

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](#).

Geophysical Survey Report for the Reticulate Lake AU/PGM Property
Porter Twp. Sudbury Mining Division, Ontario

Ground Magnetics Geophysical Survey Report

Reticulate Lake Gold/PGM Property

Porter Twp. Sudbury Mining Division

March, 2022

Mining Claim Numbers

521059, 521060, 521061

Mining Grid Cell Numbers

41I05F070, 41I05F071, 41I05F091

Prepared by:

Mitchell Turcott H.B.Sc.

Geophysical Survey Report for the Reticulate Lake AU/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

SUMMARY:

This report details the ground geophysical survey conducted on the Reticulate Lake Au/PGM Property located in Porter Twp., Sudbury Mining Division in March of 2022. The Reticulate Lake Au/PGM Property is comprised of 3 unpatented mining claims numbered 521059, 521060 & 521061 mining cell numbers 41I05F070, 41I05F071 & 41I05F091 and is 100% owned by Mitchell Turcott.

Three days were spent on the property conducting a ground magnetometer survey on March 27, 28 & 29, 2022 using a Scintrex Fluxgate Magnetometer. The magnetics survey was conducted by Mitchell Turcott (instrument operator) with help from Kirby Paul on March 27, 28 and Robert McDonald on March 29 (GPS/notes).

A total of 5.14 km of GPS grid line was surveyed over 13 lines (L8E @ 438000 m E to L1W @ 437550 m E from 5138350 m N to 5138740 m N and L6W @ 437300 m E to L8W @ 437200 m E from 5138800 m N to 5139270 m N). The GPS grid was oriented in a North/South direction with 50 metre line spacing's and 10 metre stations. A Garmin 60 CX GPS utilizing the UTM Grid Reference System (Zone 17) and NAD83 as the Map Datum was used to locate positions for the magnetic readings. No lines were cut during the ground magnetics survey eliminating the need for an exploration permit.

The objective of the ground magnetics survey work during the winter months was to survey a wetlands/marsh area and a small lake that would not be accessible for ground work during the summer months. Data collected during the magnetics survey will subsequently be used to correlate the magnetic readings with those taken over the rocks hosting a known gold showing located on the property.

The ground magnetics survey identified several anomalies that will require further investigation during the summer months to determine the cause of the magnetic response. Follow-up work is recommended that would require geological mapping, rock/soil sampling and possibly trenching/stripping in the anomalous areas.

Geophysical Survey Report for the Reticulate Lake AU/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

Table of Contents

	page
Summary	2
Introduction	4
Property Description, Location & Access	5-7
Property History & Previous Work	8-9
Ground Magnetics Survey Work Program	10-15
Ground Magnetics Data Results & Interpretation	16-17
Recommendations	18
Assessment Work Report Daily Log/Expense	19
Statement of Qualifications	20
References	21

List of Figures

Figure 1: Claim Map of the Reticulate Lake Au/PGM Property	5
Figure 2: Reticulate Lake AU/PGM Property Location Map	6
Figure 3: Digital Terrain Model of the Reticulate Lake Area	7

List of Maps

MAPS 1 & 2: GPS Ground Magnetics Survey Grids	11
MAPS 3 & 4: Ground Magnetics Survey Readings	13
MAP 5: Highlighted & Contoured Magnetics Survey Readings - Marsh	14
MAP 6: Highlighted & Contoured Magnetics Survey Readings – Lake	15

Appendix

Scintrex MF-2 Fluxgate Magnetometer Specifications	Appendix 1
Garmin 60 CSX GPS Specifications	Appendix 2

Geophysical Survey Report for the Reticulate Lake AU/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

Introduction:

This report details the ground geophysical survey conducted on the Reticulate Lake Au/PGM Property located in Porter Twp., Sudbury Mining Division in March of 2022. The objective of the ground magnetics work during the winter month of March 2022 was to survey a wetlands/marsh area and a small lake that would otherwise not be accessible for ground magnetics work during the summer months.

The property is relatively remote and apart from a high tension power line located a few km away there are no significant structures that would adversely affect ground geophysical magnetic surveying on the property.

Data collected during the ground magnetics survey will subsequently be used to correlate the magnetic readings with those taken over the rocks hosting a known quartz vein gold showing located proximal to the marsh/wetlands area on the property.

The Reticulate Lake Au/PGM Property contains anomalous concentrations of Gold (Au) and other Platinum Group Metals (PGM's- platinum, palladium, etc).

The Reticulate Lake AU/PGM Property is prospective for Ni-Cu-PGM sulphides in Nipissing age (approx. 2250 million year old) mafic intrusive rocks within Huronian aged sedimentary rocks. This is a similar geological setting to the Shakespeare Ni-Cu-PGM Mine owned and operated by Ursa Major Minerals and is located a few km to the SW of the Reticulate Lake Au/PGM Property.

The Reticulate Lake Au/PGM Property also hosts mafic intrusive rocks of the Shakespeare Layered Intrusion (approx. 2460 million year old) which are similar to the mafic intrusive rocks that make up the Sudbury Igneous Complex located to the east of the property and has several currently operating and past producing Ni-Cu-PGM mines.

The property has two distinct exploration targets:

- 1) Gold in quartz veins
- 2) Gold/Platinum/Palladium mineralization hosted within a Nipissing age Mafic Intrusion

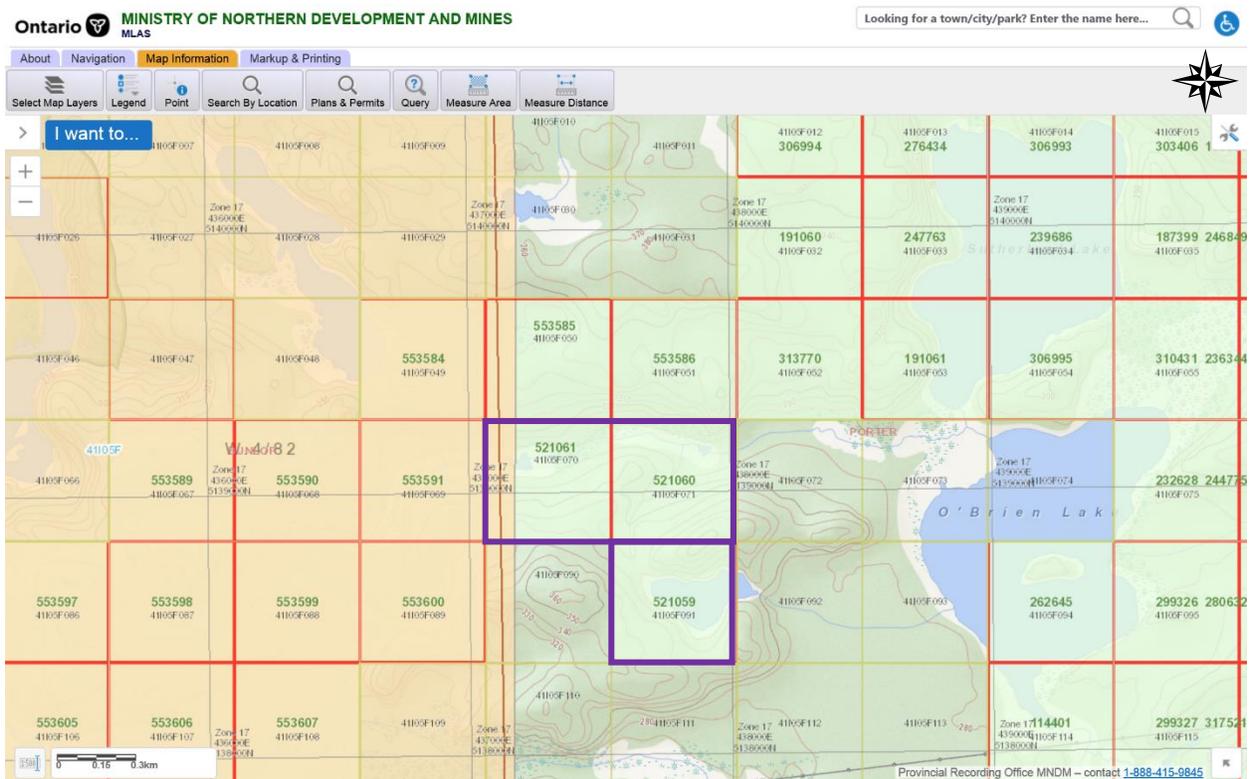
Geophysical Survey Report for the Reticulate Lake Au/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

Property Description, Location and Access:

The Reticulate Lake Au/PGM Property is comprised of 3 unpatented mining claims numbered 521059, 521060 & 521061 mining cell numbers 41105F070, 41105F071 & 41105F091 located in Porter Township, Sudbury Mining Division and is 100% owned by Mitchell Turcott (Figure 1).

Figure 1: Claim Map of the Reticulate Lake Au/PGM Property



Porter Township, Sudbury Mining District

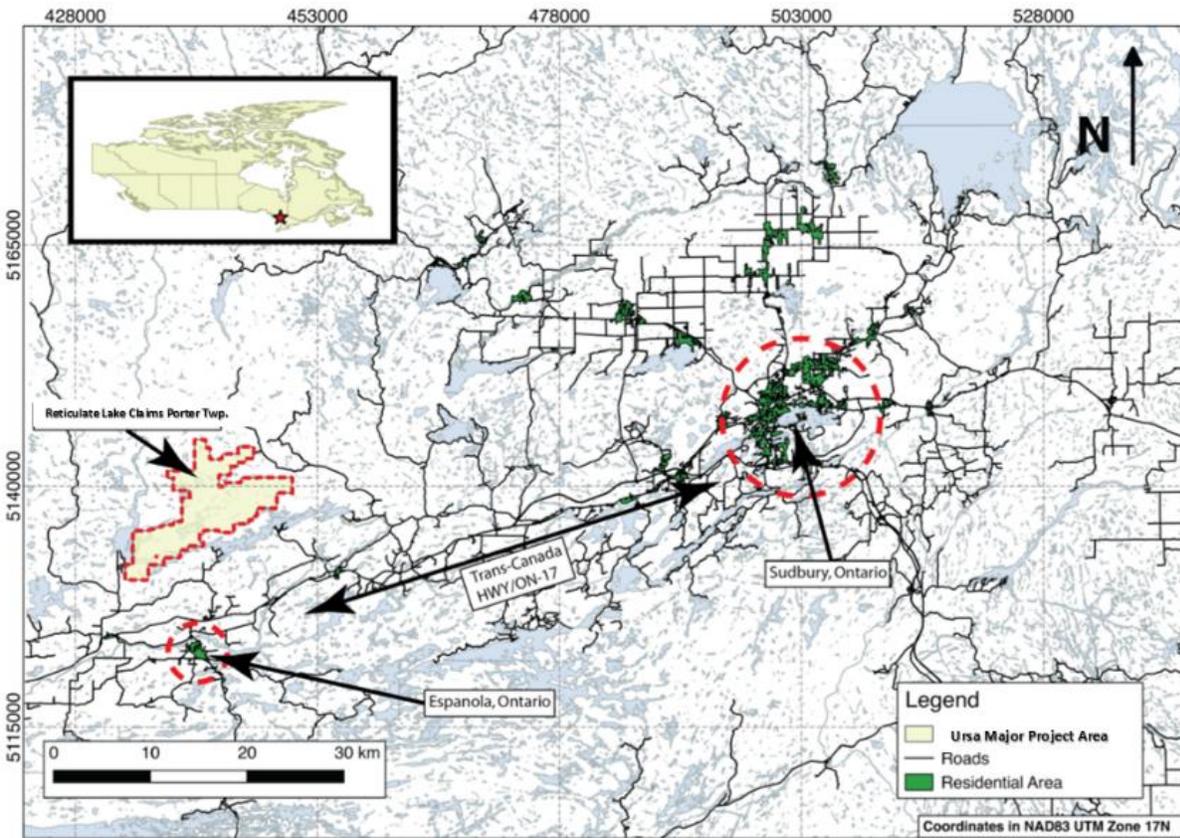
Claims Map modified from the MNDM MLAS

Geophysical Survey Report for the Reticulate Lake Au/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

The Reticulate Lake Au/PGM Property is located approximately 80 km west of the city of Greater Sudbury along Hwy 17 and about 20 km north of the small town of Espanola. The property can be accessed by vehicle following the Spanish River Road located north of the town of Nairn Centre and then travelling northwest towards the VALE owned High Falls Dam on Agnew Lake and then north on the Shakespeare Mine Road and subsequent logging roads which will take you near O'Brien Lake at which point you can traverse by foot, ATV or snowmobile approximately 2 km to the Reticulate Lake Property mining claims (Figure 2).

Figure 2: Reticulate Lake AU/PGM Property Location Map:



Note: The Reticulate Lake AU/PGM Property claims are adjacent to the Ursa Major Minerals Property which hosts the Shakespeare Ni-Cu-PGM Mine.

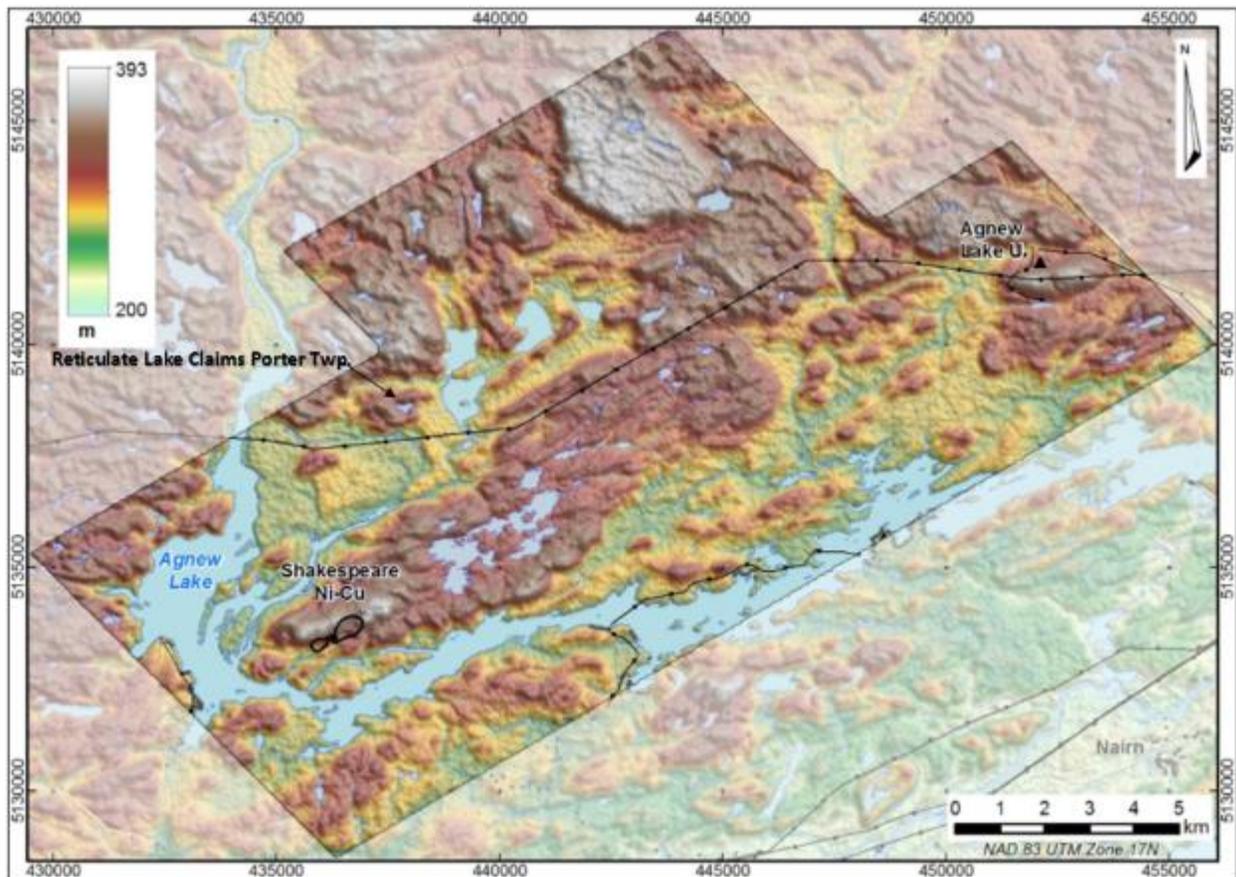
Location Map modified from Woodhead & Moul 2016

Geophysical Survey Report for the Reticulate Lake Au/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

Topographically, the property exhibits moderate relief with elevations ranging from 210 to 300 metres above sea level. There are several vertical rock cliff faces and relatively steep rock ridges within the Reticulate Lake Property claim group making it difficult to conduct geophysical or geological surveys with machinery or on foot (Figure 3). The property lies within the Great Lakes Basin and represents the northern limits of the Great Lakes Forest Region. The property is well vegetated with various types of conifers, hardwoods and softwoods which has attracted commercial logging to the area over the past several decades providing for numerous logging roads and trails that have been constructed for access & timber extraction.

Figure 3: Digital Terrain Model of the Reticulate Lake Area



Note: The Shakespeare Ni-Cu & PGM Deposit is located to the southwest of the Reticulate Lake Au/PGM Property.

Digital Terrain Map modified from Woodhead & Moul 2016

Geophysical Survey Report for the Reticulate Lake AU/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

Property History & Previous Work:

The following is a summary of reported work obtained by my review of the MNDM Assessment File archives:

1961: Geological mapping of Porter by R.M Ginn for the OGS was published.
R005_Porter Twp Geol Report_Ginn 1961

1967: Broulan Reef Mines Ltd. completed airborne magnetometer and electromagnetics surveys over the area which identified a number of anomalies. The results of any ground follow-up on the Reticulate Lake Property by Broulan Reef Mines is unknown.

1983 to 1990: BP Minerals completed airborne magnetometer and electromagnetics surveys over the area. Ground prospecting, geological mapping and diamond drilling was completed over areas of the Shakespeare Intrusion.

41J01NE0001 BP Airborne Data 1988

1993-94: Cameco conducted ground geophysics, geological mapping, sampling, trenching and diamond drilling over portions of the Nipissing Intrusion in Porter Twp.

41I05NE2018_Cameco 1994_Geol_Soil_DDH

41I05NW9700_Cameco 1993_Mag_VLF

41I05SW0001_Cameco 1993_Geol_Soil

1995-2000: Prospectors Mitch Turcott and Dan Brunne conducted trenching, geologic mapping and rock sampling on portions of the Nipissing aged mafic intrusion in Porter Twp. Several rock grab and channel samples returned anomalous Gold, Platinum and Palladium (Au, Pt, Pd) assay results.

Geophysical Survey Report for the Reticulate Lake AU/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

1998-2007: Platinum Group Metals/Pacific Northwest Capital/Kaymin Resources conducted geological mapping, trenching, sampling, airborne & ground geophysics (mag & vlf) and diamond drilling over portions of the Shakespeare Intrusion and the Reticulate Lake Property was conducted. Several anomalous gold samples in quartz vein was obtained from the Reticulate Lake Property and 4 diamond drill holes were completed in 2004 after which the property was abandoned.

20002294_2005 Ian Kelso Report

2000 to Present: Ursa Major Minerals conducted geological mapping, rock and soil sampling, airborne geophysics (2004 & 2016), trenching and diamond drilling on portions of the Nipissing aged mafic intrusion in Porter, Shakespeare and Baldwin Townships. Several rock samples from the Ursa Major Property returned anomalous Au, Pt and Pd assay results. Portions of the Reticulate Lake Au/PGM Property were flown by Ursa Major Minerals airborne geophysical surveys in 2004 & 2016 identifying magnetic and electromagnetic anomalies on the property.

42C02SE1210 2000_2001 Mike Perkins Report

20001009_Ursa Major Megatam Airborne Survey 2004

2_57305_10_Airborne Geophysical Surveys_Shakespeare Property 2016

2004-2006: Geological re-mapping of Porter and Vernon Townships by R. M. Easton for the OGS was conducted. Map and report was published.

P2845_Porter_Vernon Geology Map EASTON_2006

SFW20056_Easton Geology_Porter Twp

Geophysical Survey Report for the Reticulate Lake AU/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

Reticulate Lake Ground Magnetics Survey Work Program:

Three days were spent on the property conducting a ground magnetometer survey on March 27, 28 & 29, 2022 using a Scintrex Fluxgate Magnetometer. The magnetics survey was conducted by Mitchell Turcott (instrument operator) with help from Kirby Paul on March 27, 28 and Robert McDonald on March 29 (GPS/notes).

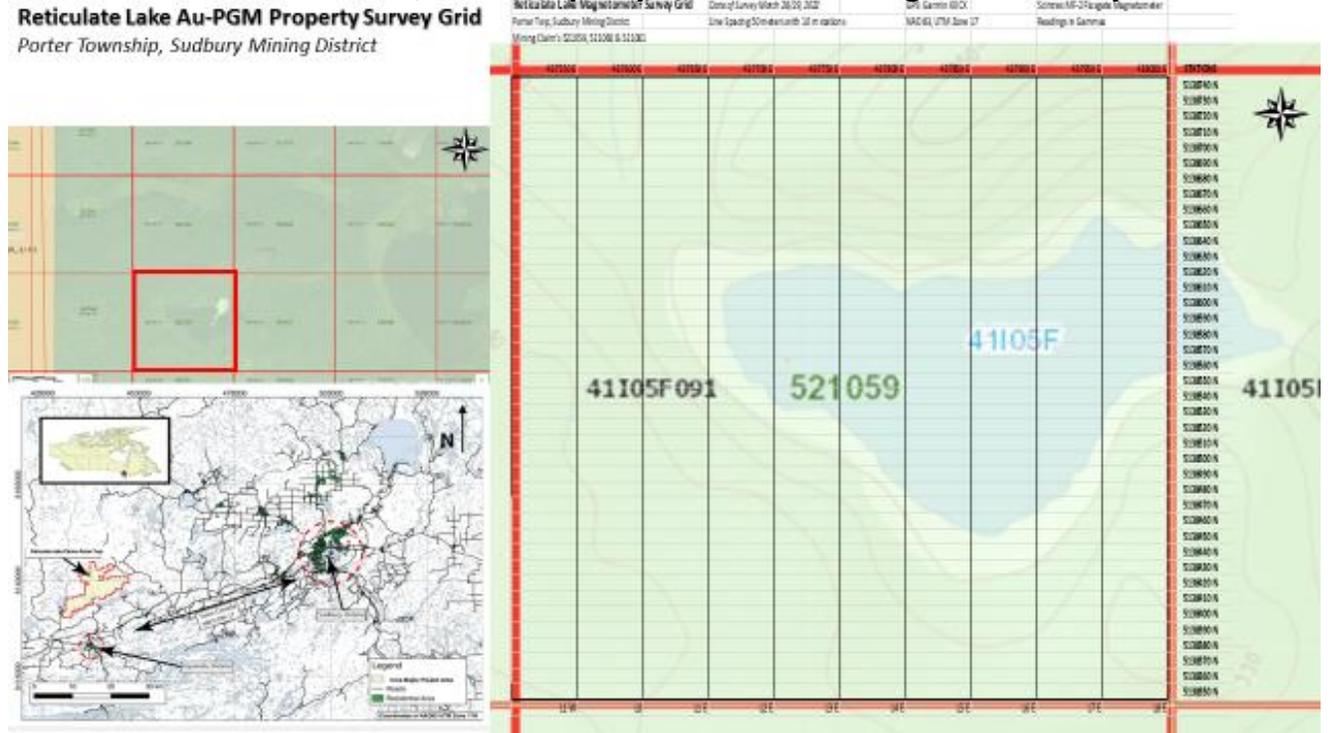
The property was accessed using snowmobiles from the West end of Agnew Lake which is easily accessed on Agnew Lake Road from the town of Webbwood located on Hwy 17W.

A total of 5.14 km of GPS grid line was surveyed over 13 lines (L8E @ 438000 m E to L1W @ 437550 m E from 5138350 m N to 5138740 m N that covers a small lake on the claims (see Map 1) and L6W @ 437300 E to L8W @ 437200 E from 5138800 m N to 5139270 m N which covers a marsh area on the mining claims and were lines not completed during the 2020 magnetics survey due to weather. See Map 2).

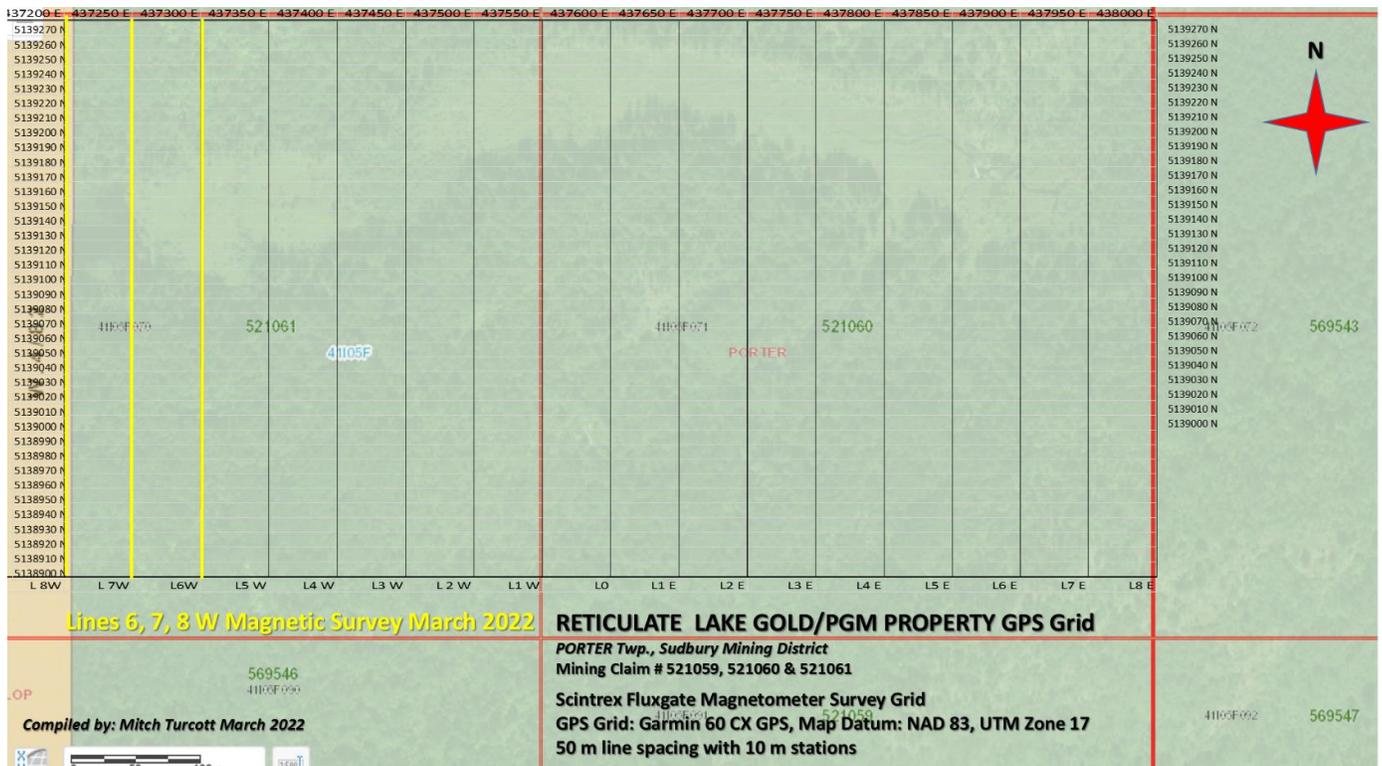
A Garmin 60 CX GPS (see Appendix 2 for instrument specifications) utilizing the UTM Grid Reference System (Zone 17) and NAD83 as the Map Datum was used to locate positions for the magnetic readings. The GPS grid was oriented in a North/South direction with 50 metre line spacing's and 10 metre stations. No grid lines were cut during the magnetics survey eliminating the need for an exploration plan/permit.

Geophysical Survey Report for the Reticulate Lake Au/PGM Property
 Porter Twp. Sudbury Mining Division, Ontario

MAP 1: Reticulate Lake Au/PGM Property GPS Ground Magnetics Survey Grid



MAP 2: Reticulate Lake Property Marsh Area GPS Ground Magnetics Survey Grid



Claim Maps modified from the MNDM MLAS, Mining Claims 521059, 521060, 521061

Geophysical Survey Report for the Reticulate Lake AU/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

The ground magnetics survey was conducted using a Scintrex Fluxgate Magnetometer (see Appendix 1 for instrument details). The magnetics instrument was zeroed at a neutral location prior to the geophysical survey and readings were taken at a base station location (438000 m E, 5139060 m N on March 27 and 438000 m E, 5138670 m N on March 28 & 29) to ensure the unit was working properly.

The magnetometer was operated by Mitchell Turcott and readings were recorded by Kirby Paul on March 27, 28 & Robert McDonald on March 29 they were also the GPS operator & navigator. Grid lines were traversed on snowshoe and readings were taken with the magnetometer at 10 metre stations on lines that were spaced 50 metres apart. To ensure magnetometer accuracy readings were tied in at the end of each loop and any magnetic drift (diurnal) was documented and then distributed evenly over the surveyed lines before the data was plotted on the GPS grid.

To minimize the number of negative values and to enable the 2022 magnetics data to be correlated with magnetic readings taken in March of 2020 550 gammas were added to all of the plotted data for ease of contouring and interpretation (550 gammas was added to the 2020 magnetics survey readings for L8E @ 438000 m E to L5W 437350 m E from 5139000 m N to 5139270 m N).

Map 3 is the ground magnetic grid survey for the marsh area located on mining claims 521060 and 521061. Lines 6, 7 & 8 W were surveyed on March 27, 2022 and the data for the ground magnetic survey conducted on Lines 8E to 5W in March of 2020 has been included to provide the completed magnetic survey data.

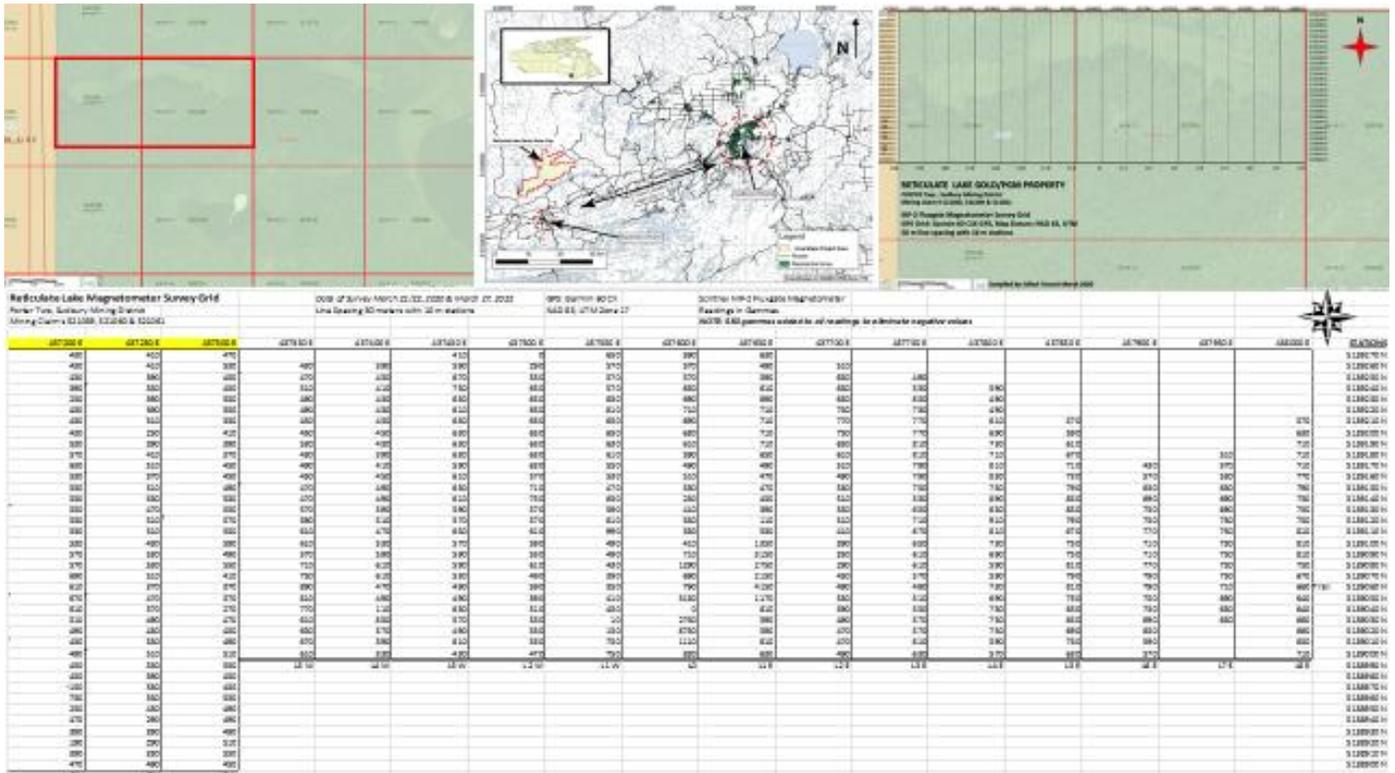
Map 4 is the ground magnetic survey data for the small lake located on mining claim 521059. The ground magnetic survey was conducted on March 28 & 29, 2022.

Map 5 is the contoured and highlighted ground magnetic survey data for the marsh area located on mining claims 521060 & 521061, Porter Twp. Sudbury Mining District with March 2022 & 2020 data.

Map 6 is the contoured and highlighted ground magnetic survey data for the small lake located on mining claim 521059, Porter Twp. Sudbury Mining Dist.

Geophysical Survey Report for the Reticulate Lake AU/PGM Property Porter Twp. Sudbury Mining Division, Ontario

Map 3: Reticulate Lake Marsh Area Ground Magnetics Survey Readings



March 27, 2022 Magnetics Survey for Lines 6, 7 & 8 W, March 2020 for Lines 8E to 5W

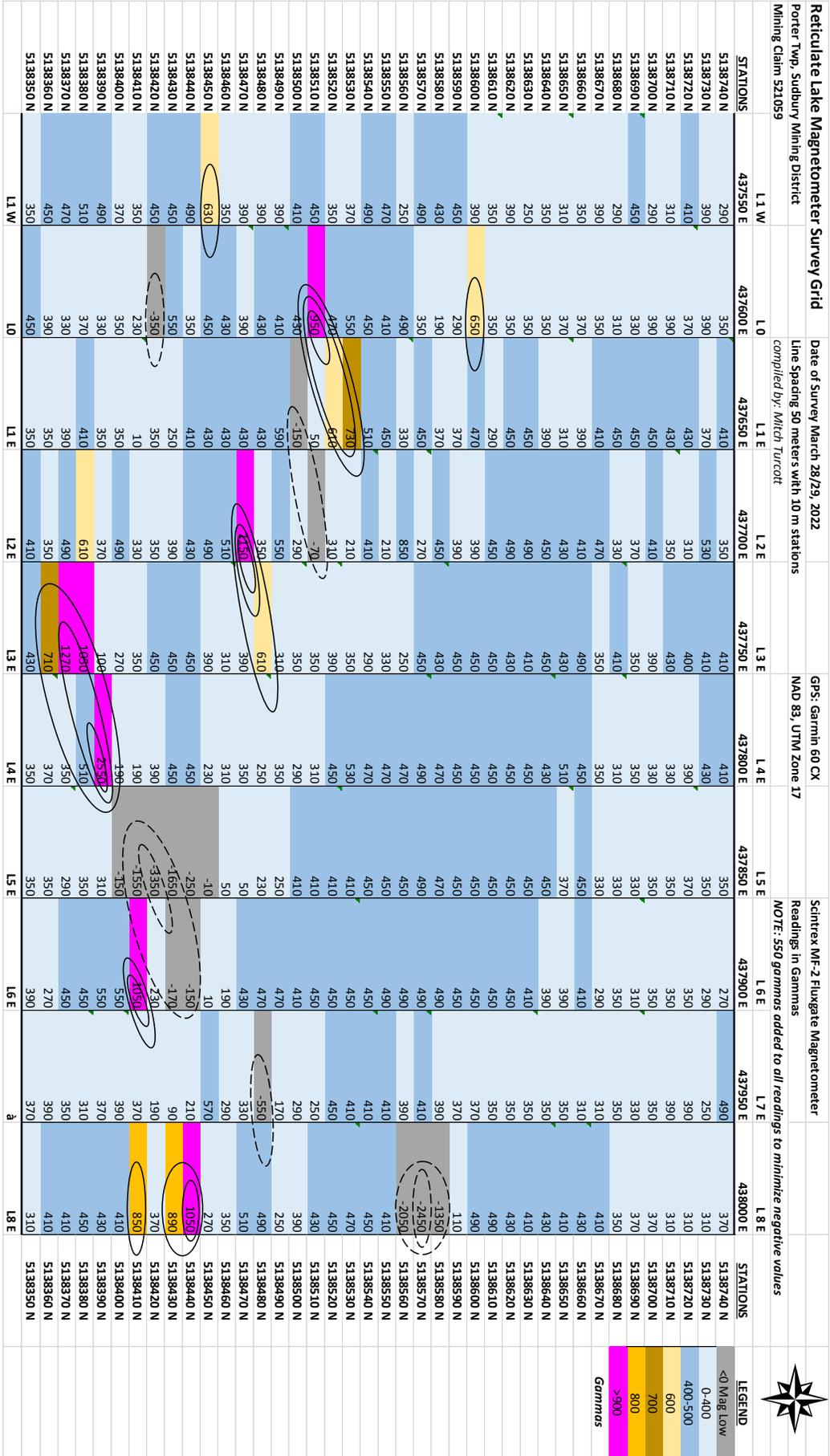
Map 4: Reticulate Lake Au/PGM Property Ground Magnetics Survey Readings

Reticulate Lake Magnetometer Survey Grid			Date of Survey March 28/29, 2022				GPS: Garmin 60 CX		Scintrex MF-2 Fluxgate Magnetometer			
Porter Twp, Sudbury Mining District			Line Spacing 50 meters with 10 m stations				NAD 83, UTM Zone 17		Readings in Gammas			
Mining Claim 521059			compiled by: Mitch Turcott						NOTE: 550 gamma values added to all readings to minimize negative values			
	L1 W	L0	L1 E	L2 E	L3 E	L4 E	L5 E	L6 E	L7 E	L8 E		
STATIONS	437550 E	437600 E	437650 E	437700 E	437750 E	437800 E	437850 E	437900 E	437950 E	438000 E	STATIONS	
5138740 N	290	350	410	350	410	410	350	270	490	370	5138740 N	
5138730 N	390	390	370	530	410	430	350	290	250	310	5138730 N	
5138720 N	410	370	430	310	400	390	370	350	390	310	5138720 N	
5138710 N	310	390	430	350	430	330	350	350	390	310	5138710 N	
5138700 N	290	390	450	410	390	330	350	350	350	370	5138700 N	
5138690 N	450	330	450	370	350	350	330	310	330	370	5138690 N	
5138680 N	290	310	450	330	410	310	330	350	350	350	5138680 N	
5138670 N	390	350	410	470	350	350	330	290	310	410	5138670 N	
5138660 N	350	370	390	410	490	450	450	410	310	430	5138660 N	
5138650 N	310	370	310	430	430	510	370	390	350	410	5138650 N	
5138640 N	350	350	390	450	450	430	450	390	350	430	5138640 N	
5138630 N	250	350	450	490	410	450	450	410	350	410	5138630 N	
5138620 N	390	350	450	490	430	450	450	450	350	430	5138620 N	
5138610 N	350	350	290	450	450	450	450	450	350	490	5138610 N	
5138600 N	390	650	470	390	450	450	450	450	370	490	5138600 N	
5138590 N	450	290	370	390	450	450	450	450	370	110	5138590 N	
5138580 N	430	190	370	450	430	470	470	490	390	-1350	5138580 N	
5138570 N	490	350	450	270	450	490	490	490	410	-2450	5138570 N	
5138560 N	250	490	330	850	250	470	450	490	390	-2050	5138560 N	
5138550 N	470	410	450	210	330	470	450	490	410	410	5138550 N	
5138540 N	490	450	510	410	290	470	450	450	410	450	5138540 N	
5138530 N	370	550	730	210	350	530	410	450	410	470	5138530 N	
5138520 N	350	470	610	310	390	450	410	450	450	450	5138520 N	
5138510 N	450	950	50	-70	350	410	410	450	250	430	5138510 N	
5138500 N	410	430	-150	290	350	290	410	410	290	390	5138500 N	
5138490 N	390	410	590	550	310	350	250	470	170	250	5138490 N	
5138480 N	390	430	430	350	610	250	230	470	-550	490	5138480 N	
5138470 N	390	390	430	1150	390	350	50	430	330	510	5138470 N	
5138460 N	350	430	430	510	310	310	50	190	290	350	5138460 N	
5138450 N	630	450	430	490	390	230	-10	10	570	270	5138450 N	
5138440 N	490	350	410	430	450	450	-250	-150	210	1050	5138440 N	
5138430 N	450	550	250	390	450	450	-1650	-170	90	890	5138430 N	
5138420 N	450	-350	350	350	450	390	-3350	230	190	370	5138420 N	
5138410 N	350	230	10	330	350	190	-1550	1050	370	850	5138410 N	
5138400 N	370	350	350	490	270	190	-150	550	390	410	5138400 N	
5138390 N	490	330	350	370	100	2550	310	550	370	430	5138390 N	
5138380 N	510	370	410	610	1050	510	350	450	310	450	5138380 N	
5138370 N	470	330	390	490	1270	350	290	450	350	410	5138370 N	
5138360 N	450	390	350	350	710	370	350	270	390	410	5138360 N	
5138350 N	350	450	350	410	430	350	350	390	370	310	5138350 N	

Geophysical Survey Report for the Reticulate Lake AU/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

Map 6: Highlighted and Contoured Magnetic Readings – Small Lake



Ground Magnetics Data Results & Interpretation Marsh Area

Several magnetic highs were located during the magnetic survey some of which are located in the marsh area north of the known gold showing located at line 0 and 5139030 m N.

The known gold mineralization in quartz veins is located on line 0 and line 1 E from 5139000 m N to 5139100 m N and the magnetic response is substantial and in the order of 8750 gammas. More prospecting of this area is recommended to determine the exact orientation of the gold mineralization.

There is a consistent higher than background of magnetic intensity on line 3 E to line 8 E (>700 gammas). The anomaly located at line 4 E @ 5139120 m N at 910 gammas appears to be trending in an east/west direction with much of the anomalous area located in the marsh/wetland area. The broad signature of this anomaly suggests a uniform rock type that may be of interest for gold mineralization.

The single reading of 990 gammas on line 1 W @ 5139110 m N should be followed up with prospecting to determine the source of the magnetic response, outcrop was observed near this station while conducting the survey and it is not far from the known gold showing on line 0.

The magnetic low located on line 2 W @ 5139270 m N is of interest and should be followed up with prospecting to determine the response. This magnetic low may be the result of a dike or geological contact and is located north of the marsh area and rock outcrop should be at or near surface in this location.

The magnetic anomaly located on lines 4 W & 5 W @ 5139030 m N to 5139080 m N is of interest and appears to be trending in a northwest direction and may be related to a structural feature like a fault or geological contact between lithologies. This magnetic feature may be of significance if it is structurally related.

There are three magnetic anomalies on line 8W @ 5139170, 5139070 to 5139040 and 5138960. These anomalies should be followed up by ground prospecting to determine the magnetic response documented during the survey.

Ground Magnetism Data Results & Interpretation Lake Area

The ground magnetism survey conducted over the small lake on mining claim 621059 detected several magnetic anomalies concentrated along the southern area of the mining claim. The most significant magnetic anomaly occurs on line 2E to line 6E from 5138360 m N to 5138440 m N with magnetic highs of 1270 gammas followed by intense magnetic lows of -3350 gammas. Ground prospecting should be conducted to determine the magnetic response.

Magnetic anomalies located on L1W, L0, L2E and L8E should also be followed up with ground prospecting to determine the response. Geological mapping and sampling of mineralized zones at these locations may help to determine whether they are of significance and require further exploration efforts.

Geophysical Survey Report for the Reticulate Lake AU/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

Recommendations:

Further work is recommended for the Reticulate Lake Au/PGM Property based on the magnetic anomalies identified during the ground magnetics survey. Geological mapping on a property scale should be conducted to correlate the ground magnetic data to the property lithologies.

The ground magnetometer survey should be extended to the south of the recently completed survey specifically at line 5 W to line 1 E from 5139000 m N to 5138800 m N on mining claims 521061 and 521060 to determine the extent of the magnetic response in the area immediately South and West of the quartz vein gold showing located at L1E & L0.

Ground magnetic survey work and prospecting should also be completed North of Reticulate Lake during the summer months from L8E 438000 m E to L1W 437550 m E from 5138740 m N to as far as possible north given the steep terrain (the topography is very steep and rocky along this area).

Areas of magnetic highs should be prospected to determine the presence of sulphides and quartz veins. Rock sampling and assaying should be conducted if the mineralization is deemed of interest.

Areas of poor outcrop exposure may need to be trenched to expose the bedrock which would allow for geological mapping, determination of the orientation of geological structures and any mineralization that may be present. The previously known gold in quartz vein showing located at line 0 should be prospected and stripped of any overburden to try to determine the precise orientation and extent of gold mineralization. A track excavator would be the best piece of equipment to remove overburden from this zone and then washed with a high pressure water pump, mapped and sampled.

The proposed recommended work program of power stripping, washing, prospecting, sampling and geological mapping would take approximately 1 week of field work with a two person field crew plus excavator operator. The estimated budget for this work program would be approximately \$15,000.00 for labour and excavator rental plus expenses (fuel, meals, sample assay's etc.).

Geophysical Survey Report for the Reticulate Lake AU/PGM Property
Porter Twp. Sudbury Mining Division, Ontario

Reticulate Lake Au/PGM Property Work Report
Daily Log/Expense:

Reticulate Lake Au/PGM Property Assessment Work Daily Log

March, 2022

<u>Month</u>	<u>Day</u>	<u>Work</u>	<u>Expense</u>
February	7	Snowshoe - Trail Brushing & Locating	\$400.00
March	26	Logistics/Equipment Prep/Mag Grid Layout	\$400.00
March	27	Break Trail Mag Survey Marsh L6, 7, 8 W with Kirby	\$800.00
March	28	Mag Survey Reticulate Lake L8,7,6,5 E with Kirby	\$800.00
March	29	Mag Survey Reticulate Lake L 4,3,2,1 E, L0 & 1W with Rob	\$800.00
March	30	Mag Data Compilation	\$400.00
March	31	Assessment Work Report Compilation	\$400.00
April	1	Assessment Work Report Compilation	\$400.00
Total Expense:			\$4,400.00

Geophysical Survey Report for the Reticulate Lake AU/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

Statement of Qualifications

I, Mitchell Turcott of 662 A Agnew Lake Road, Webbwood, Ontario, do hereby certify that:

I hold a B.Sc. degree in Geology from Laurentian University, awarded in 1998.

I hold a Geological Technician degree from Cambrian College, awarded in 1980.

I have been working as an exploration geologist and prospector since the 1970's for base and precious metals, uranium and dimensional stone in the provinces of Ontario, Quebec, Labrador, Saskatchewan, Yukon and the Northwest Territories.

The information, conclusions and recommendations contained within this report are based on my knowledge, education and experience working in the field and my review of literature, technical reports and other assessment file reports relating to the exploration for Gold, Nickel, Copper and Platinum Group Metals.

I have prepared this report as a requirement for assessment work for mining claims under the Mining Act of Ontario R.S.O. 1990 and is in compliance with Ontario Regulation 65/18 Assessment Work and in the format required as per the Technical Standards for Reporting Assessment Work.

April 1, 2022

Mitchell Turcott, Honours B.Sc. Geology

Geophysical Survey Report for the Reticulate Lake AU/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

References

Barry, J.M., Berger, J., Report on Phase 3 Diamond Drilling Agnew Lake Property, 2005; Assessment File Report for Pacific Northwest Capital Corp.

Easton, R. M., Geology and Mineral Potential of Porter and Vernon Townships, Southern Province, 2005; Ontario Geological Survey Open File Report 6172.

Fugro Airborne Systems, Logistics and Processing Report Airborne Magnetics and Megatem Survey Shakespeare and Agnew Lake Property Ontario, Canada, 2004; Assessment File Report for Ursa Major Minerals.

Hale, C. J., JvX Ltd., Agnew Lake Project O'Brien and Bye Grids Report on TDEM, Magnetometer & VLF Surveys, 2004; Assessment File Report for Pacific Northwest Capital Corp.

Kelso, I., Phase 5 Surface Exploration Program Agnew Lake Property, 2005; Assessment File Report for Pacific Northwest Capital Corp.

Woodhead, J., Moul, F., Processing and Assessment of Airgrav Data and VTEM Electromagnetic and Magnetic Data over the Shakespeare Property, 2016; Assessment File Report for Ursa Major Minerals.

Appendix 1

How a fluxgate magnetometer works

A fluxgate magnetometer is an instrument used to measure magnetic flux density (B) or magnetic field intensity (H). It consists of a soft-iron core with two coils wrapped around it: a drive coil and a sense coil. An alternating voltage drives the core continuously through a complete hysteresis cycle, from saturation in one direction to saturation in the other. The sense coil measures the flux and the magnetic flux density, B, integrated over an area. The voltage induced in a coil is proportional to the flux changes in the core.

Gating the flux

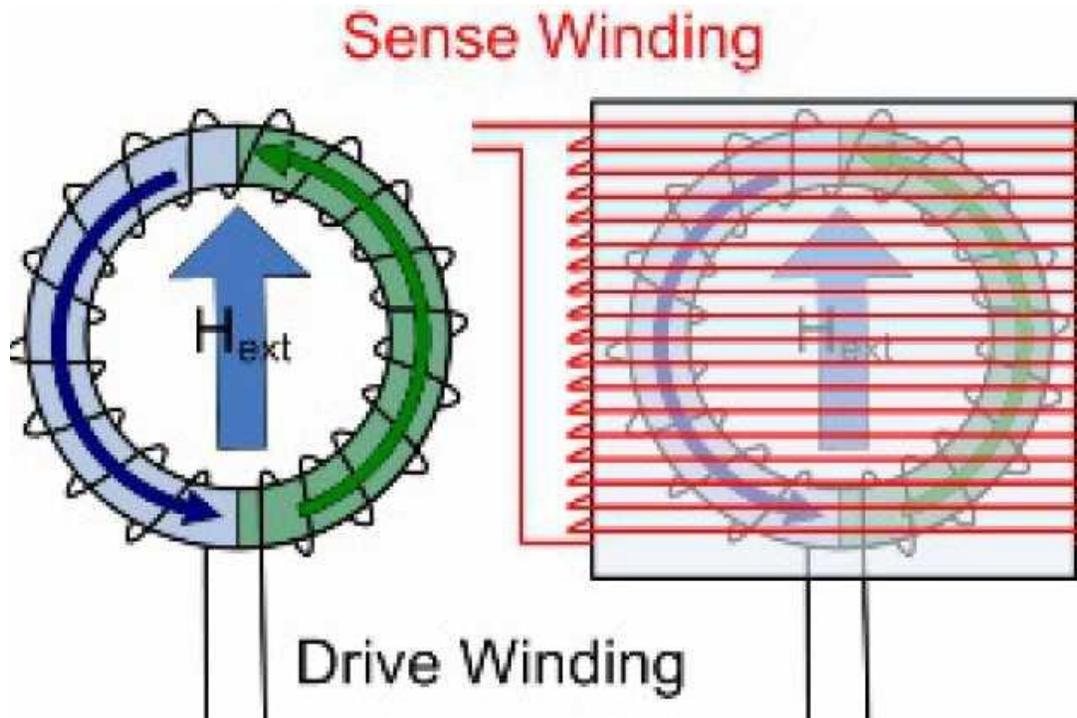
The magnetic permeability of the core – the slope of the B vs. H curve – is modulated as the core goes into and out of saturation: unsaturated, the core has the high permeability of soft iron. Saturated, the core suddenly drops to the low permeability of free space. This means that the flux, the magnetic flux density B is integrated over an area. The voltage induced in a coil is proportional to the flux density B in the core due to an external field H. The voltage induced in a coil is proportional to the flux, due to the external field being switched off as the core saturates and back on as the core desaturates – hence the name “fluxgate”. We may be interested in its individual components or its total magnitude of this gated field to be measured by the sense coil.

Geophysical Survey Report for the Reticulate Lake AU/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

Fluxgate sensors are typically ring cores of a highly magnetically permeable alloy around which are wrapped two coil windings: the drive winding and the sense winding (as shown in the figure). Some sensors will also have a third feedback winding, if the sensor is to operate in closed loop.

It is helpful to think of the ring core as two separate half cores shown in blue and green in the figure. This ring core is set up to measure the field in the direction of H_{ext} . As the current flows through the drive winding, one half core will generate a field with a component in the same direction as H_{ext} and the other will generate a field with a component in the opposite direction as H_{ext} .



DRIVE WAVEFORM

An example drive waveform is shown in Figure 2a. The transitions are in fact more 'square' than shown in the figure, here they are exaggerated to emphasize what is happening in the 2 half cores.

No external field

In the absence of an external field ($H_{ext} = 0$) the two half cores go into and come out of saturation at the same time. The fields generated exactly cancel out as shown in Figure 2b and there is no net change of flux in the sense winding, and hence no voltage induced.

Geophysical Survey Report for the Reticulate Lake AU/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

With external magnetic field

When there is an external field, the half core generating a field in the opposite direction of the external field (for first transition in Figure 2c, shown in green) comes out of saturation sooner and the half core in same sense as the external field comes out of saturation later. During this time the fields do not cancel out and there is a net change in flux in the sense winding (shown in black). According to Faraday's law, this net change in flux induces a voltage, shown in black in figure 2d. Similarly towards the end of the transition, the half core now generating a field in the same direction as H_{ext} goes into saturation sooner. Consequently, there are two spikes in voltage for each transition in the drive and the induced voltage is at twice the drive frequency.

Measuring the field

The size and phase of the induced spikes tells us about the magnitude and direction of the external field. To help amplify this signal to make it easier to detect, the fluxgate magnetometers produced by Imperial College use a capacitor to tune the sense winding. The tuned sensor waveform is shown in red in Figure 2d.

Fig. 2a: Drive Waveform

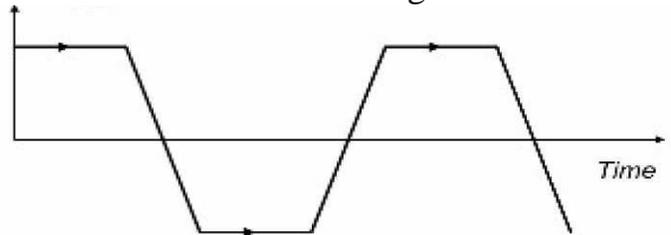


Fig. 2b: B generated by each half core with no external field

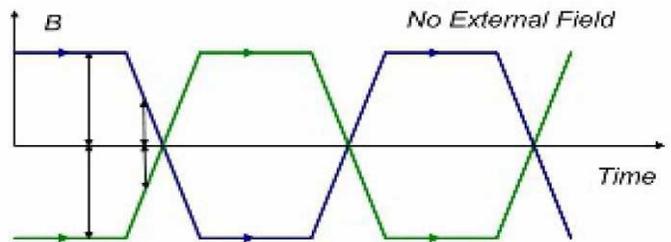


Fig. 2c: B generated by each half core in external field

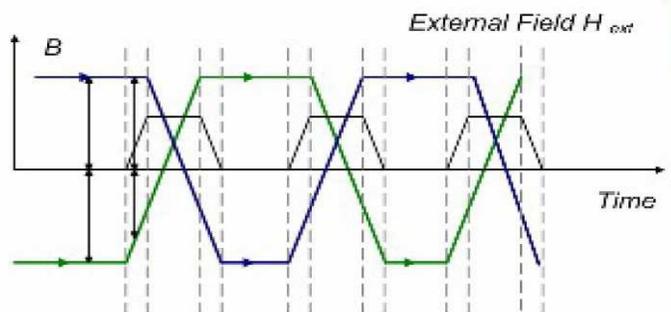
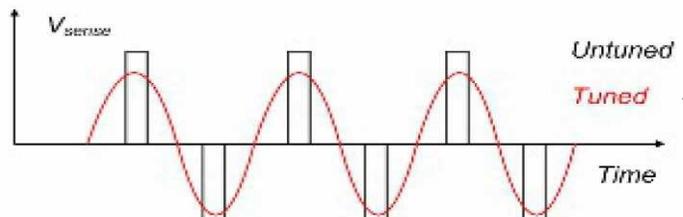


Fig. 2d: Voltage induced in the sense winding (black) Resultant voltage if the sensor is tuned (red)



Geophysical Survey Report for the Reticulate Lake AU/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

SCINTREX

MF-2 MAGNETOMETER

OPERATION OF THE INSTRUMENT:

1. Remove all ferro-magnetic objects from the operator's person, e.g. keys, coins, buttons etc. (zippers should be non-magnetic).
2. Attach carrying strap to the instrument. For light surveying the upper buttons can be used and the strap carried around the neck. In rough terrain, and for long surveys, it is advisable to attach the strap to one upper button around one shoulder to the lower button on the other side of the instrument.
3. If external batteries are to be used, attach battery pack cable to the instrument, and the pack itself to the operator's back.
4. Switch on Main Switch (1) to the first position - BAT. Meter needle should come to rest within the red arc.

(Handwritten notes and scribbles)

If not, replace or recharge the batteries. **ALWAYS CHECK TERMINALS**

5. Latitude Adjustment (Bucking):

Put Range Switch (3) to 100K position, Main Switch to Positive ("+"), Latitude Switch (3), to 0 gammas and

The bucking is then zero, and the magnetometer will read the vertical component of the magnetic field with 1% accuracy. The MF-2, with calibrated latitude control as an option, has Latitude Switch steps of 10,000 gammas \pm 0.5%; thus the reading can be taken on more sensitive ranges and the total value of vertical component calculated by adding the meter reading to the value of the field indicated on the Latitude Switch. In order to obtain readings in more sensitive ranges, it is necessary to adjust the latitude controls to give a zero reading. First, set the Latitude Switch (3) to the position which gives a reading closest to zero on the positive side, and then use the Fine Control to obtain zero. Now set the Range Switch to a desired range, and readjust the Fine Control, if necessary, to obtain an exact zero reading.



6. The only requirement for taking measurements with the MF-2, is that the instrument be reasonably stationary,

Geophysical Survey Report for the Reticulate Lake AU/PGM Property
Porter Twp. Sudbury Mining Division, Ontario

7. Calibration //

This instrument is factory calibrated and field tests have shown that only misuse (i.e. dropping, rough handling, improper shipping) can affect the calibration. Therefore, it is not necessary to re-calibrate in the field. However, should re-calibration become necessary, for any reason, the instrument should be returned to the manufacturer.

8. All parts, except the non-rechargeable batteries and cables, are guaranteed for a period of one year and in the event of a malfunction will be replaced free of charge, providing no obvious misuse has been committed. Should the instrument become inoperative, check the batteries and cables (especially connections). If these prove to be in good order, return the instrument to your supplier, or directly to the manufacturer, for prompt repair.

*** WARNING: Always remove the external batteries when the unit is being stored or shipped. Those units with internal rechargeable batteries, should be re-charged after each daily use, if possible, and at least once every six months should the unit remain in storage.

9. The charging of rechargeable batteries should be carried out using the accompanying charging unit. The procedure being:

a) Turn the magnetometer main switch to OFF.

*** N.B.*** This applies to instruments with external batteries only.

b) Connect the charger cable to the magnetometer plug (b).

c) Plug charger into 120VAC 50 to 60 Hz.

d) The charger Pilot light will indicate that the batteries are being charged and will go off when they are fully charged.

e) If charging is to be done from a 23 to 42V D.C. source, connect the D.C. cable to the charger, and proceed as above.

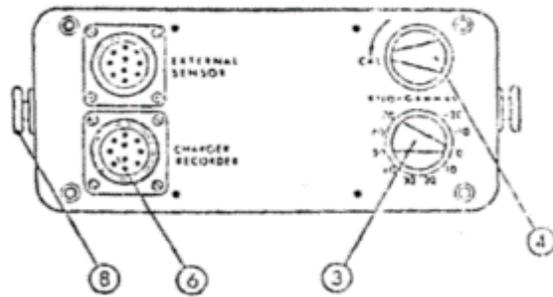
f) Should the source of charging power be 220 volts A.C., an internal adjustment to the charger is necessary.

If a power source for charging the batteries is not available in the field, the external battery pack (optional) should be used. If external pack is used, the internal batteries have to be re-charged every 6 months. For convenience the shorting plug with chain can be removed and stored in the pocket of the case.

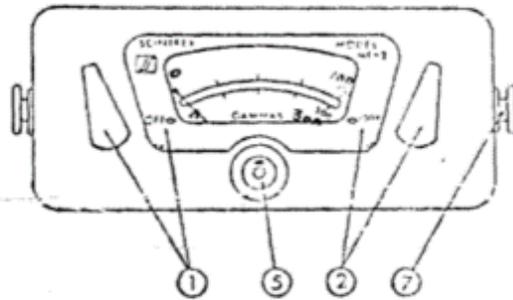
Geophysical Survey Report for the Reticulate Lake AU/PGM Property
 Porter Twp. Sudbury Mining Division, Ontario

10

3



- 1 MAIN SWITCH
- 2 RANGE SWITCH
- 3 LATITUDE SWITCH
- 4 LATITUDE FINE CONTROL
- 5 LEVEL
- 6 CHARGER & RECORDER PLUG
- 7 UPPER BUTTON
- 8 LOWER BUTTON



Geophysical Survey Report for the Reticulate Lake AU/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

10. Regional Latitude Settings:

4

Normally, each unit is preset for the Northern Hemisphere.

pre-setting for the Southern Hemisphere will be done at the factory, as per your instructions and at no extra cost. However, should the unit be required for use in both Hemispheres, re-setting instructions will be supplied on request.

FIELD PROCEDURE:

65 - 640
or
285 - 645

1. Select a base control station, the choice of location being governed by the following considerations:
 - a) General magnetic background (i.e. not anomalous if possible).
 - b) Accessibility, in relation to the area being surveyed.
2. Set the magnetometer to read between 0 and ~~400~~ ⁵⁰⁻³⁵⁰ gammas. (For the sake of convenience in contouring and to avoid small negative readings, an arbitrary value of 800 to 1000 gamma may be added to all readings).
3. For effective diurnal control, control stations should be permanently marked, and readings should be taken at the same height and location each time: a simple method is to have the top of the control station picket at about waist height. Rest the probe end of the magnetometer on this picket while taking the reading. In barren country, a mound, large rock or some similar object, can be marked and used as a substitute for pickets.
4. Normal magnetometer survey procedures should be adhered to for the remainder of the survey.
5. Powerful magnets should be kept more than 1 foot away from the MF-2 instrument.
6. During winter operation, external batteries (if used) should be kept in a pocket or under a parka. (Only use batteries with low steel content e.g. Eveready).

50-350
800-1000
SET UP FIRST
FIELD PROCEDURE

Geophysical Survey Report for the Reticulate Lake AU/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

Ranges:	Plus or minus — 1,000 gammas f. sc. 3,000 " 10,000 " 30,000 " 100,000 " Sensitivity 20 gammas/div. 50 " 200 " 500 " 2,000 "
Meter:	Taut-band suspension 1000 gammas scale 1 7/8" long — 50 div. 3000 gammas scale 1 11/16" long — 60 div.
Accuracy:	1000 to 10,000 gamma ranges \pm 0.5% of full scale 30,000 and 100,000 gamma ranges \pm 1% of full scale
Operating Temperature:	-40°C to +40°C -40°F to +100°F
Temperature Stability:	Less than 2 gammas per °C (1 gamma / °F)
Noise Level:	Total 1 gamma P-P
Long Term Stability:	\pm 1 gamma for 24 hours at constant temperature
Bucking Adjustments: (Latitude)	10,000 to 75,000 gammas by 9 steps of approximately 8,000 gammas and fine control by 10 turn potentiometer. Convertible for southern hemisphere or \pm 30,000 gammas equatorial.
Recording Output:	1.7 ma per oersted for 1000 to 100,000 gamma ranges with maximum termination of 15,000 ohms.
Response:	DC to 5 cps (3db down)
Connector:	Amphenol 91-MC3F1
Batteries:	12 x 1.5V-flashlight batteries "C" cell type) (AC Power supply available)
Consumption:	50 milliamperes
Dimensions:	Instrument — 6 1/2" x 3 1/2" x 12 1/2" 165 x 90 x 320 mm Battery pack — 4" x 2" x 7" 100 x 50 x 180 mm Shipping Container — 10" dia x 16" 254 mm dia. x 410 mm
Weights:	Instrument — 5 lbs. 12 oz. 2.6 kg. Battery Pack — 2 lbs. 4 oz. 1.0 kg. Shipping — 13 lbs. 6.0 kg.

Geophysical Survey Report for the Reticulate Lake AU/PGM Property

Porter Twp. Sudbury Mining Division, Ontario

Appendix 2



GPSMAP® 60Cx and 60CSx



Navigation features

Waypoints/icons: 1000 with name and graphic symbol, 10 nearest (automatic), 10 proximity

Routes: 50 reversible routes with up to 250 points each, plus MOB and TracBack® modes

Tracks: 10K point automatic track log; 20 saved tracks 500 points each let you retrace your path in both directions

Trip computer: Current speed, average speed, resettable max. speed, trip timer and trip distance

Alarms: Anchor drag, approach and arrival, off-course, proximity waypoint, shallow water and deep water

Tables: Built-in celestial tables for best times to fish and hunt, sun and moon rise, set and location

Map datums: More than 100 plus user datum

Position format: Lat/Lon, UTM/UPS, Maidenhead, MGRS, Loran TDs and other grids, including user UTM grid only

GPS performance

Receiver: 12 channel SiRFstar III™ high-sensitivity GPS receiver (WAAS-enabled) continuously tracks and uses up to 12 satellites to compute and update your position

Acquisition times*:

Warm: <1 sec
Cold: <38 sec
AutoLocate™: <45 sec

Update rate: 1/second, continuous

GPS accuracy:

Position: <10 meters, typical
Velocity: .05 meter/sec steady state

DGPS (WAAS) accuracy:

Position: <5 meters, typical
Velocity: .05 meter/sec steady state

Protocol messages: NMEA 0183 output protocol

Antenna: Built-in quad helix receiving antenna, with external antenna connection (MCX)

Moving map features

Basemap: Detailed routable basemap with cities, highways, interstates, exit info, rivers, lakes; preloaded with worldwide cities

Uploadable maps: Accepts downloaded or plug-in microSD map detail from a variety of optional MapSource media (64 MB microSD card included)

Electronic compass feature: (GPSMAP 60CSx only)

Accuracy: ±2 degrees with proper calibration (typical); ±5 degrees extreme northern and southern latitudes

Altimeter feature: (GPSMAP 60CSx only)

Resolution: 1 foot

Range: -2,000 to 30,000 feet

Elevation computer: Current elevation, resettable minimum and maximum elevation, ascent/descent rate, total ascent/descent, average and maximum ascent/descent rate

Pressure: Local pressure (mbar/inches HG)

Power

Source: Two "AA" batteries (not included)

Battery life: 18 hours, typical; up to 30 with battery saving

Physical

Size: 2.4W x 6.1H x 1.3D inches (61mm x 155mm x 33mm)
7.5 oz. (213 g) est.

Weight: 7.5 oz. (213 g) est.

Display: 1.5 x 2.2 inches (38.1mm x 56mm) 256-color transreflective TFT (160 x 240 pixels) (160 x 240 pixels)

Case: Waterproof to IPX-7 standards

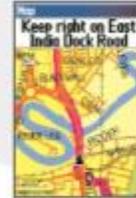
Temp. range: 5°F to 158°F (-15°C to 70°C)

Accessories

Standard: 64 MB microSD data card
Belt clip
USB PC interface cable
MapSource Trip & Waypoint Manager CD
Users manual
Quick reference guide
Wrist strap

Optional:

Automotive Navigation Kit (includes City Navigator™)
Automotive mount
Marine mount
Suction cup mount
Carrying case
12-volt adapter cable
Power/data cable
Remote GPS antenna



With enhanced street map detail from optional MapSource software, you can look up destinations and view automatic point-to-point routes.



The GPSMAP 60 series accepts downloaded map detail, including topo maps with elevation information.



The barometric altimeter feature on the GPSMAP 60CSx provides elevation profiles for climbers and hikers.



Garmin's "sensor version" GPSMAP 60CSx also features a large, easy-to-read electronic compass display.

©2006 Garmin Ltd. or its subsidiaries



Garmin International Inc.
1200 East 151st Street
Olathe, Kansas 66062, U.S.A.
913/397.8200 fax 913/397.8282

Garmin (Europe) Ltd.
Unit 5, The Quadrangle
Abbey Park Industrial Estate
Romsey, SO51 9DL, U.K.
44/1794.519944 fax 44/1794.519222

Garmin Corporation
No. 68, Jangshu 2nd Rd.
Shijr, Taipei County, Taiwan
886/2.2642.9199 fax 886/2.2642.9099

www.garmin.com

Specifications are preliminary and subject to change without notice.

* Subject to accuracy degradation to 100m 2DRMS under the U.S. Department of Defense imposed Selective Availability Program.

** These units are also able to transfer waypoints, routes and tracks between the PC and the device using MapSource™.