

A Geophysical Report On  
An Induced Polarization Survey *Nº?*  
North & South Claim Groups, Highland Valley, B.C.  
50°, 120° SW ←  
and

The Copper Mountain Property, nr. Princeton, B.C.  
49°, 120° SE *72 H/7E*  
for *S.W.*

ORO MINES LIMITED

Claims Surveyed: CN No. 3, 4, 5  
PRICE 77 - 82, 128, 130, 132, 136B,  
141, 194, 196, 203, 500, Fr.511, Fr.512  
515 and 517  
MM 1, 3, 5, 7, 30, 32, 35 - 46  
ROBB 21 and 23  
ORO 1  
JJJ 1 - 4 and 6  
JILL 1 - 7, 18, 20, 22, 24, 26, 28, 35,  
35 Fr. and 39  
ASH 1, 2, 4 and 6  
EVA 1 - 7  
ELM 2  
TOW 11 - 15

Supervision & Reporting by: R. K. Watson, B.A.Sc., P.Eng.  
Geophysicist

W. A. Finney, B.Sc.,  
Geophysicist

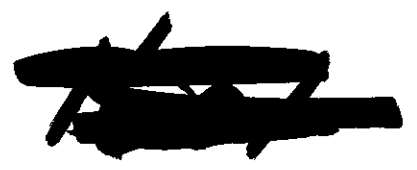
June 13<sup>th</sup> to August 19<sup>th</sup> and August 24<sup>th</sup> to September 4<sup>th</sup>, 1967



HUNTEC LIMITED

1601

1601



REPORT ON  
AN INDUCED POLARIZATION (I.P.) SURVEY  
NORTH & SOUTH CLAIM GROUPS, HIGHLAND VALLEY, B.C.  
AND  
THE COPPER MOUNTAIN PROPERTY, NR. PRINCETON, B.C.

92 I / 7 W

FDR

ORO MINES LIMITED

for 92 H / 7 E, this  
rpt. is BY referred to  
as 1041 (on map and in  
listings)

HUNTEC LIMITED  
VANCOUVER B.C.  
OCTOBER 1967

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ACCOMPANYING MAPS	MAP POCKET Scale
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Detail Profiles of Apparent Chargeability and Resistivity

South Claim Group

Fig. 1	#1	.....	Line 44E (Block 1-5)
Fig. 2	#2	.....	Line 110E (Block 2-5)

Copper Mountain Property

Fig. 3	#3		Line 140E (Block 3)
Fig. 4	#4		Line 74N (Block 4)
Fig. 5	#5		Line 72S (Block 3)
Fig. 6	#6		Line 76S ( " " )
Fig. 7	#7		Line 80S ( " " )
Fig. 8	#8		Line 92S ( " " )

## INTRODUCTION

### General

From June 13th to August 19th, and from August 24th to September 4th, 1967, an Induced Polarization survey was carried out by Huntco Limited for Orc Mines Ltd. over a property near Princeton, B.C., and two properties near Billy Lake, Highland Valley, B.C. The field crew of five men was managed by Mr. W. MAPS, and periodic technical supervision was given in the field by Mr. R. K. Watson.

The purpose of the survey was to prospect for sulphide mineralization in both massive and disseminated form. In particular, a number of the survey lines traversed areas where previous work had revealed geochemical anomalies and specific attention was given to these areas in order to detect any associated I.P. anomalies.

Survey lines were in the form of grids at 400 ft. spacings and readings were taken at 200 ft. station intervals along the lines. Places of interest were detailed using more than one electrode spacing and closer station intervals.

### The Properties

The survey area consisted of three individual properties, the North Claim Group (Highland Valley), the South Claim Group (Highland Valley) and the Copper Mountain Property (near Princeton).

### The North Claim Group      50 120 SW      CN, PRICE, FR.

This property lies within the Kamloops Mining Division and the Nicola Mining Division, and is located just north of Billy Lake (Fig. A); access is by road from Ashcroft. The I.P. survey covered 3 blocks and the mining claims surveyed

include:

CN No. 3, 4 & 5  
Price 77, 78, 79, 80, 81, 82,  
128, 130, 132, 136B,  
141, 194, 196, 203, 500,  
FR 511, FR 512, FR 515  
and 517

The area occurs within the Guichon Batholith which consists of a series of intrusives thought to be of Jurassic age, but some of the later intrusives might be younger. Rocks outcropping in the area are mainly granodiorites and quartz diorites with some smaller amounts of more acidic or basic types. The mineralization is associated with one of the earlier intrusives but locally the distinction between rocks of the different intrusives is difficult if not impossible to make.

The South Claim Group      50      120 SW      MM, Robb, Oro

This property lies approximately 6 miles south-west of Billy Lake in the Kamloops Mining Division (Fig. A), and is in geological environment similar to the North Claim Group. The I.P. survey covered 3 blocks and the mining claims surveyed include:

MM 1, 3, 5, 7, 35, 36, 37, 38, 39,  
40, 41, 42, 43, 44, 45, 46,  
30 and 32  
Robb 21 and 23  
Oro 1

The Copper Mountain Property      49      120 SW      JJI, JILL, ASH, EVA, Yow

This property lies within the Similkameen Mining Division and is located about 12 miles south of Princeton;

access is by the Hope-Princeton highway and logging roads (Fig. B. Plates 4 and 5). The I.D. survey covered 5 blocks and the mining claims surveyed include:

JJS 1, 2, 3, 4 and 6

Jill 1, 2, 3, 4, 5, 6, 7, 18,  
20, 22, 24, 26, 35, 35 FR,  
39 and 28

Ash 1, 2, 5 and 6

Eva 1, 2, 3, 4, 5, 6 and 7

Elm 2

Tow 11, 12, 13, 14 and 15

The surface geology of the area has been mapped in places and a limited amount of trenching has been done at surface mineralized showings. The property is located on or near a contact between the younger intrusive Copper Mountain Stock consisting of gabbro, diorite and pegmatite, and the older Nicola Group consisting of a complex of lavas, argillite, tuff, limestone, chlorite and sericite schist. There is evidence of tangential faulting in some places. It is noted that this type of faulting is thought to have been a factor in controlling the mineralization at Copper Mountain Mine itself, which is associated with a geologically similar contact zone.

SURVEY SPECIFICATIONS

The Equipment

The Induced Polarization equipment used was a 7.5 kw instrument manufactured in Toronto by Hunttec Limited. The following specifications apply:

Type of Current	Direct Current broken at periodic intervals. Alternate pulses of opposite polarity.
Frequency	1.5 seconds "current on" and 0.5 seconds "current off".
Integrating Time	400 milliseconds
Maximum power available	7.5 kw
Maximum current available	8.0 amps

Measurements taken in the field were:

1. The current flowing through the current electrodes C<sub>1</sub> and C<sub>2</sub>.
2. The primary voltage  $V_p$  between the measuring electrodes during "current on".
3. The secondary voltage  $V_s$  between the measuring electrodes during "current off".

The apparent chargeability ( $M_a$ ) in milliseconds is calculated by dividing the secondary voltage by the primary voltage and multiplying by 400 which is the integrating time of the receiver unit. The apparent resistivity ( $\rho_a$ ) is calculated by dividing  $V_p$  by the current and multiplying by a factor appropriate to the geometry of the electrode array used.

Electrode Configuration

The reconnaissance phase of the survey was carried



out in part using the 3-array configuration and the remainder using Pole-Dipole configuration. In both cases the current electrode  $C_1$  and the two potential electrodes  $P_1$  and  $P_2$  are moved in unison along the survey lines while the second current electrode  $C_2$  is fixed at "infinity". The distance between  $C_1$  and  $P_1$  is designated by the quantity "a". In the 3-array and Pole-Dipole configurations the distance between  $P_1$  and  $P_2$  is kept equal to "a" and " $\frac{a}{2}$ " respectively.

The reconnaissance data of the survey over the North Claim Group and the South Claim Group was obtained using 3-array configuration with the value of "a" equal to 200 ft.

The reconnaissance data for the Copper Mountain Property was obtained using Pole-Dipole configuration in Blocks 1, 3, 4 and 5 with "a" equal to 400 ft.

When Block 3 was extended and surveyed along east-west lines a 3-array configuration was used with "a" equal to 200 ft.

A 3-array configuration with "a" equal to 400 ft. was used in Block 2.

Detailing of anomalies and regions of interest was done by profiling using different "a" values. This additional information facilitates the calculation of depth, dip and location of the source rock as the value of "a" is a rough approximation to the depth penetration in each case.

### Data Presentation

The reconnaissance and detailed data for Blocks 1-N, 2-N, and 3-N in the North Claim Group is presented in profile form only (Plate 1). This is at a horizontal scale of 1" to 400 ft.

The apparent chargeability and apparent resistivity reconnaissance results for Block 1-S and 2-S of the South Claim Group are shown together as contours on Plate 2 at a scale of 1" to 400 ft. and the detail work in this area is shown as profiles at 1" to 200 Ft. in Figs. 1 and 2. The work in Block 3-S consisted of a single traverse and the results are shown as profiles on Plate 3.

The reconnaissance data for Copper Mountain Property is shown as contours on Plates 4 and 5 at a scale of 1" to 400 ft., and on Plates 6 and 7 at a scale of 1" to 200 ft. Detail work is shown as profiles in Figs. 3, 4, 5, 6, 7 and 8 at a horizontal scale of 1" to 200 ft.

The claims surveyed in each property appear on the plates along with the chargeability or resistivity results except for those in the North Claim Group which are shown separately on Plate 1-A.

## RESULTS AND INTERPRETATION

### North Claim Group

Because of the small number of lines surveyed in each block of this group of claims, no attempt was made to contour the apparent chargeability and apparent resistivity results which are presented instead as profiles only (Plate 1).

Block 1-N The apparent chargeability values are relatively low and flat which is typical of the background level in the Highland Valley area. A minor anomaly was located on line 72E at 108S using the 400 ft. electrode spacing but there was no corresponding high reading at the smaller electrode spacing nor on the adjacent line 76E. This suggests that the source of the anomaly might be centred to the west of line 72E and it would be necessary to survey lines 70E and 68E to check this out. This is recommended if other I.P. work in the general area is contemplated.

Block 2-N The apparent chargeability results are similar to those in Block 1-N, being low and flat. One high reading was recorded on line 33E at 11N and smaller anomalous readings occur on line 29E at 8N and on line 25E at 13N. These three anomalies might possibly be related and could reflect a lithologic feature along a general north-south trend in this region (Plate 1).

Another possible lithologic feature characterized by weak chargeability and resistivity response, about 0.5 to 1.0 milliseconds above background, roughly parallels the first one and is displaced about 700 ft. to the west. It is not clear what is causing these anomalous trends but the associated higher resistivity readings indicate that it might not be sulphide mineralization.

The reading on line 33E at 11N appears to be too high not to show more effect at the adjacent stations and it is now thought it might be slightly erroneous. This should be checked out at some convenient time in the future.

Block 3-N Anomalous apparent chargeability values were recorded on line 72E at station 9N using a 200 ft. electrode spacing and there is also an associated drop in the apparent resistivity values. However it is thought now that this might be a spurious high reading as the values recorded using the 400 ft. electrode spacing do not exceed the general background level. No other anomalies were discovered in this block and no further work is recommended.

#### South Claim Group

Block 1-S The apparent chargeability background lies between 1.5 and 2.5 milliseconds and there are only very minor variations outside this range. Line 44E was detailed at 400 ft. electrode spacing but no evidence was found of deeper mineralization.

Block 2-S The background apparent chargeability values are similar to Block 1-S and six weak anomalies between two and three times background were located at 114E, 54N; 120E, 62N; 120E, 76N; 106E, 96N; 106E, 106N; 114E, 64N (Plate 2). The first four of these coincide with, or are very close to, geochemical anomalies and should be investigated further.

None of the anomalies has been outlined well enough to interpret fully and it is recommended that the I.P. survey be extended to the west of the block along lines at 200 ft. intervals in order to define targets for further-

investigation. In particular the strongest anomaly at 113E, 54N should be defined by extra data to the east and west and detailed at different electrode spacing.

Block 3-S One traverse using a 200 ft. electrode spacing was made along line 92E and the results are shown on Plate 3. Two rather small anomalies occur at 106N and 110N respectively but these are less than 2.0 milli-seconds above background level. There are accompanying increases in the apparent resistivity in each case and consequently not much significance is attached to either of the anomalies.

### Copper Mountain Property

Block 1 Two lines totalling 0.8 miles were surveyed in this block. The apparent chargeability response was very weak, approximately 0.9 - 1.2 milli-seconds background and no anomalies were detected. No detailing was attempted and no further work is recommended.

Block 2 The apparent chargeability values encountered in this block are very flat and low, similar to Block 1, and indicate that probably the same rock underlies both areas. Five lines totalling approximately 5.8 miles were surveyed but only one slight anomalous region centred at 63E, 48S was detected. In the field it was not considered sufficiently important to be detailed as the interpreted causative body was considered to be quite small. However, it is over two and a half times background and open to the north-east, and the writers now believe it to be worthy of additional detailing at closer station interval and line spacing to outline its full extent. This should be a low priority project tied in with any future I.P. program in the general area.

Block 3 A strong anomaly was encountered in the eastern half of this block and it was delineated completely by extending the survey to the east along east-west lines. The additional contours of apparent chargeability and resistivity are shown on Plates 6 and 7. Detail profiles over this anomaly using multiple spacings were obtained along lines 72S, 76S, 80S and 90S and are shown on Figs. 5, 6, 7 and 8. These profiles were used to determine zones of primary interest and are more suitable for interpretation than the detailed profiles along line 140E (Fig. 3) which were obtained before the strike of the anomaly was fully defined.

The reconnaissance survey outlined a very large anomaly extending from the southern to the northern extremities of the block and it probably continues beyond these limits. The apparent chargeability response is strong throughout and in several places exceeds 40 milliseconds.

The eastern boundary of the anomaly is well defined and because of its linearity it appears that the chargeable body is sharply cut off. It is probably controlled by a fault which parallels this lineament and is known to exist between 68S and 92S (Plate 6).

Interpretation of the detailed profiles obtained at smaller electrode spacings along 76S and 92S indicate that within the broad anomalous zone there are narrow zones of stronger chargeability. These interpreted zones are outlined on Figs. 6 and 8 and also on Plate 6, which also shows an outline of the interpreted chargeable body. The zones cannot be extrapolated between lines 76S and 92S without additional data but it is thought they do exist in this region and possibly beyond these limits.

An elongated zone which is about 300 ft. wide, centred approximately on 141E and extending from 74S to 102S is more highly conductive than the surrounding rocks. This indicates that the electrical conductor in this region is of a more massive type, consisting probably of either sulphide mineralization, graphite or a combination of both.

The upper surfaces of some of the bodies of stronger chargeability are quite shallow and probably in most cases reach bedrock surface. Investigation further is recommended by trenching or shallow angled diamond drill holes.

The apparent chargeability response using the wider electrode spacing is quite strong which suggests that the chargeable body or bodies continue at depth, probably to at least 300 ft. Diamond drill holes at steeper angles (about 45°) are proposed to test this. The location and direction of seven diamond drill holes are shown on Figs. 6 and 8, and Plate 6.

Block 4 The apparent chargeability readings in this block are generally higher than in Blocks 1 and 2, and probably signify a change in rock type. This is also indicated by a general increase in resistivity readings. Significant anomalous apparent chargeability values were recorded only on lines 70N and 74N. Detailing of line 74N was carried out using a 200 ft. and 100 ft. electrode spacing and the profiles are shown on Fig. 4.

A zone of chargeable material, extending to at least 250 ft. in depth, is interpreted as the source of the anomaly. However, the zone can only be partially outlined at present (Plate 4 and Fig. 4) and it is recommended that the total anomaly and interpreted causative body be more clearly defined before any further follow-up work, such as drilling, is attempted. Extra data should be obtained north and

north-east of the present block; preferably along survey lines running north-south across the general strike of the anomaly.

Block 5 The background apparent chargeability values in this block are similar to Block 4 and are probably due to the same rock type underlying both blocks. Two weak anomalies occur on line 30N and are interpreted as being due to separate sources, each of which is probably small and of low chargeability.

A strong anomaly could possibly exist to the north-west of the block and part of it has been detected at the western end of line 42N. It is recommended that the I.P. survey should be extended to completely outline the anomaly before the other follow-up work is attempted.



### CONCLUSIONS AND RECOMMENDATIONS

The Induced Polarization survey carried out over three blocks of the North Claim Group did not discover any anomalies which appear to be directly related to previously determined geochemical anomalies. What appears to be the side effect of an anomaly was observed on line 72E at 1085 and it is recommended that the I.P. survey be extended to locate it. This should only be done in conjunction with other I.P. work in the general area.

In Block 2-S of the South Claim Group, six small anomalies were detected and four of these can be correlated with geochemical anomalies. These are about two to three times background level and warrant further investigation but they should be outlined fully by more I.P. work at 200 ft. line spacing before any drilling targets are selected.

It is recommended also that the exact location of the geochemical anomalies should be transferred to the I.P. maps in order to evaluate the potential of the I.P. anomalies and to determine the priority on which further work should be done.

A large anomaly has been clearly delineated in Block 3 of the Copper Mountain Property. This occurs in a favourable geological environment and the source could be sulphide mineralization of the disseminated type with possibly a more massive type or graphite associated with the central section.

There are also indications that several zones of material with a higher chargeability exist within the main anomalous region and that the upper surfaces of some of these are close to, or at, bedrock surface. It is strongly recommended that these zones be tested by either trenching in a general east-west direction or by a pattern of closely

spaced short drill holes.

There is evidence that the source material of the main anomaly possibly extends to 300 ft. or more. It is recommended therefore that to test this and also intersect some of the shallower bodies, seven angled holes should be drilled at the following locations:

<u>D.D.H.</u>	<u>Collar Position</u>	<u>Angle</u>
1	76+00S, 131+60E	45° to east
2	76+00S, 138+20E	45° to west
3	76+00S, 139+50E	30° to east
4	92+00S, 134+60E	45° to east
5	92+00S, 138+60E	45° to east
6	92+00S, 145+80E	35° to west
7	76+00S, 142+20E	45° to east

A strong anomaly was partially outlined in Block 4, and another in Block 5. Further I.P. work is recommended to completely define the anomalies before drilling or other follow-up work is attempted.

D.D.H. 3 and D.D.H. 7 are directed at sources showing the highest conductivity and these should be given greater priority than the others.

SUMMARY

1. The Induced Polarization survey over the North Claim Group and the South Claim Group in the Highland Valley area covered 14.9 line-miles using two separate electrode spacings on several of the lines. A total of 24.2 line-miles was surveyed over the Copper Mountain Property near Princeton, B.C., and multiple electrode spacings were used to detail anomalies.
2. The apparent chargeability values obtained in the North and South Claim Groups are relatively low which is typical of that geological environment. Further I.P. work is recommended over six small anomalies which were not fully outlined by the survey; four of these anomalies appear to be related to previously detected geochemical anomalies.
3. A very large anomaly was discovered in Block 3 of the Copper Mountain Property. This appears to represent a subsurface zone with a high chargeability and a central core of relatively high conductivity. Narrow zones of stronger chargeability, some of which are at or near bedrock surface, are interpreted within the main anomaly. A relatively strong anomaly was partially outlined in Block 4 of the property and another in Block 5.

4. Seven angled diamond drill holes are recommended to test the anomaly in Block 3. The near surface zones could be tested by either trenching or a pattern of short vertical drill holes.

HUNTEC LIMITED

W. A. Finney, B.Sc.,  
Geophysicist

R. K. Watson, B.A.Sc., P. Eng.  
Geophysicist

*R. K. Watson*



APPENDIX A  
ASSESSMENT CREDIT DATA

Personnel Qualifications

Survey Party Chief

W. Mairs

Four years, employment with Huntco, of which 80% of his time has been spent as operator or party leader on Induced Polarization surveys.

Technical Supervisor

R. K. Watson, B.A.Sc., P. Eng.  
Geophysicist

Personnel Employed on Survey

<u>Name</u>	<u>Occupation</u>	<u>Dates</u>
R. K. Watson	Geophysicist	24th June and 30th October, 1967
W. A. Finney	Geophysicist	13th June - 10th July, and 10th - 24th October, 1967
W. Mairs	Operator	13th June - 18th July, and 24th August - 3rd Sept., 1967
N. Taylor	"	13th June - 18th July, 1967
M. Samilski	"	13th - 21st June, 1967
J. James	"	13th - 21st June, 1967
D. Mather	"	21st June - 10th July, and 24th - 26th August, 1967
H. Tittmar	"	25th June - 18th July, and 24th August - 4th Sept., 1967
T. Welch	Helper	11th - 18th July, and 24th August - 4th Sept., 1967
D. Reynolds	"	24th August - 4th Sept., 1967
J. Cox	"	12th - 18th July, 1967
F. Froste	"	24th August - 3rd Sept., 1967

Personnel Employed on Survey

<u>Name</u>	<u>Occupation</u>	<u>Dates</u>
H. Cummings	Drafting	Sept. 12th - 15th and 18th - 20th, 1967
E. Helkio	"	October 5th - 31st, 1967
D. Wilson	"	Sept. 22nd, 25th - 29th, and October 4th & 5th, 1967
M. Vatcher	Typing	October 31st, 1967

Miles Surveyed

Line-Miles

North Claim Group

Reconnaissance Phase

5.0

Detail Phase

2.0

Total

7.0

South Claim Group

Reconnaissance Phase

6.3

Detail Phase

1.6

Total

7.9

Copper Mountain Property

Reconnaissance Phase

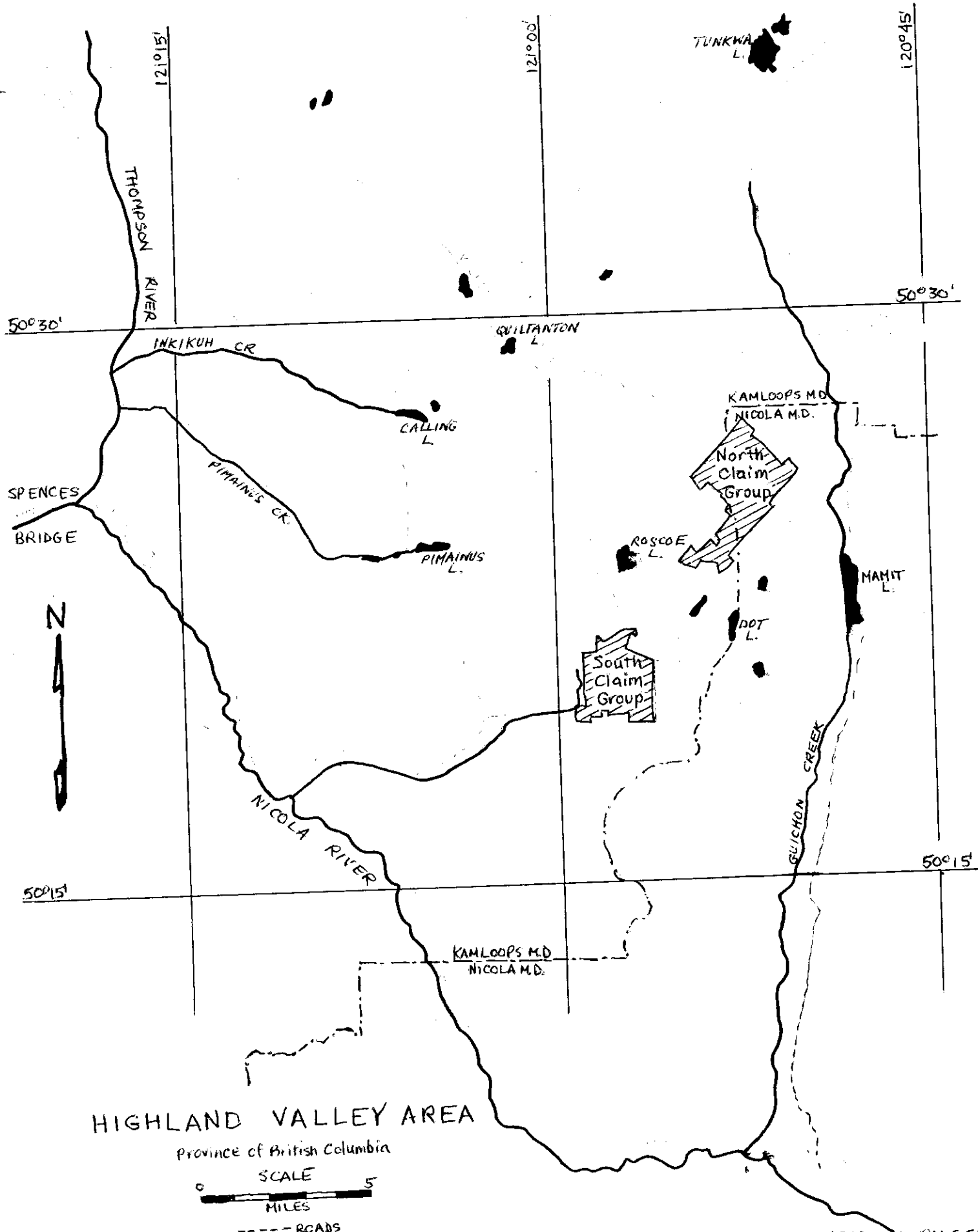
17.7

Detail Phase

6.5

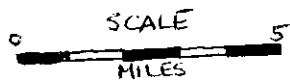
Total

24.2



HIGHLAND VALLEY AREA

Province of British Columbia



----- ROADS

FIG-A

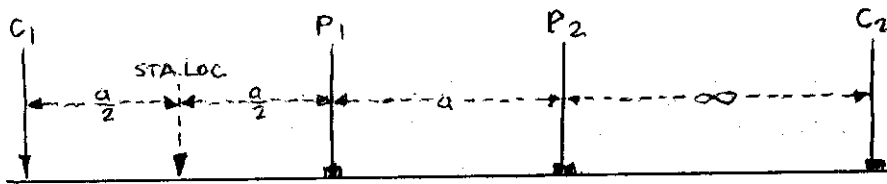
MERRITT, PH-661

DETAIL PROFILES of APPARENT CHARGEABILITY & RESISTIVITY

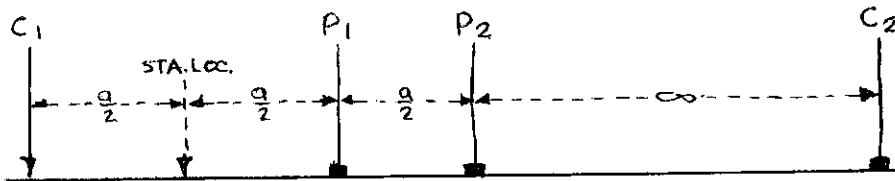
ORO MINES LIMITED.

FIGS. --- 1 to 8.  
PLATES. --- 1 & 3.

3 - ELECTRODE ARRAY



POLE - DIPOLE ARRAY



NOTE:

P<sub>1</sub> P<sub>2</sub> are Receiver Electrodes.  
C<sub>1</sub> C<sub>2</sub> are Transmitter Electrodes.

LEGEND

● ——— ●	$a = 50'$
○ ——— ○	$a = 100'$
x ——— x	$a = 200'$
■ ——— ■	$a = 300'$
△ ——— △	$a = 400'$
▲ ——— ▲	$a = 600'$
□ ——— □	$a = 800'$

Horizontal Scale: 1 inch = — feet (as indicated)

Vertical Scales:

Chargeability 1 inch = — milliseconds (as indicated)

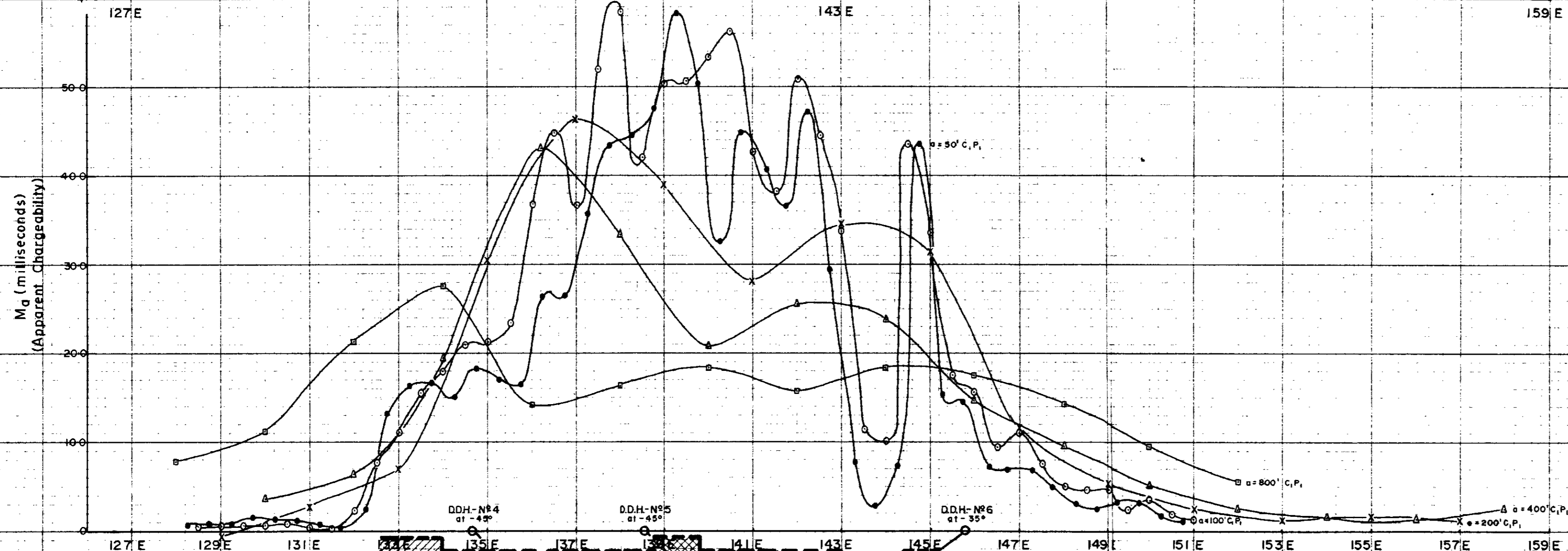
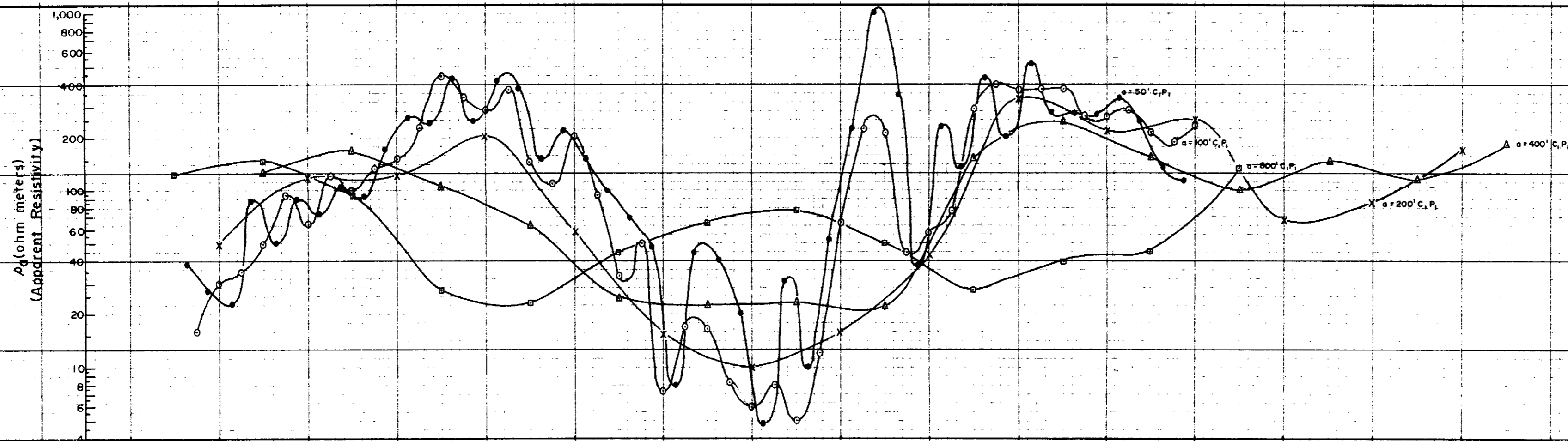
Resistivity 2 inches = 1 logarithmic cycle (ohm-meters)

DATE: OCT. 1967.



JOB NO: PH-661



INDUCED POLARIZATION SURVEY  
 DETAIL PROFILE LINE - 92S.



LEGEND

-  Weaker & Stronger Anomalous Zones
-  Recommended D.D. Holes

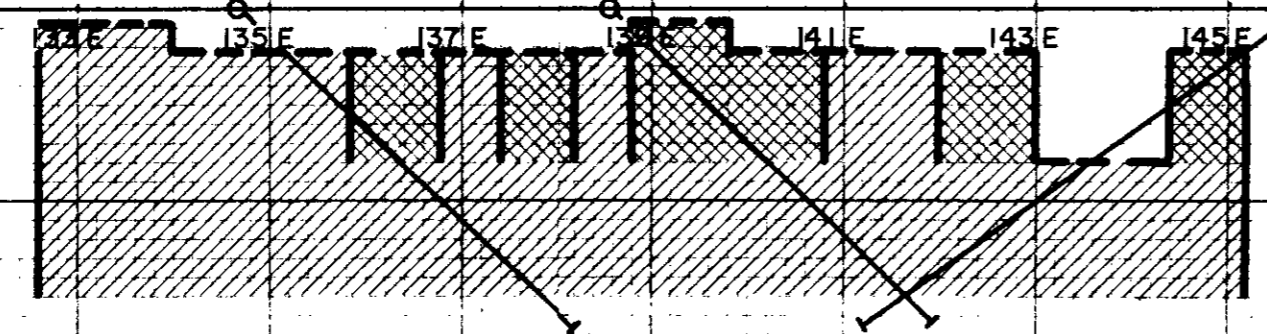
Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 1601 MAP 8

1601

BLOCK-Nº 3.

COPPER MOUNTAIN PROPERTY

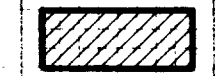
To accompany report by: *R.K. Watson*  
 R.K. Watson, B.A.Sc., P. Eng., Geophysicist  
*W.A. Finney*  
 W.A. Finney, B.Sc., Geophysicist  
 HUNTEC LIMITED, Vancouver, Canada - Aug., Sept, 1967



INDUCED POLARIZATION SURVEY  
 DETAIL PROFILE: LINE — 80S.

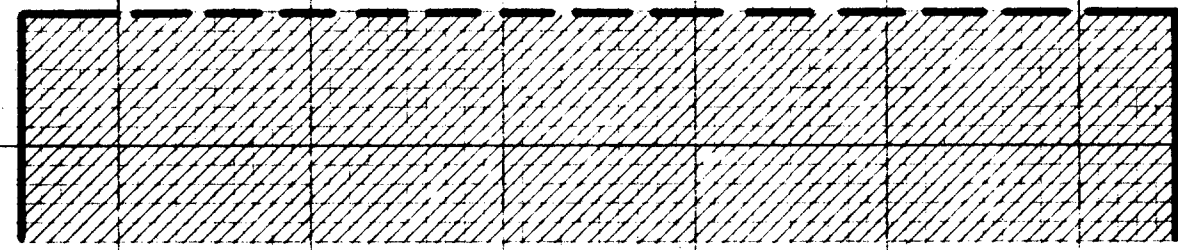
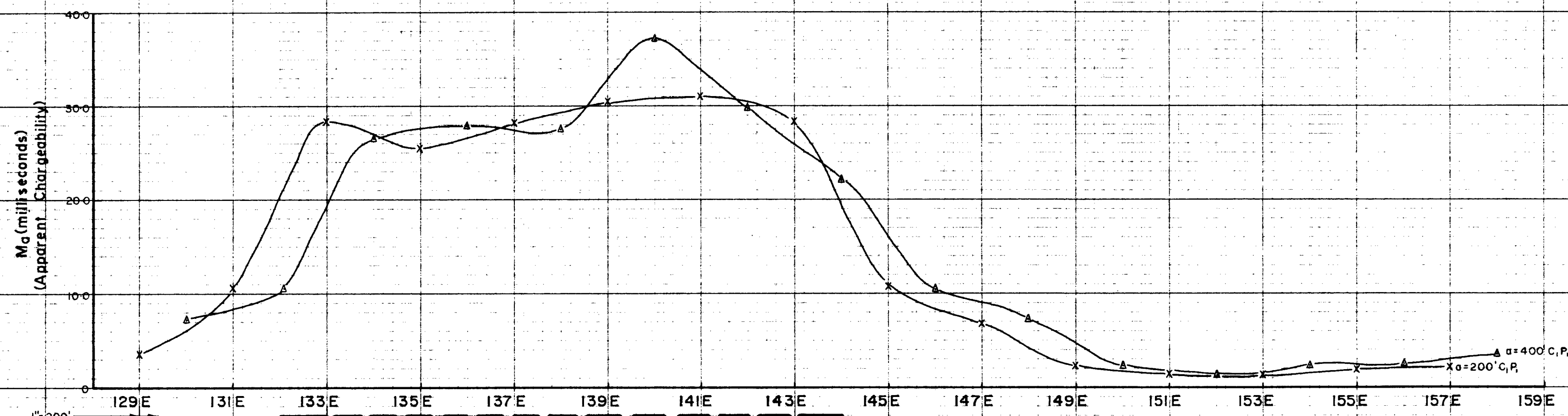
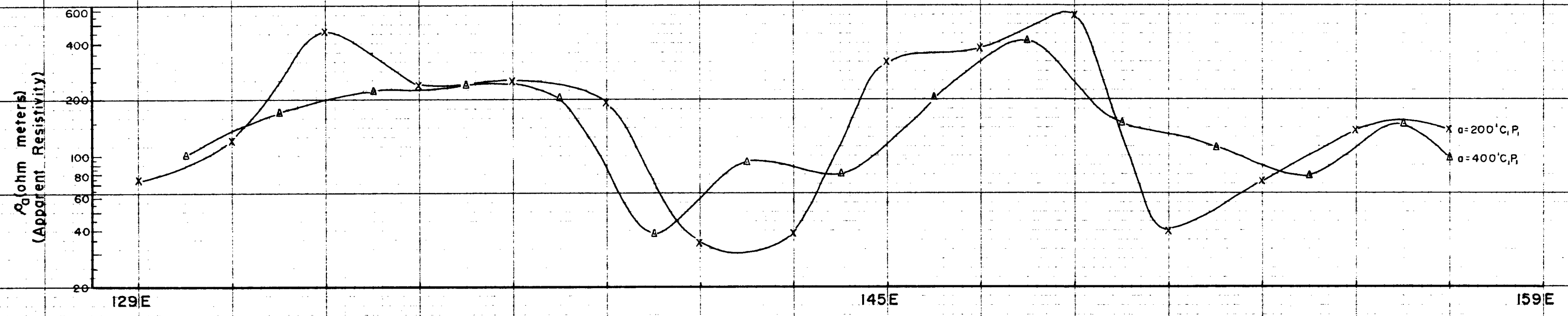
Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 1601 MAP 7

LEGEND



ANOMALOUS ZONE.

1601



BLOCK-Nº 3

COPPER MOUNTAIN PROPERTY

To accompany report by: *R. K. Watson*  
 R.K. Watson, B. A. Sc., P. Eng., Geophysicist.  
*W. A. Finney*  
 W.A. Finney, B. Sc., Geophysicist.



HUNTEC LIMITED, Vancouver, Canada, - Aug, Sept, 1967.

INDUCED POLARIZATION SURVEY

DETAIL PROFILE: LINE 76S.

Department of  
Mines and Petroleum Resources  
ANNUAL REPORT  
NO. 1601 MAP 6

LEGEND

-  Weaker & Stronger Anomalous Zones
-  Recommended D.D.Holes

1601

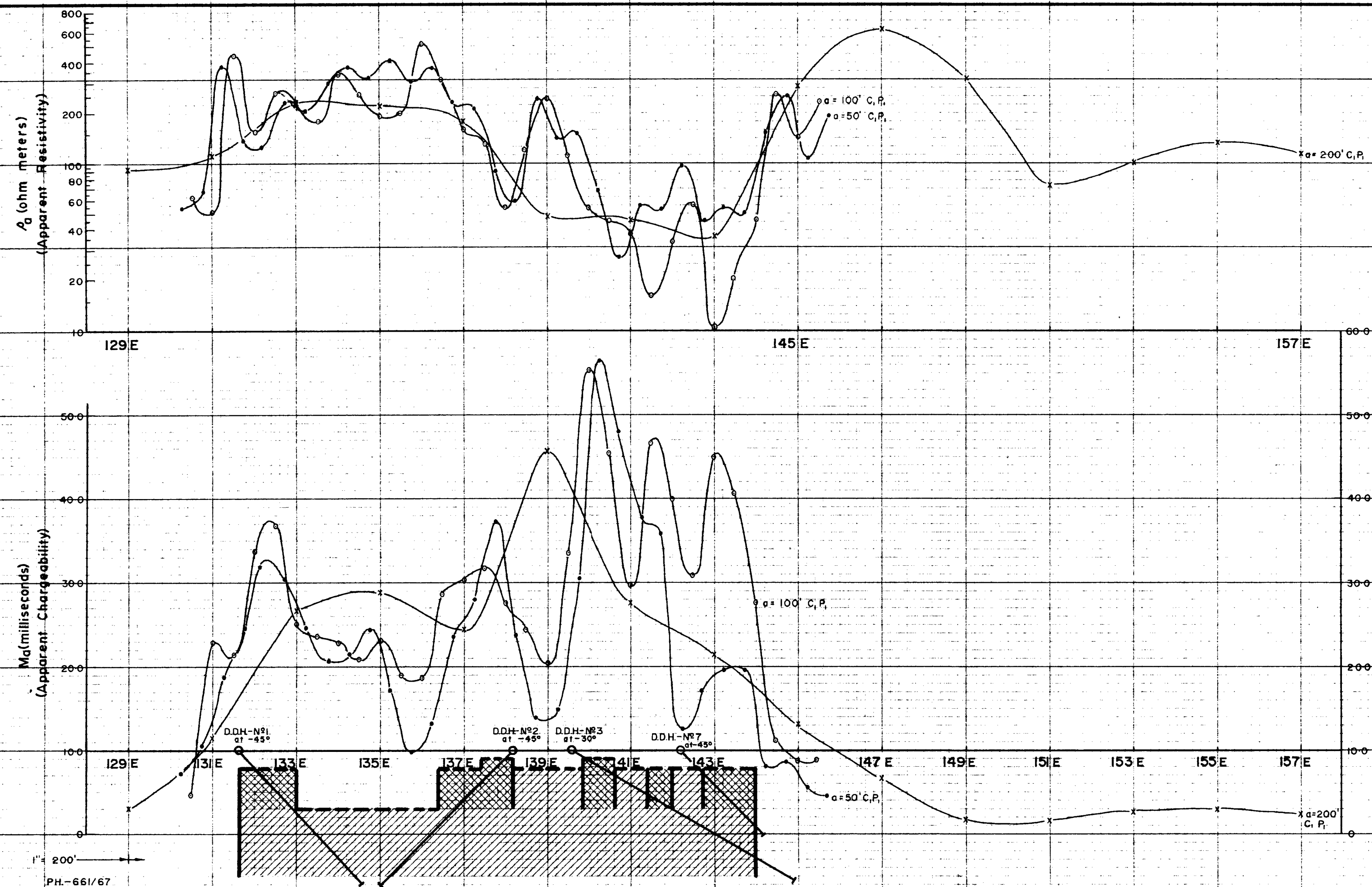
BLOCK-Nº 3

COPPER MOUNTAIN PROPERTY

To accompany report by: *R.K. Watson*  
R.K. Watson, B.A. Sc., P. Eng., Geophysicist.  
*W.A. Finney*  
W.A. Finney, B.Sc., Geophysicist.

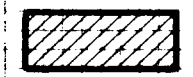
HUNTEC LIMITED, Vancouver, Canada, Aug, Sept, 1967.

FIG-6



INDUCED POLARIZATION SURVEY  
 DETAIL PROFILE: LINE — 72S.

Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 1601 MAP 5

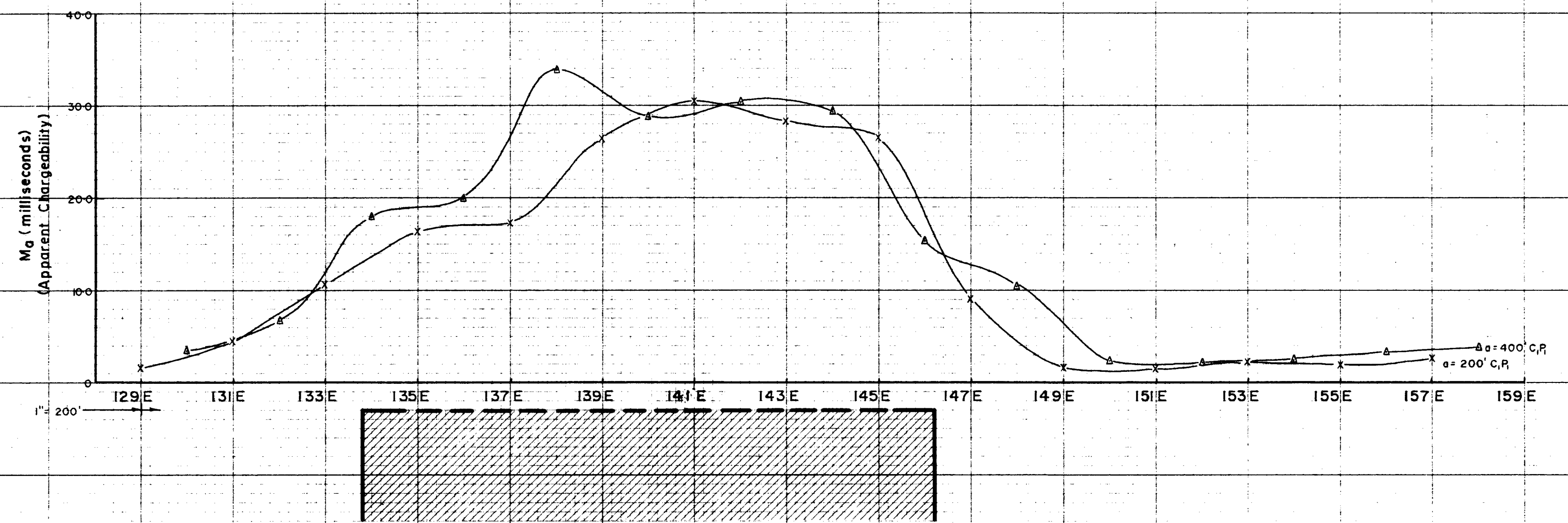
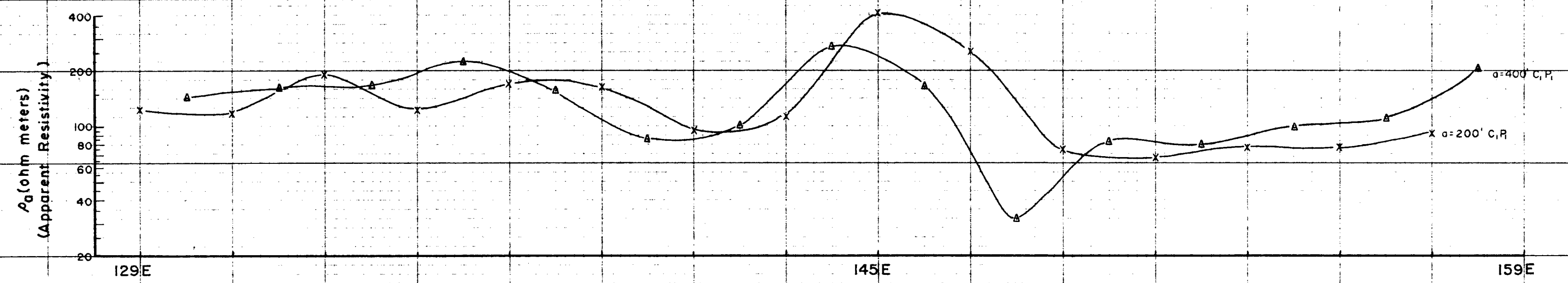
LEGEND  
 ANOMALOUS ZONE

BLOCK-Nº 3

COPPER MOUNTAIN PROPERTY

To accompany report by: *R.K. Watson*  
 R.K. Watson, B.A. Sc., P. Eng., Geophysicist.  
*W.A. Finney*  
 W.A. Finney, B.Sc., Geophysicist.  
 HUNTEC LIMITED, Vancouver, Canada — Aug, Sept, 1967.

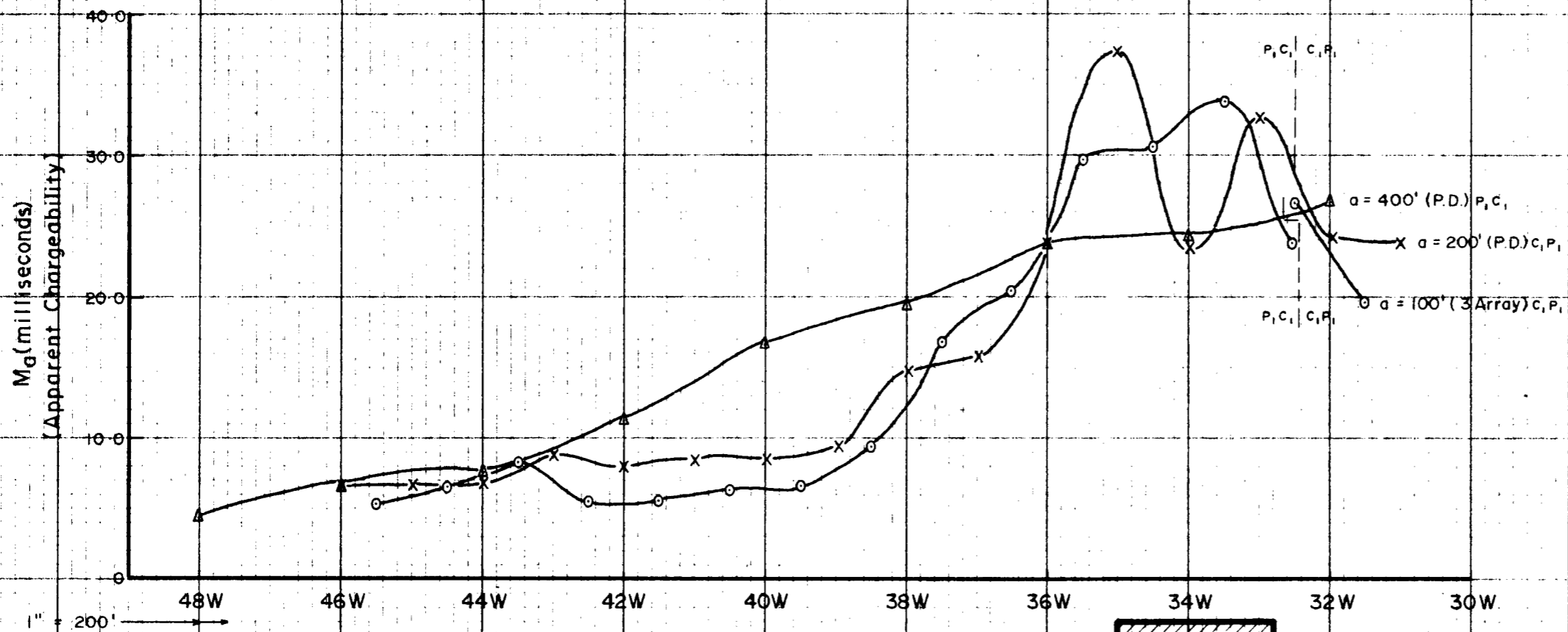
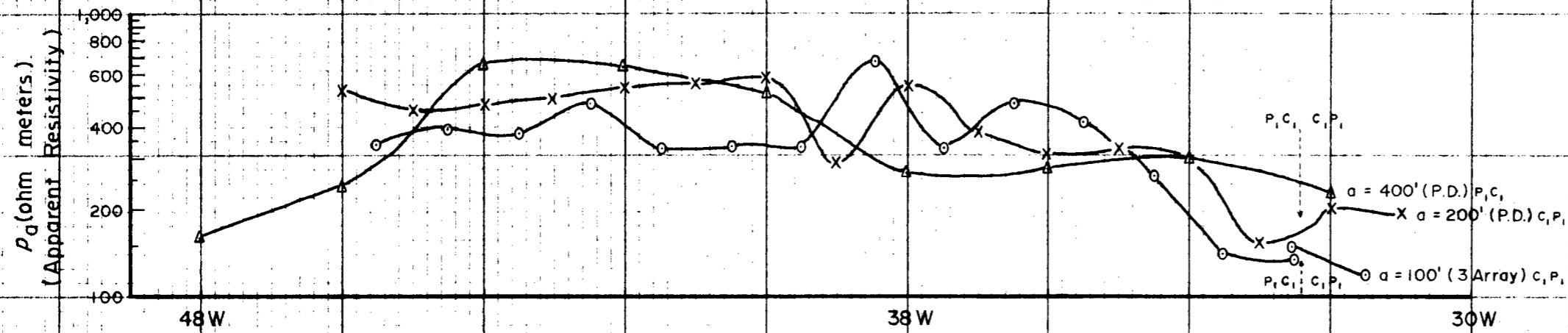
1601



1" = 200'

INDUCED POLARIZATION SURVEY  
**DETAIL PROFILE LINE-74N**

Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 1601 MAP 4



**LEGEND**

ANOMALOUS ZONE.

1601

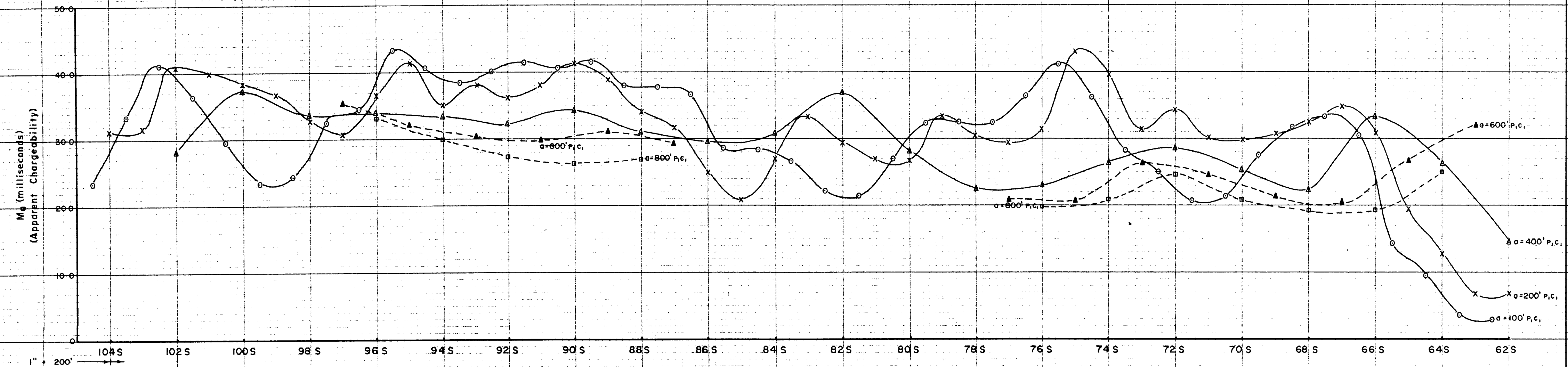
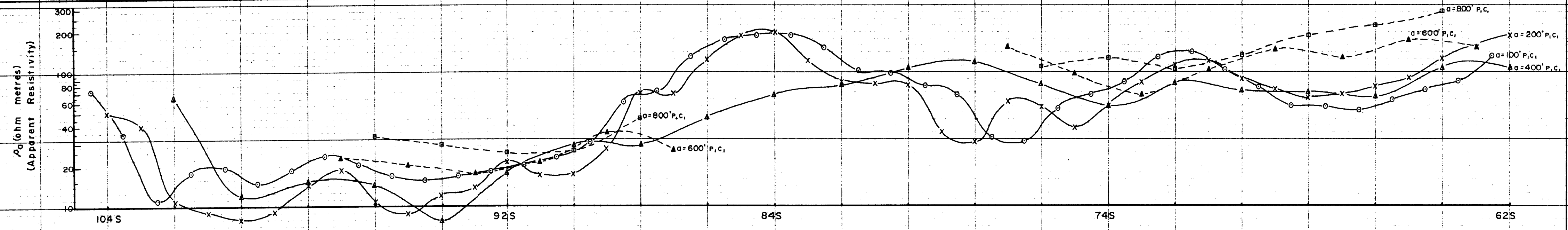
**BLOCK-N° 4**

**COPPER MOUNTAIN PROPERTY.**

To accompany report by *R.K. Watson*  
*W.A. Finney* R.K. Watson, B.A.Sc., P.Eng., Geophysicist.  
 W.A. Finney, B.Sc., Geophysicist.  
 HUNTEC LIMITED, Vancouver, Canada + JUNE, 1967

INDUCED POLARIZATION SURVEY  
 DETAIL PROFILE LINE-140 E.

Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 1601 MAP 3



1" = 200'

BLOCK-Nº 3

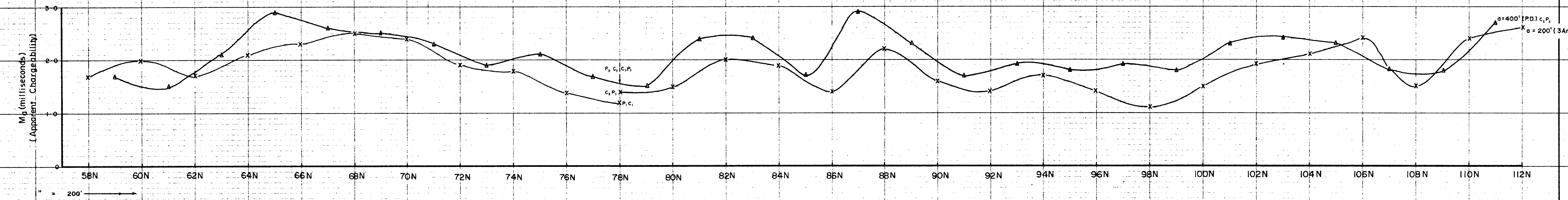
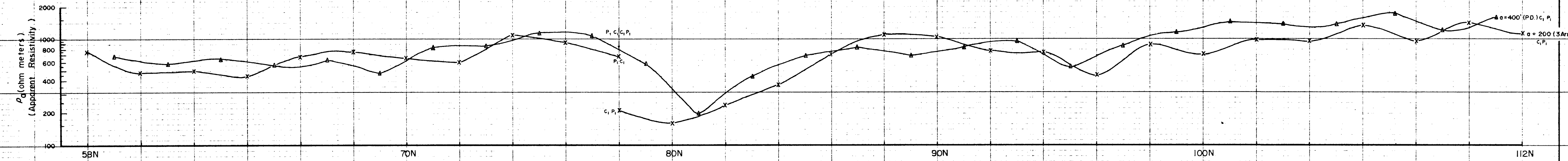
COPPER MOUNTAIN PROPERTY.

To accompany report by *R.K. Watson*  
*W.A. Finney* R.K. Watson, B.A.Sc., P.Eng., Geophysicist.  
 W.A. Finney, B.Sc., Geophysicist.  
 HUNTEC LIMITED, Vancouver, Canada - JUNE, 1967

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DETAIL PROFILE - L.110E

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 1601 MAP 2



BLOCK-2S

1601

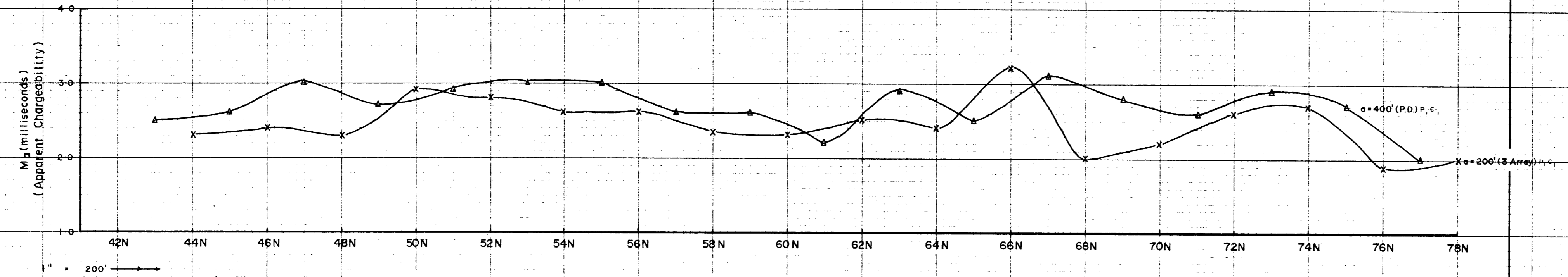
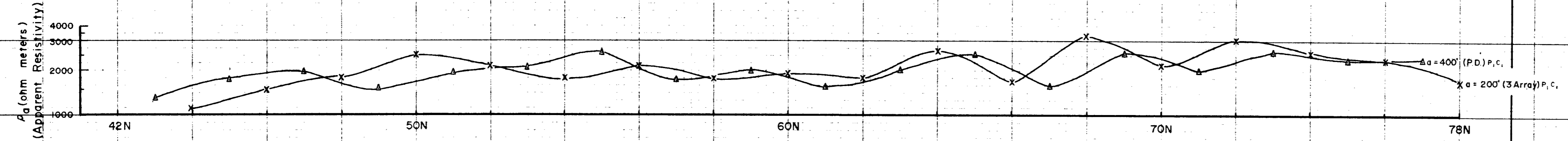
SOUTH CLAIM GROUP

To accompany report by *R. K. Watson*  
*W. A. Finney* R.K. Watson, B.A.Sc., P.Eng., Geophysicist  
W.A. Finney, B.Sc., Geophysicist  
HUNTEC LIMITED, Vancouver, Canada - July 1967

INDUCED POLARIZATION SURVEY

DETAIL PROFILE - L.44E

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 1601 MAP ✓ 1



BLOCK - 15

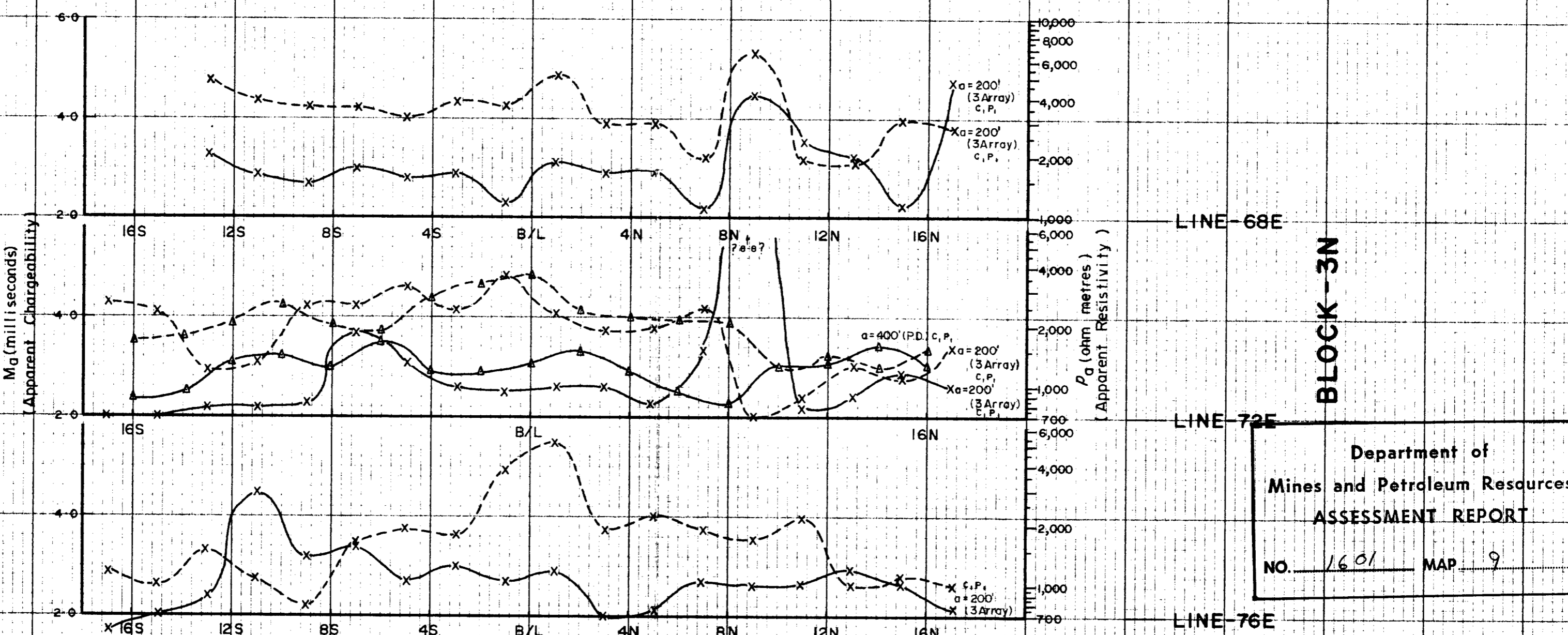
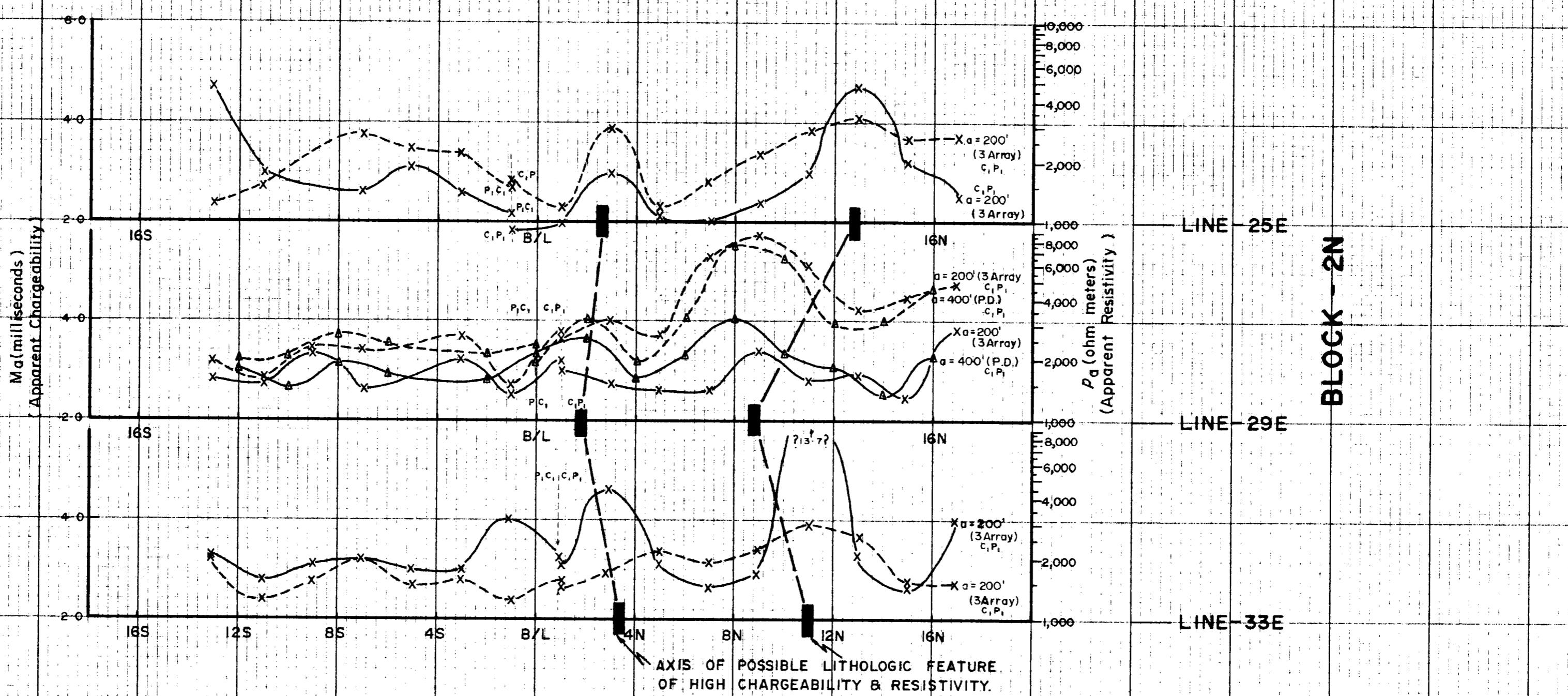
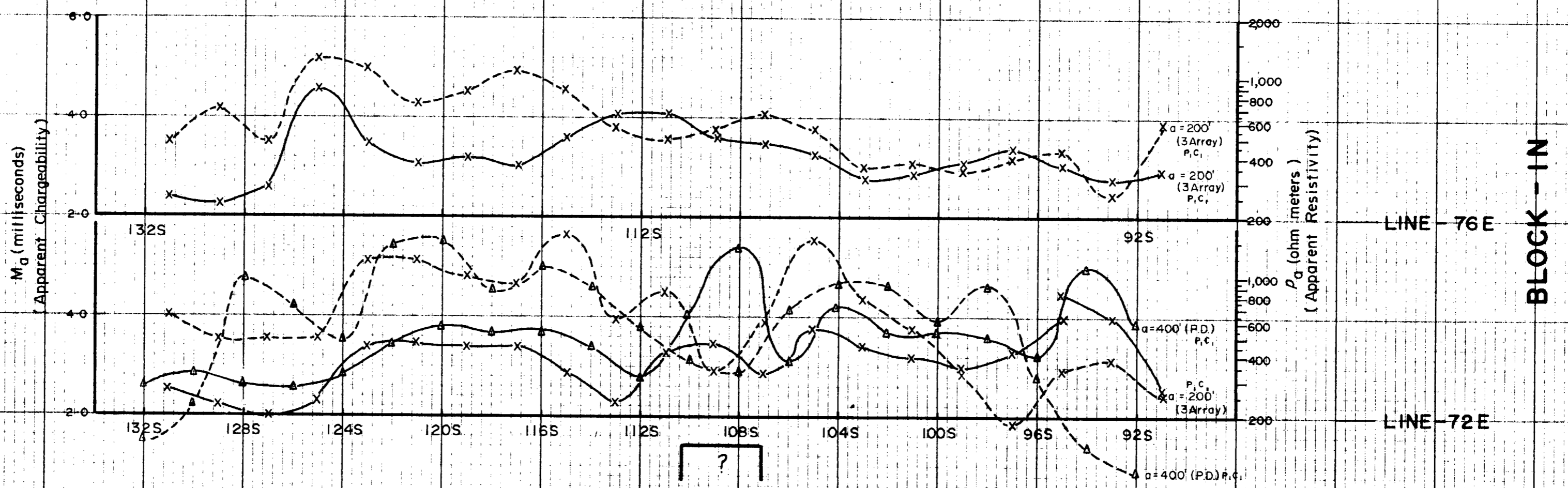
1601

SOUTH CLAIM GROUP

To accompany report by *R.K. Watson*  
*W.A. Finney* R.K. Watson, B.A.Sc., P.Eng., Geophysicist.  
 W.A. Finney, B.Sc., Geophysicist.  
 HUNTEC LIMITED, Vancouver, Canada - July 1967



DETAIL PROFILES



Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 1601 MAP 9

ORO MINES LIMITED

HIGHLAND VALLEY AREA, KAMLOOPS M.D. - B.C. (8 NICOLA M.D.)

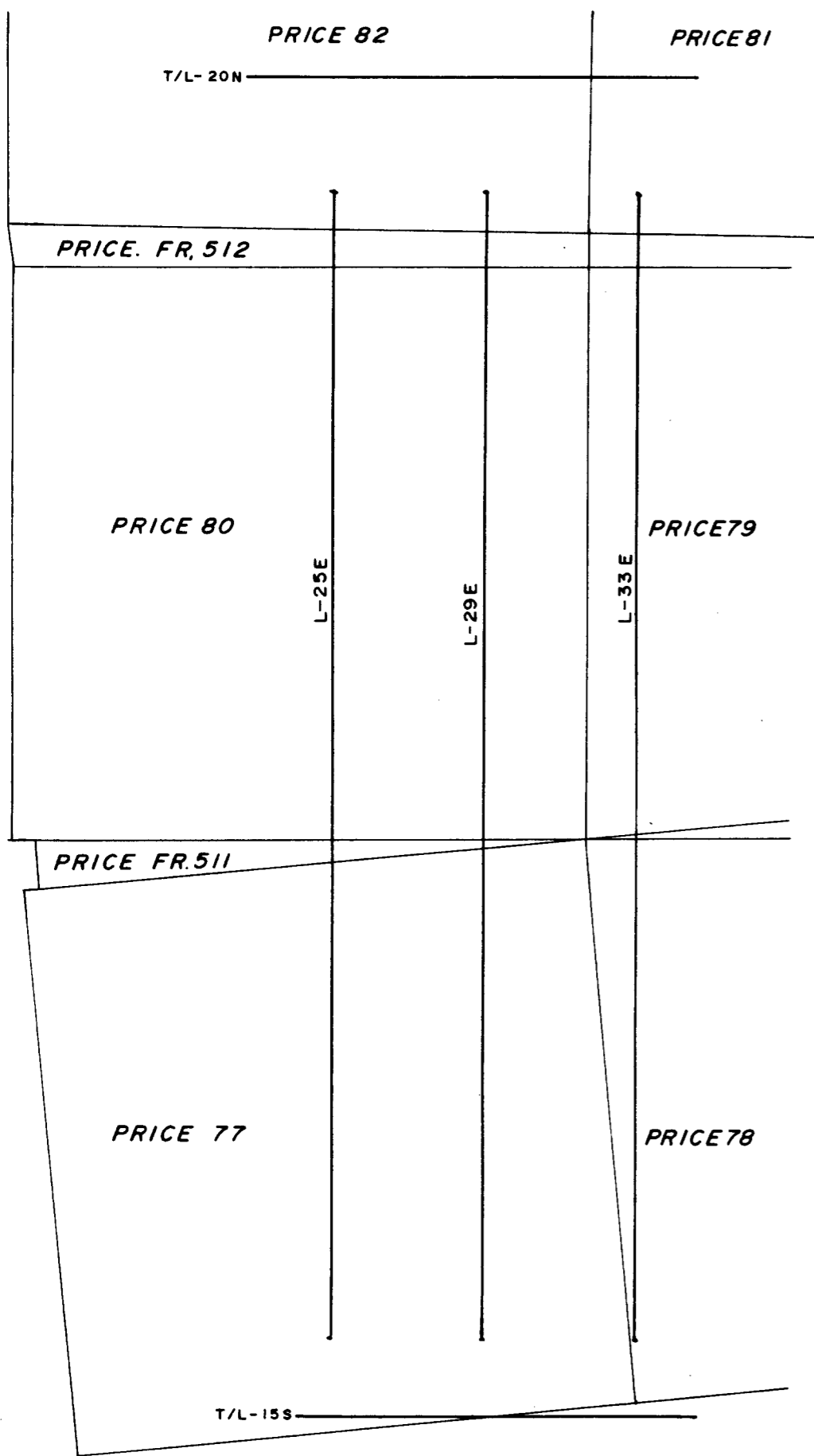
HORIZONTAL SCALE : 1 inch = 400 feet

--- RESISTIVITY  
--- CHARGEABILITY

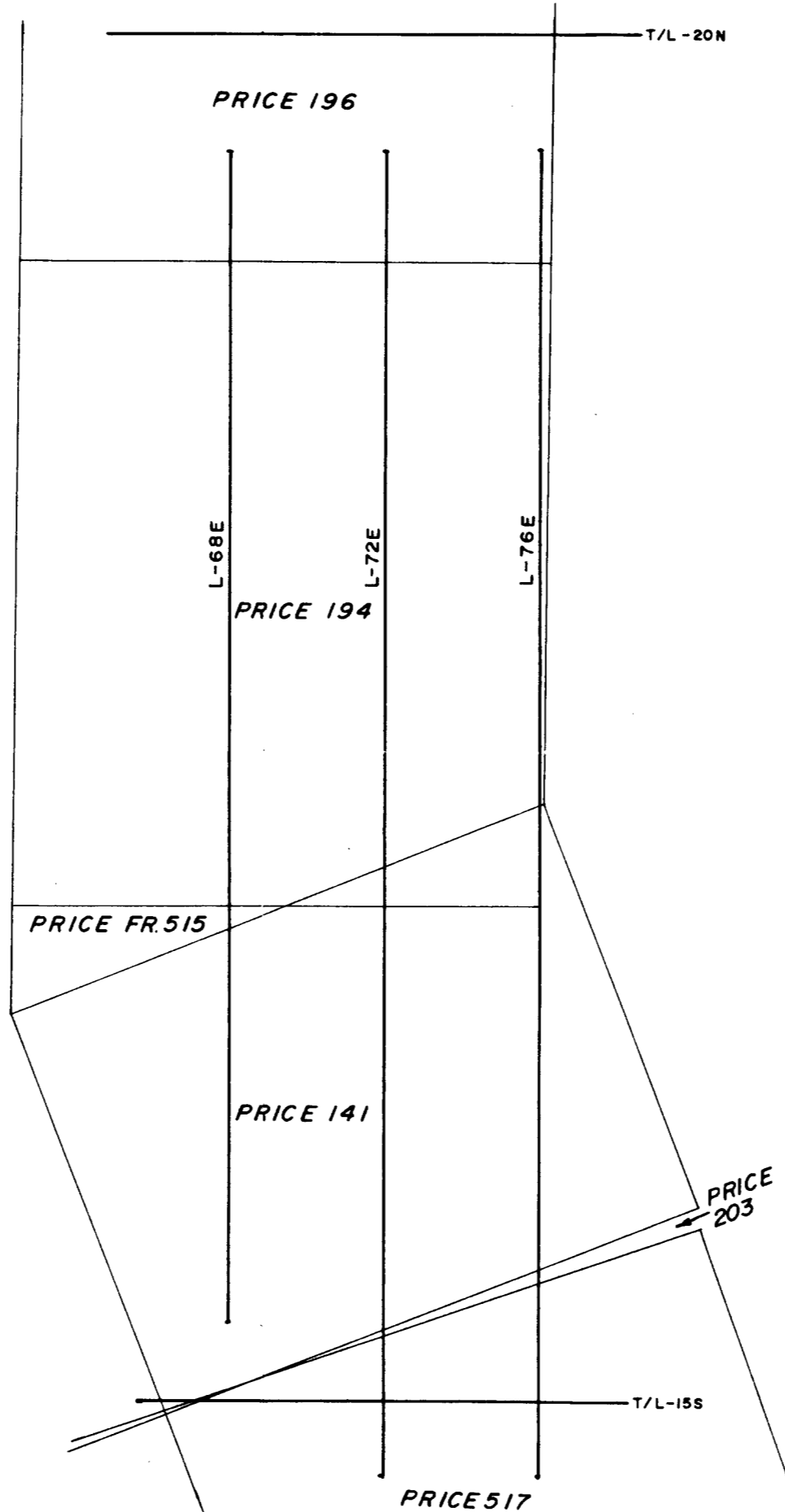
NORTH CLAIM GROUP

To accompany report by *R.K. Watson*  
R.K. Watson, B.A.Sc., P.Eng., Geophysicist  
*W.A. Finney*  
W.A. Finney, B.Sc., Geophysicist  
HUNTEC LIMITED, Vancouver, Canada - July, 1967.

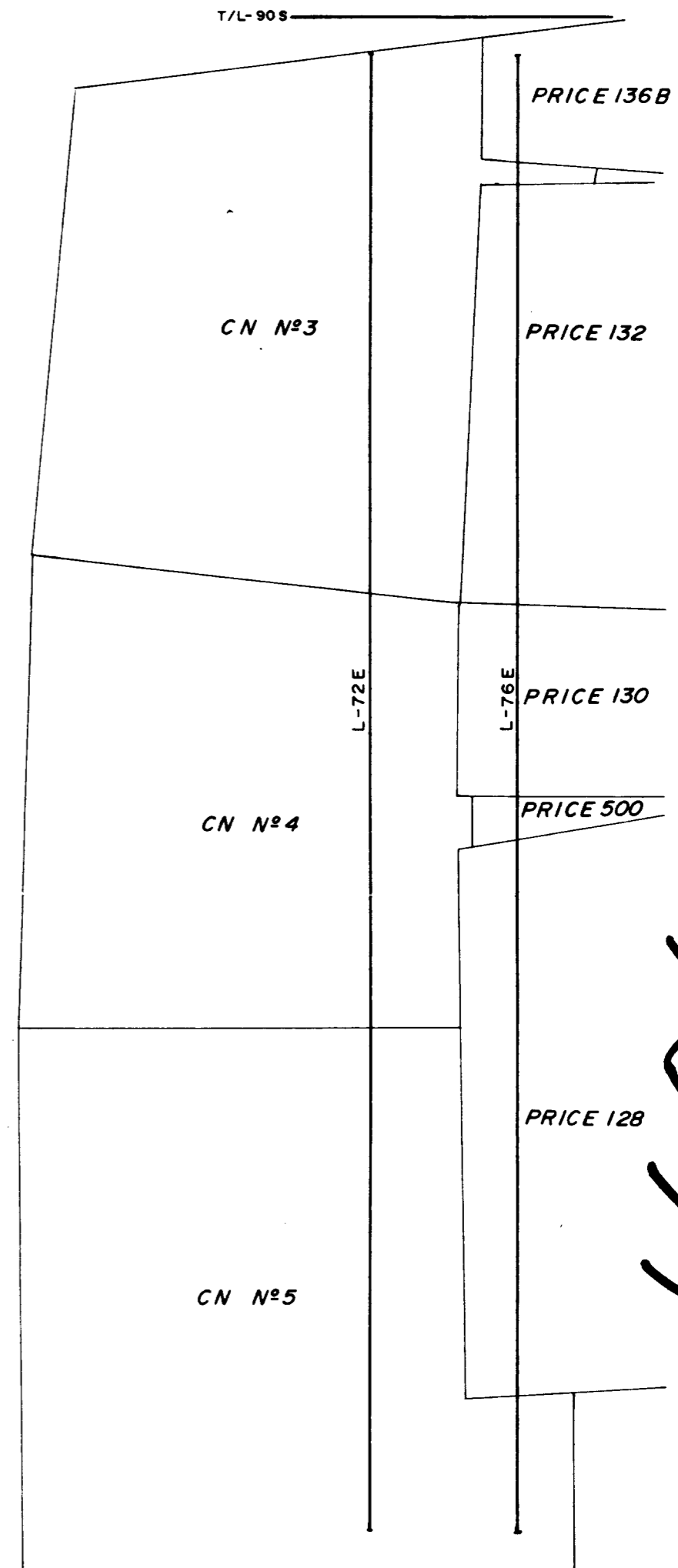
1601



BLOCK - 2N

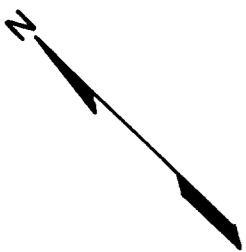


BLOCK-3N



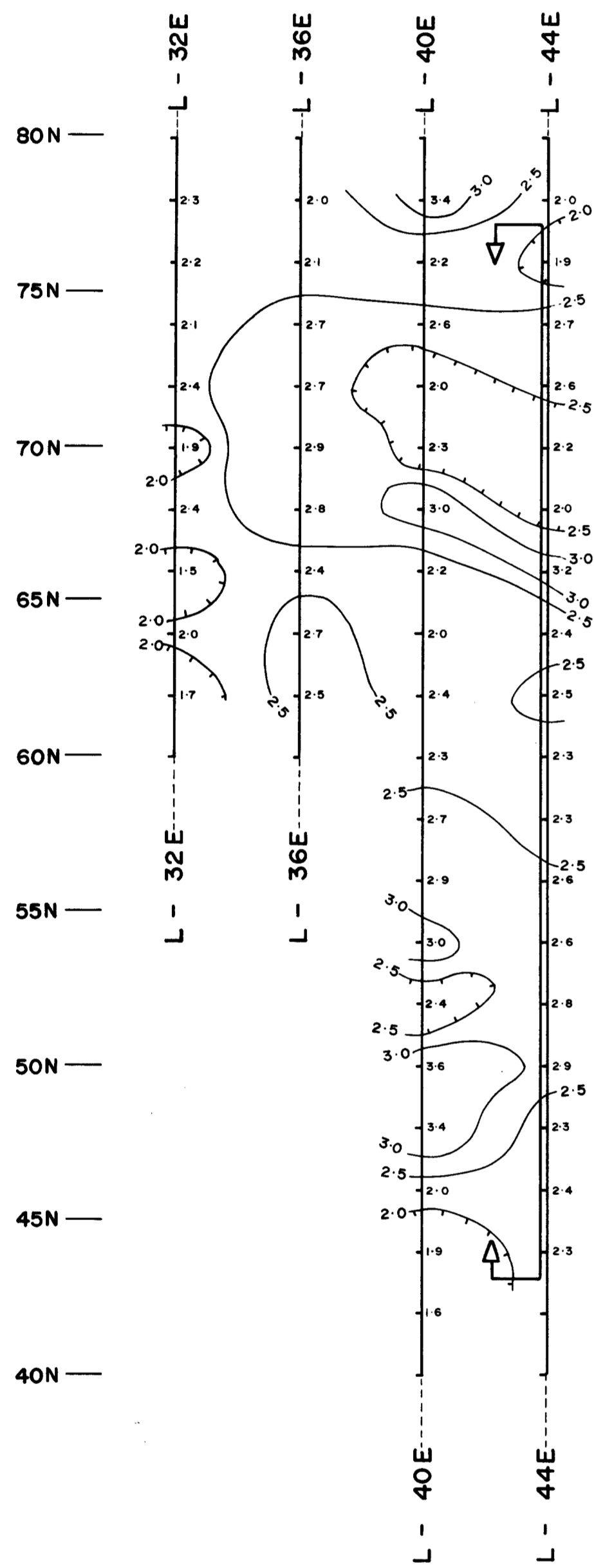
BLOCK -IN

1601

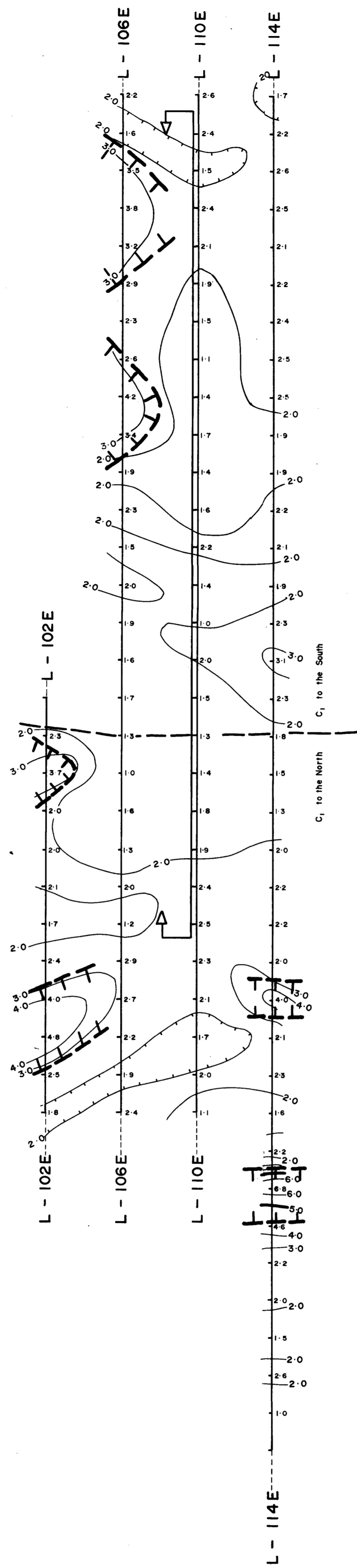


CLAIM MAP  
of  
NORTH CLAIM GROUP.  
SCALE: 1" = 400'

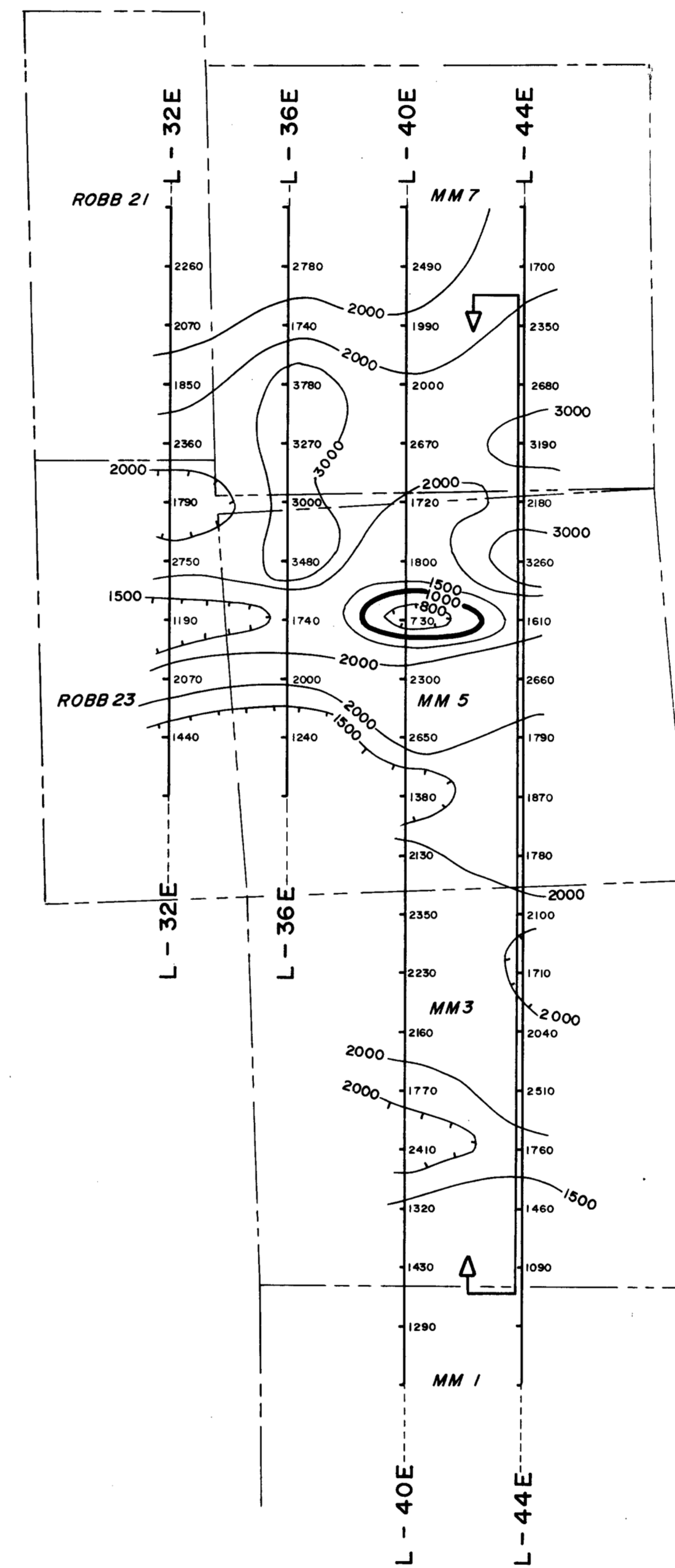
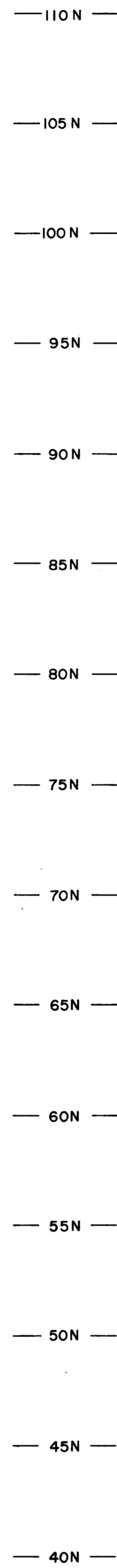
NOTE:  
I.P. DATA on PLATE-1



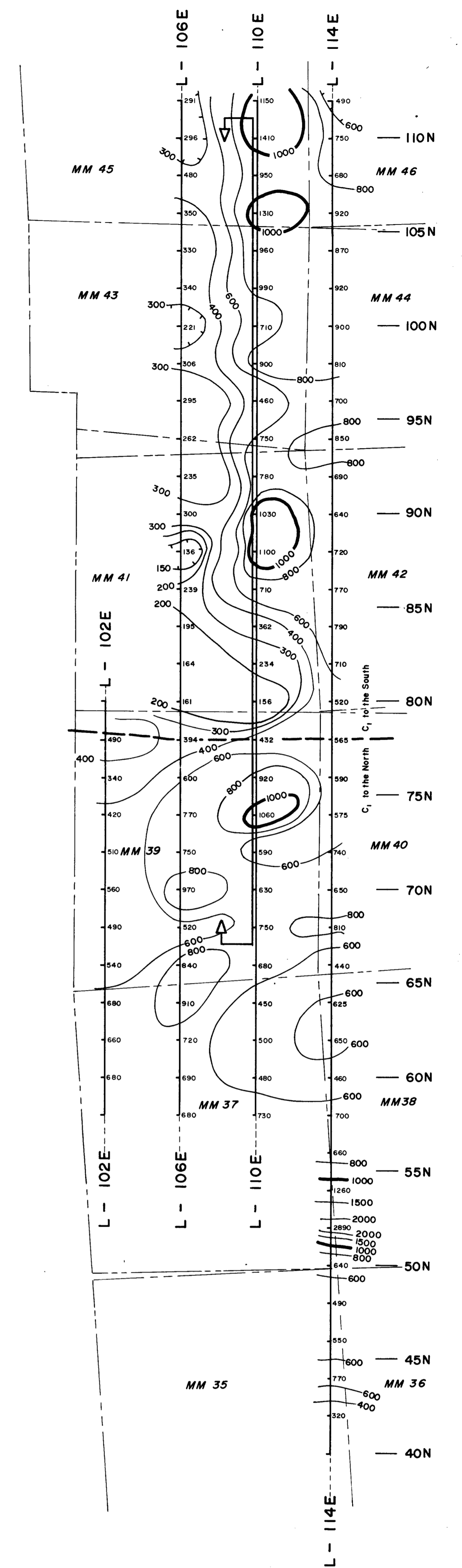
BLOCK No 1-SOUTH



BLOCK No 2-SOUTH



BLOCK No 1-SOUTH

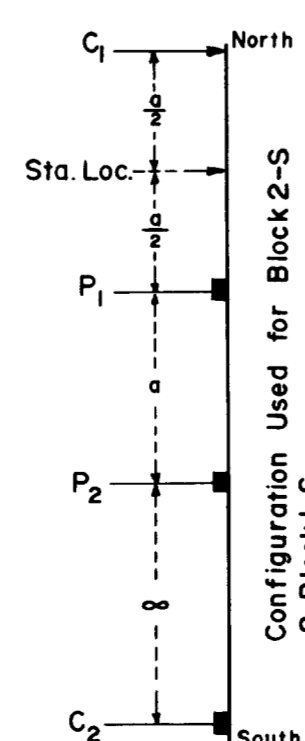


BLOCK No 2-SOUTH

APPARENT CHARGEABILITY CONTOURS

CONTOUR INTERVAL : (BLOCK No 1-S) — 0.5 milliseconds.  
 (BLOCK No 2-S) — 1.0 milliseconds

3 - ELECTRODE ARRAY.  
 a = 200 feet.



NOTE: Configuration Reversed (C<sub>1</sub> to the South)  
 North of ——— Line as indicated.

APPARENT RESISTIVITY CONTOURS.

CONTOURS AT (logarithmic intervals) 100, 150, 200  
 300, 400, 600, 800, 1000 etc. ohm - meters.

SCALE: 1 inch = 400 feet.

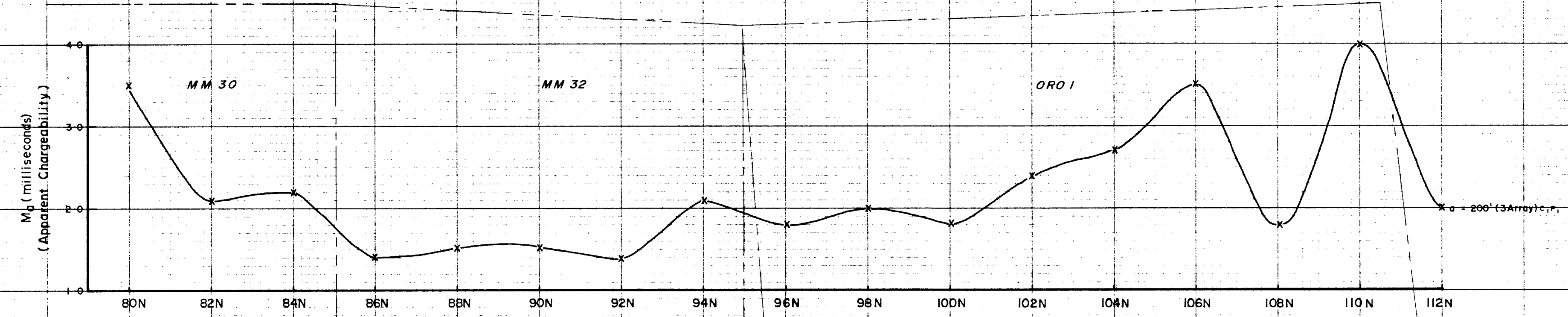
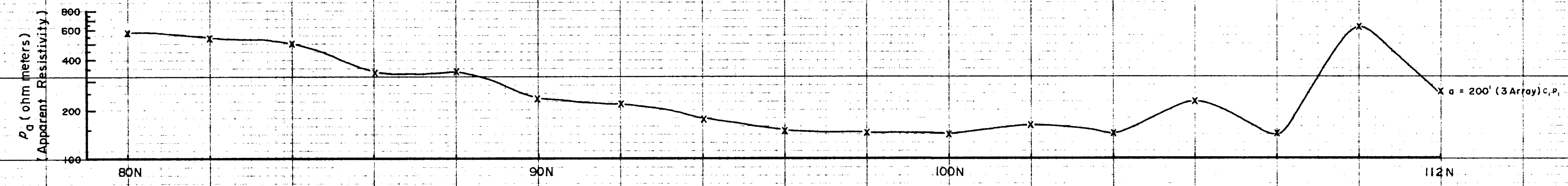
Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 1601 MAP 11

INDUCED POLARIZATION SURVEY.  
**ORO MINES LIMITED.**  
 SOUTH CLAIM GROUP.  
 HIGHLAND VALLEY AREA, KAMLOOPS M.D. - B.C.

SCALE: 1 inch = 400 feet.

To accompany report by *R. K. Watson*  
*W. A. Finney* R. K. Watson, B.Sc., P.Eng., Geophysicist.  
 W. A. Finney, B.Sc., Geophysicist.  
 HUNTEC LIMITED, Vancouver, Canada - July, 1967.

1601



BLOCK - 3S

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT

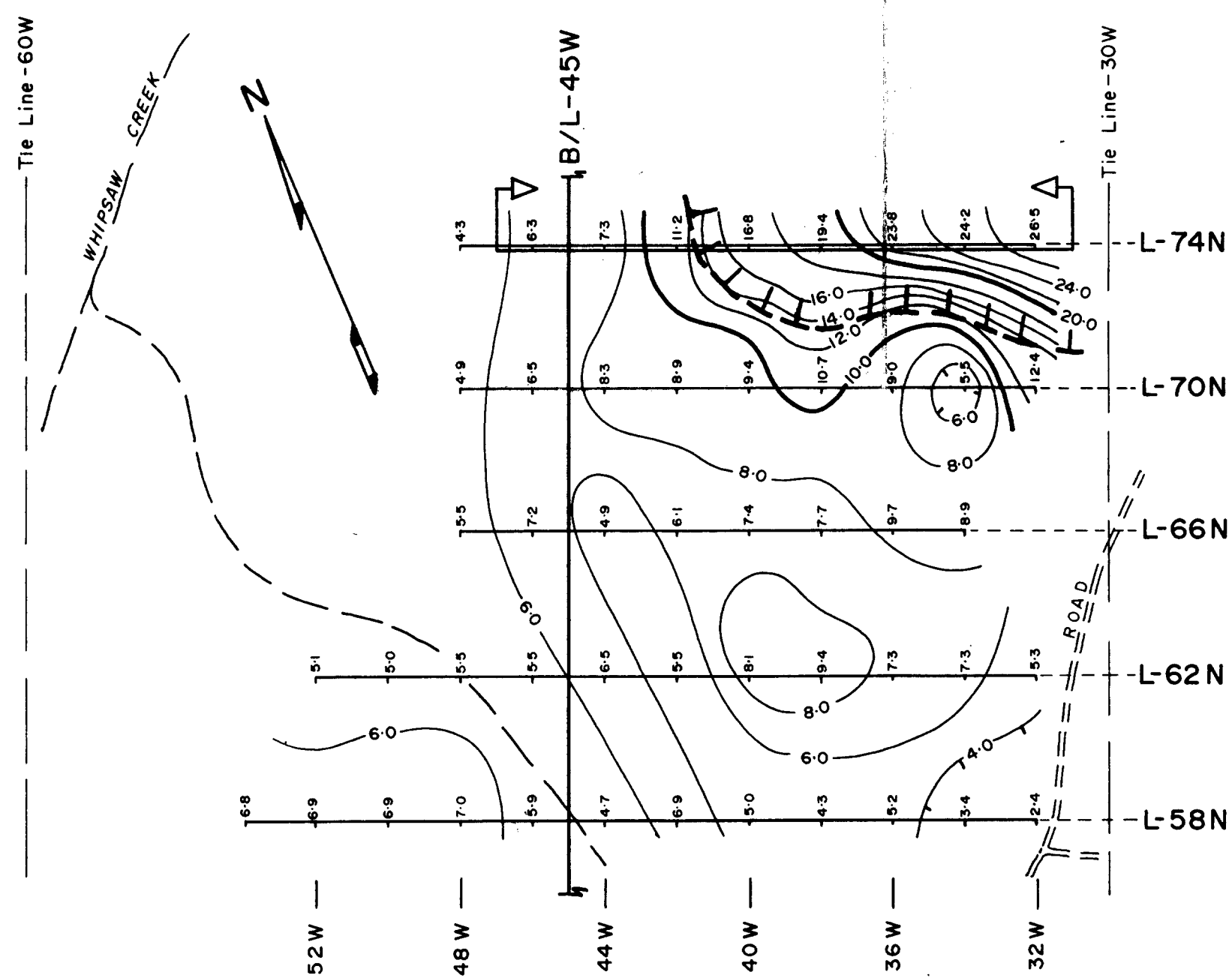
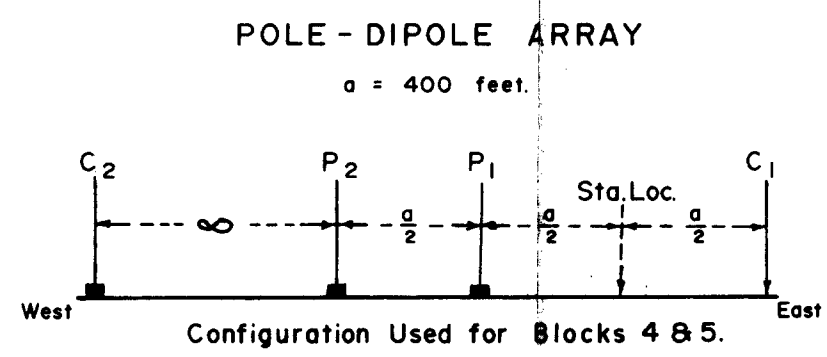
NO. 1601 MAP 12

1601

SOUTH CLAIM GROUP

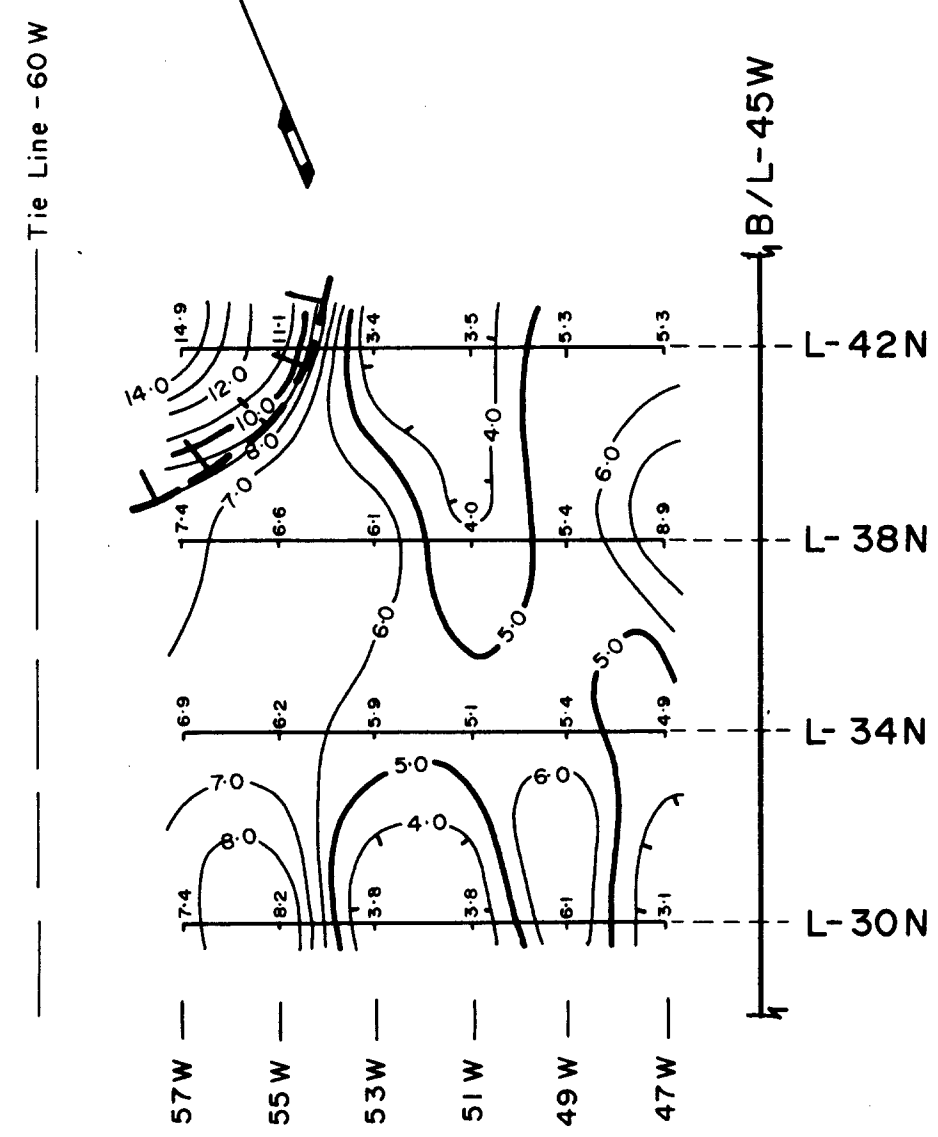
To accompany report by R.K. Watson

W.A. Finney  
R.K. Watson, B.A.Sc., P.Eng., Geophysicist  
W.A. Finney, B.Sc., Geophysicist  
HUNTEC LIMITED, Vancouver, Canada, July 1967.



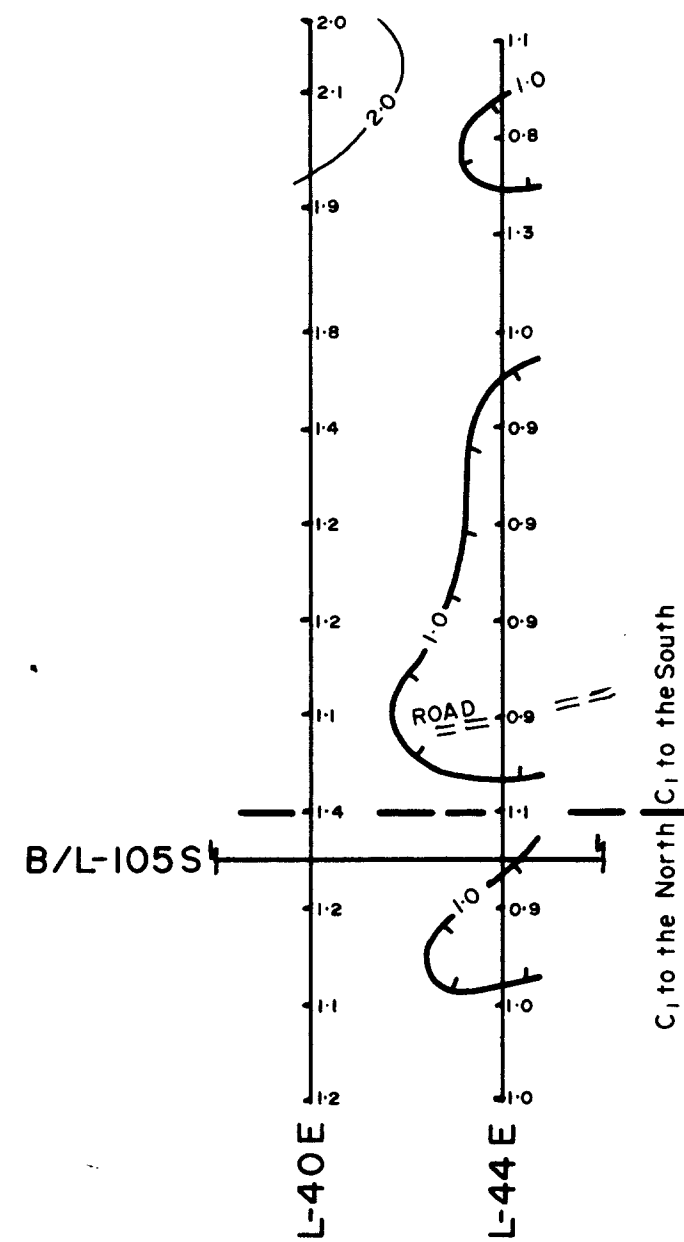
**BLOCK - No 4**

CONTOUR INTERVAL: 2.0 milliseconds.



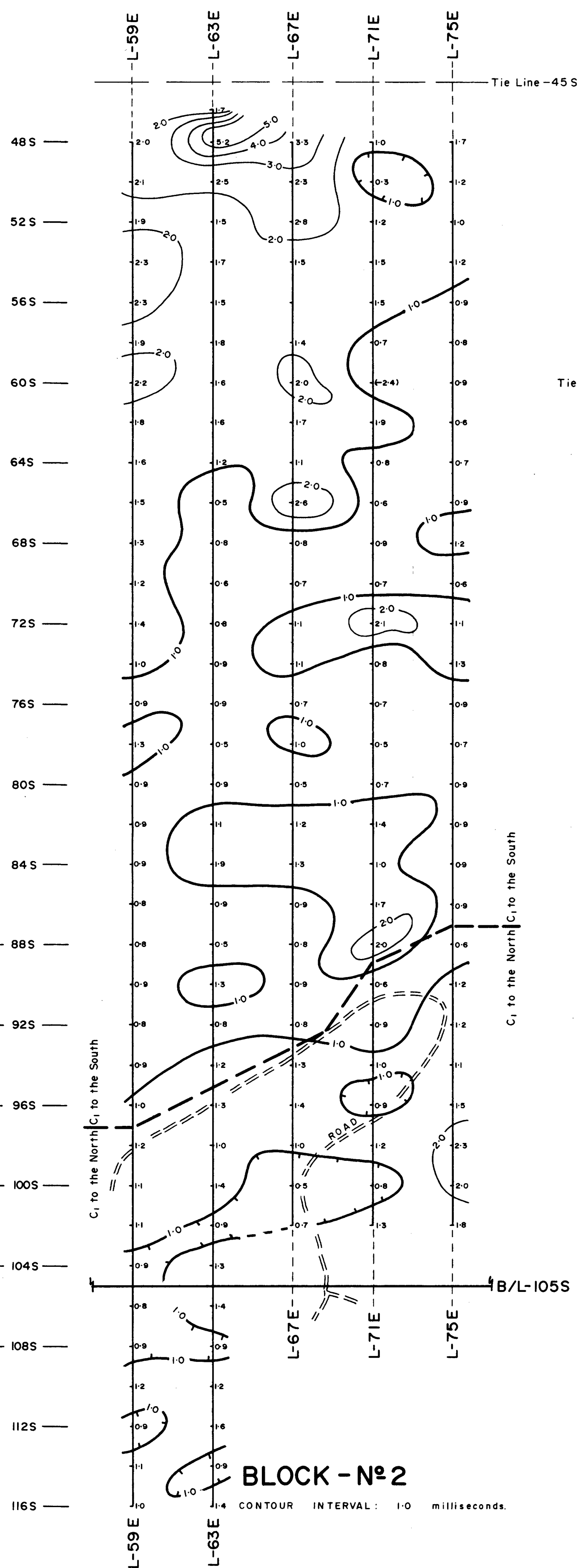
**BLOCK - No 5**

CONTOUR INTERVAL: 1.0 milliseconds.



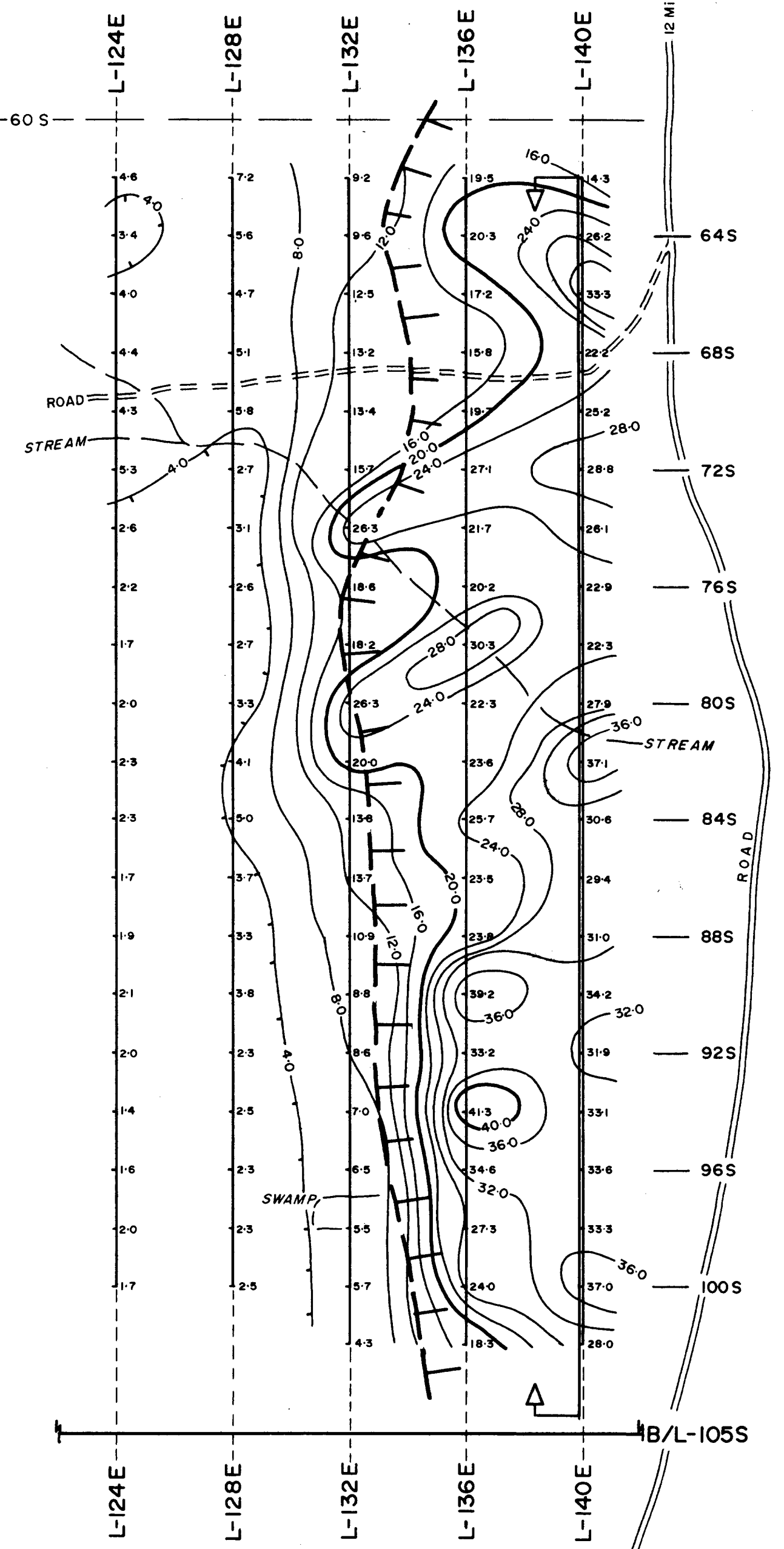
**BLOCK - No 1**

CONTOUR INTERVAL: 1.0 milliseconds.



**BLOCK - No 2**

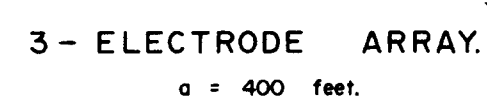
CONTOUR INTERVAL: 1.0 milliseconds.



**BLOCK - No 3**

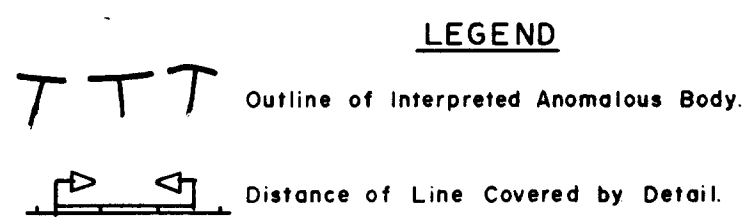
CONTOUR INTERVAL: 4.0 milliseconds.

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 1601 MAP 12



NOTE: Configuration Reversed (C1 to the South)  
North of ——— Line as Indicated.

NOTE: Configuration Reversed (C1 to the South)  
North of ——— Line as Indicated.



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INDUCED POLARIZATION SURVEY.

**ORO MINES LIMITED.**

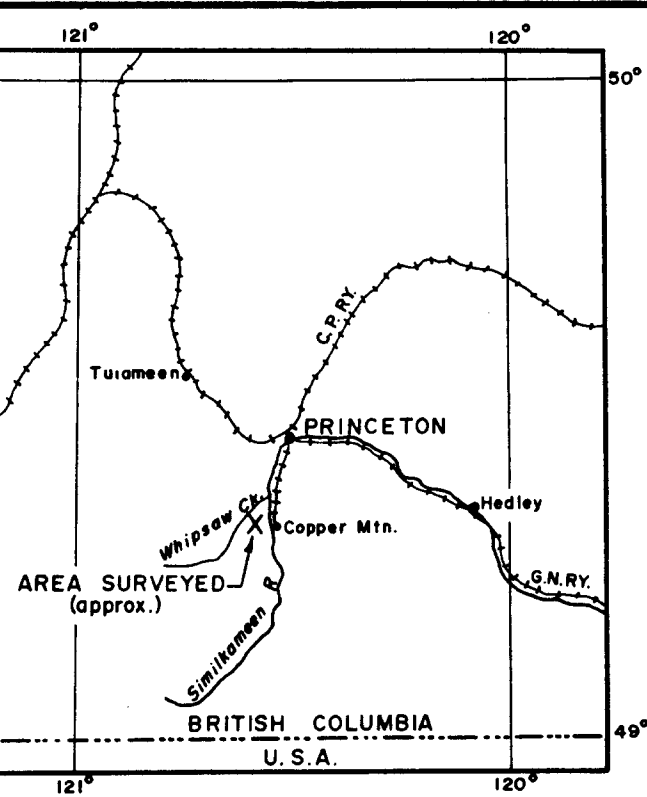
(59 CLAIMS)

PRINCETON AREA, SIMILKAMEEN M.D. - B.C.  
(COPPER MOUNTAIN PROPERTY)

APPARENT CHARGEABILITY CONTOURS  
WITH INTERPRETATION.

CONTOUR INTERVAL: — AS INDICATED  
SCALE: 1 inch = 400 feet.

To accompany report by *R.K. Watson*  
*W.A. Finney* R.K. Watson, B.A.Sc., P.Eng., Geophysicist.  
W.A. Finney, B.Sc., Geophysicist.  
HUNTEC LIMITED, Vancouver, Canada - June, 1967.

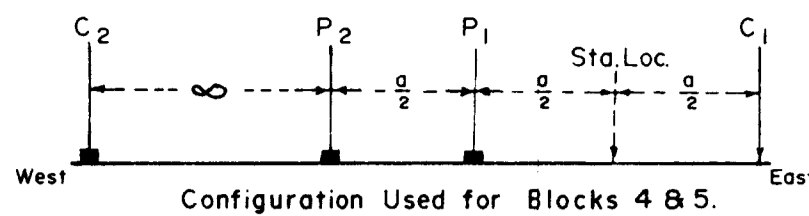


LOCATION MAP

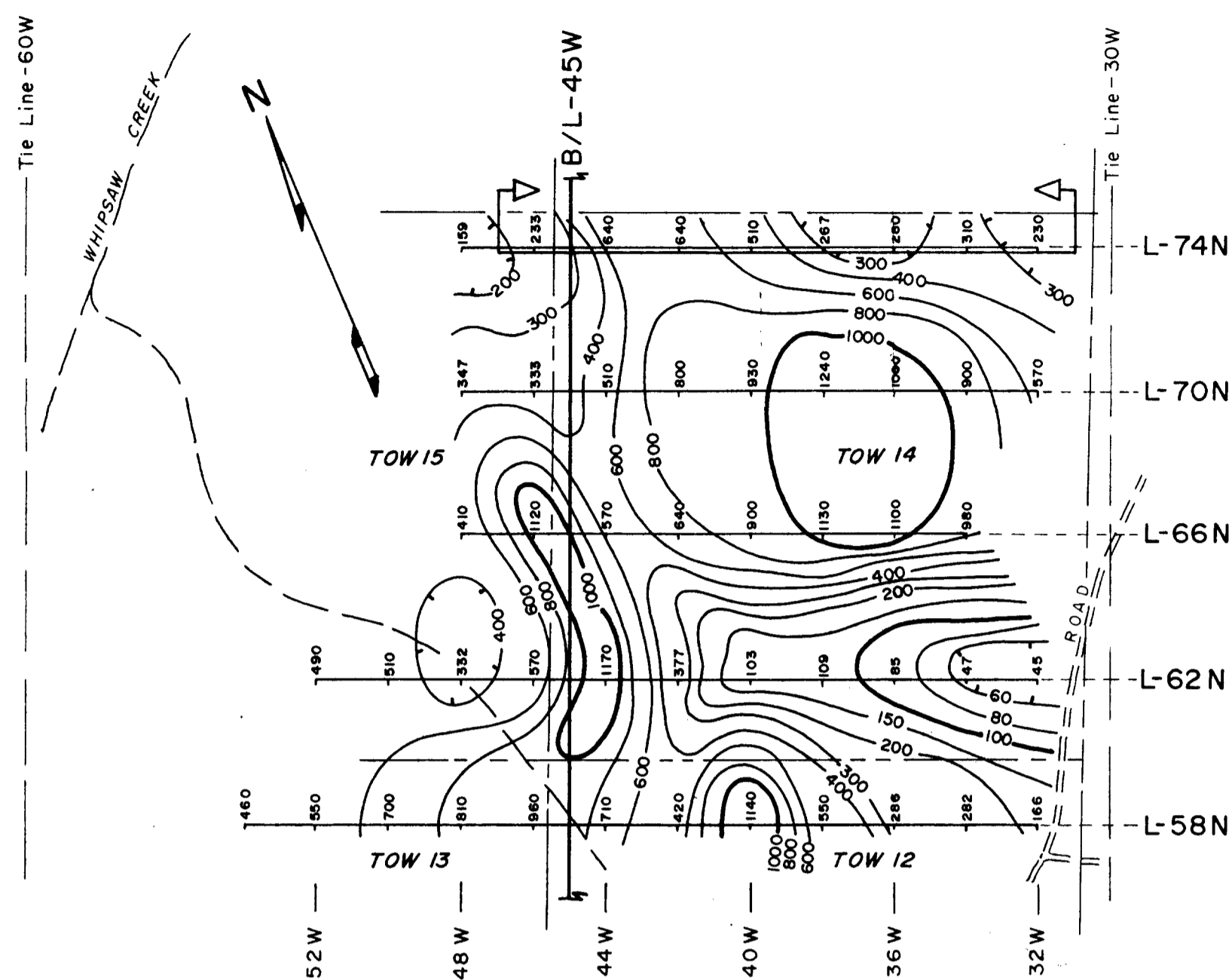
Scale: 1 inch = 20 miles.  
FIG. - B

POLE - DIPOLE ARRAY

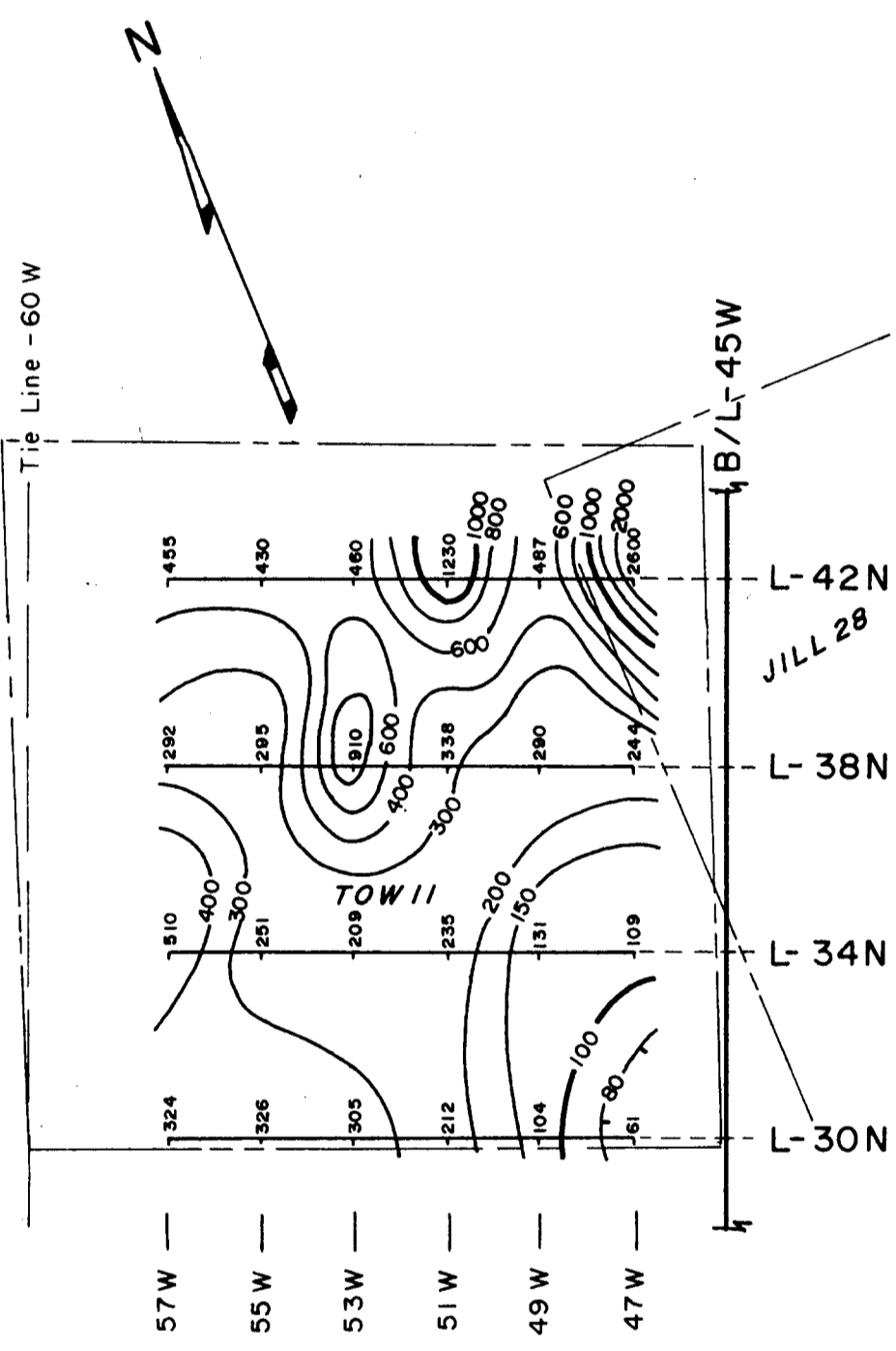
a = 400 feet.



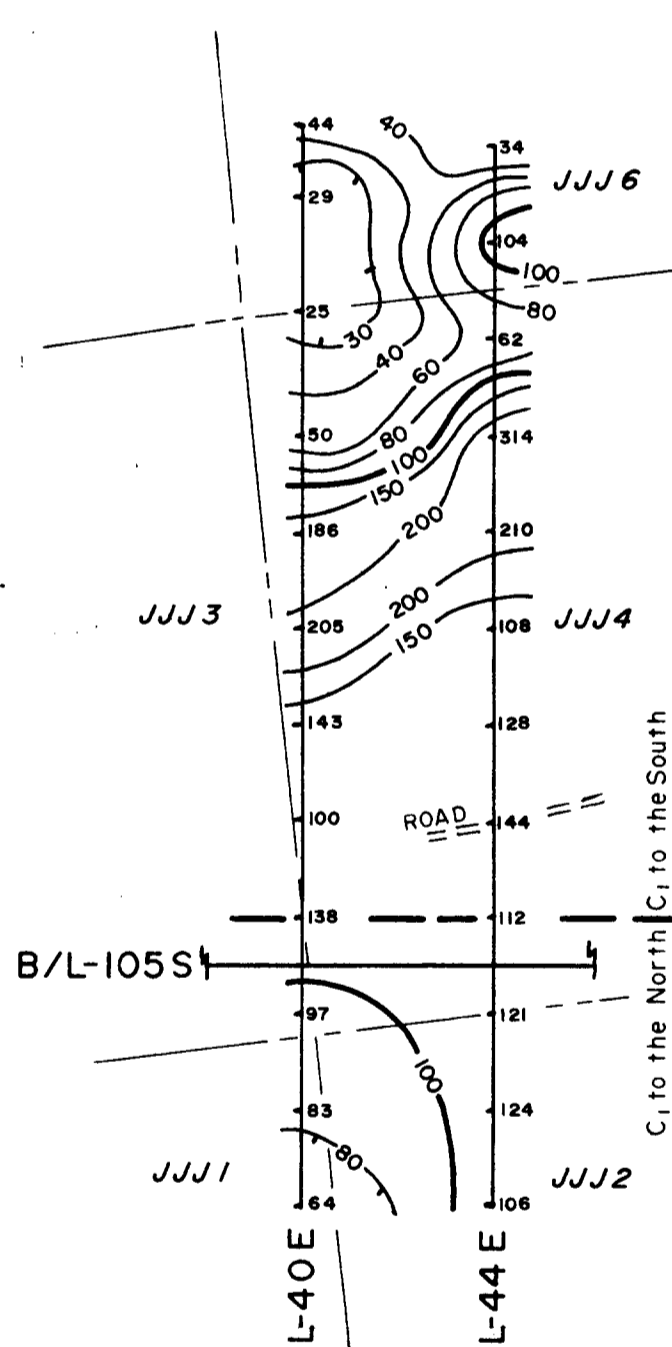
Configuration Used for Blocks 4 & 5.



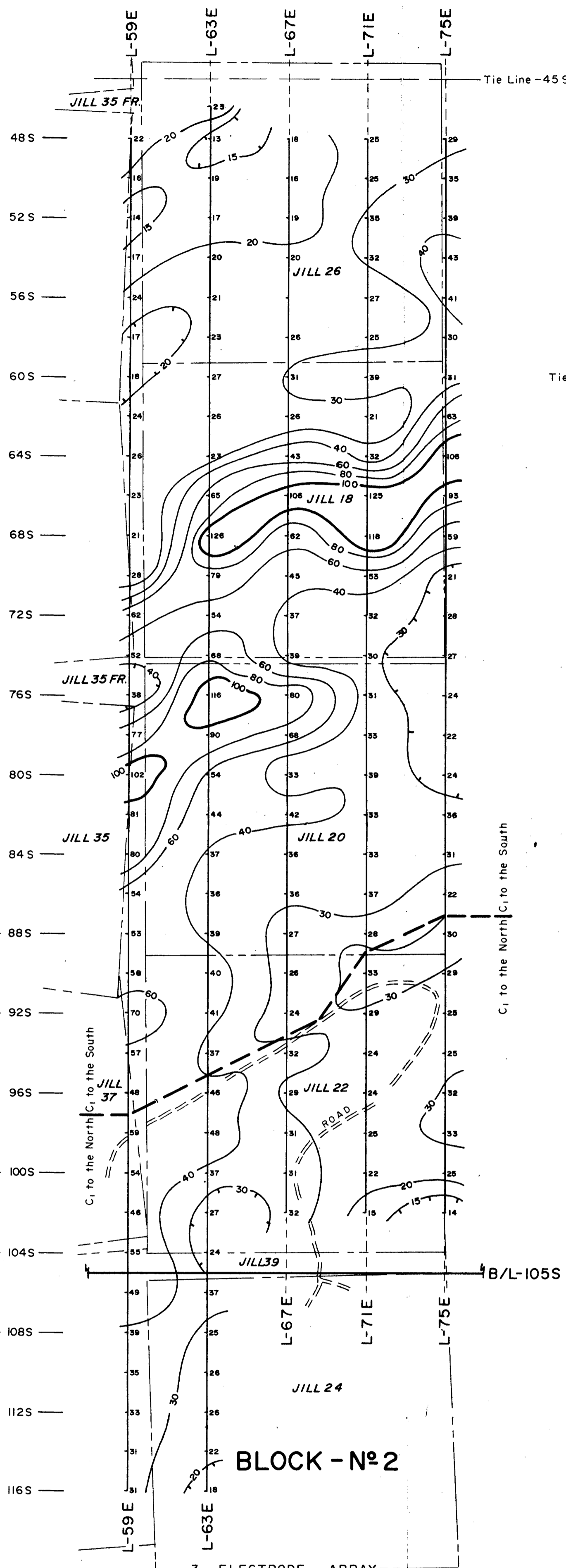
BLOCK - No 4



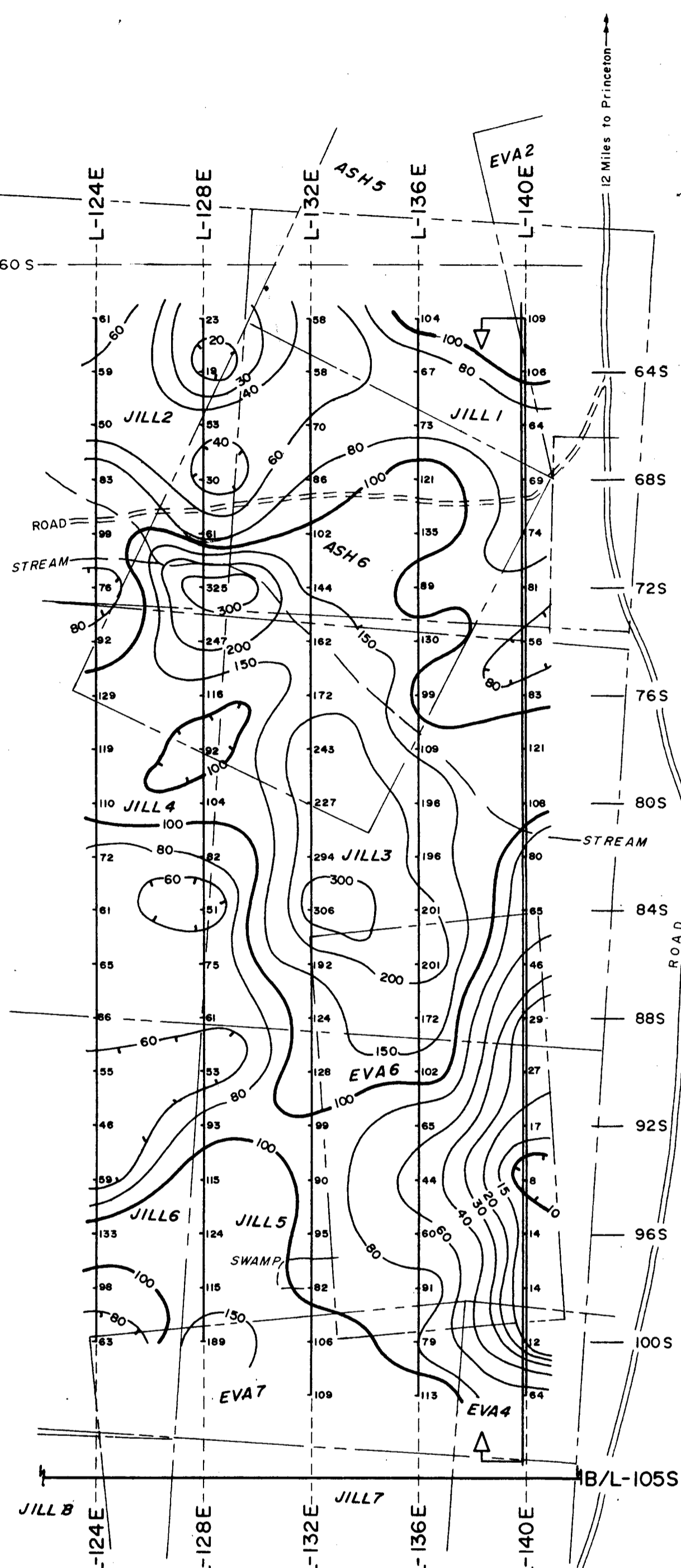
BLOCK - No 5



BLOCK - No 1



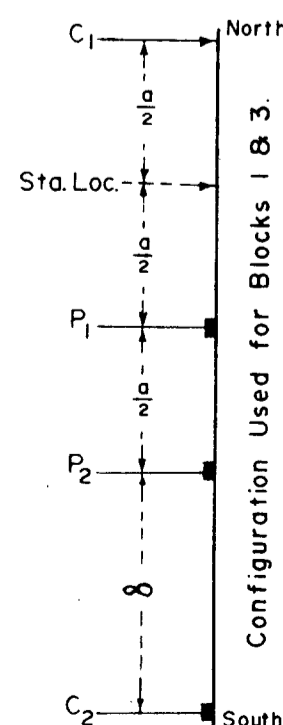
BLOCK - No 2



BLOCK - No 3

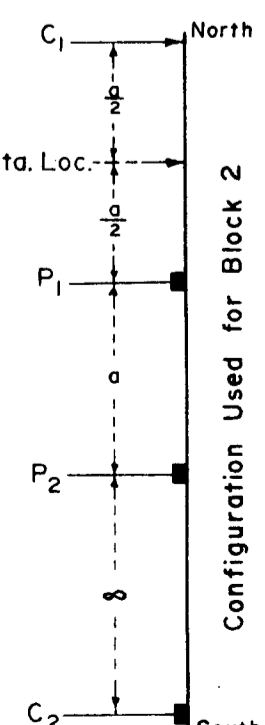
POLE - DIPOLE ARRAY

a = 400 feet.



Configuration Used for Blocks 1 & 3.

NOTE: Configuration Reversed (C1 to the South) North of --- Line as Indicated.



Configuration Used for Block 2.

NOTE: Configuration Reversed (C1 to the South) North of --- Line as Indicated.

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Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 1601 MAP 14

INDUCED POLARIZATION SURVEY.  
ORO MINES LIMITED.  
(59 CLAIMS)

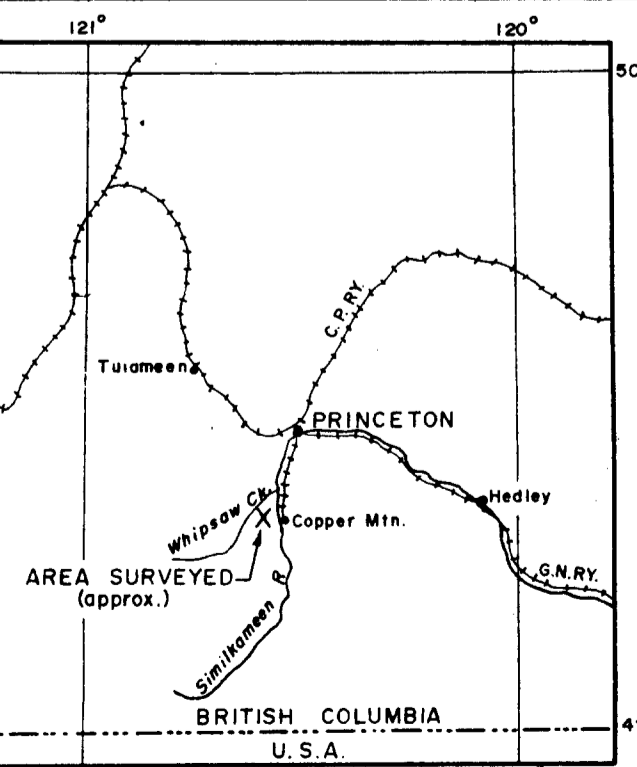
PRINCETON AREA, SIMLKAMEEN M.D. - B.C.  
(COPPER MOUNTAIN PROPERTY)

APPARENT RESISTIVITY CONTOURS.

CONTOURS AT (logarithmic intervals) 100, 150, 200,  
300, 400, 600, 800, 1000 etc. ohm - meters.

SCALE: 1 inch = 400 feet.

To accompany report by R.K. Watson  
W.A. Finney R.K. Watson, B.A.Sc., P.Eng., Geophysicist.  
W.A. Finney, B.Sc., Geophysicist.  
HUNTEC LIMITED, Vancouver, Canada - June, 1967.

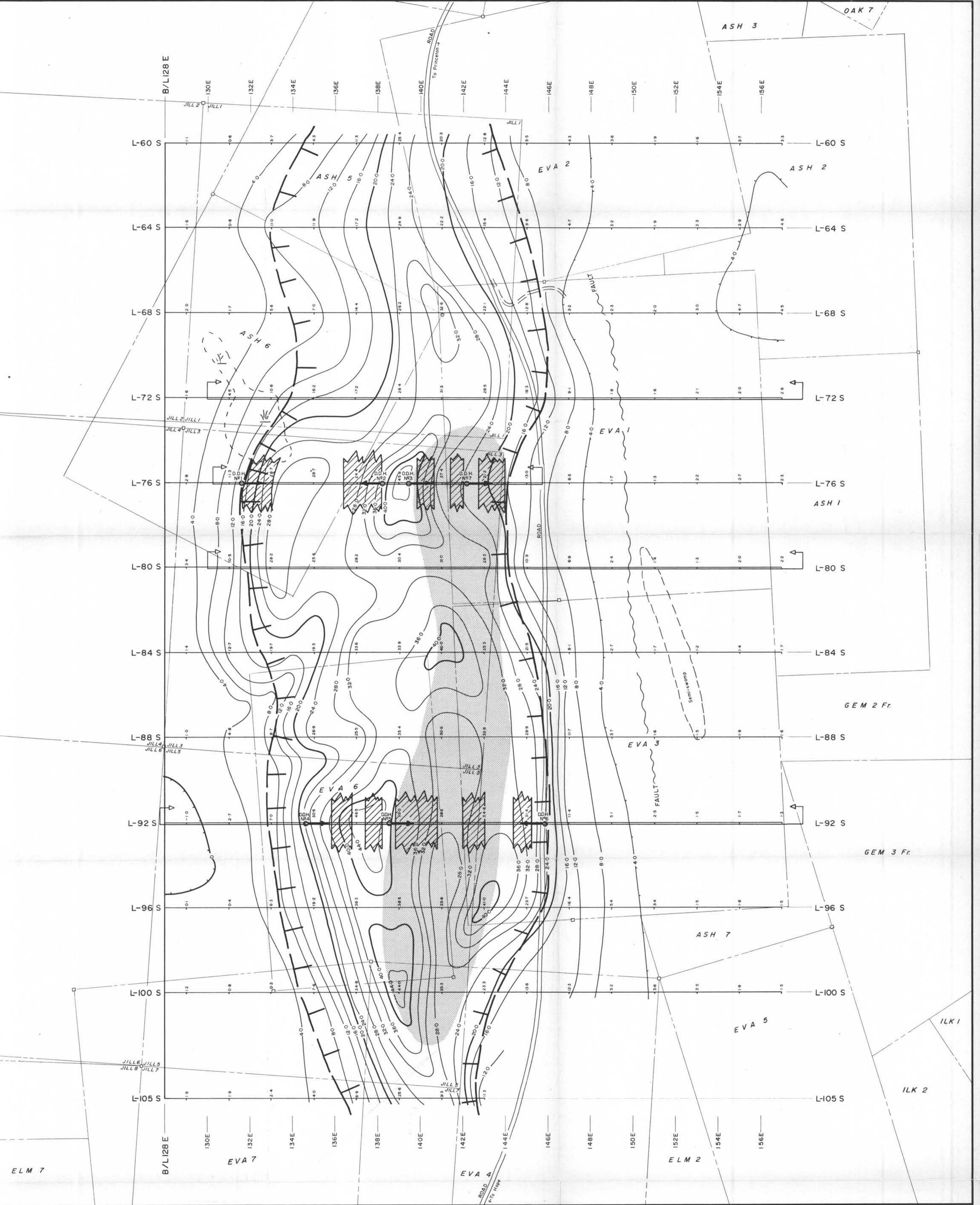


LOCATION MAP

Scale: 1 inch = 20 miles.

FIG - B

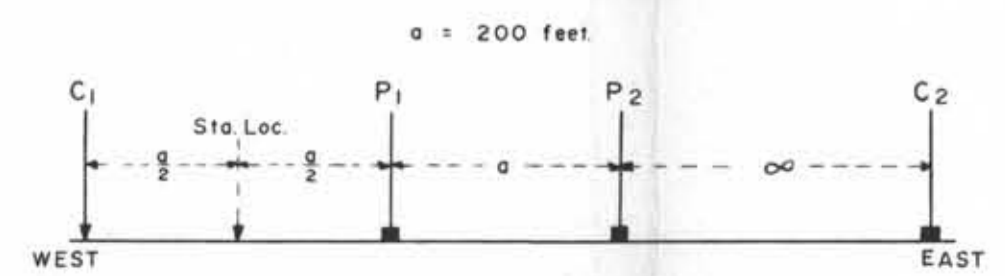
LEGEND  
Distance of Line Covered by Detail.



**LEGEND**

- Outline of Interpreted Anomalous Body.
- Stronger Anomalous Zone, Showing Possible Extent.
- Zone of High Conductivity.
- Recommended D.D. Holes.
- Distance of Line Covered by Detail.

**3 - ELECTRODE ARRAY**



Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 1601 MAP 15

**BLOCK — No 3**

INDUCED POLARIZATION SURVEY.

**ORO MINES LIMITED.**

(COPPER MOUNTAIN PROPERTY)  
PRINCETON AREA, SIMILKAMEEN M.D. - B.C.

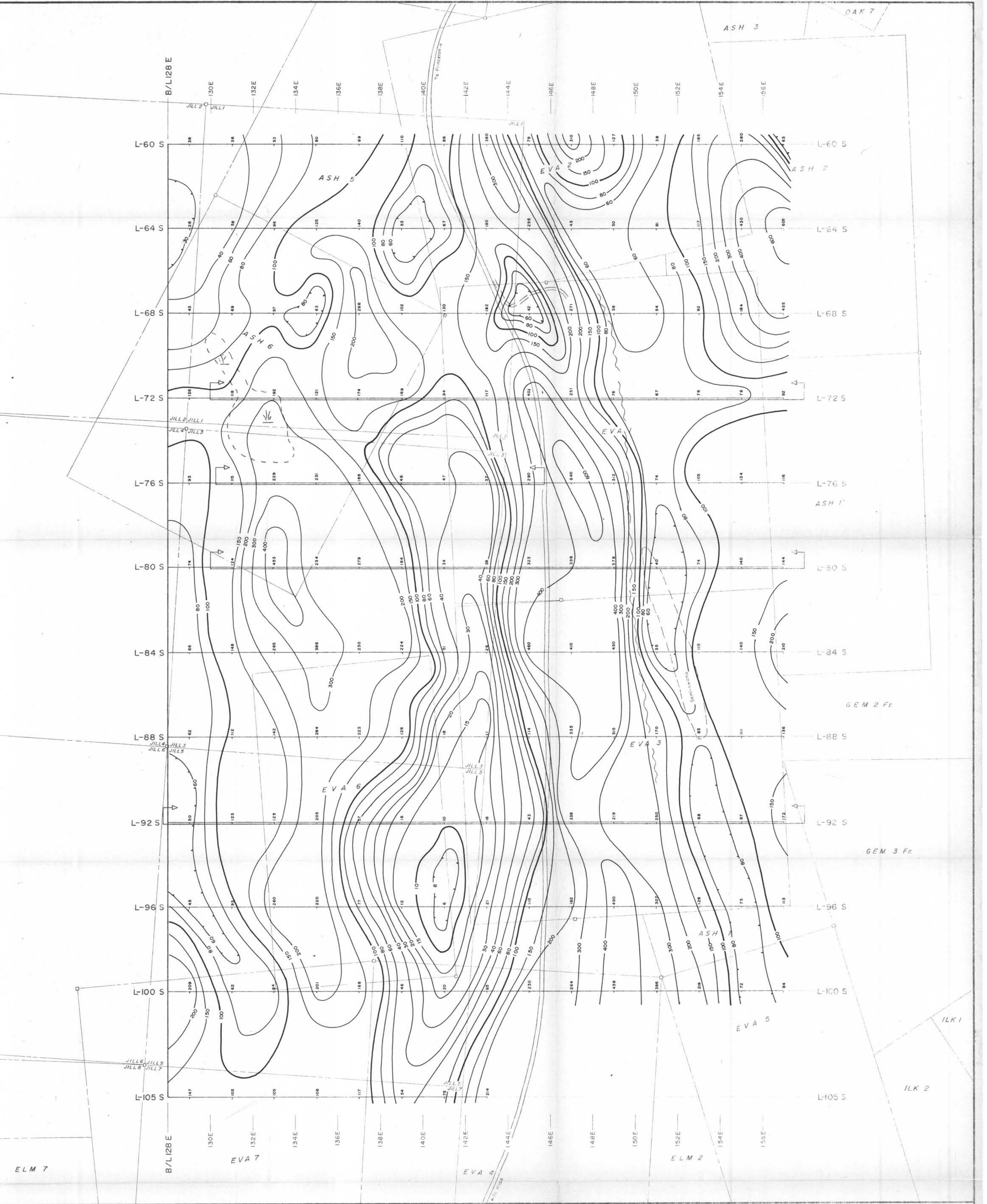
APPARENT CHARGEABILITY CONTOURS  
WITH INTERPRETATION

CONTOUR INTERVAL = 4.0 milliseconds.

SCALE: 1 inch = 200 feet.

To accompany report by *R.K. Watson*  
R.K. Watson, B.A.Sc., P.Eng., Geophysicist.  
*W.A. Finney*  
W.A. Finney, B.Sc., Geophysicist.  
HUNTEC LIMITED, Vancouver, Canada - Aug-Sept, 1967

1601



Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 1601 MAP 16

BLOCK — N<sup>o</sup> 3

INDUCED POLARIZATION, SURVEY.

ORO MINES LIMITED.

(COPPER MOUNTAIN PROPERTY)

PRINCETON AREA, SIMILKAMEEN M.D. - B.C.

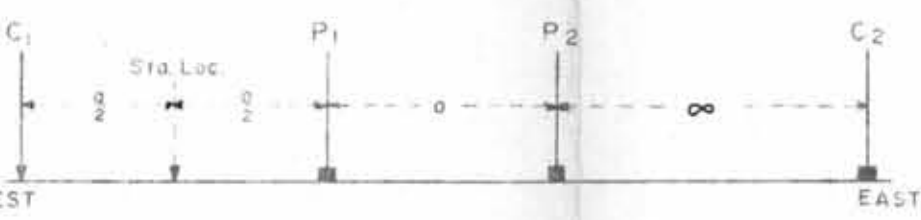
APPARENT RESISTIVITY CONTOURS:

CONTOURS AT (logarithmic intervals) 100, 150, 200,  
300, 400, 600, 800, 1000, etc. ohm-meters.

SCALE: 1 inch = 200 feet.

3- ELECTRODE ARRAY

3 x 200 feet



LEGEND

Distance of Line Covered by Detail.

To accompany report by *R. K. Watson*  
R. K. Watson, B. Sc., P. Eng., Geophysicist.  
*W. A. Finney*  
W. A. Finney, B. Sc., Geophysicist.  
HUNTEC LIMITED, Vancouver, Canada - Aug-Sept., 1967

1601