

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](#).

# ASSESSMENT REPORT

Historic Drill Core Logging and  
Magnetic Susceptibility Testing  
And

Outcrop Mapping and Rock Magnetic  
Susceptibility Testing and  
Field Observations

On

Claim 1501032

Cashel Township (M-0071)

Southern Ontario Mining Division

N.T.S. 31C/14

Jim Laidlaw

Claim Holder

08 June 2017

## INTRODUCTION

Assessment work has been conducted on Claim 1501082, Cashel Township (M-0071) in Southern Ontario Mining Division, N.T.S. 31C/14, by the claim holder and author of this report, C. Jim Laidlaw, Client Number 155942.

This work is comprised of historic drill core logging and magnetic susceptibility testing (MNDM Drill Core Library) and outcrop mapping and rock magnetic susceptibility testing and field observations (on Claim 1501082)

## CLAIM HOLDER

C. Jim Laidlaw, the Recorded Holder, holds a 100 % interest in Claim 1501032, which is comprised of 6-units, covering Lots 6, 7 and 8, in Concession 8. A detailed (copy of) Mining Claim Abstract for Claim SO 1501032 is attached.

**Ontario** Ministry of Northern Development and Mines

HOME | MINES AND MINERALS | NORTHERN DEVELOPMENT | NEWS | SITE MAP | CONTACT US

**Mining Claim Abstract**  
| Main Menu | Back |

SOUTHERN ONTARIO - Division 90		Claim Number: SO 1501032		Status: ACTIVE	
<b>Due Date:</b>	2017-Jun-08	<b>Recorded:</b>	2015-Jun-08		
<b>Work Required:</b>	\$2,400	<b>Staked:</b>	2015-Jun-08 11:51		
<b>Total Work:</b>	\$0	<b>Township/Area:</b>	CASHEL (M-0071)		
<b>Total Reserve:</b>	\$0	<b>Lot Description:</b>	LOTS 6, 7 & 8, CON 8		
<b>Present Work Assignment:</b>	\$0	<b>Claim Units:</b>	6		
<b>Claim Bank:</b>	\$0				

**Claim Holders**

Recorded Holder(s)	Percentage	Client Number
LIDLAW, CAMPBELL JAMES (	100.00 %)	155942

**Transaction Listing**

Type	Date	Applied	Description	Performed	Number
STAKER	2015-Jun-08		RECORDED BY LAIDLAW, CAMPBELL JAMES (A49808)		R1590.00854

**Claim Reservations**

- 01 400' surface rights reservation around all lakes and rivers
- 02 Sand and gravel reserved
- 03 Peat reserved
- 04 Other reservations under the Mining Act may apply
- 05 Including land under water
- 06 Excluding road

Home | Mines and Minerals | Northern Development | Ring of Fire Secretariat | News | Site Map | Contact Us

Ontario  
This site is maintained by the Government of Ontario, Canada.  
Accessibility | Privacy | Term of use  
Copyright information: © Queen's Printer for Ontario, 2015

See FIGURE 1 Southern Ontario Resident Geologist District, Cashel Township (M-0071), Ontario, Claim 1501032.

## **ACCESS**

Road Access to Claim 1501032 Property Area, Cashel Township; from the intersection of Highways 62- and 7, at Madoc ON, head north on Highway 62 for about 35.5 km, to the Weslemkoon Lake Road; turn-right onto the Weslemkoon Lake Road and drive approximately 22 km. At this point the North-west-corner of Claim 1501032 is located about 10 meters south of the road at UTM Co-ordinates 18 T 304247E, 4981119N.

See FIGURE 2 Claim 1501032, Dispositions and Work Area Covered in this Report, Cashel Township (M-0071), Southern Ontario Mining Division, N.T.S. 31C/14.

## **WORK PERFORMED**

### **Historic Drill Core Logging and Magnetic Susceptibility Testing**

Drill core archived at the Tweed Resident's Geologists Office, Drill Core Library facility was re-logged and magnetic susceptibility conducted on this core to obtain lithological and geophysical data for follow-up field work on claim 1501032. Drill core reference from assessment file: AFRI 31C14NW0002 MCMURRAY DIAMOND DRILLING 1982-1983. A total of 12 drill holes, easily located and refurbished were examined; including drill-hole numbers - 1, 2, 3, 4, 6, 7, 9, 10, 11, 12, 13 and 14 as per the above assessment file record. The data observations from this examination has been rendered in; Table 1 - Drill Core Re-logging and Drill Core Magnetic Susceptibility Testing of Historic Drill Core, from AFRI 31C14NW0002; McMurray Diamond Drilling 1982-1983, Claim 1501032, Cashel Township (M-0071), Southern Ontario Mining Division, Southern Ontario Resident Geologist District, Drill Core Library, Tweed Ontario.

### **Outcrop Mapping and Rock Magnetic Susceptibility Testing and Field Observations**

Follow-up field work conducted on claim 1501032 was comprised of outcrop observations and magnetic susceptibility readings of rock material. A total of 47 outcrop sites were visited and 42 magnetic susceptibility measurements recorded. A KAPPAMETER KT-10 Magnetic Susceptibility Meter s/n 9329 was loaned out by Tweed Resident's Geologists Office. Instrument Reading are in  $10^{-3}$  SI Units.

Appended to the report is a technical specification sheet for the KAPPAMETER KT-10 Magnetic Susceptibility Meter.

The station locations were determined using a Garmin GPSmap76CSx hand-held GPS unit; recording UTM Easting (UTME) and UTM Northing (UTMN) coordinates, (in Map Datum NAD 83).

Systematic field notes with the following data-fields were recorded at the sample sites: STATION, UTME, UTMN, GEOLOGY, GEOLOGY\_LABEL, MAGNETIC SUSCEPTIBILITY ( $10^{-3}$  SI Units), AVERAGE READING, MAXIMUM READING, MAGNETIC ATTRACTION (MA), STRIKE °, DIP °, MINERAL SYMBOL, and MINERAL, see Table 2 - Outcrop Mapping and Rock Magnetic Susceptibility Testing and Field Observations, Claim 1501032, Cashel Township (M-0071), Southern Ontario Mining Division, N.T.S. 31C/14, UTM Coordinates, Zone 18 T, Datum NAD 83.

## **PERSONNEL AND DATES WORKED**

### **DRILL CORE LIBRARY – TWEED ONTARIO**

Jim Laidlaw – 09, 10, 19 and 20 November 2015. 4 days.

### **FIELD WORK – Claim 1501032**

Jim Laidlaw - 28 November, 2015, 27 April, 9 May, 11 May, 16 May and 19 May 2017. 6 days.

Rebecca Laidlaw - 9 May, 11 May, 16 May and 19 May 2017. 4 days

## **OFFICE WORK**

Report writing by Jim Laidlaw was conducted over the period 27 May 2017 to 07 June 2017, and totalled 55 hours of work.

## **MAGNETIC SUSCEPTIBILITY DEFINITION AND DISCUSSION**

Magnetic susceptibility is defined as, the degree to which a substance can be magnetized. In mathematical terms, it is the ratio  $k$  of the intensity of the magnetization  $I$  to the magnetic field  $H$  that is responsible for the magnetization, i.e.

$$kH = I$$

From Ampere's law, it is known that a current (i.e. a moving electrical charge) generates a magnetic field. The inverse corollary to this is that a magnetic field can also influence a moving electrical charge. Therefore, put in simple terms, an oscillating EM field will be influenced to varying degrees by magnetically susceptible material.

(KT-10v1-6; KT-10 Magnetic Susceptibility Meter User's Guide Rev.1.6, Terraplus Geophysical Equipment Supplier; Web: <http://www.terraplus.ca>)

Magnetic susceptibility of rocks is in principle controlled by the type and amount of magnetic minerals contained in a rock. Sometimes, it is dominantly controlled by paramagnetic minerals (mafic silicates such as olivine, pyroxenes, amphiboles, micas, tourmaline, garnets), often by ferromagnetic minerals (iron oxides or sulphides, represented for instance by magnetite and/or pyrrhotite, respectively) and; much less frequently by diamagnetic minerals (calcite, quartz). As the ferromagnetic minerals mostly belong to accessory minerals that are often sensitive indicators of geological processes, the magnetic susceptibility is a useful parameter in solving some petrologic problems.

## **RESULTS**

### **Drill Core Magnetic Susceptibility Results**

A total of 12 drill holes, were located and refurbished and were examined; drill-hole numbers - 1, 2, 3, 4, 6, 7, 9, 10, 11, 12, 13 and 14. Drill-hole location information and hole azimuth data on the original drill logs was not recorded properly. However, the core was sufficiently well-preserved for re-logging and magnetic susceptibility measurements ( $10^{-3}$  SI Units) purposes.

<b>Rock Types</b>	<b>Average</b>	<b>Maximum</b>	<b>Count</b>
Talc-Carbonate-Serpentine	17.1	125	9
Talc-Carbonate-Tremolite	15.6	191	18
Granite	NOT OBSERVED IN DRILL CORE		
Amphibolite	1.33	30	10
Tremolite-chlorite-talc	NOT OBSERVED IN DRILL CORE		
Mafic dike	34.5	301	2
Felsic Flow	NOT OBSERVED IN DRILL CORE		
Rusty Schist	2.10	10.3	1
Quartz-Biotite-Hornblende Schist	0.319	3.08	5

The mafic dike has the highest average and maximum magnetic susceptibilities: 34.5 and 301 respectively.

The Talc-Carbonate-Serpentine and Talc-Carbonate-Tremolite have relatively similar average and maximum susceptibilities, and may be the same unit but with variable mineral constituents, possibly indicative of (mineral) layering. There are variable concentration of tremolite, magnetite and talc in these units.

The average and maximum magnetic susceptibilities for Amphibolite and Rusty Schist may are similar, possibly due to the higher concentrations of pyrrhotite and to a lesser degree, by the presence of magnetite.

The Quartz-Biotite-Hornblende Schist unit has the lowest values in this canvas.

## **RESULTS continued**

### **Outcrop Mapping Magnetic Susceptibility Results**

Follow-up field work conducted on claim 1501032 resulted in 47 outcrop sites visited and 42 magnetic susceptibility measurements recorded.

<b>Rock Types</b>	<b>Average</b>	<b>Maximum</b>	<b>Count</b>
Talc-Carbonate-Serpentine	13.1	133	9
Talc-Carbonate-Tremolite	3.66	15.9	1
Granite	0.304	0.970	1
Amphibolite	0.795	11.6	22
Tremolite-chlorite-talc	NOT OBSERVED		
Mafic dike	9.85	20.6	2
Felsic Flow	0.023	1.01	1
Rusty Schist	1.20	15.8	5
Quartz-Biotite-Hornblende Schist	0.146	0.410	1

The Talc-Carbonate-Serpentine has the highest average values and the largest maximum value, possibly due the presence of disseminated and veinlet forms of magnetite and widely distributed olivine.

The Mafic dike higher values are due to the presence of magnetite disseminated through the dike material.

The Talc-Carbonate-Tremolite has magnetic susceptibility values lower than the Talc-Carbonate-Serpentine unit, possibly due to higher concentrations of talc.

The average and maximum magnetic susceptibilities for Amphibolite and Rusty Schist may are similar, possibly due to the higher concentrations of pyrrhotite and to a lesser degree, by the presence of magnetite.

Granite, Quartz-Biotite-Hornblende Schist and Granite all have relatively low susceptibility values.

**Table and figures accompanying this report are as follows:**

**TABLE:**

Table 1 - Drill Core Re-logging and Drill Core Magnetic Susceptibility Testing of Historic Drill Core, from AFRI 31C14NW0002; McMurray Diamond Drilling 1982-1983, Claim 1501032, Cashel Township (M-0071), Southern Ontario Mining Division, Southern Ontario Resident Geologist District, Drill Core Library, Tweed Ontario.

Table 2 - Outcrop Mapping and Rock Magnetic Susceptibility Testing and Field Observations, Claim 1501032, Cashel Township (M-0071), Southern Ontario Mining Division, N.T.S. 31C/14, UTM Coordinates, Zone 18 T, Datum NAD 83.

**FIGURES:**

**FIGURE 1**

Southern Ontario Resident Geologist District  
Cashel Township (M-0071), Ontario  
Claim 1501032  
C. Jim Laidlaw  
Claim Holder

Scale - 1:10 000 000 or 1cm = 100 km

Datum: NAD 83

Drawn By: Jim Laidlaw

Date: 07 June 2017

**FIGURE 2**

Claim 1501032, Dispositions and  
Work Area Covered in this Report  
Cashel Township (M-0071)  
Southern Ontario Mining Division

Scale 1:25 000 or 1cm = 250 m

Drawn By: Jim Laidlaw

Date: 07 June 2017

N.T.S. 31C/14



**FIGURES continued**

FIGURE 3

Geological Outcrop Units and  
Rock Magnetic Susceptibility Testing  
in Claim 1501032  
Cashel Township (M-0071)  
Southern Ontario Mining Division

Scale 1:2 500 or 1cm = 25 m  
Datum: NAD 83, UTM Coordinates  
Drawn By: Jim Laidlaw  
Date: 07 June 2017

N.T.S. 31C/14

Submitted by,

Jim Laidlaw  
8 June 2017

Madoc ON

# Appendix

## Technical Specification Sheet

For

KAPPAMETER KT-10 Magnetic Susceptibility Meter

# Chapter 2

---

## The KT-10

### 2.1 Specifications

<b>Sensitivity:</b>	1x10 <sup>-6</sup> SI Units
<b>Measurement range:</b>	0.001 x 10 <sup>-3</sup> to 999.99 x10 <sup>-3</sup> SI Units Auto-Ranging
<b>Operating frequency:</b>	10 kHz
<b>Measurement Frequency</b>	20 times per second. In Scan mode (5 readings averaged together with 4 readings / second stored)
<b>Display:</b>	High Contrast LCD Graphic Display with 104 x 88 pixels
<b>Memory:</b>	Up to 2000 measurements with voice notes.
<b>Control:</b>	1 button with up / down function & pin for rough surfaces
<b>Connectors:</b>	USB, Bluetooth and GPS link via Bluetooth
<b>Battery:</b>	Two AA Batteries Rechargeable or Non-rechargeable
<b>Battery life:</b>	100 hours
<b>Operating temperature:</b>	-20 °C to 60 °C
<b>Dimensions:</b>	200mm x 57mm X 30mm
<b>Coil Diameter:</b>	65 mm
<b>Weight:</b>	0.30 kg

100°0'0"W

90°0'0"W

80°0'0"W

70°0'0"W

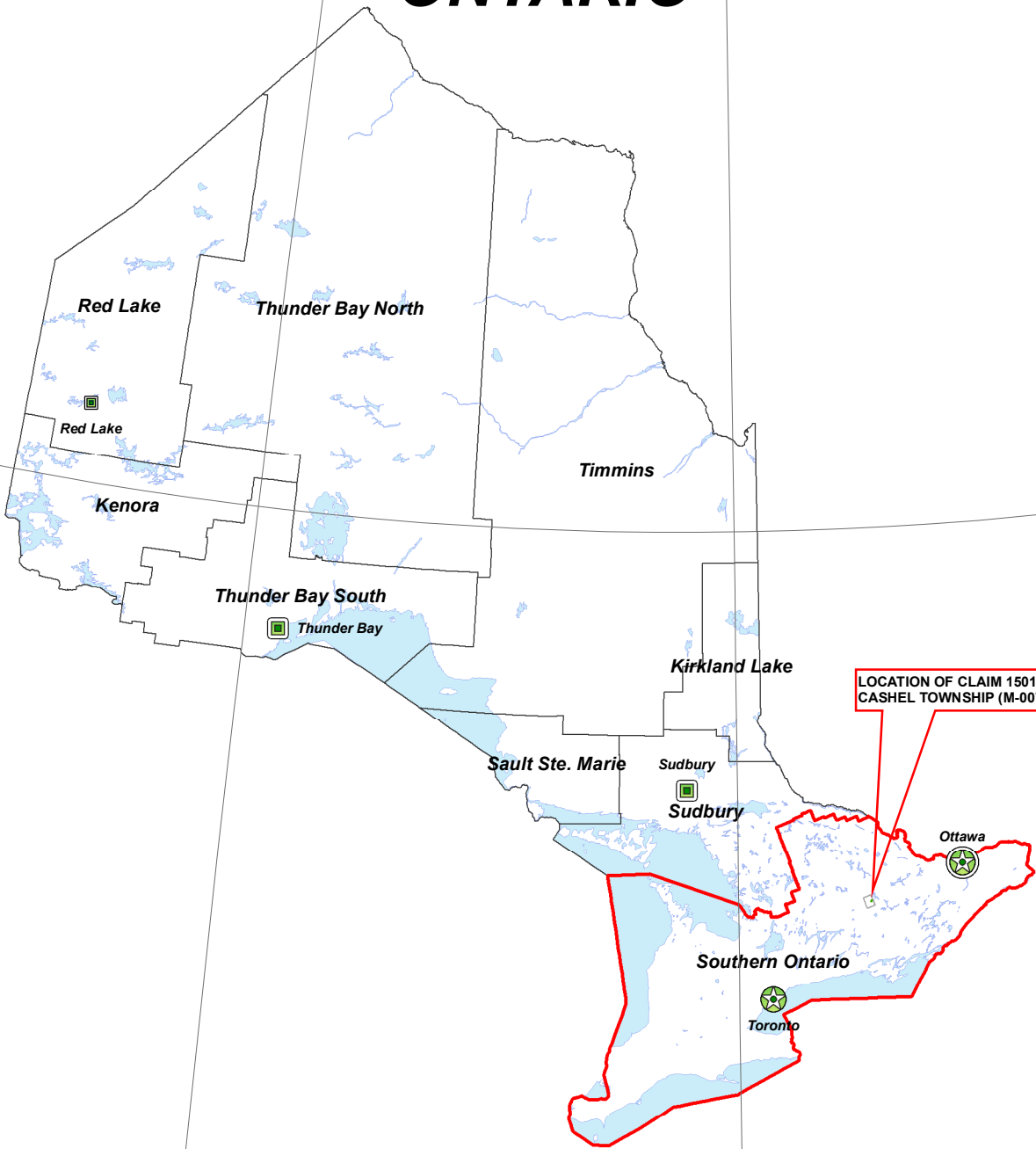
# ONTARIO

50°0'0"N

50°0'0"N

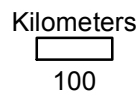
40°0'0"N

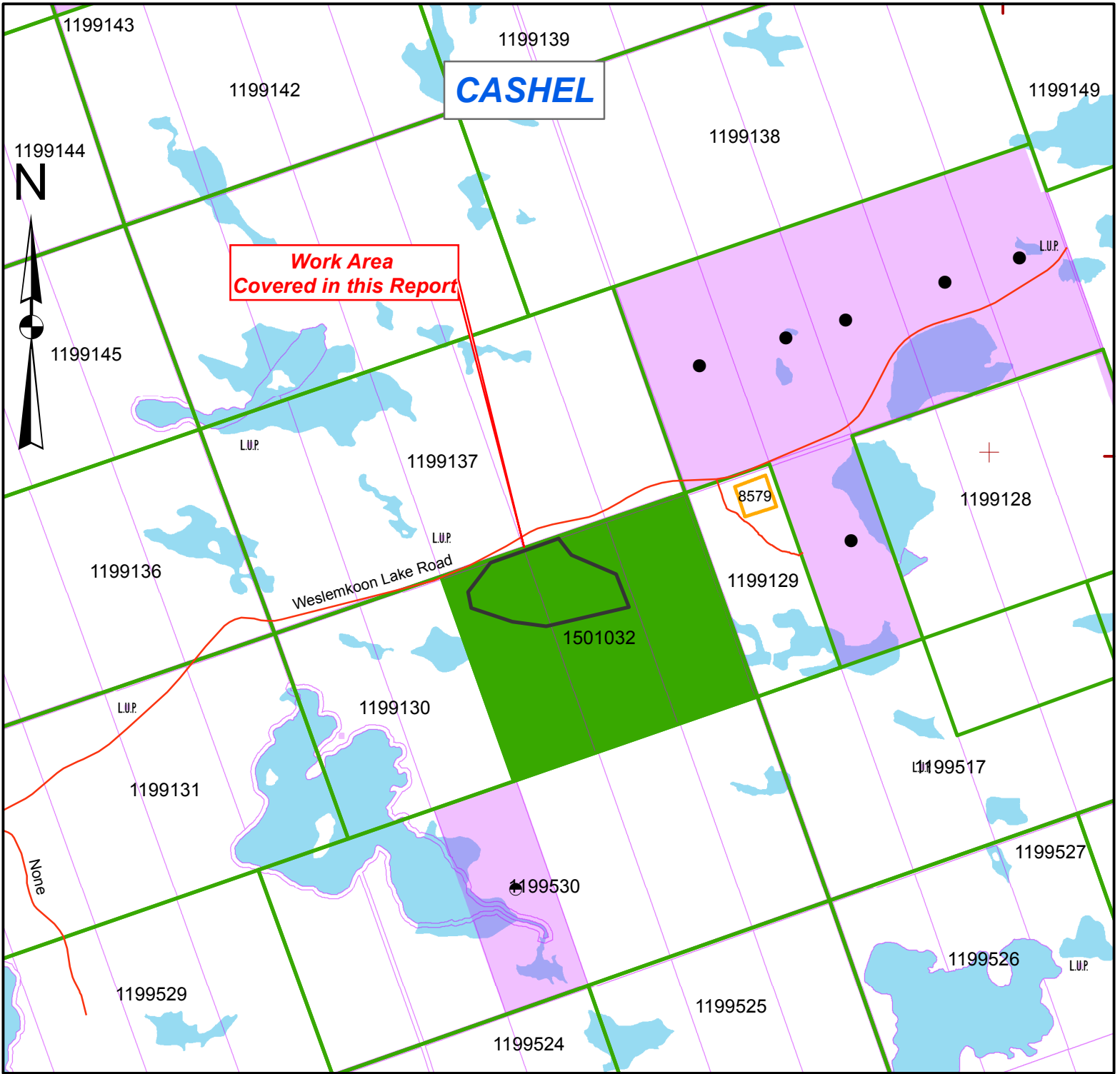
40°0'0"N



**FIGURE 1**  
 Southern Ontario Resident Geologist District  
 Cashel Township (M-0071), Ontario  
 Claim 1501032  
 C. Jim Laidlaw  
 Claim Holder

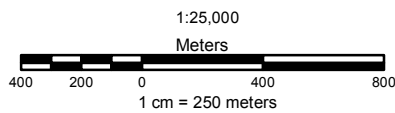
Scale - 1:10 000 000 or 1cm = 100 km  
 Datum: NAD 83  
 Drawn By: Jim Laidlaw  
 Date: 07 June 2017





**Legend**

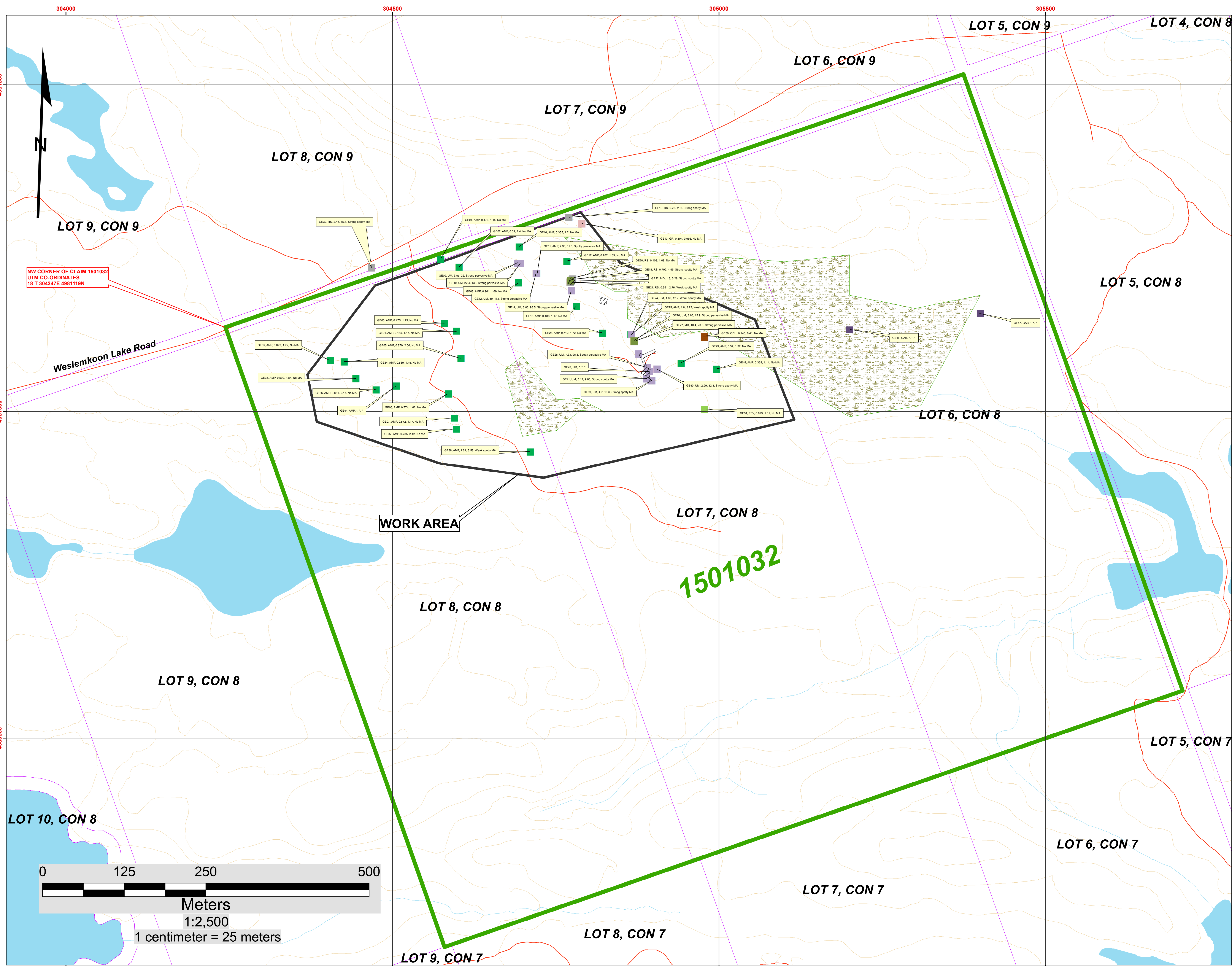
- Work Area
- Staked Claims
- Claim 1501032
- Surface and Mining Rights
- Alienation 8579
- Surface Rights Only
- L.U.P. Land Use Permit
- Patent: Surface and Mining Rights



**FIGURE 2**  
**Claim 1501032, Dispositions and**  
**Work Area Covered in this Report**  
**Cashel Township (M-0071)**  
**Southern Ontario Mining Division**

**Scale - 1:25 000 or 1cm = 250 m**  
**Datum: NAD 83**  
**Drawn By: Jim Laidlaw**  
**Date: 07 June 2017**

**N.T.S. 31C/14**



**Legend**

- Felsic Flow FFV
- Quartz-Biotite-Hornblende Schist GBH
- Granite GR
- Mafic Dike MD
- Gabbro GAB
- Rusty Schist RS
- Ultramafic UM
- Amphibolite AMP
- STRIPPED AREAS

**MAGNETIC SUSCEPTIBILITY READING**

Station	Rock Type	Average Reading	Maximum Reading	Magnetic Attraction
GE23	AMP	0.712	1.72	No MA

INSTRUMENT: KAPPAMETER KT-10  
INSTRUMENT READING: 10<sup>-3</sup> SI Units

NOTE:  
See Table 2 - Outcrop Mapping and Rock Magnetic Susceptibility Testing and Field Observations, for additional details and descriptions.

**FIGURE 3**  
**Geological Outcrop Units and Rock Magnetic Susceptibility Testing in Claim 1501032**  
 Cashel Township (M-0071)  
 Southern Ontario Mining Division

Scale 1:2 500 or 1cm = 25 m  
 Datum: NAD 83, UTM Coordinates  
 Drawn By: Jim Laidlaw  
 Date: 07 June 2017

N.T.S. 31C/14

Table 1 - Drill Core Re-logging and Drill Core Magnetic Susceptibility Testing of Historic Drill Core, from AFRI 31C14NW0002; McMurray Diamond Drilling 1982-1983

Claim 1501032  
Cashel Township (M-0071)

HOLE NUMBER	NOTE: DEPTHS IN FEET			ROCK TYPE	DESCRIPTION	PLANAR FEATURE	MAGNETIC SUSCEPTIBILITY (10 <sup>-3</sup> SI Units)		
	FROM	TO	WIDTH				AVERAGE	MAXIMUM	MAGNETIC ATTRACTION (MA)
1	0.0	62.4	62.4	Talc-Carbonate-Tremolite	Massive granular, medium to coarse-grained, white to dark green-grey with tremolite and anthophyllite, talc rich, ± magnetite and hematite.	*	62.10	160.00	Strong pervasive MA
1	62.4	64.0	1.6	Mafic dike	Fine-grained green-gray, 1-2% disseminated euhedral magnetite	UC 70° and LC 65°	51.80	301.00	Strong pervasive MA
1	64.0	100.0	36.0	Talc-Carbonate-Tremolite	Massive granular, medium to coarse-grained, white to dark green-grey with tremolite and anthophyllite, talc rich, ± magnetite and hematite. At 86.4 to 100.00 strongly foliation. EOH 100.0'	40° - 50° ca	36.10	91.70	Strong pervasive MA
2	0.0	27.0	27.0	Talc-Carbonate-Serpentine	Massive, medium to coarse-grained, tremolite, anthophyllite rosettes, olivine, feldspar, talc, with a few hematite patches; foliated sections. EOH at 27.0'	50° - 65° ca	12.00	89.50	Strong pervasive MA
3	0.0	1.4	1.4	Amphibolite	Fine-grained and foliated.	35°	0.336	1.23	No MA
3	1.4	5.6	4.2	Talc-Carbonate-Tremolite	Massive, coarse-grained, gray-green, tremolite crystal, talcose.		0.294	2.55	No MA
3	5.6	8.7	3.1	Amphibolite	Medium-grained biotite-rich foliated amphibolite, black to dark green.	20°	0.481	0.961	No MA
3	8.7	17.3	8.6	Talc-Carbonate-Tremolite	Massive, medium to coarse-grained, gray-green, tremolite, anthophyllite crystals, talc-rich; several narrow foliated magnetite-rich patches.	50°	0.966	12.2	Strong spotty MA
3	17.3	18.3	1.0	Amphibolite	Medium-grained biotite-rich foliated amphibolite, black to dark green.		0.322	0.673	No MA
3	18.3	18.9	0.6	Quartz-Biotite-Hornblende Schist	Fine to medium-grained, gray, biotite-rich.		0.114	0.169	No MA
3	18.9	24.8	5.9	Talc-Carbonate-Tremolite	Medium-grained, massive tremolite-rich with anthophyllite rosettes.		4.41	18.30	Spotty pervasive MA
3	24.8	27.5	2.7	Talc-Carbonate-Tremolite	Massive, medium-grained, gray-green, tremolite, anthophyllite crystals, talc-rich; several narrow foliated magnetite-rich patches, broken core. EOH at 27.5'		2.62	7.84	Spotty pervasive MA
4	0.0	26.5	26.5	Talc-Carbonate-Serpentine	Fine to coarse-grained, white olivine-rich, hematite in fracture-filled and patchy veinlets, with tremolite crystals and anthophyllite rosettes. EOH at 26.5'		14.60	57.50	Strong pervasive MA
6	0.0	30.0	30.0	Talc-Carbonate-Tremolite	Medium to coarse-grained, orange weathered tremolite and anthophyllite crystals, talc-rich, hematite altered, magnetite patches and fracture-filled sections.		8.35	87.90	Strong pervasive MA
6	30.0	35.4	5.4	Talc-Carbonate-Tremolite	Massive talc zone, green-gray, fibrous asbestos-form crystalline sections.		1.61	11.60	Weak spotty MA
6	35.4	37.8	2.4	Mafic dike	Fine to medium-grained, gray-green, with 1-2% euhedral magnetite crystals in centre of dike.		16.90	99.60	Strong pervasive MA
6	37.8	42.1	4.3	Talc-Carbonate-Tremolite	Massive talc zone, green-gray, fibrous asbestos-form crystalline sections.		2.75	11.80	Weak spotty MA
6	42.1	75.0	32.9	Talc-Carbonate-Tremolite	Medium to coarse-grained, orange weathered tremolite and anthophyllite crystals, talc-rich, hematite altered, magnetite patches and fracture-filled sections. EOH at 75.0'		8.61	84.80	Strong pervasive MA
7	0.0	11.9	11.9	Talc-Carbonate-Serpentine	Medium-grained, massive granular, white weathered olivine-rich.		20.90	52.70	Strong pervasive MA
7	11.9	27.1	15.2	Talc-Carbonate-Tremolite	Fine to medium-grained, massive tremolite-rich with anthophyllite rosettes. Carbonate coated fracture.		1.62	12.30	Strong spotty MA
7	27.1	28.2	1.1	Tremolite-chlorite-talc	Green-weathered, schistose, biotite-rich, contact with above unit.	UC 30°	0.757	1.18	No MA
7	28.2	68.3	40.1	Amphibolite	Fine to coarse-grained, schistose, carbonate-rich, a few fractures with py, some fine-grained garnetiferous sections.		0.593	2.99	No MA
7	68.3	70.0	1.7	Quartz-Biotite-Hornblende Schist	Fine-grained, gray. EOH 70.0'		0.122	0.223	No MA
9	0.0	28.0	28.0	Rusty Schist	Fine-grained, foliated, biotite-quartz-feldspar, po veinlets, rusty spotting due to near surface weathering in the hole. EOH at 28.0'	40°	2.10	10.30	Strong spotty MA

Table 1 - Drill Core Re-logging and Drill Core Magnetic Susceptibility Testing of Historic Drill Core, from AFRI 31C14NW0002; McMurray Diamond Drilling 1982-1983

Claim 1501032  
Cashel Township (M-0071)

HOLE NUMBER	NOTE: DEPTHS IN FEET			ROCK TYPE	DESCRIPTION	PLANAR FEATURE	MAGNETIC SUSCEPTIBILITY (10 <sup>-3</sup> SI Units)		
	FROM	TO	WIDTH				AVERAGE	MAXIMUM	MAGNETIC ATTRACTION (MA)
10	0.0	2.0	2.0	Overburden	Till				
10	2.0	102.0	100.0	Talc-Carbonate-Serpentine	Fine to coarse-grained, massive talc-rich, with olivine crystals, magnetite throughout section, grain size becomes more coarse crystalline towards bottom of hole, 2% disseminated and stringer magnetite throughout section. Split sampling from 37.5 to 52.0, talc-rich material. Observe malachite-azurite like staining through interval 52.8 to 54.6'. EOH at 102'		55.40	125.00	Strong pervasive MA
11	0.0	12.8	12.8	Talc-Carbonate-Serpentine	Medium to coarse-grained, white weathered, talc-rich, hematized patches and fractures.		40.80	84.30	Strong pervasive MA
11	12.8	74.7	61.9	Talc-Carbonate-Tremolite	Fine to coarse-grained, talc-rich, hematite fractures and patches, some orange weathered coarse-grained anthophyllite rosettes.		17.00	191.00	Strong pervasive MA
11	74.7	77.7	3.0	Amphibolite	Strongly foliated dark green, chlorite-rich and biotite-rich.	UC 80° and LC 35°	0.41	0.86	No MA
11	77.7	79.0	1.3	Quartz-Biotite-Hornblende Schist	Banded, gray-white.		0.11	0.32	No MA
11	79.0	80.0	1.0	Amphibolite	Fine-grained, black.	UC 45° and LC 30°	0.73	1.01	No MA
11	80.0	83.2	3.2	Quartz-Biotite-Hornblende Schist	Banded, gray-white.		0.23	0.61	No MA
11	83.2	94.3	11.1	Talc-Carbonate-Serpentine	Medium to coarse-grained, massive, green-white, talc-rich.		1.35	17.30	Spotty pervasive MA
11	94.3	96.0	1.7	Talc-Carbonate-Tremolite	Medium-grained, massive, white-weathered, talc-rich.		32.10	63.70	Spotty pervasive MA
11	96.0	100.6	4.6	Amphibolite	Fine-grained, dark green, moderately foliated, trace py and magnetite rich fractures.	UC 35° and LC 30°	5.57	30.00	Spotty pervasive MA
11	100.6	103.0	2.4	Talc-Carbonate-Tremolite	Medium-grained, massive, white-weathered, talc-rich. EOH at 103'		33.90	88.30	Strong pervasive MA
12	0.0	50.0	50.0	Amphibolite	Fine-grained, strongly foliated, mica developed along foliation, some fracture filled carbonate and py, disseminated po blebs. EOH at 50.0'.	30°	1.21	3.48	Strong spotty MA
13	0.0	23.8	23.8	Talc-Carbonate-Tremolite	Fine to coarse-grained, talc-rich, gray-green, hematite fractures and patches, coarse-grained anthophyllite rosettes, weakly foliated.	65°	15.00	46.50	Strong pervasive MA
13	23.8	40.0	16.2	Talc-Carbonate-Serpentine	Medium-grained, massive, gray, white-weathered, talc-rich.		0.81	50.40	Strong pervasive MA
13	40.0	54.0	14.0	Talc-Carbonate-Tremolite	Fine to coarse-grained, gray-green, talc-rich, weakly foliated.	65°	34.40	116.10	Strong pervasive MA
13	54.0	60.0	6.0	Amphibolite	Fine to medium-grained, dark green, foliated.		3.10	19.00	Strong spotty MA
13	60.0	65.8	5.8	Talc-Carbonate-Serpentine	Medium-grained, massive, gray, white-weathered, talc-rich, minor py-rich carbonate veinlets.	45°	0.36	3.39	No MA
13	65.8	124.0	58.2	Amphibolite	Fine-grained, dark green, strongly foliated, mica along foliation, narrow py-po veinlets and po as disseminated patches, some narrow quartz carbonate breccia fracture fills. EOH at 124.0'		0.54	4.71	Spotty pervasive MA
14	0.0	21.5	21.5	Talc-Carbonate-Tremolite	Medium to coarse-grained massive, gray and white-weathered, 1-3% magnetite, coarse-grained anthophyllite rosettes.		15.80	82.20	Strong pervasive MA
14	21.5	22.0	0.5	Quartz-Biotite-Hornblende Schist	Fine-grained, black		1.02	3.08	No MA
14	22.0	73.0	51.0	Talc-Carbonate-Tremolite	Medium to coarse-grained massive, gray and white-weathered, few anthophyllite rosettes.		3.08	59.10	Strong pervasive MA
14	73.0	75.0	2.0	Talc-Carbonate-Serpentine	Medium-grained, massive, gray, white-weathered, talc-rich.		8.07	25.30	Strong pervasive MA



STATION	UTME	UTMN	GEOLOGY	GEOLOGY LABEL	MAGNETIC SUSCEPTIBILITY (10 <sup>-3</sup> SI Units)			REMARKS	STRIKE °	DIP °	DIP ASPECT °	MINERAL SYMBOL	MINERAL
					AVERAGE	MAXIMUM	MAGNETIC ATTRACTION (MA)						
GE01	304574	4981233	Amphibolite	AMP	0.473	1.45	No MA	Amphibolite outcrop exposure 2 x 2.5 x 1.8 m in thick till, a few granite boulders on surface.	153	*	*	*	*
GE02	304602	4981221	Amphibolite	AMP	0.390	1.40	No MA	Amphibolite, low lying outcrop exposure; till over bedrock.	*	*	*	*	*
GE03	304580	4981135	Amphibolite	AMP	0.475	1.25	No MA	Coarse-grained amphibolite, layered outcrop; outcrop ridge 3.5 m long x 2.0 m high, rusty to black; large rusty qv blocks distributed in thin sandy silty till over bedrock.	115	64	205	QV	Quartz vein
GE04	304598	4981123	Amphibolite	AMP	0.485	1.17	No MA	Amphibolite rusty schist oc, area with large angular milky white to vitreous quartz blocks (muck), < 1% anh to ueh py in vuggy patches, some chlorite and biotite patches. Historic trench area about 20 m long; overgrown and debris filled; large quartz vein blocks throughout feature. Thin sandy silty till overburden.	*	*	*	py	Pyrite
GE05	304605	4981081	Amphibolite	AMP	0.879	2.06	No MA	Amphibolite, bedded, with rusty 5 cm wide QV, low-lying outcrop exposure.	105	72	195	QV	Quartz vein
GE06	304586	4981027	Amphibolite	AMP	0.774	1.62	No MA	Amphibolite dark grey-black, sandy-weathered outcrop; till over bedrock.	*	*	*	*	*
GE07	304595	4980990	Amphibolite	AMP	0.572	1.17	No MA	Amphibolite fine grained, grey-black, outcrop, ridge 3m high; till over bedrock.	104	68	194	*	*
GE08	304693	4981197	Amphibolite	AMP	0.961	1.69	No MA	Amphibolite black, foliated, outcrop, ridge 4.5m high; till over bedrock; till over bedrock.	93	60	183	*	*
GE11	304721	4981211	Amphibolite	AMP	2.93	11.6	Spotty pervasive MA	Amphibolite, dark green, footwall contact with talcose UM unit. Coarse-grained euhedral magnetite.	125	60	215	mag	Magnetite
GE15	304782	4981161	Amphibolite	AMP	0.188	1.17	No MA	Amphibolite, black-grey, with quartz-veinlets. Outcrop ridge moss covered.	97	72	187	QV	Quartz vein
GE16	304694	4981252	Amphibolite	AMP	0.355	1.20	No MA	Amphibolite outcrop exposure 1.5 m x 2.0 m, grey-green, quartz veinlets brecciated appearance; till covered area.	102	74	192	QV	Quartz vein
GE17	304767	4981230	Amphibolite	AMP	0.702	1.39	No MA	Amphibolite outcrop, grey-green bedded tuff.	120	72	210	*	*
GE23	304822	4981120	Amphibolite	AMP	0.712	1.72	No MA	Amphibolite, bedded, outcrop ridge, dark green-grey. Till covered area with mafic volcanic and granite erratics.	138	62	228	*	*
GE25	304865	4981118	Amphibolite	AMP	1.80	3.22	Weak spotty MA	Mafic volcanic tuff bed overlying UM.	*	*	*	*	*
GE29	304942	4981074	Amphibolite	AMP	0.37	1.37	No MA	Amphibolite, dark green, with quartz-feldspar veining, outcrop ridge.	72	77	162	QV	Quartz-feldspar veining
GE33	304444	4981050	Amphibolite	AMP	0.592	1.84	No MA	Amphibolite, coarse-grained, grey-black, low-lying outcrop exposure in skidder trail.	98	?	188	*	*
GE34	304426	4981076	Amphibolite	AMP	0.539	1.45	No MA	Amphibolite, rusty-brown to grey-green outcrop, 5-8% disseminated coarse-grained euhedral red garnets.	*	*	*	gar	Garnet
GE35	304405	4981078	Amphibolite	AMP	0.692	1.72	No MA	Amphibolite, grey-green outcrop, disseminated coarse-grained euhedral red garnets, trace pyrite.	103	64	193	gar, tr py	Garnet and Pyrite
GE36	304475	4981033	Amphibolite	AMP	0.851	2.17	No MA	Amphibolite, grey-green outcrop, bedding appears to be kinked, 5m x 2m exposure in skidder trail.	128	66	218	*	*
GE37	304598	4980973	Amphibolite	AMP	0.785	2.42	No MA	Amphibolite, hornblende-feldspar rich, with coarse-grained red euhedral garnets, schistose 1.5m high outcrop ridge.	115	67	205	gar	Garnet
GE38	304711	4980938	Amphibolite	AMP	1.61	3.58	Weak spotty MA	Amphibolite, green schistose outcrop with <1% disseminated po, 2-3% disseminated medium-grained euhedral red garnets and calcite veinlets.	122	74	212	gar, po	Garnet and Pyrrhotite
GE44	304506	4981039	Amphibolite	AMP	*	*	*	Amphibolite outcrop area adjacent to skidder trail.	*	*	*	*	*
GE45	304996	4981065	Amphibolite	AMP	0.352	1.14	No MA	Amphibolite outcrop at top of slope with quartz-feldspar veining.	*	*	*	*	*
GE09	304692	4981227	Talc-Carbonate-Serpentine	UM	3.55	22.0	Strong pervasive MA	Talc-Carbonate-Serpentine, medium grained, massive, red-green colored, talcose pitted surface, hematite altered veinlets; outcrop 10-12 m wide in low wet area.	*	*	*	hem	Hematite
GE10	304696	4981227	Talc-Carbonate-Serpentine	UM	22.4	133.0	Strong pervasive MA	Talc-Carbonate-Serpentine outcrop; second magnetic susceptibility reading.	*	*	*	*	*
GE12	304720	4981211	Talc-Carbonate-Serpentine	UM	59.0	113.0	Strong pervasive MA	Talc-Carbonate-Serpentine outcrop; second magnetic susceptibility reading.	*	*	*	*	*
GE14	304774	4981185	Talc-Carbonate-Serpentine	UM	3.06	93.5	Strong pervasive MA	Talc-Carbonate-Serpentine, medium grained, massive, red-green colored, talcose pitted surface, hematite altered veinlets; outcrop ridge 4m.	*	*	*	hem	Hematite
GE24	304866	4981118	Talc-Carbonate-Serpentine	UM	1.62	12.2	Weak spotty MA	Talc-Carbonate-Anthophyllite, outcrop ridge, UM in contact with mafic volcanic tuff bed. Adjacent to access trail.	145	67	235	talc	Talc
GE26	304870	4981107	Talc-Carbonate-Tremolite	UM	3.66	15.9	Strong pervasive MA	Ultramafic outcrop, grey-green, coarse-grained tremolite-phyric, talcose.	*	*	*	trem	Tremolite
GE28	304890	4981067	Talc-Carbonate-Serpentine	UM	7.33	95.3	Spotty pervasive MA	UM outcrop exposure in historic McMurray trench, assessment file 31C14NW0002. Rusty-brown weathered surface; coarse grains of tremolite and magnetite. A maximum magnetic susceptibility reading of 754 x 10 <sup>-3</sup> SI Units observed in magnetite-rich section of outcrop.	*	*	*	*	*
GE39	304897	4981047	Talc-Carbonate-Serpentine	UM	4.7	16.6	Strong spotty MA	Ultramafic outcrop, orange-brown weathered surface, coarse-grained tremolite-phyric, talcose, exposed area at the south-end of the McMurray Trenched Area.	*	*	*	ant	Anthophyllite
GE40	304905	4981065	Talc-Carbonate-Serpentine	UM	2.99	32.3	Strong spotty MA	Ultramafic outcrop, orange-brown weathered surface, massive and layered appearance, coarse-grained tremolite-phyric, talcose with narrow mafic dike conformable to layering(?). Outcrop exposure adjacent to historic McMurray trench, assessment file 31C14NW0002.	*	*	*	*	*
GE41	304889	4981050	Talc-Carbonate-Serpentine	UM	5.12	9.88	Strong spotty MA	Ultramafic outcrop, orange-brown weathered surface, massive and talcose. Start of access trail to main route. Outcrop exposure in historic McMurray Trenched Area, assessment file 31C14NW0002.	*	*	*	*	*
GE42	304893	4981061	Talc-Carbonate-Serpentine	UM	*	*	*	McMurray Trenched Area, Talc Zone Showing.	*	*	*	*	*
GE43	304877	4981088	Talc-Carbonate-Serpentine	UM	*	*	*	Outcrop, very talcose, "soapstone".	*	*	*	soap	Soapstone
GE18	304774	4981201	Rusty Schist	RS	0.799	4.96	Strong spotty MA	Rusty schist outcrop area, historical stripped area, biotite-quartz-hornblende, bedded, 1-2% disseminated py and 1-2 mm wide py veinlets, very rust weathered. Grab sample taken from mineralized py veinlets.	102	51	192	py	Pyrite
GE19	304770	4981297	Rusty Schist	RS	2.280	11.2	Strong spotty MA	Additional magnetic susceptibility readings over outcrop.	*	*	*	py	Pyrite
GE20	304776	4981203	Rusty Schist	RS	0.108	1.08	No MA	Additional magnetic susceptibility readings over outcrop.	*	*	*	py	Pyrite
GE21	304772	4981198	Rusty Schist	RS	0.351	2.76	Weak spotty MA	Additional magnetic susceptibility readings over outcrop.	*	*	*	py	Pyrite
GE32	304468	4981220	Rusty Schist	RS	2.46	15.8	Strong spotty MA	Rusty schist outcrop, biotite-quartz-hornblende, bedded, 1-2% disseminated po-py and 1-2 mm wide po-py veinlets, very rust weathered. Grab sample taken from mineralized po-py veinlets. Outcrop 12m wide. Off-property; adjacent to the south side of Weslemkoon Lake Road access.	118	60	208	po-py	Pyrrhotite-Pyrite
GE46	305200	4981125	Gabbro	GAB	*	*	*	Gabbro	*	*	*	*	*
GE47	305400	4981150	Gabbro	GAB	*	*	*	Gabbro	*	*	*	*	*
GE22	304773	4981200	Mafic dike	MD	1.300	3.28	Strong spotty MA	Additional magnetic susceptibility readings over outcrop.	*	*	*	py	Pyrite
GE27	304870	4981108	Mafic dike	MD	18.4	20.6	Strong pervasive MA	Mafic dike, 1 m wide, dark green, very hard and brittle with coarse magnetite crystals disseminated throughout dike. Cuts the adjacent UM outcrop.	120	60	210	mag	Magnetite
GE13	304790	4981287	Granite	GR	0.304	0.97	No MA	Granite, massive equigranular, quartz-hornblende-feldspar, outcrop on steep slope, white weathered.	*	*	*	*	*
GE30	304978	4981114	Quartz-Biotite-Hornblende Schist	QBH	0.146	0.41	No MA	Quartz-Biotite-Hornblende Schist outcrop, dark grey-green, white to pink weathered, at the base of steep ridge.	94	58	184	bio	Biotite
GE31	304978	4981003	Felsic Flow	FFV	0.023	1.01	No MA	Felsic flow rock, quartz-feldspar with minor biotite flakes, grey to white, with flattened feldspar crystals.	89	74	179	*	*