

Eskay Mining

Unlocking District-Scale Potential

Dr. John DeDecker
VP of Exploration



The data contained herein is provided for information purposes only. Certain information has been compiled from sources believed to be reliable. No information in this presentation is to be construed as an offer to buy or sell securities.

Some statements contained in this presentation are forward-looking and, therefore, involve uncertainties or risks that could cause actual results to differ materially. Such forward-looking statements include among other things, comments regarding mining and milling operations, mineral resource statements and exploration program performance. They may also include statements with respect to Eskay Mining's mineral discoveries, plans, outlook and business strategy. The words "may", "would", "could", "should", "will", "likely", "expect," "anticipate," "intend", "estimate", "plan", "forecast", "project" and "believe" or other similar words and phrases are intended to identify forward-looking information.

Factors that could cause actual results to differ materially include, but are not limited to, metal price volatility, economic and political events affecting metal supply and demand, fluctuations in mineralization grade, geological, technical, mining or processing problems, exploration programs and future results of exploration programs, future profitability and production, the ability to raise sufficient capital to fund exploration, litigation, legislative, environmental and other judicial, regulatory, political and competitive developments; technological or operational difficulties or inability to obtain permits encountered in connection with exploration activities; and labour relations matters.

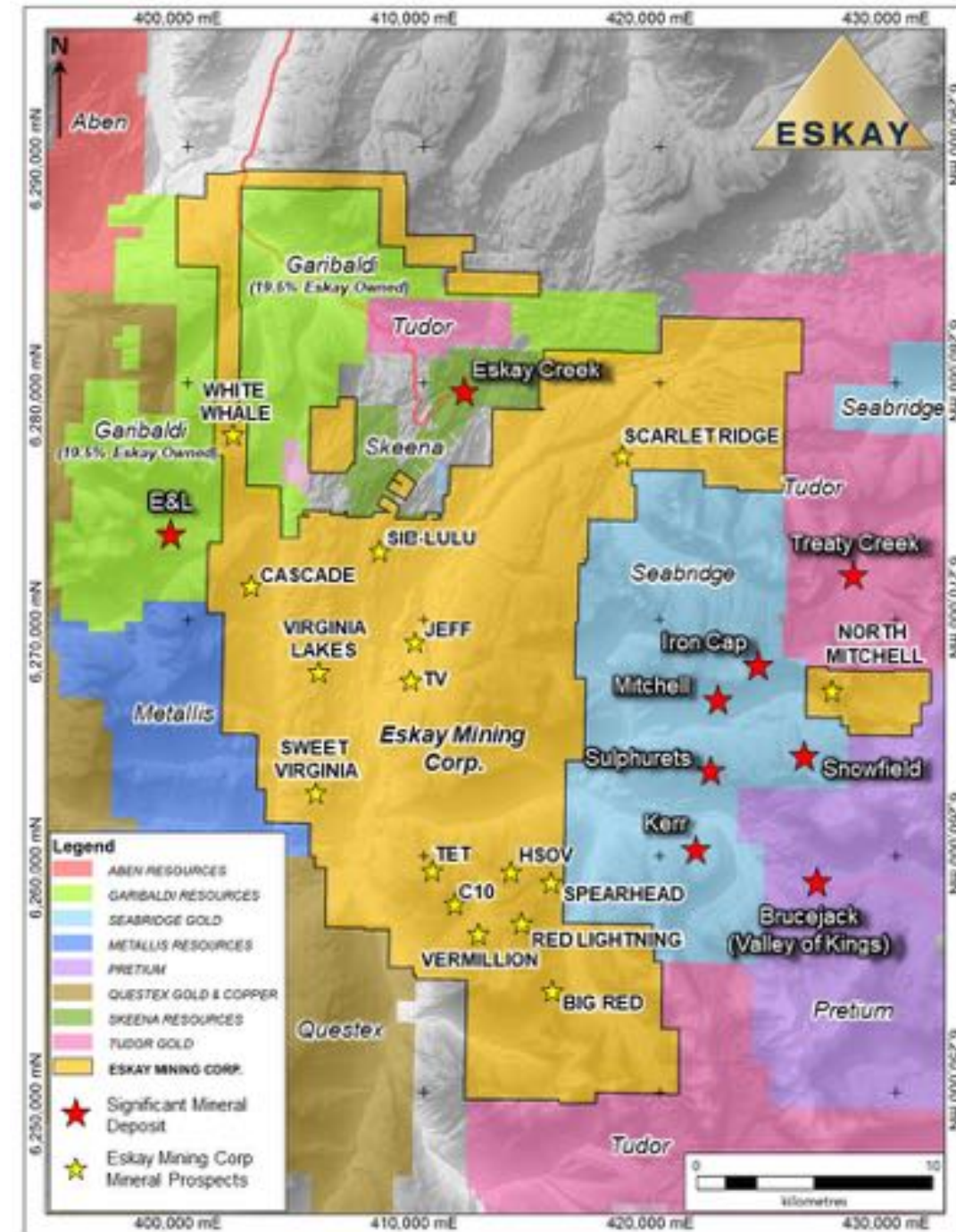
This list is not exhaustive of the factors that may affect our forward-looking information. These and other factors should be considered carefully and readers should not place undue reliance on such forward-looking information. The Company disclaims any intention or obligation to update or revise forward-looking information, whether as a result of new information, future events or otherwise. The reader agrees to hold the Company and its subsidiaries, and their respective officers, employees and agents harmless against any claims for damages or cost or any loss of any kind arising out of the access to or use of this presentation or any information contained in or obtained through this presentation.

Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Resources: These tables use the terms "Measured", "Indicated" and "Inferred" Resources. United States investors are advised that while such terms are recognized and required by Canadian regulations, the United States Securities and Exchange Commission does not recognize them. "Inferred Mineral Resources" have a great amount of uncertainty as to their existence, and as to their economic and legal feasibility. It cannot be assumed that all or any part of an Inferred Mineral Resource will ever be upgraded to a higher category. Under Canadian rules, estimates of Inferred Mineral Resources may not form the basis of feasibility or other economic studies. **United States investors are cautioned not to assume that all or any part of Measured or Indicated Mineral Resources will ever be converted into Mineral Reserves. United States investors are also cautioned not to assume that all or any part of an Inferred Mineral Resource exists, or is economically or legally mineable.**

Quinton Hennigh Ph.D., P.Geo. is a qualified person as defined by NI43-101 and has reviewed the contents of this presentation.

Eskay Mining Property

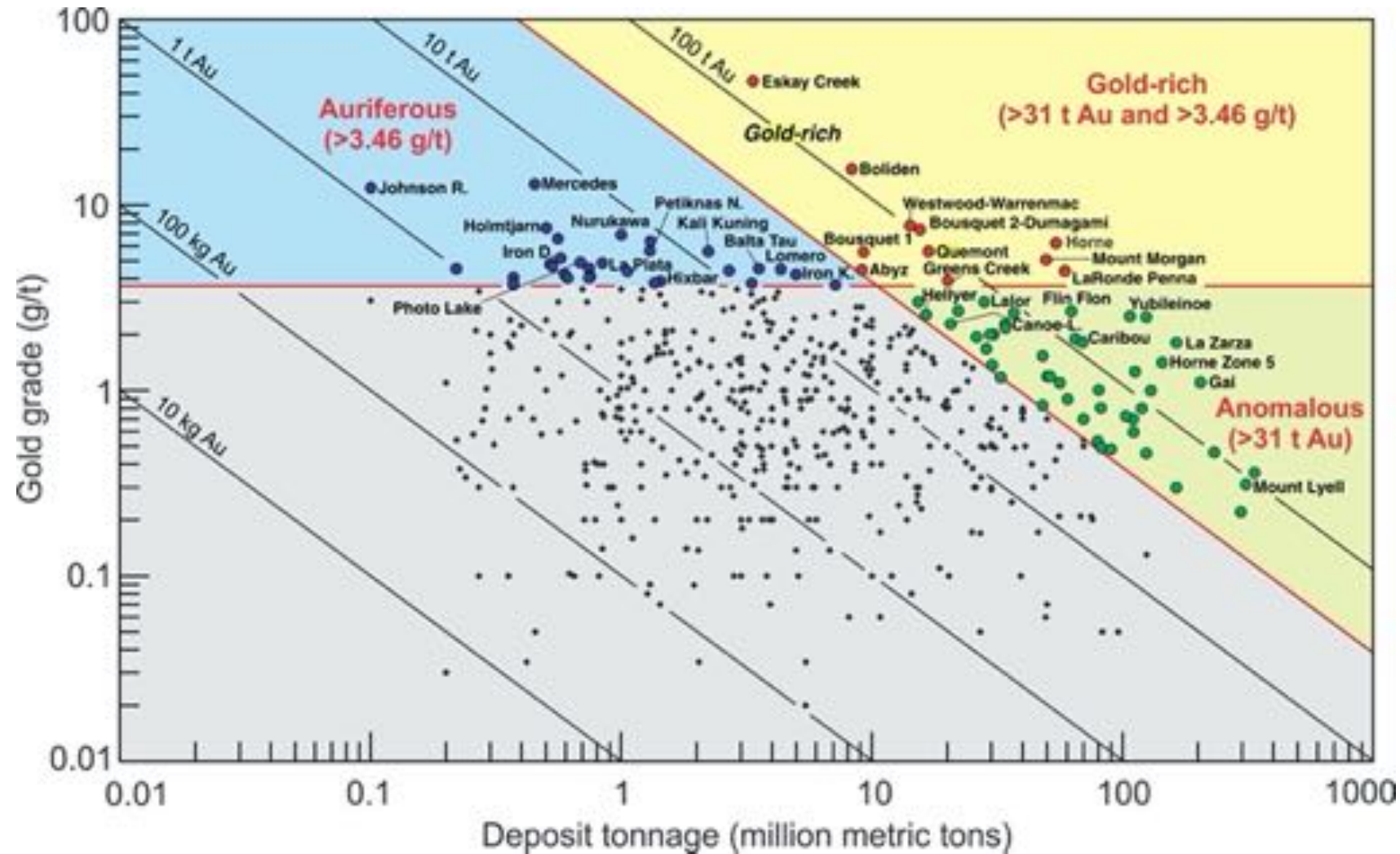
- In the heart of the Golden Triangle
- SIB-Lulu
 - Likely continuation of world-class Eskay Creek VMS system
- TV-Jeff
 - A trend of Au-Ag enriched VMS systems on the east limb of the Eskay anticline
- Corey showings (C10, GFJ, Red Lightning, Tet, Spearhead, HSOV, Big Red, Sweet Virginia, Virginia Lakes, Cascade)
- North Mitchell
 - Au showing that may be similar to the Brucejack (epithermal?) deposit



Overview of Research

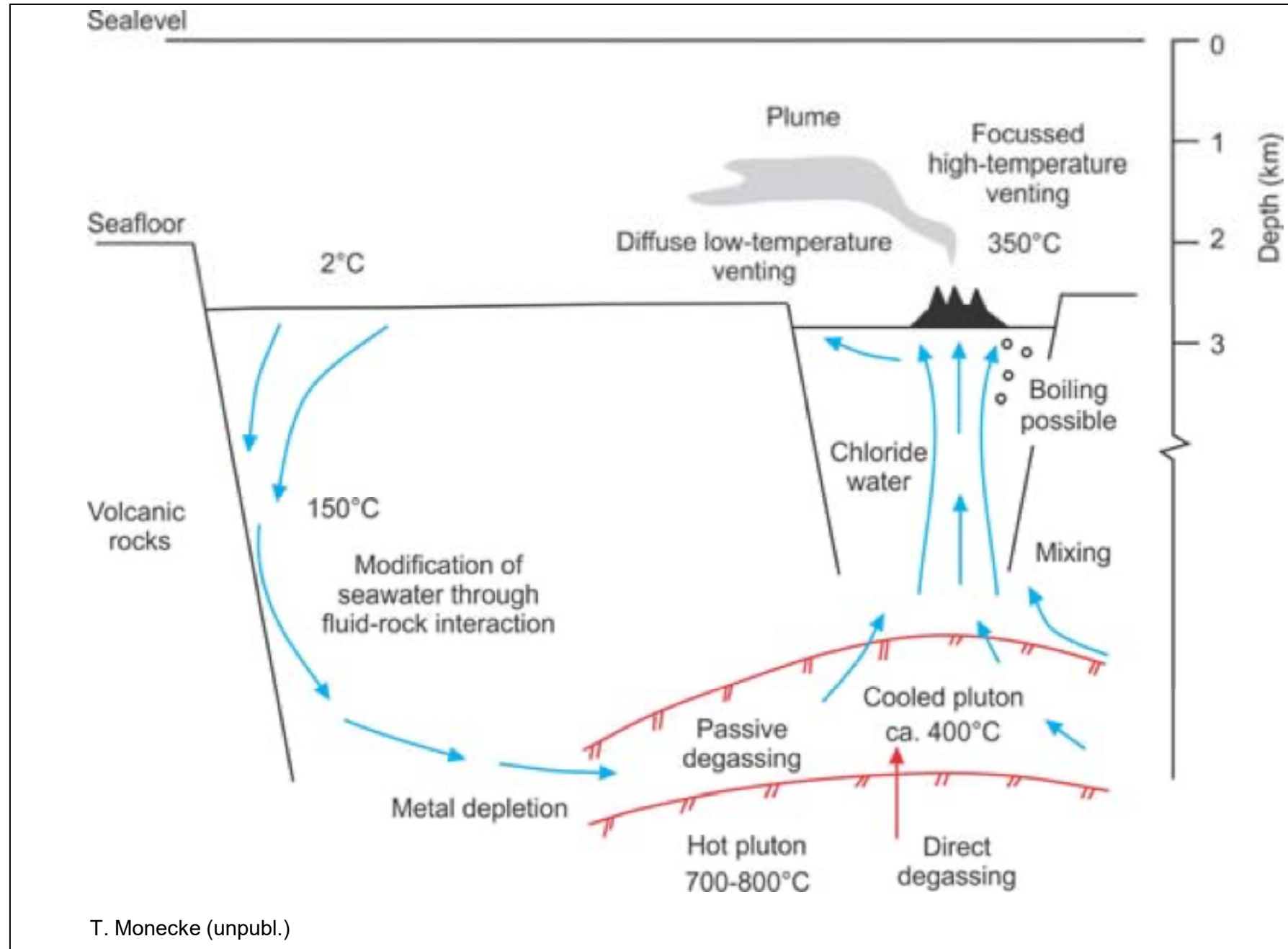
Mercier-Langevin et al. (2011)

- Eskay Creek is a world-class high-grade intermediate tonnage VMS deposit
- Is there a second Eskay Creek?
- Application of lithogeochemistry to existing bulk rock compositional dataset
- Utilization of VMS-related alteration as a vector
- Leapfrog modelling of of SIB and Corey properties
 - Utilization of 3-D model to redefine geology and alteration haloes in order to guide drilling program



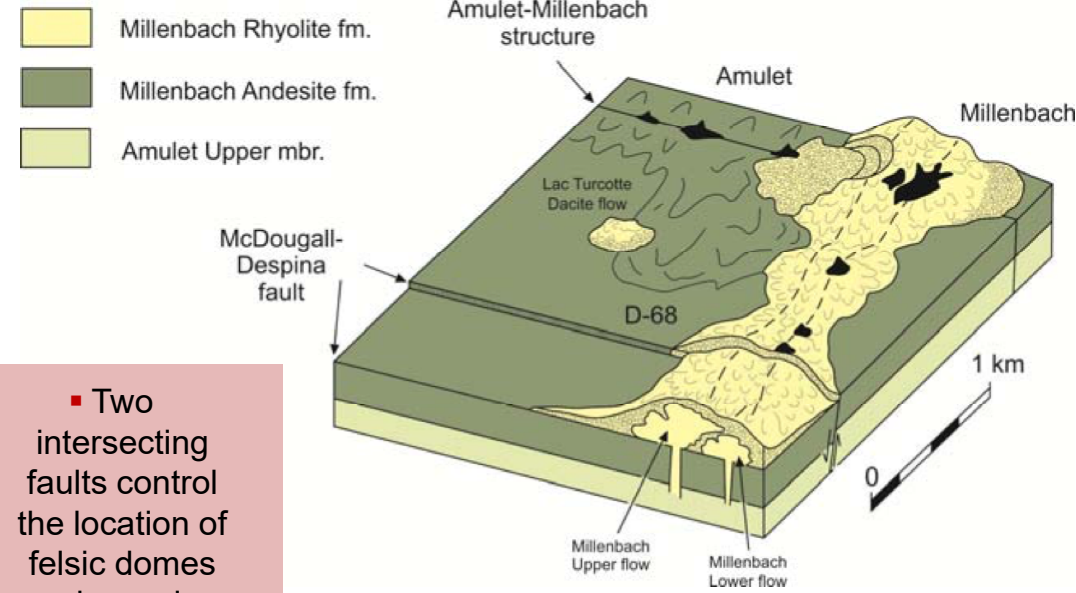
Volcanogenic Massive Sulfide Deposits

- Occur in clusters along syn-volcanic extensional structures
- Convection of seawater over igneous intrusion
 - Convecting seawater interacts with volcanic rock package and leaches metals
 - Upflow zone above pluton with sulfide stringers and intense hydrothermal alteration
 - Sulfides precipitate from hydrothermal venting on seafloor (black smokers)
 - Forms mounds of massive sulfide minerals



Volcanogenic Massive Sulfide Deposits

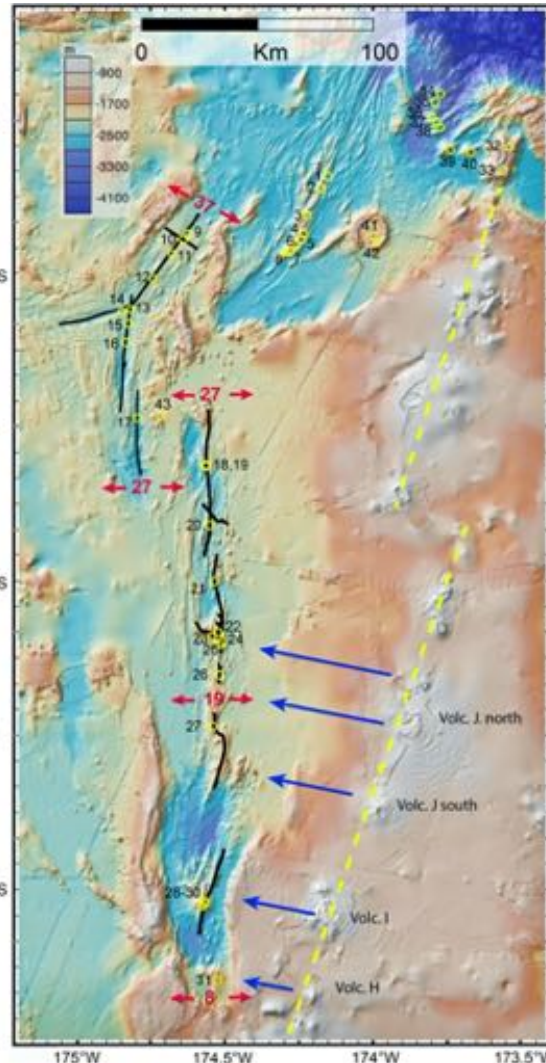
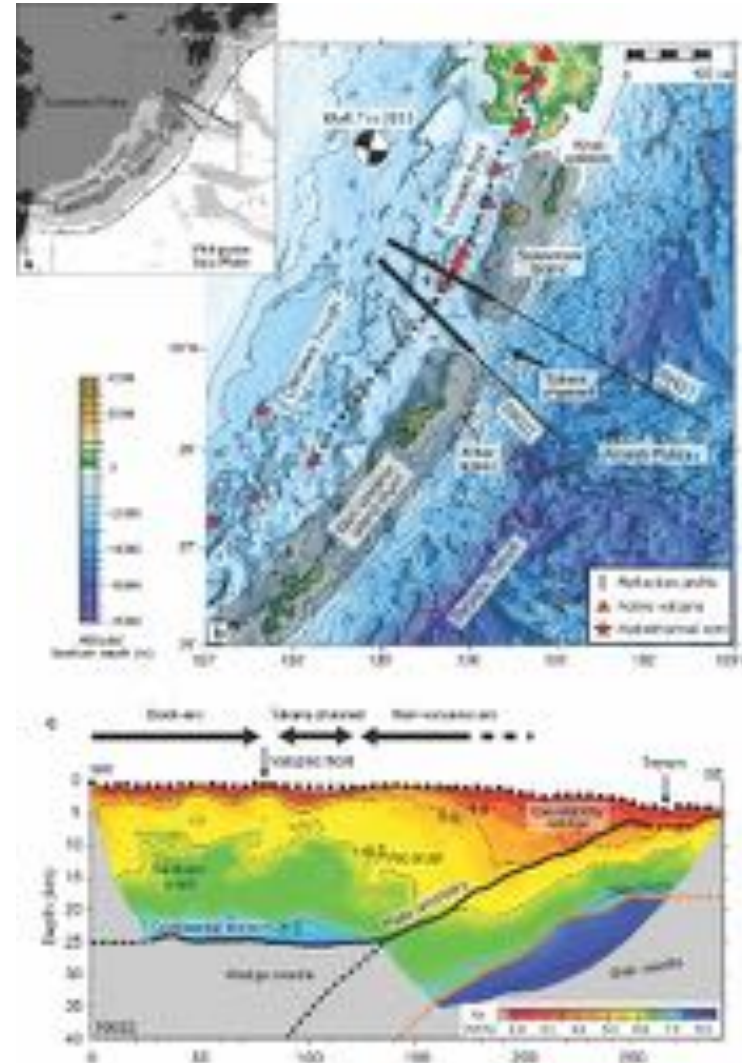
- Occur in clusters along syn-volcanic extensional structures
- Numerous examples of old and actively-forming VMS systems



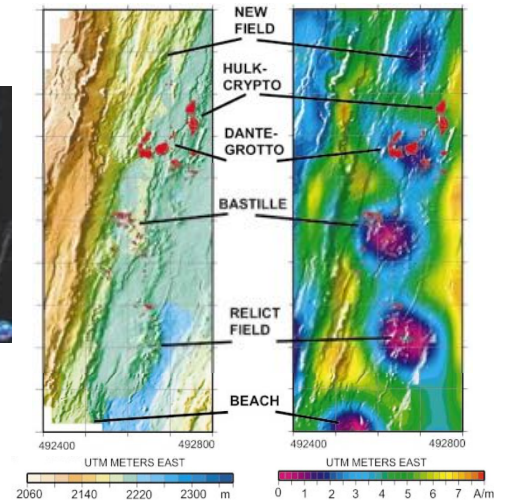
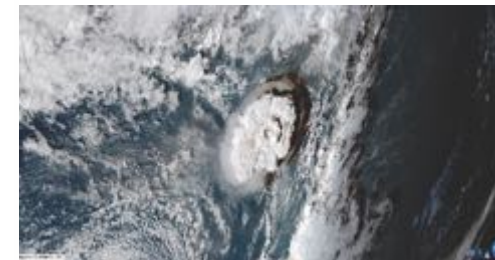
Two intersecting faults control the location of felsic domes and massive sulfide deposits

Monecke et al. (2017)

Setting of the Archean (ca. 2698 Ma) Millenbach VMS deposit, Quebec



Lau Basin hydrothermal vent field



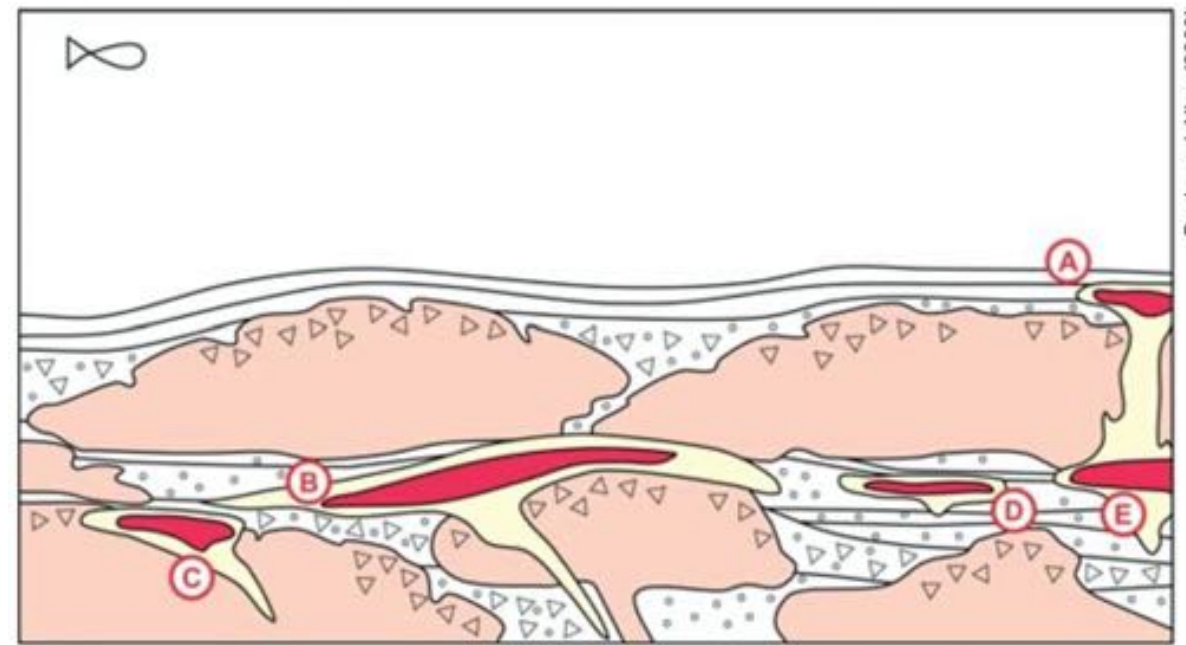
Tivey and Johnson (2002)

Juan de Fuca hydrothermal vent field

Volcanogenic Massive Sulfide Deposits

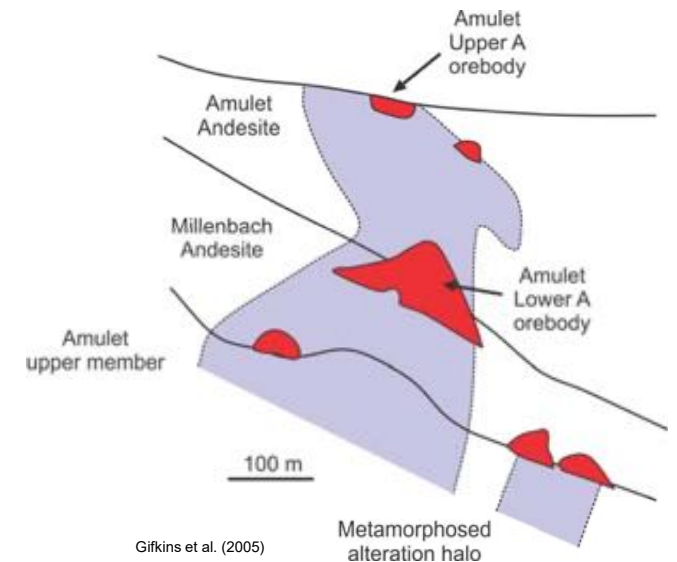
Sub-seafloor Replacement and Stacked Deposits

- The largest VMS deposits are formed by subseafloor replacement
 - Diffuse hydrothermal fluid flow through volcanic or sulfide chimney debris pile effectively “filters” metals out of solution
 - Preferable to “exhalative” hydrothermal venting into the seawater
 - Occurs 10-200 m below seafloor
- Stacked VMS deposits
 - Sulfide deposition occurs at or within 200 m of the seafloor
 - The seafloor position changes because the old seafloor is buried by lava
 - Re-establishment of the hydrothermal system during volcanic quiescence produces another sulfide body proximal to the new seafloor position
 - This process can be repeated several times



Doyle and Allen (2003)

- A = Seafloor accumulation**
- B = Synchronous seafloor/subseafloor accumulation + burial by lava**
- C = Replacement within lava**
- D = Replacement of volcaniclastic material**
- E = Seafloor accumulation + burial by lava**

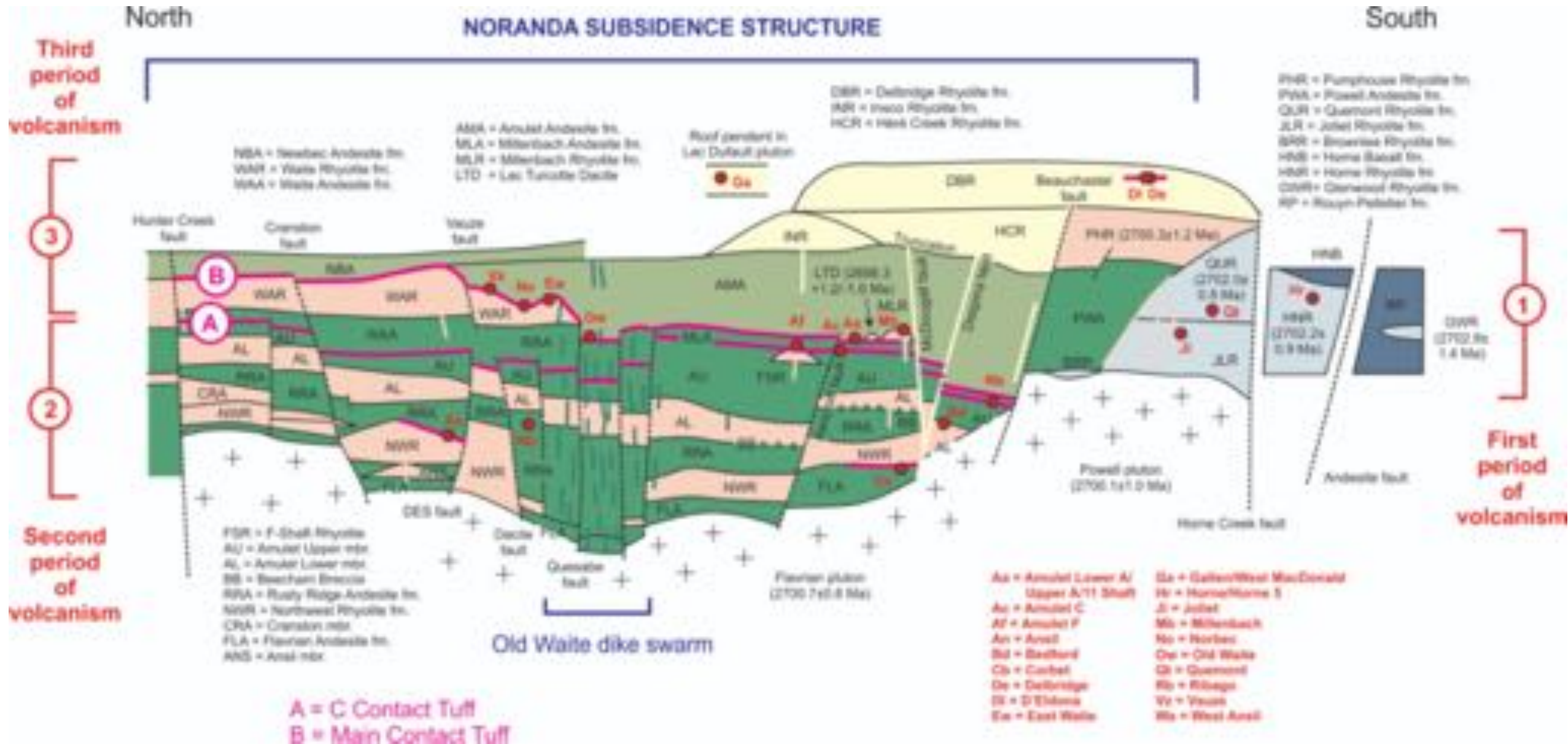


Gifkins et al. (2005)

Metamorphosed alteration halo

Volcanogenic Massive Sulfide Deposits

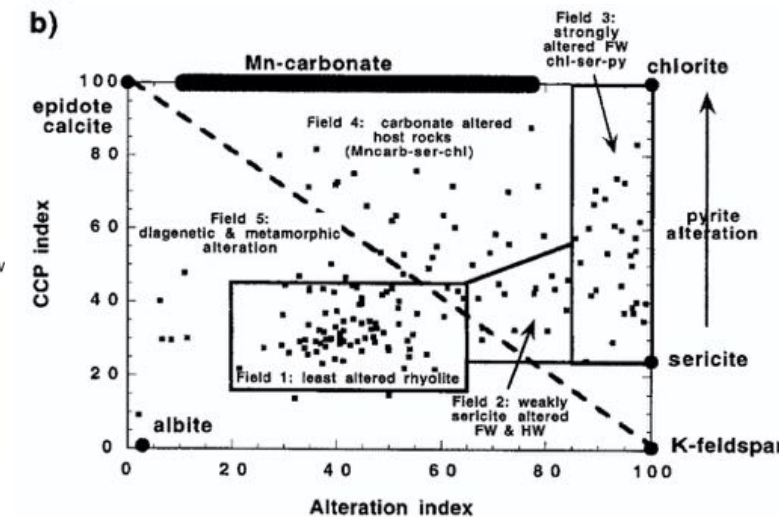
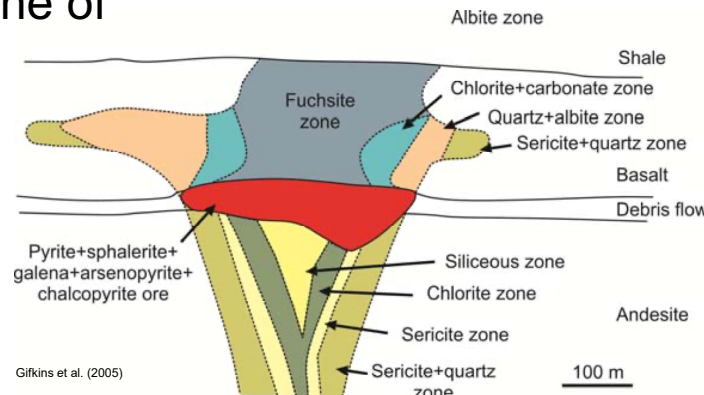
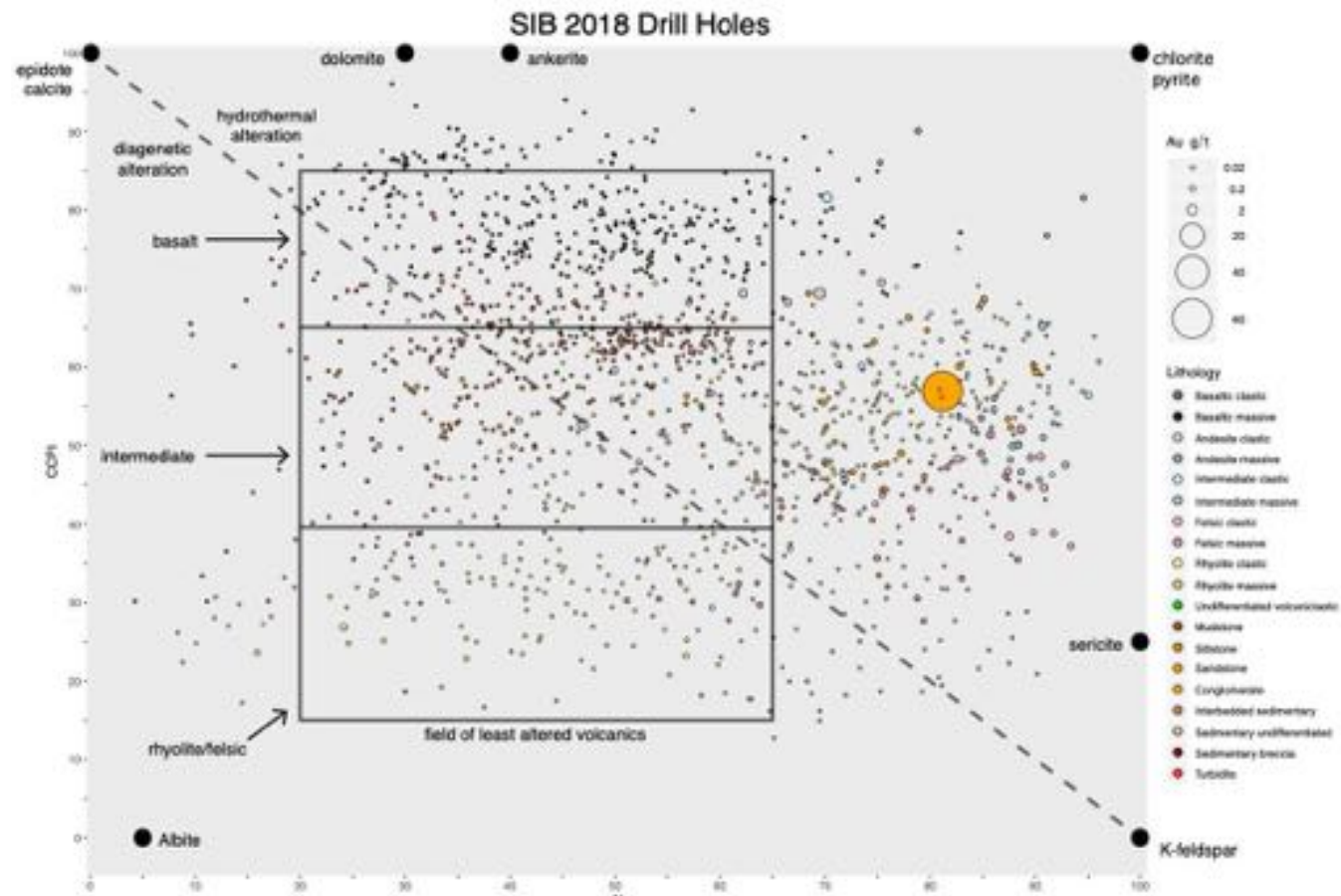
Stacked VMS Deposits: Noranda Camp



Volcanogenic Massive Sulfide Deposits: Quantifying Alteration

- Quantifying VMS alteration has been well-described by Large et al. (2001)
- Alteration index (AI)
 - $AI = 100(K_2O + MgO) / (K_2O + MgO + Na_2O + CaO)$
 - Sericitic alteration of albite distal to VMS system
 - Chlorite alteration of sericite in feeder zones to VMS system
- Carbonate-Chlorite-Pyrite index (CCPI)
 - $CCPI = 100(MgO + FeO) / (MgO + FeO + Na_2O + K_2O)$
 - Alteration associated with ore-proximal zone of VMS system

- Alteration box plot
 - Combination of AI and CCPI

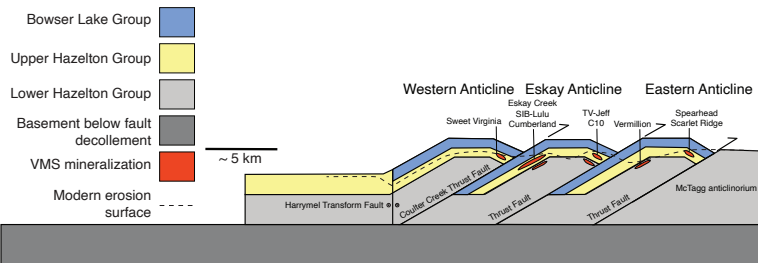
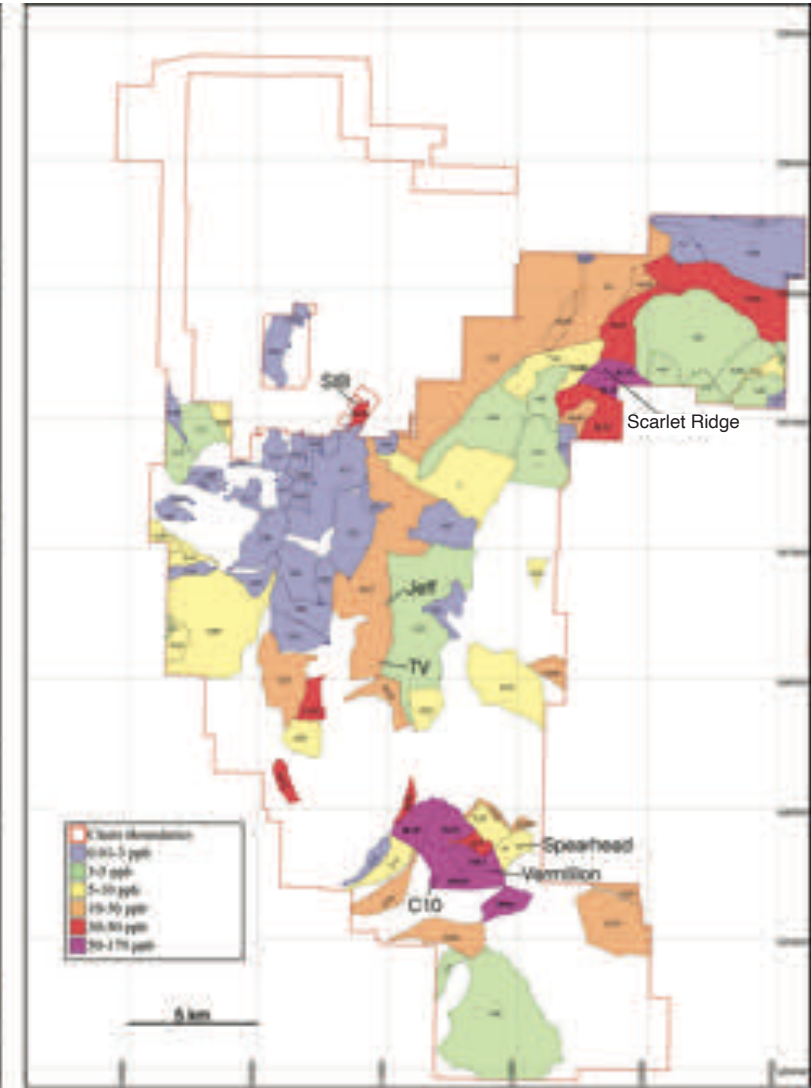
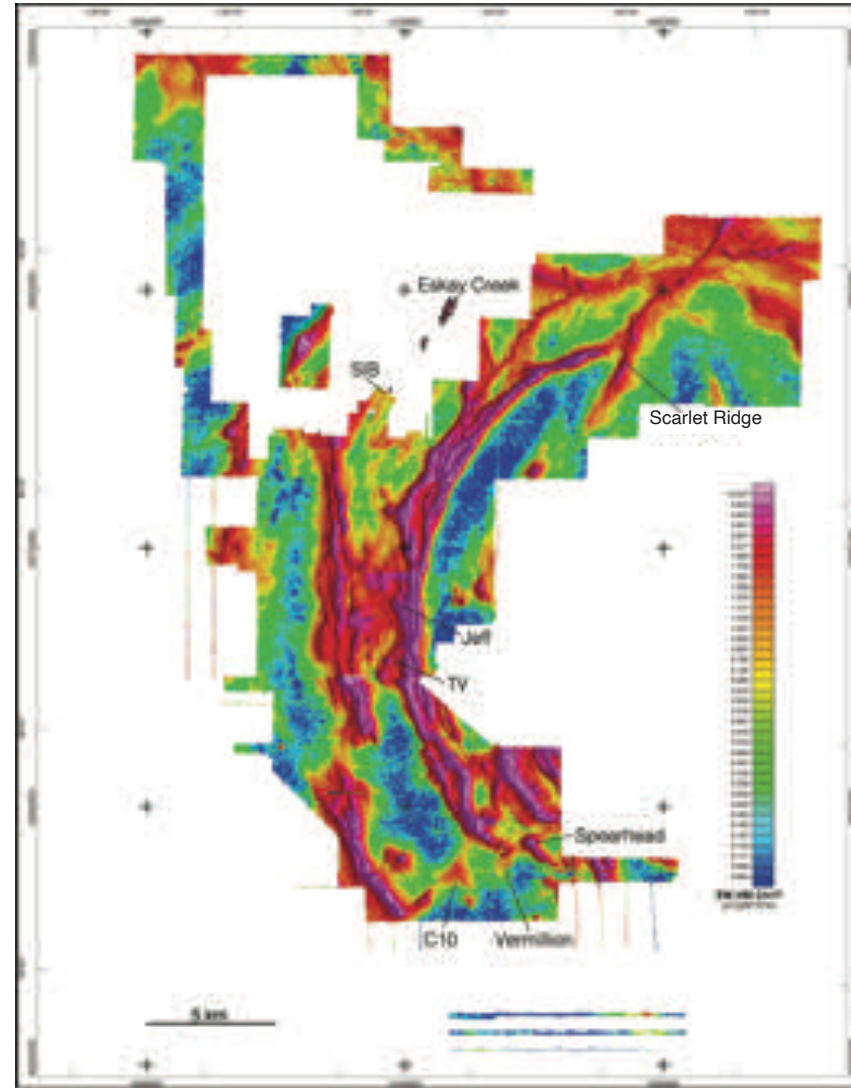


BLEG Sampling

- Bulk Leach Extractable Gold
 - Sampling of clay fraction from stream sediments
 - Analyze for Au adsorbed onto clay minerals
 - Also analyze for trace elements correlated with Au

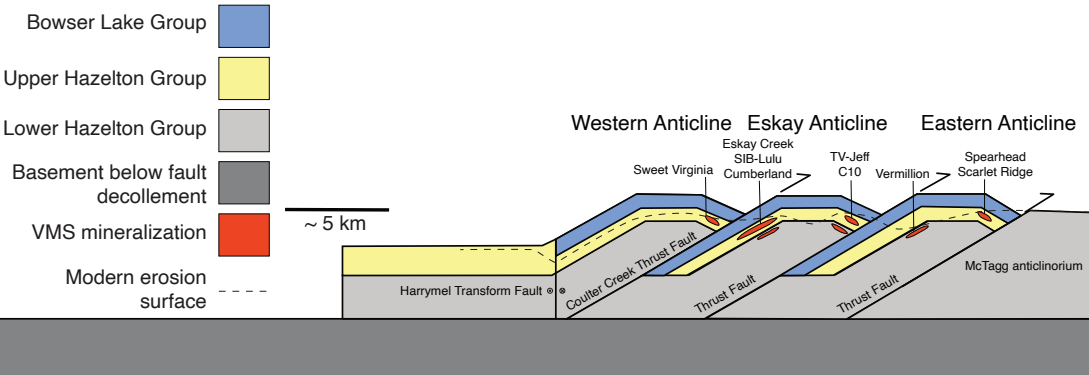
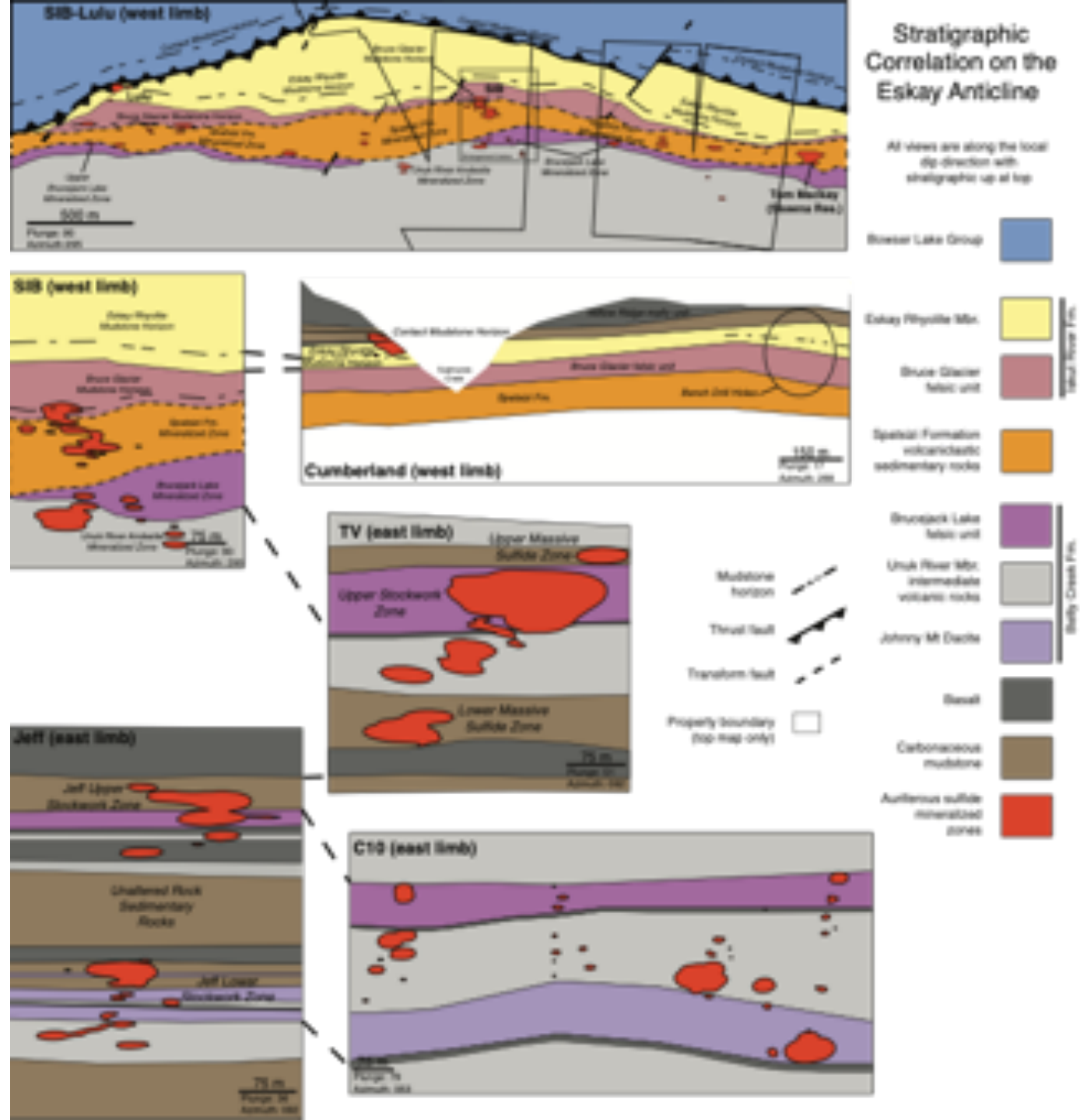
- C10, Vermillion, and Red Lightning area has several very strong Au anomalies

- Additional very strong Au anomalies in the northeastern part of the Property



Moving beyond the Contact Mudstone

- Eskay Creek hosts the newly-discovered stratiform mineralization hosted by the Lower Mudstone and Even Lower Mudstone (ELM) zones
- These strata continue onto Eskay Mining Corp claims
- Additional stratiform mineralized zones have been identified by Eskay Mining Corp.

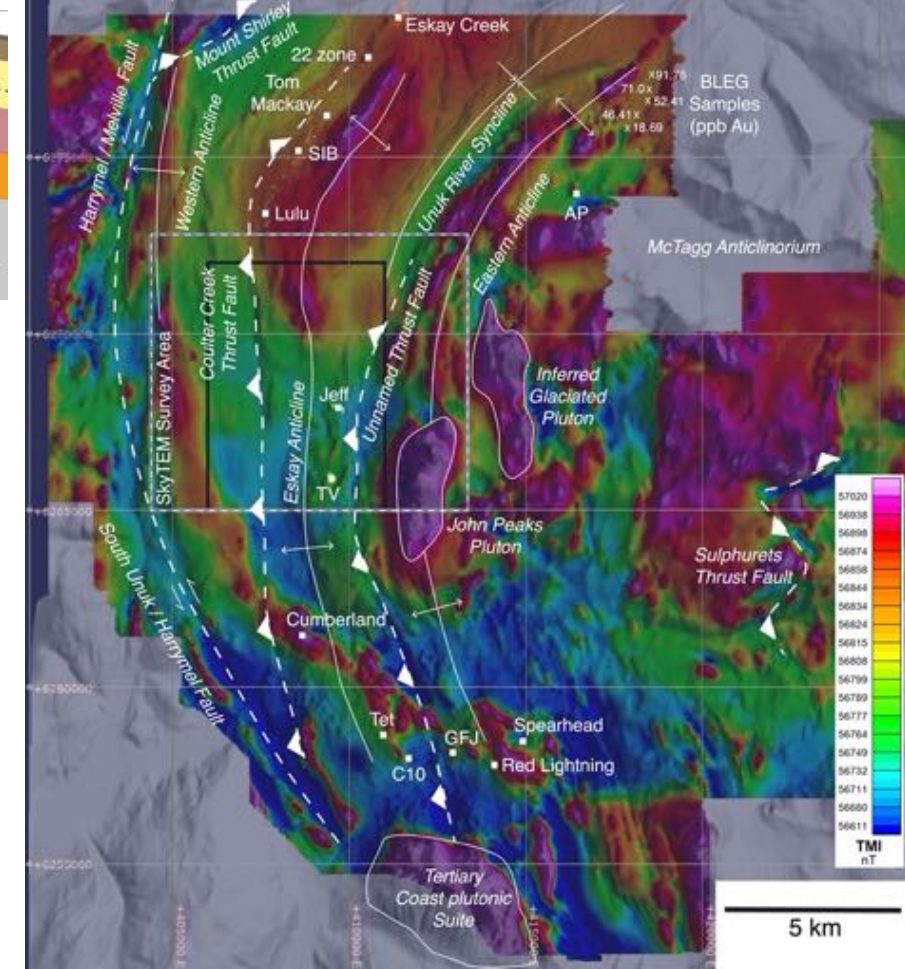
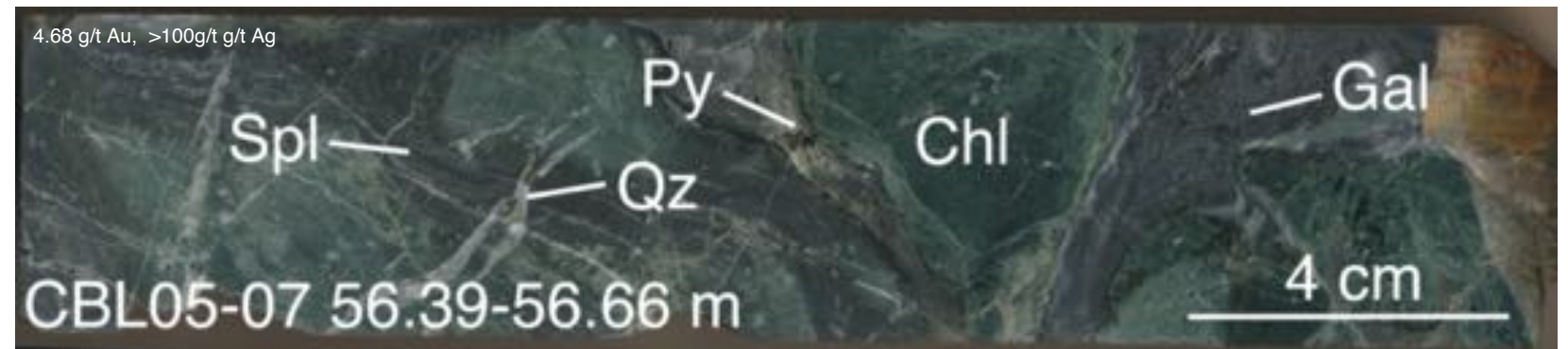
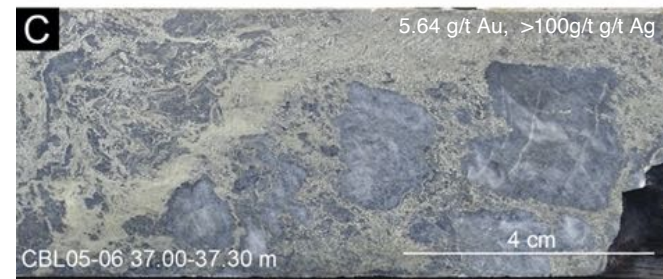
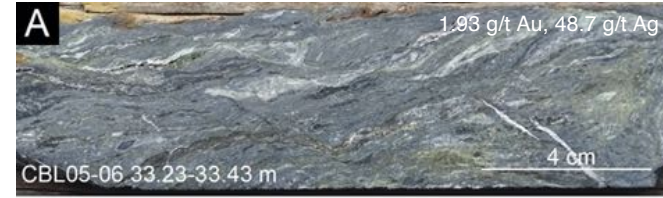
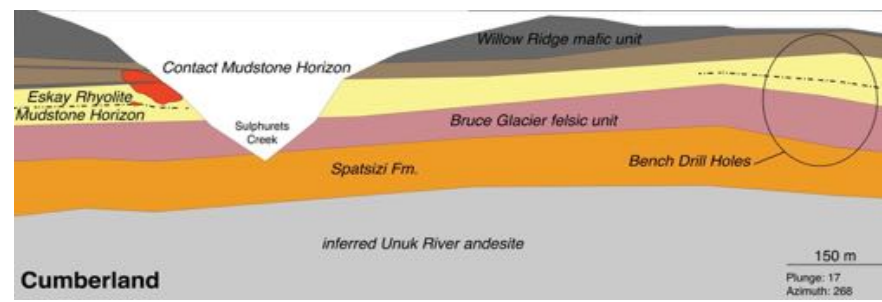


Proposed Sequence of Tectonic Events at SIB

- 1) Arc volcanism related to subduction (Betty Creek Fm. Unuk River andesite)
- 2) Slab rollback induces back-arc rifting and formation of submarine basin (e.g. the dacite units in the Betty Creek Fm. and the rhyolite flows in the Spatsizi Fm.)
- 3) Inception of rift-related volcanism (Iskut River Fm. Bruce Glacier felsic unit)
- 4) Bimodal rift-related volcanism
 - Initially dominated by Iskut River Fm. Eskay rhyolite with minor basalt
 - Period of volcanic quiescence marked by seafloor hydrothermal venting and deposition of contact mudstone
 - Basalt becomes dominant volcanic rock (Iskut River Fm. Willow Ridge mafic unit)
- 5) Termination of volcanism and deposition of Bowser Lake Group sedimentary rocks
- 6) Continued accretion of terranes to western continental margin deforms rocks described above
 - Eskay anticline with attitude of contacts steepening to the south
- 7) Thrust faulting displaces Bowser Lake Group over Hazelton Group volcanic rocks
 - Thrusting of younger rocks over older rocks possible if folding occurs first
 - The western limb of the Eskay anticline meets this condition
 - Consequently the favorable Au-bearing stratigraphy continues under the Bowser Lake Group

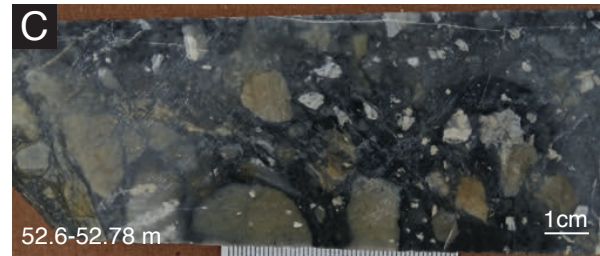
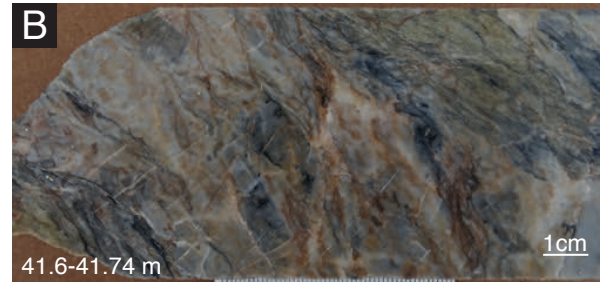
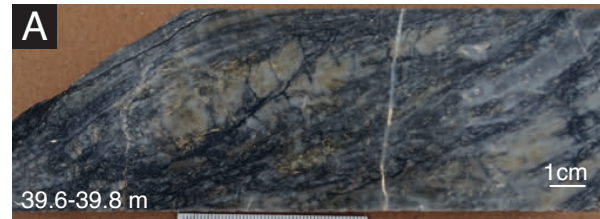
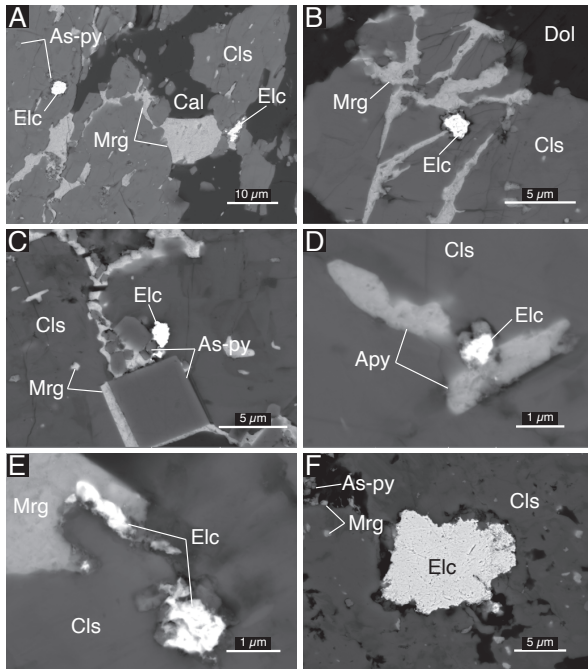
Cumberland: Contact Mudstone-hosted Mineralization

- On west limb of Eskay anticline
- Historic Au intercepts at Contact Mudstone horizon
 - Au grades up to 10.97 g/t
- Portion of known deposit eroded into Sulphurets Creek
- Indicates mineralized Contact Mudstone-horizon continues at least 15 km along strike from Eskay Creek

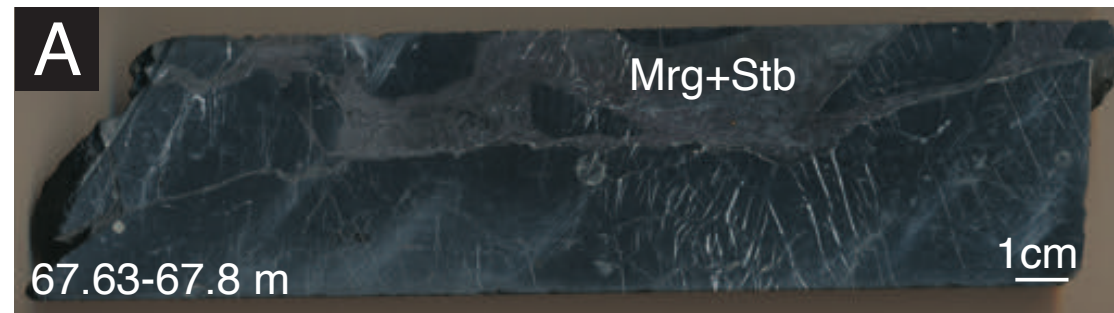


Lulu Zone: Eskay Rhyolite-hosted Mineralization

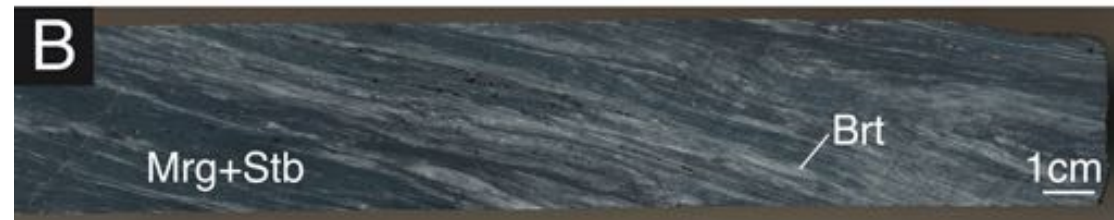
- Au and Ag is associated with stratiform mudstone horizons
- Highest-grade intercepts (up to 85 g/t Au) are within massive and semi-massive sulfosalt-sulfide bodies hosted by peperitic rhyolite



02-113



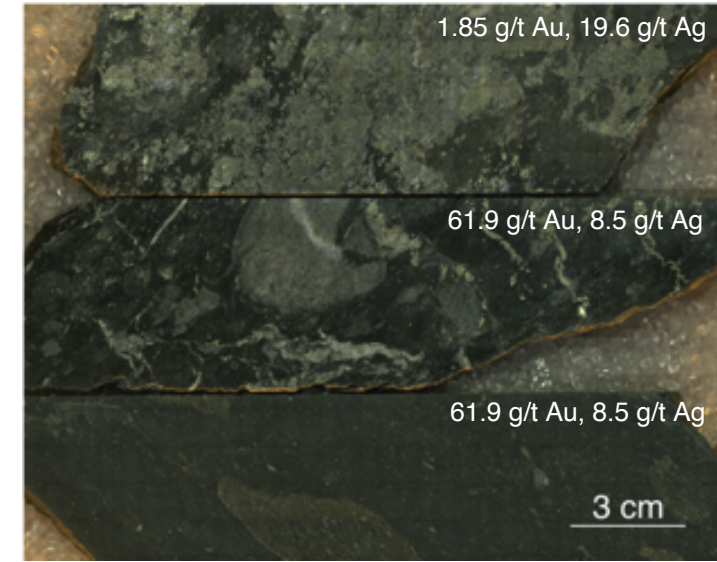
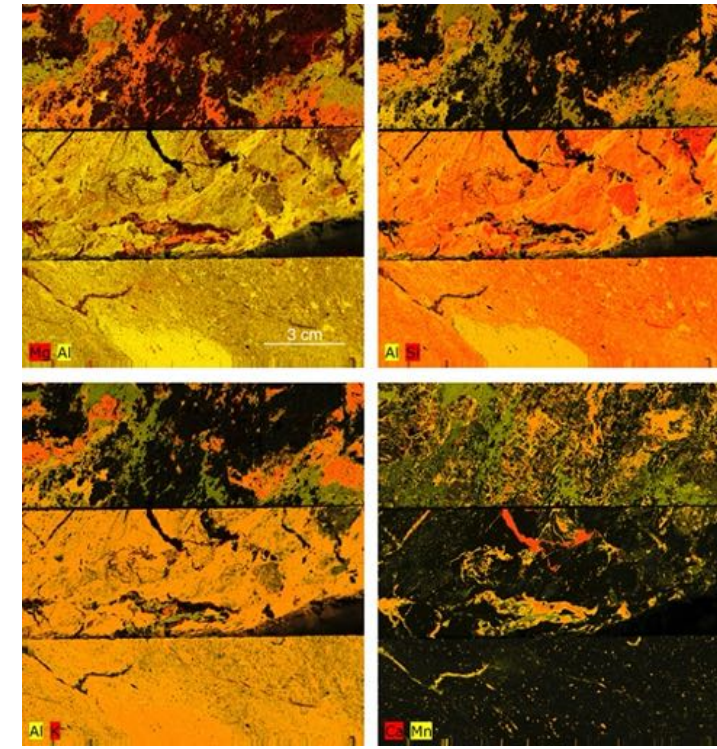
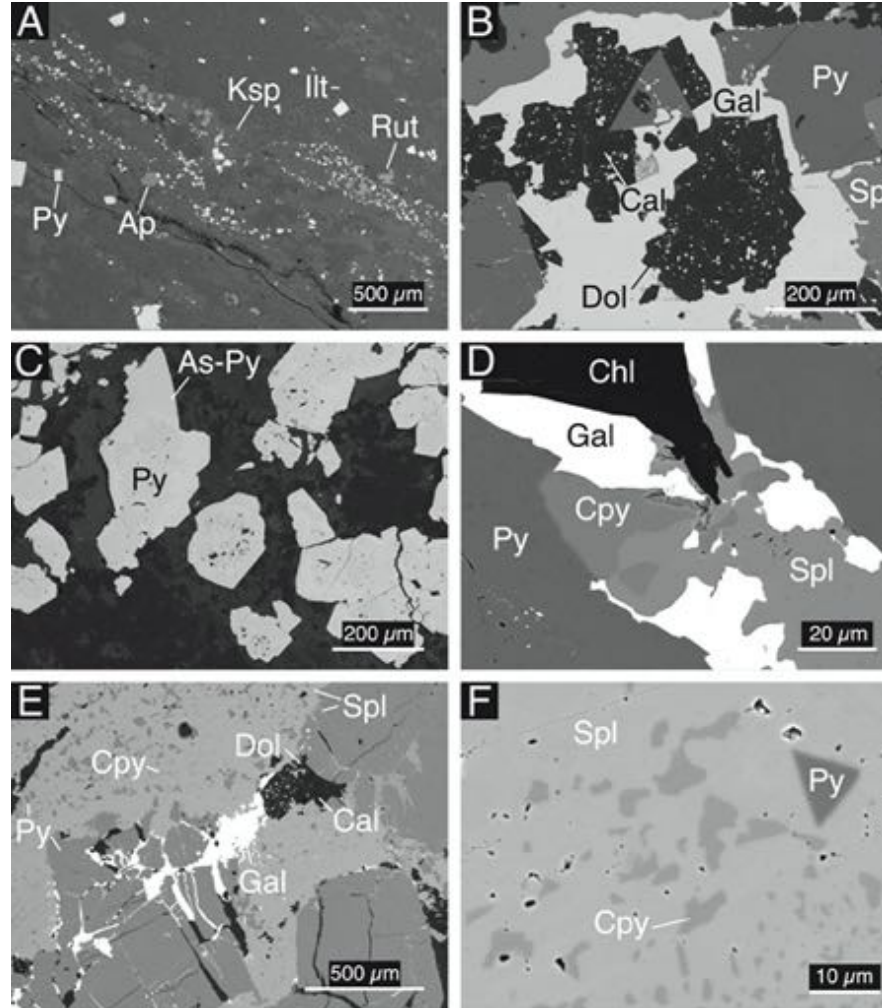
02-113



91-85

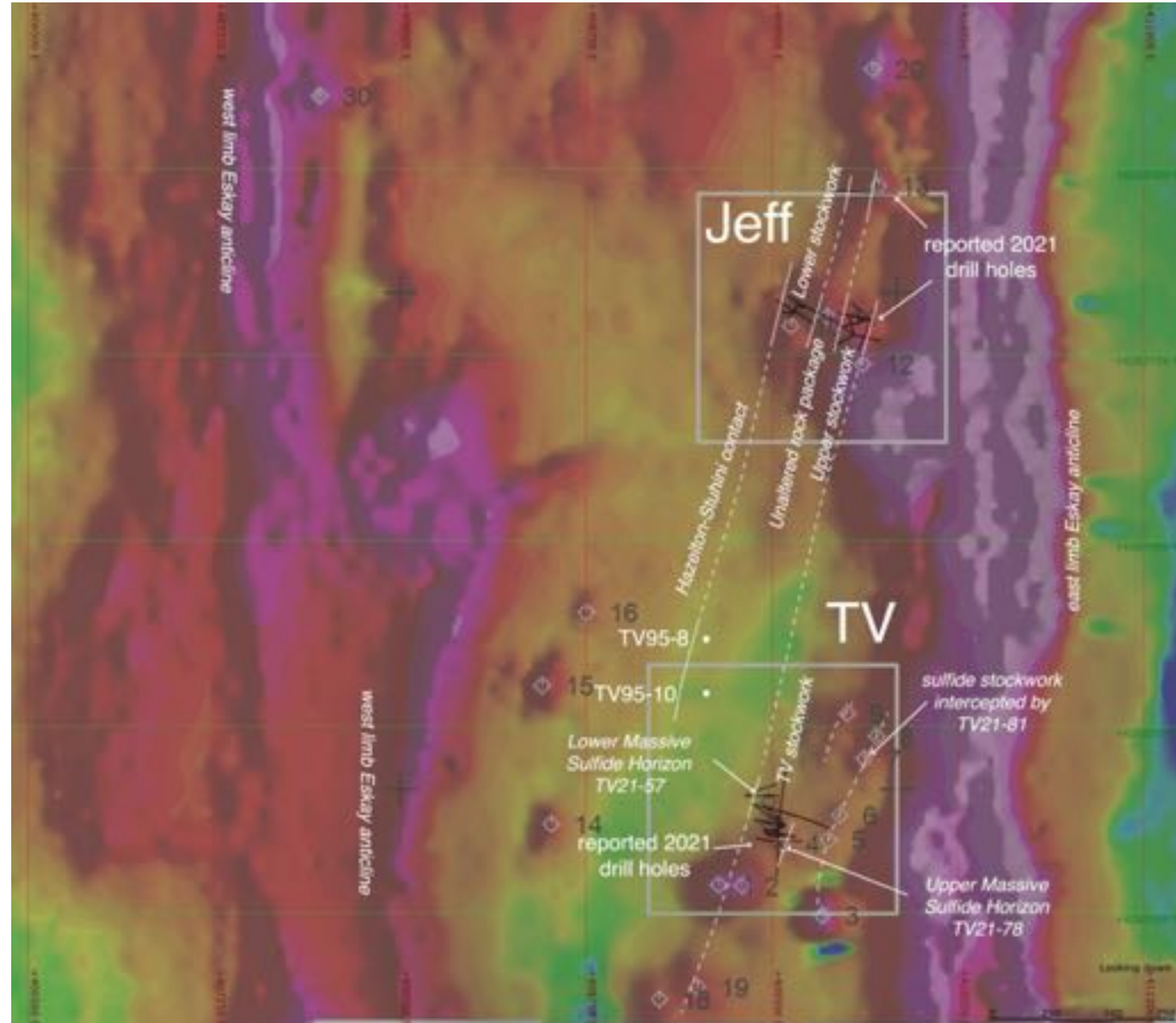
SIB: Spatsizi Formation-hosted Mineralization EK18-160

- Hosted by Spatsizi Fm. peperitic rhyolite
 - 61.9 g/t from 203.1-204.1 m
- Primary volcanoclastic pyrite, apatite, and rutile
 - Further investigations needed to identify Au host mineral
- VMS-related sulfides are associated with K-feldspar, illite, chlorite, Mn-calcite, and dolomite alteration



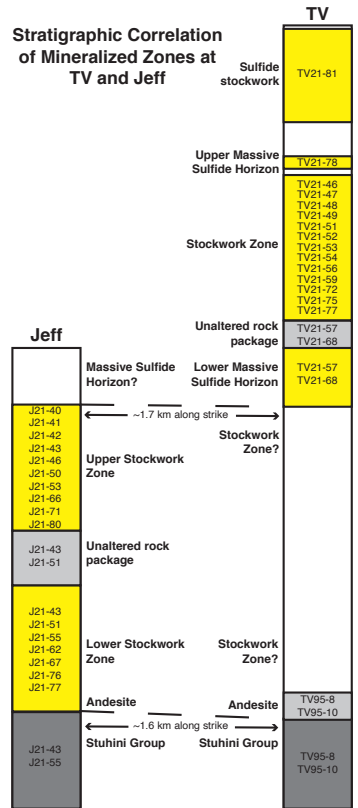
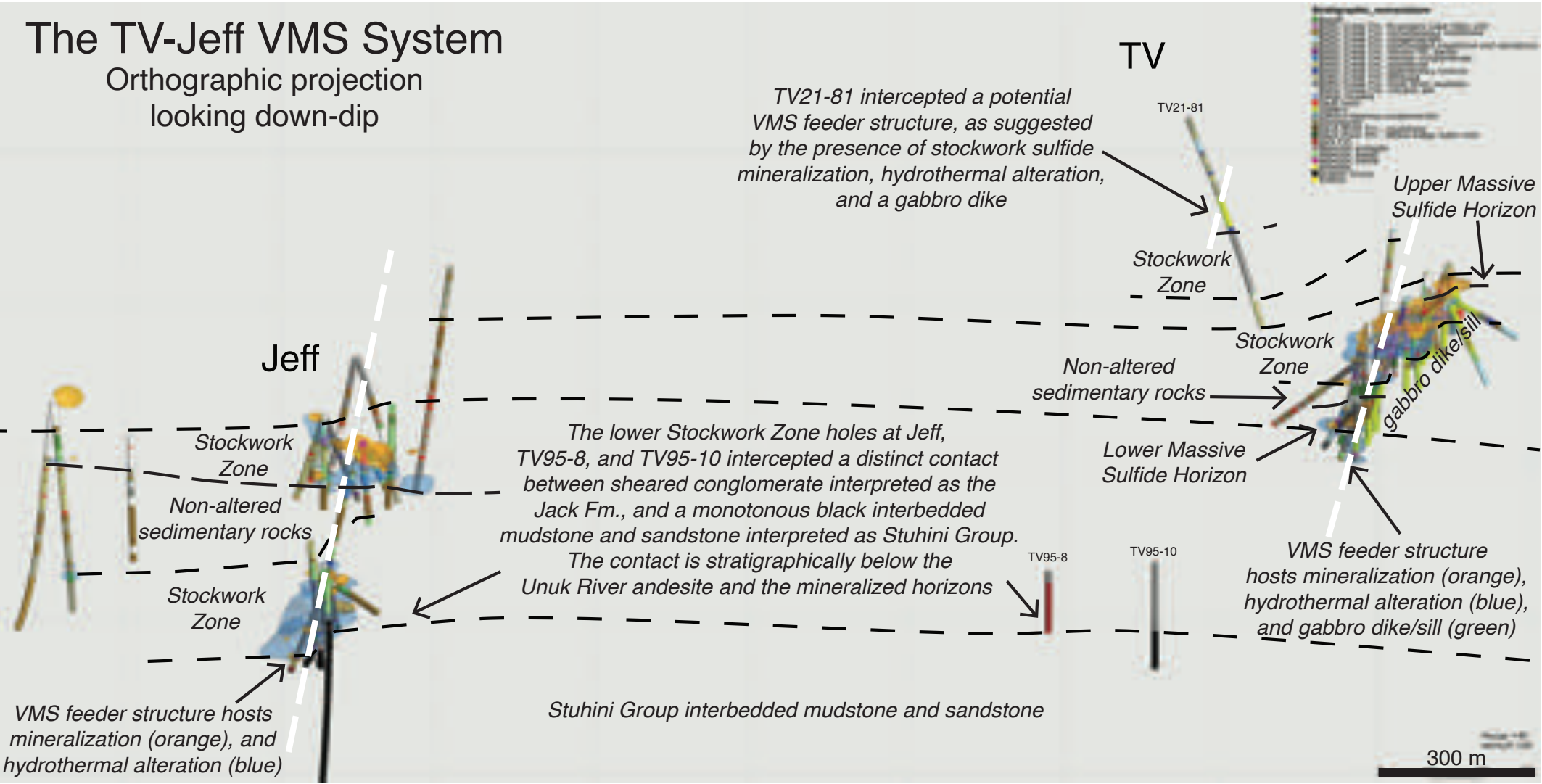
TV and Jeff Showings: Betty Creek Fm.-hosted Mineralization

- Mineralization hosted by dacitic and basaltic peperite and breccia in Betty Creek Fm.
 - Mineralization outcrops on surface
- Trend of stacked sulfide bodies on the East limb of the Eskay anticline
- SkyTEM survey shows conductivity anomalies coincident with known sulfide bodies and graphitic mudstone



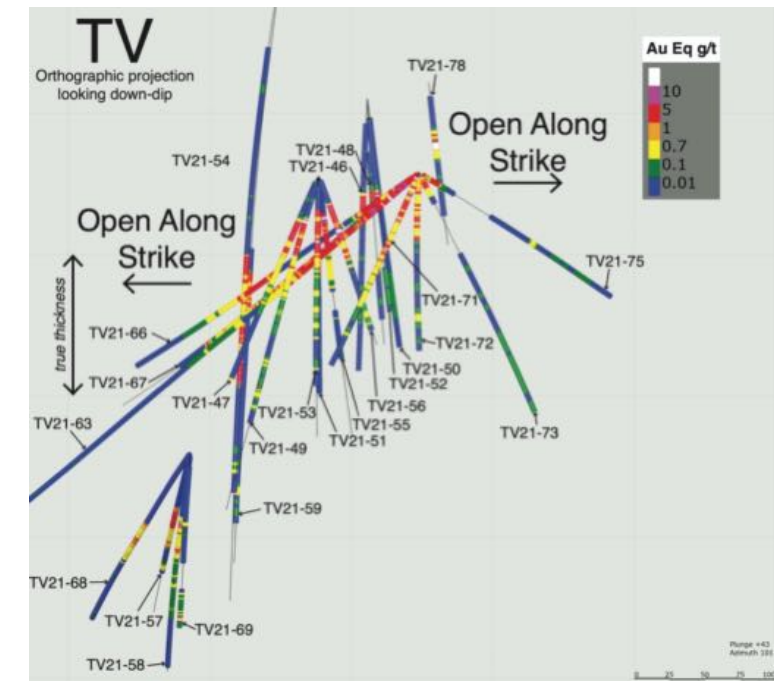
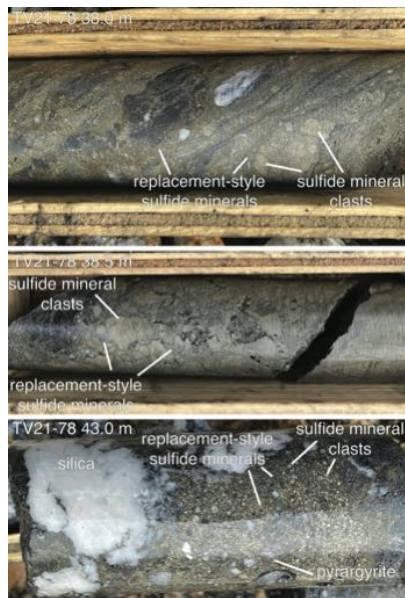
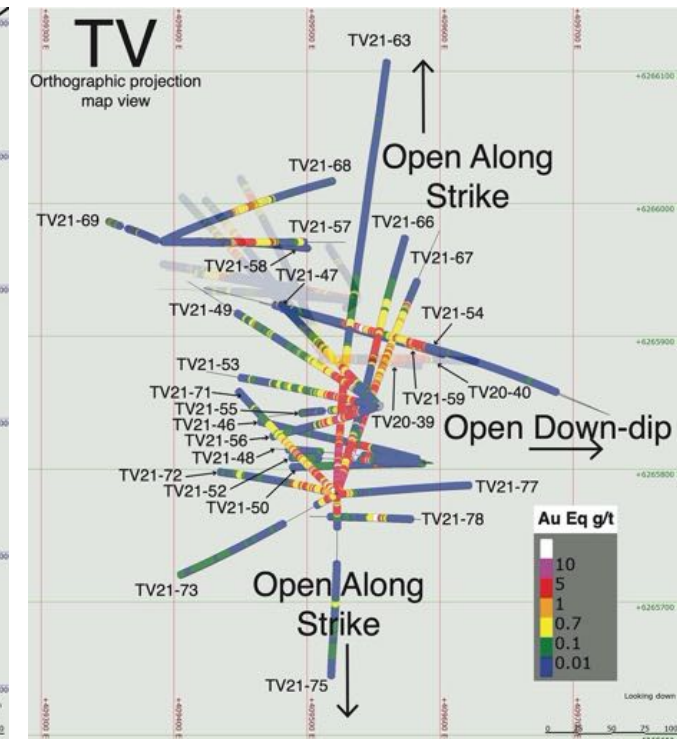
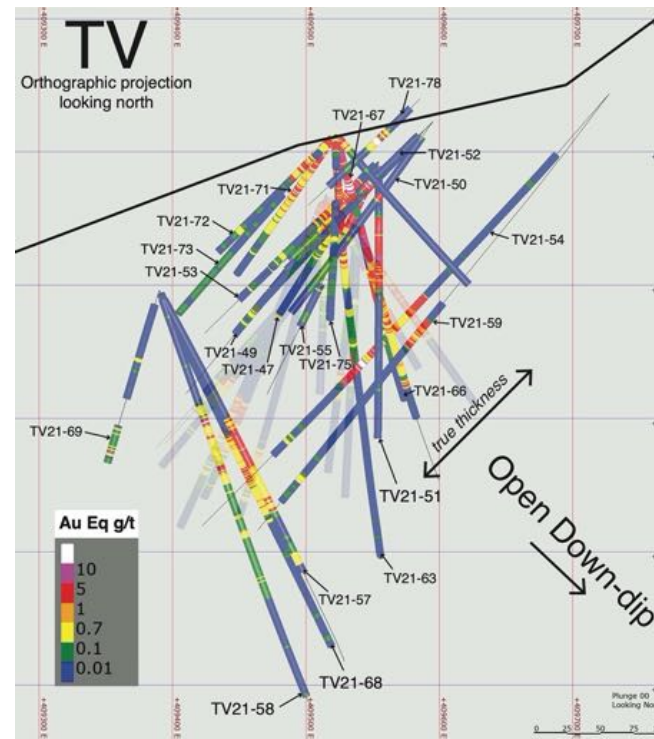
The TV-Jeff VMS System

Orthographic projection
looking down-dip



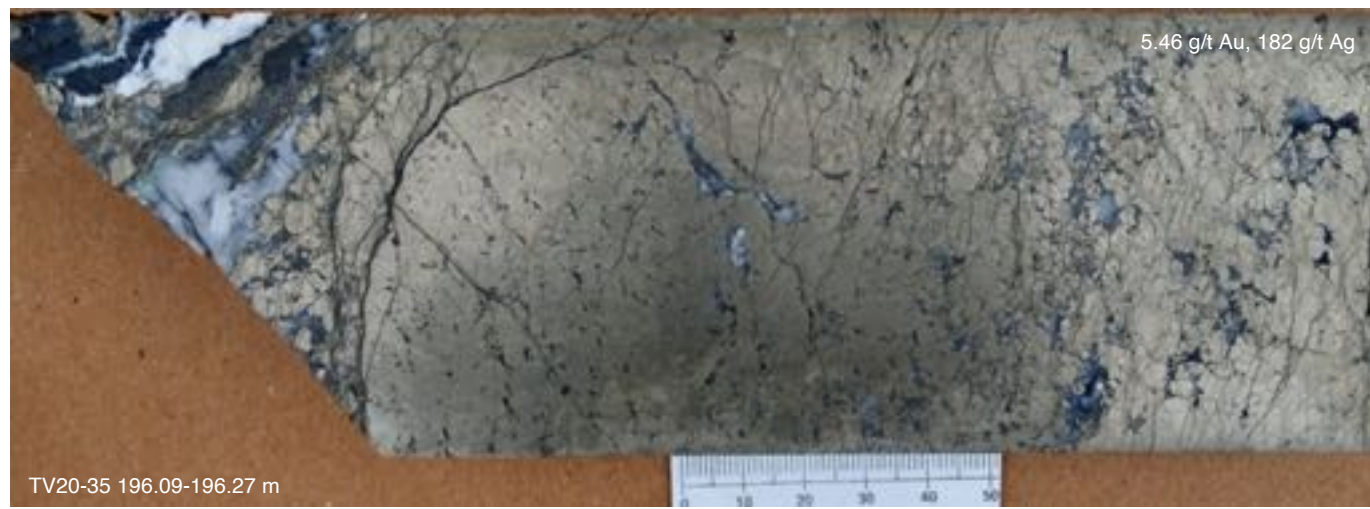
TV : Betty Creek Fm.-hosted Mineralization

- Mineralization hosted by dacite and basalt peperite and breccia in Betty Creek Fm.
- Stratigraphy and attitude of contacts are consistent with location on eastern limb of Eskay anticline
- Stratigraphy and geophysical anomalies in undrilled ground suggest additional stratiform mineralization
 - Up-stratigraphy
 - Down-dip
 - Along-strike



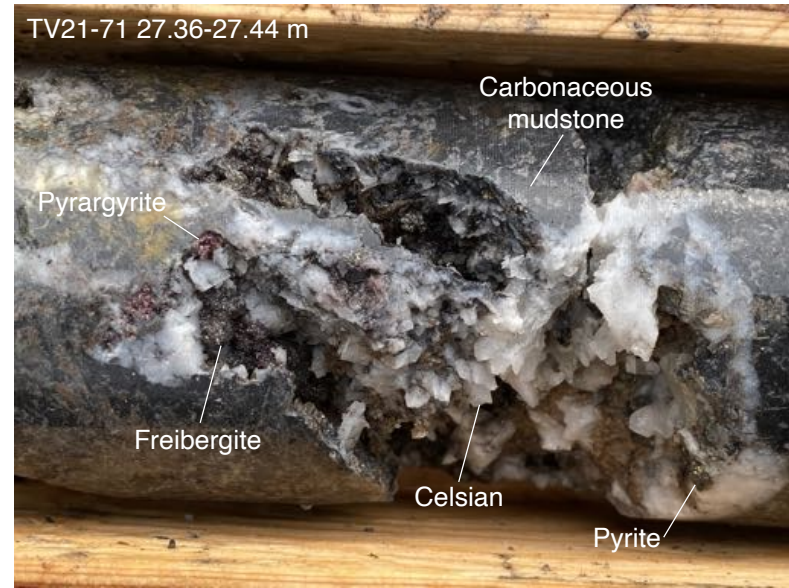
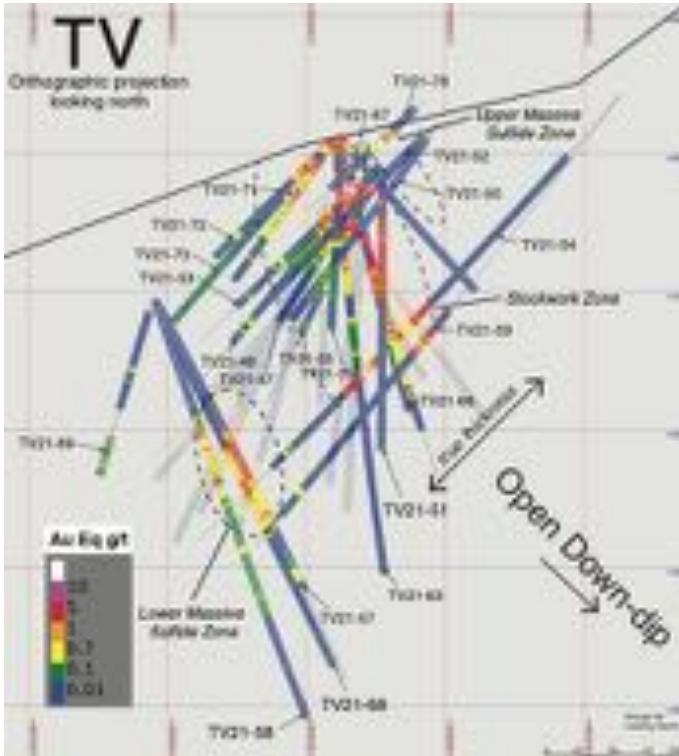
TV : Lower Massive Sulfide Zone

- Mineralization is semi-massive to massive
 - Pyrite, pyrrhotite, and sphalerite are dominant sulfide minerals
 - Au- and Ag-bearing
- Hosted by intensely hydrothermally altered mudstone
- Associated with asymmetric alteration horizon
 - Confirms paleo-seafloor position
- Potential for stockwork mineralization below (TV21-69)
- Older than the Upper Massive Sulfide Zone



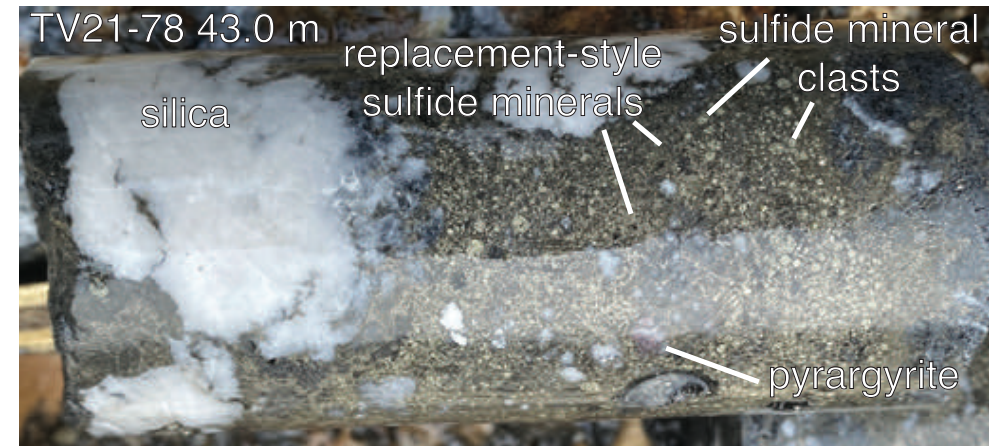
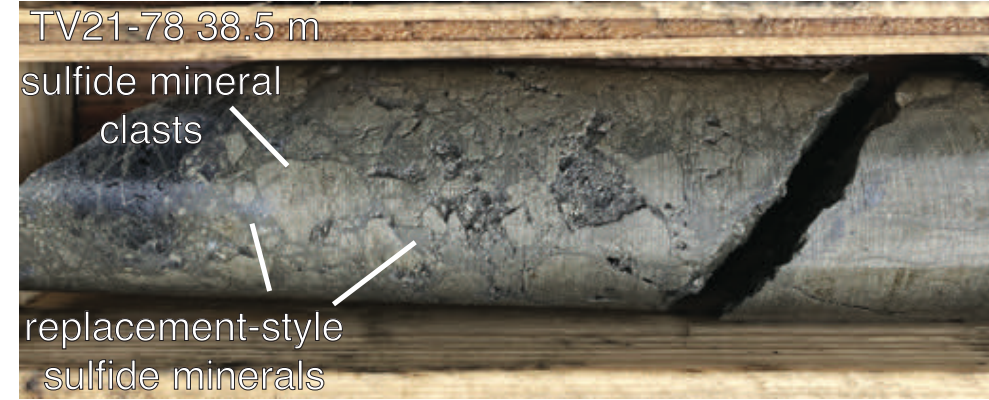
TV : Stringer-style Mineralization

- Broad zone of stringer-style mineralization overlies Lower Massive Sulfide Zone
- Abundant sulfide and Ag mineral mineralization
- Intensely silicified



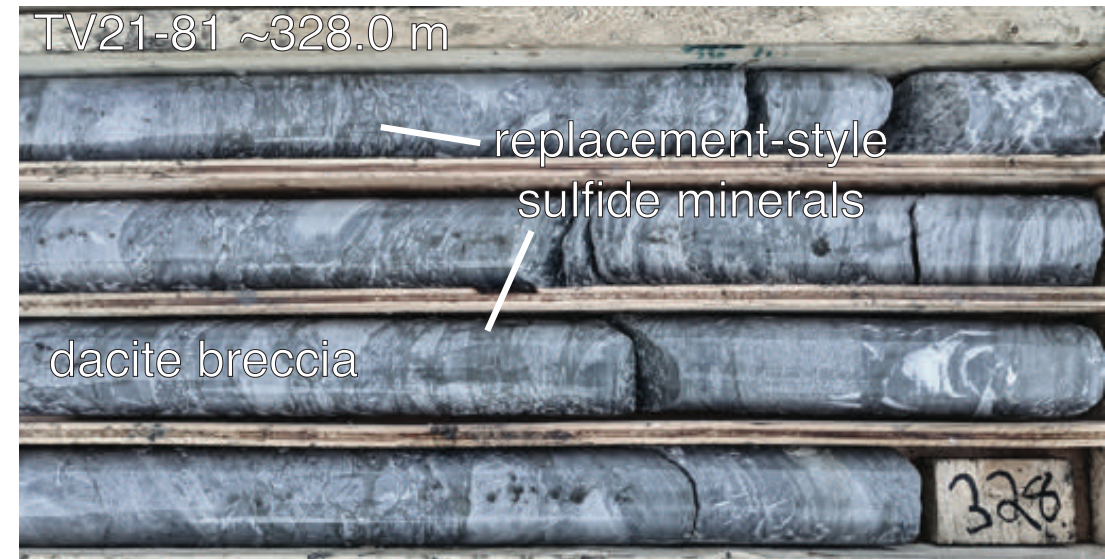
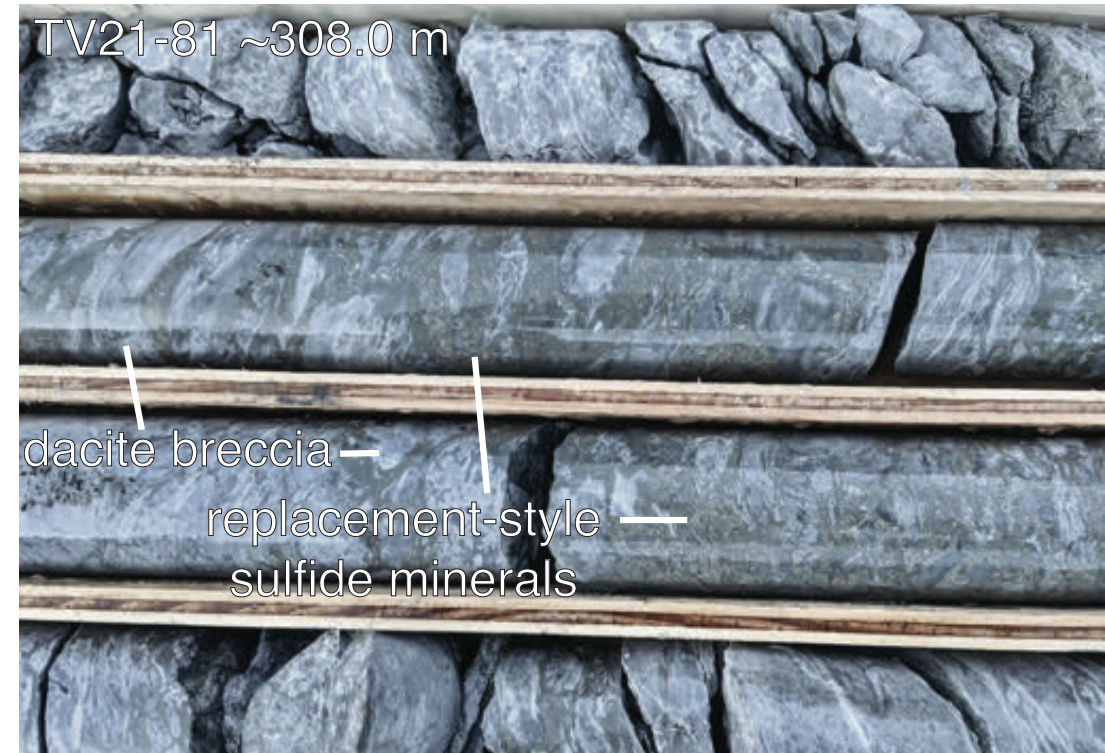
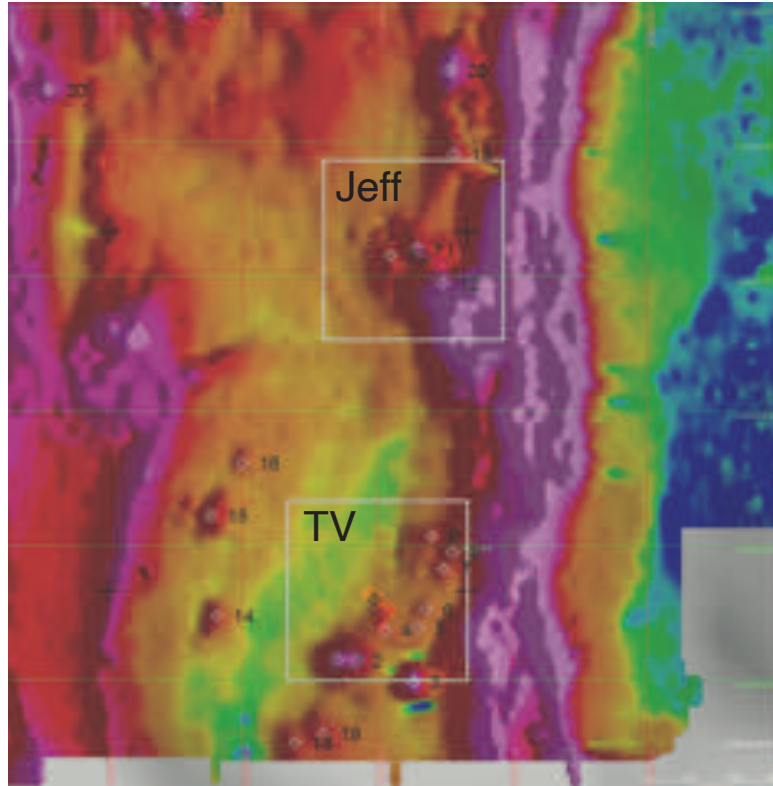
TV: Upper Massive Sulfide Zone

- First intercepted by TV21-78 that targeted the predicted location of an Upper Massive Sulfide Zone
- Approximately 9 m of massive and semi-massive sulfide mineralization
 - Pyrite clasts with replacement-style sphalerite, chalcopyrite, and pyrrhotite
 - Visible Ag-sulfosalts
- Associated with asymmetric alteration just like Lower Massive Sulfide Zone
 - Confirms that these massive sulfide bodies formed during distinct hydrothermal events
- Associated with SkyTEM and IP anomaly



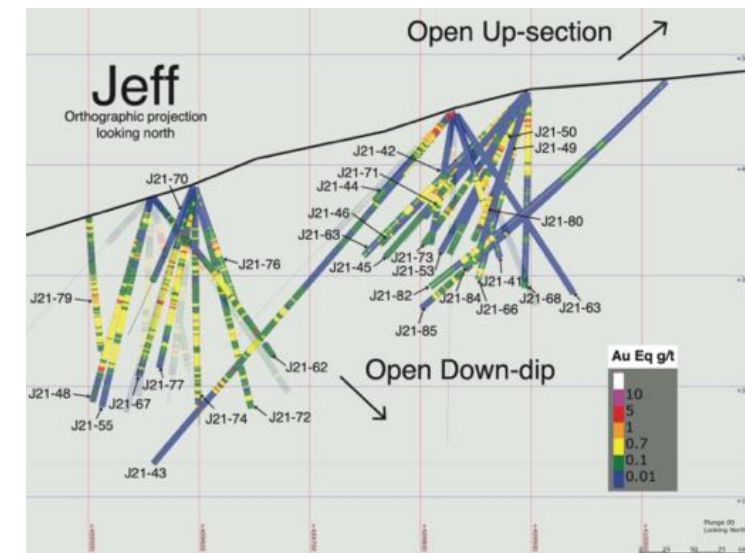
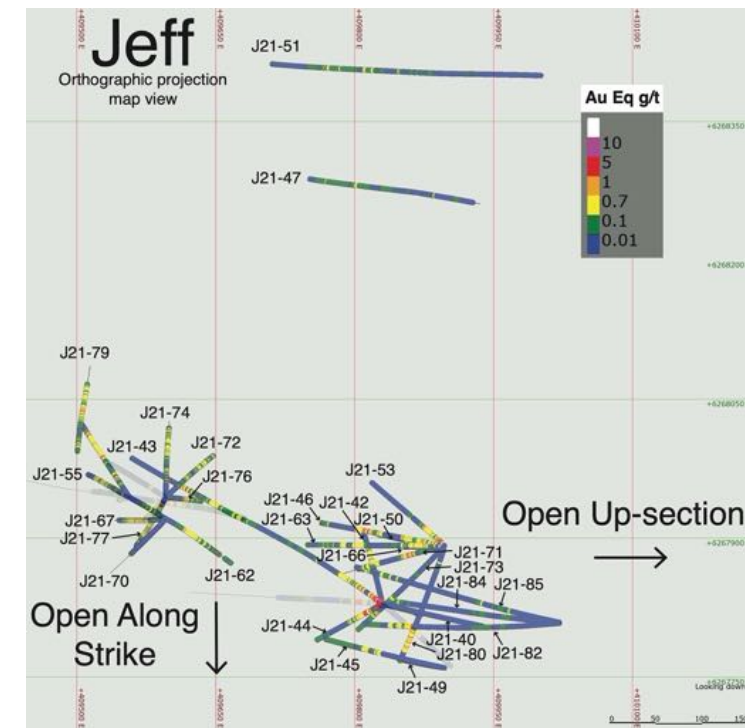
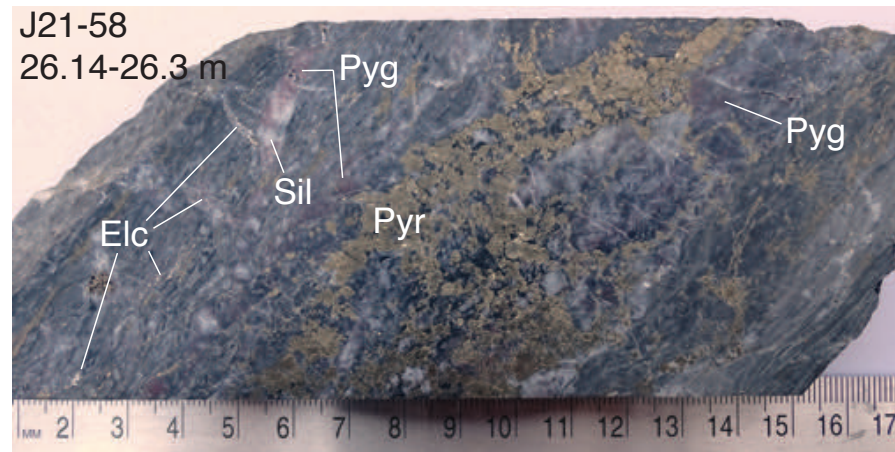
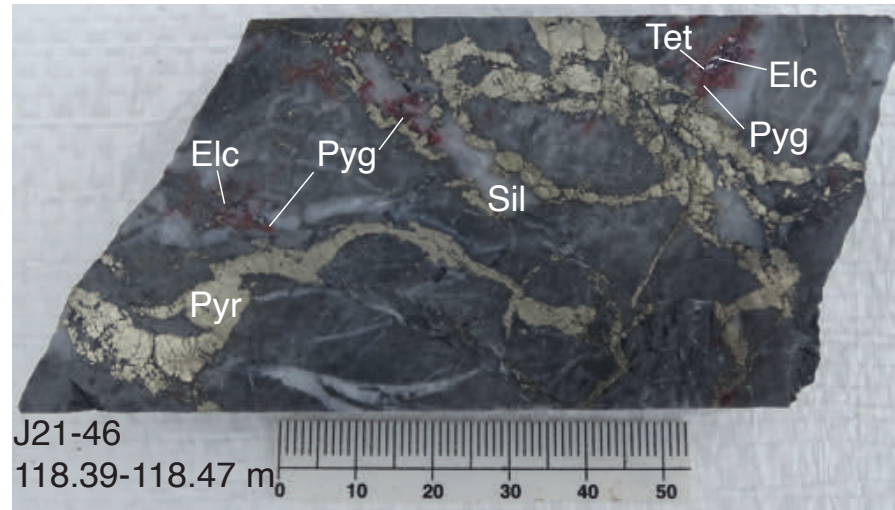
TV: Northward Extension of Sulfide Mineralization

- TV21-81 intercepted intense stringer-style sulfide mineralization from 242-328 m
 - 300 m north of known mineralization at TV
 - Hosted by dacite breccia
- Targeted using SkyTEM and IP data
- Suggests TV and Jeff may be part of one larger VMS system



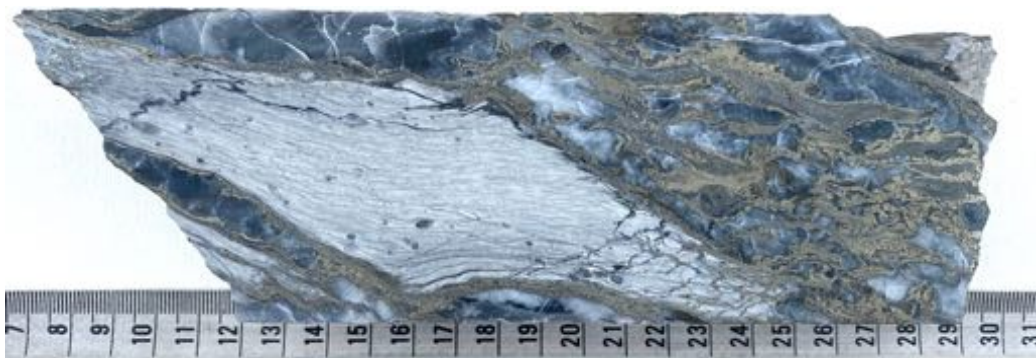
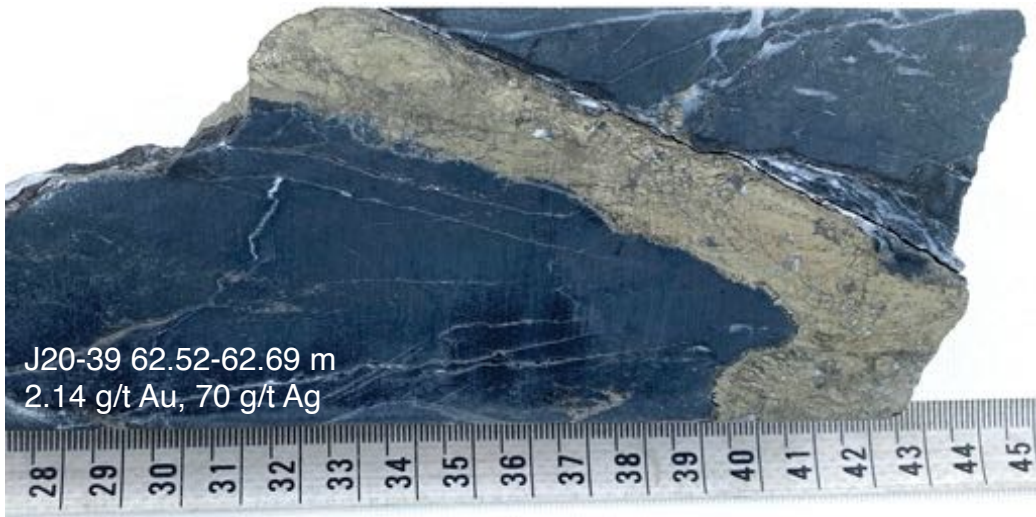
Jeff

- Stockwork-style mineralization
 - High-grade domains within a broad zone of 0.1-0.5 g/t Au mineralization
 - Associated with moderate to intense hydrothermal alteration
- Stratigraphically lower than TV
- Brucejack-like mineralization
 - Precious metal mineralogy
 - Electrum
 - Freibergite
 - Pyrargyrite
 - Acanthite
 - Alteration mineralogy
 - Silica
 - Dolomite
 - Ferroan dolomite
 - Hyalophane
 - Illite
 - Chlorite



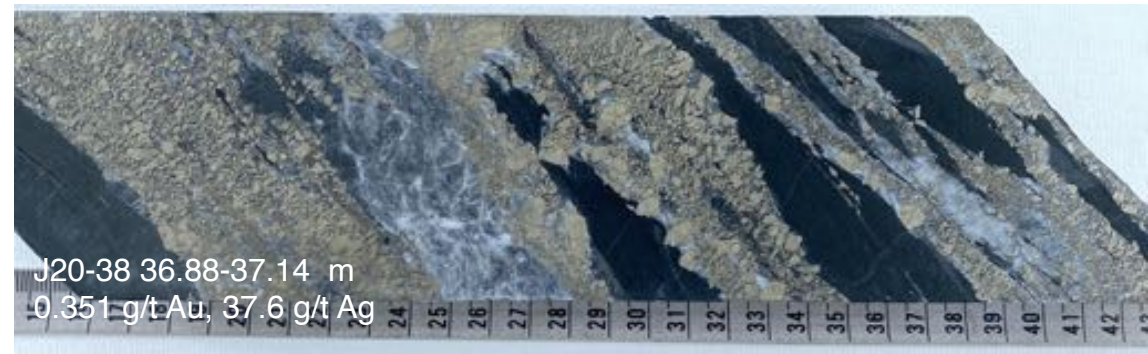
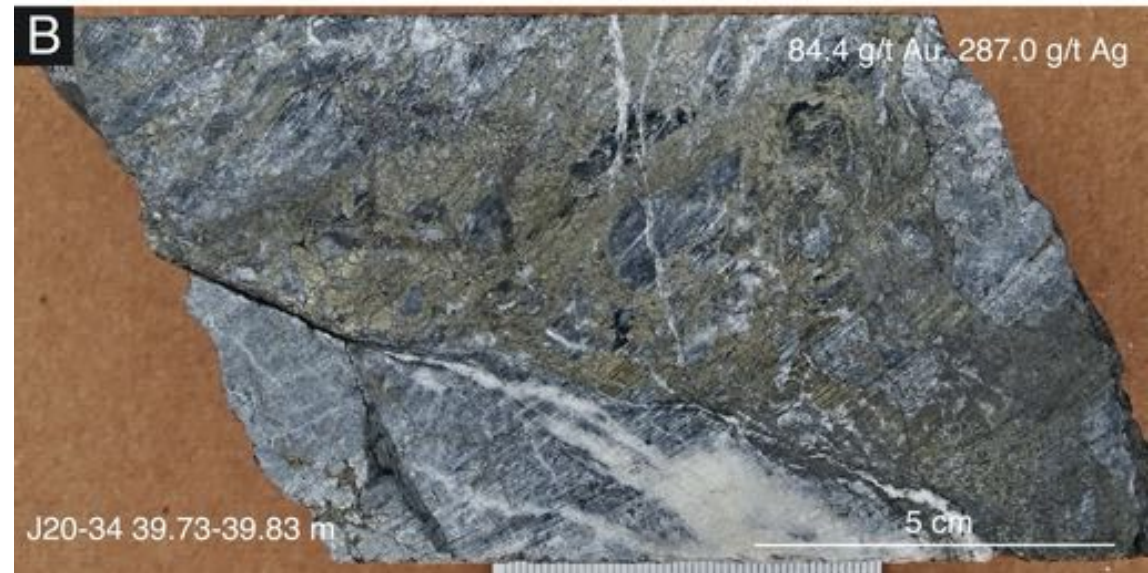
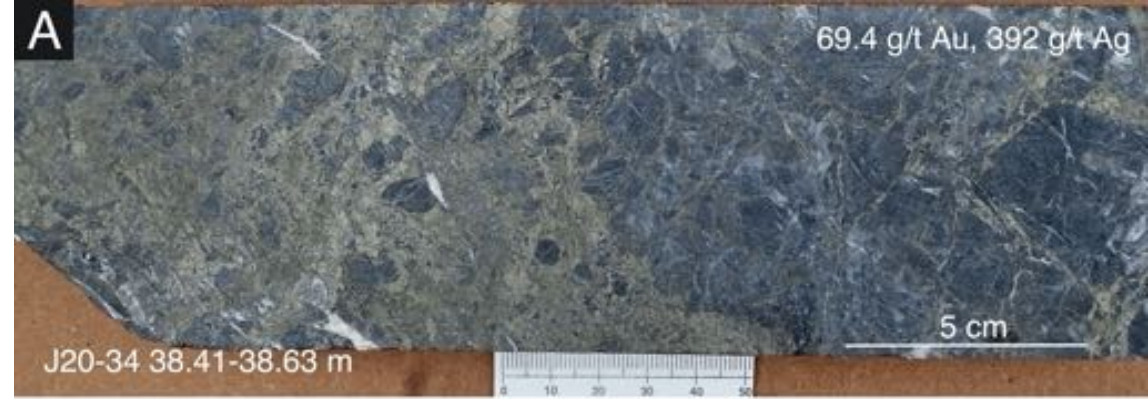
Jeff

- Mineralized dacitic and basaltic peperite in drill core



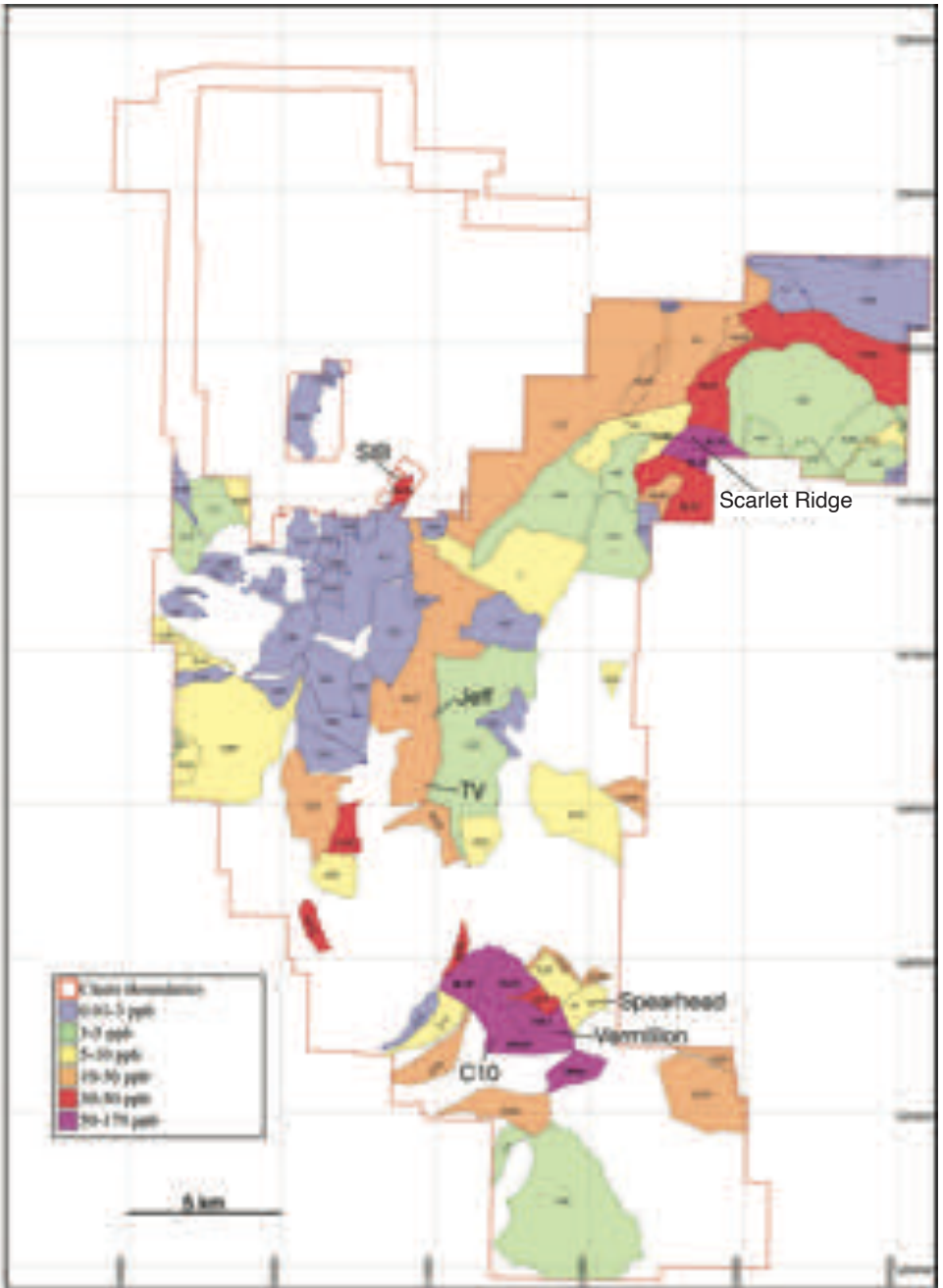
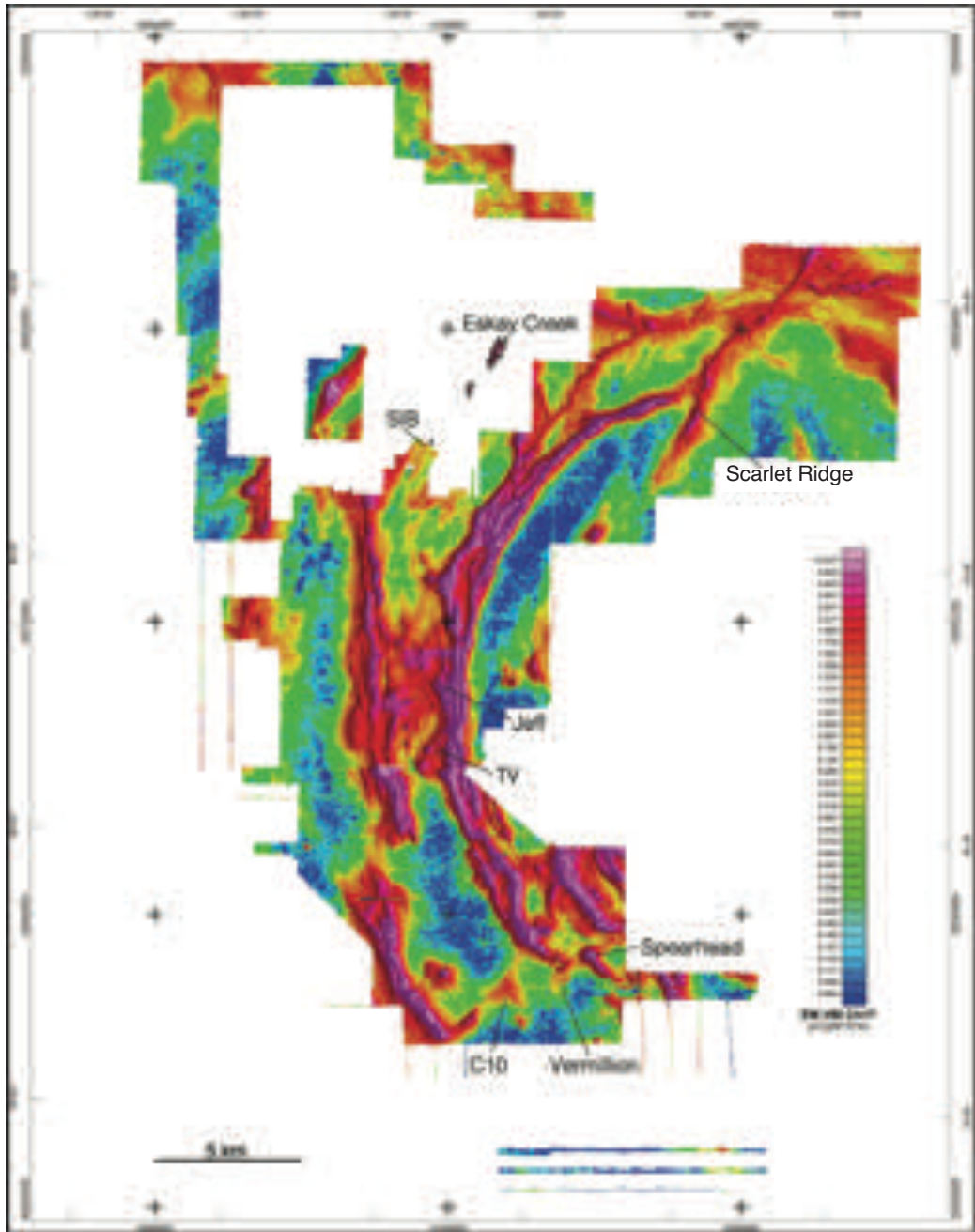
J20-39 82.8-83.0 m
0.163 g/t Au, 14 g/t Ag

J20-33 59.97-60.58 m
79.2 g/t Au, 203 g/t Ag



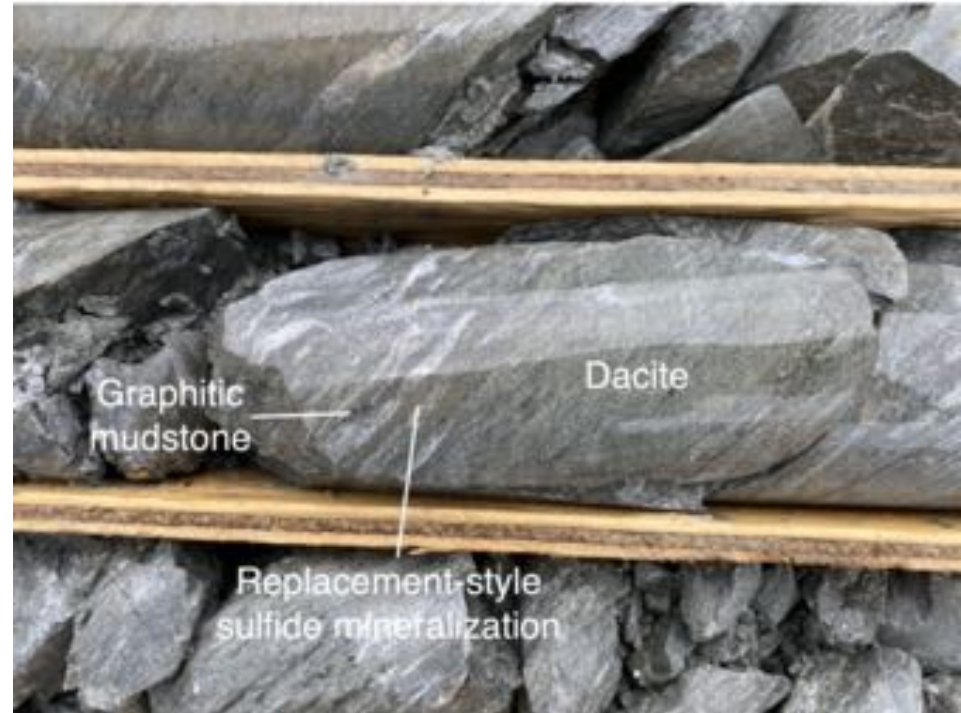
J20-38 36.88-37.14 m
0.351 g/t Au, 37.6 g/t Ag

Vermillion-C10 Region



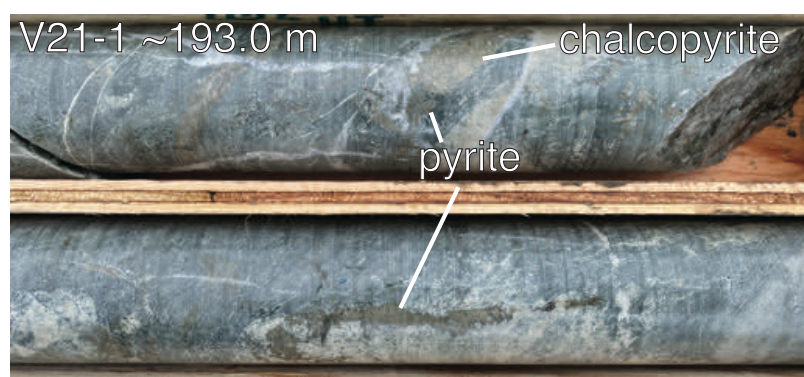
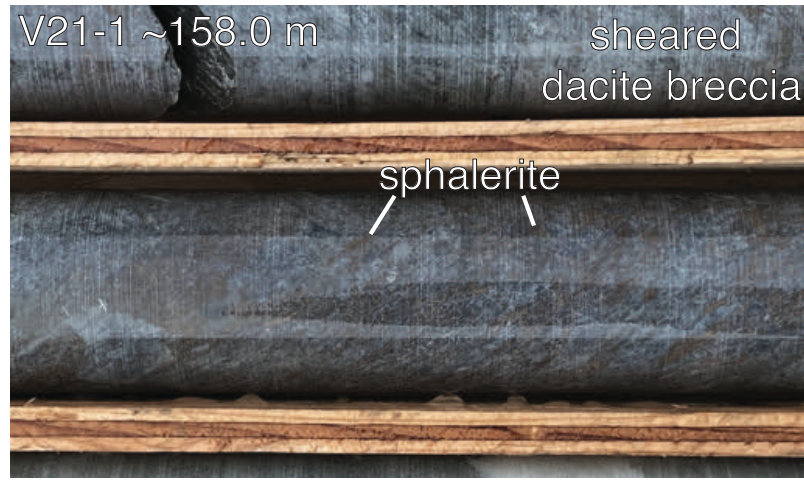
C10: Lithology and Mineralization

- Hanging Wall: dacite-hosted sulfide mineralization intercepted by several holes including C21-4 53 m south of 99.4 g/t in CR05-17
 - Likely stratigraphically correlated with Jeff
- Footwall: Willow Ridge basalt-Eskay rhyolite contact under glacial till at 204.20 m in C21-5
 - Pyrite-bearing mudstone occurs below this contact
 - Confirms that the contact mudstone horizon is present in this area



Vermillion

- 2.1 km east of C10
- Massive sulfide discovered in outcrop
- Drilling intercepted long intervals of dacite-hosted pyrite, sphalerite, chalcopyrite, and pyrrhotite stringer-style mineralization
- Rock is intensely chlorite and illite altered in drill core and on surface
- Alteration and sulfide mineralogy consistent with higher temperature hydrothermal system



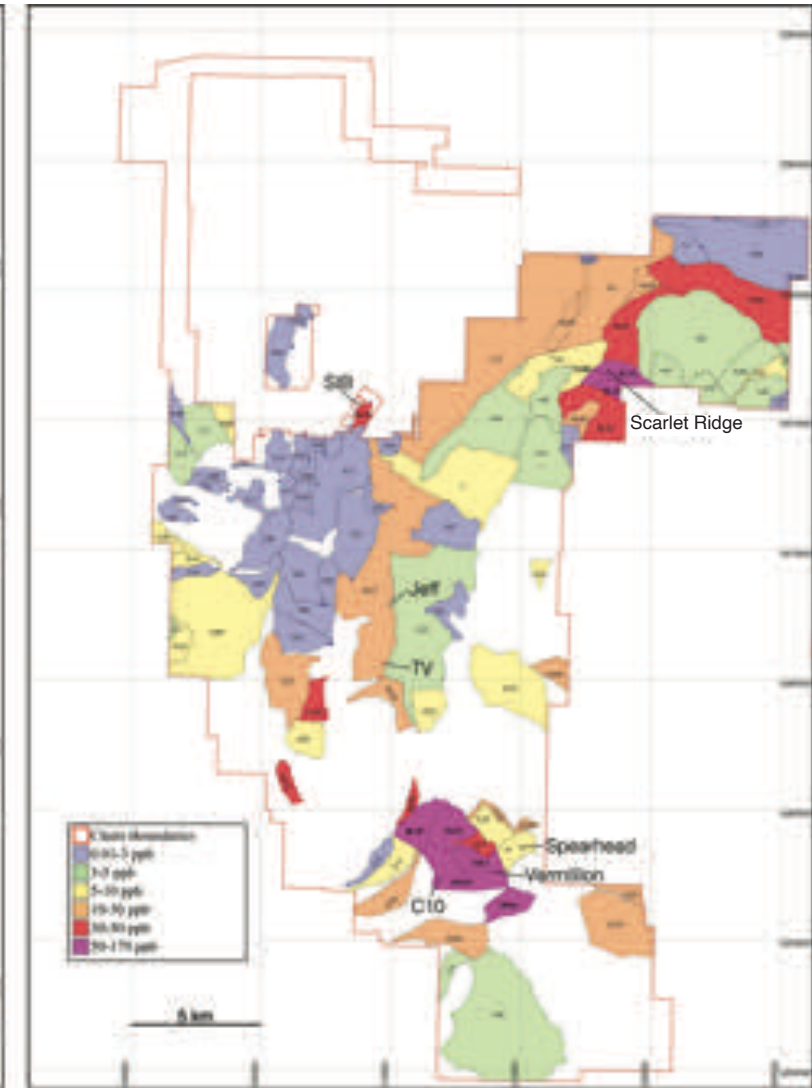
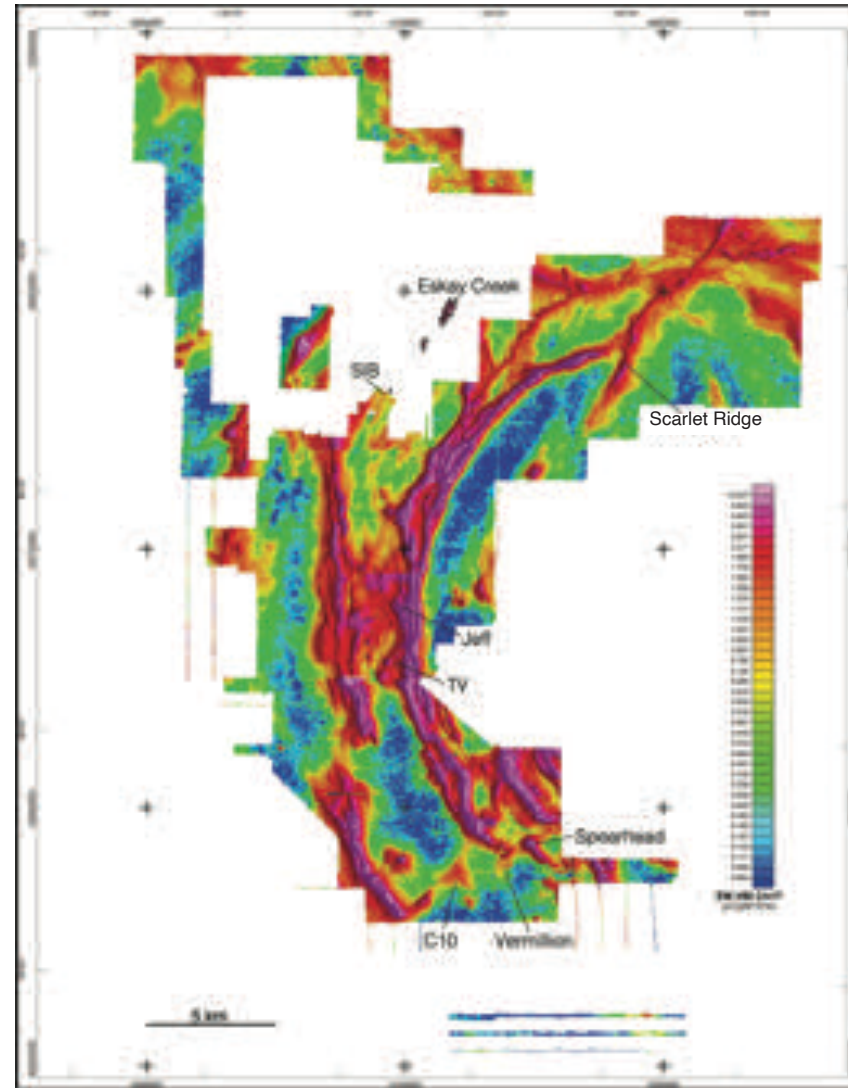
Spearhead

- Outcropping semi-massive sulfide mineralization
 - Hosted by mudstone associated with rhyolite
- 1.3 km NE of Vermillion
- Historic surface samples graded up to 4.1 g/t Au
- Along the same sinistral structure as Vermillion and Red Lightning



Scarlet Ridge

- Cluster of very strong BLEG anomalies in the NE part of property
- Scarlet Ridge is associated with extensive outcrops of peperitic rhyolite-hosted sulfide mineralization
 - On east limb of Eastern anticline
- Strong BLEG anomalies continue to NE on flanks of McTagg anticlinorium
 - Hosted by Betty Creek Fm. rocks
 - Stratigraphically correlated with Tudor Gold's CBS Zone
 - Probable thrust fault separates Eastern anticline from McTagg anticlinorium

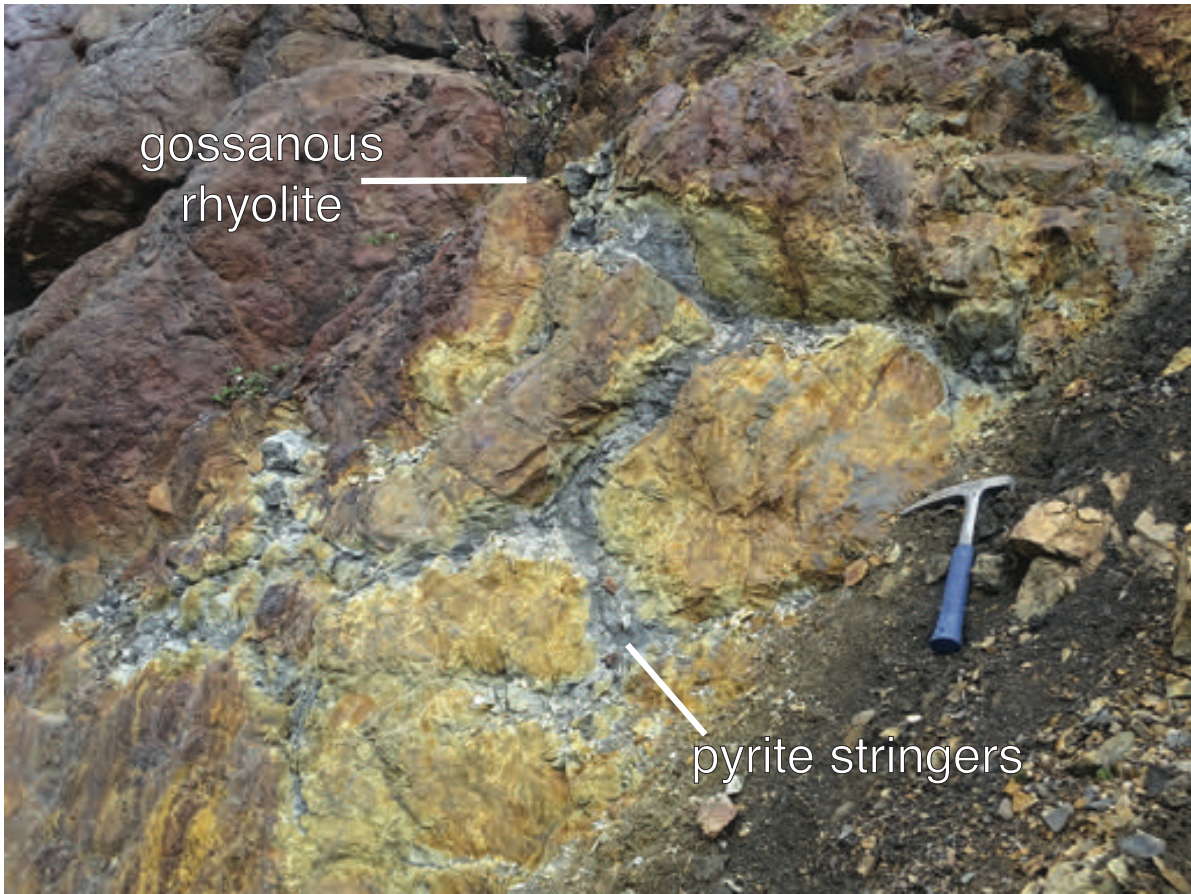


Prospects Identified by BLEG: Scarlet Ridge

- Nose and east limb of Eastern anticline
- Numerous sulfide-bearing gossans hosted by a peperitic rhyolite sill complex
- Gossanous bluff extends along strike 1.5 km
 - Trend of Au-enriched historic surface samples extends 7.6 km
- Historic drilling 4km SW along strike intercepted modest gold mineralization
 - No follow-up work has been done since 1991
- Existing geologic maps are incorrect
 - Mapped contact relationships don't make sense



Scarlet Ridge: VMS Feeder Mineralization on the Surface



Questions?

Website: <https://eskaymining.com>

Email: info@eskaymining.com



- Acknowledgements:
 - Colorado School of Mines:
 - Thomas Monecke, Katharina Pfaff, Nigel Kelly
 - The 2020 and 2021 Geology team
 - Neil Prowse, Rachel Kim, Andy Mitchell, and all the geos and geotechs
 - Driftwood Drilling
 - ITL Drilling
 - Obsidian Logistics
 - Custom Helicopters
 - BOA Exploration LLC

