

**EXPLORATION POTENTIAL**

for

**Ag-Pb-Zn MANTO DEPOSITS**

in the

**FERGUSON GROUP PROPERTY**

**NTS 94C/11E**

**Omineca Mining Division**

**April 19, 1990**

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## FERGUSON GROUP PROPERTY

### SUMMARY

The Ferguson Group property, comprising 25 reverted crown grants, is located in the Omineca Mining Division of north-central British Columbia. Numerous metallic lode prospects have had limited work since the early part of the century, the largest being the Ferguson group.

The Ferguson Group property is the primary exploration target for "Manto" type Ag-Pb-Zn polymetallic replacement deposits. Numerous similarities can be drawn from existing Manto type deposits in Nevada, Utah, Mexico and B.C. The geological setting, structural framework of transverse faults and large deep-seated crustal breaks, host lithology, chemistry and style of mineralization are all analogous.

Within a regional context, metallic deposits of note include the Cirque Pb-Zn-Ba exhalative deposit approximately 70 miles to the northeast and the Mt. Milligan copper-gold porphyry system within a large intrusive complex approximately 100 miles to the southwest.

The geology of the district consists of thick folded succession of regionally metamorphosed, Late Proterozoic to Cambrian sedimentary rocks of the Tenakihi and Ingenika groups which strike northwest across the central and northeastern part of the area. Near the southeastern border, these rocks have been intruded by the Wolverine Complex. Upper Jurassic Omineca Intrusions form the Hogem batholith which parallels the regional northwest trend.

The major structural features of the Aiken Lake map-area consist of long, relatively narrow northwest trending belts of folded rock separated by mainly steeply dipping faults. In places these structures are offset by large transverse faults that strike east, northeast, and north. The regional structures are dominated by two, nearly parallel features; the strong belt of rocks aligning the Omineca intrusions and the zone of weakness and dislocation represented by the Rocky Mountain Trench about 50 miles to the northeast.

The Ferguson group property is the primary exploration target for "Manto" type Ag-Pb-Zn polymetallic replacement deposits. Previous work has focused on the obvious exposed mineralization discovered by prospecting on the three central crown grants which have current reserves of 22,500 tonnes at a grade of 3.5 oz/ton Ag, 9.8 % Pb and 6.1 % Zn, but most of the property is covered by overburden. However, significant potential exists for discovering new mineralized zones lies within the surrounding land. Since the cessation of work in 1932, no modern exploration techniques such as geochemistry or geophysics have been used on the property.

Grade and tonnage models for Manto-type deposits developed by Mosier, Morris and Singer have estimated the average size of 52 deposits worldwide at 1.8 million tonnes with a grade of 5.2 % Pb, 3.9 % Zn, 0.094 % Cu, 150 grams/tonne Ag and 0.19 grams/tonne Au.



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3385 (10) 3716 Rev. Co	L 3728 Rev. Co	Rev. LCA 3731	Rev. Co 3733
3715 Rev. Co	L 3727	3304 (4) 3726 Rev. Co	L 3729 Rev. Co
L 3725 Rev. Co	L 3724	L 3718 c.g.	L 3719 c.g.
L 3723	L 3722	L 3721 5098 (3) Rev. Co	L 3720 5097 (3) Rev. Co
L 4998 Rev. Co	L 4999 Rev. Co	L 5000 Rev. Co	L 5001 Rev. Co
L 5003 9024 (10)	L 5002	L 5004	L 5006 Rev. Co
L 3735 Rev. Co	L 3736	L 3737	L 3738
L 3739	L 3740	L 3741	L 3742

Delkluz L.

KLUZ 5  
7087 (5)  
3NX6W

COMINCO LTD  
RESORTED MAY 21, 1965  
EXP. 1996

KLUZ 1  
4211 (9)  
13N 24W1

COMINCO LTD  
SEPT. 1981  
1996

KLUZ 2  
4212 (9)  
13N 30E1

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