



TRAILBREAKER
RESOURCES LTD.





TSX.V: TBK

A Canadian mineral exploration company focused on precious metals and copper in British Columbia and Yukon Territory.



SHeldon PROJECT

PROJECT HIGHLIGHTS

-  **LOCATION** - Mining-friendly Yukon Territory (proven track record of mine development)
-  **ACCESS** - Access via North Canol Road, 110 km NE of Ross River
-  **INFRASTRUCTURE** - Highway access to deep sea ports of Skagway and Stewart
-  **INTRUSION-RELATED GOLD POTENTIAL** - Analogous mineralization to Snowline Gold's Rogue Project, Kinross' Fort Knox Mine, and Victoria Gold's Eagle Mine

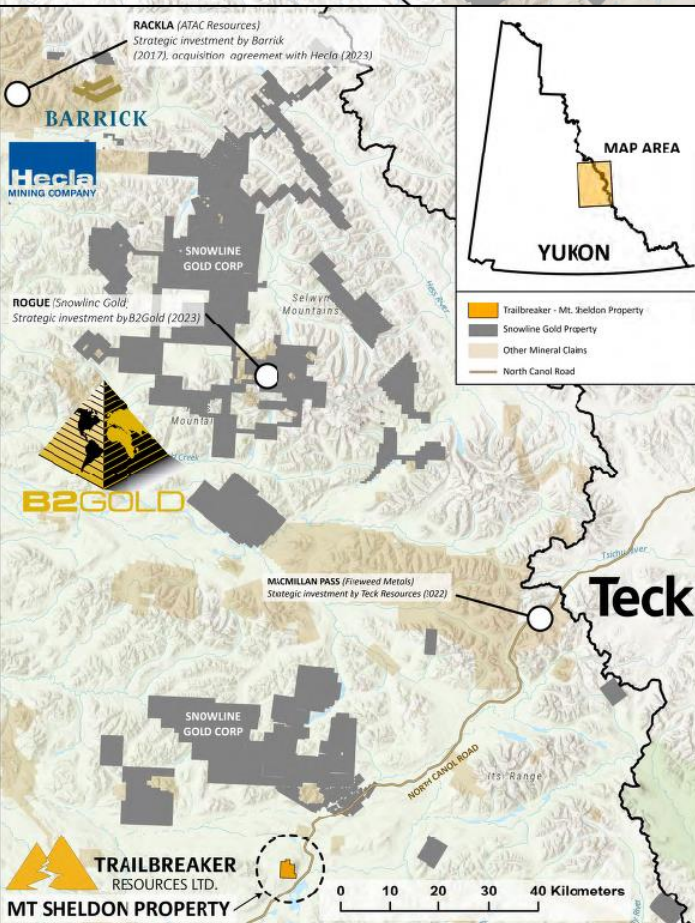
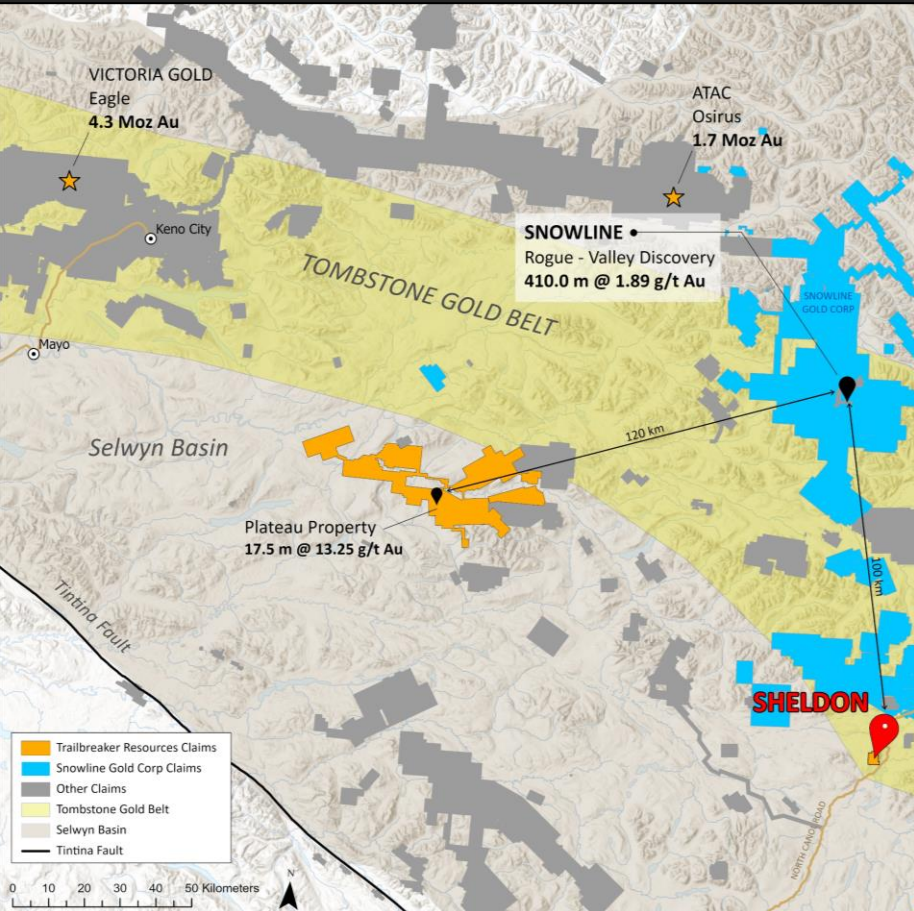
OVERVIEW

The Sheldon project is an early-stage “reduced intrusion related gold system” (RIRGS) in central Yukon Territory, within the Tombstone Gold Belt. The Tombstone Gold Belt is host to multi-million ounce mines such as Fort Knox, Alaska, and Eagle, Yukon. The presence of mid-Cretaceous (Tombstone aged) granitic plugs at Sheldon, which are coincident with Au-As-Bi-Sb-W geochemical anomalies make this a very strong target for RIRGS discovery. Regional-scale geophysical surveys highlight pyrrhotite-bearing hornfelsed rocks surrounding the intrusion and suggest that Sheldon may represent the top of a series of gold-bearing granitic stocks.

LOCATION AND INFRASTRUCTURE



SHELDON - LOCATION MAP



- 919 ha claim package, 100%-owned by Trailbreaker Resources with no underlying royalty.
- Located in central Yukon Territory, 110 km northeast of Ross River
- Highway access to deep sea ports in Skagway, Alaska and Stewart, BC
- Vehicle access to within 800 m of the project via the North Canal Road

REGIONAL GEOLOGY AND DEPOSIT MODEL

INTRUSION RELATED MINERALIZATION

Single-phase quartz veining in porphyritic Sheldon granite



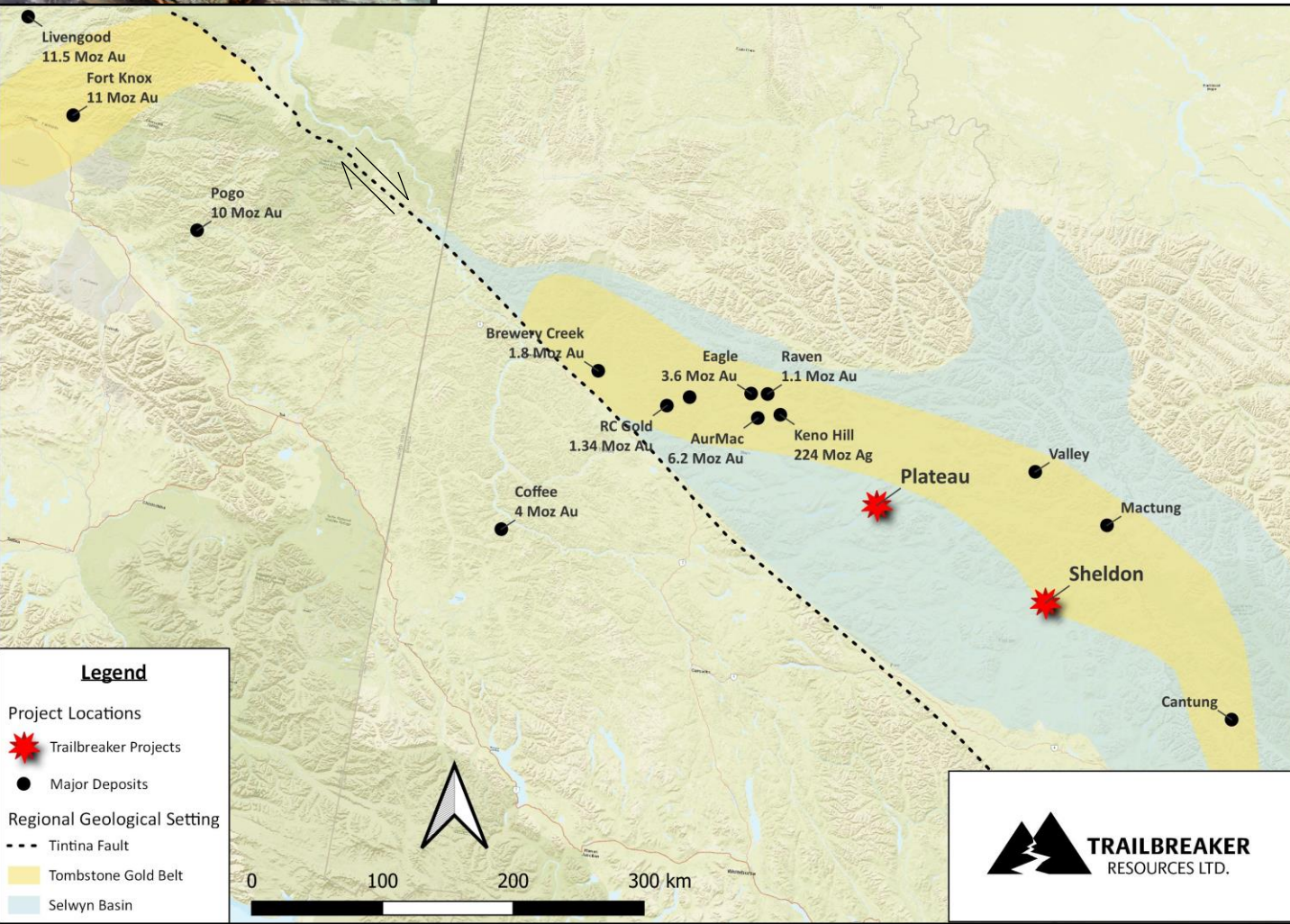
INTRUSION RELATED MINERALIZATION

Arsenopyrite-rich vein within Sheldon granite



Reduced Intrusion Related Gold System (RIRGS) potential

- RIRGS deposits are characterized by widespread arrays of sheeted auriferous quartz veins, typically forming in brittle carapace at the top of small plutons. These deposits form bulk-tonnage, low-grade Au deposits. They are characterized by Au-Bi-Te-W metal assemblage. Mineralization may also occur as skarns, replacements, and veins in the surrounding hornfelsed sedimentary rocks (Hart, 2007).
- Within Yukon Territory and Alaska, a belt of RIRGS are recognized, referred to as the Tombstone Gold Belt within the larger Selwyn Basin. The Tombstone Gold Belt is host to significant RIRGS mines including Fort Knox (11 Moz Au) and Eagle (3.8 Moz Au), as well as significant new discoveries such as Snowline Gold's Valley discovery (318.8 m @ 2.55 g/t Au). Mineralization within these deposits is hosted in mid-Cretaceous Tombstone granitic intrusions as sheeted vein arrays.
- Similar veining has been observed during historic work on the mid-Cretaceous granitic Sheldon stock.



PROPERTY GEOLOGY & MINERALIZATION

- The property covers a mid-Cretaceous granitic stock intruded into Road River and Hyland Group sedimentary rocks. The younger Road River Group are thrust atop the older Hyland Group. It is inferred that this thrust fault structure was reactivated during the emplacement of the mid-Cretaceous Sheldon Stock.
- Gold mineralization is associated with quartz and arsenopyrite veining within the Sheldon stock as well as in surrounding hornfelsed sedimentary rocks.
- The Sheldon stock is regional mapped as a mid-Cretaceous intrusion associated with regional extension during the same period as the emplacement of the Tombstone intrusive suite, which host many significant RIRGS. The stock has been locally described as a polyphase biotite granitic to granodioritic intrusion, with biotite>hornblende.
- “The RIRGS are generally well developed, surrounding small (<2 km²) isolated plutons” – Hart (2007)
- The restricted size of the intrusion and suggestion of volatile content (biotite>hornblende and local aplitic dykes) is suggested to be favourable for the formation of RIRGS (Hart, 2007).
- Hornfelsed sedimentary rocks surrounding the intrusion are also good potential hosts for mineralization. Veining has been observed in these rocks as well as disseminated pyrrhotite.



Legend

Trailbreaker Claims

- Sheldon Claim Outline

Rock Sample Geochemistry

Au (ppm)

- <DL - 0.01
- 0.01 - 0.1
- 0.1 - 0.5
- 0.5 - 1
- 1 - 6.167

Soil Sample Geochemistry

Au (ppb)

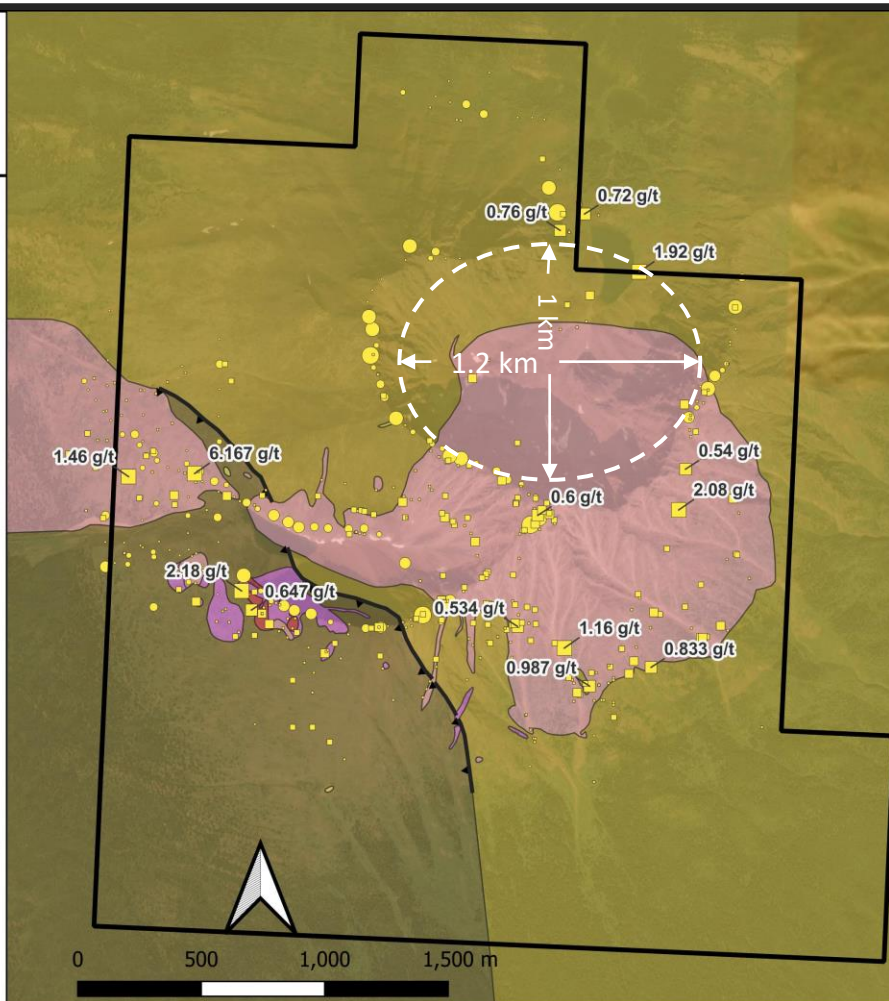
- 0 - 10
- 10 - 25
- 25 - 50
- 50 - 100
- 100 - 250
- 250 - 580

Bedrock Geology

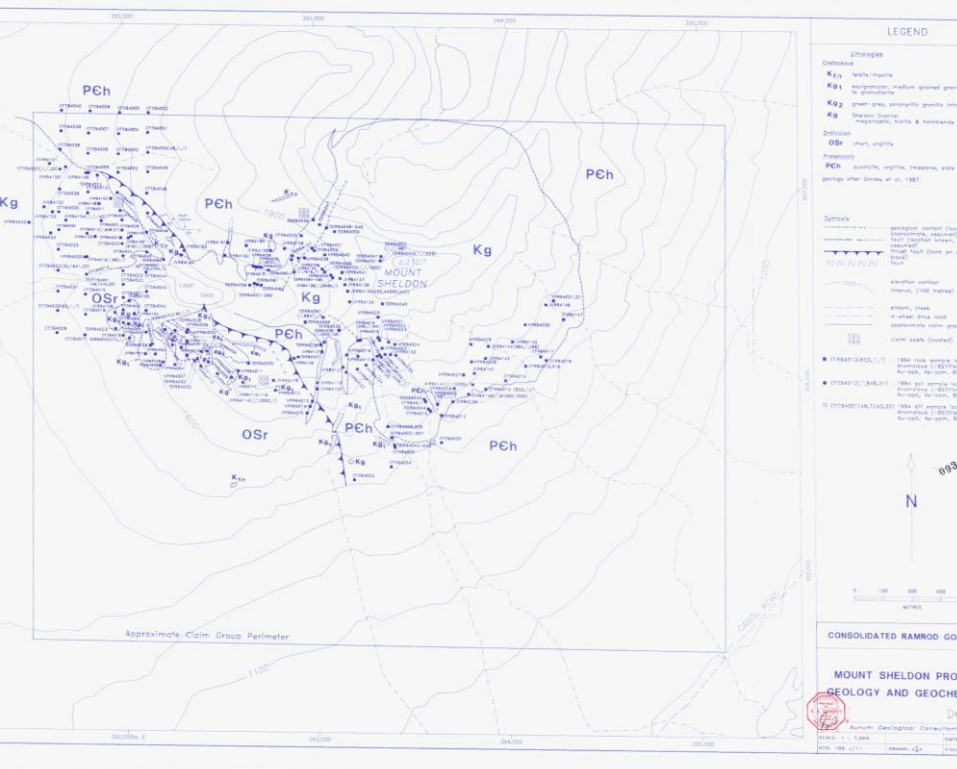
- Thrust Fault

Lithology

- Kg - Sheldon Granite: megacrystic, biotite & hornblende granite
- Kg1 - equigranular, medium grained granite to granodiorite
- Kg2 - green-grey, porphyritic granitic intrusion
- Kf/r - felsite/rhyolite
- OSr - chert, argillite
- PEh - quartzite, argillite, limestone, slate



EXPLORATION HISTORY



HISTORIC MAPPING AND SAMPLING

Completed by Aurum Geological Consultants in 1993



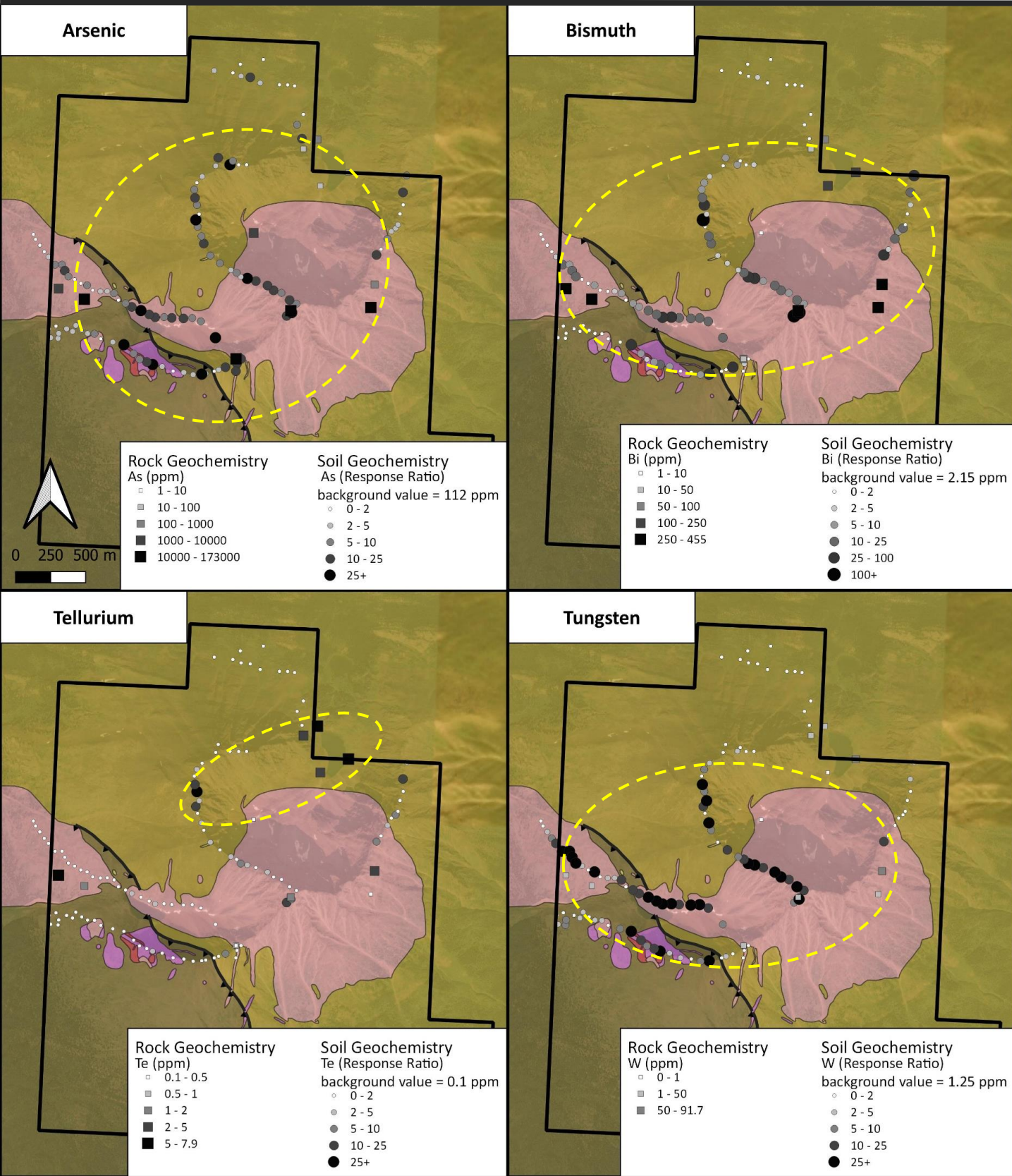
2012 PROSPECTING

Photographic examples of auriferous granitic exposures

- In 1944 the Geological Survey of Canada (GSC) first discovered gold bearing quartz veins on the flanks of Mount Sheldon, which assayed **0.69 g/t Au**.
- No further exploration was conducted until 1990, when regional stream sediment survey conducted by the GSC highlighted multiple drainages with anomalous arsenic and antimony.
- The project was first staked in 1991, with work between 1991-1993 focussed on exploration for intrusive gold systems. During this period work completed included geological mapping, prospecting, and geochemical sampling. Rock samples from this work returned values up to **6.17 g/t Au** from a granitic boulder.
- Later the claims were staked by Goldstrike Exploration LTD. in 2011 based on similarities to the Plateau project. Additional prospecting and soil sampling was completed in 2012. Numerous anomalous rock and soil samples were collected, with rock samples grading up to **2.08 g/t**.
- The project has not seen exploration since 2012.

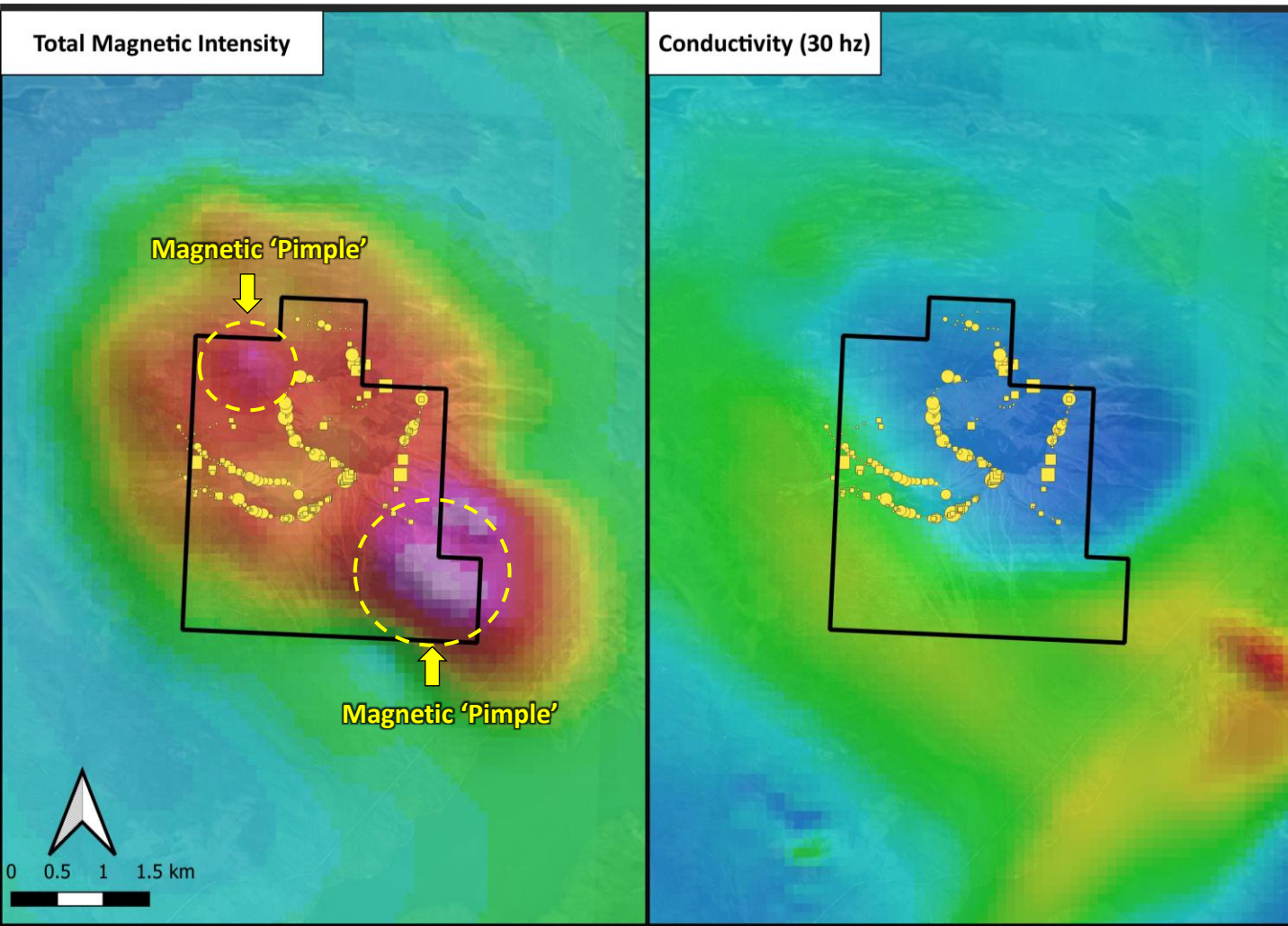
PATHFINDER GEOCHEMISTRY

- The Sheldon stock displays classic RIRGS geochemical signature with gold correlating with Ag, As, Bi, Cu, Sb, Te, and W. With gold and pathfinder elements showing strong correlation with mapped intrusives.
- Large areas within the project remain untested by geochemical techniques



GEOPHYSICS

- Regional geophysical data highlights common RIRGS signatures
- Total magnetic intensity shows magnetic highs associated with pyrrhotite-bearing hornfelsed rock in the aureole of the Sheldon Stock.
 - Strong 'pimple'-like magnetic highs occur in the SE and NW, where there may be buried intrusive plugs
- Low conductivity/high resistivity highlights the granitic intrusive rocks at Sheldon
 - The relatively small size of the intrusion is favourable for hosting mineralization, as large batholiths are unlikely to develop into mineralizing systems (Hart, 2007).
- Survey data is from regional ZTEM survey completed over the Selwyn Basin in 2008 and reprocessed by the Yukon Geological Survey in 2013
- Higher resolution magnetic survey would be helpful in improving the resolution of the pyrrhotite-bearing hornfels zone and granitic intrusive contact



TARGET ZONES

A. Strong Au-Te + all other pathfinder elements in soil and rock

- Te shows very strong correlation Au in other RIRGS deposits
- Conduct geological mapping to assess gold bearing vein densities
- Infill geochemical data, where gaps exist
- Potential for higher-grade core of a RIRGS deposit

B. Strong correlation between Au and pathfinder elements other than Te

- Conduct geological mapping focused on defining vein distribution and densities
- Infill geochemical data, where gaps exist
- Potential for lower-grade, bulk-tonnage style of mineralization

C. Magnetic 'pimple' atop inferred hornfelsed sedimentary rocks

- Could represent pyrrhotite-bearing hornfelsed rocks atop a buried granitic intrusion
- Conduct geochemical sampling
- Conduct higher-resolution magnetic survey to define zone
- Potential for buried RIRGS deposit

D. Magnetic 'pimple' atop inferred hornfelsed sedimentary rocks

- Could represent pyrrhotite-bearing hornfelsed rocks atop a buried granitic intrusion
- Conduct geochemical sampling
- Conduct higher-resolution magnetic survey to define zone
- Potential for buried RIRGS deposit



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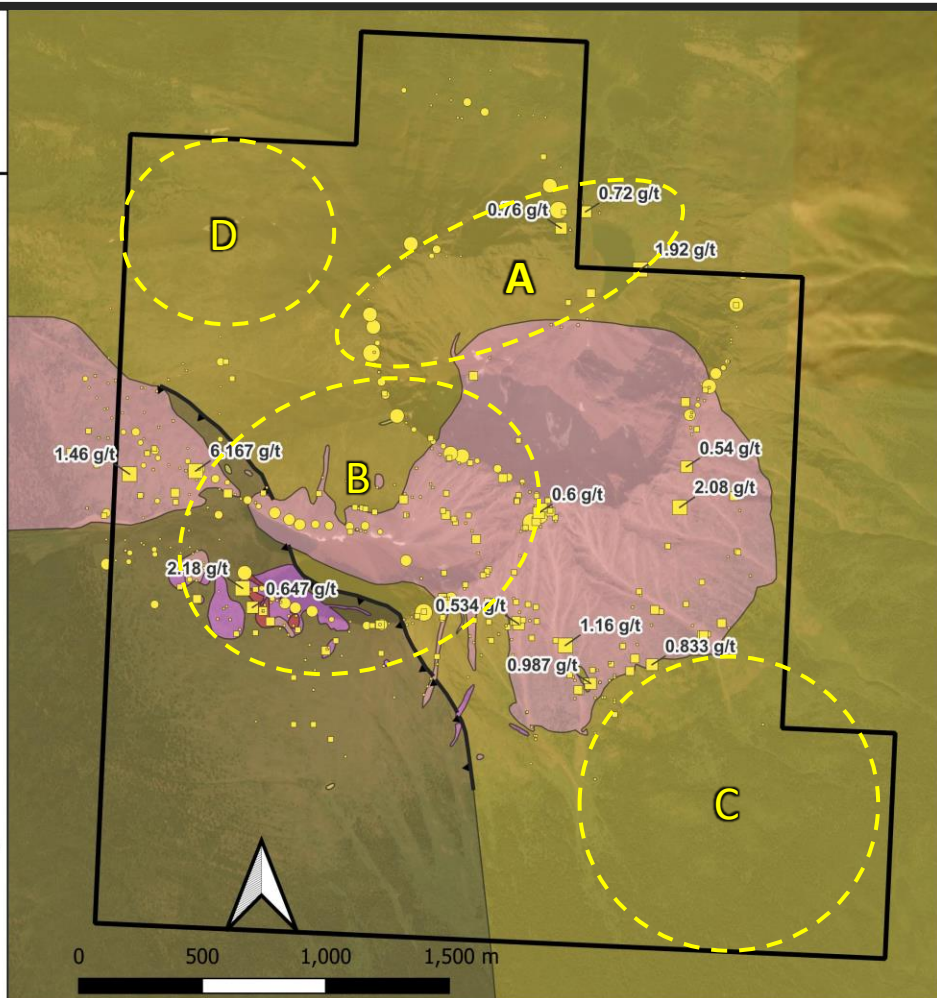
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✓ Underexplored

- *Only two surface work campaigns have been undertaken*
- *Large areas of the property untested by geochemical sampling*
- *Never before drilled*

✓ Strong Exploration Potential

- *Greatly improved regional understanding of RIRGS deposits since 1990's*
- *RIRGS style intrusion and mineralization, potentially similar to Snowline Gold's recent Valley discovery*
- *Mid-Cretaceous granitic plugs/stocks intruding into hornfelsed sedimentary rocks*
- *Classic RIRGS geochemical and geophysical signatures*
- *Evidence of economic grade gold in rock*

RECOMMENDED EXPLORATION

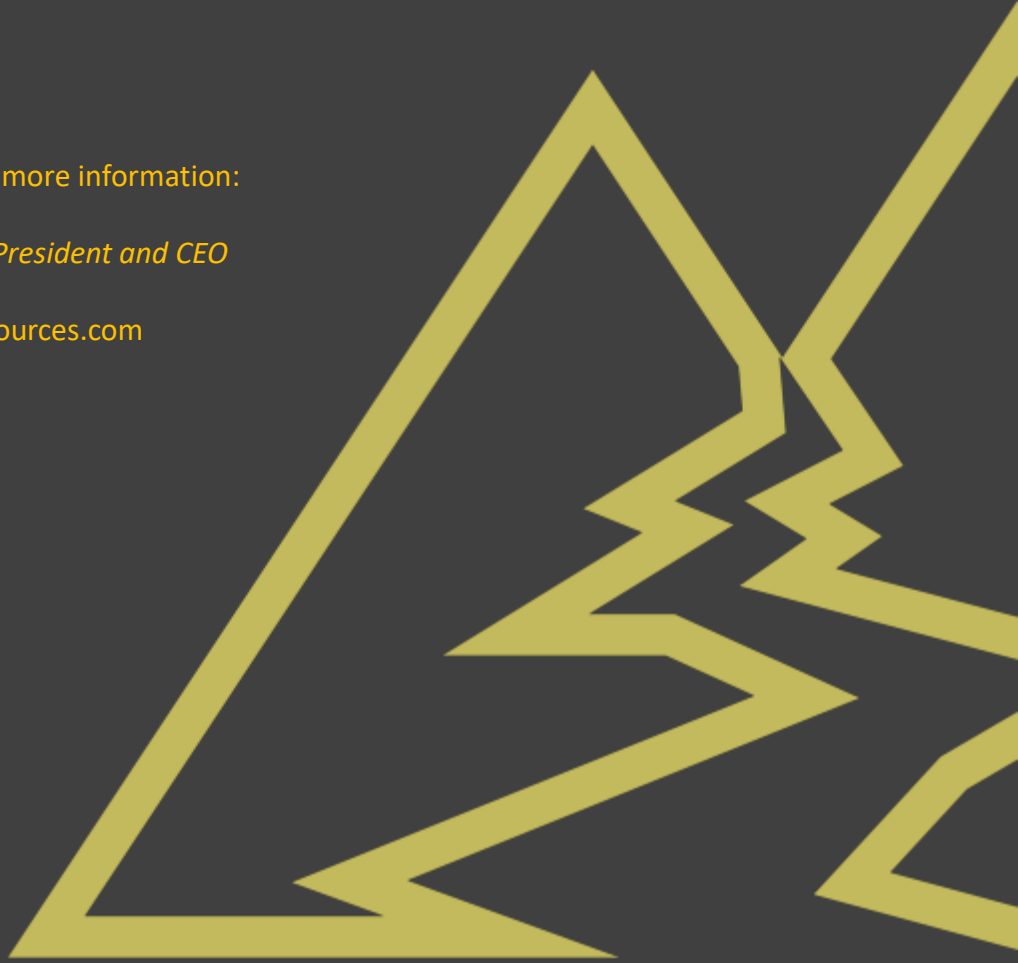
- Conduct additional geological mapping, with a focus on mapping vein distribution and density, as well as defining the extents of the hornfelsed alteration zone.
- Complete additional sampling, infilling data gaps particularly within areas of already defined anomalies, as well as toward the SE and NW where magnetic highs occur.
- Complete higher-resolution drone or helicopter magnetic survey in order to better define the hornfelsed alteration zone and granitic intrusive boundaries.
- Drill test highest priority targets based on the above exploration work, targeting high vein densities near the margins of granitic intrusions.

Please contact us for more information:

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SHARE STRUCTURE (May 2023)

Total issued and outstanding common shares: 26,467,614

Total warrants outstanding: 17,044,600 exercisable between \$0.15 and \$0.25

Total stock options outstanding: 2,397,500 exercisable between \$0.24 and \$5.95

Total fully diluted: 45,909,714

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