

MAP No.

116-A-5

ASSESSMENT REPORT
N. M. E. A. P.
CONFIDENTIAL
OPEN FILE

X
X

TYPE OF

WORK: Geol.

REPORT FILED UNDER	Belmoral Mines Ltd.	DOCUMENT NO.	061138
DATE PERFORMED	Sept. 1972	DATE FILED:	1973
LOCATION - LAT.	64°15'N	AREA:	Mike Lake, Yukon
LONG.	137°55'W		
CLAIM NO.	AS 1-8	Y65640-47	
VALUE \$			
WORK DONE BY	R.H.D. Philp (Agilis Expl. Services Ltd.)		
WORK DONE FOR	Belmoral Mines Ltd.		
REMARKS	Six mineral showings occur on the property, three are quartz veins containing gold, silver and copper mineralization.		

REPORT ON THE AS CLAIM GROUP,
YUKON TERRITORY,
FOR BELMORAL MINES LTD. (NPL)

116-A-5

64° 15' N

137° 55' W

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MAPS

Property Map 1" = 80 miles
Surface Plan 1" = 400 feet

REPORT ON THE AS CLAIM GROUP,
YUKON TERRITORY,
FOR BELMORAL MINES LTD. (NPL)

INTRODUCTION

Staked during the summer of 1972, the AS claims cover gold-copper mineral occurrences situated approximately 46 miles N70°E of Dawson City, Yukon Territory.

Following their acquisition, detailed prospecting including preliminary mapping, pitting and sampling was carried out. This work was conducted under the supervision of Mr. R. G. Hawley, geologist.

Although the writer has not visited the claims he is familiar with the general geology and conditions in the area. The following report is based on a review of available maps and reports on the area plus the results of work conducted to date on the claims.

LOCATION AND ACCESS

The claims are located 46 miles in a N70°E direction from Dawson City in the Yukon Territory and lie approximately 17 miles east of the Dempster Highway.

Co-ordinates of the group are 64°15' north latitude, 137°55' west longitude.

Access is by helicopter from Dawson City where necessary supplies are available.

PHYSIOGRAPHY

Topographic relief within the claims area is fairly rugged with elevations varying between approximately 5000 and 6500 feet above sea-level. These elevations are above timberline with slopes consisting of rock outcrop, talus, or alpine meadows.

Winters are severe in the region and preliminary surface exploration will be confined to the period early to mid-June to mid-September. Water for exploration purposes is available from a small lake at the western edge of the property.

HISTORY

Claims have been held for several years in the surrounding area. To the immediate east gold bearing veins occur on claims held by Hart River Mines; approximately 10 miles west, gold bearing veins occur on claims held by Conwest Mines Ltd.; this company also holding claims covering gold showings approximately 2 miles to the south.

Following staking of the AS claims an exploration program of detailed prospecting, reconnaissance mapping, pitting and sampling was carried out.

PROPERTY

The property discussed in this report consists of the following 8 contiguous mineral claims located in the Dawson Mining District of the Yukon Territory (Claim Sheet No. 116-A-5):

Claim Numbers

AS 1-8

Record Numbers

~~not available~~
Y 65640-47

The writer has not conducted a title search of the above claims nor checked their location in the field. However, he has known the staker in a business capacity for 12 years and is confident in the quality of his *staking*.

GEOLOGY

Regional geological mapping of the area at a scale of 1 inch = 4 miles by the Geological Survey of Canada has been published as Map 14-1962, accompanying Geological Survey of Canada Paper 62-7.

This shows the region to be largely underlain by a northwest trending belt of Precambrian and/or Cambrian sedimentary and metamorphic rocks intruded by small granitic to basic sills. The older rocks (unit 3) consist of quartzite, sandstone, conglomerate, shales, slates, phyllites, various schists and limestone.

Intrusives occupy the central portion of the claim group.

These consist of variously textured syenitic rocks with lesser

diorite. These are bounded by sediments in the north-area of showing 5, and south-showing #4 being in sediments.

The sedimentary units are strongly contorted and generally contain appreciable pyrrhotite giving them a rusty appearance. Several large dikes, up to 50 feet wide, strike southwesterly.

DESCRIPTION OF MINERAL SHOWINGS (see accompanying map for locations):

- NO. 1 This consists of a quartz vein cutting intrusives, averaging 8 inches in width and striking east with a vertical dip. It is strongly mineralized with arsenopyrite and can be traced for approximately 1000 feet before both ends disappear under talus.
- NO. 2 This lies approximately 700 feet south of No. 1 and occurs in an east striking, vertically dipping shear zone. It has been traced for about 1000 feet before disappearing under talus. Mineralization consists of arsenopyrite and chalcopyrite. The width could only be determined near the western end where it was 5 feet.
- NO. 3 This consists of 3 parallel quartz veins averaging 4 inches in width across a three foot zone and located approximately 200 feet south of No. 2. Attitude is east/vertical; mineralization consists

of arsenopyrite and chalcopyrite. The zone was traced for about 700 feet before being obscured by overburden.

- NO. 4 This consists of a large band of sediments striking N70°W, dipping S30°W and mineralized with chalcopyrite, pyrrhotite and minor arsenopyrite. Malachite was noted for over 700 feet along a cliff face. Overall grade appears low, the chalcopyrite being disseminated and as fine fracture fillings, the latter readily eroded away. Mineralization also seems to be associated with small sills of a dark intrusive.
- NO. 5 Here, minor chalcopyrite occurs along the intrusive-sedimentary contact. Overall grade is very low and no samples were taken.
- NO. 6 This consists of an easterly striking, vertically dipping shear zone of undetermined width within granitic rocks. Mineralization, which appears quite erratic, consists of chalcopyrite, arsenopyrite and an unidentified black mineral. The fault was only observed for about 50 feet, being bounded on the east by cliffs and on the west, where the strongest mineralization was noted, by snow and talus.

SAMPLE INDEX

			<u>Cu%</u>	<u>Ag oz/T</u>	<u>Au oz/T</u>
Sample #1	Showing #1	Quartz Vein 8" Arsenopyrite	0.45	0.35	0.440
Sample #2	Showing #2	Quartz Vein Arsenopyrite	0.01	0.37	0.072
Sample #3	Showing #2	Wall Rock Arsenopyrite & Black Mineral	0.01	0.05	0.007
Sample #4	Showing #3	Quartz Vein Arsenopyrite	1.95	0.32	0.640
Sample #5	Showing #2	Vein 5' wide Arsenopyrite	0.16	7.13	0.161
				#1 Spectrographic	
Sample #6	Showing #4	Sedimentary Rock Chalcopyrite	0.10	0.22	0.005
Sample #7	in float	Sedimentary Rock Arsenopyrite		0.19	0.015
Sample #8	Showing #6	Chalcopyrite and Arsenopyrite in shear in granites 8' wide	0.55	0.12	< 0.003
				#2 Spectrographic	
Sample #9	Showing #6	Chalcopyrite and arsenopyrite in shear in granites 3' wide	4.30	0.57	< 0.003

CONCLUSIONS

The AS Group of 8 claims is underlain by granitic rocks intruding sediments and metamorphics of Pre-Cambrian and/or Cambrian Age, 46 miles east-northeast of Dawson City, Yukon Territory.

The region is one of several known gold showings, previously known ones occurring to the south, east and west of the AS

Group. These most commonly occur as arsenopyrite bearing quartz veins and shear zones.

Preliminary exploratory work on the AS claims has located 6 mineralized areas - four consisting of mineralized quartz veins and shears carrying gold and silver with arsenopyrite and commonly chalcopyrite, one consisting of a broad area of disseminated copper mineralization in sediments, and the other as minor chalcopyrite along an intrusive-sedimentary contact.

Significant gold values are present in three veins, with appreciable silver in one. Two samples returned significant copper values. Bismuth was also noted in the high silver bearing sample.

In view of the encouraging results from the work to date additional exploration to further test the known mineralized zones and search for additional ones both within and beyond the property boundaries is warranted.

RECOMMENDATIONS AND ESTIMATED COSTS

The following program divided into two stages is recommended to initially carry out further exploration on the AS claims of Belmoral Mines Ltd. (NPL):

STAGE 1

Establish a grid (200 x 100 foot pattern) over the property (100 x 50 feet in mineralized areas) - 12 miles @ \$150/mile	\$ 1,800.00
Detailed geological mapping	1,200.00
Geochemical survey-testing for copper and silver	3,400.00
Electromagnetic survey	1,000.00
Prspecting surrounding area	1,000.00
Hand trenching, detailed sampling of known showings	2,500.00
Engineering and supervision	<u>1,500.00</u>
	\$12,400.00
Plus 10% contingency	<u>1,200.00</u>
TOTAL STAGE 1	<u><u>\$13,600.00</u></u>

STAGE 2

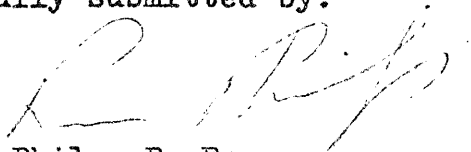
Depending on results from Stage 1, a possible Stage 2 program is outlined below:

Detailed investigation of new showings discovered through prospecting - gridding, surveys, trenching and sampling - allow	\$ 8,000.00
Provision for 1000 feet of diamond drilling @ \$18/foot overall	18,000.00
Helicopter support, mobilization, demobilization	3,000.00
Engineering supervision	<u>2,000.00</u>
	\$31,000.00

.....carried forward

.....brought forward	\$31,000.00
Plus 10% contingency	<u>3,100.00</u>
TOTAL STAGE 2	<u>\$34,100.00</u>

Respectfully submitted by:



R. H. D. Philp, P. Eng.

January 15, 1973

Vancouver, B. C.

Core Laboratories Ltd.

325 Howe Street

Vancouver, B.C.

SEMI QUANTITATIVE SPECTROGRAPHIC
ANALYSES CERTIFICATE

File No. 3835 A

Date September 27, 1972

We hereby Certify that the following are the results of semi quantitative spectrographic analyses made on ore pulp samples submitted.

Sample Identification

Sample 1: 569 - 5 SH2
Sample 2: 569 - 8 SH6
Sample 3:
Sample 4:
Sample 5:

		1	2	3	4	5			1	2	3	4	5
Aluminum	Al	0.1	10.				Lead	Pb	*	0.01			
Antimony	Sb	0.07	ND				Magnesium	Mg	0.1	3.			
Arsenic	As	**	*				Manganese	Mn	0.005	0.1			
Barium	Ba	ND	0.1				Molybdenum	Mo	0.001	ND			
Beryllium	Be	ND	ND				Niobium	Nb	ND	ND			
Bismuth	Bi	0.3	0.03				Nickel	Ni	ND	ND			
Boron	B	0.01	0.1				Silicon	Si	major	matrix			
Cadmium	Cd	ND	ND				Silver	Ag	0.01	0.001			
Calcium	Ca	0.1	major				Strontium	Sr	ND	0.1			
Chromium	Cr	0.001	0.01				Tantalum	Ta	ND	ND			
Cobalt	Co	ND	ND				Tin	Sn	ND	0.01			
Copper	Cu	0.1	*				Titanium	Ti	0.005	0.5			
Gallium	Ga	ND	ND				Tungsten	W	ND	ND			
Gold	Au	trace	trace				Vanadium	V	ND	0.01			
Iron	Fe	5.	5.				Zinc	Zn	trace	trace			
Uranium	U	ND	ND				Sodium	Na	ND	3.			
Thorium	Th	ND	ND				Potassium	K	ND	3.			

CAN TEST LTD.

All results expressed as percent

Note: Pulps retained one week.

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J.K.D.

ASSAYERS
CHEMISTS
GEOCHEMISTS



CORE LABORATORIES - CANADA LTD.

325 Howe Street Vancouver 1, B.C. Phone 688-3504

Certificate of Analysis

REPORT NO.

569

SAMPLE(S) FROM AGILIS EXPLORATION

SAMPLE NO.	Cu %	Ag oz/T.	Au oz/T.
1 SH 2	.45	.35	.440
2 SH 2	.01	.37	.072
3	.01	.05	.007
4 SH 3	1.95	.32	.640
5 SH 2	.16	7.13	.161
6 SH 4	.10	.22	.005
7		.19	.015
8 SH 6	.55	.12	< .003
9 SH 6	4.30	.57	< .003

DATE September 14, 1972

SIGNED *P. Led*

PULP AND REJECTS DISCARDED AFTER 3 MONTHS

YUKON TERRITORY

BELMORAL MINES LTD. (NPL) AS CLAIM GROUP PROPERTY MAP

