

We are committed to providing [accessible customer service](#).

If you need accessible formats or communications supports, please [contact us](#).

Nous tenons à améliorer [l'accessibilité des services à la clientèle](#).

Si vous avez besoin de formats accessibles ou d'aide à la communication, veuillez [nous contacter](#).

NTS: 420A1I

**GRASS ROOTS PROSPECTING REPORT
ISLAND PROPERTY
Claim 549204, Cell 42A01I383
TECK TOWNSHIP, ONTARIO**

**By: Robert Dillman
ARJADEE PROSPECTING
Mount Brydges, Ontario**

I N D E X

	page
Summary	2
Location and Access	2
Claim Logistics	4
Land Status and Topography	4
Regional and Local Geology	4
History of Exploration	6
Survey Dates and Personnel	8
Survey Logistics	8
Survey Results	8
Field Pictures and Rock Samples	12
Discussion of Results	15
Conclusions and Recommendations	16
Certificates of Author's	17
Figure 1. Property Location Map	3
Figure 2. Claim Map	5
Figure 3. Regional Geology Map	7
Table 1: GPS Data: Waypoints & Rock Sample Descriptions, Locations and Assay Results	9
MAPS	
Traverse Map 1 : 2,500	10
Geology and Rock Sample Locations + Assays Map	11
APPENDIX	
ASSAY CERTIFICATE	18

Summary

This report discusses the results of prospecting on the Island Property, claim 529402, cell 42A01I383 in Teck Township, Ontario. The survey was performed by property owner: Robert Dillman and assisted by Jim Renaud. The work was completed in 1 day on July 5, 2020. Approximately 825 metres was traversed on land.

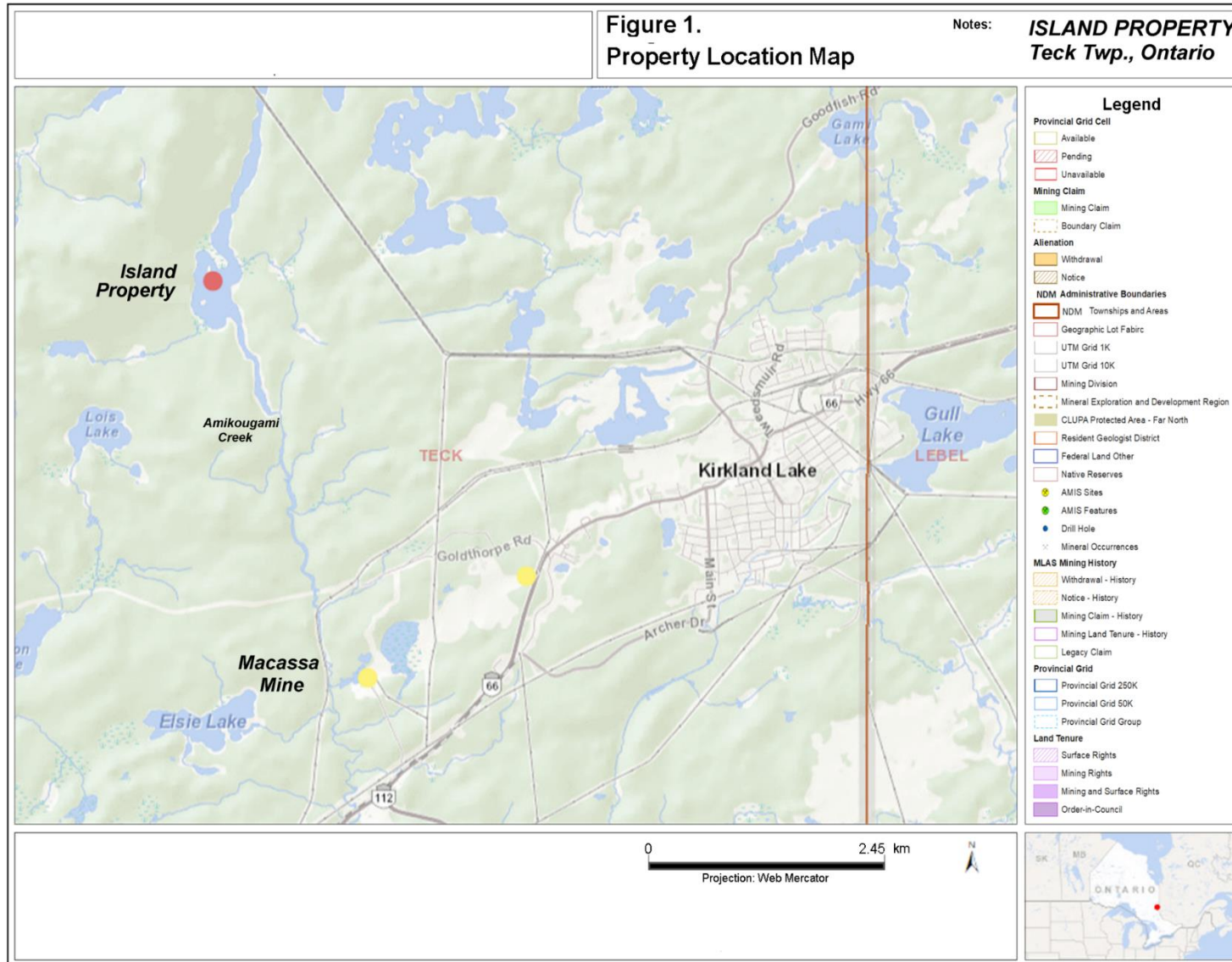
The Island Property is situated over an island in Amikougami Creek. The island is formed of two lobes of outcrop consisting of fine-grained andesite. Outcrop exposure is very good. The two sections of the island were found to be separated by a northeast striking fault which is brecciated and intruded by quartz. Several small quartz veins were also located in outcrop west of the fault.

Nine (9) rock samples were collected on the Island Property. Assays for gold for 8 samples ranged 0.001 to 0.005 ppm Au. One rock sample of andesite with fine quartz stringers assayed 0.051 ppm Au.

Location and Access

The Island Property is located in the north section of Teck township in the Larder Lake Mining Division of Ontario. The property is located approximately 5 kilometres northwest of the town of Kirkland Lake (Figure 1).

The property can only be accessed by boat. The shortest route to the property is by Amikougami Creek. Starting north of Macassa Mine site at the boat launch on Goldthorpe Road, travel north on the creek for a distance of 1.6 km where one must portage 300 metres around a set of rapids. The Island Property is another 1.3 km from the north end of the portage. Access also can be made from the boat launch on Lancaster Lake by travelling south through Amikougami Lake and into the north end Amikougami Creek. This route is approximately 11 km.



Claim Logistics and Location of Work

The Island Property is comprised of mining claim: 529402 situated in cell 42A01I383. The property is located in Teck Township, Ontario (Figure 2). The property covers an approximate area of 1.5 ha.

At the time of the survey, claim 529402 was registered to author, Robert Dillman of Mount Brydges, Ontario. Recently, in April of 2022, title of the property was transferred to Goldenfire Minerals Inc. which is owned by Jim Renaud of London, Ontario and the author, Robert Dillman.

All work was completed in cell 42A01I383, claim 529402.

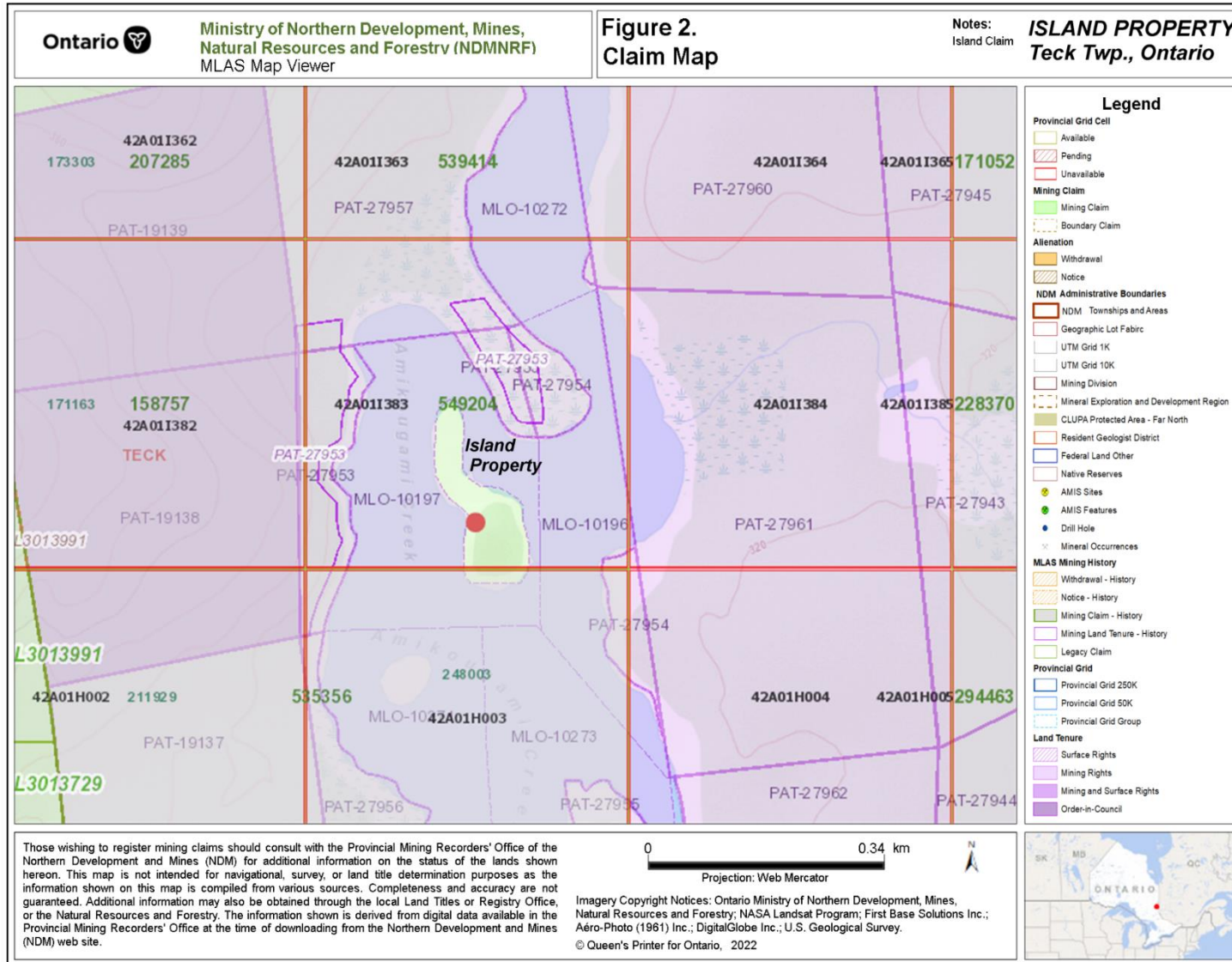
Land Status and Topography

The Island Property is situated entirely on Crown Land. The island is uninhabited. There are no buildings or habitats. There are no electrical powerlines.

Elevation of the island ranges 310 m to 320 m above sea level. Relief is considered gentle to steep. Outcrop exposure is very good and overburden is shallow to nonexistent.

Regional and Local Geology

The Island Property is located in the Kirkland Lake section of the Abitibi Greenstone Belt. The Abitibi Greenstone Belt is part of the Superior Province and extends east-west approximately 600 km from Timmins to Chibougamau. Numerous precious and base metal deposits have been discovered in the Abitibi Greenstone Belt including Timmins, Kirkland Lake, Harker-Holloway, Rouyn Noranda, Val d'Or and Chibougamau mining camps.



The property is underlain by Archean units composed of basaltic to andesitic rocks of the Black River Formation. Gabbro sills and syenite occur in the vicinity of the property (Figure 3).

The Island property is approximately 3 km north of the Kirkland Lake section of Cadillac - Larder Lake Break. The property is proximal and possibly crossed by the Amikoungami Creek fault which is a north-south orientated structure that crosses the Cadillac – Larder Lake Break.

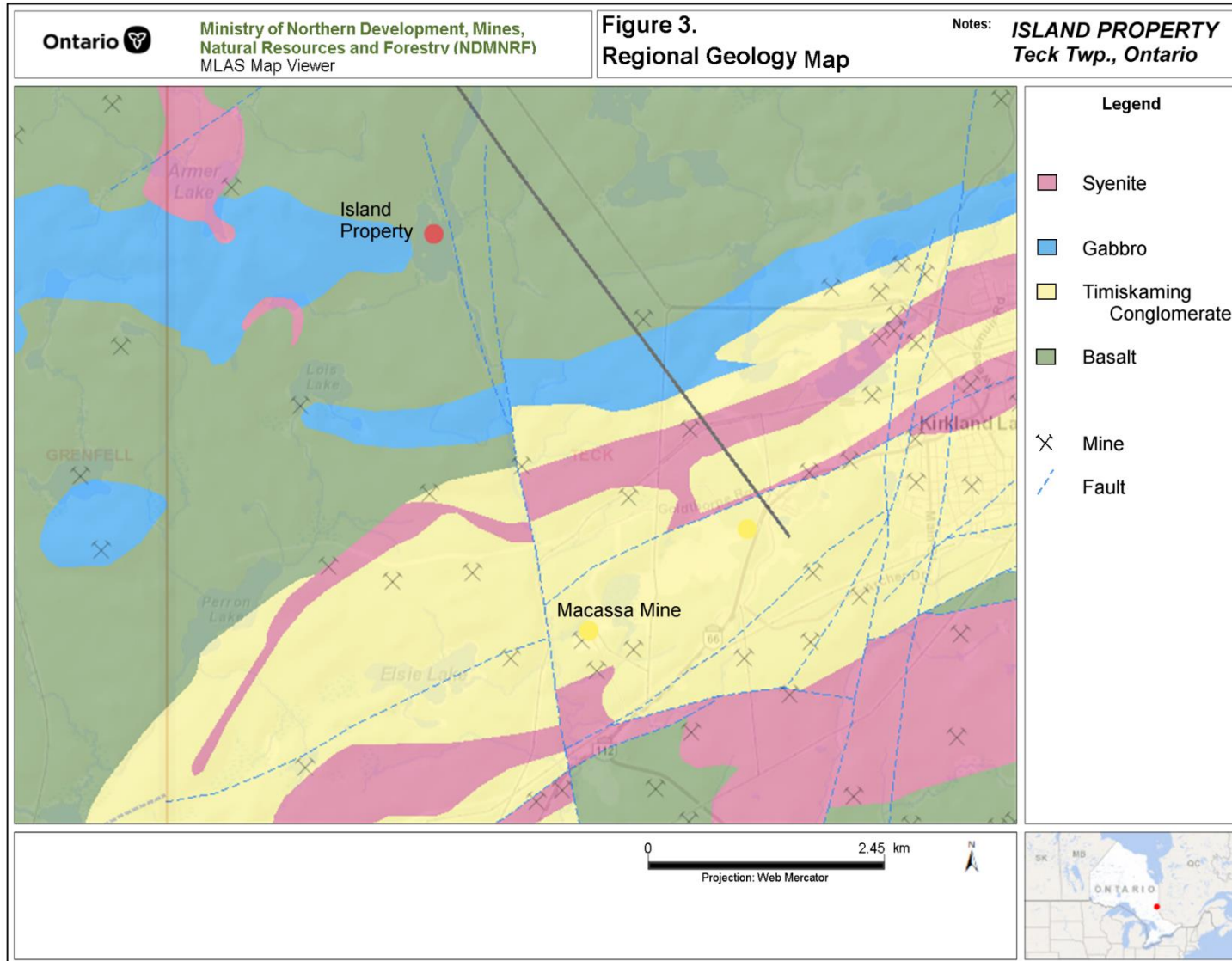
History of Exploration

There are numerous reports of exploration in the surrounding region, however a search did not reveal any reports of previous exploration on the island. The lack of exploration reports is attributed to the island being surrounded by several mining patents and at one time, the island may have been patented also. Exploration work is usually not reported on patented ground.

Gold in the Kirkland Lake-Larder Lake District was originally discovered near Larder Lake and at Swastika in 1906 by prospectors that moved northward from the Cobalt camp. During the 20th Century the Kirkland Lake-Larder Lake district developed into one of the world's premier gold mining areas with production of approximately 1,200 tonnes or over 35 million ounces of gold, at an average recovered grade of 0.345 oz Au/ton or 11.82 g Au/tonne.

Survey Dates and Personal

The Island Property was prospected in one day on July 5, 2020. The work was preformed by the author, Robert Dillman of Mount Brydges, Ontario and assisted by Dr. Jim Renaud of London, Ontario.



Survey Logistics

The traverse was initiated to prospect the Island Property in search for outcrop and gossanous horizons. The traverse is plotted at a scale of 1 : 2,500 on the accompanying Traverse Map. Geology recorded during the traverse and rock sample locations are plotted at a scale of 1 : 2,500 on the accompanying Geology and Rock Sample Map. Approximately 0.825 km was traversed on the island.

A compass and a Garmin GPS model ASTRO 900 were used to navigate. The GPS unit was set to NAD83, Zone 17. Waypoints (WP) for the traverses were periodically recorded and are listed in Table 1.

A total of 9 rock samples were collected during the traverse. Rock sample locations, descriptions and assay results also are presented in Table 1 and plotted with the geology map included with this report. All the rock samples were delivered to AGAT Laboratory for analysis. The lab is in Mississauga, Ontario. All the rock samples were Fire Assayed for gold using a 50 gram charge and finished by Inductively Coupled Plasma – Optical Emission Spectroscopy (ICP-OES) to measure the gold concentration. An assay certificate from the lab is appended to this report.

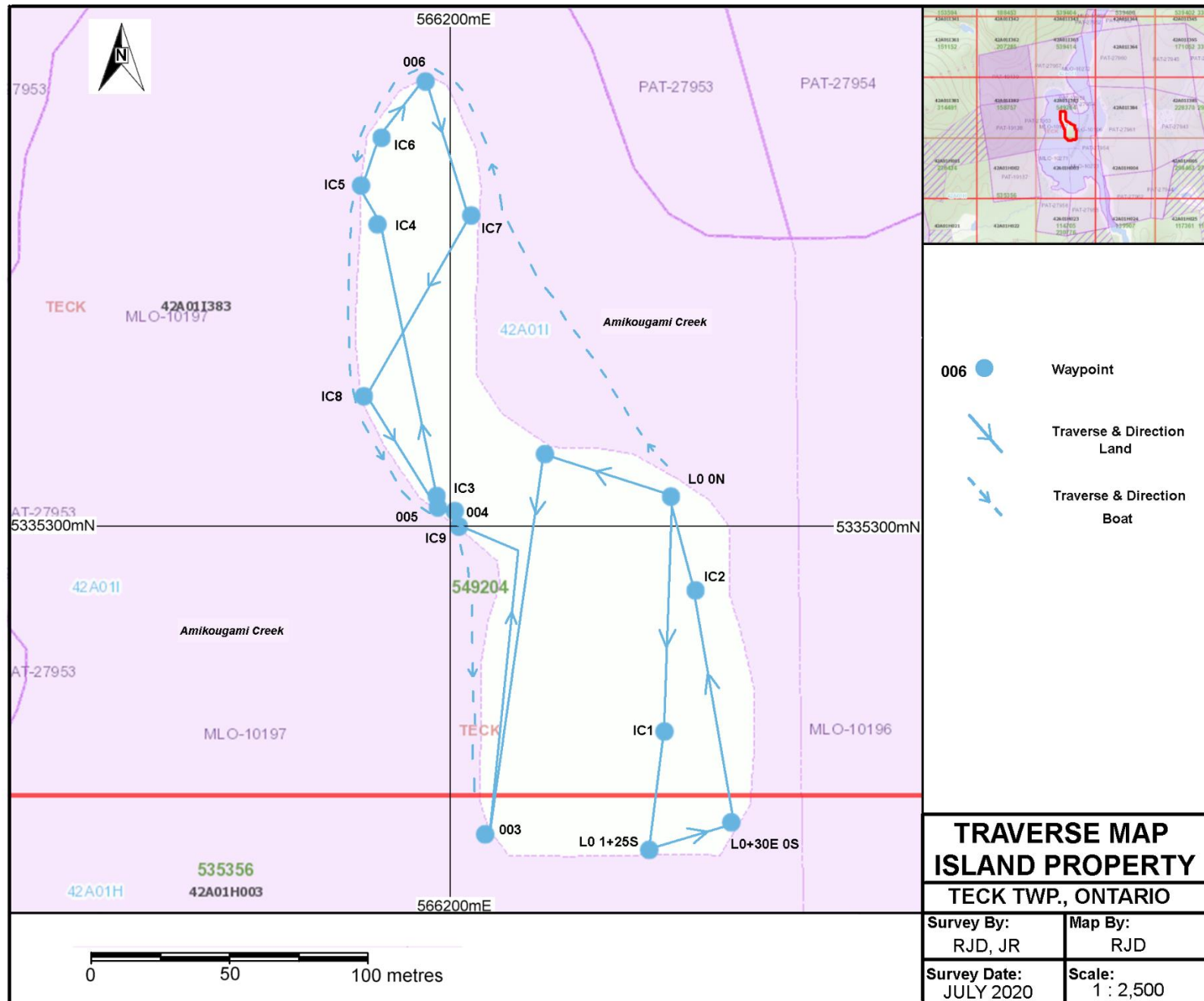
Survey Results

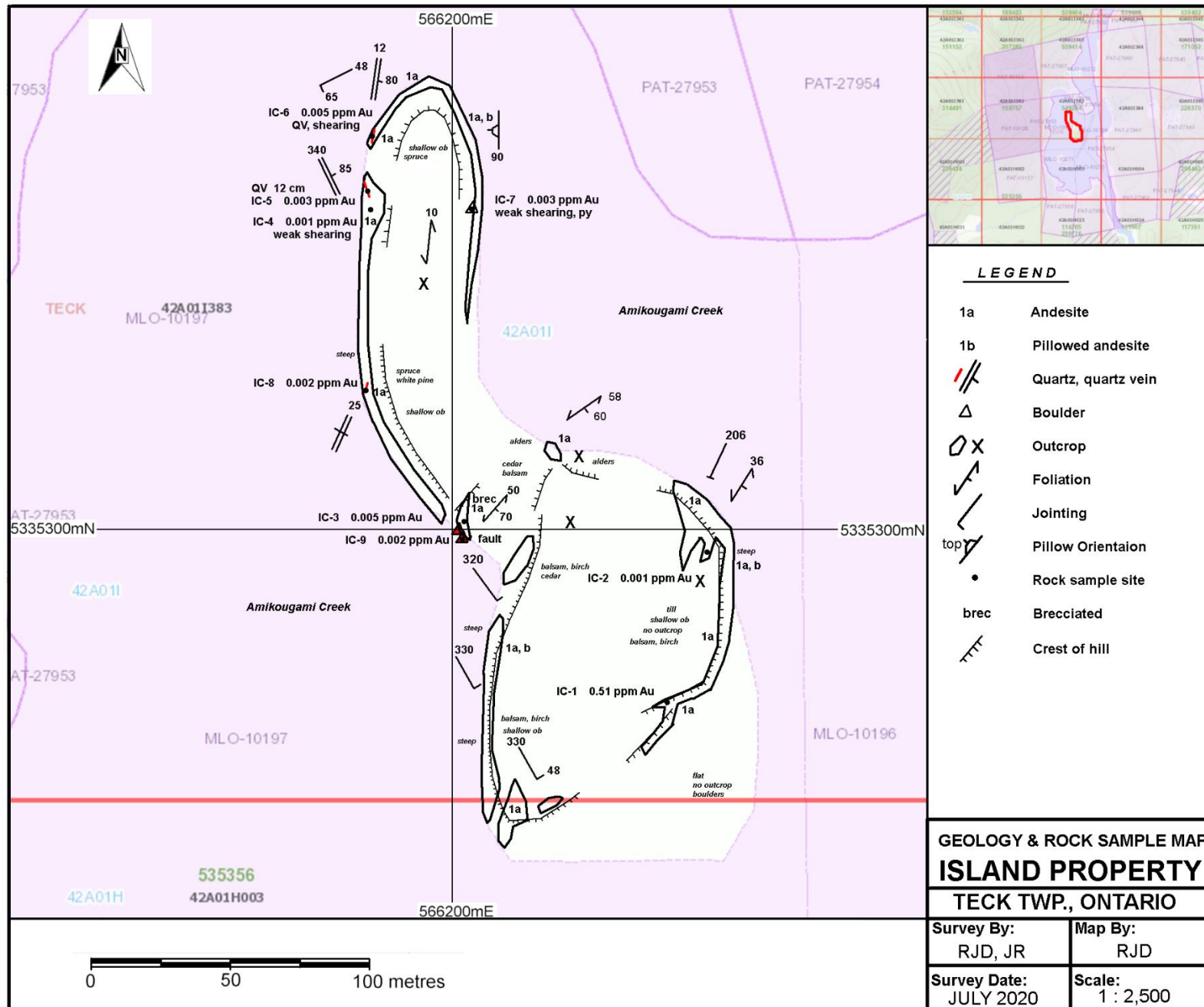
The island was found to consist of two large outcrops with little to no overburden. The outcrops at the edge of the island are mostly steep to cliff-like. A narrow depression separates the two sections of the island. Trees on the island consist of spruce, balsam, white pine, cedar, birch and alders in low areas

Outcrops exposed on the east side of the island are generally massive and consist of andesite lava with minor epidote alteration. Pillows were noted in some outcrops, In the north section of the east side of the island, a weak foliation striking 50-58⁰ and dipping 60-70⁰SE. is crossed by several orientations of east dipping joints striking 120⁰, 178⁰, and 206⁰. Joints observed in the south section strike 330⁰ and dip 48⁰NE.

Table 1. Waypoint & Rock Sample Locations
Island Property , Teck Township, Ontario NAD 83 Zone 17

Waypoint	Date	Easting	Northing	Claim Cell	Rock Sample Number	Assays Gold ppm	Notes
L0 ON	July 5, 2020	566281	5335308				andesite outcrop, joints 206°, dip 90°, birch, balsam, spruce
IC1	July 5, 2020	566280	5335230		IC-1	0.051	andesite, hairline to 0.5 cm quartz stringers, trace py, best 0.5 m
L0 1+25S	July 5, 2020	566275	5335190				flat, no outcrop, till? Birch, balsam, spruce
L0+30E OS	July 5, 2020	566303	5335200				flat, no outcrop, till? Birch, balsam, spruce, alders
IC2	July 5, 2020	566290	5335277		IC-2	0.001	pillows, andesite, trace py, joints 178°, dip 90° best, 0.5 m
L0+45W ON	July 5, 2020	566238	5335321				andesite outcrop in small bay, weak foliation 58°, dip 60° SE, joints 120°, dip 90° alders
003	July 5, 2020	566219	5335195				west facing cliff, south facing cliff andesite, joints 330°, dip 48° NE alders at base, till + birch balsam to the east
004	July 5, 2020	566199	5335301				low area between lobes of island, quartz boulders, brecciated andesite + quartz
IC3	July 5, 2020	566192	5335304		IC-3	0.005	brecciated andesite with fine-grained quartz matrix, representative 1 m. No sulphides.
IC4	July 5, 2020	566173	5335397		IC-4	0.001	weakly sheared and brecciated andesite with quartz, rusty cleavages. Best 1m.
IC5	July 5, 2020	566166	5335409		IC-5	0.003	quartz vein, 12 cm wide, strike 12°, dip 80°E, white, fine-grained, sucrosic.
IC6	July 5, 2020	566175	5335426		IC-6	0.005	brecciated andesite with quartz, rusty cleavages, best 1 m
006	July 5, 2020	566195	5335445				andesite, brecciated
IC7	July 5, 2020	566212	5335400		IC-7	0.003	loose pieces on outcrop, brecciated andesite with quartz matrix, trace pyrite, rusty, small to pillow-sized pieces.
IC8	July 5, 2020	566167	5335340		IC-8	0.002	quartz vein, 10 cm, white, fine-grained sucrosic. Strike 25°, dip 90°
IC9	July 5, 2020	566201	5335296		IC-9	0.002	Quartz, rubble crop, potential vein +1 m







The Island



IC-5 Sample site



IC-9 Sample site



Quartz in lake by IC-3 & IC-9 site.



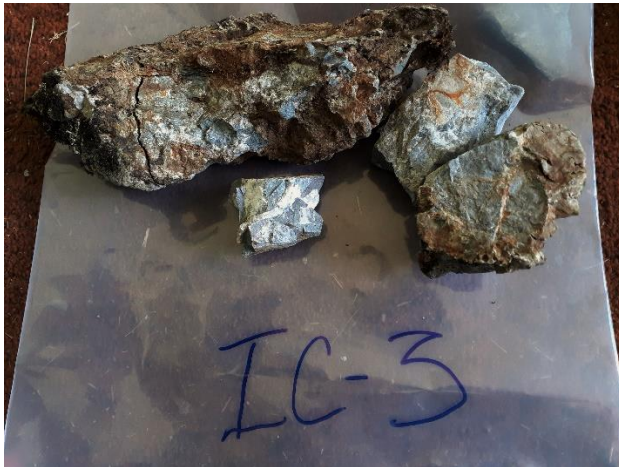
IC-9 sample site, Brecciated andesite and quartz



IC-1 0.051 ppm Au



IC-2 0.001 ppm Au



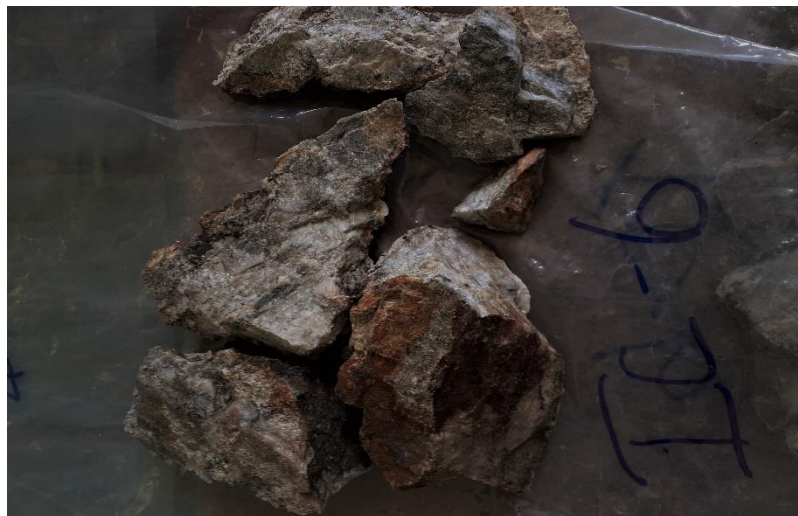
IC-3 0.005 ppm Au



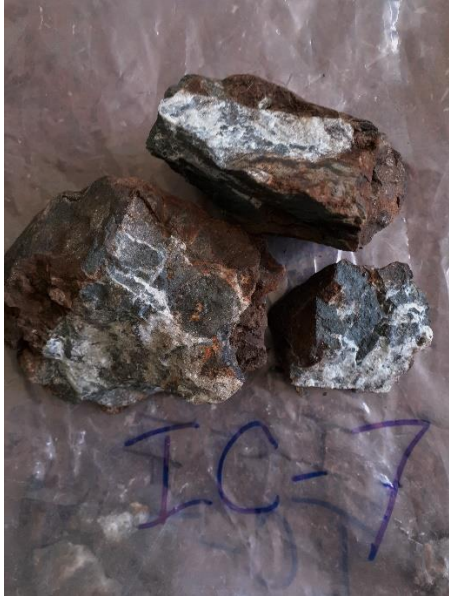
IC-4 0.001 ppm Au



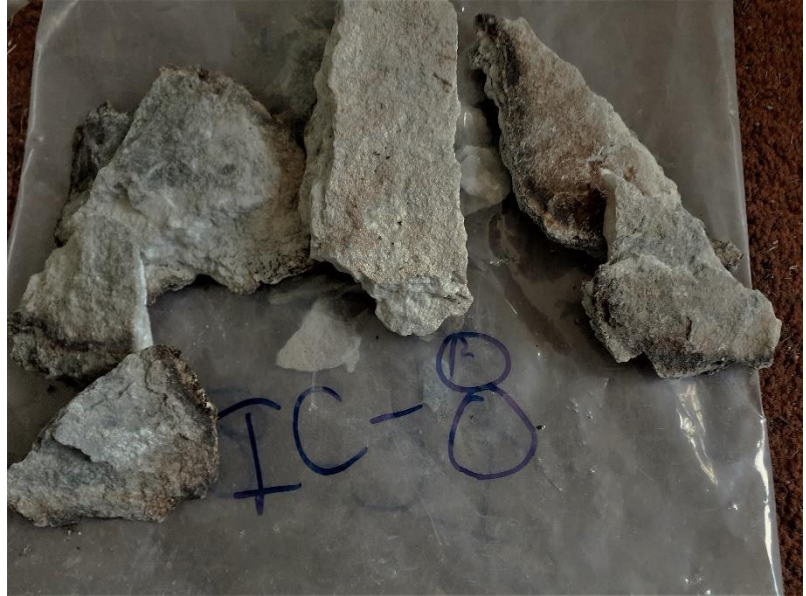
IC-5 0.003 ppm Au



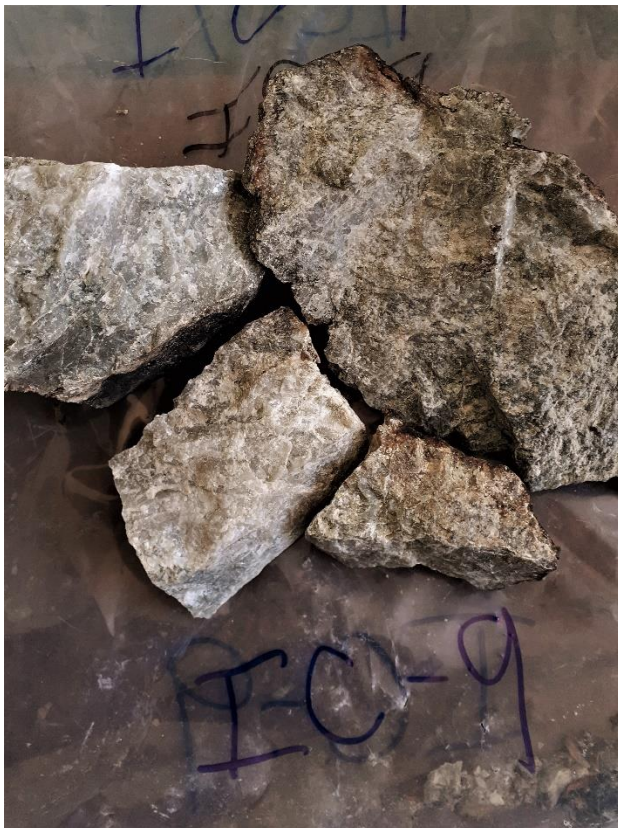
IC-6 0.005 ppm Au



IC-7 0.003 ppm Au



IC-8 0.002 ppm Au



IC-9 0.002 ppm Au

Andesite outcrops on the west side of the island display a pervasive weak to moderate foliation striking 340° and dipping 85°E . The foliation is believed to represent a shear fabric superimposed on the outcrops. The foliation is crossed by jointing striking 48° and dipping 65°SE .

Pillowed lavas were observed in several locations. Pillows in the northeast section of the west lobe of the island are stretched in a northly direction and tops appear to face west. Several rusty boulders were also found in this area.

A fault occurs in the low area between the two lobes of the island. The fault appears to strike 50° and dips 70°SE . Wallrock proximal to the west side of the fault is brecciated and infilled with white, fine-grained sucrosic quartz. Large boulders and rubble outcrop of sucrosic quartz also can be observed under water on strike of the fault. Several quartz veins ranging 10-15 cm wide occur in outcrops situated west of the fault. The vein quartz is also sucrosic. A vein close to the fault strikes 25° and dips near vertical. A 12 cm wide quartz vein at the north end of the west lobe of the island strikes 12° and dips 80°E .

Rock samples were collected from brecciated wallrock and quartz around the fault, including quartz veins west of the fault and rusty boulders found to the north. Unfortunately, assays results were not impressive from any of these structures, ranging 0.001 to 0.005 ppm Au. The best assay and only slightly anomalous was 0.051 ppm Au from sample IC-1. The sample was taken in andesite with thin stringers of quartz exposed along a southeast facing cliff-like outcrop in the southeast section of the island.

Discussion of Results

The Island Property is believed to be proximal to the northwest trending Amikougami Creek Fault at a section where the fault shifts to north in conjunction with a bend in the creek. The orientation of some of the jointing and quartz veins observed on the island appear to coincide with the projection of the Amikougami Creek Fault and are possibly related.


The fault structure running between the two lobes of the island is situated in a lineament roughly 10 metres wide and poorly exposed due to overburden. The orientation of this fault structure and the lineament appear to coincide with a northeast trending lineament that extends from Amikougami Creek to the south end of the east arm of Amikougami Lake.

Conclusions and Recommendations

The Island Property is situated over a quartz-bearing northeast trending fault structure that is poorly exposed due to overburden. To further evaluate the gold potential of this structure, overburden stripping is recommended. Due to the location and shallow nature of overburden at the work site, the proposed work can be completed manually by pick and shovel. An estimated budget for overburden stripping is \$7,500 and is based on the following expenses:

Overburden Stripping	2 men x 2 days	\$1,400
Assays		500
Boat & motor, gas		300
Travel	2 men x 2 days	2,000
Truck		500
Report and maps		<u>2,500</u>
		\$7,500

Respectfully submitted,


Robert James Dillman P.Geol.
Arjadee Prospecting



Robert Dillman B.Sc. P.Geol.

April 13, 2022

Robert J. Dillman P.Geo, B.Sc.
ARJADEE PROSPECTING
8901 Reily Drive, Mount Brydges, Ontario, Canada, N0L1W0
Phone/ fax (519) 264-9278

CERIFICATE of AUTHOR

I, Robert J. Dillman, Professional Geologist, do certify that:

1. I am the President and the holder of a Certificate of Authorization for:

ARJADEE PROSPECTING
8901 Reily Drive, Mount Brydges, Ontario, Canada N0L1W0

2. I graduated in 1991 with a Bachelor of Science Degree in Geology from the University of Western Ontario.

3. I am an active member of:

Professional Geoscientists of Ontario, PGO
Prospectors and Developers Association of Canada, PDAC

4. I have been a licensed Prospector in Ontario since 1984.

5. I have worked continuously as a Professional Geologist for 31 years.


6. Unless stated otherwise, I am responsible for the preparation of all sections of the Assessment Report titled:


GRASS ROOTS PROSPECTING REPORT: ISLAND PROPERTY
Claim 549204, Cell 42A01I383
TECK TOWNSHIP, ONTARIO

dated, April 13, 2022

7. I am not aware of any material fact or material change with respect to the subject matter of the Assessment Report that is not contained in the Assessment Report and its omission to disclose makes the Assessment Report misleading.

Dated this 13th day of April, 2022


Robert James Dillman P.Geo
Arjadee Prospecting





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

CLIENT NAME: ROBERT DILLMAN
8901 REILY DRIVE
MOUNT BRYDGES, ON N0L 1W0
519-264-9278

ATTENTION TO: ROBERT DILLMAN

PROJECT:

AGAT WORK ORDER: 20T626201

SOLID ANALYSIS REVIEWED BY: Jing Xiao, Data Reviewer

DATE REPORTED: Jul 31, 2020

PAGES (INCLUDING COVER): 8

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.



Certificate of Analysis

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

AGAT WORK ORDER: 20T626201

PROJECT:

CLIENT NAME: ROBERT DILLMAN

ATTENTION TO: ROBERT DILLMAN

(200-) Sample Login Weight

DATE SAMPLED: Jul 16, 2020	DATE RECEIVED: Jul 16, 2020	DATE REPORTED: Jul 31, 2020	SAMPLE TYPE: Rock
Analyte:	Sample Login Weight		
Unit:	kg		
RDL:	0.01		
Sample ID (AGAT ID)			
IC-1 (1278856)	1.6255		
IC-2 (1278860)	1.1153		
IC-3 (1278862)	1.6584		
IC-4 (1278865)	2.2831		
IC-5 (1278867)	0.5366		
IC-6 (1278869)	1.6407		
IC-7 (1278871)	1.4245		
IC-8 (1278873)	0.9921		
IC-9 (1278875)	2.5091		

Comments: RDL - Reported Detection Limit
 Analysis performed at AGAT 5623 McAdam Rd., Mississauga, ON (unless marked by *)

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 20T626201
PROJECT:

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

CLIENT NAME: ROBERT DILLMAN

ATTENTION TO: ROBERT DILLMAN

(202-552) Fire Assay - Trace Au, ICP-OES finish (50g charge) (ppm)			
DATE SAMPLED: Jul 16, 2020	DATE RECEIVED: Jul 16, 2020	DATE REPORTED: Jul 31, 2020	SAMPLE TYPE: Rock
	Analyte: Au		
	Unit: ppm		
Sample ID (AGAT ID)	RDL:		
IC-1 (1278858)	0.051		
IC-2 (1278860)	0.001		
IC-3 (1278862)	0.005		
IC-4 (1278865)	0.001		
IC-5 (1278867)	0.003		
IC-6 (1278869)	0.005		
IC-7 (1278871)	0.003		
IC-8 (1278873)	0.002		
IC-9 (1278875)	0.002		

Comments: RDL - Reported Detection Limit
Analysis performed at AGAT 5623 McAdam Rd., Mississauga, ON (unless marked by *)

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 20T626201
PROJECT:

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

CLIENT NAME: ROBERT DILLMAN

ATTENTION TO: ROBERT DILLMAN

Sieving - % Passing (Crushing)

DATE SAMPLED: Jul 16, 2020	DATE RECEIVED: Jul 16, 2020	DATE REPORTED: Jul 31, 2020	SAMPLE TYPE: Rock
Analyte: Pass %	Unit: %		
Sample ID (AGAT ID)	RDL:	0.01	
IC-1 (1278858)		76.14	

Comments: RDL - Reported Detection Limit
Analysis performed at AGAT 5623 McAdam Rd., Mississauga, ON (unless marked by *)

Certified By: _____



Certificate of Analysis

AGAT WORK ORDER: 20T626201
PROJECT:

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)601-9998
FAX (905)601-0589
http://www.agatlabs.com

CLIENT NAME: ROBERT DILLMAN

ATTENTION TO: ROBERT DILLMAN

Sieving - % Passing (Pulverizing)			
DATE SAMPLED: Jul 16, 2020	DATE RECEIVED: Jul 16, 2020	DATE REPORTED: Jul 31, 2020	SAMPLE TYPE: Rock
Analyte:	Pass %		
Unit:	%		
Sample ID (AGAT ID)	RDL:	0.01	
IC-1 (1278858)		86.43	

Comments: RDL - Reported Detection Limit
Analysis performed at AGAT 5623 McAdam Rd., Mississauga, ON (unless marked by *)

Certified By: _____



Quality Assurance - Replicate
 AGAT WORK ORDER: 20T626201
 PROJECT:

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

CLIENT NAME: ROBERT DILLMAN

ATTENTION TO: ROBERT DILLMAN

(202-552) Fire Assay - Trace Au, ICP-OES finish (50g charge) (ppm)												
Parameter	REPLICATE #1				REPLICATE #2							
	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD				
Au	1278858	0.051	0.009		1278873	0.002	0.002	0.0%				



Quality Assurance - Certified Reference materials
 AGAT WORK ORDER: 20T626201
 PROJECT:

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

CLIENT NAME: ROBERT DILLMAN

ATTENTION TO: ROBERT DILLMAN

(202-552) Fire Assay - Trace Au, ICP-OES finish (50g charge) (ppm)													
Parameter	CRM #1 (ref.GS6F)												
	Expect	Actual	Recovery	Limits									
Au	6.87	6.67	97%	90% - 110%									



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

Method Summary

CLIENT NAME: ROBERT DILLMAN

AGAT WORK ORDER: 20T626201

PROJECT:

ATTENTION TO: ROBERT DILLMAN

SAMPLING SITE:

SAMPLED BY:

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Sample Login Weight	MIN-12009		BALANCE
Au	MIN-12008, MIN-12004		ICP/OES
Pass %			BALANCE