



410155W9086 2.2032 DENYES

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PROJECTS UNIT

REPORT ON
GROUND GEOPHYSICS

SWAYZE PROJECT

ONTARIO

D. B. SUTHERLAND

DECEMBER, 1975

Mattogam Lake Mines

INTRODUCTION

Ten claim groups have been staked in Denyes and Halcrow Townships to cover interesting anomalies outlined by a Questor Airborne Electromagnetic Survey. To date, ground geophysics have been carried out on Groups 1 to 8 inclusive which cover airborne anomalies 1, 7, 4, 3, 24, 23, 25 and 11 and 12 respectively. The follow-up program is known as the Swayze Project and is the subject of this report.

The field work was carried out by the crews of Matagami Lake Mines Limited in the period from March 28 to April 28, 1975 and also from July 1 to August 4, 1975.

LOCATION & ACCESS

The project area is located 25 to 30 miles southeast of Chapleau. Access is by float equipped aircraft from Chapleau or by winter road from Sultan which runs as far as Lee Lake near the southeast corner of Halcrow Township.

GEOLOGY

Denyes and Halcrow townships are underlain by an east-west trending band of Archean intermediate metavolcanics and meta-sediments. The major part of the area is composed of andesitic and dacite pyroclastics. Sediments and minor felsic volcanics are found in the northern third of the area.

SURVEY INSTRUMENTS

A direct reading McPhar fluxgate instrument was used to measure the vertical field to an accuracy of ± 10 gammas.

A Geonic EM-17 electromagnetic unit was employed for the horizontal loop survey. A frequency of 1,600 Hz and coil separations of both 200, 300 and 400 feet were employed. The in-phase and quadrature components were measured to an accuracy of $\pm 1\%$ of the primary field.

The VLF-EM survey was conducted with a Crone Radem unit. Both the dip angle in degrees and the horizontal component of the field strength were recorded with an accuracy of ± 10 and $\pm 5\%$ respectively. The Cutler Maine station which operates at 17.8 KHz was used for the survey.

PRESENTATION OF RESULTS

The accompanying map sheets showing the detailed ground surveys are at a scale of 1" = 200 feet. The method and details are shown on each sheet and a separate pocket has been made for the individual claim groups 1 to 8 inclusive.

DISCUSSION OF RESULTS

The results of each claim group will be discussed separately.

Claim Group 1

Zone A consists of strong EM-17 responses on 16 W & 20 W and a weaker one on 24 W. It corresponds to airborne anomaly 1. Zone A is essentially open at both ends and could be part of a much longer conductor suggested by the airborne data. The EM-17 results indicate Zone A dips steeply north, is located at a depth of 60 feet and has a conductivity of 8 mhos. It appears to be a narrow source and the 40 foot estimate on 16 W may not be reliable.

High VLF dip angles outline an anomaly that coincides with Zone A on 16W but lies several hundred feet south on 20 W and 24 W. The VLF field strength is remarkably weak considering the dip angle response.

There is no recognizable magnetic anomaly on the three lines that cross Zone A but there is a 700 gamma closure about 800 feet to the north.

Despite the lack of magnetic correlation, Zone A is considered of first priority target on 16 W.

There are a few weak VLF crossovers on the remainder of Claim Group 1 that are not supported by the other methods. These are considered to be of minor importance.

Claim Group 2

Claim Group 2 covers airborne anomaly 7, a single line, 6 channel anomaly indicating a short conductor.

The initial EM-17 surveys, run on 0 & 4 E with 200 and 300 foot cable, gave very weak response. Subsequently, the entire

Claim Group 2 (Continued)

grid was surveyed (except 8 E) with 400 foot cable and two conductors, Zone B and C, were outlined.

Zone B consists of an apparently isolated response on 4 E. The calculated depth is 90 feet but the weak response with 300 foot cable suggests it may be deeper. It displays a conductivity of 3 mhos, but has no magnetic correlation. No VLF surveying was done on 4E. Nevertheless, Zone B is an interesting, apparently short conductor worthy of a first priority classification. Zone B may be associated with Zone C on 4 W.

Zone C also has the appearance of an isolated response but lies on strike with Zone B and may be its western continuation. It displays a similar conductivity of 4 mhos, but its indicated depth is greater (i.e., 120 feet). There appears to be no significant magnetic or VLF correlation. Zone C is not a drill target at present but should be re-evaluated on the results obtained in drilling Zone B.

Claim Group 3

This group covers a 3 channel response that is part of airborne anomaly 4.

Two lines were run on the east side of the river with EM-17 and magnetics. The data with the 200 foot cable shows a weak response on D, but the 400 foot results give a moderate anomaly displaying a conductivity of 6 mhos on O and a weak response on 4 E. Zone D appears to have limited strike length but may extend westward under the river. Zone O is indicated to be 80 feet deep and despite its lack of magnetic coincidence on O, it is regarded as a

Claim Group 3 (Continued)

first priority target. The 300 gamma magnetic high associated with the weak response on 4 E should be noted.

A strong, narrow magnetic high occurs near 9 N on 0 that may represent a dike.

Claim Group 4

Zone E is an interesting wide conductor that corresponds to airborne Anomaly 3. It was picked up with the 400 foot EM-17 survey on only two lines, but may extend westward under the river. The displayed conductivity of 5 mhos is average for the area and the indicated width of 60 feet appears valid. There is no direct magnetic coincidence, but Zone E is a first priority target on 0 where the indicated depth is 110 feet.

Claim Group 5

A 3 channel response in airborne anomaly 23 underlies Claim Group 5.

Zone F consists of strong EM-17 responses on 4 lines for a length of at least 1,200 feet and is possibly open to the west. It is shallow (i.e. 25 feet), displays 5 mhos conductivity and a width of 90 feet on 4 W. There is good VLF confirmation with strong dip angles, field strengths up to 200%, as well as indicated width on 4 W and 8 W. There is little magnetic relief near the conductor, but a gentle low of 100 gammas to the north, on 0 and 4 W,

Claim Group 5 (Continued)

suggests weak magnetic association on its eastern end.

Graphite has been found in the grid together with wide sheared gossaneous tuff. Nevertheless, Zone F is regarded as a first priority target and a drill hole has been spotted on 4 W to test its widest section.

There are moderate VLF crossovers on 4 E and 8 E that are poorly supported by the field strength and EM - 17. The area should be detailed if Zone F proves of interest.

The magnetic high extending across the south end of 4 W, 0 and 4 E probably represents a coarse grained mafic intrusive found in this area.

Claim Group 6

This claim group is located south of Denyes Lake and covers a 4 channel response in airborne anomaly 23.

The geophysical results are unusual, possibly due to the suspected heavy overburden in the area. Zone G consists of 3 moderate amplitude VLF dip angle crossovers with associated field strengths up to 130%. Broad, weak quadrature response is found in the EM-17 profiles over Zone G suggesting conductive overburden, but not typical of a bedrock conductor. There is no magnetic correlation with Zone G and it is not considered worthy of drilling at present. If drilling on other Claim Groups proves interesting, Zone G may warrant checking with induced polarization.

Claim Group 6 (Continued)

The magnetic high near 2 N on 8 W appears to be a diabase dike.

Claim Group 7

Strong, 6 channel, high conductivity responses in airborne anomaly 25 occur over the east part of Dymont Lake and this Claim Group covers them as well as the weaker responses both east and west.

On the EM-17 data, Zone H appears as a definite wide conductor from 0 to 8W. West of 8 W, it bifurcates and continues as two narrow sources to 24 W. Zone H displays conductivities in excess of 10 mhos throughout its length. There is strong confirmation in the VLF data with crossovers of more than 50 degrees and field strengths in excess of 100%. However, the VLF indicates the bifurcation may be to the east of 8 W rather than the west. No appreciable magnetic variation is evident over the zone.

A hole has been drilled in the vicinity of 10 W and several feet of graphite is reported. Zone H displays some of the characteristics of a graphitic zone and consequently the drilling downgrades its importance. However, it is considered worthy of a second priority hole on Line 0 where it has a width of about 120 feet and may be due to multiple sources.

Claim Group 8

Claim Group 8 covers airborne anomalies 11 and 12.

Claim Group 8 (Continued)

Zone I occurs on the western part of the grid and correlates with a 3 channel response in airborne anomaly 11. The EM-17 data shows a high conductivity source (i.e., 20 mhos), 100 feet deep, that extends from 8 W to 16 W and may continue farther west. There is VLF correlation in the 200% field strength increase over Zone I and dip angle crossovers in excess of 20 degrees. No strong magnetic variation is evident near the conductor.

Zone I displays high conductivity and definitely warrants a first priority classification and a drill hole on 16 W.

Zone J appears to be a variable source that extends from 12 E at least as far as 28 E. On 16 E, it appears to be 40 feet deep with a conductivity of 3 mhos while on 24 E it is 120 feet deep with a conductivity of 6 mhos. On 28 E it is 160 feet deep and it could continue east, but deeper than can be detected with the 400 foot cable. It is not confirmed in the VLF data, probably due to the deep overburden. Zone J follows a complex magnetic trend with an overall 200 gammas relief that extends farther east and west. Local, stronger magnetic variations occur along the trend and coincide with Zone J on 12 E and 28 E.

Zone J has been assigned a second priority classification on 24 E, but could be easily upgraded if encouragement is obtained in any part of the program.

SUMMARY AND RECOMMENDATIONS

Ten conductive zones, lettered A to J inclusive, have been interpreted from ground survey results on Claim Groups 1 through 8. Generally, these conductors display low to moderate conductivity and lack magnetic correlation.

Six zones, Zones A, B, D, E, F and I are regarded as first priority targets. The drill holes spotted to test them are shown on the attached drilling schedule.

Zones H and J are second priority targets. Zone H has been drilled previously and graphite is believed responsible for at least part of the conductive anomaly. Zone J should be upgraded if any encouragement is obtained in any part of the program.

Zone C is a deep source on Claim Group 2 that should be re-assessed when Zone B is drilled. Zone G is a VLF conductor, not confirmed by EM-17, that may warrant IP surveying at a later date.

Respectfully submitted,



Don B. Sutherland,

Consulting Geophysicist.

December, 1975.

PROPOSED DIAMOND DRILL SCHEDULE

No.	Airborne	Claim Group	Zone	Mhos	EM-17 Width	Depth	VLF-EM		Mag	Priority	Line	Sta	Dip	Direction	Length
	Mhos						F. S.	Dip							
1	4	1	A	8	40?	60	25?	40	0	1	16 W	14.75 S	50°S.	along Traverse	350
7	7	2	B	3	1	90	-	-	0	1	4 E	1.50 N	50°S.	along Traverse	375
-	-	2	C	4	1	120	-	-	0	0	Re-assess when Zone B Drilled				
4	2	3	D	6	1	80	-	-	300?	1	0	3.00 N	50°S.	along Traverse	350
3	3	4	E	5	60	110	-	-	0	1	0	3.25 S	50°S.	Along Traverse	450
24	1	5	F	5	90	25	200	54	-100?	1	4 W	10.25 S	50°S.	Along Traverse	400
23	1	6	G	-	-	-	130	32	0	0	Defer: Possibly IP later.				
25	18	7	H	13	120	20	150	58	0	2	0	2.25 N	50°S.	Along Traverse	350
11 & 12	9-20	8	I	20	25	100	200	20	0	1	16 W	2.00 N	50°S.	Along Traverse	375
-	-	8	J	6	60	120	0	0	200	2	24 E	6.00 N	50°S.	Along Traverse	350
										TOTAL FOOTAGE				3,000	



GEOP



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

Type of Survey(s) Geophysical
Township or Area Denyes & Halcrow
Claim Holder(s) Mattagami Lake Mines Limited
1110-8 King St. E; Toronto
Survey Company
Author of Report D. B. Sutherland
Address of Author 21 Pineneedle Grove, Miss.
68 Cheltenham Ave Toronto
Covering Dates of Survey March 28 to Dec 23, 1975
(linecutting to office)
Total Miles of Line Cut 29.1

MINING CLAIMS TRAVERSED
List numerically
(prefix) (number)
P385971, 385973, 385976
385977, 385978, 385979
385980, 385981, 385982
385985, 385986, 385987
385988, 385989, 385990
385991, 385992, 385995
385996, 386001, 386002
386003, 386004, 386006
386007, 386008, 386009
386011, 386012, 386013
386014, 386015, 386016
386017, 386018, 386019
386029, 386030, 386031
386032, 386033, 386034
386035, 386036, 386037
386039, 386040, 386741
386742, 386743, 386744
TOTAL CLAIMS 51

SPECIAL PROVISIONS
CREDITS REQUESTED
DAYS per claim
Geophysical
--Electromagnetic 20
--Magnetometer 40
--Radiometric
--Other
Geological
Geochemical

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)
Magnetometer Electromagnetic Radiometric
(enter days per claim)

DATE: SIGNATURE: Author of Report or Agent

Res. Geol. Qualifications 63.1168

Previous Surveys
File No. Type Date Claim Holder
2.736 Airborne *
LD

See work sheet on this file for assessment.

OFFICE USE ONLY

If space insufficient, attach list

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS If more than one survey, specify data for each type of survey

Number of Stations 1, 320 Number of Readings Mag. 1, 388; EM, 2, 556
Station interval 100' Line spacing
Profile scale 400'
Contour interval Mag. Contours 100 Gammas, EM Profiles 1"=20%

MAGNETIC

Instrument McPhar Fluxgate
Accuracy - Scale constant + 10 Gammas
Diurnal correction method Readings tied in to predetermined baseline Stations
Base Station check-in interval (hours)
Base Station location and value At 0 and 400' intervals East and West, within 1 hour

ELECTROMAGNETIC

Instrument Geonics EM-17
Coil configuration Horizontal Loop, C6-Planar
Coil separation 200' 300' & 400'
Accuracy + 1%
Method: [] Fixed transmitter [] Shoot back [x] In line [] Parallel line
Frequency 1600 Hz (specify V.L.F. station)
Parameters measured In phase and out of phase

GRAVITY

Instrument
Scale constant
Corrections made
Base station value and location
Elevation accuracy

INDUCED POLARIZATION RESISTIVITY

Instrument
Method [] Time Domain [] Frequency Domain
Parameters - On time Frequency
- Off time Range
- Delay time
- Integration time
Power
Electrode array
Electrode spacing
Type of electrode

GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL
TECHNICAL DATA STATEMENT

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PROJECTS UNIT

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

Type of Survey Geophysical
Township or Area Denyes & Halcrow
Claim holder(s) Mattagami Lake Mines Limited
1110-8 King St. E. Toronto
Author of Report D. B. Sutherland
68 Cheltenham Ave Toronto
Address 21 Pineneedle Grove, Miss.
Covering Dates of Survey March 18 to Dec 23, 1975
(linecutting to office)
Total Miles of Line cut 29.1

MINING CLAIMS TRAVERSED		
List numerically		
P385971,	385973,	385976
(prefix)		(number)
385977,	385978,	385979
385980,	385981,	385982
385985,	385986,	385987
385988,	386001,	386002
386003,	386004,	386006
386007,	386008,	386009
386011,	386012,	386013
386014,	386015,	386016
386017,	386018,	386019
386029,	386030,	386031
386032,	386033,	386034
386035,	386036,	386037
386039,	386040,	386741
386742,	386743,	386744
TOTAL CLAIMS		<u>45</u>

<u>SPECIAL PROVISIONS</u>		DAYS
<u>CREDITS REQUESTED</u>		per claim
ENTER 40 days (includes line cutting) for first survey.	Geophysical	
	-Electromagnetic	
	-Magnetometer	
	-Radiometric	
ENTER 20 days for each Radem additional survey using same grid.	-Other	<u>20</u>
	Geological	
	Geochemical	

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)
Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)
DATE: _____ SIGNATURE: D. B. Sutherland
Author of Report

PROJECTS SECTION
Res. Geol. _____ Qualifications 63.1168
Previous Surveys _____
Checked by _____ date _____
GEOLOGICAL BRANCH _____
Approved by _____ date _____
GEOLOGICAL BRANCH _____
Approved by _____ date _____

OFFICE USE ONLY

If space insufficient, attach list

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations 1, 071 Number of Readings 2, 141
Station interval 100'
Line spacing 400'
Profile scale or Contour intervals Contour interval 25%, Profile: 1" = 20°
(specify for each type of survey)

MAGNETIC

Instrument _____
Accuracy - Scale constant _____
Diurnal correction method _____
Base station location _____

ELECTROMAGNETIC

Instrument Crone Radem
Coil configuration _____
Coil separation _____
Accuracy Field Strength \pm 10% Dip angle \pm 5%
Method: Fixed transmitter Shoot back In line Parallel line
Frequency Cutler, Maine, 17.8 K. Hz
(specify V.L.F. station)
Parameters measured Dip Angle & Field Strength

GRAVITY

Instrument _____
Scale constant _____
Corrections made _____
Base station value and location _____

Elevation accuracy _____

INDUCED POLARIZATION -- RESISTIVITY

Instrument _____
Time domain _____ Frequency domain _____
Frequency _____ Range _____
Power _____
Electrode array _____
Electrode spacing _____
Type of electrode _____

2.2032

P.	Line			Line	Line			Area of mining claims covered.	*
	EM	Mag	Radem		EM	Mag	Radem		
385971	1/4	1/4	1/4	386018	/	/	/	Area of mining claims covered.	X / Z
72	N/C	N/C	N/C	19	N/C	N/C	N/C		
⑦ 73	2/3	3/4	2/3	386029	2/3	2/3	2/3		
Denyer 74	N/C	N/C	N/C	30	/	/	/		
Twp. 75	N/C	N/C	N/C	31	1/2	2/3	2/3		
76	1/2	1/2	1/2	① 32	1/4	1/3	1/3		
77	2/3	2/3	1/4	Halorow 33	1/2	2/3	2/3		
78	2/3	3/4	N/C	Twp. 34	3/4	/	/		
⑤ 79	3/4	/	/	35	3/4	3/4	3/4		
80	1/3	3/4	3/4	36	1/2	1/2	1/2		
Denyer 81	1/2	3/4	3/4	37	N/C	N/C	N/C		
Twp. 82	3/4	/	/	2200 38	N/C	N/C	N/C		
385985	3/4	/	/	39	N/C	N/C	N/C		
⑥ 86	/	/	/	40	2/3	2/3	2/3		
Denyer 87	3/4	/	/	386741	1/4	1/4	N/C		
Twp. 88	3/4	/	3/4	⑦ 42	3/4	3/4	N/C		
③ 89	1/3	1/2	X	Denyer 43	/	/	N/C		
90	1/3	1/2	X	Twp. 44	N/C	1/3	N/C		
Halorow 91	1/4	1/4	X	44	46	34			
Twp. 92	1/4	1/4	X	⑤⑤					
385995	1/2	2/3	X						
Halorow 96	1/3	2/3	X	EM					
386001	1/2	2/3	1/3	Area of claims not covered = 18 3/4					
② 2	1/3	1/2	1/3	20 x 44 = 880 ÷ (44 + 18) = 14.2			days per claim		
Halorow 3	1/2	3/4	3/4						
Twp. 4	2/3	3/4	1/3						
386006	1/2	1/2	1/2	Mag	Area of claims not covered = 15 3/4				
7	1/4	1/4	1/4						
8	1/2	1/2	1/3						
9	3/4	3/4	3/4	40 x 46 = 1840 ÷ (46 + 15) = 30.2			days per claim		
386011	1/4	1/3	1/3						
⑧ 12	2/3	3/4	3/4	Radem	Area of claims not covered = 11 3/4				
13	N/C	N/C	N/C						
Denyer 14	N/C	N/C	N/C						
Twp. 15	/	/	/	20 x 34 = 680 ÷ (34 + 11) = 15.1			days per claim		
16	1/4	1/3	1/3						
17	N/C	1/3	N/C						

Crockett Twp. - M.740

THE TOWNSHIP

OF 2.2032








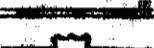






HALCROW

DISTRICT OF SUDBURY

PORCUPINE 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 

NOTES

400' Surface Rights Reservation around all lakes and rivers.

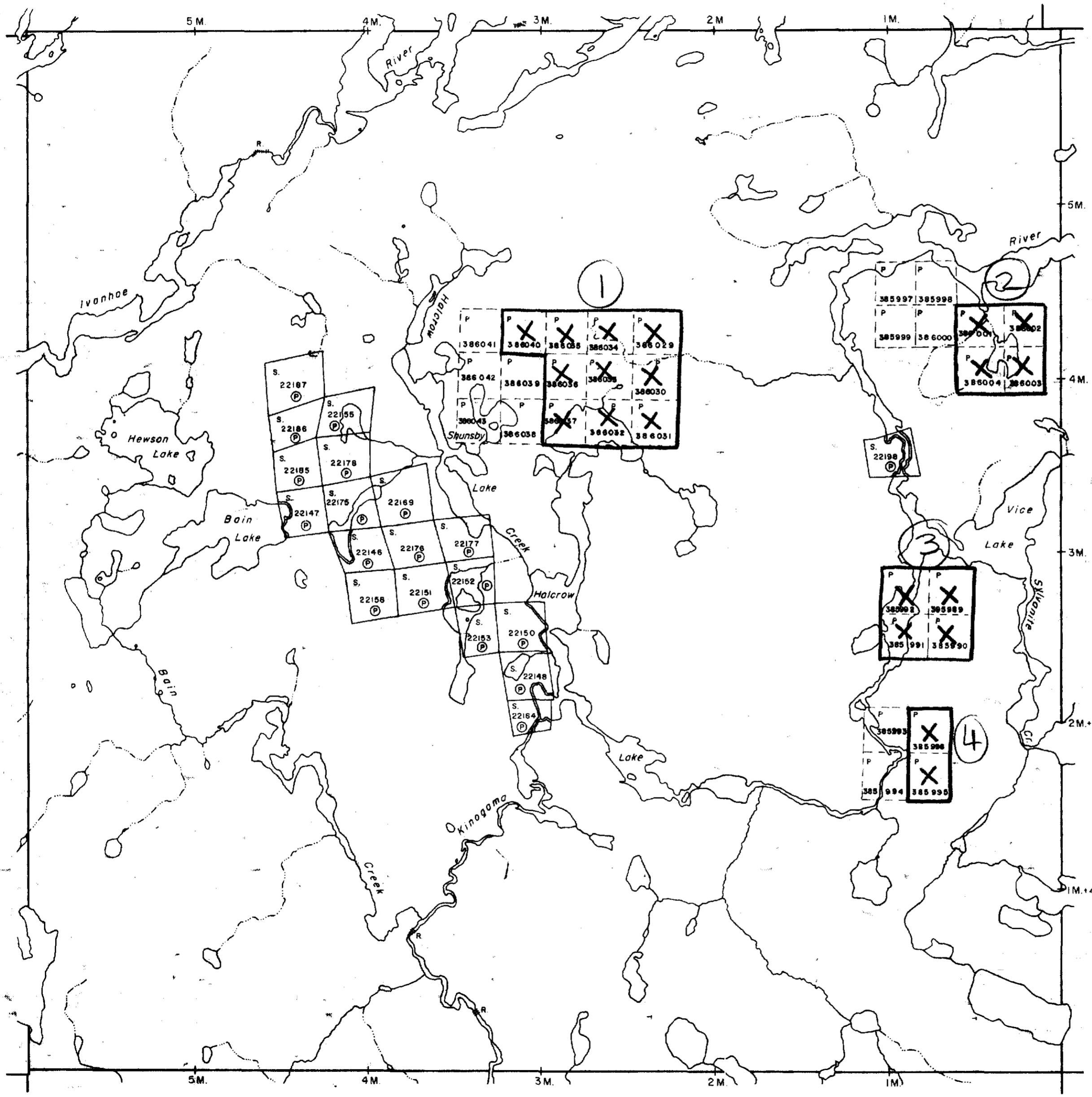
DATE OF ISSUE
 FEB 6 1976
 SURVEYS AND MAPPING
 BRANCH

PLAN NO. M.906

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

Lackner Twp. - M.975

Denyes Twp. - M.758



Tooms Twp. - M.1159



410155W9085 2.2032 DENYES

Raney Twp. - M.1069

THE TOWNSHIP OF
OF **2.2032**
DENYES

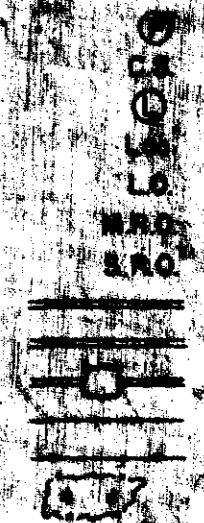
DISTRICT OF
SUDBURY

PORCUPINE
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 MUSKES
- MINES
- CANCELLED



NOTES

400' Surface Rights Reservation around
all lakes and rivers.

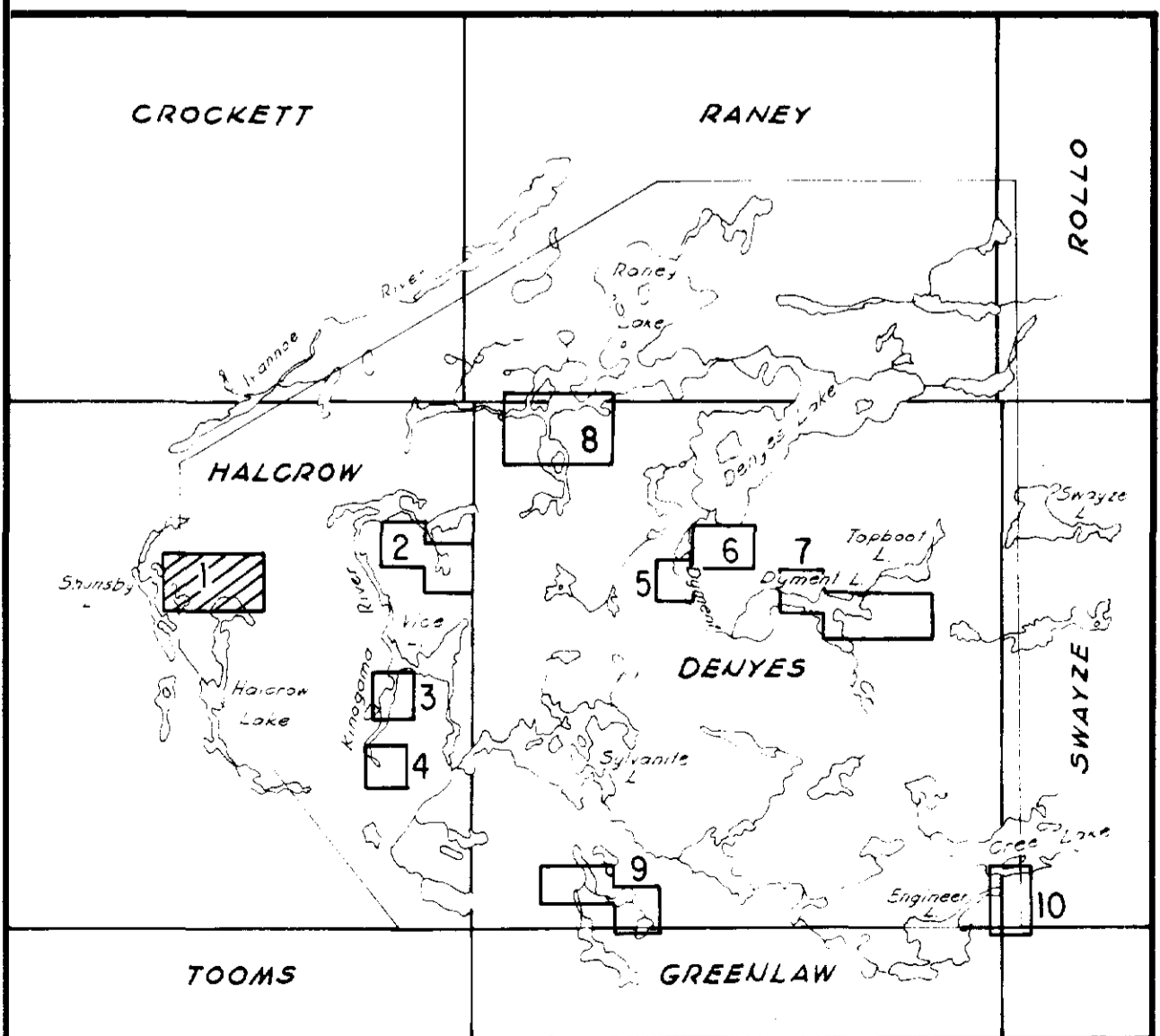
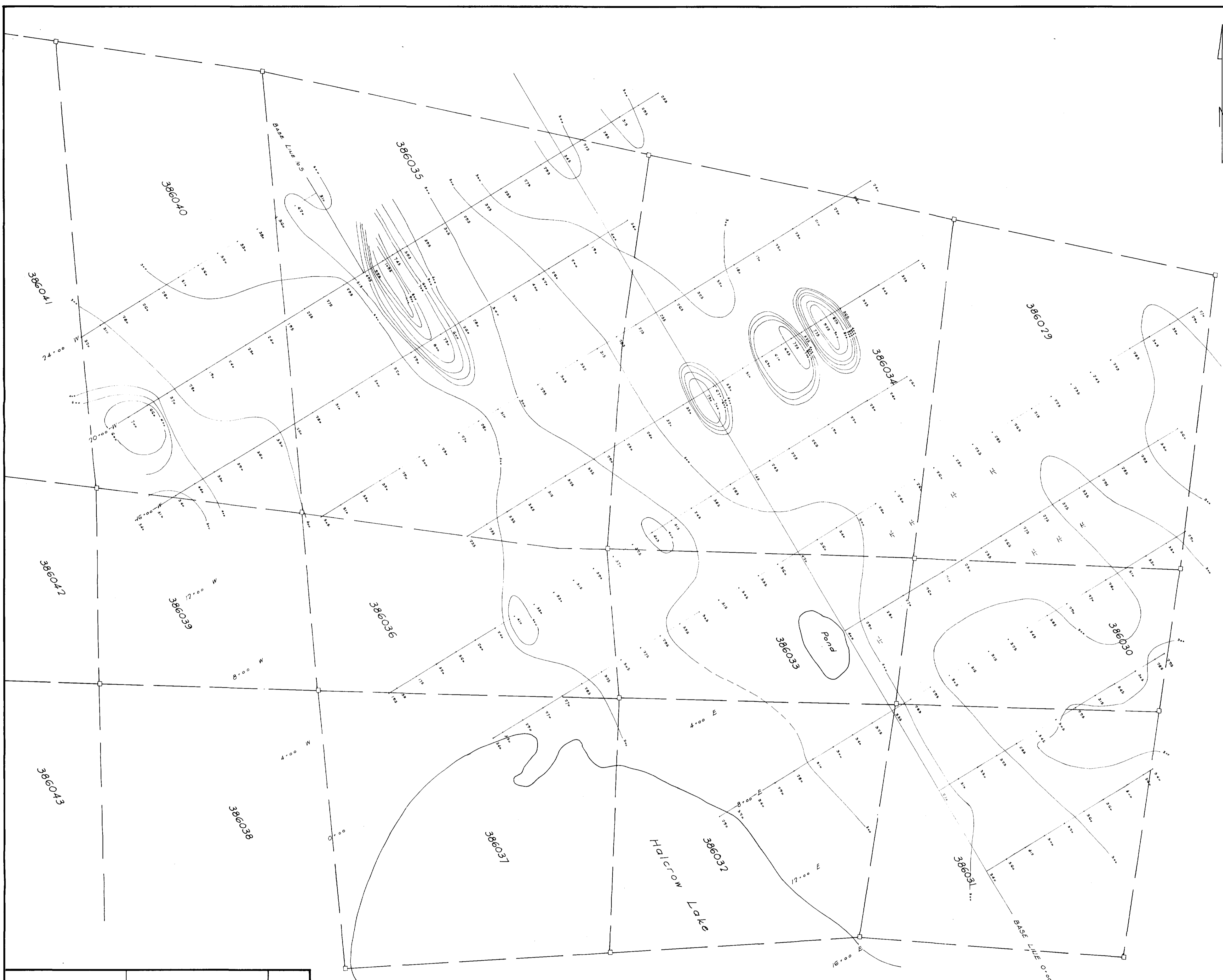
DATE OF ISSUE
FEB. 6 1975
SURVEYS AND MAPPING
BRANCH

PLAN NO. **M.758**

Greenlaw Twp. - M.895

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH





LOCATION PLAN OF
SWAYZE PROJECT
SCALE : 1" = 4 miles



Contour Interval: 100 ft

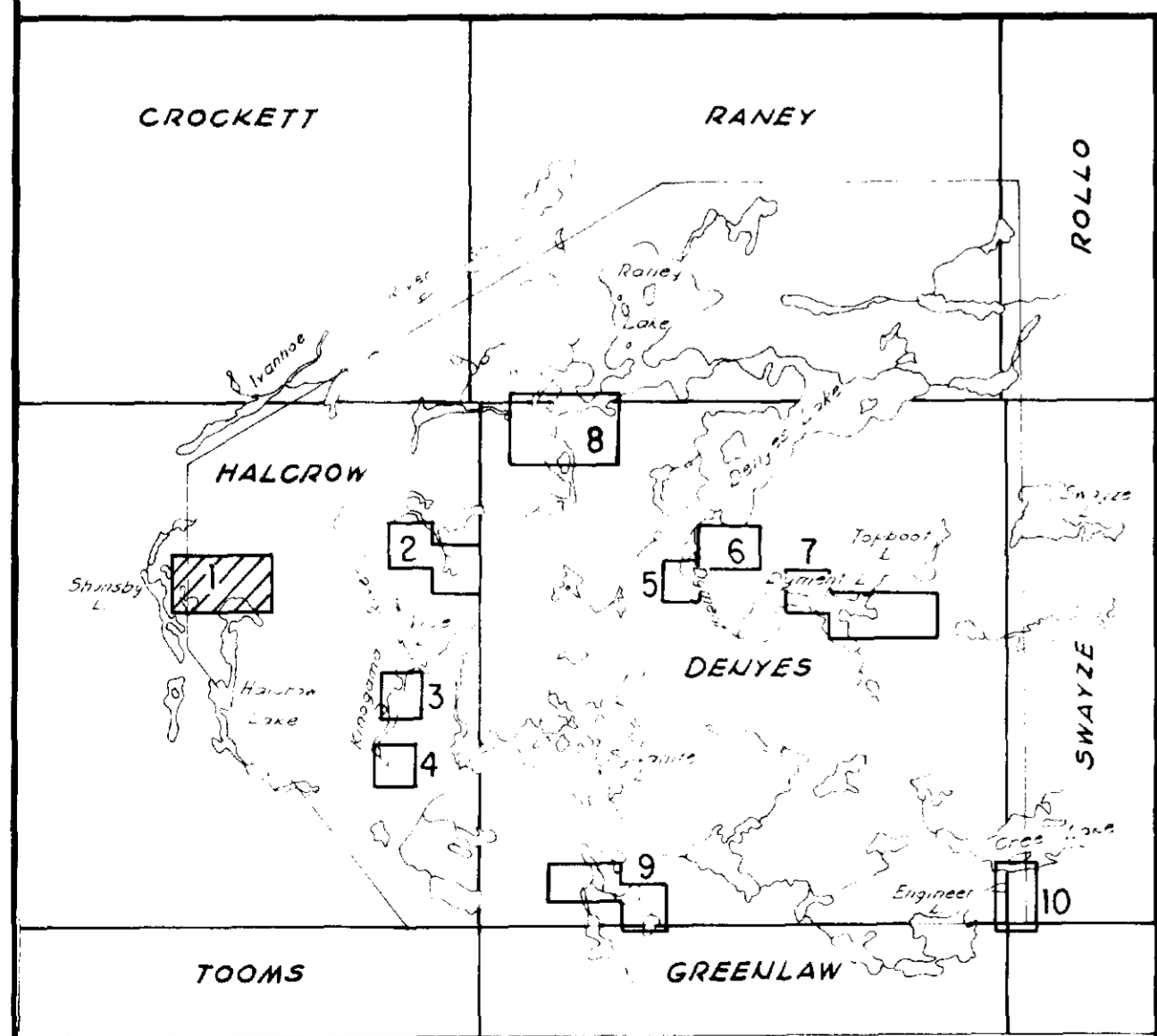
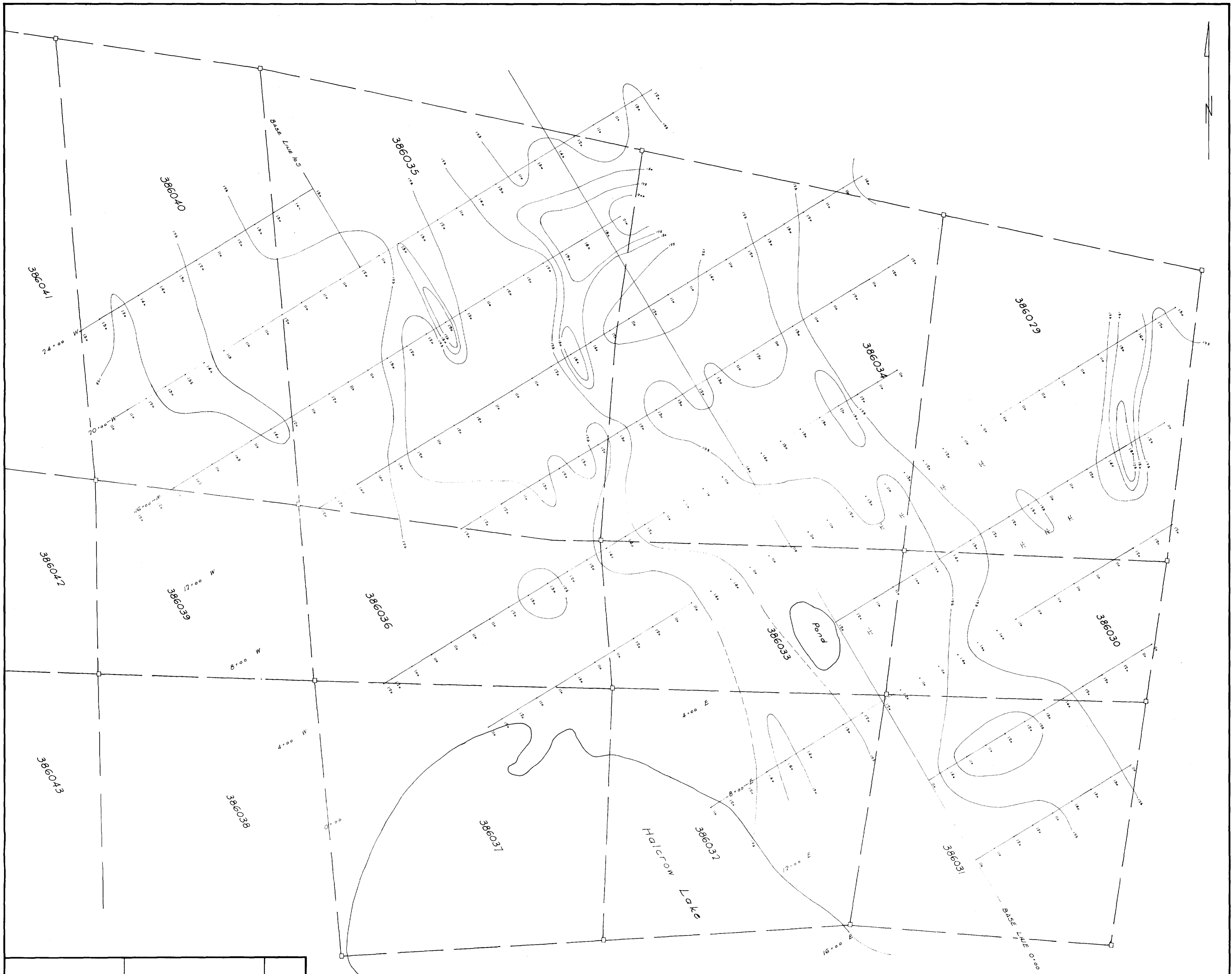
22032

MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

MAGNETOMETER SURVEY
SWAYZE PROJECT

GROUP 1
ONTARIO

SCALE : 1" = 200' DATE : AUG. 1975



LOCATION PLAN OF
SWAYZE PROJECT
SCALE: 1" = 4 miles



Contour Interval: 25'
Station: Culler, Maine

2.2032

MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

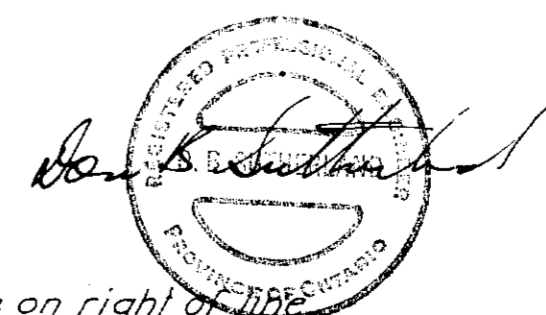
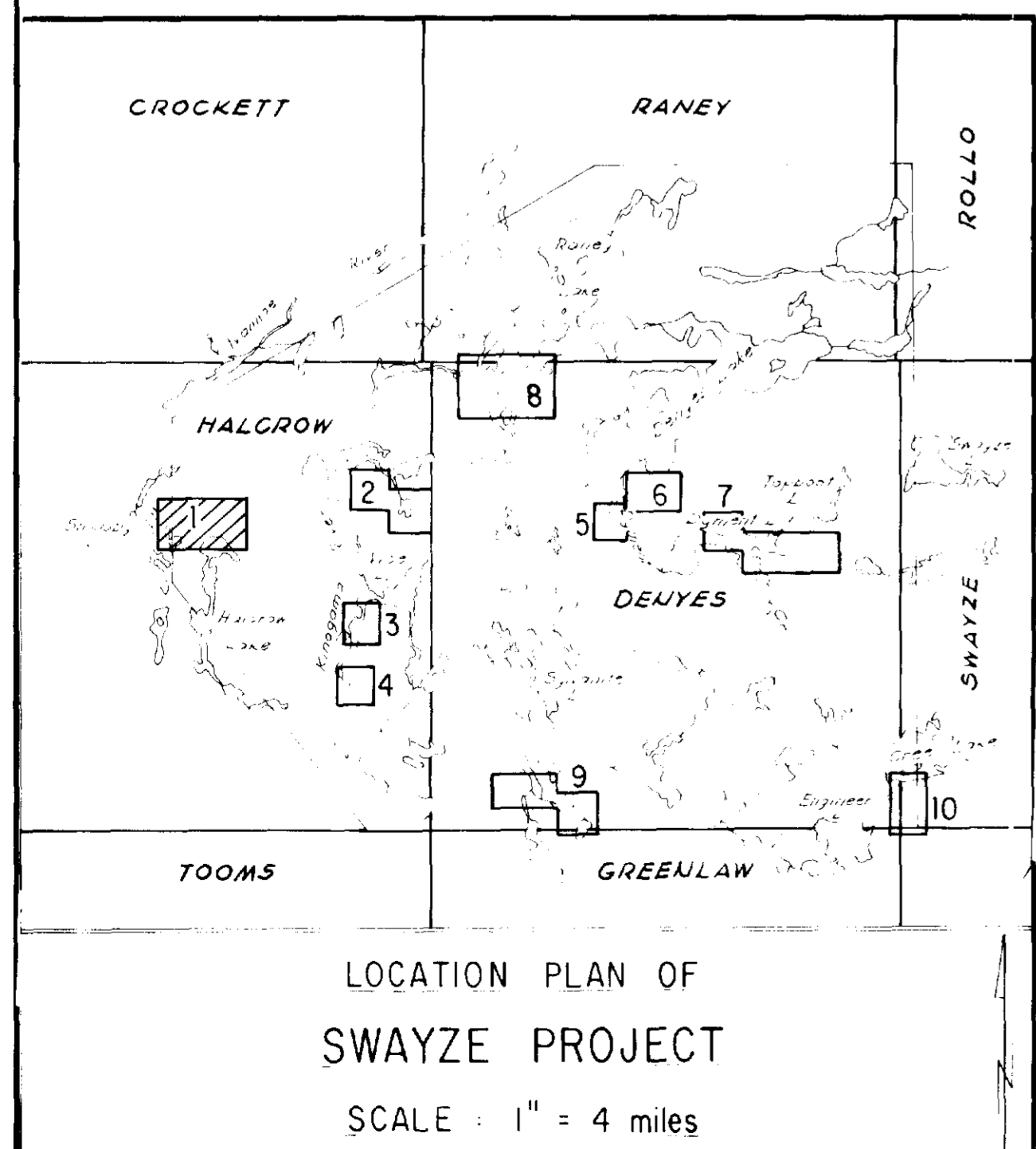
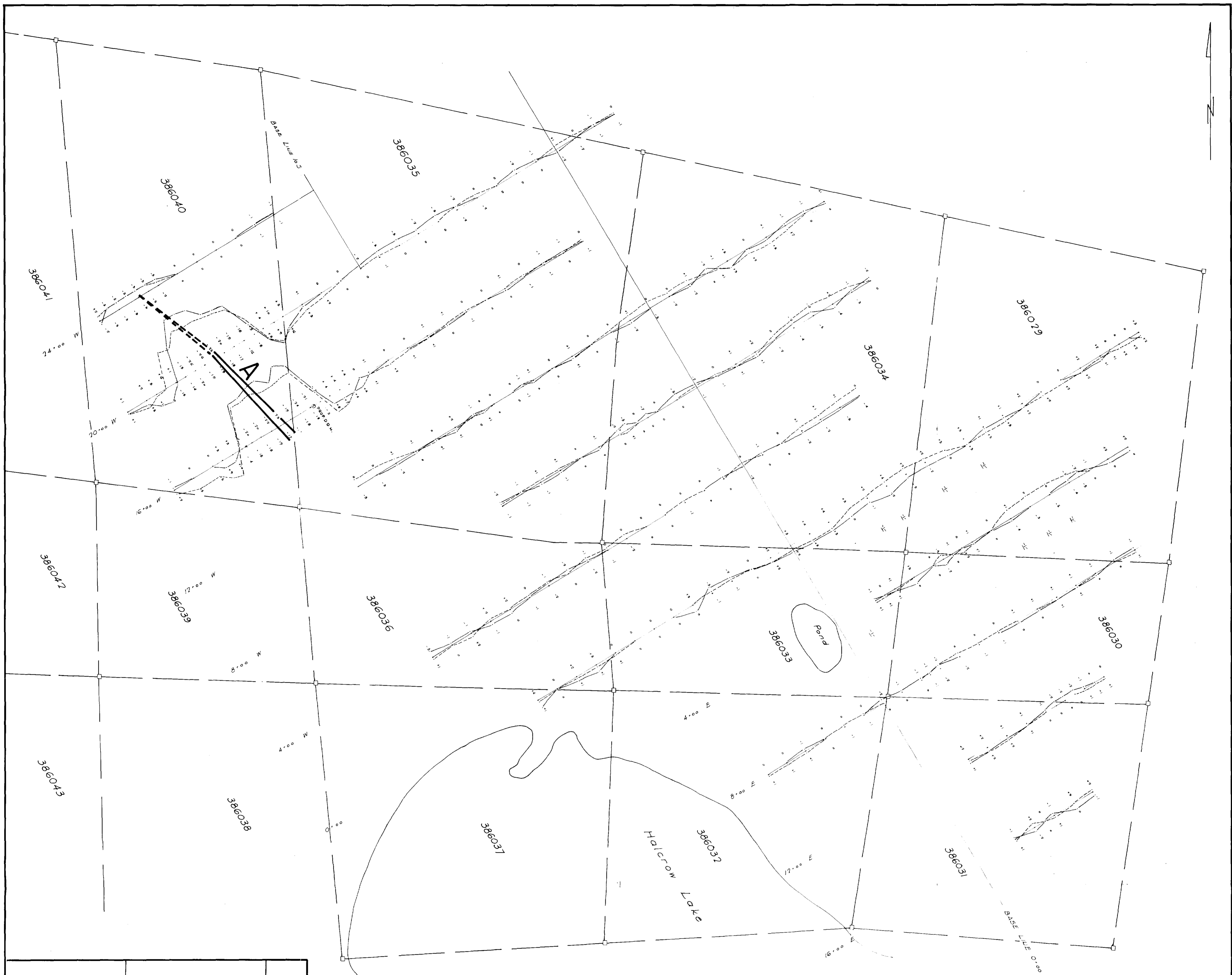
RADEM FIELD STRENGTH
SWAYZE PROJECT

GROUP 1
ONTARIO

SCALE: 1" = 200'

DATE: AUG. 1975





Out-of-Phase on right of line
In Phase on left of line
Coil spacing: 400 ft.
Frequency: 1600 Hz
— E.M. Conductor

2.2032

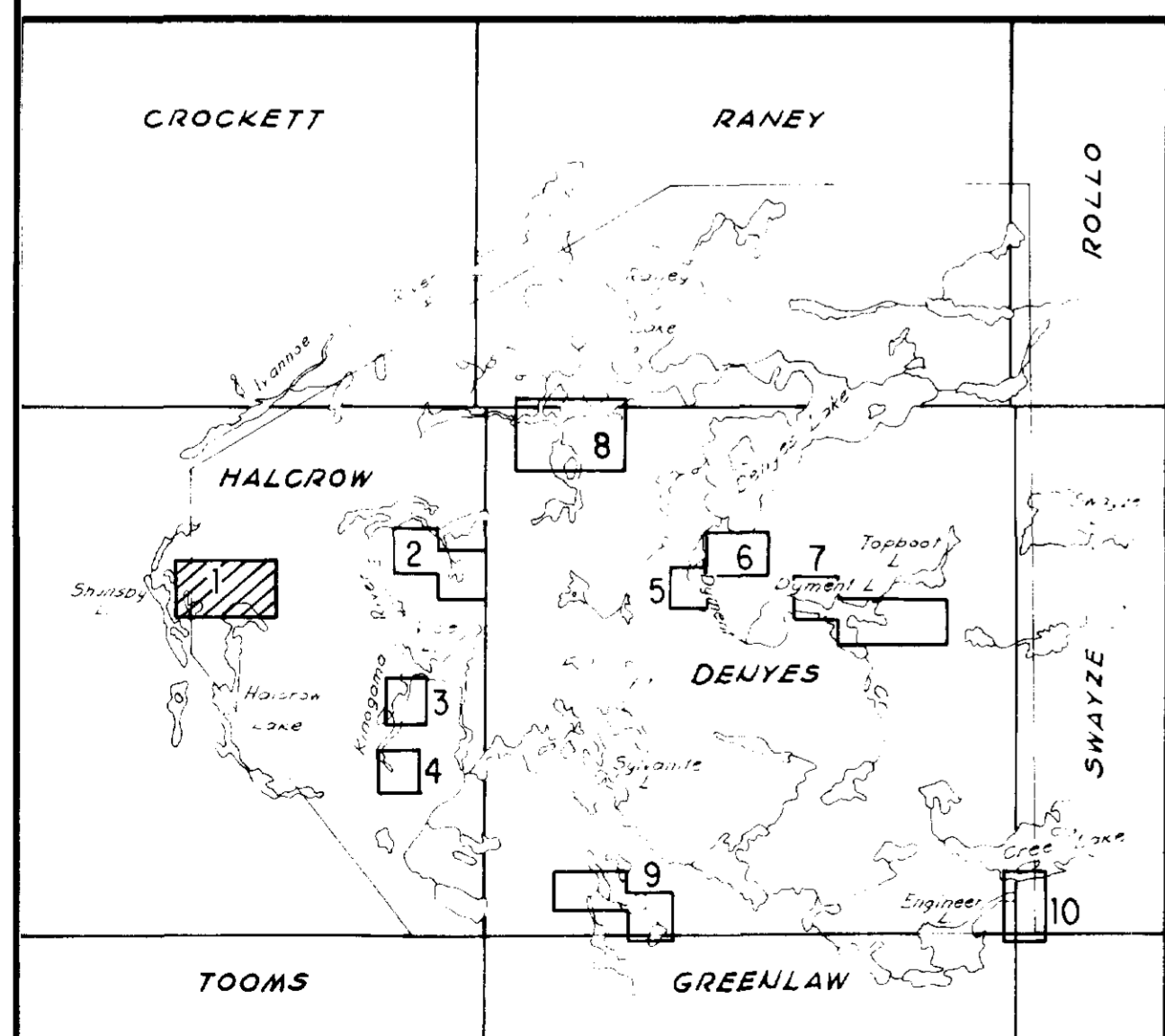
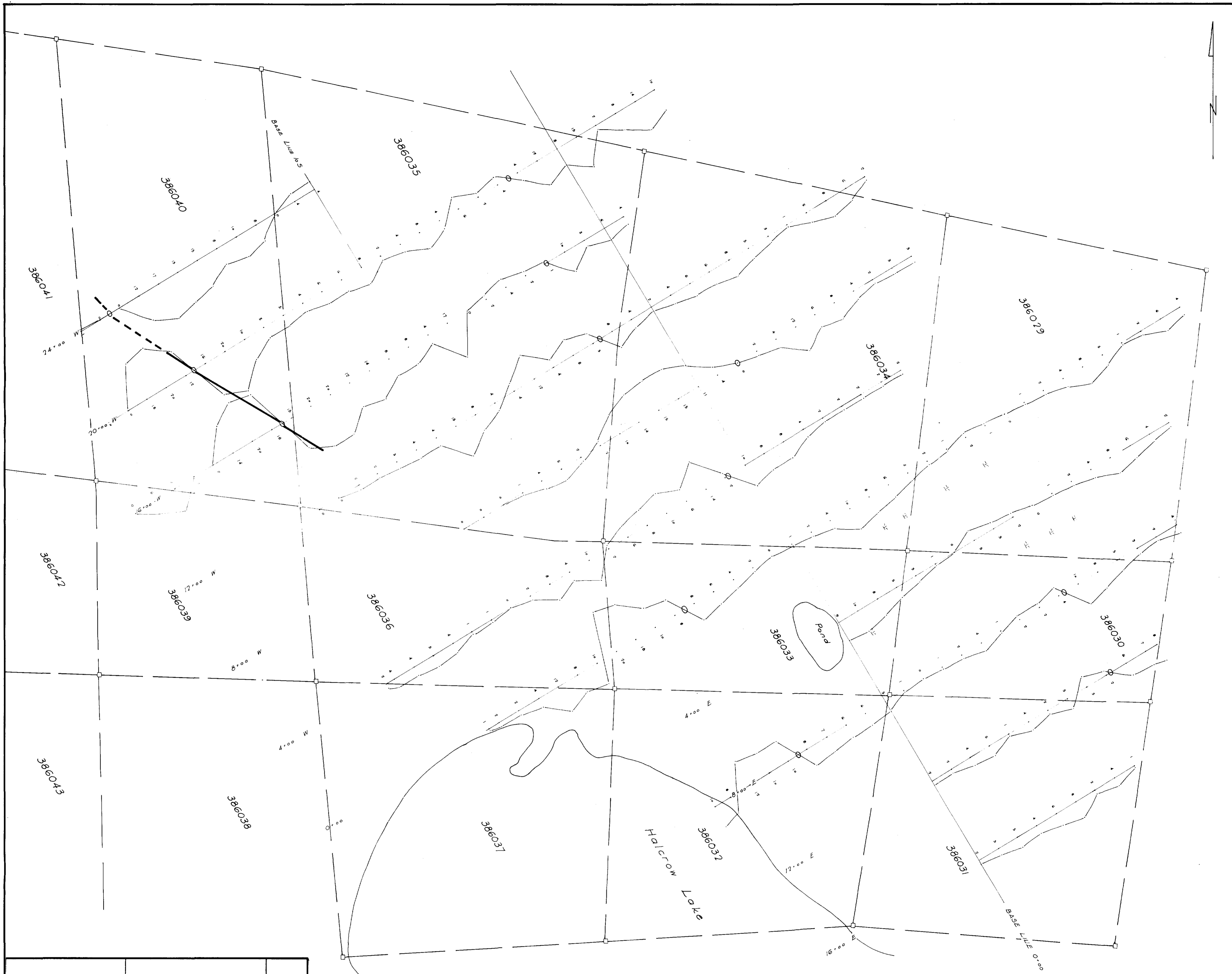
MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

EM-17 SURVEY
SWAYZE PROJECT

GROUP 1
ONTARIO

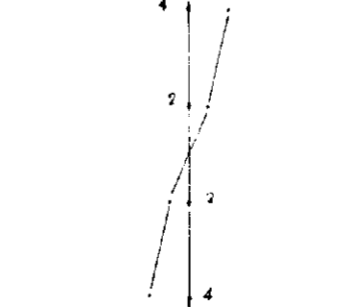
SCALE: 1" = 200'

DATE: AUG. 1975



LOCATION PLAN OF
SWAYZE PROJECT
SCALE : 1" = 4 miles

North Dip, South Dip



Scale: 1" = 20'

E.M. Conductor

Station: Cutler, Maine



MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

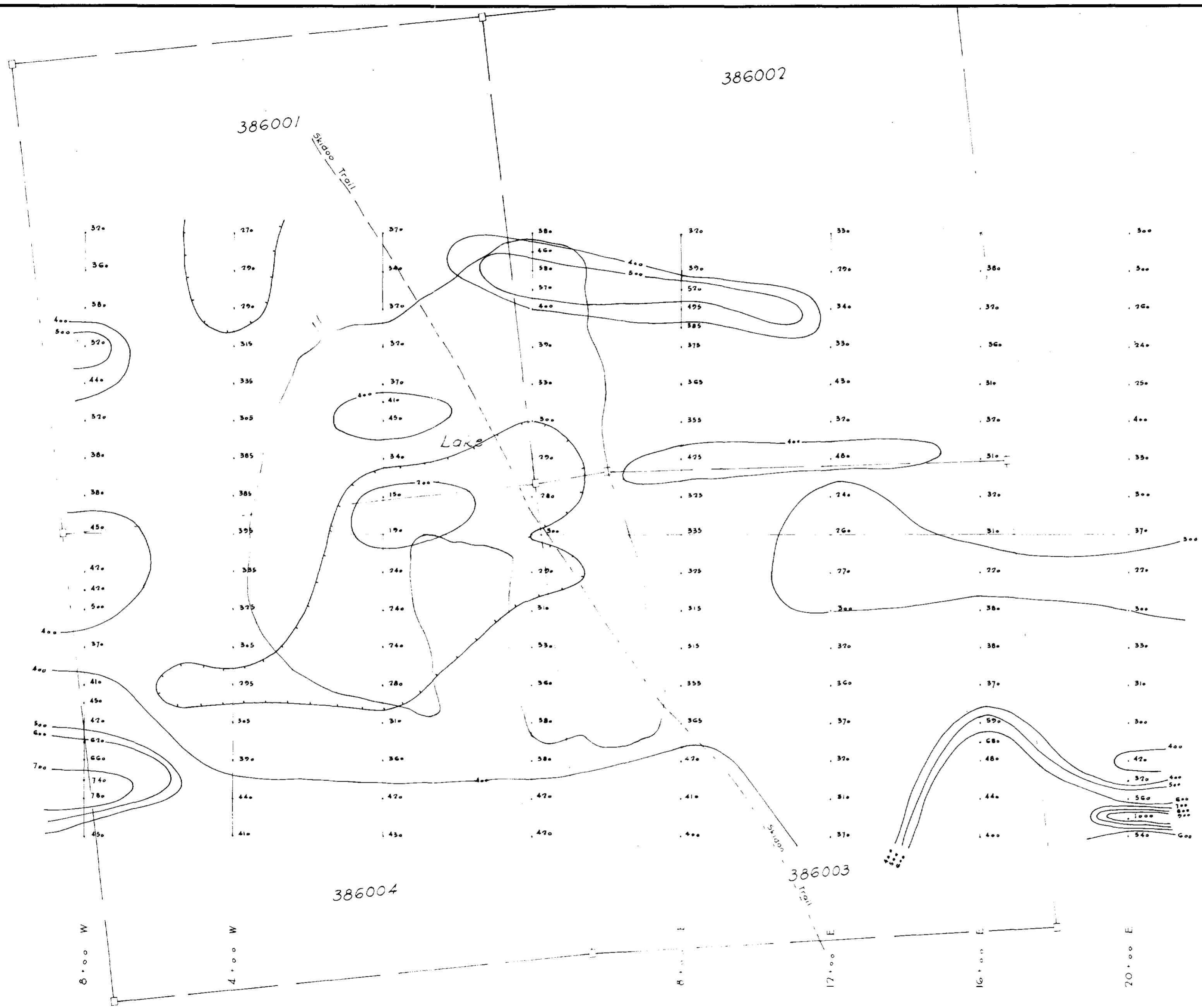
RADEM DIP ANGLE
SWAYZE PROJECT

GROUP 1
ONTARIO

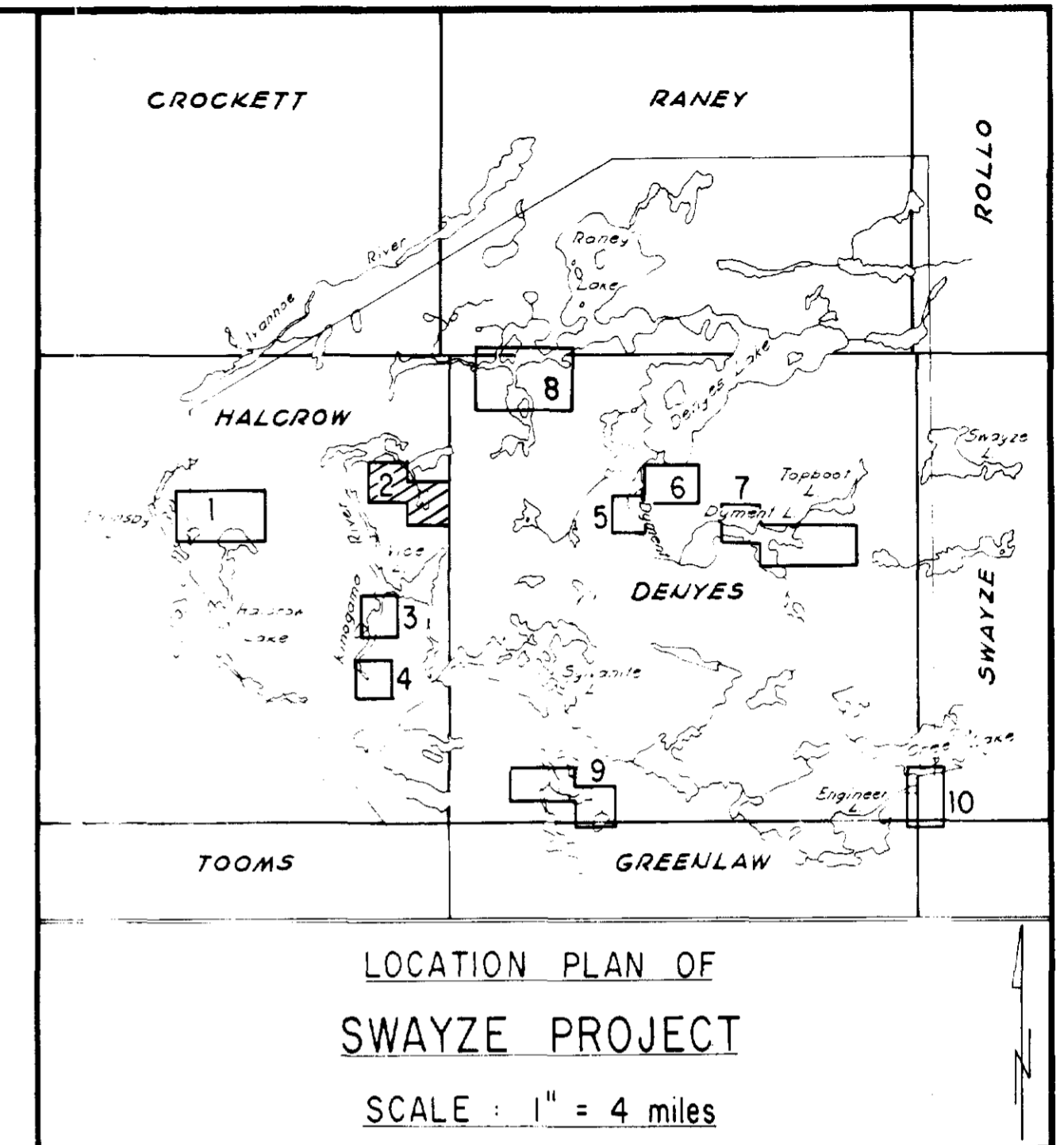
SCALE: 1" = 200'

DATE: AUG. 1975





- BASE LINE



LOCATION PLAN OF
SWAYZE PROJECT
SCALE : 1" = 4 miles

2.2032

MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

**MAGNETOMETER SURVEY
SWAYZE PROJECT**

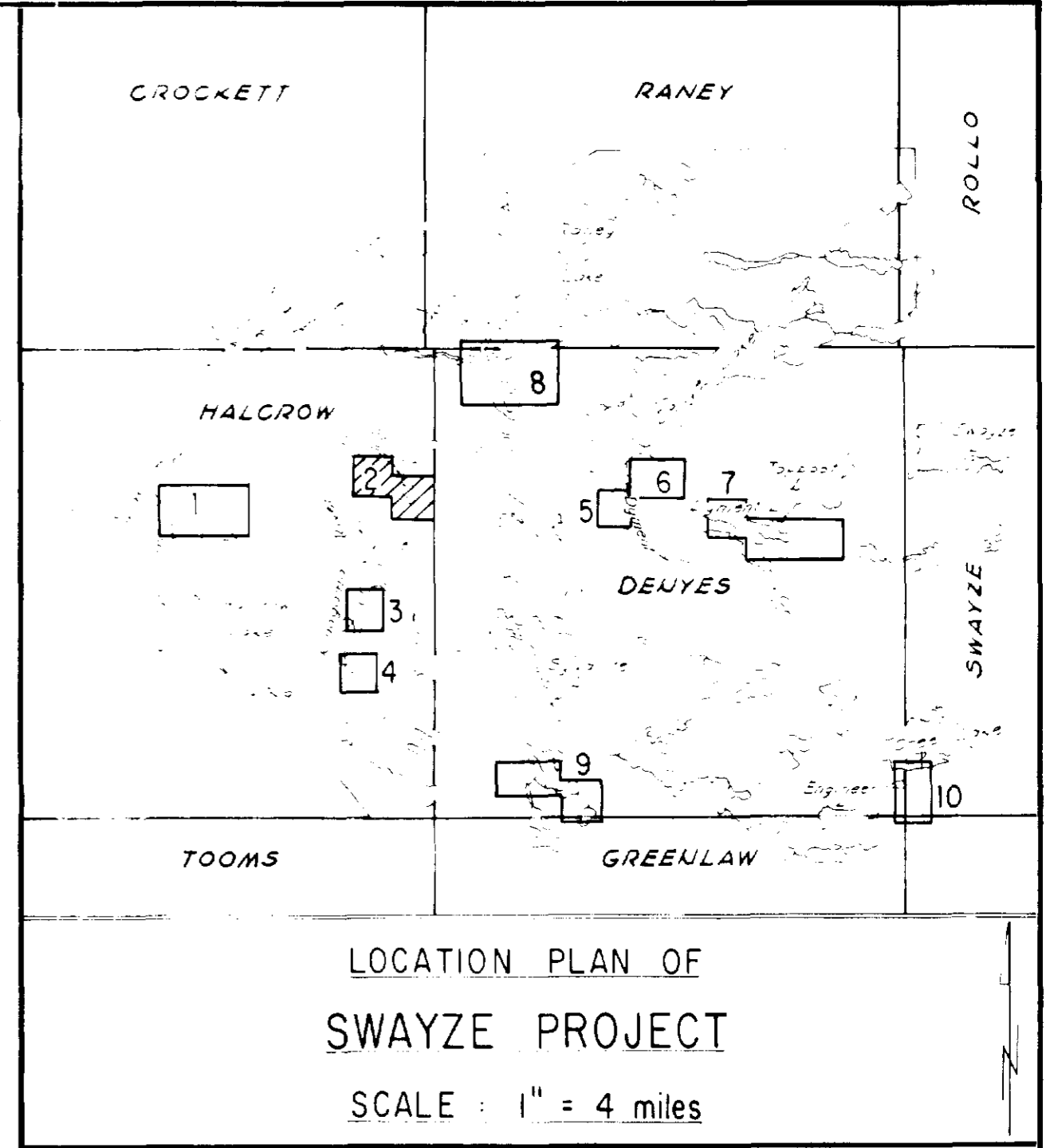
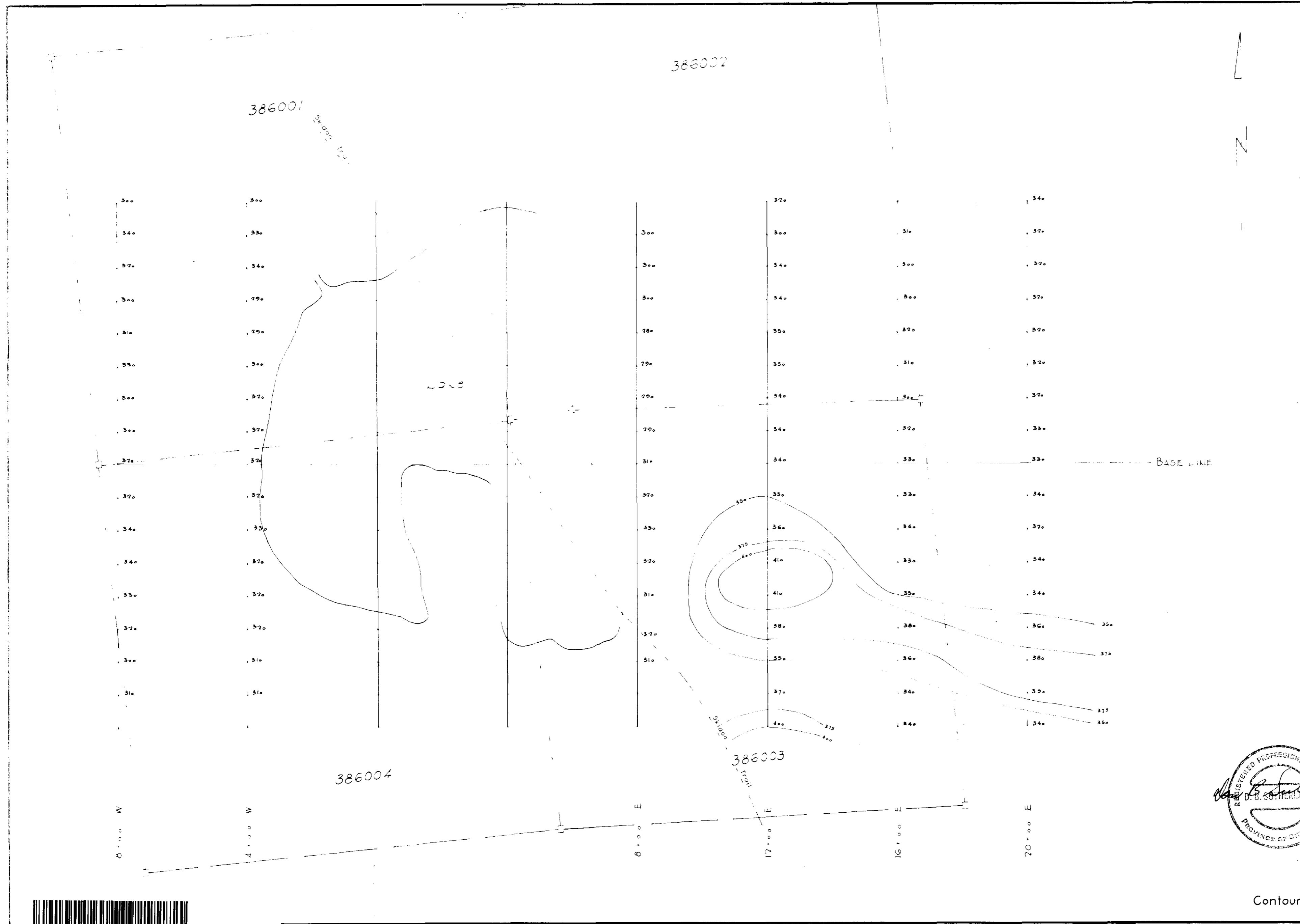
**GROUP 2
ONTARIO**



Contour Interval : 100 ♂

SCALE : 1" = 200'	TWP. : HALCROW
DATE : OCT 1975	MAP No. : 75-050006





2.2032

MATTAGAMI LAKE MINES LTD
EXPLORATION DIVISION

**RADEM FIELD STRENGTH SURVEY
SWAYZE PROJECT**

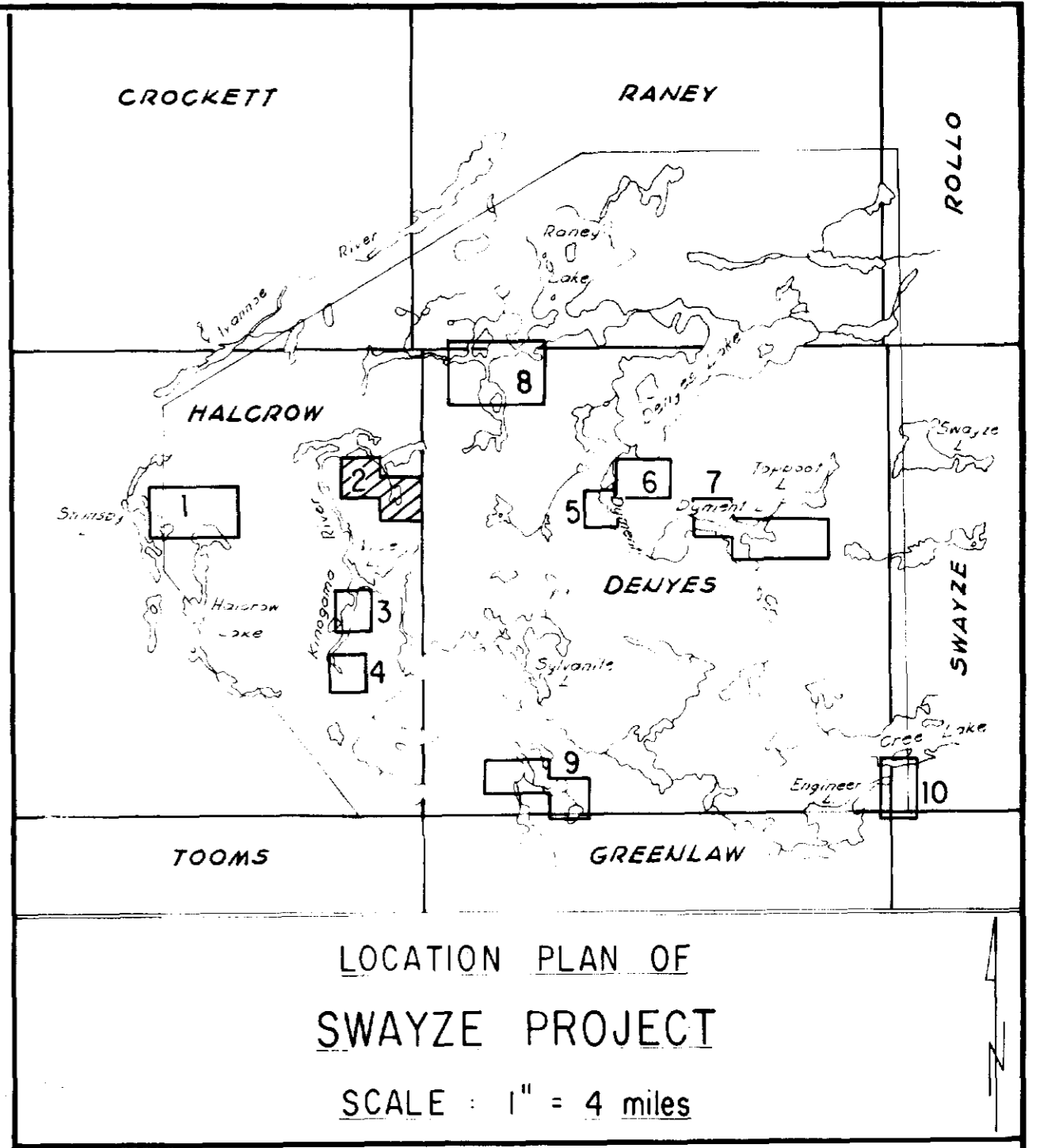
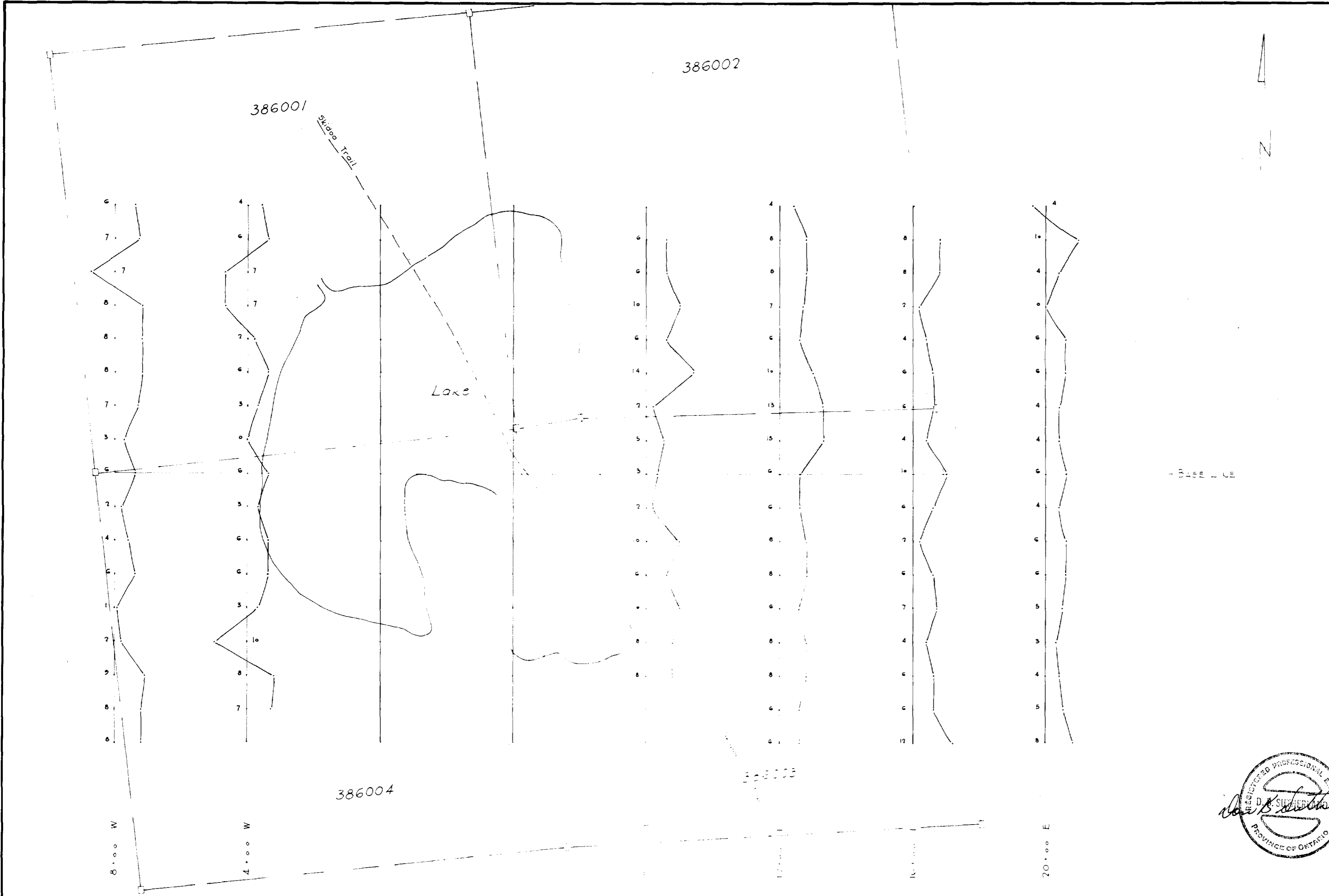
**GROUP 2
ONTARIO**

SCALE: 1" = 200'
DATE: OCT. 1975

TWP.: HALCROW
MAP No.: 75-050007

Contour Interval: 25'



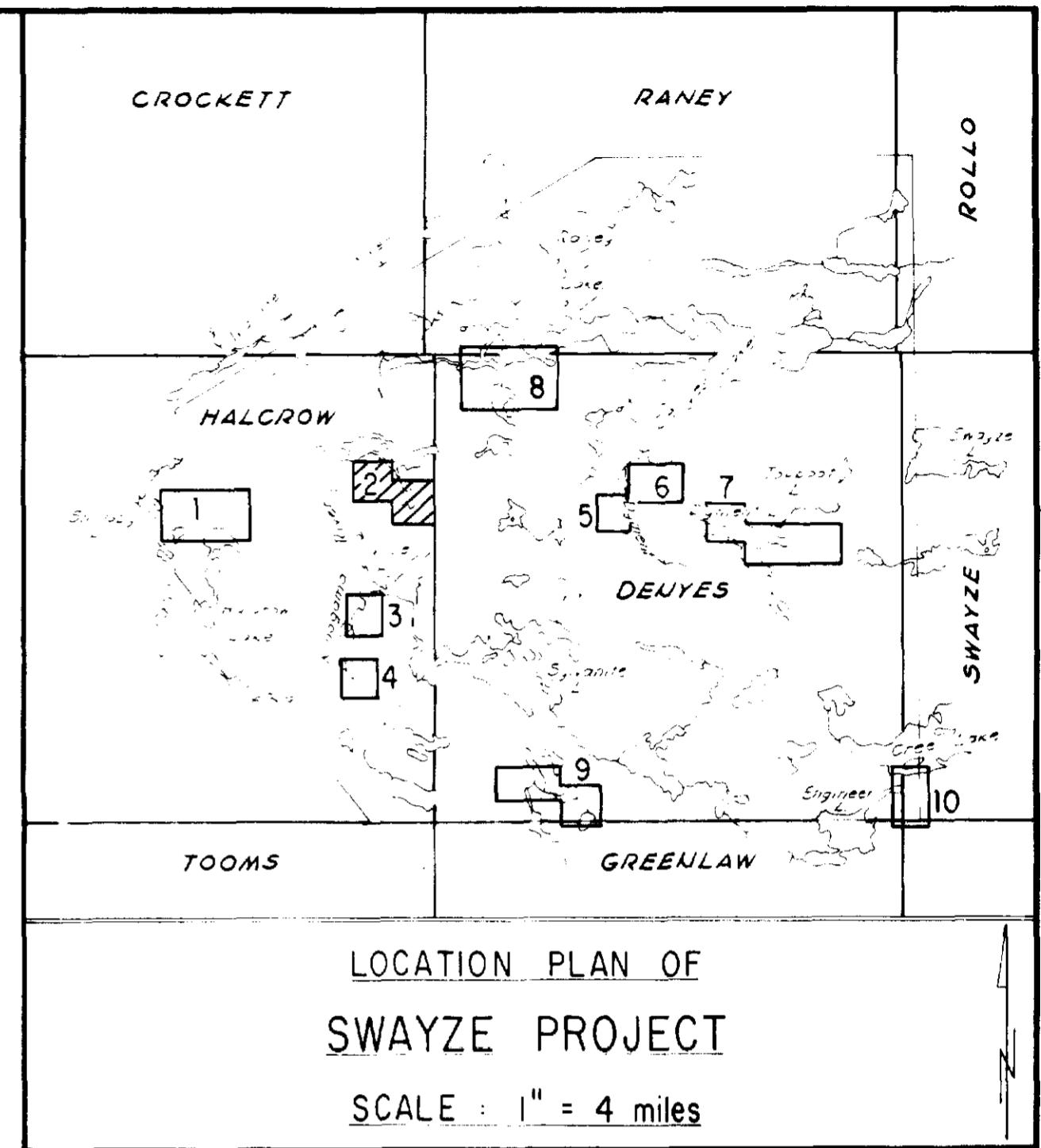
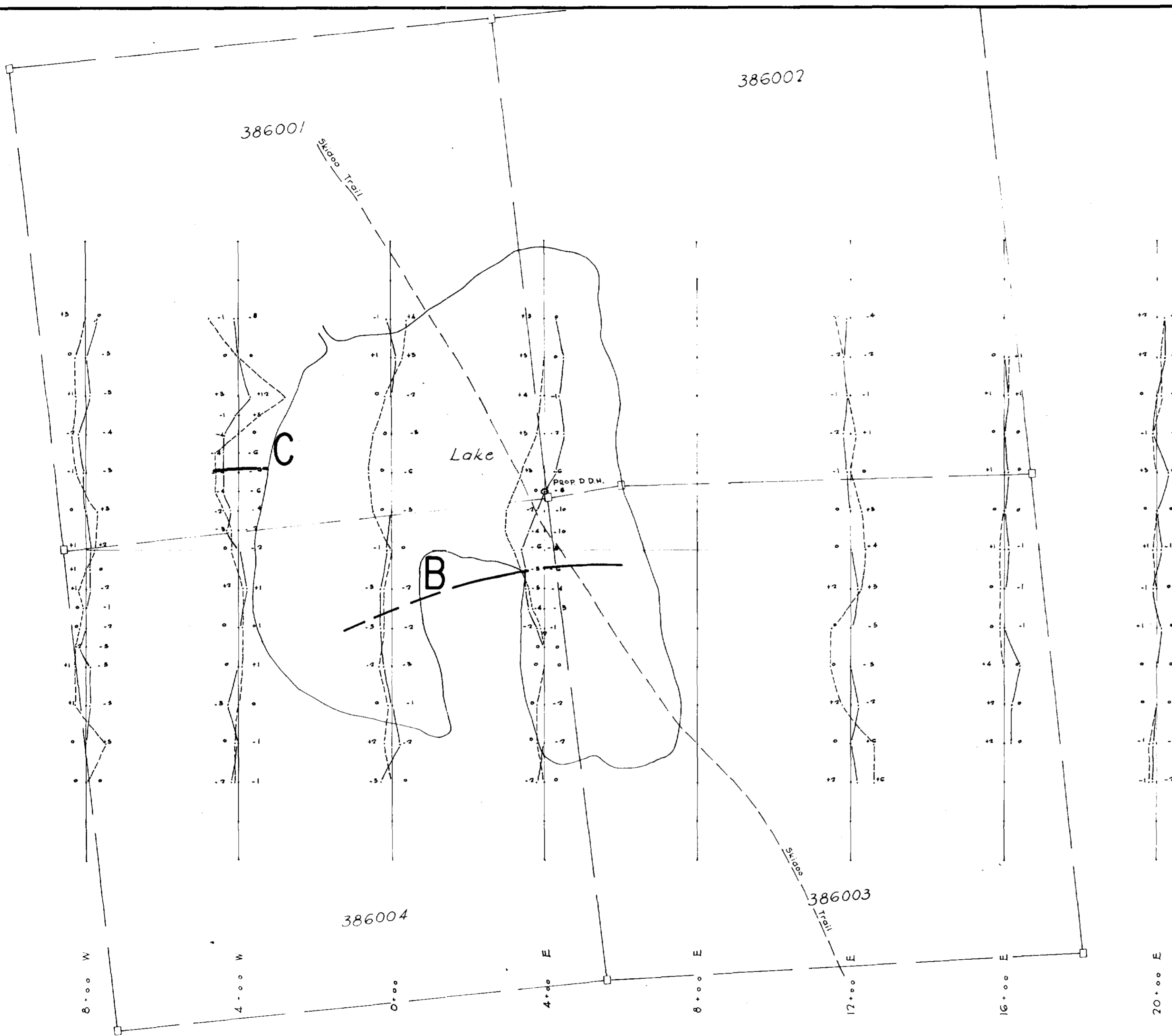


2.2032

MATTAGAMI LAKE MINES LTD. EXPLORATION DIVISION	
RADEM DIP ANGLE SURVEY SWAYZE PROJECT	
GROUP 2 ONTARIO	
SCALE: 1" = 20'	TWP: HALCROW
DATE: OCT 1975	MAP No.: 75-050006

Scale: 1" = 20'

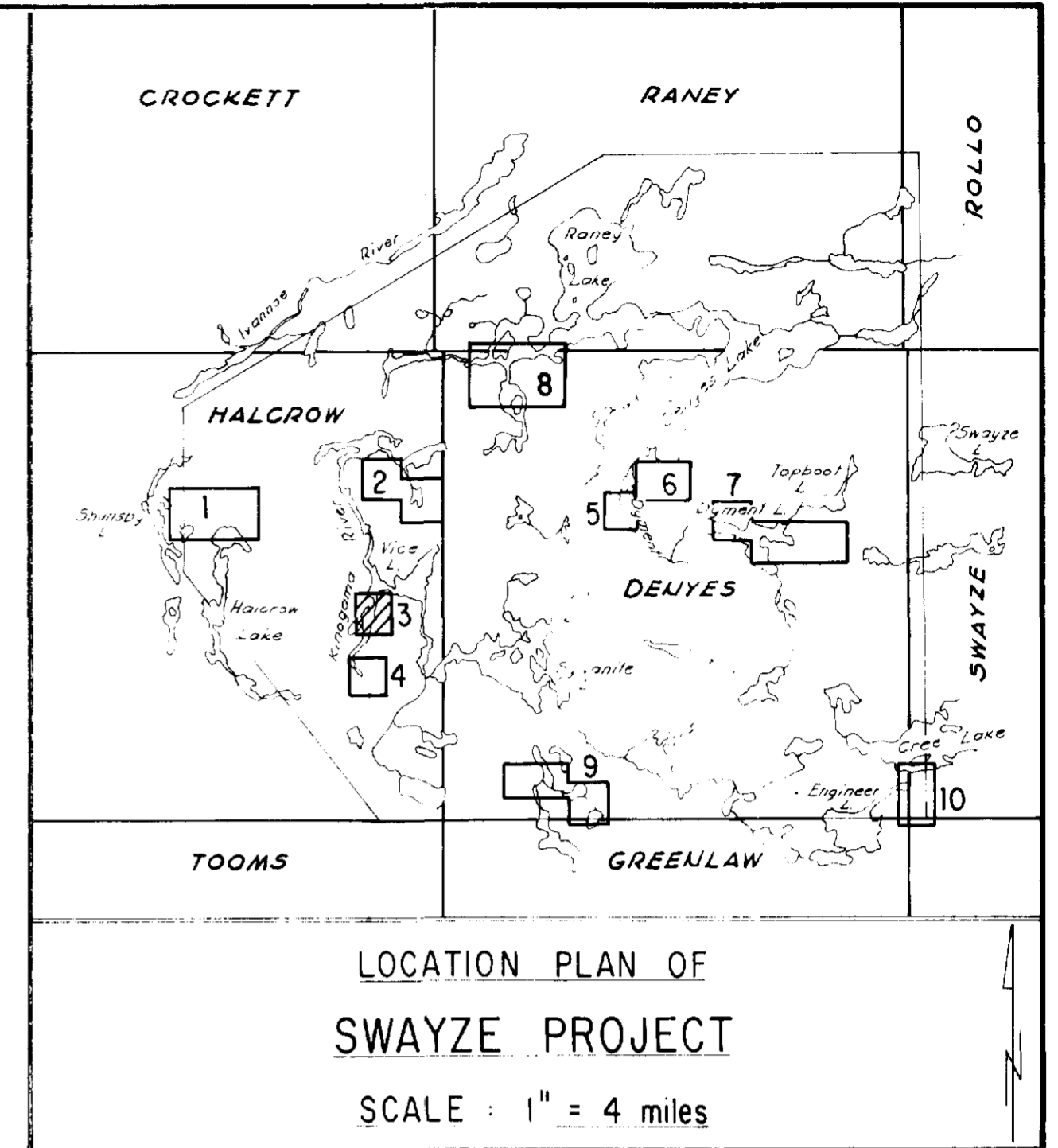
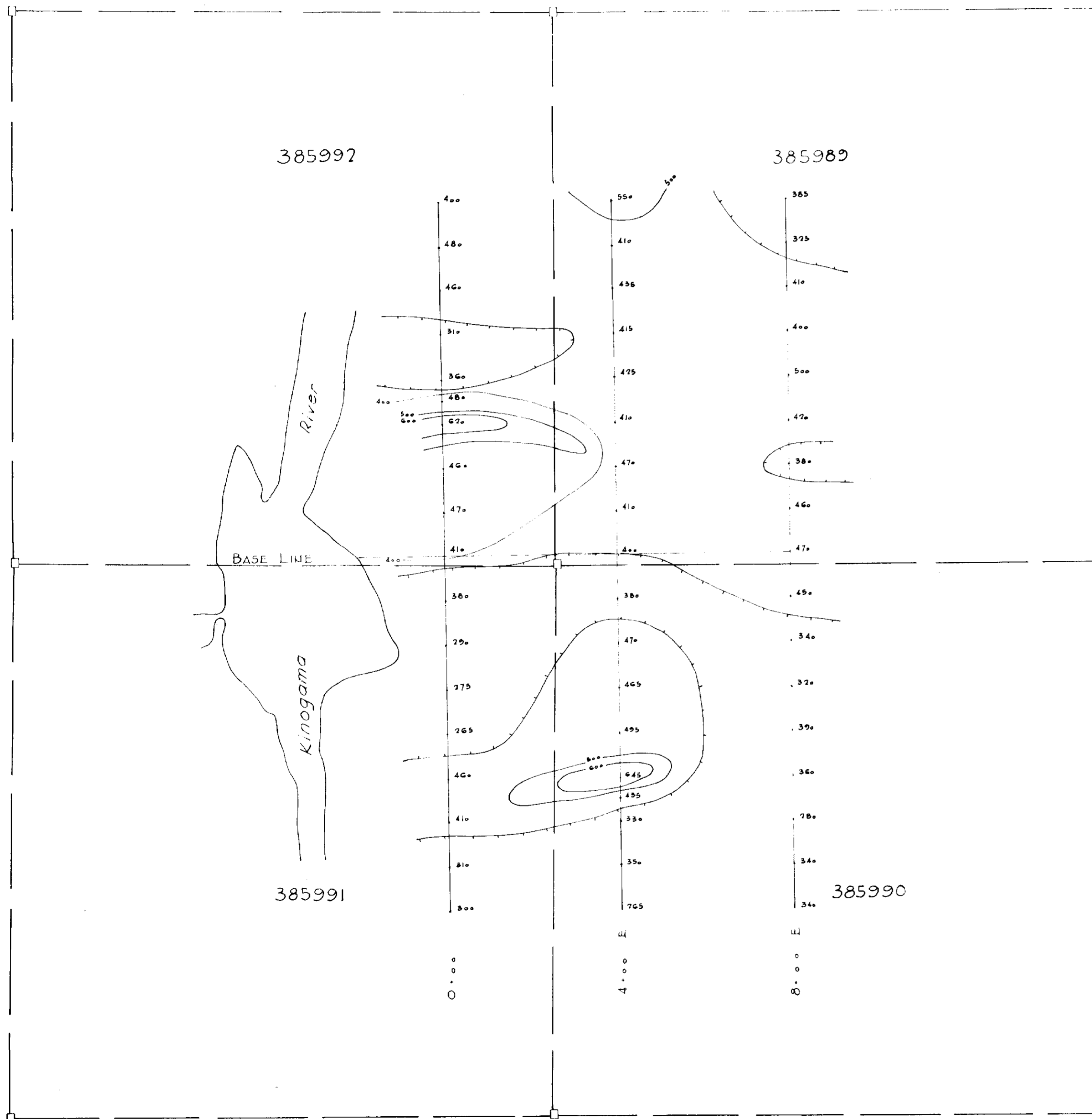




Out of Phase on right of line
 In Phase on left of line
 Coil spacing : 400 ft.
 Frequency : 1600 Hz.
 ——— E.M. Conductor

2.2032	
MATTAGAMI LAKE MINES LTD. EXPLORATION DIVISION	
EM-17 SURVEY SWAYZE PROJECT	
<u>GROUP 2</u> ONTARIO	
SCALE : 1" = 200'	TWP : HALCROW
DATE : OCT. 1975	MAP No. : 75-050009

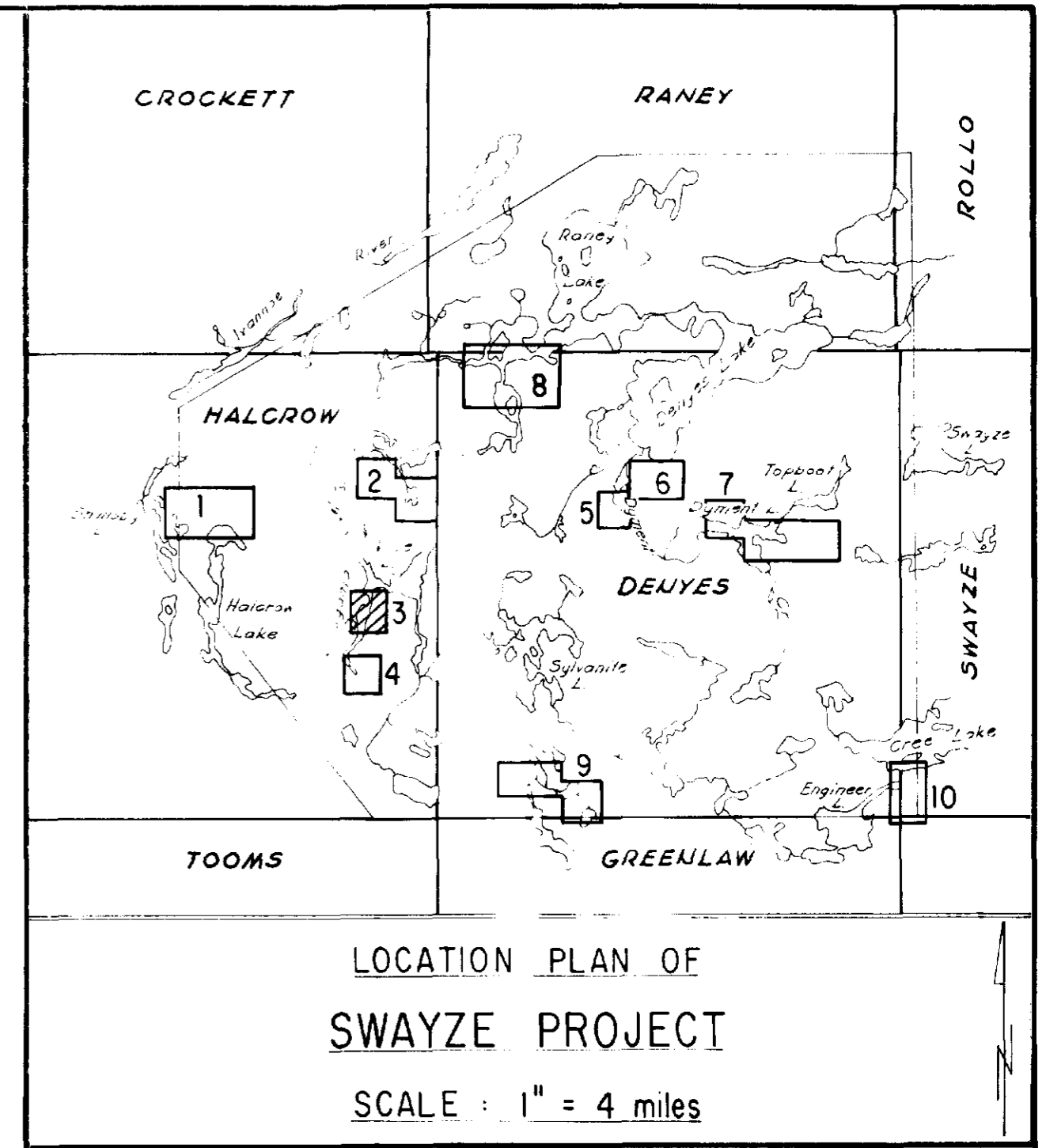
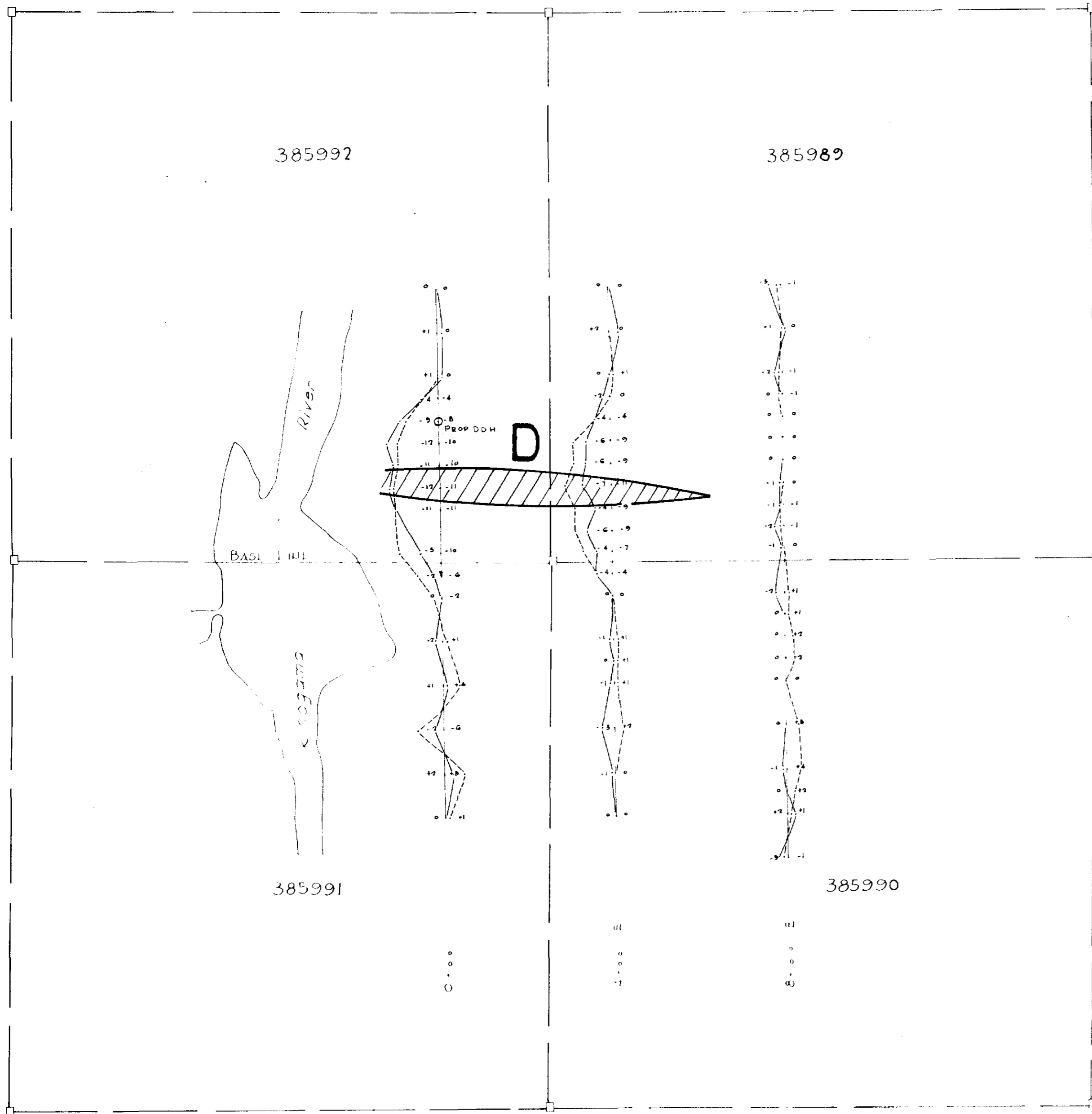




2.2032

MATTAGAMI LAKE MINES LTD EXPLORATION DIVISION	
MAGNETOMETER SURVEY SWAYZE PROJECT	
GROUP 3	
ONTARIO	
SCALE : 1" = 200'	TWP : HALCROW
DATE : OCT 1975	MAP No. : 75-050010





LEGEND

- Out-of-Phase on right of line
- In Phase on left of line
- Coil spacing : 400 ft.
- Frequency : 1600 Hz
- E.M. Conductor



2.2032

MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

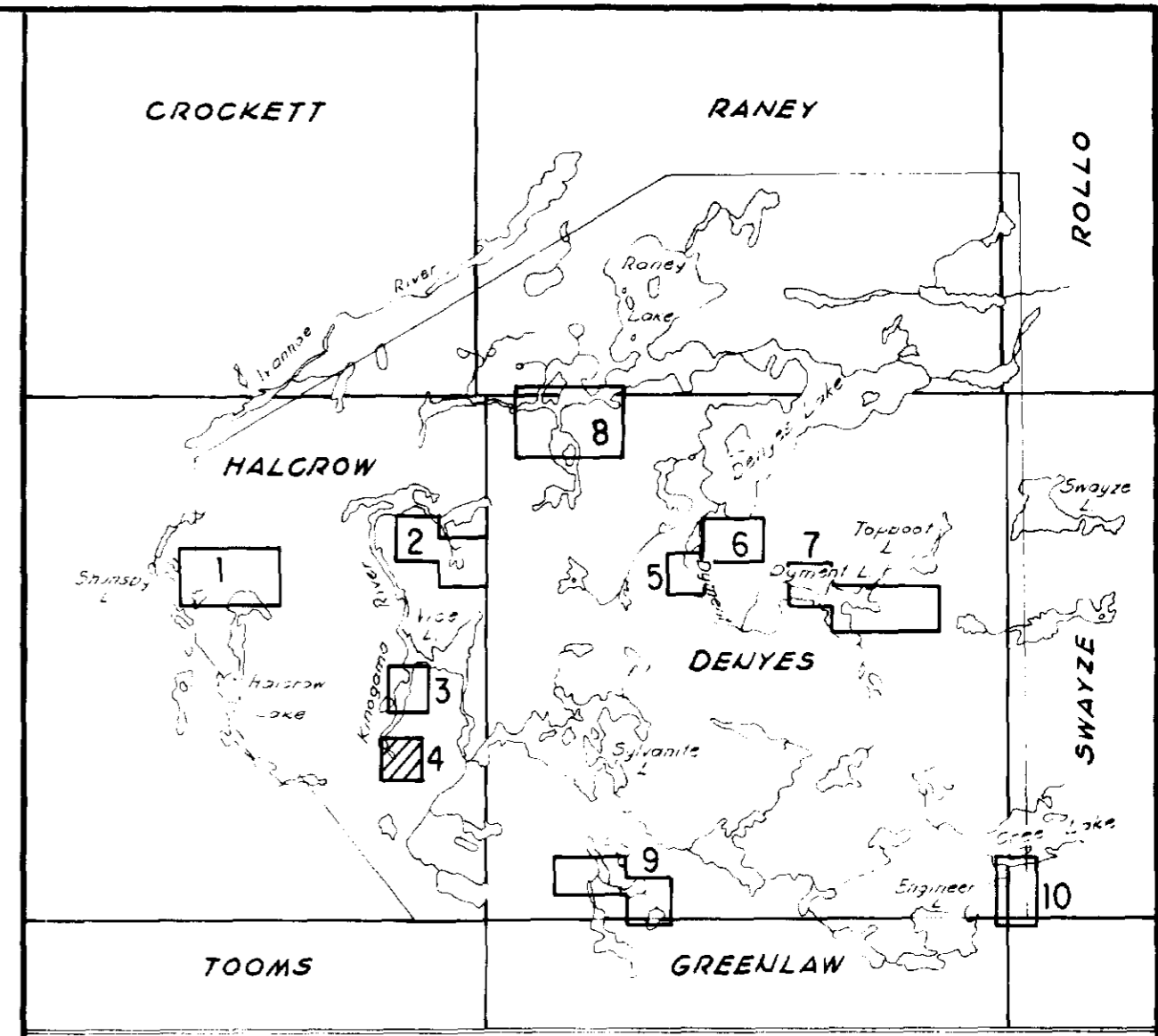
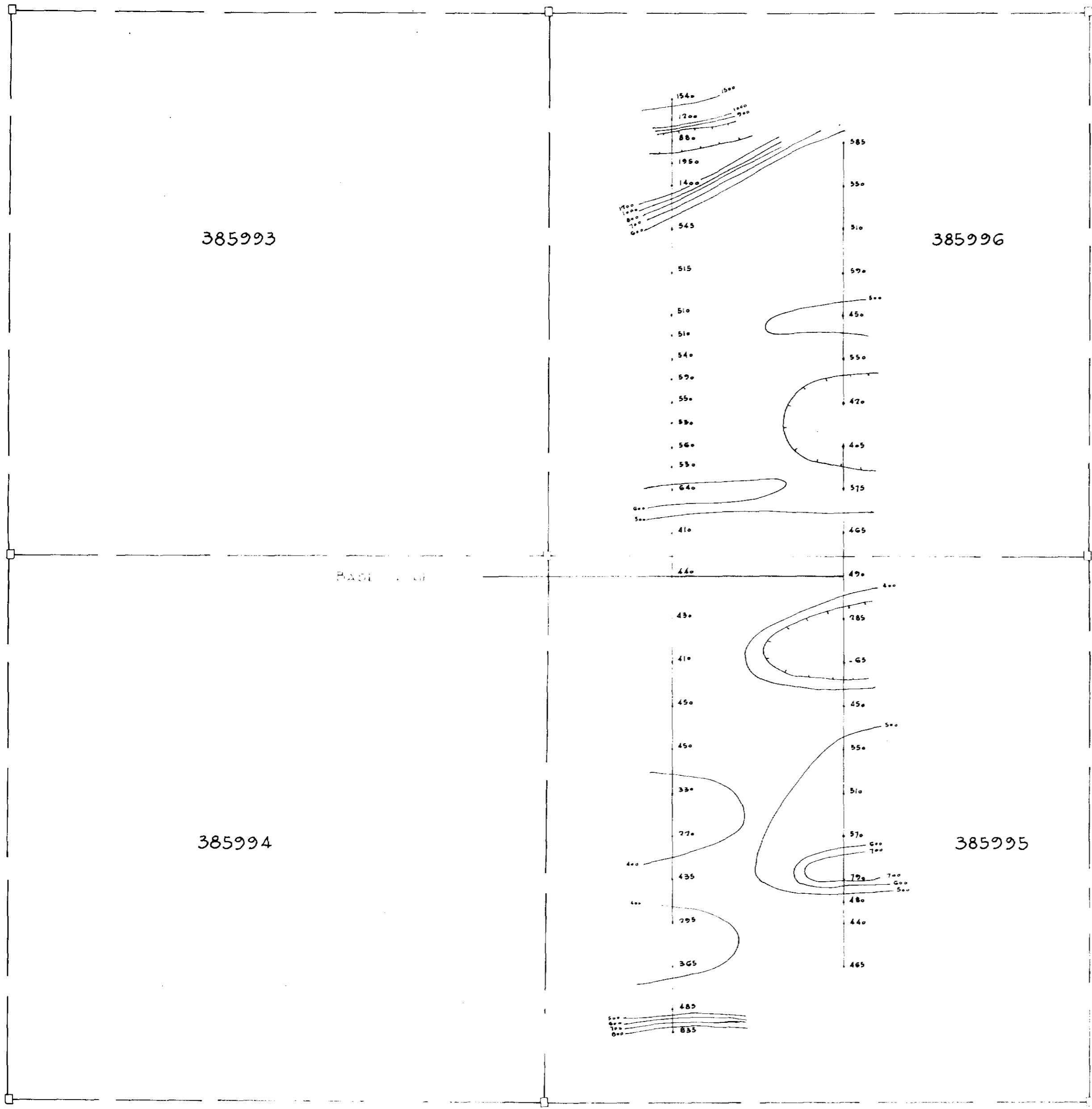
EM-17 SURVEY
SWAYZE PROJECT

GROUP 3
ONTARIO

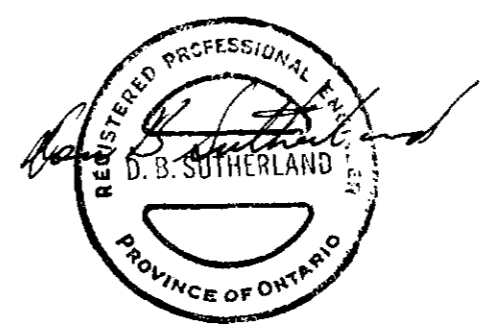
SCALE : 1" = 200'
DATE : OCT 1975

TWP : HALCROW
MAP NO : 75-050011



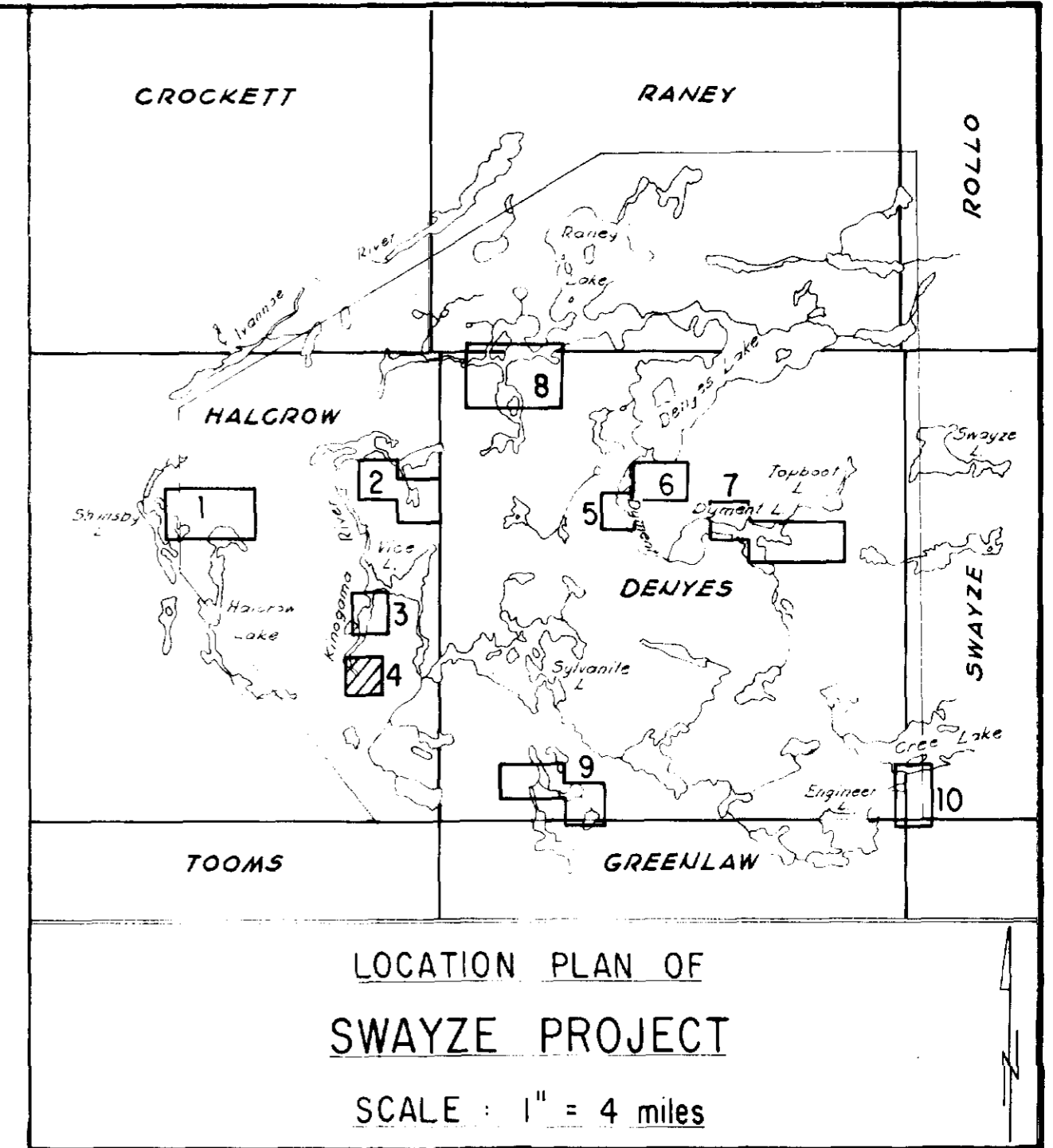
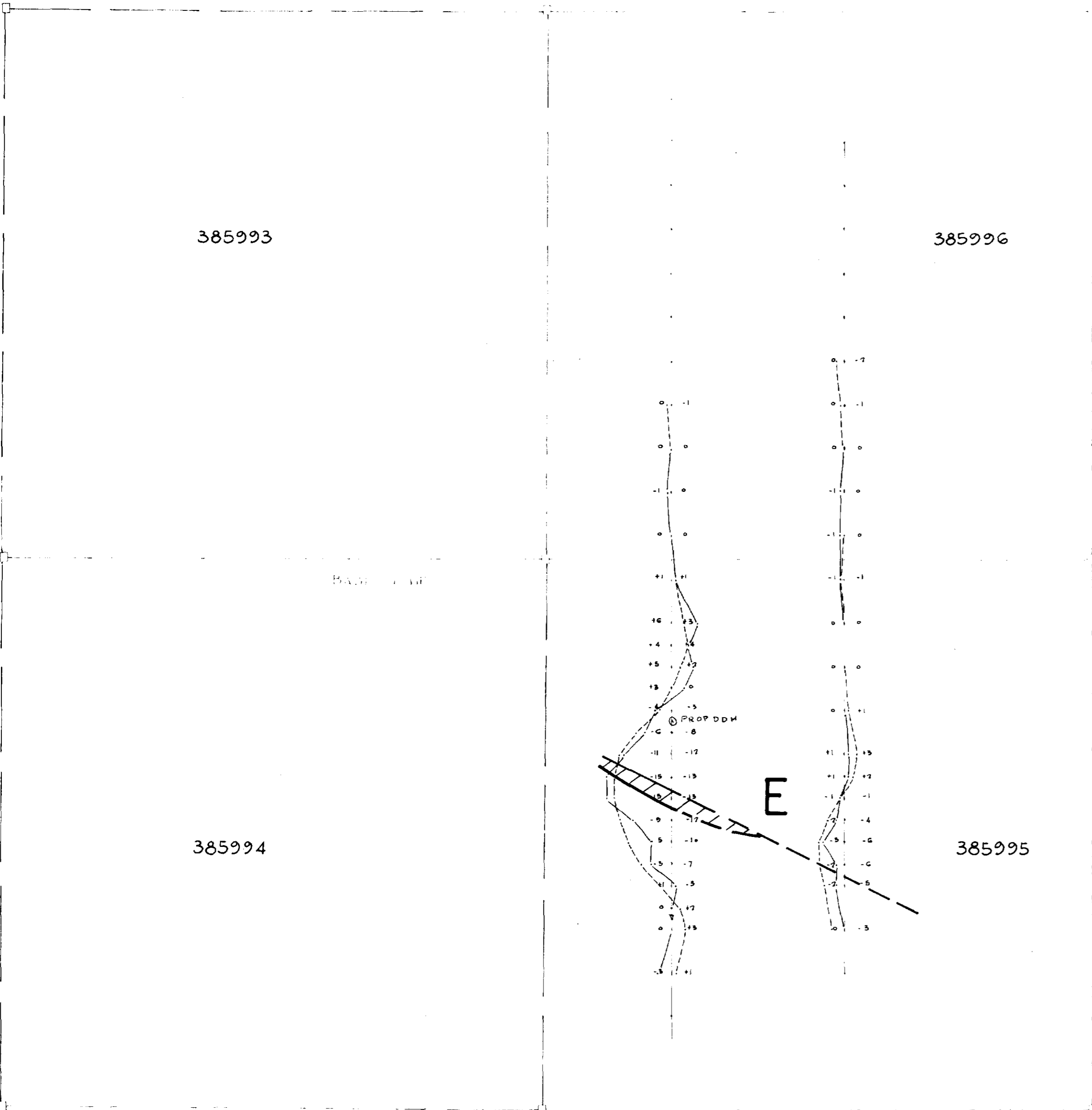


LOCATION PLAN OF
SWAYZE PROJECT
SCALE : 1" = 4 miles



MILLICAM LAKE MINES LTD. EXPLORATION DIVISION	
MAGNETOMETER SURVEY SWAYZE PROJECT GROUP 4 ONTARIO	
SCALE : 1" = 200'	TWP : HALGROW
DATE : OCT. 1975	MA# No : 75-050012





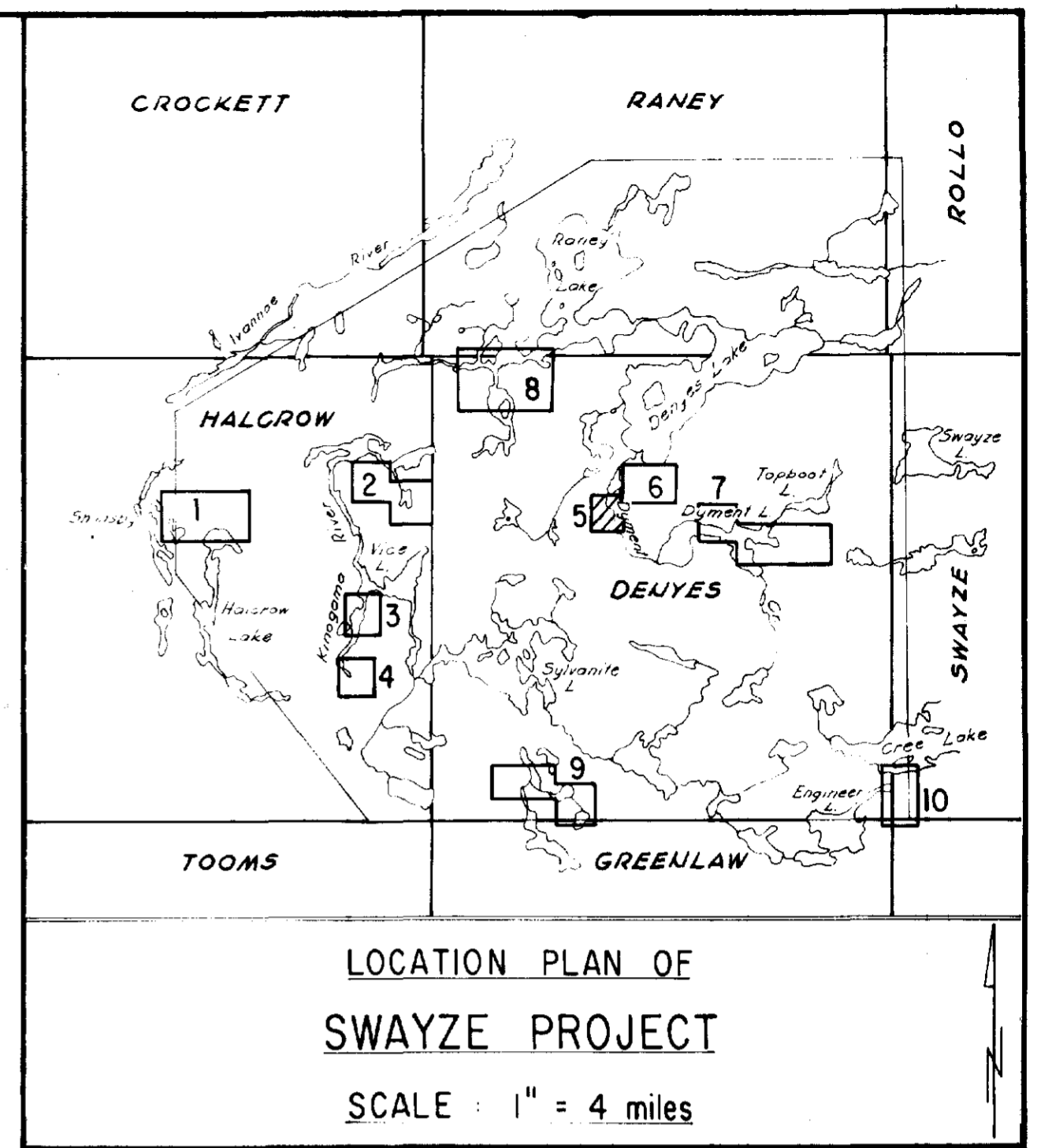
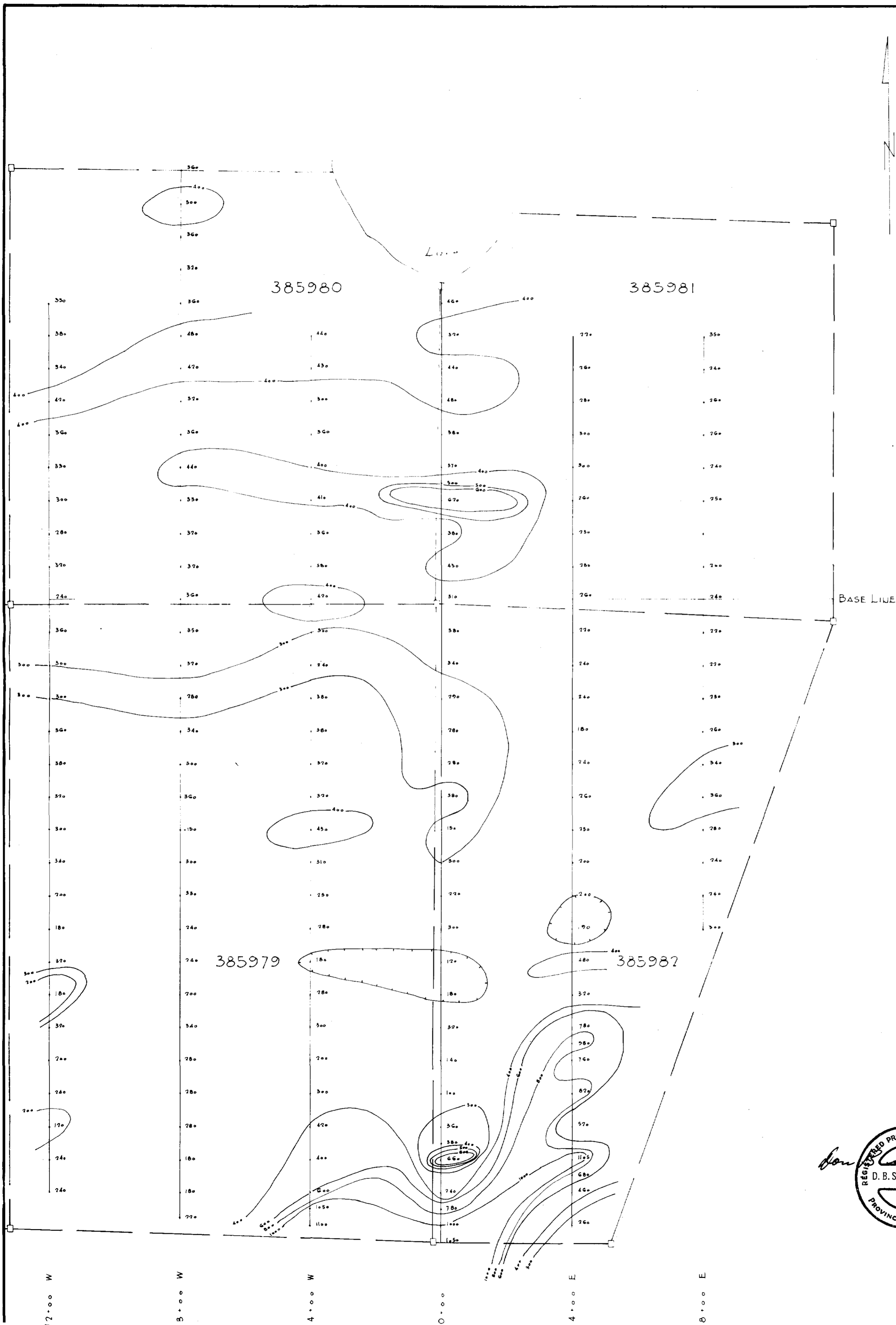
LEGEND
 Out-of-Phase on right of line
 In-Phase on left of line
 Coil spacing : 400 ft.
 Frequency : 1600 Hz
 ——— E.M. Conductor



2.2032

MATTIOLI & SONS LTD. EXETER, ENGLAND	
EM-17 SURVEY SWAYZE PROJECT	
<u>GROUP 4</u> ONTARIO	
SCALE: 1" = 200'	DATE: OCT. 1974
E.M. HALCROW	NO. 1161 75-050013





D. B. SUTHERLAND

2.2032

MATTAGAMI LAKE MINES LTD.
 EXPLORATION DIVISION

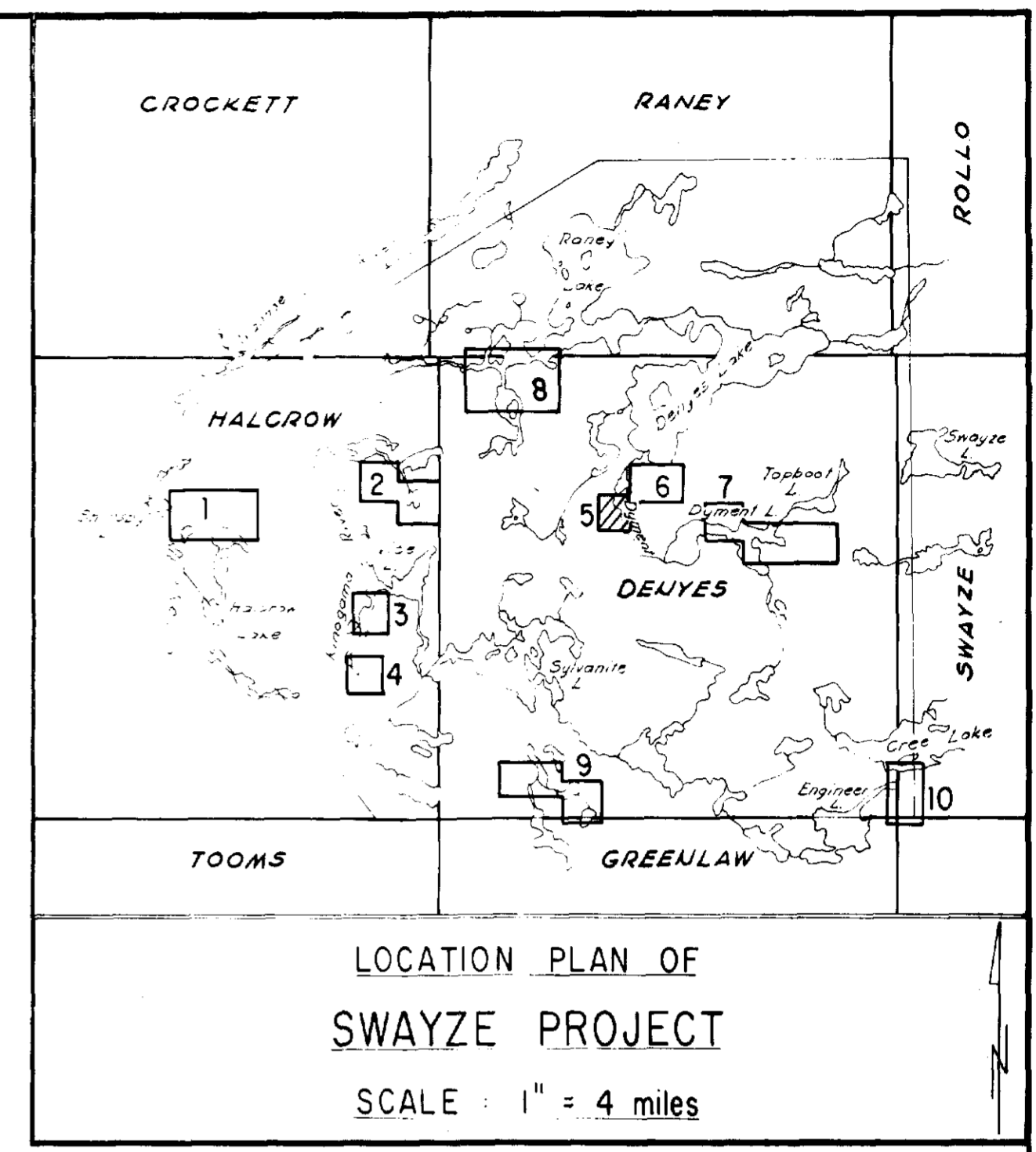
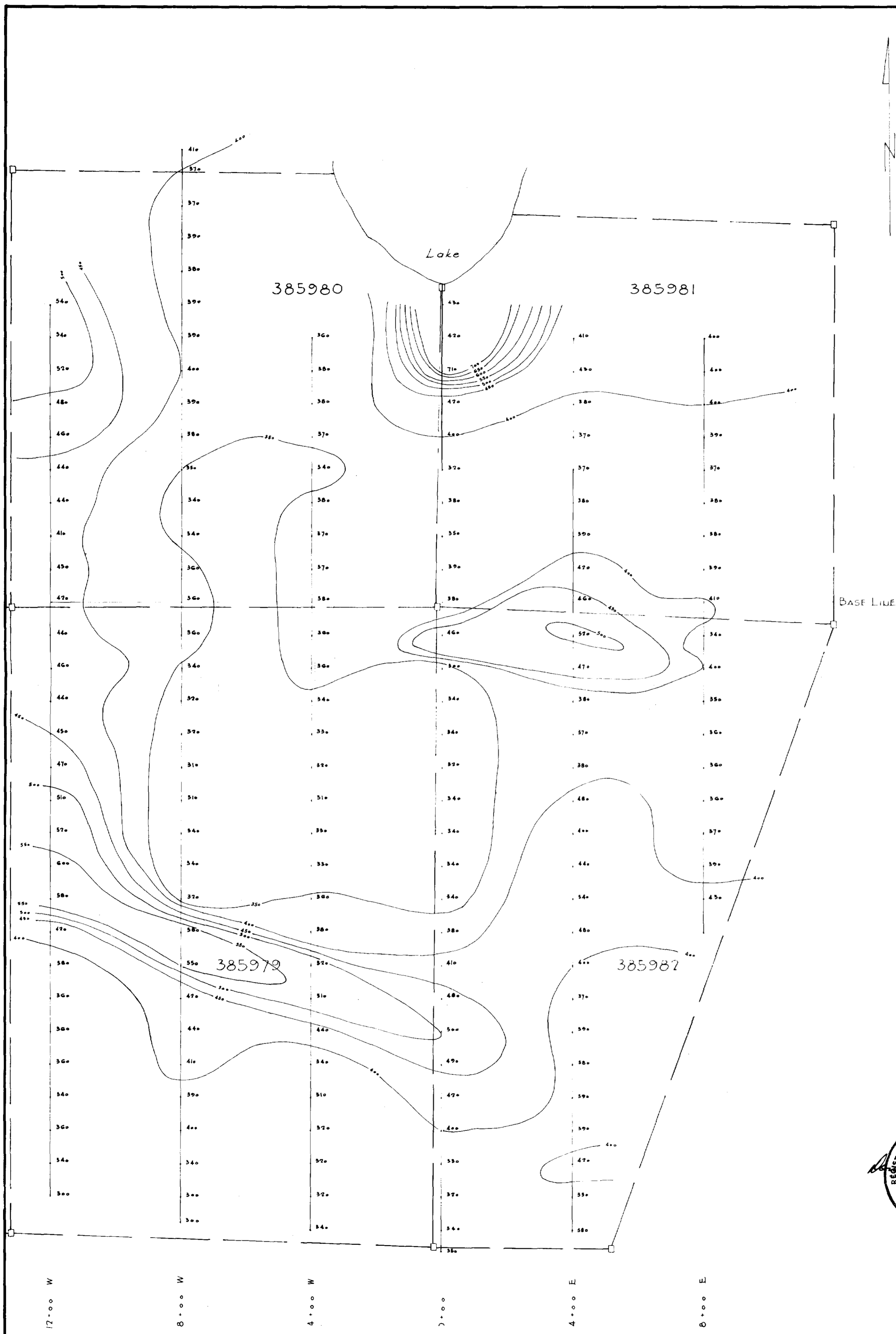
MAGNETOMETER SURVEY
SWAYZE PROJECT

GROUP 5
 ONTARIO

SCALE : 1" = 200'	TWP : DENYES
DATE : OCT. 1975	MAP No. : 75-050014

Contour Interval : 100 Y





22032

MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

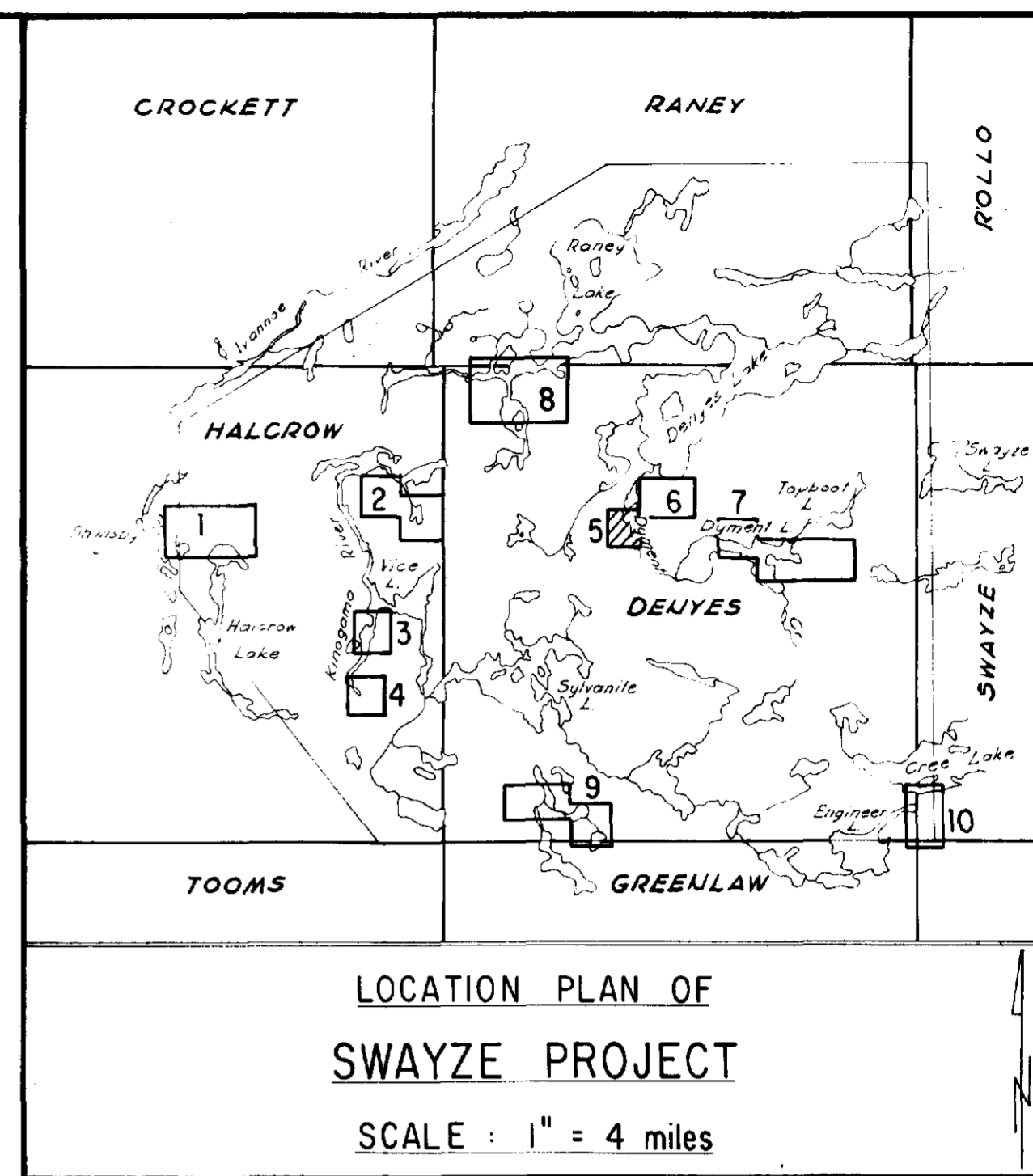
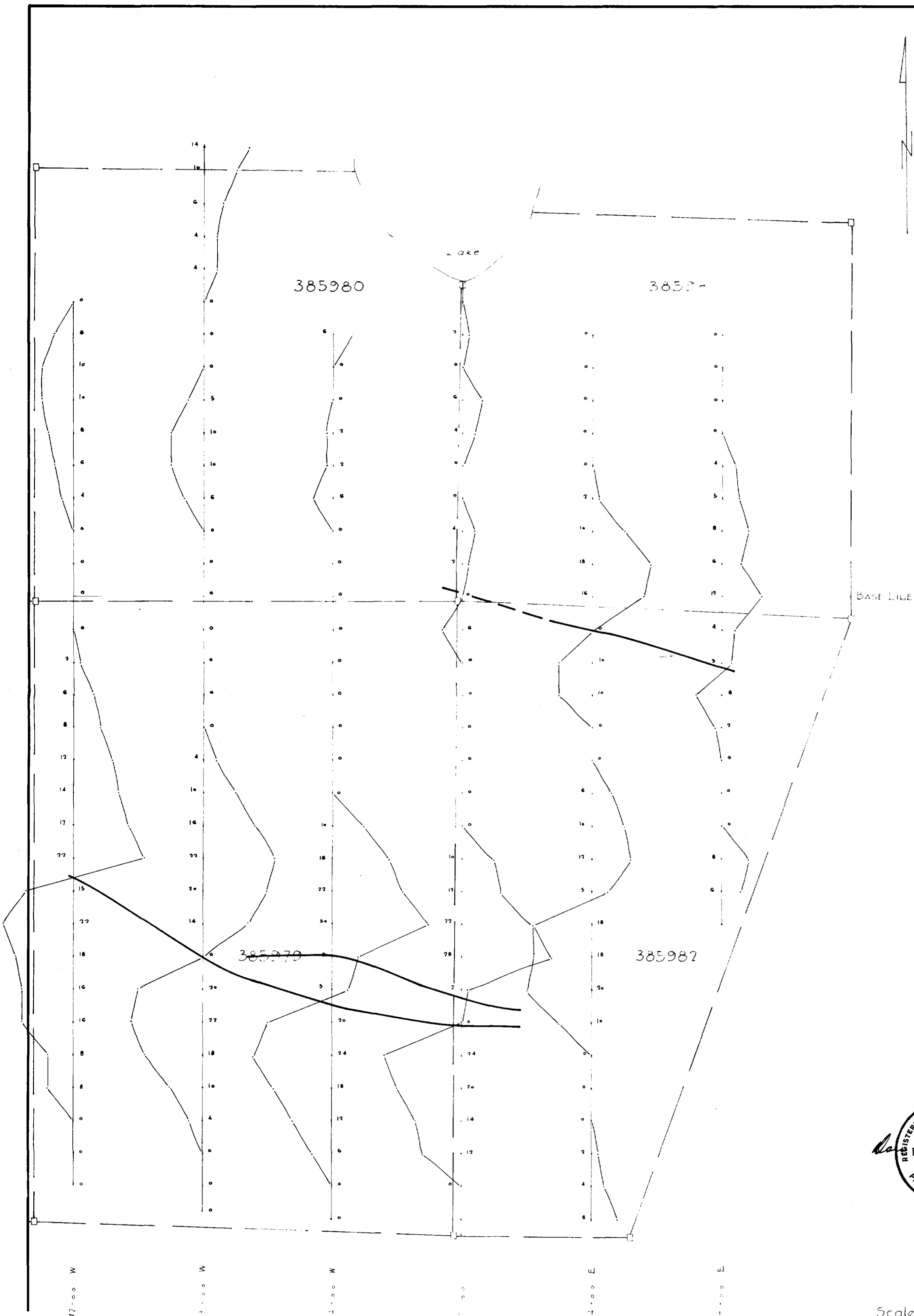
**RADEM FIELD STRENGTH SURVEY
SWAYZE PROJECT**

GROUP 5
ONTARIO

SCALE: 1" = 200'	T.M. DENYES
DATE: OCT 1975	MAP No.: 75-050015

Contour Interval: 50 %





2.2032

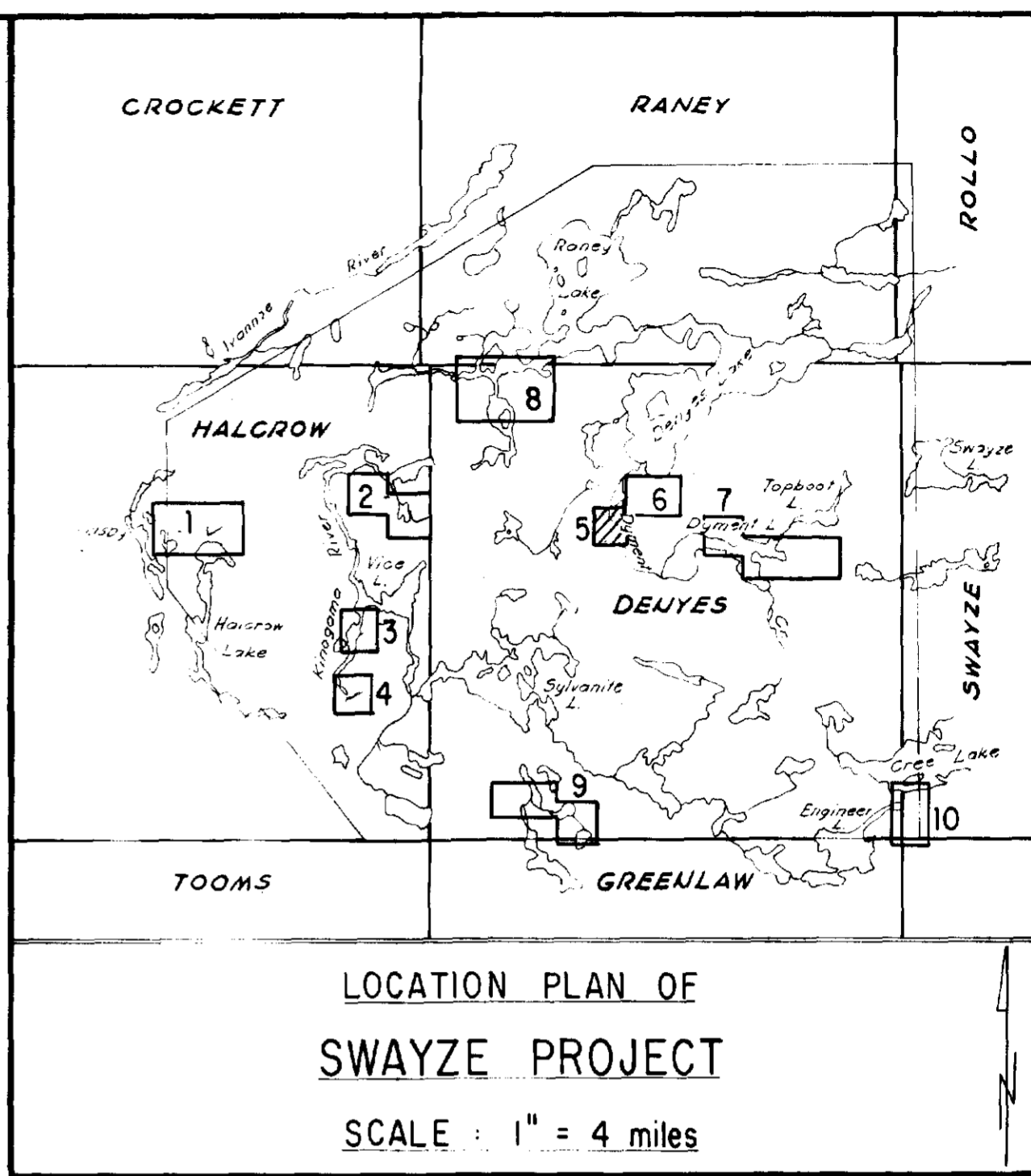
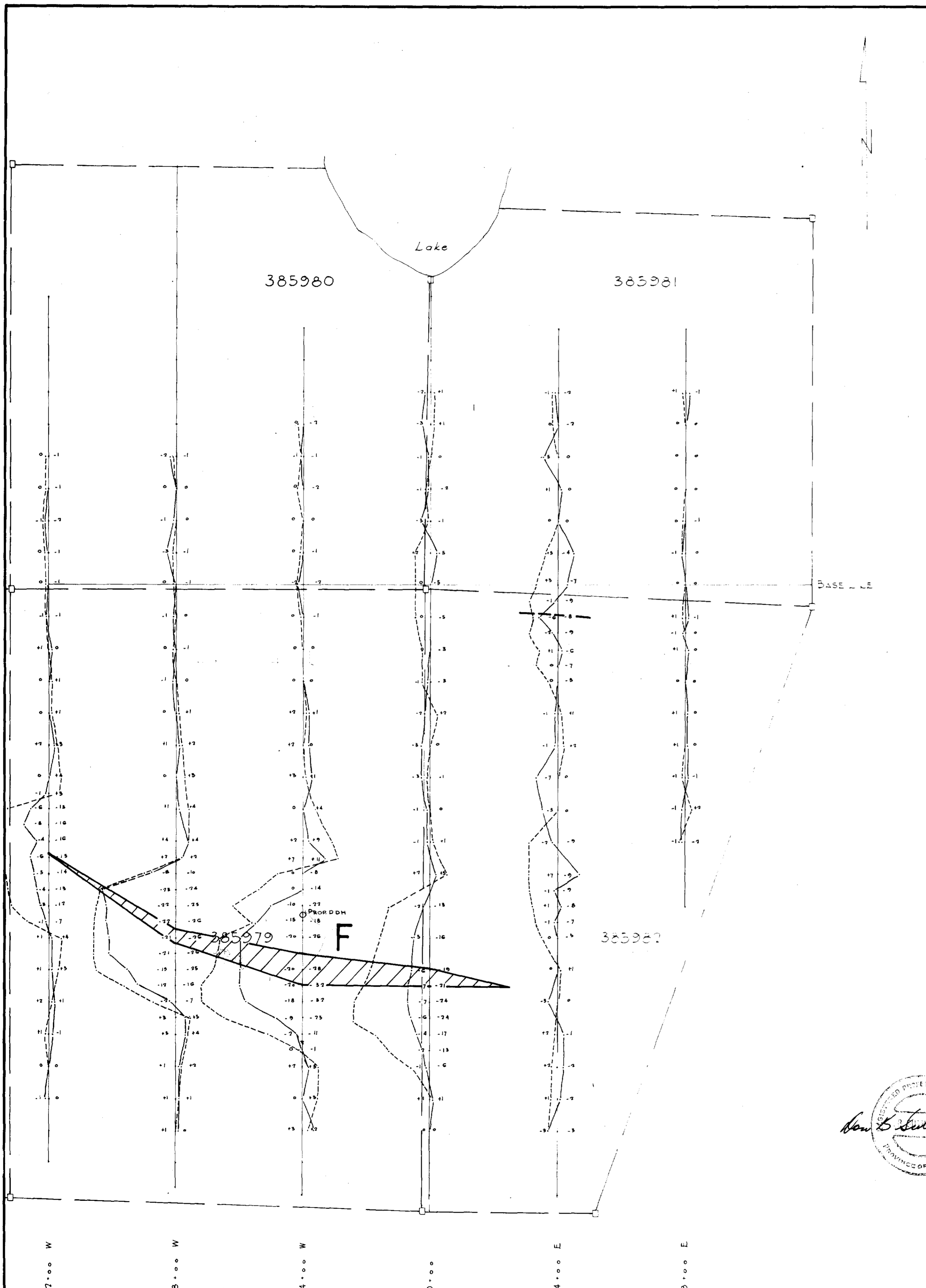
MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

RADEM DIP ANGLE SURVEY
SWAYZE PROJECT


GROUP 5
ONTARIO

Scale : 1" = 20'





LEGEND

Out of Phase on right of line
 In Phase on left of line
 Coil spacing : 400 ft.
 Frequency : 1600 Hz
 E.M. Conductor



2.2032

MATTAGAMI LAKE MINES LTD.
 EXPLORATION DIVISION

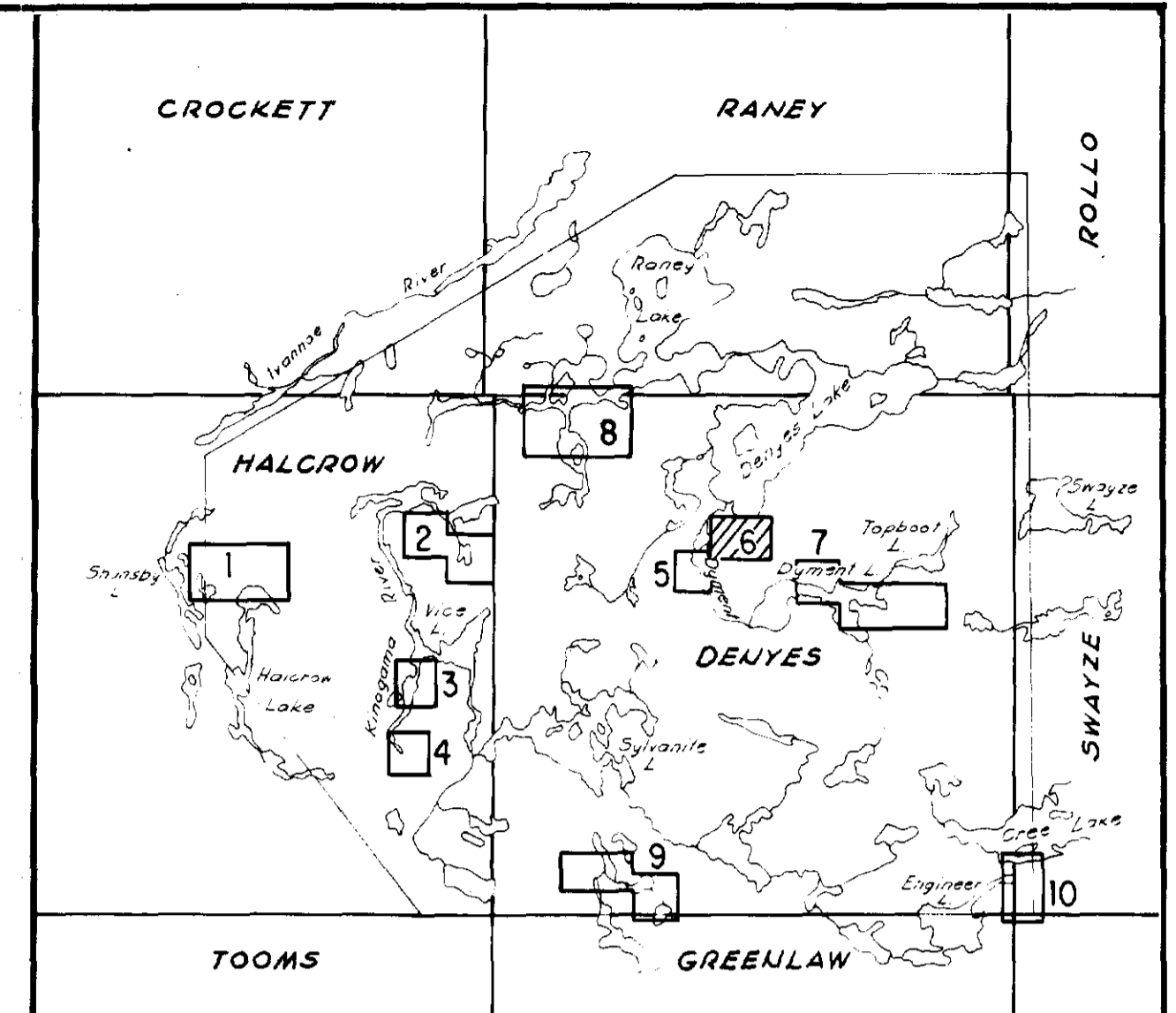
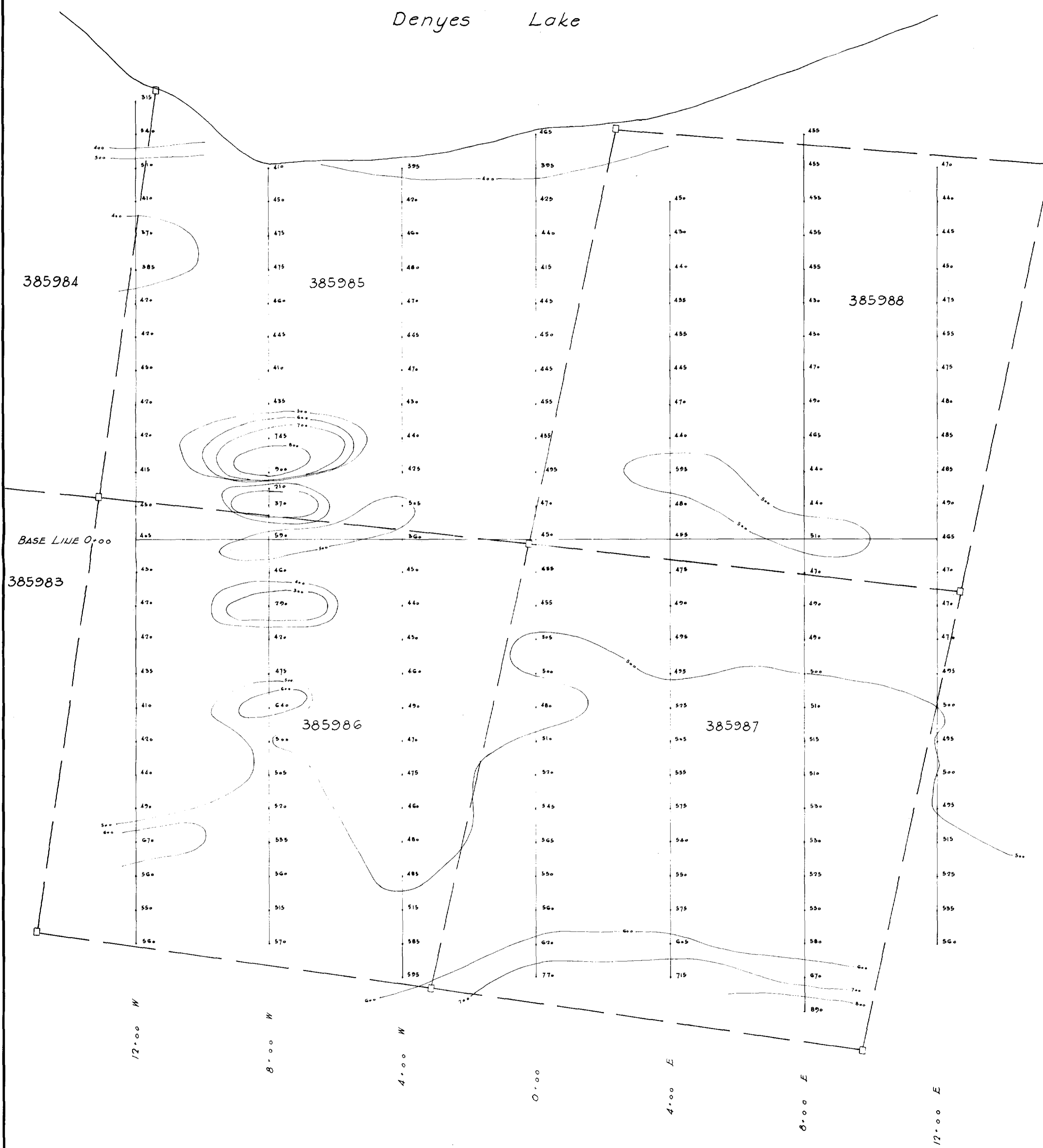
EM-17 SURVEY
SWAYZE PROJECT

GROUP 5
 ONTARIO

SCALE: 1" = 200'	TWP: DENYES
DATE: OCT. 1975	MAP No. 75-050017



Denyes Lake



LOCATION PLAN OF
SWAYZE PROJECT
SCALE : 1" = 4 miles



2.2032

MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

MAGNETOMETER SURVEY
SWAYZE PROJECT

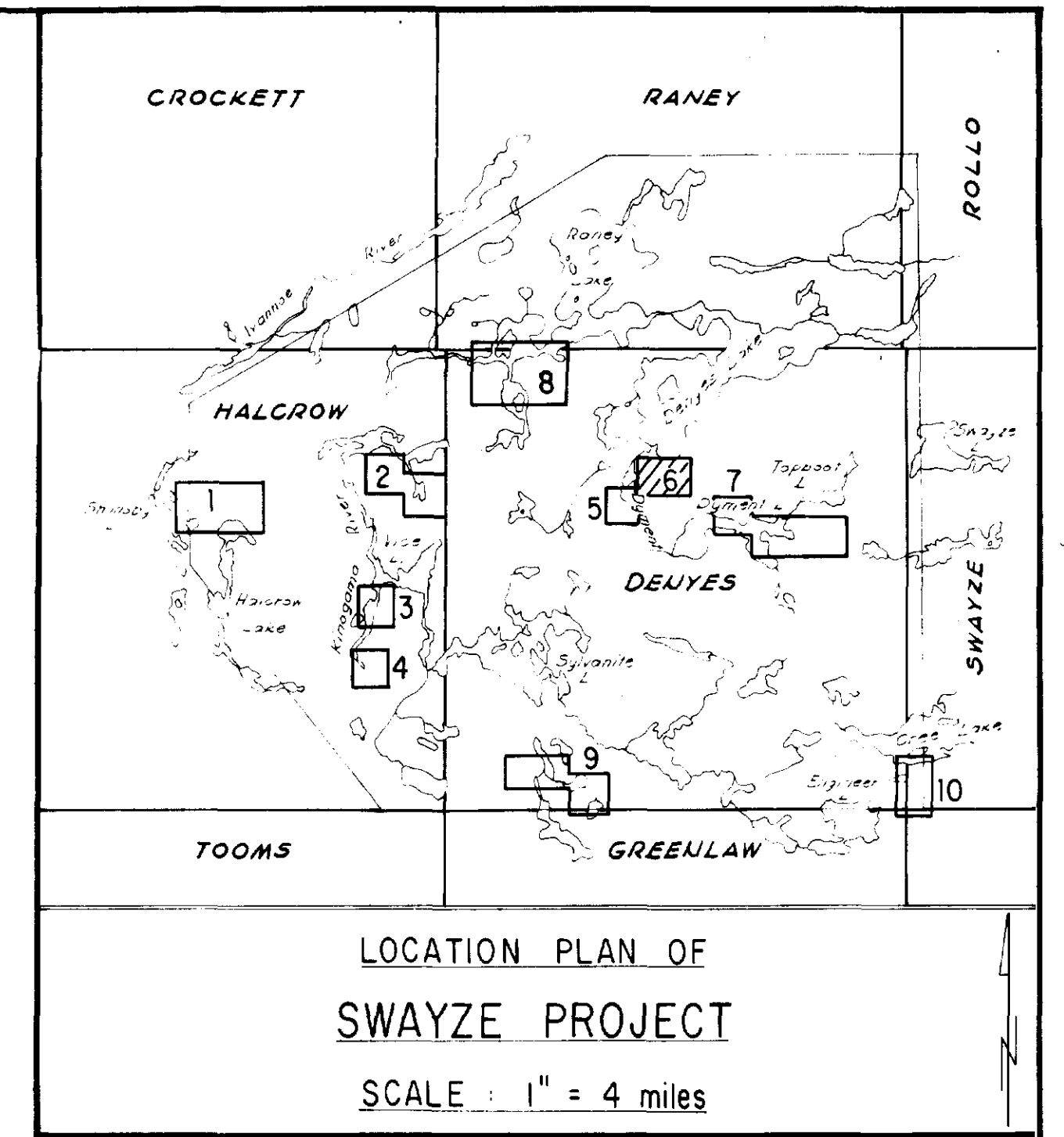
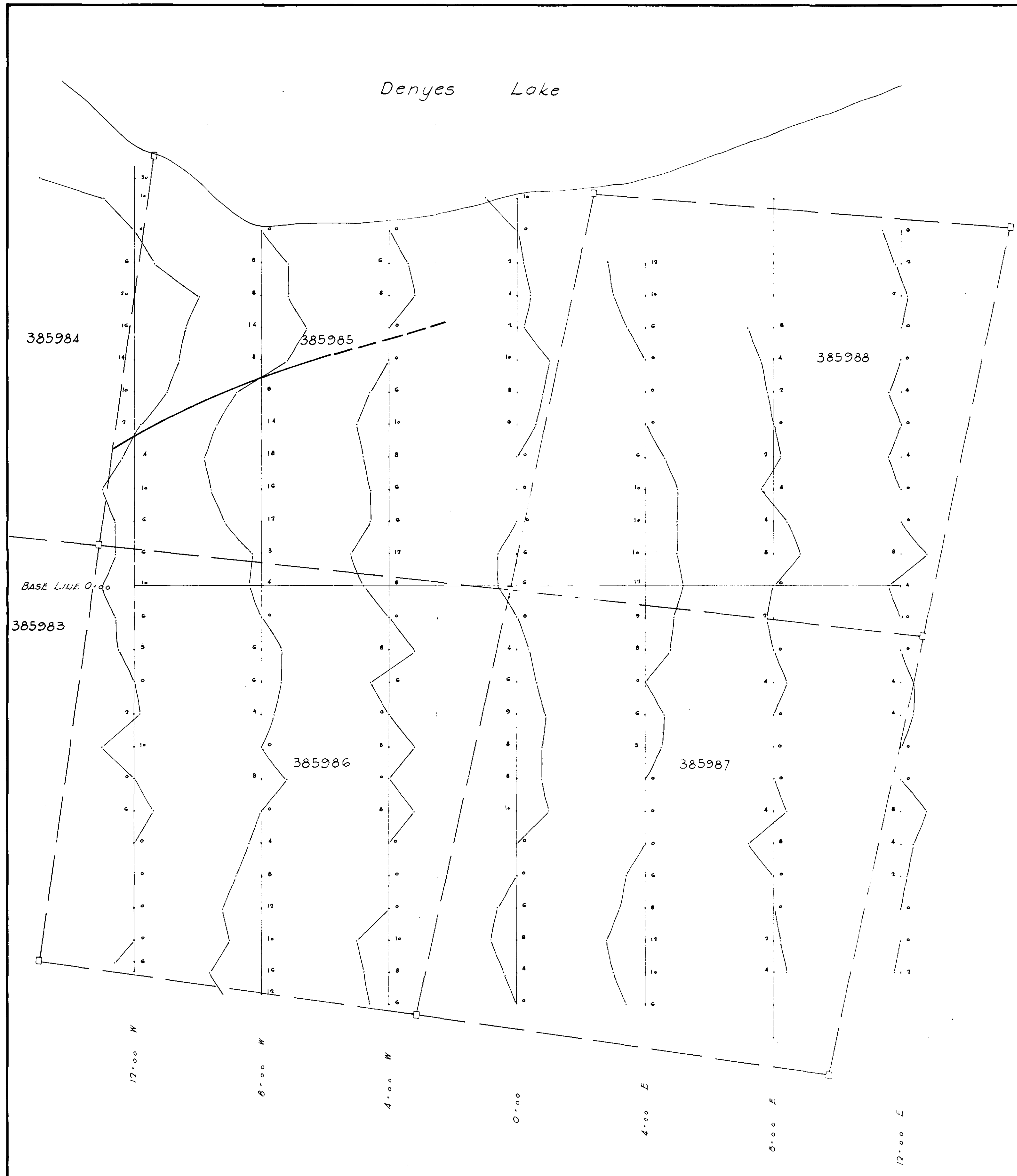
GROUP 6
ONTARIO

Contour Interval : 100 Y

SCALE : 1" = 200'
DATE : SEPT. 1975

TWP : DENYES
MAP No. : 75-050018





2.2032

MATTASAMI LAKE MINES LTD.
EXPLORATION DIVISION

RADEM DIP ANGLE SURVEY
SWAYZE PROJECT

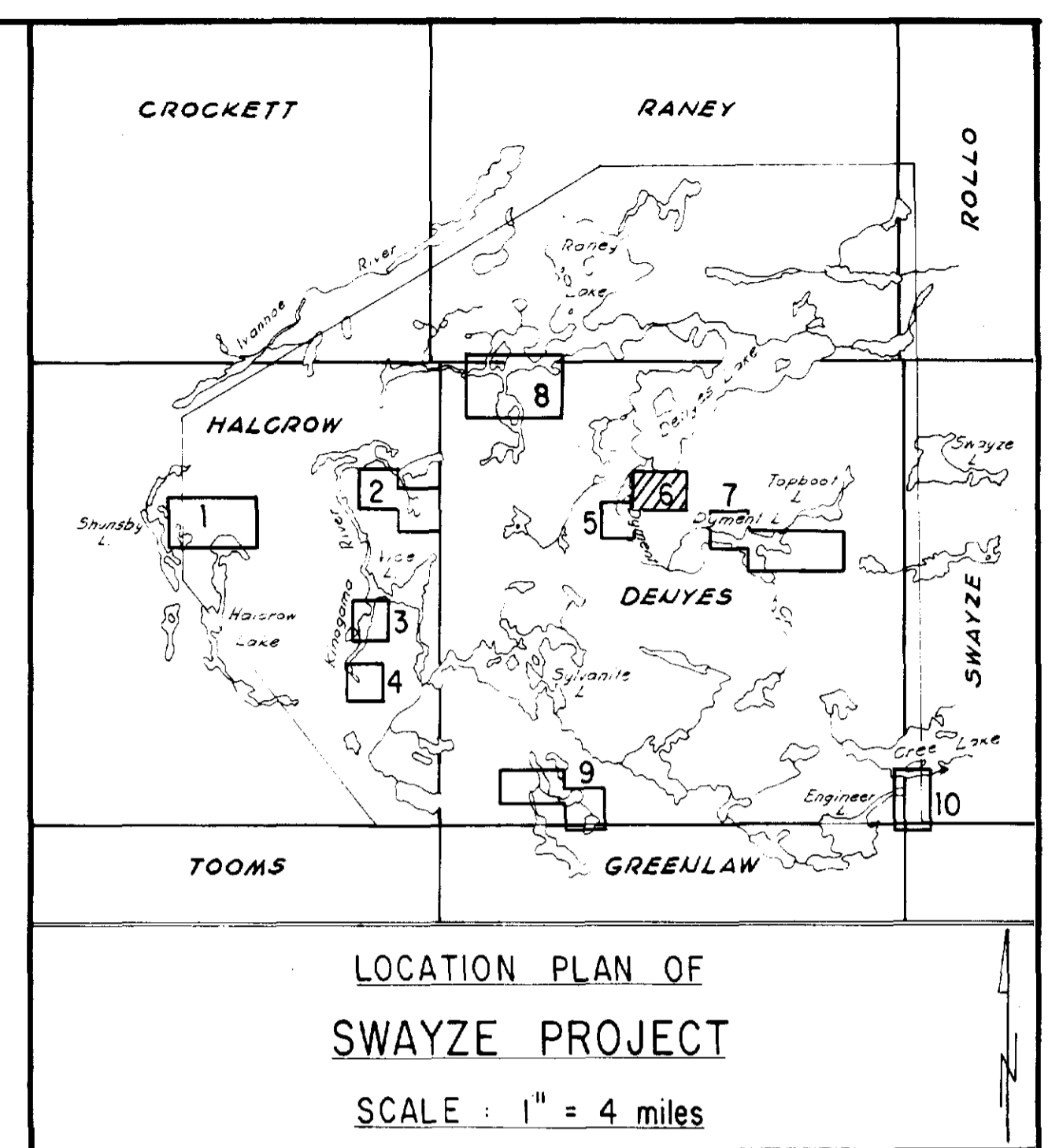
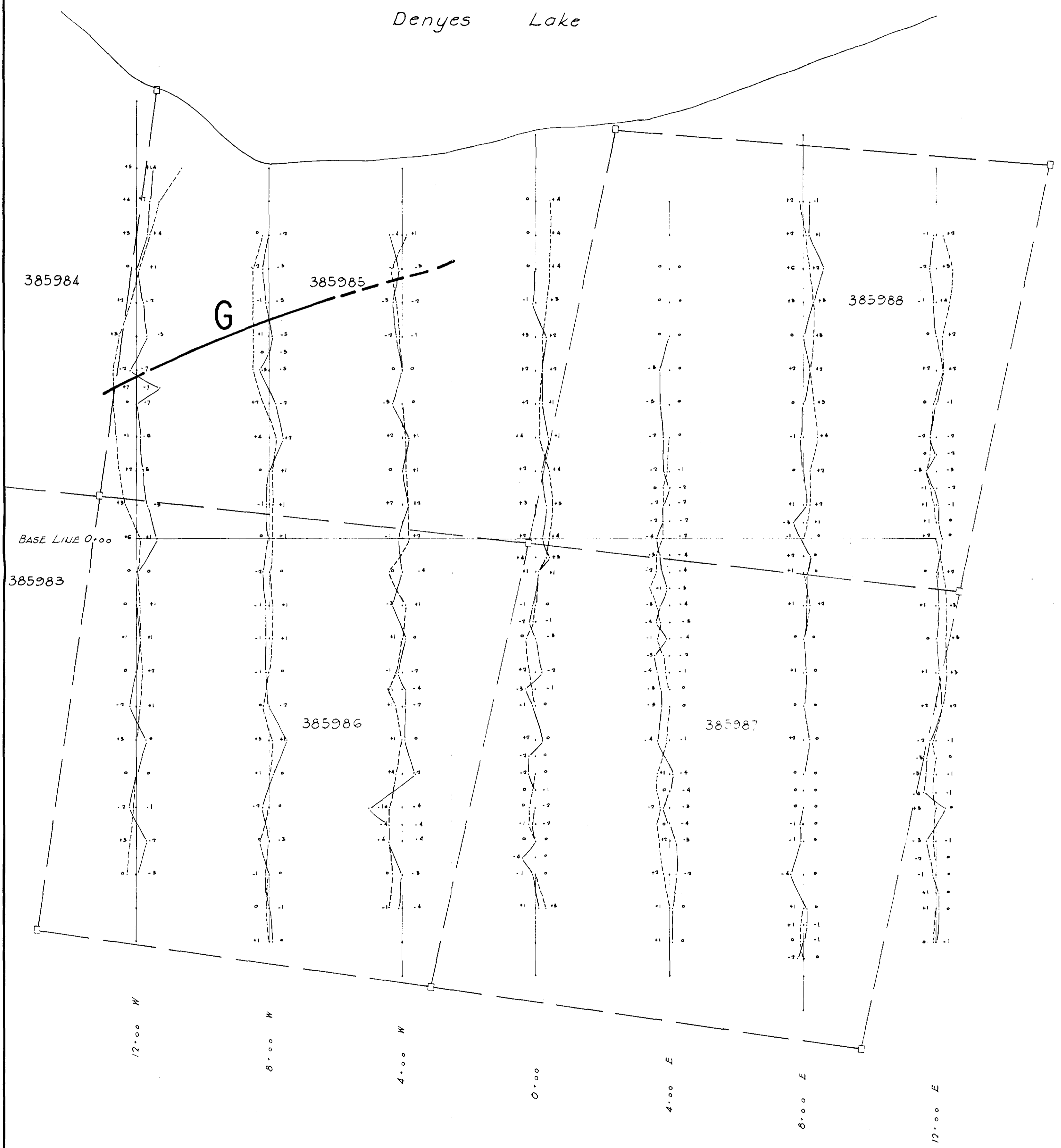
GROUP 6
ONTARIO

Scale : 1" = 20'

SCALE : 1" = 200'	TWR : DENYES
DATE : SEPT. 1975	MAP No. : 75-050020

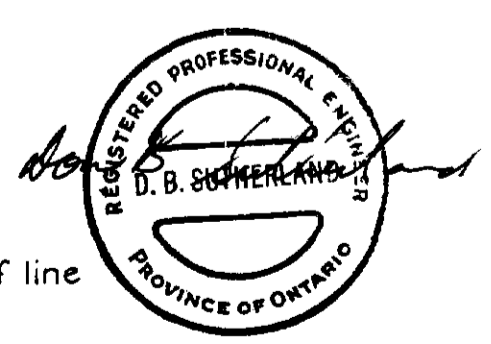


Denyes Lake



LEGEND

- Out of Phase on right of line
- - - In Phase on left of line
- Coil spacing : 400 ft.
- Frequency : 1600 Hz.
- E.M. Conductor



2.2032

MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

EM-17 SURVEY
SWAYZE PROJECT

GROUP 6
ONTARIO

SCALE : 1" = 200'	TWP : DENYES
DATE : SEPT. 1975	MAP No. : 75-050021



2. 2032

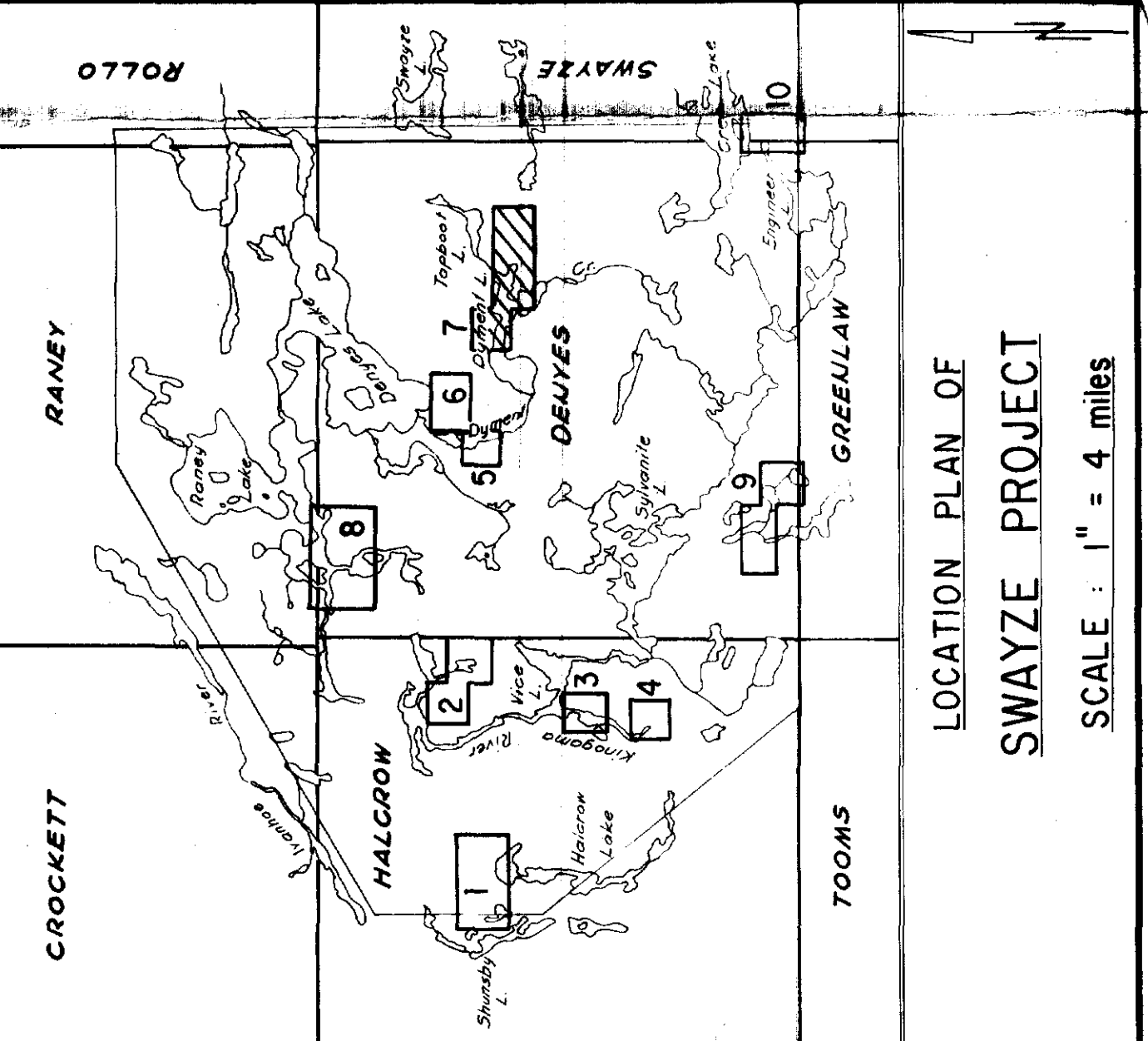
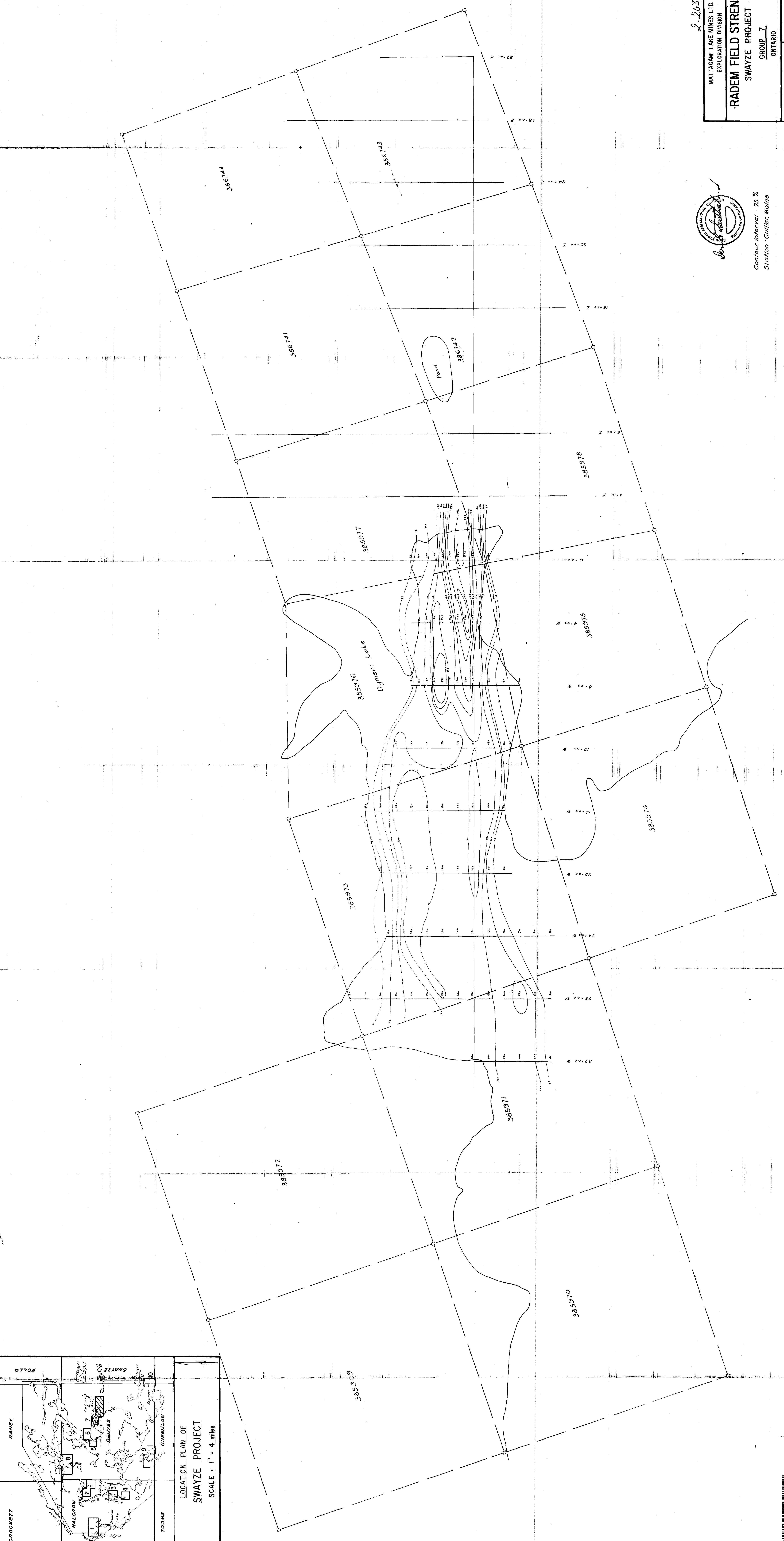
MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

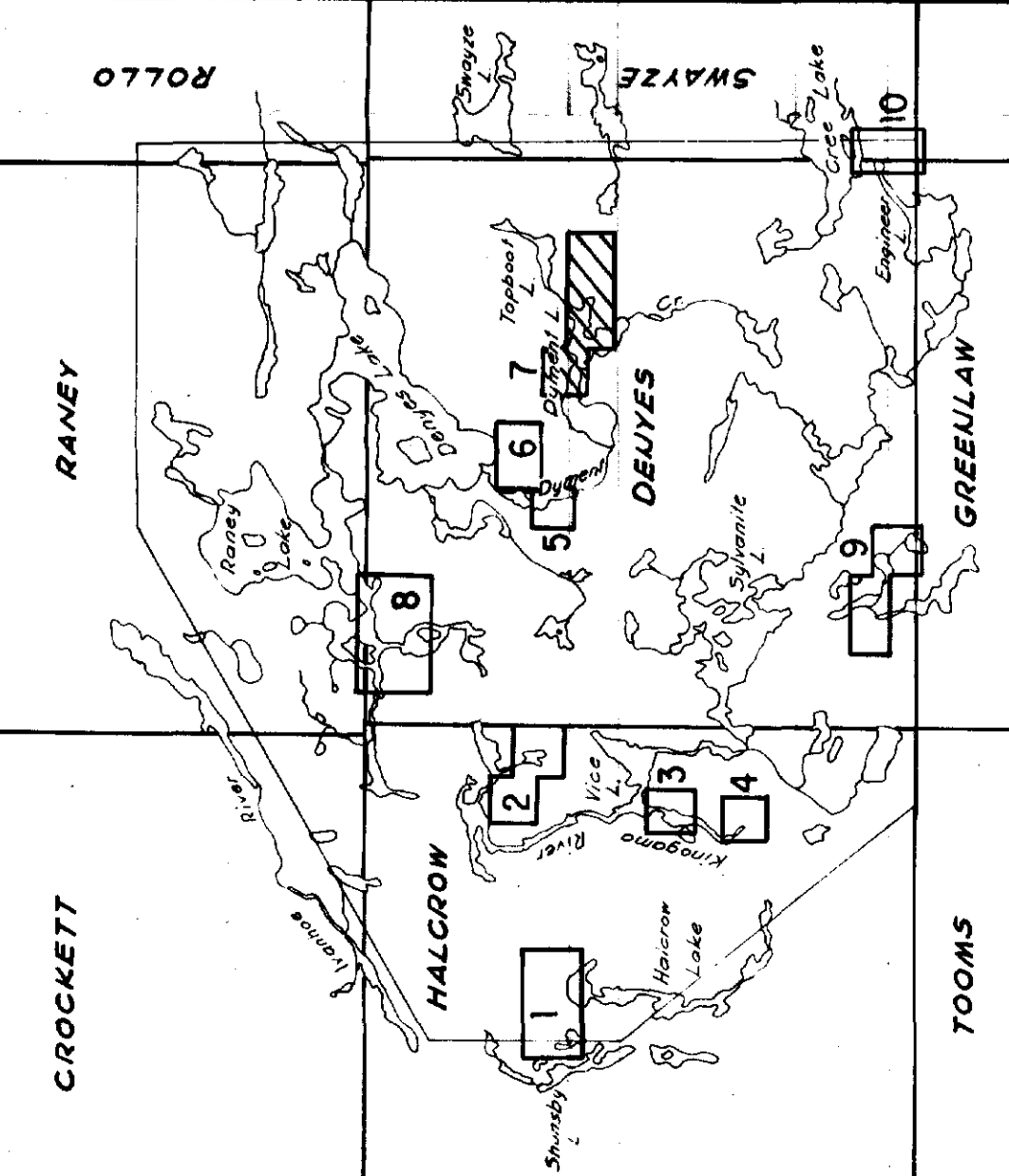
-RADEM FIELD STRENGTH
SWAYZE PROJECT
GROUP 7
ONTARIO

SCALE: 1" = 200'
DATE: AUG. 1975

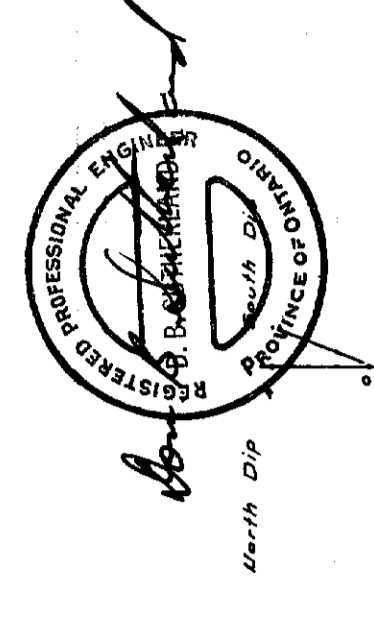
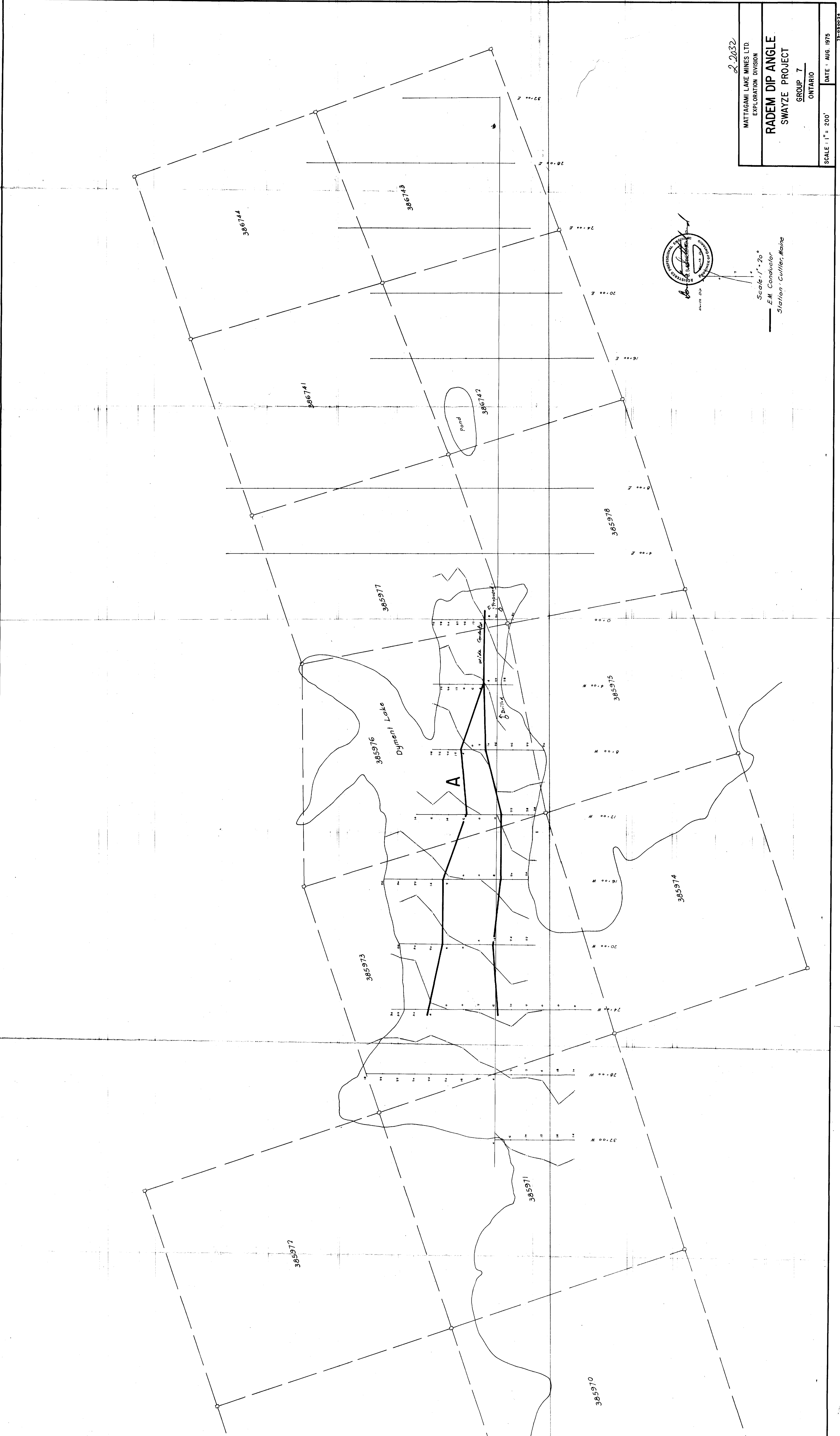


Contour Interval: 25'
Station: Cuffler, Maine





LOCATION PLAN OF
SWAYZE PROJECT
 SCALE : 1" = 4 miles

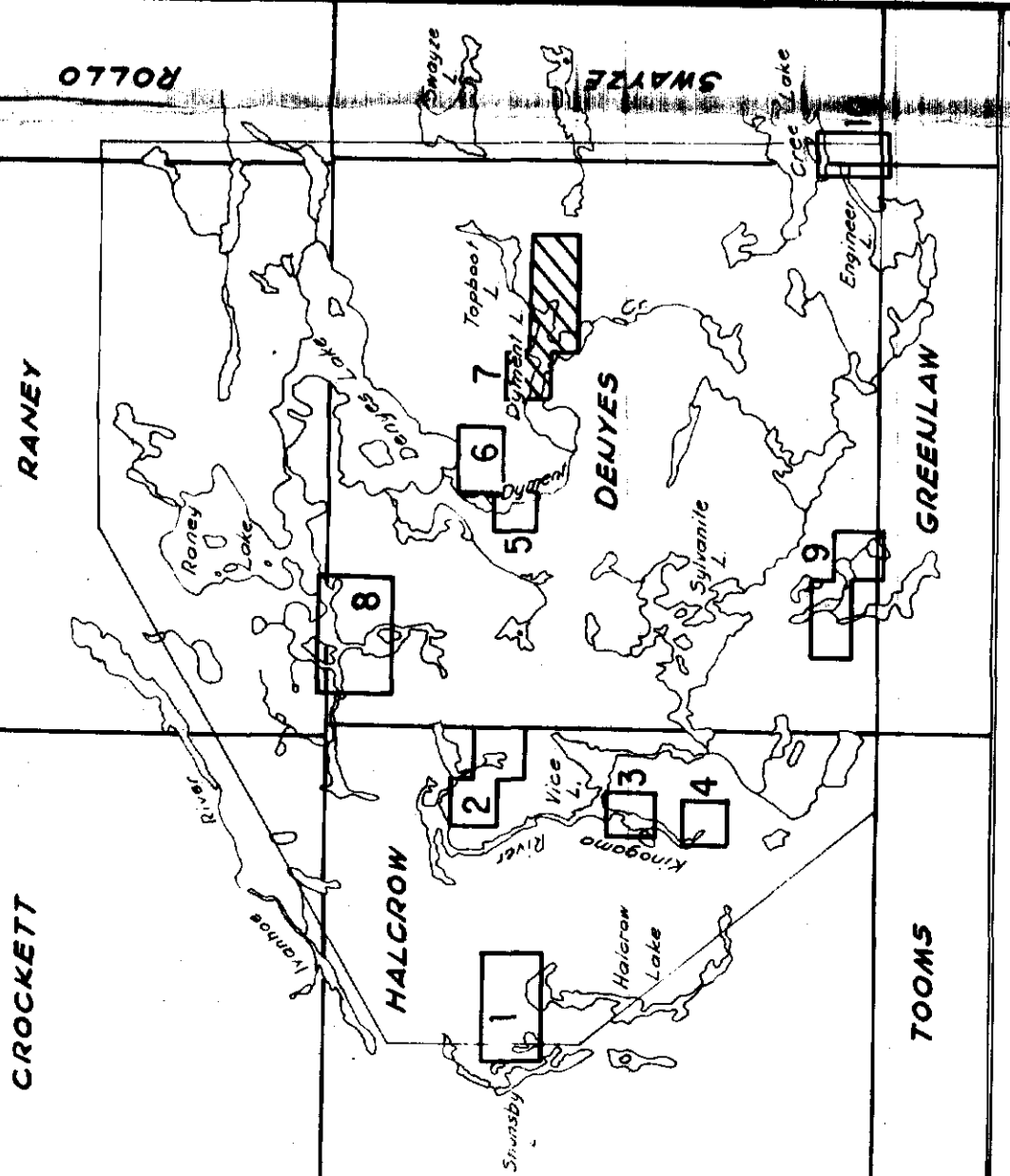


Scale: 1" = 20'
 Station: Cullien, Maine

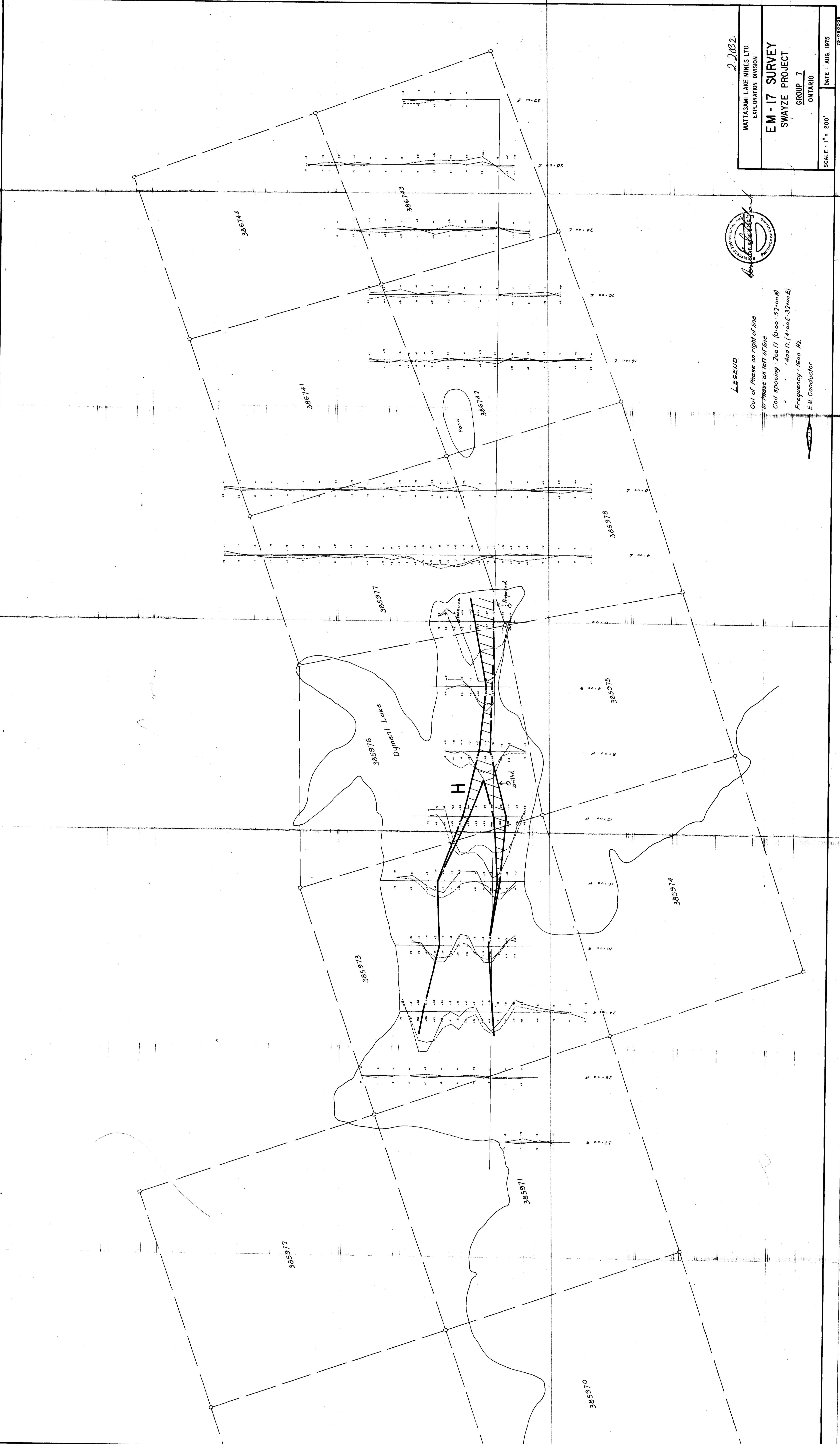
22032
 MATTAGAMI LAKE MINES LTD.
 EXPLORATION DIVISION
RADEM DIP ANGLE
 SWAYZE PROJECT
 GROUP 7
 ONTARIO

SCALE: 1" = 200' DATE: AUG. 1975
 15-200572



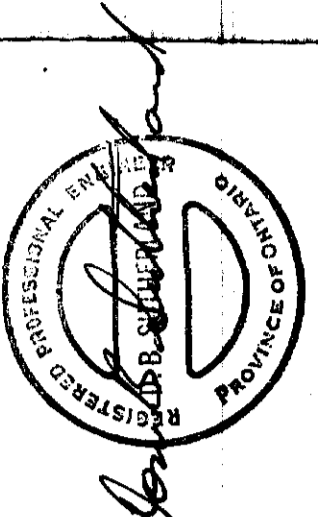


LOCATION PLAN OF
SWAYZE PROJECT
SCALE: 1" = 4 miles



LEGEND

- Out of Phase on right of line
- In Phase on left of line
- Coil spacing: 200 ft. (0.00-32.00W)
- 400 ft. (4.00E-37.00E)
- Frequency: 1600 Hz
- E.M. Conductor



2-2852

MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

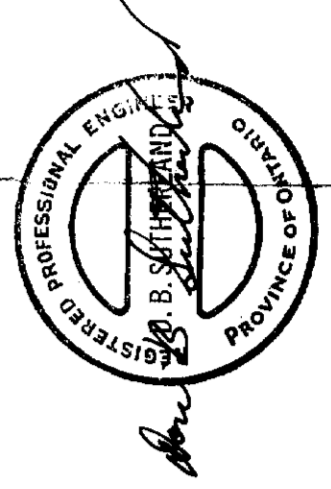
**EM-17 SURVEY
SWAYZE PROJECT**

GROUP 7
ONTARIO

SCALE: 1" = 200' DATE: AUG. 1975

75-950025





2.2032

MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

MAGNETOMETER SURVEY SWAYZE PROJECT

GROUP 8
ONTARIO

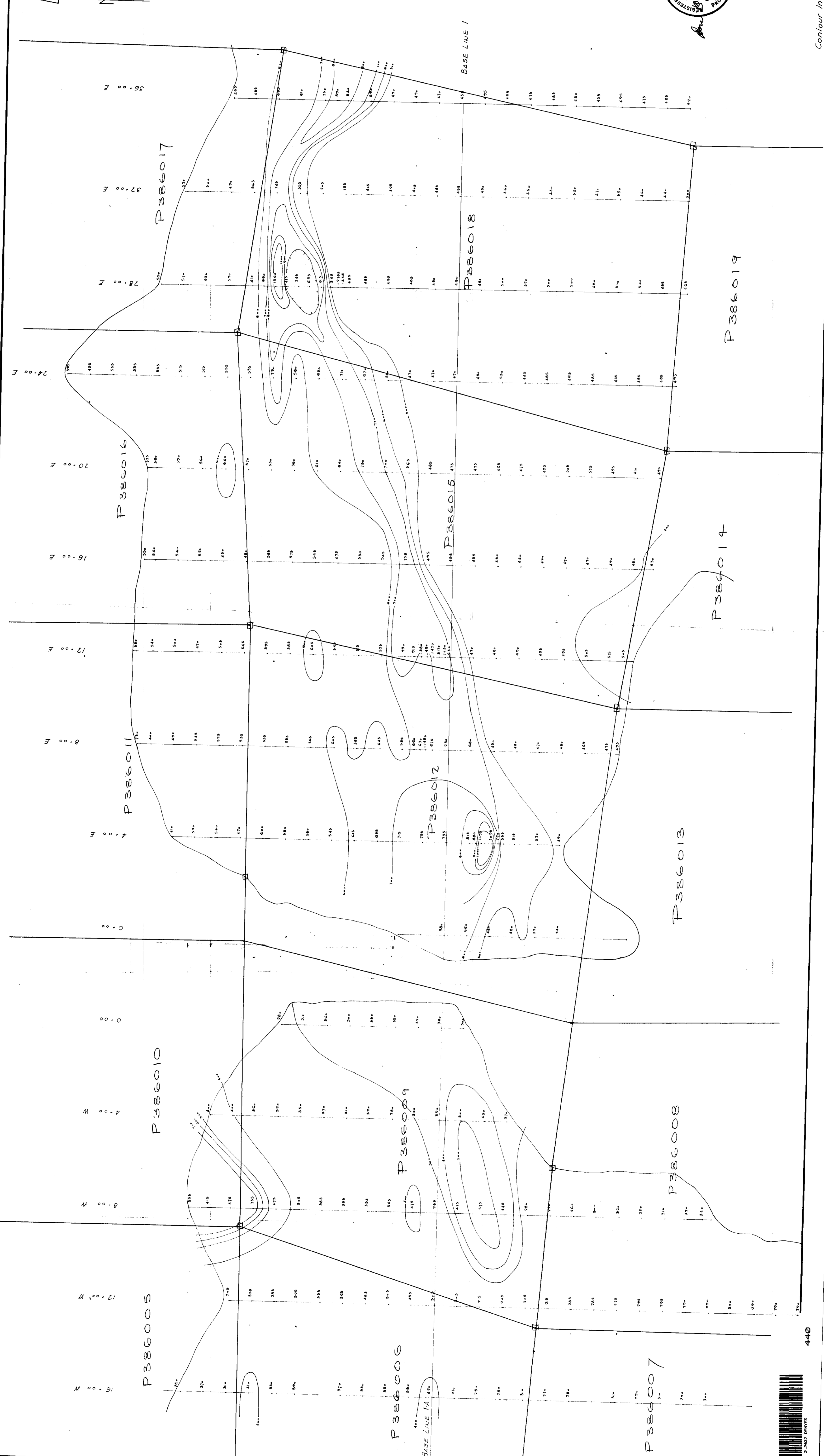
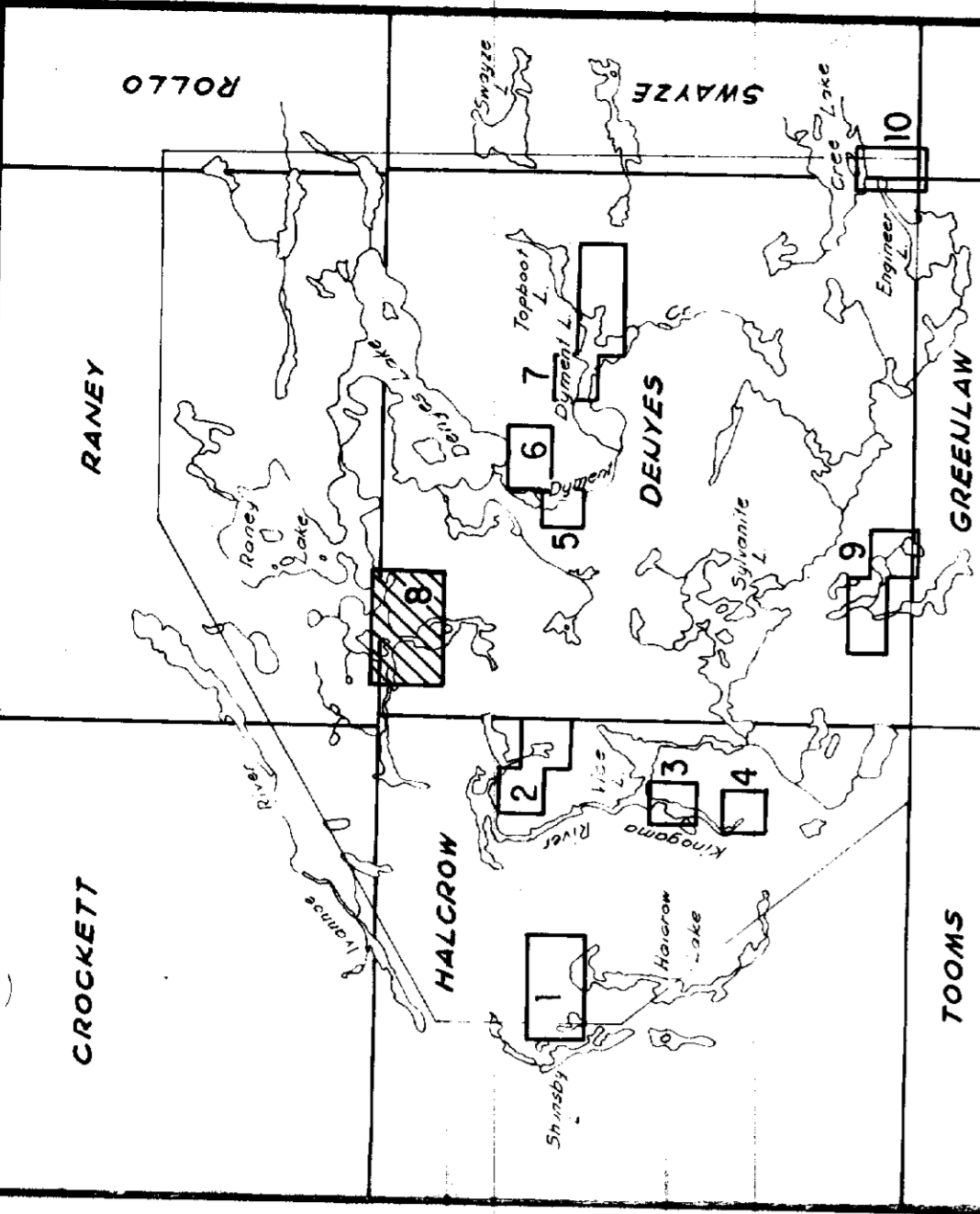
SCALE: 1" = 200'

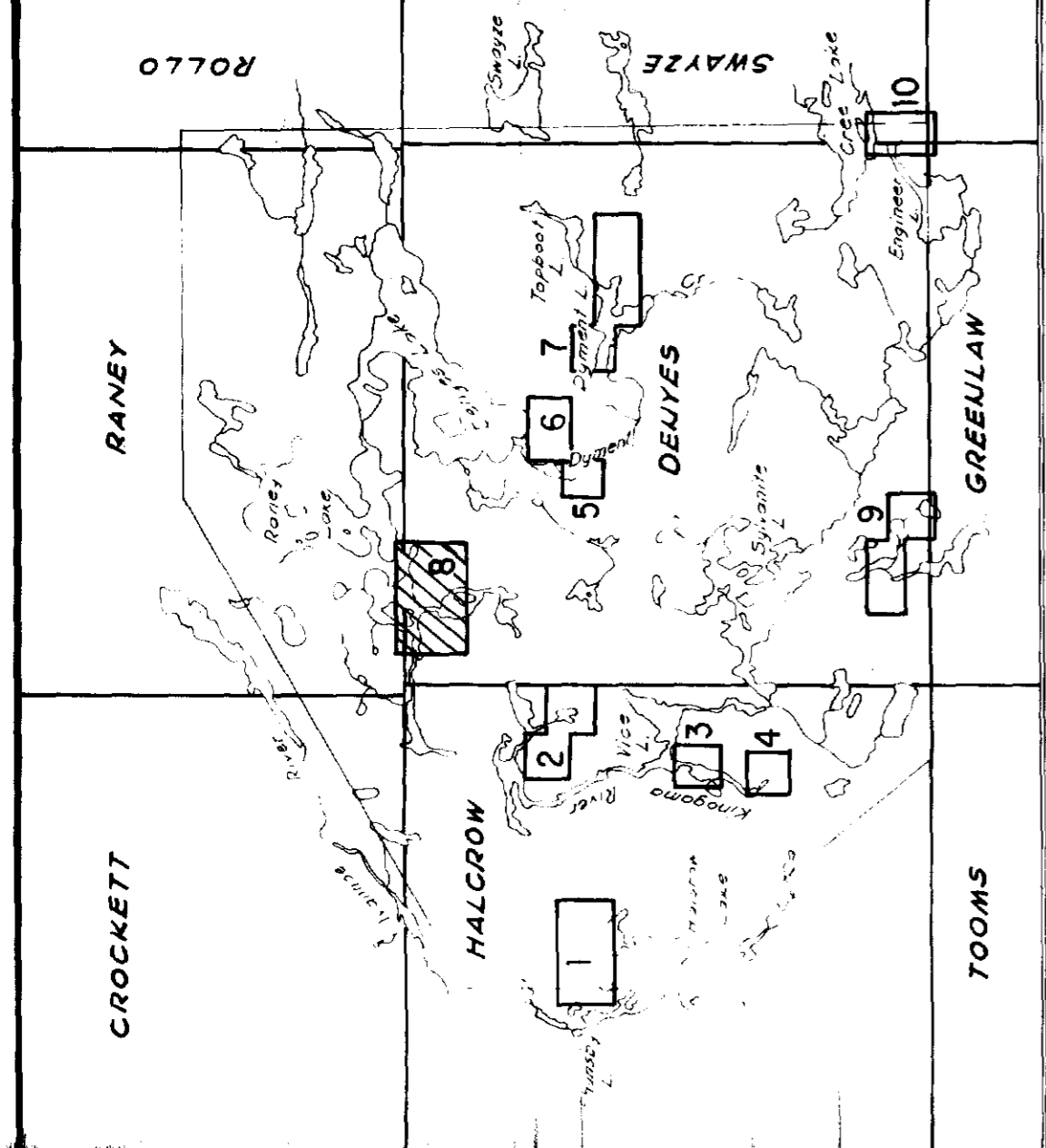
DATE: AUG. 1975

75-05026

Contour Interval: 100 ft

LOCATION PLAN OF
SWAYZE PROJECT
SCALE: 1" = 4 miles



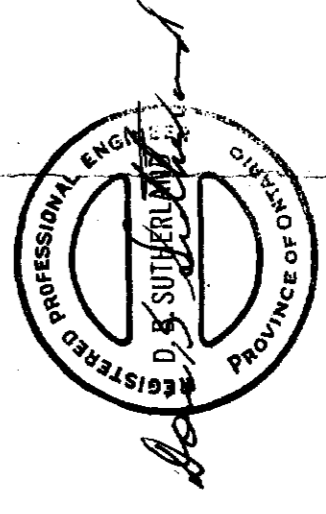


LOCATION PLAN OF
SWAYZE PROJECT
 SCALE : 1" = 4 miles

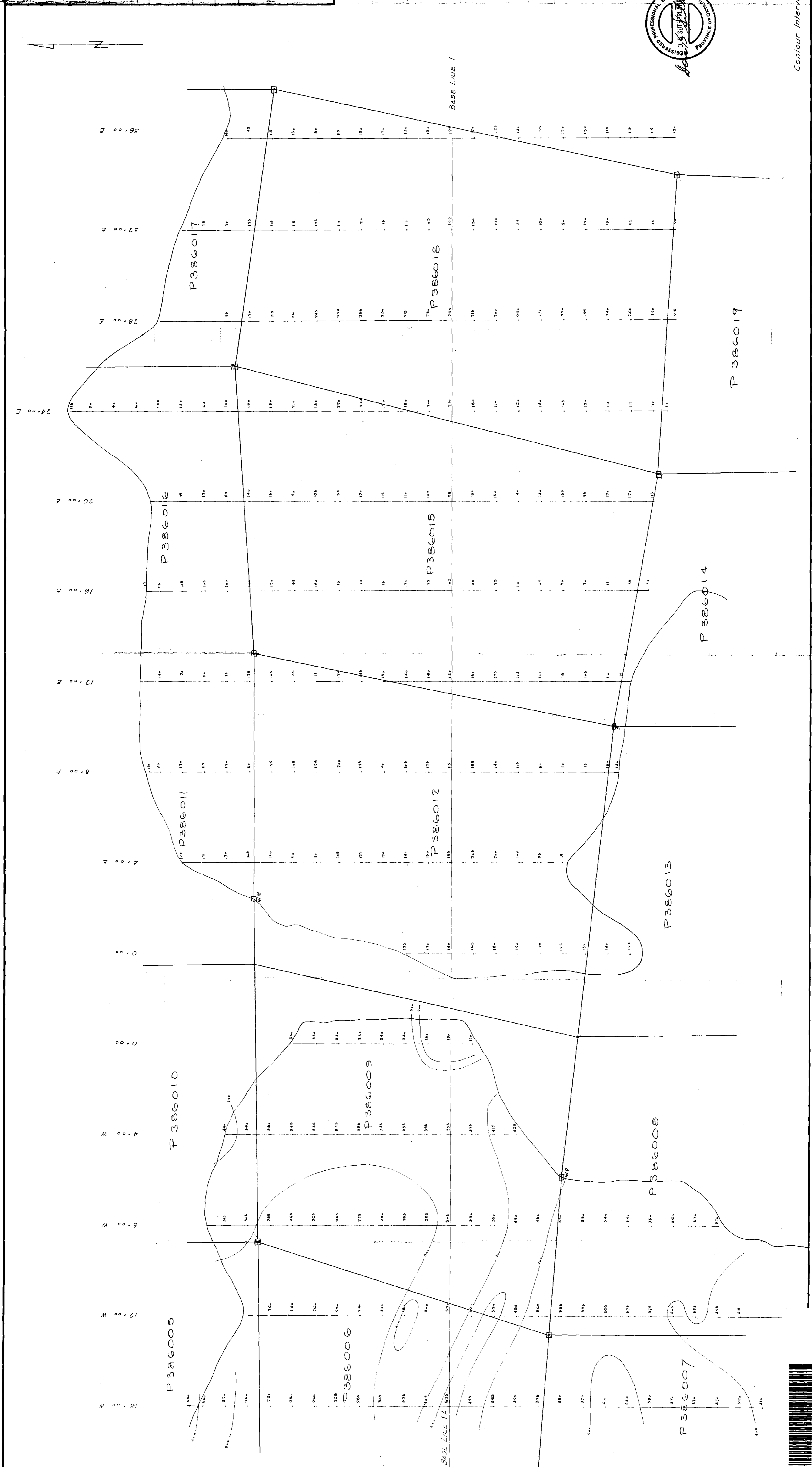
MATTAGAMI LAKE MINES LTD.
 EXPLORATION DIVISION
RADEM FIELD STRENGTH SURVEY
 SWAYZE PROJECT
 GROUP 8
 ONTARIO

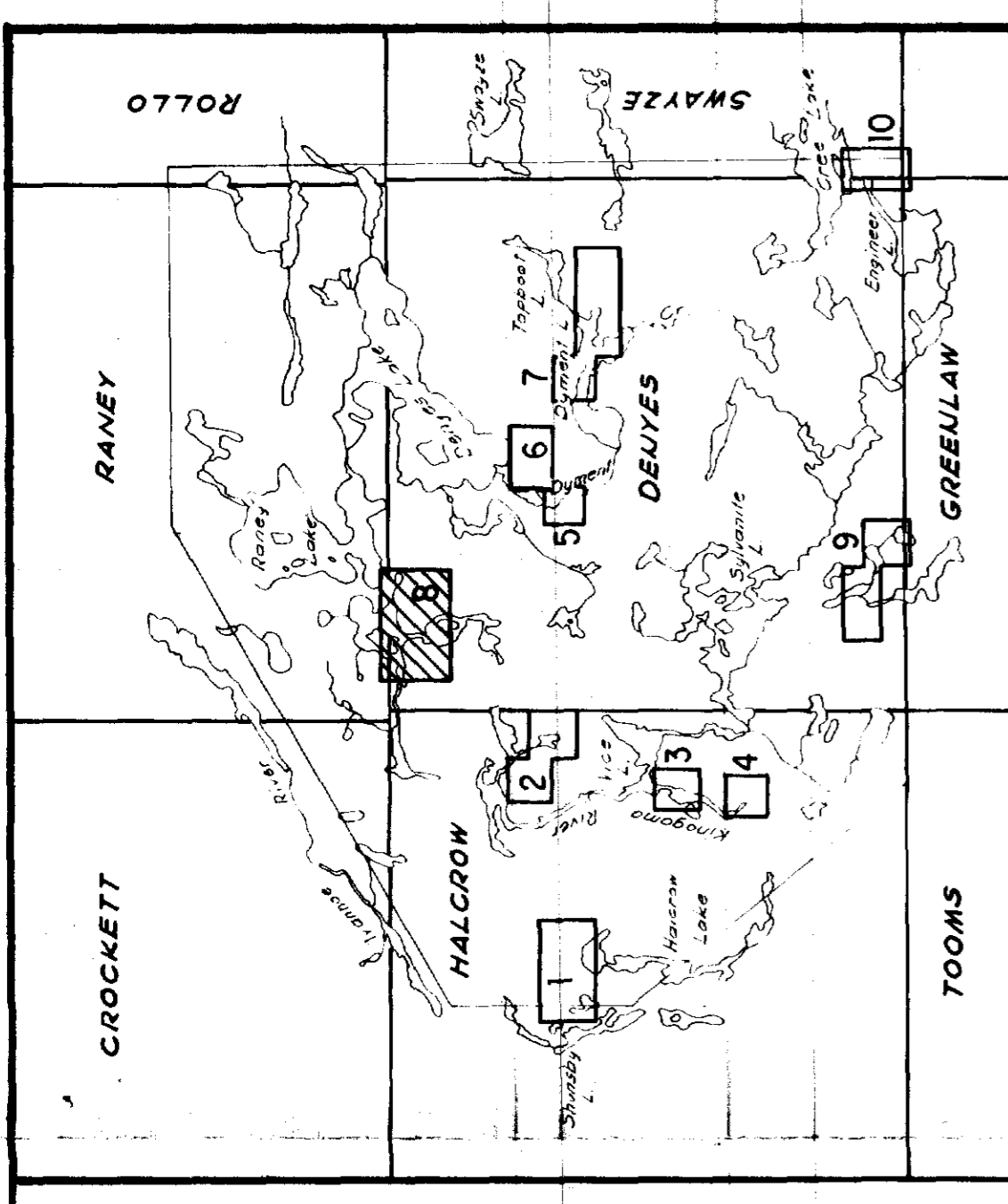
SCALE : 1" = 200'
 DATE : AUG. 1975

75-08007



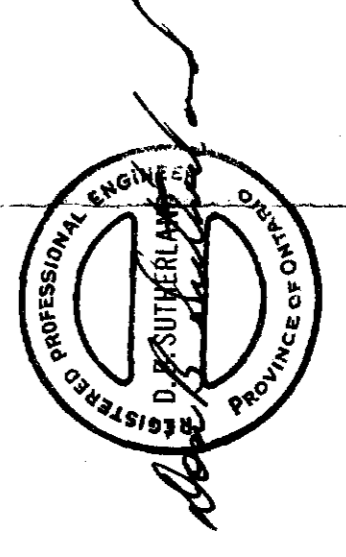
Contour Interval: 100 %



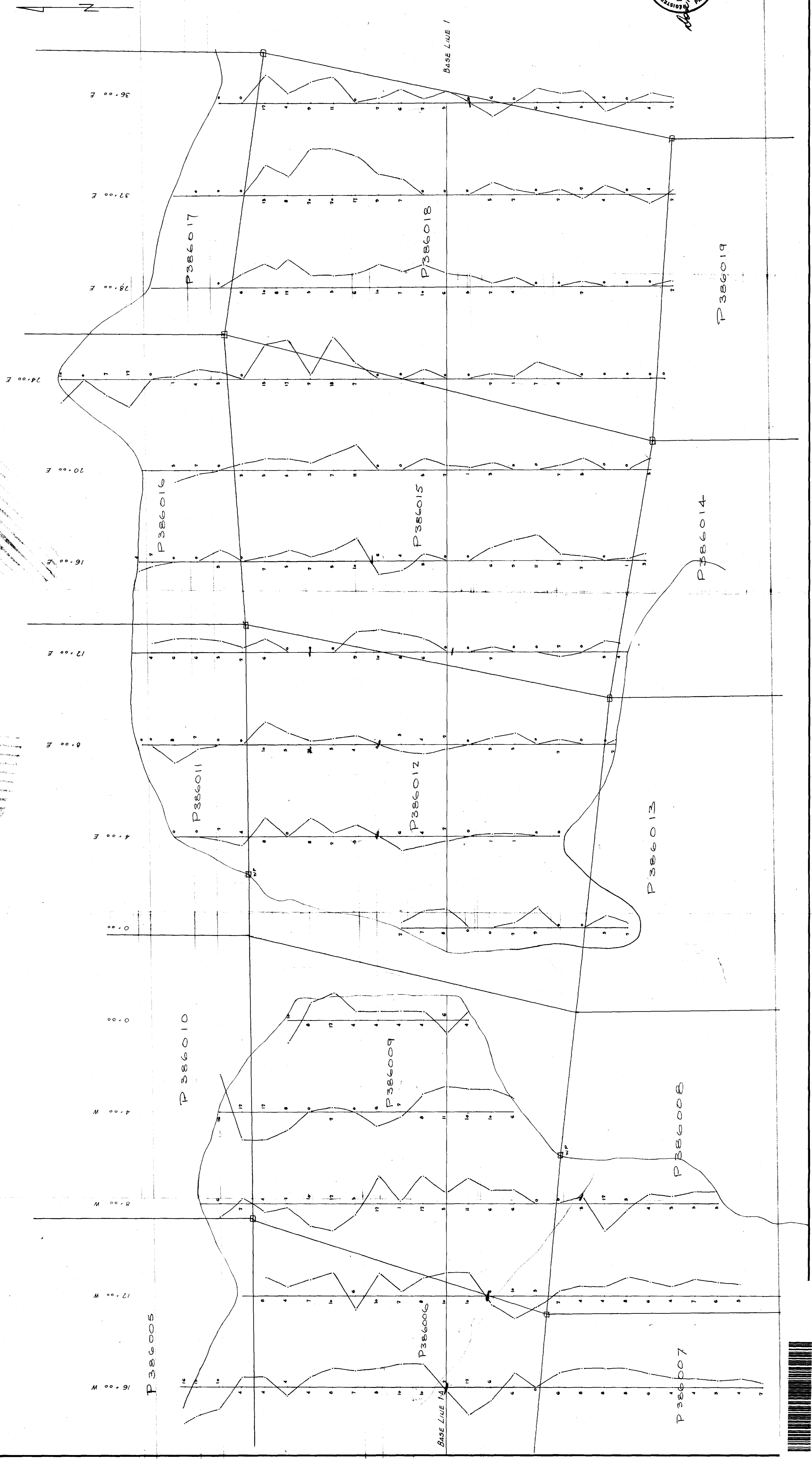


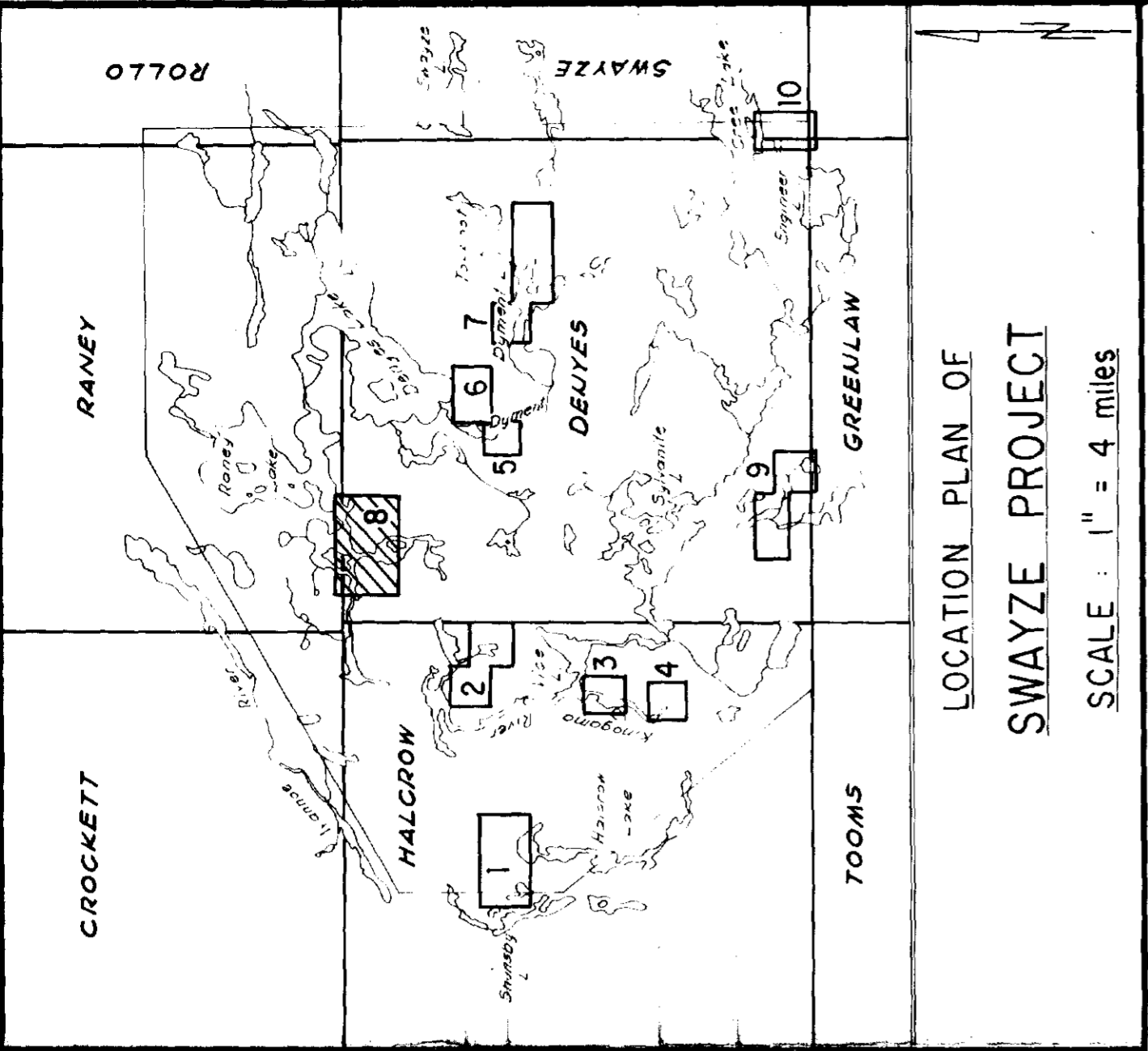
LOCATION PLAN OF
SWAYZE PROJECT
 SCALE : 1" = 4 miles

Scale : 1" = 20'



2.2032
 MATTAGAMI LAKE MINES LTD.
 EXPLORATION DIVISION
RADEM DIP ANGLE SURVEY
 SWAYZE PROJECT
 GROUP 8
 ONTARIO
 SCALE : 1" = 200' DATE : AUG. 1975



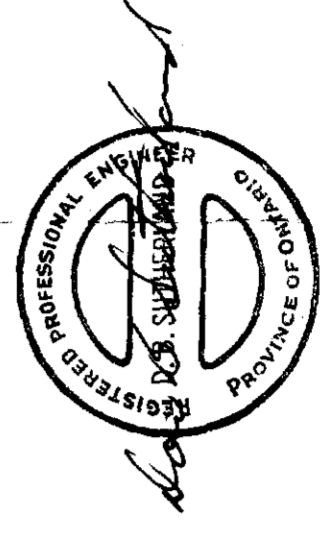


LOCATION PLAN OF
SWAYZE PROJECT

SCALE : 1" = 4 miles

LEGEND

- Out-of-Phase on right of line
- In-Phase on left of line
- Coil spacing : 400 ft.
- Frequency : 1600 Hz
- E.M. Conductor



22032

MATTAGAMI LAKE MINES LTD.
EXPLORATION DIVISION

EM-17 SURVEY

SWAYZE PROJECT

GROUP 8

ONTARIO

SCALE : 1" = 200'

DATE : AUG. 1975

75-056019

