



A TRENCHING REPORT

on the

MAT 1-4, 7-10, 11-16, and 17 Fr.
DM 1-4
SUN 1-12
and JD 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

091148

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SUMMARY AND RECOMMENDATIONS

The 2.5(+) m vein of massive sulfide plus the overlying 2.5 m of mineralized bands at the MAT showing (MAT #4 claim) still has an unknown potential which a small diamond drill program could provide the criteria as to whether there would be any requirements for additional exploration work. It is recommended that two angle holes be drilled about 30 to 45 m upstream from the showing and south of the creek and fault. One hole should be angled perpendicular to the dip of the massive sulfide band which appears to be dipping gently to the east, and the other hole angled at about 45° to the north to intersect the fault/gouge zone along Mat Creek. The depths of these holes could be a minimum of 30 m each.

The showings between the GULL 1 and 2 claims have not been fully examined. These showings could be structurally related to Cyprus Anvil's MM claims to the southwest and also contain strata-bound mineralization. It is recommended that these showings be trenched to obtain a better exposure. A D6 caterpillar tractor with wide pads or a similar sized vehicle would be large enough to do the trenching and as well could be used in areas of soft ground throughout the summer.

The other claims in the project area do not appear to have sufficient economic potential to warrant further exploration.

INTRODUCTION

This report has been prepared for Northern Horizon Resource Corporation and describes trenching on property in the Seagull Creek area, Yukon Territory, by the author between August 7th and August 8th and August 15th - August 21st, 1980.

The property consists of 54 adjoining full-size claims and one fractional claim. The claim boundaries are shown in Figure 2 and the claim data is as follows:

NORTHERN HORIZON RESOURCE CORP.
MAT SILVER PROJECT
LOCATION MAP

Sept. 1980

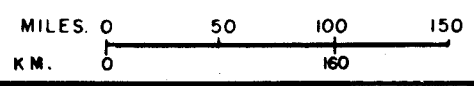
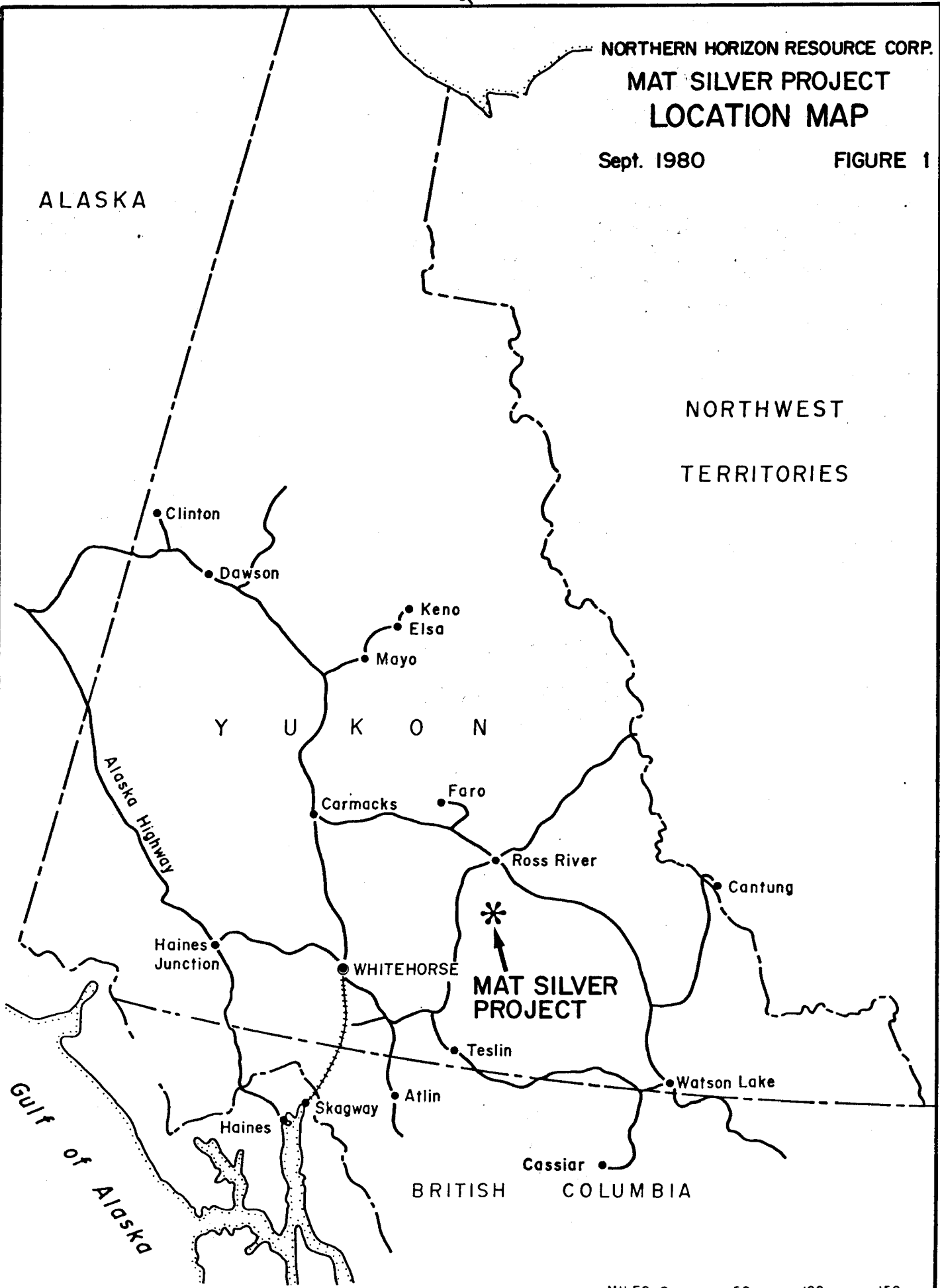
FIGURE 1

ALASKA

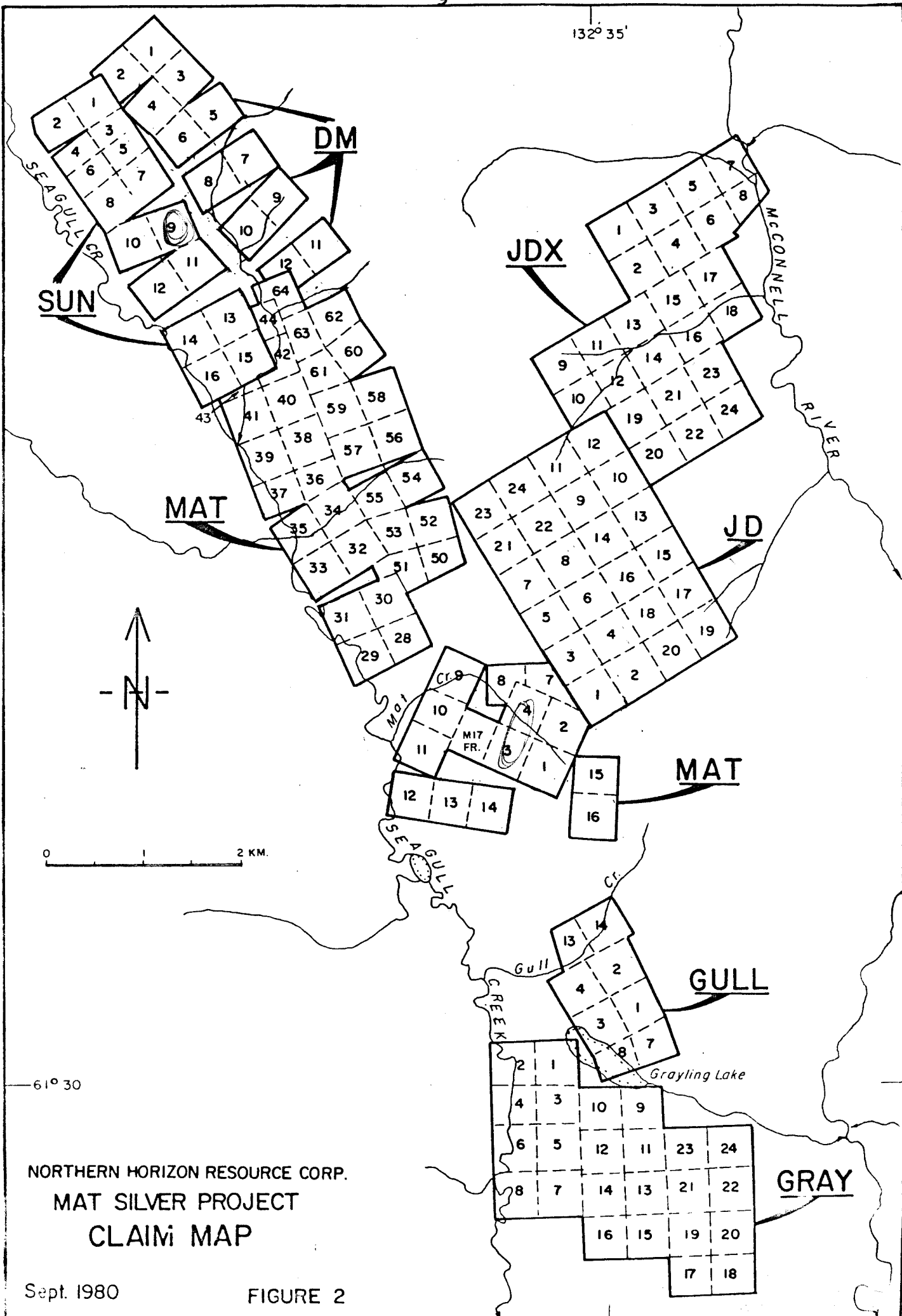
NORTHWEST
TERRITORIES

Y U K O N

BRITISH COLUMBIA



132° 35'



NORTHERN HORIZON RESOURCE CORP.
 MAT SILVER PROJECT
 CLAIM MAP

Sept. 1980

FIGURE 2

Table I

MAT 1-4	Y83159 - Y83162
MAT 7-10	Y93736 - Y93739
MAT 17 Fr.	YA25850
MAT 11-16	Y93740 - Y93745
DM 1-4	Y93809 - Y93812
SUN 1-12	Y93793 - Y93804
JD 1-12	YA00703 - YA00714
JD 13-24	YA12305 - YA12316

The above claims are held in the name of Marvin Sherman.

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 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 trenching and rock analysis on the MAT 3 and 4 and the SUN 9 claims. Trenching was done by a D7E caterpillar tractor. The crew employed on the project was:

Table 11

<u>Name</u>	<u>Address</u>	<u>Position</u>	<u>Period Employed</u>
Larry Nicoll	Vancouver, B.C.	Geologist	July 18th-August 27
George Rudyk	Whitehorse, Y.T.	Bulldozer Operator	August 16th-20th

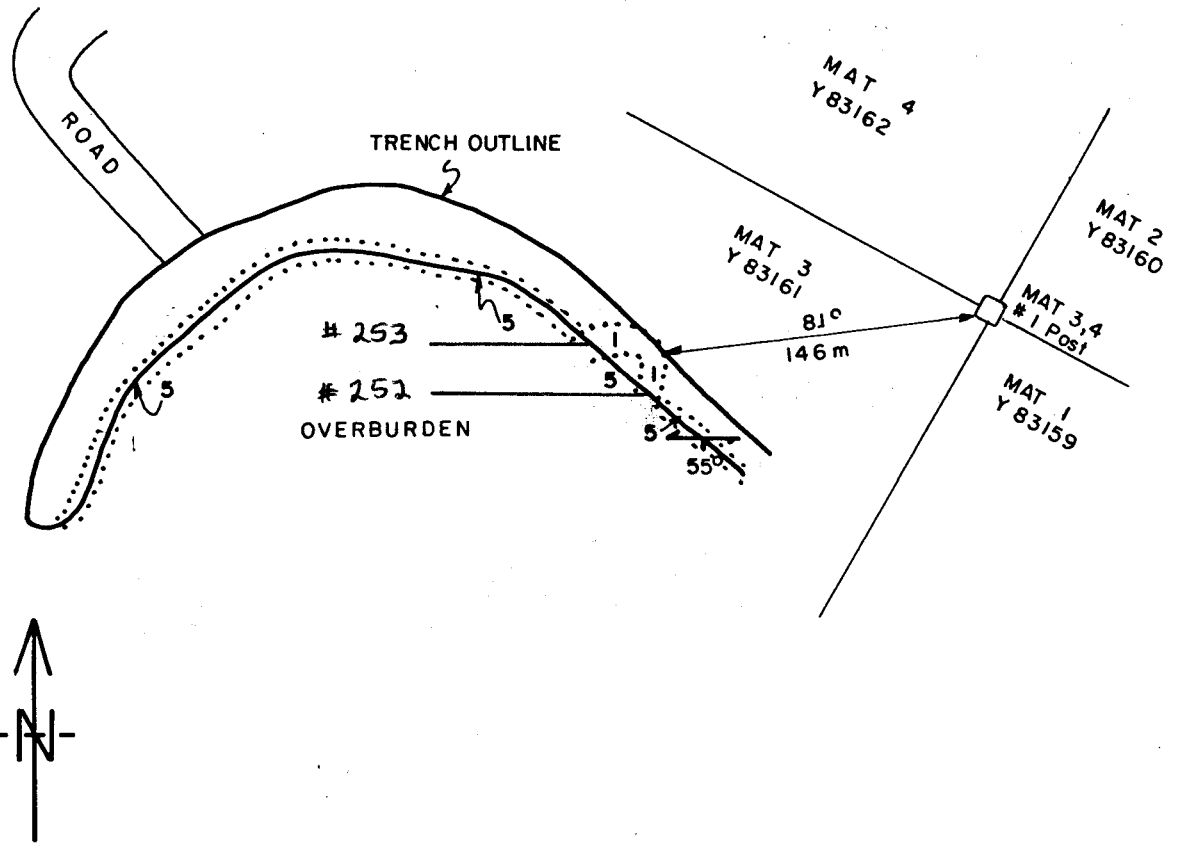
Detailed discussion of the property geology and mineralization appears in a following section of this report.

The trench on the MAT 3 claim is in a gossan zone and shows a contact between altered and unaltered rocks (Figure 3). The trench is 120 m in length, an average of 7 m in width and about 2 m of bedrock was exposed in the cut. The volume of ground removed is calculated to be 840 cubic metres.


The trench on the MAT 4 claim had first to remove fill pushed into Mat Creek during Dupont's exploration program in 1977 which covered the showing. The length of this trench is 60 m, width is 5 m and depth 6 m (Figure 4). The total distance below the top of the creek bank is about 9 m. The trench penetrated about 2 m below the original stream bed. The volume of ground removed is about 1800 cubic metres.

The SUN 9 claim had three closely-spaced trenches cut across it (Figure 5). The lengths of the trenches are 34, 30 and 20 m; widths are 4 m and they are 1 m deep. The total volume of earth removed by the three trenches is 336 cubic metres.

Soft muskeg along Seagull Creek prevented moving the D7 to the south end of the property where trenching on the GULL and GRAY claims had been planned.



LEGEND

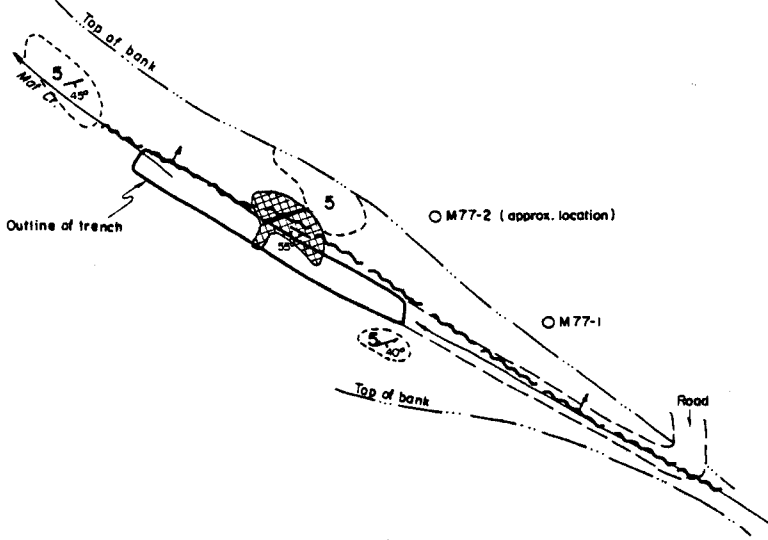
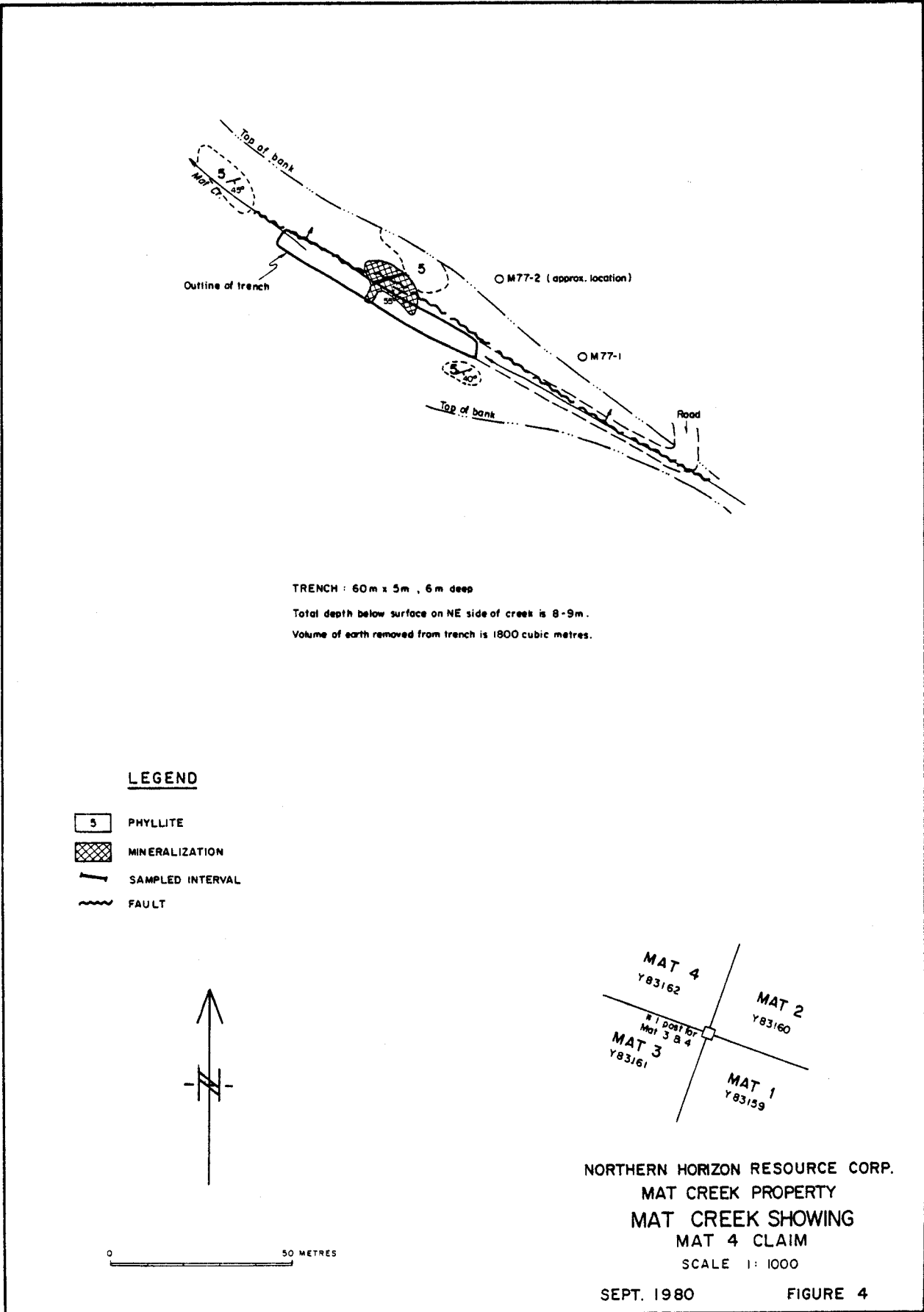
- 1 GOSSAN
- 5 PHYLLITE
-  55 FOLIATION DIP

TRENCH : 120m x 7m x 2m
 Volume of earth removed
 is 840 cubic metres.

**NORTHERN HORIZON RESOURCE CORP.
 MAT SILVER PROJECT
 TRENCH - GEOLOGY
 MAT 3 CLAIM**

Sept. 1980

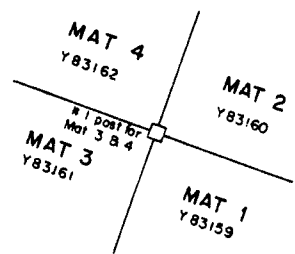
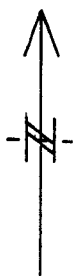
FIGURE 3



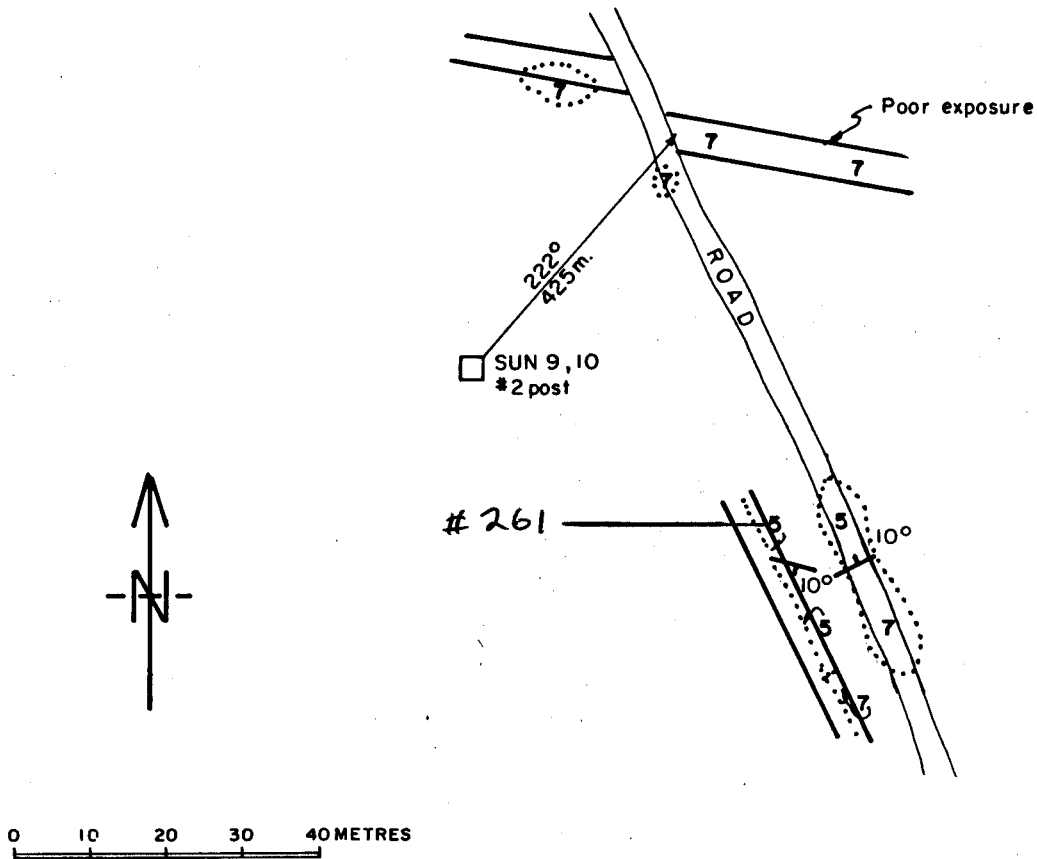
TRENCH : 60m x 5m , 6m deep
 Total depth below surface on NE side of creek is 8-9m.
 Volume of earth removed from trench is 1800 cubic metres.

LEGEND

- 5 PHYLITE
- MINERALIZATION
- SAMPLED INTERVAL
- FAULT



NORTHERN HORIZON RESOURCE CORP.
 MAT CREEK PROPERTY
 MAT CREEK SHOWING
 MAT 4 CLAIM
 SCALE 1: 1000



LEGEND

- 5 PHYLLITE
- 7 GRAYWACKE

Trenches are 34m, 30m & 20m in length x 4 m in width x 1m in depth.

Total volume of earth removed is 336 cubic metres

NORTHERN HORIZON RESOURCE CORP.
MAT SILVER PROJECT
TRENCHES - GEOLOGY
SUN 9 CLAIM

Sept. 1980

FIGURE 5

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.

JD Claims:

The main ridge located on the JD claims is predominantly grey tuff and trachyte. A gossan zone immediately west of a glacial lake consists of reddish orange altered felsic volcanics and contains abundant pyrite and possible galena. Appendix I contains the analysis of a sample taken from this location. The gossan zone adjoins a very fine grain syenite intrusion to the north.

GULL Claims:

At the south end of the main ridge and about 400 m north of Grayling Lake, the lowest exposure on the GULL claims is a light grey phyllite with thin quartzite interbeds. Higher up the shoulder towards the main ridge are buff to grey trachytes or andesites, some of which have flow banding. Reddish brown pyritic staining is common. A showing of galena and minor sphalerite is located along the boundary line between the GULL 1 and 2 claims.

MAT Claims:

The best exposure of possible economic importance is in Mat Creek on the MAT 4 claim where a vein of massive sulfide mineralization is found. Proceeding upstream from about 125 m below the showing is a light grey phyllite dipping at 45 SE although bedding attitudes along the creek are variable.

At the showing, the host rock is dark grey to black phyllite and schist, graphitic in part. Quartz veining is common with disseminated pyrite often with the quartz. Rust staining is often associated with the mineralized bands. The mineralized zone consists of at least 2.5 m of massive pyrite with lesser amounts of silvery-blue galena at the lowest part of the trench and appears to be dipping gently to the east. Trenching went about 2 m below the original stream channel, but an impermeable barrier at the lower end of the trench caused a rapid build-up of water and trenching could not go deeper. Thus, the sulfide mineralization may be thicker than 2.5 m. Above this mineralization is approximately another 2.5 m of mineralized bands of pyrite, galena, chalcopyrite and possibly bornite. The structure here is complex: a graphitic phyllite has a 15 cm mineralized vein of pyrite, galena, chalcopyrite in a gouge zone concordant with the attitude of the foliation of the phyllite which is 125°/55 SW. Near the top of the showing are convolute bands of yellowish sulphur. Aerial photographs show an 1100 m straight lineation, which is most likely a fault, along the Mat Creek channel where this showing is located.

The analyses of samples taken from the mineralized zone are given in Appendix I.

Proceeding upstream from the mineralized zone is a continuation of the phyllites and schists with the foliation having an orientation of 70°/40°SE. Overlying this is a greyish to reddish brown andesite or trachyte which has some disseminated pyrite. About 300 m east of this showing is a syenite intrusion which forms the southern portion of the ridge.

About 125 m south of the Mat Creek showing in the MAT 3 claim is a gossan zone, portions of which extend for about 350 m along a trend bearing 145°. The rock is a light to dark phyllite with limonitic staining parallel to the foliation which is oriented 90°/55°S. The trench intersected the contact between the gossan and unaltered phyllites. Minor pyrite was observed. Two channels in the gossan were sampled and the analyses are given in Appendix I.

SUN 9 Claim:

The three trenches on the SUN 9 claim encountered a medium grey, fine grain greywacke which was slightly foliated and slightly calcareous. This was interbedded with dark grey to black non-calcareous phyllite and medium greenish-grey phyllite which had limonitic staining in part. No mineralization was observed. One sample was collected for analysis - see Appendix I for results. Wheeler (1960) and Tempelman-Kluit (1977) report the occurrence in this area of Mississippian siliceous slate, shale, cherts and greyish greywackes associated with Silurian-Devonian grey or buff dolomites, sandy and silty dolomites and buff, grey and white lichen-covered quartzite.

ACKNOWLEDGMENTS

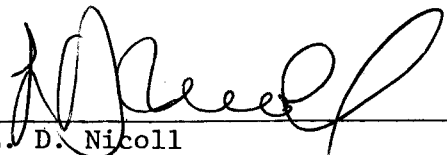
The author would like to thank both the office and field staffs of Cyprus Anvil Mining Corporation Limited and Noranda Exploration Company Limited for the assistance they provided to him. Completing this project without their aid would have been difficult.

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.

APPENDIX 1

Part of a Report Dated Aug. 27, 1980

Sample #	Description	Cu %	Pb %	Zn %	Ag oz.	Au oz.
251	JD claims gossan zone	.02	.02	.02	.02	.001
252	Mat 3 claim gossan zone (east)	.01	.02	.02	.02	.003
253	Mat 3 claim gossan zone (west)	.01	.02	.02	.02	.001
254	Mat 4 claim: (bottom) 0' - 5'	.86	30.4	.08	19.4	.001
255	Mat 4 claim: 5' - 10'	.42	6.4	.28	11.6	.001
257	Mat 4 claim: 5' - 10'	.88	4.80	.08	14.4	.001
256	Mat 4 claim: 10' - 15'	.60	8.40	.90	7.0	.001
258	Mat 4 claim: 15' - 20' (top)	.42	26.5	.44	16.2	.001
259	Mat 4 claim: vein located in 15' - 20' interval	1.38	46.6	.18	23.0	.001
261	Sun 9 claim oxidized zone	.02	.94	.02	.48	.001

Itemized Expenses for Mat + Sun Claims - 1980

	MAT 3 Claim	MAT 4 Claim	Sun #1 Claim
	\$	\$	\$
Wages			
L. Nicoll - geologist			
8 days in field @ \$115/day	345.00	345.00	230.00
2 days report preparation after field work @ \$115/day	76.67	76.67	76.66
	<u>321.67</u>		
Vehicle rental (3/4 ton 4x4 truck with camper)	300.00	300.00	200.00
D7E Caterpillar bulldozer (trenching) @ \$80/hr	720.00 (9 hrs)	1240.00 (15 1/2 hrs)	1040.00 (13 hrs)
Drafting of maps	36.42	36.42	36.41
Assays of rocks	51.00	153.00	25.90
Air cargo of rock samples Whitehorse to Vancouver	4.30	10.75	2.13
Groceries	52.95	52.95	35.31
Gasoline	26.55	26.55	26.55
Totals	<u>1612.89</u>	<u>2241.34</u>	<u>1672.56</u>
	321.67	321.67	321.66
	<u>1291.22</u>	<u>1919.67</u>	<u>1350.80</u>
	4.30	10.75	2.13
	<u>1286.92</u>	<u>1908.92</u>	<u>1348.67</u>

Receipts for work done on
the MAT, E.T.C. claims

1. C. C. ...
10-20-36
Vancouver B.C.

DATE Sept 21 1936

Material Division

MAT project

	ACCT.	FWD.
1 TRUCK RENT	7	00
2 CRANE RENT	...	00
3 MILLAGE	300	00
4 Rental Perry	200	00
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Sept 18/80.

Draughting Service for ^{Northern} Blue Horizon Resource Corp.
on Mat Creek Property

1. Previous Invoice \$ 183⁵⁰

2. Fig. 4 Mat Creek Showing ... \$ 35⁰⁰

Total Drafting → \$ 218.50

3. Balance from last payment \$ 43²⁸

Total \$ 175.22

PAID
Ch 107

Yrs. truly,
F. CHONG

213 - 514 E 5th
Vancouver, B.C.
V5T - 1J1

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

NORTHERN HORIZON RESOURCES CORP.

405-550 Burrard St.

Vancouver, B.C.

DATE Oct 14, 1980

INVOICE NO. 0329

CERTIFICATE NO. 80535

ITEM	DESCRIPTION	SUB-TOTAL	TOTAL
10	Assays for Cu, Pb, Zn, Au and Ag @ \$ 25.50	\$ 255.00	\$ 255.00

TERMS - NET 30 DAYS

Thank You

• A 0015.19 T

Gr • 0001.93

Gr • 0001.69

Is • 0001.29

Gr • 0001.12

Gr • 0001.79

Gr • 0001.69

Is • 0002.39

Gr • 0003.29

1164 25 480

SUPER VALUE

• A 0015.19 T

Gr • 0001.93

Gr • 0001.69

Is • 0001.29

Gr • 0001.12

Gr • 0001.79

Gr • 0001.69

Is • 0002.39

Gr • 0003.29

1164 25 480

SUPER VALUE

CANADA SAFEWAY

08958578

Gr TI 0.000.10

• Tr 0.000.34

Gr • 0.001.11

Gr • 0.002.79

Gr • 0.002.28

Gr TI 0.001.29

Gr • 0.002.23

Gr • 0.001.53

Gr • 0.001.63

Gr TI 0.001.23

Gr TI 0.001.15

Gr • 0.001.09

Gr • 0.001.53

Gr • 0.001.53

Gr • 0.004.49

Gr • 0.000.85

Gr • 0.000.67

Gr • 0.000.67

Gr • 0.000.73

Gr • 0.003.47

Gr TI 0.001.15

Pr • 0.001.13

Pr • 0.000.54

Gr • 0.000.67

Gr • 0.000.71

Gr • 0.000.67

Gr • 0.000.95

Gr • 0.000.89

Gr • 0.000.89

Gr • 0.000.89

Gr • 0.000.89

Gr • 0.000.89

Gr • 0.000.87

Gr • 0.000.87

Gr • 0.000.87

Pr • 0.000.50

Pr • 0.002.39

Gr • 0.000.83

Gr • 0.000.83

Gr • 0.000.83

Gr • 0.000.83

Gr • 0.000.83

Gr • 0.000.83

Gr • 0.000.83

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Gr • 0.000.83

Gr • 0.000.83

Gr • 0.000.83

Gr • 0.000.83

Gr TI 0.001.73

Gr • 0.000.85

Nit • 0.001.09

Nit • 0.001.09

Nit • 0.001.49

Nit • 0.000.79

Nit • 0.001.89

Nit • 0.001.89

Nit • 0.001.43

Nit • 0.000.69

Nit • 0.000.69

Nit • 0.000.69

Nit • 0.002.09

Nit • 0.002.33

Nit • 0.002.12

Gr • 0.001.65

Gr • 0.001.65

Gr • 0.002.39

Gr • 0.001.99

Gr • 0.000.85

Gr • 0.000.57

Gr • 0.000.57

Gr • 0.000.69

Gr • 0.000.99

Gr • 0.000.99

Gr • 0.001.79

Gr TI 0.001.99

Gr • 0.002.35

0372 22 Jul 80

Thank You

MISSION (S)



PHONE
667-6102
667-6103



TELEX
036-8258



UNIROYAL
GOODYEAR
FIRESTONE
& MICHELIN TIRES

YUKON TIRE CENTRE LTD.
COMPLETE TIRE & RADIATOR REPAIR SERVICE
107 INDUSTRIAL ROAD, WHITEHORSE, YUKON Y1A 2T7

DATE 11 19 80

NAME

ADDRESS

QUAN.	DESCRIPTION	PRICE	AMOUNT
16	GALS. / LITRES GAS REG. <input type="checkbox"/> SUP. <input type="checkbox"/> UNLEAD <input type="checkbox"/>	31	31 00
	QTS. / LITRES OIL		
	LUBRICATION		
	WASH		
<i>PAID</i>			
REC'D BY		S.S. TAX	
		TOTAL	31 66
CLERK	CASH	C.O.D.	CHARGE
		ON ACCT.	MDSE. RET'D.
			PAID OUT

42485

FLATPAKIT YUKON OFFICE SUPPLIES

654388

1983 AN HV
EST. YUKON
DIESEL FUEL

REC'D BY

WULF LAKE RTPS
000190

PAID CASH

TOTAL	28 00	28 00
-------	-------	-------

ORIGINAL
THIS COPY TO CUSTOMER
AT TIME OF DELIVERY

Thank you
for buying
Chevron

These Amounts Must Agree

129459

12500

MAT

MAT

104

CRYSTAL PALACE HOTEL
 JAKE'S CORNER
 YUKON TERRITORY
 PH. (403) 668-2727

19__

NAME _____

ADDRESS _____

QUAN.	DESCRIPTION	AMOUNT
	GAS	20 00
	LIT.	45.5
Aug 22/80		
		TAX
RECEIVED ABOVE IN GOOD ORDER		TOTAL
BY		
	CLERK	CASH
	C.O.D.	CHARGE ON ACCT.
	MDSE. RET'D.	PAID OUT

REG FORM FLATPAKIT GENERAL PURPOSE SALES 5R082E

90207