

GEOLOGICAL REPORT

on the

JAY MINERAL CLAIMS

BELMORAL MINES LTD. (NPL)

YUKON TERRITORY, MAYO MINING DIVISION

**Vancouver, B.C.
October 25, 1973**

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Geologist**

*Received Ottawa
March 12/74
G. W. Leime*

(1 copy received Nov 22/73)

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ILLUSTRATIONS

PROPERTY LOCATION MAP	1" = 80 miles
CLAIM MAP & REGIONAL GEOLOGY	1" = 1/2 mile
PROPERTY GEOLOGY	1" = 500 feet
DETAILED GEOLOGY	1" = 50 feet

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1-00

INTRODUCTION

During the period of September 10th to September 15th, 1973, a geological survey and evaluation of the geochemical survey completed in 1969 was carried out on the Jay 1-16 mineral claims. The purpose of this work was two-fold, to complete the assessment work required and to evaluate the mineral potential of the claim group. The work was executed by personnel of Agilis Engineering Ltd.

2-00

LOCATION AND ACCESS

The Jay mineral claims lie approximately 30 miles north-east of Mayo in central Yukon Territory. The centre of the property is located at approximately:

64° 00' 30" N, and 135° 38' 30" W

The property is accessible by helicopter from Mayo. A cat trail passes within five miles of the property.

3-00

PHYSIOGRAPHY

The claim group lies along the northern slopes of a low hill south of Lynx Creek. Topography is gently undulating, except along two northerly draining small creeks. Here slopes are steep and cliffs are common. Swamps and muskeg are common along Lynx Creek. Elevations vary between 2,500 feet and 4,200 feet above mean sea level.

4-00

CLIMATE AND VEGETATION

The claim group lies within the central part of the Yukon. Winters are long and cold, temperatures in excess of 40 below zero prevailing over extended periods of time are common. Summer months are warm and dry. Exploration work can be conducted from mid June to late September. Perma frost is common along northerly facing slopes.

Vegetation consists of thick stands of stunted spruce and balsam. Intervening areas of buckbrush and willow, along creeks or water seepages are present. Thick layers of moss cover the major part of the claim group.

5-00

PROPERTY

The property consists of the following mineral claims:

<u>Claim Name</u>	<u>Record Number</u>
Jay 1-16	Y31815-Y31830

The property is held under option by Belmoral Mines Ltd (NPL) from Mr. J.R. Lerner and G.C. Gutrath.

6-00

HISTORY

The property was originally located by Keno Hill Mines Ltd. to investigate geochemical silt highs encountered along the creeks. Prospecting located a galena-siderite vein structure. Several trenches were excavated but the claim group was allowed to lapse.

In March 1968 the Jay 1-16 claims were staked and subsequently acquired by Altair Mining Corporation Ltd (NPL) under a purchase agreement. During July 1969, 17.12 line miles of geochemical survey were completed by McDonald Consultants Ltd., for Altair Mining Corporation Ltd. Samples were taken on a grid basis, 100 feet apart. All samples were analysed for Pb, Zn and Ag. A total of 903 samples were taken. This survey outlined a well defined soil anomaly striking easterly and several weaker anomalous areas. The north-eastern part of the claim group was not sampled.

The property is held by Belmoral Mines Ltd (NPL) under option. In September, 1973 Agilis Engineering Ltd., on behalf of the above company completed geological mapping and evaluation of the geochemical survey.

7-00

GEOLOGY7-10 Regional:

The area has been mapped by the Geological Survey of Canada and the information has been published in Memoir 357; Geology of Mayo Lake, Scougale Creek and McQuesten Lake Map Area, Yukon Territory, by L. H. Green.

In general, the Jay mineral claims are underlain by gritty quartzite, argillite, phyllite, minor limestone and chert

(unit 3). Along the south-eastern and eastern boundary of the property, the unit is apparently truncated over Lower Cretaceous Keno Hill quartzite.

To the south, along the valley of the South McQuesten River an easterly-trending fault forms the apparent contact with unit 3 and the Keno Hill Quartzite.

The structural configuration of unit 3 is complex, several stages of folding are indicated, and the obliteration of bedding makes interpretation difficult. Large open folding on a regional basis seems to be the rule, but on a smaller scale, folding appears to be tight and highly complex.

Cretaceous granitic intrusions, usually forming small stocks intruded unit 3 north and east of the property. Granitic float found along the western part of the claims gives evidence to intrusion in this part of the claim group.

7-20 Local Geology:

The property was mapped at a scale of 1 inch = 500 feet. Ground control was obtained by chain and compass survey of the claim lines and by mapping traverses along creeks or ridges with prominent outcrops. Rocks were identified in the field with the aid of a hand lense, hence names applied are field names only.

The main rock type underlying the Jay claim group is a thin-bedded foliated gritty quartzite, interbedded with thin bands of biotite mica schist. The attitude of the quartzite bands is variable. On Jay 4, exposures within the creek bed show a definite change of strike as expressed by thin bands and foliation from northwesterly, 10 degrees

to 20 degrees W, to west, 20 degrees S when crossing the creek. The creek bank is a series of cliffs or very steep slopes. A similar setting prevails along the creek crossing Jay 3, 5 and 7. Here the strike changes from N30 E to 20°W to E20°S. This is interpreted as probable north-westerly trending faulting.

On the Jay 7 mineral claim, at the helipad, the gritty quartzite unit is overlain by a thin bedded light grey, in part schistose limestone bed. This bed is less than 80 feet thick and appears to lense out towards the east. The attitude is consistent with the quartzite outcropping west of each creek, N30E, 20N. The limestone band is in turn overlain by biotite schist.

7-30 Economic Geology:

The geochemical survey, conducted by McDonald Consultants in 1969, outlined a strong easterly trending coinciding lead, zinc and silver anomaly on Jay 5, 6, 7 and 8 sub-parallel to claim line. Detailed mapping of this area shows that partly caved trenches expose a siderite - galena vein up to 35 feet wide. The vein material is coarse crystalline strongly oxidized siderite with narrow stringers and veinlets of galena concentrated along the hanging and footwall. The vein is poorly exposed and hence no attitudes and measurements could be taken. The arrangement of trenching and the distribution of the upper-limit of siderite float suggests a very flat dip 25 to 30°E. This is re-enforced by the indicated trend of the geochemical anomaly and a surface trace of the vein.

Development work consisted of three large, partly caved trenches, several small blast holes and 6 small pits.

7-40 Description of Workings:

Trench No. 1

The trench is approximately 50 feet x 5 feet x 2 feet and located along the limestone-quartzite contact. No fresh mineralization was observed. Minor siderite and strongly limonitic soil has been seen on the dump. A sample was taken along the north wall of the trench, of caved material for a distance of ten feet.

Sample No. 16852 .003 Au/oz .07 Ag/oz .01% Pb% .20%Zn

Trench No. 2

This trench lies approximately 65 feet south of Trench 1, is completely caved and rocks within the dump suggest that it was cut over its entire length in siderite vein material. The dimensions are 45 feet x 5 feet x 3 feet.

Two samples were taken from the dump, the first along the hangingwall side, the second along the footwall side. These are not selected samples, but a composite along the trench.

Sample No.	Au/oz	Ag/oz	Pb/%	Zn/%
16857				
(5 feet)	.005	2.09	2.04	3.18
16858				
(5 feet)	.02	2.37	1.55	1.32

The sample material consisted essentially of strongly limonitic, coarse crystalline siderite. Minor galena was present as fine disseminations.

Trench No. 3

Trench 3 is located at the location of a shallow shaft. The vein is best exposed in this trench. Vein material consists of dark brown to nearly black coarse crystalline siderite. Galena veinlets have been observed in the centre and along the hangingwall of the trench. Dimensions of the trench are 35 feet x 5 feet x 3 feet. Three samples were taken along the best exposures.

Sample No.	Length	Au/oz	Ag/oz	Pb %	Zn %
16853	5.5'	.02	4.19	2.45	4.45
16854	5.0	.02	12.8	3.18	3.34
16855	5.0	.005	36.3	15.7	12.95

The results of these samples are not characteristic because of possible contamination by sloughed material.

Hand Pits

West of trench 2, six small pits, 5 feet x 4 feet x 3 feet have been dug by hand. No sulfides have been found. The pits show talus of biotite schist and glacial till. From the indicated strike of the mineralized vein it is apparent that these pits are too far to the west.

8-00

CONCLUSION

Geological mapping of the Jay mineral claims show that they are underlain by a metamorphic sequence of gritty thin banded foliate quartzites, limestone and biotite schist.

The foliation and banding as exposed varies in strike from north-easterly to easterly with flat dips north westerly. Two fault zones, coinciding with creeks are

indicated by sudden changes in attitude of banding.

Mineralization found on the property is exposed on Jay 7 and consists of a strong, up to 35 feet wide, siderite vein and associated galena along the hanging-wall. The vein strikes north-westerly with indicated dip of 20° to 30° E.

Samples taken from the trenches assayed from .003 to .02 oz of gold per ton, .07 to 36.3 oz of silver per ton, .01 to 15.7% lead and .20 to 12.95% zinc.

More surface work will be required to evaluate the potential of this property.

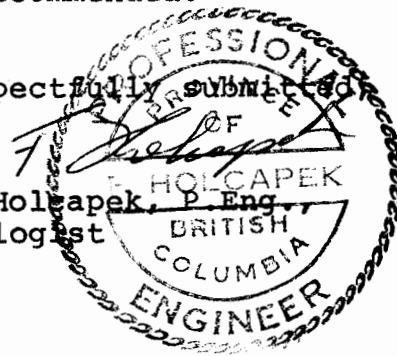
9-00

RECOMMENDATION

Geochemical sampling should be completed over the whole property, to locate possible covered vein structures in the eastern part. Extension of trenching along the indicated geochemical anomaly and known mineralized zone. Cat trenching will give the best results, if it should prove too costly to bring a cat onto the property, hand trenching along the southern extension of the geochemical anomaly and the mineralized zone, followed by diamond drilling, is recommended.

Respectfully submitted

F. Holcapek
 F. Holcapek, P. Eng.
 Geologist



Vancouver, B.C.

October 25, 1973

CERTIFICATE

I, Ferdinand Holcapek, of 92-10842 152nd Street, Surrey, British Columbia, do hereby certify that:

1. I am a graduate of the University of British Columbia, Vancouver, British Columbia, with a Bachelor of Science degree in Geology, 1969.
2. Since 1961 I have been engaged in mining exploration in British Columbia, Yukon Territory, North West Territories, Quebec, Nevada, Arizona and Australia.
3. I am a registered member, in good standing, of the Association of Professional Engineers of British Columbia.
4. I am a consulting geologist.



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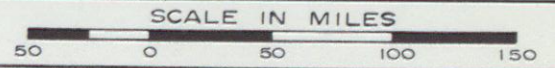
YUKON TERRITORY

BELMORAL MINES LTD. (NPL)

JAY CLAIM GROUP

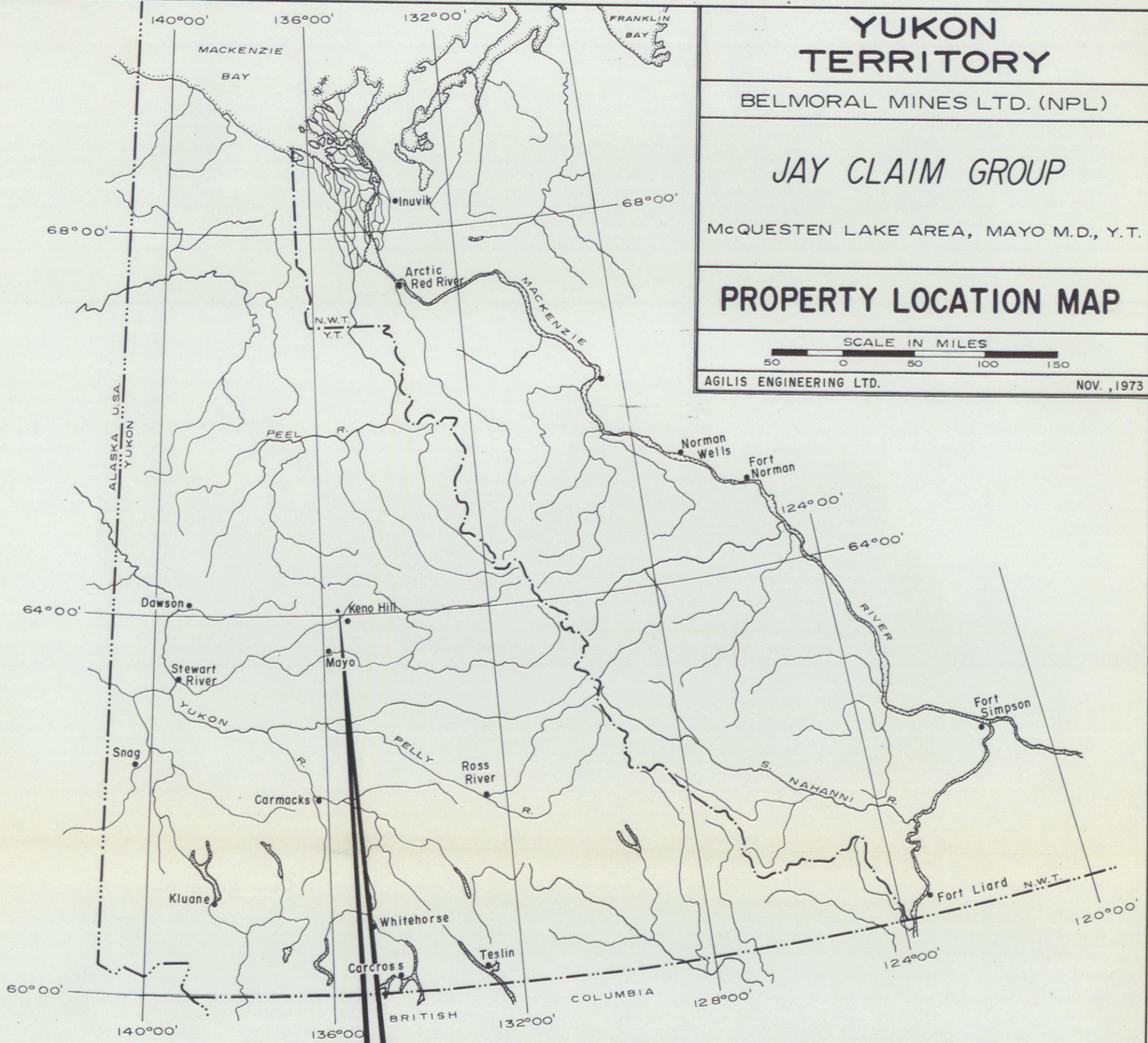
McQUESTEN LAKE AREA, MAYO M.D., Y.T.

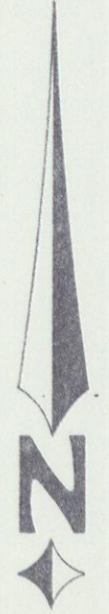
PROPERTY LOCATION MAP



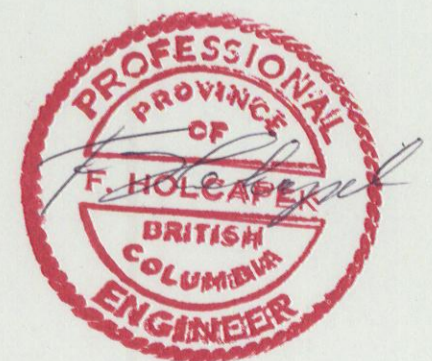
AGILIS ENGINEERING LTD.

NOV. 1973





LEGEND



BELMORAL MINES LTD. (NPL)
JAY CLAIM GROUP MCQUESTEN LAKE AREA MAYO MINING DISTRICT, Y.T.
CLAIM MAP
SCALE IN FEET 0 500 1000 1500
AGILIS ENGINEERING LTD. NOVEMBER, 1973



- LEGEND**
- Outcrop
 - Fault
 - Strike and dip
 - Jointing
 - Trenches (see detailed map)



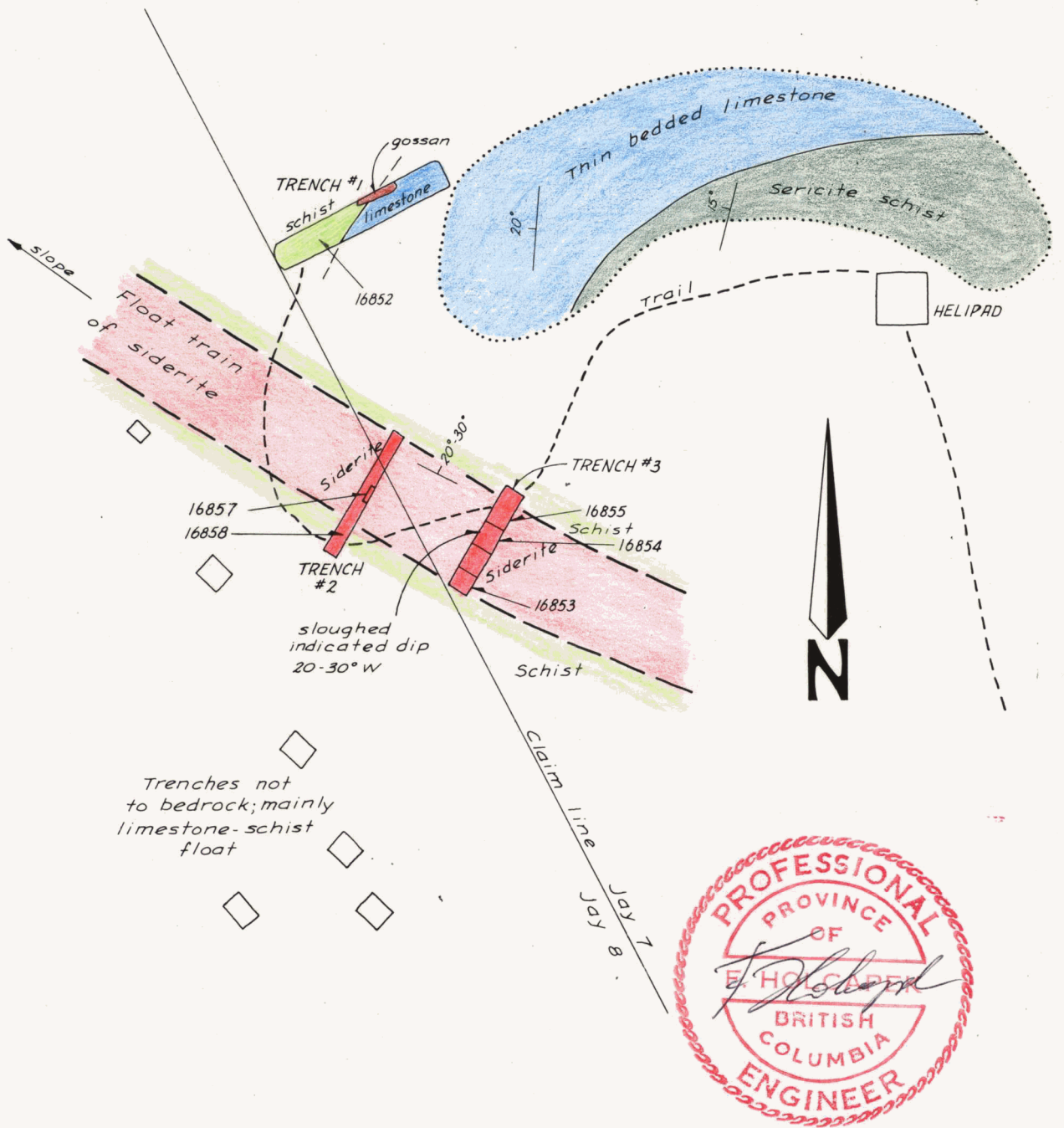
BELMORAL MINES LTD. (NPL)

JAY CLAIM GROUP
McQUESTEN LAKE AREA
MAYO MINING DISTRICT, Y.T.

GEOLOGY

SCALE IN FEET
0 500 1000 1500

AGILIS ENGINEERING LTD. NOVEMBER, 1973



	Sample	Width	Au/oz	Ag/oz	Pb%	Zn%
Trench 1	16852	10 ft	.003	.07	.01	.20
Trench 2	16857	5 ft	.005	2.09	2.04	3.18
	16858	5 ft	.02	2.37	1.55	1.32
Trench 3	16853	5.5 ft	.02	4.19	2.45	4.45
	16854	5 ft	.02	12.80	3.18	3.34
	16855	5 ft	.005	36.30	15.70	12.95

BELMORAL MINES LTD. (NPL)

JAY CLAIM GROUP
McQUESTEN LAKE AREA
MAYO MINING DISTRICT, Y.T.

**DETAILED PLAN of
GEOLOGY, TRENCHING
and SAMPLING**

SCALE: 1" = 50 feet

AGILIS ENGINEERING LTD.

NOV., 1973