V I N N I E M I N E S L I M I T E D

GEOLOGICAL REPORT ON THE COMPANY'S STRATHCONA TOWNSHIP PROPERTY

Temagami Area , Ontario

by

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CONSULTING GEOLOGIST

NORTH BAY , Ontario

November 22 , 1969.

May 3rd , 1970 .

November 22 , 1969

TO THE PRESIDENT & DIRECTORS OF
VIENIE MINES LIMITED
C/O Federal Drilling Supplies Ltd.
Box 416
NORTH BAY , Ontario

Gentlemen:

The geological report on the Company's property located in Strathcona Township , Temagami Area , Ontario is as follows :

PROPERTY , LOCATION , ACCESS

The property consists of the following thirty one unpatented mineral claims located in Strathcona Township , Province of Ontario :

T-61199 to T-61210 Inclusive 12

L-104930 to L-104940 Inclusive 11

L-104796 to L-104800 Inclusive 5

L-104[illegible]99 to L-104890 10

T-60549

The claims are situated approximately four and one half miles south of the town of Temagami , skirted along the west boundary by Highway No. 11 , crossed centrally by the Trans Canada Pipeline and old Kerguson Highway and skirted on the east by the H.E.P.C. power line . The Ontario Northland Railway passes within one mile of the northeast claim boundary . Aircraft can be landed on Lowell

Lake which rests centrally and southerly within the claim group .

GENERAL GEOLOGY

The eldest rocks are Keewatin in age and consist of rhyolite , tuff and related pyroclastics . They are covered by intermediate to andesitic lavas which exhibit considerable interlayering . Finally , a capping of Cobalt Conglomerate and interbedded chert rests unconformably on the prior series .

The rocks are intruded by Algoman acid bodies which cut the lavas and are overlain by Cobalt Conglomerate . The Cobalt Conglomerate,in turn , is intruded by Keewaunawan diabase as dykes and mainly sills injected along the lower contact or planes of weakness within the sediment .

Copper , gold and silver mineralization in the area occurrs mainly in the acid flow rocks and related pyroclastics especially adjacent to the lower contact of the Nipissing diabase sills or its feeder dykes in the vicinity of acid to intermediate intrusives . It is usually associated with pyrite , pyrrhotite and magnetite and chalcopyrite ; the gold values apparently in concentrations proportional to the chalcopyrite content .

A feature of the area is strong northeast faulting offsetting blocks of Algoman granite over distances up to two miles (south block southwest) . Metal mineralization appears to be related to this faulting which dissects the present claims throughout its length .

DETAIL GEOLOGY OF THE GRID AREA

Geological mapping was carried out throughout the current field season using the grid established for the magnetic survey which was carried out last winter . Field notes and mapping was carried out on the scale of one inch to two hundred feet , locally one inch to twenty feet , correlated and plotted on the scale of one inch to 200 feet (See Surface Geology Map No. 5284 herewith) . For clarity the geological interpretation of the data is shown on a seperate map and is enclosed herein .

On the strength of the results obtained from the geological survey two additional phases of exploration were initiated . One was the search for and location of a second promising showing located about 900 feet south of Maille Lake (See map No. 5284) . The writer is now certain that this showing presents great potential and is controlled by conditions similar to the main Maille Lake deposits but related to an entirely new structure . Its projection eastward holds important implications for anomalous areas revealed during last winter's magnetic survey of the Lowell Lake area (See map No. 5282 accompanying the May 10th geophysical report thereof) .

The eastern two thirds of the grid area is covered by Cobalt conglomerate and interbedded chert which strikes generally northeasterly and dips flatly to the east . An inlier of andesite has been mapped centering at 2300 E and 500 south and is flanked on the west by a rather continuous band of chert within the conglomerate . It appears that a band of chert may mark discontinuously the bottom of the conglomerate series .

It thus appears that chert bands mapped to the east of the main conglomerate contact indicate thinning of the conglomerate cap or up- arching of the basement so that drilling to the favourable Keewatin formations may be feasible . A range of highly elevated terrane located at 6000 east and wentering at the base line contains diorite intrusions and appear to confirm geophysical indications that this area is underlain by granitic or granodioritic stocks . Certain magnetically anomalous zones peripheral to this intrusive complex could indicate concentrations of magnetite and/ or pyrrhotite in the lava flows below the conglomerate cap . Thus anomalies 14 , 15 ,25 and 26 may indicate ore bearing magnetic concentrations .

The inlier of andesite indicates an eastward continuation of the anticlinal structure interpreted to occupy the area of Maille Lake and to plunge eastward . This is a commonly observed reason for the presence of inliers . The immediate area is considerably lower in elevation than the main contact region several hundred feet to the west and if drilling should indicate easterly continuation of the ore zone to this area it will greatly reduce the length of holes required .

The western edge of the conglomerate series is generally faulted north -southerly as indicated on the interpretation of map 5284 and the northerly edge too is apparently strike faulted . It is interesting to note that the magnetic interpretation for the location of this contact closely parallels that of the geological location .

The northwesterly portion of the grid is occupied by extensive outcrops of andesite broken occasionally by stocks of feldspar porphyry or north-southerly trending dykes of this rock.

A diorite dyke trends northeasterly from line "0" at the base line to the south end of Lake David and is thought to fill a similarly trending fault zone . An inlier of rhyolite on strike with this zone and east of Lake David may indicate that this area is anticlinal . Anomalies 6 and 7 may indicate concentrations of magnetic ore bearing minerals related to this anticlinal structure but confined to the underlying rhyolite host rock .

The southwest quadrant of the grid area is occupied by rhyolite and related pyroclastic beds of tuff and discontinuous flows of intermediate rhyolite . A broad anticlinal structure trends centrally from Maille Lake and plunges easterly and beneath the conglomerate capping . It appears to be cross-folded anticlinally through Maille Lake and is cut by a strong north-south fault which parallels line 1000 east . The west block is down faulted so that the structure repeats outcrops of rhyolite prior to plunging below the conglomerate (See shaded outline of this rhyolite on the interpretation of map No. 5284) . A diorite sill which was intruded generally along the rhyolite - andesite contact obscures much of the contact region and the associated sulphide mineralization . Important feldspar porphyry intrusives are mapped along the east boundary of the rhyolite in contact with the conglomerate . Strong north-south faulting parallels and forms the conglomerate contact and projects northerly to a dyked zone of feldspar porphyry centering at 900 east and 1000 north . Over a dozen distict showings were located along the contact region of the rhyolite ,most of which are concentrated along the interpreted anticlinal region . They consist of pyrite , pyrrhotite and chalcopyrite disseminations and stringers showing values in combined metals of up to $ 14.00 per

ton (See assay certificates Nos. 40830, 40849 , 40867 etc.) as reported by Swastika Laboratories Limited . The flat dips observed along the contacts of the rhyolite within the anticlinally cross folded anticline renders it impractical to correlate surface sampling spread over such a large area of discontinuous outcrop . Faulting is widespread and steep topographic gradients accentuate the difficulties of sampling . For this reason also bulldosing would be highly impractical and it appears that only diamond drilling can be used to successfully explore the rhyolite-andesite-diorite contact using essentially a grid system and essentially vertical drilling .

This lead to a second phase of development which occupied the later portion of the field season and was terminated by the current heavy snowfall . A random averaged Mercury Hale survey was conducted over the area of the showings adjacent to the conglomerate capping , east and west thereof . The procedure is difficult requiring soil samples from below the vegetative layer or from freshly broken rock . The results require judicious allowance for several factors which now lead to smooth correlation but at first was pure research . However , a broad zone was outlined and is indicated on the accompanying interpretation plan as a shaded area within the eastern rhyolite band and adjacent to the conglomerate contact . The halos do not coincide with the observed outcrops of mineralization indicating greater concentrations north thereof and beneath the conglomerate to the east . There is a suggestion that the halo extends southwesterly to the showings at approximately 1200 East and 1000 south but weather did not permit further holes.

Zones of anomalous magnetic gradient are shown superimposed on the interpretation of map No. 5284 and assume special significance when viewed in the light of the present information . Anomaly 1 , 2 and an area south of 12 are aligned and a mildly elevated zone in the vicinity of the showings looks significant . Anomaly 12 may be aligned with anomaly 3 while anomaly 4 may be related to strike faulting and the northwest edge of the conglomerate . Anomaly 1 is flanked on the southwest and northeast by known showings but would be expected to have major concentrations of magnetic minerals only at the base of the andesite or the diorite sill . The entire area of the anomaly is thus covered and cannot be examined by no other means except drilling to the base of the outcrops of diorite and andesite . Thus four areas have been recommended for diamond drilling and are shown on the accompanying plan No. 5284 .

A tentative diamond drill hole plan is indicated for the area of the main showings and the Mercury Halo survey . Because of the flat dip of the mineralisation initial holes will be drilled vertically , which,if drilled on a planned grid , will return a maximum of detail structural information since vertical sections can be plotted for several directions .

A similar grid will be laid out to test the other areas recommended for diamond drilling but only after the main zone has been effectively and thoroughly tested . Minimal drilling rarely leads to success and is the greatest single factor which leads to"turning down"a good property which comes into production a few years later under new progressive management .

The property exhibits many features which resemble those at Copperfields Mining which is located about twelve miles to the west and the west edge of a granitic belt which extends eastward to the present group . The rhyolite and interbedded tuff and agglomerate resembles closely the host rock for Copperfields famous chalcopyrite lenses . Structural controlls for deposits at Copperfields are abundant within the present claims but with some important additional ones . Leading geologists consider that the Copperfields surface lenses of massive chalcopyrite were but the roots remaining of a larger ore structure which has been eroded by glaciation . Excellent glacial striae were noted in the surface exposures of massive chalcopyrite and terminal morraines of glacial debris are noted nearby .A large float rock of massive chalcopyrite was found by the writer far south of all known deposits on the Copperfields' property . In fact , the entire mine area appears to have been covered by the ubiquitous Nipissing diabase sill and it is quite likely that the remnants in the vicinity of Lowell Lake at one time connected with the expansive outcrops of diabase west of Lake Temagami . This sill is considered to be Pre-ore and acted to channel and localize the mobile chalcopyrite mineralisation which under the action of thermal metamorphism and hydrothermal solution is removed from copper bearing rock and sulphides and becomes redeposited as massive chalcopyrite in zones of tension and favourable host rock . The dioritic mass intervening to the many showings of the present claims may be a contact phase of this sill . The regional and transverse faulting , the anticlinally cross-folded anticline and familiar rhyolite pyroclastic host-

rock are familiar structural controlls for base metal ore deposits both in the present area and throughout the Pre-Cambrian shield .Small feldspar porphyry masses at the crest of the antiocline and near the contact of the conglomerate capping are considered most important since it is brittle and fractures easily at the contacts affording channelways and open space for the emplacement of major sulphide deposits . At Quemont Mining Corporations (Kerr) property in the Noranda area several large orebodies located in the northeast sector of the ore zone are structurallly controlled by bodies of similar feldspar porphyry .

RECOMMENDATIONS AND CONCLUSIONS

1- It is recommended that a minimum of 7,500 feet of "A" core diamond drilling be carried out to explore tthe areas indicated on the accompanying interpretation of map No. 5284 and that at least 4,000 feet of this be allocated to the area and vicinity of the Mercury Halo survey . The holes will be vertical borings at an initial 200 foot spacing to be followed up by fill in drilling to 100 foot centres .

2- Other target areas will be drilled in the following order: Anomaly 1 immediately after or concurrent with the Halo area. Anomaly 2 on completion of anomaly 1 .
Anomaly 12 on completion of 2 and anomaly 4 on completion of No. 12.

3- Concurrent with the above drilling extend picket lines 0 to 1300 east southward for an additional 1000 feet and conduct a magnetic (total field) survey of the area which surrounds the new showing south of Maille Lake . Drill the areas of maximum magnetic gradient coincident with the most favourable

geological structures (limited reconnaissance geological mapping of this area was completed last fall).

The cost of the diamond drilling , assaying , engineering and surveying will approximate $ 50,000.00 dollars and is fully justified on the strength of the findings of the geological and geophysical combined surveys . This is a minimum programme and it must be emphasized that if it is successfull considerably greater funds will be required to complete the exploration planned .

Respectfully submitted

Ben W. Cheehak , B.Sc.

CONSULTING GEOLOGIST

for

MINERAL EXPLORATION &

ENGINEERING CONSULTANTS

North Bay , Ontario

November 22 , 1969 .

May 3rd , 1970 .

WM. GERRIE, M.A
D. KERR-LAWSON, B.A., PH.D.

TELEPHONE 642-3244
P.O. DRAWER 10

Swastika, Ont. August 14, 1969 19

SWASTIKA LABORATORIES LIMITED

Certificate of Analysis

No. 10814

We have assayed Four samples of ~~ore~~

Received Aug. 12, 1969 and submitted by R. W. Cherbak, Esq.

with the following results:

Sample No.	Gold Ozs.	per ton Value @ $35.00	Silver Ozs.	Copper %
5884	0.005	$0.17	0.09	1.15
5885	0.005	$0.17	0.08	1.33
5886	0.005	$0.17	Nil	
No number	0.005	$0.17	0.02	0.67

SWASTIKA LABORATORIES LIMITED,

per:

In accordance with long-established North American custom, unless it is specifically stated otherwise gold and silver values reported on these sheets have not been adjusted to compensate for losses and gains inherent in the fire assay process.

WM. GEORGE, M.A.
D. KERR-LAWSON, B.A., PH.D.

TELEPHONE 642-3244
P.O. DRAWER 10

Swastika, Ont., August 7, 1969 19

SWASTIKA LABORATORIES LIMITED

Certificate of Analysis

No. 40690

We have assayed three samples of ore

Received July 26, 1969 and submitted by B. W. Chesnek, Esq.

with the following results:

Sample No.	Gold per ton Ozs.	Value @ $35.00	Silver Ozs.	Copper %
5881	0.005	$0.17	0.08	0.33
5882	0.005	$0.17	0.03	0.05
5883	Nil	-	0.03	0.24

SWASTIKA LABORATORIES LIMITED,

per

In accordance with long-established North American custom, unless it is specifically stated otherwise gold and silver values reported on these sheets have not been adjusted to compensate for losses and gains inherent in the fire assay process.

WM. GERRIE, M.A.
D. KERR-LAWSON, B.A., PH.D.

TELEPHONE 642-3244
P.O. DRAWER 10

Swastika, Ont., August 21, 1969 19

SWASTIKA LABORATORIES LIMITED

Certificate of Analysis

No. 40867

We have assayed two samples of ore

Received Aug. 18, 1969 and submitted by B. W. Chechak, Esq.

with the following results:

Sample No.	Gold per ton Ozs.	Value @ $35.00	Silver Ozs.	Copper %
5887	0.01	$0.35	0.25	1.44
5888	Nil	-	0.23	1.19

SWASTIKA LABORATORIES LIMITED,

per:

In accordance with long-established North American custom, unless it is specifically stated otherwise gold and silver values reported on these sheets have not been adjusted to compensate for losses and gains inherent in the fire assay process.

63.2830

VINNIE MINES LIMITED

SURFACE GEOLOGICAL MAP

STRATHCONA TWP., TEMAGAMI AREA
PROVINCE OF ONTARIO
by
MINERAL EXPLORATION & ENGINEERING CONSULTANTS

SCALE 1" = 200' NOV. 22, 1969

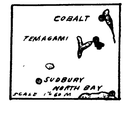
MAP NO. 5284

LOWELL LAKE LAKE DAVID MAILLE LAKE HIGHWAY No 11

LEGEND

- Outcrop Area (observed)
- Geological Contact (inferred)
- Fault zone
- Strike ; dip
- 1. Rhyolite
- 2 Diorite
- 3 Andesite
- 4 Feldspar Porphyry
- 2a Quartz Diorite
- 5 Gabbro - Diabase
- 6 Cobalt Conglomerate (Lorrain)
- 7 Granite
- Sulphide Mineralization
  py - pyrite
  pyr - pyrrhotite
  chp - chalcopyrite
- Traverse line (Cut, chained)

KEY MAP



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