

Geological Report  
Murphy Township Property  
Claim P3012787  
Timmins Area

**2. 29979**

May, 2005

D. Pyke  
B. Raine

## Table of Contents

Introduction

Previous Work

Present Survey

Regional Geology

Property Geology

Analyses

Conclusions and Recommendations

References

Sample Description

## List of Figures

Figure 1 Claim map of southeast portion Murphy Township

Figure 2 Location of claim 1032787

Figure 3 Geology of claim 1032787. Scale 1:5,000

## Tables

Table 1 Assays and whole rock analysis from claim 1032787

### List of Photos

- Photo 1 Pillowed, vesicular Mg-tholeiite
- Photo 2 Pillow breccia in Mg-tholeiite
- Photo 3 Large outcrop area of massive tholeiitic basalt
- Photo 4 Sheared, carbonatized basalt (komatiitic?)
- Photo 5 Northeast trending quartz-tourmaline vein
- Photo 6 Narrow white quartz vein cutting massive Mg-tholeiite
- Photo 7 Narrow quartz-calcite vein in sheared basalt

Geological Report  
Murphy Township Property  
Claim P3012787  
Timmins Area

Introduction

The property consists of one 40 acre mining claim, P3012787, comprising the SW1/4, S1/2, Lot 1, Concession 1, Murphy Township (Figure 1).

The claim is located approximately 10 km northeast of the Timmins city center (Figure 2) and is best accessed from a secondary road leading north from Highway 101 in South Porcupine to the Reef mine and then northwest to the Tisdale-Whitney township boundary. A winter logging road extends north along the township boundary to the southeast corner of Murphy Township.

Previous Work

Mapping of Murphy Township was first conducted by Rose (1924) and subsequently by Berry (1941). However, it was not until the mapping and compilation by Ferguson (1964), that outcrop was shown to occur on the present property. More recently, Berger (1999), remapped Murphy and Wark townships. An airborne electromagnetic and total intensity magnetic survey included Murphy township (OGS, 1988) as part of a larger survey of the general Timmins area.

To the writers knowledge, no ground exploration work has previously been undertaken on the property.

The claim was staked on June 1, 2003. Prior to this the mining rights were patented. B. Raine and D. Pyke are co-owners of the property.

Present Survey

On May 18, 2005, D. Pyke and B. Raine, undertook preliminary mapping and prospecting of the claim (Figure 3). Mapping/prospecting was done at a scale of 1: 5000, and control was afforded through the use of a Garmin GPS, model 12XL. Outcrop on the property is confined to the WNW part of the claim where recent logging of the area has exposed semi-continuous rock exposure. A total of 7 rock samples were taken, of which 3 were submitted for gold assay and one for whole rock analysis. The analyses were done by XRAL Laboratories of Don Mills, Ontario. A description of all samples is appended.

Regional Geology

The property is underlain by volcanic rocks forming the lower portion of the Tisdale assemblage (Jackson and Fyon, 1991; Berger, 1999). The Bell Creek, Owl Creek and Hoyle Pond gold deposits lie immediately to the east-northeast of the property, 3 to 7 km, in Hoyle Township and are hosted by the lower Tisdale assemblage. All the deposits are preferentially located in northeast (060 degree) trending structures (Berger, 1999).

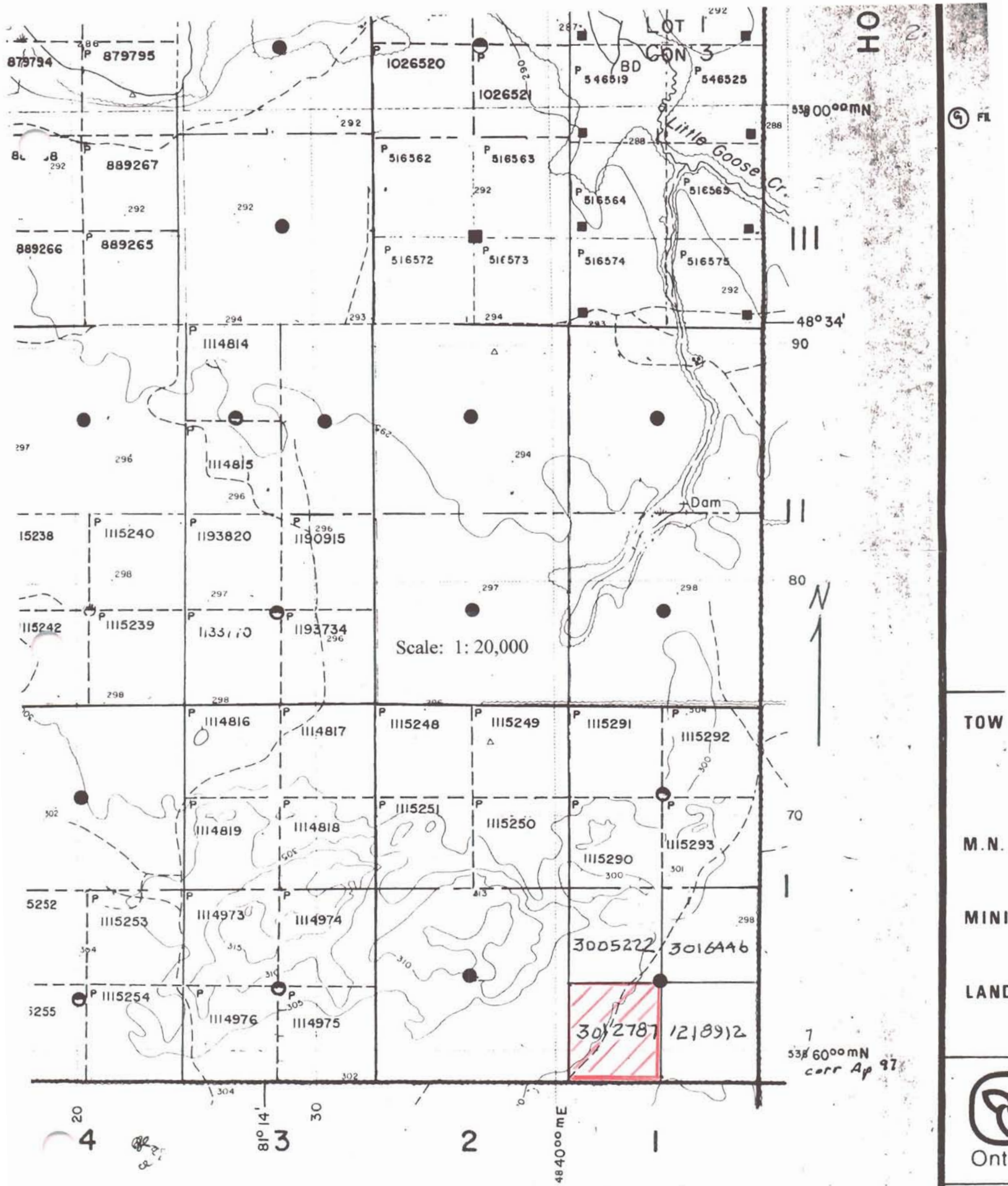
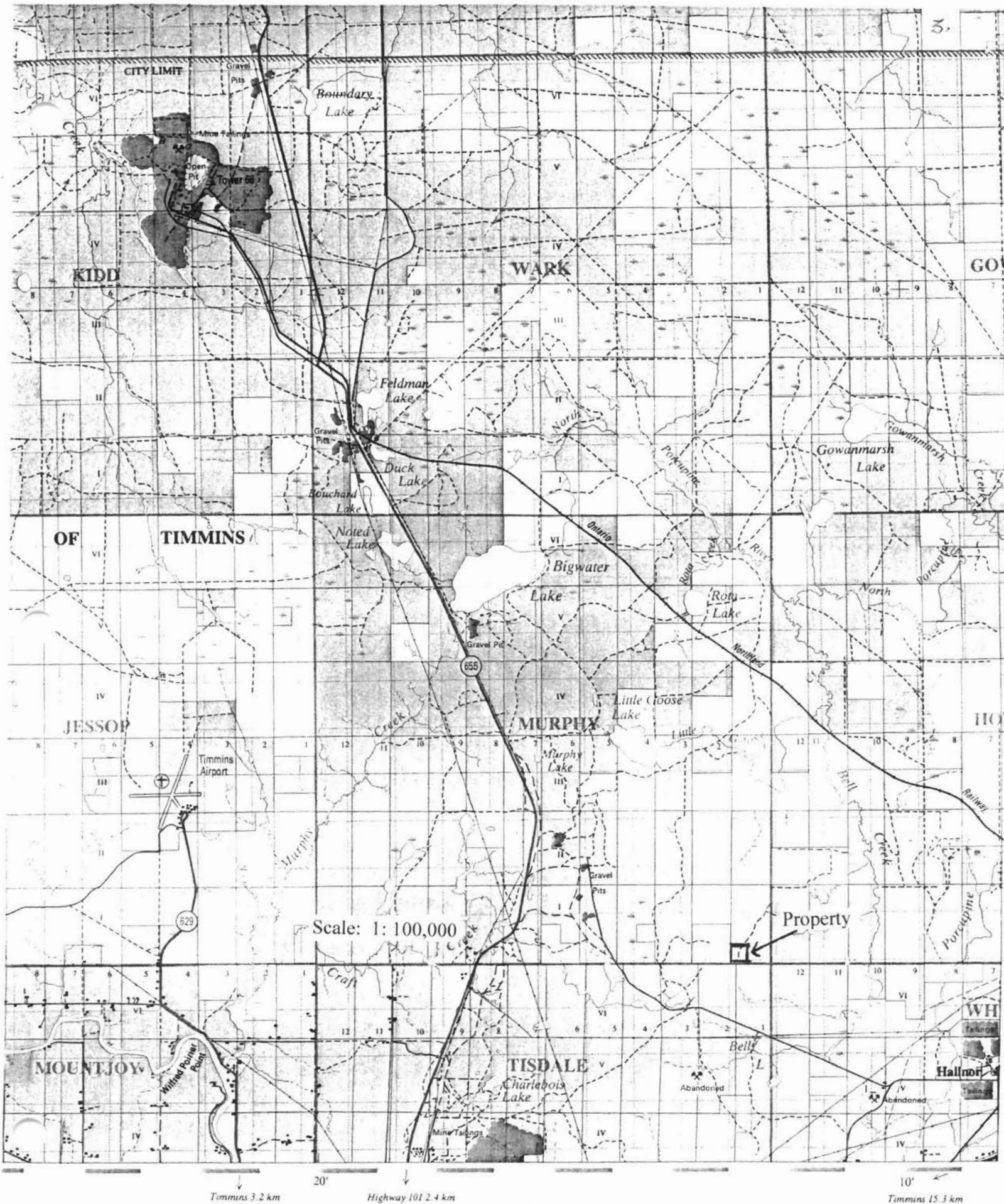


Figure 1 Claim Map of southeast portion of Murphy Township showing location of claim 3012787.



Scale: 1: 100,000

Property

Timmins 3.2 km

Highway 101 2.4 km

Timmins 15.3 km

Figure 2 Location of claim 1032787

### Property Geology

Outcrop on the property consists of pillowed and massive tholeiitic basalt (Figure 3), most of which appears to be magnesium-rich (ie. - Mg tholeiite). The pillow basalt (Photo 1) is vesicular, fine grained, light green gray fresh, weathers buff to gray buff, and commonly forms pillows 50 to 100 cm in maximum dimension. Pillow breccia is locally common and at one exposure breccia fragments were strongly lineated at 120/70SE (Photo 2). The massive basalt (Photo 3) is fine to medium grained, light to medium gray green to locally darker green on fresh surface and weathers medium gray green.

Pillow tops and the disposition of the pillowed and massive units suggests the axial trace of a synclinal structure trends northeast across the property, which would be in agreement with that proposed by Ferguson (1964). Ferguson (1964) depicts a narrow band of ultramafics within the fold structure, which were not definitely identified during the present survey. However, a sample of sheared and altered basalt (P-2-05) (Photo 4), may be of komatiitic affinity (see section on analyses).

Shearing, carbonatization and associated local quartz lenses and veining occurring over a width of up to 20 m along the southeast margin of the outcrop area supports the interpretation of a northeast trending fault (Figure 3). This fault would in part mark the separation of the higher outcrop area from the low lying muskeg to the southeast. Berger (1999) interprets a series a northeast trending faults in this corner of Murphy Township.

A northeast trending quartz vein (Photos 5 and 6), locally tourmaline bearing and varying in width from 0.1 to 1.5 m, can be traced intermittently across the outcrop area for 100 m; the dip is variable from moderate northwest to southeast. The eastern most and widest exposure of the vein contains minor needle-like crystals of tourmaline as well as numerous seams and slip surfaces of amphibole and/or chlorite; minor pyrite and trace chalcopyrite is locally present.

A 30 cm wide quartz-calcite vein (Photo 7), trending 020/75W occurs within sheared basalt near the southeast margin of the outcrop area. The vein appears brecciated with subrounded medium to dark grey quartz fragments to 2 cm enclosed in a white quartz matrix. Only a trace of sulphide was observed.

### Analyses

Three samples of quartz veining were submitted for gold assay (P-1-05, Wp-380, WP-381) and one sample (P-2-05) of sheared basalt for whole rock analysis. A description of all samples taken are appended to the report. Analytical results are given in Table 1.

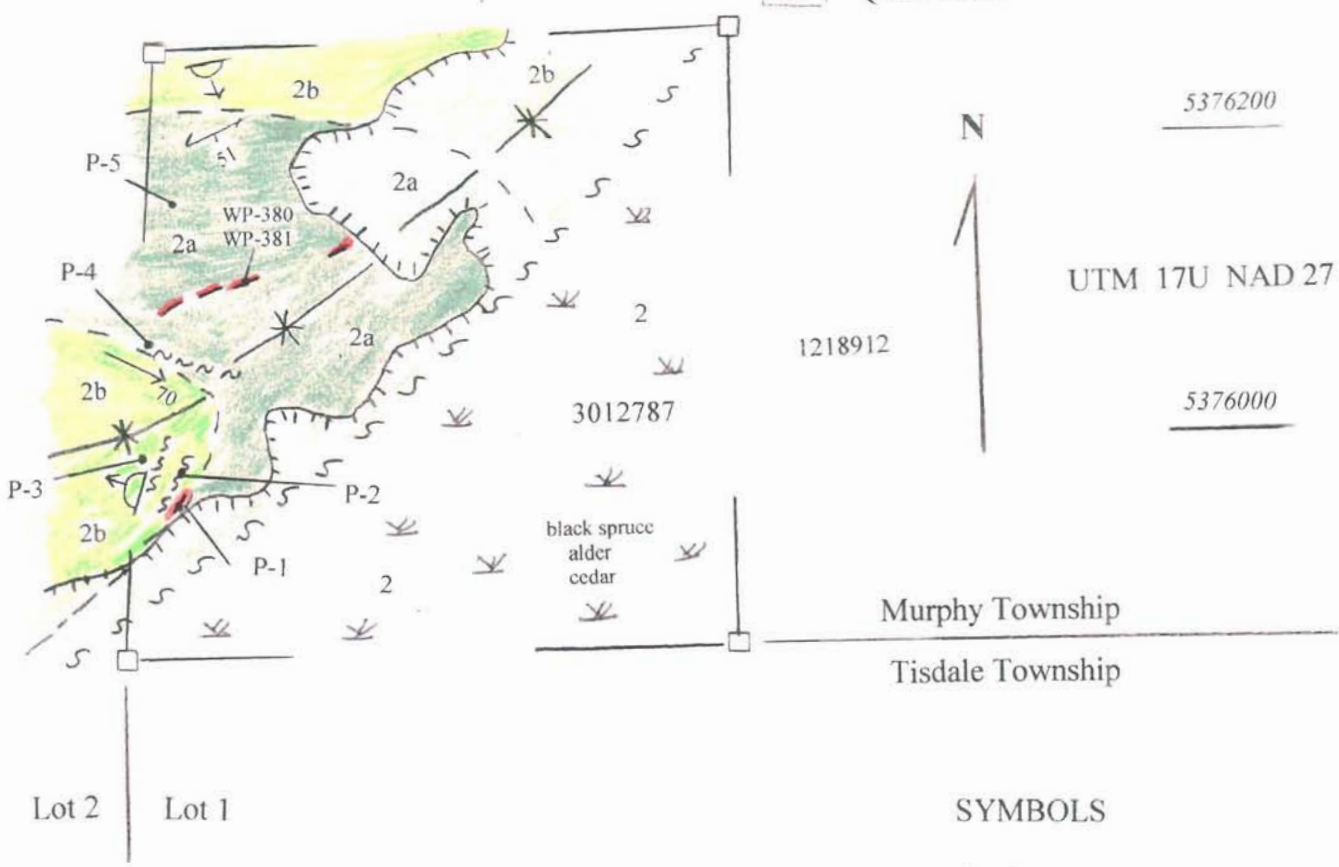
Samples WP-380 and WP-381 contained no detectable gold. Sample P-1-05 was highly anomalous, containing 598 ppb gold. At best, the sample contained only a trace of visible sulphide.

The geochemistry of sample P-2-05 is suggestive of a basaltic komatiitic rock. The Cr2O3 is high (0.17%), especially if recalculated on an anhydrous basis (0.218% - or

LEGEND

Precambrian  
Archean

- 2 Tholeiitic basalt
- 2a Massive magnesium tholeiite
- 2b Pillowed, vesicular magnesium tholeiite
- Quartz vein



black spruce  
alder  
cedar

SYMBOLS

- Geological contact
- 60 Foliation
- 40 Lineation
- Flow top from pillow shape
- Axial trace of syncline
- Shear/fault zone
- P-1 Sample location
- Edge of outcrop area

484200  
484400

Scale 1 : 5000

Figure 3 Geology of Claim 3012787, Southeast  
Murphy Township  
( SW1/4, S1/2, Lot 1, Concession 1 )

*DRPke*



Table 1 Assays and Whole Rock Analysis from Claim 3012787, Murphy Township

Sample Ident Scheme Code Analysis Unit Detection Limit	SiO2 XRF76Z %	Al2O3 XRF76Z %	CaO XRF76Z %	MgO XRF76Z %	Na2O XRF76Z %	K2O XRF76Z %	Fe2O3 XRF76Z %	MnO XRF76Z %	TiO2 XRF76Z %	P2O5 XRF76Z %	Cr2O3 XRF76Z %	LOI XRF76Z %	Sum XRF76Z %	Au FAA313 ppb
	0.01	0.01	0.01	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	5
P-1-05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	598
WP-380	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<5
WP-381	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<5
P-2-05	35.83	4	25.9	3.98	<0.02	0.14	6.87	0.77	0.29	0.02	0.17	22.45	100.4	n.a.
DUP-P-1-05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	411

2180 ppm). Also the TiO2 is quite low and was probably originally quite low, as TiO2 does not decrease much in sheared and carbonated rock.


Conclusions and Recommendations

Exposed bedrock on the property consists largely of massive and pillowed Mg-tholeiitic basalt, that forms part of a broad synclinal fold, the axial trace of which trends northeast. A northeast trending fault, as evidenced by local strong shearing, carbonatization and weak pervasive biotite alteration appears in part to truncate the southeast limb of the syncline. A narrow quartz-calcite vein within this shear zone assayed highly anomalous in gold (598 ppb). Nearby gold deposits in Hoyle Township are interpreted to be related to northeast trending structures (Berger, 1999).

It is recommended that further mapping and prospecting be undertaken to better define the fold structure, internal flow morphology and the extent and/or potential of additional veining, alteration and mineralization. The geochemistry of sample P-2-05 suggests that minor komatiitic rocks may be present on the property, as indicated by Ferguson (1964), and should be delineated. Careful prospecting is warranted along the exposed sheared and altered basalts (basaltic komatiite?) proximal to the muskeg area to better define the exposed shear zone and any associated quartz veining.

As well, a ground magnetic and IP survey will be critical to better understand the overall geology of the claim, in particular the muskeg covered area.

May 30/05  
Date

  
D. R. Pyke

## References

Berger, B. R.

1999: Geology of Murphy and Wark Townships, District of Cochrane; Ontario Geological Survey, Open File Report 5994, 64 p. Accompanied by Map P. 3305 – Revised, scale 1:20,000.

Berry, L. G.

1939: Geology of Bigwater Lake area; Ontario Department Mines, vol. 48, pt. 12 11p. Accompanied by Map 48n, scale 1 mile = inch.

Ferguson, S. A.

1964: Murphy Township; Ontario Department Mines, Prelim. Geological Map P. 255, scale 1 inch to ¼ mile.

Jackson, S. L. and Fyon, J. A.

1991: The western Abitibi Subprovince in Ontario; Ontario Geological Survey, Special Volume 4, Part 1, in Geology of Ontario, p. 405 – 482.

Ontario Geological Survey

1988: Airborne electromagnetic and total intensity magnetic survey, Timmins area, Murphy Township, Ontario Geological Survey, Map 81071, scale 1:20,000.

Rose, B.

1924: Murphy, Hoyle and Matheson Townships (Porcupine Gold Area); Ontario Department Mines, vol. 33, pt. 3, p50 –54. Accompanied by Map 33d, Scale 1 mile = 1 inch.

### Sample Description

- P-1-05 Quartz-calcite vein, 30 cm wide, trends 020/72W, brecciated, with dark smoky quartz fragments to 3 cm in a bull white quartz matrix. Sporadic lenses/patches contain 5-10 percent calcite. An assay of sample returned 598 ppb gold. UTM 484080E 5375964N.
- P-2-05 Sheared and carbonatized fine grained mafic volcanic containing 5-10 percent narrow quartz rich lenses and minor biotite development along slip surfaces. A whole rock analysis of the sample suggests a possible komatiitic affinity. UTM 484084E 5375984N.
- P-3-05 Pillowed, vesicular Mg-tholeiite, fine grained, medium to light gray green fresh. UTM 484059E 5375999N.
- P-4-05 Massive, Mg-tholeiite, fine grained, light medium green gray fresh, Weathers gray-buff. UTM 484063E 5376070N.
- P-5-05 Tholeiitic basalt, massive, fine-medium grained, medium green fresh,. UTM 484069E 5376168N.
- WP-380 Sample taken at contact of 1.5 m wide quartz tourmaline vein with strongly foliated tholeiitic basalt; contains very minor to trace chalcopyrite and pyrite. UTM 484127E 5376113N.
- WP-381 Quartz-tourmaline vein, 1.5 m wide, trending 035/45SE. Vein contains minor needles of tourmaline commonly associated with numerous seams and slip surfaces of amphibole/chlorite. No visible sulphide in sample. UTM 484127E 5376113.

***PHOTOS***

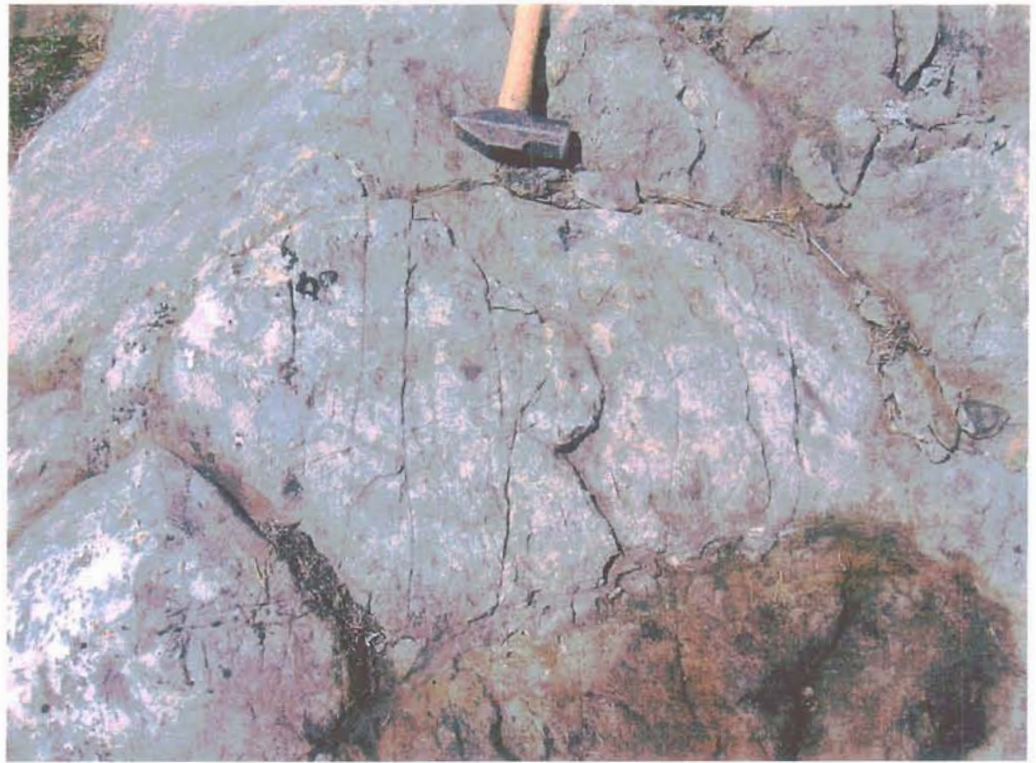


Photo 1 Pillowed, vesicular Mg-tholeiite. Pillow shape indicates tops west. Hammer handle points at 288 degrees.



Photo 2 Pillow breccia in Mg-tholeiite. Pillow fragments plunge at 120/70SE. Photo looking north (010 degrees) UTM 484058E 5376057N.



Photo 3 Large outcrop area of massive tholeiitic basalt. Recent logging has exposed semi-continuous outcrop area in northwest portion of claim. View looking northwest from UTM 484130E 5376022N.



Photo 4 Sheared, carbonatized basalt containing numerous white weathering quartz carbonate lenses. Chemical analysis (Table 1) from the outcrop suggests possible komatiitic affinity. UTM 484084E 5375984N.



Photo 5 Northeast trending (035/45SE) quartz-tourmaline vein up to 1.5 m wide. Trace to minor pyrite and chalcopyrite at vein margin in contact with strongly foliated massive Mg-tholeiite.



Photo 6 Narrow (10 cm) white quartz vein, trending 046/30NW, cutting massive Mg-tholeiite. No visible sulphide. Appears to be part of same vein (system) as tourmaline-bearing vein in Photo 5.





Photo 7 Narrow (30 cm) quartz-calcite vein in sheared basalt near southwest margin of outcrop. Only trace sulphide observed, but vein returned a highly anomalous assay of 598 ppb gold (Table 1, sample P-1-05).



# REPRINTED INVOICE

Invoice Number : 10049751  
 Date : 30-MAY-05  
 Page : 1 / 1

DR PYKE AND ASSOCIATES  
 31 Delair Crescent  
 THORNHILL ON L3T 2M3  
 Canada

Customer Number 271573  
 Currency CAD  
 Payment Term Net Due in 30 Days  
 SGS Order No. 40225

Customer Reference Attn: Dale Pyke  
 Order source reference number: 00058683  
 WO#:083779:

Item	Description	Quantity	UoM	Unit Price	Net Amount	Tax Code	Amount
37351	Sample Preparation CRU21 Crushing entire sample / 4 sample(s)	1	Ea	14.20	14.20		15.19
37351	Sample Preparation PP02 Milling 250g in Cr steel / 4 sample(s)	1	Ea	13.80	13.80		14.77
37350	Precious Metals Analysis FAI303 1AT Au Inst. Fire Assay / 3 sample(s)	1	Ea	38.25	38.25		40.93
37352	Whole Rock Analysis XRF76V Whole rock analysis / 1 sample(s)	1	Ea	35.00	35.00		37.45
37353	Administrative and Miscellaneous Charges AD24 Surcharge (50%) for Prep & XRF100 only / 1 sample(s)	1	Ea	31.50	31.50		33.71
<b>GST</b>							<b>9.30</b>
<b>Net Amount CAD</b>							<b>132.75</b>
<b>Sum of Tax CAD</b>							<b>9.30</b>
<b>Total Amount CAD</b>							<b>142.05</b>

**Contact Name:** LEE, MA LYRA  
**Direct line:** 416-445-5755 ext 235  
**E-mail:** Ma.LyraLee@sgs.com

**Please Remit To:**  
 SGS Canada Inc PO Box 4580, Dept 5 Postal Station A  
 Toronto M5W 4W2  
 Canada



2.29979

**CERTIFICATE OF ANALYSIS**

**Work Order: 083779**

To: **D.R. Pyke and Associates**  
Attn: **Dale Pyke**  
31 Delair Crescent

Date : 01/06/05

THORNHILL  
ONTARIO L3T 2M3

Copy 1 to :

P.O. No. :  
Project No. :  
No. of Samples : 4 Rock  
Date Submitted : 24/05/05  
Report Comprises : Cover Sheet plus  
Pages 1 to 2

**Distribution of unused material:**

**Pulps:** Discarded After 90 Days Unless Instructed!!!  
**Rejects:** Discarded After 90 Days Unless Instructed!!!

Certified By :

Tim Elliott, Operations Manager

**ISO 9002 REGISTERED**

**ISO 17025 Accredited for Specific Tests. SCC No. 456**

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable " = 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

Subject to SGS General Terms and Conditions



Work Order: 083779

Date: 01/06/05

FINAL

Page 1 of 2

Element. Method. Det.Lim. Units.	An FAA313 5 ppb
P-1-05	598
WP-380	<5
WP-381	<5
P-2-05	n.a.
*Dup P-1-05	411
*Blk BLANK	<5
*Std AUOE2	583

62662.2



Work Order: 083779

Date: 01/06/05

FINAL

Page 2 of 2

Element.	SiO2	Al2O3	CaO	MgO	Na2O	K2O	Fe2O3	MnO	TiO2	P2O5	Cr2O3	LOI	Sum
Method.	XRF76Z	XRF76Z	XRF76Z	XRF76Z	XRF76Z	XRF76Z	XRF76Z	XRF76Z	XRF76Z	XRF76Z	XRF76Z	XRF76Z	XRF76Z
Det.Lim.	0.01	0.01	0.01	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Units.	%	%	%	%	%	%	%	%	%	%	%	%	%
*Std XRAL04	48.66	14.89	11.00	11.68	1.34	0.43	9.28	0.16	0.38	0.03	0.06	2.40	100.3
P-1-05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
WP-380	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
WP-381	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
P-2-05	35.83	4.00	25.90	3.98	<0.02	0.14	6.87	0.77	0.29	0.02	0.17	22.45	100.4
*Dup P-1-05	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

2.29970