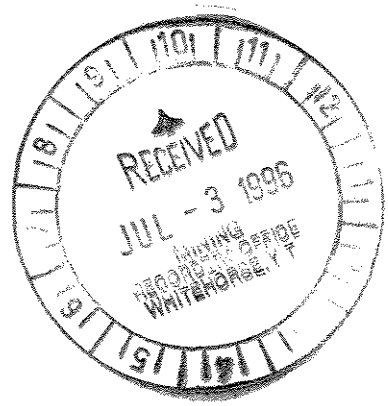
GEOLOGICAL ASSESSMENT REPORT
ON THE

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

093494

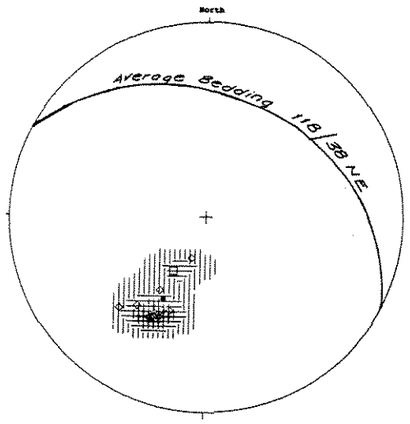
Rick J. Zuran, B.Sc.
July 2nd, 1996

Field Work Completed on May 20th, 1996

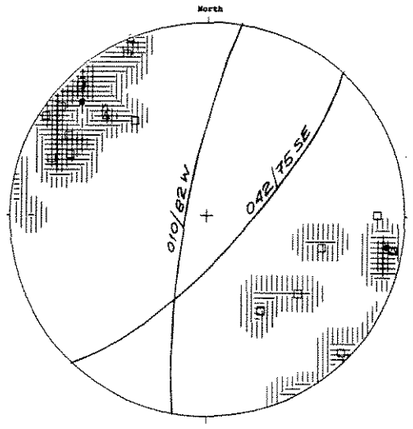
FRONTISPIECE

View looking west towards the Bar Claims.

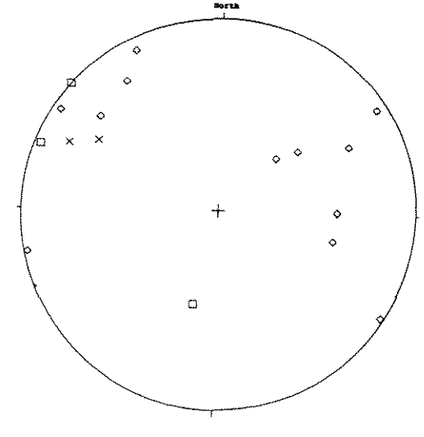
STRUCTURE



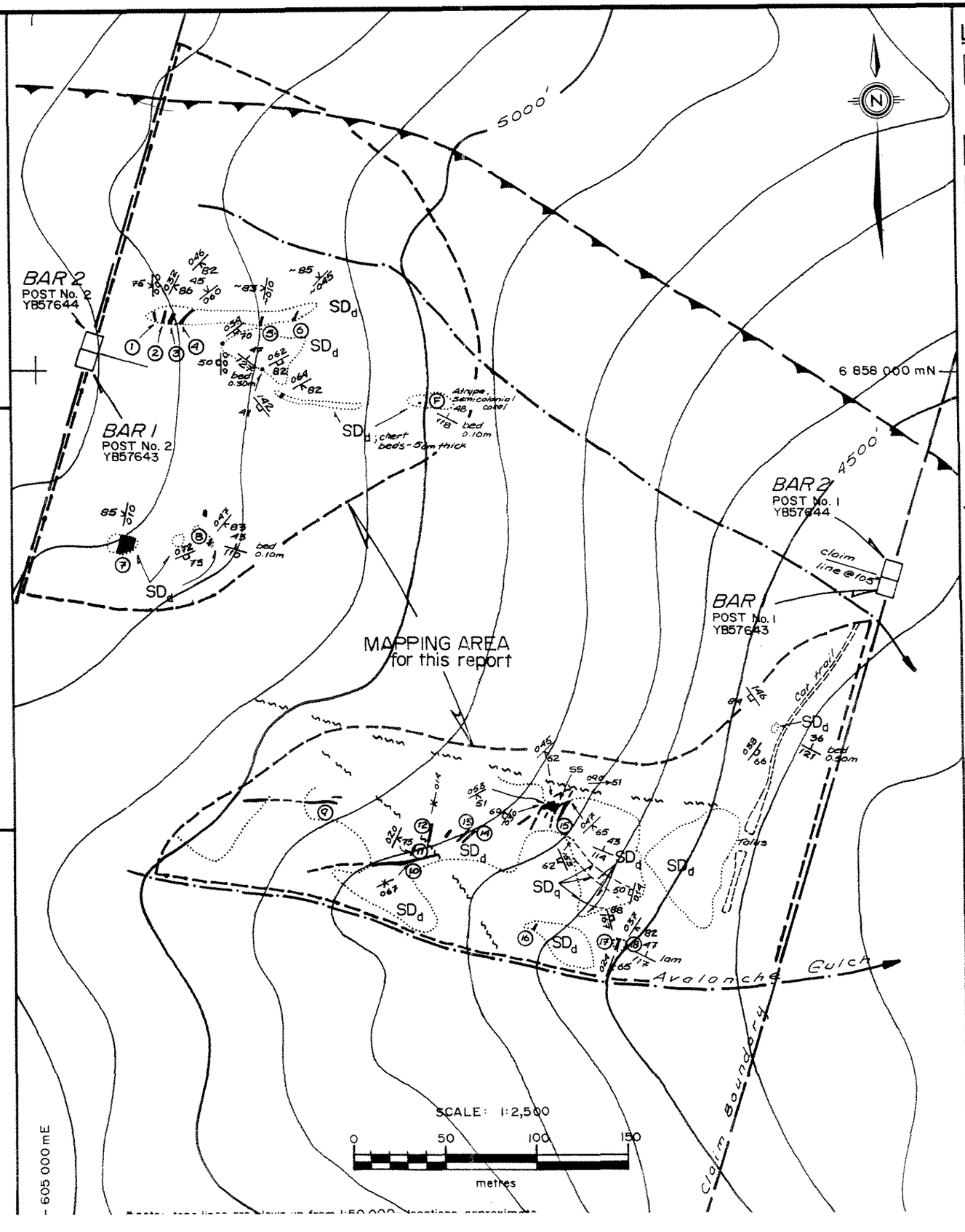
Bedding; diamonds: Dolostone
squares: Shale (east of map area)



Barite Veins; triangles: veins ≥ 0.80m wide
squares: veins < 0.80m wide



Joints; diamonds: Dolostone
squares: Barite
crosses: Shale (east of map area)



LEGEND

- BARITE VEINS (numbered)

SILURIAN & L. DEVONIAN

- SD_d DOLOSTONE
- SD_q QUARTZ SANDSTONE
- Thrust Fault
- Fault (defined, assumed)
- Bedding
- Jointing
- Lineation
- Vein Attitude (Barite)
- Outcrop
- Claim Post
- Cat Trail
- Creek

ABBREVIATIONS

lam	laminations
ss	slickensides

BARITE VEINS

No.	ATTITUDE	WIDTH (true-m)	COMMENTS
1.	000/75W	0.10m	white
2.	032/86SE	0.60m	weak FeO stain-yellow
3.	046/82SE	0.80m	white
4.	060/45NW	~0.60m	weak FeO stain-yellow
5.	~010/85W	~0.25m	estimated from a distance
6.	~045/85NW	~0.20m	" " " "
7.	~010/85W	~10m	tabular x-tals avg. 1x4cm some breccia; dk. inclusions particularly at base
8.	uncertain	0.10m	coarse tabular x-tals
9.	~070	~0.40m	estimated from a distance
10.	067/90	3.0m	massive, fngn; white w/ local pale inclusions; local MnO + FeO staining
11.	020/75SE	0.30m	white
12.	014/90	0.15m	along incised linear
13.	053/51SE	0.30m	white
14.	~040/50NW	~0.15m	chaotic, branching; pods massive; MnO_2 + limonite along HW - pale inclusions olem; joints w/ in vein: almost look like bedding
15.	047/65SE	~4m	
16.	uncertain	0.10m	discontinuous
17.	024/65SE	0.15m	> subparallel 4m apart
18.	037/82SE	0.04m	

BAR CLAIMS
GEOLOGY

DATE: May, 1996	DRAFTING: R. Zuran
N.T.S.: 105 F14 & F15	FIGURE: 3

PLATE 1: View looking northeast at Barite Veins #1-4. Host rock is a buff weathering dolostone (unit SD_d).

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 SD_d).

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.

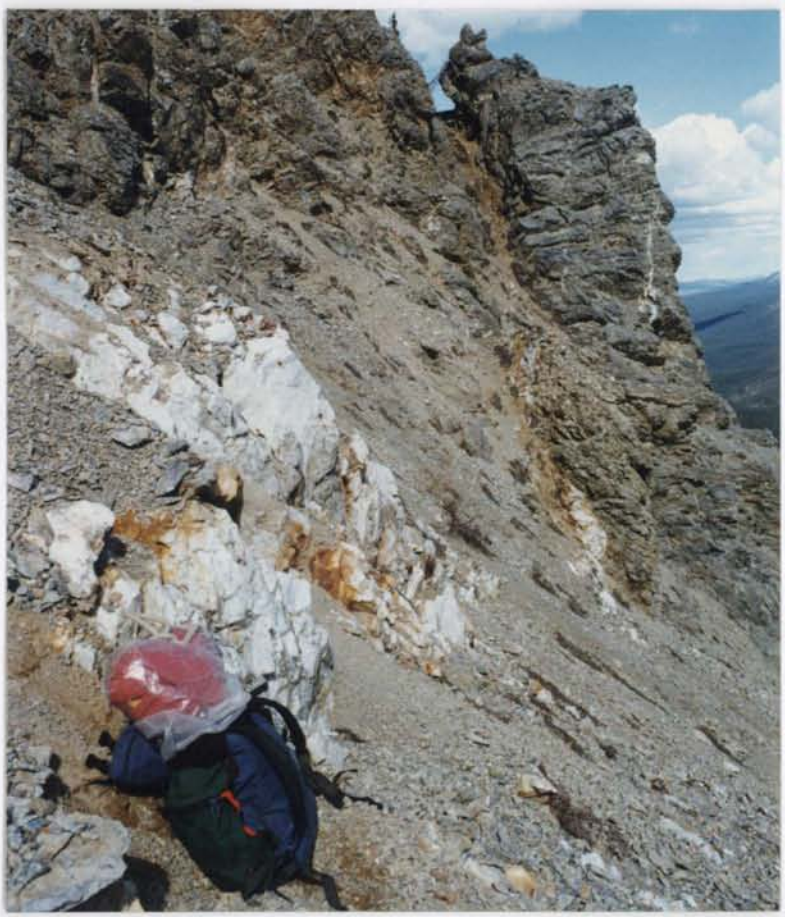


PLATE 8: Barite Vein #10; note local patches of surface iron oxide staining.

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 SD_d) containing semi-colonial coral, bryozoan, and the occasional Silurian Atrypa (?) brachiopod. Northern map area.

PLATE 12: Black chert interbeds in dolostone (unit SD_d); 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 SD_d).

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

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

Dodge, J., 1988, Geological Report on the Rite 1-2 Quartz Claims. Yukon Territory Assessment Report #092135, 10p.

McCann, A.M., 1981, Barite Mountain Property Location and Evaluation. Yukon Territory Assessment Report #091003, 4p.

Read,W., 1982, Status Report-Barite Processing Investigation-Northern Barite Project. Dome Petroleum internal company report, 9p.

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