



1111SW0045 0017 CASCADEN

REPORT

ON A

RESISTIVITY SURVEY

OF A PROPERTY IN

CASCADEN TOWNSHIP

SUDBURY DISTRICT, ONTARIO

for

EASTVIEW MINES LIMITED

SUMMARY

Seventeen zones of moderate conduction have been indicated by the resistivity survey. One of these (#11 A) has direct magnetic correlation and is on the strike of known mineralisation. Another (#1) may have been drilled previously. A minimum program of three holes, totalling 900 has been proposed to test the three most promising conductors.

INTRODUCTION

The following report is based primarily upon the results of a resistivity survey carried out by G. G. I. Surveys, Limited, on a property of Eastview Mines, Limited. The property is located on the west side of Windy Lake, in Cascaden Township, Sudbury District, about five miles southwest of the town of Levack. It includes the following 18 mining claims:

8 - 87055-72 inclusive.

Four base lines were cut on this property, oriented N 72°E, and cross lines were cut at 400' intervals perpendicular to these lines. Resistivity measurements were made at 100' intervals along these lines.

The resistivity technique employed on this survey was as follows:

A current is passed between two ground points approximately three miles apart, the line joining these two points being at right angles to the regional strike. A 60 cycle gasoline driven motor generator set is employed as

current source. Measurements of voltage gradients are made between points 100 feet apart on lines perpendicular to the strike and lying in the middle region between the two current electrodes. The magnitude of the current passing into the ground is also recorded. From these measurements may be calculated the average or "apparent" resistivity of the region between the two measuring points. The units employed are ohm metres. In the present instance an area of decreasing resistivity would be of interest for itld be associated with concentrations of sulphide mineralization. Other sources of decreased resistivity would include lakes, swamps, graphitic zones and water filled shear or fracture zonas. It is not always possible from the magnitude of the resistivity indications to differentiate between these various possible conductor sources. However, the shapes of the resistivity curve gives some information. For example, a resistivity anomaly extending over several hundreds of feet in width is not likely to be caused by the usual type of concentrated sulphide replacement sone and is probably

due to a bedrock trough filled with water or unconsolidated sediments. In order to assist in resolving sulphide from non-sulphide conductors isolated magnetometer traverses were carried out over some of the more pronounced resistivity lows. The association of pyrrhotite with the base metal mineralization in this area is characteristic.

GEOLOGY

The general geology of the region is shown by

G. S. C. Map 871-A, entitled "Chelmsford", scale 1" = 1 mile.

According to this mapping the property is underlain predominately by Levack granite and granite gneiss. The norite-granite contact would lie very close to the east boundary of the property. A more detailed map, on the scale of 1" = 800' has been prepared by Mr. S. Waisberg of the G. G. I. Staff. This shows that the northern third of the property is underlain by granite gneiss and the remainder by diorite gneiss. A few small outcrops of diabase or norite like (?) material haves been noted in the central portion of the property. Iron formation outcrops at one point.

DISCUSSION OF RESULTS

MAG COMMO

The accompanying plan map, on a scale of

1" = 200", gives the distribution of the resistivity data and
the magnetometer profiles. The resistivity units are

10 ohm metres. The magnetic data are in gammas.

Seventeen areas, numbered from north to south, exhibiting
apparant resistivities of less than 1,000 resistivity units
are selected for discussion. The lowest resistivity observed,
vis. about 5,000 ohm metres, is still not sufficiently low to
suggest large near-surface bodies of massive sulphides in
any of these areas, but less-than-massive sulphide mineralization
is a possibility. Correlation with the magnetometer profiles
assists in selecting conductors of potential interest, particularly
where those conductors lie in swampy areas.

Conductor \$1\$ has near-correlation with a 400 gammas magnetic anomaly indicated as dipping to the north. It is strange to note that a drill hole has been directed at this area from the west. The reason for this hole is unknown and no outcrop is marked on the detailed geological plan in this area. It would be of interest to obtain more information about this hole, and to determine whether or not the formational dip could be to the north. If so this hole may not have

intersected Conductor #1 and a new hole drilled from north to south across it, would be desirable.

The suggested drill hole (D.D.H.1) is shown.

Conductors #2, 3 and 4 are closely associated with creeks or swamps and are likely due to these features. No recommendations are made on these for further investigation.

Conductor 52 has some local magnetic activity but no direct correlation. The line of the creek just to the north may reflect a fault, as indicated by the magnetic profile. A single drill hole (D.D.H.2) would be warranted to investigate this area.

Conductor 5b has no magnetic correlation and lies in a gravel pit area where the overburden is possibly deep.

Conductors #6, 7, 8 and 9 all occur in swampy areas and are not regarded to be of interest.

Conductor #10 is rather broad and shallow and has not been magnetometer checked. Its electrical amplitude is not overly interesting by itself.

Conductor # lia is the most interesting of all.

It has direct magnetic correlation of the order of plus 2,000 gammas to minus 3,000 gammas.

Mineralization has been noted on the detailed geological plan on this conductor, between lines 0 and 400-E, and also near line 800-W.

Drilling (D.D.H.3) is recommended on line 0 as shown on the resistivity plan.

Conductor 11b has not been checked magnetically.

Conductor 12 has no direct magnetic correlation.

It lies near known iron formation and may be due to pyrite in association with it.

Conductors 13, 14 and 16 are broad and shallow and have not been checked magnetically. They are not of sufficient electrical amplitude to warrant drill'ng and are probably caused by overburden conditions.

Conductors 15 and 17 have no magnetic correlation.

They occur in low lying areas near Windy Lake and are probably due to overburden conditions.

DRILLING SUMMARY

D.D.H. No.	Collar	Orientation	Remarks
1	line 4400 E, 200' south of	South along line	Dependent on information on old drill hole.
2	B.L.1 line 2400 E 1800! south	North along line	To intersect Conductor
3	of B.L.1 line 0, 400' north of B.L.3	South along line	To intersect Conductor lla

Note: 1) all holes are to be 300' minimum in length and inclined at 45° dip.

2) the above holes are to be regarded as a minimum drilling program, only.

Additional drilling would be dependent on the results of the initial program.

Respectfully submitted

August 10 Sugal

Harold O. Seigel, P. Eng. Consulting Geophysicist

Toronto, Ontario July 2, 1957.

The following personnel engaged in carrying out this geophysical work were employed and supervised by G.G.I. Surveys Limited:

S. Bortrich	Bathu	rst, N	.B.	Operator	April	24-N	Aav	31/57	38 (days
C. Goulet	Ville !	Matie,	Que.	Operator	11	24-		31/57	38	11
J. Legrand	11	11	111	Helper	**	24-	• •	23/57	30	**
J. Joly	н	**	**	Helper	**	24-	#1	23/57	30	71
O. Duman	11	11	11	Helper	11	24-		31/57	38	11
H. McNally	Toron	nto, O	nt.	Admin.	Julie				1	**
F. Kelly	11	1	11	Typist	**				1	11
J. Strecansky	11) !	11	Draftsman	11				2	**
H.O. Seigel	11) 1	1	Report	11				1	
E.E. Campbell	,	t 1	1	Superv.	May				4	11

183 days

 $183 \times 4 = 732 \text{ days}$





REPORT

ON

A GEOLOGICAL SURVEY
ON PROPERTY OF

EASTVIEW MINES LIMITED

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CASCADEN TOWNSHIP

SUDBURY DISTRICT, ONTARIO

INTRODUCTION

out on a group of 16 unpatented claims in Cascaden Township, in the Sudbury Basin area of Ontario. Mapping was done during the period between June 1 and June 15, by myself and by Mr. Gabriel Goulet, who is a graduate of the Haylebury School of Mines. The mapping by Mr. Goulet was checked by me. Oscar Dumont and Steve Bortnick acted as assistants during the survey. A grid of north-south picket lines at 400' intervals was used as control. A geological map, scale of 1" = 200', accompanies this report.

PROPERTY LOCATION ACCESSIBILITY

The property comprises 18 unpatented mining claims S.87055 - S.87072 inclusive, located in Cascaden township near the west shore of Windy Lake and about five miles south westerly from the town of Levack.

The property is readily accessible by mortar road.

HISTORY

Two drill hole collars were located during the course of mapping. The results of this drilling are not known to me. A small amount of blasting was done on the mineralized showings to be described later.

GENERAL GEOLOGY OF THE AREA

The Sudbury area consists of a synclinal basin of Huronian sediments and Tuffs approximately 36 miles long and 16 miles wide which overlie a basement of Kewatin rocks, largely greenstones, Temiskaming sediments and granites. A thick sill like body, noritemicropegmatite, keweenawin in age has intruded between the Huronian sediments and the older complex. In addition to the older granite, there has been some younger granite intrusion.

Copper nickel deposits occur either as marginal deposits near or at the contact of the norite and basement rocks, or as offsets in a quartz diarite rock some distance from the football contact. Literature on the Sudbury Basin area is very extensive and need not be dealt with in this report.

G.S.C. map 871A Chelmsford at 1" = 1 mile shows the general geology in the vicinity of the claim group.

TOPOGRAPHY

The large part of the property area consists of granite and diarite gneiss outcrops. These rise as much

as 50' above the surrounding low ground. Three slightly north of west striking depressions cross the property. One, on the south, is marked by a long bay of Windy Lake. Another depression occurs in the vicinity of the telephone line as shown on the map.

The third depression is marked by a small creek on the north part of the claim group.

GEOLOGY

Rocks of the Levack granite comprise the greater part of the exposed rock. Other rock types observed were diarite-diabase dykes and iron formation. Norite was not found on the property, but several outcrops were examined on adjacent ground as shown on the accompanying plan.

Levack Granite

Two phases of the Levack granite were noted.

An acid phase granite gneiss is designated 2A on the

map, and occupies the north part of the claim group.

The central and southern parts of the claims are largely diarite gneiss, designated 2B. The gneissic banding is present in all these rocks but is generally more pronounced in the basic phase. Numerous inclusions of basic rocks are present in both phases. Some of these inclusions are quite large and some difficulty was experienced in differentiating these from basic dykes.

Iron Formation

Iron formation outcrops at two places as indicated on the accompanying plan. The two outcrops are on strike and indicate a minimum length of 300'.

A width of 20' is exposed near the road. Magnetic readings taken during a recent geophysical survey carried out on the property indicates that there are other parallel bands in this vicinity.

The presence of this iron formation in the Levack granite opens some interesting speculation as to its origin.

Danite Diahase

The presence of large basic inclusions in the granite added to the difficulty of mapping the diarite

and diabase dykes which occur. Several of these have been noted on the map. Generally they strike north-south and two of these dip flatly to the west.

The number one mineralised showing occurs in an east-west striking diarite dyke.

In general these rocks are fresh looking medium grained and with ophitic texture.

Norite

Norite does not occur on the property. Two outcrops were examined on adjacent ground and are shown on the map.

The Norite dyke as obtained from Map 871A

Chelmsford sheet, appears to be justified by the facts
obtained. However, it should be noted that the absence
of outcrops for about half-mile width in the vicinity of
this outcrop leaves the exact location of the contact
in doubt. No informa ion as to the type of the contact
could be obtained.

MINERALIZED SHOWINGS

Mineralized showings occur at three points over a length of about 2,000 and with a general east-west

strike. None of these showings are large enough or have sufficient base metal concentration to be of economical importance in themselves.

Showing #1

This most easterly showing occurs near the road. An east-west fracture about 1' wide is filled with quartz and sulphides mainly pyrite, but with some chalco pyrite and pyrrhotite. A selected sample assayed 1.72% copper and 0.81% nickel.

Showing #2

This is located about 900' west of #1 showing.

Erratic mineralization, largely pyrite, occurs over a width of about 30'. A very small amount of chalco pyrite was noted.

Showing #3

This showing is located 1100' west of #2 showing. Sulphides, mainly pyrite, replace and make up about 20% of a 4' basic band of the diarite gneiss.

A length of about 30' is exposed and was examined.

CONCLUSIONS

Dr. H. O. Seigel has reported on the geophysical survey carried out on this claim group. His conclusions and recommendations were based on the results of the surveys and from the geological mapping.

Quartz pyrite, a rock typical of the offset deposits, was not observed on the property.

Due to lack of outcrops an exact location of the norite contact could not be made, nor was there any information available that would shed any light as to the dip of the contact at this point.

Respectfully submitted

S. Waisberg, Geologist.

Taranta

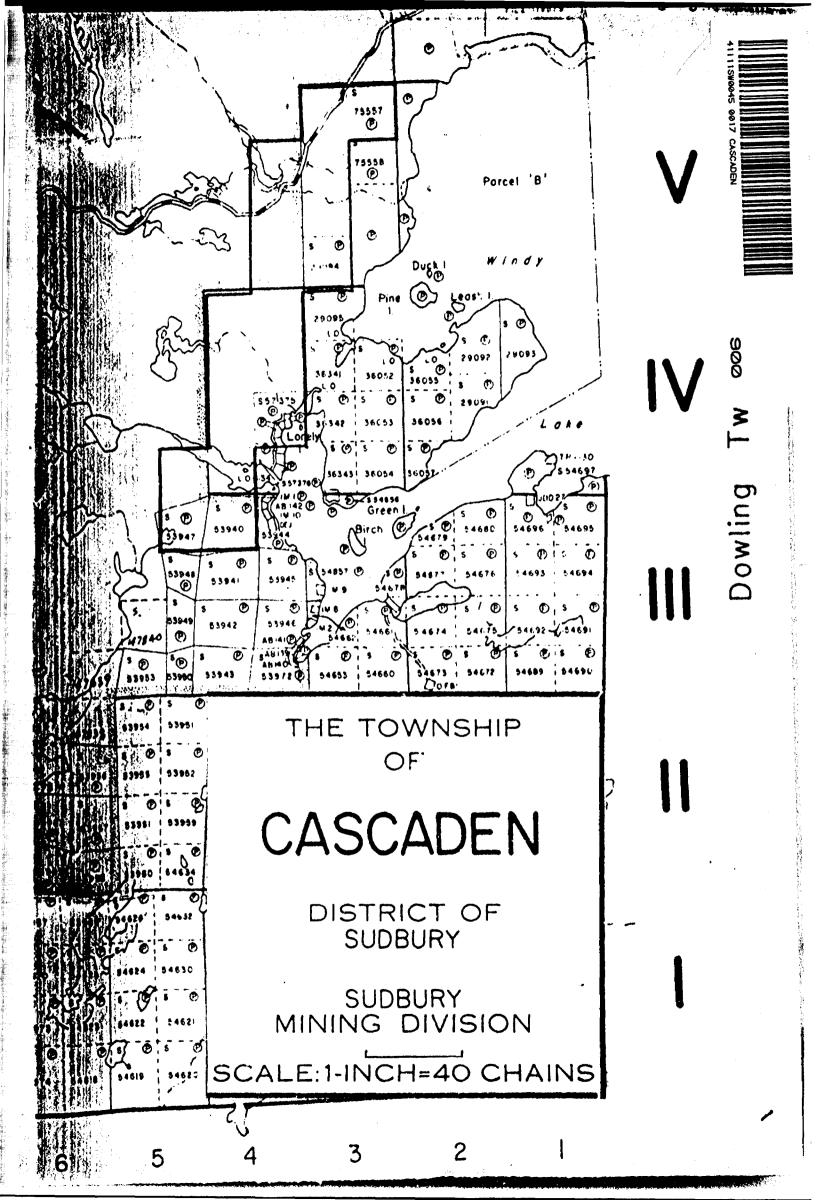
The following personnel were engaged in carrying out the Geological Mapping and Report:

Sol Waisberg	Mapping	June 1 to 15	15 days
Oscar Dumont	Assist.	June 1 to 15	15 days
Gabrielle Goulet	Mapping	June 1 to 15	15 days
Steve Bortnick	Assist.	June 1 to 15	15 days
Sol Waisberg	Report	July 10	l day
John Streconsky	Drafting	July 8 & 9	2 days
M. McGlynn	Stenog.	July 11	1 day
			64 days

 $(64 \times 4 = 256 \text{ days})$

Toronto, July 11, 1957.

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FOR ADDITIONAL

INFORMATION

SEE MAPS:

CASCADEN-0017 #1-2.

