB-2 Expected																						
STD CPB-3 Expected																						
BLK	Blank		<0.1	0.3	0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	
BLK	Blank																					
BLK	Blank																					
Prep Wash																						
ROCK-WHI	Prep Blank		1.8	4.5	1.2	30	<0.1	1.3	3.4	488	1.79	0.9	0.4	<0.5	2.0	17	<0.1	<0.1	<0.1	24	0.53	
ROCK-WHI	Prep Blank		7.1	4.8	2.2	26	<0.1	1.3	3.1	432	1.67	0.9	0.4	<0.5	1.8	17	<0.1	<0.1	<0.1	21	0.49	



Bureau Veritas Commodities Canada Ltd.
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Client: Ryan Burke
60 Boswell Crescent
Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: November 08, 2021

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MethodAnalyte		AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ370	AQ370
Unit		P	Lppm	Crppm	Mg	Bppm	Ti	B	Al	Na	K	W	Hg	ppm	Scppm	Tippm	S	Gppm	Seppm	Teppm	Mo	Pb	
MDL		%0.001	1	1	%0.01	1	%0.001	ppm	%0.01	%0.001	%0.01	ppm0.1	0.01	0.1	0.1	%0.05	1	0.5	0.2	%0.001	%0.01		
QUALITY CONTROL REPORT WHI21000451_2																							
Pulp Duplicates																							
3852920	Rock	0.029	16	8	0.31	178	<0.001	1	0.66	0.008	0.19	<0.1	<0.01	0.8	<0.1	<0.05	2	<0.5	<0.2				
REP 3852920	QC	0.028	15	7	0.31	173	<0.001	1	0.65	0.007	0.19	<0.1	<0.01	0.8	<0.1	<0.05	2	<0.5	<0.2				
Reference Materials																							
STD AGPROOF	Standard																						
STD CDN-ME-9A	Standard																						
STD CDN-ME-14A	Standard																						
STD CPB-2	Standard																						
STD CPB-3	Standard																						
STD DS11	Standard	0.070	18	61	0.84	366	0.096	7	1.21	0.077	0.41	2.8	0.23	3.2	5.0	0.28	5	2.2	4.7				
STD OREAS262	Standard	0.039	18	45	1.17	241	0.003	4	1.43	0.068	0.34	0.2	0.14	3.1	0.5	0.25	4	<0.5	0.2				
STD OXQ132	Standard																						
STD OXQ132	Standard																						
STD DS11 Expected		0.0701	18.6	61.5	0.85	385	0.0976		1.1795	0.0762	0.4	2.9	0.26	3.4	4.9	0.2835	5.1	2.2	4.56				
STD OREAS262 Expected		0.04	15.9	41.7	1.17	248	0.0027	4	1.3	0.071	0.312	0.2	0.17	3.24	0.47	0.253	4.1	0.4	0.23				
STD CDN-ME-9A Expected																				0.00033	0.0003		
STD CDN-ME-14A Expected																					0.0015	0.488	
STD AGPROOF Expected																							
STD OXQ132 Expected																							
STD CPB-2 Expected																							
STD CPB-3 Expected																							
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2				
BLK	Blank																						
BLK	Blank																						
Prep Wash																							
ROCK-WHI	Prep Blank	0.040	6	5	0.47	41	0.081	2	0.75	0.064	0.07	<0.1	<0.01	2.7	<0.1	<0.05	4	<0.5	<0.2				
ROCK-WHI	Prep Blank	0.038	6	7	0.40	41	0.070	2	0.66	0.066	0.07	<0.1	<0.01	2.2	<0.1	<0.05	3	<0.5	<0.2				



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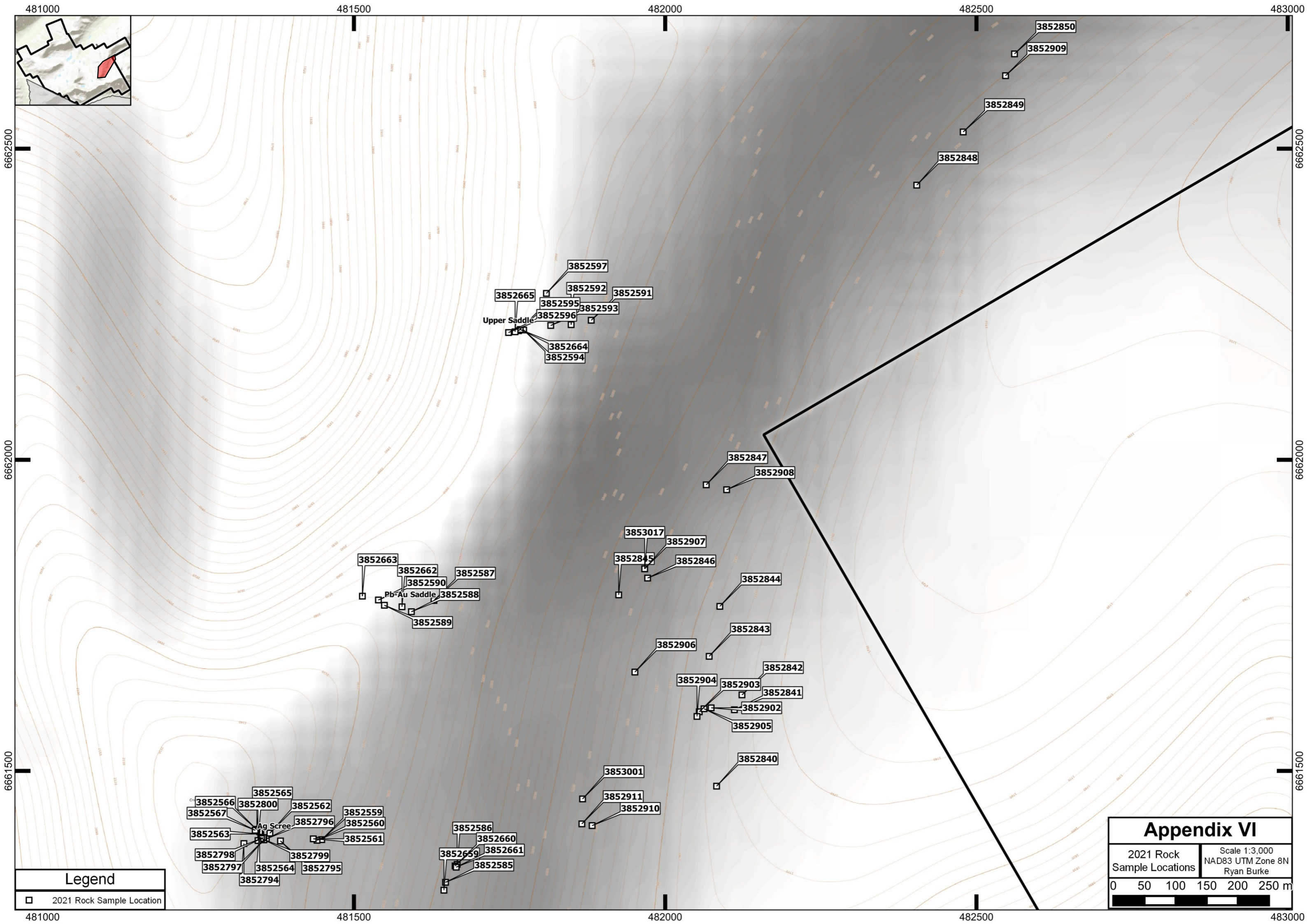
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Method	Analyte	Unit	FA530	GC817
			Ag ppm	Pb %
MDL			20	2
Pulp Duplicates				
3852920	Rock			
REP 3852920	QC			
Reference Materials				
STD AGPROOF	Standard		99	
STD CDN-ME-9A	Standard			
STD CDN-ME-14A	Standard			
STD CPB-2	Standard			63.19
STD CPB-3	Standard			58.02
STD DS11	Standard			
STD OREAS262	Standard			
STD OXQ132	Standard		148	
STD OXQ132	Standard		134	
STD DS11 Expected				
STD OREAS262 Expected				
STD CDN-ME-9A Expected				
STD CDN-ME-14A Expected				
STD AGPROOF Expected			96	
STD OXQ132 Expected			128.5	
STD CPB-2 Expected				63.52
STD CPB-3 Expected				57.94
BLK	Blank			
BLK	Blank			
BLK	Blank		<20	
Prep Wash				
ROCK-WHI	Prep Blank			
ROCK-WHI	Prep Blank			

APPENDIX VI

2021 ROCK SAMPLE LOCATION MAPS



Upper Saddle
 3852665
 3852597
 3852592
 3852591
 3852595
 3852596
 3852593
 3852664
 3852594

Pb-Au Saddle
 3852663
 3852662
 3852587
 3852590
 3852588
 3852589

Ag Scree
 3852565
 3852566
 3852800
 3852562
 3852559
 3852567
 3852796
 3852560
 3852563
 3852798
 3852799
 3852797
 3852564
 3852795
 3852794

3852586
 3852660
 3852659
 3852661
 3852585

3853001
 3852911
 3852910

3853017
 3852907
 3852845
 3852846

3852906
 3852843
 3852904
 3852903
 3852841
 3852902
 3852905

3852847
 3852908

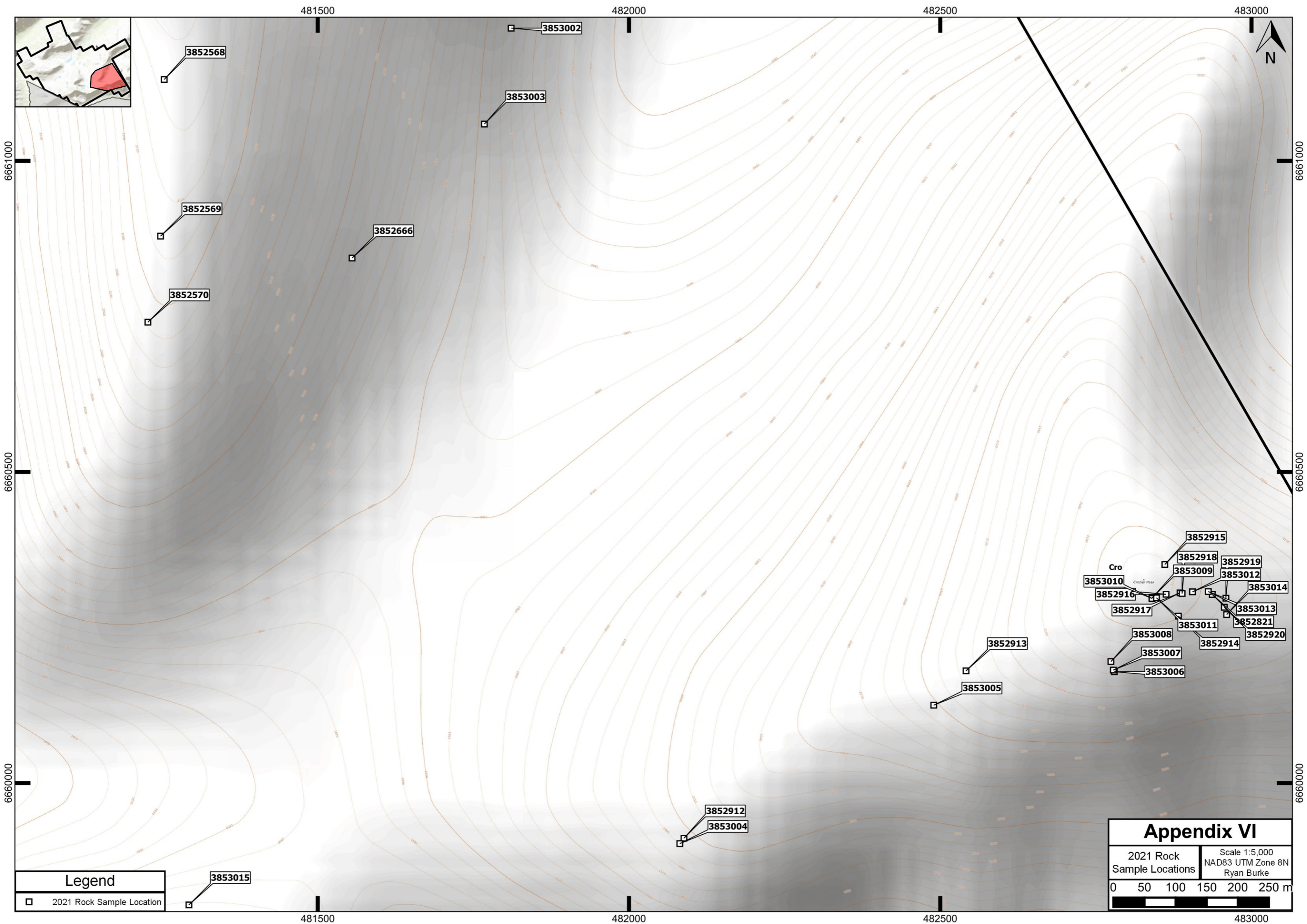
3852844
 3852842
 3852840

3852850
 3852909
 3852849
 3852848

Legend
 □ 2021 Rock Sample Location

Appendix VI

2021 Rock Sample Locations	Scale 1:3,000 NAD83 UTM Zone 8N Ryan Burke
0 50 100 150 200 250 m	

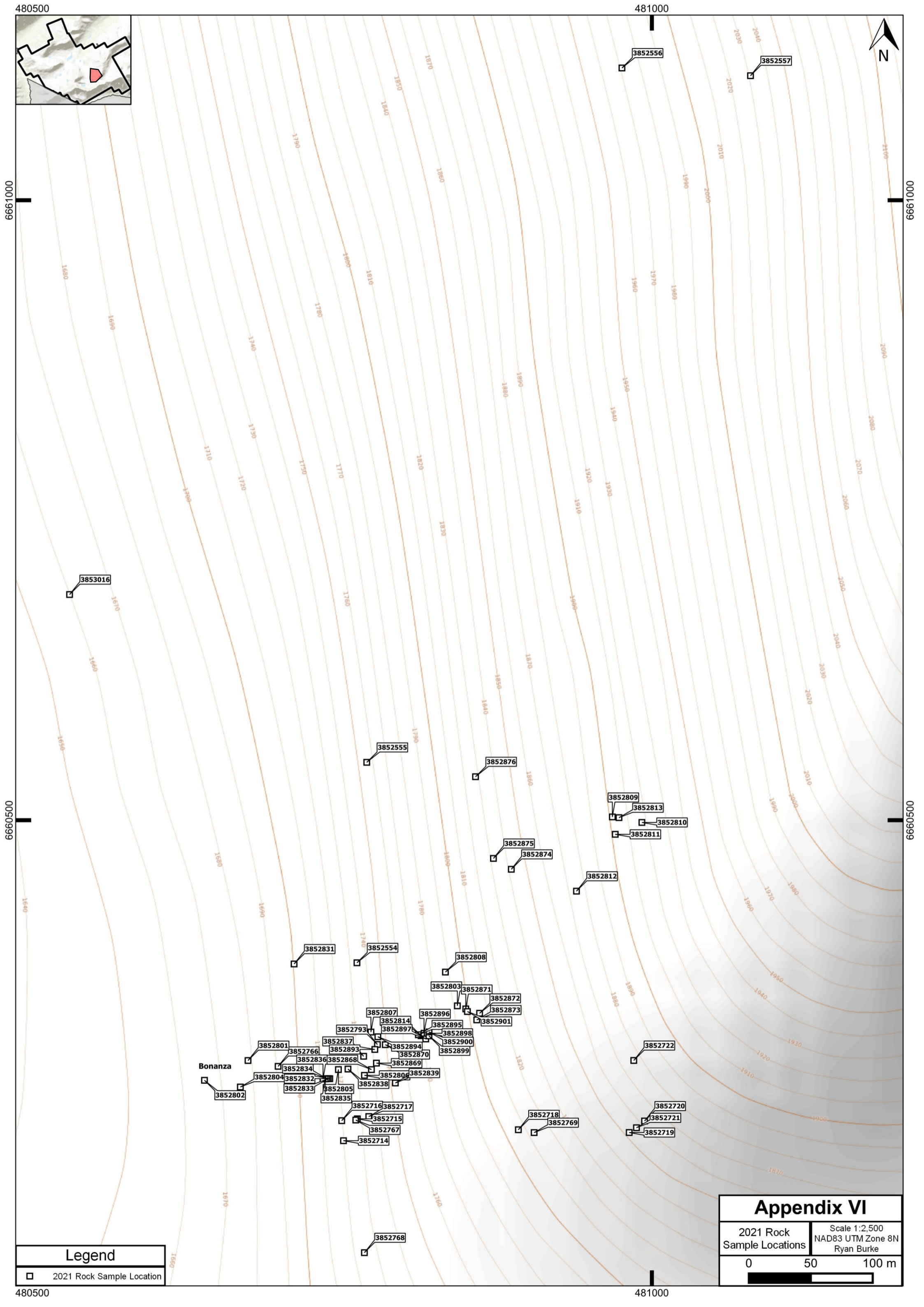
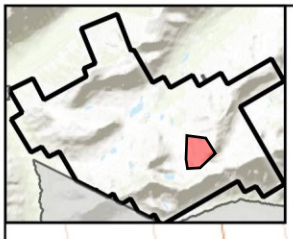


Legend

□ 2021 Rock Sample Location

Appendix VI

2021 Rock Sample Locations	Scale 1:5,000 NAD83 UTM Zone 8N Ryan Burke
0 50 100 150 200 250 m	



Legend

□ 2021 Rock Sample Location

Appendix VI

2021 Rock Sample Locations

Scale 1:2,500
NAD83 UTM Zone 8N
Ryan Burke

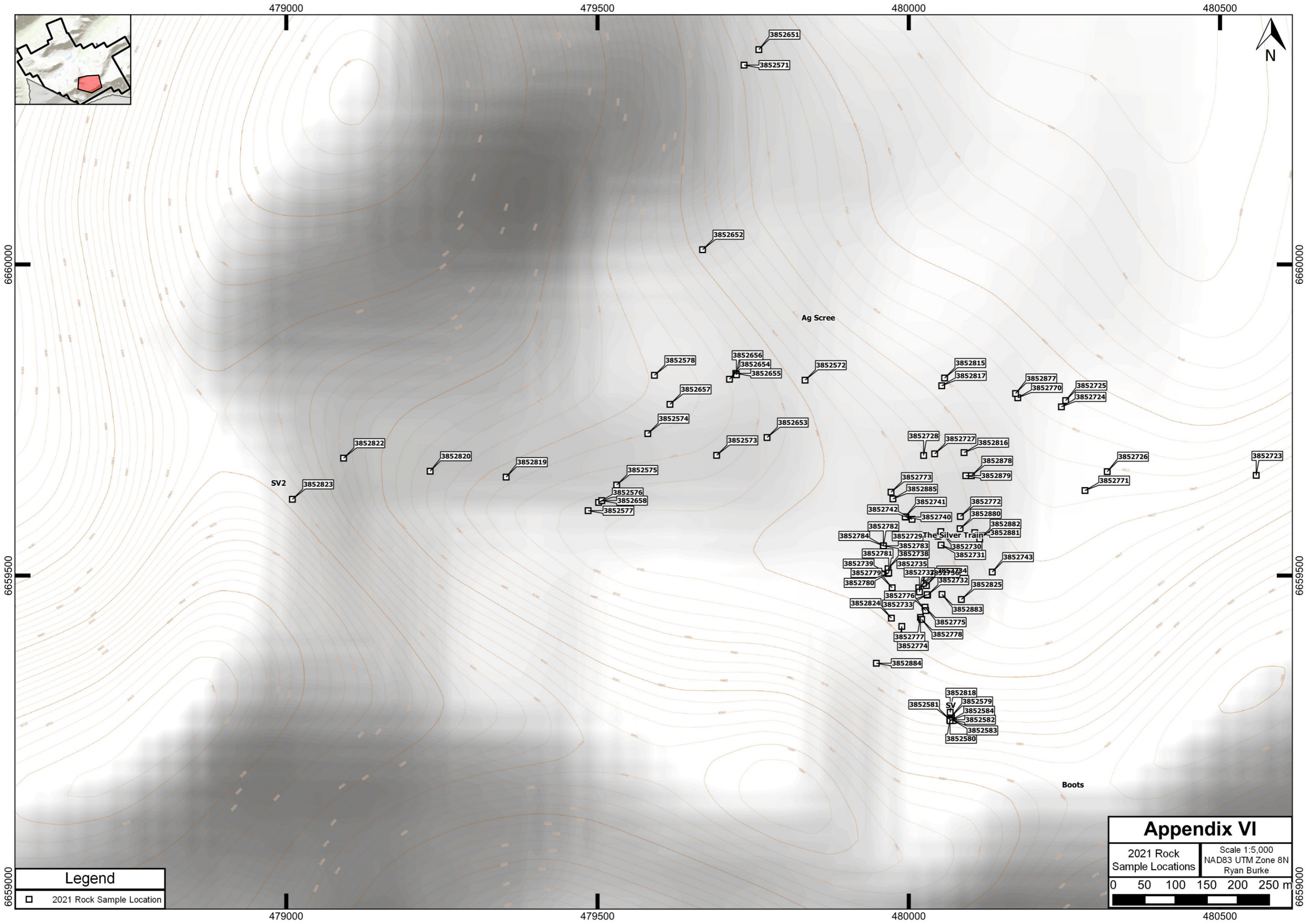
0 50 100 m

480500

481000

6660500

6661000



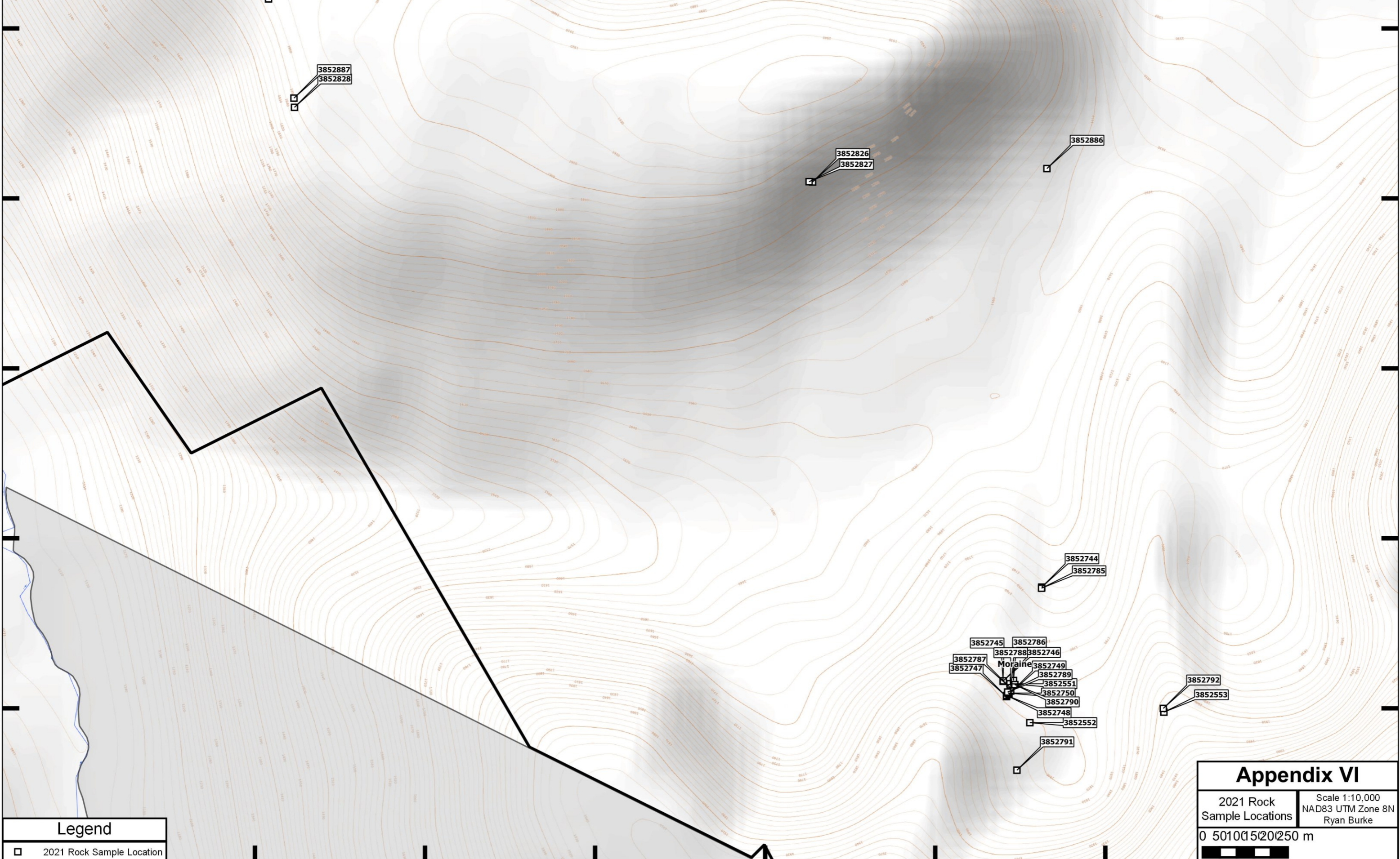
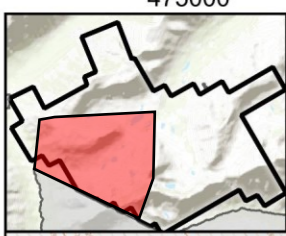
Legend

□ 2021 Rock Sample Location

Appendix VI

2021 Rock Sample Locations | Scale 1:5,000
 NAD83 UTM Zone 8N
 Ryan Burke

0 50 100 150 200 250 m



Legend

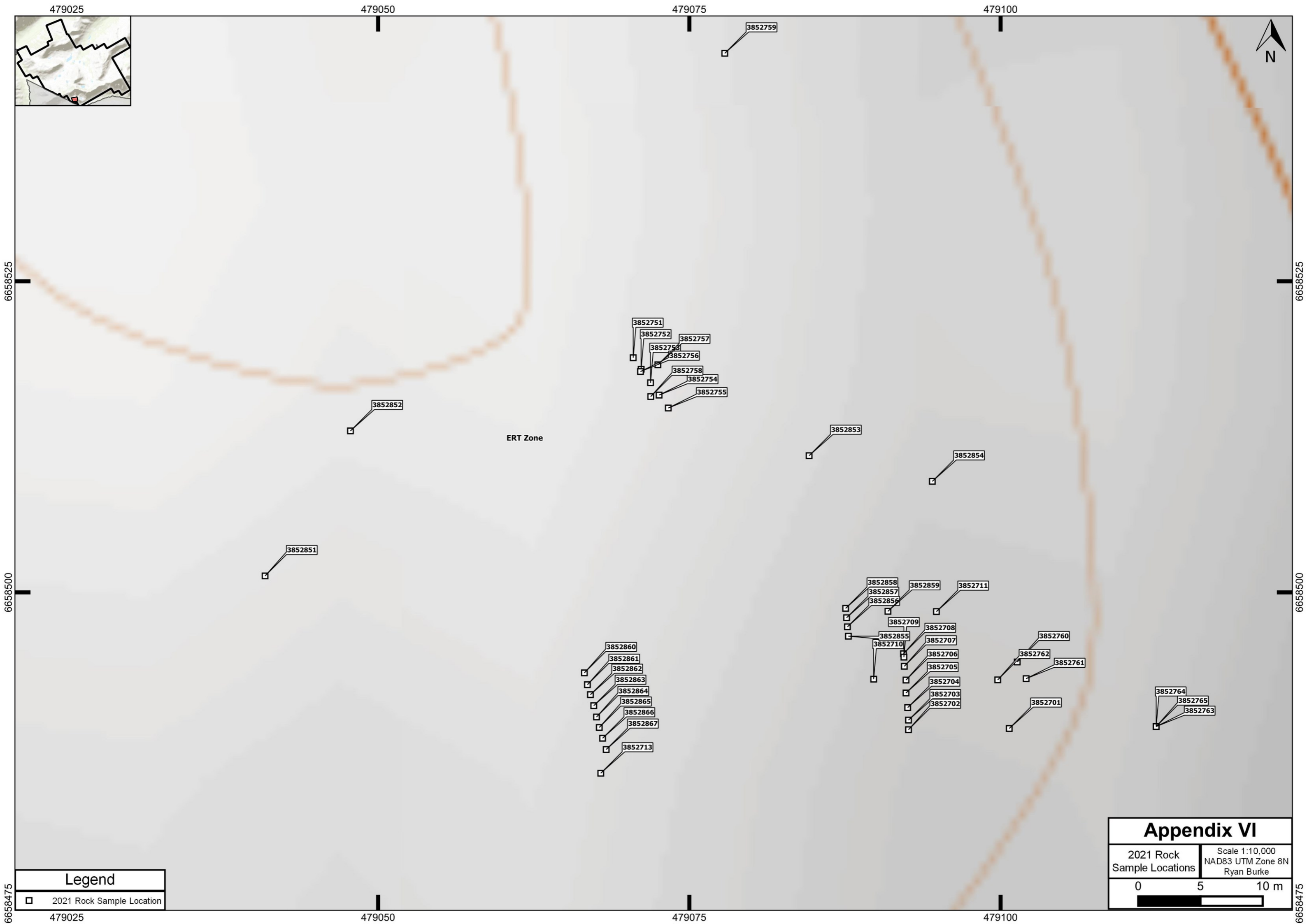
□ 2021 Rock Sample Location

Appendix VI

2021 Rock Sample Locations	Scale 1:10,000 NAD83 UTM Zone 8N Ryan Burke
0 50101520250 m	

475000 475500 476000 476500 477000 477500 478000 478500

6661500 6661000 6660500 6660000 6659500



ERT Zone

Legend	
	2021 Rock Sample Location

Appendix VI	
2021 Rock Sample Locations	Scale 1:10,000 NAD83 UTM Zone 8N Ryan Burke
0 5 10 m	

- 3852751
- 3852752
- 3852753
- 3852754
- 3852755
- 3852756
- 3852757
- 3852758
- 3852759
- 3852851
- 3852852
- 3852853
- 3852854
- 3852858
- 3852857
- 3852856
- 3852855
- 3852859
- 3852711
- 3852709
- 3852708
- 3852707
- 3852706
- 3852705
- 3852704
- 3852703
- 3852702
- 3852760
- 3852762
- 3852761
- 3852701
- 3852764
- 3852765
- 3852763
- 3852860
- 3852861
- 3852862
- 3852863
- 3852864
- 3852865
- 3852866
- 3852867
- 3852713