



52F155E0014 2.5014 BROWNIDGE

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RECEIVED

AUG 19 1982

MINING LANDS SECTION

MAVIS LAKE CLAIM GROUP

REPORT ON THE

MAGNETOMETER SURVEY

Peter J. Vanstone

August 4, 1982

Bernic Lake, Manitoba

INTRODUCTION

During June, 1982, a program of linecutting and geophysics was completed on a portion of the Mavis Lake claim group of Tantalum Mining Corporation of Canada Limited in northwestern Ontario.

The survey was carried out as an aid in identifying favourable zones for the occurrence of tantalum bearing pegmatites.

This report is being submitted for assessment purposes by the Tantalum Mining Corporation of Canada Limited.

LOCATION AND ACCESS

The Mavis Lake claim group is located in Brownridge Township approximately 14 km. by road from Dryden (Figure 1).

The western portion of the claim group can be easily accessed via the Trans Canada Highway and the road to Ghost Lake.

CLAIM GROUP

Tanco's Mavis Lake claim group is located within the Kenora Mining Division and consists of 43 contiguous, unpatented claims (Figure 2). All claims are under option from Robt. J. Fairservice.

Respectively, the names and addresses of the above are:

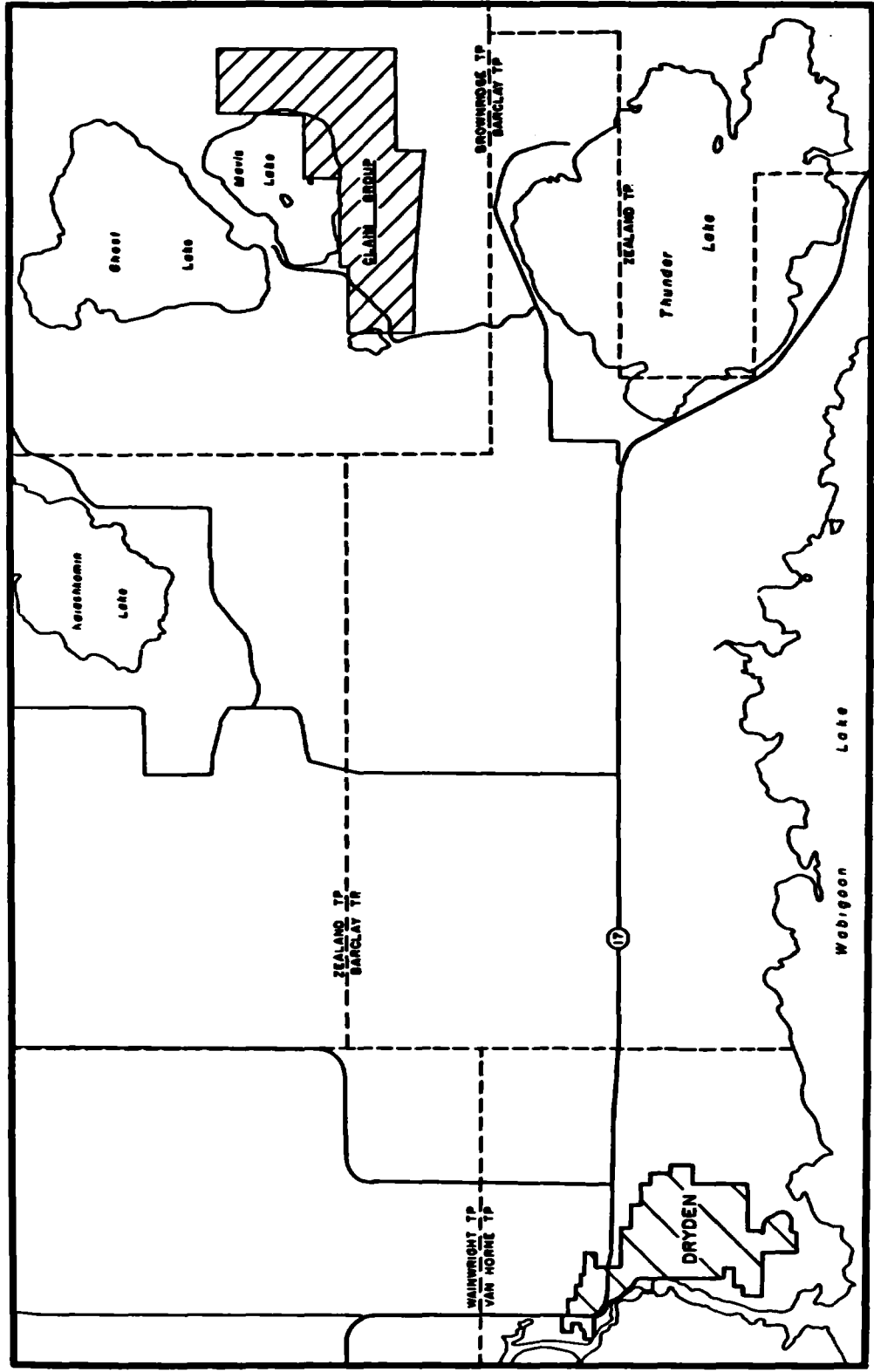
Tantalum Mining Corporation of Canada Limited
Box 28, Toronto Dominion Centre
Toronto, Ontario
M5K 1B8

Robt. J. Fairservice
P.O. Box 644
Dryden, Ontario
P8N 2Z3

PREVIOUS WORK

Geologic mapping in the Mavis Lake area was conducted by Bell (1881), Coleman (1894), Parsons (1911), Thomson (1917), Pettijohn (1939) and Satterly (1943).

Previous work on the claim group consisted of stripping, reconnaissance lithogeochemistry, geologic mapping and diamond drilling (17 holes for 702 metres).

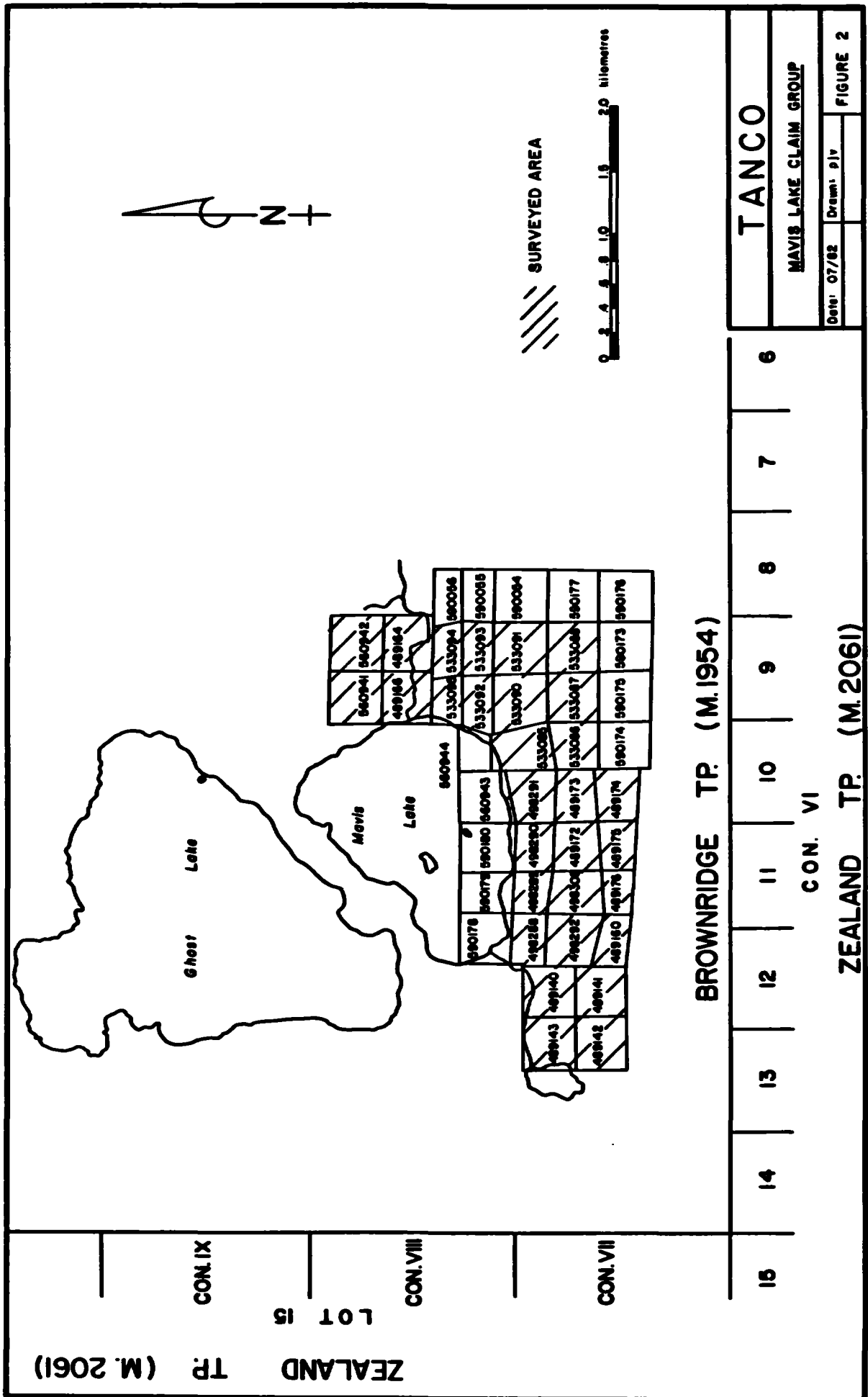


TANCO

MAVIS LAKE CLAIM GROUP LOCATION MAP

DATE: AUG, 1982 DRAWN: PJV

FIGURE 1.



ZEALAND TP. (M.2061)

CON. IX

LOT 15

CON. VIII

CON. VII

BROWNBRIDGE TP. (M.1954)

CON. VI

ZEALAND TP. (M.2061)

TANCO	
MAVIS LAKE CLAIM GROUP	
Date: 07/82	Drawn: p/v
FIGURE 2	

15	14	13	12	11	10	9	8	7	6
----	----	----	----	----	----	---	---	---	---

GEOLOGY

The regional geology is presented in the Ontario Department of Mines report "Geology of the Dryden - Wabigoon Area" by J. Satterly (1943).

The property which is located on the north limb of a westerly plunging syncline is underlain by predominantly mafic volcanics and sediments. Intermediate to felsic volcanics occur as minor intercalations within the volcanics. Intruding into these units are an occasional ultramafic dike, occasional, small, alkalic stocks and numerous granitic pegmatites.

The mafic volcanics consist of both pillowed and massive basaltic flows and amphibolite, with narrow interbeds of andesitic flows and tuffs.

The intermediate to felsic volcanics occur as narrow, tuffaceous interbeds within the more mafic volcanics. The majority of these units are dacitic in composition.

The sediments within the claim group are very poorly exposed and consist of greywacke and biotite-quartz schist.

A small, altered ultramafic dike intrudes the mafic volcanics in the southeast corner of the claim group. This dike is well foliated and has as its components serpentite, talc, possibly tremolite-actinolite and minor carbonate.

Small stocks and dikes of quartz monzonitic to granitic composition intrude both the volcanics and the sediments. On the property however, only an occasional small dike occurs.

Numerous granitic pegmatites ranging from the primary spodumene bearing variety to the albitized, tantalum bearing variety occur on the property. The dikes are generally found within the bands of mafic volcanics.

Structurally the rocks strike arcuately around the southeast corner of Mavis Lake. Dips are generally steep to the north. Tops, determined from pillowed flows, are to the south, indicating that the north limb of the syncline has been overturned.

Sets of both steep and shallow dipping joints occur throughout the property. In the western portion of the property the pegmatites appear to have an affinity for the steep dipping set, whereas in the eastern portion of the property the pegmatites appear to have an affinity for the shallow dipping set.

GEOPHYSICAL PROGRAM

The program described hereinafter consisted of linecutting followed by a magnetometer survey. The grid and subsequent survey covered 30 contiguous claims. The area covered by the survey is shown in Figure 2 and the claims surveyed are listed in Appendix 1.

(a) Linecutting

The grid which was cut for Tanco was oriented at N 20°W and had a 100 metre line spacing. A tieline at 7+75N was cut in addition to the 0+00 baseline.

(b) Magnetometer Survey

The variations in the vertical magnetic field were measured with a Scintrex MF-2 Fluxgate magnetometer by taking readings every 25 metres (12.5 metres over anomalies) along the cut lines. Anomalies were defined as a ± 200 gamma change. All stations were chained in.

The diurnal variation was measured by repeating baseline station readings which had previously been tied into a permanent magnetic base station. During the survey, the baseline was crossed at intervals not exceeding two hours with a majority of these intervals being one hour or less. An active to unsettled magnetic field during the entire survey resulted in diurnal variations in excess of 100 gammas being quite common.

The survey was carried out by Tanco personnel.

RESULTS

The contoured results of the survey (Map A) show a number of features, the most noticeable of which is a 500 to 600 metre wide band, characterized by high magnetic readings. This band extends across the grid and reflects the predominantly mafic volcanics (basalt and amphibolite with minor andesite/dacite intercalations) which underlie this portion of the claim group.

Both the north and south edges of this band are very sharp. The south edge corresponds to the volcanic - sedimentary contact as shown on Satterly's map (No. 50e). The area underlain by sediments is characterized by very low, flat readings (250 to 350 gammas). This lack of magnetic response is due to some extent, to the masking effect of the overburden which almost completely covers the sediments.

The north edge of the band corresponds to the contact between the mafic volcanics and intermediate volcanics (andesite/dacite tuffs). This tuffaceous band is 100 to 150 metres wide and is characterized by relatively flat readings (275-400 gammas.) North of this band is

another band with a magnetic signature similar to the mafic volcanics to the south. This magnetic response is due to the presence of basalt and amphibolite.

In the southeast corner of the grid a linear, east-west trending, magnetic low corresponds to an altered ultramafic dike composed of serpentinite, talc, probably tremolite-actinolite and minor carbonate.

In the southwest corner of the grid a magnetic low outlined with 100 gamma contours, may represent an increase in overburden depth. If such is the case, then a "trough" from this low appears to extend northeast across the mafic volcanics towards Mavis Lake. Where it crosses the mafic volcanics only those units with a very strong magnetic response can overcome the masking effect of the overburden. During the course of the survey no outcrop was observed in this area.

In the extreme northern portion of the grid an area of overburden has a similar magnetic signature.

CONCLUSIONS

On the Mavis Lake claim group the mafic rocks are characterized by a high (>1000 gammas), irregular magnetic response, whereas the more felsic volcanics are characterized by a lower (<500 gammas), flat magnetic response. The sediments have a low, flat magnetic response, but this appears to be partially the result of the masking effect of the overburden.

These different magnetic signatures can be used as an aid in identifying favourable zones for pegmatites, as rare metal pegmatites have an affinity for mafic volcanics.

Peter J. Vanstone.

APPENDIX 1

CLAIMS SURVEYED

K 489140

K 489141

K 489142

K 489143

K 489160

K 489164

K 489166

K 489172

K 489173

K 489174

K 489175

K 489176

K 498288

K 498289

K 498290

K 498291

K 498292

K 498308

K 533086

K 533087

K 533088

K 533089

K 533090

K 533091

K 533092

K 533093

K 533094

K 533095

K 560941

K 560942



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(s) MAGNETOMETER
Township or Area BROWNRIIDGE TOWNSHIP
Claim Holder(s) TANTALUM MINING CORPORATION OF CANADA LIMITED
Survey Company TANTALUM MINING CORP. OF CANADA LTD.
Author of Report PETER J. VANSTONE
Address of Author BOX 2000, LAC DU BONNET, MANITOBA ROE 1A0
Covering Dates of Survey JUNE 14-29, 1982
Total Miles of Line Cut 48.6 Km (30.2 Miles)

MINING CLAIMS TRAVERSED
List numerically

Table with 2 columns: Prefix (K) and Number (489140 to 533088). Total claims listed as 30.

If space insufficient, attach list

SPECIAL PROVISIONS CREDITS REQUESTED table with columns: Geophysical, Geological, Geochemical, DAYS per claim.

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)
Magnetometer _____ Electromagnetic _____ Radiometric _____

DATE: August 4/82 SIGNATURE: Peter J. Vanstone
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Table with 4 columns: File No., Type, Date, Claim Holder.

OFFICE USE ONLY

Tantalum Mining Corporation of Canada Limited

BERNIC LAKE, MANITOBA
ROE OGO

MINING CLAIMS TRAVERSED (CONTINUED)

K 533089

K 533090

K 533091

K 533092

K 533093

K 533094

K 533095

K 560941

K 560942

GEOPHYSICAL TECHNICAL DATA

GR D SURVEYS -- If more than one survey, specify data for each type of survey

Number of Stations _____ Number of Readings _____
Station interval _____ Line spacing _____
Profile scale _____
Contour interval _____

Instrument SCINTREX MF-2 FLUXGATE MAGNETOMETER
Accuracy - Scale constant + 5 GAMMAS
Diurnal correction method REPETITION OF BASE LINE STATION AND TIE LINE STATION READINGS
Base Station check-in interval (hours) 1.25 HOURS (AVERAGE)
Base Station location and value BASELINE AND TIE LINE WERE LEVELED PRIOR TO SURVEYING
USING A BASE STATION AT THE CAMP (450 GAMMAS)

Instrument _____
Coil configuration _____
Coil separation _____
Accuracy _____
Method: Fixed transmitter Shoot back In line Parallel line
Frequency _____
(specify V.L.F. station)
Parameters measured _____

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

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 _____

NEI
RO
LINE
G
VILY
PIS
Y



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

THE MINING ACT REPORT OF WORK

To the Recorder of KENORA Mining Division

I, TANTALUM MINING CORPORATION OF CANADA LIMITED T-904

name of Recorded Holder

Prospector's Licence

BOX 2000, LAC DU BONNET, MANITOBA ROE 1A0

Post Office Address

do hereby report the performance of 1,200 days of GEOPHYSICS type of work

not before reported to be applied on the following contiguous claims

Table with 6 columns: Claim No., Days, Claim No., Days, Claim No., Days. Lists various claim numbers and durations.

(PLUS ATTACHED LIST)

All the work was performed on Mining Claim (s) ALL OF THE ABOVE (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 Geophysical, Geological, Geochemical Surveys and Expenditure Credits - the name of author of report. Covering dates of survey (linecutting & office). Type of instrument used. Total amount of expenditure. Technical reports, maps, expenditure breakdown, receipts must be filed in duplicate 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)

AUTHOR - P. J. VANSTONE
SURVEY - JUNE 14-29, 1982
DRAUGHTING - JULY 7-22, 1982
EXPENDITURE - \$10,076.40

Date August 4, 1982

Signature of Recorded Holder or Agent

The Mining Act Certificate Verifying Report of Work

I, PETER J. VANSTONE
Box 2000, Lac du Bonnet, Man. ROE 1A0
(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 August 4, 1982 Signature

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

PHONE No. 204-345-8658

TRADE NAME
TANCO

Tantalum Mining Corporation of Canada Limited

BERNIC LAKE, MANITOBA
ROE OGO

<u>CLAIM NO.</u>	<u>DAYS</u>
K 533087	40
K 533088	40
K 533089	40
K 533090	40
K 533091	40
K 533092	40
K 533093	40
K 533094	40
K 533095	40
K 560941	40
K 560942	40
K 489166	40



Ontario



S2F15SE0014 2.5014 BROWNRIDGE

900
4-3-014

From

Ministry of
Natural
Resources

Notification of recording
of assessment work credits

RECEIVED

AUG 19 1982

MINING LANDS SECTION

August 18, 1982

Lands Administration Branch
Mining Lands Section
Ministry of Natural Resources
Room 1517, Whitney Block
Queen's Park, Toronto
M7A 1W3

Date of recording of work: August 9, 1982

Recorded holder: Tantalum Mining Corporation of Canada Limited

Address: Box 28, Toronto-Dominion Centre, Toronto, Ont. M5K 1B8
(Working address: Box 2000, Lac Du Bonnet, Manitoba R0E 1A0)

Township or Area: Brownridge Township M.1954

Type of survey and number of Assessment days credit per claim	Mining claims
Geophysical	
Electromagnetic _____ days	K.489140-43 inclusive
Magnetometer <u>40</u> days	K.489160-64-66
Radiometric _____ days	K.489172-76 inclusive
Induced polarization _____ days	K.498288-92 inclusive
Section 86 (18) _____ days	K.498308
Geological _____ days	K.533086-95 inclusive
Geochemical _____ days	K.560941-42
Man days <input type="checkbox"/>	
Airborne <input type="checkbox"/>	
Special provision <input checked="" type="checkbox"/>	
Ground <input type="checkbox"/>	

Notice to recorded holder:

- Survey reports and maps in duplicate be submitted to the Lands Administration Branch, Toronto within 60 days from the date of recording of this work.
- Reports and maps are being forwarded to the Lands Administration Branch with this letter.

[Signature]
Mining recorder

c.c. Tantalum Mining
Bernic Lake, Manitoba (Lac du Bonnet)



Ministry of
Natural
Resources

BROWN RIDGE TWP
M-1954

#102

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

THE MINING ACT REPORT OF WORK

To the Recorder of KENORA Mining Division

I, TANTALUM MINING CORPORATION OF CANADA LIMITED T-904

name of Recorded Holder

Prospector's Licence

BOX 2000, LAC DU BONNET, MANITOBA ROE 1A0

Post Office Address

do hereby report the performance of 1,200 days of GEOPHYSICS type of work

not before reported to be applied on the following contiguous claims

Claim No.	Days	Claim No.	Days	Claim No.	Days
K 489140	40	K 489172	40	K 498289	40
K 489141	40	K 489173	40	K 498290	40
K 489142	40	K 489174	40	K 498291	40
K 489143	40	K 489175	40	K 498292	40
K 489160	40	K 489176	40	K 498308	40
K 489164	40	K 498288	40	K 533086	40

(PLUS ATTACHED LIST)

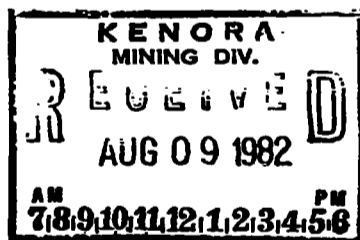
All the work was performed on Mining Claim (s) ALL OF THE ABOVE
(In the case of geological and/or geophysical survey (s) where more than 18 claims are involved attach a schedule)

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 Geophysical, Geological, Geochemical Surveys and Expenditure Credits - the name of author of report. Covering dates of survey (linecutting & office). Type of instrument used. Total amount of expenditure. Technical reports, maps, expenditure breakdown, receipts must be filed in duplicate 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)

AUTHOR - P. J. VANSTONE
SURVEY - JUNE 14-29, 1982
DRAUGHTING - JULY 7-22, 1982
EXPENDITURE - \$10,076.40



Date August 4, 1982

Peter J. Vanstone
Signature of Recorded Holder or Agent

The Mining Act
Certificate Verifying Report of Work

I, PETER J. VANSTONE
Box 2000, LAC DU BONNET, MAN. ROE 1A0
(Post Office Address)

hereby certify:

- 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.
- That the annexed report is true.

Dated August 4, 1982

Peter J. Vanstone
Signature

489140

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

PHONE NO. 204-345-8658

TRADE NAME
TANCO

Tantalum Mining Corporation of Canada Limited

BERNIC LAKE, MANITOBA
ROE OGO

<u>CLAIM NO.</u>	<u>DAYS</u>
K 533087	40
K 533088	40
K 533089	40
K 533090	40
K 533091	40
K 533092	40
K 533093	40
K 533094	40
K 533095	40
K 560941	40
K 560942	40
K 489166	40

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2.5014

1983 04 21

2.5014

Mining Recorder
Ministry of Natural Resources
808 Robertson Street
Box 5160
Kenora, Ontario
P9N 3X9

Dear Sir:

1/8000

RE: Geophysical (Magnetometer) Survey on Mining
Claims K 489130 et al in the Township of Brownridge

5/2/83

The Geophysical (Magnetometer) Survey assessment work credits
as shown on the attached statement have been approved as of
the above date.

Please inform the recorded holder of these mining claims and so
indicate on your records.

3/3/83

Yours very truly,

6/1/83

E.F. Anderson
Director
Land Management Branch

Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1380

By P. J. Van... 7/8

D. Kinwig:sc

Encl:

cc:
Tantalum Mining Corporation of Canada Ltd
Toronto, Ontario

cc:
Tantalum Mining Corporation of Canada Ltd
Lac Du Bonnet, Manitoba.

cc:
Resident Geologist
Kenora, Ontario

1983 04 21

Recorded Holder	TANTALUM MINING CORPORATION OF CANADA LIMITED
Township or Area	BROMBRIDGE TOWNSHIP

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
Geophysical	
Electromagnetic <u>40</u> days	K 489140 to 43 inclusive
Magnetometer _____ days	489160
Radiometric _____ days	489164
Induced polarization _____ days	489166
Section 86 (18) _____ days	489172 to 76 inclusive
Geological _____ days	498288 to 92 inclusive
Geochemical _____ days	498308
Man days <input type="checkbox"/>	533086 to 95 inclusive
Airborne <input type="checkbox"/>	560941-42
Special provision <input checked="" type="checkbox"/>	
Ground <input checked="" type="checkbox"/>	
<input type="checkbox"/> Credits have been reduced because of partial coverage of claims.	
<input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.	

Special credits under section 86 (15a) for the following mining claims

No credits have been allowed for the following mining claims

not sufficiently covered by the survey
 Insufficient technical data filed

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; Section 86(18)-60:



Jan 4/83

Mining Lands Comments

~~with specifications.~~
~~done~~

To: Geophysics Mr Barkow

Comments

Approved Wish to see again with corrections Date Jan 21/83 Signature Ryan RLW

To: Geology - Expenditures

Comments

Approved Wish to see again with corrections Date Signature

To: Geochemistry

Comments

Approved Wish to see again with corrections Date Signature LD

To: Mining Lands Section, Room 6462, Whitney Block. (Tel: 5-1380)

Tantalum Mining Corporation of Canada Limited

BERNIC LAKE, MANITOBA
ROE OGO

RECEIVED	
Land Management Branch	
DATE	<input type="checkbox"/>
RECEIPT PLEASE	<input type="checkbox"/>
APR 12 1983	
E. F. ANDERSON	<input type="checkbox"/>
J. B. ...	<input type="checkbox"/>
J. C. ...	<input type="checkbox"/>
C. ...	<input type="checkbox"/>

08 April 1983

Ministry of Natural Resources
Land Management Branch
Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3

Attention: Mr. E.F. Anderson

Dear Sir:

Re: Qualification of author of Geotechnical Survey reports.

I graduated from Lakehead University in 1971, with a B.Sc. (Honours) in geology. During 1973, I worked for a number of geological contractors from Thunder Bay and Winnipeg, Manitoba. From 1974 to 1980, I was employed by Hudson Bay Exploration and Development Co. Ltd. in both Flin Flon, Manitoba and Thunder Bay as a geophysical operator (ground and airborne), a drill geologist and a project geologist. I joined Tantalum Mining Corporation of Canada Limited (Tanco) in 1980 as a project geologist (exploration) and remained in that position until October 1982, at which I became Tanco's mine geologist. I was terminated at the end of December 1982, when the mine closed for an indefinite period of time. In January 1983, I was re-hired by Tanco to replace the Chief Geologist who had resigned.

In September 1982, I became a registered member of the Association of Professional Engineers of the Province of Manitoba.

Should you require further information, I can be contacted at Tanco.

Yours truly,

Peter J. Vanstone
Geologist

1983 04 05

2.5014

**Tantalum Mining Corporation of
Canada Limited**

**P.O. Box 2000
Lac Du Bonnet
Manitoba
R0E 1A0**

Attention: Mr. Peter J. Vanstone.

Dear Sirs:

**RE: Geophysical (Magnetometer) Survey submitted on
Mining Claims K 489140 et al in the Township of
Brownridge.**

**Enclosed is a copy re: Qualifications of author of
Geotechnical Survey report submitted for assessment work
credits. Please submit a brief resume for our records.**

Yours very truly,

**E.F. Anderson
Director
Land Management Branch**

**Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone: 416/965-1380**

A. Barr:sc

Encls:

**cc: Mining Recorder
Kenora.**

1982 09 22

2.5014

**Mining Recorder
Ministry of Natural Resources
808 Robertson Street
Box 5160
Kenora, Ontario
P9N 3X9**

Dear Sir:

We have received reports and maps for a Geophysical (Magnetometer) Survey submitted under Special Provisions (credit for Performance and Coverage) on Mining Claims K 489140 et al in the Township of Brownridge.

This material will be examined and assessed and a statement of assessment work credits will be issued.

Yours very truly

**E.F. Anderson
Director
Land Management Branch**

**Whitney Block, Room 6450
Queen's Park
Toronto, Ontario
M7A 1W3
Phone 416/965-1316**

J. Skura:sc

**cc: Tantalum Mining Corporation of Canada Ltd
Toronto, Ontario
Attn: Peter Vanstone.**



Ministry of Natural Resources

File _____

GEOPHYSICAL - GEOLOGICAL - GEOCHEMICAL
TECHNICAL DATA STATEMENT

RECEIVED

AUG 19 1982

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FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
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MINING LANDS SECTION

Type of Survey(s) MAGNETOMETER
Township or Area BROWNRIDGE TOWNSHIP
Claim Holder(s) TANTALUM MINING CORPORATION OF
CANADA LIMITED
Survey Company TANTALUM MINING CORP. OF CANADA LTD.
Author of Report PETER J. VANSTONE
Address of Author BOX 2000, LAC DU BONNET, MANITOBA ROE 1A0
Covering Dates of Survey JUNE 14-29, 1982
(linecutting to office)
Total Miles of Line Cut 48.6 Km (30.2 Miles)

MINING CLAIMS TRAVERSED
List numerically

K	489140 \
(prefix)	(number)
K	489141
K	489142
K	489143
K	489160 -
K	489164 -
K	489166 -
K	489172
K	489173
K	489174
K	489175
K	489176
K	489176
K	498288
K	498289
K	498290
K	498291
K	498292
K	498308 -
K	533086
K	533087
K	533088
PLUS ATTACHED LIST	
TOTAL CLAIMS	<u>30</u>

If space insufficient, attach list

SPECIAL PROVISIONS
CREDITS REQUESTED

ENTER 40 days (includes
line cutting) for first
survey.

ENTER 20 days for each
additional survey using
same grid.

Geophysical	DAYS
	per claim
-Electromagnetic	_____
-Magnetometer	<u>40</u>
-Radiometric	_____
-Other	_____
Geological	_____
Geochemical	_____

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

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

DATE: August 4/82 SIGNATURE: Peter J. Vanstone
Author of Report or Agent

Res. Geol. _____ Qualifications _____

Previous Surveys

File No.	Type	Date	Claim Holder

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

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

Number of Stations _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument SCINTREX MF-2 FLUXGATE MAGNETOMETER

Accuracy – Scale constant + 5 GAMMAS

Diurnal correction method REPETITION OF BASE LINE STATION AND TIE LINE STATION READINGS

Base Station check-in interval (hours) 1.25 HOURS (AVERAGE)

Base Station location and value BASELINE AND TIE LINE WERE LEVELED PRIOR TO SURVEYING
USING A BASE STATION AT THE CAMP (450 GAMMAS)

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 _____

Method Time Domain Frequency Domain

Parameters – On time _____ Frequency _____

– Off time _____ Range _____

– Delay time _____

– Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

Tantalum Mining Corporation of Canada Limited

BERNIC LAKE, MANITOBA
ROE OGO

MINING CLAIMS TRAVERSED (CONTINUED)

K 533089

K 533090

K 533091

K 533092

K 533093

K 533094

K 533095

K 560941

K 560942

2.5014

	Mag.		Mag.			
K-489140	✓		K-498291	✓		
41			92			
42			498308			
43			533086			
489160			87			
489164			88			
489166			89			
489172			90			
73			91			
74			92			
75			93			
76			94			
498288			95			
89			560941			
90	↓		42	↓		D.K.

NOTES

400' surface rights reservation along the shores of all lakes and rivers.

SAND and GRAVEL

- Ⓒ GRAVEL File 159618
- Ⓒ QUARRY PERMIT
- Ⓒ MNR GRAVEL RESERVE 1A29

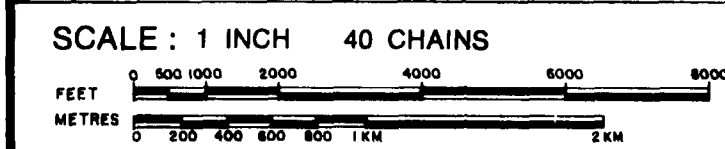
DATE OF ISSUE
 JAN - 4 1983
 Ministry of Natural Resources
 TORONTO

LEGEND

- HIGHWAY AND ROUTE No.
- OTHER ROADS
- TRAILS
- SURVEYED LINES. TOWNSHIPS, BASE LINES, ETC.
- LOTS, MINING CLAIMS, PARCELS, ETC.
- UNSURVEYED LINES. LOT LINES
- PARCEL BOUNDARY
- MINING CLAIMS ETC.
- RAILWAY AND RIGHT OF WAY
- UTILITY LINES
- NON-PERENNIAL STREAM
- FLOODING OR FLOODING RIGHTS
- SUBDIVISION
- ORIGINAL SHORELINE
- MARSH OR MUSKEG
- MINES

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	○
" MINING RIGHTS ONLY	◐
LEASE, SURFACE & MINING RIGHTS	■
" SURFACE RIGHTS ONLY	◼
" MINING RIGHTS ONLY	◻
LICENCE OF OCCUPATION	▼
CROWN LAND SALE	CS
ORDER-IN-COUNCIL	OC
RESERVATION	⊙
CANCELLED	⊘
SAND & GRAVEL	⊗

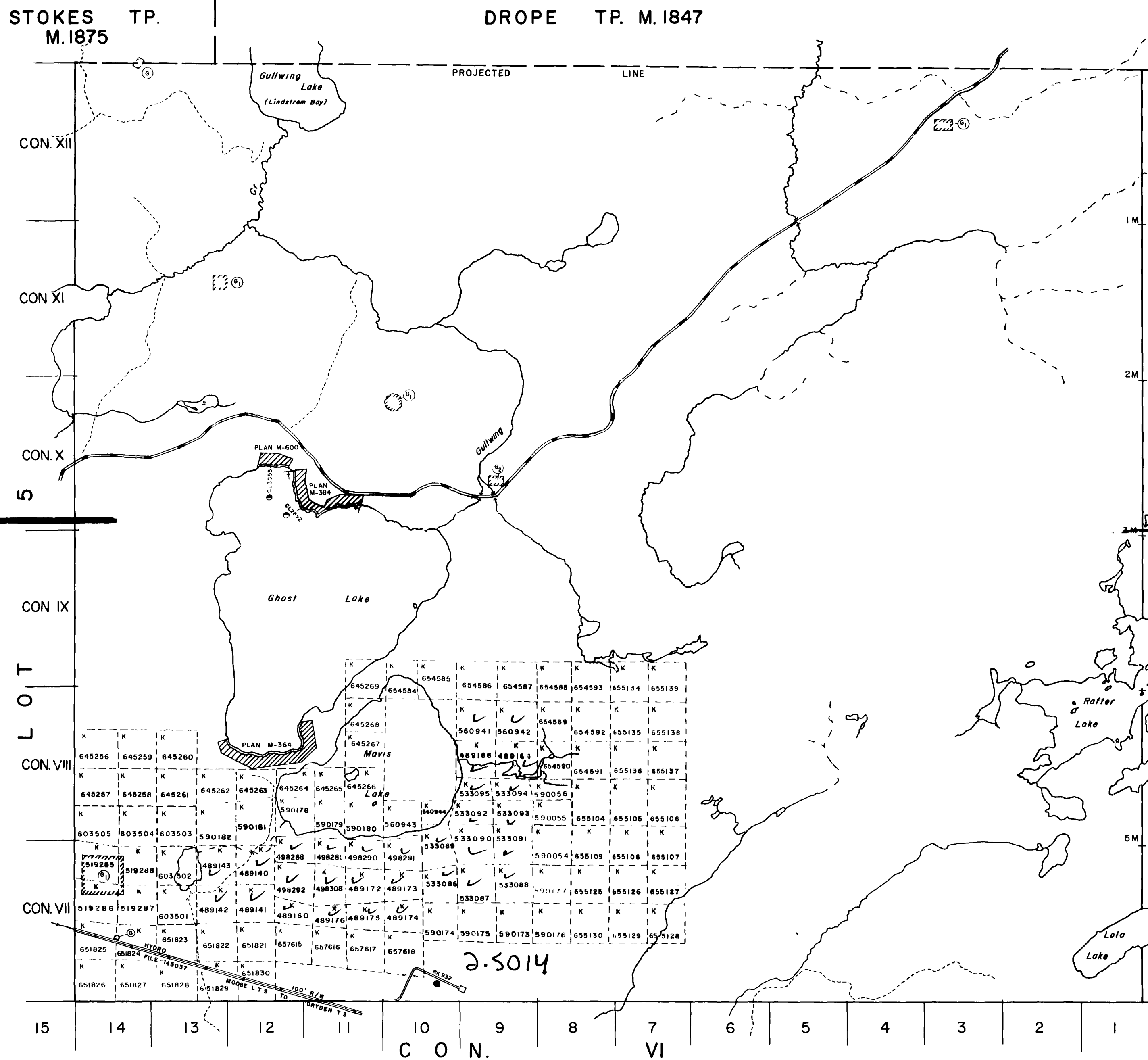


ACRES	HECTARES
40	16

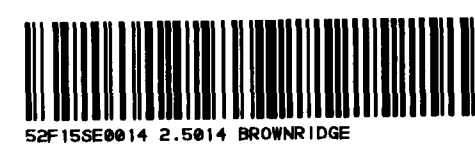
TOWNSHIP
BROWNRIIDGE
 DISTRICT
 KENORA
 MINING DIVISION
 KENORA

Ministry of Natural Resources
 Ontario Surveys and Mapping Branch

Date Nov '74 Plan No. M.1954
 Whitney Block
 Queen's Park, Toronto



SE CORNER co-ordinates
 LAT 49° 47' 59"
 DEP 92° 32' 39" Approx.



52F155E0014 2.5014 BROWNRIIDGE

200

