

Apr 11, 1972

Silver Standard 683-3093

Ingenika Mines is controlled by Silver Standard, and S.S. is interested in making deal on property. They have all info.

Access via float plane to Debbuz Lake.

Elev. Ingenika mine ~2500'. Probably accessible in mid May.

Asilinka Pt-2n are from 3500' elev to 5000'
Accessible in early to mid July

On Ingenika, make examination earlier. Fly to Debbuz Lake in Otter. Take boat + camp outfit. Walk over prospects. Map as much as possible on photos or topog maps. Time required, 5 days max on ground, plus 1 day up + 1 day back and a day or so for rest + rehab.

Probably can do this starting May 1-15. Distance from Ft. St. James 150 miles. Depends on snow + ice on lake. Est. of cost:

Air fare	150	150
Charter plane	300	300
Other transp	50	
Field costs	225	
Wages	700	

What topog available??

Ingenika Project Notes

Location and Access

- Proposed project area covers a belt 150 mi x 25 miles parallel to and on s.w. side of Rocky Mtn Trench.
- Central portion approx. - 180 mi WNW of Ft. St. John.
 - 80 mi N of Gernansen Landing
- Access by helicopter + fixed wing
trails marked on some maps are probably not suitable for 4 wheel drive vehicles.

Geology

- Belt of Cambrian - Eocambrian sediments regionally metamorphosed
- 3 main groups
 - Tenakithi Group. ± 13,000'
of quartz-mica schist, quartzite
and quartz, mica, staurolite, garnet schists
 - Ingenika Group. ± 18,000'
Lower portion - quartz chlorite, sericite
schist, quartzite, quartzitic
conglomerate, phyllite.
Upper portion.
 - largely crystalline limestone
intercalated with schist, phyllite,
and quartzite.

Wolverine Complex

- highly metamorphosed and granitized.
- includes granodiorite, granite, aplite,
schist, gneiss, Amphibolite.
- appears as more highly metamorphosed Ingenika and Tenakithi Group

Geological History

Eocambrian

Sea shore deposition of sandstones, siltstones, and carbonates
approx - 6 miles of deposition.

Early Paleozoic

Deformation - schistosity developing parallel to bedding
S₁ // S₀
- regional metamorphism
- major deformation producing
Wolverine Complex.

Mesozoic

- Uplift and folding
- NE - SW compression
- leading to recumbent broad folds trending NW-SE
- wavelengths ~ 10-15 miles axial planes dip NE.
- 2 sets of faults associated with folding.

Pelly Creek Linament.

- Thrust fault continuing off
Tomias Lk. synclinalium.

Transverse faults

- trending NE - SW.
- strike slip faults - tear faults
- associated with thrusting blocks.

Late Mesozoic

- intrusion of Hogen batholith into synclinalium
of Paleozoic rocks.

Late Mesozoic and Tertiary

- Longitudinal faults.
 - generally trend northwesterly.
 - separate major rock units
 - vertical movement primarily.

Rocky Mountain Trench - primarily vertical movement.
- probable movement from Paleozoic to Tertiary

Economic Geology

- Potential area for Pb-Zn-Ag deposits
- Those found to date are generally stratiform replacement deposits in Ingenika limestone.
- Mineralization generally associated with shear zone and preceded by silicification and $FeCO_3$.
- No definite age of faulting or shearing associated with mineralization.
- Mineralization generally consists of Pyrite, galena, sphalerite with minor pyrrhotite, magnetite, chalcocite, tetrahedrite, pyargite, and barite.
- Mineralization later than regional metamorphism.
- No known massive Pb-Zn deposits found to date in Tenakih group — although some metalization associated with g/z veins.
- Association of base metals with L. Cambrian limestone well known in eastern B.C. and Yukon. Presence of mineralization and L. Cambrian limestone (Gabrielse) makes area highly favourable for exploration.

Proposed Exploration

- Attempt to limit exploration area for follow-up when on initial recon.
- Initial Recon - by 180
 - gossan spotting
 - rough geology.
- Helicopter follow-up.
 - geology + silt sampling

Examination of properties

- determination of structures favourable for ore deposition.
- possible ore genesis
- possible association with Pelly Creek limestone.