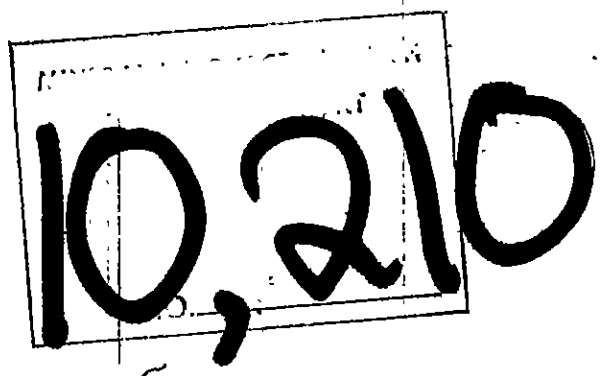
82-151-10210

TITLE	Induced Polarization Survey of the Jesse Property		
CLAIMS	Pumpkin	Record #383	(9 units)
	Stagecoach	#382	(6 units)
	Gofar 1	#1217	(4 units)
	Gofar 2	#1218	(4 units)
	Gofar 3	#1219	(4 units)
MINING DIVISION	Nicola		
LATITUDE	50° 09'N		
LONGITUDE	120° 45'W		
NTS	92I/2W		
OWNER	K. Wayne Livingstone		
AUTHOR	Michael G. Schlax Premier Geophysics Inc.		
DATES WORK DONE	November 13 - February 5, 1982		
SUBMITTED	March 18, 1982		



SUMMARY

Five lines of IP and resistivity survey have been operated on the Jesse Property to test for extensions of known mineralized outcrops under overburden, and to test for evidence of Craigmont-type mineralization in a mapped favourable structure.

A moderately anomalous zone 700 metres in width and at least 500 metres in north-south dimension has been mapped and may be representative of the type of mineralization outcropping in the north-west section of the property. A test by percussion drilling may be warranted.

No evidence of sulphide mineralization has been identified in the favourable structure unit which has been mapped at the south end of the property.

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1.0 Introduction

1.1 Terms of Reference

Premier Geophysics, Inc. of Richmond, B. C., has been retained by J.M.T. Services, Corp. to conduct geophysical investigations on the Jesse Property. Premier conducted an induced polarization (IP) and resistivity survey on the property during November, 1981.

1.2 Location and Access

The property is located at latitude 50° 09'N and longitude 120° 45'W, shown on N.T.S. sheet 921/2W. The property is four to six kilometres northeast of Merrit, B. C. Access is via the Logan Lake Road and a two-wheel drive dirt road traversing the property.

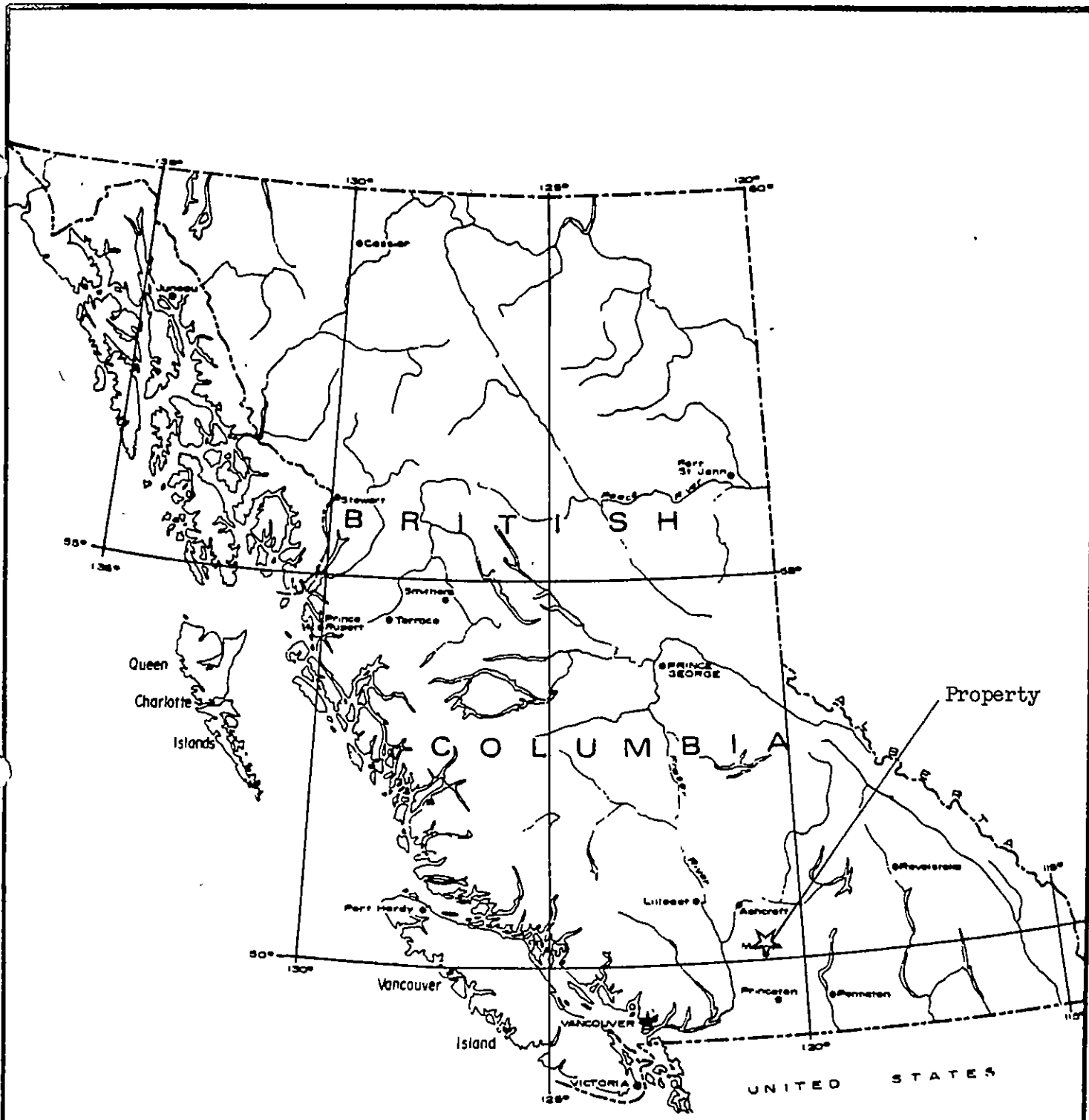
1.3 Terrain

The property lies on the highlands to the north of Merrit, B. C. Rolling terrain dissected by small drainages and moderate expanses of meadowland dominate the area. Vegetation is coniferous with little undergrowth.

1.4 Property

The Jesse property consists of the following claims:

CLAIM	RECORD NO.	UNITS
Pumpkin	383 (2)	9
Stagecoach	382 (2)	6
Gofar 1	1217 (12)	4
Gofar 2	1218 (12)	4
Gofar 3	1219 (12)	4



JMT SERVICES CORP.

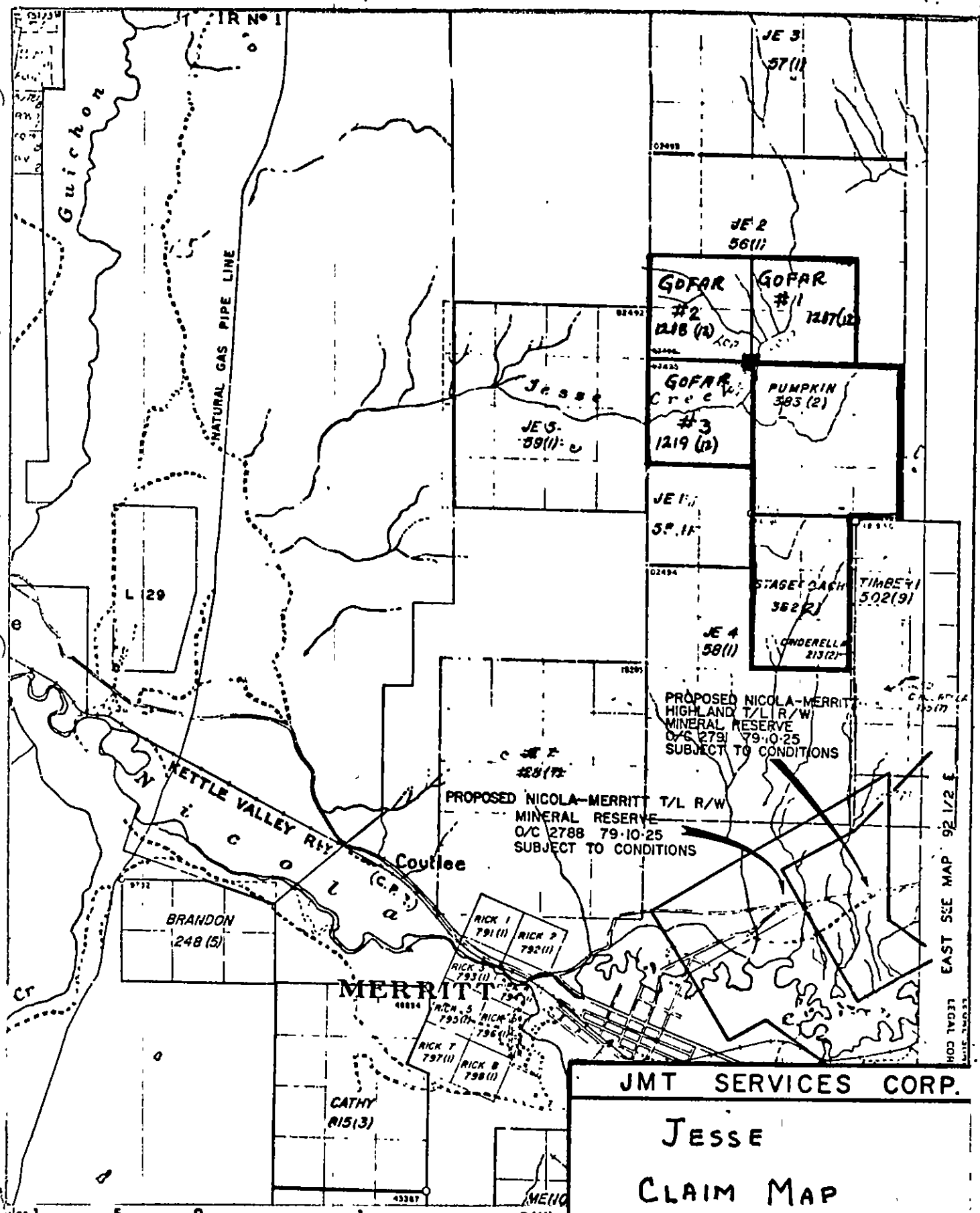
Fig. 1

JESSE
PROPERTY LOCATION MAP

SCALE

Mile 1136 0 136 Miles

Prepared by: Drawn by:	Date : Revised:	NTS MAP AREA 93 - E	DRAWING No.



JMT SERVICES CORP.

JESSE CLAIM MAP

Fig 2

Date	Scale	NTS
	1:50000	92 I/2W

1.5 Previous Work

Geologic mapping and a minor amount of geochemical analysis has been done. In 1962 Huntec Survey Corp. carried out a limited IP survey over part of the northeast of the claim area.

2.0 Geology

The property is underlain by a unit of thinly-bedded pelitic sediments and calcareous rocks which are locally skarnified and exhibit minor values of copper, zinc, and silver. Enclosing the sedimentary unit are andesitic tuffs, agglomerates and flows. These rock units are part of the Nicola Formation. Several small stocks of diorite and syenodiorite intrude these rocks on the southerly part of the property. To the northwest, the property is underlain by quartz diorite similar to the Guichon batholith.

3.0 Geophysics

3.1 Survey Method

The transmitter used in this survey was a Huntec M-4 7.5 kW Induced Polarization Transmitter, providing a polarity reversing, 50% duty cycle waveform at .125 Hertz frequency. The receiver used was a Huntec M-3.

A pole-dipole array was used with dipole length (a) of 100 metres and dipole separation (na) of n=1 through 5.

The chargeability plotted is the M-3 value derived from an

instrument program parameter setting of 120 mS delay and 60 mS M-1 integration time. Multiplying the plotted M-3 value by 4 will provide a rough conversion to "Newmont milliseconds", the familiar form of chargeability representation used in older Newmont-style receivers such as the Crone and Scintrex IPR-7. A reading of 12 mS (Newmont) may represent up to 3% metallic sulphides or other values of non-metallic materials such as graphite, clays, fault gouge,etc.

3.2 Survey Results

Line 1

Line 1 originates in an area of known outcrop (Guichon granodiorite) and proceeds east for 1.8 km over continuous overburden. The data at 1W and 2W show slightly elevated chargeability and the typical (for this area) resistivity signature of around 300 ohm-metres. From 1W to 16E very low chargeabilities are observed, coincident with low resistivity values in the 60 to 200 ohm-metre range. At 16E there is an apparent contact with another rock unit with chargeability and resistivity signatures similar to those of the granodiorite at the west end of the line. The zone of low chargeability and low resistivity from 1W to 16E may be caused by deep and pervasive overburden, or may represent overburden of variable thickness overlying an unidentified rock unit of low chargeability and moderate resistivity. The significance of the somewhat chargeable granodiorite at the west end of the line is unknown; all other values observed on the line are considered to be of background level.

Line 2

Line 2 was placed parallel to line 1 at a distance of 600m metres to the south. All of line 2 consists of background level

chargeabilities and resistivities. No areas of significant interest are noted.

Line 3

Line 3 originates from 14E on line 2 and extends south for a distance of 2.7 km along the strike of the mapped Nicola sedimentary unit. All values along this line are considered background.

Line 4

Line 4 originates in mapped Guichon granodiorite breccia which is known to be mineralized. The signature of 1.7 to 1.9% chargeability is obtained within the known unit. Observed values of from 1.1 to 1.6% may represent an extension of this rock type in an easterly direction to about 7E. Beyond that point, background chargeabilities occur, accompanied by lower resistivities. This could represent the sudden deepening of overburden, or the presence of another rock unit of lower chargeability and resistivity.

Line 5

Line 5 originates at 3E of line 4 and extends 1 km north. The anomalous chargeabilities of from 1 to 1.6 % lying between 0 and 5 North would appear to extend the mineralized zone proposed on line 4 for a distance of 500 metres north. It is noted that the background chargeabilities beyond 5N on Line 5 remain at two-thirds the magnitude of the anomaly itself, and may represent a change in the type of mineralization or the volume of sulphides present, or both.

4.0 Recommendations

A shallow percussion drill hole is recommended at station 5E on Line 4 to determine if sulphides are the cause of the anomalous

chargeabilities in that area. Further testing will have to be considered on the basis of the first hole results and the overall geological picture.

No further IP work is recommended pending determination of drill results.

Respectfully submitted by,

Michael G. Schlax

MICHAEL G. SCHLAX.

Appendix A - Statement of Qualifications

I, Michael G. Schlax of 3415 West 15th Avenue, Vancouver, British Columbia do hereby state that:

1. I am a graduate of the University of California at Berkeley with a Bachelor of Science of Engineering Geoscience degree,

2. I am employed by Premier Geophysics, Inc., of Richmond, British Columbia, as a consulting geophysicist,

3. I have personally supervised the work and the reporting of it contained herein.

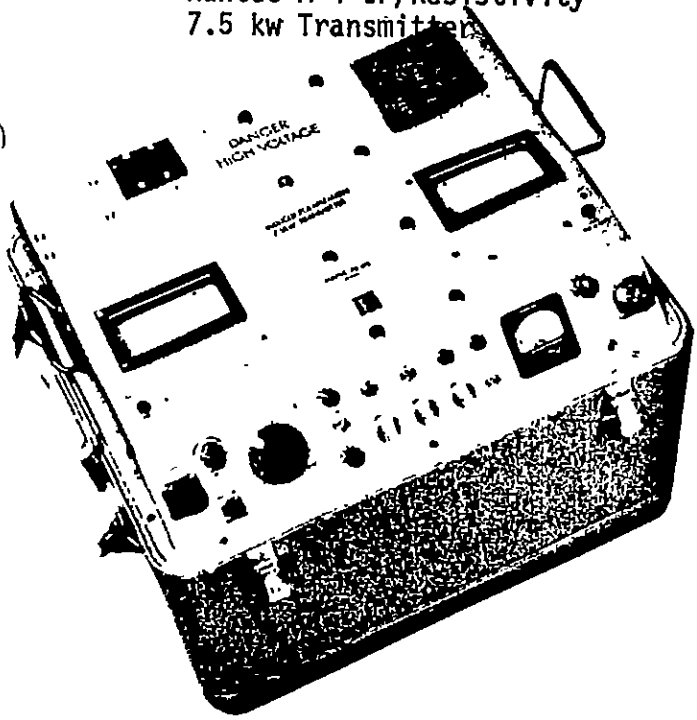
DATED at the City of Richmond, in the Province of British Columbia this 1st day of December, 1981.

Michael G. Schlax

Appendix B: Specifications: Huntec M-3 IP Receiver

Sensitivity	V_p-10^{-7} to 10^{-6} for low noise and 1% resolution.
	V_p-10^{-6} to 10 volts for 0.1% resolution. Total range 30 x 10^{-6} to 10 volts in 11 ranges.
Self-Potential	Maximum 1 volt manual. Maximum range of automatic Sp loop is ± 250% of V_p signal level.
M Factors	Resolution o.1% of V_p plus sign with Speed/Gain setting of 1.0. Resolution 0.01% plus sign with Speed/Gain setting of 10
Batteries	Detachable battery pack containing 10 nickel-cadmium size D cells. Nominal 12.5 volt four ampere hour. Weight 4½ lbs. Optional separate belt pack.
Power Consumption	0.7 amperes at 12 volts.
Dimensions	16" x 9" x 6 1/2"
Weight	16 lbs. including battery pack. 11½ lbs. when used with belt pack.
Ambient Temperature Range	-30F to + 130F.
Relative Humidity	Moisture resistant.
Absolute Accuracy	± 1% over full temperature range.

Appendix C: Specifications:
Huntec M-4 IP/Resistivity
7.5 kw Transmitter



M-4 SERIES

Induced Polarization/ Resistivity 7.5 kW Transmitter

DESCRIPTION

The HUNTEC M-4 7.5 kW Induced Polarization transmitter is designed for time domain, frequency domain (PFE) and complex resistivity applications. The unit converts primary 400 Hz ac power from an engine-alternator set to a regulated dc output current, set by the operator. Current regulation eliminates output waveform distortion due to electrode polarization effects. It is achieved in the transmitter by varying the alternator field currents. The transmitter is equipped with dummy loads to smooth out generator load variations.

FEATURES

- Solid-state switching for long life and precise timing.
- Open circuit during the "off" time ensures no counter current flow.
- Resistance measurement for load matching.
- Precision crystal controlled timing.
- Failsafe operation protects against short-circuit and overvoltage.
- Automatic regulation of output current eliminates errors due to changing polarization potential and load resistance.

SPECIFICATIONS

M-4 7.5 kW Transmitter

A) Power input:	96 — 144 V line to neutral 3 phase, 400 Hz (from Huntec generator set)
B) Output:	Voltage: 100 — 3200 V dc in 10 steps Current: 0.4 — 16 A regulated**
C) Current regulation:	Less than ±0.1% change for ±10% load change
D) Output frequency:	0.0625 Hz to 1 Hz (time domain, complex resistivity) 0.0625 Hz to 4 Hz (frequency domain) selectable on front panel
E) Frequency accuracy:	±50 ppm − 30°C to + 60°C
F) Output duty cycle: $T_{on}/(T_{on} + T_{off})$	0.5 to 0.9375 in increments of 0.0625 (time domain) 0.9375 (complex resistivity) 0.75 (frequency domain)
G) Output current meter:	Two ranges: 0-10 A and 0-20 A
H) Ground resistance meter:	Two ranges: 0-10 kΩ, 0-100 kΩ
I) Input voltage meter:	0-150 V
J) Dummy load:	Two levels: 2 kW and 6 kW
K) Temperature range:	−34°C to + 50°C
L) Size:	53 cm x 43 cm x 43 cm
M) Weight:	50 kg

**smaller currents are obtainable, but outside the current regulation range the transmitter voltage is regulated, not the current.

huntec (70) LIMITED

25 HOWDEN ROAD,
SCARBOROUGH,
ONTARIO, CANADA
M1R 3A6
PHONE (416) 751-8055
TELEX 06-963640
CABLE: HUNTOR
TORONTO

APPENDIX D

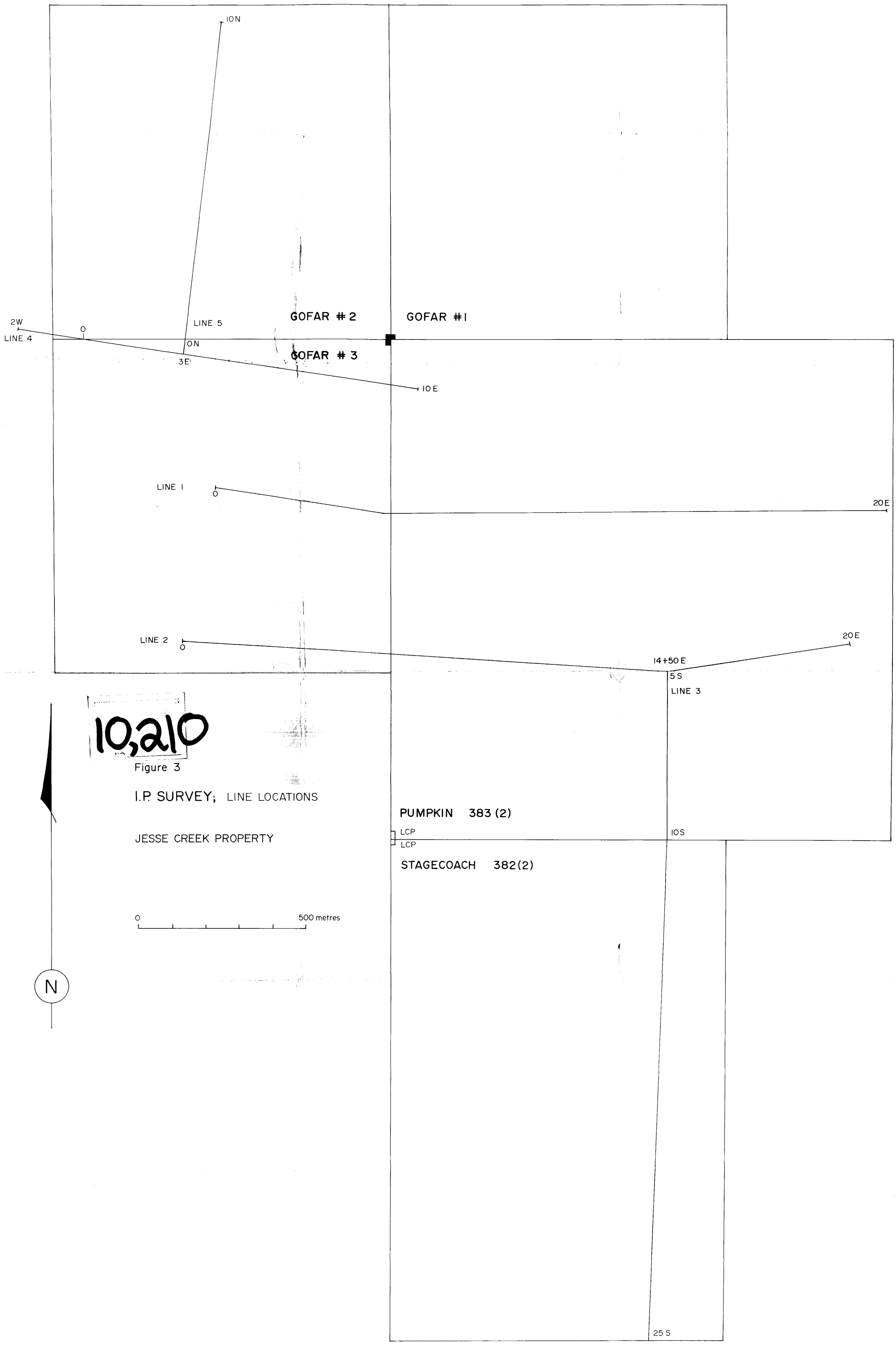
List of Field Crew		Field Days Worked
Geophysicist:	Michael G. Schlax 3415 W. 15th Avenue Vancouver, B. C. V6R 2Z2	6
Instrument Operators:		
	Tom Gee 492 E. 48th Avenue Vancouver, B. C. V5W 2E5	6
	Bryan Pielak # 106 917 W. 7th Avenue Vancouver, B. C. V5Z 1C4	6
	Victoria Seraphim 4636 W. 3rd Avenue Vancouver, B. C. V6R 1N4	6
Labour:	Harry Kujala 3475 Victoria Port Coquitlam, B. C.	6

APPENDIX E

STATEMENT OF COSTS

TIME

W. A. Howell	November 12-20, Dec 23	10 days @ $200	$ 2,000.00
K.W.Livingstone	November 13,16,19	3 days @ $300	900.00
Truck Rental	November 12-20 (Blazer)		450.00
	November 12-19 (Jimmy)		400.00
B. C. Tel			4.57
Premier Geophysics Survey			8,978.11
W.A.Howell - expenses			149.12
"			803.91
"			506.58
Report costs			400.00
			$14,592.29



10,210

Figure 3

I.P. SURVEY; LINE LOCATIONS

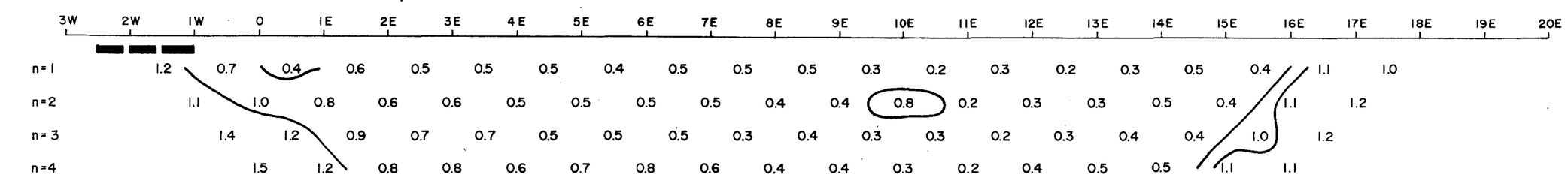
JESSE CREEK PROPERTY

0 500 metres

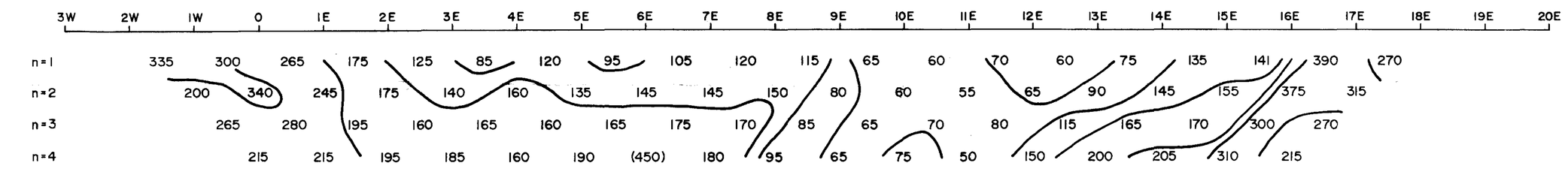
N

LINE 1

CHARGEABILITY % V_s/V_p (Apparent)

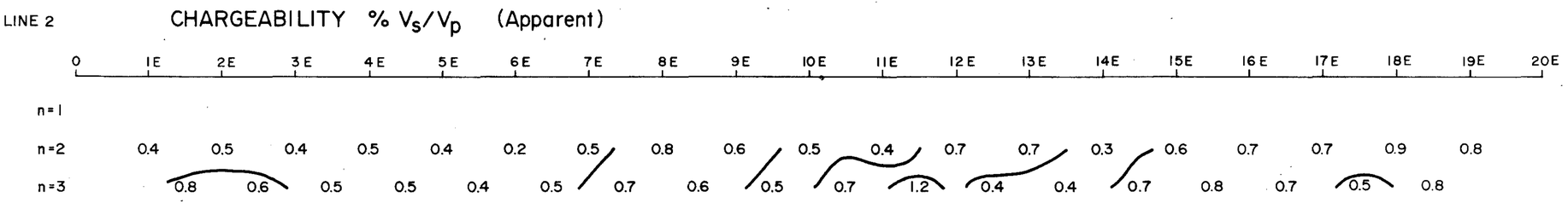


RESISTIVITY Ω-m (Apparent)

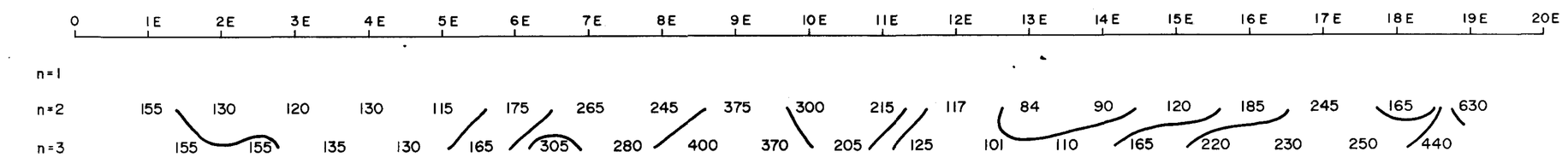


LINE 2

CHARGEABILITY % V_s/V_p (Apparent)

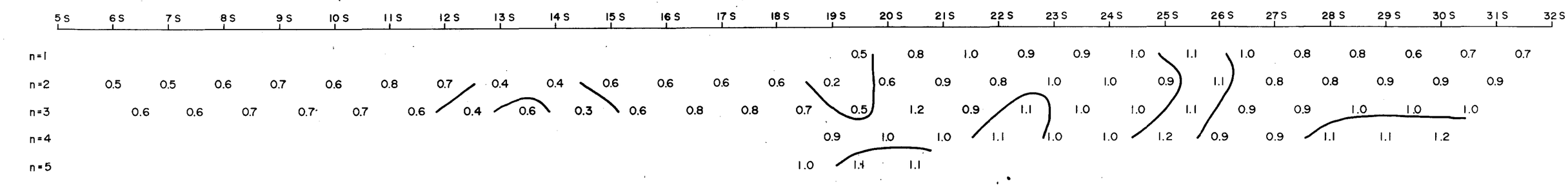


RESISTIVITY Ω-m (Apparent)

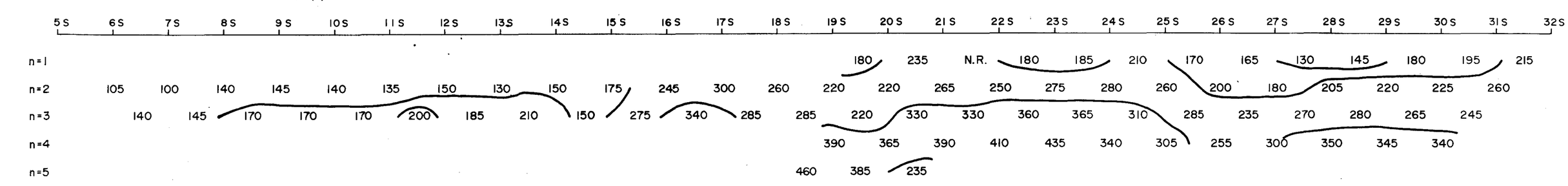


LINE 3

CHARGEABILITY % V_s/V_p (Apparent)

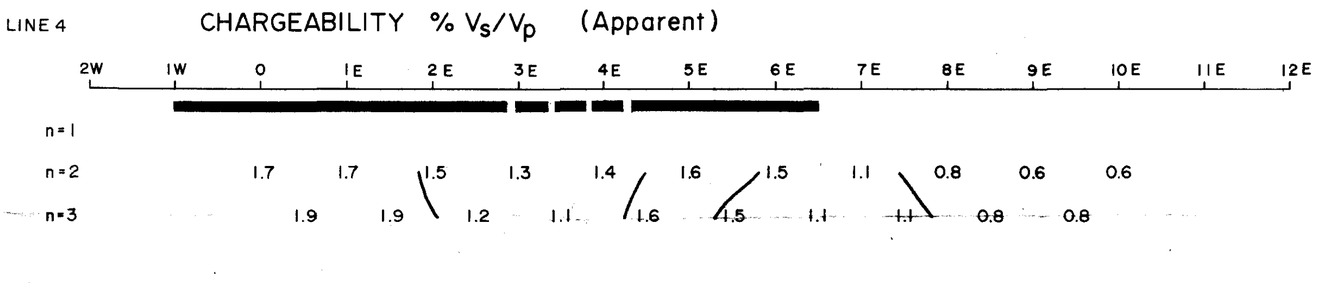


RESISTIVITY Ω-m (Apparent)

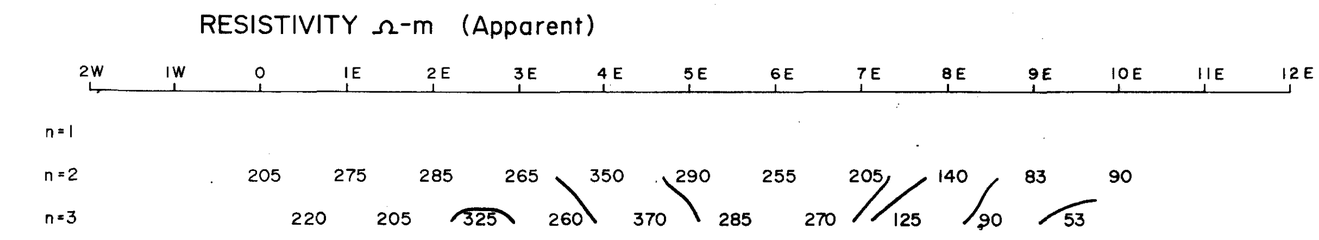


LINE 4

CHARGEABILITY % V_s/V_p (Apparent)

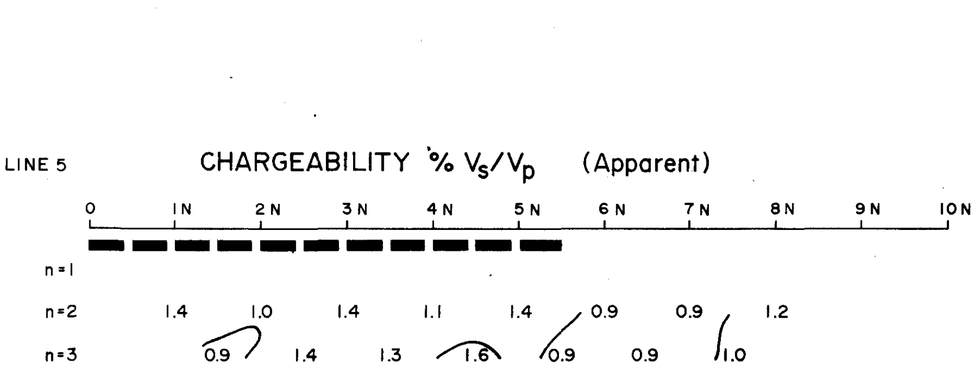


RESISTIVITY Ω-m (Apparent)

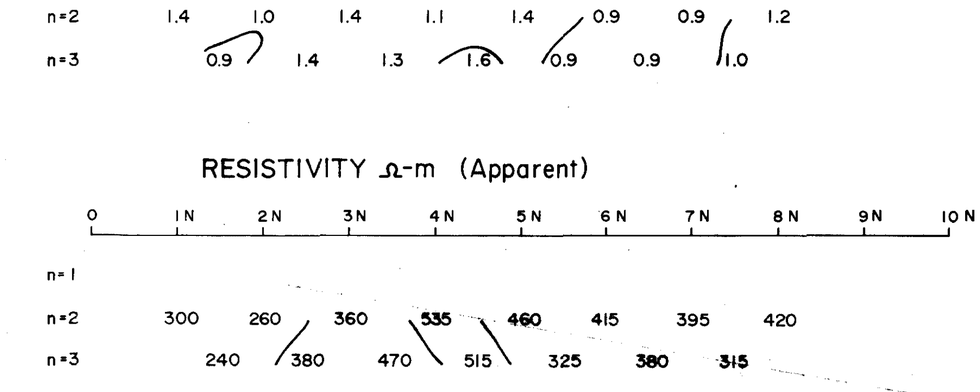


LINE 5

CHARGEABILITY % V_s/V_p (Apparent)



RESISTIVITY Ω-m (Apparent)



Legend

APPARENT CHARGEABILITY CONTOURS
.5, 1.0, 1.5, 2.0, 2.5, 3.0 % V_s/V_p

APPARENT RESISTIVITY CONTOURS ARE MODIFIED LOG CYCLE
1, 1.5, 2, 3, 5, 7, 10 OHM METRES (Ω-m)

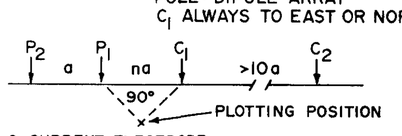
APPARENT CHARGEABILITY:

DEFINITE ANOMALY

POSSIBLE ANOMALY

PSEUDOSECTION PLOTTING

POLE-DIPOLE ARRAY
C_1 ALWAYS TO EAST OR NORTH



C = CURRENT ELECTRODE
P = POTENTIAL ELECTRODE
a = 100 m

IP RECEIVER: HUNTEC M-3
td = 120 mS
tp = 60 mS
M-3 register in % is plotted

0 50 100 METRES
HORIZONTAL SCALE ONLY

M.G. SCHLAX

G.A. SHORE

DEC 04 1981

Figure 4

JMT Services Corp.

IP AND RESISTIVITY SURVEY
JESSE PROPERTIES
Nicola Mining Division, B.C.

10210

Survey by Premier Geophysics Inc., Richmond, B.C.
Accompanies a report on an IP and Resistivity survey on the Jesse Properties by M.G. Schlax and G.A. Shore, Premier Geophysics Inc.

November 1981