### Report

### On

## **Prospecting Program**

## Ridout Lake Gold Project

## **Greenlaw & Cunningham Townships**

**Porcupine Mining Division** 

M. A. Tremblay December 20, 2011

# 2.50316

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#### Introduction

The Ridout Lake Property consists of 74 claim units covering a portion of the prolific Cadillac-Larder Break in the southwest Swayze Greenstone Belt, Porcupine Mining Division, District of Sudbury, Northern Ontario. The property is owned jointly by the author and two local prospectors. A three week mechanical stripping program was undertaken using a Cat 235 Excavator, in august and September 2009 to expose one of ten known gold showings on the property.

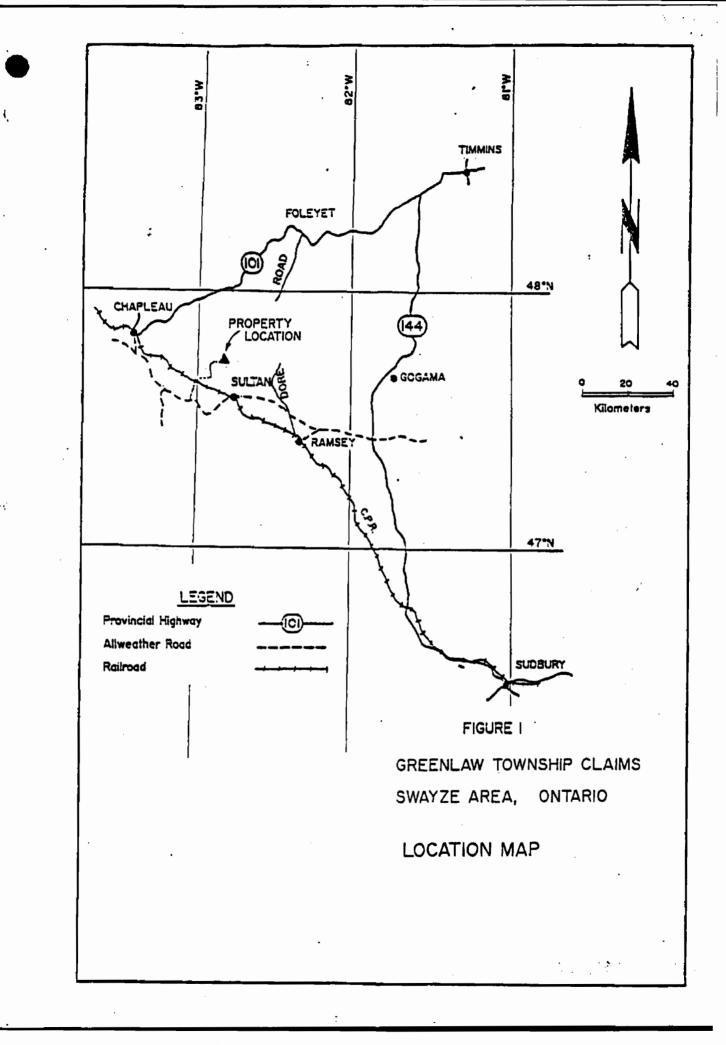
#### **Location & Access**

The Ridout Lake Property is located in Cunningham and Greenlaw townships, Porcupine Mining Division on NTS Sheets 410/10 and 410/15, approximately 50km southeast of the town of Chapleau, Ontario and 120km southwest of the city of Timmins, Ontario.

Access to Ridout Lake can be gained most quickly by fixed-wing aircraft from Chapleau, Ontario. Road access from Highways 129 and 667 can be gained to the western and northern portions of the claims from old logging roads starting at Kormak, Ontario on the CPR line to Hotstone Lake, then by boat throughout the property. Access to the south-eastern portion of the property is gained via a series of new tertiary logging roads from the Blamey Road, 17km east of Sultan, Ontario along the Sultan Industrial Road.

#### **Previous Work**

Prospecting in the area dates back to the time of the construction of the Canadian Pacific Railway in the 1880's, however no records exist from that time to the knowledge of the author. Old claim posts in the 1400 series were observed while prospecting at the west end of the Ridout Lake Property for Noranda Exploration in 1984. These are thought to be from claims that the Clement family of Ridout Station, Ontario brought to patent in the early 1900s.



The discovery of gold by Jack and Miner Kenty in 1933 led to the first big wave of exploration in the south-western portion of the Swayze Belt. 'Mines" were established at The Kenty Mine in Swayze and Dore Twps, as well as, at the Lee Lake Gold Mine and Greenlee Mines in Greenlaw Twp, the Halcrow-Swayze Mine in Halcrow Twp and the Swayze-Huycke in Cunning ham Twp, all of which are within 10 miles of the Ridout property.

From the time of WWII through to the 1960s only sporadic exploration occurred with very little work filed in the Assessment Files MNDM.

In the 1970s work generally consisted of airborne geophysical surveys followed by small drilling programs in the search for base metals.

A chronological summary of significant work on or near the property is summarized as follows:

1971: Dome Mines: 91m of drilling 1 ddh

1977-78: Granges AB: 600m drilling in 9 ddhs

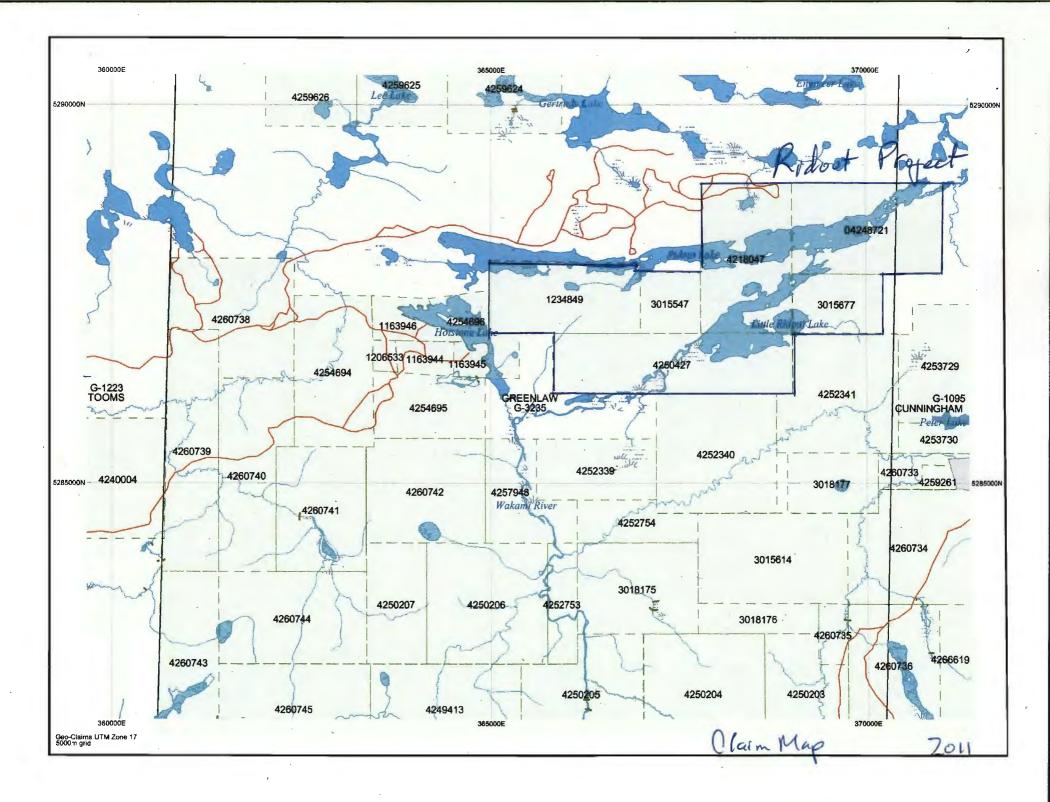
1982: Hollinger-Argus: 213m in 2 ddhs

1983-85: Noranda Exploration: Carried out a comprehensive program of geophysics, geochem, geology, power stripping and drilling on their International Rhodes JV in part optioned from prospector Kervin McDonough of St. Catherines, Ontario, and covering most of the present property as well as the old Hotstone patents.

1990-1994: K. McDonough: prospecting, geophysics, geological mapping, trenching.

1990s: M. Tremblay: several OPAP projects in the vicinity of Ridout Lake including prospecting, geophysics and litho geochemistry.

1993: Cameco Corporation: Geological mapping, geophysics (IP) followed by 870m of drilling in 6 holes along the Ridout Shear Zone, a fuchsite altered ultramafic unit (Green Carb Zone). No significant values. This was considered positive as the 'green carb zones' general carry gold values, and the lack of



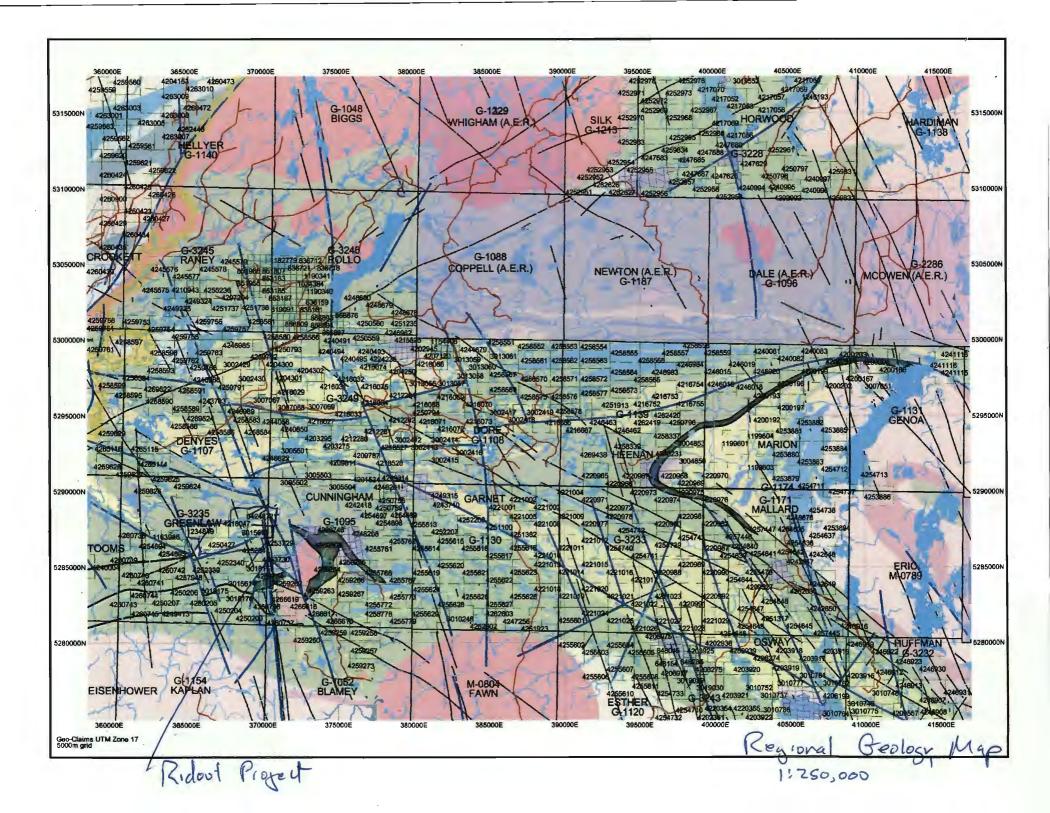
values was thought to indicate that the gold was leached from this zone and concentrated somewhere else. *If only we could find it!* 

1994-97: WMC International: Following the discovery of pristine gold grains by the OGS, WMC optioned the McDonough property and staked 490 units. Numerous gold in till anomalies were detected, coincident with IP anomalies and alteration zones along the Wakami High Strain Zone. Numerous pristine + modified gold grains and heavy metal concentrate (up to 21,000 ppb) were detected. Their Gold Island Vein (The Garvey Vein) showed from 0.1-122g/t gold in 22 samples, along it's entire length of 60m on Gold Island. A 1996 ,four hole, 1600m drill program, designed to test this zone at -300m, failed to intersect the vein due to a N-S structure occupied by a mafic dyke. The program , however did prove that a 900m by 60m altered mafic/UM unit north of Ridout Lake extended to the -300m level and contained anomalous values up to 3.1g/t/1.5 in all holes. In 1997 WMC extended their Ridout Grid west to Hotstone Lake followed by geological mapping, till sampling and IP surveys. Although IP line spacing was 300-400m, several chargeability anomalies are thought to extend across the property, likely representing mineralized shear zones.

2009: Current ownership group undertook a mechanical stripping project on the south-east portion of the property. Seven trenches were opened up with channel sampling of trenches A & B. A significant alteration zone, along the Temiskaming sediment/ mafic volcanic contact, was uncovered with disappointing channel sample results. However subsequent grab samples of 0.30 and 0.51 oz./t in trench B and 0.3 and 1.1g/t in trench G were encouraging. A sample by the OGS from the Garvey Vein on Gold Island ran 0.14 oz./t.

#### **Regional Geology**

The Ridout Lake Property is located in the south-west part of the Swayze Greenstone Belt (SGB), which is the western extension of the Abitibi Greenstone Belt. The regional geology has most recently been described by Jackson and



Fyon (1991), Heather (1993), Heather and van Beemen (1994), Heather, Shore and van Breemen (1995 & 1996).

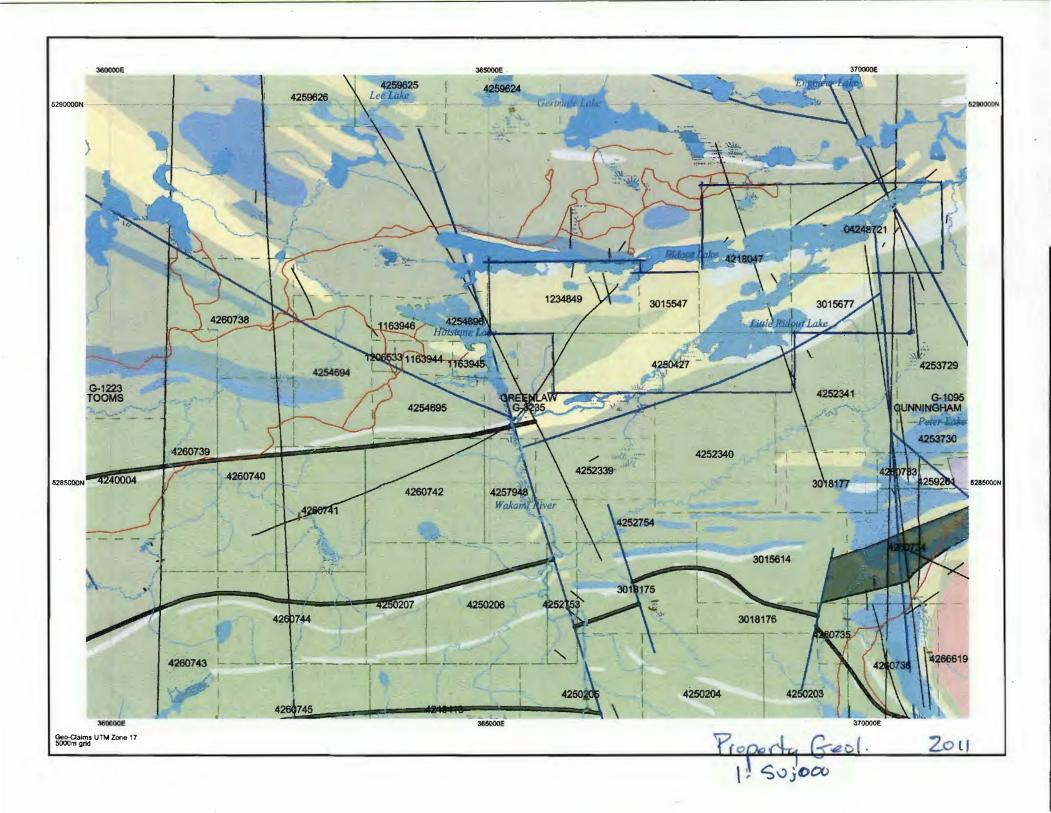
The SGB is a Neoarchean 2.8-2.6 Ga supracrustal sequence which is bounded to the east by the Kenogamissi Batholith, to the south by the Ramsey-Algoma gneissic complex and to the west by the Kapuskasing granulite terrain. Thin septa of supracrustal rocks connect the SGB to the Abitibi Greenstone Belt (AGB) in the east.

The southern part of the SGB, south of Coppell, Newton and Dale townships, can be broadly subdivided into five main assemblages, (after Jackson & Fyon, 1991). These assemblages are: Garnet-Tooms, Hong Kong, Marion, Halcrow-Swayze and Ridout assemblages.

The Garnet-Tooms assemblage under lies the southern part of Tooms and Greenlaw townships. It lies between the Ridout assemblage to the north and a unit of oxide facies iron formation that forms the top of the Hong Kong assemblage to the south. The main rock units which make up this assemblage are tholeiitic basalt, intermediate to felsic calc-alkalic flows and komatiitic flows with minor oxide facies iron formation. The basaltic rocks are cut by coarsergrained dioritic to gabbroic phases which may be intrusions or coarse flows. Generally, the massive to pillowed tholeiitic basalts form the base of the assemblage and the upper part consists of calc-alkalic feldspar porphyritic basalts and andesites.

The Ridout assemblage consists of turbidites, arkose and conglomerate with minor interbeded units of metavolcanics and iron formation. The conglomerate contains pebbles of chert, vein quartz, basalts, andesite, porphyritic rhyolite and jasper fragments. The Ridout series underlies part of Tooms, Greenlaw and Garnet townships in the south-west portion of the SGB. The Ridout assemblage has long been thought to be temporally and tectonically related to the Temiskaming assemblage of the prolific Kirkland Lake Gold Camp.

The Halcrow-Swayze assemblage is the most regionally extensive group of lithologies in the southern SGB, underlying the southern parts of Halcrow,



Denyes, Swayze, Dore and Heenan townships, the northern part of Greenlaw and much of Garnet and Benton townships. The primary lithologieswhich make up the assemblage are komatiitic flows, tholeiitic basalt and intermediate to felsic calc-alkalic volcanic interlayered with oxide facies iron formation. The komatiitic to tholeiitic phases tend to occur along the margins of the assemblage with the intermediate to felsic rocks occupying the core. (i.e. Denyes and Swayze twps).

The SGB is one of Ontario's historic gold areas and has seen prospecting activities for a variety of metals and minerals. Although there are no precious or base metal producers in the area at the present time, the SGB has a rich mineral endowment typical of the AGB. Deposits and /or occurrences of gold, silver, zinc, nickel, copper, lead, iron, molybdenum, asbestos, talc barite and marl are known in the area. Carbonatite-associated rare-earths and industrial minerals are present west of the SGB associated with the Kapuskasing Structural Zone.

Known gold mineralization in the SGB is typically of the quartz lode variety generally accompanied by shearing, fracturing and associated sulphide and carbonate. Sulphides typically include pyrite along with any or all of pyrrhotite, chalcopyrite, galena and sphalerite. Gold is present in a large variety of lithological and structural settings.

Two major structures, the Ridout High Strain Zone (RHSZ) and the Wakami High Strain Zone (WHSZ), intersect in the vicinity of Gold Island on the Ridout Lake property.

#### **Property Geology**

The geology of the property was best described by Sawitzky (1993) in his report for Kervin McDonough. This report pre-dates the most recent OGS-GSC studies and does not distinguish the various assemblages described above, but is by far the most thorough and concise geological study of the property to date. Sawitzky summarizes the property geology in his 'Introduction' as follows:

## hist of Claims

CUNNINGHAM	4248721	2011-Aug- 26	2013-Aug- 26	А	67%	\$6,000	\$0	\$0
GREENLAW	1234849	2008-Oct- 20	2012-Oct- 20	А	33%	\$4,000	\$8,000	\$0
GREENLAW	3015547	2007-Oct- 22	2011-Dec- 22	А	33%	\$1,600	\$3,200	\$0
GREENLAW	3015677	2007-Oct- 22	2011-Dec- 22	А	33%	\$2,400	\$4,800	\$0
GREENLAW	4218047	2011-Aug- 26	2013-Aug- 26	Α	67%	\$6,000	. \$0	\$0
GREENLAW	4250427	2011-Sep- 15	2013-Sep- 15	А	33%	\$6,400	\$0 <sup>1</sup>	\$0

The property is underlain by a sequence of greenschist facies volcanic and sedimentary rocks intruded by mafic and felsic rocks. The predominant rock type is volcanic and ranges in composition from ultramafic to felsic. The volcanic rocks are in contact with the sediments to the south, the latter unit forming about 10-15% of rock exposures. Mafic and felsic intrusive rocks form approximately 5-10% of outcrop exposure.

The stratigraphic sequence developed on the property is described below, sequentially from north to south and includes: mafic volcanic rocks followed by a narrow unit of massive to schistose ankerite-chlorite followed in turn by intermediate to felsic volcanic rocks, then mafic volcanic and lastly conglomeratic sediments. A felsic intrusion(?) occurs at the latter mafic volcanic and sedimentary contact. Mafic intrusions, dominantly diabase, occur throughout the sequence. The McDonough Fault separates a distinct unit of 'undeformed' mafic volcanic rocks east of the fault, from a strongly deformed sequence of rocks west of the fault.

#### Under 'Alteration and Mineralization' Sawitzky writes:

......West of the McDonough Fault, approximately 75-85% of the exposed lithologies have been altered to some degree. The dominant alteration is carbonate either as calcium and/or an iron-magnesian variety. Chloritization and sericitization occur to a lesser degree.

North of Ridout Lake a well-defined unit delineated as massive to schistose ankerite-chlorite exemplifies the degree to which hydrothermal alteration has totally altered and replaced the original protolith. This unit varies in width but attains a thickness of up to 100m. The envelope of alteration surrounding the massive carbonate core (up to 10m wide) consists of the following assemblage: Fe/Mg carbonate + chlorite + quartz +/- sericite +/- fuchsite +/- calcite +/- pyrite. The altered rock may be massive, "colour banded", schistose or veined. If the altered rock is massive, carbonate rhombs may dominate or a colour banding may be developed due to an alternating alteration mineral assemblage. This unit generally contains only minor amounts of sulphides (py). Beyond the latter zone of intense alteration moderate to weakly altered rocks prevail. DAILY ASSAY REPORT EAGLE MINE

Reported Rene Couvrette Date:13-July-11 Sample Type:Custom Assay 1 Custom Assays @13.50 Each + Taxes Chk Au Sample Number g/t Quartz Feldspor Porphipy 3% Py East of h. Ridout Lake 0.47 1 FB 13711-1 0.47 

Currentilue I								
	aboratories							
AuAssay20	001							
11 3609								
########								
	Au	Au Cl	hk					
Sample	ppb	ppb						
#	FA-AAS	FA-A	AS		1 1.0	1 0.	1011	151 11
1927	285	- A	Itered	UM, F	ichsite, Py		L. Ridout	(Float)
1928	3	-	11		11	11		
1929	102	-	11		11	1.1		
1930	8	-						
1931	. 3	-						
1932	. 9	-						
1933	102	-						
1934	142	-						
1935	5 18	-						
1936	5 4		4					
Blank Valu	€<2	-						
OxH82	1262	-						
1937	6	-						
1938	288	-						
1939	) < 2	<b>-</b> ·						
1940	) 3	-						
1941	. 16	-						
1942	. 18	-						
1943	3 14	-						

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#### DAILY ASSAY REPORT EAGLE MINE

Sample Type:Custom Assay	Reported By: I Darren Miller	Date:25-Nov-11			
4 Custom Assays @13.50 E	ach + Taxes				
	Au Chk				
Sample Number	g/t	OFP Eastob L. Ridout Lake - 1% Pyrike			
1 #1	0.16 0.16	QFP Eastob Likrabol mine 1			
2 #2	1.96 1.96	Quate-Ank-Pyrite Vein Gold Island			

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Between L0+00 and 2+00E and 3+00N to 4+00N (100 and 102E, 10+300N to 10+400N WMC grid) rocks are strongly sheared and altered with sericitization prevailing. The following assemblage occurs here: sericite + chlorite + carbonate +/- quartz +/- pyrite. Quartz veining may reach 15-20% locally in this area. Tourmaline may be present at L0+00, 3+75N. Altered felsic intrusive rocks underlie part of this area.

Unlike north of Ridout Lake, where a well-defined intense zone of alteration surrounded by less intense altered rocks is present, the area south of the lake is characterized by separate narrow lenticular zones of intense alteration surrounded by moderate to weakly altered rocks. These zones of intense alteration consist of mainly carbonatization and chloritization but locally hematization, sericitization and silicification may occur. Generally the intense alteration occurs in mylonitized rocks. The mafic volcanic rocks in this area are characterized by a colour banding, due to alteration and deformation. Alternating bands/layers of chloritized, carbonated, sericitized or veining material occur in highly tectonized rock. Sulphide content in these rocks is generally low.

The felsic sill south of Ridout Lake is often strongly altered and characterized by the following alteration assemblage: hematite +/- sericite +/- chlorite +/- quartz +/- pyrite. These rocks have also been mylonitized locally.

The sedimentary rocks at the south end of the property have been weakly to moderately altered by chlorite +/- sericite +/- carbonate +/- pyrite. Sulphides (py) are common in this unit. Quartz veining (rusty in colour) also increases here.

Sulphide mineralization north of Ridout Lake is found in the following areas:

- a. Massive to schistose ankerite-chlorite unit; associated quartz veining (2-15%), pyrite (tr. – 2%), disseminated or in stringers.
- b. Chert horizon; between L6+00E and 7+00E, 1+00N; between L10+00E and 11+00E, 0+80N; brecciation, quartz veining; pyrite (1-15%) vfg disseminated
- c. Intrusive and extrusive felsic rocks between L0+00E and 2+00E , 3+00 to 4+00N; silicification ( to 20% locally), pyrite (tr.-2%).

Sulphide mineralization south of Ridout Lake is found in the following areas:

- a. Sedimentary rocks; L15+00E 3+50N, L2+00W 4+00S, L0+00E 4+25S increased quartz veining, brecciation locally; pyrite (tr. O 10%) fg, disseminated.
- b. Intermediate volcanic rocks, gossaneous and cherty, L2+00W, 2+60N; at the contact with sediments; pyrite (2%) disseminated, f.g.
- c. Mafic and felsic volcanic (intrusive in part?) intruded by diabase. L9+00E 3+25S; shearing, quartz veining (10% locally); pyrite semi-massive layers and disseminated, poorly exposed.
- d. Mafic volcanic rock intruded by felsic intrusive rocks, between L14+00E and 15+00E, 1+50S; increased quartz veining, carbonatization and hematization in both the latter rock types; pyrite (0.5-2%) fine grained, disseminated

Under the heading 'Geochemistry" Sawitzky describemineralizationinsection c. above (since named "The Sawitzky Showing"):

The sample containing 790 ppb gold occurs in a sequence of poorly exposed rocks consisting of mafic volcanic, felsic and mafic intrusive rocks located on L9+00E, 3+25S. Both quartz veining and pyrite increase in abundance in this area. Pyrite occurs in semi-massive layers (several cm in width) or disseminated in the rock. This anomalous gold value occurs at the north contact of the felsic intrusive sill.

To date, all known anomalous gold values occur in a deformation zone localized between L5+00E and L10+00E, north and south of Ridout Lake. The area ....corresponds to a broad open flexure where lithological trends change. This 'flexure' may represent a cross-structure that in part controls gold mineralizing processes.

The number one priority in Sawitzky's 'Recommendations' was:

1. Map, prospect and sample in detail the felsic intrusive sill (?) near the south end of the property. Since felsic intrusions are commonly associated with gold mineralization the nature of the felsic body on this property

must be determined. The anomalous gold values found at the north contact of this altered and deformed felsic body makes the north contact a highly prospective area.

#### 2011 Prospecting Program

Two separate trips were made onto the project in 2011 to undertake prospecting and sampling to cover assessment work requirements on the Ridout Project.

In early July, 2011, F. Broomhead and the author flew into the property from Chapleau and prospected along the east shore of Little Ridout Lake. One sample of mineralized QFP was tested and found to contain 0.47 g/t Au.

In Late October 2011, J. Robert, F. Broomhead and the author spent 2 days prospecting the southwest portion of the property. Four samples were taken and assayed up to 1.96 g/t Au.

#### Recommendations

Previous work on the Ridout Gold Project by the present ownership group, as well as by others indicates a very promising setting for gold deposition along the Ridout Shear Zone, as well as the Wakami High Strain Zone.

Future work should include the re-establishment of the WMC grid to facilitate a 100m line spaced IP survey over the WHSZ. This should be followed by either power-stripping or diamond drilling of the best targets.

**Respectfully submitted** M.A. Tremblav

December 21, 2011

#### Certificate

I, Michael A. Tremblay, of 551 4<sup>th</sup> Line West, Sault Ste. Marie, Ontario, do hereby certify that:

- **1.** I have a one-third interest in the Ridout Lake property;
- 2. I was present and did supervise the program herein described;
- 3. I am a graduate of the Geological Engineering Technician Program 1983, at Sault College A.A.T.
- 4. That this report is based on observations in the field and the study of available data from the Resident Geologist's Office Ministry of Northern Development, Mines and Forestry in South Porcupine, Ontario.

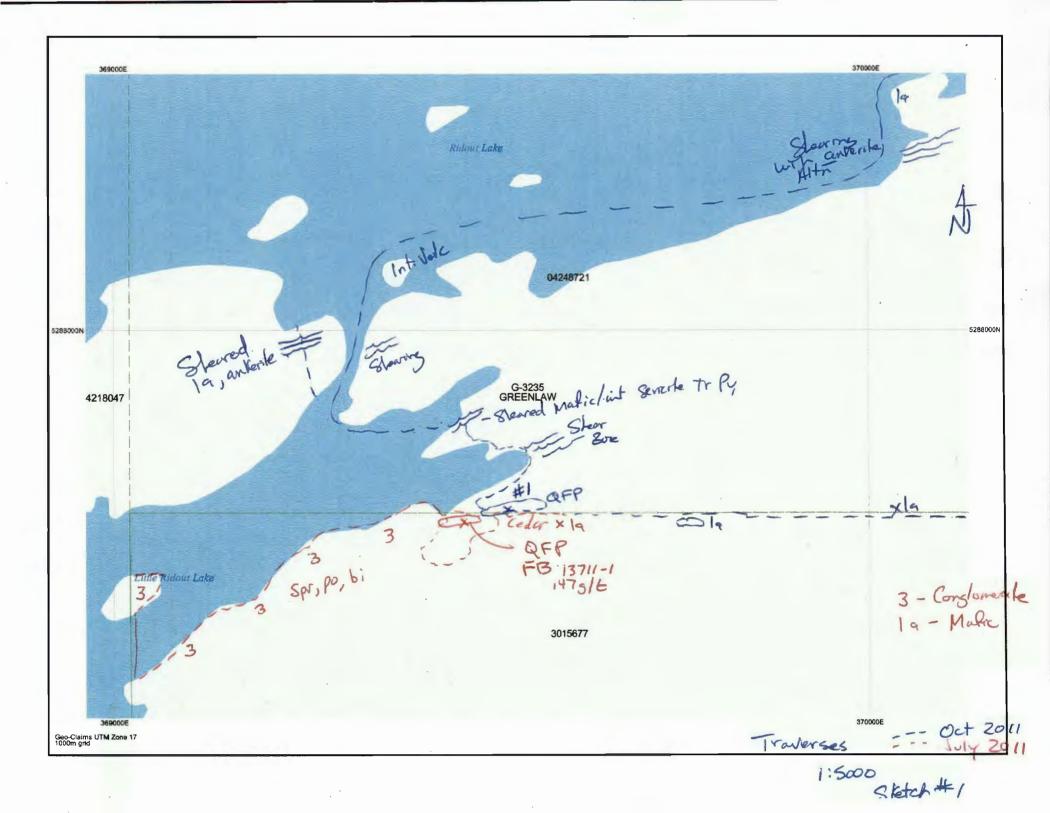
A. Tremblay

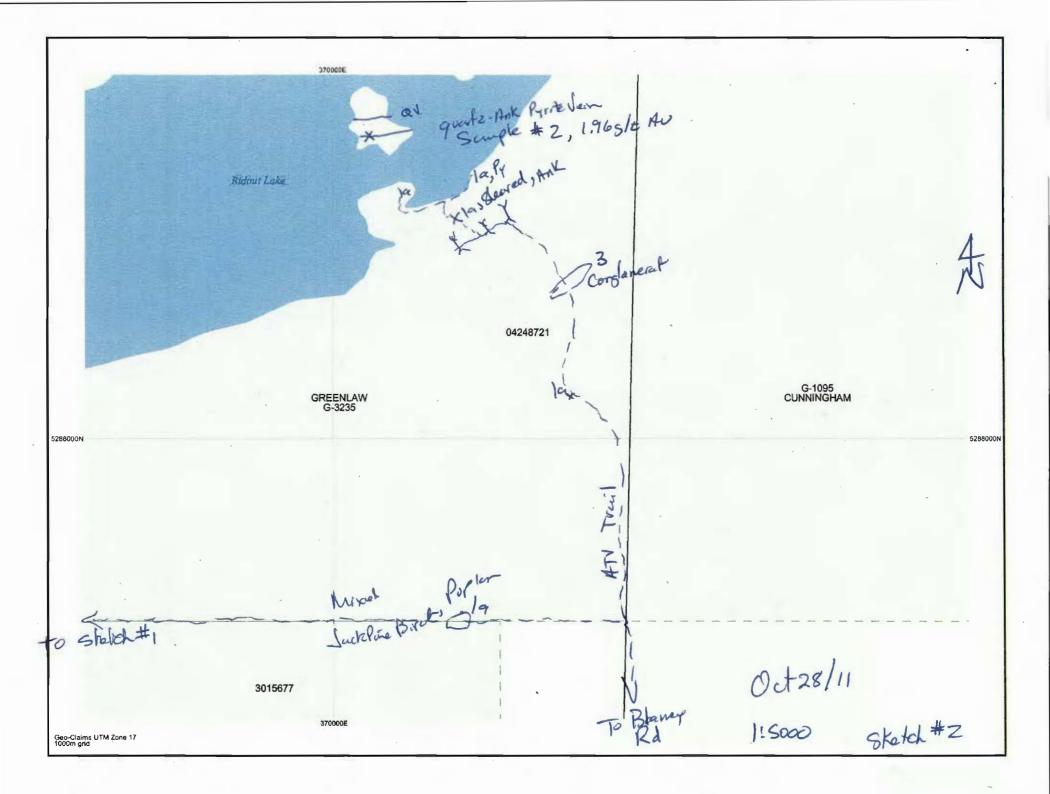
December 21, 2011

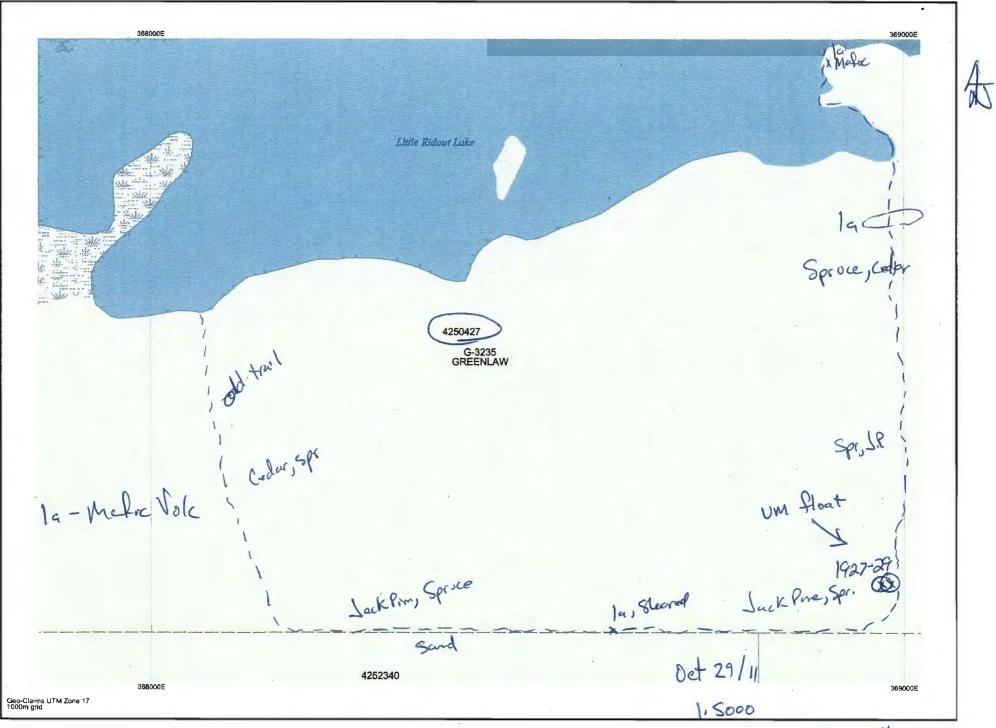
Darly Los 2011

Date	M. Tremblay	F. Broomhead	J.Robert	Description of Activities	Truck
July 8,2011	x	x		Mobe to Chapleau, Fly in to Ridout	350km
July 9,2011	x	x		Prospect east of L. Ridout, one sample-demobe	350km
Oct 26,2011	x		x	Mobe to Chapleau	550km
Oct27,2011	x	x	x	Prospect south and east of L Ridout- 3 samples	250km
Oct28,2011	x	x	х	Prospect south shore Ridout LGold Island 1 sample	250km
Oct29,2011	x		х	demobe .	550km
Total		6	4	4	2300km

.







Statch #3



Established 1928

## Swastika Laboratories Ltd

Assaying - Consulting - Representation

Page 1 of 1

21-Nov-11

#### Assay Certificate

#### Certificate Number: 11-3609

Report Date:

Company: Jack Robert

Project:

#### Attn: Jack Robert

We hereby certify the following Assay of 17 rock/grab samples submitted 03-Nov-11 by Jack Robert

Sample		Au FA-AAS ppb	Au Chk FA-AAS ppb			
1927		285				
1928		3				
1929		102				
1930		8				
1931		3				
1932	_ <u></u>	9	• • • • •	· • • • • •		···· ·
1932		102				
1934	1	102				
	T					
1935		18				
1936		4	4			a chaigen
Blank V	zlue	< 2	-			
OxH82		1262				
1937		6				
1938	CREENLAW	288				
( 1 <u>93</u> 9	11	< 2				
	·					
<u> </u>	17	З				
1941		16				
1942		18				
1943		14				
	····· ···· ··· ··· ··· ··· ··· ··· ···				-	

1. No Reject

Certified by Jr. & Lin Jing Lin, M Sc.

1 Cameron Ave., P.O. Box 10, Swastika, Ontario POK 1T0 Telephone (705) 642-3244 Fax (705) 642-3300