

**Assessment Work Report
on
Magnetometer and VLF-EM Surveys
Phase Two**

Strathcona Twp. Project

NORTHSTAR GOLD CORP.

March 2014

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1.0 SUMMARY:

From March 15 to 25, 2014, a second phase program of grid establishment and geophysical surveying was carried out on the Strathcona Twp. Project on behalf of Northstar Gold Corp., 17 Wellington Street North, P.O. 2529 New Liskeard, Ontario P0J 1P0. The objective of the work was to map and test areas of interest using magnetic and electromagnetic methods with the goal of identifying potential exploration targets for precious and base metals. The final results met expectations identifying anomalies proposed for follow-up work. Daniel St. Pierre and David Laronde performed grid work and geophysical surveying on behalf of the contractor Meegwich Consultants Inc. P.O. Box 482, Temagami, Ontario POH 2H0. David Laronde was the field supervisor and reported on the work. A total of 13 km of line was established and surveyed avoiding coverage on the small islands on Lake Temagami.

2.0 PROPERTY:

The property consists of 4 mining claims comprising about 96 hectares situated in north central Strathcona Tp.

Claim No.	Units	Due Date
4268198	2	June 8, 2014
4268199	2	June 8, 2014
4268200	1	June 8, 2014
4268201	1	June 8, 2014

Sudbury Mining Division
Strathcona Tp.

NTS: 31 M/4

3.0 LOCATION AND ACCESS:

As the crow flies the property is located 3 km southwest of the town of Temagami. Easy vehicle access is gained by taking the Temagami Marine Road west for 2 km to the public boat access landing. From here the property is a short walk of 50 meters to the south. There is also access by lake since part of the claim covers the water.

4.0 MAGNETOMETER SURVEY:

4.1 Instrumentation: Gem Systems GSM-19 overhauser magnetometers serial no. 58479 and 7052358 were used for the survey. These units have an accuracy of +/- 1/100th of a gamma. 13 km was surveyed taking 1300 readings at 10 meter intervals. A base station was set up near the property and used to monitor and correct for the diurnal variation during the course of the survey. The base station cycled at 15 second intervals.

4.1 Survey Results and Interpretation: The results are presented in contour format on plans at 1:2500 scale.

As a proximal effect the magnetic survey starts to pick up a regional iron formation at the north-western limits of the grid. Values increase gradually with a northward trend. The Sherman Mine south pit is some 1400 meters to the north northwest.

A narrow lineament of magnetic highs travels northeast across the grid with a coincident conductive zone (Conductor C and C-1). At the east boundary another similar magnetic trend takes shape and continues east. There is no conductive association this time. These are mafic dikes that might be

associated with a horizon or layer within a larger unit of differentiated mafic gabbro.

At the centre of the grid is a collection of three isolated magnetic highs with spotty highs confined to an area of 10-30 meters. These could be pockets of magnetite as a boulder effect.

The remainder of the grid is relatively quiet which is typical for a metavolcanic suite.

The background is fairly quiet with most values falling in a 700-800 nT range. This is a typical response of metavolcanic sequences.

5.0 VLF Electromagnetic Survey:

A total of 13 km was surveyed for a total of 1300 readings taken at 10 meter stations on lines spaced at 50 meters.

5.1 Instrumentation: A Geonics EM-16 VLF-EM receiver (Ser. No. 7052358) was used for the survey. The in-phase and quadrature components were recorded using VLF transmitting station Cutler, Maine NAA transmitting at 24.0 kHz. The measured quantities are the in-phase and quadrature components of the vertical magnetic field measured as a percentage of horizontal primary field (read to a resolution of +/- 1%).

5.2 Survey Results: The results of the survey are presented in profile form on plans at 1:2500 scale.

The survey picked up a conductive trend, Conductor C and C-1 that strike more or less parallel with the local stratigraphy. It would appear that the responses are caused by an electrolytic source such as a water-filled fault containing salts however a coincident magnetic linear response puts a

question mark on that interpretation. The anomaly should be followed up to determine if a metallic source is present.

Conductor D is a weak response and is likely related to C.

6.0 CONCLUSIONS AND RECOMMENDATIONS:

One would expect that the magnetic survey would outline and map out a gabbroic rock unit prospective for nickel and copper given that the host rock is nearly void of magnetic responses. Historic reserves indicate 500,000 tons of low grade nickel and copper are indicated at the base of the gabbro intrusion. The survey seems to have only defined a linear or dike response at the north contact of the gabbro and host metavolcanic geology. This could be a more magnetic layer within the gabbro that marks the contact with the metavolcanic rock.

Because of the high frequencies used, VLF-EM surveys tend to pick up topographic and geological noise (overburden filled depressions) as well as prospective bedrock anomalies. In this survey the conductors would appear to be a fault or lineament associated with the Northeast Arm Deformation Zone however a coincident magnetic response may indicate a metallic source and thus requires follow-up work.

Further work:

Future work should explore for sulphides associated with the nickel and copper mineralization. An I.P. survey would detect disseminated sulphides below surface and therefore recommended. A HLEM could also be conducted to detect any massive or stringer sulphide occurrences.

Downhole geophysics is recommended to penetrate and explore at depth.

References

Geological Map #2361 OGS 1975 Geological Compilation Series 1in to 4
miles Sudbury – Cobalt Sheet

1978 Geologic Report N. 163 - Geology of the Northeast Temagami
Area - G. Bennett

CERTIFICATE OF AUTHOR

I, David Laronde of the town of Temagami, Ontario hereby certify:

1. That I am a geology technologist and have been engaged in mineral exploration for the past 34 years.
2. That I am a graduate of Cambrian College in Sudbury with a diploma in Geology Engineering Technology 1979.
3. That my knowledge of the property described herein was acquired by field work and documentation.

Dated at Temagami this 31st day of March 2014.

David Laronde