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Geophysical Report of Work

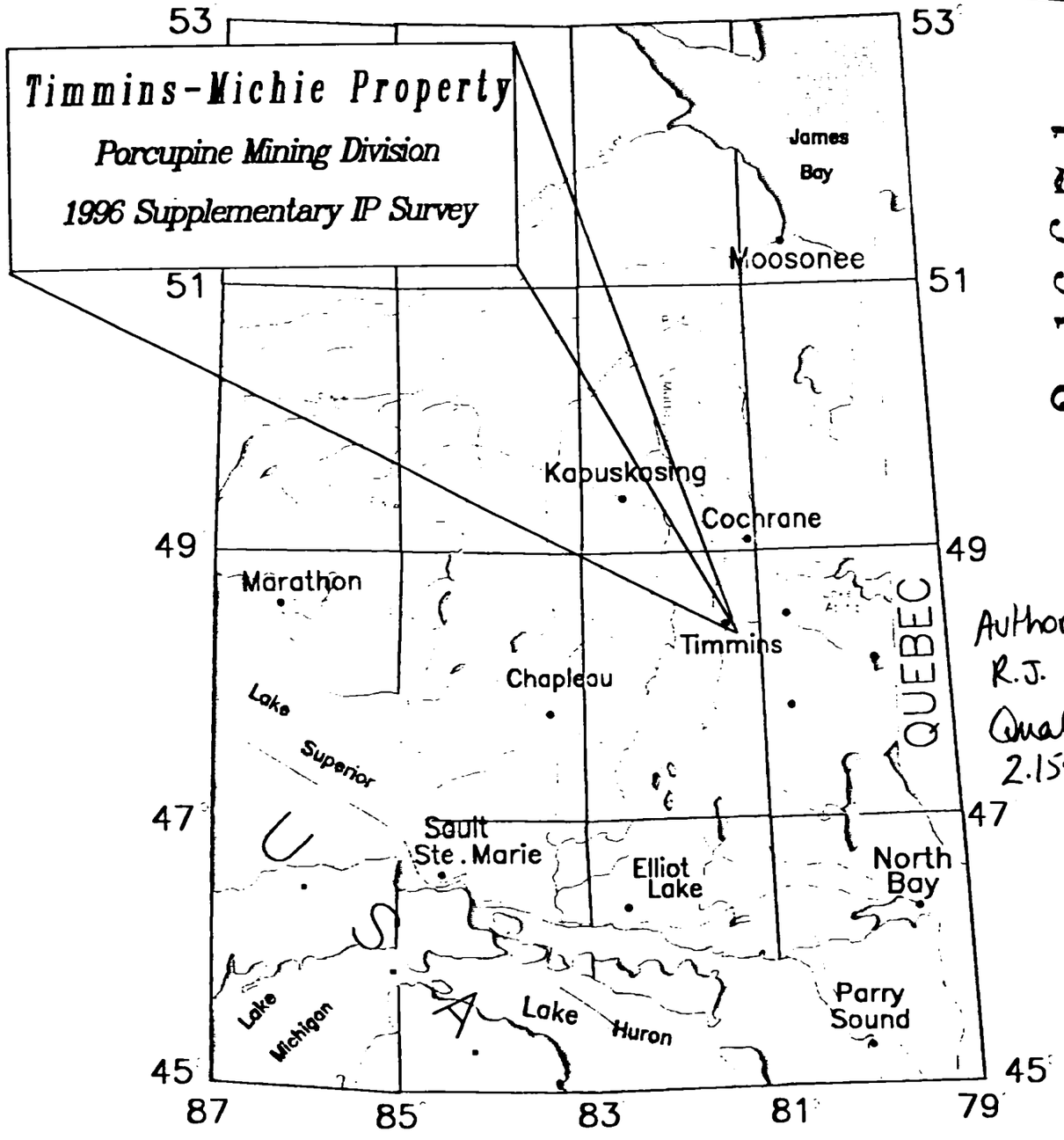
for

Royal Oak Mines Inc

Timmins-Michie Property

Porcupine Mining Division

1996 Supplementary IP Survey



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Qual. #
2.15919

M C Exploration Services Inc **April 1996**

Summary

Royal Oak Mines Inc., Exploration Division, of Timmins, ON, contracted M C Exploration Services Inc. of South Porcupine, ON, to do exploration on their recently acquired Timmins-Michie Property, northeastern ON. Since there is a limited amount of work done in the area the property is considered to be a base metal and/or precious metal prospect. Royal Oak has drilled four test holes on the property to date. The main objective of the 1996 geophysical program is to fulfil gaps (fill-in lines and over Dougherty Lake) in the time domain induced polarization survey previously done anticipating a better understanding of the structural geology. To date 87.475 Km of IP survey covers the near 280 Km grid. The survey is most successful delineating geological variances. Upon consideration of the presented results further work will depend on the clients interest.

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L- 0+00 (" " " ")
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L- 400E (1996 Pole Dipole Survey)
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1.0 Introduction

In January 1996, Royal Oak Mines Inc, Exploration Division contracted M C Exploration Services Inc., of South Porcupine, ON, to do additional exploration on their recently acquired Timmins-Michie Property. The twenty eight (28) contiguous claim property spreads over the southwest part of Timmins Township and northwest part of Michie Township. With little exploration done in the area it is considered to be a base metal and/or precious metal prospect. Royal Oak has drilled four test holes on the property, the logs are not available at the time of the writing of this report. It is known that the predominant high chargeability trends in conjunction with apparent resistivity lows are indicative of argillaceous rocks with a graphitic horizon bedded parallel to sulfides. This compounded feature bisects the grid in a sinuous trend. Objectively, the additional 32.4 km coverage of time domain induced polarization survey covers Dougherty Lake along with additional fill-in lines completing the main area of interest on the near 280 Km Grid. The IP coverage now tallies 87.475 done in four (4) phases, refer to table 1 on page 3. An additional 10 km of Line cutting was also done preceding the IP survey. The supplementary IP survey now covers an area suitable to produce a plan map using the data from the sections. The derived plan maps are included in this report and delineates geological variances of significance. This report embodies sixteen (16) IP Sections with an additional two (500W and 700W) which were surveyed in 1995 and not filed previously due to the time limit of filing assessment work requirements. Results indicate a resistive blanket which limits coverage in areas of interest and reveals that the eskers on the property inject problems into the survey and deserve close attention. Crews were frustrated by the imposed high contact resistances and were unable to induce adequate current although using a Huntec 7.5 Kw transmitter with several grounding rods.

2.0 Geophysical Agenda

2.1 Past Exploration

East West Resource Inc. of Vancouver, BC, initially staked the Timmins-Michie property in 1992 based on a favourable north trending volcanic pile and a southeast trending sericite schist zone. Favourable gold assays also prompted interest in the area. In 1994 a near 280 Km grid was cut by East West preceding a total field magnetic survey over the entire grid. In late fall of 1994 a pilot survey consisting of a time domain induced polarization done on line 100W favoured the Pole Dipole Array over the Dipole Dipole, owing to the better penetration by the former array. These past surveys in conjunction with an additional 50.92 km of Pole Dipole IP survey can be found in the assessment files, Timmins Resident Geologist Office. In December of 1995 Royal Oak Mines investigated the property with four test holes. The logs four the four diamond drill holes are not available at the time of writing this report.

2.2 1996 Line Cutting

Figure 2 on the following page outlines the additional 10 km cut and chained by M C Exploration crews in March 1996. Part of the additional lines cover Dougherty Lake.

2.3 IP Survey Procedure

M C Exploration geophysical crews read the 32.4 Km during March and April 1996, with the similar Pole Dipole Array. The selected 50m Dipole (spacing) recorded levels n1 to n6 inclusively on all lines. The two infinity electrode (C2) positions induced current southerly resulting with traverses having a mobile current electrode (C1) lagging north on all sections. This is referred to as a negative sense of current induction. The Huntec 7.5 Kw transmitter in conjunction with the Androtex TDR-6 Receiver were used.

TABLE 1

IP Survey Coverage Update

Line	Array	Limits	Distance	Direction	Overlap	filename	
100W	PLDPL	1600S - 1600N	3.200km	S - N		T1WPL.DAT	PHASE I
100W	DPLDPL	650N - 1600N	0.950km	S - N		T1WDP.DAT	completed by Oct., 94.
			4.150km				
4000E	PLDPL	200S - 1600N	1.800km	S - N		T40E.DAT	
3300E	"	1100S - 1600N	2.700km	N - S		T33E.DAT	
3000E	"	1200S - 1600N	2.700km	S - N		T30E.DAT	
1600E	"	725S - 1600N	2.325km	N - S		T16E.DAT	PHASE II
1500E	"	650S - 1600N	2.250km	S - N		T15E.DAT	completed by Aug., 95.
1400E	"	600S - 1600N	2.200km	S - N		T14E.DAT	
1300E	"	450S - 1600N	2.050km	N - S		T13E.DAT	
1500W	"	700N - 3200N	2.500km	N - S		T15W.DAT	
1700W	"	825N - 3200N	2.375km	S - N		T17W.DAT	
			25.050km				
3100E	PlDp1	1050S - 1600N	2.650Km	N - S		T31E.DAT	
1900E	"	1100S - 1600N	2.700Km	S - N		T19E.DAT	
1800E	"	400S - 1325N	1.425Km	N - S		T18E.DAT	
1700E	"	750S - 500N	1.250Km	S - N		T17E.DAT	
1200E	"	800S - 650N	1.450Km	S - N		T12E.DAT	PHASE III
1100E	"	800S - 650N	1.450Km	N - S		T11E.DAT	completed by Sep., 95.
1000E	"	800S - 650N	1.450Km	S - N		T10E.DAT	
900E	"	800S - 750N	1.550Km	S - N		T9E.DAT	
800E	"	850S - 800N	1.650Km	S - N		T8E.DAT	
700E	"	750S - 800N	1.550Km	N - S		T7E.DAT	
100E	"	3200N - 0N	3.200Km	N - S		T1E.DAT	
100W	"	0N - 2000N	2.000Km	S - N		T1W.DAT	
500W	"	2750N - 100N	2.650Km	N - S		T5W.DAT	
700W	"	350N - 1150N	0.900Km	S - N		T7W.DAT	
			25.875Km				
800W	PLDPL	1600N - 500S	2.100Km	N - S		T8W.DAT	
600W	"	500S - 1600N	2.100Km	S - N		T6W.DAT	
400W	"	1600N - 500S	2.100Km	N - S		T4W.DAT	
200W	"	3400N - 500S	3.900Km	N - S		T2W.DAT	
0+00	"	500S - 2600N	3.900Km	S - N		T0W.DAT	
200E	"	3400N - 500S	3.900Km	N - S		T2E.DAT	
300E	"	2600N - 500S	3.900Km	N - S		T3E.DAT	PHASE IV
400E	"	500S - 3400N	3.900Km	S - N		T4E.DAT	completed by Apr., 96.
500E	"	2600N - 500S	3.900Km	N - S		T5E.DAT	
600E	"	500S - 1600N	2.100Km	S - N		T6E.DAT	
700E	"	1600N - 500N	1.100Km	N - S	300m	96T7E.DAT	
800E	"	500N - 1600N	1.100Km	S - N	300m	96T8E.DAT	
900E	"	1600N - 500N	1.100Km	N - S	350m	96T9E.DAT	
1000E	"	500N - 1600N	1.100Km	S - N	150m	96T10E.DAT	
1100E	"	1600N - 500N	1.100Km	N - S	150m	96T11E.DAT	
1200E	"	500N - 1600N	1.100Km	S - N	150m	96T12E.DAT	
			33.400Km				

Grand total **87.475Km** surveyed to date.

NOTE: Phase I & II, 25.050 Km filed for assessment August 22, 95.
Phase III, 25.875 Km filed for assessment September 08, 95.
Section L-500W & L-700W, 3.550 Km not filed previously.
Phase IV now reported on & sections L-500W & L-700W.

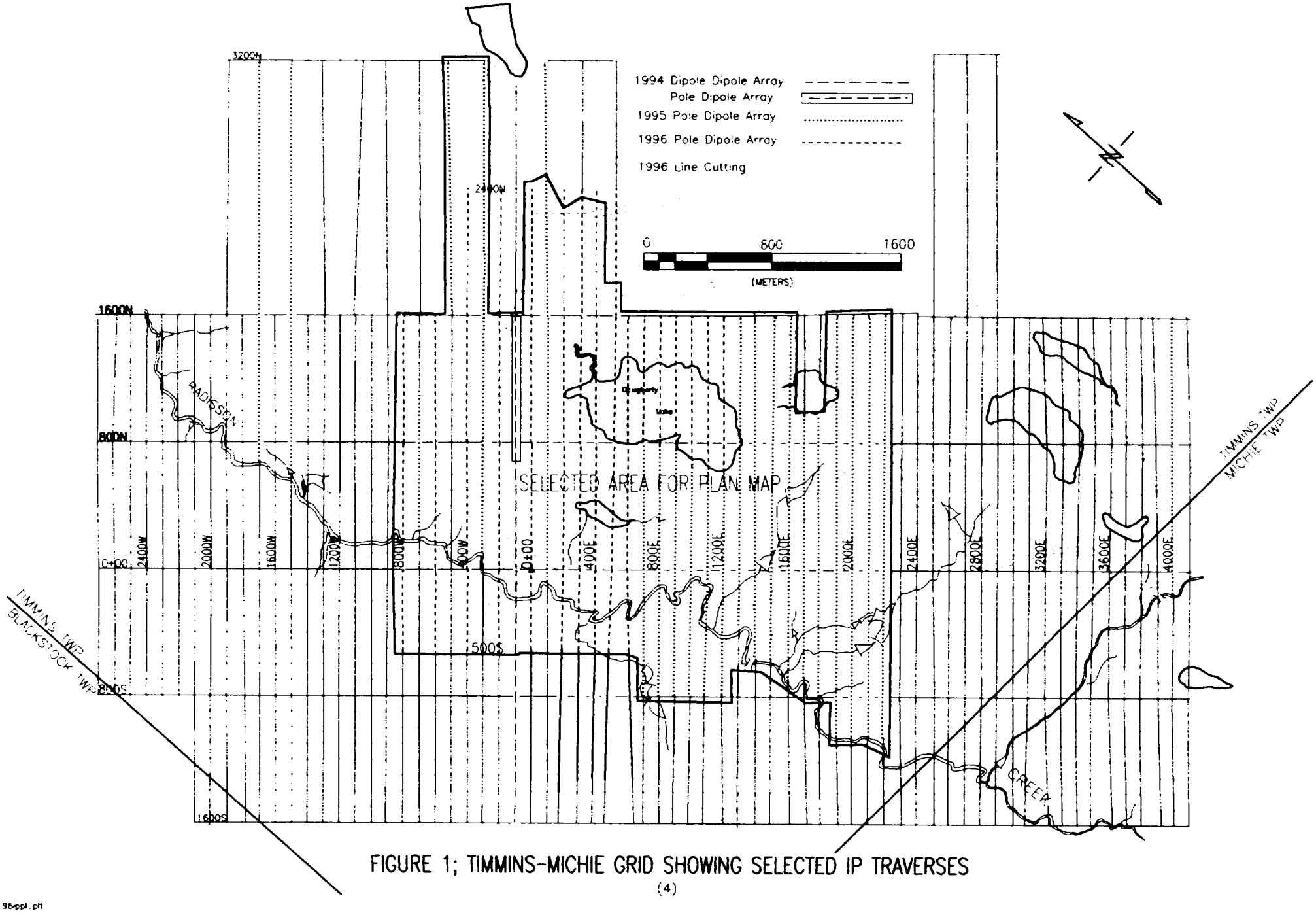


FIGURE 1; TIMMINS-MICHIE GRID SHOWING SELECTED IP TRAVERSES

96ppl.plt

2.4 1995 IP Survey Results

Section L- 500W, shows a better penetrating survey north of tie line 1600N, comparative to other attempts. The broad homogeneous resistivity response beyond 1200N implies a broad underlay of sedimentary rocks. The IP high under 1500N is postulated to reflect argillaceous rocks with the good electronic conduction. The resistivity highs under 800N infer an intrusive mass. Section L- 700W is a relatively short traverse attempting to delineate the eastern anomaly (over the main showing). This section infers an intrusive unit with low IP effects for the area surveyed.

2.5 1996 IP Survey Results

The west limit of the 1996 survey, Section L- 800W shows horizontal apparent resistivity impacts limiting penetration. It is probable that the anomalies seen on the chargeability section are off-line (easterly). Section L- 600W, from the south limit up to 1000N is indicative of a horizontal resistive layer at the n3 level. Three high contact resistances at surface resulted with gaps poorly defining anomalies. Crews lost one setup on Section L- 400W on the north bank of the Radisson Creek. Traversing northerly, the last good contact was achieved at station 1600N. The response along the south limit infers a broad intrusive unit while the northern anomaly infers a sedimentary type underlay. Section L- 200W, coarsely following the access road to the main showing on the property is predominantly covered by esker. The results north of station 700N proves high contact resistances impeding current penetration. Crews achieved good current penetration until station 2000N on Section L- 0+00. This section well defines separate targets as follows; (1)an intermediate intrusive unit is postulated along the south with a broad resistivity high and chargeability high, (2)argillaceous sediments are inferred along the north by resistivity lows and chargeability highs. The narrow resistivity high under 1550N probably reflects a bisecting dike. Section L- 200E, also shows two similar broad anomalies (as L- 0+00). The chargeability highs indicate sulphides and that the sulphides are massive. No stations were lost along this traverse. Along section L- 300E, high contact resistances prevented readings between station 0 to 200S, just north of the Radisson Creek. High contact resistances limited the traverse northerly at station 2000N. The northern sedimentary rocks show massive sulphide response under 900N and 1750N. The southern intrusive unit is obscured at the south limit. Section L- 400E, limited northerly by high contact resistances at station 1900N displays a triple high chargeability response within the sedimentary package. The IP effects within the intrusive body are by comparison lower than Section L- 300E. The postulated intrusive body is poorly defined due to outcrop preventing good current electrode contacts. Crews were unable to prospect section L- 500E northerly beyond 1400N, again due to the sand and gravel till. The southern chargeability high anomaly is now displaced northerly from the theorized intrusive body. This can perhaps be related to an off-line effect. The twosome chargeability high trends under 800N and 1200N are again conformable to sedimentary rocks substantiated by a resistivity low attribute.

2.4 1996 IP Survey Results continued

On Section **L- 600E**, crews depicted a triple chargeability high package. The resistivity section infers the two anomalies, central and north are conformable to the theorized sedimentary rocks. The rise in resistivities on the most south IP high postulates a probable unconformity. Section **L- 700E**, completing the traverse started in 1995, shows similar response as seen on section L- 600E. A narrow resistivity high under 300S perhaps infers a diabase dike at this location. At the north limit the rise in resistivity theorizes a new contact at the north limit of the survey. ·Section **L- 800E** shows a broad chargeable zone from 150N to 1350N. The change in resistivity under 400N infers a probable unconformity at the south limit of the broad chargeability high. The narrow resistivity highs under 50S and 300S are probable reflections of bisecting dikes. Along Section **L- 900E** crews lost one station at 1350N. The resistivity section now shows a homogenous resistivity response from 400S to 400N. The source is problematical at this time. The chargeability anomaly under 250N relates to the postulated unconformity theorized on section L- 800E. The noise on the chargeability section under 350S happens in close proximity to the Radisson Creek. This type of response is often related to a water & clay saturated fault. The broad high IP effects between 500N and 1100N reflect chargeable argillaceous rocks. ·Section **L- 1000E** shows a geological contact under 400N with the postulated unconformable rocks from 100N to 300N. The origin of the south geology is unknown at this time, intermediate rocks are postulated. The noise under 400S infers a water & clay saturated fault. The isolated resistivity highs under 50S and 900N infer bisecting dikes. The argillaceous package lies between 400N and 1300N. ·Showing a similar response to the previous lines section **L- 1100E** did not receive sufficient overlap south of Dougherty Lake, under 500N. ·Along section **L- 1200E** crews were unable to read from 1200N to 1600N due to high contact resistances (sand & gravel). This section shows a separation within the sedimentary package characterized by an increase in resistivity under 725N. This section also did not receive enough overlap.

FIGURE 2: Apparent Chargeability Plan Map (reduced), showing filtered data (level 1 to level 4) from the 1994 to 1996 IP Sections (50m Dipole).

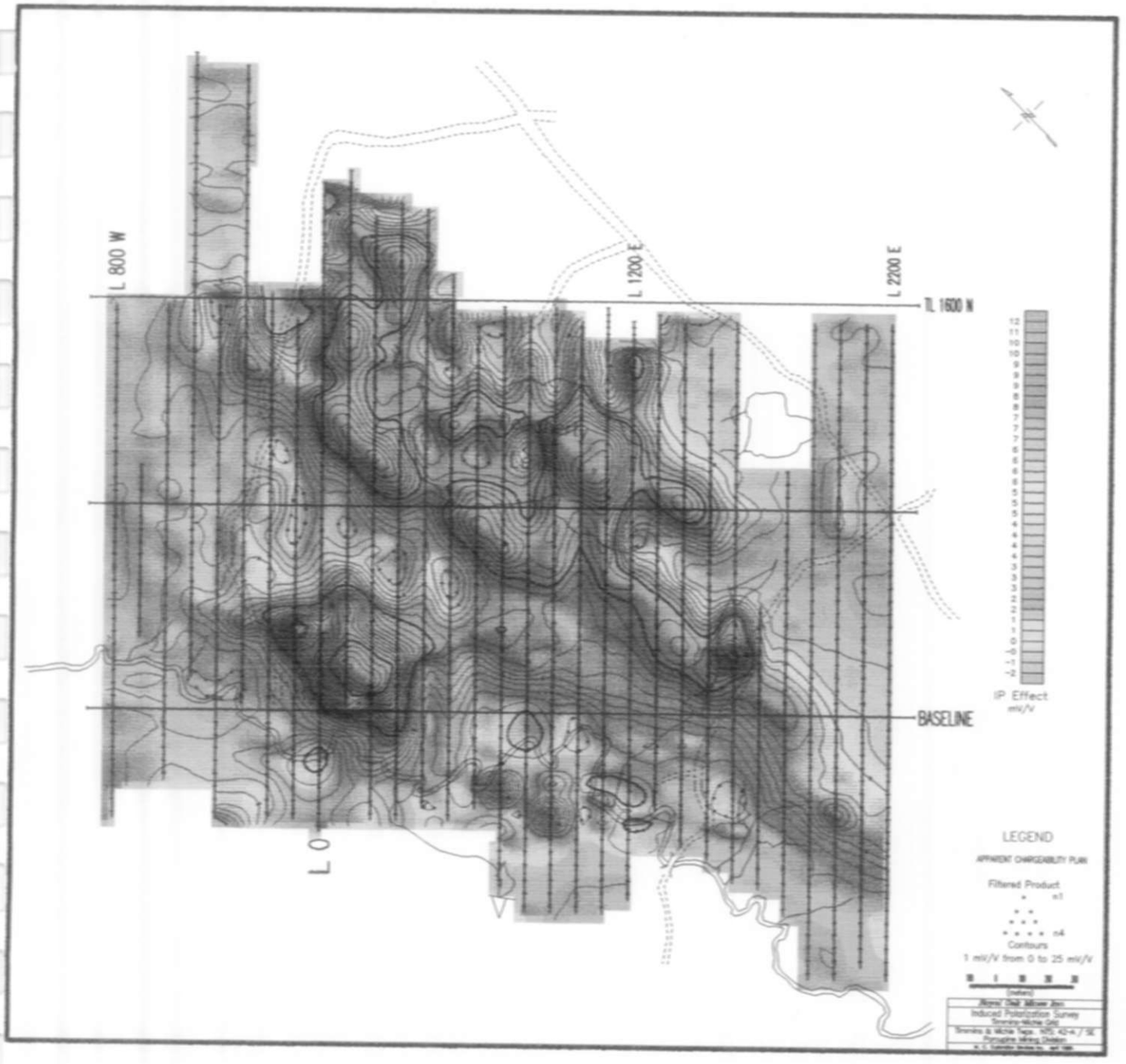
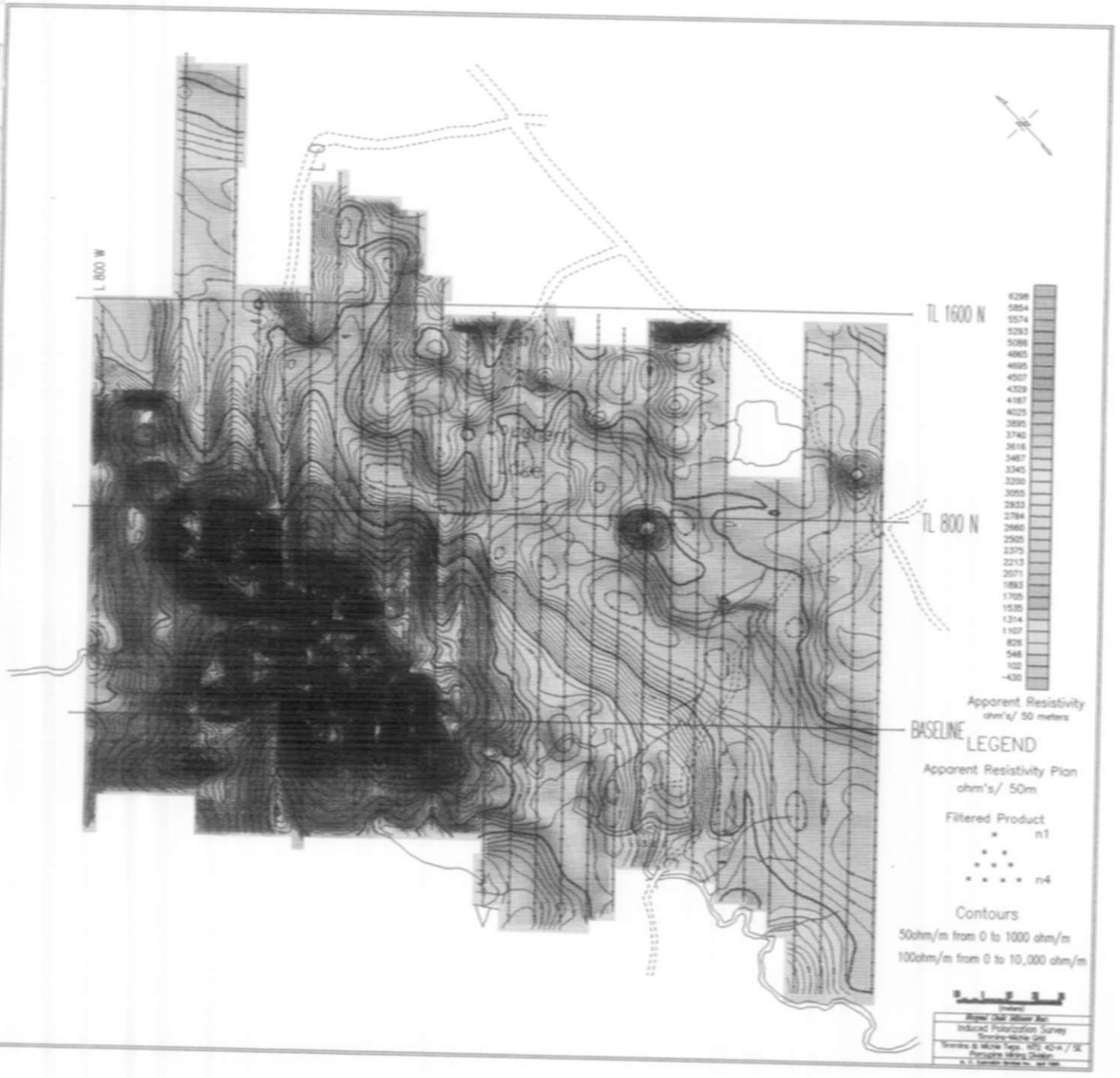


FIGURE 2: Apparent Resistivity Plan Map (reduced), showing filtered data (level 1 to level 4) from the 1994 to 1996 IP Sections (50m Dipole).



3.1 Implications

3.1 Conclusion

In 1994 when M C Exploration geophysical crews attempted to initiate the pilot survey on line 100W @ tie line 1600N the Vp (primary voltage) was too low to synchronize the receiver. The plan maps derived from the sections now explains the problem encountered in 1994 by the geological structure paralleling the lines in this vicinity. When crews reversed their traverse from south to north readings were obtainable. It is not possible to conclude that the theorized intrusive on the sections is real without drill hole information. It can also be theorized that a high degree of metamorphism can be the cause of the high apparent resistivity values seen at the SW corner of Figure 3. The high resistive mass has an associated IP effect ranging from 10 mV/V to 30 mV/V (Figure 2). The resistive mass is cut by an inferred fault trending N135°T (parallel to the baseline). This is evident across lines 400W to 300E inclusively at 350 m north of the baseline. This fault appears to end at a magnetically inferred fault which bisects the grid trending near NS. A third fault can now be theorized trending parallel to the survey lines in the vicinity of line 1000E. The magnetic survey does not refute this theory. The sedimentary package of rocks that can now be seen trending near NS to then take a sinuous course near tie line 1600N steered easterly. The chargeability noise seen south of the baseline near 300S, once postulated to trend near NS now appears isolated by a halo of IP lows.

3.2 Recommendations

Perhaps a geochemical survey limited within the volcanic rocks would be helpful in classifying sulfide mineralization. Upon the clients decision, additional IP coverage would be favoured in the following areas traversing parallel to the baseline (including some additional line cutting); (1) along tie line 1600N westerly, and south of the baseline across lines 400E to 1200E inclusively near and along the Radisson Creek. If the northern area should be pursued with additional IP coverage maximum attention should be given to the high contact resistances. The stations should initially be prepared with copper conduits saturated with a $CuSO_4$ solution before launching the IP survey. The author favors additional exploration to be done in the volcanic package.

4.0 CERTIFICATION

I **Richard Daigle** residing at 1115 Maclean Dr, U15 in the city of Timmins, ON, Certify;

1. I have received an Electronic Technologist Certificate in 1979 from Radio College of Canada, Toronto, ON.

2. I have been computer literate and utilized geophysical equipment for fifteen years.

3. Experienced Max-Min (HLEM) interpretations along with field operations under the supervision of John Betz, 1979- 81.

4. Geophysicist Assistant for Kidd Creek Mines under the supervision of Mr. Doug Londry, 1981- 85.

5. Fulfilled geophysical contracts in NE Ontario, 1985-87.

6. Fulfilled geophysical contracts (IP, HLEM, MAG, SP) along with property assessments in Eastern Canada, 1987- 92.

7. I have been employed by M.C. Exploration Services Inc as Geophysical Evaluator for the past four years.

8. I have no direct interest in the property reported upon.

DATE: Jan. 12, 1996.
Timmins, ON

R. J. Daigle

5.0 Equipment Specification

5.1 Receiver

·Androtex TDR-6; The TDR-6 induced polarization receiver is a highly cost-effective instrument for the detailed measurements of IP effects and apparent resistivity phenomenon. Up to six dipoles can be measured simultaneously, thus increasing production. A wide input voltage range, up to 30V, simplifies surveys over the narrow shallow conductors of large resistivity contrast. Input signal indicators are provided for each dipole. All data are displayed on a 2x16 character display LCD module and any selected parameters can be monitored on a separate analogue meter for noise evaluation during the stacking/averaging. Although the TDR-6 receiver is automatic it allows full control and communications with the operator at all times during measurements. Since the input signal synchronises the receiver at each cycle, the transmitter timing stability is not critical and any standard time domain transmitter can be used. Data are stored in the internal memory with a capacity of up to 3700 readings (450 stations). The data format is directly compatible with Geosoft without the necessity of an instrument conversion program.

Features

- Wide input signal range
- Automatic self-potential cancellation
- Staking/averaging of Vp and M for high measurement accuracy in noisy environments
- High rejection of power line interference
- Continuity resistance test
- Switch selectable delay and integration time
- Multiwindow chargeability measurements
- Digital output for data logger
- Six channel input provided
- Compatible with standard time domain transmitters
- Alpha-numeric LCD display
- Audio indicator for automatic SP compensation
- Portable

Specifications

Dipole	n1 to n6 simultaneously	
Input Impedance	10 megohm	
Input Voltage (Vp)	range 100uV to 30 Volts (automatic)	accuracy 0.5% resolution 10uV
Self Potential (SP)	range ±2V, accuracy 1%, Automatic compensation ±1	
Chargeability (M)	range 300mV/V, accuracy 2%, resolution 1mV/V	
Automatic Stacking	2 to 32 cycles	
Delay Time	programmable	
Integration Time	programmable for each gate (10 gates)	
Total Chargeability Time	During integration time of all gates	
Synchronisation Signal	programmable from channel 1 to 6	
Filtering	power lines: dual notch 60/180Hz or 50/150Hz.	100dB. other: Anti-alias. RF and spike rejection
Internal Test	Vp=1V, M=30mV/V	
Ground resistance test	0 to 300 Kohm	
Transmitting Time	1, 2, 4 and 8 sec pulse duration ON OFF	
Digital Display	Two line 16 alphanumeric LCD	
Analogue Meters	Six-monitoring input signal and course	resistance testing
Controls	Push button reset, toggle start-stop, rotary (data scroll) Dipole, keypad 16 key 4x4	Re-Im-test, rotary (data scroll) display, rotary
Memory Capacity	3700 readings, 450 stations (n1 to n6)	
Data Output	serial I/O RS-232 (programmable baud rate).	Geosoft compatible output format
Temperature Range	Operating -30°to +50°C, storage -40° to +60°C	
Power Supply	Four 1.5V D cells	
Dimensions	31x16x29 cm	
Weight	6.5 kg (14.3lbs)	

5.2 Transmitter

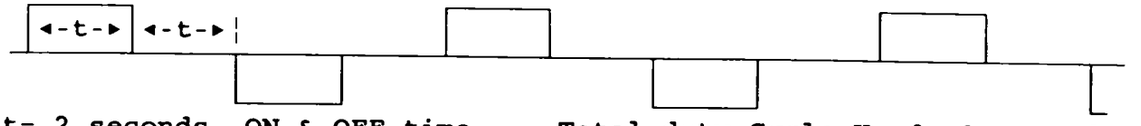
HUNTEC M-2 7.5KW Transmitter; The Huntec 7.5KW time domain induced polarization transmitter contains circuitry and front panel controls to step up and convert the primary AC voltage from a motor generator into a rectangular low frequency output waveform. The output amplitude may be selected by the operator for transmission into the ground via current electrodes. Some of the features designed to provide simple, reliable operation includes; solid - state (SCR) current ON-OFF switching, automatic protection from excessive input voltage excursions; independent measurements of current electrode contact resistance. A dummy load and voltage regulator are used to uniform the circuitry ensuring a steady delivered current (Ig).

Specifications

* Power Input	96- 144V line to neutral 3 phase, 400Hz, 7.5KVA.
* Output	Voltage, 100 to 3300 VDC in 10 steps. Current: 0.4 to 16 Amp regulated
* Current Regulation	Less than ±0.2% change for ±10% load change.
* Cycling Rate	2 seconds ON, 2 seconds OFF.
* Current Output Meter	0 to 10 Amps & 0 to 20 Amps.
* Ground Resistance	Two ranges; 0 to 10kohms & 0 to 100Kohms
* Input Voltage Meter	0 to 150VAC.
* Dummy Load	two levels; 2000 watts & 6000 watts.
* Temperature Range	-30°F to +120°F.
* Weight	Transmitter: 50kg. Generator =200kg

The high voltages on the output lines is dangerous to life.

output; DC interrupted square wave.



t= 2 seconds, ON & OFF time. Total duty Cycle Used; 8 seconds.

6.0 Survey Theory

IP Method

The phenomena of Induced Polarization (IP) was reported as early as 1920 by Schlumberger. The IP survey technique allows a variety of arrays (which all have advantages and disadvantages) and reads two separate elements;(1)The chargeability or IP effect (M) and Apparent Resistivity. The IP technique is useful for detecting sulphide bodies and is also useful as a structural mapping tool. The IP effect is the measurement of the residual voltage in rocks that remains after the interception of a primary voltage. It includes many types of dipolar charge distributions set up by the passage of current through consolidated or unconsolidated rocks. Among the causes are concentration polarization and electrokinetic effects in rocks containing electronic conducters such as metallic sulphides and graphite. The term overvoltage applies to secondary voltages set up by a current in the earth which decays when it is interrupted. These secondary effects are measure by a receiver via potential electrodes. The current flow is actually maintained by charged ions in the solutions. The IP effect is created when this ionic current flow is converted to electronic current flow at the surface of metallic minerals (or some clays, and platy silicates.). The IP method is generally used for prospecting low grade (or disseminated) sulphide ores where metallic particles, sulfides in particular, give an anomalous response. Barren rock (with certain exceptions) gives a low response. In practice IP is measured in one or two ways;(1) In a pure form, a steady current of some seconds (nominally 2 seconds) is passed and abruptly interrupted. The slowly decaying transient voltage existing in the ground are measured after interruption. This is known as the time domain method. The factor Vs/ Vp is the integrated product for a specified time, and several readings are averaged (suppressing noise and coupling effects). The resultant chargeability, M is essentially an unitless value but it is usually represented in mV/V. The second method entails a comparison of the apparent resistivity using sinusoidal alternating currents of 2 frequencies within the normal range of 0.1 to 10.0 cps. The factor used to represent the IP effect by this frequency domain method is the percent frequency effect (PFE) and is defined by (R1-R2 /R1x100% where R1 and R2 are the apparent resistivities at the low and high frequencies.

Use and Limitations

The effective depth of penetration of any IP survey is a function of the resistivity of the surface layer(s) with respect to the resistivity of the lower layer. All arrays have different effects from this resistivity contrast some are less affected than others. When the surface layer is 0.01 of the lower layer the effective penetration is very poor hence the term masking. Masking occurs most often in areas of thick clay cover. The size of the target therefore becomes important when detection is desirous under a conductive surface layer. The frequency domain methods are the most adversely affected by masking as inductive coupling can be much greater than the response.

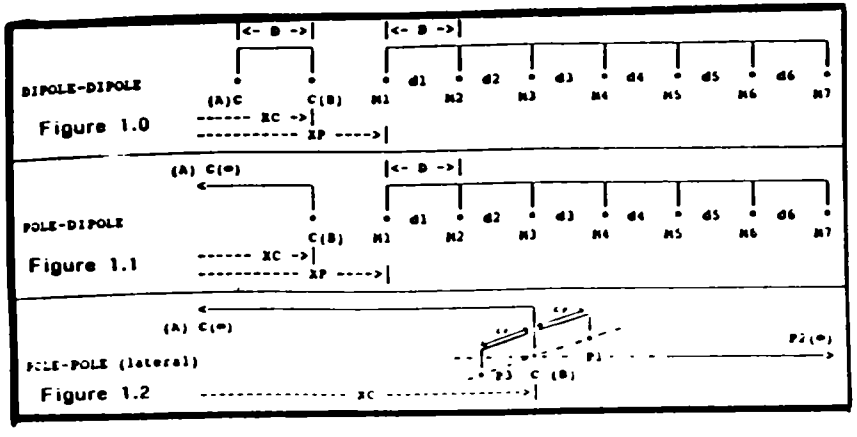
Standard Definitions of Chargeability

The IP parameter, chargeability (M) varies with time. For practical reasons the entire decay curve is not sampled. Instead the secondary voltage is sampled one or more times at various intervals. Because the secondary voltage is received at extremely low levels in many prospecting situations, measurements of its amplitude at any given time is extremely susceptible to noise. Therefore the secondary voltage is usually integrated for a period of time called a gate. Thus, if the noise has a zero mean, the integration will tend to cancel the noise. The Newmount M Factor is a standard time domain IP parameter. The gate delay, of 80 mSeconds (used by the TDS-6) was chosen to allow time for normal electromagnetic effects and capacitive coupling effects between the transmitter and receiver to attenuate so that the secondary voltage consists only of the IP decay voltage.

The TDS-6 total integration time of 1500 milliSeconds (gate) is divided into ten individual gates. The time-constant of the IP dispersion curve, Cole-Cole dispersion (M H Pelton 1977), obtained from the ten individual gates (windows) is directly related to the physical size of the metallic particles. This data is available at the clients request since all of the obtained field data is archived (downloaded) to computer.

Induced Polarization Survey

Electrode Arrays



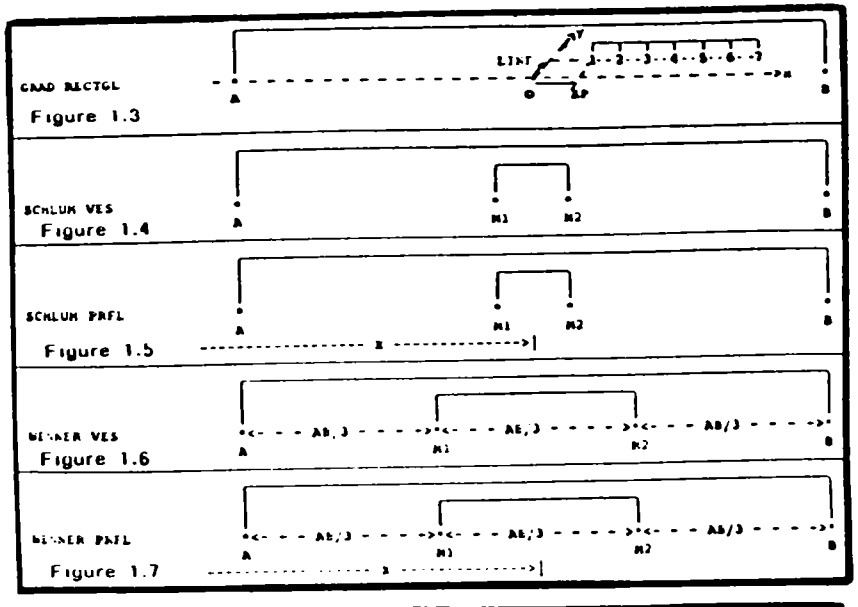
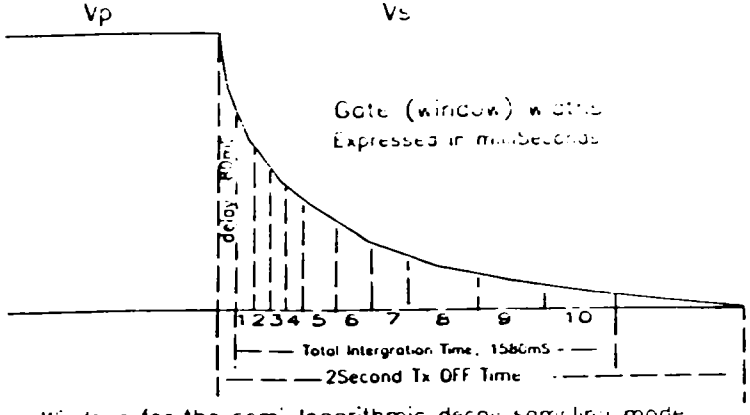


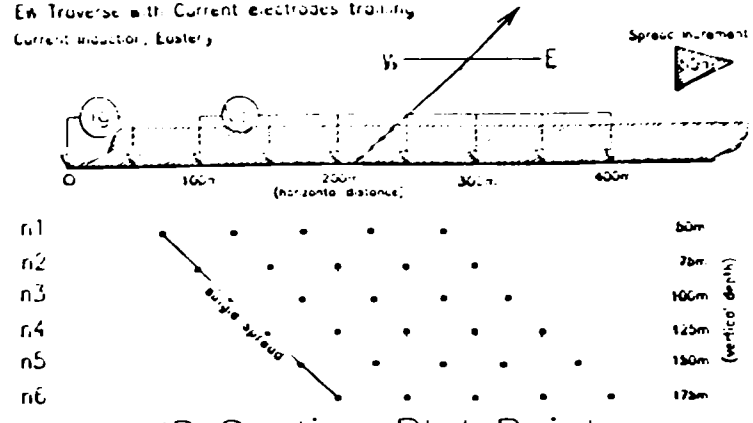
Figure 2.0



Windows for the semi-logarithmic decay sampling mode.

M1:80mS, M2:80mS, M3:80mS, M4:80mS, M5 160mS
M6:160mS, M7:160mS, M8:320mS, M9:320mS, M10:320mS

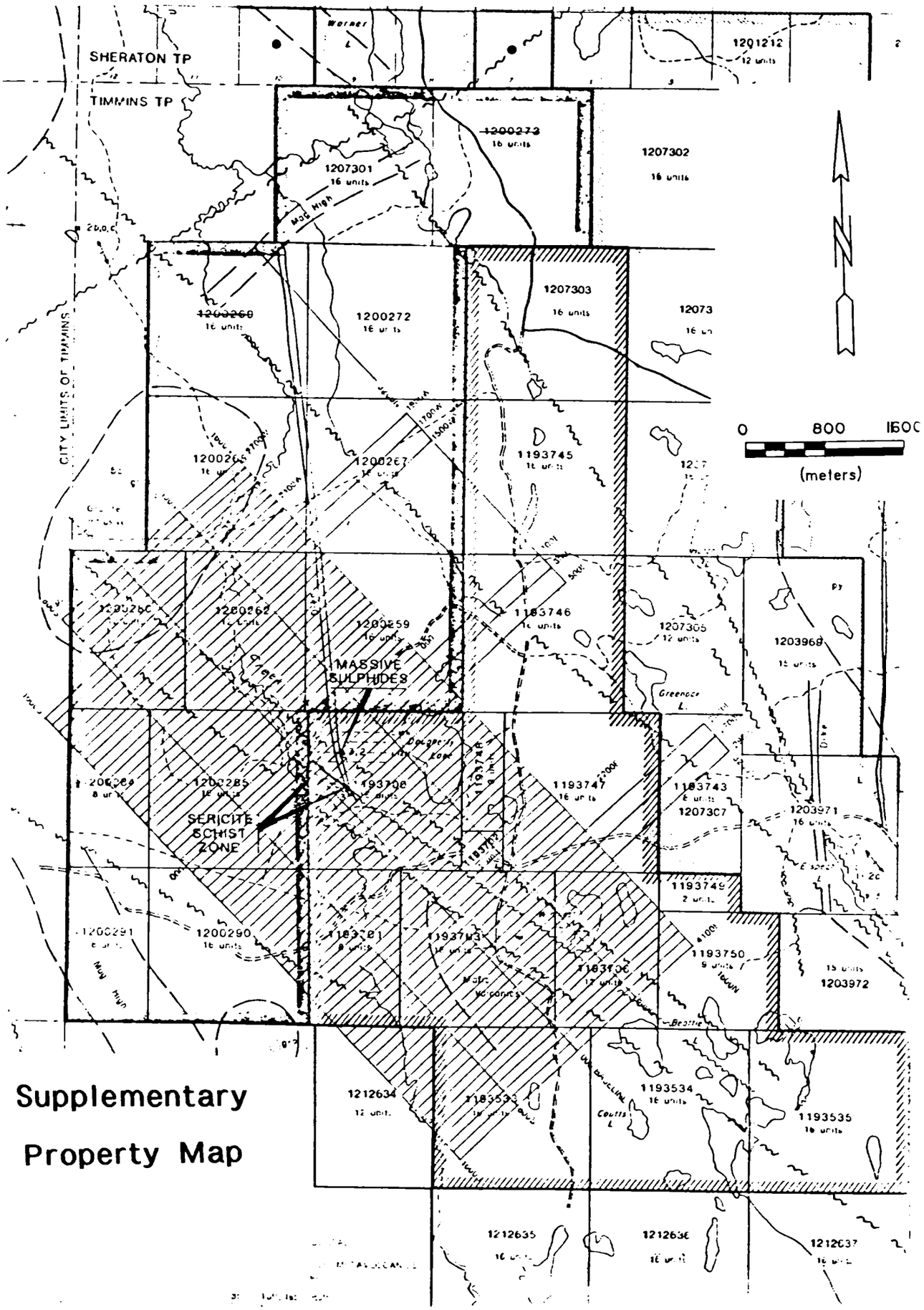
Figure 3.0



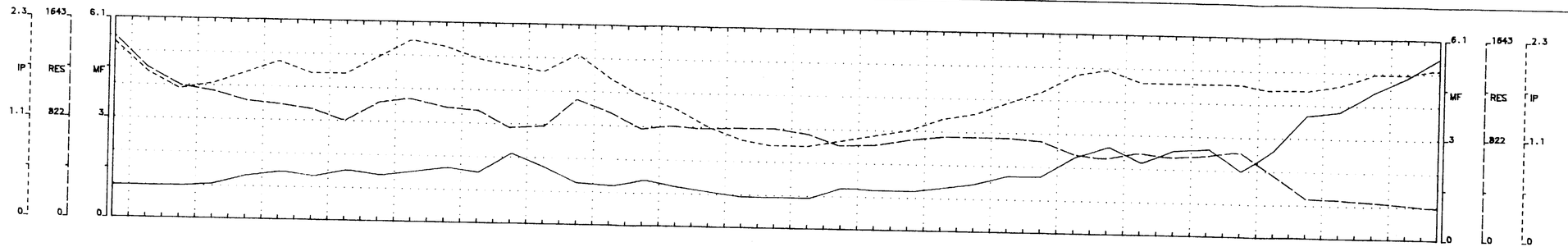
IP Section Plot Point

(with theoretical depths from n1 to n6)

NOTE: Pole Dipole Plot Points are at some locations.

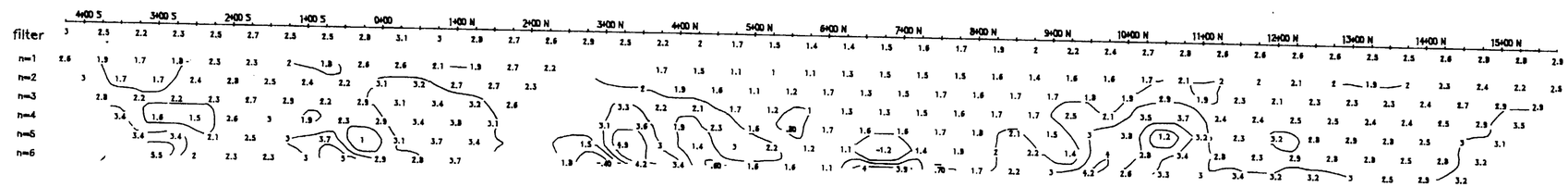


Supplementary Property Map



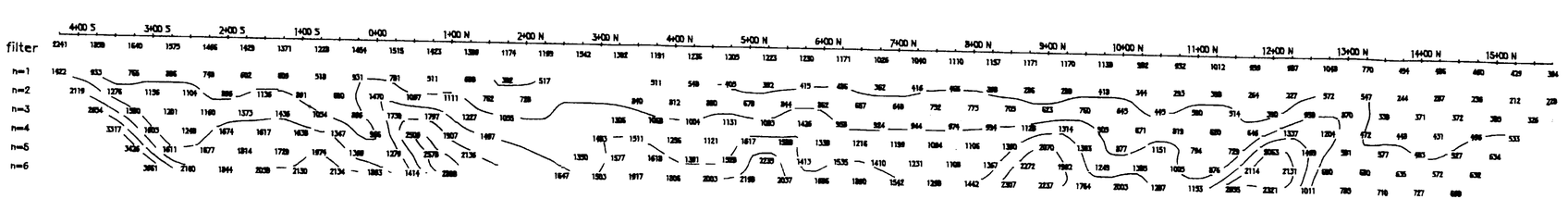
Topo

Interpretation



Chargeability
mV/V

Interpretation



Resistivity
ohm/meters

Topo

Interpretation

filter

Chargeability
mV/V

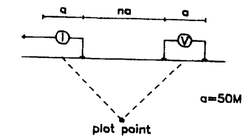
Interpretation

filter

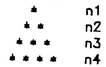
Resistivity
ohm/meters

L- 8+00W

Pole-Dipole Array



Filter



	Cont. Intervals	Profiles
Resistivity	; 500 ohm/meter	– – – – –
Chargeability	; 1.0 mV/V	– – – – –
Metal Factor	; 1 %	————

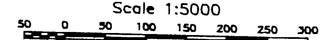
INSTRUMENTS

BRGM Elerec 6, Time Domain Receiver
1760mSec Total Intergration Time, 80mS Delay.
MT= (80+80+80+80+160+160+160+320+320+320) mSec
Huntec M2, 7.5Kw Transmitter
8Second Total Duty Cycle, 2Sec On/Off Time.

INTERPRETATION

- Low Effect
  Poorly Chargeable mV/V, IP effect
  Low Apparent Resistivity, rho
- Moderately Low Effect
- Moderately High Effect
- High Effect
  Good Chargeability mV/V, IP effect
  High Apparent Resistivity, rho

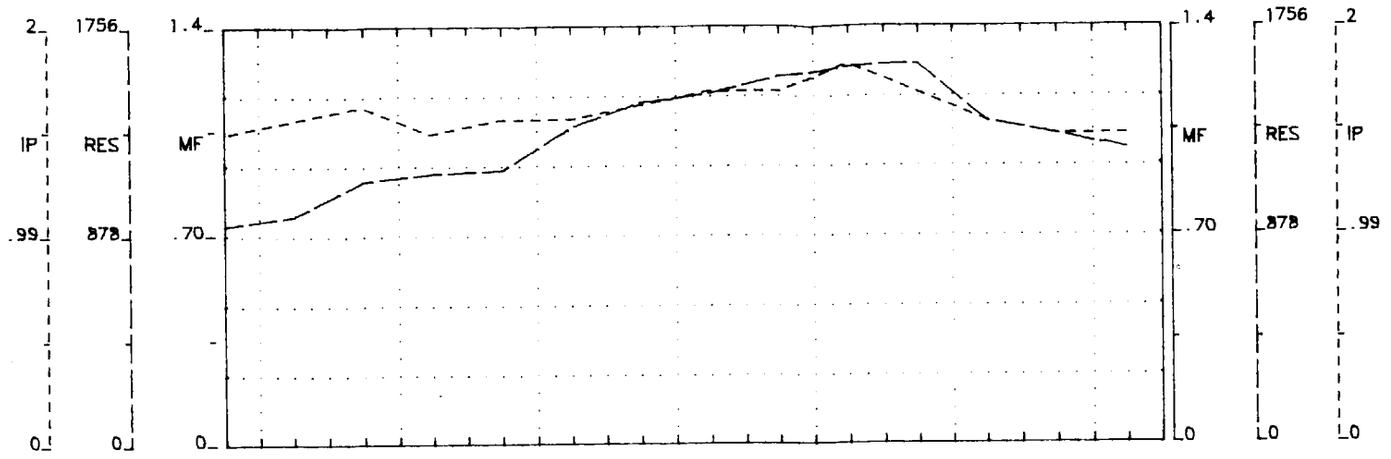
Scale 1:5000



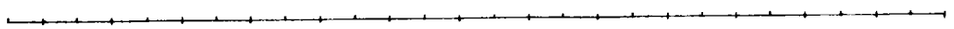
Royal Oak Mines Inc

Induced Polarization Survey
Timmins Grid
Timmins & Michie Twp's, NTS: 42- A/ SE

Porcupine Mining Division
M. C. Exploration Services Inc. Mar 1996.

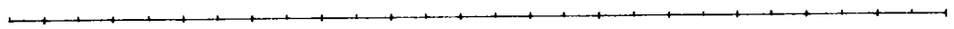


Topo



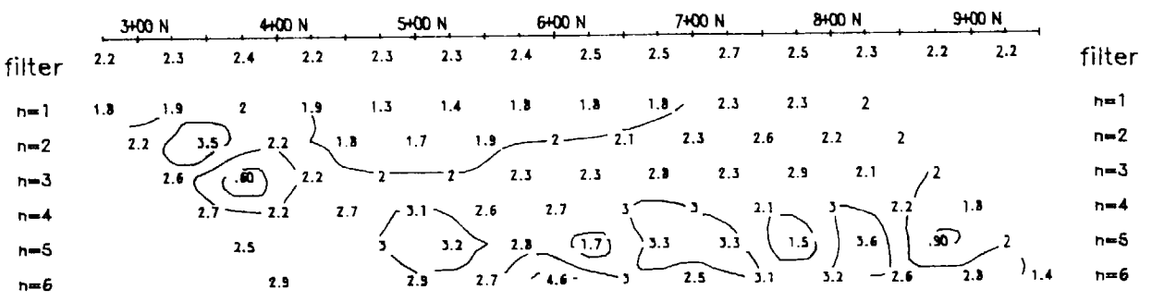
Topo

Interpretation



Interpretation

Chargeability
mV/V

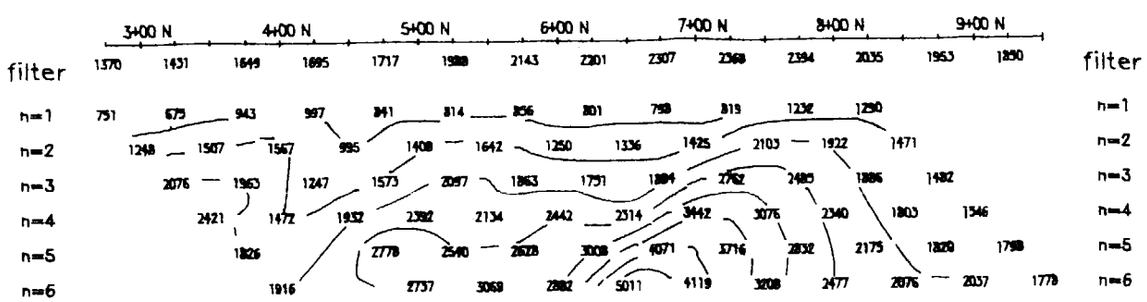


Chargeability
mV/V

Interpretation

Interpretation

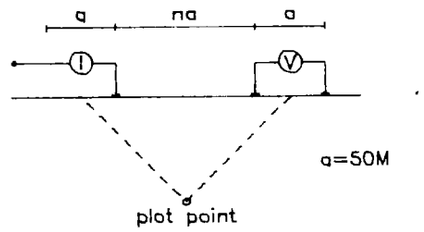
Resistivity
ohm/meters



Resistivity
ohm/meters

L- 7+00W

Pole-Dipole Array



Filter

* n1
* * n2
* * * n3
* * * * n4

	Cont. Intervals	Profiles
Resistivity ;	500 ohm/meter	-- -- -- --
Chargeability ;	1.0 mV/V	- - - - - -
Metal Factor ;	1 %	----------

INSTRUMENTS

BRGM Elerec 6, Time Domain Receiver
1760mSec Total Intergration Time, 80mS Delay.
MT= (80+80+80+80+160+160+160+320+320+320) mSec
Huntec M2, 7.5Kw Transmitter
8Second Total Duty Cycle, 2Sec On/Off Time.

INTERPRETATION

Low Effect
Poorly Chargeable mV/V, IP effect
Low Apparent Resistivity, rho

Moderately Low Effect

Moderately High Effect

High Effect
Good Chargeability mV/V, IP effect
High Apparent Resistivity, rho

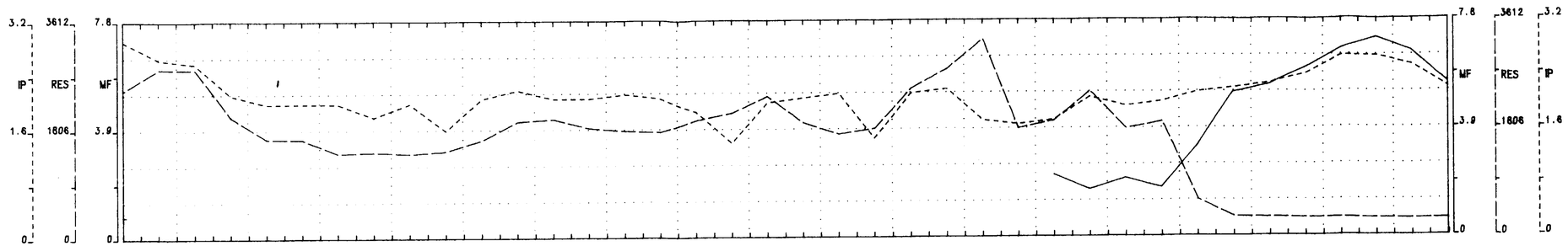
Scale 1:5000

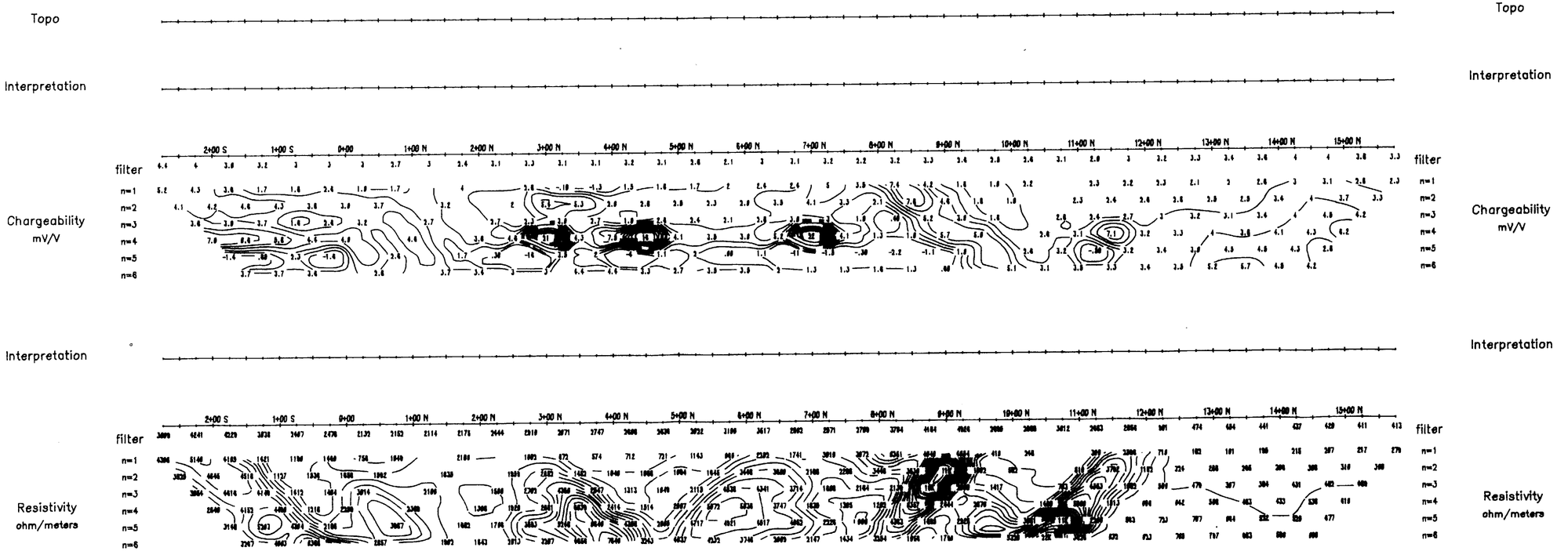
50 0 50 100 150 200 250 300
(meters)

East West Resource Inc

1995 IP Survey
Timmins-Michie Grid
Timmins & Michie Twp's, NTS: 42- A/ SE

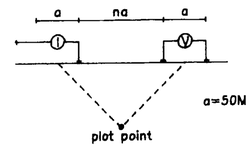
Porcupine Mining Division
M. C. Exploration Services Inc. Apr 1996.





L- 6+00W

Pole-Dipole Array



Filter

* n1
** n2
*** n3
**** n4

	Cont. Intervals	Profiles
Resistivity	500 ohm/meter	-- -- -- --
Chargeability	1.0 mV/V	- - - - - -
Metal Factor	1 %	----------

INSTRUMENTS

BRGM Elerec 6, Time Domain Receiver
1760mSec Total Intergration Time, 80mS Delay.
MT= (80+80+80+80+160+160+160+320+320+320) mSec
Huntec M2, 7.5Kw Transmitter
8Second Total Duty Cycle, 2Sec On/Off Time.

INTERPRETATION

Low Effect
Poorly Chargeable mV/V, IP effect
Low Apparent Resistivity, rho

Moderately Low Effect

Moderately High Effect

High Effect
Good Chargeability mV/V, IP effect
High Apparent Resistivity, rho

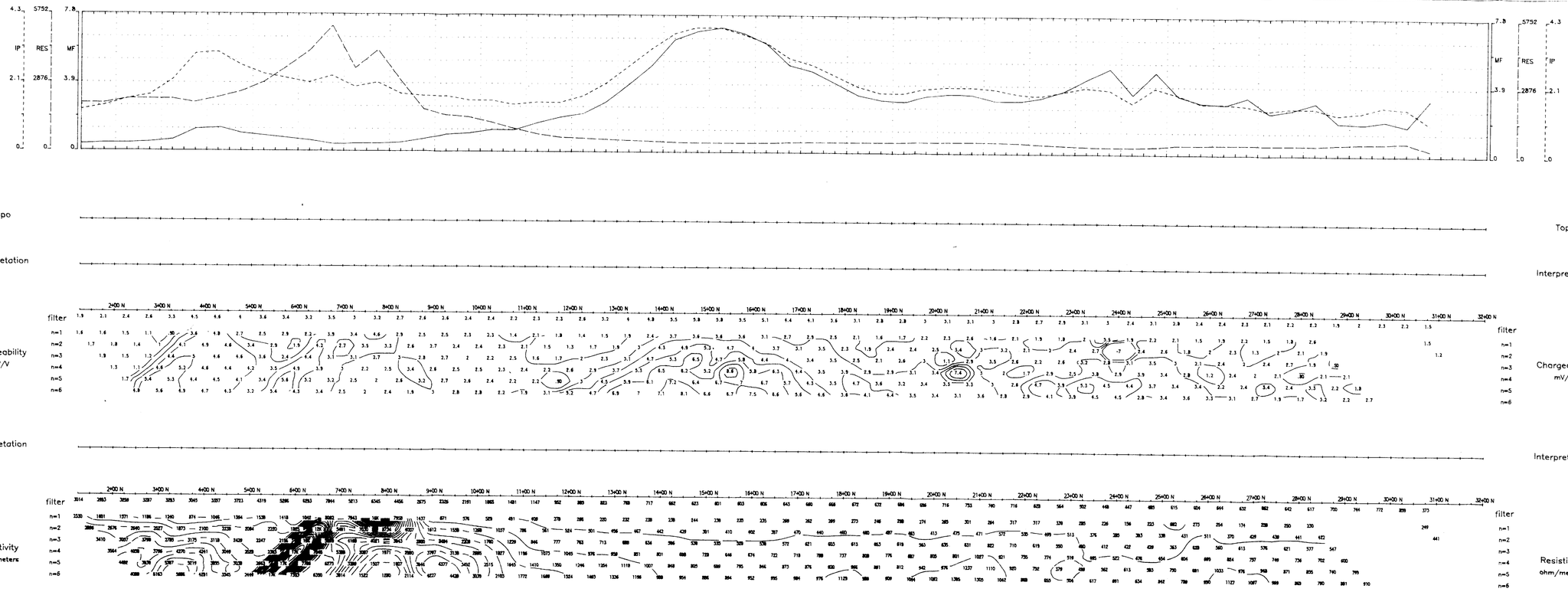
Scale 1:5000

50 0 50 100 150 200 250 300
(meters)

Royal Oak Mines Inc

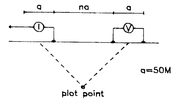
Induced Polarization Survey
Timmins Grid
Timmins & Michie Twp's, NTS: 42- A/ SE

Porcupine Mining Division
M. C. Exploration Services Inc. Mar 1996.



L- 5+00W

Pole-Dipole Array



Filter

	Cont. Intervals	Profiles
Resistivity	500 ohm/meter	– – – –
Chargeability	1.0 mV/V	– – – – –
Metal Factor	1 %	----------

INSTRUMENTS

BRGM Elerec 6, Time Domain Receiver
1760mSec Total Intergration Time, 80mS Delay.
MT= (80+80+80+80+160+160+160+320+320+320) mSec
Huntec M2, 7.5Kw Transmitter
8Second Total Duty Cycle, 2Sec On/Off Time.

INTERPRETATION

- Low Effect
  Poorly Chargeable mV/V, IP effect
  Low Apparent Resistivity, rho
- Moderately Low Effect
- Moderately High Effect
- High Effect
  Good Chargeability mV/V, IP effect
  High Apparent Resistivity, rho

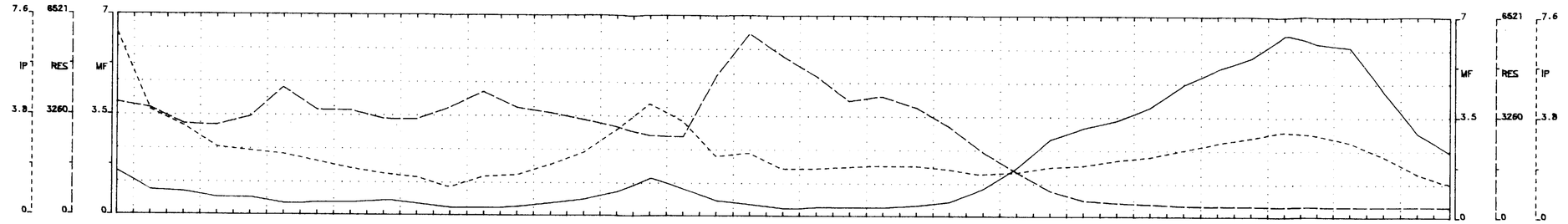
Scale 1:5000

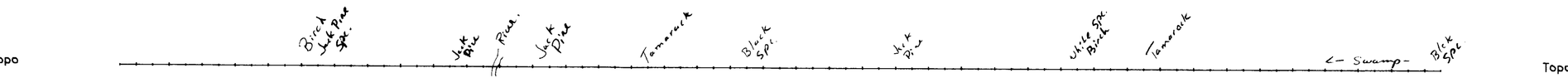
50 0 50 100 150 200 250 300
(meters)

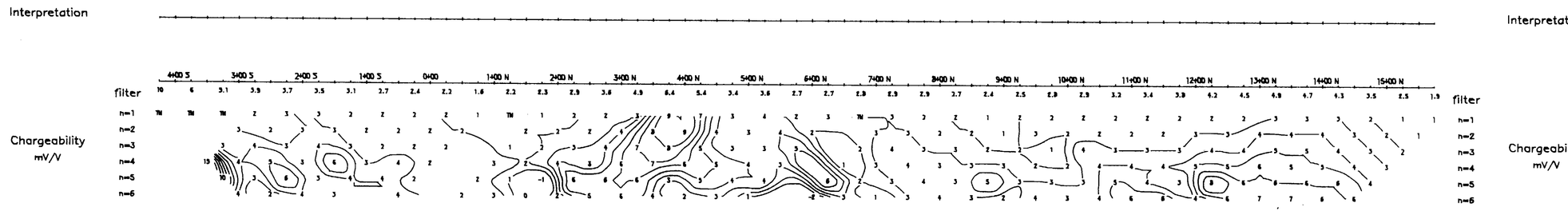
East West Resource Inc

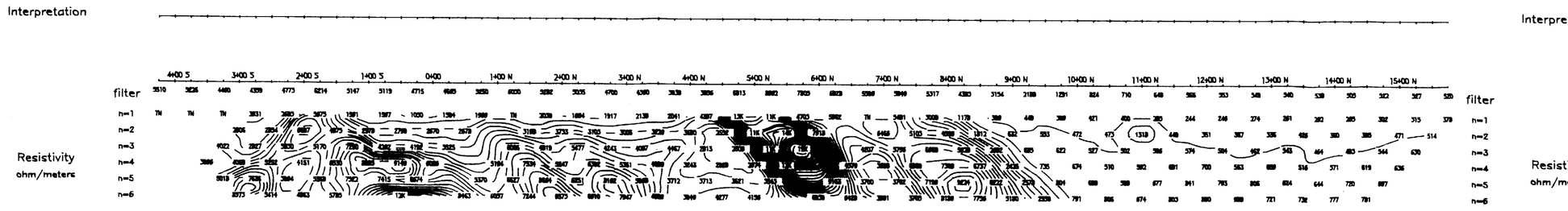
1995 IP Survey
Timmins-Michie Grid
Timmins & Michie Twp's, NTS: 42- A/ SE

Porcupine Mining Division
M. C. Exploration Services Inc. Apr 1996.



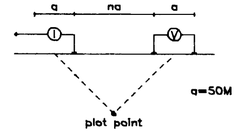






L- 400W

Pole-Dipole Array



Filter

* n1
** n2
*** n3
**** n4

	Cont. Intervals	Profiles
Resistivity ;	500 ohm/meter	— — — — —
Chargeability ;	1.0 mV/V	- - - - - -
Metal Factor ;	1 %	----------

INSTRUMENTS

BRGM Elerec 6, Time Domain Receiver
1760mSec Total Intergration Time, 80mS Delay.
MT= (80+80+80+80+160+160+160+320+320+320) mSec
Huntec M2, 7.5Kw Transmitter
8Second Total Duty Cycle, 2Sec On/Off Time.

INTERPRETATION

Low Effect
Poorly Chargeable mV/V, IP effect
Low Apparent Resistivity, rho

Moderately Low Effect

Moderately High Effect

High Effect
Good Chargeability mV/V, IP effect
High Apparent Resistivity, rho

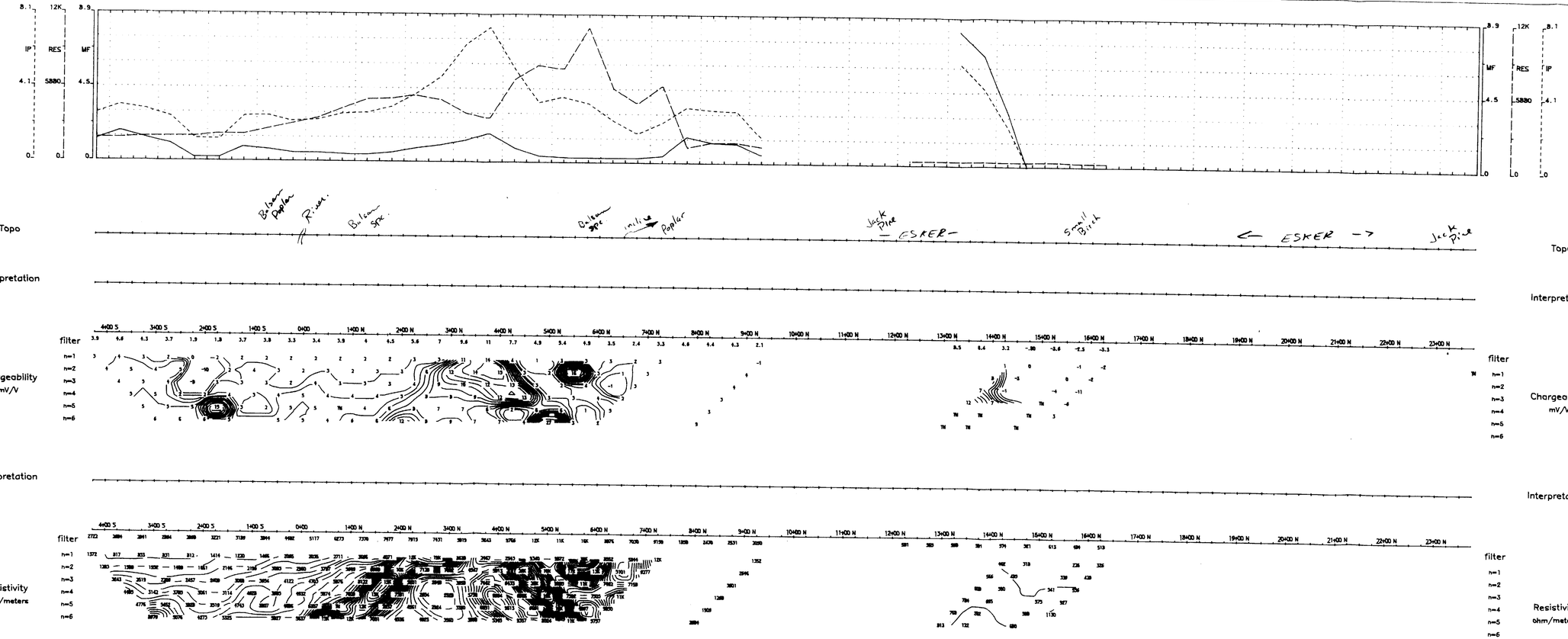
Scale 1:5000

50 0 50 100 150 200 250 300
(meters)

Royal Oak Mines Inc

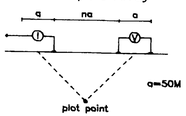
Induced Polarization Survey
Timmins Grid
Timmins & Michie Twp's, NTS: 42- A/ SE

Porcupine Mining Division
M. C. Exploration Services Inc. Mar 1996.



L- 200W

Pole-Dipole Array



Filter

n1
n2
n3
n4

	Cont. Intervals	Profiles
Resistivity	; 500 ohm/meter	
Chargeability	; 1.0 mV/V	
Metal Factor	; 1 %	

INSTRUMENTS

BRGM Elerec 6, Time Domain Receiver
1760mSec Total Intergration Time, 80mS Delay.
MT= (80+80+80+80+160+160+160+320+320+320) mSec
Huntec M2, 7.5Kw Transmitter
8Second Total Duty Cycle, 2Sec On/Off Time.

INTERPRETATION

- Low Effect
  Poorly Chargeable mV/V, IP effect
  Low Apparent Resistivity, rho
- Moderately Low Effect
- Moderately High Effect
- High Effect
  Good Chargeability mV/V, IP effect
  High Apparent Resistivity, rho

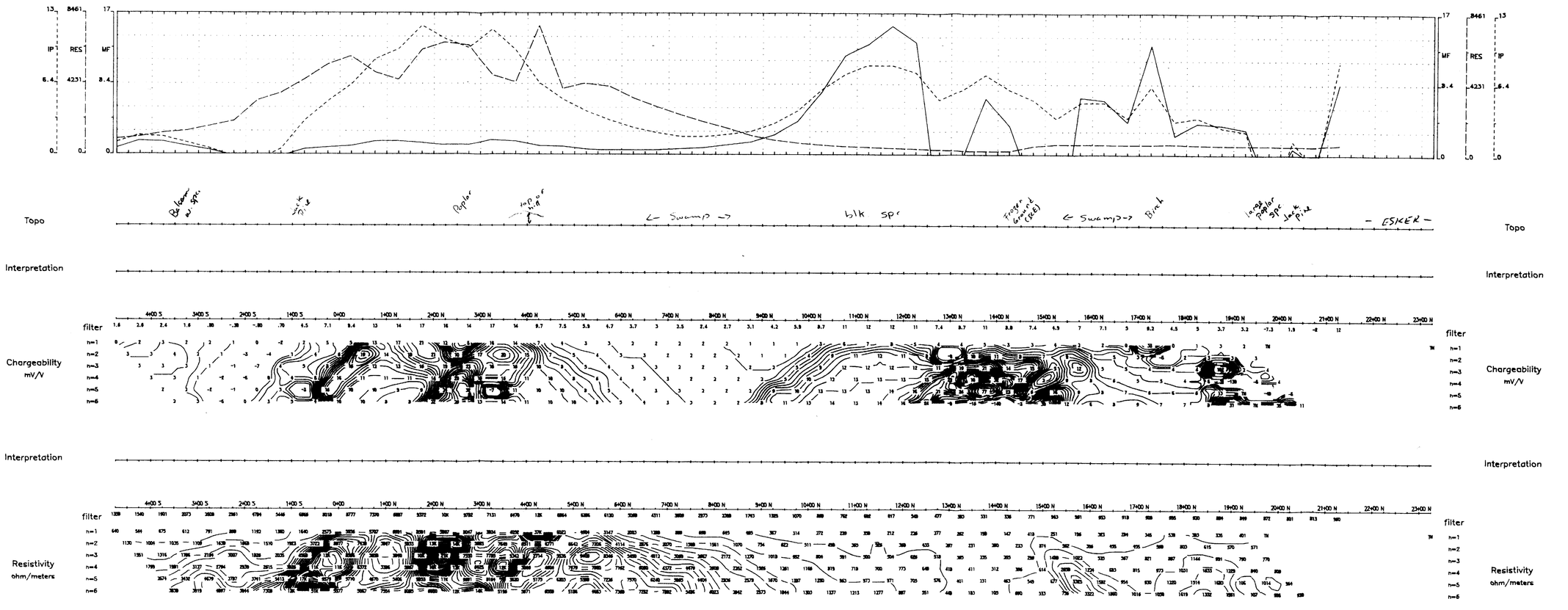
Scale 1:5000

50 0 50 100 150 200 250 300
(meters)

Royal Oak Mines Inc

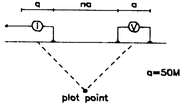
Induced Polarization Survey
Timmins Grid
Timmins & Michie Twp's, NTS: 42- A/ SE

Porcupine Mining Division
M. C. Exploration Services Inc. Mar 1996.



L- 0+00

Pole-Dipole Array



Filter

n1
n2
n3
n4

	Cont. Intervals	Profiles
Resistivity	500 ohm/meter	— — — —
Chargeability	1.0 mV/V	- - - - - -
Metal Factor	1 %	----------

INSTRUMENTS

BRGM Elerec 6, Time Domain Receiver
1760mSec Total Intergration Time, 80mS Delay.
MT= (80+80+80+80+160+160+160+320+320+320) mSec
Huntec M2, 7.5Kw Transmitter
8Second Total Duty Cycle, 2Sec On/Off Time.

INTERPRETATION

- Low Effect
  Poorly Chargeable mV/V, IP effect
  Low Apparent Resistivity, rho
- Moderately Low Effect
- Moderately High Effect
- High Effect
  Good Chargeability mV/V, IP effect
  High Apparent Resistivity, rho

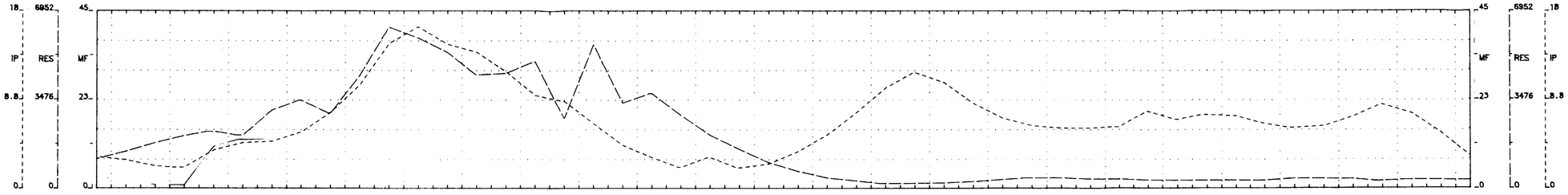
Scale 1:5000

50 0 50 100 150 200 250 300
(meters)

Royal Oak Mines Inc

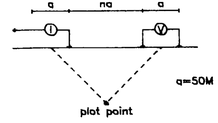
Induced Polarization Survey
Timmins Grid
Timmins & Michie Twp's, NTS: 42- A/ SE

Porcupine Mining Division
M. C. Exploration Services Inc. Mar 1996.



L- 2+00E

Pole-Dipole Array



Filter

*	n1
**	n2
***	n3
****	n4

	Cont. Intervals	Profiles
Resistivity	; 500 ohm/meter	
Chargeability	; 1.0 mV/V	
Metal Factor	; 1 %	

INSTRUMENTS

BRGM Elerec 6, Time Domain Receiver
1760mSec Total Intergration Time, 80mS Delay.
MT= (80+80+80+80+160+160+160+320+320+320) mSec
Huntec M2, 7.5Kw Transmitter
8Second Total Duty Cycle, 2Sec On/Off Time.

INTERPRETATION

- Low Effect
  Poorly Chargeable mV/V, IP effect
  Low Apparent Resistivity, rho
- Moderately Low Effect
- Moderately High Effect
- High Effect
  Good Chargeability mV/V, IP effect
  High Apparent Resistivity, rho

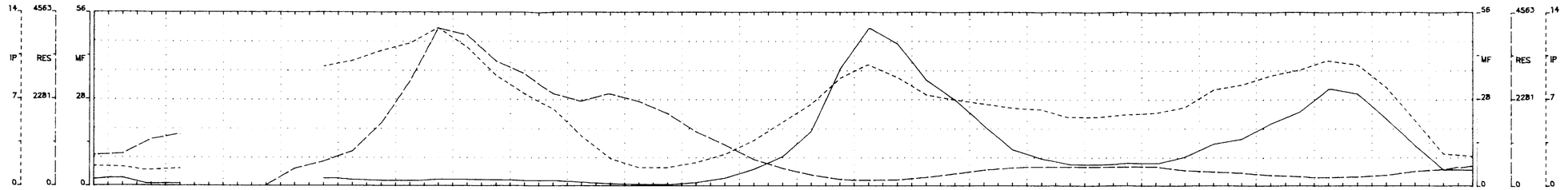
Scale 1:5000

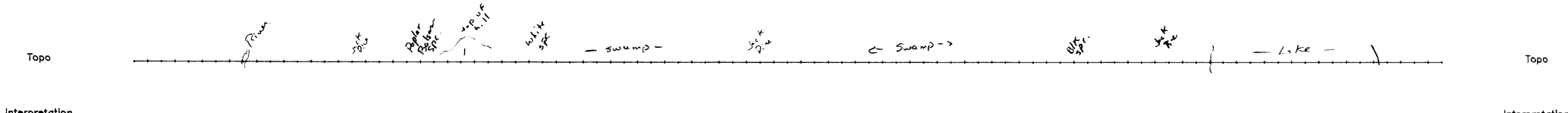
50 0 50 100 150 200 250 300
(meters)

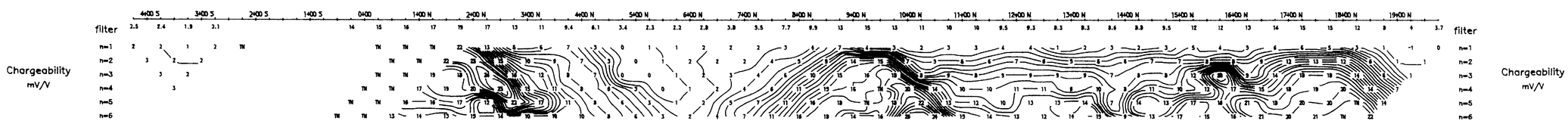
Royal Oak Mines Inc

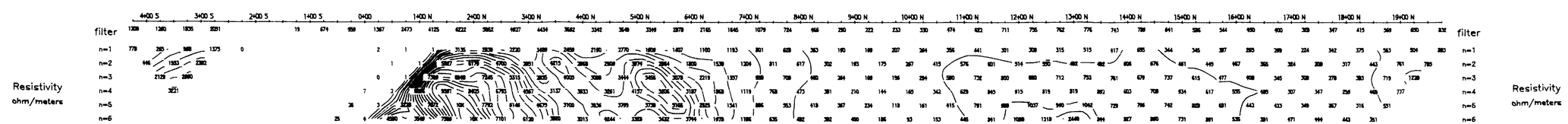
Induced Polarization Survey
Timmins Grid
Timmins & Michie Twp's, NTS: 42- A/ SE

Porcupine Mining Division
M. C. Exploration Services Inc. Mar 1996.



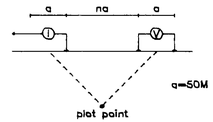






L- 3+00E

Pole-Dipole Array



Filter

n1
n2
n3
n4

	Cont. Intervals	Profiles
Resistivity ;	500 ohm/meter	— — — —
Chargeability ;	1.0 mV/V	- - - - - -
Metal Factor ;	1 %	----------

INSTRUMENTS

BRGM Elerec 6, Time Domain Receiver
1760mSec Total Intergration Time, 80mS Delay.
MT= (80+80+80+80+160+160+160+320+320+320) mSec
Huntec M2, 7.5Kw Transmitter
8Second Total Duty Cycle, 2Sec On/Off Time.

INTERPRETATION

- Low Effect
  Poorly Chargeable mV/V, IP effect
  Low Apparent Resistivity, rho
- Moderately Low Effect
- Moderately High Effect
- High Effect
  Good Chargeability mV/V, IP effect
  High Apparent Resistivity, rho

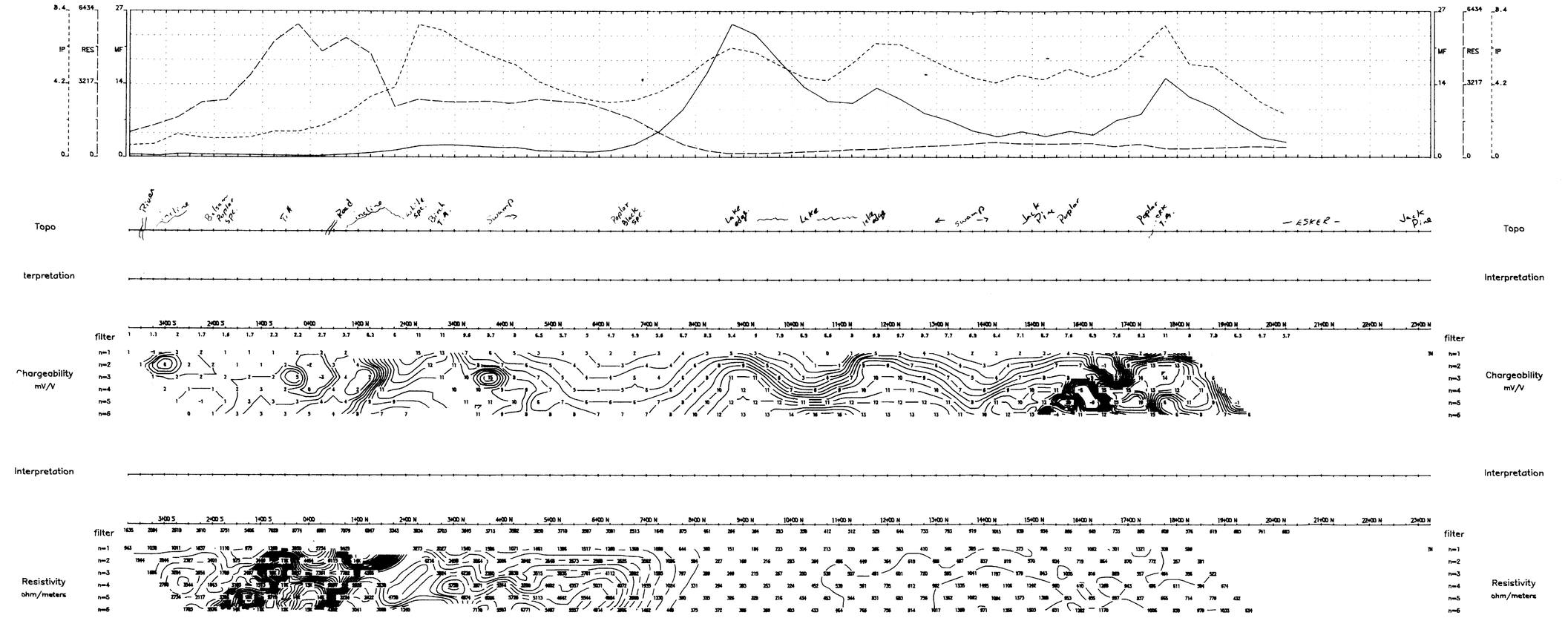
Scale 1:5000

50 0 50 100 150 200 250 300
(meters)

Royal Oak Mines Inc

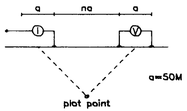
Induced Polarization Survey
Timmins Grid
Timmins & Michie Twp's, NTS: 42- A/ SE

Porcupine Mining Division
M. C. Exploration Services Inc. Mar 1996.



L- 4+00E

Pole-Dipole Array



Filter

n1
n2
n3
n4

	Cont. Intervals	Profiles
Resistivity	500 ohm/meter	
Chargeability	1.0 mV/V	
Metal Factor	1 %	

INSTRUMENTS

BRGM Elerec 6, Time Domain Receiver
1760mSec Total Intergration Time, 80mS Delay.
MT= (80+80+80+80+160+160+160+320+320+320) mSec
Huntec M2, 7.5Kw Transmitter
8Second Total Duty Cycle, 2Sec On/Off Time.

INTERPRETATION

- Low Effect
  Poorly Chargeable mV/V, IP effect
  Low Apparent Resistivity, rho
- Moderately Low Effect
- Moderately High Effect
- High Effect
  Good Chargeability mV/V, IP effect
  High Apparent Resistivity, rho

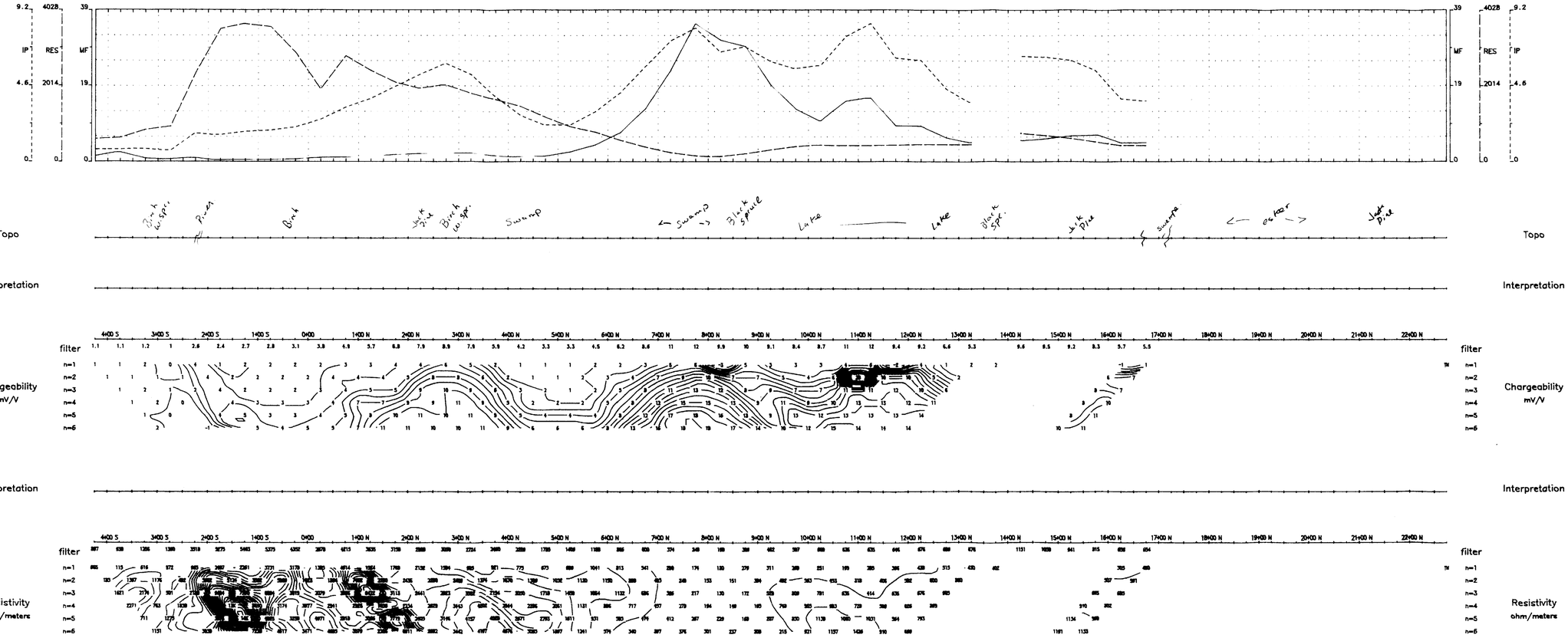
Scale 1:5000

50 0 50 100 150 200 250 300
(meters)

Royal Oak Mines Inc

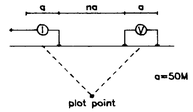
Induced Polarization Survey
Timmins Grid
Timmins & Michie Twp's, NTS: 42- A/ SE

Porcupine Mining Division
M. C. Exploration Services Inc. Mar 1996.



L- 5+00E

Pole-Dipole Array



Filter

* n1
** n2
*** n3
**** n4

	Cont. Intervals	Profiles
Resistivity ;	500 ohm/meter	— — — —
Chargeability ;	1.0 mV/V	- - - - - -
Metal Factor ;	1 %	----------

INSTRUMENTS

BRGM Elerec 6, Time Domain Receiver
1760mSec Total Intergration Time, 80mS Delay.
MT= (80+80+80+80+160+160+160+320+320+320) mSec
Huntec M2, 7.5Kw Transmitter
8Second Total Duty Cycle, 2Sec On/Off Time.

INTERPRETATION

- Low Effect
  Poorly Chargeable mV/V, IP effect
  Low Apparent Resistivity, rho
- Moderately Low Effect
- Moderately High Effect
- High Effect
  Good Chargeability mV/V, IP effect
  High Apparent Resistivity, rho

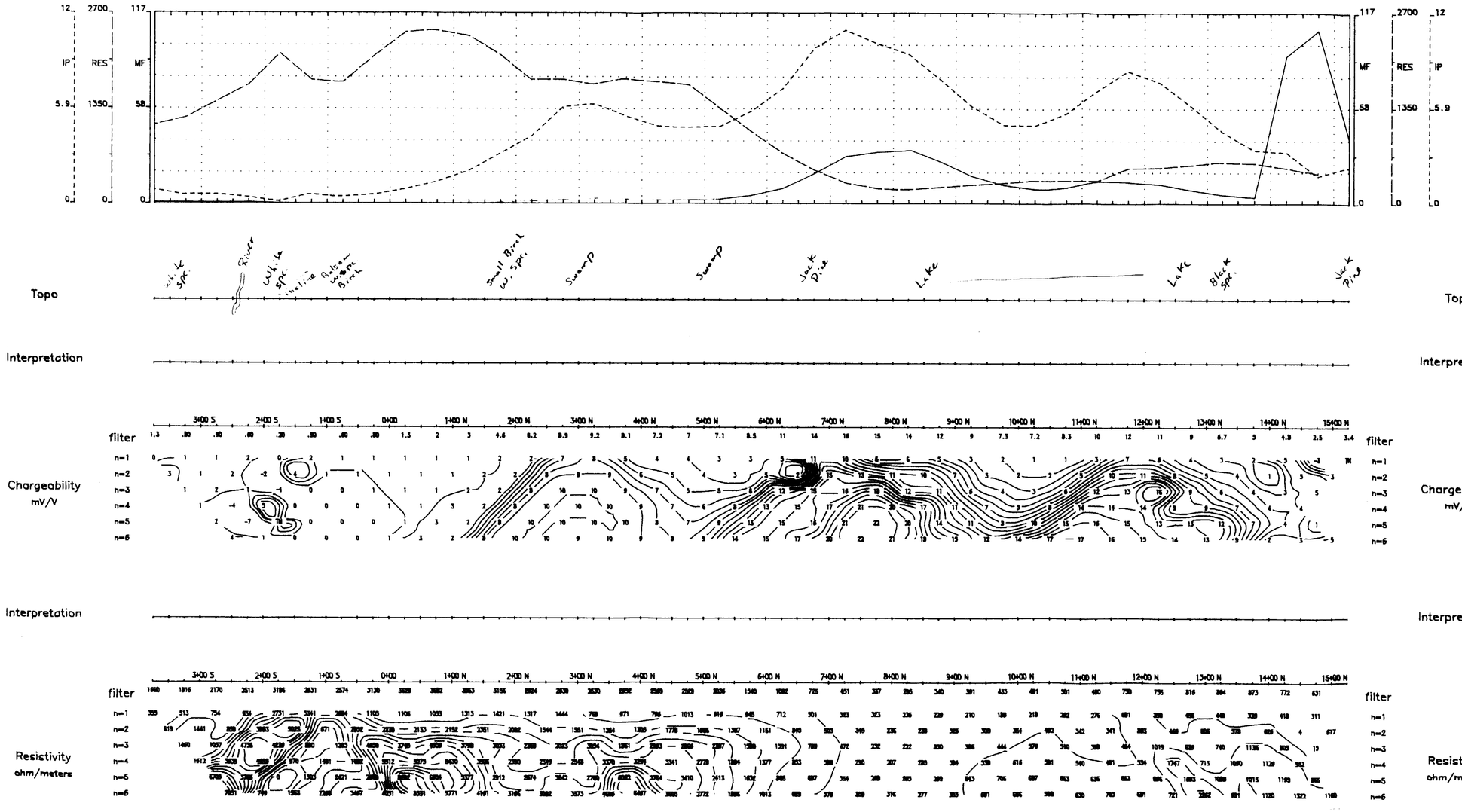
Scale 1:5000

50 0 50 100 150 200 250 300
(meters)

Royal Oak Mines Inc

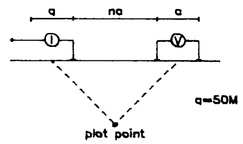
Induced Polarization Survey
Timmins Grid
Timmins & Michie Twp's, NTS: 42- A/ SE

Porcupine Mining Division
M. C. Exploration Services Inc. Mar 1996.



L- 6+00E

Pole-Dipole Array



Filter

* n1
** n2
*** n3
**** n4

	Cont. Intervals	Profiles
Resistivity	500 ohm/meter	– – – – –
Chargeability	1.0 mV/V	– – – – –
Metal Factor	1 %	----------

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Royal Oak Mines Inc

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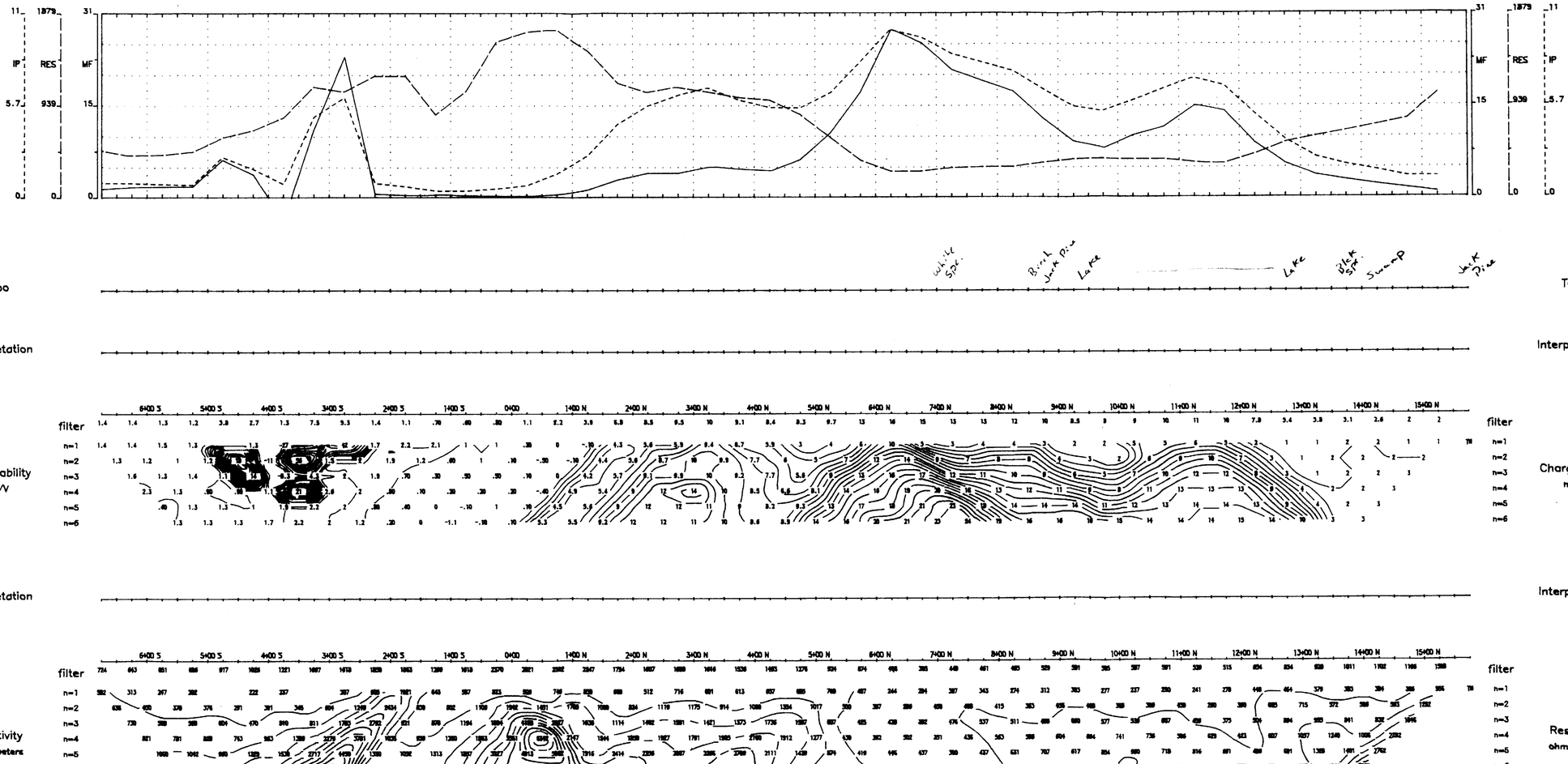
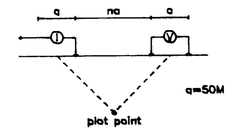


L- 7+00E

Pole-Dipole Array



Filter

- n1
- n2
- n3
- n4

	Cont. Intervals	Profiles
Resistivity	500 ohm/meter	
Chargeability	1.0 mV/V	
Metal Factor	1 %	

INSTRUMENTS

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(meters)

Royal Oak Mines Inc

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Timmins Grid
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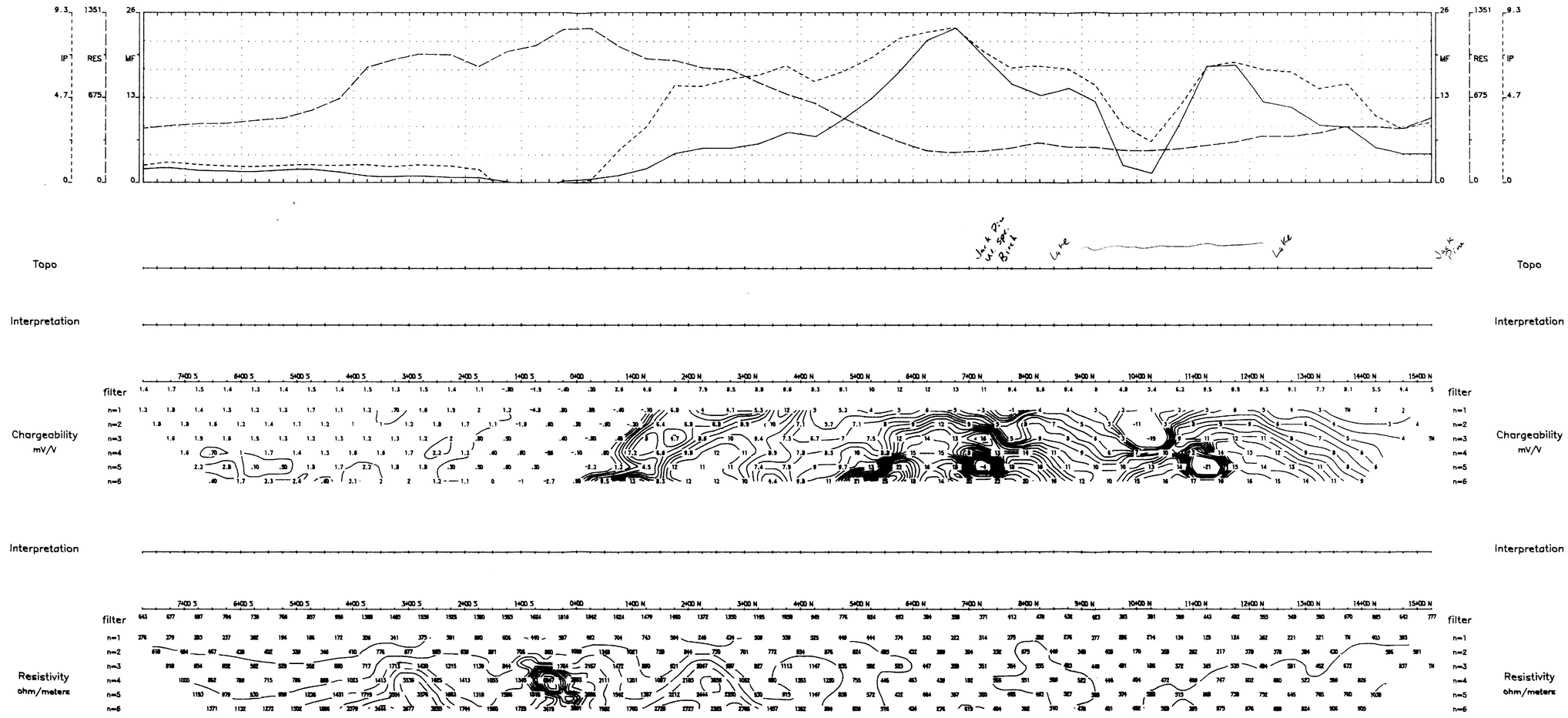
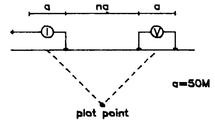
Porcupine Mining Division
M. C. Exploration Services Inc. Mar 1996.



L- 8+00E

Pole-Dipole Array



Filter

n1
n2
n3
n4

	Cont. Intervals	Profiles
Resistivity	500 ohm/meter	
Chargeability	1.0 mV/V	
Metal Factor	1 %	

INSTRUMENTS

BRGM Elerec 6, Time Domain Receiver
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Scale 1:5000

50 0 50 100 150 200 250 300
(meters)

Royal Oak Mines Inc

Induced Polarization Survey
Timmins Grid
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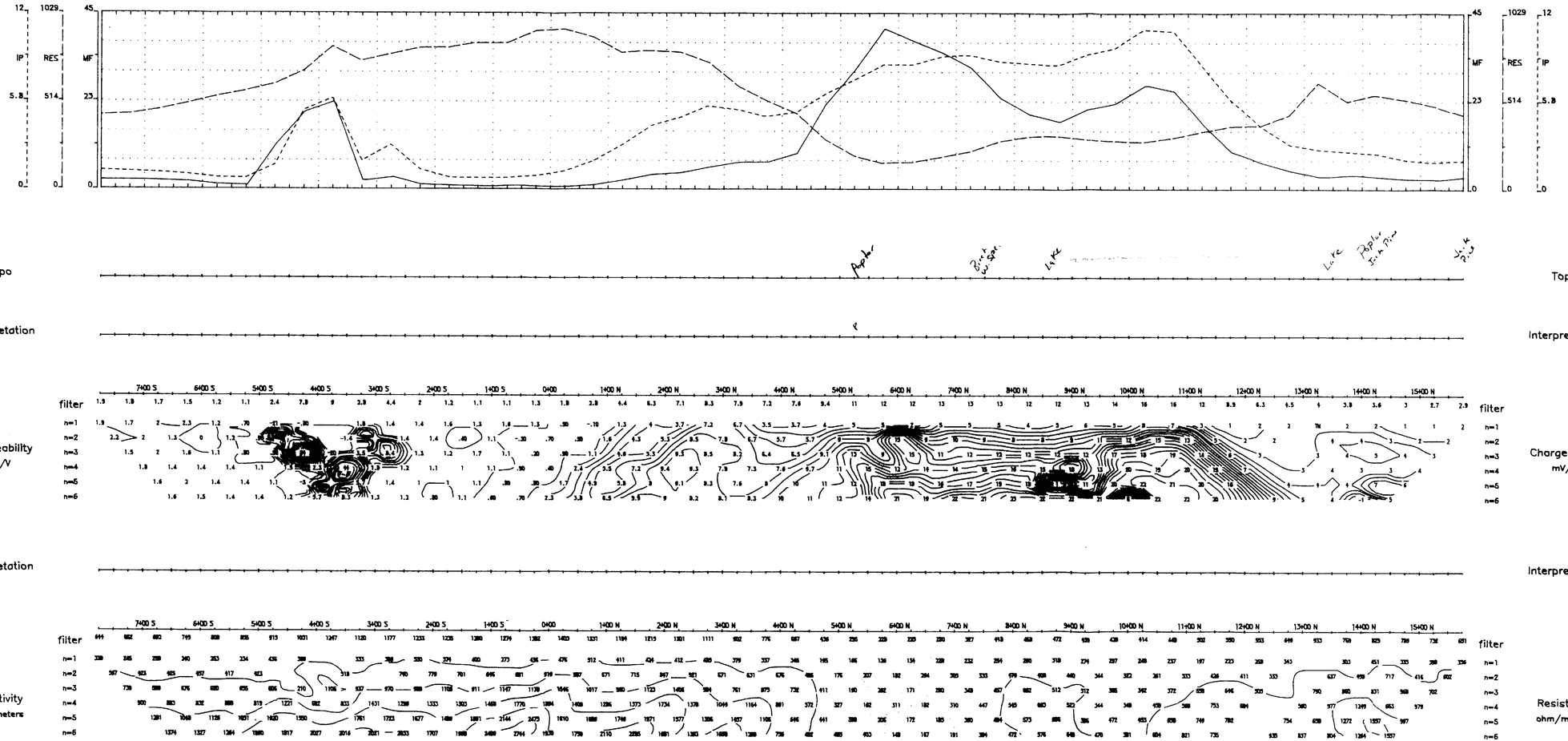
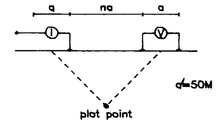
Porcupine Mining Division
M. C. Exploration Services Inc. Mar 1996.



L- 9+00E

Pole-Dipole Array



Filter

n1
n2
n3
n4

	Cont. Intervals	Profiles
Resistivity	500 ohm/meter	
Chargeability	1.0 mV/V	
Metal Factor	1 %	

INSTRUMENTS

BRGM Elerec 6, Time Domain Receiver
1760mSec Total Intergration Time, 80mS Delay.
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Moderately High Effect

High Effect
Good Chargeability mV/V, IP effect
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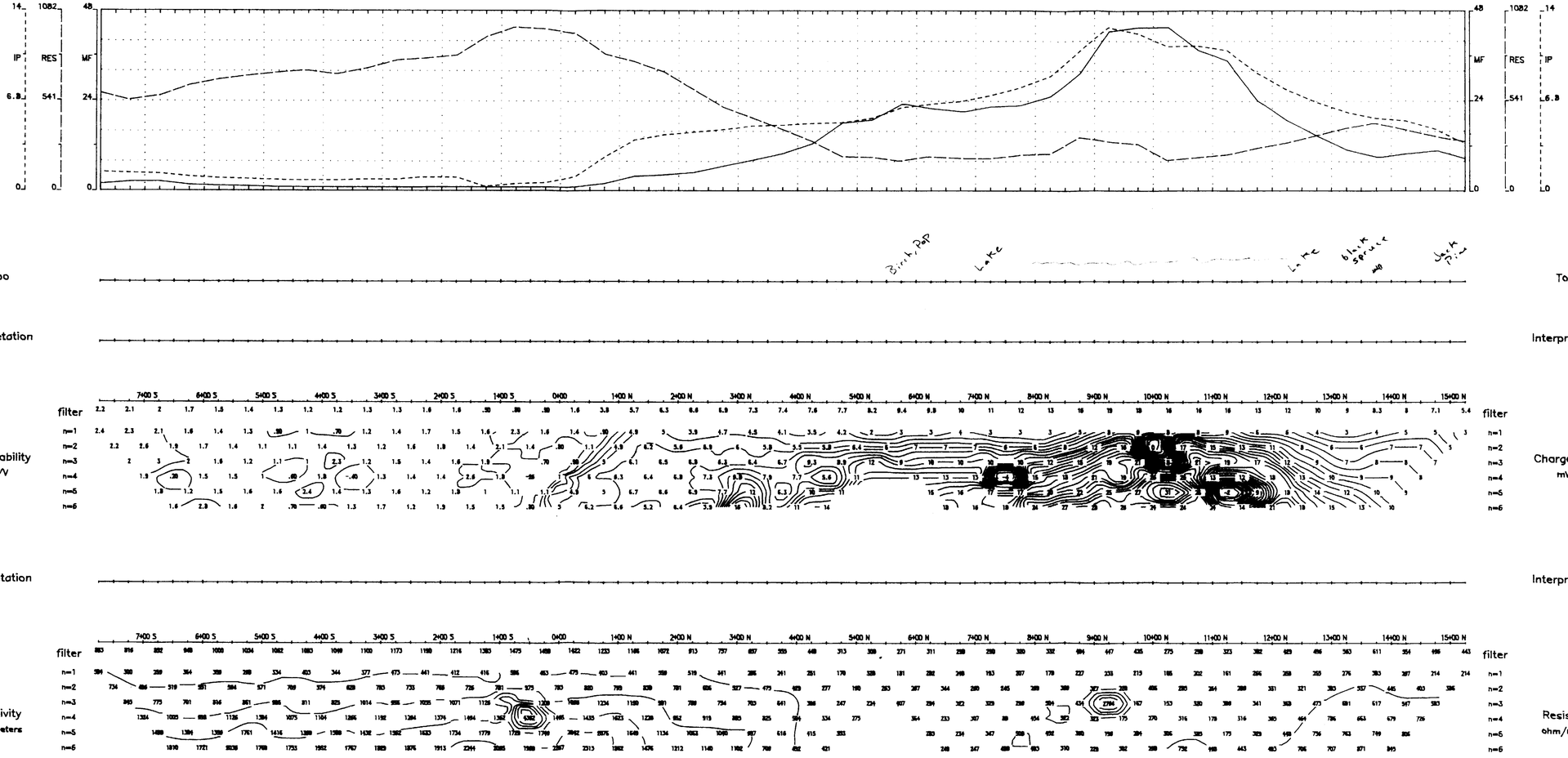
50 0 50 100 150 200 250 300
(meters)

Royal Oak Mines Inc

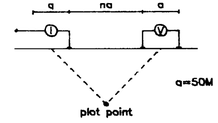
Induced Polarization Survey
Timmins Grid
Timmins & Michie Twp's, NTS: 42- A/ SE

Porcupine Mining Division
M. C. Exploration Services Inc. Mar 1996.



L-10+00E

Pole-Dipole Array



Filter

* n1
** n2
*** n3
**** n4

	Cont. Intervals	Profiles
Resistivity	; 500 ohm/meter	- - - - - -
Chargeability	; 1.0 mV/V	- - - - - -
Metal Factor	; 1 %	----------

INSTRUMENTS

BRGM Elerec 6, Time Domain Receiver
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(meters)

Royal Oak Mines Inc

Induced Polarization Survey
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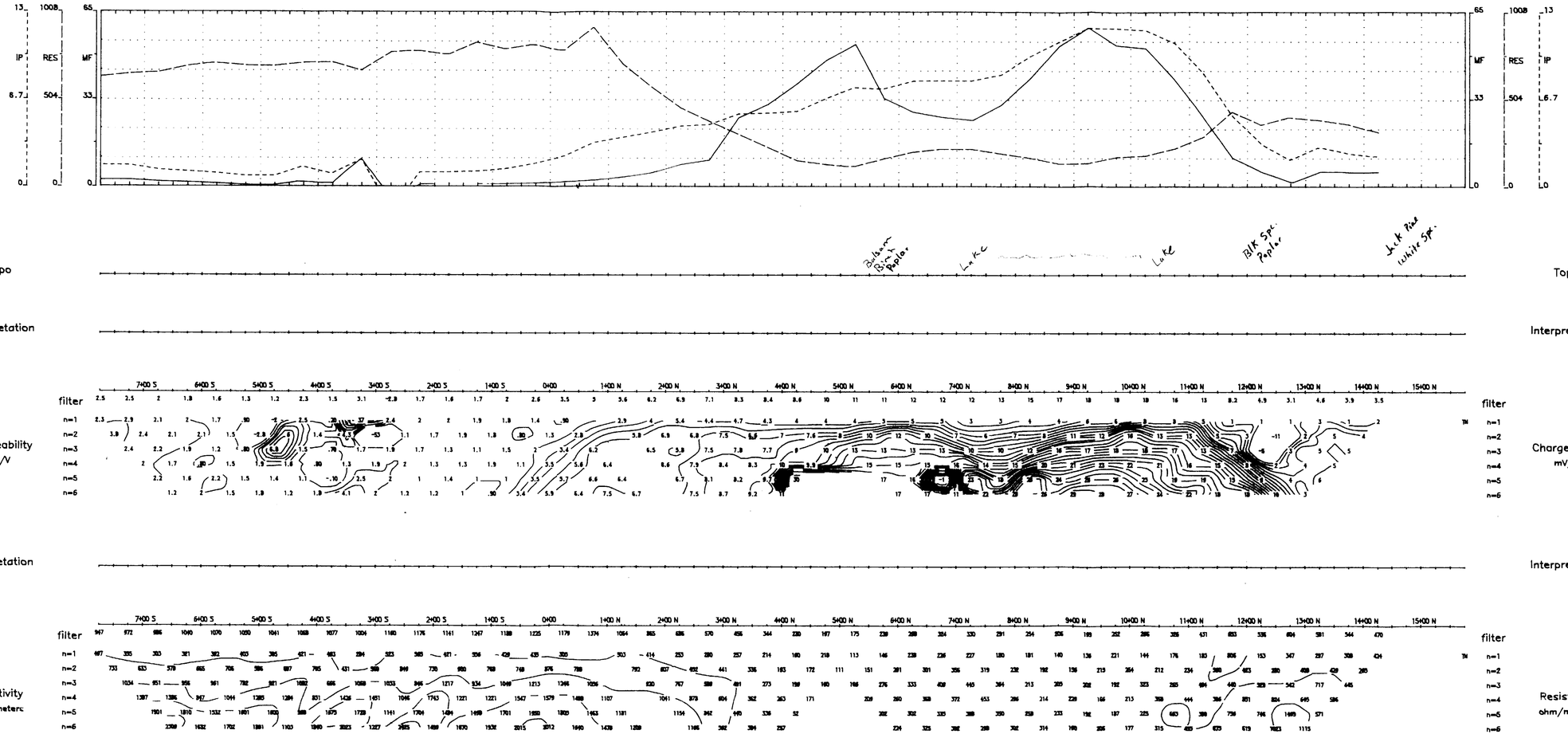
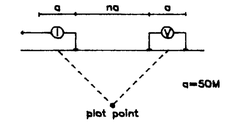
Timmins & Michie Twp's, NTS: 42- A/ SE

Porcupine Mining Division
M. C. Exploration Services Inc. Mar 1996.



L-11+00E

Pole-Dipole Array



Filter

* n1
** n2
*** n3
**** n4

	Cont. Intervals	Profiles
Resistivity ;	500 ohm/meter	- - - - - -
Chargeability ;	1.0 mV/V	- - - - - -
Metal Factor ;	1 %	----------

INSTRUMENTS

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(meters)

Royal Oak Mines Inc

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Timmins Grid
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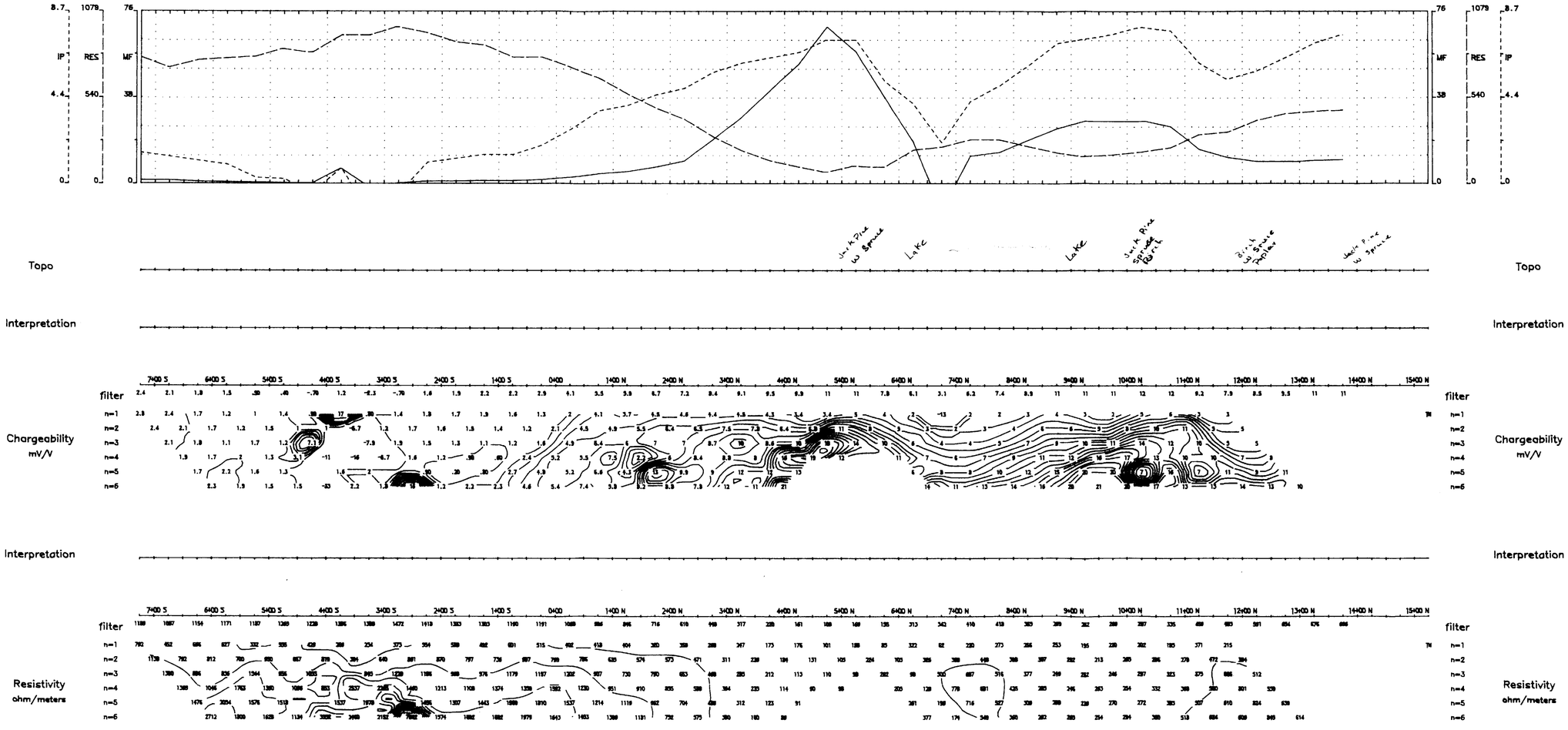
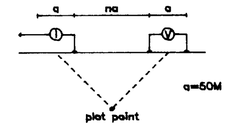
Porcupine Mining Division
M. C. Exploration Services Inc. Mar 1996.



L-12+00E

Pole-Dipole Array



Filter

n1
n2
n3
n4

	Cont. Intervals	Profiles
Resistivity	; 500 ohm/meter	
Chargeability	; 1.0 mV/V	
Metal Factor	; 1 %	

INSTRUMENTS

BRGM Elerec 6, Time Domain Receiver
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Scale 1:5000

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(meters)

Royal Oak Mines Inc

Induced Polarization Survey
Timmins Grid
Timmins & Michie Twp's, NTS: 42- A/ SE

Porcupine Mining Division
M. C. Exploration Services Inc. Mar 1996.

Ministry of Northern Development and Mines
Ontario

Report of Work Conducted After Recording Claim

Mining Act

Transaction Number
W9660.00369

Personal information collected on this form is obtained under the authority of the Mining Act. This information will be used for correspondence. Questions abc this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, Fourth Floor, 159 Cedar Stre Sudbury, Ontario, P3E 6A5, telephone (705) 670-7264.

2.16671

Instructions:
- Please type or print and submit in duplicate.
- Refer to the Mining Act and Regulations
  Recorder.
- A separate copy of this form must be co
- Technical reports and maps must accom
- A sketch, showing the claims the work is

42A07SE0007 2 16671 TIMMINS

900

Recorded Holder(s) ROYAL OAK MINES INC		Client No. 136226
Address P.O. Bag 2010 TIMMINS Ontario		Telephone No. 705-360-1141
Mining Division Porcupine	Township/Area Timmins - Michie Townships	M or G Plan No. M.314 - G3960
Dates Work Performed From: Feb 20 1996	To: May 10 1996	

Work Performed (Check One Work Group Only)

	Work Group	Type
✓	Geotechnical Survey	Geophysical Survey (Induced Polarization)
	Physical Work, Including Drilling	
	Rehabilitation	
	Other Authorized Work	
	Assays	
	Assignment from Reserve	

RECEIVED
JUL 10 1996
MINING LANDS BRANCH

Total Assessment Work Claimed on the Attached Statement of Costs $ ~~32,238~~ 30,399 pd.

Note: The Minister may reject for assessment work credit all or part of the assessment work submitted if the recorded holder cannot verify expenditures claimed in the statement of costs within 30 days of a request for verification.

Persons and Survey Company Who Performed the Work (Give Name and Address of Author of Report)

Name	Address
M.C. Exploration Services Inc	P.O. Box 362 Porcupine Ont. P0N 1C0
Peter Harvey (Auther)	c/o Royal Oak Mines Inc. (address above)

(attach a schedule if necessary)

Certification of Beneficial Interest • See Note No. 1 on reverse side

I certify that at the time the work was performed, the claims covered in this work report were recorded in the current holder's name or held under a beneficial interest by the current recorded holder.	Date May 28/96	Recorded Holder or Agent (Signature) Peter Harvey

Certification of Work Report

I certify that I have a personal knowledge of the facts set forth in this Work report, having performed the work or witnessed same during and/or after its completion and annexed report is true.

Name and Address of Person Certifying
Peter Harvey c/o Royal Oak Mines Inc. - address above

Telepone No. 360-1141	Date May 28 '96	Certified By (Signature) Peter Harvey

For Office Use Only

Total Value Cr. Recorded 30,399	Date Recorded	Mining Recorder Not Dated Gary White	Received Stamp MAY 28 1996
	Deemed Approval Date May. 25/96	Date Approved	
	Date Notice for Amendments Sent		

Number for Applying Reserve	Claim Number (see Note 2)	of Claim Units	Assessment Work Done on this Claim	Value Applied to this Claim	Value Assigned from this Claim	Reserve: Work to be Claimed at a Future Date
	1200262	12	1294		1294	--
	1200259	16	9273		9273	
	1193746	16	2915		2915	
	1200285	16	3632		3632	
	1193700	16	11146 PH ~~12985~~		11146 PH ~~12171~~	~~814~~ PH
	1193748	3	2139		2139	
	1200290	16	~~$~~	PH 6400		
	1193706	12		435 ~~1150~~		
	1193749	2		764		
	1193750	9		3600		
	1193533	16		6400		
	1193534	16		6400		
	1193535	16		6400		
	13		30,359 PH	30,359 PH	30,359 PH	
			~~32,238~~ PH	~~31,424~~	~~31,424~~	~~814~~ PH
	Total Number of Claims		Total Value Work Done	Total Value Work Applied	Total Assigned From	Total Reserve

41 (03/91)

RECEIVED
MAY 10 1996
MINING BRANCH

Credits you are claiming in this report may be cut back. In order to minimize the adverse effects of such deletions, please indicate from which claims you wish to priorize the deletion of credits. Please mark (✓) one of the following:

1. ☐ Credits are to be cut back starting with the claim listed last, working backwards.
2. ☐ Credits are to be cut back equally over all claims contained in this report of work.
3. ☐ Credits are to be cut back as priorized on the attached appendix.

In the event that you have not specified your choice of priority, option one will be implemented.

MAY 1996

Note 1: Examples of beneficial interest are unrecorded transfers, option agreements, memorandum of agreements, etc., with respe to the mining claims.

Note 2: If work has been performed on patented or leased land, please complete the following:

I certify that the recorded holder had a beneficial interest in the pat or leased land at the time the work was performed.

Signature

Date

Ministry of Northern Development and Mines

Ministère du Développement du Nord et des mines

Ontario

Statement of Costs for Assessment Credit

État des coûts aux fins du crédit d'évaluation

Mining Act/Loi sur les mines

Transaction No./N° de transaction: W9660.00369

2.16971

Personal information collected on this form is obtained under the authority of the **Mining Act**. This information will be used to maintain a record and ongoing status of the mining claim(s). Questions about this collection should be directed to the Provincial Manager, Mining Lands, Ministry of Northern Development and Mines, 4th Floor, 159 Cedar Street, Sudbury, Ontario P3E 6A5, telephone (705) 670-7264.

Les renseignements personnels contenus dans la présente formule sont recueillis en vertu de la **Loi sur les mines** et serviront à tenir à jour un registre des concessions minières. Adresser toute quesiton sur la collece de ces renseignements au chef provincial des terrains miniers, ministère du Développement du Nord et des Mines, 159, rue Cedar, 4e étage, Sudbury (Ontario) P3E 6A5, téléphone (705) 670-7264.

1. Direct Costs/Coûts directs

Type	Description	Amount Montant	Totals Total global
Wages Salaires	Labour Main-d'oeuvre		
	Field Supervision Supervision sur le terrain		
Contractor's and Consultant's Fees Droits de l'entrepreneur et de l'expert-conseil	Type M.C. Exploration	30,399	
			30,399
Supplies Used Fournitures utilisées	Type		
Equipment Rental Location de matériel	Type		
		Total Direct Costs Total des coûts directs	30,399

2. Indirect Costs/Coûts indirects

** Note: When claiming Rehabilitation work Indirect costs are not allowable as assessment work.
Pour le remboursement des travaux de réhabilitation, les coûts indirects ne sont pas admissibles en tant que travaux d'évaluation.

Type	Description	Amount Montant	Totals Total global
Transportation Transport	Type ~~Driving~~	~~1839~~	
			~~1839~~
Food and Lodging Nourriture et hébergement			
Mobilization and Demobilization Mobilisation et démobilisation			
		Sub Total of Indirect Costs Total partiel des coûts indirects	
		Amount Allowable (not greater than 20% of Direct Costs) Montant admissible (n'excédant pas 20 % des coûts directs)	~~1839~~
		Total Value of Assessment Credit (Total of Direct and Allowable Indirect costs) / **Valeur totale du crédit d'évaluation (Total des coûts directs et indirects admissibles**	~~32,238~~ 30,399 PH

RECEIVED
JUL 10 1996
MINING LANDS BRANCH

Note: The recorded holder will be required to verify expenditures claimed in this statement of costs within 30 days of a request for verification. If verification is not made, the Minister may reject for assessment work all or part of the assessment work submitted.

Note : Le titulaire enregistré sera tenu de vérifier les dépenses demandées dans le présent état des coûts dans les 30 jours suivant une demande à cet effet. Si la vérification n'est pas effectuée, le ministre peut rejeter tout ou une partie des travaux d'évaluation présentés.

Filing Discounts

1. Work filed within two years of completion is claimed at 100% of the above Total Value of Assessment Credit.
2. Work filed three, four or five years after completion is claimed at 50% of the above Total Value of Assessment Credit. See calculations below:

Total Value of Assessment Credit	Total Assessment Claimed
× 0.50 =	

Remises pour dépôt

1. Les travaux déposés dans les deux ans suivant leur achèvement sont remboursés à 100 % de la valeur totale susmentionnée du crédit d'évaluation.
2. Les travaux déposés trois, quatre ou cinq ans après leur achèvement sont remboursés à 50 % de la valeur totale du crédit d'évaluation susmentionné. Voir les calculs ci-dessous.

Valeur totale du crédit d'évaluation	Évaluation totale demandée
× 0,50 =	

Certification Verifying Statement of Costs

I hereby certify:
that the amounts shown are as accurate as possible and these costs were incurred while conducting assessment work on the lands shown on the accompanying Report of Work form.

that as Project Geologist (Recorded Holder, Agent, Position in Company) I am authorized

to make this certification

Attestation de l'état des coûts

MAY 23 1996

J'atteste par la présente :
que les montants indiqués sont le plus exact possible et que ces dépenses ont été engagées pour effectuer les travaux d'évaluation sur les terrains indiqués dans la formule de rapport de travail ci-joint.

Et qu'à titre de _____ (titulaire enregistré, représentant, poste occupé dans la compagnie) je suis autorisé

à faire cette attestation.

Signature	Date
	May 23 96

Ontario

Ministry of Northern Development and Mines
Ministère du Développement du Nord et des Mines

Geoscience Assessment Office
933 Ramsey Lake Road
6th Floor
Sudbury, Ontario
P3E 6B5

Telephone: (705) 670-5853
Fax: (705) 670-5863

August 13, 1996

Our File: 2.16671
Transaction #: W9660.00369

Mining Recorder
Ministry of Northern Development & Mines
60 Wilson Avenue, 1st Floor
Timmins, Ontario
P4N 2S7

Dear Mr. White:

SUBJECT: APPROVAL OF ASSESSMENT WORK CREDIT ON MINING LAND, CLAIM(S) 1200262 IN TIMMINS TOWNSHIP

Assessment work credit has been approved as outlined on the Declaration of Assessment Work Form accompanying this submission. The credit has been approved under Section 14, Geophysics (IP), of the Assessment Work Regulation.

The approval date is August 13, 1996. Please indicate this approval on the claim record.

If you have any questions regarding this correspondence, please contact Steven Beneteau at (705) 670-5855.

Yours sincerely,
ORIGINAL SIGNED BY:

for Ron C. Gashinski
Senior Manager, Mining Lands Section
Mines and Minerals Division

SBB/jf

cc: Resident Geologist
Timmins, Ontario

Assessment Files Library
Sudbury, Ontario

SHERATON TWP. M. 386

EGAN TWP. M. 346

BLACKSTOCK TWP. M. 263

McEVAY TWP. M. 367

MICHIE TWP. M. 301

1212699

1207301

1206912

1200273

1207302

1193739

16 UNITS

1212700

(4 UNITS)

1200279

16 UNITS

(16 UNITS)

(16 UNITS)

F1

1128984

1128983

16 UNITS

1180148

10 UNITS

15 UNITS

1206913

1200269

16 UNITS

1200272

16 UNITS

1207303

1193744

16 UNITS

1207306

1193740

16 UNITS

(16 UNITS)

(16 UNITS)

RY 256

1207304

1193741

16 UNITS

(16 UNITS)

Lysell L.

Wasdo

1200268

16 UNITS

1200267

16 UNITS

1193745

16 UNITS

1200280

12 UNITS

1200262

12 UNITS

1200259

16 UNITS

1193746

16 UNITS

1207305

1203969

1200244

15 UNITS

Greenock L.

1193742

12 UNITS

(12 UNITS)

Radisson

Gordon L.

Flood L.

1207307

Dougherty Lake

1193700

3 UNITS

1193747

16 UNITS

1200284

8 UNITS

1200285

16 UNITS

16 UNITS

1193702

2.16671

(IP)

1193743

8 UNITS

(8 UNITS)

1200241

1203971

1203973

1200242

16 UNITS

6 UNITS

1193749

2 UNITS

1200290

16 UNITS

1200291

8 UNITS

1193703

16 UNITS

1193706

12 UNITS

1193750

9 UNITS

1203972

1200243

15 UNITS

Winnett L.

Beattie

James

Timmerman

1M

2M

3M

4M

5M

6M

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

Areas withdrawn from staking under Section 43 of the Mining Act, R.S.O. 1970.

	Order No.	File	Date	Disposition
R1	W.67/77	192164	28/6/77	S.R.O.
R2	W 86/77	188543	27/10/77	S.R.O.
R3	W. 19/78	188543	10/10/78	S.R.O.
R4	W 34/85	188543	10/10/89	S.R.&M.R.

SAND and GRAVEL

(S) Quarry Permit

X work done on.

✓ work applied.

(1) THIS TWP. IS SUBJECT TO FOREST AGREEMENT [illegible] FURTHER INFORMATION IS AVAILABLE CONCERNING

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PORCUPINE MINING DIVISION

LEGEND

PATENTED LAND	(P) or
PATENTED FOR SURFACE RIGHTS ONLY	
LEASE	L
LICENSE OF OCCUPATION	L.O.
CROWN LAND SALES	C.S.
LOCATED LAND	Lbo.
CANCELLED	C.
MINING RIGHTS ONLY	M.R.O
SURFACE RIGHTS ONLY	S.R.O.
HIGHWAY & ROUTE NO.	(17)
ROADS	
TRAILS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	

*used only with summer resort locations or when space is limited

TOWNSHIP OF

TIMMINS

DISTRICT OF COCHRANE

PORCUPINE MINING DIVISION

SCALE : 1 INCH 40 CHAINS (1/2 MILE)

DR. C.V.T.

DATE MARCH '71

PLAN NO. M.314

ONTARIO

MINISTRY OF NATURAL RESOURCES

SURVEYS AND MAPPING BRANCH

THE INFOPMATION THAT APPEARS ON THIS MAP HAS BEEN COMPILED FROM VARIOUS SOURCES, AND ACCURACY IS NOT GUARANTEED. THOSE WISHING TO STAKE MINING CLAIMS SHOULD CONSULT WITH THE MINING RECORDER, MINISTRY OF NORTHERN DEVELOPMENT AND MINES, FOR ADDITIONAL INFORMATION ON THE STATUS OF THE LANDS SHOWN HEREON.

2.16671

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MINING LANDS BRANCH

JUL 10 1996

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