REPORT ON AN AIRBORNE GEOPHYSICAL SURVEY ~~SIX MILE~~ FOUR BAY LAKE ONTARIO ON BEHALF OF LARCHMONT MINES LIMITED

by

Klement Danda, M.Sc., P. Eng.,
Geophysicist

Jan Klein, M.Sc., P. Eng.,
Geophysicist

TORONTO, Ontario

June 1971.

52J02SW0060 52J02SW0069 FOURBAY LAKE

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TABLE OF CONTENTS

Reference: 71-9354-02

SUMMARY

A combined airborne electromagnetic and magnetic survey was executed over 114 claims located in the Six Mile Lake Area of Ontario on behalf of Larchmont Mines Limited. A total of 123 miles of line was flown.

The survey resulted in the location of several isolated mostly broad anomalies. Three conductor intersections revealing a coincident magnetic response can be caused by massive sulphides and have been recommended for geological and geophysical ground follow-up.

REPORT ON AN AIRBORNE GEOPHYSICAL SURVEY
SIX MILE LAKE AREA, ONTARIO
ON BEHALF OF
LARCHMONT MINES LIMITED

INTRODUCTION

During the period April 29th to May 2nd, 1971, an airborne geophysical survey was undertaken by Seigel Associates Limited over two blocs of claims located in the Six Mile Lake area, Ontario (see fig. 1 on the scale of 1:250,000). The first bloc (marked A) comprises 30 claims, the second bloc (marked B) comprises 84 claims (see Table 1). The survey was on behalf of Larchmont Mines Limited. A total of 34 miles was flown over Bloc A and a total of 89 miles over Bloc B (see Plate 1, claim map on the scale of 1" = 1320').

The airborne survey included electromagnetic and magnetic measurements. Geophysical equipment used for these measurements was, respectively, a Scintrex Rio-Mullard type in-phase and out-of-phase electromagnetic system operating at 320 cycles per second and a Scintrex MAP-2 nuclear precession magnetometer.

Appendix A attached gives full details of the airborne geophysical equipment and ancillary equipment employed as well as the treatment of data resulting from these surveys. The basic transport vehicle employed during the survey was a De Havilland Otter aircraft (CF-IUZ) owned by Scintrex Limited, Toronto.

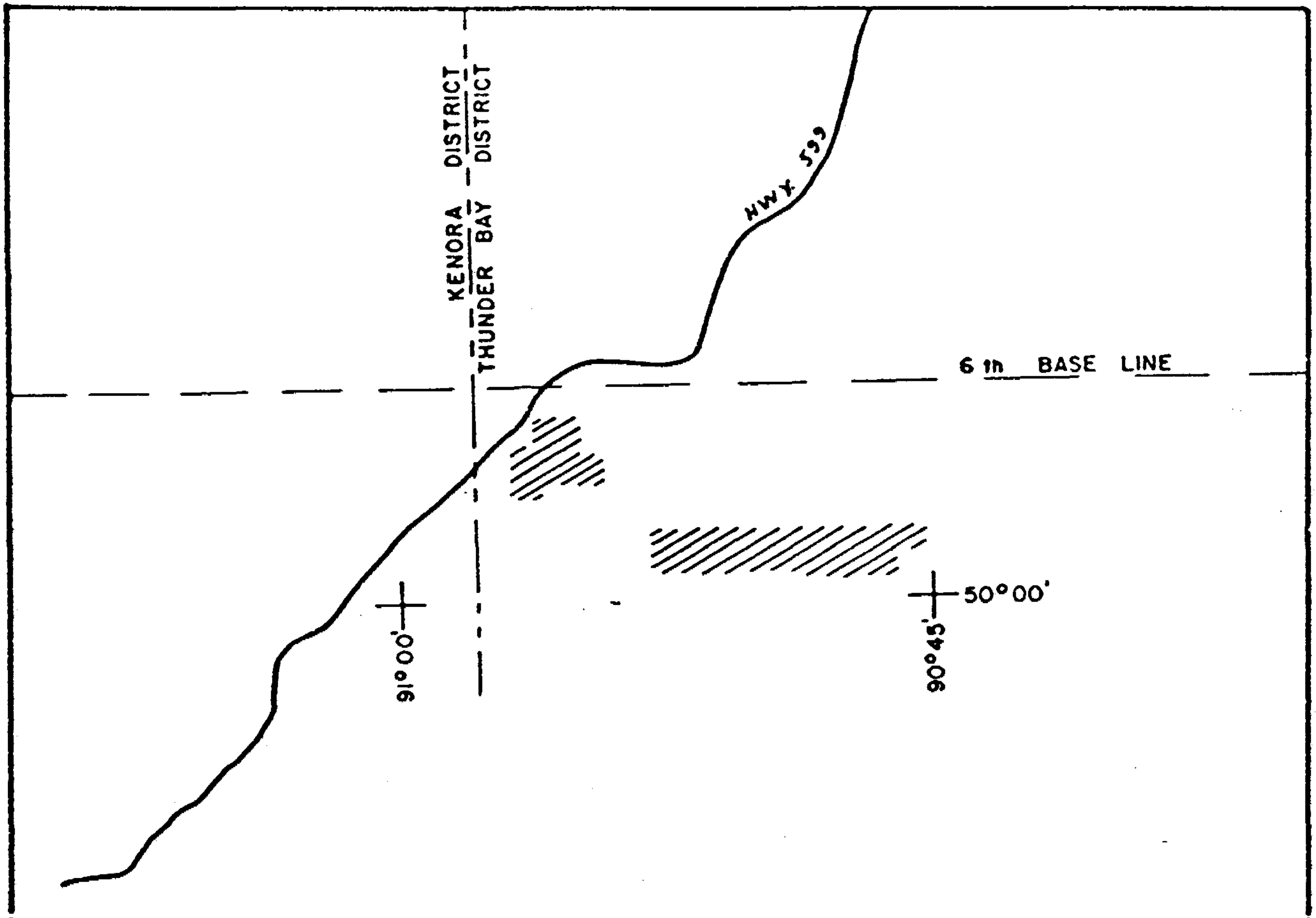


FIGURE 1

LOCATION MAP

LARCHMONT MINES LIMITED

STURGEON LAKE AREA, ONT.

AIRBORNE GEOPHYSICAL SURVEY

1 INCH

1 cm

5 0 5 10 MILES

SCALE : 1:250,000

71-9354

In-flight navigation and flight path recovery were based on a mosaic with a scale of 1"=1320'. The survey line spacing was 400 feet, the line or direction being approximately north - south.

The survey was flown at an average airspeed of 90 miles per hour and at an average altitude of 175 feet.

The purpose of the electromagnetic survey was to map the distribution of subsurface conducting systems within the survey area. The magnetometer results are presented in contour form which enable an interpretation in terms of rock types and geological structures. The magnetic data are also used in direct correlation with the electromagnetic results.

PRESENTATION OF DATA

The results of the geophysical survey are presented on Plates 1 and 2 each of which are on the scale 1"=1320'. Plate 1 shows the electromagnetic results together with the flight lines and Plate 2 shows the magnetic results in contour form at a 10 gamma interval.

The peak location of the electromagnetic anomalies is shown on the Plate 1 by a circle in the appropriate location. In the case of broad conductors, or closely spaced multiple conducting zones, there may be more than one peak. In this event all major peaks are shown. The conductor half width, indicated on the plan by an open bar, is the distance between the points of half the maximum conductor disturbance.

The in-phase and out-of-phase amplitudes are scaled from the original traces and are noted in parts per million opposite the peak location. A conductor peak with apparent direct magnetic correlation is indicated by a double concentric circle.

The original geophysical traces are on the following scales:

Edin Recorder (from top to bottom of chart)

1st and 2nd channel	not used	
3rd channel	magnetometer	25 gammas/mm
4th channel	electronic noise indicator	
5th channel	altimeter	Logarithmic
6th channel	electromagnetic (out-of-phase)	30 ppm/mm
7th channel	electromagnetometer (in-phase)	30 ppm/mm
8th channel	accelerometer	
9th channel	fiducial marker	

Anadex Recorder

The total magnetic field values were recorded in digital form on a paper print-out, together with the fiducial numbers as well.

DISCUSSION OF RESULTS

The airborne electromagnetic survey resulted in the location of several isolated often broad, multiple conductors. Even though the anomalies are isolated, a certain trend in the conduction is shown between lines 52S and 83N south of the tie line in Block B. The conductor amplitudes exhibit a spectrum of responses and all the anomalies are graded in the second and third category.

One of the most important criteria in the evaluation of the electromagnetic anomalies is the in-phase over out-of-phase ratio. In general, highly conducting bodies, such as massive sulphides or graphite and sea water have high ratios, however, most overburden will have lower ratios. In areas where there is clear differentiation in conductivity between targets of economic interest and other possible conductors the ratio is a diagnostic feature. In some areas there is an overlap of conductivity ranges and then the ratio cannot be too rigidly relied upon. Another important criteria is the magnetic coincidence. A conducting body which shows a magnetic correlation is more likely to be a sulphide body than one that is non-magnetic. Still another important criteria is the strike length. Most producing base metal mines have ore bodies of only a relatively short strike extent and most ore bodies give only a single or double line anomaly during the course of any reconnaissance airborne survey. For this reason single line anomalies cannot be overlooked but neither must long conducting zones be neglected as some ore bodies are known to occur along extensive marker horizons. (e.g. Thompson area),

All but three electromagnetic anomalies revealed during the present survey likely belong to the group of near surface conductors of horizontal extend.

Three anomalies can be classified in the group of steeply dipping tabular conductors and are threrfore of interest. These are: Intersection A and B on line 16 and intersection A on line 58. These reveal very weak responses, however, they all show magnetic correlation.

The magnetic contour plan shows a moderate relief combined with a general east-west trend.

Magnetic highs "A" and "B" (up to 100 gammas) are accompanied by a very weak electromagnetic distortion pattern.

Magnetic high "C" is striking in east-northeast to west-southwest direction and reveals a 70 gammas peak amplitude. Magnetic highs A, B and C likely reflect more basic horizons, possible basic intrusive plugs in the meta volcanic/sedimentary sequence.

Magnetic high "D" runs in an east-west direction. It is associated with a metagabbro intrusive (Map 2169 on the scale of 1" = 4 miles).

Magnetic high "E" runs in a northwest-southeast direction. Magnetic relief is up to 250 gammas. It probably reflects a gabbroic dyke parallel to the series of granitic dykes mapped in this area. Several small faults in a northwest and northeast direction are shown on the magnetic plan.

CONCLUSIONS AND RECOMMENDATIONS

During the present survey several isolated but open broad conductors were revealed. Investigation of the electromagnetic anomalies should be limited only to the anomalies A and B on line 16 (Bloc A) and to the anomalay A on the line 58 (Bloc B). These intersections reveal a coincident magnetic high and possible reflect massive sulphides. For examination of selected targets on the ground and for the determination of their precise location the combination of surveys on small grids, comprising geological mapping magnetic and electromagnetic measurements, is recommended. These small grids should consist of a baseline of approximately 2000 feet long and 6 lines perpendicular to the baseline at 400 feet spacing having a length of 1000 feet on either side. It is recommended to execute Turam electromagnetic measurements.

Respectfully submitted,

Klement Danda

Klement Danda, M.Sc., P. Eng.,
Geophysicist.

Jan Klein

Jan Klein, M.Sc., P. Eng.,
Geophysicist.

TABLE 1

CLAIM NUMBERS

250054		246646	248519
250075		246647	248520
250076		246650	248521
250077		246651	252909
250078		246652	252910
250079		246653	252911
249331		246654	252912
249332		246655	252913
249333		246656	252914
249334		246657	252915
245335		246658	252916
249336		246659	252917
249337		246660	252918
249338		246675	252919
249339		246676	252920
249340	Block A	246677	252921
249341		246678	252922
249342		246679	252923
249343		246680	252924
249344		246681	252925
249345		246682	252926
249348		246683	252927
249349		246684	252928
249350		246685	252929
249050		246686	252930
249051		246687	252931
249052		246688	252932
249053		248501	252933
249054		248502	252934
249045		248503	252935
246621		248504	252936
246622		248511	252937
246623		248512	252938
246624		248513	252939
246625		248514	252940
246626		248515	217593
246627		248516	
246628		248517	
246629		248518	

(Block A: bracket spans 250054 through 249045)

Total - 114 Claims

APPENDIX A

SURVEY EQUIPMENT AND PROCEDURES

Electromagnetic System - Scintrex-Rio Mullard

The aircraft used in the present survey is a De Havilland Otter DHC-3 with Canadian registration CF-IUZ. This aircraft is a single engine, slow speed high performance type with a gross weight of 8000 lbs. It may be equipped with wheels, skis or floats as required.

The aircrew consists of pilot, navigator and equipment operator. The aircraft is flown along the proposed lines at an altitude of 150-200 feet using mosaics for navigation.

The operator records in the flight log, the line numbers, direction of flight, duration of flight and starting and finishing fiducial numbers.

The Rio-Mullard Electromagnetic System measures in-phase and out-of-phase components of the secondary field at a frequency of 320 Hz.

A transmitter generates a closely controlled sine wave of 320 Hz which is amplified and fed to a transmitting coil mounted on the starboard wing-tip. This coil is iron cored, has vertical windings and is mounted with its axis in the direction of flight. The circulating coil power is 7500 volt-amperes.

A receiving coil is mounted on the port wing, coplanar with, and 62 feet from the transmitting coil. The voltage developed in the receiver coil due to the transmitted field is 100 millivolts. In the absence of external conductors, this voltage is cancelled by a reference voltage derived directly from the transmitter voltage.

When the aircraft comes within the range of a conductor, the normal (or primary) field is changed by a secondary field and the resultant voltage at the receiver coil is amplified and passed on to the EM receiver in the aircraft. This signal is filtered and split into one component in-phase and one component out-of-phase with reference to the transmitter voltage. The signals are then passed through phase -sensitive detectors where their amplitudes may be read on meters, or recorded on a chart. A system of calibration is included so that the amplitude of responses (anomalies) may be determined in "parts per million" of the primary receiver coil voltage prior to cancellation. The noise level of the system due to movement of the metal aircraft within the EM field is normally 50 parts per million less. Significant conductors depending on distance and size will produce anomalies of more than 50 parts per million.

Calibration marks are shown on the recorder chart and are generally of the order of 1 cm for 300 parts per million.

The reference or "zero" level for each EM trace is an arbitrary one and is obtained empirically from the regional level of each trace. These levels may drift very slowly during a flight because of temperature changes. These drifts are very gradual and are readily distinguishable from much quicker, local changes due to conductors of a geologic origin. Similarly, severe turbulence effects sometimes introduce low-order, primarily in-phase disturbances which are of such short period that they may also readily be distinguished from the effects of geologic conductors.

Man-made disturbances are often to be seen, including power lines, pipe lines, metal fences, railways, etc. The former are generally recognizable as such because they usually show through as cyclic noise of irregular shape and phase relationship. Non-energized, grounded power lines (e.g. 3 phase systems) may also give rise to proper conductor indications, however. Such indications, as well as those from pipe lines and metal fences, etc. are usually of short duration and can be distinguished from proper geologic sources except for very narrow, near-surface lenses. In some instances ground investigation may be necessary in order to resolve the ambiguity of possible source. Whereas the airborne geophysical crew attempts to note visible man-made conductors of the above types, the ground moves by so rapidly at the low flight elevation employed that 100% recognition of such sources cannot be expected from the air.

The normal terrain clearance of the aircraft is 150-250 ft. depending on the surface topography and tree cover, etc. The established useful depth of detection of the system for moderate-to-large conducting bodies is about 400 ft. sub-aircraft under conditions of low extraneous geolgoic noise, i.e. where the general level of conductivity of the overburden and rock types of the area is low. The useful depth of detection of the system is therefore, between 150 ft. and 250 ft. beneath the ground surface under these conditions.

Interpretation of Results: The EM records are interpreted to determine the presence of conducting bodies and to obtain some information relating to their character. The intervalometer time marks (see below) are synchronized with the positioning camera film strip (also see below) and thereby permit the relating of the conductors with appropriate ground locations. The altimeter data (see below) indicate, for each conductor, what the terrain clearance was at the time of detection.

A plan is prepared, either using a subdued photo-mosaic ("greyflex") or an overlay from a mosaic or topographic plan as base. The flight path of each survey line is obtained by means of "tie points", which are features on the mosaic or topographic plan which are also recognizable on the positioning camera film. The flight path is interpolated between these tie points.

Any anomalies noted are listed in the report, indicating their position, amplitudes, magnetic correlation, if any, relative anomaly rating, and comments which may be of significance.

The anomalies are then plotted on a base map in coded form, according to a legend shown on the base map. Anomaly groups which reflect probable ground conductors are circled and numbered. These are described and discussed in the report in the context of their geophysical and where possible, geological significance.

For each conductor the following quantities are measured and recorded:

A. Half width. This is the distance between the points of half the maximum conductor disturbance. For a very thin, steeply dipping body or pipe line, etc., the half width will be about 1.6 times its depth below the aircraft. If the bird is at a mean conductor clearance of 150 feet the half width would be about 250 feet. Larger half widths reflect either more deeply buried or more likely, thicker conductors.

B. Peak Location. The in-phase conductor peak location is shown on the plan by a circle in the appropriate location. In the case of broad conductors or closely spaced multiple conductor zones there may be more than one peak, in which event all major peaks are shown. If a conductor is of short half width there may be no room for a half width bar and only the peak circle will be shown. A conductor which is likely man-made will be indicated by an X rather than by a circle.

C. In-Phase and Out-of-Phase Amplitudes. These amplitudes are scaled from the EM traces and noted in parts per million. On the flight plan, opposite each peak location (circle) will be given the peak in-phase and out-of-phase amplitudes (see below).

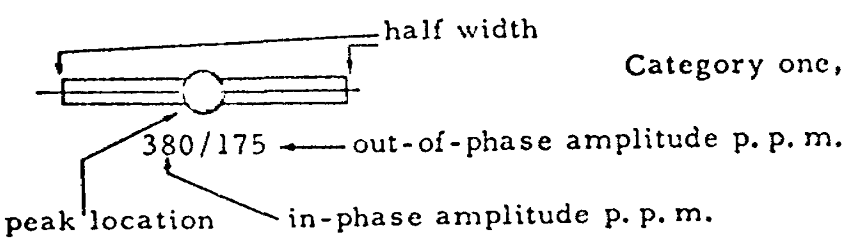
D. Conductor Coding. Conductor intersections are graded in electrical categories 1, 2, and 3, based on the in-phase amplitude but taking into account the terrain clearance. For tabular bodies such as sheet-like ore deposits, strata bound conductors and overburden, their response drops off almost in accordance with the inverse cube power of the elevation. Assuming an average 50 feet of overburden, a category 1 conductor has a peak in-phase response equivalent to 200 ppm or over at 150 feet aircraft-terrain clearance. A category 2 conductor has a peak in-phase response under similar conditions of between 75 ppm and 200 ppm. A category 3 conductor has an equivalent peak in-phase response of less than 75 ppm.

The respective peak circles are shaded to reflect their electrical category, with category 1 fully shaded, category 2 half shaded and category 3 unshaded.

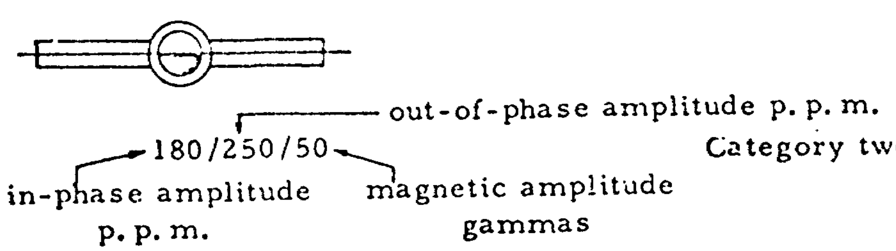
The ratio of peak in-phase over peak out-of-phase amplitudes is indicative of a conductivity-size factor for the conductor. Generally, high conducting bodies such as massive sulphides or graphite and sea-water, etc., have ratios of 1 or over. Moderate conductivity-size bodies will have ratios between .5 and 1. Poor conductivity bodies (e.g. most overburden and some sulphide and graphitic zones) will have ratios of less than .5. In areas where there is a clear differentiation in conductivity between the targets of potential economic interest and other possible conductors, the ratio is a diagnostic feature. In some areas, however, there is an overlap of conductivity ranges and then the ratio cannot be too rigidly relied upon.

Where magnetic data is available, preferably from a coincident recording magnetometer, any correlating magnetic activity will be noted for the pertinent conductor peak. A conductor peak with apparently direct magnetic correlation will be indicated by a double concentric circle. Although a conducting body which is appreciably magnetic is more likely to be a sulphide body than one which is non-magnetic, there are many very important base metal ore bodies which are quite non-magnetic.

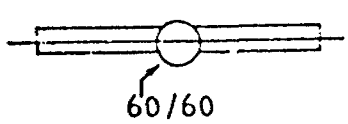
Examples of conductor coding are given below.



Category one, no magnetic correlation.



Category two, magnetic correlation.



Category three, no magnetic correlation.

X

Probably man-made conductor.

Altimeter: The altitude of the aircraft is monitored to an accuracy of ± 10 feet using a Bonzer Model TRN-70 radio altimeter at 1600 MHz. The altimeter results are recorded permanently on one channel of the eight channel recorder.

Camera: The path recovery camera is an Automax 35 mm unit with a special wide angle lens. Its operation is controlled by an intervalometer whereby one frame is triggered for each fiducial number. The camera is thus synchronized with the Edin and Moseley recorders.

Intervalometer: The intervalometer is a Scintrex Model IV-1 Solid State unit with variable time interval from 0.5 to 2 seconds. It operates the marker pens on the two recorders, the frame camera, and a rotary counter. The repetition rate is set so that the camera frames produce only slight overlap. This is approximately once per second.

Recorders: The Edin recorder is an eight-channel ink recorder type 8001. The galvanometer sensitivities are 12 volts full scale into 1350 ohms. The scale on each channel is four centimetres in width and the normal recording speed is 2 millimetres per second. The horizontal scale on the chart is thus roughly 4" per mile of traverse.

The Moseley recorder is a single channel ink recorder type 680. This recorder is used to register the magnetic information.

Reduction of Data: Upon completion of a flight, the film is developed and the actual path of the aircraft is plotted on a base map. This is accomplished by comparing film points with the base map planimetry. For any given point, the appropriate fiducial number is placed on the base map (or photo laydown). The actual flight path is produced by joining the fiducial points.

Where field results are desired, anomalies are chosen and are assigned appropriate fiducial numbers. The anomalies are then transferred to their correct position on the base map.

Flight lines and fiducial numbers are finally presented on a greyflex which is made using the photo mosaic as a base.

In the case of EM or radiometric results the anomalies are plotted on the greyflex as boxes with symbols representing anomaly grade or amplitude (as noted on the legend accompanying each map). Anomaly "systems" are then outlined at which stage a geophysical interpretation can be made.

MAP-2 Proton-Precession Magnetometer

The MAP-2 is a lightweight, one gamma airborne proton-precession magnetometer with a range of 20,000 to 100,000 gammas and an automatic five digit visual display. This new instrument has several significant advantages over other instruments of this type besides its compact size and light weight.

One of its most interesting features is that, unlike other airborne magnetometers which have to be switched manually from one narrow (usually 4000-6000 gammas) range to another, the MAP-2 tracks automatically over its full 80,000 gamma range.

This advantage is particularly significant in surveys flown at low terrain clearances in areas of high magnetic relief, conditions which are common in mineral prospecting.

The instrument is of compact modular design ($\frac{1}{2}$ standard rack size) and has both digital and analogue outputs. The analogue outputs are either 100 or 1000 gammas full scale, with automatic stepping. During each step, an indication of the new stepping level is recorded, providing a permanent reference identifying each step.

The measuring sequence can either be sequentially triggered internally through its own programmer or initiated by a suitable command pulse.

In addition while on internal triggering the instrument provides an external output command pulse enabling other instrumentation to be synchronized with the magnetometer.

The MAP-2 has an unusually wide temperature range, +50°C to -30°C, to permit operation in conditions varying from tropical to arctic without any loss of accuracy.

Specifications:

Range:	20 - 100,000 gammas (world-wide) continuous range (automatic tracking).
Sensitivity:	$\pm$ 1 gamma (fully automatic)
Accuracy:	$\pm$ 1 gamma
Sampling Rate:	Automatic standard 1 second, with provision for external triggering from other equipment with minimum 1 second intervals.

Readout-Visual: Digital Display by 5 incandescent, 7 bar display lights.

Digital Data Output: BDC 1-2-4-8 DTL, TTL Compatible

Analog Data Output: 5 V full scale for 1000 gammas, 100 gammas, 1 gamma resolution

External Trigger: Requirement: +4V to 0 transition (as slave)

Trigger Output: +4V to 0 transition at start of cycle (as master)

Power Requirements: 24-30V DC, 3.2A max.

Temperature Range: -30 to +50 degrees C

Dimensions and Weights:

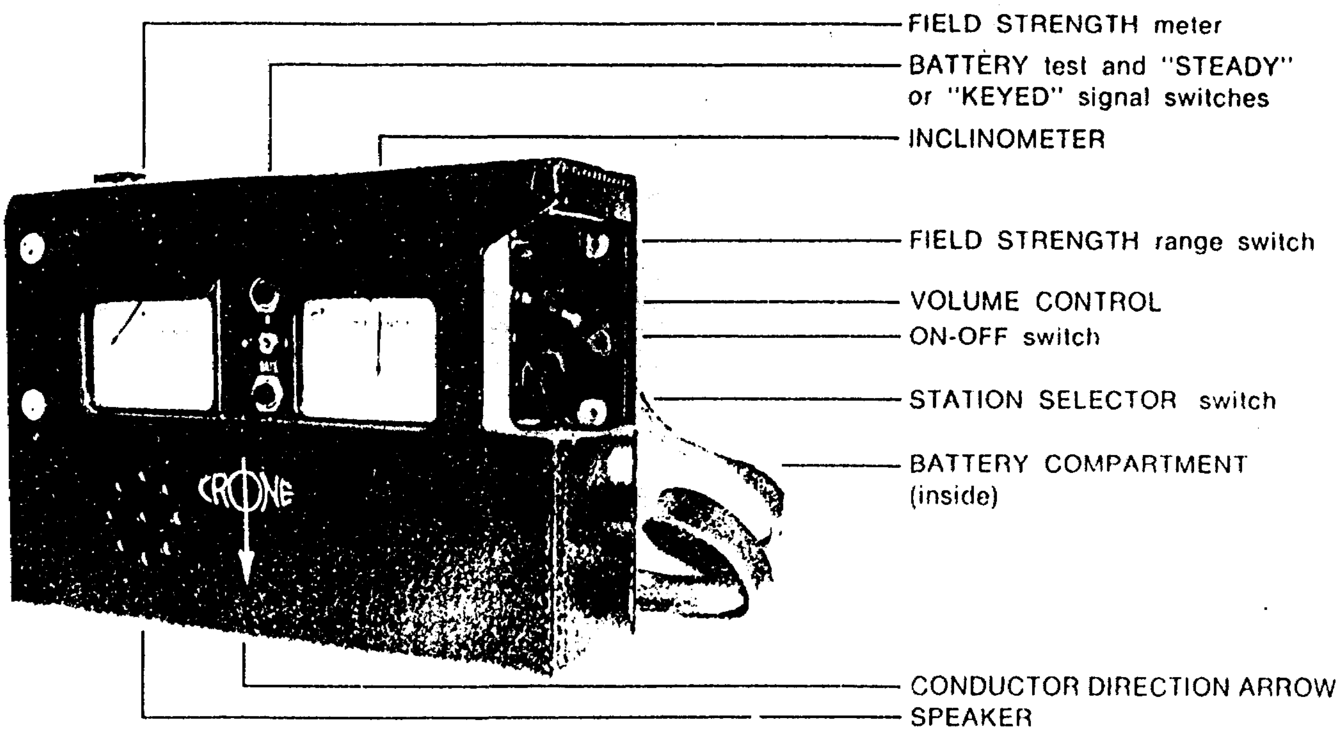
Console:
$8\frac{1}{2}$'' x $5\frac{1}{4}$'' x 13'' (half rack)
$21\frac{1}{2}$ cm x $13\frac{1}{2}$ cm x 33 cm
12 lbs. (5.4 kg)

Tow Bird:
7'' x 23'' (18 cm x 58 cm)
20 lbs. (9 kg)

CRONE GEOPHYSICS LIMITED

3607 WOLFEDALE ROAD,
MISSISSAUGA, ONTARIO,
CANADA.

Phone: 270-0096



This is a rugged, simple to operate, ONE MAN EM unit. It can be used without line cutting and is thus ideally suited for GROUND LOCATION OF AIRBORNE CONDUCTORS and the CHECKING OUT OF MINERAL SHOWINGS. This instrument utilizes higher than normal EM frequencies and is capable of detecting DISSEMINATED SULPHIDE DEPOSITS and SMALL SULPHIDE BODIES. It accurately isolates BANDED CONDUCTORS and operates through areas of HIGH HYDRO NOISE. The method is capable of deep penetration but due to the high frequency used its penetration is limited in areas of clay and conductive overburden.

The DIP ANGLE measurement detects a conductor from a considerable distance and is used primarily for locating conductors. The FIELD STRENGTH measurement is used to define the shape and attitude of the conductor.

52J02SW0060 52J02SW0069 FOURBAY LAKE

900

PROJECTS SECTION

DEPARTMENT OF MINES AND NORTHERN AFFAIRS

FILE: 2.463

TECHNICAL ASSESSMENT WORK CREDITS

Recorder Holder .... M. W. Rennick ....

Township or Area .... Fourbay Lake ....

Type of Survey and number of Assessment Days Credits per claim	Mining Claims
GEOPHYSICAL Airborne [X] Ground [ ]	Pa. 217593
Magnetometer ....40.... days	246621 to 29 incl.
Electromagnetic ....40.... days	246646 - 47
Radiometric .... days	246650 to 60 incl.
....	246675 to 88 incl.
GEOLOGICAL .... days	248501 to 04 incl.
GEOCHEMICAL .... days	248511 to 21 incl.
SECTION 84 (14) .... days	249049 to 54 incl.
Special Provision [ ] Man days [ ]	249331 to 45 incl.
	249348 to 50 incl.
	250054
	250075 to 79 incl.
	252909 to 40 incl.

NOTICE OF INTENT TO BE ISSUED

- [ ] Credits have been reduced because of partial coverage of claims.
- [ ] Credits have been reduced because of corrections to work dates and figures of applicant.
- [ ] NO CREDITS have been allowed for the following mining claims as they were not sufficiently covered by the survey:

______

______

______

______

______

NOTE *The Mining Recorder may reduce the above credits if necessary in order that the total number of approved assessment days recorded on each claim does not exceed the maximum allowed as follows: Geophysical – 80; Geological – 40; Geochemical – 40;*

FOURBAY LAKE
M- 2879

ONTARIO

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

#125 (S)

THE MINING ACT REPORT OF WORK

To the Recorder of Patricia Mining Division Mining Division

I, M. W. Rennick A29838
name of Recorded Holder Miner's Licence

234 Donlea Drive, Toronto 17, Ontario
Post Office Address

do hereby report the performance of 123 mi x 40 = 38 days of Airborne EM Surveying
130 claims type of work

not before reported to be applied on the following contiguous claims

Claim No.	Days	Claim No.	Days	Claim No.	Days
see attached list					

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)

Chris Ball - 605 Finch Avenue W., Willowdale, Ontario
Gordon Watt - 62 Emma Street, Guelph, Ontario
Don Thorburn - 63 Dolly Varden, Scarborough, Ontario
Harry Barr - R.R. #1, Guelph, Ontario

Survey flown April 29th, and May 2nd.

Date May 6th, 1971

Signature of Recorded Holder or Agent

The Mining Act
Certificate Verifying Report of Work

I, Jan Klein

222 Snidercroft Road, Concord, 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.

PATRICIA MINING DIV. RECEIVED MAY 10 1971 AM PM

Dated May 6th 1971

Signature

MAY 1971

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

125 (a)

CLAIM NUMBERS

250054
250075
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252939
252940
217593

Total - 114 Claims

38 days E.M.

PATRICIA MINING DIV.
RECEIVED
MAY 10 1971

52 J/02 SW (18)

FOURBAY LAKE
M-2879

ONTARIO

THE MINING ACT REPORT OF WORK

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

#125 (b)

To the Recorder of Patricia Mining Division Mining Division

I, M. W. Rennick — A29838
name of Recorded Holder — Miner's Licence

234 Donlea Drive, Toronto 17, Ontario
Post Office Address

do hereby report the performance of 123 mil x 40 = 38 days of Airborne Magnetic Surveying
130 claims — type of work

not before reported to be applied on the following contiguous claims

Claim No.	Days	Claim No.	Days	Claim No.	Days
see attached list					

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)

Chris Ball, 605 Finch Avenue W., Willowdale, Ontario
Gordon Watt, 62 Emma Street, Guelph, Ontario
Don Thorburn, 63 Dolly Varden, Scarborough, Ontario
Harry Barr, R.R. #1, Guelph, Ontario

Survey flown April 29th and May 2, 1971

Date May 6th, 1971 — Signature of Recorded Holder or Agent

The Mining Act
Certificate Verifying Report of Work

I, Jan Klein

222 Snidercroft Road, Concord, 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 May 6th 1971 — Signature

PATRICIA MINING DIV. RECEIVED MAY 10 1971 AM PM 7,8,9,10,11,12,1,2,3,4,5,6

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

#125 (b)

CLAIM NUMBERS

250054
250075
250076
250077
250078
250079
249331
249332
249333
249334
245335
249336
249337
249338
249339
249340
249341
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249343
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249348
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249350
249050
249051
249052
249053
249054
249049 ~~249045~~ ← ?
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252932
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252934
252935
252936
252937
252938
252939
252940
217593

Total - 114 Claims

38 days May
(air)

52 J/02 SW (36)

AREA CODE — 416
TELEPHONE — 365-6918

ONTARIO

2.463

WHITNEY BLOCK
QUEEN'S PARK
TORONTO 182, ONT.

DEPARTMENT OF MINES AND NORTHERN AFFAIRS
MINING LANDS BRANCH

October 14, 1971

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

Dear Sir:

Re: Mining Claim Pa. 217593 et al,
Fourbay Lake Area. File 2.463

The Airborne Geophysical (Magnetometer and Electromagnetic) assessment work credits as shown on the attached list 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/mw

Encl.

cc: M. W. Rennick,
234 Donlea Drive,
Toronto 17, Ontario.

cc: Mr. Jan Klein,
222 Snidercroft Road,
Concord, Ontario.

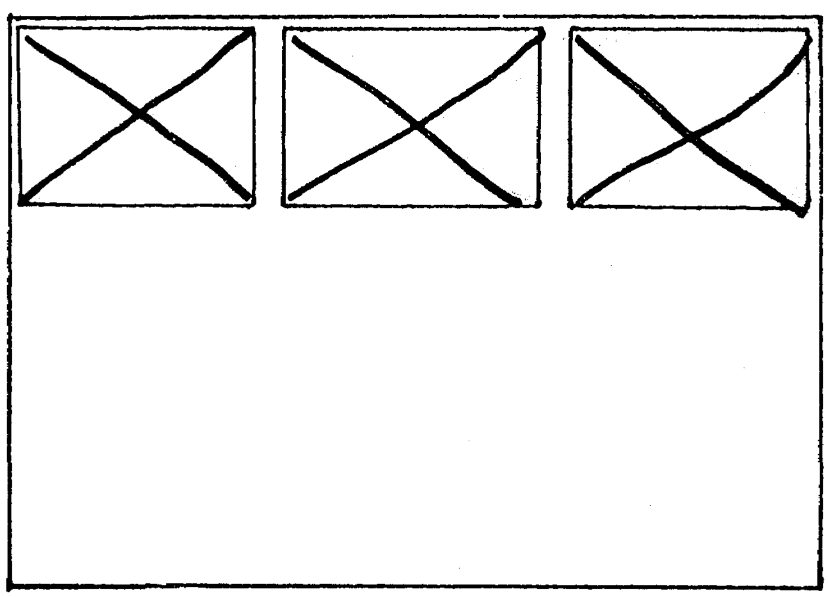
cc: Mr. H. L. King,
Resident Geologist,
808 Robertson Street,
Kenora, Ontario.

SEE ACCOMPANYING MAP(S) IDENTIFIED AS

52J/02SW-0069 #1-3

LOCATED IN THE MAP CHANNEL IN THE FOLLOWING SEQUENCE

(X)



AREA OF

FOURBAY LAKE

DISTRICT OF
KENORA · THUNDER BAY

PATRICIA
MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

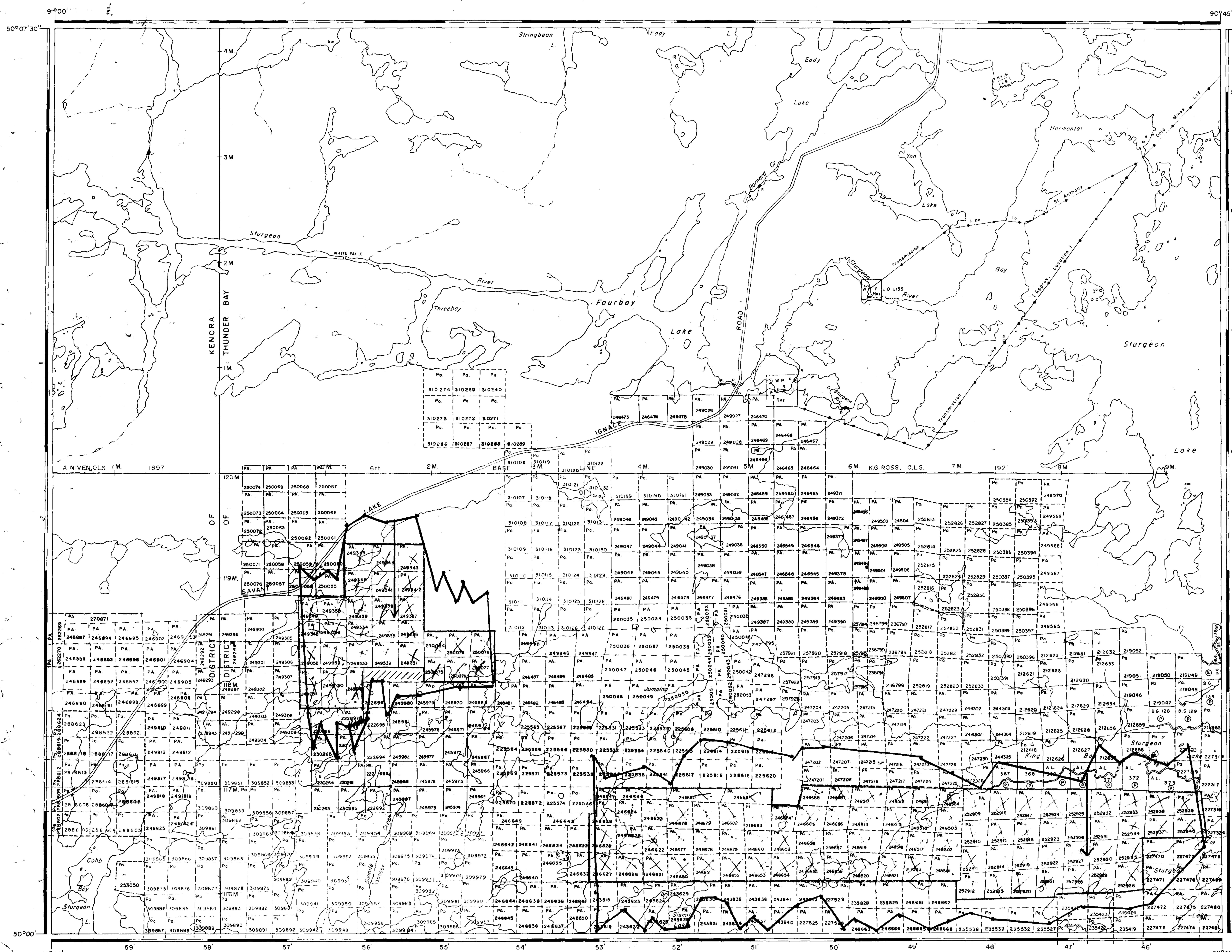
LEGEND

PATENTED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	
CANCELLED	C.

NOTES

400' Surface Rights Reservation around all lakes and rivers.

DATE OF ISSUE
MAY 25 1971



Sixmile Lake Area - M.2877

52J/02SW-0069 #1

NATIONAL TOPOGRAPHIC SERIES 52 J

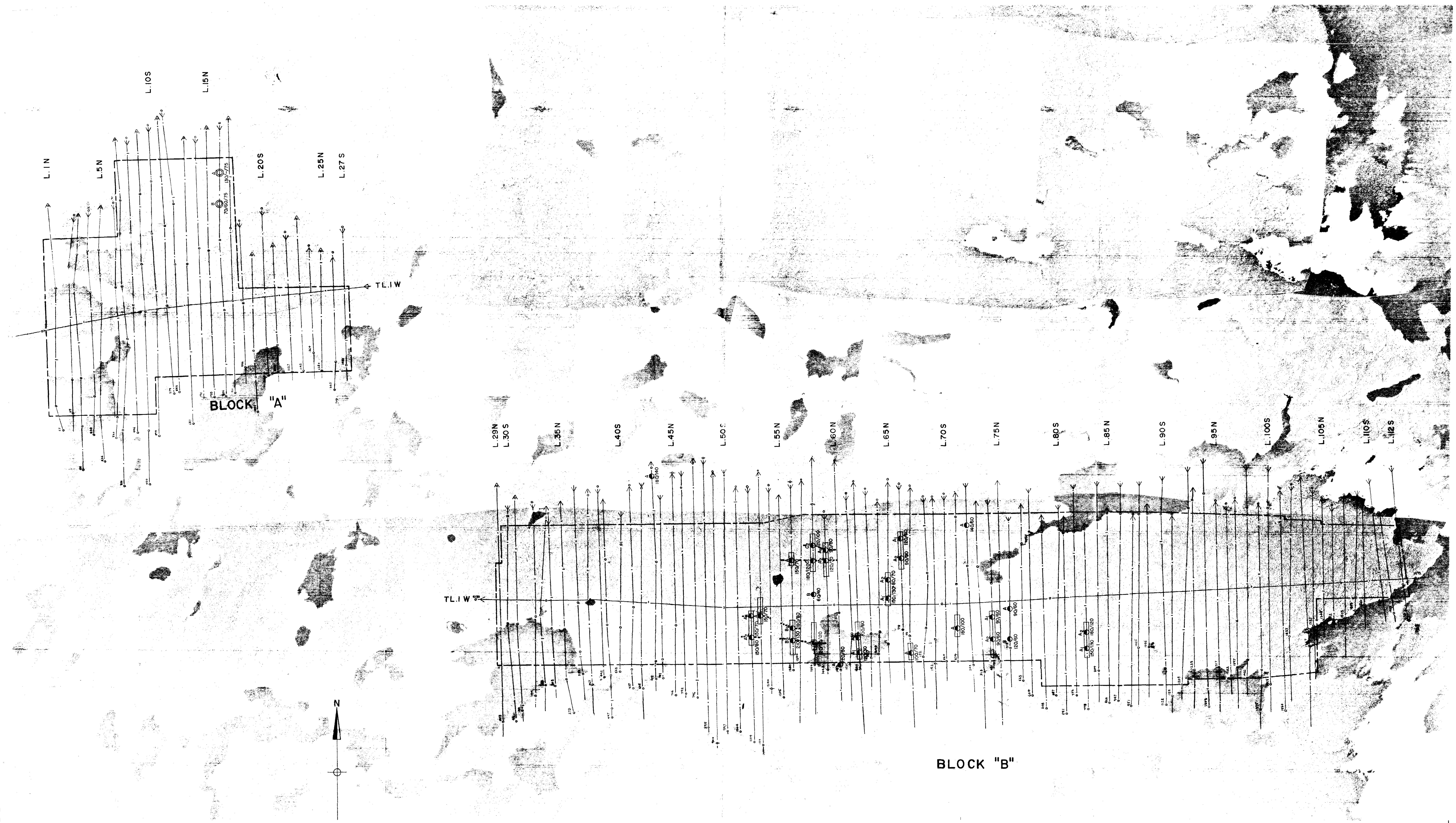
PLAN NO. M.2879

ONTARIO
DEPARTMENT OF MINES
AND NORTHERN AFFAIRS

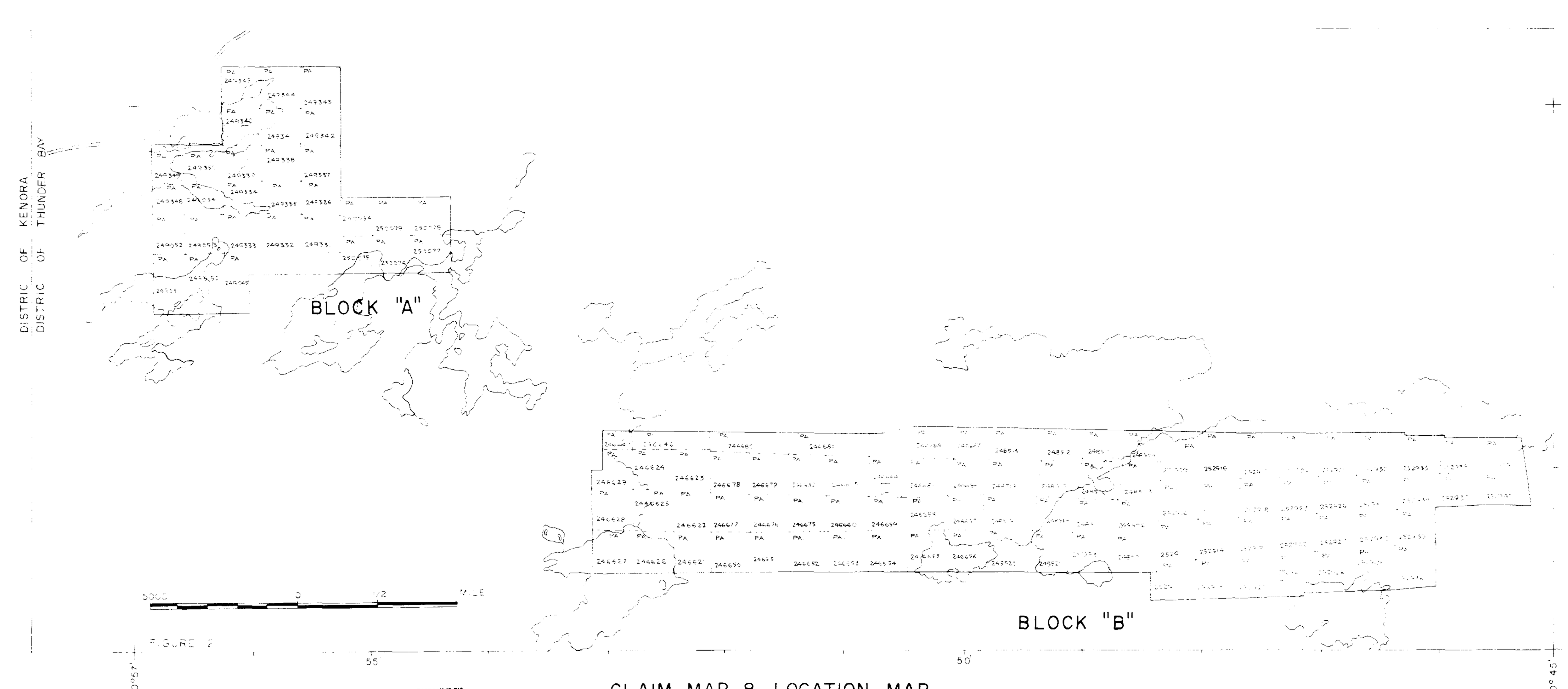
501904

52J02SW0069 52J02SW0069 FOURBAY LAKE

200



52J/02SW-0069 #2



ELECTROMAGNETIC ANOMALY PLAN

LEGEND

PLATE I

LARCHMONT MINES LIMITED

STURGEON LAKE AREA, ONT.

AIRBORNE GEOPHYSICAL SURVEY

SCALE : 1" = 1320'

SURVEY BY SEIGEL ASSOCIATES LIMITED

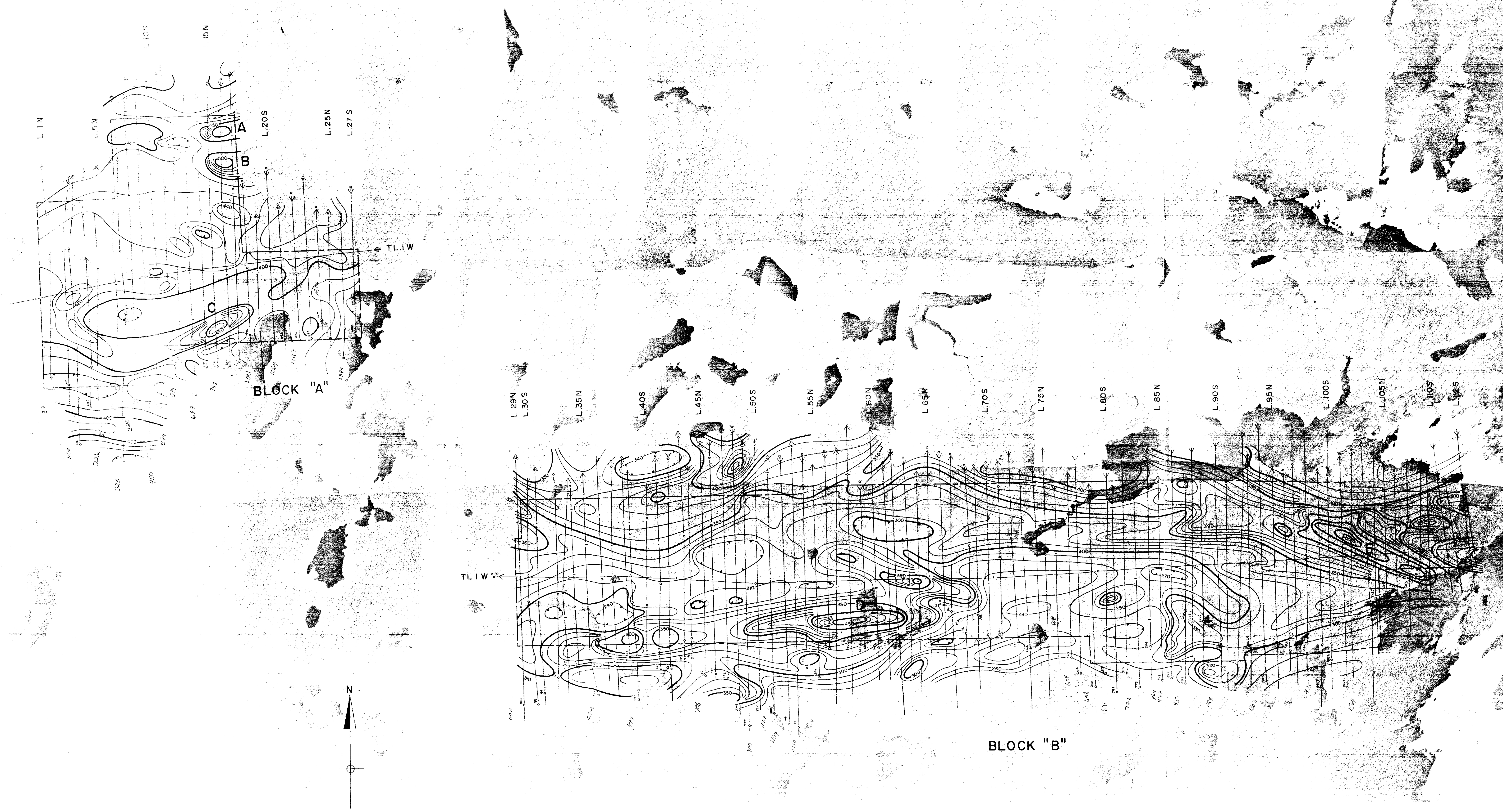
FLOWN AND COMPILED APRIL - MAY 1971

FLIGHT ALTITUDE ≈ 75'

FLIGHT LINE SPACING ≈ 400'

2.463

71-9354-01



52J/02SW-0069 #3 ★

PLATE 2

LARCHMONT MINES LIMITED

STURGEON LAKE AREA, ONT.

1" = 1320'

BLOCK "B"

220