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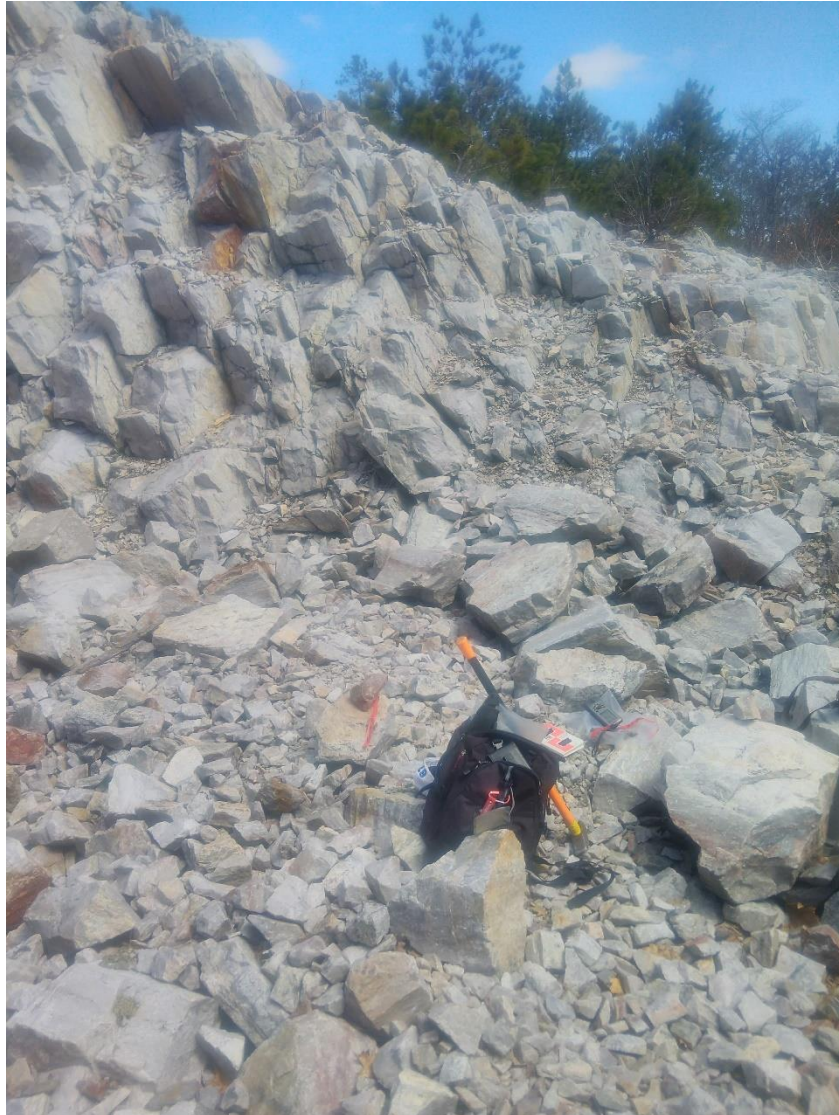
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# Wavy Lake Silica Property May 3, 2019 Property Visit

Eden Township, Sudbury Mining Division



Prepared by:  
M. Gaudreau,  
May 14, 2019

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# WAVY LAKE SILICA PROPERTY

## INTRODUCTION

On May 3<sup>rd</sup>, 2019, Don Fudge traveled from North Bay to Sudbury, picked up Marc Gaudreau and drove to the Eden Lake Silica Property. The intent of work performed in this report was to determine if gold occurs on the Wavy Lake Property (Property). The focus of the field travers was to resample the historical bulk sample area where now visible rusty sulfide occurs after years of weathering and to sample contacts of previously mapped rock units on the outer perimeter of the >90% purity silica body.

## LOCATION & ACCESS

The Property is located in the central east portion of Eden township in the District of Sudbury. It is located at a latitude of 46° 19' and longitude of 81° 05'.

Access to the area can be obtained by driving 27 kilometers south of Sudbury on Long Lake Road, Tilton Lake Road and Wavy Trail. One kilometer down the Wavy Trail after the turnoff from the Tilton Lake Road a trail 2.3 km. long leads eastward to the area. For this study a partially overgrown bulk sample access road located north of the Wavy Lake North Shore Road was used.

## PROPERTY TENURE

SUDBURY Mining Division – Don Fudge, 2019 Property claims

Township	Cell Claim Number	Recording Date	Due Date	Bdy. Cell	Percent	Work Required
EDEN, TILTON	313434	10/04/2018	08/06/2019	N	100%	\$400
EDEN, TILTON	288936	10/04/2018	08/06/2019	N	100%	\$400
EDEN	296196	10/04/2018	24/06/2019	N	100%	\$400
EDEN	143338	10/04/2018	24/06/2019	N	100%	\$400
EDEN	138190	10/04/2018	24/06/2019	N	100%	\$400
EDEN	150809	10/04/2018	24/06/2019	N	100%	\$400
EDEN	254126	10/04/2018	21/09/2019	Y	100%	\$200
EDEN	127691	10/04/2018	21/09/2019	Y	100%	\$200
EDEN	180063	10/04/2018	21/09/2019	Y	100%	\$200
EDEN	277394	10/04/2018	24/06/2019	Y	100%	\$200



Figure 1: Way Lake Silica Property - Ontario Key Location Map

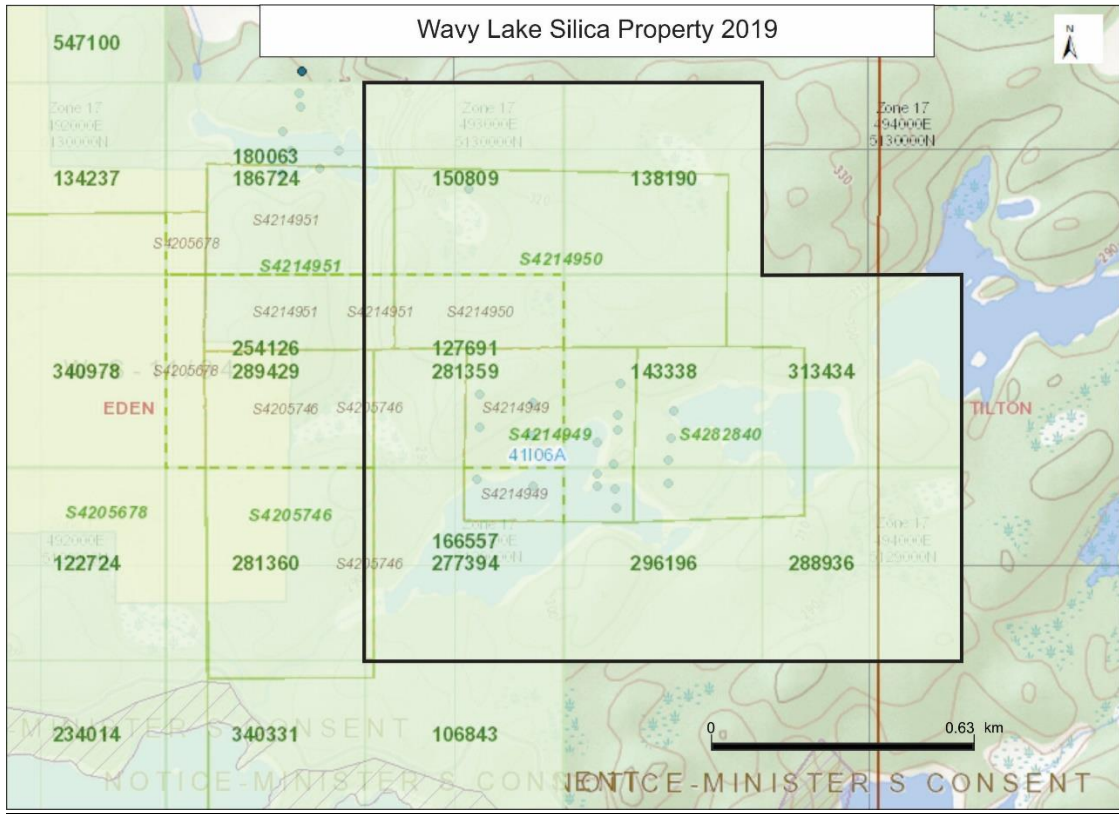


Figure 2: Property Location Map 2019

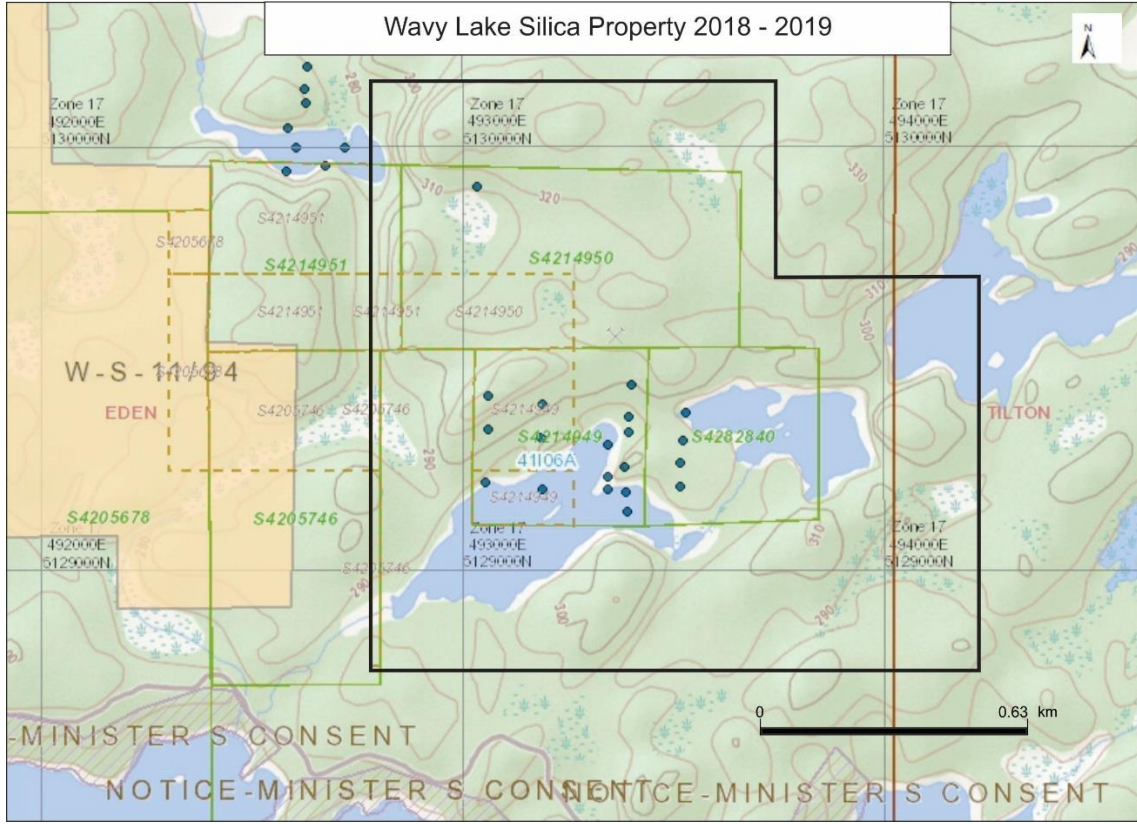


Figure 3: Property Claim Map 2018 -2019

## PREVIOUS WORK DONE BY OTHERS

Work outside of these claims has been done on the nearby past producing Long Lake Gold Mine and various exploration work to examine a nearby extension of the Copper Cliff Offset, but aside from that, in the immediate area of this work, the following has been done;

1966: Geologic thesis mapping (see Spaven, HR in references section)

1975: Mapping by the OGS in (see Card, KD in references section)

Previous past claim staking in the area was also noted.

## REVIOUS WORK DONE BY ROBERT KOMARECHKA

1991: Geologic mapping, B. Komarechka.

1992: Geologic mapping, B. Komarechka.

1992: Percussion Drill Evaluation, B. Komarechka.

1993: Trail construction, stripping, analysis of drill cutting, bulk sampling.

2000: Beep Mat Study, B. Komarechka.

2010: Recutting of claim lines, B. Komarechka.

2011: Silica assays of bulk sampled material on site, B. Komarechka.

## GEOLOGY

### Regional Geology

The area of study represents a portion of the western contact of the Eden Lake Granite with the Proterozoic Huronian rocks of the Lorrain formation.

Generally the Lorrain formation in the area, adjacent to the earlier Gowganda formation to the west, grades from a pink arkosic quartzite into a tan massive aluminous quartzite, then into a massive to banded green alumina rich orthoquartzite, then into orthoquartzite with red bands of hematitic quartzite, then into areas of orthoquartzite and cherty orthoquartzite, containing occasional reddish hematitic swirls. The highest values of silica appear to occur in the last two rock types.

From the results of previous mapping and assay results it is apparent that the occurrence of the last two members of the upper Lorrain appear along a parallel trend that matches the Gowganda Lorrain contact as indicated in OGS map 2299. Unfortunately, this contact is not continuous due to intrusions of Nippising Diabase and later Eden Lake Intrusives. In addition, alteration due to local thermal effects from these intrusions, their metasomatic alterations and small scale structural movements and folding add complexity to the geological picture.

Past field observations suggest that the Eden Lake Granite frequently intruded along pre-existing (Nippising) diabase intrusions within the Huronian

metasediments. This resulted in partial assimilation and occasional brecciation of the surrounding diabase and quartzites. A result of this assimilation is the production of a hybrid rock noted as grey granite on the map. This rock is frequently encountered along the contact of the Huronian metasediments and the Eden Lake Granites and is gradationally with the latter.

The intrusion of the Eden Lake Granite and the tectonic effects of the nearby Grenville Front resulted in numerous local faults and minor local displacements. Generally, the more siliceous quartzites reacted to this by brittle fracturing while the more argillaceous metasediments responded by plastic deformation as evidenced by their highly variable dip and strike.

*\*Circa - B. Komarechka*

### Geology of the Sampled Area

The sampled area is located in the easternmost extension of an east west band of primarily white cherty orthoquartzite believed to represent the upper Lorrain Formation. This area has been labeled as Zone 3 in previous assessment reports by B. Komarechka and others.

The northern contact of this zone appears to change gradationally to an interbedded unit of narrow orthoquartzite, feldspar rich quartzite and arkosic bands. This area generally weathers recessively compared to the orthoquartzite and is bounded to the north by a combination of primarily diabase, followed by grey granite and gneissic metapelite. These last three rock type form a prominent ridge paralleling zone #3 to the north. Eden Lake Granite is also found in some areas but generally not in the immediate sampled area.

The northern contact of the orthoquartzites as shown on the Geology map is poorly defined as most of this area is covered by overburden. In addition, the contact, in some areas, appears to be nonlinear due to some local folding and displacement. Despite the above, the contact was drawn to show the maximum southern extension of orthoquartzite having +90% silica content. Locally some variations from this contact line may be expected.

The southern contact of this zone appears to change abruptly along the base of a high east-west ridge of primarily grey granite. This somewhat undulating contact appears to be pushed northward along lobe shaped areas of granite intrusions. To the east of this contact the enclosing rocks change from a grey granite to a gneissic metapelite. These rocks show a highly variable strike and dip orientation along the contact. This may represent an area of plastic deformation. A small area of Eden Lake pink granite occurs along the contact in the southwest corner of the map area, but generally this rock is more common in the center of granitic bodies.



The southern contact seems to be well defined along the base of the above mentioned ridge but due to the lack of outcrop between the contact and the high quality silica orthoquartzite bedrock exposed to the north (between lines 3+71W and 1+20W) and due to the possibility of the westward extension of a large waste band, drill proven reserves were calculated for only part of this area.

Several variations in quality are found along the strike length of Zone #3. The purest area of this zone is generally white, cherty with occasional reddish hematitic swirls. The silica content of this area from a percussion chip analysis averages 94.53%. In the southwestern part of this zone there is a slight reduction of the silica (estimated 91 - 92% silica) content due to the presence of a series of parallel thin 1/16" - 1/2" micaceous seams, some minor granitic bands and some boudinaged granite and diabase trains.

*\*Circa - B. Komarechka*

The 2019 sample program is intended to confirm if gold is associated with selected rusty seams where the bulk sample was taken and geological rock contacts where previous sampling was not assayed for gold.

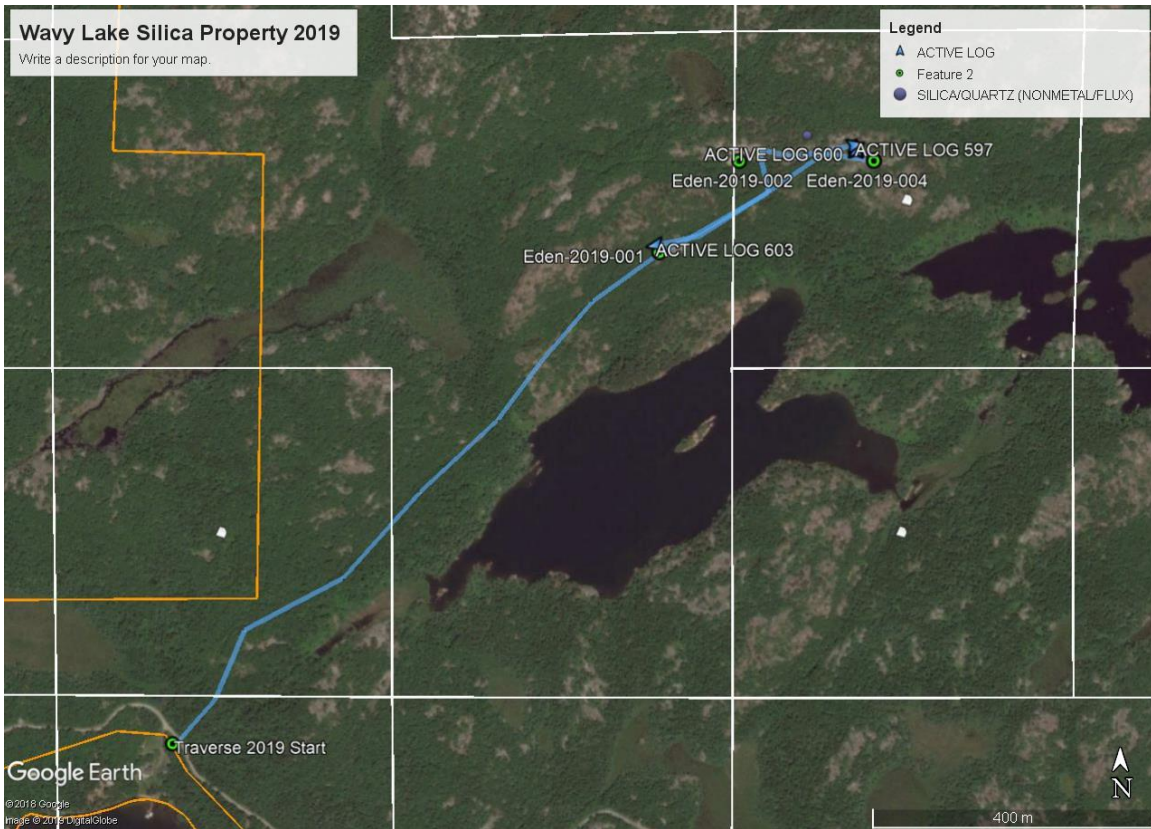
## DESCRIPTION OF FIELD ACTIVITIES

### Sample Collection

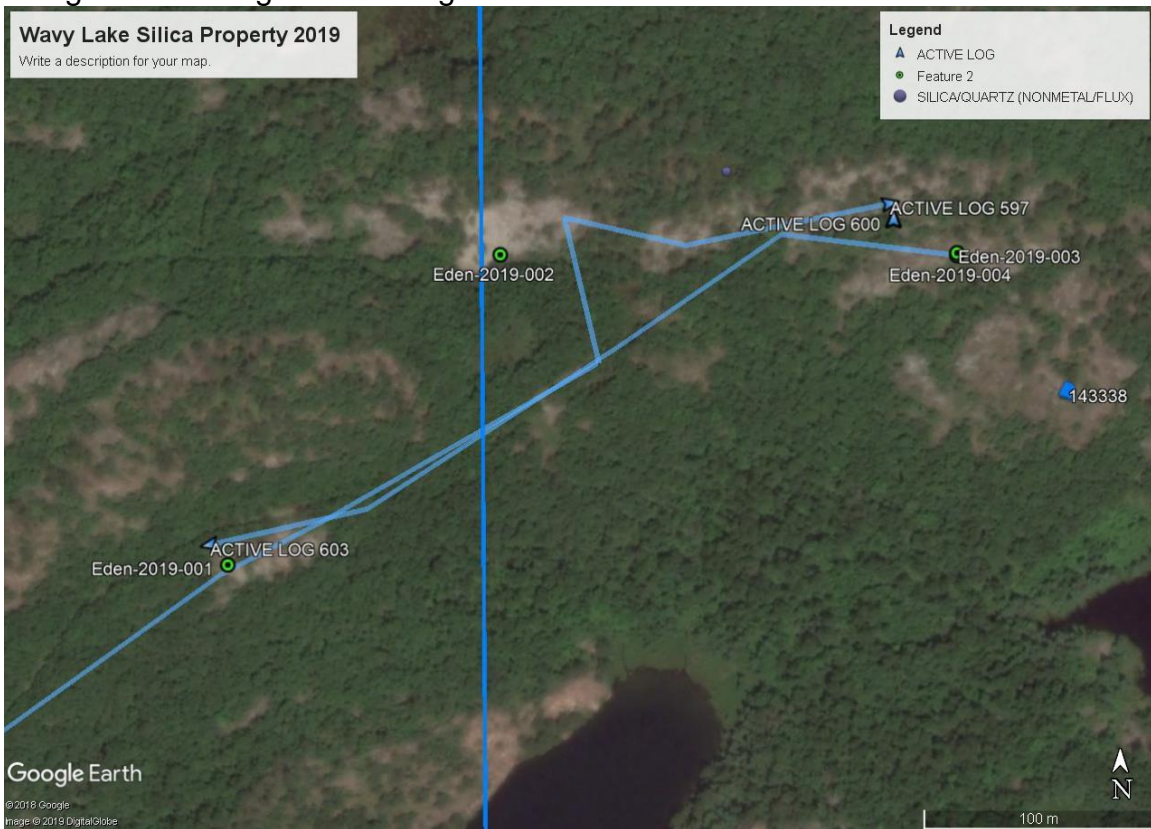
A field visit to collect samples for assaying was undertaken by the claimholder Don Fudge and field assistant, Marc Gaudreau on May 3<sup>rd</sup>, 2019. A total of 4 samples were collected from selected outcrops that had silica content in the 90% range, rusty seam and on or near the contact of rock units.

The 4 collected samples were labeled, examined and delivered to AGAT laboratories in Sudbury for a 30 gram gold fire assay analysis. See attached assay certificate.

Map Point	Easting NAD 83 UTM Zone 17	Northing NAD 83 UTM Zone 17	Sample #	Rock Type
1	493160	5129397	Eden-2019-001	Orthoquartzite
2	493272	5129524	Eden-2019-002	Orthoquartzite
3	493459	5129524	Eden-2019-003	Arkose
4	493459	5129523	Eden-2019-004	Metasediment



Google Earth Image of track log from start to end of travers.



Google Earth Image of sample locations on claims 127691 and 143338.

## Sample Descriptions

Eden-2019-001: Faintly light grey to tan white orthoquartzite, fine grained, with silicified matrix, having minor feldspathic fragments and minor muscovite, estimated 90-95% quartz.

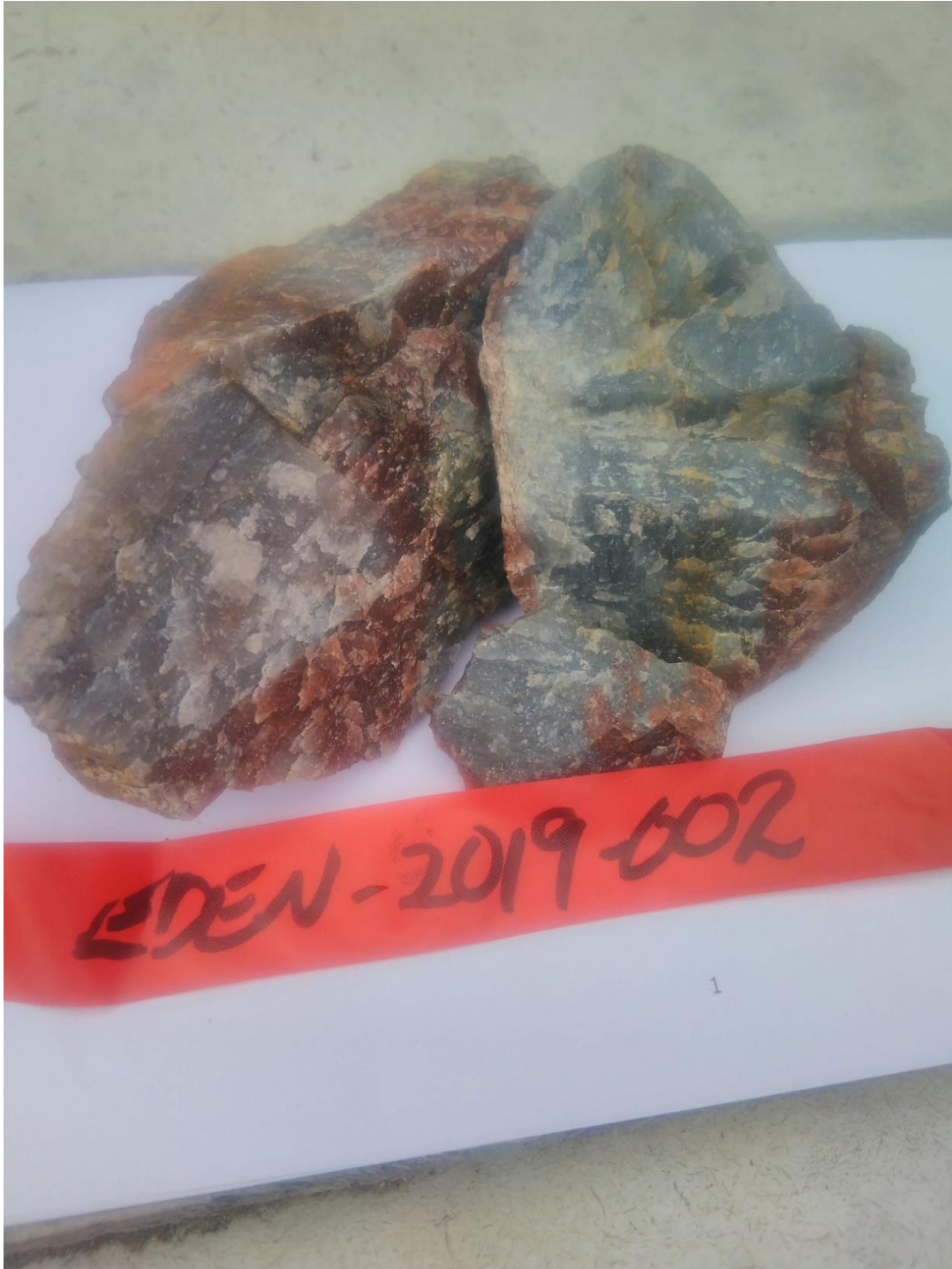


Sample: Eden-2019-001



Sample: Eden-2019-001

Eden-2019-002: Similar to Eden-2019-001 but having a darker grayish colour quartzite, fine grained, with silicified matrix, having minor feldspathic fragments and minor muscovite, estimated 90-95% quartz. Section of rock selected from strongly hematized seam. Hematite staining appears as brown to red patches within and rusty on fracture faces where weathered out small vugs occur.



Sample: Eden-2019-002

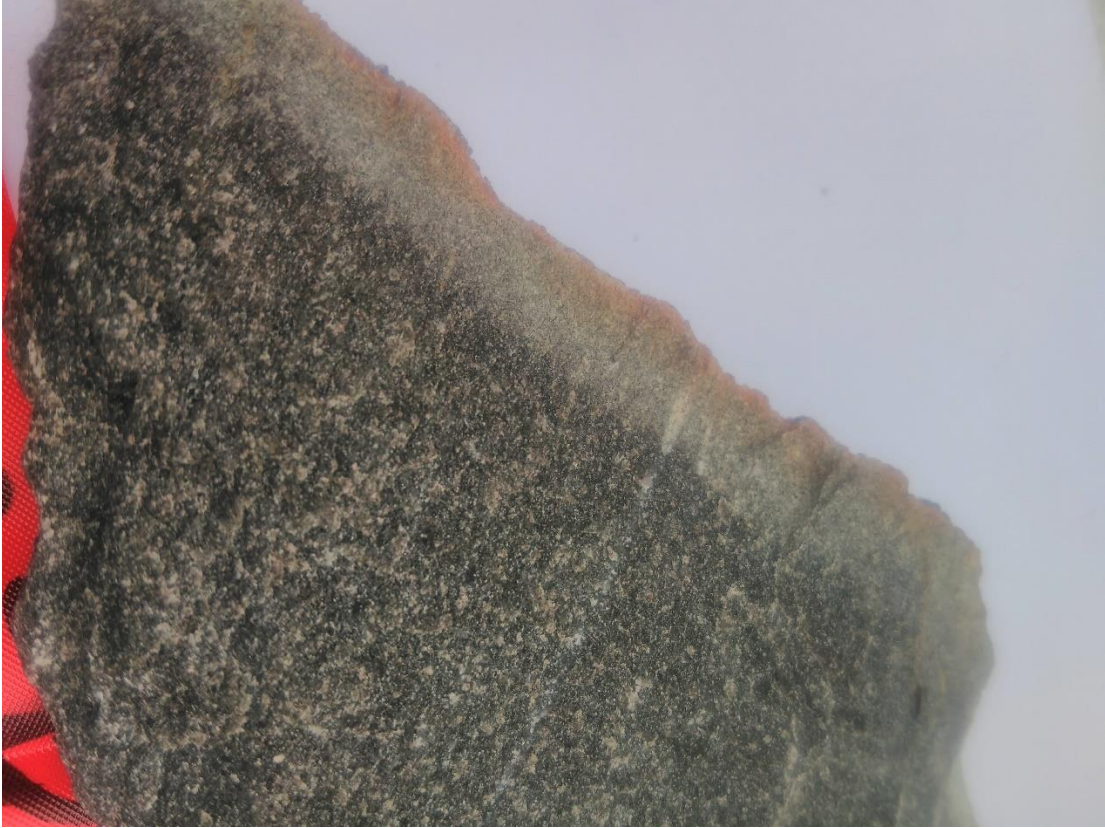


Sample: Eden-2019-002

Eden-2019-003: Dark grey, altered arkose, fine grained, with silicified matrix, containing biotite, 0.5 cm weathering rind, alteration to sericitic lamina texture. No reaction to acid test, baron of visible sulfides.



Sample: Eden-2019-003



Sample: Eden-2019-003



Eden-2019-004: Course grained quartz-plagioclase, metasomatized metasediment, derived from the Gowganda Formation, altered by contact metamorphism of the Grenville Front.



Sample: Eden-2019-004



Location: Entrance to bulk sample haul road, travers start point.

## CONCLUSIONS & RECOMMENDATIONS

- The four (4) field samples returned 0.004 gr/ton or less gold.
- An examination of exposed outcrops of the area indicates the quartz has an off white colour which may limit its decorative stone market potential. The quartzites contain interstitial muscovite resulting in anomalous alumina reducing the silica content to the 90 % + range. At this time it is not known if blasting and crushing of this material would enhance the silica grade. The location of the bulk sample containing >90% Si and the rusty seams, now tested for gold, have confirmed the gold potential is limited.
- Checking of selected contacts of other rocks units other than silica has also confirmed the potential at the sample sites gold potential is limited however additional prospecting and sampling along strike may be warranted.
- The prospecting and sampling were successful in somewhat testing the gold potential of the proposed quarry site and confirmed the rusty hematized areas does not include a gold credit.
- Further prospecting east along strike of the >90 silica zone returned???

## REFERENCES

1. Card, K. D., Palonen, P. A., and Siemiatkowska, K. M.,  
1975: Geology of the Louise-Eden Area, District of Sudbury; Ontario Div.  
Mines, GR124, 66p. Accompanied by Map 2299, Scale, 1 inch to 1/2 mile.
2. Komarechka, Robert G.,  
1991: Lorrain Orthoquartzite Study - Silica Potential - Eden Township,  
OPAP Reg. #OP90-291.
3. Komarechka, Robert G.,  
1992: Lorrain Orthoquartzite Study - Silica Potential - Claims #S1117707,  
S1117708 and S1094930 - Eden Township, Jan. 1992.
4. Komarechka, Robert G.,  
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Claim S1094928 - Eden Township, Feb. 1992.
5. Komarechka, Robert G.,  
2011: Wavy Lake Silica Property – Silica Assays- Eden Township,  
Claim S1101771 - Eden Township, Dec. 8, 2011.
6. Spaven, H. R.,  
1966: Granite Tectonics in part of Eden Township, Sudbury District,  
Ontario; unpublished Msc. thesis, McMaster University, Hamilton,  
Ontario.

# APPENDIX- ASSAY CERTIFICATES



5623 McADAM ROAD  
MISSISSAUGA, ONTARIO  
CANADA L4Z 1N9  
TEL (905)501-9998  
FAX (905)501-0589  
<http://www.agatlabs.com>

**CLIENT NAME: FUDGE & ASSOCIATES INTERNATIONAL**  
160 BRYAN ROAD  
NORTH BAY, ON P1C 1C2  
705-472-3053

**ATTENTION TO: Don Fudge**

**PROJECT:**

**AGAT WORK ORDER: 19T465649**

**SOLID ANALYSIS REVIEWED BY: Sherin Moussa, Senior Technician**

**DATE REPORTED: May 16, 2019**

**PAGES (INCLUDING COVER): 6**

Should you require any information regarding this analysis please contact your client services representative at (905) 501-9998

**\*NOTES**

All samples are stored at no charge for 90 days. Please contact the lab if you require additional sample storage time.



**AGAT** Laboratories

**Certificate of Analysis**  
 AGAT WORK ORDER: 19T465649  
 PROJECT:

5623 McADAM ROAD  
 MISSISSAUGA, ONTARIO  
 CANADA L4Z 1N9  
 TEL (905)501-9988  
 FAX (905)501-0589  
 http://www.agatlabs.com

CLIENT NAME: FUDGE & ASSOCIATES INTERNATIONAL

ATTENTION TO: Don Fudge

DATE SAMPLED: May 09, 2019	DATE RECEIVED: May 09, 2019	DATE REPORTED: May 16, 2019	SAMPLE TYPE: Rock
(200-) Sample Login Weight			
<b>Analyte:</b>	Sample Login Weight		
<b>Unit:</b>	kg		
<b>RDL:</b>	0.01		
<b>Sample ID (AGAT ID)</b>			
EDEN-2019-001 (184762)	0.282		
EDEN-2019-002 (184763)	0.129		
EDEN-2019-003 (184764)	0.092		
EDEN-2019-004 (184765)	0.238		

Comments: RDL - Reported Detection Limit

**Certified By:**

*Sherin Hoossaf*



**AGAT** Laboratories

# Certificate of Analysis

AGAT WORK ORDER: 19T465649  
PROJECT:

5623 McADAM ROAD  
MISSISSAUGA, ONTARIO  
CANADA L4Z 1N9  
TEL (905)501-9998  
FAX (905)501-0589  
<http://www.agatlabs.com>

CLIENT NAME: FUDGE & ASSOCIATES INTERNATIONAL

ATTENTION TO: Don Fudge

DATE SAMPLED: May 09, 2019	DATE RECEIVED: May 09, 2019	DATE REPORTED: May 16, 2019	SAMPLE TYPE: Rock
<b>(202-052) Fire Assay - Trace Au, ICP-OES finish (ppm)</b>			
Sample ID (AGAT ID)	Analyte: Au	Unit: ppm	
EDEN-2019-001 (184762)	RDL: 0.001		
EDEN-2019-002 (184763)		0.004	
EDEN-2019-003 (184764)		0.001	
EDEN-2019-004 (184765)		0.002	

Comments: RDL - Reported Detection Limit

**Certified By:**

**AGAT** CERTIFICATE OF ANALYSIS (V1)

*Results relate only to the items tested. Results apply to samples as received.*



**AGAT** Laboratories

Quality Assurance - Replicate  
AGAT WORK ORDER: 19T465649  
PROJECT:

5623 McADAM ROAD  
MISSISSAUGA, ONTARIO  
CANADA L4Z 1N9  
TEL (905)501-9998  
FAX (905)501-0569  
<http://www.agatlabs.com>

CLIENT NAME: FUDGE & ASSOCIATES INTERNATIONAL

ATTENTION TO: Don Fudge

(202-052) Fire Assay - Trace Au, ICP-OES finish (ppm)

Parameter	Sample ID	REPLICATE #1		RPD
		Original	Replicate	
Au	184762	0.0015	0.0015	0.0%

Results relate only to the items tested. Results apply to samples as received.



**AGAT** Laboratories

**Quality Assurance - Certified Reference materials**  
**AGAT WORK ORDER: 19T465649**  
**PROJECT:**

5623 McADAM ROAD  
MISSISSAUGA, ONTARIO  
CANADA L4Z 1N9  
TEL (905)501-9998  
FAX (905)501-0589  
<http://www.agatlabs.com>

CLIENT NAME: FUDGE & ASSOCIATES INTERNATIONAL

ATTENTION TO: Don Fudge

**(202-052) Fire Assay - Trace Au, ICP-OES finish (ppm)**

Parameter	CRM #1 (ref.1P5R)		
	Expect	Actual	Recovery
Au	1.81	1.95	108%
			Limits
			90% - 110%





## Method Summary

CLIENT NAME: FUDGE & ASSOCIATES INTERNATIONAL

AGAT WORK ORDER: 19T465649

PROJECT:

ATTENTION TO: Don Fudge

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
<b>Solid Analysis</b>			
Sample Login Weight	MIN-12009		BALANCE
Au	MIN-12006, MIN-12004		ICP/OES