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# **PORTER MAGNETIC HIGH**

# 2021 Prospecting Report

Porter Township Sudbury Mining Division

Ontario, Canada

April 29, 2022

By: M. Gaudreau

For: Fudge & Associates

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### Summary

The Porter Magnetic High (Property) consist of a single multi-cell claim 583604. The 2-unit cell claim was staked on April 9, 2020. The claim requires \$800.00 annually to keep it in good standing. The due date is April 9, 2022. The claim is recorded 100% in the name of Don Thomas Fudge. This report details the field work completed by prospectors M. Gaudreau (Client Number 408864) and B. Berdusco (Client Number 10004062) who were retained by D. Fudge to carry out prospecting. The prospecting was focused on determining the source of an east west striking magnetic high anomaly situated in the southern part of the claim. The prospectors made two attempts to locate and access the Property to prospect and determine the source of the strong magnetic anomaly. On November 19, 2021, the Property was not located due to the confusing network of forest roads. On November 20, 2021, the claim was located, accessed, and prospected. During both attempts the area of the strong magnetic high anomaly was not reached and remains undetermined, however, on route the prospectors discovered several lithologies containing disseminated sulfides. Each location where sulfides where discovered was sampled. A total of five (5) samples were taken in the field. The samples were hand delivered to AGAT Laboratory in Sudbury on 2022-03-18, for Sodium Peroxide Fusion with ICP-OES and ICP-MS Finish and Au, Pt & Pd by Fire Assay - ICP Finish (50g) analysis under work order number 22T874820. At the time of submitting this report the assay results had not been received from AGAT Laboratories.

## Location & Access

The Property is situated in east central Dunlop Township line, approximately 65 kilometers west of Sudbury, Ontario, Canada within the Sudbury Mining Division. The Property is centered at UTM NAD83, Zone 17 437556E, 5139973N. The Property can be accessed by a series of forest haul roads. Starting from Kings Highway 17, turn north to Worthington on Highway 4 at coordinate 471526E, 5135448N. Continue west on Highway 5 to the junction at Turbine and yield northwest onto High Falls Road. At 458798E, 5136880N turn north onto the former Agnew Lake Mine Road to the Shakespeare Mine. Continue northbound to coordinate 443789E, 5148313N and turn westbound to coordinate 436149E, 5142213N keep left, heading eastward. At 437502E, 5141547N continue south. This last stretch of road is best driven during the summer when the roads have dried out otherwise a 4x4 or ATV is required. The walking distance to the parking area is approximately 1.5 kilometers. Park at coordinate 437622E, 5140440N and continue to the north claim line boundary at coordinate 437453E, 5140202N.

## **Ownership and Claim Status**

The Property consist of a single multi-cell claim 583604. The 2-unit cell claim was staked on April 9, 2020. The claim requires \$800.00 annually to keep it in good standing. The due date is April 9, 2022. The claim is recorded 100% in the name of Don Thomas Fudge.



Figure 1 Porter magnetic High Property Ontario Location Map

## **Exploration Plan, Permit & First Nations**

There is currently no active Exploration Plan or Exploration Permit on the Property. The Sagamok Anishnawbek First Nation and the Métis Nation of Ontario who have land claims that cover the Property had not been notified prior to the prospecting as it was not applicable at this stage of work.

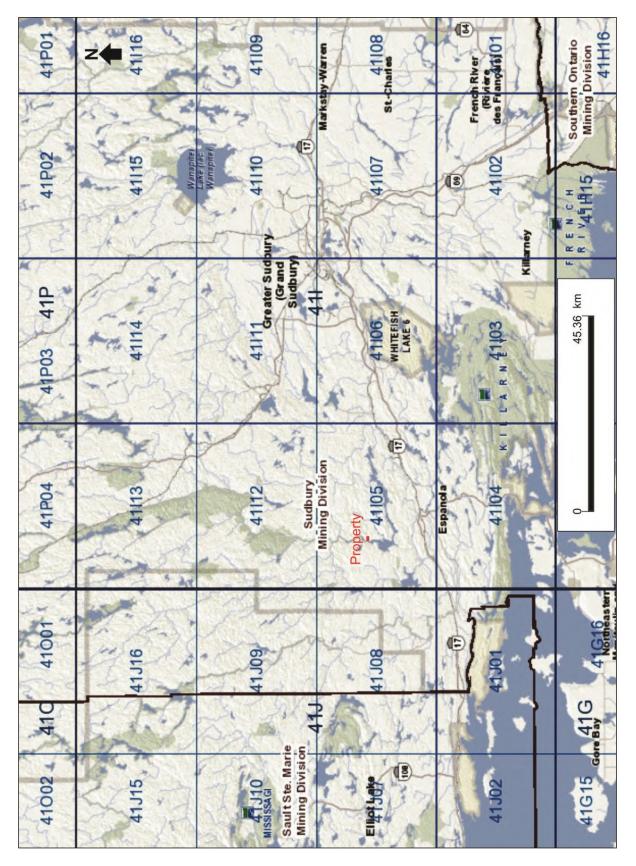


Figure 2 Porter Magnetic Anomaly Property Regional Claim Location

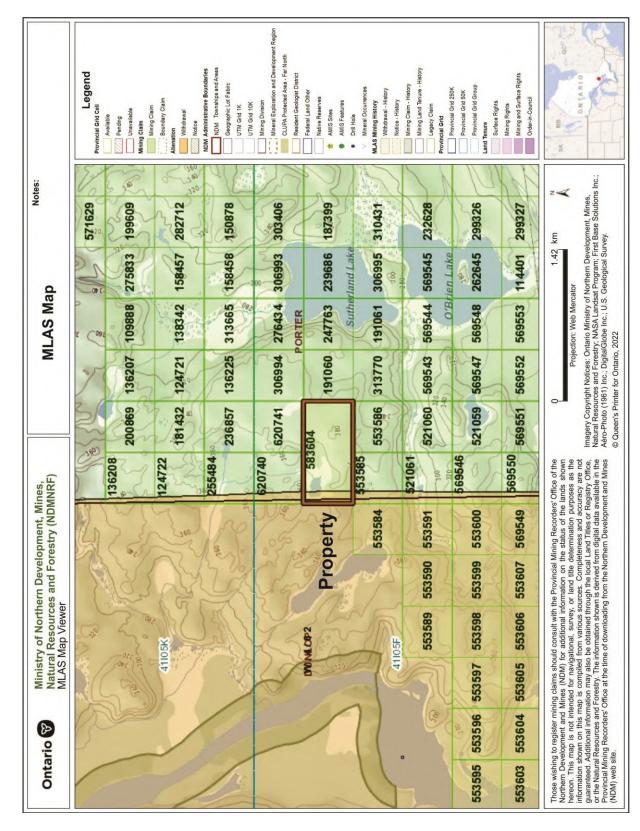
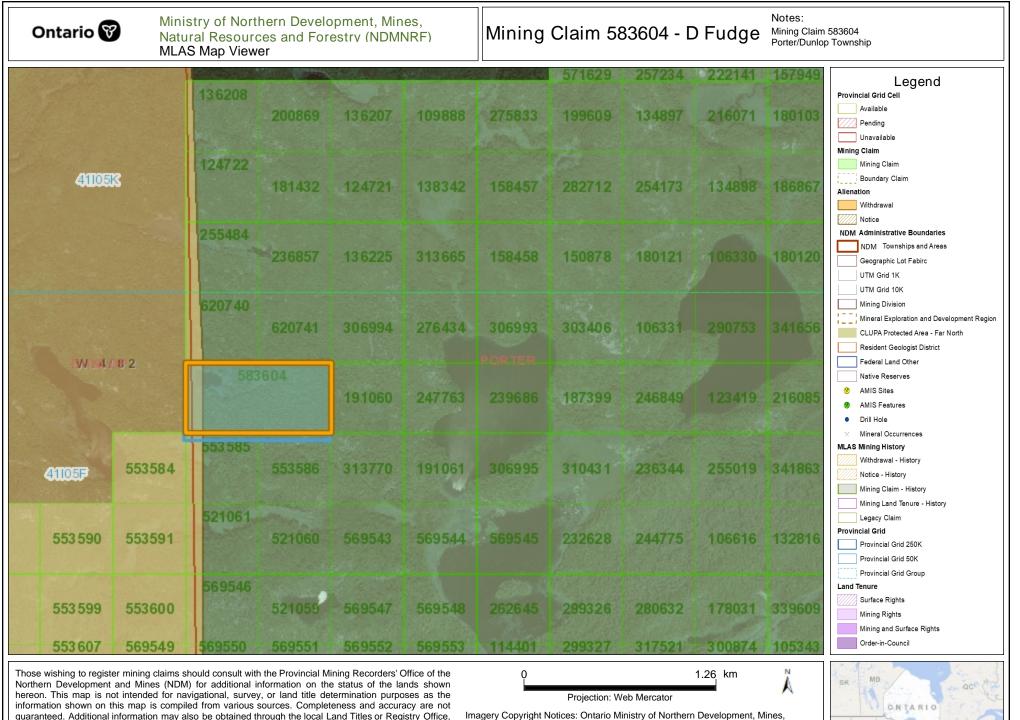


Figure 3 Porter Magnetic High Property Claim Location Map



guaranteed. Additional information may also be obtained through the local Land Titles or Registry Office, or the Natural Resources and Forestry. The information shown is derived from digital data available in the Provincial Mining Recorders' Office at the time of downloading from the Northern Development and Mines (NDM) web site.

Natural Resources and Forestry; NASA Landsat Program; First Base Solutions Inc.; Aéro-Photo (1961) Inc.; DigitalGlobe Inc.; U.S. Geological Survey.

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## Accessibility and Infrastructure

The Property is easily accessible year-round by motor vehicles (optimum route) by turning north off Kings Highway 17 West, on the west side of the community of Webbwood onto Agnew Lake Road. Travel north on Agnew Lake Road to the intersection of the West Branch Road. Turn west onto the West Branch Road at UTM NAD83 Zone 17 432385 E, 5128919 N. Remain on this forest road, should cross a high transmission line, continuing north to the claim. The south claim line should be intersected at approximately UTM NAD83 Zone 17 415753 E, 5138498 N. If the access route is not plowed during the winter season the Property can still be accessed in by snowmobile. Other than the new forestry requirements for operations, no additional infrastructure exists within or proximal to the Property.

## **Regional Climate**

The mean annual temperature for the area is slightly above the freezing point at 1°C. The average July temperature is 20°C and the average January temperature is -15°C. The precipitation is highest in September. Snow typically falls from October to May, but the peak is from November to March.

## **Historical Work**

There are no historical, publicly available assessment documents with regard to exploration work, on the ground, within the Property.

#### Geology Regional Geology

The property is in the Abitibi subprovince of the Superior Province of the Canadian Shield. Geological mapping and geological interpretations in Porter Twp and surrounding area have been carried out by Ginn (1961), the only published information on the area, from which the following summary Is taken: Porter Township is predominantly underlain by sedimentary rocks of the Huronian Supergroup consisting of quartzites, conglomerates, greywackes and argillites with minor Intercalated limestone. Large masses of gabbroic rock occur throughout the township and are generally concordant to major structures and lithologies. They have been interpreted as sill-like bodies intruded into the Huronian sedimentary sequence. Archean felsic intrusive rocks of variable granitic composition occur in the north-eastern portion of the township and may be unconformably overlain by the Huronian rocks. From the geological map of Porter Twp, the main structural feature of the property area is shown as the large Porter syncline, a synclinal structure composed mainly of Huronian sedimentary rocks, closing to the east. A series of strong, subparallel faults trend east-west or northeast through the syncline, causing significant tectonic disturbance to the rocks in the syncline. Significant fault structures in the area include: Hunter Lake Fault, O'Brien Fault, South Cygnet Fault, North Sealine Fault, Sutherland Bay Fault and the South Sealine Fault Porter Twp lies within the Nipissing

Magmatic Province (Lightfoot and Naldrett, 1996) which outcrops within the Proterozoic Huronian supracrustal belt. It has an east-west extent of almost 450 km and a north-south breadth of about 350 km. More than 20% of this area is covered by mafic (dominantly gabbroic), tholeiitic, intrusive rocks referred to collectively as Nipissing Diabase. Between Cobalt and Sault Ste. Marie, intrusions of Nipissing Diabase form undulating sills, cone-sheets or lopoliths and dykes. Most Nipissing intrusions show very little differentiation and consist almost entirely of quartz diabase, whereas some of the intrusions are highly differentiated from basal guartz diabase, gabbro-norite (hypersthene gabbro), vari-textured gabbro, granophyric gabbro, aplite, granodioritic to granitic rocks and a capping quartz diabase (Lightfoot et al, 1991a). Olivine has been reported from only a few intrusions where it occurs in the basal quartz diabase and hypersthene gabbro units (Lightfoot et al., 1986). Nipissing Diabase represent a major intrusive event between 2,206 Ma and 2,223 Ma (Corfu and Andrews, 1986; Noble and Lightfoot, 1992) and probably the remnants of an eroded Continental Flood Basalt system (e.g. Lightfoot et al., 1987; Lightfoot et al., 1991a). The possibility that Nipissing Diabase was associated with intraplate volcanism, rifting and basin development, is suggestive of an environment favorable for the formation of significant concentrations of magmatic sulphide minerals rich in Cu-Ni-PGE (Lightfoot et al., 1987). Moreover, there are several geochemical and structural similarities between Nipissing Diabase and the sills and intrusions which host the prolific Ni-Cu-PGE deposits in Noril'sk, Russia (Lightfoot and Naldrett, 1996) and the large, basin-related Ni-Cu-PGE deposits found in the Insizwa Complex, southern Africa (Lightfoot et al., 1984).

#### **Regional Mineralization**

Exploration in Porter and surrounding Townships has focused on nickel, copper, PGE's, uranium and gold mineralization. The Shakespeare Deposit, located in the north-east corner of Shakespeare Township approximately 5 km south-west of the property, contains near surface resource of 2,081,000 tonnes of 0.36% Ni, 0.42% Cu, 0.224 g/T Au, 0.40 g/T Pt, and 0.44 g/T Pd and is located in mafic and gabbroic rocks similar sample PORTER-2021-02.

Nipissing Diabase represent a major intrusive event that spanned about 100 Ma and are presumably the feeders of an eroded continental flood basalt system (Lightfoot et al., 1987). The possibility that Nipissing Diabase were associated with intrapfate volcanism, rifting and basin development is suggestive of an environment favourable for the formation of significant concentrations of magmatic sulphide minerals rich in Cu-Ni-PGE (Lightfoot et al., 1987). Moreover, there are several geochemical and structural similarities between Nipissing Diabase and the sills and intrusions which host the prolific Ni-Cu-PGE deposits in Noril'sk, Russia (Lightfoot and Naldrett, 1996) and the large, basin-related Ni-Cu-PGE deposits found in the Insizwa Complex, southern Africa (Lightfoot et al., 1984). Innes and Colvine (1979), recognizing a distinct distribution of metals in the area between Sault Ste. Marie and Cobalt, promoted the idea of an Early Proterozoic metallogenic province. However, this idea became superseded by the usage of various terms including Huronian-Nipissing Magmatic Belt (Peck

et al., 1995) and Nipissing Magmatic Province (Lightfoot and Naldrett, 1996). The former term was Introduced to describe an extensive Early Proterozoic magmatic province inclusive of Matachewan Dyke Swarm, East Bull Lake suite of intrusions, Huronian volcanic rocks and Nipissing Diabase. These intrusions were formed during the initial stages of Huronian Rifting and within the basin-fill Huronian Supergroup sediments (e.g. Vogel et al., 1998). On the basis of the area's geological timing with major Huronian events and in order to formally recognize this area of the Southern Province as a metallotect with unusually high concentrations of PGE-Cu-Ni, it is proposed that the term Huronian Metallogenic Province or HMP be adopted. Although much of the early work on the petrology, structure and mineralization of the Nipissing Diabase concentrated in the Cobalt-Gowganda region of the Southern Province (e.g. Hriskevich, 1968; Conrod, 1989), it has long been recognized that the corridor from Sault Ste. Marie to Cobalt, Ontario contains hundreds of Cu-Ni sulphide occurrences associated with Nipissing Diabase. Exploration for economic magmatic Cu-Ni sulphide deposits in this region has proven unsuccessful due largely to low concentrations of Cu (generally 0.1-1.0%) and Ni (generally 0.05-0.5%). By the 1980s there was increased interest in the Nipissing Diabase with particular attention given toward their potential as hosts to PGE associated with copper-nickel sulphide. It is now recognized that many of these Cu-Ni occurrences contain significant concentrations of PGE and this, coupled with extremely buoyant platinum and palladium prices, has resulted in a recent flurry of prospecting, staking and exploration in the Sudbury Mining Division.

## Summary of Field Work

In the fall of 2021, M. Gaudreau and B. Berdusco were retained by Fudge & Associates to determine the source of a strong east-west trending magnetic anomaly situated in the south part of the Property. On November 19, 2021, the field team tried to access the Property however took several wrong turns. By the time the Property was located there wasn't sufficient time left in the day. The next day, November 20,2021, the prospectors drove from Hanmer directly to the parking area known from reconnaissance the previous day. There was a walk of approximately 300m to the north claim line at coordinate 437453E, 5140203N.

#### Prospecting Site visit: November 19, 2021

M. Gaudreau and B. Berdusco departed Hanmer Ontario in the morning of November 19, 2021. A one-way trip took approximately to the parking location took 4 hours (round trip totaled approximately 295km). The Property was not located due to the confusing road system and there was not sufficient time remaining in the day to access the Property safely.

#### Site visit: November 20, 2021

M. Gaudreau and B. Berdusco departed Hanmer Ontario in the morning of November 20, 2021. A one-way trip took approximately 2.3 hours (round trip totals approximately 275km) to arrive at the parking location located at coordinate 415570E, 5138931N. Continuing southbound on foot to the first sample location, located approximately 30m south of the north claim line where samples PORTER-2021-1A and PORTER-2021-1B were taken at coordinate 437453E, 5140169N. The reason for taking two samples at this location was because the rock outcroppings were very different.

Sample PORTER-2021-1A: Pegmatite textured granodiorite, feldspar 40%, hornblende 40%, quartz 10%. Is not magnetic, is very competent, no reaction to acid test. No alteration. The hornblende occurs as 2 - 4mm thick bands interweaved surrounding the poorly developed feldspar crystals. The quartz is difficult to see on a broken surface. The sample contains only very minor disseminate pyrite crystals. Assay results are pending.

Sample PORTER-2021-1B: Pegmatite textured, very coarse-grained granite. K-felspar 30%, plagioclase 40%, quartz 25% with possible albite crystals (twinning noted) and a few 1cm sized magnetite blebs. Rust has developed on several fracture planes. Assay results are pending.

Continuing south towards the magnetic high anomaly a north westerly trending dike was located. The contacts of the dike were gradual and weathered surfaces showed a bedding texture of up to several centimeters. Between the bedding textures pyrite mineralization occurs as 1-4mm sized disseminated blebs. The pyrite also occurs as random disseminations throughout. Sample PORTER-2021-02 was taken as an aggregate sample from several locations were identical. On the east contact of the dike which is estimated to be 4-5m wide and having a vertical dip several quartz veins with disseminate pyrite and epidote are visible. They were not sampled on this visit. The dike can be seen from Google Earth occupying an elongated low depression in the same north westerly strike direction. At first glance the dike looks unmineralized. The <1% disseminate pyrite is visible on broken surfaces.

Sample PORTER-2021-02: A dark grey, mafic composition. The chlorite is altered to very fine grained massive textured biotite rich mafic volcanic rock. The sample is non-magnetic. Pyrite occurs as blebby patches. The sample was taken at coordinate437422E, 5140091N. Assay results are pending.

The field team looped back by taking a route that circled a wide low area during which a coarse fragment breccia was located and sampled. A selectively mineralized fragment was broken from the breccia and taken for assay.

Sample PORTER-2021-03: Described as a very fine grained dark grey mafic volcanic with 4-5mm sized intergrowths of K-feldspar, disseminated roughly 3cm apart, throughout. The pyrite occurs as <0.5% and is very fine grained and distributed sporadically throughout. The sample was taken at coordinate 437491E, 5139968N. The sample is moderately magnetic and does not react to acid test. Due to limited exposed outcrop determining a strike was not completed. The prospectors are unfamiliar with this rock. This rock unit could be one of several magnetic dikes found in Porter township and as shown on OGS Map 2011, unit 5c a porphyritic metagabbro. These dikes are typically magnetic, and the matrix fragments were mostly rounded. If it is a porphyritic metagabbro it is very fine grained. Assay results are pending.

While returning to the vehicle another dike was located at coordinate 437635E, 5140049N and sampled. The dike has a vertical dip and strikes east-west. The dike is strongly magnetic and has a strong reaction to acid test. The dike contacts with the granite are very sharp. On the south contact narrow quartz veining has developed by "sweating out". Pyrite is visible as narrow lenticular growths. The dike has only minor very fine disseminated pyrite.

Sample PORTER-2021-04: Described as a dark grey, very fine-grained, basic volcanic that is strongly magnetic and has a strong reaction to the acid test. The dike is approximately 6m wide. The core of the dike has weathered more recessively. The odd, very fine-grained pyrite crystal was observed in the south contact. Assay results are pending.

Getting later in the day the prospectors returned to the truck. While on route the GPS lost satellite and some time was spent relocating ourselves.

The terrain was not difficult to traverse, made up of several meter high cliffs and rolling hills withseveral water filled low areas. The forest floor was covered with a mix of oak leaves and pine needles. The tree I the area consisted of maple, oak, birch, cedar, low bush, tag alders, redpine, white pine, spruce and white birch.

Below is a compilation map of the claim (D. Fudge) 583604 showing the strong 2<sup>nd</sup> vertical derivative magnetic map superimposed over MLAS superimposed over the geology map M2011. The magnetic anomaly is either a porphyoblast metagabbro or diorite-gabbro with possible mineralization accompanying the magnetite.

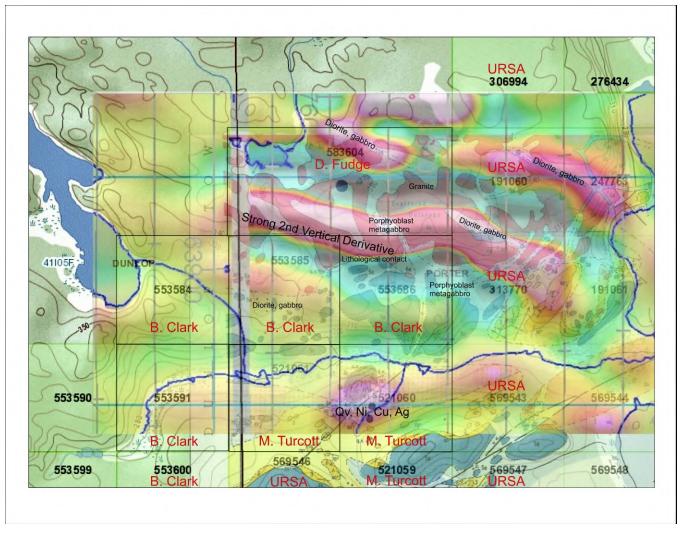


Figure 4 Property geological, magnetic, claims compilation map.

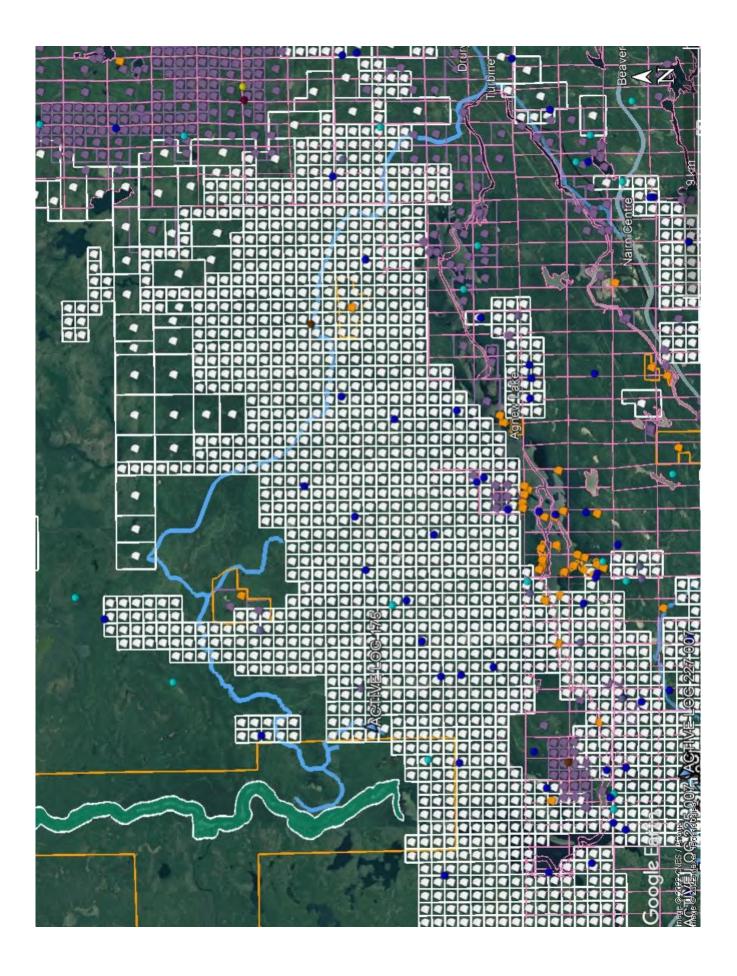
#### Recommendations

The Prospectors recommend a third site visit in the late spring to confirm the magnetic high. If the samples return anomalous results, additional prospecting should be completed at those locations as well

GPS TRACKS & PHOTOS: December 20, 2021



Figure 5 GPS track for 2021-11-19 & 2021-11-20



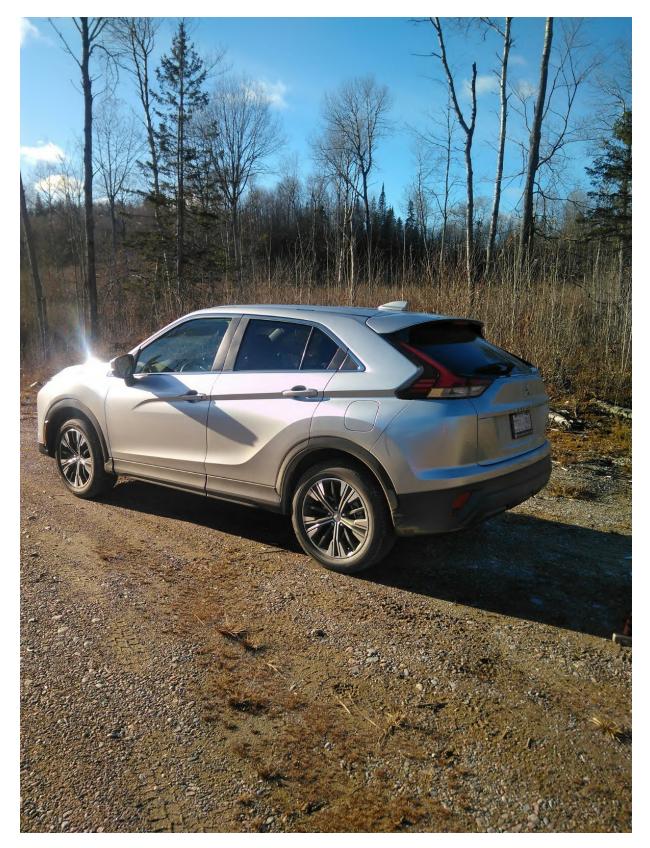




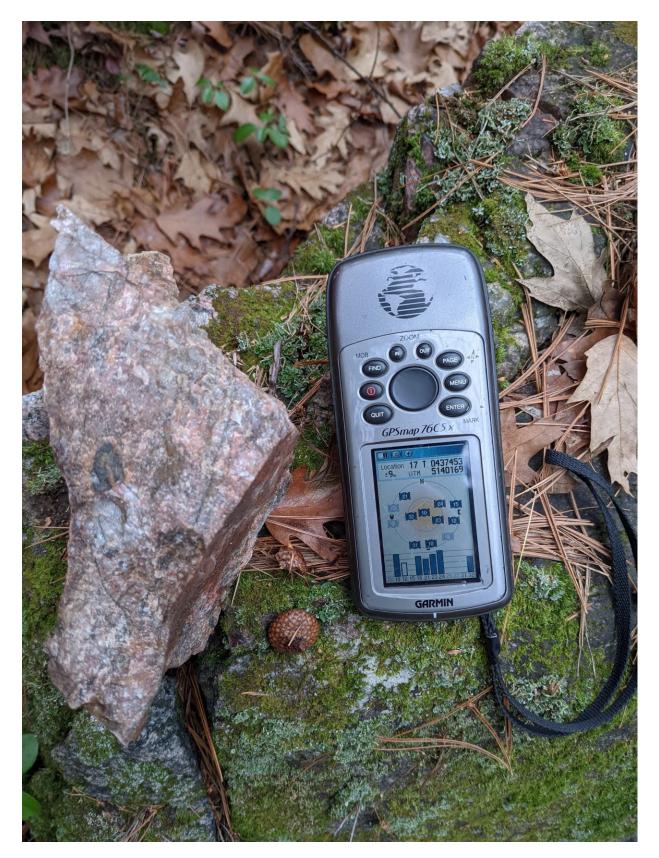




Prospector B. Berdusco at parking location 2021-11-19.



Enterprise vehicle rental, 2021-11-19 & 2021-11-20.



Location of samples PORTER-2021-01A & PORTER-2021-01B.



Location of sample PORTER-2021-02.



Location of sample PORTER-2021-02.



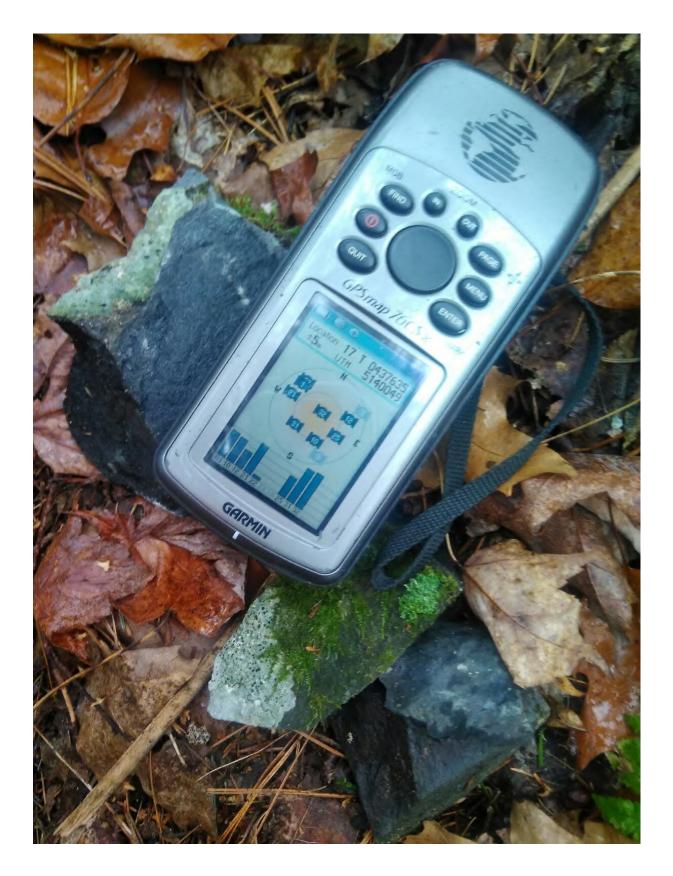
Location of sample PORTER-2021-02.



Looking west at east end of small lake where sample PORTER-2021-02 was taken.



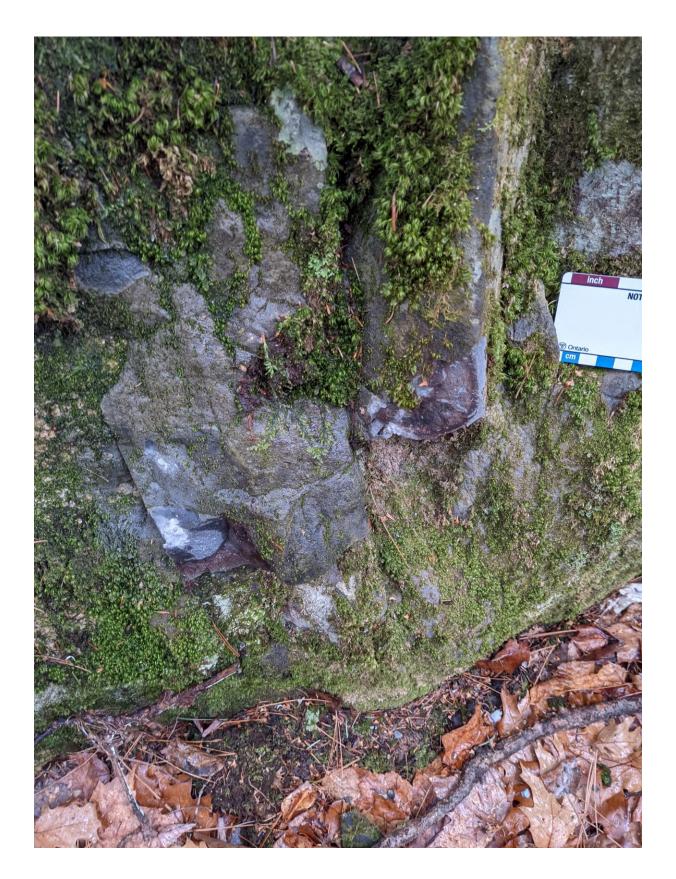
Location of sample PORTER-2021-03.



Location of sample PORTER-2021-04.



Looking south at mafic dike face at location of sample PORTER-2021-04.



Zoomed view, looking south at mafic dike face at location of sample PORTER-2021-04



Sample PORTER-2021-01A prepared and submitted for assay.



Sample PORTER-2021-01B prepared and submitted for assay.



Sample PORTER-2021-02 prepared and submitted for assay.



Sample PORTER-2021-03 prepared and submitted for assay.



Sample PORTER-2021-04 prepared and submitted for assay.

## Appendices

#### Invoices submitted separately for the following expenses:

- 1. November 19, 2021. Cost of one (1) day prospecting site visit by M. Gaudreau.
- 2. November 20, 2021. Cost of one (1) day prospecting site visit by M. Gaudreau.
- 3. November 19, 2021. Cost of one (1) day prospecting site visit by B. Berdusco.
- 4. November 20, 2021. Cost of one (1) day prospecting site visit by B. Berdusco.
- 5. November 19, 2021. Cost of one (1) day lunch by M. Gaudreau.
- 6. November 20, 2021. Cost of one (1) day lunch by M. Gaudreau.
- 7. November 19, 2021. Cost of one (1) vehicle rental by M. Gaudreau.
- 8. November 20, 2021. Cost of one (1) vehicle rental by M. Gaudreau.
- 9. Fuel receipts @ \$0.50km flat rate.
- 10. Cost of sample preparation and delivery to AGAT Laboratories in Sudbury.
- 11. Cost of assessment report writing.

Available upon request from M. Gaudreau.

# AGAT Laboratories

5623 McAdam Road Mississauga, ON L4Z 1N9 P: 905.501.9998 • F: 905.501.0589

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#### Work Order Number: 22T874820

Company			Contact	
4568710 FUDGE	4568710 FUDGE & ASSOCIATES INTERNATIONAL		Contact Name:	Marc Gaudreau
160 BRYAN ROAD			Tel:	705 472 3053
NORTH BAY	ON	P1C 1C2	Fax:	
Tel: 705-472-3053	Fax:		Email:	miningresults@agatlabs.com; canmap@cyberbeach.net

#### Other Information

PO:	Submission Date: 3/18/2022	8:21:07 AM
AFE:	Effective Date:	3/18/2022 12:00:00 AM
Project No:		

#### Operations, analysis, materials included in work order

PRODUCT ID	DESCRIPTION	QUANTITY
200001	Dry <5kg crush to 75% passing 2 mm, split to 250-g and pulverize to 85% passing 75 um	5
200026	Weight (per sample) as received	5
200047	Administrative Processing Fee / Workorder	1
200220	Environmentally safe disposal of pulps	5
200221	Environmentally safe disposal of rejects	5
201378	Sodium Peroxide Fusion with ICP-OES and ICP-MS Finish (per sample)	5
202555	Au, Pt & Pd by Fire Assay - ICP Finish (50g)	5

#### Sample Identification Information, Provided by client

Sample Id	Туре	Sample Description	Analysis Required	Other Information
	Sample Date			
3632453A	Rock	PORTER-2021-01A		
	Mar 17, 2022			
3632453A- DUP	Rock	PORTER-2021-01A		
	Mar 17, 2022			

#### Work Order Number: 22T874820

3632454A	Rock Mar 17, 2022	PORTER-2021-01B
3632455A	Rock Mar 17, 2022	PORTER-2021-02
3632456A	Rock Mar 17, 2022	PORTER-2021-03
3632457A	Rock Mar 17, 2022	PORTER-2021-04