52-G-14
MADSEN RED LAKE GOLD MINES LTD. OPTION
STURGEON LAKE, ONTARIO
GEOLOGICAL AND GEOPHYSICAL REPORTS

September, 1972
Toronto, Ontario

W. Benham
H. Beckmann

010C

52-G-14
MADSEN RED LAKE GOLD MINES LTD. OPTION
STURGEON LAKE, ONTARIO

TABLE OF CONTENTS

MAPS IN POCKET	Scale	Drawing
Location Map	1" to 2640 feet	L-2589
Geology Maps	1" to 400 feet	G-4397,3388
Magnetometer Survey	1" to 400 feet	M-4401,3390
Electromagnetic Surveys	1" to 400 feet	E-4400,3389

52-G-14
MADSEN RED LAKE GOLD MINES LTD. OPTION
STURGEON LAKE, ONTARIO

SUMMARY

During July 1972, detailed mapping, magnetometer and EM surveys were carried out on the Madsen Red Lake Gold Mines Limited optioned property in the Sturgeon Lake Area, Northwestern Ontario.

The geological mapping showed the southern part of the property to be underlain by andesites, diorites and quartz diorites. The complete lack of outcrop in the northern claims prevented an accurate geological assessment of this area which is interpreted as being underlain by extensions of the acid volcanics that host the Mattabi Mines Limited base metal deposit.

The magnetometer survey was carried out over the entire land portion of the claim group indicating banded, positive anomalies in an area underlain by diorite, while the portion of the property, projected to be underlain by rhyolites returned very little magnetic contrast.

The peninsula extending into Young Lake was surveyed with the SE 600 EM, employing the parallel line method, no actual cross overs were indicated, but a series of unidirectional tilt suggest some zoning.

A showing on line 8 East at 30 South was investigated and tested for conduction along strike by a turam SE 71 survey

on 6 lines, but no conduction was detected.

It is recommended that the magnetometer survey be completed and that an IP or Turam EM survey be carried out over the northern portion of the property during the winter season.

52-G-14
MADSEN RED LAKE GOLD MINES LTD. OPTION
STURGEON LAKE, ONTARIO

INTRODUCTION

This report describes the detailed geological mapping magnetometer and EM surveys carried out by Rio Tinto Canadian Exploration Limited, during July, 1972 on the Madsen Red Lake Gold Mines Limited optioned property in the Sturgeon Lake area of northwestern Ontario.

Previous reconnaissance mapping and the compilation of assessment file and government reports of the Sturgeon Lake area indicated that the property may be underlain by westward extensions of the favourable acid volcanics that host the Mattabi Mine Ltd. base metal deposit.

PROPERTY, ACCESS AND LOCATION

The property consists of fifty contiguous claims in the Sturgeon Lake area, District of Kenora, Patricia Mining Division northwestern Ontario.

Its location is shown on Map L-2589, accompanying this report.

Access is by Highway 599, which crosses the southern claims, from Ignace, 45 miles to the south, and by boat via Elbow and Young Lakes.

Madsen acquired the ground from Lake-O-Explorations Limited, who staked the claims in November 1969, during the

rush that followed the discovery of a massive sulphide, base metal deposit, nine miles to the east by Mattagami Lake Mines Limited in September 1969.

Rio Tinto presently holds the property under a working option agreement effective April 30, 1976.

PREVIOUS WORK

Madsen had the claims covered by a line grid and EM 16 V.L.F. survey in early 1970. This survey detected several overburden and shear zone conductors, but no strong bedrock conductors were detected.

Three old trenches have been blasted west of L 8 E at 29+00 S to expose a rusty silicified shear zone in quartz diorites. Grab samples assaying low copper and nickel values have been reported.

Madsen put down five packsack holes. Three in the vicinity of the above showing and two on an island in Sturgeon Lake to test a northeast shear zone indicated by the EM 16 survey. Diorites, quartz diorites and andesties with minor disseminated pyrite were intersected.

Most of the work carried out to date has been concentrated on the southern claims.

GEOLOGY

(a) General

The property covers extensions of the Archean meta - volcanic belt that extends westward from the Mattabi Mines

Limited Cu, Zn, Ag massive sulphide deposit, nine miles to the east.

Outcrop is very scarce due to extensive areas being covered by glacial sands, gravels, tills, thick alder and cedar swamps.

In the north and central parts of the property, the rocks consist of a series of metavolcanics consisting of rhyolite tuffs, agglomerates and flows to the north and andesites to the south.

The extreme southern claims are underlain by diorites and quartz diorites.

Quartz-feldspar dykes intrude all other rocks of the area.

The volcanics strike 250° to 260°, dip steeply north to vertical, and top north as indicated by pillowed andesites to the south of Young Lake. The mafic volcanics are highly sheared and have been metamorphosed to an upper greenschist facies.

(b) Property

The results of the geological mapping are shown on drawings G-4397 and G-3388 accompanying this report.

The mapping was carried out by J. Casey, the writer and under the writer's supervision by traversing along lines cut at 400 foot intervals.

The main rock types found are described below:

(i) Andesites (1)

The mafic volcanics found in the central portion of the property occur as massive and pillowed lavas, tuffs and agglomerates, chlorite schists and locally as feldspar porphyritic lavas.

The lack of outcrop and the intensity of shearing makes it difficult to outline accurately the various andesite units.

The massive andesites are best exposed southwest of the baseline in contact with the diorites. They are fine grained, grey-green to dark green and in parts silicified by the intrusion of the diorites. On L16W, 18+50S, sheared pillows were observed; but no top determinations were possible. N. Trowell, O.D.M., 1970 describes pillowed andesite facing north 2000-3000 feet to the west of the property.

The massive andesites are overlain by mafic tuffs and agglomerates. The tuffs exposed on the south shore of Young Lake consist of 1mm to 30 mm lenticular grey-green mafic fragments in a highly sheared, dark green chloritic matrix. Ire Irregular 2-3mm white carbonate patches and crushed feldspar phenocrysts are common.

The green-brown weathered agglomerates consist of rounded stretched 10-20cm fragments in a chloritic tuffaceous matrix.

In places the pyroclastics are more dacitic in composition for example the south shore of Sturgeon Lake.

Locally the andesites are feldspar porphyritic and amygdaloidal. They consist of 2-5mm stretched feldspar pheno-

crysts and quartz and carbonate filled "vesicles" in a sheared chloritic matrix. The sheared porphyritic lavas are difficult to distinguish from the sheared porphyritic pyroclastics.

(ii) Dacites (2)

A single dacite fragmental outcrop occurs on L 24E at 10+00S. It consists of fine grained, grey-green, 5-10cm subrounded fragments in a darker chloritic matrix. This dacitic unit is completely enclosed by intrusives.

(iii) Rhyolite Tuff (3) and Rhyolite (4)

The northern portion of the property is interpreted as being underlain by felsic volcanics consisting mainly of rhyolite tuffs, agglomerates and possibly rhyolite flows.

However, no outcrop at all was found in this area which is covered by numerous thick cedar swamps and granite boulder hills and ridges.

Two angular boulders of fine grained, light grey, siliceous, massive rhyolite were found, but their source is unknown. The low magnetic relief supports the theory that the area is underlain by acidic rocks.

Assessment file ddh records and O.D.M. reports describe acid tuffs, agglomerates and flows to the northeast and east of the property.

A study of the aeromagnetics suggest that the contact between the rhyolites and the underlying andesites occurs 1000 to 1500 feet north of the south shore of Young Lake.

(iv) Diorite (5)

The diorites occur as narrow dykes cutting the andesites as a more basic phase of a diorite/quartz diorite intrusive underlying the southern part of the property.

They are fine to medium grained, dark green to black and massive. Occasionally they are highly sheared and difficult to distinguish from the andesite.

(v) Quartz Diorite (6)

The southern claims are underlain by a large quartz diorite body that is part of the Beidelman Bay - Darkwater Lake-Bell Lake Granodiorite - Trondhjemite - Quartz Porphyry Complex that extends for twelve miles to the east. This body is described in detail by N. Trowell in O.D.M. Open File Report 5051.

The quartz diorite is medium grained, equigranular, grey-green on weathered surface and dark green to black on a fresh surface. It consists of 40 to 50 percent hornblende, 30 to 40 percent plagioclase and 10 to 20 percent blue, translucent quartz.

The diorite phases of this complex are similar in physical appearance except they contain 0 to 10 percent blue quartz; the quartz being finer grained, and less conspicuous.

(vi) Quartz-feldspar Porphyry Intrusive (7)

The quartz-feldspar porphyrys occur as narrow dykes cutting all other rocks of the area and as a small oval-shaped body in the southwestern corner of the property.

They consist mainly of 1-3 mm anhedral to euhedral, white feldspar and scatterd 2mm rounded, light blue quartz phenocrysts set in a medium grained, grey-green felsic matrix. They are massive to slightly foliated.

(c) Structure

The metavolcanics strike 250° to 260°, dip steeply north to vertical and face north as indicated by pillowed structures to the west of the property.

The volcanics and locally the diorites are highly sheared and have been metamorphosed to an upper green schist facies.

The EM 16 survey, the magnetic patterns and the offset of the andesite formations indicate a major fault system striking north eastwards through the south end of Sturgeon Lake.

The EM 16 results and the magnetics also suggest several other minor faults in the southern half of the property.

(d) Mineralization

West of L 8E at 29+00S, a barren sulphide occurrence is exposed by three old trenches. The showing consists mainly of disseminated pyrite with minor amounts of pyrrhotite and chalcopyrite in a silicified shear zone 20 to 40 feet wide striking 250°. It is exposed for a strike length of about 200 feet.

Grab sample 115267 of the best pyrite mineralization assayed 0.21 percent Cu and 0.009 percent Ni.

An X-ray semi-quantitative analysis of grab sample 115268 of the best chalcopyrite, pyrrhotite mineralization returned 2.00 percent Cu and 0.50 percent Ni.

See Appendix I for complete results.

Low copper and nickel values were reported from three packsack holes drilled in this area.

A Turam EM survey carried out over this showing failed to detect any significant conduction.

DISCUSSION

The geological mapping has shown the southern part of the property to be underlain by andesites, diorites and quartz diorites.

The complete lack of outcrop in the northern claims prevented an accurate geological assessment of this area which is interpreted as being underlain by the extensions of the favourable acid volcanics that hostthe Mattabi Mines Limited base metal deposit.

A deep penetrating geophysical method such as IP or Turam EM is required to better assess the potential of the northern claims.

Wayne Benham

Wayne Benham

SECTION II

DISCUSSION OF GEOPHYSICAL RESULTS

Electromagnetics

The northern portion of the claim group, covering part of a peninsula into Young Lake was surveyed with SE 600 EM, on the parallel line system. If any conduction is indicated, it is very minor and is observed as unidirectional tilts only, that can be traced over several lines. Very little could be gained by detail, setup work using the same system, but a deeper penetrating turam EM or IP survey is recommended for the same area and including the Young Lake portion of the claims, to be carried out during the winter season.

A six line loop of SE 71 turam EM, centred on a mineral showing was surveyed on the southern portion of the claim block to test for conduction along strike, but no anomaly was detected. The data of the electromagnetic surveys are presented on drawings E-3389 and E-4400.

Magnetometer Survey

The entire land portion of the claim group was surveyed with a MF 2 Fluxgate magnetometer, the data was corrected for diurnal and instrument drift and are presented as isodynamic contours on drawings M-4401 and M-3390.

Considerable magnetic activity is indicated in the southern portion of the claim group, displayed by banded, narrow,

short frequency positive magnetic anomalies caused by the varying magnetite content within diorite and andesites. Block faulting is indicated south of Sturgeon Lake, but this has to be varified by additional magnetic coverage of the Sturgeon Lake portion of the claim group.

There is a noticeable magnetic change west and northwest of Sturgeon Lake and in particular on the Young Lake peninsula. Here the magnetic contrast is relatively flat, suggesting a definite change in the underlying geological formations.

Conclusion

No conductivity was indicated by the EM survey and the narrow, banded magnetic anomalies are all underlain by diorite and andesites.

Recommendation

It is recommended to carry out an IP or turam survey over the northern portion of the claim group and also extend the magnetometer survey to cover the lake portion of the property during the winter season 1972-73.

H. Beckmann

REFERENCE MAPS AND REPORTS

Aeromagnetic Survey Series, 1 inch to 1 mile, Map 1127-G, Watcomb Lake, 1961.

Metionga Lake Area, Geological Report No. 24, O.D.M. D. Rodgers, 1964

Sioux Lookout-Armstrong Sheet, Geological Compilation Series Map 2169, 1 inch to 4 miles, 1970

Geology of the Watcomb Area, Geological Report No. 88, O.D.M., N. F. Trowell, 1970

Bell Lake - Sturgeon Lake Area, Maps P588 to P591, 1 inch to ¼ mile, N. F. Trowell, 1970

Geology of the Bell Lake - Sturgeon Lake Area, Open File Report 5051, O.D.M., N. F. Trowell, 1970

O.D.M. Assessment Files, Sturgeon Lake Area

Ground Electromagnetic Survey, Lake-O-Exploration Group, Sturgeon Lake, Madsen Rel Lake Gold Mines Ltd., F. A. Innes, 1970

APPENDIX I

ANALYSIS REPORT

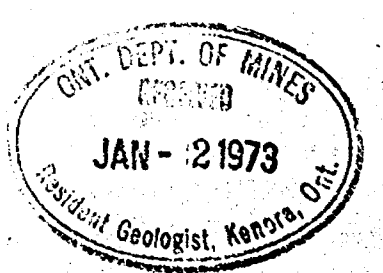
Lab. No.	Sample Description	% Cu	% Ni	% Zn	% Mo	Au	Ag
F-768	C-21596; 115267	.21	.009	.0044	.001	ND	
	C-21595						ND

X-RAY SEMI-QUANTITATIVE ANALYSIS REPORT

Lab No.: F-769

Sample Description: C-21595; 115268

Element	%
Al	*
Si	21
P	*
S	*
Cl	*
K	0.4
Ca	3.0
Ti	0.6
V	0.02
Cr	0.02
Mn	0.15
Fe	26
Co	0.03
Ni	0.5
Cu	2.0
Zn	0.03
As	ND
Rb	ND
Sr	0.01
Y	ND
Zr	0.01
Nb	ND
MO	ND
Sb	ND



SEMI QUANTITATIVE REPORT cont'd

Element	%
Ba	ND
Ce	ND
Hg	ND
Pb	0.02
Bi	ND
Th	ND
U	ND

* Al, P, S, and Cl not determined

APPENDIX

GEOPHYSICAL SURVEYS

FLUXGATE MAGNETOMETER MF 2 (SCINTREX)

The MF 2 Fluxgate Magnetometer is a hand held instrument.

It is orientation independent, measures the vertical component of the earth's magnetic field directly in gammas over a range of ± 300 to 100,000 gammas with an accuracy of beter than 1%.

Readings are taken and recorded from a top mounted meter after levelling the magnetometer.

Periodic checks are made to base stations for diurnal drift.

These base stations are generally located at the line intersection along base lines favouring areas of low magnetic contrast, along shore lines for later winter work and are time controlled, closed in loops. Closures do not excede 1 to 1½ hours depending on the time of the day and will be re-run if deviations are suspect of accidental shock or might be caused by magnetic storms.

Corrections for drift and day to day variations have been applied to the presented data.

APPENDIX

GEOPHYSICAL SURVEYS

FLUXGATE MAGNETOMETER MF 2 (SCINTREX)

The MF 2 Fluxgate Magnetometer is a hand held instrument.

It is orientation independent, measures the vertical component of the earth's magnetic field directly in gamms over a range of $\pm$ 300 to 100,000 gammas with an accuracy of better than 1%.

Readings are taken and recorded from a top mounted meter after levelling the magnetometer.

Periodic checks are made to base stations for diurnal drift.

Corrections for drift and day to day changes have been applied to the presented data.

File 2.10.25

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

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: Magnetometer

Township or Area: Sturgeon Lake Area (M2266)

Claim holder(s): Madsen Red Lake Gold Mines
c/o Rio Tinto Canadian Expl/ Ltd.

Author of Report: H. Beckmann

Address: c/o Rio Tinto Canadian Expl. Ltd.
120 Adelaide Street W., Toronto, Ontario

Covering Dates of Survey: June 30 - July 27, 1972
(linecutting to office)

Total Miles of Line cut: nil

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

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: July 27, 1972 SIGNATURE: H. Beckmann
Author of Report or Agent

PROJECTS SECTION

Res. Geol. Kenora Qualifications 2.11(4)

Previous Surveys 2.196 (E 72) received linecutting credits - 1970

LD

Checked by _____ date _____

GEOLOGICAL BRANCH

Approved by _____ date _____

GEOLOGICAL BRANCH

Approved by _____ date _____

OFFICE USE ONLY

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
PA 245578	PA 245611
245579	245636
245580	245637
245581	245638
245582	245639
245583	245640
245584	245641
245585	245642
245586	245643
245590	245644
245593	245645
245599	245646
245600	245647
245601	245648
245602	245649
245603	245650
245604	245651
245605	245652
245606	
245607	
245609	
245610	

TOTAL CLAIMS 40

If space insufficient, attach list

Show instrument technical data in each space for type of survey submitted or indicate "not applicable"

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations 1649 Number of Readings 1649

Station interval 100 feet

Line spacing 400 feet

Profile scale or Contour intervals 200 gammas
(specify for each type of survey)

MAGNETIC

Instrument Sharpe MF2

Accuracy - Scale constant

Diurnal correction method

Base station location

ELECTROMAGNETIC

Instrument

Coil configuration

Coil separation

Accuracy

Method: ☐ Fixed transmitter ☐ Shoot back ☐ In line ☐ Parallel line

Frequency
(specify V.L.F. station)

Parameters measured

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

File

RECEIVED
SEP 27 1972
PROJECTS SECTION

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

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: Geological

Township or Area: Sturgeon Lake Area (M2266)

Claim holder(s): Madsen Red Lake Gold Mines Ltd.
c/o Rio Tinto Canadian Expl. Ltd.

Author of Report: Wayne Benham

Address: =c/o Rio Tinto Canadian Exploration Ltd.
120 Adelaide Street W., Toronto, Ontario

Covering Dates of Survey: June 21 - July 27, 1972
(linecutting to office)

* Total Miles of Line cut: 8.3 Brushing & Cleaning

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

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: July 27, 1972 SIGNATURE: Wayne Benham
Author of Report or Agent

PROJECTS SECTION

Res. Geol. _____ _____ Qualifications 2.143

Previous Surveys _____

Checked by _____ date _____

GEOLOGICAL BRANCH
20 Tech + 15 line = 35 days

Approved by _____ date _____

GEOLOGICAL BRANCH

Approved by _____ date _____

OFFICE USE ONLY

Lines brushed + cleaned on claims marked by X only - coverage needs = 15 days/claim.

Claims marked (X)

Other 20 days

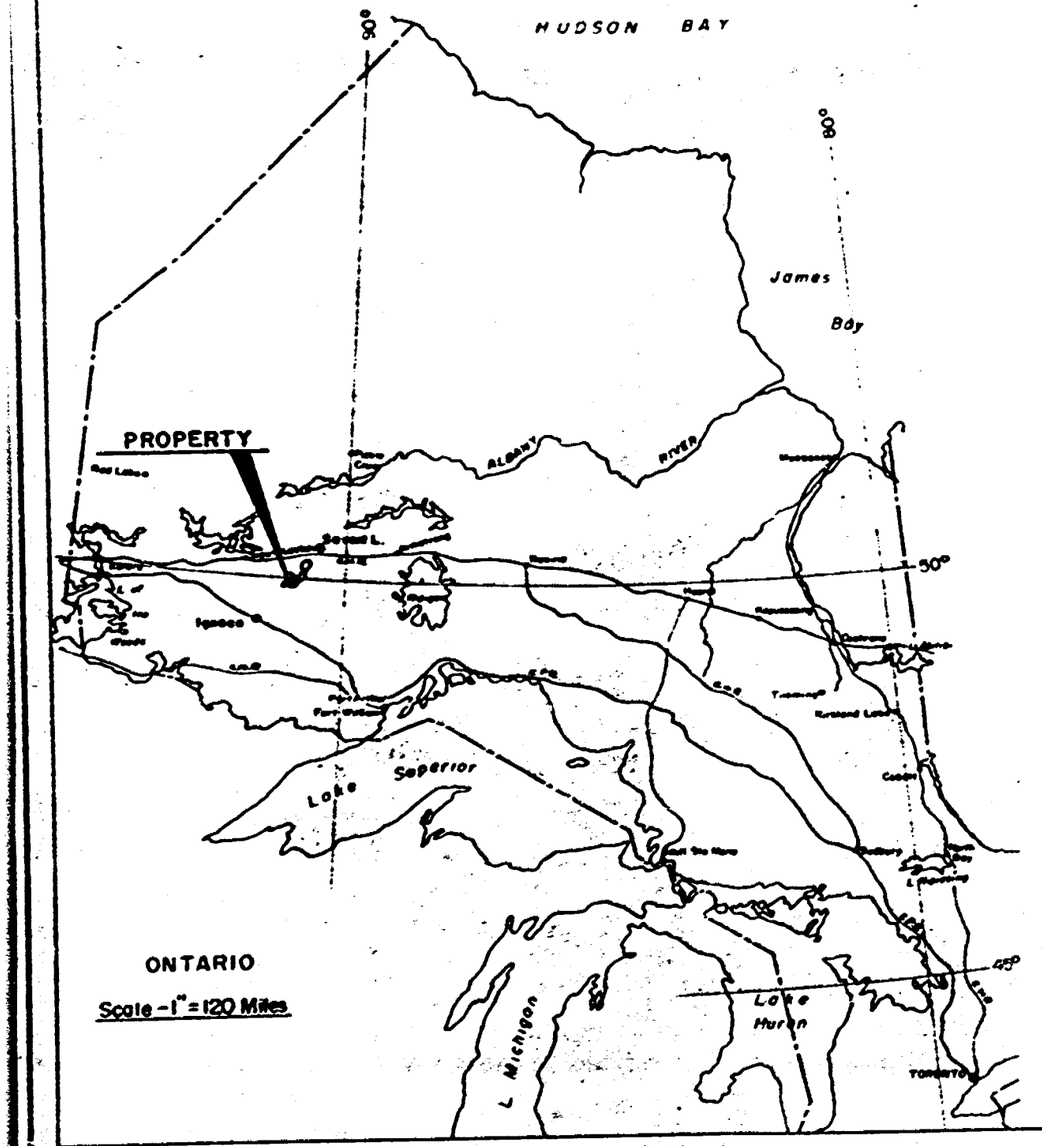
MINING CLAIMS TRAVERSED
List numerically

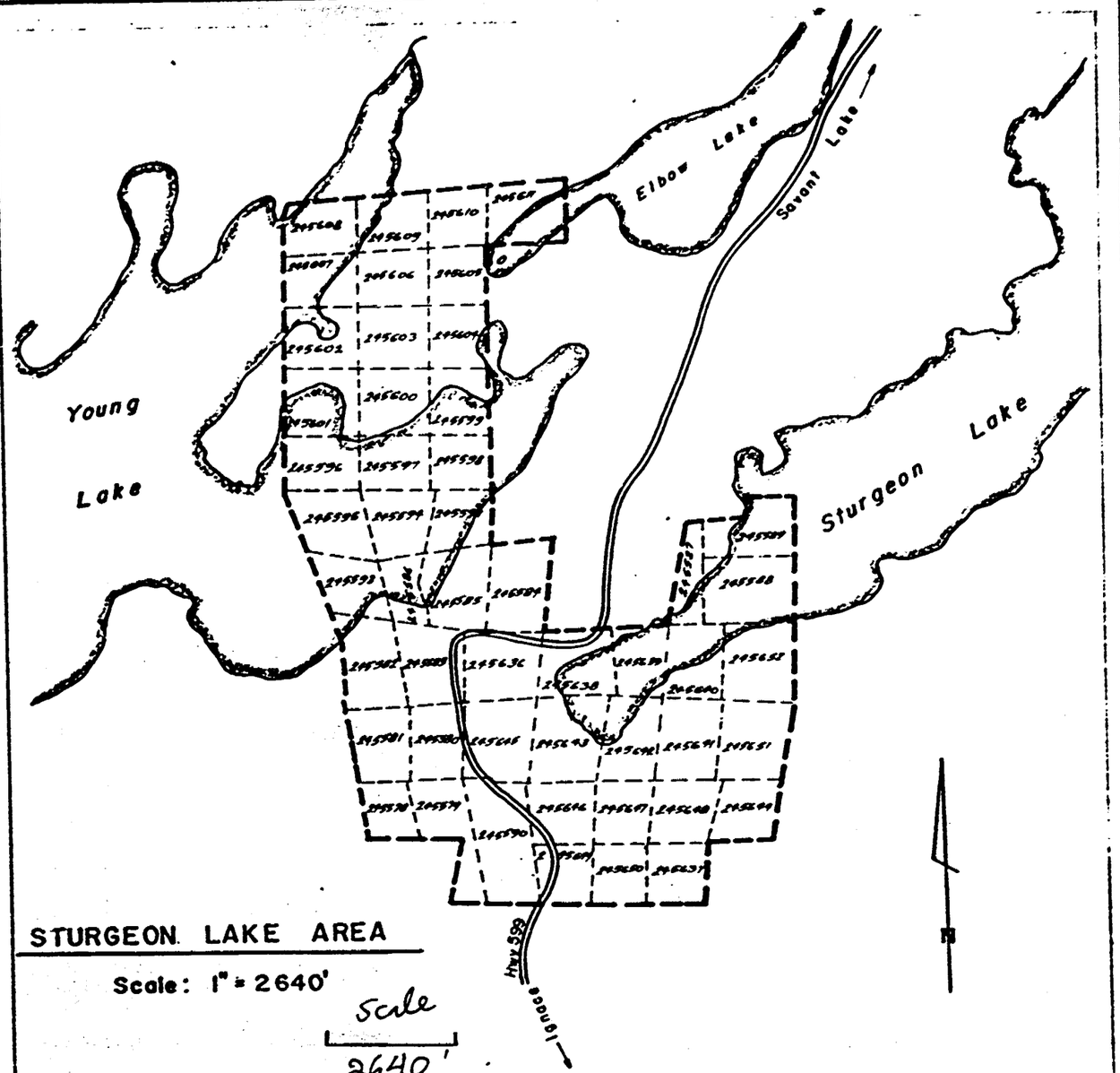
(prefix)	(number)		
PA	245578	X PA	245611 10
	245579		245636
	245580		245637
	245581		245638
	245582		245639
	245583		245640
	245584		245641
	245585		245642
	245586		245643
	245590		245644
	245593		245645
X	245599 10		245646
X	245600 20		245647
X	245601 10		245648
X	245602 15		245649
X	245603 20		245650
X	245604 20		245651
X	245605 20		245652
X	245606 20		
X	245607 5		
X	245609 15		
X	245610 20		

Linecutting

TOTAL CLAIMS 40

If space insufficient, attach list





N.T.S.
52-G-14

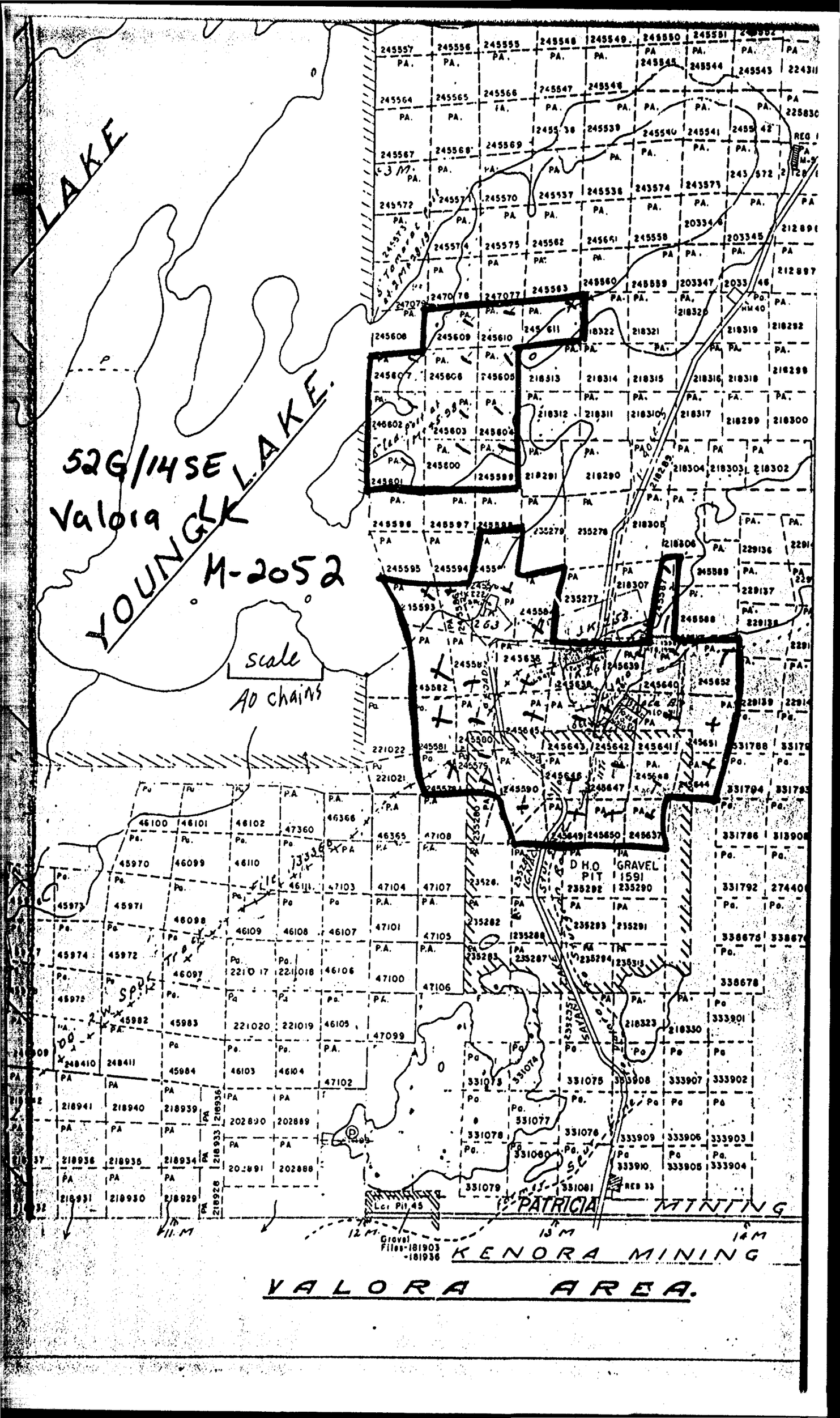
Note: All claims have prefix P.A.

RIO TINTO CANADIAN EXPLORATION LTD.

MADSEN OPTION - STURGEON LAKE AREA - ONT.

LOCATION MAP

July - 1972 W.B., J.W.C. / e.k. DWG L-2589


LAKE
YOUNG LAKE
52G/14SE
Valora
M-2052
scale
40 chains
D H O
GRAVEL
PIT
1591
PATRICIA
MINING
KENORA MINING

VALORA AREA.

ONTARIO
Ministry of Natural Resources

File: 2.1023

M1617, Whitney Block,
Parliament Buildings,
Queens Park, Toronto M7A 1X1

Telephone: 416:965-6918

December 27, 1972.

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

900

Dear Sir:

Re: Mining claims Pa. 245578 et al,
S. W. part of Sturgeon Lake.
File 2.1023

The Geophysical (Magnetometer) and Geological assessment work credits as listed with my Notice of Intent dated December 8, 1972 have been approved as of the date above. Please inform the recorded holder and so indicate on your records.

Yours very truly,

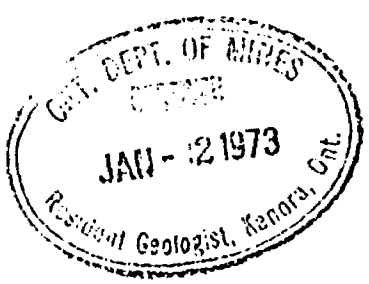
Fred W. Matthews,
Supervisor,
Projects Unit.

/dg.

c.c. Madsen Red Lake Gold Mines Ltd.

c.c. Rio Tinto Canadian Explo. Ltd.

✓c.c. Resident Geologist, Kenora.



SEE ACCOMPANYING MAP(S) IDENTIFIED AS

52G/14SE-0061 #1-3

LOCATED IN THE MAP CHANNEL IN THE FOLLOWING SEQUENCE

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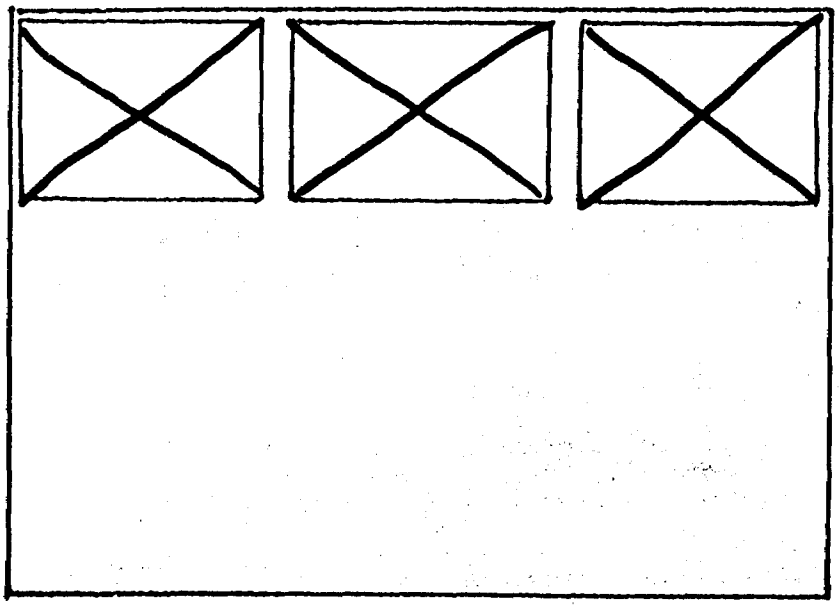
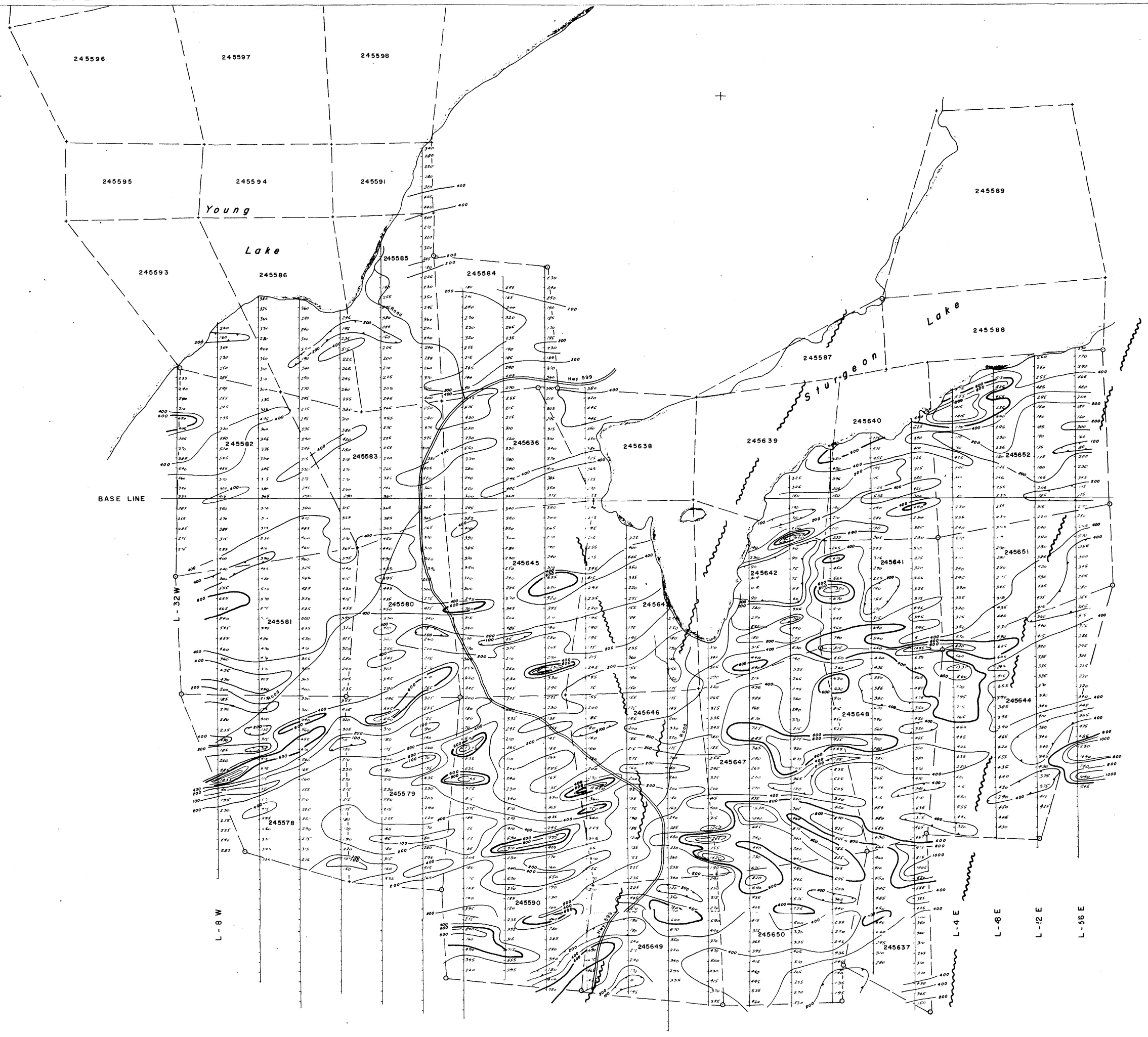


FOR ADDITIONAL INFORMATION SEE MAPS:

52G/14SE-0061 ##4-6



LEGEND:

750 Value in gammas

Contour interval in gammas

100 Gamma contour interval
200 " " "
400 " " "
600 " " "
800 " " "

Mag Low

Interpreted Faults

KEY

2

N.T.S
52-G-14

SCALE
400 0 400 800 1200 1600
One Inch = 400 Feet

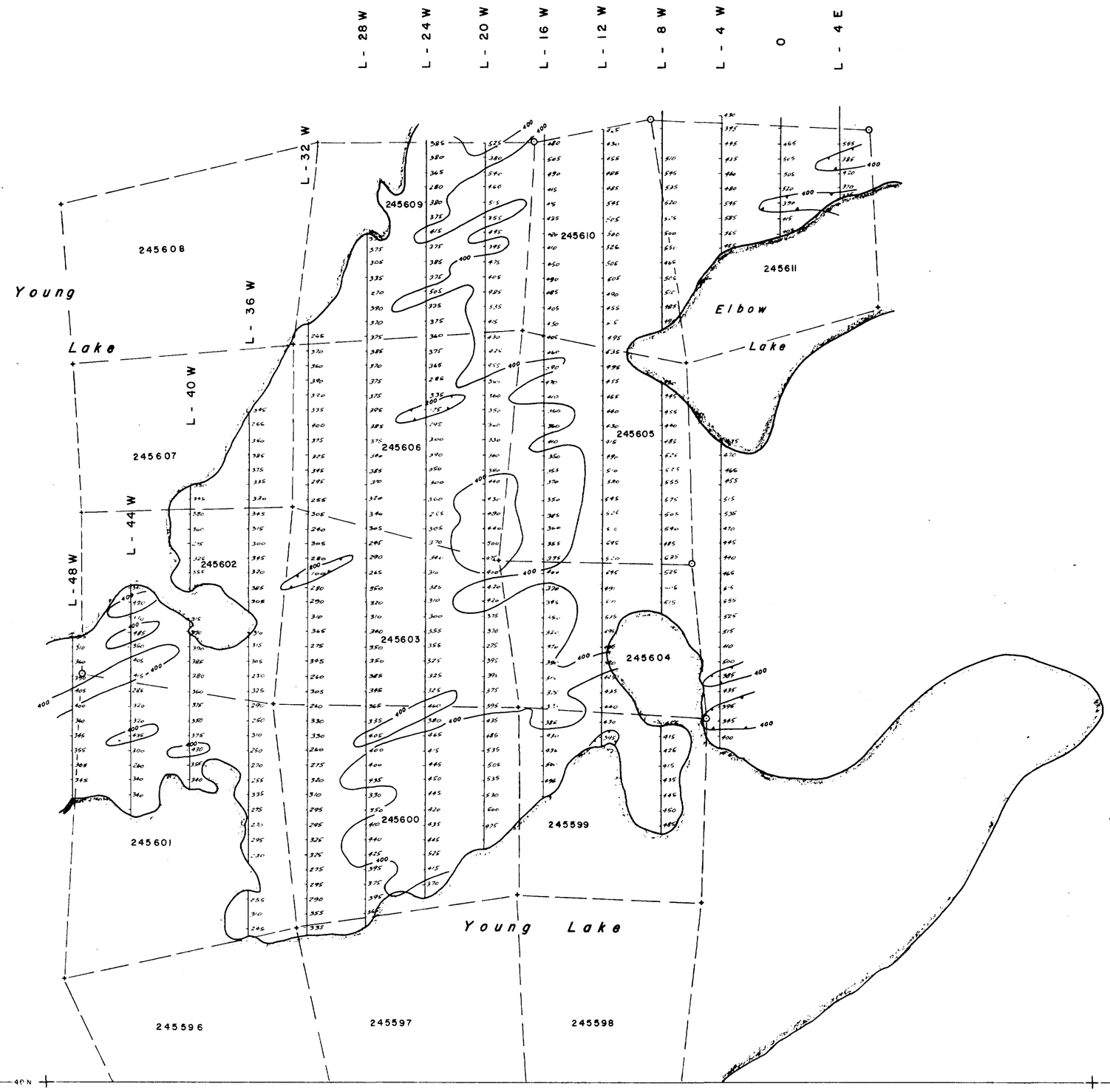
RIO TINTO CANADIAN EXPLORATION LIMITED

MADSEN OPTION – STURGEON LAKE AREA – ONT.

MAGNETOMETER SURVEY

July - 1972 | H. B., Z.M. / e.k. | DWG. M-4401

2.1023



N

NOTE

For Legend See Sheet No. 1

KEY

2
1

N.T.S
52 - G - 14

SCALE

400 0 400 800 1200 1600

One Inch = 400 Feet

2.1023

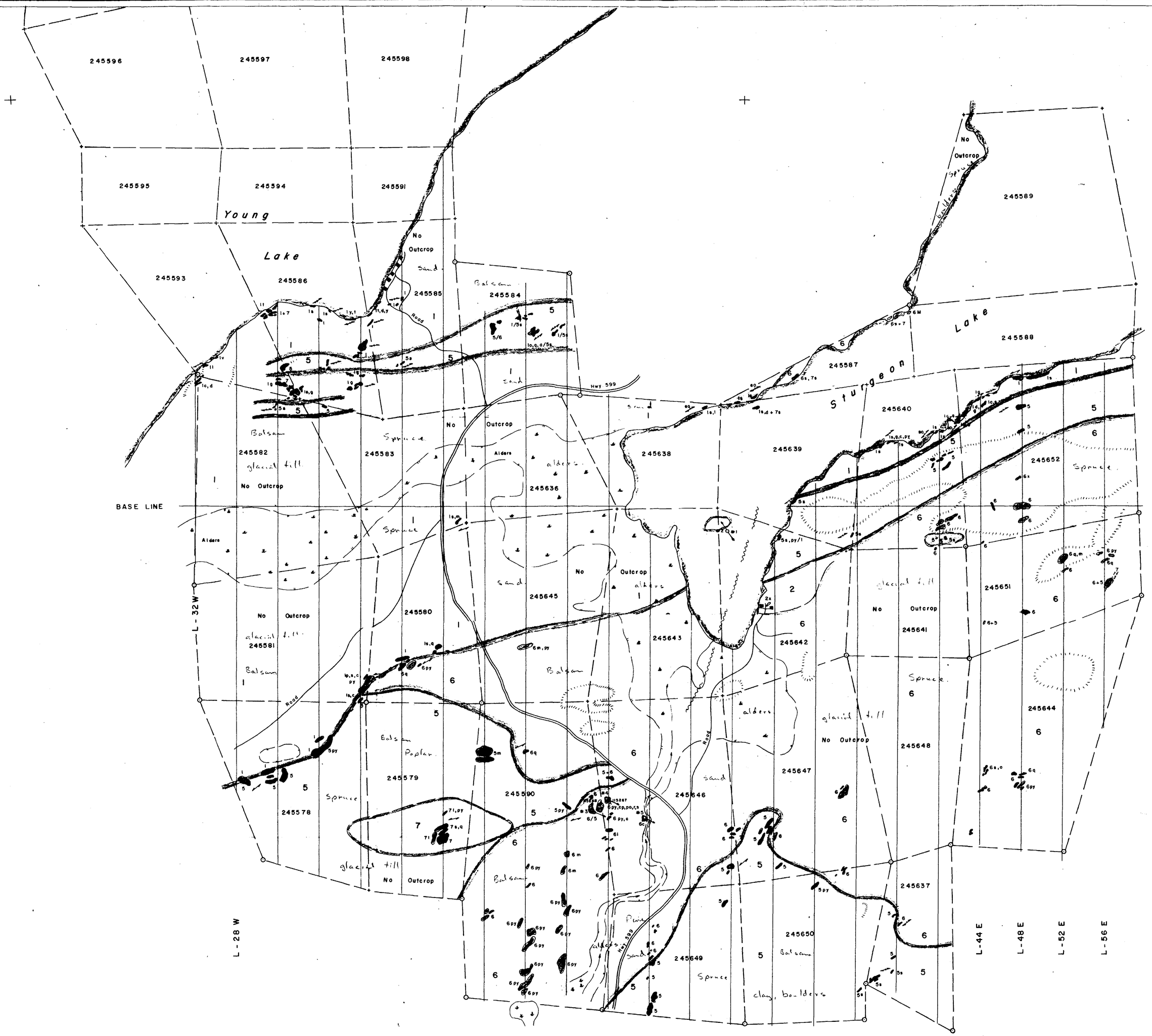
RIO TINTO CANADIAN EXPLORATION LIMITED

MADSEN OPTION – STURGEON LAKE AREA – ONT.

MAGNETOMETER SURVEY

July - 1972 | H. B., Z. M. / e. k. | DWG. M - 3390

A. Beckmann



LEGEND:

- QUARTZ-FELDSPAR PORPHYRY, FELDSPAR PORPHYRY INTRUSIVE
- QUARTZ DIORITE
- DIORITE
- RHYOLITE
- RHYOLITE TUFFS
- DACITE TUFFS
- ANDESITE FLOWS, TUFFS, CHLORITE SCHISTS

a	Altered	qe	Quartz eyes
b	Banded, Layered	r	Rusty
c	Chloritic	s	Sheared
d	Dacitic	t	Tuffaceous
g	Agglomerate	v	Vesicular
i	Siliceous	w	Sericitic
M	Magnetic	x	Fragmental
m	Massive	y	Amygdules
o	Biotite	cp	Chalcopyrite
p	Pillowed	py	Pyrite
q	Quartz vein	po	Pyrrhotite

SYMBOLS:

- Outcrop area
- Trenches
- Geological contact
- Fault assumed
- Strike and dip of shearing
- Strike and dip of layering, bedding
- Drill hole

KEY

- Sample location
- Claim post (located, unlocated)
- Ridges
- Swamp, marsh
- Cabin

N.T.S. 52 - G - 16

SCALE

400 0 400 800 1200 1600

One inch = 400 Feet

2.1023

Wayne Benham

RIO TINTO CANADIAN EXPLORATION LIMITED

MADSEN OPTION – STURGEON LAKE AREA – ONT.

ES01-S

GEOLOGICAL MAP

July - 1972 | W.B., J.W.C. / e.k. | DWG. G - 4397