

PRYME ENERGY RESOURCES INC.

SEEL PROPERTY INDUCED POLARIZATION SURVEY

(SN 1,2,3,4 A&M 1,2,3,4,5,6)

Sechelt, Kenechin Pt. West, B.C.

Vancouver M. D.

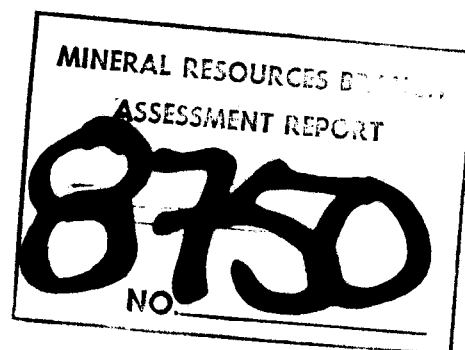
NTS 92 G 12 W

49° 37.5' N, 123° 51' W

by

Mauro G. Berretta, M.Sc.

June 1980



MAURO G. BERRETTA

TELEPHONE (604) 462-7705

GEOPHYSICIST

26935 - 100TH AVENUE

WHONNOCK, B.C.

CANADA

SUMMARY

An induced polarization survey on the Seel property has outlined a strong anomaly about 300 m. wide, 500 m. long and open at both ends along strike. The cause is thought to be sulfide mineralization such as pyrite, chalcopyrite, possibly associated with molybdenite, within altered and somewhat fractured diorite. Further exploration is recommended in the form of trenching and/or drilling.

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INTRODUCTION

During the period from April 17 to April 25, 1980, inclusive an induced polarization survey was carried out on the Seel property, on Sechelt Inlet, on behalf of Pryme Energy Resources Ltd. The field work was carried out under the direction of Gordon Ellis, B.Sc., M.Ba., geophysicist.

Crew

G. Ellis, geophysicist  
M. Mayer, technician  
G. Havemann, field assistant  
R. Quail, field assistant  
K. McNairn, field assistant  
E. Reid, cook

The property consists of ten claim units, as follows.

<u>Claim Name</u>	<u>Record Number</u>	<u>Expiry Date</u>
SN1 to SN4	19757-19760	June 5, 1988
A&M1 to A&M6	557-562	Oct. 11, 1980

The claims are located in the Vancouver Mining Division, on the eastern portion of Sechelt Peninsula, some 3 km. due west of Kenechin Point on Sechelt Inlet, and 15 km. north of Sechelt. Access is via boat from Sechelt (Fig. 1).

GEOLOGY

The property is underlain by Coast Batholith diorites, that display variable alteration, and which are intruded by andesite dykes. Pyrite occurs as pockets, in fracture planes, in massive pods within quartz veins, and as

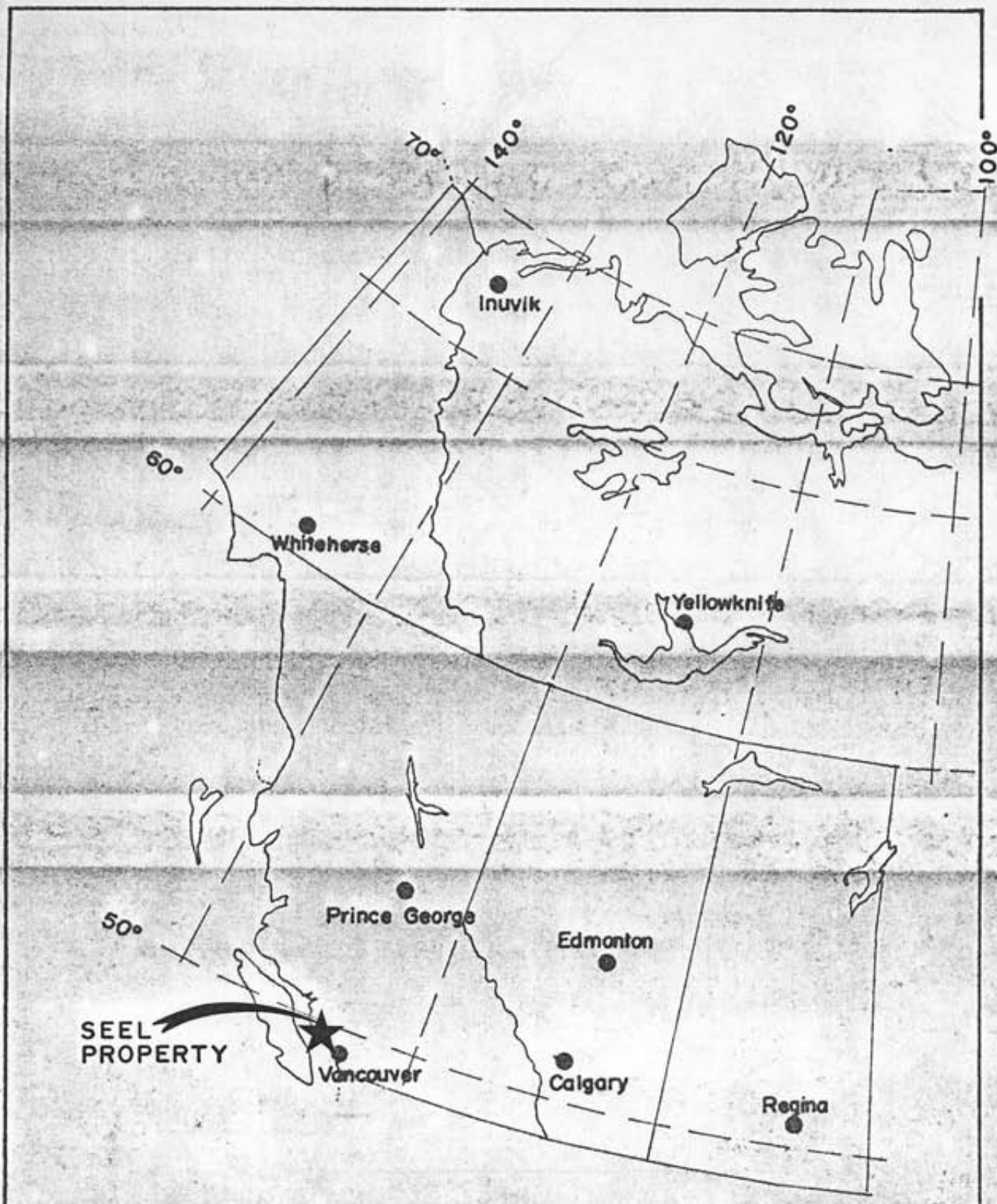
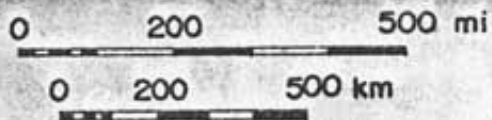


FIG. 1

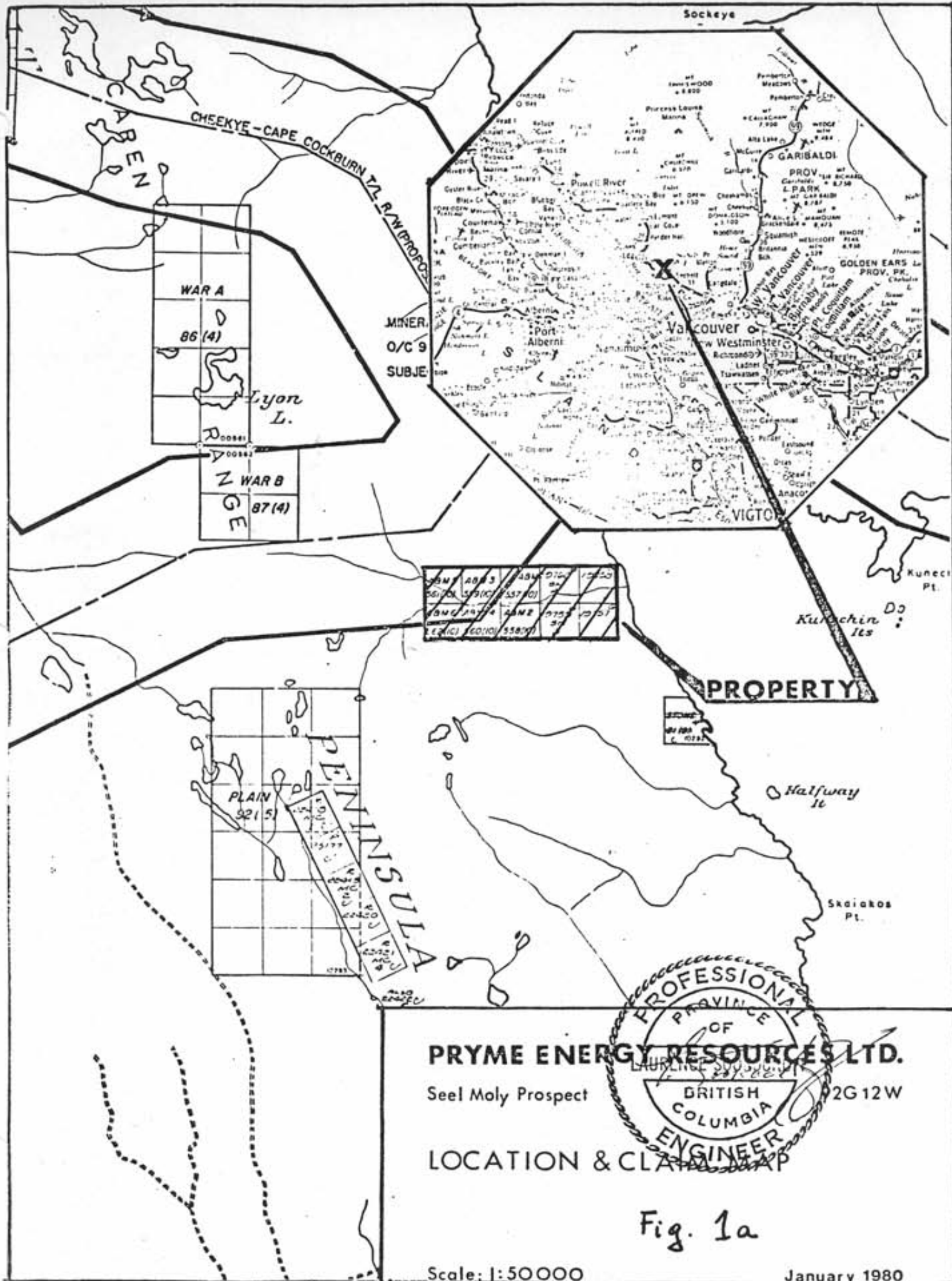


**LOCATION MAP**

**PRYME ENERGY  
RESOURCES LTD.**

DATE : MAY, 1980

M.G. BERRETTA  
WHONNOCK, B.C.



**PRYME ENERGY RESOURCES LTD.**

Seel Moly Prospect

LOCATION & CLAIM MAP



Fig. 1a

Scale: 1:50000

January 1980

disseminations within the host rock.

Mineralization occurs as splashes and disseminations of molybdenite associated with both quartz veins and pyrite.

Previous geochemical work on the property has outlined anomalous values in both molybdenum and copper.

#### INDUCED POLARIZATION SURVEY

In view of the limited outcrop exposed on the property, an induced polarization survey was recommended in order to map the extent of the observed sulfide mineralization.

A dipole-dipole array was employed using  $n=1$  and a dipole of 60 m., giving an effective depth of penetration of about 30 m. Instrumentation consisted of a Sabre Mk.II, 450 watt frequency domain system. A frequency span of 0.3-10 Hz. was used.

Approximately 5 km. of data was obtained along nine survey lines. Line intervals of 60 m. and 120 m. were used with a station interval of 60 m. (Fig. 2).

Anomalies were detailed with additional separations (  $n=1$ ,  $n=2$  ) along three separate survey lines.

### SURVEY RESULTS AND INTERPRETATION

The percent frequency effect data is shown in Figure 3. Background response is in the range 0 to 2% pfe, with 5% as the lower anomalous limit. A strong anomaly is defined in the north half of the survey area, with a peak amplitude of 25% at about 120S, 200W. This zone appears to trend north-east south-west, is about 300 m. wide, 500 m. long and is open along strike at both ends. Detail measurements were taken along lines 00, 240S and Line Rd. The results (Fig. 5) indicate that the source of the anomaly is probably within 20 m. of the surface. Depth extent is indicated by increasing pfe values with the deeper sensing separations. The pfe pseudosections also display some evidence of a 'pant-leg' effect, which may indicate a concentrated source in and above the 'pant-leg' low.

The resistivity data (Fig. 4) displays values that are typical of massive diorites ( in the range of 5000 ohm-m to 20,000 ohm-m ). Within the anomalous area, values decrease to relative lows in the range of 500 ohm-m. to 2000 ohm-m. This is most likely due to the alteration and/or fracturing of the host rock, and possibly in part due to sulfide content.

The cause of the anomaly then is interpreted to be sulfide mineralization such as pyrite, chalcopyrite, molybdenite etc., within altered and/or fractured diorites. The content of sulfides could be in the range of 5% to 10% by volume, if disseminated and substantially higher if massive.




RECOMMENDATIONS

The anomalous zone defined by the survey should be explored further by trenching and/or drilling. Targets should be selected on the basis of all geophysical, geological and geochemical data. Pending results of this work, the i.p. survey area may be extended to the west, where the anomaly is open. To the north-east, water negates this possibility.

Respectfully submitted,

June, 1980

  
Mauro G. Berretta, M.Sc.  
Geophysicist

STATEMENT OF COSTS

6 man crew including:

- 1) one geophysicist
- 2) one technician
- 3) three field assistants
- 4) one cook
- 5) i.p. equipment
- 6) camp and supplies
- 7) one 4x4 suburban

Seven field days April 18 - 24 inclusive

at \$1000 per day.....\$7,000.00

Two mobe/demobe days

at \$500 per day.....\$1,000.00

TOTAL \$8,000.00

MAURO G. BERRETTA

TELEPHONE (604) 462-7705

GEOPHYSICIST

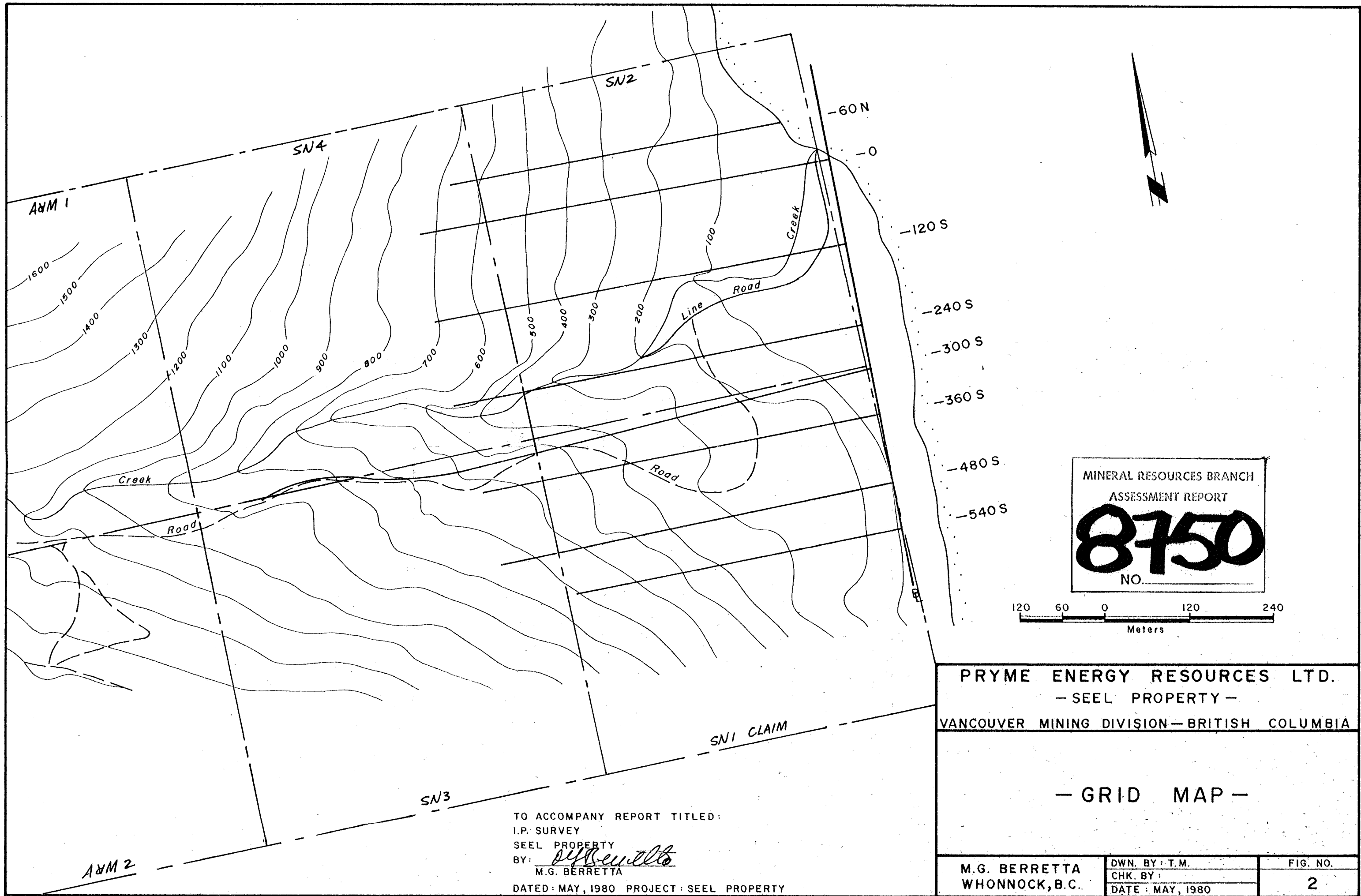
26935 - 100TH AVENUE  
WHONNOCK, B.C.

CANADA

I, MAURO G. BERRETTA, do hereby certify that I have the following qualifications:

1. 1964, B.Sc. (Physics), University of Windsor
2. 1965, M.Sc. (Physics), University of Windsor
3. 1963-64, oceanography and marine geophysics research with Great Lakes Institute, University of Toronto
4. 1968-69, lecturer in exploration geophysics (GP 400, GP 402) with Department of Geophysics, U.B.C.
5. 1970-78, instructor in mining and petroleum geophysics with B.C. Institute of Technology
6. 1968- , exploration geophysicist as an employee, consultant, joint venture partner with numerous mining and oil companies (Scintrex, Chevron Minerals, Kerr Addison, Cominco, Rio Alto, Little Long Lac, Aquitaine Oil, C.A.Ager and Associates, etc.)  
  
 , experience in all phases of geophysics (i.p., magnetics, e.m., seismics, gravity, resistivity), with special concentration on i.p., e.m., and resistivity methods (in excess of 1500 survey miles)
7. 1974-75, President, B.C.Geophysical Society
8. 1979- , President, Nugold Enterprises Corporation (VCE)
9. 1980- , President, Tunkwa Copper Mines Ltd. (VCE)
10. 1980- , President, Inca Resources Inc.

  
Mauro G. Berretta



MINERAL RESOURCES BRANCH  
 ASSESSMENT REPORT  
**8750**  
 NO. \_\_\_\_\_



PRYME ENERGY RESOURCES LTD.  
 - SEEL PROPERTY -  
 VANCOUVER MINING DIVISION - BRITISH COLUMBIA

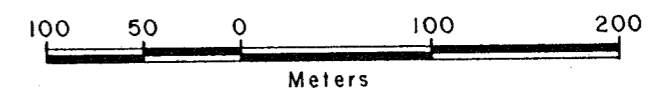
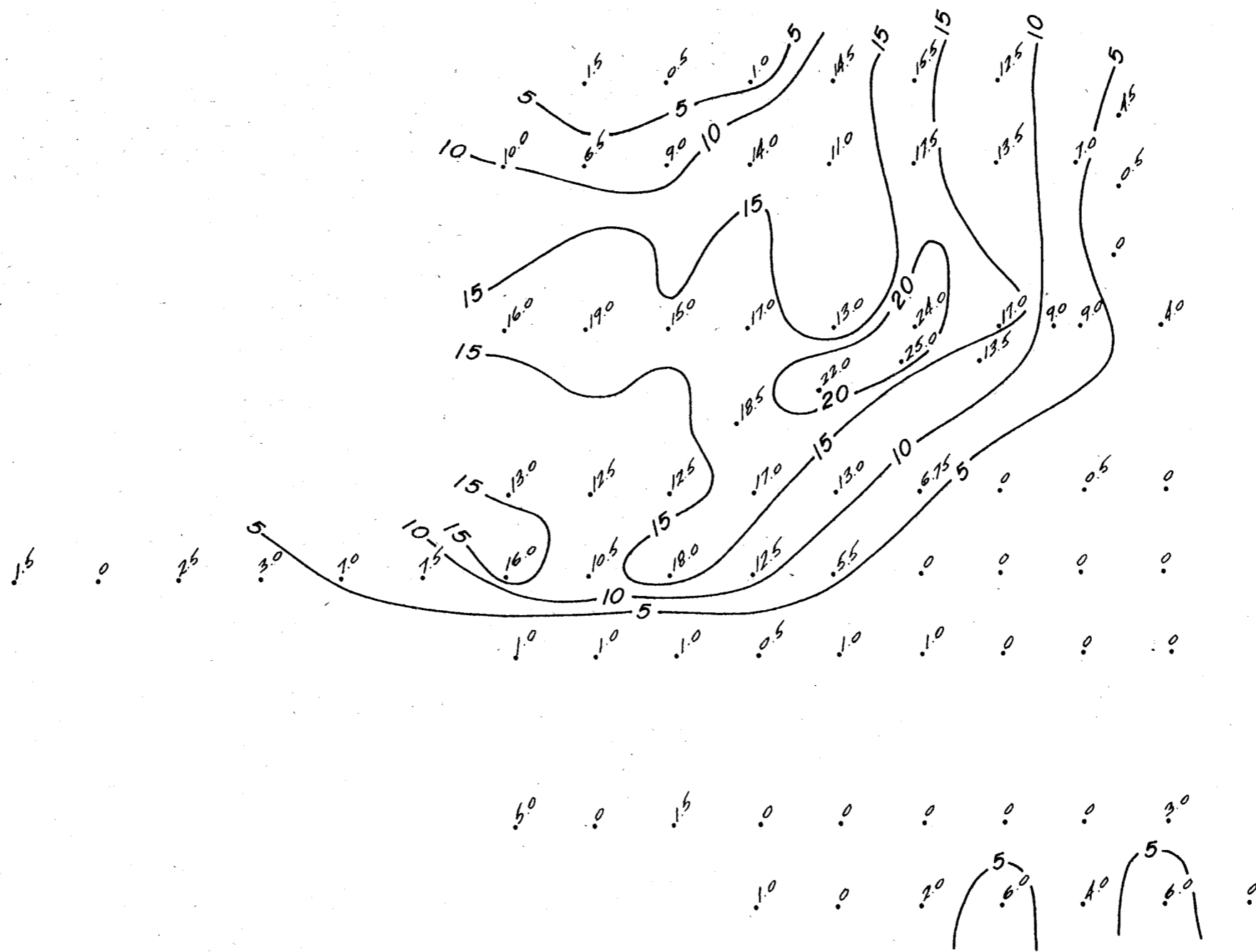
- GRID MAP -

TO ACCOMPANY REPORT TITLED:  
 I.P. SURVEY  
 SEEL PROPERTY  
 BY: *M.G. Berretta*  
 M.G. BERRETTA  
 DATED: MAY, 1980 PROJECT: SEEL PROPERTY

M.G. BERRETTA WHONNOCK, B.C.	DWN. BY: T.M. CHK. BY: DATE: MAY, 1980	FIG. NO. 2
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60 N—  
 0—  
 120 S—  
 240 S—  
 300 S—  
 360 S—  
 480 S—  
 540 S—

8W | 7W | 6W | 5W | 4W | 3W | 2W | 1W | 0 | 1E



**NOTE**  
 Dipole - Dipole  
 a = 200'  
 0.3 - 10 Hz  
 n = 1

MINERAL RESOURCES  
 ASSESSMENT REPORT  
**8750**  
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**PRYME ENERGY RESOURCES LTD.**  
 — SEEL PROPERTY —  
 VANCOUVER MINING DIVISION — BRITISH COLUMBIA

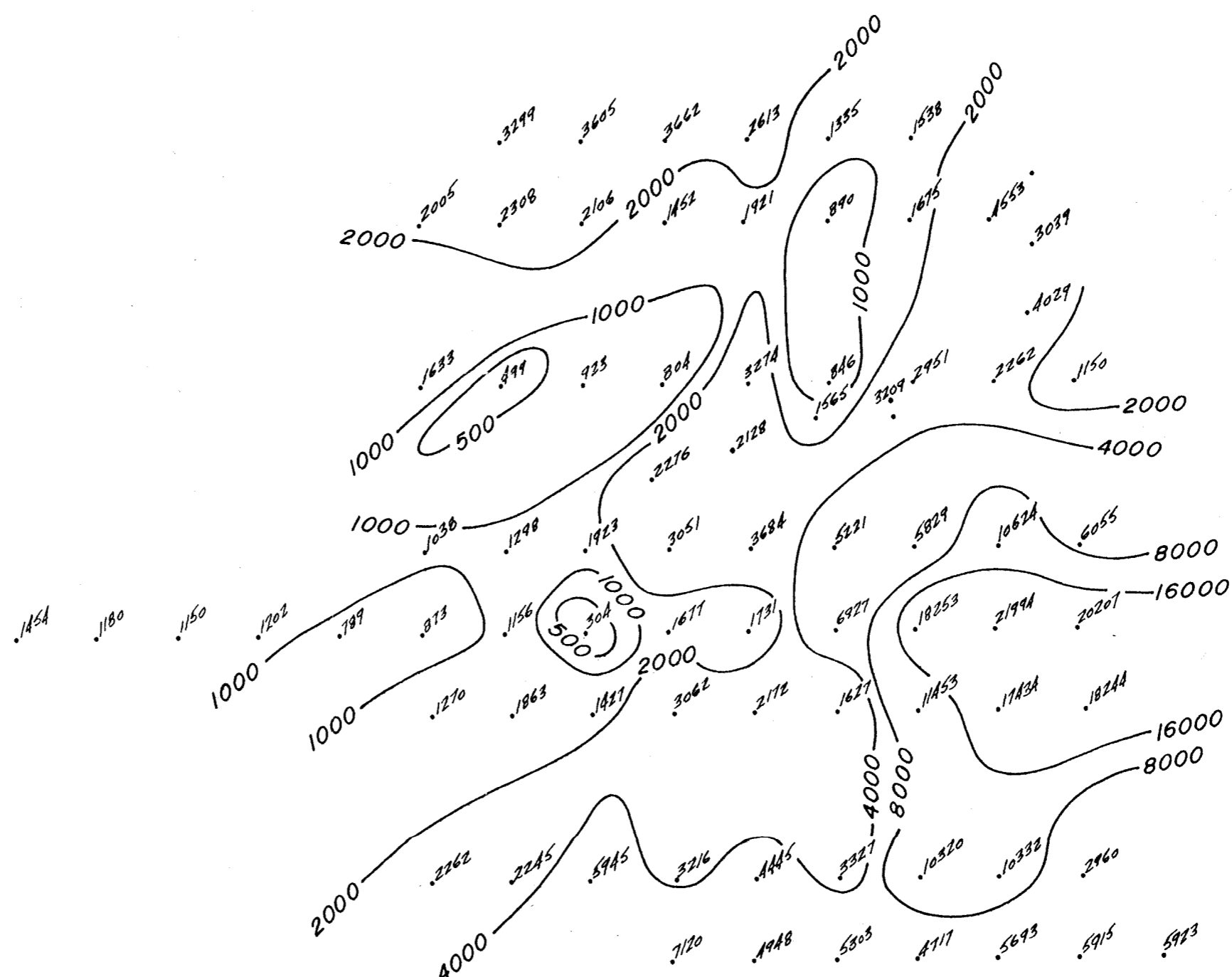
**P.F.E. MAP**  
 CONTOUR INTERVAL : 5 Percent

M.G. BERRETTA WHONNOCK, B.C.	DWN. BY: T.M. CHK. BY:	FIG. NO. <b>3</b>
	DATE: MAY, 1980	

TO ACCOMPANY REPORT TITLED:  
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 SEEL PROPERTY  
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 M.G. BERRETTA  
 DATED: MAY, 1980 PROJECT: SEEL PROPERTY

60 N—  
0—  
120 S—  
240 S—  
300 S—  
360 S—  
480 S—  
540 S—

8 W | 7 W | 6 W | 5 W | 4 W | 3 W | 2 W | 1 W | 0 | 1 E



MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**8750**  
NO.



NOTE  
Dipole - Dipole  
 $a = 200'$   
0.3 - 10 Hz  
 $n = 1$

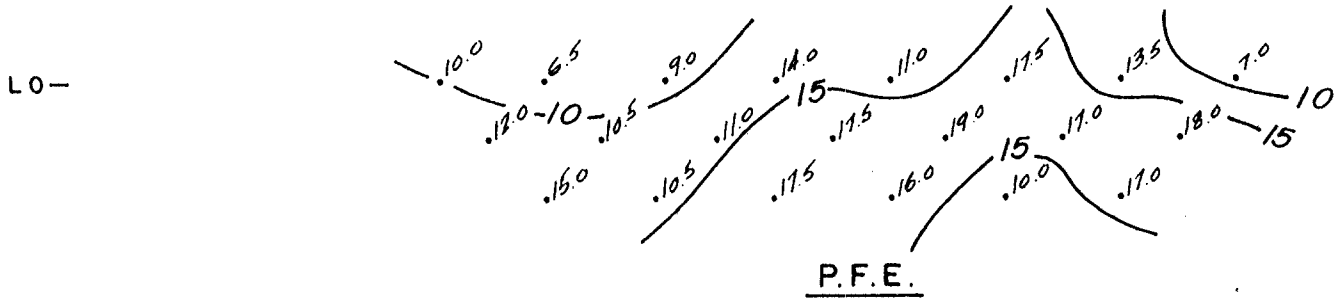
PRYME ENERGY RESOURCES LTD.  
— SEEL PROPERTY —  
VANCOUVER MINING DIVISION - BRITISH COLUMBIA

RESISTIVITY MAP  
CONTOUR INTERVAL : 500, 1000  
2000, 4000 Ohm Meters

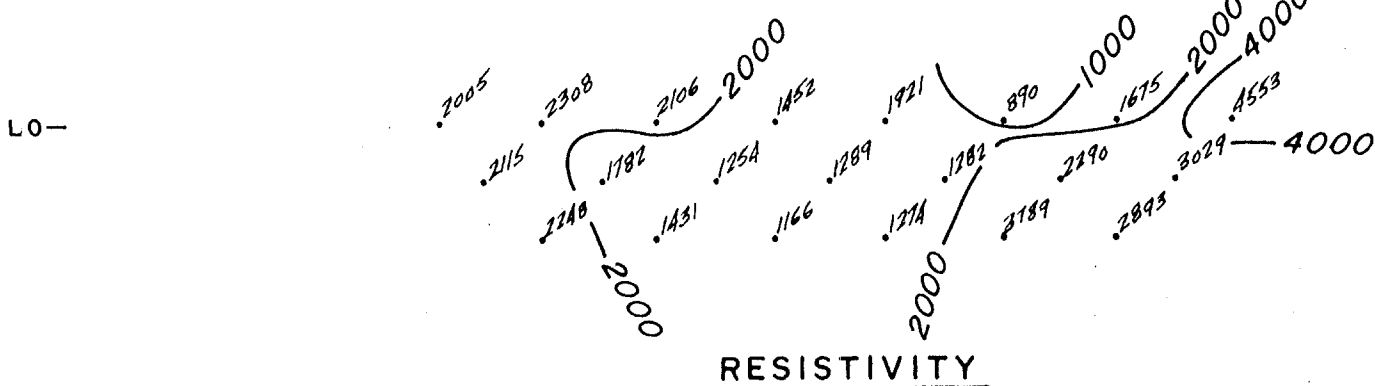
TO ACCOMPANY REPORT TITLED :  
I.P. SURVEY  
SEEL PROPERTY  
BY: *M.G. Berretta*  
M.G. BERRETTA  
DATED : MAY, 1980 PROJECT : SEEL PROPERTY

M.G. BERRETTA WHONNOCK, B.C.	DWN. BY: T.M. CHK. BY: DATE: MAY, 1980	FIG. NO. 4
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6W | 5W | 4W | 3W | 2W | 1W | 0

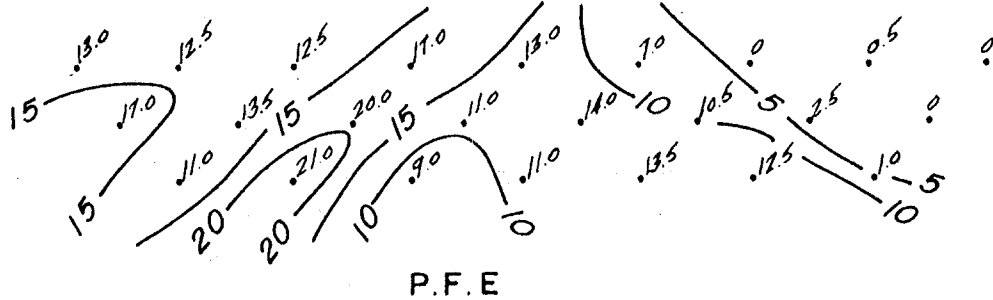


P.F.E.



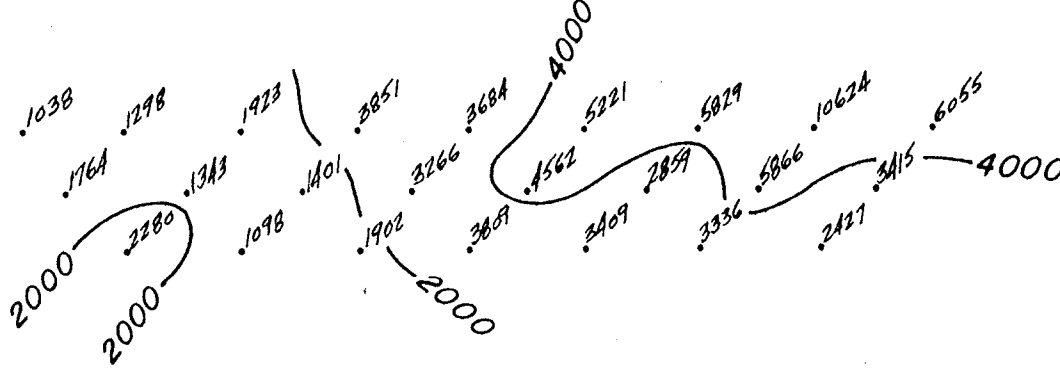
RESISTIVITY

L 240S-



P.F.E.

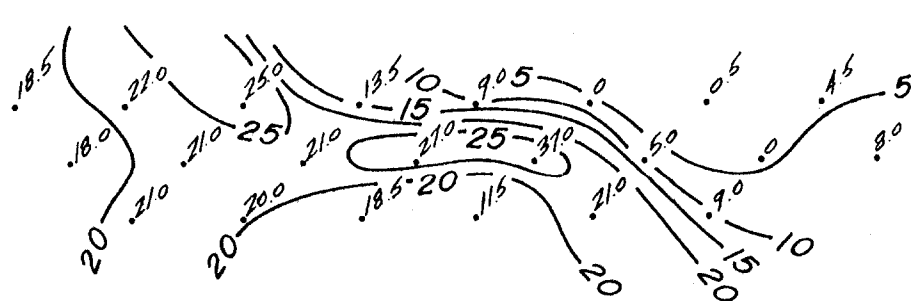
L 240S-



RESISTIVITY

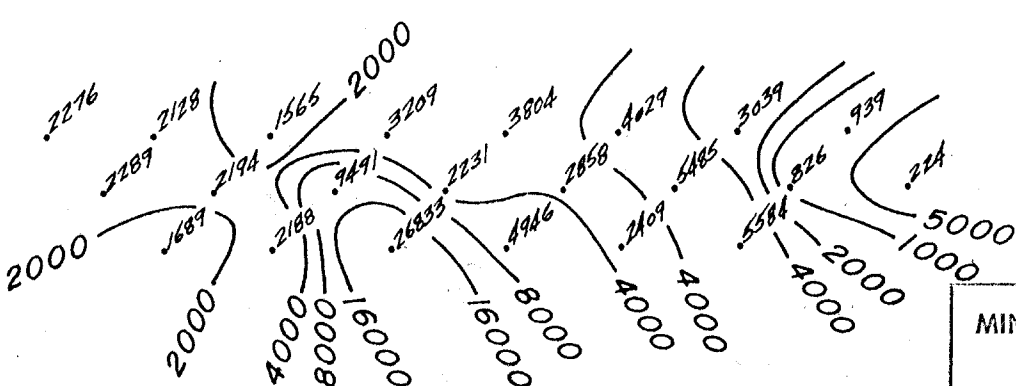
35S | 25S | 15S | 5S | 5N

Rd/Creek Bed-



P.F.E.

Rd/Creek Bed-



RESISTIVITY

MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**8750**  
NO.



NOTE  
Dipole - Dipole  
a = 200'  
n = 1  
0.3 - 10 Hz

PRYME ENERGY RESOURCES LTD.  
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**I.P. DETAIL**  
CONTOUR INTERVAL : 5% P.F.E.  
CONTOUR INTERVAL : 1000, 2000  
4000 Ohm Meters

M.G. BERRETTA WHONNOCK, B.C.	DWN. BY : T.M. CHK. BY : DATE : MAY, 1980	FIG. NO. 5
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TO ACCOMPANY REPORT TITLED :  
I.P. SURVEY  
SEEL PROPERTY  
BY: *M.G. Berretta*  
M.G. BERRETTA  
DATED : MAY, 1980 PROJECT : SEEL PROPERTY