

**YMEP REPORT ON 2021 SOIL GEOCHEMISTRY AND PROSPECTING  
AT THE**

**TAUT PROJECT**  
YMEP FOCUSED REGIONAL PROJECT 21- 055

CLAIMS:

**TAUT 1 - 36: YD132101 – YD132136**  
**TAUT 37 – 40: YD17517 - YD17520**  
**TAUT 41 – 50: YD18092 – YD18100**  
**TAUT 51 – 52: YD17515 – YD17516**

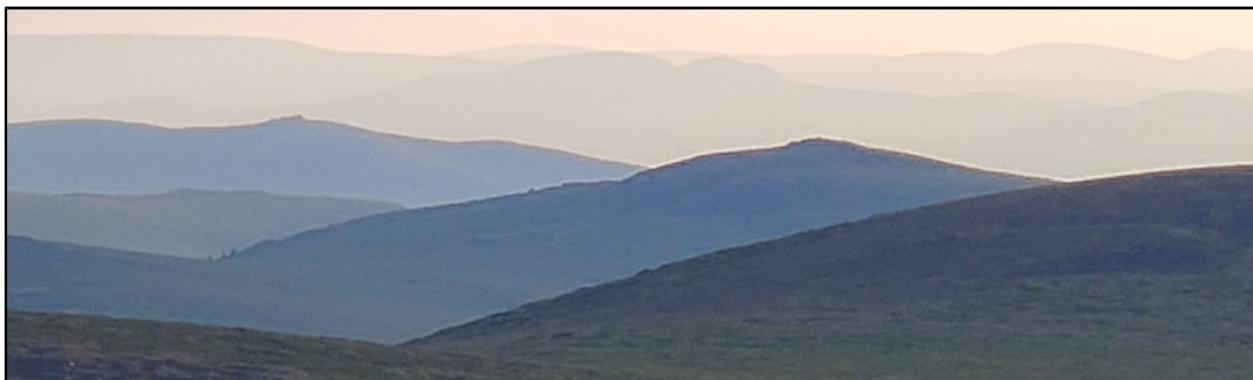
**NTS: 115H/15 & 115H/10**

Latitude 61°46'N; Longitude 136°47'W

Whitehorse Mining District, Yukon, CANADA

Prepared By The Claim Owners: William Mann, P.Geo. and Roger Hulstein, P.Geo.

Field Work Conducted July 16 – July 21, 2021



January 15, 2022

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## 1.0 EXECUTIVE SUMMARY

The purpose of this report on the Taut project (YMEP 2021-055) is to fulfill obligations arising from funding obtained through the Yukon Mineral Exploration Program (YMEP) and to fulfill the requirements for claim assessment credit. This report describes and summarizes the geological and geochemical results obtained in 2021 from a six day field program carried out from July 16<sup>th</sup> – July 21<sup>st</sup>, 2021 by the authors.

The Taut Project is located in west central Yukon, approximately 150 kilometres northwest of Whitehorse, Yukon. The all – weather North Klondike Highway is located about 40 kilometers to the east. Access in 2021 was by helicopter based out of Whitehorse. In June, 2019 a total of 36 Yukon Quartz Claims (Taut 1-36) were staked in the center of the project area to cover a historic zone of diamond drilling and most of the known anomalous soil and rock geochemistry. A further 16 claims (Taut 37 – 52) were staked in August, 2020 to extend ownership around the southern claim area. All the claims are registered in the name of William Mann (100%) on behalf of both partners.

The property is located within the traditional territories of the Little Salmon Carmacks First Nation (LSCFN) and the Champagne and Aishihik First Nation (CAFN). The authors are not aware of any other significant factors or risks potentially affecting access, title, or the right or ability to perform exploration or eventually carry out mining on the property.

The project area is located within the Stikine terrane and is underlain largely by Jurassic rocks of the Aishihik batholith consisting of an older foliated granodiorite and a younger non foliated quartz monzonite. These rocks are capped by Late Cretaceous andesites and intruded by coeval intermediate porphyritic intrusions. A sample of weakly chlorite - epidote – sericite altered feldspar – hornblende porphyry was recently dated and yielded an age of 76.12 +/- 0.72 Ma. This age date is similar to that of the Cu-Mo-Au-Ag Casino and Nucleus – Revenue porphyry deposits located approximately 150 km and 65 km to the northwest, respectively.

Noranda Exploration Company, Limited identified the area as a Cu-Mo porphyry target in the late 1970's and followed up by staking claims, mapping, geochemical sampling, magnetometer and induced polarization (IP) surveys and diamond drilled three vertical holes totaling 270.62 m in 1980. Drilling targeted geophysical anomalies in an overburden filled valley, now labelled the "Tahte Mystery Bowl". Overburden was reported to be 10.7 m – 26.5 m thick in the drill holes with no nearby outcrop.

Following a hiatus in exploration the target was re-staked in 2009 by Cathro Resources Corp. The Noranda drill core was resampled in 2010 with DDH-1 returning 65.53 m of 60 ppb Au, 549 ppm Cu and 46 ppm Mo. DDH -3 returned 50.82 m of 138 ppb Au, 735 ppm Cu and 91 ppm Mo (including 7.75m of missing core with no values). Cathro subsequently carried out soil and rock sampling surveys, reconnaissance mapping, and a three line IP survey in 2013. This IP survey confirmed and refined the Noranda IP chargeability anomaly with the result that two of the located drill sites (unknown drill hole numbers) are on the margins of the two strongest IP anomalies identified in 2013.

Northwest of the “Tahte Mystery Bowl” geological mapping and geochemical sampling by Cathro located a northwest trending, approximately 2400 m by 600 m wide, zone of quartz veining containing disseminated molybdenite, hosted by non-foliated quartz monzonite, that they named the Ribbon Zone.

In 2019 the two Noranda drill sites and three 2013 IP lines were relocated on the ground in the “Tahte Mystery Bowl”. The alluvium – colluvium filled valley is approximately 1300 m in diameter. Three test pits were excavated by hand tools to depths of 1.2 m and 0.60 m over the strongest IP chargeability anomalies in the valley before encountering permafrost. In total five soil samples were collected from these pits and three returned 31.8 ppb – 97.9 ppb gold in spite of extensive overburden.

A total of 5 rock samples, 89 B-C horizon soil samples and 47 Ah horizon soil samples were collected 2021. Gold and copper results from the rock samples contained low to weakly anomalous values, with best results (65.7 ppb Au, 79.8 ppm Cu) from test pit 21-1 located near the site of the highest gold in soil sample.

Test soil lines in 2019 located a previously unrecognized gold in soil anomaly over 1700 m on a volcanic ridge on the southwest side of the Taut claims, and immediately southwest of the “Tahte Mystery Bowl” valley. The South Ridge zone is underlain by Carmacks Group andesite and locally intruded by the weakly altered feldspar – hornblende porphyry that yielded a Late Cretaceous age date. Work in 2020 and 2021 confirmed this anomaly. Samples from this area returned many anomalous Au values from soil samples, including the highest value on the property 1018 ppb Au. Anomalous values were also reported for Ag, Cu, Mo, Pb, Zn, As and Sb. The altered and mineralized rocks in this area tend to be recessive weathering, with the fresh volcanic rocks more prominent. A recessive lineament that crosses the ridge in this area has soils that are geochemically anomalous, although the lineament is covered to a great extent by boulders of fresh volcanics.

The area immediately northwest of the “Tahte Mystery Bowl” and on the eastern side of the Ribbon Zone is underlain by a number of northwest trending recessive zones and andesite outcrops, likely dykes or sills. Soil geochemistry of in this area in 2019 returned anomalous values for Au, Ag, Cu, Pb, Zn and Mo. Further detailed work should be conducted in the Northwest Anomaly area.

The mineralization intersected in 1980 drilling is part of a porphyry Cu- Mo- Au- Ag system that is similar in age to the giant Casino porphyry deposit. Further work is warranted and recommended on the Taut Property and surrounding project area given; the very encouraging Cu – Au results obtained from the Noranda drill holes in the “Tahte Mystery Bowl”, anomalous gold values obtained in the Tahte Mystery Bowl test pits, anomalous gold in rock and soil results over 1700 m on the South Ridge zone, and the two kilometer long molybdenite Ribbon Zone on the north side. Prior to drilling a more detailed magnetic +/- radiometric survey is recommended along with a Lidar or DEM survey. Due to favourable results from the 2021 orientation survey of Ah horizon ultra-trace soil geochemistry, further sampling with this technique should be conducted over certain parts of the property.

Additional mapping, geochemical sampling (rock and soil) should be carried out over the aeromagnetic highs and areas underlain by volcanic/porphyry units on the south end of the claims and in the area of volcanic dykes located at the Northwest anomaly.



Plate 2. Aerial View looking SE. Tahte Mystery Bowl and SW volcanic ridge (unit uKC2) and saddle with camp.

## 2.0 INTRODUCTION

This report on the Taut 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.Geo. and Roger Hulstein, P.Geo., are two Whitehorse, Yukon based mineral exploration geologists. A total of \$25,179 xx pending final \$\$ - RH in eligible expenses was incurred in 2021. This report is the required final report for the YMEP program describing and summarizing the work carried out in 2021, the results, and recommendations for further work.

The information and data used in the report was collected by the authors during a 2021 field program carried out from July 16<sup>th</sup> to July 21<sup>st</sup> and on referenced sources. The earliest referenced work was carried out by Noranda Exploration Company, Limited in 1977 – 1980 (Fairbank et al, 1977 and McDonald, 1981). This work included geological mapping, geophysics (magnetics and induced polarization surveys) and soil geochemistry (not filed for assessment) followed by diamond drilling. Following a lengthy exploration hiatus Cathro Resources Corp. re-staked the property in 2009 and optioned it to Skeena Resources Limited in 2010 who carried out a program of soil sampling and re-logging and sampling of the three drill holes (total 270.62 m) completed by Noranda (Cathro and Pautler, 2011). Skeena returned the property to Cathro Resources in 2010 who subsequently carried out a program of soil sampling, geophysics (induced polarization), and limited prospecting (Cathro, 2014).

No further exploration work was carried out by Cathro Resources and the claims were allowed to lapse. William Mann restaked the property in June, 2019 and subsequently partners Mann and Hulstein carried out a program of soil sampling, limited geological mapping, test pitting and prospecting on the claims and surrounding area in August, 2019. Further work was conducted in August, 2020 including the addition of 16 claims, soil geochemistry and prospecting. A total of 5 rock samples, 89 B-C horizon soil samples and 47 Ah horizon soil samples were collected in July 2021, as described in this report.

## 3.0 RELIANCE ON OTHER EXPERTS

The authors visited the property from the 16<sup>th</sup> to 21<sup>st</sup> of July, 2021 (and previously in 2019 and 2020), and together obtained 5 rock samples and 136 soil samples. Results of this program have been incorporated into the report. The authors are responsible for all sections of this report.

There was no reliance on other experts in the preparation of this report on the Taut Project beyond those sources that are referenced. The authors have not verified data from exploration programs prior to 2019 that are referenced. The assumption is made that all previous work has been completed to best-practice industry standards and the authors have no reason to doubt this assumption.

Much of the information on the Taut Project (geological setting, structural geology, airborne geophysics and past assessment reports) was obtained from public sources provided by the Government of Yukon.

Information on claim tenure, including adjacent properties, and regional geology was provided by the Government of Yukon's website "GeoYukon" of the Yukon Geology Survey at <https://mapservices.gov.yk.ca/GeoYukon/>. Information on regional geology and mineral deposits was also provided by the "Yukon Bedrock Geology" website available at <https://yukon.ca/en/yukon-geology#bedrock-geology> and at <http://data.geology.gov.yk.ca/Compilation/3>.

## 4.0 PROPERTY DESCRIPTION AND LOCATION

The Taut property, which lies within and is part of the Taut project area, consists of 52 contiguous Yukon quartz claims, comprising approximately 1086 hectares (2683 acres). The property is located (centered) at 61°46' N Latitude, 136°47' W Longitude (UTM NAD 83: 405500E, 6849500, Zone 8) on NTS map sheet 115H/15 and 115H/10 in the Whitehorse Mining District of Yukon Territory, Canada (Figure 1). The property claims are held by William Mann who has a joint ownership agreement (51%/49%) with Roger Hulstein. Up to date information on the claims can be obtained from the Yukon Government, Energy, Mines and Resources Department available online from the Yukon Mining Recorder (<https://apps.gov.yk.ca/ymcs/f?p=116:1>)

Table 1. Claim status of the property as of December 1, 2021.

| Grant Number | Claim Name | Claim Number | Registered Claim Owner | Recording Date | Staking Date | Claim Expiry Date |
|--------------|------------|--------------|------------------------|----------------|--------------|-------------------|
| YD132101     | TAUT       | 1            | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2029-04-30        |
| YD132102     | TAUT       | 2            | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2029-04-30        |
| YD132103     | TAUT       | 3            | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2029-04-30        |
| YD132104     | TAUT       | 4            | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2029-04-30        |
| YD132105     | TAUT       | 5            | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2029-04-30        |
| YD132106     | TAUT       | 6            | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2029-04-30        |
| YD132107     | TAUT       | 7            | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2027-04-30        |
| YD132108     | TAUT       | 8            | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2027-04-30        |
| YD132109     | TAUT       | 9            | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2027-04-30        |
| YD132110     | TAUT       | 10           | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2027-04-30        |
| YD132111     | TAUT       | 11           | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2027-04-30        |
| YD132112     | TAUT       | 12           | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2027-04-30        |
| YD132113     | TAUT       | 13           | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2029-04-30        |
| YD132114     | TAUT       | 14           | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2029-04-30        |
| YD132115     | TAUT       | 15           | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2029-04-30        |
| YD132116     | TAUT       | 16           | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2029-04-30        |
| YD132117     | TAUT       | 17           | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2029-04-30        |
| YD132118     | TAUT       | 18           | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2029-04-30        |
| YD132119     | TAUT       | 19           | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2029-04-30        |
| YD132120     | TAUT       | 20           | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2027-04-30        |
| YD132121     | TAUT       | 21           | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2029-04-30        |
| YD132122     | TAUT       | 22           | William Mann - 100%    | 2019-06-11     | 2019-06-10   | 2027-04-30        |

|          |      |    |                     |            |            |            |
|----------|------|----|---------------------|------------|------------|------------|
| YD132123 | TAUT | 23 | William Mann - 100% | 2019-06-11 | 2019-06-10 | 2027-04-30 |
| YD132124 | TAUT | 24 | William Mann - 100% | 2019-06-11 | 2019-06-10 | 2027-04-30 |
| YD132125 | TAUT | 25 | William Mann - 100% | 2019-06-11 | 2019-06-10 | 2027-04-30 |
| YD132126 | TAUT | 26 | William Mann - 100% | 2019-06-11 | 2019-06-10 | 2027-04-30 |
| YD132127 | TAUT | 27 | William Mann - 100% | 2019-06-11 | 2019-06-10 | 2027-04-30 |
| YD132128 | TAUT | 28 | William Mann - 100% | 2019-06-11 | 2019-06-10 | 2027-04-30 |
| YD132129 | TAUT | 29 | William Mann - 100% | 2019-06-11 | 2019-06-10 | 2027-04-30 |
| YD132130 | TAUT | 30 | William Mann - 100% | 2019-06-11 | 2019-06-10 | 2027-04-30 |
| YD132131 | TAUT | 31 | William Mann - 100% | 2019-06-11 | 2019-06-10 | 2027-04-30 |
| YD132132 | TAUT | 32 | William Mann - 100% | 2019-06-11 | 2019-06-10 | 2029-04-30 |
| YD132133 | TAUT | 33 | William Mann - 100% | 2019-06-11 | 2019-06-10 | 2025-06-11 |
| YD132134 | TAUT | 34 | William Mann - 100% | 2019-06-11 | 2019-06-10 | 2029-04-30 |
| YD132135 | TAUT | 35 | William Mann - 100% | 2019-06-11 | 2019-06-10 | 2027-04-30 |
| YD132136 | TAUT | 36 | William Mann - 100% | 2019-06-11 | 2019-06-10 | 2027-04-30 |
| YD17517  | TAUT | 37 | William Mann - 100% | 2020-08-18 | 2020-08-11 | 2026-04-30 |
| YD17518  | TAUT | 38 | William Mann - 100% | 2020-08-18 | 2020-08-11 | 2026-04-30 |
| YD17519  | TAUT | 39 | William Mann - 100% | 2020-08-18 | 2020-08-11 | 2026-04-30 |
| YD17520  | TAUT | 40 | William Mann - 100% | 2020-08-18 | 2020-08-11 | 2026-04-30 |
| YD18091  | TAUT | 41 | William Mann - 100% | 2020-08-18 | 2020-08-11 | 2026-04-30 |
| YD18092  | TAUT | 42 | William Mann - 100% | 2020-08-18 | 2020-08-11 | 2026-04-30 |
| YD18093  | TAUT | 43 | William Mann - 100% | 2020-08-18 | 2020-08-11 | 2026-04-30 |
| YD18094  | TAUT | 44 | William Mann - 100% | 2020-08-18 | 2020-08-11 | 2026-04-30 |
| YD18095  | TAUT | 45 | William Mann - 100% | 2020-08-18 | 2020-08-11 | 2026-04-30 |
| YD18096  | TAUT | 46 | William Mann - 100% | 2020-08-18 | 2020-08-11 | 2026-04-30 |
| YD18097  | TAUT | 47 | William Mann - 100% | 2020-08-18 | 2020-08-11 | 2026-04-30 |
| YD18098  | TAUT | 48 | William Mann - 100% | 2020-08-18 | 2020-08-11 | 2026-04-30 |
| YD18099  | TAUT | 49 | William Mann - 100% | 2020-08-18 | 2020-08-15 | 2026-04-30 |
| YD18100  | TAUT | 50 | William Mann - 100% | 2020-08-18 | 2020-08-15 | 2026-04-30 |
| YD17515  | TAUT | 51 | William Mann - 100% | 2020-08-18 | 2020-08-15 | 2026-04-30 |
| YD17516  | TAUT | 52 | William Mann - 100% | 2020-08-18 | 2020-08-15 | 2026-04-30 |

The claim expiry dates in the table above includes assessment work performed in 2021 and described in this report that is pending approval.

The surface rights on the property are held by the Crown. Exploration activities are therefore dependant on obtaining the appropriate land use permit(s) for proposed exploration activities. A Class 1 “Notification” permit, number Q2021-0176 was obtained for 2021 work. Activities allowed under a “Class 1” exploration permit comprise rock, soil and silt geochemical sampling, geological mapping, trenching (to a limit of 400 m<sup>3</sup> per claim), temporary trail construction (to a maximum of 3.0 km) and a maximum of 250 person-days in camp.

A gradation of permits, for Class 2 through Class 4 activities, is required for more significant programs like diamond drilling and reverse-circulation drilling programs having a footprint exceeding Class 1 limits. Larger exploration programs require a “Class 3 Permit”, are valid for five years (ten if requested) and acquired through the local Mining Recorder, Department of Energy, Mines and Resources (EMR), Government of Yukon.

Class 3 permit activities allow for sizable diamond drilling programs (depending on the number of clearings per claim), up to 5,000 m<sup>3</sup> of trenching per claim per year, the establishment of up to 15 km of new roads and 40 km of new trails, and up to 200,000 tonnes of underground excavation. Additional permits required are a “Consolidated Environmental Act Permit” for

proper disposal of camp waste and ash resulting from incineration, and a “Fuel Spill Contingency Plan”. A “Yukon Water License” is required if water usage exceeds 300 m<sup>3</sup>/day. Additional licenses may be required for “Disposal of Special Waste”.

All applications for Class 2 through Class 4 require review by the Yukon Environmental and Socioeconomic Board (YESAB). YESAB will recommend whether a project may proceed, whether it may proceed with modifications, or whether the project does not meet the environmental or socioeconomic expectations and should not proceed. Following submission by YESAB, a Decision Body determines whether to accept the recommendations, and, if a permit is awarded, what the conditions of the permit will be.

There are no significant environmental liabilities on the property beyond one, full 200 liter fuel drum found on the property in 2019. This drum is located on an alpine ridgeline near a cairn at field station RH19450 (NAD 83 UTM: 405285 E, 684933 N) and likely contains either Jet A or Jet B fuel. When it was examined in August 2019 the drum appeared sound and was not weeping fuel. At the two located drill sites, field stations RH19412 and TAHDDH (NAD 83 UTMs: 405980 E, 6848984 N and 406158 E, 6848984 N, respectfully), a number of steel drill rods were found.

The property is located within the shared traditional territories of the Little Salmon Carmacks First Nation (LSCFN) and the Champagne Aishihik First Nation (CAFN). Approximately 500 m north of the northwest corner of the Taut claim group is a “Category B” block of land, block LSC R-22B that covers the ground to the north and east. Joint claim owners William Mann and Roger Hulstein intend to make initial contact with the LSCFN and CAFN towards securing a respectful working relationship and establishing “social license” for future work once the pandemic is over.

The authors are not aware of any other significant factors or risks potentially affecting access, title, or the right or ability to perform exploration on the property.

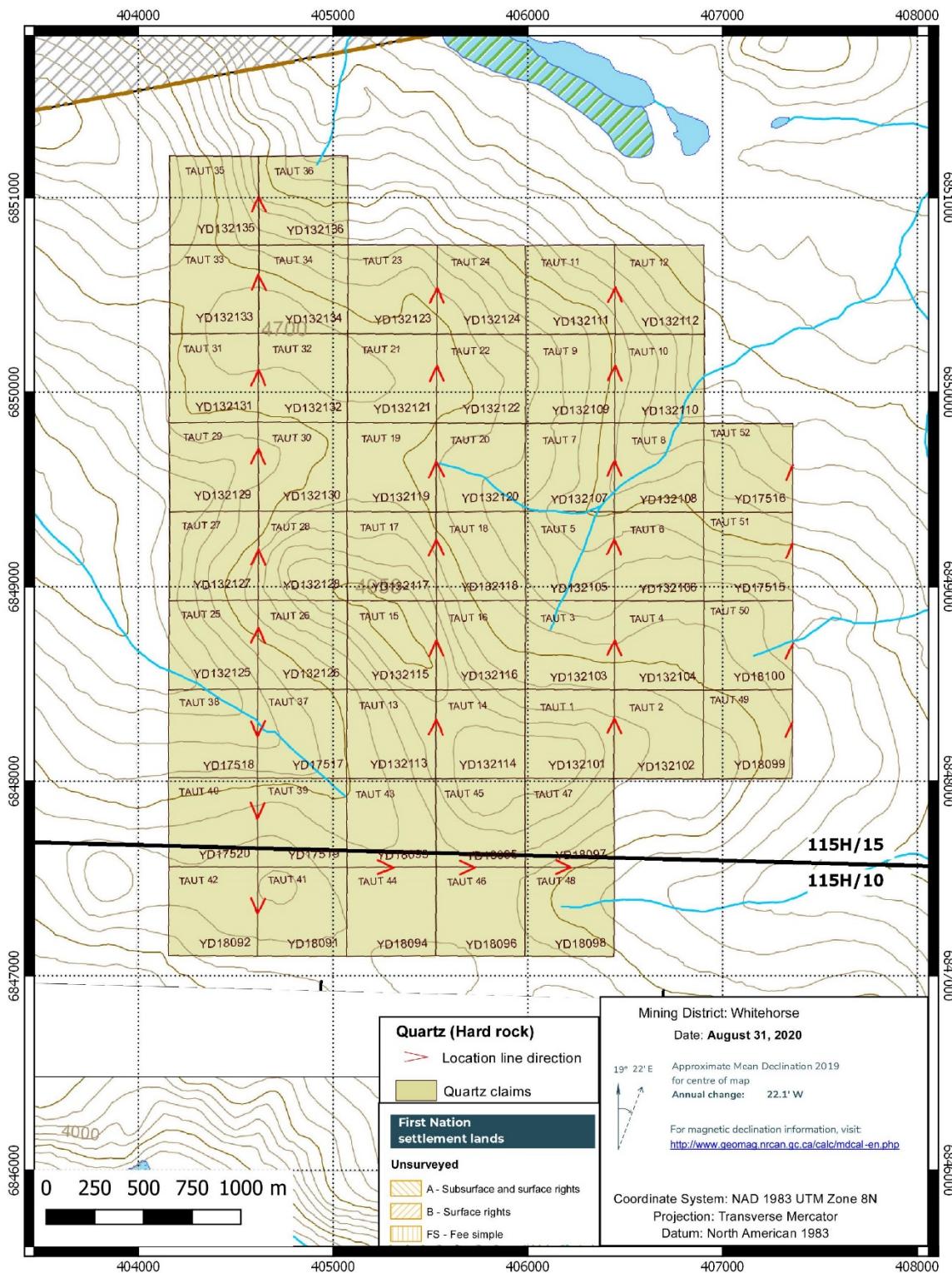


Figure 1. Claim Map, NTS 115H/ 15 &amp; 115H/ 10

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

The TAUT claims lie about 148km northwest of Whitehorse, and 43 km southwest of Carmacks in the Whitehorse Mining District (Figure 2). They are located on NTS map sheets 115H/15 and 115H/10, and are centred at approximately 61°46'N Lat., 136°47'W Long. The project lies at the headwaters of Incised Creek, which drains easterly into the Nordenskiold river, and Tahte Creek which drains northwesterly into Mackintosh Creek and then into the Nisling river.

Elevations on the property range from 1180 m to 1511 m, within the subalpine and alpine zones, with tree line generally near 1370 m. Topography is mostly gentle and rounded, with a few steep rocky slopes and outcrops. Vegetation on the property is sparse, mostly grasses and mosses with buckbrush proximal to stream drainages. A few clusters of spruce trees are present at lower elevations, but the property is essentially all above treeline.

Access to the property is by helicopter, with abundant landing areas across the claims. Road access is relatively nearby in three directions. The Mt. Nansen road network is about 27 km to the north, with minor stream crossings. The Klondike Highway and Yukon power grid is about 36 km to the east, across the Nordenskiold river. The Aishihik road is about 30 km to the southwest, with minor stream crossings.

The TAUT project lies within the Yukon Plateau- Central ecoregion of the Boreal Cordillera ecozone (Smith et. al. 2004). The area is dry with total annual precipitation of about 250 to 275 mm, about two thirds of which falls during the summer. Snow typically covers the ground from early October until late April. The mean January temperature is about -20° C, and the mean July temperature is about +10° C. The area lies immediately west of the Reid age glacial limit, and was covered by Pre-Reid glaciation. The project lies in the Extensive Discontinuous Permafrost zone, with permafrost present in thicker soils on north and east facing slopes and in valleys.

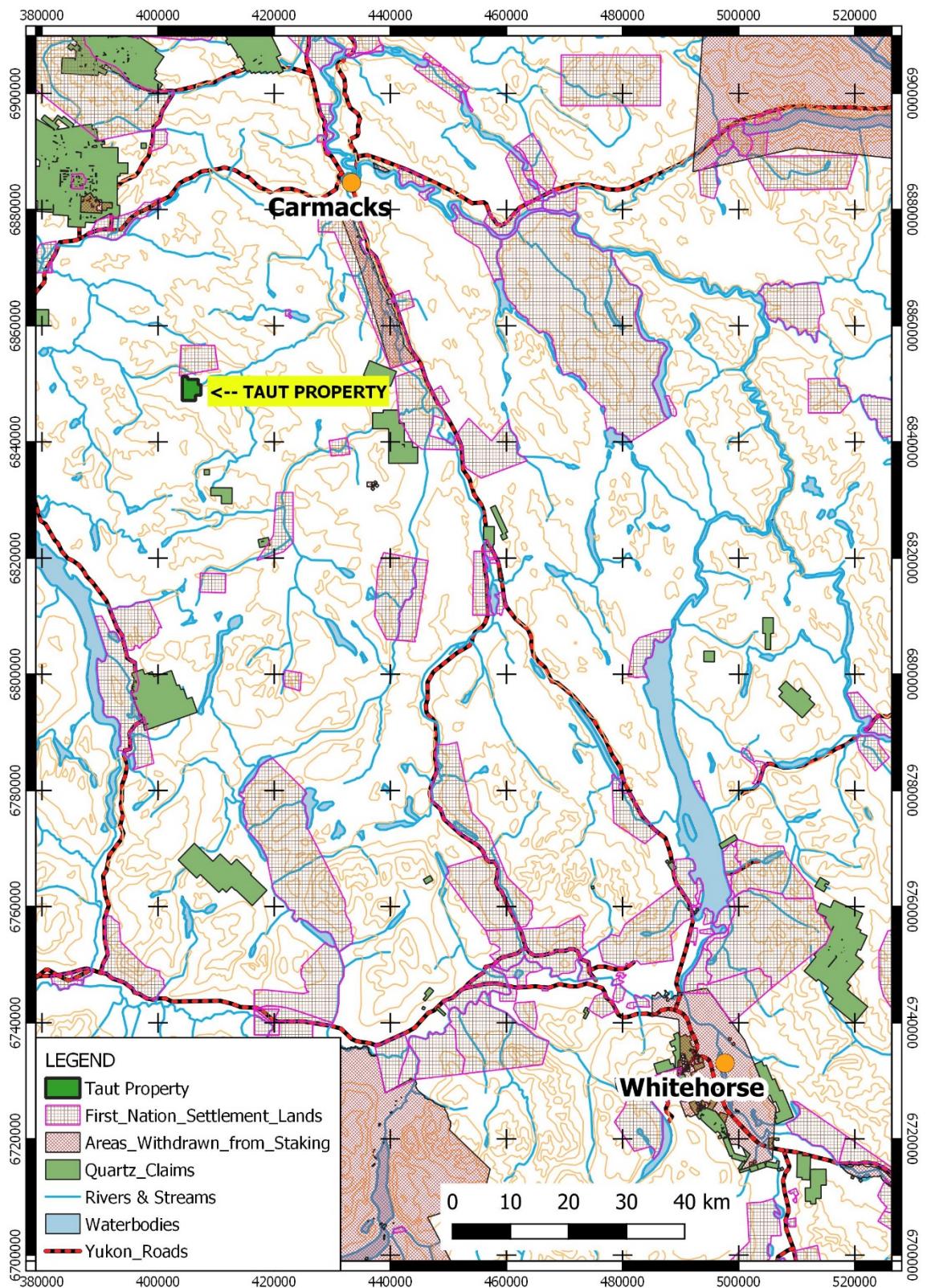


Figure 2. TAUT Project Location Map

## 6.0 HISTORY

**1966-1979** – Surficial geological mapping of the area by the Geological Survey of Canada at 1:100,000 scale (Hughes, 1989). The project area is covered by colluvial veneer and bedrock, and the Reid glacial limit lies proximal to the eastern edge of the TAUT claims.

**1970-1972** – Reconnaissance bedrock geological mapping conducted in the area by the Geological Survey of Canada at 1:250,000 scale (Tempelman-Kluit, 1973).

**1977** - Staked as 42 TAH claims by Noranda Exploration Company, which explored with linecutting (13.94 miles), IP (12.76 line-miles), magnetics (22.68 miles), geological mapping and geochemical surveys (Fairbanks et. al., 1977). The geochemistry was not filed for assessment, and is not available. Some of the work extended beyond the claim boundaries, particularly to the south. Noranda concluded: “The I.P. and geology surveys indicate the potential for a porphyry type Cu-Mo occurrence associated with the feldspar porphyry unit.”

**1980** - In 1980, Noranda completed three diamond drill holes totaling 269 m on the Tah claims (Macdonald, 1980), however, the report does not specify the targets. The hole location map in the report is rudimentary and the grid coordinates of two of the holes show them being at the same location, which does not match with the map. The collars of two drill holes (assumed to be TA-80-01 and 03) were located during the 2019 field program and are shown on Figure 6. The drill holes appear to have tested an area of moderate PFE values (chargeability), approximately midway between the PFE high “ridge” and the mapped kaolinite-sericite-silica alteration zones. The holes cored the three intrusive phases mapped on surface plus a dark green dyke. The logs describe moderate to intense alteration (clay, sericite, hematite, jarosite), intense fracturing, deep weathering, quartz veining, up to 5-10% disseminated pyrite in multiple phases, along with occasional malachite, molybdenite, fluorite and gypsum. Assaying was incomplete, yet several mineralized sections were reported (here converted to metric):

### Hole Length (m) Grade

|      |      |                               |
|------|------|-------------------------------|
| #1   | 19.8 | 0.12 g/t Au                   |
| and  | 19.8 | 0.07 % Cu (deeper in hole)    |
| #3   | 20.3 | 0.144 g/t Au and 10.53 g/t Ag |
| incl | 1.54 | 0.96 g/t Au                   |
| and  | 4.56 | 16.2 g/t Ag                   |

**1989** – The Tahte area (along with two areas to the south) were staked by Golden Quail Resources Ltd. as the Nick III block of 34 claims in 1989. Golden Quail carried out reconnaissance prospecting in 1989, with 3 heavy mineral stream samples and one rock sample. The samples were analyzed for Au, Pt & Pd. One heavy mineral sample was anomalous, with 139 ppb Au from a location on the southwest side of the current TAUT claims (Lambert, 1990).

**1990** – Golden Hemlock optioned the Nick III claims and collected 6 silt samples from the claims and nearby. These samples were only analyzed for Au and As, with a maximum Au value of 40 ppb (Davidson, 1991).

**1997** – Glacial limit mapping conducted in the area by the Geological Survey of Canada at 1:250,000 scale (Duk-Rodkin, 2002). The middle Pleistocene (ca. 200 ka) Reid glacial limit lies proximal to the east side of the TAUT property. The bulk of the property was affected by the Pre-Reid glaciation (ca. 3 ma).

**2010** – 74 SUZI claims were staked to cover the area of the old TAH claims by Cathro Resources Corp. 24 stream sediment (silt) samples and 4 moss mat samples were collected from creeks and tributaries. 49 rock samples were collected. 155 soil samples were collected at 50 m spacing on five E-W lines spaced 200 m apart.

The Ribbon zone was discovered – molybdenite in quartz veins to 5m wide, located about 1.5km north of the Tahte zone. Re-logging and sampling of historic Noranda drill core was completed at the Bostock Core Library in Whitehorse (Cathro & Pautler, 2011). The detailed silt sampling of the area did not discover anything new, but confirmed the Tahte area as anomalous in Cu, Mo & Au and the Ribbon zone as anomalous in Mo. “Core from 3 historic Noranda holes was re-logged and re-sampled, confirming that Cu-Mo-Au mineralization is associated with silica, clay and sericite-pyrite alteration of a multiphase intrusive complex. Holes TA-80-01 and 03 encountered weak to moderate porphyry-style alteration and mineralization over their full lengths with maximum values reaching 170 ppb Au, 1134 ppm Cu and 229 ppm Mo. The alteration, host rocks, mineralogy and metal values are consistent with porphyry-style mineralization.”

**2011** – An airborne magnetic survey of 115H/15 was flown by the Geological Survey of Canada (Kiss & Coyle, 2011). The survey had 400 m line spacing and a nominal 100 m terrain clearance. At the project area distinct and irregular magnetic highs are surrounded by an annular magnetic low.

**2012** – Cathro staked additional claims to the north, collected 29 B-horizon soil samples, 40 power auger soil samples from 85cm depth, and extended the Ribbon zone by prospecting (Cathro, 2013). 20 rock grab samples were collected from the Ribbon zone area, which extended the zone to 1.5 km length. Molybdenum is found as molybdenite and ferrimolybdite in white quartz veins with accessory pyrite and rare galena. Veins are up to 5 m wide, near vertical, and trend about 300°. Regarding the usefulness of power auger results, the shallow soil sampling appears to demonstrate slightly higher highs for Cu and Mo, and better clustering for Cu and Au.

**2013** – Cathro collected 73 B-horizon soil samples and 3 rock samples in the vicinity of the Ribbon moly zone and Tahte zone (Cathro, 2014). Three parallel IP survey lines were laid out in an ENE direction to cross known geophysical and geological features. The IP lines were 3300 to 2500 m long. The IP work confirmed the IP high results of Noranda at the Tahte zone, and showed an anomaly proximal to the Ribbon zone. The core of the Tahte zone has a coincident Cu- Mo- Au- Ag geochemical anomalies, IP anomalies and Mag anomalies in an area about 1500 m diameter with no outcrop.

**2014** – U- Pb isotopic analysis of porphyritic rock on the property returned an age of  $76.12 \pm 0.72$  Ma, conducted by Murray Allan, Pacific Centre for Isotopic and Geochemical Research, Dept.

Earth and Ocean Sciences, The University of British Columbia. This is within the age range of the Casino intrusive suite.

**2019** - 36 TAUT claims were staked by all-star prospecting duo Mann & Hulstein to cover the Tahte and Ribbon targets. A program of soil geochemistry, prospecting, geological mapping and petrography was conducted later in the summer. This work resulted in the identification of the southwest saddle and lineament as gold-enriched polymetallic targets.

**2020** – 16 additional TAUT claims were staked to expand the property to the southwest. 17 rock samples and 122 soil samples were collected. One test pit was dug at the site of the highest gold in soil value. The Hematite Breccia zone was identified, and the South Ridge and Northwest zones recognized as target areas warranting additional work.

## 7.0 GEOLOGICAL SETTING AND MINERALIZATION

### REGIONAL GEOLOGY

Little government mapping has been completed in the specific area of the claims. The Aishihik map sheet and the area of the Taut property were mapped in 1970-73 at a scale of 250,000 scale by the GSC (Tempelman-Kluit, GSC Map 17-1973). The area north of the claims was mapped in a preliminary manner at 1:100,000 (Ryan et. al., 2016). This map shows the Tahte minfile occurrence near it's eastern edge, however no geological details are shown in the area of the claims. For example, the volcanic rocks at the South Ridge zone are not shown. The Mt. Nansen map sheet 15km to the north of the claims was recently re-mapped at 1:50,000 scale (Sack et. al., 2021).

In 2011 the GSC commissioned an airborne magnetic survey of the area at 1:50,000 scale which has proved useful in interpreting the regional and property geology (Kiss & Coyle, 2011). This data was reprocessed at 1:250,000 scale which is useful in showing the regional magnetic pattern, and provides coverage of the southern part of the property (Aurora Geosciences & Bruce, 2020).

A recent regional geological compilation is shown on the Yukon Map Maker website (<http://mapservices.gov.yk.ca/GeoYukon/>) (Figures 3). The area southwest of Carmacks is mainly underlain by volcanic and intrusive rocks of the Stikine Terrane. To the east of Carmacks, across the northwest trending Braeburn Fault, the Upper Triassic Whitehorse Trough consists of sedimentary and volcanic rocks laid down in a basinal environment.

Rocks of the Stikine Terrane in the area of the Taut Project consists largely of intrusive rocks belonging to the Aishihik batholith, Long Lake Suite, and are subdivided into map unit EJgA, (foliated granodiorite, diorite and potassium feldspar granite of Jurassic age) and map unit EJgL (felsic granite and mesocratic hornblende syenite of Jurassic age). Tempelman-Kluit originally mapped these two intrusive units that he assumed to be of Triassic age as Trgdm, now unit EJgL and the slightly younger unit Trqm, now map unit EJgL, both now part of the Long Lake Suite.

Younger rocks on the property, mapped by Tempelman-Kluit (1974) as varicoloured acid tuff (map unit Tvr), are now interpreted as Carmacks Group andesites (map unit uKC2), and are commonly non-tuffaceous, feldspar – hornblende porphyritic and magnetite bearing.

A  $^{207}\text{Pb}/^{235}\text{U}$  age date sample, described as a weakly chlorite – epidote – sericite altered feldspar – hornblende porphyry, from this unit returned an age of 76.12 +/- 0.72 Ma (Allen, 2014). This age places the intrusive and the probable coeval Carmacks volcanics within the Casino plutonic suite of 79 – 72 Ma (Allan et al., 2013). The geological legend of the rock units present in the Taut Project area is presented in Table 2 below.

Table 2. Geological legend of the Taut Property area.

| GEOLOGICAL LEGEND   |               |   |
|---|---------------|---|
| Late Cretaceous   |               |   |
| YGS<br>2020*  | DTK<br>1973** | Description   |
| <b>uKC2</b>   | Tvr           | Carmacks Group; andesite volcanics, commonly feldspar, hornblende porphyritic, magnetite bearing where fresh  |
| Jurassic  |               |   |
| <b>EJgL</b>   | Trgdm         | Long Lake Suite, Aishihik Batholith; dark grey weathering, coarse - grained, equigranular biotite hornblende granodiorite to quartz diorite; commonly shows layering or foliation of mafics; may include pink quartz monzonite of unit EJgL |
| <b>EJqL2</b>  | Trqm          | Long Lake Suite, Aishikik Batholith; medium - coarse grained foliated biotite - hornblende granodiorite, pink quartz monzonite, aplite, local biotite rich gneiss schlieren   |
| * <a href="http://mapservices.gov.yk.ca/GeoYukon/">http://mapservices.gov.yk.ca/GeoYukon/</a><br>**Tempelman-Kluit (1974) - GSC Map 17-1973 |               |   |

To the north and east of the project area the map unit EJqL2 includes porphyritic quartz monzonite of Tempelman-Kluit's (1974) Mqmp map unit. This unit is porphyritic (pink K-feldspar), medium-grained, hornblende biotite quartz monzonite and includes minor pink quartz monzonite (unit Trqm) and undifferentiated hornblende granodiorite (Trgdm).

The TAUT Project area lies between two northwest trending regional dextral faults that merge into one northeast of the area (Figure 3). Given the configuration of the faults it is not unreasonable to expect a certain amount of dilation between them, on the Taut property and in the project area. The northwest trend is similar to the trend of the faults that control most of the mineral deposits and mineralization found in the Dawson Range located just to the north of the TAUT Project. These deposits include a number of Casino age (ca. 79-72 Ma) copper – gold porphyries and related distal gold deposits; Casino, Nucleus – Revenue, Sonora Gulch and Cash, all located along the northwest trending dextral strike – slip Big Creek Fault. Other Casino age mineral occurrences include the Sato and the Hopper, both to the south of the TAUT project area.

Further to the north, the Aishihik Suite is host to important alkalic porphyry copper-gold deposits including Williams Creek and the Minto mine. Approximately 40 km to the north of the Taut property the mid – Cretaceous Mount Nansen camp is host to several precious metal epithermal deposits including; Huestis, Webber, Klaza (also of Casino age) and Brown – McDade. Near Whitehorse, Cretaceous skarn deposits of the Whitehorse copper belt were mined historically.

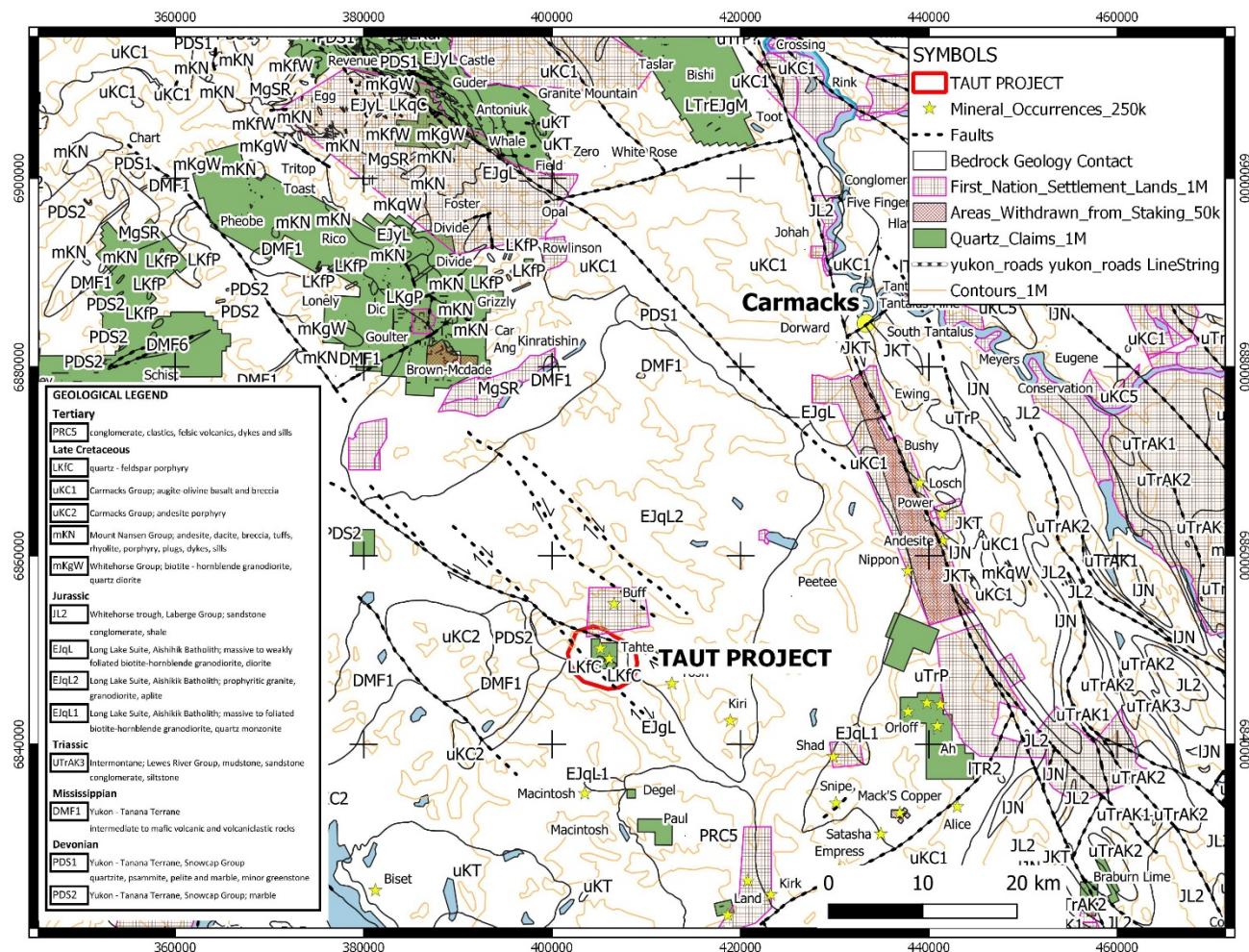


Figure 3. Regional Geology Map

## REGIONAL SURFICIAL GEOLOGY

The TAUT project area falls within the “pre-Reid” glaciation limit (Hughes, 1989 and Duk-Rodkin, 2002), and therefore, has not seen glaciation in approximately 3 million years. Jean Pautler (Cathro and Pautler, 2011) relogged the three holes drilled on the property by Noranda in 1981 (Macdonald, 1981) and recorded strong oxidation down to several hundred feet depth in bedrock, as well as deep overburden at the drillhole collars. YGS surficial geologist Jeff Bond has also confirmed that in addition to deep weathering, soils in the area contain loess (windblown glacial silt) and volcanic ash layers, which can subdue the soil geochemical response (Cathro and Pautler, 2011). Extensive solifluction and cryoturbation has affected the colluvium on hillsides and valley bottoms and further complicates the geochemical response of any mineralization. North and east facing slopes such as the Tahte Mystery Bowl are more affected by permafrost

than south and west facing slopes. Streams draining the project area are of low to moderate gradient and choked with vegetation and recent sediment in the upper reaches of the drainages and the lower portions while not vegetated contain abundant recent sediment, boulders and organics.

#### TAUT PROPERTY AND TAUT PROJECT AREA GEOLOGY

Outcrop and felsenmeer on the property and in the project area is restricted to the rounded ridges and steeper portions of the hillsides, particularly the north facing slopes. Scree and talus covers the upper portions of the hillsides that give way to vegetated covered slopes lower down and in valley bottom.

The oldest unit underlying the property is foliated biotite – hornblende granodiorite of the Jurassic Aishihik batholith of the Long Lake Suite (map unit EJqL2) found on the east side of the property and project area (Figure 6). This foliated unit locally contains mafic minerals, biotite – hornblende, and feldspar – quartz segregations giving it a gneissic appearance. The foliation and mineral banding dips shallowly to moderately to the northeast. This unit appears unaltered and devoid of mineralization where observed in 2019 to 2021 but is locally cut by aplite dykes and sills that are accompanied by minor quartz veins.

Slightly younger and non-foliated quartz monzonite rocks of the Aishihik batholith (map unit EJgL) are located on the west side of the property and project area. These non-foliated mostly leucocratic granitoids commonly contain quartz phenocrysts and have a medium grained quartz – feldspar matrix where observed in 2019 to 2021. These rocks are quite different in appearance from the older EJqL2 unit and are locally cut by white quartz veins with molybdenite and rare galena. In fact, these rocks appear to be much younger and more homogeneous than the older foliated heterogeneous EJqL2 unit of the Aishihik batholith. During field mapping in 2019 this unit was informally referred to as quartz porphyry, as the feldspars and mafics were commonly bleached hydrothermally or by weathering to sericite or clay and typically anhedral. Only the anhedral quartz grains were identifiable in hand specimen. One thin section revealed the presence of quartz syenite, with quartz phenocrysts in a pale anhedral feldspar matrix which had no sericitic or clay alteration (specimen T6, 2019).

The Early Late Cretaceous Carmacks Group andesite and related hypabyssal rocks are the youngest rocks encountered on the property and in the project area. They are also the least voluminous. The most prominent outcrops are exposed on the south side of the property (The South Ridge Zone) on an approximately east – west trending ridge as mostly fresh grey weathering grey feldspar – hornblende andesite and magnetite bearing except where altered. It is on this ridge that the Mineral Deposit Research Unit, University of British Columbia has reported an age of  $76.12 \pm 0.72$  Ma (Allan, 2014) from a weakly chlorite - epidote - sericite altered feldspar –hornblende porphyry. This porphyry is interpreted to be a hypabyssal intrusive coeval with the andesite volcanics.

Carmacks Group andesite is also found on the north side of the Taut property as elongated northwest trending outcrops (the Northwest Anomaly) between the Jurassic foliated granodiorite (map unit EJqL2) to the northeast and the non-foliated quartz porphyritic quartz monzonite to the

southwest. Between these isolated outcrops are recessive zones with orange – brown soils that likely demark fault zones and or altered rocks. The larger magnetite bearing andesite outcrops are coincident with the strongest positive aeromagnetic anomalies recorded by the GSC.

Between the north and south exposures of the Carmacks Group andesite on the property is a vegetated valley, with a northeast stream drainage, with an approximate diameter of 1300 m, devoid of outcrop or felsenmeer called the Tahte Mystery Bowl. It is in this valley that Noranda drilled three BQ size diamond drill holes (270.62 m in total) in 1980 (Macdonald, 1981). All three holes were drilled vertically and encountered bedrock between 10.7 m and 26.5 m depths. Only two drill sites were located in 2019 and by previous workers (Cathro and Pautler, 2011; Cathro, 2014) and the exact locations of the three drill holes (which holes were drilled on the two drill pads) could not be determined with certainty.

Bedrock in the three drill holes consisted predominantly of variably weathered and altered foliated biotite – granodiorite and feldspar porphyry (non-foliated?) according to Jean Pautler (Cathro and Pautler, 2011). Granodiorite description for DDH-2 matches that of map unit EJqL2. Cathro and Pautler describe the alteration ranging from weak propylitic to phyllitic (quartz-sericite-pyrite). The granodiorite is cut by a number of oxidized fault zones and dykes that range in composition from aplite, andesite to lamprophyre. The granodiorite and feldspar porphyry intersected in DDH-1 and DDH-3 respectively is not described as foliated and although it contains 5-10% biotite – hornblende is likely equivalent to map unit EJgL. Feldspars are commonly altered to hematite and the rocks are variably propylitic to sericite altered with weak to moderate clay (unclear if clay is alteration or weathering product). The feldspar porphyry in DDH-3 is cut by quartz stringers and veinlets that contains trace disseminated molybdenite.

Thin sections were prepared from seven rock samples in 2019, which were described by Dr. Tim Liverton. This work confirms the presence of propylitic (chlorite- epidote- pyrite) and phyllitic (quartz- sericite- pyrite) styles of alteration. The presence of clay alteration may be due to weathering, or may be argillic alteration. There is some weak feldspar rimming and biotite that maybe secondary, however it is not certain that these mineral textures are due to potassic alteration.

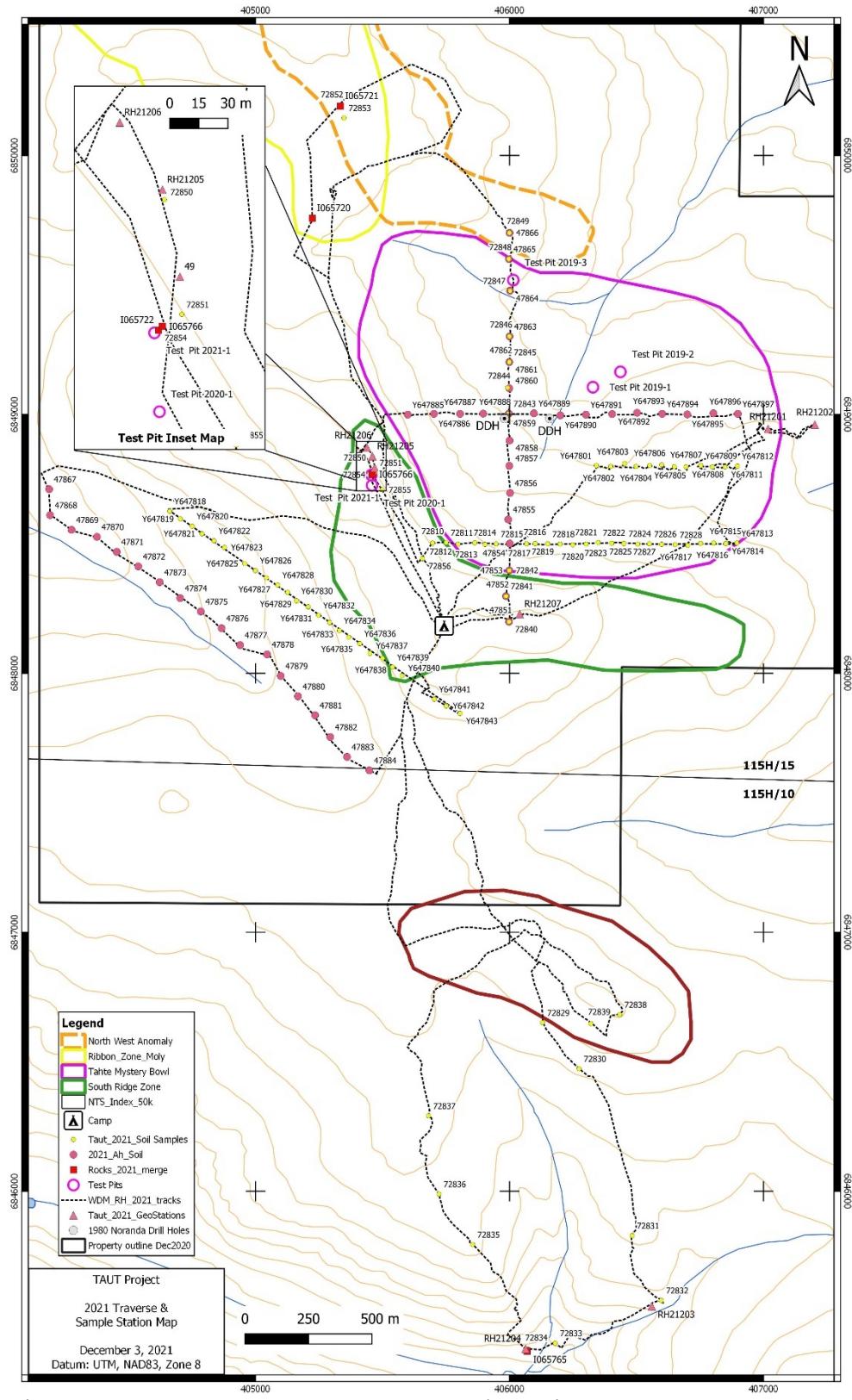


Figure 4. 2021 Property Traverses & Sample Stations

## TAUT PROPERTY AND TAUT PROJECT AREA MINERALIZATION

There are three known areas on the property and in the project area that have been identified as having significant mineralization; the Ribbon Zone, the “Tahte Mystery Bowl” and the South Ridge Zone. Mineralization in the “Tahte Mystery Bowl” is found in the drill core recovered from the three 1980 Noranda diamond drills that targeted geophysical anomalies (Figure 6).

The Ribbon Zone found on the northwest side of the Taut property and extending off of it to the northwest trends northwest and covers an approximate area of 2.4 km by 0.6 km. The current boundaries of the zone are defined by molybdenite with rare galena found in white quartz veins found in talus and felsenmeier and coincident anomalous rock and soil geochemistry for Molybdenum. Molybdenite is found disseminated in trace to 1-3% amounts in a number of northwest trending white quartz veins that can be traced in quartz monzonite felsenmeier for hundreds of meters. Veins appear to be sub vertical, widths are likely meter scale and Cathro (2014) estimates vein widths up to 5-7 m in places.

The “Tahte Mystery Bowl” located on the southwest side of the Taut property covers a valley bounded by outcrop or talus – colluvium covered slopes on three sides with the northeast side occupied by a northeast flowing stream drainage. Following a program of mapping, geochemical sampling and an induced polarization survey Noranda drilled three vertical diamond drill holes, totaling 270.62 m, in the valley on IP targets. As described above the drill holes intersected granodiorite, quartz monzonite and various felsic to mafic dykes. Mineralization consists of ubiquitous pyrite ranging from 1-10 % and averaging 3-5 % as disseminations or in quartz veinlets. Traces of chalcopyrite, bornite and molybdenite were also noted and usually are found with quartz veins (Cathro and Pautler, 2011). Geochemical results from the re-sampling are summarized below in Table 3.

Table 3. Selected intersections from 2010 re-sampling of Noranda drill core (Cathro and Pautler, 2011)

| <b>Drill Hole</b> | <b>From (m)</b> | <b>To (m)</b> | <b>Interval (m)</b> | <b>Au ppb</b> | <b>Cu ppm</b> | <b>Mo ppm</b> |
|-------------------|-----------------|---------------|---------------------|---------------|---------------|---------------|
| DDH - 1           | 26.52           | 92.05         | 65.53               | 60            | 549           | 46            |
| DDH - 2           | 87.48           | 90.55         | 3.07                | 15            | 214           | 605           |
| DDH - 3           | 11.28           | 62.10         | 50.82               | 113           | 735           | 91            |
| including         | 20.00           | 44.81         | 24.81               | 138           | 854           | 117           |
|                   | 62.10           | 69.85         | core missing        |               |               |               |
| and               | 69.85           | 85.00         | 15.15               | 82            | 493           | 137           |

As noted by Cathro and Pautler (2011), although assays are not ore-grade, DDH – 1 and DDH – 3 encountered weak to moderate porphyry-style alteration and mineralization over their full lengths with maximum values reaching 170 ppb Au, 1134 ppm Cu and 229 ppm Mo. The alteration, host rocks, mineralogy and metal values are consistent with porphyry-style mineralization. The high Ag values reported by Noranda in hole 3 (up to 16.2 ppm Ag) were not reproduced, with maximum values in 2010 analysis of 1.2 ppm Ag.

Areas of gossanous clay rich altered andesite and possibly feldspar – hornblende porphyry rocks were located in 2019 at the South Ridge zone on the southwest side of the property near the ridge top in the vicinity of the 76.12 +/- 0.72 Ma age date sample site. Rocks and soil in the area just south of here are locally bleached and rusty, with some visible pyrite and rare trace chalcopyrite mineralization. Soil samples located 150 m to 350 m to the southwest on the ridgetop returned values of 715.3 ppb, 68.1 ppb and 61.7 ppb gold. This gold in soil anomaly is the strongest on the property, and was confirmed by 2021 sample #72850, which returned the highest gold result on the property at 1018 ppb Au.

The Northwest Zone, located immediately north of the Tahte Mystery Bowl and west of the Ribbon zone has altered pyritic porphyritic rocks and polymetallic anomalous soils. This area has not been extensively examined.

The Hematite Breccia zone is located immediately south of the claims, and displays strong structural deformation, silicification and hematite +/- limonite mineralization over an area roughly 1000 m by 500 m. This zone is geologically intriguing despite low levels of the target elements.

## 8.0 DEPOSIT TYPES

Based on geology, styles of mineralization and structure, the mineralization described in the Noranda drill holes, targeting IP anomalies the “Tahte Mystery Bowl”, is classified as part of a bulk tonnage porphyry Au-Cu system and may be part of a much larger system which includes the Ribbon Mo Zone and may extend beneath the volcanic rocks to the south and west. Overall, the drill results coupled with the anomalous gold in soil geochemistry and the Late Cretaceous age date for the feldspar – hornblende porphyry shows encouraging geological and mineralogical characteristics similar to the Casino Cu-Au-Mo-Ag porphyry deposit (see Fig. 5).

A secondary target that is possible in this environment is high grade Au- Ag veins found peripheral to porphyry deposits similar to the Klaza veins in the Mt. Nansen area 30 km to the north (Lee et.al., 2020). The Bomber vein located peripheral to the Casino deposit is a similar example (Yukon minfile 115J 027). To date there have been no significant precious metal veins located in the TAUT area.

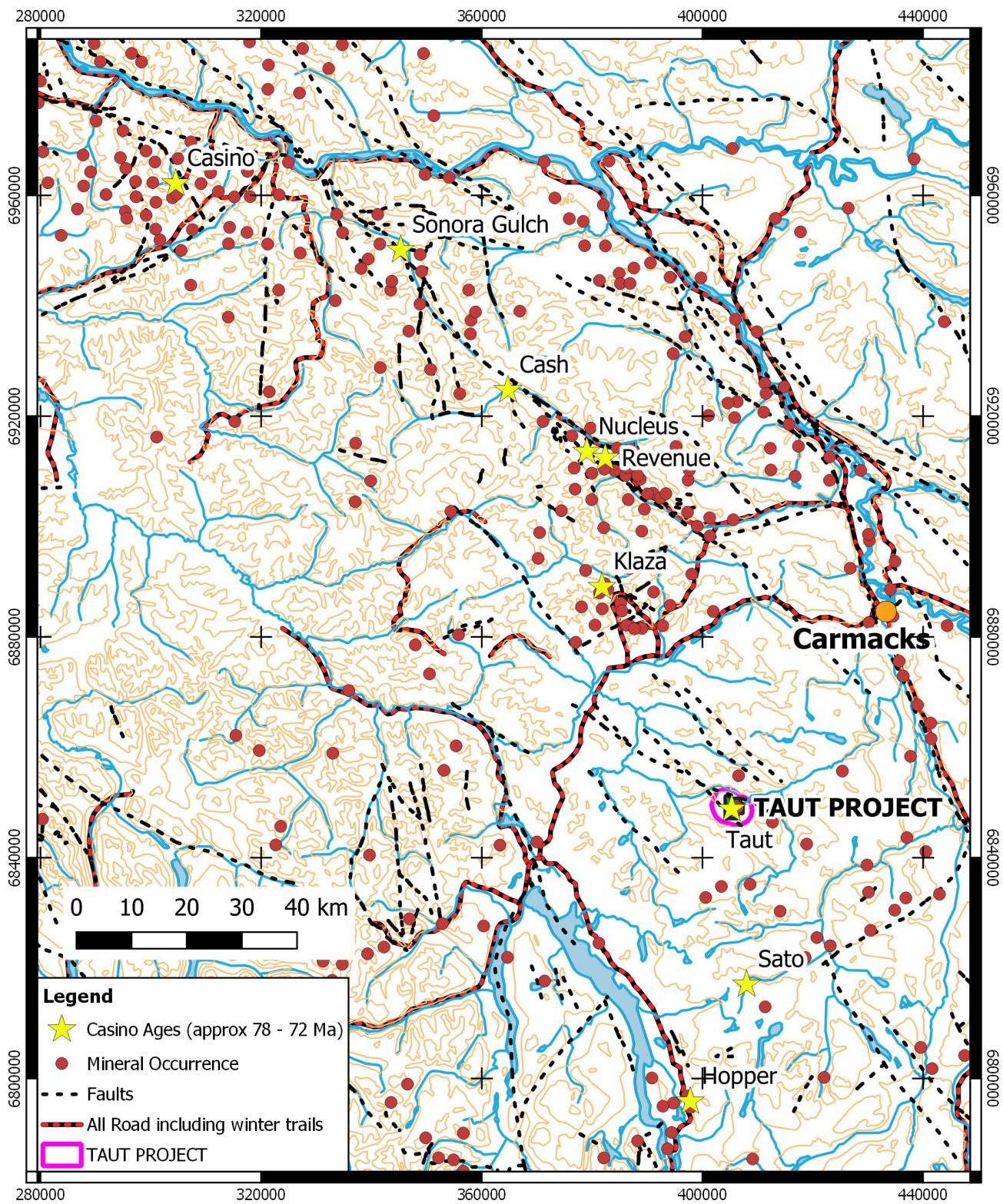


Figure 5. Casino Age Porphyry deposits

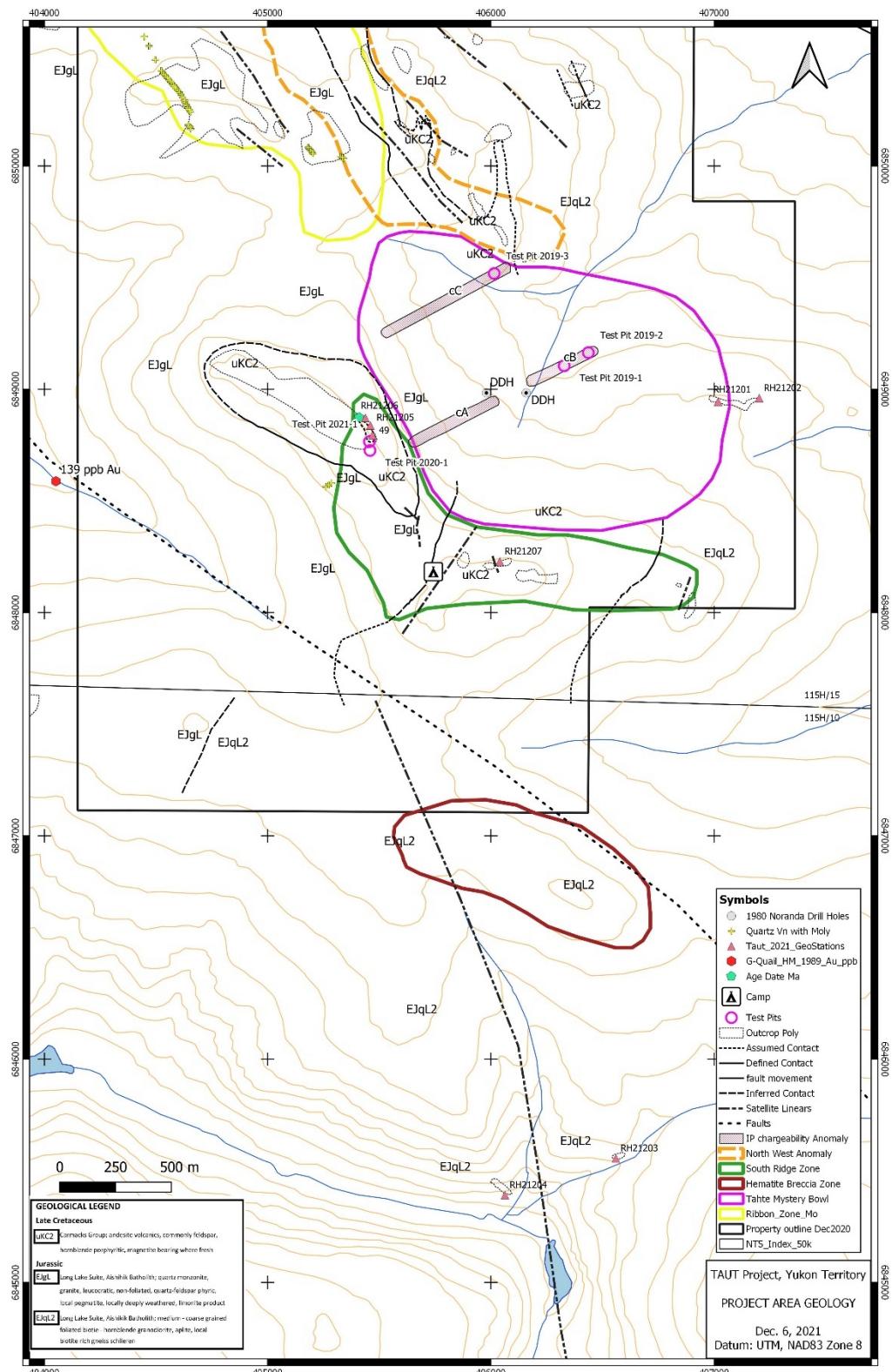


Figure 6. Property Geology and 2021 Stations

## 9.0 EXPLORATION

A description of historic (prior to 2009) and more recent exploration work by Cathro Resource Corp. from 2009 to 2014 has been described in prior Yukon assessment reports and Yukon Mineral Exploration Program reports (Fairbank et al, 1977; Macdonald, 1980; Cathro and Pautler, 2011; Cathro, 2013; and Cathro, 2014; Mann and Hulstein, 2019 & 2020). This work and results are not discussed in detail in this report although some of the geochemical results are included on maps for the elements of interest described below.

Field work in 2021 consisted of prospecting, reconnaissance geological mapping, grid and selective conventional soil sampling, “Ah horizon” soil sampling, rock sampling and the excavation of one test pit and is described below. All sample and field stations locations were collected by GPS, Garmin models 60CSx and GPSmap 64st, with an accuracy commonly of +/- 3 m, using a UTM grid, NAD83 Datum in Zone 8v. 2021 Traverses and sample numbers are shown in figure 4, while Property Geology and Stations are shown in figure 6.

Fieldwork commenced on July 16<sup>th</sup>, 2021 with mobilization to the property by helicopter and was completed on July 21<sup>st</sup>, when the two person crew demobilized by helicopter. Shortened field traverses were completed on both the 16<sup>th</sup> and the 21<sup>st</sup>. All fieldwork was carried out on foot from a tent camp established on a ridge saddle on the south side of the Taut claim block. Traverses were completed over the saddle and lineament where the camp is located, and over the ridge northwest of camp where the 76.12 +/- 0.72 Ma age date sample site is located. The Tahte Mystery Bowl was sampled for additional soil samples, with an orientation survey with both conventional and Ah horizon sampling.

An additional traverse with concurrent prospecting and soil sampling was done south of the claims from the Hematite Breccia zone southward towards a small lake. A hydrothermally altered foliated granodiorite cut by quartz veins was observed, but was not enriched in metals (Plate 3). This traverse returned a single anomaly, 70 ppm Cu in soil (sample #72832).

A total of 5 rock samples, 47 Ah horizon soil samples and 90 conventional soil samples were submitted to Bureau Veritas Mineral laboratories for geochemical analysis of Au and 35 additional elements including, Ag, Cu, Pb, Zn, Mo, As, Bi, and Sb (details presented in Appendices II, III, IV, V, VI & VII). Property geology and geological stations are shown in Figure 6. 2021 sample locations and sample numbers are shown in Figure 4. Compiled geochemical results for Au, Cu and Mo are shown on Figures 7 to 9 respectively in the map pocket.

The five rock samples consisted of 0.4 -1.6 kilograms of representative rock, felsenmeer or float, which was being tested. One of the rock samples were collected off claims during a reconnaissance traverse south of the claims. Two of the rock samples were collected from Test Pit 21-1 at the South Ridge zone, one from a silicified, slickensided boulder just northwest of the Mystery Bowl and one from a rusty anomalous soil pit at the North West Anomaly. The highest

gold value returned from rock was 65.7 ppb Au from a pyrite-altered andesite (sample IO65722) from the Test Pit at the South Ridge Saddle area.



Plate 3. Reconnaissance traverse 1.5 km south of claims. Altered Foliated Granodiorite with quartz veins.

#### AH HORIZON SOIL GEOCHEMISTRY VS CONVENTIONAL B-C SOILS

Two types of soil samples were collected in 2021 to test the applicability of “Ah” horizon analysis compared to conventional B or C horizon sampling. An orientation survey was conducted on two perpendicular lines crossing the Tahte Mystery Bowl with both types of samples collected from each site where possible, at 100 m spacing. The concept of using Ah samples was prompted by the presence of 11 to 22 m of old Pre-Reid glacial material along with loess and White River ash that overlie the Mystery Bowl (known from drillhole collars). This thick overburden is thought to dilute the geochemical signature, along with the presence of thick organic material that tends to preserve permafrost. Many potential soil sample sites do not thaw deeply enough to allow collection of good quality conventional soils.

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 even below a thin layer of the Carmacks Group volcanics which are present in the South Ridge zone that overlie the porphyry deposit certain to be present. Two lines of Ah soils were collected running north-south and east-west across the Mystery Bowl at 100 m centres to compare with the existing anomalies. The valleys south and west of the South Ridge are covered with a thick organic layer similar to the Mystery Bowl area, and a single line of Ah soils was collected parallel to the creek to the west.

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, and this is present in most parts of the Mystery Bowl. 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 2021 “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 always 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 4). The Ah samples collected were at least a fist-sized amount, which was placed in a labelled Hubco bag to allow drying. In some locations a buried Ah layer was present, indicating previous slope instability, and if present sampled along with the upper layer.

The Ah horizon in some cases has higher metal values than conventional soils, particularly for Mn, Co, Mo, Se and Cd (Figures 10 – 14). Values of Zn, As, Ag and Fe are similar to those returned from conventional soils. Au and Pb values appear to be lower than in conventional soils, which might have been predicted based on the low mobility of these metals. Au values are also likely to be sporadic and less reliable due to the smaller analytical sample size, 0.5 g vs 15 g for conventional soil analysis. The use of Ultra Trace analysis appears to be beneficial for identifying patterns of certain indicator elements with lower detection limits such as Bi and Se. Overall, the Ah horizon sampling was successful in confirming the location and anomalous nature of the Mystery Bowl with a polymetallic anomaly in Cu, Mo, Ag, Zn, Bi, Sb, Co, Se and Cd.

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 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.

Conventional B or C horizon soil samples were collected with either a soil auger or shovel, usually at the maximum depth possible, commonly >20 cm – 60 cm, and with attention given to avoiding loess and volcanic ash contamination. Where sample test lines were established, sample spacing was at approximately 50 m. Shovel sampling was preferable on rocky ridges, while the auger was better for deep soils with thick organic cover. Some proposed soil sites returned no sample due to thick organic material lying directly on talus, common on the steep southwest margins of the Mystery Bowl. Permafrost was also locally an impediment to sample collection.

Eleven soil samples and one rock sample were collected off the claims, during a reconnaissance traverse south of the claims from the Hematite Breccia zone due south towards a creek valley with a small lake. A best anomaly of 70 ppm Cu was returned from soil. An outcrop of hydrothermally altered quartz monzonite with narrow quartz veins was located (plate 3).

A total of 36 conventional B-C horizon soils were collected on east-west grid lines over the Tahte Mystery Bowl, extending grid soil coverage and the polymetallic anomaly to the south and east. Another 10 soils were collected on a north-south grid line crossing the Mystery Bowl as part of the Ah soil orientation survey. A further contour line was sampled on the western slope of the South Ridge zone. A few soils were collected in favourable looking locations near the age date sample, which returned the best Cu-Au value to date on the property (sample #72850, 549 ppm Cu & 1018 ppb Au – see plate 5). This helps to confirm the strong potential of the South Ridge near the highest elevation on the claims.

The southernmost grid conventional soil line within the Tahte Mystery Bowl, L 6848500N returned multiple adjacent samples anomalous in Cu (up to 104.9 ppm), Au (up to 201 ppb) and other elements of interest in 2021 sampling. This line included 10 adjacent samples spaced 50 m apart with greater than 20 ppb Au. This extension of the anomaly reveals the ever-growing potential of the TAUT claims.



Plate 4. “Ah” Soil 47855, inverted soil profile. Darkest layer is “Ah” horizon, adjacent ash layer.



Plate 5. Soil sample #72850, 549 ppm Cu & 1018 ppb Au at South Ridge zone.

#### TEST PIT

One test pit was excavated using pick and shovels near the site of the highest gold in soil result on the property (2019 sample #1961008, 715.3 ppb Au). Pit 21-1 was dug uphill and northeast of the 2020 test pit by about 30 m. The pit was dug about 1.5 m x 1.2 m x 1.0 m deep. Two rock

samples were collected from this pit (IO65722 & IO65766), and one soil sample (72854). 2021 samples returned moderately anomalous polymetallic values (Zn, As, Ag, Au, Bi, S etc.), with a best gold value of 65.7 ppb in pyritic porphyry rock. Although the rocks in this test pit appeared to be better mineralized than those from test pit 20-1, the levels of target metals were lower.

There was only one float rock type returned from the pit, angular blocky rusty epidote- chlorite-altered, locally silicified, pyritic andesitic porphyry.



Plate 6. Test Pit #21-1. Soil #72854 , rocks #IO65722 & IO65766

#### **PORTABLE XRF**

A Niton XL3t portable hand-held XRF was used in the field to provide rapid qualitative evaluation of soils and rocks. The information provided by the XRF was useful in confirming anomalous areas, and could be used to adjust soil line locations and lengths.

XRF readings were taken for 30 seconds through the soil sample bags, and high values of Pb, Zn, Cu and As used as indicators of mineralization. Rock samples were also analyzed by XRF, and

this information was used to reduce the number of rock samples submitted for assay. The XRF was not used for Ah horizon samples because it was assumed that values would be too low to register, however after reviewing the Ah assay results it is likely that some samples would likely show anomalies by XRF. XRF data is presented in Appendix IX.

A visual comparison of XRF and ICP-MS analysis of metals of interest results show a similar pattern (i.e. highly anomalous areas are anomalous). The highest values are focused on the Saddle and Lineament areas, with local high values in the Mystery Bowl and Northwest zone. A map showing Cu in conventional B-C horizon soils by XRF is included in Appendix IX, and shows a similar pattern to the assay results shown in figure 8.

## GEOPHYSICS

Airborne magnetics flown by the GSC (Kiss and Coyle, 2011) have proven to be effective in delineating fault structures on a regional scale and highlighting the magnetic Carmacks Group andesites and related hypabyssal porphyries. A compilation showing the magnetic signature along with IP chargeability highs and gold values is shown in Figure 13. The airborne magnetics for all of map sheet 115H have been compiled, which shows the regional patterns better (Aurora & Bruce, 2020).

The IP survey carried out by Cathro Resource Corp. highlighted two strong IP chargeability anomalies (numbered cA and cB) on line 700 N in the “Tahte Mystery Bowl” on the margin of the two identified 1980 Noranda drill sites (Cathro, 2014). The next line to the north, of the three line survey at 1200 N also identified a strong chargeability anomaly (cC). A third line over quartz monzonite returned a weak chargeability anomaly (cD) to the east of the Ribbon zone in the area of mapped northwest trending andesite outcrops, likely sills or dykes called the Northwest Anomaly. The IP anomalies in the “Tahte Mystery Bowl” have not been adequately tested.

## THIN SECTIONS

Eight rock specimens collected in 2021 at the property were slabbed and sent to Van Petro for thin section or polished thin section preparation. These samples were examined petrographically by Dr. Tim Liverton, and the results are presented in Appendix X.



Plate 7. The Tahte Mystery Bowl – no outcrop!

## 10.0 DRILLING

Three short BQ diamond drill holes totaling 882 feet (268.8 m) were drilled on the property in 1980 by Noranda (MacDonald, 1980). The location and orientation of these holes is not exactly known, as information in the report is conflicting. The small scale map with the report shows 3 evenly spaced vertical holes across an east-west grid line, while the logs suggest that the first two holes were drilled from a single location, and the third 600 feet to the east. This fits with the location on site of two drill stations identified by cut logs, milled lumber (hole markers?), old drill steel and an empty barrel. Considerable effort was made searching for a third site without success.

The drill core is present at the core library maintained by the Yukon Geological Survey in Whitehorse. The core was relogged and resampled by geologists Jean Pautler and Rob Stroschein in 2010, who concluded that the alteration and mineralization was typical of a porphyry copper environment (Cathro & Pautler, 2011). Of note, the depth of overburden at these holes ranged from 35 feet to 87 feet (11 m to 26.5 m).

## 11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

The 2021 samples were placed into rice bags in the field by the authors, sealed and secured. The samples were transported and delivered directly by the author 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). There was no evidence of any tampering with the samples during collection or shipping. All sample preparation was conducted by the laboratory.

## 12.0 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.

## 13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

The property is an early stage exploration project, and no mineral processing or metallurgical testing has been done.

## 14.0 MINERAL RESOURCE ESTIMATES

The property is an early stage exploration project, and no mineral resource has been identified.

## 15.0 ADJACENT PROPERTIES

There are no mineral properties within several kilometers of the TAUT property. The BUFF minfile occurrence 115H 033 lies about 4km north of the TAUT property within Little Salmon Carmacks First Nation land claim block LSC R-22B. The BUFF occurrence is poorly described and has not been explored since 1973. It consists of molybdenite in quartz veins hosted by quartz monzonite, possibly similar to the Ribbon zone on the TAUT project.

## 16.0 OTHER RELEVANT DATA AND INFORMATION

The reader is encouraged to review the references; Cathro and Pautler, 2011; Cathro, 2013; Cathro, 2014; and Mann and Hulstein, 2019 & 2020 for details on the recent geochemical and geophysical surveys. There is no other relevant data or information available that has not been included in this report.

## 17.0 INTERPRETATION AND CONCLUSIONS

The mineralization intersected in 1980 drilling is part of a porphyry Cu- Mo- Au- Ag system that is the same age as the giant Casino porphyry deposit to the northwest, amongst other similar deposits in the region. The values of Cu and Au in the drillholes are the highest found on the property to date, yet this mineralization lies beneath deep overburden that fills a recessive area roughly 1300 m in diameter with no outcrop or subcrop called the “Tahte Mystery Bowl”. The soils in this recessive area are weakly anomalous in target metals despite the thick (11 m to 26 m at drill holes) cover of material that is partly glacial in origin (Pre-Reid age), contains loess and volcanic ash, is cryoturbated and often frozen.

The presence of molybdenite in quartz veins and alteration of the country rocks that extend beyond this central area for kilometers to the north in the Ribbon zone and to the southwest is evidence of a large and strong hydrothermal system. The molybdenum potential of these zones appears to be modest, as the veins are narrow and widely spaced, and the disseminated molybdenite appears to be sparse within the country rocks.

The porphyritic rocks that crop out south and west of the Tahte zone were interpreted to be Carmacks volcanic rocks. The ridge to the southwest is obviously a thin cap rock in places. The identification of a Casino-aged intrusive plug immediately southwest of the Tahte bowl within the volcanics (and probably a feeder to the volcanics) increases the potential of the area around and under the volcanic cap, and extends the area of interest to the south. The presence of polymetallic soil geochemical anomalies on the southwest ridge, including the highest Au and Cu in soil values on the property emphasizes the expansion potential in this direction. The enhanced polymetallic values obtained from the “lineament” that crosses the southwest ridge suggests that this structure and probably others suggested by linear magnetic anomalies are likely to control the hydrothermal system and mineralization.

## 18.0 RECOMMENDATIONS

A more detailed magnetics +/- radiometrics survey (100 m spaced, helicopter borne OR 50 m spaced drone borne magnetics only) would be beneficial for indicating important structures and geological contacts. The radiometrics could potentially identify a potassic altered porphyry target.

A Lidar survey or DEM survey would help to identify structures that could control the hydrothermal system. Sourcing a high resolution satellite image would provide a superior base for mapping. Additional IP lines are warranted over the southern side of the Mystery Bowl and across the South Ridge zone.

Further prospecting and soil geochemistry on the south and west parts of the claims and north of the Mystery Bowl is recommended. Additional grid soil lines on the south side of the South Ridge is warranted.

Examination and mapping of the volcanic/ intrusive porphyry bodies south and west of the Tahte zone was completed in 2020 and 2021. This unit was previously assumed to be a late volcanic cap rock overlying the porphyry system, however the presence of a Casino aged porphyry plug

within this unit (Allan, 2014), along with strongly anomalous soils in the saddle and lineament area indicates high potential in and near this unit. The unit extends to the south and should be examined in more detail.

The “Tahte Mystery Bowl” should be tested by some form of drilling capable of reaching bedrock on a 100 m grid. Perhaps a mobile percussion drill, with immediate XRF field testing of bedrock material.

The orientation survey of Ah horizon ultra trace soil geochemistry conducted in 2021 over the Mystery Bowl indicates that this method is useful at locating mineralization at significant depth beneath thick cover, and is relatively easy to collect in permafrost areas. This method should be used in appropriate areas on the property where conventional soils are difficult to collect. It is further hoped that the Ah method might be able to show anomalies beneath thin volcanic cover in the South Ridge area.

A test pit at the site of 1.018 g/t Au & 549 ppm Cu soil sample is warranted. This is the highest grade soil from the property, and lies near the ridge crest about 100 m from the Casino porphyry age date location. This site has very little organic soil, and abundant rock float which should be carefully examined.

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## 20.0 CERTIFICATES

**WILLIAM D. MANN, M.Sc., P.Geo.  
19 HAYES CRESCENT, WHITEHORSE, YUKON Y1A 0E1**

1. I am a member in good standing of Engineers and Geoscientists, British Columbia, License #31907.
2. I am a Graduate of Queen's University, 1986, with a Master of Science Degree in Mineral Exploration Geology.
3. I am a Graduate of the University of British Columbia, 1983, with a Bachelor of Science Degree in Geology.
4. I have worked in mineral exploration and mining continuously since 1979.
5. I participated in the work program on the TAUT claims July 16- 21, 2021.
6. I am a co-owner of the TAUT claims.

January 15, 2022



William D. Mann, M.Sc., P.Geo.

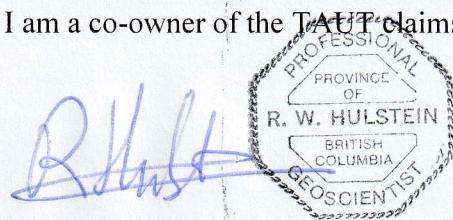


### STATEMENT of QUALIFICATIONS (RWH)

I, Roger W. Hulstein, of:  
 106 Wilson Drive  
 Whitehorse, Yukon Territory  
 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 registered as a professional geoscientist (No. 19127) with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
5. I am the co-author of this report on the Taut Project in the Whitehorse Mining District, Yukon.
6. The report is based on personal examination of selected areas within the project area on July 16 – 21, 2021 and on referenced sources.
7. I am a co-owner of the TAUT claims.



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

January 15, 2022

## **APPENDIX I**

## **COSTS**

## APPENDIX I - COSTS

| <b>Taut Porphyry Project, 2021 - 055; YMEP Final Expenditures to Jan. 10, 2022</b> |                                    |                            |       |      |                    |
|--|------------------------------------|----------------------------|-------|------|--------------------|
| R. Hulstein & Bill Mann  |                                    |                            |       |      |                    |
| 6 Day Field Program (including mob and demobilization): Aug. 10 - 17, 2021         |                                    |                            |       |      |                    |
|  |                                    | Activity                   | Units | Rate | Total              |
| <b>Prep/Unpack</b>   | RH & WDM, 1.5 day each             | Field Prep and unpack      | 3     | 500  | \$1,500.00         |
|  |                                    |                            |       |      |                    |
| <b>Labour/Field</b>  | W.D. Mann                          | Prospecting/ Sampling      | 6     | 500  | \$3,000.00         |
| (Inc mob-demob)  | R. Hulstein                        | Prospecting/ Sampling      | 6     | 500  | \$3,000.00         |
|  |                                    |                            |       |      |                    |
| <b>Field Costs</b>   | \$100 per worker-day               | 5 nights in field x 2      | 10    | 100  | \$1,000.00         |
|  |                                    |                            |       |      |                    |
| <b>Trucks</b>  | \$.60 per km                       | Whitehorse to Carmacks rtn |       |      |                    |
|  |                                    |                            |       |      |                    |
| <b>Helicopter</b>  | Capital Helicopters Invoice 155963 |                            | 4.2   |      | \$6,869.37         |
|  |                                    |                            |       |      |                    |
| <b>Assays</b>  | BV invoice WHI21000267             | Conventional soils         | 90    |      | \$2,938.95         |
|  | BV invoice WHI21000266             | Rocks                      | 5     |      | \$195.48           |
|  | BV invoice WHI21000268             | Ah Soils                   | 47    |      | \$1,505.17         |
|  |                                    |                            |       |      |                    |
| <b>Niton XRF</b>   | \$110/d                            | 6 field days               | 6     | 110  | \$770.00           |
|  |                                    |                            |       |      |                    |
| <b>Thin Sections</b>   | Dr. T Liverton                     | Examination & Report       | 8     | 125  | \$1,050.00         |
|  | Vancouver Petrographics            | Thin section preparation   | 8     |      | \$325.00           |
|  |                                    |                            |       |      |                    |
| <b>Postage</b>   | Thin sections to Van Pet           |                            |       |      | \$13.78            |
|  |                                    |                            |       |      |                    |
| <b>Report &amp; Maps</b>   | WDM & R. Hulstein                  |                            | 6     | 500  | \$3,000.00         |
|  |                                    |                            |       |      |                    |
|  | Subtotal                           |                            |       |      | \$25,167.75        |
|  | <b>TOTAL</b>                       |                            |       |      | <b>\$25,167.75</b> |
|  | <b>YMEP request:</b>               |                            |       |      | <b>\$18,875.81</b> |

**APPENDIX II**

**B-C Horizon Soil Assay Certificates**



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

**Client:** **Mann & Hulstein Prospectors**  
Whitehorse Yukon Canada

Submitted By: Bill Mann  
Receiving Lab: Canada-Whitehorse  
Received: July 26, 2021  
Analysis Start: August 13, 2021  
Report Date: September 15, 2021  
Page: 1 of 4

## CERTIFICATE OF ANALYSIS

WHI21000267.1

### CLIENT JOB INFORMATION

Project: TAUT

Shipment ID:

P.O. Number

Number of Samples: 90

### SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

DISP-RJT-SOIL Immediate Disposal of Soil Reject

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

| Procedure Code | Number of Samples | Code Description                                 | Test Wgt (g) | Report Status | Lab |
|----------------|-------------------|--|--------------|---------------|-----|
| SS80           | 90                | Dry at 60C sieve 100g to -80 mesh                |              |               | WHI |
| AQ201          | 89                | 1:1:1 Aqua Regia digestion ICP-MS analysis       | 15           | Completed     | VAN |
| DISPL          | 90                | Disposal of pulps                                |              |               | VAN |
| SHP01          | 90                | Per sample shipping charges for branch shipments |              |               | VAN |

### ADDITIONAL COMMENTS

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

Invoice To: Mann & Hulstein Prospectors  
Whitehorse Yukon  
Canada

CC:

*Jeffrey Cannon*  
**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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Client: **Mann & Hulstein Prospectors**  
Whitehorse Yukon Canada

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PHONE (604) 253-3158

Project: TAUT  
Report Date: September 15, 2021

Page: 2 of 4

Part: 1 of 2

## CERTIFICATE OF ANALYSIS

WHI21000267.1

| Method<br>Analyte<br>Unit<br>MDL | AQ201 |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                  | Mo    | Cu    | Pb    | Zn    | Ag    | Ni    | Co    | Mn    | Fe    | As    | U     | Au    | Th    | Sr    | Cd    | Sb    | Bi    | V     | Ca    | P     |       |       |       |
|                                  | ppm   | %     | ppm   | ppm   | ppb   | ppm   | ppm   | ppm   | ppm   | ppm   | %     | %     |       |       |       |       |
|                                  | 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 |       |       |       |
| 72810                            | Soil  | 1.3   | 21.8  | 33.6  | 110   | 0.6   | 10.8  | 7.1   | 400   | 2.73  | 10.4  | 0.4   | 20.5  | 1.4   | 17    | 0.6   | 0.4   | 0.3   | 46    | 0.19  | 0.057 |       |       |
| 72811                            | Soil  | 1.0   | 22.7  | 13.6  | 79    | 0.5   | 6.6   | 7.9   | 514   | 1.87  | 5.0   | 0.5   | 12.0  | 1.0   | 18    | 1.0   | 0.6   | 0.2   | 37    | 0.18  | 0.049 |       |       |
| 72812                            | Soil  | 6.6   | 104.9 | 238.7 | 239   | 1.2   | 11.9  | 16.4  | 1775  | 4.88  | 21.5  | 1.6   | 48.2  | 1.6   | 18    | 0.8   | 2.6   | 0.9   | 51    | 0.17  | 0.105 |       |       |
| 72813                            | Soil  | 4.5   | 50.9  | 36.8  | 87    | 0.5   | 11.0  | 9.0   | 254   | 3.58  | 12.7  | 1.3   | 17.4  | 4.9   | 17    | 1.0   | 0.8   | 0.3   | 61    | 0.22  | 0.075 |       |       |
| 72814                            | Soil  | 17.0  | 57.8  | 81.6  | 102   | 2.0   | 10.0  | 21.4  | 1339  | 13.68 | 15.7  | 1.4   | 27.5  | 4.4   | 23    | 1.3   | 1.6   | 0.3   | 37    | 0.28  | 0.101 |       |       |
| 72815                            | Soil  | 3.2   | 66.2  | 27.4  | 169   | 0.4   | 26.4  | 13.2  | 411   | 4.54  | 6.4   | 1.0   | 21.7  | 11.0  | 21    | 0.4   | 0.5   | 0.3   | 65    | 0.34  | 0.082 |       |       |
| 72816                            | Soil  | 1.1   | 39.3  | 43.4  | 129   | 0.6   | 11.0  | 8.1   | 439   | 3.83  | 9.1   | 0.9   | 201.0 | 6.0   | 31    | 0.4   | 0.8   | 0.7   | 64    | 0.29  | 0.086 |       |       |
| 72817                            | Soil  | 0.3   | 12.6  | 3.6   | 31    | 0.2   | 2.8   | 15.5  | 911   | 1.30  | 1.0   | 0.2   | 5.6   | 1.0   | 20    | 0.3   | 0.1   | <0.1  | 30    | 0.26  | 0.096 |       |       |
| 72818                            | Soil  | 0.5   | 14.5  | 10.8  | 49    | 0.4   | 3.9   | 2.4   | 138   | 0.81  | 1.7   | 0.4   | 11.9  | 1.0   | 16    | 0.2   | 0.2   | 0.2   | 16    | 0.25  | 0.070 |       |       |
| 72819                            | Soil  | 1.7   | 34.9  | 29.1  | 185   | 0.2   | 15.3  | 13.4  | 941   | 3.48  | 6.9   | 0.5   | 32.3  | 2.7   | 42    | 0.8   | 0.5   | 0.6   | 61    | 0.74  | 0.063 |       |       |
| 72820                            | Soil  | 1.6   | 24.8  | 27.7  | 128   | 0.2   | 11.7  | 12.1  | 558   | 6.55  | 10.0  | 0.7   | 11.5  | 3.8   | 21    | 0.7   | 0.6   | 0.1   | 70    | 0.40  | 0.104 |       |       |
| 72821                            | Soil  | 0.7   | 8.7   | 5.1   | 22    | 0.2   | 2.6   | 16.1  | 947   | 0.93  | 1.9   | 0.2   | 3.5   | 0.4   | 12    | 0.3   | <0.1  | <0.1  | 22    | 0.15  | 0.062 |       |       |
| 72822                            | Soil  | 1.5   | 29.6  | 16.0  | 152   | 0.3   | 15.2  | 17.3  | 1189  | 3.20  | 6.8   | 0.5   | 26.1  | 1.7   | 25    | 1.3   | 0.3   | 0.2   | 63    | 0.33  | 0.087 |       |       |
| 72823                            | Soil  | 1.9   | 17.5  | 8.8   | 53    | 0.2   | 7.3   | 8.7   | 328   | 3.30  | 4.5   | 0.3   | 9.1   | 1.4   | 23    | 0.4   | 0.2   | 0.1   | 66    | 0.32  | 0.091 |       |       |
| 72824                            | Soil  | 0.5   | 33.2  | 2.9   | 19    | 0.2   | 2.4   | 4.6   | 747   | 2.64  | 2.7   | 0.3   | 5.8   | 0.6   | 17    | 0.3   | 0.1   | <0.1  | 61    | 0.27  | 0.078 |       |       |
| 72825                            | Soil  | 1.5   | 23.9  | 9.4   | 88    | <0.1  | 8.6   | 9.1   | 580   | 3.29  | 4.3   | 0.3   | 8.6   | 2.2   | 22    | 0.2   | 0.2   | 0.2   | 77    | 0.29  | 0.085 |       |       |
| 72826                            | Soil  | 4.2   | 35.1  | 20.1  | 101   | 0.3   | 9.8   | 9.3   | 410   | 5.77  | 8.5   | 0.6   | 14.5  | 3.0   | 30    | 0.3   | 0.3   | 0.2   | 65    | 0.35  | 0.116 |       |       |
| 72827                            | Soil  | 2.1   | 29.5  | 29.2  | 85    | 0.2   | 14.4  | 8.4   | 411   | 3.28  | 5.2   | 0.5   | 6.0   | 3.3   | 47    | 0.3   | 0.3   | 0.1   | 68    | 0.37  | 0.064 |       |       |
| 72828                            | Soil  | 2.6   | 24.0  | 19.5  | 103   | 0.2   | 15.1  | 7.3   | 455   | 3.38  | 4.4   | 0.6   | 28.5  | 4.7   | 42    | 0.5   | 0.2   | 0.3   | 71    | 0.42  | 0.055 |       |       |
| 72829                            | Soil  | 0.7   | 17.5  | 24.6  | 72    | <0.1  | 18.2  | 9.3   | 289   | 2.57  | 6.4   | 0.6   | 5.7   | 3.8   | 16    | 0.3   | 0.4   | 0.1   | 65    | 0.17  | 0.029 |       |       |
| 72830                            | Soil  | 0.7   | 16.3  | 11.3  | 66    | <0.1  | 17.5  | 8.2   | 283   | 2.78  | 6.6   | 0.4   | 1.1   | 2.8   | 15    | 0.3   | 0.3   | 0.1   | 63    | 0.17  | 0.043 |       |       |
| 72831                            | Soil  | 1.4   | 12.6  | 6.8   | 119   | <0.1  | 14.3  | 14.4  | 549   | 4.76  | 6.0   | 0.5   | <0.5  | 4.2   | 22    | <0.1  | 0.2   | <0.1  | 116   | 0.40  | 0.129 |       |       |
| 72832                            | Soil  | 2.1   | 73.6  | 7.4   | 104   | <0.1  | 22.3  | 14.2  | 464   | 4.19  | 8.2   | 0.4   | 1.6   | 3.5   | 29    | 0.1   | 0.3   | <0.1  | 100   | 0.37  | 0.095 |       |       |
| 72833                            | Soil  | 0.6   | 24.0  | 4.6   | 158   | <0.1  | 11.2  | 7.7   | 458   | 2.70  | 3.3   | 0.7   | <0.5  | 1.5   | 82    | 0.7   | 0.1   | <0.1  | 70    | 1.04  | 0.208 |       |       |
| 72834                            | Soil  | 0.4   | 6.5   | 15.0  | 71    | <0.1  | 5.0   | 5.1   | 1173  | 2.28  | 7.5   | 0.5   | 0.6   | 5.5   | 27    | <0.1  | 0.1   | 0.1   | 31    | 0.48  | 0.033 |       |       |
| 72835                            | Soil  | 0.7   | 10.5  | 7.2   | 138   | <0.1  | 18.4  | 14.3  | 671   | 5.07  | 7.6   | 0.9   | 0.7   | 4.9   | 28    | 0.1   | 0.3   | 0.2   | 104   | 0.44  | 0.115 |       |       |
| 72836                            | Soil  | 0.5   | 10.9  | 2.9   | 136   | <0.1  | 23.5  | 23.6  | 1043  | 6.55  | 2.0   | 0.8   | <0.5  | 6.0   | 46    | 0.1   | 0.2   | <0.1  | 155   | 1.05  | 0.325 |       |       |
| 72837                            | Soil  | 0.3   | 13.9  | 4.0   | 84    | <0.1  | 15.9  | 15.2  | 635   | 3.63  | 2.6   | 0.4   | 0.7   | 5.4   | 36    | <0.1  | 0.1   | <0.1  | 101   | 0.71  | 0.192 |       |       |
| 72838                            | Soil  | 0.7   | 23.0  | 12.0  | 105   | <0.1  | 25.6  | 12.0  | 427   | 3.33  | 8.0   | 0.6   | 1.6   | 3.4   | 16    | 0.5   | 0.4   | 0.1   | 75    | 0.19  | 0.027 |       |       |
| 72839                            | Soil  | 0.5   | 15.8  | 16.0  | 86    | <0.1  | 19.9  | 9.8   | 359   | 2.76  | 6.7   | 0.6   | 1.2   | 3.5   | 15    | 0.5   | 0.4   | <0.1  | 64    | 0.17  | 0.034 |       |       |

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Project: TAUT  
Report Date: September 15, 2021

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Part: 2 of 2

## CERTIFICATE OF ANALYSIS

WHI21000267.1

| Method<br>Analyte<br>Unit<br>MDL | AQ201 |      |      |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
|                                  | La    | Cr    | Mg    | Ba    | Ti    | B     | Al    | Na    | K     | W     | Hg    | Sc    | Tl    | S     | Ga    | Se    | Te   |      |
|                                  | ppm   | ppm   | %     | ppm   | %     | ppm   | %     | %     | %     | ppm   | ppm   | ppm   | ppm   | %     | ppm   | ppm   | ppm  |      |
|                                  | 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  |      |
| 72810                            | Soil  | 10    | 20    | 0.36  | 130   | 0.028 | <1    | 1.74  | 0.016 | 0.06  | 0.1   | 0.05  | 2.9   | 0.1   | <0.05 | 6     | <0.5 | 0.3  |
| 72811                            | Soil  | 9     | 12    | 0.25  | 141   | 0.046 | 1     | 0.85  | 0.033 | 0.08  | <0.1  | 0.04  | 1.9   | 0.1   | <0.05 | 4     | <0.5 | <0.2 |
| 72812                            | Soil  | 13    | 23    | 0.42  | 171   | 0.031 | <1    | 1.57  | 0.017 | 0.06  | <0.1  | 0.14  | 3.9   | 0.1   | 0.07  | 6     | 1.2  | 1.0  |
| 72813                            | Soil  | 27    | 23    | 0.42  | 124   | 0.070 | <1    | 1.32  | 0.019 | 0.11  | <0.1  | 0.07  | 3.8   | 0.1   | <0.05 | 5     | 0.5  | 0.3  |
| 72814                            | Soil  | 19    | 19    | 0.22  | 198   | 0.023 | <1    | 1.06  | 0.015 | 0.05  | 0.1   | 0.18  | 4.5   | <0.1  | 0.08  | 3     | 1.0  | 0.5  |
| 72815                            | Soil  | 29    | 41    | 0.80  | 175   | 0.115 | <1    | 2.30  | 0.014 | 0.26  | <0.1  | 0.07  | 7.4   | 0.2   | <0.05 | 8     | <0.5 | 0.4  |
| 72816                            | Soil  | 20    | 25    | 0.86  | 181   | 0.050 | <1    | 2.13  | 0.015 | 0.11  | <0.1  | 0.02  | 5.6   | 0.1   | 0.06  | 7     | 0.5  | 0.6  |
| 72817                            | Soil  | 7     | 5     | 0.15  | 102   | 0.059 | <1    | 0.39  | 0.028 | 0.03  | <0.1  | 0.02  | 1.1   | <0.1  | 0.07  | 2     | <0.5 | <0.2 |
| 72818                            | Soil  | 6     | 7     | 0.23  | 114   | 0.026 | <1    | 0.65  | 0.034 | 0.04  | <0.1  | 0.02  | 1.7   | <0.1  | 0.09  | 2     | <0.5 | <0.2 |
| 72819                            | Soil  | 11    | 26    | 0.73  | 188   | 0.074 | 2     | 1.47  | 0.017 | 0.14  | <0.1  | 0.04  | 4.3   | <0.1  | 0.10  | 7     | <0.5 | 0.7  |
| 72820                            | Soil  | 17    | 24    | 0.78  | 195   | 0.052 | <1    | 1.73  | 0.018 | 0.10  | <0.1  | 0.02  | 5.6   | <0.1  | <0.05 | 6     | <0.5 | 0.2  |
| 72821                            | Soil  | 4     | 6     | 0.19  | 57    | 0.032 | <1    | 0.47  | 0.033 | 0.02  | <0.1  | <0.01 | 1.1   | <0.1  | 0.06  | 2     | <0.5 | <0.2 |
| 72822                            | Soil  | 12    | 34    | 0.80  | 220   | 0.059 | 1     | 2.13  | 0.016 | 0.06  | 0.1   | 0.03  | 4.9   | 0.1   | 0.06  | 8     | 0.5  | 0.3  |
| 72823                            | Soil  | 8     | 18    | 0.53  | 129   | 0.047 | <1    | 1.34  | 0.020 | 0.04  | <0.1  | 0.02  | 2.9   | <0.1  | 0.06  | 6     | <0.5 | 0.2  |
| 72824                            | Soil  | 6     | 7     | 0.16  | 63    | 0.031 | <1    | 0.76  | 0.036 | 0.03  | <0.1  | 0.02  | 1.6   | <0.1  | 0.11  | 2     | <0.5 | <0.2 |
| 72825                            | Soil  | 9     | 19    | 0.86  | 163   | 0.082 | <1    | 2.03  | 0.025 | 0.12  | <0.1  | 0.01  | 4.8   | 0.1   | <0.05 | 7     | <0.5 | 0.3  |
| 72826                            | Soil  | 19    | 22    | 0.91  | 211   | 0.015 | <1    | 2.03  | 0.014 | 0.07  | <0.1  | 0.04  | 5.5   | <0.1  | <0.05 | 7     | 0.8  | 0.2  |
| 72827                            | Soil  | 14    | 32    | 0.82  | 227   | 0.074 | <1    | 2.03  | 0.024 | 0.10  | <0.1  | 0.01  | 5.8   | 0.1   | 0.07  | 7     | <0.5 | <0.2 |
| 72828                            | Soil  | 18    | 37    | 1.07  | 329   | 0.055 | <1    | 2.34  | 0.020 | 0.11  | <0.1  | 0.02  | 6.7   | 0.1   | 0.09  | 7     | 0.7  | <0.2 |
| 72829                            | Soil  | 10    | 31    | 0.51  | 135   | 0.092 | 1     | 2.01  | 0.011 | 0.09  | 0.1   | 0.20  | 4.3   | 0.1   | <0.05 | 6     | <0.5 | <0.2 |
| 72830                            | Soil  | 8     | 26    | 0.47  | 287   | 0.087 | 1     | 2.09  | 0.012 | 0.11  | 0.3   | 0.15  | 4.0   | <0.1  | 0.07  | 6     | <0.5 | <0.2 |
| 72831                            | Soil  | 9     | 29    | 1.24  | 189   | 0.200 | <1    | 2.82  | 0.013 | 0.51  | <0.1  | 0.02  | 8.1   | 0.3   | <0.05 | 11    | <0.5 | <0.2 |
| 72832                            | Soil  | 11    | 46    | 1.16  | 176   | 0.182 | <1    | 3.03  | 0.016 | 0.37  | 0.1   | 0.01  | 6.3   | 0.2   | 0.10  | 10    | <0.5 | <0.2 |
| 72833                            | Soil  | 26    | 22    | 0.58  | 277   | 0.091 | 3     | 1.45  | 0.018 | 0.26  | <0.1  | 0.03  | 3.5   | 0.1   | 0.16  | 6     | 0.6  | <0.2 |
| 72834                            | Soil  | 21    | 8     | 0.38  | 195   | 0.046 | <1    | 1.56  | 0.011 | 0.25  | <0.1  | 0.01  | 4.1   | 0.2   | 0.08  | 6     | <0.5 | <0.2 |
| 72835                            | Soil  | 11    | 46    | 1.08  | 158   | 0.135 | 1     | 3.33  | 0.015 | 0.32  | <0.1  | 0.01  | 10.3  | 0.3   | <0.05 | 13    | <0.5 | <0.2 |
| 72836                            | Soil  | 27    | 93    | 1.84  | 233   | 0.210 | <1    | 3.55  | 0.023 | 0.85  | <0.1  | <0.01 | 13.1  | 0.4   | <0.05 | 15    | <0.5 | <0.2 |
| 72837                            | Soil  | 32    | 32    | 1.34  | 355   | 0.206 | <1    | 2.37  | 0.018 | 0.53  | <0.1  | <0.01 | 5.3   | 0.3   | <0.05 | 8     | <0.5 | <0.2 |
| 72838                            | Soil  | 11    | 36    | 0.63  | 159   | 0.107 | 2     | 2.46  | 0.012 | 0.10  | 0.1   | 0.05  | 5.4   | 0.1   | 0.09  | 7     | <0.5 | <0.2 |
| 72839                            | Soil  | 12    | 30    | 0.49  | 178   | 0.105 | 2     | 2.02  | 0.011 | 0.09  | 0.2   | 0.18  | 4.8   | <0.1  | 0.08  | 6     | <0.5 | <0.2 |

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Project: TAUT  
Report Date: September 15, 2021

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Part: 1 of 2

## CERTIFICATE OF ANALYSIS

WHI21000267.1

| Method<br>Analyte<br>Unit<br>MDL | 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     |       |       |
|                                  | ppm   | %     | ppm   | ppm   | ppb   | ppm    | ppm   | ppm   | ppm   | ppm   | %     | %     |       |       |       |
|                                  | 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 |       |       |
| 72840                            | Soil  | 0.6   | 22.9  | 16.1  | 78    | 0.2   | 21.5  | 11.6  | 608   | 3.42  | 8.2   | 0.5   | 2.4    | 2.6   | 18    | 0.2   | 0.4   | 0.1   | 77    | 0.21  | 0.050 |       |
| 72841                            | Soil  | 1.1   | 49.4  | 80.5  | 204   | 1.3   | 20.9  | 16.6  | 892   | 4.43  | 17.6  | 1.0   | 44.4   | 5.3   | 25    | 1.1   | 0.7   | 2.3   | 66    | 0.39  | 0.103 |       |
| 72842                            | Soil  | 1.3   | 47.2  | 44.6  | 184   | 1.1   | 26.4  | 12.7  | 590   | 4.95  | 12.5  | 1.1   | 29.1   | 8.6   | 38    | 0.5   | 0.6   | 0.6   | 78    | 0.75  | 0.091 |       |
| 72843                            | Soil  | 8.8   | 36.4  | 14.4  | 55    | 0.3   | 11.3  | 5.7   | 147   | 2.10  | 5.2   | 0.8   | 10.9   | 1.6   | 32    | 0.2   | 0.3   | 0.2   | 53    | 0.24  | 0.099 |       |
| 72844                            | Soil  | 6.7   | 95.7  | 11.6  | 54    | 0.2   | 9.5   | 6.5   | 218   | 2.28  | 4.0   | 0.9   | 16.7   | 3.3   | 30    | 0.2   | 0.3   | 0.2   | 52    | 0.24  | 0.075 |       |
| 72845                            | Soil  | 5.9   | 60.7  | 15.9  | 61    | 0.3   | 13.6  | 6.1   | 165   | 2.67  | 7.0   | 1.0   | 14.6   | 3.0   | 34    | 0.3   | 0.4   | 0.3   | 57    | 0.26  | 0.071 |       |
| 72846                            | Soil  | 10.7  | 39.9  | 12.0  | 45    | <0.1  | 8.8   | 8.9   | 457   | 2.59  | 6.6   | 0.4   | 4.4    | 1.0   | 17    | 0.1   | 0.3   | 0.2   | 62    | 0.14  | 0.056 |       |
| 72847                            | Soil  | 2.8   | 67.3  | 26.2  | 114   | 0.3   | 13.5  | 14.8  | 823   | 4.97  | 9.0   | 1.1   | 18.5   | 7.5   | 81    | 0.4   | 0.3   | 0.5   | 72    | 0.25  | 0.099 |       |
| 72848                            | Soil  | 1.5   | 56.6  | 18.3  | 233   | <0.1  | 16.4  | 24.7  | 1345  | 4.47  | 5.8   | 1.0   | 8.8    | 6.4   | 26    | 0.4   | 0.3   | 0.5   | 63    | 0.39  | 0.060 |       |
| 72849                            | Soil  | 2.8   | 41.3  | 14.7  | 173   | 0.2   | 27.2  | 18.5  | 878   | 4.00  | 8.8   | 0.8   | 5.0    | 5.5   | 22    | 0.8   | 0.4   | 0.4   | 76    | 0.26  | 0.070 |       |
| 72850                            | Soil  | 4.7   | 549.8 | 80.8  | 156   | 9.9   | 10.8  | 9.7   | 651   | 4.31  | 34.3  | 1.6   | 1018.2 | 2.7   | 155   | 0.4   | 23.5  | 19.4  | 49    | 0.54  | 0.097 |       |
| 72851                            | Soil  | 3.2   | 48.6  | 28.1  | 113   | 0.5   | 16.0  | 32.7  | 920   | 4.26  | 32.0  | 0.9   | 79.6   | 2.7   | 57    | 0.4   | 0.4   | 0.9   | 51    | 0.20  | 0.044 |       |
| 72852                            | Soil  | 9.8   | 114.6 | 46.0  | 140   | 0.9   | 10.5  | 7.6   | 395   | 5.43  | 12.6  | 1.1   | 98.4   | 6.9   | 125   | 0.4   | 0.8   | 1.0   | 58    | 0.16  | 0.110 |       |
| 72853                            | Soil  | 6.5   | 99.0  | 8.9   | 74    | 0.2   | 13.0  | 9.2   | 323   | 4.38  | 4.0   | 1.4   | 3.2    | 4.4   | 75    | 0.2   | 0.2   | 0.7   | 49    | 0.21  | 0.099 |       |
| 72854                            | Soil  | 1.3   | 46.7  | 23.5  | 85    | 0.2   | 11.8  | 20.4  | 696   | 4.17  | 18.7  | 0.6   | 45.0   | 2.7   | 104   | 0.4   | 0.3   | 0.7   | 41    | 0.19  | 0.069 |       |
| 72855                            | Soil  | 1.2   | 37.0  | 51.5  | 106   | 0.9   | 6.9   | 10.1  | 668   | 4.49  | 10.7  | 0.5   | 41.4   | 3.0   | 42    | 0.3   | 0.3   | 2.3   | 38    | 0.13  | 0.086 |       |
| 72856                            | Soil  | 1.9   | 25.0  | 109.8 | 176   | 0.9   | 11.4  | 10.4  | 993   | 3.07  | 15.2  | 0.7   | 28.2   | 2.7   | 12    | 0.6   | 1.2   | 0.5   | 41    | 0.09  | 0.050 |       |
| Y647801                          | Soil  | 11.2  | 46.2  | 13.9  | 73    | 0.2   | 10.6  | 9.3   | 272   | 4.80  | 9.7   | 0.6   | 20.1   | 3.2   | 36    | 0.1   | 0.2   | 0.3   | 67    | 0.29  | 0.070 |       |
| Y647802                          | Soil  | 6.5   | 45.8  | 9.8   | 54    | 0.2   | 9.7   | 5.5   | 295   | 5.60  | 3.6   | 0.5   | 22.3   | 2.3   | 66    | 0.2   | 0.2   | 0.3   | 85    | 0.19  | 0.071 |       |
| Y647803                          | Soil  | 3.4   | 46.3  | 13.5  | 82    | 0.3   | 11.0  | 12.6  | 587   | 2.80  | 3.1   | 0.6   | 15.3   | 2.7   | 33    | 0.2   | 0.2   | 0.3   | 58    | 0.32  | 0.086 |       |
| Y647804                          | Soil  | 3.1   | 67.8  | 6.1   | 83    | 0.2   | 15.8  | 15.1  | 812   | 3.54  | 3.2   | 0.3   | 26.5   | 2.1   | 31    | 0.2   | 0.1   | 0.2   | 79    | 0.41  | 0.076 |       |
| Y647805                          | Soil  | 2.7   | 60.0  | 14.0  | 111   | 0.6   | 14.3  | 16.4  | 921   | 2.91  | 4.3   | 0.4   | 27.1   | 1.4   | 34    | 0.2   | 0.3   | 0.4   | 61    | 0.31  | 0.083 |       |
| Y647806                          | Soil  | 5.7   | 56.4  | 8.6   | 82    | 0.1   | 8.6   | 6.6   | 298   | 2.75  | 2.2   | 0.3   | 23.2   | 3.0   | 29    | 0.3   | 0.2   | 0.2   | 59    | 0.28  | 0.065 |       |
| Y647807                          | Soil  | 5.5   | 39.2  | 12.5  | 90    | 0.1   | 11.7  | 8.0   | 371   | 3.48  | 4.0   | 0.4   | 16.9   | 2.6   | 42    | 0.2   | 0.2   | 0.3   | 71    | 0.29  | 0.076 |       |
| Y647808                          | Soil  | 8.2   | 43.7  | 15.0  | 97    | 0.3   | 10.8  | 9.6   | 307   | 4.10  | 4.5   | 0.6   | 15.5   | 3.2   | 49    | 0.3   | 0.3   | 0.2   | 57    | 0.27  | 0.086 |       |
| Y647809                          | Soil  | 2.2   | 31.6  | 13.4  | 92    | 0.2   | 13.3  | 11.9  | 707   | 3.77  | 5.2   | 0.5   | 8.0    | 3.3   | 33    | 0.3   | 0.3   | 0.2   | 77    | 0.26  | 0.059 |       |
| Y647810                          | Soil  | 3.9   | 24.4  | 17.4  | 84    | 0.1   | 10.0  | 7.4   | 295   | 3.97  | 6.1   | 0.6   | 6.4    | 6.4   | 24    | <0.1  | 0.2   | 0.9   | 55    | 0.16  | 0.052 |       |
| Y647811                          | Soil  | 1.7   | 31.2  | 9.0   | 99    | 0.1   | 15.0  | 13.7  | 874   | 3.67  | 5.9   | 0.5   | 6.3    | 2.5   | 39    | 0.2   | 0.2   | 0.4   | 83    | 0.52  | 0.142 |       |
| Y647812                          | Soil  | 2.2   | 46.4  | 19.4  | 119   | 0.2   | 12.4  | 43.3  | 3270  | 4.37  | 7.1   | 0.5   | 10.5   | 3.2   | 34    | 0.4   | 0.3   | 0.5   | 82    | 0.35  | 0.113 |       |
| Y647813                          | Soil  | 2.8   | 31.7  | 11.5  | 59    | 0.2   | 12.6  | 9.4   | 749   | 3.26  | 4.8   | 0.6   | 45.6   | 2.6   | 57    | <0.1  | 0.2   | 0.2   | 57    | 0.36  | 0.077 |       |

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Project: TAUT  
Report Date: September 15, 2021

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Part: 2 of 2

## CERTIFICATE OF ANALYSIS

WHI21000267.1

| Method<br>Analyte<br>Unit<br>MDL | AQ201 |      |      |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
|                                  | La    | Cr    | Mg    | Ba    | Ti    | B     | Al    | Na    | K     | W     | Hg    | Sc    | Tl    | S     | Ga    | Se    | Te   |      |
|                                  | ppm   | ppm   | %     | ppm   | %     | ppm   | %     | %     | %     | ppm   | ppm   | ppm   | ppm   | %     | ppm   | ppm   | ppm  |      |
|                                  | 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  |      |
| 72840                            | Soil  | 13    | 32    | 0.78  | 279   | 0.070 | <1    | 2.93  | 0.015 | 0.10  | <0.1  | 0.06  | 4.7   | 0.1   | 0.06  | 7     | <0.5 | <0.2 |
| 72841                            | Soil  | 23    | 35    | 0.81  | 145   | 0.083 | <1    | 1.98  | 0.015 | 0.12  | <0.1  | 0.04  | 5.9   | 0.1   | 0.07  | 6     | <0.5 | 1.3  |
| 72842                            | Soil  | 33    | 48    | 1.17  | 293   | 0.127 | <1    | 2.52  | 0.021 | 0.33  | <0.1  | 0.06  | 9.4   | 0.2   | 0.10  | 9     | <0.5 | 0.6  |
| 72843                            | Soil  | 13    | 29    | 0.50  | 157   | 0.058 | <1    | 1.90  | 0.014 | 0.09  | <0.1  | 0.04  | 3.3   | 0.2   | 0.11  | 6     | <0.5 | <0.2 |
| 72844                            | Soil  | 13    | 23    | 0.55  | 199   | 0.079 | 1     | 1.89  | 0.011 | 0.12  | <0.1  | 0.04  | 4.3   | 0.2   | <0.05 | 5     | <0.5 | <0.2 |
| 72845                            | Soil  | 15    | 30    | 0.60  | 255   | 0.078 | 2     | 2.30  | 0.012 | 0.08  | <0.1  | 0.06  | 5.1   | 0.1   | <0.05 | 7     | <0.5 | <0.2 |
| 72846                            | Soil  | 8     | 21    | 0.41  | 158   | 0.070 | 1     | 1.34  | 0.010 | 0.07  | 0.1   | 0.02  | 2.5   | 0.1   | 0.07  | 6     | <0.5 | <0.2 |
| 72847                            | Soil  | 23    | 24    | 1.01  | 239   | 0.105 | <1    | 2.51  | 0.052 | 0.44  | 0.1   | <0.01 | 7.5   | 0.3   | 0.34  | 9     | 0.7  | 0.4  |
| 72848                            | Soil  | 18    | 23    | 1.23  | 181   | 0.083 | <1    | 3.45  | 0.008 | 0.30  | <0.1  | 0.01  | 6.6   | 0.2   | <0.05 | 9     | <0.5 | 0.2  |
| 72849                            | Soil  | 13    | 41    | 0.97  | 183   | 0.130 | 2     | 3.00  | 0.015 | 0.28  | 0.1   | 0.02  | 6.3   | 0.2   | <0.05 | 8     | <0.5 | 0.3  |
| 72850                            | Soil  | 12    | 24    | 0.63  | 191   | 0.009 | <1    | 2.25  | 0.027 | 0.06  | <0.1  | 0.07  | 4.0   | 0.2   | <0.05 | 6     | 0.6  | 3.8  |
| 72851                            | Soil  | 12    | 28    | 0.73  | 155   | 0.039 | <1    | 2.06  | 0.018 | 0.06  | <0.1  | 0.02  | 4.2   | 0.1   | <0.05 | 6     | 0.6  | 1.6  |
| 72852                            | Soil  | 13    | 45    | 0.51  | 192   | 0.031 | <1    | 1.53  | 0.044 | 0.18  | <0.1  | 0.04  | 6.1   | 0.1   | 0.39  | 6     | 1.4  | 1.1  |
| 72853                            | Soil  | 16    | 39    | 0.28  | 205   | 0.012 | <1    | 1.03  | 0.040 | 0.09  | <0.1  | <0.01 | 8.9   | <0.1  | 0.17  | 4     | 0.9  | 0.3  |
| 72854                            | Soil  | 10    | 23    | 0.59  | 127   | 0.030 | <1    | 1.71  | 0.019 | 0.05  | <0.1  | 0.02  | 3.1   | <0.1  | <0.05 | 4     | <0.5 | 1.1  |
| 72855                            | Soil  | 16    | 21    | 0.71  | 240   | 0.006 | <1    | 1.69  | 0.038 | 0.06  | <0.1  | 0.03  | 3.1   | <0.1  | 0.16  | 5     | 1.0  | 1.8  |
| 72856                            | Soil  | 14    | 19    | 0.35  | 133   | 0.024 | <1    | 1.55  | 0.010 | 0.08  | <0.1  | 0.05  | 3.3   | 0.2   | <0.05 | 4     | <0.5 | 0.7  |
| Y647801                          | Soil  | 13    | 29    | 0.92  | 176   | 0.036 | <1    | 2.09  | 0.012 | 0.08  | <0.1  | 0.03  | 5.5   | 0.2   | <0.05 | 7     | <0.5 | 0.3  |
| Y647802                          | Soil  | 12    | 37    | 1.20  | 279   | 0.079 | <1    | 2.84  | 0.016 | 0.15  | <0.1  | 0.04  | 9.0   | 0.2   | 0.06  | 9     | <0.5 | 0.3  |
| Y647803                          | Soil  | 11    | 26    | 0.85  | 188   | 0.063 | <1    | 2.04  | 0.017 | 0.09  | <0.1  | 0.04  | 5.2   | 0.1   | 0.07  | 7     | 0.5  | <0.2 |
| Y647804                          | Soil  | 8     | 41    | 1.16  | 183   | 0.110 | <1    | 2.09  | 0.024 | 0.15  | <0.1  | 0.01  | 5.9   | 0.1   | <0.05 | 7     | <0.5 | <0.2 |
| Y647805                          | Soil  | 10    | 43    | 0.85  | 159   | 0.044 | <1    | 1.87  | 0.016 | 0.06  | <0.1  | 0.03  | 4.1   | 0.1   | 0.08  | 7     | <0.5 | 0.3  |
| Y647806                          | Soil  | 11    | 24    | 0.91  | 125   | 0.055 | <1    | 1.60  | 0.015 | 0.09  | <0.1  | <0.01 | 4.5   | <0.1  | <0.05 | 5     | <0.5 | <0.2 |
| Y647807                          | Soil  | 11    | 27    | 1.07  | 215   | 0.057 | <1    | 2.53  | 0.020 | 0.12  | <0.1  | 0.02  | 5.9   | 0.1   | <0.05 | 8     | <0.5 | <0.2 |
| Y647808                          | Soil  | 18    | 26    | 0.87  | 231   | 0.041 | <1    | 2.47  | 0.025 | 0.14  | <0.1  | 0.02  | 5.4   | 0.1   | 0.13  | 7     | 0.9  | 0.2  |
| Y647809                          | Soil  | 12    | 33    | 1.01  | 240   | 0.110 | <1    | 2.18  | 0.023 | 0.26  | <0.1  | 0.02  | 6.9   | 0.1   | 0.17  | 8     | <0.5 | <0.2 |
| Y647810                          | Soil  | 21    | 23    | 0.67  | 160   | 0.109 | <1    | 1.57  | 0.016 | 0.28  | <0.1  | 0.02  | 6.7   | 0.2   | 0.12  | 5     | <0.5 | 0.5  |
| Y647811                          | Soil  | 13    | 42    | 1.15  | 257   | 0.150 | <1    | 2.22  | 0.019 | 0.31  | <0.1  | 0.01  | 5.9   | 0.2   | 0.09  | 8     | <0.5 | 0.4  |
| Y647812                          | Soil  | 15    | 28    | 0.82  | 264   | 0.092 | <1    | 2.14  | 0.014 | 0.16  | <0.1  | 0.02  | 5.7   | 0.2   | 0.08  | 9     | <0.5 | 0.4  |
| Y647813                          | Soil  | 16    | 27    | 0.71  | 306   | 0.063 | <1    | 1.74  | 0.035 | 0.12  | 0.1   | 0.02  | 4.4   | 0.1   | 0.15  | 6     | <0.5 | 0.2  |

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Report Date: September 15, 2021

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Part: 1 of 2

## CERTIFICATE OF ANALYSIS

WHI21000267.1

| Method<br>Analyte<br>Unit<br>MDL | AQ201 |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                  | Mo    | Cu    | Pb    | Zn    | Ag    | Ni    | Co    | Mn    | Fe    | As    | U     | Au    | Th    | Sr    | Cd    | Sb    | Bi    | V     | Ca    | P     |       |       |
|                                  | ppm   | %     | ppm   | ppm   | ppb   | ppm   | ppm   | ppm   | ppm   | ppm   | %     | %     |       |       |       |
|                                  | 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 |       |       |
| Y647814                          | Soil  | 1.8   | 33.4  | 10.4  | 73    | <0.1  | 14.9  | 9.7   | 554   | 3.27  | 5.0   | 0.5   | 8.3   | 2.6   | 45    | 0.1   | 0.2   | 0.1   | 84    | 0.32  | 0.070 |       |
| Y647815                          | Soil  | 1.9   | 45.1  | 13.9  | 89    | 0.1   | 12.4  | 13.8  | 871   | 3.47  | 6.0   | 0.4   | 19.2  | 2.4   | 38    | 0.3   | 0.3   | 0.2   | 82    | 0.36  | 0.068 |       |
| Y647816                          | Soil  | 2.0   | 30.3  | 18.8  | 107   | 0.2   | 13.4  | 13.0  | 1045  | 3.49  | 6.3   | 0.5   | 8.8   | 2.1   | 31    | 0.3   | 0.3   | 0.2   | 86    | 0.34  | 0.055 |       |
| Y647817                          | Soil  | 1.8   | 26.1  | 16.1  | 97    | 0.2   | 7.7   | 6.1   | 497   | 3.35  | 3.4   | 0.5   | 18.8  | 2.9   | 59    | 0.3   | 0.2   | 0.2   | 61    | 0.27  | 0.087 |       |
| Y647818                          | Soil  | 1.7   | 31.2  | 14.2  | 113   | 0.1   | 20.3  | 7.4   | 405   | 2.81  | 6.9   | 1.4   | 2.9   | 2.8   | 36    | 0.2   | 0.3   | 0.1   | 56    | 0.43  | 0.067 |       |
| Y647819                          | Soil  | 0.7   | 13.3  | 6.5   | 44    | <0.1  | 8.6   | 5.4   | 282   | 1.64  | 3.0   | 0.4   | 0.9   | 1.2   | 25    | 0.1   | 0.1   | <0.1  | 43    | 0.31  | 0.036 |       |
| Y647820                          | Soil  | 0.7   | 12.9  | 8.3   | 39    | <0.1  | 10.2  | 4.4   | 288   | 1.52  | 2.9   | 0.6   | 1.3   | 2.1   | 20    | 0.1   | 0.1   | <0.1  | 39    | 0.30  | 0.036 |       |
| Y647821                          | Soil  | 0.9   | 22.3  | 27.9  | 65    | <0.1  | 16.4  | 8.0   | 498   | 2.62  | 6.5   | 0.6   | 2.9   | 2.0   | 35    | 0.2   | 0.3   | 0.1   | 55    | 0.46  | 0.043 |       |
| Y647822                          | Soil  | 0.8   | 9.2   | 11.0  | 40    | <0.1  | 8.9   | 4.1   | 187   | 2.33  | 7.6   | 0.4   | 1.2   | 2.3   | 18    | <0.1  | 0.2   | <0.1  | 47    | 0.32  | 0.053 |       |
| Y647823                          | Soil  | 1.7   | 15.2  | 10.7  | 54    | <0.1  | 9.5   | 4.6   | 264   | 2.05  | 4.6   | 0.4   | 1.2   | 1.8   | 26    | 0.2   | 0.2   | 0.1   | 47    | 0.40  | 0.057 |       |
| Y647824                          | Soil  | I.S.  |       |
| Y647825                          | Soil  | 4.1   | 16.8  | 12.8  | 123   | <0.1  | 13.5  | 9.2   | 598   | 2.30  | 6.1   | 0.5   | 8.3   | 2.4   | 22    | 0.6   | 0.3   | 0.1   | 50    | 0.30  | 0.069 |       |
| Y647826                          | Soil  | 6.0   | 24.7  | 14.6  | 113   | 0.2   | 15.3  | 9.2   | 765   | 2.72  | 8.3   | 0.6   | 4.1   | 2.3   | 22    | 0.4   | 0.3   | 0.2   | 61    | 0.24  | 0.053 |       |
| Y647827                          | Soil  | 1.9   | 25.7  | 15.8  | 86    | 0.1   | 16.9  | 13.1  | 1314  | 2.68  | 7.9   | 0.7   | 8.9   | 3.2   | 21    | 0.3   | 0.4   | 0.1   | 58    | 0.28  | 0.058 |       |
| Y647828                          | Soil  | 2.1   | 30.6  | 31.7  | 124   | 0.4   | 22.1  | 12.6  | 725   | 3.28  | 12.4  | 0.7   | 9.2   | 3.5   | 26    | 0.4   | 0.4   | 0.3   | 77    | 0.31  | 0.047 |       |
| Y647829                          | Soil  | 0.7   | 17.7  | 18.6  | 81    | 0.2   | 12.3  | 8.3   | 698   | 2.13  | 6.8   | 0.6   | 14.6  | 3.8   | 21    | 0.4   | 0.4   | 0.2   | 49    | 0.32  | 0.078 |       |
| Y647830                          | Soil  | 0.8   | 17.3  | 16.3  | 96    | 0.2   | 12.6  | 7.4   | 721   | 2.08  | 6.0   | 0.4   | 7.1   | 3.1   | 19    | 0.4   | 0.3   | 0.1   | 47    | 0.30  | 0.078 |       |
| Y647831                          | Soil  | 0.8   | 18.8  | 19.4  | 98    | 0.1   | 13.5  | 7.6   | 543   | 2.25  | 6.7   | 0.5   | 8.1   | 3.4   | 19    | 0.4   | 0.3   | 0.1   | 52    | 0.28  | 0.056 |       |
| Y647832                          | Soil  | 0.7   | 15.5  | 24.5  | 94    | 0.1   | 13.4  | 8.7   | 580   | 2.32  | 7.4   | 0.4   | 5.7   | 3.1   | 22    | 0.2   | 0.3   | 0.1   | 56    | 0.29  | 0.052 |       |
| Y647833                          | Soil  | 0.8   | 23.4  | 24.5  | 178   | 0.1   | 21.3  | 11.6  | 816   | 3.02  | 11.3  | 0.5   | 8.4   | 3.6   | 27    | 0.6   | 0.5   | 0.1   | 68    | 0.42  | 0.087 |       |
| Y647834                          | Soil  | 0.9   | 22.2  | 25.7  | 160   | 0.4   | 12.3  | 6.2   | 751   | 2.13  | 9.4   | 0.6   | 23.1  | 2.7   | 22    | 0.5   | 0.8   | 0.1   | 52    | 0.32  | 0.070 |       |
| Y647835                          | Soil  | 1.0   | 21.3  | 31.1  | 148   | 0.3   | 17.7  | 11.8  | 632   | 3.02  | 10.9  | 0.6   | 6.5   | 3.4   | 21    | 0.9   | 0.5   | 0.1   | 71    | 0.28  | 0.060 |       |
| Y647836                          | Soil  | 0.8   | 20.6  | 37.8  | 166   | <0.1  | 22.5  | 13.0  | 756   | 3.24  | 12.4  | 0.5   | 3.7   | 3.7   | 31    | 0.5   | 0.5   | 0.1   | 70    | 0.36  | 0.053 |       |
| Y647837                          | Soil  | 0.7   | 16.8  | 25.7  | 92    | 0.2   | 16.5  | 9.4   | 663   | 2.48  | 7.3   | 0.4   | 1.8   | 2.0   | 24    | 0.3   | 0.3   | <0.1  | 57    | 0.29  | 0.065 |       |
| Y647838                          | Soil  | 0.9   | 15.2  | 25.5  | 90    | 0.2   | 16.8  | 9.1   | 409   | 2.99  | 7.4   | 0.5   | 1.6   | 3.4   | 21    | 0.4   | 0.4   | 0.1   | 73    | 0.28  | 0.041 |       |
| Y647839                          | Soil  | 0.9   | 15.0  | 36.8  | 105   | 0.2   | 17.5  | 9.4   | 625   | 2.76  | 9.2   | 0.4   | 23.3  | 2.8   | 22    | 0.4   | 0.6   | <0.1  | 61    | 0.27  | 0.039 |       |
| Y647840                          | Soil  | 1.3   | 31.4  | 84.0  | 291   | 1.9   | 29.0  | 11.9  | 872   | 4.18  | 19.2  | 0.9   | 27.6  | 3.6   | 62    | 1.0   | 0.9   | <0.1  | 87    | 1.03  | 0.117 |       |
| Y647841                          | Soil  | 0.8   | 25.1  | 7.2   | 62    | <0.1  | 23.2  | 12.0  | 510   | 3.31  | 6.4   | 0.5   | 0.8   | 2.9   | 29    | 0.1   | 0.3   | <0.1  | 82    | 0.34  | 0.064 |       |
| Y647842                          | Soil  | 0.6   | 24.3  | 5.9   | 61    | <0.1  | 19.8  | 12.8  | 645   | 3.41  | 6.2   | 0.5   | 0.8   | 3.4   | 45    | <0.1  | 0.3   | <0.1  | 96    | 0.48  | 0.058 |       |
| Y647843                          | Soil  | 0.8   | 21.0  | 6.4   | 62    | 0.1   | 19.9  | 10.9  | 468   | 3.18  | 5.8   | 0.5   | 6.9   | 2.8   | 46    | <0.1  | 0.3   | 0.1   | 88    | 0.51  | 0.060 |       |

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Client: **Mann & Hulstein Prospectors**  
Whitehorse Yukon Canada

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Project: TAUT  
Report Date: September 15, 2021

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Part: 2 of 2

## CERTIFICATE OF ANALYSIS

WHI21000267.1

| Analyte | Method | AQ201 |      |      |      |       |      |      |       |      |      |       |      |      |       |      |      |      |  |
|---------|--------|-------|------|------|------|-------|------|------|-------|------|------|-------|------|------|-------|------|------|------|--|
|         |        | La    | Cr   | Mg   | Ba   | Ti    | B    | Al   | Na    | K    | W    | Hg    | Sc   | Tl   | S     | Ga   | Se   | Te   |  |
|         |        | ppm   | ppm  | %    | ppm  | %     | ppm  | %    | %     | %    | ppm  | ppm   | ppm  | ppm  | %     | ppm  | ppm  | ppm  |  |
|         |        | 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  |  |
| Y647814 | Soil   | 12    | 29   | 0.91 | 260  | 0.101 | <1   | 1.97 | 0.024 | 0.11 | <0.1 | <0.01 | 6.0  | <0.1 | 0.10  | 8    | <0.5 | <0.2 |  |
| Y647815 | Soil   | 11    | 25   | 0.85 | 260  | 0.083 | <1   | 1.54 | 0.025 | 0.09 | <0.1 | 0.01  | 5.3  | <0.1 | 0.09  | 6    | <0.5 | 0.3  |  |
| Y647816 | Soil   | 11    | 29   | 0.88 | 250  | 0.086 | <1   | 1.96 | 0.021 | 0.09 | 0.1  | 0.03  | 5.7  | <0.1 | <0.05 | 8    | <0.5 | 0.3  |  |
| Y647817 | Soil   | 13    | 20   | 0.98 | 287  | 0.077 | <1   | 1.82 | 0.043 | 0.18 | <0.1 | 0.01  | 5.8  | 0.2  | 0.23  | 7    | <0.5 | 0.2  |  |
| Y647818 | Soil   | 19    | 37   | 0.63 | 512  | 0.052 | <1   | 2.53 | 0.016 | 0.12 | 0.1  | 0.03  | 6.5  | 0.1  | 0.07  | 6    | <0.5 | <0.2 |  |
| Y647819 | Soil   | 9     | 18   | 0.34 | 229  | 0.065 | <1   | 0.98 | 0.017 | 0.08 | <0.1 | 0.02  | 2.5  | <0.1 | 0.06  | 4    | <0.5 | <0.2 |  |
| Y647820 | Soil   | 12    | 23   | 0.41 | 181  | 0.058 | <1   | 1.17 | 0.013 | 0.06 | <0.1 | 0.02  | 3.3  | <0.1 | <0.05 | 4    | <0.5 | <0.2 |  |
| Y647821 | Soil   | 14    | 31   | 0.62 | 334  | 0.070 | <1   | 1.78 | 0.017 | 0.11 | 0.1  | 0.01  | 4.8  | <0.1 | 0.08  | 5    | <0.5 | <0.2 |  |
| Y647822 | Soil   | 12    | 21   | 0.40 | 125  | 0.060 | <1   | 1.12 | 0.012 | 0.07 | <0.1 | 0.03  | 2.8  | <0.1 | <0.05 | 4    | <0.5 | <0.2 |  |
| Y647823 | Soil   | 12    | 22   | 0.41 | 238  | 0.054 | <1   | 1.39 | 0.016 | 0.06 | <0.1 | 0.02  | 3.3  | <0.1 | 0.07  | 4    | <0.5 | <0.2 |  |
| Y647824 | Soil   | I.S.  | I.S. | I.S. | I.S. | I.S.  | I.S. | I.S. | I.S.  | I.S. | I.S. | I.S.  | I.S. | I.S. | I.S.  | I.S. | I.S. | I.S. |  |
| Y647825 | Soil   | 10    | 24   | 0.47 | 200  | 0.066 | 1    | 1.44 | 0.012 | 0.10 | <0.1 | 0.01  | 3.7  | <0.1 | <0.05 | 5    | <0.5 | <0.2 |  |
| Y647826 | Soil   | 13    | 28   | 0.48 | 260  | 0.074 | 2    | 1.73 | 0.011 | 0.11 | 0.1  | 0.02  | 4.6  | <0.1 | 0.06  | 7    | 0.5  | <0.2 |  |
| Y647827 | Soil   | 15    | 29   | 0.52 | 204  | 0.076 | <1   | 1.62 | 0.013 | 0.09 | 0.1  | 0.02  | 4.3  | <0.1 | 0.07  | 5    | <0.5 | <0.2 |  |
| Y647828 | Soil   | 16    | 39   | 0.71 | 317  | 0.088 | 2    | 2.37 | 0.014 | 0.12 | 0.2  | 0.03  | 5.6  | 0.1  | 0.07  | 8    | <0.5 | 0.2  |  |
| Y647829 | Soil   | 15    | 23   | 0.42 | 126  | 0.078 | 1    | 1.15 | 0.017 | 0.08 | 0.1  | 0.02  | 3.4  | <0.1 | <0.05 | 4    | <0.5 | 0.2  |  |
| Y647830 | Soil   | 12    | 21   | 0.40 | 140  | 0.070 | <1   | 1.12 | 0.011 | 0.08 | <0.1 | 0.02  | 3.1  | <0.1 | 0.05  | 4    | <0.5 | <0.2 |  |
| Y647831 | Soil   | 12    | 25   | 0.49 | 131  | 0.088 | <1   | 1.26 | 0.014 | 0.10 | 0.1  | 0.01  | 3.5  | <0.1 | 0.05  | 4    | <0.5 | <0.2 |  |
| Y647832 | Soil   | 11    | 24   | 0.48 | 209  | 0.082 | 1    | 1.27 | 0.014 | 0.08 | 0.1  | 0.01  | 3.0  | <0.1 | 0.05  | 5    | <0.5 | <0.2 |  |
| Y647833 | Soil   | 12    | 35   | 0.68 | 173  | 0.101 | 2    | 1.96 | 0.017 | 0.14 | 0.2  | 0.02  | 5.2  | 0.1  | 0.08  | 6    | <0.5 | <0.2 |  |
| Y647834 | Soil   | 12    | 24   | 0.40 | 105  | 0.070 | 1    | 1.21 | 0.020 | 0.07 | <0.1 | 0.03  | 3.4  | <0.1 | 0.06  | 4    | <0.5 | <0.2 |  |
| Y647835 | Soil   | 13    | 32   | 0.50 | 137  | 0.099 | 1    | 1.88 | 0.014 | 0.12 | 0.2  | 0.03  | 4.3  | 0.1  | 0.06  | 7    | <0.5 | <0.2 |  |
| Y647836 | Soil   | 12    | 36   | 0.65 | 173  | 0.105 | 1    | 2.00 | 0.015 | 0.12 | 0.1  | 0.03  | 5.3  | 0.1  | <0.05 | 7    | <0.5 | <0.2 |  |
| Y647837 | Soil   | 8     | 25   | 0.43 | 172  | 0.062 | <1   | 1.84 | 0.019 | 0.07 | 0.1  | 0.02  | 3.8  | <0.1 | 0.08  | 5    | <0.5 | <0.2 |  |
| Y647838 | Soil   | 12    | 33   | 0.57 | 138  | 0.115 | 1    | 1.95 | 0.019 | 0.09 | 0.2  | 0.03  | 4.7  | 0.1  | 0.10  | 8    | <0.5 | <0.2 |  |
| Y647839 | Soil   | 11    | 28   | 0.48 | 207  | 0.058 | <1   | 1.74 | 0.013 | 0.06 | <0.1 | 0.02  | 4.3  | <0.1 | 0.07  | 5    | <0.5 | <0.2 |  |
| Y647840 | Soil   | 18    | 43   | 0.79 | 642  | 0.060 | 2    | 3.23 | 0.021 | 0.17 | 0.2  | 0.13  | 11.6 | 0.2  | 0.18  | 8    | 0.8  | <0.2 |  |
| Y647841 | Soil   | 13    | 33   | 0.79 | 201  | 0.114 | 1    | 2.93 | 0.030 | 0.08 | 0.1  | 0.03  | 6.3  | <0.1 | 0.07  | 7    | <0.5 | <0.2 |  |
| Y647842 | Soil   | 13    | 35   | 0.92 | 255  | 0.093 | <1   | 2.75 | 0.030 | 0.08 | <0.1 | 0.03  | 8.3  | 0.1  | 0.05  | 7    | <0.5 | <0.2 |  |
| Y647843 | Soil   | 13    | 36   | 0.81 | 246  | 0.088 | 1    | 2.70 | 0.024 | 0.09 | 0.1  | 0.02  | 6.6  | 0.1  | 0.08  | 8    | <0.5 | <0.2 |  |

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PHONE (604) 253-3158

Project: TAUT  
Report Date: September 15, 2021

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Part: 1 of 2

## QUALITY CONTROL REPORT

WHI21000267.1

| Method<br>Analyte<br>Unit<br>MDL | AQ201    | 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      |        |        |
|                                  | ppm      | ppm   | ppm    | ppm   | ppm   | ppm   | ppm   | ppm   | %     | ppm   | ppm   | ppb   | ppm   | ppm   | ppm   | ppm   | ppm   | %     | %     | %      |        |        |
|                                  | 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                  |          |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |        |        |
| 72816                            | Soil     | 1.1   | 39.3   | 43.4  | 129   | 0.6   | 11.0  | 8.1   | 439   | 3.83  | 9.1   | 0.9   | 201.0 | 6.0   | 31    | 0.4   | 0.8   | 0.7   | 64    | 0.29   | 0.086  |        |
| REP 72816                        | QC       | 1.1   | 38.0   | 42.9  | 124   | 0.5   | 10.6  | 8.0   | 398   | 3.61  | 9.2   | 0.9   | 20.3  | 5.5   | 29    | 0.3   | 0.8   | 0.7   | 62    | 0.30   | 0.079  |        |
| 72852                            | Soil     | 9.8   | 114.6  | 46.0  | 140   | 0.9   | 10.5  | 7.6   | 395   | 5.43  | 12.6  | 1.1   | 98.4  | 6.9   | 125   | 0.4   | 0.8   | 1.0   | 58    | 0.16   | 0.110  |        |
| REP 72852                        | QC       | 10.3  | 116.0  | 46.7  | 149   | 1.0   | 10.2  | 7.9   | 416   | 5.73  | 12.7  | 1.1   | 120.9 | 7.1   | 127   | 0.3   | 0.9   | 1.1   | 60    | 0.18   | 0.113  |        |
| Y647828                          | Soil     | 2.1   | 30.6   | 31.7  | 124   | 0.4   | 22.1  | 12.6  | 725   | 3.28  | 12.4  | 0.7   | 9.2   | 3.5   | 26    | 0.4   | 0.4   | 0.3   | 77    | 0.31   | 0.047  |        |
| REP Y647828                      | QC       | 2.1   | 30.8   | 31.5  | 130   | 0.4   | 21.6  | 12.8  | 716   | 3.35  | 12.1  | 0.7   | 9.4   | 3.5   | 25    | 0.4   | 0.4   | 0.3   | 73    | 0.28   | 0.043  |        |
| Reference Materials              |          |       |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |        |        |        |
| STD BVGEO01                      | Standard | 11.0  | 4593.5 | 195.7 | 1621  | 2.6   | 164.7 | 25.1  | 735   | 3.91  | 124.0 | 3.9   | 215.8 | 15.7  | 55    | 6.1   | 3.5   | 24.7  | 77    | 1.44   | 0.075  |        |
| STD DS11                         | Standard | 16.7  | 162.1  | 149.4 | 366   | 1.7   | 81.3  | 15.5  | 1051  | 3.43  | 46.4  | 2.8   | 63.8  | 9.1   | 69    | 2.4   | 9.3   | 12.1  | 53    | 1.15   | 0.073  |        |
| STD DS11                         | Standard | 16.3  | 150.2  | 141.3 | 350   | 1.7   | 83.0  | 15.1  | 928   | 3.37  | 45.9  | 2.7   | 63.9  | 8.7   | 67    | 2.5   | 8.7   | 12.4  | 54    | 1.05   | 0.078  |        |
| STD OREAS262                     | Standard | 0.7   | 116.4  | 58.7  | 157   | 0.5   | 67.6  | 28.4  | 522   | 3.56  | 38.0  | 1.3   | 69.1  | 10.1  | 36    | 0.6   | 5.8   | 1.0   | 20    | 3.00   | 0.047  |        |
| STD OREAS262                     | Standard | 0.8   | 111.3  | 58.9  | 147   | 0.5   | 67.5  | 29.1  | 456   | 3.44  | 37.1  | 1.2   | 55.1  | 10.4  | 36    | 0.7   | 5.2   | 1.1   | 23    | 3.03   | 0.044  |        |
| STD OREAS262                     | Standard | 0.6   | 124.1  | 58.3  | 141   | 0.5   | 64.7  | 30.1  | 533   | 3.38  | 35.7  | 1.2   | 65.9  | 9.7   | 35    | 0.6   | 5.4   | 1.0   | 24    | 2.93   | 0.041  |        |
| 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 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 | 0.0727 |        |
| 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  | <0.1  | 8      | <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  | <0.1  | <2     | <0.01  | <0.001 |
| BLK                              | Blank    | <0.1  | 0.5    | <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  | <0.1  | <2     | <0.01  | <0.001 |



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Project: TAUT  
Report Date: September 15, 2021

Page: 1 of 1

Part: 2 of 2

## QUALITY CONTROL REPORT

WHI21000267.1

| Method<br>Analyte<br>Unit<br>MDL | 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   |      |
|                                  | ppm      | ppm   | %     | ppm    | %     | ppm    | %     | %      | %      | ppm   | ppm   | ppm   | ppm   | %     | ppm    | ppm   | ppm  |      |
|                                  | 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                  |          |       |       |        |       |        |       |        |        |       |       |       |       |       |        |       |      |      |
| 72816                            | Soil     | 20    | 25    | 0.86   | 181   | 0.050  | <1    | 2.13   | 0.015  | 0.11  | <0.1  | 0.02  | 5.6   | 0.1   | 0.06   | 7     | 0.5  | 0.6  |
| REP 72816                        | QC       | 20    | 23    | 0.81   | 179   | 0.050  | <1    | 1.97   | 0.016  | 0.11  | <0.1  | 0.03  | 5.4   | 0.1   | 0.06   | 7     | <0.5 | 0.6  |
| 72852                            | Soil     | 13    | 45    | 0.51   | 192   | 0.031  | <1    | 1.53   | 0.044  | 0.18  | <0.1  | 0.04  | 6.1   | 0.1   | 0.39   | 6     | 1.4  | 1.1  |
| REP 72852                        | QC       | 15    | 47    | 0.55   | 205   | 0.039  | <1    | 1.52   | 0.048  | 0.20  | <0.1  | 0.04  | 6.5   | 0.1   | 0.40   | 6     | 1.5  | 1.0  |
| Y647828                          | Soil     | 16    | 39    | 0.71   | 317   | 0.088  | 2     | 2.37   | 0.014  | 0.12  | 0.2   | 0.03  | 5.6   | 0.1   | 0.07   | 8     | <0.5 | 0.2  |
| REP Y647828                      | QC       | 16    | 37    | 0.72   | 317   | 0.083  | 2     | 2.30   | 0.013  | 0.11  | 0.2   | 0.02  | 5.5   | 0.1   | 0.06   | 8     | <0.5 | <0.2 |
| Reference Materials              |          |       |       |        |       |        |       |        |        |       |       |       |       |       |        |       |      |      |
| STD BVGEO01                      | Standard | 27    | 179   | 1.31   | 320   | 0.239  | 4     | 2.22   | 0.183  | 0.97  | 5.5   | 0.09  | 6.7   | 0.6   | 0.71   | 7     | 4.7  | 0.9  |
| STD DS11                         | Standard | 19    | 68    | 0.90   | 376   | 0.099  | 6     | 1.14   | 0.084  | 0.43  | 3.4   | 0.29  | 3.9   | 5.2   | 0.31   | 6     | 2.2  | 4.9  |
| STD DS11                         | Standard | 19    | 61    | 0.87   | 382   | 0.097  | 7     | 1.23   | 0.073  | 0.42  | 3.1   | 0.25  | 3.6   | 5.1   | 0.29   | 5     | 2.3  | 4.6  |
| STD OREAS262                     | Standard | 18    | 46    | 1.20   | 258   | 0.003  | 4     | 1.31   | 0.070  | 0.29  | 0.2   | 0.16  | 3.9   | 0.5   | 0.25   | 4     | <0.5 | 0.2  |
| STD OREAS262                     | Standard | 17    | 45    | 1.13   | 255   | 0.003  | 4     | 1.25   | 0.062  | 0.30  | 0.2   | 0.17  | 3.3   | 0.5   | 0.29   | 4     | <0.5 | 0.3  |
| STD OREAS262                     | Standard | 17    | 42    | 1.20   | 253   | 0.003  | 4     | 1.18   | 0.064  | 0.27  | 0.2   | 0.15  | 3.5   | 0.5   | 0.25   | 4     | <0.5 | 0.3  |
| STD DS11 Expected                |          | 18.6  | 61.5  | 0.85   | 385   | 0.0976 |       | 1.1795 | 0.0762 | 0.4   | 2.9   | 0.26  | 3.4   | 4.9   | 0.2835 | 5.1   | 2.2  | 4.56 |
| STD BVGEO01 Expected             |          | 25.9  | 187   | 1.2963 | 260   | 0.233  | 3.8   | 2.347  | 0.1924 | 0.89  | 5.3   | 0.1   | 5.97  | 0.62  | 0.6655 | 7.37  | 4.84 | 1.02 |
| STD OREAS262 Expected            |          | 15.9  | 41.7  | 1.17   | 248   | 0.0027 | 4     | 1.3    | 0.071  | 0.312 | 0.2   | 0.17  | 3.24  | 0.47  | 0.253  | 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  | 0.08   | <1    | <0.5 | <0.2 |
| BLK                              | Blank    | <1    | <1    | <0.01  | <1    | <0.001 | <1    | <0.01  | <0.001 | <0.01 | <0.1  | <0.01 | <0.1  | <0.1  | <0.05  | <1    | <0.5 | <0.2 |
| BLK                              | Blank    | <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 |

## **Appendix III**

### **Ah Horizon Soil Assay Certificates**



**BUREAU  
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[www.bureauveritas.com/um](http://www.bureauveritas.com/um)

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

**Client:** **Mann & Hulstein Prospects**  
Whitehorse Yukon Canada

Submitted By: Bill Mann  
Receiving Lab: Canada-Whitehorse  
Received: July 26, 2021  
Analysis Start: August 11, 2021  
Report Date: September 07, 2021  
Page: 1 of 3

## CERTIFICATE OF ANALYSIS

WHI21000268.1

### CLIENT JOB INFORMATION

Project: TAUT

Shipment ID:

P.O. Number

Number of Samples: 47

### SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

DISP-RJT-SOIL Immediate Disposal of Soil Reject

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

| Procedure Code | Number of Samples | Code Description                                      | Test Wgt (g) | Report Status | Lab |
|----------------|-------------------|---|--------------|---------------|-----|
| SS80           | 47                | Dry at 60C sieve 100g to -80 mesh                     |              |               | WHI |
| AQ250          | 47                | 1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis | 0.5          | Completed     | VAN |
| DISPL          | 47                | Disposal of pulps                                     |              |               | VAN |
| SHP01          | 47                | Per sample shipping charges for branch shipments      |              |               | VAN |

### ADDITIONAL COMMENTS

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

Invoice To: Mann & Hulstein Prospects  
Whitehorse Yukon  
Canada

CC:

GEORGE ARCALA  
Instrumentation Shift 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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Canada

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Client: **Mann & Hulstein Prospects**  
Whitehorse Yukon Canada

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Project: TAUT  
Report Date: September 07, 2021

Page: 2 of 3

Part: 1 of 2

## CERTIFICATE OF ANALYSIS

WHI21000268.1

| Analyte | Method  | AQ250 |        |       |       |      |      |       |        |       |      |      |      |      |       |      |      |       |     |      |       |
|---------|---------|-------|--------|-------|-------|------|------|-------|--------|-------|------|------|------|------|-------|------|------|-------|-----|------|-------|
|         |         | Mo    | Cu     | Pb    | Zn    | Ag   | Ni   | Co    | Mn     | Fe    | As   | U    | Au   | Th   | Sr    | Cd   | Sb   | Bi    | V   | Ca   | P     |
|         |         | 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 |
| Y647851 | AH Soil | 0.63  | 17.84  | 15.99 | 75.8  | 372  | 15.5 | 10.8  | 854    | 2.35  | 6.3  | 0.3  | 1.6  | 0.3  | 61.4  | 0.50 | 0.43 | 0.10  | 46  | 1.13 | 0.123 |
| Y647852 | AH Soil | 1.08  | 16.90  | 27.37 | 50.2  | 782  | 7.9  | 4.6   | 145    | 1.87  | 5.4  | 0.8  | 8.9  | 0.1  | 31.7  | 0.33 | 0.41 | 0.23  | 27  | 0.38 | 0.128 |
| Y647853 | AH Soil | 0.88  | 49.67  | 16.32 | 79.9  | 621  | 14.4 | 7.0   | 636    | 1.80  | 5.7  | 0.8  | 16.8 | 0.8  | 50.3  | 0.98 | 0.56 | 0.21  | 34  | 1.38 | 0.103 |
| Y647854 | AH Soil | 1.11  | 33.90  | 2.96  | 60.6  | 224  | 8.5  | 16.8  | 7010   | 0.81  | 0.9  | 0.4  | 2.4  | <0.1 | 53.5  | 2.26 | 0.56 | 0.04  | 12  | 0.73 | 0.141 |
| Y647855 | AH Soil | 2.38  | 61.21  | 3.58  | 57.8  | 427  | 10.2 | 274.2 | >10000 | 11.93 | 3.9  | 0.6  | 4.3  | 0.6  | 39.0  | 2.57 | 0.41 | 0.09  | 34  | 0.45 | 0.151 |
| Y647856 | AH Soil | 2.43  | 26.27  | 14.48 | 38.4  | 187  | 5.0  | 6.5   | 150    | 5.22  | 26.0 | 0.5  | 4.5  | 1.6  | 22.5  | 0.44 | 0.20 | 0.10  | 174 | 0.34 | 0.141 |
| Y647857 | AH Soil | 10.78 | 131.53 | 6.55  | 81.5  | 544  | 21.6 | 175.8 | >10000 | 1.90  | 2.1  | 1.6  | 7.0  | <0.1 | 54.0  | 3.72 | 0.36 | 0.10  | 34  | 0.57 | 0.139 |
| Y647858 | AH Soil | 23.08 | 38.25  | 17.52 | 49.1  | 647  | 9.2  | 628.0 | >10000 | 5.11  | 7.0  | 0.8  | 8.1  | 0.3  | 38.2  | 2.38 | 0.67 | 0.18  | 47  | 0.30 | 0.191 |
| Y647859 | AH Soil | 1.17  | 33.66  | 6.20  | 17.1  | 843  | 5.5  | 2.4   | 103    | 0.71  | 0.8  | 1.4  | 15.0 | <0.1 | 31.1  | 0.56 | 0.24 | 0.07  | 17  | 0.25 | 0.153 |
| Y647860 | AH Soil | 1.74  | 83.35  | 4.95  | 18.2  | 410  | 8.6  | 4.5   | 127    | 1.12  | 1.6  | 1.2  | 4.4  | <0.1 | 31.8  | 0.86 | 0.25 | 0.07  | 13  | 0.19 | 0.145 |
| Y647861 | AH Soil | 3.90  | 56.56  | 5.36  | 24.5  | 465  | 7.2  | 8.5   | 122    | 1.67  | 2.7  | 1.1  | 5.7  | <0.1 | 36.9  | 0.84 | 0.38 | 0.07  | 22  | 0.24 | 0.172 |
| Y647862 | AH Soil | 4.57  | 66.72  | 6.66  | 31.1  | 542  | 8.6  | 9.8   | 122    | 1.86  | 3.0  | 1.4  | 6.6  | <0.1 | 49.4  | 0.75 | 0.46 | 0.08  | 19  | 0.28 | 0.187 |
| Y647863 | AH Soil | 8.93  | 48.64  | 4.27  | 19.3  | 428  | 6.7  | 4.8   | 115    | 5.14  | 5.9  | 1.1  | 6.3  | <0.1 | 20.5  | 0.31 | 0.48 | 0.09  | 44  | 0.13 | 0.148 |
| Y647864 | AH Soil | 1.33  | 72.56  | 14.57 | 45.8  | 851  | 10.7 | 4.0   | 138    | 1.98  | 3.9  | 2.0  | 24.4 | 0.6  | 37.2  | 1.38 | 0.22 | 0.30  | 32  | 0.22 | 0.076 |
| Y647865 | AH Soil | 0.72  | 30.67  | 9.00  | 28.2  | 771  | 6.9  | 3.6   | 56     | 0.76  | 1.1  | 1.7  | 4.2  | <0.1 | 50.7  | 2.78 | 0.31 | 0.06  | 9   | 0.63 | 0.165 |
| Y647866 | AH Soil | 0.99  | 34.07  | 3.62  | 75.8  | 1395 | 11.7 | 8.3   | 1946   | 1.06  | 1.6  | 0.6  | 1.0  | 0.1  | 36.6  | 3.66 | 0.22 | 0.07  | 21  | 0.25 | 0.068 |
| Y647867 | AH Soil | 0.13  | 4.77   | 0.74  | 6.8   | 70   | 1.1  | 1.3   | 20     | 0.39  | 0.3  | <0.1 | <0.2 | <0.1 | 7.6   | 0.12 | 0.09 | <0.02 | 11  | 0.03 | 0.038 |
| Y647868 | AH Soil | 0.20  | 3.24   | 1.39  | 10.3  | 49   | 2.4  | 1.3   | 29     | 0.39  | 0.3  | 0.2  | <0.2 | <0.1 | 11.3  | 0.80 | 0.07 | <0.02 | 11  | 0.08 | 0.039 |
| Y647869 | AH Soil | 0.32  | 12.12  | 4.20  | 23.9  | 73   | 7.1  | 3.8   | 125    | 1.16  | 1.6  | 0.6  | 1.2  | 0.5  | 24.6  | 0.20 | 0.15 | 0.06  | 18  | 0.21 | 0.084 |
| Y647870 | AH Soil | 0.42  | 27.95  | 1.31  | 13.3  | 100  | 7.4  | 1.8   | 59     | 0.54  | 0.6  | 0.9  | 1.2  | 0.1  | 57.1  | 0.37 | 0.33 | 0.03  | 12  | 0.52 | 0.116 |
| Y647871 | AH Soil | 4.16  | 25.65  | 1.63  | 11.0  | 604  | 7.2  | 13.8  | 1444   | 5.08  | 11.4 | 1.3  | 1.6  | 0.5  | 50.9  | 0.26 | 0.35 | 0.12  | 119 | 0.49 | 0.139 |
| Y647872 | AH Soil | 0.24  | 17.59  | 1.03  | 11.1  | 50   | 4.0  | 2.4   | 57     | 0.62  | 0.6  | 0.4  | <0.2 | 0.2  | 28.4  | 0.39 | 0.16 | <0.02 | 11  | 0.27 | 0.093 |
| Y647873 | AH Soil | 0.87  | 43.97  | 3.69  | 28.1  | 375  | 9.3  | 4.1   | 274    | 1.97  | 9.2  | 1.2  | 3.2  | 0.7  | 46.3  | 1.33 | 0.41 | 0.10  | 41  | 0.55 | 0.141 |
| Y647874 | AH Soil | 0.52  | 13.56  | 4.39  | 48.7  | 141  | 8.9  | 2.5   | 86     | 0.69  | 1.2  | 0.5  | 1.7  | 0.2  | 28.5  | 0.52 | 0.14 | 0.07  | 12  | 0.26 | 0.070 |
| Y647875 | AH Soil | 4.92  | 34.40  | 4.01  | 34.1  | 488  | 13.2 | 46.5  | 5232   | 5.64  | 15.0 | 1.0  | 3.4  | 0.2  | 60.3  | 0.76 | 0.39 | 0.11  | 79  | 0.46 | 0.142 |
| Y647876 | AH Soil | 0.42  | 67.31  | 3.75  | 16.9  | 405  | 14.1 | 2.4   | 66     | 0.52  | 0.7  | 1.0  | 5.1  | <0.1 | 56.3  | 1.32 | 0.19 | 0.07  | 12  | 0.46 | 0.150 |
| Y647877 | AH Soil | 0.56  | 16.83  | 5.04  | 25.6  | 176  | 9.1  | 6.1   | 1099   | 0.91  | 1.7  | 0.4  | 2.4  | 0.2  | 51.1  | 0.51 | 0.25 | 0.07  | 20  | 0.47 | 0.092 |
| Y647878 | AH Soil | 1.45  | 28.25  | 32.38 | 146.3 | 339  | 25.3 | 21.9  | 7080   | 2.18  | 5.4  | 1.0  | 6.1  | 0.9  | 84.7  | 5.51 | 0.85 | 0.15  | 42  | 0.77 | 0.159 |
| Y647879 | AH Soil | 2.56  | 49.62  | 11.39 | 53.0  | 388  | 14.3 | 36.5  | 6116   | 2.69  | 8.8  | 1.4  | 3.6  | 0.4  | 67.4  | 1.32 | 0.44 | 0.12  | 57  | 0.58 | 0.153 |
| Y647880 | AH Soil | 0.48  | 38.03  | 5.75  | 39.9  | 537  | 17.0 | 10.6  | 454    | 0.95  | 1.2  | 0.8  | 3.0  | 0.3  | 127.2 | 1.42 | 0.41 | 0.07  | 17  | 1.24 | 0.167 |

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.



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**Client:** Mann & Hulstein Prospects  
Whitehorse Yukon Canada

Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Project: TAUT  
Report Date: September 07, 2021

Page: 2 of 3

Part: 2 of 2

## CERTIFICATE OF ANALYSIS

WHI21000268.1

| Method<br>Analyte<br>Unit<br>MDL | 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    |     |
|                                  | ppm     | ppm   | %     | ppm   | %      | ppm   | %     | %     | %     | ppm   | ppm   | ppm   | %     | ppb   | ppm   | ppm   | ppm   |     |
|                                  | 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   |     |
| Y647851                          | AH Soil | 8.1   | 20.8  | 0.60  | 663.3  | 0.031 | <20   | 1.76  | 0.009 | 0.13  | <0.1  | 2.2   | 0.09  | 0.09  | 135   | 0.5   | 0.03  | 5.3 |
| Y647852                          | AH Soil | 18.5  | 14.0  | 0.15  | 159.5  | 0.020 | <20   | 1.03  | 0.009 | 0.06  | <0.1  | 1.4   | 0.08  | 0.14  | 139   | 0.5   | 0.13  | 3.3 |
| Y647853                          | AH Soil | 20.4  | 16.4  | 0.35  | 259.7  | 0.045 | <20   | 1.00  | 0.016 | 0.08  | <0.1  | 2.3   | 0.10  | 0.13  | 47    | 0.8   | 0.21  | 3.6 |
| Y647854                          | AH Soil | 8.0   | 7.6   | 0.09  | 310.8  | 0.019 | <20   | 0.68  | 0.013 | 0.05  | <0.1  | 0.8   | 0.08  | 0.19  | 127   | 0.7   | 0.11  | 1.2 |
| Y647855                          | AH Soil | 17.3  | 8.7   | 0.06  | 439.2  | 0.016 | <20   | 0.93  | 0.004 | 0.05  | <0.1  | 1.7   | 0.11  | 0.23  | 116   | 1.3   | 0.32  | 1.8 |
| Y647856                          | AH Soil | 11.3  | 10.1  | 0.08  | 63.8   | 0.125 | <20   | 0.52  | 0.009 | 0.03  | <0.1  | 1.6   | 0.03  | 0.08  | 28    | 0.5   | 0.07  | 4.3 |
| Y647857                          | AH Soil | 23.0  | 8.9   | 0.09  | 668.7  | 0.021 | <20   | 0.52  | 0.009 | 0.04  | <0.1  | 1.0   | 0.12  | 0.13  | 74    | 0.9   | 0.12  | 2.0 |
| Y647858                          | AH Soil | 15.3  | 16.0  | 0.12  | 1224.2 | 0.021 | <20   | 0.92  | 0.006 | 0.07  | 0.1   | 1.6   | 0.84  | 0.18  | 110   | 1.2   | 0.57  | 3.3 |
| Y647859                          | AH Soil | 9.4   | 18.3  | 0.13  | 120.3  | 0.021 | <20   | 1.01  | 0.008 | 0.05  | <0.1  | 0.7   | 0.09  | 0.23  | 179   | 0.8   | 0.09  | 2.4 |
| Y647860                          | AH Soil | 14.0  | 11.3  | 0.11  | 158.9  | 0.010 | <20   | 0.93  | 0.008 | 0.06  | <0.1  | 0.7   | 0.04  | 0.14  | 92    | 0.8   | 0.05  | 2.2 |
| Y647861                          | AH Soil | 12.2  | 9.9   | 0.12  | 226.7  | 0.014 | <20   | 0.74  | 0.009 | 0.06  | <0.1  | 0.8   | 0.06  | 0.15  | 116   | 0.9   | 0.07  | 1.8 |
| Y647862                          | AH Soil | 16.6  | 10.6  | 0.11  | 305.4  | 0.011 | <20   | 0.76  | 0.008 | 0.08  | <0.1  | 0.9   | 0.08  | 0.17  | 160   | 1.0   | 0.05  | 1.7 |
| Y647863                          | AH Soil | 8.3   | 14.6  | 0.11  | 219.0  | 0.016 | <20   | 0.92  | 0.007 | 0.04  | <0.1  | 1.0   | 0.08  | 0.18  | 57    | 1.5   | 0.09  | 2.4 |
| Y647864                          | AH Soil | 12.9  | 17.3  | 0.22  | 103.8  | 0.040 | <20   | 1.26  | 0.019 | 0.12  | 0.1   | 2.5   | 0.09  | 0.12  | 55    | 0.7   | 0.19  | 4.5 |
| Y647865                          | AH Soil | 22.2  | 6.9   | 0.09  | 130.2  | 0.011 | <20   | 0.58  | 0.012 | 0.07  | <0.1  | 0.6   | 0.04  | 0.22  | 118   | 0.9   | 0.03  | 1.3 |
| Y647866                          | AH Soil | 12.5  | 10.1  | 0.07  | 179.6  | 0.045 | <20   | 0.77  | 0.018 | 0.06  | <0.1  | 1.3   | 0.05  | 0.03  | 40    | 0.4   | <0.02 | 2.5 |
| Y647867                          | AH Soil | 0.7   | 2.3   | 0.03  | 13.4   | 0.023 | <20   | 0.15  | 0.019 | 0.04  | <0.1  | 0.3   | <0.02 | <0.02 | 24    | 0.3   | <0.02 | 1.0 |
| Y647868                          | AH Soil | 1.7   | 4.8   | 0.05  | 37.7   | 0.023 | <20   | 0.16  | 0.018 | 0.04  | <0.1  | 0.4   | <0.02 | 0.02  | 25    | 0.2   | <0.02 | 1.0 |
| Y647869                          | AH Soil | 10.3  | 13.1  | 0.15  | 261.0  | 0.030 | <20   | 1.35  | 0.027 | 0.10  | <0.1  | 2.9   | 0.06  | 0.04  | 66    | 0.3   | <0.02 | 3.4 |
| Y647870                          | AH Soil | 17.8  | 9.5   | 0.13  | 297.9  | 0.028 | <20   | 0.57  | 0.026 | 0.07  | <0.1  | 1.8   | 0.02  | 0.12  | 120   | 0.8   | <0.02 | 1.5 |
| Y647871                          | AH Soil | 16.0  | 15.2  | 0.09  | 303.0  | 0.032 | <20   | 0.72  | 0.019 | 0.04  | 0.2   | 2.4   | 0.03  | 0.12  | 94    | 1.0   | 0.06  | 3.0 |
| Y647872                          | AH Soil | 8.8   | 7.3   | 0.12  | 116.0  | 0.042 | <20   | 0.40  | 0.028 | 0.02  | <0.1  | 1.2   | 0.03  | 0.05  | 31    | 0.4   | <0.02 | 1.3 |
| Y647873                          | AH Soil | 32.6  | 16.5  | 0.14  | 252.0  | 0.031 | <20   | 1.37  | 0.021 | 0.07  | <0.1  | 2.6   | 0.05  | 0.15  | 87    | 1.1   | 0.07  | 3.1 |
| Y647874                          | AH Soil | 11.0  | 13.3  | 0.19  | 246.0  | 0.032 | <20   | 1.00  | 0.030 | 0.06  | <0.1  | 1.4   | 0.06  | 0.06  | 36    | 0.4   | 0.03  | 3.3 |
| Y647875                          | AH Soil | 22.3  | 13.5  | 0.10  | 512.2  | 0.020 | <20   | 0.76  | 0.016 | 0.03  | <0.1  | 1.7   | 0.05  | 0.15  | 97    | 0.9   | 0.36  | 2.6 |
| Y647876                          | AH Soil | 29.2  | 13.3  | 0.12  | 495.7  | 0.019 | <20   | 0.79  | 0.016 | 0.03  | <0.1  | 0.9   | 0.04  | 0.32  | 108   | 0.8   | 0.05  | 2.2 |
| Y647877                          | AH Soil | 10.5  | 9.6   | 0.18  | 247.2  | 0.031 | <20   | 0.67  | 0.028 | 0.06  | <0.1  | 1.3   | 0.05  | 0.08  | 55    | 0.3   | 0.04  | 2.0 |
| Y647878                          | AH Soil | 22.0  | 27.6  | 0.39  | 619.2  | 0.055 | <20   | 1.51  | 0.014 | 0.15  | 0.1   | 3.8   | 0.18  | 0.15  | 138   | 0.8   | 0.09  | 3.8 |
| Y647879                          | AH Soil | 26.0  | 18.6  | 0.18  | 331.9  | 0.038 | <20   | 1.20  | 0.016 | 0.06  | <0.1  | 2.4   | 0.11  | 0.14  | 105   | 0.9   | 0.07  | 4.4 |
| Y647880                          | AH Soil | 14.8  | 19.4  | 0.23  | 366.1  | 0.031 | <20   | 1.21  | 0.015 | 0.05  | <0.1  | 1.8   | 0.09  | 0.27  | 101   | 0.9   | 0.02  | 3.0 |

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Project: TAUT  
Report Date: September 07, 2021

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## CERTIFICATE OF ANALYSIS

WHI21000268.1

| Analyte | Method  | AQ250 |        |       |       |      |      |       |        |      |      |     |      |      |       |      |      |       |    |      |       |
|---------|---------|-------|--------|-------|-------|------|------|-------|--------|------|------|-----|------|------|-------|------|------|-------|----|------|-------|
|         |         | Mo    | Cu     | Pb    | Zn    | Ag   | Ni   | Co    | Mn     | Fe   | As   | U   | Au   | Th   | Sr    | Cd   | Sb   | Bi    | V  | Ca   |       |
|         |         | 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 |
| Y647881 | AH Soil | 2.14  | 41.15  | 5.03  | 155.6 | 1152 | 23.2 | 71.5  | >10000 | 4.74 | 12.4 | 0.9 | 2.6  | 0.6  | 84.6  | 2.55 | 0.59 | 0.07  | 57 | 0.94 | 0.153 |
| Y647882 | AH Soil | 1.16  | 29.56  | 2.31  | 29.8  | 348  | 8.7  | 5.5   | 1543   | 1.20 | 2.4  | 0.5 | 1.1  | 0.2  | 88.0  | 0.72 | 0.32 | 0.04  | 34 | 0.95 | 0.131 |
| Y647883 | AH Soil | 0.33  | 23.96  | 0.74  | 13.9  | 68   | 3.8  | 2.2   | 230    | 0.98 | 0.8  | 0.2 | 1.0  | 0.1  | 69.8  | 0.29 | 0.23 | <0.02 | 15 | 0.62 | 0.147 |
| Y647884 | AH Soil | 0.64  | 16.42  | 3.31  | 31.3  | 91   | 8.0  | 8.1   | 295    | 3.33 | 5.9  | 0.4 | 0.8  | 0.5  | 55.5  | 0.11 | 0.18 | 0.05  | 72 | 0.49 | 0.097 |
| Y647885 | AH Soil | 3.21  | 16.51  | 6.06  | 46.7  | 328  | 5.4  | 2.1   | 113    | 0.98 | 3.4  | 0.2 | 1.0  | <0.1 | 21.7  | 0.48 | 0.54 | 0.10  | 19 | 0.15 | 0.119 |
| Y647886 | AH Soil | 3.80  | 40.06  | 13.63 | 25.0  | 576  | 8.2  | 3.3   | 71     | 2.19 | 6.6  | 1.2 | 22.9 | 0.4  | 40.1  | 0.35 | 0.87 | 0.22  | 17 | 0.17 | 0.139 |
| Y647887 | AH Soil | 3.41  | 33.97  | 11.16 | 21.6  | 409  | 6.4  | 20.1  | 1334   | 2.50 | 5.2  | 1.1 | 6.5  | 0.1  | 36.5  | 0.64 | 0.62 | 0.13  | 31 | 0.25 | 0.137 |
| Y647888 | AH Soil | 8.10  | 34.43  | 13.05 | 26.8  | 746  | 8.0  | 207.6 | 7641   | 2.37 | 3.6  | 1.3 | 8.4  | 0.2  | 45.2  | 1.30 | 0.66 | 0.09  | 22 | 0.29 | 0.179 |
| Y647889 | AH Soil | 4.16  | 46.94  | 4.67  | 42.1  | 359  | 13.4 | 101.6 | >10000 | 3.20 | 3.5  | 1.2 | 6.8  | 0.1  | 60.1  | 3.95 | 0.73 | 0.05  | 23 | 0.77 | 0.137 |
| Y647890 | AH Soil | 19.55 | 36.41  | 7.75  | 51.2  | 282  | 9.1  | 9.3   | 1581   | 1.22 | 1.3  | 0.7 | 6.5  | 0.1  | 45.4  | 0.90 | 0.39 | 0.10  | 23 | 0.50 | 0.150 |
| Y647891 | AH Soil | 2.92  | 54.35  | 3.13  | 142.3 | 297  | 18.1 | 18.2  | >10000 | 1.36 | 1.2  | 0.5 | 5.0  | 0.3  | 147.3 | 2.09 | 0.48 | 0.04  | 12 | 2.22 | 0.189 |
| Y647892 | AH Soil | 2.63  | 113.23 | 4.82  | 16.8  | 377  | 11.6 | 91.9  | 8383   | 5.65 | 6.6  | 0.9 | 6.8  | 0.2  | 46.4  | 0.38 | 0.42 | 0.14  | 80 | 0.37 | 0.175 |
| Y647893 | AH Soil | 2.66  | 51.89  | 7.11  | 40.4  | 1243 | 8.5  | 89.0  | >10000 | 2.09 | 2.8  | 1.9 | 43.1 | 0.3  | 36.6  | 1.32 | 0.31 | 0.20  | 25 | 0.31 | 0.183 |
| Y647894 | AH Soil | 0.92  | 30.53  | 3.42  | 31.5  | 613  | 6.4  | 3.0   | 132    | 1.07 | 1.3  | 1.1 | 8.2  | 0.1  | 35.4  | 0.45 | 0.16 | 0.07  | 19 | 0.35 | 0.117 |
| Y647895 | AH Soil | 1.24  | 44.85  | 15.12 | 49.7  | 1039 | 11.8 | 4.1   | 320    | 1.41 | 2.4  | 1.5 | 6.4  | <0.1 | 50.4  | 1.24 | 0.20 | 0.08  | 26 | 0.46 | 0.130 |
| Y647896 | AH Soil | 1.01  | 56.68  | 4.19  | 39.5  | 599  | 14.6 | 6.1   | 1484   | 0.98 | 0.9  | 0.9 | 4.9  | <0.1 | 55.8  | 1.70 | 0.18 | 0.03  | 27 | 0.45 | 0.105 |
| Y647897 | AH Soil | 1.23  | 60.76  | 5.06  | 101.3 | 672  | 17.6 | 7.9   | 3733   | 0.98 | 1.3  | 1.1 | 8.7  | 0.3  | 108.8 | 4.43 | 0.39 | 0.08  | 17 | 0.98 | 0.149 |



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Project: TAUT  
Report Date: September 07, 2021

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## CERTIFICATE OF ANALYSIS

WHI21000268.1

| Analyte | Method  | AQ250 |      |      |        |       |     |      |       |      |      |     |      |      |     |     |       |     |  |
|---------|---------|-------|------|------|--------|-------|-----|------|-------|------|------|-----|------|------|-----|-----|-------|-----|--|
|         |         | La    | Cr   | Mg   | Ba     | Ti    | B   | Al   | Na    | K    | W    | Sc  | Tl   | S    | Hg  | Se  | Te    | Ga  |  |
|         |         | ppm   | ppm  | %    | ppm    | %     | ppm | %    | %     | %    | ppm  | ppm | ppm  | %    | ppb | ppm | ppm   | ppm |  |
|         |         | 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 |  |
| Y647881 | AH Soil | 30.8  | 18.2 | 0.14 | 1168.6 | 0.023 | <20 | 0.95 | 0.015 | 0.04 | <0.1 | 3.8 | 0.11 | 0.21 | 98  | 1.3 | 0.05  | 1.9 |  |
| Y647882 | AH Soil | 15.7  | 11.6 | 0.12 | 251.1  | 0.022 | <20 | 0.85 | 0.017 | 0.03 | <0.1 | 1.3 | 0.08 | 0.15 | 66  | 0.8 | <0.02 | 1.7 |  |
| Y647883 | AH Soil | 5.0   | 6.5  | 0.10 | 80.7   | 0.018 | <20 | 0.44 | 0.014 | 0.04 | <0.1 | 1.0 | 0.05 | 0.13 | 88  | 0.6 | <0.02 | 0.7 |  |
| Y647884 | AH Soil | 7.5   | 15.9 | 0.33 | 121.2  | 0.048 | <20 | 1.25 | 0.021 | 0.04 | <0.1 | 2.7 | 0.05 | 0.08 | 69  | 0.5 | <0.02 | 3.9 |  |
| Y647885 | AH Soil | 2.8   | 6.8  | 0.07 | 196.9  | 0.017 | <20 | 0.26 | 0.014 | 0.14 | <0.1 | 0.4 | 0.03 | 0.13 | 100 | 0.5 | 0.05  | 1.7 |  |
| Y647886 | AH Soil | 11.4  | 13.8 | 0.12 | 700.4  | 0.022 | <20 | 0.86 | 0.010 | 0.10 | <0.1 | 1.9 | 0.14 | 0.29 | 160 | 1.4 | 0.18  | 2.2 |  |
| Y647887 | AH Soil | 11.3  | 9.7  | 0.11 | 168.6  | 0.021 | <20 | 0.82 | 0.013 | 0.05 | <0.1 | 1.0 | 0.12 | 0.17 | 118 | 0.8 | 0.12  | 2.3 |  |
| Y647888 | AH Soil | 12.5  | 15.4 | 0.10 | 373.6  | 0.016 | <20 | 0.84 | 0.009 | 0.05 | <0.1 | 1.4 | 0.26 | 0.20 | 166 | 1.0 | 0.14  | 2.3 |  |
| Y647889 | AH Soil | 17.3  | 11.1 | 0.07 | 947.4  | 0.009 | <20 | 1.48 | 0.007 | 0.05 | <0.1 | 1.5 | 0.25 | 0.21 | 105 | 1.0 | 0.27  | 2.4 |  |
| Y647890 | AH Soil | 11.6  | 12.1 | 0.25 | 272.4  | 0.024 | <20 | 1.03 | 0.014 | 0.08 | <0.1 | 1.1 | 0.12 | 0.14 | 81  | 1.5 | 0.05  | 3.0 |  |
| Y647891 | AH Soil | 12.1  | 10.1 | 0.16 | 816.6  | 0.014 | <20 | 0.75 | 0.007 | 0.04 | <0.1 | 1.2 | 0.09 | 0.22 | 115 | 1.0 | 0.10  | 1.5 |  |
| Y647892 | AH Soil | 16.1  | 14.5 | 0.10 | 326.0  | 0.016 | <20 | 0.91 | 0.013 | 0.03 | <0.1 | 1.3 | 0.07 | 0.16 | 121 | 1.4 | 0.21  | 3.9 |  |
| Y647893 | AH Soil | 13.8  | 21.3 | 0.11 | 340.1  | 0.015 | <20 | 1.07 | 0.012 | 0.03 | <0.1 | 1.7 | 0.30 | 0.18 | 146 | 1.3 | 0.39  | 2.8 |  |
| Y647894 | AH Soil | 10.5  | 11.8 | 0.14 | 128.3  | 0.014 | <20 | 0.72 | 0.011 | 0.03 | <0.1 | 1.2 | 0.06 | 0.15 | 99  | 0.7 | 0.12  | 1.8 |  |
| Y647895 | AH Soil | 15.6  | 14.8 | 0.18 | 212.8  | 0.017 | <20 | 0.98 | 0.012 | 0.05 | <0.1 | 1.0 | 0.07 | 0.16 | 113 | 0.8 | 0.08  | 3.0 |  |
| Y647896 | AH Soil | 24.9  | 8.0  | 0.10 | 259.2  | 0.020 | <20 | 0.45 | 0.015 | 0.03 | <0.1 | 0.9 | 0.04 | 0.12 | 90  | 0.6 | 0.05  | 1.6 |  |
| Y647897 | AH Soil | 89.1  | 12.9 | 0.19 | 716.8  | 0.018 | <20 | 0.79 | 0.014 | 0.04 | <0.1 | 2.9 | 0.07 | 0.18 | 160 | 1.3 | 0.12  | 2.3 |  |



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Project: TAUT  
Report Date: September 07, 2021

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## QUALITY CONTROL REPORT

WHI21000268.1

| Method<br>Analyte<br>Unit<br>MDL | 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             |
|                                  | ppm      | ppm   | ppm     | ppm    | ppb    | ppm   | ppm   | ppm   | %      | ppm   | ppm   | ppb   | ppm   | ppm   | ppm   | ppm   | ppm   | ppm   | %     | %             |
|                                  | 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                  |          |       |         |        |        |       |       |       |        |       |       |       |       |       |       |       |       |       |       |               |
| Y647859                          | AH Soil  | 1.17  | 33.66   | 6.20   | 17.1   | 843   | 5.5   | 2.4   | 103    | 0.71  | 0.8   | 1.4   | 15.0  | <0.1  | 31.1  | 0.56  | 0.24  | 0.07  | 17    | 0.25 0.153    |
| REP Y647859                      | QC       | 1.18  | 34.79   | 6.33   | 19.0   | 843   | 5.7   | 2.5   | 99     | 0.74  | 0.5   | 1.5   | 13.8  | <0.1  | 30.9  | 0.54  | 0.23  | 0.07  | 18    | 0.25 0.154    |
| Y647893                          | AH Soil  | 2.66  | 51.89   | 7.11   | 40.4   | 1243  | 8.5   | 89.0  | >10000 | 2.09  | 2.8   | 1.9   | 43.1  | 0.3   | 36.6  | 1.32  | 0.31  | 0.20  | 25    | 0.31 0.183    |
| REP Y647893                      | QC       | 2.61  | 49.62   | 7.00   | 37.3   | 1235  | 8.0   | 87.7  | >10000 | 2.06  | 2.8   | 1.7   | 40.3  | 0.3   | 36.4  | 1.20  | 0.29  | 0.19  | 25    | 0.30 0.181    |
| Reference Materials              |          |       |         |        |        |       |       |       |        |       |       |       |       |       |       |       |       |       |       |               |
| STD BVGEO01                      | Standard | 10.73 | 4218.82 | 182.81 | 1675.8 | 2637  | 153.7 | 26.0  | 686    | 3.50  | 123.7 | 4.2   | 204.4 | 14.8  | 54.9  | 7.26  | 3.16  | 25.66 | 69    | 1.22 0.070    |
| STD DS11                         | Standard | 13.70 | 142.71  | 126.94 | 323.2  | 2032  | 80.7  | 15.0  | 988    | 2.91  | 45.9  | 2.6   | 53.9  | 7.2   | 57.6  | 2.48  | 7.85  | 11.71 | 45    | 0.97 0.068    |
| STD OREAS262                     | Standard | 0.66  | 115.60  | 55.84  | 147.9  | 445   | 67.8  | 30.0  | 513    | 3.06  | 36.7  | 1.1   | 56.1  | 9.0   | 34.0  | 0.73  | 3.23  | 1.04  | 20    | 2.81 0.038    |
| STD OREAS262                     | Standard | 0.67  | 113.95  | 59.05  | 157.3  | 467   | 66.2  | 29.9  | 535    | 3.19  | 39.0  | 1.2   | 53.0  | 9.2   | 36.6  | 0.65  | 3.27  | 1.06  | 20    | 2.92 0.040    |
| 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 BVGEO01 Expected             |          | 10.8  | 4415    | 187    | 1741   | 2530  | 163   | 25    | 733    | 3.7   | 121   | 3.77  | 219   | 14.4  | 55    | 6.5   | 2.2   | 25.6  | 73    | 1.3219 0.0727 |
| 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   | 0.06   | <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  | <0.1   | <2    | <0.1  | <0.1  | 2      | <0.01 | 0.2   | <0.1  | <0.2  | <0.1  | <0.5  | <0.01 | <0.02 | <0.02 | <1    | <0.01 <0.001  |



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## QUALITY CONTROL REPORT

WHI21000268.1

| Method<br>Analyte<br>Unit<br>MDL | 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    |      |
|                                  | ppm      | ppm   | %     | ppm    | %     | ppm    | %     | %     | %      | ppm   | ppm   | ppm   | %     | ppb    | ppm   | ppm   | ppm   |      |
|                                  | 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   |      |
| <b>Pulp Duplicates</b>           |          |       |       |        |       |        |       |       |        |       |       |       |       |        |       |       |       |      |
| Y647859                          | AH Soil  | 9.4   | 18.3  | 0.13   | 120.3 | 0.021  | <20   | 1.01  | 0.008  | 0.05  | <0.1  | 0.7   | 0.09  | 0.23   | 179   | 0.8   | 0.09  | 2.4  |
| REP Y647859                      | QC       | 9.3   | 18.5  | 0.13   | 117.0 | 0.024  | <20   | 1.00  | 0.012  | 0.05  | <0.1  | 0.9   | 0.09  | 0.22   | 172   | 1.0   | 0.08  | 2.5  |
| Y647893                          | AH Soil  | 13.8  | 21.3  | 0.11   | 340.1 | 0.015  | <20   | 1.07  | 0.012  | 0.03  | <0.1  | 1.7   | 0.30  | 0.18   | 146   | 1.3   | 0.39  | 2.8  |
| REP Y647893                      | QC       | 12.8  | 19.2  | 0.11   | 299.3 | 0.015  | <20   | 1.03  | 0.012  | 0.03  | <0.1  | 1.6   | 0.29  | 0.18   | 145   | 1.3   | 0.38  | 2.8  |
| <b>Reference Materials</b>       |          |       |       |        |       |        |       |       |        |       |       |       |       |        |       |       |       |      |
| STD BVGEO01                      | Standard | 28.7  | 165.7 | 1.22   | 331.3 | 0.248  | <20   | 2.13  | 0.178  | 0.85  | 3.8   | 5.8   | 0.58  | 0.64   | 94    | 4.5   | 1.03  | 6.8  |
| STD DS11                         | Standard | 17.8  | 59.9  | 0.81   | 403.6 | 0.099  | <20   | 1.04  | 0.064  | 0.37  | 2.4   | 3.1   | 4.50  | 0.27   | 220   | 1.9   | 4.22  | 4.4  |
| STD OREAS262                     | Standard | 17.2  | 45.0  | 1.11   | 231.0 | 0.004  | <20   | 1.18  | 0.064  | 0.29  | <0.1  | 3.4   | 0.43  | 0.25   | 148   | 0.5   | 0.22  | 3.5  |
| STD OREAS262                     | Standard | 17.3  | 47.7  | 1.15   | 248.1 | 0.003  | <20   | 1.20  | 0.067  | 0.30  | 0.1   | 3.4   | 0.43  | 0.26   | 160   | 0.4   | 0.21  | 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 BVGEO01 Expected             |          | 25.9  | 171   | 1.2963 | 340   | 0.233  |       | 2.347 | 0.1924 | 0.89  | 3.5   | 5.97  | 0.62  | 0.6655 | 100   | 4.84  | 1.02  | 7.37 |
| 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 |

**APPENDIX IV**

**Rock Assay Certificates**



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

**Client:** **Mann & Hulstein Prospects**  
Whitehorse Yukon Canada

Submitted By: Bill Mann  
Receiving Lab: Canada-Whitehorse  
Received: July 26, 2021  
Analysis Start: August 13, 2021  
Report Date: August 26, 2021  
Page: 1 of 2

## CERTIFICATE OF ANALYSIS

WHI21000266.1

### CLIENT JOB INFORMATION

Project: TAUT

Shipment ID:

P.O. Number

Number of Samples: 5

### SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

| Procedure Code | Number of Samples | Code Description                                  | Test Wgt (g) | Report Status | Lab |
|----------------|-------------------|---|--------------|---------------|-----|
| PRP70-250      | 5                 | Crush, split and pulverize 250 g rock to 200 mesh |              |               | WHI |
| AQ201          | 5                 | 1:1:1 Aqua Regia digestion ICP-MS analysis        | 15           | Completed     | VAN |
| SHP01          | 5                 | Per sample shipping charges for branch shipments  |              |               | VAN |

### SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

DISP-RJT Dispose of Reject After 60 days

### ADDITIONAL COMMENTS

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

Invoice To: Mann & Hulstein Prospects  
Whitehorse Yukon  
Canada

CC:



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: **Mann & Hulstein Prospects**  
Whitehorse Yukon Canada

Project: TAUT  
Report Date: August 26, 2021

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Part: 1 of 2

## CERTIFICATE OF ANALYSIS

WHI21000266.1

| Method  | WGHT    | 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   | ppb   | 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  |
| I065720 | Rock    | 0.46  | 154.0 | 1.8   | 6.6   | 4     | 0.3   | 0.9   | 0.3   | 50    | 0.58  | 1.8   | 0.1   | 2.5   | 0.3   | 3     | 0.2   | 0.5   | 0.3   | 2     | <0.01 |
| I065721 | Rock    | 1.53  | 3.5   | 79.8  | 14.3  | 79    | 0.7   | 6.8   | 3.2   | 238   | 2.52  | 3.5   | 0.6   | 7.4   | 3.4   | 79    | <0.1  | 0.3   | 0.5   | 44    | 0.34  |
| I065722 | Rock    | 0.78  | 0.6   | 6.2   | 16.2  | 81    | 0.8   | 7.4   | 10.3  | 516   | 3.36  | 16.6  | 0.5   | 65.7  | 2.3   | 55    | <0.1  | 0.2   | 0.8   | 37    | 0.28  |
| I065765 | Rock    | 0.69  | 26.2  | 1.5   | 10.4  | 20    | <0.1  | 0.9   | 1.3   | 455   | 0.82  | 1.5   | 0.3   | 1.4   | 1.4   | 58    | <0.1  | <0.1  | 0.3   | 6     | 1.43  |
| I065766 | Rock    | 1.62  | 0.3   | 4.6   | 6.9   | 79    | 0.3   | 9.2   | 8.8   | 543   | 2.54  | 12.9  | 0.6   | 25.0  | 2.4   | 193   | 0.8   | 0.2   | 0.5   | 46    | 0.53  |



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**Client:** **Mann & Hulstein Prospects**  
Whitehorse Yukon Canada

Project: TAUT  
Report Date: August 26, 2021

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Part: 2 of 2

## CERTIFICATE OF ANALYSIS

WHI21000266.1

| 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  |
| I065720 | Rock    | 0.001 | <1    | 6     | <0.01 | 24    | <0.001 | <1    | 0.03  | 0.002 | 0.02  | 0.8   | 0.11  | <0.1  | <0.1  | <0.05 | <1    | <0.5  | <0.2 |
| I065721 | Rock    | 0.073 | 10    | 35    | 0.59  | 541   | 0.070  | <1    | 1.26  | 0.084 | 0.15  | 0.1   | 0.02  | 4.4   | <0.1  | 0.42  | 5     | <0.5  | 0.2  |
| I065722 | Rock    | 0.081 | 5     | 22    | 1.12  | 91    | 0.006  | <1    | 1.90  | 0.060 | 0.07  | <0.1  | <0.01 | 2.9   | <0.1  | 1.50  | 6     | <0.5  | 1.3  |
| I065765 | Rock    | 0.012 | 5     | 4     | 0.08  | 50    | 0.002  | <1    | 0.26  | 0.060 | 0.10  | 0.2   | 0.06  | 1.3   | <0.1  | 0.12  | <1    | <0.5  | <0.2 |
| I065766 | Rock    | 0.081 | 9     | 24    | 1.29  | 246   | 0.042  | <1    | 2.06  | 0.099 | 0.08  | <0.1  | <0.01 | 3.6   | <0.1  | 0.67  | 7     | <0.5  | 0.7  |



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Project: TAUT  
Report Date: August 26, 2021

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Part: 1 of 2

## QUALITY CONTROL REPORT

WHI21000266.1

| Method<br>Analyte<br>Unit<br>MDL | WGHT       | AQ201 |       |       |
|----------------------------------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                  | Wgt        | Mo    | Cu    | Pb    | Zn    | Ag    | Ni    | Co    | Mn    | Fe    | As    | U     | Au    | Th    | Sr    | Cd    | Sb    | Bi    | V     | Ca    |       |
|                                  | kg         | ppm   | %     | ppm   | ppm   | ppb   | ppm   | ppm   | ppm   | ppm   | ppm   | %     |       |       |
|                                  | 0.01       | 0.1   | 0.1   | 0.1   | 1     | 0.1   | 0.1   | 0.1   | 1     | 0.01  | 0.5   | 0.1   | 0.5   | 0.1   | 1     | 0.1   | 0.1   | 0.1   | 1     | 0.01  |       |
| Core Reject Duplicates           |            |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| I065721                          | Rock       | 1.53  | 3.5   | 79.8  | 14.3  | 79    | 0.7   | 6.8   | 3.2   | 238   | 2.52  | 3.5   | 0.6   | 7.4   | 3.4   | 79    | <0.1  | 0.3   | 0.5   | 44    | 0.34  |
| DUP I065721                      | QC         |       | 3.4   | 74.4  | 12.8  | 76    | 0.7   | 6.0   | 2.9   | 222   | 2.31  | 2.8   | 0.6   | 9.4   | 3.3   | 74    | <0.1  | 0.3   | 0.5   | 41    | 0.31  |
| Reference Materials              |            |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| STD DS11                         | Standard   |       | 14.5  | 144.4 | 139.1 | 341   | 1.7   | 79.8  | 13.6  | 1023  | 3.13  | 44.8  | 2.7   | 62.4  | 8.1   | 72    | 2.3   | 9.2   | 12.4  | 49    | 1.08  |
| STD OREAS262                     | Standard   |       | 0.7   | 116.0 | 58.9  | 157   | 0.5   | 65.9  | 27.5  | 554   | 3.30  | 37.1  | 1.3   | 73.2  | 10.3  | 38    | 0.7   | 6.1   | 1.0   | 23    | 2.97  |
| STD DS11 Expected                |            |       | 14.6  | 149   | 138   | 345   | 1.71  | 77.7  | 14.2  | 1055  | 3.1   | 42.8  | 2.59  | 79    | 7.65  | 67.3  | 2.37  | 8.74  | 12.2  | 50    | 1.063 |
| STD OREAS262 Expected            |            |       | 0.68  | 118   | 56    | 154   | 0.45  | 62    | 26.9  | 530   | 3.284 | 35.8  | 1.22  | 65    | 9.33  | 36    | 0.61  | 5.06  | 1.03  | 22.5  | 2.98  |
| BLK                              | Blank      |       | <0.1  | <0.1  | <0.1  | <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 |       | 0.6   | 1.9   | 1.9   | 28    | <0.1  | 0.9   | 3.2   | 445   | 1.75  | 3.1   | 0.5   | <0.5  | 2.6   | 25    | <0.1  | 0.2   | <0.1  | 23    | 0.56  |



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Whitehorse Yukon Canada

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9050 Shaughnessy St Vancouver British Columbia V6P 6E5 Canada

PHONE (604) 253-3158

Project: TAUT  
Report Date: August 26, 2021

Page: 1 of 1

Part: 2 of 2

## QUALITY CONTROL REPORT

WHI21000266.1

| 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  |
| Core Reject Duplicates |            |        |       |       |       |       |        |       |        |        |       |       |       |       |       |        |       |       |      |
| I065721                | Rock       | 0.073  | 10    | 35    | 0.59  | 541   | 0.070  | <1    | 1.26   | 0.084  | 0.15  | 0.1   | 0.02  | 4.4   | <0.1  | 0.42   | 5     | <0.5  | 0.2  |
| DUP I065721            | QC         | 0.071  | 9     | 32    | 0.55  | 494   | 0.059  | <1    | 1.16   | 0.077  | 0.14  | <0.1  | <0.01 | 4.2   | <0.1  | 0.38   | 5     | <0.5  | 0.3  |
| Reference Materials    |            |        |       |       |       |       |        |       |        |        |       |       |       |       |       |        |       |       |      |
| STD DS11               | Standard   | 0.071  | 20    | 58    | 0.85  | 407   | 0.097  | 4     | 1.18   | 0.073  | 0.40  | 3.0   | 0.26  | 3.1   | 4.9   | 0.28   | 5     | 1.3   | 4.7  |
| STD OREAS262           | Standard   | 0.040  | 20    | 44    | 1.19  | 266   | 0.003  | 3     | 1.48   | 0.068  | 0.33  | 0.2   | 0.17  | 3.4   | 0.5   | 0.26   | 4     | <0.5  | 0.2  |
| STD DS11 Expected      |            | 0.0701 | 18.6  | 61.5  | 0.85  | 385   | 0.0976 |       | 1.1795 | 0.0762 | 0.4   | 2.9   | 0.26  | 3.4   | 4.9   | 0.2835 | 5.1   | 2.2   | 4.56 |
| STD OREAS262 Expected  |            | 0.04   | 15.9  | 41.7  | 1.17  | 248   | 0.0027 | 4     | 1.3    | 0.071  | 0.312 | 0.2   | 0.17  | 3.24  | 0.47  | 0.253  | 4.1   | 0.4   | 0.23 |
| 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 | 0.040  | 7     | 4     | 0.42  | 66    | 0.091  | <1    | 0.84   | 0.111  | 0.11  | 0.3   | 0.01  | 2.6   | <0.1  | <0.05  | 4     | <0.5  | <0.2 |

**APPENDIX V**

**BC Horizon Soil Sample Locations**

**&**

**Descriptions**

|         |   |          |      |       |      |   |        |         |      |   |         |          |              |         |   |          | Method | AQ201 |
|---------|---|----------|------|-------|------|---|--------|---------|------|---|---------|----------|--------------|---------|---|----------|--------|-------|
|         | Taut 2021 B-C Horizon Soil Samples                |          |      |       |      |   |        |         |      |   |         |          |              |         |   | Analyte  | Mo     |       |
|         | All coordinates; Grid: UTM, Datum: NAD 83 Zone 8V |          |      |       |      |   |        |         |      |   |         |          |              |         |   | Unit     | PPM    |       |
| Sample# | Date  | Time     | Grid | Datum | Zone | V | East   | North   | Elev | m | Sampler | Depth-cm | Color        | Quality | Description   | Type/MDL | 0.1    |       |
| 72810   | 7/16/2021   | 12:39:19 | UTM  | NAD83 | 8    | V | 405697 | 6848503 | 1455 | m | WDM     | 15       | red-brown    | mod     | B/C, angular rock                                     | Soil     | 1.3    |       |
| 72811   | 7/16/2021   | 12:59:00 | UTM  | NAD83 | 8    | V | 405750 | 6848505 | 1446 | m | WDM     | 20       | orange-brown | mod     | B/C, saturated  | Soil     | 1      |       |
| 72812   | 7/16/2021   | 1:10:38  | UTM  | NAD83 | 8    | V | 405797 | 6848499 | 1438 | m | WDM     | 25       | orange-brown | mod     | B/C, pond bottom                                      | Soil     | 6.6    |       |
| 72813   | 7/16/2021   | 1:30:09  | UTM  | NAD83 | 8    | V | 405863 | 6848504 | 1427 | m | WDM     | 20       | orange-brown | poor    | B/C   | Soil     | 4.5    |       |
| 72814   | 7/16/2021   | 1:41:28  | UTM  | NAD83 | 8    | V | 405903 | 6848498 | 1425 | m | WDM     | 25       | orange-brown | good    | B/C, from bottom of 50cm deep pond                    | Soil     | 17     |       |
| 72815   | 7/16/2021   | 1:52:06  | UTM  | NAD83 | 8    | V | 405947 | 6848500 | 1423 | m | WDM     | 40       | orange-brown | good    | B/C, gritty, from frost boil                          | Soil     | 3.2    |       |
| 72816   | 7/16/2021   | 2:37:01  | UTM  | NAD83 | 8    | V | 406067 | 6848500 | 1420 | m | WDM     | 20       | grey-brown   | mod     | gritty  | Soil     | 1.1    |       |
| 72817   | 7/16/2021   | 2:52:31  | UTM  | NAD83 | 8    | V | 406101 | 6848501 | 1420 | m | WDM     | 25       | orange-brown | poor    | B/C, rocky  | Soil     | 0.3    |       |
| 72818   | 7/16/2021   | 3:06:43  | UTM  | NAD83 | 8    | V | 406150 | 6848500 | 1419 | m | WDM     | 35       | grey-brown   | good    | gritty  | Soil     | 0.5    |       |
| 72819   | 7/16/2021   | 3:16:44  | UTM  | NAD83 | 8    | V | 406199 | 6848499 | 1419 | m | WDM     | 25       | grey-brown   | mod     | dry, rocky  | Soil     | 1.7    |       |
| 72820   | 7/16/2021   | 3:27:35  | UTM  | NAD83 | 8    | V | 406249 | 6848496 | 1417 | m | WDM     | 30       | orange-brown | good    | B/C, pond bottom, saturated, gritty                   | Soil     | 1.6    |       |
| 72821   | 7/16/2021   | 3:47:14  | UTM  | NAD83 | 8    | V | 406302 | 6848499 | 1416 | m | WDM     | 30       | grey-brown   | mod     | rocky, diluted w/ ash & loess                         | Soil     | 0.7    |       |
| 72822   | 7/16/2021   | 4:13:36  | UTM  | NAD83 | 8    | V | 406349 | 6848505 | 1410 | m | WDM     | 30       | grey-brown   | good    | rocky   | Soil     | 1.5    |       |
| 72823   | 7/16/2021   | 4:26:10  | UTM  | NAD83 | 8    | V | 406402 | 6848502 | 1408 | m | WDM     | 25       | orange-brown | good    | B/C, rocky  | Soil     | 1.9    |       |
| 72824   | 7/16/2021   | 4:37:27  | UTM  | NAD83 | 8    | V | 406450 | 6848501 | 1409 | m | WDM     | 25       | orange-brown | mod     | B/C, saturate, rocky                                  | Soil     | 0.5    |       |
| 72825   | 7/16/2021   | 4:51:05  | UTM  | NAD83 | 8    | V | 406505 | 6848499 | 1408 | m | WDM     | 25       | orange-brown | good    | B/C, rocky  | Soil     | 1.5    |       |
| 72826   | 7/16/2021   | 5:03:33  | UTM  | NAD83 | 8    | V | 406551 | 6848500 | 1406 | m | WDM     | 40       | orange-brown | good    | B/C, rocky  | Soil     | 4.2    |       |
| 72827   | 7/16/2021   | 5:14:19  | UTM  | NAD83 | 8    | V | 406599 | 6848498 | 1405 | m | WDM     | 40       | orange-brown | good    | B/C, rocky  | Soil     | 2.1    |       |
| 72828   | 7/16/2021   | 5:23:53  | UTM  | NAD83 | 8    | V | 406652 | 6848497 | 1404 | m | WDM     | 35       | orange-brown | good    | B/C, rocky, saturated                                 | Soil     | 2.6    |       |
| 72829   | 7/17/2021   | 10:18:22 | UTM  | NAD83 | 8    | V | 406130 | 6846651 | 1396 | m | WDM     | 30       | tan          | good    | dry, rocky  | Soil     | 0.7    |       |
| 72830   | 7/17/2021   | 10:35:02 | UTM  | NAD83 | 8    | V | 406274 | 6846473 | 1379 | m | WDM     | 30       | tan          | good    | dry, rocky  | Soil     | 0.7    |       |
| 72831   | 7/17/2021   | 11:05:15 | UTM  | NAD83 | 8    | V | 406483 | 6845828 | 1320 | m | WDM     | 35       | brown        | good    | dry, rocky & sandy                                    | Soil     | 1.4    |       |
| 72832   | 7/17/2021   | 11:27:06 | UTM  | NAD83 | 8    | V | 406598 | 6845578 | 1281 | m | WDM     | 40       | tan          | good    | dry, rocky  | Soil     | 2.1    |       |
| 72833   | 7/17/2021   | 12:23:18 | UTM  | NAD83 | 8    | V | 406180 | 6845413 | 1167 | m | WDM     | 5        | grey-brown   | good    | Silt from dry creek bed, steep, granodiorite boulders | Soil     | 0.6    |       |
| 72834   | 7/17/2021   | 12:40:37 | UTM  | NAD83 | 8    | V | 406073 | 6845389 | 1173 | m | WDM     | 10       | grey-brown   | good    | talus fines   | Soil     | 0.4    |       |
| 72835   | 7/17/2021   | 2:29:52  | UTM  | NAD83 | 8    | V | 405855 | 6845794 | 1358 | m | WDM     | 40       | orange-brown | good    | dry   | Soil     | 0.7    |       |
| 72836   | 7/17/2021   | 2:40:25  | UTM  | NAD83 | 8    | V | 405722 | 6845989 | 1373 | m | WDM     | 40       | orange-brown | good    | grus, dry   | Soil     | 0.5    |       |
| 72837   | 7/17/2021   | 2:54:58  | UTM  | NAD83 | 8    | V | 405681 | 6846291 | 1390 | m | WDM     | 40       | grey-brown   | good    | gritty "C" w/ black mica, beneath org-brn "B"         | Soil     | 0.3    |       |
| 72838   | 7/17/2021   | 4:03:34  | UTM  | NAD83 | 8    | V | 406434 | 6846682 | 1438 | m | WDM     | 40       | tan          | good    | B/C, loamy (loess dilution)                           | Soil     | 0.7    |       |
| 72839   | 7/17/2021   | 4:19:46  | UTM  | NAD83 | 8    | V | 406320 | 6846647 | 1428 | m | WDM     | 40       | tan          | good    | grus w/ loess   | Soil     | 0.5    |       |
| 72840   | 7/18/2021   | 9:53:44  | UTM  | NAD83 | 8    | V | 405998 | 6848199 | 1491 | m | WDM     | 10       | tan          | good    | ridge crest, well-drained, rocky, some loess          | Soil     | 0.6    |       |
| 72841   | 7/18/2021   | 10:16:45 | UTM  | NAD83 | 8    | V | 405986 | 6848298 | 1469 | m | WDM     | 25       | brown        | good    | B/C, rocky talus                                      | Soil     | 1.1    |       |
| 72842   | 7/18/2021   | 10:29:15 | UTM  | NAD83 | 8    | V | 405999 | 6848397 | 1440 | m | WDM     | 25       | tan          | good    | mod slope   | Soil     | 1.3    |       |
| 72843   | 7/18/2021   |          | UTM  | NAD83 | 8    | V | 405997 | 6849003 | 1362 | m | WDM     | 35       | brown        | mod     | ~25m E of DDH, "C" w/ boulders & cobbles              | Soil     | 8.8    |       |
| 72844   | 7/18/2021   | 12:30:39 | UTM  | NAD83 | 8    | V | 405992 | 6849103 | 1354 | m | WDM     | 25       | orange-brown | good    | cryoturbated "B" w/ ash dilution                      | Soil     | 6.7    |       |



|         | AQ201 |               |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
|         | Cr    | Mg    | Ba    | Ti    | B     | Al    | Na    | K     | W     | Hg    | Sc    | Tl    | S     | Ga    | Se    | Te    |               |
|         | PPM   | %     | PPM   | %     | PPM   | %     | %     | %     | PPM   |               |
| Sample# | 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   | Certificate   |
| 72810   | 20    | 0.36  | 130   | 0.028 | <1    | 1.74  | 0.016 | 0.06  | 0.1   | 0.05  | 2.9   | 0.1   | <0.05 | 6     | <0.5  | 0.3   | WHI21000267.1 |
| 72811   | 12    | 0.25  | 141   | 0.046 | 1     | 0.85  | 0.033 | 0.08  | <0.1  | 0.04  | 1.9   | 0.1   | <0.05 | 4     | <0.5  | <0.2  | WHI21000267.1 |
| 72812   | 23    | 0.42  | 171   | 0.031 | <1    | 1.57  | 0.017 | 0.06  | <0.1  | 0.14  | 3.9   | 0.1   | 0.07  | 6     | 1.2   | 1     | WHI21000267.1 |
| 72813   | 23    | 0.42  | 124   | 0.07  | <1    | 1.32  | 0.019 | 0.11  | <0.1  | 0.07  | 3.8   | 0.1   | <0.05 | 5     | 0.5   | 0.3   | WHI21000267.1 |
| 72814   | 19    | 0.22  | 198   | 0.023 | <1    | 1.06  | 0.015 | 0.05  | 0.1   | 0.18  | 4.5   | <0.1  | 0.08  | 3     | 1     | 0.5   | WHI21000267.1 |
| 72815   | 41    | 0.8   | 175   | 0.115 | <1    | 2.3   | 0.014 | 0.26  | <0.1  | 0.07  | 7.4   | 0.2   | <0.05 | 8     | <0.5  | 0.4   | WHI21000267.1 |
| 72816   | 25    | 0.86  | 181   | 0.05  | <1    | 2.13  | 0.015 | 0.11  | <0.1  | 0.02  | 5.6   | 0.1   | 0.06  | 7     | 0.5   | 0.6   | WHI21000267.1 |
| 72817   | 5     | 0.15  | 102   | 0.059 | <1    | 0.39  | 0.028 | 0.03  | <0.1  | 0.02  | 1.1   | <0.1  | 0.07  | 2     | <0.5  | <0.2  | WHI21000267.1 |
| 72818   | 7     | 0.23  | 114   | 0.026 | <1    | 0.65  | 0.034 | 0.04  | <0.1  | 0.02  | 1.7   | <0.1  | 0.09  | 2     | <0.5  | <0.2  | WHI21000267.1 |
| 72819   | 26    | 0.73  | 188   | 0.074 | 2     | 1.47  | 0.017 | 0.14  | <0.1  | 0.04  | 4.3   | <0.1  | 0.1   | 7     | <0.5  | 0.7   | WHI21000267.1 |
| 72820   | 24    | 0.78  | 195   | 0.052 | <1    | 1.73  | 0.018 | 0.1   | <0.1  | 0.02  | 5.6   | <0.1  | <0.05 | 6     | <0.5  | 0.2   | WHI21000267.1 |
| 72821   | 6     | 0.19  | 57    | 0.032 | <1    | 0.47  | 0.033 | 0.02  | <0.1  | <0.01 | 1.1   | <0.1  | 0.06  | 2     | <0.5  | <0.2  | WHI21000267.1 |
| 72822   | 34    | 0.8   | 220   | 0.059 | 1     | 2.13  | 0.016 | 0.06  | 0.1   | 0.03  | 4.9   | 0.1   | 0.06  | 8     | 0.5   | 0.3   | WHI21000267.1 |
| 72823   | 18    | 0.53  | 129   | 0.047 | <1    | 1.34  | 0.02  | 0.04  | <0.1  | 0.02  | 2.9   | <0.1  | 0.06  | 6     | <0.5  | 0.2   | WHI21000267.1 |
| 72824   | 7     | 0.16  | 63    | 0.031 | <1    | 0.76  | 0.036 | 0.03  | <0.1  | 0.02  | 1.6   | <0.1  | 0.11  | 2     | <0.5  | <0.2  | WHI21000267.1 |
| 72825   | 19    | 0.86  | 163   | 0.082 | <1    | 2.03  | 0.025 | 0.12  | <0.1  | 0.01  | 4.8   | 0.1   | <0.05 | 7     | <0.5  | 0.3   | WHI21000267.1 |
| 72826   | 22    | 0.91  | 211   | 0.015 | <1    | 2.03  | 0.014 | 0.07  | <0.1  | 0.04  | 5.5   | <0.1  | <0.05 | 7     | 0.8   | 0.2   | WHI21000267.1 |
| 72827   | 32    | 0.82  | 227   | 0.074 | <1    | 2.03  | 0.024 | 0.1   | <0.1  | 0.01  | 5.8   | 0.1   | 0.07  | 7     | <0.5  | <0.2  | WHI21000267.1 |
| 72828   | 37    | 1.07  | 329   | 0.055 | <1    | 2.34  | 0.02  | 0.11  | <0.1  | 0.02  | 6.7   | 0.1   | 0.09  | 7     | 0.7   | <0.2  | WHI21000267.1 |
| 72829   | 31    | 0.51  | 135   | 0.092 | 1     | 2.01  | 0.011 | 0.09  | 0.1   | 0.2   | 4.3   | 0.1   | <0.05 | 6     | <0.5  | <0.2  | WHI21000267.1 |
| 72830   | 26    | 0.47  | 287   | 0.087 | 1     | 2.09  | 0.012 | 0.11  | 0.3   | 0.15  | 4     | <0.1  | 0.07  | 6     | <0.5  | <0.2  | WHI21000267.1 |
| 72831   | 29    | 1.24  | 189   | 0.2   | <1    | 2.82  | 0.013 | 0.51  | <0.1  | 0.02  | 8.1   | 0.3   | <0.05 | 11    | <0.5  | <0.2  | WHI21000267.1 |
| 72832   | 46    | 1.16  | 176   | 0.182 | <1    | 3.03  | 0.016 | 0.37  | 0.1   | 0.01  | 6.3   | 0.2   | 0.1   | 10    | <0.5  | <0.2  | WHI21000267.1 |
| 72833   | 22    | 0.58  | 277   | 0.091 | 3     | 1.45  | 0.018 | 0.26  | <0.1  | 0.03  | 3.5   | 0.1   | 0.16  | 6     | 0.6   | <0.2  | WHI21000267.1 |
| 72834   | 8     | 0.38  | 195   | 0.046 | <1    | 1.56  | 0.011 | 0.25  | <0.1  | 0.01  | 4.1   | 0.2   | 0.08  | 6     | <0.5  | <0.2  | WHI21000267.1 |
| 72835   | 46    | 1.08  | 158   | 0.135 | 1     | 3.33  | 0.015 | 0.32  | <0.1  | 0.01  | 10.3  | 0.3   | <0.05 | 13    | <0.5  | <0.2  | WHI21000267.1 |
| 72836   | 93    | 1.84  | 233   | 0.21  | <1    | 3.55  | 0.023 | 0.85  | <0.1  | <0.01 | 13.1  | 0.4   | <0.05 | 15    | <0.5  | <0.2  | WHI21000267.1 |
| 72837   | 32    | 1.34  | 355   | 0.206 | <1    | 2.37  | 0.018 | 0.53  | <0.1  | <0.01 | 5.3   | 0.3   | <0.05 | 8     | <0.5  | <0.2  | WHI21000267.1 |
| 72838   | 36    | 0.63  | 159   | 0.107 | 2     | 2.46  | 0.012 | 0.1   | 0.1   | 0.05  | 5.4   | 0.1   | 0.09  | 7     | <0.5  | <0.2  | WHI21000267.1 |
| 72839   | 30    | 0.49  | 178   | 0.105 | 2     | 2.02  | 0.011 | 0.09  | 0.2   | 0.18  | 4.8   | <0.1  | 0.08  | 6     | <0.5  | <0.2  | WHI21000267.1 |
| 72840   | 32    | 0.78  | 279   | 0.07  | <1    | 2.93  | 0.015 | 0.1   | <0.1  | 0.06  | 4.7   | 0.1   | 0.06  | 7     | <0.5  | <0.2  | WHI21000267.1 |
| 72841   | 35    | 0.81  | 145   | 0.083 | <1    | 1.98  | 0.015 | 0.12  | <0.1  | 0.04  | 5.9   | 0.1   | 0.07  | 6     | <0.5  | 1.3   | WHI21000267.1 |
| 72842   | 48    | 1.17  | 293   | 0.127 | <1    | 2.52  | 0.021 | 0.33  | <0.1  | 0.06  | 9.4   | 0.2   | 0.1   | 9     | <0.5  | 0.6   | WHI21000267.1 |
| 72843   | 29    | 0.5   | 157   | 0.058 | <1    | 1.9   | 0.014 | 0.09  | <0.1  | 0.04  | 3.3   | 0.2   | 0.11  | 6     | <0.5  | <0.2  | WHI21000267.1 |
| 72844   | 23    | 0.55  | 199   | 0.079 | 1     | 1.89  | 0.011 | 0.12  | <0.1  | 0.04  | 4.3   | 0.2   | <0.05 | 5     | <0.5  | <0.2  | WHI21000267.1 |

|         |   |            |      |       |      |   |        |         |      |   |         |          |              |         |  |          | Method | AQ201 |
|---------|---|------------|------|-------|------|---|--------|---------|------|---|---------|----------|--------------|---------|--|----------|--------|-------|
|         | Taut 2021 B-C Horizon Soil Samples                |            |      |       |      |   |        |         |      |   |         |          |              |         |  | Analyte  | Mo     |       |
|         | All coordinates; Grid: UTM, Datum: NAD 83 Zone 8V |            |      |       |      |   |        |         |      |   |         |          |              |         |  | Unit     | PPM    |       |
| Sample# | Date  | Time       | Grid | Datum | Zone | V | East   | North   | Elev | m | Sampler | Depth-cm | Color        | Quality | Description  | Type/MDL | 0.1    |       |
| 72845   | 7/18/2021   | 12:42:05   | UTM  | NAD83 | 8    | V | 405999 | 6849202 | 1345 | m | WDM     | 20       | grey-brown   | mod     | "C" w/ ash, silt, sand & pebbles in pothole  | Soil     | 5.9    |       |
| 72846   | 7/18/2021   | 1:03:29    | UTM  | NAD83 | 8    | V | 406000 | 6849301 | 1337 | m | WDM     | 35       | brown        | good    | "C" beneath 15cm ash   | Soil     | 10.7   |       |
| 72847   | 7/18/2021   | 1:20:23    | UTM  | NAD83 | 8    | V | 406002 | 6849477 | 1332 | m | WDM     | 25       | tan          | good    | beneath 5cm orange "B" horizon   | Soil     | 2.8    |       |
| 72848   | 7/18/2021   | 1:33:47    | UTM  | NAD83 | 8    | V | 405997 | 6849600 | 1346 | m | WDM     | 25       | orange-brown | good    | mod slope, south-facing, well-drained "B" horizon  | Soil     | 1.5    |       |
| 72849   | 7/18/2021   | 1:46:32    | UTM  | NAD83 | 8    | V | 406000 | 6849701 | 1356 | m | WDM     | 15       | orange-brown | good    | mod slope, south-facing, well-drained "B" horizon, bare soil patch                           | Soil     | 2.8    |       |
| 72850   | 7/18/2021   | 4:31:52    | UTM  | NAD83 | 8    | V | 405461 | 6848833 | 1493 | m | WDM     | 30       | orange       | good    | rocky, dry, well-drained   | Soil     | 4.7    |       |
| 72851   | 7/18/2021   | 4:40:44    | UTM  | NAD83 | 8    | V | 405470 | 6848775 | 1491 | m | WDM     | 25       | orange-brown | good    | rocky  | Soil     | 3.2    |       |
| 72852   | 7/20/2021   | 11:17:09   | UTM  | NAD83 | 8    | V | 405334 | 6850190 | 1423 | m | WDM     | 35       | orange       | good    | field duplicate of #1961135, rocky orange soil   | Soil     | 9.8    |       |
| 72853   | 7/20/2021   | 11:30:49   | UTM  | NAD83 | 8    | V | 405348 | 6850145 | 1423 | m | WDM     | 35       | orange       | good    | sand- silt (grus), gentle slope, well-drained  | Soil     | 6.5    |       |
| 72854   | 7/21/2021   | 10:33:04   | UTM  | NAD83 | 8    | V | 405458 | 6848767 | 1523 | m | WDM     | 100      | orange       | good    | Test pit 21-1, 1.0m deep, mid slope, silt-sand- pebble, "C"                                  | Soil     | 1.3    |       |
| 72855   | 7/21/2021   | 11:42:52   | UTM  | NAD83 | 8    | V | 405498 | 6848709 | 1493 | m | WDM     | 25       | orange       | good    | ridge crest, well-drained, rocky, silt-sand, pyritic andesite                                | Soil     | 1.2    |       |
| 72856   | 7/21/2021   | 11:58:15   | UTM  | NAD83 | 8    | V | 405657 | 6848443 | 1475 | m | WDM     | 30       | brown        | good    | ridge crest, well-drained, rocky, silt-sand (grus)   | Soil     | 1.9    |       |
| Y647801 | 16-Jul-21   | 12:54:09PM | UTM  | NAD83 | 8    | V | 406342 | 6848802 | 1369 | m | RH      | 40       | org-brn      | mod     | rare andesite float  | Soil     | 11.2   |       |
| Y647802 | 16-Jul-21   | 1:11:58PM  | UTM  | NAD83 | 8    | V | 406398 | 6848799 | 1359 | m | RH      | 30       | org-brn      | mod     | frost boil, andesite float, soil lenses are alluvial?  | Soil     | 6.5    |       |
| Y647803 | 16-Jul-21   | 1:24:44PM  | UTM  | NAD83 | 8    | V | 406453 | 6848810 | 1368 | m | RH      | 25       | grey-brn     | mod     | bog hole, in local drainage, ash and loess mixed with sandy -silt                            | Soil     | 3.4    |       |
| Y647804 | 16-Jul-21   | 1:31:49PM  | UTM  | NAD83 | 8    | V | 406498 | 6848799 | 1374 | m | RH      | 34       | brown        | mod     | frost boil, sandy soil, ash-loess, andesite pebbles, looks alluvial                          | Soil     | 3.1    |       |
| Y647805 | 16-Jul-21   | 1:48:31PM  | UTM  | NAD83 | 8    | V | 406552 | 6848802 | 1380 | m | RH      | 30       | brown        | mod     | Frost boil, sandy - silt, ash and loess. Andesite float                                      | Soil     | 2.7    |       |
| Y647806 | 16-Jul-21   | 1:59:53PM  | UTM  | NAD83 | 8    | V | 406599 | 6848805 | 1384 | m | RH      | 30       | org-brn      | good    | Frost boil, sandy-silt, minor ash loess, andesite pebbles                                    | Soil     | 5.7    |       |
| Y647807 | 16-Jul-21   | 2:16:57PM  | UTM  | NAD83 | 8    | V | 406649 | 6848798 | 1385 | m | RH      | 50       | brown        | mod     | frost boil, sandy soil, orange altered andesite pebbles, loess and ash                       | Soil     | 5.5    |       |
| Y647808 | 16-Jul-21   | 2:28:38PM  | UTM  | NAD83 | 8    | V | 406695 | 6848797 | 1388 | m | RH      | 25       | brown        | mod     | frost boil, pebbles and boulders of andesite, some orange altered andesite, minor ash-loess. | Soil     | 8.2    |       |
| Y647809 | 16-Jul-21   | 3:34:39PM  | UTM  | NAD83 | 8    | V | 406753 | 6848802 | 1377 | m | RH      | 35       | brown        | mod     | frost boil - pool, rocky, andesite amd granodiorite float, sandy pebble soil.                | Soil     | 2.2    |       |
| Y647810 | 16-Jul-21   | 3:49:39PM  | UTM  | NAD83 | 8    | V | 406799 | 6848797 | 1375 | m | RH      | 30       | org-brn      | good    | frost boil - pool, rocky, andesite amd granodiorite float, sandy pebble soil.                | Soil     | 3.9    |       |



|         | AQ201         |  |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|--|
|         | Cr    | Mg    | Ba    | Ti    | B     | Al    | Na    | K     | W     | Hg    | Sc    | Tl    | S     | Ga    | Se    | Te    |               |  |
|         | PPM   | %     | PPM   | %     | PPM   | %     | %     | %     | PPM   |               |  |
| Sample# | 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   | Certificate   |  |
| 72845   | 30    | 0.6   | 255   | 0.078 | 2     | 2.3   | 0.012 | 0.08  | <0.1  | 0.06  | 5.1   | 0.1   | <0.05 | 7     | <0.5  | <0.2  | WHI21000267.1 |  |
| 72846   | 21    | 0.41  | 158   | 0.07  | 1     | 1.34  | 0.01  | 0.07  | 0.1   | 0.02  | 2.5   | 0.1   | 0.07  | 6     | <0.5  | <0.2  | WHI21000267.1 |  |
| 72847   | 24    | 1.01  | 239   | 0.105 | <1    | 2.51  | 0.052 | 0.44  | 0.1   | <0.01 | 7.5   | 0.3   | 0.34  | 9     | 0.7   | 0.4   | WHI21000267.1 |  |
| 72848   | 23    | 1.23  | 181   | 0.083 | <1    | 3.45  | 0.008 | 0.3   | <0.1  | 0.01  | 6.6   | 0.2   | <0.05 | 9     | <0.5  | 0.2   | WHI21000267.1 |  |
| 72849   | 41    | 0.97  | 183   | 0.13  | 2     | 3     | 0.015 | 0.28  | 0.1   | 0.02  | 6.3   | 0.2   | <0.05 | 8     | <0.5  | 0.3   | WHI21000267.1 |  |
| 72850   | 24    | 0.63  | 191   | 0.009 | <1    | 2.25  | 0.027 | 0.06  | <0.1  | 0.07  | 4     | 0.2   | <0.05 | 6     | 0.6   | 3.8   | WHI21000267.1 |  |
| 72851   | 28    | 0.73  | 155   | 0.039 | <1    | 2.06  | 0.018 | 0.06  | <0.1  | 0.02  | 4.2   | 0.1   | <0.05 | 6     | 0.6   | 1.6   | WHI21000267.1 |  |
| 72852   | 45    | 0.51  | 192   | 0.031 | <1    | 1.53  | 0.044 | 0.18  | <0.1  | 0.04  | 6.1   | 0.1   | 0.39  | 6     | 1.4   | 1.1   | WHI21000267.1 |  |
| 72853   | 39    | 0.28  | 205   | 0.012 | <1    | 1.03  | 0.04  | 0.09  | <0.1  | <0.01 | 8.9   | <0.1  | 0.17  | 4     | 0.9   | 0.3   | WHI21000267.1 |  |
| 72854   | 23    | 0.59  | 127   | 0.03  | <1    | 1.71  | 0.019 | 0.05  | <0.1  | 0.02  | 3.1   | <0.1  | <0.05 | 4     | <0.5  | 1.1   | WHI21000267.1 |  |
| 72855   | 21    | 0.71  | 240   | 0.006 | <1    | 1.69  | 0.038 | 0.06  | <0.1  | 0.03  | 3.1   | <0.1  | 0.16  | 5     | 1     | 1.8   | WHI21000267.1 |  |
| 72856   | 19    | 0.35  | 133   | 0.024 | <1    | 1.55  | 0.01  | 0.08  | <0.1  | 0.05  | 3.3   | 0.2   | <0.05 | 4     | <0.5  | 0.7   | WHI21000267.1 |  |
| Y647801 | 29    | 0.92  | 176   | 0.036 | <1    | 2.09  | 0.012 | 0.08  | <0.1  | 0.03  | 5.5   | 0.2   | <0.05 | 7     | <0.5  | 0.3   | WHI21000267.1 |  |
| Y647802 | 37    | 1.2   | 279   | 0.079 | <1    | 2.84  | 0.016 | 0.15  | <0.1  | 0.04  | 9     | 0.2   | 0.06  | 9     | <0.5  | 0.3   | WHI21000267.1 |  |
| Y647803 | 26    | 0.85  | 188   | 0.063 | <1    | 2.04  | 0.017 | 0.09  | <0.1  | 0.04  | 5.2   | 0.1   | 0.07  | 7     | 0.5   | <0.2  | WHI21000267.1 |  |
| Y647804 | 41    | 1.16  | 183   | 0.11  | <1    | 2.09  | 0.024 | 0.15  | <0.1  | 0.01  | 5.9   | 0.1   | <0.05 | 7     | <0.5  | <0.2  | WHI21000267.1 |  |
| Y647805 | 43    | 0.85  | 159   | 0.044 | <1    | 1.87  | 0.016 | 0.06  | <0.1  | 0.03  | 4.1   | 0.1   | 0.08  | 7     | <0.5  | 0.3   | WHI21000267.1 |  |
| Y647806 | 24    | 0.91  | 125   | 0.055 | <1    | 1.6   | 0.015 | 0.09  | <0.1  | <0.01 | 4.5   | <0.1  | <0.05 | 5     | <0.5  | <0.2  | WHI21000267.1 |  |
| Y647807 | 27    | 1.07  | 215   | 0.057 | <1    | 2.53  | 0.02  | 0.12  | <0.1  | 0.02  | 5.9   | 0.1   | <0.05 | 8     | <0.5  | <0.2  | WHI21000267.1 |  |
| Y647808 | 26    | 0.87  | 231   | 0.041 | <1    | 2.47  | 0.025 | 0.14  | <0.1  | 0.02  | 5.4   | 0.1   | 0.13  | 7     | 0.9   | 0.2   | WHI21000267.1 |  |
| Y647809 | 33    | 1.01  | 240   | 0.11  | <1    | 2.18  | 0.023 | 0.26  | <0.1  | 0.02  | 6.9   | 0.1   | 0.17  | 8     | <0.5  | <0.2  | WHI21000267.1 |  |
| Y647810 | 23    | 0.67  | 160   | 0.109 | <1    | 1.57  | 0.016 | 0.28  | <0.1  | 0.02  | 6.7   | 0.2   | 0.12  | 5     | <0.5  | 0.5   | WHI21000267.1 |  |

|         |   |            |      |       |      |   |        |         |      |   |         |          |           |         |   |          | Method | AQ201 |
|---------|---|------------|------|-------|------|---|--------|---------|------|---|---------|----------|-----------|---------|---|----------|--------|-------|
|         | Taut 2021 B-C Horizon Soil Samples                |            |      |       |      |   |        |         |      |   |         |          |           |         |   | Analyte  | Mo     |       |
|         | All coordinates; Grid: UTM, Datum: NAD 83 Zone 8V |            |      |       |      |   |        |         |      |   |         |          |           |         |   | Unit     | PPM    |       |
| Sample# | Date  | Time       | Grid | Datum | Zone | V | East   | North   | Elev | m | Sampler | Depth-cm | Color     | Quality | Description   | Type/MDL | 0.1    |       |
| Y647811 | 16-Jul-21   | 4:00:48PM  | UTM  | NAD83 | 8    | V | 406849 | 6848797 | 1377 | m | RH      | 40       | brown     | good    | frost boil - pool, rocky, andesite amd granodiorite float, sandy pebble soil. Looks alluvial. | Soil     | 1.7    |       |
| Y647812 | 16-Jul-21   | 4:11:05PM  | UTM  | NAD83 | 8    | V | 406897 | 6848800 | 1377 | m | RH      | 30       | brown     | good    | frost boil - pool, rocky, andesite amd granodiorite float, sandy pebble soil. Looks alluvial. | Soil     | 2.2    |       |
| Y647813 | 16-Jul-21   | 4:42:10PM  | UTM  | NAD83 | 8    | V | 406895 | 6848503 | 1400 | m | RH      | 40       | org-brn   | good    | frost boil - pool, rocky, andesite amd granodiorite float, sandy pebble soil. Looks alluvial. | Soil     | 2.8    |       |
| Y647814 | 16-Jul-21   | 5:02:09PM  | UTM  | NAD83 | 8    | V | 406852 | 6848501 | 1402 | m | RH      | 35       | brown     | mod     | very rocky, andesite-granodiorite float, pebbles, minor sand -silt.                           | Soil     | 1.8    |       |
| Y647815 | 16-Jul-21   | 5:15:26PM  | UTM  | NAD83 | 8    | V | 406804 | 6848503 | 1402 | m | RH      | 35       | brown     | mod     | very rocky, andesite-granodiorite float, pebbles- sand -silt mixed with loess.                | Soil     | 1.9    |       |
| Y647816 | 16-Jul-21   | 5:25:46PM  | UTM  | NAD83 | 8    | V | 406752 | 6848502 | 1405 | m | RH      | 35       | brown     | mod     | very rocky, andesite-granodiorite float, pebbles- sand -silt, possible loess.                 | Soil     | 2      |       |
| Y647817 | 16-Jul-21   | 5:36:37PM  | UTM  | NAD83 | 8    | V | 406702 | 6848494 | 1406 | m | RH      | 30       | brown     | mod     | frost boil, mionr ash and loess, pebbles of andesite and granodiorite.                        | Soil     | 1.8    |       |
| Y647818 | 19-Jul-21   | 9:52:58AM  | UTM  | NAD83 | 8    | V | 404662 | 6848626 | 1370 | m | RH      | 40       | dark brn  | mod     | talus of tan-orange biot grd.   | Soil     | 1.7    |       |
| Y647819 | 19-Jul-21   | 10:06:50AM | UTM  | NAD83 | 8    | V | 404704 | 6848596 | 1376 | m | RH      | 35       | light brn | mod     | sandy pebble soil, looks alluvial, float of tan-orange biot grd.                              | Soil     | 0.7    |       |
| Y647820 | 19-Jul-21   | 10:20:42AM | UTM  | NAD83 | 8    | V | 404750 | 6848568 | 1376 | m | RH      | 40       | brn       | mod     | brn sandy "B", float of tan-org biot grd  | Soil     | 0.7    |       |
| Y647821 | 19-Jul-21   | 10:37:40AM | UTM  | NAD83 | 8    | V | 404789 | 6848539 | 1378 | m | RH      | 40       | brn       | mod     | sandy, rounded pebbles, fresh feld porphyry andesite float                                    | Soil     | 0.9    |       |
| Y647822 | 19-Jul-21   | 10:50:33AM | UTM  | NAD83 | 8    | V | 404836 | 6848512 | 1383 | m | RH      | 40       | brn       | mod     | sandy - pebble soil, fresh andesite and org biot grd float                                    | Soil     | 0.8    |       |
| Y647823 | 19-Jul-21   | 11:11:32AM | UTM  | NAD83 | 8    | V | 404877 | 6848486 | 1386 | m | RH      | 40       | dark brn  | mod     | sandy pebble soil, fresh andesite boulder float   | Soil     | 1.7    |       |
| Y647824 | 19-Jul-21   | 11:22:03AM | UTM  | NAD83 | 8    | V | 404922 | 6848453 | 1385 | m | RH      | 25       | brn       | mod     | sandy pebble soil, orange biot grd float (no andesite).                                       | Soil     | I.S.   |       |
| Y647825 | 19-Jul-21   | 11:33:36AM | UTM  | NAD83 | 8    | V | 404957 | 6848424 | 1386 | m | RH      | 30       | brn       | good    | qtz porphyry float.   | Soil     | 4.1    |       |
| Y647826 | 19-Jul-21   | 11:42:38AM | UTM  | NAD83 | 8    | V | 404999 | 6848397 | 1390 | m | RH      | 30       | brn       | good    | sandy - pebbles. Weakly chl and epidote altered Andesite and qtz porphyry float.              | Soil     | 6      |       |
| Y647827 | 19-Jul-21   | 11:55:25AM | UTM  | NAD83 | 8    | V | 405042 | 6848369 | 1389 | m | RH      | 30       | brn       | good    | sandy - pebbles. Weakly chl and epidote altered Andesite and qtz porphyry float.              | Soil     | 1.9    |       |



|         | AQ201         |  |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|--|
|         | Cr    | Mg    | Ba    | Ti    | B     | Al    | Na    | K     | W     | Hg    | Sc    | Tl    | S     | Ga    | Se    | Te    |               |  |
|         | PPM   | %     | PPM   | %     | PPM   | %     | %     | %     | PPM   |               |  |
| Sample# | 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   | Certificate   |  |
| Y647811 | 42    | 1.15  | 257   | 0.15  | <1    | 2.22  | 0.019 | 0.31  | <0.1  | 0.01  | 5.9   | 0.2   | 0.09  | 8     | <0.5  | 0.4   | WHI21000267.1 |  |
| Y647812 | 28    | 0.82  | 264   | 0.092 | <1    | 2.14  | 0.014 | 0.16  | <0.1  | 0.02  | 5.7   | 0.2   | 0.08  | 9     | <0.5  | 0.4   | WHI21000267.1 |  |
| Y647813 | 27    | 0.71  | 306   | 0.063 | <1    | 1.74  | 0.035 | 0.12  | 0.1   | 0.02  | 4.4   | 0.1   | 0.15  | 6     | <0.5  | 0.2   | WHI21000267.1 |  |
| Y647814 | 29    | 0.91  | 260   | 0.101 | <1    | 1.97  | 0.024 | 0.11  | <0.1  | <0.01 | 6     | <0.1  | 0.1   | 8     | <0.5  | <0.2  | WHI21000267.1 |  |
| Y647815 | 25    | 0.85  | 260   | 0.083 | <1    | 1.54  | 0.025 | 0.09  | <0.1  | 0.01  | 5.3   | <0.1  | 0.09  | 6     | <0.5  | 0.3   | WHI21000267.1 |  |
| Y647816 | 29    | 0.88  | 250   | 0.086 | <1    | 1.96  | 0.021 | 0.09  | 0.1   | 0.03  | 5.7   | <0.1  | <0.05 | 8     | <0.5  | 0.3   | WHI21000267.1 |  |
| Y647817 | 20    | 0.98  | 287   | 0.077 | <1    | 1.82  | 0.043 | 0.18  | <0.1  | 0.01  | 5.8   | 0.2   | 0.23  | 7     | <0.5  | 0.2   | WHI21000267.1 |  |
| Y647818 | 37    | 0.63  | 512   | 0.052 | <1    | 2.53  | 0.016 | 0.12  | 0.1   | 0.03  | 6.5   | 0.1   | 0.07  | 6     | <0.5  | <0.2  | WHI21000267.1 |  |
| Y647819 | 18    | 0.34  | 229   | 0.065 | <1    | 0.98  | 0.017 | 0.08  | <0.1  | 0.02  | 2.5   | <0.1  | 0.06  | 4     | <0.5  | <0.2  | WHI21000267.1 |  |
| Y647820 | 23    | 0.41  | 181   | 0.058 | <1    | 1.17  | 0.013 | 0.06  | <0.1  | 0.02  | 3.3   | <0.1  | <0.05 | 4     | <0.5  | <0.2  | WHI21000267.1 |  |
| Y647821 | 31    | 0.62  | 334   | 0.07  | <1    | 1.78  | 0.017 | 0.11  | 0.1   | 0.01  | 4.8   | <0.1  | 0.08  | 5     | <0.5  | <0.2  | WHI21000267.1 |  |
| Y647822 | 21    | 0.4   | 125   | 0.06  | <1    | 1.12  | 0.012 | 0.07  | <0.1  | 0.03  | 2.8   | <0.1  | <0.05 | 4     | <0.5  | <0.2  | WHI21000267.1 |  |
| Y647823 | 22    | 0.41  | 238   | 0.054 | <1    | 1.39  | 0.016 | 0.06  | <0.1  | 0.02  | 3.3   | <0.1  | 0.07  | 4     | <0.5  | <0.2  | WHI21000267.1 |  |
| Y647824 | I.S.  | WHI21000267.1 |  |
| Y647825 | 24    | 0.47  | 200   | 0.066 | 1     | 1.44  | 0.012 | 0.1   | <0.1  | 0.01  | 3.7   | <0.1  | <0.05 | 5     | <0.5  | <0.2  | WHI21000267.1 |  |
| Y647826 | 28    | 0.48  | 260   | 0.074 | 2     | 1.73  | 0.011 | 0.11  | 0.1   | 0.02  | 4.6   | <0.1  | 0.06  | 7     | 0.5   | <0.2  | WHI21000267.1 |  |
| Y647827 | 29    | 0.52  | 204   | 0.076 | <1    | 1.62  | 0.013 | 0.09  | 0.1   | 0.02  | 4.3   | <0.1  | 0.07  | 5     | <0.5  | <0.2  | WHI21000267.1 |  |

|         |   |            |      |       |      |   |        |         |      |   |         |          |           |         |   | Method   | AQ201 |
|---------|---|------------|------|-------|------|---|--------|---------|------|---|---------|----------|-----------|---------|---|----------|-------|
|         | Taut 2021 B-C Horizon Soil Samples                |            |      |       |      |   |        |         |      |   |         |          |           |         | Analyte   | Mo       |       |
|         | All coordinates; Grid: UTM, Datum: NAD 83 Zone 8V |            |      |       |      |   |        |         |      |   |         |          |           |         | Unit  | PPM      |       |
| Sample# | Date  | Time       | Grid | Datum | Zone | V | East   | North   | Elev | m | Sampler | Depth-cm | Color     | Quality | Description   | Type/MDL | 0.1   |
| Y647828 | 19-Jul-21   | 12:08:07PM | UTM  | NAD83 | 8    | V | 405087 | 6848341 | 1394 | m | RH      | 30       | brn       | good    | very sandy, quartz porphyry float   | Soil     | 2.1   |
| Y647829 | 19-Jul-21   | 12:36:41PM | UTM  | NAD83 | 8    | V | 405126 | 6848313 | 1398 | m | RH      | 25       | brn       | good    | soliflucted - frost boil, sandy, qtz porphyry float   | Soil     | 0.7   |
| Y647830 | 19-Jul-21   | 12:46:02PM | UTM  | NAD83 | 8    | V | 405161 | 6848280 | 1400 | m | RH      | 35       | brn       | good    | soliflucted - frost boil, sandy, qtz porphyry float   | Soil     | 0.8   |
| Y647831 | 19-Jul-21   | 12:56:47PM | UTM  | NAD83 | 8    | V | 405207 | 6848257 | 1405 | m | RH      | 25       | brn       | good    | soliflucted - frost boil, very sandy, qtz porphyry float  | Soil     | 0.8   |
| Y647832 | 19-Jul-21   | 1:08:28PM  | UTM  | NAD83 | 8    | V | 405248 | 6848224 | 1406 | m | RH      | 40       | brn       | good    | soliflucted - frost boil, very sandy, qtz porphyry float  | Soil     | 0.7   |
| Y647833 | 19-Jul-21   | 1:17:11PM  | UTM  | NAD83 | 8    | V | 405291 | 6848196 | 1410 | m | RH      | 35       | brn       | good    | soliflucted - frost boil, very sandy, qtz porphyry float  | Soil     | 0.8   |
| Y647834 | 19-Jul-21   | 1:34:22PM  | UTM  | NAD83 | 8    | V | 405330 | 6848165 | 1413 | m | RH      | 45       | brn       | good    | soliflucted - frost boil, very sandy, qtz porphyry float  | Soil     | 0.9   |
| Y647835 | 19-Jul-21   | 1:45:16PM  | UTM  | NAD83 | 8    | V | 405367 | 6848139 | 1415 | m | RH      | 25       | org-brn   | good    | soliflucted - frost boil, very sandy, qtz porphyry float  | Soil     | 1     |
| Y647836 | 19-Jul-21   | 1:57:27PM  | UTM  | NAD83 | 8    | V | 405410 | 6848115 | 1421 | m | RH      | 25       | light brn | good    | soliflucted - frost boil, very sandy, qtz porphyry float  | Soil     | 0.8   |
| Y647837 | 19-Jul-21   | 2:13:11PM  | UTM  | NAD83 | 8    | V | 405450 | 6848077 | 1426 | m | RH      | 35       | med brown | poor    | very loamy, suspect high % loess, very blocky angular boulders of qtz porphyry float. Tough to get! | Soil     | 0.7   |
| Y647838 | 19-Jul-21   | 2:22:57PM  | UTM  | NAD83 | 8    | V | 405500 | 6848058 | 1434 | m | RH      | 30       | med brown | mod     | loamy, suspect loess, very blocky angular boulders of qtz porphyry float. Tough to get!             | Soil     | 0.9   |
| Y647839 | 19-Jul-21   | 2:35:20PM  | UTM  | NAD83 | 8    | V | 405539 | 6848024 | 1435 | m | RH      | 35       | med brown | mod     | loamy, suspect loess, very blocky angular boulders of qtz porphyry float. Tough to get!             | Soil     | 0.9   |
| Y647840 | 19-Jul-21   | 2:52:27PM  | UTM  | NAD83 | 8    | V | 405577 | 6847991 | 1439 | m | RH      | 35       | dk brn    | mod     | loamy sany silt, angular float of qtz porphyry and dark grey fresh andesite.                        | Soil     | 1.3   |
| Y647841 | 19-Jul-21   | 3:15:54PM  | UTM  | NAD83 | 8    | V | 405704 | 6847900 | 1455 | m | RH      | 35       | brn       | mod     | loamy sandy silt, angular scree of mostly small (<10 cm) pieces of fresh grey andesite              | Soil     | 0.8   |
| Y647842 | 19-Jul-21   | 3:25:44PM  | UTM  | NAD83 | 8    | V | 405751 | 6847874 | 1453 | m | RH      | 30       | brn       | mod     | loamy sandy silt, angular scree of mostly small (<10 cm) pieces of fresh grey andesite              | Soil     | 0.6   |
| Y647843 | 19-Jul-21   | 3:34:35PM  | UTM  | NAD83 | 8    | V | 405805 | 6847845 | 1448 | m | RH      | 30       | brn       | mod     | loamy sandy silt, angular scree of mostly small (<10 cm) pieces of fresh grey andesite              | Soil     | 0.8   |

|         | AQ201 |     |     |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
|         | Cu    | Pb    | Zn    | Ag    | Ni    | Co    | Mn    | Fe    | As    | U     | Au    | Th    | Sr    | Cd    | Sb    | Bi    | V     | Ca    | P     | %     | %     | PPM   | PPM   | PPM   | PPM   | PPM   | PPM   | PPM | La  |
| Sample# | 0.1   | 0.1   | 1     | 0.1   | 0.1   | 0.1   | 0.1   | 1     | 0.01  | 0.5   | 0.1   | 0.5   | 0.1   | 1     | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 2     | 0.01  | 0.001 | 1     | 0.1   | 0.1   | 0.1   | 0.1 | 0.1 |
| Y647828 | 30.6  | 31.7  | 124   | 0.4   | 22.1  | 12.6  | 725   | 3.28  | 12.4  | 0.7   | 9.2   | 3.5   | 26    | 0.4   | 0.4   | 0.3   | 77    | 0.31  | 0.047 | 16    |       |       |       |       |       |       |       |     |     |
| Y647829 | 17.7  | 18.6  | 81    | 0.2   | 12.3  | 8.3   | 698   | 2.13  | 6.8   | 0.6   | 14.6  | 3.8   | 21    | 0.4   | 0.4   | 0.2   | 49    | 0.32  | 0.078 | 15    |       |       |       |       |       |       |       |     |     |
| Y647830 | 17.3  | 16.3  | 96    | 0.2   | 12.6  | 7.4   | 721   | 2.08  | 6     | 0.4   | 7.1   | 3.1   | 19    | 0.4   | 0.3   | 0.1   | 47    | 0.3   | 0.078 | 12    |       |       |       |       |       |       |       |     |     |
| Y647831 | 18.8  | 19.4  | 98    | 0.1   | 13.5  | 7.6   | 543   | 2.25  | 6.7   | 0.5   | 8.1   | 3.4   | 19    | 0.4   | 0.3   | 0.1   | 52    | 0.28  | 0.056 | 12    |       |       |       |       |       |       |       |     |     |
| Y647832 | 15.5  | 24.5  | 94    | 0.1   | 13.4  | 8.7   | 580   | 2.32  | 7.4   | 0.4   | 5.7   | 3.1   | 22    | 0.2   | 0.3   | 0.1   | 56    | 0.29  | 0.052 | 11    |       |       |       |       |       |       |       |     |     |
| Y647833 | 23.4  | 24.5  | 178   | 0.1   | 21.3  | 11.6  | 816   | 3.02  | 11.3  | 0.5   | 8.4   | 3.6   | 27    | 0.6   | 0.5   | 0.1   | 68    | 0.42  | 0.087 | 12    |       |       |       |       |       |       |       |     |     |
| Y647834 | 22.2  | 25.7  | 160   | 0.4   | 12.3  | 6.2   | 751   | 2.13  | 9.4   | 0.6   | 23.1  | 2.7   | 22    | 0.5   | 0.8   | 0.1   | 52    | 0.32  | 0.07  | 12    |       |       |       |       |       |       |       |     |     |
| Y647835 | 21.3  | 31.1  | 148   | 0.3   | 17.7  | 11.8  | 632   | 3.02  | 10.9  | 0.6   | 6.5   | 3.4   | 21    | 0.9   | 0.5   | 0.1   | 71    | 0.28  | 0.06  | 13    |       |       |       |       |       |       |       |     |     |
| Y647836 | 20.6  | 37.8  | 166   | <0.1  | 22.5  | 13    | 756   | 3.24  | 12.4  | 0.5   | 3.7   | 3.7   | 31    | 0.5   | 0.5   | 0.1   | 70    | 0.36  | 0.053 | 12    |       |       |       |       |       |       |       |     |     |
| Y647837 | 16.8  | 25.7  | 92    | 0.2   | 16.5  | 9.4   | 663   | 2.48  | 7.3   | 0.4   | 1.8   | 2     | 24    | 0.3   | 0.3   | <0.1  | 57    | 0.29  | 0.065 | 8     |       |       |       |       |       |       |       |     |     |
| Y647838 | 15.2  | 25.5  | 90    | 0.2   | 16.8  | 9.1   | 409   | 2.99  | 7.4   | 0.5   | 1.6   | 3.4   | 21    | 0.4   | 0.4   | 0.1   | 73    | 0.28  | 0.041 | 12    |       |       |       |       |       |       |       |     |     |
| Y647839 | 15    | 36.8  | 105   | 0.2   | 17.5  | 9.4   | 625   | 2.76  | 9.2   | 0.4   | 23.3  | 2.8   | 22    | 0.4   | 0.6   | <0.1  | 61    | 0.27  | 0.039 | 11    |       |       |       |       |       |       |       |     |     |
| Y647840 | 31.4  | 84    | 291   | 1.9   | 29    | 11.9  | 872   | 4.18  | 19.2  | 0.9   | 27.6  | 3.6   | 62    | 1     | 0.9   | <0.1  | 87    | 1.03  | 0.117 | 18    |       |       |       |       |       |       |       |     |     |
| Y647841 | 25.1  | 7.2   | 62    | <0.1  | 23.2  | 12    | 510   | 3.31  | 6.4   | 0.5   | 0.8   | 2.9   | 29    | 0.1   | 0.3   | <0.1  | 82    | 0.34  | 0.064 | 13    |       |       |       |       |       |       |       |     |     |
| Y647842 | 24.3  | 5.9   | 61    | <0.1  | 19.8  | 12.8  | 645   | 3.41  | 6.2   | 0.5   | 0.8   | 3.4   | 45    | <0.1  | 0.3   | <0.1  | 96    | 0.48  | 0.058 | 13    |       |       |       |       |       |       |       |     |     |
| Y647843 | 21    | 6.4   | 62    | 0.1   | 19.9  | 10.9  | 468   | 3.18  | 5.8   | 0.5   | 6.9   | 2.8   | 46    | <0.1  | 0.3   | 0.1   | 88    | 0.51  | 0.06  | 13    |       |       |       |       |       |       |       |     |     |

|         | AQ201 |               |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
|         | Cr    | Mg    | Ba    | Ti    | B     | Al    | Na    | K     | W     | Hg    | Sc    | Tl    | S     | Ga    | Se    | Te    |               |
|         | PPM   | %     | PPM   | %     | PPM   | %     | %     | %     | PPM   | PPM   | PPM   | PPM   | %     | PPM   | PPM   | PPM   |               |
| Sample# | 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   | Certificate   |
| Y647828 | 39    | 0.71  | 317   | 0.088 | 2     | 2.37  | 0.014 | 0.12  | 0.2   | 0.03  | 5.6   | 0.1   | 0.07  | 8     | <0.5  | 0.2   | WHI21000267.1 |
| Y647829 | 23    | 0.42  | 126   | 0.078 | 1     | 1.15  | 0.017 | 0.08  | 0.1   | 0.02  | 3.4   | <0.1  | <0.05 | 4     | <0.5  | 0.2   | WHI21000267.1 |
| Y647830 | 21    | 0.4   | 140   | 0.07  | <1    | 1.12  | 0.011 | 0.08  | <0.1  | 0.02  | 3.1   | <0.1  | 0.05  | 4     | <0.5  | <0.2  | WHI21000267.1 |
| Y647831 | 25    | 0.49  | 131   | 0.088 | <1    | 1.26  | 0.014 | 0.1   | 0.1   | 0.01  | 3.5   | <0.1  | 0.05  | 4     | <0.5  | <0.2  | WHI21000267.1 |
| Y647832 | 24    | 0.48  | 209   | 0.082 | 1     | 1.27  | 0.014 | 0.08  | 0.1   | 0.01  | 3     | <0.1  | 0.05  | 5     | <0.5  | <0.2  | WHI21000267.1 |
| Y647833 | 35    | 0.68  | 173   | 0.101 | 2     | 1.96  | 0.017 | 0.14  | 0.2   | 0.02  | 5.2   | 0.1   | 0.08  | 6     | <0.5  | <0.2  | WHI21000267.1 |
| Y647834 | 24    | 0.4   | 105   | 0.07  | 1     | 1.21  | 0.02  | 0.07  | <0.1  | 0.03  | 3.4   | <0.1  | 0.06  | 4     | <0.5  | <0.2  | WHI21000267.1 |
| Y647835 | 32    | 0.5   | 137   | 0.099 | 1     | 1.88  | 0.014 | 0.12  | 0.2   | 0.03  | 4.3   | 0.1   | 0.06  | 7     | <0.5  | <0.2  | WHI21000267.1 |
| Y647836 | 36    | 0.65  | 173   | 0.105 | 1     | 2     | 0.015 | 0.12  | 0.1   | 0.03  | 5.3   | 0.1   | <0.05 | 7     | <0.5  | <0.2  | WHI21000267.1 |
| Y647837 | 25    | 0.43  | 172   | 0.062 | <1    | 1.84  | 0.019 | 0.07  | 0.1   | 0.02  | 3.8   | <0.1  | 0.08  | 5     | <0.5  | <0.2  | WHI21000267.1 |
| Y647838 | 33    | 0.57  | 138   | 0.115 | 1     | 1.95  | 0.019 | 0.09  | 0.2   | 0.03  | 4.7   | 0.1   | 0.1   | 8     | <0.5  | <0.2  | WHI21000267.1 |
| Y647839 | 28    | 0.48  | 207   | 0.058 | <1    | 1.74  | 0.013 | 0.06  | <0.1  | 0.02  | 4.3   | <0.1  | 0.07  | 5     | <0.5  | <0.2  | WHI21000267.1 |
| Y647840 | 43    | 0.79  | 642   | 0.06  | 2     | 3.23  | 0.021 | 0.17  | 0.2   | 0.13  | 11.6  | 0.2   | 0.18  | 8     | 0.8   | <0.2  | WHI21000267.1 |
| Y647841 | 33    | 0.79  | 201   | 0.114 | 1     | 2.93  | 0.03  | 0.08  | 0.1   | 0.03  | 6.3   | <0.1  | 0.07  | 7     | <0.5  | <0.2  | WHI21000267.1 |
| Y647842 | 35    | 0.92  | 255   | 0.093 | <1    | 2.75  | 0.03  | 0.08  | <0.1  | 0.03  | 8.3   | 0.1   | 0.05  | 7     | <0.5  | <0.2  | WHI21000267.1 |
| Y647843 | 36    | 0.81  | 246   | 0.088 | 1     | 2.7   | 0.024 | 0.09  | 0.1   | 0.02  | 6.6   | 0.1   | 0.08  | 8     | <0.5  | <0.2  | WHI21000267.1 |

**APPENDIX VI**

**Ah Horizon Soil Sample Locations**

**& Descriptions**

| Taut 2021 Ah Horizon Soil Samples                 |           |          |      |       |      |   |        |         |      |   |         |         |          |        |          |                                       |
|---|-----------|----------|------|-------|------|---|--------|---------|------|---|---------|---------|----------|--------|----------|---------------------------------------|
| All coordinates; Grid: UTM, Datum: NAD 83 Zone 8V |           |          |      |       |      |   |        |         |      |   |         |         |          |        |          |                                       |
| Sample#   | Date      | Time     | Grid | Datum | Zone | V | East   | North   | Elev | m | Sampler | Type    | Depth-cm | Color  | Quality  | Description                           |
| 47851   | 7/18/2021 |          | UTM  | NAD83 | 8    | V | 405998 | 6848199 | 1491 | m | WDM     | Ah Soil | 5        | Dk Brn | Moderate | <1cm Ah, mixed w/ ash, loess          |
| 47852   | 7/18/2021 |          | UTM  | NAD83 | 8    | V | 405986 | 6848298 | 1469 | m | WDM     | Ah Soil | 15       | Dk Brn | Moderate | Ah present in pockets                 |
| 47853   | 7/18/2021 |          | UTM  | NAD83 | 8    | V | 405999 | 6848397 | 1440 | m | WDM     | Ah Soil | 19       | Dk Brn | Moderate | 5cm Ah w/ roots, fibrous              |
| 47854   | 7/18/2021 | 10:40:46 | UTM  | NAD83 | 8    | V | 406001 | 6848501 | 1421 | m | WDM     | Ah Soil | 29       | Dk Brn | Moderate | Ah above & below ash, permafrost      |
| 47855   | 7/18/2021 | 10:55:24 | UTM  | NAD83 | 8    | V | 405995 | 6848594 | 1412 | m | WDM     | Ah Soil | 17       | Dk Brn | Good     | 3 cm Ah, poorly drained               |
| 47856   | 7/18/2021 | 11:02:49 | UTM  | NAD83 | 8    | V | 406002 | 6848696 | 1398 | m | WDM     | Ah Soil | 24       | Dk Brn | Good     | 15cm Ah inc. buried layer             |
| 47857   | 7/18/2021 | 11:18:21 | UTM  | NAD83 | 8    | V | 405999 | 6848801 | 1387 | m | WDM     | Ah Soil | 17       | Dk Brn | Good     | 3cm Ah, permafrost                    |
| 47858   | 7/18/2021 | 11:31:00 | UTM  | NAD83 | 8    | V | 406000 | 6848899 | 1376 | m | WDM     | Ah Soil | 24       | Dk Brn | Good     | 5cm brown Ah,bottom cm dk brn sampled |
| 47859   | 7/18/2021 | 12:17:15 | UTM  | NAD83 | 8    | V | 405997 | 6849003 | 1362 | m | WDM     | Ah Soil | 19       | Dk Brn | Good     | 5cm Ah, ~25m from DDH                 |
| 47860   | 7/18/2021 | 12:32:42 | UTM  | NAD83 | 8    | V | 405999 | 6849101 | 1353 | m | WDM     | Ah Soil | 19       | Dk Brn | Good     | 5cm Ah, permafrost, poorly drained    |
| 47861   | 7/18/2021 |          | UTM  | NAD83 | 8    | V | 405999 | 6849202 | 1345 | m | WDM     | Ah Soil | 17       | Dk Brn | Good     | 1 - 4cm Ah, poorly drained            |
| 47862   | 7/18/2021 |          | UTM  | NAD83 | 8    | V | 405999 | 6849202 | 1345 | m | WDM     | Ah Soil | 17       | Dk Brn | Good     | field duplicate of 47861              |
| 47863   | 7/18/2021 |          | UTM  | NAD83 | 8    | V | 406000 | 6849301 | 1337 | m | WDM     | Ah Soil | 19       | Brown  | Moderate | 5cm Ah                                |
| 47864   | 7/18/2021 |          | UTM  | NAD83 | 8    | V | 406002 | 6849477 | 1332 | m | WDM     | Ah Soil | 16       | Dk Brn | Good     | 0 - 4cm Ah, hard to find              |
| 47865   | 7/18/2021 |          | UTM  | NAD83 | 8    | V | 405997 | 6849600 | 1346 | m | WDM     | Ah Soil | 28       | Dk Brn | Good     | 10 cm good Ah beneath 20cm moss       |
| 47866   | 7/18/2021 |          | UTM  | NAD83 | 8    | V | 406000 | 6849701 | 1356 | m | WDM     | Ah Soil | 15       | Dk Brn | Good     | 1cm Ah, discontinuous                 |
| 47867   | 7/19/2021 | 10:01:38 | UTM  | NAD83 | 8    | V | 404187 | 6848711 | 1313 | m | WDM     | Ah Soil | 11       | Brown  | Poor     | top 3mm of ash & bottom of organics   |
| 47868   | 7/19/2021 | 10:26:50 | UTM  | NAD83 | 8    | V | 404191 | 6848611 | 1310 | m | WDM     | Ah Soil | 11       | Dk Brn | Moderate | 0 - 2cm Ah, rooty                     |
| 47869   | 7/19/2021 | 10:45:39 | UTM  | NAD83 | 8    | V | 404275 | 6848554 | 1317 | m | WDM     | Ah Soil | 19       | Dk Brn | Moderate | 5cm Ah, rooty                         |
| 47870   | 7/19/2021 | 11:02:18 | UTM  | NAD83 | 8    | V | 404375 | 6848527 | 1324 | m | WDM     | Ah Soil | 8        | Dk Brn | Good     | 2 - 10 cm Ah                          |
| 47871   | 7/19/2021 | 11:16:12 | UTM  | NAD83 | 8    | V | 404453 | 6848469 | 1329 | m | WDM     | Ah Soil | 14       | Dk Brn | Good     | 6cm Ah, sampled bottom 1cm            |
| 47872   | 7/19/2021 | 11:29:49 | UTM  | NAD83 | 8    | V | 404538 | 6848413 | 1335 | m | WDM     | Ah Soil | 14       | Dk Brn | Good     | 5cm Ah, sampled bottom 1cm            |
| 47873   | 7/19/2021 | 11:46:18 | UTM  | NAD83 | 8    | V | 404622 | 6848352 | 1340 | m | WDM     | Ah Soil | 14       | Dk Brn | Good     | 5cm Ah, sampled bottom 1cm            |
| 47874   | 7/19/2021 | 12:09:59 | UTM  | NAD83 | 8    | V | 404703 | 6848290 | 1348 | m | WDM     | Ah Soil | 10       | Dk Brn | Good     | 3cm Ah                                |
| 47875   | 7/19/2021 | 12:24:28 | UTM  | NAD83 | 8    | V | 404784 | 6848239 | 1354 | m | WDM     | Ah Soil | 10       | Black  | Good     | Some Charcoal, 1- 5cm Ah              |
| 47876   | 7/19/2021 | 12:41:06 | UTM  | NAD83 | 8    | V | 404866 | 6848174 | 1360 | m | WDM     | Ah Soil | 4        | Black  | Good     | In mudhole, some Charcoal, 5cm Ah     |
| 47877   | 7/19/2021 | 1:02:35  | UTM  | NAD83 | 8    | V | 404939 | 6848109 | 1366 | m | WDM     | Ah Soil | 14       | Dk Brn | Moderate | Some Charcoal, 0- 5cm Ah              |
| 47878   | 7/19/2021 | 1:26:48  | UTM  | NAD83 | 8    | V | 405045 | 6848073 | 1373 | m | WDM     | Ah Soil | 5        | Dk Brn | Moderate | 1cm Ah on boulders, rooty             |
| 47879   | 7/19/2021 | 1:44:37  | UTM  | NAD83 | 8    | V | 405099 | 6847990 | 1377 | m | WDM     | Ah Soil | 8        | Dk Brn | Good     | 1cm Ah, rooty                         |



|         | 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    |               |
|         | PPM   | PPM   | %     | PPM    | %     | PPM   | %     | %     | %     | PPM   | PPM   | PPM   | %     | PPB   | PPM   | PPM   | PPM   |               |
| Sample# | 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   | Certificate   |
| 47851   | 8.1   | 20.8  | 0.6   | 663.3  | 0.031 | <20   | 1.76  | 0.009 | 0.13  | <0.1  | 2.2   | 0.09  | 0.09  | 135   | 0.5   | 0.03  | 5.3   | WHI21000268.1 |
| 47852   | 18.5  | 14    | 0.15  | 159.5  | 0.02  | <20   | 1.03  | 0.009 | 0.06  | <0.1  | 1.4   | 0.08  | 0.14  | 139   | 0.5   | 0.13  | 3.3   | WHI21000268.1 |
| 47853   | 20.4  | 16.4  | 0.35  | 259.7  | 0.045 | <20   | 1     | 0.016 | 0.08  | <0.1  | 2.3   | 0.1   | 0.13  | 47    | 0.8   | 0.21  | 3.6   | WHI21000268.1 |
| 47854   | 8     | 7.6   | 0.09  | 310.8  | 0.019 | <20   | 0.68  | 0.013 | 0.05  | <0.1  | 0.8   | 0.08  | 0.19  | 127   | 0.7   | 0.11  | 1.2   | WHI21000268.1 |
| 47855   | 17.3  | 8.7   | 0.06  | 439.2  | 0.016 | <20   | 0.93  | 0.004 | 0.05  | <0.1  | 1.7   | 0.11  | 0.23  | 116   | 1.3   | 0.32  | 1.8   | WHI21000268.1 |
| 47856   | 11.3  | 10.1  | 0.08  | 63.8   | 0.125 | <20   | 0.52  | 0.009 | 0.03  | <0.1  | 1.6   | 0.03  | 0.08  | 28    | 0.5   | 0.07  | 4.3   | WHI21000268.1 |
| 47857   | 23    | 8.9   | 0.09  | 668.7  | 0.021 | <20   | 0.52  | 0.009 | 0.04  | <0.1  | 1     | 0.12  | 0.13  | 74    | 0.9   | 0.12  | 2     | WHI21000268.1 |
| 47858   | 15.3  | 16    | 0.12  | 1224.2 | 0.021 | <20   | 0.92  | 0.006 | 0.07  | 0.1   | 1.6   | 0.84  | 0.18  | 110   | 1.2   | 0.57  | 3.3   | WHI21000268.1 |
| 47859   | 9.4   | 18.3  | 0.13  | 120.3  | 0.021 | <20   | 1.01  | 0.008 | 0.05  | <0.1  | 0.7   | 0.09  | 0.23  | 179   | 0.8   | 0.09  | 2.4   | WHI21000268.1 |
| 47860   | 14    | 11.3  | 0.11  | 158.9  | 0.01  | <20   | 0.93  | 0.008 | 0.06  | <0.1  | 0.7   | 0.04  | 0.14  | 92    | 0.8   | 0.05  | 2.2   | WHI21000268.1 |
| 47861   | 12.2  | 9.9   | 0.12  | 226.7  | 0.014 | <20   | 0.74  | 0.009 | 0.06  | <0.1  | 0.8   | 0.06  | 0.15  | 116   | 0.9   | 0.07  | 1.8   | WHI21000268.1 |
| 47862   | 16.6  | 10.6  | 0.11  | 305.4  | 0.011 | <20   | 0.76  | 0.008 | 0.08  | <0.1  | 0.9   | 0.08  | 0.17  | 160   | 1     | 0.05  | 1.7   | WHI21000268.1 |
| 47863   | 8.3   | 14.6  | 0.11  | 219    | 0.016 | <20   | 0.92  | 0.007 | 0.04  | <0.1  | 1     | 0.08  | 0.18  | 57    | 1.5   | 0.09  | 2.4   | WHI21000268.1 |
| 47864   | 12.9  | 17.3  | 0.22  | 103.8  | 0.04  | <20   | 1.26  | 0.019 | 0.12  | 0.1   | 2.5   | 0.09  | 0.12  | 55    | 0.7   | 0.19  | 4.5   | WHI21000268.1 |
| 47865   | 22.2  | 6.9   | 0.09  | 130.2  | 0.011 | <20   | 0.58  | 0.012 | 0.07  | <0.1  | 0.6   | 0.04  | 0.22  | 118   | 0.9   | 0.03  | 1.3   | WHI21000268.1 |
| 47866   | 12.5  | 10.1  | 0.07  | 179.6  | 0.045 | <20   | 0.77  | 0.018 | 0.06  | <0.1  | 1.3   | 0.05  | 0.03  | 40    | 0.4   | <0.02 | 2.5   | WHI21000268.1 |
| 47867   | 0.7   | 2.3   | 0.03  | 13.4   | 0.023 | <20   | 0.15  | 0.019 | 0.04  | <0.1  | 0.3   | <0.02 | <0.02 | 24    | 0.3   | <0.02 | 1     | WHI21000268.1 |
| 47868   | 1.7   | 4.8   | 0.05  | 37.7   | 0.023 | <20   | 0.16  | 0.018 | 0.04  | <0.1  | 0.4   | <0.02 | 0.02  | 25    | 0.2   | <0.02 | 1     | WHI21000268.1 |
| 47869   | 10.3  | 13.1  | 0.15  | 261    | 0.03  | <20   | 1.35  | 0.027 | 0.1   | <0.1  | 2.9   | 0.06  | 0.04  | 66    | 0.3   | <0.02 | 3.4   | WHI21000268.1 |
| 47870   | 17.8  | 9.5   | 0.13  | 297.9  | 0.028 | <20   | 0.57  | 0.026 | 0.07  | <0.1  | 1.8   | 0.02  | 0.12  | 120   | 0.8   | <0.02 | 1.5   | WHI21000268.1 |
| 47871   | 16    | 15.2  | 0.09  | 303    | 0.032 | <20   | 0.72  | 0.019 | 0.04  | 0.2   | 2.4   | 0.03  | 0.12  | 94    | 1     | 0.06  | 3     | WHI21000268.1 |
| 47872   | 8.8   | 7.3   | 0.12  | 116    | 0.042 | <20   | 0.4   | 0.028 | 0.02  | <0.1  | 1.2   | 0.03  | 0.05  | 31    | 0.4   | <0.02 | 1.3   | WHI21000268.1 |
| 47873   | 32.6  | 16.5  | 0.14  | 252    | 0.031 | <20   | 1.37  | 0.021 | 0.07  | <0.1  | 2.6   | 0.05  | 0.15  | 87    | 1.1   | 0.07  | 3.1   | WHI21000268.1 |
| 47874   | 11    | 13.3  | 0.19  | 246    | 0.032 | <20   | 1     | 0.03  | 0.06  | <0.1  | 1.4   | 0.06  | 0.06  | 36    | 0.4   | 0.03  | 3.3   | WHI21000268.1 |
| 47875   | 22.3  | 13.5  | 0.1   | 512.2  | 0.02  | <20   | 0.76  | 0.016 | 0.03  | <0.1  | 1.7   | 0.05  | 0.15  | 97    | 0.9   | 0.36  | 2.6   | WHI21000268.1 |
| 47876   | 29.2  | 13.3  | 0.12  | 495.7  | 0.019 | <20   | 0.79  | 0.016 | 0.03  | <0.1  | 0.9   | 0.04  | 0.32  | 108   | 0.8   | 0.05  | 2.2   | WHI21000268.1 |
| 47877   | 10.5  | 9.6   | 0.18  | 247.2  | 0.031 | <20   | 0.67  | 0.028 | 0.06  | <0.1  | 1.3   | 0.05  | 0.08  | 55    | 0.3   | 0.04  | 2     | WHI21000268.1 |
| 47878   | 22    | 27.6  | 0.39  | 619.2  | 0.055 | <20   | 1.51  | 0.014 | 0.15  | 0.1   | 3.8   | 0.18  | 0.15  | 138   | 0.8   | 0.09  | 3.8   | WHI21000268.1 |
| 47879   | 26    | 18.6  | 0.18  | 331.9  | 0.038 | <20   | 1.2   | 0.016 | 0.06  | <0.1  | 2.4   | 0.11  | 0.14  | 105   | 0.9   | 0.07  | 4.4   | WHI21000268.1 |

| Taut 2021 Ah Horizon Soil Samples                 |           |            |      |       |      |   |        |         |      |   |         |         |          |        |           |  |
|---|-----------|------------|------|-------|------|---|--------|---------|------|---|---------|---------|----------|--------|-----------|--|
| All coordinates; Grid: UTM, Datum: NAD 83 Zone 8V |           |            |      |       |      |   |        |         |      |   |         |         |          |        |           |  |
| Sample#   | Date      | Time       | Grid | Datum | Zone | V | East   | North   | Elev | m | Sampler | Type    | Depth-cm | Color  | Quality   | Description  |
| 47880   | 7/19/2021 | 2:06:33    | UTM  | NAD83 | 8    | V | 405167 | 6847911 | 1382 | m | WDM     | Ah Soil | 9        | Dk Brn | Good      | 3 cm Ah  |
| 47881   | 7/19/2021 | 2:21:53    | UTM  | NAD83 | 8    | V | 405234 | 6847838 | 1387 | m | WDM     | Ah Soil | 19       | Dk Brn | Good      | 10cm Ah, dk brn & red-brown, some charcoal                               |
| 47882   | 7/19/2021 | 2:35:33    | UTM  | NAD83 | 8    | V | 405294 | 6847754 | 1393 | m | WDM     | Ah Soil | 10       | Dk Brn | Good      | 1- 3cm Ah  |
| 47883   | 7/19/2021 | 2:50:00    | UTM  | NAD83 | 8    | V | 405360 | 6847677 | 1399 | m | WDM     | Ah Soil | 19       | Dk Brn | Good      | 10+ cm Ah  |
| 47884   | 7/19/2021 | 3:08:54    | UTM  | NAD83 | 8    | V | 405448 | 6847625 | 1404 | m | WDM     | Ah Soil | 14       | Dk Brn | Moderate  | 5cm Ah, very fibrous   |
| Y647885   | 20-Jul-21 | 10:09:00AM | UTM  | NAD83 | 8    | V | 405599 | 6848999 | 1435 | m | RH      | Soil Ah | 6        | Dk Brn | Poor      | <1cm Ah, dry, on steep scree slope                                       |
| Y647886   | 20-Jul-21 | 10:37:43AM | UTM  | NAD83 | 8    | V | 405702 | 6849002 | 1391 | m | RH      | Soil Ah | 25       | Dk Brn | Moderate  | 5-10 Ah, very peaty  |
| Y647887   | 20-Jul-21 | 10:47:38AM | UTM  | NAD83 | 8    | V | 405805 | 6849002 | 1390 | m | RH      | Soil Ah | 17       | Dk Brn | Moderate  | 2-5 Ah, above scree and ash.   |
| Y647888   | 20-Jul-21 | 11:08:16AM | UTM  | NAD83 | 8    | V | 405896 | 6849003 | 1382 | m | RH      | Soil Ah | 16       | Dk Brn | Moderate  | 2 cm Ah, above scree and ash   |
| Y647889   | 20-Jul-21 | 11:28:32AM | UTM  | NAD83 | 8    | V | 406096 | 6849004 | 1357 | m | RH      | Soil Ah | 22       | Dk Brn | Moderate  | 3 cm Ah, above ash band, peaty   |
| Y647890   | 20-Jul-21 | 11:45:32AM | UTM  | NAD83 | 8    | V | 406200 | 6848996 | 1344 | m | RH      | Soil Ah | 6        | Dk Brn | Moderate  | 1-2 cm Ah, on flood plain of ash   |
| Y647891   | 20-Jul-21 | 12:01:33PM | UTM  | NAD83 | 8    | V | 406301 | 6848999 | 1343 | m | RH      | Soil Ah | 24       | black  | Moderate  | 5 cm Ah or humus.  |
| Y647892   | 20-Jul-21 | 12:56:14PM | UTM  | NAD83 | 8    | V | 406404 | 6849001 | 1345 | m | RH      | Soil Ah | 16       | Dk Brn | Good      | <2 cm Ah collected above ash horizon, peaty.                             |
| Y647893   | 20-Jul-21 | 1:08:38PM  | UTM  | NAD83 | 8    | V | 406502 | 6849006 | 1350 | m | RH      | Soil Ah | 22       | Dk Brn | Good      | 3 cm Ah above mineral soil on E. edge fo bowl proper.                    |
| Y647894   | 20-Jul-21 | 1:23:41PM  | UTM  | NAD83 | 8    | V | 406601 | 6849002 | 1357 | m | RH      | Soil Ah | 16       | black  | Very Good | 2 cm Ah, pockets of AH above ash bed., not peaty, minor roots.           |
| Y647895   | 20-Jul-21 | 1:36:59PM  | UTM  | NAD83 | 8    | V | 406700 | 6849000 | 1363 | m | RH      | Soil Ah | 16       | black  | Good      | 2 cm Ah on mineral soil, few roots.                                      |
| Y647896   | 20-Jul-21 | 1:50:46PM  | UTM  | NAD83 | 8    | V | 406803 | 6849004 | 1362 | m | RH      | Soil Ah | 16       | black  | Good      | 2 cm Ah, pockets of AH above ash bed., not peaty, minor roots.           |
| Y647897   | 20-Jul-21 | 2:04:47PM  | UTM  | NAD83 | 8    | V | 406899 | 6849002 | 1363 | m | RH      | Soil Ah | 11       | Dk Brn | Good      | 1 cm Ah, peaty, approx 50 m west of large granodiorite outcrop on ridge. |



|         | AQ250 | 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    |               |
|         | PPM   | PPM   | %     | PPM    | %     | PPM   | %     | %     | %     | PPM   | PPM   | PPM   | %     | PPB   | PPM   | PPM   | PPM   |               |
| Sample# | 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   | Certificate   |
| 47880   | 14.8  | 19.4  | 0.23  | 366.1  | 0.031 | <20   | 1.21  | 0.015 | 0.05  | <0.1  | 1.8   | 0.09  | 0.27  | 101   | 0.9   | 0.02  | 3     | WHI21000268.1 |
| 47881   | 30.8  | 18.2  | 0.14  | 1168.6 | 0.023 | <20   | 0.95  | 0.015 | 0.04  | <0.1  | 3.8   | 0.11  | 0.21  | 98    | 1.3   | 0.05  | 1.9   | WHI21000268.1 |
| 47882   | 15.7  | 11.6  | 0.12  | 251.1  | 0.022 | <20   | 0.85  | 0.017 | 0.03  | <0.1  | 1.3   | 0.08  | 0.15  | 66    | 0.8   | <0.02 | 1.7   | WHI21000268.1 |
| 47883   | 5     | 6.5   | 0.1   | 80.7   | 0.018 | <20   | 0.44  | 0.014 | 0.04  | <0.1  | 1     | 0.05  | 0.13  | 88    | 0.6   | <0.02 | 0.7   | WHI21000268.1 |
| 47884   | 7.5   | 15.9  | 0.33  | 121.2  | 0.048 | <20   | 1.25  | 0.021 | 0.04  | <0.1  | 2.7   | 0.05  | 0.08  | 69    | 0.5   | <0.02 | 3.9   | WHI21000268.1 |
| Y647885 | 2.8   | 6.8   | 0.07  | 196.9  | 0.017 | <20   | 0.26  | 0.014 | 0.14  | <0.1  | 0.4   | 0.03  | 0.13  | 100   | 0.5   | 0.05  | 1.7   | WHI21000268.1 |
| Y647886 | 11.4  | 13.8  | 0.12  | 700.4  | 0.022 | <20   | 0.86  | 0.01  | 0.1   | <0.1  | 1.9   | 0.14  | 0.29  | 160   | 1.4   | 0.18  | 2.2   | WHI21000268.1 |
| Y647887 | 11.3  | 9.7   | 0.11  | 168.6  | 0.021 | <20   | 0.82  | 0.013 | 0.05  | <0.1  | 1     | 0.12  | 0.17  | 118   | 0.8   | 0.12  | 2.3   | WHI21000268.1 |
| Y647888 | 12.5  | 15.4  | 0.1   | 373.6  | 0.016 | <20   | 0.84  | 0.009 | 0.05  | <0.1  | 1.4   | 0.26  | 0.2   | 166   | 1     | 0.14  | 2.3   | WHI21000268.1 |
| Y647889 | 17.3  | 11.1  | 0.07  | 947.4  | 0.009 | <20   | 1.48  | 0.007 | 0.05  | <0.1  | 1.5   | 0.25  | 0.21  | 105   | 1     | 0.27  | 2.4   | WHI21000268.1 |
| Y647890 | 11.6  | 12.1  | 0.25  | 272.4  | 0.024 | <20   | 1.03  | 0.014 | 0.08  | <0.1  | 1.1   | 0.12  | 0.14  | 81    | 1.5   | 0.05  | 3     | WHI21000268.1 |
| Y647891 | 12.1  | 10.1  | 0.16  | 816.6  | 0.014 | <20   | 0.75  | 0.007 | 0.04  | <0.1  | 1.2   | 0.09  | 0.22  | 115   | 1     | 0.1   | 1.5   | WHI21000268.1 |
| Y647892 | 16.1  | 14.5  | 0.1   | 326    | 0.016 | <20   | 0.91  | 0.013 | 0.03  | <0.1  | 1.3   | 0.07  | 0.16  | 121   | 1.4   | 0.21  | 3.9   | WHI21000268.1 |
| Y647893 | 13.8  | 21.3  | 0.11  | 340.1  | 0.015 | <20   | 1.07  | 0.012 | 0.03  | <0.1  | 1.7   | 0.3   | 0.18  | 146   | 1.3   | 0.39  | 2.8   | WHI21000268.1 |
| Y647894 | 10.5  | 11.8  | 0.14  | 128.3  | 0.014 | <20   | 0.72  | 0.011 | 0.03  | <0.1  | 1.2   | 0.06  | 0.15  | 99    | 0.7   | 0.12  | 1.8   | WHI21000268.1 |
| Y647895 | 15.6  | 14.8  | 0.18  | 212.8  | 0.017 | <20   | 0.98  | 0.012 | 0.05  | <0.1  | 1     | 0.07  | 0.16  | 113   | 0.8   | 0.08  | 3     | WHI21000268.1 |
| Y647896 | 24.9  | 8     | 0.1   | 259.2  | 0.02  | <20   | 0.45  | 0.015 | 0.03  | <0.1  | 0.9   | 0.04  | 0.12  | 90    | 0.6   | 0.05  | 1.6   | WHI21000268.1 |
| Y647897 | 89.1  | 12.9  | 0.19  | 716.8  | 0.018 | <20   | 0.79  | 0.014 | 0.04  | <0.1  | 2.9   | 0.07  | 0.18  | 160   | 1.3   | 0.12  | 2.3   | WHI21000268.1 |

**APPENDIX VII**

**Rock Sample Locations**

**&**

**Descriptions**

| Taut 2021 Rock Samples                            |           |          |      |       |      |        |       |      |   |         |      |       |   |  |      |      |      |
|---|-----------|----------|------|-------|------|--------|-------|------|---|---------|------|-------|---|--|------|------|------|
| All coordinates; Grid: UTM, Datum: NAD 83 Zone 8V |           |          |      |       |      |        |       |      |   |         |      |       |   |  |      |      |      |
| Station   | Date      | Time     | Grid | Datum | Zone | East   | North | Elev | m | Sampler | Type | Type2 | Description   |  |      |      |      |
| I065720   | 7/20/2021 | 9:53:06  | UTM  | NAD83 | 8V   | 405223 | 7E+06 | 1406 | m | WDM     | rock |       | Boulders in swampy area, slickensides, limonite, hematite, silicification, boxwork after sulphides (?)  |  | 0.46 | 154  | 1.8  |
| I065721   | 7/19/2021 |          | UTM  | NAD83 | 8V   | 405334 | 7E+06 |      | m | WDM     | rock |       | Assorted rusty pebbles from pit at soil sample 1961135  |  | 1.53 | 3.5  | 79.8 |
| I065722   | 7/21/2021 |          | UTM  | NAD83 | 8V   | 405458 | 7E+06 |      | m | WDM     | rock |       | Test Pit 21-1. Altered andesite, chloritized hornblende, fine-grained irregular pyrite ~1%, tr chalcopyrite   |  | 0.78 | 0.6  | 6.2  |
| I065765   | 17-Jul-21 | 12:56:41 | UTM  | NAD83 | 8V   | 406069 | 7E+06 | 1184 | m | RH      | rock | grab  | selected grab from outcrop of grey qtz veining cross cutting bleached FeOx stained foliated granodiorite  |  | 0.69 | 26.2 | 1.5  |
| I065766   | 21-Jul-21 | 11:00:43 | UTM  | NAD83 | 8V   | 405460 | 7E+06 | 1501 | m | RH      | rock | float | float from bottom of 1 m deep test pit. Rusty weathering grey bleached weakly silicified - epidote altered pyritic feldspar porphyritic andesite with tr ace cpy. Appox 3-5% diss py, very fine tr cpy, Epidote clots- books replacing hornblende. Non magnetic and non calcareous. Py and cpy replacing mafics (Biot- Hbl). Hand spec. WDM rk sample I065722 and soil 72854 from bottom of pit, 'C' horizon. |  | 1.62 | 0.3  | 4.6  |

| Station | Pb_ppm | Zn_ppm | Ag_ppm | Ni_ppm | Co_ppm | Mn_ppm | Fe_pct | As_ppm | U_ppm | Au_ppb(25gICPMS) | Th_ppm | Sr_ppm | Cd_ppm | Sb_ppm | Bi_ppm | V_ppm | Ca_pct | P_ppm |       |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|-------|------------------|--------|--------|--------|--------|--------|-------|--------|-------|-------|
| I065720 | 6.6    | 4      | 0.3    | 0.9    | 0.3    | 50     | 0.58   | 1.8    | 0.1   |                  | 2.5    | 0.3    | 3      | 0.2    | 0.5    | 0.3   | 2      | <0.01 | 0.001 |
| I065721 | 14.3   | 79     | 0.7    | 6.8    | 3.2    | 238    | 2.52   | 3.5    | 0.6   |                  | 7.4    | 3.4    | 79     | <0.1   | 0.3    | 0.5   | 44     | 0.34  | 0.073 |
| I065722 | 16.2   | 81     | 0.8    | 7.4    | 10.3   | 516    | 3.36   | 16.6   | 0.5   |                  | 65.7   | 2.3    | 55     | <0.1   | 0.2    | 0.8   | 37     | 0.28  | 0.081 |
| I065765 | 10.4   | 20     | <0.1   | 0.9    | 1.3    | 455    | 0.82   | 1.5    | 0.3   |                  | 1.4    | 1.4    | 58     | <0.1   | <0.1   | 0.3   | 6      | 1.43  | 0.012 |
| I065766 | 6.9    | 79     | 0.3    | 9.2    | 8.8    | 543    | 2.54   | 12.9   | 0.6   |                  | 25     | 2.4    | 193    | 0.8    | 0.2    | 0.5   | 46     | 0.53  | 0.081 |

| Station | La_ppm | Cr_ppm | Mg_pct | Ba_ppm | Ti_pct | B_ppm | Al_pct | Na_pct | K_pct | W_ppm | Hg_ppm | Sc_ppm | Tl_ppm | S_pct | Ga_ppm | Se_ppm | Te_ppm | Certificate   |
|---------|--------|--------|--------|--------|--------|-------|--------|--------|-------|-------|--------|--------|--------|-------|--------|--------|--------|---------------|
| I065720 | <1     | 6      | <0.01  | 24     | <0.001 | <1    | 0.03   | 0.002  | 0.02  | 0.8   | 0.11   | <0.1   | <0.1   | <0.05 | <1     | <0.5   | <0.2   | WHI21000266.1 |
| I065721 | 10     | 35     | 0.59   | 541    | 0.07   | <1    | 1.26   | 0.084  | 0.15  | 0.1   | 0.02   | 4.4    | <0.1   | 0.42  | 5      | <0.5   | 0.2    | WHI21000266.1 |
| I065722 | 5      | 22     | 1.12   | 91     | 0.006  | <1    | 1.9    | 0.06   | 0.07  | <0.1  | <0.01  | 2.9    | <0.1   | 1.5   | 6      | <0.5   | 1.3    | WHI21000266.1 |
| I065765 | 5      | 4      | 0.08   | 50     | 0.002  | <1    | 0.26   | 0.06   | 0.1   | 0.2   | 0.06   | 1.3    | <0.1   | 0.12  | <1     | <0.5   | <0.2   | WHI21000266.1 |
| I065766 | 9      | 24     | 1.29   | 246    | 0.042  | <1    | 2.06   | 0.099  | 0.08  | <0.1  | <0.01  | 3.6    | <0.1   | 0.67  | 7      | <0.5   | 0.7    | WHI21000266.1 |

**APPENDIX VIII**

**Field Station Locations**

**&**

**Descriptions**

| Taut 2021 Field Stations                          |           |           |            |        |         |      |   |                |            |              |   |  |
|---|-----------|-----------|------------|--------|---------|------|---|----------------|------------|--------------|---|--|
| All coordinates; Grid: UTM, Datum: NAD 83 Zone 8V |           |           |            |        |         |      |   |                |            |              |   |  |
| Station   | Geologist | Date      | Time       | East   | North   | Elev | m | Structure_Type | Strike-Dip | Rock Type    | Description   |  |
| 49  | WDM       | 7/21/2021 | 11:23:18   | 405469 | 6848794 | 1504 | m | WDM            | rock       | float        | Andesite specimen for T/S, black hornblende, epidote, magnetic, white- grey grn fspars phenos, crystalline groundmass   |  |
| RH21201   | RH        | 16-Jul-21 | 2:44:05PM  | 407018 | 6848944 | 1378 | m | Foliation      | 330/80N    | granodiorite | Outcrop of grey weathering light orange-grey biotite granodiorite, medium grained, well foliated, crosscut but rare light orange aplite dykelets trending 310/50N.  |  |
| RH21202   | RH        | 16-Jul-21 | 2:52:37PM  | 407202 | 6848960 | 1363 | m | dykelet        | 240/20N    | granodiorite | NE side of outcrop on ridge. Granodiorite as stn 21-201. Rare crosscutting 2mm silica - Fe stained veinlets - fracture fill and offsetting aplite dykelets. Veinlets are part of min system?  |  |
| RH21203   | RH        | 17-Jul-21 | 11:34:44AM | 406560 | 6845556 | 1288 | m | fabric-shear   | 210/80W    | granodiorite | Outcrop on valley edge, one of a series, grey weathering grey foliated biotite granodiorite crosscut by pink </= 0.5m W-W trending shallow dipping (20N) aplite to pegmatitic dykes. Angular float in area of pink - white weathering granite.  |  |
| RH21204   | RH        | 17-Jul-21 | 12:47:22PM | 406063 | 6845391 | 1175 | m |                |            |              | 10x10m high cliff of bleached biotite foliated granodiorite, weak limonite stain around <2cm-3cm grey qtz veinlets. Qtz vein zone approx 214/60-70W.  |  |
| RH21205   | RH        | 18-Jul-21 | 4:32:51PM  | 405460 | 6848838 | 1498 | m | linear         | 170        | andesite     | WDM sample site on bench near ridgeline, bench defines a linear at 170 deg. Orange soil, some rusty stained (weak) andesite in sea of angular fresh andesite. Anomalous 277 ppb Au sample about 50m to SW in similar environment but has chlorite altered andesite with bleached mafics adjacent to it. |  |
| RH21206   | RH        | 21-Jul-21 | 11:25:54AM | 405438 | 6848872 | 1502 | m |                |            |              | Scree of rusty weathering light grey green epidote altered andesite, Weakly silicified and pyritized feldspars. Locally non magnetic but most pieces still magnetic. Station on linear defined by rusty weathering andesite and depression in hillside.   |  |
| RH21207   |           | 21-Jul-21 | 1:04:04PM  | 406040 | 6848229 | 1492 | m |                |            |              | Grab of andesite for handsample - thin section of fresh andesite. Medium grained, magnetic, rare feldspar phenos. Weak calcite alteration (on fractures only?), highly magnetic. Weak chlorite alteration in 'B' sample. Photos, and photos looking W.  |  |

## **APPENDIX IX**

### **XRF Data**

|          | Taut 2021 B-C Horizon Soil Samples                |         |            |             |       |          |        |          |        |          |       |          |       |          |       |          |       |          |       |          |
|----------|---|---------|------------|-------------|-------|----------|--------|----------|--------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|
|          | All coordinates; Grid: UTM, Datum: NAD 83 Zone 8V |         |            |             |       |          |        |          |        |          |       |          |       |          |       |          |       |          |       |          |
| Sample # | East  | North   | Reading No | Duration    | Mo    | Mo Error | Zr     | Zr Error | Sr     | Sr Error | Rb    | Rb Error | Th    | Th Error | Pb    | Pb Error | Se    | Se Error | As    | As Error |
| 72810    | 405697  | 6848503 | 1699       | 30.12 < LOD | 5.77  |          | 74     | 6.78     | 185.84 | 7.42     | 21.16 | 3.32     | < LOD | 5.66     | 12.52 | 5.93     | < LOD | 3.15     | < LOD | 6.94     |
| 72811    | 405750  | 6848505 | 1700       | 30.14 < LOD | 5.87  |          | 93.11  | 7.6      | 288.82 | 9.18     | 21.56 | 3.36     | < LOD | 5.77     | 11.69 | 5.96     | < LOD | 3.57     | < LOD | 6.4      |
| 72812    | 405797  | 6848499 | 1701       | 30.11       | 7.48  | 4.5      | 115    | 8.83     | 249.55 | 9.56     | 36.01 | 4.54     | < LOD | 8.93     | 167.3 | 16.48    | < LOD | 4.28     | < LOD | 19.3     |
| 72813    | 405863  | 6848504 | 1702       | 30.13       | 9.06  | 4.52     | 110.5  | 8.89     | 296.98 | 10.36    | 28.39 | 4.2      | < LOD | 6.85     | 18.28 | 7.43     | < LOD | 4.35     | < LOD | 8.98     |
| 72814    | 405903  | 6848498 | 1703       | 30.14       | 8.3   | 4.48     | 64.72  | 7.01     | 97.3   | 6.22     | 14.67 | 3.28     | < LOD | 7.72     | 32.48 | 8.67     | < LOD | 4.14     | < LOD | 10.7     |
| 72815    | 405947  | 6848500 | 1704       | 30.15       | 7.59  | 4.73     | 246.88 | 11.21    | 212.05 | 8.92     | 66.82 | 5.88     | < LOD | 8.04     | 21.82 | 7.92     | < LOD | 4.31     | < LOD | 9.16     |
| 72816    | 406067  | 6848500 | 1705       | 30.12 < LOD | 6.29  |          | 124.73 | 8.62     | 235.1  | 8.96     | 35.72 | 4.24     | < LOD | 6.54     | 37.59 | 8.76     | < LOD | 4.1      | < LOD | 9.72     |
| 72817    | 406101  | 6848501 | 1706       | 30.14 < LOD | 5.79  |          | 82.16  | 7.83     | 373.12 | 10.53    | 15.87 | 3.14     | < LOD | 5.99     | < LOD | 7.46     | < LOD | 3.48     | < LOD | 5.98     |
| 72818    | 406150  | 6848500 | 1707       | 30.11       | 6.7   | 4.33     | 87.84  | 7.89     | 215.09 | 8.71     | 33.67 | 4.19     | < LOD | 7.06     | 18.26 | 7.31     | < LOD | 4.04     | < LOD | 8.59     |
| 72819    | 406199  | 6848499 | 1708       | 30.06 < LOD | 6.71  |          | 134.68 | 9.73     | 303.22 | 10.82    | 43.32 | 5.01     | < LOD | 8.03     | 16.66 | 7.55     | < LOD | 3.99     | < LOD | 8.88     |
| 72820    | 406249  | 6848496 | 1709       | 30.14 < LOD | 6.59  |          | 94.15  | 8.3      | 197    | 8.71     | 19.61 | 3.71     | < LOD | 6.81     | 11.92 | 6.75     | < LOD | 3.9      | < LOD | 8.39     |
| 72821    | 406302  | 6848499 | 1710       | 30.13 < LOD | 5.91  |          | 68.46  | 7.08     | 271.31 | 8.95     | 15.01 | 3.12     | < LOD | 5.93     | < LOD | 7.93     | < LOD | 2.98     | < LOD | 5.96     |
| 72822    | 406349  | 6848505 | 1711       | 38.52 < LOD | 6.46  |          | 108.26 | 8.42     | 206.07 | 8.66     | 18.03 | 3.47     | < LOD | 6.72     | < LOD | 9.59     | < LOD | 3.8      | < LOD | 7.74     |
| 72823    | 406402  | 6848502 | 1712       | 30.12       | 10.04 | 3.9      | 60.44  | 6.09     | 131.24 | 6.17     | 10.85 | 2.63     | < LOD | 5.73     | < LOD | 7.89     | < LOD | 3.29     | < LOD | 5.72     |
| 72824    | 406450  | 6848501 | 1713       | 30.12 < LOD | 5.4   |          | 48.33  | 5.69     | 167.37 | 6.59     | 11.9  | 2.56     | < LOD | 5.33     | < LOD | 6.21     | < LOD | 3.1      | < LOD | 4.44     |
| 72825    | 406505  | 6848499 | 1714       | 30.11 < LOD | 6.14  |          | 127.85 | 8.91     | 321.31 | 10.28    | 19.19 | 3.52     | < LOD | 6.6      | 12.74 | 6.41     | < LOD | 3.32     | < LOD | 6.95     |
| 72826    | 406551  | 6848500 | 1715       | 30.13 < LOD | 6.5   |          | 100.1  | 8.23     | 218.24 | 8.84     | 22.8  | 3.72     | < LOD | 6.48     | 17.26 | 7.15     | < LOD | 4.01     | < LOD | 8.09     |
| 72827    | 406599  | 6848498 | 1716       | 30.12 < LOD | 6.48  |          | 149.65 | 9.1      | 227.87 | 8.84     | 22.79 | 3.74     | < LOD | 6.8      | 20.9  | 7.43     | < LOD | 4.05     | < LOD | 8.69     |
| 72828    | 406652  | 6848497 | 1717       | 30.14 < LOD | 6.3   |          | 87.61  | 7.43     | 146.96 | 7.13     | 32.59 | 4.19     | < LOD | 7.21     | < LOD | 8.81     | < LOD | 3.8      | < LOD | 7.26     |
| 72829    | 406130  | 6846651 | 1735       | 30.14 < LOD | 6.75  |          | 49.01  | 8.32     | 347.06 | 11.95    | 65.61 | 6.18     | < LOD | 8.02     | 24.59 | 8.61     | < LOD | 4.15     | < LOD | 9.77     |
| 72830    | 406274  | 6846473 | 1736       | 30.12 < LOD | 6.68  |          | 140.63 | 10.23    | 407.67 | 12.45    | 43.66 | 5.07     | < LOD | 7.8      | 19.19 | 7.76     | < LOD | 3.84     | < LOD | 9.05     |
| 72831    | 406483  | 6845828 | 1737       | 30.16 < LOD | 7.41  |          | 109.36 | 11.1     | 575.46 | 15.91    | 48.4  | 5.79     | < LOD | 7.65     | 17.44 | 8.14     | < LOD | 4.24     | < LOD | 9.51     |
| 72832    | 406598  | 6845578 | 1738       | 30.12 < LOD | 7.28  |          | 118.18 | 11.41    | 592.82 | 16.2     | 36.8  | 5.23     | < LOD | 8.62     | 16.55 | 8.13     | < LOD | 4.25     | < LOD | 9.82     |
| 72833    | 406180  | 6845413 | 1739       | 30.13 < LOD | 7.5   |          | 108.92 | 10.17    | 363.57 | 12.71    | 48    | 5.73     | < LOD | 8.23     | 14.02 | 7.87     | < LOD | 4.7      | < LOD | 9.12     |
| 72834    | 406073  | 6845389 | 1740       | 30.08 < LOD | 6.4   |          | 50.6   | 7.82     | 313.48 | 10.88    | 77.42 | 6.3      | < LOD | 7.37     | 12.1  | 6.97     | < LOD | 4        | < LOD | 8.42     |
| 72835    | 405855  | 6845794 | 1741       | 30.09 < LOD | 7.19  |          | 139.33 | 10.99    | 393.42 | 13.24    | 36.08 | 5.1      | < LOD | 8.47     | 14.42 | 7.77     | < LOD | 3.94     | < LOD | 9.04     |
| 72836    | 405722  | 6845989 | 1742       | 30.12 < LOD | 7.27  |          | 114.63 | 11.32    | 596.12 | 16.19    | 27.63 | 4.66     | < LOD | 8.88     | 14.78 | 7.94     | < LOD | 4.3      | < LOD | 8.15     |
| 72837    | 405681  | 6846291 | 1743       | 30.13 < LOD | 7.11  |          | 113.45 | 10.98    | 641.43 | 16.1     | 24.01 | 4.39     | < LOD | 7.2      | 13.52 | 7.51     | < LOD | 4.46     | < LOD | 7.88     |
| 72838    | 406434  | 6846682 | 1744       | 30.14 < LOD | 7.15  |          | 156.09 | 10.52    | 331.07 | 11.59    | 52.5  | 5.54     | < LOD | 7.47     | 17.52 | 7.83     | < LOD | 4.48     | < LOD | 9.39     |
| 72839    | 406320  | 6846647 | 1745       | 30.12 < LOD | 6.51  |          | 85.75  | 8.42     | 279.98 | 10.23    | 33.52 | 4.42     | < LOD | 7.35     | 14.83 | 7.26     | < LOD | 4.57     | < LOD | 8.72     |
| 72840    | 405998  | 6848199 | 1750       | 30.14 < LOD | 6.99  |          | 167.67 | 10.6     | 278.2  | 10.71    | 39.5  | 4.88     | < LOD | 7.64     | 18.46 | 7.87     | < LOD | 4.12     | 12.97 | 6.9      |
| 72841    | 405986  | 6848298 | 1751       | 30.13 < LOD | 7.07  |          | 117.42 | 9.88     | 275.12 | 11       | 40.87 | 5.3      | < LOD | 8.64     | 44.14 | 10.64    | < LOD | 4.89     | < LOD | 13.11    |
| 72842    | 405999  | 6848397 | 1752       | 30.12 < LOD | 7.24  |          | 211.4  | 11.37    | 204.71 | 9.41     | 58.87 | 5.92     | 11.31 | 6.68     | 55.28 | 11.38    | < LOD | 4.33     | 18.65 | 9.59     |
| 72843    | 405997  | 6849003 | 1753       | 30.11 < LOD | 6.49  |          | 97.39  | 8.98     | 392.06 | 11.78    | 30.15 | 4.31     | < LOD | 7.78     | < LOD | 9.24     | < LOD | 4.54     | < LOD | 7.41     |
| 72844    | 405992  | 6849103 | 1754       | 30.13 < LOD | 7.34  |          | 158.35 | 11.07    | 385.5  | 12.8     | 42.51 | 5.22     | < LOD | 7.73     | 15.82 | 7.91     | < LOD | 4.81     | < LOD | 9.41     |
| 72845    | 405999  | 6849202 | 1755       | 30.08       | 12.99 | 5.12     | 135.97 | 10.29    | 277.63 | 11.04    | 21.45 | 4.16     | 11.19 | 6.17     | 16.26 | 8.12     | < LOD | 4.85     | < LOD | 9.15     |
| 72846    | 406000  | 6849301 | 1756       | 30.12 < LOD | 6.22  |          | 79.95  | 8.03     | 301.08 | 10.15    | 29.5  | 4.08     | < LOD | 6.49     | 10.38 | 6.36     | < LOD | 3.65     | < LOD | 7.76     |
| 72847    | 406002  | 6849477 | 1757       | 30.13 < LOD | 6.98  |          | 101.63 | 9.41     | 288.41 | 11.06    | 31.59 | 4.72     | < LOD | 8.56     | 22.16 | 8.4      | < LOD | 3.99     | < LOD | 9.34     |

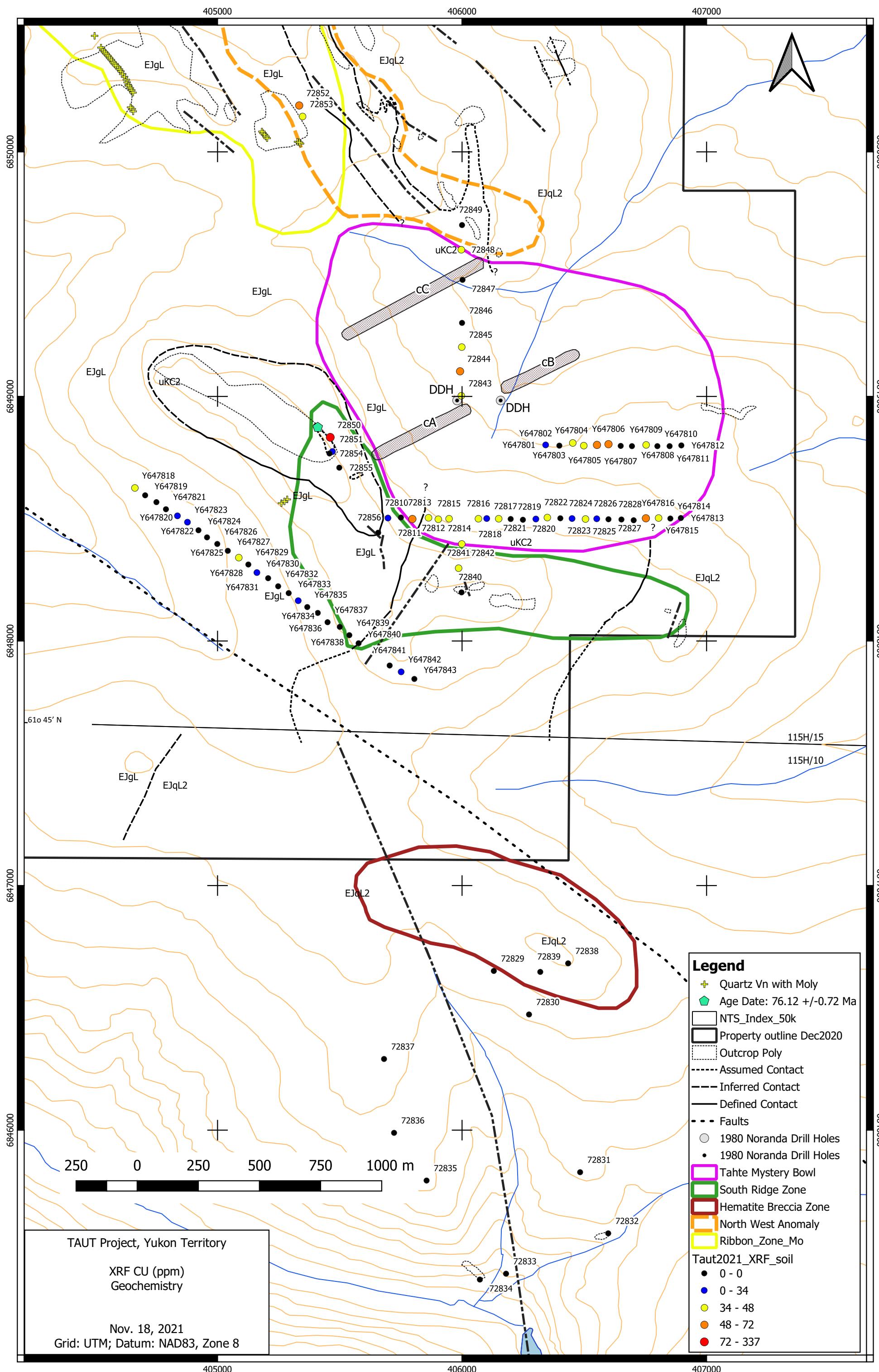
| Sample # | Zn     | Zn Error | W     | W Error | Cu    | Cu Error | Ni    | Ni Error | Co     | Co Error | Fe       | Fe Error | Mn      | Mn Error |
|----------|--------|----------|-------|---------|-------|----------|-------|----------|--------|----------|----------|----------|---------|----------|
| 72810    | 84.44  | 14.5     | < LOD | 56.06   | 25.2  | 15.39    | < LOD | 46.05    | 99.49  | 66.22    | 8724.17  | 226.59   | 211.05  | 56.49    |
| 72811    | 53.23  | 12.34    | < LOD | 56.16   | < LOD | 22.09    | < LOD | 44.97    | 102.56 | 58.31    | 6439.16  | 195.34   | 229.91  | 57       |
| 72812    | 149.72 | 20.51    | < LOD | 59.59   | 59.85 | 20.8     | < LOD | 55.73    | < LOD  | 156.04   | 18406.13 | 366.65   | 816.28  | 106.52   |
| 72813    | 58.58  | 15.02    | < LOD | 65.49   | 42    | 19.29    | < LOD | 51.02    | < LOD  | 160.98   | 19434.53 | 374.77   | 296.55  | 74.4     |
| 72814    | 32.16  | 15.47    | 90.58 | 48.34   | 47.83 | 19.92    | < LOD | 60.97    | 748.27 | 195.72   | 61473.61 | 675.76   | 849.22  | 119.92   |
| 72815    | 119.17 | 19.24    | < LOD | 68.97   | 43.45 | 19.86    | < LOD | 57.27    | 326.42 | 112.87   | 19674.25 | 381.46   | 279.3   | 74.84    |
| 72816    | 89.87  | 16.47    | < LOD | 65.62   | 40.25 | 18.38    | < LOD | 51.39    | < LOD  | 136.95   | 14811.08 | 317.28   | 328.63  | 72.87    |
| 72817    | 48.77  | 12.06    | < LOD | 52.46   | 23.25 | 15.45    | < LOD | 45.63    | < LOD  | 89.49    | 7161.01  | 208.68   | 402.73  | 70.29    |
| 72818    | 129.22 | 18.66    | < LOD | 56.83   | 41.41 | 18.74    | < LOD | 49.33    | 150.72 | 81.88    | 11072.47 | 278.54   | 214.51  | 63.33    |
| 72819    | 173.81 | 22.64    | < LOD | 67.96   | < LOD | 28.61    | < LOD | 58.69    | < LOD  | 171.63   | 20745.46 | 400.54   | 658.78  | 101.31   |
| 72820    | 81.51  | 18       | < LOD | 67.89   | < LOD | 28.27    | < LOD | 58.91    | 426.01 | 165.16   | 43801.19 | 575.14   | 439.05  | 94.44    |
| 72821    | 52.89  | 12.45    | < LOD | 55.89   | 28.68 | 15.68    | < LOD | 43.76    | < LOD  | 91.98    | 7485.91  | 212.53   | 1001.61 | 101.43   |
| 72822    | 76.48  | 15.67    | < LOD | 59.42   | 47.65 | 19.7     | < LOD | 51.54    | 130.43 | 84.57    | 11674.42 | 290.98   | 579.28  | 90.3     |
| 72823    | 14.41  | 8.66     | < LOD | 48.26   | < LOD | 21.81    | < LOD | 43.36    | < LOD  | 93.7     | 8115.84  | 214.2    | 213.94  | 55.11    |
| 72824    | < LOD  | 11.55    | < LOD | 47.28   | 32.84 | 14.24    | < LOD | 39.99    | 116.72 | 50.78    | 5310.54  | 166.39   | 440.19  | 66.19    |
| 72825    | 37.93  | 12.42    | < LOD | 60.03   | 37.22 | 17.63    | < LOD | 47.81    | 180.02 | 89.44    | 14166.66 | 306.12   | 310.37  | 70.2     |
| 72826    | 47.96  | 14.05    | < LOD | 62.78   | 33.87 | 18.45    | < LOD | 53.46    | 215.73 | 112.6    | 21527.13 | 390.52   | 339.76  | 76.76    |
| 72827    | 46.18  | 13.15    | < LOD | 59.21   | < LOD | 23.54    | < LOD | 50.46    | < LOD  | 137.05   | 14896.61 | 318.54   | 268.77  | 68.44    |
| 72828    | 47.37  | 12.99    | < LOD | 57.73   | < LOD | 25.47    | < LOD | 49.88    | < LOD  | 120.96   | 12252.33 | 287.56   | 309.79  | 69.22    |
| 72829    | 38.43  | 13.87    | < LOD | 66.48   | < LOD | 27.11    | < LOD | 59.98    | < LOD  | 145.22   | 15005.47 | 352.69   | 332.34  | 81.06    |
| 72830    | 41.22  | 13.91    | < LOD | 67.61   | < LOD | 25.92    | < LOD | 57.7     | < LOD  | 153.81   | 17493.46 | 366.57   | 351.13  | 80.68    |
| 72831    | 43.3   | 15.89    | < LOD | 73.66   | < LOD | 32.45    | < LOD | 58.47    | < LOD  | 204.36   | 25689.27 | 478.74   | 493.74  | 100.37   |
| 72832    | 65.31  | 18.1     | < LOD | 78.15   | < LOD | 32.99    | < LOD | 68.28    | < LOD  | 219.88   | 31410.83 | 531.12   | 699.04  | 116.53   |
| 72833    | 68.27  | 17.25    | < LOD | 75.95   | < LOD | 30.57    | < LOD | 65.51    | 155.3  | 101.23   | 13491.32 | 347.85   | 350.49  | 86.31    |
| 72834    | 25.77  | 11.83    | < LOD | 66.98   | < LOD | 24.29    | < LOD | 51.04    | < LOD  | 102.08   | 7341.13  | 237.98   | 579.94  | 91.91    |
| 72835    | 82.73  | 19.26    | < LOD | 73.48   | < LOD | 31.54    | < LOD | 68.58    | < LOD  | 233.28   | 34222.74 | 553.66   | 666.89  | 114.97   |
| 72836    | 57.68  | 17.98    | < LOD | 73.01   | < LOD | 30.12    | < LOD | 66.8     | < LOD  | 265.9    | 47214.68 | 648.34   | 871.11  | 129.14   |
| 72837    | 41.18  | 14.64    | < LOD | 68.06   | < LOD | 27.81    | < LOD | 56.71    | 209.1  | 118.95   | 20666.23 | 412.35   | 477.2   | 93.25    |
| 72838    | 57.43  | 16.14    | < LOD | 73.51   | < LOD | 30.33    | 65.02 | 42.77    | < LOD  | 181.6    | 23057.22 | 432.93   | 481.43  | 93.82    |
| 72839    | 56.27  | 14.73    | < LOD | 64.85   | < LOD | 25.41    | < LOD | 53.92    | < LOD  | 144.75   | 15637.93 | 342.07   | 390.05  | 81.11    |
| 72840    | 51.41  | 15.52    | < LOD | 66.07   | < LOD | 29.06    | < LOD | 61.24    | 213.68 | 129.53   | 24865.35 | 452.28   | 583.2   | 101.93   |
| 72841    | 112.83 | 20.94    | < LOD | 74.88   | 46.56 | 22.97    | < LOD | 68.45    | 230.91 | 144.76   | 29363.79 | 507.44   | 804.34  | 119.23   |
| 72842    | 110.4  | 20.4     | < LOD | 70.53   | 42.96 | 22.04    | < LOD | 64.44    | < LOD  | 214.99   | 30422.14 | 508.12   | 443.4   | 97.03    |
| 72843    | 30.65  | 12.07    | < LOD | 62.22   | 38.76 | 18.97    | < LOD | 52.58    | < LOD  | 118.36   | 10930.72 | 280.17   | 234.31  | 66.02    |
| 72844    | 36.7   | 14.63    | < LOD | 71.49   | 72.37 | 24.31    | < LOD | 60.86    | < LOD  | 172.68   | 19755.43 | 411.71   | 520.88  | 98.49    |
| 72845    | 39.52  | 14.38    | < LOD | 71.22   | 39.44 | 22.13    | < LOD | 56.65    | < LOD  | 126.67   | 9827.38  | 294.41   | 191.17  | 68.48    |
| 72846    | 22.21  | 11.02    | < LOD | 56.73   | < LOD | 25.66    | < LOD | 54.64    | < LOD  | 135.46   | 14792.17 | 318.97   | 395.79  | 77.64    |
| 72847    | 64.19  | 16.81    | < LOD | 71.16   | < LOD | 31.23    | < LOD | 65.35    | < LOD  | 187.38   | 23310.35 | 444.4    | 642.16  | 106.17   |

| Sample # | East   | North   | Reading No | Duration | Mo    | Mo Error | Zr     | Zr Error | Sr     | Sr Error | Rb    | Rb Error | Th    | Th Error | Pb    | Pb Error | Se    | Se Error | As    | As Error |
|----------|--------|---------|------------|----------|-------|----------|--------|----------|--------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|
| 72848    | 405997 | 6849600 | 1758       | 30.13    | < LOD | 7        | 106.62 | 8.84     | 165.24 | 8.36     | 32.21 | 4.5      | 12.39 | 6.17     | 18.77 | 7.95     | < LOD | 3.85     | < LOD | 9.16     |
| 72849    | 406000 | 6849701 | 1759       | 30.83    | < LOD | 7.13     | 137.47 | 9.75     | 227.12 | 9.69     | 39.52 | 5.02     | < LOD | 7.58     | 15.97 | 7.63     | < LOD | 4.31     | < LOD | 9.14     |
| 72850    | 405461 | 6848833 | 1760       | 30.13    | < LOD | 7.36     | 154.03 | 10.56    | 275.23 | 10.86    | 34.34 | 4.81     | 16.18 | 6.96     | 45.63 | 10.67    | < LOD | 4.34     | 30.93 | 9.8      |
| 72851    | 405470 | 6848775 | 1761       | 30.14    | 9.37  | 5.04     | 158.63 | 11.2     | 390.9  | 12.98    | 27.11 | 4.49     | < LOD | 9.07     | 24.57 | 8.97     | < LOD | 4.96     | 13.62 | 7.65     |
| 72852    | 405334 | 6850190 | 1788       | 30.14    | < LOD | 7.55     | 154.18 | 11.16    | 385.08 | 12.98    | 43.46 | 5.48     | < LOD | 8.89     | 32.12 | 9.79     | < LOD | 5.33     | 15.25 | 8.32     |
| 72853    | 405348 | 6850145 | 1789       | 30.14    | < LOD | 6.87     | 137.51 | 10.32    | 380.76 | 12.33    | 39.03 | 5        | 10.57 | 5.91     | < LOD | 9.9      | < LOD | 4.82     | < LOD | 7.37     |
| 72854    | 405458 | 6848767 | 1795       | 30.13    | < LOD | 7.27     | 161.8  | 11.71    | 532.43 | 14.98    | 25.74 | 4.32     | < LOD | 8.46     | 13.64 | 7.73     | < LOD | 4.62     | < LOD | 9.25     |
| 72855    | 405498 | 6848709 | 1796       | 30.12    | < LOD | 6.82     | 149.36 | 10.33    | 359.7  | 11.84    | 26.5  | 4.12     | < LOD | 8.21     | 15.18 | 7.5      | < LOD | 4.14     | 10.91 | 6.4      |
| 72856    | 405657 | 6848443 | 1797       | 30.13    | < LOD | 6.35     | 98.86  | 9.46     | 471.2  | 13.07    | 50.01 | 5.17     | < LOD | 8.42     | 75.2  | 11.85    | < LOD | 4.11     | < LOD | 13.77    |
| Y647801  | 406342 | 6848802 | 1718       | 30.14    | < LOD | 6.58     | 116.02 | 8.64     | 231.89 | 9.11     | 26.23 | 3.97     | < LOD | 6.77     | 10.4  | 6.51     | < LOD | 4.11     | < LOD | 7.63     |
| Y647802  | 406398 | 6848799 | 1719       | 30.11    | < LOD | 6.7      | 83.6   | 8.14     | 187.41 | 8.66     | 22.05 | 3.89     | < LOD | 7.1      | 10.87 | 6.87     | < LOD | 4.11     | < LOD | 7.58     |
| Y647803  | 406453 | 6848810 | 1720       | 30.12    | < LOD | 6.55     | 125.25 | 9.13     | 309.7  | 10.45    | 25.14 | 4        | < LOD | 6.55     | 15.59 | 6.98     | < LOD | 3.68     | < LOD | 7.8      |
| Y647804  | 406498 | 6848799 | 1721       | 30.12    | < LOD | 6.68     | 130.07 | 9.93     | 371.98 | 11.97    | 24.44 | 4.12     | < LOD | 7.68     | < LOD | 10.09    | < LOD | 4.21     | < LOD | 7.77     |
| Y647805  | 406552 | 6848802 | 1722       | 30.12    | < LOD | 6.26     | 100.95 | 8.15     | 252.16 | 9.19     | 17.43 | 3.38     | < LOD | 6.5      | 9.81  | 6.23     | < LOD | 3.91     | < LOD | 7.4      |
| Y647806  | 406599 | 6848805 | 1723       | 30.1     | < LOD | 6.96     | 149.81 | 10.08    | 296.61 | 10.78    | 29.27 | 4.38     | < LOD | 7.97     | 11.54 | 7.02     | < LOD | 3.93     | < LOD | 8.17     |
| Y647807  | 406649 | 6848798 | 1724       | 30.13    | < LOD | 6.75     | 137.78 | 9.55     | 296.01 | 10.46    | 25.09 | 4.11     | < LOD | 7.68     | 13.16 | 7.02     | < LOD | 4.19     | < LOD | 7.93     |
| Y647808  | 406695 | 6848797 | 1725       | 30.13    | < LOD | 6.89     | 142.85 | 9.72     | 255.33 | 9.98     | 33.5  | 4.51     | < LOD | 7.88     | 18.12 | 7.67     | < LOD | 4.22     | < LOD | 8.74     |
| Y647809  | 406753 | 6848802 | 1726       | 30.13    | < LOD | 6.56     | 105.21 | 8.99     | 313.73 | 10.81    | 29.23 | 4.2      | < LOD | 6.54     | < LOD | 9.76     | < LOD | 4.43     | < LOD | 7.73     |
| Y647810  | 406799 | 6848797 | 1727       | 30.07    | 8.04  | 4.78     | 152.74 | 9.64     | 158.14 | 8.04     | 24.47 | 4.13     | 9     | 5.62     | 15.9  | 7.57     | < LOD | 4.29     | < LOD | 8.73     |
| Y647811  | 406849 | 6848797 | 1728       | 30.14    | < LOD | 6.69     | 106.63 | 10.1     | 529.21 | 14.23    | 25.91 | 4.26     | < LOD | 7.06     | < LOD | 9.73     | < LOD | 3.94     | < LOD | 8.01     |
| Y647812  | 406897 | 6848800 | 1729       | 30.15    | < LOD | 7.04     | 130.31 | 10.48    | 419.31 | 13.12    | 35.76 | 4.88     | < LOD | 8.13     | 16.15 | 7.78     | < LOD | 4.5      | < LOD | 9.04     |
| Y647813  | 406895 | 6848503 | 1730       | 30.12    | < LOD | 6.7      | 133.68 | 9.65     | 337.14 | 11.17    | 29.97 | 4.28     | < LOD | 6.73     | < LOD | 9.54     | < LOD | 3.87     | < LOD | 7.13     |
| Y647814  | 406852 | 6848501 | 1731       | 30.12    | < LOD | 6.67     | 117.19 | 9.33     | 282.29 | 10.51    | 23.23 | 4.08     | < LOD | 7.59     | < LOD | 9.47     | < LOD | 4.63     | < LOD | 7.94     |
| Y647815  | 406804 | 6848503 | 1732       | 30.11    | < LOD | 6.9      | 119.43 | 9.84     | 325.93 | 11.59    | 27.95 | 4.43     | < LOD | 7.92     | 18.87 | 8.08     | < LOD | 4.79     | < LOD | 9        |
| Y647816  | 406752 | 6848502 | 1733       | 30.15    | < LOD | 7.73     | 132.73 | 11.19    | 349.05 | 13.12    | 21.45 | 4.61     | < LOD | 7.73     | 12.21 | 7.92     | < LOD | 4.85     | < LOD | 8.83     |
| Y647817  | 406702 | 6848494 | 1734       | 30.15    | < LOD | 7.02     | 118.49 | 9.9      | 343.9  | 11.91    | 27.33 | 4.41     | < LOD | 7.16     | 14.95 | 7.69     | < LOD | 4.82     | < LOD | 9.27     |
| Y647818  | 404662 | 6848626 | 1762       | 30.12    | < LOD | 6.36     | 100.25 | 8.48     | 299.72 | 10.15    | 33.8  | 4.32     | < LOD | 7.19     | 15.24 | 6.88     | < LOD | 3.59     | < LOD | 7.69     |
| Y647819  | 404704 | 6848596 | 1763       | 30.13    | < LOD | 6.1      | 75.58  | 8.48     | 423.27 | 12       | 44.12 | 4.83     | < LOD | 7.17     | 15.62 | 6.92     | < LOD | 3.18     | < LOD | 7.6      |
| Y647820  | 404750 | 6848568 | 1764       | 30.13    | < LOD | 6.77     | 110.47 | 9.51     | 394.09 | 12.17    | 31.98 | 4.45     | < LOD | 6.78     | < LOD | 10.14    | < LOD | 4.02     | < LOD | 7.33     |
| Y647821  | 404789 | 6848539 | 1765       | 30.07    | < LOD | 6.51     | 102.91 | 8.83     | 362.91 | 11.19    | 37.42 | 4.53     | < LOD | 7.08     | 20.59 | 7.55     | < LOD | 4.04     | < LOD | 8.84     |
| Y647822  | 404836 | 6848512 | 1766       | 30.14    | 8.22  | 4.61     | 84.44  | 9.37     | 465.96 | 13.32    | 37.16 | 4.73     | < LOD | 7.82     | 15.27 | 7.61     | 5.42  | 3.31     | < LOD | 8.57     |
| Y647823  | 404877 | 6848486 | 1767       | 30.14    | < LOD | 6        | 80.73  | 8.07     | 392.13 | 11.06    | 35.59 | 4.2      | < LOD | 5.67     | < LOD | 8.66     | < LOD | 3.5      | < LOD | 6.49     |
| Y647824  | 404922 | 6848453 | 1768       | 30.1     | < LOD | 6.34     | 90.49  | 9.14     | 502.02 | 13.13    | 40.73 | 4.78     | < LOD | 6.1      | 15.78 | 7.01     | < LOD | 3.77     | < LOD | 8.59     |
| Y647825  | 404957 | 6848424 | 1769       | 30.1     | < LOD | 6.79     | 129.93 | 10.39    | 486.74 | 13.65    | 41.34 | 5.07     | < LOD | 8.12     | 14.61 | 7.39     | < LOD | 4.05     | < LOD | 8.55     |
| Y647826  | 404999 | 6848397 | 1770       | 30.15    | < LOD | 6.36     | 58.93  | 8.39     | 469.68 | 12.71    | 42.12 | 4.73     | < LOD | 6.85     | 13.89 | 6.8      | < LOD | 3.47     | < LOD | 8.06     |
| Y647827  | 405042 | 6848369 | 1771       | 30.14    | < LOD | 6.45     | 75.4   | 8.73     | 470.73 | 12.73    | 30.66 | 4.26     | < LOD | 6.76     | 12.67 | 6.71     | < LOD | 3.77     | < LOD | 7.31     |
| Y647828  | 405087 | 6848341 | 1772       | 30.12    | < LOD | 6.07     | 73.41  | 7.43     | 236.39 | 8.85     | 38.61 | 4.4      | < LOD | 6.69     | 24.6  | 7.58     | < LOD | 3.63     | < LOD | 9.05     |
| Y647829  | 405126 | 6848313 | 1773       | 30.14    | < LOD | 6.31     | 90.65  | 8.3      | 333.42 | 10.55    | 23.29 | 3.74     | < LOD | 6.82     | 13.54 | 6.71     | < LOD | 3.89     | < LOD | 7.87     |
| Y647830  | 405161 | 6848280 | 1774       | 30.12    | < LOD | 6.29     | 51.54  | 9.25     | 674.61 | 15.44    | 46.47 | 5.11     | < LOD | 7.61     | 17.41 | 7.44     | < LOD | 3.73     | < LOD | 8.48     |
| Y647831  | 405207 | 6848257 | 1775       | 30.09    | < LOD | 6.7      | 104.96 | 10.02    | 526.78 | 14.12    | 34.3  | 4.65     | < LOD | 8.2      | 25.71 | 8.4      | < LOD | 3.83     | < LOD | 8.99     |

| Sample # | Zn     | Zn Error | W     | W Error | Cu     | Cu Error | Ni    | Ni Error | Co     | Co Error | Fe       | Fe Error | Mn      | Mn Error |
|----------|--------|----------|-------|---------|--------|----------|-------|----------|--------|----------|----------|----------|---------|----------|
| 72848    | 164.08 | 23.33    | < LOD | 70.02   | 47.13  | 21.76    | < LOD | 61.4     | < LOD  | 222.82   | 33658.81 | 526.46   | 815.61  | 118      |
| 72849    | 119.42 | 20.49    | < LOD | 73.31   | < LOD  | 29.53    | < LOD | 59.32    | < LOD  | 187.42   | 26121.57 | 462.27   | 599.09  | 103.09   |
| 72850    | 127.45 | 22.12    | < LOD | 72.73   | 336.55 | 38.51    | < LOD | 64.05    | < LOD  | 221.53   | 32233.72 | 524.12   | 710.85  | 113.48   |
| 72851    | 89.39  | 19.3     | < LOD | 70.38   | 33.83  | 21.76    | < LOD | 69.04    | 256.49 | 152.44   | 32981.06 | 535.02   | 1104.41 | 136.1    |
| 72852    | 107.02 | 21.13    | < LOD | 72.16   | 51.25  | 23.11    | < LOD | 65.96    | 384.01 | 174.99   | 42557.8  | 610.89   | 347.58  | 96.33    |
| 72853    | 45.09  | 15.2     | < LOD | 68.48   | 46.2   | 21.25    | < LOD | 58.76    | < LOD  | 201.09   | 28261.76 | 475.98   | 267.24  | 80.44    |
| 72854    | 59.78  | 16.75    | < LOD | 70.56   | < LOD  | 29.89    | < LOD | 62.18    | < LOD  | 200.69   | 26378.58 | 474.79   | 573.02  | 103.42   |
| 72855    | 82.7   | 17.27    | < LOD | 60.62   | < LOD  | 27.16    | < LOD | 59.63    | < LOD  | 185.18   | 24218.43 | 435.89   | 714.71  | 106.38   |
| 72856    | 96.46  | 17.56    | < LOD | 61.73   | < LOD  | 25.34    | < LOD | 54.32    | < LOD  | 161.73   | 20079.5  | 384.25   | 751.13  | 103.58   |
| Y647801  | 37.13  | 13.05    | < LOD | 59.04   | 29.23  | 18.12    | < LOD | 56.54    | 245.27 | 115.57   | 22523.4  | 399.42   | 198.83  | 67.51    |
| Y647802  | 23.85  | 13       | < LOD | 63.08   | < LOD  | 29.25    | < LOD | 57.74    | < LOD  | 201.52   | 29746.91 | 482.48   | 274.64  | 79.63    |
| Y647803  | 57.83  | 14.45    | < LOD | 60.97   | 39.44  | 18.91    | < LOD | 55.04    | < LOD  | 143.37   | 16194.76 | 338.76   | 518.73  | 87.28    |
| Y647804  | 47.92  | 14.77    | < LOD | 69.91   | 36.47  | 20.12    | < LOD | 59.79    | < LOD  | 167.31   | 19635.77 | 390.36   | 468.36  | 89.85    |
| Y647805  | 56.64  | 14.13    | < LOD | 59.87   | 56.27  | 19.16    | < LOD | 49.96    | 174.54 | 100.96   | 18415.66 | 350.87   | 611.82  | 91.04    |
| Y647806  | 75.76  | 17.08    | < LOD | 62.3    | 68.52  | 22.42    | < LOD | 57.68    | < LOD  | 192.12   | 27498.23 | 463.64   | 398.4   | 88.27    |
| Y647807  | 60.43  | 15.13    | < LOD | 64.89   | < LOD  | 27.77    | < LOD | 55.58    | < LOD  | 156.24   | 18155.97 | 366.25   | 231.17  | 69.25    |
| Y647808  | 59.94  | 15.97    | < LOD | 68.78   | < LOD  | 27.58    | < LOD | 58.08    | 213.36 | 129.82   | 26630.38 | 454.29   | 331.74  | 81.64    |
| Y647809  | 40.98  | 13.43    | < LOD | 60.17   | 37.49  | 19.57    | < LOD | 58.38    | < LOD  | 152.56   | 17073.97 | 357.21   | 309.16  | 76.11    |
| Y647810  | 45.82  | 14.23    | < LOD | 64.4    | < LOD  | 27.8     | < LOD | 52.93    | 147.89 | 97.57    | 14234.69 | 336.73   | 171.38  | 65.39    |
| Y647811  | 40.28  | 13.95    | < LOD | 65.25   | < LOD  | 27.92    | < LOD | 60.05    | < LOD  | 166.14   | 19692.04 | 391.45   | 731.33  | 105.96   |
| Y647812  | 69.01  | 17.38    | < LOD | 70.47   | < LOD  | 30.61    | < LOD | 61.01    | < LOD  | 207.34   | 30056.5  | 499.9    | 1750.2  | 159.97   |
| Y647813  | 32.4   | 12.96    | < LOD | 64.21   | < LOD  | 27.12    | < LOD | 57.27    | < LOD  | 162.48   | 20096.25 | 386.76   | 499.92  | 90.39    |
| Y647814  | 46.58  | 14.59    | < LOD | 68.75   | < LOD  | 28.05    | < LOD | 56.48    | < LOD  | 161.47   | 18885.84 | 384.62   | 559.24  | 95.61    |
| Y647815  | 38.71  | 14.54    | < LOD | 75.59   | 44.06  | 21.85    | < LOD | 63.84    | < LOD  | 166.42   | 18481.03 | 391.58   | 678.16  | 105.85   |
| Y647816  | 59.67  | 18.07    | < LOD | 86.89   | 50.43  | 25.53    | < LOD | 70.65    | < LOD  | 181.89   | 17992.63 | 423.31   | 814.11  | 124.46   |
| Y647817  | 68.48  | 16.78    | < LOD | 64.49   | < LOD  | 30.34    | < LOD | 60.77    | < LOD  | 184.62   | 22774.23 | 434.45   | 528.13  | 98.5     |
| Y647818  | 47.64  | 13.34    | < LOD | 60.14   | 39.15  | 18.43    | < LOD | 50.77    | < LOD  | 127.79   | 12837.6  | 297.92   | 241.4   | 65.63    |
| Y647819  | 15.44  | 10.05    | < LOD | 59.32   | < LOD  | 23.74    | < LOD | 52.33    | < LOD  | 99.42    | 7598.3   | 229.9    | 273.22  | 66.47    |
| Y647820  | 17.47  | 10.55    | < LOD | 54.79   | < LOD  | 28.07    | < LOD | 52.43    | 138.57 | 74.31    | 8057.25  | 248.44   | 177.56  | 61.33    |
| Y647821  | 42.77  | 12.82    | < LOD | 57.07   | < LOD  | 26.37    | < LOD | 53.76    | < LOD  | 127.38   | 12457.43 | 294.81   | 382.15  | 76.74    |
| Y647822  | 19.64  | 11.6     | < LOD | 62.33   | 33.89  | 19.63    | < LOD | 52.54    | < LOD  | 133.87   | 13142.77 | 318.8    | 237.23  | 69.7     |
| Y647823  | 20.38  | 9.98     | < LOD | 53.33   | 26.33  | 16.26    | < LOD | 47.95    | 104.47 | 66.94    | 8149.97  | 227.46   | 145.76  | 52.85    |
| Y647824  | 58.74  | 14.12    | < LOD | 59.87   | < LOD  | 25.99    | < LOD | 50.34    | < LOD  | 112.26   | 10188.15 | 267.32   | 324.94  | 71.92    |
| Y647825  | 67.94  | 15.99    | < LOD | 68.37   | < LOD  | 26.15    | < LOD | 56.15    | < LOD  | 140.83   | 14109.26 | 331.66   | 533.48  | 92.35    |
| Y647826  | 54.44  | 13.9     | < LOD | 61.26   | < LOD  | 25.43    | < LOD | 51.47    | < LOD  | 122.1    | 11556.68 | 284.87   | 504.3   | 84.6     |
| Y647827  | 29.46  | 11.78    | < LOD | 63.66   | < LOD  | 25.92    | < LOD | 53.87    | 154.4  | 73.99    | 8673.13  | 247.83   | 698.63  | 95.38    |
| Y647828  | 52.56  | 13.36    | < LOD | 55.18   | 38.95  | 17.82    | < LOD | 51.76    | < LOD  | 138.96   | 15892.31 | 323.83   | 597.69  | 89.28    |
| Y647829  | 26.64  | 10.99    | < LOD | 58.88   | < LOD  | 23.12    | < LOD | 50.41    | 125.85 | 66.35    | 7220.79  | 221.58   | 343.74  | 70.79    |
| Y647830  | 52.42  | 13.77    | < LOD | 60.36   | 27.52  | 18.2     | < LOD | 51.97    | < LOD  | 97.17    | 7401.41  | 233.02   | 626.32  | 92.12    |
| Y647831  | 53.11  | 14.48    | < LOD | 64.59   | < LOD  | 26.24    | < LOD | 56.32    | < LOD  | 126.92   | 11433.51 | 297.39   | 446.5   | 85.13    |

| Sample # | East   | North   | Reading No | Duration | Mo    | Mo Error | Zr     | Zr Error | Sr     | Sr Error | Rb    | Rb Error | Th    | Th Error | Pb    | Pb Error | Se    | Se Error | As    | As Error |
|----------|--------|---------|------------|----------|-------|----------|--------|----------|--------|----------|-------|----------|-------|----------|-------|----------|-------|----------|-------|----------|
| Y647832  | 405248 | 6848224 | 1776       | 30.13    | < LOD | 6.62     | 63.47  | 10.06    | 735.33 | 16.68    | 45.77 | 5.39     | < LOD | 7.53     | 13.2  | 7.29     | < LOD | 4.18     | < LOD | 8.97     |
| Y647833  | 405291 | 6848196 | 1777       | 30.14    | < LOD | 6.62     | 129.35 | 10.26    | 456.05 | 13.23    | 31.42 | 4.6      | < LOD | 7.7      | 21.78 | 8.13     | < LOD | 4.61     | < LOD | 9.95     |
| Y647834  | 405330 | 6848165 | 1778       | 30.13    | < LOD | 5.99     | 77.23  | 8.18     | 411.39 | 11.43    | 25.98 | 3.83     | < LOD | 7.05     | 15.07 | 6.71     | < LOD | 3.63     | < LOD | 8.3      |
| Y647835  | 405367 | 6848139 | 1779       | 30.13    | < LOD | 6.36     | 103.6  | 9.27     | 432.56 | 12.37    | 31.33 | 4.43     | < LOD | 7.78     | 15.09 | 7.18     | < LOD | 4.06     | 10.27 | 6.04     |
| Y647836  | 405410 | 6848115 | 1780       | 30.13    | < LOD | 6.94     | 87.29  | 10.34    | 609.35 | 15.65    | 46.76 | 5.52     | < LOD | 8.95     | 19.03 | 8.19     | < LOD | 4.52     | 10.5  | 6.83     |
| Y647837  | 405450 | 6848077 | 1781       | 30.12    | < LOD | 6.4      | 72.91  | 9.68     | 643.85 | 15.3     | 38.53 | 4.9      | < LOD | 7.9      | 27.04 | 8.44     | < LOD | 4.08     | < LOD | 9.27     |
| Y647838  | 405500 | 6848058 | 1782       | 30.13    | < LOD | 7.18     | 129.28 | 10.1     | 313.57 | 11.49    | 33.86 | 4.79     | < LOD | 8.2      | 16.24 | 7.97     | < LOD | 4.95     | < LOD | 8.65     |
| Y647839  | 405539 | 6848024 | 1783       | 30.15    | < LOD | 7.12     | 149.79 | 11.03    | 383.21 | 12.93    | 33.1  | 4.9      | < LOD | 8.73     | 39.04 | 10.3     | < LOD | 4.98     | < LOD | 12.34    |
| Y647840  | 405577 | 6847991 | 1784       | 30.4     | 7.44  | 4.86     | 93.48  | 9.52     | 340.26 | 12.03    | 35.9  | 4.93     | < LOD | 9.4      | 44.26 | 10.49    | < LOD | 4.31     | < LOD | 12.98    |
| Y647841  | 405704 | 6847900 | 1785       | 30.12    | < LOD | 6.97     | 152.9  | 10.88    | 479.85 | 13.69    | 24.56 | 4.15     | < LOD | 6.84     | < LOD | 9.14     | < LOD | 4.35     | < LOD | 7.8      |
| Y647842  | 405751 | 6847874 | 1786       | 30.15    | < LOD | 7.12     | 152.4  | 10.98    | 446.9  | 13.49    | 30.07 | 4.64     | < LOD | 8.17     | 13.15 | 7.48     | < LOD | 4.38     | < LOD | 8.7      |
| Y647843  | 405805 | 6847845 | 1787       | 30.13    | < LOD | 7.09     | 148.79 | 10.95    | 431.73 | 13.37    | 34.3  | 4.84     | < LOD | 8.44     | < LOD | 10.33    | < LOD | 3.75     | < LOD | 8.52     |

| Sample # | Zn     | Zn Error | W     | W Error | Cu    | Cu Error | Ni    | Ni Error | Co    | Co Error | Fe       | Fe Error | Mn     | Mn Error |
|----------|--------|----------|-------|---------|-------|----------|-------|----------|-------|----------|----------|----------|--------|----------|
| Y647832  | 63.74  | 15.5     | < LOD | 67.55   | < LOD | 26.99    | < LOD | 54.85    | < LOD | 122.13   | 10556.45 | 286.77   | 513.3  | 89.61    |
| Y647833  | 84.6   | 17.45    | < LOD | 71.08   | < LOD | 28.62    | < LOD | 55.33    | < LOD | 152.89   | 17034.46 | 364.32   | 581.5  | 96.43    |
| Y647834  | 84.56  | 15.26    | < LOD | 56.97   | 29.54 | 16.71    | < LOD | 46.8     | < LOD | 106.08   | 9514.06  | 248.38   | 574.22 | 84.07    |
| Y647835  | 75.03  | 15.56    | < LOD | 59.26   | < LOD | 25.57    | < LOD | 51.52    | < LOD | 130.27   | 13232.59 | 308.3    | 371.57 | 77.47    |
| Y647836  | 79.45  | 17.72    | < LOD | 73.72   | < LOD | 29.69    | < LOD | 60.22    | < LOD | 171.19   | 20350.43 | 408.16   | 593.78 | 100.3    |
| Y647837  | 45.55  | 13.7     | < LOD | 64.99   | < LOD | 24.17    | < LOD | 55.6     | < LOD | 127.85   | 11960.54 | 298.62   | 527.72 | 89.03    |
| Y647838  | 54.5   | 15.85    | < LOD | 68.16   | < LOD | 29.19    | < LOD | 62.36    | < LOD | 182.49   | 22007.08 | 430.52   | 345.36 | 85.83    |
| Y647839  | 61.04  | 16.74    | < LOD | 73.95   | < LOD | 31.16    | < LOD | 66.81    | < LOD | 169.6    | 18454.52 | 402.87   | 583.5  | 103.04   |
| Y647840  | 172.06 | 23.99    | < LOD | 75.96   | < LOD | 29.69    | < LOD | 61.77    | < LOD | 194.48   | 24528.56 | 457.64   | 495.78 | 96.79    |
| Y647841  | 32.83  | 13.5     | < LOD | 65.15   | < LOD | 27.6     | < LOD | 59.54    | < LOD | 174.31   | 21578.75 | 413.18   | 504.98 | 93.41    |
| Y647842  | 31.87  | 13.91    | < LOD | 66.5    | 33.5  | 20.74    | < LOD | 63.15    | < LOD | 191.96   | 24818.77 | 451.74   | 553.28 | 99.68    |
| Y647843  | 53.9   | 15.94    | < LOD | 71.44   | < LOD | 30.01    | 66.73 | 44.12    | < LOD | 186.18   | 23136.01 | 439.77   | 480.68 | 95.57    |



**APPENDIX X**

**Thin Section Report**

## **APPENDIX X - TAUT THIN SECTIONS**

Eight rocks were selected from the TAUT project area for thin section examination, with rock slabs sent to Vancouver Petrographic for preparation. The thin section were then sent to Dr. Tim Liverton for petrographic examination and photomicrography. The section numbering (T8 – T15) continues from a series of thin sections examined in 2019 by Dr. Liverton (T1 – T7) and presented in an appendix to that years assessment report (Mann & Hulstein, 2019). The locations for all thin sections to date are presented on a map below.

## TAUT 2021 Thin Section Samples

UTM NAD83 Zone  
8V

| SAMPLE | Field name   | East   | North   | Field DESCRIPTION  |
|--------|--------------|--------|---------|--|
| T8     | WDM Pit 21-1 | 405458 | 6848767 | Polished Thin Section. Pyritic feldspar porphyry boulder with epidote, chlorite, silica alteration from 2021 test pit. Orange- weathering, light green rock. Trace chalcopyrite. Non-magnetic. Rock assay #I065722   |
| T9     | RH20101      | 405414 | 6848865 | YGS age date location, fist size sample of porphyry. Grey weathering grey feld-hbl porphyry, weak epidote alteration, minor FeOx on fractures. Magnetic. Two phases evident in hand samples, a coarser and finer grained groundmass, both with phenos of approx same size. |
| T10    | WDM 049      | 405469 | 6848794 | Andesitic boulder, crystalline groundmass (non-volcanic), magnetic, c.g. black hbl., pale green to white fspat phenos, epidote.  |
| T11    | RH21207A     | 406040 | 6848229 | Fresh andesite, collected for thin section. Medium grained, magnetite, rare feldspar phenocrysts, calcite alteration along fracture face, some epidote.  |
| T12    | RH21207B     | 406040 | 6848229 | Fresh andesite, collected for thin section. Medium grained, magnetite, rare feldspar phenocrysts, weak chlorite alteration.  |
| T13    | I065713      | 405724 | 6846928 | Boulder from Hematite breccia area south of claims, brecciated, silicified, FeOx.  |
| T14    | RH20118      | 405491 | 6848756 | hand sample of grey weathering grey pyritic andesite porphyry.   |
| T15    | WDM 61Au     | 405550 | 6848542 | Boulder from site of 2019 soil with 61ppb Au. Pyritic, magnetic altd andesite, porphyritic, pale green, epidote.   |

T8

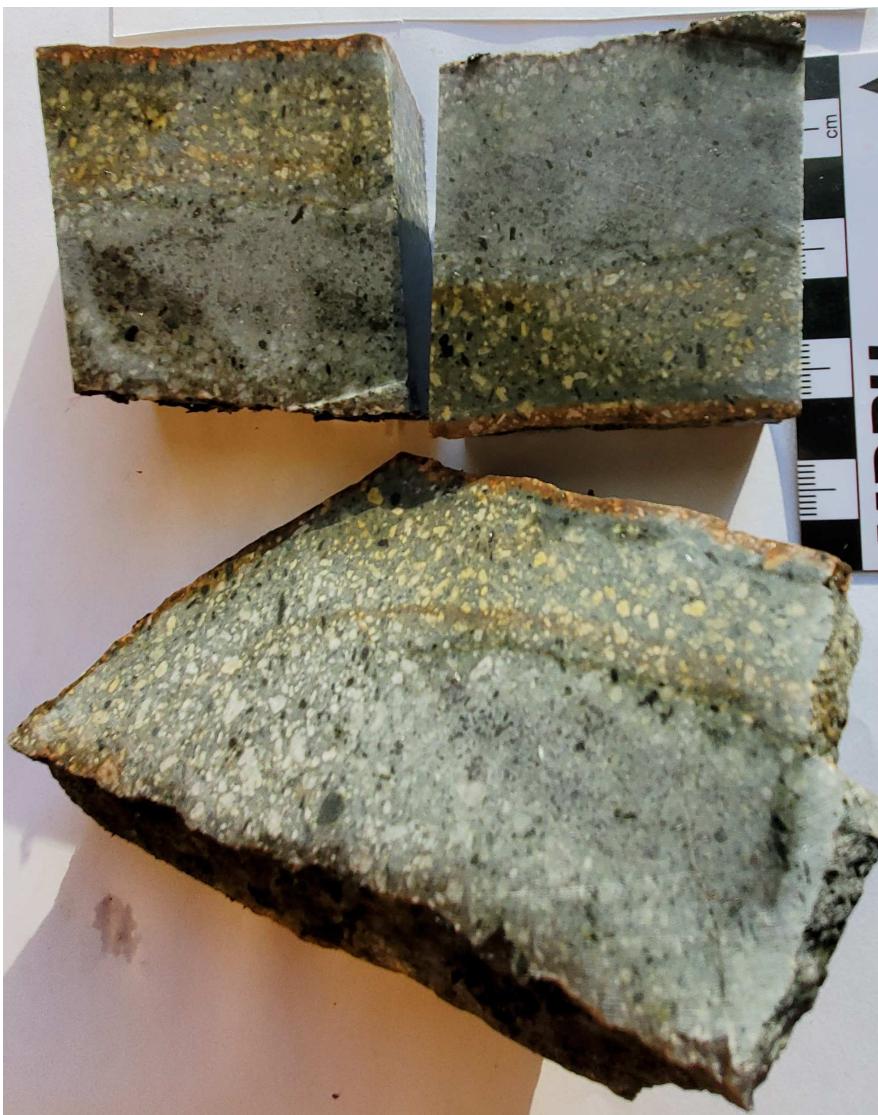
A fine-grained volcanic. Feldspar phenocrysts are up to 1mm long with plagioclase predominating. The groundmass is of feldspar  $\leq 0.1$  mm grainsize. Contains some epidote to 1mm, which might be pseudomorphs of ferromagnesians: perhaps 1% volume. Opaques are in clusters to 0.5mm: pyrite only. These are in subhedral to rounded anhedral forms.



T8 – Pit 21-1

## T9

A highly clay-altered fine-grained volcanic (more altered than T8). Phenocrysts are K-feldspar, euhedral to 4mm long, plagioclase to 2mm long in subhedral form, with hornblende to 3mm in euhedral crystals. Epidote, in 0.2mm anhedral form is both included in feldspars and the groundmass. The groundmass is 0.04-0.08mm grainsize subhedral feldspar and very clay altered. The phenocrysts occupy from 30 to 50% of any particular field. Pyrite (1%) is in subhedral 0.2-0.4mm grains.



T9 – From Age Date Sample Location

## T10

This is a heavily clay-altered, probably sub-volcanic intrusive. It has subhedral to euhedral plagioclase and K-feldspar to about 2mm long, with just one plagioclase at 4mm. Anhedral to euhedral hornblende is  $\leq$ 2mm long. There is very little quartz (0.3mm) and occasional epidote to 0.5mm. The groundmass is of 0.1-0.2mm feldspars with no obvious quartz. It is quite clay altered. Neither apatite nor zircon were noted.



T10 – Andesite

## T11

Another clay altered intrusive. It has euhedral K-feldspar to 5mm, euhedral plagioclase to 4mm long, euhedral hornblende to 3mm, though most are 1mm: about 25% of the volume. Euhedral pyrite is to 0.3mm, about 1%. 0.3mm, rounded quartz phenocrysts are rare. The groundmass is <0.1mm anhedral feldspar. Both feldspar phenocrysts and the groundmass are clay altered.



T11 – “Fresh-Looking” Andesite

## T12

This is a slightly clay-altered intrusive. Some plagioclase phenocrysts and feldspar in the groundmass show clay. Euhedral plagioclase is to 5mm long, K-feldspar to 1mm and subhedral form. Euhedral hornblende (15%) is to 2.5mm long. Subhedral pyrite, 0.5%, is to 0.3mm. The groundmass occupies about 50% and is 0.05mm feldspar. Occasional apatite crystals are 0.06mm long, with rare 0.3mm examples. No zircon was noted.



T12 - "Fresh-Looking" Andesite

### T13

This is a highly fractured, v. fine grained volcanic of mostly 0.02-0.04mm feldspars. It has angular masses of quartz to 5mm across that have been brecciated and which occupy 25-30% of the rock. Some of the smaller fracture surfaces carry sericite. Less than a dozen 0.02mm anhedral pyrite grains were noted.



T13 – From Hematite Breccia zone, “silicified”

## T14

A highly clay and epidote altered intrusive. Clay alteration of the feldspars, mostly originally plagioclase, is such that their outlines are barely discernable. 0.3mm grains of epidote are common throughout the groundmass. A few 0.3mm pyrite grains are present. Quartz is in angular grains. The groundmass is typically of 0.04mm feldspars which contain some 1mm irregularly shaped masses of quartz and carbonate.



T14 – Andesite porphyry

## T15

This is a slightly clay-altered intermediate volcanic or sub-volcanic intrusion.

Plagioclase phenocrysts are up to 2mm long, are subhedral to euhedral and have only a little clay alteration. Plagioclase phenocrysts are up to 2mm long, are subhedral to euhedral, and are quite subordinate. Hornblende is euhedral, up to 2mm long, with very slight sericite alteration. One 5mm cluster of the amphibole has some epidote and carbonate. Occasional 0.5mm quartz grains are present. The groundmass is predominantly of 0.05mm feldspars.



T15 – Altered Porphyritic Andesite

## **ADDITIONAL NOTE ON NOMENCLATURE**

The Streckeisen scheme for igneous rock classification relies on the modal proportions of feldspars and quartz. In rocks where much of the bulk is a fine-grained groundmass, this makes identification inaccurate. Judging the proportion of the groundmass that stains with cobaltinitrite, together with proportion of phenocrysts gives an approximate result, but with heavy clay alteration, this might be skewed toward potassic compositions. All of the Taut rocks are intermediate in composition, tending toward plagioclase being somewhat dominant. Quartz content is limited, so most are on the quartz monzonite-diorite line rather than being granites.

## **TAUT COBALTINITRITE STAINED SLABS**

T8

Only the smaller phenocrysts (about 25%) stain. Half of the groundmass has stained.

T9

$\geq$  half of the groundmass has stained.

T10

The phenocrysts are plagioclase. About 2/3 of the groundmass stains.

T11

Coarse phenocrysts are unstained - plagioclase. about half of the groundmass stains.

T12

Phenocrysts are plagioclase. 80% of the groundmass stains.

T13

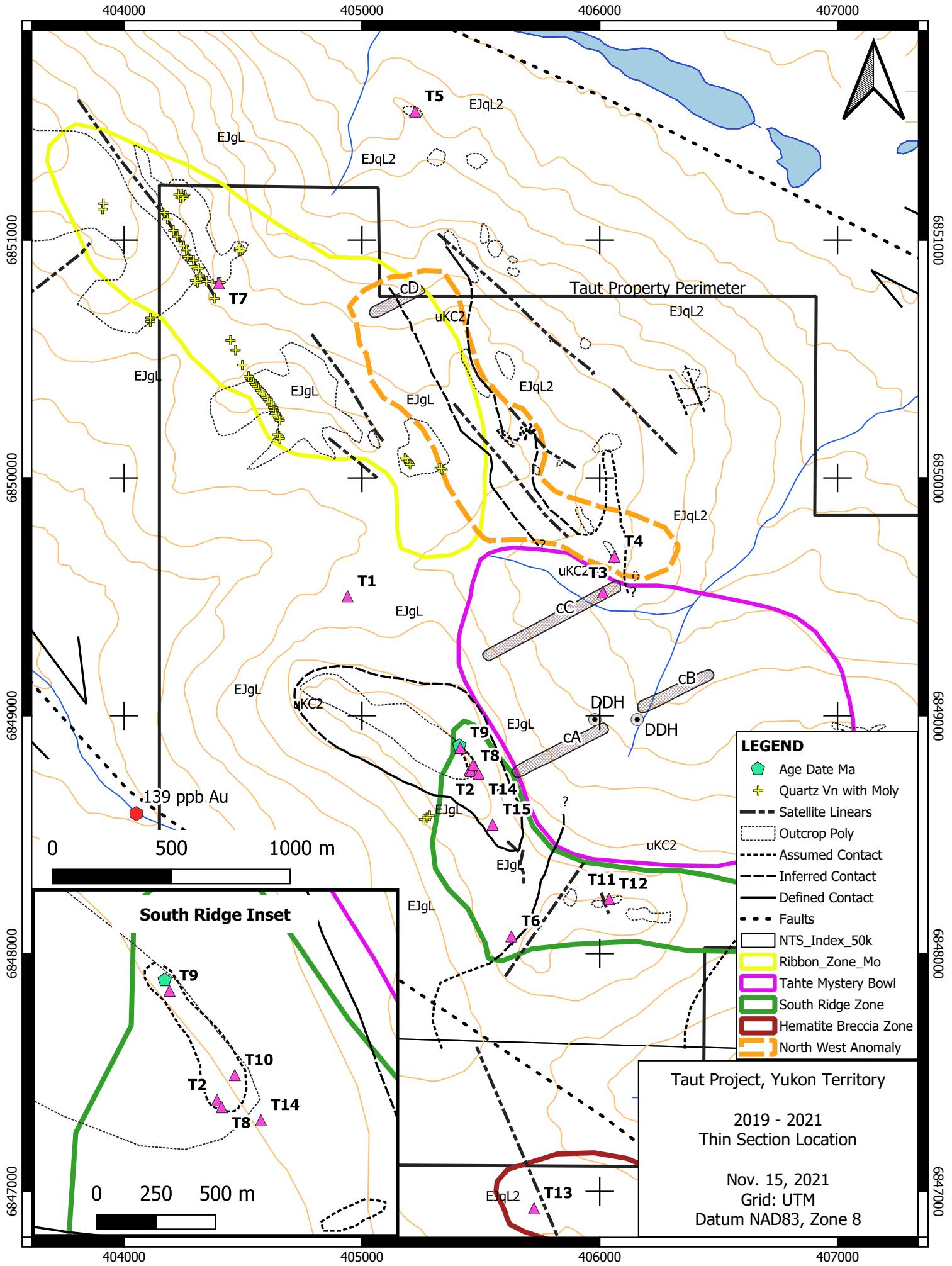
Only a few small phenocrysts stain.

T14

Part of the groundmass (< 50%) stains. The few large phenocrysts are plagioclase.

T15

Phenocrysts are plagioclase. About half of the groundmass stains.



**MAP  
POCKET**

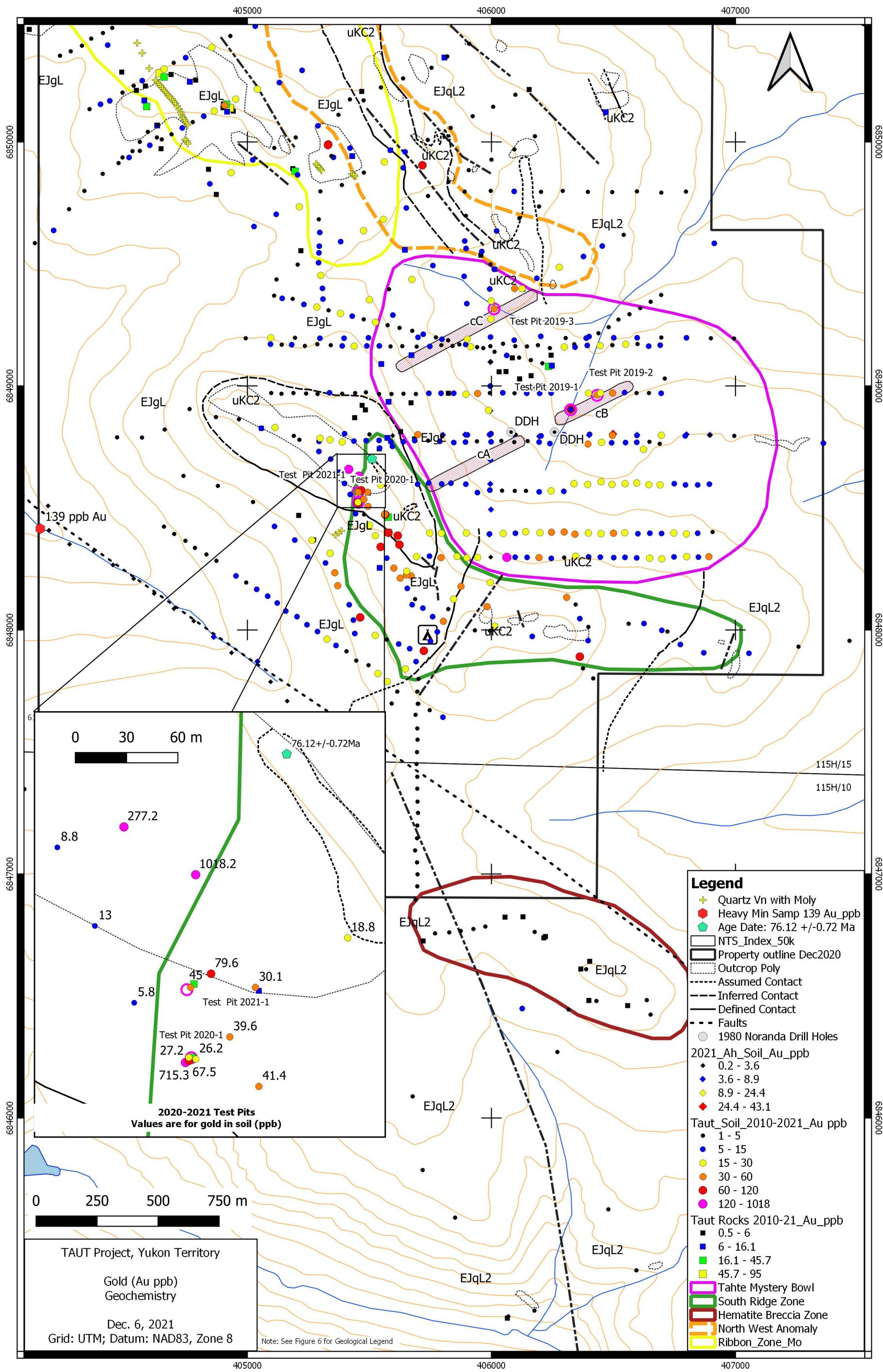


Figure 7. Au Geochemistry

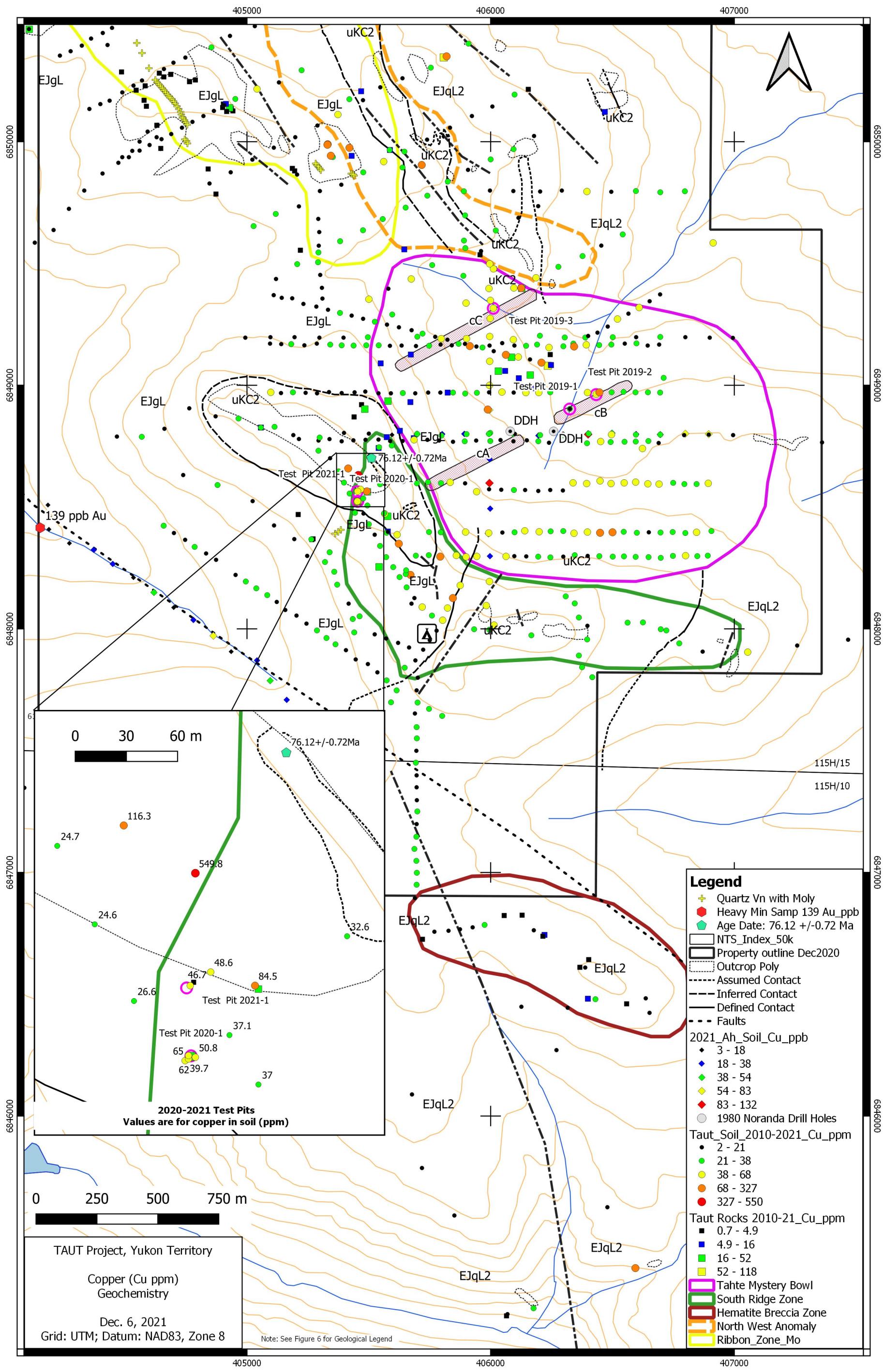
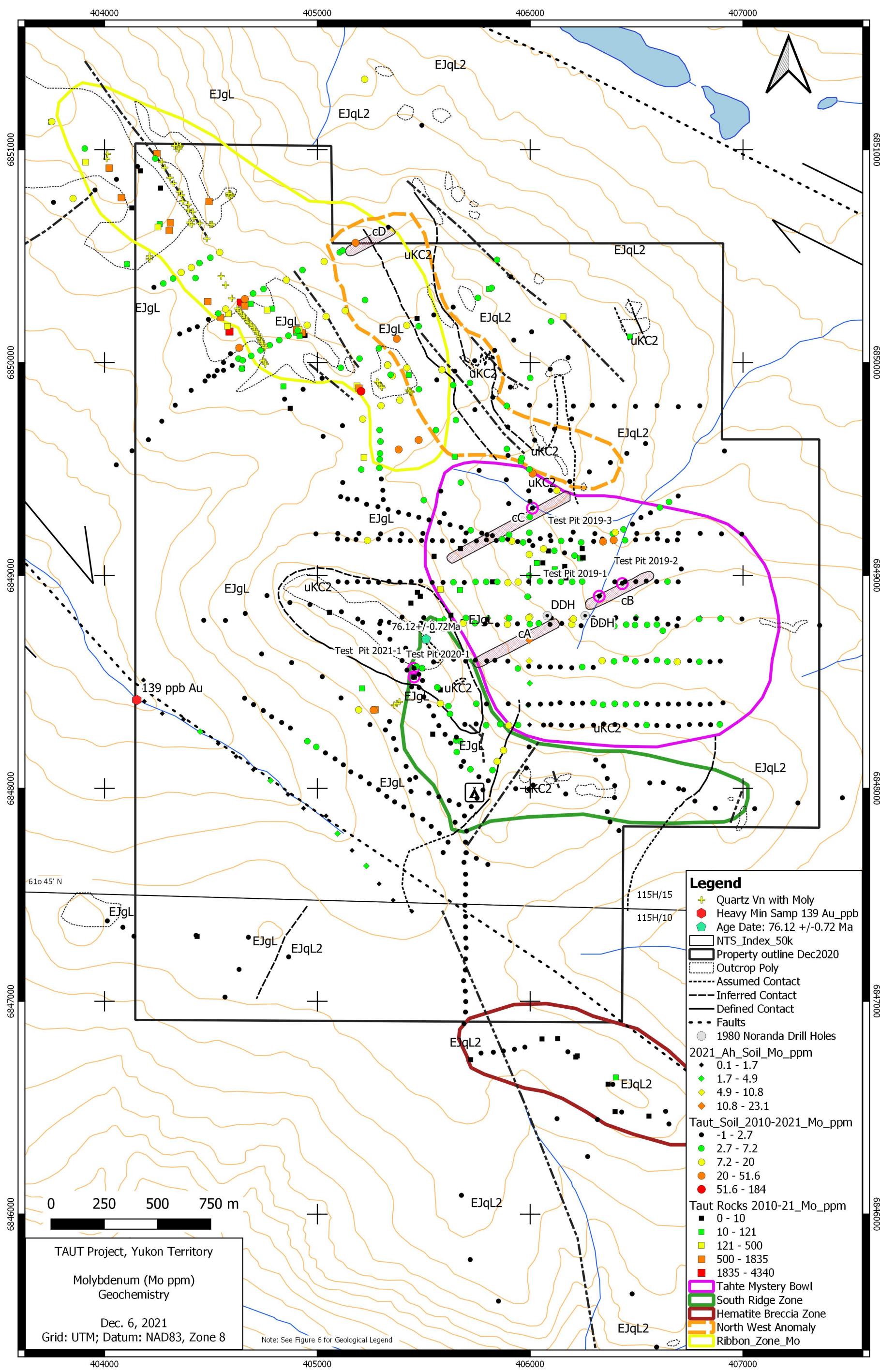


Figure 8. Cu Geochemistry



## Figure 9. Mo Geochemistry

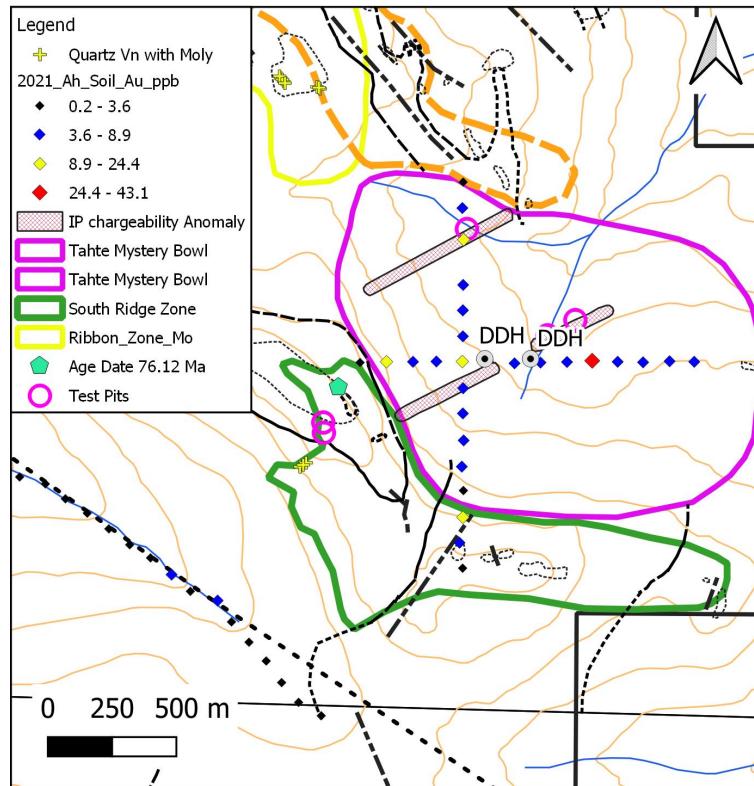


Fig 10a. Ah Soil samples, Au ppb.

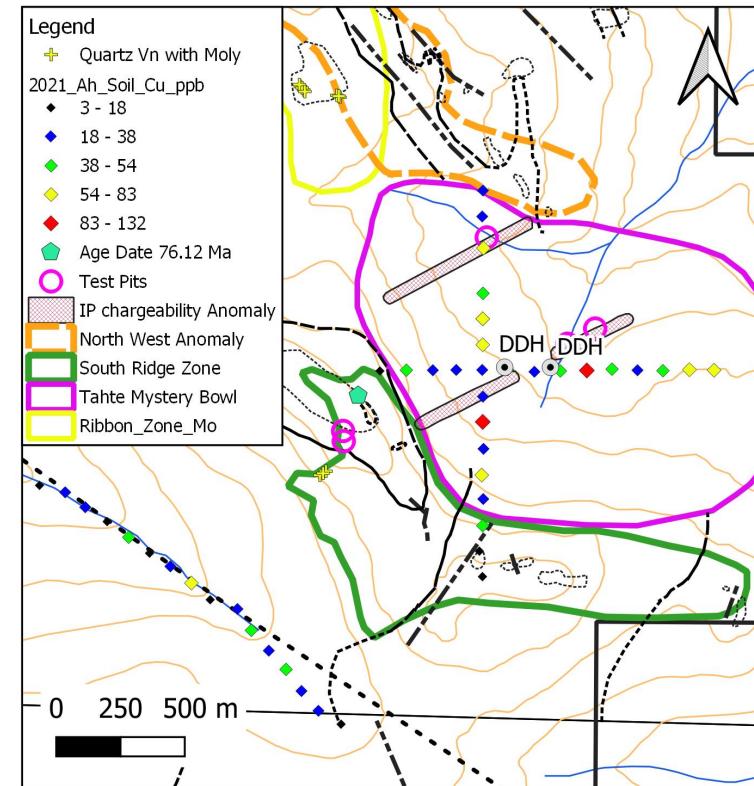


Fig 10c. Ah Soil samples, Cu ppm.

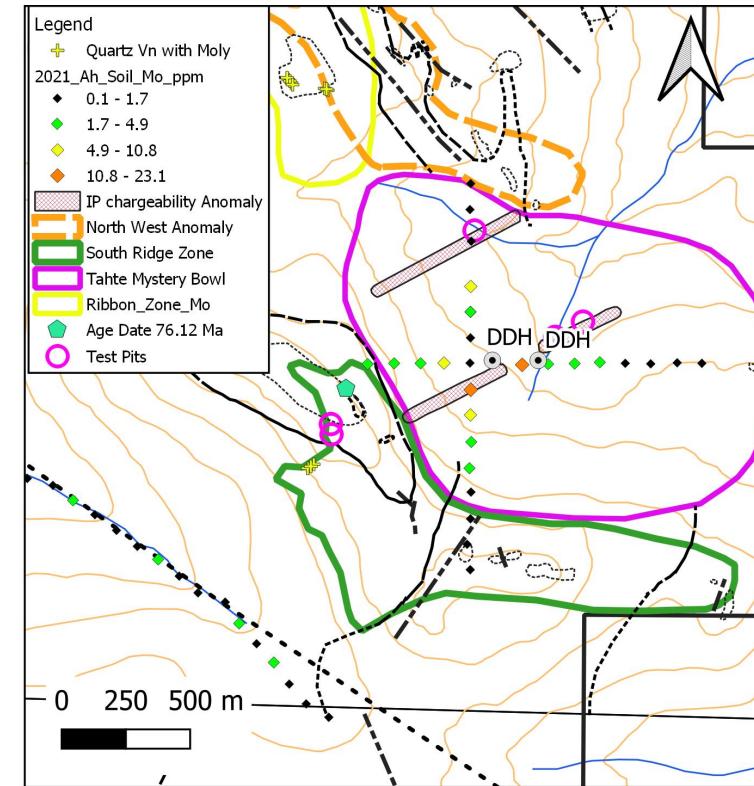


Fig 10e. Ah Soil samples, Mo ppm.

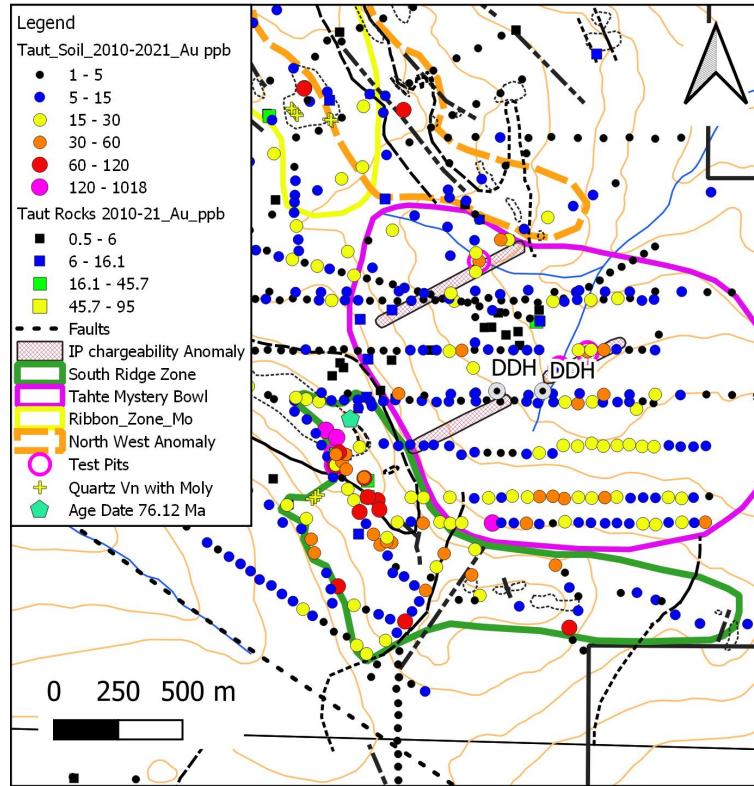


Fig 10b. B - C Soil samples, Au ppb.

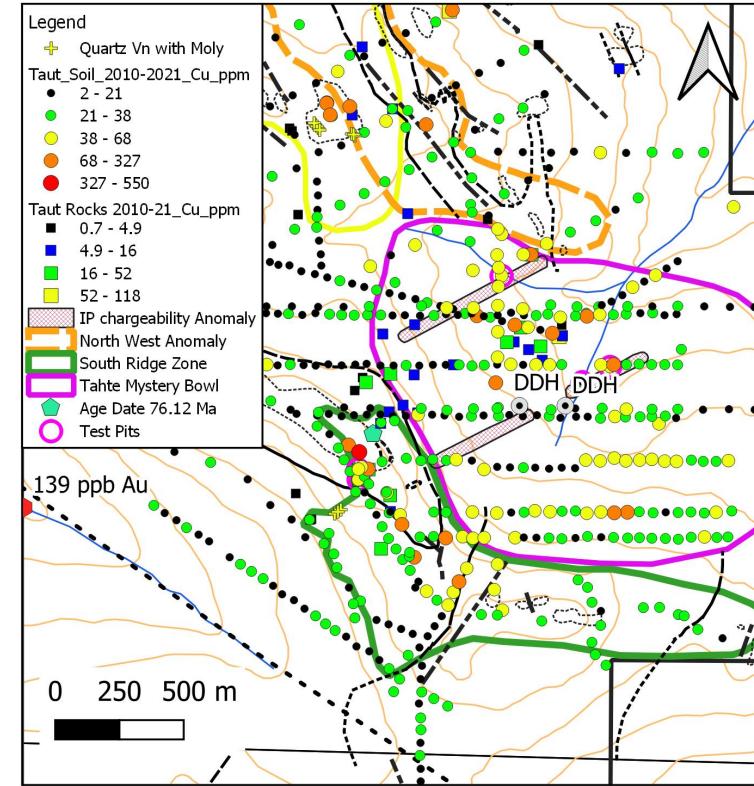


Fig 10d. B - C Soil samples, Cu ppm.

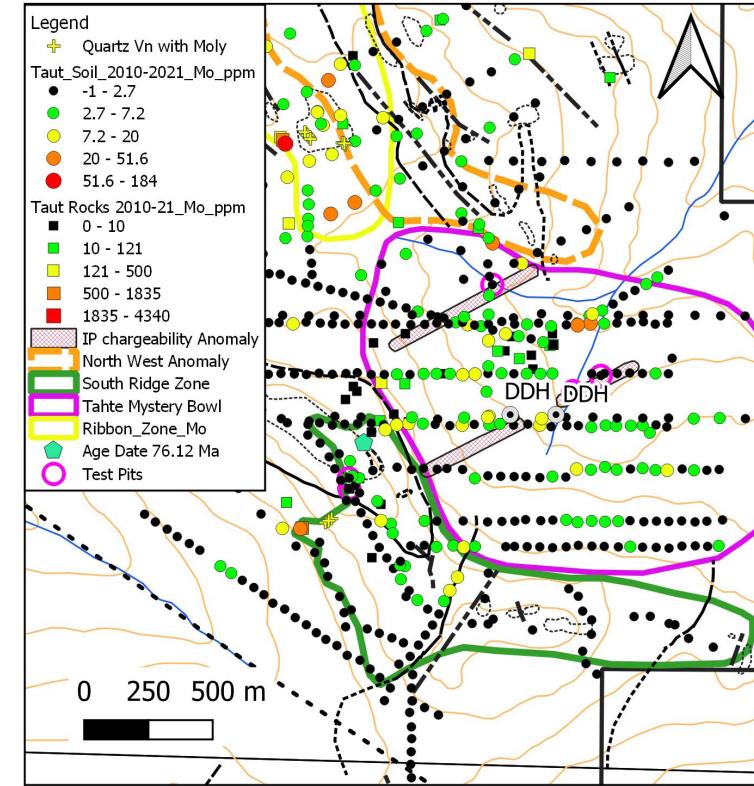


Fig 10f. B - C Soil samples, Mo ppm.

Figure 10. Ah vs Conventional Soil Geochemistry – Au, Cu, Mo

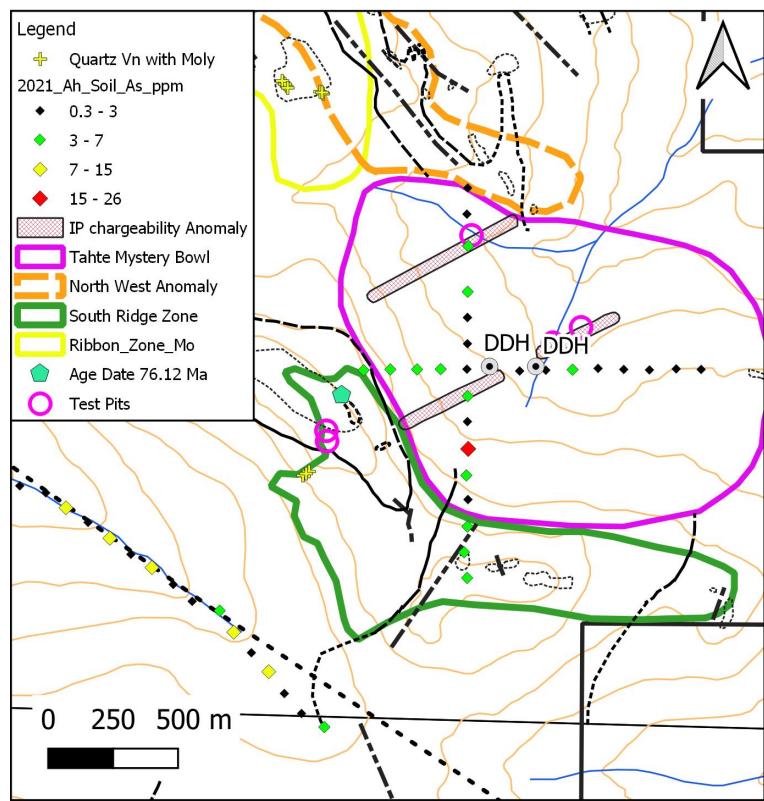


Fig 11a. Ah Soil samples, As ppm.

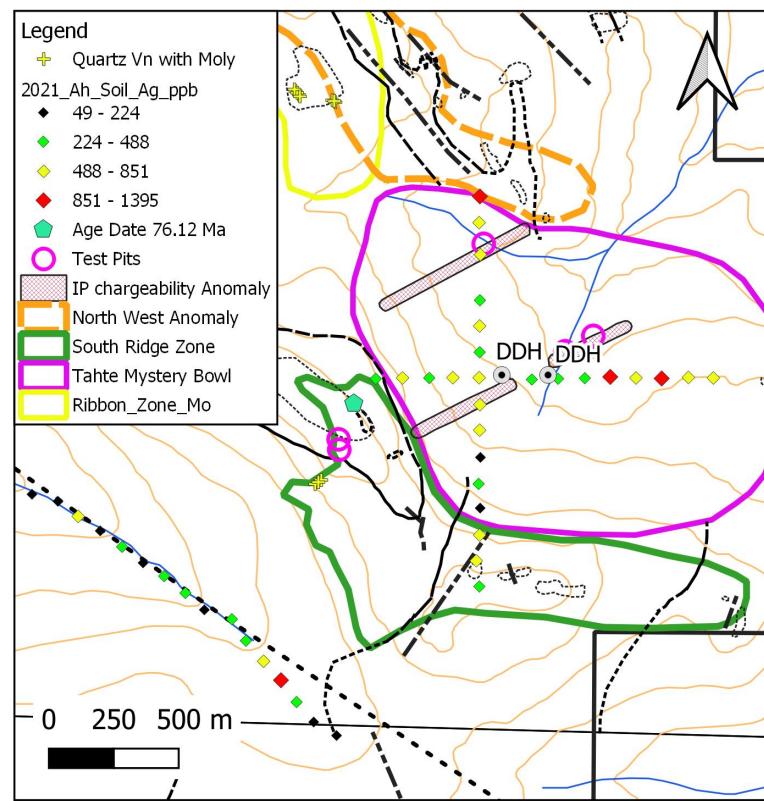


Fig 11c. Ah Soil samples, Ag ppm.

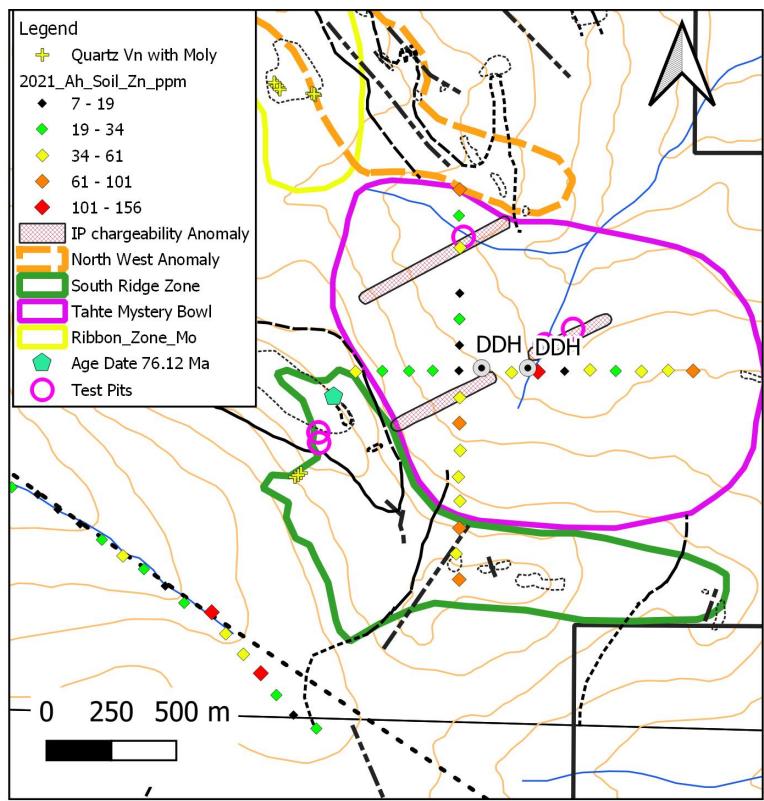


Fig 11e. Ah Soil samples, Zn ppm.

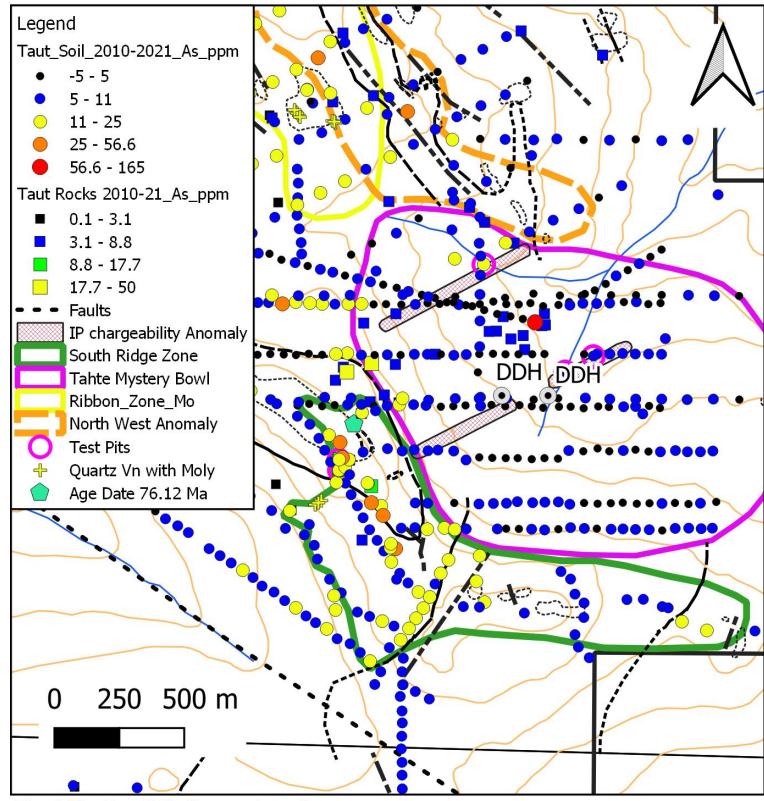


Fig 11b. B - C Soil samples, As ppm.

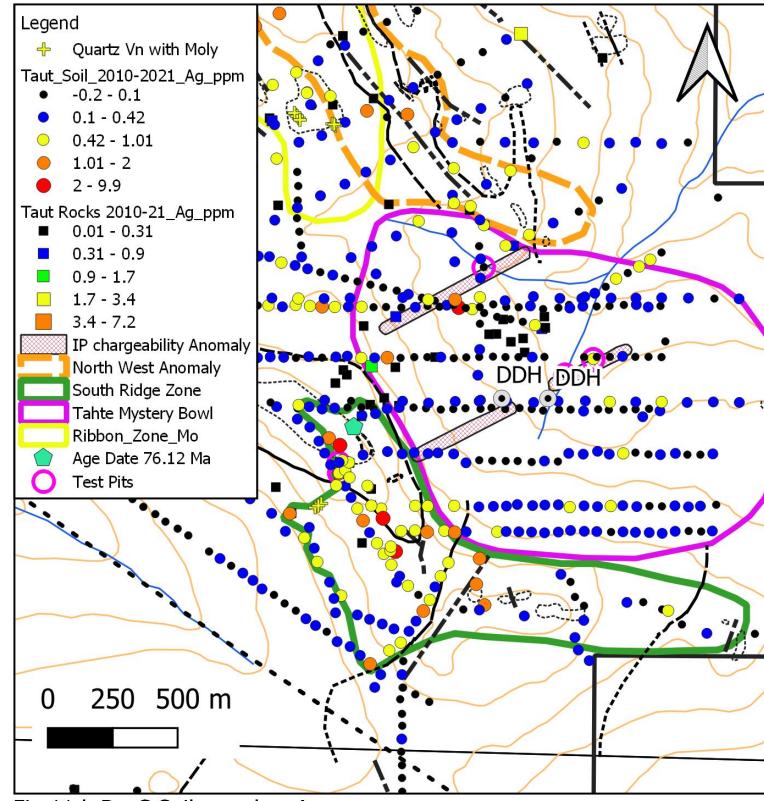


Fig 11d. B - C Soil samples, Ag ppm.

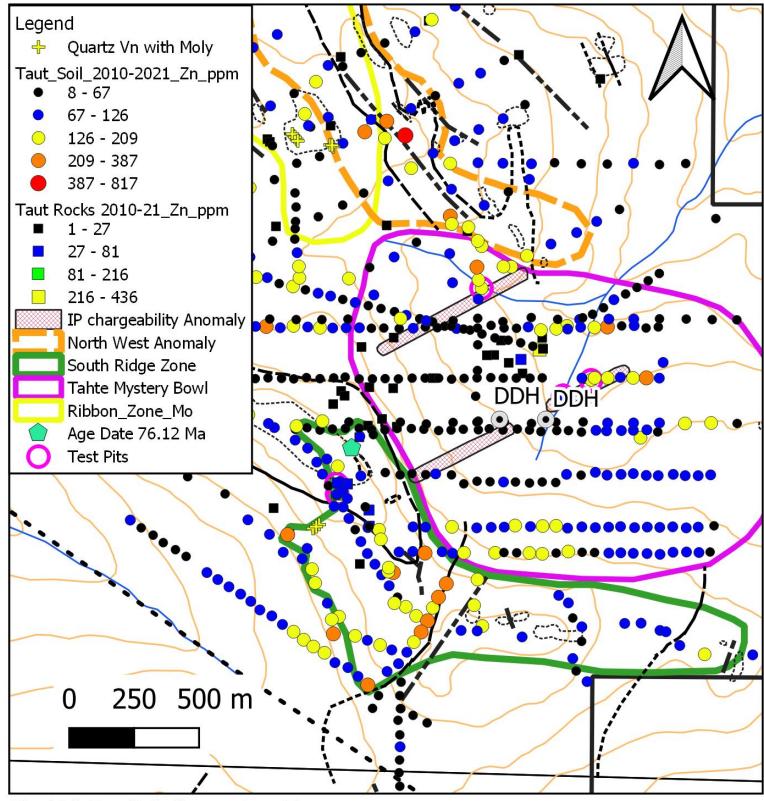


Fig 11f. B - C Soil samples, Zn ppm.

Figure 11. Ah vs Conventional Soil Geochemistry – As, Ag, Zn

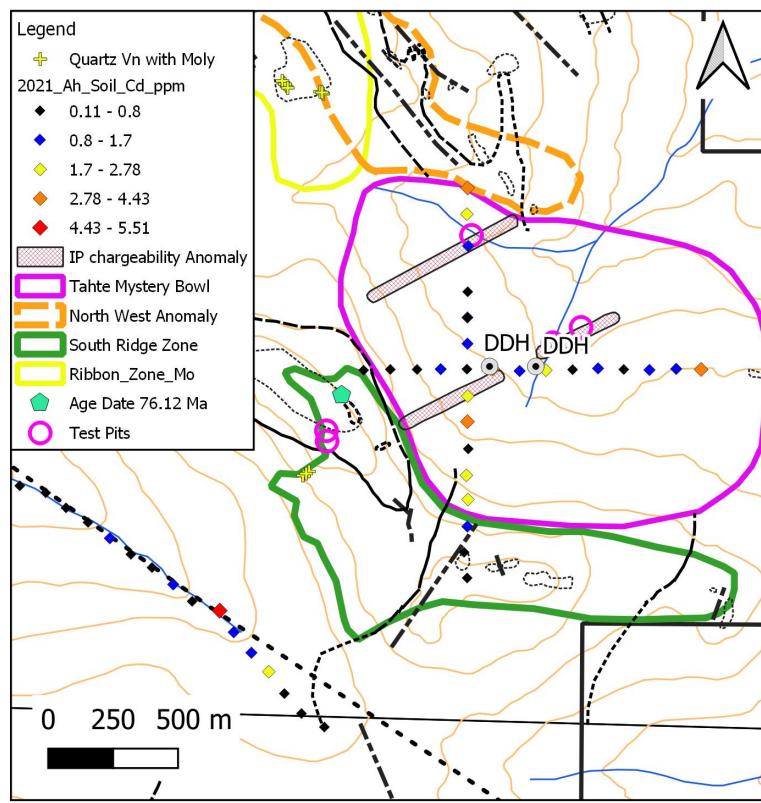


Fig 12a. Ah Soil samples, Cd ppm.

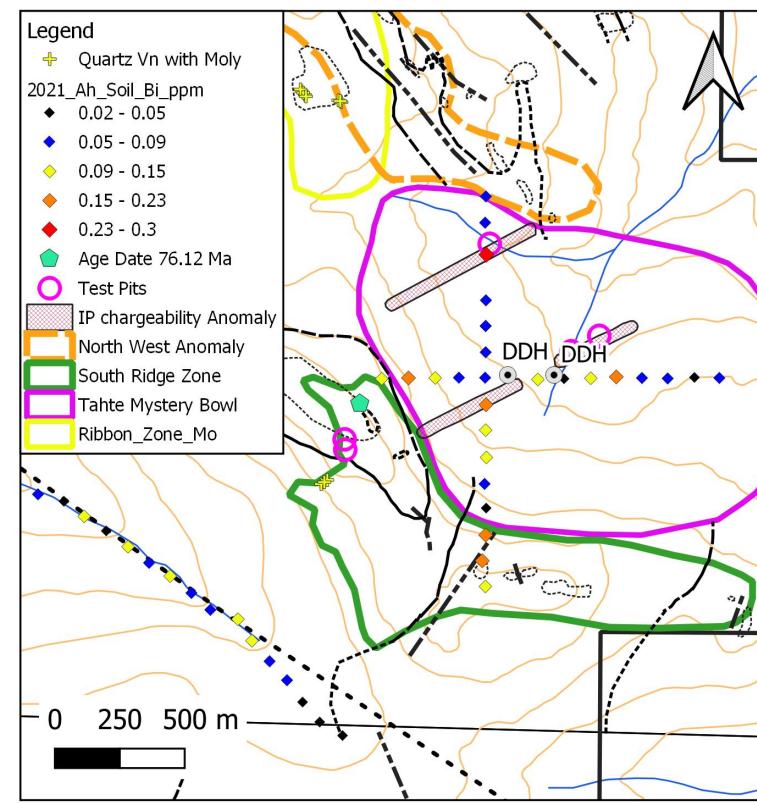


Fig 12c. Ah Soil samples, Bi ppm.

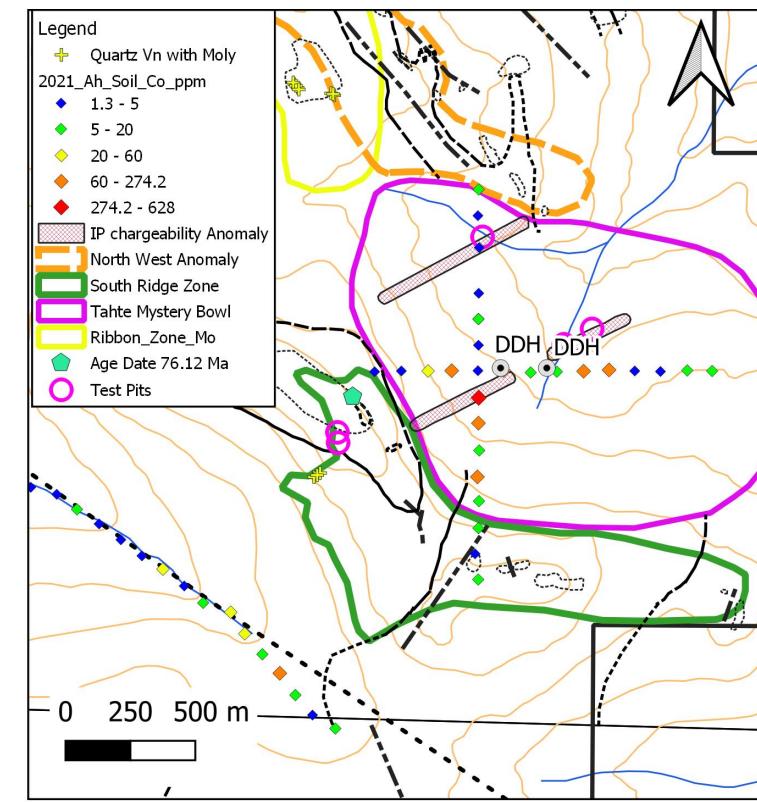


Fig 12e. Ah Soil samples, Co ppm.

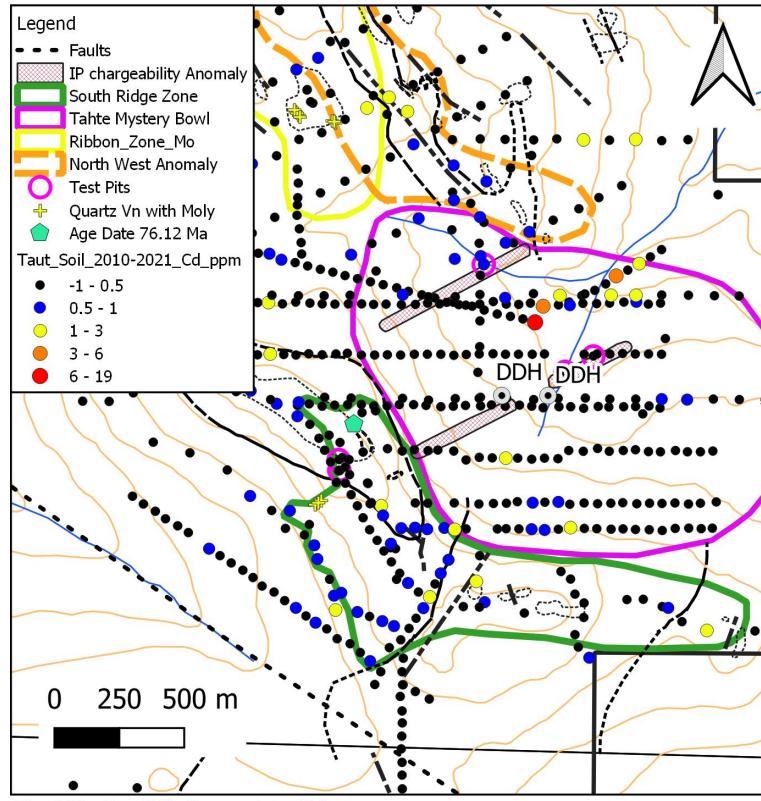


Fig 12b. B - C Soil samples, Cd ppm.

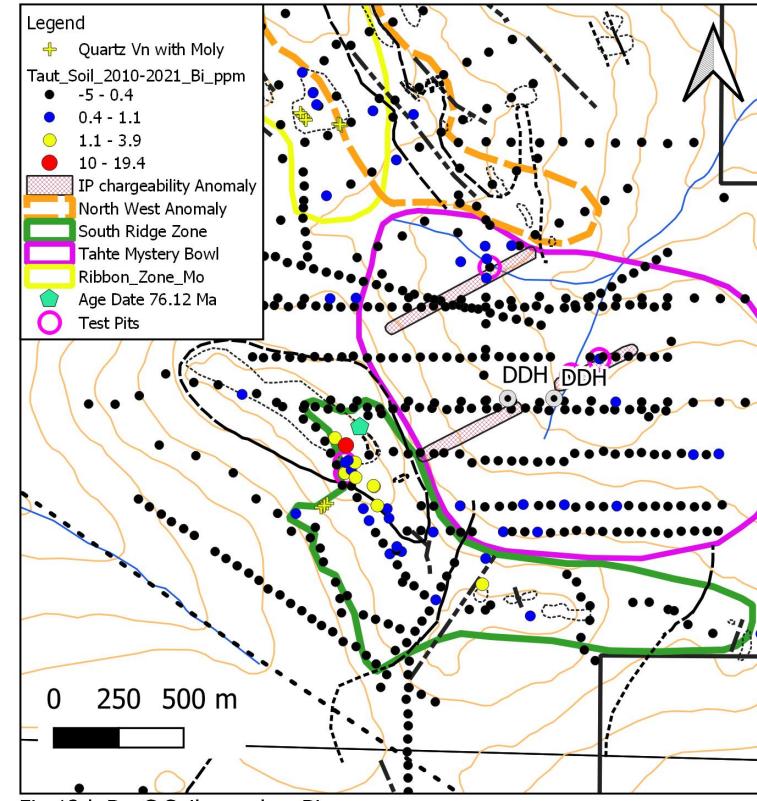


Fig 12d. B - C Soil samples, Bi ppm.

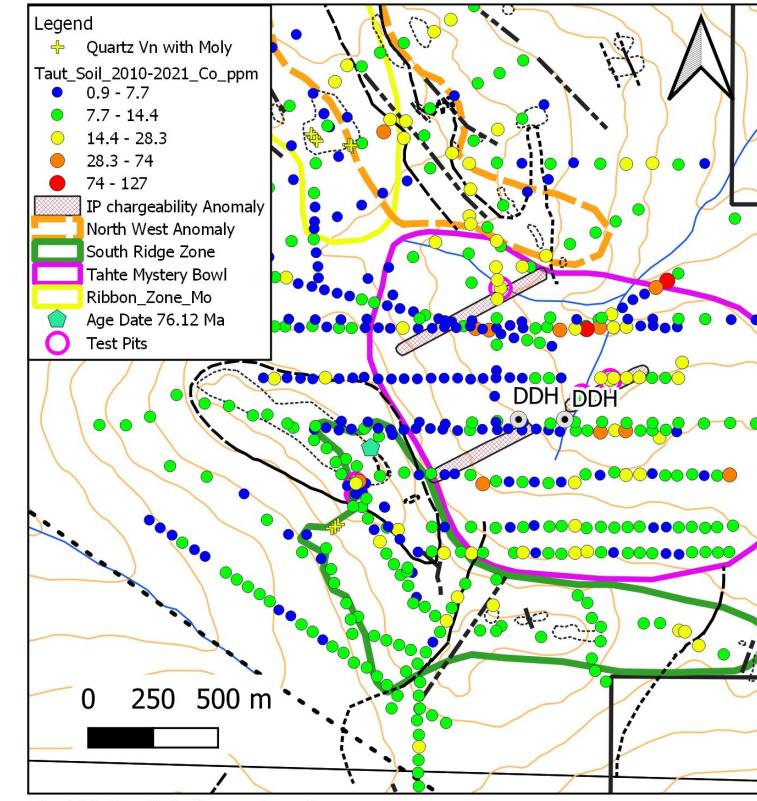


Fig 12f. B - C Soil samples, Co ppm.

Figure 12. Ah vs Conventional Soil Geochemistry – Cd, Bi, Co

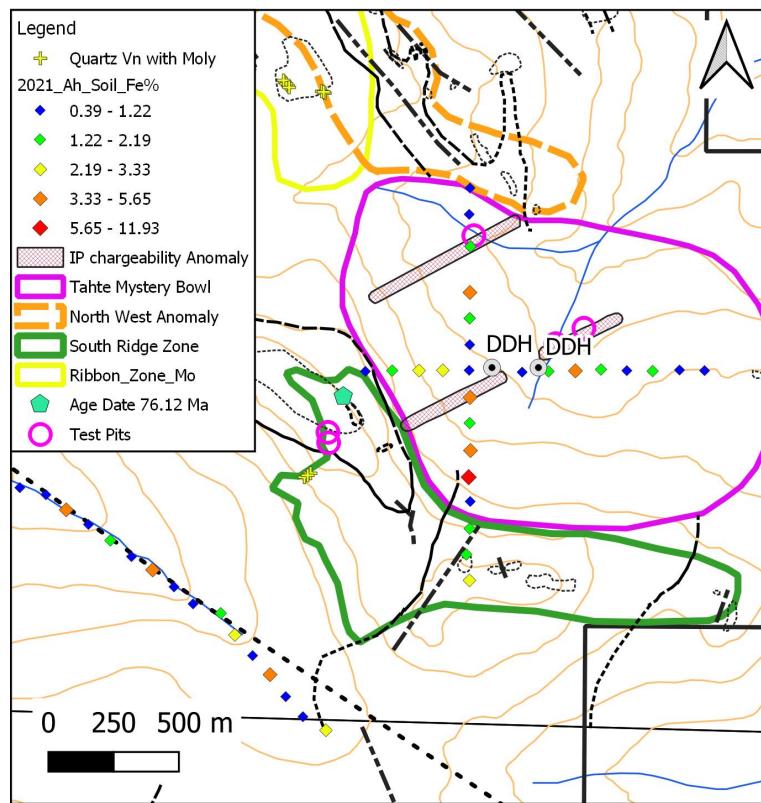


Fig 13a. Ah Soil samples, Fe%.

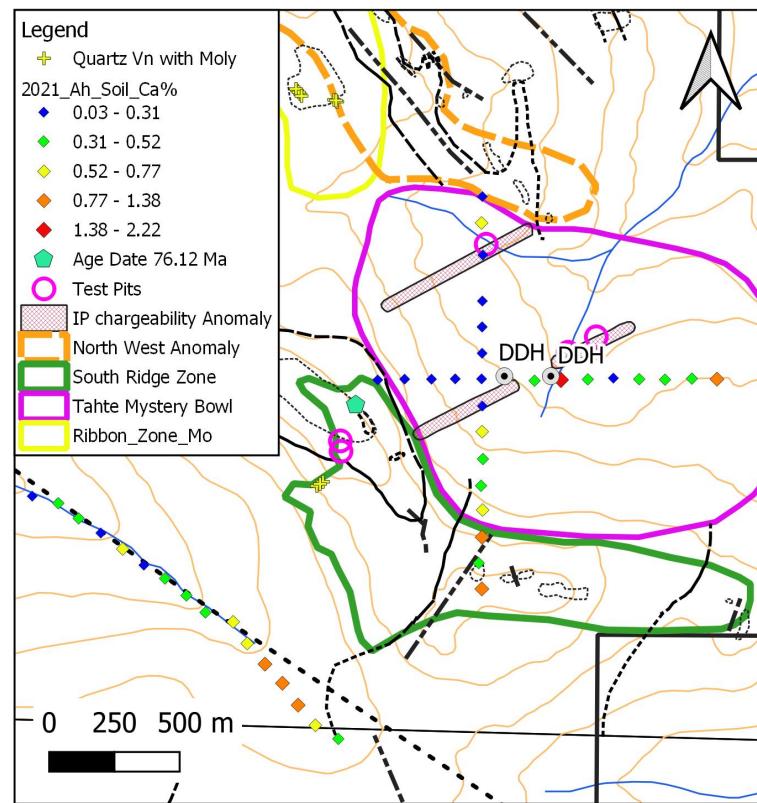


Fig 13c. Ah Soil samples, Ca%.

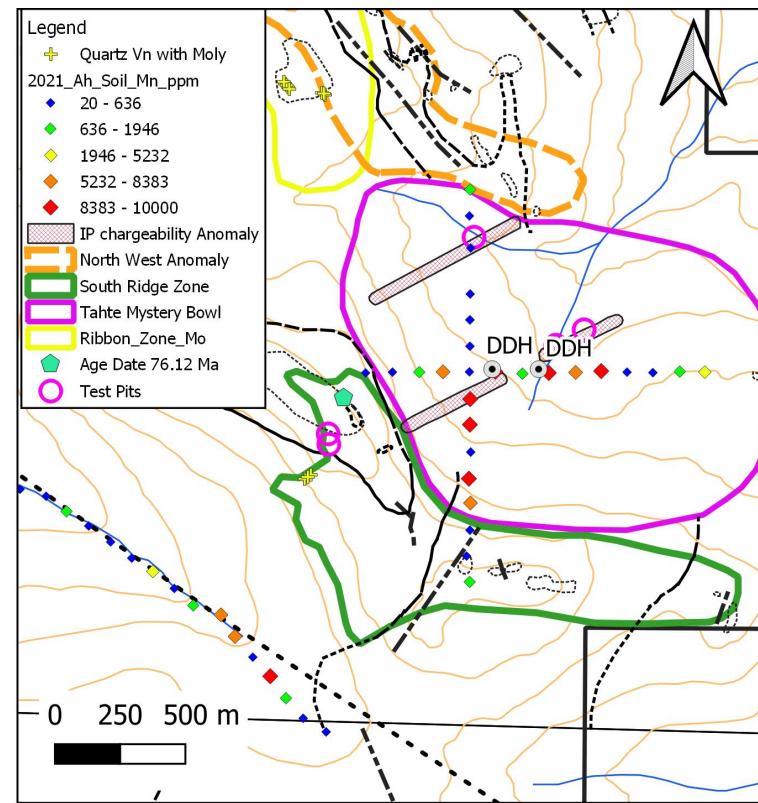


Fig 13e. Ah Soil samples, Mn ppm.

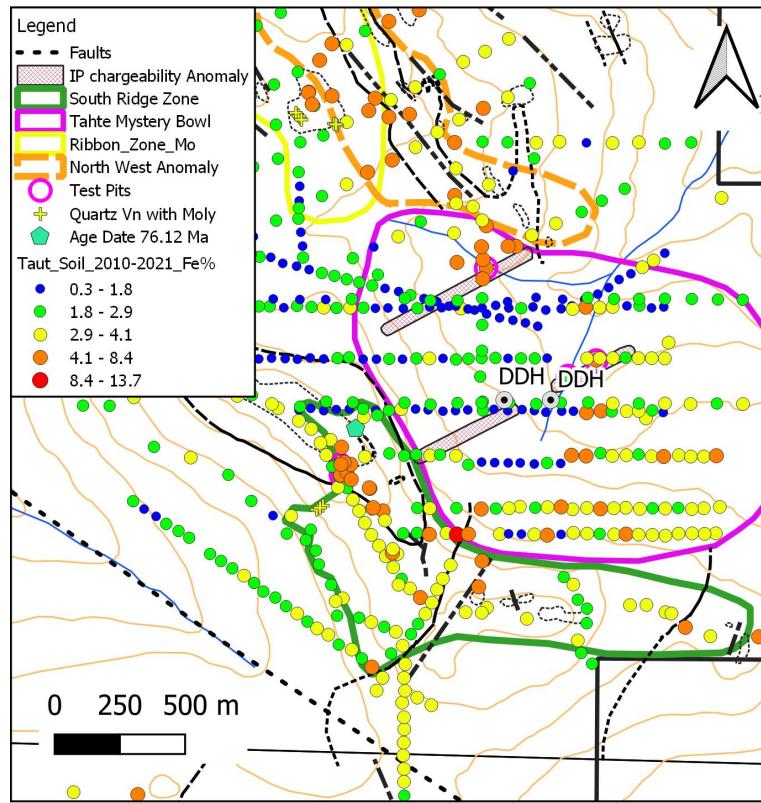


Fig 13b. B - C Soil samples, Fe%.

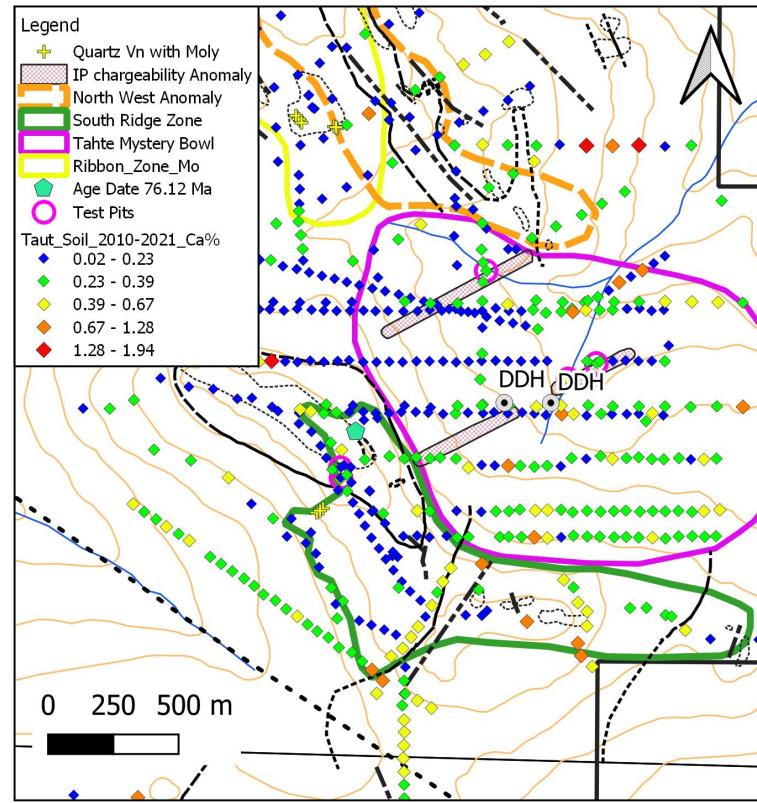


Fig 13d. B - C Soil samples, Ca%.

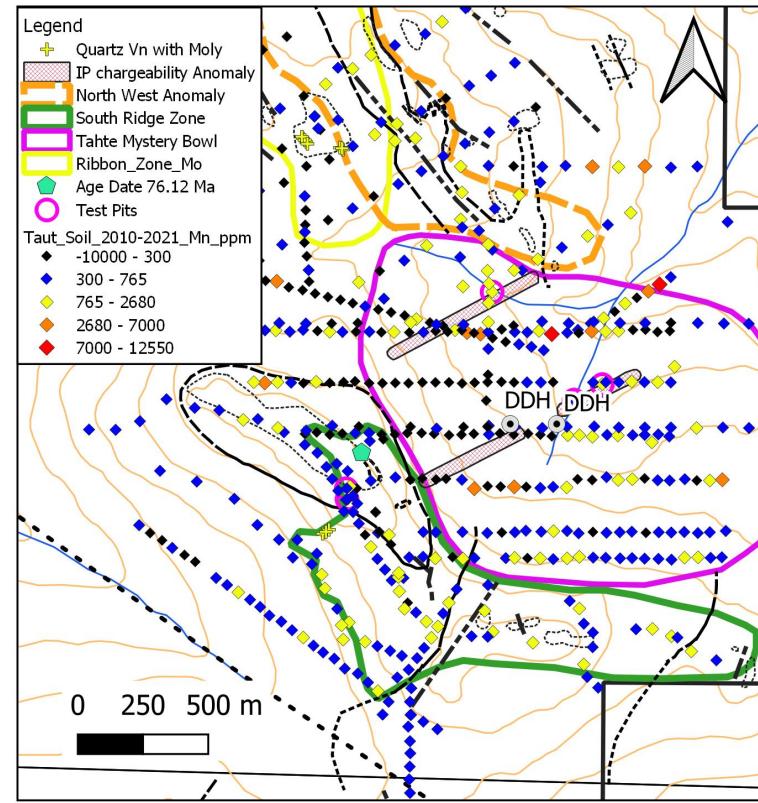


Fig 13f. B - C Soil samples, Mn ppm.

Figure 13. Ah vs Conventional Soil Geochemistry – Fe, Ca, Mn

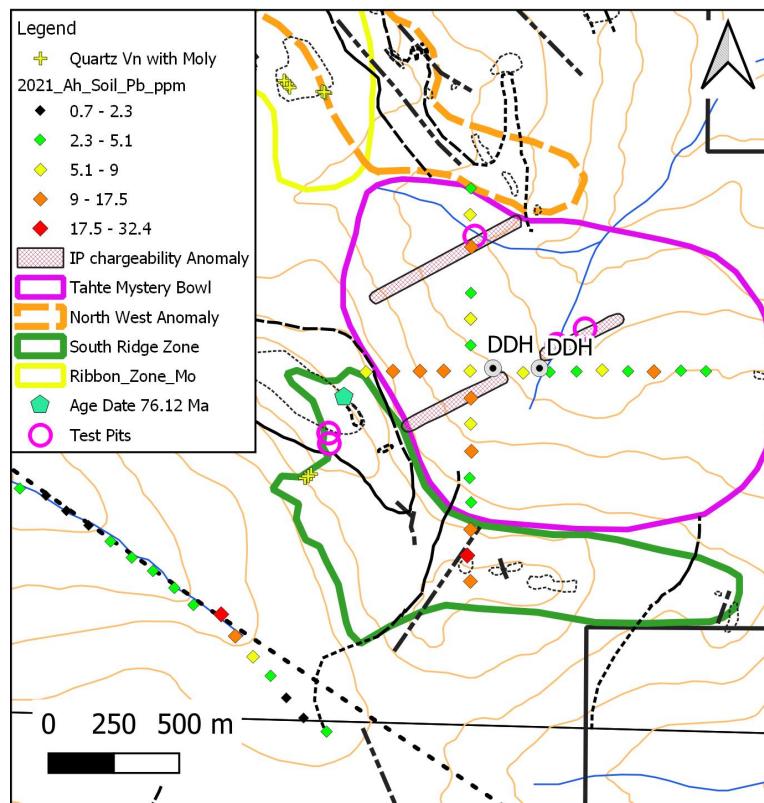


Fig 14a. Ah Soil samples, Pb ppm.

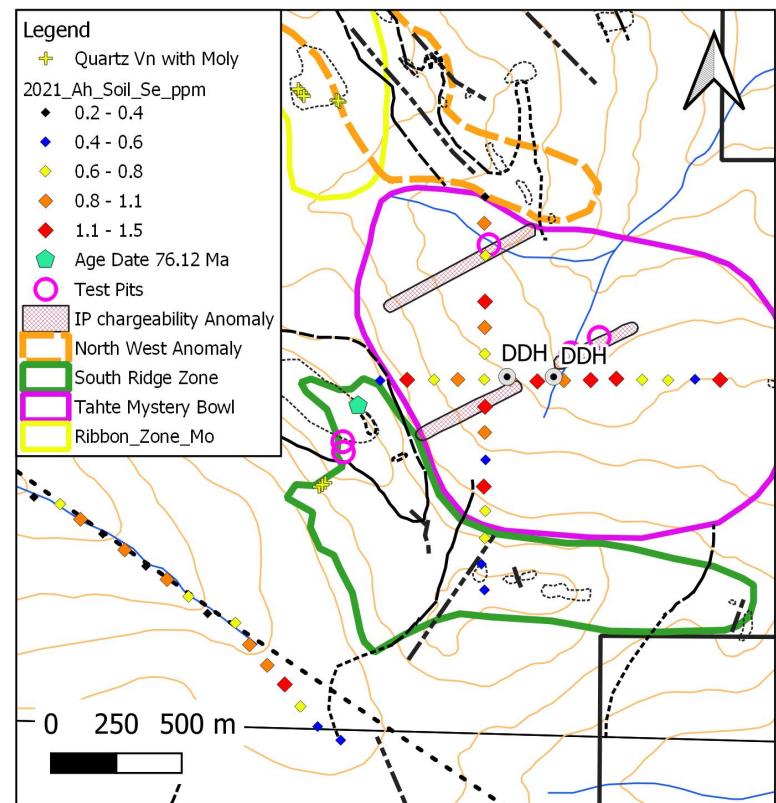


Fig 14c. Ah Soil samples, Se ppm

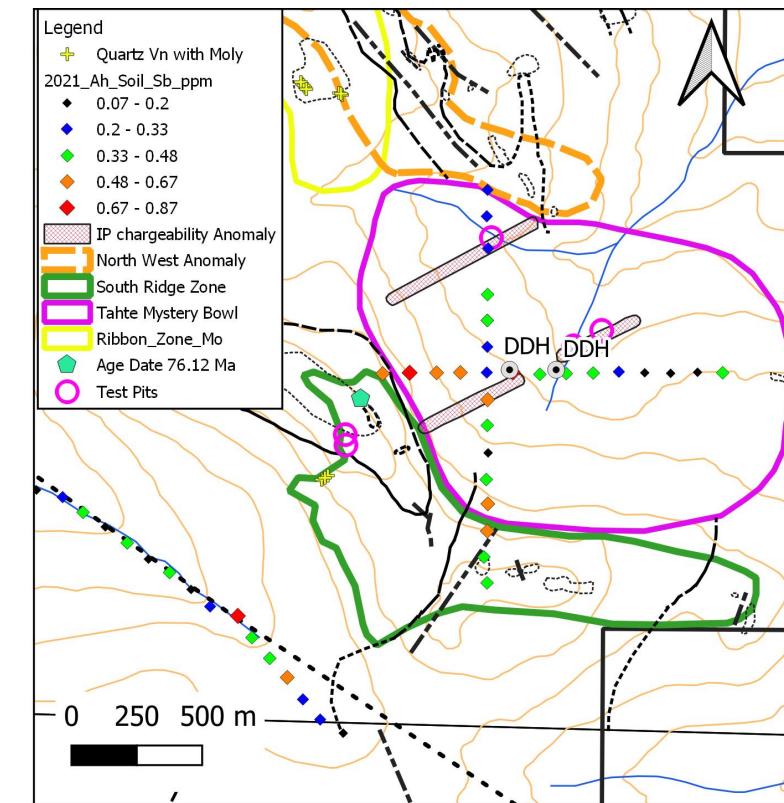


Fig 14e. Ah Soil samples, Sb ppm.

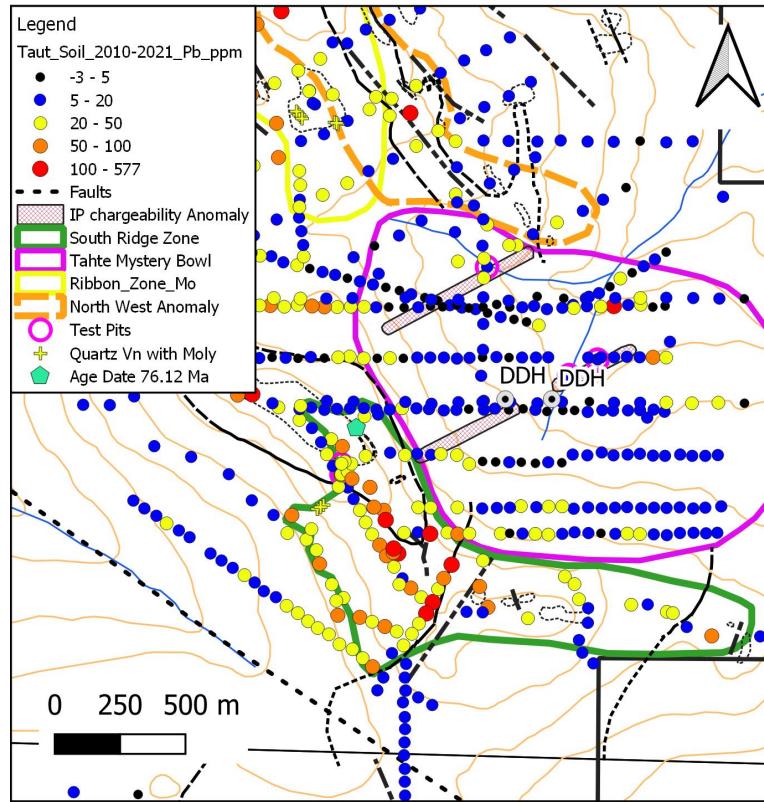


Fig 14b. B - C Soil samples, Pb ppm.

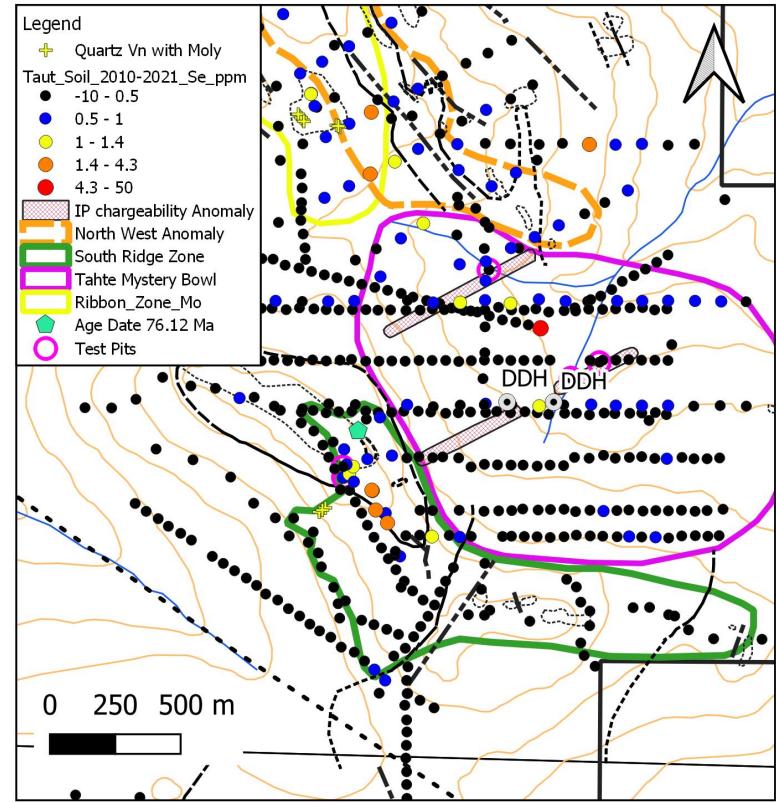


Fig 14d. B - C Soil samples, Se ppm.

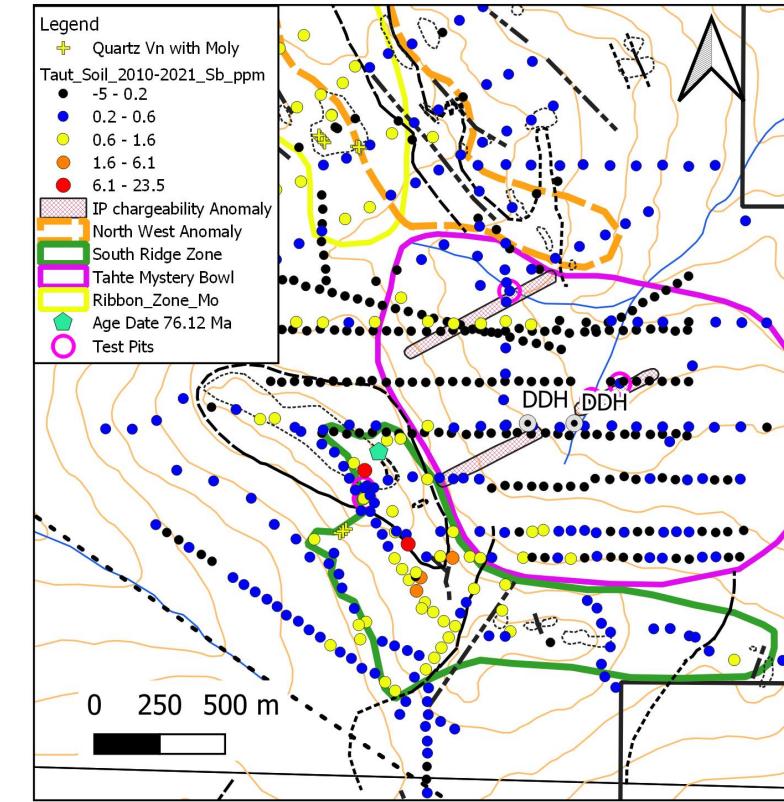


Fig 14f. B - C Soil samples, Sb ppm.

Figure 14. Ah vs Conventional Soil Geochemistry – Pb, Se, Sb

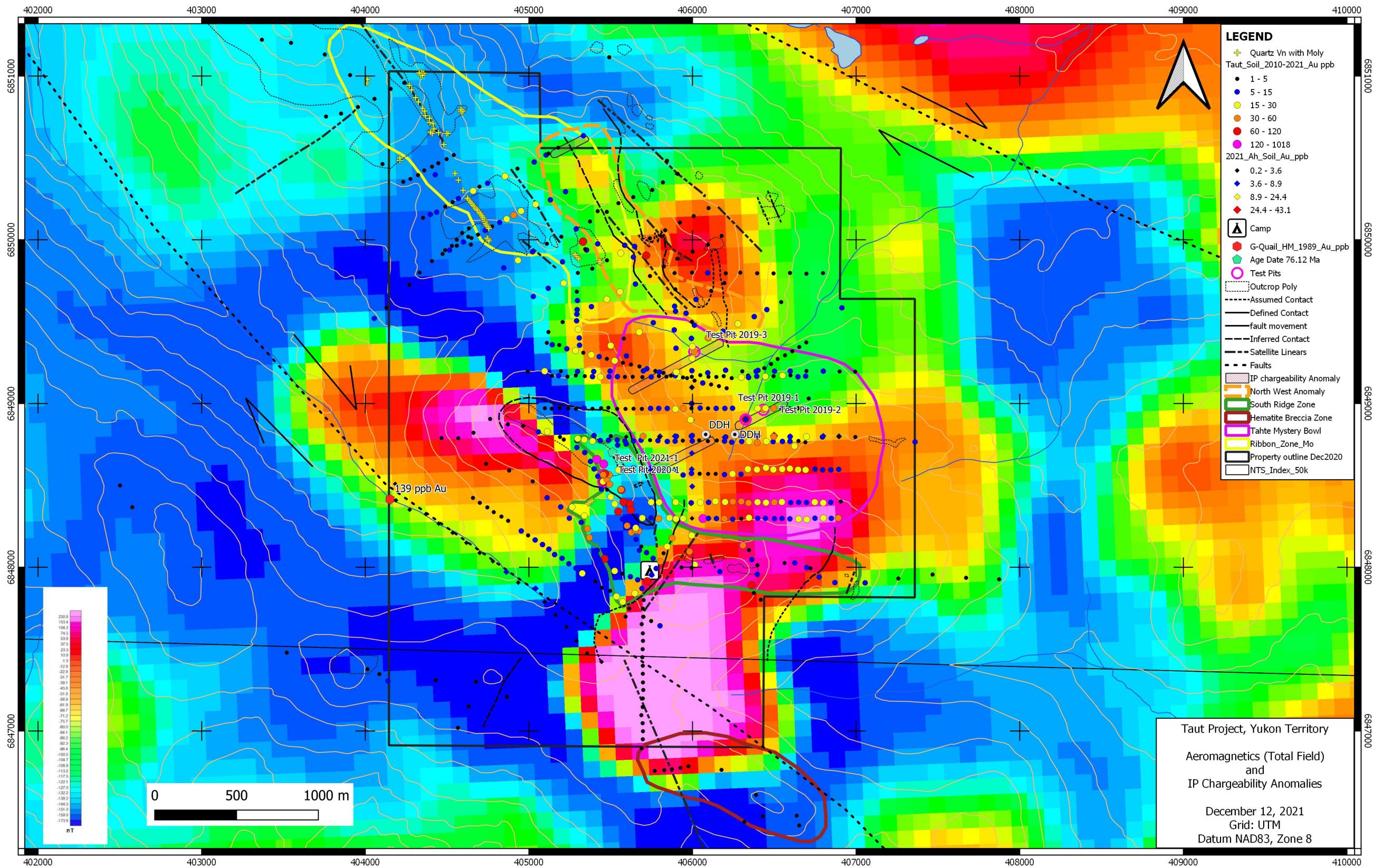


Figure 15. Magnetics, IP, Geology and Au Compilation