GEOPHYSICAL REPORT ON THE IRON HORSE MINERAL CLAIM OF BRICAN RESOURCES LTD. (NPL)

82E/13W
Osoyoos Mining Division
Lat. 49° 48'N; Long. 119° 54'W

for

ESSO RESOURCES CANADA LIMITED

by
Alfred Stewart

May 26, 1980

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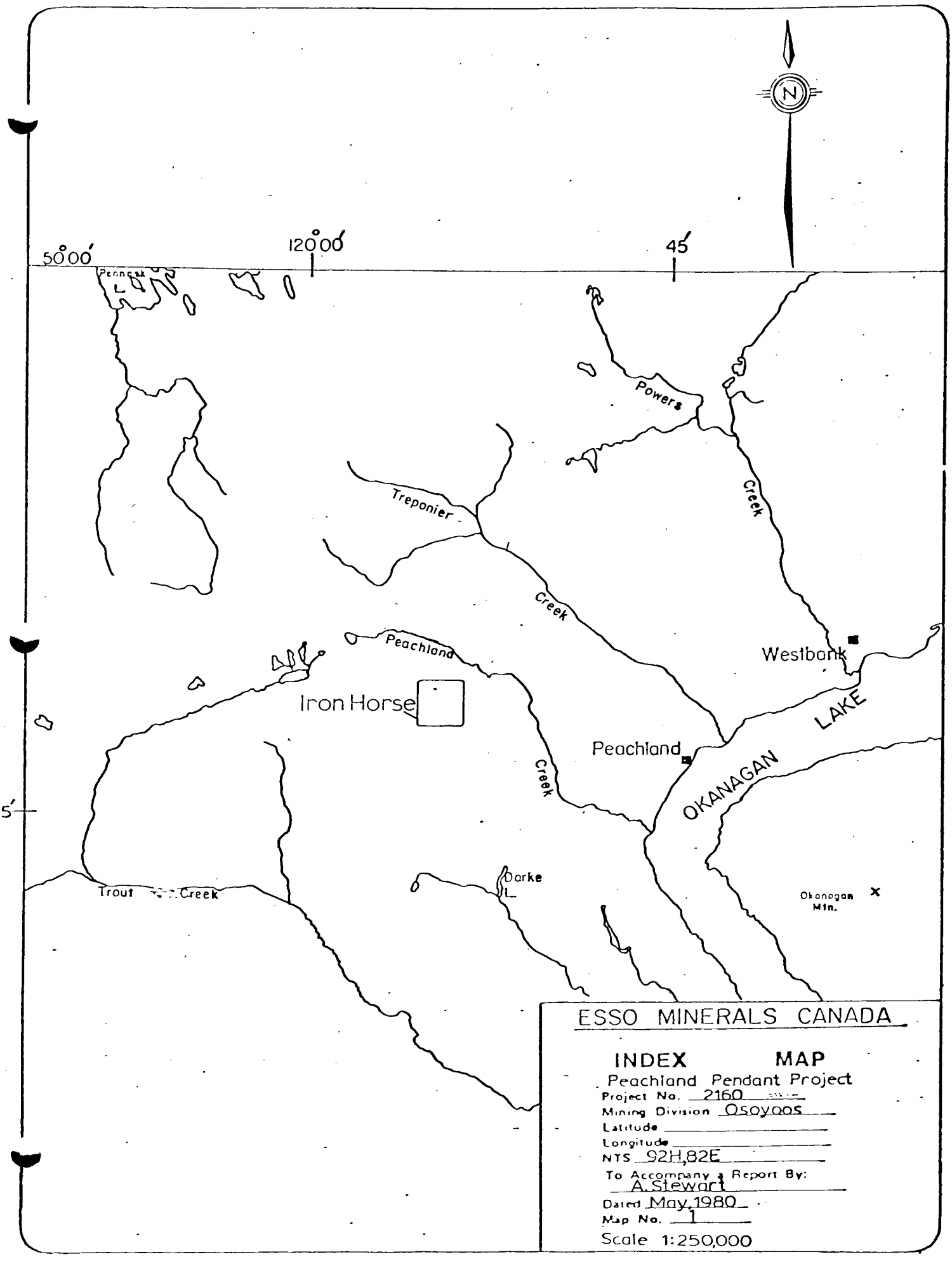
GEOPHYSICAL REPORT ON
THE IRON HORSE MINERAL CLAIMS

INTRODUCTION

This report deals with a magnetometer survey carried out by the staff from Esso Resources Canada Limited. The survey was conducted on the Iron Horse mineral claim during May 1980 and its purpose was to detect and trace known copper showings on the property by means of a magnetometer survey.

1) Location and Access

The Iron Horse Mineral Claim is located in NTS quadrant 82E/13W. Access is gained by a combination of secondary roads, logging roads and a four-wheel-drive trail taken from the community of Peachland, B.C.



ESSO MINERALS CANADA

INDEX MAP

Peachland Pendant Project

Project No. 2160

Mining Division Osoyoos

Latitude

Longitude

NTS 92H,82E

To Accompany a Report By:
A. Stewart

Dated May, 1980

Map No. 1

Scale 1:250,000

2) Property

The property consists of one claim of 20 units.

Claim	Record No.	No. of Units
Iron Horse	409	20

The Iron Horse claim is approximately 16 kilometers west of Peachland via the Brenda Mines road and the Headwaters Lake road. Location is on the side of a steep hill on the north shore of the Headwaters Lake.

3) History

Circa 1932-34: The Iron Horse prospect was discovered by Otto and Pete Sandberg and the following claims established: Iron Horse L.1698, Horse L.1699, Iron L.1700 and Derby Gypsy No. 1-7.

1936: Trenching and stripping was carried out by the Sandbergs.

1956: Noranda Exploration Co. Ltd. carried out an SP survey, trenching and some diamond drilling.

1966: BrenMac Mines Ltd. carried out geological mapping, soil sampling, an I.P. survey, built five miles of road, trenching and test pitting plus 800 feet (?) of drilling in 100 (?) percussion and 4 rotary holes.

1966-77: The ground was held.

1978: The present Iron Horse claim was staked.

References: B.C.D.M. Annual Reports 1936 p. D26; 1966 pp. 185-186, Assessment Report No. 886.

4) Work Done

A magnetometer survey was carried out on a 24 line kilometer flagged grid established by Brican Resources in 1979. In addition, a new 24 km grid was established immediately to the west of the Brican grid, and a magnetometer survey completed on it. Esso Resouces' three-man crew carried out this work from May 10th to May 20th, 1980. The geophysical operator was Garnet Dawson.

MAGNETOMETER SURVEY

1) Procedure and Theory

A Geometrics G-816 portable proton precession magnetometer was used. This instrument digitally displays the total magnetic field strength by measuring the frequency at which protons (hydrogen nuclei) precess about the prevelant earth's magnetic field. The precession frequency is directly proportional to the total magnetic field strength at the point of measurement. Sensitivities of $\pm$ 1.0 gamma can be achieved with this magnetometer.

Time variations of the magnetic field (diurnal) were obtained by repeated readings at base stations established within the survey area. The base station values were then fixed and any time variations of the magnetic field along the traverse lines were linearly distributed by tieing in to one or more of the base stations at the end of each traverse. These linearly distributed variations in the traverse station values were then removed from the field data.

Magnetometer readings for the Iron Horse Grid were taken at 25 meter intervals along lines spaced 100 meters apart. The data is presented in plan form at a horizontal scale of 1:5000 and contoured at 200 gamma intervals.

2) Results

The most significant magnetic feature detected during the survey was a long north-west trending magnetic high extending from L1W 6+50S to the baseline at L12W. Several more local magnetic highs occur on the north side of the grid, on lines 13 to 20. These local magnetic highs lie along the same north-westerly trend as the long magnetic feature on the south side of the grid. All of the above-mentioned magnetic features have a magnetic relief of four hundred gammas above background.

3) Conclusions

A strong north-west trending magnetic high was detected during the survey. This feature coincides with skarn type copper mineralization previously explored in the vicinity of 10+00W, 1+00S to 12+00W, 0+00S. It also coincides with a molybdenum mineralized diorite intrusive at L7+00W, 4+00S. The magnetite content of this diorite may, for the most part, be responsible for the magnetic expression. The high magnetic values in the vicinity of 10+00W, 1+00S are probably a local expression of pyrrhotite associated with the skarn.

It is recommended that geologic mapping be carried out in the vicinity of L1W, 6+50S to determine the source of the geophysical response. The northwestward extension of this feature should also be ground-checked.

Alfred Stewart

ITEMIZED COST STATEMENT

LABOUR		
Survey Operator	10 days @ $71/day	$ 710.00
Helper	17 days @ $50/day	850.00
ACCOMODATION		
27 man-days @ $33/day		891.00
TRANSPORTATION		
Truck Rental	10 days @ $30/day	300.00
GEOPHYSICAL EQUIPMENT		
Magnetometer Rental	10 days @ $23.30/day	233.00
FIELD SUPPLIES		100.00
REPORT PREPARATION	2 man-days @ $71/day	192.00
DRAFTING	2 man-days @ $71.00/day	142.00
	TOTAL	$ 3,418.00

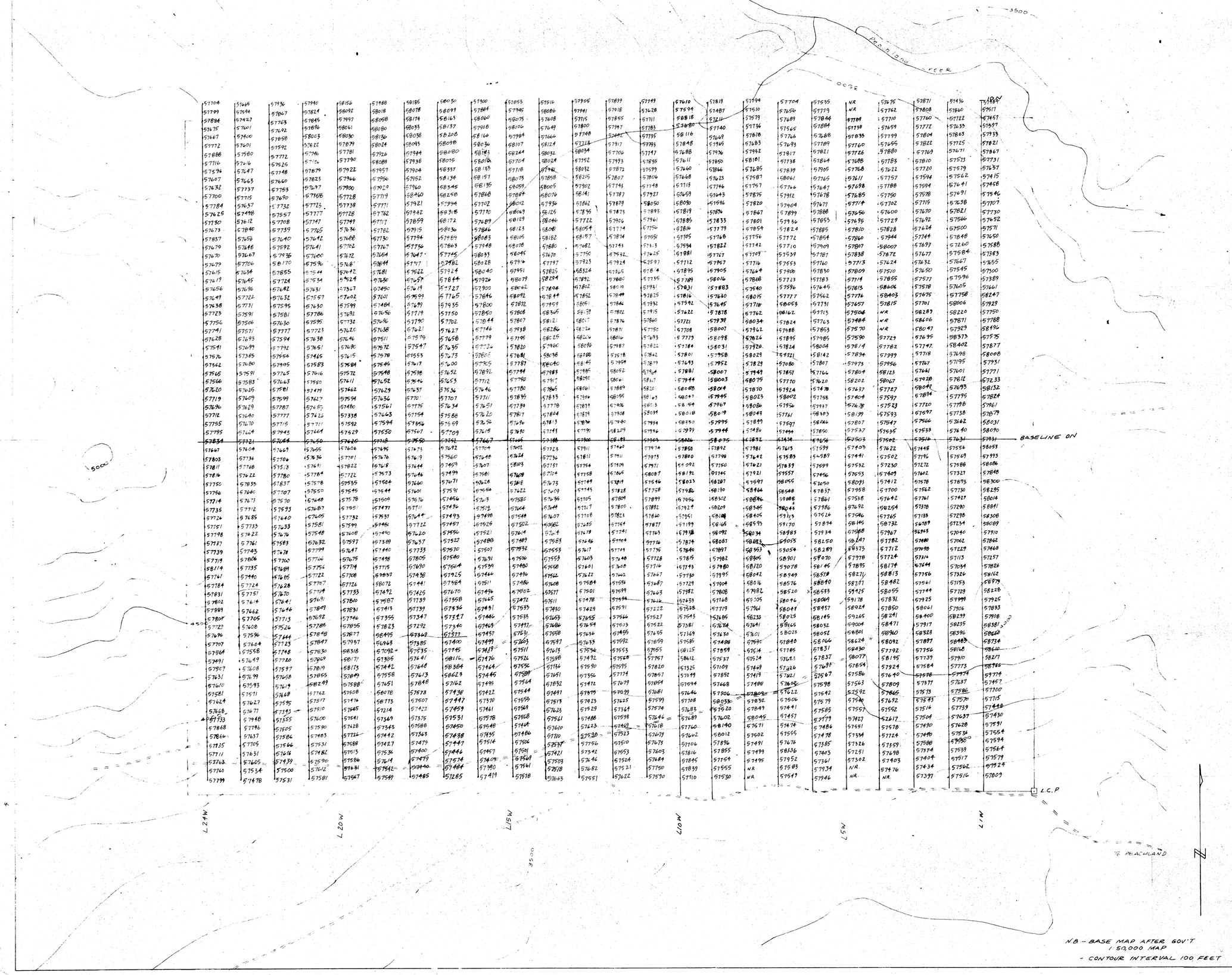
Alfred Stewart

STATEMENT OF QUALIFICATIONS

Garnet L. Dawson

Geophysical Operator

Garnet L. Dawson is currently a student at the University of Manitoba where he is completing the requirements for a B.Sc. in Earth Sciences, and will be graduating in December of 1980. Mr. Dawson worked with Trigg, Woollett Consulting Ltd. in 1979 and Eldorado Nuclear Ltd. in 1978 for the summer field season. In the past two summers he has acted as a geological field assistant conducting magnetometer and radiometric surveys in northern Saskatchewan and in the Dismal Lake area, North West Territories.



Magnetometer Survey

Instrument: Geometrics G-816 Proton Precession Magnetometer

Operator: G. Dawson

Supervisor: A. Stewart

Dates: May 10 - 20, 1980

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8143
I.O.

GRID TOTALS 21 km

PART 2 OF 2

0 100 200 300
metres

BRICAN RESOURCES LTD.

ESSO MINERALS CANADA

MAGNETOMETER SURVEY
GRID MAP

IRON HORSE CLAIM

82E/13W 050Y005 M.D. B.C.

SCALE: 1:5,000	DATE: May, 1980
DWN. BY: WRG	PROJ. N°: 075
	FIG. N°:

N.B - BASE MAP AFTER GOV'T 1:50,000 MAP
- CONTOUR INTERVAL 100 FEET