



42E16SE0017 2.8058 CASTLEBAR LAKE

010

REPORT ON THE  
GABBRO LAKE SHOWING PROPERTY  
DISTRICT OF THUNDER BAY, ONTARIO  
GEOLOGY AND MAGNETOMETER SURVEY

**RECEIVED**

MAY 2 - 1985

MINING LANDS SECTION



By: H. Dowhaluk, B.A., F.G.A.C.  
Box 118,  
Tamworth, Ont., KOK 3G0

April 15, 1985

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Gabbro Lake Showing Property  
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## INTRODUCTION

The writer was requested to map the Gabbro Lake Showing claim group in the Longlac area by Mr. Paul Martin, president of Golden Tiger Mining Exploration Company Inc. The twelve claims (and two additional claims which were staked to cover some unexpected open ground) are situated in the Longlac area of the District of Thunder Bay, Ontario. In the mapping, carried out in November of 1984, very little outcrop was found on the property but the trenches at the Gabbro Lake Showing were located, mapped in detail, sampled, and the presence of gold was established.

Furthermore, magnetometer and VLF electromagnetic surveys were carried out in January of 1985. The property, geology and surveys are described below with recommendations for further work.

## PROPERTY, LOCATION, ACCESS

The property belongs to Golden Tiger Mining Exploration Company Inc. whose address is:

35 Allenbrooke,  
Dollard des Ormeaux, Que., H9A 2S7

The property is located just south of the Trans-Canada Highway No. 11 at a point 2.4 miles (3.8 km) east of the town of Longlac, or, 3 miles (5 km) west of Klotz Lake, in the area of Castlebar Lake (NTS 42 E/16) in the District (and Mining Division) of Thunder Bay, Ontario.

The property can be reached by walking south from the Trans-Canada Highway No. 11 for a distance of one quarter mile.

The area is unsurveyed but the claims are presumed to be 40 acres each (one triangular claim, 813313, contains about 20 acres) for a total of 540 acres. These claims are further described as 747273 to 747284 inclusive and 813312 and 813313. These are shown on Ontario MNR map G-220, 'Castlebar Lake Area'. On their east side, these claims tie onto the surveyed and patented claims numbered 22603, 22604, and 22605 which are shown on the adjoining 'Klotz Lake' map No. G-295.

TOPOGRAPHY, VEGETATION, LOCAL RESOURCES

The south half and northwest parts of the property are flat to gently sloping black spruce plains at an elevation of approximately 950 feet above sea level. A mixed-forest upland area with elevations of slightly over or under 1,000 feet above sea level covers most of the north half of the property.

There is no well defined drainage pattern over most of the property. A line of cedar swamps in the south part of the property drains into a small muskeg pond which drains into Hoiles Creek. Hoiles Creek drains into Klotz Lake and eventually into James Bay by way of the Kenogami and Albany River systems. The creek touches the southeast corner of the claim group; here it has clay and silt banks up to ten feet high covered with speckled alder as it meanders northeasterly.

Physiographically, the property is part of the Abitibi Upland portion of the James Region and it is close to the south margin of the Clay Belt. The climate is subarctic and the flora is classified as boreal coniferous forest. Black spruce is by far the most prevalent tree.

The upland portion supports a mixed forest of white birch, aspen poplar, white spruce, black spruce, jack pine, and balsam fir. Some trees reach a diameter of fourteen inches. These trees occur in various combinations; the birch often forms pure stands. Mountain (moose) maple is the common underbrush and club-moss is abundant on the forest floor.

The upland forest passes into high black spruce forest where trees up to eight inches in diameter grow closely together, and then into monotonous black spruce swamp with its smaller trees, thick mat of sphagnum moss on the ground, and ubiquitous underbrush of Labrador tea and speckled alder. This in turn gives way, with increasing moisture, to muskeg with its thick mat of peat and sphagnum moss and scattering of stunted black spruce and

tamarack and finally to open floating bog and muskeg ponds. Leatherleaf, low birch, swamp laurel, sedge, pitcher-plant and cranberry are typical plants of the open bogs. White cedar and willow tend to mark springs or water courses.

Most ordinary supplies and materials are available in Longlac. There is an airport at nearby Geraldton. The Beardmore-Geraldton camp has produced 4.12 million ounces of gold in the past so that there is a strong tradition of gold mining in the area. The Little Long Lac mine produced from 1934 to 1953; the McLeod-Cockshutt produced from 1938 to about 1968. At present, forest products and tourism are the main industries of the area.

### HISTORY

In 1934 the Little long Lac was the first gold mine to go into production in the Geraldton area. The Beardmore-Geraldton area rapidly became an important gold camp and prospecting activity spilled over eastwards into the area of the subject claims.

In the summer of 1936, H.W. Fairbairn mapped the northern Long Lake area and this mapping was carried eastwards in 1937 by R.D. Macdonald whose report and map, Geology of the Pagwachuan Lake Area, (Vol. XLVI, Pt III, 1937, ODM) covers our claim area. Macdonald reports that the prospectors, A. Ward and W. Morrow, had discovered and opened up by trenches in 1936 the gold showing which is described in this report.

The property area was again covered cursorily in the ODM report Geology along the Trans-Canada Highway between Hearst and Longlac, by E.L. Evans (Vol LI, Pt IX, 1942). Recently, in 1979, the area was mapped in detail by S.E. Amukun of the Ontario Geological Survey (Report 235, Geology of the Klob Lake Area, OGS, 1984.

S.E. Amukun mentions in his report on the Klob Lake area that the ground held by A. Ward and W. Morrow was part of the Gabbro North Group of Shell Canada Resources Limited in 1979. (p 67). The south boundary of claims 747283, 747278 and 747275 is actually an old base line which was probably cut by Shell for its geological and geophysical ground surveys to follow up a previous airborne geophysical survey. Amukun also mentions that New Jersey Zinc Expl-

Exploration Company (Canada) Limited also carried out a cursory examination of the entire Klob Lake map-area.

No diamond drilling has been reported on the subject claim group in the data available to the writer nor did he see any signs of drilling while mapping.

In 1983, the property was staked by Archie Weirmeir during the Klotz Lake rush. Early in 1984, lines were cut at one hundred meter intervals and a VLF electromagnetic (EM-16) and proton magnetometer surveys were carried out by Monte Hall under the supervision of Wayne Holmstead. At the same time Getty Canadian Metals did an airborne electromagnetic and magnetic survey over the Klotz Lake area which covered this group. The claims lapsed in the spring of 1984 for technical reasons and were restaked by L.R. Westover for the present owner.

The property was mapped by the writer in November of 1984 and magnetometer and VLF electromagnetic (EM-16) surveys were carried out in January of 1985 by Louis Martin.

#### TABLE OF FORMATIONS

##### PHANEROZOIC

##### CENOZOIC

##### Quaternary

Recent: Soil, swamp deposits, alluvial deposits.

Pleistocene: Glacial till - gravelly, sandy, clayey

##### PRECAMBRIAN

##### EARLY PRECAMBRIAN (ARCHEAN)

Dior : Diorite, quartz diorite (Paglamin Lake stock)

Ark : Meta-arkose

Grs : Greenstone, mafic to intermediate metavolcanics  
(flows, tuffs)

### GENERAL GEOLOGY

The property is part of the Superior Province in the Canadian Shield and is underlain by crystalline rocks of Archean Age which are over 2,000 million years old. The property lies in the Wabigoon Volcanic Belt and the area may be considered as the eastern extension of the Beardmore-Geraldton mining belt.

The general geology of the area is shown on the OGS map No. 2469 (S.E. Amukun, 1979, 1 inch to  $\frac{1}{2}$  mile). In the property area this map shows massive to foliated Archean metavolcanics to be intruded by the Paglamin Lake stock (diorite, quartz diorite).

Surficial till and peat of Pleistocene and Recent age cover the Archean rocks.

### QUATERNARY GEOLOGY

The large upland area on the north half of the property is made up of Pleistocene sandy till. The sandy till is mostly ground moraine but it displays some drumlinoid features which indicate the glaciation to have been advancing in the direction S 60°W. No outcrop was found on this upland area although some of this ground moraine may have been snagged by subcrop crags.

The soil on this upland portion is podzol with a gray bleached zone in the "A" horizon and a brown colour in the "B" horizon.

The property is close to the south edge of the Clay Belt (glacial Lake Barlow-Ojibway) and lacustrine clay could be present in the low areas but none was noted, nor looked for.

The muskeg pond in the southeastern part of the property is a deglaciation feature - ice disintegration forming a small kettle lake now largely choked by floating bog. The lowland areas have accumulated a variable amount of peat since glaciation to cover the underlying boulder clay and sandy till.

### PROPERTY GEOLOGY

Outcrop is scarce on the property so that little is known of the underlying rock over large areas. The largest area of outcrop is in the vicinity of the Gabbro Lake showing located at the

north-south boundary of claims 747284 and 747277 (centred at 5+50 S on L-7-W). The rocks show some foliation with a strike of 260° and a dip to the north at 75°. Massive to schistose greenstone on the north side is in gradational contact with arkose to the south; this arkose grades into diorite southwards - the Paglamin Lake stock.

The greenstone is a highly altered basic volcanic made up of flows and tuffaceous material. It is greenish gray in colour, fine-grained with some differentiation of the plagioclase feldspar from the mafic minerals (chlorite-hornblende). It weathers dark green or rusty (from disseminated pyrite). Presumably the volcanic was first broken down by weathering to produce clastic material for the formation of arkose. All these rocks were later recrystallized through metamorphism.

The arkose is whitish in colour, medium-grained to ~~fine-grained~~ and composed of white feldspar with scattered "eyes" of quartz. Disseminated pyrite is commonly present, particularly in the fine-grained siliceous band up to twenty feet wide close to the greenstone contact. This siliceous band is the "showing" which carries gold. Some small bands of greenstone occur in the arkose.

The arkose appears to grade into the foliated diorite and quartz diorite to the south. This diorite is medium-grained, well foliated with platy mafic material and whitish feldspar. Large quartz grains or eyes are often present. This rock has hybrid features suggesting a genesis by granitization of pre-existing sediments.

The only other area of outcrop is around 2+50 S on L-3-W. Here we have a greenstone-diorite contact. The diorite is foliated and dark coloured. Another outcrop of foliated diorite lies just south of the property near line 4-W.

#### ECONOMIC GEOLOGY

R.D. Macdonald in his report mentioned earlier described what is now known as the Gabbro Lake Showing.

"A second group of claims situated 1½ miles northeast of Gabbro lake lie in greenstone, which is intruded by quartz diorite. Assay values running between \$4.00 and \$5.00\* were obtained from a heavily mineralized shear zone. This group was not worked during 1937."

(\*0.11 and 0.14 oz/t gold respectively).



The showing was exposed by Morrow and Ward by several small trenches as well as one trench that is over 25 meters long. A zone of siliceous arkose mineralized with two to five percent disseminated pyrite extends east-west for a distance of 100 meters. The width of the silicification appears to be at least six meters although some gold is present in a zone almost 30 meters wide. This zone may have been produced originally by leaching of argillaceous material, probably by rain water, from saprolite derived by weathering of the underlying volcanic to leave a more siliceous residue.

Several grab samples were taken by the writer. A value of 0.10 oz/t gold was obtained in the trench on the west side of I-7-W at 5+80 S in siliceous material carrying 5 percent disseminated pyrite close to the greenstone contact. Arkose with quartz stringers assayed 0.07 oz/t gold in a small pit at the west end. Values of 0.01 and 0.02 were obtained in other trenches. These trenches are in poor shape and sampling is difficult but the values obtained confirm the old reports of the presence of gold.

Holmstead reports values of 0.001, 0.025, 0.02 and 0.03 oz/t gold in the south part of the long trench. The writer obtained a value of 0.01 oz/t gold at the north end of this 90-foot trench. Very small amounts of gold appear to be present over a width of almost 100 feet.

#### GEOPHYSICAL SURVEYS

The first set of geophysical surveys was carried out in January of 1984 by Monte Hall under the supervision of Wayne Holmstead on the then Weirmeir claims. The north-south grid lines were cut at one hundred meter intervals and readings were taken every 25 meters. The magnetometer survey was carried out using a portable proton magnetometer, Geometrics Model G-816, which measures the earth's total magnetic field with an accuracy of one gamma from a push-button control.

The VLF (very low frequency) electromagnetic survey was carried out by means of the Geonics EM-16 instrument which received signals from the submarine station NLK, Seattle, at a frequency of 18.6 kHz.

Also in January of 1984, a combined helicopter-borne magnetic, electromagnetic and VLF survey was carried out by Aerodat Limited for Getty Mines Limited in the Klotz Lake area. Equipment operated included a 3-frequency HEM and VLF systems, a magnetometer and a radar positioning device at a nominal spacing of 150 meters. This survey covered the subject claims and the results are congruent with the ground surveys.

Unaware that the above geophysical survey results (Holmstead's) were in fact available to the public in the Ontario assessment work files, Golden Tiger rastered the same grid and carried out magnetometer and VLF electromagnetic surveys of its own on essentially the same property in January of 1985.

The Golden Tiger magnetometer map is included in this report; however, instrument problems with the EM-16 towards the end of the survey rendered some of the data suspect and a few lines need yet to be rerun before the data can be presented. Meanwhile, Holmstead's VLF electromagnetic survey plan is included as an appendix to this report for the sake of completeness. The ensuing section on the VLF electromagnetic survey is based on Holmstead's plan.

#### VLF ELECTROMAGNETIC EM-16 GROUND SURVEY

The most prominent conductor axis runs east-west across claims 747283, 747278 and 747275 at about 3+50S on the grid lines. This trend is about 300 meters north of the Morrow-Ward showing. This conductor trend runs through what is shown to be greenstone in the west end and the Paglamin Lake stock (diorite) in the east end on Amukun's "Klob Lake" map. It appears to represent a major shear zone. Another small conductor axis occurs about 150 meters north of the Morrow-Ward showing; this crosses lines 8-W, 7-W and 6-W at about 4+50 S.

A second large conductor trend extends east-west near the southern boundary and may reflect wetland. However, this low area could have been caused by shearing so that this anomaly should not be dismissed offhand.

There are several small electromagnetic anomalies mostly in

the north half of the property. These seldom cross more than two lines and even though they are rather mediocre anomalies, they could possibly reflect mineralization.

#### MAGNETOMETER SURVEY

The southeastern third of the property shows higher magnetic readings which probably reflects disseminated magnetite in the Paglamin Lake stock, particularly along its edges. A tongue of higher magnetic readings extends westwards to coincide with the Morrow-Ward showing.

Some anomalous magnetic readings occur in the northwest portion of the property. A strong anomaly occurs in the north part of claim 747281 which is some 1600 gammas above normal.

#### CONCLUSIONS AND RECOMMENDATIONS

R.L. Scott Hogg of Aerodat Limited in his report on the Klotz Lake survey writes,

"Disseminated mineralization, such as gold and certain poorly conducting sulphide minerals cannot be expected to produce a significant or perhaps even measureable electromagnetic anomaly...It is recommended that those most familiar with the detailed geology of the area can best evaluate the relative significance of the various anomalies and assign relative follow-up priority."

The type of mineralization seen by the writer in the Morrow-Ward showing is not likely to produce any notable VLF electromagnetic or magnetic anomalies. However, there is still the potential for a low grade disseminated type of sulphide-gold mineralization as well as smaller silicified gold-bearing zones with disseminated mineralization. The most effective way to explore the property at this stage is by means of diamond drilling.

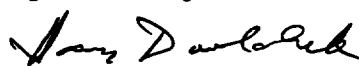
It is felt that some drilling is preferable at this stage since gold is known to be present. An induced potential (I.P.) survey could be done but it might not add much to the picture at this stage since it would appear that disseminated magnetite in the Paglamin Lake stock might simply mask the gold mineralization and even detract from it. Little is known of the detailed geology on the property and present generalizations are based on very little data.

Two thousand feet of diamond drilling is recommended. Two holes, about 300 feet in length, should be drilled on the Gabbro Lake (Morrow-Ward) showing; another three holes (900 feet) should test the VLF-EM conductor in the vicinity of the small muskeg pond as well as the prominent conductor north of the showing; six hundred feet would be left to test four smaller conductors mostly in the northern part of the property.

The following diamond drill holes are recommended. As drilling progresses and experience is gained, some changes may be desirable.

No. 1	L-7-W	5+50 S	300 feet	South at 45°
No. 2	7+50 W	5+50 S	300 feet	South at 45°
No. 3	L-7-W	6+25 S	200 feet	South at 45°
No. 4	L-2-W	6+50 S	300 feet	South at 45°
No. 5	L-3-W	7+40 S	300 feet	South at 45°
No. 6	L-2-W	2+25 S	150 feet	South at 45°
No. 7	L-9-W	7+25 N	150 feet	South at 45°
No. 8	L-6-W	6+75 N	150 feet	South at 45°
No. 9	L-1-W	0+25 N	150 feet	South at 45°

Respectfully submitted,



Harry Dowhaluk, B.A., F.G.A.C.



April 15, 1985

REFERENCES

- Aerodat Limited, for Getty Mines Limited, Report on Combined Helicopter-borne Magnetic, Electromagnetic and VLF Survey, Klotz Lake, Ontario. March, 1984. ODM, Assessment files.
- Amukun, S.E., Geology of the Klob Lake Area, District of Thunder Bay, (42 E/9, 42 F/12,13). Report 235, OGS, 1984
- Baldwin, W.K.W., Plants of the Clay Belt of Northern Ontario and Quebec, Nat. Museum of Canada, Ottawa, Bulletin No.156, 1958.
- Evans, E.L., Geology along the Trans-Canada Highway between Hearst and Longlac, ODM, Vol LI, Pt 9, 1942.
- Holmstead, Wayne, Geophysical Surveys on the Gabbro Lake Property, District of Thunder Bay, March, 1984. ODM Assessment files.
- Macdonald, R.D., Geology of the Pagwachuan Lake Area, ODM, XLVI, Pt 3, 1937.

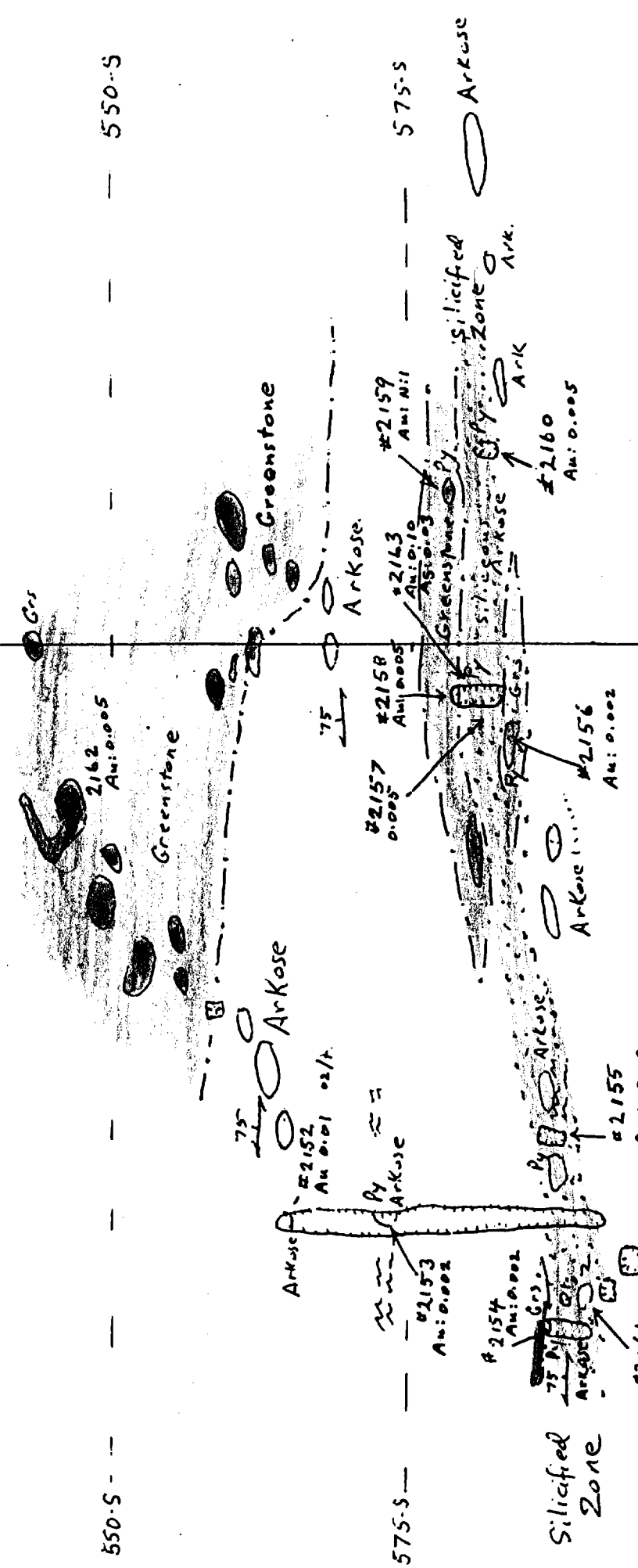
- Maps:
- |     |         |                |
|-----|---------|----------------|
| OGS | 2469    | Klob Lake      |
| MNR | G-220   | Castlebar Lake |
| NTS | 42 E/16 | Castlebar Lake |
|     | 42 F/13 | Flint Lake     |

M-L-7

550-S - - - - - 550-S

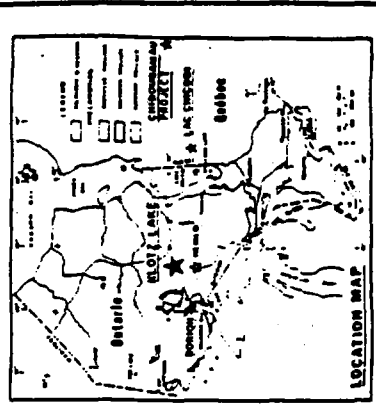
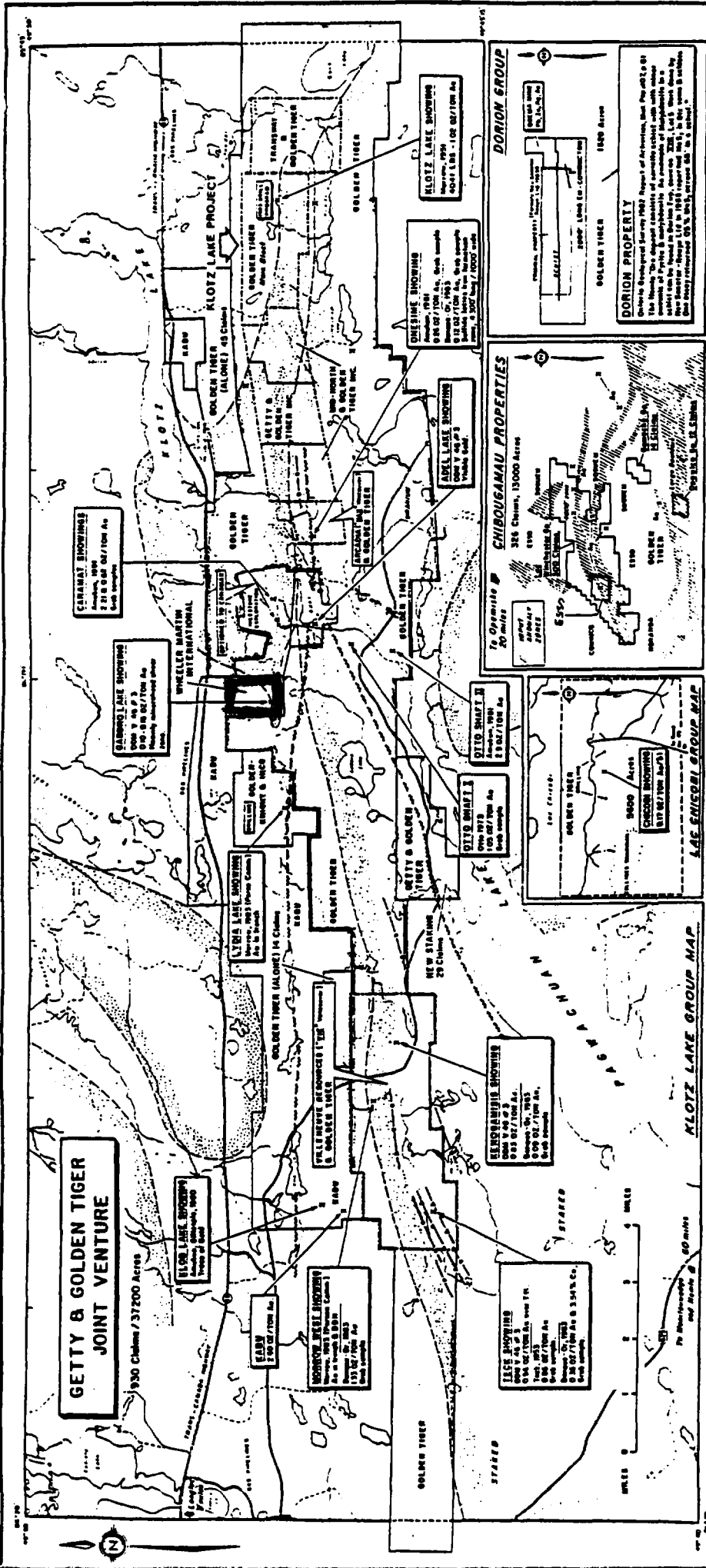
575-S - - - - - 575-S

600-S - - - - - 600-S



GABRO LAKE SHOWING  
 Klotz Lake Area  
 Scale: 1 cm = 5 m (1:500)  
 Date: Nov. 26, 1984 H. D. ...

☐ Trench, Pit  
 ○ Outcrop



**MINING EXPLORATION  
COMPANY  
INC.**

**SOCIÉTÉ  
D'EXPLORATION MINIÈRE**

Listed: **GTM - Montreal Exchange.**

**KLOTZ LK & DORION GROUPS (Ontario) / CHICOBÉ & CHIBOUGAMAU GROUPS (Québec)**

**GOLD SHOWINGS, LAND STATUS & GEOLOGICAL COMPILATION**

**LEGEND**

- Intermediate to Felsic intrusions.
- Archean Sediments.
- Archean Mafic Volcanics.
- Geological contact.
- Fault zone.
- Gold showing.
- Magnetic anomaly, (Iron Fm.).
- Vertical loop EM anomaly.
- Claim group, (Golden Tiger).
- Claim group, (Others).







631742

629873

685529

685628

629879

59950

52950

59900

59850

629878

629870

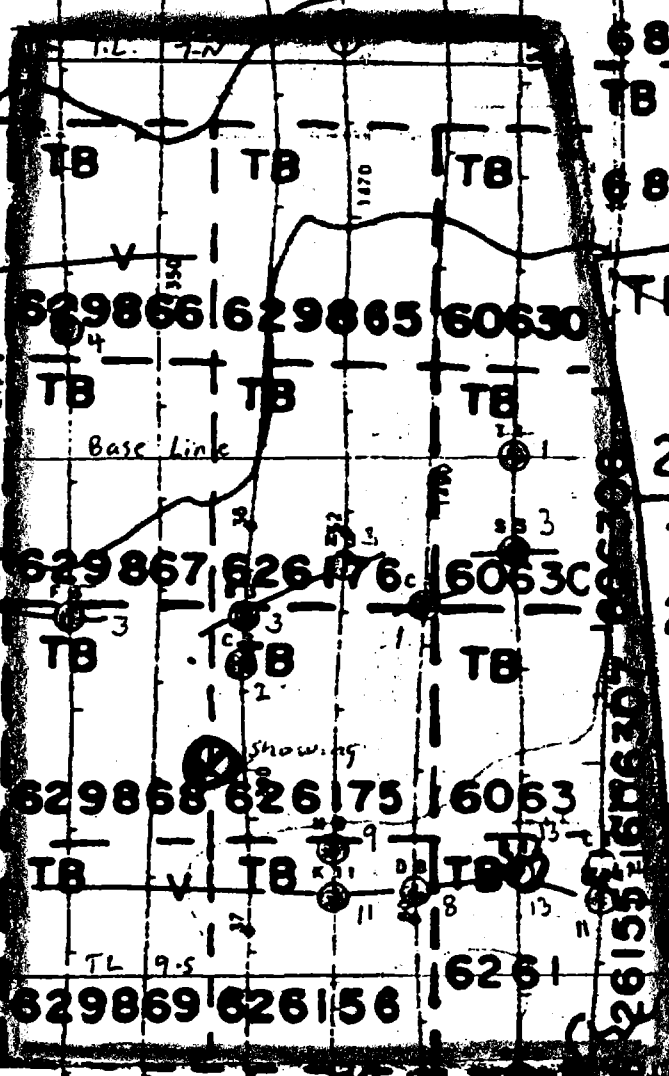
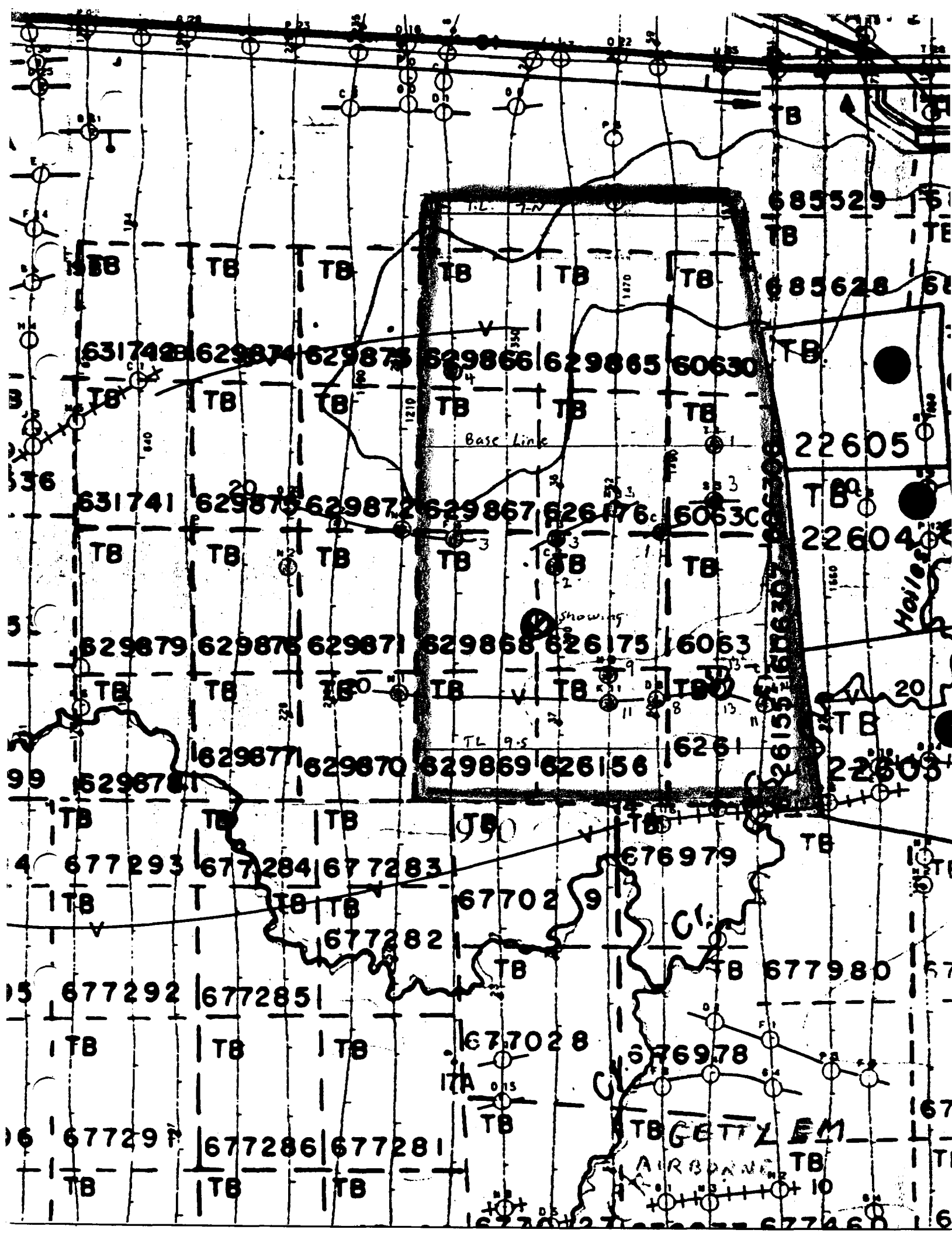
62000

677283

677029

GETTY MAG  
Airborne

677



631742 629874 629873 629866 629865 60630

631741 629875 629872 629867 626176 60630

629879 629876 629871 629868 626175 6063

629877 629870 629869 626156 6261

677293 677284 677283 676979

677292 677285 677029

677291 677286 677281 676978

Base Line

Showing

GETTLEM

AIRBORNE

685529  
685628

22605  
22604

22603

677980

677260

Heiler

20

10

16

MINING LANDS SECTION

MAY 2 1984

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Geophysical Surveys  
on the  
Gabbro Lake Property  
District of  
Thunder Bay

Wayne Holmstead, FGAC  
March, 1984

2.5787

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Maps

- Map 1: Magnetometer Survey
- Map 2: Electromagnetic Survey, Values and Profiles
- Map 3: Electromagnetic Survey, Fraser Plot

Introduction

A magnetic survey and electromagnetic survey have been completed on the Gabbro Lake claims numbered;

TB606305 to 606307

TB626155 to 626156

TB626175 to 626176

TB629865 to 629869.

The twelve claims are located just south of the Trans-Canada Highway, about 40 kilometers east of Longlac in the District of Thunder Bay.

The object of the surveys were to determine if there was a geophysical signature to a gold showing reported to occur on the property.

## History and Geology

The property is reported to include a gold showing that assayed 0.11 to 0.14 oz./ton gold in a heavily mineralized shear zone (Macdonald, ODM Vol. 46, Pt. III, 1937).

The writer's visit to the property indicated that the northern portion was heavily covered by overburden and no outcrop was exposed. In the southern portion of the claim block, outcrops of mafic volcanic rock intruded by quartz porphyry were observed, both heavily mineralized with disseminated pyrite.

An old trench was located on claim 629869 at the contact between sheared quartz porphyry and the schistose equivalent of the mafic volcanic rock. The trench was found to be 90 feet long and trended in a north-south direction. Most of the trench was caved in and overgrown, however, it was possible to take 4 grab samples.

The first sample was of slightly sheared quartz porphyry and assayed 0.02 oz./ton gold. The second sample (0.03 oz./ton) was from a quartz vein cutting the porphyry in an east-west direction parallel to the foliation. The third and fourth samples were from strongly sheared porphyry with numerous quartz stringers and assayed 0.001 and 0.025 oz./ton gold. All four samples were taken at the south end of the trench where bedrock was exposed. A major portion of the trench could not be sampled due to its poor condition.

Observations indicated that shearing increased in the rocks to the south, possibly due to the Klob Lake-Moiles Creek fault that is thought to pass nearby. It is in the vicinity of this fault zone that other gold showings in the area have been located.

### Magnetometer Survey

The magnetometer survey data is plotted and contoured on Map#1 at a scale of 1 cm. = 25 meters. The survey method and instrument data are described in the Appendix.

Several east-west trending anomalies are located in the southeast portion of the grid, south of the baseline and east of L9+00W. The anomalies are generally about 60,000 to 61,000 gammas in a background of 59,800 to 59,900 gammas.

Another area of anomalous magnetics is located in the northwest corner of the grid. The maximum amplitude of this set of anomalies is a single reading of 61,438 gammas.

### Electromagnetic Survey

The electromagnetic survey is plotted on two maps at a scale of 1 cm. = 25 m. The values and profiles are plotted on Map #2 and a contoured Fraser plot is on Map #3. The survey method and instrument data are described in the Appendix.

From the Fraser plot, two east-west trending anomalies may be observed. The most southerly anomaly which intersects the lines at 7+00 to 8+00S corresponds with swampland and may be due to conductive overburden. The anomaly is coincident with a magnetic anomaly from lines 0+00W to 6+00W.

The second anomaly intersects the lines at 250S to 350S and does not appear to correspond with swamp. The anomaly is coincident with a magnetic anomaly from lines 0+00W to 4+00W.

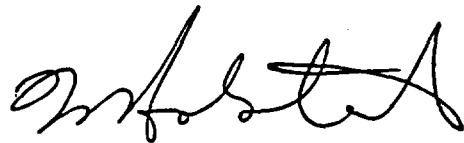
Conclusions

It is difficult to make meaningful conclusions about the surveys until the property has been geologically mapped. It may be concluded however that at least one electromagnetic anomaly is present that is due to bedrock expression. Both anomalies detected are partially coincident with magnetic anomalies especially in the eastern portion of the grid.

The assumed location of the reported gold showing coincides with a magnetic high and appears to lie at the boundary between higher and lower magnetic background.

Recommendations

- 1) The VLF-EM conductors should be verified by an alternative method such as Horizontal Loop EM.
- 2) The property should be thoroughly mapped and prospected to try to determine the source of the anomalies.

A handwritten signature in black ink, appearing to be 'M. Foster' or similar, written in a cursive style.

MAR 27, 1984



Appendix: Instrument and Survey Specifications

I) Magnetic Survey

Instrument- Geometrics G-816

Surveyed by-Monte Hall

Date- January, 1984

Magnetic Field Measured- total field

Direction of Readings- north

Station Reading Intervals- 25m.

Line Spacing- 100m.

Total Amount Surveyed- 19.9 km.

Data Treatment- corrected for diurnal variation by means of  
established magnetic controls in the field.

II) Electromagnetic Survey

Instrument- Geonics EM-16

Surveyed by- Monte Hall

Date- January, 1984

Station- NLK, Seattle

Frequency-18.6 kHz.

Power- 300 kW.

Direction of Readings- North

Station Reading Intervals- 25m.

Line Spacing- 100m.

Data Treatment- Fraser Filtering

Fraser, D. C.

1969: Contouring of VLF-EM Data,  
Geophysics, Vol. 34, #6.

LM



Ministry of Natural Resources  
Ontario

Report of Work  
(Geophysical, Geological,  
Geochemical and Expenditures)

17  
#18



42E16SE0017 2.8058 CASTLEBAR LAKE

900

W 8504-185

Mining Act

Do not use shaded areas below.

Type of Survey(s) <b>Geological - Magnetometer</b>		Township or Area <b>(6-220) Castlebar Lake Area</b>	
Claim Holder(s) <b>Golden Tiger Mining Exploration Company Inc.</b>		Prospector's Licence No. <b>T- 1216</b>	
Address <b>35 Allenbrooke Dollard-des-Ormeaux, Qué H9A 2S7</b>			
Survey Company <b>Exchange Mining Holdings Ltd.</b>		Date of Survey (from & to) <b>04   11   84</b> to <b>05   04   85</b>	Total Miles of line Cut <b>22.33 Km.</b>
Name and Address of Author (of Geo-Technical report) <b>Harry Dowhaluk Box 118 Tamworth, Ont.</b>			

Credits Requested per Each Claim in Columns at right

Special Provisions	Geophysical	Days per Claim
For first survey: Enter 40 days. (This includes line cutting)	- Electromagnetic	
	- Magnetometer	20
For each additional survey: using the same grid: Enter 20 days (for each)	- Radiometric	
	<b>Geological</b>	40
Man Days Complete reverse side and enter total(s) here	Geological	
	Geochemical	
	Geophysical	
	- Electromagnetic	
	- Magnetometer	
Airborne Credits Note: Special provisions credits do not apply to Airborne Surveys.	- Radiometric	
	- Other	
	Geological	
	Geochemical	
	Electromagnetic	
	Magnetometer	
	Radiometric	

Mining Claims Traversed (List in numerical sequence)

Prefix	Mining Claim		Expend. Days Cr.	Prefix	Mining Claim		Expend. Days Cr.
	Number				Number		
TB	747273		60				
	747274		60				
	747275		60				
	747276		60				
	747277		60				
	747278		60				
	747279		60				
	747280		60				
	747281		60				
	747282		60				
	747283		60				
	747284		60				
	813312		60				
	813313		60				

RECEIVED

MAY 21 1985

MINING LANDS SECTION

Total number of mining claims covered by this report of work.

14

Expenditures (excludes power stripping)

Type of Work Performed

Performed on Claim(s)

Calculation of Expenditure Days Credits

Total Expenditures	÷	15	=	Total Days Credits
\$				

Instructions  
Total Days Credits may be apportioned at the claim holder's choice. Enter number of days credits per claim selected in columns at right.

For Office Use Only

Total Days Cr. Recorded	Date Recorded	Mining Recorder
840	May 9, 1985	Gregory M. Hayes
	85.5.24	

Date	Recorded Holder / Agent (Signature)
May 6, 1985	<i>Paul Martin</i>

Certification Verifying Report of Work

I 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 and the annexed report is true.

Name and Postal Address of Person Certifying  
**Paul Martin 35 Allenbrooke, Dollard-des-Ormeaux, Que H9A 2S7**

Date Certified	Certified by (Signature)
May 6, 1985	<i>Paul Martin</i>

### 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, MAGNETOMETER  
Township or Area CASTLEBAR LAKE AREA  
Claim holder(s) GOLDEN TIGER MINING Exploration  
Company, Inc.  
Author of Report H. DOWHALUK  
Address BOX 118, TAMWORTH, ONT. K0K3G0  
Covering Dates of Survey NOV. 14, 1984 - APR. 15, 1985  
(linecutting to office)  
Total Miles of Line cut 22.33 Km.

MINING CLAIMS TRAVERSED	
List numerically	
TB	747273
(prefix)	(number)
	747274
	747275
	747276
	747277
	747278
	747279
	747280
	747281
	747282
	747283
	747284
	813312
	813313
TOTAL CLAIMS <u>14</u>	

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

**AIRBORNE CREDITS** (Special provision credits do not apply to airborne surveys)  
Magnetometer \_\_\_\_\_ Electromagnetic \_\_\_\_\_ Radiometric \_\_\_\_\_  
(enter days per claim)  
DATE: Apr. 15, 1985 SIGNATURE: Hans Dowhaluk  
Author of Report or Agent

**PROJECTS SECTION**  
Res. Geol. \_\_\_\_\_ Qualifications BSA-376  
Previous Surveys \_\_\_\_\_  
Checked by \_\_\_\_\_ date \_\_\_\_\_  
**GEOLOGICAL BRANCH** \_\_\_\_\_  
Approved by \_\_\_\_\_ date \_\_\_\_\_  
**GEOLOGICAL BRANCH** \_\_\_\_\_  
Approved by \_\_\_\_\_ date \_\_\_\_\_

OFFICE USE ONLY

If space insul. Ant, 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 807 Number of Readings 807  
Station interval 25 m  
Line spacing 100 m  
Profile scale or Contour intervals 100 gammas magnetic contours.  
(specify for each type of survey)

#### MAGNETIC

Instrument Geometrics G-816  
Accuracy - Scale constant 1 gamma.  
Diurnal correction method Closed loop, Base station, 3 substations.  
Base station location L-7-W, 7+50N.

#### 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 \_\_\_\_\_

1985 05 21

File: 2.8058

Mining Recorder  
Ministry of Natural Resources  
P.O. Box 5000  
Thunder Bay, Ontario  
P7C 5G6

Dear Madam:

We received reports and maps on May 2, 1985 for a Geophysical (Magnetometer) and Geological Survey submitted under Special Provisions (credit for Performance and Coverage) and Data for Assaying on Mining Claims TB 747273, et al, in the Area of Castlebar Lake.

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

We do not have a copy of the report of work which is normally filed with your office prior to the submission of this technical data. Please forward a copy as soon as possible.

Yours sincerely,

S.E. Yundt  
Director  
Land Management Branch

Whitney Block, Room 6643  
Queen's Park  
Toronto, Ontario  
M7A 1W3  
Phone:(416)965-4888

A. Barr:mc

cc: Golden Tiger Mining Exploration  
35 Allenbrooke  
Dollard des Ormeau  
Quebec, Quebec  
H9A 2S7  
cc: H. Dowhaluk  
Box 118  
Tamworth, Ontario  
K0K 3B0



m GL

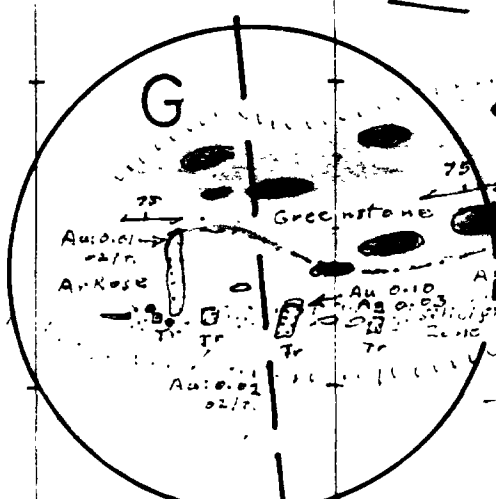
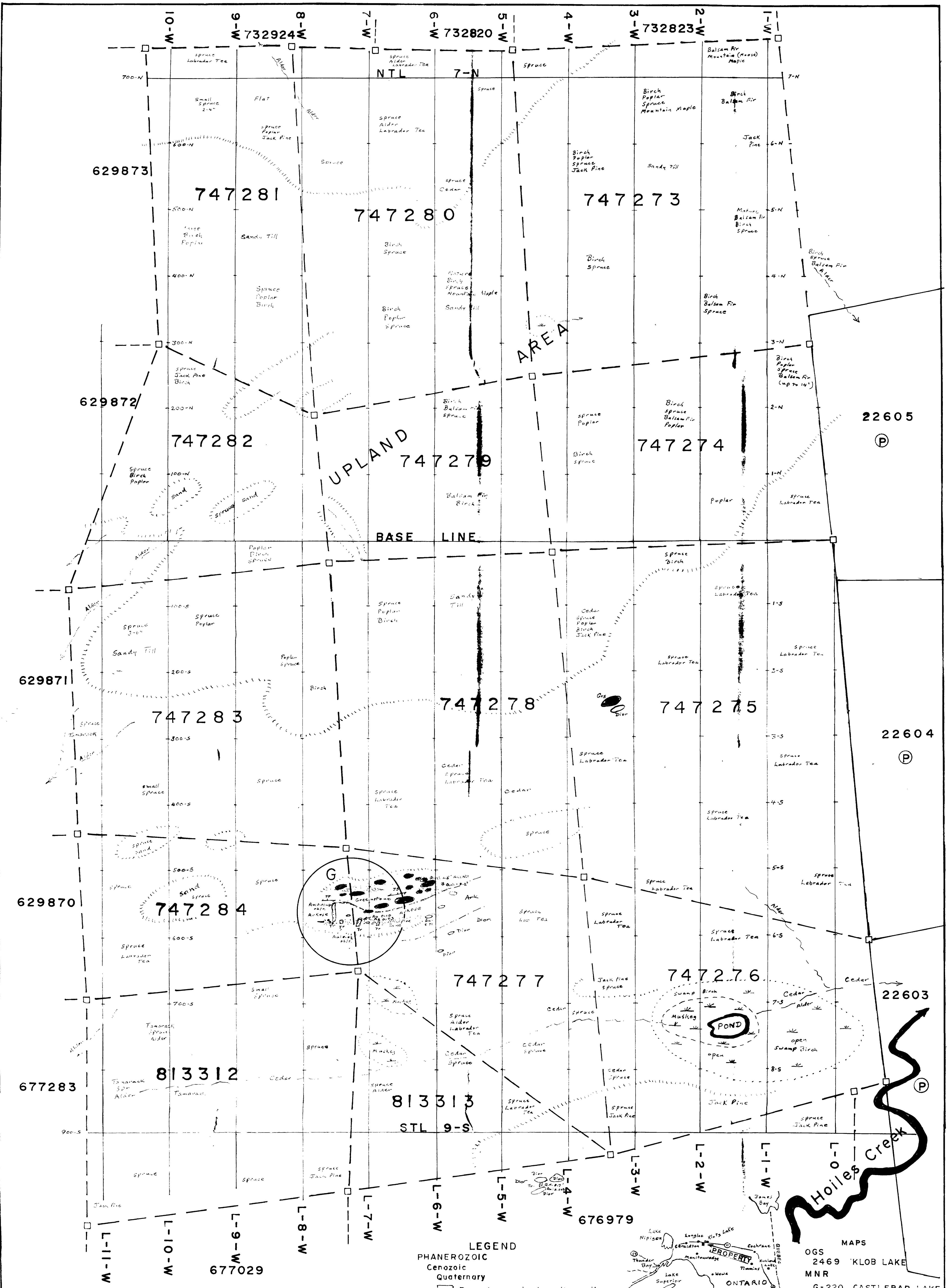
2.8058

747273	✓	✓											
74	✓	✓											
75	✓	✓											
76	✓	✓											
77	✓	✓											
78	✓	✓											
79	✓	✓											
80	✓	✓											
81	✓	✓											
82	✓	✓											
83	✓	✓											
84	✓	✓											
813312	✓	✓											
12	✓	✓											

2.







- LEGEND**
- PHANEROZOIC**  
 Cenozoic  
 Quaternary  
 [Symbol] Recent, organic deposits, soil  
 [Symbol] Pleistocene, sandy till, boulder clay
- ARCHEAN**  
 Plutonic Rocks  
 Dior. [Symbol] Diorite
- Metavolcanics, metasediments**  
 Grs. [Symbol] Greenstone  
 Ark. [Symbol] Arkose
- [Symbol] Outcrop  
 [Symbol] Schistosity  
 [Symbol] Trench  
 [Symbol] Swamp, wet places

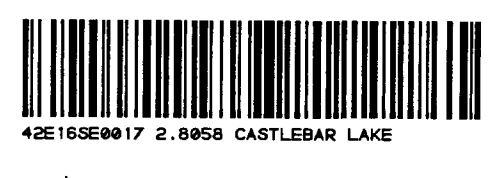


**MAPS**  
 OGS 2469 KLOB LAKE  
 MNR G-220 CASTLEBAR LAKE  
 G-295 KLOTZ LAKE

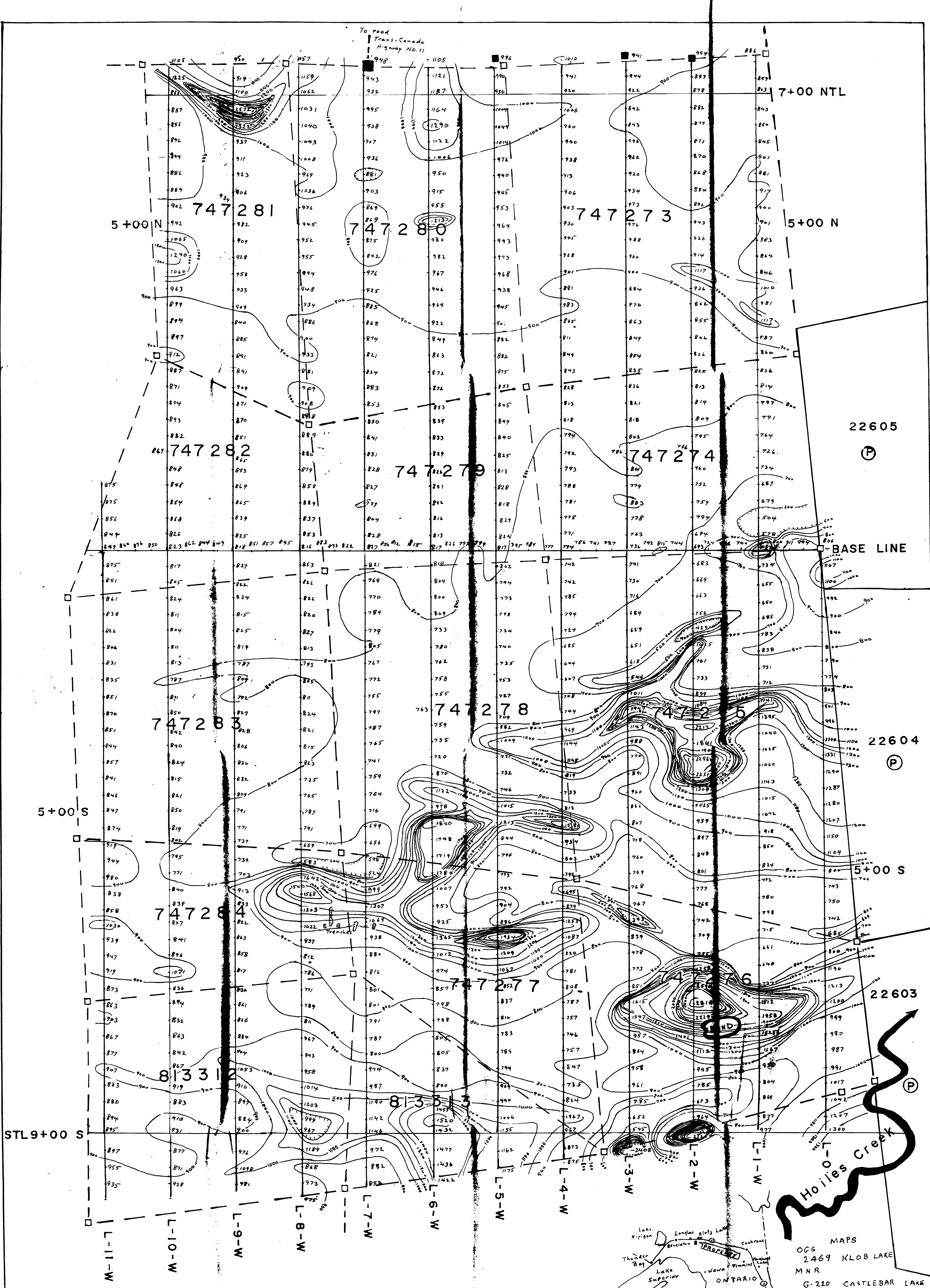
**NTS**  
 42 E/16 CASTLEBAR LAKE  
 42 F/13 FLINT LAKE

**GEOLOGICAL PLAN**  
 GOLDEN TIGER MINING EXPLORATION COMPANY INC.  
**GABBRO LAKE SHOWING PROPERTY**  
 KLOTZ LAKE AREA  
 Thunder Bay Mining Division  
 Ontario

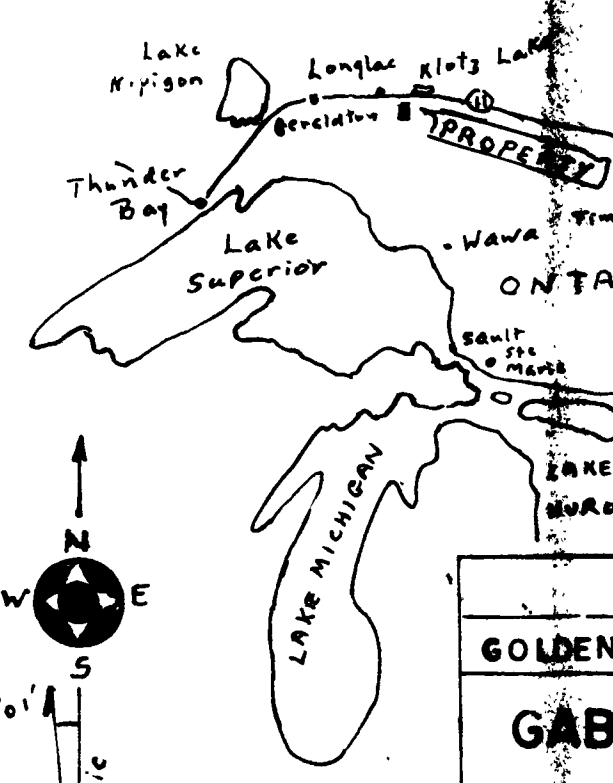
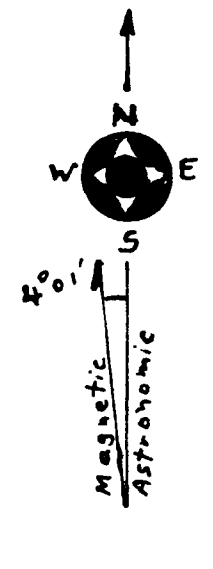
SCALE: 1 cm = 25 m DATE: December, 1984  
 Mapped by: H. Dowhaluk *H. Dowhaluk*



28058



INSTRUMENT: Geometrics G-816 Proton Magnetometer  
 OPERATOR: Louis Martin  
 NOTE: To obtain total values, add 59,000 gammas to each reading



MAPS  
 OGS 2469 KLOB LAKE  
 MNR G-220 CASTLEBAR LAKE  
 G-295 KLOTZ LAKE  
 NTS 42 E/16 CASTLEBAR LAKE  
 42 F/13 FLINT LAKE

MAGNETOMETER SURVEY	
GOLDEN TIGER MINING EXPLORATION COMPANY INC	
GABBRO LAKE SHOWING PROPERTY KLOTZ LAKE AREA	
Thunder Bay Mining Division Ontario	
SCALE: 1 cm = 25 m	DATE: March, 1985
Drawn by: H. Dowhaluk	<i>[Signature]</i>

