GEOLOGICAL REPORT ON THE JAY 1-16 MINERAL CLAIMS OF BELMORAL MINES LTD. (NPL). MAYO MINING DISTRICT, YUKON TERRITORY.

Vancouver, B.C.
September 20, 1974.

J.R. Deighton, Geologist

AGILIS ENGINEERING LTD.
CONSULTING ENGINEERS & GEOLOGISTS
107-325 HOWE STREET, VANCOUVER, B.C. V6C 1Z7

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GEOLOGICAL REPORT ON THE

JAY 1-16 MINERAL CLAIMS OF

BELMORAL MINES LTD. (NPL)

MCQUESTEN LAKE AREA, MAYO MINING DISTRICT,

YUKON TERRITORY

1-00 SUMMARY

The Jay 1-16 mineral claims are situated 30 miles northeast of Mayo, Yukon Territory. Co-ordinates of the property are 64°00'30" N. Latitude, 135°38'30" W. Longitude. The property is held by Belmoral Mines Ltd. (NPL) under option.

In 1973, Agilis Engineering Ltd., on behalf of Belmoral Mines Ltd. (NPL), completed geological mapping and evaluation of the geochemical survey conducted by McDonald Consultants Ltd. in 1969.

This report covers the trenching, pitting, drilling and geochemical anomaly investigations carried out during the summer of 1974 by personnel of Agilis Engineering Ltd., under the direction of J.R. Deighton.

2-00 CONCLUSIONS

Drill core recovery was very low, not exceeding 30% and the circulation return was too low to enable sludges to be collected. Drill hole sampling is thus inconclusive.

The weaker anomalies to the south of the main geochemical anomaly were found to be in swamp areas and resulted from a drainage concentration of metal values in high organic soils.

At least a partial source of the stronger and more extensive lead-zinc-silver anomaly was found to be a zone of siderite-quartz carrying values in lead, zinc and silver. This zone appears to be elliptical in shape, with a strike length of approximately 200 feet and a breadth of 30 feet. Trenching indicates the zone has a width of 9 feet and is underlain by biotite-sericite schists.

Only four trenches intersected the mineralization. The mineralized zone appears to be dipping gently north to northwest at 20-30°. The zone is truncated by a well defined reverse fault. The upthrown side brings a biotite-sericite schist in contact with it. On the south and south-west side of the fault, the mineralized zone has been eroded.

Investigation of the main anomaly indicates that the only explanation for its existence is the downward dispersion of metal ions from the eroded mineralized zone.

The predominant rock types in the area of trenching are quartzites and schists, which are probably interbedded. Alteration minerals associated with the schists are graphite, biotite, sericite, chlorite and pyrite. Along the fault, alteration is more intense with abundant kaolinization. A granitic dyke was encountered in Hole #5 and in Trench #7. A thin limestone bed is present in the area of the trenches.

Trench #3 was sampled after re-excavation. Assays ranged as follows:

Ag 2.39 to 4.96 oz/ton
Pb 1.28 to 3.14%
Zn 3.15 to 5.20%

Gold and copper values were negligible. Diamond drill core from Hole #7 was assayed. The material was rusty calcite-quartz. Results are Au 0.01 oz/ton and Ag 2.19 oz/ton. Only 10 inches of core was recovered in the three foot interval.

Vancouver, B.C.
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3-00 INTRODUCTION

During the period of May 31 to June 29, 1974, a diamond drilling and hand trenching programme was carried out on the Jay 1-16 mineral claims. The purpose of this work was to evaluate the known vein on the property and to investigate the geochemical anomalies outlined in previous work.

The programme consisted on enlarging and re-sampling of old trenches, excavating eight new trenches and completing six diamond drill holes of a small size. Additional detailed geology of the work area was completed. All work was executed by personnel of Agilis Engineering Ltd.

4-00 LOCATION AND ACCESS

The Jay mineral claims lie approximately 30 miles northeast of Mayo in the Central Yukon. The center of the property is located at co-ordinates 64°00'30" N. Latitude and 135°38'30" W. Longitude. The property is accessible by helicopter from Mayo.

5-00 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.

6-00 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. Permafrost 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.

7-00 PROPERTY

The property consists of the following mineral claims:

Claim Name	Record Number
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.

8-00 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.

9-00 GEOLOGY

9-10 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 southeastern and eastern boundary of the property the unit is apparently trusted 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 of intrusion in this part of the claim group.

9-20 Geology:

Mapping around the trenched area, shows that the known vein is a remnant. The vein has a strike length of 200 feet, a breadth of 30 feet and a width of 9 feet. This vein has been truncated by a reverse fault at the south end of Trenches 2, 3 and 3A. The fault cuts off the down-dip extension to the veins exposed on surface. The vein was not found on the other side of the fault by the trenching and drilling done. Topographic features terminate the vein along its surface strike, so the vein has the appearance of an elliptical wedge.

The vein is composed of galena, sphalerite, pyrite with siderite and quartz and has a slight banded appearance or mineral zoning. The vein appears to be striking 110-130° and dips at from 20-30° southwards.

The enclosing rock around the vein is a grey sericitic to brown sericitic-biotitic schist. The schists in the

area of the vein appear to be dipping to the south to southwest at a low angle. The schistosity in the area of Trench 6, indicate a slight anticlinal fold with its axis having a southeasterly trend.

A limestone band was traced around the nose of the hill from Trench 2 to Trench 8. The limestone is a massive grey limestone. It never reaches a thickness of greater than 25 feet and appears to thin in a southerly direction.

10-00 GEOCHEMICAL ANOMALIES

The geochemical anomalies on the property were investigated by trenching, drilling or by prospecting. No mineralization was found to be associated with any of the anomalies.

The largest anomaly, extending from the mineral showing down the hill along the baseline, was investigated by trenching and prospecting. The trenching revealed no mineralization. The anomaly in lead, zinc and silver, cannot be explained fully but it is suggested that it may be the result of downward dispersion from the eroded vein.

Other anomalies to the west were investigated by trenching and pitting. Permafrost was encountered within 6 inches of surface and no bedrock was encountered within 5 feet, when the trenches and pits had to be abandoned because of water collecting in the bottom.

Several of the high to moderately high, small, 1 to 2 sample anomalies were found to be swamp anomalies. In the areas of these anomalies,the collected samples may

have been entirely organic in character, thus causing the anomaly. The sample sites were investigated by mattock and no soil other than organic material could be found.

11-00 TRENCHING

Nine trenches and six prospect pits were drilled and blasted, three trenches were re-blasted to give a fresh surface for examination and sampling. A total of 160 cubic yards of rock and permafrost were moved.

12-00 DRILLING

Six EXT diamond drill holes were put down to test for the vein. A total of 235 feet were drilled. Core recovery was poor because of the small size of the bits and machine, combined with the poor drilling qualities of the schistose rocks.

Logs of the drill holes are included in the Appendix of the report.

13-00 RESULTS

Five channel chip samples were taken from across the known vein. These samples had assay ranges of 0.01 to 0.02% Cu, 1.28 to 3.14% Pb, 3.15 to 5.20% Zn, 2.34 to 4.96 oz/ton Ag, 0.003 to 0.024 oz/ton Au. A selected sample of the best mineralization returned an assay of 0.02% Cu, 4.65% Pb, 6.41% Zn, 7.87 oz/ton Ag, 0.005 oz/ton Au.

One sample from drill Hole #7 was sent in for assay. The sample came from 30-33' of the hole and consisted of broken chunks of rusty calcite-siderite-quartz veinlets. The sample returned a surprising value of 2.19 oz/ton Ag and 0.01 oz/ton Au. Core recovery from this 3' section was only 10", a 28% recovery. No conclusion can be made from this one sample because of the poor core recovery.

Respectfully submitted,

J.R. Deighton, Geologist

Vancouver, B.C.
September 20, 1974

CERTIFICATION

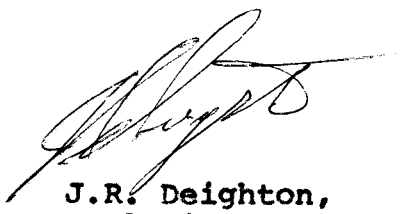
I, JOHN RAYMOND DEIGHTON, of 3250 West 33rd Avenue, Vancouver, British Columbia, do hereby certify that:

I am a graduate of the University of British Columbia, with a Bachelor of Science Degree in Geology, 1965.

Since graduation I have been engaged in Mineral Exploration in British Columbia, Yukon, North-west Territories, Washington, Arizona and California.

I am a Fellow of the Geological Association of Canada and of the Canadian Institute of Mining and Metallurgy.

I am a Geologist.



Vancouver, B.C.
September 20, 1974

J.R. Deighton,
Geologist.

CHEMEX LABS LTD.

212 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA
TELEPHONE: 985-0648
AREA CODE; 604

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ASSAY

CERTIFICATE NO. 23033

INVOICE NO. 11691

RECEIVED July 5/74

ANALYSED Jul, 9/74

TO: Agilis Exploration Services Ltd.,
#107 - 325 Howe St.,
Vancouver 1, B.C.

ATTN: Bill - Jay

SAMPLE NO. :	Oz/Ton Silver	Oz/Ton Gold	Fire assay
22541	2.19	.01	

DAICE HOLE #7. 10" CORE: RECOVERY FROM 30 - 35'

CTA MEMBER CANADIAN TESTING ASSOCIATION

REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA

#44 John. Deighton.

212 BROOKSBANK AVE.
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CERTIFICATE OF ASSAY

CERTIFICATE NO. 22941

INVOICE NO. 11568

RECEIVED June 20/74

ANALYSED June 25/74

TO: Agilis Exploration Services Ltd.,
#107 - 325 Howe St.,
Vancouver 1, B. C.

ATTN:

SAMPLE NO. :	% Copper	% Lead	% Zinc	Oz/Ton Silver	Oz/Ton Gold
22539	0.02	4.65	6.41	7.87	0.005

SELECTED MATERIAL FROM TRENCH #3

MEMBER
CANADIAN TESTING
ASSOCIATION

REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA

CHEMEX LABS LTD.

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CERTIFICATE OF ASSAY

CERTIFICATE NO. 11519

INVOICE NO. 23597

RECEIVED June 11/74

ANALYSED June 18/74

TO: Agilis Exploration Services Ltd.,
#107 - 325 Howe St.,
Vancouver 1, B. C.

ATTN: Mr. J.R.Deighton

SAMPLE NO. :	% Copper	% Lead	% Zinc	Oz/Ton Silver	Oz/Ton Gold
16507 A 22534	0.01	1.28	3.72	2.39	0.005
16508 A 22537	0.02	1.54	5.20	3.41	< 0.003
16509 A 22538	< 0.01	< 0.01	0.02	0.04	< 0.003
16510 22535	0.02	3.14	3.36	4.96	0.024
16511 A 22536	< 0.01	2.88	3.15	4.88	0.005

Bel - Jay.

MEMBER
CANADIAN TESTING
ASSOCIATION

REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA

COLLAR
NORTH
EAST
ELEVATION
AZIMUTH
DIP
LEVEL

Agilis Exploration Services Ltd.

DIAMOND DRILL RECORD

PROJECT Jay Claim Group
HOLE NO. #1
COMMENCED June 1974
COMPLETED June 1974
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	WIDTH	SAMPLE NO.	ASSAYS Au OZ	Ag OZ				WIDTH & ASSAY WxAu	WxAg		COMMENTS Core Recovery
0	8'	Overburden													8"
8	10.5	Schists Graphite - Sericite with yellow white quartz (Sweat) Schistocity cuts ~~are~~ core at θ - 20°													
10.5	13.5	Same as above													8
13.5	17	Graphitic schists													6"
17	20	Graphitic schists with sweat quartz													6"
20	24	Black - grey graphitic schists with sweat quartz													24"
24	30	Grey graphitic schists with sweat quartz.													18"
30	33	As above													18"
33	36	As above													20
36	39	White quartz rusty section.													4"
39	40	Grey schists with sweat quartz													12"
40	45	Black Graphitic Schists													4"
		Total Core footage - 37'													
		Total Recovery 128"													
		% recovery 30%													
		Hole stopped because water circulation lost at 45'.													

COLLAR
NORTH
EAST
ELEVATION
AZIMUTH
DIP
LEVEL

Agilis Exploration Services Ltd.

DIAMOND DRILL RECORD

PROJECT Jay Group
HOLE NO. #2
COMMENCED June 13, 1974.
COMPLETED Jun3 15, 1974.
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	WIDTH	SAMPLE NO.	ASSAYS Au OZ	Ag OZ				WIDTH & ASSAY WxAu	WxAg		COMMENTS Core Recovery
0		Overburden													
	15'	Grey sericitic schists with quartz sweat													
15	23	As above													24"
23	29	As above													12
29	41	As above with the occassional speck of pyrite up to 5% in places in both the quartz and sericitic-chlorite schists. Pyrite extremely fine disseminated, or in blotches													54"
41	45	As above. Schisocity cuts the core at right angles to 20-30°													12"
		Core Recovery 19%													

COLLAR
NORTH
EAST
ELEVATION
AZIMUTH
DIP
LEVEL

Agilis Exploration Services Ltd.

DIAMOND DRILL RECORD

PROJECT Jay Group
HOLE NO. #3
COMMENCED June 15, 1974
COMPLETED June 16, 1974.
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	WIDTH	SAMPLE NO.	ASSAYS Au OZ	Ag OZ				WIDTH & ASSAY WxAu	WxAg		COMMENTS Core rec.
0	27'	15' casing. overburden													
		27' hole abandoned because of caving													
		and rods sticking in hole													

COLLAR
NORTH
EAST
ELEVATION
AZIMUTH
DIP
LEVEL

Agilis Exploration Services Ltd.

DIAMOND DRILL RECORD

PROJECT Jay Group
HOLE NO. #4
COMMENCED June 16, 1974
COMPLETED June 17, 1974.
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	CORE SAMPLES TO	CORE SAMPLES WIDTH	CORE SAMPLES SAMPLE NO.	ASSAYS Au OZ	ASSAYS Ag OZ	WIDTH & ASSAY WxAu	WIDTH & ASSAY WxAg	COMMENTS
0'	13'	Overburden at 8' and 1' quartz boulder cut									Core rec.
13	37	Very fine sericitic to biotitic schists. Flakes very small and no core recovery from hole									
		Lost hole, rods sticking.									

COLLAR
NORTH
EAST
ELEVATION
AZIMUTH
DIP
LEVEL

Agilis Exploration Services Ltd.

DIAMOND DRILL RECORD

PROJECT Jay Group
HOLE NO. #5
COMMENCED June 17, 1974
COMPLETED June 18, 1974
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	WIDTH	SAMPLE NO.	ASSAYS Au OZ	Ag OZ				WIDTH & ASSAY WxAu	WxAg		COMMENTS
0	4'	Overburden													Core rec.
4	13	Granitic dyke. Well fractured rusty on fractures													
13	35	Brown sericitic schists. Very fine grained and friable.													
		35' hole abandoned because of caving													

COLLAR
NORTH
EAST
ELEVATION
AZIMUTH
DIP
LEVEL

Agilis Exploration Services Ltd.

DIAMOND DRILL RECORD

PROJECT Jay Group
HOLE NO. #7
COMMENCED June 19, 1974.
COMPLETED June 29, 1974.
PURPOSE OF HOLE

FROM	TO	DESCRIPTION	CORE SAMPLES FROM	TO	WIDTH	SAMPLE NO.	ASSAYS Au OZ	Ag OZ				WIDTH & ASSAY WxAu	WxAg		COMMENTS
0	25'	Casing overburden													
25	26.5	Quartzites and sericitic schists with minor graphitic schists. Schists cut core at 15-20°													9"
26.6	27	Same as above, quartzites and sericitic schists													6"
27	27.6	Same as above													6"
27.6	30	As above with some quartz veining on sweat quartz													12"
30	33	As above some rusty calcitic-aragonte veinlets					0.01	2.19	22541						10"
33	46	No core recovery - probably sericitic schists with occasional small pieces of quartz													
		Total core length - 21'													
		Total recovery 3'8"													
		% recovery 18%													

YUKON TERRITORY

BELMORAL MINES LTD. (NPL)

JAY CLAIM GROUP

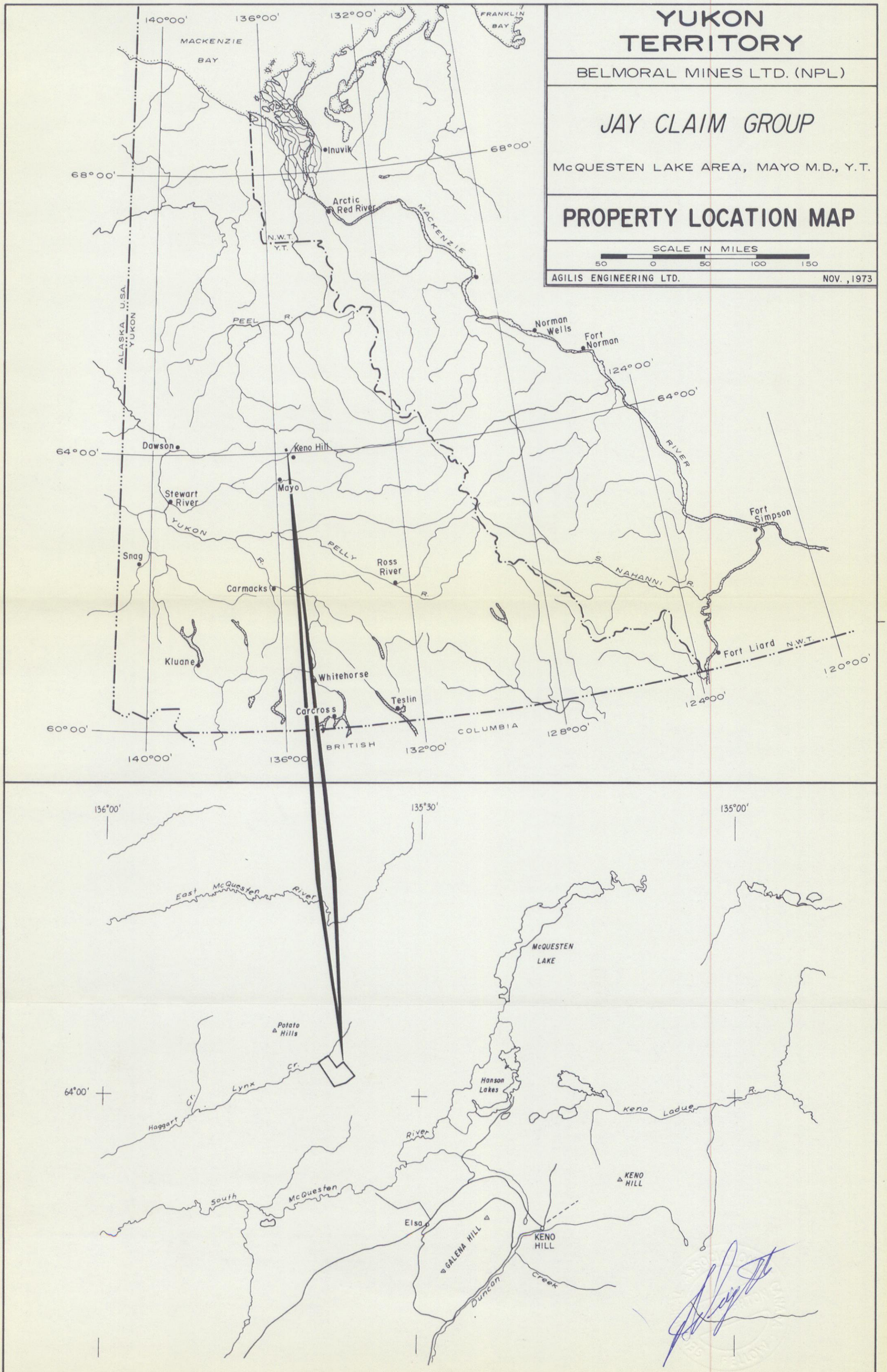
McQUESTEN LAKE AREA, MAYO M.D., Y.T.

PROPERTY LOCATION MAP

SCALE IN MILES

50 0 50 100 150

AGILIS ENGINEERING LTD. NOV., 1973



BASE LINE

Trench 10. 18. Cu.Yds did not reach bedrock permafrost at 6"

8N. — 7N. — 6N. — 5N. — 4N. — 3N. — 2N. — 1N. — 0 — 1S. — 2S. — 3S. — 4S. — 5S. — 6S. — 7S. — 8S. — 9S. — 10S. — 11S. — 12S.

6 5 7 8

Trench 6. 40.0 Cu.Yds. Brown Sericite - Biotitic Schists with sweat Quartz.

Pit 1.0 Cu.Yds Brown-grey Biotitic-graphitic Schists.

Station 18N.

5 Prospect pits 3.0 Cu.Yds. each.
No pit reached bedrock.
No mineralization observed in overburden - permafrost at 6"

Surface

Overburden

23537 — 23536 — 23535 — 23534

Sericite Schists - Quartzites.

Vein material Sphalerite, Galena, Pyride, Siderite, and Quartz.

west end of trench

East end of trench

Sample No.	% Copper	% Lead	% Zinc	Oz/ton Silver	Oz/ton Gold
23534	0.01	1.28	3.72	2.39	0.005
23535	0.02	3.14	3.36	4.96	0.024
23536	< 0.01	2.88	3.15	4.88	0.005
23537	0.02	1.54	5.20	3.41	< 0.003
23539	0.02	4.65	6.41	7.87	0.005 - SELECTED SAMPLE

ASSAY PLAN
OF
TRENCH No. 3.
Scale: 1" = 5' Approx.

Outline of extent of vein mineralization.

Trench 5. 10.0 Cu Yds. Brown Sericite - Biotitic Schists with sweat Quartz overlain by Limestone rubble.

Trench 1. 23538 <0.01% Cu, <0.01% Pb, 0.02 % Zn, 0.04 oz./ton Ag, <0.003 oz./ton Au.

Trench 3A. vein 12 Cu.Yds.

Trench 3B. vein 13 Cu.Yds. Brown Sericite - Biotitic Schists.

Trench 2 — Trench 3 — 80 — 85

Trench 4. 15 Cu. Yds. Brown Sericite Schists. Fault 5' wide contains occasional blebbs of mineralization Galena & sphalerite.

D.D.H. 4. (V.)

D.D.H. 3 (V.) — D.D.H. 5 (V.) — D.D.H. 7 (V.)

Trench 7. 15.0 Cu.Yds. Grey - brown Sericitic Schist minor black graphitic Schist some sweat Quartz. Biotitic Feldspar Porphyry dyke.

D.D.H. 2 (V.)

Trench 8. 4.0 Cu.Yds, grey Sericite schists. with sweat Quartz.

D.D.H. 1. (V.)

Trench 9. 1.0 Cu.Yds. Sericite Schists & Quartzite.

LEGEND

Cu.Yds — Cubic Yards
nnnnn — Fault
60 — Dip
D.D.H.7 (V) — Diamond drill hole (vertical)

Trench 10. — 6N. — 4N. — 2N. — 0 — 2S. — 4S. — 6S. — 8S. — 10S. — 12S.

6 5 7 8

5 Prospect Pits

Trench 6.

Pit

Trench 5. — Trench 1. — Trench 2 — Trench 3, 3A, & 3B. — Trench 4.

D.D.H.4 — D.D.H.3 — D.D.H.5 — D.D.H.7

Trench 7.

D.D.H.2.

D.D.H.1 — Trench 8. — Trench 9.

BASE LINE

SCALE: 1"=200'

Trench No.	Dimension
3A	28'x4'x3' = 336 Cu. Ft.
3B	10'x12'x3' = 360 Cu. Ft.
4	34'x4'x3' = 408 Cu. Ft.
5	30'x3'x3' = 270 Cu. Ft.
6	120'x3'x3' = 1080 Cu. Ft.
7	50'x4'x2' = 400 Cu. Ft.
8	6'x4'x4' = 96 Cu. Ft.
9	6'x3'x2' = 36 Cu. Ft.
10	30'x4'x4' = 480 Cu. Ft.

BELMORAL MINES LTD.(NPL)
JAY CLAIM GROUP McQUESTEN LAKE AREA
MAYO MINING DISTRICT YUKON TERRITORY

DETAILED PLAN OF TRENCHING

SCALE IN FEET
100 0 100 200 300

AGILIS ENGINEERING LTD. JULY 1974