

REPORT ON MAGNETOMETER SURVEY
PAM NO. 1 AND PAM NO. 2 GROUPS by
G.I. Hall

October 14, 1975

CLAIMS: PAM No. 1 and No. 2 Groups
LOCATION: OMINECA MINING DIVISION
55 miles SW Houston, B.C.
Latitude $53^{\circ} 47^{\prime} \mathrm{N}$ Longitude $127^{\circ} 00^{\prime} \mathrm{W}$ NS 93 E/14,15 935/145, 15W

DATES: June 17, 1975 - July 19, 1975

OWNER: Hudson's Bay $0 i 1$ and Gas Company Limited
OPERATOR: Hudson's Bay Oil and Gas Company Limited

Department of
Mines and Petroleum Resources ASSESSMENT REPORT

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INTRODUCTION:
A ground magnetometer survey was completed over all PAM claims along flagged grid lines 150 metres apart. The survey was carried out from June 17 to July 19, 1975.

## LOCATION:

The PAM claims are located two miles south of the southeastern arm of Nadina Lake, 55 miles southwest of Houston, B.C. Latitude $53^{\circ} 47^{\prime} \mathrm{N}$, Longitude $127^{\circ} 00^{\prime} \mathrm{W}$, NTS $93 \mathrm{E} / 14,15$.

## ACCESS:

The Tahtsa Forestry Access road passes through the northwestern corner of the claim block. The Dina Forestry Tower access road passes through the northeastern corner of the claim block. Approximately 7 kilometres of drill access trail were constructed in 1974 and 1975 on the claim block.

CHAIN AND COMPASS GRID:
A control grid of approximately 75 line kilometres was established on the PAM claims by means of a chain and compass survey. North-south lines were flagged 150 metres apart, with station spacings measured at 30 metre intervals.

MAGNETOMETER SURVEY:
A. Instrumentation

A proton precession magnetometer model G-816 was used for the survey. The total field is measured to the nearest 10 gammas with the sensing bottle carried on the surveyor's back.
B. Method of Survey

Base stations were established at 150 metre intervals along the control grid base line ( $50+00 \mathrm{~W}$ ) so that diurnal drift corrections and daily variations in the magnetic field could be made. Readings were taken during the survey at these base stations at intervals not exceeding two hours, and usually less than one hour.

Three readings were taken at each station 30 metres apart along the flagged lines 150 metres apart. The readings were averaged and corrected for diurnal drift and daily variations. The corrected values
in gammas were plotted on the accompanying map. M.L. Legros and J. Bennett conducted the survey.

## C. Interpretation

Add 57,000 gammas to the values on the map to obtain the total intensity of the magnetic field at each station.

The values were contoured with a 500 gamma contour interval. The anomalous area in the northeastern part of the claim block is underlain by interbedded andesitic and tuffaceous volcanic rocks that are moderately magnetic, although no magnetite was seen in the fine-grained rocks. The other anomalous zones (above 57,000 gammas) have an eastnortheasterly trend conforming to the regional strike of the rocks in the area. Magnetite was observed along fractures in brecciated andesite on line $50+00 \mathrm{~W}$ just north of the small lake at the southern end of the line. The anomalous zone just north of the base line between lines $29+00 \mathrm{~W}$ and $38+00 \mathrm{~W}$ reflects abundant outcrop composed of andesitic volcanics, in part amygdaloida1. No magnetite was observed. The anomalous area to the west is underlain by overburden.

GIH:kd1

The work described in this report was done under my general supervision

Kenneth -C. Rose, P.Eng., B.C.

Claim No.
Record No.
Record Date
Years Applied
PAM NO. 1 GROUP

| PAM 3-5 | $129564-566$ | October 24 | $2(1977)$ |
| :---: | :--- | :--- | :--- |
| 6 | 129567 | October 24 | $3(1978)$ |
| 7 | 129568 | October 24 | $2(1977)$ |
| 8 | 129569 | October 24 | $3(1978)$ |
| 9 | 129570 | October 24 | $2(1977)$ |
| 10 | 129571 | October 24 | $3(1978)$ |
| 11 | 129572 | October 24 | $2(1977)$ |
| 12 | 129573 | October 24 | $3(1978)$ |
| $13-16$ | $129574-577$ | October 24 | $2(1977)$ |
| 21 | 129582 | October 24 | $2(1977)$ |
| 22 | 129583 | October 24 | $3(1978)$ |
| 23 | 129584 | October 24 | $3(1978)$ |
| 24 | 129585 | October 24 | $2(1978)$ |
| 25 | 129587 | October 24 | $2(1978)$ |
| 26 | 129588 | October 24 | $1(1977)$ |
| 27 | 129589 | October 24 | $2(1978)$ |
| 28 | 129590 | October 24 | $1(1977)$ |
| 29 | 129591 | October 24 | $2(1978)$ |
| 30 | 129592 | October 24 | $1(1977)$ |
| 31 | 129593 | October 24 | $1(1977)$ |
| 32 | 129594 | October 24 | $1(1977)$ |
| 33 | 129595 | October 24 | $2(1977)$ |
| 34 | 129597 | October 24 | $2(1977)$ |
| 36 | 129614 | October 24 | $2(1977)$ |
| 53 | October 24 | $2(1977)$ |  |

## LIST OF CLAIMS AND DISTRIBUTION OF WORK

| Claim No. | Record No. | Record Date | Years Applied |
| :---: | :--- | :--- | :--- |
| PAM NO. 2 GROUP |  |  |  |
| PAM 39-42 | $129600-603$ | October 24 | $1(1976)$ |
| $43-50$ | $129604-611$ | October 24 | $1(1977)$ |
| $51-52$ | $129612-613$ | October 24 | $1(1976)$ |
| 59 | 129620 | October 24 | $1(1976)$ |
| 61 | 129622 | October 24 | $1(1976)$ |
| 63 | 129624 | October 24 | $1(1976)$ |
| 65 | 129626 | October 24 | $1(1976)$ |
| 67 | 129628 | October 24 | $1(1976)$ |
| 69 | 129630 | October 24 | $1(1976)$ |

## STATEMENT OF COSTS

Establish grid system of N -S lines
150 metres apart. Total 75 line km.
18 days @ \$100/day ..... $\$ 1800$
18 days @ \$75/day ..... 1350
24 days @ \$40/day ..... 960
Ground Magnetometer Survey
75 Line km.
23 days @ \$40/day ..... 920
Accommodation
83 man days @ \$15/day ..... 1245
Vehicle Costs
41 days @ \$20/day ..... 820
Flagging Tape
200 rolls @ \$1.00/roll ..... 200$\$ 7295$

## LIST OF PERSONNEL

| Name | Position | Days on Project |  | Rate |
| :---: | :---: | :---: | :---: | :---: |
| G.I. Hall | Geologist | June 8-16, 18-22, 24-27 | (GRID) | \$100/day |
| D.B. Kilby | Geologist | June 8-16, 18-22, 24-27 | (GRID) | \$ 75/day |
| M.L. Legros | Technician | June 8-13, 15-18, 27-28 June 19-22, 24-26 July 15-17, 19 | $\begin{aligned} & \text { (GRID) } \\ & \text { (MAG) } \\ & \text { (MAG) } \end{aligned}$ | \$ 40/day |
| J. Bennett | Technician | $\begin{aligned} & \text { June 8-13, } 15-18,27-28 \\ & \text { June 19-22, 24-26 } \\ & \text { July 15-19 } \end{aligned}$ | $\begin{aligned} & \text { (GRID) } \\ & \text { (MAG) } \\ & \text { (MAG) } \end{aligned}$ | \$ 40/day |

## STATEMENT OF QUALIFICATIONS

G.I. Hall

B.Sc., Geology, 1965GeologistM.L. LegrosTechnicianJ. BennettTechnician
M.S. Geology, 1970

Mining Technology, 1973

Mining Technician, 1970

Michigan Technical University Houghton, Michigan

University Wisconsin-Milwaukee Milwaukee, Wisconsin
B.C.I.T., Vancouver,

Haileybury School of Mines



