



32E13NE9322 2.4292 LOWER DETOUR LAKE

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REPORT ON  
AN AIRBORNE MAGNETIC SURVEY  
DETOUR LAKE AREA  
PORCUPINE MINING DIVISION  
ONTARIO  
for  
Getty Canadian Metals, Limited

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**RECEIVED**  
NOV 17 1981  
MINING LANDS SECTION

Toronto, Ontario  
October, 1981

W.E. Brereton, P.Eng.  
MPH Consulting Limited.

*W.E. Brereton*

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## 1.0 INTRODUCTION

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This report contains our interpretation of the results of an airborne magnetic survey flown in the Detour Lake area of northeastern Ontario during May of 1981.

Interest in the area centres around the discovery in 1974 by Amoco Canada Petroleum Ltd., of what has become a major gold deposit near Detour Lake immediately to the north of the area described herein.

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## 2.0 LOCATION

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The Detour area is centred approximately 110 kilometers north-east of Cochrane, Ontario, and 600 kilometers directly north from Toronto, Ontario.

Appendix I shows a general property location map along with a more detailed map outlining the survey area.

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### 3.0 PROPERTY

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The airborne surveying covered a total of 850 unpatented mining claims in the Porcupine Mining Division. A location map on the geophysical sheet outlines the property area. Appendix II contains a summary of the claim numbers along with the technical data statements.

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## 4.0 AIRBORNE SURVEYS

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### 4.1 General

The total survey involved 2001 kilometers (1243 miles) of airborne data collection and was flown by Questor Surveys Limited of Toronto. The survey aircraft was a Britten-Norman Trislander, registration C-GNKW, based out of Timmins, Ontario.

### 4.2 Map Compilation

The base maps for compilation and flight path recovery were constructed from uncontrolled mosaics which were produced from photographs at a scale of 1:50,000. The final maps were reproduced at a scale of 1:10,000 on stable transparent film from which white prints can be made.

Flight path recovery was accomplished by comparison of the 35 mm film with the mosaic in order to locate the fiducial points. These points were approximately 1130 meters apart.

### 4.3 Survey Procedure

Terrain clearance was maintained as close to 122 meters as possible, with the E.M. bird at approximately 46 meters above the ground. A normal S-pattern flight path was used. An equipment operator logged flight details and monitored instruments. A line spacing of 200 meters was used.

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## 5.0 GEOLOGY AND MINERAL OCCURRENCES

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### 5.1 Summary

The Detour Project area is underlain by metavolcanic and metasedimentary rocks of Archean age in the north-central portion of the Abitibi Greenstone Belt. These rocks have been elevated to the almandine-amphibolite facies of regional metamorphism. Later granitoids of granitic to dioritic composition truncate the metavolcanic and metasedimentary rocks. Diabase dykes, the youngest rocks in the region, cut all rock types. Pleistocene cover comprising clayey till, glaciolacustrine clay, sandy till and glaciofluvial eskers is variable in extent and may be up to 60 m or more in thickness although it generally averages approximately 30 m.

Regionally, the Normetal Cu-Zn ( $\pm$  Au, Ag) volcanogenic massive sulphide deposit is located within the next greenstone belt immediately to the south of the present project area. Selco's major «Mines Selbaie» Cu-Zn-Au-Ag deposit is being readied for production 29 km along strike to the east of Amoco's Detour deposit in Brouillan Township, Quebec.

### 5.2 Survey Area Geology

The metasedimentary-metavolcanic rocks in the survey area generally strike east-west and dip steeply. The disposition

of units has been interpreted in large part from aeromagnetic data as outcrop is scarce.

The base of the local stratigraphic succession is interpreted to be a unit of felsic to intermediate metavolcanics with some metasediment which is exposed along the Detour River in the vicinity of the Quebec border. In the north, this unit is overlain by a discrete unit of clastic metasediments as seen along the north shore of Lower Detour Lake. The combined metavolcanic-metasedimentary unit to the south of Atkinson Lake in the south portion of the survey area is interpreted by the present study to be the reappearance, i.e. the lateral equivalent, of this stratigraphy.

A unit of mafic to intermediate flows and pyroclastics overlies the lower units. Some ultramafic flow members are present as noted in the vicinity of the Amoco deposit which is contained within this unit. The apparent equivalents of the unit form two belts in the south, one extending through Atkinson Lake and a second through Cuthbert Lake.

Overlying these mafic volcanic rocks are the youngest non-intrusive rocks in the area, a complex unit containing interbedded felsic to intermediate metavolcanics, mafic to intermediate metavolcanics and fine-grained metasediments. This

unit grades laterally to the northwest into a predominantly metasedimentary assemblage with some mafic flows in the area of Vandette Lake. Within this sequence, graphitic tuffs and metasediments, often with large amounts of associated pyrite and pyrrhotite are common. Geophysically inferred iron formation is present within these rocks west of Vandette Lake. The iron formation has also been located by drilling.

Applying the concept of volcanic cycles, the contact between clastic metasediments and overlying mafic-ultramafic metavolcanics marks the base of a major volcanic cycle. The mafic-ultramafic rocks hosting the Amoco deposit would constitute the «mafic plate». The complex sequence containing the sulphidic sediments and iron formation marks the top of this cycle. The local mafic units in the vicinity of Vandette Lake may actually be the base of the next cycle. The mafic base of the lower cycle is not exposed. In total, there are at least one and a half cycles represented in the exposed rocks.

The metavolcanic-metasedimentary assemblage is invaded and truncated by a major granitic batholith to the west. Small intrusives of mafic to felsic composition are present as at Detour Lake (granodiorite) and Lower Detour Lake (gabbro).



Structurally, there appear to be two phases of fold deformation. The best-defined major structural feature is the east-west trending anticline north of Detour Lake. The fold plunges 35 to 45 degrees to the west. A local flexure or warp on the north limb contains the Amoco deposit. The complimentary anticline to the south is interpreted to be in the vicinity of Dobson Lake. The intervening synclinal axis probably passes through the Nash Lake area.

The east-west folds appear to have been re-folded about a north-south axis in the vicinity of the granitic intrusion. This refolding explains the predominant north-south strikes noted in some areas (e.g. the iron formation west of Vandette Lake).

### 5.3 Exploration History and Previous Work

The area encompassing the present holdings has recently been mapped by G. Johns of the Ontario Geological Survey from whose report many of the subsequent descriptions and comments are taken.

Mineral exploration activity has been recorded in the area since 1912 when gold was discovered on the Patten River. There has been sporadic exploration activity since 1925 following the discovery of a major copper-zinc deposit at Normetal, Quebec, with peak periods of exploration activity

in the late 1950's, early 1960's and early 1970's. Most of this activity was directed towards the search for base metals, with a concentration of exploration efforts in the vicinity of Atkinson and Vandette Lakes.

Numerous massive pyrite-pyrrhotite diamond drill intersections have been recorded in the assessment files of the respective provincial governments. Many of these intersections were probably never assayed for gold. In addition, many ground electromagnetic conductors were never drill tested.

A major rush into the region followed the Amoco gold discovery in 1974 and extensive claim staking occurred in the Lower Detour-Detour-Sunday Lakes region. Extensive staking was also carried out in adjoining portions of Quebec.

Due to the usual problems of sparse outcrop in the clay belt of the Cochrane area, the main exploration approach to date has been airborne geophysics followed by ground geophysics and the diamond drilling of EM conductors. Some companies in the area at present are employing overburden drilling as an exploration tool.

## 5.4 Detour Gold Deposit

### 5.4.1 Introduction

The following comments and descriptions are based largely on a paper delivered by A.C. Jackson of Amoco at the 1980 CIMM annual meeting in Toronto, the Dome Mines Ltd. 1980 annual report and G. John's Ontario Government report.

### 5.4.2 Geology and Mineralization

In the immediate vicinity of the deposit, the stratigraphic sequence, as known, consists of several hundred to several thousand feet of fine-grained arkosic and graphitic sediments with occasional interbedded basaltic to ultramafic flows and tuffs. This grades upward into a sequence of interbedded mafic tuffs and sediments approximately 310 m (1,000 feet) in thickness, with the mafic tuffs being predominant. This, in turn, is overlain by a distinctive variolitic basalt sequence which is up to 90 m (300 ft) thick. This basalt consists of 10% to 15% felsic clots set in a chloritic to amphibolitic groundmass. Within this unit there are several narrow (several cm thick) interbeds of pinkish coloured chert (Figure 2).

The variolitic sequence is overlain by a very well banded sequence of mafic tuffs up to 30 m (100 ft) thick. These are chloritic and biotitic and are characterized by alternating light-dark beds up to 2 cm in thickness.

The mafic tuffs are overlain by a series of ultramafic flows and tuffs which vary in thickness from 3 m to 90 m. In the thicker portions, these rocks appear quite massive, varying from finely crystalline talc-carbonate rocks to medium to coarsely crystalline tremolite-actinolite talc-carbonate units. The thinner parts of the unit are usually very well-banded and appear to be tuffs as they contain numerous relict fragments. These are also highly altered to talc-carbonate. Petrographically, the ultramafic is typically made up of 50% talc, 10-20% tremolite, 10-15% chlorite and 5% sulphides and magnetite.

Several quartz-eye porphyry units occur in the central part of the ultramafic. These units are generally foliated and in some cases appear tuffaceous but their somewhat irregular nature and the often chloritic contacts suggest that they are dikes. Petrographically, the porphyry consists of 60-70% quartz and potash feldspar occurring as a fine-grained ground mass and

also as larger phenocrysts. Foliated stringers of muscovite comprise up to 15% of the rock along with variable amounts of chlorite, biotite, and carbonate. Pyrrhotite with minor pyrite occurs as irregular masses and comprises up to 5% of the rock. Two other units found within the ultramafics consist of coarsely crystalline gabbroic and pyroxenitic intrusives. The gabbro is non-magnetic and has been largely altered to tremolite and chlorite. The pyroxenite is highly magnetic and is characterized by large pseudomorphs of tremolite and magnetite after olivene or pyroxene. This unit forms a large mass on the eastern end of the main Detour ore zone and is indicated by a large magnetic high.

The upper part of the ultramafic section has been largely altered to a dark chloritic rock characterized by smears and blebs of pyrrhotite and chalcopyrite. It contains up to 50% chlorite, 40% tremolite and 6% sulphides. It generally does not display any talcose alteration. This part of the sequence is usually less than 15 m thick and is only slightly magnetic. This unit is probably a separate flow somewhat different in original composition than the lower ultramafic.

The ultramafic unit is overlain by a cherty tuff which is generally from 0.3 m to 3 m but usually less than 1.5 m thick. It is a creamy grey, very well-laminated chert. The lower contact is usually marked by a 0.3 m to 0.6 m band of pyrrhotite with minor chalcopyrite. These sulphides usually contain rounded inclusions of quartz from 1 cm to 5 cm in diameter.

The cherty tuff is overlain by several tens to hundreds of metres of basaltic flows with occasional interbedded dacitic to andesitic flows and tuffs. The first 150 m to 200 m of the basalts are massive to moderately foliated, medium to coarsely crystalline rocks. They typically consist of 50-60% hornblende, 10% biotite, 5-15% plagioclase, 5% quartz, 3% chlorite, 2% carbonate, and 1-3% pyrrhotite.

Intrusive into the sequence, particularly east of the deposit, are several magnetic dioritic sills.

The «main zone» of mineralization is essentially an auriferous quartz fracture zone. It is centred on the cherty tuff unit and the immediately overlying basalts. Gold values extend beneath the cherty tuff into the underlying altered ultramafics.

The main quartz fracture zone has an indicated strike length of 210 m to 275 m (700 to 900 ft). It is somewhat arcuate in plan with strikes varying from east-west in the west to northeast-southwest in the east. The mineralized zone plunges 35 to 45 degrees to the west.

The main zone is generally 6 m to 12 m (20-40 ft) in width and consists of a system of quartz veins which contain 10-15% pyrrhotite, 0.5-1% chalcopyrite and 1-5% pyrite within the veins and as selvages. The zone is characterized by extensive biotite alteration of the basalts. The quartz veins are generally less than 15 cm in width and average 3 to 5 veins per 1.5 m through the zone. The gold occurs mainly as free grains within the quartz veins and sulphide selvages. A small amount also occurs in gold-silver tellurides. Gold particles are usually 10 to 12 microns in size and are often adhered to sulphide grains. Other sulphides commonly encountered are marcasite and various bismuth and lead tellurides.

The main zone has been shown by surface diamond drilling to extend to a vertical depth of 550 m (1,800 ft) and is open at depth. It averages 425 m

(1,400 ft) in strike length and 9 m (29 ft) in horizontal width down to the 900 foot level. From there down to the 1,800 foot level the strike length decreases to 210 m to 305 m (700-1,000 ft) but the average width increases to 150 m (50 ft). A second zone, referred to as the west zone, occurs on the same cherty horizon approximately 150 m (500 ft) west of the main zone. It appears to occur on a slight bulge or dome in the ultramafics. This zone is similar to the main zone but averages 350 m (1,000 ft) in length, 3.4 m (11 ft) in width and extends for 150 m (500 ft) below surface.

Several other zones of mineralization have been indicated but are less well-defined than the main zone. Four zones were indicated in the hanging wall basalts above the main zone and are referred to as the quartz-vein zones. The mineralization in these is similar to the main zone in that the gold is within quartz veins with associated pyrrhotite and chalcopyrite and biotite selvages. Most of these quartz-vein zones have been interpreted to occur in structures that parallel the main zone.

Three of the zones occur within 90 m of the main zone while the fourth is 275 m above the main zone. There is, however, only one of the quartz-vein zones east



of the nose of the fold. This occurs 30 m above the main zone. West of the nose of the fold, the quartz veining becomes more complex and appears to break up into the various «quartz vein» zones. These zones are generally narrow, averaging 3-4.5 m (10 to 15 ft) in width but are slightly higher grade than the main zone. Except for one of the zones, these appear to be much more restricted or «pod-like» in extent than the main zone and do not display the extensive vertical continuity of the main zone. There are also a considerable number of isolated values which were intersected west of the nose of the fold but which were not correlatable between holes and as such are not included in any of the «zones».

There are also several zones of mineralization indicated in the talc-carbonate rocks. In these zones, the gold occurs as blebs and specks within the rock in close association with pyrrhotite and chalcopyrite. Quartz veins are occasionally present but are not essential for the presence of gold. These talc-carbonate zones occur along the plunging hinge line of the subsidiary warp containing the main zone.

#### 5.4.3 Mining

Present reserves are quoted at approximately 28 million tons averaging 0.125 oz Au per ton.

Current plans call for production to start in the fall of 1983 at 2000 tons per day.

Initial production will be by open pit, stripping on which will commence in early 1982.

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## 6.0 AEROMAGNETIC SURVEY RESULTS AND INTERPRETATION

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The claim group covered by the survey has the form of an 'E' with the long axis in a north-south direction (Map 1).

The most prominent magnetic feature in the north arm of the 'E' is a distinct linear high which trends east-southeast through Lower Detour Lake to the Quebec border. Maximum intensities range up to approximately 60,500 gammas relative to a background in the area of approximately 59,500 gammas. Disposition of magnetic gradients indicates near vertical, dike-like source(s).

This anomaly continues to the northwest around the Detour anticline and, in a gross stratigraphic sense, marks the lateral, time-equivalents of the rocks which host the Amoco gold deposit.

The causative source of the above anomaly is interpreted to be unit(s) of magnetite-bearing mafic metavolcanics.

The area of low magnetic intensities immediately north of Lower Detour Lake reflects the arkosic metasediments which occur stratigraphically beneath the above mafic metavolcanics.

The central arm of the 'E', east of Vandette Lake, contains two magnetic highs in an otherwise bland magnetic background. The

first of these is a linear series of highs extending east from the east shore of Vandette Lake for approximately 4 kilometers. Magnetic gradients indicate a south dip. Maximum anomaly amplitudes are in the 300 gamma range. The causative source is again inferred to be a unit(s) of magnetite-bearing mafic metavolcanic within a predominantly metasedimentary-felsic metavolcanic environment.

The second anomaly of interest is located in the east part of the central arm centred on claim P 586570. The anomaly is oval-shaped in plan and is indicative of a pipe-like body. Magnetic gradients clearly indicate a south dip/plunge. The causative source is inferred to be a south-plunging, magnetite-bearing mafic plug, possibly of gabbroic or dioritic composition.

The south arm of the 'E', encompassing Atkinson Lake, is characterized by a very active magnetic pattern - one of high magnetic relief and intensities. An extremely strong, narrow linear magnetic high extends from the west and terminates at the southeast end of Atkinson Lake. Gradients indicate a south dip and relatively shallow depth of burial. The most likely cause is a magnetite iron formation. The sharp truncation in the area of Atkinson Lake may be indicative of a fault. The remaining magnetic activity is probably due to a thick series of magnetite-bearing mafic metavolcanics and associated intrusives. As noted, these rocks are

herein interpreted to be the stratigraphic equivalents of the rocks which host the Amoco gold deposit.

The central portion of the north-south arm of the 'E' contains a prominent north-striking linear magnetic high. Gradients suggest a steep to vertical dip. Previous drill information indicates this feature to be a magnetite-bearing iron formation containing stratiform pyritic-pyrrhotite.

An offset to the west of Vandette Lake is probably a fault displacement.

An ovoid high in the northwest, directly south of Detour River, is probably unrelated to the iron formation and may represent a mafic intrusive body.

Magnetic elements in the survey area allow some conclusions to be drawn regarding geologic structure on the property.

The magnetic data indicate at least two directions of folding - north-south and east-west. The latter folding may be related to deformation synchronous with the intrusion/re-mobilization of the granite to the west.

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## 7.0 SUMMARY AND CONCLUSIONS

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Airborne magnetic surveys have been completed on 850 mining claims in the Detour Lake area, Province of Ontario.

A series of magnetic anomalies located by the surveying are due to magnetite-bearing mafic metavolcanics/intrusives and magnetite iron formation.

Analysis of magnetic trends indicates at best two directions of folding in the underlying Archean metavolcanic-metasedimentary rocks. A magnetite iron formation in the west part of the survey area may have some gold potential considering the occurrence of gold deposits with this lithologic type in other mining areas.

Respectfully submitted,

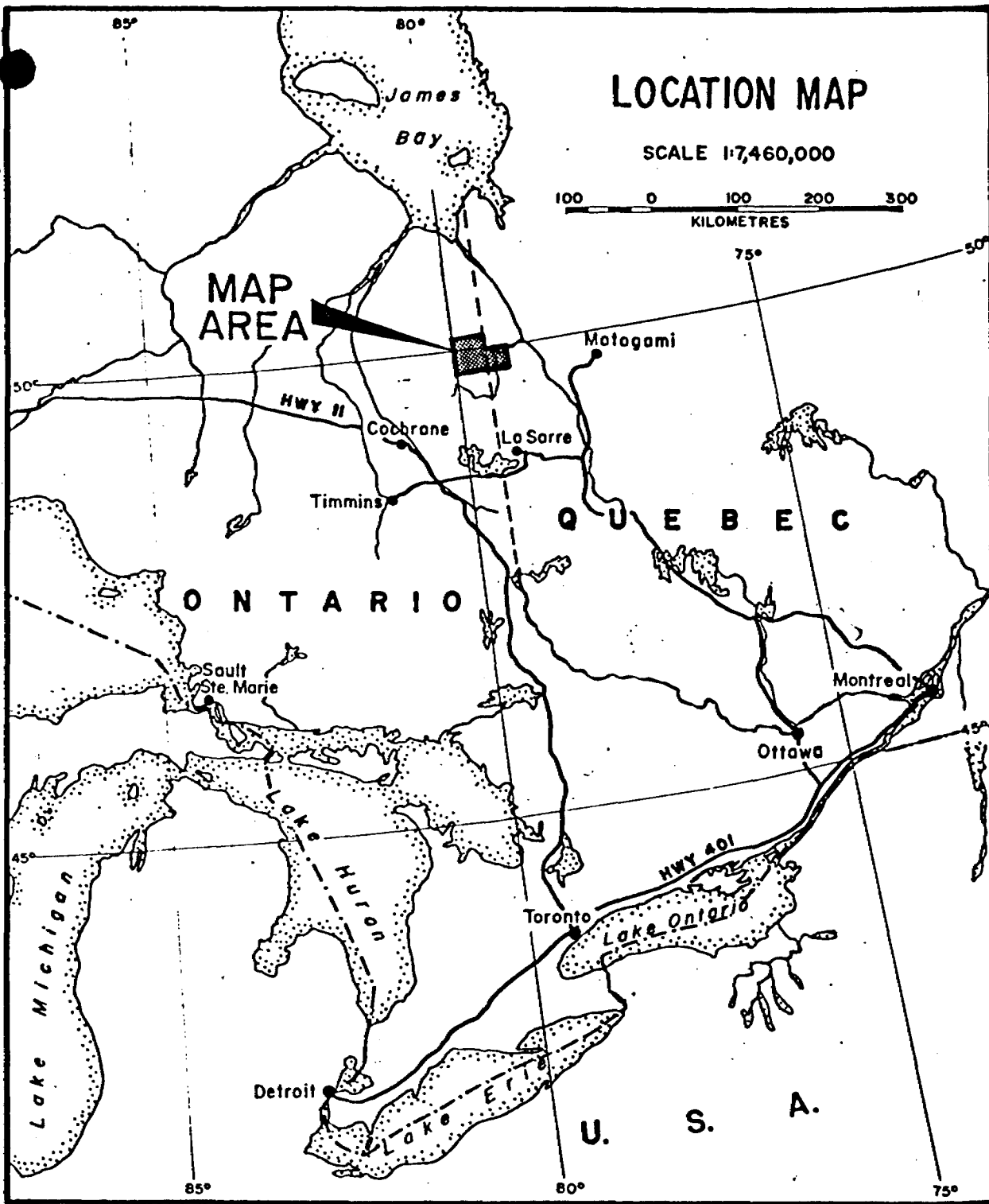


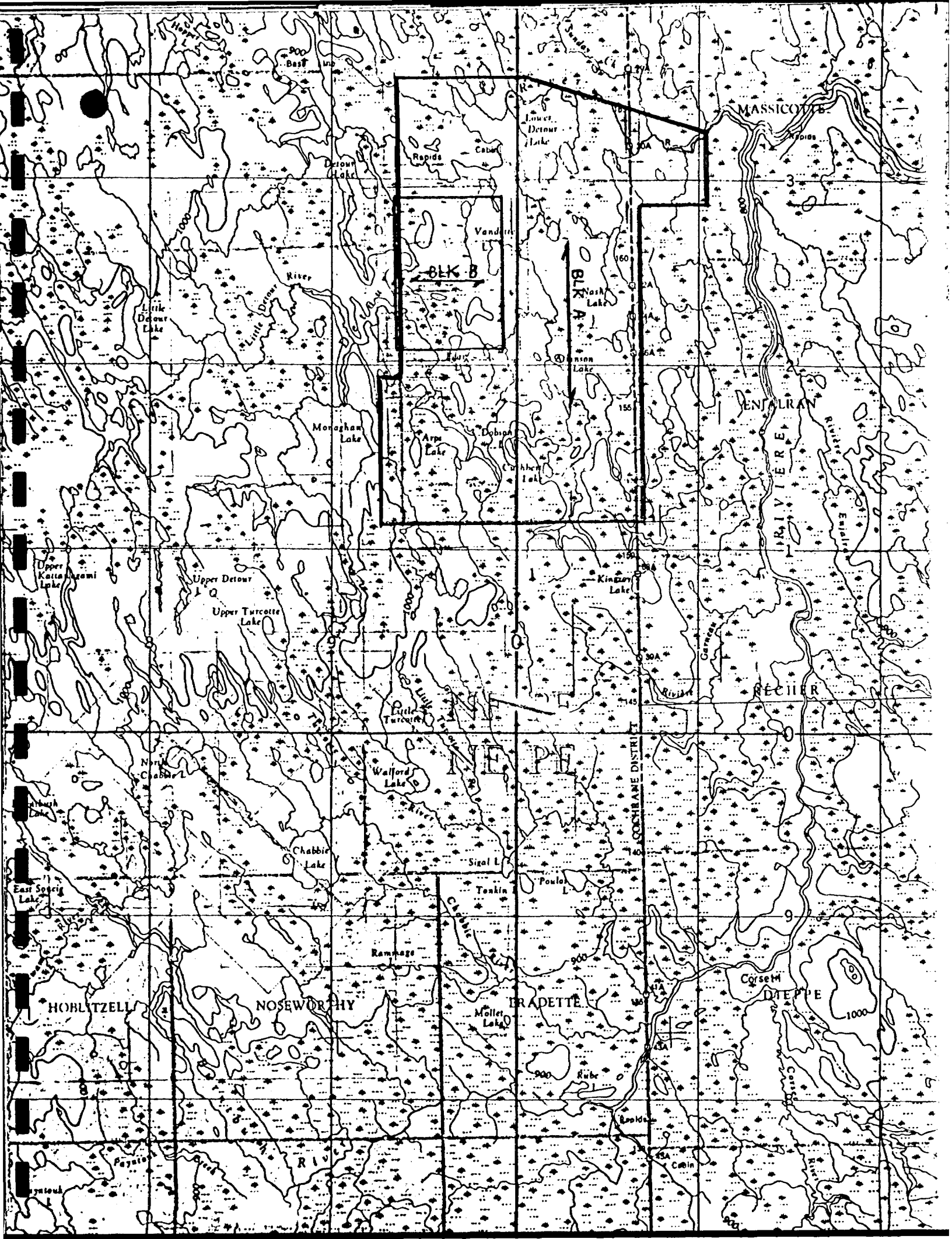
W.E. Brereton, P.Eng.

# LOCATION MAP

SCALE 1:7,460,000

100 0 100 200 300  
KILOMETRES









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) Airborne Magnetics  
Township or Area Lower Detour Lake  
Claim Holder(s) Getty Canadian Metals Limited  
  
Survey Company Questor Surveys Ltd.  
Author of Report W.E. Brereton  
Address of Author 141 Adelaide St. W. Suite 706, Toronto  
Covering Dates of Survey May 1-7, Sept. 15-Oct. 15/81  
(linecutting to office)  
Total Miles of Line Cut \_\_\_\_\_

MINING CLAIMS TRAVERSED  
List numerically

(prefix) (number)

as follows

SPECIAL PROVISIONS  
CREDITS REQUESTED

DAYS  
per claim

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

ENTER 20 days for each  
additional survey using  
same grid.

- Geophysical
  - Electromagnetic \_\_\_\_\_
  - Magnetometer \_\_\_\_\_
  - Radiometric \_\_\_\_\_
  - Other \_\_\_\_\_
- Geological \_\_\_\_\_
- Geochemical \_\_\_\_\_

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

Magnetometer 20 Electromagnetic \_\_\_\_\_ Radiometric \_\_\_\_\_  
(enter days per claim)

DATE: Oct. 15/81 SIGNATURE: W.E. Brereton  
Author of Report or Agent

Res. Geol. \_\_\_\_\_ Qualifications \_\_\_\_\_

Previous Surveys

File No.	Type	Date	Claim Holder
			<u>W.D.</u>

TOTAL CLAIMS 850

If space insufficient, attach list

SELF POTENTIAL

Instrument \_\_\_\_\_ Range \_\_\_\_\_

Survey Method \_\_\_\_\_

Corrections made \_\_\_\_\_

RADIOMETRIC

Instrument \_\_\_\_\_

Values measured \_\_\_\_\_

Energy windows (levels) \_\_\_\_\_

Height of instrument \_\_\_\_\_ Background Count \_\_\_\_\_

Size of detector \_\_\_\_\_

Overburden \_\_\_\_\_

(type, depth - include outcrop map)

OTHERS (SEISMIC, DRILL WELL LOGGING ETC.)

Type of survey \_\_\_\_\_

Instrument \_\_\_\_\_

Accuracy \_\_\_\_\_

Parameters measured \_\_\_\_\_

Additional information (for understanding results) \_\_\_\_\_

AIRBORNE SURVEYS

Type of survey(s) Airborne Magnetics

Instrument(s) Sonotek 5010 proton magnetometer  
(specify for each type of survey)

Accuracy 1 gamma  
(specify for each type of survey)

Aircraft used Britten-Norman Trislander

Sensor altitude 122 m

Navigation and flight path recovery method Visual navigation; inflight 35 mm film strips  
relative to previously prepared 1:10000 photo mosaics

Aircraft altitude 122 m Line Spacing 200 m

Miles flown over total area 1243 Over claims only 425 miles

DETOUR CLAIMS

585140-173	585821-826
585100-137	585831-836
576594-596	585841-846
576602-608	585857-858
584966-995	585180-219
585269-286	585642-661
585060-099	585602-621
585819-820	585220-259
585827-830	585622-641
585837-840	585759-767
585847-856	585859-898
585289-308	585899-928
585552-581	585930-959
585768-774	585960-989
585779-784	586576-579
585785-786	586588-591
585791-798	586580-587
585174-178	585775-778
586498-517	585787-790
586025-031	586518-537
586035-041	585373-388
586045-051	585582
586055-059	529158-167
585990-991	577564
585995-586001	595003-010
585309-325	586348-360
586568-575	586343-345
568293-302	619141-164
568303-304	618857-876
576775-782	619165-172
619058-077	619201-215

TOTAL CLAIMS: 850



32E13NE9322 2.4292 LOWER DETOUR LAKE

900

1982 08 16

2.4292

Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7

Dear Sir:

RE: Airborne Geophysical (Magnetic) Survey  
on Mining Claims P 329158 et al in the  
Area of Lower Detour Lake

The Airborne Geophysical (Magnetic) 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.

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

A. Barrisc

Encls:

cc: MPH Consulting Limited  
Toronto, Ontario  
Attn: W.E. Brereton.

cc: Resident Geologist  
Timmins, Ontario



Ontario

Ministry of  
Natural  
Resources

# Technical Assessment Work Credits

File

2.4292

Recorded Holder

**GETTY CANADIAN METALS LIMITED**

Township or Area

Type of survey and number of Assessment days credit per claim	Mining Claims Assessed
<p><b>Geophysical</b></p> <p>Electromagnetic _____ days</p> <p>Magnetometer <u>20</u> _____ days</p> <p>Radiometric _____ days</p> <p>Induced polarization _____ days</p> <p><b>Section 86 (18)</b> _____ days</p> <p><b>Geological</b> _____ days</p> <p><b>Geochemical</b> _____ days</p> <p>Man days <input type="checkbox"/>                      Airborne <input type="checkbox"/></p> <p>Special provision <input type="checkbox"/>                      Ground <input type="checkbox"/></p> <p><input type="checkbox"/> Credits have been reduced because of partial coverage of claims.</p> <p><input type="checkbox"/> Credits have been reduced because of corrections to work dates and figures of applicant.</p>	<p><b>As per attached list.</b></p>

**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:



# RUSH/URGENT

2.4292

Mining Lands Comments

L.D.

*is the scale on the contour maps acceptable?*

To: Geophysics *Mr Barber*

Comments

*- report not signed*

Approved  Wish to see again with corrections

Date *March 2 / 82*

Signature *Ryan Barber*

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

To: Mining Lands Section, Room 6462, Whitney Block.

(Tel: 5-1380)

November 20, 1981

2.4272

Office of the Mining Recorder  
Ministry of Natural Resources  
60 Wilson Avenue  
Timmins, Ontario  
P4N 2S7

Dear Sir:

We have received reports and maps for an Airborne Geophysical (Magnetic) Survey on Mining Claims P.529158 et al, in the Area of Lower Detour Lake.

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: 416/965-1380

J. Skura/bk

cc: MPH Consulting Limited  
Toronto, Ontario  
Attention: W.E. Brereton



Ontario

24292

P-585140

Ministry of  
Natural  
Resources

Notification of recording  
of assessment work credits

**RECEIVED**

**NOV 13 1981**

**MINING LANDS SECTION**

Lands Administration Branch  
Mining Lands Section  
Ministry of Natural Resources  
Room 1617, Whitney Block  
Queen's Park, Toronto  
M7A 1W3

Date of recording of work: November 5, 1981

Recorded holder: Getty Canadian Metals Limited

Address: 130 Adalaide Street West  
Suite 1100, Toronto, Ontario

Township or Area: Lower Detour Lake Area & Atkinson Lake Area

Type of survey and number of Assessment days credit per claim	Mining claims
Geophysical Electromagnetic _____ days Airborne Magnetometer <u>20</u> _____ days Radiometric _____ days induced polarization _____ days Section <u>77 19</u> _____ days Geological _____ days Geochemical _____ days Man days <input type="checkbox"/> Airborne <input checked="" type="checkbox"/> Special provision <input type="checkbox"/> Ground <input checked="" type="checkbox"/>	See Attached List.

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. Getty Canadian Metals Ltd.



<u>No. of days</u>		<u>No. of days</u>	
P-585641	20	P-585909	20
P-585759	20	P-585910	20
P-585760	20	P-585911	20
P-585761	20	P-585912	20
P-585762	20	P-585913	20
P-585763	20	P-585914	20
P-585764	20	P-585915	20
P-585765	20	P-585916	20
P-585766	20	P-585917	20
P-585767	20	P-585918	20
P-585859	20	P-585919	20
P-585860	20	P-585920	20
P-585861	20	P-585921	20
P-585862	20	P-585922	20
P-585863	20	P-585923	20
P-585864	20	P-585924	20
P-585865	20	P-585925	20
P-585866	20	P-585926	20
P-585867	20	P-585927	20
P-585868	20	P-585928	20
P-585869	20		20
P-585870	20	P-585930	20
P-585871	20	P-585931	20
P-585872	20	P-585932	20
P-585873	20	P-585933	20
P-585874	20	P-585934	20
P-585875	20	P-585935	20
P-585876	20	P-585936	20
P-585877	20	P-585937	20
P-585878	20	P-585938	20
P-585879	20	P-585939	20
P-585880	20	P-585940	20
P-585881	20	P-585941	20
P-585882	20	P-585942	20
P-585883	20	P-585943	20
P-585884	20	P-585944	20
P-585885	20	P-585945	20
P-585886	20	P-585946	20
P-585887	20	P-585947	20
P-585888	20	P-585948	20
P-585889	20	P-585949	20
P-585890	20	P-585950	20
P-585891	20	P-585951	20
P-585892	20	P-585952	20
P-585893	20	P-585953	20
P-585894	20	P-585954	20
P-585895	20	P-585955	20
P-585896	20	P-585956	20
P-585897	20	P-585957	20
P-585898	20	P-585958	20
P-585899	20	P-585959	20
P-585900	20	P-585960	20
P-585901	20	P-585961	20
P-585902	20	P-585962	20
P-585903	20	P-585963	20
P-585904	20	P-585964	20
P-585905	20	P-585965	20
P-585906	20	P-585966	20
P-585907	20	P-585967	20
P-585908	20	P-585968	20

No. of days

No. of days

P-585140 20  
P-585141 20  
P-585142 20  
P-585143 20  
P-585144 20  
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P-584995 20

425 x 40 =  
17000 : 850  
= 20 day

No. of days

No. of days

P-585269	20	P-585827	20
P-585270	20	P-585828	20
P-585271	20	P-585829	20
P-585272	20	P-585830	20
P-585273	20	P-585837	20
P-585274	20	P-585838	20
P-585275	20	P-585839	20
P-585276	20	P-585840	20
P-585277	20	P-585847	20
P-585278	20	P-585848	20
P-585279	20	P-585849	20
P-585280	20	P-585850	20
P-585281	20	P-585851	20
P-585282	20	P-585852	20
P-585283	20	P-585853	20
P-585284	20	P-585854	20
P-585285	20	P-585855	20
P-585286	20	P-585856	20
P-585060	20	P-585289	20
P-585061	20	P-585290	20
P-585062	20	P-585291	20
P-585063	20	P-585292	20
P-585064	20	P-585293	20
P-585065	20	P-585294	20
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P-585067	20	P-585296	20
P-585068	20	P-585297	20
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P-585070	20	P-585299	20
P-585071	20	P-585300	20
P-585072	20	P-585301	20
P-585073	20	P-585302	20
P-585074	20	P-585303	20
P-585075	20	P-585304	20
P-585076	20	P-585305	20
P-585077	20	P-585306	20
P-585078	20	P-585307	20
P-585079	20	P-585308	20
P-585080	20	P-585552	20
P-585081	20	P-585553	20
P-585082	20	P-585554	20
P-585083	20	P-585555	20
P-585084	20	P-585556	20
P-585085	20	P-585557	20
P-585086	20	P-585558	20
P-585087	20	P-585559	20
P-585088	20	P-585560	20
P-585089	20	P-585561	20
P-585090	20	P-585562	20
P-585091	20	P-585563	20
P-585092	20	P-585564	20
P-585093	20	P-585565	20
P-585094	20	P-585566	20
P-585095	20	P-585567	20
P-585096	20	P-585568	20
P-585097	20	P-585569	20
P-585098	20	P-585570	20
P-585099	20	P-585571	20
P-585819	20	P-585572	20
P-585820	20	P-585573	20

No. of days

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P-585574 20  
P-585575 20  
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No. of days

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P-585199 20  
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No. of daysNo. of days

P-619141	20	P-619165	20
P-619142	20	P-619166	20
P-619143	20	P-619167	20
P-619144	20	P-619168	20
P-619145	20	P-619169	20
P-619146	20	P-619170	20
P-619147	20	P-619171	20
P-619148	20	P-619172	20
P-619149	20	P-619201	20
P-619150	20	P-619202	20
P-619151	20	P-619203	20
P-619152	20	P-619204	20
P-619153	20	P-619205	20
P-619154	20	P-619206	20
P-619155	20	P-619207	20
P-619156	20	P-619208	20
P-619157	20	P-619209	20
P-619158	20	P-619210	20
P-619159	20	P-619211	20
P-619160	20	P-619212	20
P-619161	20	P-619213	20
P-619162	20	P-619214	20
P-619163	20	P-619215	20
P-619164	20		
P-618857	20		
P-618858	20		
P-618859	20		
P-618860	20		
P-618861	20		
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No. of days

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DETOUR CLAIMS

585140-173	585821-826
585100-137	585831-836
576594-596	585841-846
576602-608	585857-858
584966-995	585180-219
585269-286	585642-661
585060-099	585602-621
585819-820	585220-259
585827-830	585622-641
585837-840	585759-767
585847-856	585859-898
585289-308	585899-928
585552-581	585930-959
585768-774	585960-989
585779-784	586576-579
585785-786	586588-591
585791-798	586580-587
585174-178	585775-778
586498-517	585787-790
586025-031	586518-537
586035-041	585373-388
586045-051	585582
586055-059	529158-167
585990-991	577564
585995-586001	595003-010
585309-325	586348-360
586568-575	586343-345
568293-302	619141-164
568303-304	618857-876
576775-782	619165-172
619058-077	619201-215

TOTAL CLAIMS: 850

MPH Consulting Limited

Suite 706, 141 Adelaide St. W.  
Toronto, Canada M5H 3L5  
(416) 363-6375  
(416) 363-4002  
Telex 06-219626



November 9, 1981.

Mr. F.W. Mathews,  
Room 6450, Whitney Block,  
Queen's Park,  
99 Wellesley Street West,  
Toronto, Ontario.  
M7A 1W3

Dear Mr. Mathews:

Please find enclosed two copies of a report for assessment purposes on an airborne magnetic survey in Detour Lake area, northeastern Ontario.

Yours truly,

MPH CONSULTING LIMITED

W.E. Brereton, P.Eng.,  
Vice President.

WEB/la  
Encl.

RECEIVED

NOV 17 1981

MINING LANDS SECTION

RECEIVED

NOV 17 1981

MINING LANDS SECTION

SUNDAY LAKE M-3003

AREA OF LOWER DETOUR LAKE

DISTRICT OF COCHRANE  
PORCUPINE 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 (—)

NOTES

400' Surface rights reservation around all lakes and rivers

Areas withdrawn from staking under Section 43 of the Mining Act (R.S.O. 1970).

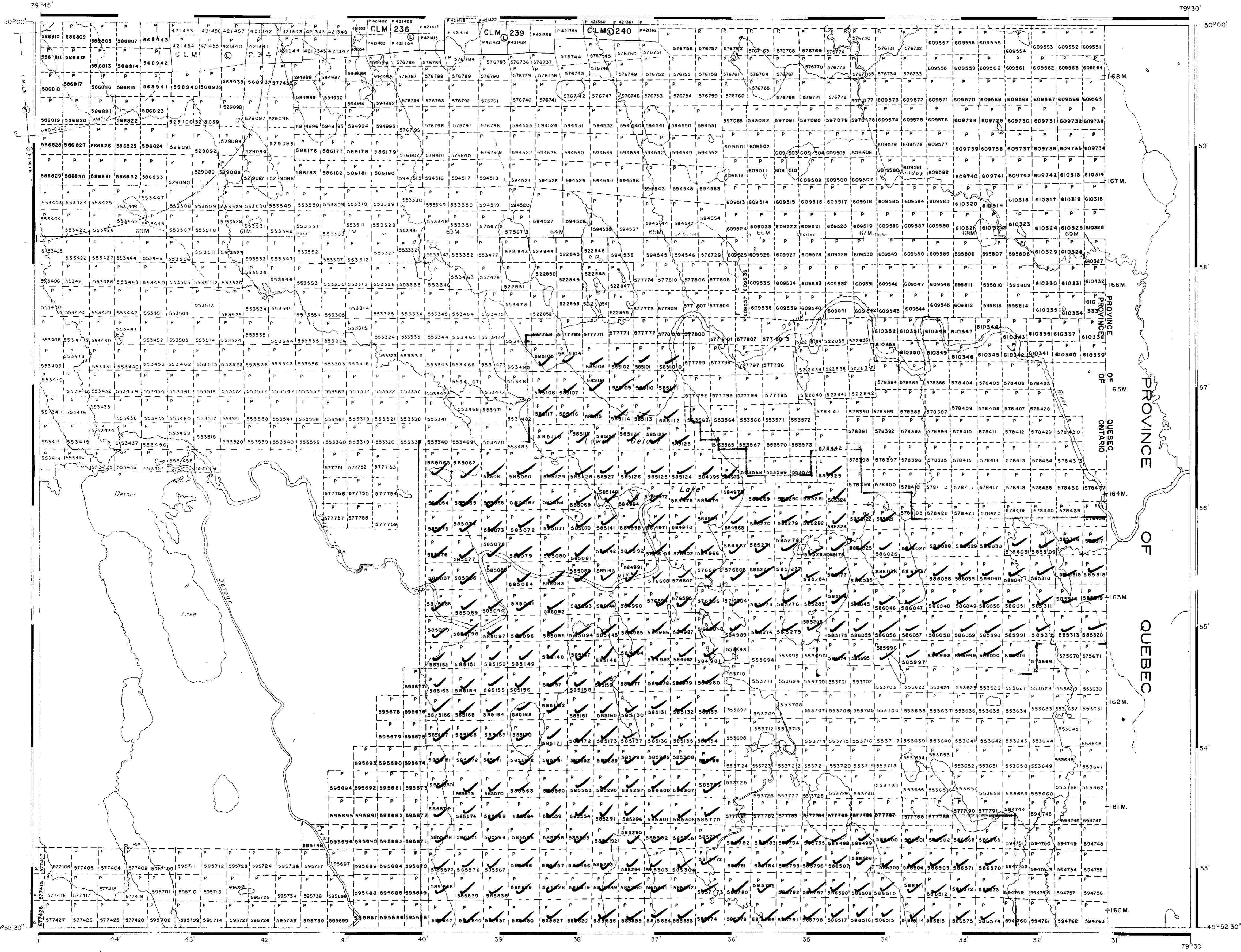
Order No.	File	Date	Disposition
1	N.R. 1/81	188511	15/1/81 S.R.O.

DATE OF ISSUE  
FEB 25 1982  
Ministry of Natural Resources  
TORONTO

NATIONAL TOPOGRAPHIC SERIES 32E13

PLAN NO. -M.2603

ONTARIO  
MINISTRY OF NATURAL RESOURCES  
SURVEYS AND MAPPING BRANCH



HOPPER LAKE M-2601

PROVINCE OF ONTARIO  
PROVINCE OF QUEBEC

ATKINSON LAKE M-2622



32E13N6322 2.4292 LOWER DETOUR LAKE

200

498793

LOWER DETOUR LAKE - M.2603

AREA OF

ATKINSON LAKE

DISTRICT OF COCHRANE

PORCUPINE MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

- PATENTED LAND Ⓟ
- CROWN LAND SALE C.S.
- LEASES Ⓛ
- 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 MUSKOG —
- MINES Ⓜ
- CANCELLED C.

NOTES

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

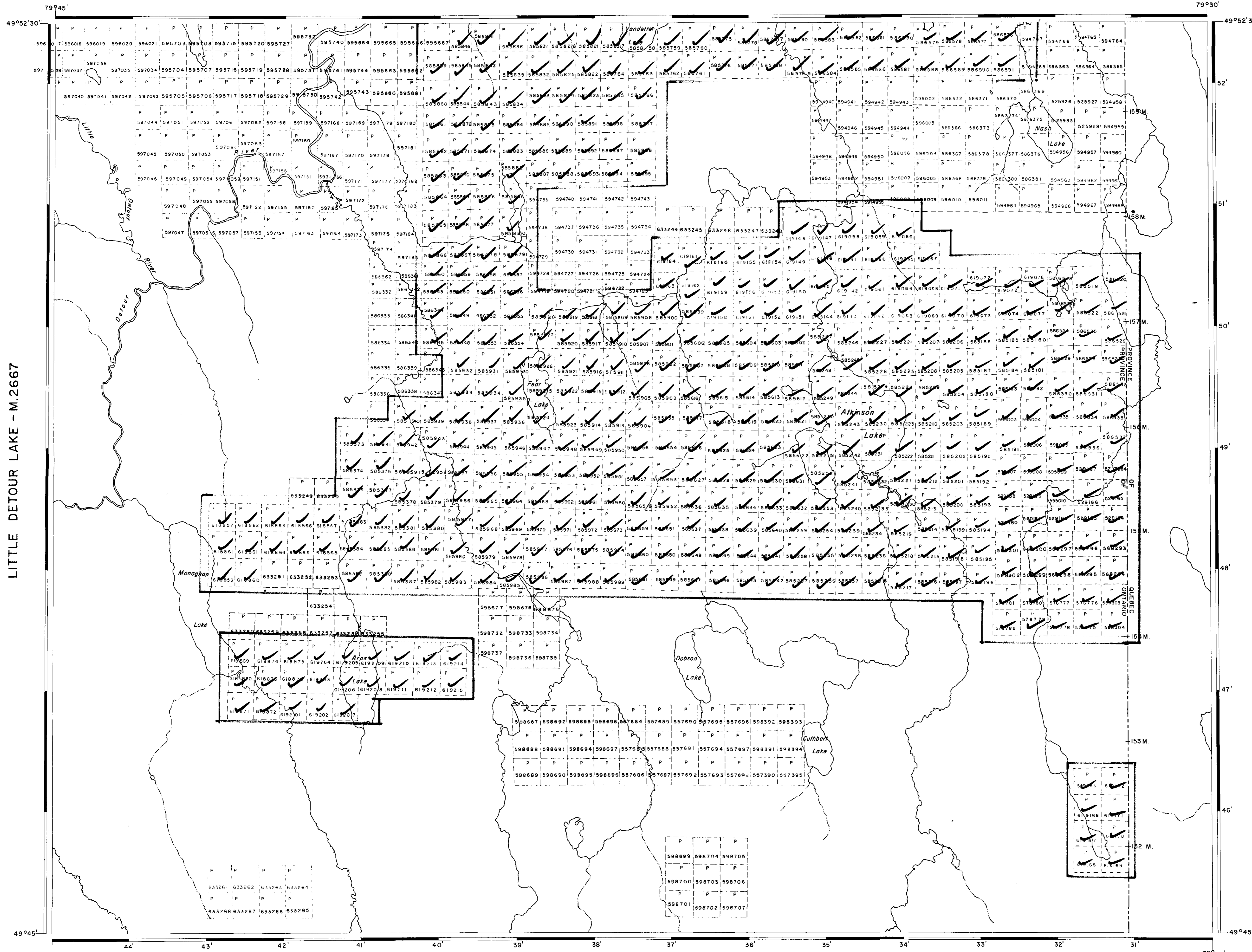
DATE OF ISSUE  
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Ministry of Natural Resources  
TORONTO

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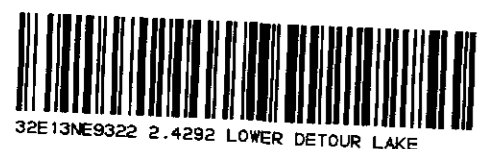
PLAN NO. - M.2622

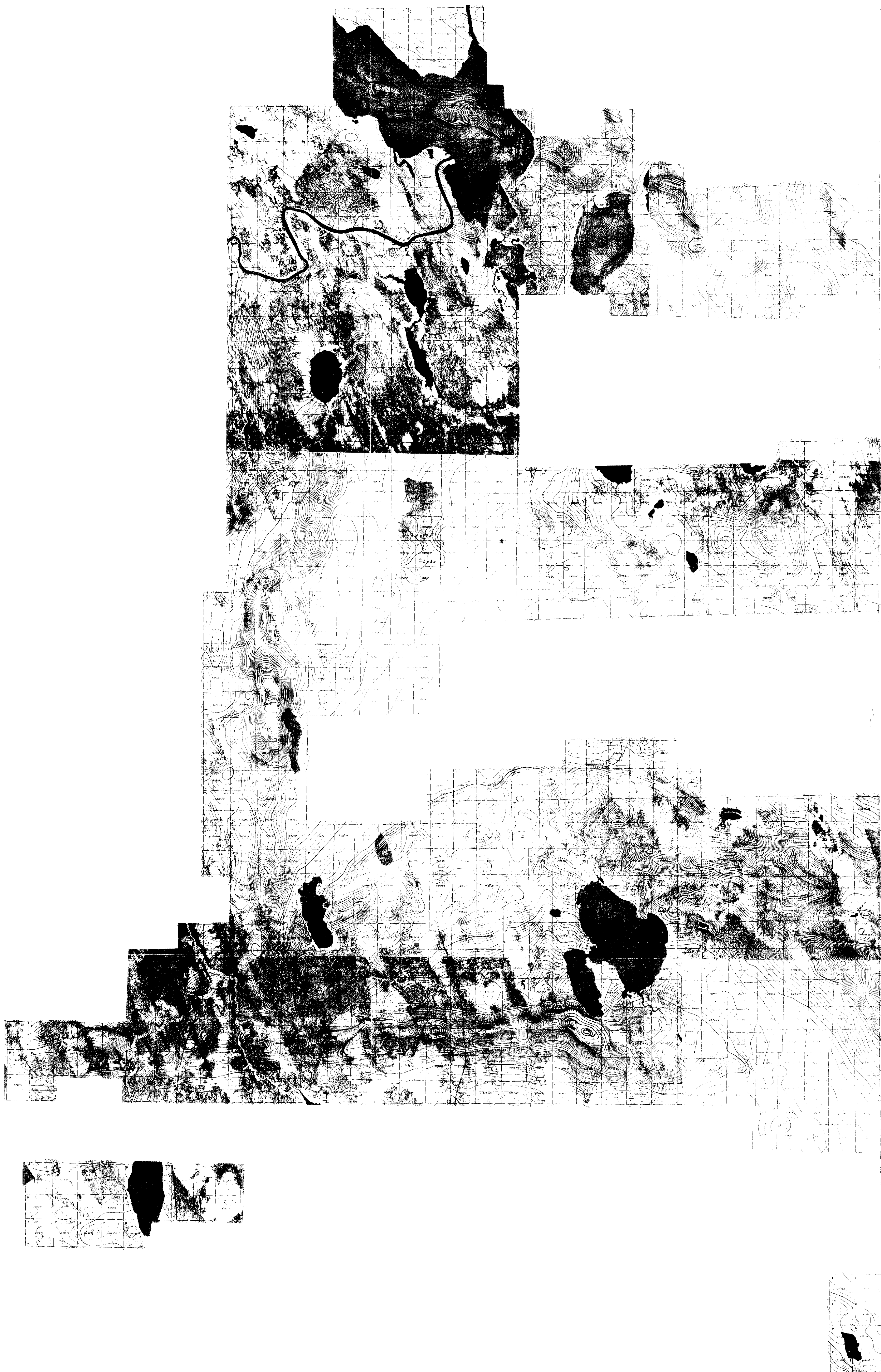
ONTARIO  
MINISTRY OF NATURAL RESOURCES  
SURVEYS AND MAPPING BRANCH



LITTLE DETOUR LAKE - M.2667

KINGROY LAKE - M.2659





LOCATION MAP



L E G E N D

- Contour Interval 20 Feet
- Contour Interval 10 Feet
- Contour Interval 5 Feet
- Contour Interval 2 Feet
- Contour Interval 1 Foot
- Contour Interval 0.5 Feet
- Contour Interval 0.2 Feet
- Contour Interval 0.1 Feet
- Contour Interval 0.05 Feet
- Contour Interval 0.02 Feet
- Contour Interval 0.01 Feet
- Contour Interval 0.005 Feet
- Contour Interval 0.002 Feet
- Contour Interval 0.001 Feet

GETTY CANADIAN  
METALS, LIMITED  
LIE TOUR LAKE AREA

AIRBORNE MAGNETIC SURVEY

Project No.	G-457	By	W. BREKENTON
Scale	1:25,000	Drawn	GCS LIMITED
Drawing No.	1	Date	SEPT 1981

