

# Hunker Tenement Field Mapping and Prospecting 2021 – Report

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# Executive Summary

## Hunker

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1. Gold is associated to deformed rock and vuggy quartz veins in the Klondike schist and banded quartzite.
2. Boxcar target zone contains high anomalous values of Cu, Zn, Pb, Ag, and Au associated to a NNW-trending oblique-slip fault.
3. The Prince and King targets at the headwaters of the Quartz Creek and Sulphur Creeks, respectively, contain the highest anomalous Au values.
4. In the western Hunker claim area, Cu-Au is interpreted to be associated with ENE-trending extensional faults that cross cut imbricate, steeply dipping NNW- to NW-trending and WSW- to SW-vergent thrusts.



WGO-NM-187 – Boxcar vein

WGO-NM-187  
>10000 ppm Cu  
8937 ppm Pb  
5279 ppm Zn  
21.6 ppm Ag  
16.2 ppm Co

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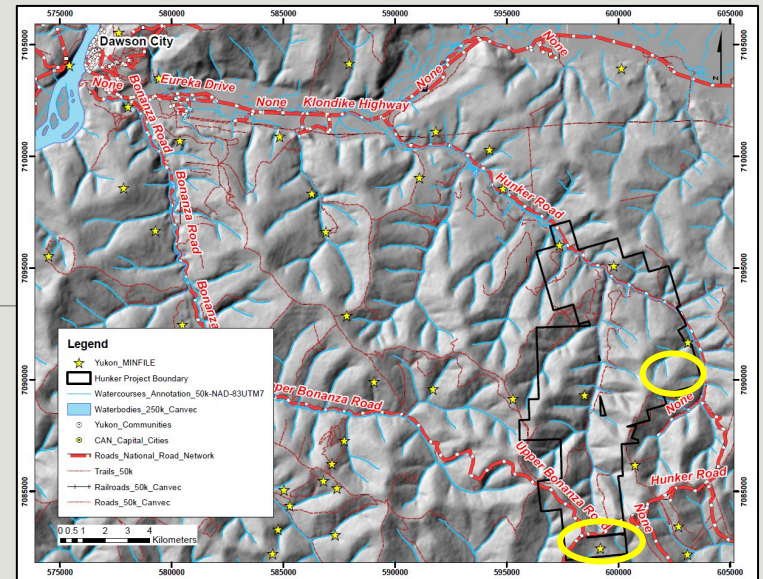
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# Introduction

This report will summarize the field observations of a field mapping and prospecting project conducted in the summer of 2021 on the Hunker (HUN) property for White Gold Corporation. The HUN property is situated approximately 25 km east-southeast of Dawson City, YT (image right).

This program was proposed for investigation based on **1)** historical soil and GT probe Au anomalies from field surveys that highlighted two main areas of interest: a) the Prince and King targets in the southern area of Hunker, and b) two anomalies in the western part of the Hunker claim block, northwest and north of the Fawcett vein mineral occurrence (see Hanewich, 2020; Feduk, 2021); and **2)** to familiarize the White Gold Corp. technical team with the geology, alteration, structure, and mineralization of the Hunker claim area.

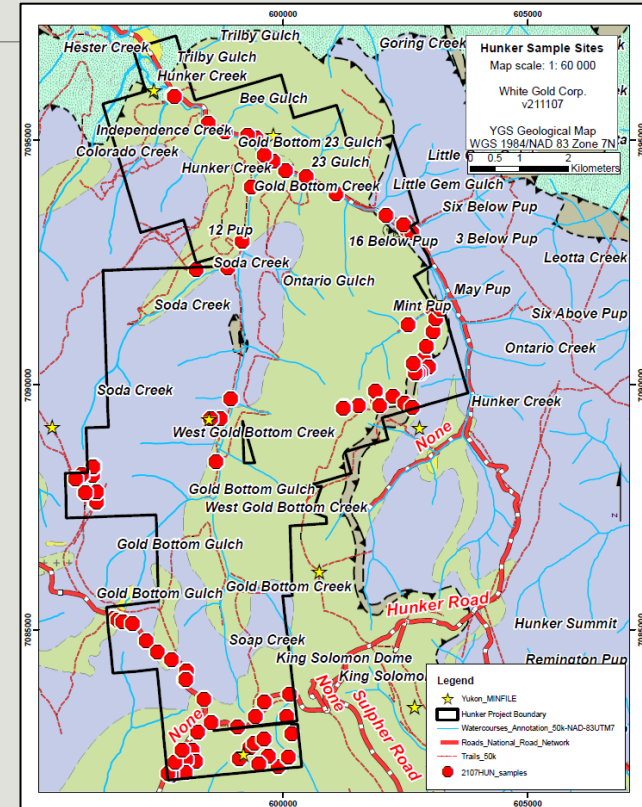


These objectives were attained by collecting data and samples from both exposed rock outcrop, as well as subcrop and float from targets with defined soil geochemistry Au anomalies. Due to the size of the claim area, road access played a major role in determining where efforts were placed. Another role of this project was to conduct a reconnaissance of the roads in the claim area. A brief summary is provided herein this report describing road conditions and access.

# Introduction

Field mapping was conducted based out of the “White Gold Corp. house” 2 km east of Dawson City. A total of 8 days were conducted in the field (see Table 1 on next page). The program was conducted through two methods: 1) roadside reconnaissance and 2) ridge and spur style traverses for a cumulative total of ~43 km traversed.

Sampling occurred on an approximated regular interval relative to the length of the traverse. This regularity was interrupted in special instances where additional sampling was deemed necessary. Sampling from rock outcrop was prioritized, while subcrop and float (from dugout pits or from surface) were collected to fulfill the sampling interval when necessary. A total of 91 samples were collected over this period and sent for geochemical assay (refer to image right and Table 2). 23 samples were duplicated for the White Gold Corp. rock library. Hand samples were sent to Bureau Veritas in Whitehorse for multi-element and gold analysis using aqua regia and fire assay techniques, respectively.



| Day   | Date       | Task                             | Traverse Length (km) | Samples Collected | Target                               |
|-------|------------|----------------------------------|----------------------|-------------------|--------------------------------------|
| Day 1 | 07/17/2021 | Road recon,; sample and prospect | N/A                  | 11                | Bum; Mint Pup Creek                  |
| Day 2 | 08/16/2021 | Sample and prospect              | 3.31                 | 11                | Boxcar                               |
| Day 3 | 08/17/2021 | Road recon.; sample and prospect | 9.46                 | 16                | Upper Bonanza Creek Road             |
| Day 4 | 08/18/2021 | Sample and prospect              | 3.21                 | 9                 | Prince                               |
| Day 5 | 08/19/2021 | Sample and prospect              | 5.43                 | 10                | King                                 |
| Day 6 | 08/20/2021 | Road recon.; sample and prospect | 7.43                 | 15                | Hunker Creek Road                    |
| Day 7 | 08/21/2021 | Sample and prospect              | 7.10                 | 9                 | Target NW of Fawcett                 |
| Day 8 | 08/23/2021 | Sample and prospect              | 5.90                 | 10                | Mint Pup Creek (target N of Fawcett) |

Table 1. Daily field mapping and prospecting information.

| Shipment No. | Shipment Date   | Shipment ID(s)     | Job Number (BV) | Sample ID (WGO-NM-xxx) | Assay ID                            | Project | No. of Samples |
|--------------|-----------------|--------------------|-----------------|------------------------|-------------------------------------|---------|----------------|
| 1            | July 14, 2021   | GENX210714-01-ROCK | WHI21000227     | 001-028; 039-044       | 1769226-1769250;<br>1769951-1769953 | BET     | 34             |
|              |                 |                    | WHI21000228     | 029-038                | 1769954-1769963                     | BHC     | 10             |
| 2            | July 31, 2021   | GENX210731-01-ROCK | WHI21000321     | 053-061                | 1769970-1769978                     | BZA     | 9              |
|              |                 |                    | WHI21000322     | 062-067                | 1769979-1769984                     | BZA     | 6              |
|              |                 |                    |                 | 068-078                | 1769985-1769995                     | HUN     | 11             |
| 3            | August 16, 2021 | GENX210816-01-ROCK | WHI21000385     | 079-138                | 1769996-1767000;<br>1492176-1492230 | NOL     | 60             |
|              |                 | GENX210816-02-ROCK | WHI21000386     | 139-176                | 1492231-1492250;<br>1769776-1769793 | NOL     | 28             |
| 4            | August 26, 2021 | GENX210826-01-ROCK | WHI21000438     | 177-186; 257-266       | 1769794-1769802;<br>1805949-1805958 | NOL     | 10             |
|              |                 | GENX210826-02-ROCK | WHI21000439     | 187-256; 267-276       | 1769804-1769825;<br>1805901-1805968 | HUN     | 80             |

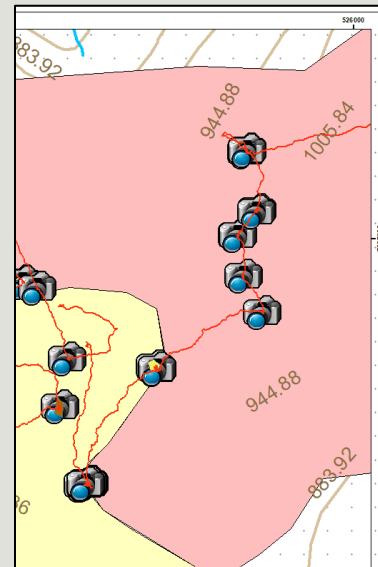
Table 2. General sample data. HUN samples highlighted in teal.

# Products

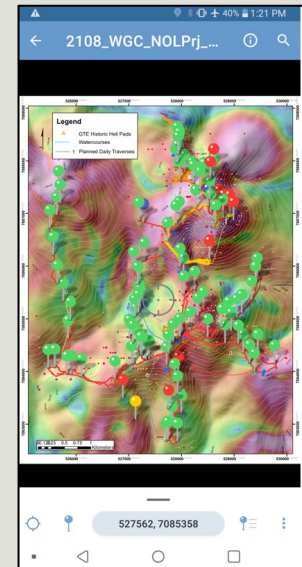


Examples of samples from the rock library

1. Geological map (modified after YGS, 2019) for the Hunker claim area.
2. Samples collected for:
  1. Geochemical analysis (n=91)
  2. Rock library (n=18)
3. Digital
  - i. Fulcrum data sheet with field sample data and appended geochemical assay data, and rock library data; Clino and Avenza apps
  - ii. CSV and SHP and KML files
  - iii. MPK and KML compilation; includes hyperlinked photos.



Photos can be observed clicking on the hyperlinked cameras.

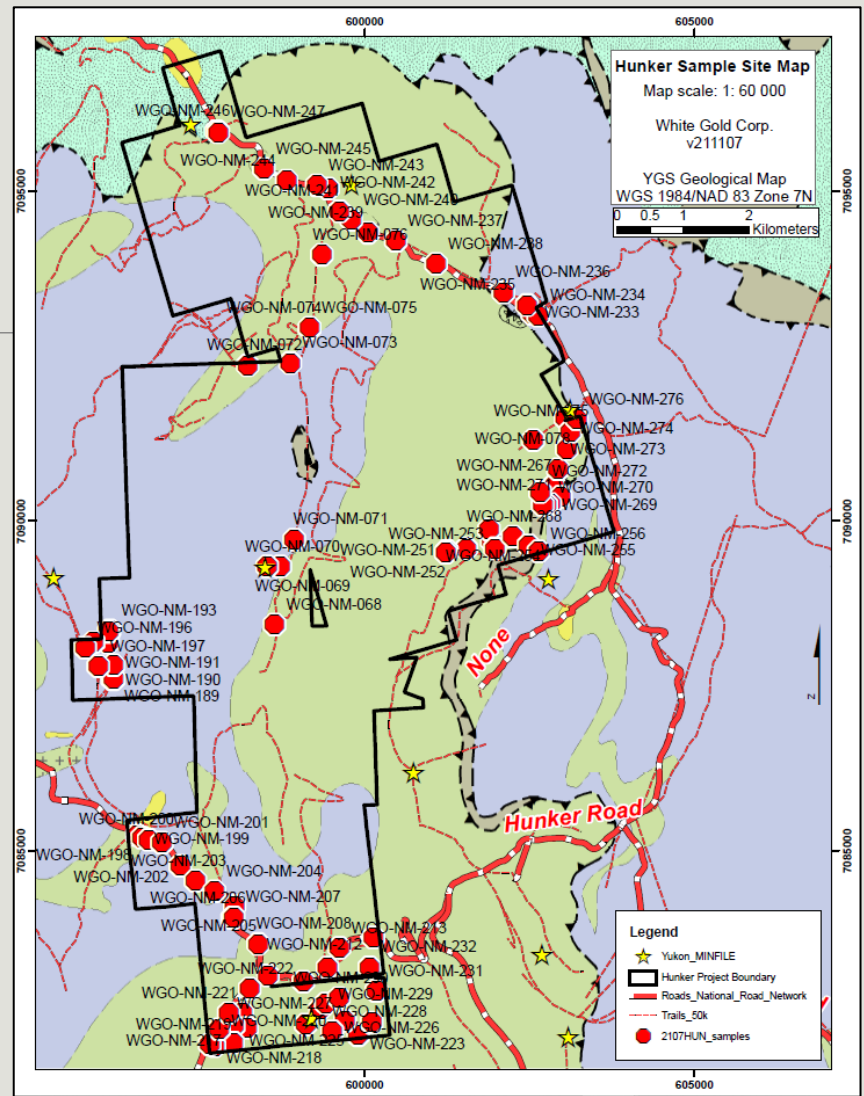


Avenza Maps screen on phone



# Map Area Hunker

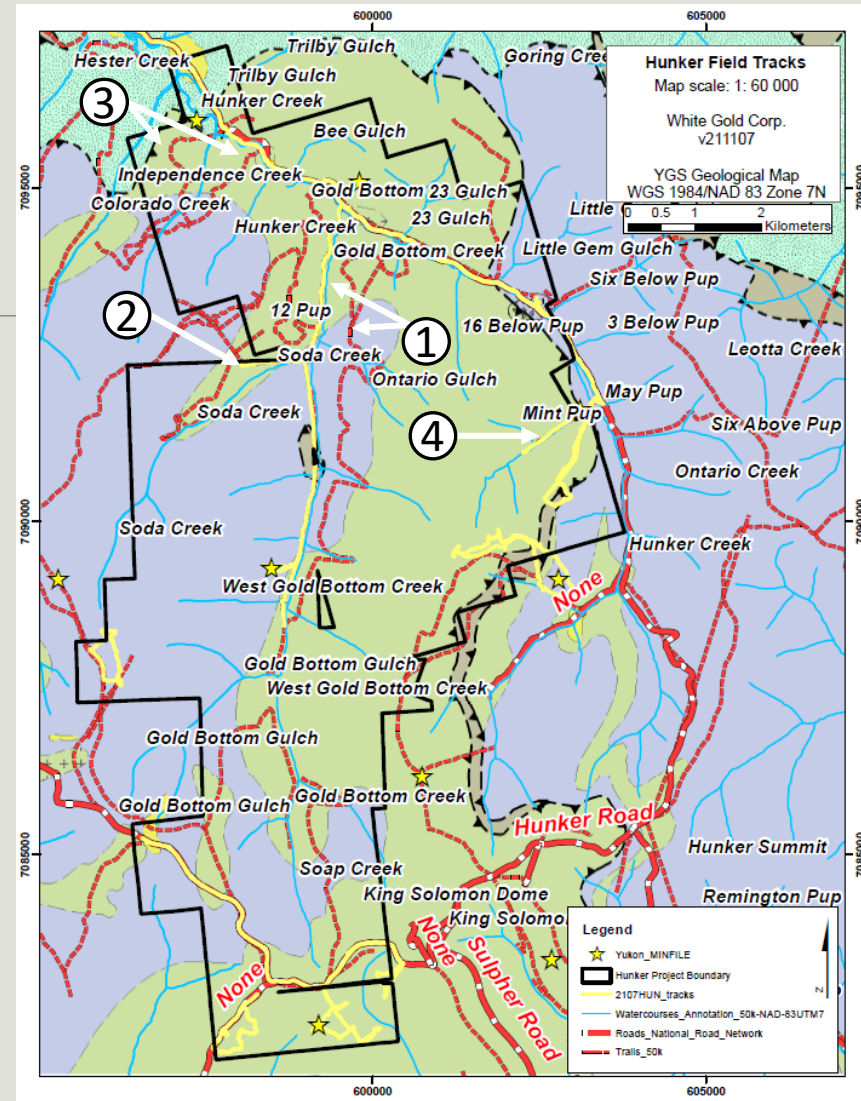
Sample numbers label the sample collection sites for the 2021 Hunker claim area mapping and prospecting program.



# Map Area Road Access

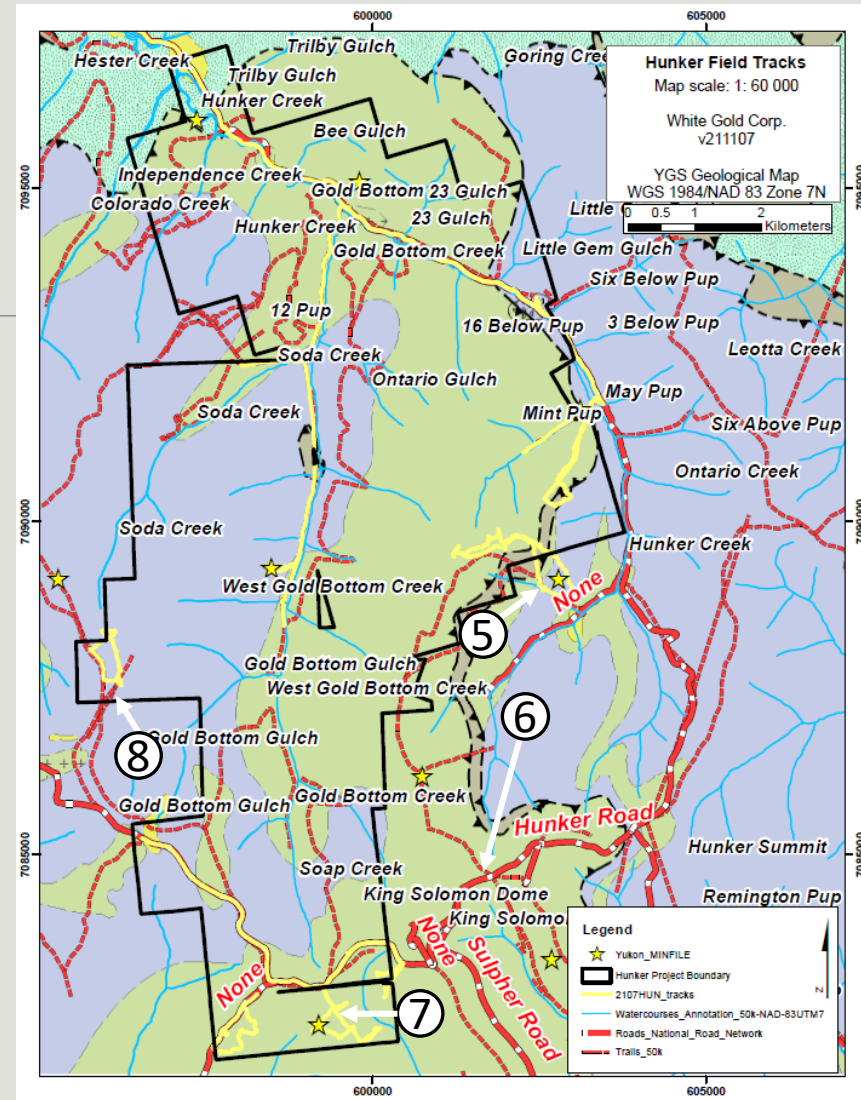
Road access and conditions were highly variable ranging from new and maintained daily (e.g., Hunker Creek Road) to old and overgrown trails and roads.

1. We utilized the maintained road on west side of Gold Bottom Creek to access “Bum” target. Be wary of road conditions after rainfall as it is a fine silty road with some ruts. East side road of Gold Bottom Creek is inaccessible.
2. Access up ridge up north side of Soda Creek is drivable. We did not continue past fork in road.
3. Roads that access up Colorado Creek are private.
4. Active but quiet placer mining project up Mint Pup Creek. The road contains several zones where rock crops out.



# Map Area Road Access

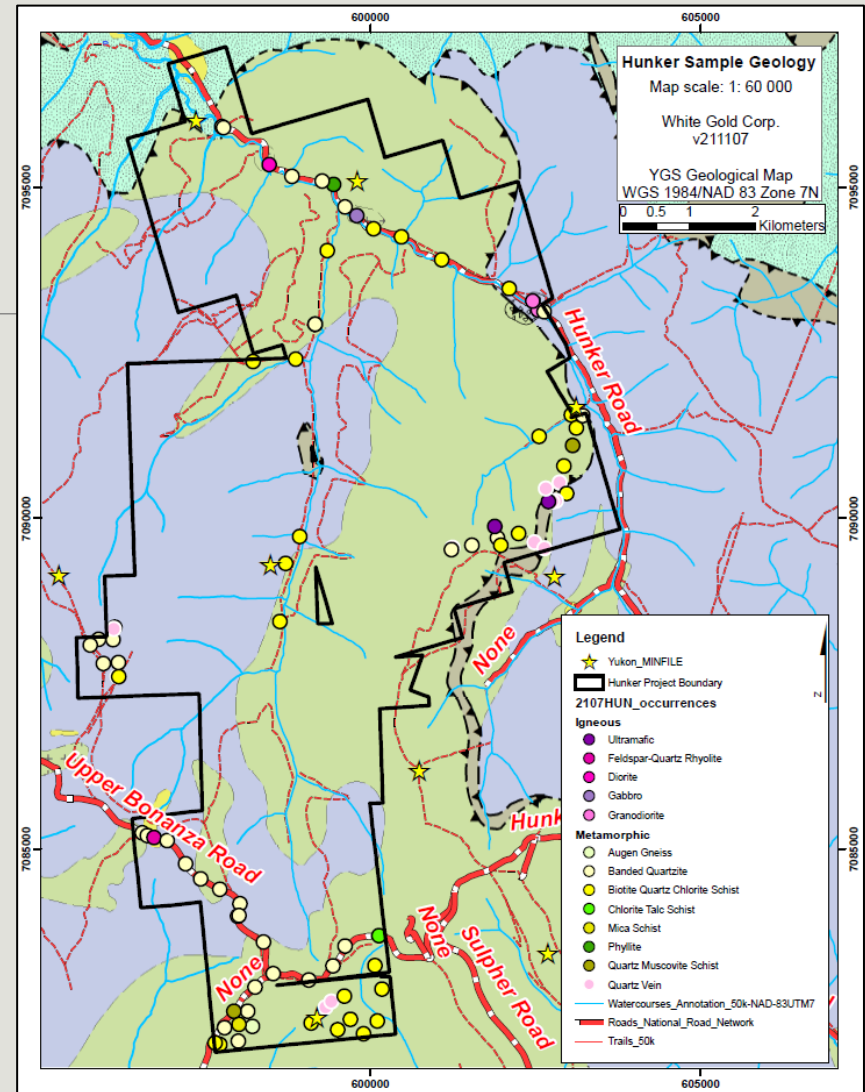
5. To access the target NW of the “Fawcett Vein” mineral occurrence in the west Hunker claim area turn right off of Hunker Creek Road, onto unnamed road. Turn right again when road splits. Park before road becomes overgrown. Access zone traversing the ridge.
6. Large ruts made the old road that is mapped to access the Mitchell vein zone from the south inaccessible by truck. A 4x4 ATV is recommended for future use.
7. Old road along ridge through the King target anomaly is not terribly overgrown and is accessible with 4x4 ATV.
8. Side road off of Upper Bonanza Road is accessible up to Boxcar mine shaft.



# Geology Hunker

From Gibson (2015):

The property lies within the Yukon-Tanana Terrain (YTT). Within the project area the YTT is dominated by three distinct metamorphic assemblages, comprising metamorphosed carbonaceous clastic sedimentary rocks of the Late Devonian to Early Mississippian Snowcap Assemblage (purple in map), metamorphosed mafic and ultramafic volcanics and related intrusive rocks of the Late Paleozoic Slide Mountain Assemblage, and felsic-mafic meta-volcanics and intrusives of the Middle to Late Permian Klondike Assemblage (green in map).

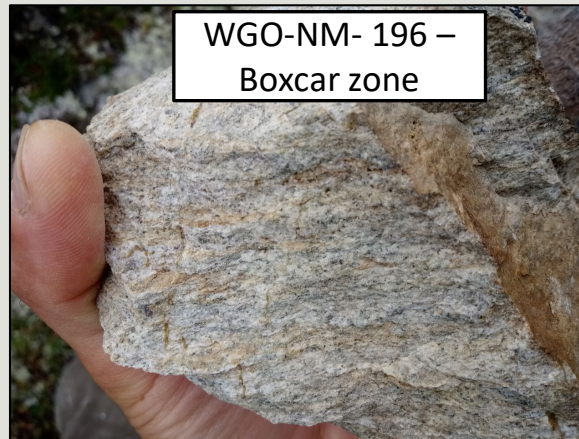


# Geology

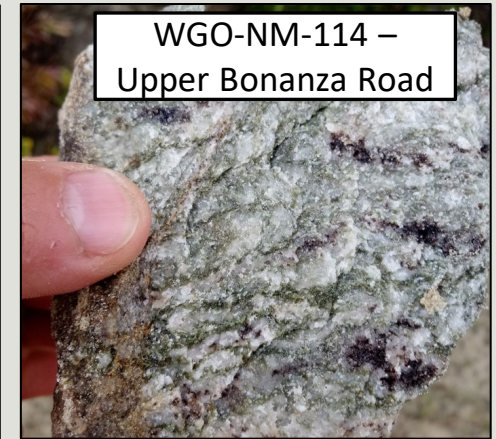
## Hunker: metamorphic rocks



- Strongly iron-oxidized graphite-chlorite banded quartzite to quartz-mica schist. Boundaraged concordant mesothermal quartz veins are variably occurring and discontinuous along strike and depth (Rushton et al., 1993).



- Muscovite-clay rich quartz-mica schist.



- Phyllite to schist with bands of green sericite and discontinuous lenses of earthy hematite.

# Geology

## Hunker: intrusive units

WGO-NM-200 – Upper Bonanza Road



- **Porphyritic rhyolite** contains plagioclase-quartz (20%) and hornblende (3%) phenocrysts occupy an otherwise fine-grained grey aphanitic groundmass.

WGO-NM-240 –  
Hunker Creek Road



- **Gabbro** is partially chloritized and medium grained with high concentration of hornblende. This rock is not magnetic and locally contains (2<sup>nd</sup>?) biotite.
- Mapped by the YGS (Mortensen, 1996) as metamorphosed Sulphur Creek suite granodiorite and quartz monzonite.

# Geology

## Hunker: intrusive units

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- Previously unmapped and variably magnetic porphyritic to equigranular **granodiorite** is variably altered with increasing potassium feldspar-silicification and porphyritic texture towards the NW. Trace pyrite after mafic minerals.



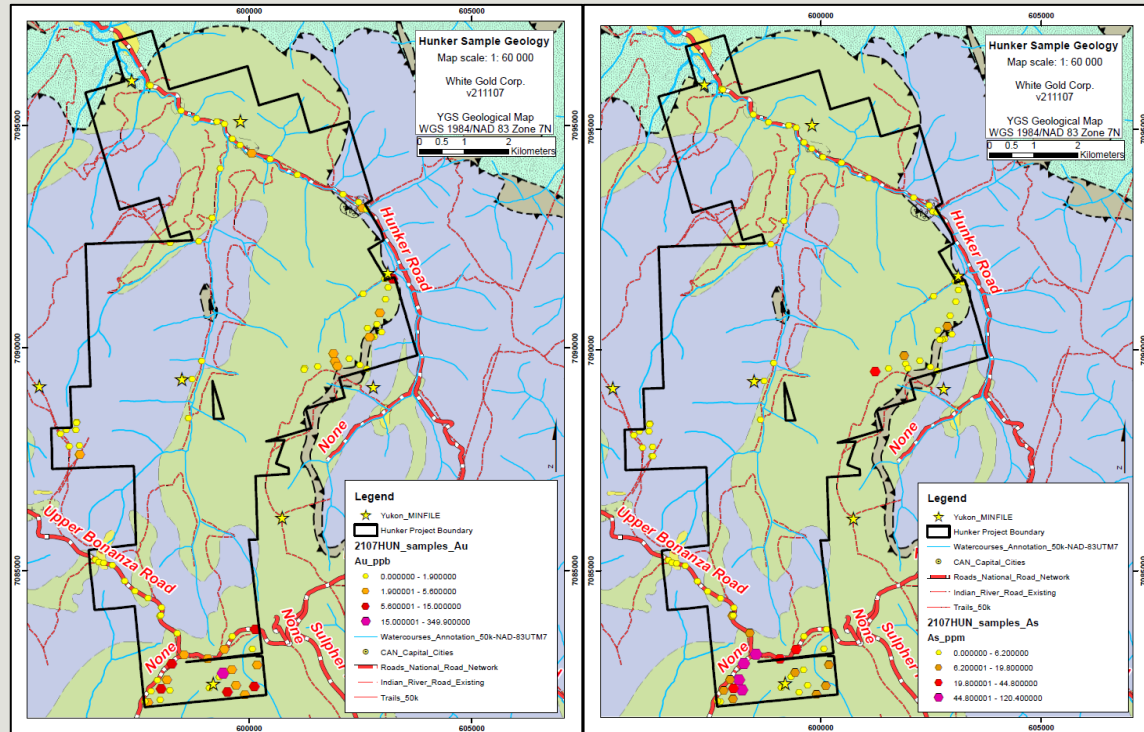
- Equigranular (2-4 mm) **diorite** with white plagioclase and chloritized green hornblende crystals. Magnetite is disseminated (primary?). There is penetrative foliation defined by aligned but not strained weakly sericitized plagioclase lathes and strongly chloritized hornblende crystals.
- Mapped by the YGS (Mortensen, 1996) as metamorphosed Sulphur Creek suite granodiorite and quartz monzonite.

# Mineralization Hunker

Anomalous Au values are detected predominantly in the southern Hunker claim area (image on the left). Gold values are typically associated to anomalous As concentrations (image, right).

The King target zone contains the most samples with the highest concentrations. The Prince and the zone N and NW of the Fawcett vein mineral occurrence contain anomalous values of varying concentrations.

Sample number 229 from the King target area contains the highest concentration of Au.

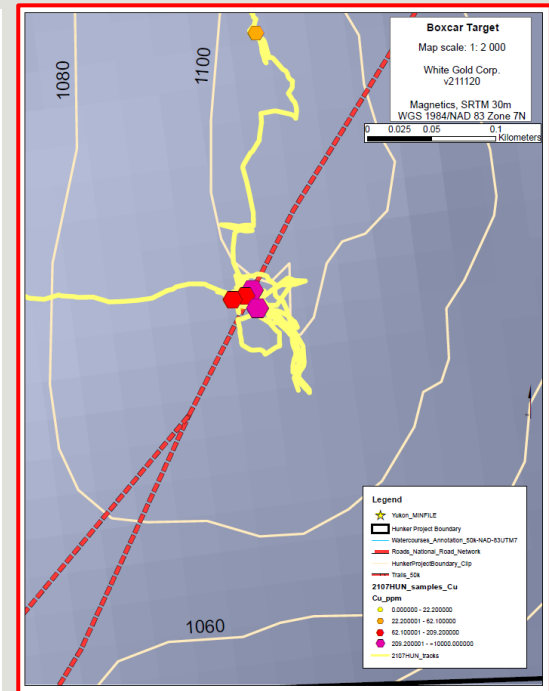
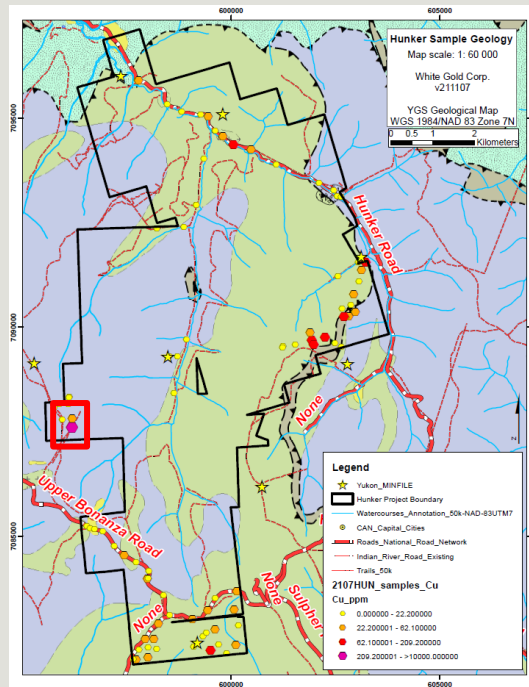




# Mineralization

## Hunker: Boxcar

The Boxcar target zone is unique in that it contains anomalous Cu, Ag, Zn, and Pb grades.



# Structural Geology Hunker

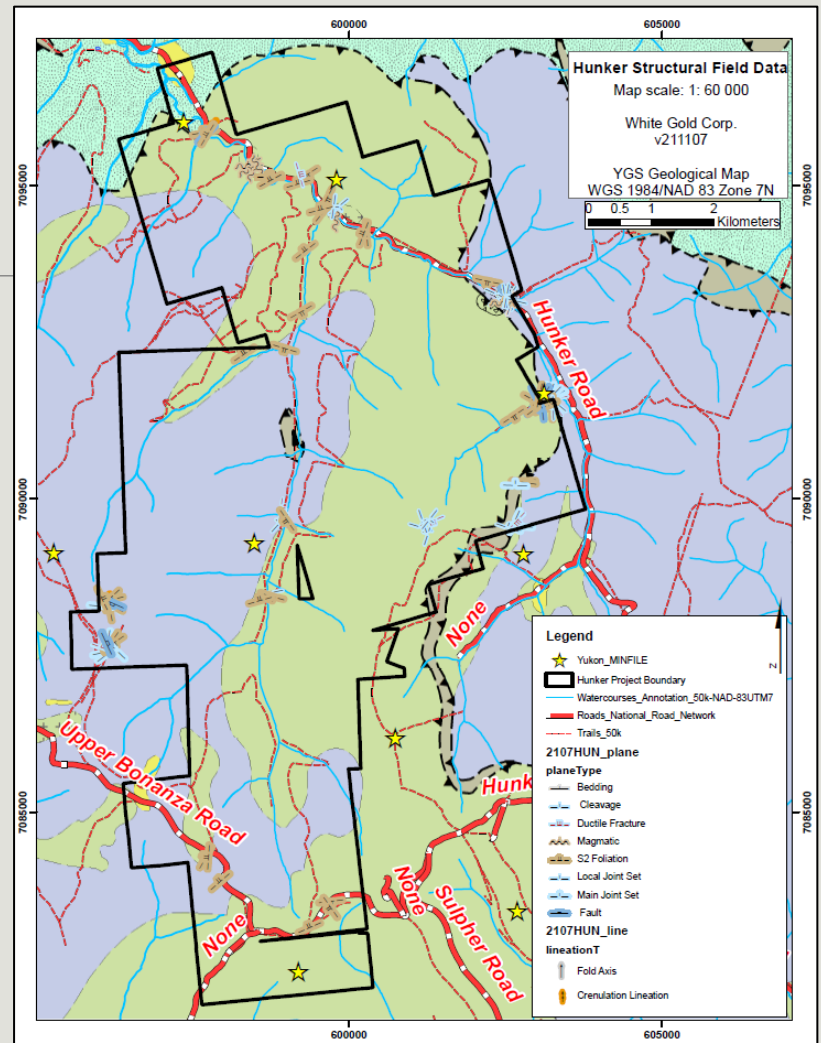
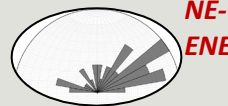
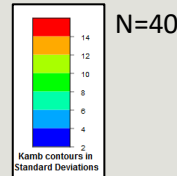
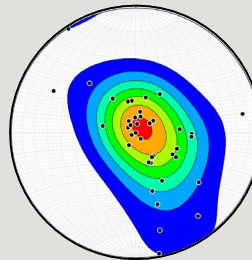
Zones such as Boxcar and Mint Pup Creek, as well as road side cuts proved to contain more opportunities in relation to surrounding areas for structural data.

The contact between the Klondike schist and the Snowcap assemblage is generally difficult to discern in the field. Along Hunker Creek Road, in the NE area of the claim area, intrusive bodies may delineate this contact.

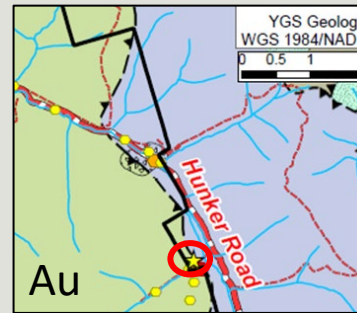
S2 foliation is commonly sub-horizontally oriented to gently dipping towards north-northwest to northwest.

Mapped structure is further discussed by local sites visited.

All S2 foliation poles to planes



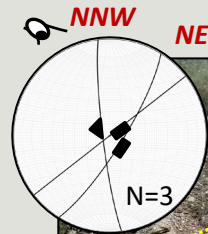
# Sites of Interest Mint Pup Creek



Yellow dotted line highlights the S<sub>2</sub> foliation in a zone of highly fractured schist that is cut by NNW-trending and sub-vertical graphite hosting faults (back-rotated imbricate thrusts?) cross cut by NE-trending and steeply SE-dipping normal faults.



Looking SW



Looking towards SE

Geochemical analysis indicate that the graphite is not associated with any gold.

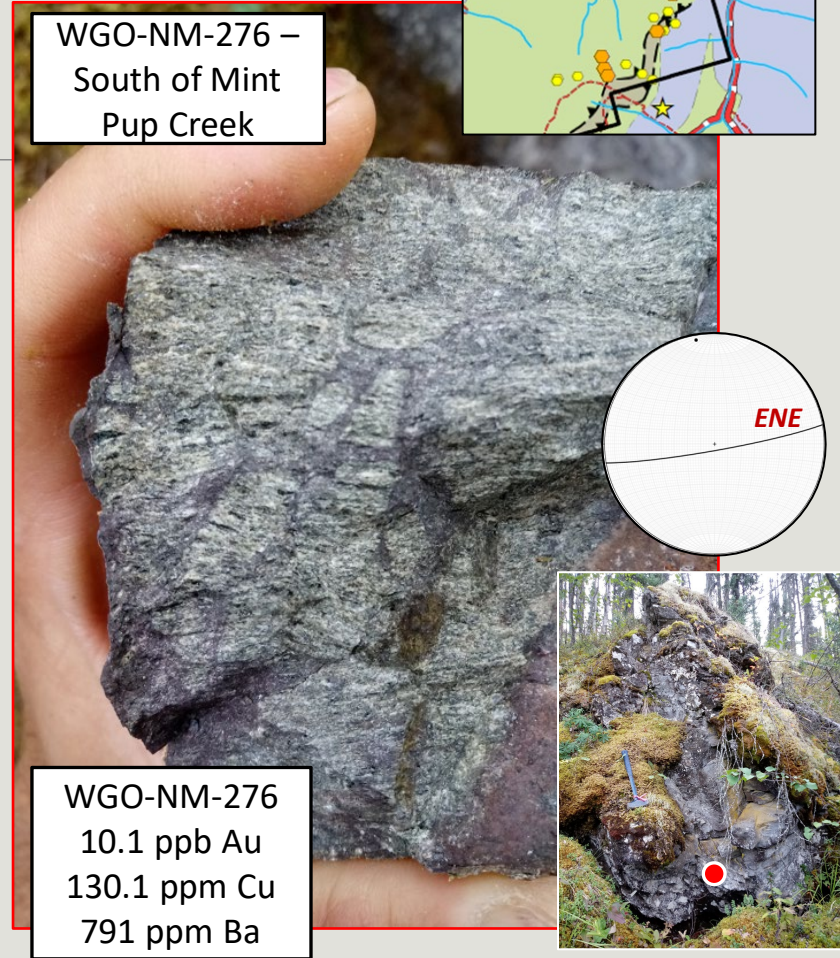
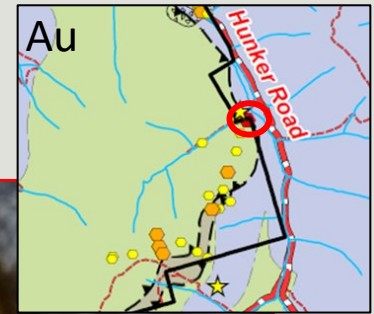
# Sites of Interest

## Mint Pup Creek - Ridge

Rock outcrop on a NE-trending ridge just south of Mint Pup Creek (inset image; red dot represents sample collection location) contains banded quartz-rich strongly chloritized schist. The rock is strongly silicified and cross cut by reddish-brown earthy hematite ± magnetite ± carbonate ± goethite thin (<1- 1cm mm wide) stockwork veinlets (crackle breccia?) to dendritic brittle-ductile veinlets. Disseminated magnetite is common with crystals up to 0.5 mm in size. Carbonate is pervasive and may post-date breccia.

Foliation varies from shallowly west- to northwest- dipping and is cross cut by magnetite-hematite rich extensional fractures that trend ENE and are sub-vertical to steeply towards south-southeast.

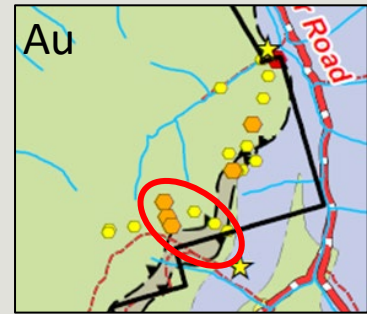
WGO-NM-276 –  
South of Mint  
Pup Creek



WGO-NM-276  
10.1 ppb Au  
130.1 ppm Cu  
791 ppm Ba

# Sites of Interest

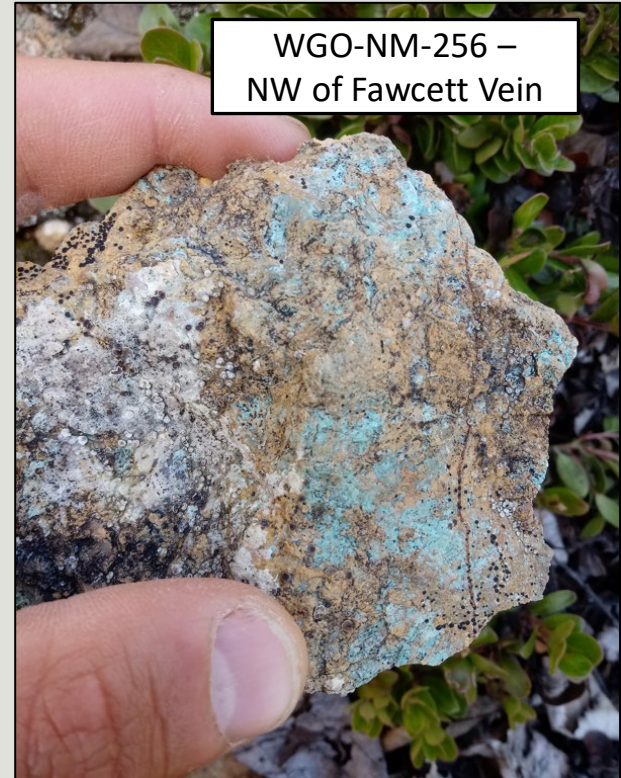
## NW of Fawcett Vein - Ridge



Many trenches, pits, and old roads were found along the NW-trending ridge in the area of interest. The largest trench was NE-trending and 20-30 m long and 5 m wide (image below). It exposes subcrop of a quartz vein intensely fractured by sheeted goethite veinlets. Pervasive limonite and patchy fuchsite (image right) occurs near the contact with schist; however geochemical analysis yielded low Au values.



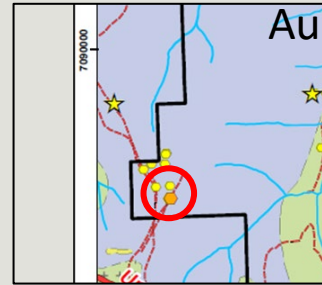
Looking SE – down ridge



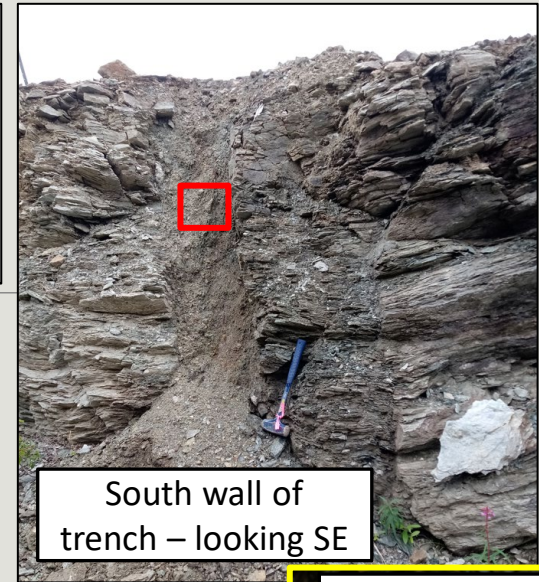
WGO-NM-256 –  
NW of Fawcett Vein

# Sites of Interest

## Boxcar

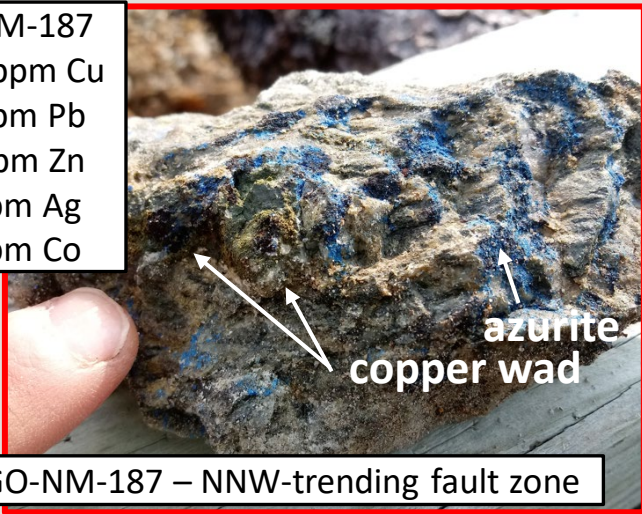


A NNW-trending fault contains a mineralized quartz vein (sample 187). The main fault is 50 to 100 cm wide and traceable for 30-40 m. The quartz vein within main fault is sub-parallel to R1 shear (see stereonet next slide). R1 fault is thinner (up to 20 cm wide) and observed in the south shaft and in the North wall of main trench. Sample 189 was collected from a boudinaged quartz vein sub-concordant to schist foliation.

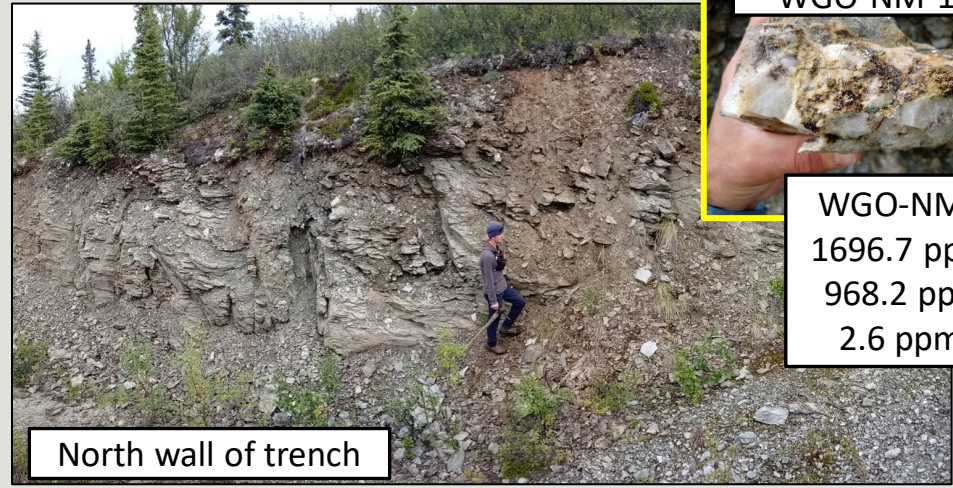


South wall of trench – looking SE

WGO-NM-187  
 >10000 ppm Cu  
 8937 ppm Pb  
 5279 ppm Zn  
 21.6 ppm Ag  
 16.2 ppm Co



WGO-NM-187 – NNW-trending fault zone



North wall of trench



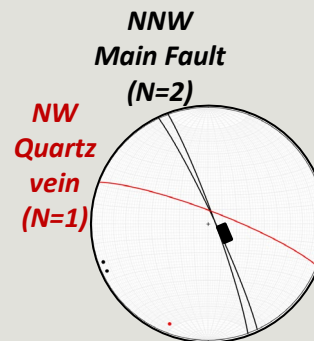
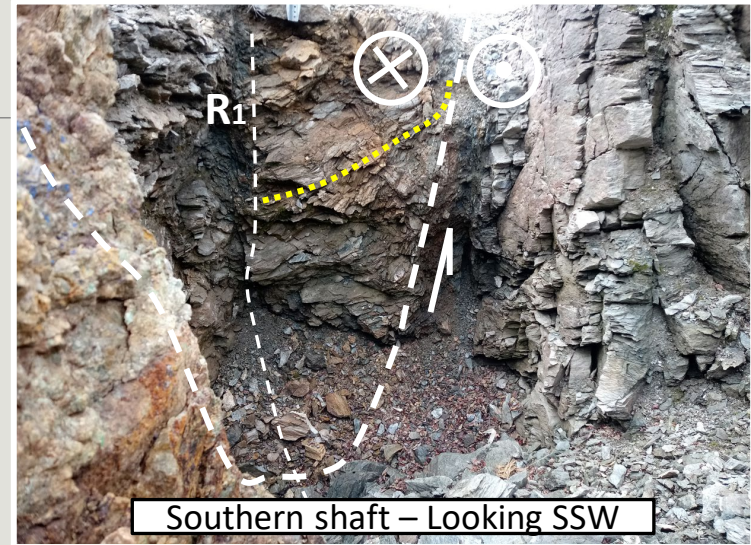
WGO-NM-189  
 WGO-NM-089  
 1696.7 ppm Cu  
 968.2 ppb Au  
 2.6 ppm Ag

# Sites of Interest

## Boxcar

The main fault (large dashed line) drag folds schist and indicates west side-up kinematics and weak drag folding of the west block rock into the image is interpreted as dextral shear sense. The main NNW-trending oblique dextral fault comprises a 6 cm wide deformed quartz vein with a damage zone that is strongly weathered and oxidized with malachite, azurite, hematite, cassiterite?, goethite, and copper wad.

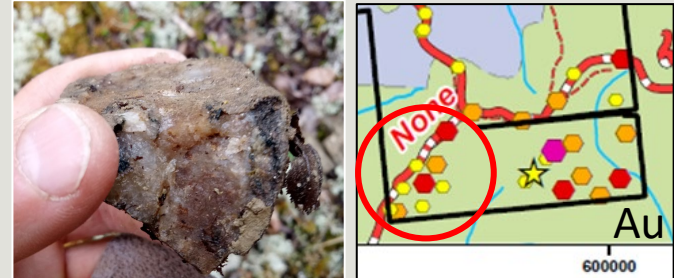
The NW-trending R1 shear (thin dashed line) and quartz vein however, infer a NW-directed sigma 1 that contradicts the dextral shear sense observations observed through drag-folding. This may be interpreted through, post-mineralization reactivation through right-lateral movement along the main fault.



# Sites of Interest

## Prince Target - Quartz Creek Headwaters/ Road

Southwestern zone of the Prince anomaly contains elevated levels of hematite and high density of sugary quartz veins concordant and discordant to a deformed quartz-rich schist foliation in float samples. Float boulders of various sizes surface out from the ground are typically angular in shape. Thin veinlets up to 3 mm wide contain complete jarosite-goethite replacement. Jarosite-goethite also occurs as replacement of relic cubic pyrite.



WGO-NM-216

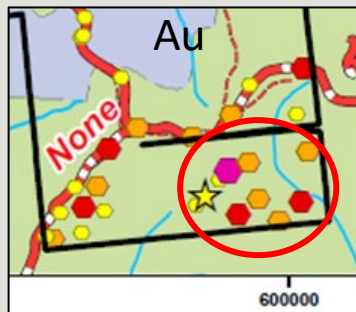
WGO-NM-216  
349.9 ppb Au  
2.6 ppm Ag



# Sites of Interest

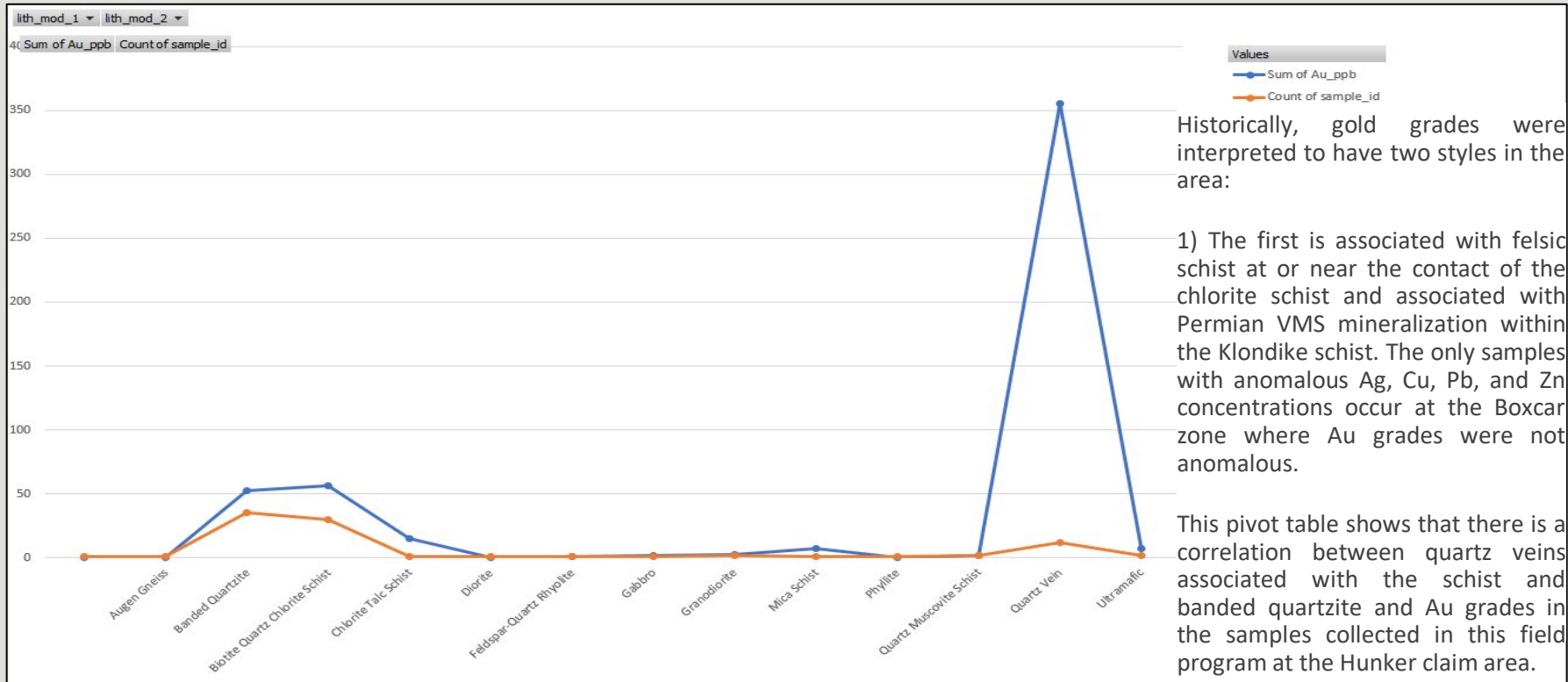
## King Target - Sulphur Creek Headwaters/Ridge

Intense vuggy bull to translucent and sugary and vuggy quartz veins are concordant to chloritized-schist foliation. The rock is moderately to strongly deformed and not commonly crenulated. Pervasive quartz alteration is strong and when vugs are present, they are associated with jarosite-goethite (up to 10% total)



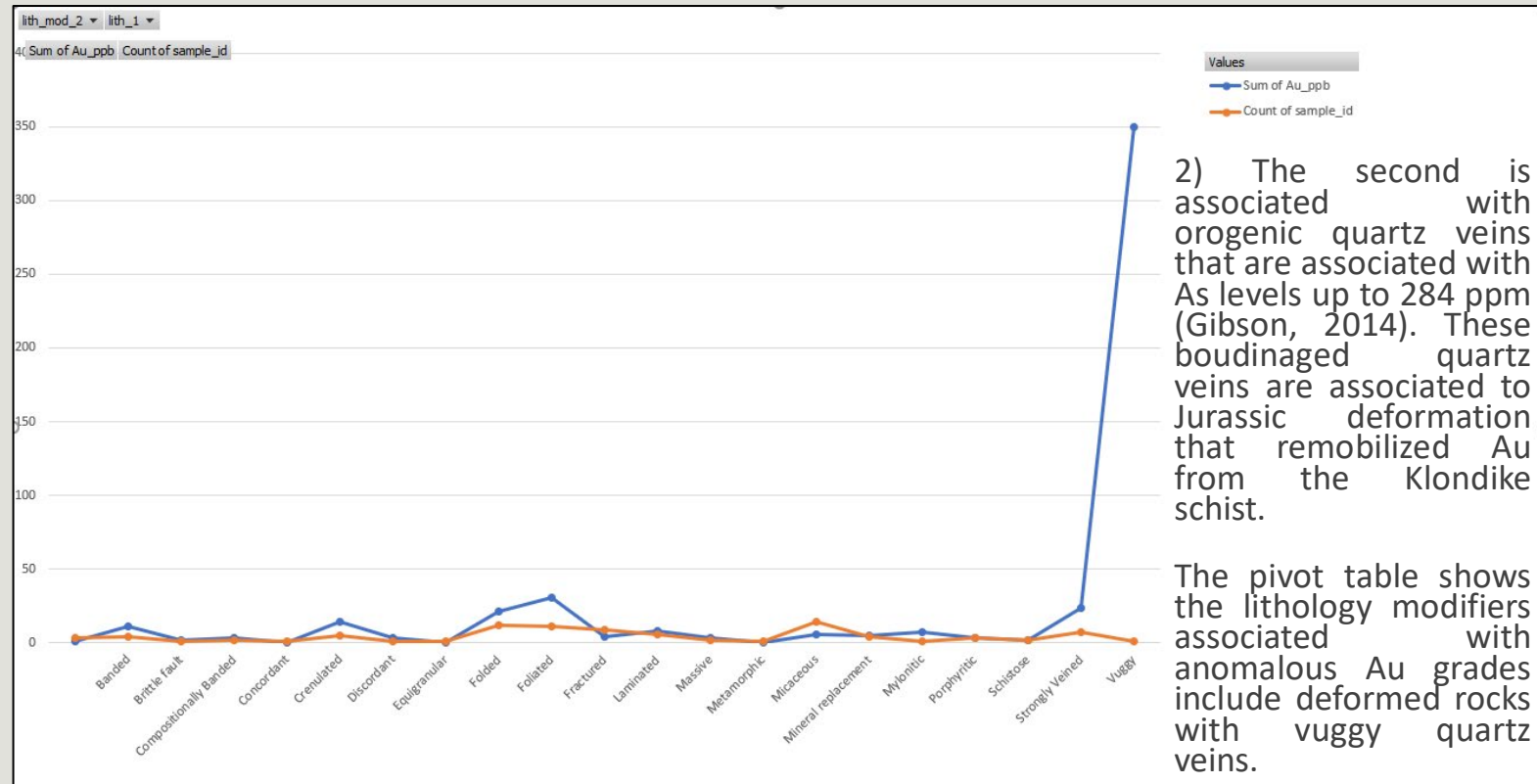
# Discussion

## Lithological Controls on Gold Mineralization



# Discussion

## Structural Controls on Gold Mineralization

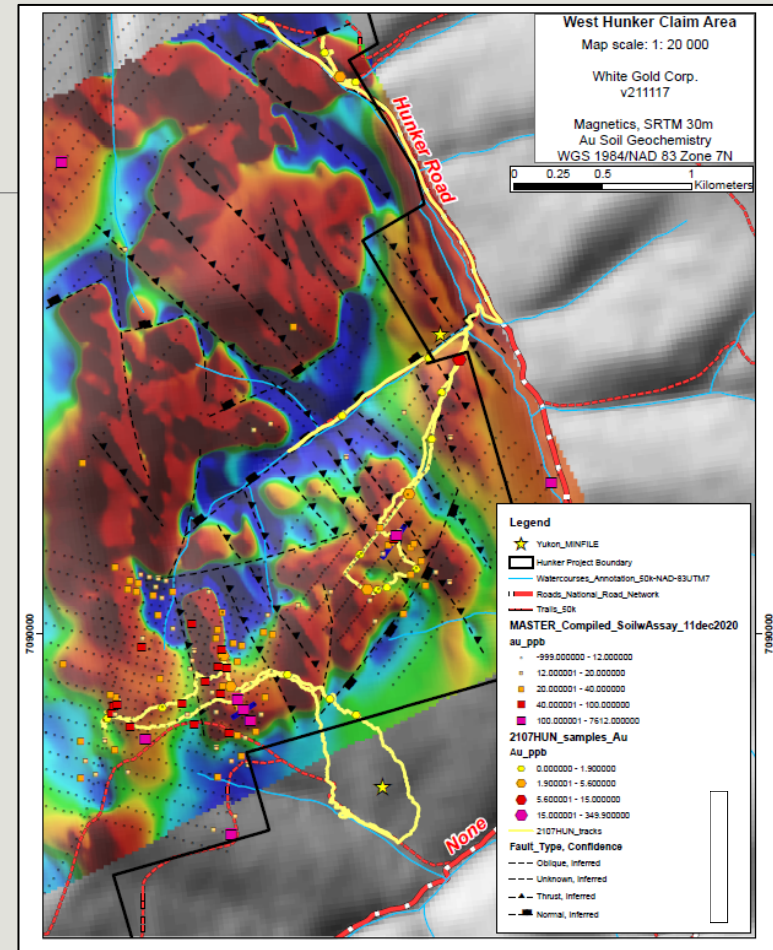


# Discussion

## Controls on Mineralization: Western Hunker Zone

The geophysics in the western Hunker zone target supports the observations in the Mint Pup Creek area and occur as follows: 1) NNW- to NW-trending imbricate and back-rotated(?) thrust faults cross cut by 2) ENE- (to NE-)trending normal faults. I interpret the ENE-trending extensional structures associated with hematite-magnetite crackle breccia and associated anomalous Cu-Au grades (sample 276) despite Au soil anomalies not reflective of this.

Similarly, Sanchez (2021) interprets similar N- and NW-trending thrusts that are cross cut later NW-trending structures interpreted to be associated with anomalous Au in soil geochemistry in the Bonanza internal report using magnetics, DIGHEM, and LiDAR data. Bonanza is ~18 km away and the Klondike schist similarly to Hunker comprise the rock. Therefore, it is not unlikely to have similar styles of control on mineralization.

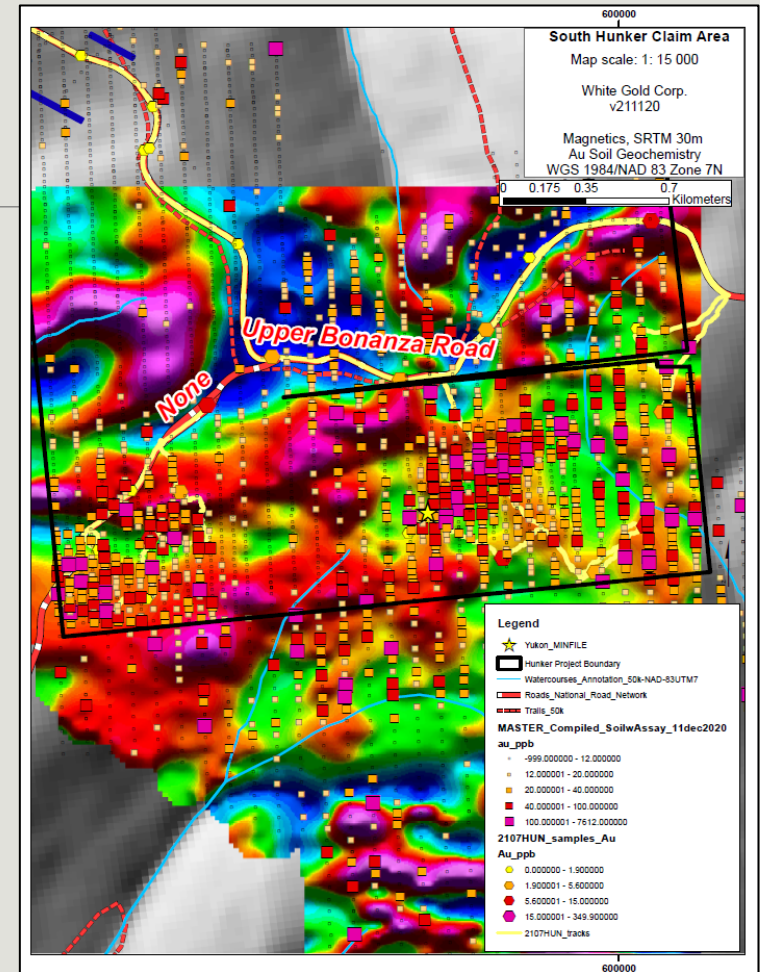


# Discussion

## Controls on Mineralization: South Hunker Zone

As alluded to in the report by Gibson (2015) and supported by the samples in this project, the anomalous Au in the King zone (and likely similarly, the Prince zone) is not associated to any geochemical or alteration and is suggested that it was remobilized during deformation.

The magnetics (right) show that there is a prominent E-trending fabric in the rock that may be associated to the regional S<sub>2</sub> foliation. Similarly, an E-trending fault was identified by RAB drilling (Gibson, 2015). Further analysis of geophysical data and drill data may help define structures and their role in localizing gold in this area.



# Conclusions

## Hunker

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- The south Hunker area yielded the most anomalous gold grades. Gold is associated to deformed rock and vuggy quartz veins in the Klondike schist and banded quartzite.
- The Boxcar zone, and sample 276 in the western Hunker area yielded anomalous copper grades.

### West Hunker:

- NNW- to NW-trending, steeply-dipping and WSW- to SW-vergent imbricate thrust faults with elevated graphite concentrations, are cross cut by:
- ENE-trending normal faults are associated with hematite-magnetite crackle breccia containing anomalous Au-Cu mineralization.

### Boxcar:

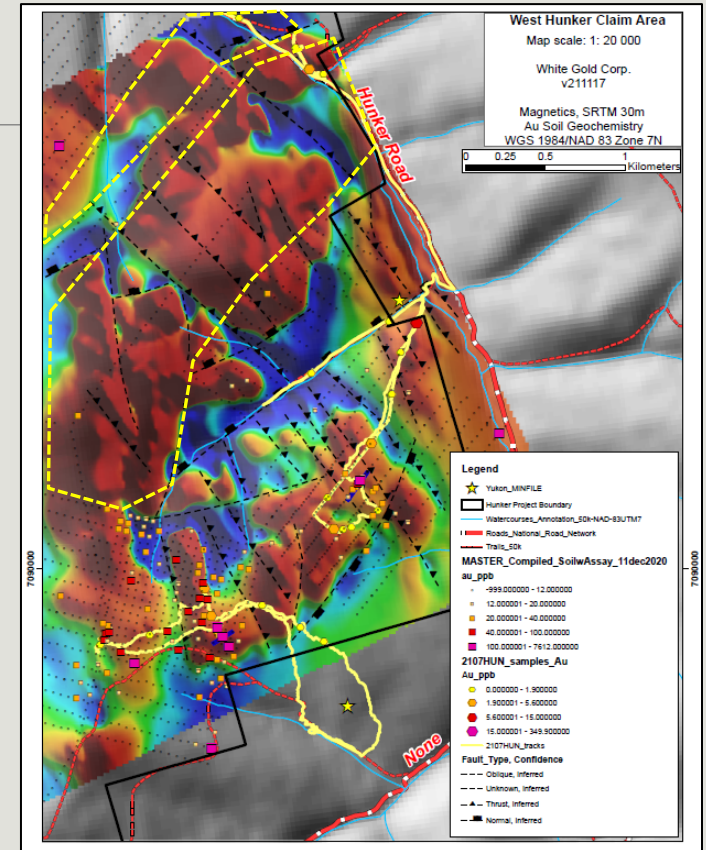
NNW-trending oblique-slip fault associated with Cu-Ag-Pb-Zn and minor Au mineralization.

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# Recommendations

## Hunker

1. Soil sampling and further prospecting in the zone outlined in dashed yellow line in the image to the right as these areas border anomalous Au in soils.
2. Structural interpretation of the Dighem and IP data for the Hunker claim area including Prince, King, and Boxcar zones to vector the mineralization before potential drilling.
3. Continued ridge and spur style mapping and prospecting to cover the ground outstanding from this program.



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