INTRODUCTION

Between March 24th and April 14th, 1967, an Induced Polarization survey was carried out by Hunttec Limited, Toronto, for Canadian Lencourt Mines Limited, Toronto, on a property located in Whitney Township, near Timmins, Ontario.

The survey crew was managed by Hunttec's senior operator, Mr. A. Schamotta; assistants were Messrs. V. Esbensen, G. Boulay, R. Carisse and M. Samilski, all of Hunttec Limited. Canadian Lencourt Mines Limited was represented by Mr. W.B. Pelette, geologist of Watts, Griffis & McOuat Limited. Supervision and interpretation were done by Dr. N.R. Paterson, senior geophysicist of Hunttec.

The equipment used for the survey was the Hunttec pulse-type I.P. system with a power rating of 2.5 kilowatts. Cycling rate of this equipment is 1 1/2 seconds on and 1/2 seconds off, consecutive cycles reversing in polarity; the decay voltage is averaged over 400 milliseconds, commencing 15 milliseconds after the primary current is switched off. Readings of average decay voltage, referred to the primary voltage between the same measuring points, is expressed in terms of the ratio in units of milliseconds. This quantity is termed the apparent charge-ability. Readings of primary voltage and primary current provide at the same time measurements of apparent resistivity of the ground.

Calculations of apparent chargeability and apparent resistivity were made in the field and preliminary maps were prepared in order that detailing could be decided on at the completion of the reconnaissance survey.

A total of 7.61 miles of reconnaissance work was carried out at a basic line spacing of 400 feet and a station spacing of 200 feet. In addition, some 1.70 miles of detailing were done on intermediate lines and over anomalies on the reconnaissance lines.

The claims covered by the survey are as follows:

55291, 88665, 89933, 89934, 85663,  
93115, 89936;

and in part:

93113, 93114, 85662, 85666, 92005,  
54993, 88559, 89935, 85661.

LOCATION AND ACCESS

The property lies in Lots 7, 8 and 9, Concession 2, Whitney Township, approximately 8 miles southeast of Timmins, Ontario. Access is by secondary road south from Highway 101.

REGIONAL GEOLOGY

At the time of carrying out the survey and the interpretation, the only geological mapping on the property consists of Ontario Department of Mines Map No. 47a at a scale of 1 inch = 200 feet accompanying report 2000 by M.E. Hurst, 1938. This map shows the property to be underlain mainly by acid to intermediate Keewatin volcanics, dipping gently (10° - 40°) to the northeast. Interbedded with the volcanics are siliceous iron formation, pyroclastics and tuffs. The rocks are cut by granite and quartz diabase dikes. Serpentinites are noted in the western portion of the property, and these may be basic Keewatin lavas.

Topographic relief is low, the surface consisting mainly of spruce swamp, with minor ridges of outcrop. Overburden, where exposed, consists mainly of sand and gravel.

OTHER GEOPHYSICAL SURVEYS

A ground magnetometer survey was conducted by Watts, Griffis & McQuat Limited prior to the I.P. survey. The results have been used in the I.P. interpretation and have been taken into consideration in formulating the recommendations presented in this report.

A vertical loop E.M. survey was also conducted over part of the property prior to the I.P. survey. The E.M. conductor axes are shown on the accompanying interpretation maps.

## SURVEY PROCEDURE

In view of the gentle dip of the country rocks and the probable nature of sulphide mineralization on the property, it was decided that an electrode array should be used that would have its maximum sensitivity to relatively flat bodies in the depth range 150 - 250 feet below ground. Accordingly, the pole-dipole array was used for the reconnaissance survey, with an electrode separation of 200 feet. This method will also respond to bodies at or near surface and, if sufficiently large, to depths in excess of 300 feet.

With the pole-dipole array one current electrode is held fixed (in this case on the secondary road some two miles north of the property) while the second current electrode and the two potential electrodes are moved in unison along the survey lines. The separation between the potential electrodes is one half the basic electrode separation, namely 100 feet during the reconnaissance phase. Readings of apparent chargeability and apparent resistivity are plotted mid-way between the moving current electrode and the nearest potential electrode.

Detailing of anomalies was done with the same electrode array using separations of 100 feet and 50 feet.

The reconnaissance data are presented as contours of apparent chargeability and apparent resistivity at a scale of 1 inch = 200 feet on

maps accompanying this report. The detail surveys are plotted as profiles at a horizontal scale of 1 inch = 200 feet and vertical scales of 1 inch = 4 ms (chargeability) and 2 inches per logarithmic cycle (resistivity), and are also included in the map pocket of this report.

## INTERPRETATION

The survey consists of two areas of distinctly different characteristics; the first, occurring east of 20+00W, has a low and generally smooth I.P. background, together with a fairly uniform resistivity background; west of this line, the chargeability background is distinctly anomalous and the resistivity contours show a marked elongation and relief. A similar pattern is not noticeable on the magnetic contours, which appear to be dominated by the diabase dikes and the serpentinized lavas in the western part of the property.

There is generally poor correlation between resistivity and chargeability contours. A notable exception is the strong I.P. anomaly at the west end of Line 20+00S, which has a coincident resistivity low. Resistivity variations are attributed primarily to variations in overburden thickness and/or type. For example, the resistivity lows in the eastern corner of the property and along the north boundary of the region surveyed are believed to coincide with areas of increasing overburden thickness. The broad resistivity high near the centre of the main block surveyed is believed to represent outcrop or relatively shallow overburden. West of the line which separates the areas of different geophysical characteristics, the strong resistivity relief is believed to be representative of shallow but rapidly varying overburden thickness, associated with a pronounced formational trend. Outcrops in this area are steeply eroded and have a similar trend. Two narrow resistivity lows, at 23+00W on Line 24+00S and at 37+00W on Line 4+00N are believed to correspond to



local bedrock depressions rather than to metallic conductors; (the former correlates with a weak E.M. anomaly, but has no I.P. expression). The very pronounced resistivity low at the west end of Line 20+00S is almost certainly associated with mineralization in the form of graphite and/or iron formation, both of which have been reported in the outcrop which coincides with this anomaly. The I.P. anomalies elsewhere on the property show little or no resistivity correlation, though the chargeability high at the east end of Line 8+00N shows roughly coincident magnetic and resistivity highs. These may be attributable in part to a locally shallow overburden but more probably imply some additional factor such as mineralization or bedrock alteration.

The low I.P. background in the eastern half of the property is typical of the area and characteristic of unmineralized Keewatin greenstones. The minor anomalies at 13+00W on Line 24+00S and at the east end of Line 32+00S may represent mineralization and/or bedrock alteration at depth. Detail work at an electrode separation of 400 feet would be required to determine the true chargeability under these anomalies.

In the western part of the property the strong chargeability relief is believed to be associated with mineralization in the form of sulphides, graphite, and possibly magnetite with or without associated serpentinization or other alteration.

The I. P. anomalies form a more or less continuous chain stretching from Line 16+00N to the south boundary of the area surveyed. This chain or belt is approximately 500 feet wide but pinches and swells and is broken completely at several locations. Superimposed on this belt are a number of less elongated anomalies, displaced to the east and west of the belt itself. Specifically, these include the anomalies at the west ends of Lines 0+00 and 4+00N, Lines 20+00S and 24+00S; Lines 32+00S and 36+00S; and the anomalies at the east end of Line 8+00N. With the exception of the one last mentioned, the anomalies all coincide with outcrops, forming northwest trending ridges. The other anomaly is believed also to be over outcrop or very shallow overburden. These anomalies are believed to be caused by graphite or magnetite, possibly accompanied in some cases by serpentinization. Sulphide mineralization should, however, only be ruled out if surface mapping, trenching, stripping, etc. substantiates the above hypothesis.

The narrower anomalies along the previously mentioned chain or belt have somewhat different characteristics and are believed to be associated with sulphide mineralization in a gently east-dipping rock formation. This hypothesis is supported by the following evidence:

- 1) Rock exposed by blasting at 27+00W on Line 8+00S shows abundant pyrite over a narrow vertical width.
- 2) None of the anomalies comprising this belt show corresponding magnetic or resistivity effects; if the

cause is magnetite or graphite, one would normally observe some form of correlation.

- 3) The elongation of the anomalies strongly parallels the formational strike as mapped and as revealed by the topography and the resistivity contours.

I.P. detailing on Lines 4+00S, 12+00S, and 20+00S confirms the above-mentioned characteristics. The responses at the various electrode separations are difficult to compare quantitatively as they are not accurately defined at the basic 100-foot station spacing. An east dip of between  $10^{\circ}$  and  $30^{\circ}$  is, however, expected. Mineralization is thought to occur less than 50 feet below ground and to continue for a true width of at least 50 feet. Sulphide content is expected to be low; probably less than 5% by volume averaged over the total width. Massive stringers, pods, lenses, etc. are not expected.

There is no obvious correlation between the E.M. conductors and the favourable I.P. anomalies. The I.P. anomalies interpreted as graphite and/or magnetite do, however, appear to correlate with E.M. conductors.

### SUMMARY AND RECOMMENDATIONS

The Induced Polarization survey has outlined a chain or belt of anomalies thought to be related to sulphide mineralization. The belt occurs over a total strike length of 5200 feet and is open at the south end. Sulphide mineralization is believed to occur in a gently ( $10^{\circ}$  -  $30^{\circ}$ ) east-dipping rock formation, having a surface width of generally more than 250 feet and a true width of at least 50 feet. Average sulphide content is believed to be less than 5% by volume.

A number of stronger I.P. anomalies occur adjacent to this belt and correlate generally with both outcrops and E.M. conductors. They are believed to be associated with graphite and/or magnetite, possibly accompanied by serpentinization. These anomalies should be examined on the ground, with stripping and trenching where necessary. Only if a satisfactory explanation is not forthcoming should drilling be considered.

Weak anomalies occur on Lines 4+00S, 24+00S, and 32+00S, well removed to the east of the main anomalous belt. These anomalies may be caused by mineralization in an overlying rock formation or they may be produced by structural deformation of the same formation as apparently outcrops further west. Further detailing of the anomalies would be necessary before drilling can be recommended.

A limited program of diamond drilling is recommended on the main anomalous belt before any additional geophysical work is carried out:

DDH #1 - 24+50 W on Line 12+00S

DDH #2 - 26+00W on Line 4+00S

If encouragement is obtained in these holes, drilling is also recommended at the following locations:

DDH #3 - 35+00W on Line 4+00N

DDH #4 - 39+00W on Line 12+00N.

All drill holes should be vertical and of sufficient length to penetrate the mineralized zone. This is expected to involve holes not less than 250 feet in length.

Consideration should be given to further drilling and geophysics if the results of the above program are favourable.

Respectfully submitted.

HUNTEC LIMITED



Norman R. Paterson, Ph.D., P.Eng.  
Senior Geophysicist

ASSESSMENT FILING DATALine Miles

The reconnaissance phase of the survey consisted of 7.61 line miles, and 1.70 miles of detailing were done. The number of stations was as follows:

Reconnaissance	219
Detail	<u>120</u>
Total	339

Personnel Time

The total number of 8-hour man days required to complete the survey was as follows:

	<u>8-hour man days</u>
Field Work	96
Supervision and report writing	3
Data reduction & drafting	11
Typing	<u>1</u>
	111

Personnel employed on survey:

<u>Name</u>	<u>Occupation</u>	<u>Address</u>	<u>Dates</u>
N.R. Paterson	Geophysicist	1450 O'Connor Dr. Toronto, 16. Ont.	Mar. 20, Apr. 1, 24, 1967
A. Schamotta	Operator	-do-	Mar. 23-Apr. 15, 1967
V. Esbensen	Operator	-do-	-do-
R. Carisse	Operator	-do-	Mar. 27-Apr. 2; Apr. 10-15, 1967
G. Boulay	Operator	-do-	Mar. 27-Apr. 15, 1967
M. Samilski	Operator	-do-	Mar. 29-Apr. 15, 1967
Miss J. Wilson	Drafting	-do-	Apr. 18, 19, 25
Miss H. Ricketts	Drafting	-do-	Apr. 13, 18, 19, 28
Mrs. P. Tapson	Drafting	-do-	Apr. 19-21
Mrs. D. Lovie	Drafting	-do-	Apr. 20, 21
Miss E. Reid	Typing	-do-	Apr. 25, 1967



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### SUMMARY

Exploration in the form of geophysics, geological mapping, sampling and diamond drilling has been completed on a 27-claim group in Whitney Township.

Results were without consequence, and the option should be terminated.

### CONCLUSIONS AND RECOMMENDATIONS

The significant assays in silver were found to be directly related to appreciable amounts of sphalerite and/or galena.

Geophysics and geological mapping outlined a mineralized zone 4,500 feet long with a true width of 13 feet. Diamond drilling and surface sampling indicated only minor silver values, and the results of a geochemical survey over the main I. P. anomaly (coincident with the mineralized zone) showed no real significance.

It would appear that only minor disseminated sphalerite or galena might result in silver values of ore grade, but this seems unlikely without some sort of structural control, and none was evident.

Further expenditure is not recommended and the option on the group of 27 claims should be allowed to expire.

### INTRODUCTION

Designed to investigate significant assays in silver from a surface exposure, a program of exploration was carried out during March, April and May of 1967 on a portion of the property in Whitney Township under option to Canadian Lencourt Mines Limited. The work, interrupted by two weeks of break-up included: electromagnetic, magnetic, induced polarization and geochemical surveys; diamond drilling; geological mapping and some rock trenching and sampling.



## PROPERTY

The property, owned by R. E. Allerston of Timmins, consists of 27 contiguous unpatented mining claims in the southwest quarter of Whitney Township, Porcupine Mining Division, District of Cochrane, Ontario. These claims, as shown on the accompanying location map, total 1,080 acres and are designated as follows:

P-54993	SW 1/4	S 1/2	Lot 9	Conc. II
P-55291	NW 1/4	S 1/2	Lot 9	Conc. II
P-85660	SE 1/4	S 1/2	Lot 7	Conc. II
P-85661	SW 1/4	S 1/2	Lot 7	Conc. II
P-85662	NE 1/4	S 1/2	Lot 7	Conc. II
P-85663	NW 1/4	S 1/2	Lot 7	Conc. II
P-85664	NW 1/4	N 1/2	Lot 7	Conc. II
P-85665	NE 1/4	N 1/2	Lot 7	Conc. II
P-85666	SW 1/4	N 1/2	Lot 7	Conc. II
P-85667	SE 1/4	N 1/2	Lot 7	Conc. II
P-88559	SE 1/4	S 1/2	Lot 9	Conc. II
P-88665	NE 1/4	S 1/2	Lot 9	Conc. II
P-89933	NW 1/4	S 1/2	Lot 8	Conc. II
P-89934	NE 1/4	S 1/2	Lot 8	Conc. II
P-89935	SW 1/4	S 1/2	Lot 8	Conc. II
P-89936	SE 1/4	S 1/2	Lot 8	Conc. II
P-92005	SE 1/4	S 1/2	Lot 10	Conc. II
P-92492	NE 1/4	S 1/2	Lot 7	Conc. III
P-92493	SE 1/4	S 1/2	Lot 7	Conc. III
P-92494	NW 1/4	S 1/2	Lot 7	Conc. III
P-92495	SW 1/4	S 1/2	Lot 7	Conc. III
P-92496	NW 1/4	N 1/2	Lot 6	Conc. II
P-92501	SW 1/4	N 1/2	Lot 6	Conc. II
P-93112	NW 1/4	N 1/2	Lot 8	Conc. II
P-93113	SW 1/4	N 1/2	Lot 8	Conc. II
P-93114	NE 1/4	N 1/2	Lot 8	Conc. II
P-93115	SE 1/4	N 1/2	Lot 8	Conc. II

## ACCESS

A farm road from Highway 101 at Golden City (10 miles east of Timmins) passes through the west end of the property. The extension of this road into the south half of concession II is not maintained, but is suitable for car or truck travel during the summer months.

## HISTORY

The area has been well prospected over the past forty or fifty years, most of the work having been an investigation of quartz veins in search of gold. Some good values in silver, copper, lead and zinc were reported, but have not since been substantiated.

In recent years, some work was done by Union Carbide Exploration Limited on claim P-55291. Metallurgical testing of a talc-magnesium carbonate zone was not successful in producing a sufficiently high-grade magnesite product.

Southern Whitney Township was not covered during the staking rush of 1964, and no assessment records are available for the immediate area.

## GENERAL GEOLOGY

The rocks of the area are part of a major anticline, plunging northeasterly at a low angle, parallel to and south of the Porcupine-Destor fault.

Two separate periods of igneous activity have resulted in the metamorphic and structural deformation of acid and basic volcanics of early Precambrian age. The resulting rocks are relatively flat-lying chloritic and sericitic schists.

Ultrabasic intrusives have been altered to serpentinite and carbonate rocks. The granite porphyry is fine grained, with the ferromagnesium minerals altered to chlorite.

Steeply dipping diabase dikes, trending N 10° W, cut all of the above formations.

## MINERALIZATION

A siliceous banded sulphide horizon lies conformably in the quartz-sericite schist. Pyrite, the predominant mineral, occurs primarily as thin seams. There are occasional traces and sporadic concentrations of sphalerite and galena which result in significant silver values. Other minerals include minor pyrrhotite, chalcopyrite, magnetite and arsenopyrite.

The sulphide zone is exposed intermittently over a strike length of 4,500 feet and in most cases is badly weathered. The true width, as indicated by drilling, is 13 feet with a dip of 12° to the northeast.

### DETAILS OF EXPLORATION

#### Linecutting

Horizontal control was maintained using a baseline oriented at S 54° E, with crosslines 400 feet apart. Two intermediate lines were cut on either side of line 8 + 00 S. The grid, involving 11.9 miles, covered approximately 12 of the 27 claims, being restricted to the area along the mineralized zone.

#### Electromagnetic Survey

Using a Sharpe SE 250 electromagnetic unit on a frequency of 1,000 c. p. s., readings were taken at 100-foot intervals from line 0 + 00 to line 36 + 00 S. The remainder in the southwest corner of the group was omitted because of the more rugged terrain and the fact that the configuration employed was not suited to those conditions.

#### Magnetic Survey

A Sharpe MF-1 fluxgate was used in the magnetometer survey with readings recorded every 100 feet. One central base station was used to measure diurnal variation, and corrections were applied to all magnetic values.

#### Induced Polarization Survey

A total of 7.61 miles of reconnaissance and 1.70 miles of detailing was covered in an I. P. survey by Hunttec Limited. The Hunttec pulse-type system was used with the pole-dipole array and an electrode separation of 200 feet.

#### Geochemical Survey

Soil samples were collected at 100-foot intervals over the main I. P. anomaly, from line 0 + 00 to line 28 + 00S, including three intermediate lines at 18 + 00 S, 22 + 00 S, and 26 + 00 S. Both the "A" and "B" horizons were sampled where possible, and silver determinations (by cyanide leach) were made on all soils. In addition, "B" horizon samples from lines 0 + 00, 8 + 00 S, and 28 + 00 S were analysed for mercury vapour.

### Diamond Drilling

In order to test the original showing and two I. P. anomalies, five holes totalling 1,003 feet were drilled by Continental Diamond Drilling Limited. The core, which is stored at Canadian Jamieson Mines Limited, was logged and mineralized sections were sampled.

### Geological Mapping

Geological mapping, on a scale of 1" = 200', was carried out by the writer, using the grid lines for control. General mapping procedure and geological terminology were validated by a geologist of Watts, Griffis and McOuat Limited, during a three-day visit to the property. His comments are included in the discussion of results.

### Rock Trenching and Sampling

Mineralized outcrops were chip sampled wherever fresh rock could be exposed by blasting. Grab samples were otherwise taken, and while certain ones were checked for gold, all were analysed for silver.

## DISCUSSION OF RESULTS

### Geophysics

Geophysical survey results aided in geological interpretation and provided some indication of sulphide mineralization.

The strongest response from both E. M. and I. P. was encountered over the outcrop area of graphitic and ferruginous quartzite, which was also indicated by a magnetic anomaly.

Bodies of serpentinite were outlined by I. P. and magnetic surveys, the latter also indicating the presence of two diabase dikes.

The main I. P. zone is a chain of anomalies occurring over a length of 5,200 feet in a more or less east-west direction across the grid. Some of the anomalies constituting this belt are attributable to the principal sulphide zone, as evidenced by surface exposures and diamond drilling. However, on the strongest response at 25 + 00 W on line 12 + 00 S, diamond drilling to a depth of 284 feet failed to encounter significant mineralization.

Two weak E. M. conductors, on line 24 + 00 S at 23 + 00 W and on line 36 + 00 S at 20 + 00 W, may represent sulphide concentrations. The former coincides with one of the mineralized outcrops.

### Geochemistry

In the geochemical analysis of soils, nearly all silver values were less than 0.2 parts per million. The only anomalous indications (ranging from twice to ten times background) were found in the immediate vicinity of mineralized outcrops, the sampling of which gave low assays in silver. A few isolated above-background mercury values are not considered to be significant.

### Geology

"Structural irregularities seem largely to have been enhanced by intrusive tectonism, which has superimposed the development of contact metamorphic structures on the pre-existing rocks and to have distorted their otherwise monoclinical regularity. Some evidence of faulting (post mineralization) is apparent but, in general, the overall structure is weak, and does not appear to present likely sites for ore deposition."

### Sampling

At four locations, mineralized outcrops were blasted in an attempt to expose an un-oxidized surface for sampling. This was only successful in one instance, and a 20-pound random chip sample was taken. Assaying 0.38 ounces of silver per ton, it probably gives the best representation of average grade.

Assays of chip and grab samples from divers other locations vary from trace to 9.78 ounces of silver per ton, and up to 0.10 ounces of gold per ton.

A representative grab sample of magnesite from an old pit assayed 18.66% soluble MgO, 4.84% FeO and 3.55% Fe<sub>2</sub>O<sub>3</sub>.

### Diamond Drilling

Diamond drill holes L-1 and L-2 were located to intersect the favourable sulphide horizon, down dip from the original showing. On the same section, and at distances of 100 and 350 feet respectively from the exposure, both holes encountered overburden in excess of 45 feet, and began coring in quartz-sericite schist.

Holes L-3 and L-4 were designed to test the most favourable I. P. anomalies. L-3, drilled to a depth of 284 feet, did not encounter significant mineralization. L-4, at 26 + 00 W on line 4 + 00 S, intersected the siliceous mineralized bed from 39.6 feet to 52.6 feet, but silver values were low.

In order to gain information as to the attitude and thickness of the sulphide zone, hole L-5 was located 100 feet behind L-4. The zone was thus indicated to have a true width of 13 feet and a northeast dip of 12°. No sphalerite or galena was noted in the core, and silver values were less than 0.50 ounces per ton.

Respectfully submitted,

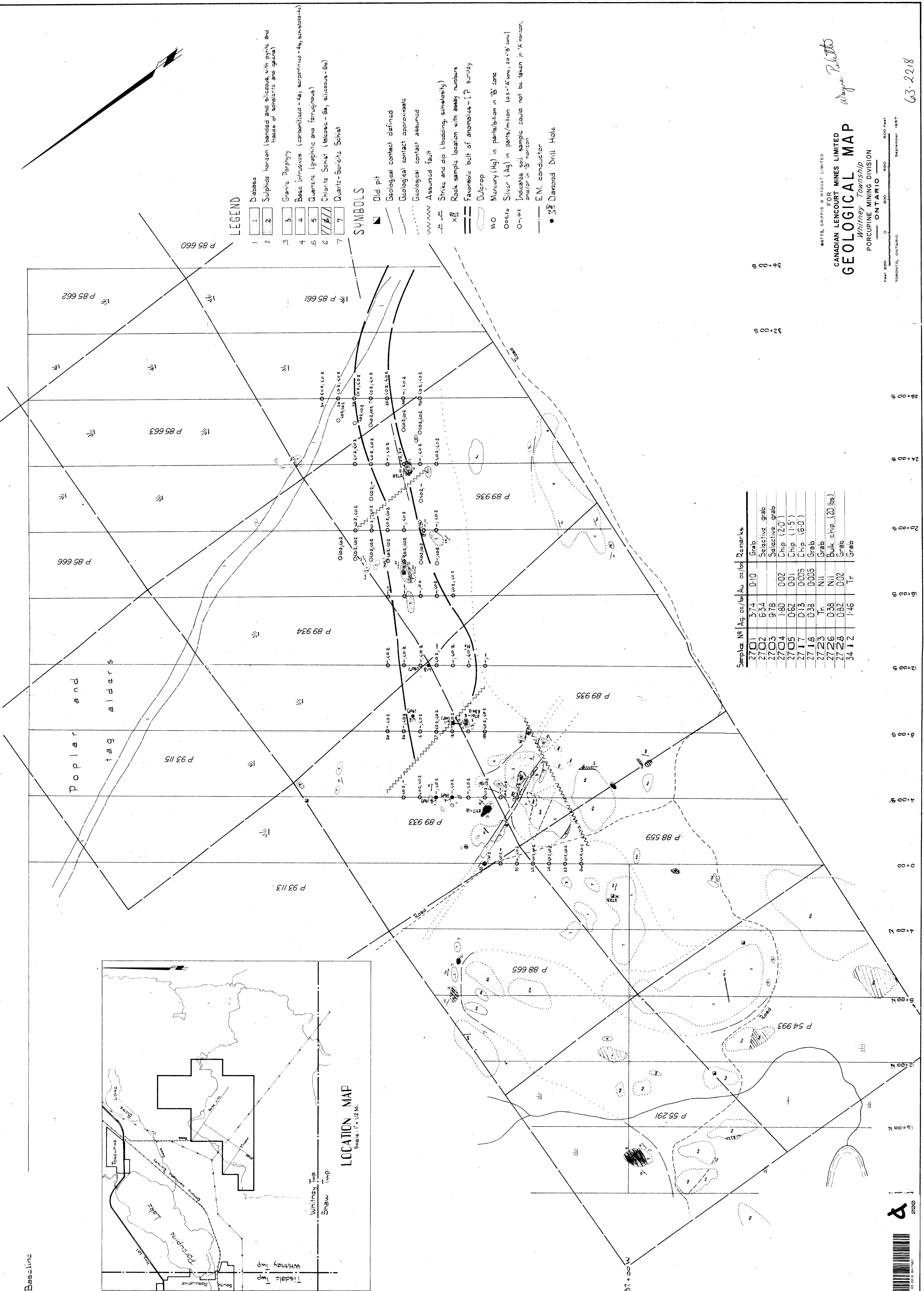
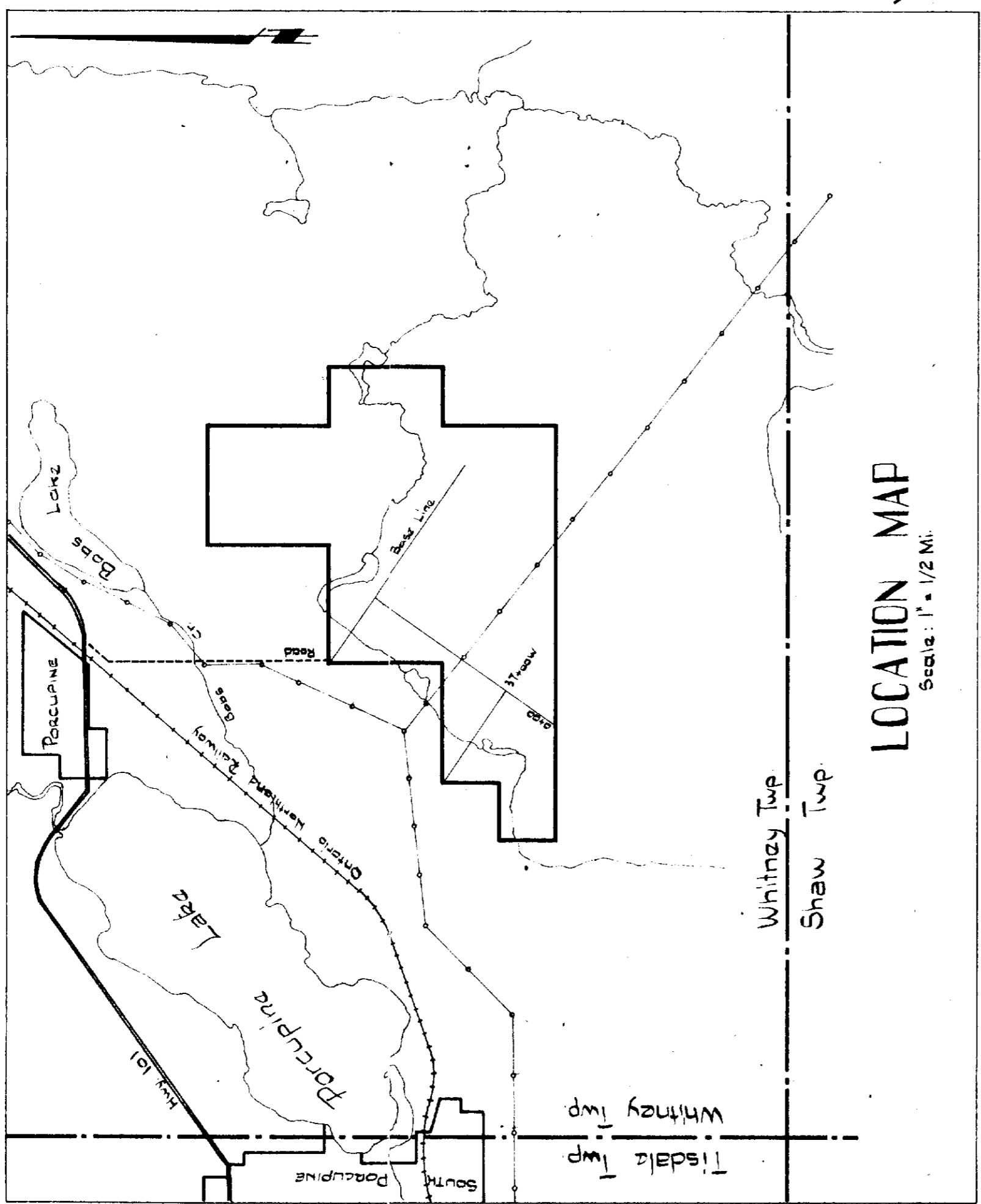
WATTS, GRIFFIS AND McOUAT LIMITED



W. B. Pelette

Toronto, Ontario  
September 22, 1967

Baseline



- LEGEND**
- 1 Diabase
  - 2 Sulphide horizon (banded and siliceous, with pyrite and traces of sphalerite and galena)
  - 3 Granitic Porphyry
  - 4 Basic Intrusives (carbonitized - Ag, serpentinized - Ag, schistose - Ag)
  - 5 Quartzite (graphitic and ferruginous)
  - 6 Chlorite Schist (bicolor - G), siliceous - Gb
  - 7 Quartz-Schist Schist

- SYMBOLS**
- Old pit
  - Geological contact defined
  - Geological contact approximate
  - Geological contact assumed
  - Assumed fault
  - Strike and dip (bedding, schistosity)
  - Rock sample location with assay numbers
  - Favorable belt of anomalies - I.P. survey
  - Outcrop
  - Mercury (Hg) in parts/billion in 'B' zone
  - Silver (Ag) in parts/million (0.5" x 0.5" zone)
  - Indicates soil sample could not be taken in 'A' horizon, and/or in 'B' horizon
  - E.M. conductor
  - Diamond Drill Hole

Sample No	Ag	oz./ton	Au	oz./ton	Remarks
2701	3.74	0.10			Grab
2702	6.34				Selective grab
2703	9.78				Selective grab
2704	1.80	0.02			Chip (2.0)
2705	0.62	0.01			Chip (1.5)
2717	0.13	0.005			Chip (6.0)
2718	0.38	0.005			Grab
2723	Tr	Nil			Grab
2726	0.38	Nil			Bulk chip (20 lbs)
2728	0.82	0.02			Grab
3412	1.46	Tr			Grab

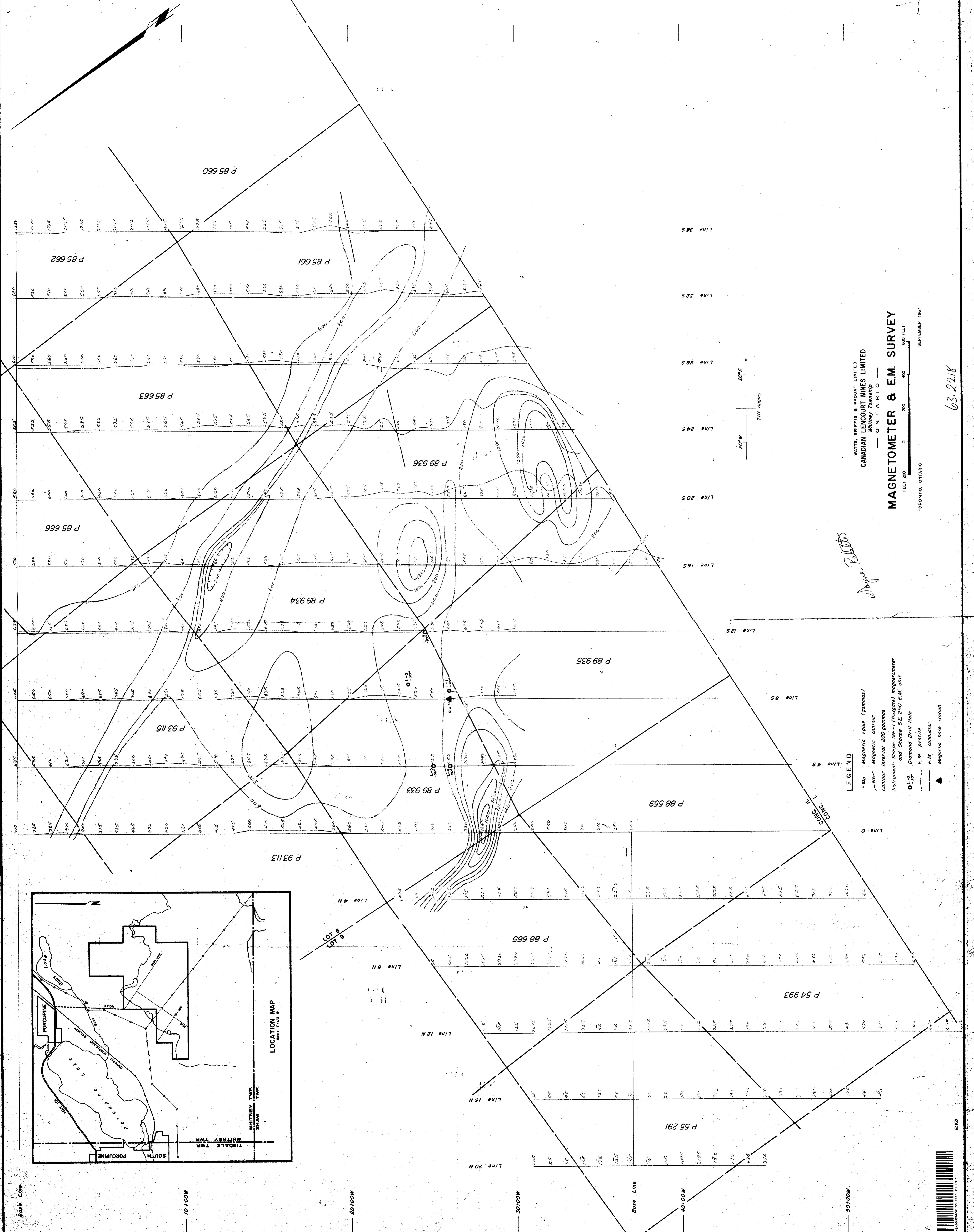
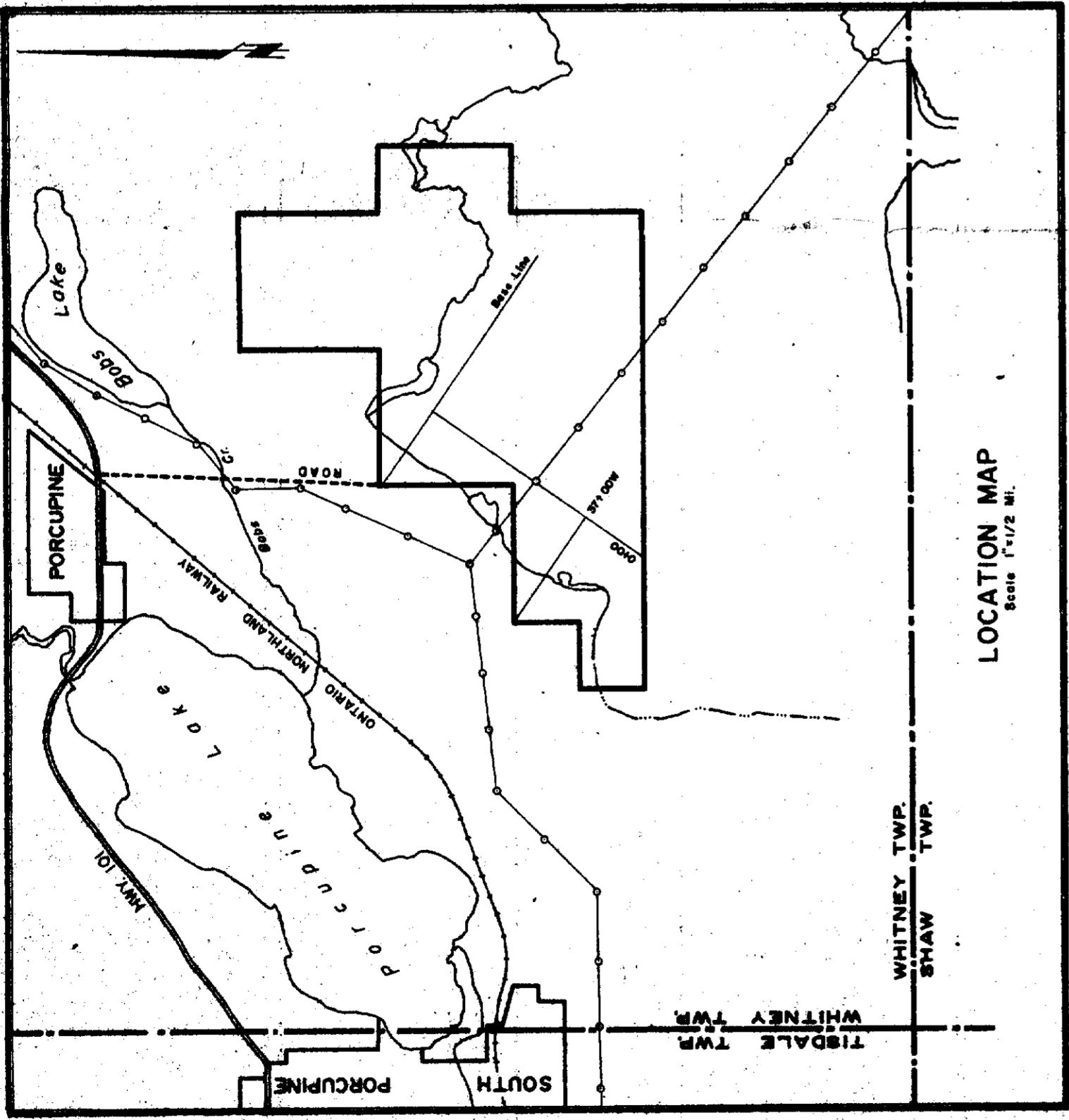
WATTS, GRIFFIS & MOUNT LIMITED  
FOR  
**CANADIAN LENCOURT MINES LIMITED**  
**GEOLOGICAL MAP**  
Whitney Township  
PORCUPINE MINING DIVISION  
ONTARIO

FORM 200  
TORONTO, ONTARIO  
SEPTEMBER 1967



63-2218

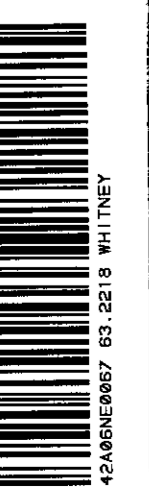
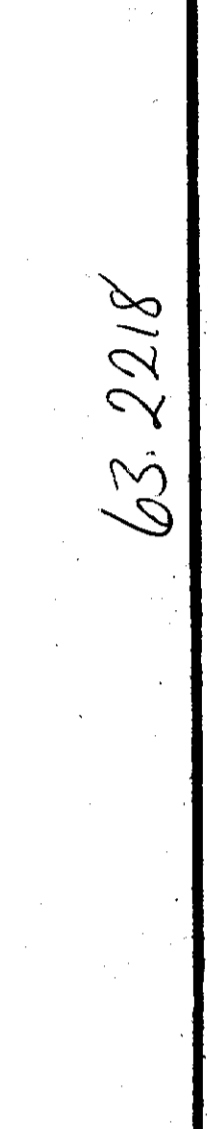




**LEGEND**

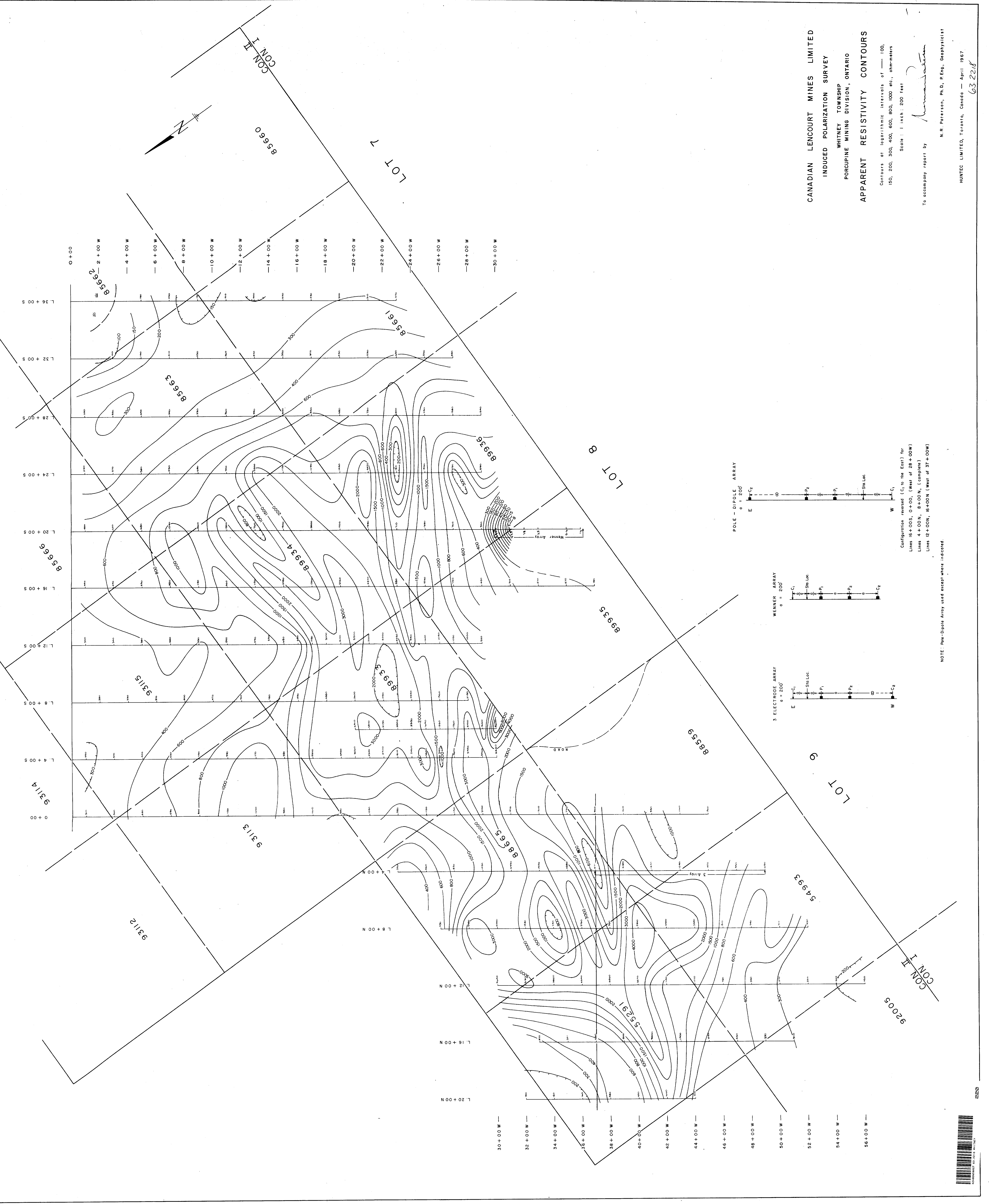
- Magnetic value (gammas)
- Magnetic contour
- Contour interval 200 gammas
- Instrument: Sharp MF-1 (Fluogam) magnetometer and Sharp S.E. 250 E.M. unit.
- L-2 Diamond Drill Hole
- E.M. profile
- E.M. conductor
- ▲ Magnetic base station

Watts, Griffis & Miquat Limited  
**CANADIAN LENCOURT MINES LIMITED**  
 Whitney Township  
 — ONTARIO —  
**MAGNETOMETER & E.M. SURVEY**  
 SEPTEMBER 1967



63-2218



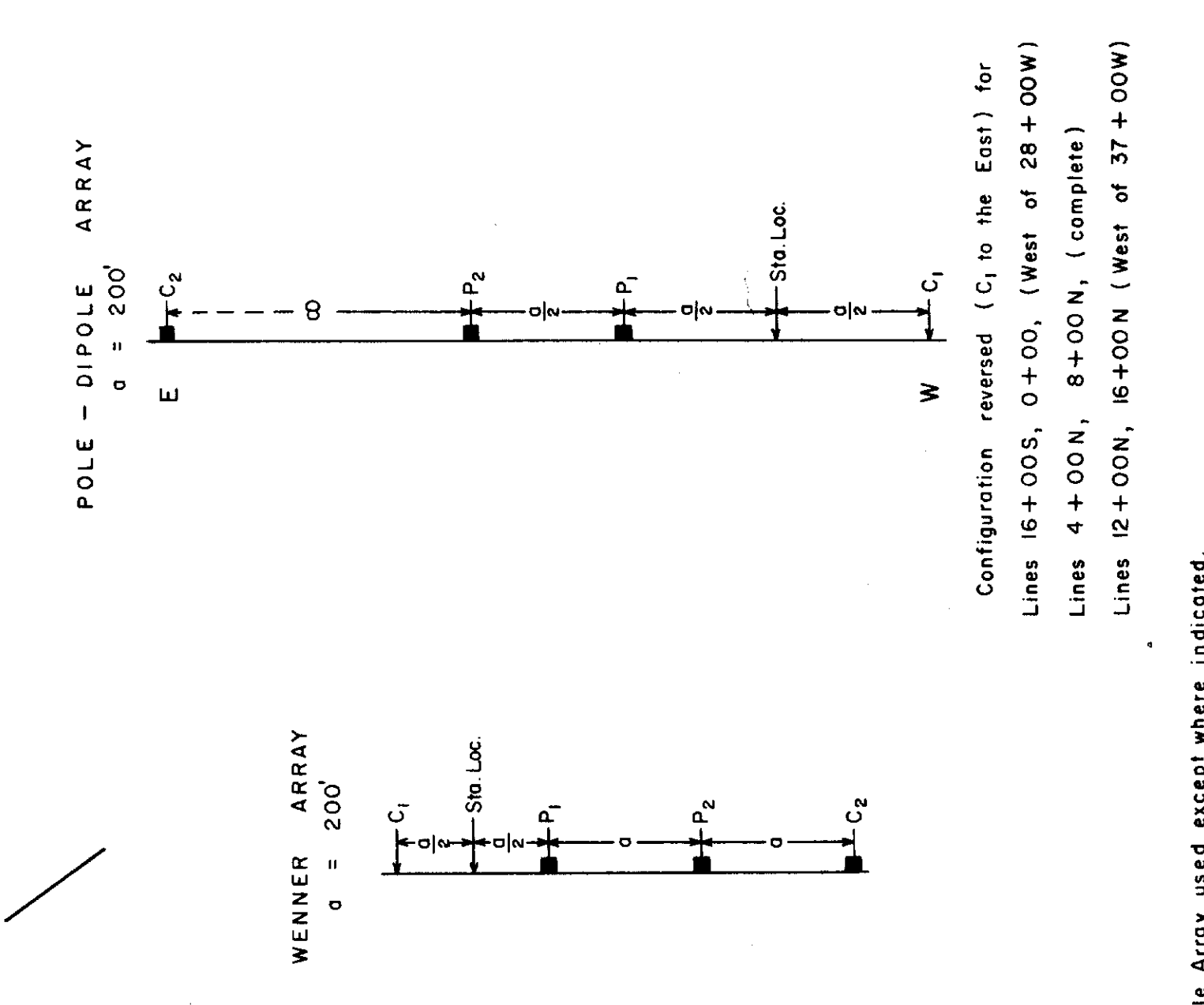


CANADIAN LENCOURT MINES LIMITED  
 INDUCED POLARIZATION SURVEY  
 WHITNEY TOWNSHIP  
 PORCUPINE MINING DIVISION, ONTARIO  
 APPARENT RESISTIVITY CONTOURS

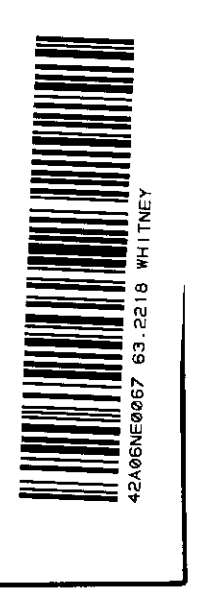
Contours at logarithmic intervals of 100,  
 150, 200, 300, 400, 600, 800, 1000 etc., ohm-meters  
 Scale: 1 inch = 200 feet

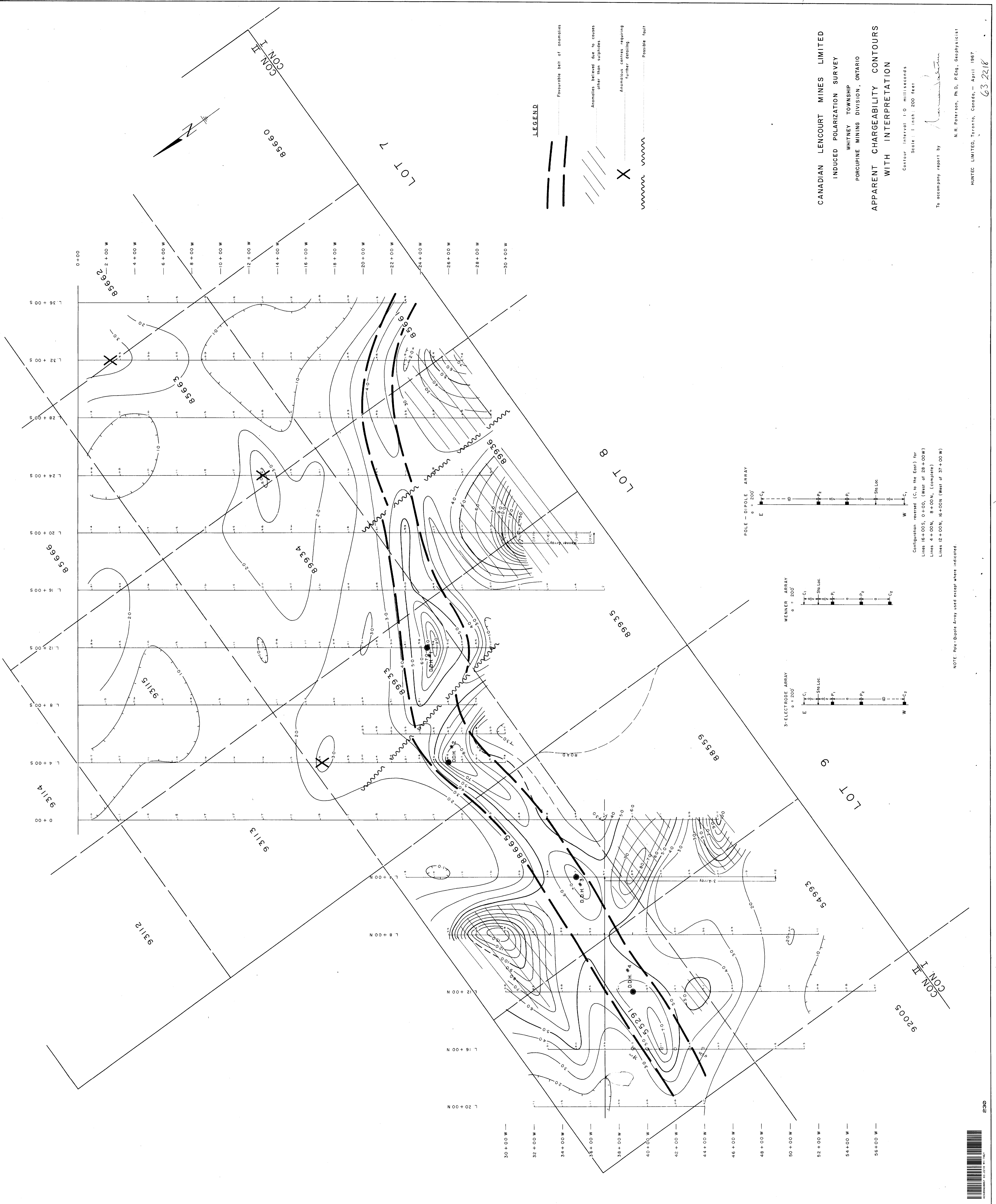
To accompany report by *[Signature]*  
 N.R. Peterson, Ph.D., P.Eng., Geophysicist

HUNTEC LIMITED, Toronto, Canada - April 1967  
 63-2218



NOTE: Pole-Dipole Array used except where indicated.





CANADIAN LENCOURT MINES LIMITED  
 INDUCED POLARIZATION SURVEY  
 WHITNEY TOWNSHIP  
 PORCUPINE MINING DIVISION, ONTARIO  
 APPARENT CHARGEABILITY CONTOURS  
 WITH INTERPRETATION

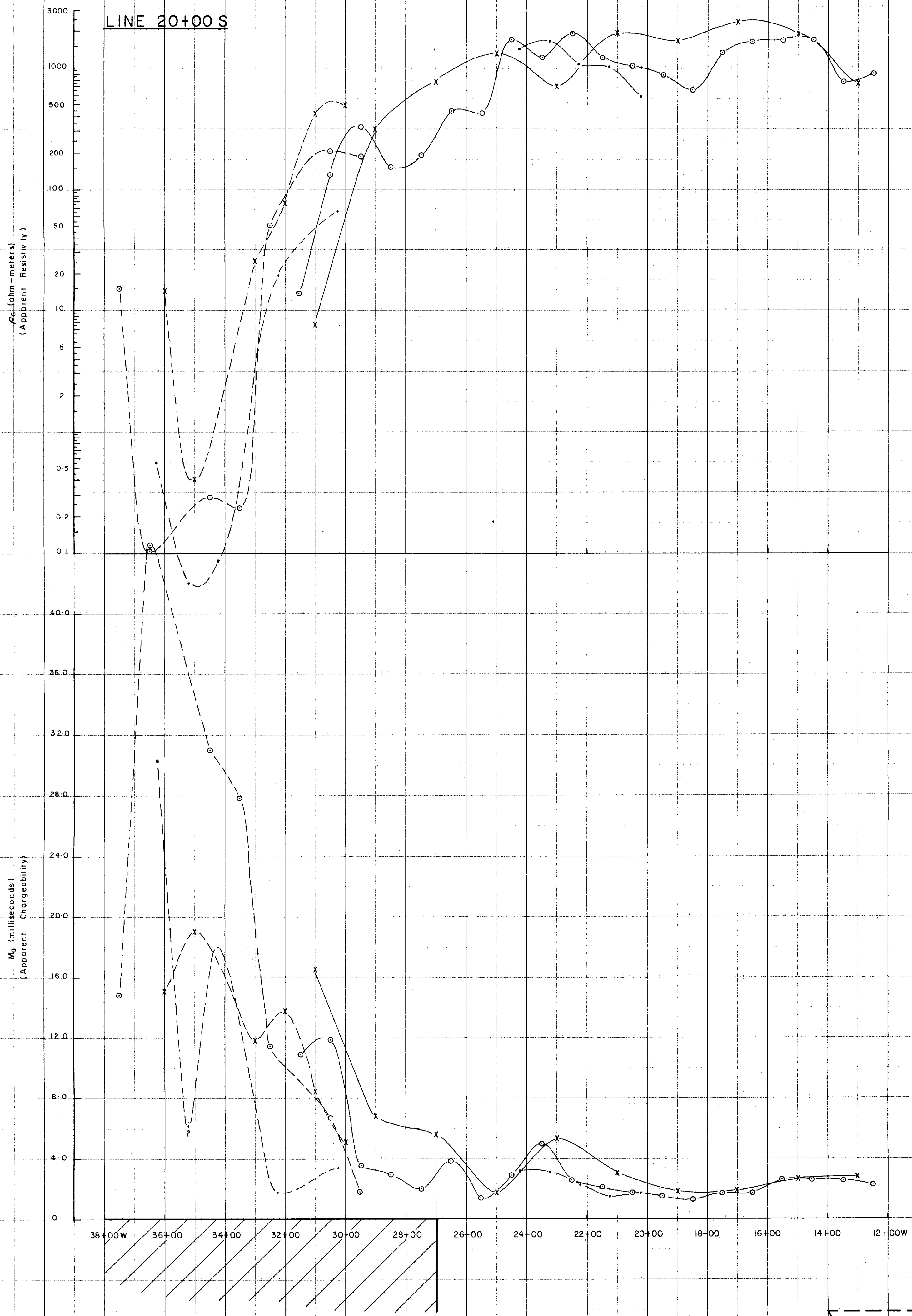
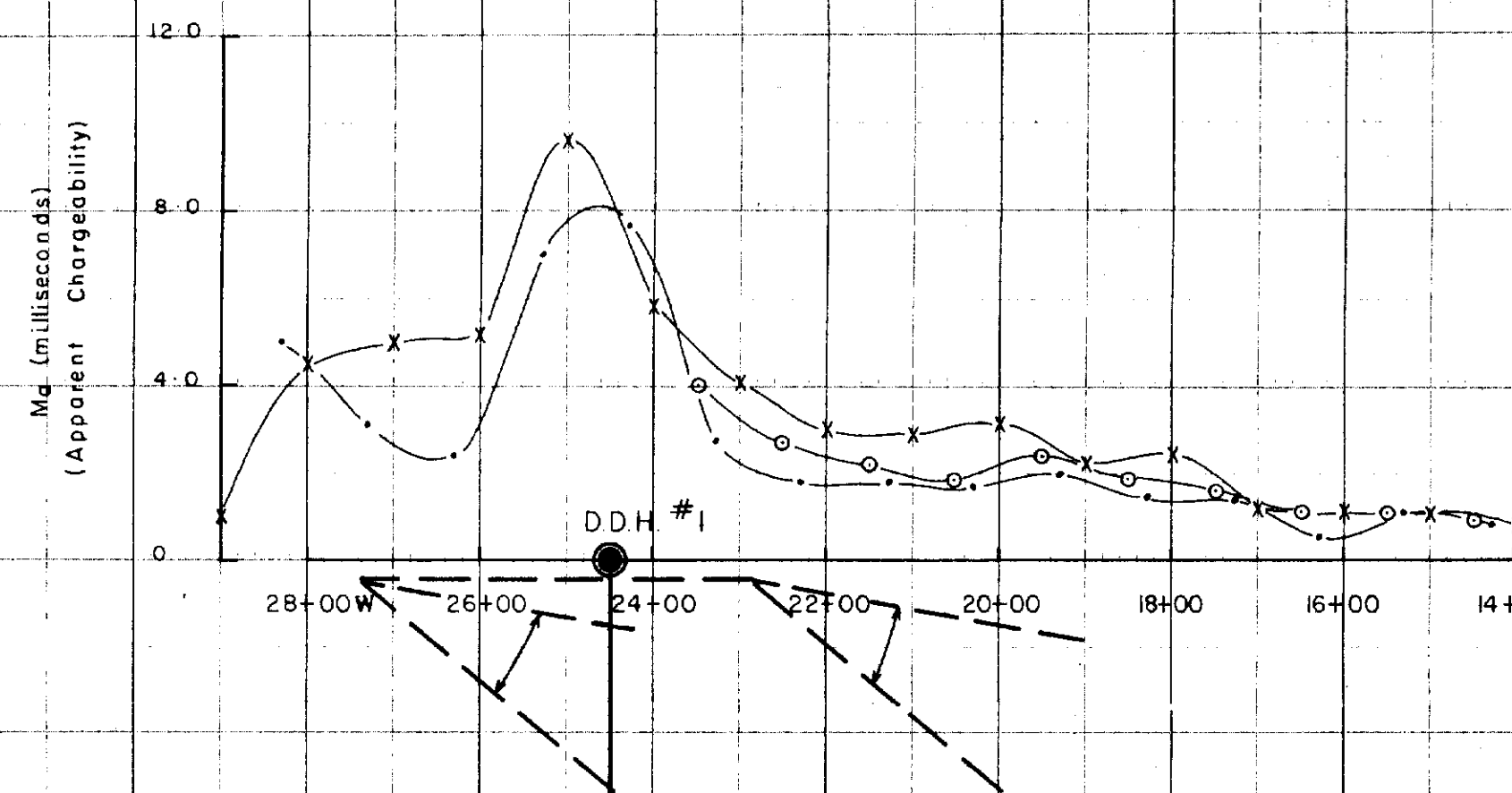
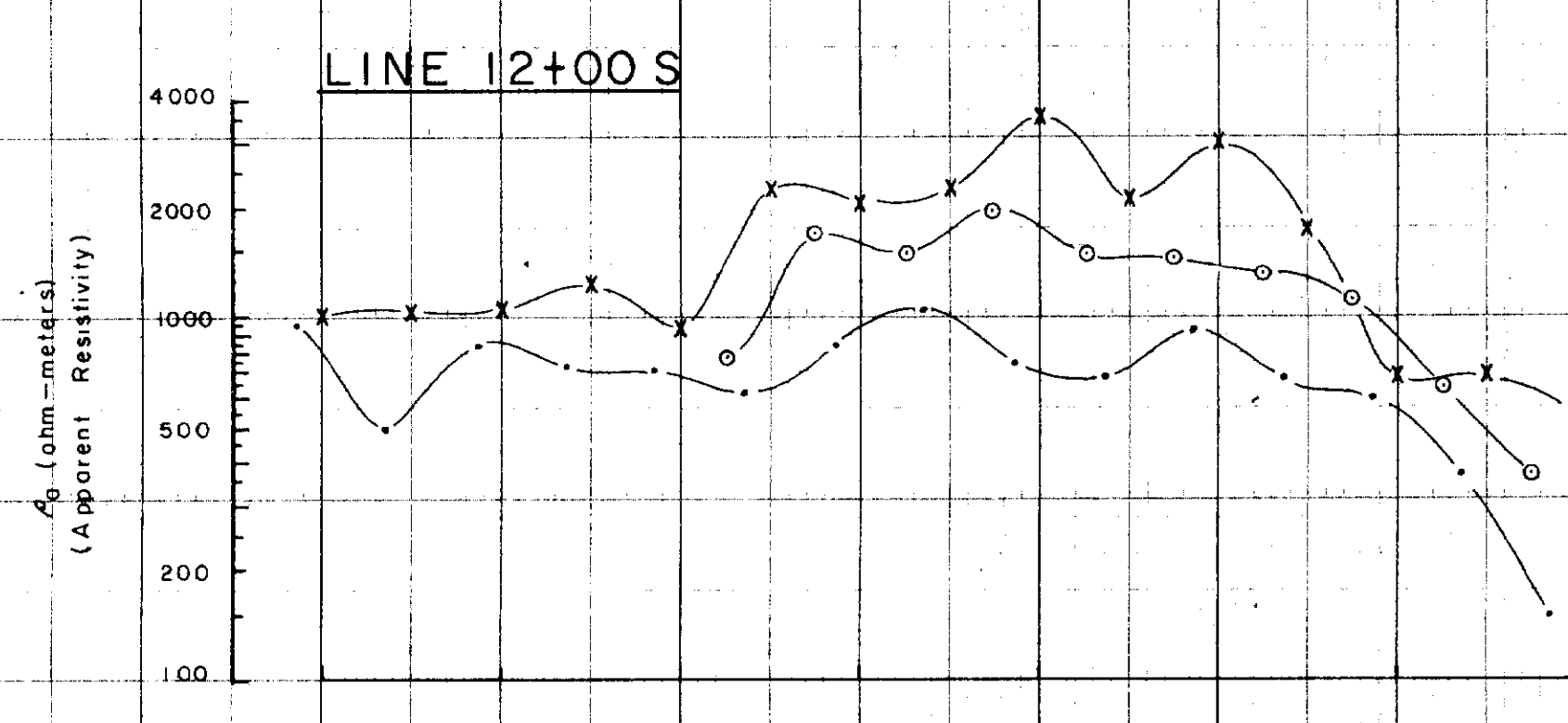
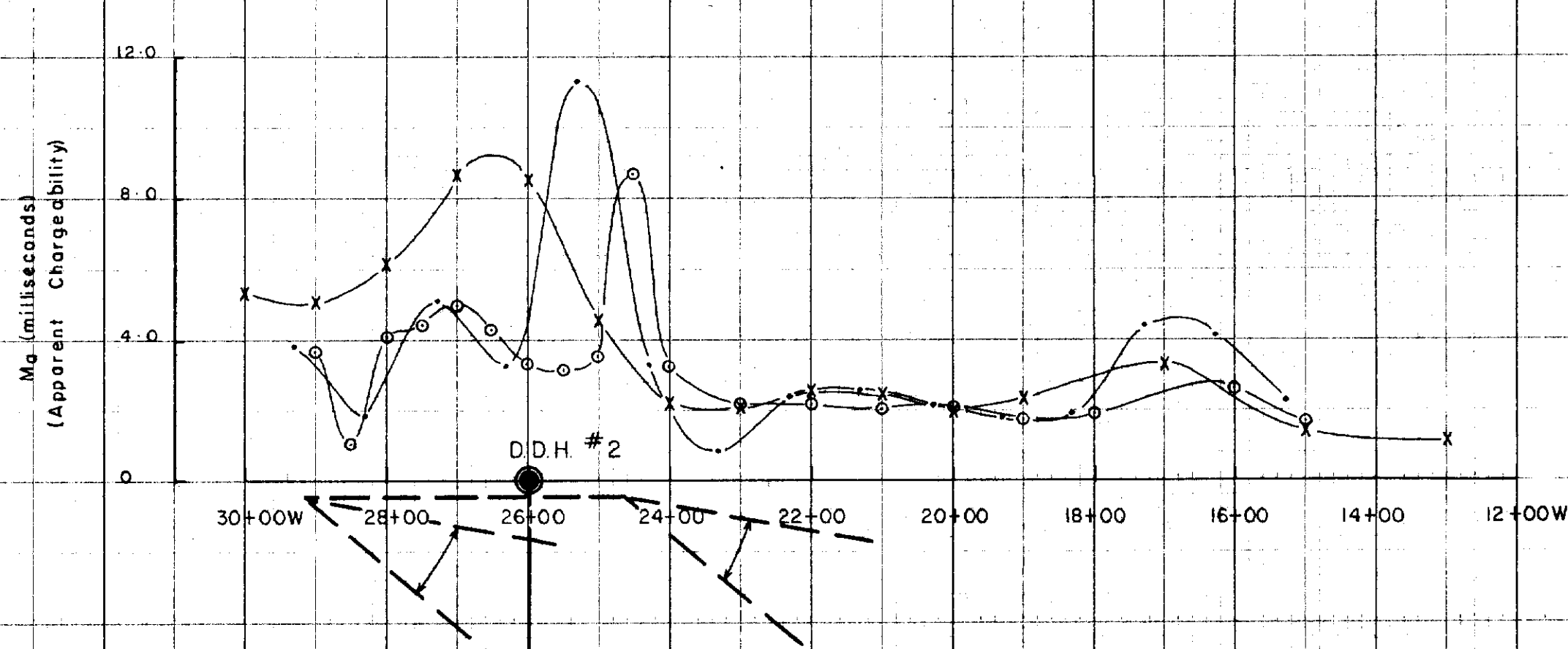
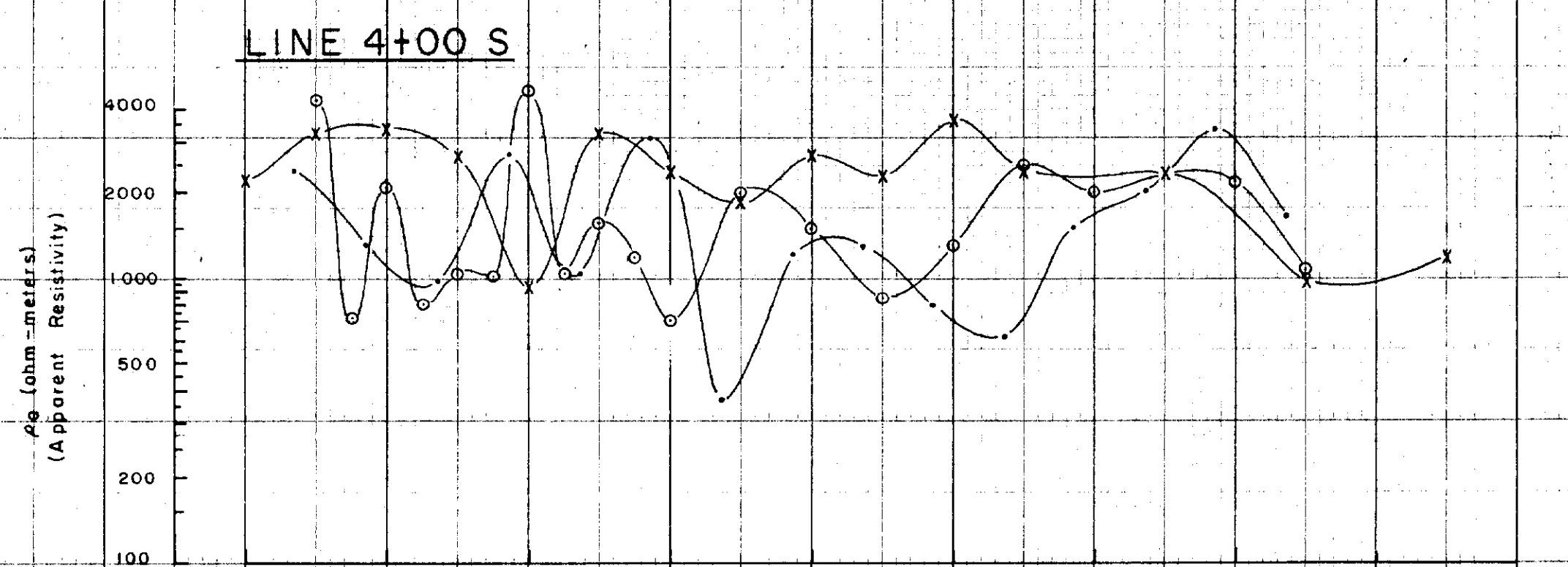
Contour Interval: 1.0 milliseconds  
 Scale: 1 inch = 200 feet

To accompany report by *N. R. Peterson*

N. R. Peterson, Ph.D., P. Eng., Geophysicist  
 HUNTEC LIMITED, Toronto, Canada, - April 1967

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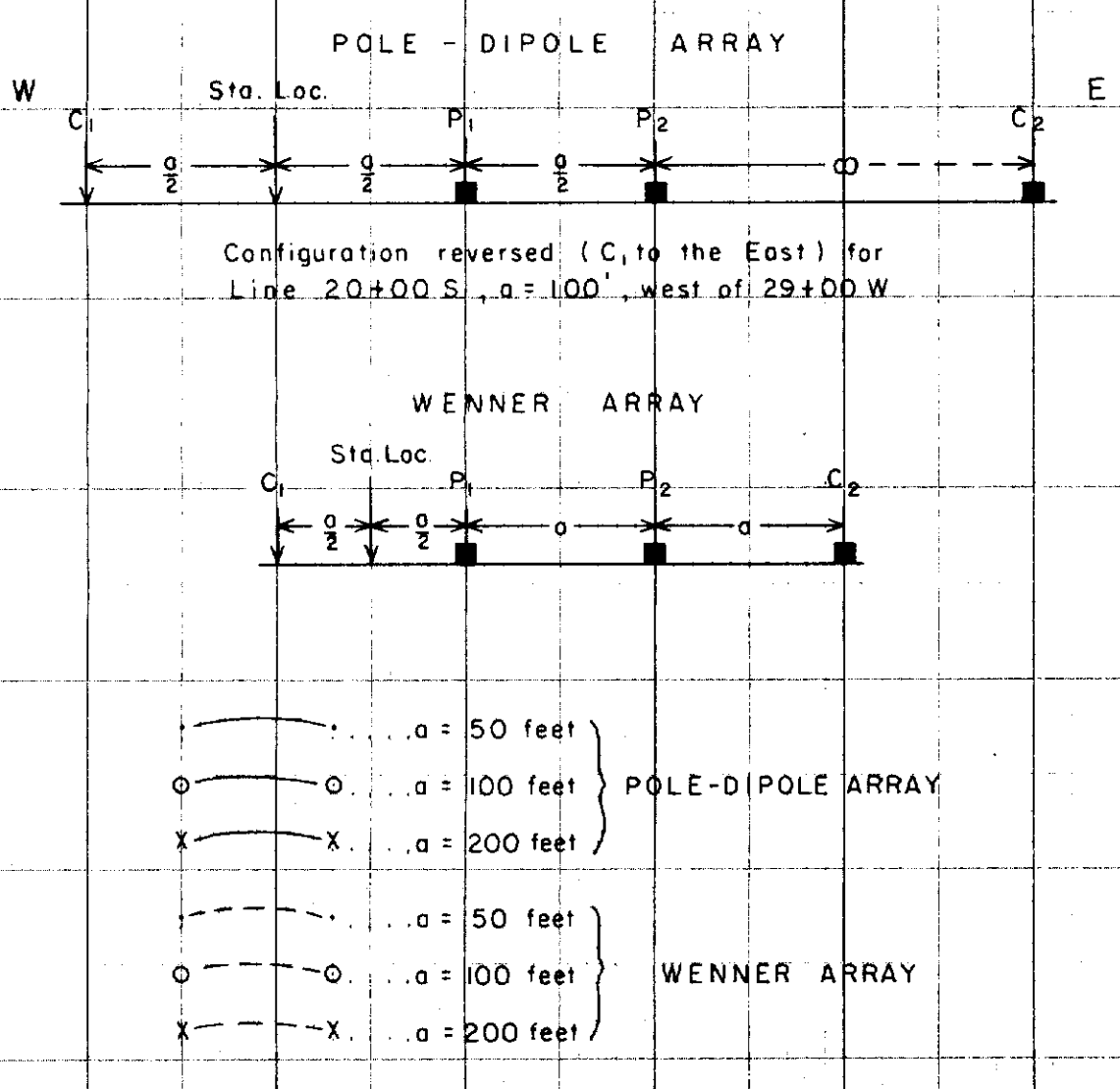




**LEGEND**

--- Interpreted favourable zone of chargeability

/// Chargeability believed due to causes other than sulphides



**CANADIAN LENCOURT MINES LIMITED**

**INDUCED POLARIZATION SURVEY**

WHITNEY TOWNSHIP  
PORCUPINE MINING DIVISION, ONTARIO

**DETAIL PROFILES OF  
APPARENT CHARGEABILITY & RESISTIVITY  
WITH INTERPRETATION**

HORIZONTAL SCALE 1 inch = 200 feet

VERTICAL SCALES  
Chargeability 1 inch = 4.0 milliseconds  
Resistivity 2 inches = logarithmic cycle (ohm-meters)

To accompany report by *[Signature]*

N. R. Peterson, Ph.D., P. Eng., Geophysicist

