



42C01NW0003 0020 AGUONIE

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DRILLING PROGRAMME REPORT  
GOUDREAU CLAIM GROUP  
OF  
CANORAMA EXPLORATIONS LIMITED

SSM-817

DRILLING PROGRAMME REPORT  
GOUDREAU CLAIM GROUP  
OF  
CANORAMA EXPLORATIONS LIMITED

Summary and Conclusions

A diamond drilling programme was conducted in February 1960 on the nine claim group property of the company located near Goudreau, Ontario. The programme was designed to investigate anomalous conditions arising from a combined magnetic and electromagnetic survey completed on the property in November 1959.

As the results were not encouraging, the programme was stopped on completion of the minimum footage of 1000 feet (3 holes). It is recommended that the assessment credits be applied to the nine claims and that consideration be given to a reconnaissance prospecting programme.

Introduction

Canorama Explorations Limited acquired a contiguous group of nine unpatented mining claims in the Goudreau area during the recent revival of interest in the area. Two mines, the Golden Algoma and the old Cline Lake Gold Mine, are now under active development.

The purpose of this report is to summarize the results obtained in a drilling programme conducted during February 1960 on this claim group.

Property, Location and Access

The property of Canorama Explorations Limited consists of nine contiguous unpatented mining claims located in the central portion of Township 27, Range 26 in the Algoma District. They are held under lease from the Algoma Central Railway.

The claim group is distant from Goudreau about two miles in the south - west direction, though due to rugged terrain, access to the claims for drilling purposes is best made by the Morrison Lake portage route off the Lochalsh road.

The claims are numbered as follows:

6680 - 81	2
6684 - 85	2
6688 - 89	2
6692 - 94	<u>3</u>
	9 claims

### Geology

The area of the claims has not been mapped in detail. However, the Ontario Department of Mines, Map #49G suggests they are underlain by a sequence or repetition of acid lavas and tuffs. This is confirmed by the drilling results and the magnetic data obtained from the geophysical surveys.

The principal type encountered was siliceous rhyolite sometimes porphyritic, green to grey in colour and generally massive and fine grained in texture.

Numerous barren quartz veins are contained in the rhyolite though in one instance, as will be noted later, values in gold and copper were obtained.

A diabase dike was intersected in the second hole.

### Geophysics

A complete coverage magnetic and electromagnetic survey was conducted over the property in November 1959. Seven magnetic zones and seven conductors were located and in three instances they exhibit a close relation.

The magnetic contouring shows a general east - west strike in the geological formations and drill holes were sited with this in mind. The three correlated anomalies were recommended for drilling.

### Discussion of Results

Copies of the logs and sections accompany this report. A short resume of each hole is given below. Samples for assay were taken frequently.

#### Hole # 1

Drilled to a depth of 307 feet to intersect a weak conductor related to a magnetic zone. Rhyolite was encountered with numerous quartz veins but no sulphides except for scattered pyrite. From an examination of the core and the drill site, the conductor may be attributed to a talcose shear at 142 feet or to the effect of a swamp lying to the north of the drill collar.

607-817

Hole # 2

Cased on bedrock. This hole was drilled to 334 feet with rhyolite as the principal rock type. From 66.3 to 116.6 a section of diabase was cut. A quartzose rhyolite near the bottom contact of this dike gave 0.41% copper and .02 ozs. of gold over .4 feet. As the diabase contains minute grains of magnetite, this probably explains the magnetic anomaly.

Hole # 3

Drilled to a depth of 359 feet, this hole was drilled to test the strongest part of a four line conductor not associated with a magnetic anomaly. Porphyritic rhyolite was found throughout the hole, generally solid and unsheared for the most part. Some quartz veins and interbedded andesites occur. No explanation can be given for the conductor from the core.

Remarks

As the first three holes were not encouraging and the remaining holes were directed on anomalies of weaker magnitude, the drilling programme was stopped, with 1000 feet, exactly, drilled.

Subsequent to the completion of this programme, local information reports a lead - zinc showing on or near Claim No. 6680. The nature of this occurrence is not known.

Summary and Conclusions

The drill programme did not disclose mineralization of interest. As this programme was based on results of geophysical work designed for the detection of sulphides, the presence (or absence) of auriferous quartz veins is not established. Numerous quartz filled fractures are known to occur on the property and if intrusive granodiorites or quartz porphyry are found to be present on the property, the potential of associated veins would be enhanced. Outcrops are numerous.

It is therefore recommended that:

1. The claims be retained in good standing by application of assessment credits equally on the nine claims.

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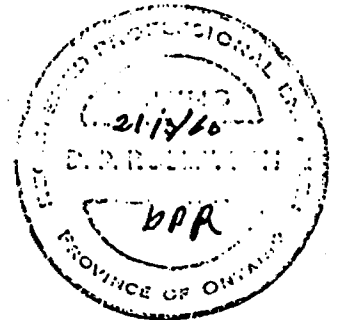
2. Pending the results of work on adjacent properties,  
- further work should consist of a geological search  
for acid intrusives and associated quartz veins.

Respectfully submitted,

SULMAC EXPLORATION SERVICES LIMITED



D. P. Robertson, B.A., P. Eng.



March 21, 1960

Toronto, Ontario



APPENDIX I

ASSESSMENT CREDITS APPLICABLE

<u>AXT Core Drilling</u>	<u>Date</u>	<u>Footage</u>	<u>Claim</u>	<u>Days Credit</u>
# 1 Hole	Feb. 13-15/60	307'	6689	307
# 2 Hole	Feb. 17-19/60	334'	6694	334
# 3 Hole	Feb. 24-26/60	359'	6692	359
				<u>1000</u>

Drilled by Inspiration Mining and Development  
Company Limited,  
360 Bay Street,  
Toronto, Ontario.

111 days credit to be applied on each of 9 contiguous claims.

SM-817

SULMAC EXPLORATION SERVICES LIMITED

PROPERTY Canorana (Goudreau Property) SAMPLING RECORD Claim No. 6689 SHEET NO. 1

HOLE NO. 1 DEPTH 307.0 ANGLE 5° STRIKE North ELEVATION \_\_\_\_\_ CO-ORDINATES 9+00E 4+00S

DEPTH FEET	FORMATION	SAMPLE NO.	LENGTH FT.	ANALYSIS			LENGTH FEET	PROGRESSIVE TOTALS	
				Au Oz/ton				FEET X PER CENT	
				%	%	%			
	Collar								
28.0	Casing - later reamed to 35' to stop sand cave around collar								
101.0	Rhyolite (acid lava) highly siliceous, quartz sometimes in phenocrysts, streaky patches of orthoclase feldspar.								
105.0	Rhyolite - some quartz	5901A	4.0	Tr.					
142.0	Similar rhyolite as described above with a little more shearing, core colours now predominantly grey with talcy shears and interjected streaks of white muscovite-potash mica.								
145.0	Quartz, rhyolite, talcy shears and muscovite mica.	5902A	3.0	Tr.					
152.0	Original darker green coloured rhyolite with small veinlets of quartz up to 1/4" in diameter.								
155.0	Quartz and rhyolite	5903A	3.0	Tr.					
170.0	Typical green siliceous rhyolite - scattered feldspar concentrations core very solid again								
172.6	White bull quartz to slightly grey quartz - highly fractured around contact at 172.6 -								

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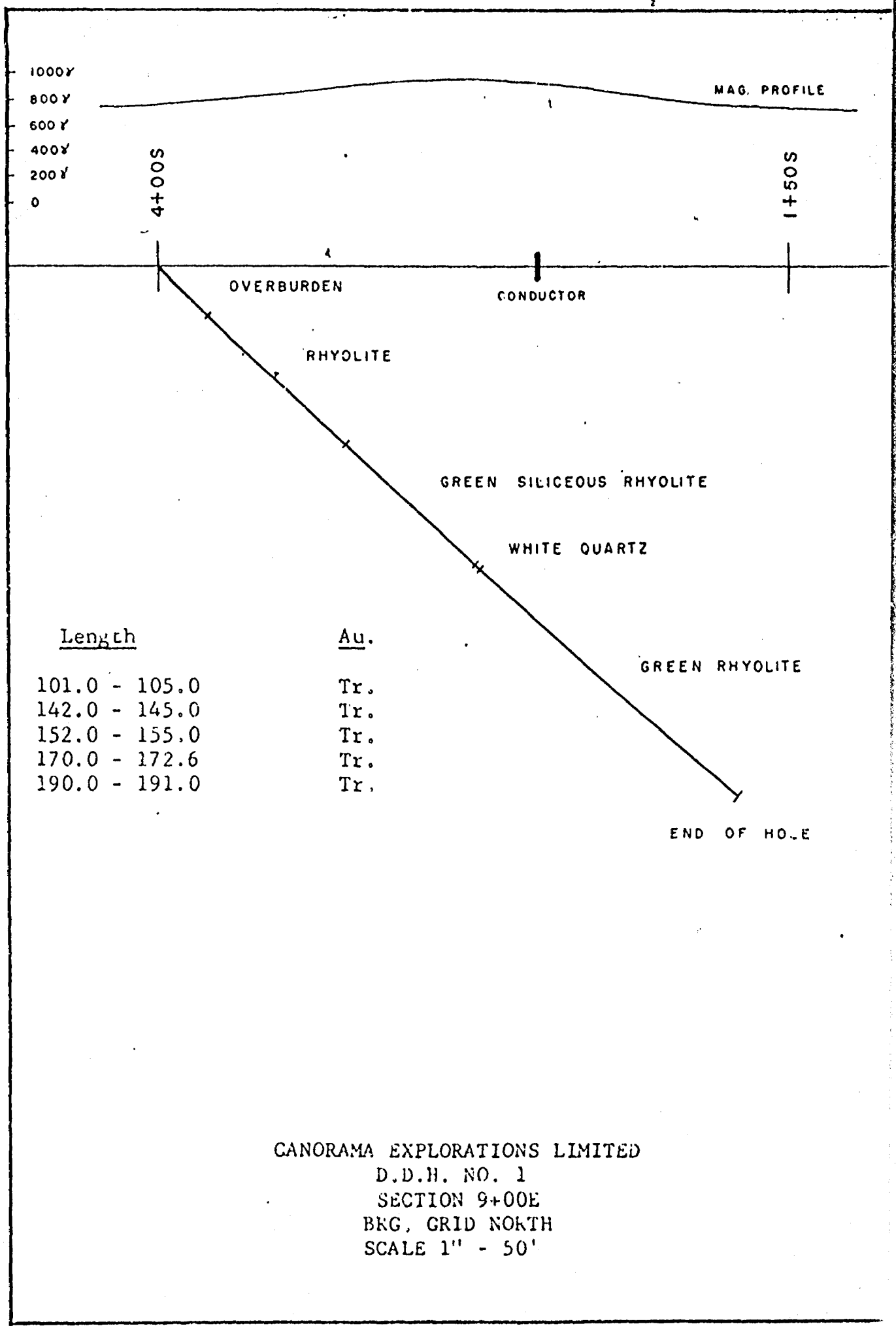
PROPERTY Canorama (Goudreau Property) SAMPLING RECORD Claim No. 6689

SHEET NO. 2

HOLE NO. 1 DEPTH 307.0 ANGLE - 45° STRIKE North ELEVATION \_\_\_\_\_

CO-ORDINATES  
9+00E 4+00S

DEPTH FEET	FORMATION	SAMPLE NO.	LENGTH FT.	ANALYSIS			LENGTH FEET	PROGRESSIVE TOTALS	
				Au Oz/ton	%	%		FEET X PER CENT	
	quartz also partially crystallized								
172.5	(as above)	5904A	2.6	Tr.					
190.0	Green Rhyolite, very scattered quartz stringers.								
191.0	White quartz, shearing with some talc and minor rhyolite.	5905A	1.0	Tr.					
307.0	Rhyolite - green to grey feldspar blebs, very minor shearing, quartz stringers up to 2". minor shearing around quartz stringers								
307.0	End of hole.								
Notes:	Started - Feb. 13/60 Completed - Feb. 15/60 Total depth - 307.0' Bedrock - 23' Casing - 36' AX - all pulled - Corrected Tests: 100' - 46°30'      41°30' 300' - 45°30'      40°30'								
	Drilled by Inspiration on Claim # 6689								
	FRANK WALTERS								



CANORAMA EXPLORATIONS LIMITED  
 D.D.H. NO. 1  
 SECTION 9+00E  
 BKG, GRID NORTH  
 SCALE 1" - 50'





SULMAC EXPLORATION SERVICES LIMITED

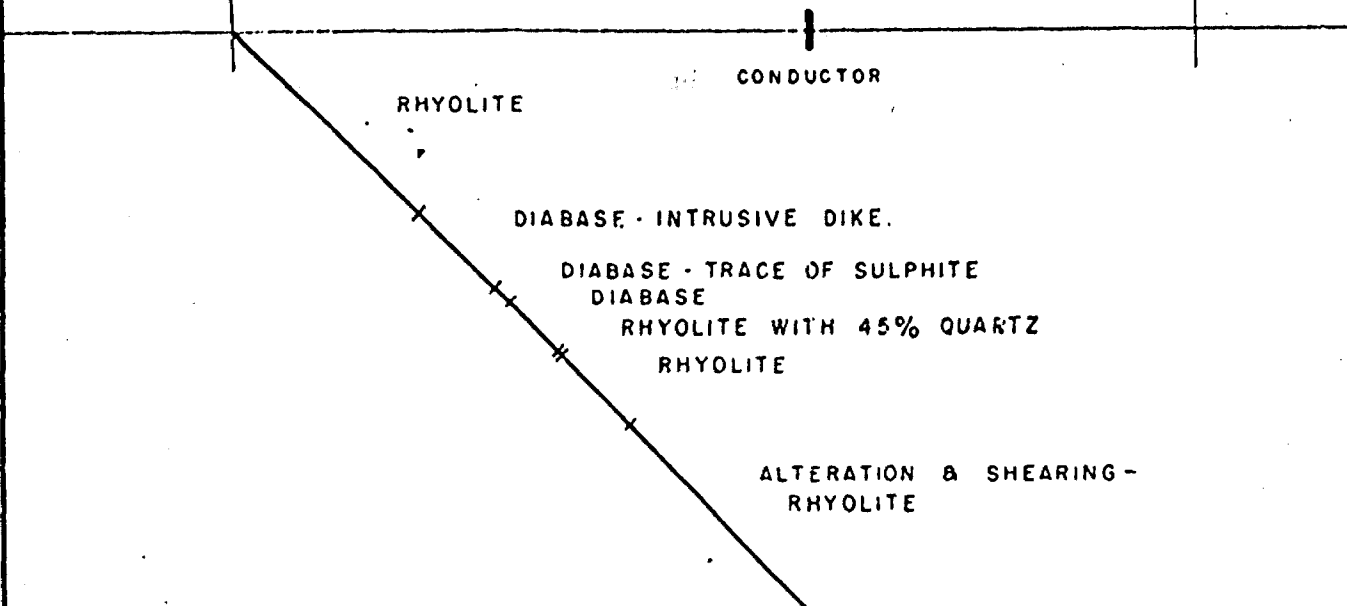
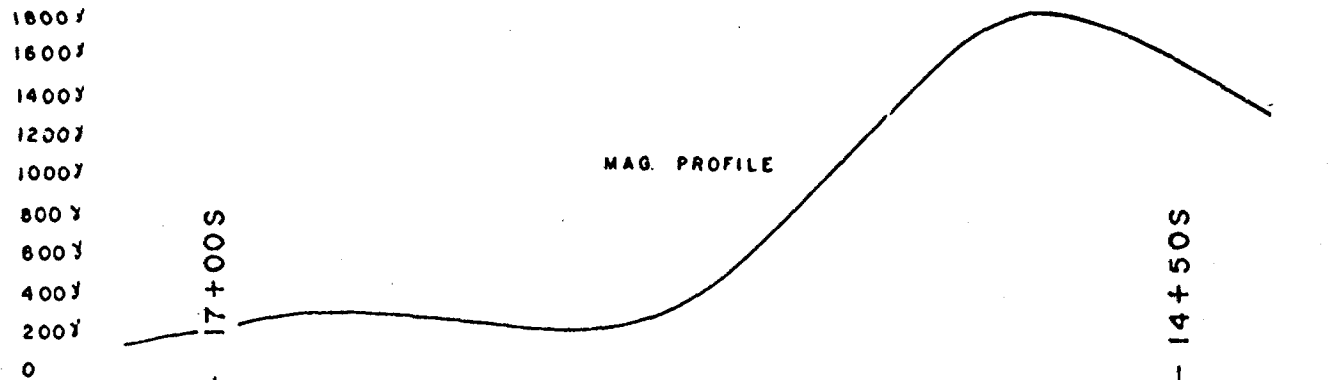
PROPERTY Canorama (Goudreau Property) SAMPLING RECORD Claim No. 6694

SHEET NO. 3

HOLE NO. 2 DEPTH 334.0' ANGLE - 45° STRIKE N30°E ELEVATION \_\_\_\_\_

CO-ORDINATES  
27+00E 17+00S

DEPTH FEET	FORMATION	SAMPLE NO.	LENGTH FT.	ANALYSIS			LENGTH FEET	PROGRESSIVE TOTALS FEET X PER CENT		
				Cu. %	Au Oz/ton %	%				
256.6	RHYOLITE with 30% quartz with trace of sulphide	5912A	1.0	.01	Tr.					
273.2	RHYOLITE very siliceous slightly greenish									
274.3	RHYOLITE with numerous pyrite cubes, 1% sulphide 100% pyrite	5913A	1.6	.04	Tr.					
291.6	RHYOLITE - same as above mineralization - nil									
292.4	Basic black BASALT intrusive									
334.0	RHYOLITE - slightly green quartz and felspar - very solid									
334.0	End of hole.									
NOTES	Started - Feb. 17, 1960 Completed - Feb. 19, 1960 Total depth - 334.0'  Bed rock set up 4' AX casing for collar - all pulled  Tests: 100' - 51°30'      Corrected 44°30' 300'      53°                      46°  Drilled by Inspiration on Claim # 6694  FRANK WALTERS									



<u>Length</u>	<u>Cu.</u>	<u>Au.</u>
94.0 - 99.0	.01	Tr.
103.0 - 105.0	.02	Tr.
116.6 - 117.0	.41	.02
139.6 - 142.6	Tr.	Tr.
216.0 - 218.0	.09	Tr.
227.6 - 230.6	.04	Tr.
255.6 - 256.6	.01	Tr.
273.2 - 274.8	.04	Tr.

RHYOLITE

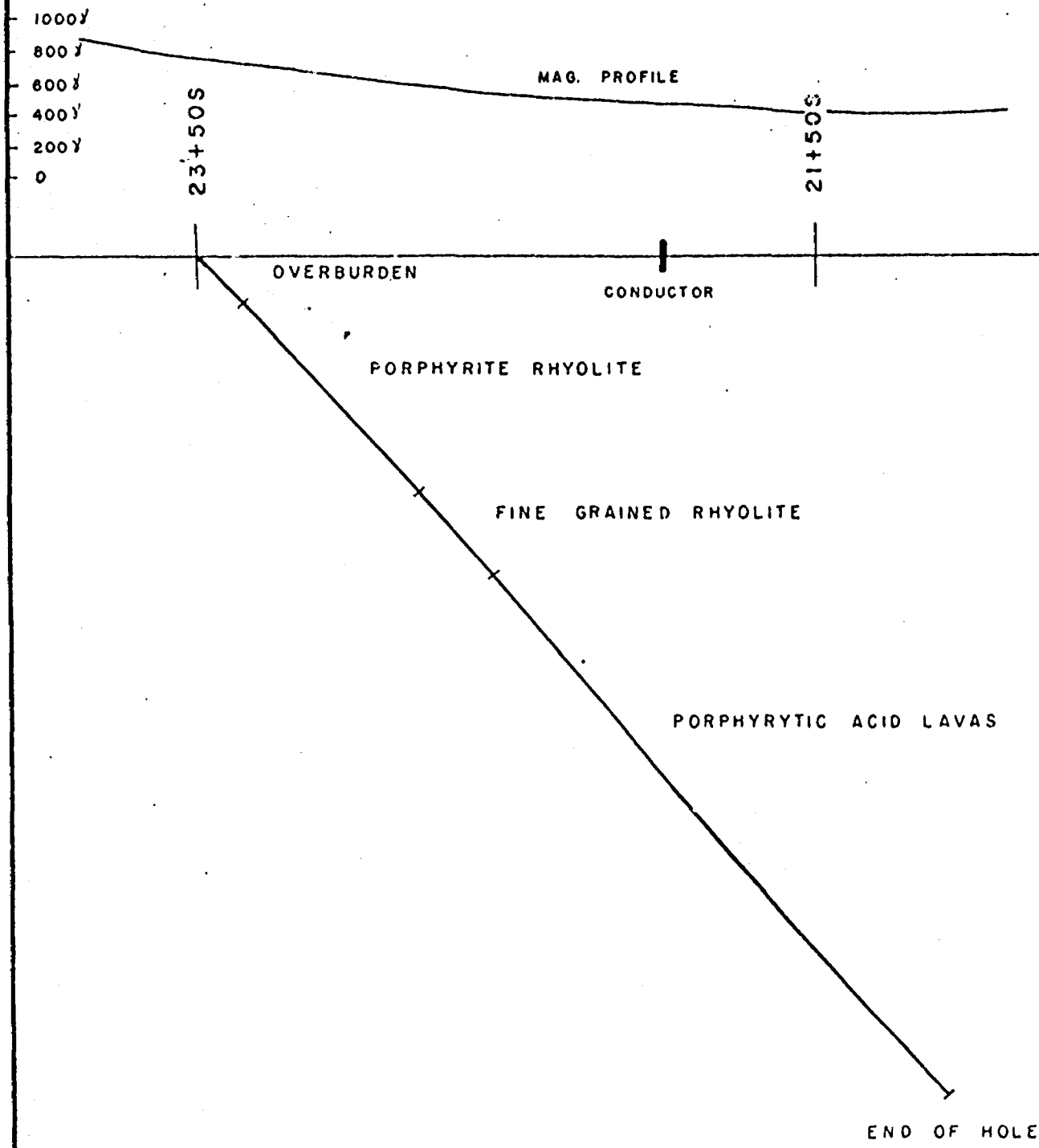
END OF HOLE

CANORAMA EXPLORATIONS LIMITED  
 D.D.H. No. 2  
 SECTION 27+00E  
 BKG. GRID NORTH  
 SCALE 1" - 50'









CANORAMA EXPLORATIONS LIMITED  
 D.D.H. NO. 3  
 SECTION 0+00  
 BRG. GRID NORTH  
 SCALE 1" - 50'

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Temp. 27, R. 26

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REPORT ON MAGNETIC AND ELECTROMAGNETIC  
SURVEYS OF THE GOUDREAU CLAIM GROUP  
OF CANORAMA EXPLORATION LIMITED. (d-0)

RECEIVED

DEC 7 1965

RESIDENT GEOLOGIST  
SAULT STE. MARIE

Summary and Recommendations

Magnetic and electromagnetic surveys of the Canorama claim group outlined seven magnetic zones and a similar number of electromagnetic conductors. In two cases there is close correlation between the magnetic zones and conductors. Geological mapping would prove helpful in further assessment of these geophysical surveys.

It is recommended that magnetic zones A and B and their associated conductors be tested with one drill hole each. In addition there are three contingent drill holes suggested.

Introduction.

Recent discovery and development of gold bearing copper deposits in the vicinity of Goudreau had lead to renewed interest in the area. Goudreau is a station on the Algoma Central and Hudson Bay Railway about 20 miles south of the railroad junction at Franz.

These deposits are closely associated with the Keewatin-type volcanics where they are cut by later intrusives.

It was recommended that magnetic and electromagnetic surveys be carried out on the group of nine claims held under lease from the Algoma Central, by Canorama Explorations Limited. The hope that the magnetic survey would outline the geological units on the property and possibly locate magnetic sulphide while the electromagnetic survey would serve to describe any conductive sulphide zones.

11. Property and Access

The claim group is shown in the sketch opposite the summary page. This group is made up of nine claims in the centre of Township 27, Range 26, Sault Ste. Marie Mining Division. Access is on foot from the Algoma Central Railway which lies two miles to the west.

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111. Geophysical Surveys

The line cutting and geophysical surveys were carried out during November 1959. The survey crews lived in Goudreau and travelled daily to the property.

From an east-west base line, north-south traverse lines at 300 foot spacings were cut. On these traverse lines magnetic and electromagnetic surveys were completed.

Magnetic Survey:

The contoured map of the magnetic survey shows a general east-west strike in the geological formations. The magnetic contouring suggests a sequence or reception of acid lavas and tuffs in accordance with the Ontario Department of Mines Map (49g). This sequence of lavas and tuffs is suggested on the magnetic map where the areas of high magnetic relief are outlined. Geological mapping would help to confirm this.

A few of the magnetic features prove of interest from an economic standpoint. In addition when these magnetic features ~~xxx~~ coincide with the electromagnetic conductors their importance increases.

Magnetic Zone A: is a broad feature, striking east-west with a high centred at 3+00S, Line 9E.

Magnetic Zone B: is a sharp dipole-type anomaly lying in the southeast corner of the claim group. The zone appears to strike northwest, but its eastward extension is untested.

Magnetic Zone . is similar to A except that its relationship with the nearby electromagnetic conductors is less definite.

Magnetic Zone D: lies to the north of B and strikes northeast.

Magnetic Zone E: is a very narrow zone paralleling the southern boundary of the claim group. The central portion of the anomaly is quite narrow and lies over the lake.

Magnetic Zone F: Although it is not completely described, has high relief. This zone is located in the southwest corner of the claim group.

Magnetic Zone G: lies in the northeast corner of the claim group and has a minor electro-magnetic conductor lying near the western end. A single crossover on the western peak of this zone may prove interesting.

In addition to the above zones there are several minor magnetic anomalies that, because of the limited geological knowledge at this present time, are not of interest.

Electromagnetic Survey.

The results of the vertical loop electromagnetic survey are shown in profile form on the magnetic contour map. Three of the conductive zones 1, 2 and 3, show good correlation with magnetic zones. An additional four conductors together with several questionable and isolated crossovers all lack close correlation with magnetic zones.

The conductors are discussed as follows:

Conductor 1

extends from 3+50S, Line 18E to 2+50S, Line 9E. The best defined crossover occurs at 2+50S, Line 9E, which in turn lies over the centre of a magnetic high, Zone A.

Conductor 2

strikes north - west and lies over the strong dipolar magnetic anomaly, Zone B.

Conductor 3

is a weakly defined anomaly lying in the centre of the magnetic Zone C. At present the information available indicates that the eastern end of the zone is the more interesting.

Conductor 4

is located between magnetic Zones E and F and off the end of Zone D. The conductor's relationship to these magnetic zones is not readily apparent. A single crossover at 25+00S, Line 3E may be related to this conductor.

Conductors 5 and 6

were interpreted to strike parallel to Conductor 2 but the true strike in this area is in doubt. Magnetic correlation is lacking.

Conductor 7

shows two crossovers at 3+25N, Line 9E and at 2+50N Line 12E. There are in addition indications that the zone may extend to the west for 600 feet. The zone appears most strongly on Line 12E.

The remaining conductors and questionable conductors do not at present warrant attention on the basis of the available information.

IV Conclusions and Recommendations

The east-west geological trend on the claim group was outlined by the magnetic survey. Several magnetic anomalies were located. These anomalies when correlated with electromagnetic conductors, are of interest.

A detailed geological examination of the group might explain the nature of some of these magnetic and electromagnetic anomalies.

From present knowledge it is recommended that two drill holes and an additional three contingent holes be drilled to test the anomalies.

<u>Hole</u>	<u>Line</u>	<u>Station</u>	<u>Zone</u>	<u>Conductor</u>	<u>Dip</u>	<u>Azimuth</u>	<u>Depth</u>
1	9+00E	4+00s	A	1	45°	Grid North	300'
2	27+00E	17+00S	B	2	45°	Grid N30°E	300'
contingent on above holes:							
3	0+00E	23+50S		4	45°	Grid North	350'
4	9+00E	8+00N	C	3	45°	Grid North	300'
5	9+00E	29+50N	G		45°	Grid South	300'

SULMAC EXPLORATION SERVICES LIMITED

T.R. Gledhill.  
Chief Geophysicist.

Toronto, Ontario.  
December 2, 1959.

Township 27. Range 26.

One afternoon was devoted to the open pit operations of R. Fry and associates, at Goudreau Ontario. Two pits have been mined and a third is being mined presently. The Goudreau pyrite deposits are described by Collins and Quirke in Memoir 147 of the Geological Survey of Canada.

One pit, near Goudreau can be seen from the railroad, and although no figure was given for tonnage mined, it is estimated that approximately 225,000 tons of pyrite were taken out. A second pit approximately three miles east of Goudreau, called the Bear pit is reported to have yielded 400,000 tons of pyrite. At the present pit, 50,000 tons had been taken out at the time of the visit. (June 5, 1961). The purity of the pyrite in this pit is 35%. Quartz and pyrrhotite are associated minerals.

At the time of the visit, men were working two shifts and 9 cars of ore, 50 tons per car, were being loaded. During periods of demand, 30 to 35 cars can be loaded per day.

In the pit operation, a 20' to 30' bench is drilled with a Gardner-Dewer waterless drill. Holes are loaded with ammonium nitrate powder, and the bench blasted. The tonnage per blast is not known.

At the time of the visit the following flow sheet was in effect. (1) Pit material loaded 15 ton Euclids by Lima 1 1/2 cu.yard shovel. (2) Material hauled three miles to portable crushers at the railroad. (3) Material crushed to 4" and conveyed into rail cars.

A new flow sheet was to be put into effect shortly and may be in operation at the present time. It is as follows: (1) Pit material loaded on to Euclids and hauled to an intermediate crusher station founded on existing Nichols-Chemical Plant foundations: (2) Buchanan jaw crusher reduces material to 3": (3) Material conveyed to loading bin where another fleet of Euclids hauls to rail and dumps directly into railcars.

Personnel number approximately 30 men. John Dumas is superintendent

C.R. Kustra.  
July 1961.

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REPORT ON MAGNETOMETER SURVEY  
CAESAR MINERALS LIMITED.  
RANGE 26, TOWNSHIP 27.  
ONTARIO.

Caesar Minerals Ltd.,  
69, Yonge Street,  
Toronto, Ontario.

By. E.B. Nicholls. P. Eng.  
Geophysicist.

Don Mills, Ontario.  
June 24th, 1960.

Gentlemen:

The following report describes the results and interpretation of the geophysical survey carried out over the group of claims held by Caesar Minerals Limited, located in Range 26 of Township 27, Ontario.

The magnetometer survey was carried out by Mr. John Needham, 113, Brasmar Avenue, Toronto, Ontario, during the period June 1st - 15th 1960. The results of the survey are depicted on the map accompanying this report.

SUMMARY AND RECOMMENDATIONS:

The magnetometer survey conducted over the sixteen claims indicated an area of fairly uniform magnetic intensity cutting through in an east-west direction. The results also indicated the presence of two north-south faults.

From the general geology of the area, it is thought that the results outlined the various formations of the area.

From the results obtained it is recommended that no drilling be carried out without first conducting a geological and an electrical-type geophysical survey.

PROPERTY, LOCATION AND ACCESS:

The property of Caesar Minerals Limited, comprises a group of 16 claims, which are situated approximately 2 miles east of mileage 175 on the Algoma Central and Hudson Bay Railway and three and one half miles south east from Goudreau Station. The claims group is located in Range 26 of Township 27, District of Algoma, Ontario. The group is situated within the Algoma Central Land Grant. The claims are further described as follows:-

Nos. 6872 - 6887 Inclusive.

Parts of claims Nos. 6884 - 6887 are located in Billboy Lake and were not covered by the survey at this time.

NOT TO BE REMOVED FROM  
THE OFFICE OF THE RESIDENT  
GEOLOGIST, ONT. DEPT. OF MINES  
SAULT STE. MARIE, ONT.

RECEIVED

DEC 7 1965

RESIDENT GEOLOGIST  
SAULT STE. MARIE

RECEIVED FROM  
ALGOMA CENTRAL RAILWAY

7-17-60

Access to the property is made by aircraft from Wawa to Billboy Lake, which is situated on the south boundary of the property. Access can also be made from the Algoma Central Railway by walking east for two miles from mileage 175 on the railroad.

#### TOPOGRAPHY:

The property is located in an area which is typical of the region. The terrain has the usual rugged character of the Canadian shield with hills and ridges rising ordinarily not more than one hundred feet above the valley bottoms.

The property is bordered on the north and south by lakes. The steep sided ridges follow the general east-west trend through the central part of the property, the valley bottoms being occupied by cedar swamps.

#### GENERAL GEOLOGY:

All the consolidated rocks are of the pre-Cambrian age. They are covered in many places by glacial deposit which at times is fairly thick. For the most part rocks of volcanic origin make up the greater part of the pre-Cambrian formations. These consist of acid and basic lavas. Sedimentary rocks of the Dore series lie above some of the volcanic rocks. These occur as a band which has been displaced by numerous north-south faults. There are also intrusive rocks of great variety to be found throughout the area.

The property discussed in this report, lies within the band of acid lavas which cuts through Township 27, Range 26. The McVeigh Creek Fault which is the major feature of the area, lies two miles east of the property.

A number of gold mines are to be found in the general area, but it is to be noted that they are all located outside the band of acid lavas. The ore bodies do not appear to be associated with the sediments.

#### INTERPRETATION OF THE MAGNETOMETER SURVEY:

The results of the geophysical survey conducted over the claim group held by Caesar Minerals Limited are depicted on the map accompanying this report.

The magnetometer readings are expressed in gammas and are plotted to the east of the traverse lines. All readings are with reference to the Base Control Station which is located at 0+00 on line 48W.

From the contour pattern of the magnetometer results it will be seen that the general strike trend is

east-west which agrees with the geology of the area. In general the area is of fairly uniform intensity, however, a band of higher magnetics is seen to be cutting through the centre portion of the property, and another band lies to the north of this. These east-west trending bands have zones of higher magnetic readings within them. North-South trending faults appear to cut through the property, and slight movement has taken place as can be seen in the disturbed magnetic readings. Contacts between the various rock types are readily seen from the magnetic readings, the formations appear to lie nearly vertical.

From an interpretation of the results obtained during this survey, it is recommended that an electrical-type geophysical survey be carried out before planning any other programme.

INSTRUMENT DATA:

For the magnetometer survey a Sharpe's Model A-2 Askania-type instrument was used, having a sensitivity of 20.0 gammas per scale division.

SURVEY DATA:

The survey was carried out over picket lines cut at 300 foot intervals. These traverse lines were turned off at right angles to a base line which was established through the centre of the property in an east-west direction.

A total of 13.5 miles of traverse lines and base line were cut and chained.

The magnetometer survey was conducted along the picket lines, readings being taken at 100 foot intervals. A total of 12.6 miles of line were surveyed by this method and 696 readings were taken.

The number of eight hour man-days to complete the survey are as follows:-

	8 hour man days	Attributable to Assessment work.
Line Cutting and chaining	75 x 4	300
Operating magnetometer survey	30 x 4	120
Drafting	2 x 4	8
Field Supervisor	25 x 4	100
Interpretation & Report	3 x 4	12
Office Typing and Supervision	2 x 4	8
<b>Total</b>	<b>137 x 4</b>	<b>548</b>

Township 27. Range 26. (1G) A.C.R.

1. A.O.P. anomaly 16, arosheets, islocated east of Emily Lake, one mile south of Goudreau. Overburden in the area underlying the anomalous zone is thick and consists of sandy and gravelly unsorted drift. Rock outcrops, although scarce, indicated the probable cause of the anomaly. The area is underlain by acid volcanics and/or tuffs, intruded by a large volume of fine grained diorite; both rocks carry finely divided magnetite disseminated throughout the ground mass in amounts sufficient to offset a compass needle. It is felt that the magnetite content is sufficient to cause the anomaly.

2. The McMahon claim is located 2 mile northwest of Goudreau (Map 366) The showing consists of two narrow 3" quartz veins sparsely mineralized with pyrite, contained in basic volcanics. The veins do not appear to be continuous and have been test-pitted. Gledhill reported the occurrence of visible gold in the veins. A sample, (SA-147) was taken.

↳ 0.12 g./ton

C.R. Kustra.  
September 1961.






TWP. 27 RANGE 26

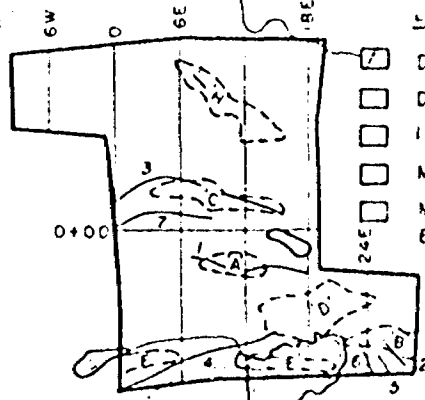
GOUDREAU STA.

Morrison Lake

Aitken Lake

LEGEND

-  DIABASE
-  DIORITE
-  IRON FORMATION
-  MAINLY BASIC LAVAS
-  MAINLY ACID LAVAS & TUFFS



RAILWAY  
CENTRAL  
ALGOMA

Billyboy Lake

*This township Algoma-Central  
and Hudson Bay Railway  
land grant*

SUMMARY MAP

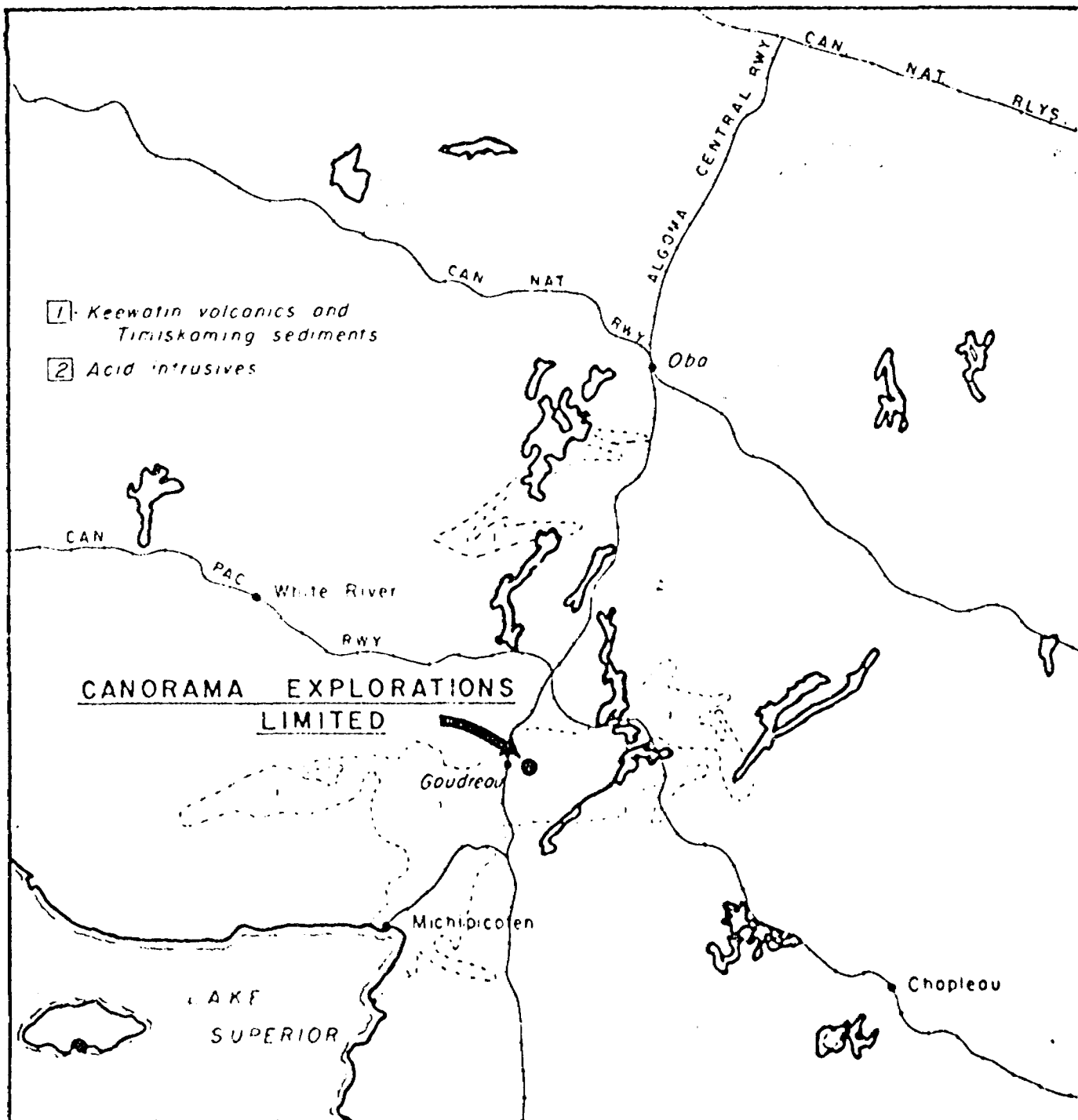
CANORAMA EXPLORATIONS LIMITED

GOUDREAU-LOCHALSH AREA

ONTARIO

SCALE 1" = 1/2 MI.

DECEMBER 1959



**CANORAMA EXPLORATIONS LIMITED**

LOCATION AND GEOLOGY MAP

**CANORAMA EXPLORATIONS LIMITED**  
**GOUDREAU TOWNSHIP**  
**ONTARIO**

SCALE 1 inch = 20 miles

NOVEMBER, 1959

TWP. 27 RANGE 26

GOUDREAU STA.

Morrison Lake

Aitken Lake

6680

6681

6682

6683

6684

6685

6686

6687

6688

6689

6690

RAILWAY

CENTRAL

ALGOWA

Billyboy Lake

*This township Algoma Central  
and Hudson Bay Railway  
land grant*

9 CLAIM GROUP

CANORAMA EXPLORATIONS LIMITED

GOUDREAU-LOCHALSH AREA

ONTARIO

SCALE 1" = 1/2 MI.

DECEMBER 1959



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REPORT OF  
MAGNETOMETER SURVEY  
CAESAR MINERALS LTD.  
RANGE 26, TOWNSHIP 27  
ONTARIO.

Prepared by:

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Geophysicist.

39 Addison Crescent,  
Don Mills, Ontario.



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CERTIFICATE.

Appendix - List of Persons Employed.

Caesar Minerals Ltd.,  
69 Yonge Street,  
Toronto, Ontario;

Gentlemen:

The following report describes the results and interpretation of the geophysical survey carried out over the group of claims held by Caesar Minerals Limited, located in Range 26 of Township 27, Ontario.

The magnetometer survey was carried out by Mr. John Needham, 115 Brasmar Avenue, Toronto, Ontario during the period June 1st - 15th 1960. The results of the survey are depicted on the map accompanying this report.

#### SUMMARY AND RECOMMENDATIONS:

The magnetometer survey conducted over the sixteen claims indicated an area of fairly uniform magnetic intensity cutting through in an east-west direction. The results also indicated the presence of two north-south faults.

From the general geology of the area, it is thought that the results outlined the various formations of the area.

From the results obtained, it is recommended that no drilling be carried out without

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first conducting a geological and an electrical-type geophysical survey.

PROPERTY, LOCATION AND ACCESS:

The property of Caesar Minerals Limited, comprises a group of 16 claims, which are situated approximately 2 miles east of mileage 175 on the Algoma Central and Hudson Bay Railway and three and one half miles south east from Goudreau station. The claims group is located in Range 26 of Township 27, District of Algoma, Ontario. The group is situated within the Algoma Central Land Grant. The claims are further described as follows:-

Nos. 6872 - 6887 Inclusive

Parts of claims Nos. 6884 - 6887 are located in Billboy Lake and were not covered by the survey at this time.

Access to the property is made by aircraft from Wawa to Billboy Lake, which is situated on the south boundary of the property. Access can also be made from the Algoma Central Railway by walking east for two miles from mileage 175 on the railroad.

TOPOGRAPHY:

The property is located in an area which is typical of the region. The terrain has the usual rugged character of the Canadian shield with hills and

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ridges rising ordinarily not more than one hundred feet above the valley bottoms.

The property is bordered on the north and south by lakes. Steep sided ridges follow the general east-west trend through the central part of the property, the valley bottoms being occupied by cedar swamps.

#### GENERAL GEOLOGY:

All the consolidated rocks are of the pre-Cambrian age. They are covered in many places by glacial deposit which at times is fairly thick. For the most part rocks of volcanic origin make up the greater part of the pre-Cambrian formations. These consist of acid and basic lavas. Sedimentary rocks of the Dore series lie above some of the volcanic rocks. These occur as a band which has been displaced by numerous north-south faults. There are also intrusive rocks of great variety to be found throughout the area.

The property discussed in this report, lies within the band of acid lavas which cuts through Township 27, Range 26. The McVeigh Creek Fault which is the major feature of the area, lies two miles east of the property.

A number of gold mines are to be found in the general area, but it is to be noted that they are

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all located outside the band of acid lavas. The  
ore bodies do not appear to be associated with the  
sediments.

INTERPRETATION OF THE MAGNETOMETER SURVEY:

The results of the geophysical survey  
conducted over the claims group held by Caesar  
Minerals Limited are depicted on the map accompanying  
this report.

The magnetometer readings are expressed in  
gammas and are plotted to the east of the traverse  
lines. All readings are with reference to the Base  
Control Station which is located at 0400 on line 45W.

From the contour pattern of the magnetometer  
results it will be seen that the general strike trend  
is east-west which agrees with the geology of the area.  
In general the area is of fairly uniform intensity,  
however a band of higher magnetics is seen to be  
cutting through the centre portion of the property, and  
another band lies to the north of this. These east-  
west trending bands have zones of higher magnetic  
readings within them. North-south trending faults  
appear to cut through the property, and slight movement  
has taken place as can be seen in the disturbed magnetic  
readings. Contacts between the various rock types are

- page five -

readily seen from the magnetic readings, the formations appear to lie nearly vertical.

From an interpretation of the results obtained during this survey, it is recommended that an electrical-type geophysical survey be carried out before planning any other programme.

#### INSTRUMENT DATA:

For the magnetometer survey a Sharpe's Model A-2 Askania-type instrument was used, having a sensitivity of 20.0 gammas per scale division.

#### SURVEY DATA:

The survey was carried out over picket lines out at 300 foot intervals. These traverse lines were turned off at right angles to a base line which was established through the centre of the property in an east-west direction.

A total of 13.5 miles of traverse lines and base line were cut and chained.

The magnetometer survey was conducted along the picket lines, readings being taken at 100 foot intervals. A total of 12.6 miles of line were surveyed by this method and 696 readings were taken.

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The number of eight hour man-days to complete the survey are as follows:-

	<u>8-Hour man days</u>	<u>Attributable to Assessment work.</u>
Line Cutting and chaining	75 x 4	300
Operating magnetometer survey	30 x 4	120
Drafting	2 x 4	8
Field supervisor	25 x 4	100
Interpretation & Report	3 x 4	12
Office typing & Supervision	<u>2 x 4</u>	<u>8</u>
Total	137 x 4	548

Respectfully submitted,

E. B. Nicholls, P. Eng.  
Geophysicist.

Don Mills, Ontario.  
June 24th, 1960

REPORT ON  
MAGNETIC AND ELECTROMAGNETIC SURVEYS  
OF THE  
GODREAU CLAIM GROUP  
OF  
CANORAMA EXPLORATIONS LIMITED



REPORT ON  
MAGNETIC AND ELECTROMAGNETIC SURVEYS  
OF THE  
GOUDREAU CLAIM GROUP  
OF  
CANORAMA EXPLORATIONS LIMITED

Summary and Recommendations

Magnetic and electromagnetic surveys of the Canorama claim group outlined seven magnetic zones and a similar number of electromagnetic conductors. In two cases there is close correlation between the magnetic zones and conductors. Geological mapping would prove helpful in further assessment of these geophysical surveys.

It is recommended that magnetic zones A and B and their associated conductors be tested with one drill hole each. In addition there are three contingent drill holes suggested.

REPORT ON  
MAGNETIC AND ELECTROMAGNETIC SURVEYS  
OF THE  
GOUDREAU CLAIM GROUP  
OF  
CANORAMA EXPLORATIONS LIMITED

I Introduction

Recent discovery and development of gold-bearing copper deposits in the vicinity of Goudreau has lead to renewed interest in the area. Goudreau is a station on the Algoma Central and Hudson Bay Railway about 20 miles south of the railroad junction at Franz.

These deposits are closely associated with the Keewatin-type volcanics where they are cut by later intrusives.

It was recommended that magnetic and electromagnetic surveys be carried out on the group of nine claims held under lease from the Algoma Central, by Canorama Explorations Limited. The hope was that the magnetic survey

would outline the geological units on the property and possibly locate magnetic sulphide, while the electromagnetic survey would serve to describe any conductive sulphide zones.

## II Property and Access

The claim group is shown in the sketch opposite the summary page. This group is made up of nine claims in the centre of Township 27, Range XXVI, Sault Ste. Marie Mining Division. Access is on foot from the Algoma Central Railway which lies two miles to the west.

## III Geophysical Surveys

The line cutting and geophysical surveys were carried out during November, 1959. The survey crews lived in Goudreau and travelled daily to the property.

From an east - west base line, north - south traverse lines at 300 foot spacings were cut. On these traverse lines magnetic and electromagnetic surveys were completed.

### Magnetic Survey:

The contoured map of the magnetic survey shows

a general east - west strike in the geological formations. The magnetic contouring suggests a sequence or repetition of acid lavas and tuffs in accordance with the Ontario Department of Mines Map (49g). This sequence of lavas and tuffs is suggested on the magnetic map where the areas of high magnetic relief are outlined. Geological mapping would help to confirm this.

A few of the magnetic features prove of interest from an economic standpoint. In addition, when these magnetic features coincide with the electromagnetic conductors their importance increases.

Magnetic Zone A: is a broad feature, striking east - west with a high centred at 3+00S, Line 9E.

Magnetic Zone B: is a sharp dipole-type anomaly lying in the southeast corner of the claim group. The zone appears to strike northwest, but its eastward extension is untested.

Magnetic Zone C: is similar to A except that its relationship with the nearby electromagnetic conductors is less definite.

Magnetic Zone D: lies to the north of B and strikes northeast.

Magnetic Zone E: is a very narrow zone paralleling the southern boundary of the claim group. The central portion of the anomaly is quite narrow and lies over the lake.

Magnetic Zone F: Although it is not completely described, has high relief. This zone is located in the southwest corner of the claim group.

Magnetic Zone G: lies in the northeast corner of the claim group and has a minor electromagnetic conductor lying near the western end. A single crossover on the western peak of this zone may prove interesting.

In addition to the above zones there are several minor magnetic anomalies that, because of the limited geological knowledge at this present time, are not of interest.

#### Electromagnetic Survey

The results of the vertical loop electromagnetic survey are shown in profile form on the magnetic contour map. Three of the conductive zones, 1, 2 and 3, show

good correlation with magnetic zones. An additional four conductors together with several questionable and isolated crossovers all lack close correlation with magnetic zones.

The conductors are discussed as follows:

**Conductor 1**

extends from 3+50S, Line 18E to 2+50S, Line 9E.

The best defined crossover occurs at 2+50S, Line 9E, which in turn lies over the centre of a magnetic high, Zone A.

**Conductor 2**

strikes north - west and lies over the strong dipolar magnetic anomaly, Zone B.

**Conductor 3**

is a weakly defined anomaly lying in the centre of the magnetic Zone C. At present the information available indicates that the eastern end of the zone is the more interesting.

**Conductor 4**

is located between magnetic Zones E and F and off the end of Zone D. The conductor's relationship to these magnetic zones is not readily

apparent. A single crossover at 25+00S,  
Line 3E may be related to this conductor.

Conductors 5 and 6

were interpreted to strike parallel to Conductor  
2 but the true strike in this area is in doubt.  
Magnetic correlation is lacking.

Conductor 7

shows two crossovers at 3+25N, Line 9E and  
at 2+50N, Line 12E. There are in addition  
indications that the zone may extend to the  
west for 600 feet. The zone appears most  
strongly on Line 12E.

The remaining conductors and questionable con-  
ductors do not at present warrant attention on the basis  
of the available information.

#### IV Conclusions and Recommendations

The east - west geological trend on the claim  
group was outlined by the magnetic survey. Several magnetic  
anomalies were located. These anomalies when correlated  
with electromagnetic conductors, are of interest.

A detailed geological examination of the group might explain the nature of some of these magnetic and electromagnetic anomalies.

From present knowledge it is recommended that two drill holes and an additional three contingent holes be drilled to test the anomalies.

<u>Hole</u>	<u>Line</u>	<u>Station</u>	<u>Zone</u>	<u>Conductor</u>	<u>Dip</u>	<u>Azimuth</u>	<u>Depth</u>
1	9+00E	4+00S	A	1	45°	Grid North	300' ✓
2	27+00E	17+00S	B	2	45°	Grid N30°E	300' ✓
contingent on above holes:							
3	0+00E	23+50S		4	45°	Grid North	350' ✓
4	9+00E	8+00N	C	3	45°	Grid North	300' ✓
5	9+00E	29+50N	G		45°	Grid South	300' ✓

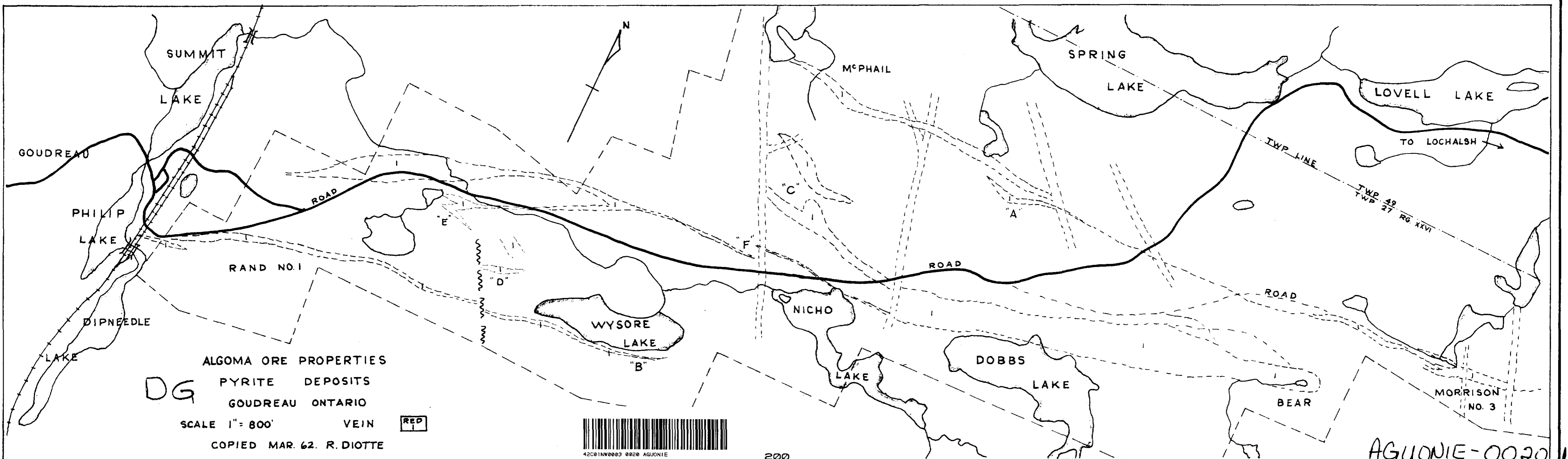
SUIMAC EXPLORATION SERVICES LIMITED

*Tom Gledhill*

T.R. Gledhill,  
Chief Geophysicist.

Toronto, Ontario,  
December 2, 1959.



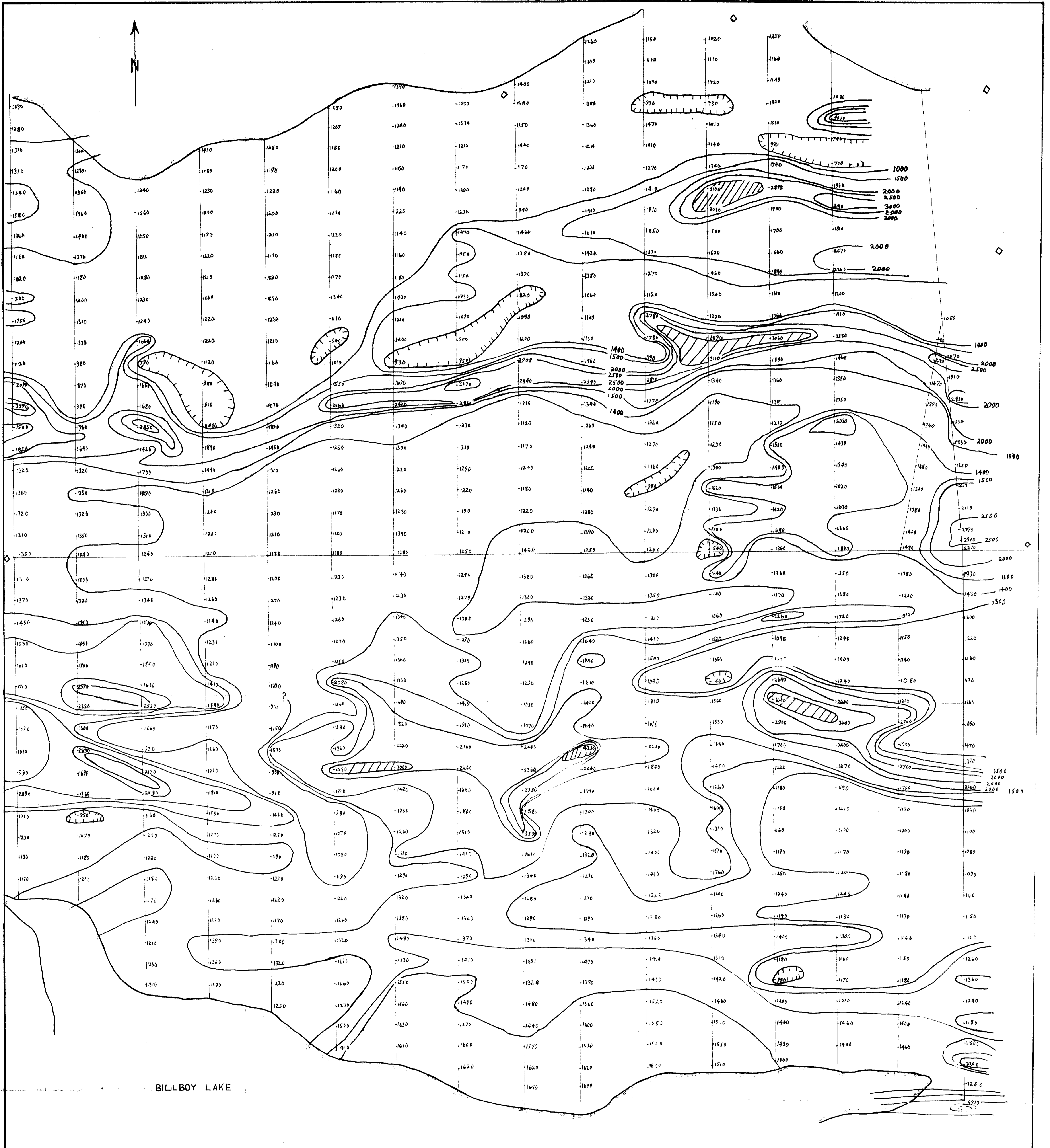


**DG**  
 ALGOMA ORE PROPERTIES  
 PYRITE DEPOSITS  
 GOUDREAU ONTARIO  
 SCALE 1" = 800'  
 VEIN RED  
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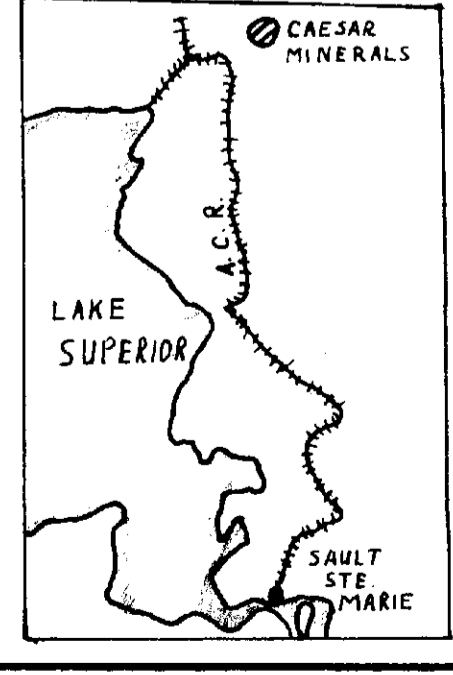
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BILLBOY LAKE

**LEGEND**

- 1000 contour of magnetic readings
- magnetic high
- magnetic low
- location of claim posts
- swamp
- cliff or high ground
- 5,000 gammas or more
- 4,000-5,000 gammas
- 3,000-4,000 gammas
- 2,000-3,000 gammas
- 1,000-2,000 gammas
- 500-1,000 gammas
- 500 gammas or less



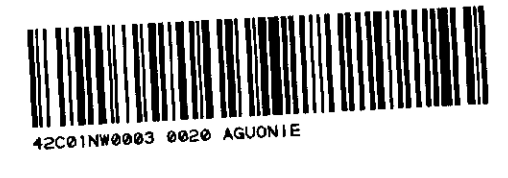
D.G.  
 PLAN OF MAGNETOMETER SURVEY  
 over property of  
**CAESAR MINERALS LTD.**  
 TOWNSHIP 27, RANGE XXVI  
 Algoma Central and Hudson Bay Railroad Land Grant  
 SAULT STE MARIE MINING DIVISION  
 survey by  
**J. NEEDHAM AND ASSOCIATES**  
 mining services

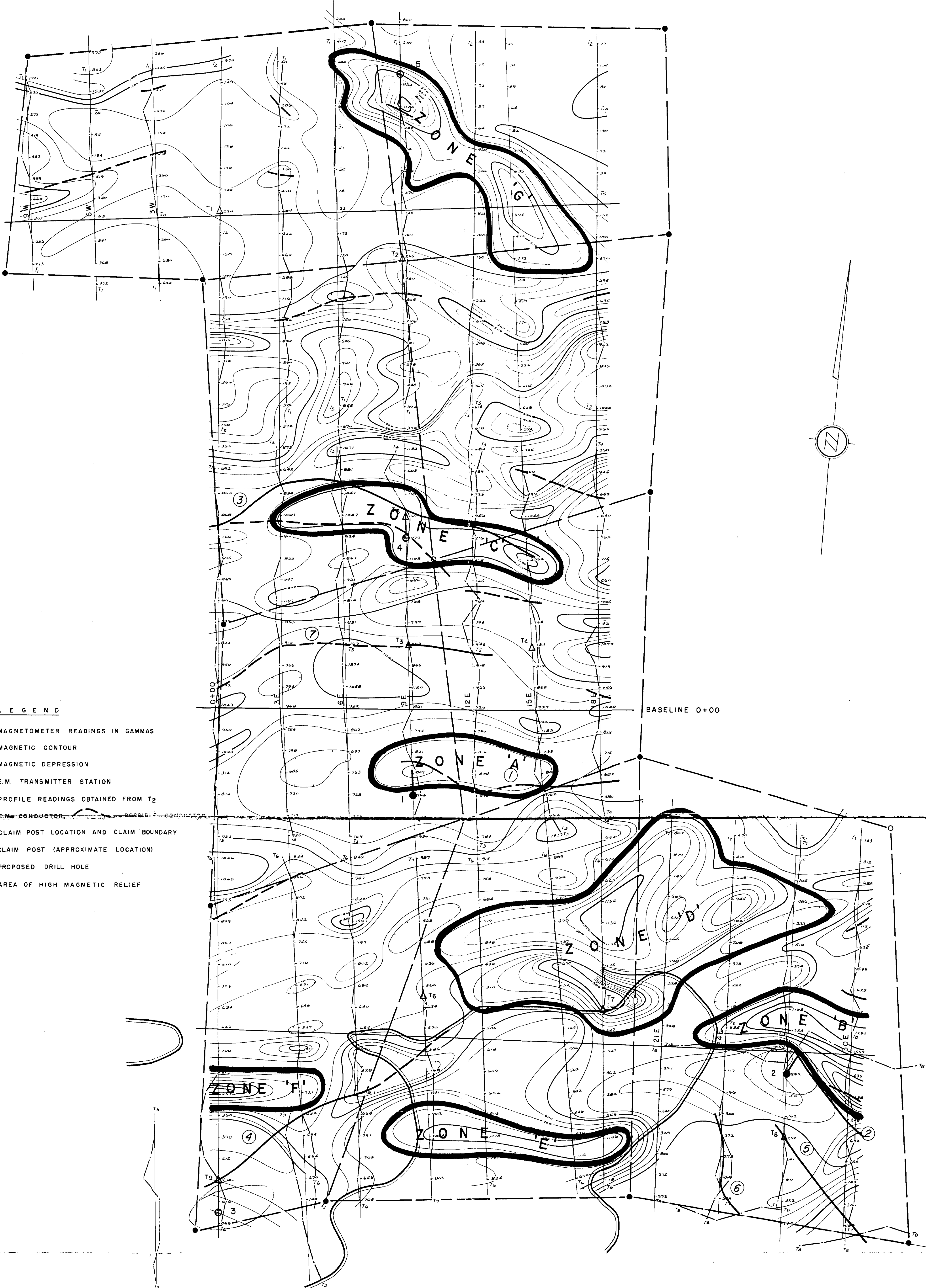
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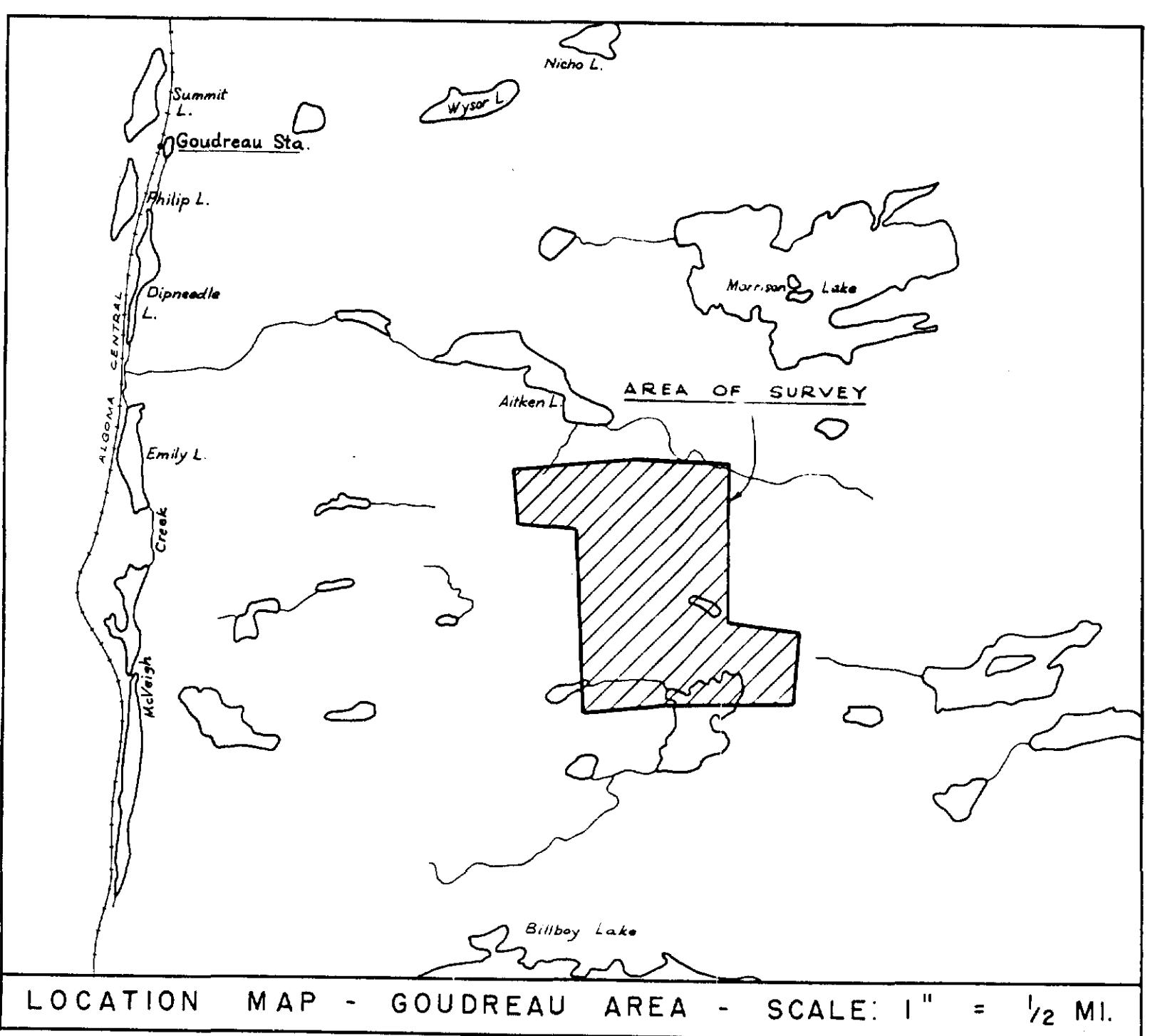
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LEGEND

- MAGNETOMETER READINGS IN GAMMAS
- MAGNETIC CONTOUR
- MAGNETIC DEPRESSION
- E.M. TRANSMITTER STATION
- PROFILE READINGS OBTAINED FROM T2
- E.M. CONDUCTOR - POSSIBLE CONDUCTOR
- CLAIM POST LOCATION AND CLAIM BOUNDARY
- CLAIM POST (APPROXIMATE LOCATION)
- PROPOSED DRILL HOLE
- AREA OF HIGH MAGNETIC RELIEF



LOCATION MAP - GOUDREAU AREA - SCALE: 1" = 1/2 MI.

PLAN OF GEOPHYSICAL SURVEYS  
**CANORAMA EXPLORATIONS LIMITED**  
 GOUDREAU AREA  
 DISTRICT OF ALGOMA  
 ONTARIO

SCALE 1" = 200'

DECEMBER, 1959

SURVEYS BY **SULMAC EXPLORATION SERVICES LIMITED**

