

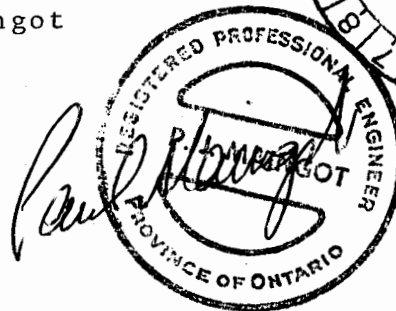
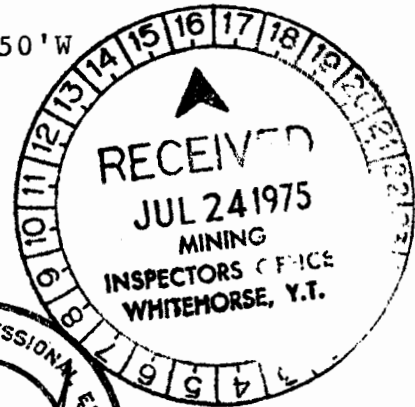


GEOCHEMICAL REPORT

ML GROUP - 106-L-4, Southern Richardson Mtns.

Latitude 66° 07'N, Longitude 135° 50'W

Field Supervisor: C. Harivel
Report Written by: A. Jackson
Approved by: P. Maingot



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 \$ 2302.28

D.B. Craig
Resident Geologist or
Resident Mining Engineer

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

[Signature]
S.M. BAXTER
Supervising Mining Recorder
Commissioner of Yukon Territory

2302.28



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INTRODUCTION

During the summer of 1974 a reconnaissance geochemical and prospecting program was completed by Amoco Canada Petroleum Company Ltd., Mining Division, in the Richardson Mountains in the Yukon Territory. The object of the program was to locate lead-zinc mineralization. The program was based out of Margaret Lake, latitude $65^{\circ} 20' N$, longitude $135^{\circ} 30' W$, and was serviced from Mayo, approximately 128 air miles S.W. of Margaret Lake. Access to the Richardson Mountains from Margaret Lake was largely by helicopter, with occasional support of float equipped aircraft which could land at Caribou Lake (Lat. $66^{\circ} 21' N$, Long. $135^{\circ} 15' W$) and Prospect Lake (Lat. $66^{\circ} 04'$, $135^{\circ} 50' W$) (Unofficial names).

The Richardson Trough was the site of deep water shale deposition from Late Cambrian to Upper Silurian - Lower Devonian. This sequence of graptolitic shales, argillaceous limestones, cherts, mudstones, and conglomerates has been called the Road River Formation by Jackson and Lenz (1962). Generally the Road River Formation represents deep water basin and basin-slope environments. The deep trough was surrounded by shelf-type carbonates of the Yukon and

MacKenzie platforms.

During the reconnaissance stream sampling several streams draining the area centered on longitude $135^{\circ} 50'W$, latitude $66^{\circ} 07'N$, were found to be anomalous in lead and zinc.

Preliminary prospecting located minor lead mineralization within Cambrian limestone. On June 23 and 25, 1974, 118 claims constituting the ML Group were staked over the anomalous area for Amoco Canada Petroleum Company Ltd. The geochemical work on the ML Group was completed from a two-man fly camp located on the claim group. The fly camp was serviced from the base camp at Margaret Lake and from Mayo.

GEOCHEMICAL SURVEYGeneral Description

A soil sampling survey was completed over portions of 14 claims in the ML Group between July 25 - July 30, 1974. The survey was completed on lines spaced at 500 feet with samples collected every 200 feet. A picket line base line was established along the NE-SW claim line common to claims Y89683, Y89684 to Y89703, Y89704. The sample lines were run by pace and compass methods off the base line. Where it was possible to differentiate, soil samples were collected from the B soil horizon. Where soil horizons were difficult to differentiate, samples were generally collected from soils beneath the zone of humus and vegetation. The soils were analysed for total copper, lead and zinc. The analyses were completed by Whitehorse Assay, 1156 First Avenue, Whitehorse. The samples were dried, crushed and seived. The -80 mesh fraction was analysed by digestion in concentrated aqua regia, diluting with de-ionized water, and read by atomic absorption.

Interpretation

The soil survey indicated that the area sampled has a relatively high background level for both lead and zinc, with a lead background of near 100 ppm. and zinc from 200 - 300 ppm. The survey outlined one fairly large lead-zinc anomaly and parts of two smaller anomalies both north and south of it. The main zinc anomaly with values above 1000 ppm. is 2400 feet long x 2000 feet wide, with a central zone of 1600' x 800' of values greater than 3000 ppm. There is an irregularly shaped but coincident lead anomaly with values ranging from 500 to 2700 ppm. over an area of approximately 2400' x 800'. A smaller anomaly occurs approximately 2000' NE of this one, being 1000' x 800' with values over 1000 ppm Zn and two narrow coincident zones of high lead (up to 1160 ppm). This anomaly is open to the north. Another small anomaly occurs on the south edge of the grid, 1000' x 600' of over 1000 ppm. Zn and up to 960 ppm Pb. This anomaly is open to the south.

Conclusions and Recommendations

It appears that the soil anomalies are directly related to minor lead and zinc mineralization "disseminated" in the

limestone as this type of mineralization was noted within the main anomaly. The area should be soil sampled and rock sampled in detail however to closely define the anomalous areas. The grid should be extended to the north and to the south. This should be followed by I.P. and if results warrant, diamond drilling.

Personnel

The soil sampling was completed by the following people:

J. Britton - 1749 Acadia Road, Vancouver, B.C.

D. Stewart - 1909 - 25-A St. S.W., Calgary, Alberta

The work was supervised by C. Harivel, 1909 Trafalgar, Vancouver, B.C. The survey was completed between July 25 to July 31, 1974.

Survey Costs

The total survey costs have been broken down as follows:

Geochemical Analysis:

Claim #Y89668(82) - \$11.80 (6 samples @ \$2.00 each, less 10%)

Claim #Y89670(84) - \$18.00 (10 samples @ \$2.00 each, less 10%)

Claim #Y89672(86) - \$16.20 (9 samples @ \$2.00 each, less 10%)
 Claim #Y89674(88) - \$ 5.40 (3 samples @ \$2.00 each, less 10%)
 Claim #Y89687(111) - \$27.00 (15 samples @ \$2.00 each, less 10%)
 Claim #Y89688(112) - \$25.20 (14 samples @ \$2.00 each, less 10%)
 Claim #Y89689(113) - \$43.20 (24 samples @ \$2.00 each, less 10%)
 Claim #Y89690(114) - \$37.80 (21 samples @ \$2.00 each, less 10%)
 Claim #Y89691(115) - \$43.20 (24 samples @ \$2.00 each, less 10%)
 Claim #Y89692(116) - \$37.80 (21 samples @ \$2.00 each, less 10%)
 Claim #Y89693(117) - \$45.00 (25 samples @ \$2.00 each, less 10%)
 Claim #Y89694(118) - \$37.80 (21 samples @ \$2.00 each, less 10%)
 Claim #Y89695(119) - \$14.40 (8 samples @ \$2.00 each, less 10%)
 Claim #Y89696(120) - \$12.60 (7 samples @ \$2.00 each, less 10%)

Salaries:

J. Britton at \$800/month x 5/30 = \$133

D. Stewart at \$550/month x 5/30 = \$91

Aircraft (Casual Charter):

One charter trip from Mayo to Carlson (Prospect Lake)

With fuel (3 barrels of 5 total) = \$520.30 x 3/5 = \$312.18

Fuel:

205.92 x 3/5 = \$123.54

(3 barrels out of total of 5)

Helicopter:

8 hours at \$140 = \$1120.00

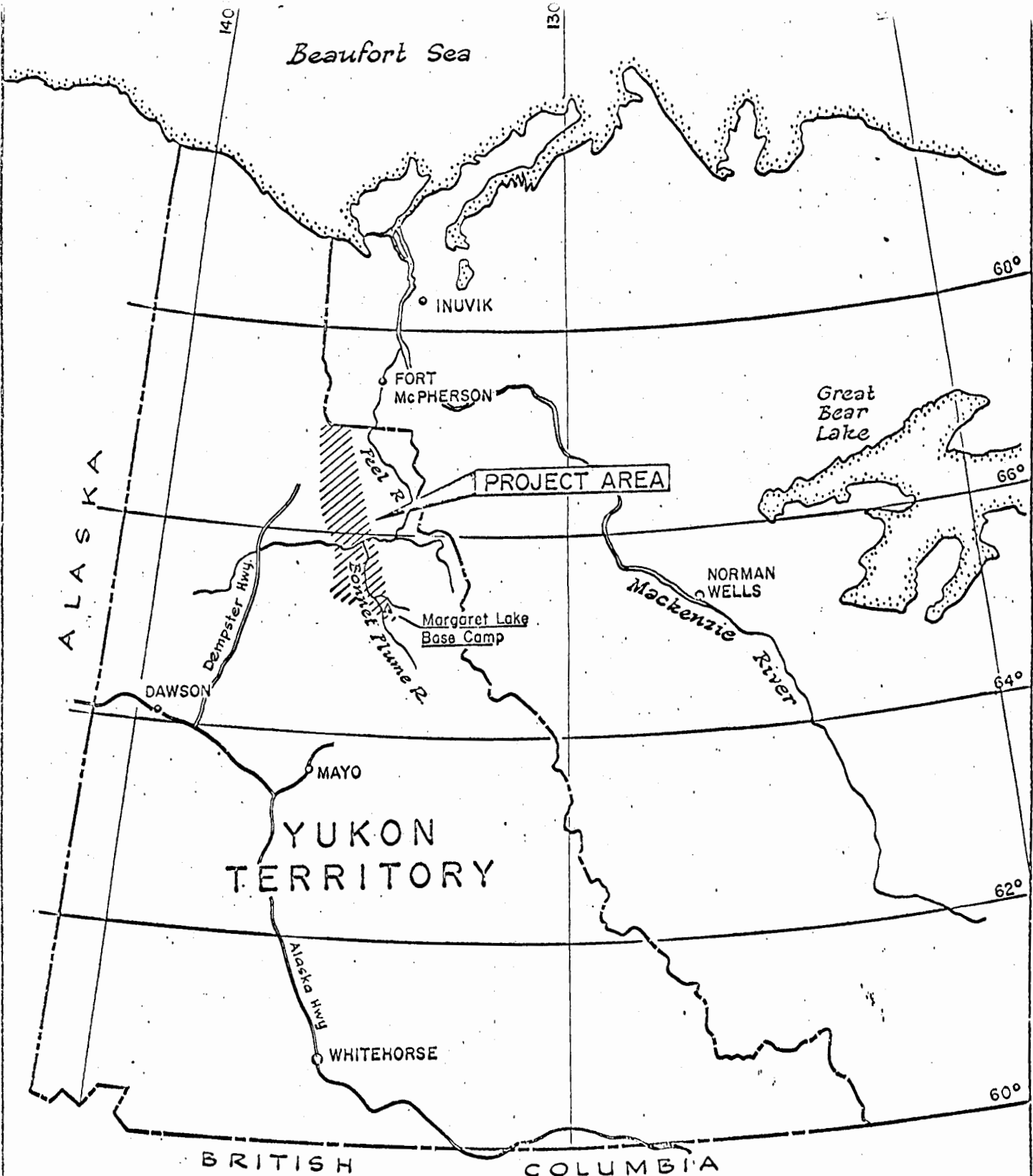
Groceries:

10 man days at \$5.00 per day = \$50.00

Grouping

<u>#1 Group</u>	<u>#2 Group</u>
Y89662 - ML 76	Y89672 - ML 86
Y89664 - ML 78	Y89674 - ML 88
Y89666 - ML 80	Y89693 - ML 117
Y89668 - ML 82	Y89694 - ML 118
Y89670 - ML 84	Y89695 - ML 119
Y89683 - ML 107	Y89696 - ML 120
Y89684 - ML 108	
Y89685 - ML 109	

<u>#1 Group</u>	<u>#2 Group</u>
Y89686 - ML 110	\$87.12/claim on costs other than assays
Y89687 - ML 111	\$21.90/claim on assays
Y89688 - ML 112	<hr/>
Y89689 - ML 113	\$109.02 Total applicable/claim
Y89690 - ML 114	
Y89691 - ML 115	
Y89692 - ML 116	
\$ 87.12/claim on costs other than assays	
\$ 15.89/claim on assays	
<hr/>	
\$103.01 Total applicable/claim	



AMOCO CANADA PETROLEUM CO. LTD.
 MINING DIVISION
 PROPERTY LOCATION MAP
BONNET PLUME PROJECT
 74C-006

SCALE: 1 INCH TO 94 MILES

Fig. 1

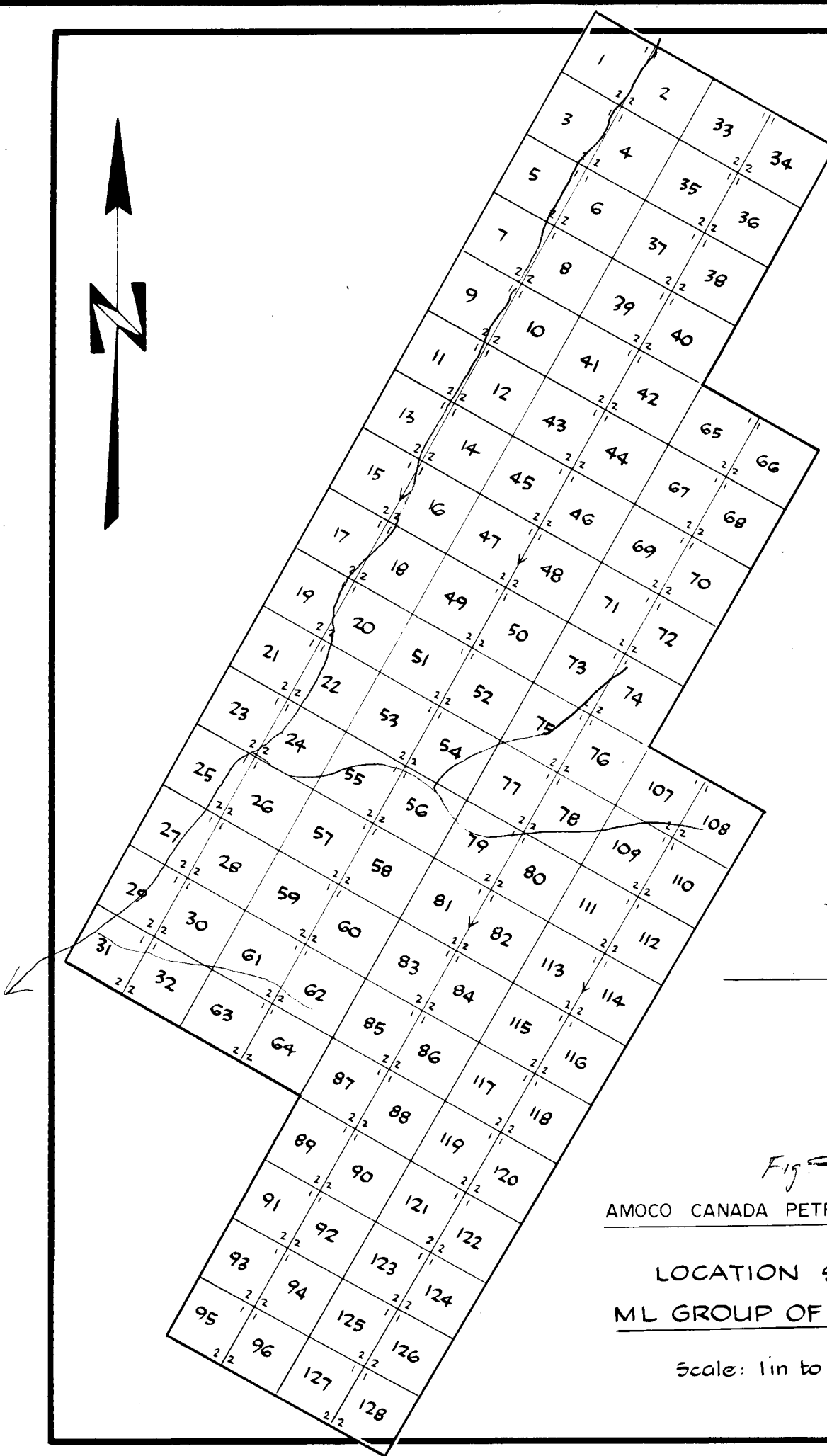


Fig. 2

AMOCO CANADA PETROLEUM CO. LTD.

LOCATION SKETCH
ML GROUP OF CLAIMS

Scale: 1 in to 3000 ft

CANADA)
)
TO WIT:)

I, ALVIN JACKSON

of #2010-65 Queen St. W, Toronto, Ont.

do solemnly declare - that the expenses itemized
in the accompanying reports on the M.L.
Group, 106-4-4, are true representation
of the amount expended in 1974
on these claims.

And I make this solemn declaration conscientiously believing it to
be true and knowing that it is of the same force and effect as if made
under oath.

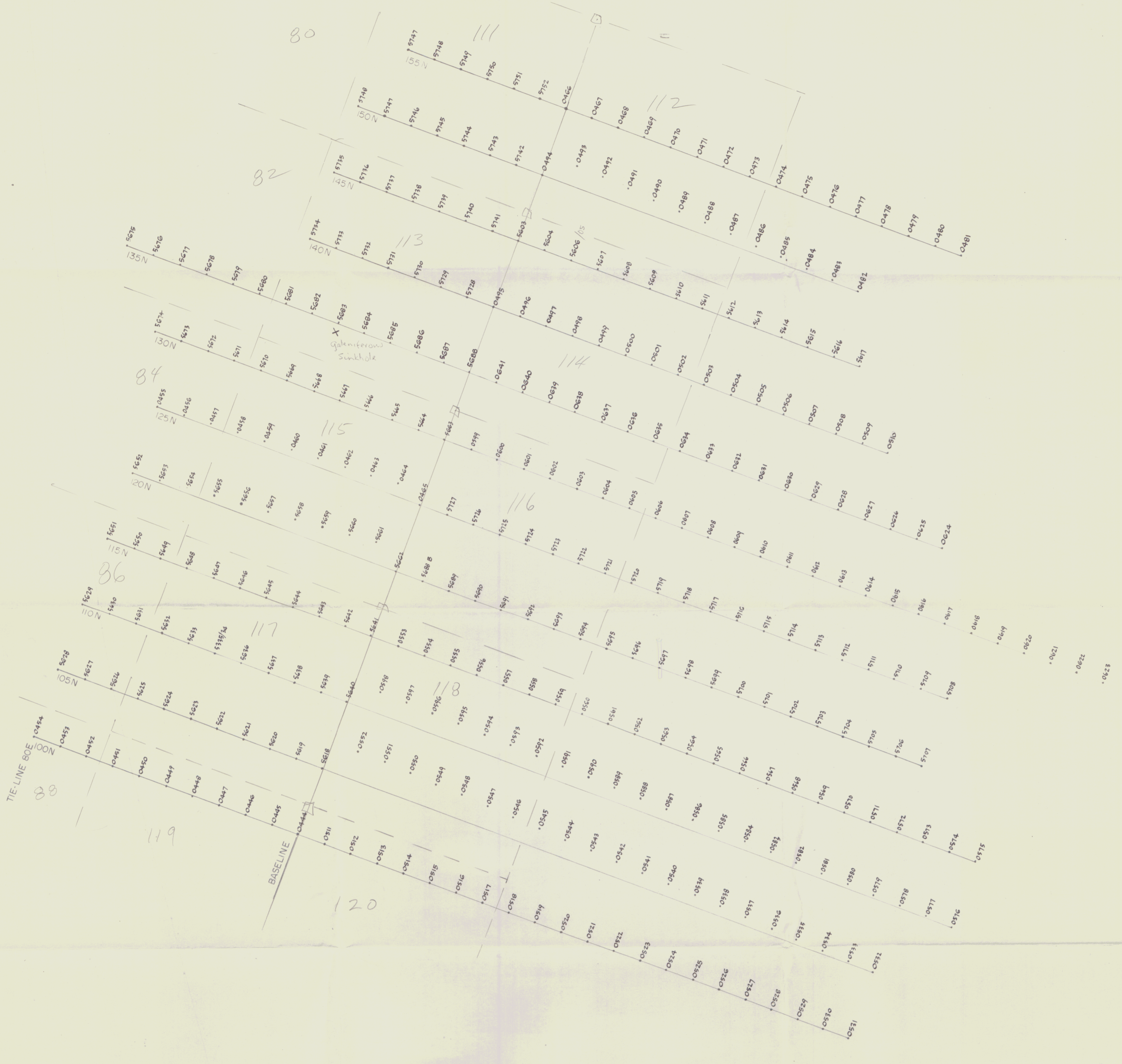
Declared before me at DAWSON, YUKON

in the _____ this

_____ day of JUL 18 1975 19__

[Signature]
Notary Public

[Signature]



sample
soil Allocation map - fig 48
geochem. results - fig 49

AMOCO CANADA PETROLEUM CO. LTD.
MINING DIVISION

"SINKHOLE GRID" ML GROUP
74C-00G

DRAWN BY	d.o's	CHECKED BY	
SCALE	1 in to 400 ft	APPROVED BY	
DATE	Oct. 1974	DRAWING No.	



22-36-208 Cu, Pb, Zn in p.p.m

AMOCO CANADA PETROLEUM Co. LTD. MINING DIVISION		
GEOCHEMISTRY RESULTS "SINKHOLE GRID" ML GROUP <small>74C-006</small>		
DRAWN BY	d.o's	CHECKED BY
SCALE	1 in to 400 ft	APPROVED BY
DATE	Oct. 1974	DRAWING No.