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Work Assessment Report

# Hemlo North Property

Wabikoba Lake Area

Thunder Bay District

Ontario

NTS 42 C/13

Assembled by: John Florek

Date: December 13, 2016

# Table of Contents

## Summary:

A Prospecting program was initiated to follow up on results from historical drillholes on the previously named Qued Property. Also, to the south of the property is a historical gold intercepts drilled by Hemlo Gold Mines in 1995. The results, of the drillhole (F1-95-2), indicated a zone of high-grade gold mineralization at the margins of the Musher Lake Porphyry within volcanoclastics with iron-formation. This zone graded 37.4 g/t Au over 1.0 meter. There are visuals of green mica in hydrothermal breccias adjacent to felsic intrusives in the vicinity, and the vision of the prospecting was to expand on this concept for gold mineralization along the margin of a similar felsic porphyry, which is seen to the south and is intimately related to the gold mineralization in vicinity.

Although high-grade, gold samples were never found on the surface during prospecting, abundant sulfidation of the rocks were witnessed. This mineralization was spatially associated with felsic porphyries.

## Introduction:

John Florek has 100% interest in the Hemlo North Property located in Wabikoba Lake Area of the Thunder Bay District, Ontario, within the Northern Portion of the Hemlo Greenstone Belt. The Property consists of one (1) claim (6 claim units). **Table 1** and **Figure 1 and 2** show the location of the group of claim units.

| **Hemlo North Property – John C Florek** | |
|---|---|
| **Claim Number Group** | **Claim Units** |
| 4263483 | 6 |
| | |

**Table 1:** Claims 100% owned by John C Florek

The Hemlo North property is located 32 kilometres south of Manitowadge, Ontario. The property is readily accessible by logging roads and is 5 km east of Hwy 614.

## Regional Geology

The property occurs within the Wawa Subprovince of the Superior Province. It lies along the north limb of the Archean Schreiber-Hemlo greenstone belt. The belt consists of variably metamorphosed southwest dipping metavolcanic and metasedimentary units.

The nearby Hemlo Gold Deposit has produced 20+ million ounces of gold to date. It is located in the highly strained Lake Superior Shear Zone. The deposit is westward plunging, and extends for a strike length of 2.5 km. The Hemlo North property is located approximately 16 km northeast of this deposit.

## Property Geology

The Hemlo North property lies directly on the northern contact of the Musher Lake Granodiorite Pluton. To the north, flanking the intrusion is a series of felsic intrusives that are hosted in predominately mafic

volcanics with subordinate metasedimentary rocks. The rocks on the property steeply dip to the south and strike to the southeast. Geological mapping suggests southward younging direction for the pillow flows associated with the mafic volcanic sequence (**Figure 4**).

Historical drilling has intercepted significant areas of alteration and mineralization. Although the Musher Lake Porphyry is both visually and chemically altered, no apparent gold values were obtained in this rock unit. However, gold mineralizaton was encountered in the flanking auspicious volcanoclasitic/metasedimentary sequences within the mafic volcanics; these areas of mineralization are spatially associated with felsic intrusives rocks. These felsic intrusives rocks are significantly altered and contain pyrite, molybdenum, and green mica. **Figure 3** shows the location of the rocks collected during prospecting in 2016, which are related and proximal to a felsic porphyry intrusive with sulfide mineralization; similar to the setting just south of the claim group where 37.4 g/t Au was intercepted in a drillhole.

## Historical Work Performed

Several previous companies have worked near the vicinity of the property and the information is contained in the assessment files located at the MNDM. A brief synopsis below of work performed around and within this property are contained in these reports (information is taken from assessment report 42C13SE0070):

**McIntyre-Porcupine Mines, Von Klien option, 1962**
Numerous copper-nickel and copper-tead-zinc occurrences were discovered. Electromagnetic conductors and magnetic anomalies were tested with 28 diamond drill holes, but mineralization was weak and discontinuous with depth.

**Noranda Exploration Co. Ltd, 1976**
Dotted Lake airborne survey completed over the area.

**Pryme Energy (North), 1982**
Work concentrated on the Mcintyre occurrence.

**Qued Resources, 1983**
Geological mapping, trenching and drilling was completed on a claim group to the north of the Fowler #1 property. Emphasis was on stratabound gold mineralization within iron rich interflow sedimentary sequences. Drilling returned values of up to 0.025 oz/ton over 3 metres.

**Norman Resources Limited, 1983**
Geological mapping, soil geochemistry, airborne magnetics and VLF-EM data were collected covering an area immediately southeast of the present claim block. Soil samples were all low range with one sample returning 45 ppb. No significant near surface concentration of precious metals were discovered.

**Kelly-Kerr Energy Corp., 1986-1988**
Geological mapping, stripping, soil geochemistry covered an area to the east of the present claim group.

**Noranda Exploration Co. Ltd, Newjay Property, 1987-1989**
Humus geochemistry and geology filed covering a portion of the adjacent North Limb claim group. No anomalous Au values were found in the 23 rock samples analysed. A weak Au humus anomaly is reported to overlie a felsic-mafic contact.

**Noranda Exploration Co. Ltd, Norman Resources Property, 1989**
Geological report, plans, soil/rock geochemistry and assays filed for a claim block located southeast of the present property. Several anomalous Au values were recorded from the soil survey samples but results were not considered encouraging.

**Fowler/Shuman, Armand Lake Property, 1991**
A report was competed covering prospecting and stripping on the Folwer #1 property.

**Newmont Exploration of Canada Ltd., 1992**
Geological and lithogeochemical reports for a claim group located south-east of the present claims.

**Hemlo Gold Mines Inc., 1994**
Trenching and geological mapping was completed on trenches 150E, 153E, and 156E on the Fowler #1 property.

**Hemlo Gold Mines Inc., 1995**
Drilling of Nine holes on the North Limb properties
Mapping of cut line and re-mapping of old exploration trenches.

**Sparton Resources**
No work report filed.

## Work Program

The main goal was to identify and prospect the area where a felsic porphyry outcropped, which is potentially related to know gold occurrences in the vicinity.

A review of the historical work was performed on the property prior to field work. Attempts were made to put pertinent historical information into a GIS format, so that precise areas could be located since all established surface grids are now extinct. This was the basis for prospecting and collecting mineralized outcrop samples to follow up on conceptual targets. Samples that were collected are shown in **Figure 3** and **Appendix A**.

The visual petrography did show that the rocks in the area have been silicified in area of the mineralization encountered.

In addition, GPS mapping, of former existing trails and possible DDH locations, was also accomplished; to provide future access to historical drillholes and future unencumbered entry to property.

## Recommendations

Further investigation of this claim group is warranted due to barren and endowed gold mineralizaton in the area. It is suggest that the following be accomplished:

- Follow-up of geochemical, geophysical surveys, and/or additional drilling.
- The reestablishment of an overgrown trail to provide access.
- Additional evaluation of the historical drilling and geochemical dataset.

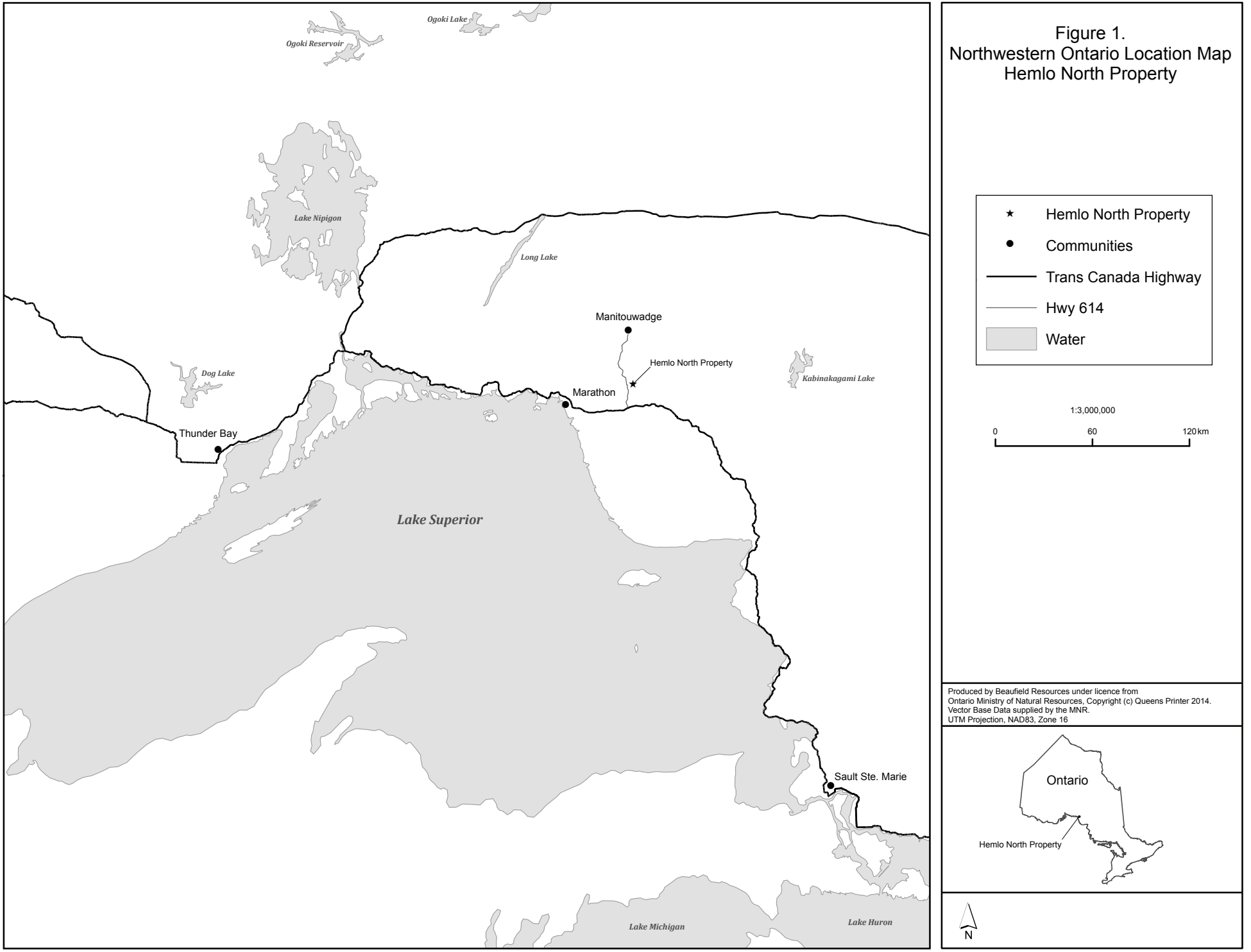
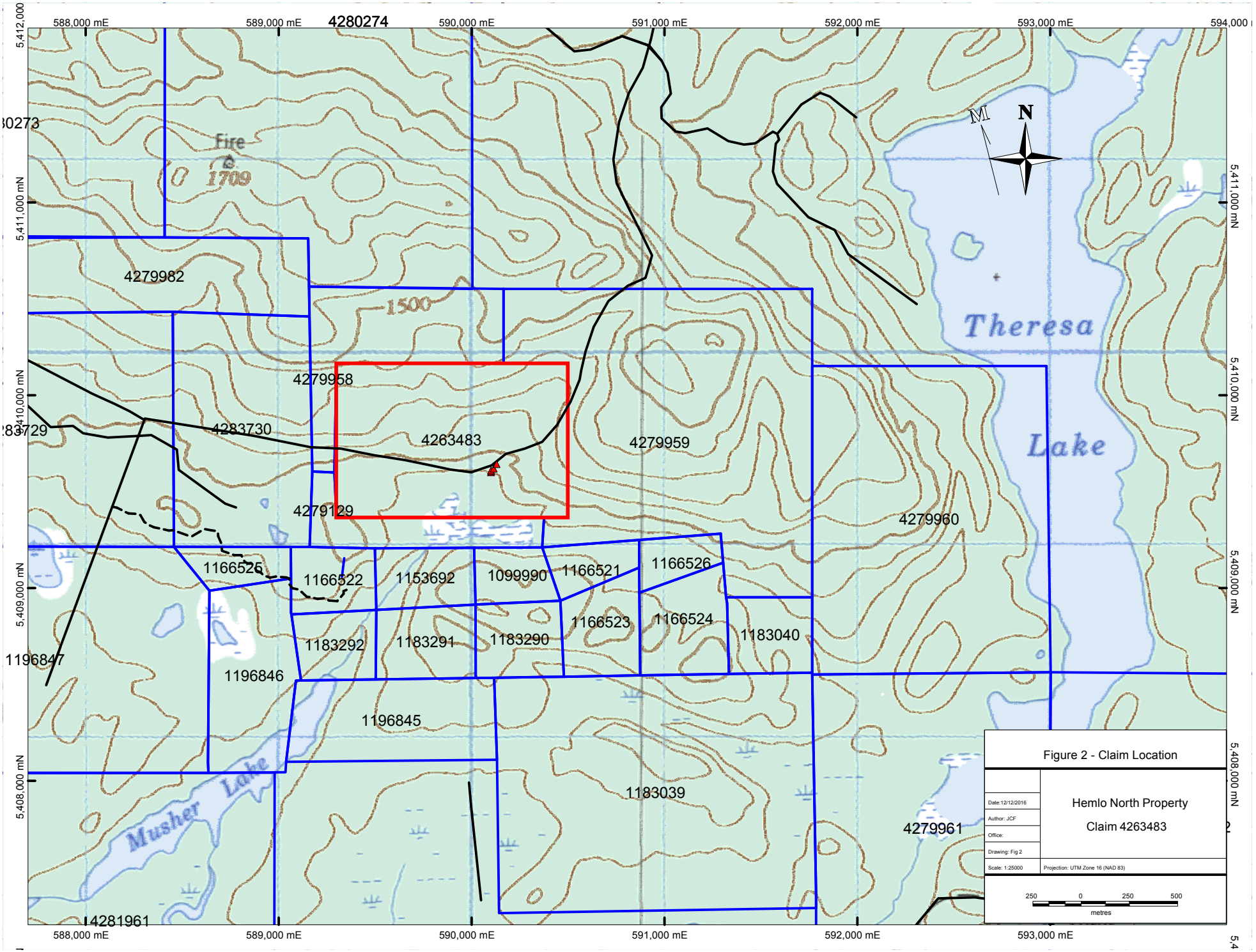
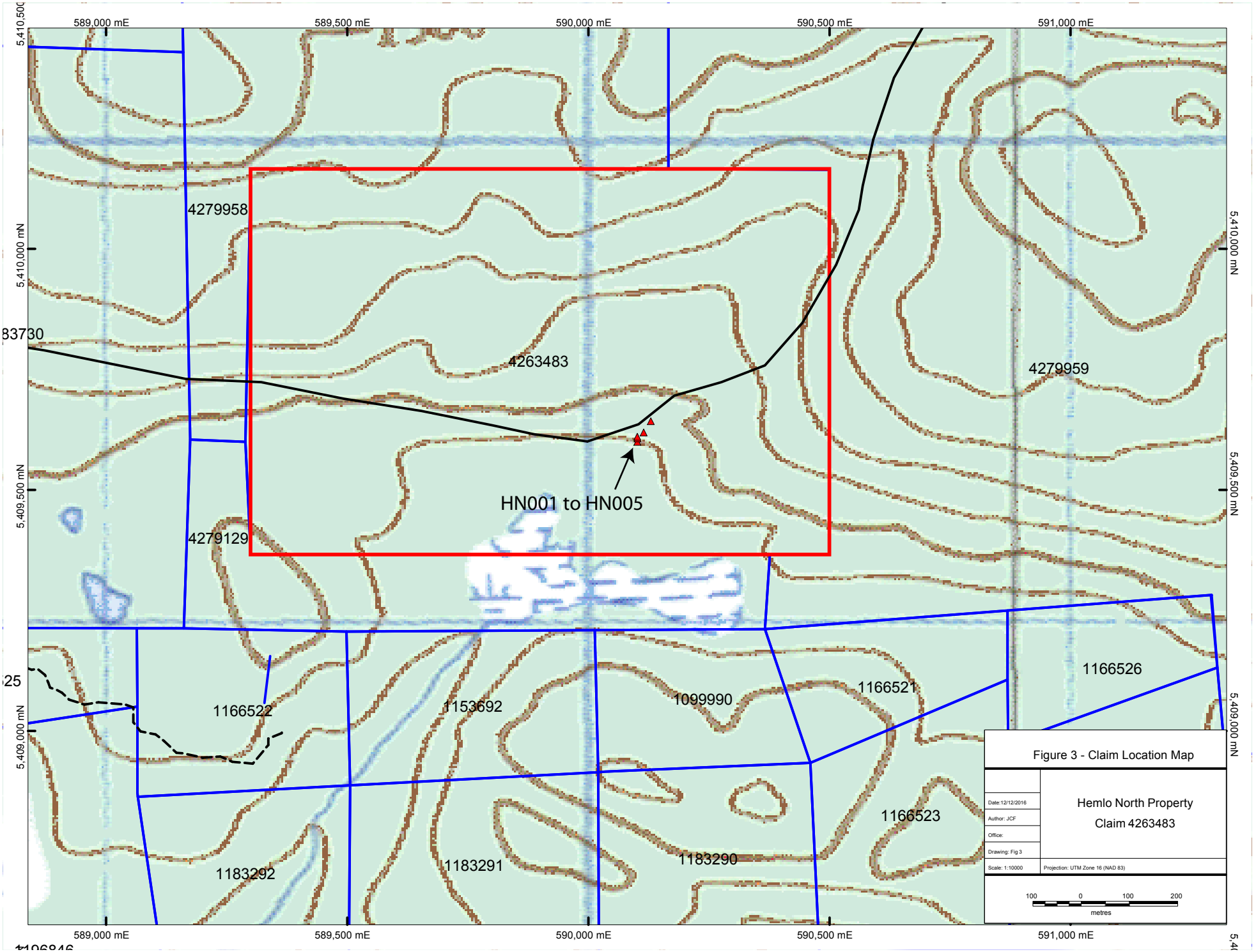
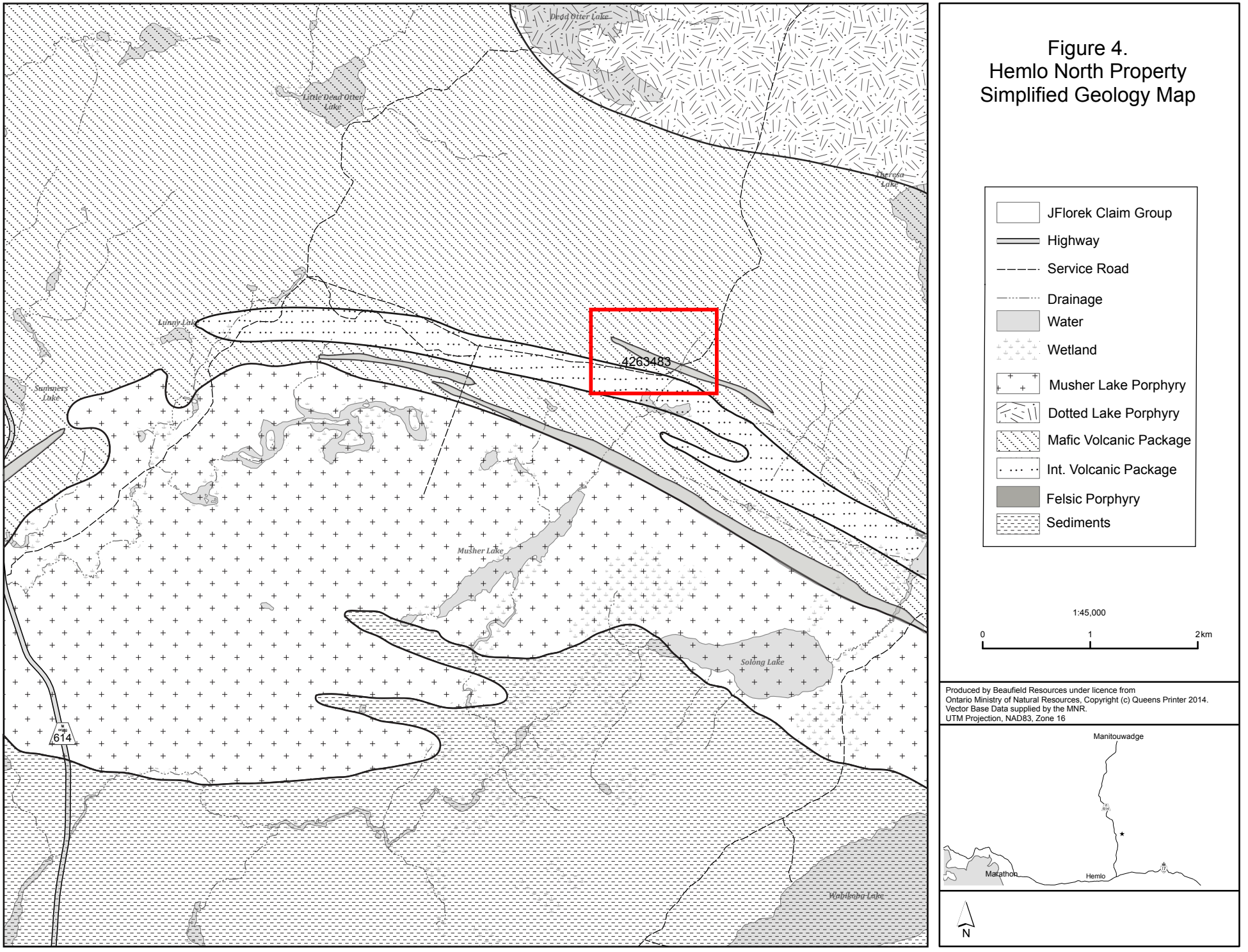


Figure 1.
Northwestern Ontario Location Map
Hemlo North Property
Ogoki Lake
Ogoki Reservoir
Lake Nipigon
Long Lake
Manitouwadge
Hemlo North Property
Dog Lake
Kabinakagami Lake
Marathon
Thunder Bay
Lake Superior
Sault Ste. Marie
Lake Michigan
Lake Huron
Hemlo North Property
Communities
Trans Canada Highway
Hwy 614
Water
1:3,000,000
0
60
120 km
Produced by Beaufield Resources under licence from
Ontario Ministry of Natural Resources, Copyright (c) Queens Printer 2014.
Vector Base Data supplied by the MNR.
UTM Projection, NAD83, Zone 16
Ontario
Hemlo North Property
N


588,000 mE
589,000 mE
590,000 mE
591,000 mE
592,000 mE
593,000 mE
594,000
5,412,000
5,411,000 mN
5,410,000 mN
5,409,000 mN
5,408,000 mN
4280274
Fire
1709
1500
4279982
4279958
4283730
4263483
4279959
4279129
4279960
1166526
1166522
1153692
1099990
1166521
1166526
1166523
1166524
1183040
1183292
1183291
1183290
1196847
1196846
1196845
1183039
4279961
4281961
Theresa
Lake
Musher Lake
N
M
Figure 2 - Claim Location
Hemlo North Property
Claim 4263483
Date:12/12/2016
Author: JCF
Office:
Drawing: Fig 2
Scale: 1:25000
Projection: UTM Zone 16 (NAD 83)
250 0 250 500
metres


589,000 mE
589,500 mE
590,000 mE
590,500 mE
591,000 mE
5,410,000 mN
5,409,500 mN
5,409,000 mN
4279958
4263483
4279959
HN001 to HN005
4279129
1166522
1153692
1099990
1166521
1166526
1166523
1183290
1183291
1183292
Figure 3 - Claim Location Map
Hemlo North Property
Claim 4263483
Date:12/12/2016
Author: JCF
Office:
Drawing: Fig 3
Scale: 1:10000
Projection: UTM Zone 16 (NAD 83)
100 0 100 200
metres


Dead Otter Lake
Little Dead Otter Lake
Therese Lake
Lunny Lake
Summers Lake
4263483
Musher Lake
Solong Lake
614
Wabikoba Lake
Figure 4.
Hemlo North Property
Simplified Geology Map
JFlorek Claim Group
Highway
Service Road
Drainage
Water
Wetland
Musher Lake Porphyry
Dotted Lake Porphyry
Mafic Volcanic Package
Int. Volcanic Package
Felsic Porphyry
Sediments
1:45,000
0
1
2km
Produced by Beaufield Resources under licence from
Ontario Ministry of Natural Resources, Copyright (c) Queens Printer 2014.
Vector Base Data supplied by the MNR.
UTM Projection, NAD83, Zone 16
Manitouwadge
Marathon
Hemlo
N

# Appendix A

## Geochemistry and Table

## Hemlo North Samples

| SampleID | time | latitude (y) | longitude (x) | Elevation (z) |
|---|---|---|---|---|
| HN001 | 29/10/2016 18:07 | 48.832835 | -85.772232 | 401.7 |
| HN002 | 29/10/2016 18:10 | 48.832899 | -85.772224 | 402.5 |
| HN003 | 29/10/2016 18:12 | 48.832929 | -85.77223 | 402.7 |
| HN004 | 29/10/2016 18:16 | 48.833008 | -85.772048 | 404.2 |
| HN005 | 29/10/2016 18:19 | 48.833214 | -85.771837 | 407.3 |

# Certificate of Analysis
## Work Order : CO1607448
## [Report File No.: 0000029184]

**Date:** December 06, 2016

**To:** **COD SGS MINERALS**
C/O LESLIE STREET.
DON MILLS ON M3B 2M3

**P.O. No.:** John Florek 01/12/2016
**Project No.:** -
**Samples:** 5
**Received:** Dec 1, 2016
**Pages:** Page 1 to 2
(Inclusive of Cover Sheet)

**Methods Summary**

| No. Of Samples | Method Code | Description |
|---|---|---|
| 5 | GE_FAI323 | Au by FAS, ICP-AES, 30g |
| 5 | G_PRP89V | Dry, Crush to 75%, Split to 250g, Pulv to 85%, 75µ |
| 5 | G_SCR32 | Dry Soil Screening, Various Meshes, <2kg |

Certified By : _____

Report Footer:

L.N.R. = Listed not received
n.a. = Not applicable
I.S. = Insufficient Sample
– = No result

*INF = Composition of this sample makes detection impossible by this method

*M* after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. *NAA08V) were subcontracted
Elements marked with the @ symbol (e.g. @Cu) denote assays performed using accredited test methods

| Element | Au | Au | -180µm |
|---|---|---|---|
| Method | GE_FAI323 | GE_FAI323 | G_SCR32 |
| Det.Lim. | 0.005 | 5 | 0.01 |
| Units | g/t | ppb | % |
| HN001 | 0.005 | N.A. | -- |
| HN002 | <0.005 | N.A. | -- |
| HN003 | <0.005 | N.A. | -- |
| HN004 | 0.007 | N.A. | -- |
| HN005 | 0.008 | N.A. | -- |
| *Rep HN002 | <0.005 | N.A. | |
| *Std OREAS200 | 0.350 | N.A. | |
| *Blk BLANK | <0.005 | N.A. | |

# Appendix B

## Expenditures

## Hemlo North Lake Claims 4263483

| | MOB | Demob | |
|---|---|---|---|
| | October-29-16 | October-30-16 | December |
| **Prospecting/Physical Feature Mapping** | 800 | 800 | |
| **ATV Rental** | 200 | 200 | |
| **Truck and ATV Mileage costs** | 120 | 120 | |
| **Perdiem+Hotel** | 140 | 140 | |
| **Soil Samples Analysis /Rock Sample Analysis** | | | 125 |
| **Report Writing/Figures** | | | 2400 |
| | 1260 | 1260 | 2525 |
| | | **Total Costs** | **$5,045.00** |

| **Description** | **Quanity** | **units** | **cost/unit** | **Total** | |
|---|---|---|---|---|---|
| Sampling, Prospecting (P.Geo, M.Sc Geologist) | 2 | day | $800.00 | $1,600.00 | Work Costs |
| Geochemical Analysis-Rock Samples | 5 | each | $25.00 | $125.00 | Associated Costs |
| Report Writing | 2 | day | $800.00 | $1,600.00 | Associated Costs |
| Figures | 1 | day | $800.00 | $800.00 | Associated Costs |
| ATV | 2 | day | $200.00 | $400.00 | Transportation Costs |
| Truck Mileage +ATV | 400 | km | $0.60 | $240.00 | Transportation Costs |
| Hotel Allocation | 2 | day | $70.00 | $140.00 | Food and Lodging |
| Perdiem | 2 | day | $70.00 | $140.00 | Food and Lodging |
| | | | **Total Costs** | **$5,045.00** | |

***Electronic Assessment Categories***

| | |
|---|---|
| Work Costs | $1,600.00 |
| Associated Costs | $2,525.00 |
| Transportation Costs | $640.00 |
| Food and Lodging | $280.00 |
| **Total Costs** | **$5,045.00** |

# Appendix C

## Assessment Work