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OCT 14 1980

MINING DIVISION

INDUCED POLARIZATION OF WA - WB
AND BOB'S LAKE GRIDS, WHITNEY TOWNSHIP
PORCUPINE MINING DIVISION

by

R.S. Middleton
ROSARIO RESOURCES CANADA LTD.
P.O. Box 1367, Timmins, Ontario

October 1980

INTRODUCTION

Purpose of Survey

A detailed dipole - dipole I.P. survey was carried out in 1979 over a wide area in southern Whitney Township in search of disseminated sulphides. The principle geological targets were sulphide - chert horizons, sulphide in carbonate horizons (either carbonated ultramafic flows or bedded carbonates), and disseminated pyrite in alteration zones in the sericite schists, (felsic tuffs). All three settings are considered to be hosts for gold mineralization.

Location and Access

The portion of the Rosario property covered by this I.P. survey is located in the southern three concessions of Whitney Township and within lots 1 to 8. Whitney Township is located 6 miles east of downtown Timmins and is therefore located within the limits of the City of Timmins. Access to the property is by a road from Porcupine which is situated on the lot 8 - 9 boundary.

Property

All of the claims are held in the name of Rosario Resources Canada Ltd. The project is a 50 - 50 joint venture with Dupont of Canada Exploration Ltd. and the majority of the claims are staked claims with the exception of claims in Con. I, lots 7 and 8 and part of lot 6 which are under option from R.E. Allerston.

Previous Work

An airborne EM (Dighem), magnetic and resistivity survey which was filed for assessment credits covers the region surveyed with I.P. In addition a helicopterborne magnetic survey by Aerodat as well as fixed wing (Otter) magnetics and wing tip EM surveys by Canadian Aero for Oro Mines cover the area.

I.P. surveys by Rosario were completed in 1976 over the area north of Sheet 3 and the results of this survey are included on the sheet showing the I.P. profiles over the Bob's Lake Grid.

A geological survey of the Allerston claims by Rosario's geologists was also done in 1976 and this report gives more detail on previous work by other companies.

Subsequent to this I.P. survey two diamond drill holes were completed in 1980,

one in the vicinity of the southeast corner of claim P. 451716 in lot 2, Con. III, and one in the northeast corner of claim P. 435182 in lot 3 (on line 40W). In addition 3 holes were drilled in late 1979 as a result of this survey to test I.P. anomalies in Con. I, lot 8 (holes W 79-5, W 79-6 and W 79-7).

WHITNEY TWP

<u>Claim No.</u>	<u>Days Credit</u>	<u>Claim No.</u>	<u>Days Credit</u>
P. 420080	29 days	P. 493377	29 days
P. 420081	29 days	P. 493382	29 days
P. 420082	29 days	P. 493565	29 days
P. 420083	29 days	P. 493568	29 days
P. 420085	29 days	P. 493569	29 days
P. 420087	29 days	P. 493570	29 days
P. 420330	29 days	P. 493571	29 days
P. 420331	29 days	P. 522256	29 days
P. 420332	29 days	P. 522257	29 days
P. 420333	29 days	P. 522260	29 days
P. 435182	29 days	P. 522262	29 days
P. 435183	29 days	P. 522263	29 days
P. 435184	29 days	P. 522264	29 days
P. 435185	29 days	P. 522265	29 days
P. 435186	29 days	P. 522266	29 days
P. 435187	29 days	P. 522267	29 days
P. 435188	29 days	P. 522268	29 days
P. 435189	29 days	P. 522269	29 days
P. 435190	29 days	P. 522274	29 days
P. 435191	29 days	P. 522279	29 days
P. 451716	29 days	P. 522282	29 days
P. 451717	29 days	P. 536528	29 days
P. 480423	29 days	P. 536529	29 days
P. 493365	29 days	P. 536530	29 days
P. 493375	29 days	P. 539930	29 days
P. 493376	29 days		
		Total = 51 claims	

SURVEY PROCEDURE AND INSTRUMENTATION

The survey was done using a Scintrex I.P.R. 8 receiver and a portable Crone 250 watt transmitter. A square wave current pulse, 2 seconds "on", 2 seconds "off" was transmitted into the ground via steel stakes. A dipole - dipole array was used with "a" = 200 ft., $n = 1$ and in some areas covered by Sheet 2 an "a" spacing of 100 ft. with $n = 2$ was used. Readings at one hundred foot intervals on 400 foot lines were taken. Three time gates were read after the shut off of the pulse (Mode 232).

Readings were plotted for the centre time gate which is equal to 0.75 of the Newmont standard time window.

Resistivity values in ohm metres have been plotted on separate contour maps which are at the back of this report.

Survey Statistics

The accompanying table shows the personnel involved in the survey and the dates of work. A total of 52.59 miles of grid were covered, however not all lines were read. Approximately 2,500 stations were observed.

Covering dates of the survey and personnel involved are given on the attached table.

INTERPRETATION

Background chargeabilities are in the 0 - 5 range and anomalous values in excess of 80 ms have been observed.

Sheet 1

The three claims that make up the Bob's Lake Grid are located in Con. 3, lot 8, east half. Chargeabilities from 26 ms to 43 ms on claim P. 536528 are associated with an eastward trending chert sulphide horizon. A broad chargeability zone in claim P. 536529 in the 14 - 15 ms range is associated with pyritization and further examination of this horizon is warranted. A drill hole, W 80-5 positioned on claim P. 536528 at -70° was drilled to an 800 foot depth and was collared in the chert sulphide horizon below which a pyritized tuff horizon with associated sphalerite - galena was intersected.

Sheet 2

Chargeabilities up to 30 ms on line 116E - 112E within 700 feet of BL 0 are associated with an oxide - sulphide iron formation. A possible fault off set of this horizon is associated with an anomaly on 120 E on TL 24S and the linking branch of this horizon is reflected in anomalous values on line 120E at 10s - 14s.

A broad chargeability area up to 18 ms on L 16E, BL WA area reflects a felsic intrusive with minor pyritization. A westward trending branch of this anomaly also has a quadrature Max Min II anomaly associated with it which has been tested by drill hole W 79-4 collared near 2E, 2 + 50N, $- 45^{\circ}$ SE.

A zone of serpentinized peridotite was (talc chlorite) encountered which may explain the chargeabilities.

One small isolated anomaly on line 0 on Grid WA at 17s is worthy of attention since it may reflect a phase in the carbonated komatiites that have been observed along the Whitney - Shaw Twp. line.

Sheet 3

Anomalous north trending chargeabilities in lot 8 on claims P. 100126, P. 94858 are associated with sulphide chert horizons. This horizon change strike and cross claim P. 97745 and P. 420330 where it has been tested by holes W 79-7 and W 79-6 respectively.

This horizon dips to the east and northeast at 25° - 35° .

Other anomalies in this vicinity are also caused by sulphide chert iron formation that is repeated by faulting and folding and this unit eventually trends southeastward into Shaw Twp. Hole W 79-5 tested one I.P. anomaly and the unit encountered was graphitic argillite with pyrite.

An eastward trending anomaly near the old power line on claims P. 420083 and 420080 to P. 420087 on line 104E/18s is associated with a sulphide chert horizon which was tested by hole W 79-3 on line 80E. This horizon has an associated Dighem EM and Max Min II anomaly.

Sheet 4

The Grid WB BL 0, line 0 area has a subtle I.P. anomaly with an associated quadrature Max Min anomaly and helicopter EM anomaly which has now been tested by hole W 80-1 and was found to be graphitic tuff in quartz eye tuffs and talc chlorite host rocks.

An anomaly on line 40W, 20N in claim P. 435182 was also found to be caused by graphitic tuffs as demonstrated by hole W 80-2.

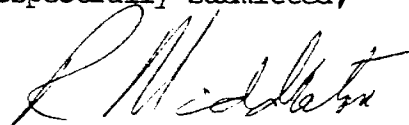
CONCLUSIONS AND RECOMMENDATIONS

Further drilling on the Bob's Lake Grid is required to test anomalous chargeability zones associated with pyritization in felsic tuffs. These anomalies are gold targets with associated base metals.

Drilling on Grid WA, line 0 to test an isolated I.P. anomaly near carbonate rocks is also recommended.

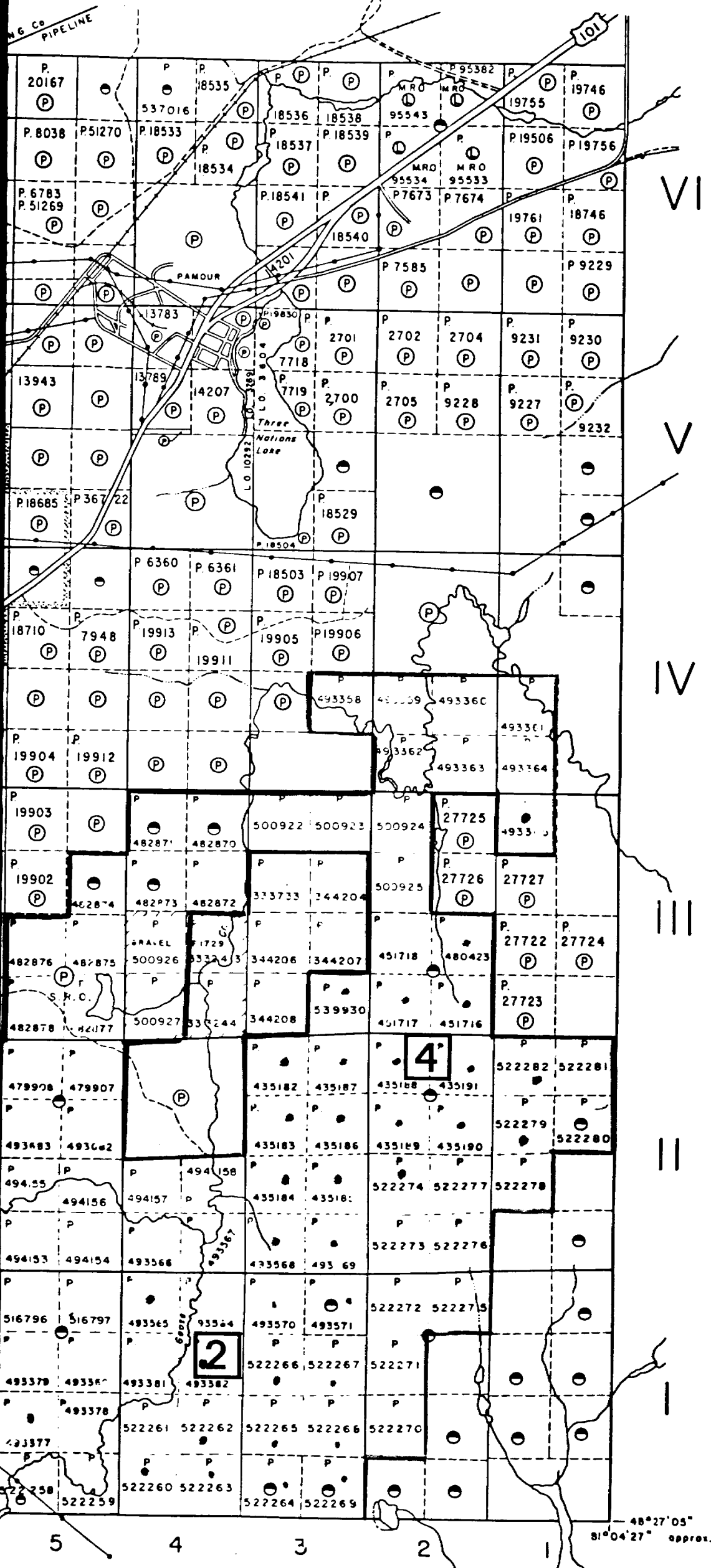
Re-evaluation of rock geochemical gold values in the chert sulphide horizons is required before any further drilling can be contemplated on extensions of these horizons.

Respectfully submitted,



R.S. Middleton
Exploration Manager

RSM/lyd



48°27'05"
81°04'27" approx.

WHITNEY

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	(X)
CANCELLED	(C)
S.R.O. PATENTED	(●)
M.R.O. LEASED	(■)

NOTES

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

This township lies within the Municipality of CITY of TIMMINS.

No disposition of sand and gravel on lands north of C.N.Ry., from May 8, 1964 until further notice Form D.O.M. file 550.13

Any restakings within stippled area in Lots 5, 6, 7, 8 Con 4 and 5 subject to rights and privileges granted to Pamour Porcupine Mines Ltd for tailings disposal

Resurvey Claims

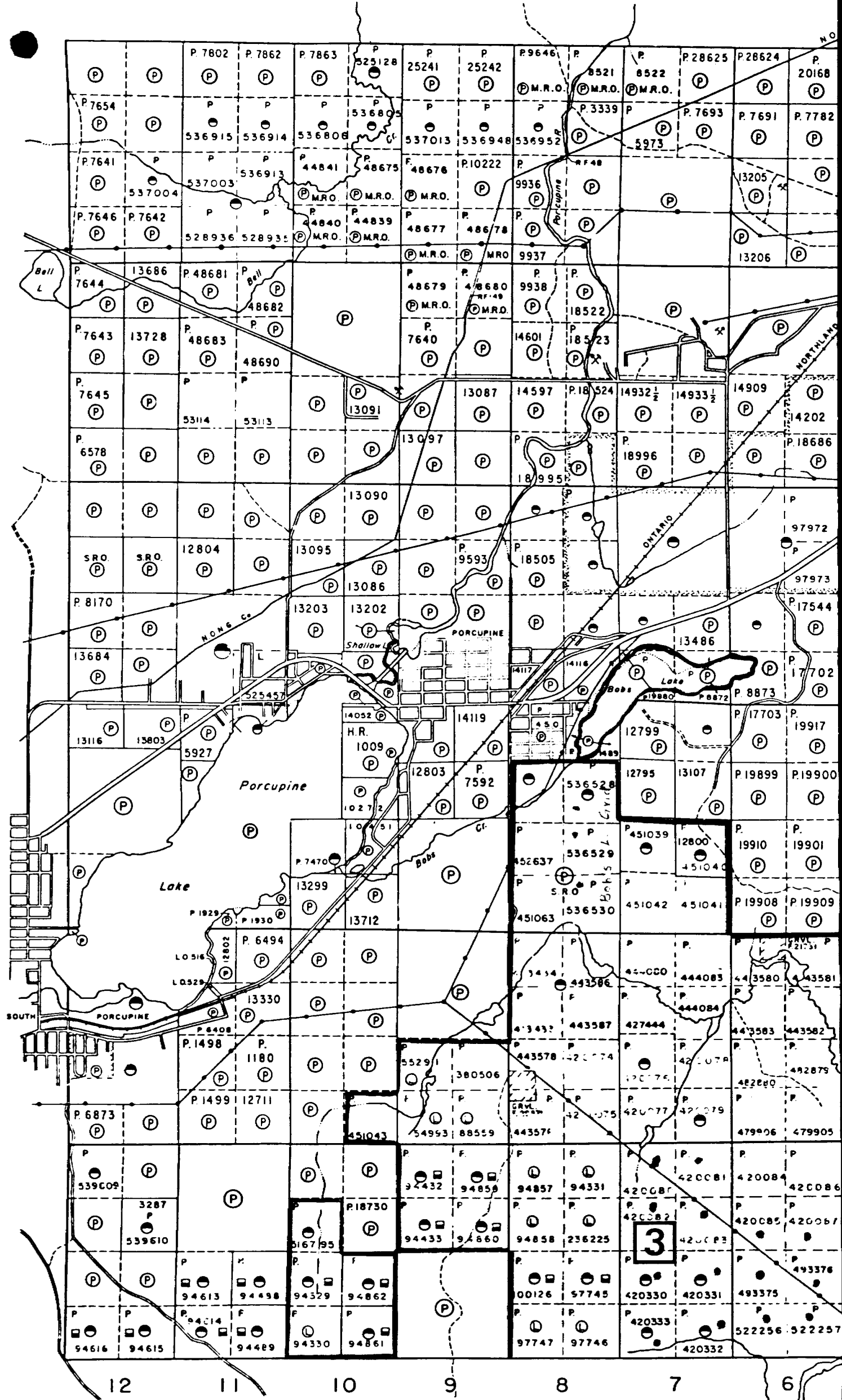
INDEX MAP

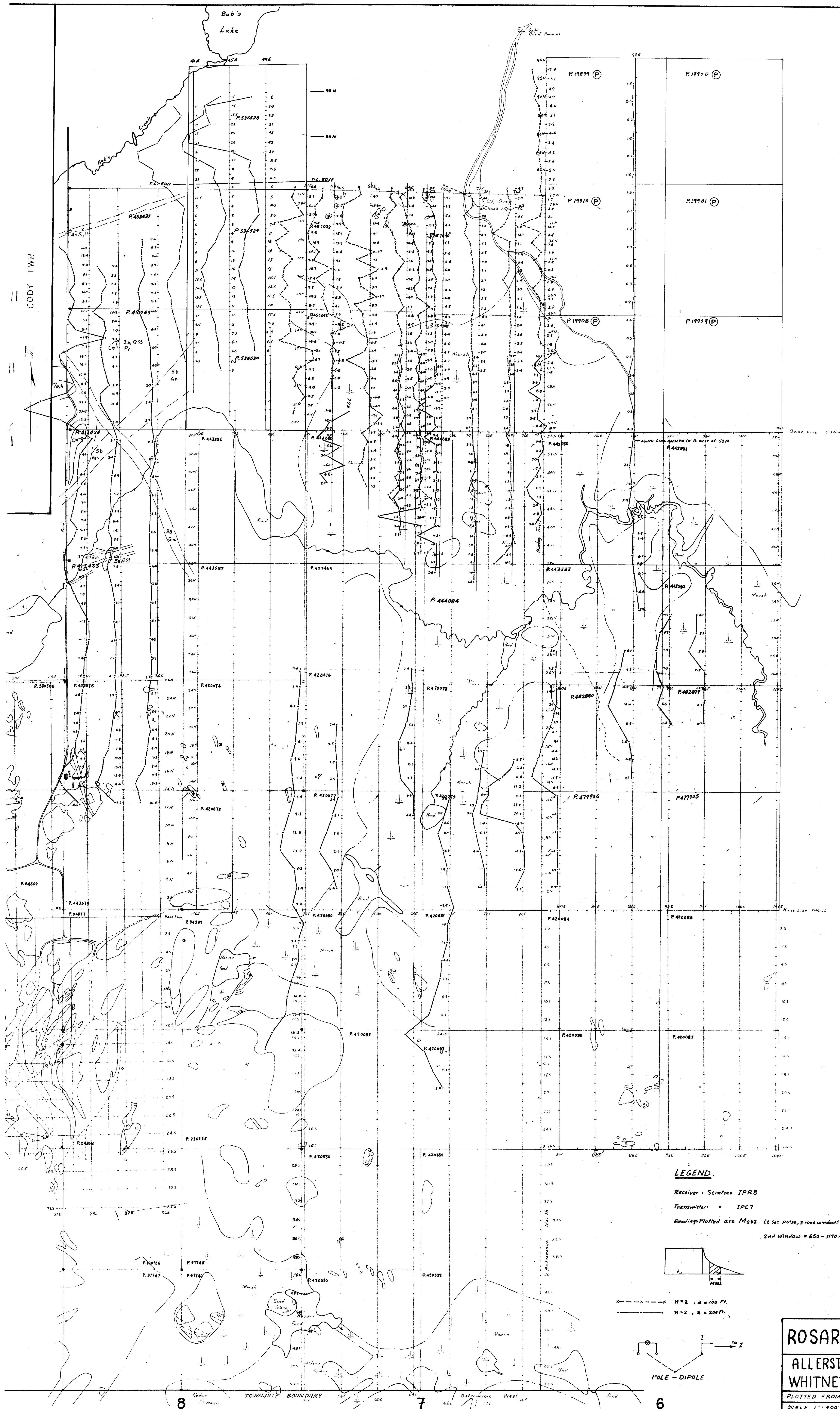
WA & WB Grids

- Sheet 2
- Sheet 3
- Sheet 4

ONTARIO

MINISTRY OF NATURAL RESOURCES





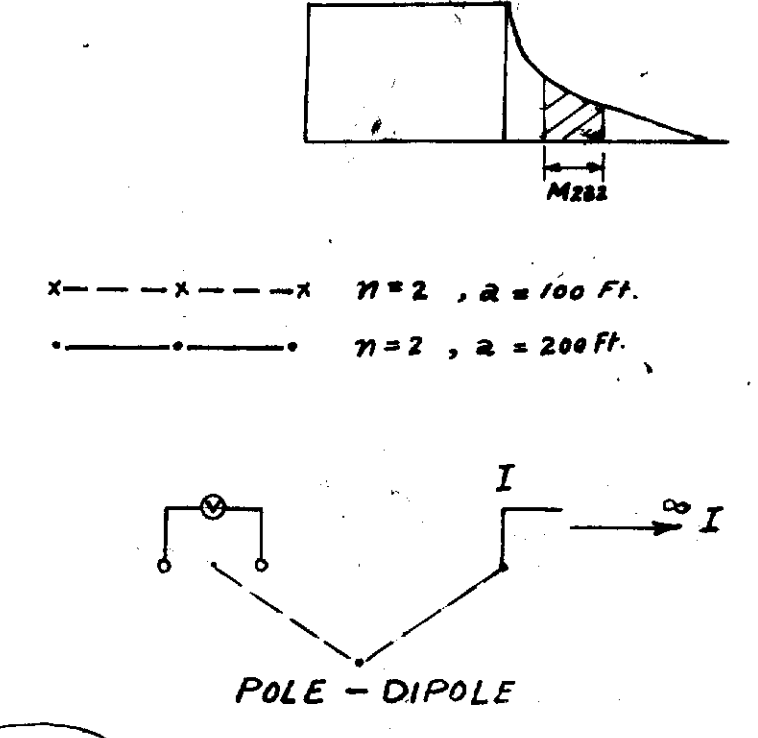
III

II

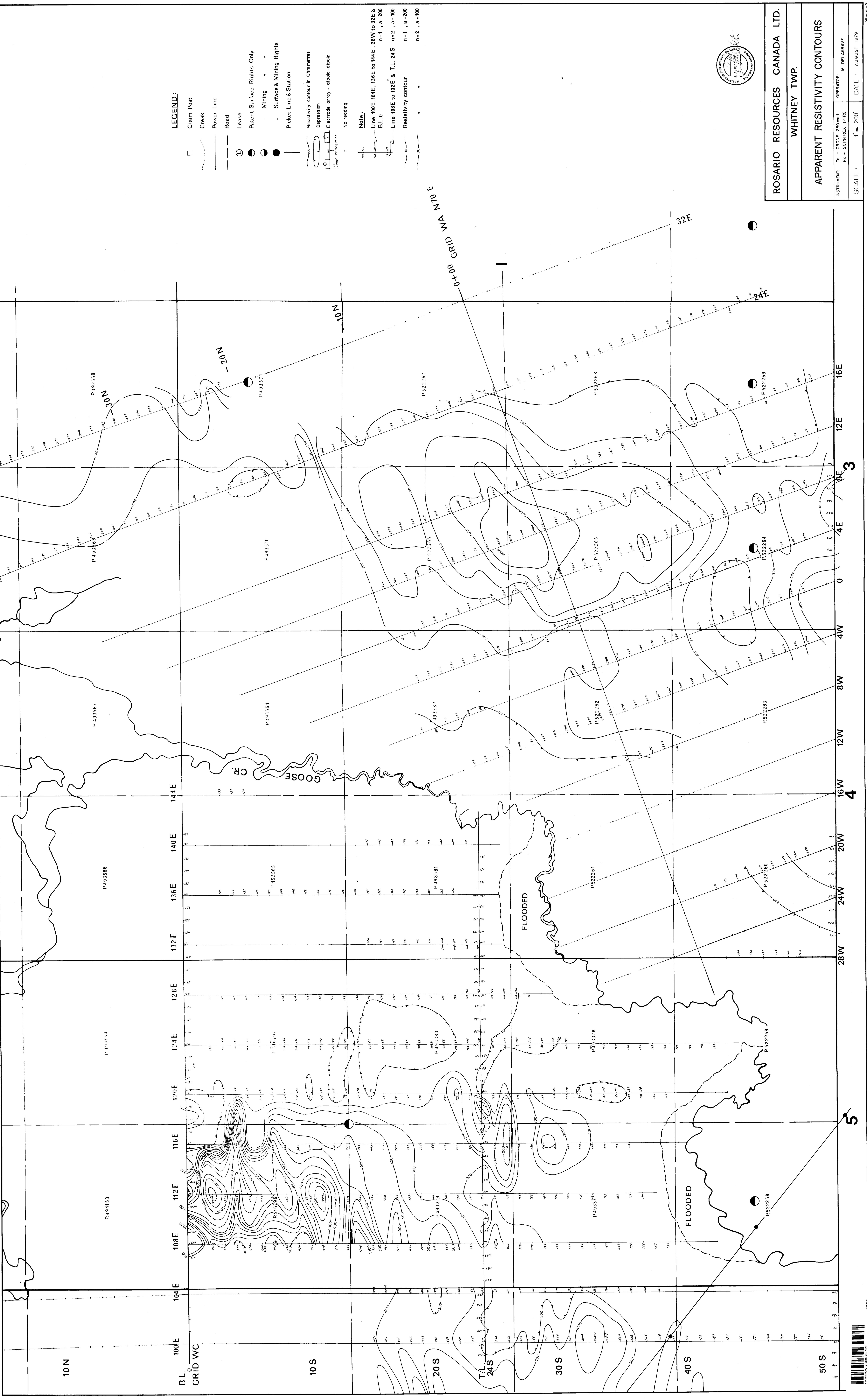
I

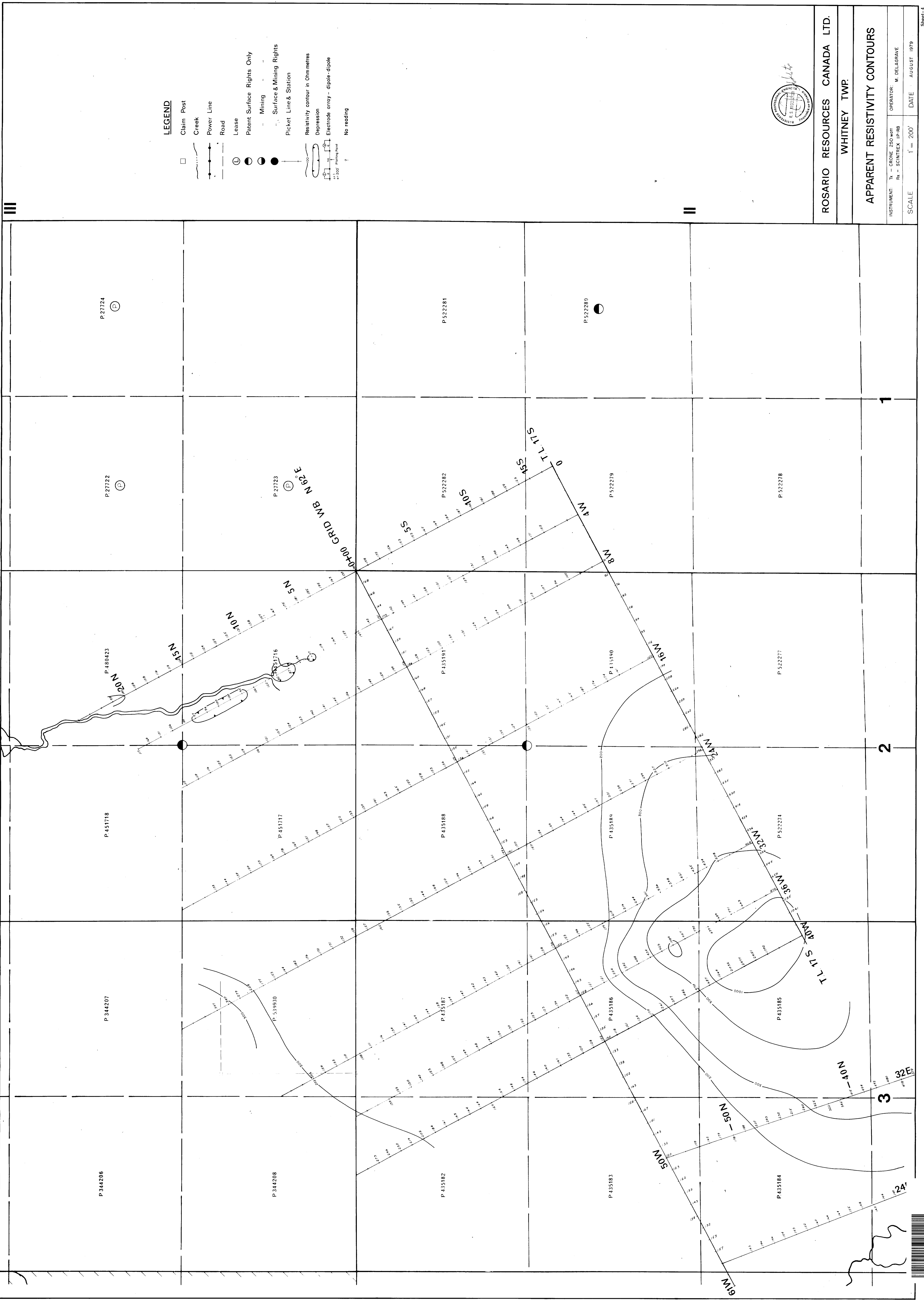
LEGEND

Receiver: Scintrex IPR8
 Transmitter: IPCT
 Readings Plotted are M222 (3 Sec. Pulse, 3 time windows, 2nd window)
 2nd Window = 650 - 1170 ms.



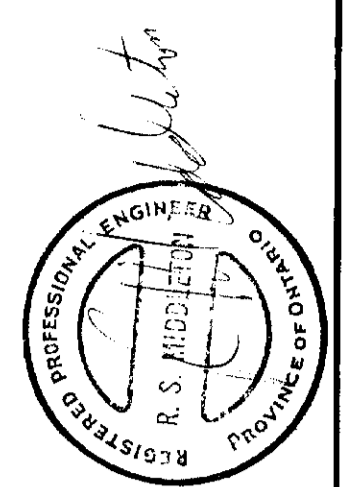
ROSARIO RESOURCES CORP
ALLERSTON CLAIM GROUP
WHITNEY TOWNSHIP, ONTARIO
 PLOTTED FROM LAND SURVEY MAP
 SCALE 1" = 400' DRAWN BY: R.P. BOWEN
I.P. SURVEY
 GEOLOGY BY: R.P. BOWEN ASSISTED BY: J. WINTERS
 1" = 10 ms. (Vertical)





LEGEND

- Claim Post
- ~ Creek
- Power Line
- Road
- Lease
- Mining
- Surface & Mining Rights
- Picket Line & Station
- Resistivity contour in Ohmmetres
- Depression
- Electrode array - dipole-dipole
- 2" = 200' Pictorial View
- ?
- No reading

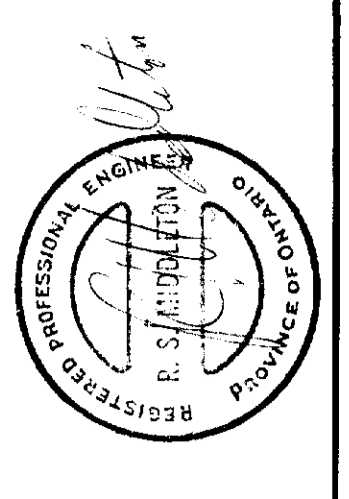
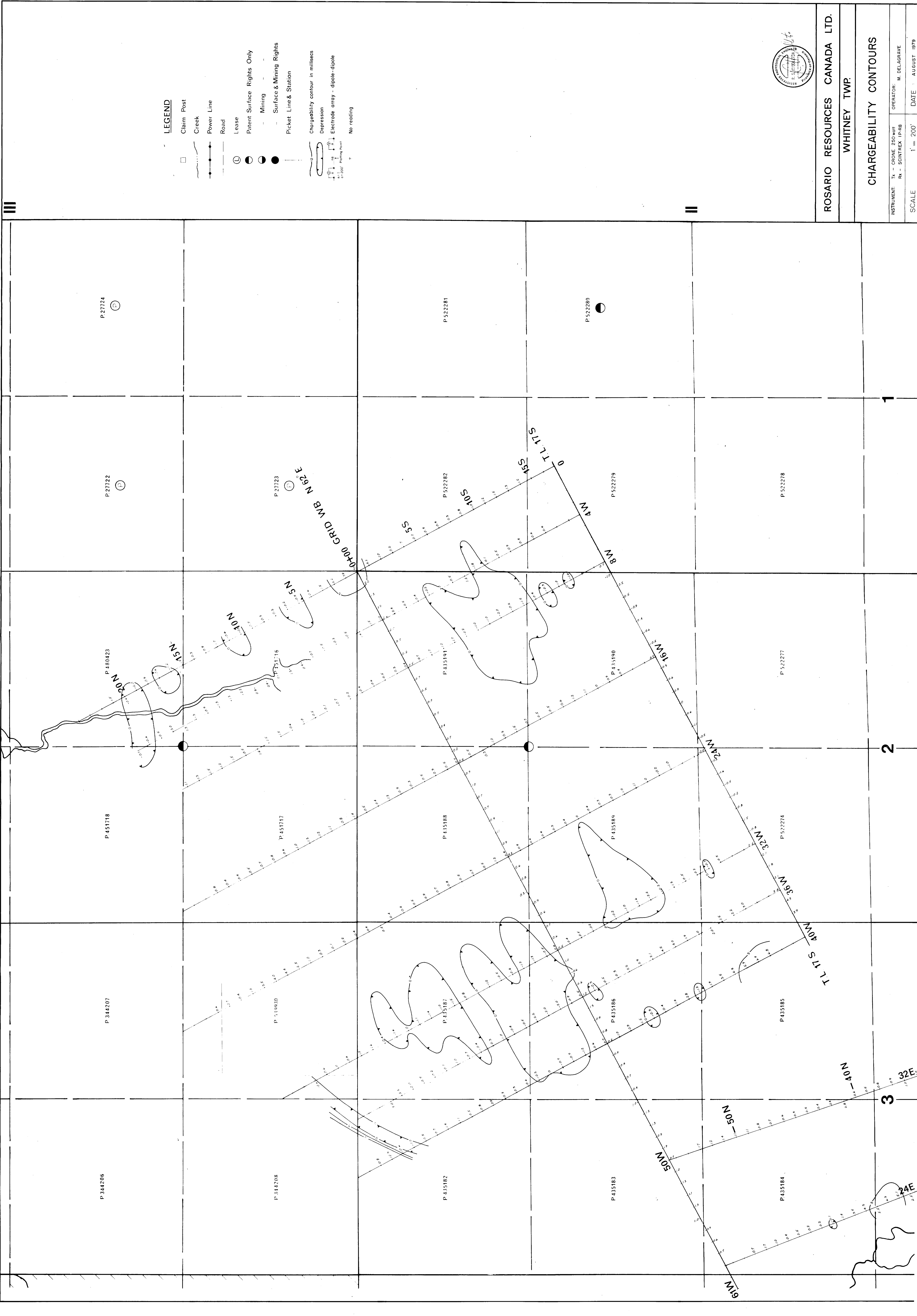


ROSARIO RESOURCES CANADA LTD.
 WHITNEY TWP.
 APPARENT RESISTIVITY CONTOURS

INSTRUMENT: TN - CRONE 250 with
 RA - SCINTREX 1P-H8 OPERATOR: M. DELAGRAVE
 SCALE: 1" = 200' DATE: AUGUST 1979

LEGEND

- Claim Post
- ~ Creek
- Power Line
- Road
- Lease
- Patent Surface Rights Only
- Mining
- Surface & Mining Rights
- Picket Line & Station
- Chargeability contour in milliseccs
- Depression
- Electrode array - dipole-dipole
- No reading



ROSARIO RESOURCES CANADA LTD.
WHITNEY TWP.

CHARGEABILITY CONTOURS

INSTRUMENT: TR - CRONE 2550 WHIT
OPERATOR: M. DELAGRAVE
RE - SCINTREX IP-R8
SCALE: 1" = 200'
DATE: AUGUST 1979

