

GEOPHYSICAL ASSESSMENT REPORT

on the

BIG "M" GROUP

at claims

on Kokanee Creek

12 miles east of

the City of Nelson

NELSON MINING DIVISION

NTS Location 82F/11E

Latitude and Longitude

49° 36.5' 117° 08'

Report by:

Pearson Gallagher Ltd.

June 14, 1980.

NELSON, B.C.

MINERAL RESOURCES BRANCH

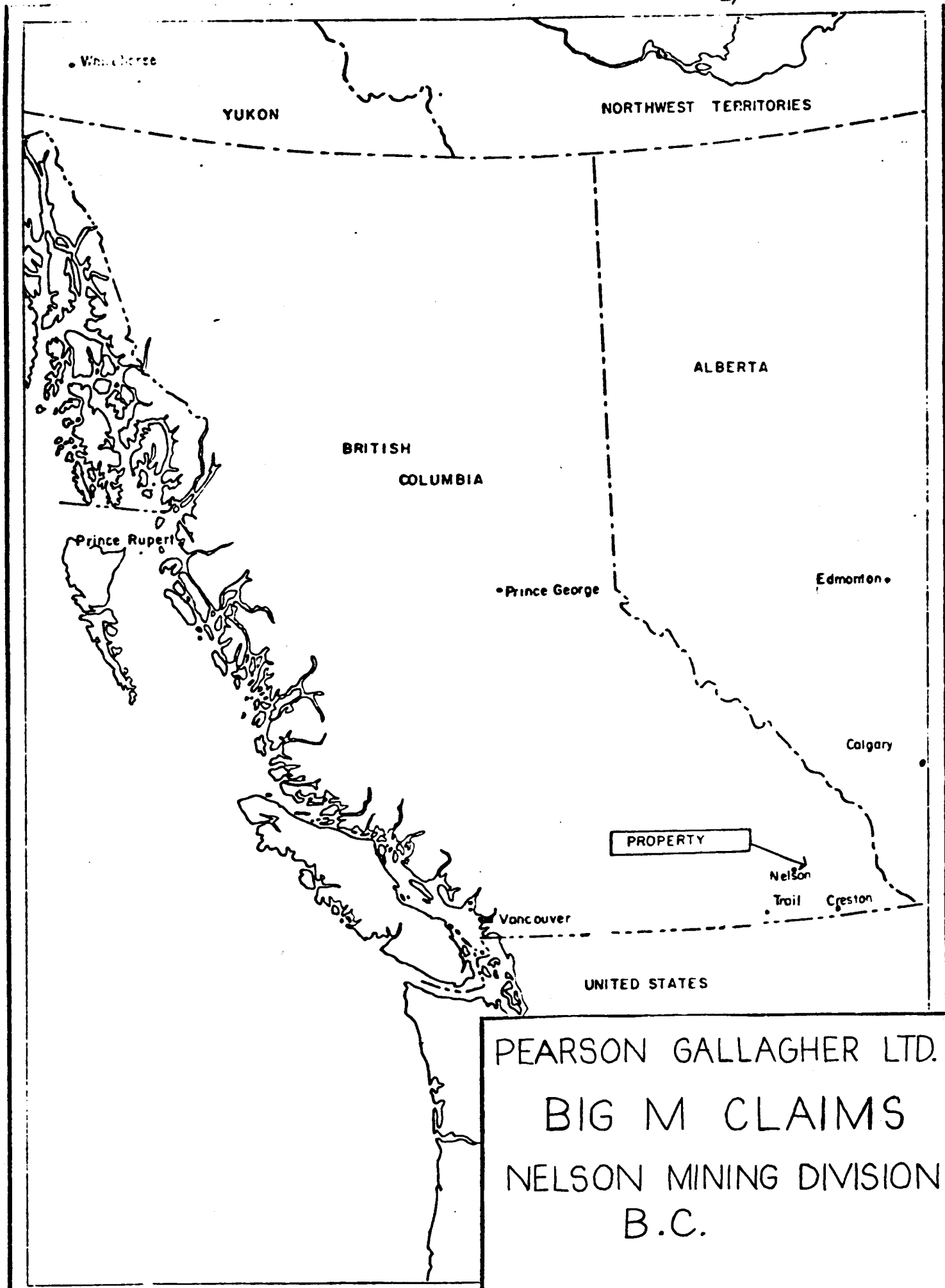
ASSESSMENT REPORT

N  
8725

TABLE OF CONTENTSPAGE

Location Map	1
Location & Access	2
General Setting	2
Property Information	3
Work Summary	3
Interpretations & Recommendations	3
Index Map	4
Map Showing Grid	5
Map Showing Magnetometer Values (In Envelope)	
Soil & Rock Sample Location Map	6
Soil Sample Assay	7
Rock Sample Assay	8
Itemized Cost Statement	9
Specifications of Fluxgate Magnetometer	10
Author's Qualifications	11

8725



PEARSON GALLAGHER LTD.  
BIG M CLAIMS  
NELSON MINING DIVISION  
B.C.

### LOCATION & ACCESS

The Big "M" Group is located 12 miles east of the City of Nelson on Kokanee Creek. A good gravel road at Kokanee Park branches off the Nelson/Balfour Highway and intersects the claims.

### GENERAL SETTING

The Big "M" Group is situated on a western slope of Kokanee Creek in the Kootenay Lake (West Arm) Valley. The elevation of the claims is approximately 3,000 feet above sea level.

The forest and vegetation are typical of the area. Various coniferous trees including larch, fir and pine species are found. The forest floor is quite thick with underbrush.

The region is underlain by Nelson Plutonic Rocks which consist mainly of porphyritic granite and granodiorite (Map 1090A Nelson West Half - Geological Survey of Canada).

The claims cover a portion of an area mapped by the G.S.C. shown as Ymir Group. Ymir Group consists of argillite, slate, limestone and paragneiss. Within this zone there is a large outcrop of oxidized mineralization consisting mainly of pyrrhotite, pyrite, minor sphalerite and hydrozincite.

### PROPERTY INFORMATION

The Big "M" Group was staked by Anton Nyhuis of Nelson in June of 1979. The claims were prospected during 1979, and in January 1980, Robin W. Pearson bought the claims. In June of 1980, the author conducted a magnetometer survey over the area of mineralization on the claims.

### WORK SUMMARY

A small grid was laid out over the mineralized area. The baseline ran north  $45^{\circ}$  east. Cross lines were surveyed and readings were taken every 50 metres (25 metres in anomalous zones) with a McPhar M.700 Fluxgate magnetometer. Due to the high anomalous readings and the close check in values no diurnal correction was applied.

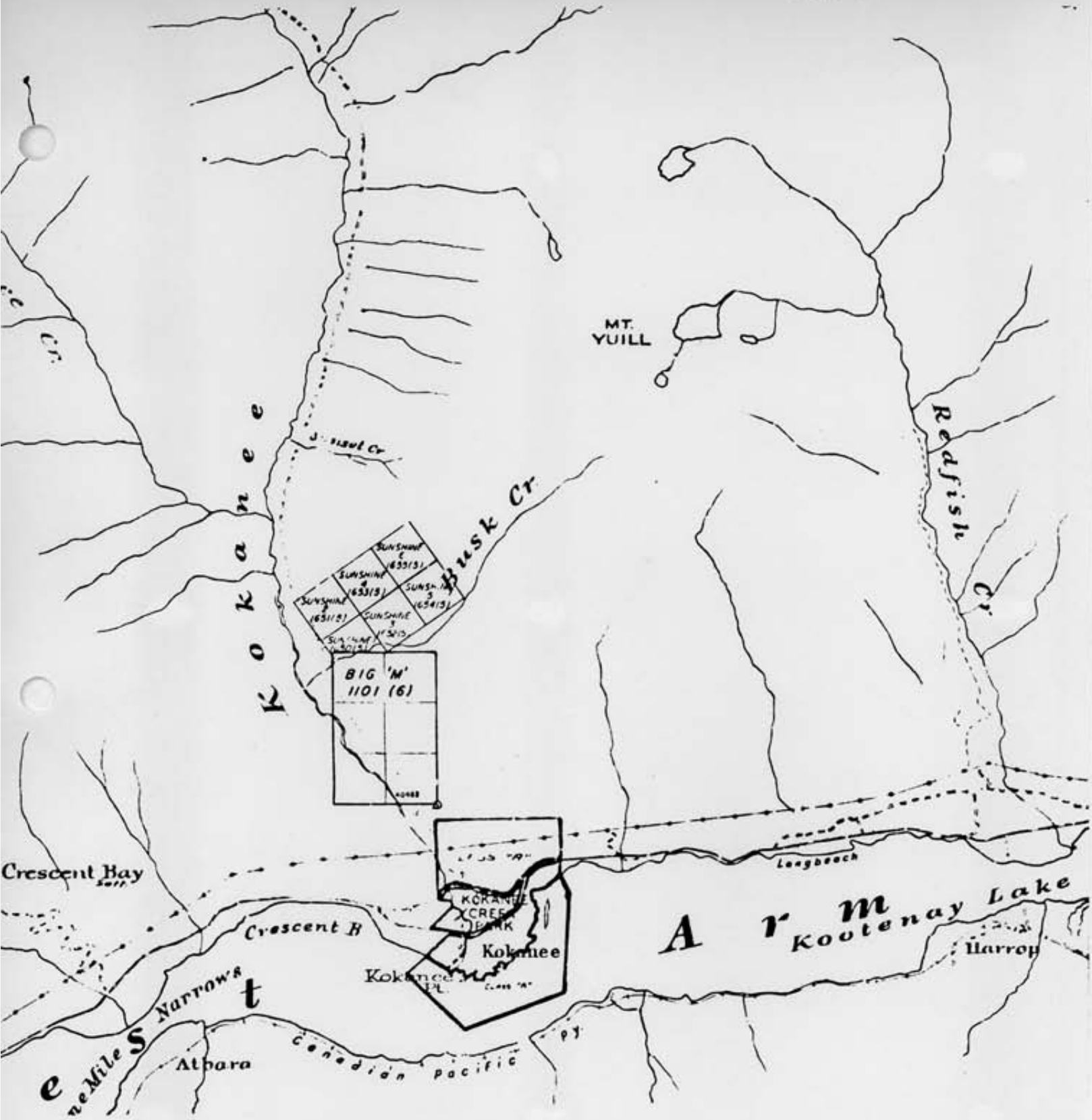
### INTERPRETATIONS AND RECOMMENDATIONS

The results of the magnetometer survey are shown on accompanying maps.

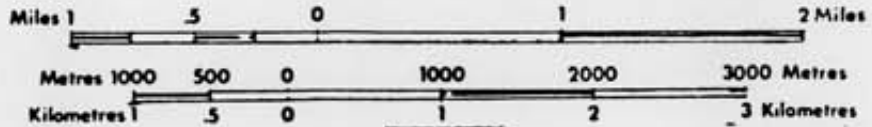
Values ranged from a low of 140 gammas on line 100 east Station 425 East to a high of 1950 gammas on Line 00 Station 400 North.

An anomalous area appears over 250 metres on Line 100 East and extends into heavy overburden 200 metres to the southwest.

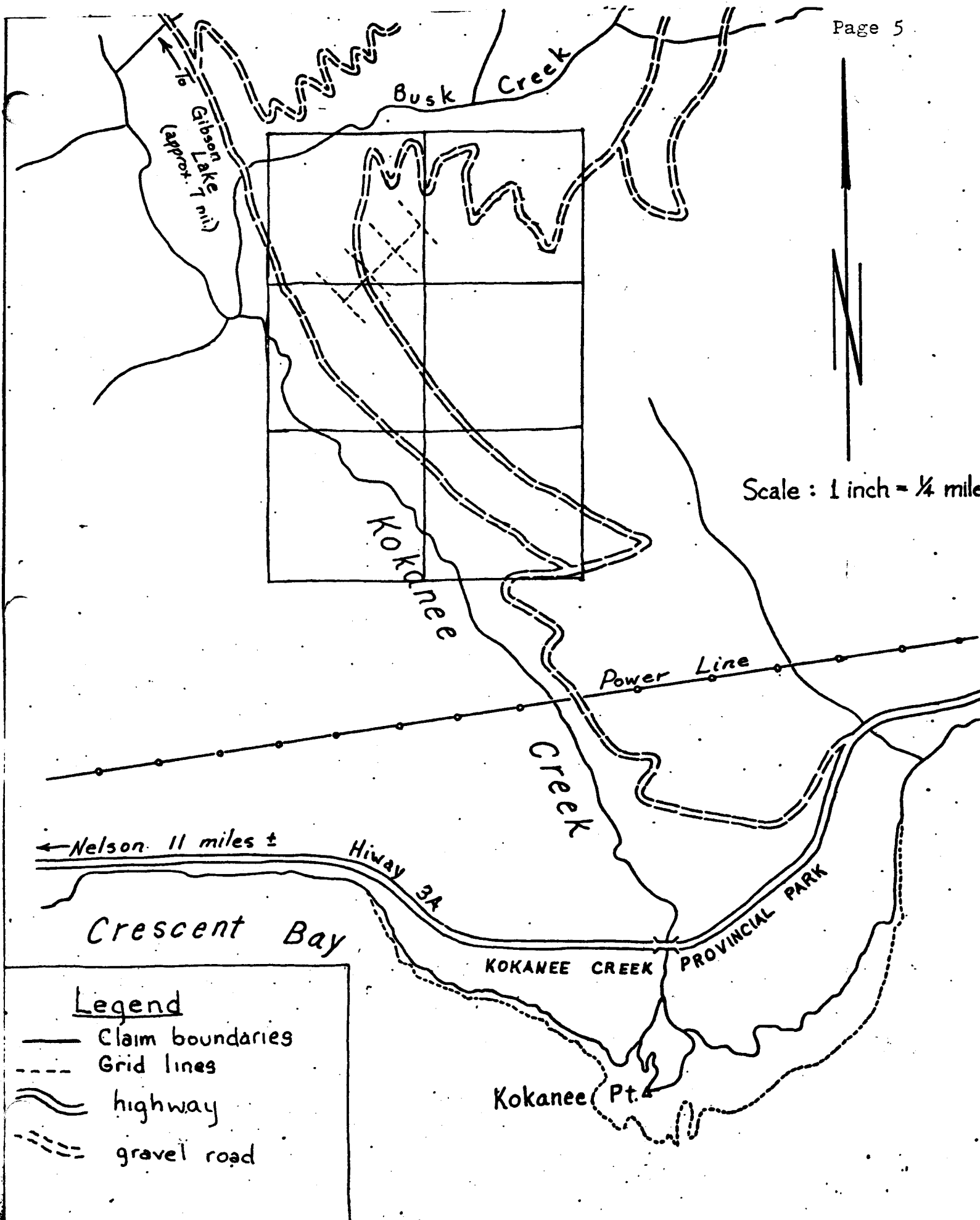
A more detailed magnetometer survey should be carried out along with a geochem survey to determine diamond drill locations.



M82F/11E



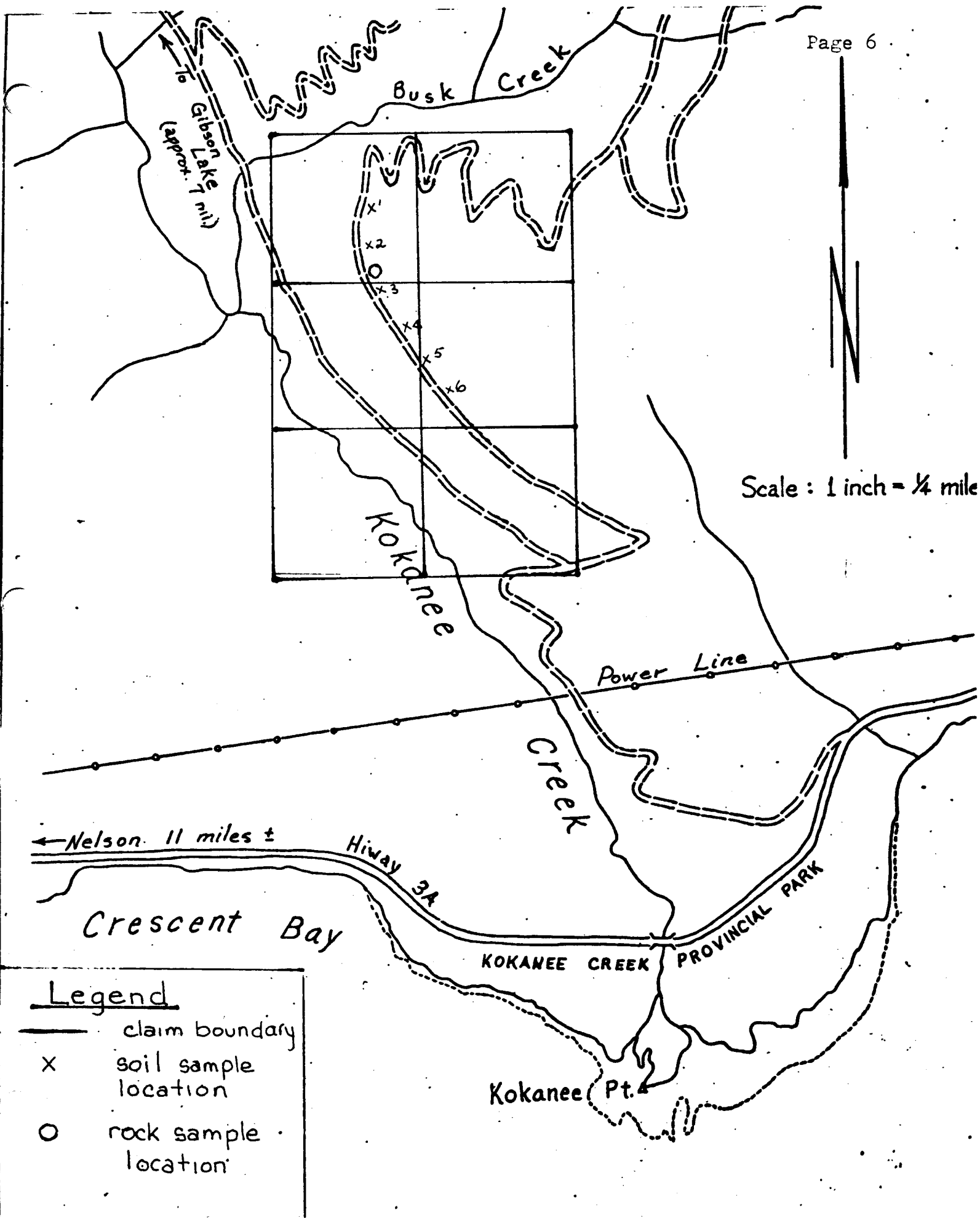
49 43



Scale : 1 inch = 1/4 mile

Legend

- Claim boundaries
- - - Grid lines
- == highway
- - - gravel road

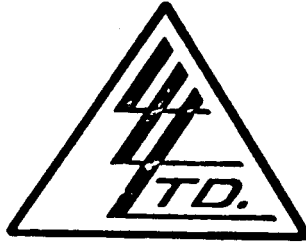


Legend

	claim boundary
	soil sample location
	rock sample location







File No. 18307  
 Date December 3, 1979  
 Samples Rock

**Certificate of  
 ASSAY of  
 LORING LABORATORIES LTD.**

SAMPLE No.	OZ./TON GOLD	OZ./TON SILVER	% Cu	% Pb	% Zn	% Ni	Total % MoS <sub>2</sub>
<u>"Rock Samples"</u>							
8882	Trace	.70	-	.42	3.50	.02	.004
<p><b>I</b> <b>Hereby Certify</b> THAT THE ABOVE RESULTS ARE THOSE          ASSAYS MADE BY ME UPON THE HEREIN DESCRIBED SAMPLES . . . .</p>							

Rejects Retained one month.  
 Dupes Retained one month  
 unless specific arrangements  
 made in advance.

*Adm. J. J. J. J.*

ITEMIZED COST STATEMENTEstablishing Grid

June 12, One day, cut grid and mark stations  
at \$200. per day = \$200.

Magnetometer Survey

June 13, One day, fluxgate magnetometer  
survey at \$300. per day = \$300.

Office Work

June 14, One day, plotting results and  
making report at \$100. per day = \$100.

TOTAL COST \$600.

McPHAR M700 Flux Gate Magnetometer**SECTION 2****SPECIFICATIONS****2-1 MAXIMUM SENSITIVITY**

At gammas per scale division on 1,000 gamma range.  
Readability is 1/4 scale division or 5 gammas.

**2-2 MAXIMUM MEASUREMENT**

Zero to  $\pm 100,000$  gammas in five ranges.

Range Switch Position	Full Scale In Gammas	Gammas Per Scale Division
1K	1,000	20 black scale
3K	3,000	50 red scale
10K	10,000	200 black scale
30K	30,000	500 red scale
100K	100,000	2,000 black scale

**2-3 MEASUREMENT POLARITY**

The above ranges can be reversed in polarity as a simple function of the Polarity switch.

**2-4 LATITUDE ADJUSTMENT**

The latitude adjustment permits cancelling the earth's field up to a magnitude of  $\pm 100,000$  gammas. The adjustment control is a ten revolution precision potentiometer located under the sliding side panel. A positive type locking lever on the control removes the hazard of accidentally dislodging the setting.

**2-5 SELF-LEVELLING SENSING HEAD**

The unique self-levelling sensing head of this magnetometer is inserted as a plug-in unit. It is easily detached so that the same magnetometer can be used with other types of sensing heads such as the airborne gyro stabilized head etc.

It is recommended that the instrument be re-calibrated at our servicing depot, each time the sensing head is changed.

**2-6 ORIENTATION ERROR**

The orientation error is set at the factory to 25 gammas or less in the presence of a 15,000 gamma horizontal field. It is poss-

ible to adjust the orientation error and the procedure is explained in the section 9-2 under Maintenance.

**2-7 TEMPERATURE STABILITY**

Over the temperature range of  $-35$  to  $+55$  degrees centigrade the temperature drift is limited to less than 50 gammas. See section 4-6 on Minimizing Temperature Drift.

**2-8 BATTERY SUPPLY**

The M700 Magnetometer is powered by two internally mounted 9 volt batteries. Any pair of the following batteries may be used.

Eveready No. 276  
Mallory No. M1603  
Burgess No. D6  
R. C. A. No. VS306

For sub-zero operation the batteries may be transferred to an external battery case and carried under clothing to keep them from freezing. See section 6, Operation with External Batteries.

Two types of external battery cases are available see accessory list, section 11. One type is for the above batteries. Another type of case will accommodate the equivalent in flashlight cells for use in countries where the normal batteries are difficult to obtain.

**2-9 ACCESSORY RECEPTACLE**

A Cannon receptacle is located on the side of the instrument under the sliding panel. This increases the versatility of the instrument so it can be used in a number of ways in addition to its normal vertical field ground magnetometer function. See section 8, under Extended Applications and section 11, under Accessories.

**2-10 ACCESSORY & LATITUDE SWITCH**

This is a double function switch. The first function is to permit operation north or south of the equator by simply changing one step

AUTHOR'S QUALIFICATIONS

I, Robin W. Pearson, certify that I am a geophysical instrument operator-technician with eighteen (18) years experience operating all types of geophysical equipment throughout the world.

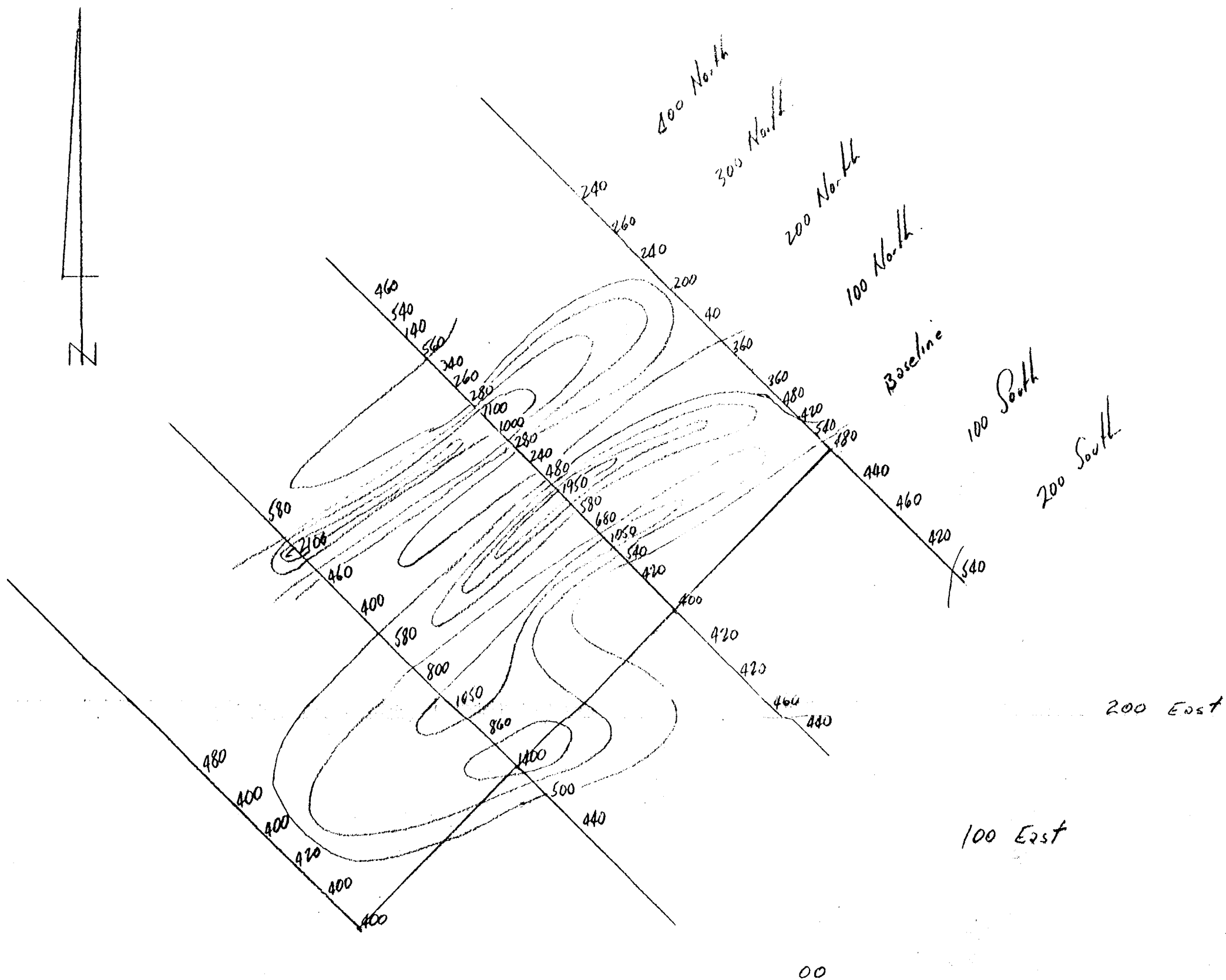
My past employers include Kenting Earth Sciences and McPhar Geophysics and included in the previous work was experimental geophysical work with base metals and coal.

I have been a self-employed prospector and mining exploration contractor for the past seven years.

Signed:

A handwritten signature in cursive script, appearing to read 'R. W. Pearson', is written over a solid horizontal line.

Robin W. Pearson



MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT

N

8725

PEARSON GALLAGHER LT  
BIG "M" CLAIMS

MAGNETOMETER SURVEY

SCALE:  $\frac{100}{100 \text{ metres}}$

DATE: JUNE 12-14, 1980