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**PROSPECTING REPORT  
RJM GARNETS INC. PROPERTY  
MATTAWAN TOWNSHIP  
CLAIMS 4254069 AND 4271820  
APRIL 27, 2017**

Prepared for RJM Garnets Inc. by

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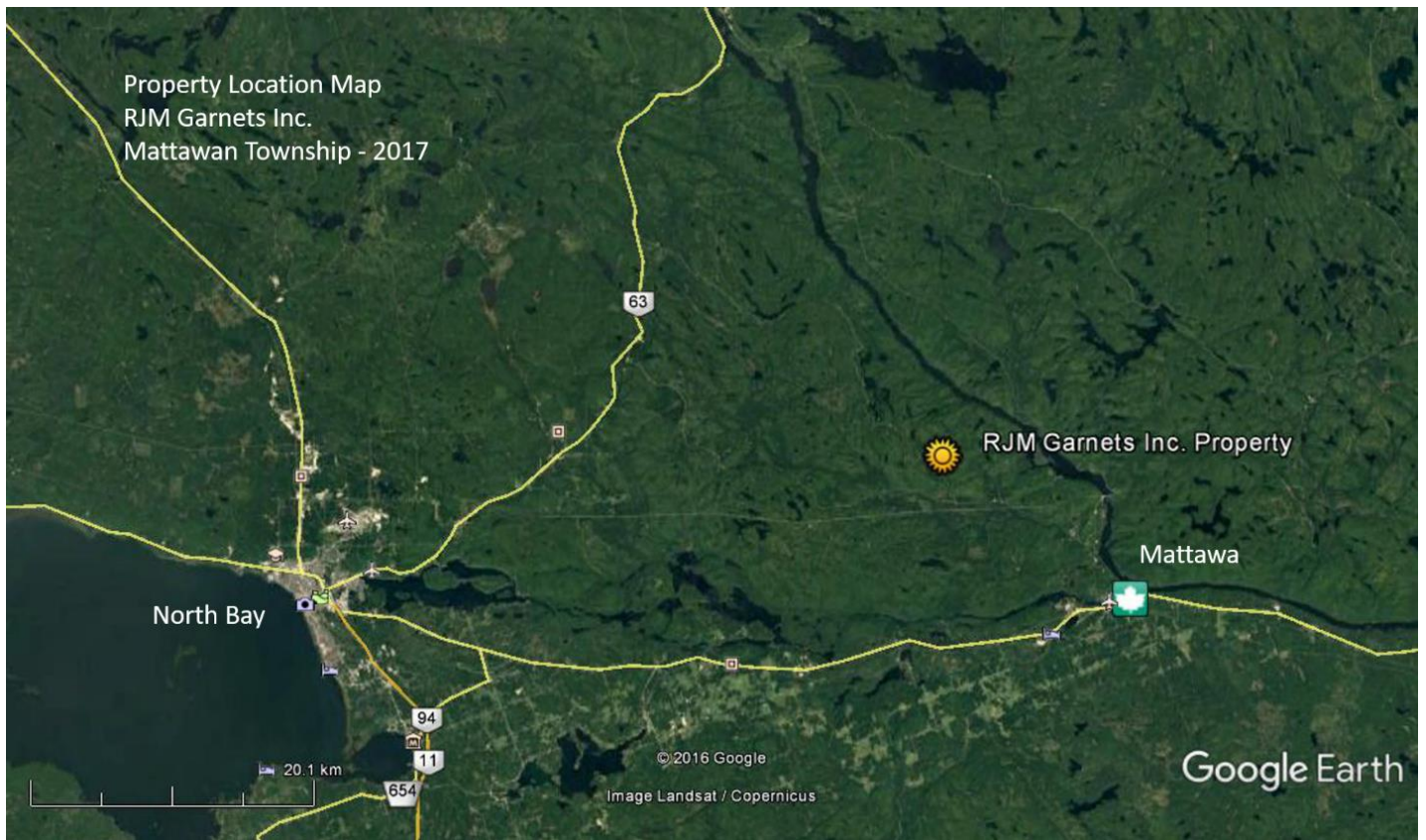
### Prospecting and Sampling Location Sketches

- Figure 01:** **Regional Location Map** – RJM Garnets Inc. Property, Mattawan Township – **pg. 3**  
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## **Introduction**

On April 27, 2017 the author, accompanied by Mr. M. Williams and Mr. R. Cross of RJM Garnets Inc. travelled to the RJM Garnets Inc. claims in Mattawan Township (Figure 01) to carry out initial prospecting of the north part of their claim block (figure 02). The author travelled 204 km from Alban, Ontario while Mssrs Williams and Cross travelled from Saskatchewan and Alberta, respectively to participate in the prospecting exercise.

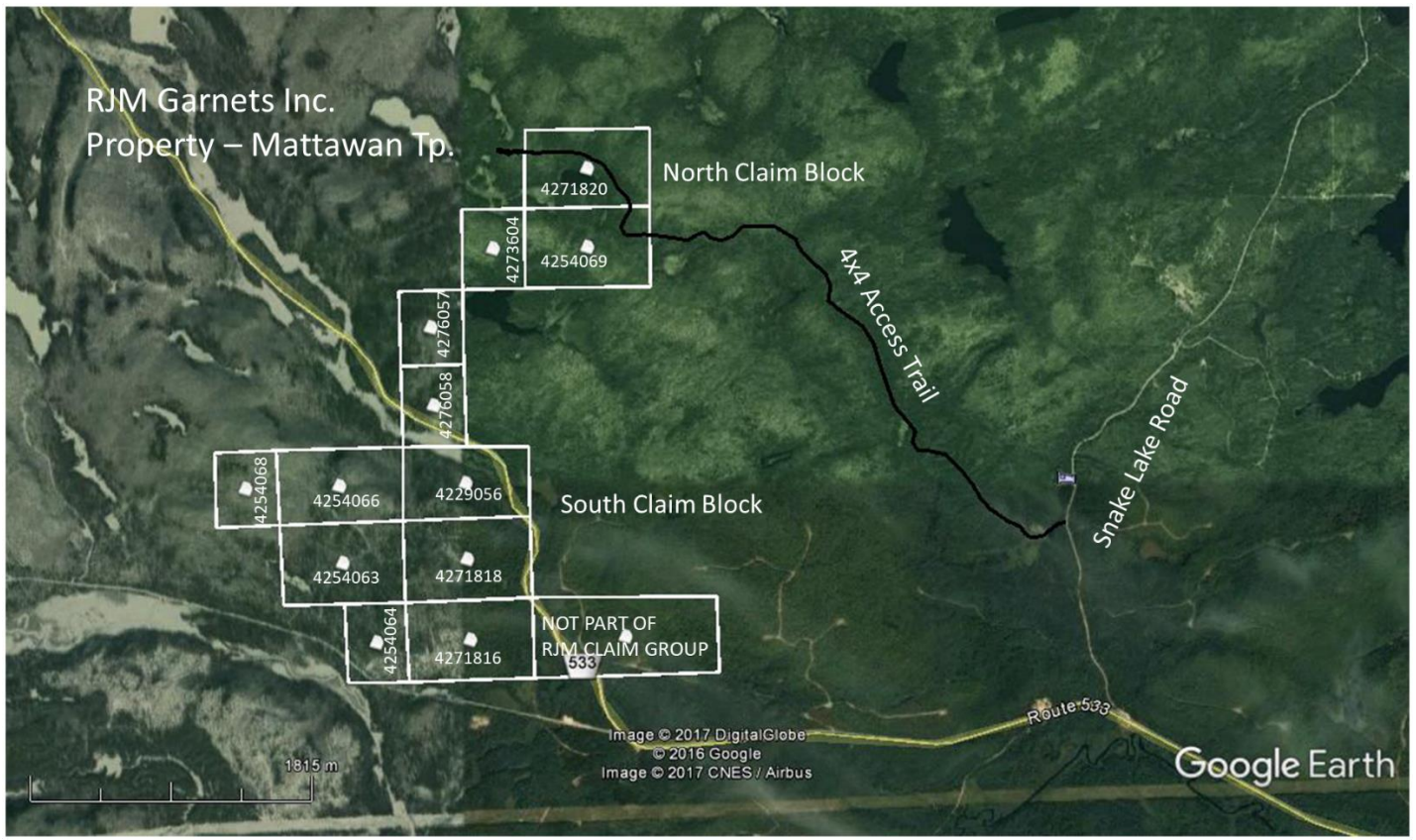
The purpose of the visit was to evaluate the area around a small pond located in the centre of claim 4271820 for the presence of economic concentrations of garnet in bedrock encountered during previous claim staking. Parts of claim 4254069 were prospected as well. All GPS readings were taken using UTM NAD87 datum settings on a Garmin GPSmap 76S unit.



**Figure 01.** Regional Location Map – RJM Garnets Inc. Property, Mattawan Township. Scale 1:530,000

## **Access**

Access to the property is from the Town of Mattawa, approximately 15 km north via Highway 533, which bisects the claim block. The north block of claims is accessible via Snake Creek Road off Highway 533 for 1.4km and then west or 4.2km via old forest access trails using all terrain vehicles (see figure 02).



**Figure 02.** Property Map showing access to North Claim Block. Scale 1:47,500

### **Prospecting Method**

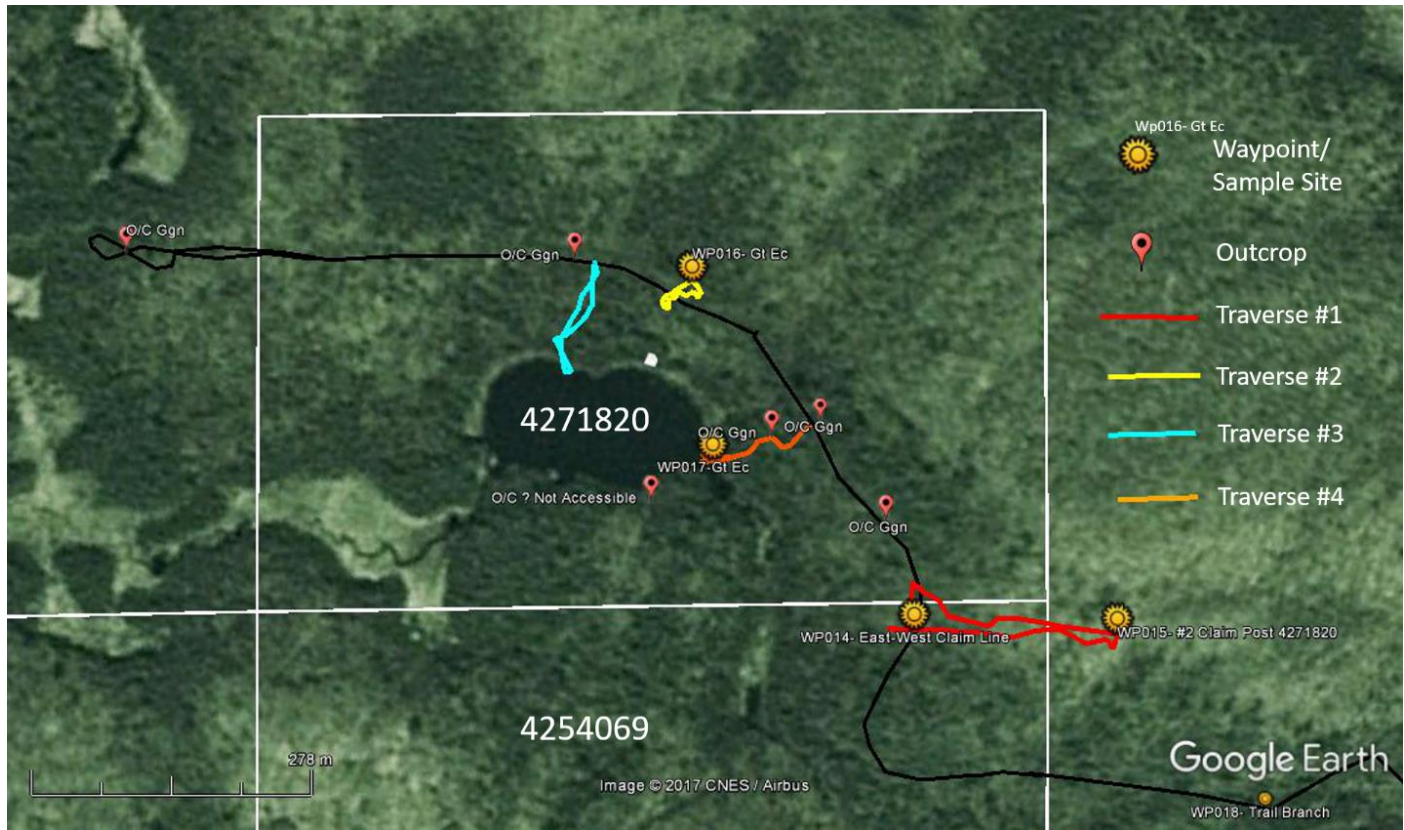
Prospecting was carried out by traversing and GPS-mapping of the old forestry trails and by foot pace-and-compass traverses off the main trails. All outcrop encountered was examined and documented. Outcrop of interest was hand stripped using a grub hoe and axe to expose the bedrock and rocks mineralized with garnet were GPS-mapped in and grab sampled.

### **Observations**

The area prospected has laterally extensive overburden coverage and outcrop occurs as isolated small knobs and low, discontinuous ridges. Due to time constraints, high water levels, unstable beaver dams and remnant snow in low lying areas, not all observed outcrop was visited and evaluated, but these areas were identified for future follow-up. The main area of interest located on the south side of small pond was inaccessible and will need to be evaluated later.

The main access trail and the foot traverses were mapped using GPS and pace-and-compass traverse methods (Figure 03). Where claim lines and posts were identified their locations were GPS-mapped as well. Two

showings of significant garnet mineralization were discovered (WP016- Gt Ec and WP017- Gt Ec) and sampled and several outcrops of “grey gneiss” were documented (figure 03).



**Figure 03.** Detail of trail and ground traverses and sample locations – April 24, 2017. Scale 1:7300

**Showing #1 WP016- Gt Ec: UTM 17T 663975E; 5141564N (NAD83)**

Located just north of the west fork of the main trail approximately 120m north of the east end of small pond, claim 2471820. Low knob of weathered, equigranular fine-grained, gritty, mafic rock with irregular blebs of fine-grained orange-red garnet throughout (Gt-Ec). Grey-white plagioclase porphyroblasts up to 3mm apparent but minerals generally fine-grained equigranular. Few well-developed structural or metamorphic textures, poorly developed gneissosity of garnet blebs and wisps. Visual estimate of 15% - 20% average, with localized concentrations up to 30%. SAMPLE WP016- Gt Ec.

**Showing #2. WP017- Gt Ec: UTM 17T 664001E; 5141383N (NAD83)**

Showing outcrops on the southeast shore of small pond, at north side of creek outlet, approximately 185m south of Showing #1 and 90m west of the main trail on claim 2471820. Similar in many respects to Showing

#1, but with some recognizable structural features evident as poorly developed gneissic fabric and crude alignment of garnet minerals in mafic mineral-dominant granular host rock. Thin, pale-grey plagioclase bands demonstrate gneissosity, which trends 065° to 078° and dips steeply to the southeast. Visual estimate of 25 - 40% garnet average, with localized concentrations up to 60%. SAMPLE WP017- Gt Ec.

### **Local Geology**

Several small exposures of “grey gneiss” (OC /Ggn) were observed along the trail and traverse lines and were examined. Most exposures were small and examination was limited to measuring gneissic texture and identifying main mineral types and their concentrations. Grey gneiss appears to be common in the area and may make up a significant part of the underlying bedrock. It shares both mineralogical and structural similarities with meta-anorthosite gneiss present throughout much of the Grenville geologic province.

### **Conclusions and Recommendations**

Work done by previous claim holders, (Komarechka, R., 2002, 2008) identified significant garnet concentrations in eclogitic and amphibolitic rocks south of small pond. The prospecting program carried out on 27 April, 2017 was unable to access this area to verify and sample the documented occurrences due to high water levels.

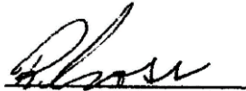
Reconnaissance traverses of the accessible areas around small pond resulted in the discovery of two previously unknown areas of significantly enriched garnet mineralization in what are believed to be eclogitic host rocks. The extent of the two, new garnet mineralized zones is unconstrained.

1. Further prospecting of the area north and south of small lake should be made a priority.
2. Stripping of the two new occurrences should be completed to try and determine the relationship between country rock and mineralized rocks and the extent of garnet mineralization.
3. Select samples should be collected to be analysed for precious-base metal content related to Cu-Ni-PGM mineralization as seen associated with anorthosite rocks elsewhere in the Grenville.
4. Select samples of the unusual eclogitic-type garnetiferous mafic rocks should be collected and analysed to try and determine their pre-metamorphic origin. It is possible the garnetiferous, eclogitic-type rocks may be intrusive, related to older lamproitic or kimberlitic intrusive/extrusive events.
5. Previously identified garnet-mineralized areas south of small lake should be re-defined and, if warranted stripped and sampled as well.
6. Larger (25kg) Samples of mineralized material from the two new garnet occurrences should be collected and analysed to determine garnet grade and the garnet’s suitability as an abrasive.



**Jim Ireland**

**May 30, 2017**



**Rodney Cross**

**May 30, 2017**



**Marty Williams**

**May 30, 2017**

**Referenced Bibliography**

Komarechka, Robert, G.  
2002, Geological Report - Tower Lake, Discovery Hill and Bangs Lake Areas,  
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Komarechka, Robert, G.  
2008, Cursory Geological Report – Tower Lake and Bangs Lake Areas,  
Mattawa Township. Submitted on behalf of BMCTBG (Assessment Report  
Mattawan twp. – Sudbury District Resident Geologist's Office)

**Figure 04.** Scanned copy of participating prospector's signatures, verified by author.