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ASSESSMENT REFORT on the Geological Examination of the

RONOKE (Lot 3402) and LEXINGTON (Lot 3718)

MINERAL CLAINS

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situated on

Ymir Creek

Seven (7) Kilometers Northeast of Ymir, B.C.

Nelson M.D.

N.T.S. 82F/6E

Latitude 49°20'N; Longitude 117°10'W

Field Work October 29, 1976

MINERAL RESOURCES BRANCH ABSESSMENT REPORT

Report by:

D. R. Cochrane, P.Eng., Dec. 5, 1976, Delta, B.C.



Cochrane Consultants Limited 4882 Detta St., Delta, B.C. V4K 2T8 946-9221 Geotechnical Consulting / Exploration Services geology geophysics geochemistry TABLE OF CONTENTS

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#### INTRODUCTION:

The Ymir Gold Camp in southcentral British Columbia has a modest past production record dating back to the late 1890s and continuing somewhat intermittantly until 1951. The camp had twentythree (23) producers, and produced 268,000 ounces of gold and 1,386,000 ounces of silver from 873,000 tons of ore milled, (or shipped).

In view of the increase in the price of gold since 1972, from the previous fixed \$35.00 (U.S.) an ounce to the current (November, 1976) price of \$130.00 per ounce, many old gold camps are being economically re-evaluated. Modern emphasis however, is away from narrow, labour intensive "vein" type deposits towards replacement, skarn or metasedimentary deposits which have larger dimensions and are therefore amenable to highly mechanized methods of mining and extraction.

The Ronoke and Lexington claims lie near the center-east section of the Old Ymir Gold Camp, and were recently inspected by the author as part of a general re-examination of the area in general.

This report describes work done, and first impressions of the claims during a very brief visit, and is designed for assessment work submission. Assessment work details are summarized in Appendix I. Metric units have been used throughout, in keeping with modern practice.

#### LOCATION AND ACCESS:

The Lexington and Ronoke claims are accessible by car or truck during snow free months, being seven (7) road kilometers northeast of the Town of Ymir on the Ymir (formerly Wild Horse) Creek Road. Both claims straddle the creek and a branch road off the main Ymir Creek road proceeds downhill to the creek and old workings.

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Ymir is situated in the Salmo Valley between Nelson and the town of Salmo, and is serviced by Highway No. 6, the East Kootemy Power Line and the Burlington Northern Railway.

The N.T.S. code reference for the area is 82F/6E.

#### CLAIMS INFORMATION:

The Lexington and Ronoke are reverted crown granted mineral claims acquired by Mr. C. F. Graham of Merritt, B.C. in the fall of 1975. They are registered in the Nelson Mining Divison and are shown on B. C. Department of Mines Minerals Claim Map No. 82F/6E.

The following table lists claims information:

CLAIM NAME	LOT #	RECORD #	ACRES	* EXPIRY DATE
LEXINGTON	3718	119	46.66	Nov. 10, 1976
RONORE	3402	110	51.05	NOV. 10, 1970

\*As of Nov. 1, 1976



#### GENERAL SETTING:

1

The Nelson-Ymir-Salmo area lies in the southcentral portion of the Province, within the Nelson Ranges of the Selkirk Mountains. This region is an impressive upland surface with steep to moderately rounded peaks rising to elevations in excess of 2200 meters above sea level.

Forest cover is extensive and well developed below elevations of about 1800 meters, and several saw mills and logging outfits are actively engaged in the forest resource industry. At higher elevations the vegetation becomes subalpine to alpine.

Ymir is essentially a "Ghost Town" but is strategically located in the Salmo Valley between Nelson and Salmo. There is a restaurant, gas station and hotel.

#### HISTORY:

The Ronoke and Lexington claims were crown granted on March 19, 1901 by a company' named London and Rossland (B.C.) Ltd. This company had acquired several adjoining claims in 1899, 1900 and 1901, however there is no further reference to the company in B.C. Minister of Mines Reports after 1901. Cockfield (1936) reports that at that time (1936), the claims were owned by A. J. Campbell, W. Roy Hunter and associates, and several cuts and three adits were reported on the property close to Wildhorse (Ymir) Creek. At the time of Cockfield's field work, in 1936, the adits had caved and were inaccessible.



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Apparently little work has been conducted since that time until 1975 when the crown grants reverted to the crown and were recently acquired by Mr. C. F. Graham.

#### GENERAL GEOLOGY:

The Ymir Gold camp lies on the east flank of a large, north trending synclinorius whose axis runs from Salmo to Nelson, a distance of roughly 40 kilometers. The synclinorium is "floating" being enclosed, for the most part, in Nelson Plutonic rocks, and the latter is considered by most workers as being derived by metamorphism of pre-existing volcanic and sedimentary rocks. (Little, 1960, pg. 98).

The synclinorium consists of the following sequence (from outside, or oldest, towards the center and youngest).

- Lower or Pre-Jurassic Ymir Group (formerly Pend-D'Oreille by Drysdale) consisting of argillite, slate and paragneiss.
- Lower Jurassic Rossland Formation consisting predominantly of greenstones.
- 3. Mid/Upper Jurassic Hall Formation, which conformably overlies the Rossland, and consists of argillite, sandstone and conglomerate. This entire complex is intruded by various intrusions of the Nelson plutonic suite, and is locally strongly deformed and metamorphosed.



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To the east of the synclinorium is a sequence of Cambrian and Ordovician strata that are northerly trending and are characterized by quartzite, argillite and various schists.

Productive metalliferous gold, silver lead and zinc deposits occur in all the above described rocks except the Hall Formation.

#### DESCRIPTION OF SHOWINGS:

The Lexington/Ronoke showings are adjacent to Ymir Creek, and the lower showing is on the south side of the creek and the upper (upstream approximately 300 meters) showing is on the north side of the creek. Exposure is extremely limited and the adits are now caved and therefore examination was restricted to the dumps, a few open cuts and an occassional outcrop. Immediately south of the creek is a gravel bluff, and further south several gravel benches and the overburden commpletely obscures bedrock.

#### LOWER SHOWING (Lexington)

The lower showing consists of the dumps from two caved adits and a few cuts that are still open. The rocks are silicified, rusty, altered schists and Nelson intrusive rocks. The schists were assigned to the Pend d' Oreille group by Drysdale (1914) and Cockfield (1936). Most regional geological maps show the area underlain entirely by the Nelson granodiorite. Presumably then the lowermost showing is an Xenolith of schist in the Nelson igneous complex.



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The silicified schist and hybrid rocks contain veinlets and disseminations of pyrite with some scattered galena and a trace of chalcopyrite. Cockfield reports that the mineralization "follow certain beds or series of beds in the schists". He reports that five assays across 40 feet averaged \$7.00 a ton in gold. (or 0.2 ounces Au per ton with gold at \$35.00 per ounce). The Nelson rocks observed were coarse grained biotite grnodiorites with traces of disseminated pyrite.

#### UPPER SHOWING

Approximately 300 meters upstream, and on the north bank of the river is a small outcrop and a caved adit. The adit is apparently caved for a distance of about 10 meters from the portal and the adit appears to have been driven northeasterly on a series of vertical joint sets in a highly silicified host rock. Cockfield (1936) reports \$40.00 in gold from this zone (or 1.14 ounces per ton at the old price of \$35.00 per ounce for gold).

Specimens collected by the author were exacined under a binocular microscope and ranged from hornblende-biotite schist, to a siliceous-pyritic sample with traces of galena, chalcopyrite and considerable graphite. There is some noticeable sulphide/quartz banding in many of the specimens. No free native gold was observed.

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## CONCLUDING REMARKS:

Old workings on the Lexington and Ronoke claims are caved and presently inaccessible. Overburden in the valley is extensive and therefore outcrops are exceedingly rare, and restricted to the lowermost stream bed section of the claims.

Previous reports refer to the mineralization as "replacing" or following certain beds in the schists and the lower workings are reported to carry 0.2 ounces of gold across 40 feet.

Induced polarization test work is suggested as a means of determining the extent of mineralization.

Respectfully submitted,

D. R. Cochrane, P.Eng., December 5, 1976, Delta, B.C.

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#### APPENDIX 1

#### Assessment Work Details

LOCATION: Ymir Crrek, seven (7) kilometers east of Ymir, B.C.

N.T.S. 82F/6E - Nelson Mining Division

DATES WORKED: October 29, 1976

FIELD PERSONNEL:

Mr. C. F. Graham, prospector, Merritt, B.C. Mr. I. Urquhart, prospector, Merritt, B.C. D. R. Cochrane, P.Eng.

WORK DONE:

Examination of old workings and sample collection

COSTS:

Graha	m/Urquhart; 2 man days @ \$50.00/day	-	\$ 100.00
D. R.	Cochrane, P.Eng. 1 day @ \$200.00/day		200.00

Total \$ 300.00

### APPENDIX II

# Bibliography

B. C. Minister of Mines Reports:

1899, 1900, 1901

Drysdale, C.W. (1917), G.S.C. Memoir 94 Cockfield, W.E. (1936), G.S.C. Memoir 191 Little, H.W. (1960), G.S.C. Memoir 308