# KENNETH GUY <br> EXPLORATION SERVICES 



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# REPORT ON A GROUND MAGNETIC <br> AND <br> ELECTROMAGNETIC SURVEY <br> FOR <br> MILL CITY GOLD CORPORATION 

Whitney Township
Porcupine Mining Division

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## SUMMARY AND RECOMMENDATIONS

The Whitney township property of Mill City Gold Corporation is located in Whitney township, in the heart of the Porcupine gold camp. The property encloses a portion of favourable, gold bearing stratigraphy along strike from the most prolific gold mines in Canada.

The VLF-EM and magnetic surveys were successful in outlining a number of anomalies, one of which testing by previous holders returned $0.94 \mathrm{oz} /$ ton Au over 2.5 feet.

Five VLF-EM anomalies were detected of which two are rated high priority follow-up including the anomaly representing the gold occurence. Another is rated for additional follow-up of a lower priority. The other two are not recommended for additional testing.

The Mill City Gold Corporation, Whitney township project consists of three claims, 120 acres, in Whitney township, in the heart of the Porcupine gold camp.

The property lies between and on trend with the Hollinger - McIntyre, Coniaurium Mines sector, approximately three miles to the southwest and the Broulan - Hallnor - Pamour operations, $1 / 2$ to 2 miles to the east.

The property overlies rocks of the Tisdale group of volcanics which host the majority of the gold production of the Porcupine camp.

LOCATION AND ACCESS

The Mill City Gold Corporation, Whitney property is located in Whitney township, District of Cochrane, Porcupine Mining Division, Ontario. The property lies within the boundaries of the city of Timmins.

Access to the property is from Porcupine via an all weather gravel road, off Highway 101. The gravel road transects the property from southeast to northwest.

## PROPERTY

The claims covered in whole or in part are:

$$
\begin{array}{llll}
\text { P921774 } & \text { NE } \frac{1}{4}, N \frac{1}{2} & \text { L12 CV } \\
\text { P932117 } & \text { SW } \frac{1}{4}, N \frac{1}{2} & \text { L11 CV } \\
\text { P932116 } & \text { SE } \frac{1}{4}, N \frac{1}{2} & \text { L11 CV }
\end{array}
$$

Three contiguous claims, 120 acres.


In 1960-61, four holes were drilled on the property then held by James H. Dillon. The holes tested a west-northwest striking magnetic high. The best intersection averaged $0.94 \mathrm{oz} / \operatorname{ton}$ Au over 2.5 feet. Along strike to the west, south of the Mill City Gold western claim, an old shaft is located within the same zone.

In 1981 Rio Alto conducted magnetic and VLF-EM surveys over the property. No record of additional follow-up.

In 1983 Kidd Creek Mines conducted HLEM and magnetic surveys over the property. Two diamond drill holes were drilled. Assay data is not available but the logs indicate that sericite-carbonate alteration zones were intersected.

LINE CUTTING

A total of 2.8 miles of lines were cut on the three claims during June, 1987.

An east-west BLO was established along the common east-west claim line. Section lines were cut at 400 foot intervals. A Tie line was established on the south boundary to circumvent an open beaver pond.

The Very Low Frequency Electromagnetic (VLF-EM) survey was carried out utilizing a Geonics EM-16. Readings of both Inphase and Quadrature were taken every 100 feet, with an accuracy of $1 \%$ on both. The section lines were read utilizing the Cutler, Maine (NAA) transmission station operating at a frequency of 24.0 kHz . The base line and tie line were read utilizing the Annapolis, Maryland (NSS) transmission station operating at a frequency of 21.4 kHz .

A total of 2.8 miles of lines were surveyed during the VLF-EM survey conducted in June, 1987.

The magnetic survey was conducted utilizing a Geometrics G-816 proton precession magnetometer measuring the total magnetic field. Readings were taken every 100 feet along section lines, tie line and base line.

The intersection of the section lines on the base line served as a base station for monitoring diurnal drift. This method allows readings to be taken and corrected with an accuracy of one gamma.

A total of 2.8 miles of lines were surveyed during the magnetic survey conducted in June, 1987.

The magnetic data is presented as a contoured plan map (back pocket).

The VLF-EM data is presented as a profile plan map (back pocket).

## Magnetic Survey -

A magnetic high, up to 1,500 gammas above background, strikes westnorthwest through claims 932116 and 932117 , and immediately south of 921774. This zone represents the target of the 1960 drilling and hosted spherulitic volcanics with disseminated sulphides, including an intersection of 0.94 oz/ton Au over 2.5 feet. Drilling by Kidd Creek intersected ultramafic volcanics which are the likely cause of the magnetic anomaly. However, to the south of the ultramafic a sericite-carbonate alteration zone was intersected.

Another magnetic anomaly occurs in the northeast corner of 921774 where an east-west striking, 100 gamma, anomaly is detected.

## VLF-EM Survey

The VLF-EM survey detected five anomalies, designated 'A' through 'E' on the VLF plan map.

Anomaly A - One line VLF anomaly with slight magnetic flanking to the north. Probable non-bedrock source - low priority follow-up.

Anomaly B - This anomaly represents the natural gas pipeline paralleling the road - anomaly explained, no follow-up.

Anomaly C - One line anomaly with no magnetic correlation. Appears to correspond to a Kidd Creek HLEM anomaly, therefore it is likely of bedrock source. Additional follow-up is warranted.

Anomaly D - Three line anomaly, direct correlation with the magnetic high. On strike with the gold intersection and the reported shaft to the west. HIGH PRIORITY FOLLOW-UP IS RECOMMENDED.

Anomaly E - Four line anomaly, flanks to the south the magnetic trend associated with the gold occurence. It does not appear to have been directly tested previously, a Kidd Creek drill hole along strike to the east intersected a sericitecarbonate alteration zone.

HIGH PRIORITY FOLLOW-UP IS RECOMMENDED.

I, the undersigned, Kenneth Guy, residing at 180 Nadine Street, South Porcupine, Ontario graduated with a Bachelor of Science degree in Earth Science - Geology from the University of Waterloo, Waterloo, Ontario in 1978.

I have been employed in the field of Geology since graduation in 1978.

I am a fellow of the Geological Association of Canada.

I do not hold, nor do I expect to receive an interest of any kind in these claims held by Mill City Gold Corporation or in any other mining claims they may have.

The interpretations and conclusions are based on my experience with the Davidson-Broulan Project, Getty-Davidson Tisdale Joint Venture and other properties in the Timmins area.


Timmins, Ontario






