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# PROSPECTING REPORT RJM GARNETS INC. PROPERTY MATTAWAN TOWNSHIP CLAIMS 4254069 AND 4271820 August 13, 2017

Prepared for RJM Garnets Inc. by

Jim Ireland, Consultant Ranger Bay Consulting

Appendix:

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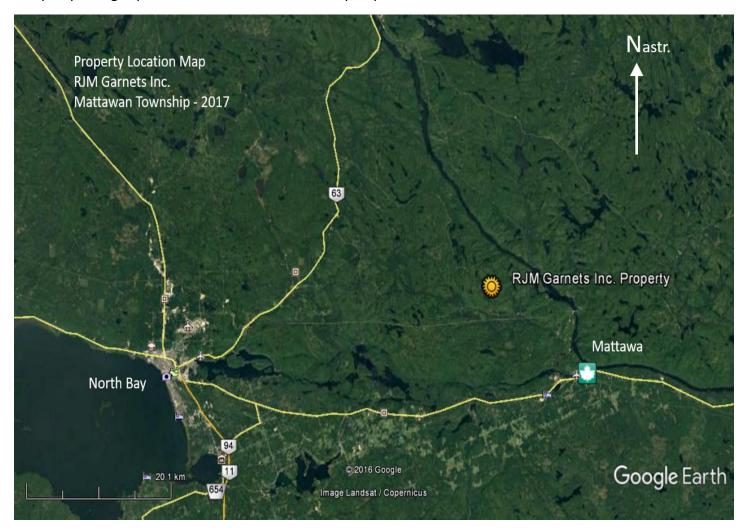
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#### Introduction

On August 13, 2017 the author, accompanied by Mr. R. Cross of RJM Garnets Inc. travelled to the RJM Garnets Inc. claims in Mattawan Township (Figure 01) to carry out additional prospecting of the north part of their claim block (figure 02). The author travelled 191 km from Alban, Ontario while Mr. Cross travelled xx km within Ontario from Edmonton, Alberta 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 exploration activities in the area. Areas that were inaccessible during the previous visit on April 24, 2017 were the focus of this prospecting trip. Parts of claim 4254069 were prospected as well.



<u>Figure 01.</u> Regional Location Map – RJM Garnets Inc. Property, Mattawan Township. Scale 1:530,000

All GPS readings were taken using UTM NAD83 datum settings on a Garmin GPSmap 76S unit. Due to extensive top canopy cover, only a few GPS coordinates were obtained during the traverse. Most locations were plotted using pace-and-compass methods.

#### 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 Lake Road off Highway 533 for 1.4 km and then west for 4.2km via old forest access trails using all terrain vehicles (see figure 02).



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

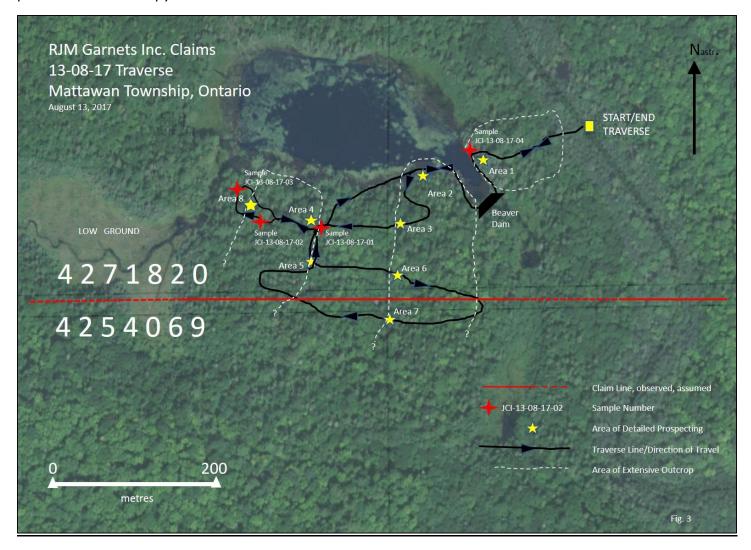
#### **Prospecting Method**

GPS-mapping of the old forestry access trails was done in April of 2017. Prospecting was carried primarily by pace-and-compass traverse. 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 with significant garnet content were mapped in and grab sampled. Samples were shipped to SGS Lakefield Research Limited for analysis. Analytical results were pending at the time of writing.

#### **Observations**

Areas rendered inaccessible in April 2017 due to high water levels, unstable beaver dams and remnant snow in low lying areas were accessed and evaluated. The area prospected has laterally extensive but thin overburden coverage and outcrop occurs as isolated low rock knobs and low to moderate, discontinuous ridges up to 20m in height. Vegetation is dominated by mature and immature stands of hardwood, including Beech, Maple, Aspen and minor Oak. Minor mature White pine, Red pine and Black spruce are scattered throughout the forest.

The foot traverse was mapped using a combination of pace-and-compass traverse and GPS mapping methods (Figure 03). Where claim lines and posts were identified their locations mapped. Several showings of significant garnet mineralization were documented (e.g. <u>JCI-13-08-17-01</u>, <u>JCI-13-08-17-02</u>) and sampled and several outcrops of variably garnetiferous "grey gneiss" were documented (figure 03). UTM coordinates are provided where canopy cover allowed.



**<u>Figure 03</u>**. Detail of ground traverse and sample locations – August 13, 2017. 1:5700

#### AREA 1: Sample JCI-13-08-17-04. WP017- Gt Ec: UTM 17T 664001E; 5141383N (NAD83)

Originally documented as showing WP017-Gt Ec. on April 24, 2017. Located on the southeast shore of a small pond, north side of creek outlet, approximately 110m west of the main trail on claim 4271820. Recognizable structural features include poorly developed gneissic fabric and crude alignment of garnet minerals in a grey, amphibole-plagioclase, granular host rock. Thin, discontinuous, pale-grey plagioclase bands demonstrate gneissosity, which trends 065° to 078° and dips steeply to the southeast. Visual estimate of 25 - 40% fine-grained garnet average, with localized concentrations up to 60% garnet.

#### AREA 2: UTM 17T 663955E; 5141358N(NAD 83); Includes AREAS 3, 6 and 7;

Following the shore line from the beaver dam at the east end of the small pond, a continuous outcropping of garnet-poor, grey amphibolite gneiss is the dominant rock type. At Area 2, significant garnet (>10%) becomes evident. Area 2 represents the north end of a prominent north-south ridge (up to 20m high) of grey gneiss extending over 200m to the south of the shoreline. This ridge was examined in detail at Areas 3, 6 and 7. The best exposures are found at Areas 6 and 7, where the boundary between garnetiferous gneiss and barren grey gneiss is well defined. The garnet-bearing rock is exposed on the west edge of the ridge and extends up to 8m eastward, where it transitions abruptly into barren amphibolite gneiss. Contact relationships are not obvious. The ridge was followed south into claim 4254069 (Area 7). The garnet concentrations average 10 - 15% - no samples were taken.

#### AREAS 4 and 5: 100m South and 75m West of AREA 2; SAMPLE JCI-13-08-17-01;

A low outcrop of garnet-pyroxene-amphibolite gneiss trending 195° and dipping 065°E is exposed, forming the east edge of a low, north-south ridge that extends north to the small pond 100m to the north and south 100m to the claim line separating 4271820 from 4254069. The outcrop contains abundant fine-grained garnet occurring as discrete bands, lenses and isolated grains that comprises about 50% of the rock on average. Large pseudomorphic pyroxene phenocrysts up to 30mm make up the rest of the rock mineralogy. Sample was collected across a discontinuous face of 20m, from Areas 4 and 5.

#### AREA 8: 75m to 110m West of Area 4. SAMPLE JCI-13-08-17-02 and SAMPLE JCI-13-08-17-03;

A short, 75m traverse west from AREA 4, across the axis of the low north-south trending ridge led to a well exposed, west facing ridge face comprised of garnet-pyroxene-amphibolite gneiss. Garnet content was equal to or greater than the rocks observed on the east side of the ridge – Sample JCI-13-08-17-02. Style of mineralization is identical to rocks observed in Area 4; abundant coarse-grained pseudomorphic pyroxene with bands, lenses and disseminations of fine-grained garnet. The ridge line was followed northwest about 25m to a prominent outcrop of garnet-pyroxene-amphibolite gneiss. The ridge, made up entirely of garnet-pyroxene-amphibolite gneiss, is approximately 20m high at this point, dropping to the west. Sample JCI-13-08-17-03 was collected at this site.

#### **Conclusions**

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.

The area of interest was accessed on 13 August 2017 and prospected for garnet mineralization (figure 3). Many of the previously documented sites with extensive garnet mineralized areas were identified and confirmed qualitatively. Samples of the highest grade garnetiferous rocks were collected and delivered to SGS Canada Inc. facilities in Lakefield, Ontario. Analyses are pending. The extent of the significant garnet mineralized zones is unconstrained due to thin but extensive overburden. A route for mechanized equipment to access the mineralized areas on claims 4271820 and 4254069, south of small lake will be required to evaluate the extent of mineralization.

#### **Recommendations**

- 1. Further prospecting of the area north and south of small lake should be made a priority.
- 2. Stripping of the confirmed occurrences should be completed to try and determine the relationship between country rock and mineralized rocks and the extent of high-grade garnet mineralization.
- 3. 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.
- 4. Previously identified garnet-mineralized areas north and south of small lake should be better defined and stripped, mapped out and sampled.

# APPENDIX: Summary of Expenditures Related to Prospecting Trip, 13 August, 2017

## 3A Dates and Costs of Work Performed

From Date	To Date	Work Type	Unit of Work	Cost per Unit of Work	Actual Costs (\$)	Time-adjusted Credit (\$)
2017-08-13	2017-08-13	Prospecting	Per day	150.00	300.00	300.00

# 3B Associated Costs

From Date	To Date	Associated Costs	Actual Costs (\$)	Time-adjusted Credit (\$)
2017-08-09	2017-08-10	Consultation- Project Planning@ \$40/hr - 3 hrs	120.00	120.00
2017-08-13	2017-08-13	Consultation- Field Oversight@ \$40/hr - 12 hrs	480.00	480.00
2017-08-24	2017-09-06	Consultation- Report and Maps@ \$40/hr - 9 hrs	380.00	380.00
2017-08-13	2017-08-13	Supplies, flagging, sample bags, etc.	25.00	25.00
2017-08-13	2017-08-13	Rental truck, trailer and 2 ATV's	575.00	575.00

# 3C Transportation Costs

From date	To Date	Transportation Costs	Actual Costs	Time-Adjusted Credit
2017-08-07	2017-08-19	Air Travel, Edmonton to North Bay- @ 60% of \$698 (Ontario Portion)	419.00	419.00
2017-08-07	2017-08-19	Road Travel; North Bay to Mattawa(x2); North Bay to Peterborough, return, to deliver samples to SGS Canada Inc. 872km @ \$0.50/km	436.00	436.00
2017-08-13	2017-08-13	Road Travel, Alban to Mattawa, return 372 km @ 0.50/km	186.00	186.00

# 3D Food and Lodging Costs

From date	To Date	Food and Lodging Costs	Actual Costs	Time-Adjusted Credit
2017-08-07	2017-08-19	Accommodation and Meals, all	600.00	600.00
		inclusive, 3 days @ \$200/day		

August 13, 2017

Prospecting Report Mattawan Township

Jim Ireland

**Rodney Cross** 

August 31, 2017

August 31, 2017

#### **Referenced Bibliography**

Komarechka, Robert, G.

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

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.