URN CLAIMS

GENERAL

Bedded barite occurrences are widespread in eastern Selwyn Basin. These barite horizons occur near the base of Lower Devonian to Mississippian Earn Group. Chert is generally characteristic of the group. Similar barite occurrences are now known in western Selwyn Basin. Urn Claims 1 - 131 were staked to cover this new barite locality.

URN CLAIMS AREA

An on-going regional mapping program in the Faro area has outlined several bedded barite occurrences. These barite beds outcrop on the north slope of Rose Mountain, four miles west of the Faro open pit and concentrator. Three barite beds have been noted and represent two or possibly three separate horizons. Continuity within and correlation between these horizons is hampered by lack of outcrop. Nevertheless, topographic, structural and tenor information from known exposures has restricted the area of immediate economic interest. Rigorous mapping of the Urn Claims may reveal additional potentially economic sites.

Barite occurrences are found on maps D-6 and E-6. The lower barite horizon, Unit 7B, has a potential strike length in excess of 12,000 feet, based on three exposures. Barite continuity for this distance is dubious as barite has been observed to grade laterally into buff-weathering phyllitic chert wall rocks. Nevertheless, the potential exists for sub-cropping barite in the 10,000 feet between Urn Site 4 and Urn Site 10. In addition, this area may afford relatively favourable topographic

conditions, should high grade barite be found. Assay results from Sites 4 and 10 are 63% $BaSO_4$/10' and 48% $BaSO_4$/10' respectively. Wall rocks at the sample sites were not observed but local topography suggests a true barite thickness not exceeding 40'.

The upper barite horizon, Unit 7D, is 1,000' immediately up-section from Unit 7B. This horizon is continuously exposed along 4,000' of strike length (sites 3, 5 and 6). To the east, Unit 7D appears to have been eroded shortly after deposition since barite cobbles (nodules?) occur in phyllitic chert wallrocks; to the west, barite float occurs 10,000' along strike from the last barite outcrop. Unit 7D has a true thickness of approximately 30 - 40' with most outcrops in the 5 - 15' range. Wall rocks are not exposed in the latter instances. Assay data are incomplete but moderate 25^{o}-55^{o} dips into the rugged hillside preclude any open pit potential.

The barite horizon of immediate economic interest straddles map sheets D-6 and E-6. Correlation with Units 7B or 7D, or the possibility of a third horizon, is uncertain. This latter possibility has some credibility since slate and conglomerate form the respective footwall and hanging wall, whereas all other barite occurrences have phyllitic chert wall rocks. Urn Sites 1, 2, 8 and 9 are located on this horizon to give a projected strike length of 14,000'. At Site 9, a 10' sample assayed 90% $BaSO_4$ and occupies a topographically favourable quarry site; the eastern-most exposure is much more siliceous and less than 20' thick. Site 1, central to the above localities, is 40-50' thick and has interbanded low and high grade zones. Progressive thickness and grade variations exhibited by these exposures may indicate a crude decrease in grade and thickness

of barite from west to east.

SUMMARY AND CONCLUSIONS

Two, and possibly three, distinct barite horizons outcrop four miles west of the Anvil open pit. To date, one locality, Site 9, offers the grade, thickness and topography necessary for a potentially economic quarry site. Detailed investigations may reveal additional economically interesting localities.

Respectfully submitted,

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