REPORT ON A GROUND GEOPHYSICAL SURVEY IN SHAW TOWNSHIP, PORCUPINE M.D. DISTRICT OF COCHRANE, ONTARIO FOR PAC EXPLORATIONS LIMITED

BY
BARRINGER RESEARCH LIMITED
304 CARLINGVIEW DRIVE
METROPOLITAN TORONTO
REXDALE, ONTARIO

JULY, 1973

1. INTRODUCTION

1.1. GENERAL

During the period from February 23 to April 19, 1973, both dates inclusive, a ground geophysical survey was carried out by Barringer Research Limited on a group of claims in Shaw Township, near Timmins, Ontario. The work was carried out as an extension of work done on a claims group immediately to the east.

The following report describes the results of the geophysical survey.

1.2 PROPERTY

The property consists of 20 claims in Shaw Township, southeast of South Porcupine, near Timmins, Ontario. The claims are in Porcupine Mining Division, and are numbered P 363427 - 363438, P 363443 - 363444, P 355174 - 355175, P 355178 - 355181, all numbers inclusive, for a total of 20.

1.3 LOCATION AND ACCESS

The property is approximately 11 miles east-southeast of Timmins, Ontario and 6 miles southeast of South Porcupine, Ontario. Access is by the gravel road joining South Porcupine and the INCO-Noranda Langmuir Mine, which passes about 1.5 miles southwest of the property. A bush road leading north from the gravel road just west of the Redstone River provides closer access, by vehicle in summertime and by snowmobile in winter, to the east end of the present property as well as to the adjoining claims group acquired earlier. A trail suitable for snowmobiles has been cut to the south end of Line 398 W from the bush road.

The topography is mainly very flat, with outcrops rising steeply from the swamps in the west end and more gently in the east, where outcrop also is more extensive.

Reference: Topographic map NTS Timmins 42 A/6E.

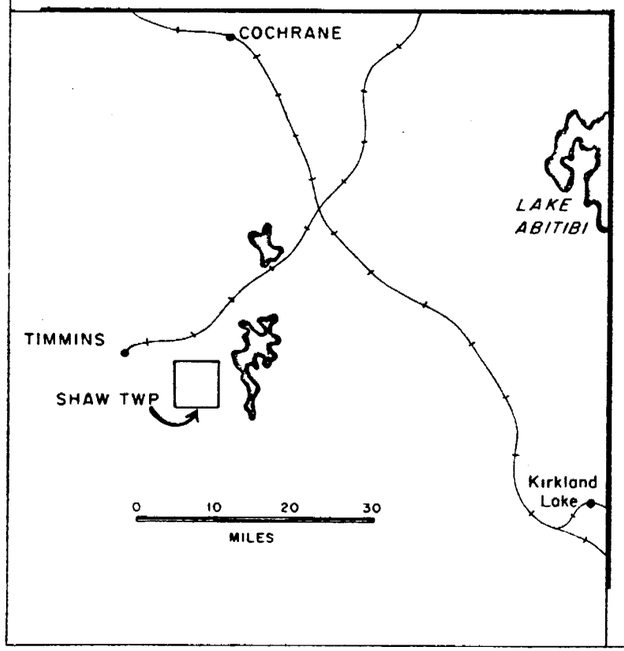
Twp. not subdivided from L.4W

LOT 4 | LOT 3 | LOT 2

Redstone River

P. 363438	P. 363437	P. 363436	P. 363435	P. 363444	P. 355181	P. 355178
P. 363434	P. 363431	P. 363430	P. 363428	P. 363443	P. 355180	P. 355179
P. 363433	P. 363432	P. 363429	P. 363427	P. 355174	P. 355175	

CON. 5



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—A—

Work undertaken by
BARRINGER RESEARCH LTD, Toronto, Canada.

REGISTERED PROFESSIONAL ENGINEER
Roger J. Cavén
PROVINCE OF ONTARIO

PAC EXPLORATIONS LIMITED

SHAW TWP., PORCUPINE M.D. ONTARIO

LOCALITY PLAN

APRIL 1973 | Scale 1" = 1320' | DWG. 5-341-1

1.4 PREVIOUS WORK

Old claim maps as well as old claim posts and grids on the property show evidence of previous work.

An electromagnetic survey carried out by Economic Mineral Investigations Limited of Kingston, Ontario, in 1971, was reported on in January of 1972. The same company also reported on geological investigations in July 1971. The results of the EM survey appear to have met with very limited success as judged by a two-page report.

Geological investigations have also been carried out by Anshaw Porcupine Mines Limited and Canadian Nickel Company Limited.

Some drilling has also been carried out with reported lengths of 110-120 feet, testing both the iron formation and quartz veins.

The main target appears to have been gold after a gold occurrence in the iron formation was found further southeast along strike, as well as possible massive sulphide mineralization.

In September and October of 1972 Barringer Research Limited carried out geological and geophysical surveys on the adjoining claims group to the east. In this work an ultramafic rock was found in the west central part of the property. A high induced polarization response was obtained over this rock, samples of which were analysed to contain 620 ppm Nickel, 140 ppm Copper and 84 ppm Cobalt by hot perchloric acid digestion. Both the IP anomaly and the rock formation were open to the west.

1.5 GEOPHYSICAL SURVEY

Previous work appears to have been directed towards finding massive sulphide mineralization and to some extent gold in quartz veins. The present work has been more concerned with mapping the overall sulphide content which occurs as disseminated mineralization, some of it as coarse pyrite crystals. The induced

polarization method is well suited to this task. In order to facilitate geological mapping a ground magnetic survey was also carried out with a basic station interval of 100 feet, and less in areas of anomalous conditions.

The ground magnetic survey comprised 1592 stations over a total of 20.3 line miles. The reconnassaince induced polarization survey covered 17.5 miles and detail coverage an additional 2.5 miles at three or four electrode separations for a total of 620 readings.

Additional is some detail induced polarization work over a weak but potentially important anomaly on the grid on the adjoining claims group to the east. Total amount of work consisted of 3800 feet with four electrode separations for a total of 64 readings.

1.6 SURVEY CONTROL

The grid was cut by Mr. Ralph Allerston, of Timmins, under separate contract. The grid was laid out with an east-west base line commencing at Station 36W on the base line of the earlier work on the adjoining property to the east. The starting point was denoted Station 360W to avoid confusion with the earlier grid. During the course of the survey it was found that the grid lines did not form a regular grid. The perimeter was then chained by the Barringer Research crew and two bearings obtained on the base line, one at the extreme west end, the other at Line 398W at which point the intersection between survey line and base line formed a right angle.

The grid was chained and picketed with 100 foot stations.

1.7 PERSONNEL

The ground magnetic survey was carried out by Roger Cavén, P. Eng., and the induced polarization survey by Roger Cavén and George Young, Senior Geophysical Operator, under the direct supervision of Roger Cavén, P. Eng., Senior Geophysicist.

2. SURVEY PROCEDURES

The grid was laid out with a generally east-west base line and north-south survey lines with a spacing of 400 feet.

The magnetic survey was carried out with a MePhar M-700 Fluxgate magnetometer which measures the vertical component of the earth's magnetic field. All the survey lines and the base line were traversed. Nominal station interval was 100 feet, but it was found that many steep gradients existed. In anomalous areas and over many of the outcrops the station interval was shortened to 50 feet for a better definition of trends and to make a later correlation to geology more meaningful. The magnetic data was corrected for diurnal variations and drift by means of control stations established at 400 foot intervals along the base line by multiple looping, and tied to Station 8W on the base line of the grid on the adjacent claims to the east. Due to the controls established during looping, all even numbered stations along the base line with relative magnetic intensity below 1000 gammas are effectively control stations.

The induced polarization survey was also carried out over all the survey lines. A pole-dipole electrode array was used throughout,, on a station interval equal to the dipole length, i.e. 200 feet. The potential dipole length is also referred to as the "a" spacing. The current pole was situated to the south of the potential dipole throughout the survey, in order to make line-to-line correlation possible and thus to make the data contourable. The reconnaissance IP work was done with n = 2 for a potential dipole to current pole distance of 400 feet, while the detail survey was made with n = 1, 3 and 4 or in some cases n = 3 and 4 only, for dipole to current pole separations at 200, 600 and 800 feet or 600 and 800 feet respectively. The detail work is shown as pseudo sections including n = 2, with all the data being compatible.

The potential dipole and the one current pole move in unison along the survey line, while the second or "infinity" current pole is fixed at a distance which is sufficiently large so as not to affect significantly the current distribution of the moving current pole. Commonly this distance is at least 10 times the "na" spacing from the nearest survey point on the grid.

A 7.5 kw transmitter and generator was employed for this survey.

3. DESCRIPTION OF THE INSTRUMENTATION

3.1 INDUCED POLARIZATION SYSTEM

The induced polarization system used is the time-domain system. The DC-pulse or time-domain approach to the induced polarization method comprises of passing direct current through the ground which builds up charges on the interfaces between metallic minerals and electrolytes. The current is switched off and the redistribution of these charges is measured as a voltage decay (referred to as "overvoltage" or I.P. effect) at the ground surface. Comparison of this secondary voltage (V_s) with the primary voltage (V_p) when the current is on provides a measure of the chargeability of the sub-surface.

The system consists of a generator set, a transmitter and receiver. The generator set, consisting of an engine driven alternator and voltage regulator, provides the primary power at 120V AC - 400 Hz to the transmitter. The transmitter contains the circuitry and front panel controls to set up and convert the primary AC voltage to a rectangular low frequency wave form, the amplitude of which can be selected by the operator for application to the ground. The transmitter also contains switching circuitry for the current. The current is applied to the ground for 2.0 seconds and it is switched off for 2.0 seconds. The polarity of current is reversed after each pulse.

The generator set and the transmitter are manufactured by Huntec Limited of Toronto, and are available as 2.5 or 7.5 kw units. The receiver is the Newmont designed N IV manufactured by Crone Geophysics Limited, Mississauga, Ontario. The receiver contains its own power supply and has an SP buckout, manual and automatic. After the primary voltage between the potential electrodes has been determined, the receiver automatically integrates the secondary voltage between 0.45 and 0.90 seconds (M) as well as between 0.90 - 1.35 seconds (N) after the termination of each primary current pulse for six consecutive pulses (3 complete cycles), compares the sum to the primary voltage measurement and displays a readout directly in milliseconds on a meter.

The applied current is measured on the transmitter and the apparent resistivity

for the given electrode array calculated from the current (Ig) and primary voltage (V_p) and factor applicable to the electrode array employed.

In most environments the measurement of the chargeability can be repeated to an accuracy of 5 - 10% or better, depending on the power rating and ground resistivity.

3.2 FLUXGATE MAGNETOMETER

The McPhar M-700 magnetometer is a fluxgate instrument designed primarily to measure the vertical component of the earth's magnetic field.

The instrument is held vertical with the aid of a round spirit level after which the instrument is selflevelling. Readout is obtained from a panel-meter the full scale of which is switch-selectable from 1000 gammas to 100,000 gammas, positive or negative. In areas of low gradient it is possible to read the magnetometer to the nearest 5 gamma value on the lowest scale if held sufficiently still and level. In a practical situation an accuracy of $\pm$20 gammas, i.e. one scale division, is more common. The absolute accuracy decreases on the higher scales, but can be held to $\pm$1% of full scale.

The fluxgate magnetometer is usually the instrument of choice in surveys where very steep gradients are expected, because its operation is not affected by these.

In areas of high gradients the repeatability of the readings is critically dependent upon the accuracy with which the same station is occupied. Base stations should therefore be selected in magnetic background where gradients are negligible. It is also preferable that base stations have fixed horizontal platforms upon which the instrument can be positioned accurately. At a suitable base station the instrument is set to a low value, or if a government base station is available the instrument is set to the established value or related to it by looping.

4. DATA REDUCTION AND PRESENTATION OF THE RESULTS

The magnetic results are corrected for diurnal variations and drift with respect to base stations established along the base line and referred to the magnetic intensity at Station BL/8W on the connecting grid immediately to the east. The data is presented as a contour plan at a scale of 1:2400.

The induced polarization data is presented as contour plans separately for chargeability, apparent resistivity and normalized chargeability in the reconnaissance mode. The detail induced polarization work is presented as pseudo-sections separately for chargeability and apparent resistivity.

The contour plans are presented at a scale of 1:2400, while the scale of the pseudo sections is 1:4800.

In addition three pseudo sections each of chargeability and apparent resistivity are shown for some detail work on Lines 20W, 24W and 28W of the adjoining grid to the east. Scale is 1:4800.

5. KNOWN GEOLOGY

The geology of the claims group immediately to the east was described in detail in: "Report on Geological and Geophysical Surveys, Shaw Township, Porcupine M.D., District of Cochrane, Ontario, for Pac Explorations Limited (Barringer Research Limited, December 1972).

In the course of the geological mapping an ultramafic rock was found, samples of which were analysed to contain 620 ppm Ni, 140 ppm Cu and 84 ppm Co by hot perchloric acid digestion, which is within the range of the ultramafic flows and sills of the northern Gold Belt area, and thus a potential host rock for economic mineralization. Over the ultramafic body also occurred an induced polarization anomaly.

Both the geophysical anomaly and the ultramafic body were open to the west.

The previous geological work over the present property describes lenses of iron formation, altered peridotites, diorites and quartz-diorites, quartz veins, etc., i.e. in general similar to earlier descriptions of the claims adjoining to the east.

6. INTERPRETATION

6.1 MAGNETICS

In common with the previous work on the adjoining property the magnetic survey utilized a vertical field fluxgate magnetometer. In addition a common base station was utilized so as to make the results directly comparable. The data (Dwg. Nos. 5-341-2A and 2B) reveals a highly complex geology, with magnetic intensities much higher and gradients steeper than those encountered to the east. There are few areas of a smoothly varying magnetic field, the most notable ones occurring in the southwest corner on the property and another on Claim P 355174. In many places it was noted that moving the magnetometer a few feet gave a totally different reading, especially noticeable in the eastern part of the grid, although present to some degree in all but the "quiet" areas. The high gradients caused discrepancies at the overlap of the present and previous grids along Line 370W since different stations were occupied on the grids. The gross picture, however, agrees well for both surveys.

As was mentioned above, some magnetic intensities are much higher for this survey than the intensities found to the east. The highest intensities and gradients have been interpreted as due to iron formation. The pyrrhotite and perhaps also magnetite content appears to have increased to the west, at least in parts of the iron formation.

Apart from the iron formation, there are magnetic andesites and diabase dikes, as well as an ultrabasic rock present. It is not possible from the magnetic data to separate the various lithologic units or even outline some with complete certainty, but some of the prominent features have been indicated on the interpretation map (Dwg. Nos. 5-341-6A and 6B). Some faults have also been deduced and show good agreement with linears on aerial photographs.

6.2 INDUCED POLARIZATION AND RESISTIVITY

In the course of an induced polarization survey, not only the chargeability, but also the primary voltage between the measuring electrodes and the current input

into the ground are recorded. From this data and a geometric constant dependant upon the electode array the bulk, or apparent, resistivity of the ground is calculated. The apparent resistivity contour plan (Dwg. Nos. 5-341-4A and 4B) reflects both the underlying lithology and the faults in the area, as well as to some extent the overburden. The north-northwest trending fault sone near the west end of the grid appears as a resistivity low. Another fault from the south end of Line 434W to the north end of Line 410W may form a break in the rock types, as the resistivities are much lower to the west of the fault.

The very high resistivities, mostly above 10,000 ohm-metres, are interpreted to be caused by a dense unaltered rock type, possibly a granodiorite. The high resistivity areas are also characterized by low chargeabilities and thus appear barren of significant mineralization.

The range of apparent resistivity values spans almost three orders of magnitude from a low of 37 to a high of 28750 ohm-metres. Many of the low values show the influence of the conductive overburden in the swamps, others are clearly related to the chargeability anomalies.

The chargeability pattern favours the east end of the grid. In the western part of the grid the chargeability values are very low. That effective penetration to bedrock was in fact achieved is verified by the resistivity map, as well as by observations on traversing outcrops without any meaningful increase in chargeability. To assess the validity of small increases in chargeability a pseudo depth-section was measured in the vicinity of the base line along Line 450W. The results showed a fairly uniform continuation to depth of the chargeability readings. It was concluded that a change in rock type caused the slightly higher values.

Further east the chargeability anomalies increase in amplitude and show consistently good values at depth, and correlate with relative apparent resistivity lows; as would be expected for mineralization.

From geological mapping and induced polarization work on the property adjoining to the east it is known that the iron formation can respond strongly to IP

measurements due to an abundance of iron sulphides. Geological mapping has also showed that the ultrabasic rock is often adjacent to the iron formation and can be highly chargeable.

In the present grid the chargeability anomalies are mostly broad. Many of the interpreted sections of iron formation fall on the flanks of the high anomalies, others on low anomalies. This pattern suggests that the iron formation alone would not be the source of the induced polarization effect, but rather that a combination of the iron formation and an adjacent body such as a mineralized ultrabasic unit would be the cause.

The iron formation which has been shown represents the highly magnetic portions but lower susceptibility or even non-magnetic iron formations may exist and not be distinguishable in this environment. It thus seems likely that the iron formation in places has a greater extent than is shown on the interpretation map.

Ten anomalies have been selected as significant and are numbered in order of decreasing approximate priority.

decreasing approximate priority.

Anomaly 1: Lines 382W - 398W, at 10 N

A broad anomaly centred on an intense high across four lines at 10N with the highest value recorded at L 394W/10N. Two sections of iron formation flank the anomaly at its west end.

Anomaly 2: Lines 374W - 382W, at 4S

This anomaly is situated on the lowest recorded apparent resistivity, 37 ohm-metres, at L 378W/4S, with outcrop nearby. It appears to form an extension of the ultrabasic rock unit found during mapping further east. It is closely flanked by a member of the iron formation on the south. The chargeability anomaly is likely to be enhanced by this relationship.

Anomaly 3: Lines 390W - 410W, at 14S to 16S

The pseudo sections on Lines 398W and 406W indicate a source in the form of a steeply dipping or vertical sheet or vein plunging to the east. The near surface expression is not very strong on Line 398W, but the body may come close to surface near Line 406W. Iron sulphides in the form of coarsely crystalline

pyrite was observed in the neighbourhood, probably part of the iron formation which is evident from the magnetics immediately to the south of the anomaly.

Anomaly 4: Lines 398W - 410W, at 8S to 12S

A broad anomaly of medium intensity to the north of Anomaly 3 of which it may be an extension. A widely disseminated mineralization is indicated near the contact with the high resistivity rocks immediately to the north.

Anomaly 5: Line 374W/2S - Line 386W/4N

The east end of this anomaly coincides with interpreted iron formation. The possibility exists that the entire anomaly is caused by the iron sulphides but its location is such that it may also form an extension of Anomaly 2 and the ultrabasic rock unit, particularly along its westerly projection.

Anomaly 6: Line 386W/2S - Line 390W/Base Line

Possibly a faulted off part of Anomaly 2 with lower amplitude.

Anomaly 7: Line 422W/6N - Line 426W/8N

This chargeability feature is narrow, veinlike in appearance, and of moderate amplitude. Its coincidence with interpreted iron formation suggests this as the only source. Geological investigation and sampling is recommended, but no drilling at present.

Anomaly 8: Line 418W/2N

A single line and station anomaly, this feature is located at the crossing of two faults. There is no appreciable magnetic indication that this anomaly is a part of Anomaly 7. Geological investigation only is recommended at this time.

Anomaly 9: Line 394W/18S - Line 398W/20S

Located south of Anomaly 3 as well as south of the interpreted iron formation it may not be connected with either. The trend of the anomaly is aligned along a SW - NE fault. Drilling is recommended unless there is geological evidence to the contrary.

Anomaly 10: Line 370W/10N

This anomaly has a relatively low amplitude but is open to the east. It was not picked up in the previous survey indicating a limited extent. The low chargeability amplitude down rates this anomaly relative to the others and no drilling is recommended in the initial programme, unless geological evidence would merit it.

7. CONCLUSIONS AND RECOMMENDATIONS

The magnetic survey has shown the presence of very high gradients as well as high vertical field intensities on the east half of the grid. The highest gradients and intensities have been interpreted as iron formation. The iron formation deduced from the magnetics is highly discontinuous. Whether this discontinuity is indeed present or not is best resolved through geological mapping since the presence of non-magnetic or low susceptibility portions would not be distinguishable. Numerous faults have also been interpreted from the magnetics as well as apparent resistivity and chargeability data. These faults in general coincide well with photo linears interpreted independently.

The apparent resistivity data show that effective penetration was achieved in the induced polarization survey. The range of resistivity values recorded is much larger than two orders of magnitude, i.e. from a low of 37 to a high of 28750 ohm-metres, but with the majority of values between 1000 and 10,000 ohm-metres. Most of the resistivities below 1000 ohm-metres reflect the presence of highly conductive overburden in the swamps while others coincide with chargeability anomalies and thus due to the concentration of mineralization or possibly graphite. The highest values reflect relatively dense, unaltered rock.

The interpreted parts of the iron formation do not generally correlate well with the chargeability anomalies, however, some of the broad chargeability anomalies in the east end of the grid are interpreted as combined effects of iron formation and mineralized extrusive or intrusive rocks.

Ten chargeability anomalies have been shown in approximate order of decreasing priority. The anomalies are shown as areas rather than as discrete bodies, partly because a disseminated mineralization is expected.

The following drill holes are tentatively recommended to test the chargeability anomalies:

Anomaly 1:

DDH 1.1 Collar at L 394W/8N, bearing Grid North -45°, length 450 feet.

DDH 1.2 Collar at L 394W/10N, bearing Grid North, -45°, length 350 feet.

DDH 1.3 Collar at L 386W/8+50N, bearing Grid North, -45°, length 550 feet.

Anomaly 2:

DDH 2.1 Collar at L 382W/5+50S, bearing Grid North, -45°, length 550 feet.

DDH 2.2 Collar at L 374W/5S, bearing N 18°E, -45°, length 500 feet.

Anomaly 3:

DDH 3.1 Collar at L 398W/15+50S, bearing Grid North, -45°, length 300 feet.

DDH 3.2 Collar at L 406W/17+50S, bearing Grid North, -45°, length 350 feet.

Anomaly 4:

DDH 4.1 Collar at L 402W/9S, bearing Grid South, -45°, length 500 feet.

Anomaly 5:

DDH 5.1 Collar at L 386W/1+50N, bearing N 25°E, -45°, length 350 feet.

Anomaly 6:

DDH 6.1 Collar at L 386W/3S, bearing N 25°E, -45°, length 450 feet.

Anomaly 7:

No drilling recommended at this time.

Anonaly 8:

No drilling recommended at this time.

Anomaly 9:

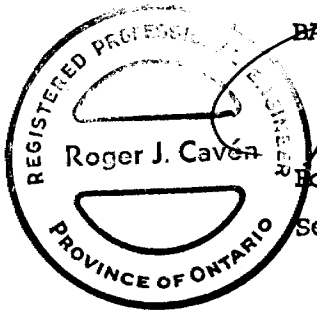
DDH 9.1 Collar at L 398W/21S, bearing Grid North, -45°, length 200 feet.

Anomaly 10:

No drilling recommended at this time.

The above recommendations are based solely on the geophysical data and take into account a small amount of uncertainty in anomaly location as well as attempting to sample the anomaly both at depth and lateral extent. Final recommendations for drilling should take the mapped geology into consideration.

Based upon closer geological knowledge some drill holes may be shortened and others eliminated as redundant for an initial drill programme.



BARRINGER RESEARCH LIMITED

Roger Cavén, P. Eng.,
Senior Geophysicist.

File 2.1289

GEOPHYSICAL – GEOL(
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TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

PROJECTS SECTION

Type of Survey: Magnetometer
Township or Area: Shaw Township
Claim holder(s): Pac Explorations Limited

Author of Report: R. Cavén
Address: 304 Carlingview Dr., Rexdale
Covering Dates of Survey: 23 Feb. to 14 Mar. 1973
(linecutting to office)
Total Miles of Line cut: 20.3 line miles

SPECIAL PROVISIONS CREDITS REQUESTED

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	
–Electromagnetic	
–Magnetometer	40
–Radiometric	
–Other	
Geological	
Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: 5 September 1973 SIGNATURE: Roga Cavén
Author of Report

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
P	355174
P	355175
P	355178
P	355179
P	355180
P	355181
P	363427
P	363428
P	363429
P	363430
P	363431
P	363432
P	363433
P	363434
P	363435
P	363436
P	363437
P	363438
P	363443
P	363444

If space insufficient, attach list

TOTAL CLAIMS 20

OFFICE USE ONLY

PROJECTS SECTION
Res. Geol. L.D. Qualifications 2.1049
Previous Surveys 2.1142

Checked by _____ date _____

GEOLOGICAL BRANCH

Approved by _____ date _____

GEOLOGICAL BRANCH

Approved by _____ date _____

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations 1592 Number of Readings 1592

Station interval 100 feet basic - detail at 50 feet

Line spacing 400 feet

Profile scale or Contour intervals 100 gammas
(specify for each type of survey)

MAGNETIC

Instrument McPhar M-700 Fluxgate Magnetometer

Accuracy - Scale constant ± 20 gammas

Diurnal correction method Base station looping

Base station location Base line / 8W

ELECTROMAGNETIC

Instrument

Coil configuration

Coil separation

Accuracy

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency
(specify V.L.F. station)

Parameters measured

GRAVITY

Instrument

Scale constant

Corrections made

Base station value and location

Elevation accuracy

INDUCED POLARIZATION -- RESISTIVITY

Instrument

Time domain Frequency domain

Frequency Range

Power

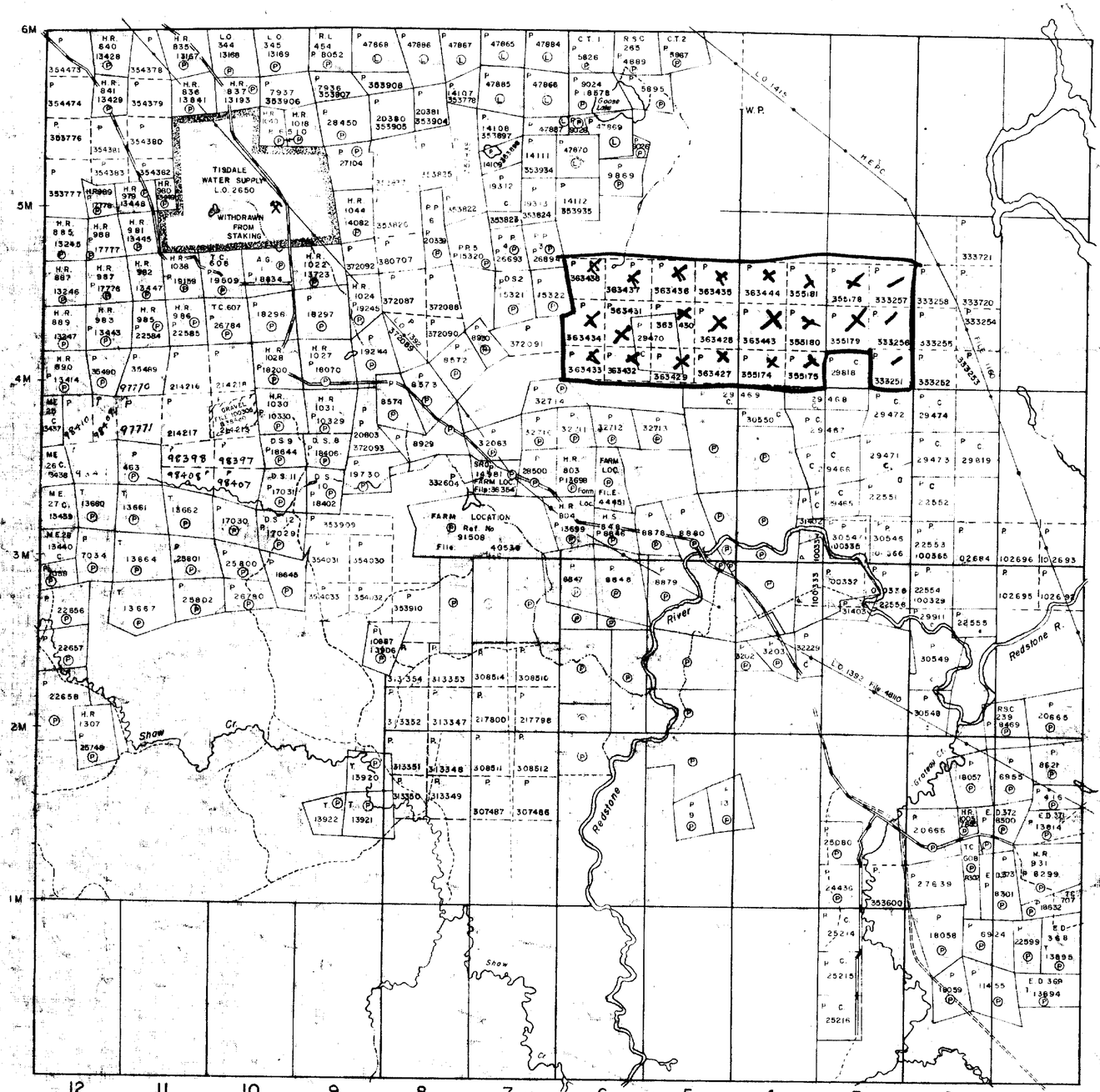
Electrode array

Electrode spacing

Type of electrode

TRIM LINE

Whitney Twp. (M. 319)



Deloro Twp. (M.272)

Carman Twp. (M.266)

Eldorado Twp. (M. 276)

THE TOWNSHIP OF

SHAW

DISTRICT OF COCHRANE

PORCUPINE MINING DIVISION

SCALE: 1-INCH=40 CHAINS

LEGEND

PATENTED LAND	P.
CROWN LAND SALE	C.S.
LEASES	L
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C.

NOTES

400' Surface Rights Reservation around all Lakes and Rivers.

Unpatented Mining Claims in The Subdivided Portion of Shaw Twp are Subject to Section 118 of The Mining Act Dept of Mines File No. 83.5

MINING LANDS
DATE OF ISSUE
SEP 10 1973
MINISTRY OF NATURAL RESOURCES

030605 05

PLAN NO.- M.311

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

200

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TRIM LINE

N
A

210

LEGEND

Contour interval 100 gammas
2500 gamma contour
500 gamma contour
100 gamma contour
Depression
Claim post, located, unlocated

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2.1289

Work undertaken by
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REGISTERED PROFESSIONAL ENGINEER
Roger J. Cavén
PROVINCE OF ONTARIO

2.1289

PAC EXPLORATIONS LIMITED

SHAW TOWNSHIP, PORCUPINE M.D., ONTARIO

VERTICAL FIELD
MAGNETICS

APRIL 1973	SCALE: 1" = 200'	DWG. 5-341-2A

462W 458W 454W 450W 446W 442W 438W

10N 5N BASE LINE (Bearing 93°) 5S 10S 15S 20S

P363438 P363437 P363436 P363434 P363431 P363433 P363432 P363430 P363429

220

2.1289

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LEGEND

Contour Interval 100 gammas

2500 gamma contour...

500 gamma contour...

100 gamma contour...

Depression...

Claim post, located, unlocated. □,○

INDEX

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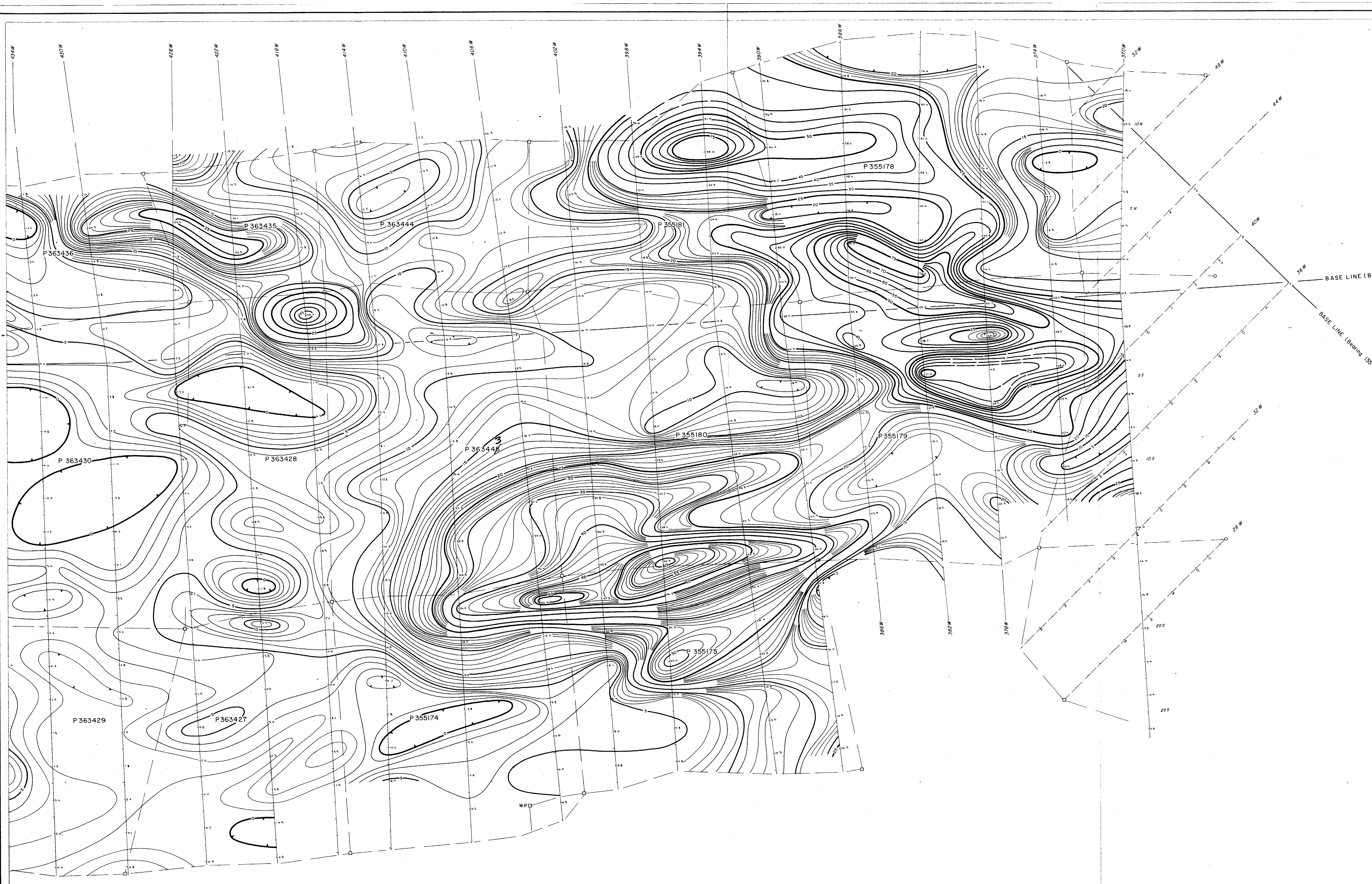
VERTICAL FIELD MAGNETICS

APRIL 1973	SCALE 1" = 200'	DWG. 5-341-2B



2.1289

LEGEND

Contour Interval 1 Millisec
25 Millisec contour
5 Millisec contour
1 Millisec contour
Depression
Claim post, located, unlocated

ELECTRODE CONFIGURATION

P_2
a
P_1 Plotting point
na
a = 200
n = 2
C_1
C_2

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B	A

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Roger J. Cavén
PROVINCE OF ONTARIO

PAC EXPLORATIONS LIMITED		
SHAW TOWNSHIP, PORCUPINE M.D., ONTARIO		
CHARGEABILITY CONTOURS POLE-DIPOLE		
n = 2		a = 200'
APRIL 1973	SCALE: 1" = 200'	DWG. 5-341-3A

230

462W 458W 454W 450W 446W 442W 438W

10N
5N
BASE LINE (Bearing 93°)
5S
10S
15S
20S
25S

P363438
P363436
P363437
P363434
P363431
P363433
P363432
P363430
P363429

LEGEND

Contour Interval 1 Millisec

25 Millisec contour

5 Millisec contour

1 Millisec contour

Depression

Claim post, located, unlocated □,O

ELECTRODE CONFIGURATION

Plotting point

a = 200
n = 2

INDEX

B A

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SHAW TOWNSHIP, PORCUPINE M.D., ONTARIO

CHARGEABILITY CONTOURS
POLE-DIPOLE

n = 2 a = 200'

APRIL 1973	SCALE 1" = 200'	DWG. 5-341-3B

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APPARENT RESISTIVITY CONTOURS
POLE-DIPOLE
n = 2 | a = 200'

APRIL 1973 | SCALE: 1" = 200' | DWG.5-341-4A

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ELECTRODE CONFIGURATION

LEGEND

Contour interval 100 Ohm-metres
2500 Ohm-metre contour
500 Ohm-metre contour
100 Ohm-metre contour
Depression
Claim post, located, unlocated

250

2.1289

BASE LINE (Bearing 86°)

BASE LINE (Bearing 135°)

P 355178
P 355179
P 355180
P 355181
P 363427
P 363428
P 363429
P 363430
P 363435
P 363436
P 363444

462W 458W 454W 450W 446W 442W 438W

10N

5N

BASE LINE (Bearing 93°)

5S

10S

15S

20S

25S

P363438

P363436

P363437

P363434

P363431

P363433

P363432

P363429

P363430

260

N

A

LEGEND

Contour Interval 100 Ohm-metres

2500 Ohm-metre contour

500 Ohm-metre contour

100 Ohm-metre contour

Depression

Claim post, located, unlocated

ELECTRODE CONFIGURATION

P_2 a P_1 ← Plotting point na C_1 C_2

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B A

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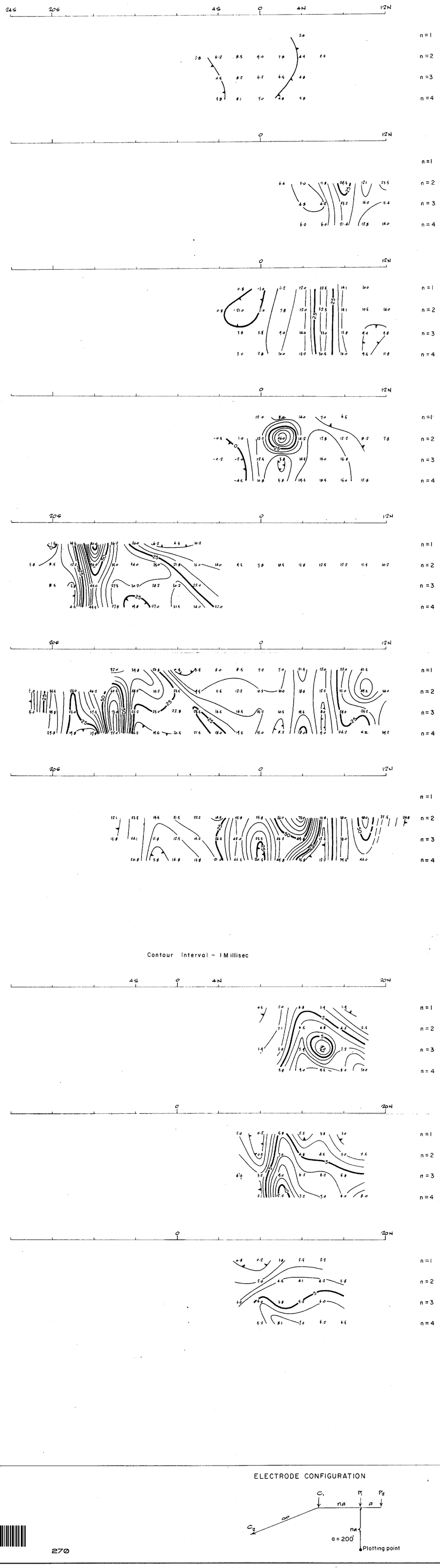
APPARENT RESISTIVITY CONTOURS
POLE-DIPOLE

n = 2 a = 200'

APRIL 1973	SCALE 1" = 200'	DWG. 5-341-48

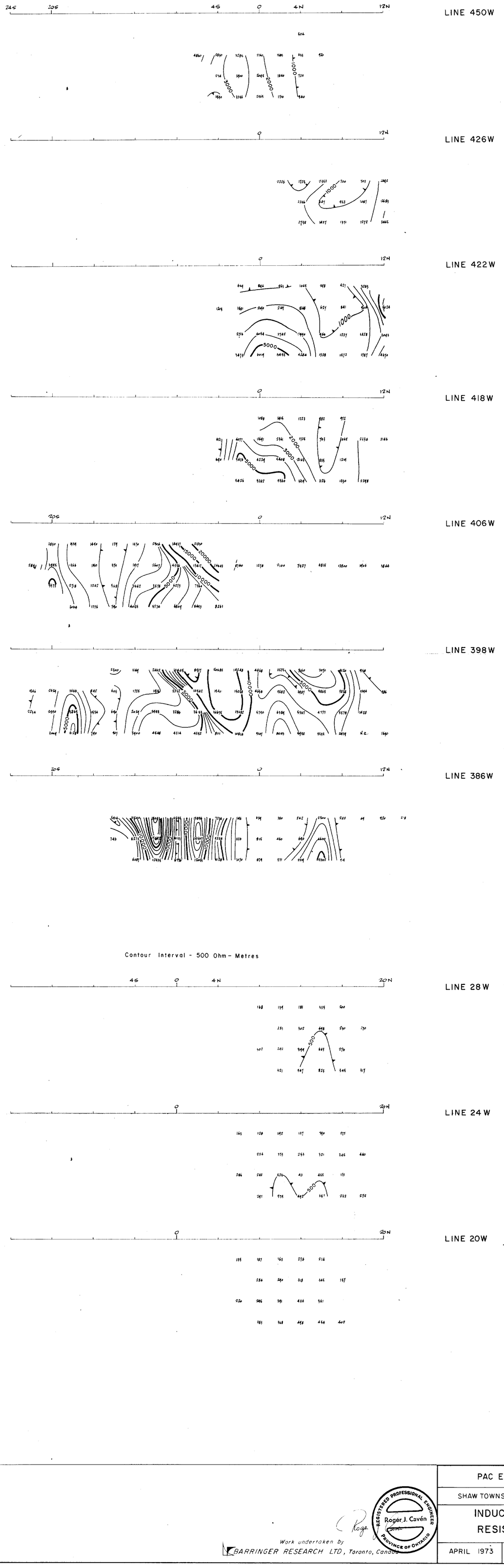
CHARGEABILITY

Contour Interval - 5 Millisecs



APPARENT RESISTIVITY

Contour Interval - 1000 Ohm - Metres



Contour Interval - 1 Millisec

Contour Interval - 500 Ohm - Metres

ELECTRODE CONFIGURATION

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INDUCED POLARIZATION RESISTIVITY SECTIONS
POLE - DIPOLE

APRIL 1973 | Scale 1" = 400' | DWG. 5-341-5

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PROVINCE OF ONTARIO

LEGEND

Contour Interval 1 Millisec
Iron formation (magnetic)
Fault
Diabase dyke
IP anomaly
Claim post, located, unlocated

ELECTRODE CONFIGURATION

Plotting point
a = 200
n = 2

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B | A

280

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SHAW TOWNSHIP, PORCUPINE M.D., ONTARIO

INTERPRETATION

APRIL 1973 | SCALE 1" = 200' | DWG. 5-341-6A

462W 458W 454W 450W 446W 442W 438W

10N 5N BASE LINE (Bearing 93°) 5S 10S 15S 20S 25S

P363438 P363437 P363436 P363434 P363431 P363433 P363432 P363430 P363429

42A06NE0318 2.1289 SHAW

290

N

A

LEGEND

Contour Interval 1 Millisec

Iron formation (magnetic)

Fault

Diabase dyke

IP anomaly

Claim post, located, unlocated

ELECTRODE CONFIGURATION

P_2 a P_1 Plotting point na C_1 C_2

a = 200
n = 2

INDEX

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SHAW TOWNSHIP, PORCUPINE M.D., ONTARIO

INTERPRETATION

APRIL 1973 | SCALE 1" = 200' | DWG. 5-341-6B