# ASSESSMENT REPORT

describing

# MAPPING, PROSPECTING AND GEOCHEMICAL SAMPLING

fieldwork performed from August 31st to September 8th, 2019

at the

## WARDEN AND PIKE PROPERTIES

| | |
|---|---|
| WARDEN 1-4 | YE96672-YE96675 |
| PIKE 1-7 | YE9665-YE96671 |
| PIKE 8-9 | YE96676-YE796677 |

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 2020

## CONTENTS



## APPENDICES

# FIGURES

## TABLES

## INTRODUCTION

The Warden and Pike properties cover base metal high sulphidation epithermal gold and copper molybdenum +- gold porphyry style mineralization in the Intermontane Belt of the Canadian Cordillera in southwestern Yukon.

This report describes an exploration program conducted by Ryan Burke and Charlie Pike between August 30th and September 8th, 2019. A combination of claim staking, geological mapping, prospecting and geochemical sampling was carried out by a two-person crew working from a tent camp on the property. The author supervised the program and interpreted all data in this report and his Statement of Qualifications appears in Appendix I. A Statement of Expenditures appears in Appendix II.

## PROPERTY LOCATION, CLAIM DATA AND ACCESS

The Warden property consists of 4 contiguous mineral claims and the Pike property consists of 9 contiguous mineral claims located 70 km south southwest of Whitehorse and 27 km west of Carcross, in southwestern Yukon, at latitude 60°5'N and longitude 135°23'W on mapsheet NTS 105D/ 03 (Figure 1).

The claims are registered in the Whitehorse Mining Recorder in the name of Ryan Burke. Claim data are listed below. Locations of individual claims are shown in Figure 2.

| Claim Name | Grant Number | Expiry Date* |
|---|---|---|
| WARDEN 1-4 | YE96672-YE96675 | Sep. 10, 2020 |
| PIKE 1-7 | YE9665-YE96671 | Sep. 9, 2020 |
| PIKE 8-9 | YE96676-YE796677 | Sep. 9, 2020 |

* Expiry date does not include 2019 work filed for assessment and is pending approval

Access to and from the project area was directly from Whitehorse via an AS350SD helicopter provided by Horizon Helicopters Ltd.

Work on the Warden and Pike was completed from a tent camp located in the valley bottom directly south of Mt. Ward.

A helicopter staging area lies 9 km North of the property, at 479815 mE, 6671351 mN (UTM Zone 8; NAD 1983). The staging area is accessible with a 4x4 truck via the Annie Lake Road.

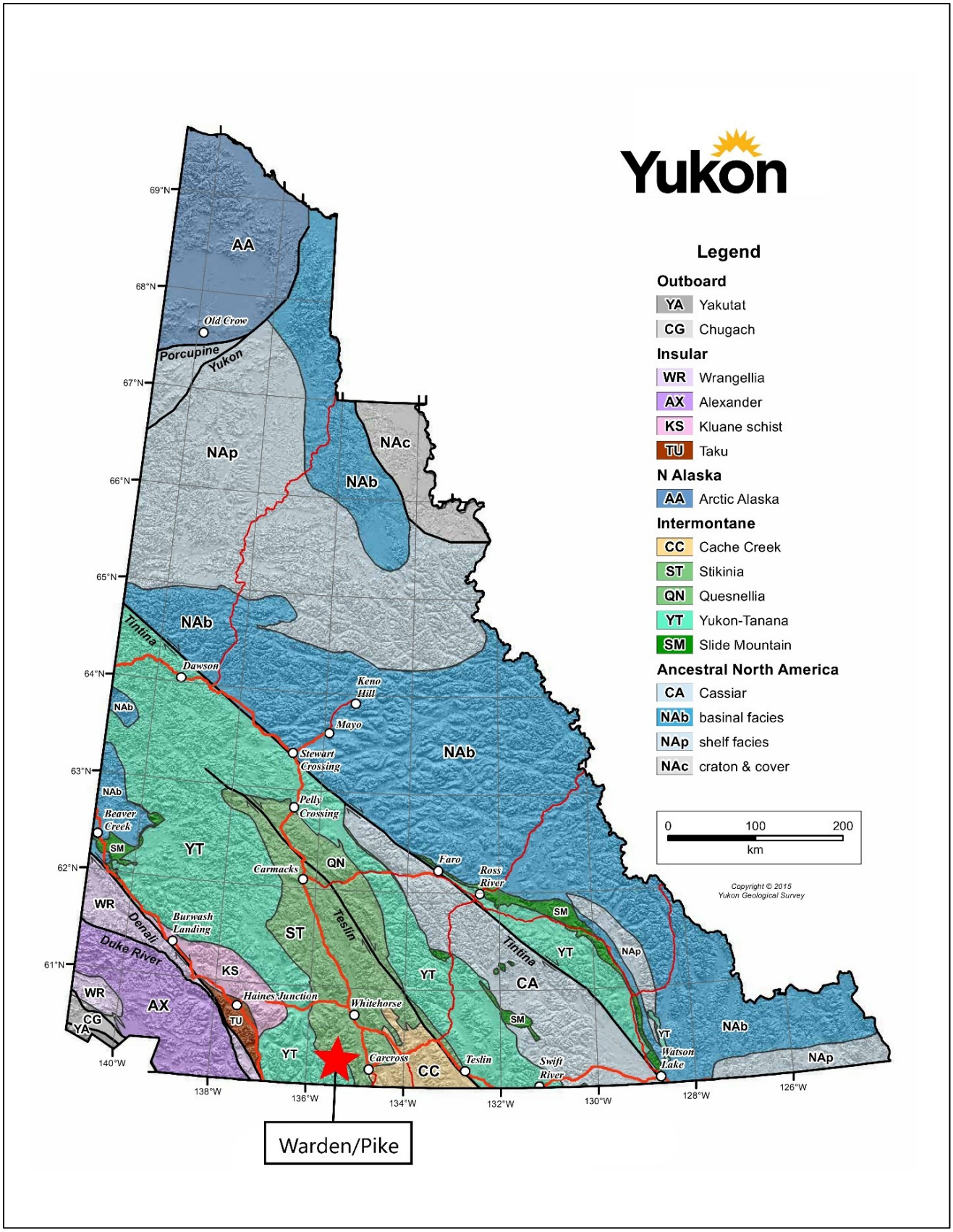


Figure 1: Location of the Warden and Pike Properties

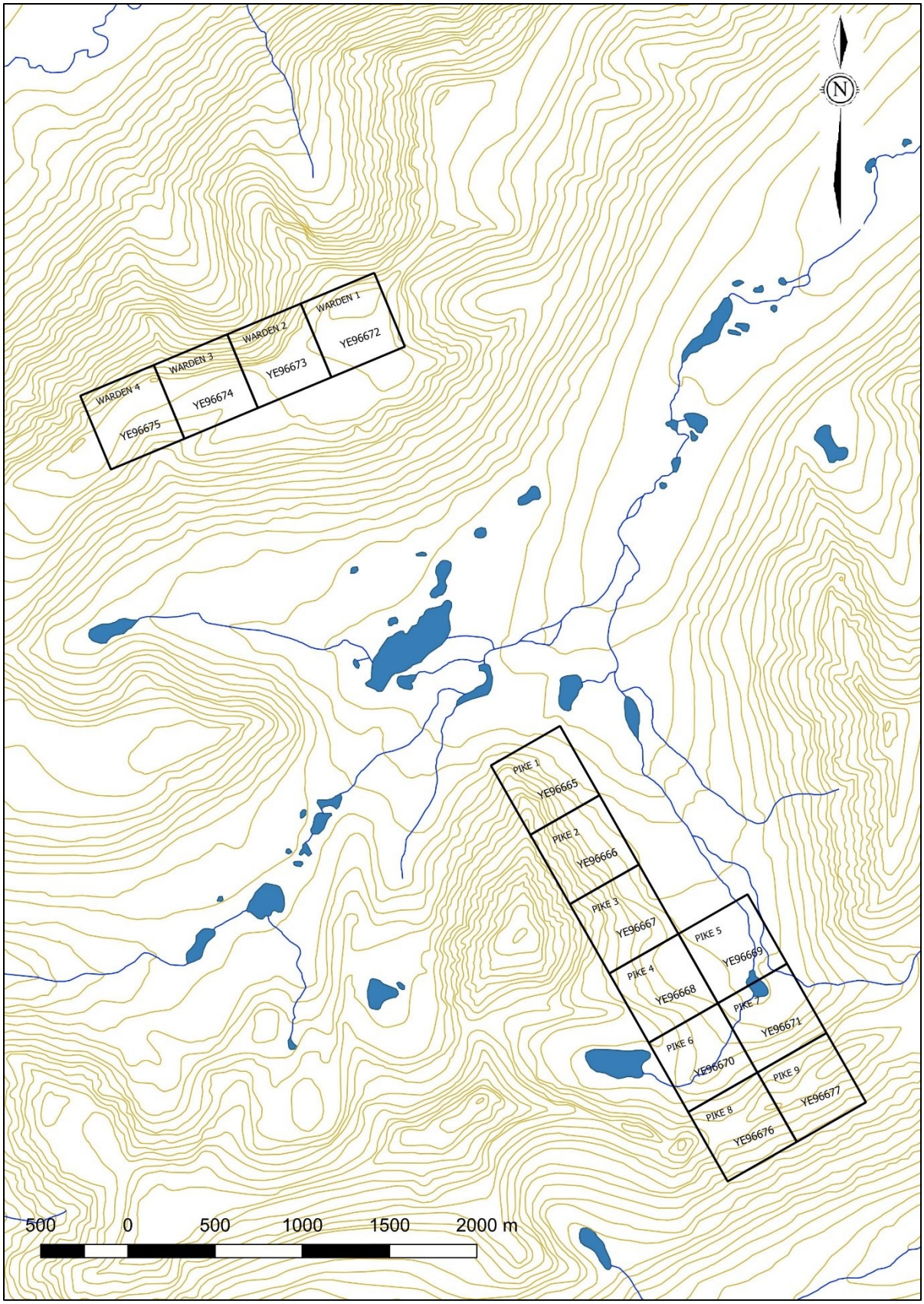

Figure 2: Claim locations map

## EXPLORATION HISTORY

The Mt. Skukum Volcanic Complex and surrounding area has been the subject of extensive exploration throughout history, including a period of brief mine production at Mt. Skukum from 1986 to 1988. During this period a total of 233,400 tons of ore were processed in the plant, recovering a total 2,500 kilograms (77,790 tr. oz.) of gold (Naas and Rodger, 1999).

As of 2013, there are three deposits with NI 43-101 compliant mineral resources in the Mt. Skukum area. These are the Mt. Skukum, Skukum Creek, and Goddell Gully deposits, and their respective resources are listed in the table below, using a 3 g/t Au cutoff (modified from Naas and Simpson, 2013):

**Table I: Resource estimates for Mt. Skukum, Skukum Creek, and Goddell Gully**

| Deposit Name | Indicated Resource | Inferred Resource | Contained oz Au eq. |
|---|---|---|---|
| Mt. Skukum (Lake Zone) | N/A | 90,500 t @ 9.51 g/t Au eq. | 27,673 inferred |
| Skukum Creek | 1,086,800 tonnes @ 8.73 g/t Au eq. | 586,000 t @ 6.83 g/t Au eq. | 305,043 indicated<br>128,681 inferred |
| Goddell Gully | 329,700 t @ 8.13 g/t Au eq. | 483,900 t @ 7.13 g/t Au eq. | 86,180 indicated<br>110,928 inferred |

An in-depth review of historical exploration activities in the Mt. Skukum area is available in New Pacific Metals Corp.'s 2013 Technical Report on the Mt. Skukum

The Bennett Lake Volcanic Complex is a contemporaneous volcanic complex, deposited in a similar geological setting, located 15 kms south of the Mt. Skukum Volcanic Complex. It has been the subject of less intensive exploration effort compared to the Mt. Skukum area, and the potential for it to host similar styles of mineralization has not been not evaluated thoroughly.

The only historical work that has been performed on the Warden and Pike claim block is summarized below:

In 1988, Skukum Gold Inc. performed a regional exploration program south of the Wheaton river near Mount Ward. Exploration work consisted of mapping, prospecting, talus fine and silt sampling. Three mineralized vein systems were identified in the rock glacier cirque in the southern end of the Wheaton River valley. Historical samples of vein material from within the cirque assayed up to 417.1 g/t Ag, 19.67 g/t Au, 3.98% Pb, and 1.47% Cu.

In addition, a 0.8 $km^2$, predominantly gold talus fine anomaly was identified on the southeast portion of the historical claim block. Chalcopyrite mineralization was also discovered in this area. An outcrop sample returned 5.58 % Cu, 33.8 g/t Ag, and 0.75 g/t Au.

## GEOMORPHOLOGY

The Warden and Pike properties are located in the Intermontane Belt, within the Boundary Ranges of the Canadian Cordillera. The climate in this 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.

Both sets of claims overlie both rugged and gentle topography with flat, glacially scoured alpine ridge tops and precipitous mountainsides. Permanent snowfields exist on northern facing ridges of most ridges and mountains in the area, with valley floors of 1500 metres and summits up to 2200 metres. Both properties lie above treeline, which is roughly 1450m.

## REGIONAL GEOLOGY

The Warden and Pike properties are located within the Coast Plutonic Complex, a large linear agglomeration of geochemically distinct plutons ranging in age from Late Triassic through Eocene. Five groups of plutonic rocks can be differentiated on the basis of age: Late Triassic, Early Jurassic, mid-Cretaceous, Late Cretaceous/Paleocene, and Early Eocene (Radloff and Hart, 1990).

Oldest rocks in the area comprise domains and screens of probable 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 (Figure 3) (modified from Naas, 2007).

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 and which forms the easternmost limit of exposures of the Nisling Terrane (Naas, 2007).

The Eocene Skukum Group is the northernmost part of the Sloko volcanic province and outcrops in two distinct areas, the Mount Skukum Volcanic Complex (MSVC) and the Bennett Lake Volcanic Complex (BLVC)

The MSVC is an early Eocene, bimodal sequence of sub-aerial volcanic and volcaniclastic rocks covering 140km$^2$. These were deposited unconformable upon metamorphic and plutonic rocks of the Nisling Terrane and Coast Plutonic Complex. The complex forms a 20 x 11 km ellipsoid which is bounded by faults along its southern and eastern contacts. The maximum accumulated thickness of volcanic strata is estimated 850 m. The complex is divided into two parts. The southeastern portion of the complex is underlain by dominantly andesitic flows and breccias.

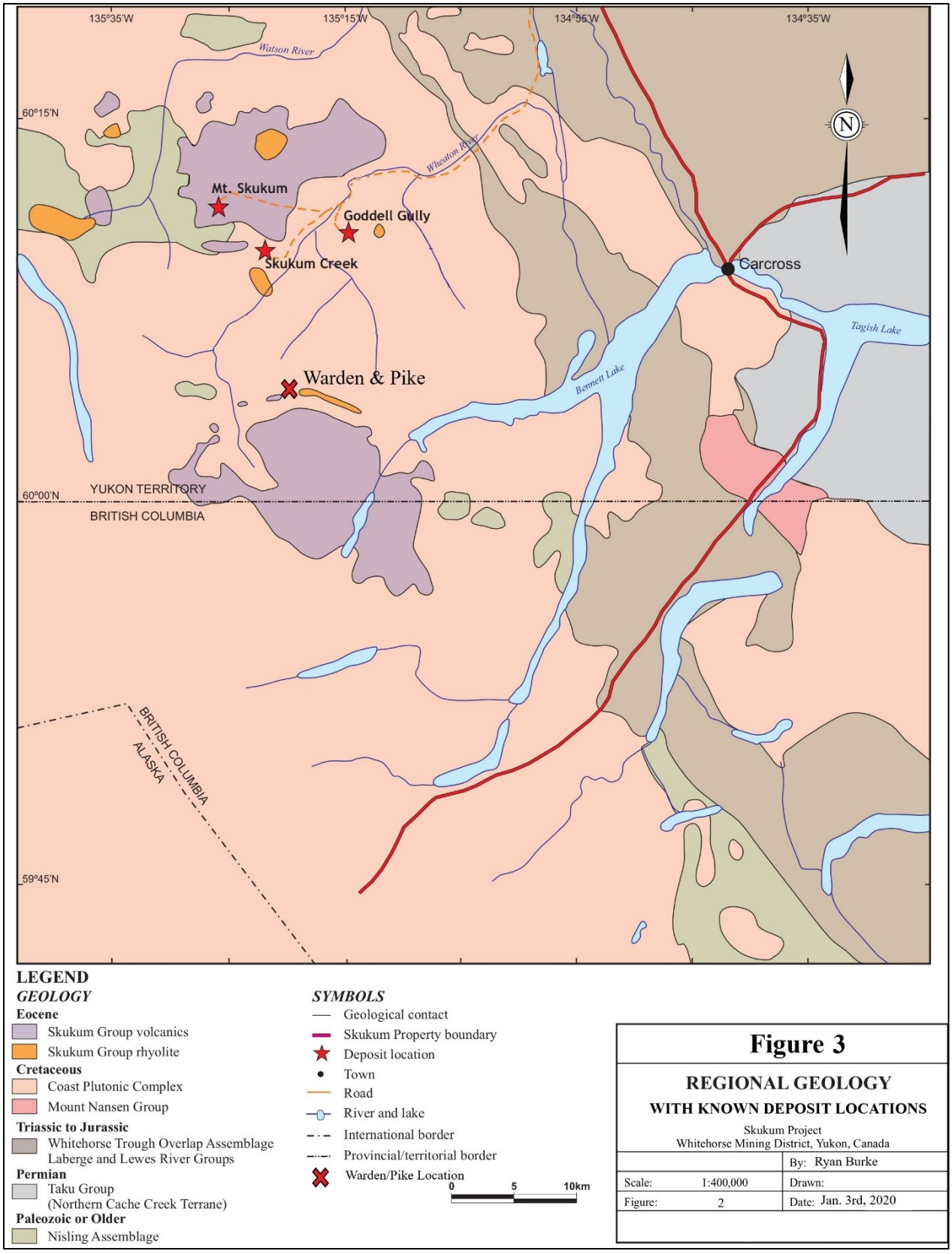


Figure 3: Regional Geology with known deposit locations, including location of the Warden and Pike properties. (Modified from Naas, 2007)

Thick accumulations of pyroclastic rocks form a fault-bounded graben nested into the northeastern part of the complex.

The BLVC is a 19 x 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. The BLVC differs from the MSVC in that a greater thickness of strata remain preserved and lithologically it contains a higher percentage of andesitic flows. 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 about 230 degrees of a subelliptical arc, 30 kilometres long by 19 kilometres wide, around the periphery of the complex. It is postulated the ring dyke formed during caldera collapse. The dykes are nearly vertical, pinch and swell, and generally ranging from 150 to 300 metres wide. At the west and southeast ends of the arc the dykes splay out into a maze of smaller dykes and sills. 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).

Structurally, the BLVC is dominated by a series of arcuate, slightly concentric step faults cut by a few larger radiating faults. A central rhyolite plug and ring dyke system representing late stage doming are well developed.

## PROPERTY GEOLOGY

The Warden and Pike properties lie along the northern limit of the BLVC, along the northern limit of the ring dyke, 10 km south of the MSVC. The property geology of Warden and Pike are shown in Figure 4 and Figure 5, respectively. Figure 6 includes significant results from the Pike Property. Regional and property lithological units are shown in Table II below.

**Table II: Regional/Property Lithological Units (*after* YGS, 2020)**

| Unit | Formation | Age | Description |
|---|---|---|---|
| Ead | Skukum | Eocene | Andesite dyke dark grey, aphyric; rare porphyritic texture defined by hornblende and plagioclase. |
| Ebd | Skukum | Eocene | Basalt dyke fine-grained aphantic dark greenish grey with trace disseminated pyrite, patchy rusty weathering |
| Edd | Skukum | Eocene | Dacite dyke brown to brick-brown aphanitic rock with small plagioclase phenocrsysts |
| Erd | Skukum | Eocene | Rhyolite Dyke light beige to weathered orangeish-brown, blockily weathered, with variably disseminated pyrite |

| | | | |
|---|---|---|---|
| QV | Skukum? | Eocene? | Quartz Vein |
| PRC | Skukum | Eocene | Bennett Lake Ring Dykes – Coarse quartz-feldspar porphyry |
| PR | Ruby Range | Cenozoic | Biotite Granite |
| mKW | Whitehorse | Mid-Cretaceous | Biotite-hornblende granodiorite (Mt. McNeil pluton?) medium grey, medium-grained, equigranular to seriate, with euhedral amphibole grains 3-5 mm in size; contains abundant magnetite; rare autolithic fine-grained diorite/monzonite fragments; hornblende and biotite partially replaced by greenish chlorite; pervasively weakly altered; epidote staining on fracture surfaces; abundant weakly disseminated pyrite |
| PDS | YTT | Neoproterozoic to Devonian | Quartzite, psammite, pelite and marble; minor greenstone and amphibolite |

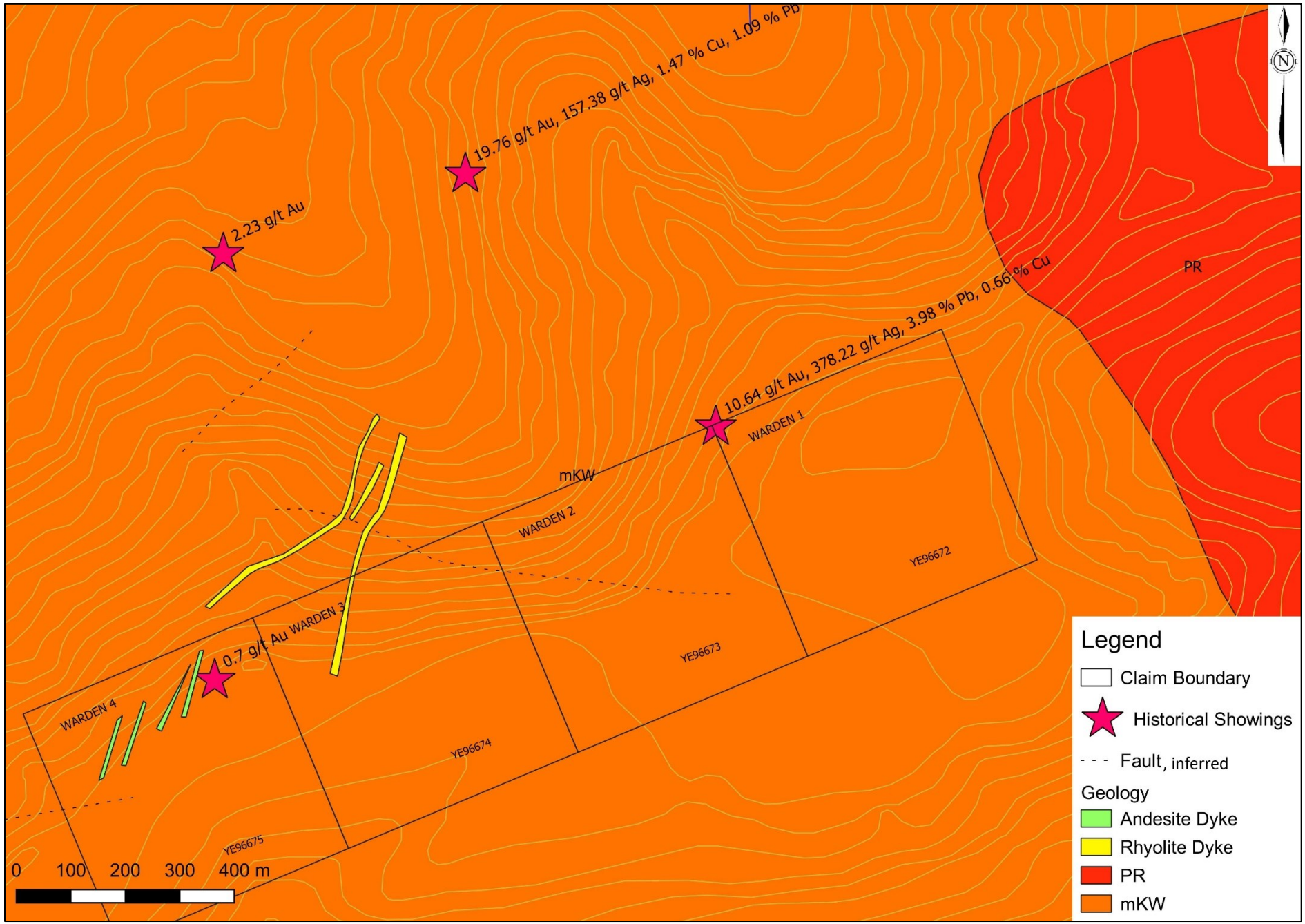

Figure 4: Warden Property Geology

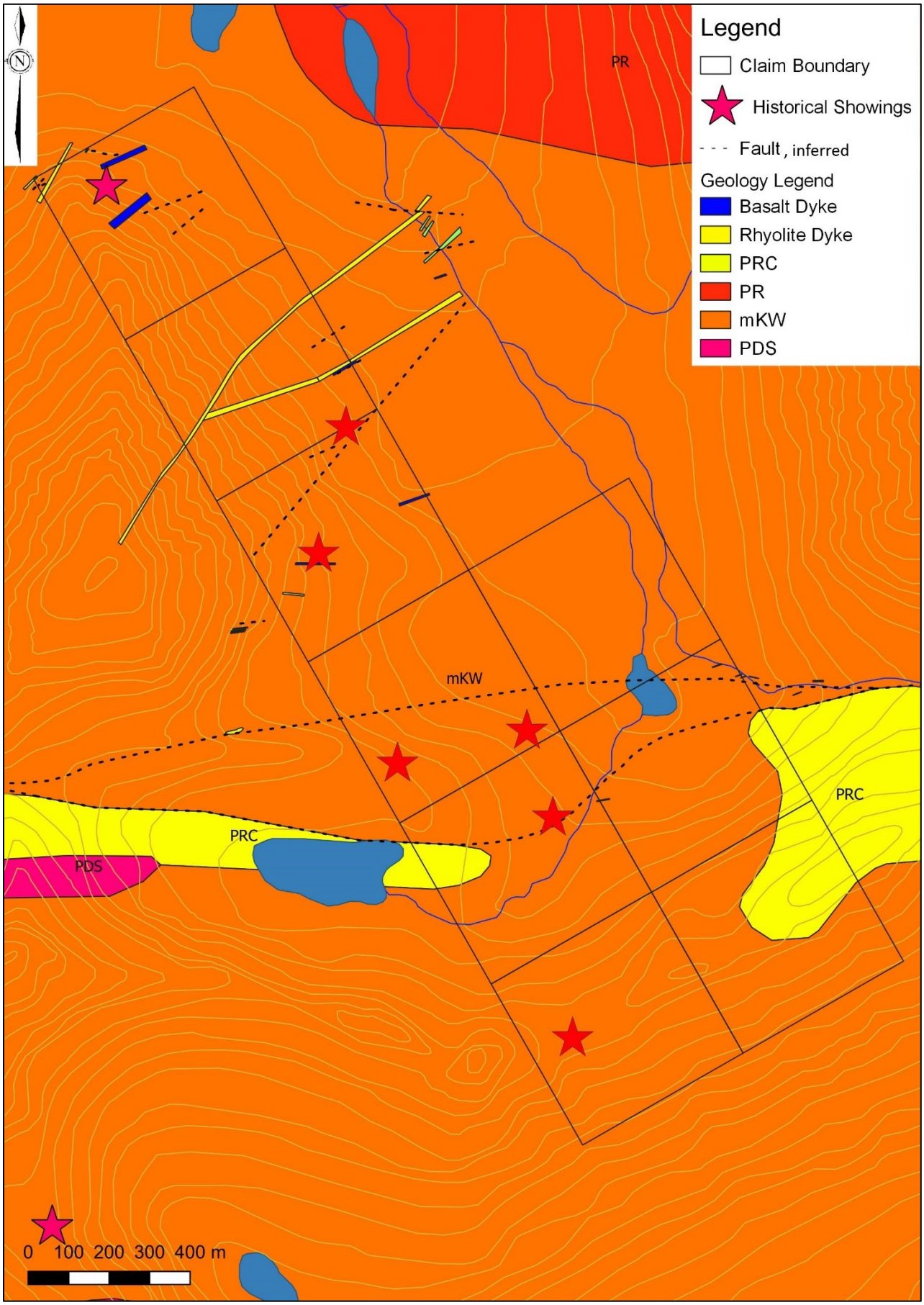

Figure 5: Pike Property Geology

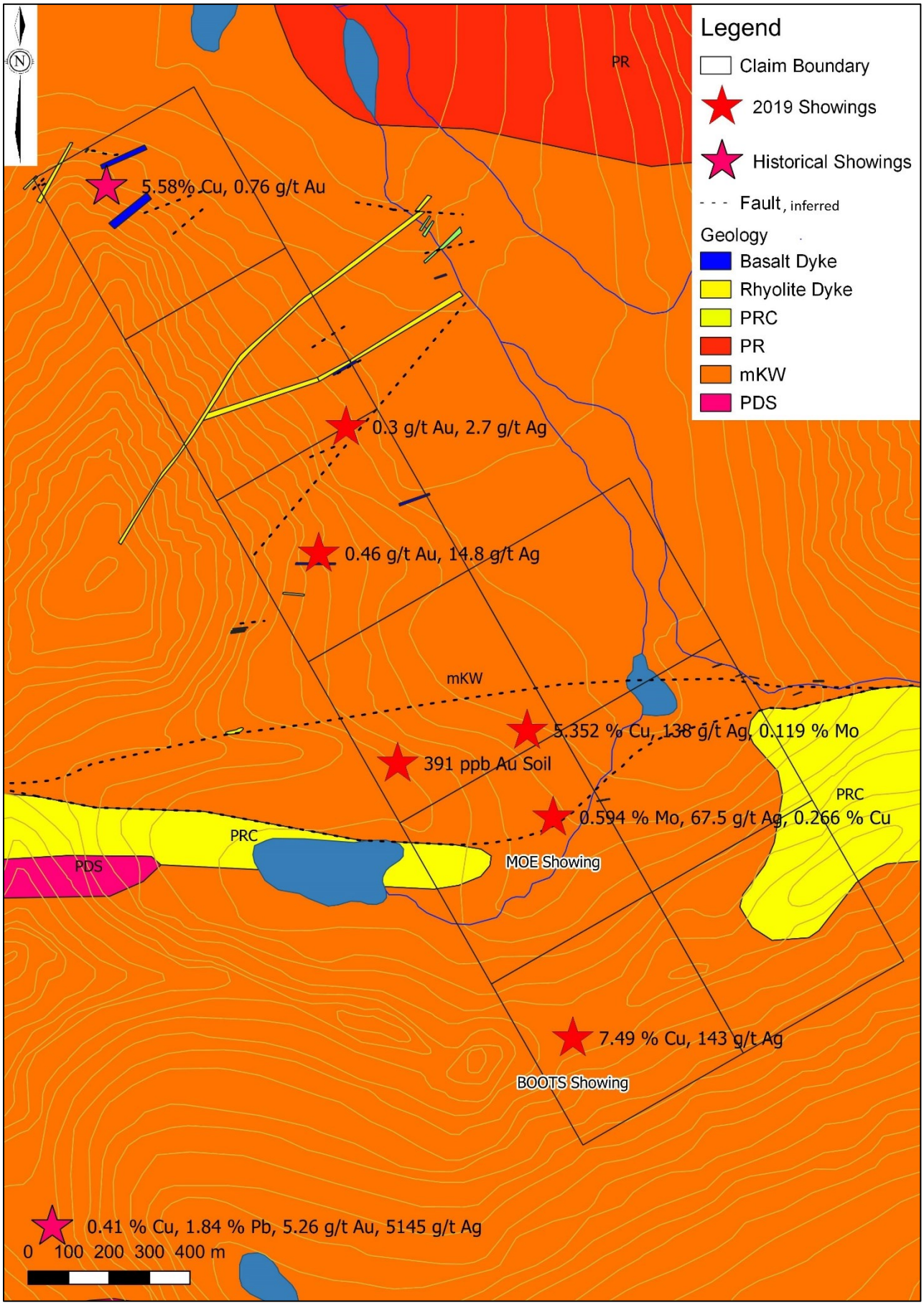

Figure 6: Pike Property Geology with Labelled Showings

Underlying the property is a magnetic biotite-hornblende granodiorite (mKW). Pervasive chlorite and epidote alteration are common. Rare pyrite with very rare chalcopyrite stringer veinlets occur sporadically throughout the granodiorite. Hornblende and biotite have been at least partially replaced by greenish chlorite in even the freshest samples. The granodiorite is crosscut by younger basalt to rhyolite dykes that vary in width from 1 to 30 m (Hart and Radloff, 1990). This unit is likely the Mt. McNeil granodiorite based on historical descriptions.

Numerous dykes of varying composition and size outcrop throughout the property. There are fine-grained basaltic dykes with pervasive chloritization of mafics, rusty pale green to dark grey dacitic dykes, and mauve to tan brown, heavily fractured, weakly pyritized, fine-grained rhyolite dykes. These dykes occur somewhat sporadically throughout the property, increasing in density with proximity to the ring dyke. The ring dyke outcrops prominently in 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 size from 10 to 50 m.

Outcrop exposure is abundant due to the U-shaped valleys formed by glacial activity in this region. A layer of till exists in the valley bottom, ranging in thickness from 1 to 10 m. Glacially scoured outcrop has been observed on ridgelines at 1700 m as well as in the valley bottom at 1450 m. Glacial striae trend 170 degrees, and ice movement direction was northwards.

## MINERALIZATION

### Warden Mineralization

Significant mineralization encountered on the Warden property include historical results from previous work by Skukum Exploration Inc. in 1988. Historical showings were unable to be accessed from the top of Mt. Ward due to the rugged topography in the rock glacier cirque. Historical showings must be accessed from the base of the Wheaton River valley, traversing from the bottom of the cirque rather than the top.

In 1988, three separate vein systems were found near the Warden property. These three veins are named the Confession vein, the Repent vein, and the Squeaker veins.

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 10.68g/t Au, 378g/t Ag, 3.98% Pb and 0.66% Cu.

The Repent vein system is described as a, “bull white and honey coloured quartz veins in granodiorite with chlorite salvages and blobs 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 157.38 g/t Ag, 19.67 g/t Au, 1.09 % Pb and 1.47% Cu. (Wilkins and MacKinnon, 1988)

## Pike Mineralization

In 2019, 49 rock samples were collected on the Pike property (Figure 7). Mineralization on the Pike property consists of rare, mm-scale quartz carbonate stringers with trace pyrite +- chalcopyrite within chlorite-epidote altered granodiorite. Oxidized, pitted and vuggy quartz boulders quartz carbonate breccia is found throughout the property, ranging from fist-sized to 50 $cm^3$. A 1 by 2 m zone of malachite staining on a granodiorite outcrop occurs on the northern end of the Pike property at 479153 mE, 6661261 mN. A historical grab sample from this area assayed 5.58% Cu and 0.755 g/t Au.

Multiple new showings have been discovered as a result of the 2019 prospecting and mapping program. Highlights from sampling in the area include up to 0.46 g/t Au, 143 g/t Ag, 7.49% Cu, and 0.594% Mo, and >2000 ppm Bi. The showings are summarized below, and the following table contains highlights of the 2019 prospecting rock samples from the Pike Property

**Table III: Significant Rock Samples from 2019 Prospecting – Pike Property**

| Sample ID | Copper (%) | Silver (g/t) | Gold (ppb) | Molybdenum (%) | Bismuth (ppm) |
|---|---|---|---|---|---|
| 1894758 | 0.14 | **97.4** | 7.3 | .0024 | >2000 |
| 1894760 | **5.352** | **138** | 59.4 | 0.119 | >2000 |
| 1894767 | 0.07 | 2.7 | **304.3** | 0.005 | 40.8 |
| 1894781 | 0.03 | 14.8 | **456.2** | 0.003 | 30.3 |
| 1894791 | **7.49** | **143** | 43.6 | 0.03 | 709.3 |
| 1894799 | 0.27 | **67.5** | 18.9 | **0.594** | 14.4 |

**The Boots Showing**: located on the southern edge of the claim block, along an east west trending ridge of granodiorite near a north-south trending saddle 20 metres to the west. It is a 50 cm wide quartz vein trending 090/64 with heavy fracturing and oxidation, vuggy textures and malachite staining, containing 5% pyrite and 2-5% chalcopyrite. The vein is hosted in granodiorite and it has been traced for 15 m along strike. Grab samples from this vein have graded up to 7.49% Cu and 143 g/t Ag.

**The Moe Showing**: A well-mineralized float sample of gossanous quartz with flaky, coarse-grained molybdenite and pyrite within oxidized vugs was found 550 m north of the XXX Showing. This sample graded 0.594 % Mo, 67.5 g/t Ag and 0.266 % Cu. A gossanous quartz vein float grab with pyrite and chalcopyrite was found 230 m north of the Moe Showing. This sample graded 5.352 % Cu, 138 g/t Ag, and 0.119 % Mo. 100 m north of the Moe Showing is a 50 cm quartz vein in granodiorite, trending 060/55. This vein has been traced along strike for 35 metres and a chip sample across the vein assayed 48.9 ppm Pb and 106 ppm Zn. However, this vein is still noteworthy due to its close proximity to the Moe Showing.

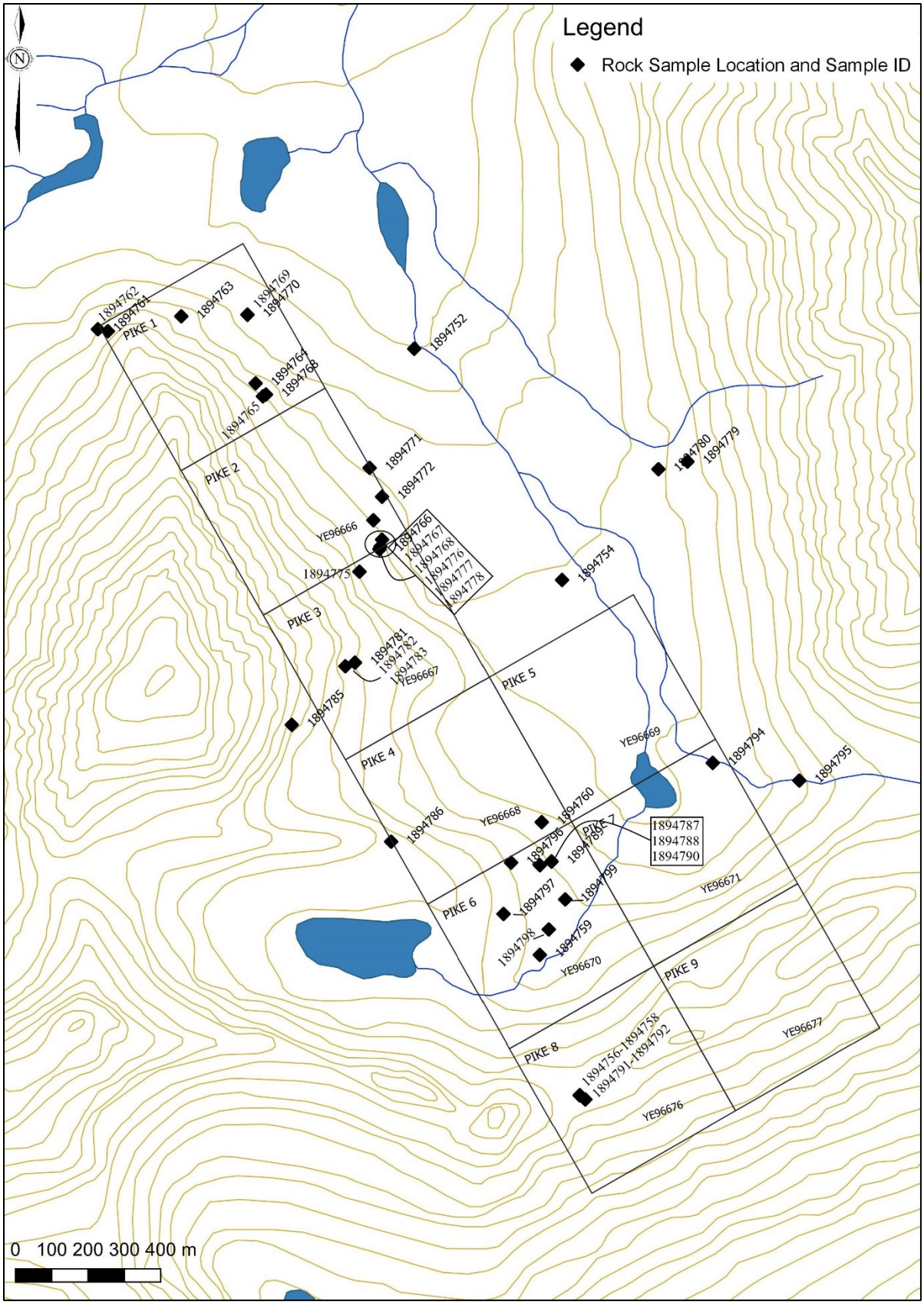

Figure 7: Rock Sample locations and sample ID – Pike Property

## SOIL GEOCHEMISTRY

In 2019, 40 soil samples were collected from the Warden property, and 48 soil samples from the Pike property. A description of sampling procedures, transport and analytical techniques can be found in Appendix IV. Anomalous thresholds for soil samples can be found in the following table:

**Table IV- Anomalous Threshold Values for Soil Samples – Pike and Warden**

| Element | Weak | Moderate | Strong | Peak |
|---|---|---|---|---|
| Gold (ppb) | 5-10 | 10-38 | 38-391 | 390.9 |
| Silver (ppm) | 0.2-0.3 | 0.3-0.4 | 0.4-1.1 | 1.1 |
| Copper (ppm) | 15-30 | 30-45 | 45-68 | 67.60 |
| Lead (ppm) | 20-32 | 32-46 | 46-80 | 78.9 |
| Zinc (ppm | 50-80 | 80-110 | 110-153 | 153 |
| Arsenic (ppm) | 3-5 | 5-10 | 10-18 | 17.30 |
| Bismuth (ppm) | 0.25-0.5 | 0.5-1 | 1-2.6 | 2.6 |
| Antimony (ppm) | 0.2-0.4 | 0.4-0.6 | 0.6-1.1 | 1.1 |
| Mercury (ppm) | 0.010-0.025 | 0.025-0.040 | 0.040-0.060 | 0.060 |
| Molybdenum (ppm) | 1-2 | 2-5 | 5-12.5 | 12.5 |

### Warden Soil Geochemistry

One 500 by 400 m east west oriented soil grid was placed on the Warden property. Samples were taken every 50 m along 100 m line spacings. Sample locations and ID are listed in Figure 8. Geochemical results for gold, copper, and mercury are shown in figures 9 to 11, respectively.

A moderate gold-in-soil anomaly on the southwestern end of the grid forms a 100 $m^2$ ellipse with its long axis oriented north-south. There is also a strong single mercury anomaly in this area.

A moderate to strong copper anomaly on the northern edge of the grid forms a 60 m east-west linear.

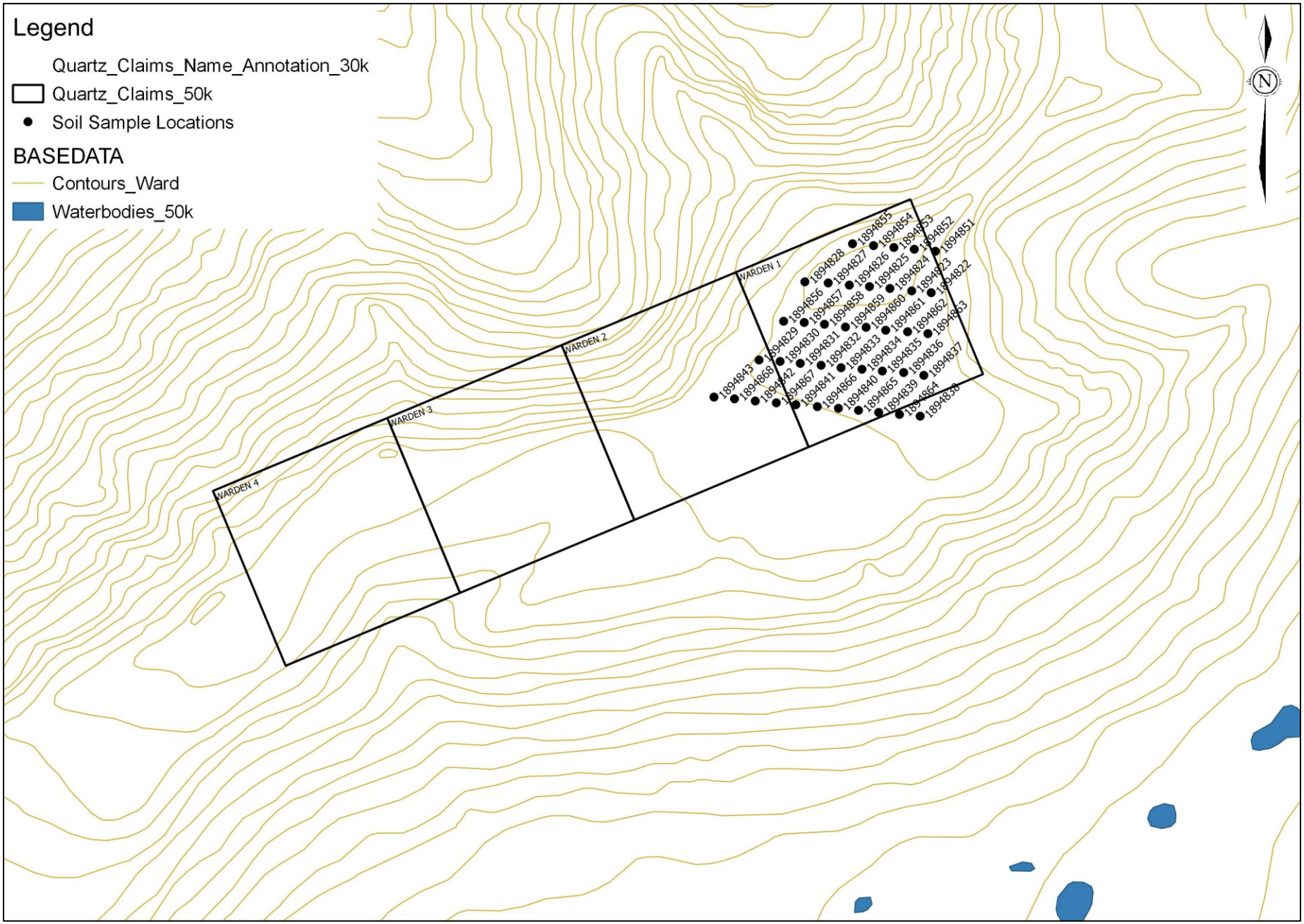

Figure 8: 2019 soil sample locations with Sample ID's for the Warden property.

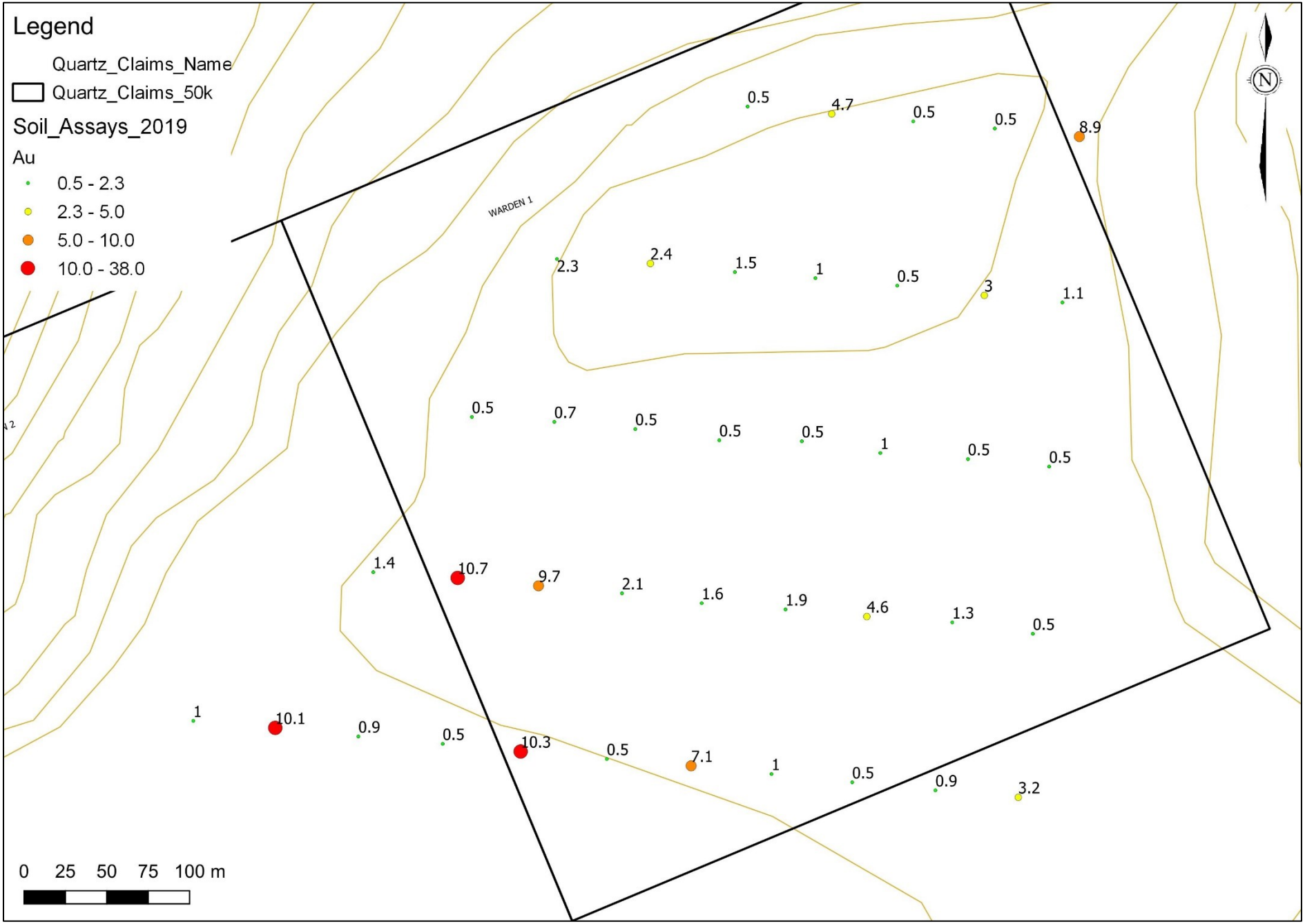

Figure 9: Warden Au soil geochemistry (ppb)

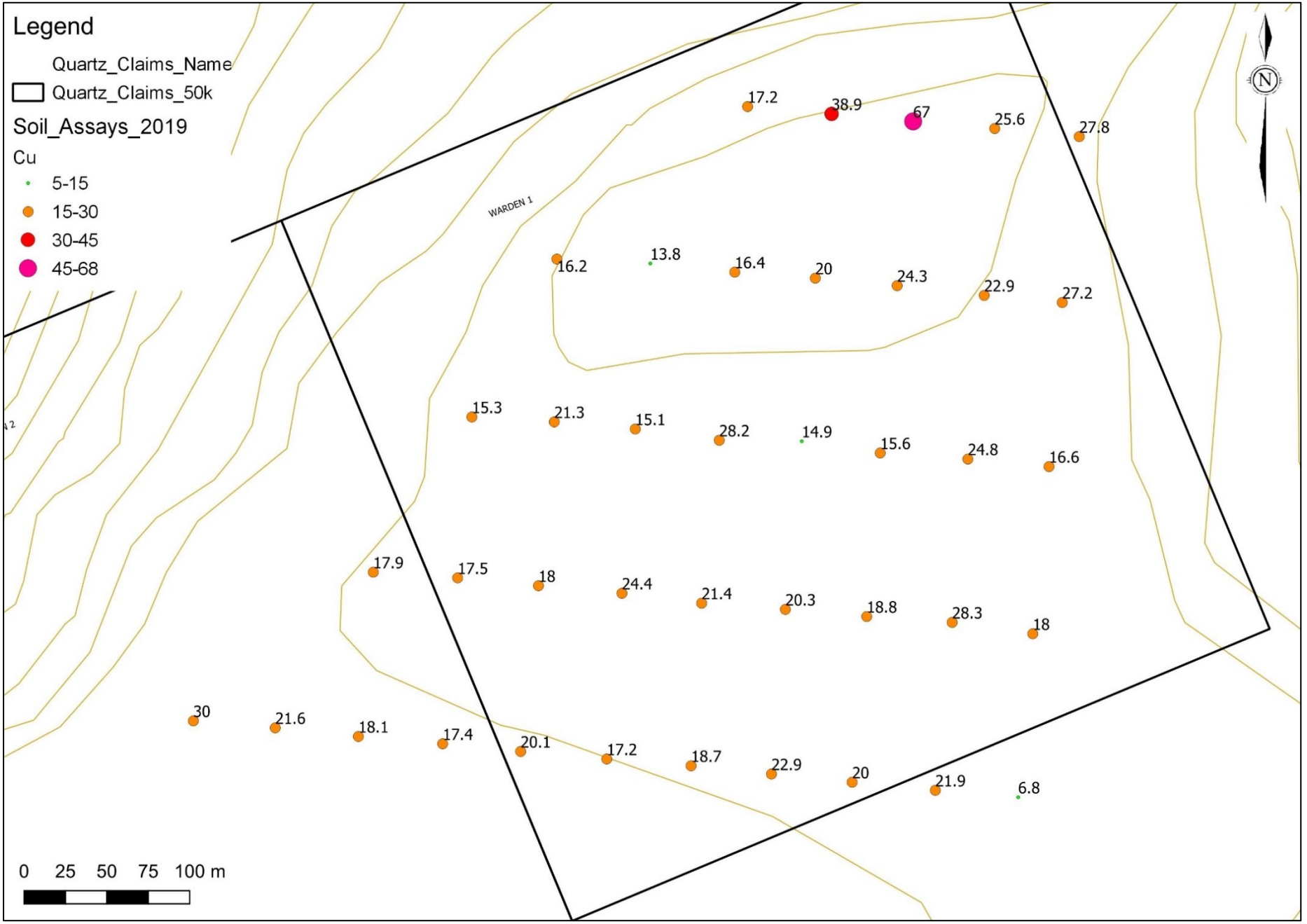

Figure 10: Warden Cu soil geochemistry (ppm)

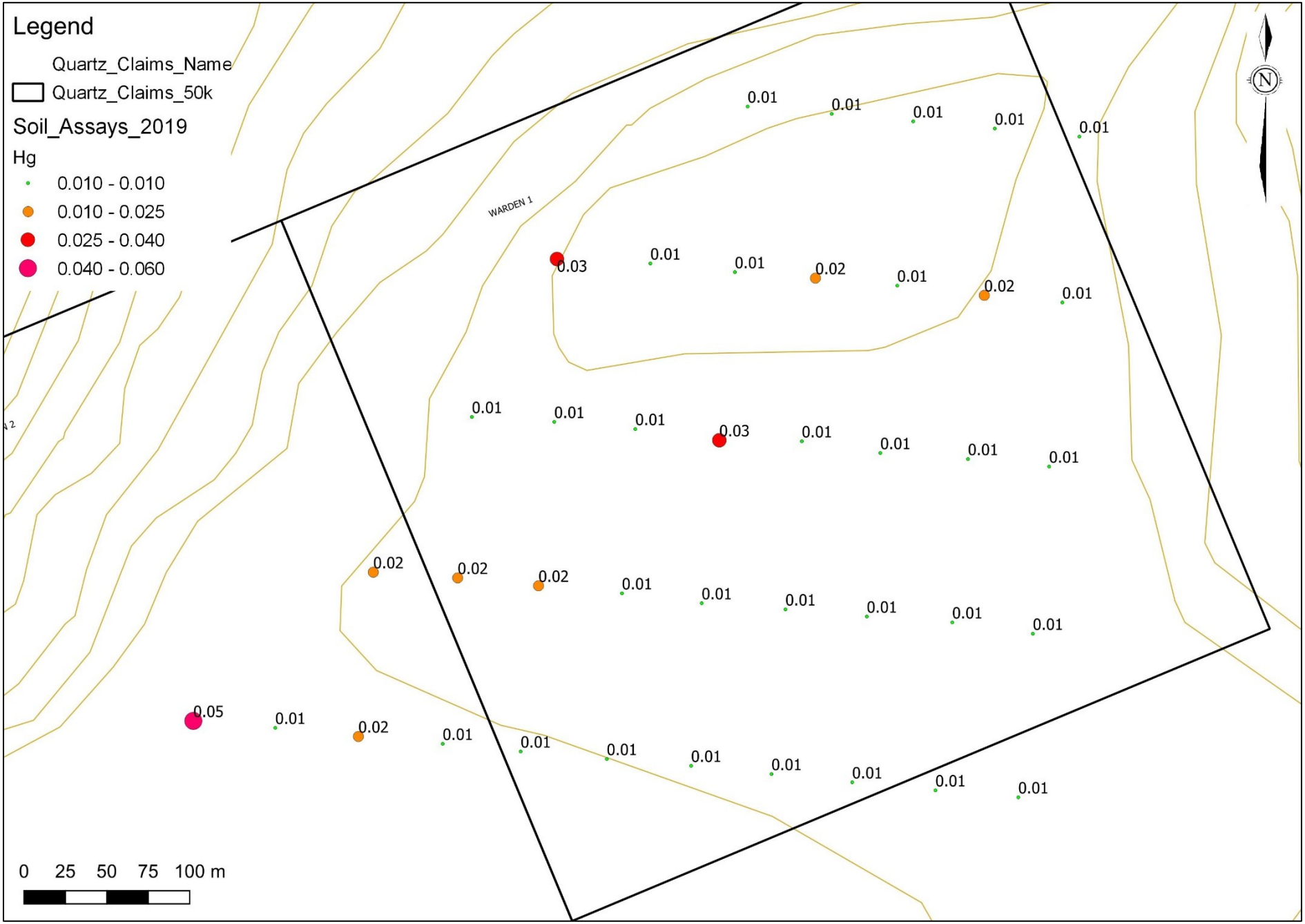

Figure 11: Warden Hg soil geochemistry (ppm)

## Pike Soil Geochemistry

In 2019, 40 soil samples were collected on and off the claimblock of the Pike property. Sample locations and sample ID's are shown in Figure 12. Ridge and spur soil sampling with line spacings of 50 m was deemed the most effective method of sample collection, due to extensive talus cover. Talus fine samples were collected in areas of poor soil development.

Geochemical results on the Pike property are thematically mapped for gold, silver, copper, lead, zinc, arsenic, bismuth, antimony, mercury and molybdenum are shown in Figures 13 to 22, respectively.

Goechemical sampling defined two distinctively different, notable geochemical signatures on the Pike property.

First, along the western edge of the claim block, extending westward, is a prominent multielemental geochemical anomaly for gold, arsenic, copper, mercury +- silver +- molybdenum. The peak value for gold, 391 ppb Au, was collected here. There is also a moderate to strong geochemical response for arsenic, copper, mercury, and a moderate to strong response for silver and molybdenum. This anomaly has a length of 200 m or more. Its true trend or continuity is indiscernible with the current dataset, but preliminary results are encouraging.

Second, on the southeastern portion of the property, there is a distinct multielemental geochemical anomaly for lead, zinc, bismuth, antimony +- molybdenum. There are multiple soil anomalies of the aforementioned elements over a length of 450 m. Its true trend or continuity is indiscernible with the current dataset, but preliminary results are encouraging.

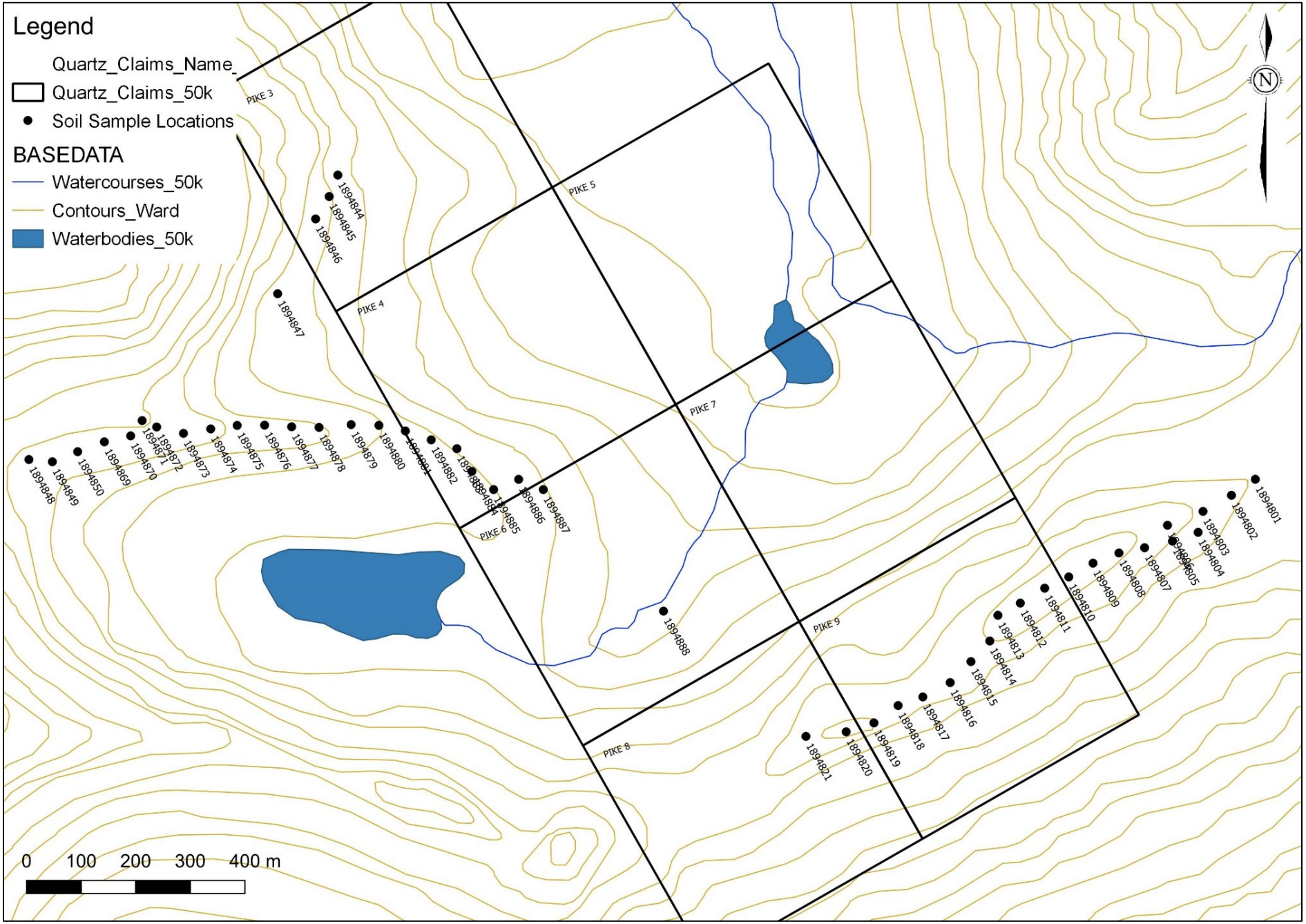

Figure 12: Pike soil sample locations and Sample ID’s

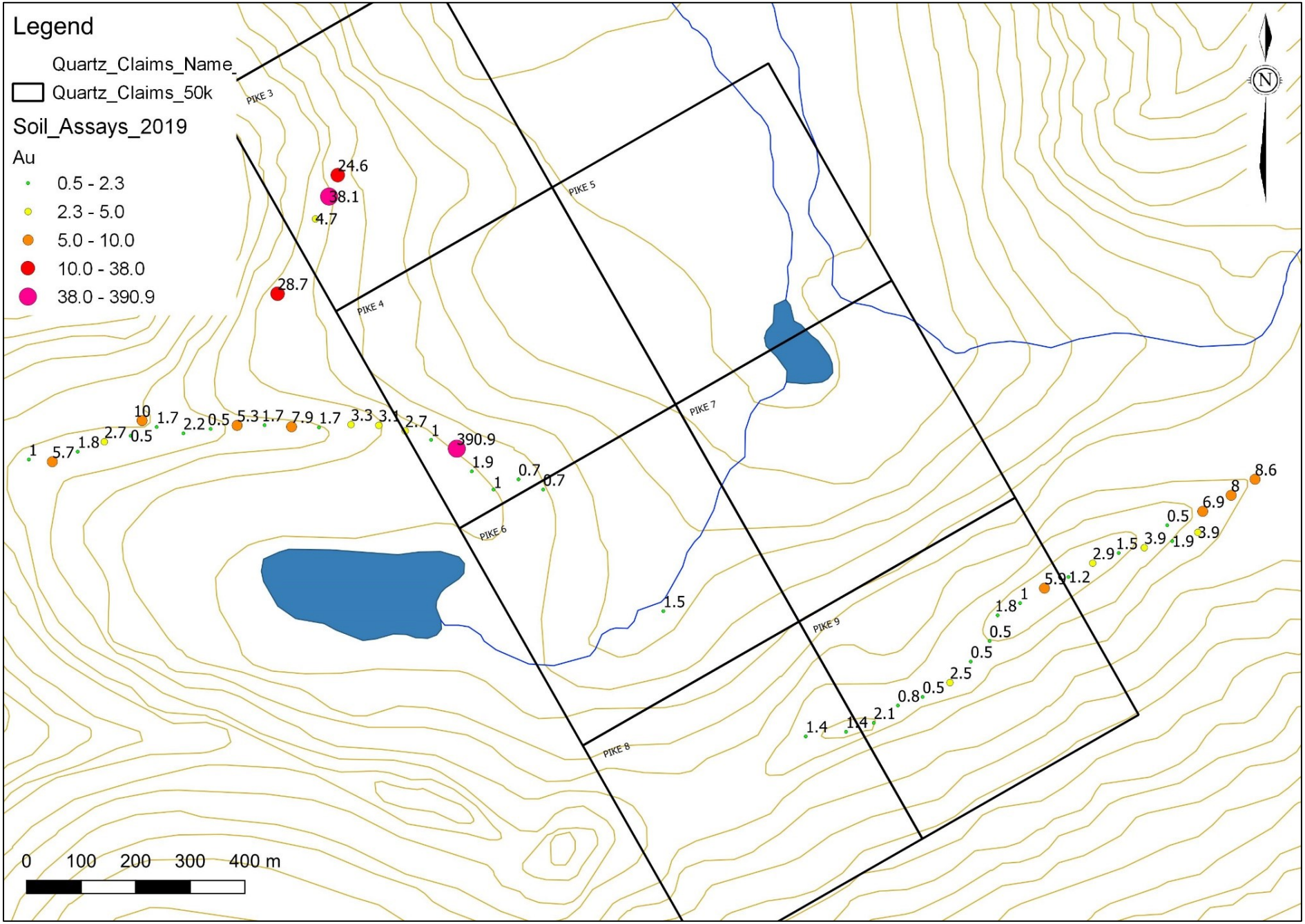

Figure 13: Pike Au soil geochemistry (ppb)

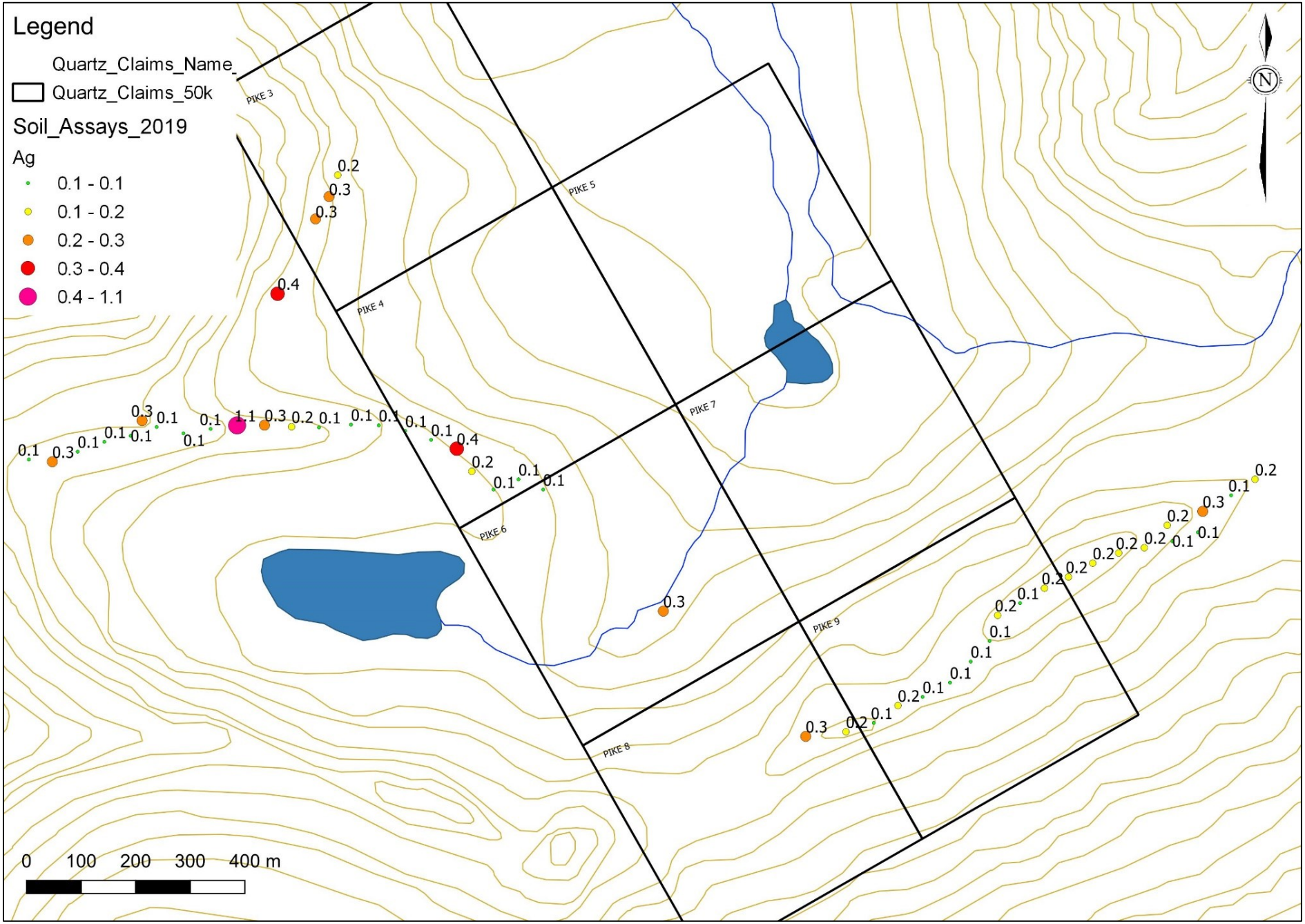

Figure 14: Pike Ag soil geochemistry (ppm)

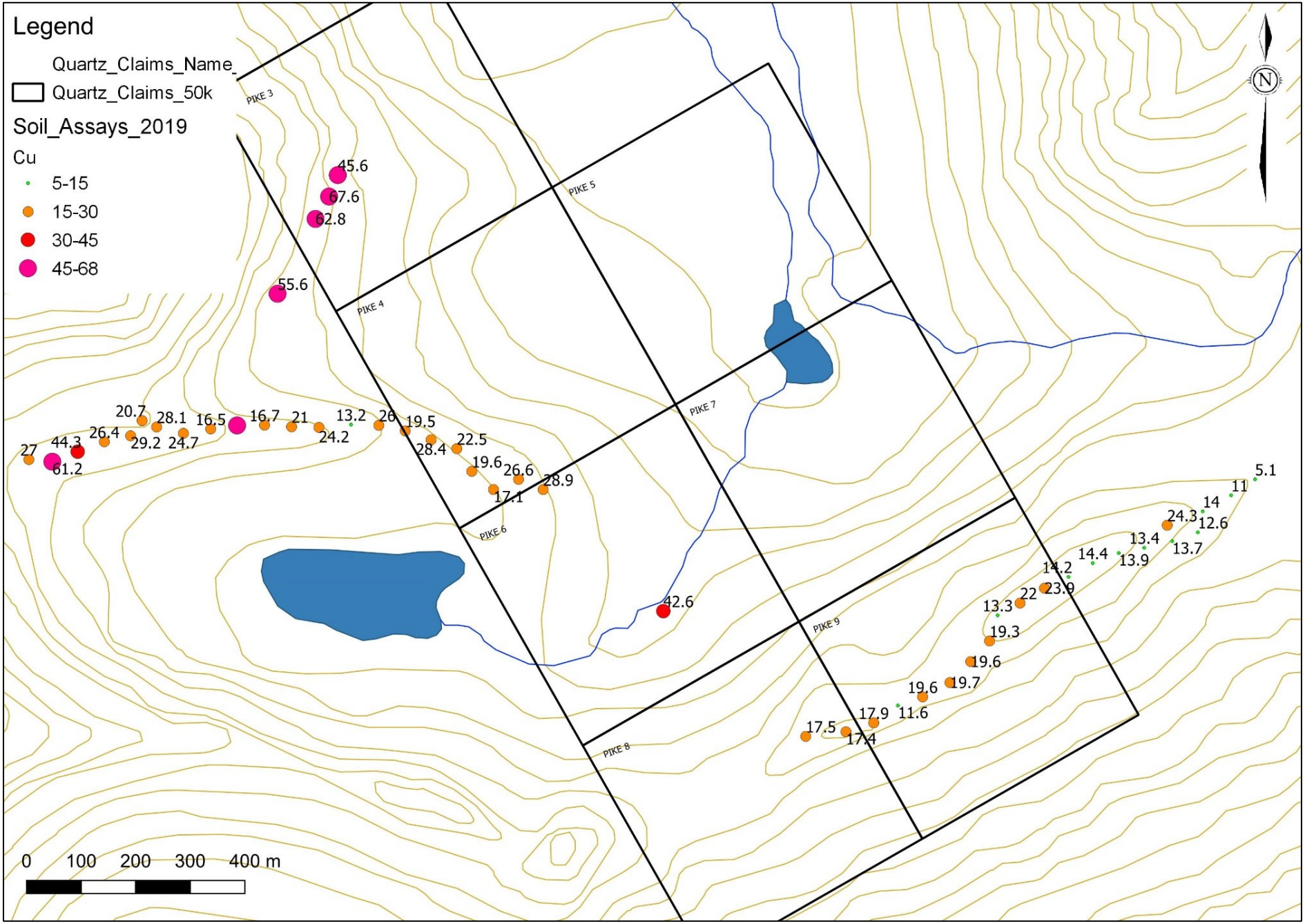

Figure 15: Pike Cu soil geochemistry (ppm)

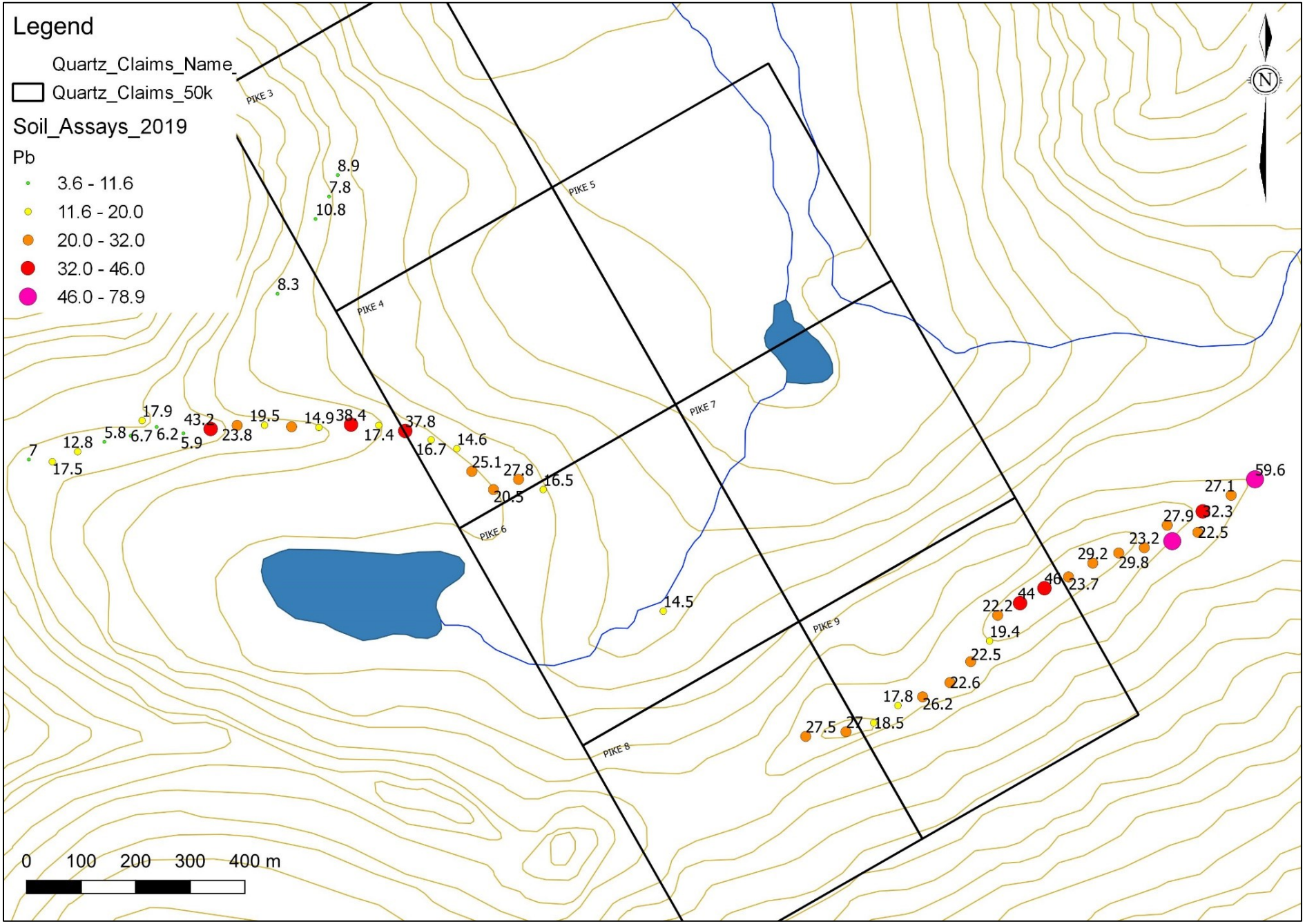

Figure 16: Pike Pb soil geochemistry (ppm)

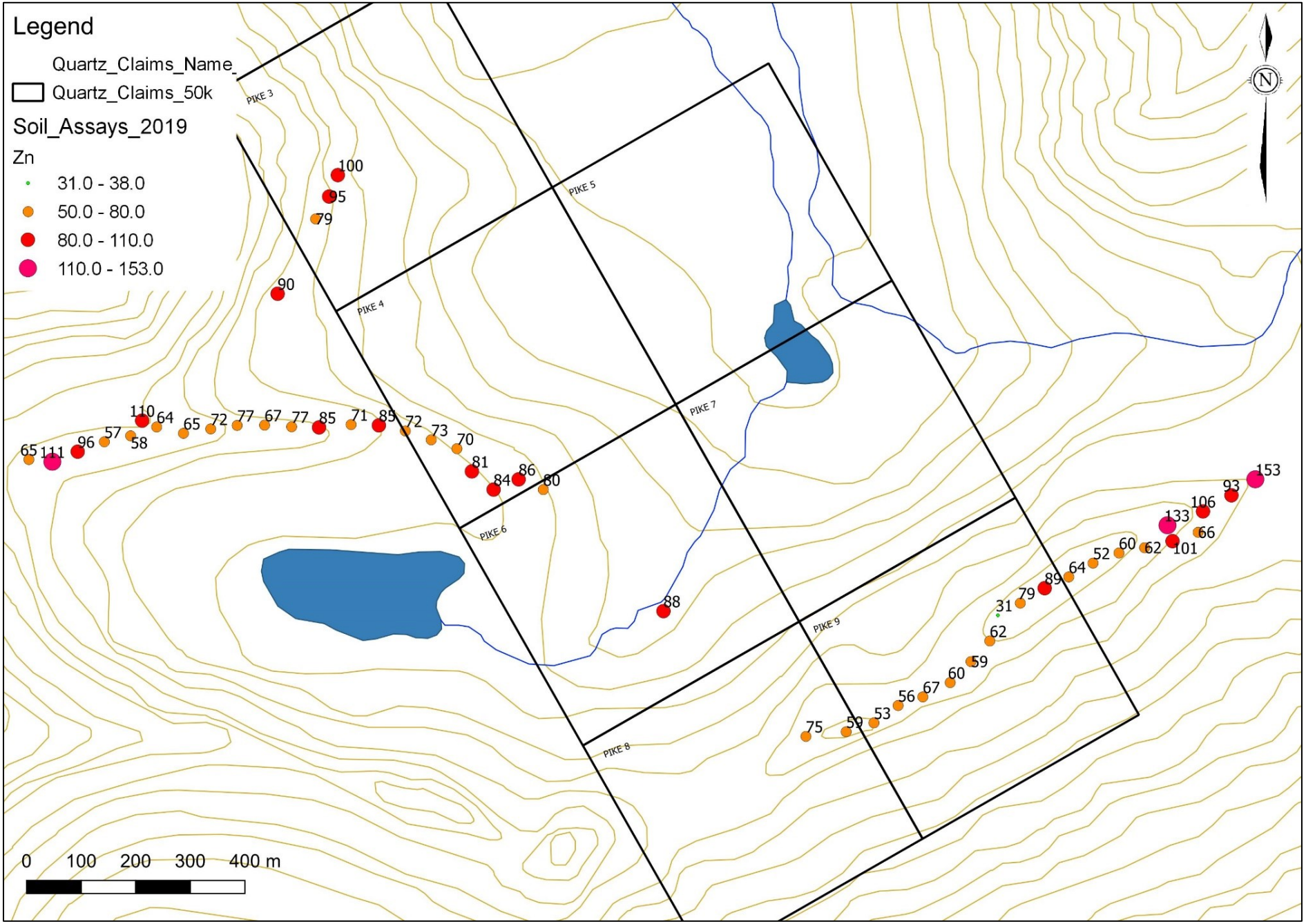

Figure 17: Pike Zn soil geochemistry (ppm)

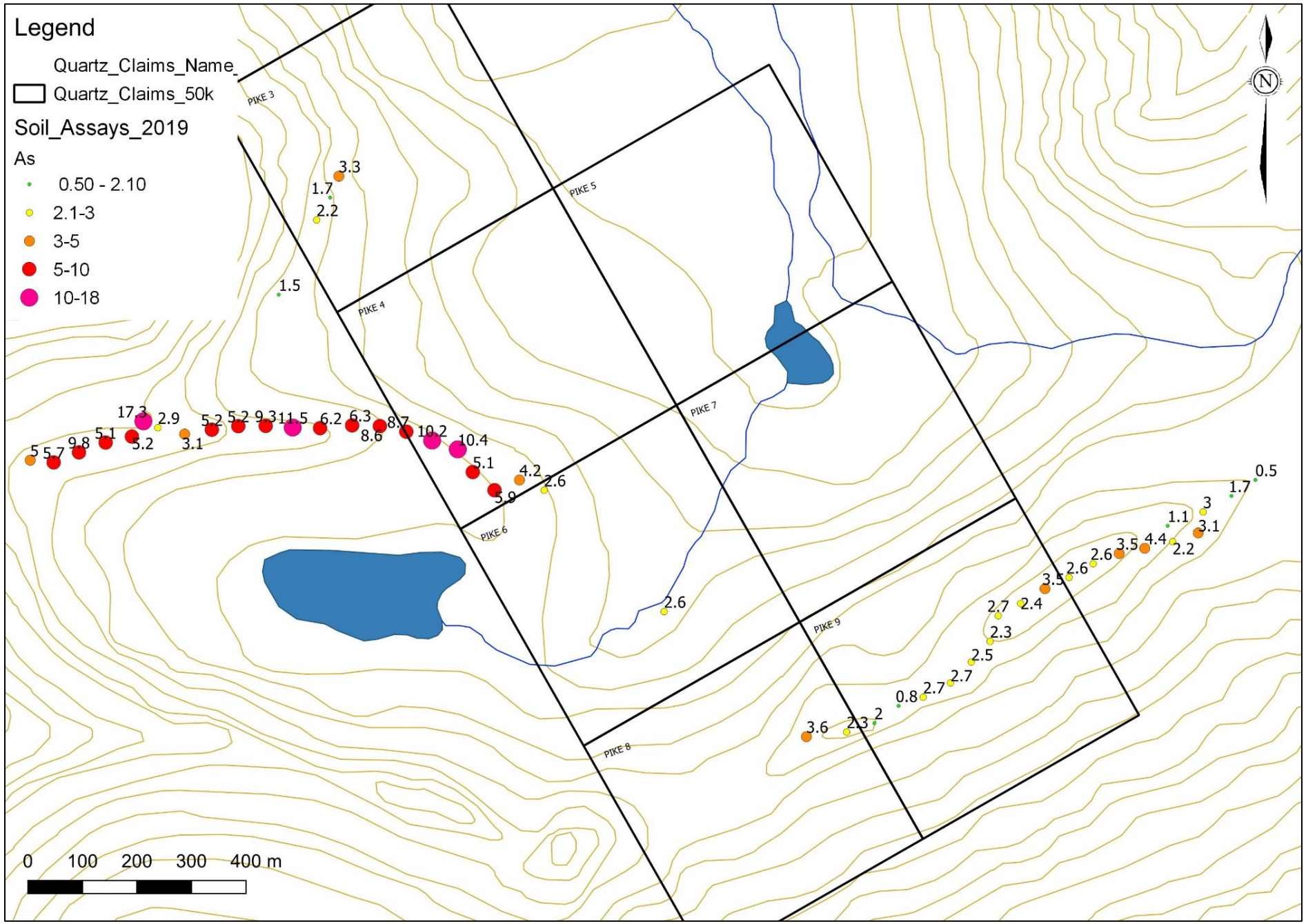

Figure 18: Pike As soil geochemistry (ppm)

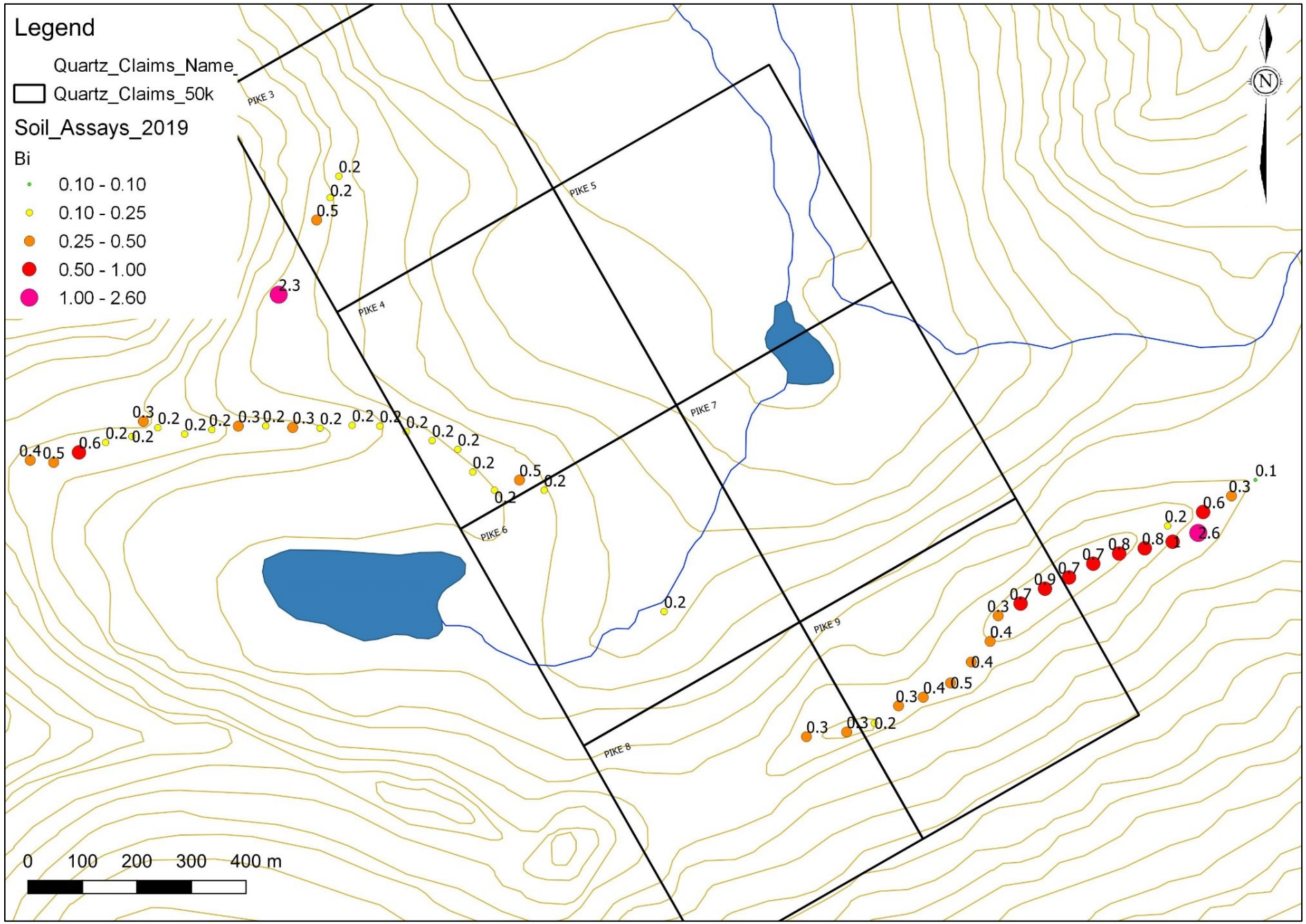

Figure 19: Pike Bi soil geochemistry (ppm)

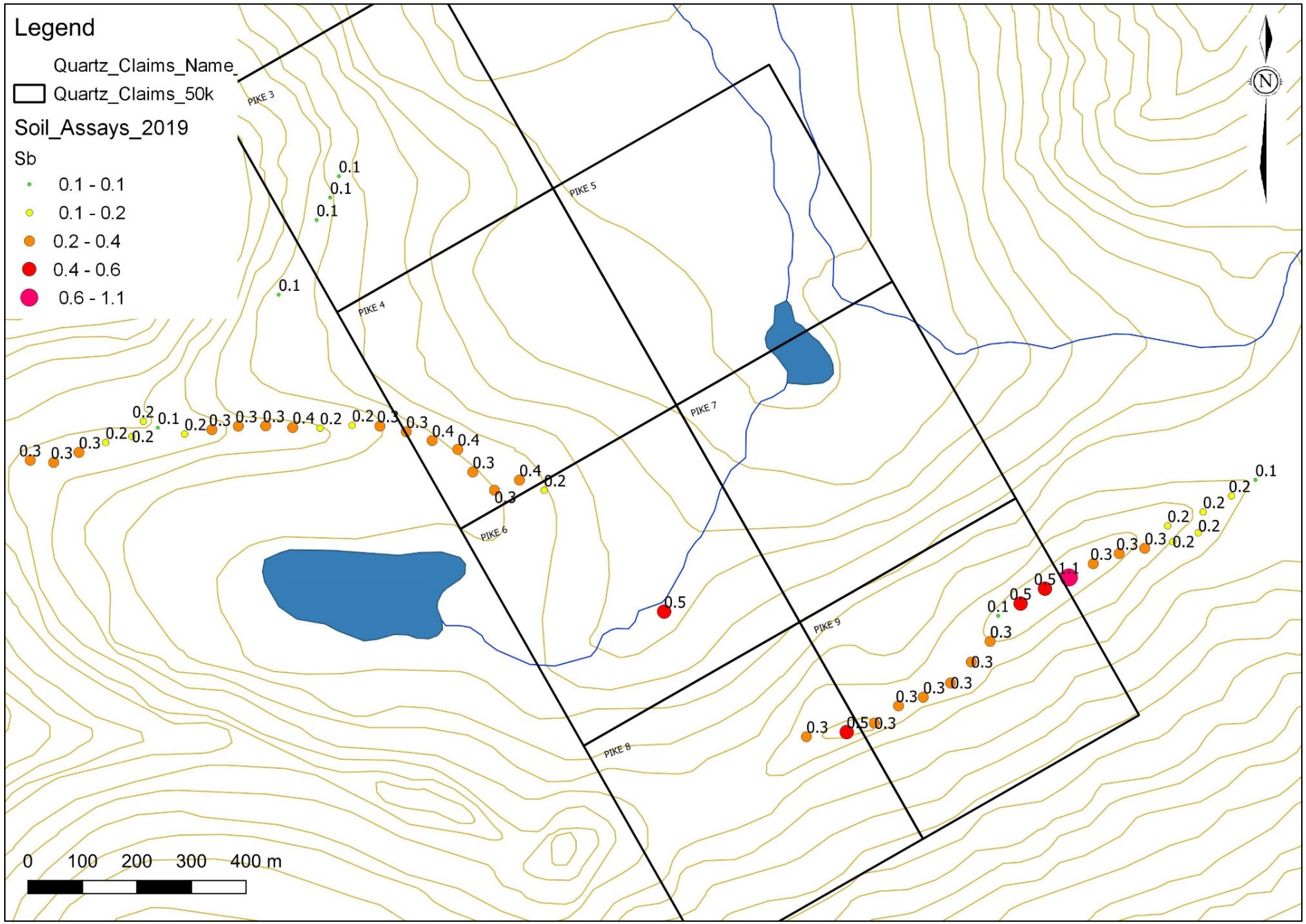

Figure 20: Pike Sb soil geochemistry (ppm)

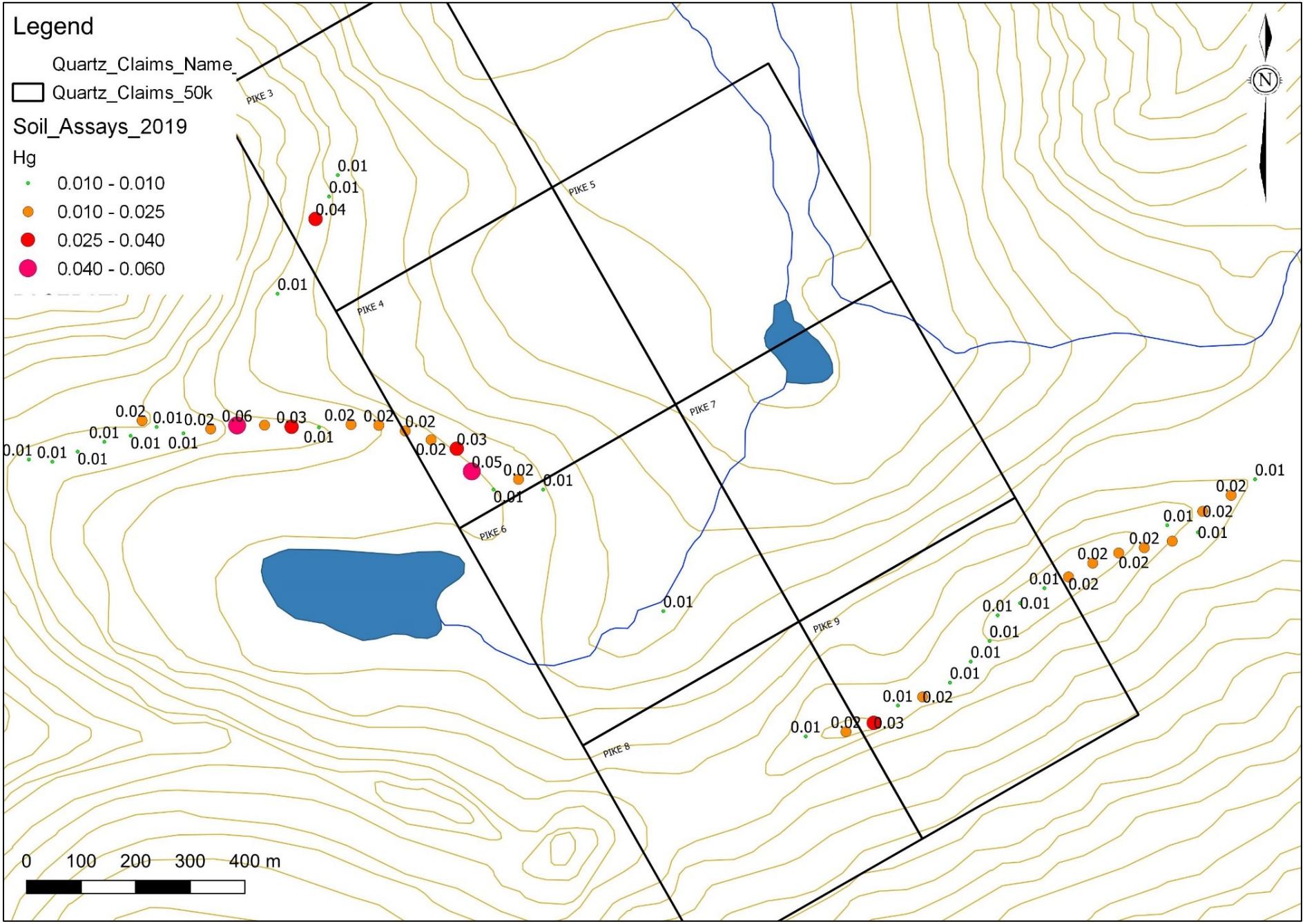

Figure 21: Pike Hg soil geochemistry (ppm)

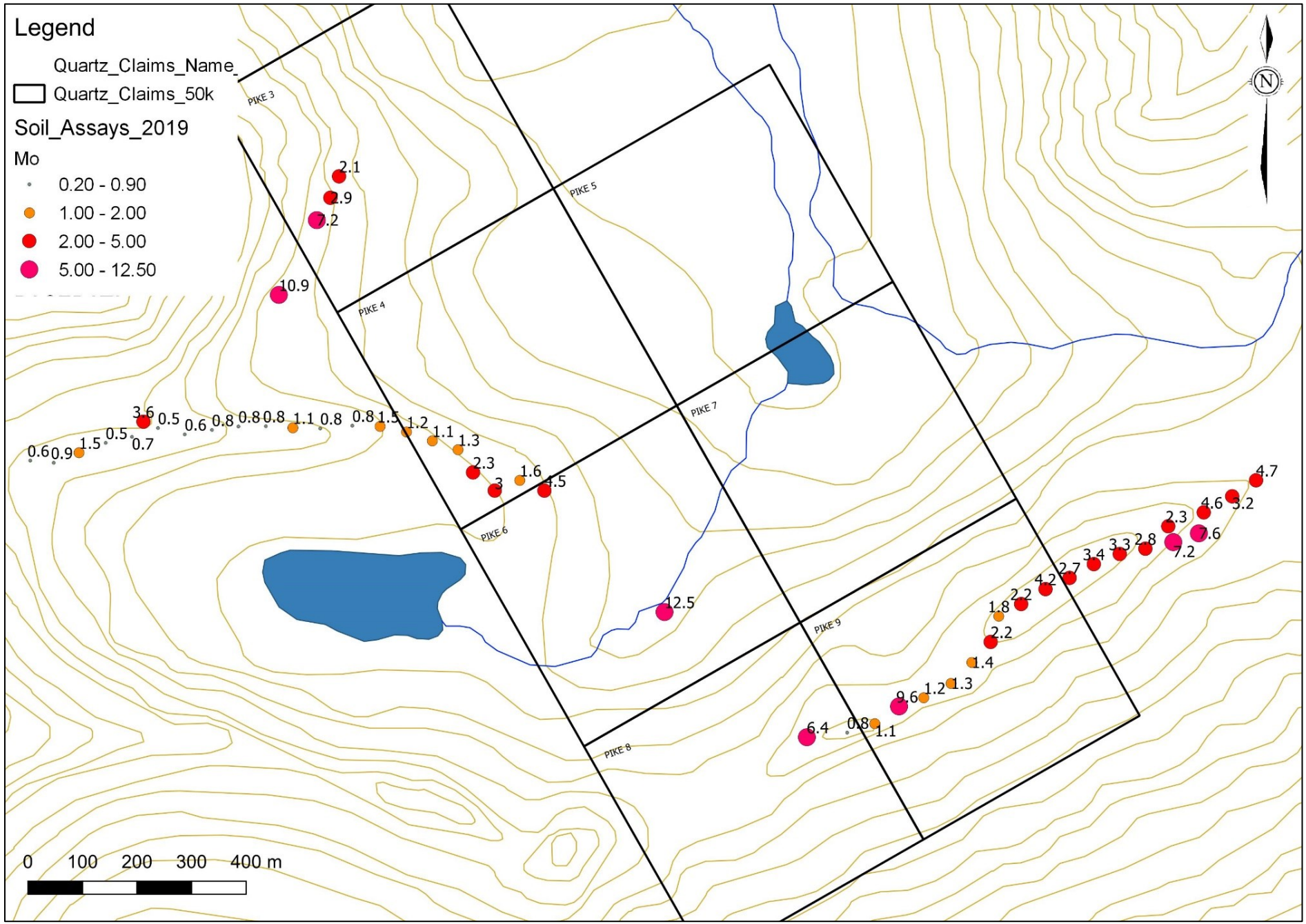

Figure 22: Pike Mo soil geochemistry (ppm)

## DISCUSSION AND CONCLUSIONS

Regionally, most of the tectonic and magmatic events have or may have been accompanied by respective metallogenic assemblages (Mihalynuk et al, 1997). In particular, Upper Triassic arc rocks of the Whitehorse Trough are lithologically and temporally equivalent to those hosting important copper-molybdenum-gold porphyry deposits in southern British Columbia. Early Jurassic intrusive rocks are also known to host copper-gold mineralization in the central-western Yukon (Minto and Williams Creek deposits; Tafti and Mortensen, 2004). Cretaceous plutons produce copper skarns where they cut Upper Triassic carbonates in the Whitehorse copper belt (Mihalynuk et al, 1997), as well as copper-gold porphyry mineralization. The southern end of this belt may extend into the Skukum and Bennett area. (Naas and Simpson, 2013)

Epithermal gold-silver mineralization related to volcanic rocks forms a distinct belt extending from north to south across southern Yukon; this incorporates the Mount Nansen cluster of epithermal gold deposits and occurrences related to 100 Ma Mount Nansen volcanics, the Laforma epithermal gold deposit related to the Carmacks Group volcanics (75 Ma), and finally the Mt. Skukum and Bennett Lake areas related to Tertiary volcanic rocks (55 Ma). The emplacement of some of these volcanic rocks are responsible for both epithermal and related copper-porphyry deposits (i.e., the Laforma gold veins and the Casino copper molybdenum-gold deposit), suggesting the respective epithermal-porphyry transitions (Naas, 2007).

At the Warden property, historical sampling of vein material assayed up to 19.67 g/t Au, 378g/t Ag, 3.98% Pb, and 1.47% Cu (Wilkins and MacKinnon, 1988).

The Pike property covers copper, silver, gold, and molybdenum mineralization over a 2500 by 400 m area. Multiple vein-hosted showings have been discovered on the property, assaying up to 456 ppb Au, 143 g/t Ag, 7.49 % Cu, and 0.594% Mo.

Mineralization at the Warden and Pike properties could be related to the ring dyke developed due to caldera collapse of the Bennett Lake Subsidence complex. Numerous northeast-trending, Eocene aged, compositionally diverse dykes on the property could also contribute to mineralization. One large outcrop of sheared rock, located beneath the 391 ppb gold-in-soil anomaly has been observed on the property, but needs follow-up work to determine its mineral potential (Figure 23)

The polymetallic, vein-hosted signature observed at the Warden and Pike properties is comparable to the Skukum Creek deposit located 10 km to the north. In the Skukum Creek area, zones of mineralization are hosted primarily by northeast-trending faults. The Rainbow and Kuhn zones occur along intermixed andesite and rhyolite dykes, monolithic and polylithic phreatomagmatic breccias, semi-brittle shear zones and quartz-sulphide veins within Mt. McNeil granodiorite. Within the Rainbow and Kuhn Zones, mineralization occurs in quartz-sulphide veins that are intimately associated with an anastomosing network of shear zones that cross and/or are developed along dyke contacts (Figure 24; Naas and Simpson, 2013).

Sulphide mineralization occurs primarily as pyrite, arsenopyrite, galena, sphalerite, and chalcopyrite. There is commonly an early stage of pyrite-arsenopyrite without associated

precious metals. Gold at Skukum Creek occurs mostly as electrum and minor to trace native gold and is directly related to a late stage of galena-stibnite mineralization that replaces earlier arsenopyrite-pyrite-sphalerite. Silver is hosted predominantly in freibergite, with trace to minor native silver and argentite with trace amounts occurring within galena, chalcopyrite, stibnite and sphalerite (Naas, 2007).

A proposed structural analogue is hypothesized for the southern portion of the Pike property, based on topographical interpretation and shearing in outcrop observed near the peak gold-in-soil anomaly (Figure 25).

Figure 23: Sheared outcrop on Pike 4 claim (view is to the south)

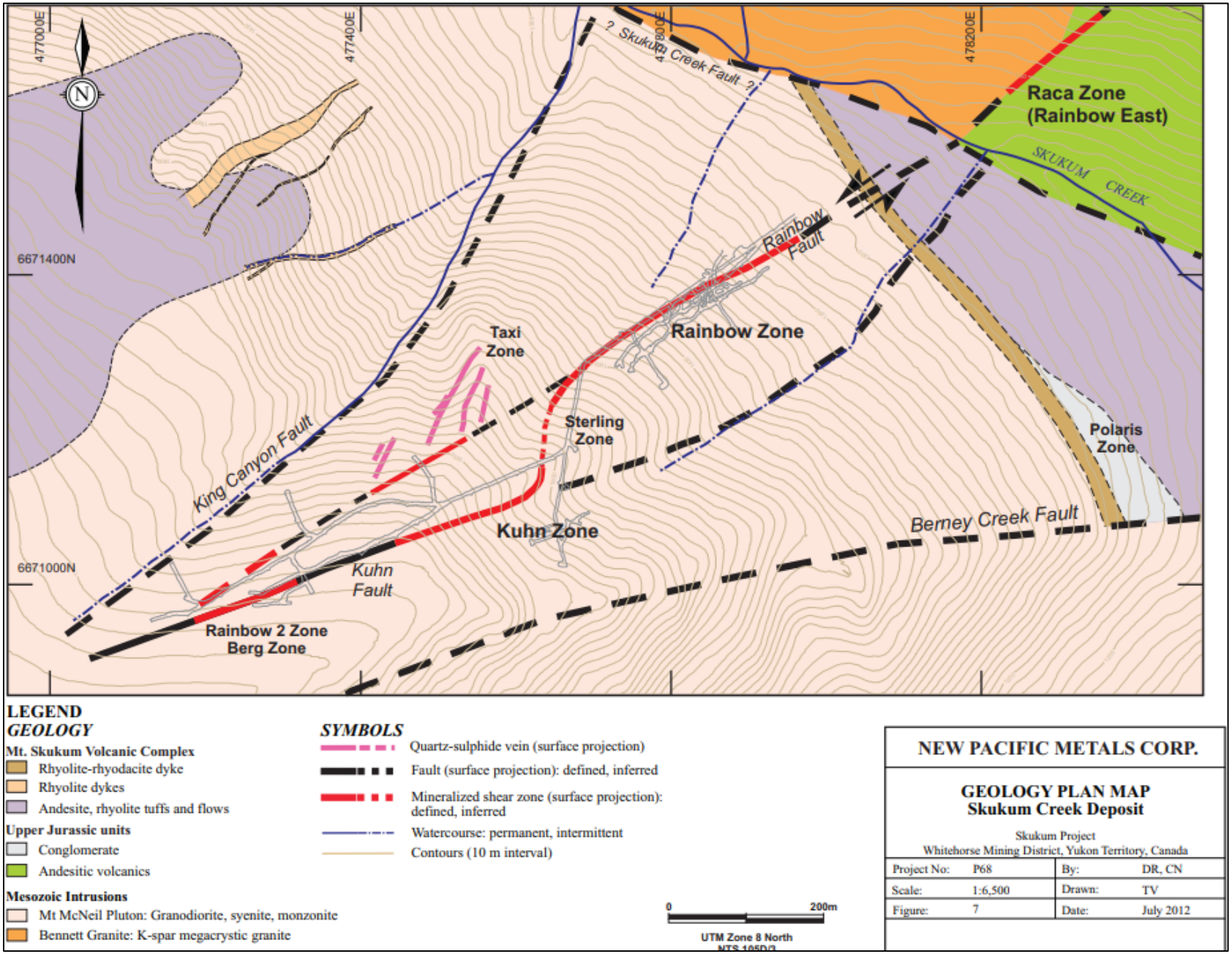


Figure 24: Geological map of the Skukum Creek zone, compiled from company maps (Naas and Simpson, 2013)

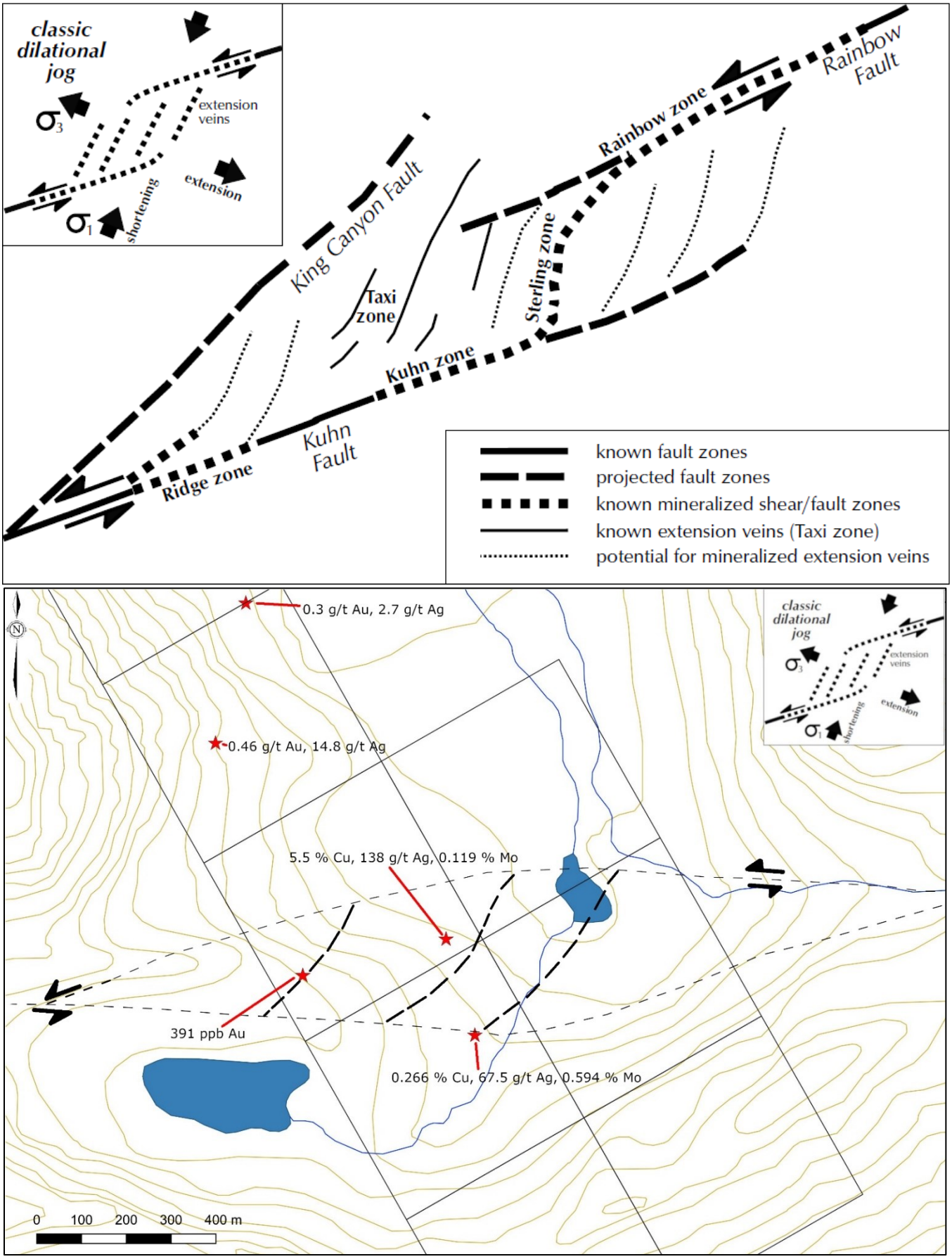


Figure 25: Structural Comparison between Skukum Creek and the Pike property (modified from Lang et al., 2003)

The Pike property is in a similar geological setting as Skukum Creek. It is hosted in the same granodiorite, and could have a similar structural setting. However, further investigation and fieldwork is required in order to fully test this hypothesis. Encouraging geochemical soil and rock sample results warrant follow-up work on both the Warden and Pike properties.

The following is recommended for future work on the Warden property:

- Claim staking from the bottom of the rock glacier cirque in order to cover historical showings from 1988.

- Relocate and re-sample the Repent, Squeaker, and Confession vein systems within the cirque.

The following is recommended for future work on the Pike property:

- Expansion of the claim block to the east and west along the contact of the rhyolite ring dyke, as well as in the valley bottom.

- Ground magnetometer geophysical survey to locate volcanic dykes (magnetic low) from the Mt. McNeil granodiorite (magnetic high), and to delineate potential structures.

- VLF-EM survey oriented southeast in order to highlight northeast trending structures and determine their strike and dip.

- Detailed mapping and follow-up of anomalous soil samples collected in 2019

- Till sampling in the valley bottom, with lines oriented north south

.

- Hand-trenching to expose bedrock above the 391 ppb Au soil sample.

- Detailed unmanned aerial vehicle (UAV) orthophotography of the property to assist in geological mapping and interpretation.

Respectfully submitted,

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

# REFERENCES


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# 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.

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

# APPENDIX II

# STATEMENT OF EXPENDITURES

## Statement of Expenditures

| | | |
|---|---|---|
| **Labour and Camp Costs** | | |
| Project Geologist | 9 days @ $500 per day | $4,500.00 |
| Geologist | 10 days @ $450 per day | $5,000.00 |
| Labourer | 1 day @ $275 per day | $275.00 |
| General Camp Costs | 9 days @ $100/day/person | $1,800.00 |
| **Equipment Rental** | | |
| 2000W Generator | 9 days @ $10 per day | $90.00 |
| **Helicopter Costs (AS350SD)** | | $2,391.90 |
| **Analytical Costs** | | **$**2,830.14 |
| **Miscellaneous Costs** | | $234.00 |
| **Report Writing** | **50 hours @ $37.00 per hour** | **$1,850.00** |
| **TOTAL EXPENDITURES** | | **$18,471.04** |

# APPENDIX III

# ROCK SAMPLE DESCRIPTIONS & PHOTOGRAPHS

| Sample ID | lith_1 | Comments |
|---|---|---|
| 1894751 | mKW | medium grained hornblende granodiorite with weak carbonate veining developed along fractures. One surface has well developed actinolite crsytals up to 3cm long |
| 1894752 | Erd | Eocene rhyolite dyke, finegrained with hematite along fracture surfaces |
| 1894753 | mKw | rusty gd with minor quartz veining along fracture. Vein hosts cm-sized subhedral pyrite up to 5% disseminated in rusty blebby clots. Groundmass is altered, minor chlorite after hbl |
| 1894754 | mKW | rusty gd with Py and minor Cp developed along frx surfaces; minor chloritization and ksp alteration along margins of mineralized frx |
| 1894755 | QV | milky white banded quartz vein with malachite staining on fracture surfaces |
| 1894756 | QV | qv with minor mal staining on frx surfaces |
| 1894757 | QV | qv from outcrop (mal stained vein 50 cm wide - boots showing) with blebby py alteration hosted in oxidized grungy pit |
| 1894758 | QV | grungy hematite and ox stained QV from boots showing - 50 cm wide QV |
| 1894759 | QV | malachite stained banded milky white QV |
| 1894760 | QV | sulfide rich (py p to 40%) rusty qv grab from outcrop) |
| 1894761 | QV | quartz carbonate vein 5 cm wide; euhedral quartz comb texture with carb infilling space and along vein margin; minor chl +- Epi alteration along margin of vein |
| 1894762 | QV | rusty pitted qv; 4 cm wide, with minor sulfide and weathered pits along vein margin. Quartz looks more transparent and glassy rather than milky here (possibly diff't set of veins from Mal-stained milky banded veins?) |
| 1894763 | mKW | altered GD with limonitic oxidized pits along qv coming up along fracture. No visible sulfide |
| 1894764 | mKW | altered gd; magnetic; with quartz veins with py +- Cp min |
| 1894765 | QV | milky fractured qv with no visible sulfides. Minor rusty staining on frx surfaces |
| 1894766 | QV | milky frx QV with minor rusty oxidized vugs; minor manganese staining on some frx |
| 1894767 | Jgd | altred rusty qv along frx in GD, with minor sulfide on frx surfaces |
| 1894768 | QV | quartz vein along frx in Gd, nie Py +- Cp alteration along frx surface |
| 1894769 | QV | 50+% Py +- Cp min along 5 cm wide qv hosted in Gd |
| 1894770 | mKW | 40 cm margin of 5 cm wide quartz vein (1894769) Py+- Cp alteration extends 40 cm on eithre side of the quartz vein |

| | | |
|---|---|---|
| 1894771 | mKW | rusty manganese stained qv in gd. No visible sulfide |
| 1894772 | Ebd | chlosritized basalt dyke with minor sulfide min; blebby disseminated. Amygdaloidal with carbonate filling (rare, <2%) |
| 1894773 | mKW | epidote and shlcorite fractures in granodiorite with minor qtz, Py +- Cp along fractures |
| 1894774 | QV | sulfide rich euhedral coarse grained quartz vein along gd with good (~10% py mineralization) within the quartz vein |
| 1894775 | QV | sulfide rich euhedral qtz vein with minor chl and Py along open spaces |
| 1894776 | QV | large 50 by 40 by 40 QV found in talus float with oxidized cubic pyrite vugs throughout, large piece of vein material. Some vugs have a sooty grey look to them |
| 1894777 | QV | large 50 by 40 by 40 QV found in talus float with oxidized cubic pyrite vugs throughout, large piece of vein material. Some vugs have a sooty grey look to them |
| 1894778 | QV | qv; fault hosted; with minor sulfide min throughout. Manganese stained |
| 1894779 | QV | rusyt QV taken from other side of valley in talus slope; possible extension of EW trending veins across entire valley |
| 1894780 | mKW | minor sulfide min along frx in gd |
| 1894781 | QV | heavily fractured quartz vein with minor PY min along frx; |
| 1894782 | mKW | strongly chloritized and silicified gd with disseminated Py throughout (~5%) |
| 1894783 | QVBX | quartz vein breccia with chlorite carbonate alteration along weathered surface. Patchy blebs of intense SER +- clay altered blebs with minor dissem PY |
| 1894784 | QV | rusty qv with minor pyrite alteration; blebby 3% |
| 1894785 | mKW | rusty gd with vuggy oxidized qtz frx; heavily altered |
| 1894786 | QV | milky banded qv with greyish-white alteration on weaathered surface. Minor frx, no visible sulfide |
| 1894787 | QV | banded quartz vein from outcrop (40-50cm wide; with dissem Py and strange greenish fine grained alteration mineral (scorodite?)) lots of macro photos here |
| 1894788 | QV | duplicate sample of 1894787 |
| 1894789 | QV | composite chip samples of 40 cm wide vein material |
| 1894790 | QV | qtz carb vein with chlorite and epidote staining along margin; no visible sulfide |
| 1894791 | QV | sulfide rich grab sample, consists of 20+ % PY =- CP =- Pyh |
| 1894792 | QV | hematite and limonite stained vuggy qv grab from malachite vein showing |
| 1894793 | QV | qv grab from malachite vein o/c; rusty limonite on frx surfaces |

| | | |
|---|---|---|
| 1894794 | Erd | rhyolite dyke grab from creek in S-end of property; minor dissem PY throughout |
| 1894795 | Erd | manganese stained rhyolite dyke grab from creek near QFP fault |
| 1894796 | QV | banded qv with minor frx and no visible sulfides |
| 1894797 | QVBX | qtz vein breccia with minor limonite in openspace fillings with minor euhedral qtz |
| 1894798 | Ebd | quartz developed in feldspar rich andesitic to basalt dyke with minor sulfide min |
| 1894799 | QV | rusty quartz vein with flaky molybdenite up to 1 cm by 1 cm. Moly flakes comprise up to 3% of the sample. Oxidized vein |


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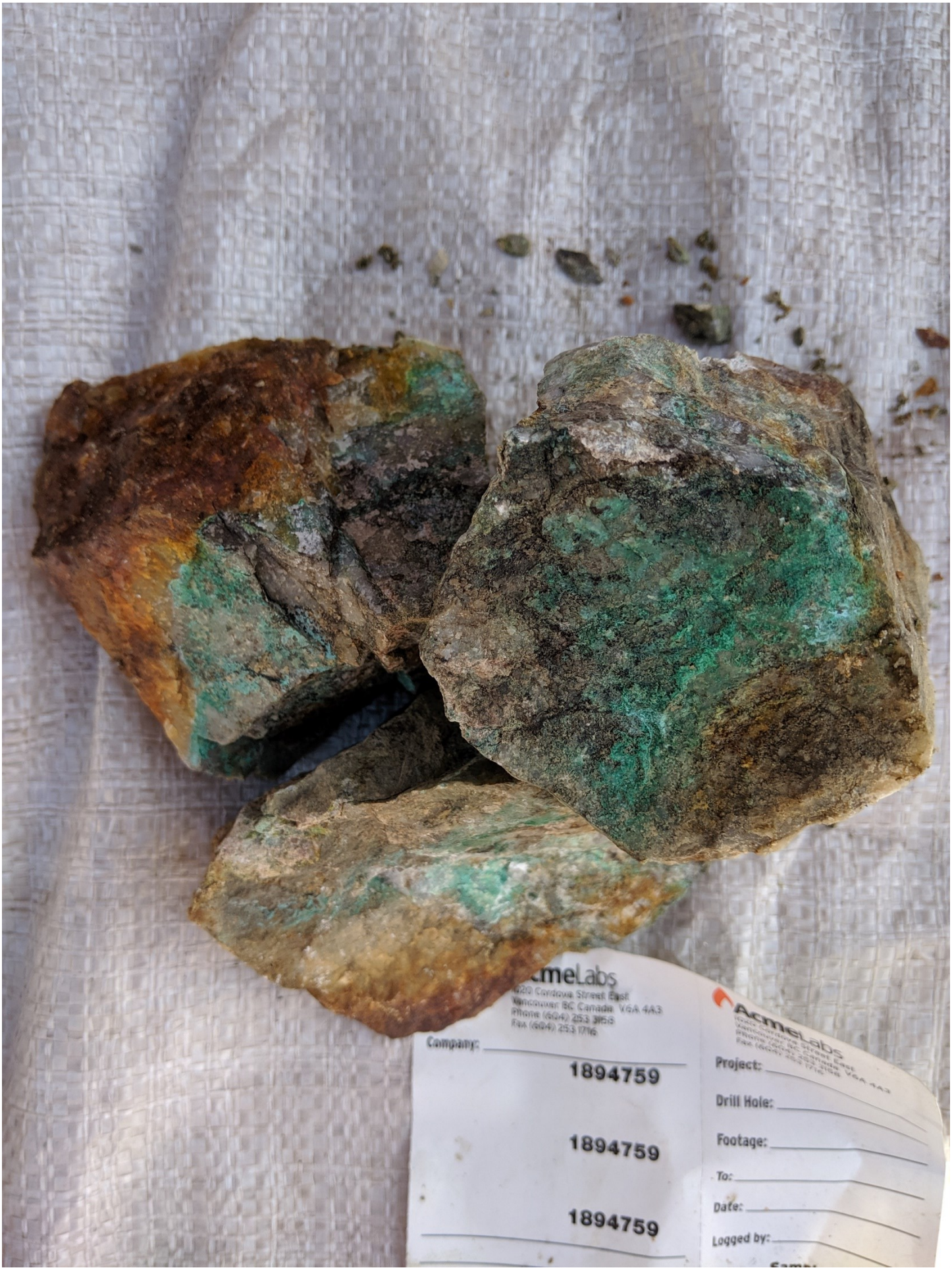
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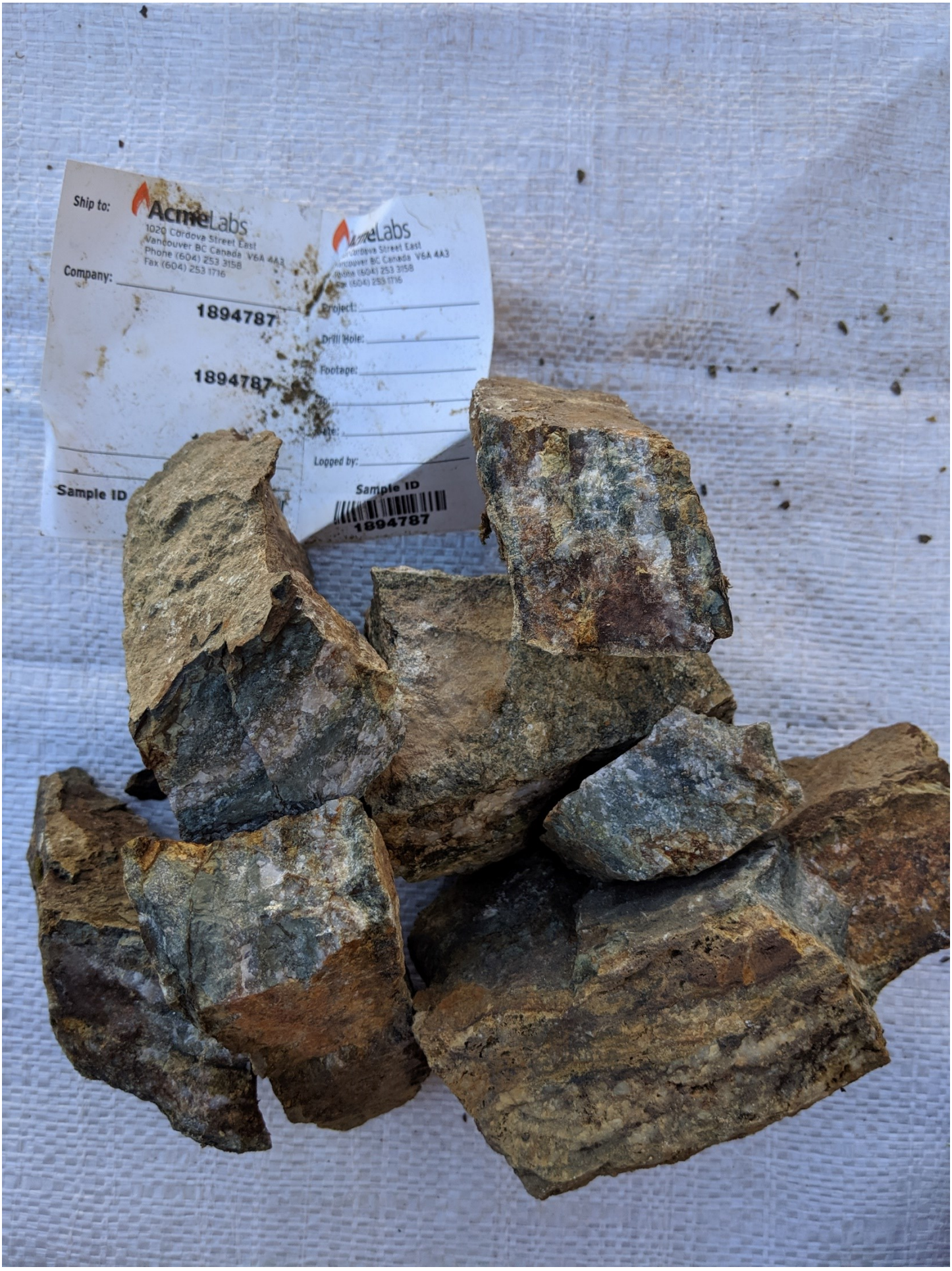
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# APPENDIX IV

# SAMPLE HANDLING AND ANALYTICAL PROCEDURES

# SAMPLE HANDLING AND ANALYTICAL PROCEDURES

All rock and soil samples collected during the 2019 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 2019 were marked with orange 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.

## Soil Geochemical Samples

All soil geochemical samples collected on the property were located by means of handheld GPS units. Sample locations were marked with orange flagging tape and labelled with sample number. Soil samples were placed into individual pre-numbered kraft paper bags.

The soil samples were sent to BV, where they were dried and screened to minus 180 microns. A 50 g split of the screened fraction was dissolved in aqua regia and analyzed by AQ201.

# APPENDIX V

# CERTIFICATES OF ANALYSIS

BUREAU VERITAS MINERAL LABORATORIES Canada

www.bureauveritas.com/um

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
Receiving Lab: Canada-Whitehorse
Received: October 16, 2019
Report Date: November 08, 2019
Page: 1 of 3

# CERTIFICATE OF ANALYSIS WHI19000681.1

## CLIENT JOB INFORMATION

Project: PIKE
Shipment ID:
P.O. Number
Number of Samples: 48

## SAMPLE DISPOSAL

PICKUP-PLP Client to Pickup Pulps
STOR-RJT-SOIL Store Soil Reject - RJSV Charges Apply

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

## SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

| Procedure Code | Number of Samples | Code Description | Test Wgt (g) | Report Status | Lab |
|---|---|---|---|---|---|
| DY060 | 48 | Dry at 60C | | | WHI |
| SS80 | 48 | Dry at 60C sieve 100g to -80 mesh | | | WHI |
| AQ201 | 48 | 1:1:1 Aqua Regia digestion ICP-MS analysis | 15 | Completed | VAN |
| SHP01 | 48 | Per sample shipping charges for branch shipments | | | VAN |
| SLBHP | 0 | Sort, label and box pulps | | | WHI |
| SVRJT | 48 | Save all or part of Soil Reject | | | WHI |

## ADDITIONAL COMMENTS

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

CC:

KERRY JAY
Geochem Project Specialist

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.
All results are considered the confidential property of the client. Bureau Veritas assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
"*" asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

BUREAU VERITAS MINERAL LABORATORIES Canada

www.bureauveritas.com/um

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, 2019



# CERTIFICATE OF ANALYSIS WHI19000681.1

| | | Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Analyte | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La |
| | | Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % | ppm |
| | | MDL | 0.1 | 0.1 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.5 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 2 | 0.01 | 0.001 | 1 |
| 1894801 | Soil | | 4.7 | 5.1 | 59.6 | 153 | 0.2 | 3.6 | 2.5 | 2021 | 3.45 | <0.5 | 8.6 | 25.6 | 20 | 0.4 | 0.1 | 0.1 | 8 | 0.35 | 0.030 | 71 |
| 1894802 | Soil | | 3.2 | 11.0 | 27.1 | 93 | 0.1 | 6.6 | 5.3 | 918 | 2.23 | 1.7 | 8.0 | 20.5 | 14 | 0.2 | 0.2 | 0.3 | 23 | 0.22 | 0.060 | 41 |
| 1894803 | Soil | | 4.6 | 14.0 | 32.3 | 106 | 0.3 | 10.4 | 6.1 | 772 | 2.53 | 3.0 | 6.9 | 24.1 | 19 | 0.2 | 0.2 | 0.6 | 31 | 0.40 | 0.075 | 60 |
| 1894804 | Soil | | 7.6 | 12.6 | 22.5 | 66 | <0.1 | 11.7 | 7.4 | 963 | 2.34 | 3.1 | 3.9 | 30.0 | 14 | 0.3 | 0.2 | 2.6 | 38 | 0.23 | 0.089 | 37 |
| 1894805 | Soil | | 7.2 | 13.7 | 78.9 | 101 | <0.1 | 6.4 | 6.3 | 941 | 2.22 | 2.2 | 1.9 | 17.4 | 14 | 0.3 | 0.2 | 1.0 | 28 | 0.14 | 0.047 | 28 |
| 1894806 | Soil | | 2.3 | 24.3 | 27.9 | 133 | 0.2 | 55.7 | 24.2 | 1406 | 4.29 | 1.1 | <0.5 | 13.0 | 48 | 0.6 | 0.2 | 0.2 | 58 | 1.83 | 0.197 | 36 |
| 1894807 | Soil | | 2.8 | 13.4 | 23.2 | 62 | 0.2 | 12.3 | 6.3 | 516 | 1.97 | 4.4 | 3.9 | 10.6 | 17 | 0.2 | 0.3 | 0.8 | 34 | 0.24 | 0.092 | 31 |
| 1894808 | Soil | | 3.3 | 13.9 | 29.8 | 60 | 0.2 | 8.7 | 6.1 | 571 | 2.14 | 3.5 | 1.5 | 5.6 | 17 | 0.3 | 0.3 | 0.8 | 35 | 0.17 | 0.064 | 24 |
| 1894809 | Soil | | 3.4 | 14.4 | 29.2 | 52 | 0.2 | 10.3 | 6.3 | 478 | 2.09 | 2.6 | 2.9 | 4.7 | 17 | 0.4 | 0.3 | 0.7 | 35 | 0.17 | 0.060 | 22 |
| 1894810 | Soil | | 2.7 | 14.2 | 23.7 | 64 | 0.2 | 8.2 | 8.9 | 759 | 2.64 | 2.6 | 1.2 | 3.2 | 18 | 0.2 | 1.1 | 0.7 | 48 | 0.25 | 0.099 | 27 |
| 1894811 | Soil | | 4.2 | 23.9 | 46.0 | 89 | 0.2 | 12.8 | 8.8 | 666 | 2.39 | 3.5 | 5.9 | 12.8 | 29 | 0.3 | 0.5 | 0.9 | 49 | 0.29 | 0.089 | 26 |
| 1894812 | Soil | | 2.2 | 22.0 | 44.0 | 79 | 0.1 | 14.2 | 8.3 | 659 | 2.19 | 2.4 | 1.0 | 12.5 | 25 | 0.4 | 0.5 | 0.7 | 46 | 0.28 | 0.085 | 26 |
| 1894813 | Soil | | 1.8 | 13.3 | 22.2 | 31 | 0.2 | 3.7 | 3.0 | 375 | 1.43 | 2.7 | 1.8 | 47.6 | 18 | 0.2 | 0.1 | 0.3 | 8 | 0.27 | 0.042 | 83 |
| 1894814 | Soil | | 2.2 | 19.3 | 19.4 | 62 | 0.1 | 12.0 | 8.7 | 654 | 2.37 | 2.3 | <0.5 | 9.9 | 26 | 0.2 | 0.3 | 0.4 | 50 | 0.37 | 0.082 | 28 |
| 1894815 | Soil | | 1.4 | 19.6 | 22.5 | 59 | 0.1 | 9.9 | 7.3 | 636 | 2.04 | 2.5 | <0.5 | 6.4 | 30 | 0.4 | 0.3 | 0.4 | 41 | 0.29 | 0.042 | 27 |
| 1894816 | Soil | | 1.3 | 19.7 | 22.6 | 60 | <0.1 | 9.5 | 7.9 | 673 | 2.28 | 2.7 | 2.5 | 13.4 | 30 | 0.3 | 0.3 | 0.5 | 48 | 0.38 | 0.074 | 31 |
| 1894817 | Soil | | 1.2 | 19.6 | 26.2 | 67 | 0.1 | 11.7 | 9.9 | 645 | 2.31 | 2.7 | 0.5 | 11.1 | 41 | 0.4 | 0.3 | 0.4 | 54 | 0.49 | 0.101 | 24 |
| 1894818 | Soil | | 9.6 | 11.6 | 17.8 | 56 | 0.2 | 3.8 | 7.9 | 458 | 2.98 | 0.8 | 0.8 | 16.1 | 26 | 0.3 | 0.3 | 0.3 | 20 | 0.39 | 0.082 | 52 |
| 1894819 | Soil | | 1.1 | 17.9 | 18.5 | 53 | <0.1 | 9.7 | 8.3 | 582 | 2.16 | 2.0 | 2.1 | 9.4 | 35 | 0.2 | 0.3 | 0.2 | 49 | 0.39 | 0.066 | 17 |
| 1894820 | Soil | | 0.8 | 17.4 | 27.0 | 59 | 0.2 | 9.1 | 8.8 | 710 | 2.24 | 2.3 | 1.4 | 12.4 | 42 | 0.3 | 0.5 | 0.3 | 53 | 0.47 | 0.057 | 23 |
| 1894821 | Soil | | 6.4 | 17.5 | 27.5 | 75 | 0.3 | 6.1 | 8.1 | 1195 | 2.90 | 3.6 | 1.4 | 24.9 | 24 | 0.3 | 0.3 | 0.3 | 35 | 0.29 | 0.090 | 65 |
| 1894844 | Soil | | 2.1 | 45.6 | 8.9 | 100 | 0.2 | 13.2 | 25.3 | 1320 | 5.34 | 3.3 | 24.6 | 7.3 | 69 | <0.1 | <0.1 | 0.2 | 145 | 0.82 | 0.171 | 13 |
| 1894845 | Soil | | 2.9 | 67.6 | 7.8 | 95 | 0.3 | 14.9 | 26.9 | 1455 | 4.66 | 1.7 | 38.1 | 7.1 | 117 | 0.4 | <0.1 | 0.2 | 130 | 0.98 | 0.170 | 12 |
| 1894846 | Soil | | 7.2 | 62.8 | 10.8 | 79 | 0.3 | 21.2 | 24.2 | 1089 | 3.79 | 2.2 | 4.7 | 3.9 | 82 | 0.2 | 0.1 | 0.5 | 88 | 0.89 | 0.125 | 16 |
| 1894847 | Soil | | 10.9 | 55.6 | 8.3 | 90 | 0.4 | 17.8 | 21.9 | 1272 | 4.28 | 1.5 | 28.7 | 7.5 | 97 | 0.2 | <0.1 | 2.3 | 107 | 0.93 | 0.176 | 21 |
| 1894848 | Soil | | 0.6 | 27.0 | 7.0 | 65 | <0.1 | 17.8 | 12.0 | 498 | 2.96 | 5.0 | 1.0 | 11.4 | 36 | 0.1 | 0.3 | 0.4 | 77 | 0.61 | 0.153 | 22 |
| 1894849 | Soil | | 0.9 | 61.2 | 17.5 | 111 | 0.3 | 25.0 | 17.2 | 1163 | 3.60 | 5.7 | 5.7 | 12.3 | 79 | 0.2 | 0.3 | 0.5 | 90 | 0.88 | 0.120 | 30 |
| 1894850 | Soil | | 1.5 | 44.3 | 12.8 | 96 | 0.1 | 39.2 | 17.4 | 789 | 3.55 | 9.8 | 1.8 | 10.1 | 37 | 0.2 | 0.3 | 0.6 | 93 | 0.43 | 0.115 | 18 |
| 1894869 | Soil | | 0.5 | 26.4 | 5.8 | 57 | <0.1 | 23.3 | 12.7 | 497 | 2.92 | 5.1 | 2.7 | 7.3 | 32 | 0.2 | 0.2 | 0.2 | 72 | 0.47 | 0.124 | 15 |
| 1894870 | Soil | | 0.7 | 29.2 | 6.7 | 58 | <0.1 | 25.5 | 13.2 | 480 | 2.91 | 5.2 | <0.5 | 6.6 | 32 | <0.1 | 0.2 | 0.2 | 66 | 0.39 | 0.117 | 15 |

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

Project: PIKE
Report Date: November 08, 2019



# CERTIFICATE OF ANALYSIS WHI19000681.1

| | | Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Analyte | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se | Te |
| | | Unit | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm |
| | | MDL | 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 |
| 1894801 | Soil | | 5 | 0.16 | 274 | 0.003 | 2 | 1.13 | 0.009 | 0.05 | <0.1 | <0.01 | 3.4 | <0.1 | <0.05 | 4 | 0.6 | <0.2 |
| 1894802 | Soil | | 11 | 0.39 | 158 | 0.016 | 2 | 1.05 | 0.010 | 0.07 | <0.1 | 0.02 | 2.7 | <0.1 | <0.05 | 4 | <0.5 | <0.2 |
| 1894803 | Soil | | 15 | 0.52 | 295 | 0.013 | 2 | 1.33 | 0.011 | 0.10 | 0.2 | 0.02 | 4.0 | <0.1 | <0.05 | 5 | 0.5 | <0.2 |
| 1894804 | Soil | | 17 | 0.58 | 104 | 0.026 | <1 | 1.43 | 0.013 | 0.06 | 0.6 | <0.01 | 4.0 | <0.1 | <0.05 | 5 | <0.5 | <0.2 |
| 1894805 | Soil | | 11 | 0.39 | 205 | 0.009 | <1 | 1.65 | 0.009 | 0.07 | 0.2 | 0.02 | 2.5 | 0.1 | <0.05 | 4 | <0.5 | <0.2 |
| 1894806 | Soil | | 53 | 0.35 | 238 | 0.005 | <1 | 1.44 | 0.018 | 0.08 | <0.1 | <0.01 | 12.2 | <0.1 | <0.05 | 4 | <0.5 | <0.2 |
| 1894807 | Soil | | 21 | 0.46 | 66 | 0.024 | <1 | 1.44 | 0.010 | 0.04 | 0.2 | 0.02 | 2.2 | <0.1 | <0.05 | 4 | <0.5 | <0.2 |
| 1894808 | Soil | | 16 | 0.47 | 82 | 0.013 | <1 | 1.44 | 0.009 | 0.04 | 0.2 | 0.02 | 1.7 | <0.1 | <0.05 | 5 | <0.5 | <0.2 |
| 1894809 | Soil | | 16 | 0.52 | 55 | 0.019 | <1 | 1.45 | 0.009 | 0.04 | 0.2 | 0.02 | 2.0 | <0.1 | <0.05 | 4 | <0.5 | <0.2 |
| 1894810 | Soil | | 13 | 0.48 | 65 | 0.008 | <1 | 1.54 | 0.007 | 0.07 | 0.2 | 0.02 | 2.1 | <0.1 | <0.05 | 5 | 0.5 | <0.2 |
| 1894811 | Soil | | 20 | 0.62 | 52 | 0.030 | <1 | 1.71 | 0.008 | 0.05 | 0.3 | 0.01 | 3.6 | <0.1 | <0.05 | 6 | <0.5 | <0.2 |
| 1894812 | Soil | | 22 | 0.67 | 53 | 0.029 | <1 | 1.62 | 0.009 | 0.04 | 0.2 | 0.01 | 2.8 | <0.1 | <0.05 | 5 | <0.5 | <0.2 |
| 1894813 | Soil | | 3 | 0.12 | 844 | 0.001 | <1 | 0.60 | 0.006 | 0.10 | 0.2 | <0.01 | 1.3 | <0.1 | <0.05 | 1 | <0.5 | <0.2 |
| 1894814 | Soil | | 20 | 0.74 | 79 | 0.039 | <1 | 1.58 | 0.010 | 0.04 | 0.2 | 0.01 | 3.3 | <0.1 | <0.05 | 5 | 0.5 | <0.2 |
| 1894815 | Soil | | 15 | 0.63 | 75 | 0.030 | <1 | 1.57 | 0.008 | 0.03 | 0.2 | <0.01 | 2.3 | <0.1 | <0.05 | 5 | <0.5 | <0.2 |
| 1894816 | Soil | | 17 | 0.69 | 107 | 0.045 | <1 | 1.68 | 0.010 | 0.04 | 0.2 | <0.01 | 3.1 | <0.1 | <0.05 | 6 | <0.5 | <0.2 |
| 1894817 | Soil | | 19 | 0.89 | 54 | 0.086 | <1 | 2.03 | 0.011 | 0.06 | 0.4 | 0.02 | 3.5 | <0.1 | <0.05 | 6 | <0.5 | <0.2 |
| 1894818 | Soil | | 6 | 0.35 | 174 | 0.006 | <1 | 1.35 | 0.005 | 0.10 | 0.3 | 0.01 | 2.2 | <0.1 | <0.05 | 3 | <0.5 | <0.2 |
| 1894819 | Soil | | 16 | 0.83 | 47 | 0.060 | 1 | 1.70 | 0.012 | 0.05 | 0.4 | 0.03 | 2.9 | <0.1 | <0.05 | 6 | 0.5 | <0.2 |
| 1894820 | Soil | | 16 | 0.86 | 94 | 0.051 | <1 | 1.91 | 0.011 | 0.05 | 0.3 | 0.02 | 3.5 | <0.1 | <0.05 | 6 | <0.5 | <0.2 |
| 1894821 | Soil | | 8 | 0.42 | 130 | 0.016 | <1 | 1.24 | 0.008 | 0.11 | 0.5 | <0.01 | 3.5 | <0.1 | <0.05 | 4 | <0.5 | <0.2 |
| 1894844 | Soil | | 28 | 2.32 | 187 | 0.174 | <1 | 2.99 | 0.017 | 0.30 | 0.3 | 0.01 | 6.9 | 0.2 | <0.05 | 11 | <0.5 | <0.2 |
| 1894845 | Soil | | 28 | 2.63 | 199 | 0.185 | <1 | 2.81 | 0.023 | 0.29 | 1.3 | 0.01 | 7.9 | 0.3 | <0.05 | 10 | <0.5 | <0.2 |
| 1894846 | Soil | | 37 | 1.46 | 218 | 0.102 | <1 | 2.48 | 0.022 | 0.12 | 0.4 | 0.04 | 4.1 | 0.2 | 0.06 | 8 | 0.7 | <0.2 |
| 1894847 | Soil | | 32 | 1.98 | 309 | 0.129 | <1 | 2.51 | 0.017 | 0.39 | 1.0 | 0.01 | 6.0 | 0.2 | <0.05 | 9 | <0.5 | 0.2 |
| 1894848 | Soil | | 34 | 0.98 | 104 | 0.097 | <1 | 1.86 | 0.016 | 0.11 | 0.4 | <0.01 | 4.1 | 0.1 | <0.05 | 6 | <0.5 | <0.2 |
| 1894849 | Soil | | 42 | 1.55 | 157 | 0.112 | <1 | 3.02 | 0.021 | 0.24 | 0.4 | <0.01 | 7.6 | 0.2 | <0.05 | 11 | <0.5 | <0.2 |
| 1894850 | Soil | | 73 | 1.44 | 98 | 0.102 | <1 | 2.48 | 0.016 | 0.16 | 0.6 | 0.01 | 5.0 | 0.1 | <0.05 | 9 | <0.5 | <0.2 |
| 1894869 | Soil | | 45 | 1.10 | 104 | 0.110 | <1 | 2.08 | 0.018 | 0.11 | 0.4 | <0.01 | 3.2 | 0.1 | <0.05 | 5 | <0.5 | <0.2 |
| 1894870 | Soil | | 40 | 1.04 | 116 | 0.103 | <1 | 1.99 | 0.018 | 0.10 | 0.3 | 0.01 | 3.2 | 0.1 | <0.05 | 5 | <0.5 | <0.2 |

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PHONE (604) 253-3158

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

Project: PIKE
Report Date: November 08, 2019



# CERTIFICATE OF ANALYSIS WHI19000681.1

| | Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La |
| | Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % | ppm |
| | MDL | 0.1 | 0.1 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.5 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 2 | 0.01 | 0.001 | 1 |
| 1894871 | Soil | 3.6 | 20.7 | 17.9 | 110 | 0.3 | 16.1 | 23.0 | 1969 | 5.61 | 17.3 | 10.0 | 21.5 | 20 | 0.1 | 0.2 | 0.3 | 88 | 0.47 | 0.126 | 64 |
| 1894872 | Soil | 0.5 | 28.1 | 6.2 | 64 | <0.1 | 21.8 | 14.3 | 593 | 3.21 | 2.9 | 1.7 | 9.0 | 33 | <0.1 | 0.1 | 0.2 | 76 | 0.41 | 0.106 | 16 |
| 1894873 | Soil | 0.6 | 24.7 | 5.9 | 65 | <0.1 | 16.4 | 13.3 | 633 | 3.03 | 3.1 | 2.2 | 12.7 | 32 | 0.1 | 0.2 | 0.2 | 74 | 0.46 | 0.111 | 20 |
| 1894874 | Soil | 0.8 | 16.5 | 43.2 | 72 | 0.1 | 10.5 | 14.6 | 1158 | 3.08 | 5.2 | <0.5 | 19.1 | 44 | 0.3 | 0.3 | 0.2 | 55 | 0.48 | 0.098 | 16 |
| 1894875 | Soil | 0.8 | 56.7 | 23.8 | 77 | 1.1 | 40.2 | 23.0 | 2079 | 3.90 | 5.2 | 5.3 | 7.7 | 43 | 1.0 | 0.3 | 0.3 | 79 | 0.78 | 0.179 | 40 |
| 1894876 | Soil | 0.8 | 16.7 | 19.5 | 67 | 0.3 | 14.3 | 11.7 | 855 | 2.98 | 9.3 | 1.7 | 7.7 | 22 | 0.1 | 0.3 | 0.2 | 64 | 0.24 | 0.074 | 20 |
| 1894877 | Soil | 1.1 | 21.0 | 21.2 | 77 | 0.2 | 16.7 | 17.4 | 1665 | 4.00 | 11.5 | 7.9 | 4.5 | 35 | 0.3 | 0.4 | 0.3 | 78 | 0.32 | 0.142 | 21 |
| 1894878 | Soil | 0.8 | 24.2 | 14.9 | 85 | <0.1 | 15.5 | 14.5 | 992 | 3.71 | 6.2 | 1.7 | 13.5 | 21 | 0.2 | 0.2 | 0.2 | 78 | 0.28 | 0.093 | 21 |
| 1894879 | Soil | 0.8 | 13.2 | 38.4 | 71 | 0.1 | 9.4 | 14.1 | 1469 | 4.43 | 6.3 | 3.3 | 45.1 | 20 | <0.1 | 0.2 | 0.2 | 55 | 0.23 | 0.044 | 37 |
| 1894880 | Soil | 1.5 | 26.0 | 17.4 | 85 | <0.1 | 17.6 | 13.3 | 837 | 3.42 | 8.6 | 3.1 | 8.8 | 21 | 0.1 | 0.3 | 0.2 | 79 | 0.26 | 0.072 | 16 |
| 1894881 | Soil | 1.2 | 19.5 | 37.8 | 72 | <0.1 | 14.1 | 13.3 | 1114 | 3.56 | 8.7 | 2.7 | 8.6 | 18 | 0.1 | 0.3 | 0.2 | 73 | 0.19 | 0.059 | 14 |
| 1894882 | Soil | 1.1 | 28.4 | 16.7 | 73 | 0.1 | 15.1 | 12.8 | 757 | 3.15 | 10.2 | 1.0 | 7.3 | 26 | 0.1 | 0.4 | 0.2 | 78 | 0.34 | 0.076 | 17 |
| 1894883 | Soil | 1.3 | 22.5 | 14.6 | 70 | 0.4 | 15.0 | 12.2 | 767 | 3.30 | 10.4 | 390.9 | 5.8 | 31 | 0.2 | 0.4 | 0.2 | 77 | 0.35 | 0.067 | 34 |
| 1894884 | Soil | 2.3 | 19.6 | 25.1 | 81 | 0.2 | 10.6 | 11.5 | 1037 | 3.40 | 5.1 | 1.9 | 3.7 | 22 | 0.2 | 0.3 | 0.2 | 64 | 0.19 | 0.099 | 19 |
| 1894885 | Soil | 3.0 | 17.1 | 20.5 | 84 | <0.1 | 6.8 | 8.3 | 1071 | 3.39 | 5.9 | 1.0 | 9.3 | 22 | 0.3 | 0.3 | 0.2 | 42 | 0.24 | 0.056 | 21 |
| 1894886 | Soil | 1.6 | 26.6 | 27.8 | 86 | <0.1 | 13.9 | 13.5 | 954 | 3.21 | 4.2 | 0.7 | 6.1 | 37 | 0.2 | 0.4 | 0.5 | 71 | 0.32 | 0.060 | 20 |
| 1894887 | Soil | 4.5 | 28.9 | 16.5 | 80 | <0.1 | 20.5 | 18.7 | 1055 | 4.53 | 2.6 | 0.7 | 8.2 | 21 | 0.3 | 0.2 | 0.2 | 76 | 0.28 | 0.112 | 20 |
| 1894888 | Soil | 12.5 | 42.6 | 14.5 | 88 | 0.3 | 19.2 | 25.7 | 1292 | 4.44 | 2.6 | 1.5 | 18.5 | 44 | 0.5 | 0.5 | 0.2 | 79 | 1.26 | 0.130 | 41 |

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

Project: PIKE
Report Date: November 08, 2019



# CERTIFICATE OF ANALYSIS WHI19000681.1

| | Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se | Te |
| | Unit | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm |
| | MDL | 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 |
| 1894871 | Soil | 17 | 0.68 | 362 | 0.001 | <1 | 1.64 | 0.007 | 0.16 | 0.2 | 0.02 | 11.0 | 0.1 | <0.05 | 6 | <0.5 | <0.2 |
| 1894872 | Soil | 40 | 1.29 | 102 | 0.129 | <1 | 2.26 | 0.017 | 0.17 | 0.5 | 0.01 | 3.1 | 0.1 | <0.05 | 7 | <0.5 | <0.2 |
| 1894873 | Soil | 27 | 1.16 | 112 | 0.122 | <1 | 1.98 | 0.017 | 0.16 | 0.2 | <0.01 | 3.6 | 0.2 | <0.05 | 6 | <0.5 | <0.2 |
| 1894874 | Soil | 20 | 1.29 | 76 | 0.005 | <1 | 2.61 | 0.008 | 0.10 | 0.2 | 0.02 | 4.6 | <0.1 | <0.05 | 10 | <0.5 | <0.2 |
| 1894875 | Soil | 65 | 1.70 | 293 | 0.015 | <1 | 3.19 | 0.012 | 0.15 | 0.2 | 0.06 | 9.0 | 0.1 | 0.09 | 8 | <0.5 | <0.2 |
| 1894876 | Soil | 22 | 1.08 | 119 | 0.035 | <1 | 2.40 | 0.014 | 0.06 | 0.1 | 0.02 | 3.0 | 0.1 | <0.05 | 7 | <0.5 | <0.2 |
| 1894877 | Soil | 25 | 1.24 | 112 | 0.030 | 2 | 2.87 | 0.012 | 0.06 | 0.2 | 0.03 | 3.7 | 0.1 | 0.06 | 8 | <0.5 | <0.2 |
| 1894878 | Soil | 24 | 1.33 | 100 | 0.040 | 2 | 3.05 | 0.010 | 0.09 | 0.2 | 0.01 | 5.7 | 0.1 | <0.05 | 8 | 0.6 | <0.2 |
| 1894879 | Soil | 14 | 0.85 | 200 | 0.002 | 2 | 2.39 | 0.008 | 0.07 | <0.1 | 0.02 | 5.8 | <0.1 | <0.05 | 6 | <0.5 | <0.2 |
| 1894880 | Soil | 31 | 1.18 | 94 | 0.052 | 2 | 2.43 | 0.010 | 0.05 | 0.2 | 0.02 | 5.1 | <0.1 | <0.05 | 7 | 0.8 | <0.2 |
| 1894881 | Soil | 24 | 1.27 | 65 | 0.040 | <1 | 2.49 | 0.010 | 0.06 | 0.2 | 0.02 | 4.5 | <0.1 | <0.05 | 8 | <0.5 | <0.2 |
| 1894882 | Soil | 25 | 1.04 | 99 | 0.074 | <1 | 2.32 | 0.012 | 0.05 | 0.3 | 0.02 | 4.9 | <0.1 | <0.05 | 7 | 0.9 | <0.2 |
| 1894883 | Soil | 26 | 1.13 | 75 | 0.074 | <1 | 2.23 | 0.011 | 0.05 | 0.3 | 0.03 | 4.6 | <0.1 | <0.05 | 8 | 0.7 | <0.2 |
| 1894884 | Soil | 18 | 0.83 | 92 | 0.016 | <1 | 2.60 | 0.009 | 0.06 | 0.2 | 0.05 | 2.7 | <0.1 | <0.05 | 8 | <0.5 | <0.2 |
| 1894885 | Soil | 11 | 0.59 | 193 | 0.034 | <1 | 1.97 | 0.011 | 0.06 | 0.3 | 0.01 | 5.5 | <0.1 | <0.05 | 5 | <0.5 | <0.2 |
| 1894886 | Soil | 24 | 1.19 | 93 | 0.031 | 1 | 2.64 | 0.011 | 0.06 | 0.3 | 0.02 | 3.8 | 0.1 | <0.05 | 8 | <0.5 | <0.2 |
| 1894887 | Soil | 22 | 0.68 | 65 | 0.013 | <1 | 2.17 | 0.008 | 0.04 | <0.1 | 0.01 | 6.6 | <0.1 | <0.05 | 6 | <0.5 | <0.2 |
| 1894888 | Soil | 20 | 0.91 | 117 | 0.003 | <1 | 1.71 | 0.008 | 0.09 | <0.1 | <0.01 | 11.3 | <0.1 | <0.05 | 6 | 0.9 | <0.2 |

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

Project: PIKE

Report Date: November 08, 2019



# QUALITY CONTROL REPORT WHI19000681.1

| | Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La |
| | Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % | ppm |
| | MDL | 0.1 | 0.1 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.5 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 2 | 0.01 | 0.001 | 1 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | | | |
| 1894809 | Soil | 3.4 | 14.4 | 29.2 | 52 | 0.2 | 10.3 | 6.3 | 478 | 2.09 | 2.6 | 2.9 | 4.7 | 17 | 0.4 | 0.3 | 0.7 | 35 | 0.17 | 0.060 | 22 |
| REP 1894809 | QC | 3.7 | 14.2 | 30.1 | 56 | 0.2 | 10.5 | 6.7 | 493 | 2.17 | 2.6 | <0.5 | 5.0 | 18 | 0.3 | 0.3 | 0.7 | 37 | 0.19 | 0.069 | 23 |
| 1894885 | Soil | 3.0 | 17.1 | 20.5 | 84 | <0.1 | 6.8 | 8.3 | 1071 | 3.39 | 5.9 | 1.0 | 9.3 | 22 | 0.3 | 0.3 | 0.2 | 42 | 0.24 | 0.056 | 21 |
| REP 1894885 | QC | 2.9 | 17.6 | 20.8 | 87 | <0.1 | 6.5 | 8.6 | 1011 | 3.43 | 5.6 | 1.2 | 10.0 | 22 | 0.3 | 0.2 | 0.2 | 40 | 0.23 | 0.060 | 21 |
| Reference Materials | | | | | | | | | | | | | | | | | | | | | |
| STD BVGEO01 | Standard | 11.0 | 4708.7 | 196.5 | 1748 | 2.4 | 154.4 | 23.5 | 678 | 3.66 | 107.8 | 204.1 | 17.3 | 53 | 5.9 | 3.5 | 23.0 | 72 | 1.29 | 0.067 | 24 |
| STD DS11 | Standard | 15.9 | 152.3 | 143.7 | 343 | 1.8 | 79.5 | 14.9 | 1023 | 3.11 | 43.4 | 117.7 | 9.2 | 74 | 2.7 | 8.8 | 11.8 | 57 | 1.16 | 0.078 | 21 |
| STD OREAS262 | Standard | 0.7 | 114.7 | 59.4 | 151 | 0.5 | 66.3 | 28.7 | 551 | 3.37 | 35.8 | 75.1 | 10.0 | 36 | 0.6 | 5.4 | 1.0 | 25 | 3.05 | 0.038 | 18 |
| STD OREAS262 | Standard | 0.6 | 132.0 | 58.3 | 158 | 0.5 | 64.4 | 27.2 | 555 | 3.33 | 37.1 | 74.4 | 10.5 | 37 | 0.6 | 5.4 | 1.0 | 26 | 3.06 | 0.039 | 20 |
| STD BVGEO01 Expected | | 11.2 | 4415 | 187 | 1741 | 2.53 | 163 | 25 | 733 | 3.7 | 121 | 219 | 14.4 | 55 | 6.5 | 3.39 | 25.6 | 73 | 1.3219 | 0.0727 | 25.9 |
| STD DS11 Expected | | 14.6 | 149 | 138 | 345 | 1.71 | 77.7 | 14.2 | 1055 | 3.1 | 42.8 | 79 | 7.65 | 67.3 | 2.37 | 8.74 | 12.2 | 50 | 1.063 | 0.0701 | 18.6 |
| STD OREAS262 Expected | | 0.68 | 118 | 56 | 154 | 0.45 | 62 | 26.9 | 530 | 3.284 | 35.8 | 65 | 9.33 | 36 | 0.61 | 5.06 | 1.03 | 22.5 | 2.98 | 0.04 | 15.9 |
| BLK | Blank | <0.1 | 0.2 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <1 | <0.01 | <0.5 | <0.5 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | 4 | <0.01 | <0.001 | <1 |
| BLK | Blank | <0.1 | 0.1 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <1 | <0.01 | <0.5 | <0.5 | 0.1 | <1 | <0.1 | <0.1 | <0.1 | 3 | <0.01 | <0.001 | <1 |

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

Project: PIKE
Report Date: November 08, 2019



# QUALITY CONTROL REPORT WHI19000681.1

| | Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se | Te |
| | Unit | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm |
| | MDL | 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 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | |
| 1894809 | Soil | 16 | 0.52 | 55 | 0.019 | <1 | 1.45 | 0.009 | 0.04 | 0.2 | 0.02 | 2.0 | <0.1 | <0.05 | 4 | <0.5 | <0.2 |
| REP 1894809 | QC | 17 | 0.51 | 56 | 0.022 | <1 | 1.52 | 0.009 | 0.05 | 0.2 | 0.02 | 1.8 | <0.1 | <0.05 | 5 | <0.5 | <0.2 |
| 1894885 | Soil | 11 | 0.59 | 193 | 0.034 | <1 | 1.97 | 0.011 | 0.06 | 0.3 | 0.01 | 5.5 | <0.1 | <0.05 | 5 | <0.5 | <0.2 |
| REP 1894885 | QC | 11 | 0.65 | 192 | 0.034 | <1 | 2.13 | 0.011 | 0.06 | 0.3 | 0.02 | 5.6 | <0.1 | <0.05 | 6 | <0.5 | <0.2 |
| Reference Materials | | | | | | | | | | | | | | | | | |
| STD BVGEO01 | Standard | 196 | 1.31 | 296 | 0.208 | 4 | 2.25 | 0.191 | 0.81 | 5.0 | 0.10 | 6.7 | 0.6 | 0.63 | 7 | 4.2 | 0.8 |
| STD DS11 | Standard | 61 | 0.89 | 372 | 0.100 | 7 | 1.29 | 0.086 | 0.43 | 3.2 | 0.26 | 3.8 | 5.0 | 0.28 | 5 | 2.2 | 5.0 |
| STD OREAS262 | Standard | 47 | 1.12 | 258 | 0.003 | 5 | 1.36 | 0.067 | 0.34 | 0.3 | 0.17 | 3.4 | 0.5 | 0.24 | 4 | <0.5 | 0.3 |
| STD OREAS262 | Standard | 47 | 1.14 | 266 | 0.004 | 5 | 1.38 | 0.068 | 0.35 | 0.3 | 0.15 | 3.4 | 0.5 | 0.26 | 4 | 0.7 | 0.2 |
| STD BVGEO01 Expected | | 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 | | 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 | | 41.7 | 1.17 | 248 | 0.0027 | 4 | 1.3 | 0.071 | 0.312 | 0.2 | 0.17 | 3.24 | 0.47 | 0.253 | 3.73 | 0.4 | 0.23 |
| BLK | Blank | <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 | <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 |

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

Submitted By: Ryan Burke
Receiving Lab: Canada-Whitehorse
Received: October 16, 2019
Report Date: November 22, 2019


# CERTIFICATE OF ANALYSIS WHI19000682.2

## CLIENT JOB INFORMATION

Project: PIKE
Shipment ID:
P.O. Number
Number of Samples: 49

## SAMPLE DISPOSAL

RTRN-PLP Return After 90 days
RTRN-RJT Return After 60 days

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

## SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

| Procedure Code | Number of Samples | Code Description | Test Wgt (g) | Report Status | Lab |
|---|---|---|---|---|---|
| PRP70-250 | 49 | Crush, split and pulverize 250 g rock to 200 mesh | | | WHI |
| AQ201 | 49 | 1:1:1 Aqua Regia digestion ICP-MS analysis | 15 | Completed | VAN |
| SLBHP | 0 | Sort, label and box pulps | | | WHI |
| SHP01 | 49 | Per sample shipping charges for branch shipments | | | VAN |
| AQ370 | 3 | 1:1:1 Aqua Regia digestion ICP-ES analysis | 1 | Completed | VAN |

## ADDITIONAL COMMENTS

Version 2 : AQ370 included.

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

CC:

MAY LAI
Data Validation Specialist

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PHONE (604) 253-3158

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

Project: PIKE
Report Date: November 22, 2019



# CERTIFICATE OF ANALYSIS WHI19000682.2

| | Method | WGHT | 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 | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P |
| | Unit | kg | 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 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.001 |
| 1894751 | Rock | 1.69 | 0.5 | 7.6 | 6.2 | 42 | 0.2 | 4.8 | 10.1 | 475 | 2.52 | 1.7 | 17.5 | 23.2 | 17 | <0.1 | <0.1 | 1.3 | 69 | 1.41 | 0.055 |
| 1894752 | Rock | 1.32 | 0.3 | 0.6 | 17.8 | 13 | <0.1 | 0.7 | 0.4 | 280 | 0.57 | <0.5 | 1.5 | 16.5 | 8 | <0.1 | <0.1 | <0.1 | <1 | 0.36 | 0.002 |
| 1894753 | Rock | 1.29 | 1.5 | 29.7 | 3.2 | 28 | 0.2 | 17.6 | 38.0 | 268 | 2.55 | <0.5 | 0.7 | 1.6 | 40 | <0.1 | <0.1 | 0.6 | 27 | 0.46 | 0.046 |
| 1894754 | Rock | 1.06 | 11.0 | 899.5 | 32.9 | 35 | 9.2 | 11.5 | 53.2 | 282 | 5.56 | 0.9 | 5.0 | 8.0 | 17 | 0.2 | 0.2 | 2.7 | 14 | 0.30 | 0.030 |
| 1894755 | Rock | 1.45 | 91.5 | 9104.3 | 28.6 | 62 | 26.7 | 2.7 | 5.8 | 482 | 1.51 | 1.2 | 5.4 | 2.7 | 25 | 1.1 | 0.2 | 727.5 | 18 | 0.43 | 0.015 |
| 1894756 | Rock | 1.23 | 118.6 | 3613.2 | 26.9 | 61 | 26.3 | 3.0 | 6.5 | 437 | 2.70 | 0.9 | 4.8 | 2.5 | 47 | 0.5 | 0.3 | 567.6 | 30 | 0.49 | 0.027 |
| 1894757 | Rock | 0.93 | 344.8 | 9080.3 | 38.6 | 43 | 53.6 | 1.8 | 2.5 | 155 | 3.62 | <0.5 | 5.7 | 2.3 | 29 | 0.3 | 0.2 | 903.0 | 16 | 0.26 | 0.006 |
| 1894758 | Rock | 1.65 | 24.4 | 1418.1 | 122.0 | 44 | 97.4 | 1.5 | 2.6 | 96 | 4.63 | <0.5 | 7.3 | 1.9 | 43 | 0.2 | 0.5 | >2000 | 32 | 0.36 | 0.051 |
| 1894759 | Rock | 1.41 | 133.7 | 4021.2 | 228.7 | 16 | 27.4 | 1.6 | 3.6 | 201 | 1.19 | 1.2 | 3.8 | 0.5 | 11 | 8.8 | 0.2 | 136.1 | 7 | 0.32 | 0.004 |
| 1894760 | Rock | 1.19 | 1190.7 | >10000 | 153.2 | 186 | >100 | 4.9 | 18.6 | 155 | 12.37 | 0.8 | 59.4 | 5.4 | 45 | 6.4 | 0.4 | >2000 | 186 | 0.37 | 0.039 |
| 1894761 | Rock | 1.22 | 4.0 | 64.4 | 1.4 | 26 | 0.4 | 2.9 | 6.3 | 403 | 1.61 | 0.7 | 2.7 | 0.6 | 11 | <0.1 | <0.1 | 5.7 | 22 | 1.05 | 0.011 |
| 1894762 | Rock | 0.89 | 9.2 | 101.3 | 5.2 | 20 | 0.9 | 4.3 | 19.0 | 219 | 3.58 | 2.0 | 25.9 | 3.2 | 38 | <0.1 | <0.1 | 16.9 | 25 | 0.30 | 0.045 |
| 1894763 | Rock | 0.92 | 21.4 | 10.0 | 4.9 | 44 | 0.2 | 6.3 | 11.6 | 433 | 3.23 | 0.5 | 4.6 | 5.6 | 48 | <0.1 | 0.1 | 7.6 | 47 | 0.56 | 0.071 |
| 1894764 | Rock | 0.92 | 0.9 | 14.4 | 3.0 | 71 | 0.2 | 7.4 | 14.3 | 632 | 3.72 | <0.5 | 23.1 | 3.6 | 41 | <0.1 | <0.1 | 4.0 | 69 | 0.92 | 0.128 |
| 1894765 | Rock | 0.71 | 4.3 | 9.0 | 0.7 | 1 | <0.1 | 1.9 | 0.7 | 62 | 0.90 | <0.5 | <0.5 | <0.1 | 3 | <0.1 | <0.1 | 1.8 | 2 | 0.02 | 0.003 |
| 1894766 | Rock | 1.64 | 35.7 | 42.6 | 4.5 | 5 | 2.0 | 1.9 | 7.4 | 76 | 2.66 | 0.9 | 5.7 | 0.7 | 18 | <0.1 | <0.1 | 24.0 | 8 | 0.03 | 0.013 |
| 1894767 | Rock | 0.59 | 49.8 | 70.0 | 11.9 | 39 | 2.7 | 20.4 | 89.8 | 425 | 10.05 | 1.2 | 304.3 | 1.6 | 62 | <0.1 | <0.1 | 40.8 | 48 | 0.92 | 0.085 |
| 1894768 | Rock | 1.14 | 251.3 | 18.2 | 7.9 | 14 | 0.5 | 6.5 | 24.6 | 216 | 2.57 | 0.5 | 22.4 | 0.9 | 43 | <0.1 | <0.1 | 39.2 | 19 | 0.68 | 0.029 |
| 1894769 | Rock | 1.17 | 4.9 | 130.6 | 14.4 | 8 | 1.5 | 40.9 | 359.9 | 93 | 17.17 | <0.5 | 49.6 | 0.4 | 22 | <0.1 | <0.1 | 13.8 | 11 | 0.22 | 0.010 |
| 1894770 | Rock | 1.16 | 0.9 | 127.9 | 2.2 | 68 | 0.3 | 7.0 | 16.8 | 612 | 3.96 | <0.5 | 6.7 | 2.3 | 29 | <0.1 | <0.1 | 1.0 | 97 | 0.70 | 0.141 |
| 1894771 | Rock | 0.91 | 6.5 | 17.1 | 5.4 | 31 | 0.4 | 4.3 | 15.8 | 367 | 2.86 | 0.5 | 5.8 | 3.2 | 62 | <0.1 | 0.1 | 8.4 | 36 | 0.54 | 0.066 |
| 1894772 | Rock | 1.69 | 18.4 | 2.5 | 12.1 | 74 | 0.2 | 1.6 | 4.6 | 1176 | 2.12 | 1.2 | 1.8 | 11.7 | 18 | 0.5 | <0.1 | 0.7 | 10 | 0.95 | 0.041 |
| 1894773 | Rock | 3.09 | 1.5 | 67.1 | 3.6 | 56 | 0.5 | 9.0 | 25.4 | 571 | 4.10 | <0.5 | 2.6 | 2.3 | 43 | 0.1 | <0.1 | 4.4 | 70 | 1.08 | 0.143 |
| 1894774 | Rock | 0.72 | 1.6 | 842.8 | 9.0 | 39 | 6.3 | 10.6 | 80.0 | 119 | 11.42 | 0.7 | 34.7 | 2.2 | 12 | 3.1 | <0.1 | 11.2 | 5 | 0.42 | 0.019 |
| 1894775 | Rock | 1.90 | 1.1 | 778.9 | 8.7 | 3 | 7.1 | 1.0 | 8.0 | 45 | 1.23 | <0.5 | 43.3 | 1.6 | 10 | 0.2 | <0.1 | 1.9 | 1 | <0.01 | 0.004 |
| 1894776 | Rock | 3.39 | 1.4 | 6.6 | 15.9 | <1 | 8.0 | 0.9 | 2.3 | 36 | 0.87 | <0.5 | 9.5 | 0.1 | 2 | <0.1 | <0.1 | 9.8 | <1 | <0.01 | <0.001 |
| 1894777 | Rock | 1.84 | 0.7 | 4.2 | 9.3 | <1 | 2.7 | 0.6 | 0.9 | 34 | 0.74 | <0.5 | 10.1 | 0.3 | 7 | <0.1 | <0.1 | 4.5 | <1 | <0.01 | <0.001 |
| 1894778 | Rock | 2.93 | 1.4 | 125.4 | 12.4 | 12 | 1.3 | 2.2 | 21.1 | 134 | 1.94 | <0.5 | 3.2 | 3.8 | 9 | 0.5 | <0.1 | 2.9 | 3 | 0.22 | 0.016 |
| 1894779 | Rock | 1.23 | 0.4 | 7.2 | 5.6 | 34 | 0.5 | 14.6 | 24.7 | 245 | 3.73 | <0.5 | 5.3 | 3.7 | 38 | <0.1 | <0.1 | 8.7 | 36 | 0.39 | 0.069 |
| 1894780 | Rock | 3.49 | 0.7 | 429.7 | 1.8 | 56 | 0.7 | 6.7 | 14.5 | 495 | 4.57 | <0.5 | 2.0 | 3.6 | 39 | 0.2 | <0.1 | 1.2 | 127 | 1.01 | 0.204 |

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

Project: PIKE
Report Date: November 22, 2019



# CERTIFICATE OF ANALYSIS WHI19000682.2

| | Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ370 | AQ370 | AQ370 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se | Te | Mo | Cu | Pb |
| | Unit | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | % | % | % |
| | MDL | 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 | 0.01 |
| 1894751 | Rock | 17 | 9 | 0.85 | 24 | 0.162 | <1 | 1.74 | 0.070 | 0.09 | 0.6 | <0.01 | 3.8 | <0.1 | <0.05 | 8 | <0.5 | <0.2 | | | |
| 1894752 | Rock | 25 | 2 | 0.01 | 18 | 0.002 | <1 | 0.40 | 0.044 | 0.34 | 0.3 | <0.01 | 0.3 | 0.1 | <0.05 | 2 | <0.5 | <0.2 | | | |
| 1894753 | Rock | 5 | 11 | 0.65 | 71 | 0.099 | <1 | 0.81 | 0.039 | 0.07 | 0.5 | <0.01 | 1.1 | <0.1 | 1.11 | 3 | 1.2 | <0.2 | | | |
| 1894754 | Rock | 5 | 5 | 0.50 | 26 | 0.003 | <1 | 1.10 | 0.035 | 0.11 | 0.1 | 0.01 | 1.2 | <0.1 | 4.00 | 5 | 3.6 | 0.2 | | | |
| 1894755 | Rock | 7 | 4 | 0.28 | 28 | 0.048 | <1 | 0.53 | 0.009 | 0.10 | 0.5 | <0.01 | 1.3 | <0.1 | 0.22 | 2 | 8.7 | 4.6 | | | |
| 1894756 | Rock | 5 | 5 | 0.29 | 24 | 0.070 | <1 | 0.74 | 0.012 | 0.08 | 0.8 | <0.01 | 1.9 | <0.1 | 0.12 | 3 | 9.7 | 4.3 | | | |
| 1894757 | Rock | 2 | 2 | 0.09 | 15 | 0.010 | <1 | 0.32 | 0.004 | 0.05 | 0.6 | <0.01 | 0.4 | <0.1 | 0.86 | 2 | 21.8 | 9.5 | | | |
| 1894758 | Rock | 3 | 4 | 0.07 | 22 | 0.060 | <1 | 0.39 | 0.006 | 0.06 | 0.6 | 0.01 | 1.1 | <0.1 | 0.12 | 3 | 34.7 | 27.5 | | | |
| 1894759 | Rock | 2 | 2 | 0.08 | 17 | 0.001 | <1 | 0.16 | 0.002 | 0.03 | 0.8 | 0.01 | 0.4 | <0.1 | 0.19 | <1 | 4.5 | 1.2 | | | |
| 1894760 | Rock | 7 | 9 | 0.30 | 53 | 0.010 | <1 | 0.80 | 0.010 | 0.06 | 1.6 | 0.04 | 2.2 | <0.1 | 3.26 | 5 | 90.9 | 21.5 | 0.119 | 5.352 | 0.01 |
| 1894761 | Rock | 3 | 2 | 0.46 | 19 | 0.002 | <1 | 0.67 | 0.006 | 0.04 | <0.1 | <0.01 | 1.1 | <0.1 | 0.14 | 3 | <0.5 | <0.2 | | | |
| 1894762 | Rock | 7 | 4 | 0.37 | 86 | 0.028 | <1 | 0.75 | 0.042 | 0.18 | 0.2 | <0.01 | 1.9 | <0.1 | 0.65 | 3 | 1.5 | 0.3 | | | |
| 1894763 | Rock | 7 | 9 | 0.86 | 55 | 0.146 | <1 | 1.34 | 0.046 | 0.15 | 1.4 | <0.01 | 1.3 | <0.1 | 0.51 | 6 | <0.5 | <0.2 | | | |
| 1894764 | Rock | 12 | 11 | 1.41 | 149 | 0.217 | <1 | 1.76 | 0.076 | 0.54 | 46.0 | <0.01 | 3.7 | 0.2 | 1.03 | 6 | 0.6 | <0.2 | | | |
| 1894765 | Rock | <1 | 3 | 0.02 | 6 | 0.002 | <1 | 0.04 | 0.003 | 0.01 | 0.4 | <0.01 | 0.1 | <0.1 | <0.05 | <1 | <0.5 | <0.2 | | | |
| 1894766 | Rock | 4 | 2 | 0.04 | 59 | 0.001 | <1 | 0.17 | 0.010 | 0.03 | 0.2 | <0.01 | 0.3 | <0.1 | <0.05 | <1 | <0.5 | 0.6 | | | |
| 1894767 | Rock | 5 | 10 | 0.84 | 43 | 0.091 | <1 | 1.33 | 0.030 | 0.19 | 0.8 | 0.02 | 2.3 | <0.1 | 3.72 | 5 | 2.0 | 3.5 | | | |
| 1894768 | Rock | 3 | 4 | 0.29 | 58 | 0.055 | <1 | 0.54 | 0.014 | 0.10 | >100 | * | 1.0 | <0.1 | 1.56 | 2 | 0.9 | 0.4 | | | |
| 1894769 | Rock | 2 | 3 | 0.14 | 10 | 0.062 | <1 | 0.29 | 0.017 | 0.09 | >100 | * | 0.5 | <0.1 | >10 | 1 | 5.0 | 3.8 | | | |
| 1894770 | Rock | 9 | 12 | 1.54 | 241 | 0.249 | <1 | 2.03 | 0.094 | 1.27 | 8.5 | <0.01 | 4.4 | 0.5 | 0.70 | 7 | <0.5 | <0.2 | | | |
| 1894771 | Rock | 9 | 6 | 0.72 | 131 | 0.166 | <1 | 1.10 | 0.040 | 0.41 | 2.1 | <0.01 | 1.6 | 0.1 | 0.49 | 4 | 0.8 | 0.2 | | | |
| 1894772 | Rock | 17 | 5 | 0.18 | 9 | 0.006 | <1 | 0.90 | 0.053 | 0.25 | 0.3 | <0.01 | 2.0 | <0.1 | 0.24 | 5 | <0.5 | <0.2 | | | |
| 1894773 | Rock | 11 | 10 | 1.42 | 130 | 0.216 | <1 | 1.78 | 0.072 | 0.62 | 2.4 | <0.01 | 3.7 | 0.3 | 1.35 | 6 | 0.7 | 0.2 | | | |
| 1894774 | Rock | 1 | 2 | 0.05 | 28 | 0.002 | <1 | 0.28 | 0.030 | 0.16 | 0.2 | 0.02 | 0.4 | <0.1 | >10 | <1 | 7.0 | 1.7 | | | |
| 1894775 | Rock | 3 | 2 | 0.01 | 46 | 0.001 | <1 | 0.10 | 0.013 | 0.07 | 0.1 | <0.01 | 0.1 | <0.1 | 0.49 | <1 | 0.9 | <0.2 | | | |
| 1894776 | Rock | <1 | 2 | <0.01 | 19 | <0.001 | <1 | 0.03 | 0.005 | 0.03 | 0.2 | <0.01 | <0.1 | <0.1 | 0.28 | <1 | 1.8 | <0.2 | | | |
| 1894777 | Rock | <1 | 2 | <0.01 | 32 | <0.001 | <1 | 0.07 | 0.027 | 0.06 | <0.1 | <0.01 | <0.1 | <0.1 | 0.14 | <1 | 0.7 | <0.2 | | | |
| 1894778 | Rock | 6 | 2 | 0.08 | 82 | 0.002 | <1 | 0.28 | 0.024 | 0.14 | 0.1 | <0.01 | 0.2 | <0.1 | 1.10 | <1 | 1.1 | 0.3 | | | |
| 1894779 | Rock | 12 | 4 | 0.85 | 72 | 0.120 | <1 | 1.13 | 0.054 | 0.15 | 0.2 | <0.01 | 1.1 | <0.1 | 1.60 | 4 | 2.5 | 4.7 | | | |
| 1894780 | Rock | 10 | 3 | 1.42 | 120 | 0.211 | <1 | 1.67 | 0.072 | 0.32 | 40.5 | <0.01 | 5.3 | 0.2 | 1.19 | 6 | 0.7 | <0.2 | | | |

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PHONE (604) 253-3158

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

Project: PIKE
Report Date: November 22, 2019



# CERTIFICATE OF ANALYSIS WHI19000682.2

| | Method | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Zn | Ag | Ni | Co | Mn | Fe | As | Sr | Cd | Sb | Bi | Ca | P | Cr | Mg | Al | Na | K | W | Hg |
| | Unit | % | ppm | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % |
| | MDL | 0.01 | 2 | 0.001 | 0.001 | 0.01 | 0.01 | 0.01 | 0.001 | 0.001 | 0.001 | 0.01 | 0.01 | 0.001 | 0.001 | 0.01 | 0.01 | 0.01 | 0.01 | 0.001 | 0.001 |
| 1894751 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894752 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894753 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894754 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894755 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894756 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894757 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894758 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894759 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894760 | Rock | 0.02 | 138 | <0.001 | 0.002 | 0.01 | 12.11 | <0.01 | 0.004 | <0.001 | <0.001 | 0.30 | 0.33 | 0.043 | 0.001 | 0.31 | 0.73 | 0.01 | 0.08 | <0.001 | <0.001 |
| 1894761 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894762 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894763 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894764 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894765 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894766 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894767 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894768 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894769 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894770 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894771 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894772 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894773 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894774 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894775 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894776 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894777 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894778 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894779 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894780 | Rock | | | | | | | | | | | | | | | | | | | | |

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

Project: PIKE
Report Date: November 22, 2019



# CERTIFICATE OF ANALYSIS WHI19000682.2

| | | Method | AQ370 |
|---|---|---|---|
| | | Analyte | S |
| | | Unit | % |
| | | MDL | 0.05 |
| 1894751 | Rock | | |
| 1894752 | Rock | | |
| 1894753 | Rock | | |
| 1894754 | Rock | | |
| 1894755 | Rock | | |
| 1894756 | Rock | | |
| 1894757 | Rock | | |
| 1894758 | Rock | | |
| 1894759 | Rock | | |
| 1894760 | Rock | | 5.44 |
| 1894761 | Rock | | |
| 1894762 | Rock | | |
| 1894763 | Rock | | |
| 1894764 | Rock | | |
| 1894765 | Rock | | |
| 1894766 | Rock | | |
| 1894767 | Rock | | |
| 1894768 | Rock | | |
| 1894769 | Rock | | |
| 1894770 | Rock | | |
| 1894771 | Rock | | |
| 1894772 | Rock | | |
| 1894773 | Rock | | |
| 1894774 | Rock | | |
| 1894775 | Rock | | |
| 1894776 | Rock | | |
| 1894777 | Rock | | |
| 1894778 | Rock | | |
| 1894779 | Rock | | |
| 1894780 | Rock | | |

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

Project: PIKE
Report Date: November 22, 2019



# CERTIFICATE OF ANALYSIS WHI19000682.2

| | Method | WGHT | 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 | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P |
| | Unit | kg | 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 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.001 |
| 1894781 | Rock | 1.14 | 3.8 | 25.0 | 129.8 | 15 | 14.8 | 10.2 | 81.6 | 583 | 4.94 | 8.6 | 456.2 | <0.1 | 63 | 0.9 | <0.1 | 30.3 | 7 | 2.68 | 0.002 |
| 1894782 | Rock | 1.44 | 12.5 | 10.8 | 6.0 | 103 | 0.2 | 16.1 | 24.0 | 638 | 5.79 | 24.1 | 15.8 | 5.3 | 36 | <0.1 | 0.3 | 0.6 | 121 | 1.07 | 0.284 |
| 1894783 | Rock | 2.08 | 1.2 | 20.7 | 3.5 | 29 | 0.4 | 2.2 | 6.5 | 889 | 2.28 | 3.1 | 24.2 | 0.5 | 103 | 0.1 | <0.1 | 0.4 | 28 | 3.46 | 0.010 |
| 1894784 | Rock | 1.31 | 5.1 | 5.7 | 1.2 | 2 | <0.1 | 3.8 | 25.5 | 66 | 1.17 | 1.0 | 2.6 | 0.4 | 5 | <0.1 | <0.1 | 0.2 | 3 | 0.12 | 0.002 |
| 1894785 | Rock | 1.46 | 3.7 | 15.5 | 35.8 | 48 | 7.3 | 6.1 | 12.9 | 408 | 3.52 | 0.6 | 3.4 | 7.4 | 53 | 0.1 | <0.1 | 188.6 | 46 | 0.58 | 0.102 |
| 1894786 | Rock | 1.82 | 2.8 | 8.1 | 0.8 | 6 | 0.4 | 3.3 | 0.4 | 47 | 0.67 | 8.8 | 1.4 | 0.4 | 2 | <0.1 | 0.4 | 0.6 | 18 | 0.03 | 0.016 |
| 1894787 | Rock | 2.40 | 4.9 | 10.4 | 5.7 | 87 | 0.2 | 3.1 | 9.7 | 957 | 2.76 | 2.3 | 5.1 | 1.7 | 141 | 0.9 | 1.2 | 0.8 | 18 | 3.26 | 0.022 |
| 1894788 | Rock | 1.52 | 4.5 | 14.1 | 9.8 | 106 | 0.2 | 3.4 | 12.0 | 1176 | 3.02 | 2.7 | 4.2 | 2.2 | 148 | 1.3 | 1.2 | 0.3 | 21 | 3.37 | 0.027 |
| 1894789 | Rock | 1.31 | 0.5 | 63.9 | 14.7 | 101 | 0.3 | 2.8 | 8.8 | 1122 | 3.02 | 5.2 | 1.3 | 0.5 | 88 | 1.9 | 1.4 | 0.3 | 13 | 4.33 | 0.004 |
| 1894790 | Rock | 2.16 | 0.2 | 41.5 | 48.9 | 73 | 0.3 | 3.0 | 6.0 | 585 | 1.73 | 0.6 | <0.5 | 0.5 | 54 | 2.0 | 1.7 | 0.3 | 14 | 2.05 | 0.010 |
| 1894791 | Rock | 1.71 | 302.8 | >10000 | 18.7 | 281 | >100 | 2.9 | 14.1 | 51 | 11.56 | 3.3 | 43.6 | 0.7 | 8 | 8.6 | 0.2 | 709.3 | 12 | 0.09 | 0.008 |
| 1894792 | Rock | 2.06 | 52.8 | 389.3 | 8.3 | 12 | 11.0 | 0.8 | 0.7 | 43 | 1.52 | <0.5 | 6.3 | 0.3 | 6 | <0.1 | 0.1 | 491.4 | 6 | 0.06 | 0.001 |
| 1894793 | Rock | 1.11 | 2.1 | 210.7 | 1.5 | 6 | 1.3 | 8.1 | 2.8 | 82 | 1.10 | 14.7 | 1.0 | 0.2 | 1 | <0.1 | 2.4 | 5.2 | 3 | 0.01 | 0.002 |
| 1894794 | Rock | 1.26 | 4.4 | 20.9 | 8.8 | 56 | 0.1 | 0.5 | 0.3 | 162 | 1.00 | <0.5 | <0.5 | 8.7 | 6 | 0.9 | <0.1 | 2.6 | 2 | 0.11 | 0.001 |
| 1894795 | Rock | 1.16 | 5.1 | 32.0 | 29.8 | 99 | 0.8 | 1.4 | 1.1 | 285 | 1.33 | 1.1 | 0.7 | 11.3 | 4 | 0.1 | 0.2 | 1.4 | 5 | 0.02 | 0.016 |
| 1894796 | Rock | 1.49 | 0.4 | 14.1 | 4.0 | 3 | <0.1 | 0.9 | 0.5 | 94 | 0.37 | 0.6 | 1.0 | 5.9 | 4 | <0.1 | <0.1 | 0.8 | 1 | 0.03 | 0.002 |
| 1894797 | Rock | 0.97 | 6.4 | 17.1 | 5.4 | 13 | 0.3 | 3.5 | 2.5 | 225 | 0.76 | 1.2 | 0.7 | 2.0 | 3 | 0.1 | <0.1 | 1.0 | 4 | 0.20 | 0.029 |
| 1894798 | Rock | 0.66 | 0.4 | 107.1 | 15.5 | 48 | 0.4 | 5.5 | 10.3 | 402 | 2.45 | 1.1 | 0.9 | 4.1 | 32 | 0.2 | 0.3 | 0.5 | 40 | 0.78 | 0.068 |
| 1894799 | Rock | 1.28 | >2000 | 2682.9 | 27.8 | 35 | 67.5 | 1.3 | 5.0 | 47 | 5.97 | 91.5 | 18.9 | 1.1 | 2 | 7.3 | 1.2 | 14.4 | <1 | <0.01 | 0.002 |

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

Project: PIKE
Report Date: November 22, 2019



# CERTIFICATE OF ANALYSIS WHI19000682.2

| | Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ370 | AQ370 | AQ370 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se | Te | Mo | Cu | Pb |
| | Unit | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | % | % | % |
| | MDL | 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 | 0.01 |
| 1894781 | Rock | 1 | 11 | 0.27 | 4 | 0.002 | <1 | 0.26 | 0.002 | <0.01 | 0.3 | 0.01 | 1.1 | <0.1 | 3.37 | <1 | 2.5 | 6.1 | | | |
| 1894782 | Rock | 21 | 12 | 2.40 | 44 | 0.202 | <1 | 2.87 | 0.014 | 0.26 | 1.5 | <0.01 | 5.8 | <0.1 | 1.66 | 10 | 0.6 | <0.2 | | | |
| 1894783 | Rock | 10 | 3 | 0.98 | 38 | 0.002 | <1 | 1.12 | 0.002 | 0.08 | 0.3 | <0.01 | 1.6 | <0.1 | 0.36 | 4 | <0.5 | <0.2 | | | |
| 1894784 | Rock | <1 | 3 | 0.05 | 2 | 0.007 | 1 | 0.08 | 0.003 | <0.01 | 0.2 | <0.01 | 0.3 | <0.1 | 0.52 | <1 | <0.5 | <0.2 | | | |
| 1894785 | Rock | 12 | 11 | 0.98 | 176 | 0.077 | 2 | 1.54 | 0.079 | 0.28 | 0.2 | <0.01 | 4.0 | <0.1 | 0.38 | 6 | 0.9 | 0.5 | | | |
| 1894786 | Rock | <1 | 5 | 0.07 | 10 | <0.001 | 1 | 0.09 | 0.003 | <0.01 | <0.1 | <0.01 | 0.2 | <0.1 | <0.05 | <1 | 1.3 | <0.2 | | | |
| 1894787 | Rock | 6 | 2 | 0.91 | 45 | 0.032 | 2 | 1.06 | 0.010 | 0.07 | 1.0 | <0.01 | 2.3 | <0.1 | 0.09 | 4 | <0.5 | <0.2 | | | |
| 1894788 | Rock | 8 | 2 | 0.91 | 44 | 0.067 | <1 | 1.14 | 0.008 | 0.03 | 1.5 | <0.01 | 2.7 | <0.1 | 0.10 | 4 | <0.5 | <0.2 | | | |
| 1894789 | Rock | 3 | 2 | 0.50 | 26 | 0.002 | 1 | 0.37 | 0.007 | 0.02 | 2.1 | <0.01 | 1.0 | <0.1 | 0.41 | 2 | <0.5 | <0.2 | | | |
| 1894790 | Rock | 5 | 2 | 0.86 | 22 | 0.016 | 1 | 0.67 | 0.006 | 0.02 | 1.0 | <0.01 | 2.2 | <0.1 | <0.05 | 2 | <0.5 | <0.2 | | | |
| 1894791 | Rock | <1 | 2 | 0.03 | 6 | 0.008 | <1 | 0.11 | 0.001 | 0.01 | 1.5 | 0.05 | 0.4 | <0.1 | 4.06 | 1 | >100 | 25.1 | 0.029 | 7.489 | <0.01 |
| 1894792 | Rock | <1 | 2 | <0.01 | 1 | 0.002 | <1 | 0.06 | <0.001 | <0.01 | 0.8 | <0.01 | 0.2 | <0.1 | <0.05 | 1 | 4.4 | 2.3 | | | |
| 1894793 | Rock | <1 | 2 | 0.04 | 10 | 0.001 | <1 | 0.11 | 0.002 | 0.02 | <0.1 | <0.01 | 0.5 | <0.1 | <0.05 | <1 | 1.0 | <0.2 | | | |
| 1894794 | Rock | 27 | 1 | <0.01 | 26 | 0.005 | <1 | 0.31 | 0.038 | 0.23 | 0.9 | <0.01 | 0.3 | <0.1 | <0.05 | 2 | <0.5 | <0.2 | | | |
| 1894795 | Rock | 36 | 3 | <0.01 | 31 | 0.001 | <1 | 0.32 | 0.062 | 0.12 | <0.1 | <0.01 | 0.8 | <0.1 | 0.07 | 2 | <0.5 | 0.2 | | | |
| 1894796 | Rock | 1 | 2 | 0.05 | 19 | <0.001 | <1 | 0.16 | 0.019 | 0.12 | <0.1 | <0.01 | 0.3 | <0.1 | <0.05 | <1 | <0.5 | <0.2 | | | |
| 1894797 | Rock | 12 | 3 | 0.02 | 52 | <0.001 | <1 | 0.17 | 0.002 | 0.10 | <0.1 | <0.01 | 0.7 | <0.1 | <0.05 | <1 | <0.5 | <0.2 | | | |
| 1894798 | Rock | 11 | 6 | 0.42 | 62 | 0.042 | 2 | 1.06 | 0.046 | 0.15 | 0.7 | <0.01 | 4.1 | <0.1 | <0.05 | 3 | <0.5 | <0.2 | | | |
| 1894799 | Rock | <1 | 2 | <0.01 | 43 | <0.001 | <1 | 0.11 | 0.003 | 0.01 | 1.1 | 0.04 | 0.4 | <0.1 | 1.01 | <1 | 21.6 | 1.0 | 0.594 | 0.266 | <0.01 |

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Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: November 22, 2019



# CERTIFICATE OF ANALYSIS WHI19000682.2

| | Method | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Zn | Ag | Ni | Co | Mn | Fe | As | Sr | Cd | Sb | Bi | Ca | P | Cr | Mg | Al | Na | K | W | Hg |
| | Unit | % | ppm | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % |
| | MDL | 0.01 | 2 | 0.001 | 0.001 | 0.01 | 0.01 | 0.01 | 0.001 | 0.001 | 0.001 | 0.01 | 0.01 | 0.001 | 0.001 | 0.01 | 0.01 | 0.01 | 0.01 | 0.001 | 0.001 |
| 1894781 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894782 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894783 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894784 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894785 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894786 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894787 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894788 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894789 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894790 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894791 | Rock | 0.03 | 143 | <0.001 | 0.001 | <0.01 | 11.38 | <0.01 | <0.001 | <0.001 | <0.001 | 0.07 | 0.09 | 0.007 | <0.001 | 0.03 | 0.10 | <0.01 | 0.01 | <0.001 | <0.001 |
| 1894792 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894793 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894794 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894795 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894796 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894797 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894798 | Rock | | | | | | | | | | | | | | | | | | | | |
| 1894799 | Rock | <0.01 | 66 | <0.001 | <0.001 | <0.01 | 5.99 | <0.01 | <0.001 | <0.001 | <0.001 | <0.01 | 0.02 | 0.002 | <0.001 | <0.01 | 0.09 | <0.01 | 0.01 | <0.001 | <0.001 |

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Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: November 22, 2019



# CERTIFICATE OF ANALYSIS WHI19000682.2

| | | Method | AQ370 |
|---|---|---|---|
| | | Analyte | S |
| | | Unit | % |
| | | MDL | 0.05 |
| 1894781 | Rock | | |
| 1894782 | Rock | | |
| 1894783 | Rock | | |
| 1894784 | Rock | | |
| 1894785 | Rock | | |
| 1894786 | Rock | | |
| 1894787 | Rock | | |
| 1894788 | Rock | | |
| 1894789 | Rock | | |
| 1894790 | Rock | | |
| 1894791 | Rock | | 7.10 |
| 1894792 | Rock | | |
| 1894793 | Rock | | |
| 1894794 | Rock | | |
| 1894795 | Rock | | |
| 1894796 | Rock | | |
| 1894797 | Rock | | |
| 1894798 | Rock | | |
| 1894799 | Rock | | 0.99 |

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Whitehorse Yukon Y1A 4T3 Canada

Project: PIKE
Report Date: November 22, 2019



# QUALITY CONTROL REPORT WHI19000682.2

| | | Method | WGHT | 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 | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P |
| | | Unit | kg | 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 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.001 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | | | | |
| 1894760 | Rock | | 1.19 | 1190.7 | >10000 | 153.2 | 186 | >100 | 4.9 | 18.6 | 155 | 12.37 | 0.8 | 59.4 | 5.4 | 45 | 6.4 | 0.4 | >2000 | 186 | 0.37 | 0.039 |
| REP 1894760 | QC | | | 1194.4 | >10000 | 150.9 | 185 | >100 | 4.9 | 18.4 | 152 | 12.22 | 0.7 | 56.6 | 5.4 | 44 | 6.3 | 0.4 | >2000 | 185 | 0.36 | 0.039 |
| 1894788 | Rock | | 1.52 | 4.5 | 14.1 | 9.8 | 106 | 0.2 | 3.4 | 12.0 | 1176 | 3.02 | 2.7 | 4.2 | 2.2 | 148 | 1.3 | 1.2 | 0.3 | 21 | 3.37 | 0.027 |
| REP 1894788 | QC | | | 5.1 | 15.4 | 10.8 | 108 | 0.2 | 3.6 | 12.0 | 1192 | 3.09 | 3.0 | 4.9 | 2.4 | 148 | 1.5 | 1.2 | 0.3 | 22 | 3.42 | 0.030 |
| Core Reject Duplicates | | | | | | | | | | | | | | | | | | | | | | |
| 1894783 | Rock | | 2.08 | 1.2 | 20.7 | 3.5 | 29 | 0.4 | 2.2 | 6.5 | 889 | 2.28 | 3.1 | 24.2 | 0.5 | 103 | 0.1 | <0.1 | 0.4 | 28 | 3.46 | 0.010 |
| DUP 1894783 | QC | | | 1.2 | 20.4 | 3.0 | 29 | 0.3 | 2.1 | 6.3 | 882 | 2.26 | 2.7 | 31.5 | 0.5 | 102 | 0.2 | <0.1 | 0.3 | 28 | 3.41 | 0.010 |
| Reference Materials | | | | | | | | | | | | | | | | | | | | | | |
| STD BVGEO01 | Standard | | | 11.3 | 4376.8 | 192.4 | 1722 | 2.6 | 153.4 | 25.5 | 715 | 3.71 | 122.6 | 213.3 | 16.7 | 60 | 6.7 | 3.5 | 26.7 | 70 | 1.31 | 0.080 |
| STD CDN-ME-9A | Standard | | | | | | | | | | | | | | | | | | | | | |
| STD CDN-ME-14A | Standard | | | | | | | | | | | | | | | | | | | | | |
| STD DS11 | Standard | | | 15.5 | 146.6 | 126.0 | 330 | 1.8 | 84.9 | 13.9 | 997 | 3.11 | 43.6 | 86.9 | 7.4 | 63 | 2.1 | 7.8 | 10.4 | 47 | 1.05 | 0.067 |
| STD OREAS262 | Standard | | | 0.8 | 118.3 | 53.6 | 151 | 0.5 | 68.7 | 27.3 | 541 | 3.23 | 36.8 | 74.4 | 8.9 | 34 | 0.6 | 5.3 | 1.4 | 22 | 2.95 | 0.038 |
| STD OREAS262 | Standard | | | 0.6 | 121.7 | 56.3 | 151 | 0.4 | 61.4 | 27.8 | 539 | 3.25 | 35.3 | 58.1 | 10.4 | 34 | 0.6 | 5.1 | 1.1 | 22 | 2.97 | 0.043 |
| STD DS11 Expected | | | | 14.6 | 149 | 138 | 345 | 1.71 | 77.7 | 14.2 | 1055 | 3.1 | 42.8 | 79 | 7.65 | 67.3 | 2.37 | 8.74 | 12.2 | 50 | 1.063 | 0.0701 |
| STD BVGEO01 Expected | | | | 11.2 | 4415 | 187 | 1741 | 2.53 | 163 | 25 | 733 | 3.7 | 121 | 219 | 14.4 | 55 | 6.5 | 3.39 | 25.6 | 73 | 1.3219 | 0.0727 |
| STD OREAS262 Expected | | | | 0.68 | 118 | 56 | 154 | 0.45 | 62 | 26.9 | 530 | 3.284 | 35.8 | 65 | 9.33 | 36 | 0.61 | 5.06 | 1.03 | 22.5 | 2.98 | 0.04 |
| STD CDN-ME-9A Expected | | | | | | | | | | | | | | | | | | | | | | |
| STD CDN-ME-14A Expected | | | | | | | | | | | | | | | | | | | | | | |
| BLK | Blank | | | <0.1 | 0.2 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <1 | <0.01 | <0.5 | <0.5 | <0.1 | <1 | <0.1 | <0.1 | 0.3 | <1 | <0.01 | <0.001 |
| BLK | Blank | | | <0.1 | <0.1 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <1 | <0.01 | <0.5 | <0.5 | 0.1 | <1 | <0.1 | <0.1 | <0.1 | <1 | <0.01 | <0.001 |
| BLK | Blank | | | | | | | | | | | | | | | | | | | | | |
| Prep Wash | | | | | | | | | | | | | | | | | | | | | | |
| ROCK-WHI | Prep Blank | | | 0.9 | 6.2 | 1.2 | 36 | <0.1 | 2.5 | 4.9 | 614 | 2.13 | 0.7 | 1.2 | 2.1 | 25 | <0.1 | <0.1 | <0.1 | 30 | 0.77 | 0.039 |
| ROCK-WHI | Prep Blank | | | 0.9 | 5.2 | 0.9 | 35 | <0.1 | 1.8 | 4.7 | 591 | 2.11 | 1.1 | 0.7 | 2.1 | 23 | <0.1 | <0.1 | <0.1 | 29 | 0.64 | 0.039 |

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Project: PIKE
Report Date: November 22, 2019



# QUALITY CONTROL REPORT WHI19000682.2

| | Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ370 | AQ370 | AQ370 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se | Te | Mo | Cu | Pb |
| | Unit | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | % | % | % |
| | MDL | 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 | 0.01 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | | | |
| 1894760 | Rock | 7 | 9 | 0.30 | 53 | 0.010 | <1 | 0.80 | 0.010 | 0.06 | 1.6 | 0.04 | 2.2 | <0.1 | 3.26 | 5 | 90.9 | 21.5 | 0.119 | 5.352 | 0.01 |
| REP 1894760 | QC | 7 | 8 | 0.31 | 51 | 0.010 | <1 | 0.79 | 0.011 | 0.06 | 1.6 | 0.04 | 2.1 | <0.1 | 3.40 | 5 | 90.9 | 21.6 | | | |
| 1894788 | Rock | 8 | 2 | 0.91 | 44 | 0.067 | <1 | 1.14 | 0.008 | 0.03 | 1.5 | <0.01 | 2.7 | <0.1 | 0.10 | 4 | <0.5 | <0.2 | | | |
| REP 1894788 | QC | 9 | 2 | 0.93 | 46 | 0.074 | 1 | 1.16 | 0.009 | 0.04 | 1.8 | <0.01 | 3.1 | <0.1 | 0.10 | 4 | <0.5 | <0.2 | | | |
| Core Reject Duplicates | | | | | | | | | | | | | | | | | | | | | |
| 1894783 | Rock | 10 | 3 | 0.98 | 38 | 0.002 | <1 | 1.12 | 0.002 | 0.08 | 0.3 | <0.01 | 1.6 | <0.1 | 0.36 | 4 | <0.5 | <0.2 | | | |
| DUP 1894783 | QC | 10 | 3 | 0.96 | 40 | 0.002 | <1 | 1.12 | 0.002 | 0.08 | 0.2 | <0.01 | 1.6 | <0.1 | 0.36 | 4 | <0.5 | <0.2 | | | |
| Reference Materials | | | | | | | | | | | | | | | | | | | | | |
| STD BVGEO01 | Standard | 27 | 183 | 1.30 | 254 | 0.232 | 5 | 2.37 | 0.195 | 0.88 | 5.2 | 0.09 | 6.3 | 0.6 | 0.66 | 8 | 5.6 | 0.9 | | | |
| STD CDN-ME-9A | Standard | | | | | | | | | | | | | | | | | | <0.001 | 0.654 | <0.01 |
| STD CDN-ME-14A | Standard | | | | | | | | | | | | | | | | | | 0.002 | 1.259 | 0.49 |
| STD DS11 | Standard | 17 | 59 | 0.84 | 348 | 0.092 | 7 | 1.17 | 0.071 | 0.40 | 3.1 | 0.28 | 3.2 | 4.9 | 0.26 | 5 | 2.5 | 4.6 | | | |
| STD OREAS262 | Standard | 16 | 44 | 1.18 | 242 | 0.003 | 4 | 1.46 | 0.065 | 0.31 | 0.2 | 0.16 | 3.3 | 0.5 | 0.24 | 4 | 0.8 | 0.2 | | | |
| STD OREAS262 | Standard | 16 | 41 | 1.17 | 241 | 0.003 | 4 | 1.40 | 0.067 | 0.31 | 0.2 | 0.16 | 3.4 | 0.5 | 0.25 | 4 | <0.5 | 0.2 | | | |
| STD DS11 Expected | | 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 | | 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 | | 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 | 3.73 | 0.4 | 0.23 | | | |
| STD CDN-ME-9A Expected | | | | | | | | | | | | | | | | | | | 0.00033 | 0.654 | 0.003 |
| STD CDN-ME-14A Expected | | | | | | | | | | | | | | | | | | | 0.0015 | 1.24 | 0.488 |
| BLK | Blank | <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 | <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 | <0.01 |
| Prep Wash | | | | | | | | | | | | | | | | | | | | | |
| ROCK-WHI | Prep Blank | 6 | 5 | 0.60 | 56 | 0.082 | 1 | 1.11 | 0.097 | 0.09 | 0.2 | <0.01 | 3.2 | <0.1 | <0.05 | 4 | <0.5 | <0.2 | | | |
| ROCK-WHI | Prep Blank | 6 | 4 | 0.56 | 55 | 0.079 | 2 | 1.07 | 0.102 | 0.09 | 0.1 | <0.01 | 3.0 | <0.1 | <0.05 | 4 | <0.5 | <0.2 | | | |

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PHONE (604) 253-3158

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

Project: PIKE
Report Date: November 22, 2019



# QUALITY CONTROL REPORT WHI19000682.2

| | | Method | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 | AQ370 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Analyte | Zn | Ag | Ni | Co | Mn | Fe | As | Sr | Cd | Sb | Bi | Ca | P | Cr | Mg | Al | Na | K | W | Hg |
| | | Unit | % | ppm | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % | % |
| | | MDL | 0.01 | 2 | 0.001 | 0.001 | 0.01 | 0.01 | 0.01 | 0.001 | 0.001 | 0.001 | 0.01 | 0.01 | 0.001 | 0.001 | 0.01 | 0.01 | 0.01 | 0.01 | 0.001 | 0.001 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | | | | |
| 1894760 | Rock | | 0.02 | 138 | <0.001 | 0.002 | 0.01 | 12.11 | <0.01 | 0.004 | <0.001 | <0.001 | 0.30 | 0.33 | 0.043 | 0.001 | 0.31 | 0.73 | 0.01 | 0.08 | <0.001 | <0.001 |
| REP 1894760 | QC | | | | | | | | | | | | | | | | | | | | | |
| 1894788 | Rock | | | | | | | | | | | | | | | | | | | | | |
| REP 1894788 | QC | | | | | | | | | | | | | | | | | | | | | |
| Core Reject Duplicates | | | | | | | | | | | | | | | | | | | | | | |
| 1894783 | Rock | | | | | | | | | | | | | | | | | | | | | |
| DUP 1894783 | QC | | | | | | | | | | | | | | | | | | | | | |
| Reference Materials | | | | | | | | | | | | | | | | | | | | | | |
| STD BVGEO01 | Standard | | | | | | | | | | | | | | | | | | | | | |
| STD CDN-ME-9A | Standard | | <0.01 | 3 | 0.917 | 0.016 | 0.06 | 11.47 | <0.01 | 0.005 | <0.001 | <0.001 | <0.01 | 1.23 | 0.058 | 0.014 | 2.74 | 1.99 | 0.27 | 0.18 | <0.001 | <0.001 |
| STD CDN-ME-14A | Standard | | 3.14 | 44 | 0.002 | 0.017 | 0.06 | 17.55 | 0.01 | <0.001 | 0.009 | 0.003 | <0.01 | 0.31 | 0.014 | 0.003 | 0.89 | 1.13 | 0.02 | 0.36 | <0.001 | <0.001 |
| STD DS11 | Standard | | | | | | | | | | | | | | | | | | | | | |
| STD OREAS262 | Standard | | | | | | | | | | | | | | | | | | | | | |
| STD OREAS262 | Standard | | | | | | | | | | | | | | | | | | | | | |
| STD DS11 Expected | | | | | | | | | | | | | | | | | | | | | | |
| STD BVGEO01 Expected | | | | | | | | | | | | | | | | | | | | | | |
| STD OREAS262 Expected | | | | | | | | | | | | | | | | | | | | | | |
| STD CDN-ME-9A Expected | | | 0.0096 | 3.3 | 0.912 | 0.0165 | 0.066 | 11.73 | 0.00125 | 0.006 | | 0 | 0.00014 | 0.0002 | 1.37 | 0.0583 | 0.0134 | 2.84 | 2.21 | 0.309 | 0.1813 | 0 | 0 |
| STD CDN-ME-14A Expected | | | 2.97 | 42.3 | 0.0018 | 0.017 | 0.0589 | 17.29 | 0.0105 | 0.00036 | 0.0088 | 0.0024 | 0.0096 | 0.298 | 0.0127 | 0.0019 | 0.8787 | 1.14 | 0.0264 | 0.359 | | 0.0015 |
| BLK | Blank | | | | | | | | | | | | | | | | | | | | | |
| BLK | Blank | | | | | | | | | | | | | | | | | | | | | |
| BLK | Blank | | <0.01 | <2 | <0.001 | <0.001 | <0.01 | <0.01 | <0.01 | <0.001 | <0.001 | <0.001 | <0.01 | <0.01 | <0.001 | <0.001 | <0.01 | <0.01 | <0.01 | <0.01 | <0.001 | <0.001 |
| Prep Wash | | | | | | | | | | | | | | | | | | | | | | |
| ROCK-WHI | Prep Blank | | | | | | | | | | | | | | | | | | | | | |
| ROCK-WHI | Prep Blank | | | | | | | | | | | | | | | | | | | | | |

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PHONE (604) 253-3158

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

Project: PIKE

Report Date: November 22, 2019



# QUALITY CONTROL REPORT WHI19000682.2

| | | Method | AQ370 |
|---|---|---|---|
| | | Analyte | S |
| | | Unit | % |
| | | MDL | 0.05 |
| Pulp Duplicates | | | |
| 1894760 | Rock | | 5.44 |
| REP 1894760 | QC | | |
| 1894788 | Rock | | |
| REP 1894788 | QC | | |
| Core Reject Duplicates | | | |
| 1894783 | Rock | | |
| DUP 1894783 | QC | | |
| Reference Materials | | | |
| STD BVGEO01 | Standard | | |
| STD CDN-ME-9A | Standard | | 3.25 |
| STD CDN-ME-14A | Standard | | 16.72 |
| STD DS11 | Standard | | |
| STD OREAS262 | Standard | | |
| STD OREAS262 | Standard | | |
| STD DS11 Expected | | | |
| STD BVGEO01 Expected | | | |
| STD OREAS262 Expected | | | |
| STD CDN-ME-9A Expected | | | 3.34 |
| STD CDN-ME-14A Expected | | | 16.52 |
| BLK | Blank | | |
| BLK | Blank | | |
| BLK | Blank | | <0.05 |
| Prep Wash | | | |
| ROCK-WHI | Prep Blank | | |
| ROCK-WHI | Prep Blank | | |

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

Submitted By: Ryan Burke
Receiving Lab: Canada-Whitehorse
Received: October 16, 2019
Report Date: November 08, 2019
Page: 1 of 3

# CERTIFICATE OF ANALYSIS WHI19000683.1

## CLIENT JOB INFORMATION

Project: WARDEN
Shipment ID:
P.O. Number
Number of Samples: 40

## SAMPLE DISPOSAL

PICKUP-PLP Client to Pickup Pulps
STOR-RJT-SOIL Store Soil Reject - RJSV Charges Apply

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

## SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

| Procedure Code | Number of Samples | Code Description | Test Wgt (g) | Report Status | Lab |
|---|---|---|---|---|---|
| DY060 | 40 | Dry at 60C | | | WHI |
| SS80 | 40 | Dry at 60C sieve 100g to -80 mesh | | | WHI |
| AQ201 | 40 | 1:1:1 Aqua Regia digestion ICP-MS analysis | 15 | Completed | VAN |
| SHP01 | 40 | Per sample shipping charges for branch shipments | | | VAN |
| SLBHP | 0 | Sort, label and box pulps | | | WHI |
| SVRJT | 40 | Save all or part of Soil Reject | | | WHI |

## ADDITIONAL COMMENTS

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

CC:

KERRY JAY
Geochem Project Specialist

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

Project: WARDEN
Report Date: November 08, 2019



# CERTIFICATE OF ANALYSIS WHI19000683.1

| | Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La |
| | Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % | ppm |
| | MDL | 0.1 | 0.1 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.5 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 2 | 0.01 | 0.001 | 1 |
| 1894822 | Soil | 0.3 | 27.2 | 10.7 | 82 | <0.1 | 25.5 | 16.4 | 710 | 3.83 | 1.8 | 1.1 | 8.4 | 40 | 0.2 | 0.1 | <0.1 | 97 | 0.55 | 0.126 | 19 |
| 1894823 | Soil | 0.5 | 22.9 | 7.4 | 74 | <0.1 | 20.2 | 14.9 | 698 | 3.93 | 2.5 | 3.0 | 5.8 | 28 | <0.1 | 0.1 | 0.1 | 93 | 0.37 | 0.120 | 15 |
| 1894824 | Soil | 0.4 | 24.3 | 5.9 | 70 | <0.1 | 19.0 | 13.2 | 521 | 3.29 | 1.9 | 0.5 | 8.7 | 29 | <0.1 | 0.1 | <0.1 | 86 | 0.51 | 0.145 | 19 |
| 1894825 | Soil | 0.5 | 20.0 | 9.0 | 69 | <0.1 | 25.2 | 14.3 | 607 | 3.29 | 3.2 | 1.0 | 11.3 | 26 | <0.1 | 0.2 | 0.1 | 76 | 0.36 | 0.106 | 21 |
| 1894826 | Soil | 0.6 | 16.4 | 8.0 | 62 | <0.1 | 26.0 | 11.9 | 509 | 3.00 | 3.5 | 1.5 | 13.2 | 29 | <0.1 | 0.2 | 0.1 | 63 | 0.36 | 0.081 | 26 |
| 1894827 | Soil | 0.2 | 13.8 | 6.5 | 68 | <0.1 | 24.4 | 12.5 | 496 | 2.72 | 1.8 | 2.4 | 10.9 | 31 | 0.1 | 0.1 | 0.1 | 54 | 0.38 | 0.087 | 25 |
| 1894828 | Soil | 0.5 | 16.2 | 7.0 | 54 | <0.1 | 28.7 | 14.2 | 445 | 3.00 | 1.7 | 2.3 | 10.9 | 21 | <0.1 | <0.1 | 0.1 | 64 | 0.27 | 0.089 | 18 |
| 1894829 | Soil | 0.6 | 17.9 | 10.1 | 65 | <0.1 | 21.6 | 11.7 | 513 | 3.00 | 2.8 | 1.4 | 11.4 | 31 | <0.1 | 0.2 | 0.1 | 72 | 0.36 | 0.085 | 20 |
| 1894830 | Soil | 0.5 | 17.5 | 8.1 | 63 | <0.1 | 20.9 | 11.2 | 496 | 2.94 | 2.5 | 10.7 | 14.6 | 28 | 0.2 | 0.1 | 0.1 | 70 | 0.40 | 0.102 | 22 |
| 1894831 | Soil | 0.6 | 18.0 | 9.8 | 71 | <0.1 | 19.9 | 11.5 | 684 | 3.35 | 2.4 | 9.7 | 15.6 | 27 | <0.1 | 0.1 | 0.2 | 76 | 0.31 | 0.099 | 24 |
| 1894832 | Soil | 0.7 | 24.4 | 17.9 | 75 | <0.1 | 26.3 | 12.9 | 677 | 3.57 | 3.2 | 2.1 | 17.9 | 17 | 0.1 | 0.2 | 0.2 | 90 | 0.24 | 0.086 | 23 |
| 1894833 | Soil | 0.5 | 21.4 | 13.0 | 69 | <0.1 | 21.3 | 11.5 | 573 | 3.05 | 3.1 | 1.6 | 14.6 | 25 | 0.1 | 0.2 | 0.2 | 78 | 0.38 | 0.108 | 24 |
| 1894834 | Soil | 0.5 | 20.3 | 10.2 | 74 | <0.1 | 22.3 | 11.6 | 601 | 3.15 | 3.7 | 1.9 | 18.2 | 25 | 0.2 | 0.2 | 0.1 | 73 | 0.37 | 0.104 | 24 |
| 1894835 | Soil | 0.6 | 18.8 | 8.1 | 66 | <0.1 | 19.3 | 11.0 | 515 | 2.97 | 2.6 | 4.6 | 12.9 | 25 | 0.1 | 0.1 | 0.1 | 84 | 0.37 | 0.112 | 19 |
| 1894836 | Soil | 0.5 | 28.3 | 8.7 | 74 | <0.1 | 21.9 | 15.1 | 693 | 3.69 | 2.9 | 1.3 | 9.7 | 24 | <0.1 | 0.1 | 0.1 | 100 | 0.39 | 0.140 | 19 |
| 1894837 | Soil | 0.3 | 18.0 | 5.2 | 59 | <0.1 | 16.3 | 11.6 | 499 | 3.35 | 1.8 | <0.5 | 7.3 | 25 | 0.1 | 0.1 | <0.1 | 89 | 0.39 | 0.114 | 15 |
| 1894838 | Soil | 0.2 | 6.8 | 3.6 | 38 | <0.1 | 10.7 | 6.6 | 273 | 2.09 | 0.7 | 3.2 | 16.7 | 28 | <0.1 | <0.1 | <0.1 | 58 | 0.54 | 0.131 | 23 |
| 1894839 | Soil | 0.2 | 20.0 | 6.5 | 64 | <0.1 | 14.3 | 11.2 | 546 | 3.38 | 1.6 | <0.5 | 11.0 | 26 | <0.1 | <0.1 | <0.1 | 84 | 0.39 | 0.103 | 19 |
| 1894840 | Soil | 0.5 | 18.7 | 9.8 | 72 | <0.1 | 19.6 | 10.4 | 618 | 3.14 | 3.1 | 7.1 | 18.1 | 24 | 0.1 | 0.1 | 0.1 | 73 | 0.28 | 0.100 | 23 |
| 1894841 | Soil | 0.6 | 20.1 | 15.6 | 74 | <0.1 | 20.8 | 11.6 | 674 | 3.16 | 2.8 | 10.3 | 14.0 | 22 | 0.1 | 0.1 | 0.2 | 74 | 0.27 | 0.099 | 26 |
| 1894842 | Soil | 0.6 | 18.1 | 11.6 | 73 | <0.1 | 20.6 | 11.6 | 588 | 3.23 | 2.7 | 0.9 | 11.9 | 28 | 0.1 | 0.1 | 0.2 | 76 | 0.27 | 0.091 | 21 |
| 1894843 | Soil | 1.1 | 30.0 | 19.6 | 72 | 0.2 | 22.7 | 21.8 | 1691 | 3.72 | 3.1 | 1.0 | 6.9 | 44 | 0.1 | 0.1 | 0.3 | 92 | 0.31 | 0.139 | 20 |
| 1894851 | Soil | 0.4 | 27.8 | 7.1 | 68 | <0.1 | 28.2 | 17.4 | 589 | 3.80 | 2.2 | 8.9 | 9.3 | 38 | <0.1 | <0.1 | <0.1 | 96 | 0.54 | 0.145 | 19 |
| 1894852 | Soil | 0.4 | 25.6 | 5.3 | 74 | <0.1 | 27.7 | 16.7 | 586 | 3.89 | 1.8 | <0.5 | 7.3 | 33 | <0.1 | <0.1 | <0.1 | 100 | 0.49 | 0.135 | 15 |
| 1894853 | Soil | 0.5 | 67.0 | 5.3 | 67 | <0.1 | 23.2 | 17.9 | 596 | 3.73 | 1.9 | <0.5 | 4.6 | 39 | 0.1 | 0.1 | 0.1 | 79 | 0.51 | 0.168 | 15 |
| 1894854 | Soil | 0.7 | 38.9 | 7.2 | 70 | <0.1 | 26.5 | 15.0 | 559 | 3.39 | 3.3 | 4.7 | 6.2 | 28 | <0.1 | 0.2 | 0.2 | 78 | 0.43 | 0.132 | 17 |
| 1894855 | Soil | 0.4 | 17.2 | 7.7 | 68 | <0.1 | 34.2 | 15.1 | 570 | 3.20 | 2.7 | <0.5 | 12.4 | 29 | 0.1 | 0.1 | 0.2 | 59 | 0.33 | 0.091 | 16 |
| 1894856 | Soil | 0.2 | 15.3 | 16.1 | 58 | <0.1 | 19.6 | 10.5 | 516 | 2.66 | 1.0 | <0.5 | 10.8 | 29 | 0.1 | <0.1 | 0.2 | 47 | 0.34 | 0.095 | 23 |
| 1894857 | Soil | 0.4 | 21.3 | 9.4 | 71 | <0.1 | 23.5 | 12.8 | 665 | 2.89 | 1.5 | 0.7 | 10.5 | 38 | <0.1 | 0.1 | 0.2 | 57 | 0.46 | 0.110 | 26 |
| 1894858 | Soil | 0.4 | 15.1 | 8.7 | 55 | <0.1 | 21.4 | 10.6 | 466 | 2.60 | 2.1 | <0.5 | 9.4 | 18 | <0.1 | 0.1 | 0.1 | 53 | 0.25 | 0.085 | 22 |

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

Project: WARDEN
Report Date: November 08, 2019



# CERTIFICATE OF ANALYSIS WHI19000683.1

| | Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se | Te |
| | Unit | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm |
| | MDL | 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 |
| 1894822 | Soil | 51 | 1.36 | 272 | 0.227 | <1 | 2.32 | 0.024 | 0.21 | 0.2 | 0.01 | 4.4 | 0.2 | <0.05 | 8 | <0.5 | <0.2 |
| 1894823 | Soil | 49 | 1.14 | 223 | 0.162 | <1 | 2.17 | 0.019 | 0.16 | 0.2 | 0.02 | 3.6 | 0.2 | <0.05 | 7 | 0.6 | <0.2 |
| 1894824 | Soil | 48 | 1.03 | 219 | 0.168 | <1 | 1.69 | 0.016 | 0.25 | 0.1 | <0.01 | 3.7 | 0.2 | <0.05 | 6 | <0.5 | <0.2 |
| 1894825 | Soil | 57 | 1.04 | 155 | 0.139 | <1 | 2.02 | 0.018 | 0.12 | 0.1 | 0.02 | 3.2 | 0.2 | <0.05 | 7 | <0.5 | <0.2 |
| 1894826 | Soil | 68 | 0.88 | 161 | 0.123 | <1 | 1.70 | 0.016 | 0.10 | 0.1 | <0.01 | 3.8 | 0.2 | <0.05 | 5 | <0.5 | <0.2 |
| 1894827 | Soil | 67 | 0.99 | 191 | 0.123 | <1 | 1.51 | 0.017 | 0.13 | 0.1 | <0.01 | 3.1 | 0.2 | <0.05 | 5 | <0.5 | <0.2 |
| 1894828 | Soil | 84 | 1.00 | 122 | 0.108 | <1 | 1.61 | 0.014 | 0.10 | <0.1 | 0.03 | 2.6 | 0.2 | <0.05 | 6 | <0.5 | <0.2 |
| 1894829 | Soil | 47 | 0.92 | 155 | 0.135 | 1 | 1.94 | 0.017 | 0.10 | 0.2 | 0.02 | 3.6 | 0.2 | <0.05 | 6 | <0.5 | <0.2 |
| 1894830 | Soil | 44 | 0.88 | 178 | 0.131 | <1 | 1.74 | 0.014 | 0.14 | 0.2 | 0.02 | 3.4 | 0.2 | <0.05 | 6 | <0.5 | <0.2 |
| 1894831 | Soil | 42 | 0.98 | 157 | 0.143 | <1 | 1.79 | 0.016 | 0.17 | 0.1 | 0.02 | 3.3 | 0.2 | <0.05 | 6 | <0.5 | <0.2 |
| 1894832 | Soil | 50 | 1.03 | 206 | 0.150 | 1 | 2.43 | 0.015 | 0.21 | 0.1 | <0.01 | 4.4 | 0.3 | <0.05 | 8 | <0.5 | <0.2 |
| 1894833 | Soil | 46 | 0.94 | 185 | 0.149 | <1 | 2.16 | 0.019 | 0.16 | 0.1 | 0.01 | 3.7 | 0.2 | <0.05 | 7 | <0.5 | <0.2 |
| 1894834 | Soil | 41 | 0.88 | 177 | 0.143 | 1 | 2.10 | 0.016 | 0.14 | 0.2 | 0.01 | 4.1 | 0.2 | <0.05 | 7 | <0.5 | <0.2 |
| 1894835 | Soil | 39 | 0.93 | 142 | 0.149 | <1 | 1.97 | 0.018 | 0.14 | 0.1 | <0.01 | 3.1 | 0.2 | <0.05 | 6 | <0.5 | <0.2 |
| 1894836 | Soil | 47 | 1.13 | 212 | 0.176 | <1 | 2.74 | 0.017 | 0.20 | <0.1 | 0.01 | 4.0 | 0.2 | <0.05 | 8 | <0.5 | <0.2 |
| 1894837 | Soil | 34 | 0.90 | 189 | 0.172 | 1 | 1.69 | 0.014 | 0.20 | <0.1 | <0.01 | 2.6 | 0.2 | <0.05 | 6 | <0.5 | <0.2 |
| 1894838 | Soil | 28 | 0.52 | 84 | 0.100 | <1 | 0.93 | 0.015 | 0.13 | 0.1 | <0.01 | 2.4 | 0.1 | <0.05 | 3 | <0.5 | <0.2 |
| 1894839 | Soil | 30 | 0.83 | 207 | 0.181 | 1 | 1.80 | 0.018 | 0.20 | 0.1 | <0.01 | 3.6 | 0.2 | <0.05 | 7 | <0.5 | <0.2 |
| 1894840 | Soil | 35 | 0.88 | 201 | 0.146 | 1 | 2.21 | 0.016 | 0.17 | 0.2 | 0.01 | 3.7 | 0.2 | <0.05 | 7 | <0.5 | <0.2 |
| 1894841 | Soil | 43 | 0.92 | 177 | 0.132 | <1 | 2.48 | 0.016 | 0.15 | 0.1 | 0.01 | 3.7 | 0.2 | <0.05 | 7 | <0.5 | <0.2 |
| 1894842 | Soil | 44 | 0.87 | 171 | 0.117 | <1 | 2.13 | 0.017 | 0.13 | 0.1 | 0.02 | 3.1 | 0.2 | <0.05 | 7 | <0.5 | <0.2 |
| 1894843 | Soil | 41 | 1.11 | 296 | 0.122 | 1 | 3.29 | 0.018 | 0.15 | 0.2 | 0.05 | 4.3 | 0.3 | 0.12 | 10 | <0.5 | <0.2 |
| 1894851 | Soil | 67 | 1.32 | 185 | 0.194 | <1 | 2.33 | 0.022 | 0.18 | 0.2 | <0.01 | 4.9 | 0.2 | <0.05 | 8 | <0.5 | <0.2 |
| 1894852 | Soil | 77 | 1.27 | 212 | 0.191 | 1 | 2.04 | 0.021 | 0.22 | 0.1 | <0.01 | 3.4 | 0.2 | <0.05 | 7 | <0.5 | <0.2 |
| 1894853 | Soil | 61 | 1.21 | 167 | 0.146 | <1 | 1.69 | 0.012 | 0.17 | 0.1 | <0.01 | 3.4 | 0.1 | <0.05 | 6 | <0.5 | <0.2 |
| 1894854 | Soil | 54 | 1.11 | 197 | 0.155 | 2 | 1.99 | 0.014 | 0.18 | 0.2 | 0.01 | 3.2 | 0.2 | <0.05 | 7 | 0.7 | <0.2 |
| 1894855 | Soil | 76 | 1.27 | 152 | 0.116 | <1 | 1.82 | 0.011 | 0.13 | 0.2 | <0.01 | 2.6 | 0.2 | <0.05 | 6 | <0.5 | <0.2 |
| 1894856 | Soil | 44 | 0.86 | 164 | 0.108 | <1 | 1.45 | 0.010 | 0.14 | 0.1 | <0.01 | 2.6 | 0.1 | <0.05 | 5 | <0.5 | <0.2 |
| 1894857 | Soil | 46 | 1.03 | 220 | 0.136 | <1 | 1.93 | 0.012 | 0.17 | 0.1 | <0.01 | 3.7 | 0.2 | <0.05 | 6 | <0.5 | <0.2 |
| 1894858 | Soil | 54 | 0.74 | 138 | 0.100 | <1 | 1.69 | 0.010 | 0.09 | 0.2 | 0.01 | 2.5 | 0.1 | <0.05 | 5 | <0.5 | <0.2 |

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

Project: WARDEN
Report Date: November 08, 2019



# CERTIFICATE OF ANALYSIS WHI19000683.1

| | Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La |
| | Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % | ppm |
| | MDL | 0.1 | 0.1 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.5 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 2 | 0.01 | 0.001 | 1 |
| 1894859 | Soil | 1.1 | 28.2 | 18.1 | 86 | <0.1 | 31.4 | 17.8 | 1109 | 3.96 | 4.4 | <0.5 | 5.3 | 21 | <0.1 | 0.3 | 0.3 | 89 | 0.19 | 0.117 | 19 |
| 1894860 | Soil | 0.4 | 14.9 | 6.9 | 56 | <0.1 | 19.9 | 10.1 | 445 | 2.71 | 2.1 | <0.5 | 9.7 | 21 | 0.1 | 0.1 | 0.1 | 52 | 0.30 | 0.099 | 22 |
| 1894861 | Soil | 0.3 | 15.6 | 6.3 | 59 | <0.1 | 18.3 | 11.1 | 452 | 2.79 | 1.4 | 1.0 | 10.0 | 35 | 0.2 | <0.1 | <0.1 | 61 | 0.41 | 0.110 | 18 |
| 1894862 | Soil | 0.2 | 24.8 | 5.4 | 71 | <0.1 | 17.8 | 12.6 | 506 | 3.06 | 1.3 | <0.5 | 6.7 | 40 | <0.1 | <0.1 | <0.1 | 73 | 0.49 | 0.142 | 17 |
| 1894863 | Soil | 0.3 | 16.6 | 4.2 | 58 | <0.1 | 16.0 | 11.6 | 444 | 3.06 | 1.0 | <0.5 | 4.6 | 24 | <0.1 | <0.1 | <0.1 | 74 | 0.41 | 0.139 | 15 |
| 1894864 | Soil | 0.3 | 21.9 | 5.9 | 59 | <0.1 | 16.4 | 11.4 | 494 | 3.00 | 1.3 | 0.9 | 8.8 | 50 | <0.1 | <0.1 | 0.2 | 78 | 0.55 | 0.152 | 20 |
| 1894865 | Soil | 0.4 | 22.9 | 9.5 | 70 | <0.1 | 20.0 | 12.5 | 613 | 3.28 | 2.2 | 1.0 | 10.5 | 29 | <0.1 | 0.1 | 0.1 | 75 | 0.27 | 0.109 | 21 |
| 1894866 | Soil | 0.5 | 17.2 | 10.4 | 68 | <0.1 | 19.3 | 11.2 | 593 | 3.02 | 2.5 | <0.5 | 9.2 | 20 | 0.1 | 0.1 | 0.2 | 65 | 0.25 | 0.096 | 20 |
| 1894867 | Soil | 0.5 | 17.4 | 9.0 | 63 | <0.1 | 18.6 | 9.9 | 531 | 2.78 | 2.2 | <0.5 | 13.7 | 21 | <0.1 | 0.1 | 0.1 | 62 | 0.29 | 0.112 | 23 |
| 1894868 | Soil | 0.5 | 21.6 | 10.4 | 68 | 0.1 | 20.9 | 12.1 | 623 | 3.00 | 2.4 | 10.1 | 12.5 | 20 | <0.1 | 0.1 | 0.1 | 64 | 0.28 | 0.102 | 22 |

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| | Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se | Te |
| | Unit | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm |
| | MDL | 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 |
| 1894859 | Soil | 55 | 1.06 | 177 | 0.110 | 2 | 2.98 | 0.012 | 0.13 | 0.2 | 0.03 | 3.5 | 0.3 | <0.05 | 10 | 1.1 | <0.2 |
| 1894860 | Soil | 45 | 0.77 | 136 | 0.110 | 1 | 1.53 | 0.011 | 0.10 | 0.1 | 0.01 | 2.6 | 0.1 | <0.05 | 5 | <0.5 | <0.2 |
| 1894861 | Soil | 37 | 0.91 | 154 | 0.126 | <1 | 1.57 | 0.011 | 0.15 | 0.1 | <0.01 | 2.9 | 0.2 | <0.05 | 5 | <0.5 | <0.2 |
| 1894862 | Soil | 35 | 1.06 | 204 | 0.178 | <1 | 1.73 | 0.012 | 0.26 | 0.1 | <0.01 | 2.9 | 0.2 | <0.05 | 6 | <0.5 | <0.2 |
| 1894863 | Soil | 35 | 0.95 | 211 | 0.165 | <1 | 1.64 | 0.011 | 0.24 | <0.1 | <0.01 | 2.3 | 0.2 | <0.05 | 5 | <0.5 | <0.2 |
| 1894864 | Soil | 27 | 1.01 | 227 | 0.188 | <1 | 1.95 | 0.015 | 0.27 | 0.1 | <0.01 | 3.3 | 0.2 | <0.05 | 6 | <0.5 | <0.2 |
| 1894865 | Soil | 33 | 0.91 | 259 | 0.171 | <1 | 2.66 | 0.010 | 0.18 | 0.2 | <0.01 | 3.6 | 0.2 | <0.05 | 8 | <0.5 | <0.2 |
| 1894866 | Soil | 34 | 0.82 | 146 | 0.130 | <1 | 2.10 | 0.010 | 0.15 | 0.1 | <0.01 | 2.9 | 0.2 | <0.05 | 7 | <0.5 | <0.2 |
| 1894867 | Soil | 31 | 0.80 | 191 | 0.125 | <1 | 1.99 | 0.010 | 0.14 | 0.2 | 0.01 | 2.9 | 0.2 | <0.05 | 6 | <0.5 | <0.2 |
| 1894868 | Soil | 37 | 0.91 | 181 | 0.139 | <1 | 2.19 | 0.010 | 0.17 | 0.2 | 0.01 | 3.4 | 0.2 | <0.05 | 7 | <0.5 | <0.2 |

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# QUALITY CONTROL REPORT WHI19000683.1

| | Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P | La |
| | Unit | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % | ppm |
| | MDL | 0.1 | 0.1 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 1 | 0.01 | 0.5 | 0.5 | 0.1 | 1 | 0.1 | 0.1 | 0.1 | 2 | 0.01 | 0.001 | 1 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | | | |
| 1894856 | Soil | 0.2 | 15.3 | 16.1 | 58 | <0.1 | 19.6 | 10.5 | 516 | 2.66 | 1.0 | <0.5 | 10.8 | 29 | 0.1 | <0.1 | 0.2 | 47 | 0.34 | 0.095 | 23 |
| REP 1894856 | QC | 0.3 | 14.9 | 16.3 | 59 | <0.1 | 20.0 | 11.2 | 511 | 2.71 | 1.1 | 64.8 | 10.7 | 29 | 0.1 | <0.1 | 0.2 | 51 | 0.35 | 0.099 | 23 |
| Reference Materials | | | | | | | | | | | | | | | | | | | | | |
| STD BVGEO01 | Standard | 11.0 | 4708.7 | 196.5 | 1748 | 2.4 | 154.4 | 23.5 | 678 | 3.66 | 107.8 | 204.1 | 17.3 | 53 | 5.9 | 3.5 | 23.0 | 72 | 1.29 | 0.067 | 24 |
| STD DS11 | Standard | 14.1 | 157.5 | 138.0 | 339 | 1.7 | 78.3 | 13.5 | 979 | 3.15 | 42.5 | 80.7 | 7.6 | 66 | 2.3 | 8.9 | 12.3 | 46 | 1.00 | 0.066 | 17 |
| STD DS11 | Standard | 14.4 | 143.9 | 130.5 | 321 | 1.7 | 75.8 | 13.1 | 971 | 2.97 | 39.7 | 75.7 | 7.2 | 66 | 2.1 | 8.7 | 11.4 | 46 | 0.97 | 0.063 | 17 |
| STD OREAS262 | Standard | 0.7 | 114.7 | 59.4 | 151 | 0.5 | 66.3 | 28.7 | 551 | 3.37 | 35.8 | 75.1 | 10.0 | 36 | 0.6 | 5.4 | 1.0 | 25 | 3.05 | 0.038 | 18 |
| STD OREAS262 | Standard | 0.7 | 123.2 | 58.4 | 157 | 0.5 | 65.4 | 29.0 | 559 | 3.48 | 37.3 | 66.0 | 9.5 | 38 | 0.6 | 6.3 | 1.1 | 21 | 3.11 | 0.039 | 15 |
| STD OREAS262 | Standard | 0.7 | 116.5 | 53.3 | 145 | 0.5 | 62.2 | 26.3 | 513 | 3.15 | 31.9 | 70.0 | 8.7 | 35 | 0.5 | 6.2 | 0.9 | 19 | 2.77 | 0.036 | 16 |
| STD BVGEO01 Expected | | 11.2 | 4415 | 187 | 1741 | 2.53 | 163 | 25 | 733 | 3.7 | 121 | 219 | 14.4 | 55 | 6.5 | 3.39 | 25.6 | 73 | 1.3219 | 0.0727 | 25.9 |
| STD DS11 Expected | | 14.6 | 149 | 138 | 345 | 1.71 | 77.7 | 14.2 | 1055 | 3.1 | 42.8 | 79 | 7.65 | 67.3 | 2.37 | 8.74 | 12.2 | 50 | 1.063 | 0.0701 | 18.6 |
| STD OREAS262 Expected | | 0.68 | 118 | 56 | 154 | 0.45 | 62 | 26.9 | 530 | 3.284 | 35.8 | 65 | 9.33 | 36 | 0.61 | 5.06 | 1.03 | 22.5 | 2.98 | 0.04 | 15.9 |
| BLK | Blank | <0.1 | 0.2 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <1 | <0.01 | <0.5 | <0.5 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | 4 | <0.01 | <0.001 | <1 |
| BLK | Blank | <0.1 | <0.1 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <1 | <0.01 | <0.5 | <0.5 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <2 | <0.01 | <0.001 | <1 |
| BLK | Blank | <0.1 | 0.2 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <1 | <0.01 | <0.5 | <0.5 | <0.1 | <1 | <0.1 | <0.1 | <0.1 | <2 | <0.01 | <0.001 | <1 |

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# QUALITY CONTROL REPORT WHI19000683.1

| | | Method | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 | AQ201 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Analyte | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Hg | Sc | Tl | S | Ga | Se | Te |
| | | Unit | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm |
| | | MDL | 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 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | |
| 1894856 | Soil | | 44 | 0.86 | 164 | 0.108 | <1 | 1.45 | 0.010 | 0.14 | 0.1 | <0.01 | 2.6 | 0.1 | <0.05 | 5 | <0.5 | <0.2 |
| REP 1894856 | QC | | 45 | 0.89 | 165 | 0.107 | <1 | 1.41 | 0.010 | 0.13 | 0.1 | <0.01 | 2.5 | 0.2 | <0.05 | 5 | <0.5 | <0.2 |
| Reference Materials | | | | | | | | | | | | | | | | | | |
| STD BVGEO01 | Standard | | 196 | 1.31 | 296 | 0.208 | 4 | 2.25 | 0.191 | 0.81 | 5.0 | 0.10 | 6.7 | 0.6 | 0.63 | 7 | 4.2 | 0.8 |
| STD DS11 | Standard | | 55 | 0.78 | 337 | 0.085 | 5 | 1.11 | 0.064 | 0.40 | 3.2 | 0.26 | 2.8 | 4.9 | 0.24 | 5 | 2.5 | 4.7 |
| STD DS11 | Standard | | 56 | 0.80 | 347 | 0.084 | 5 | 1.11 | 0.066 | 0.37 | 2.7 | 0.25 | 2.9 | 4.6 | 0.29 | 5 | 2.2 | 4.9 |
| STD OREAS262 | Standard | | 47 | 1.12 | 258 | 0.003 | 5 | 1.36 | 0.067 | 0.34 | 0.3 | 0.17 | 3.4 | 0.5 | 0.24 | 4 | <0.5 | 0.3 |
| STD OREAS262 | Standard | | 42 | 1.15 | 250 | 0.003 | 3 | 1.26 | 0.064 | 0.29 | 0.3 | 0.19 | 3.1 | 0.5 | 0.26 | 4 | 0.6 | 0.3 |
| STD OREAS262 | Standard | | 42 | 1.14 | 234 | 0.003 | 3 | 1.24 | 0.064 | 0.29 | 0.2 | 0.15 | 3.1 | 0.4 | 0.32 | 4 | 0.6 | <0.2 |
| STD BVGEO01 Expected | | | 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 | | | 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 | | | 41.7 | 1.17 | 248 | 0.0027 | 4 | 1.3 | 0.071 | 0.312 | 0.2 | 0.17 | 3.24 | 0.47 | 0.253 | 3.73 | 0.4 | 0.23 |
| BLK | Blank | | <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 | | <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 | | <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 |