GEOLOGICAL ASSESSMENT REPORT
ON THE
BAR CLAIMS

Claims:
BAR 1  (YB57643)
BAR 2  (YB57644)

WHITEHORSE MINING DISTRICT
N.T.S.: 105 F/14 & F/15
LATITUDE: 61°50'N, LONGITUDE: 133°01'W

Rick J. Zuran, B.Sc.
July 2nd, 1996

Field Work Completed on May 20th, 1996
View looking west towards the Bar Claims.
PLATE 1: View looking northeast at Barite Veins #1-4. Host rock is a buff weathering dolostone (unit SDa).

PLATE 2: Barite Vein #3; 0.80m wide with an attitude of 046/82 SE. Blue-grey colour due to carbonaceous impurities.
PLATE 3: Barite Vein #7; barite vein breccia comprising orange weathering limonite + iron oxides with dolostone clasts.

PLATE 4: Barite Vein #7; barite vein breccia with clasts of dolostone (unit SDa).
PLATE 5: Barite Vein #8; replacement of fossiliferous matter along bedding by coarse tabular barite+silica.

PLATE 6: Adjacent to Barite Vein #8; replacement of fossiliferous (coral?) with silica+minor barite.
PLATE 7: Barite Vein #10; fine grain massive barite @ 067/90 averaging 1m wide over 50m strike length.

PLATE 8: Barite Vein #10; note local patches of surface iron oxide staining.
PLATE 9: Barite Vein #10; massive white fine grained barite.

PLATE 10: Barite Vein #15; view looking north-vein branches into several smaller veins in the foreground.
PLATE 11: Fossiliferous dolostone (unit SDa) containing semi-colonial coral, bryozoan, and the occasional Silurian Atrypa (?) brachiopod. Northern map area.

PLATE 12: Black chert interbeds in dolostone (unit SDa); 3 to 10 cm wide; ~30m southeast of Vein #4.
8. CONCLUSIONS

Further work for increased commercial quality barite on the BAR 1 and 2 claims is promising. Thoughts, suggestions and conclusions are presented in the following paragraphs.

The regional Porcupine Thrust Fault system puts Siluro-Devonian dolostones over possible Earn Group carbonaceous shales, (Dodge, J., 1988). Remobilized barite from bedded barite in Earn Group rocks below has percolated up preferred joints and structures into the above Siluro-Devonian dolostone forming the barite veins and locally replacing fossiliferous matter along beds within the dolostone on the BAR claims.

A total of 18 barite veins were mapped; 3 of which are 1 to 10 metres in thickness; all are open at depth and at least in one direction. The general geometry of the veins is variable, however continuous strike length of up to 50 metres with an average width of 1 metre has been recorded at Barite Vein #10. This confirms that consistent geometry of barite veins in the area can be found.

Stereonet plots confirm that some of the barite veins mapped prefer the 042/75 SE joint sets within the host dolostone country rock (unit SDa).

Barite Vein #7 may be part of the same vein swarm as Barite Veins #1 to 4, 120 metres to the north. Barite Veins #10, 13, 14 and 15, all on strike with each other, may be related to Barite Vein #7 via an east-southeast trending sinistral strike slip displacement of ~250 metres. Further mapping will clarify these points and could increase the barite tonnage on the BAR claims.
9. STATEMENT OF COSTS

Detailed geological mapping at 1:2,500 scale was conducted over the BAR 1 and 2 claims on May 20th, 1996.

FIELD PERSONNEL
Rick J. Zuran (Geologist) @ 300/day for one day $300

TRANSPORTATION
Whitehorse to Barite Mountain via Faro/Ross River return: 800 km @ $0.35/km $280

FOOD & ACCOMODATION
1 man @ $100/day $100

REPORT PREPARATION (Geological Services)
Rick J. Zuran: one day of report writing @ $300/day. $300

MISC. COSTS (Field consumables—flagging tape, topoline; drafting supplies) $30

Total Expenditures $1,010
10. STATEMENT OF QUALIFICATIONS

I, Rick J. Zuran, B.Sc., with a residence of RR #1, Site #4, Compartment #31, Whitehorse, Y1A 5V6, Canada, do hereby certify that:

1. I am a graduate of the University of British Columbia with a Bachelor Degree in Geological Sciences (1988).

2. I have been engaged in mineral/field exploration since 1977 for base metals, uranium, and precious metals in the Yukon Territory, Northwest Territories, British Columbia, Labrador, Saskatchewan, and Montana (USA).

3. I have been associated as an employee or consultant with the following universities/companies:

   University of Ottawa          Omni Resources Ltd.
   University of British Columbia Mt. Skukum Gold Mining
   Denison Mines Ltd.            Total Energold Corp.
   Anaconda Canada Expl. Ltd     North American Metals
   Selco Ltd.                    Kennecott Canada Inc.
   BP Minerals Ltd.

4. I am a member of the Yukon Chamber of Mines.

5. The work described in this report is based on field work conducted on May 20th, 1996 and completed by myself.

6. I am the author of this report.

Dated at Whitehorse, Yukon Territory this 2nd day of July, 1996.

Respectfully submitted,

Rick J. Zuran
11. REFERENCES


Tempelman-Kluit, D., 1977, Open File #486. GSC publication, 3 map sheets.