



52J07SW0050 52J07SW0018 ARMIT LAKE

010

PROJECTS SECTION TORONTO	
R E C E I V E D	
FEB 1 - 1971	
AM	PM
7,8,9,10,11,12	1,2,3,4,5,6

REPORT ON  
CANEX AERIAL EXPLORATION LTD.  
-BLACK GIANT MINES LTD.  
CLAIM GROUP  
SAVANT LAKE AREA, ONTARIO.  
V.118

January, 1971.

By: C. Milgendorf  
P.H. Faulkner

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Accompanying Maps

<u>Drawing No.</u> (Bound into Report)	<u>Title</u>	<u>Scale</u>
118-1	Location of Airborne Survey	1" = 2 miles
118-1A	Location Map	1" = 2640'
(In Map Pockets)		
118-2	General Geology ✓	1" = 2640'
118-3	Anomaly 1 - Geophysics ✓	1" = 200'
118-3A	Anomaly 1 - Geology ✓	1" = 200'
118-4	Anomaly 4 - Geophysics ✓	1" = 200'
118-4A	Anomaly 4 - Geology ✓	1" = 200'
118-5	Anomaly 5 - Geophysics ✓	1" = 200'
118-5A	Anomaly 5 - Geology ✓	1" = 200'

contd. ...

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<u>Drawing No.</u> <u>(In Map Pockets)</u>	<u>Title</u>	<u>Scale</u>
118-6	Anomaly 6 - Geophysics ✓	1" = 200'
118-6A	Anomaly 6 - Geology ✓	1" = 200'
118-7A, 7B & 7C	Anomaly 7 - Geophysics ✓	1" = 200'
118-7D	Anomaly 7 - Geology ✓	1" = 200'
118-8	Anomaly 8 - Geophysics ✓	1" = 200'
118-8A	Anomaly 8 - Geology ✓	1" = 200'
118-9A to 9E	Anomaly 9 & A - Geophysics ✓	1" = 200'
118-9F	Anomaly 9 & A - Geology ✓	1" = 200'
118-10	Anomaly 11 - Geophysics ✓	1" = 200'
118-11	Anomaly B - Geophysics	1" = 200'
118-12	Anomaly E - Geophysics ✓	1" = 200'
118-13	Anomaly B, 11 & E - Geology ✓	1" = 200'

2.295

REPORT ON  
CANEX AERIAL EXPLORATION-BLACK GIANT MINES LTD.  
CLAIM GROUP

INTRODUCTION

During the months of January and February, 1970 a total of 171 claims were staked in the Patricia Mining Division for Canex and Black Giant, following an airborne geophysical survey by McPhar Geophysics Ltd. of Don Mills, Ontario. The airborne geophysical survey was conducted over an east-west trending belt of felsic metavolcanics and metasediments thought to be favourable for sulphide deposition. The area surveyed is shown on the location map, included with this report.

SUMMARY

A program made up of ground geophysical follow up on airborne anomalies, geological mapping and diamond drilling was conducted from May 17, 1970 until September 3, 1970 under Canex supervision. A total of eleven airborne anomalies were located by ground geophysics and of these five were selected to be tested by diamond drilling. The geology of the drill holes was meta greywacke, chlorite schist and dacitic tuff, mineralized with pyrite and pyrrhotite. One hole intersected graphite.

The most interesting airborne anomalies have been explained as due to the presence of massive pyrite and pyrrhotite in the diamond drill core.

LOCATION

The block of 171 claims is located 55 miles northeast of Sioux Lookout, Ontario and 9 miles north of Savant Lake, Ontario. The claims extend from Hough Lake on the east to Fairchild Lake on the west.

ACCESS

The property is most easily reached by float equipped aircraft from Sioux Lookout, Ontario.

TOPOGRAPHY

The terrain is predominately flat and swampy with several northeast trending esker ridges. The trees found in the area are birch, poplar, balsam, spruce and jackpine.

GENERAL GEOLOGY

The geology of the region can be found on O.D.M. Map 2169, Sioux Lookout Armstrong Sheet and O.D.M. Preliminary Map P.354 Miniss Lake Sheet. The rocks underlying the property are an east-west trending belt of meta felsic volcanics and metasediments. Large granite areas lie to the north and south.

contd. ...

ECONOMIC GEOLOGY

A total of 7 diamond drill holes were put down to explain geophysical conductors. The sulphides intersected were pyrite and pyrrhotite. In hole number six, graphite along with pyrite and pyrrhotite was intersected.

A quartz vein containing minor amounts of chalcopyrite and galena was found while examining rock outcrop on the property.

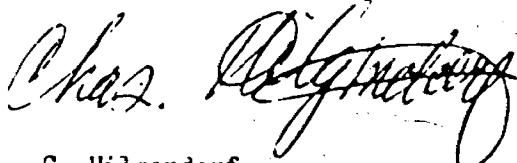
WORK DONE

Following an airborne geophysical survey eleven airborne anomalies were located on the ground using a SE-600 combined horizontal and vertical loop E.M. and a Sharpe MF-1 fluxgate magnetometer. The results of the ground geophysical surveys accompany this report.

The geology of the geophysical grids was mapped and is included with this report. Outcrop was scarce on the grids mapped.

On the basis of geophysics and geology five anomalies were selected for testing by diamond drilling. The location of the drill holes and log sheets are included in this report. All of the drill holes were drilled by a Winkie Diamond Drill. A hole on anomaly #1 was lost at 130' and had to be redrilled. A total of 1187.5' were drilled during the program.

Respectfully Submitted



C. Hilgendorf  
Canex Aerial Exploration Ltd.

CH/of

## GEOPHYSICS

As a result of an airborne electromagnetic survey flown in the Hough Lake area, Patricia Mining Division, eleven of the anomalous areas were selected for ground follow-up on the property held jointly by Black Giant Mines Ltd. and Canex Aerial Exploration Ltd.

## TYPE OF WORK

A reconnaissance ground crew first located the anomaly and set up a Base Line to run parallel to the strike of the conductor. A small grid of lines at 400 ft. c centres were then cut and chained.

Electromagnetic and magnetometer surveys were then carried out on stations every 100 feet or less. The E.M. survey was carried out with a horizontal loop system (Scintrex SE-600) operated at a coil separation of 200 feet measuring in-phase and out-of-phase components of the vertical secondary field at a frequency of 1600 Hz. Results are expressed in percentages of the primary transmitted field.

The SE-600 E.M. unit can also be used as a vertical unit measuring "dip angles". This procedure was carried out on all anomalies with the hopes of being able to more accurately "pin-point" the source of the conductors for drilling purposes.

A Sharpe MF-1 vertical component magnetometer with a sensitivity of +20 gammas was used. In areas of increased activity stations have been reduced to 50 feet to provide greater definition and detail of the anomalies.

The airborne anomalies were very widespread and in order to facilitate the ground crew, a helicopter was used for transportation from a main base camp setup on Sheehorn Lake.

## DISCUSSION OF RESULTS

All of the anomalies checked on the ground are located within a group of 156 claims staked over an east-west trending belt of felsic metavolcanics and metasediments.

The airborne anomalies were numbered by McPhar and the same numbers are used by the ground crew. Anomalies that were not given numbers and that were thought to be worthy of ground checking have been assigned letters. A brief description of each anomaly ground checked follows:

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la.

2.29.5

DESCRIPTION OF ROCK TYPES

Chloritic Schist - highly sheared, dark green, fine grained, chloritic schist.

Greywacke - light grey, sericitic, feldspar fragments and finely bedded.

Shale - dark grey to black, finely bedded dense shale.

Gabbro - dark green, massive, slightly chloritic basic rock.

Rhyolite - light grey, dense white weathering rock.

Dacitic Tuff - light grey to black, dense, hard, minor flow banding and cut by calcite stringers.

Feldspathic Tuff - light grey to grey, feldspar fragments, minor flow banding, sheared tuff.

Meta Volcanic - massive dark green to black, slightly chloritic basic rock.

Chas. O. Anderson

AUTOPOSITIVES FILED  
SEPERATELY

Anomaly #1 (Dwg.3)

The most westerly anomaly lying in claim PA-254550. A total of 120 E.M. and 71 magnetic stations were established on this grid. Anomaly was picked up on two lines. Out-of-phase responses are greater than in-phase representing only a fair to poor conductor. Vertical loop E.M. confirmed the location of the anomaly. Anomaly is situated between two relatively minor magnetic highs in the order of 400-600 gammas above background.

One drill hole (118-1-6) was put down here and the results are included with this report in the form of a log and section.

Anomaly #4 (Dwg.4)

Located near the middle of the 156 claim group, this airborne anomaly is rated as very poor. The grid covers part of claims PA-257971-972 and PA-257973-976. No conductors were detected from ground E.M. A large magnetic high crosses all lines near the north end and could indicate a geological contact.

The airborne response could well have been caused from overburden effects.

No further work was carried out on this grid.

Anomaly #5 (Dwg.5)

This anomaly is also located near the centre of the claim group on claims PA-257704 and PA-257705. A very weak out-of-phase response was detected on lines 4-W, 8-W and 12-W which probably represent conductive overburden. The vertical loop survey failed to detect any conductive zone. Magnetics are generally higher on the south part of the grid, with spiky, local highs up to 2000 gammas above background being present. This could be due to a deepening of the overburden to the north.

No further work is recommended.

Anomaly #6 (Dwg.6)

Anomaly 6 is located in the eastern part of the claim group. A very weak E.M. response with the out-of-phase amplitude being greater than the in-phase, thus representing a poor quality conductor.

A response of this nature probably represents a weakly mineralised zone or a conductive overburden effect. The magnetics remain very flat on this grid.

Work was carried out over portions of 3 claims, namely PA-257161, 257166 and 257167.

No further work was carried out over this anomaly.

contd.

Anomaly #7 (Dwgs. 7A, 7B & 7C)

This anomaly is located on claims PA-254562 and 254571 in the eastern part of the claim group. Conductor has been traced for a length of 2000' but can be rated only as fair. On five of the six lines surveyed the cut-of-phase response is greater than the in-phase, indicating poor conductivity.

The vertical loop survey confirmed the presence of a conductive zone and a better location marker. A small magnetic anomaly is associated with the E.M.

One hole (118-7-3) was drilled on this grid to a depth of 176 feet intersecting zones of pyrite and pyrrhotite. A complete log for the hole is included with this report.

Anomaly #8 (Dwg. 8)

Located approximately one mile west of Shoehorn Lake on claims PA-254565, 254566 and 254568. This was one of the best E.M. anomalies on the property. It was detected on four lines and is open to the east. The E.M. responses show large amplitudes with good ratio's indicating better conductivity. Vertical loop results also show strong cross-over dip angles.

There is approximately a 1400-1500 gamma magnetic anomaly coinciding with the E.M. The magnetics indicate that a fault may be present between lines 0+00 and 4-E striking about 60°.

One drill hole (118-8-4) was drilled to a depth of 175'. This hole intersected zones of pyrite, pyrrhotite and traces of graphite. For more detail of drilling, see log.

Anomaly #9 and A (Dwgs. 9A to 9E)

These anomalies are close together and were incorporated into a single grid. A total of 4.77 line miles were cut to cover both areas.

Anomaly A was detected on two lines and responded very weakly as did the vertical loop survey. There is no magnetic relief and from the results, would have to be rated as a poor conductor. This anomaly falls within the boundaries of claim PA-257129.

Anomaly 9 has been detected for a strike length of at least 2000 feet, however, lines 20-W and 40-W have very weak responses. The largest amplitude readings are on L-32-W between stations 3+50S and 5+50S. However, lines 24-W, 28-W and 36-W also show good quality response. Magnetics show a very large, local high coinciding with the E.M. on L-28-W and 32-W. This anomaly would rate as very good.

Another weak anomaly with magnetic coincidence was detected on L-32-W at 1+20S.

Two drill holes (118-9-1 and 118-9-2) were put down on this grid for a total of 349.5'. For complete results of drilling see logs with this report. However, it appears that the drilling more than adequately explained both conductors and no further work was carried out.

D.

Anomaly 11 (Dwg.10)

Located approximately 1/2 mile south of Hough Lake on claims PA-257145 and 257147. Rated as one of the better airborne anomalies, unfortunately was not detected with ground geophysics.

Some activity on the out-of-phase response is detected, but is likely due to overburden effects. Magnetics tend to stay flat with the exception of the odd spiky reading representing an increase in magnetite in very minor amounts.

No further work was carried out and at the present time no work is recommended.

Anomaly B (Dwg.11)

This anomaly is located on claims PA-257138 and 257145 tying onto the south shore of Hough Lake. A very weak and poor quality response were detected on L-4-W at 2+00S. As above, out-of-phase activity is present on the remaining lines. The vertical loop survey shows very weak "cross-overs" on LO+00 and L-4-W.

A strong magnetic anomaly is picked up north of the Base Line indicating an increase in magnetite content.

A hole (118-B-5) was drilled intersecting minor amounts of pyrite, pyrrhotite and graphite.

Anomaly E (Dwg.12)

Situated south of anomalies #11 and "B" on claims PA-257147-148, the results on this grid show a very poor quality conductor.

The only response detected actually lies outside the claim boundary. The E.M. results show a very weak, one line conductor. Vertical loop E.M. failed to detect any conductive zones while the magnetics remain consistently flat.

No further work is recommended at this time.

SUMMARY AND CONCLUSIONS

A total of eleven airborne anomalies were ground checked. Of these, five were drilled which more than adequately explained the geophysical anomalies.

No mineralization of economic importance was encountered and it is therefore recommended that no further work be carried out at this time.

Respectfully Submitted,

*J.H. Faulkner*

J.H. Faulkner

FHF/of

III.

Diamond Drilling done by Canex Aerial Exploration Ltd.

Winkie Drill - XY core, 7/8"

Diamond Drillers:

Mr. M. Simard, Chibougamau, Que.  
Mr. J.M. Simard, Chibougamau, Que.  
Mr. O. Simard, Chibougamau, Que.

DDH-118-9-1 . . . . .	175'	on claim No. PA-257128
DDH-118-9-3 . . . . .	173'	" " No. PA-257128
DDH-118-7-3 . . . . .	176'	" " No. PA-254571
DDH-118-8-4 . . . . .	175'	" " No. PA-254568
DDH-118-8-5 . . . . .	<u>184'</u>	" " No. PA-257139
	<u>883'</u>	

Assessment credit 883 x 1 =

883 days

TOTAL ASSESSMENT CREDITS = 1645 Days



52J07SW0050 52J07SW0018 ARMIT LAKE

900

416  
365-6918

2000  
00000000000000000000000000000000

2.295

Weight: 0.00  
Length: 0.00  
Width: 0.00  
Depth: 0.00

DEPARTMENT OF MINES AND NORTHERN AFFAIRS  
OTTAWA, ONTARIO

September 16, 1971.

Mr. W. A. Buchan,  
Mining Recorder,  
Court House,  
Sioux Lookout, Ontario.

Dear Sir:

Re: Mining Claim No. PA 254562 et al,  
Armit, Evans and Houghton Lakes.

The Geophysical (Magnetometer, Electromagnetic) and Geological assessment work credits as listed with my Notice of Intent dated September 1, 1971 have been approved as of the date above. Please inform the recorded holder and so indicate on your records.

Yours very truly,

Fred W. Matthews,  
Supervisor,  
Projects Section.

OJ/dg.

c.c. Canex Aerial Exploration Ltd.

c.c. Mr. C. Hilgendorf.

c.c. Resident Geologist, ✓  
Kenora.

DESCRIPTION OF ROCK TYPES

Chloritic Schist - highly sheared, dark green, fine grained, chloritic schist.

Greywacke - light grey, sericitic, feldspar fragments and finely bedded.

Shale - dark grey to black, finely bedded dense shale.

Gabbro - dark green, massive, slightly chloritic basic rock.

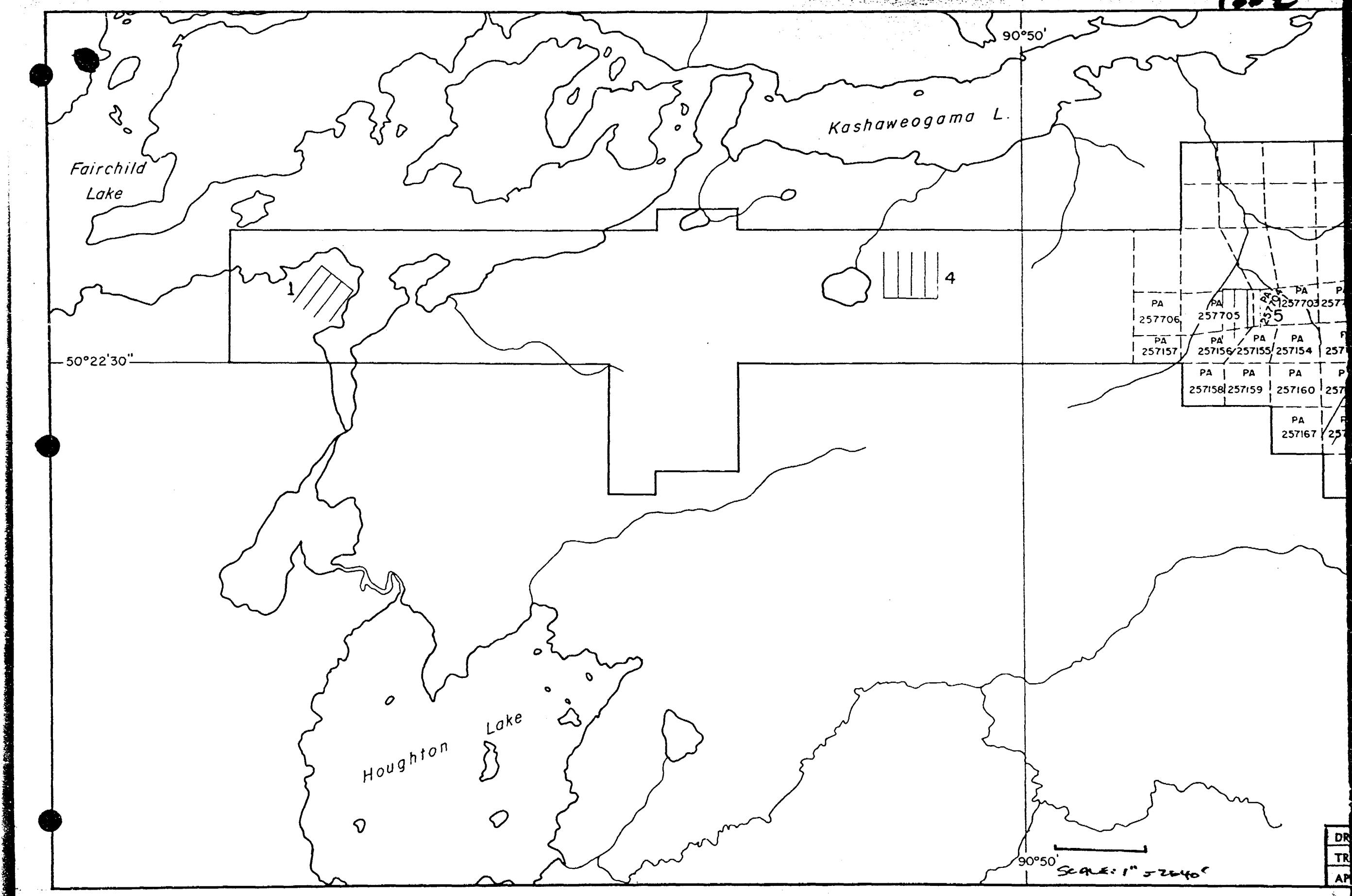
Rhyolite - light grey, dense white weathering rock.

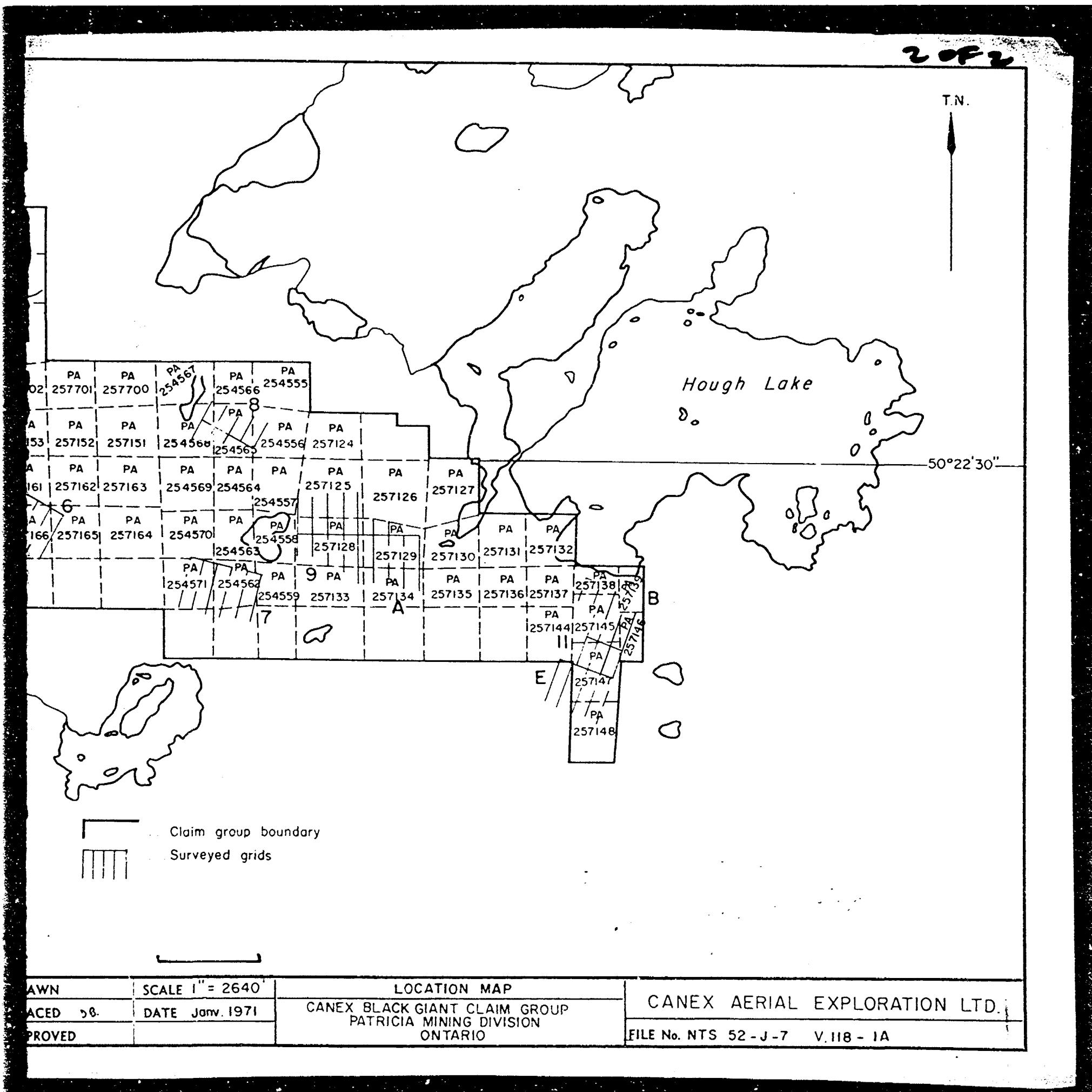
Dacitic Tuff - light grey to black, dense, hard, minor flow banding and cut by calcite stringers.

Feldspathic Tuff - light grey to grey, feldspar fragments, minor flow banding, sheared tuff.

Meta Volcanic - massive dark green to black, slightly chloritic basic rock.

  
Chas. D. G. McNeely





ARMIT LAKE HOUGHTON LAKE M-2165

M-2744

EVANS LAKE  
ONTARIO  
M-1774

#441

THE MINING ACT REPORT OF WORK

A separate form is required for each type of work to be recorded.

To the Recorder of ..... Patricia ..... Mining Division

I, ..... Canex Aerial Exploration Ltd. ..... A-37534

name of Recorded Holder Miner's Licence

..... Suite 2600, 401 Bay Street, Toronto

Post Office Address

do hereby report the performance of ..... 32 ..... days of ..... Linecutting ..... type of work

not before reported to be applied on the following contiguous claims

Claim No.	Days	Claim No.	Days	Claim No.	Days
254562	2	257125	2	257148	2
254565	2	257128	2	257161	2
254568	2	257129	2	257166	2
254571	2	257138	2	257167	2
257704	2	257145	2	.....	.....
257705	2	257147	2	.....	.....

All the work was performed on Mining Claim (s) .....  
(In the case of geological and/or geophysical survey (s) where more than 18 claims are involved attach a schedule)

READ CAREFULLY: THE FOLLOWING INFORMATION IS REQUIRED BY THE MINING RECORDER.

For Manual Work, Stripping or Opening up of Mines, Sinking Shafts or Other Actual Mining Operations - Names and addresses of the men who performed the work and the dates and hours of their employment.

For Diamond and other Core Drilling - Footage, No. and angle of holes and diameter of core. Name and address of owner or operator of drill. Dates when drilling was done. Signed core log and sketch in duplicate.

For Compressed Air or Other Power Driven or Mechanical Equipment

Type of drill or equipment. Names and addresses of men engaged in operating equipment and the dates and hours of their employment.

For Power Stripping - Type of equipment. Name and address of owner or operator. Amount expended. Dates on which work was done. Proof of actual cost must be submitted within 30 days of recording.

With each of the above types of work sketches are required to show the location and extent of the work in relation to the nearest claim post. In the case of diamond or other core drilling the sketch must be submitted in duplicate.

For Geological and Geophysical Survey - The names and addresses of men employed as well as dates. Type of instrument used in the case of geophysical survey. Reports and maps in duplicate must be filed with the Minister within 60 days of recording.

For Land Survey - the name and address of Ontario Land surveyor.

The Required Information is as Follows: (Attach a list if this space is insufficient)

14.59 Miles Line Cut

Personnel & Dates Worked

P. Makinen, South Porcupine, Ont. - May 23, 28-31 incl., June 1-3, 8, 11, 12, 15, 1970

R. Labine, Chelmsford, Ont. - June 4, 6, 1970

B. Hudson, Ottawa, Ontario - June 1-15 incl., 1970.

C. Lepage, Sioux Lookout, Ont. - May 20-23, 28-31, June 1-4, 1970.

O. Simard, Chibougamau, Que. - June 5-7 incl. 1970

Date ..... Jan 22 1971 .....

Jean A. Hilgendorf  
Signature of Recorded Holder or Agent

The Mining Act  
Certificate Verifying Report of Work

I, ..... C. Hilgendorf, Geologist .....

..... Suite 2600, 401 Bay Street, Toronto, Ontario

(Post Office Address)

hereby certify:

1. That I have a personal and intimate knowledge of the facts set forth in the report of work annexed here-to, having performed the work or witnessed same during and/or after its completion.

2. That the annexed report is true.

Dated: Jan 22 1971

Signature

254555

THE PENALTY FOR MAKING A FALSE STATEMENT IN THIS REPORT AND/OR CERTIFICATE IS \$500. OR SIX MONTHS IMPRISONMENT OR BOTH

ARMIT LAKE  
M-2744

HOUGHTON LAKE M-2168'

EVANS LAKE  
M-1774

ONTARIO

#442

THE MINING ACT REPORT OF WORK

A separate form is required for each type of work to be recorded.

To the Recorder of ..... Patricia ..... Mining Division

I, ..... Phoenix Aerial Exploration Ltd. ..... A-37534 .....  
name of Recorded holder Miner's Licence

Suite 2000, 401 Bay Street, Toronto ..... Post Office Address

do hereby report the performance of ..... 96 ..... days of ..... Geological .....  
not before reported to be applied on the following contiguous claims

Claim No.	Days	Claim No.	Days	Claim No.	Days
254562 H	6	257125 H	6	257148 E	6
254565 A	6	257128 H	6	257161 H	6
254568 A	6	257129 H	6	257166 H	6
254571 - H	6	257138 E	6	257167 H	6
257704 A	6	257145 E	6	.....	.....
257705 A	6	257147 E	6	.....	.....

All the work was performed on Mining Claim (s) .....  
(In the case of geological and/or geophysical survey (s) where more than 18 claims are involved attach a schedule)

READ CAREFULLY: THE FOLLOWING INFORMATION IS REQUIRED BY THE MINING RECORDER.

For Manual Work, Stripping or Opening up of Mines, Sinking Shafts or Other Actual Mining Operations - Names and addresses of the men who performed the work and the dates and hours of their employment.

For Diamond and other Core Drilling - Footage, No. and angle of holes and diameter of core. Name and address of owner or operator of drill. Dates when drilling was done. Signed core log and sketch in duplicate.

For Compressed Air or Other Power Driven or Mechanical Equipment

Type of drill or equipment. Names and addresses of men engaged in operating equipment and the dates and hours of their employment.

For Power Stripping - Type of equipment. Name and address of owner or operator. Amount expended. Dates on which work was done. Proof of actual cost must be submitted within 30 days of recording.

With each of the above types of work sketches are required to show the location and extent of the work in relation to the nearest claim post. In the case of diamond or other core drilling the sketch must be submitted in duplicate.

For Geological and Geophysical Survey - The names and addresses of men employed as well as dates. Type of instrument used in the case of geophysical survey. Reports and maps in duplicate must be filed with the Minister within 60 days of recording.

For Land Survey - the name and address of Ontario Land surveyor.

The Required Information is as Follows: (Attach a list if this space is insufficient)

Personnel & Dates Worked

Mr. C. Hilgendorf, Geologist, May 21-30 incl., June 18-21 incl., 1970.

Date ..... Jan 22 1971 .....

Signature of Recorded Holder or Agent

The Mining Act  
Certificate Verifying Report of Work

I, ..... C. Hilgendorf, Geologist .....

..... Suite 2600, 401 Bay Street, Toronto, Ontario.  
(Post Office Address)

hereby certify:

1. That I have a personal and intimate knowledge of the facts set forth in the report of work annexed hereto, having performed the work or witnessed same during and/or after its completion.

2. That the annexed report is true.

Dated ..... Jan 22 1971 ..... Signature

THE PENALTY FOR MAKING A FALSE STATEMENT IN THIS REPORT AND/OR CERTIFICATE IS \$500. OR SIX MONTHS IMPRISONMENT OR BOTH

ARMITLAKE  
M-2744

HOUGHTON LAKE M-2165

EVANS LAKE  
M-1774

#440

ONTARIO

THE MINING ACT REPORT OF WORK

A separate form is required for each type of work to be recorded.

To the Recorder of ..... Patricia ..... Mining Division

I, ..... Canex Aerial Exploration Ltd. ..... A-37534 .....

name of Recorded Holder

Miner's Licence

Suite 2600, 401 Bay Street, Toronto, Ontario .....

Post Office Address

do hereby report the performance of ..... 608 ..... days of ..... Ground Geophysical ..... type of work

not before reported to be applied on the following contiguous claims

Claim No.	Days	Claim No.	Days	Claim No.	Days
254562	38	257125	38	257148	38
254565	38	257128	38	257161	38
254568	38	257129	38	257166	38
254571	38	257138	38	257167	38
257704	38	257145	38	.....	.....
257705	38	257147	38	.....	.....

All the work was performed on Mining Claim (s) .....  
(In the case of geological and/or geophysical survey (s) where more than 18 claims are involved attach a schedule)

READ CAREFULLY: THE FOLLOWING INFORMATION IS REQUIRED BY THE MINING RECORDER.

For Manual Work, Stripping or Opening up of Mines, Sinking Shafts or Other Actual Mining Operations - Names and addresses of the men who performed the work and the dates and hours of their employment.

For Diamond and other Core Drilling - Footage, No. and angle of holes and diameter of core. Name and address of owner or operator of drill. Dates when drilling was done. Signed core log and sketch in duplicate.

For Compressed Air or Other Power Driven or Mechanical Equipment

Type of drill or equipment. Names and addresses of men engaged in operating equipment and the dates and hours of their employment.

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For Geological and Geophysical Survey - The names and addresses of men employed as well as dates. Type of instrument used in the case of geophysical survey. Reports and maps in duplicate must be filed with the Minister within 60 days of recording.

For Land Survey - the name and address of Ontario Land surveyor.

The Required Information is as Follows: (Attach a list if this space is insufficient)

Instrument Used	Line Miles	No. of Stations
Scintrex SE-600 Vert. Loop & Horiz. Loop E.M. System	10.56(Vert.) 12.39(Horiz.)	596 790
Sharpo MF-1 Magnetometer	11.53	761

Personnel & Dates Worked

F.H. Faulkner, Sr. Operator, 8 Rollins Place, Islington, Ont. - May 21-23, 25, 29-31/70

W. Taylor, Operator, R.R.#2, Red Bank, N.B. - May 20-23, 25, 28-31, June 1-13, 15/70

P. Makinen, Operator, South Porcupine, Ont. - May 20-22, June 4-7, 9-10, 13, 14/70

R. Labine, Geophysical Assist., Chelmsford, Ont. - May 20-23, 28-31, June 1-3, 5, 7  
9-11, 13-16, 1970

B. Hudson, Geophysical Assist., Ottawa, Ont. - May 20-23, 28-31, 1970

Date ..... *May 21-23, 1970* ..... *Year* ..... *1970* ..... Signature of Recorded Holder or Agent

M. Laforte, Geophysical Assist., Chicoutimi, Que. - May 27-31, June 1-16, 1970

The Mining Act  
Certificate Verifying Report of Work

I, ..... C. Hilgendorf, Geologist, .....

..... Suite 2600, 401 Bay Street, Toronto, Ontario.  
(Post Office Address)

hereby certify:

1. That I have a personal and intimate knowledge of the facts set forth in the report of work annexed here-to, having performed the work or witnessed same during and/or after its completion.

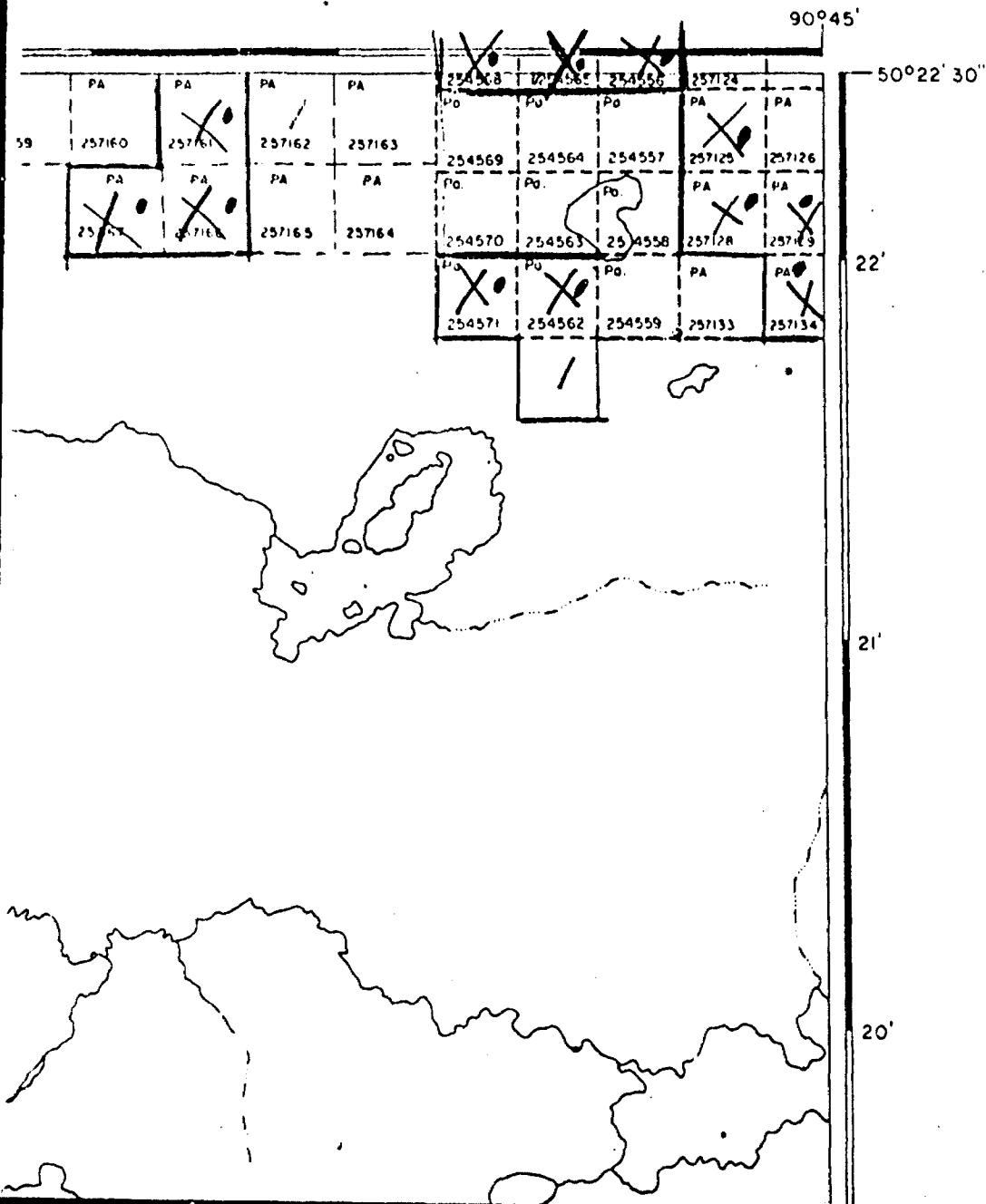
2. That the annexed report is true.

Dated ..... *May 22, 1970* ..... Signature

*C. Hilgendorf*  
Signature

*254562*

THE PENALTY FOR MAKING A FALSE STATEMENT IN THIS REPORT AND/OR CERTIFICATE IS \$500. OR SIX MONTHS IMPRISONMENT OR BOTH



AREA OF  
*Class Map*  
HOUGHTON LAKE  
*X = E.M + Min.  
Geologic etc.*  
DISTRICT OF  
KENORA - THUNDER BAY

PATRICIA  
MINING DIVISION

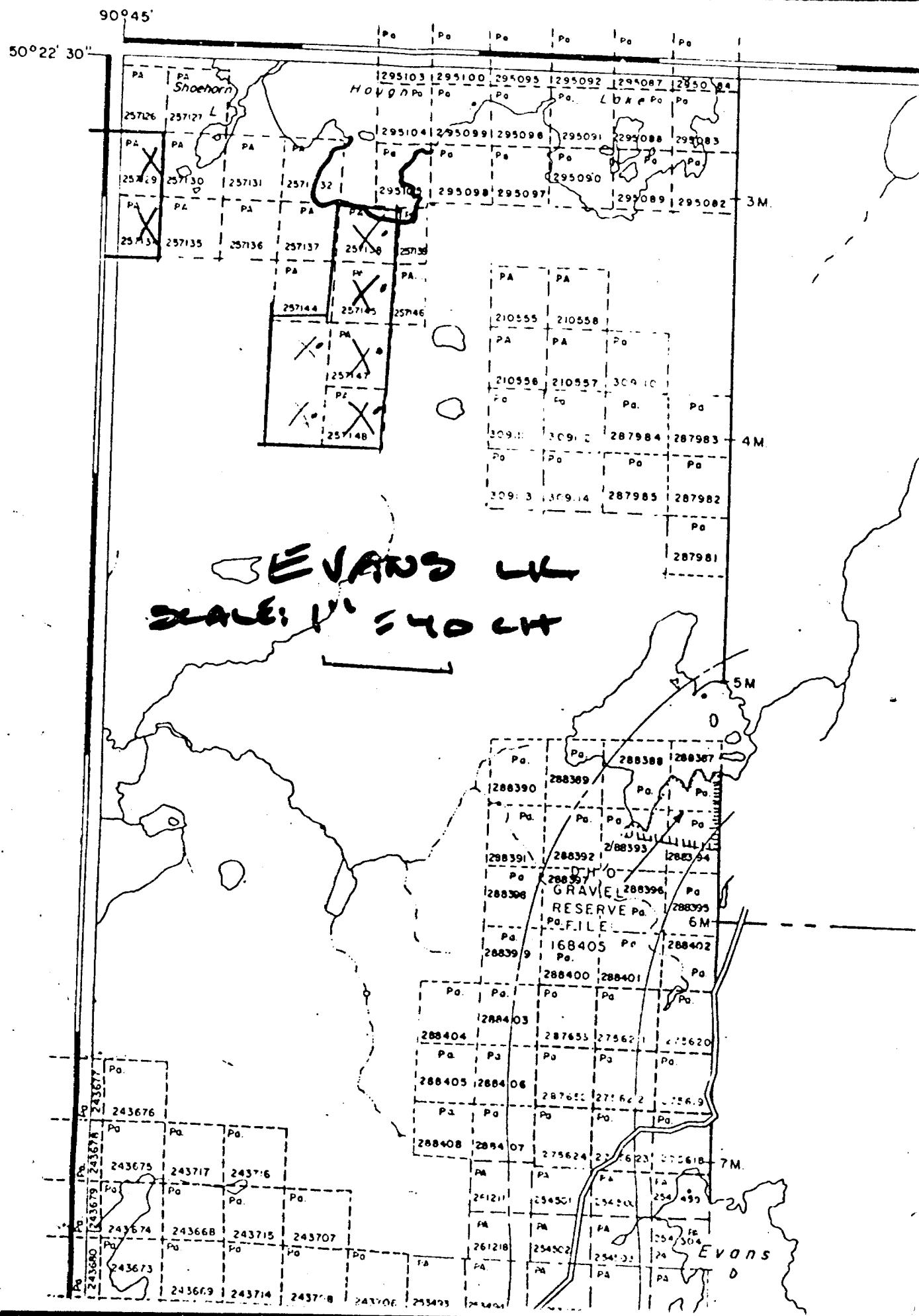
SCALE: 1-INCH = 40 CHAINS

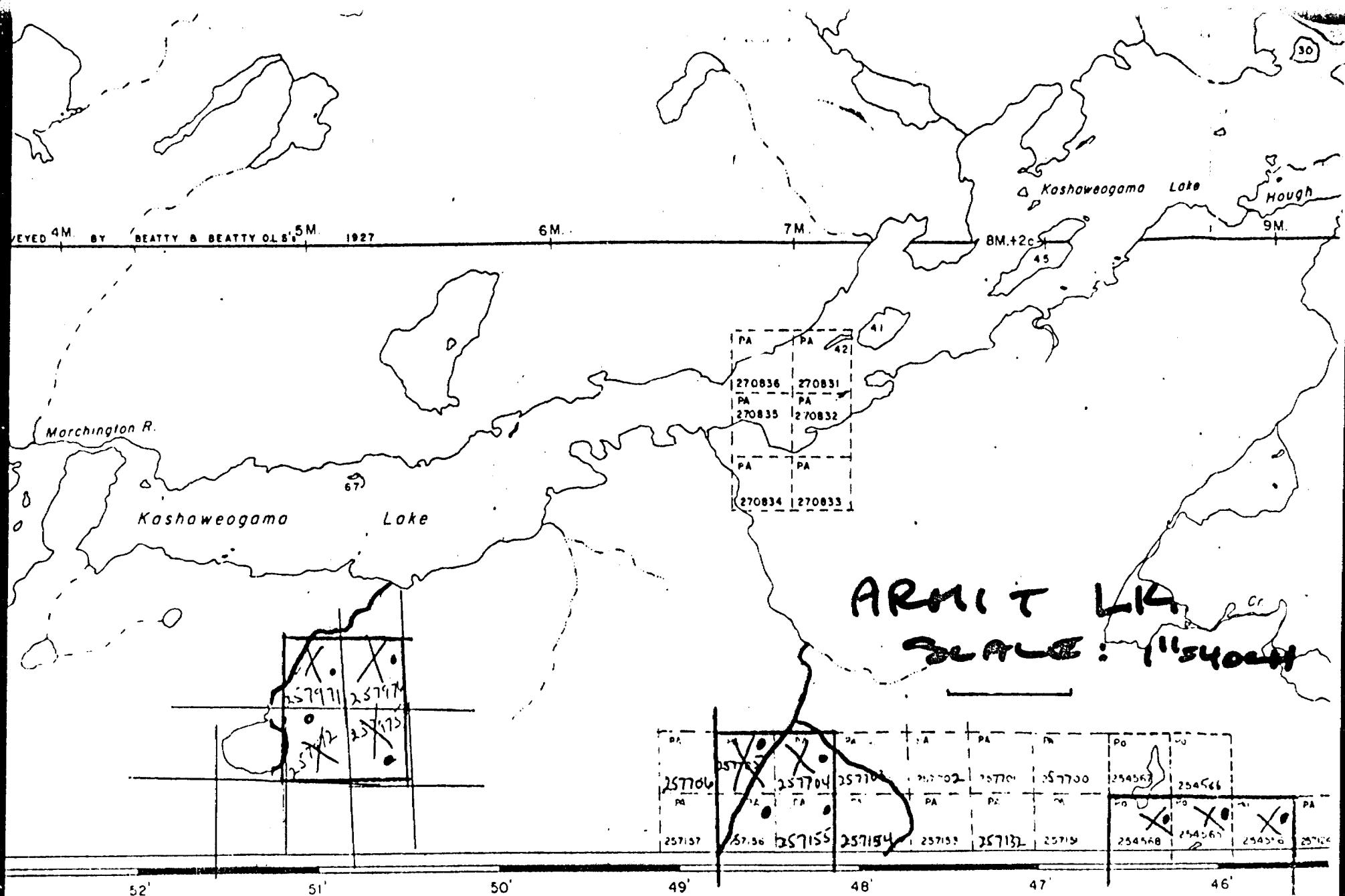
LEGEND

- PATENTED LAND
- CROWN LAND SALE
- LEASES
- LOCATED LAND
- LICENSE OF OCCUPATION
- MINING RIGHTS ONLY
- SURFACE RIGHTS ONLY
- ROADS
- IMPROVED ROADS
- KING'S HIGHWAYS
- RAILWAYS
- POWER LINES
- MARSH OR MUSKEG
- MINES
- CANCELLED



HOUGHTON LAKE - M. 2165





ON LAKE - M.2165

OF SURVEYED  
MERIDIAN  
OF

THUNDER

1M.

1M.

2M.

3M. 7TH BASE LINE SURVEYED 4M. BY

DISTRICT  
DISTRICT

23M.

Fairchild

+22M

22M 26cN

57'

56'

55'

54'

53'

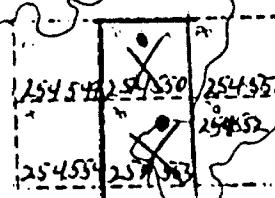
59' 58' 57' 56' 55' 54' 53'

109  
86  
110  
94  
Id No. 69  
West Part of 69  
East Part of 69  
72  
Norchin

Lake

ABRAHAT L.

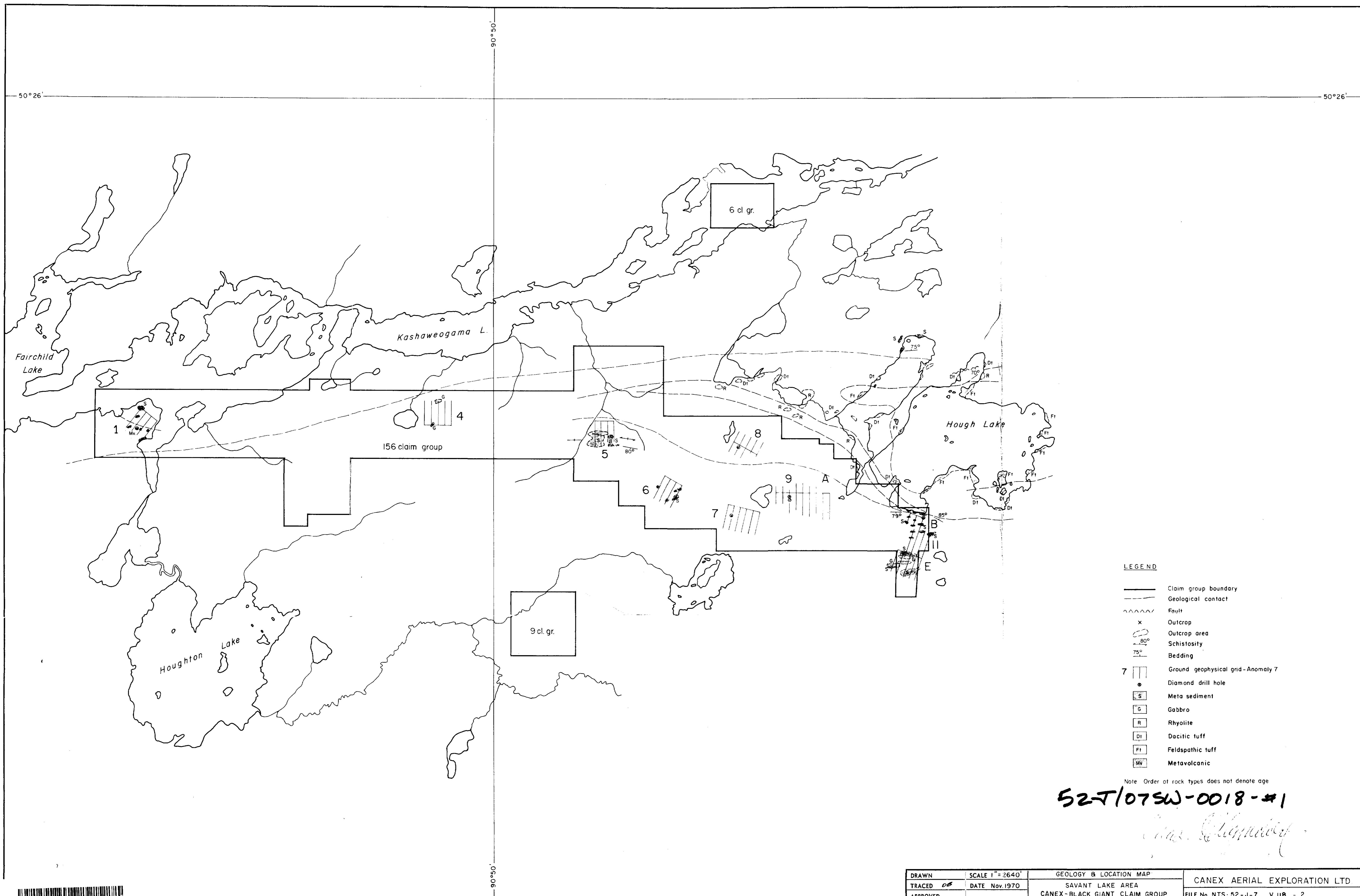
SCALE : 1" = 4000'

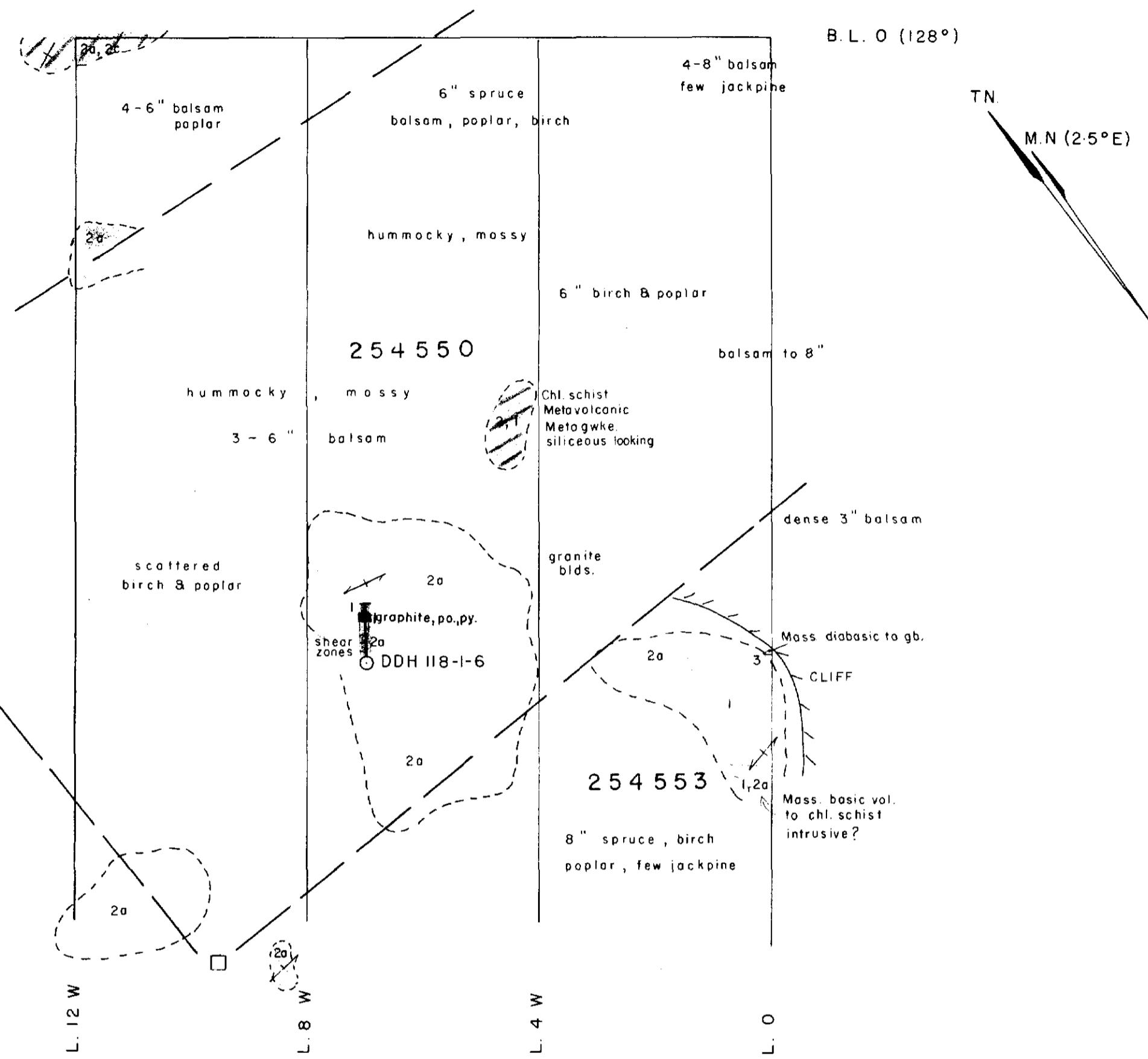


HOUGHTON L.

FOR ADDITIONAL  
INFORMATION  
SEE MAPS:

52-107 SW-0018 #1-II24





LEGEND

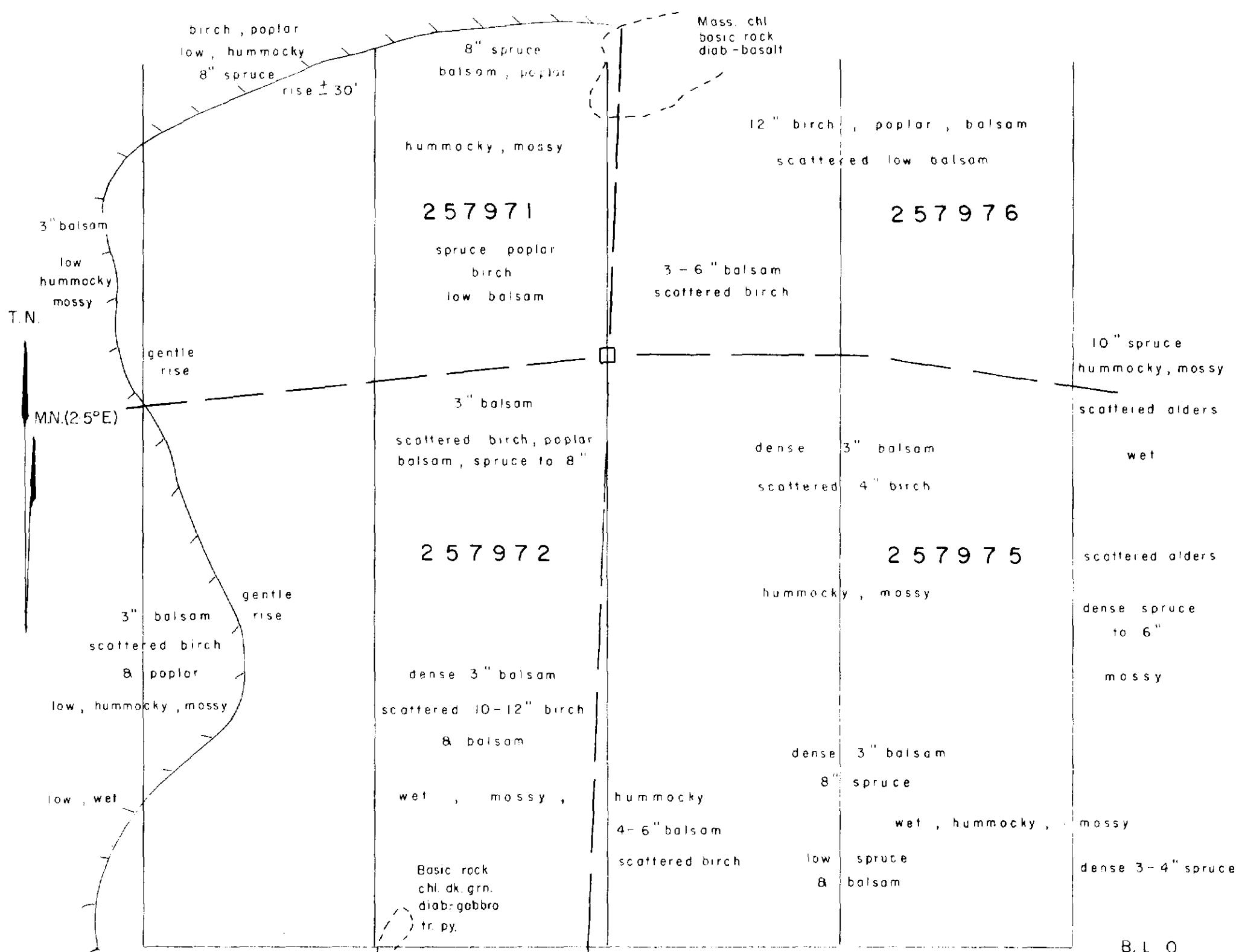
- ... Area of rock outcrop
- Bedding - vertical
- Schistosity - vertical
- Location of diamond drill hole
- 3 Gabbro
- Meta sediments
- 2a Chloritic schist
- 1/2c Greywacke
- Metavolcanics
- pes does not denote age

*Chas. Alexander*

52J07SW-0018-#2

CANEX AERIAL EXPLORATION LTD	
GEOLOGICAL SURVEY	
SAVANT LAKE AREA	
PATRICIA MINING DIVISION, ONTARIO	
Anom. No. 1	
156 Claim Group (Canex-Black Giant)	
SCALE: 1" = 200'	DRAWN: <i>gaw</i>
DATE: Dec., 1970	FILE No.: N.T.S. 52-J-7 V II8-3A





LEGEND

Rock outcrop

O T.N.

W 4 W 8 W 2 W 6

*Chas. Olegard*  
52J107SW-0018-#3

CANEX AERIAL EXPLORATION LTD.

GEOLOGICAL SURVEY

SAVANT LAKE AREA

PATRICIA MINING DIVISION, ONTARIO

Anom. No. 4

156 Claim Group (Canex-Black Giant)

SCALE : 1" = 200'

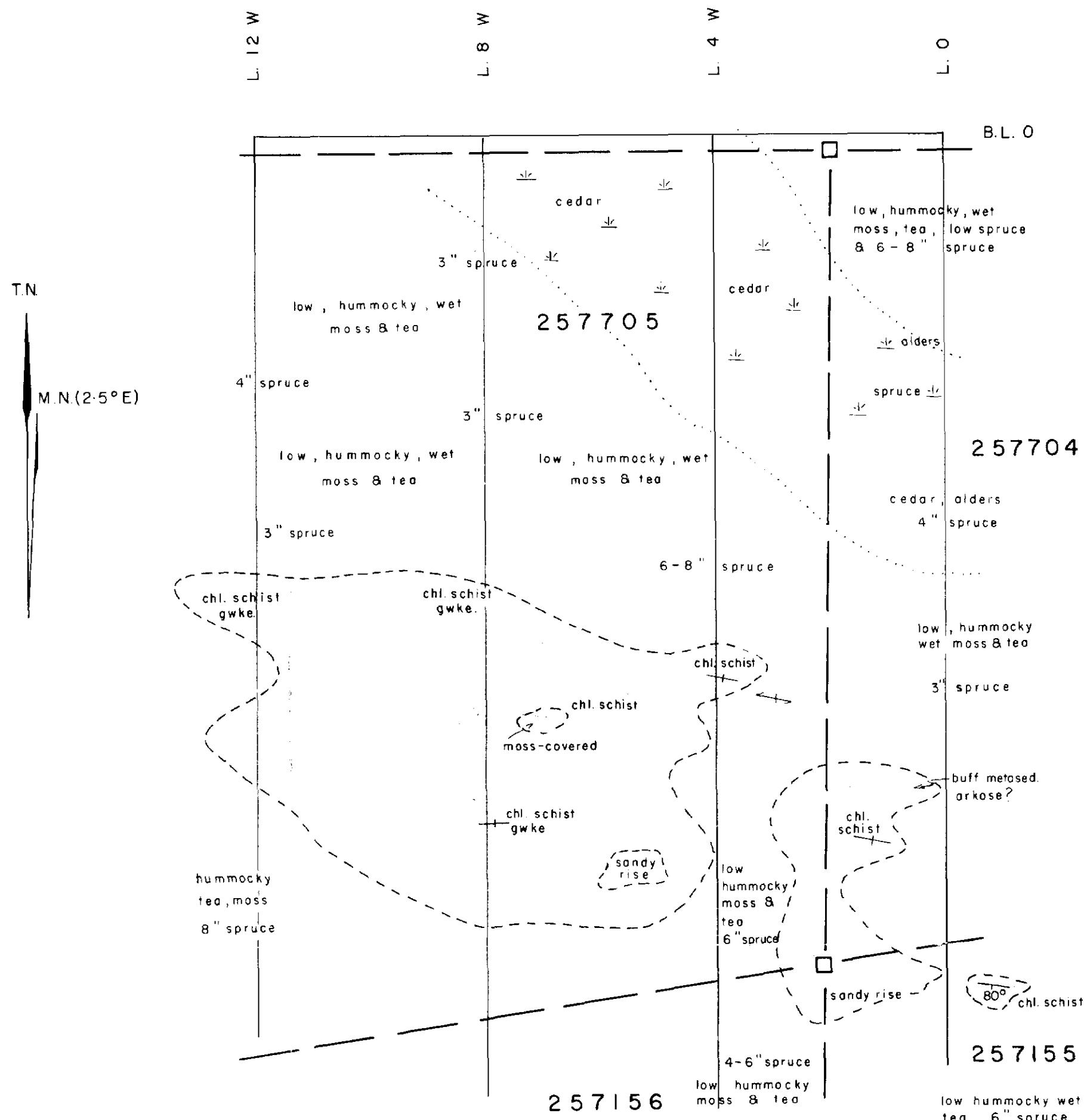
DRAWN : *JW.*

DATE : Dec., 1970

FILE No.: N.T.S. 52-J-7 VII8-4A



52J07SW0050 52J07SW0018 ARMIT LAKE



52J107SW-0018-#4

LEGEND

(dashed circle) ... Area of rock outcrop

X, /<sub>80°</sub> . Bedding - vertical, inclined

X . Schistosity - vertical

(swamp) ... Swamp

[square] ... Meta sediments

CANEX AERIAL EXPLORATION LTD.

GEOLOGICAL SURVEY

SAVANT LAKE AREA

PATRICIA MINING DIVISION, ONTARIO

Anom. No. 5

156 Claim Group (Canex-Black Giant)

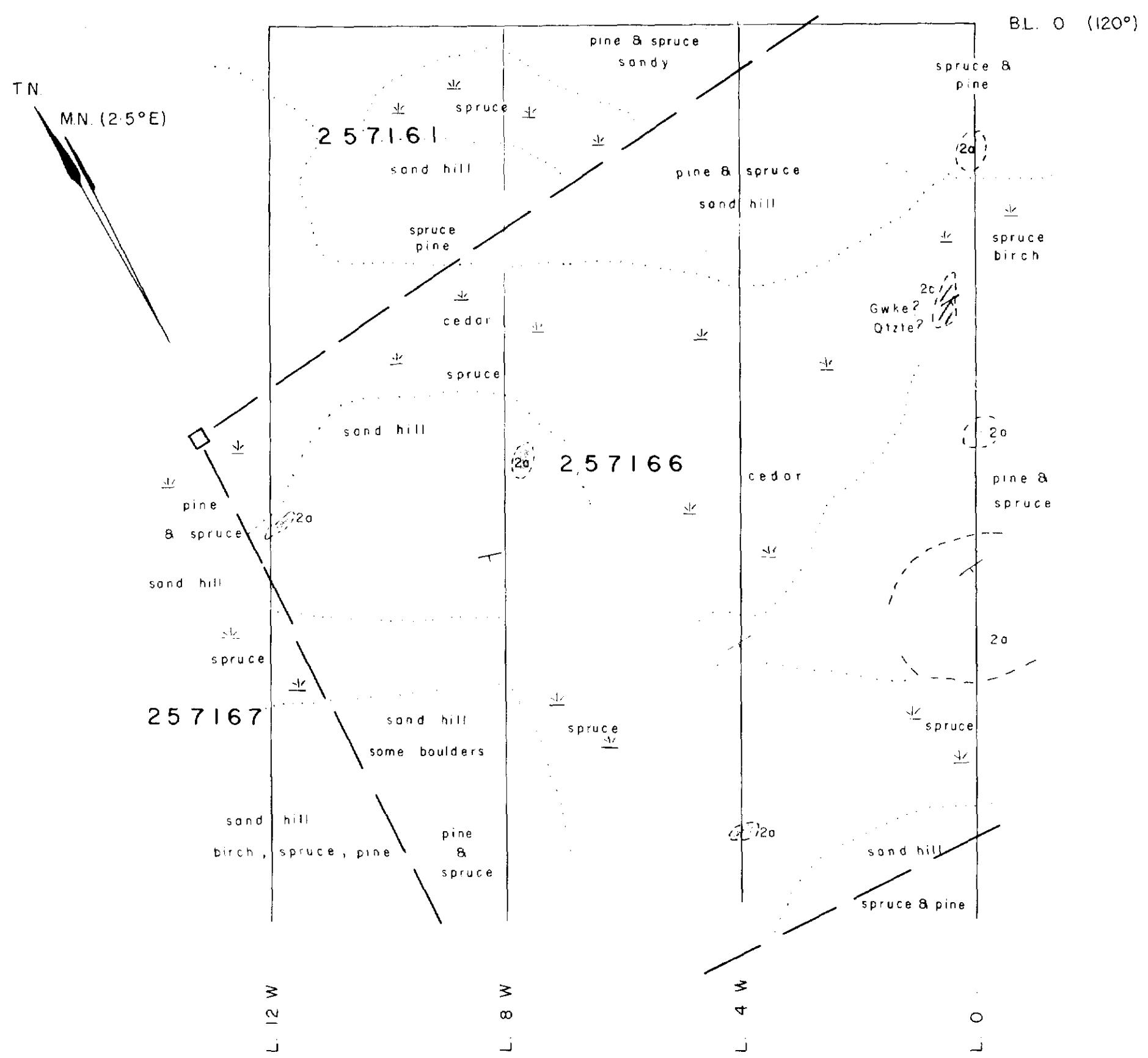
SCALE : 1" = 200'

DRAWN : J.W.

DATE : Dec., 1970

FILE No. N.T.S. 52-J-7 V 118-5A





*Chris. Ottolini*  
52J07SW-0018-#5

CANEX AERIAL EXPLORATION LTD.

GEOLOGICAL SURVEY

SAVANT LAKE AREA

PATRICIA MINING DIVISION, ONTARIO

Anom. No. 6

156 Claim Group (Canex-Black Giant)

SCALE: 1" = 200'

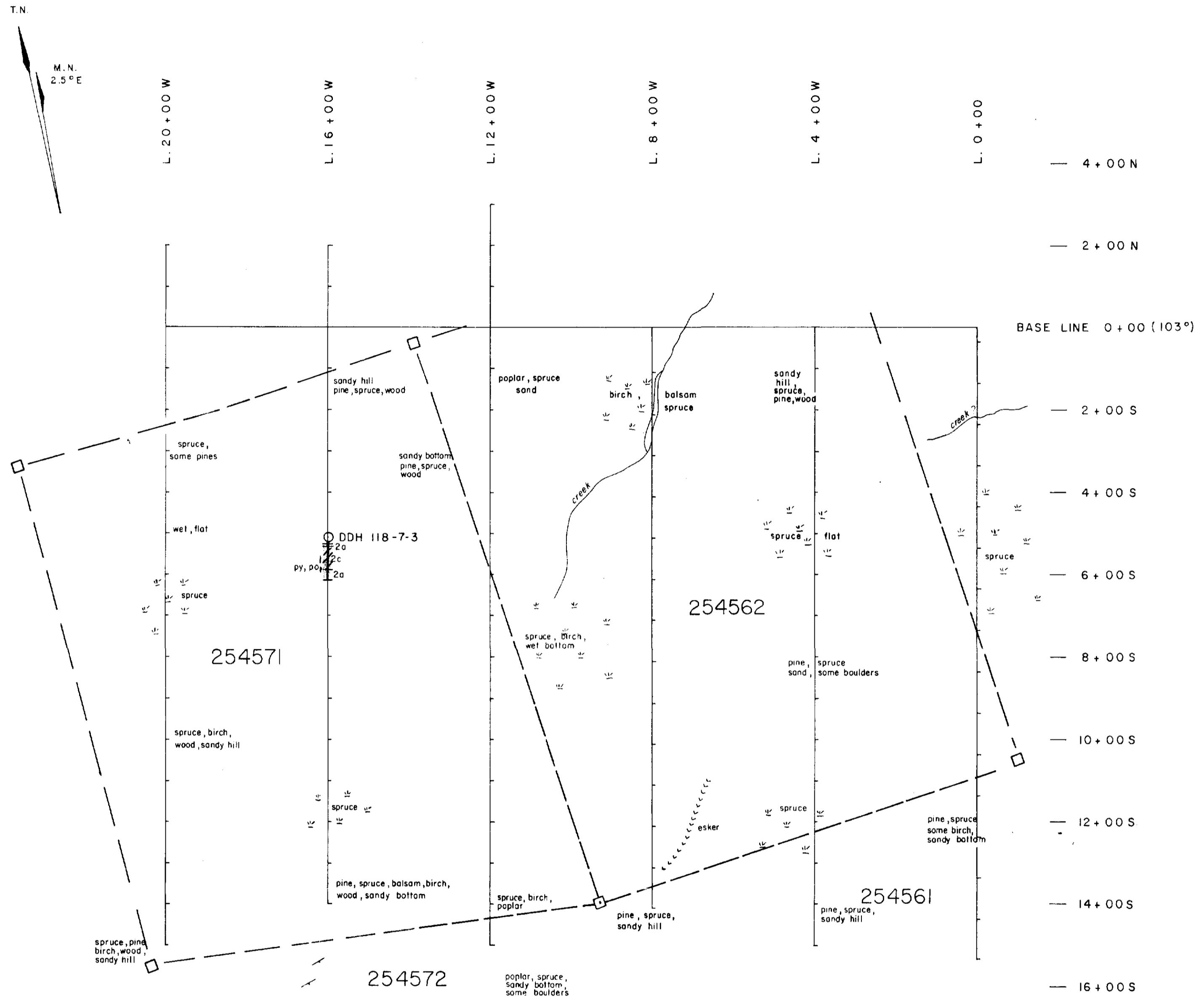
DRAWN: 9W

DATE: Dec., 1970

FILE No. N.T.S. 52-J-7 V 118-6A



52J07SW0050 52J07SW0018 ARMIT LAKE



#### LEGEND

- Swamp
- Bedding, dip unknown
- Location of diamond drill hole

NOTE: No rock outcrops were observed in this area.

Meta-sediments (order does not denote age)

- |     |                  |
|-----|------------------|
| 2'g | Chloritic schist |
| /Zg | Greywacke        |

*Chas. Belanger*

52-T/07SW-0018-#6

CANEX AERIAL EXPLORATION LTD.

#### GEOLOGICAL SURVEY

SAVANT LAKE AREA

PATRICIA MINING DIVISION, ONTARIO

Anom. No. 7

156 Claim Group (Canex - Black Giant)

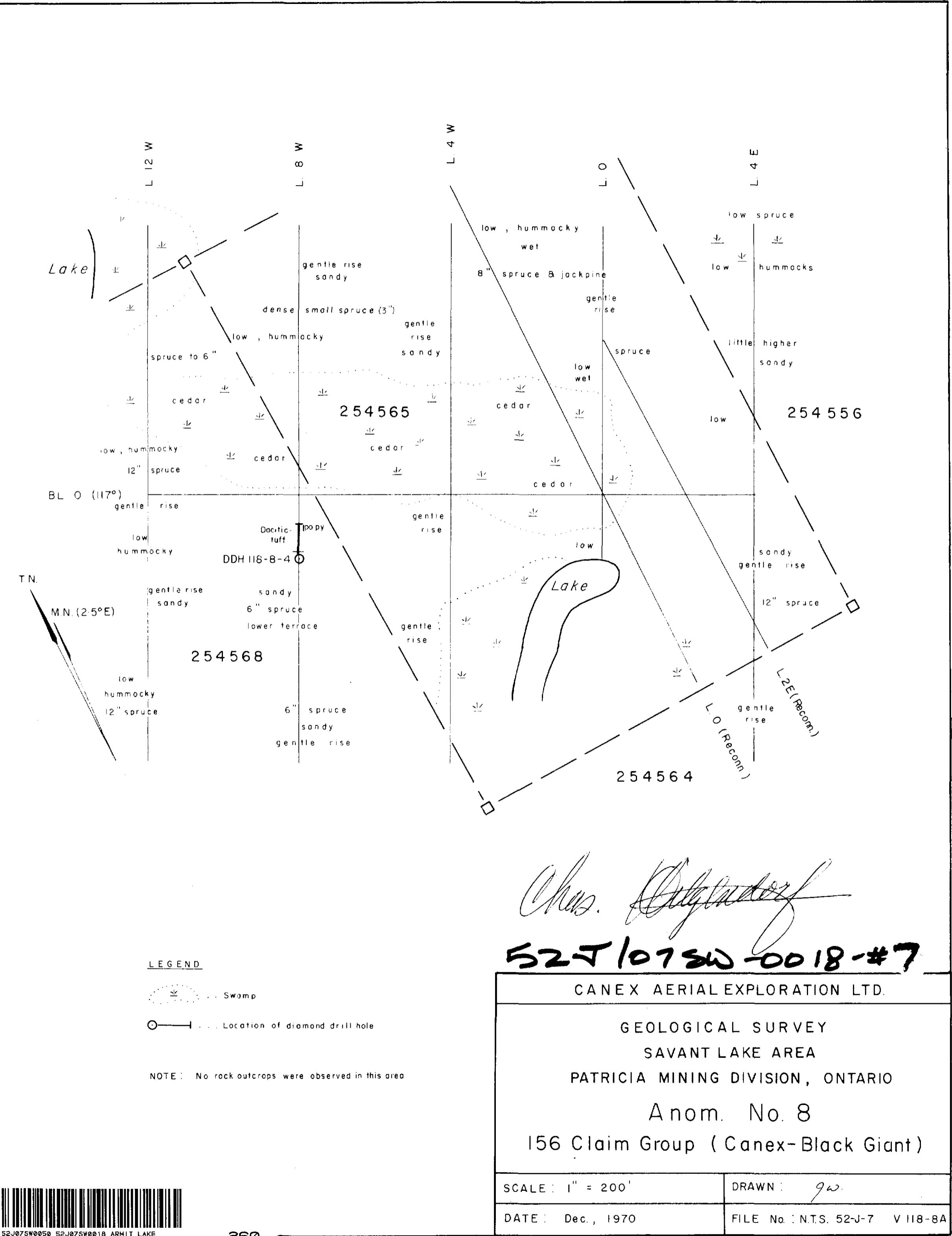
SCALE 1" = 200'

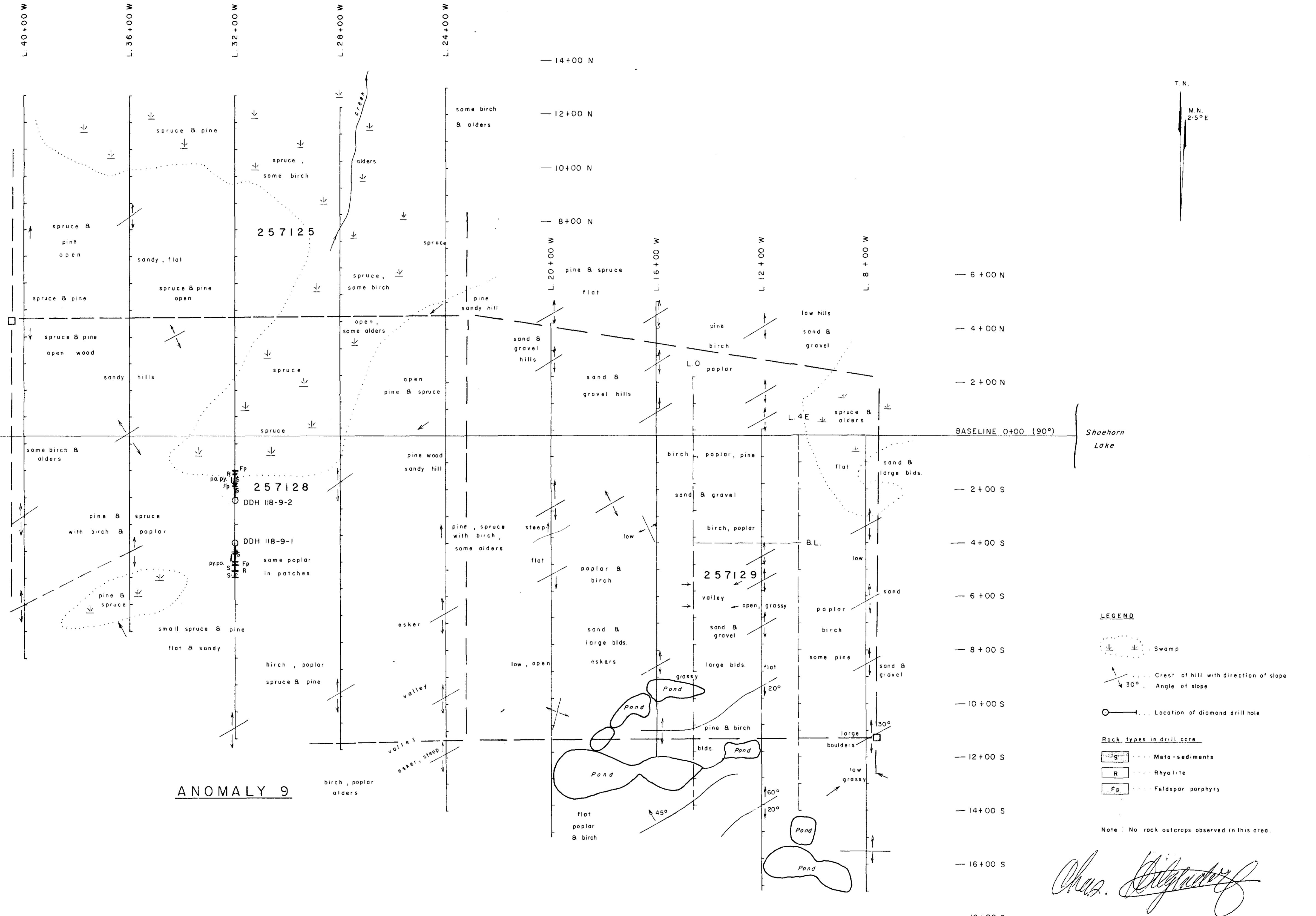
DRAWN *re*

DATE June, 1970

FILE No. N.T.S. 52-J-7 V.118-7D

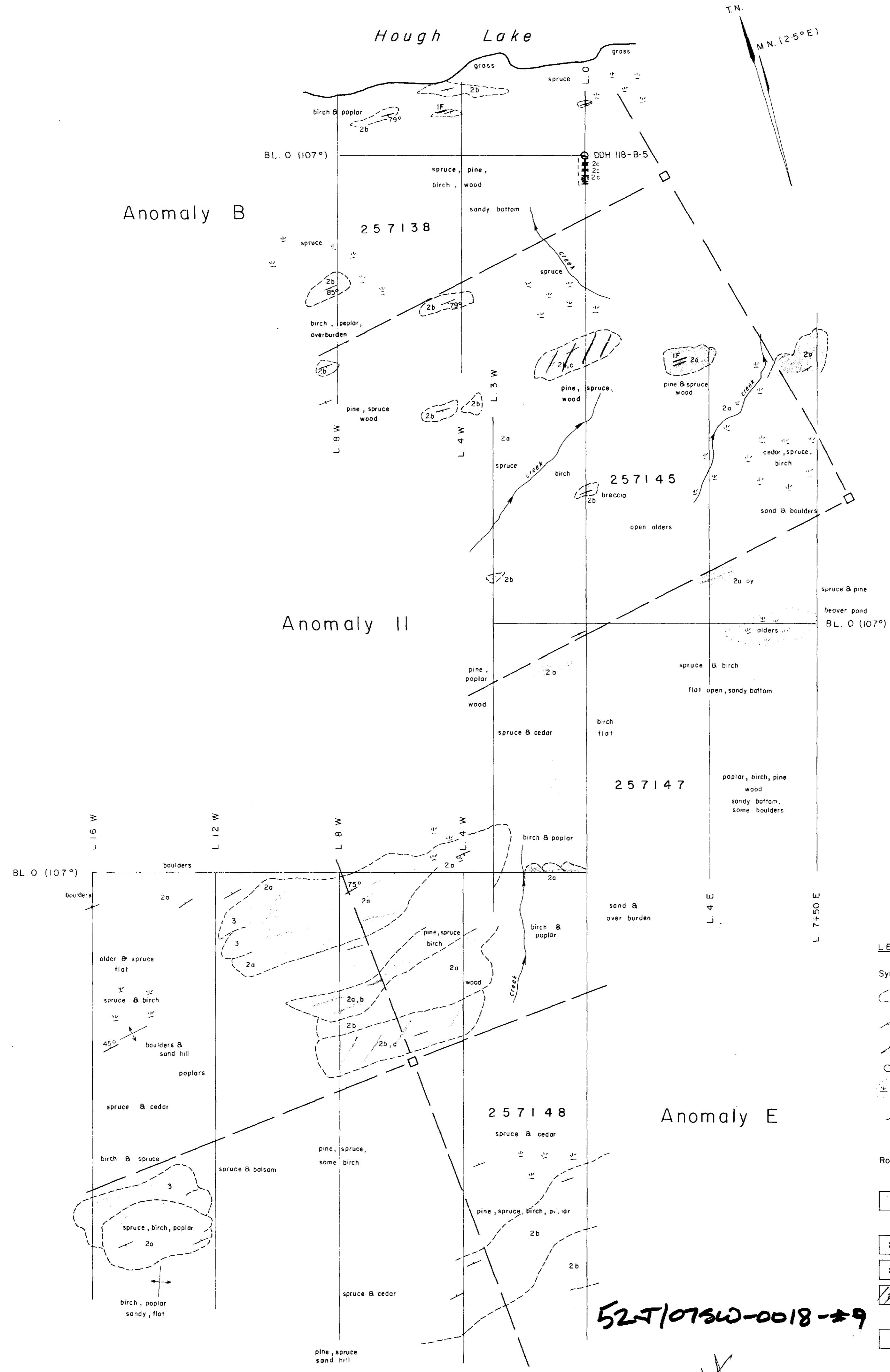






CANEX AERIAL EXPLORATION LTD.	
GEOLOGICAL SURVEY	
SAVANT LAKE AREA	
PATRICIA MINING DIVISION, ONTARIO	
ANOMS. No. 9 & A	
156 Claim Group (Canex-Black Giant)	
SCALE: 1" = 200'	DRAWN: 9W
DATE: June, 1970	FILE No. N.T.S. 52-J-7 VII8-9F





52-T/07500-0018 - #9

CANEX AERIAL EXPLORATION LTD

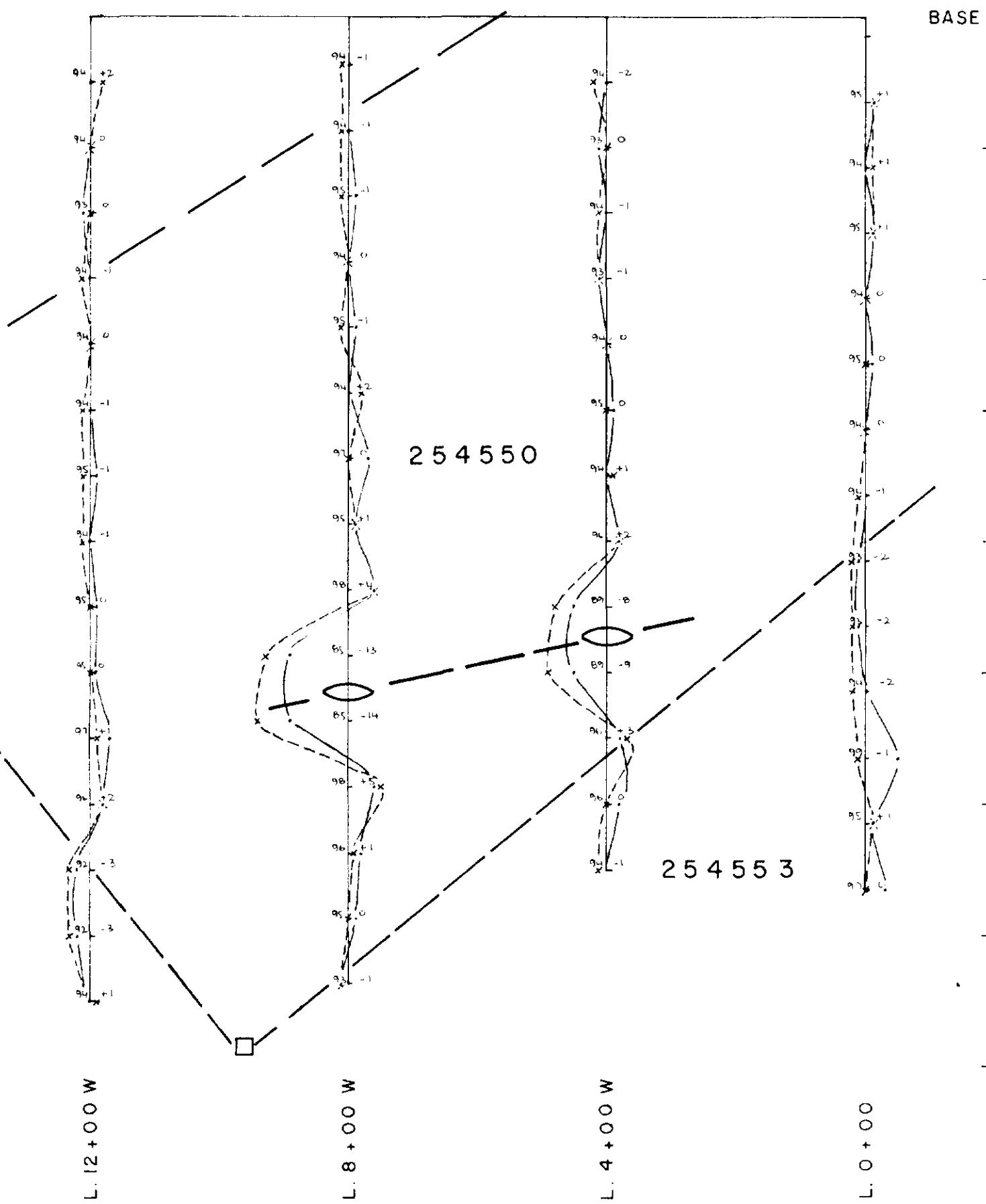
GEOLOGICAL SURVEY

## SAVANT LAKE AREA

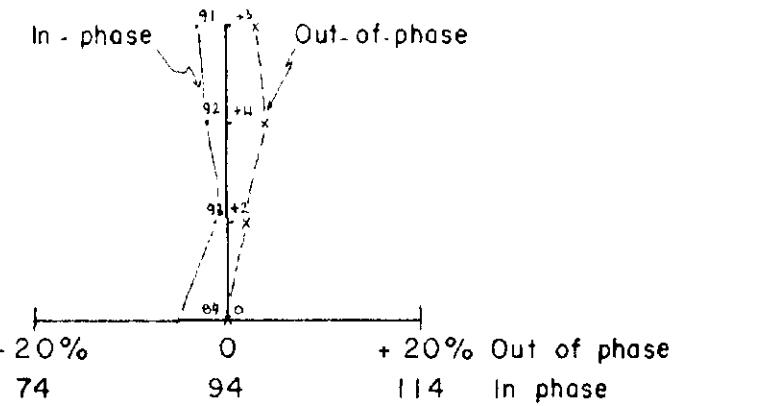
PATRICIA MINING DIVISION , ONTARIO

ANOMS. B, II & E  
150 Slides (200 Black & White)

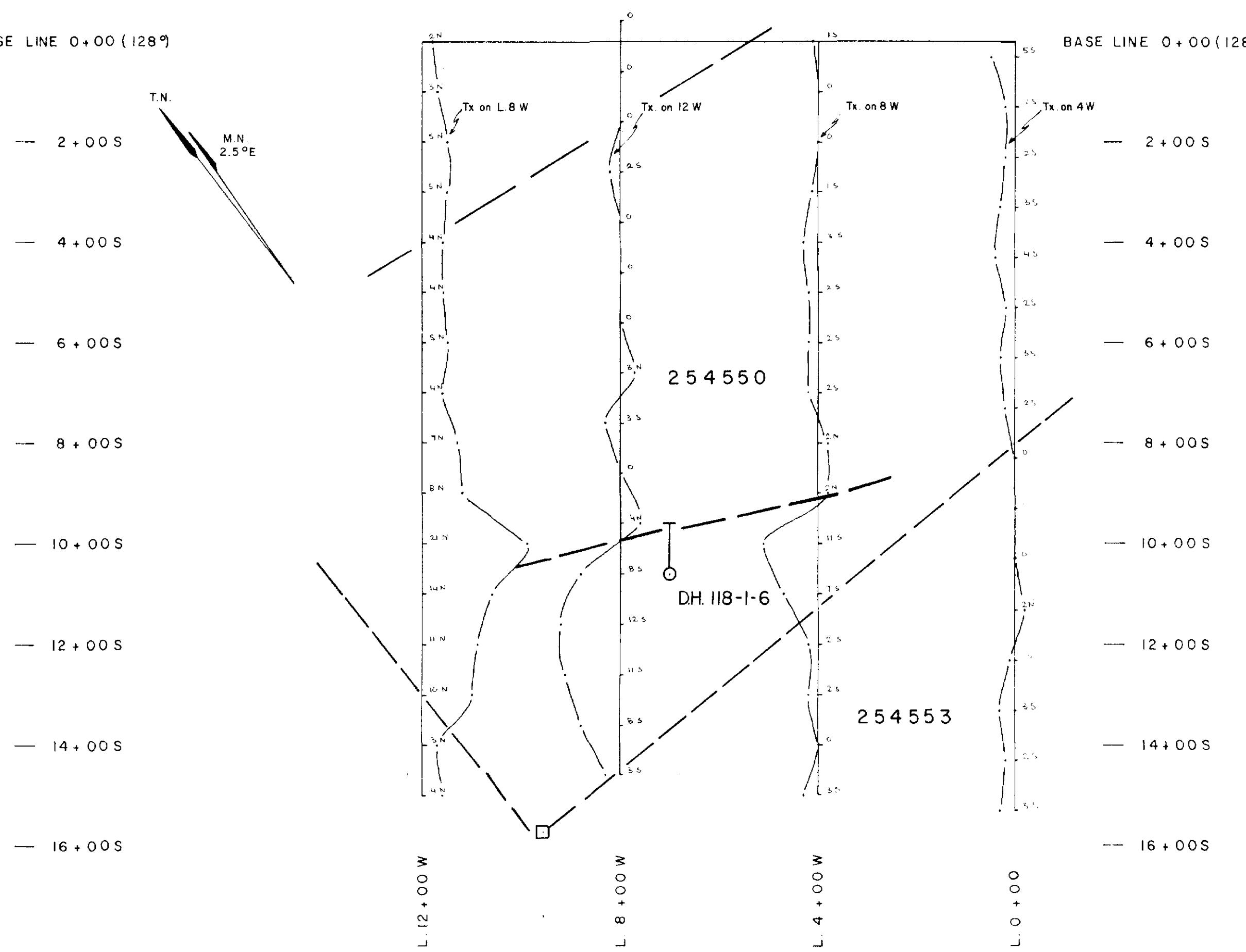
156 Claim Group (Canex-Black Giant)	
SCALE 1" = 200'	DRAWN
DATE Dec., 1970	FILE No. N.T.S. 52-J-7 V 118-13



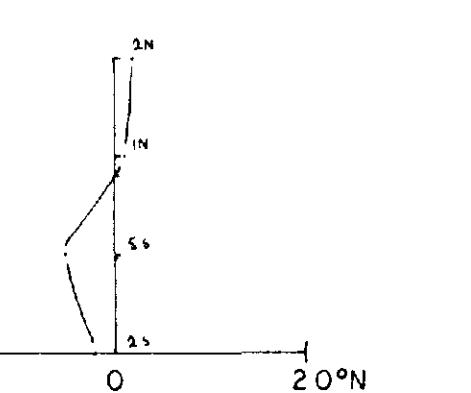
HORIZONTAL LOOP - E.M. SURVEY



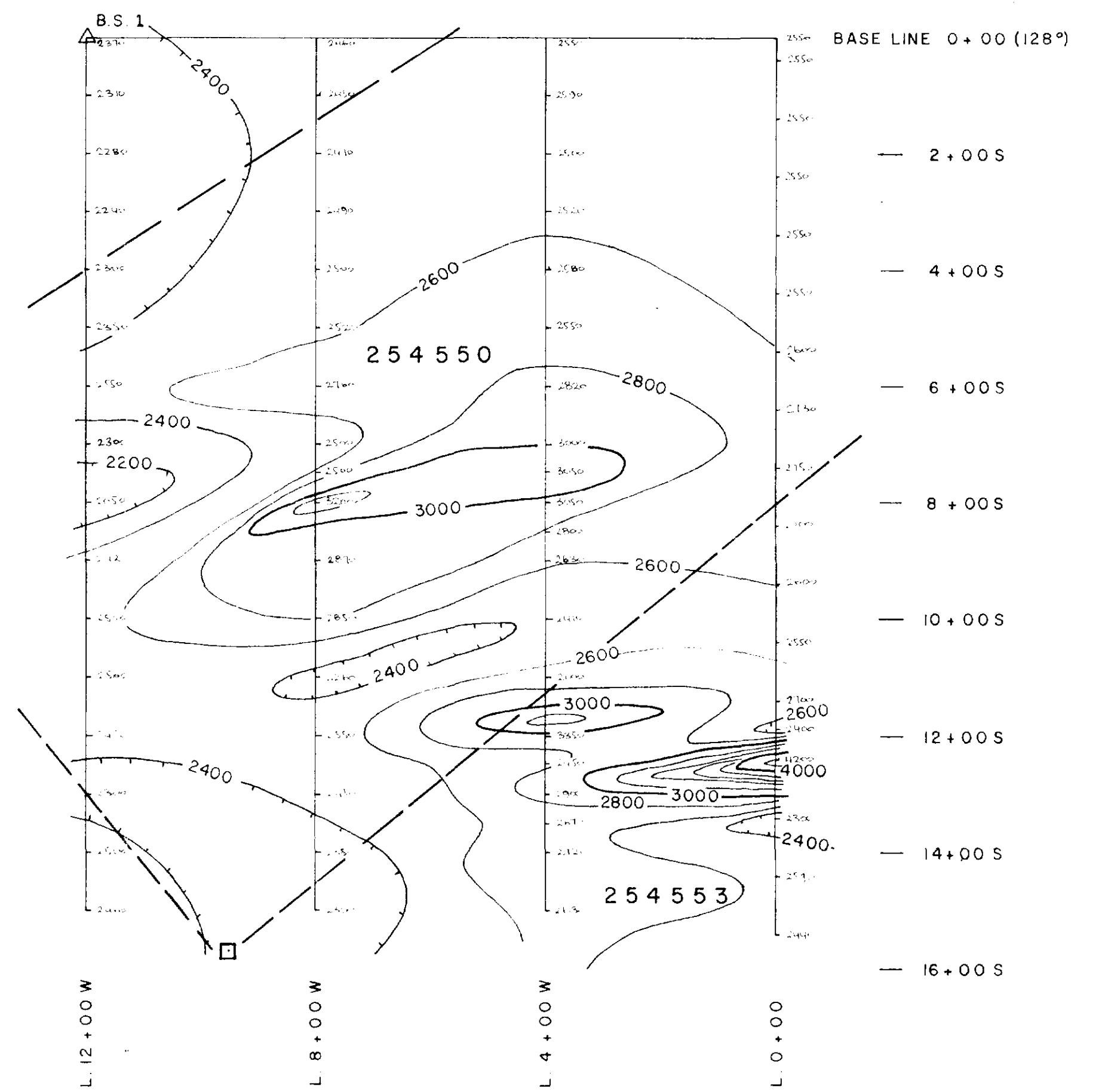
Frequency : 1600 c.p.s.  
Separation : 200 ft.



VERTICAL LOOP - E.M. SURVEY



Frequency: 1600 c.p.s.



GROUND MAGNETOMETER SURVEY

CONTOUR INTERVAL: 200 gammas

*J.H. Janzen*, 2.295

CANEX AERIAL EXPLORATION LTD.

GROUND GEOPHYSICAL SURVEYS  
SAVANT LAKE AREA

PATRICIA MINING DIVISION, ONTARIO

Anom. No. 1

156 Claim Group (Canex - Black Giant)

Instruments used : Sharpe SE-600 E.M. system, ser. no. 459

B Sharpe MF-1 magnetometer, ser. no. 906466

Operators : Paul Makinen, Richard Labine, Brian Hudson

Date surveyed : June 4, 14, 1970

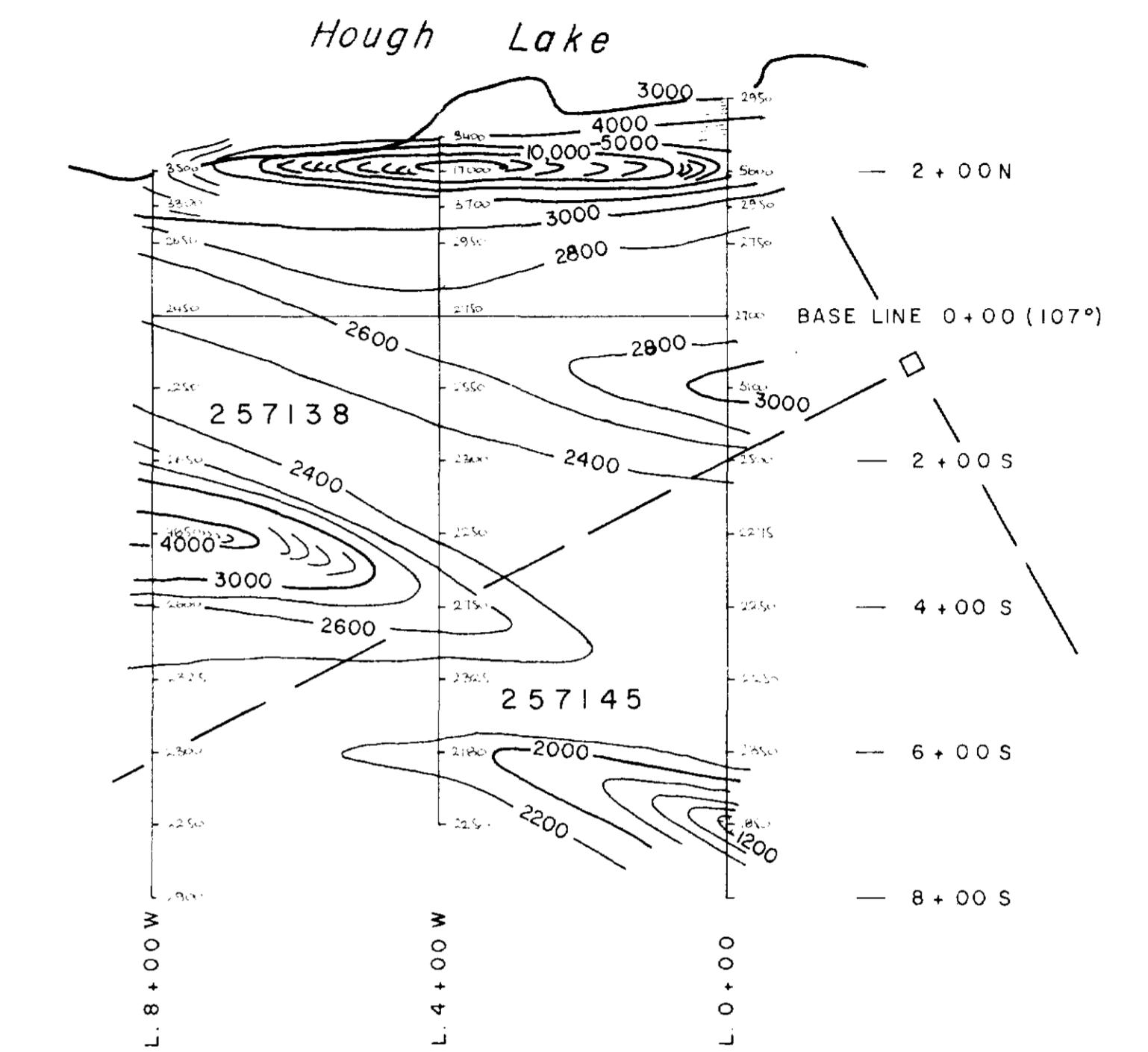
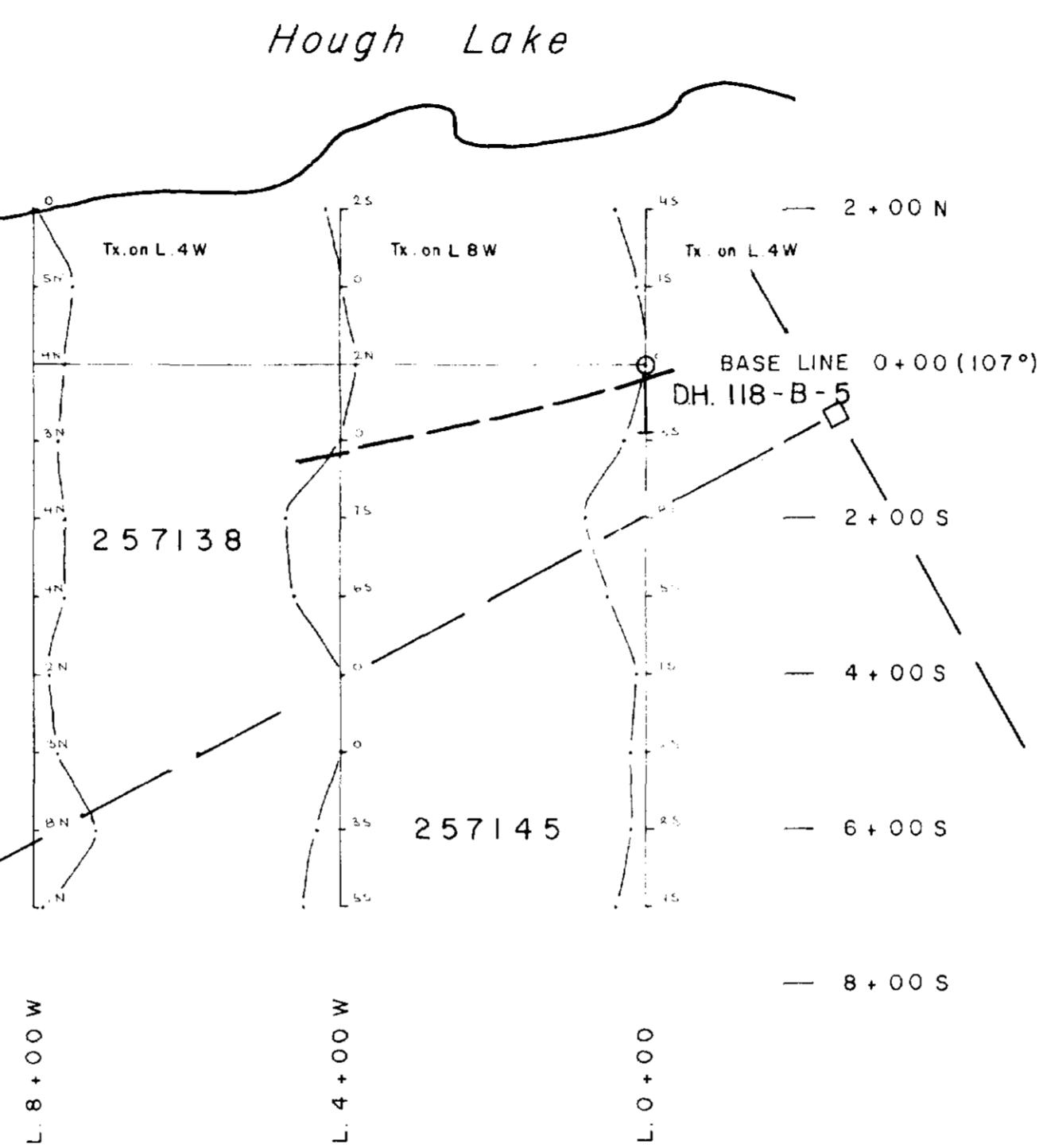
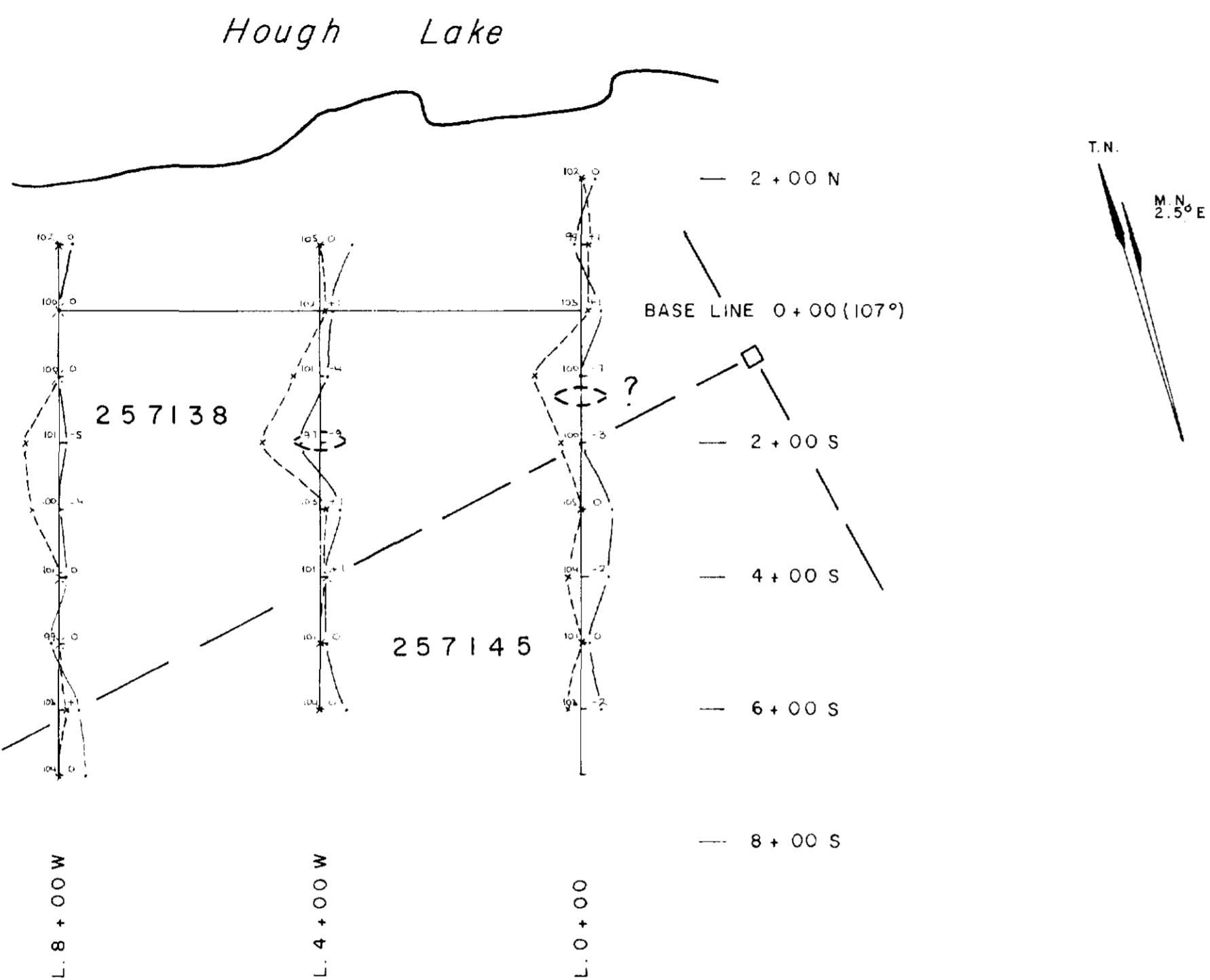
SCALE: 1" = 200'

DRAWN: DR.

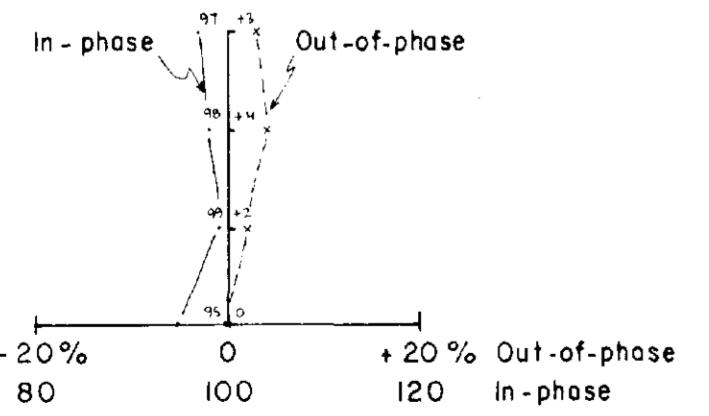
DATE June, 1970

FILE No NTS 52-J-7 V.II8-3

S2J075#0050 S2J075#0018 ARNIT LAKE



HORIZONTAL LOOP - E.M. SURVEY

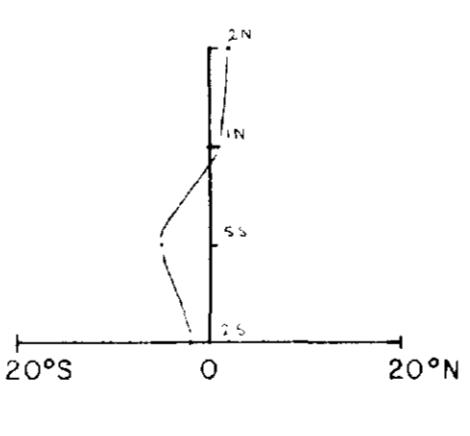


Frequency : 1600 c.p.s.  
Separation : 200 ft.

LEGEND

- <--> ... Poor E.M. conductor
- — ... Interpreted conductor axis
- O --- ... Location of drill hole

VERTICAL LOOP - E.M. SURVEY



Frequency : 1600 c.p.s.

GROUND MAGNETOMETER SURVEY

CONTOUR INTERVAL: 200 gammas

*Brian Taylor  
J.A. Saulnier.*

CANEX AERIAL EXPLORATION LTD.

GROUND GEOPHYSICAL SURVEYS

SAVANT LAKE AREA

PATRICIA MINING DIVISION, ONTARIO

Anom. "B"

156 Claim Group (Canex-Black Giant)

Instruments used : Sharpe SE-600 EM system, No. 459 & Sharpe MF-1 magnetometer, No. 906466

Operators : Wm. Taylor, Oliver Simard, R. Labine, Paul Makinen, Marc Laforte

Date surveyed : June 8, 1970

SCALE : 1" = 200'

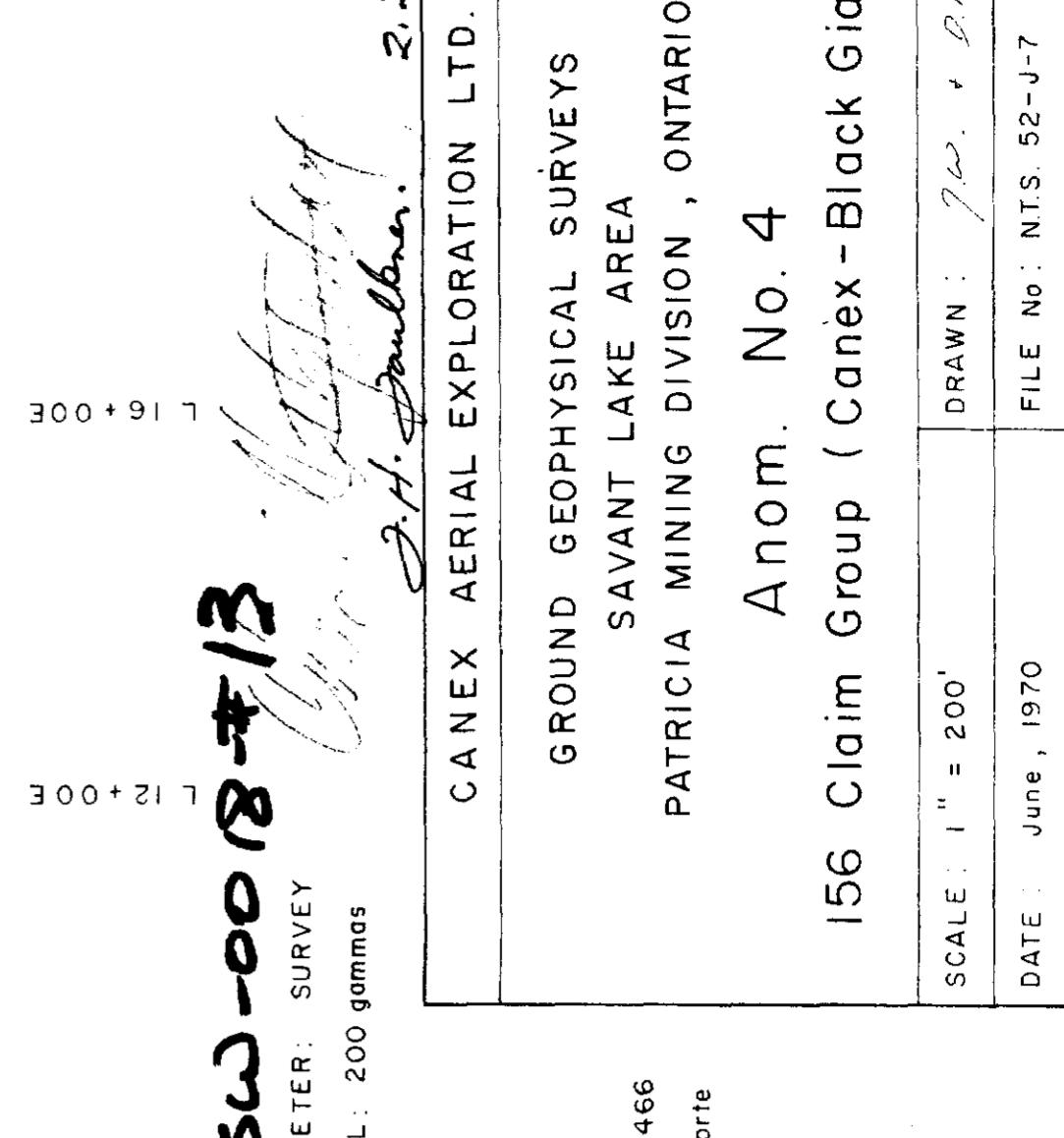
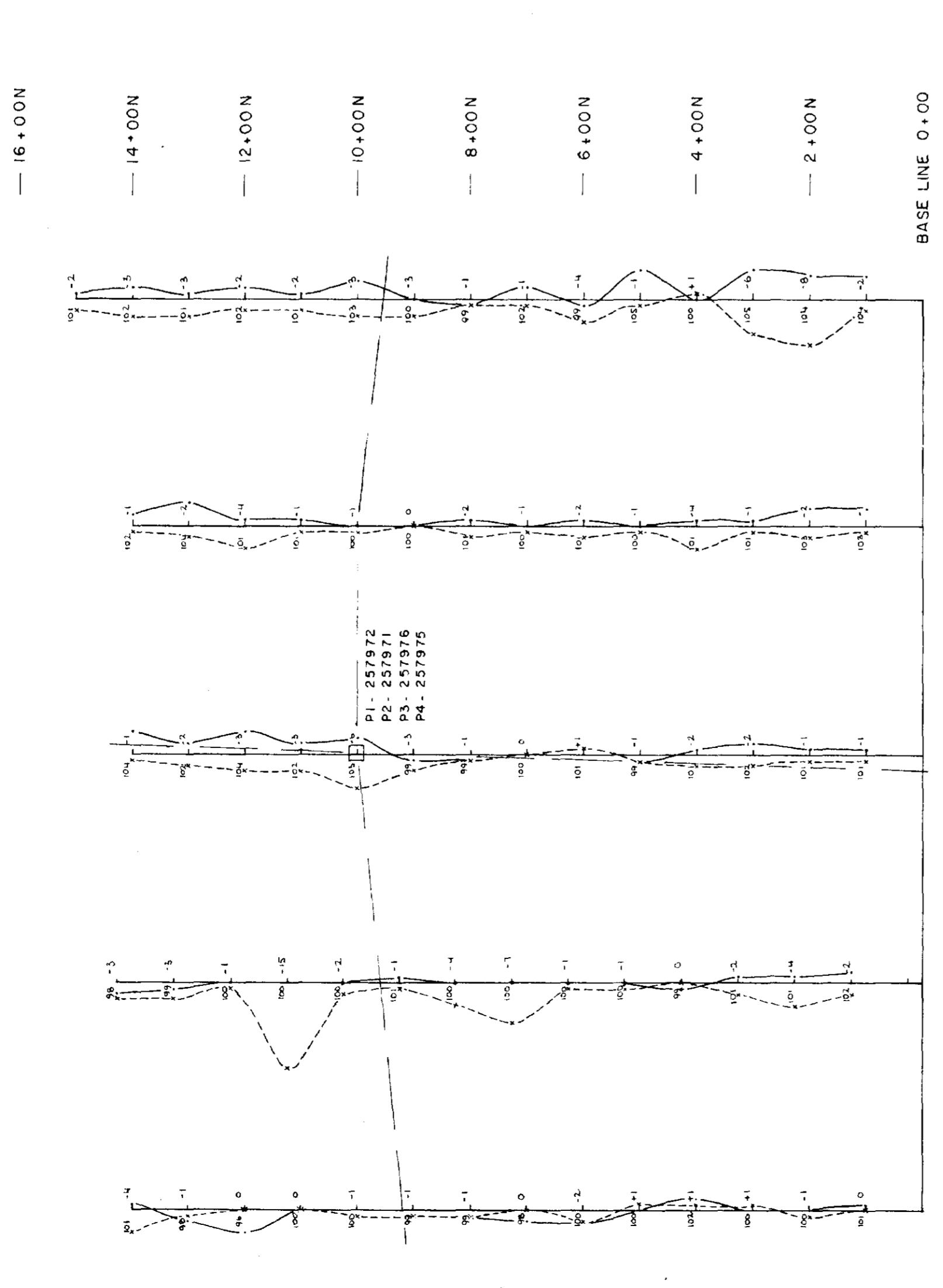
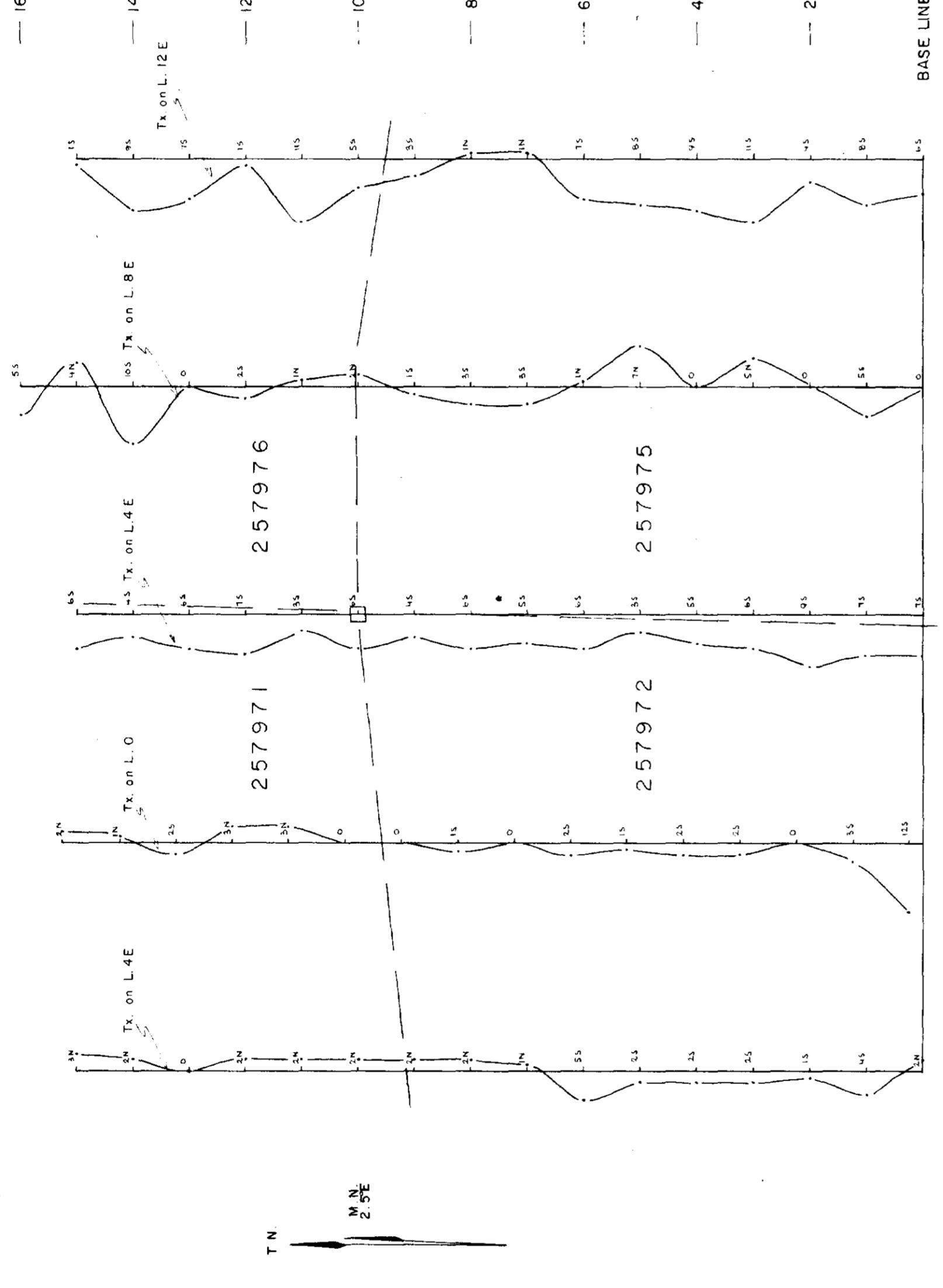
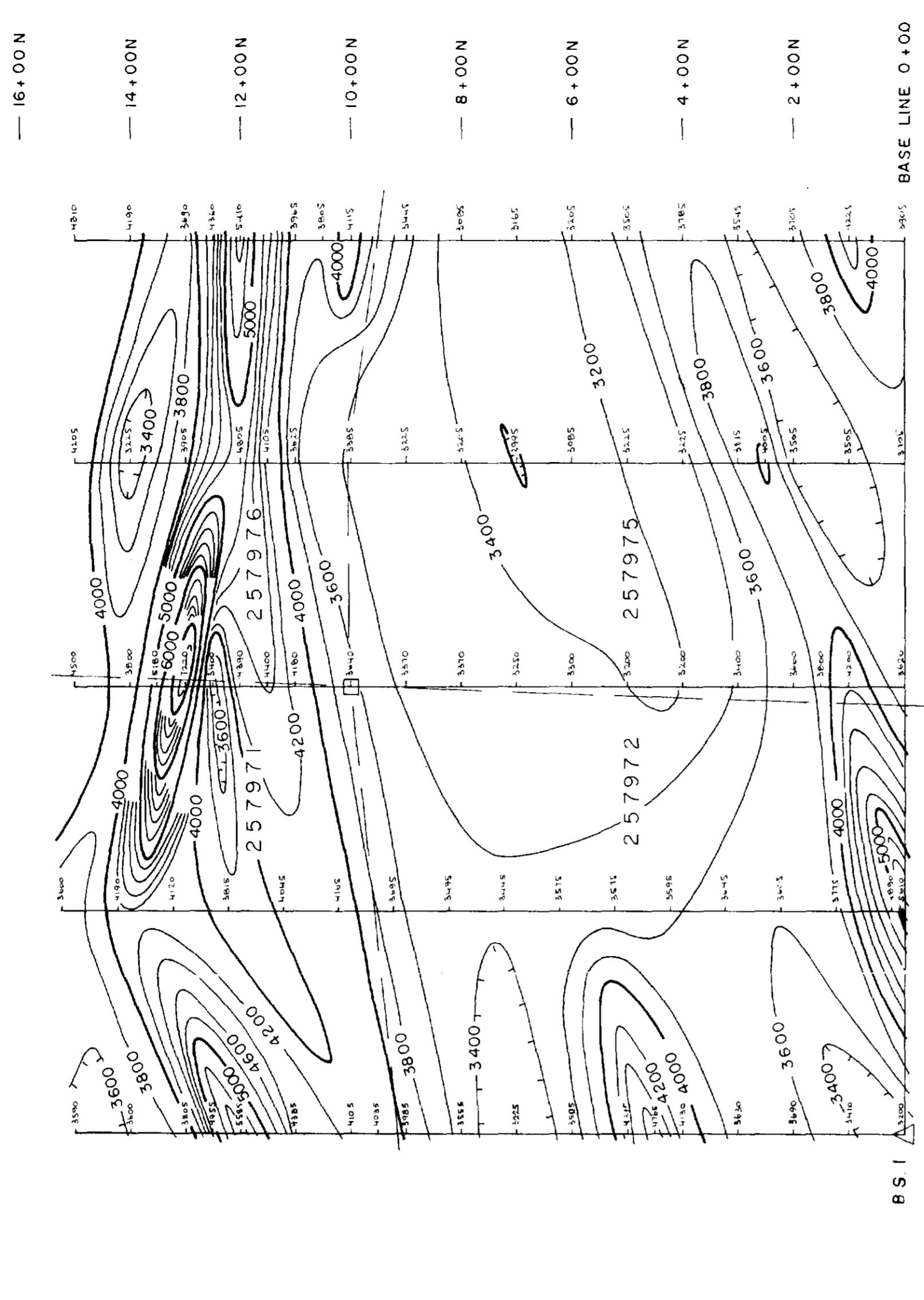
DRAWN : DS

DATE : June, 1970

FILE No : NTS 52-J-7 V.118-II



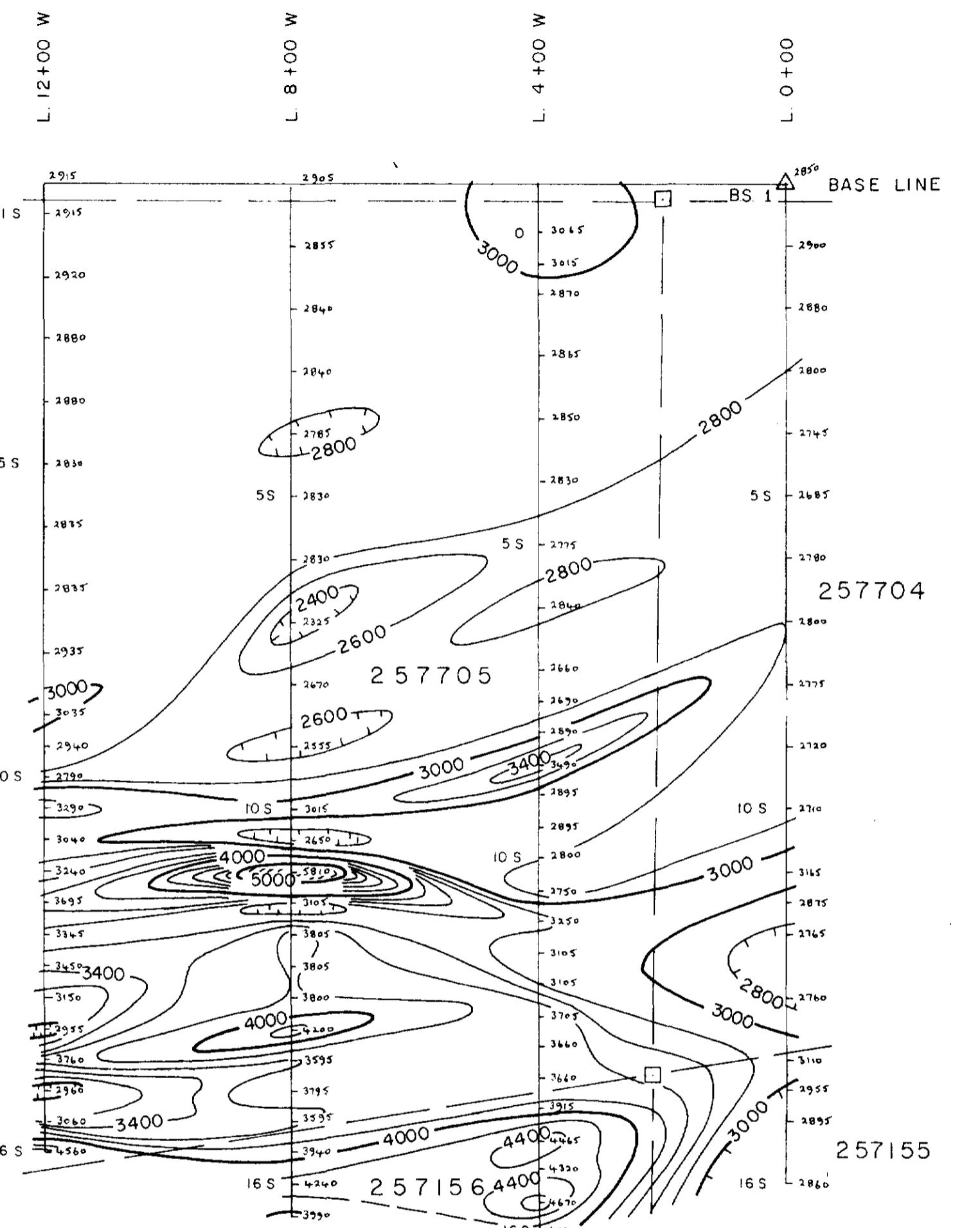
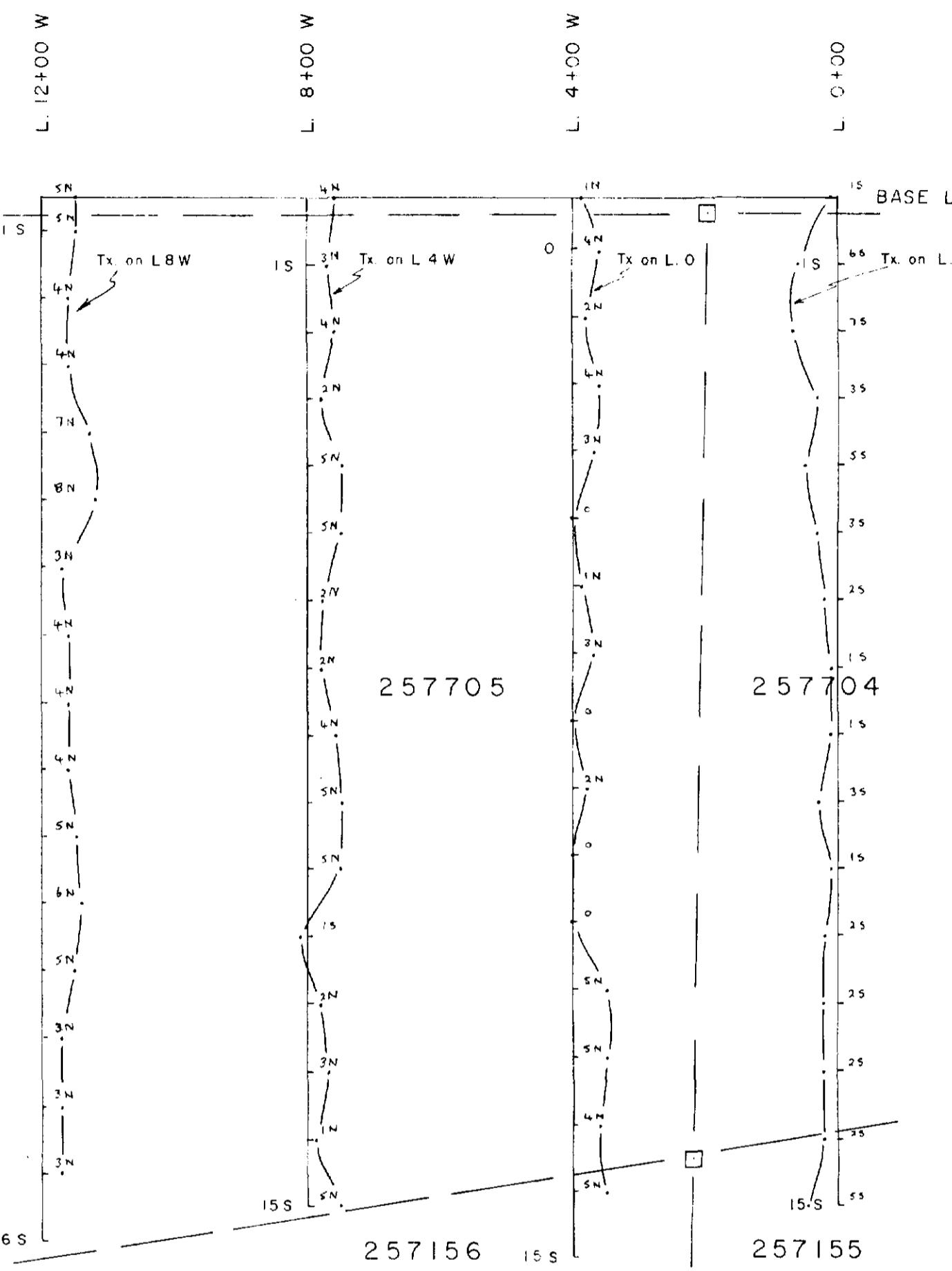
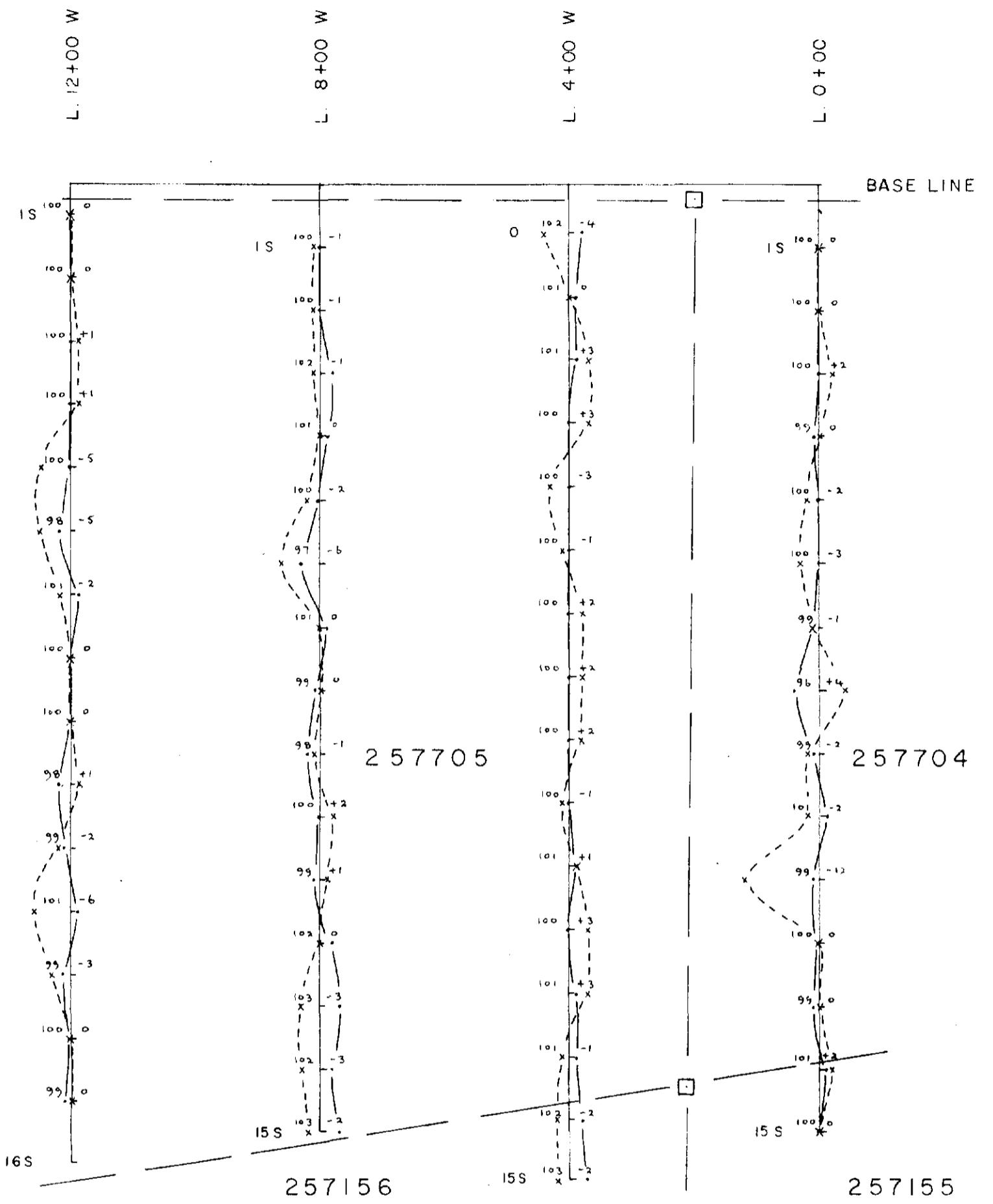




2.295

320

320

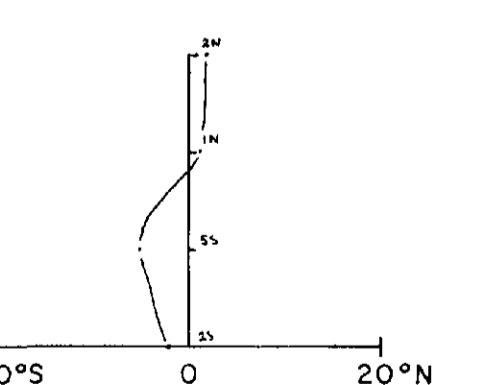


In-phase      Out-of-phase

-20%      0      +20% Out-of-phase

80      100      120 In-phase

Frequency : 1600 c.p.s.  
Separation : 200 ft.



Instruments used : Sharpe SE-600 E.M. system, No. 459  
& Sharpe MF-1 magnetometer, No. 906466  
Operators : Wm. Taylor, Richard Labine, Paul Makinen  
Date surveyed : May 27, 1970

52T/07SW-0018-#14  
R. H. Dahlke  
2.295

CANEX AERIAL EXPLORATION LTD.

GROUND GEOPHYSICAL SURVEYS  
SAVANT LAKE AREA  
PATRICIA MINING DIVISION, ONTARIO

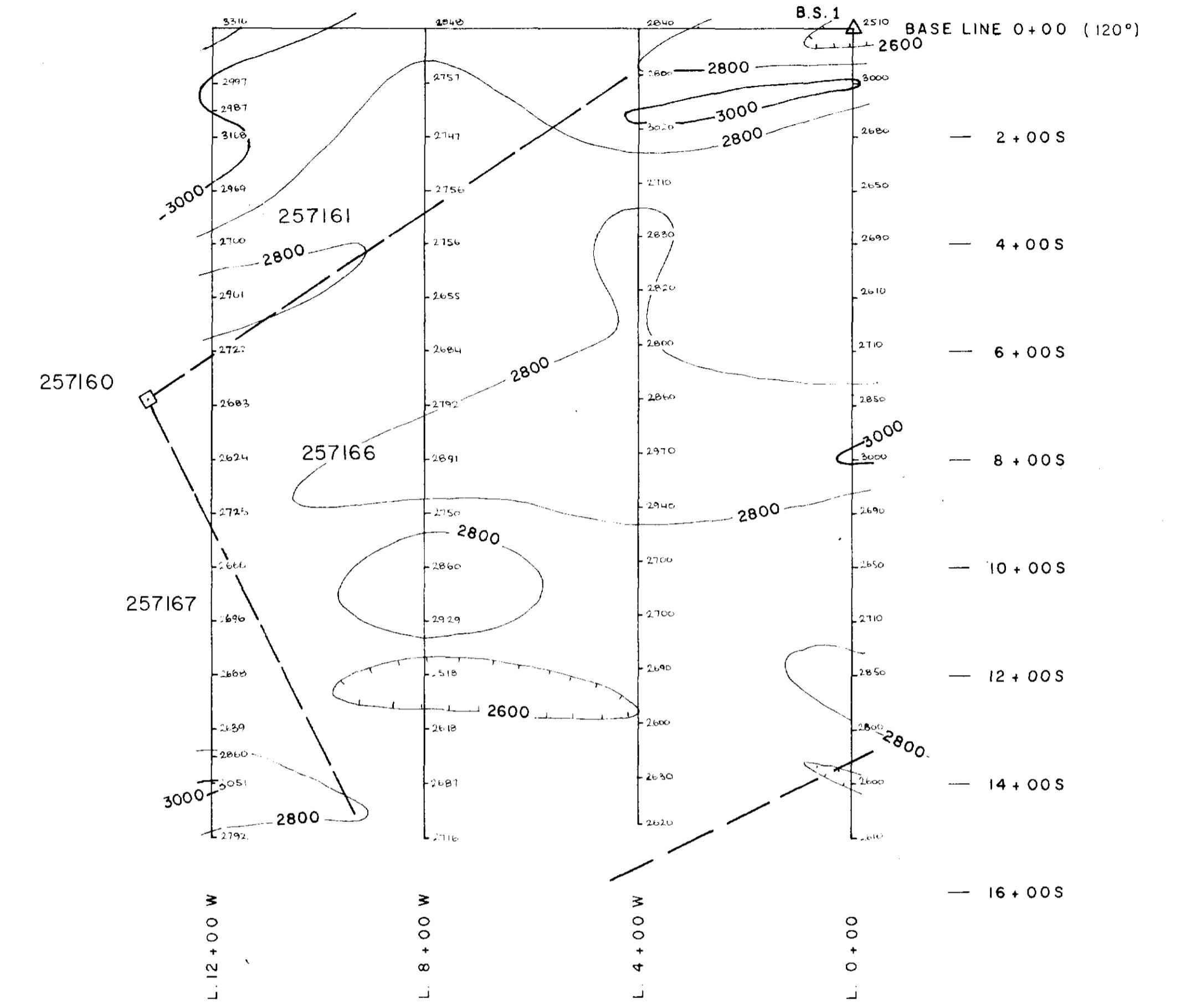
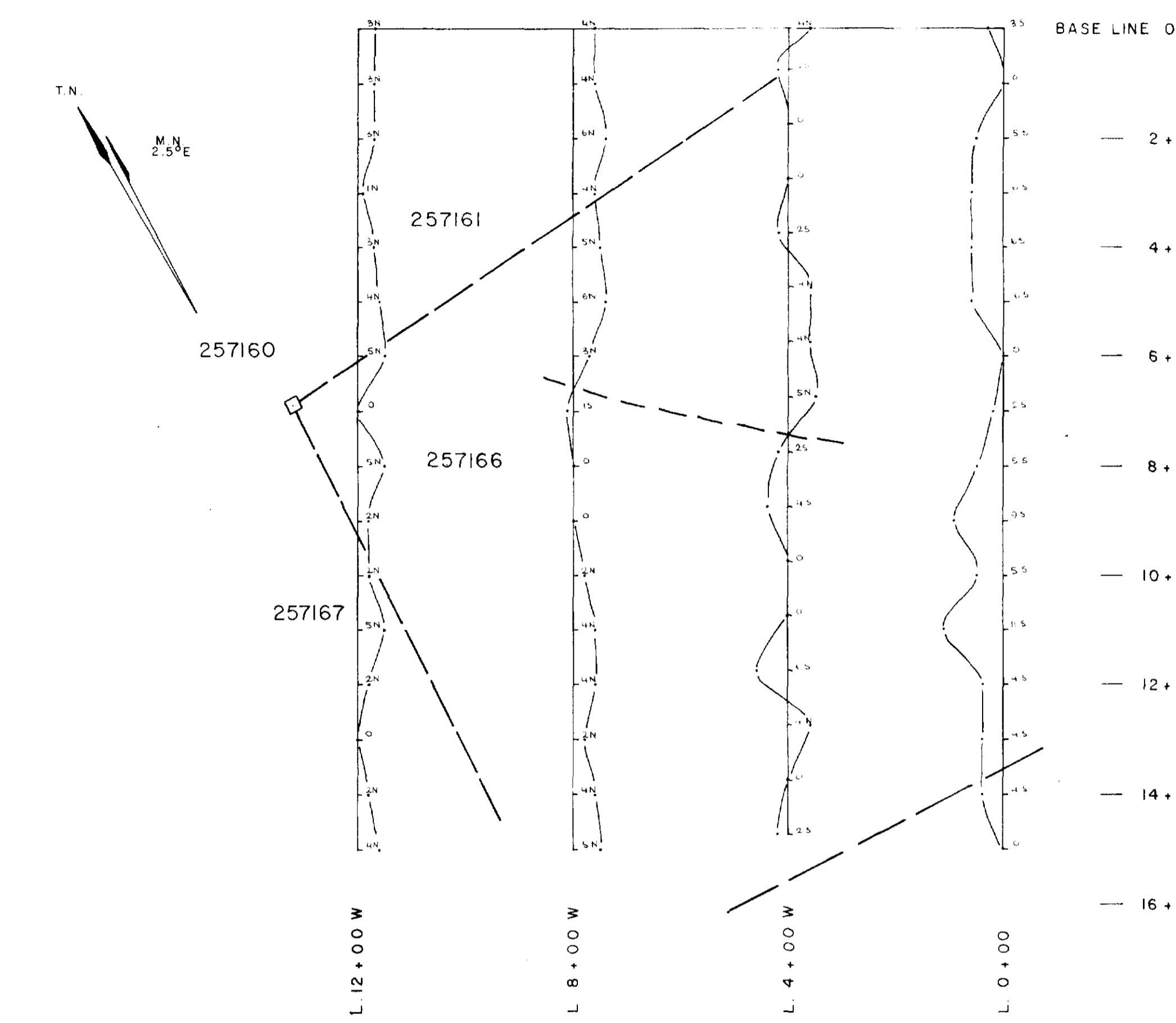
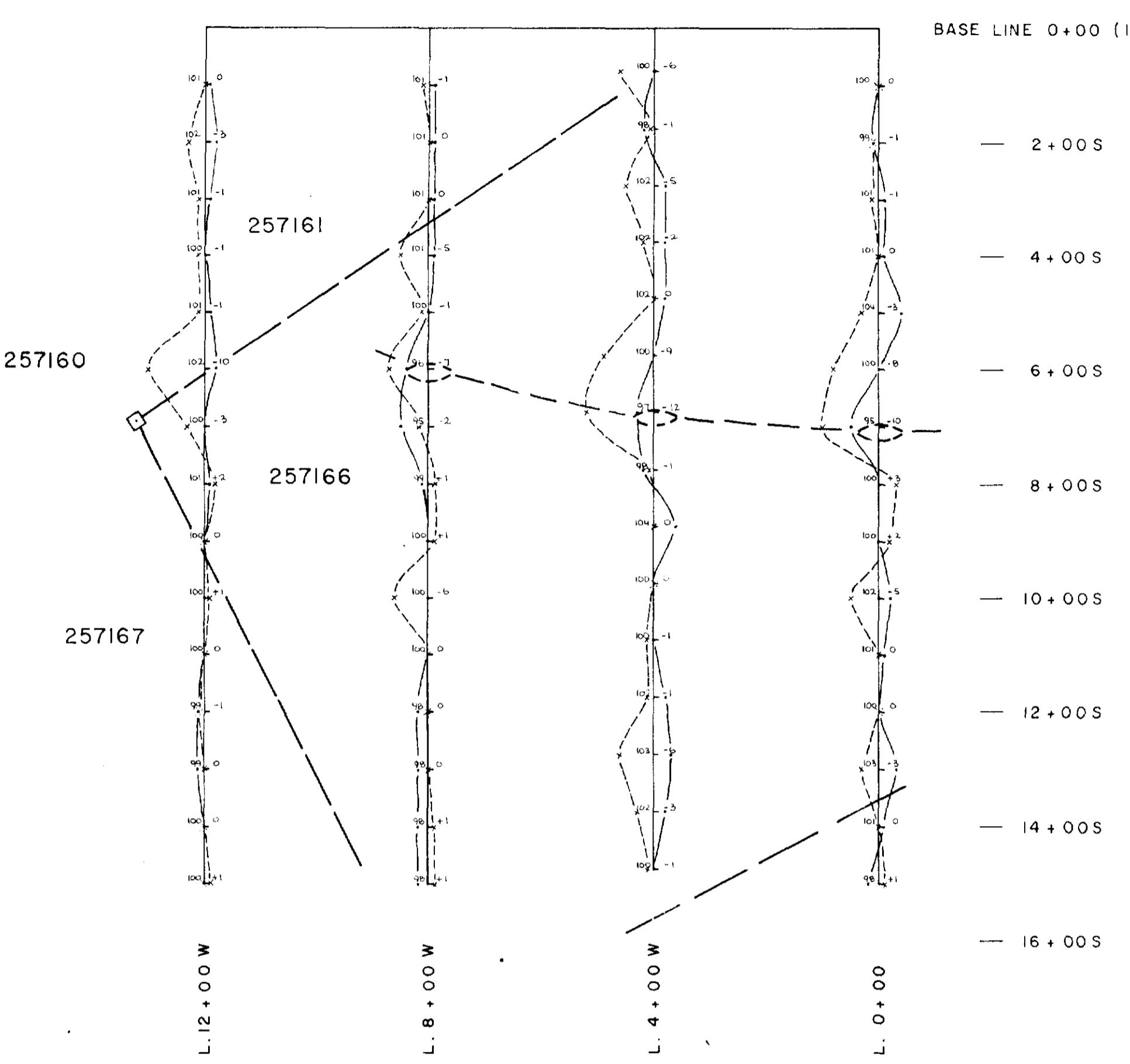
Anom. No 5

156 Claim Group (Canex-Black Giant)

SCALE : 1" = 200'	DRAWN: J.W. + D.B.
DATE : June, 1970	FILE No NTS 52-J-7 V.118-5

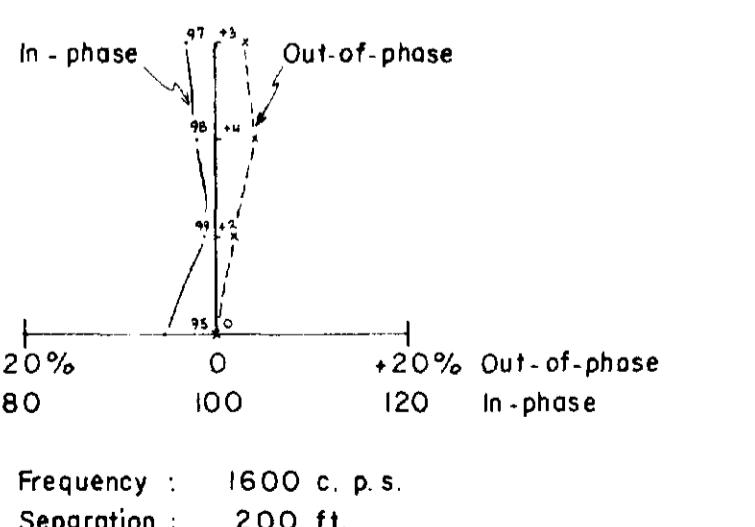


52J07SW0058 52J07SW0018 ARMIT LAKE



52-F 10750-0018-#15

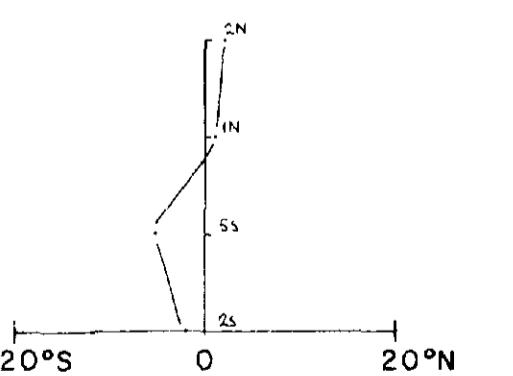
HORIZONTAL LOOP - E. M. SURVEY



END

- — . . . Claim line & post  
- - - - - Poor E.M. conductor  
— Interpreted conductor axis

## VERTICAL LOOP - E M SURVEY



OUND MAGNETOMETER SURVEY  
CONTOUR INTERVAL: 200 gammas

J. H. Faulkner.  
Mrs. Wrightson

2125

CANEX AERIAL EXPLORATION LTD.

ROUND GEOPHYSICAL SURVEYS  
SAVANT LAKE AREA

**SAVANT LAKE AREA**  
**ATRICIA MINING DIVISION ONTARIO**

nam No 6

## 156 Claim Group (Canex - Black Giant)

Documents used : Sharpe SF-600 F M system No 459

8. Sharpe ME-1 magnetometer No 906466

Brigitte Hudson, Marc Laferte, Balakrishna

aditors : Brian Hudson , Marc Létoré , R. Labine

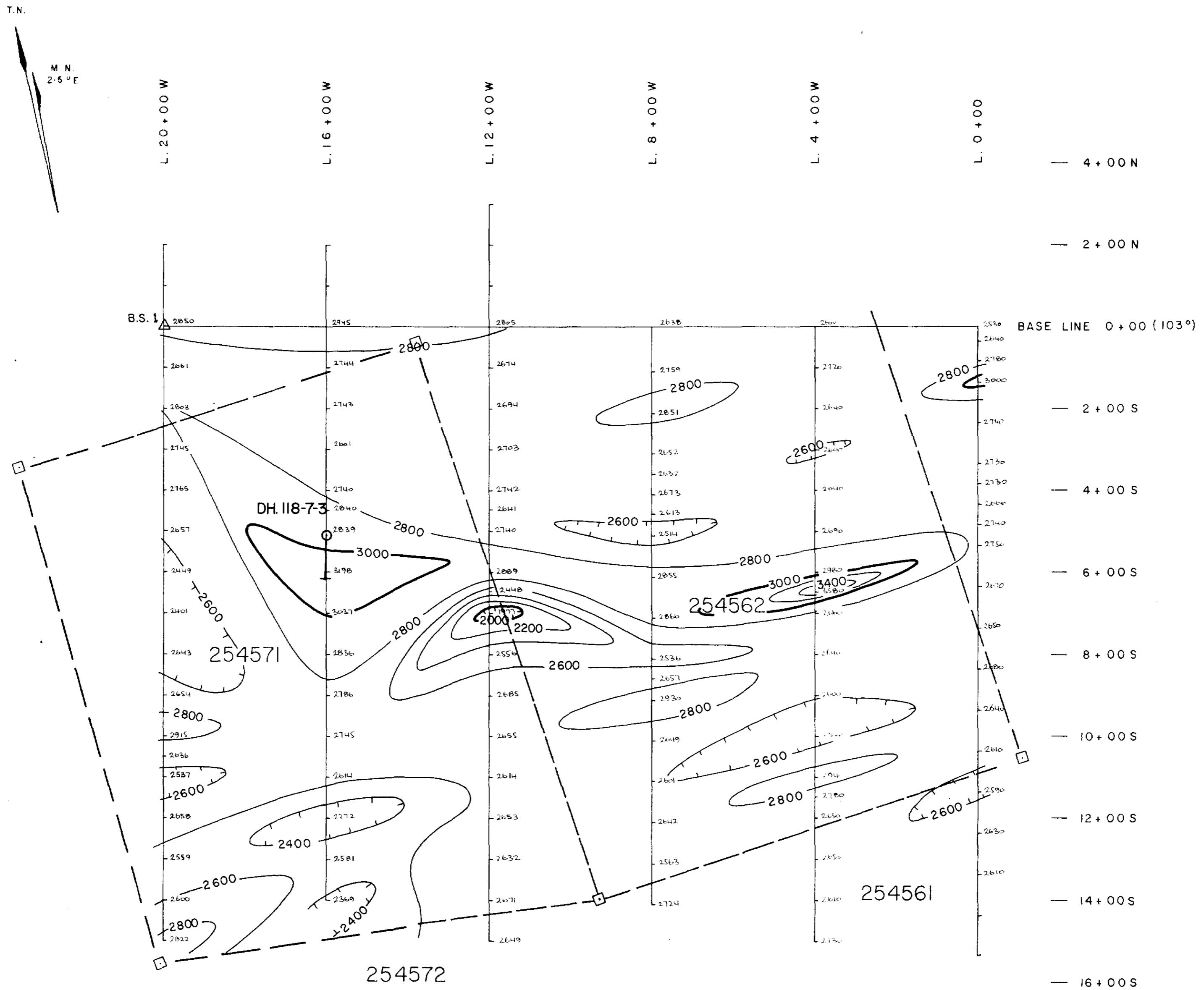
surveyed : June 2, 3 1970

$t'' = 300'$

DOWN D2

June 1970

LE No NTS 52-17 V



52J107SW-0018-#15

CONTOUR INTERVAL : 200 gammas

Instrument used : Sharpe MF-1,  
ser. no. 906466  
Operator : Richard Labine  
Date surveyed : June 3, 1970

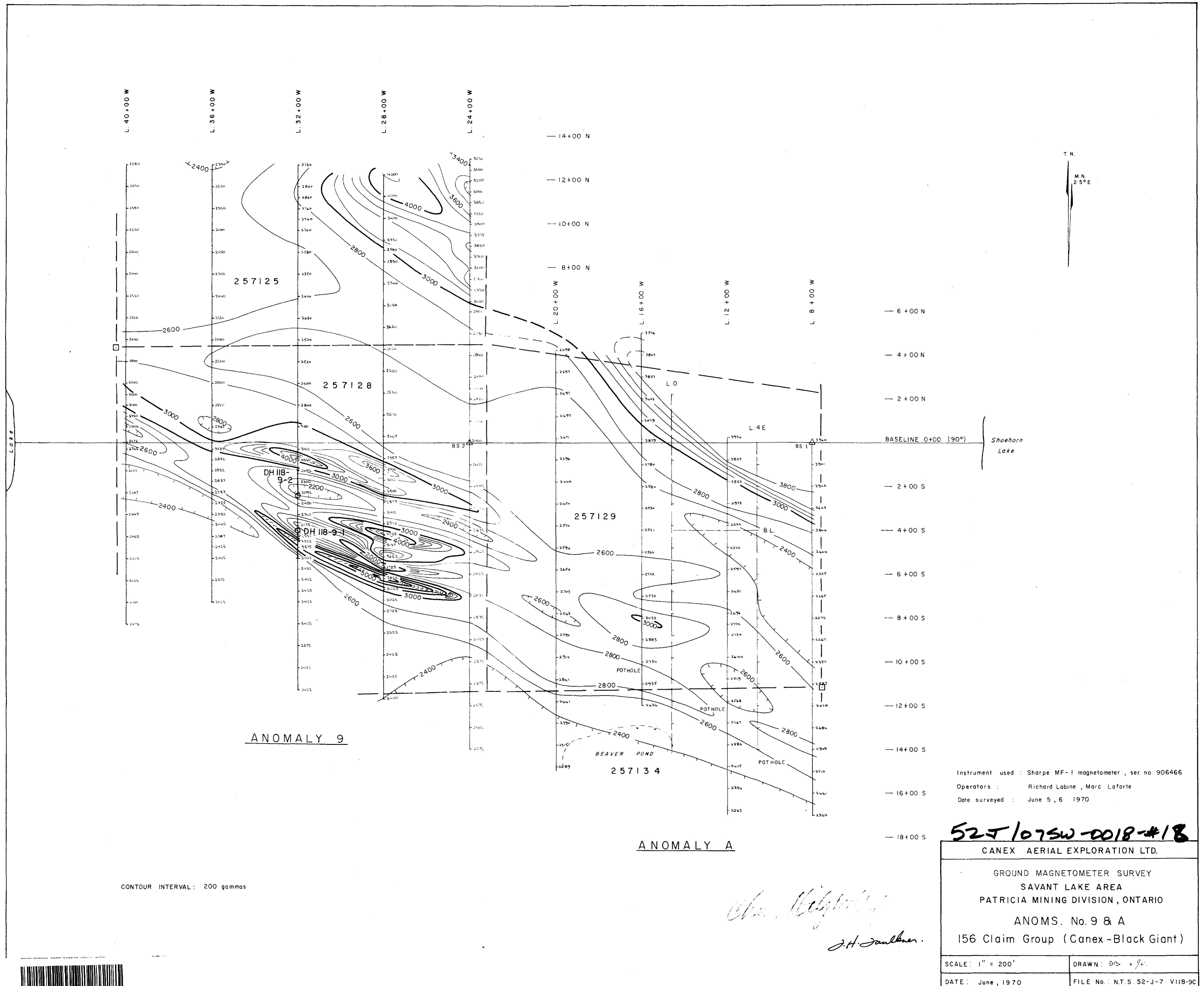
CANEX AERIAL EXPLORATION LTD.  
GROUND MAGNETOMETER SURVEY  
SAVANT LAKE AREA  
PATRICIA MINING DIVISION, ONTARIO  
Anom. No. 7  
156 Claim Group (Canex - Black Giant)

SCALE 1" = 200'	DRAWN DB + 9L1
DATE June, 1970	FILE No N.T.S. 52-J-7 V.II8-7C

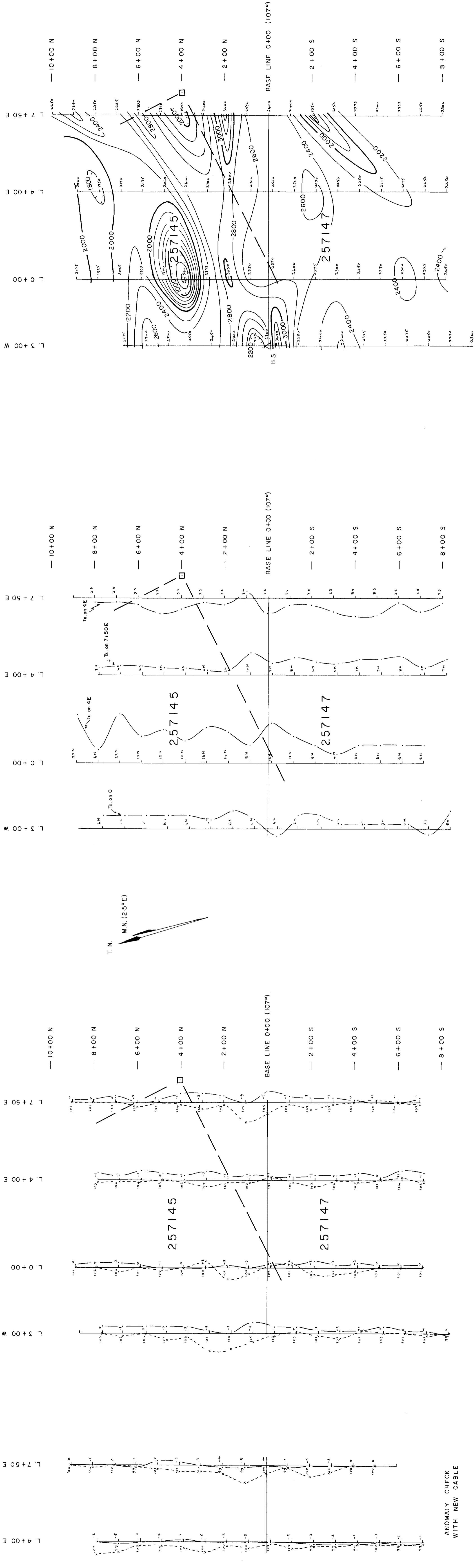


52J07SW0050 52J07SW0018 ARMIT LAKE





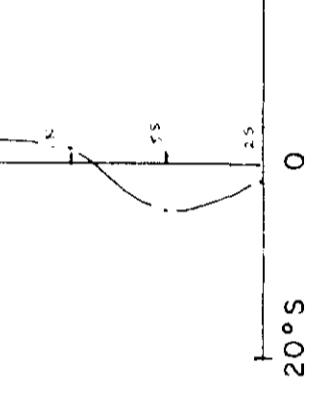
52J07SW0018



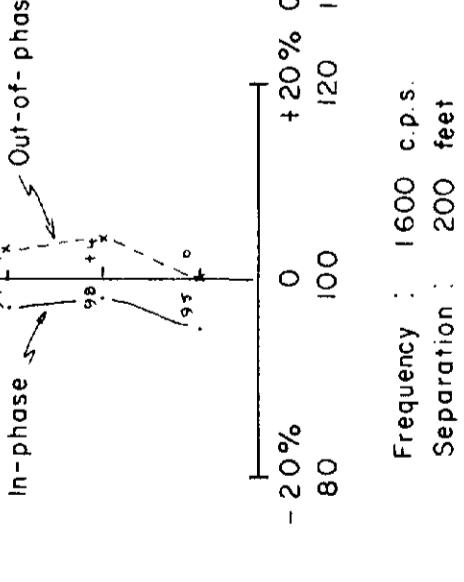
GROUND MAGNETOMETER SURVEY  
CONTOUR INTERVAL : 200 gammas

52510733-0018-#19  
*J. H. Danher.*

VERTICAL LOOP E.M. SURVEY  
Frequency : 1600 c.p.s.



HORIZONTAL LOOP E.M. SURVEY  
Frequency : 1600 c.p.s.  
Separation : 200 feet



CANEX AERIAL EXPLORATION LTD.  
GROUND GEOPHYSICAL SURVEYS  
SAVANT LAKE AREA  
PATRICIA MINING DIVISION, ONTARIO  
Anom. No. 11  
156 Claim Group (Canex-Black Giant)

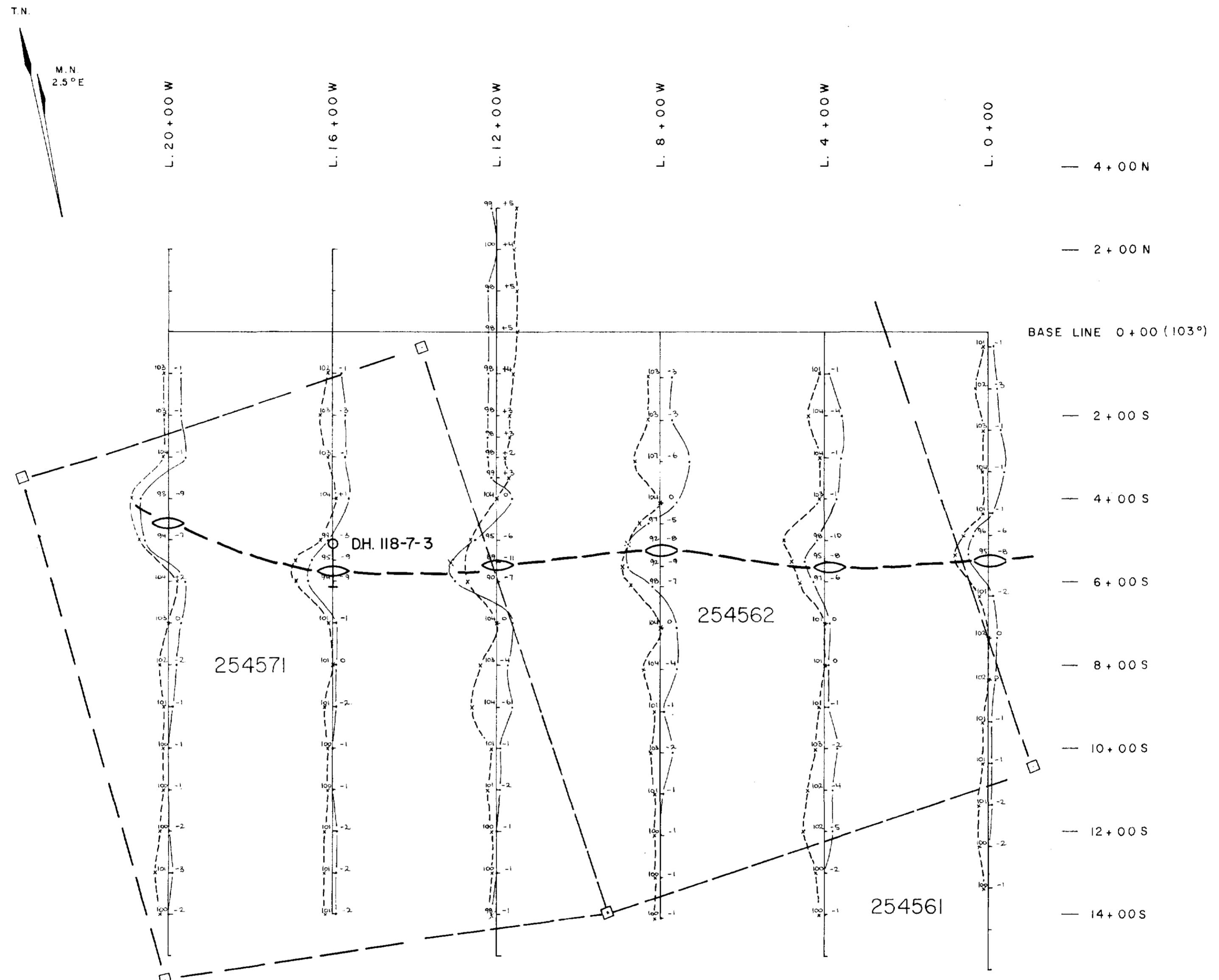
SCALE : 1" = 200'  
DATE : June, 1970  
DRAWN : *[Signature]*  
FILE NO.: NTS 52-J-7 V-18-10



52-0733-0018-#19

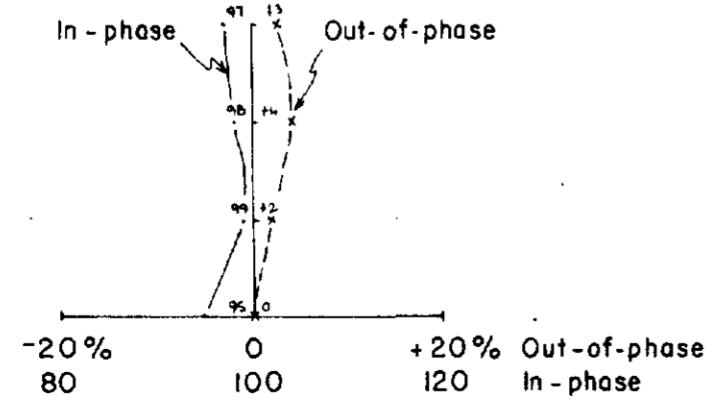
ARMIT LANE

2.295



52T/07SW-0018-#20

#### HORIZONTAL LOOP (SE-600)



#### LEGEND

- — Claim line & post
- — Fair E.M. conductor
- Interpreted conductor axis
- — Location of drill hole

Instrument used : Sharpe SE-600, ser.no. 459

Operators : Wm. Taylor, Marc Laforte

Date surveyed : June 3, 7 1970

CANEX AERIAL EXPLORATION LTD.

GROUND ELECTROMAGNETIC SURVEY  
SAVANT LAKE AREA

PATRICIA MINING DIVISION, ONTARIO

Anom. No. 7

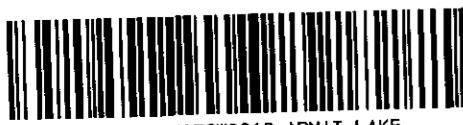
156 Claim Group (Canex - Black Giant)

SCALE 1" = 200'

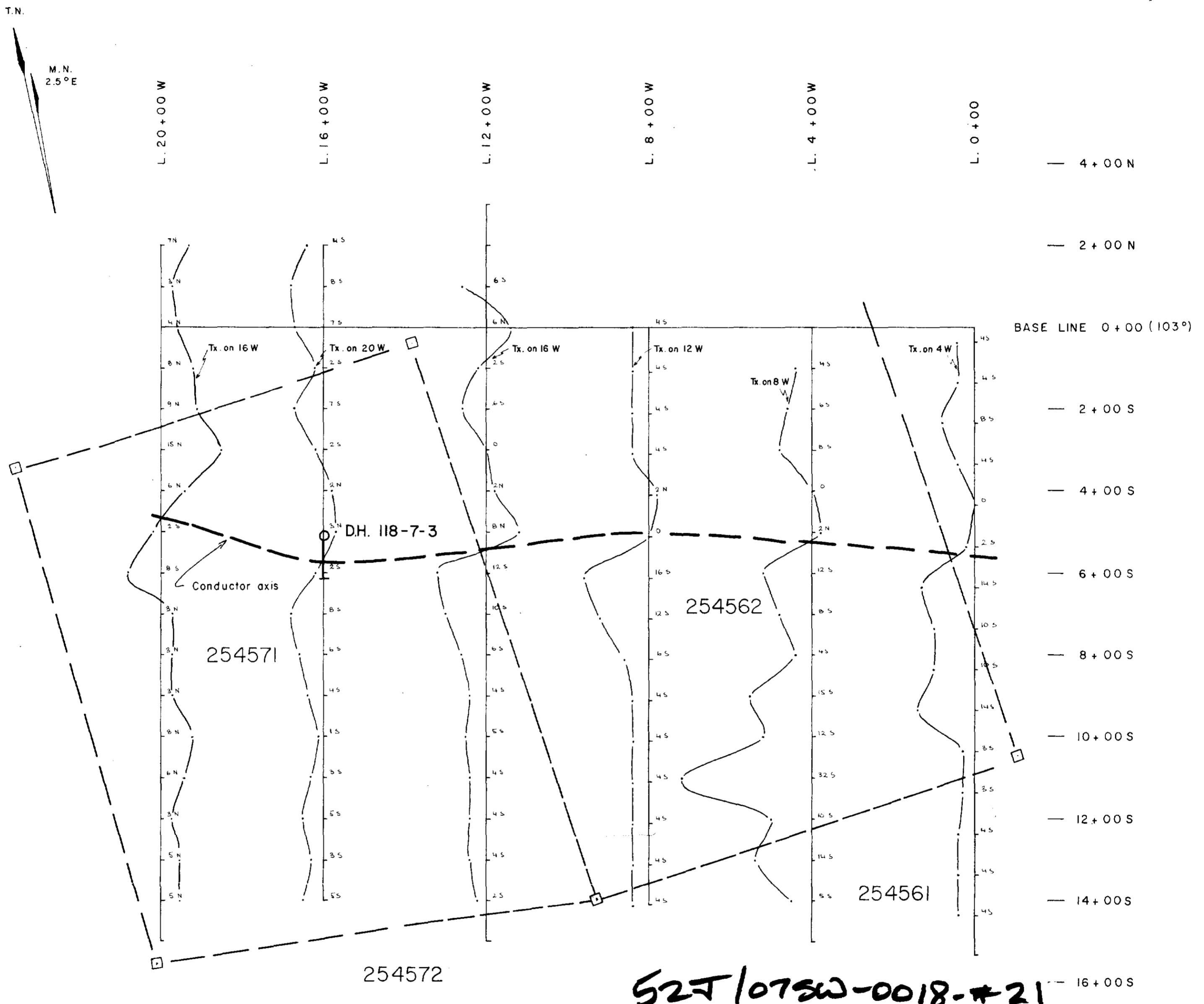
DRAWN 1:3

DATE June, 1970

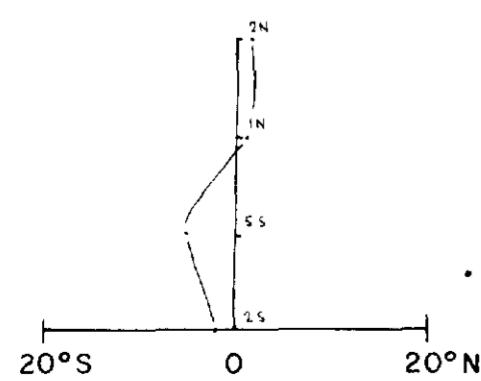
FILE No N.T.S. 52-J-7 V.II8-7B



J.H. Jankura  
John H. Jankura



VERTICAL LOOP (SE-600)



Frequency : 1600 c.p.s.

J.H. Faulkner.

Chas. H. Wittig

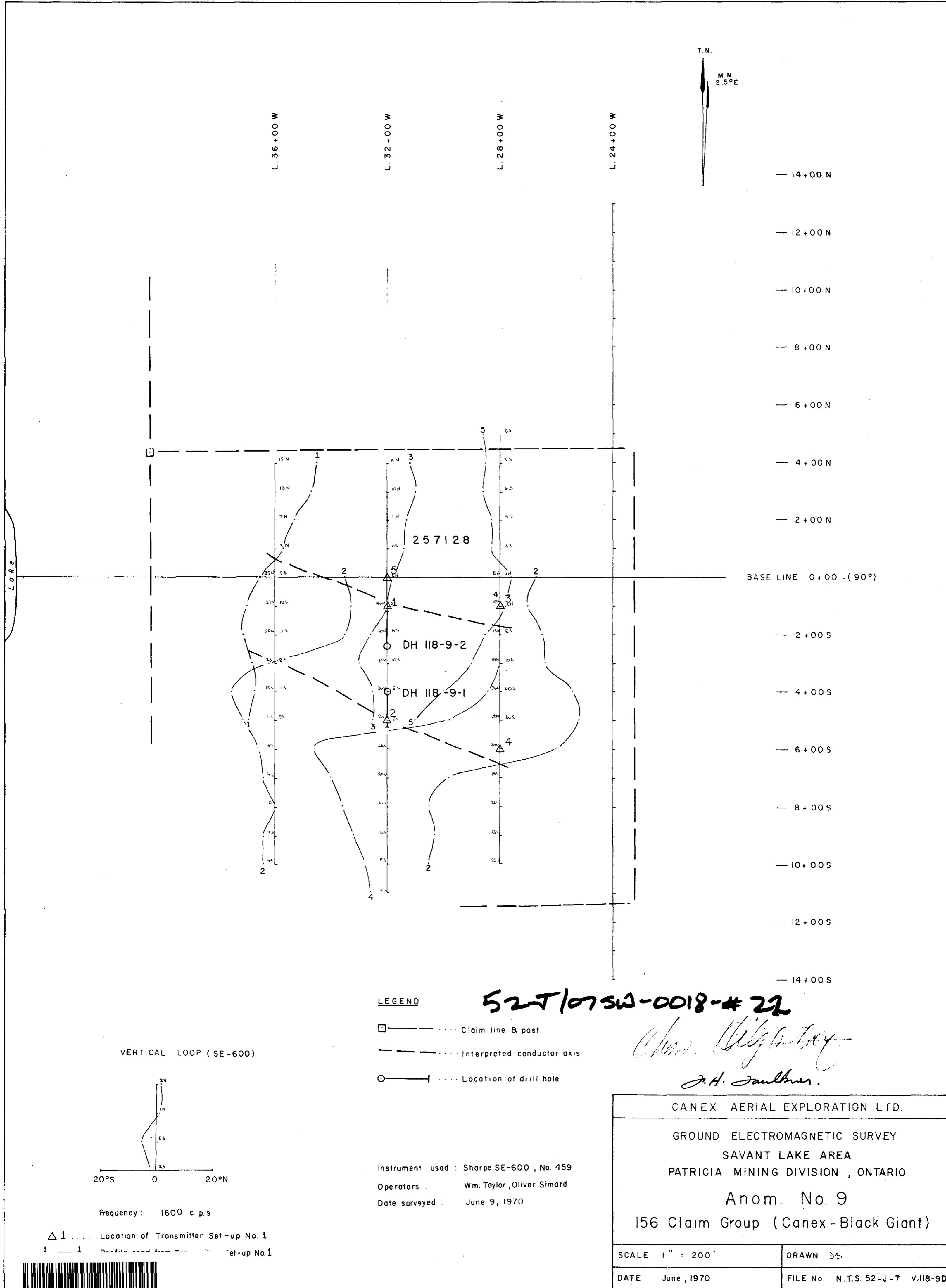
Instrument used : Sharpe SE-600, ser.no. 459

Operators : Marc Laforte, Brian Hudson,  
Wm. Taylor, Oliver Simard

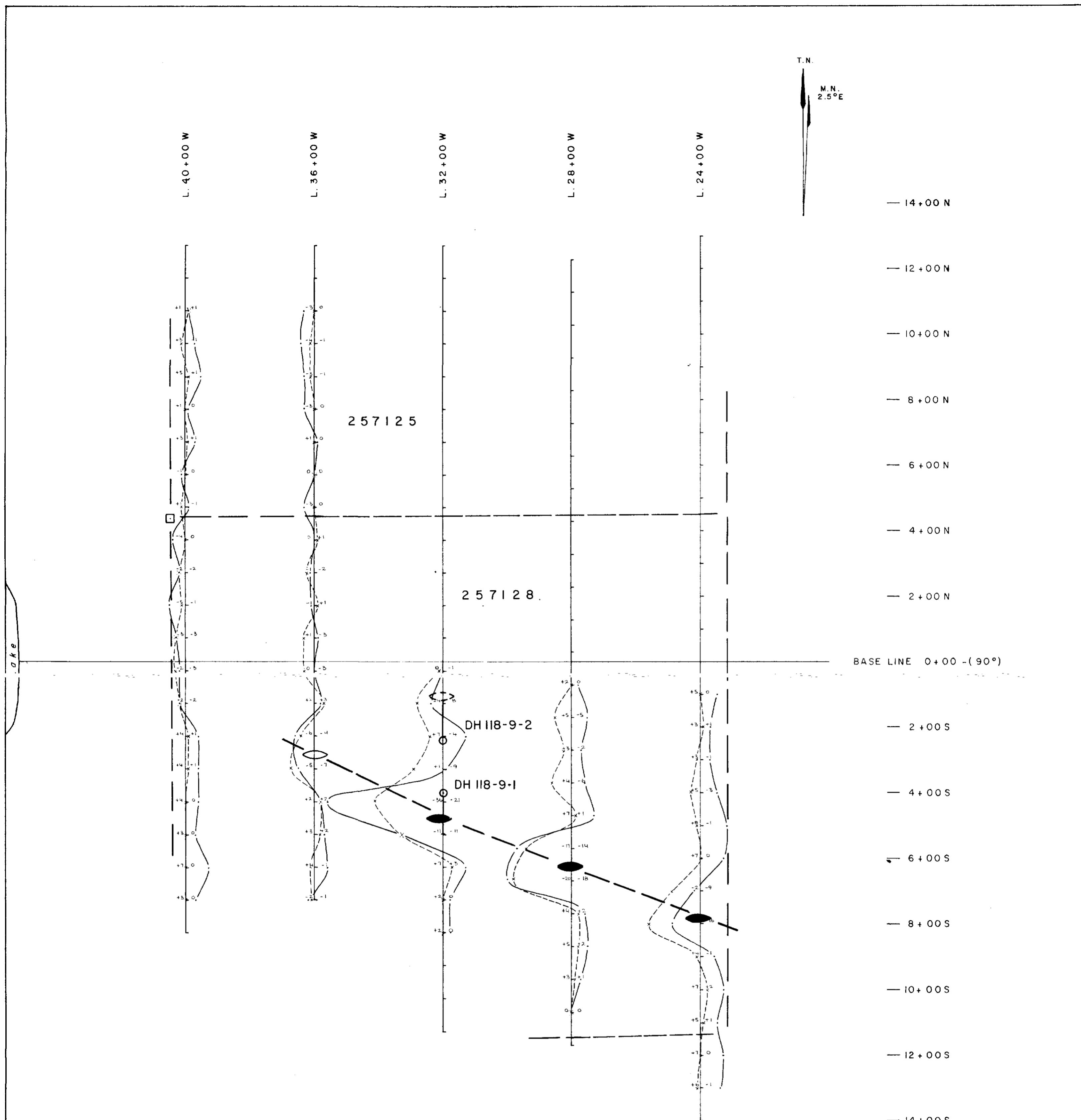
Date surveyed : June 3, 7 1970

CANEX AERIAL EXPLORATION LTD.	
GROUND ELECTROMAGNETIC SURVEY	
SAVANT LAKE AREA	
PATRICIA MINING DIVISION, ONTARIO	
Anom. No. 7	
156 Claim Group (Canex - Black Giant)	
SCALE 1" = 200'	DRAWN BY
DATE June, 1970	FILE NO. N.T.S. 52-J-7 V.II8-7A



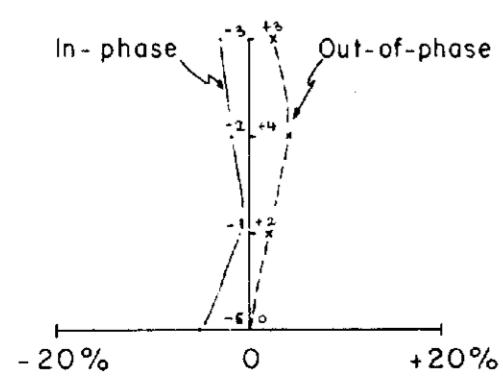


52J07SW0050 52J07SW0018 ARMIT LAKE



52T107SW-0018-#23  
*Brian Hudson*  
*J.H. Janikin*

HORIZONTAL LOOP (RONKA MARK IV)



Frequency : 876 c.p.s.  
Separation : 200 ft.

LEGEND

- — Claim line & post
- — Good E.M. conductor
- — Fair E.M. conductor
- <> — Poor E.M. conductor
- Interpreted conductor axis
- — Location of drill hole

CANEX AERIAL EXPLORATION LTD.

GROUND ELECTROMAGNETIC SURVEY

SAVANT LAKE AREA

PATRICIA MINING DIVISION, ONTARIO

Anom. No. 9

156 Claim Group (Canex-Black Giant)

SCALE 1" = 200'

DRAWN DB

DATE June, 1970

FILE NO N.T.S. 52-J-7 V.II8-9E



