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**Assessment Work Report**

**Magnetometer Survey**

**Scholes Twp. Property**

**Scholes Township**

November 22, 2021 (revised Dec.8, 2021)

Author: David Laronde

**TABLE OF CONTENTS**

1.0	Summary
2.0	Property Description
3.0	Regional and Local Geological Settings
4.0	Location and Access
5.0	Magnetometer Survey
	5.1 Instrumentation
	5.2 Survey Results and Interpretation
6.0	Conclusions and Recommendations

**LIST OF FIGURES**

Figure 1	Location Map of Property	1:5,000
Figure 2	Claim and Grid Map	1:20,000

**LIST OF MAPS**

Map No.1	Magnetometer contour map of total field	1:5000
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**1.0 SUMMARY:**

From November 7 to 12, 2021, a magnetometer survey was carried out on the Scholes Twp. Property on behalf of claimholder Trefstone Corp. 49 Caroline Court, Sudbury, Ontario P3A 4H2.

David Laronde, 73 Lakeshore Drive, P.O. Box 482, Temagami, Ontario POH 2H0 performed the geophysical surveying and authored the report. A total of 12 km of grid line was established and surveyed. The grid lines were located with a modern Global Positioning System GPS unit Garmin Map 76 Csx capable of 5 meter accuracy. Stations were flagged at 25 meter intervals by Matt Steeves and David Laronde. Universal Transverse Mercator UTM coordinates were used as they relate to NAD 83 Zone 17.

The MLAS claim cells where the work was done are: 241542, 308894, 308895, 106435, 120660,251254, 315634, 183731, 131074, 195286, 330545, 289422,246017,314841.

The Legacy claims involved are 3014444, 3017117, 3017138, 4275001, 4275002, 4275003, 4275004.

**2.0 PROPERTY DESCRIPTION:**

Historically, the property was owned by Eagle Rock Mines and explored for Algoma type, oxide facies, iron formation within Archean greenstone capped by 800-100 feet of Nipissing diabase. Robust exploration from 1952-1961 using geophysics and drilling outlined a total of 330 million tonnes grading 26.9% sol. Fe (Burns 1966). There was a 1177 foot shaft sunk and 2,100 feet of lateral work, bulk sampling and metallurgical testing by North American Rare Metals Ltd., Rio Tinto Mining Co. and Eagle Rock Mines Ltd. Trefstone Corp. then staked the property in 2005.

The whole property today consists of 19 contiguous MLAS mining claim cells situated in north central Scholes Twp. (Note: some cell numbers are listed more than once since they are a part of multiple legacy claims) (the 7 legacy claims are listed below).

Legacy Claim Id	Township	Tenure ID	Tenure Type	Anniversary Date	Work Required
3014444	SCHOLES	330545	Single Cell Mining Claim	2022-08-19	400
3014444	SCHOLES	326691	Boundary Cell Mining Claim	2022-08-19	200
3014444	SCHOLES	251254	Boundary Cell Mining Claim	2022-01-17	200
3014444	SCHOLES	183731	Boundary Cell Mining Claim	2022-08-19	200
3017117	SCHOLES	330545	Single Cell Mining Claim	2022-08-19	400
3017117	SCHOLES	195286	Single Cell Mining Claim	2022-08-19	400
3017117	SCHOLES	183731	Boundary Cell Mining Claim	2022-08-19	200
3017117	SCHOLES	131074	Boundary Cell Mining Claim	2022-08-19	200
3017138	SCHOLES	330545	Single Cell Mining Claim	2022-08-19	400
3017138	SCHOLES	326691	Boundary Cell Mining Claim	2022-08-19	200
3017138	SCHOLES	239145	Boundary Cell Mining Claim	2022-08-19	200
3017138	SCHOLES	223418	Single Cell Mining Claim	2022-08-19	400
4275001	SCHOLES	315634	Boundary Cell Mining Claim	2021-12-30	200
4275001	SCHOLES	308895	Boundary Cell Mining Claim	2021-12-30	200
4275001	SCHOLES	308894	Boundary Cell Mining Claim	2021-12-30	200
4275001	SCHOLES	296173	Boundary Cell Mining Claim	2021-12-30	200
4275001	SCHOLES	241542	Boundary Cell Mining Claim	2021-12-30	200
4275001	SCHOLES	120660	Boundary Cell Mining Claim	2021-12-30	200
4275002	SCHOLES	298637	Single Cell Mining Claim	2021-12-30	400
4275002	SCHOLES	279964	Single Cell Mining Claim	2021-12-30	400
4275002	SCHOLES	231952	Boundary Cell Mining Claim	2021-12-30	200
4275002	SCHOLES	120660	Boundary Cell Mining Claim	2021-12-30	200
4275002	SCHOLES	120659	Boundary Cell Mining Claim	2021-12-30	200
4275002	SCHOLES	106435	Single Cell Mining Claim	2021-12-30	400
4275003	SCHOLES	314841	Single Cell Mining Claim	2021-12-30	400
4275003	SCHOLES	289422	Single Cell Mining Claim	2021-12-30	400
4275003	SCHOLES	279964	Single Cell Mining Claim	2021-12-30	400
4275003	SCHOLES	246017	Single Cell Mining Claim	2021-12-30	400
4275003	SCHOLES	120659	Boundary Cell Mining Claim	2021-12-30	200
4275004	SCHOLES	318748	Single Cell Mining Claim	2021-12-30	400
4275004	SCHOLES	289422	Single Cell Mining Claim	2021-12-30	400
4275004	BELFAST,SCHOLES	252853	Single Cell Mining Claim	2021-12-30	400
4275004	SCHOLES	246017	Single Cell Mining Claim	2021-12-30	400
4275004	SCHOLES	246016	Single Cell Mining Claim	2021-12-30	400

4275004 BELFAST,SCHOLES 233341 Single Cell Mining Claim 2021-12-30 400

### **3.0 REGIONAL AND LOCAL GEOLOGICAL SETTINGS:**

*Regionally the iron formation on the property occurs in Archean volcanic rocks which are covered by Huronian Cobalt Group sediments and Whitewater Group Nipissing diabase up to 1000 feet thick.*

*Locally the geological setting is characterised by northeast trending iron formation buried at 1000 foot depths by vertical to steeply dipping Nipissing diabase. Local fracturing and shearing is pervasive in low topography areas.*

**3.1 Mineral Deposit/Model Type:** *Gold associated with highly prospective iron formation similar to Golden Rose Mine 7 km to the west.*

**3.2 Reason for Exploration Work:** The objective of the work was to map prospective, subtle, magnetic low trends and magnetic characteristics of the underlying geology to help define any gold mineralization controlling structure.

### **4.0 LOCATION AND ACCESS:**

The property is within the Sudbury Mining Division with topographic reference NTS:41 I/16.

The topography on the property is generally steep-sided forested hills typical of the underlying Nipissing diabase terrain. It is well drained and rugged however several old logging roads that are now hunters and anglers trails provide good access to most places on the claims.

As the crow flies the property is located 75 km northeast of the city of Sudbury and is accessed by truck or SUV in a roundabout way. First take Hwy 805 northward from the hamlet of River Valley for a distance of 37 km to a bridge and a fork in the road. Take the right fork on a well

maintained road and travel along Manito and Emerald Lakes. From Emerald Lake continue northeast some 6 km to a right fork near Rachel Lake. From here the road is very rough and an ATV is recommended to continue eastward another 5 km to the claims. The road entrance is marked with a Gull Lake Road sign. The road enters the property from the west then continues across the property exiting at the east boundary.

## **5.0 MAGNETOMETER SURVEY:**

**5.1 Instrumentation:** Gem Systems GSM-19 overhauser magnetometers serial no. 58479 and 7052358 were used as field unit and base station for the survey. These units have an accuracy of +/- 1/100th of a gamma. 12.0 km was surveyed taking 960 readings at 12.5 meter intervals. The base station cycled at 15 second intervals and the data was used to correct for diurnal drift during the survey.

**5.2 Survey Results and Interpretation:** The results are presented in contour format on plans at 1:5000 scale.

The magnetic survey has outlined two prominent highly magnetic bodies with relatively well defined boundaries. The flanks and edges of these were surveyed for potential controlling structure as it relates to gold exploration.

West Body: This egg shaped feature is 800 meters in length and 325 meters at the widest spot. Intensity ranges up to 9300 nT above background with a mean value of 7000-9000 nT. These magnetic values are consistent with local banded iron formation and within a mafic intrusive.

East Body: Only the northeastern part or the “nose” of this strongly magnetic feature was covered with the survey. This response essentially mirrors the West Body with values approaching 9,000 nT above background indicating iron formation.

## **6.0 CONCLUSIONS AND RECOMMENDATIONS:**

The intense magnetic responses encountered are a signature trait of the underlying banded iron formation that is overlain by 800-1100 feet of Nipissing diabase.

For the intended purposes of this survey the highly magnetic iron formation and diabase influence seems to mask out any anticipated subtle low magnetic responses from close proximity fault structures. This is evident along the north flank of the western magnetic feature between L 59250 E and 59750 E where a prominent topographic low has little to no apparent magnetic low response. Due to the close proximity to the banded iron formation the only apparent magnetic response is the degrading magnetic values as distance from the iron formation increases.

Any further geophysical surveying to identify controlling structure should be electrical since the iron formation and diabase intensity is influencing magnetic responses for a few hundred meters beyond its physical boundaries. Test lines are warranted and recommended.

An induced polarization survey can benefit an exploration program in two ways. It will map the resistivity of any structure and scan for disseminated sulphide mineralization. The latter is known for its association with gold. The close proximity to the historic Golden Rose Mine 7 km to the west at Emerald Lake warrants it.

A second option for an electrical survey is a few test lines with a low cost VLF-EM survey in conjunction with a soil geochemistry survey.



In the future, a first derivative gradient magnetic calculation and associated mapping would benefit the search for subtle linear magnetic lows that may represent structure.

**References**

Geological Map #2361 OGS 1975 Geological Compilation Series 1in to 4 miles

Sudbury-Cobalt Sheet 1:250,000

Geological Map #2385 OGS 1973 Afton and Scholes Townships

Deposit MDI 41i16NE00036 - Ministry of Northern Development and Mines

Mineral Resources Circular No. 11-1968 Roman Shklanka pp 275,276

**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 41 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 22nd day of November 2021.



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David Laronde

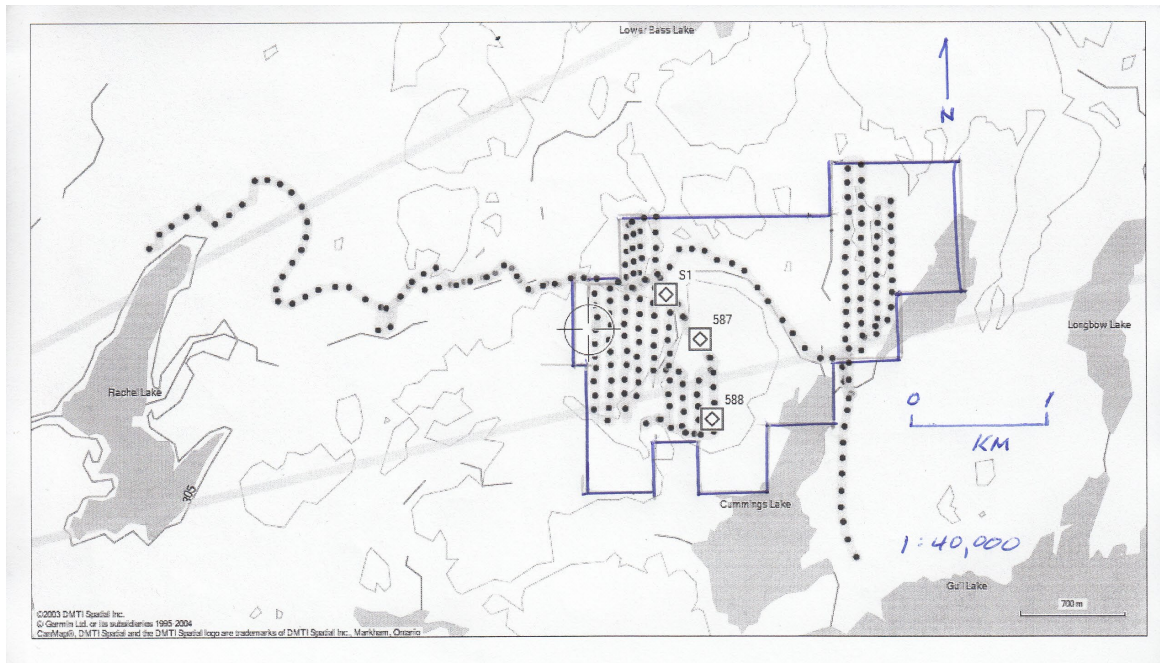


Figure 1 – Location Map – Scale 1:40,000

- GPS track
- Property Boundary

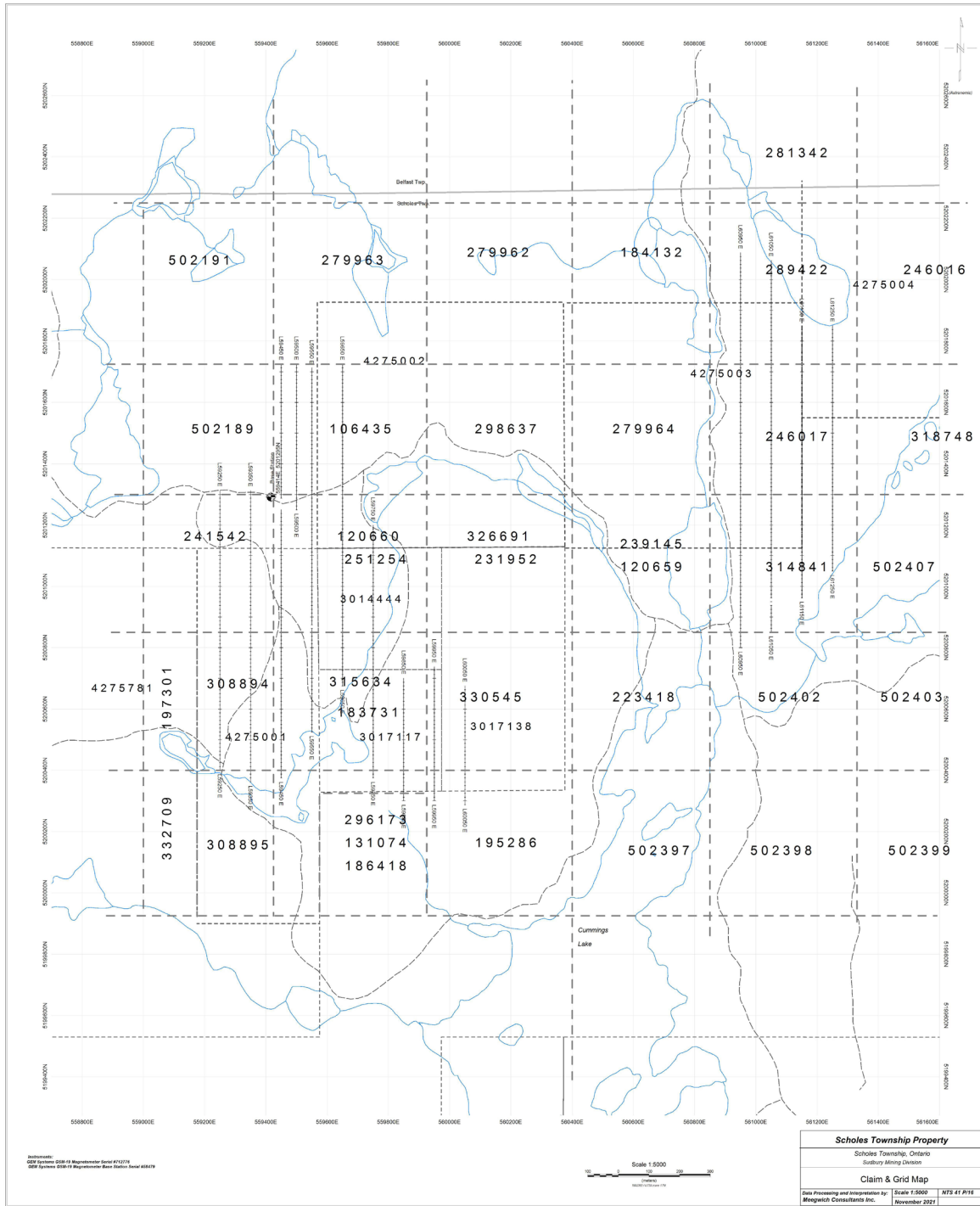
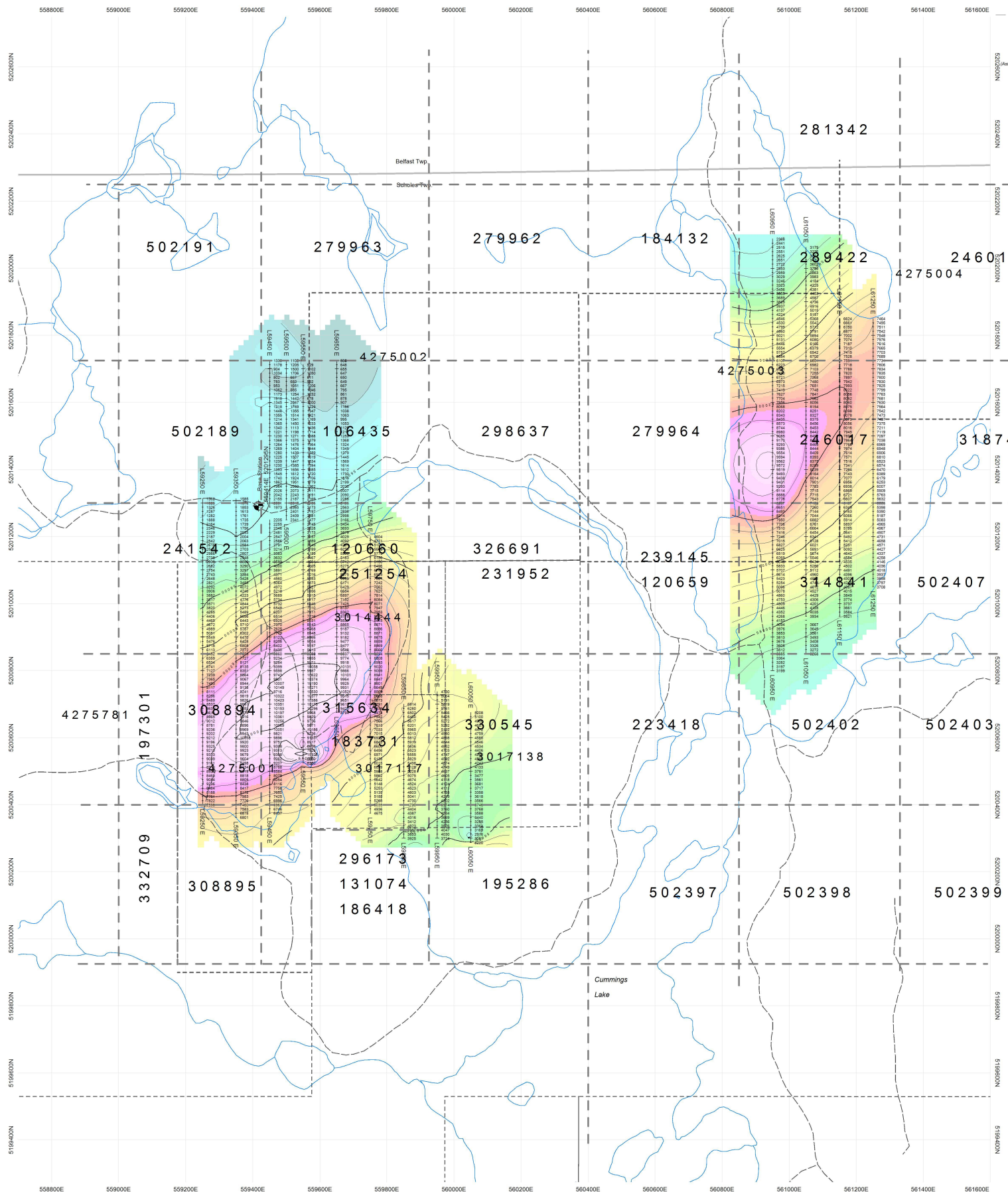
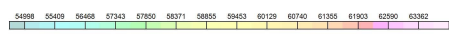


Figure 2 – Claim and Grid Map



Instruments:  
 GEM Systems GSM-19 Magnetometer Serial 9712776  
 GEM Systems GSM-19 Magnetometer Base Station Serial 858479



<b>Scholes Township Property</b>	
Scholes Township, Ontario Sudbury Mining Division	
<b>Total Field Magnetics</b>	
Contours	
Data Processing and Interpretation by: <b>Meegwich Consultants Inc.</b>	Scale 1:5000 November 2021
NTS 41 P/16	