

A GEOLOGICAL REPORT

on the

JDX 1-24 CLAIMS

N.T.S. Sheet 105-F-10
Latitude 61°33' - Longitude 132°35'
Watson Lake Mining District, Yukon Territory

Prepared for
NORTHERN HORIZON RESOURCE CORPORATION
by
L. D. NICOLL

August 27, 1980

090674

This report has been examined by the Geological Evaluation and is recommended to the Commission for consideration as representing a valid claim under Section 53 (4) Yukon Mining Act.

RECEIVED
1980 DEC 8
MINING RECORDER
WATSON LAKE, Y.T.
I.A. & N.D.

Office of the Supervisor Mining
DEC 17 1980
Commissioner of Yukon Territory

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of

\$ 3,600.00

[Handwritten Signature]

Resident Geologist or
Resident Mining Engineer

Considered as representation work under
Section 53 (4) Yukon Quartz Mining Act.

B. R. BAXTER
Supervising Mining Recorder

[Handwritten Signature]
Commissioner of Yukon Territory

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W L M D

ASSESSMENT REPORTS

I.S.N. 39388

MAP No. 105 F 10 TYPE OF WORK: Geological Report

REPORT FILED UNDER	Northern Horizon Resource Corporation.,	
DATE PERFORMED	Aug 9-14, 1980	DATE FILED: Dec 8, 1980
LOCATION - LAT.	61°33'	
LONG.	132°35'	
CLAIM Nos.	JDX 1-24	
WORK DONE BY	Northern Horizon Resource Corporation.,	
WORK DONE FOR	Northern Horizon Resource Corporation.,	
REMARKS	The claims were staked in 1980 to cover geology considered favourable for lead-zinc mineralization related to felsic volcanics like that on the MAT claims. The geology of the claims was mapped.	
69-JDX		
090674		

STAR PRINTING, WHITEHORSE

This report is indexed & microfilmed

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SUMMARY AND RECOMMENDATIONS

The JDX claims require additional prospecting along the creek beds and a stream sediment and soil geochemical program on the eastern slope of the main ridge is also recommended. Under the Yukon Quartz Mining Act, this would have to be done within the first three years after the recording of the claims (before 1983).

INTRODUCTION

This report has been prepared for Northern Horizon Resource Corporation and describes reconnaissance geology on property in the Seagull Creek area, Yukon Territory, by the author between August 9th and August 14th, 1980. Figure 1 is the locality index map.

The property consists of 24 adjoining full-size claims. The claim boundaries are shown in Figure 2 and the claim data is as follows:

Table I

JDX 1-24

Grant numbers not
yet issued

The above claims are held in the name of Northern
Horizon Resource Corporation.

LOCATION AND ACCESS

The property is located in the south-central Yukon, about 56 km south of Ross River. The claims are on the east side of Seagull Creek, from 5 to 15 km south of Lower Seagull Lake. Road access to the property is by turning off the South Canal Road at Km 162 onto a dirt road parallel to Groundhog Creek and proceeding east for about 27 km. A 4x4 vehicle is recommended.

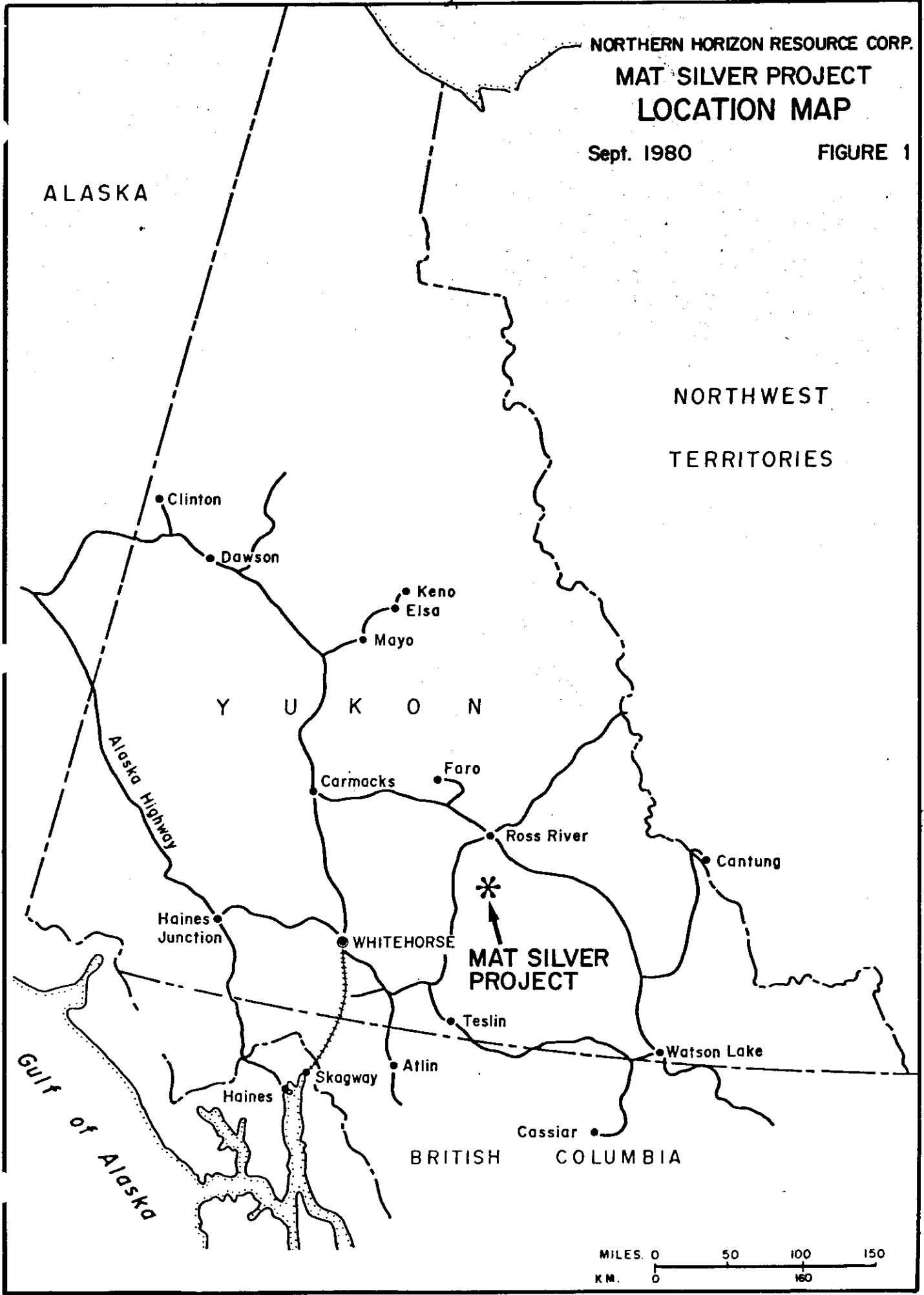
TOPOGRAPHY AND VEGETATION

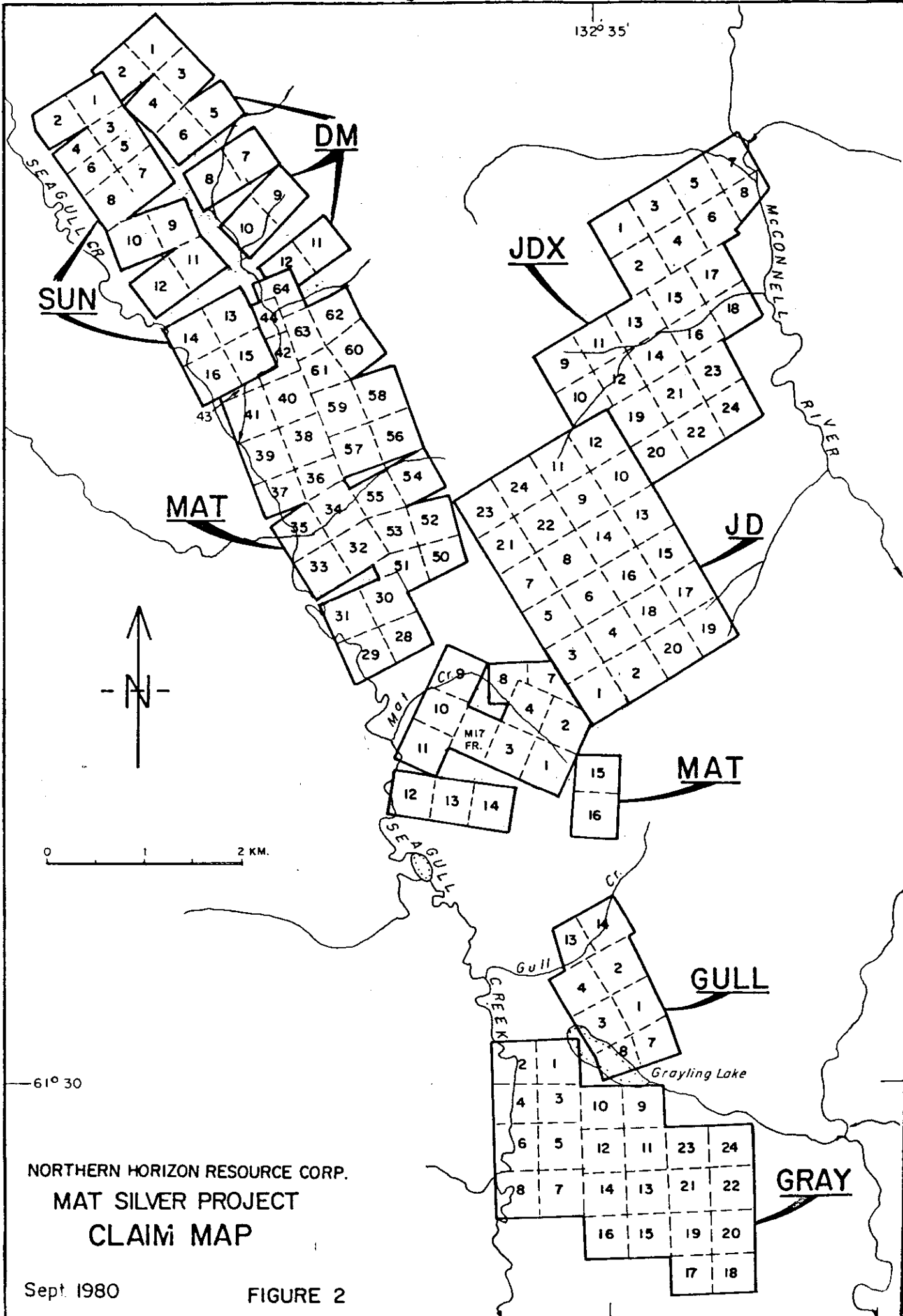
The claims, except for the JD and JDX claims, extend from the valley floor of Seagull Creek to about two-thirds up the western slope of a north-northwest trending ridge. The JD claims are located along the top of this

NORTHERN HORIZON RESOURCE CORP.
MAT SILVER PROJECT
LOCATION MAP

Sept. 1980

FIGURE 1





NORTHERN HORIZON RESOURCE CORP.
 MAT SILVER PROJECT
 CLAIM MAP

Sept. 1980

FIGURE 2

ridge and the JDx claims extend from about two-thirds up the eastern slope of the ridge to the McConnell River which lies to the east of the ridge. The elevation of the valley floor is about 1200 m and the ridge is about 1800 m.

Vegetation on the lower slopes consists of spruce and fir, with the treeline at about 1400 m. The valley floors consist of low bush and grass and often muskeg.

HISTORY

The Ross River area has been actively prospected since the 1950's when the first concordant lead-zinc deposits of the district were discovered. The northern portion of the ridge east of Seagull Creek was examined by Canol Mines Ltd. in the mid-1960's. The area which is now the MAT claims was first staked as the BOX claims by Conwest in 1963 and was restaked in 1966 by J. K. Campbell. Marvin Sherman and Nithex Exploration have restaked the area and acquired additional claims through transfers since 1974. Northern Horizon staked the JDx claims in 1980.

ASSESSMENT WORK

The work done on the property consisted of reconnaissance geological mapping on a scale of 1:12,500, between Aug 9 - Aug 14, 1980. The crew employed on the project was:

Table 11

<u>Name</u>	<u>Address</u>	<u>Position</u>	<u>Period Employed</u>
Wes Buyarski	Winnipeg, Manitoba	Geological Assistant	August 5th-14th
Larry Nicoll	Vancouver, B.C.	Geologist	July 18th - Aug 27

Detailed discussion of the property geology and mineralization appears in a following section of this report.

The JDX claims staked in March 1980 were the only ones eligible for geological reconnaissance. Bedrock mapping was done on a scale of 1:12,500 and was done directly onto a topographic base map, assisted by 1" = half mile aerial photographs. Figure 3 is the resultant geological map. A Hughes 500 helicopter was rented on a casual basis to transport the field crew to and from the claims on one occasion.

REGIONAL GEOLOGY

On the west side of Seagull Creek, Middle and Upper Cambrian phyllites are overlain by Silurian-Devonian dolomites. The phyllites are of unknown thickness and are, in part, limy, dolomitic and locally change to hornfels. In some areas, the phyllites are separated from the overlying dolomites by black slate, platy limestone and siltstone totalling less than 200 m in thickness. The dolomite consists of three members: a sandy/silty dolomitic basal unit, a dolomitic sandstone and quartzite middle unit and a dark grey dolomite in the upper unit.

Separated from the old Paleozoic rocks on the west by an inferred fault, the Seagull Creek Fault, are volcanics which are probably Mississippian in age. The volcanics are composed of heterogeneous, rusty, black, white and orange weathered lapilli and sand-size tuff; volcanic breccia and flow rocks ranging in composition from trachyte to andesite; black argillaceous slate and pale green and grey cherty tuff; minor finely crystalline buff limestone and locally abundant trachyte dykes. These may be pyritized and strongly foliated in part (Tempelman-Kluit, 1977). The Mississippian rocks overlie the Cambrian and Silurian-Devonian units and the Lower Paleozoic rocks are often intensely folded.

Associated only with the volcanics are resistant, medium to fine grained equigranular hornblende syenite intrusions.

Major geologic structures in the area trend northwestward. The Tintina Fault, the dominant structure in the region, lies 32 km to the northeast; between it and the Seagull Creek Fault are numerous other faults, the chief of which are the Porcupine Thrust and the St. Cyr Fault (Wheeler, 1960).

PROPERTY GEOLOGY AND MINERALIZATION

The claims located along Seagull Creek are almost entirely covered by glacial or fluvial gravels. Outcrop is found only on those claims located on the upper slopes of the main ridge - roughly a line which approximates the treeline.

JDX Claims:

The geologic map of these claims on a scale of 1:12,500 is shown as Figure 3. The top of the main ridge is a syenite stock; proceeding eastwards down a shoulder, the contact between the plutonic rocks and clastics is marked by an amphibolite zone which is gradational into black slate. To the north, the slate appears to become a greyish phyllite. Along the lowest portion of an east-west trending cliff is a contact between the phyllite and a limestone. The lower two-thirds of the slope to the claims' eastern boundary along the McConnell River is covered by overburden.

ACKNOWLEDGMENTS


The author would like to thank both the office and field staffs of Cyprus Anvil Mining Corporation Limited and Noranda Exploration Company Limited for the assistance they provided to him. Completing this project without their aid would have been difficult.

CERTIFICATION

I, Larry D. Nicoll of Vancouver, British Columbia, DO HEREBY CERTIFY:

1. That I am a consulting geologist with a business address of Box 1255, Postal Station "A", Vancouver, B.C.
2. That I am a graduate of the University of Calgary, Alberta, where I obtained a B.Sc. (Geology) in 1972 and an M.Sc. (Geology) in 1974.
3. That I have practised my profession as a geologist in Canada and the United States for the past six years.
4. That I personally observed the work described within this report on the claims in the Seagull Creek property described within.
5. That I have no direct or indirect interests in any of the mineral claims or in any security held by Northern Horizon Resource Corporation, nor do I expect to receive any.

DATED this 27th day of August, 1980 at the City of Whitehorse in the Yukon Territory.



 L. D. Nicoll

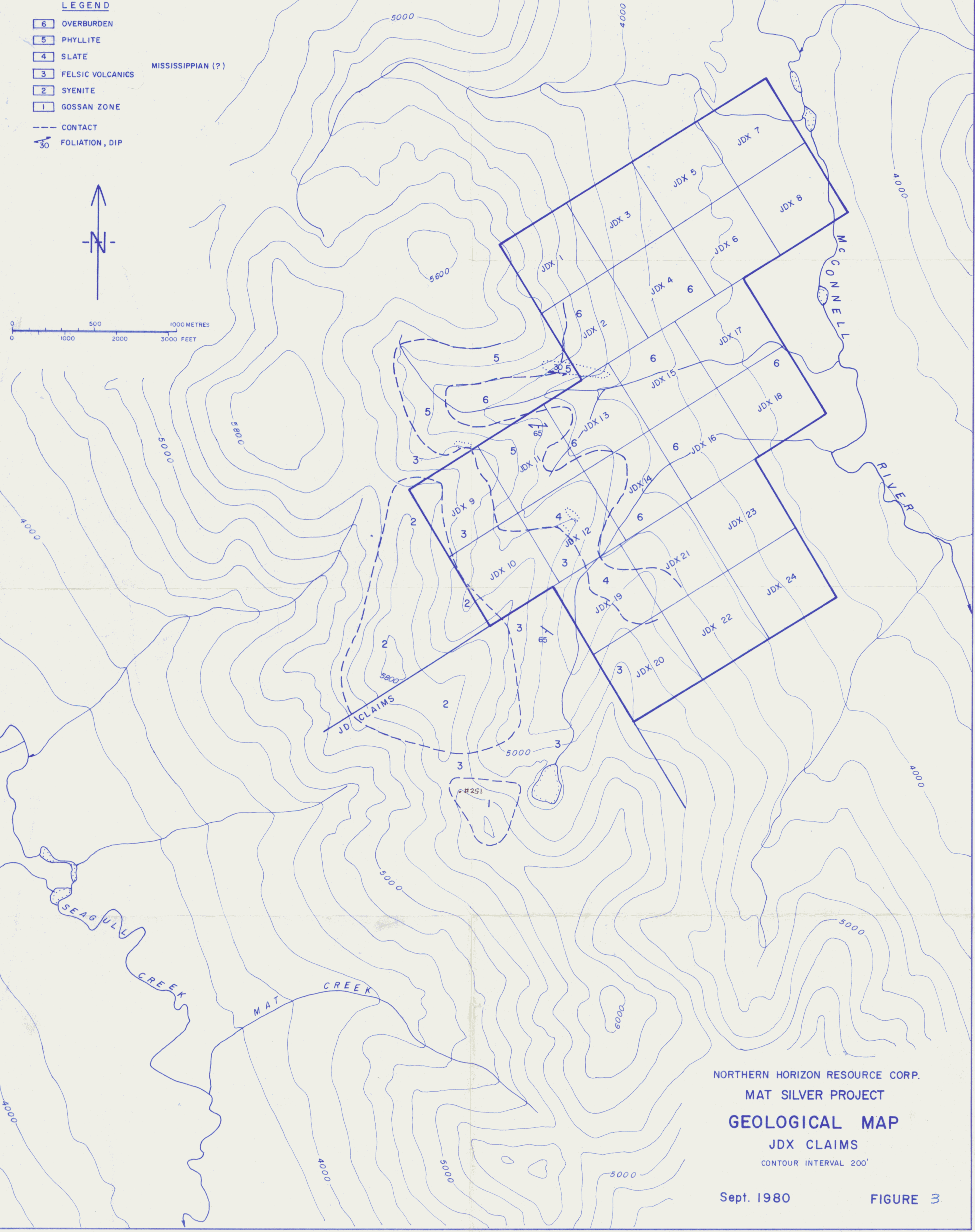
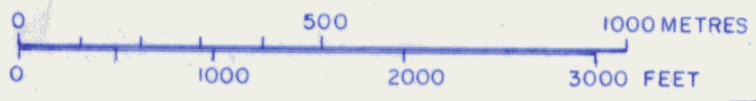
REFERENCES

- Tempelman-Kluit, D. J. (1977): Quiet Lake, Y.T. Map Sheet 1:250,000, Open File 486; Geological Survey of Canada.
- Wheeler, J. O., Green, L. H., Roddick, J. A. (1960): Quiet Lake, Y.T. Map Sheet 1:250,000, Map 7-1960; Geological Survey of Canada.

LEGEND

- 6 OVERBURDEN
- 5 PHYLLITE
- 4 SLATE
- 3 FELSIC VOLCANICS
- 2 SYENITE
- 1 GOSSAN ZONE
- CONTACT
- 30 FOLIATION, DIP

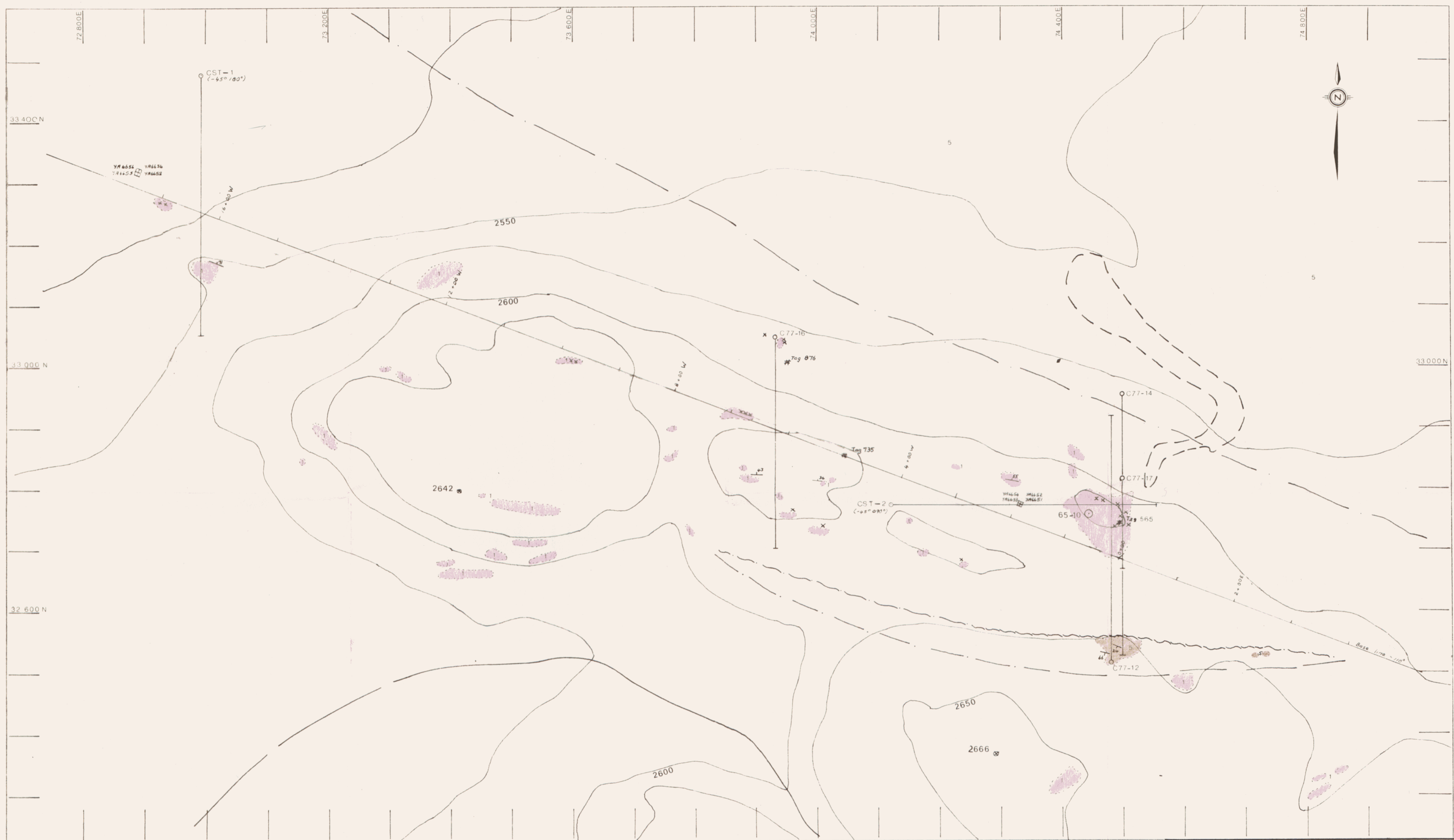
MISSISSIPPIAN (?)



NORTHERN HORIZON RESOURCE CORP.
MAT SILVER PROJECT
GEOLOGICAL MAP
JDX CLAIMS
CONTOUR INTERVAL 200'

Sept. 1980

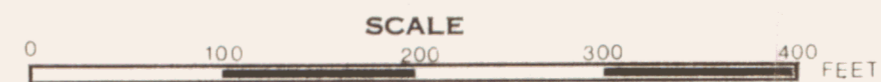
FIGURE 3



LEGEND

- Dolomite
- Argillite shale
- xx Pb Zn mineralization
- Fault
- - - - contact inferred
- outcrop
- ⊙ Tag 876 surveyed point
- OCST-2 drill hole
- ⊠ claim post

N.T.S. 106 C/3



CANADIAN SUPERIOR EXPLORATION LIMITED

C.S.E - McINTYRE — CRAIG JOINT VENTURE

CRAIG CLAIMS GROUP — TRENT ZONE

DRILL HOLE PLAN

Drawn by SCJames Scale 1" = 100'	Work Gifford 1977 Janes 1980 Date King 1980	P/B4-80 Fig 6 DWG.
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