

# 2022 REPORT ON PROSPECTING, SOIL GEOCHEMISTRY AND LINE CUTTING AT THE CDL PROJECT

YMEP FOCUSED REGIONAL PROJECT 22- 014

CLAIMS: CDL 1 – 36, YD132137 - YD132172

Whitehorse Mining Division, Yukon Territory, CANADA

NTS 105E/ 7

UTM NAD 84 Zone 8V

Latitude 61° 24'N; Longitude 134° 54'W

By: William Mann and Roger Hulstein  
Field Work Performed June 18 – 24, 2022



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## 1.0 EXECUTIVE SUMMARY

The CDL 1-36 claims are located 70 km (by air) northeast of Whitehorse, Yukon on NTS mapsheet 105E/7 between the north end of Lake Laberge and the Teslin River. The claims were staked to cover ground considered favorable for intrusion-related mineralization, particularly alkalic gold copper porphyry mineralization analogous to that found on the MARS Minfile occurrence 10 km to the south. The CDL project was approved for funding in 2022 under the “focused regional” module of the Yukon Mineral Exploration Program.

The CDL property is underlain mainly by Jurassic Laberge Group sedimentary and volcanic rocks and minor Triassic Lewes River Group limestone. These units are intruded by middle Jurassic Bryde Suite monzonite. A large, prominent magnetic high is related to the monzonitic intrusions on the CDL property. These intrusions are thought to be less eroded at the CDL property than at the MARS property, and therefore have potential for a greater vertical extent of mineralization. The BACON Minfile occurrence and a polymetallic skarn are found in the northern part of the property.

The 2022 work program included 27 B/C horizon soil samples, 5 silt samples, 50 Ah horizon soil samples and 9 rock samples sent for analysis. A portable XRF unit was used in the field to screen samples and guide daily work.

The CDL project is an early stage mineral exploration property with poor outcrop, heavy vegetation, poor visibility, and moraine blanket soils that in places may not reflect bedrock.

The 2022 program confirmed the usefulness of “Ah” soil geochemistry compared to both B/C horizon soils and biogeochemistry. The two westernmost Ah soil samples returned anomalous Au, Cu and Bi, which suggests some potential for alkalic porphyry mineralization in this area. Prospecting was successful in locating some moderately anomalous float rock, but did not result in discovery of any potentially economic material or strong confirmation of alkalic porphyry potential. The cutline, which is useful for improved access through the very thick bush was re-cut where overgrown and extended to the north. Two additional helicopter landing sites were located, and trees cut to facilitate landing.

Further prospecting and geochemistry work is recommended focused on the potential for alkalic copper-gold porphyry mineralization. This work should focus on the far south and far north ends of the property.

## 2.0 INTRODUCTION

This report on the CDL porphyry project has been prepared for the Yukon Mineral Exploration Program (YMEP) and fulfills program requirements. The report also fulfills assessment reporting requirements to maintain the claims. The project sponsors and the authors of this report, William Mann, P.Geol. and Roger Hulstein, P.Geol., are two Whitehorse, Yukon based mineral exploration geologists. A total of \$20,105.83 in eligible expenses was incurred in 2022. This report is the required final report for the YMEP program describing and summarizing the work carried out in 2022, the results, and recommendations for further work. Of the total expenditure about  $\frac{3}{4}$  was spent on the CDL claims and the rest exploring open ground to the west of the claims.

The information and data used in the report was collected by the authors during a 2022 field program carried out from June 18<sup>th</sup> to 24<sup>th</sup> and on referenced sources. The earliest referenced work was carried out by the DC Syndicate (Dome and Cominco) in 1975, which led to the discovery of the Bacon minfile occurrence. This work was not filed for assessment. No further work is noted until 1997, when Camdan Exploration staked the JAVA claims in the area. Camdan worked the area in 1997, 1999 and 2009 with prospecting, line cutting and an airborne magnetics survey (Ouellette, 1997, 2000 & 2010). No further exploration work was carried out by Camdan and the claims were allowed to lapse.

William Mann restaked the property in June, 2019 and subsequently partners Mann and Walton carried out a program of soil sampling, GPS location and prospecting on the claims and surrounding area in September, 2019. In 2022 Mann and partner Hulstein collected a total of 9 rock samples, 27 B/C horizon soil samples, 5 silt samples and 50 Ah horizon soil samples, as described in this report.

## 3.0 PROPERTY DESCRIPTION AND LOCATION

The CDL property is located 70 km (by air) northeast of Whitehorse, Yukon on NTS mapsheet 105E/7 between the north end of Lake Laberge and the west bank of the Teslin River (Figure 1). The property consists of 36 contiguous quartz claims north of Miller Creek, covering 752.4 hectares centered at latitude 61° 24'N and 134° 54'W.

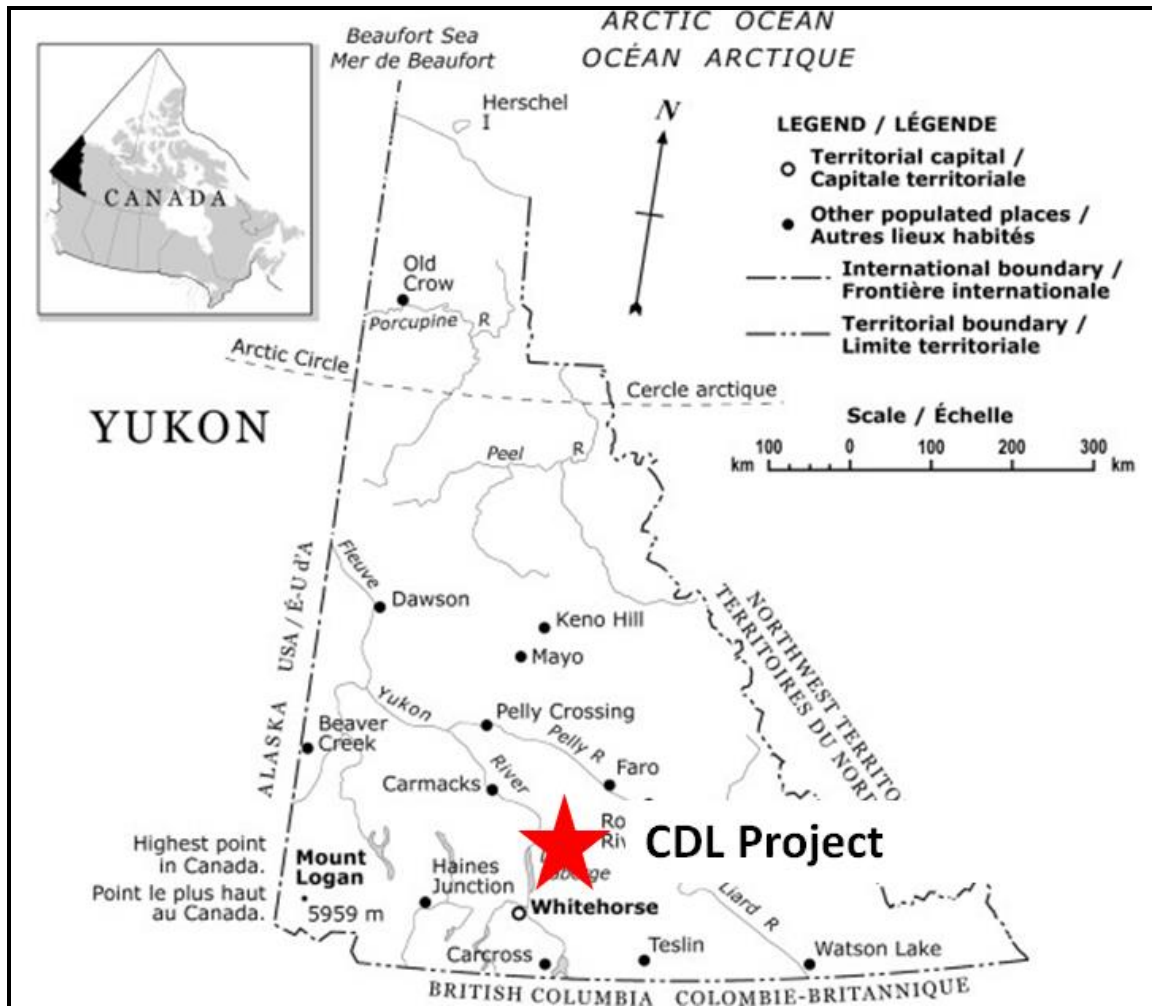


Figure 1. CDL Property Location Map

The property is accessed by helicopter from Whitehorse. Landing sites are rare due to thick forest cover. During the 2019 and 2022 field programs, vegetation at historical landing sites was re-cut for future access. Suitable landing site coordinates and notes are presented in Table 1. It may be possible to land a float plane on Little Miller Lake, which marks the south boundary of the CDL area of interest. A winter tote trail to the Livingstone Creek placer mining area passes within 25 km of the CDL claims (Figure 2).

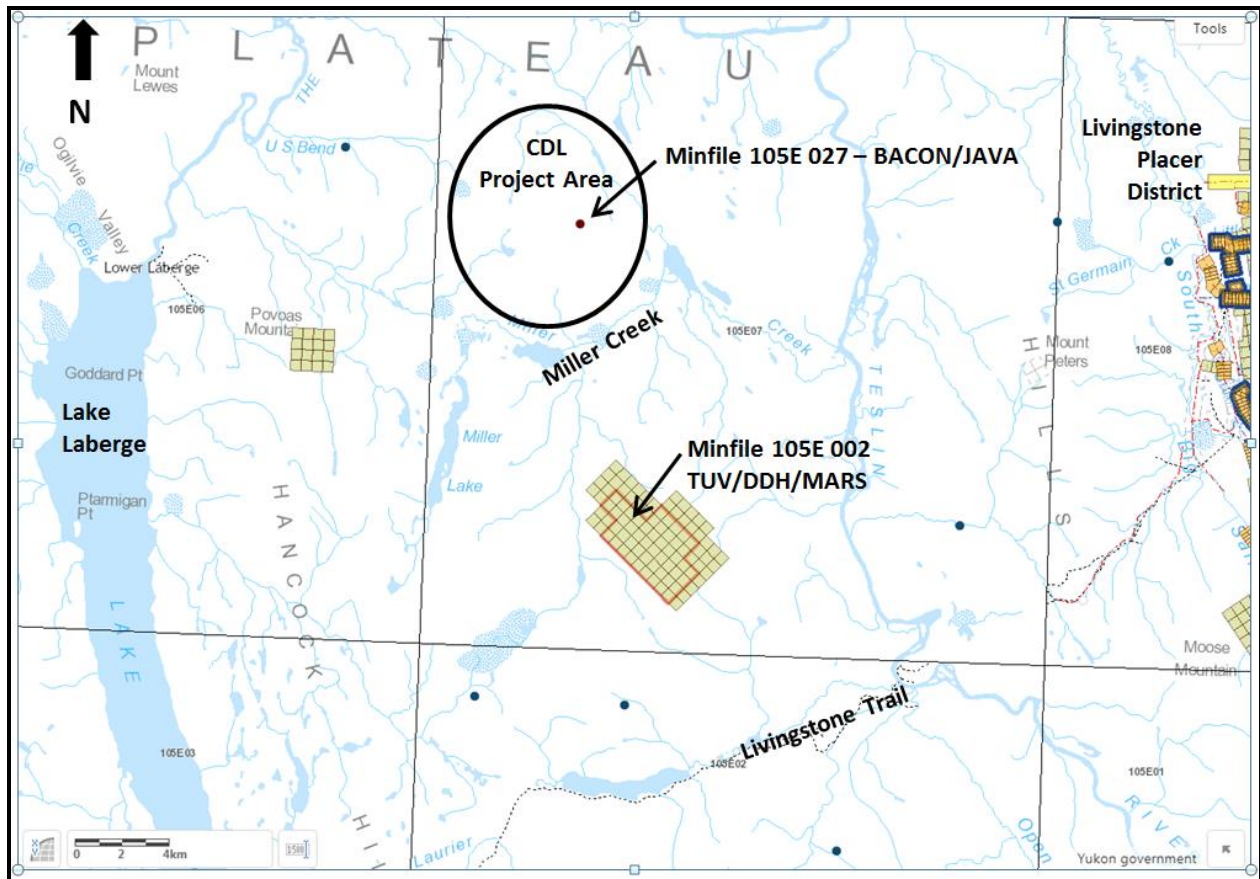


Figure 2. CDL and Area of Interest

**Table 1 CDL Property Helicopter Landing Sites**

Site	East	North	Description
2019 Camp	505840	6807280	Highest point on claims, good camp site, central
1999 Camp	505100	6808510	Good landing site and camp site, near skarn showings
2022 Camp	505190	6806840	Near pond and head of cutline, good campsite
Staking pickup	504880	6809430	Above large limestone outcrop, marginal camping
Strawberry Hill	504990	6804300	Good landing site and camp site
Juniper Hill	504970	6804680	Good landing site and camp site

(UTM WGS 84 Zone 8V)

The CDL 1-36 claims (Grant No. YD132137-YD132172) were located on June 10, 2019 and recorded on June 12 with the Whitehorse Mining Recorder (Figure 2). The CDL claims are

registered (100%) in the name of William Mann and are in good standing under the *Quartz Mining Act* until June 12, 2026 prior to the filing of this work for assessment purposes. William Mann holds the claims in a 51%/49% partnership with Roger Hulstein.

Work in 2022 was conducted under Yukon Government Mining Land Use Class 1 “Notification” Permit #2022-0095, valid from May 25, 2022 until May 24, 2023.

The property lies in overlapping, settled traditional territories of the Ta'an Kwäch'än Council, Kwanlin Dün First Nation and Little Salmon/Carmacks First Nation. No land claim blocks lie adjacent to the CDL property.

#### 4.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The claims cover a moderately rugged mountainous area that lies below treeline, within the Yukon Plateau physiographic region. The lowest elevation on the property lies above the valley floor at about 2800 feet (850 m), and extends to the highest peak in the area at 4234 feet (1290 m), where the 2019 camp was located. Access to the property is by helicopter.

The climate is cool and arid, with warm summers and long, cold winters. The property is normally free of snow from late May to late September.

The property lies within the Yukon Southern Lakes ecoregion of the Boreal Cordillera ecozone (Smith et. al., 2004). The claims are covered by boreal/subalpine coniferous forest, with a thick mixture of subalpine fir, pine, white spruce, aspen and rare paper birch. A thick understory of dwarf birch, willow, alder and other shrubs is present in most areas. The claim area has not been burnt by forest fire in recent decades. The claims lie within the sporadic discontinuous permafrost zone, with some frost encountered in soil sample holes, especially at higher elevations and on north or east facing slopes.

#### 5.0 HISTORY

Placer gold was discovered in the late 1800s in the Livingstone Creek area, 30 km to the southeast of the CDL property. The first 1:250,000 geological map of the area was released by the Geological Survey of Canada (GSC) in 1938 (Bostock and Lees, 1938) based on topographic and geological field work between 1929 and 1934.

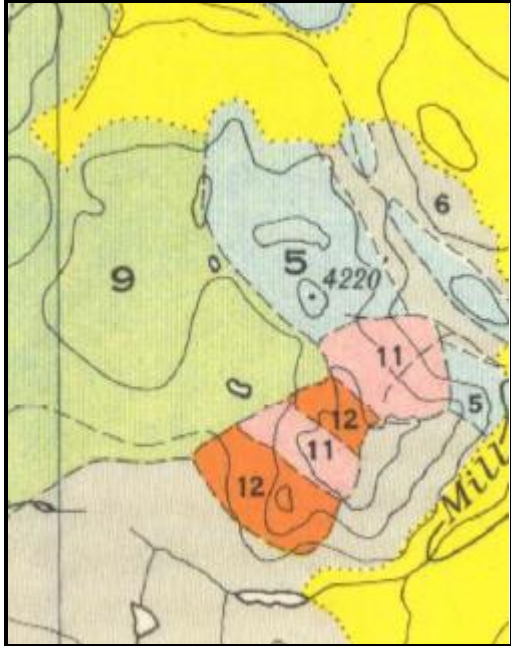


Figure 3. CDL property area geology (Bostock & Lees, 1938)

There are no records of mineral discoveries in the general area prior to 1971. The history of the TUV/DDH/MARS porphyry occurrence south of Miller Creek is included due to its proximity and geological similarity to the CDL property. The CDL property has also been known as the BOND, BACON, or JAVA property.

### 1971

United Keno Hill Mines Ltd, in a joint venture with Falconbridge and Canadian Superior, carried out a regional helicopter-supported stream sediment sampling program. Selected grab rock samples returned up to 0.53% copper and 0.04% molybdenum in the (MARS) area south of Miller Creek. Over 900 soil sample results showed small, isolated, erratic anomalies paralleling the main ridge topography (Pangman, P.G. and VanTassell, 1972).

### 1975

The DC Syndicate (Dome and Cominco) conducted a large-scale reconnaissance exploration program for copper in the area north of Whitehorse and east of Lake Laberge. The DC Syndicate targeted small intrusive bodies which were thought to be favorable targets for porphyry copper deposits and related mineralized skarns. The BOND claims were staked by the DC Syndicate within the CDL project area to cover minor malachite, chalcopyrite and molybdenite mineralization associated with monzonite north of Miller Creek. Geological mapping, silt and soil sampling work was completed<sup>1</sup> and the “Bacon” Minfile (105E 027) occurrence is recorded. A 42 sample soil grid was established at 400’ centres along the ridge in the vicinity of the skarn showing, with samples analyzed for Cu, Mo, Zn & As. Silt samples were analyzed for 3 elements, Cu, Mo & Zn. A geological outcrop map was produced for the area. It is believed that the forest cover was far less dense in 1975 than at present.

<sup>1</sup> No assessment work was recorded.

### 1978- 1979

Surficial geological mapping of the area is completed (Klassen and Morison, 1987). A moraine blanket is mapped at the CDL property.

### 1984

The GSC releases an updated 1:250,000 scale map of the Laberge area (Tempelman-Kluit, 1984). The intrusive stock underlying the TUV porphyry copper occurrence south of Miller Creek is dated as Jurassic. The map shows several small exposures of the Jurassic intrusive north of Miller Creek.

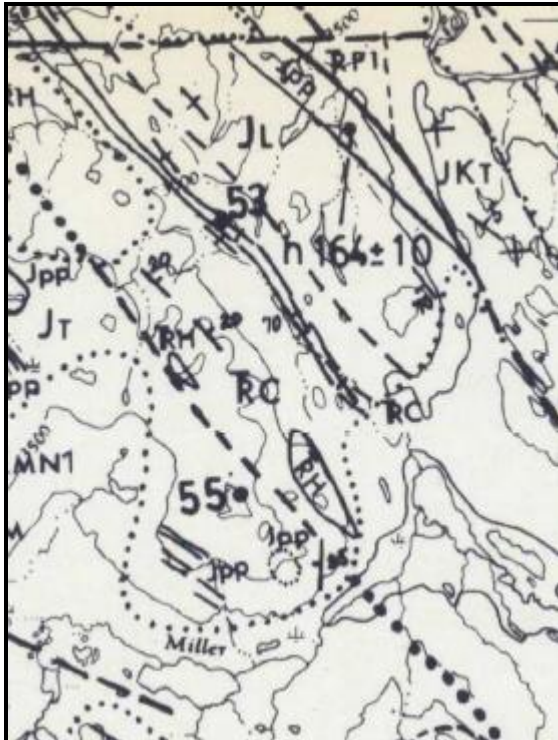


Figure 4. CDL property area geology (Tempelman-Kluit, 1984)

### 1996-2000

#### **TUV/DDH/MARS Minfile Occurrence – south of Miller Creek**

In 1996 the TUV occurrence on Windy Mountain south of Miller Creek was staked as the DDH and MARS claims. Fieldwork by Camdan Exploration including prospecting, mapping, soil sampling and a ground magnetic survey confirmed the gold content of the porphyry system and the presence of abundant magnetite veins and disseminations (Walton, 1996). The property was optioned to Placer Dome Canada in 1997 who flew an airborne gamma-ray and magnetic geophysics survey and completed additional sampling over the property (Wark, 1997).

The Yukon Geological Survey studied the geology and geochemistry of the underlying monzonite on the MARS property, termed the Teslin Crossing Pluton, and determined that the pluton is consistent with Jurassic alkalic plutons in British Columbia that host gold-rich porphyry copper deposits (Hart, 1997).

### **BACON/JAVA Minfile Occurrence – north of Miller Creek**

The original BOND claims area north of Miller Creek and explored by the DC Syndicate was re-staked as the JAVA property in 1997 by Camdan Exploration to cover an aeromagnetic anomaly similar to the one underlying the TUV/DDH/MARS property south of Miller Creek. Camdan carried out small prospecting and rock and soil sampling programs in 1997 and 1999. Massive to semi-massive chalcopyrite-sphalerite skarn mineralization was discovered in 1997 (Ouellette, 1997 and 2000). A 2.5 kilometre cut line oriented north-south was cut on the south-facing slope to facilitate access.

### **2001 to 2004**

#### **TUV/DDH/MARS Minfile Occurrence – south of Miller Creek**

Saturn Ventures Inc. conducted rock and soil sampling on the DDH/MARS claims. Rock samples from mineralized zones returned up to 1.7% copper and 4,790 ppb gold. In 2004 Saturn completed 827 m of diamond drilling in seven holes. One hole encountered a 4.37 metre intersection grading 6.43 g/t Au coinciding with a positive magnetic anomaly. The intrusive is identified as a silica-oversaturated alkali copper-gold-molybdenum porphyry with strong similarities to the Cadia and Goonumbia deposits in Australia (Lang and McClaren, 2003).

### **2001**

The glacial limits and ice flow directions in the project area were mapped by the Geological Survey of Canada. Glaciers flowed to the northeast and northwest over the CDL area (Duk-Rodkin, 2001).

### **2009**

BACON/JAVA Minfile occurrence – north of Miller Creek (CDL project area)

An airborne geophysical survey covering 62.6 line km at 100 m spacing to collect radiometric and magnetic data was completed over the JAVA claim block. The survey covered 3 km by 2.2 km with lines spaced 100 m apart. The average terrain clearance was 42.8 m. The survey shows a strong 500 m x 300 m magnetic anomaly centered on the skarn occurrence (Ouellette, 2010).

### **2011**

Highlights from a 2011 two-hole drill program at **MARS** include two intersections near the bottom of hole Mars-11-02 returning 23.07 metres of 0.27 gram per tonne gold and 0.16 per cent copper and 14.75 metres of 0.17 g/t gold and 0.25 per cent copper (Unger, 2011).

### **2013**

A regional program of biogeochemical sampling of spruce bark included work at and near the current CDL property (Kreft, 2013, YMEP 2013- 042). Prospecting and biogeochemical sampling traverses were designed to assess granitic bodies and positive aeromagnetic anomalies in the area, with alkalic porphyries the target. Two anomalous areas were identified from bark analysis, including one on the southern end of the current CDL claims (Figure 5). The eastern line shown lies close to the outline.

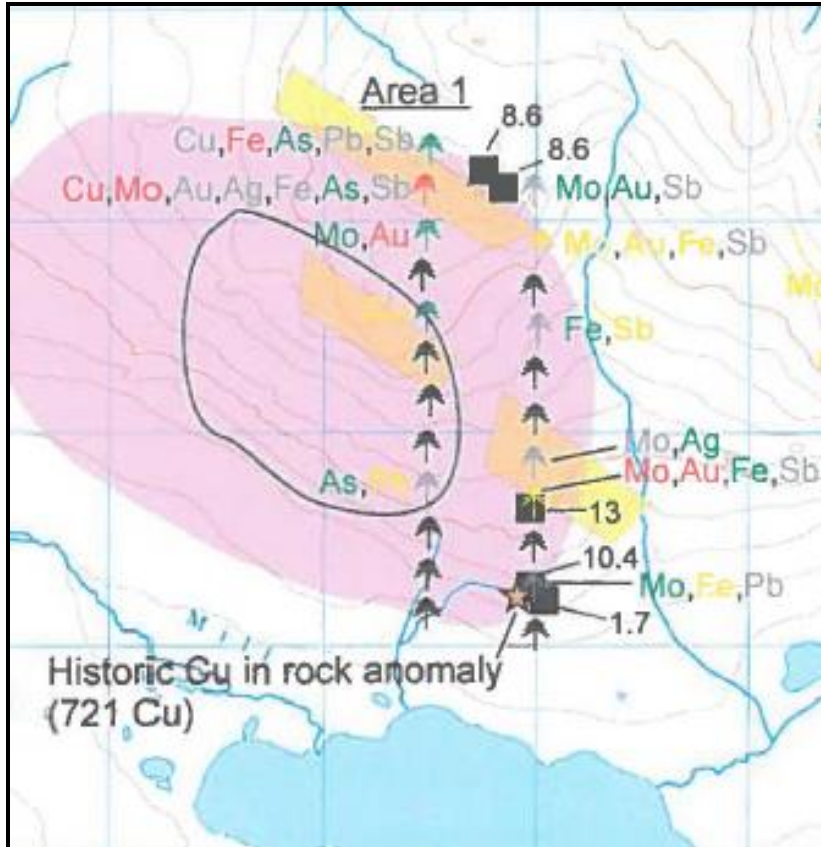


Figure 5. Java/ Bacon biogeochemical anomaly (Kreft, 2013)

## 2014

B. Kreft (YMIP 2014-022) commissioned a combined magnetic and radiometric airborne geophysical survey (Figure 6) over the CDL area north of Miller Lake to follow-up on the spruce bark sampling and further examine the gold-copper porphyry potential of the area. This survey covered a much larger area than the 2009 airborne magnetic program, roughly 8 km x 6 km, but with a 200 m line spacing. The average terrain clearance was 40 m. The radiometric data appears to be useful for differentiating discrete intrusive bodies (Kreft, 2015). The southern intrusive body, about 2km in diameter, has the strongest magnetic high and potassium anomaly.

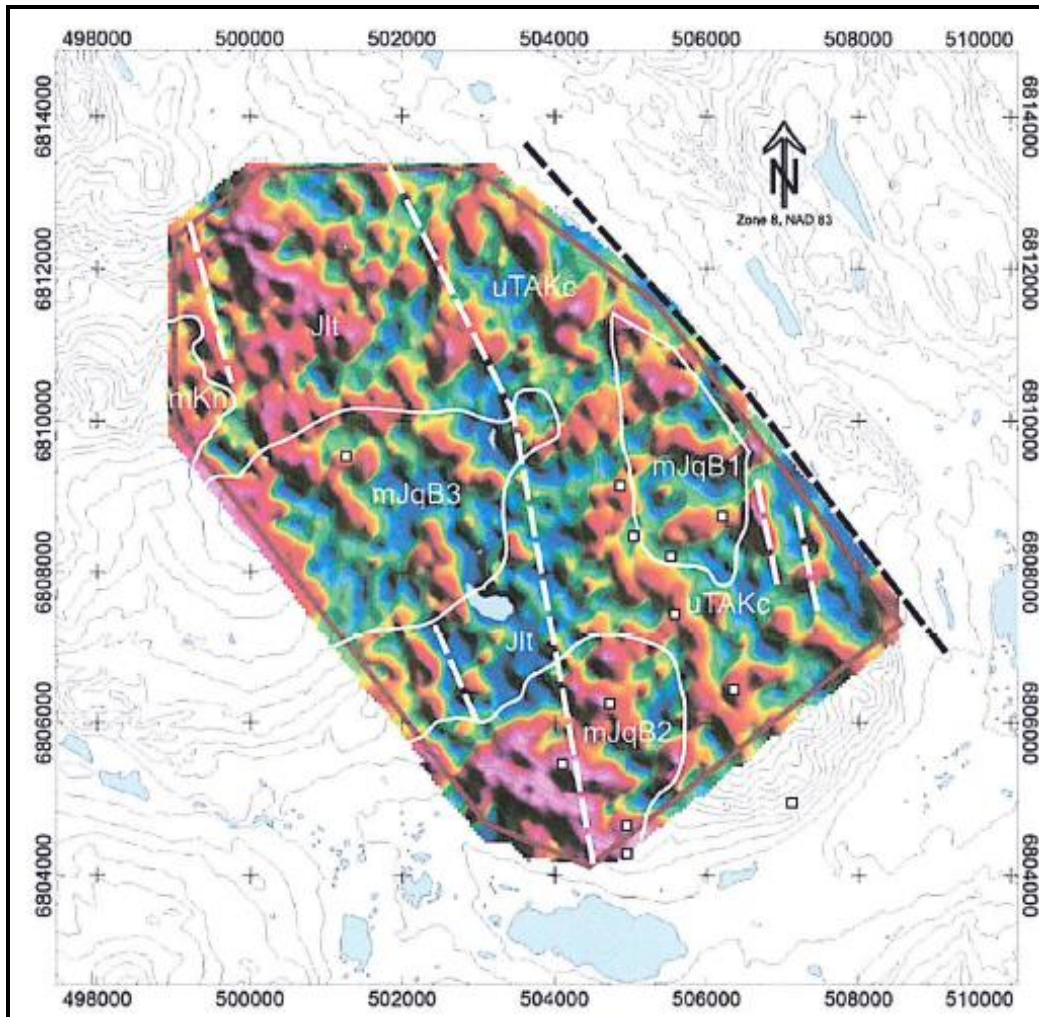


Figure 6. Potassium Radiometric map. Note southern lobe.

## 2016

Strategic Metals Ltd. conducted geochemical sampling, prospecting, geological mapping, hand trenching, diamond drilling and total cyanide solubility testing at the **MARS** property (Mitchell, 2017). Three holes were drilled, bringing the total number of drillholes on the property to twelve.

## 2018

An airborne magnetic survey (Figures 7, 8) was conducted by the Geological Survey of Canada and the Yukon Geological Survey over part of 105E at 1:100,000 scale (Kiss & Boulanger, 2018, Figures 7, 10).

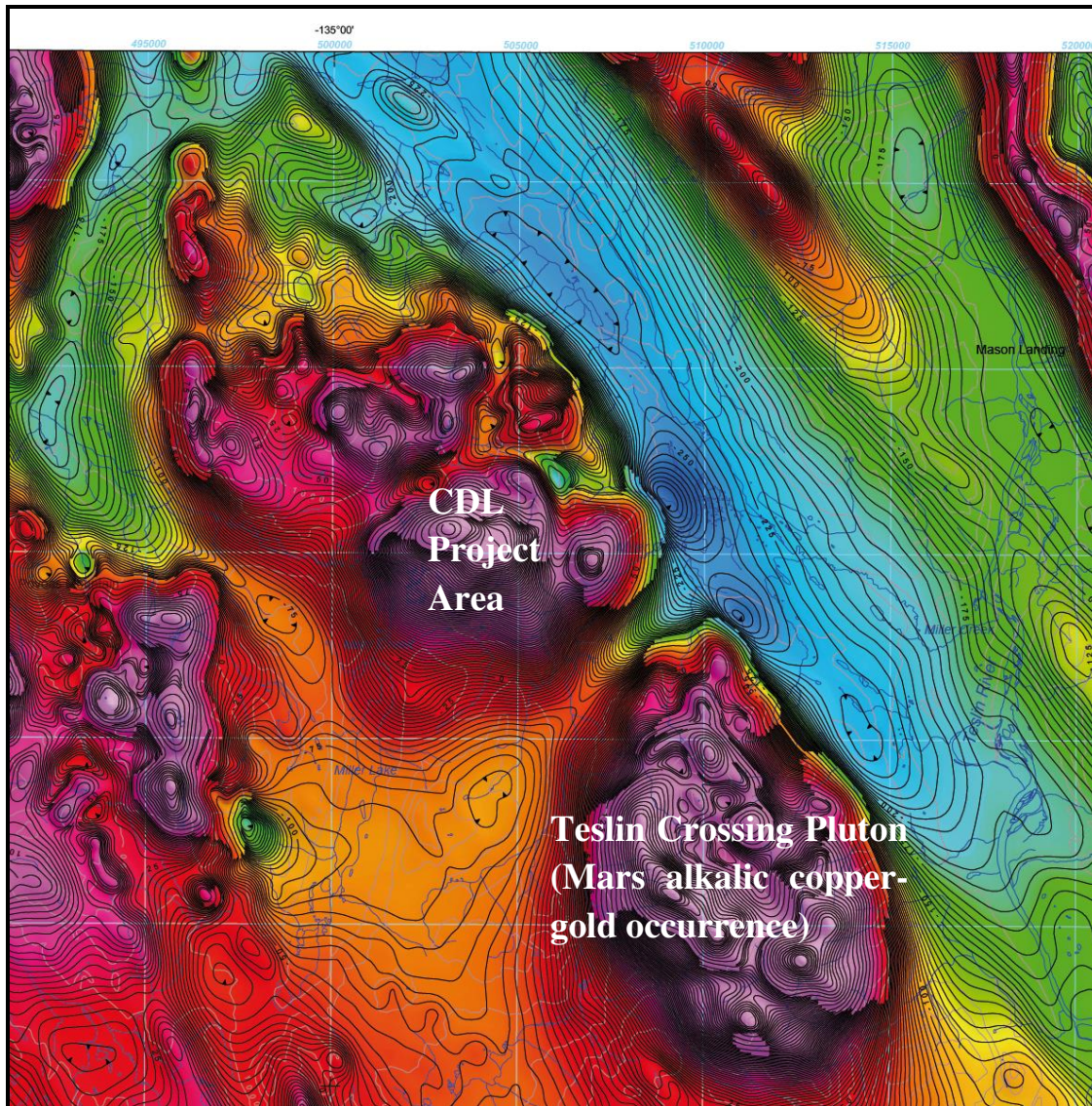


Figure 7. Aeromagnetic Survey Map of MARS & CDL Area (Kiss And Boulanger, 2018)

## 2019

36 CDL claims were staked by W. Mann in partnership with L. Walton. The claims were explored with funding by YMEP grant 19-086 (Walton & Mann, 2019). A program of prospecting and soil geochemistry was conducted over the entire claim block, with 94 soil samples and 7 rock samples sent for analysis. Areas of previous work were located by GPS, including mineralized showings, helicopter landing sites, camp sites and the cut line, all of which were obscured by thick bush. Thin sections of key rock types on the property were examined by Dr. T. Liverton, with trachytic crystal tuffs and andesites forming a large component of the local lithologies.

With limited drilling to date at **MARS**, work on evaluating the potential of the areas north and south of Miller Creek is still at an early stage. The area south of Miller Creek over the Teslin

Crossing Pluton is now held as the DDH, STAR and STARS claims by Archer, Cathro & Associates on behalf of Strategic Minerals Ltd. The area over the BOND/BACON/JAVA area of interest north of Miller Creek is now covered in part by the CDL 1-36 claims.

## 6.0 GEOLOGICAL SETTING AND MINERALIZATION

### REGIONAL GEOLOGY

The CDL property is located at the northern end of Stikinia Terrane, part of the Intermontane region of the Canadian Cordillera. The Triassic Lewes River volcanic arc evolved during the Middle and Late Triassic and eventually eroded into the adjacent Whitehorse Trough marginal basin through Middle Jurassic. During the Middle Jurassic local intrusives and related volcanics cut Whitehorse Trough sediments. Figure 8 shows the regional geological setting.

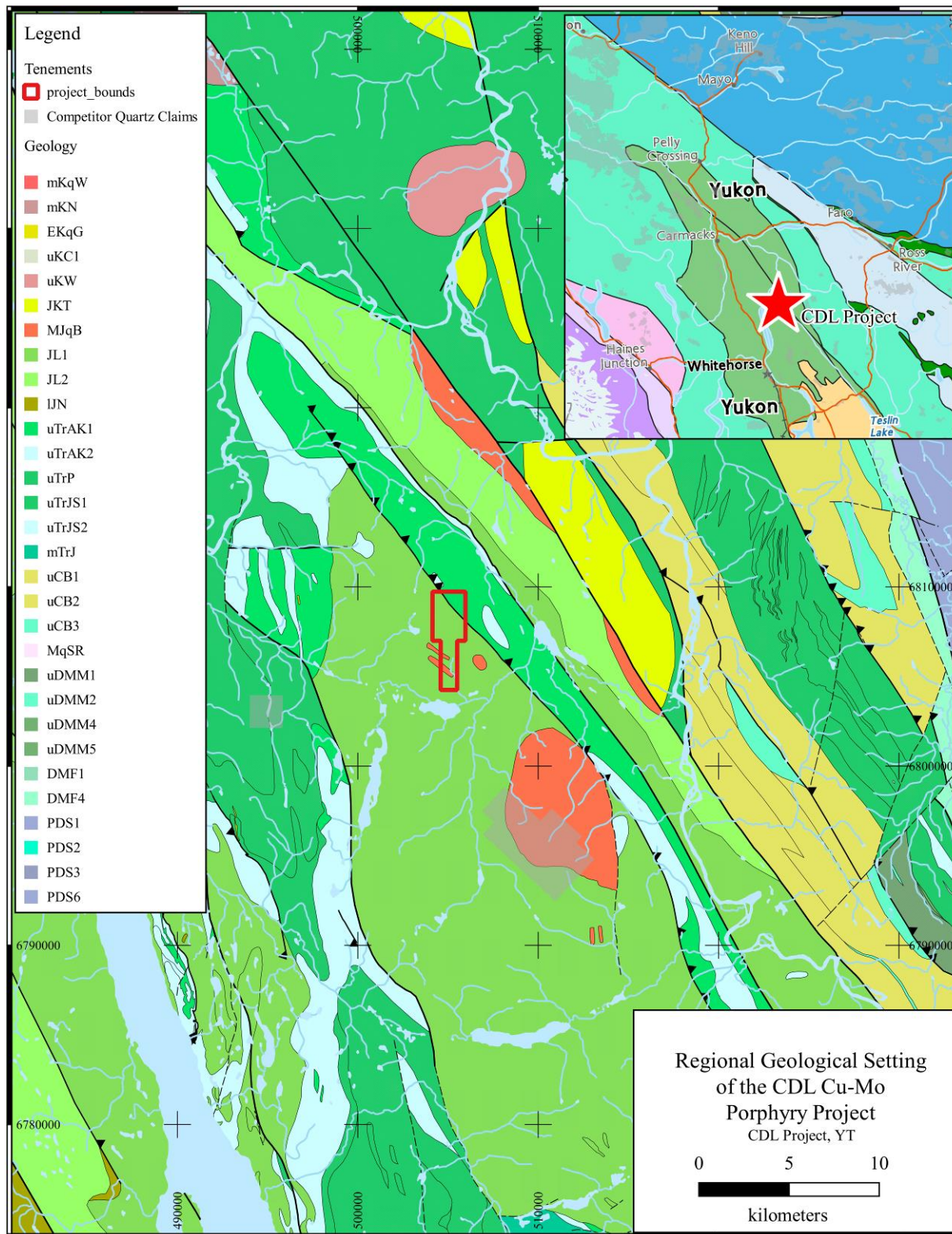


Figure 8. Regional Geology in the CDL area (from GeoYukon)

Table 2. Geological Legend (Colpron, 2011):

EARLY CRETACEOUS

EKqG Goddard Suite (138-136 Ma) quartz-phyric rhyolite and rhyodacite dikes

MIDDLE JURASSIC

MJqb BRYDE SUITE: undeformed felsic granitic rocks  
Teslin Crossing Stock: medium to fine grained, equigranular leucocratic monzonite, syenite and granite and related dykes of dacite to andesite porphyry with euhedral andesine, hornblende and locally quartz in aphanitic greenish, or gray groundmass

LOWER TO MIDDLE JURASSIC

JLt LABERGE GROUP  
Tanglefoot Formation: poorly sorted, medium bedded to massive lithic sandstone and minor mudstone with interbeds and thick members of resistant heterolithic pebble and boulder conglomerate, calcareous siltstones, minor ash and crystal tuff; coal; limestone

UPPER TRIASSIC

LEWES RIVER GROUP  
Aksala Formation: mixed clastic-carbonate assemblage divisible into three dominant facies including calcareous lithic sandstone and locally thick carbonate  
uTAKc Casca Member: brown mudstone, black and minor red siltstone, greenish-grey, calcareous sandstone and interbedded bioclastic, argillic limestone; igneous or limestone clast pebble and cobble conglomerate, laharic debris flows; rare feldspar-augite porphyry flows.  
uTAKh Hancock Member: massive to thick bedded limestone; minor thin bedded argillaceous to sooty limestone; coarsely crystalline, massive dolostone, minor laminated chert, massive to poorly bedded, limestone conglomerate debris flows and conglomerate; calcareous sandstone.

## PROPERTY GEOLOGY

Recent work by the Yukon Geological Survey has enhanced knowledge about the geology underlying the Miller Creek area. The Teslin Crossing Pluton is identified as belonging to the Bryde suite (172-168 Ma) of alkalic post-collisional plutons that intrude Stikinia and Cache Creek terranes and Whitehorse Trough. A bedrock geology compilation map of the Whitehorse Trough (Colpron, 2011) and recent bedrock geology mapping and investigations in the area east of Lake Laberge (Bordet, et al., 2019) have led to a better understanding of the regional geology and structural features. Of particular interest is the recent aeromagnetic survey (Kiss and Boulanger, 2018) over a broad area of southern Yukon, including the Miller Creek area. Property geology knowledge was further enhanced by the aeromagnetic and radiometric survey by Kreft (2015, Figure 6), which delineated three distinct lobes of the property area magnetic anomaly with variable potassium signatures.

A series of Middle Jurassic monzonite, syenite and granitic sills intrude Triassic Lewes River volcanic units intermixed with limestone and Jurassic Laberge Group sedimentary rocks on the CDL property. The intrusive rocks are thought to be related to the Teslin Crossing Stock, which belongs to the Bryde suite of granitic rocks. Northwest trending structures include the Chain Lake thrust fault contact projected to lie in the area of the skarn zone and bands of volcanic tuffs, intrusive sills and sedimentary rock in the southern half of the property that dip gently to the south. A detailed examination of the Teslin Crossing Pluton is included in a recent atlas of late Triassic to Jurassic plutons in the Intermontane terrane of Yukon (Sack et.al., 2020, Figure 9).

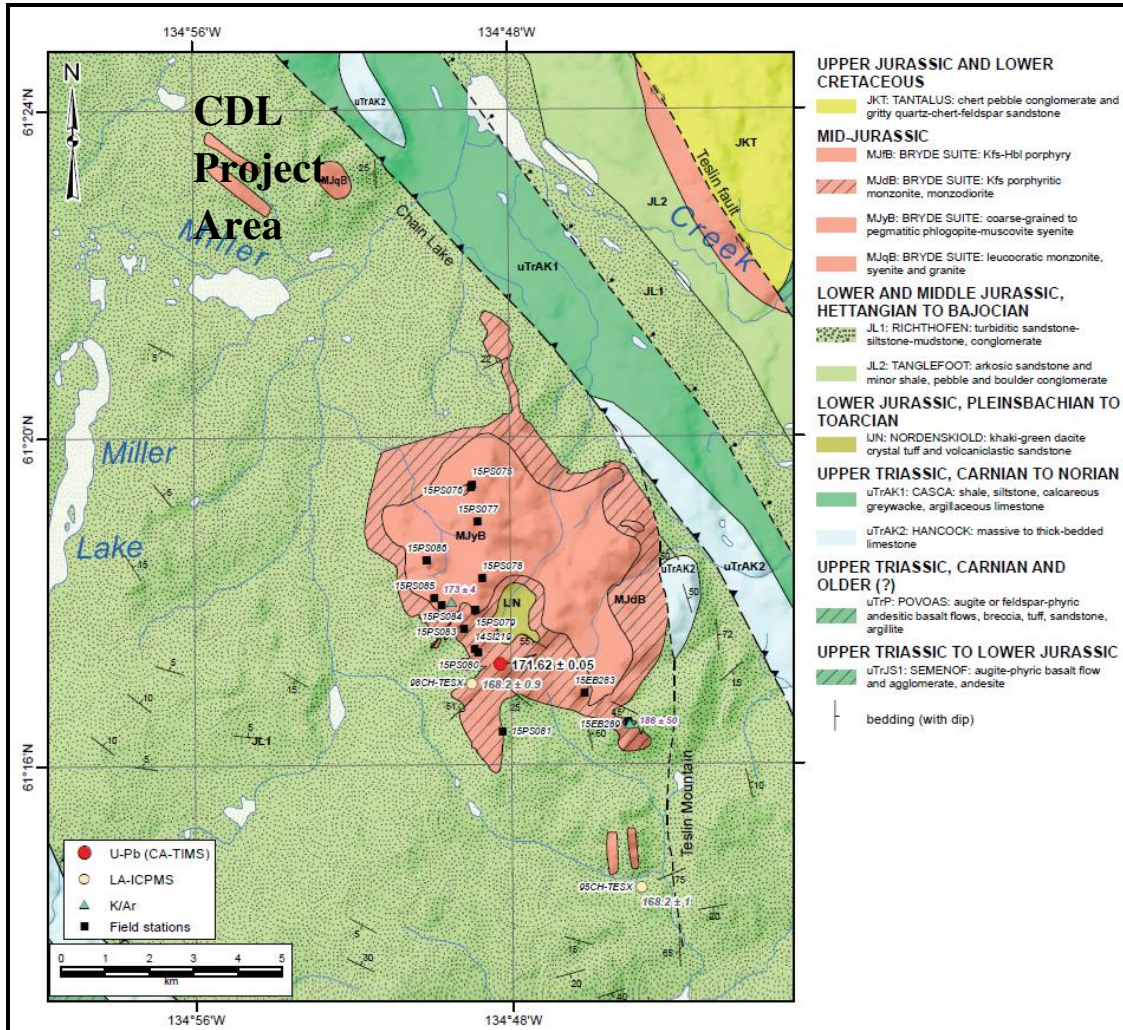


Figure 9. MARS and CDL Jurassic intrusions from Sack et al., 2020.

Early Cretaceous rhyolite and rhyodacite dykes are noted by Bordet, et al., (2019) near the project area.

Thin section petrography indicates a series of latite crystal tuffs, lapilli tuff, andesite flows and monzonite on the property. Medium grained crystal tuffs appear very similar to monzonite sills in outcrop and hand specimen. Triassic Lewes River Group limestone is noted in the north and east part of the property and was reported in the southern part of the property by Ouellette, but was not seen during brief examinations in 2019 or 2022. Relation of the rock units to each other and an understanding of the structure is limited due to lack of outcrop.

## MINERALIZATION

The original DC Syndicate “Bacon” Minfile occurrence 105E 027, is recorded as chalcopyrite and molybdenite in dry fractures in a monzonite stock cutting andesite volcanic rocks and greywacke. According to the file, andesite float containing chalcopyrite was reported west of the

original BOND claims, but DC Syndicate's soil geochemistry program did not locate a specific area of interest. The Bacon occurrence has not been re-examined since 1975.

Skarn mineralization consisting of massive chalcopyrite and sphalerite with elevated silver, gold, and bismuth was identified in the northern part of the CDL area (Ouellette, 1997). Rock samples collected during this time returned values up to 18,031 ppm copper, 7.1% zinc, 31.8 ppm silver, 1639 ppb gold and 1513 ppm bismuth. The skarn zone lies proximal to the 1999 camp site and helicopter pad on the ridge crest at about UTM 505100E, 6808510N. This skarn showing consists of several pits less than one meter diameter with outcrop, subcrop and rubble. The skarn appears to be less than one meter thick, with similarly thin limestone host in the area. A small outcrop of Biotite Granite is exposed within a couple of meters from the skarn. Limestone thickens considerably a few hundred meters to the north, probably across a major fault zone.

A second skarn zone was identified on the far south of the claims, overlooking Little Miller Lake in 1999. A sample of bleached and limonitic, medium grained dioritic rock with minor malachite staining was collected 30 m east and downslope of the second skarn zone during Camdan's 1999 program; however no significant mineralization was identified. This target was not relocated during limited work in 2019 or 2022.

## 7.0 DEPOSIT TYPES

The primary target at the CDL project is Alkalic Porphyry Copper-Gold deposits. This type of mineralization has not been located yet, but the potential is inferred based on the geological similarity to the MARS project ten kilometers to the south, where alkalic porphyry type geology and mineralization has been noted. The alkalic porphyry present at MARS is somewhat atypical in that significant quartz veining with molybdenum is present in addition to typical low quartz, high iron oxide and sulphide with copper material.

Secondary targets include intrusion related base and precious metal skarns and veins. Skarns have been found on the CDL property, however their potential seems to be limited due to the thin nature of the host limestone in the skarn area. The nearest intrusion to the skarn is a biotite granite, which is not prospective for alkalic porphyries. The limestone is much thicker at the north end of the property, however this may be located across a regionally significant fault.

## 8.0 EXPLORATION

### 2022 LOGISTICS

The authors accessed the property by helicopter to the camp site located at UTM 505190E, 6806840N (Table 1). This location had a suitable landing site, a flat camp site and some water

available from a nearby pond. This wet setting in the month of June resulted in enormous numbers of mosquitoes, which was challenging. Late June is a bit early for deep mineral soil sampling beneath the thick organic layer present in most of the target area, but is fine for sampling the “Ah” horizon.

An electric bear fence was established around the kitchen, as required by the Class 1 licence. No bears were observed. It is advised for field workers to carry a machete on this property, as the bush is often very thick.

A portable XRF device was used to test rocks and soils in the field. This was useful for the potential to quickly identify highly mineralized samples.



Plate 2. Camp Kitchen area with electric bear fence

## PROSPECTING AND GEOLOGY

Outcrop on the property is scarce, as is float rock, which along with very thick bush makes prospecting difficult. Outcrops and boulders were examined where stumbled upon, along with a more thorough examination of several outcrops proximal to the 2022 camp (Figure 13). Rock analyses are presented in Appendix IV, rock descriptions in Appendix VIII and field stations in Appendix IX.

Outcrops in the area of the 2022 campsite and the cutline extending towards Miller lake were examined in 2022. Various lithologies were encountered ranging from shale, latite crystal tuffs, fine grained rhyolite, volcanoclastics +/- hornblende bearing and monzonite, the last likely

occurring as sills. This appears to be a conformable package of rocks that overall appear to strike east to southeast and dip about 30 degrees to the south. As a result, on the south facing hillside between the 2022 campsite and Miller Lake, numerous outcrops have southerly dip slope surfaces. Since the hillside approximates a dip slope the overall thickness of the rock package is not that great but forms a relatively thin cover for what are presumed to be buried magnetite bearing rocks – the possible alkalic porphyry.



Plate 3. Sample 3839754 Elevated Mo, Pb, As, Sb



Plate 4. Gently south dipping shale and crystal tuff strata near 2022 Camp

Two out of the 9 rock samples, numbers 3839754 and 3839759 returned anomalous values for As and +/- Mo, Cu, Pb, Au, Sb and Se. Float sample 3839754 collected on the west side of the project area examined in 2022 is described as a rusty red, leached, rounded pebble with quartz. Although it has likely been glacially transported some distance it contained 539.4 ppm Pb, 84.9 ppm Mo and 18.2 ppm Sb making it noteworthy.

Sample 3839759 collected near the 2022 campsite from ‘patches’ of outcrop over a 20 m distance is described as a weakly rusty weathering, weakly brecciated, monzonitic volcanoclastic crosscut by fractures containing 0.5% disseminated pyrite and possibly trace unidentified silver sulfides. Geochemical analysis of this sample returned 209.1 ppm Cu, 322 ppm Zn, 196.8 ppm As, 10.8 ppb Au and 2.5 ppm Se. This sample confirms anomalous results obtained from the area in 2019.

Prospecting of the outcrops and float did not locate any significant mineralization, alteration or quartz or calcite veining.

## AH HORIZON SOIL GEOCHEMISTRY

One of the main objectives of the 2022 exploration program was to evaluate the suitability of sampling the “Ah” soil horizon as an alternative to conventional B/C horizon mineral soils, and to the spruce bark biogeochemistry pioneered by Kreft in 2013. Several of Kreft’s sample locations were relocated, with old flagging tape and scraped tree bark still visible. These locations were tested with both Ah and B/C soils where possible. Permafrost prevented the collection of mineral soil at several sites.

The Ah soil horizon was found at most locations in the project area, and was usually of good quality and easy to collect.

The use of the Ah horizon was suggested by work in central British Columbia that showed the ability of the humic acid rich material to trap mobile ions by chelation from sources down to 300m depth (Heberlein and Samson, 2010). The use of this method is not common in the Yukon, and use in permafrost terrain is somewhat experimental, although the authors were aware of the presence of the Ah horizon in unglaciated parts of the Yukon (Bond and Sanborn, 2006) and the apparently successful use of the Ah horizon for exploration of a similar porphyry target also covered by deep Pre-Reid glacial material along the Big Creek fault by Teck Resources (Berg and Liebrecht, 2013). It is hoped that this technique might also be able to detect anomalies below the thick, transported moraine present at the CDL area.

The Ah layer is the uppermost mineral soil (if less than or equal to 17% organic content). It contains a variable amount of organic material, and in some cases fragments of charcoal. The best quality Ah material is black with a greasy texture. However, this material is not always

present, so the sample collected in some cases was dark brown, perhaps with little mineral content if located above the ash layer. In a few cases, the top centimeter of B horizon and bottom centimeter of organic layer was collected. Multiple pits had to be dug in some locations seeking good quality Ah material. In other locations there was up to 10 cm of black Ah horizon, in which case the lowermost centimeter was sampled. If the organic content of the material is above 17 percent, the horizon should more properly be called the “Hh” horizon, highly decomposed humic-rich organics (Bond & Sanborn Appendix 4, 2006). Many of the 2022 “Ah” samples were actually “Hh” horizon due to high carbon content, however this is considered to be acceptable, as the distinction between the two horizons is not obvious in the field.

Ah horizon samples were collected using a shovel to extract a cylinder of soil about 30 cm deep, and then cutting out the lowermost 1 or 2 cm of Ah horizon for sampling (Plate 5). The Ah samples collected were at least a fist-sized amount, which was placed in a labelled paper or Hubco bag to allow drying.

The benefits of sampling the Ah horizon compared to conventional B-C horizon soils include the shallower sampling depth that potentially allows collection early in the field season (June), when conventional soils would likely be frozen if covered by an organic layer. In some areas the conventional soils never thaw deeply enough to allow penetration beneath ash and loess layers. Ah soils are particularly useful in areas with thick (greater than 10 cm) organic soils, and might not be present or well developed when an organic layer is sparse. Therefore, high elevation, gently sloping, north or east facing terrain or valley bottom areas with moss and grass cover or black spruce forests might be best explored using the Ah horizon. The Ah horizon also offers the potential to reveal anomalies from beneath barren or transported cover. One drawback to using the Ah horizon is the lower likelihood of strong gold anomalies in this material, particularly if gold is the main target element. In other areas the Ah horizon may not be present or adequately developed.

Ah soils were collected running north- south at 50 to 100 m centres along the cutline, along the biogeochemistry sample line, and along an east-west line cutting across the centre of the magnetic anomaly (Figures 11, 12). Ah horizon analyses are presented in Appendix III and samples are described in Appendix VI.

Results from the 2022 survey returned a number of samples anomalous for Cu, Ag, Zn, Bi and Fe. At the sites where a conventional B-C soil sample was also collected, there are generally also weakly anomalous or elevated values for the same elements. Being essentially isolated lines no broad patterns can be interpreted. Of note, the westernmost two Ah soil samples on the east- west soil line returned anomalous Au, Cu and Bi, which may indicate potential in this direction for alkalic porphyry mineralization.



Plate 5. Inverted soil profile showing red-brown B horizon over White River ash, over Ah horizon (sample 3839719), over organic layer, with C horizon (sample 3839667) in shovel.

### CONVENTIONAL B/C HORIZON SOIL GEOCHEMISTRY

Conventional B or C horizon samples were collected by shovel from as deep as possible. Samples were collected along the outline in areas where there were gaps in the 2019 sampling, as well as in the same locations as “Ah” horizon soils in order to compare the effectiveness of both methods (Figures 13, 14). The B & C horizon soils were frozen in some places and therefore not sampled. No strong anomalies or significant polymetallic clusters were observed in the results. Sample analyses are presented in Appendix II, with sample descriptions in Appendix V.

### STREAM SEDIMENT SAMPLING

A creek flows southward through the southerly part of the CDL property into Miller creek. This creek was sampled at five locations in 2022 seeking areas of enhanced mineralization (Figure 13). The sampling method involved screening of coarse material and panning to enhance the collection of heavy minerals, and is thus a hybrid silt and heavy mineral method intended to locate areas of higher gold and other heavy metal concentrations. The stream sediment samples were assayed in the same batch as the B/C horizon soils, with assays presented in Appendix II. The stream sediments are described in Appendix VII.

This survey was not successful in locating significant anomalies. Of the five samples collected sample 3839664 had some interesting, elevated values for Zn, Fe, Mn, As, and Se. The stream sediment was composed of mixed lithologies including abundant pebbles of monzonite, crystal tuff, shale – argillite and a variety of volcanic rock types. It is likely that the stream sample sediment is composed to a large degree of exotic material transported by glaciers from elsewhere.



Plate 6. Silt sample location #3839662

## LINE CUTTING

A 2 km long, 1.5 m wide, magnetic north-south oriented surveyed cutline was established in 1997 on the original JAVA claims by Aurum Geological Consultants (Ouellette, 1997). This line provides an efficient route of travel through the thick forest in the area, and has locally become a game trail. Sections of the line were recut in 2022 where overgrown by alders, willows or fallen trees with a machete or axe. The line was also extended to the north by about 1000 m by machete and axe, along UTM 504955E to 6807100N (Figure 11). This length includes a section that was partially cut in 1997 across an area of buckbrush and swamp that was difficult to locate. No large trees were cut down on this extension. In addition, two good helicopter landing sites with camp site potential were recut by axe and machete at “Strawberry Hill” and “Juniper Hill.”



Plate 7. 2022 Cutline extension

## 9.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

The 2022 samples were placed into rice bags in the field by the authors, sealed and secured. The samples were transported and delivered directly by W. Mann to the Whitehorse preparation facility of Bureau Veritas Minerals (Acmelab). The samples were dried at 60°C. Soil samples were sieved to -80 mesh. Rocks were crushed, then a 250 g split was pulverized to 200 mesh.

The prepared samples were shipped by BVM to their Vancouver laboratory where the rocks and conventional soils were analyzed by BVM method AQ201 for 36 elements by ICP-MS after digestion of 15 g by 1:1:1 aqua regia.

“Ah type” soil samples were analyzed by Ultratrace method AQ250 for 37 elements by ICP-MS after digestion of 0.5 g by 1:1:1 aqua regia.

Bureau Veritas Mineral Laboratories is accredited and certified to the International Organization for Standardization for Quality ISO9001:2008, Environmental Management: ISO14001 and Safety Management OH SAS 18001 and AS4801.

Quality control procedures were implemented at the laboratory, involving the regular insertion of blanks and standards and repeat analyses on the samples. Quality Assurance data is provided for each batch of samples and included with each analytical certificate (Appendices II, III & IV).

There was no evidence of any tampering with the samples during collection or shipping. All sample preparation was conducted by the laboratory.

## 10.0 DATA VERIFICATION

The property is an early stage exploration project, therefore no independent reference standard samples, field duplicates or blanks were included in the samples submitted for analysis. The analytical laboratory conducts quality assurance testing, and this is considered to be adequate for a project at this stage. This QA/QC data is presented along with the analytical certificates in Appendices II, III & IV. Inspection of this data indicates analytical variation that is considered to be acceptable.

A recognized limitation of the analytical method selected is poor reproducibility of gold values when 15 g of sample is digested by aqua regia and then analyzed by ICP. The 0.5 g sample used for Ultratrace analysis is even less reliable. A fire assay method with larger sample size is considered to be the best for gold analysis accuracy.

## 11.0 ADJACENT PROPERTIES

There are no mineral properties within several kilometers of the CDL property. The MARS minifile occurrence 105E 002 & Andrew 105E 067 lie about 10km south of the CDL property within the Teslin Crossing pluton, and are considered to be relevant as an analogue to the CDL area due to the similar magnetic signature and intrusive rocks. The alkalic porphyry type mineralization in this area is the key target at CDL.

## 12.0 INTERPRETATION AND CONCLUSIONS

Alkalic porphyry deposits tend to have a significant portion of mineralization that is hosted in volcanic rocks similar in age to the causative intrusive body. At the MARS occurrence known mineralization is entirely hosted in the intrusive, with no volcanic rocks present. At CDL the intrusive bodies are small sills, and a considerable volume of volcanic rocks are present but have not been reported in regional government mapping, likely due to poor outcrop and scarcity of obvious helicopter landing sites. The presence of volcanic rocks suggests a much shallower level of erosion at CDL compared to MARS, despite similar magnetic signatures of the associated intrusive complexes. Considerable mineralization may have been eroded away at MARS, but preserved at CDL, once we actually find any porphyry mineralization at CDL.

The CDL property potentially hosts a buried alkalic porphyry deposit as indicated by the strong positive airborne magnetic anomaly and coincident radiometric potassium anomaly that remains unexplained. “Ah” horizon soils appear to be a valid sample medium for use in this area.

## 13.0 RECOMMENDATIONS

The primary focus of further work should continue to be on the intrusive body underlying the southern third of the claims which is highly magnetic and highly potassic, as seen in the airborne survey (Kreft, 2015). This body is thought to have the highest potential for the exposure of an alkalic copper-gold porphyry. A one week program of prospecting and sampling with two or three workers is recommended.

A camp should be located near the southern area of the claims at “Strawberry Hill”. From this base, reports of limestone, skarn mineralization and copper-rich rocks (Ouellette, 1997) could be verified and re-interpreted in light of the more detailed airborne geophysical survey information and petrographic analysis available. The successful application of “Ah” soil analysis on the property, as an alternative to conventional B/C horizon sampling or biogeochemistry, should be continued across the southern magnetic/ potassic lobe in this area, exploring further south and west than tested in 2022. It is thought that “Ah” soils should be able to see through the thicker soils on the lower slopes north of Miller creek where the airborne geophysical anomalies continue. Elevated Ah values for Au, Cu and Bi were identified at the west end of the east-west soil line in 2022, and this area could be expanded.

The limestone at the north end of the claims should be examined for large-scale skarn mineralization. A one week program of prospecting and sampling with two or three workers is recommended. The ridge immediately north of the claims should be prospected to the west where another strong magnetic anomaly is present (near the small lake). This ridge should also be followed to the west, where relatively abundant outcrop is present. The Bacon showing should also be relocated and examined.

## 14.0 REFERENCES

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## 15.0 CERTIFICATES

**WILLIAM D. MANN, M.Sc., P.Geo.**

**19 HAYES CRESCENT, WHITEHORSE, YUKON Y1A 0E1**

1. I am a Graduate of Queen's University, 1986, with a Master of Science Degree in Mineral Exploration Geology.
2. I am a Graduate of the University of British Columbia, 1983, with a Bachelor of Science Degree in Geology.
3. I have worked in mineral exploration and mining continuously since 1979.
4. I participated in the work program on the CDL claims in September, 2019 and June, 2022.
5. I am a co-owner of the CDL claims.

DATE AND SIGNATURE: \_\_\_\_\_ January 18, 2023  
William D. Mann

**ROGER WILLIAM HULSTEIN, B.Sc.**

**Of 106 WILSON DRIVE, WHITEHORSE, YUKON Y1A 0C9**

do hereby certify that:

1. I am an independent, self-employed, mineral exploration geologist with over 30 years of experience working in the Yukon.
2. I am a graduate of Saint Mary's University, Halifax, with a degree in geology (B.Sc., 1981) and have been involved in geology and mineral exploration continuously since 1978.
3. I am a fellow of the Geological Association of Canada (F3572).
4. I am the co-author of this report on the CDL Claims in the Whitehorse Mining District, Yukon.
5. The report is based on personal examination of selected areas within the project area on June 18 – 24, 2022 and on referenced sources.
6. I am a co-owner of the CDL claims.

**Roger Hulstein, B.Sc., P.Geo.**

**January 15, 2022**

**APPENDIX 1 - COSTS**

**CDL Claims Statement of Expenditures 2022**

W.D. Mann

		<b>Activity</b>	<b>Units</b>	<b>Rate</b>	<b>Total</b>	<b>Work On Claims</b>
<b>CDL EXPLORATION</b>		<b>June 18 - 24, 2022</b>	<b>CDL Claims 105E/7</b>			
<b>Labour</b>	W.D. Mann	Sampling/ Prospecting	7	500	\$3,500.00	\$2,750.00
	Roger Hulstein	Sampling/ Prospecting	7	500	\$3,500.00	\$3,000.00
<b>Field Costs</b>	\$100 per worker-day		14	100	\$1,400.00	\$1,150.00
	W.D. Mann	preparation/ demob	1	500	\$500.00	\$500.00
	Roger Hulstein	preparation/ demob	1	500	\$500.00	\$500.00
<b>Assays</b>	conventional B/C	soils - VANI439721 17/32	32		\$1,128.96	\$599.76
	Ah soils	VANI439452 28/50	50		\$1,729.88	\$968.73
	Bureau Veritas	rocks VANI439032 6/9	9		\$378.89	\$252.59
<b>Helicopter</b>	Capital Helicopters invoice # 229507	Long Ranger mob/ demob	2.3		\$3,918.10	\$3,918.10
<b>XRF</b>	Niton XL3t	\$110 per day of use 4/5	5	110	\$550.00	\$330.00
<b>Report</b>	Mann & Hulstein	Writing, Editing, Printing, Maps	6	500	\$3,000.00	\$3,000.00
<b>TOTAL</b>					<b>\$20,105.83</b>	<b>\$16,969.19</b>
					YMEP	<b>Assessment</b>
Work off claims: 22 of 50 Ah soils, 15 of 32 B/C soils, 3 of 9 rocks 2.5 worker -days off claims						<b>Credit</b>



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9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada  
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**Client:** **Bill Mann**  
19 Hayes Cres.  
Whitehorse Yukon Y1A 0E1 Canada

Submitted By: Bill Mann  
Receiving Lab: Canada-Whitehorse  
Received: June 27, 2022  
Analysis Start: July 18, 2022  
Report Date: August 03, 2022  
Page: 1 of 3

# CERTIFICATE OF ANALYSIS

WHI22000291.1

## CLIENT JOB INFORMATION

Project: CDL  
Shipment ID:  
P.O. Number  
Number of Samples: 32

## SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days  
DISP-RJT-SOIL Immediate Disposal of Soil Reject

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

Invoice To: Bill Mann  
19 Hayes Cres.  
Whitehorse Yukon Y1A 0E1  
Canada

CC: Roger Hulstein

## SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
SS80	32	Dry at 60C sieve 100g to -80 mesh			WHI
AQ201	32	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN
DISPL	32	Disposal of pulps			VAN
SHP01	32	Per sample shipping charges for branch shipments			VAN

## ADDITIONAL COMMENTS

  
JEFFREY CANNON  
Geochemistry Department Supervisor



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Project: CDL  
Report Date: August 03, 2022

Page: 2 of 3

Part: 1 of 2

# CERTIFICATE OF ANALYSIS

# WHI22000291.1

Method Analyte Unit MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	
	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	1	0.1	0.01	0.001	
272911	Soil	1.8	21.3	7.5	82	<0.1	23.1	7.8	336	2.34	8.1	0.5	2.8	2.0	62	0.3	0.8	0.1	57	0.63	0.043
272912	Soil	4.1	44.8	11.4	113	0.2	22.5	5.9	212	2.86	13.0	0.5	3.5	2.9	90	0.3	1.4	0.3	54	0.61	0.034
272913	Soil	2.3	16.5	7.9	57	<0.1	18.5	8.8	523	2.58	14.9	0.4	0.6	2.9	21	0.4	0.7	0.1	47	0.26	0.077
272914	Soil	2.0	25.2	7.5	42	<0.1	21.7	7.1	184	2.17	8.8	0.5	1.8	2.7	32	<0.1	0.6	0.1	57	0.41	0.013
272915	Soil	1.6	33.3	6.4	61	<0.1	26.0	6.5	237	2.12	8.1	0.7	2.4	2.7	31	0.2	0.8	0.1	52	0.46	0.030
272867	Soil	1.0	15.1	6.6	40	<0.1	18.6	6.9	408	1.91	5.9	0.5	1.2	1.4	34	0.1	0.3	0.1	52	0.52	0.026
272868	Soil	1.2	16.4	6.2	58	<0.1	22.3	6.5	231	2.07	6.4	0.5	1.4	2.6	21	0.3	0.4	0.1	50	0.33	0.043
272869	Soil	2.6	43.9	10.4	71	0.1	31.5	9.9	404	2.46	11.0	0.6	3.4	2.0	148	0.6	0.8	0.1	59	4.26	0.067
272870	Soil	1.1	25.9	7.3	44	<0.1	30.1	9.1	320	2.43	9.4	0.7	1.2	4.7	33	<0.1	0.6	0.1	58	0.52	0.035
272871	Soil	2.1	80.1	9.6	77	0.3	44.9	9.5	371	2.61	12.9	0.6	6.4	2.3	96	0.3	1.0	0.1	62	2.36	0.082
3839651	Soil	1.7	21.6	10.2	60	<0.1	22.7	7.6	271	2.25	8.3	0.7	3.8	2.7	20	0.1	0.7	0.1	59	0.23	0.021
3839652	Soil	1.1	12.4	7.1	41	<0.1	15.5	5.3	177	1.75	5.2	0.4	0.8	2.3	18	0.1	0.4	<0.1	49	0.21	0.014
3839653	Soil	1.0	6.5	6.7	60	<0.1	13.0	6.8	308	1.39	2.9	0.3	0.6	0.8	23	0.2	0.2	0.1	43	0.36	0.023
3839654	Soil	2.6	27.6	8.4	57	<0.1	29.7	8.8	299	2.62	10.7	0.8	2.0	3.0	26	<0.1	0.7	0.1	62	0.35	0.020
3839655	Soil	2.7	24.0	10.4	70	<0.1	29.2	9.1	296	2.61	11.5	0.6	1.5	2.6	22	0.2	0.7	0.1	61	0.32	0.023
3839656	Soil	1.8	18.4	7.2	51	<0.1	23.1	8.0	385	2.21	6.8	0.6	1.2	2.5	29	<0.1	0.5	0.1	62	0.39	0.034
3839657	Soil	1.8	21.9	7.5	55	0.2	26.6	8.4	197	2.54	9.7	0.4	1.0	2.3	21	1.2	0.6	0.1	61	0.25	0.023
3839658	Soil	2.4	31.0	7.6	58	<0.1	30.5	8.0	276	2.57	11.7	0.8	2.2	2.5	38	0.1	0.7	0.1	63	0.40	0.033
3839659	Soil	2.0	30.8	8.0	61	<0.1	27.5	9.0	351	2.43	10.7	0.8	1.7	2.0	29	0.2	0.6	0.1	60	0.40	0.027
3839660	Soil	2.1	22.3	7.5	55	<0.1	25.9	9.0	365	2.39	9.2	0.6	1.9	2.1	33	0.1	0.5	0.1	62	0.50	0.038
3839661	Soil	2.2	38.6	9.0	64	0.1	31.1	10.1	234	2.65	11.3	0.7	3.4	2.9	64	0.2	0.8	0.1	62	0.67	0.041
3839662	Soil	1.3	12.7	4.4	88	<0.1	18.1	6.4	284	2.28	5.2	0.6	11.0	1.8	40	0.3	0.4	<0.1	68	0.61	0.068
3839663	Soil	2.4	15.8	4.0	83	<0.1	18.9	8.0	2578	10.58	37.4	0.5	1.6	1.4	151	0.7	0.6	<0.1	60	1.96	0.083
3839664	Soil	0.9	17.5	5.0	88	<0.1	20.2	7.3	382	2.11	8.2	0.5	4.1	1.7	55	0.5	0.4	<0.1	52	0.84	0.069
3839665	Soil	0.8	10.0	3.9	74	<0.1	17.5	6.3	276	1.84	4.1	0.4	42.0	1.8	39	1.2	0.3	<0.1	54	0.58	0.062
3839666	Soil	1.1	12.0	4.1	62	<0.1	18.3	6.6	356	2.14	4.7	0.4	0.7	1.7	69	0.3	0.3	<0.1	59	1.55	0.063
3839667	Soil	2.2	37.2	8.7	56	<0.1	31.1	9.1	310	2.91	12.6	0.9	2.9	3.9	33	<0.1	0.7	0.1	67	0.42	0.039
3839668	Soil	4.3	61.8	9.8	76	<0.1	45.8	10.8	410	3.10	15.6	1.3	5.3	3.3	41	0.1	1.0	0.2	73	0.53	0.035
3839669	Soil	1.9	22.1	7.7	50	<0.1	24.9	7.9	270	2.28	8.7	0.5	1.3	2.0	24	0.1	0.5	0.1	61	0.30	0.021
3839670	Soil	2.2	32.9	7.8	68	<0.1	28.0	8.7	311	2.53	13.2	0.7	3.0	1.6	36	0.2	0.8	0.2	65	0.43	0.024



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Bureau Veritas Commodities Canada Ltd.

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19 Hayes Cres.  
Whitehorse Yukon Y1A 0E1 Canada

**Project:** CDL  
**Report Date:** August 03, 2022

**Page:** 2 of 3

**Part:** 2 of 2

# CERTIFICATE OF ANALYSIS

WHI22000291.1

Method	Analyte	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	TI	S	Ga	Se	Te
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	0.05	1	0.5	0.2	
272911	Soil	9	28	0.62	97	0.037	4	1.10	0.019	0.09	0.1	0.02	6.0	0.2	<0.05	4	0.7	<0.2
272912	Soil	13	28	0.72	129	0.018	5	1.43	0.013	0.22	<0.1	0.02	5.0	0.4	0.07	5	1.5	<0.2
272913	Soil	7	23	0.46	117	0.038	2	1.23	0.014	0.11	0.1	0.01	3.3	0.1	<0.05	4	0.7	<0.2
272914	Soil	9	28	0.40	140	0.045	1	1.24	0.016	0.07	0.1	0.01	4.7	0.1	<0.05	4	0.6	<0.2
272915	Soil	13	29	0.48	155	0.047	3	1.13	0.020	0.10	0.1	0.03	6.0	0.1	<0.05	4	0.7	<0.2
272867	Soil	8	28	0.43	176	0.054	1	1.26	0.012	0.06	0.2	0.01	3.5	0.1	<0.05	4	0.6	<0.2
272868	Soil	9	31	0.54	102	0.073	2	1.28	0.013	0.12	0.2	<0.01	4.0	0.1	<0.05	4	<0.5	<0.2
272869	Soil	10	29	0.66	210	0.042	3	1.10	0.024	0.08	0.1	0.04	5.6	0.2	<0.05	4	0.7	<0.2
272870	Soil	13	42	0.61	164	0.092	2	1.34	0.021	0.09	0.2	0.01	6.1	<0.1	<0.05	4	<0.5	<0.2
272871	Soil	13	34	0.65	178	0.048	4	1.12	0.021	0.13	0.2	0.10	6.9	0.3	<0.05	4	0.9	<0.2
3839651	Soil	11	27	0.45	125	0.033	1	1.40	0.013	0.11	0.1	0.02	4.8	0.2	<0.05	4	<0.5	<0.2
3839652	Soil	8	25	0.41	73	0.058	1	1.04	0.014	0.05	0.1	0.02	2.7	<0.1	<0.05	4	<0.5	<0.2
3839653	Soil	6	23	0.45	72	0.057	2	0.97	0.017	0.09	0.2	<0.01	2.4	0.1	<0.05	4	<0.5	<0.2
3839654	Soil	10	34	0.59	140	0.047	2	1.36	0.015	0.09	0.2	0.02	6.3	0.2	<0.05	4	0.8	<0.2
3839655	Soil	9	34	0.52	153	0.057	2	1.36	0.013	0.11	0.1	0.01	4.9	0.2	<0.05	4	0.6	<0.2
3839656	Soil	9	33	0.57	220	0.055	2	1.48	0.017	0.06	0.2	0.01	4.7	0.1	<0.05	5	<0.5	<0.2
3839657	Soil	8	36	0.50	83	0.064	2	1.46	0.014	0.14	0.2	<0.01	4.0	0.2	<0.05	4	<0.5	<0.2
3839658	Soil	10	32	0.54	198	0.036	2	1.38	0.014	0.08	0.2	0.02	6.2	0.2	<0.05	4	0.8	<0.2
3839659	Soil	13	33	0.53	222	0.041	2	1.35	0.014	0.06	0.2	0.02	6.5	0.2	<0.05	4	0.7	<0.2
3839660	Soil	9	33	0.59	249	0.042	2	1.46	0.020	0.08	0.2	0.02	5.6	0.2	<0.05	5	<0.5	<0.2
3839661	Soil	14	35	0.63	170	0.049	3	1.29	0.019	0.08	0.2	0.03	7.3	0.2	<0.05	4	0.8	<0.2
3839662	Soil	9	28	0.53	85	0.054	2	0.88	0.021	0.06	0.4	0.01	3.1	0.1	<0.05	4	0.7	<0.2
3839663	Soil	7	19	0.39	323	0.035	3	0.77	0.023	0.06	0.1	0.03	3.4	0.1	0.10	3	2.2	<0.2
3839664	Soil	9	23	0.49	95	0.045	3	0.94	0.025	0.07	0.1	0.03	3.8	0.2	0.06	3	0.9	<0.2
3839665	Soil	9	23	0.47	82	0.049	2	0.83	0.022	0.06	0.2	0.02	2.9	0.1	<0.05	3	<0.5	<0.2
3839666	Soil	9	27	0.49	98	0.052	2	0.80	0.022	0.06	0.2	0.02	3.1	0.1	<0.05	3	<0.5	<0.2
3839667	Soil	14	38	0.58	163	0.058	2	1.43	0.016	0.09	0.2	0.02	8.8	0.2	<0.05	5	0.7	<0.2
3839668	Soil	19	38	0.66	167	0.045	3	1.44	0.031	0.09	0.2	0.04	9.8	0.3	<0.05	5	0.9	<0.2
3839669	Soil	9	32	0.56	129	0.054	1	1.33	0.013	0.06	0.2	<0.01	3.9	0.2	<0.05	4	<0.5	<0.2
3839670	Soil	11	31	0.52	133	0.043	2	1.34	0.023	0.07	0.2	0.02	5.8	0.2	<0.05	4	0.6	<0.2



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**Client:** **Bill Mann**  
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Whitehorse Yukon Y1A 0E1 Canada

Project: CDL  
Report Date: August 03, 2022

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Part: 1 of 2

# CERTIFICATE OF ANALYSIS

WHI22000291.1

Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Unit	ppm	ppm	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	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	0.1	2	0.01	0.001
3839671	Soil	1.6	17.2	7.1	53	<0.1	23.5	7.6	244	2.23	8.9	0.5	1.4	2.4	22	0.1	0.5	0.1	59	0.30	0.023	
3839672	Soil	1.6	34.7	7.9	71	0.1	32.0	9.5	329	2.57	11.9	0.6	2.7	2.8	33	0.2	0.8	0.2	59	0.49	0.056	



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**Client:** **Bill Mann**  
19 Hayes Cres.  
Whitehorse Yukon Y1A 0E1 Canada

Project: CDL  
Report Date: August 03, 2022

Page: 3 of 3

Part: 2 of 2

# CERTIFICATE OF ANALYSIS

WHI22000291.1

Method	AQ201																	
	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	
Analyte	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	
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	0.01	0.05	1	0.5	0.2	
3839671	Soil	8	32	0.54	190	0.063	1	1.52	0.012	0.06	0.2	<0.01	3.7	0.2	<0.05	5	<0.5	<0.2
3839672	Soil	13	33	0.61	182	0.055	2	1.33	0.018	0.06	0.2	0.04	5.5	0.1	<0.05	4	0.5	<0.2



Bureau Veritas Commodities Canada Ltd.  
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Project: CDL  
Report Date: August 03, 2022

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Part: 1 of 2

# QUALITY CONTROL REPORT

WHI22000291.1

Method	Analyte	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
Unit		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%	%
MDL		0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001
Pulp Duplicates																					
3839665	Soil	0.8	10.0	3.9	74	<0.1	17.5	6.3	276	1.84	4.1	0.4	42.0	1.8	39	1.2	0.3	<0.1	54	0.58	0.062
REP 3839665	QC	0.8	10.0	3.9	72	<0.1	17.2	6.2	267	1.81	3.8	0.4	1.0	1.8	38	0.3	0.3	<0.1	54	0.57	0.061
Reference Materials																					
STD DS11	Standard	14.4	151.1	131.8	355	1.8	84.0	14.0	1060	3.24	44.7	2.5	60.5	7.5	66	2.4	7.2	10.7	55	1.09	0.069
STD DS11	Standard	14.0	141.8	129.5	332	1.7	79.5	13.8	1019	3.13	42.0	2.3	78.0	7.5	65	2.2	6.9	11.1	51	1.04	0.071
STD OREAS262	Standard	0.7	123.9	56.8	161	0.5	68.7	28.2	563	3.45	37.5	1.2	55.4	9.3	35	0.7	3.4	1.0	25	3.15	0.039
STD OREAS262	Standard	0.6	112.8	54.1	153	0.5	63.5	27.5	528	3.30	34.7	1.1	51.7	8.9	34	0.6	3.7	0.9	24	2.91	0.039
STD DS11 Expected		14.6	149	138	345	1.71	77.7	14.2	1055	3.1	42.8	2.59	79	7.65	67.3	2.37	8.74	12.2	50	1.063	0.0701
STD OREAS262 Expected		0.68	118	56	154	0.45	62	26.9	530	3.284	35.8	1.22	65	9.33	36	0.61	5.06	1.03	22.5	2.98	0.04
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001
BLK	Blank	<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<2	<0.01	<0.001



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# QUALITY CONTROL REPORT

WHI22000291.1

Method	Analyte	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		La	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	ppm
MDL		1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2	
Pulp Duplicates																		
3839665	Soil	9	23	0.47	82	0.049	2	0.83	0.022	0.06	0.2	0.02	2.9	0.1	<0.05	3	<0.5	<0.2
REP 3839665	QC	9	23	0.45	80	0.048	2	0.80	0.021	0.06	0.1	0.02	2.8	0.1	<0.05	3	0.5	<0.2
Reference Materials																		
STD DS11	Standard	18	61	0.86	363	0.094	7	1.15	0.072	0.40	3.0	0.24	3.3	4.7	0.30	5	2.5	4.7
STD DS11	Standard	18	59	0.84	356	0.093	7	1.16	0.072	0.38	2.6	0.25	3.1	4.8	0.27	5	2.2	4.6
STD OREAS262	Standard	18	45	1.21	238	0.004	4	1.29	0.067	0.30	0.2	0.16	3.3	0.5	0.29	4	0.7	0.3
STD OREAS262	Standard	16	43	1.16	239	0.003	4	1.36	0.066	0.31	0.1	0.16	3.0	0.5	0.27	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 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	4.1	0.4	0.23
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



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**Client:** **Bill Mann**  
19 Hayes Cres.  
Whitehorse Yukon Y1A 0E1 Canada

Submitted By: Bill Mann  
Receiving Lab: Canada-Whitehorse  
Received: June 27, 2022  
Analysis Start: July 18, 2022  
Report Date: August 02, 2022  
Page: 1 of 3

# CERTIFICATE OF ANALYSIS

WHI22000293.1

## CLIENT JOB INFORMATION

Project: CDL  
Shipment ID:  
P.O. Number  
Number of Samples: 50

## SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days  
DISP-RJT-SOIL Immediate Disposal of Soil Reject

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


Invoice To: Bill Mann  
19 Hayes Cres.  
Whitehorse Yukon Y1A 0E1  
Canada

CC: Roger Hulstein

## SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
SS80	50	Dry at 60C sieve 100g to -80 mesh			WHI
AQ250	50	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	0.5	Completed	VAN
DISPL	50	Disposal of pulps			VAN
SHP01	50	Per sample shipping charges for branch shipments			VAN

## ADDITIONAL COMMENTS

  
JEFFREY CANNON  
Geochemistry Department Supervisor

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.



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Project: CDL  
Report Date: August 02, 2022

Page: 2 of 3

Part: 1 of 2

# CERTIFICATE OF ANALYSIS

# WHI22000293.1

Method	Analyte	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
Unit		ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%	%
MDL		0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	1	0.01	0.001
73045	AH Soil	1.05	31.14	1.83	54.2	66	15.8	3.0	334	0.55	1.2	1.7	2.9	0.3	161.5	2.33	0.50	0.24	13	2.36	0.105
73046	AH Soil	0.98	45.22	1.62	28.6	102	21.2	2.7	455	0.42	1.1	7.3	2.2	0.1	443.6	4.00	0.76	0.05	14	8.14	0.145
73047	AH Soil	0.98	21.63	2.97	75.1	262	11.0	5.6	761	0.55	0.6	0.2	0.9	<0.1	75.5	4.51	0.16	0.04	13	0.84	0.071
73048	AH Soil	3.04	22.60	3.18	109.2	307	10.6	3.7	673	0.49	<0.1	0.9	1.8	0.3	119.3	9.76	0.25	0.04	10	1.81	0.123
73049	AH Soil	2.60	8.48	2.22	63.4	354	5.4	2.9	256	0.38	0.1	<0.1	<0.2	0.2	48.0	7.33	0.19	0.03	9	0.59	0.058
73050	AH Soil	1.21	10.61	3.01	29.9	75	5.7	3.0	437	0.67	0.8	0.1	0.4	0.3	35.9	0.44	0.14	0.04	17	0.45	0.031
73051	AH Soil	1.41	46.76	3.93	117.9	300	21.0	7.6	1992	0.83	0.3	0.5	1.1	0.2	94.3	6.72	0.29	0.07	15	1.54	0.188
73052	AH Soil	0.64	14.58	1.20	20.8	62	6.8	3.0	381	0.33	0.6	1.2	0.8	<0.1	138.7	1.26	0.20	0.02	7	2.82	0.084
73053	AH Soil	0.46	25.70	3.41	13.8	144	11.6	10.9	973	0.67	0.4	0.4	0.2	<0.1	56.6	0.85	0.22	0.05	14	0.41	0.050
73054	AH Soil	0.51	25.68	6.75	16.6	96	5.5	1.7	28	0.62	1.2	0.4	<0.2	<0.1	21.7	0.53	0.07	0.12	17	0.18	0.039
73055	AH Soil	0.76	14.00	3.48	59.9	234	9.5	5.2	351	0.79	0.6	0.2	<0.2	<0.1	41.1	2.61	0.10	0.06	20	0.36	0.039
73056	AH Soil	0.65	33.07	3.24	17.1	190	8.7	6.3	302	0.80	1.4	0.5	0.9	0.1	84.2	0.67	0.14	0.06	19	1.24	0.082
73057	AH Soil	0.77	39.41	3.66	51.4	220	15.9	6.9	908	1.12	2.0	0.7	1.3	0.2	78.4	0.76	0.24	0.08	26	1.16	0.081
73058	AH Soil	0.37	17.58	2.27	20.2	64	7.4	5.7	402	0.63	0.5	0.3	0.7	<0.1	50.0	0.42	0.11	0.05	15	0.70	0.049
73059	AH Soil	1.21	19.43	2.59	101.4	367	9.5	6.3	694	0.71	0.7	0.3	0.5	<0.1	56.4	4.56	0.17	0.04	14	0.93	0.096
272916	AH Soil	1.33	27.48	2.28	24.4	234	11.3	4.3	666	0.75	1.2	2.2	2.3	0.1	79.3	0.33	0.39	0.04	17	1.32	0.096
272917	AH Soil	0.74	19.93	2.37	46.0	512	10.5	6.6	766	0.58	0.8	0.3	<0.2	<0.1	84.7	2.95	0.30	0.03	12	1.35	0.082
272918	AH Soil	1.02	12.41	2.20	31.0	640	7.4	7.9	788	0.49	0.9	0.2	1.2	<0.1	78.5	2.13	0.17	0.03	10	1.33	0.097
272919	AH Soil	0.45	10.42	2.02	36.6	126	7.7	4.2	446	0.57	1.0	0.3	0.4	<0.1	55.6	1.02	0.11	0.03	15	0.92	0.046
272920	AH Soil	1.34	16.63	3.84	102.9	73	15.4	5.4	364	1.36	4.1	0.6	0.7	0.5	81.0	1.09	0.37	0.05	33	1.59	0.086
272921	AH Soil	0.79	32.18	2.83	58.0	72	22.3	3.9	256	0.89	2.3	1.1	1.1	0.7	96.1	1.66	0.47	0.14	21	1.72	0.072
272922	AH Soil	1.17	46.69	4.76	55.1	171	26.1	6.4	480	1.45	4.3	1.5	1.7	0.3	88.3	0.91	0.49	0.09	33	1.63	0.071
3839701	AH Soil	0.48	16.43	3.11	66.4	165	7.4	4.9	502	0.42	0.4	0.2	0.6	0.1	64.4	4.26	0.11	0.06	10	1.17	0.056
3839702	AH Soil	1.20	8.79	0.53	63.3	32	3.3	0.7	158	0.11	0.3	0.8	<0.2	0.1	164.9	0.46	0.13	<0.02	2	3.65	0.084
3839703	AH Soil	1.98	15.01	2.02	72.3	214	7.6	3.4	985	0.51	0.5	0.2	0.5	<0.1	87.5	2.21	0.12	0.03	12	1.47	0.062
3839704	AH Soil	1.83	23.22	2.54	79.8	349	24.4	5.0	1195	0.41	0.5	0.1	0.7	<0.1	119.4	4.47	0.11	0.04	7	2.07	0.090
3839705	AH Soil	0.54	13.72	1.71	31.7	228	6.1	1.8	159	0.36	0.3	0.2	<0.2	<0.1	43.2	1.89	0.08	0.02	8	0.47	0.042
3839706	AH Soil	1.56	6.92	1.66	89.2	734	5.3	2.6	362	0.30	0.5	<0.1	1.3	<0.1	88.2	19.84	0.08	<0.02	7	1.02	0.076
3839707	AH Soil	0.85	34.34	2.52	66.1	368	15.5	7.0	1051	0.74	1.2	0.4	0.9	<0.1	108.3	3.29	0.19	0.05	15	1.60	0.095
3839708	AH Soil	0.79	16.10	2.22	60.6	268	9.3	3.4	521	0.46	0.8	0.2	1.0	<0.1	94.2	5.57	0.08	0.04	10	1.38	0.049



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# CERTIFICATE OF ANALYSIS

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Method	Analyte	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
Unit		ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppm
MDL		0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	5	0.1	0.02	0.1	0.1
73045	AH Soil	4.2	8.1	0.15	73.7	0.016	24	0.37	0.020	0.07	<0.1	1.0	0.05	0.14	60	0.9	0.02	1.5
73046	AH Soil	4.8	6.0	0.16	133.1	0.010	38	0.42	0.016	0.07	<0.1	0.7	0.05	0.16	66	3.5	0.03	1.1
73047	AH Soil	2.5	6.2	0.08	404.3	0.020	30	0.32	0.025	0.09	<0.1	0.7	0.02	0.04	69	<0.1	<0.02	1.4
73048	AH Soil	3.4	6.2	0.11	286.6	0.021	25	0.34	0.019	0.10	<0.1	1.1	0.03	0.07	103	4.0	0.02	1.1
73049	AH Soil	1.1	4.0	0.05	152.6	0.020	<20	0.17	0.020	0.07	<0.1	0.7	<0.02	0.06	87	0.5	<0.02	0.9
73050	AH Soil	2.4	6.9	0.09	189.2	0.032	<20	0.34	0.018	0.05	<0.1	0.9	0.04	0.03	64	0.4	<0.02	1.5
73051	AH Soil	7.9	9.8	0.14	381.6	0.027	25	0.62	0.024	0.08	<0.1	1.6	0.05	0.06	78	1.1	<0.02	1.9
73052	AH Soil	2.0	4.1	0.10	190.0	0.010	<20	0.26	0.020	0.04	<0.1	0.4	0.02	0.12	45	0.5	<0.02	0.9
73053	AH Soil	9.6	6.2	0.08	431.6	0.019	<20	0.56	0.023	0.04	<0.1	0.7	0.03	0.03	51	<0.1	<0.02	1.8
73054	AH Soil	7.5	11.9	0.07	163.7	0.025	<20	0.66	0.012	0.03	<0.1	0.6	0.07	0.03	28	<0.1	<0.02	3.6
73055	AH Soil	3.0	9.7	0.11	182.7	0.021	<20	0.50	0.021	0.05	<0.1	0.6	0.04	0.02	34	<0.1	<0.02	2.6
73056	AH Soil	5.1	8.5	0.13	167.9	0.028	20	0.63	0.028	0.03	0.1	0.7	0.04	0.06	32	0.3	<0.02	2.7
73057	AH Soil	7.5	15.6	0.18	266.9	0.034	20	0.94	0.031	0.04	<0.1	1.6	0.06	0.05	25	0.1	<0.02	2.8
73058	AH Soil	3.4	5.3	0.11	129.1	0.028	<20	0.46	0.035	0.03	<0.1	0.5	0.03	0.03	12	<0.1	<0.02	2.1
73059	AH Soil	4.9	7.6	0.15	154.5	0.014	<20	0.51	0.023	0.09	0.3	0.5	0.04	0.05	65	<0.1	<0.02	1.7
272916	AH Soil	5.9	9.0	0.14	140.1	0.024	22	0.69	0.023	0.02	<0.1	0.9	0.09	0.11	49	0.5	<0.02	2.1
272917	AH Soil	3.9	6.4	0.12	203.9	0.015	<20	0.46	0.022	0.04	<0.1	0.4	0.06	0.07	49	<0.1	<0.02	1.8
272918	AH Soil	3.3	5.5	0.09	160.1	0.006	<20	0.40	0.018	0.06	<0.1	0.3	0.04	0.09	74	<0.1	<0.02	1.2
272919	AH Soil	3.1	7.1	0.12	143.8	0.021	<20	0.42	0.027	0.04	<0.1	0.6	0.04	0.04	21	<0.1	<0.02	1.8
272920	AH Soil	6.0	20.5	0.40	124.8	0.031	<20	0.84	0.020	0.07	<0.1	2.6	0.11	0.10	32	0.4	<0.02	2.7
272921	AH Soil	6.9	12.2	0.23	171.1	0.024	<20	0.75	0.024	0.04	<0.1	1.5	0.08	0.10	45	0.4	<0.02	2.0
272922	AH Soil	10.2	18.6	0.29	238.2	0.022	<20	0.94	0.025	0.04	<0.1	2.1	0.10	0.07	37	1.0	0.03	2.8
3839701	AH Soil	1.8	6.0	0.10	49.4	0.023	<20	0.26	0.024	0.06	<0.1	0.7	0.02	0.08	50	<0.1	<0.02	1.4
3839702	AH Soil	<0.5	2.6	0.17	71.5	0.004	24	0.09	0.014	0.03	<0.1	0.2	<0.02	0.23	65	0.7	<0.02	0.2
3839703	AH Soil	2.2	5.7	0.13	335.1	0.021	<20	0.28	0.019	0.06	0.1	0.7	0.04	0.07	73	0.1	<0.02	1.2
3839704	AH Soil	2.2	5.4	0.14	514.3	0.011	<20	0.31	0.017	0.07	<0.1	0.5	0.03	0.07	84	0.2	<0.02	1.1
3839705	AH Soil	2.3	3.7	0.05	124.4	0.014	<20	0.21	0.021	0.04	<0.1	0.4	0.03	0.03	47	<0.1	<0.02	1.0
3839706	AH Soil	1.0	3.9	0.07	213.2	0.012	37	0.17	0.021	0.08	<0.1	0.4	<0.02	0.08	115	0.2	<0.02	0.7
3839707	AH Soil	5.9	8.4	0.14	479.3	0.019	<20	0.63	0.025	0.05	<0.1	0.9	0.07	0.07	54	0.6	<0.02	2.0
3839708	AH Soil	2.6	5.6	0.11	268.9	0.008	<20	0.32	0.027	0.04	<0.1	0.4	0.03	0.05	32	<0.1	<0.02	1.4



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**Project:** CDL  
**Report Date:** August 02, 2022

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# CERTIFICATE OF ANALYSIS

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Method	Analyte	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
Unit		ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
MDL		0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.1	0.2	0.01	0.02	0.02	1	0.01	0.001	
3839709	AH Soil	1.31	35.97	3.16	50.5	290	18.6	8.2	1354	0.85	1.2	0.6	0.7	0.1	89.8	4.52	0.21	0.07	18	1.49	0.107
3839710	AH Soil	2.74	25.03	1.51	18.9	74	10.9	4.3	659	0.43	0.3	2.0	0.7	0.7	117.0	1.07	0.36	0.04	10	2.07	0.088
3839711	AH Soil	5.49	20.73	0.75	85.3	71	16.5	6.2	9459	0.38	1.1	2.9	0.7	<0.1	209.6	2.53	0.38	<0.02	7	3.67	0.072
3839712	AH Soil	0.39	10.50	0.63	11.3	56	4.1	0.8	155	0.18	<0.1	5.1	0.4	<0.1	384.7	0.99	0.19	<0.02	5	10.26	0.052
3839713	AH Soil	0.37	38.94	1.45	70.3	216	10.9	2.5	445	0.46	<0.1	1.3	2.4	0.1	200.2	1.21	0.33	0.02	11	4.70	0.080
3839714	AH Soil	1.10	27.04	3.44	81.7	160	12.0	5.4	1117	0.66	0.4	0.1	0.7	<0.1	48.2	2.78	0.12	0.05	15	0.55	0.048
3839715	AH Soil	1.17	30.45	2.57	265.6	142	11.3	4.4	1197	0.64	0.3	<0.1	<0.2	<0.1	80.1	3.92	0.09	0.05	13	1.20	0.104
3839716	AH Soil	0.64	17.89	1.72	79.6	187	7.0	3.8	1103	0.54	0.3	<0.1	<0.2	<0.1	42.0	1.79	0.07	0.03	14	0.52	0.050
3839717	AH Soil	0.84	21.33	1.82	16.1	77	9.8	5.5	1087	0.49	1.6	2.4	<0.2	<0.1	221.8	0.50	0.41	0.03	11	4.54	0.093
3839718	AH Soil	0.55	16.73	1.64	16.7	195	6.8	3.2	366	0.56	1.3	0.5	0.2	<0.1	120.7	0.46	0.12	0.05	13	1.99	0.055
3839719	AH Soil	2.16	12.98	2.38	17.3	123	7.3	3.7	702	0.58	0.5	0.2	<0.2	0.1	31.7	1.41	0.08	0.05	15	0.47	0.032
3839720	AH Soil	2.41	12.04	2.59	27.7	73	7.9	3.2	472	0.63	0.7	<0.1	<0.2	<0.1	31.3	1.35	0.10	0.05	15	0.49	0.031
3839721	AH Soil	1.03	21.97	1.41	22.1	239	8.6	1.8	28	0.43	0.8	0.5	<0.2	<0.1	59.7	1.34	0.21	0.03	9	0.91	0.065
3839722	AH Soil	0.45	26.79	1.85	13.3	502	9.9	3.9	96	0.64	1.7	0.3	<0.2	<0.1	26.5	2.73	0.08	0.05	15	0.26	0.052
3839723	AH Soil	0.66	28.32	1.64	13.8	134	12.0	3.9	617	0.75	1.3	1.1	0.8	<0.1	93.7	0.50	0.34	0.04	15	1.59	0.064
3839724	AH Soil	7.04	21.42	1.18	7.7	113	9.7	2.7	2996	0.29	<0.1	9.6	1.0	<0.1	233.3	1.35	1.51	<0.02	6	5.63	0.097
3839725	AH Soil	0.82	18.78	2.28	30.1	221	13.0	4.9	508	0.67	1.1	0.1	<0.2	<0.1	84.3	1.38	0.14	0.04	15	1.48	0.063
3839726	AH Soil	0.47	14.80	3.50	17.3	148	5.6	2.7	48	0.64	0.8	0.3	0.3	<0.1	14.4	1.07	0.07	0.06	16	0.15	0.045
3839727	AH Soil	0.82	12.66	2.90	22.7	193	7.1	2.2	34	0.38	0.3	0.2	<0.2	<0.1	33.7	3.01	0.09	0.05	9	0.39	0.051
3839728	AH Soil	0.46	9.18	2.07	12.7	112	5.2	4.2	358	0.53	0.9	0.5	0.6	<0.1	31.8	0.56	0.18	0.03	12	0.45	0.045



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Method	Analyte	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
Unit		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm
MDL		0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1
3839709	AH Soil	5.7	10.5	0.18	230.9	0.017	<20	0.62	0.028	0.05	<0.1	0.8	0.05	0.08	50	0.4	<0.02	2.2
3839710	AH Soil	3.0	4.2	0.14	129.3	0.018	23	0.38	0.033	0.02	<0.1	0.4	0.05	0.19	38	1.4	<0.02	1.3
3839711	AH Soil	1.4	3.1	0.13	485.6	0.005	27	0.25	0.016	0.02	<0.1	0.3	0.13	0.28	24	1.4	<0.02	0.9
3839712	AH Soil	1.3	2.8	0.09	94.9	0.007	52	0.21	0.020	0.02	<0.1	0.2	<0.02	0.36	31	1.5	0.04	0.6
3839713	AH Soil	3.2	5.2	0.15	208.3	0.018	28	0.38	0.032	0.04	<0.1	0.6	0.03	0.14	22	1.9	<0.02	0.9
3839714	AH Soil	2.2	6.4	0.09	260.5	0.020	<20	0.32	0.020	0.05	<0.1	0.7	0.03	0.02	36	<0.1	<0.02	1.5
3839715	AH Soil	2.2	6.0	0.12	386.7	0.024	<20	0.34	0.022	0.07	<0.1	0.6	0.03	0.04	47	0.5	<0.02	1.4
3839716	AH Soil	1.5	4.2	0.08	172.7	0.021	<20	0.24	0.022	0.05	<0.1	0.3	0.02	0.02	23	<0.1	<0.02	1.3
3839717	AH Soil	2.7	7.1	0.19	187.5	0.008	<20	0.39	0.010	0.02	0.1	0.3	0.06	0.36	47	1.5	0.03	1.0
3839718	AH Soil	3.1	5.5	0.08	224.3	0.024	<20	0.43	0.020	0.07	<0.1	0.4	0.03	0.05	28	0.5	0.02	1.5
3839719	AH Soil	2.1	5.8	0.08	146.2	0.030	<20	0.28	0.020	0.04	<0.1	0.6	0.02	0.03	41	<0.1	<0.02	1.6
3839720	AH Soil	2.4	7.6	0.11	198.3	0.027	<20	0.38	0.017	0.04	<0.1	0.6	0.03	0.02	50	0.1	<0.02	1.8
3839721	AH Soil	3.3	3.6	0.07	60.5	0.012	<20	0.36	0.020	0.02	<0.1	0.2	<0.02	0.08	36	0.5	<0.02	1.1
3839722	AH Soil	5.2	7.0	0.08	85.7	0.016	<20	0.40	0.023	0.04	<0.1	0.4	<0.02	0.04	36	0.2	<0.02	1.7
3839723	AH Soil	6.5	5.9	0.12	184.7	0.019	<20	0.63	0.033	0.04	<0.1	0.6	0.04	0.08	36	1.0	0.02	1.5
3839724	AH Soil	2.1	3.7	0.07	289.4	0.004	<20	0.38	0.007	0.02	<0.1	0.2	0.06	0.42	65	6.4	0.02	0.6
3839725	AH Soil	2.6	7.5	0.18	194.0	0.021	<20	0.40	0.021	0.08	<0.1	0.4	0.04	0.07	52	0.4	<0.02	1.7
3839726	AH Soil	3.9	8.5	0.08	89.1	0.005	<20	0.44	0.015	0.03	<0.1	<0.1	0.02	0.03	39	<0.1	<0.02	2.1
3839727	AH Soil	2.1	4.5	0.05	123.2	0.006	<20	0.20	0.015	0.04	<0.1	<0.1	0.02	0.04	45	0.2	<0.02	0.9
3839728	AH Soil	3.9	5.4	0.07	114.4	0.016	<20	0.34	0.020	0.03	<0.1	0.6	0.04	0.05	47	0.4	<0.02	1.3



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

Project: CDL  
Report Date: August 02, 2022

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# QUALITY CONTROL REPORT

## WHI22000293.1

Method	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	1	0.01	0.001	
Pulp Duplicates																					
73045	AH Soil	1.05	31.14	1.83	54.2	66	15.8	3.0	334	0.55	1.2	1.7	2.9	0.3	161.5	2.33	0.50	0.24	13	2.36	0.105
REP 73045	QC	1.03	31.56	1.79	51.0	72	16.3	3.0	359	0.52	0.9	1.7	2.3	0.2	165.4	2.29	0.49	0.07	12	2.51	0.106
3839715	AH Soil	1.17	30.45	2.57	265.6	142	11.3	4.4	1197	0.64	0.3	<0.1	<0.2	<0.1	80.1	3.92	0.09	0.05	13	1.20	0.104
REP 3839715	QC	1.16	31.12	2.70	269.6	152	11.4	4.4	1216	0.67	0.3	<0.1	0.7	<0.1	79.1	3.93	0.09	0.05	13	1.19	0.106
Reference Materials																					
STD DS11	Standard	15.03	141.90	133.02	335.9	1587	80.6	14.4	1027	2.97	44.4	2.5	70.1	8.1	67.5	2.32	5.05	11.48	45	1.05	0.068
STD DS11	Standard	13.81	149.06	123.70	336.1	1713	78.6	13.5	1072	3.02	42.8	2.4	62.8	7.4	64.8	2.27	5.92	9.87	46	0.99	0.066
STD OREAS262	Standard	0.61	108.47	56.50	149.3	461	63.5	27.8	531	3.14	34.7	1.2	57.5	9.0	35.0	0.63	1.41	0.95	20	2.89	0.039
STD OREAS262	Standard	0.56	115.91	51.59	150.2	431	61.4	26.0	510	3.25	35.1	1.1	45.9	8.5	32.4	0.59	1.89	0.87	21	2.80	0.038
STD DS11 Expected		13.9	149	138	345	1710	77.7	14.2	1055	3.1	42.8	2.59	79	7.65	67.3	2.37	7.2	12.2	50	1.063	0.0701
STD OREAS262 Expected		0.68	118	56	154	450	62	26.9	530	3.284	35.8	1.22	65	9.33	36	0.61	3.39	1.03	22.5	2.98	0.04
BLK	Blank	<0.01	0.01	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	<1	<0.01	<0.001
BLK	Blank	<0.01	<0.01	<0.01	0.2	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	<1	<0.01	<0.001



Bureau Veritas Commodities Canada Ltd.  
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# QUALITY CONTROL REPORT

WHI22000293.1

Method	Analyte	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga
Unit		ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm
MDL		0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1
Pulp Duplicates																		
73045	AH Soil	4.2	8.1	0.15	73.7	0.016	24	0.37	0.020	0.07	<0.1	1.0	0.05	0.14	60	0.9	0.02	1.5
REP 73045	QC	4.2	7.9	0.14	76.1	0.014	<20	0.38	0.019	0.07	<0.1	0.9	0.05	0.14	61	1.0	<0.02	1.4
3839715	AH Soil	2.2	6.0	0.12	386.7	0.024	<20	0.34	0.022	0.07	<0.1	0.6	0.03	0.04	47	0.5	<0.02	1.4
REP 3839715	QC	2.3	6.1	0.12	390.1	0.025	<20	0.34	0.025	0.06	<0.1	0.6	0.03	0.03	36	0.5	<0.02	1.5
Reference Materials																		
STD DS11	Standard	18.5	60.6	0.83	407.2	0.099	<20	1.14	0.074	0.39	1.9	3.4	4.55	0.26	251	1.8	4.25	4.9
STD DS11	Standard	19.0	58.6	0.81	386.2	0.098	<20	1.22	0.073	0.39	2.5	3.2	4.65	0.28	246	2.2	4.54	4.9
STD OREAS262	Standard	19.0	44.6	1.13	242.6	0.004	<20	1.30	0.067	0.33	<0.1	3.6	0.45	0.24	151	0.3	0.20	4.0
STD OREAS262	Standard	16.4	41.4	1.14	221.2	0.003	<20	1.27	0.069	0.31	<0.1	3.1	0.44	0.24	147	0.6	0.20	3.7
STD DS11 Expected		18.6	61.5	0.85	417	0.0976		1.129	0.0694	0.4	2.9	3.1	4.9	0.2835	260	2.2	4.56	4.7
STD OREAS262 Expected		15.9	41.7	1.17	248	0.003		1.3	0.071	0.312	0.13	3.24	0.47	0.269	170	0.4	0.23	3.9
BLK	Blank	<0.5	<0.5	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1
BLK	Blank	<0.5	<0.5	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1



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

**Client:** **Bill Mann**  
19 Hayes Cres.  
Whitehorse Yukon Y1A 0E1 Canada

Submitted By: Bill Mann  
Receiving Lab: Canada-Whitehorse  
Received: June 27, 2022  
Analysis Start: July 09, 2022  
Report Date: July 26, 2022  
Page: 1 of 2

# CERTIFICATE OF ANALYSIS

WHI22000289.1

## CLIENT JOB INFORMATION

Project: CDL  
Shipment ID:  
P.O. Number  
Number of Samples: 9

## SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days  
DISP-RJT Dispose of Reject 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.

Invoice To: Bill Mann  
19 Hayes Cres.  
Whitehorse Yukon Y1A 0E1  
Canada

CC: Roger Hulstein

## SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PRP70-250	9	Crush, split and pulverize 250 g rock to 200 mesh			WHI
AQ201	9	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN
SHP01	9	Per sample shipping charges for branch shipments			VAN

## ADDITIONAL COMMENTS

  
SOFIA DEVOTA  
XRF Manager

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.



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**Client:** **Bill Mann**  
19 Hayes Cres.  
Whitehorse Yukon Y1A 0E1 Canada

**Project:** CDL  
**Report Date:** July 26, 2022

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**Part:** 1 of 2

# CERTIFICATE OF ANALYSIS

WHI22000289.1

Method	Analyte	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca
Unit		kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
MDL		0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01
3839751	Rock	0.74	1.1	15.3	17.0	57	<0.1	7.3	6.6	792	2.24	2.2	1.0	0.6	3.5	206	<0.1	0.6	0.2	50	2.99
3839752	Rock	0.75	2.8	40.0	12.8	89	<0.1	8.6	12.5	909	3.34	6.5	1.3	2.6	4.6	87	0.5	1.0	0.1	91	1.47
3839753	Rock	0.93	0.5	7.2	4.4	36	<0.1	5.4	3.1	637	0.80	3.6	<0.1	0.8	0.1	80	<0.1	0.9	<0.1	29	2.52
3839754	Rock	0.12	84.9	31.3	539.4	73	<0.1	13.4	4.8	1179	4.24	35.9	5.3	4.6	1.5	121	0.3	18.2	<0.1	65	3.12
3839755	Rock	0.71	1.9	10.4	10.1	49	<0.1	5.5	2.4	180	1.76	1.8	0.6	<0.5	2.6	13	0.1	0.6	0.1	20	0.14
3839756	Rock	0.75	1.9	12.4	14.1	91	<0.1	6.3	3.3	287	1.80	3.1	0.5	1.5	2.5	17	0.4	0.7	<0.1	14	0.20
3839757	Rock	1.07	2.0	49.7	10.5	62	<0.1	7.1	13.4	785	3.57	7.7	1.4	<0.5	4.1	74	0.2	0.2	0.1	117	2.32
3839758	Rock	1.30	7.2	41.7	14.4	49	0.1	8.2	4.4	410	2.94	15.7	2.1	<0.5	5.1	74	0.4	0.9	0.4	115	0.87
3839759	Rock	1.74	2.3	209.1	10.7	322	0.2	8.7	14.8	843	3.77	196.8	1.8	10.8	5.0	125	3.1	0.5	2.1	116	2.53



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**Client:** **Bill Mann**  
19 Hayes Cres.  
Whitehorse Yukon Y1A 0E1 Canada

**Project:** CDL  
**Report Date:** July 26, 2022

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**Part:** 2 of 2

# CERTIFICATE OF ANALYSIS

WHI22000289.1

Method	Analyte	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	
Unit		%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm		
MDL		0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2		
3839751	Rock	0.089	25	15	0.81	336	0.006	<1	1.03	0.082	0.09	<0.1	<0.01	2.6	<0.1	<0.05	9	<0.5	<0.2	
3839752	Rock	0.138	35	12	1.16	832	0.006	<1	1.62	0.058	0.16	<0.1	<0.01	3.0	<0.1	0.08	11	0.7	<0.2	
3839753	Rock	0.015	<1	8	0.17	22	0.033	1155	0.76	0.009	0.05	<0.1	<0.01	2.1	<0.1	<0.05	1	<0.5	<0.2	
3839754	Rock	0.015	7	16	0.46	2253	<0.001	29	0.29	0.004	0.13	0.2	0.23	3.2	0.1	0.05	<1	<0.5	<0.2	
3839755	Rock	0.043	6	12	0.36	117	0.002	14	0.80	0.054	0.15	<0.1	<0.01	1.1	<0.1	<0.05	4	<0.5	<0.2	
3839756	Rock	0.033	5	10	0.43	83	0.009	6	0.86	0.046	0.12	<0.1	<0.01	1.2	<0.1	<0.05	4	<0.5	<0.2	
3839757	Rock	0.132	16	13	1.70	140	0.131	4	1.96	0.070	0.12	0.2	<0.01	5.4	<0.1	0.07	12	0.6	<0.2	
3839758	Rock	0.067	11	30	0.90	129	0.130	7	1.76	0.100	0.42	0.3	<0.01	6.2	0.2	0.11	9	2.4	<0.2	
3839759	Rock	0.129	19	15	1.48	135	0.108	2	2.34	0.198	0.35	0.2	<0.01	5.8	0.3	0.20	9	2.5	<0.2	



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Project: CDL  
Report Date: July 26, 2022

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# QUALITY CONTROL REPORT

WHI22000289.1

Method	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5	0.1	1	0.1	0.1	0.1	1	0.01	
Pulp Duplicates																					
3839759	Rock	1.74	2.3	209.1	10.7	322	0.2	8.7	14.8	843	3.77	196.8	1.8	10.8	5.0	125	3.1	0.5	2.1	116	2.53
REP 3839759	QC		2.4	208.3	10.9	331	0.2	8.9	14.8	824	3.71	197.2	1.8	11.7	5.2	125	3.1	0.5	2.2	114	2.58
Reference Materials																					
STD BVGEO01	Standard		9.8	4381.5	174.9	1710	2.5	155.7	24.9	734	3.80	117.7	3.4	193.7	13.5	54	6.0	2.3	22.6	68	1.29
STD OREAS262	Standard		0.6	110.1	52.0	147	0.4	60.7	26.2	526	3.18	33.4	1.1	44.4	8.4	33	0.6	2.6	0.9	18	2.96
STD BVGEO01 Expected			11.2	4415	187	1741	2.53	163	25	733	3.7	121	3.77	219	14.4	55	6.5	3.39	25.6	73	1.3219
STD OREAS262 Expected			0.68	118	56	154	0.45	62	26.9	530	3.284	35.8	1.22	65	9.33	36	0.61	5.06	1.03	22.5	2.98
BLK	Blank		<0.1	<0.1	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01	<0.5	<0.1	<0.5	<0.1	<1	<0.1	<0.1	<0.1	<1	<0.01
Prep Wash																					
ROCK-WHI	Prep Blank		1.1	2.2	1.2	25	<0.1	1.5	3.2	416	1.72	0.8	0.4	<0.5	2.0	17	<0.1	<0.1	<0.1	20	0.52



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Project: CDL  
Report Date: July 26, 2022

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# QUALITY CONTROL REPORT

WHI22000289.1

Method		AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte		P	La	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	ppm
MDL		0.001	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
Pulp Duplicates																			
3839759	Rock	0.129	19	15	1.48	135	0.108	2	2.34	0.198	0.35	0.2	<0.01	5.8	0.3	0.20	9	2.5	<0.2
REP 3839759	QC	0.131	19	15	1.47	137	0.110	2	2.37	0.200	0.35	0.2	<0.01	5.8	0.3	0.21	9	2.5	<0.2
Reference Materials																			
STD BVGEO01	Standard	0.073	24	179	1.29	136	0.227	3	2.32	0.192	0.88	4.1	0.08	5.6	0.6	0.68	7	4.9	1.0
STD OREAS262	Standard	0.036	15	41	1.14	224	0.003	6	1.20	0.065	0.30	0.1	0.14	3.0	0.4	0.25	4	0.7	0.2
STD BVGEO01 Expected		0.0727	25.9	187	1.2963	260	0.233	3.8	2.347	0.1924	0.89	5.3	0.1	5.97	0.62	0.6655	7.37	4.84	1.02
STD OREAS262 Expected		0.04	15.9	41.7	1.17	248	0.0027	4	1.3	0.071	0.312	0.2	0.17	3.24	0.47	0.253	4.1	0.4	0.23
BLK	Blank	<0.001	<1	<1	<0.01	<1	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.01	<0.1	<0.1	<0.05	<1	<0.5	<0.2
Prep Wash																			
ROCK-WHI	Prep Blank	0.038	6	6	0.42	42	0.075	<1	0.75	0.088	0.08	<0.1	<0.01	2.4	<0.1	<0.05	3	<0.5	<0.2

CDL 2022 B-C Horizon Soil Samples														Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201		
All coordinates; Grid: UTM, Datum: NAD 83 Zone 8V														Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au			
Sample#	Date	Time	Grid	Datum	Zone	East_UTM	North_UTM	Elev	m	Sampler	Type	Depth-cm	Color	Quality	Description	Sample	Unit	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM			
																Type/MDL	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1			
272911	2022-06-19T21:59:06Z		UTM	NAD83	8v	502995	6805638	934	m	WDM	Soil B-C	15	grey-brown	mod	1cm ash, no loess, till w/ rounded pebbles	272911	Soil B-C	1.8	21.3	7.5	82	<0.1	23.1	7.8	336	2.34	8.1	0.5	2.8
272912	2022-06-19T22:21:07Z		UTM	NAD83	8v	503098	6805641	944	m	WDM	Soil B-C	40	grey & brown	mod	silty	272912	Soil B-C	4.1	44.8	11.4	113	0.2	22.5	5.9	212	2.86	13	0.5	3.5
272913	2022-06-19T23:07:54Z		UTM	NAD83	8v	503397	6805630	973	m	WDM	Soil B-C	20	orange-brown	good	rounded pebbles	272913	Soil B-C	2.3	16.5	7.9	57	<0.1	18.5	8.8	523	2.58	14.9	0.4	0.6
272914	2022-06-19T23:27:11Z		UTM	NAD83	8v	503500	6805639	991	m	WDM	Soil B-C	10	yellow-brown	good	2cm ash, no loess	272914	Soil B-C	2	25.2	7.5	42	<0.1	21.7	7.1	184	2.17	8.8	0.5	1.8
272915	2022-06-19T23:48:06Z		UTM	NAD83	8v	503599	6805642	1007	m	WDM	Soil B-C	10	orange-brown	good	rounded pebbles	272915	Soil B-C	1.6	33.3	6.4	61	<0.1	26	6.5	237	2.12	8.1	0.7	2.4
272867	2022-06-20T22:01:22Z		UTM	NAD83	8v	504484	6805551	1082	m	WDM	Soil B-C	25	yellow-brown	good	gritty soil	272867	Soil B-C	1	15.1	6.6	40	<0.1	18.6	6.9	408	1.91	5.9	0.5	1.2
272868	2022-06-20T22:29:36Z		UTM	NAD83	8v	504491	6805347	1053	m	WDM	Soil B-C	20	yellow-brown	good	5cm ash + loess, 5cm red brown B, then yellow-brown	272868	Soil B-C	1.2	16.4	6.2	58	<0.1	22.3	6.5	231	2.07	6.4	0.5	1.4
272869	2022-06-21	1:02:29	UTM	NAD83	8v	504743	6804304	869	m	WDM	Soil B-C	35	grey-brown	good	angular pebbles	272869	Soil B-C	2.6	43.9	10.4	71	0.1	31.5	9.9	404	2.46	11	0.6	3.4
272870	2022-06-21	1:25:47	UTM	NAD83	8v	504847	6804289	880	m	WDM	Soil B-C	40	yellow-brown	good	till beneath red-brown loess	272870	Soil B-C	1.1	25.9	7.3	44	<0.1	30.1	9.1	320	2.43	9.4	0.7	1.2
272871	2022-06-21	2:05:07	UTM	NAD83	8v	504989	6804322	899	m	WDM	Soil B-C	45	grey-brown	good	till beneath red-brown loess	272871	Soil B-C	2.1	80.1	9.6	77	0.3	44.9	9.5	371	2.61	12.9	0.6	6.4
3839651	19-Jun-22	1:51:52PM	UTM	NAD83	8v	503546	6805655	1015	m	RH	Soil B-C	10	red-brown	Poor	SW dipping slope, clearing, locally steep as clearing underlain by white rhyolite. Loamy loess rich soil on rhyolite bedrock, pebbles of bedrock with rare qtz veining.	3839651	Soil B-C	1.7	21.6	10.2	60	<0.1	22.7	7.6	271	2.25	8.3	0.7	3.8
3839652	19-Jun-22	2:08:56PM	UTM	NAD83	8v	503505	6805689	1016	m	RH	Soil B-C	15	tan	Poor	Mixture of tan till (rounded pebbles) and loess + ash and minor angular rhy fragments, on rhyolite subcrop.	3839652	Soil B-C	1.1	12.4	7.1	41	<0.1	15.5	5.3	177	1.75	5.2	0.4	0.8
3839653	20-Jun-22	11:55:32AM	UTM	NAD83	8v	503799	6805640	1034	m	RH	Soil B-C	30	tan	good	Rounded pebbles, reworked till.	3839653	Soil B-C	1	6.5	6.7	60	<0.1	13	6.8	308	1.39	2.9	0.3	0.6
3839654	20-Jun-22	1:00:23PM	UTM	NAD83	8v	504005	6805628	1061	m	RH	Soil B-C	30	tan	mod	Rounded pebbles, reworked till?, frozen at 30cm.	3839654	Soil B-C	2.6	27.6	8.4	57	<0.1	29.7	8.8	299	2.62	10.7	0.8	2
3839655	20-Jun-22	1:23:18PM	UTM	NAD83	8v	504098	6805635	1079	m	RH	Soil B-C	30	tan	mod	Rounded pebbles, reworked till?, frozen at 30cm.	3839655	Soil B-C	2.7	24	10.4	70	<0.1	29.2	9.1	296	2.61	11.5	0.6	1.5
3839656	20-Jun-22	1:46:36PM	UTM	NAD83	8v	504198	6805635	1104	m	RH	Soil B-C	25	tan	poor	Loamy - loess with Rounded pebbles, reworked till?, frozen at 25cm.	3839656	Soil B-C	1.8	18.4	7.2	51	<0.1	23.1	8	385	2.21	6.8	0.6	1.2
3839657	20-Jun-22	2:09:14PM	UTM	NAD83	8v	504302	6805635	1103	m	RH	Soil B-C	30	tan	good	below organics, 10cm ash & 10cm loess, sample of reworked till - loess, rounded pebbles.	3839657	Soil B-C	1.8	21.9	7.5	55	0.2	26.6	8.4	197	2.54	9.7	0.4	1
3839658	20-Jun-22	2:42:38PM	UTM	NAD83	8v	504405	6805629	1100	m	RH	Soil B-C	30	tan	good	rounded pebbles, float of angular weakly limonitic weathering grey chert and sandst.	3839658	Soil B-C	2.4	31	7.6	58	<0.1	30.5	8	276	2.57	11.7	0.8	2.2
3839659	20-Jun-22	2:58:20PM	UTM	NAD83	8v	504501	6805635	1097	m	RH	Soil B-C	35	tan	good	rounded pebbles up to 20 cm., float of angular grey shale - possibly nearby bedrock? 15-20 cm loess horizon below ash band.	3839659	Soil B-C	2	30.8	8	61	<0.1	27.5	9	351	2.43	10.7	0.8	1.7
3839660	20-Jun-22	3:18:09PM	UTM	NAD83	8v	504601	6805636	1087	m	RH	Soil B-C	35	tan	good	loamy - loess with rounded pebbles.	3839660	Soil B-C	2.1	22.3	7.5	55	<0.1	25.9	9	365	2.39	9.2	0.6	1.9
3839661	20-Jun-22	4:14:59PM	UTM	NAD83	8v	504903	6805639	1040	m	RH	Soil B-C	40	tan	mod	loamy - loess, grit - silt with rounded pebbles.	3839661	Soil B-C	2.2	38.6	9	64	0.1	31.1	10.1	234	2.65	11.3	0.7	3.4
3839667	23-Jun-22	10:49:00AM	UTM	NAD83	8v	505020	6805794	1083	m	RH	Soil B-C	35	tan-green	good	Sandy silt, rounded pebbles.	3839667	Soil B-C	2.2	37.2	8.7	56	<0.1	31.1	9.1	310	2.91	12.6	0.9	2.9
3839668	23-Jun-22	11:22:01AM	UTM	NAD83	8v	505009	6805893	1088	m	RH	Soil B-C	30	tan	good	Till, sandy silt, rounded pebbles, as sample 3839667.	3839668	Soil B-C	4.3	61.8	9.8	76	<0.1	45.8	10.8	410	3.1	15.6	1.3	5.3
3839669	23-Jun-22	12:03:34PM	UTM	NAD83	8v	504998	6806101	1123	m	RH	Soil B-C	30	tan	good	Till, Sandy silt, rounded pebbles.	3839669	Soil B-C	1.9	22.1	7.7	50	<0.1	24.9	7.9	270	2.28	8.7	0.5	1.3
3839670	23-Jun-22	1:41:48PM	UTM	NAD83	8v	504946	6806805	1218	m	RH	Soil B-C	30	tan	mod	Till, Sandy silt, rounded pebbles. Reworked till, clayey silt, rounded pebbles. Below 5cm ash - loess band	3839670	Soil B-C	2.2	32.9	7.8	68	<0.1	28	8.7	311	2.53	13.2	0.7	3
3839671	23-Jun-22	2:25:14PM	UTM	NAD83	8v	504955	6807005	1233	m	RH	Soil B-C	25	tan	mod		3839671	Soil B-C	1.6	17.2	7.1	53	<0.1	23.5	7.6	244	2.23	8.9	0.5	1.4



CDL 2022 B-C Horizon Soil Samples															Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
All coordinates; Grid: UTM, Datum: NAD 83 Zone 8V															Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au		
Sample#	Date	Time	Grid	Datum	Zone	East_UTM	North_UTM	Elev	m	Sampler	Type	Depth-cm	Color	Quality	Description	Sample	Type/MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.1	0.5
3839672	23-Jun-22	2:56:24PM	UTM	NAD83	8v	504955	6807097	1213	m	RH	Soil B-C	25	tan	mod	Frozen reworked till, rounded pebbles and angular grey shale - argillite pebbles. Sandy silt - B horizon.	3839672	Soil B-C	1.6	34.7	7.9	71	0.1	32	9.5	329	2.57	11.9	0.6	2.7
1961053	9/2/2019	15:34:00	UTM	WGS 84	8v	505129	6808540	1234	m	WDM	Soil	20	dk red-brown	good	At base of 3m rusty (hornfels?) cliff. Sandy soil w/ angular rock. Area generally has thick moss, outcrop very rare.	1961053	Soil	21.1	604.4	16.9	25	6.6	4.4	2.2	616	9.68	11.9		76.2
1961054	9/5/2019	14:11:58	UTM	WGS 84	8v	505209	6806709	1177	m	WDM	Soil	25	orange-brown	good	Silty. On steep slope proximal to OC37 - crystal tuff.	1961054	Soil	2.4	41.6	10.3	68	<0.1	28.2	11.5	381	2.92	14.4		1.3
1961055	9/5/2019	14:56:50	UTM	WGS 84	8v	505267	6806699	1169	m	WDM	Soil	30	light brown	good	Silty with angular rock chips. Steep bank. Proximal to OC28 - crystal bomb tuff.	1961055	Soil	13.2	58.3	13.5	491	0.2	58.5	17.1	334	3.64	33		7.4
1961056	9/5/2019	16:20:33	UTM	WGS 84	8v	505881	6806076	1132	m	WDM	Soil	25	orange-brown	good	Silty. Area has angular cobbles monzonite with rusty fractures, at surface.	1961056	Soil	2.3	12.1	13.2	55	<0.1	15.7	6.8	239	2.48	6		1.8
																1961057	Soil	1.8	24	6.8	52	0.1	28.1	9.2	331	2.22	7.9		3.4
1961151	2019-09-05			WGS 84	8v	504844	6807201			CO	Soil					1961151	Soil	1.4	17.3	7.1	46	<0.1	23.3	8.1	194	2.57	10.8		2.3
1961152	2019-09-05			WGS 84	8v	504699	6807200			CO	Soil					1961152	Soil	2.3	23.2	7.7	93	<0.1	28	10.1	270	2.52	10.6		3.5
1961153	2019-09-05			WGS 84	8v	504804	6607209			CO	Soil					1961153	Soil	1.8	52.1	9.2	91	0.2	39.9	10.5	315	2.59	9.3		3.9
1961154	2019-09-05			WGS 84	8v	504887	6807260			CO	Soil					1961154	Soil	1.2	15.1	6.4	45	<0.1	21.5	7.1	235	2.2	7.1		3
1961155	2019-09-05			WGS 84	8v	504978	6807234			CO	Soil					1961155	Soil	2.1	22.2	7.6	66	<0.1	27.1	8.1	252	2.38	9.4		2.3
1961156	2019-09-05			WGS 84	8v	505019	6807183			CO	Soil					1961156	Soil	1.9	28.8	8.1	54	0.1	28.7	9.4	177	2.66	12.9		1.7
1961157	2019-09-05			WGS 84	8v	504608	6808505			CO	Soil					1961157	Soil	1.8	30.7	7.4	90	0.1	21.5	7.3	391	1.98	8		4.4
1961158	2019-09-05			WGS 84	8v	504649	6808505			CO	Soil					1961158	Soil	2.1	43.6	8.9	82	0.1	32.6	10.3	339	2.54	11.8		13.4
1961159	2019-09-05			WGS 84	8v	504702	6808500			CO	Soil					1961159	Soil	2	21.2	6.8	56	<0.1	23.9	8.2	263	2.28	11.7		3.2
1961160	2019-09-05			WGS 84	8v	504799	6808502			CO	Soil					1961160	Soil	1.4	49.6	7	61	0.3	34.9	9.5	428	2.47	8.5		4.1
1961161	2019-09-05			WGS 84	8v	504851	6808505			CO	Soil					1961161	Soil	2.9	36.5	9.5	77	<0.1	32.6	10.3	361	2.81	11.4		4.2
1961162	2019-09-05			WGS 84	8v	504900	6808500			CO	Soil					1961162	Soil	2.4	32	10.5	161	0.1	28.9	8.6	316	2.2	9		2.3
1961163	2019-09-05			WGS 84	8v	504952	6808501			CO	Soil					1961163	Soil	1.8	45.1	8.8	84	0.1	35.9	9.2	330	2.46	10		3.8
1961164	2019-09-05			WGS 84	8v	505000	6808504			CO	Soil					1961164	Soil	2.2	34.3	7.5	67	<0.1	33.6	9	271	2.3	9.8		3.4
1961165	2019-09-05			WGS 84	8v	505100	6808500			CO	Soil					1961165	Soil	1.7	22.4	7.8	54	<0.1	19.9	7.6	273	2.14	7.6		1.3
1961166	2019-09-05			WGS 84	8v	505150	6808501			CO	Soil					1961166	Soil	1.6	55.5	5.9	61	0.2	24.2	7.8	295	1.96	7.1		2.8
1961167	2019-09-05			WGS 84	8v	505197	6808500			CO	Soil					1961167	Soil	1.4	127.1	19.2	523	0.7	23.9	9.9	322	2.4	9.2		9.3
1961168	2019-09-05			WGS 84	8v	505251	6808502			CO	Soil					1961168	Soil	0.9	93.9	7.5	127	0.1	28.4	10.3	345	2.14	7		3.7
1961169	2019-09-05			WGS 84	8v	505298	6808505			CO	Soil					1961169	Soil	1.8	29.4	7.1	68	<0.1	24.7	8.6	377	2.34	9.6		2.4
1961170	2019-09-05			WGS 84	8v	505350	6808501			CO	Soil					1961170	Soil	1.6	35.8	8.4	62	0.1	32.3	10.4	326	2.59	9.6		4.3
1961171	2019-09-05			WGS 84	8v	505401	6808505			CO	Soil					1961171	Soil	0.8	20.1	6	41	<0.1	17.3	6.1	347	1.62	5		2.8
1961172	2019-09-05			WGS 84	8v	505450	6808500			CO	Soil					1961172	Soil	0.9	17.5	6	37	<0.1	19.1	6.8	204	1.83	5		5.9
1961173	2019-09-05			WGS 84	8v	505505	6808497			CO	Soil					1961173	Soil	0.5	12.6	5.8	34	<0.1	21.2	6.7	187	1.97	6		2.7



CDL 2022 B-C Horizon Soil Samples														Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201						
All coordinates; Grid: UTM, Datum: NAD 83 Zone 8V														Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au								
Sample#	Date	Time	Grid	Datum	Zone	East_UTM	North_UTM	Elev	m	Sampler	Type	Depth-cm	Color	Quality	Description	Sample	Type/MDL	Unit	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
1961174	2019-09-05			WGS 84	8v	505553	6808500			CO	Soil					1961174	Soil	1.1	25.3	7.1	46	<0.1	30.5	9.7	246	2.48	8.5						3.7	
1961175	2019-09-05			WGS 84	8v	505600	6808501			CO	Soil					1961175	Soil	0.6	19.1	5.5	38	<0.1	30.3	8.2	268	2.25	8.9							5.5
1961176	2019-09-05			WGS 84	8v	505655	6808505			CO	Soil					1961176	Soil	1.1	19.6	6.7	46	<0.1	27.5	7.9	251	2.21	8							2.2
1961177	2019-09-05			WGS 84	8v	505698	6808505			CO	Soil					1961177	Soil	0.7	15.5	6	46	0.1	18.7	6.3	207	1.75	4.8							2.9
1961178	2019-09-05			WGS 84	8v	505750	6808498			CO	Soil					1961178	Soil	1.3	16.6	7.4	65	<0.1	19.3	6.5	253	2.1	5.5							0.7
1961179	2019-09-05			WGS 84	8v	505800	6808498			CO	Soil					1961179	Soil	0.5	20.8	4.7	40	<0.1	25.8	7.2	286	1.81	6.3							2.8
1961180	2019-09-05			WGS 84	8v	504313	6809000			CO	Soil					1961180	Soil	2.2	32.9	8.4	62	<0.1	29.1	8	289	2.41	10							2.6
1961181	2019-09-05			WGS 84	8v	504350	6808999			CO	Soil					1961181	Soil	1.1	19.8	6.5	48	<0.1	24.4	8.7	333	2.08	6.7							2.7
1961182	2019-09-05			WGS 84	8v	504395	6809004			CO	Soil					1961182	Soil	1.1	37.8	6.8	50	0.1	28	7.7	259	2.27	7							3.8
1961183	2019-09-05			WGS 84	8v	504445	6808996			CO	Soil					1961183	Soil	1.3	16.7	6.4	51	<0.1	20.8	6.9	236	1.99	6.7							1.5
1961184	2019-09-05			WGS 84	8v	504495	6808997			CO	Soil					1961184	Soil	2.1	20.3	7.5	66	<0.1	17.3	7.1	227	2.13	5							1.6
1961185	2019-09-05			WGS 84	8v	504555	6809000			CO	Soil					1961185	Soil	1.5	21.3	7.5	55	<0.1	22.2	7	254	2.1	8.2							1.5
1961186	2019-09-05			WGS 84	8v	504600	6809000			CO	Soil					1961186	Soil	0.7	18.8	6.4	47	<0.1	24.5	7.9	322	2.07	7							1.6
1961187	2019-09-05			WGS 84	8v	504650	6808995			CO	Soil					1961187	Soil	1.1	13.8	6.2	40	<0.1	21.4	6.5	185	2.04	7.8							0.8
1961188	2019-09-05			WGS 84	8v	504700	6809001			CO	Soil					1961188	Soil	1.7	19.3	6.6	45	<0.1	16.2	6	181	2.02	6							2.7
1961189	2019-09-05			WGS 84	8v	504745	6809005			CO	Soil					1961189	Soil	1.3	30.9	7.7	41	0.2	19.2	7.7	240	1.85	5							3.6
1961190	2019-09-05			WGS 84	8v	504796	6808998			CO	Soil					1961190	Soil	1.1	31.9	5.9	43	0.1	22	7.3	337	1.83	6.9							2.7
1961191	2019-09-05			WGS 84	8v	504850	6808996			CO	Soil					1961191	Soil	2.8	25.7	6.9	51	<0.1	27.3	8.6	295	2.53	10.3							1.3
1961192	2019-09-05			WGS 84	8v	504908	6809006			CO	Soil					1961192	Soil	1.2	16.4	5.9	45	<0.1	23.4	8.3	270	2.71	8.5							2.9
1961193	2019-09-05			WGS 84	8v	504950	6809013			CO	Soil					1961193	Soil	1.1	20.2	6	41	0.2	27.6	8.2	214	2.45	8.3							2.1
1961194	2019-09-05			WGS 84	8v	504996	6809004			CO	Soil					1961194	Soil	1.9	30.8	6.6	56	<0.1	33	8.7	212	2.41	10.1							0.9
1961195	2019-09-05			WGS 84	8v	505050	6808997			CO	Soil					1961195	Soil	1.8	21.1	6.3	55	<0.1	23.1	7.1	227	2.14	9.7							<0.5
1961196	2019-09-05			WGS 84	8v	505100	6809010			CO	Soil					1961196	Soil	4.7	62.3	7.5	72	<0.1	32.3	9.1	254	2.51	10.1							6.7
1961197	2019-09-05			WGS 84	8v	505150	6809011			CO	Soil					1961197	Soil	3.4	23.1	2.3	29	<0.1	10.4	4	314	0.95	2.6							<0.5
1961198	2019-09-05			WGS 84	8v	505200	6808993			CO	Soil					1961198	Soil	0.6	17.5	4.4	39	<0.1	24.8	7.3	248	1.89	6.7							2.5
1961199	2019-09-05			WGS 84	8v	505250	6808994			CO	Soil					1961199	Soil	1.1	24.7	6.3	52	<0.1	20.7	6.8	248	1.99	8.1							9.2
1961200	2019-09-05			WGS 84	8v	505298	6809000			CO	Soil					1961200	Soil	1.5	23.1	6.7	81	<0.1	27.9	9.4	263	2.45	8.1							1.6
1961201	2019-09-05			WGS 84	8v	505345	6809000			CO	Soil					1961201	Soil	1.1	20.7	4.4	39	<0.1	17.1	5.2	151	1.41	5							2.3
1961202	2019-09-05			WGS 84	8v	504979	6806540			CO	Soil				North end	1961202	Soil	1.2	29.6	7.5	84	0.2	29.5	10.1	344	2.29	7.2							1.8
1961203	2019-09-05			WGS 84	8v	504978	6806499			CO	Soil				Cutline soils 2019	1961203	Soil	2.1	46.5	10	93	<0.1	37.9	11.5	395	2.96	10.8							6.5
1961204	2019-09-05			WGS 84	8v	504976	6806449			CO	Soil					1961204	Soil	2.6	33	8.8	70	<0.1	26.6	8.3	264	2.54	10.9							4.2
1961205	2019-09-05			WGS 84	8v	504978	6806400			CO	Soil					1961205	Soil	3.1	31.8	7.8	63	<0.1	31.3	8.8	258	2.47	9.8							1.7
1961206	2019-09-05			WGS 84	8v	504977	6806352			CO	Soil					1961206	Soil	3	33.5	7.9	104	<0.1	28.6	8.6	430	2.39	9.6							4.4



CDL 2022 B-C Horizon Soil Samples														Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201								
All coordinates; Grid: UTM, Datum: NAD 83 Zone 8V														Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au										
Sample#	Date	Time	Grid	Datum	Zone	East_UTM	North_UTM	Elev	m	Sampler	Type	Depth-cm	Color	Quality	Description	Sample	Type/MDL	Unit	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
1961207	2019-09-05			WGS 84	8v	504978	6806300			CO	Soil					1961207	Soil	2.8	34.2	7.2	92	<0.1	30.8	8.2	257	2.34	9							3.7		
1961208	2019-09-05			WGS 84	8v	504980	6806240			CO	Soil					1961208	Soil	1.6	77	6.1	61	0.3	41.1	7.8	778	1.8	5.8								2	
1961209	2019-09-05			WGS 84	8v	505038	6805387			CO	Soil				middle	1961209	Soil	1.3	30.4	6.9	51	0.1	26.5	9.1	257	1.99	6.1								3.9	
1961210	2019-09-05			WGS 84	8v	505114	6804159			CO	Soil					1961210	Soil	1.2	13.7	5.9	56	<0.1	17.3	7.9	231	1.93	5								0.9	
1961211	2019-09-05			WGS 84	8v	505110	6804284			CO	Soil				South end	1961211	Soil	1.1	16	6	66	<0.1	18.8	7.6	336	2.02	5								<0.5	
1961212	2019-09-05			WGS 84	8v	505092	6804385			CO	Soil					1961212	Soil	2.1	25.1	6.8	46	<0.1	25.5	8	242	2.37	8.9									1.9
1961213	2019-09-05			WGS 84	8v	505085	6804513			CO	Soil					1961213	Soil	1.1	11.2	6.2	69	<0.1	15.2	8.1	371	1.86	3.4									2.6
1961214	2019-09-05			WGS 84	8v	505084	6804635			CO	Soil					1961214	Soil	1.9	19.2	7.1	42	<0.1	21.2	8.9	200	2.22	10.2									1.5
1961215	2019-09-05			WGS 84	8v	505081	6804742			CO	Soil					1961215	Soil	1.3	17.8	6.8	47	<0.1	22.3	8.3	258	2.26	6.8									1.7
1961216	2019-09-05			WGS 84	8v	505070	6804856			CO	Soil					1961216	Soil	2.2	37	8.7	73	0.1	26.5	9.8	330	2.35	10.3									2.5
1961217	2019-09-05			WGS 84	8v	505052	6805092			CO	Soil					1961217	Soil	0.6	16.6	6.2	39	<0.1	21.3	7.3	200	1.83	6.3									1.5
1961218	2019-09-05			WGS 84	8v	505048	6805219			CO	Soil					1961218	Soil	1	30.9	6.2	47	<0.1	22.8	7.8	310	2.03	6									4
1961219	2019-09-05			WGS 84	8v	505040	6805349			CO	Soil				Cutline soils 2019	1961219	Soil	1	24.3	7.3	55	<0.1	27.9	9.7	215	2.35	7.5									1.8
1961220	2019-09-05			WGS 84	8v	505032	6805514			CO	Soil					1961220	Soil	1.4	29.5	8.5	59	0.1	30.1	10.5	197	2.53	8.5									5.4
1961221	2019-09-05			WGS84	8	504851	6808505			CO	Soil					1961221	Soil	1.1	35.9	6.2	55	0.1	33.1	9.4	409	2.09	5.6									2
1961228	2019-09-05			WGS 84	8v	504700	6805014			CO	Soil				south end	1961228	Soil	1.9	19.8	5.8	54	<0.1	24	10.8	479	2.51	7.2									1.6
1961229	2019-09-05			WGS 84	8v	504691	6805049			CO	Soil				Line 504700E soils	1961229	Soil	2.9	34.1	7.8	56	<0.1	25.9	10.7	212	2.82	10.4									0.9
1961230	2019-09-05			WGS 84	8v	504699	6805104			CO	Soil					1961230	Soil	1.4	37.6	5.3	53	<0.1	26.4	6.8	203	2.03	3.9									5.5
1961231	2019-09-05			WGS 84	8v	504700	6805206			CO	Soil					1961231	Soil	1	32.1	6.9	88	0.1	27.8	9.4	357	2.15	3.8									0.7
1961232	2019-09-05			WGS 84	8v	504702	6805281			CO	Soil					1961232	Soil	0.8	11.2	7.2	75	0.1	22	9.2	320	2.34	3.3									0.7
1961233	2019-09-05			WGS 84	8v	504709	6805300			CO	Soil					1961233	Soil	1.3	19.2	7.8	60	0.1	19.1	7.9	225	2.44	6.4									4.7
1961234	2019-09-05			WGS 84	8v	504704	6805401			CO	Soil					1961234	Soil	2.2	18	6.8	106	0.1	16.2	7.7	289	2.19	7.1									<0.5
1961235	2019-09-05			WGS 84	8v	504696	6805501			CO	Soil					1961235	Soil	1.3	12.9	7.3	52	<0.1	19.5	8	323	2.35	6.1									1
1961236	2019-09-05			WGS 84	8v	504712	6805600			CO	Soil					1961236	Soil	1.2	18.5	6.9	53	<0.1	24.6	8.6	297	2.26	6.1									<0.5
1961237	2019-09-05			WGS 84	8v	504719	6805755			CO	Soil					1961237	Soil	1	16.8	6.8	61	<0.1	24.3	10.1	714	2.36	6.7									2.9
1961238	2019-09-05			WGS 84	8v	504697	6805805			CO	Soil					1961238	Soil	2.6	33	7.3	58	<0.1	31.4	9.2	443	2.81	10.8									1.5
1961239	2019-09-05			WGS 84	8v	504697	6805919			CO	Soil					1961239	Soil	2.3	18.1	7.3	69	<0.1	22.2	9.1	307	2.7	7.7									<0.5
1961240	2019-09-05			WGS 84	8v	504701	6806140			CO	Soil					1961240	Soil	2.3	22.9	7.6	47	<0.1	19.2	7.6	363	2.25	6.1									<0.5
1961241	2019-09-05			WGS 84	8v	504700	6806180			CO	Soil					1961241	Soil	2.3	19.2	6.4	41	<0.1	21.6	6.9	251	2.02	6.8									2.2
1961242	2019-09-05			WGS 84	8v	504704	6806290			CO	Soil					1961242	Soil	2.5	63.5	7.9	164	0.4	46.4	14.5	773	2.53	6.2									3.6
1961243	2019-09-05			WGS 84	8v	504700	6806400			CO	Soil					1961243	Soil	2	23.5	7	60	<0.1	23.4	7.4	277	2.22	7.2									2.8
1961244	2019-09-05			WGS 84	8v	504715	6806497			CO	Soil				north end	1961244	Soil	2.5	46.7	9.2	96	0.2	38.5	10.9	385	3.02	15.3								3.9	
72910	2019-09-05			WGS 84	8v	505340	6807753			LW	Soil					72910	Soil	0.9	10.6	8.2	76	<0.1	13.9	9	601	2.63	8.2								30.9	



Sample#	Date	Time	Grid	Datum	Zone	Number	East_utm	North_utm	Elev	m	Sampler	Type	Depth-cm	Color	Quality	Description	Sample	Type	Mo	Cu
73045	2022-06-19T21:59:06Z		UTM	NAD83	8v	73045	502995	6805640	933.964783	m	WDM	AH_Soil	10	black	moderate	<1cm rooty Ah	73045	AH_Soil	1.05	31.14
73046	2022-06-19T22:21:07Z		UTM	NAD83	8v	73046	503098	6805641	944.144714	m	WDM	AH_Soil	15	black	moderate	~ 1cm fibrous Ah	73046	AH_Soil	0.98	45.22
73047	2022-06-19T22:34:03Z		UTM	NAD83	8v	73047	503200	6805631	954.65387	m	WDM	AH_Soil	5	black	good	1cm Ah w/ charcoal pockets of Ah at base of 10cm organics, w/ ash	73047	AH_Soil	0.98	21.63
73048	2022-06-19T22:47:23Z		UTM	NAD83	8v	73048	503306	6805632	962.208008	m	WDM	AH_Soil	10	black	moderate	1cm Ah beneath 5 to 10 cm organics	73048	AH_Soil	3.04	22.6
73049	2022-06-19T23:07:54Z		UTM	NAD83	8v	73049	503397	6805630	973.185242	m	WDM	AH_Soil	10	black	good	organics	73049	AH_Soil	2.6	8.48
73050	2022-06-19T23:27:11Z		UTM	NAD83	8v	73050	503500	6805639	991.386597	m	WDM	AH_Soil	2	black	moderate	spotty Ah, w/ charcoal	73050	AH_Soil	1.21	10.61
73051	2022-06-19T23:48:06Z		UTM	NAD83	8v	73051	503599	6805642	1007.16217	m	WDM	AH_Soil	2	black	good	1 - 2 cm Ah 5 to 10 cm Ah, bottom cm sampled	73051	AH_Soil	1.41	46.76
73052	2022-06-20T00:07:12Z		UTM	NAD83	8v	73052	503678	6805637	1018.373901	m	WDM	AH_Soil	10	black	good	~1cm Ah w/ charcoal, beneath moss & organics	73052	AH_Soil	0.64	14.58
73053	2022-06-20T17:40:31Z		UTM	NAD83	8v	73053	504499	6806346	1199.765381	m	WDM	AH_Soil	15	black	good	~1cm fibrous Ah, black & red- brown	73053	AH_Soil	0.46	25.7
73054	2022-06-20T18:51:58Z		UTM	NAD83	8v	73054	504481	6806237	1160.620605	m	WDM	AH_Soil	10	black	moderate	~1cm fibrous Ah, black & dark brown, w/ charcoal	73054	AH_Soil	0.51	25.68
73055	2022-06-20T19:48:55Z		UTM	NAD83	8v	73055	504477	6806129	1150.689575	m	WDM	AH_Soil	15	black	moderate	~1cm Ah w/ charcoal	73055	AH_Soil	0.76	14
73056	2022-06-20T20:42:10Z		UTM	NAD83	8v	73056	504492	6805940	1118.122314	m	WDM	AH_Soil	10	black	good	1- 2cm Ah + buried layer	73056	AH_Soil	0.65	33.07
73057	2022-06-20T21:05:56Z		UTM	NAD83	8v	73057	504480	6805747	1097.983276	m	WDM	AH_Soil	15	black	good	~1cm Ah w/ charcoal	73057	AH_Soil	0.77	39.41
73058	2022-06-20T22:01:22Z		UTM	NAD83	8v	73058	504484	6805551	1082.477051	m	WDM	AH_Soil	15	black	good	~1cm Ah, fibrous	73058	AH_Soil	0.37	17.58
73059	2022-06-20T22:29:36Z		UTM	NAD83	8v	73059	504491	6805347	1053.28894	m	WDM	AH_Soil	10	black	moderate	10cm black Ah beneath 15cm brown organics	73059	AH_Soil	1.21	19.43
272916	18-Jun-22		UTM	NAD83	8v	272916	504979	6806540			WDM	AH_Soil	15	black	good	0 to 4cm black Ah beneath 5cm brown org	272916	AH_Soil	1.33	27.48
272917	18-Jun-22		UTM	NAD83	8v	272917	504978	6806499			WDM	AH_Soil	5	black	good	1cm Ah, fibrous beneath 10 cm brown organics	272917	AH_Soil	0.74	19.93
272918	18-Jun-22		UTM	NAD83	8v	272918	504976	6806449			WDM	AH_Soil	10	black	moderate	sporadic Ah, some charcoal	272918	AH_Soil	1.02	12.41
272919	18-Jun-22		UTM	NAD83	8v	272919	504978	6806400			WDM	AH_Soil	10	black	good	1cm black Ah beneath 15cm brown organics	272919	AH_Soil	0.45	10.42
272920	18-Jun-22		UTM	NAD83	8v	272920	504977	6806352			WDM	AH_Soil	15	black	moderate	1cm good black Ah beneath fibrous orgs	272920	AH_Soil	1.34	16.63
272921	18-Jun-22		UTM	NAD83	8v	272921	504978	6806300			WDM	AH_Soil	15	black	good	pockets of Ah near base of 20cm organics at base of large spruce	272921	AH_Soil	0.79	32.18
272922	18-Jun-22		UTM	NAD83	8v	272922	504980	6806240			WDM	AH_Soil	20	black	good	1-2 cm fibrous peaty band above ash.	272922	AH_Soil	1.17	46.69
3839701	20-Jun-22 11:56:13AM		UTM	NAD83	8v	3839701	503799	6805639	1033.535156	m	RH	AH_Soil	15	black	mod	peaty layer, frozen, minor charcoal, no ash layer visible.	3839701	AH_Soil	0.48	16.43
3839702	20-Jun-22 12:21:16PM		UTM	NAD83	8v	3839702	503900	6805638	1036.419189	m	RH	AH_Soil	30	black	poor	below moss, above ash, <1cm - 1cm peaty fibrous band, minor charcoal.	3839702	AH_Soil	1.2	8.79
3839703	20-Jun-22 1:00:58PM		UTM	NAD83	8v	3839703	504002	6805633	1060.211167	m	RH	AH_Soil	10	black	mod	below moss, above ash, <1cm - 2cm peaty fibrous band, minor charcoal.	3839703	AH_Soil	1.98	15.01
3839704	20-Jun-22 1:22:24PM		UTM	NAD83	8v	3839704	504099	6805635	1079.918701	m	RH	AH_Soil	10	black	mod	<10cm moss, above ash, <1cm - 5cm fibrous Ah band above 10 ash layer.	3839704	AH_Soil	1.83	23.22
3839705	20-Jun-22 1:46:10PM		UTM	NAD83	8v	3839705	504196	6805635	1104.19165	m	RH	AH_Soil	10	black	mod	10cm moss, 5cm black horizon above ash with 1-2 cm Ah with roots, peaty.	3839705	AH_Soil	0.54	13.72
3839706	20-Jun-22 2:08:43PM		UTM	NAD83	8v	3839706	504302	6805635	1102.509277	m	RH	AH_Soil	10	black	mod		3839706	AH_Soil	1.56	6.92

Sample#	Date	Time	Grid	Datum	Zone	Number	East_utm	North_utm	Elev	m	Sampler	Type	Depth-cm	Color	Quality	Description	Sample	Type	Mo	Cu
3839707	20-Jun-22	2:41:58PM	UTM	NAD83	8v	3839707	504406	6805633	1103.230225	m	RH	AH_Soil	10	black	mod	10cm moss, <1cm-2cm black horizon, fibrous, peaty resting on ash.	3839707	AH_Soil	0.85	34.34
3839708	20-Jun-22	2:57:29PM	UTM	NAD83	8v	3839708	504501	6805635	1096.501221	m	RH	AH_Soil	10	black	mod	10cm moss, <1cm-3cm black horizon, fibrous, peaty resting on 5cm thick ash band.	3839708	AH_Soil	0.79	16.1
3839709	20-Jun-22	3:16:59PM	UTM	NAD83	8v	3839709	504601	6805636	1086.647705	m	RH	AH_Soil	20	black	good	18cm moss, 5-10cm brn - black horizon - <2-5cm Ah, fibrous, resting on ash band + <1cm thick discontinuous Ah below ash.	3839709	AH_Soil	1.31	35.97
3839710	20-Jun-22	3:42:02PM	UTM	NAD83	8v	3839710	504699	6805633	1070.30542	m	RH	AH_Soil	20	black	good	15cm moss, 10-15 cm black A with good 5 cm Ah on ash band and mixed with ash, ash is frozen.	3839710	AH_Soil	2.74	25.03
3839711	20-Jun-22	3:55:59PM	UTM	NAD83	8v	3839711	504804	6805644	1064.056885	m	RH	AH_Soil	25	black	good	20-25 cm ash, 10-15 cm black A horizon with 5 cm Ah on frozen ash.	3839711	AH_Soil	5.49	20.73
3839712	20-Jun-22	4:14:20PM	UTM	NAD83	8v	3839712	504903	6805639	1040.264404	m	RH	AH_Soil	25	black	mod	20 cm moss - organics, 10 cm mixed A and ash lenses, discontinuous Ah 1-3 cm above - between ash band(s).	3839712	AH_Soil	0.39	10.5
3839713	20-Jun-22	4:28:10PM	UTM	NAD83	8v	3839713	505026	6805636	1027.046387	m	RH	AH_Soil	25	black	mod	20 cm moss - organics, 10 cm A with 1-3cm Ah above frozen ash band.	3839713	AH_Soil	0.37	38.94
3839714	21-Jun-22	1:13:42PM	UTM	NAD83	8v	3839714	504754	6804304	882.1286621	m	RH	AH_Soil	10	black	moderate	<1cm, spotty Ah, some charcoal	3839714	AH_Soil	1.1	27.04
3839715	21-Jun-22		UTM	NAD83	8v	3839715	504847	6804289	880.451477	m	WDM	AH_Soil	10	dark brown	moderate	~1cm fibrous Ah, discontinuous	3839715	AH_Soil	1.17	30.45
3839716	21-Jun-22		UTM	NAD83	8v	3839716	504988	6804322	898.922729	m	WDM	AH_Soil	15	black	moderate	1- 2cm Ah	3839716	AH_Soil	0.64	17.89
3839717	23-Jun-22	9:52:09AM	UTM	NAD83	8v	3839717	505029	6805607	1032.093262	m	RH	AH_Soil	25	black	mod	20-30 cm A under moss and organics, 10cm Ah partly frozen, fibrous. No visible ash layer but thin ash band in A horizon	3839717	AH_Soil	0.84	21.33
3839718	23-Jun-22	10:18:01AM	UTM	NAD83	8v	3839718	505024	6805705	1056.606689	m	RH	AH_Soil	20	black	mod	20 cm moss and organics, 2 cm fibrous, minor charcoal Ah on ash bed, frozen loess below ash.	3839718	AH_Soil	0.55	16.73
3839719	23-Jun-22	10:48:04AM	UTM	NAD83	8v	3839719	505017	6805796	1080.158936	m	RH	AH_Soil	10	black	poor	10 cm moss and organics, <1cm fibrous Ah with rootlets above ash bed	3839719	AH_Soil	2.16	12.98
3839720	23-Jun-22	11:18:46AM	UTM	NAD83	8v	3839720	505008	6805893	1087.849365	m	RH	AH_Soil	5	black	poor	<5cm moss, <1 cm Ah, fibrous - rootlets, on 5 cm ash bed.	3839720	AH_Soil	2.41	12.04
3839721	23-Jun-22	11:40:07AM	UTM	NAD83	8v	3839721	505004	6805999	1104.431885	m	RH	AH_Soil	23	black	mod	20 cm moss and organics, 5 cm A with <1cm Ah on frozen ash.	3839721	AH_Soil	1.03	21.97
3839722	23-Jun-22	12:01:05PM	UTM	NAD83	8v	3839722	505001	6806094	1121.254883	m	RH	AH_Soil	20	black	good	10-15 cm moss - organics, 5-10 cm A with 2-5 cm Ah.	3839722	AH_Soil	0.45	26.79

Sample#	Date	Time	Grid	Datum	Zone	Number	East_utm	North_utm	Elev	m	Sampler	Type	Depth-cm	Color	Quality	Description	Sample	Type	Mo	Cu
3839723	23-Jun-22	12:40:21PM	UTM	NAD83	8v	3839723	504987	6806204	1132.06958	m	RH	AH_Soil	20	black	good	20 cm moss, 10 cm moss - organics, 5-10 cm A with <5cm Ah, minor charcoal, both Ah and ash below are frozen.	3839723	AH_Soil	0.66	28.32
3839724	23-Jun-22	1:15:21PM	UTM	NAD83	8v	3839724	504962	6806702	1188.306396	m	RH	AH_Soil	20	black	good	20 cm moss-organics, about 10 cm A with 5cm Ah, frozen below Ah. In swamp, no gradient.	3839724	AH_Soil	7.04	21.42
3839725	23-Jun-22	1:39:20PM	UTM	NAD83	8v	3839725	504951	6806809	1217.145752	m	RH	AH_Soil	15	black	poor	10 cm moss and organics, <10cm poorly developed A, no real Ah, above 5 cm ash bed. Moderate - steep slope.	3839725	AH_Soil	0.82	18.78
3839726	23-Jun-22	2:04:44PM	UTM	NAD83	8v	3839726	504956	6806914	1229.883057	m	RH	AH_Soil	<5	black	poor	<5cm moss - organics, 1-2 cm A - poorly developed on <5 cm ash band. Ash in sample.	3839726	AH_Soil	0.47	14.8
3839727	23-Jun-22	2:24:29PM	UTM	NAD83	8v	3839727	504954	6807005	1229.161865	m	RH	AH_Soil	15	black	mod	<5 cm moss - organics, 5-10 cm A with 2-3 cm poor Ah horizon on ash bed.	3839727	AH_Soil	0.82	12.66
3839728	23-Jun-22	2:55:26PM	UTM	NAD83	8v	3839728	504954	6807099	1211.137451	m	RH	AH_Soil	10	black	poor	<10cm moss - organics, <1-2cm A, poorly developed, no real Ah, minor charcoal, some ash dilution.	3839728	AH_Soil	0.46	9.18

Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Cert
1.83	54.2	66	15.8	3	334	0.55	1.2	1.7	2.9	0.3	161.5	2.33	0.5	0.24	13	2.36	0.105	4.2	8.1	0.15	73.7	0.016	24	0.37	0.02	0.07	<0.1	1	0.05	0.14	60	0.9	0.02	1.5	WHI22000293
1.62	28.6	102	21.2	2.7	455	0.42	1.1	7.3	2.2	0.1	443.6	4	0.76	0.05	14	8.14	0.145	4.8	6	0.16	133.1	0.01	38	0.42	0.016	0.07	<0.1	0.7	0.05	0.16	66	3.5	0.03	1.1	WHI22000293
2.97	75.1	262	11	5.6	761	0.55	0.6	0.2	0.9	<0.1	75.5	4.51	0.16	0.04	13	0.84	0.071	2.5	6.2	0.08	404.3	0.02	30	0.32	0.025	0.09	<0.1	0.7	0.02	0.04	69	<0.1	<0.02	1.4	WHI22000293
3.18	109.2	307	10.6	3.7	673	0.49	<0.1	0.9	1.8	0.3	119.3	9.76	0.25	0.04	10	1.81	0.123	3.4	6.2	0.11	286.6	0.021	25	0.34	0.019	0.1	<0.1	1.1	0.03	0.07	103	4	0.02	1.1	WHI22000293
2.22	63.4	354	5.4	2.9	256	0.38	0.1	<0.1	<0.2	0.2	48	7.33	0.19	0.03	9	0.59	0.058	1.1	4	0.05	152.6	0.02	<20	0.17	0.02	0.07	<0.1	0.7	<0.02	0.06	87	0.5	<0.02	0.9	WHI22000293
3.01	29.9	75	5.7	3	437	0.67	0.8	0.1	0.4	0.3	35.9	0.44	0.14	0.04	17	0.45	0.031	2.4	6.9	0.09	189.2	0.032	<20	0.34	0.018	0.05	<0.1	0.9	0.04	0.03	64	0.4	<0.02	1.5	WHI22000293
3.93	117.9	300	21	7.6	1992	0.83	0.3	0.5	1.1	0.2	94.3	6.72	0.29	0.07	15	1.54	0.188	7.9	9.8	0.14	381.6	0.027	25	0.62	0.024	0.08	<0.1	1.6	0.05	0.06	78	1.1	<0.02	1.9	WHI22000293
1.2	20.8	62	6.8	3	381	0.33	0.6	1.2	0.8	<0.1	138.7	1.26	0.2	0.02	7	2.82	0.084	2	4.1	0.1	190	0.01	<20	0.26	0.02	0.04	<0.1	0.4	0.02	0.12	45	0.5	<0.02	0.9	WHI22000293
3.41	13.8	144	11.6	10.9	973	0.67	0.4	0.4	0.2	<0.1	56.6	0.85	0.22	0.05	14	0.41	0.05	9.6	6.2	0.08	431.6	0.019	<20	0.56	0.023	0.04	<0.1	0.7	0.03	0.03	51	<0.1	<0.02	1.8	WHI22000293
6.75	16.6	96	5.5	1.7	28	0.62	1.2	0.4	<0.2	<0.1	21.7	0.53	0.07	0.12	17	0.18	0.039	7.5	11.9	0.07	163.7	0.025	<20	0.66	0.012	0.03	<0.1	0.6	0.07	0.03	28	<0.1	<0.02	3.6	WHI22000293
3.48	59.9	234	9.5	5.2	351	0.79	0.6	0.2	<0.2	<0.1	41.1	2.61	0.1	0.06	20	0.36	0.039	3	9.7	0.11	182.7	0.021	<20	0.5	0.021	0.05	<0.1	0.6	0.04	0.02	34	<0.1	<0.02	2.6	WHI22000293
3.24	17.1	190	8.7	6.3	302	0.8	1.4	0.5	0.9	0.1	84.2	0.67	0.14	0.06	19	1.24	0.082	5.1	8.5	0.13	167.9	0.028	20	0.63	0.028	0.03	0.1	0.7	0.04	0.06	32	0.3	<0.02	2.7	WHI22000293
3.66	51.4	220	15.9	6.9	908	1.12	2	0.7	1.3	0.2	78.4	0.76	0.24	0.08	26	1.16	0.081	7.5	15.6	0.18	266.9	0.034	20	0.94	0.031	0.04	<0.1	1.6	0.06	0.05	25	0.1	<0.02	2.8	WHI22000293
2.27	20.2	64	7.4	5.7	402	0.63	0.5	0.3	0.7	<0.1	50	0.42	0.11	0.05	15	0.7	0.049	3.4	5.3	0.11	129.1	0.028	<20	0.46	0.035	0.03	<0.1	0.5	0.03	0.03	12	<0.1	<0.02	2.1	WHI22000293
2.59	101.4	367	9.5	6.3	694	0.71	0.7	0.3	0.5	<0.1	56.4	4.56	0.17	0.04	14	0.93	0.096	4.9	7.6	0.15	154.5	0.014	<20	0.51	0.023	0.09	0.3	0.5	0.04	0.05	65	<0.1	<0.02	1.7	WHI22000293
2.28	24.4	234	11.3	4.3	666	0.75	1.2	2.2	2.3	0.1	79.3	0.33	0.39	0.04	17	1.32	0.096	5.9	9	0.14	140.1	0.024	22	0.69	0.023	0.02	<0.1	0.9	0.09	0.11	49	0.5	<0.02	2.1	WHI22000293
2.37	46	512	10.5	6.6	766	0.58	0.8	0.3	<0.2	<0.1	84.7	2.95	0.3	0.03	12	1.35	0.082	3.9	6.4	0.12	203.9	0.015	<20	0.46	0.022	0.04	<0.1	0.4	0.06	0.07	49	<0.1	<0.02	1.8	WHI22000293
2.2	31	640	7.4	7.9	788	0.49	0.9	0.2	1.2	<0.1	78.5	2.13	0.17	0.03	10	1.33	0.097	3.3	5.5	0.09	160.1	0.006	<20	0.4	0.018	0.06	<0.1	0.3	0.04	0.09	74	<0.1	<0.02	1.2	WHI22000293
2.02	36.6	126	7.7	4.2	446	0.57	1	0.3	0.4	<0.1	55.6	1.02	0.11	0.03	15	0.92	0.046	3.1	7.1	0.12	143.8	0.021	<20	0.42	0.027	0.04	<0.1	0.6	0.04	0.04	21	<0.1	<0.02	1.8	WHI22000293
3.84	102.9	73	15.4	5.4	364	1.36	4.1	0.6	0.7	0.5	81	1.09	0.37	0.05	33	1.59	0.086	6	20.5	0.4	124.8	0.031	<20	0.84	0.02	0.07	<0.1	2.6	0.11	0.1	32	0.4	<0.02	2.7	WHI22000293
2.83	58	72	22.3	3.9	256	0.89	2.3	1.1	1.1	0.7	96.1	1.66	0.47	0.14	21	1.72	0.072	6.9	12.2	0.23	171.1	0.024	<20	0.75	0.024	0.04	<0.1	1.5	0.08	0.1	45	0.4	<0.02	2	WHI22000293
4.76	55.1	171	26.1	6.4	480	1.45	4.3	1.5	1.7	0.3	88.3	0.91	0.49	0.09	33	1.63	0.071	10.2	18.6	0.29	238.2	0.022	<20	0.94	0.025	0.04	<0.1	2.1	0.1	0.07	37	1	0.03	2.8	WHI22000293
3.11	66.4	165	7.4	4.9	502	0.42	0.4	0.2	0.6	0.1	64.4	4.26	0.11	0.06	10	1.17	0.056	1.8	6	0.1	49.4	0.023	<20	0.26	0.024	0.06	<0.1	0.7	0.02	0.08	50	<0.1	<0.02	1.4	WHI22000293
0.53	63.3	32	3.3	0.7	158	0.11	0.3	0.8	<0.2	0.1	164.9	0.46	0.13	<0.02	2	3.65	0.084	<0.5	2.6	0.17	71.5	0.004	24	0.09	0.014	0.03	<0.1	0.2	<0.02	0.23	65	0.7	<0.02	0.2	WHI22000293
2.02	72.3	214	7.6	3.4	985	0.51	0.5	0.2	0.5	<0.1	87.5	2.21	0.12	0.03	12	1.47	0.062	2.2	5.7	0.13	335.1	0.021	<20	0.28	0.019	0.06	0.1	0.7	0.04	0.07	73	0.1	<0.02	1.2	WHI22000293
2.54	79.8	349	24.4	5	1195	0.41	0.5	0.1	0.7	<0.1	119.4	4.47	0.11	0.04	7	2.07	0.09	2.2	5.4	0.14	514.3	0.011	<20	0.31	0.017	0.07	<0.1	0.5	0.03	0.07	84	0.2	<0.02	1.1	WHI22000293
1.71	31.7	228	6.1	1.8	159	0.36	0.3	0.2	<0.2	<0.1	43.2	1.89	0.08	0.02	8	0.47	0.042	2.3	3.7	0.05	124.4	0.014	<20	0.21	0.021	0.04	<0.1	0.4	0.03	0.03	47	<0.1	<0.02	1	WHI22000293
1.66	89.2	734	5.3	2.6	362	0.3	0.5	<0.1	1.3	<0.1	88.2	19.84	0.08	<0.02	7	1.02	0.076	1	3.9	0.07	213.2	0.012	37	0.17	0.021	0.08	<0.1	0.4	<0.02	0.08	115	0.2	<0.02	0.7	WHI22000293

Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Cert
2.52	66.1	368	15.5	7	1051	0.74	1.2	0.4	0.9	<0.1	108.3	3.29	0.19	0.05	15	1.6	0.095	5.9	8.4	0.14	479.3	0.019	<20	0.63	0.025	0.05	<0.1	0.9	0.07	0.07	54	0.6	<0.02	2	WHI22000293
2.22	60.6	268	9.3	3.4	521	0.46	0.8	0.2	1	<0.1	94.2	5.57	0.08	0.04	10	1.38	0.049	2.6	5.6	0.11	268.9	0.008	<20	0.32	0.027	0.04	<0.1	0.4	0.03	0.05	32	<0.1	<0.02	1.4	WHI22000293
3.16	50.5	290	18.6	8.2	1354	0.85	1.2	0.6	0.7	0.1	89.8	4.52	0.21	0.07	18	1.49	0.107	5.7	10.5	0.18	230.9	0.017	<20	0.62	0.028	0.05	<0.1	0.8	0.05	0.08	50	0.4	<0.02	2.2	WHI22000293
1.51	18.9	74	10.9	4.3	659	0.43	0.3	2	0.7	0.7	117	1.07	0.36	0.04	10	2.07	0.088	3	4.2	0.14	129.3	0.018	23	0.38	0.033	0.02	<0.1	0.4	0.05	0.19	38	1.4	<0.02	1.3	WHI22000293
0.75	85.3	71	16.5	6.2	9459	0.38	1.1	2.9	0.7	<0.1	209.6	2.53	0.38	<0.02	7	3.67	0.072	1.4	3.1	0.13	485.6	0.005	27	0.25	0.016	0.02	<0.1	0.3	0.13	0.28	24	1.4	<0.02	0.9	WHI22000293
0.63	11.3	56	4.1	0.8	155	0.18	<0.1	5.1	0.4	<0.1	384.7	0.99	0.19	<0.02	5	10.26	0.052	1.3	2.8	0.09	94.9	0.007	52	0.21	0.02	0.02	<0.1	0.2	<0.02	0.36	31	1.5	0.04	0.6	WHI22000293
1.45	70.3	216	10.9	2.5	445	0.46	<0.1	1.3	2.4	0.1	200.2	1.21	0.33	0.02	11	4.7	0.08	3.2	5.2	0.15	208.3	0.018	28	0.38	0.032	0.04	<0.1	0.6	0.03	0.14	22	1.9	<0.02	0.9	WHI22000293
3.44	81.7	160	12	5.4	1117	0.66	0.4	0.1	0.7	<0.1	48.2	2.78	0.12	0.05	15	0.55	0.048	2.2	6.4	0.09	260.5	0.02	<20	0.32	0.02	0.05	<0.1	0.7	0.03	0.02	36	<0.1	<0.02	1.5	WHI22000293
2.57	265.6	142	11.3	4.4	1197	0.64	0.3	<0.1	<0.2	<0.1	80.1	3.92	0.09	0.05	13	1.2	0.104	2.2	6	0.12	386.7	0.024	<20	0.34	0.022	0.07	<0.1	0.6	0.03	0.04	47	0.5	<0.02	1.4	WHI22000293
1.72	79.6	187	7	3.8	1103	0.54	0.3	<0.1	<0.2	<0.1	42	1.79	0.07	0.03	14	0.52	0.05	1.5	4.2	0.08	172.7	0.021	<20	0.24	0.022	0.05	<0.1	0.3	0.02	0.02	23	<0.1	<0.02	1.3	WHI22000293
1.82	16.1	77	9.8	5.5	1087	0.49	1.6	2.4	<0.2	<0.1	221.8	0.5	0.41	0.03	11	4.54	0.093	2.7	7.1	0.19	187.5	0.008	<20	0.39	0.01	0.02	0.1	0.3	0.06	0.36	47	1.5	0.03	1	WHI22000293
1.64	16.7	195	6.8	3.2	366	0.56	1.3	0.5	0.2	<0.1	120.7	0.46	0.12	0.05	13	1.99	0.055	3.1	5.5	0.08	224.3	0.024	<20	0.43	0.02	0.07	<0.1	0.4	0.03	0.05	28	0.5	0.02	1.5	WHI22000293
2.38	17.3	123	7.3	3.7	702	0.58	0.5	0.2	<0.2	0.1	31.7	1.41	0.08	0.05	15	0.47	0.032	2.1	5.8	0.08	146.2	0.03	<20	0.28	0.02	0.04	<0.1	0.6	0.02	0.03	41	<0.1	<0.02	1.6	WHI22000293
2.59	27.7	73	7.9	3.2	472	0.63	0.7	<0.1	<0.2	<0.1	31.3	1.35	0.1	0.05	15	0.49	0.031	2.4	7.6	0.11	198.3	0.027	<20	0.38	0.017	0.04	<0.1	0.6	0.03	0.02	50	0.1	<0.02	1.8	WHI22000293
1.41	22.1	239	8.6	1.8	28	0.43	0.8	0.5	<0.2	<0.1	59.7	1.34	0.21	0.03	9	0.91	0.065	3.3	3.6	0.07	60.5	0.012	<20	0.36	0.02	0.02	<0.1	0.2	<0.02	0.08	36	0.5	<0.02	1.1	WHI22000293
1.85	13.3	502	9.9	3.9	96	0.64	1.7	0.3	<0.2	<0.1	26.5	2.73	0.08	0.05	15	0.26	0.052	5.2	7	0.08	85.7	0.016	<20	0.4	0.023	0.04	<0.1	0.4	<0.02	0.04	36	0.2	<0.02	1.7	WHI22000293

Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Cert
1.64	13.8	134	12	3.9	617	0.75	1.3	1.1	0.8	<0.1	93.7	0.5	0.34	0.04	15	1.59	0.064	6.5	5.9	0.12	184.7	0.019	<20	0.63	0.033	0.04	<0.1	0.6	0.04	0.08	36	1	0.02	1.5	WHI22000293
1.18	7.7	113	9.7	2.7	2996	0.29	<0.1	9.6	1	<0.1	233.3	1.35	1.51	<0.02	6	5.63	0.097	2.1	3.7	0.07	289.4	0.004	<20	0.38	0.007	0.02	<0.1	0.2	0.06	0.42	65	6.4	0.02	0.6	WHI22000293
2.28	30.1	221	13	4.9	508	0.67	1.1	0.1	<0.2	<0.1	84.3	1.38	0.14	0.04	15	1.48	0.063	2.6	7.5	0.18	194	0.021	<20	0.4	0.021	0.08	<0.1	0.4	0.04	0.07	52	0.4	<0.02	1.7	WHI22000293
3.5	17.3	148	5.6	2.7	48	0.64	0.8	0.3	0.3	<0.1	14.4	1.07	0.07	0.06	16	0.15	0.045	3.9	8.5	0.08	89.1	0.005	<20	0.44	0.015	0.03	<0.1	<0.1	0.02	0.03	39	<0.1	<0.02	2.1	WHI22000293
2.9	22.7	193	7.1	2.2	34	0.38	0.3	0.2	<0.2	<0.1	33.7	3.01	0.09	0.05	9	0.39	0.051	2.1	4.5	0.05	123.2	0.006	<20	0.2	0.015	0.04	<0.1	<0.1	0.02	0.04	45	0.2	<0.02	0.9	WHI22000293
2.07	12.7	112	5.2	4.2	358	0.53	0.9	0.5	0.6	<0.1	31.8	0.56	0.18	0.03	12	0.45	0.045	3.9	5.4	0.07	114.4	0.016	<20	0.34	0.02	0.03	<0.1	0.6	0.04	0.05	47	0.4	<0.02	1.3	WHI22000293

Appendix VII Stream Sediment Sample Descriptions

Station	Date	Time	Grid	Datum	Zone	East_UTM	North_UTM	Elev	m	Sampler	Type	Depth-cm	Color	Quality	Description
3839662	22-Jun-22	1:13:14PM	UTM	NAD83	8v	505332	6806374	1105.152832	m	RH	Silt_Samp		brown	good	0.3-0.4m wide creek, 5cm deep, mod slope, plung pool trap, gravel-sand-silt plus minor organics and ash-loess. Sample is screened <2mm with the addition of 1/2 medium panned heavies - reduced, sample added to silt sample. Moderate magnetite noted, rare speck hematite. Mixed lith pebbles of monzonite, X-tal tuff, siltst, shale - argillite, and mixed volcanics.
3839663	22-Jun-22	1:44:00PM	UTM	NAD83	8v	505307	6805944	1054.203613	m	RH	Silt_Samp		red-brown	poor	Moss, red- Fe stream slime and ash - some silt? Nothing to pan. Braided creek through bog.
3839664	22-Jun-22	2:12:42PM	UTM	NAD83	8v	505263	6805875	1042.187012	m	RH	Silt_Samp		brown	mod	Some moss-organics-ash but mostly sand , silt and pebbles <1/2 cm of mixed lithology. Plunge pool, moderate gradient creek, 1/2 m wide x 0.3m deep. Screened silt <2mm sample with 1/2 pan of <2mm panned sample added to silt sample.
3839665	22-Jun-22	2:48:29PM	UTM	NAD83	8v	505238	6805660	1018.154297	m	RH	Silt_Samp		brown	mod	Some moss-organics-ash but mostly sand , silt and pebbles <1/2 cm of mixed lithology. Plunge pool, moderate gradient creek, 1/2 m wide x 0.3m deep. Screened silt <2mm sample with 1/2 pan of <2mm panned sample added to silt sample.
3839666	22-Jun-22	3:29:15PM	UTM	NAD83	8v	505292	6805378	981.3842773	m	RH	Silt_Samp		brown	mod	Some moss-organics-ash but mostly sand , silt and pebbles <1/2 cm of mixed lithology. Plunge pool, moderate gradient creek, 1/2 m wide x 0.3m deep. Screened silt <2mm sample with 1/2 pan of <2mm panned sample added to silt sample.

Sample	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	i	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Cert
3839662	1.3	12.7	4.4	88	<0.1	18.1	6.4	284	2.28	5.2	0.6	11	1.8	40	0.3	0.4	<0.1	68	0.61	0.068	9	28	0.53	85	0.054	2	0.88	0.021	0.06	0.4	0.01	3.1	0.1	<0.05	4	0.7	<0.2	WHI22000291
3839663	2.4	15.8	4	83	<0.1	18.9	8	2578	10.58	37.4	0.5	1.6	1.4	151	0.7	0.6	<0.1	60	1.96	0.083	7	19	0.39	323	0.035	3	0.77	0.023	0.06	0.1	0.03	3.4	0.1	0.1	3	2.2	<0.2	WHI22000291
3839664	0.9	17.5	5	88	<0.1	20.2	7.3	382	2.11	8.2	0.5	4.1	1.7	55	0.5	0.4	<0.1	52	0.84	0.069	9	23	0.49	95	0.045	3	0.94	0.025	0.07	0.1	0.03	3.8	0.2	0.06	3	0.9	<0.2	WHI22000291
3839665	0.8	10	3.9	74	<0.1	17.5	6.3	276	1.84	4.1	0.4	42	1.8	39	1.2	0.3	<0.1	54	0.58	0.062	9	23	0.47	82	0.049	2	0.83	0.022	0.06	0.2	0.02	2.9	0.1	<0.05	3	<0.5	<0.2	WHI22000291
3839666	1.1	12	4.1	62	<0.1	18.3	6.6	356	2.14	4.7	0.4	0.7	1.7	69	0.3	0.3	<0.1	59	1.55	0.063	9	27	0.49	98	0.052	2	0.8	0.022	0.06	0.2	0.02	3.1	0.1	<0.05	3	<0.5	<0.2	WHI22000291

Appendix VIII		Rock Sample Descriptions																
Station	Date	Grid	Datum	Zone	East_utm	North_utm	Sampler	Type	Type2	Structure_T	Strike-Dip	Description	Sample	Type	KG	Mo	Cu	Pb
3839751	2022-06-21T20:45:19Z	UTM	NAD83	8v	504970	6804269	WDM	rock	outcrop			grey & white QV up to 5mm width cuts monzonite outcrop	3839751	Rock	0.74	1.1	15.3	17
3839752	2022-06-21T21:35:48Z	UTM	NAD83	8v	504990	6804240	WDM	rock	outcrop			0.5% pyrite + weathered pits in siliceous "Qtz Monzonite", grey, rare Q eyes, glassy matrix, m.g. fspar & hornblende	3839752	Rock	0.75	2.8	40	12.8
3839753		UTM	NAD83	8v	503540	6805655	WDM	rock	float			Grey & white QVs cut f.g. felsic volcanic cobble	3839753	Rock	0.93	0.5	7.2	4.4
3839754		UTM	NAD83	8v	503540	6805655	WDM	rock	float			rusty red rounded pebble	3839754	Rock	0.12	84.9	31.3	539.4
3839755		UTM	NAD83	8v	504493	6806245	WDM	rock	outcrop			trachytic xtl tuff w/ local lapilli, hematitic, limonitic & MnOx coat fractures, o/c & float in 40m x 10m area	3839755	Rock	0.71	1.9	10.4	10.1
3839756		UTM	NAD83	8v	504479	6806135	WDM	rock	outcrop			trachytic xtl tuff, hematitic, limonitic fractures, o/c chip at 40m x 10m area	3839756	Rock	0.75	1.9	12.4	14.1
3839757	22-JUN-22 11:06:05AM	UTM	NAD83	8v	505275	6806697	RH	rock	outcrop	foliation	120/30S	Weakly rusty weathering crystal tuff, pitted, weakly fractured, feldspars weakly replaced by calcite, non mag.	3839757	Rock	1.07	2	49.7	10.5
3839758	23-JUN-22 6:07:09PM	UTM	NAD83	8v	505132	6806877	RH	rock	outcrop	foliation	086/25S	grab over 1 m of rusty weathering well foliated shale - argillite unit (at Stn RH22017 - unit 17b), non calcareous, non magnetic.	3839758	Rock	1.3	7.2	41.7	14.4
3839759	24-JUN-22 1:25:51PM	UTM	NAD83	8v	505230	6806708	RH	rock	outcrop			Small patches of o/c over E-W distance of 20 m and 3-4m N-S (up-down hill). Grab of weakly rusty grey weathering grey monzonite - volcanic; Hbl, feldspar crystal phyric, crosscut by fractures, minor brecciation with fine gr hbl matrix - on cm scale angular lithic clasts <1cm, 0.5% diss fine gr bright py ans possibly other trace silver sulfide(s).	3839759	Rock	1.74	2.3	209.1	10.7
65707	9/3/2019	UTM	WGS 84	8v	505150	6808457	WDM	rock	float			Chips of cobbles from pit dug at site of rusty cobble on surface. Limonite-rich rock after sulphides. Some c.g. white marble. Non-magnetic.	65707	Rock	0.77	0.9	858.9	336
65708	9/3/2019	UTM	WGS 84	8v	505154	6808458	WDM	rock	float			Chips of cobbles from old prospecting pit 5m downslope from 65707 under root of large tree. 50cm x 15cm x 20cm deep. Some red-brown garnets and dark grey-green skarn. Some biotite-quartz endoskarn (?). Non-magnetic.	65708	Rock	1.07	6.7	272.4	19
65709	9/3/2019	UTM	WGS 84	8v	505156	6808465	WDM	rock	float			Chips of cobbles from old prospecting pit 50cm wide x 75cm high dug into bank. 2 rock types: (A) dark red-brown garnet skarn, non-magnetic. (B) Light orange-brown to light grey endoskarn. Biotite-quartz- rich w/ dissem. F.g. sulphides. No fresh surfaces seen, breaks on rusty fractures. One cobble with green malachite stain.	65709	Rock	0.88	0.6	2774.4	12.4
65710	9/5/2019	UTM	WGS 84	8v	505204	6806723	WDM	rock	outcrop			Chips of skarn-altered (?) crystal tuff. Trace f.g. sulphide. From OC36. Non-magnetic, variably calcareous. NOT rusty weathering. Dark grey-green c.g. rock w/ c.g. hornblende.	65710	Rock	0.68	1.3	50.6	12.2
65711	9/5/2019	UTM	WGS 84	8v	506167	6806323	WDM	rock	outcrop			Chips from outcrop and rubble from steep hillside proximal to recessive linear. Rock is rusty w/ Quartz vugs. Protolith indistinct, hard to get a fresh surface.	65711	Rock	0.79	1.5	82	27.6
65712	9/2/2019	UTM	WGS 84	8v	505132	6808538	WDM	rock	outcrop			Panel Chip of 3m x 3m outcrop (OC10). Fine-grained pyritic hornfels, very rusty. Rock breaks on rusty fractures, so hard to examine. No skarn minerals observed. Boxwork limonitic pockets up to 10cm after sulphides.	65712	Rock	0.54	26	679	7.8
72866	2019-09-04	UTM	WGS84	8v	505340	6807753	LW	rock					72866	Rock	1.09	0.8	1.7	3.6

Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	i	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	Cert
57	<0.1	7.3	6.6	792	2.24	2.2	1	0.6	3.5	206	<0.1	0.6	0.2	50	2.99	0.089	25	15	0.81	336	0.006	<1	1.03	0.082	0.09	<0.1	<0.01	2.6	<0.1	<0.05	9	<0.5	<0.2	WHI22000289
89	<0.1	8.6	12.5	909	3.34	6.5	1.3	2.6	4.6	87	0.5	1	0.1	91	1.47	0.138	35	12	1.16	832	0.006	<1	1.62	0.058	0.16	<0.1	<0.01	3	<0.1	0.08	11	0.7	<0.2	WHI22000289
36	<0.1	5.4	3.1	637	0.8	3.6	<0.1	0.8	0.1	80	<0.1	0.9	<0.1	29	2.52	0.015	<1	8	0.17	22	0.033	1155	0.76	0.009	0.05	<0.1	<0.01	2.1	<0.1	<0.05	1	<0.5	<0.2	WHI22000289
73	<0.1	13.4	4.8	1179	4.24	35.9	5.3	4.6	1.5	121	0.3	18.2	<0.1	65	3.12	0.015	7	16	0.46	2253	<0.001	29	0.29	0.004	0.13	0.2	0.23	3.2	0.1	0.05	<1	<0.5	<0.2	WHI22000289
49	<0.1	5.5	2.4	180	1.76	1.8	0.6	<0.5	2.6	13	0.1	0.6	0.1	20	0.14	0.043	6	12	0.36	117	0.002	14	0.8	0.054	0.15	<0.1	<0.01	1.1	<0.1	<0.05	4	<0.5	<0.2	WHI22000289
91	<0.1	6.3	3.3	287	1.8	3.1	0.5	1.5	2.5	17	0.4	0.7	<0.1	14	0.2	0.033	5	10	0.43	83	0.009	6	0.86	0.046	0.12	<0.1	<0.01	1.2	<0.1	<0.05	4	<0.5	<0.2	WHI22000289
62	<0.1	7.1	13.4	785	3.57	7.7	1.4	<0.5	4.1	74	0.2	0.2	0.1	117	2.32	0.132	16	13	1.7	140	0.131	4	1.96	0.07	0.12	0.2	<0.01	5.4	<0.1	0.07	12	0.6	<0.2	WHI22000289
49	0.1	8.2	4.4	410	2.94	15.7	2.1	<0.5	5.1	74	0.4	0.9	0.4	115	0.87	0.067	11	30	0.9	129	0.13	7	1.76	0.1	0.42	0.3	<0.01	6.2	0.2	0.11	9	2.4	<0.2	WHI22000289
322	0.2	8.7	14.8	843	3.77	196.8	1.8	10.8	5	125	3.1	0.5	2.1	116	2.53	0.129	19	15	1.48	135	0.108	2	2.34	0.198	0.35	0.2	<0.01	5.8	0.3	0.2	9	2.5	<0.2	WHI22000289
449	6.5	2.9	5.7	1159	10.84	32.5		82.6	2.8	163	7.9	2.5	160.8	33	21.35	0.058	7	16	0.5	28	0.075	2	0.91	0.002	0.09	5.3	<0.01	2.8	<0.1	0.06	5	2.7	0.7	WHI9000535
154	0.2	63.1	11.9	316	2.45	8.7		3.4	14.1	214	3.3	0.2	1.2	71	2.17	0.17	21	43	1.36	233	0.213	<1	3.52	0.384	0.33	0.7	<0.01	1.8	0.4	0.34	8	<0.5	<0.2	WHI9000535
251	3	8.6	9.1	404	3.93	59.3		17.3	5.4	172	2.5	11.3	10.3	13	2.56	0.102	11	7	0.28	129	0.032	4	2.96	0.066	0.13	0.6	<0.01	3.7	0.1	0.99	6	1.9	1.3	WHI9000535
70	<0.1	7	13.3	705	3.42	6.7		<0.5	4.8	100	0.2	0.4	0.3	124	1.78	0.137	19	10	1.66	234	0.141	3	2.02	0.094	0.14	0.2	<0.01	6.3	0.1	0.06	10	<0.5	<0.2	WHI9000535
115	0.1	11.8	11.5	543	3.05	7.8		2.2	1.2	52	0.6	2.2	0.1	99	1.72	0.057	5	33	0.8	56	0.143	<1	1.57	0.04	0.17	0.2	<0.01	9.3	<0.1	<0.05	8	1.4	<0.2	WHI9000535
10	2.6	<0.1	0.7	2174	15.43	24		47.7	0.3	<1	0.2	0.1	43.4	23	12.74	0.014	3	2	0.05	8	0.002	1	0.28	0.002	<0.01	18.7	<0.01	0.9	<0.1	0.18	10	1.8	<0.2	WHI9000535
18	0.1	1.7	1.7	276	0.46	1.6		5.3	0.5	66	<0.1	0.2	<0.1	13	3.25	0.05	1	3	0.14	18	0.073	<1	1.6	0.651	0.05	0.1	<0.01	1.2	<0.1	<0.05	3	<0.5	<0.2	WHI9000535

**Appendix IX Field Station Locations and Descriptions**

Station	Geologist	Grid	Datum	Zone	East	North	Elev	m	Date	Time	AM_PM	Structure_Type	Strike-Dip	Rock Type	Description
BL5100N	RH	UTM	NAD83	8v	505009	6805726	1060	m	23-Jun-22	10:30:30AM					
Camp	RH	UTM	NAD83	8v	505179	6806822	1198	m	18-Jun-22	2:11:23PM					
CAMPJERRY	WDM	UTM	NAD83	8v	504315	6805500	1134	m	2022-06-24	5:22:19	PM				old camp site from helicopter, ca 1997
CLIFF	WDM	UTM	NAD83	8v	504630	6806403	1200	m	2022-06-20	10:16:45	AM				large outcrop of trachytic tuff
EOLINE	WDM	UTM	NAD83	8v	505115	6804150	849	m	2022-06-21	2:59:25	PM				last cutting seen at south end of cutline
GRANIT	WDM	UTM	NAD83	8v	503210	6805635	955	m	2022-06-19	2:38:02	PM				6m x 1.5m o/c f.g. grey monzonitic rock, calcareous, non-magnetic, mossy
HELI22	WDM	UTM	NAD83	8v	504971	6804681	943	m	2022-06-21	3:50:01	PM				decent heli landing & campsite, "Juniper Hill"
HEM	WDM	UTM	NAD83	8v	504493	6806245	1165	m	2022-06-20	11:35:35	AM				40m x 10m ridge w/ o/c & float, site of rock #3839755
HEM2	WDM	UTM	NAD83	8v	504479	6806135	1152	m	2022-06-20	1:08:18	PM				40m x 10m ridge w/ o/c & float, site of rock #3839756
HEM3	WDM	UTM	NAD83	8v	504677	6806730	1184	m	2022-06-22	3:36:24	PM				eastern half of 60m x 20m rocky ridge w/ hematitic staining. Fine-grained grey-green rock w/ aligned Hb <1mm, tr pyrite, 1cm black shale rip-ups. Sampled but not assayed?
HEM4	WDM	UTM	NAD83	8v	504631	6806754	1182	m	2022-06-22	3:40:06	PM				western half of 60m x 20m rocky ridge w/ hematitic staining. Fine-grained grey-green rock w/ aligned Hb <1mm, tr pyrite, 1cm black shale rip-ups. Sampled but not assayed?
Line	RH	UTM	NAD83	8v	504957	6806765	1202	m	2022-06-19	7:15:32PM					
LKS01	WDM	UTM	NAD83	8v	504499	6806353	1200	m	2022-06-18	2:24:58	PM				Bernie Kreft anomalous bark sample site, 2014
LKS02	WDM	UTM	NAD83	8v	504479	6806153	1198	m	2022-06-20	10:57:09	AM				Bernie Kreft anomalous bark sample site, 2014
LKS03	WDM	UTM	NAD83	8v	504489	6805945	1149	m	2022-06-20	1:19:12	PM				Bernie Kreft anomalous bark sample site, 2014
LKS04	WDM	UTM	NAD83	8v	504487	6805744	1117	m	2022-06-20	1:46:48	PM				Bernie Kreft anomalous bark sample site, 2014
LKS05	WDM	UTM	NAD83	8v	504489	6805551	1098	m	2022-06-20	2:20:44	PM				Bernie Kreft anomalous bark sample site, 2014
LKS06	WDM	UTM	NAD83	8v	504488	6805350	1084	m	2022-06-20	3:11:48	PM				Bernie Kreft anomalous bark sample site, 2014
Old_camp	RH	UTM	NAD83	8v	504325	6805625	1208	m	2022-06-20	9:25:12AM					
Old_samp1961?	RH	UTM	NAD83	8v	504698	6805900	1115	m	2022-06-20	10:35:42AM					
OLDCUT	WDM	UTM	NAD83	8v	504956	6806782	1206	m	2022-06-23	10:09:25	AM				northernmost cutting on cutline prior to 2022
RH22001		UTM	NAD83	8v	504967	6806561	1171	m	2022-06-18	3:00:31PM					Old picket in buck brush inscribed with start of cut line. O/C 25m to east
RH22002		UTM	NAD83	8v	504972	6804276	895	m	2022-06-21	12:36:19PM					At heli pad (cut out by RH and WDM) and possible camp site. Steep bluff to S down to Miller Lake. O/C along bluff edge <50m to E of grey weathering med grained, 1-2mm x-tals, occ hornblende of <1cm, poss. Biotite, approx 5 5 mafics total, Qtz content hard to determine, locally trachytic texture, HS, monzonite (WDM), poss diorite?
RH22003		UTM	NAD83	8v	505006	6804244	888	m	2022-06-21	2:19:35PM					W. end of clearing on top of S facing slope and O/C along bluff edge. White weathering white fine grained rhyolite, specks py and biot. - monzonite as stn 002 located 20 m to W.
RH22004		UTM	NAD83	8v	505015	6804713	944	m	2022-06-21	3:39:06PM					subcrop, angular rubble pile of 10x5cm cobbles of white rhyolite. Similar/same as stn 003.
RH22005		UTM	NAD83	8v	504973	6804672	944	m	2022-06-21	3:57:28PM					Knob of outcrop (monzonite) helipad. Grey med grained hbl monzonite, euhedral equigranular (1-2mm) hornblende phenocrysts - hbl clusters approx 0.7cm, magnetic. HS WDM has photo f clast (X-tals - lithic tuff) or zenoliths. 2 cm angular fresh looking clasts/zenoliths.
RH22006		UTM	NAD83	8v	505012	6804797	958	m	2022-06-21	4:37:19PM					Small cliff approx 3-4 m high x 25m long of grey weatherig grey monzonite as above.
RH22007		UTM	NAD83	8v	504981	6806579	1172	m	2022-06-21	6:30:18PM					O/C 25m E-W, 5 m N-S, flat surfaces, grey weathering light grey felsic volcanic - likely X-tal tuff, discontinuous banding, HS, calcareous, non mag.
RH22008		UTM	NAD83	8v	505253	6806767	1182	m	2022-06-22	10:24:52AM					small 1x1 m O/C - maybe slightly displaced, SOS monzonite, biot hbl 1-2 mm, equigranular.
RH22009		UTM	NAD83	8v	505271	6806732	1188	m	2022-06-22	10:34:17AM		foliation	085/30S	shale	Small 3x4m cliffy o/c of slightly rusty weathering black shale - argillite, HS, non mag
RH22010		UTM	NAD83	8v	505261	6806724	1167	m	2022-06-22	10:42:03AM					Above shale-argillite o/c, 10x2m o/c of grey weathering feldspar phyrictuff or flow (similar to monzonite above and previous day). Has grey aphanitic groundmass. Non mag, HS.

Station	Geologist	Grid	Datum	Zone	East	North	Elev	m	Date	Time	AM_PM	Structure_Type	Strike-Dip	Rock Type	Description
RH22011		UTM	NAD83	8v	505276	6806697	1179	m	2022-06-22	10:57:52AM		foliation	120/30 S	shale	S. End of o/c from Stn 009-010. Mixed argillite - shale and X-tall tuff at stn. Possible lense or pod of argillite in X-tall tuff? Old blue flag and possible soil sample as 011 stn. Non mag, weakly calcareous, feldspar x-tals. See sketch.
RH22012		UTM	NAD83	8v	505326	6806636			2022-06-23						subcrop - float - angular of grey qtz monzonite, non mag, calcareous
RH22013		UTM	NAD83	8v	505383	6806578	1153	m	2022-06-22	11:52:18AM		spaced frac - S0?	035/75E		Cliff o/c approx 25m E-W, 10+ m high of grey hbl biot monzonite, weakly calc, Tr py.
RH22014		UTM	NAD83	8v	505473	6806376	1121	m	2022-06-22	12:23:16PM					1x3m o/c of grey monzonite, crowded feldspars, almost porphyritic, 3mm feldspars, groundmass 1-2 mm, non mag, tr calc
RH22015		UTM	NAD83	8v	505136	6806848	1211	m	2022-06-23	4:01:33PM		spaced cleavage	267/68N		SE end of cliff (nearest point to camp). Grey weathering grey x-tal tuff-volcanic-sill-hypabyssal monzonite. Aphanitic matrix but crowded 1-2 mm feldspars, minor - trace biotite and hornblende, non mag, tr calcite on fractures and local crystal replacement. Minor Fe on fracture. HS, photo. 5-10m to NNE of stn along cliff o/c looks to be more like monzonite, mod calcite and non mag., HS numbered RH22015A.
RH22016		UTM	NAD83	8v	505139	6806866	1213	m	2022-06-23	4:23:57PM		massive			Continuous o/c from 22015 but at 22016 appears to be monzonite with 5+% monzonite Non mag, non calc.
RH22017		UTM	NAD83	8v	505132	6806877	1213	m	2022-06-23	4:43:41PM		foliation			5m high x 2-6 m wide cliffy o/c of three liths; 17a) Upper unit of x-tal tuff? Tr biot., calcareous, 17b) mid unit of dark grey shale - argillite, well foliated and 17c) massive light grey medium grained monzonite? Few phenos. No units are magnetic.
RH22018		UTM	NAD83	8v	505283	6806738	1184	m	2022-06-24	1:39:13PM					Patchy low o/c oer approx. 10m x 1.2m of grey weathering grey monzonite, few qtz crystals - pheno's or 'eyes', crowded crystal matrix, fine py - hbl-biot interstitial to X-tals, non-mag, mod calc, local crystal alignment.
RH22019		UTM	NAD83	8v	505328	6806717	1187	m	2022-06-24	1:52:01PM		bedding	134/28S		10x15m clearing, dip slope of monzonite or hbl-feldspar crystal tuff. Photos WDM's o/c 2019-oc35; grey weathering fine grained grey - green tuff - aphanitic matrix - fine gr crystals, possible epiclastic? 20m to NW fine gr grey volcanoclastic with grey shale rip up clasts, non mag. WDM photo No rocks magnetic or calcareous.
RH22020		UTM	NAD83	8v	505417	6806882	1220	m	2022-06-24	2:26:23PM					
SUBCROP	WDM	UTM	NAD83	8v	503538	6805655	1001	m	2022-06-19	1:35:55	PM				50m x 20m steep hillside w/ subcrop felsic volcanics, exposed mineral soil
YD13236P1	WDM	UTM	NAD83	8v	505090	6804276	878	m	2022-06-21	3:11:04	PM				CDL claim post observed in 2022

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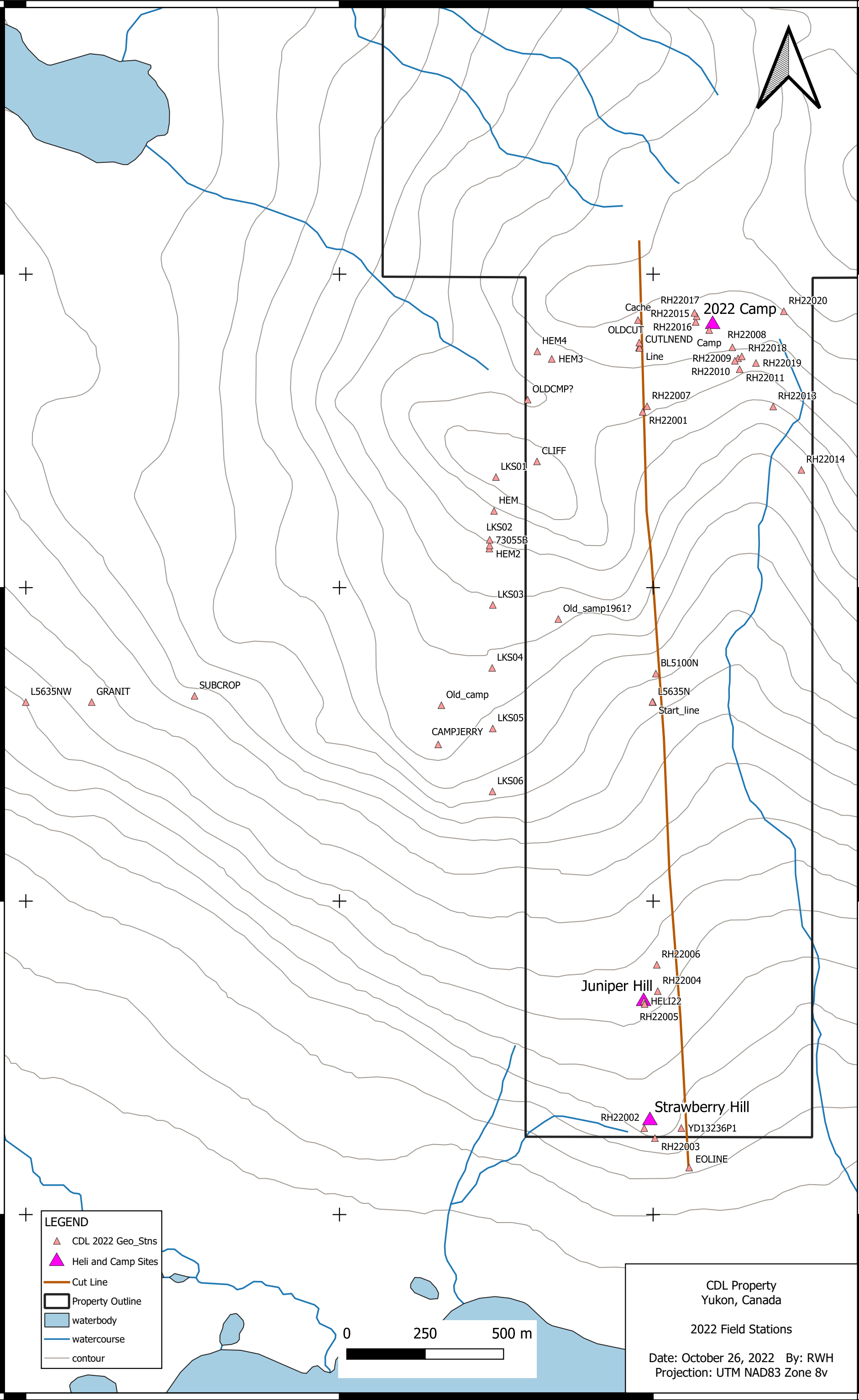
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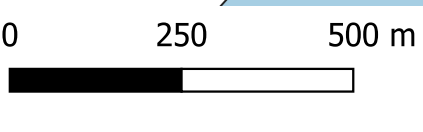
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**LEGEND**

- ▲ CDL 2022 Geo\_Stns
- ▲ Heli and Camp Sites
- Cut Line
- Property Outline
- waterbody
- watercourse
- contour



CDL Property  
Yukon, Canada

2022 Field Stations

Date: October 26, 2022 By: RWH  
Projection: UTM NAD83 Zone 8v

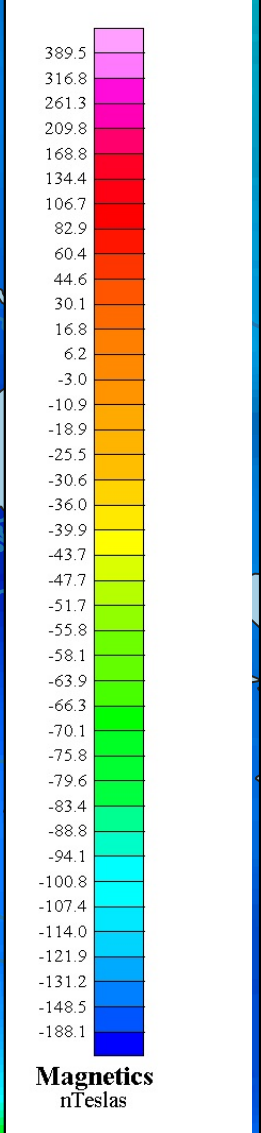
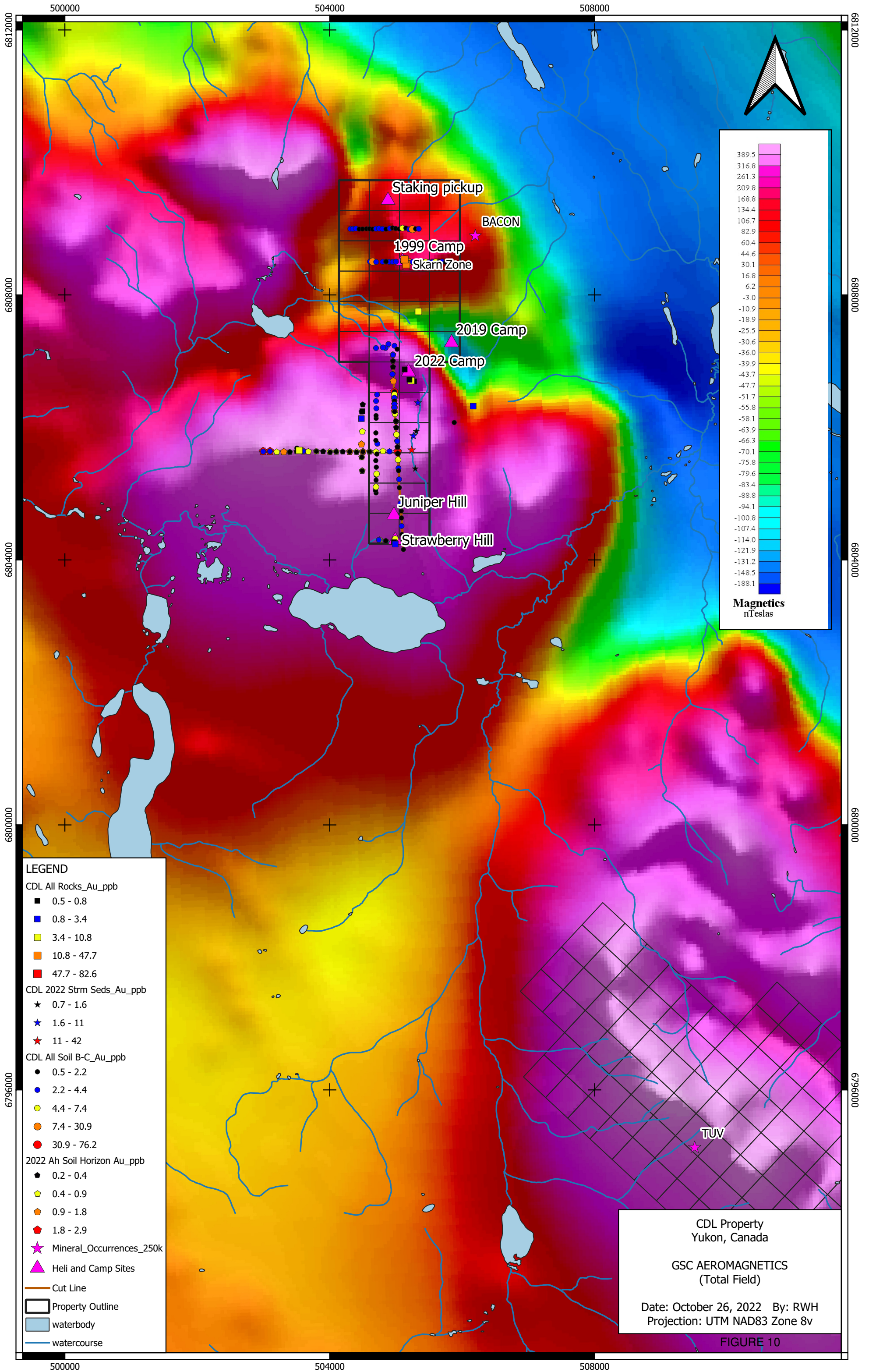
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Appendix X CDL XRF readings

Sample #	Reading No	Duration	Units	Mo	Mo Error	Zr	Zr Error	Sr	Sr Error	U	U Error	Rb	Rb Error	Th	Th Error	Pb	Pb Error	Au	Au Error	Se	Se Error	As	As Error	Zn	Zn Error	W	W Error	Cu	Cu Error	Ni	Ni Error	Co	Co Error	Fe	Fe Error	Mn	Mn Error	Ca	Ca Error
272911	1884	30.45	ppm	13.65	4.75	97.98	8.91	293.59	10.66	<LOD	11.62	42.85	4.9	<LOD	6.91	10.37	6.78	<LOD	10.01	<LOD	4.21	9.63	5.84	187.5	23.3	<LOD	71.68	47.9	20.92	<LOD	56.03	144	95.39	13965	329.32	274.78	73.4	<LOD	14.47
272912	1885	30.11	ppm	<LOD	6.87	91.49	8.8	283.3	10.54	<LOD	13.63	69.37	6.1	<LOD	8.38	<LOD	9	<LOD	10.72	<LOD	4.11	21.16	6.26	287.12	28.16	<LOD	71.6	44.91	20.83	<LOD	57.06	240	108.67	17555	370.83	112.29	61.49		
272913	1886	30.12	ppm	<LOD	7.29	66.19	8.73	281.57	11.18	<LOD	13.18	41.64	5.28	<LOD	8.93	14.15	7.91	<LOD	10.27	<LOD	4.72	<LOD	9.9	38.37	14.88	<LOD	70.71	33.05	21.94	<LOD	62.99	<LOD	180.53	20687	428.29	530.15	100.5		
272914	1887	30.12	ppm	<LOD	6.57	100.14	8.63	276.14	10.06	<LOD	12	36.34	4.59	<LOD	7.21	<LOD	9.63	<LOD	10.21	<LOD	4.25	10.54	5.59	29.59	12.09	<LOD	58.33	38.13	19.21	<LOD	53.83	<LOD	137.16	13774	317.7	197.85	65.19		
272915	1888	30.11	ppm	<LOD	6.48	118.8	8.84	256.5	9.6	<LOD	12.31	36.92	4.62	<LOD	6.96	<LOD	9.71	<LOD	9.66	<LOD	4.32	9.21	5.5	37.83	12.97	<LOD	62.66	44.36	19.41	<LOD	54.26	168	95.02	14927	327.28	425.26	81.86		
272867	1889	30.15	ppm	<LOD	6.31	114.27	8.03	157.09	7.36	<LOD	9.94	24.56	3.71	<LOD	5.69	<LOD	8.61	<LOD	7.92	<LOD	3.42	<LOD	6.48	<LOD	13.52	<LOD	57.06	31.33	17.56	<LOD	48.79	99	61.09	6110	204.19	171.98	56.46		
272868	1890	30.11	ppm	8.5	4.06	93.36	7.15	151.53	6.84	<LOD	9.56	29.16	3.74	<LOD	6.3	<LOD	8.13	<LOD	9.02	<LOD	3.51	<LOD	6.22	29.91	10.36	<LOD	51.57	<LOD	21.69	<LOD	45.07	126	56.11	5459	182.5	<LOD	62.61		
3839753	1891	30.15	ppm	25.39	5.38	121.93	9.53	174.96	8.86	<LOD	11.54	30.88	4.62	<LOD	9.5	50.8	11.06	<LOD	13.61	<LOD	4.16	38.3	10.54	69.17	18.44	<LOD	75.67	<LOD	31.9	<LOD	67.35	<LOD	246.98	40412	594.59	1125.61	139.84		
3839753	1894	30.14	ppm	<LOD	7.5	32.28	8.02	247.33	11.1	<LOD	12.94	31.58	5	<LOD	7.85	<LOD	10.87	<LOD	10.62	<LOD	5.48	<LOD	8.56	218.9	28.65	<LOD	91.63	<LOD	33.01	<LOD	67.91	<LOD	199.88	23109	481.05	2548.42	205.24		
3839753	1895	30.46	ppm	<LOD	8.17	191.03	14.05	649.04	18.32	<LOD	17.06	66.51	7.05	<LOD	10.2	<LOD	13.07	<LOD	12.65	<LOD	5.59	<LOD	10.66	27.24	14.63	<LOD	80.16	<LOD	36.37	<LOD	64.75	<LOD	123.51	8377	299.86	833.05	128.09	2655.35	1476.88
3839754	1896	30.15	ppm	62.91	6.31	48.83	8.62	277.84	11.44	<LOD	12.76	25.17	4.67	<LOD	17.81	950.65	42.55	<LOD	17.19	<LOD	6.79	<LOD	49.1	120.24	22.79	<LOD	78.36	54.98	24.56	<LOD	66.82	<LOD	264.81	42351	627.8	682.94	120.4		
3839755	1897	30.45	ppm	<LOD	8.38	173.03	12.19	279.77	12.2	<LOD	16.52	57.15	6.71	<LOD	9.37	13.04	8.43	<LOD	13.68	<LOD	5.33	<LOD	9.16	<LOD	22.74	<LOD	93.61	<LOD	37.72	<LOD	72.44	<LOD	188.56	21109	472.82	117.78	74.24	<LOD	108.21
3839755	1898	30.14	ppm	<LOD	6.48	63.81	7.98	292.34	10.46	<LOD	13.3	57.44	5.56	<LOD	6.88	10.83	6.81	<LOD	9.04	<LOD	4.3	<LOD	7.43	72.08	15.62	<LOD	66.48	<LOD	27.82	<LOD	54.51	<LOD	94.53	7038	231.53	486.8	85.26		
3839755	1899	30.14	ppm	<LOD	7.46	81.29	9.31	285.61	11.49	<LOD	13.94	54.39	5.97	<LOD	9.25	<LOD	11.17	<LOD	10.58	<LOD	4.46	<LOD	8.35	23.03	13.13	<LOD	73.58	<LOD	31.92	<LOD	61.95	<LOD	133.87	11326	323.93	134.29	66.21		
3839756	1900	30.14	ppm	<LOD	7.09	69.82	8.82	326.35	11.75	<LOD	14.46	59.94	6.03	<LOD	7.13	16.62	7.87	<LOD	10.32	<LOD	4.26	<LOD	9.58	17.93	11.71	<LOD	69.02	<LOD	30.07	<LOD	55.29	<LOD	99.38	6318	232.92	<LOD	73.29		
3839756	1901	30.09	ppm	<LOD	7.09	80.65	9.01	285.52	11.14	<LOD	13.03	44.77	5.36	<LOD	8.21	<LOD	10.44	<LOD	11.83	<LOD	4.56	<LOD	8.05	81.79	17.57	<LOD	67.27	<LOD	25.94	<LOD	62.09	<LOD	132.25	10932	309.1	248.82	74.32		
3839751	1902	30.13	ppm	<LOD	6.95	127.43	12.12	935.35	19.08	<LOD	13.68	12.76	3.75	<LOD	8.2	15.26	7.73	<LOD	11.18	<LOD	4.73	<LOD	8.56	29.58	13.36	<LOD	75.31	<LOD	26.48	<LOD	56.71	<LOD	140.89	13514	329.49	851.38	111.95		
3839752	1904	30.13	ppm	8.82	5.48	224.35	15.08	927.85	21.01	<LOD	19.41	97.87	8.13	<LOD	10.45	17.74	9.08	<LOD	12.62	<LOD	5.14	14.38	7.82	137.54	24.06	<LOD	78.83	72.09	26.69	<LOD	72.22	<LOD	242.96	34816	581.49	1282.4	153.62		
272869	1905	30.14	ppm	<LOD	6.62	73.57	8.16	292.74	10.41	<LOD	10.32	22.93	3.79	<LOD	6.37	<LOD	9.67	<LOD	9.8	<LOD	3.77	<LOD	7.36	29.01	12.12	<LOD	63.41	48.68	20.34	<LOD	57.08	180	81.2	9856	271.1	138.56	57.76		
272870	1906	30.12	ppm	<LOD	6.61	143.44	9.26	234.04	9.21	<LOD	11.86	34.35	4.48	<LOD	6.99	11.77	6.65	<LOD	9.23	<LOD	3.86	<LOD	7.96	18.6	11.28	<LOD	67.42	30.43	18.46	<LOD	53.53	166	86.89	12122	295.67	145.5	58.2		
272871	1907	30.12	ppm	<LOD	6.69	120.94	9.3	277.1	10.32	<LOD	12.01	40.68	4.85	<LOD	7.43	<LOD	9.55	<LOD	10.15	<LOD	4.32	12.82	5.8	43.87	14.25	<LOD	66.87	44.44	20.54	<LOD	60.35	190	111.51	19516	386.95	349.13	80.83		
3839651	1908	30.15	ppm	<LOD	6.9	129.91	9.7	294.65	10.77	<LOD	12.38	41.27	4.97	<LOD	8.28	<LOD	9.79	<LOD	10.39	<LOD	4.81	10.14	5.64	48.42	14.77	<LOD	68.96	<LOD	29	<LOD	56.55	<LOD	159.36	17764	374.35	317.22	79.49		
3839652	1909	30.14	ppm	<LOD	7.25	274.54	12.23	261.68	10.2	<LOD	13.01	41.48	5.06	<LOD	7.37	<LOD	9.87	<LOD	9.52	<LOD	4.18	8.51	5.61	46.5	14.42	<LOD	68.47	<LOD	29.28	<LOD	56.26	201	96.88	13599	328.66	188.13	67.47		
3839653	1910	30.13	ppm	<LOD	6.64	111.82	8.93	263.71	9.94	<LOD	12.13	55.82	5.38	<LOD	7.98	14.4	7.23	<LOD	9.51	<LOD	4.21	<LOD	8.07	44.87	13.72	<LOD	66.38	<LOD	25.54	<LOD	55.85	178	88.67	12033	300.79	406.97	81.22		
3839654	1911	30.14	ppm	16.31	3.51	16.18	4.02	65.47	3.99	<LOD	6.41	3.84	1.84	<LOD	4.6	<LOD	6.61	<LOD	7.22	<LOD	2.86	<LOD	4.39	28.12	8.24	<LOD	39.3	<LOD	16.73	<LOD	33.3	<LOD	32.56	1067	72.9	246.67	48.26		
3839655	1912	30.12	ppm	<LOD	6.47	131.68	9.29	292.36	10.26	<LOD	11.43	40.89	4.68	<LOD	7.76	<LOD	8.87	<LOD	9.75	<LOD	4.12	11.19	5.3	39.92	13.13	<LOD	64.9	<LOD	26.24	<LOD	56.06	194	90.96	13174	308.68	258.52	69.93		
3839656	1913	30.14	ppm	<LOD	6.42	132.6	8.88	253.14	9.3	<LOD	10.96	29.66	4.08	<LOD	6.88	<LOD	8.6	<LOD	8.23	<LOD	3.6	<LOD	6.89	34.6	12.03	<LOD	59.27	30.42	17.68	<LOD	52.64	<LOD	121.45	11424	279.43	245.41	65.54		
3839657	1914	30.15	ppm	<LOD	6.66	268.07	11.03	192.11	8.17	<LOD	10.92	38.12	4.43	<LOD	7.15	<LOD	9.29	<LOD	9.35	<LOD	4.11	<LOD	7.31	51.93	13.15	<LOD	53.43	<LOD	25.27	<LOD	49.9	144	73.3	8806	246.09	151.83	56.48		
3839658	1915	30.12	ppm	<LOD	6.82	305.47	11.91	224.43	8.95	<LOD	10.99	30.43	4.19	<LOD	6.83	<LOD	8.74	<LOD	10.23	<LOD	4.35	<LOD	6.95	31	12	<LOD	67.81	<LOD	25.92	<LOD	52.5	179	64.19	5759	203.56	139.07	54.74		
3839659	1916	30.15	ppm	<LOD	6.35	107.83	8.45	243.64	9.24	<LOD	11.06	42.16	4.64	<LOD	7.41	<LOD	9.39	<LOD	10.33	<LOD	4.04	8.31	5.27	35.2	12.25	<LOD	55.75	33.21	18.2	<LOD	55.03	184	93.76	14799	321.29	275.22	70.04		
3839660	1917	30.13	ppm	<LOD	6.96	280.34	11.8	215.6	9.02	<LOD	11.36	26.74	4.13	<LOD	6.91	<LOD	9.18	<LOD	8.74	<LOD	4.03	<LOD	7.38	36.58	12.57	<LOD	65.61	<LOD	25.46	<LOD	54.31	193	62.85	4936	193.89	170.82	58.45		
3839661	1918	30.15	ppm	<LOD	6.81	101.8	8.91	259.62	10.11	<LOD	11.81	37.3	4.73	<LOD	7.58	<LOD	9.71	<LOD	10.76	<LOD	4.37	8.32	5.51	37.24	13.64	<LOD	69.46	37.35	20.45	<LOD	61.57	<LOD	147.03	14904	342.18				



**LEGEND**

CDL All Rocks\_Au\_ppb

- 0.5 - 0.8
- 0.8 - 3.4
- 3.4 - 10.8
- 10.8 - 47.7
- 47.7 - 82.6

CDL 2022 Strm Seds\_Au\_ppb

- 0.7 - 1.6
- 1.6 - 11
- 11 - 42

CDL All Soil B-C\_Au\_ppb

- 0.5 - 2.2
- 2.2 - 4.4
- 4.4 - 7.4
- 7.4 - 30.9
- 30.9 - 76.2

2022 Ah Soil Horizon Au\_ppb

- 0.2 - 0.4
- 0.4 - 0.9
- 0.9 - 1.8
- 1.8 - 2.9

Mineral\_Occurrences\_250k

Heli and Camp Sites

Cut Line

Property Outline

waterbody

watercourse

CDL Property  
Yukon, Canada

GSC AEROMAGNETICS  
(Total Field)

Date: October 26, 2022 By: RWH  
Projection: UTM NAD83 Zone 8v

FIGURE 10

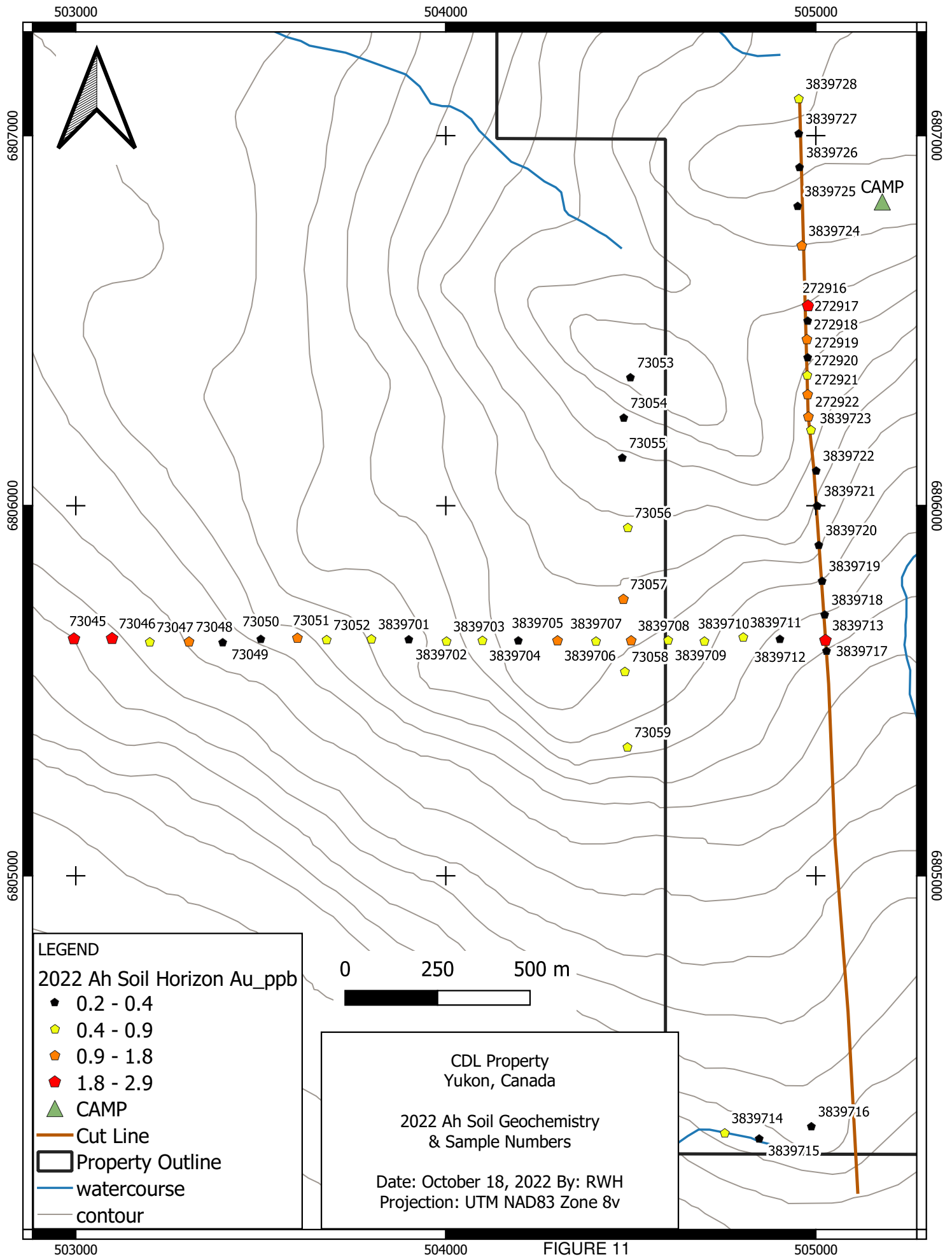
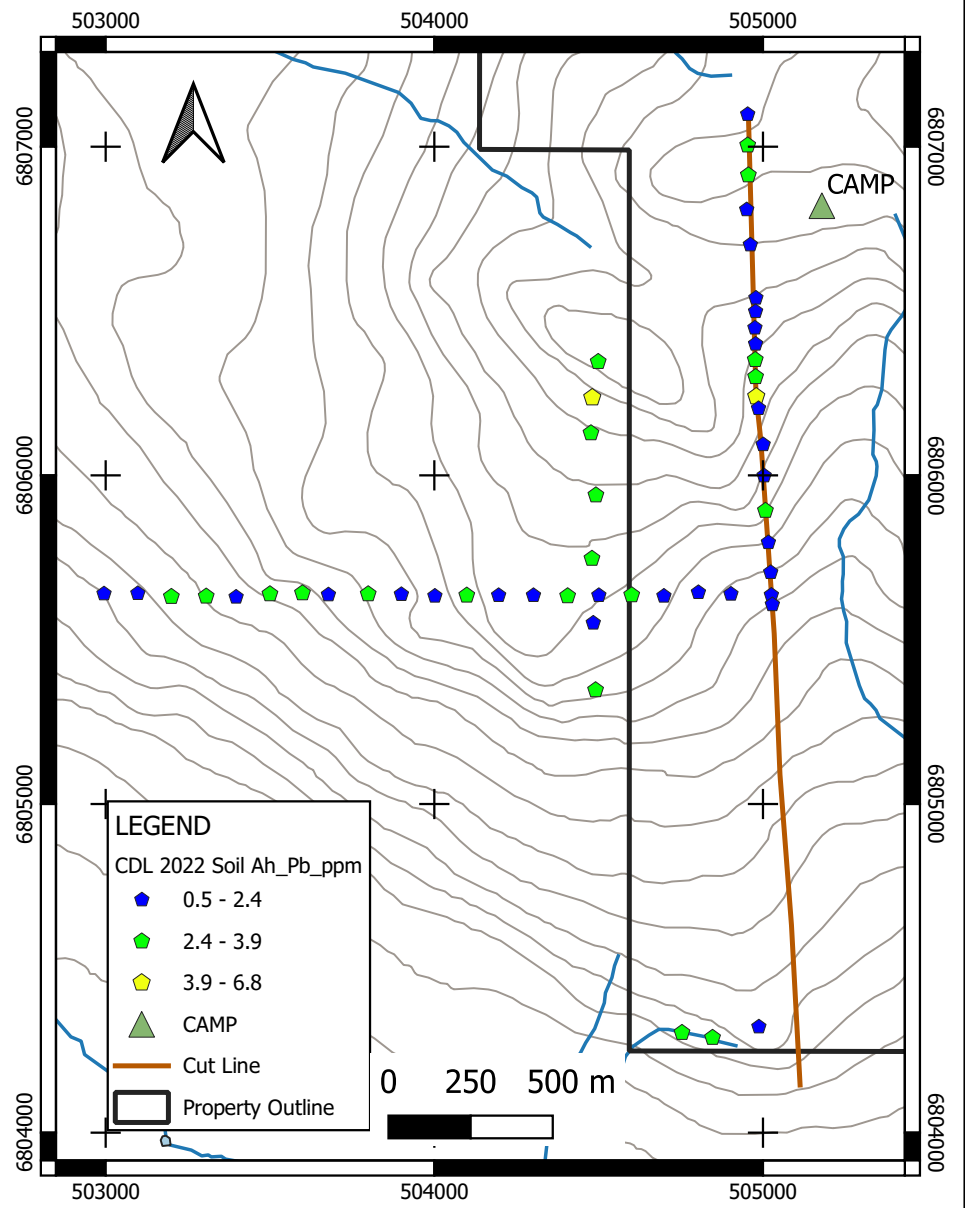
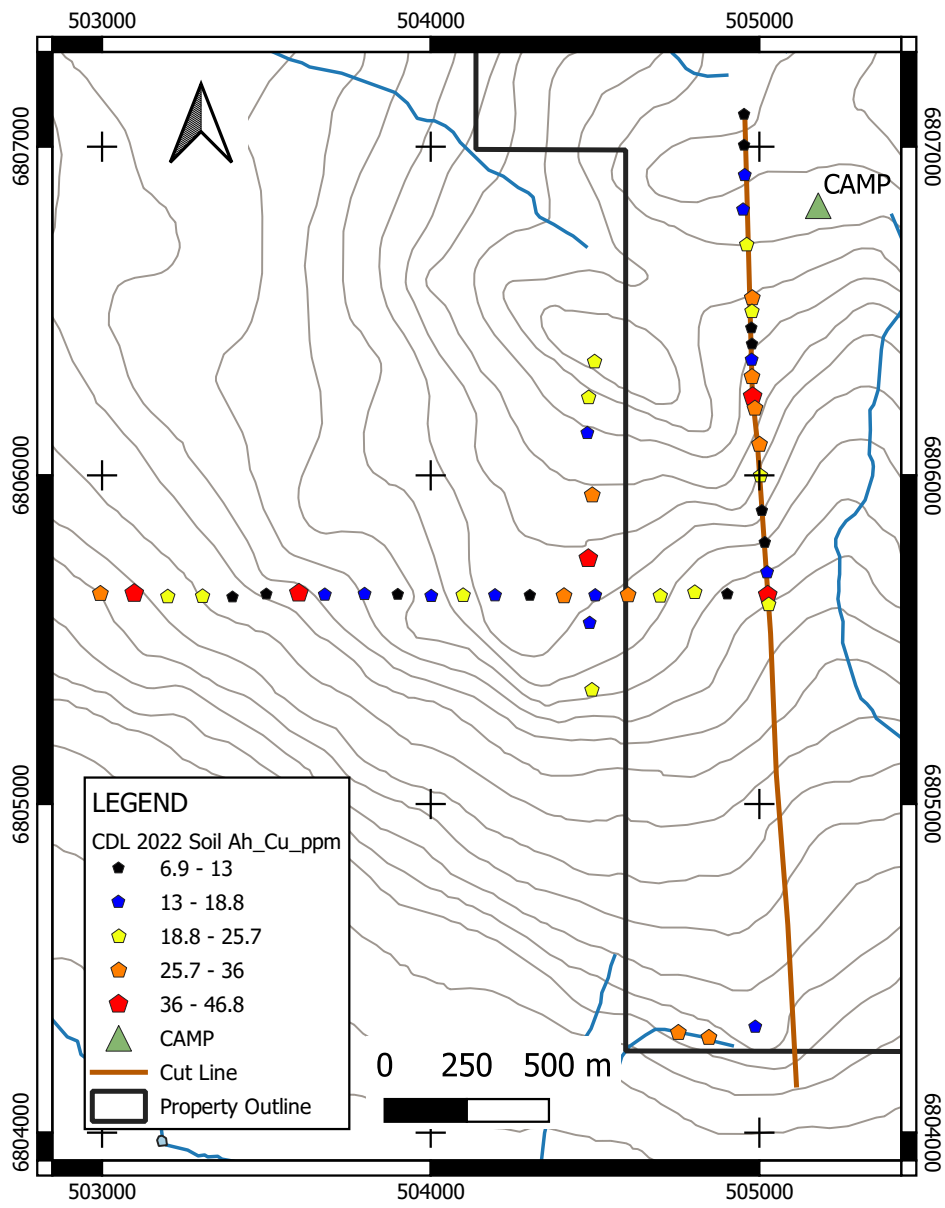
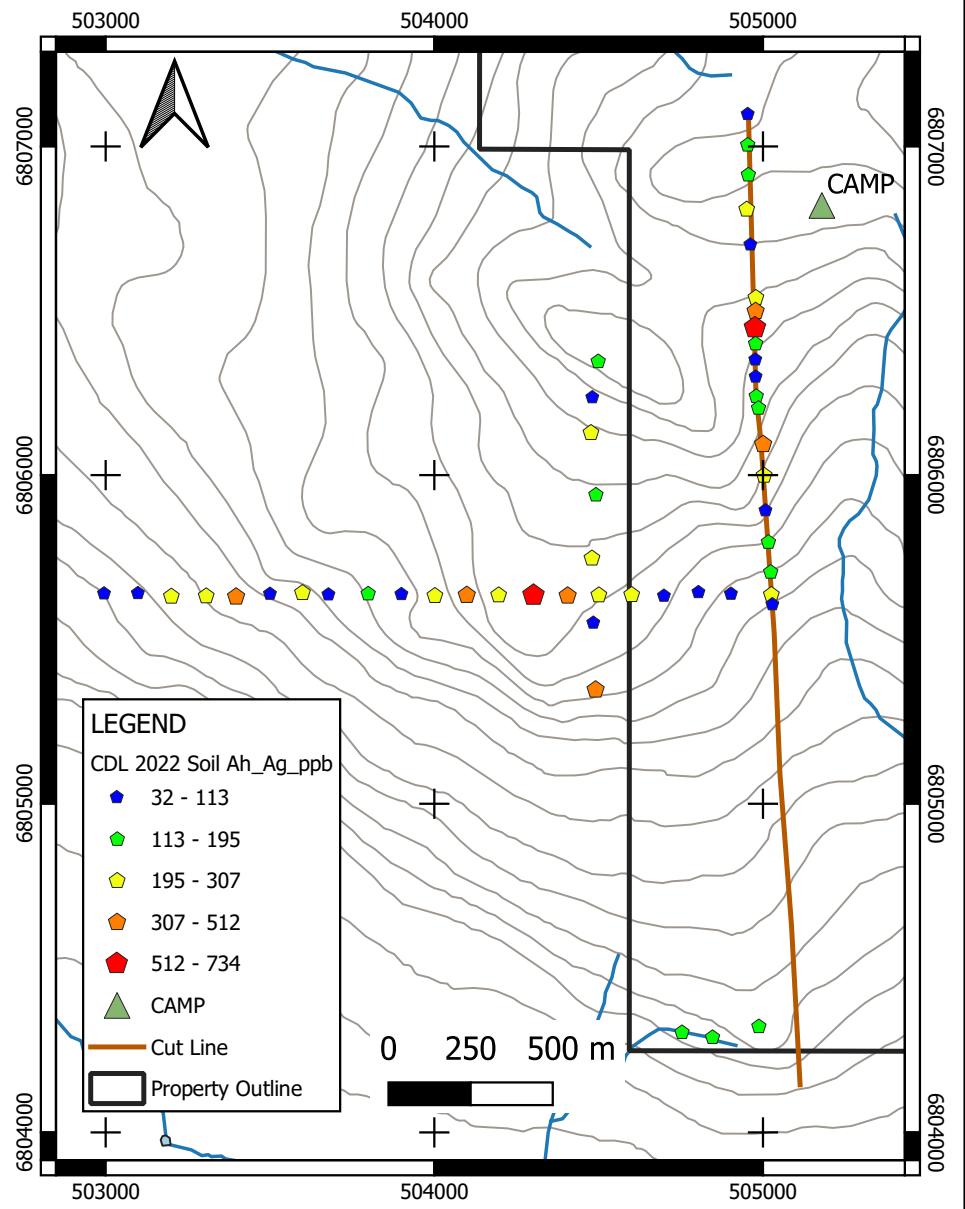
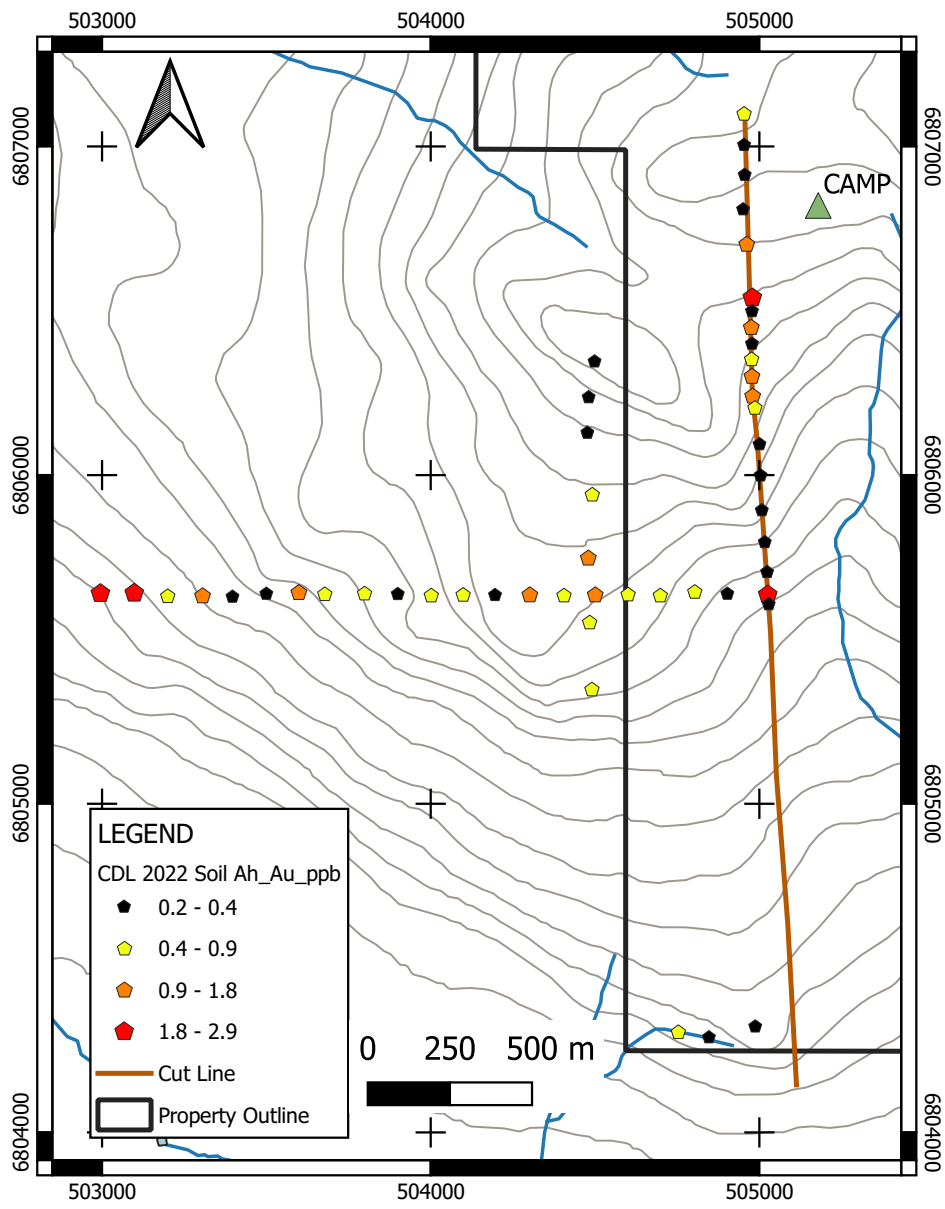


FIGURE 11

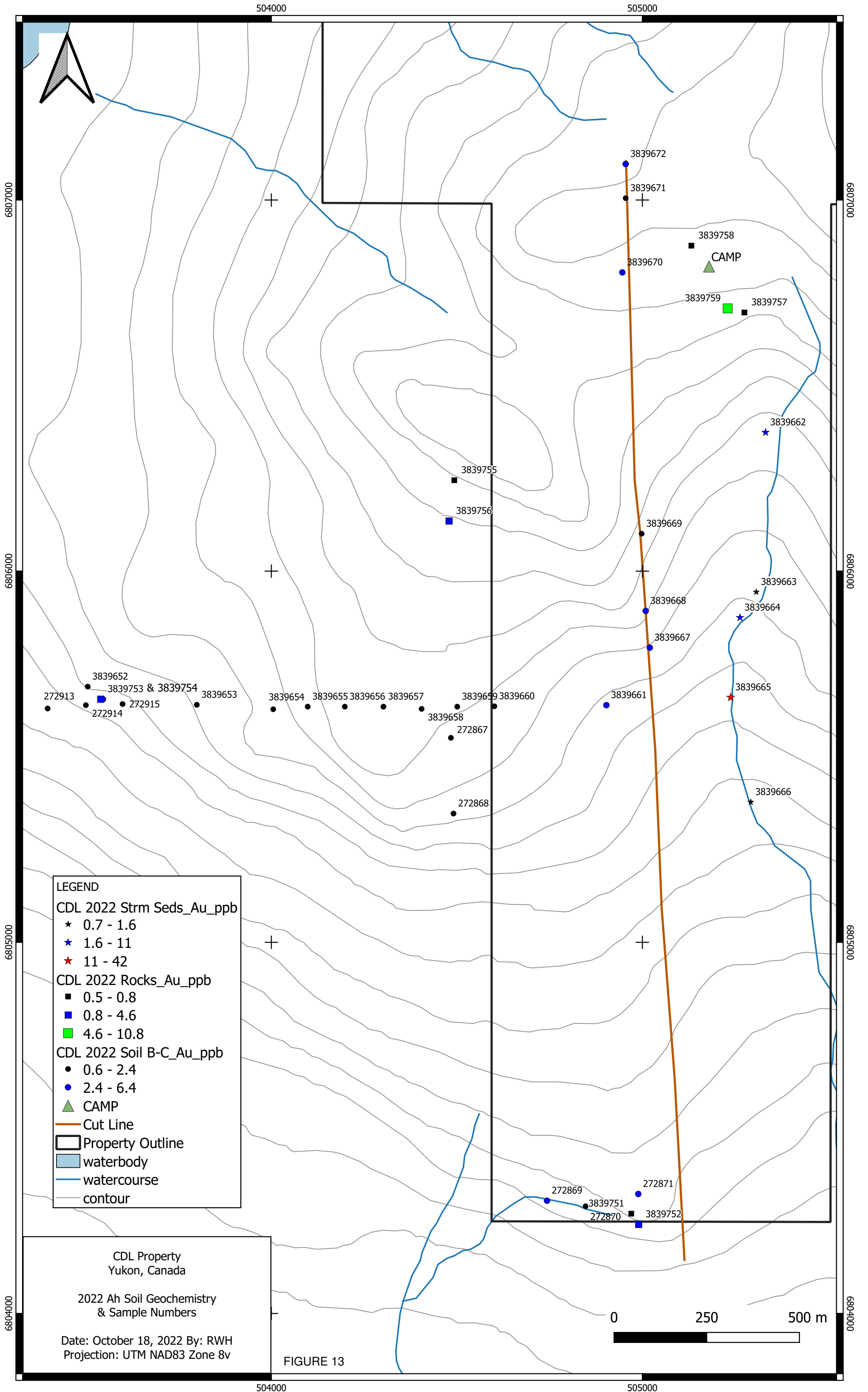


CDL Property  
 Yukon, Canada

Ah Soil Geochemistry  
 Au ppb, Ag ppb, Cu ppm, Pb ppm

Date: October 21, 2022 By: RWH  
 Projection: UTM NAD 83 Zone 8v NTS: 105E/07

FIGURE 12

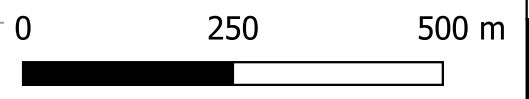


CDL Property  
Yukon, Canada

2022 Ah Soil Geochemistry  
& Sample Numbers

Date: October 18, 2022 By: RWH  
Projection: UTM NAD83 Zone 8v

FIGURE 13



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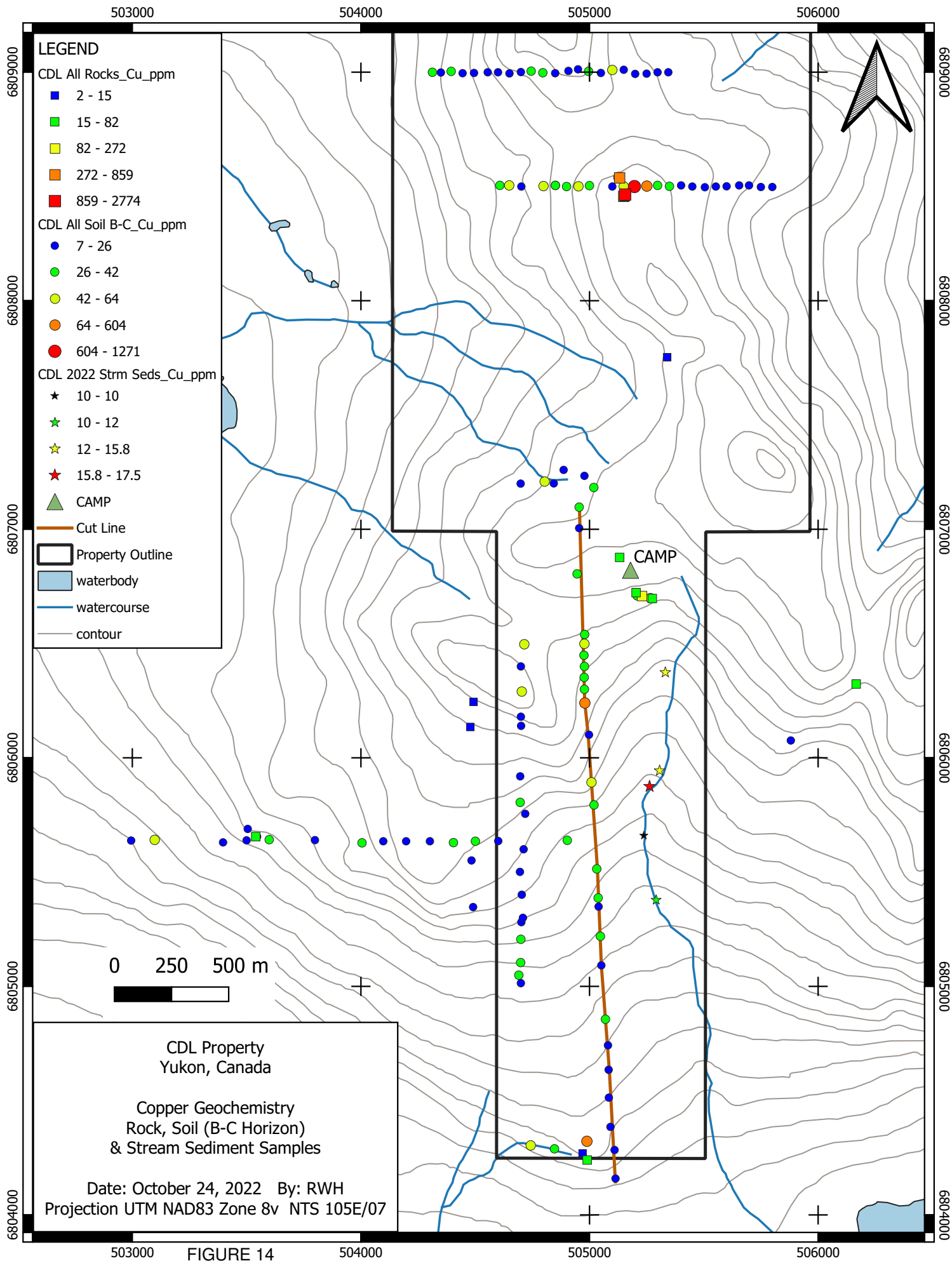


FIGURE 14