



Transition Metals

Highland Gold Project

New High Sulphidation Gold System – Cape Breton, Nova Scotia

Au

Ni

Cu

Co

Pt

Pd

XTM – TSXV

Introduction



- Large regional stream sediment gold anomaly outlined in the McMillan Flowage area in the Cape Breton Highlands in the 1980's.
- Follow up work by INCO led to the discovery of more than 30 bedrock gold showings
- Similar geology to gold deposits in the Carolinas, Newfoundland and the British Islands.
- Limited glacial erosion concurrent with the alpine glacial "Ice-Shed" of the Cape Breton highlands preserves a well developed Cretaceous aged saprolitic weathering profile at surface – similar to that preserved in Canada's Yukon/Labrador
- Property optioned in 2018 from award winning Nova Scotia Prospector Joe Richman. Transition has option to acquire 100% interest subject to 2% NSR of which 1.0% can be purchased for \$1.25 million
- **Work by Transition identifies potential for high sulphidation gold system(s) on the property**



Highlands Regional Geology

- Suture between Ordovician - Silurian volcanics and sediments of Ganderia, and Late Proterozoic sediments, volcanics, and intrusives of Avalonia
- The Avalon composite terrain is known to host both Orogenic (mesothermal) and Epithermal styles of gold
 - Haile, SC (3.32 Moz M&I, 0.6 Moz Inferred) , Ridgeway (1.5 Moz), Brewer (~190,000 Oz)
 - Brewer Miner, SC (Ridgeway (56.7 t), Haile (48.1 t), and Brewer (5.4 t), exceeds 110 t of gold (Scheetz et al. 1991)
 - Hope Brook, NFLD (0.84 Moz Indicated, 0.11 Moz Inferred)
- The orogeny also continues towards Great Britain (and beyond) as the Caledonian to host other deposits
 - 5.3 Moz – Currahginalt, Cavancau, Cononish
- At Highland property, 3 main structural trends (NNW, NNE and NE) meet, creating a strong dilational geometry along NW and NE directions that host the known gold-bearing quartz veins discovered to date.

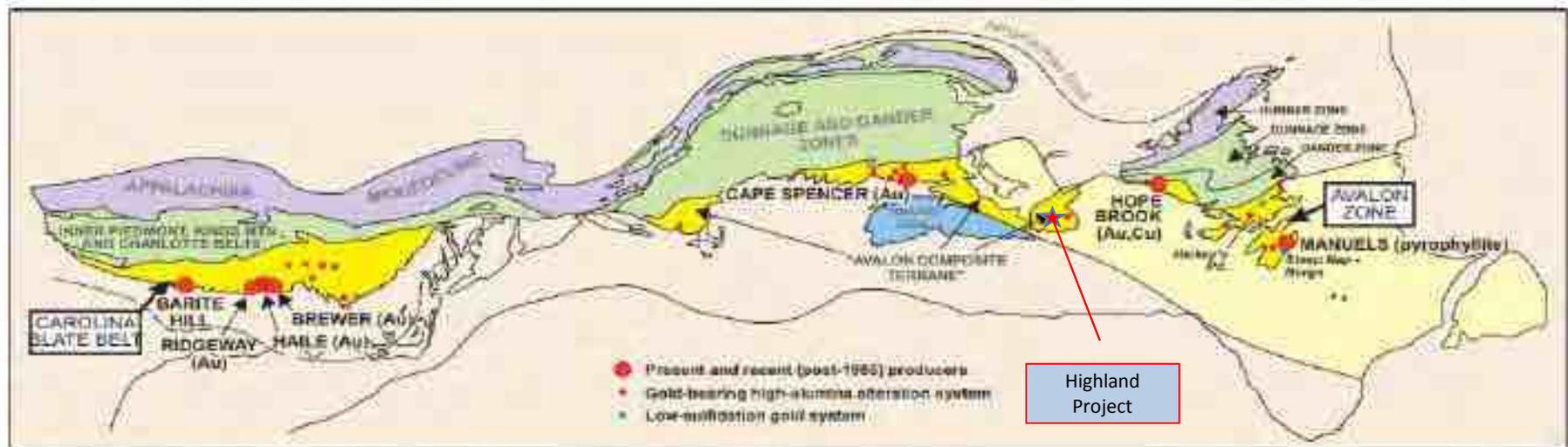
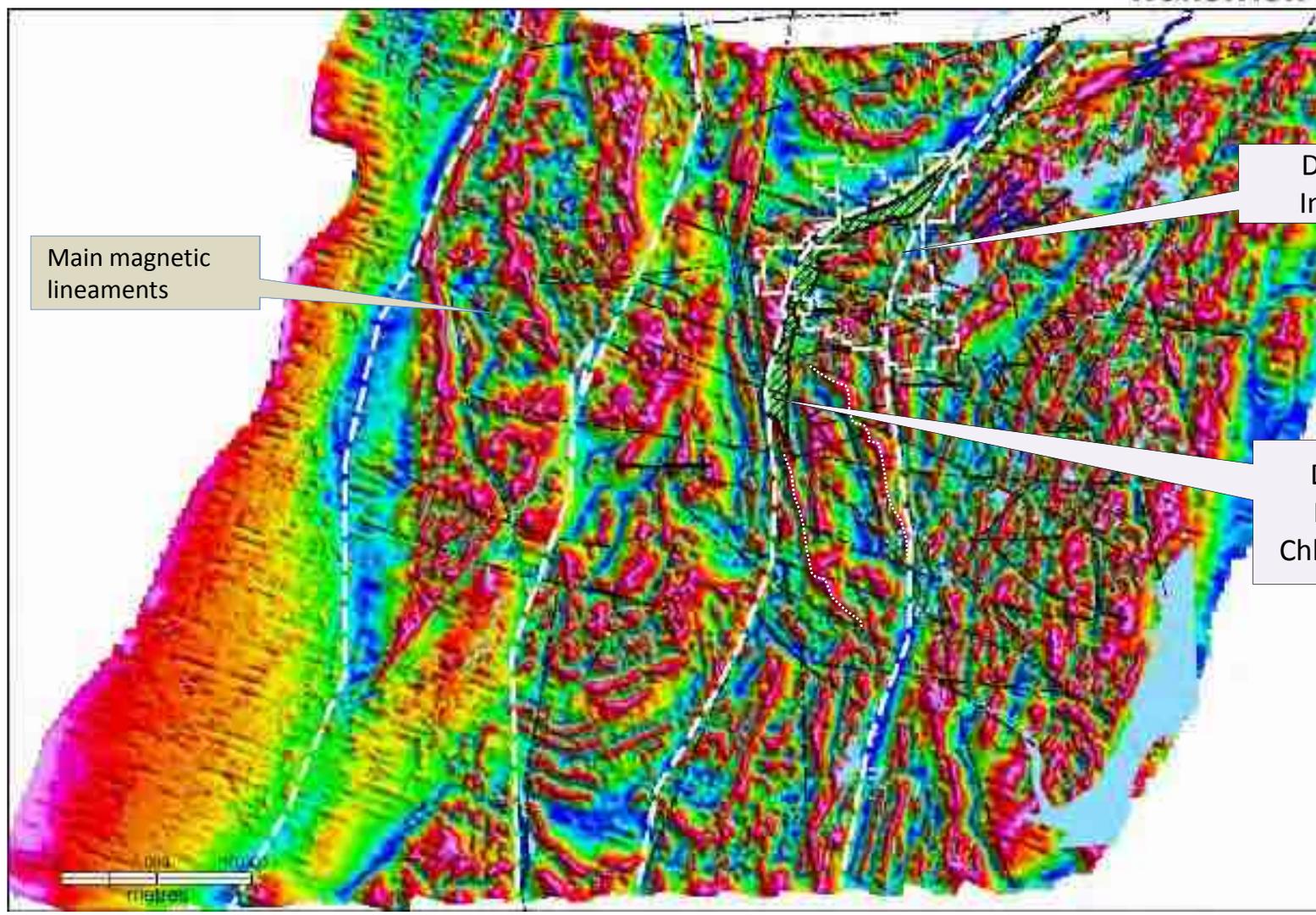


Figure 3: Distribution of Avalonian rocks within the Appalachian Orogen (modified from O'Brien, Dube and O'Driscoll, 1999; base map modified from William and Hatcher, 1983)

CAP BRETON AREA: distinct tectonic domains well reflect on magnetic map.



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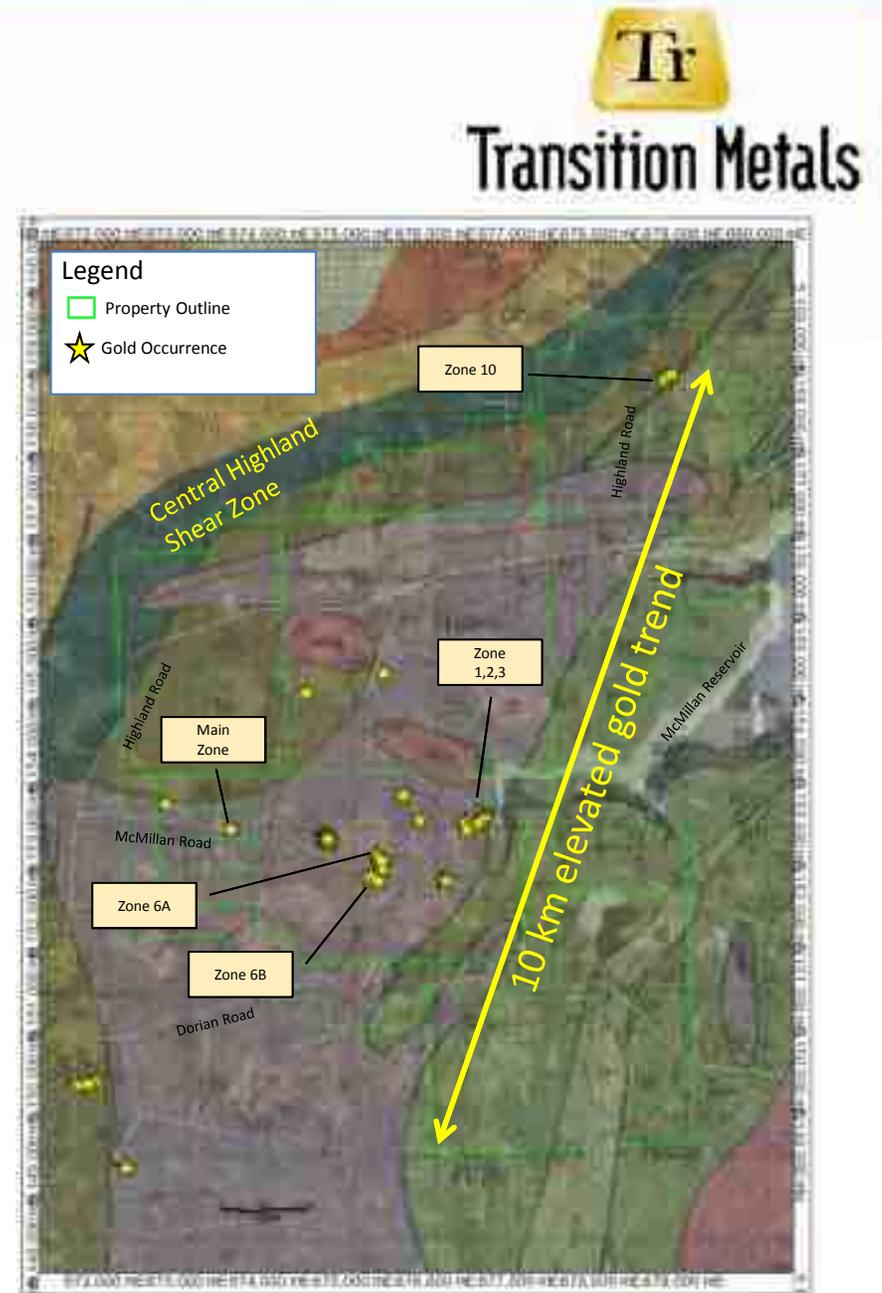
Main magnetic lineaments

Domain-Interface

Devonian Mylonite Chlorite Schist

Project Highlights

- 30+ bedrock showings with high grade grab samples
 - 3,000 tonne bulk sample with 26 g/t estimated head grade processed in early 2,000's at Main Zone
 - 9 showing areas returning grab samples greater than 8 g/t, 23 greater than 1.7 g/t - 104 g/t sample from Zone 6B
- **Best Results from channels**
 - 12.8 g/t Au over 3.1m , 3.18g/t over 3.2m (Big Vein)
 - 26.8 g/t over 1m (Main Vein)
 - 17.1 g/t over 0.7m (Cameron's wall)
- **Best Results from drilling**
 - 4.95 g/t Au over 3.0 m (HL14-01 – Zone 6A)
 - 2.52 g/t Au over 1.03 m (HL-14-06 – Zone 1,2,3)
 - 2.35 g/t Au over 1.4 m (Hole 77359-0 - Zone 10)
- Since acquiring, Transition has completed
 - 1,300 line kilometres of high resolution fixed-wing Magnetic Gradient and VLF-EM
 - Collected 66 basal till samples which are being analysed by ODM for gold grain counts, morphology and geochem
 - MMI soil sampling to follow up and target anomalous results detected by the vendor
 - Reviewed historical data compilation
 - Available drill core at Stellarton core library reviewed
- Approximately 500-1000m of RAB drilling planned for November to test initial identified targets



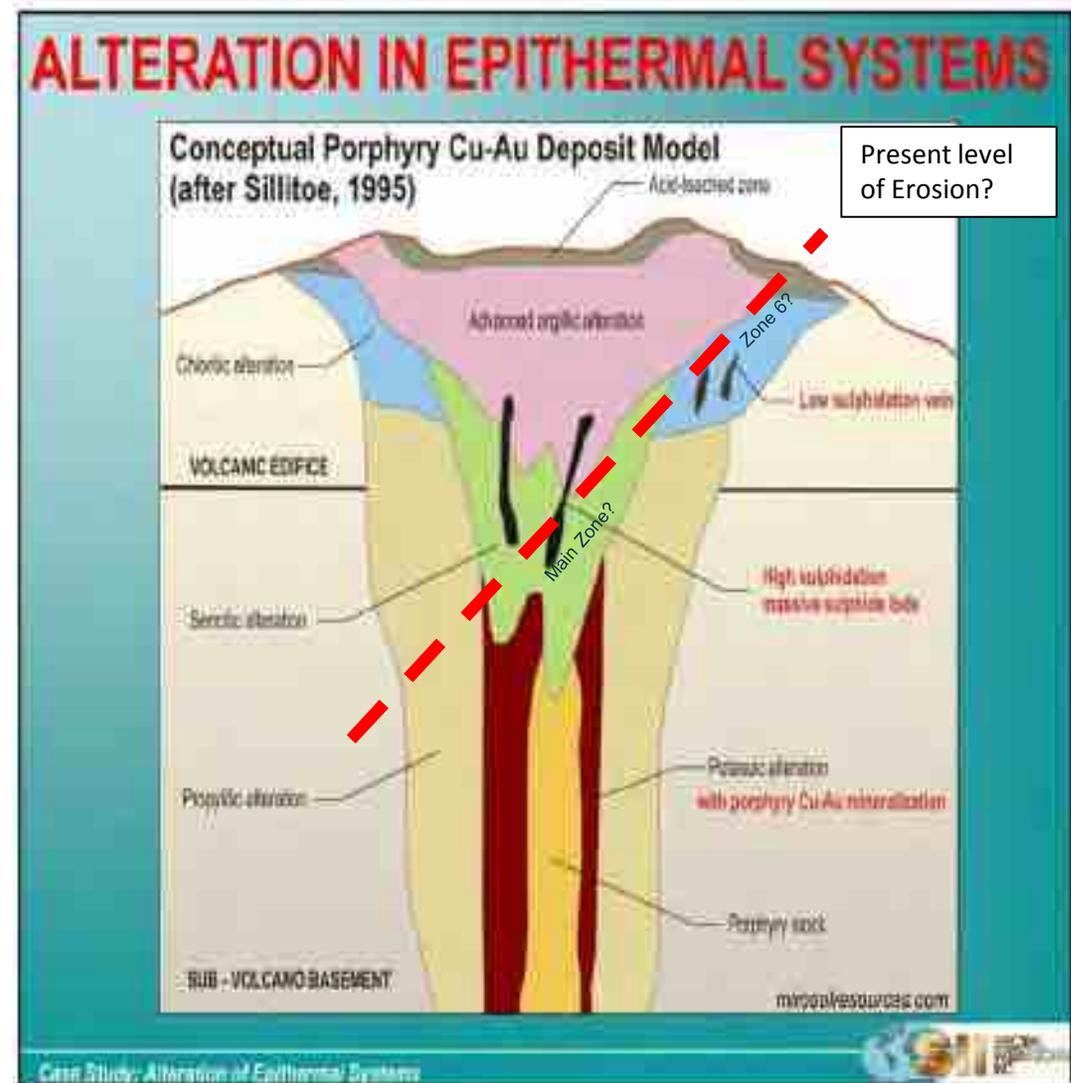
Deposit Model

Possible Fit: High Sulphidation Epithermal?

- ✓ Similar alteration systems occur in other parts of the Avalonian Belt, most notably in the northern Burin Peninsula, southeastern Newfoundland
- ✓ Notable examples: Hope Brook – located 150km to the NE in southern Newfoundland, Pilot Mountain, Brewer Mine – South Carolina, Boliden, Enasen – Sweden

Evidence at Highland:

- Hot intrusion derived acidic hydrothermal fluids
 - ✓ Project sits along suture zone intruded by suite of Devonian felsic intrusions
- Potassic alteration around the intrusion at depth grading upwards into sericite and argillic alteration at near surface
 - ✓ Extensive potassic alteration developed in host rocks.
- Propylitic alteration halo
 - ✓ Areas of strong Chlorite+ Epidote+ Albite+ Carbonate+ Hematite+ Pyrite alteration
 - ✓ Mag highlights large areas of apparent strong magnetite destruction at intersecting structures
- Breccias
 - ✓ Potential diatreme breccias identified off Dorion Road
- Silica Cap
 - ✓ Large silicified area with elevated arsenic, gold and zinc identified on Dorion Road



Mineralization

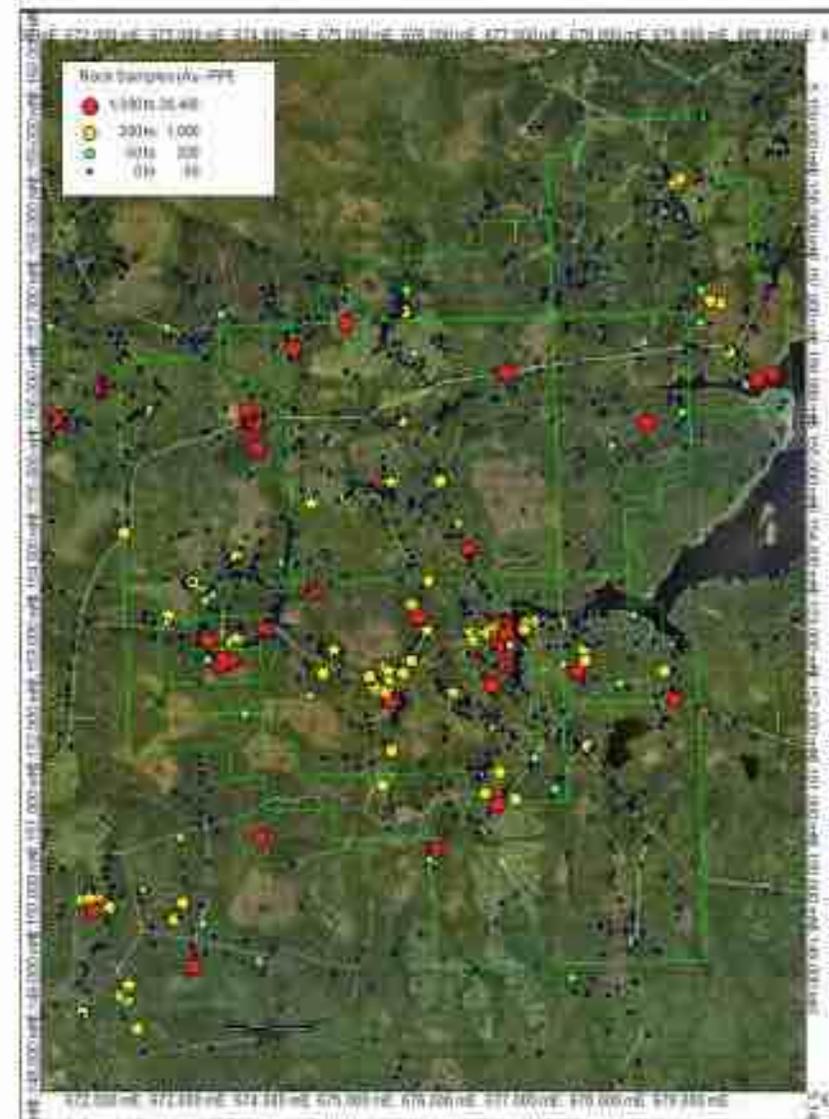
- Gold and electrum occur as inclusions in hematite, pyrite and galena and rare free gold in quartz veins
- Gold associated quartz/pyrite/specular hematite +/- chlorite/muscovite/clays within broader envelope quartz-epidote-chlorite
- Where exposed at surface best mineralization occurs within clay/hematite rich seams that extend at depth for at least 100m
- At surface - pyritic material can weather out completely forming earthy hematite to box-work textured goethite pods/vugs
- Free gold has been observed in weathered out pyrite vugs – described as “gold larvae”
- Where fresh, pyritic dominated sulphides occur as earthy to cm scale cubic masses occurring in late tensional fractures.
- Recovery of gold bearing intervals in diamond drill core has proven very challenging to date.
- Hematitic clays, sand can be washed out by the coring process



Outcrop/Subcrop/Rocks

Cluster of High Grade Gold Occurrences

- Database now of more than 3,000 rock samples (mix of bedrock /subcrop/angular float) help define more than 30 mineralized zones with outcrop exposed by trenching.
- Poor bedrock exposure – only natural bedrock in recessive creeks/south shore of the McMillan reservoir
- Boulder tracing has proven effective to locate sub-cropping zones of veining which have been exposed by trenching
- Due to saprolitic weathering developed into the sub-surface, bedrock depths are variable.
- Harder rock types generate bedrock topographic highs (*quartz veining, granite gneisses, diorite*), softer rock types (*shear zones, altered rocks*) are more recessively weathered
- Results highlight multiple zones of subcropping gold mineralization with good grades, but over narrow widths
- Evidence for widespread alteration (potassic, epidote-chlorite-carbonate-sercite-muscovite-clay group minerals)
- Good evidence for presence of larger scale mineralizing systems

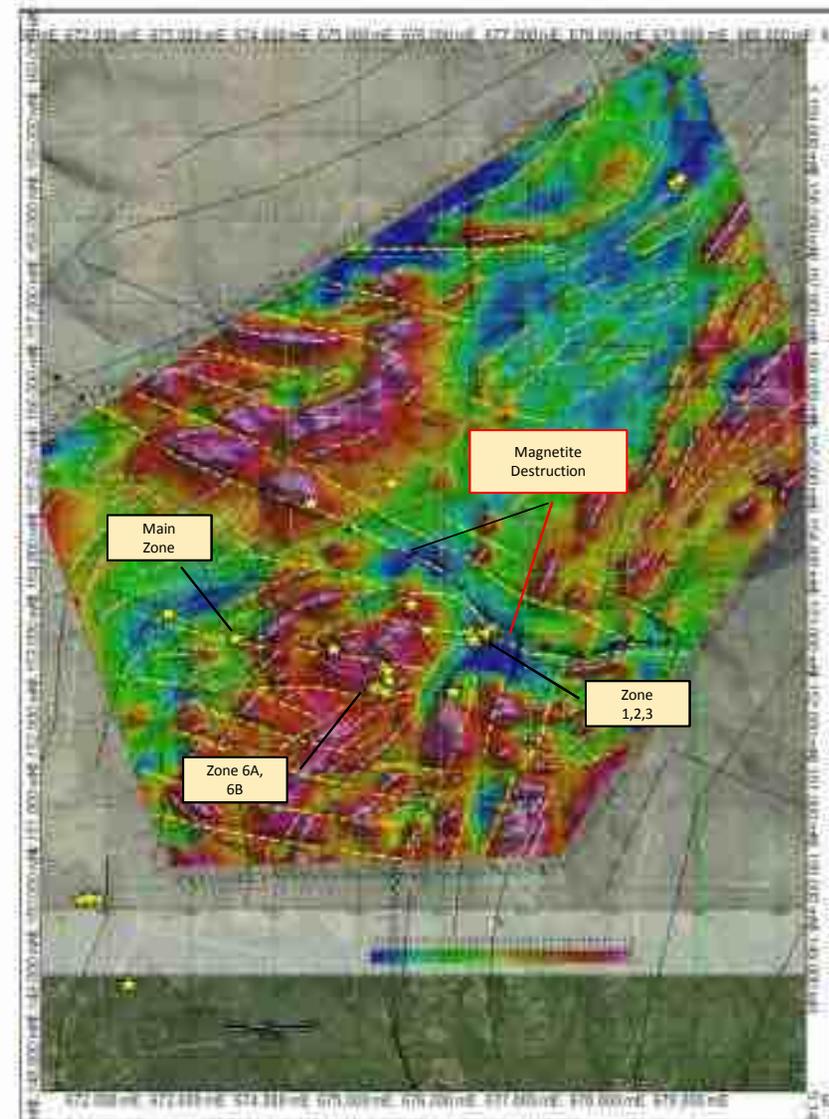


Geophysics

New Structure and Targets Defined



- Prior geophysical coverage in the Highlands is very limited – province scale mag only
- With limited prior exploration and poor outcrop, the highlands plateau remains very much a frontier exploration district in Canada
- INCO flew a 200m line spaced helicopter Mag/VLF/Radiometric survey in 1987 – good for highlighting large scale structural features
- In September 2018 – Transition completed 1,300 line kilometres of high resolution (50 metres spaced) low level fixed wing Horizontal Gradient Mag/VLF surveying
- Large zones of magnetite destruction related to extensive propylitic style alteration highlighted
- New survey highlights subtle structures associated with known mineralized zones
- Discrete mag highs – close proximity to known occurrences
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- VLF highlights structure and a number of zones with bedrock conductance in prospective environments

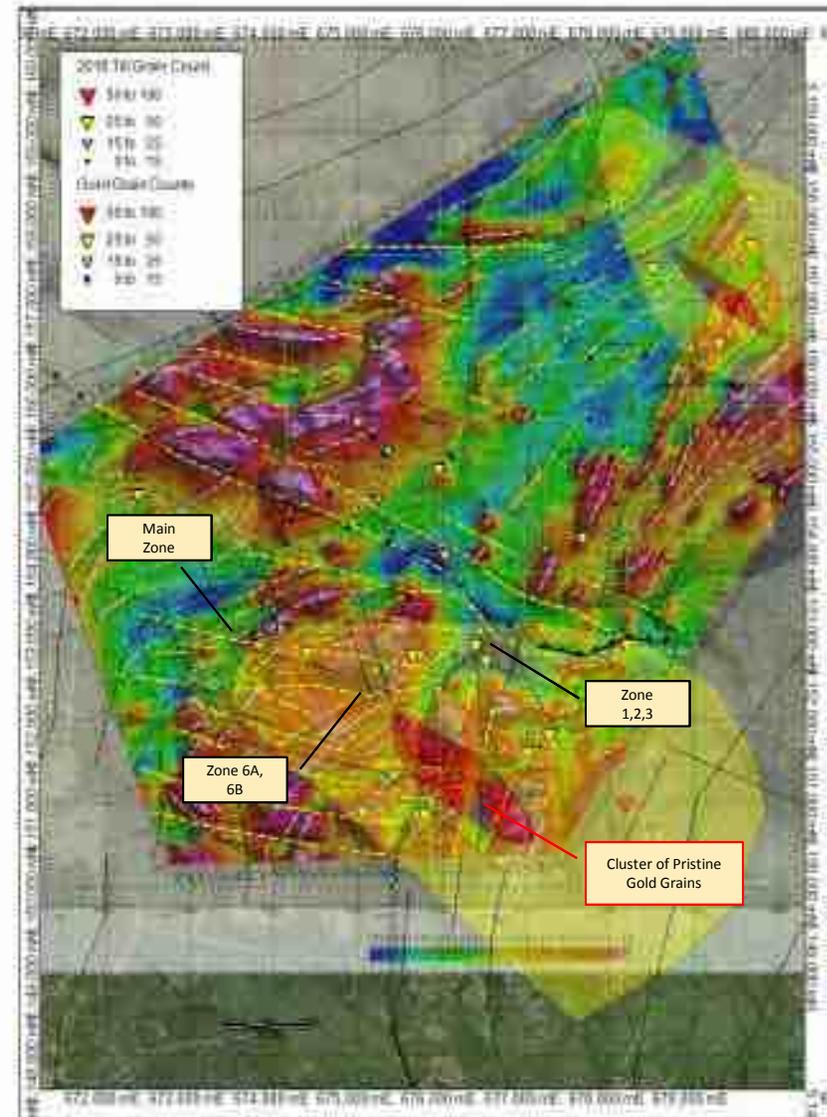


Till

Evidence for Large Till Dispersion Footprint



- Extensive stream sediment and till work was undertaken by Inco in the 1980's. This work was effective at highlighting anomalous areas in a regional sense
- A total of 66 basal till samples were collected by Transition in August of 2018
- Transition is consulting with Overburden Drilling Management (ODM) of Ottawa to obtain more standardized basal till coverage on the property
- This work has returned some of the highest gold grain counts from till yet obtained from Nova Scotia
- Prelim till results highlight a large gold in till dispersion footprint down ice (ESE) from the McMillan road trend that has not been fully defined
- Large cluster of pristine grains highlight new areas to the southeast of the McMillan Road trend
- Additional assay data from this work (HMC analysis) pending



Soil Geochemistry

B-Horizon Soil Sampling

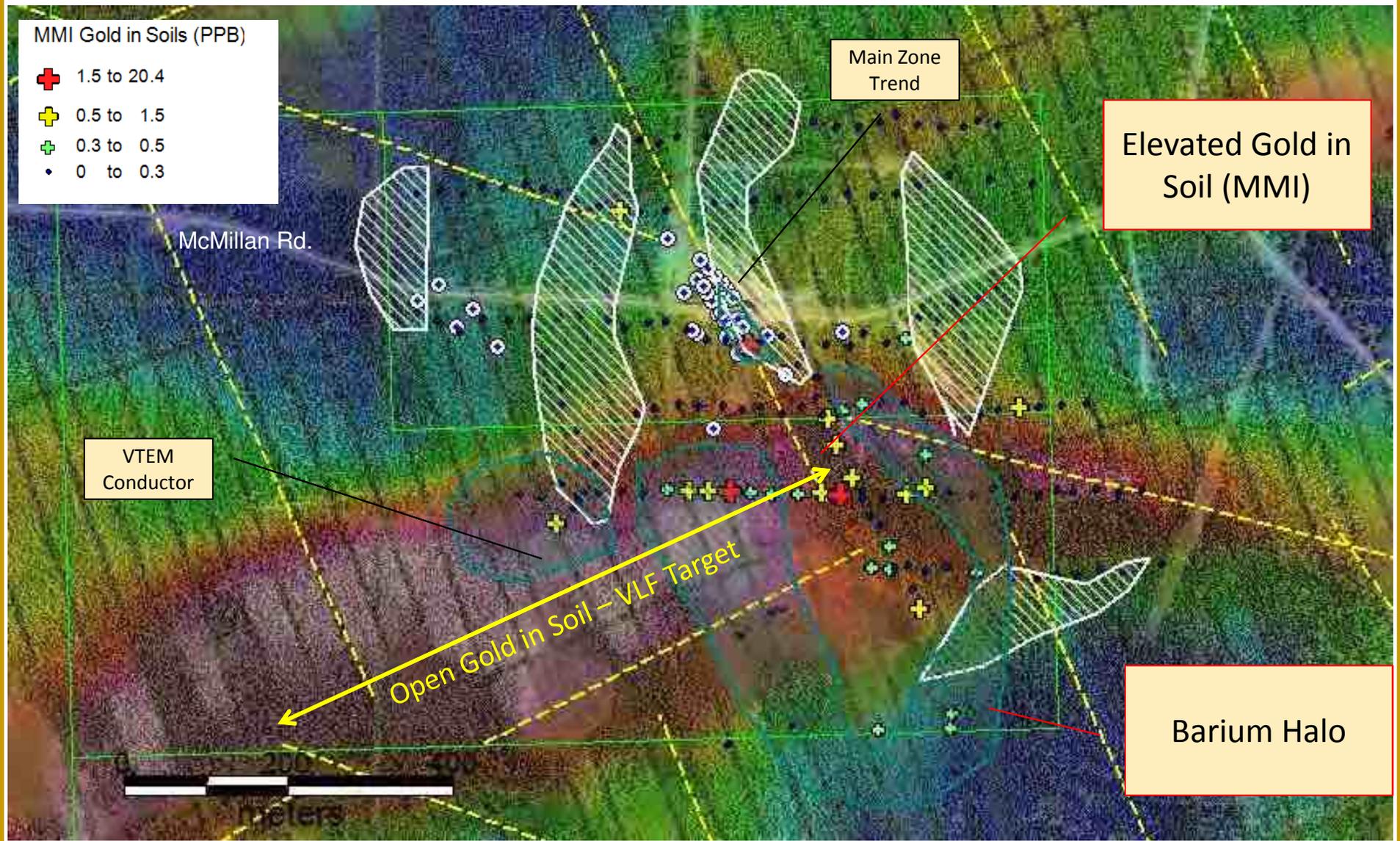


- Inco collected >4,500 soils aqua regia soil samples in area in the 1980's from B-Horizon soils developed over tills.
- Survey was locally effective at highlighting some subcropping veins, and some broad trends of elevated arsenic and gold
- The B-horizon aqua regia results are not considered an effective method to detect and target mineralization under mobile cover
- Property holder Joe Richman completed some MMI sampling over the Main Zone and an area SE the Zone 6A, 6B area in 2015.
- Transition complimented this work in by taking an additional 35 soil samples south of Main Zone in 2018
- This work has highlighted a large redox style gold anomaly to the SE along the Main Zone mineralization trend that the company intends to test by RAB drilling
- Results suggest that MMI could be more widely applied as a cost effective way to highlight and target mineralized zones under cover



Soil Geochemistry - MMI

Well defined Redox Target Southeast of Main Zone



RAB Drilling Program

- Historical diamond drilling plagued by poor core recoveries (*Hole HL14-01 at Zone 6A returned 4.95 g/t Au over 3.0 m, but only 80cm of core recovered*)
- Transition planning to employ the use of a RAB Drill (Reverse Air Blast) configuration to test targets associated with extensions to sub cropping zones of mineralization. Using XRF to analyze drill chips as they come up.
- Same company and similar approach used by PDAC award winner Sean Ryan to explore in the Yukon
- RAB drill will collect continuous chip samples through the saprolitic bedrock interface into zones of oxidized mineralization up to 100 metres into bedrock
- Cost effective way to prospect for depth extensions to known zones at surface and zones of sub-cropping mineralization
- ~20 holes for approximately 650 metres planned to outline near surface of the Main and 6B zones and to test new target areas highlighted by work in 2018



RAB Drilling

Sample Collection Procedures

- Uses compressed air up to 200 psi at 300 cubic feet per second air to drive a 3.5" diameter percussion rotary hammer/carbide bit combination through overburden, the bedrock interface up to 100m into bedrock
- Chip samples/mud/dust cuttings are back-flushed up the hole through the casin into a cyclone /bag/sample splitting apparatus
- Between each 5' run, the hole is flushed out with air
- Each run collects ~5 gallon pail - ~35 kg of sample which is split into the following fractions:
 - 20% - 5 to 7 kg goes into a plastic sample bag to be shipped to the lab
 - A 200g rep sample is put into a receptacle in a chip tray (like a core box) for future reference
 - A small sample is collected for analysis with a portable XRF
 - The other 80% can either be stored or dumped on site.
 - Additional splits can be sent in for other studies/for duplicates
- All samples will be analysed with the XRF as they come up. It is hopeful that the XRF will assist with identifying changes in rock type, presence of mineralization in a way that can prioritize sampling



Exploration Targeting Considerations



- Gold associated with pyritic sulphides associated with late structures.
- Hosted by different rock types – best showings seem to be located near contacts
- Gold seems associated with both mag highs and lows, High sulphidation systems can be conductive



- Main Zone trend remains open at depths below 30 metres
- Work in 2018 highlights a coincident soil geochem/geophysical target along trend from the Main Zone structure (best showing on property)
- Coincident mag-low, VTEM targets located within potential source area for large gold and till anomaly highlighted in the SE portion of the property – trending back towards the McMillan Road area
- Additional MMI, Ground IP, RAB drilling would be costs effective tools to further evaluate targets

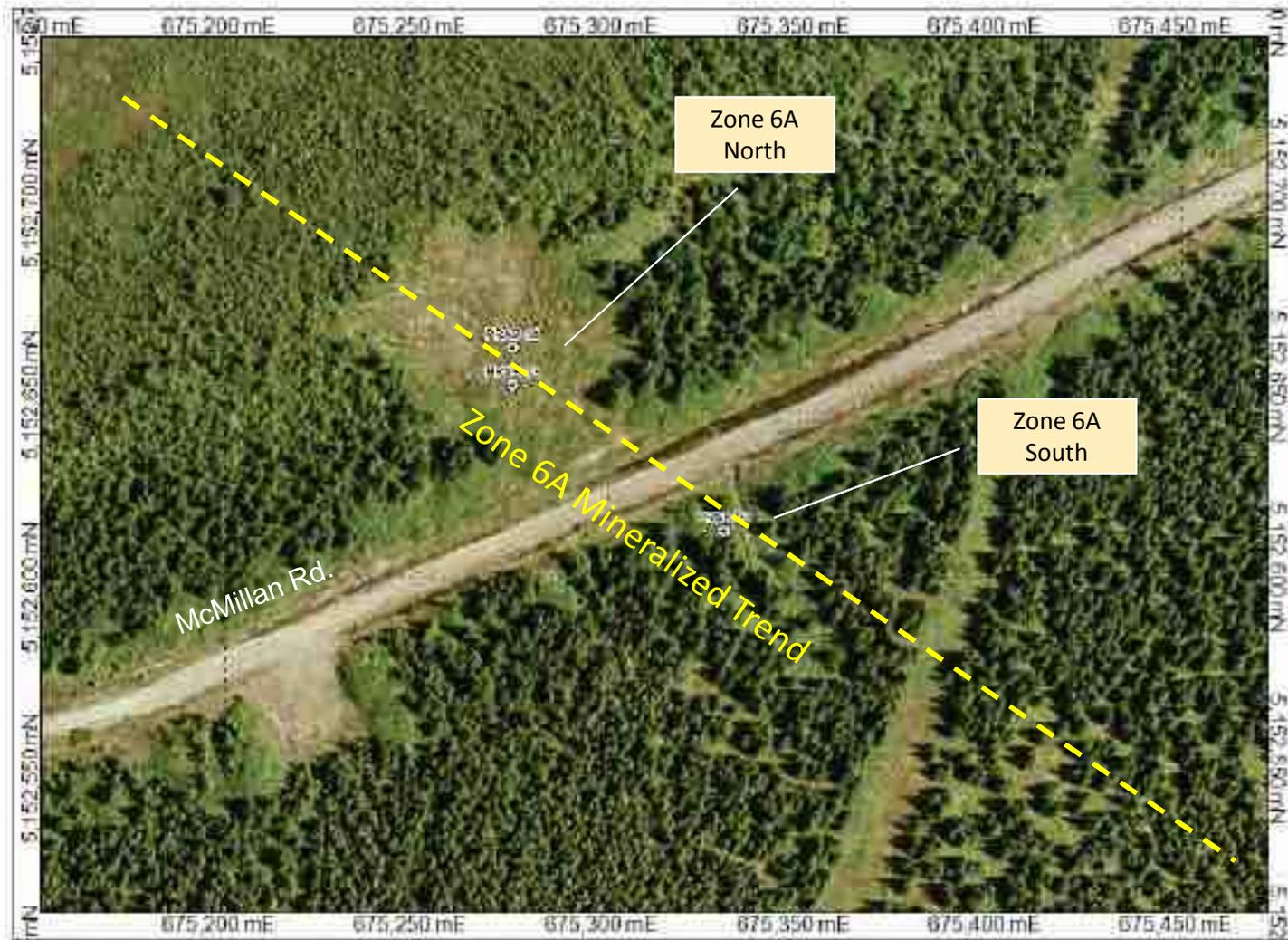
RAB Drilling Program

Proposed hole locations (Area 1- Main Zone)



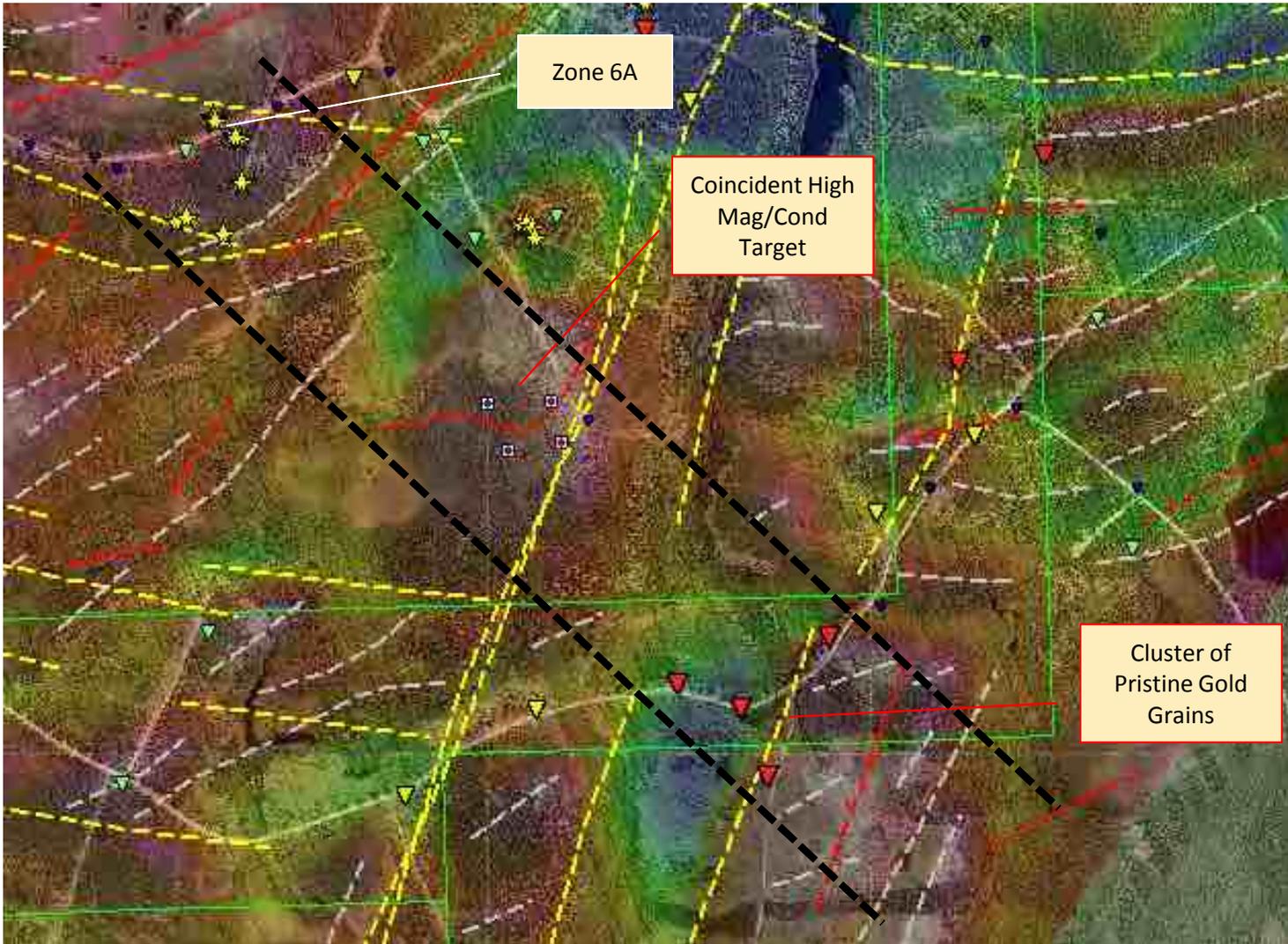
RAB Drilling Program

Proposed hole locations (Area 2- Zone 6A)



RAB Drilling Program

Proposed hole locations (Area 3)



RAB Drilling Program

Proposed hole locations (Area 3)





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