

PRELIMINARY GEOLOGICAL REPORT

ON THE

JAN MINERAL CLAIM GROUP

Latitude 64°33'N

Longitude 129°58'W

MACKENZIE MINING DISTRICT

N.T.S. 106A-12

NORTHWEST TERRITORIES

CANADA

by

J.D. Guild

November, 1973

WELCOME NORTH MINES LTD. (N.P.L.)
Suite 8, 1161 Melville Street,
VANCOUVER, BRITISH COLUMBIA
CANADA

PRELIMINARY GEOLOGICAL REPORT

ON THE

JAN MINERAL CLAIM GROUP

C O N T E N T S

	<u>Page</u>
INTRODUCTION	1
LOCATION AND ACCESS	1
MINERAL CLAIMS	2
GEOLOGY	2
MINERAL OCCURRENCES	3
CONCLUSION AND RECOMMENDATIONS	4

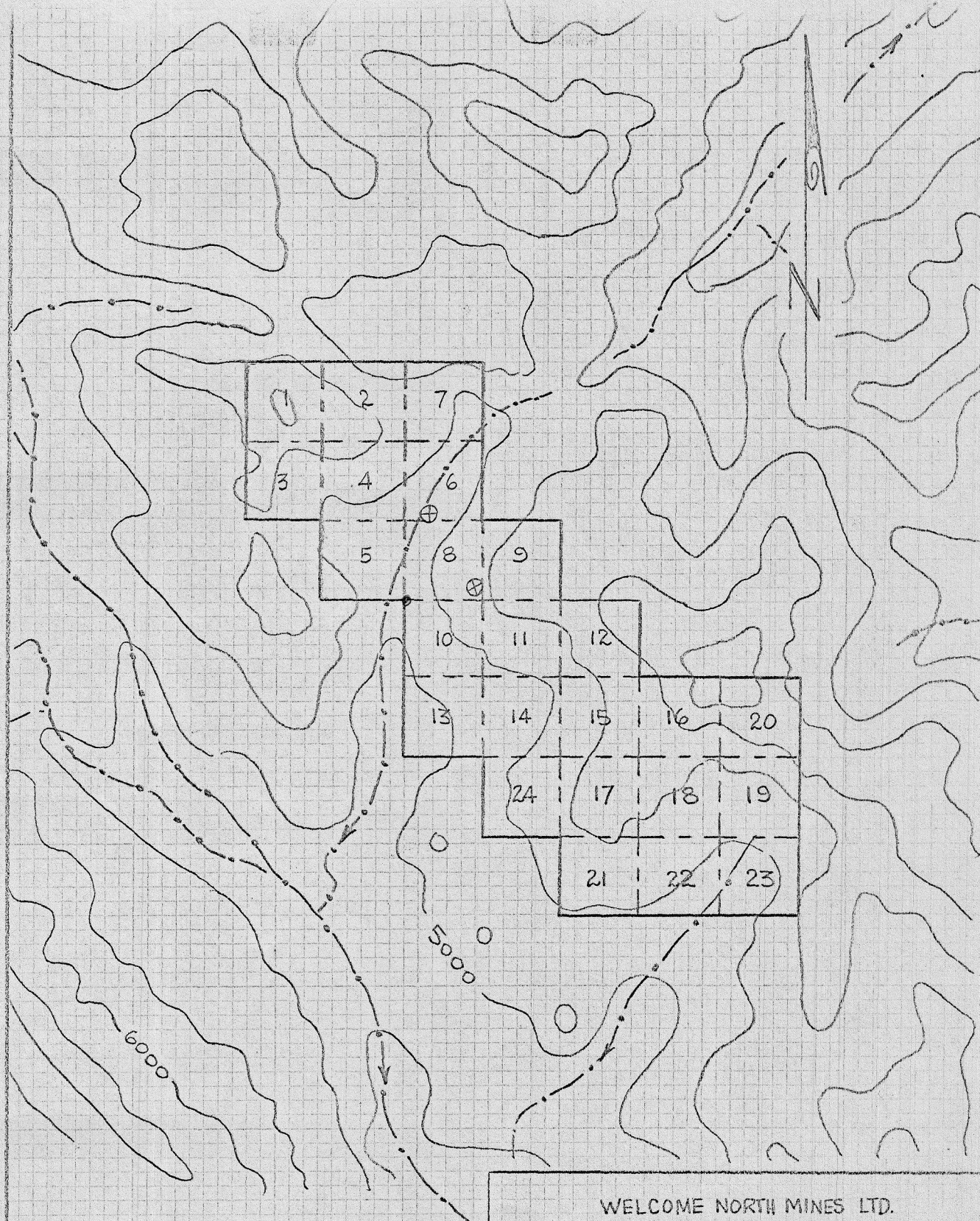
PRELIMINARY GEOLOGICAL REPORT

ON THE

JAN MINERAL CLAIM GROUP

LIST OF ILLUSTRATIONS

<u>Figure No.</u>	<u>Title</u>	<u>Page No.</u>
1	LOCATION MAP JAN PROPERTY	5
2	CLAIM MAP JAN PROPERTY	6
3	PLAN OF JAN SHOWINGS	7



JAN CLAIMS 1-24
 TAG NUMBERS
 A 50421 - A 50440
 A 69596 - A 69599

WELCOME NORTH MINES LTD.		
JAN PROPERTY		
NTS. 106A-12		
JAN CLAIMS LOCATION		
Figure 2	1" = 1/2 MILE	Nov. 1975

PRELIMINARY GEOLOGICAL REPORT

ON THE

JAN MINERAL CLAIM GROUP

INTRODUCTION

The JAN Mineral Claim Group was staked by Welcome North Mines Ltd. in September, 1973. The claims were staked to cover an occurrence of lead-zinc mineralization within a carbonate formation believed to be of Devonian age. The property has received preliminary exploration in the form of prospecting but no attempt, to date, has been made to geologically evaluate the ground. A program of geological mapping and prospecting is recommended.

LOCATION AND ACCESS

The JAN Group is located at latitude 64°33'N and longitude 129°58'W on a small westerly flowing tributary of the Mountain River in the Northwest Territories. Elevations within the claim block range from 5500 to 7000 feet.

Access to the property is best gained by fixed wing, wheeled, single engine aircraft to Godlin airstrip, located some 64 miles southeast of the claims, or by float-equipped aircraft to Godlin Lakes, near Godlin airstrip. From Godlin a helicopter is most conveniently used to reach the JAN Group.

Present plans by the Federal Government call for commencement of construction of the Canol Road between MacMillan Pass and the MacKenzie River in 1974 and, at that time, ground transportation should be able to reach the Godlin Lakes area from Ross River, some 180 miles to the southwest.

MINERAL CLAIMS

The JAN Property consists of the following 24 located mineral claims, MacKenzie Mining District, owned by Welcome North Mines Ltd.

<u>Claims</u>	<u>Tag Numbers</u>
JAN 1-24	A50421-A50440 A69596-A69599

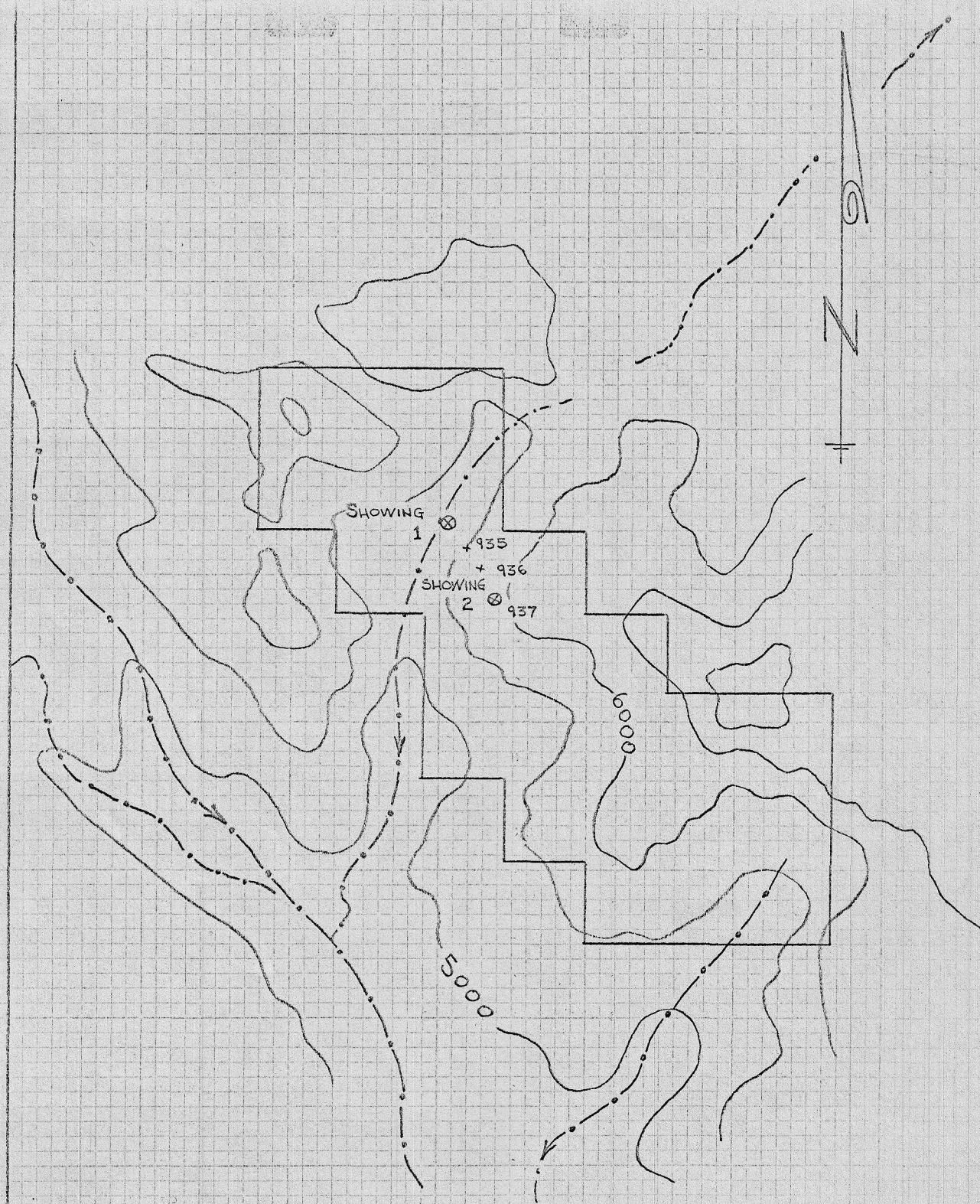
GEOLOGY

The JAN Claims were staked following the discovery of lead-zinc mineralized float rock in a stream channel below the showings later found in place. The zone lies approximately six miles to the south and along the regional strike of known and possibly related mineral occurrences.

As there is only sketchy published geological information on the region and no attempt, to date, has been made by the Company to map the claim group or area, little detail is known of the geology of the property.

The mineral occurrences are found in a finely crystalline grey to black dolomite within a thick carbonate sequence thought to be of Devonian age. A regional, steep lying, fault traverses the claim group, however the relationship, if any, between this fault and the mineral zone has yet to be established.

Mineralization, which consists mainly of red to honey coloured sphalerite acts as the healing matrix to a light grey weathering, largely massive but intensely shattered dolomite. Sphalerite veinlets ranging up to a maximum thickness of 1¹/₂ feet have been observed. Locally, calcite, coarsely crystalline galena and sinithsonite form accessory minerals within the zone. Specimens that exhibit cavity vug filling and or fossil replacement by sphalerite have been found in talus slopes below the showings.



WELCOME NORTH MINES LTD.		
JAN PROPERTY		
N.T.S. 106A-12 SHOWING & SAMPLE LOCATIONS		
Figure 3	1" = 1/2 MILE	NOV. 1973

Mineralization has been discontinuously traced over a distance of approximately 1800 feet and occurrence of lead-zinc and gossanous pyrite have been reported along strike by Company prospectors for an additional 1¹/₂ miles to the south.

Talus cover and formational dip slopes largely mask the character and true thicknesses of the deposit, thickness estimates range from 30 to 200 feet. Deposition may be related to simple hydrothermal fault breccia filling as well as a syngenetic origin within stratiform interformational brecciated-reefoidal structures.

MINERAL OCCURRENCES

The two principal showings are separated by an extensive talus slide and approximately 400 feet difference in elevation. Each appears to be on general regional strike with the other and the two are believed to correlate. The intervening talus contains an almost continuous train of mineralized float between the two exposures.

Showing 1 crops out on the southerly creek bank near the pass to an adjoining creek. The red sphalerite veinlets, disseminations and fracture and vug fillings occur in a brecciated black dolomite which is exposed for approximately 300 feet along the creek. The zone containing the mineralization is approximately 30 feet thick and is essentially flat lying. Spectacular specimens of semi-massive sphalerite can be found in the creek downstream from the showing.

Showing 2 is higher in elevation than Showing 1 and is exposed in a sub-parallel formational dip slope in a dry wash partially free of talus cover. The mineralization occurs in much the same mode as Showing 1 and crops out over an area of the hillside some 300 by 200 feet. The 200 foot width may in part be an apparent thickness due to the dip slope.

The following samples were taken on the property:

<u>Sample Number</u>	<u>%age Lead</u>	<u>%age Zinc</u>	<u>Comments</u>
881	0.43	5.28) Grab samples from Showing 1.
883	0.14	8.30	
935	0.04	2.08) Grab samples from float between the two showings.
936	0.02	5.67	
937	3.43	4.47	Chip every 5 feet over a 200 foot width, Showing 2.
938	0.15	0.24	Black shaley dolomite which appears to form the cap rock to the zone.

CONCLUSION AND RECOMMENDATIONS

The JAN Claim Group occurs in a geological environment favourable for lead-zinc deposition. Examination of mineral occurrences on the property has indicated zones of potential economic interest. It is recommended that a program of detailed geological mapping, prospecting, rock geochemistry and sampling be conducted on the Claim Group with the view to trenching and detailed surface sampling.

Respectfully submitted,

J.D. Guild,
Geologist,
Welcome North Mines Ltd. (N.P.L.)