

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](#).

Report

On

Mining Claims

344913, 344912, 315439, 227250, 222546, 137428

Butt Township

District of Nipissing

Southern Ontario Mining District

Submitted By:

Richard Keevil , Geologist

March 20 , 2020

Richard R. Keevil , P.Geol

1760 Ravenscliffe Road, Huntsville Ontario, P1H2J2, Tel. (705)7839499

Introduction

Mary-Ann and Michael Gilchrist together own six active mining claims 344913,344912,315439,227250,222546,137428 in Butt Township which is the area covered by this report. These claims were formed from Legacy Claims 3018940 and 3018941.

This geological report is being submitted in compliance with the requirements for assessment work credits under the Mining Act of Ontario.

Location and Access

The Mining Claims are located in the north-central part of Butt Twp in Ontario. Access is gained from Hwy 11 at Emsdale ; Hwy 518 through Kearney and Sand Lake to the Forestry Tower Road. Travel northeast for 15 km. towards the Tim Lake access point for Algonquin Provincial Park. Turn left before descending to the Tim River. The claims are located approximately 1 km. northwest intersected by recent logging roads and landings. These claims are about 3 km. up-strike from an inactive Open Pit Graphite Mine presently held by Ontario Graphite.

Previous Work

A Geological report was submitted by Keevil Consulting on November 11, 2016. and November 8, 2017

GPS corner post locating was completed in 2014

Rick Keevil submitted geological reports as a result of field investigations with Vince Sheehan in November of 2012 and 2013

Anthony Menard submitted a Geological Report on the study area in October of 1993 in which he identified within a northeast/southwest trending metasedimentary rock exposures of graphite gneiss averaging approximately 2 to 3 % Graphitic Carbon in a Pelitic Metasedimentary Gneiss.

Further Investigations were undertaken by Don Baxter In November of 2004 and by Vince Sheehan in 2005 at which time a conductor was identified using an EM15

Geophysical

Richard Keevil and Robert Stead conducted a VLF electrical conductivity survey over the study area which identified several anomalies in 2011.

Geology

The study area lies within the Parry Sound Domain of the Grenville Structural Province of the Precambrian Shield. Metasedimentary gneisses trend northeast/southwest and dip to the east at approximately 40 degrees. Within the pelitic metasediments are medium to coarse grained graphite flakes which were likely formed as a result of regional (high grade) metamorphism reaching upper amphibolite to granulite facies and transforming carbon into graphite. Further concentration may have occurred as a result of shearing and folding which may have resulted in a stacking of graphitic layers during thrusting events at depth.

Within this sequence are metapelites with metaquartzite, Amphibolite Gneiss, Quartzofeldspathic Gneiss .and biotite gneiss. Most rocks have been crosscut and injected with Granitic Pegmatites to varying amounts. Some may be a result of local re-melting of silicate minerals.

Purpose of Study

The purpose of this study is to determine if existing fault structures host significant graphitic layers within the pelitic metasediments and if there is mineralization in the pegmatite dikes.

Fieldwork

Field work was conducted by R.Keevil and M.McBrien in November 2019 sampling select outcrops tot determine rock lithology of graphitic gneiss outcrops and quartz vein mineralogy. A total of five samples were taken from the north 1/2 of claim No. 137428 for hand and microscope identification.

Rock Descriptions: Using hand lense and Wild Heerbrugg Microscope.(M5)

S1 20 UTM zone 17 0651521,506805

course grained pink pegmatite

Quartz clear glassy mainly in stringers 30%

Felspar (orthoclase) 45%

Mica (biotite) 10%

Horneblende 5%

Garnet (almandine) 10 %

Other Minerals 3-8%

Rock Name :Quartzo Felspathic Pegmatite

S2 20 0651534,5068728

Dark green fine grained gneiss

Horneblende 70%

Biotite Mica 10%

Olivene 5%

Other minerals- 15%

Rock Name Amphibolite Gneiss

S3 20 0651558.5068636

Light coloured medium grained gneiss

Orthoclase Feldspar 40%

Quartz 20%

Mica (muscovite and biotite) 10%

Hornblende 10%

Graphite 2-3%

Other minerals 1-2%

Rock Name Pelitic Gneiss

S4 20 0651554 5068662

Medium grained dark grey gneiss

Hornblende 50%

Feldspar 25%

Biotite mica 15%

Quartz 10%

Garnet 2 -5%

Rock Name Amphibolite gneiss

S5 20 0651525 5068679

Coarse to medium grained grey with rusty stains

Plagioclase Feldspar 30%

Quartz 30%

Mica (muscovite and biotite) 10%

Hornblende 20%

Other minerals 1-2%

Rock Name Granitic Gneiss

S4 20 0651554 5068662

Medium grained dark grey gneiss

Hornblende 50%

Feldspar 25%

Biotite mica 15%

Quartz 10%

Garnet 2 -5%

Rock Name Amphibolite gneiss

Conclusions

-No graphitic layers were found within the study area.

-No mineralization was associated with observed Pegmatitic Dikes

Recommendations for further work.

Stripping, trenching and sampling to further expose the graphitic zones would enable more detailed investigations. Samples should be tested for Graphitic Carbon.

The EM 16 or similar Survey should be extended to include areas of claims not covered by recent reports using the same line orientation and VLF transmitting station used in 2008.

Targets for diamond drilling are indicated within previous reports. Results from inclined holes would help determine the true thickness of the graphitic layers..

Quartz veins should be sampled and assayed for gold.

Aboriginal consultation should be initiated

The number of claims could be reduced from 6 to 2 without losing significant acreage (see table below) due to the configuration of the new boundary claims. The mineral potential of the claim sections should be determined prior to letting them go.

Claim no	Acreage held by Gilchrist
222546	1.5
315439	2.2

227250 3.2

344250 2.4

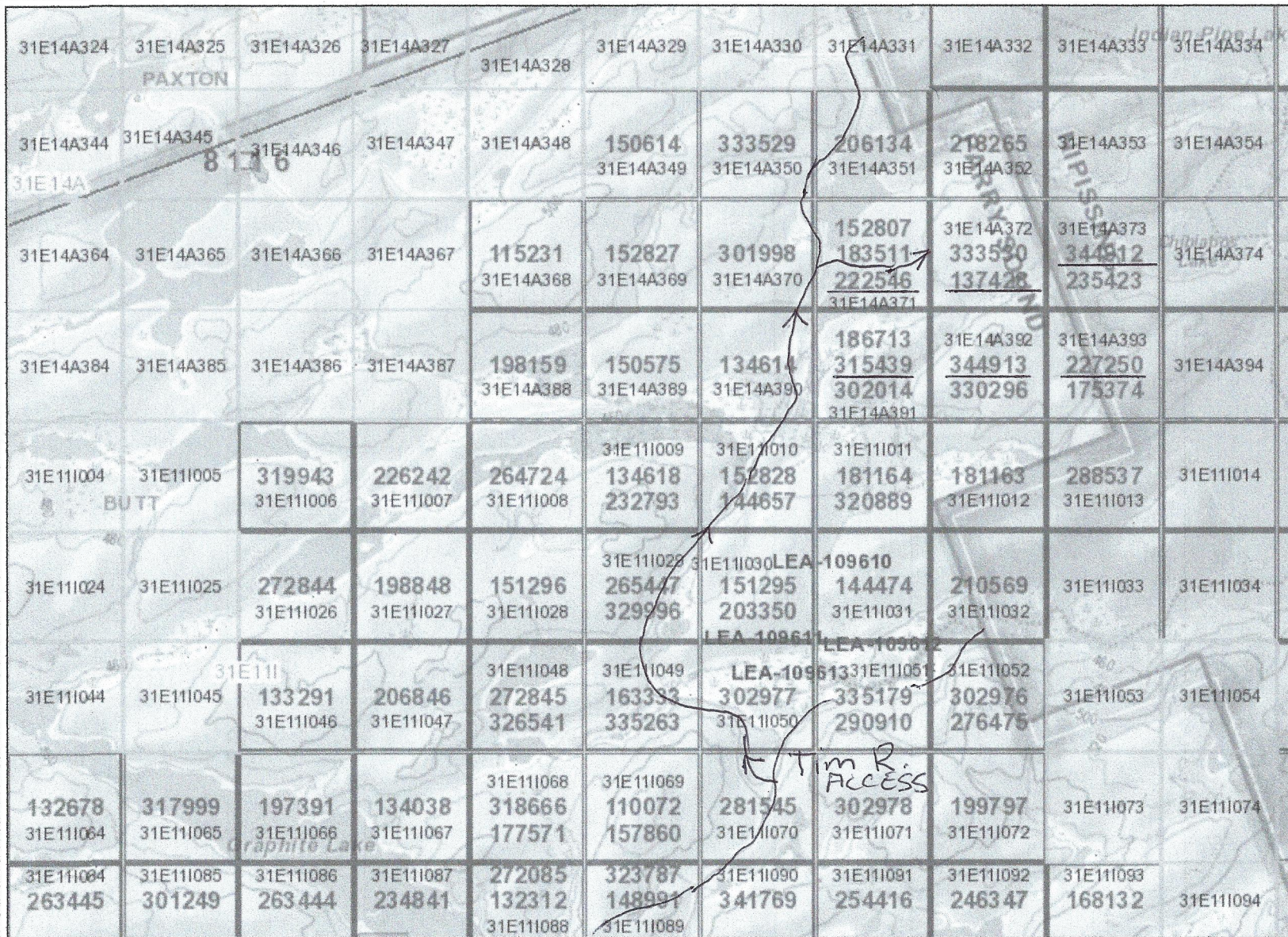
Claims 137428 and 344913 would be retained .

Retained claim boundaries should be located in the field.

Richard R. Keevil , Consulting Geologist
1760 Ravenscliffe Road, Huntsville Ontario, P1H2J2, Tel. (705)7839499.



CLAIM LOCATIONS
& ACCESS



Legend

Provincial Grid Cell

- Available
- Pending
- Unavailable

Mining Claim

- Mining Claim
- Boundary Claim

Alienation

- Withdrawal
- Notice

ENDM Administrative Boundaries

- ENDM Townships and Areas
- Geographic Lot Fabric
- UTM Grid 1K
- UTM Grid 10K
- Mining Division
- Mineral Exploration and Development Region
- CLUPA Protected Area - Far North
- Resident Geologist District
- Federal Land Other
- Native Reserves
- AMIS Sites
- AMIS Features
- Drill Hole
- Mineral Occurrences

MLAS Mining History

- Withdrawal - History
- Notice - History
- Mining Claim - History
- Mining Land Tenure - History
- Legacy Claim

Provincial Grid

- Provincial Grid 250K
- Provincial Grid 50K
- Provincial Grid Group

Land Tenure

- Surface Rights
- Mining Rights
- Mining and Surface Rights
- Order-in-Council

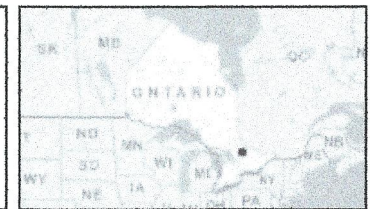


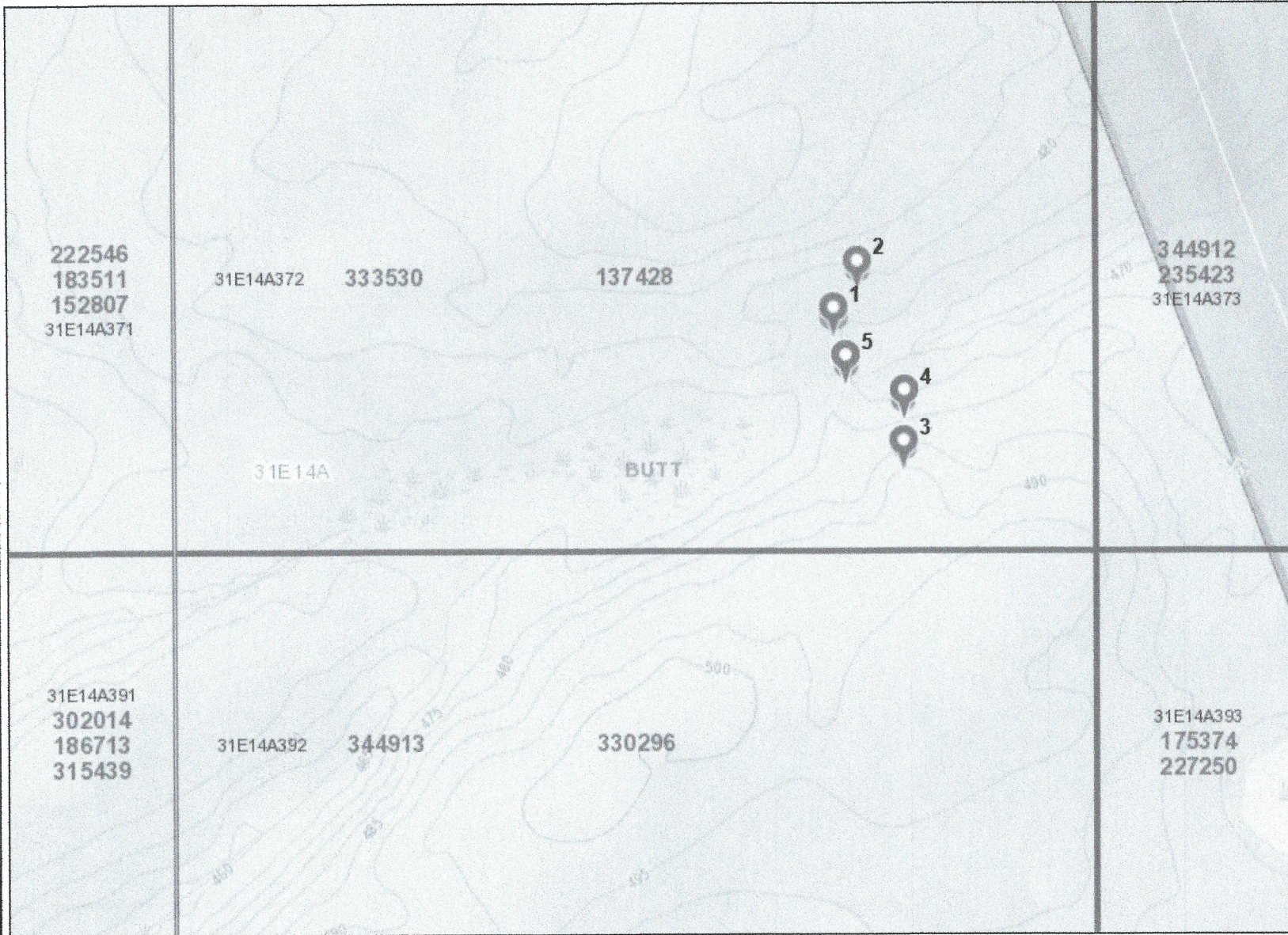
Projection: Web Mercator



The Ontario Ministry of Northern Development and Mines shall not be liable in any way for the use of, or reliance upon, this map or any information on this map. This map should not be used for: navigation, a plan of survey, routes, nor locations.

Imagery Copyright Notices: Ontario Ministry of Natural Resources and Forestry; NASA Landsat Program; First Base Solutions Inc.; Aéro-Photo (1961) Inc.; DigitalGlobe Inc.; U.S. Geological Survey.





Legend

- Provincial Grid Cell**
 - Available
 - Pending
 - Unavailable
- Mining Claim**
 - Mining Claim
 - Boundary Claim
- Alienation**
 - Withdrawal
 - Notice
- ENDM Administrative Boundaries**
 - ENDM Townships and Areas
 - Geographic Lot Fabric
 - UTM Grid 1K
 - UTM Grid 10K
 - Mining Division
 - Mineral Exploration and Development Region
 - CLUPA Protected Area - Far North
 - Resident Geologist District
 - Federal Land Other
 - Native Reserves
 - AMIS Sites
 - AMIS Features
 - Drill Hole
 - Mineral Occurrences
- MLAS Mining History**
 - Withdrawal - History
 - Notice - History
 - Mining Claim - History
 - Mining Land Tenure - History
 - Legacy Claim
- Provincial Grid**
 - Provincial Grid 250K
 - Provincial Grid 50K
 - Provincial Grid Group
- Land Tenure**
 - Surface Rights
 - Mining Rights
 - Mining and Surface Rights
 - Order-in-Council



Projection: Web Mercator



The Ontario Ministry of Northern Development and Mines shall not be liable in any way for the use of, or reliance upon, this map or any information on this map. This map should not be used for: navigation, a plan of survey, routes, nor locations.

Imagery Copyright Notices: Ontario Ministry of Natural Resources and Forestry; NASA Landsat Program; First Base Solutions Inc.; Aéro-Photo (1961) Inc.; DigitalGlobe Inc.; U.S. Geological Survey.

