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Assessment Report on
Geological Mapping
Chrome Puddy Property,
Thunder Bay Mining Division,
Ontario

Patented Claims PAT-16029, -16032, -16033, -16034, -16035, -16036, -16038, and -16039
Obonga Lake and Puddy Lake Areas, Thunder Bay Mining Division
Latitude 49° 58' 12" N, Longitude 89° 29' 25" W
UTM (NAD 83) Zone 16U, 321,432 m E, 5,538,265 m N
NTS 52H 13/14

For:
Pavey Ark Minerals Inc.
Client number 41165

Prepared By:
Richard Sutcliffe, P.Geo. (Client number 225603)
130 Foxridge Drive,
Ancaster, ON, L9G 5B9

January 10, 2023

Executive Summary

This assessment report documents geological mapping of the Chrome Puddy Property, Thunder Bay Mining Division, Ontario. The Property, owned by Pavey Ark Minerals Inc. (Pavey Ark) contains bulk-tonnage nickeliferous magnetite mineralization and the past-producing Chrome Lake chromite mine hosted in a serpentinized ultramafic intrusion. Additionally, the Property has exploration targets for Ni-Cu-PGM magmatic sulphide mineralization.

The Chrome Puddy Property is located 178 km north of the city Thunder Bay, 49 km southwest of the town of Armstrong Station, and 1,043 km northwest of Toronto, Ontario. Highway 527, a paved highway that extends north from Thunder Bay to Armstrong, is located 25 km east of the Property. The property is accessed from the Obonga Lake and Scalp Creek roads and then a 2.2 km long hiking/snowmobile trail that extends SW to the Property from the west end of the Scalp Creek road. Puddy Lake and Chrome Lake are accessible by float plane that can be chartered in Armstrong.

Field work for this report was carried out July 5 to 9, 2022, August 7 to 10, 2022 and September 9 to 13, 2022 on eight (8) patented claims PAT-16029, -16032, -16033, -16034, -16035, -16036, -16038, and -16039. The mapping was carried out by R. H. Sutcliffe, P.Geo for a total of fifteen (15) days in the field. Camp set up and access trail work completed by A-Star Prospecting under the supervision of Greg Smith was done in advance of the mapping in July 5 to 9, 2022. The entire Chrome Puddy Property consists of 11 Patented Claims and 75 staked claims all of which are contiguous and cover a total area of approximately 1,580 ha. Total exploration expenditures for the mapping program were $45,175. This field work was supported by an OJEP grant to Pavey Ark.

The Chrome Property is underlain by a serpentinized ultramafic intrusion. Historically, exploration in the eastern portion of the serpentinite on which this work was performed has targeted chromite. Following the discovery of chromite at Chrome Lake in 1928, Consolidated Chromium Corporation completed trenching, drilling and shaft sinking at the Chrome Lake mine where 7,672 tons of chromite were mined between 1934 and 1938. Significant nickel mineralization associated with magnetite in serpentinized ultramafic rocks was discovered in 1964 at Puddy Lake. Commerce Nickel drilled 20 holes totalling 1,455.3 m in 1965 and 1966 and reported a historical resource estimated at 30 million tons grading 0.27% Ni, 0.017% Co, and 7.2% recoverable Fe to a depth of 400 ft (122 m) (Commerce Nickel Mines Ltd, Annual Report 1966).

The Chrome Puddy Property is underlain by the Chrome-Puddy ultramafic intrusion that is exposed for 7 km along strike and is approximately 1 km in width. Whittaker (1986) reported that rocks of the intrusion include dunite, peridotite, and minor pyroxenite, all of which are serpentinized. Underground workings at the Chrome mine, foliation measurements, and magnetic data indicate that the intrusion and contacts have a southerly dip at approximately 45^{o}. Medium-grained, biotite tonalite bounds the ultramafic intrusion the north. South of

Puddy Lake, the ultramafic intrusion is bound by mixed metasedimentary and granitic rocks. North-striking and east-striking diabase dikes of probable middle Proterozoic age cut the ultramafic intrusion.

Serpentinite hosted nickel mineralization on the Property has characteristics of Mt. Keith-style mineralization, but with sulphur-poor mineralogy that is dominated by Ni, Fe oxide phases. The identification of conductive EM geophysical anomalies in the Puddy ultramafic intrusion also indicates the potential for discovery of a magmatic copper-nickel-PGE sulphide deposits in an environment similar to the Kambalda style Ni deposits.

Table of Contents

1.0 Introduction

This assessment report documents geological mapping of the Chrome Puddy Property, Thunder Bay Mining Division, Ontario. The work for this assessment was completed on July 4 to 10, August 5 to 11, 2022 and September 8 to 14, 2022 on eight (8) patented claims (PAT-16029, -16032, -16033, -16034, -16035, -16036, -16038, and -16039). Total expenditures were $45,175. The Property contains bulk-tonnage nickeliferous magnetite mineralization and the past-producing Chrome Lake chromite mine both hosted in a serpentinized ultramafic intrusion. Additionally, the Property has exploration targets for Ni-Cu-PGM magmatic sulphide mineralization.

2.0 Location and Access

The Chrome Puddy Property is located in the Thunder Bay Mining District of northwestern Ontario. The property is 178 km north of the city Thunder Bay, 49 km southwest of the town of Armstrong Station, and 1,043 km northwest of Toronto, Ontario. Highway 527, a paved highway that extends north from Thunder Bay to Armstrong, is located 25 km east of the Property.

Logging roads east of the Property come to within 2.2 km of Chrome Lake. The logging road access route is from the "Obonga Lake Road" which is a signed gravel road west of highway 527 and located 30 km south of Armstrong Station. From the Obonga Lake Road, the property is accessed from the unmaintained Scalp Creek Road and then a hiking/snowmobile trail. The trail is approximately 2.2 km long and extends west to the Property from the west end of the Scalp Creek road.

Chrome Lake and Puddy Lake can be accessed by float equipped aircraft that can be chartered in Armstrong.

Figure 1. Chrome Property Location

Source: Google Earth 2016

3.0 Claim Holdings and Property Disposition

The work for this assessment was completed on eight (8) patented claims PAT-16029, -16032, -16033, -16034, -16035, -16036, -16038, and -16039. The entire Chrome Puddy Property consists of 11 Patented Claims and 75 staked claims all of which are contiguous and cover a total area of approximately 1,580 ha. Claims are 100% owned by Pavey Ark Minerals Inc., a private company. The complete list of staked and patented claims that forms the Chrome – Puddy Property is provided in Appendix 1 and 2. Map 1 is a 1:50,000 scale Claims Map from MLAS that shows the location of the Property. Figure 2 provides an outline of the staked mineral claims. Four boundary claims at the east end of Puddy Lake are owned by a third party.

Figure 2. Chrome Puddy Property staked claims outline

Source: MLAS, accessed January 9, 2023

4.0 Previous Work

Historically, exploration and development in the eastern portion of the Chrome-Puddy serpentinite has targeted chromite, while the western portions of the intrusion have been explored for nickel and precious metals. Historic exploration activity on the property, as documented by Puumala et al. (2012) is summarized below.

Chromite was first discovered in the vicinity of Chrome Lake in 1928 by W.K. Keefe and R.A. MacDonald who staked the occurrence and transferred ownership to Golden Centre Mines Inc. of New York. In 1930 Consolidated Chromium Corporation, a subsidiary of Golden Centre Mines, began development work, including stripping, trenching, drilling and shaft sinking. The shaft was sunk to a depth of 350 feet, with levels at 100 and 225 feet. Operations ceased in late fall of 1930 and did not resume until 1933, when new owner Chromium Alloy Co. sent 70 tons of ore to Niagara Falls, New York, for beneficiation tests. Chromium Mining and Smelting Corp. Ltd. was formed and took control of the property in 1934 and re-commenced operations in 1936. Underground work was discontinued in 1937 because of poor ore recovery, and all activities on the site ceased in 1938. The Chrome property has been inactive since 1938.

Between 1964 and 1967, Commerce Nickel Mines carried out the first significant exploration program targeting nickel in the western portion of the Puddy serpentinite, including trenching, geological mapping, geochemical and geophysical surveys and diamond drilling (24 diamond-drill holes, totalling 5,590 feet). Between 1967 and 1968, Newmont Mining Corp. of Canada completed trenching, electromagnetic surveying and diamond drilling (10 holes, totalling 3106 feet). By the mid- to late-1980s, the area began to receive attention for its PGE potential. Between 1985 and 1993, K. Kuhner carried out prospecting, outcrop stripping, surface sampling and ground geophysical surveys on claims located on the south side of Puddy Lake. The property was transferred to Obonga Precious Metals Ltd. in 1993, and Obonga completed approximately 20 diamond-drill holes between 1993 and 1996. Imperial Platinum Corp. carried out geological mapping, sampling and ground geophysical surveys in 1987 and 1988 over an adjacent property encompassing areas west, north and southeast of Puddy Lake.

The OGS completed airborne magnetic and electromagnetic surveys with the Dighem EM system in 2000 with 200m line spacing and a nominal 58m terrain clearance (OGS 2000). The most recent exploration activity includes ground magnetic and electromagnetic surveys conducted by Vale Inco Ltd. in 2007 over a property covering the western half of the Puddy Lake serpentinite that identified a number of east west trending conductors, particularly north of Puddy Lake. D. Plumridge has carried out prospecting and sampling of a claim near the southeast end of Puddy Lake since 2004. Pavey Ark Minerals Inc reported results of mapping, portable XRF analysis and prospecting in 2014 and 2015. Pavey Ark conducted geological mapping, channel sampling and VLF-EM surveying on a 3.7 km grid north west of the Chrome Mine shaft in 2016 to 2019.

5.0 Regional Geology

The Chrome Puddy Property is located in the Obonga metavolcanic and metasedimentary greenstone belt of the Archean Superior Province. The Obonga greenstone belt is a relatively small (approximately 10 x 40 km) greenstone belt, situated between the Sturgeon-Savant belt on the west and the Onaman-Tashota belt to the east, and has been considered to be part of the Wabigoon Subprovince (Percival and Stott 2000). In the Sturgeon Lake area, the greenstone belt is host to significant volcanogenic massive sulphide deposits including the Cu-Zn-Pb Mattabi Mine that produced from 1972 to 1991.

The Chrome Puddy Property is underlain by the Chrome-Puddy ultramafic intrusion that is exposed for 7 km along strike and is approximately 1 km in width. Whittaker (1986) reported that rocks of the intrusion include dunite, peridotite, and minor pyroxenite, all of which are serpentinized. Underground workings, foliation measurements, and magnetic data indicate that the intrusion and contacts have a southerly dip at approximately 45^{o}. Medium-grained, biotite tonalite bounds the Serpentinite to the north. South of Puddy Lake, the serpentinite intrusion is bound by mixed metasedimentary and granitic rocks. North-striking and east-striking diabase dikes of probable middle Proterozoic age cut the ultramafic intrusion.

The exploration evaluates potential for Mt. Keith-style disseminated nickel mineralization, but with sulphur-poor mineralogy that is dominated by Ni, Fe oxide phases. The identification of conductive EM geophysical anomalies in the Puddy ultramafic intrusion also indicates the potential for discovery of a magmatic copper-nickel-PGE sulphide deposits in an environment similar to the Kambalda style Ni deposits. The Property also hosts reef and/or podiform chromite mineralization.

6.0 Geological Mapping Program

6.1 Logistics

A-Star Prospecting of Thunder Bay under the supervision of Mr. Greg Smith was contracted to provide support for the program. This included labour for access trail construction, field camp construction, and mapping assistants. Three men were supplied for the July program which

was focussed on trail construction, and mobilization of gear for a tent camp on the Property. Two men were supplied for each of the August and September programs. Trail access was more difficult than anticipated a Beaver was chartered from Armstrong to Chrome Lake in September to provide supplies. Trails for access were constructed from the Scalp Creek Road to the east part of the Property, to the shaft area, and west to Chrome Lake. Parts of the trail are only suitable for hiking due to difficult terrain.

6.2 Mapping Program

Geological mapping on the eight (8) patented claims PAT-16029, -16032, -16033, -16034, -16035, -16036, -16038, and -16039 was conducted by R.H. Sutcliffe on August 7 to 10, 2022 and September 9 to 13, 2022. Trail access and camp set up in preparation for mapping was carried out from July 5 to 9, 2022 by A-Star Prospecting from Thunder Bay. A-Star Prospecting also provided field assistance for the mapping.

Mapping was done by bush and shoreline traverses. Portions of the Property are characterized by very large boulders and blocks making it locally difficult to conclusively identify bedrock. Outcrops and station locations were located by a handheld Garmin Etrex GPS receiver.

Geological data is presented in Appendix 3. In addition to data collected in 2022, the geological map has compiled earlier mapping data by Pavey Ark in 2013, 2014, 2015, 2016, and 2018. For the purposes of this assessment report data collected in 2022 are highlighted in bold in Appendix 3. Sample locations and descriptions of representative samples collected during 2022 field work are described in Appendix 4. Selected georeferenced sample locations are provided in Appendix 5.

Daily logs for the current 2022 assessment submission are provided in Appendix 6 and daily GPS tracks are presented in Appendix 7. Waypoints for all data were compiled by Brent Clark using ArcGIS software and are plotted on a digital map base map obtained from Can Vec, LIO, MNRF, and NDM at a scale of 1:10,000. Waypoints were recorded using the NAD83 datum and are located zone 16U. Foliation measurements were obtained using a Brunton Compass. Magnetic declination is 3^{o} 53'W.

6.3 Geological Results

Six lithological units are represented on the 1:10,000 scale property scale geological map presented as Map 2. Table 1 provides a stratigraphic column for the major lithological units on the Chrome Puddy Property and shows the age and relationships of the major lithological units.

Table 1. Stratigraphic column of major lithological units for the Chrome Puddy Property

PHANEROZOIC	
Pleistocene and Recent	Boulder fields, till, swamp, stream and lake deposits
Unconformity	
PRECAMBRIAN	

Middle Proterozoic	
Intrusive Rocks	Diabase Dyke, Porphyritic Felsite Dyke
Intrusive Contact	
Archean	
Felsic Plutonic Rocks	Biotite tonalite
Intrusive Contact	
Ultramafic and Mafic Intrusive Rocks ("Chrome Puddy Intrusion")	Dunite, peridotite, serpentinite, chromitite, gabbro
Intrusive Contact	
Metasediments	Biotite Schist
Metamorphosed Felsic Subvolcanic to Volcanic Rocks	Felsite
Mafic Metavolcanic Rocks	Amphibolite

Photographs of typical lithologies are shown in Figure 3.

Figure 3. Photographs of typical lithologies and features on the Chrome Puddy Property

Wpt 85, Slatey metasediment, east of Ultramafic

Wpt 75, Peridotite outcrop, Puddy Intrusion

	
Wpt 133, Contact of metased (upper right) with amphibolite (left) at Scalp Ck waterfall	Wpt 113, 2 m scale rounded boulders on grid L3+00W 0+50S

The lithological units are described as follows.

6.1 Amphibolite

Fine-grained, dark green to grey, foliated amphibolite (Unit 1a) on the property consists of amphibolite that is probably derived from mafic metavolcanic rocks. Amphibolite outcrops are primarily localized at the east end of the Chrome-Puddy Intrusion near Scalp Creek. Here the amphibolite forms a structurally concordant unit located north of the Chrome Puddy Intrusion and continues east past the eastern limit of the Chrome Puddy Intrusion where the amphibolite is located north of the metasedimentary rocks. The structurally conformable contact of amphibolite with structurally overlying biotite schist of probable metasedimentary origin is exposed at the eastern waterfall on Scalp Creek.

Medium grained black amphibolite also occurs as inclusions in foliated and gneissic tonalite.

6.2 Felsite

Fine grained, light grey to buff coloured, foliated felsite (unit 2a) of possible metavolcanic or subvolcanic origin occurs within biotite schist east of the Chrome-Puddy intrusion.

6.3 Metasediments

Strongly foliated biotite schist (unit 3a) of probable metasedimentary origin occurs south of the Chrome-Puddy serpentinite south of Puddy Lake and at the east end of the ultramafic intrusion at Scalp Creek. This unit is “flaggy” weathering and may possibly locally be part of a deformation zone that forms the southern contact of the serpentinite.

6.4 Chrome-Puddy Ultramafic Intrusion

The Chrome Puddy intrusion (unit 4) is generally highly serpentinized and the ultramafic rocks have been completely altered to serpentine, talc, chlorite, carbonate, magnetite, and amphibole. This lithology is mapped as unit 4a. The alteration, metamorphism and deformation has made the interpretation of protoliths in the intrusion difficult (Graham 1930; Hurst 1931; Simpson and Chamberlain 1967; Whittaker 1986). Overall, the identification of the ultramafic rocks is generally easy as the weathering of the Puddy Lake intrusion commonly results in rusty outcrops with "elephant skin" texture and the presence of serpentine and talc commonly results in a "soapy" feel when scratched with a hammer. Typically, the rocks are very dark grey green in colour and appear relatively fine-grained.

Although no ultramafic rocks with primary mineralogy remain, the original rock types in some areas can be inferred with confidence by comparison with the results of studies on known types of serpentine pseudomorphs. The best-preserved primary texture in the ultramafic rock is relict olivine cumulate texture that locally exceeds 90% of the rock and indicates the original rock was probably a dunite. In some rocks, the presence of intercumulus poikilitic amphibole probably replaces pyroxene and is indicative of peridotite. These rocks are mapped as unit 4b.

Chromite rich ultramafic rocks with greater than approximately 10% chromite (unit 4c) are mapped in the eastern portion of the ultramafic intrusion, east of Chrome Lake. Massive chromite (chromitite) occurs at the E-Zone shaft area, and at the B-Zone east of Chrome Lake. The northern end of Chrome Lake has outcrops with distinct podiform chromite layers. Massive chromite mineralization is locally associated with lilac to purple coloured alteration, likely chromian clinochlore (kammererite).

Magnetite is ubiquitous in ultramafic host rocks, being a coproduct of the serpentinization process and most commonly occurs as finely and irregularly distributed grains throughout the serpentine with remobilization into clusters, stringers and veins.

6.5 Tonalite

Strongly foliated medium grained biotite tonalite (Unit 5a) occurs north of the Chrome-Puddy intrusion. Good exposures are present in the vicinity of Scalp Creek and along the northern contact of the Chrome Puddy Intrusion.

6.5 Diabase Dikes

Diabase dykes related to the Middle Proterozoic mid-continent rift magmatic event intrude the Archean rocks. Based on a linear magnetic feature, a major 020^{o} trending dyke is interpreted to intrude the Chrome Puddy Intrusion and metasedimentary rocks south of the intrusion. A massive, brick-red, porphyritic felsite dike (unit 6b) intrudes the sedimentary rocks at Scalp Creek. The felsite dyke has a fine aphanitic matrix and contains 2 to 3 mm euhedral rectangular feldspar phenocrysts.

6.6 Structure

The data indicate that the east end of the Chrome-Puddy intrusion has a moderate (approximately 45^{o}) south-dipping orientation. North of the interpreted contact of the serpentinite, the host rocks are biotite tonalite with a strongly penetrative foliation that has a moderate to shallow, southwest dip. Underground workings at the #1 shaft of the Chrome Lake Mine also document that both the northern and southern contacts of the serpentinite dip south at approximately 45^{o} (Hurst, 1931).

Although the southern contact of the intrusion has been previously described as a conglomerate with granitoid clasts, Percival and Stott (2000) interpret this rock as a mylonite derived from a granitic protolith. This deformation zone is east striking, and exhibits shear bands consistent with a dextral asymmetry. On the northern contact within 100 m of the ultramafic-tonalite contact, the tonalite has an intense southeast-trending foliation and shear fabrics that also exhibit a dextral transcurrent shear sense.

6.7 Pleistocene and Recent

The Chrome Puddy Property is characterized by the widespread presence of large rounded boulders and locally large angular blocks of heaved bedrock covering much of the property. There are also a number of steep dominantly south east oriented canyon-like valleys with boulder debris. Scalp Creek, that drains the eastern part of the Property, has two waterfalls with plunge pools at the base. These features are a product of outflow from glacial Lake Agassiz, a large proglacial lake on the south margin of the retreating Laurentide continental ice sheet in the Wisconsin glaciation.

Leverington and Teller (2003) have reconstructed the eastern outlets of Lake Agassiz in the area that includes the modern Puddy Lake and Obonga Lake area. In the Holocene, between approximately 9,400 to 8,000 years BP the eastern outflow from Lake Agassiz occurred through a relatively small number of major channels, including the valleys of modern Kopka River.

Leverington and Teller (2003) have concluded that during the Lower Campbell stage at about 9,000 years BP, eastward drainage from glacial Lake Agassiz to the Nipigon basin opened up in the area northeast of Uneven Lake. Although initial drainage may have been constrained by the ice margin to flow through the lower reaches of the Kaiashk (Gull) River system with flow along the area of Wig Creek, subsequent retreat of the ice margin would have allowed flow to the Obonga and Kopka lake areas along a route from Scalp Creek to the lower reaches of the Kopka River valley.

The releases of water from Lake Agassiz along newly opened channels resulted in drops in water level between 8 and 20 m, and were associated with catastrophic releases of 1,000's of cubic km water. Associated with some to the Lake Agassiz eastern outlet channels are 50-100 m deep plunge basins and extensive blankets of large (>0.5 m) rounded boulders (Teller and Thorleifson 1983).

Features associated with these very high energy flood channels are readily observed on the Chrome Puddy Property. The small lakes on Scalp Creek on Patented Claim TB9294 are good examples of plunge pools.

7.0 Conclusions and Recommendations

The Chrome-Puddy ultramafic intrusion displays several distinct styles of mineralization which range from layered/podiform chromite, to Fe+Ni+PGM oxide mineralization and Ni+Cu+PGM sulphide mineralization. Previous mapping by Pavey Ark has identified broad geochemical trends that will be useful in focusing exploration. These trends include: the overall iron-rich nature of the western portion of the intrusion and enrichment of Cr in the eastern part of the intrusion.

Serpentinite hosted nickel mineralization on the Property has characteristics of Mt. Keith-style mineralization, but with sulphur-poor mineralogy that is dominated by Ni, Fe oxide phases. The identification of conductive EM geophysical anomalies in the Puddy ultramafic intrusion also indicates the potential for discovery of a magmatic copper-nickel-PGE sulphide deposits in an environment similar to the Kambalda style Ni deposits.

Future exploration efforts should be directed as follows:

1) Drilling to evaluate Ni+Cu+Co+PGM+Au in magnetite veins and mineralized serpentinite with the objective of definition of potential bulk mineable mineralization;
2) Further investigation of historically reported Ni+Cu sulphide mineralization, including follow up on the EM anomalies defined by Vale-INCO in 2007 and on OGS airborne surveys in 2000;
3) Chromite horizons at the mine site and the untested northern portion of Chrome Lake should be followed up with prospecting and possibly drilling. It is noteworthy that the Chrome Lake Mine has reported very high Cr: Fe ratios with significant zones of high grade material.

8.0 References

Graham, A.R., 1930, Obonga Lake Chromite Area, District of Thunder Bay, in the Thirty-Ninth Annual Report of the Ontario Department of Mines, Vol. XXXIX, Part II, pp. 51-60.

Hurst, M.E., 1931, Chromite Deposits of the Obonga Lake Area, District of Thunder Bay, in the Fortieth Annual Report of the Ontario Department of Mines, Vol. XL, Part IV, pp. 111-119.

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Puumala, M., et al. 2013, Report of Activities 2012, Resident Geologists Program, Thunder Bay South District, Ontario Geological Survey P6285.

Simpson, P.R., and Chamberlain, J.A., 1967: Nickel Distribution in Serpentinites from Puddy Lake, Ontario; Geo. Assoc. Canada Proceedings, Vol. 18, p.67-91.

Teller J.T., and Thorleifson, L.H. 1983, The Lake Agassiz – Lake Superior Connection, in Glacial Lake Agassiz, edited by J.T. Teller and L. Clayton, Geological Assoc. of Canada, Special Paper 26, pp. 261-290.

Whittaker, P.J., 1986, Chromite Deposits in Ontario, Ontario Geological Survey, Study 55, 97p.

9.0 Statement of Qualifications

I, Richard H. Sutcliffe, of 130 Foxridge Drive, Ancaster, Ontario, do hereby certify that:
I am a graduate of University of Toronto (B.Sc. Geology, 1977, M.Sc Geology 1980), and a graduate of University of Western Ontario (Ph.D. Geology, 1986) and I have been practising my profession as a geologist since.
I am a member with the Association of Professional Geoscientists of Ontario (#852).
I have direct knowledge of the exploration work performed for this assessment and I am indirectly the owner of the claims on which the work was performed.

Signed

"R.H. Sutcliffe"

Richard H. Sutcliffe, Ph.D., P.Geo.
January 7, 2023
Ancaster, Ontario

Acknowledgements

Field support by Greg Smith of A-Star Prospecting was greatly appreciated. This assessment work was financially supported by an OJEP grant to Pavey Ark with matching financial contribution by Pavey Ark.

Appendix 1. Chrome Puddy Property Claims

Township / Area	Tenure ID	Tenure Type	Anniversary Date	Tenure Status	Work Required	Work Applied
OBONGA LAKE AREA	631575	Single Cell Mining Claim	2023-01-19	Active	400	0
OBONGA LAKE AREA	631574	Single Cell Mining Claim	2023-01-19	Active	400	0
OBONGA LAKE AREA	631573	Single Cell Mining Claim	2023-01-19	Active	400	0
PUDDY LAKE AREA	184717	Single Cell Mining Claim	2023-03-21	Active	400	1187
PUDDY LAKE AREA	120740	Boundary Cell Mining Claim	2023-03-21	Active	200	600
PUDDY LAKE AREA	548955	Single Cell Mining Claim	2023-04-24	Active	400	800
PUDDY LAKE AREA	548972	Single Cell Mining Claim	2023-04-26	Active	400	800
OBONGA LAKE AREA	670586	Single Cell Mining Claim	2023-08-06	Active	400	0
OBONGA LAKE AREA	670585	Single Cell Mining Claim	2023-08-06	Active	400	0
OBONGA LAKE AREA,PUDDY LAKE AREA	670587	Single Cell Mining Claim	2023-08-06	Active	400	0
OBONGA LAKE AREA,PUDDY LAKE AREA	670584	Single Cell Mining Claim	2023-08-06	Active	400	0
OBONGA LAKE AREA,PUDDY LAKE AREA	670583	Single Cell Mining Claim	2023-08-06	Active	400	0
OBONGA LAKE AREA	279745	Single Cell Mining Claim	2023-12-02	Active	200	200
OBONGA LAKE AREA	268426	Single Cell Mining Claim	2023-12-02	Active	200	200
OBONGA LAKE AREA	261066	Single Cell Mining Claim	2023-12-02	Active	200	200
OBONGA LAKE AREA	261065	Single Cell Mining Claim	2023-12-02	Active	400	400
OBONGA LAKE AREA	164485	Single Cell Mining Claim	2023-12-02	Active	200	200
OBONGA LAKE AREA	340354	Single Cell Mining Claim	2023-12-02	Active	400	800
OBONGA LAKE AREA	281892	Single Cell Mining Claim	2023-12-02	Active	200	400
OBONGA LAKE AREA	252884	Single Cell Mining Claim	2023-12-02	Active	400	800
OBONGA LAKE AREA	233023	Single Cell Mining Claim	2023-12-02	Active	400	400
OBONGA LAKE AREA	179321	Single Cell Mining Claim	2023-12-02	Active	400	800
OBONGA LAKE AREA	179320	Single Cell Mining Claim	2023-12-02	Active	400	800
OBONGA LAKE AREA	166580	Single Cell Mining Claim	2023-12-02	Active	400	800
OBONGA LAKE AREA	149533	Single Cell Mining Claim	2023-12-02	Active	400	800
OBONGA LAKE AREA	134085	Single Cell Mining Claim	2023-12-02	Active	200	400
OBONGA LAKE AREA	121686	Single Cell Mining Claim	2023-12-02	Active	400	400
OBONGA LAKE AREA	106043	Single Cell Mining Claim	2023-12-02	Active	200	400
OBONGA LAKE AREA	302837	Single Cell Mining Claim	2023-12-02	Active	400	800
OBONGA LAKE AREA,PUDDY LAKE AREA	341571	Single Cell Mining Claim	2023-12-02	Active	200	400
OBONGA LAKE AREA,PUDDY LAKE AREA	180061	Single Cell Mining Claim	2023-12-02	Active	400	800
OBONGA LAKE AREA,PUDDY LAKE AREA	134850	Single Cell Mining Claim	2023-12-02	Active	400	800
PUDDY LAKE AREA	340260	Single Cell Mining Claim	2023-12-02	Active	400	800
PUDDY LAKE AREA	339676	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	301526	Single Cell Mining Claim	2023-12-02	Active	400	800

PUDDY LAKE AREA	233274	Single Cell Mining Claim	2023-12-02	Active	400	800
PUDDY LAKE AREA	225269	Single Cell Mining Claim	2023-12-02	Active	400	800
PUDDY LAKE AREA	178105	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	121453	Single Cell Mining Claim	2023-12-02	Active	400	800
PUDDY LAKE AREA	121452	Single Cell Mining Claim	2023-12-02	Active	400	800
PUDDY LAKE AREA	106762	Single Cell Mining Claim	2023-12-02	Active	400	800
PUDDY LAKE AREA	301445	Boundary Cell Mining Claim	2023-12-02	Active	200	209
PUDDY LAKE AREA	290692	Single Cell Mining Claim	2023-12-02	Active	400	800
PUDDY LAKE AREA	282629	Single Cell Mining Claim	2023-12-02	Active	200	400
PUDDY LAKE AREA	180062	Single Cell Mining Claim	2023-12-02	Active	400	800
PUDDY LAKE AREA	180047	Single Cell Mining Claim	2023-12-02	Active	200	400
PUDDY LAKE AREA	289296	Boundary Cell Mining Claim	2023-12-02	Active	200	200
PUDDY LAKE AREA	341568	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	319502	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	302819	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	302818	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	302817	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	289295	Single Cell Mining Claim	2023-12-02	Active	400	200
PUDDY LAKE AREA	282627	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	252204	Single Cell Mining Claim	2023-12-02	Active	400	200
PUDDY LAKE AREA	234611	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	234610	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	234609	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	199015	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	186806	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	186805	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	134829	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	134828	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	132895	Single Cell Mining Claim	2023-12-02	Active	200	200
PUDDY LAKE AREA	106245	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	106244	Single Cell Mining Claim	2023-12-02	Active	400	400
PUDDY LAKE AREA	280709	Single Cell Mining Claim	2023-12-02	Active	200	200
PUDDY LAKE AREA	178104	Single Cell Mining Claim	2023-12-02	Active	200	200
PUDDY LAKE AREA	164572	Single Cell Mining Claim	2023-12-02	Active	200	200
PUDDY LAKE AREA	121380	Boundary Cell Mining Claim	2023-12-02	Active	200	200
PUDDY LAKE AREA	696148	Single Cell Mining Claim	2023-12-10	Active	400	0
PUDDY LAKE AREA	721744	Single Cell Mining Claim	2024-04-27	Active	400	0
OBONGA LAKE AREA	731396	Single Cell Mining Claim	2024-06-07	Active	400	0
OBONGA LAKE AREA	731395	Single Cell Mining Claim	2024-06-07	Active	400	0
OBONGA LAKE AREA	731394	Single Cell Mining Claim	2024-06-07	Active	400	0

Appendix 2. Chrome Puddy Property Patented Claims

Mining Right Number	Patent Number	Area (ha)	PIN	Parcel Number	Township
PAT-16029	TB8420	35.835	62504-1962(LT)	6348TBF	G-0118
PAT-16030	TB8421	20.603	62504-1561(LT)	6349TBF	G-0118
PAT-16031	TB8422	13.719	62504-1965(LT)	6350TBF	G-0118
PAT-16032	TB8423	26.887	62504-1562(LT)	6351TBF	G-0118
PAT-16033	TB8424	28.02	62504-1968(LT)	6352TBF	G-0118
PAT-16034	TB8425	18.061	62504-1563(LT)	6353TBF	G-0100,G-0118
PAT-16035	TB8426	16.944	62504-1369(LT)	6354TBF	G-0118
PAT-16036	TB8427	12.901	62504-1564(LT)	6355TBF	G-0118
PAT-16037	TB8428	7.216	62504-1973(LT)	6356TBF	G-0100,G-0118
PAT-16038	TB8814	30.218	62504-1560(LT)	6208TBF	G-0100
PAT-16039	TB9294	16.414	62504-1568(LT)	6466TBF	G-0100

Appendix 3. Data for Geological Map

FID	easting	northing	Descrip	Rock_code	sub_code	Alter	Min	Fol	dip
0	321837	5538283	Mafic unit has minor sulphide	1	b		py	0	0
1	321849	5538289	Amphibolite, mafic, foliated	1	a			0	0
2	321899	5538299	Waterfall, contact of metased and amphibolite, photo	1	a			0	0
3	321902	5538301	Amphibolite, foliated, 082/45S, sample 677347	1	a			82	45
4	321677	5538226	Foliated amphibolite, flaggy cleavage, fol 074/52S, sample CP15-05, photo 2653 (view of Scalp creek)	1	a			74	52
5	318313	5538213	Amphibolite	1	a			0	0
6	319435	5538252	Amphibolite	1	a			0	0
7	321897	5538330	Outcrop at top of water fall, amphibolite schist, sample CP-03, foliation 105/30S.	1	a			105	30
8	321365	5538365	Proposed DDH drill grid parallel to N, 45 incl	1	a			0	0
9	321643	5538191	Felsite/tonalite, foliated, quartz veinlets	2		qv		0	0
10	321675	5538217	Felsite/tonalite, foliated	2				0	0
11	321917	5538279	Felsite, foliated	2				0	0
12	321652	5538171	Metased, 058 52S	3	a			58	52
13	321645	5538203	Metased, slatey, normal, 090 45S	3	a			90	45
14	321680	5538223	Metased, 062 42S	3	a			90	70
15	321679	5538249	Metased, fine hornfels(?), 090 70S	3	a			90	70
16	321640	5538256	Metased, slabby	3	a			0	0
17	321639	5538270	Metased	3	a			0	0
18	321596	5538281	Metased (?), sample 677343	3	a			0	0
19	321426	5538251	Metasediment, 100 54S (GPS Compass 085)	3	a			100	54
20	321901	5538224	Metased, flaggy	3	a			0	0
21	321948	5538264	Metased	3	a			0	0
22	321847	5538219	Metased, flaggy, 076 52S	3	a			76	52
23	321791	5538255	Metased, flaggy, 076 55S	3	a			76	55
24	321834	5538281	Metased	3	a			0	0
25	321837	5538287	Metased, gabbro, shear 062 50S, qtz veinlets, photo	3	a	qv		62	50
26	321905	5538296	Metased, sulphide, sample 677346	3	a		py	0	0
27	321847	5538159	Metased, slate	3	a			0	0
28	321848	5538157	Metased, slatey cleavage, 060/60S	3	a			60	60

FID	easting	northing	Descrip	Rock_code	sub_code	Alter	Min	Fol	dip
29	**321425**	**5538254**	**Metased, 070/45S, sample,drill locn**	**3**	**a**			**70**	**45**
30	**321431**	**5538243**	**Metased, 060/48S**	**3**	**a**			**60**	**48**
31	321923	5538165	Outcrop on east side of creek, metased pelitic schist (?/or mylonite?), foliation 090/45S, sample CP-01	3	a			90	45
32	321895	5538224	Outcrop on east side of creek, metased pelitic schist (?/or mylonite?)	3	a			0	0
33	318791	5537530	south road conductor, metasediment, dark black, strongly foliated, with f.g po diss po up to 3% (reason for conductivity?)	3	a		po	0	0
34	318837	5537345	slightly sheared, dark grey to black, metasedimetary rock, 10% fine to very fine grained biotite, very gossaned surface yet only tr py, relic quartz grains, rusty yellow eyes up to 2mm wide	3	a			0	0
35	318837	5537345	sheared metased, similat to 162 sample, however, 10% of sample is quartz veins from a stockwork, veins are up to 5mm wide with 1% py near margins, and minor po associated with py, quartz is milky white in colour	3	a	qv	py	0	0
36	**319930**	**5539062**	**Large, high ultramafic outcrop**	**4**	**b**			**0**	**0**
37	**319931**	**5539058**	**Peridotite, sample 677340**	**4**	**b**			**0**	**0**
38	**319940**	**5539105**	**Peridotite outcrop**	**4**	**b**			**0**	**0**
39	**321339**	**5538327**	**Peridotite outcrop**	**4**	**b**			**0**	**0**
40	320261	5538958	Serpentinite	4	a			0	0
41	320383	5538883	Serpentinite, mgt veinlets, 5-10% diss oxides, magnetic	4	a		mgt	0	0
42	320401	5538879	Serpentinite, relict cum ol, 10% intercum oxide, weakly mag	4	b		mgt	0	0
43	320414	5538883	Peridotite, serpentinized, relict cum olivine, poss. Poikilitic pyroxene, < 5% oxide, weakly mag	4	b			0	0
44	320245	5538934	Serpentinite, possible chromite, 5% oxides, weakly mag	4	a			0	0
45	320206	5538978	Serpentinite, â€œpepperedâ€ texture, 5-10% oxides, weakly mag, TS	4	a		mgt	0	0

FID	easting	northing	Descrip	Rock_code	sub_code	Alter	Min	Fol	dip
46	320200	5538971	Serpentinite, heavily â€œpepperedâ€, 10% oxides, weakly magnetic, TS	4	a		mgt	0	0
47	320103	5538982	Serpentinite, poss. Relict ol, with intercumulus oxide, magnetic, sampled 1st day	4	b			0	0
48	320237	5538882	Serpentinite, blocky cleavage, black, weak mag	4	a			0	0
49	320248	5538920	Serpentinite, less than 5% oxide, massive	4	a			0	0
50	320245	5538935	Serpentinite, massive, magnetic 10% oxide, may have been sampled in 2017	4	a			0	0
51	320240	5538967	Serpentinite, massive	4	a			0	0
52	320225	5538987	Serpentinite, peppered, 10% oxides, massive	4	a		mgt	0	0
53	320185	5539011	Serpentinite, massive, relict cum ol	4	b			0	0
54	321335	5538326	O/c, serpentinite, talc-carb alteration, sample CH16-01	4	a	talc, carb		0	0
55	319434	5537920	Commerce East Showing, Serpentinite, carbonatized, magnetite veinlets, sample CP15-01	4	a	carb	mgt	0	0
56	319418	5537912	Commerce East Showing, Trench, Serpentinite, carbonatized, magnetite veinlets, CP15-02, photos 2626, 27, 28	4	a	carb	mgt	0	0
57	319422	5537909	Sample CP15-03, magnetite vein sample (selected vein), previous metallic sample tag 3604 (Kuhner?), photo 2629 (vein), 2630 (general overview)	4	a		mgt	0	0
58	319353	5537949	Sample CP15-04, magnetite vein in serpentinite, photo 2632 (31 deleted)	4	a		mgt	0	0
59	320122	5538817	Outcrop of serpentinized ultramatic	4	a			0	0
60	320176	5538956	Outcrop of serpentinized ultramafic, elephant skin weathering	4	a			0	0
61	321611	5538263	Serpentinized ultramafic, talc, foliated at 060/50S	4	a	talc, carb		60	50
62	318428	5537927	UM	4	a			0	0
63	318246	5537924	Peridotite/dunite?	4	b			0	0
64	317990	5537938	Talc	4	a	talc		0	0
65	317708	5537892	UM	4	a			0	0
66	317096	5537791	UM	4	a			0	0

FID	easting	northing	Descrip	Rock_code	sub_code	Alter	Min	Fol	dip
67	316650	5537629	UM	4	a			0	0
68	316453	5537482	UM	4	a			0	0
69	316350	5537596	UM	4	a			0	0
70	316483	5537757	UM	4	a			0	0
71	316947	5537893	UM	4	a			0	0
72	316981	5538075	Serpentinite	4	a			0	0
73	317435	5538132	UM	4	a			0	0
74	317612	5538053	UM	4	a			0	0
75	319530	5538015	Komatiite	4	a			0	0
76	319373	5538078	UM	4	a			0	0
77	320010	5538381	Peridotite	4	b			0	0
78	319951	5538617	UM	4	a			0	0
79	319940	5538807	UM	4	a			0	0
80	319956	5538888	Talc	4	a	talc		0	0
81	319823	5539171	UM	4	a			0	0
82	319832	5538096	UM	4	a			0	0
83	316784	5537855	Magnetitite	4	a		mgt	0	0
84	319373	5537955	Calcite	4	a	carb		0	0
85	319345	5537942	Serpentinite	4	a			0	0
86	319353	5537948	Magnetitite	4	a		mgt	0	0
87	319361	5537955	Serpentinite	4	a			0	0
88	319407	5537977	Magnetitite	4	a		mgt	0	0
89	319433	5537918	Serpentinite	4	a			0	0
90	319422	5537919	Magnetitite	4	a		mgt	0	0
91	319450	5537934	UM	4	a			0	0
92	318998	5538224	Metalgabbro	4	a			0	0
93	317720	5538124	Magnetite	4	a		mgt	0	0
94	317790	5538154	UM	4	a			0	0
95	317801	5538180	Magnetite	4	a		mgt	0	0
96	321402	5538290	Chromitite	4	c		chr	0	0
97	321479	5538323	Chromitite	4	c		chr	0	0
98	316774	5537850	Magnetite	4	a		mgt	0	0
99	320355	5538830	Peridotite, B Zone	4	b		chr	0	0
100	319456	5537925	follow up on Au anomaly, green oxidixed serpentinite with v.f.g diss py up to 2%, massive serpentinite, not noteable structure other than late stage fractures	4	a		py	0	0

FID	easting	northing	Descrip	Rock_code	sub_code	Alter	Min	Fol	dip
101	319503	5538046	blue tinge, altered ultra mafic, with reddish purple inclusions of similar ultramafic however different alteration product so must be dif lithology, xenolith? Inclusions are up to 1cm wide, possible relic magmatic event? Tr po, 1% magnetite diss and 2% m	4	a			0	0
102	319420	5537916	serpentinite, green, with magnetite veins and stylolitic fracture workings, vein is 2cm wide with mm scale fractures that have propagated throughout, <8% magnetite in sample	4	a		mgt	0	0
103	319493	5538049	green (serpentinite) ultramafic with strong fractures filled with magnetic perp crystal growth to vein wall, 7% magnetite, <1% diss magnetite, altered to serpentinite	4	a		mgt	0	0
104	319602	5537937	brownish ultramafic with carb alteration or talc? Tr py and <1% po, fine grained associated with fractures	4	a	talc		0	0
105	319492	5538047	green ultramafic with 5% magnetite veins, strongly magnetic	4	a		mgt	0	0
106	319475	5538039	ultramafic, slight red tinge to dark fine grained, with red (hematite?) nodules/eyes, blebs? And <1% malachite stained in late stage fractures should have elevated Cu, possible PGE sample, <1% diss po, tr cpy	4	a			0	0
107	319123	5538647	ultramafic, dark fine grained with strong sulphide associatation to wavy fracture in sample, 2% po, tr py, magnetic	4	a		po, py	0	0
108	318863	5538316	ultramafic, dark green, medium grained with soapish light powder on fresh surface, tr py, 1% po, tr magnetite? Magnetic	4	a			0	0
109	319825	5538062	ultramafic (dark, fine grained, with fine grain diss sulphides, chromite? Or just pyrrhotite? (1%)) tr py	4	a			0	0
110	319612	5537948	purplish ultramafic? Sampled on east side of Puddy, north of rapids/creek mouth, fine grained with chalky carb alt? tr py, 0.5-1% po, very weakly magnetic	4	a			0	0

FID	easting	northing	Descrip	Rock_code	sub_code	Alter	Min	Fol	dip
111	319439	5537930	green ultramafic rock with 6% magnetite veins, very lime green, strongly magnetite, fine grained diss mag <1%	4	a			0	0
112	319375	5537943	similar rock to 353 except with 4% magnetite associated to small 1-2mm wide fractures, outcrop is highly weathered and fratured, talus	4	a		mgt	0	0
113	319325	5537927	western extent of outcrop with 5% magnetite in green ultramafic, mainy associated to small fractures, other sulphides <1% fine diss, mostly po?	4	a		mgt	0	0
114	318872	5538348	dark green ultramafic, with po/sulphide (3%) assocaited to large irregular altered fracture zones in outcrop	4	a		po	0	0
115	318973	5538262	dark green to black fine grained with some black medim grained minerals, 1% po fine grained diss throughout, only outcrop in large boulder section on northside of puddy	4	a			0	0
116	319197	5538274	dark fine to medium grained ultramafic rock, slight soapy chalky texture is blebs of medium to coarse grained po, (<2%)	4	a	talc	po	0	0
117	321515	5538501	Biotite Tonalite	5				0	0
118	**319933**	**5539125**	**Biotite tonalite, huge blocks, prob in place, foliated 028 30W**	**5**				**208**	**30**
119	**319974**	**5539141**	**Tonalite, huge fractured blocks, dangerous ground**	**5**				**0**	**0**
120	**319983**	**5539132**	**Biotite tonalite, foliated 012 60W**	**5**				**192**	**60**
121	**320006**	**5539094**	**Biotite tonalite blocks**	**5**				**0**	**0**
122	**321554**	**5538329**	**Ultramafic, carbonatized, sample 677344**	**5**	**a**	**carb**		**0**	**0**
123	322741	5539364	30 cm QV with tour	5		qv	tour	0	0
124	322702	5539376	o/c, tonalite with chlorite alteration	5		chl		0	0
125	322738	5539373	6 cm QV with tour+musc+py at 150/80N in foliated tonalite	5		qv	tour	330	80
126	322733	5539367	Float block, 4 cm QV with tour+py in altered tonalite	5		qv	tour, py	0	0
127	322800	5539294	QV in pink altered tonalite with chl	5		qv		0	0
128	322550	5539397	Altered tonalite with QVâ€™lets, chlorite, rusty	5		qv		0	0

FID	easting	northing	Descrip	Rock_code	sub_code	Alter	Min	Fol	dip
129	322545	5539397	QVs in chlorite altered tonalite, rusty	5		qv, chl		0	0
130	322477	5539425	Altered tonalite, sub-mylonite, rusty	5				0	0
131	320819	5538633	Prob o/c mossy ridge tonalite	5				0	0
132	320980	5538664	325N Tonalite with strong foliation	5				0	0
133	321035	5538924	Prob o/c, tonalite, fol 136/30S	5				136	30
134	321153	5538772	Probable tonalite o/c, fol 108/42S	5				108	42
135	321186	5538830	Biotite tonalite, fol 124/34S, lin 248/30	5				124	34
136	321318	5538742	Biotite tonalite, fol 114/38S, lin 264/24	5				114	24
137	321266	5538640	Bio tonalite ridge, steep drop to north, probably heaved giant blocks	5				0	0
138	321505	5538561	Bio tonalite, fol 116/34S, quartz veinlets, sample CR16-02	5				116	34
139	320469	5539306	Tonalite, foliation 260/30S	5				80	30
140	321903	5538351	Outcrop on east side of creek, tonalite gneiss	5				0	0
141	321927	5538403	Outcrop on east side of creek, tonalite gneiss, foliation 115/40S, at location of former winter road	5				115	40
142	320670	5539582	Tonalite, fol 115/70S	5				115	70
143	321138	5538932	Tonalite, fol 110/50S	5				110	50
144	318827	5537430	foliated tonalite, 1% diss py, quartz grains are subhedral, light degree of deformation from regional event, slight magnetite with <1% po, mainly magnetic at po grains	5				0	0
145	**321902**	**5538212**	**Brick red fsp porph, aphanitic with 3 mm euhedral fsp phenos**	**6**	**b**			**0**	**0**
146	**321926**	**5538218**	**Red porphyry**	**6**	**b**			**0**	**0**
147	321902	5538214	Outcrop on east side of creek, brick red, felsite porphyry, probably Keweenawan, sample CP-02	6	b			0	0
148	318747	5538201	Gabbro	4	d			0	0

Bold data collected in 2022. Other data compiled from mapping by Pavey Ark prior to 2022..

Appendix 4. Sample locations and descriptions

Sample No	wpt	Easting	Northing	Sample descriptions
677333	28	321431	5538283	Peridotite, purple rhodochrome alteration, from trench at shaft
677334	29	321448	5538262	Amphib-garnet-pyrite (iron formation?), lineated, south waste pile
677335	29	321448	5538262	Metasediment, sulphidic, graphitic, south waste pile
677336	30	321480	5538326	Peridotite, massive, talc, carbonate veins, north waste pile
677337	30	321480	5538326	Massive peridotite, disseminated chromite (?), north waste pile
677338	30	321480	5538326	Talc-carb schist, North waste pile
677339	31	321425	5538254	Metased, o/c south of shaft, drill loc'n
677340	60	319931	5539058	Peridotite, relict cpx
677341		321643	5538191	Felsite, fg, foliated, qv's
677342	91	321679	5538242	Metased, qv's, tr. fine sulphide
677343	94	321596	5538281	Metased
677344	95	321554	5538329	Ultramafic carbonatized, talc
677345		321378	5538374	Hornfels, amphib?, foliated
677346	134	321905	5538296	Metased, sulphide
677347	135	321902	5538301	Amphibolite, foliated

UTM Coordinates, NAD83, Zone 16U. Samples 677333 to 677339 collected August, 2022; Samples 677340 to 677347 collected September, 2022.

Appendix 5. Selected georeferenced sample locations

Sample 677340, Peridotite

Sample 677340, Peridotite

Sample 677341, Foliated felsite

Sample 677342, Metasediment

Sample 677345, Amphibolite, grey weathered

Sample 677346, Metasediment with sulphides

Appendix 6. Daily logs

Waypoint	Time	Easting	Northing	Comments
1	Aug 7, 2022, 12:29 pm	321432	5538275	Shaft
2	12:37	321404	5538221	
3	12:40	321420	5538205	
4	4:55 pm	321648	5538103	End of trail cutting Sunday
5	Aug 7, 2022, 6:48 pm	322529	5539974	Road Camp
6	Aug 8, 2022, 10:06 am	322076	5540326	Trail head
7	Aug 9, 2022, 9:46 am	321867	5538171	Leave Waterfall Camp
8	Aug 9, 2022, 9:54 am	321847	5538159	Metased, slate
9	Aug 9, 2022, 10:01 am	321661	5538095	Large blders on hill
10	10:06	321546	5538144	Trail on level ground from here
11	10:14	321389	5538241	Rusty seepage from mill?
12	11:37	320353	5538271	Temp loss of trail
13	11:43	320312	5538297	Re-estatablished trail
14	12:49 pm	320029	5538355	Chrome Lake shore, blders
15	12:57	320039	5538164	Trail all blders, no good for quad
16	1:19	319782	5538094	South shore shallow with angular blders
17	1:32	319630	5538072	Creek to Puddy Lake, blders, East shore Puddy Lake, all blders
18	1:40	319655	5538090	Huge cedars, 20 incl plus
19	1:48	319590	5538156	Puddy Lake, blder shore
20	1.49	319591	5538156	Drops off quickly, deeper water
21	1:54	319566	5538206	Puddy, blder shore, deep
22	2:06 pm	319650	5538328	Chrome Lake, blder shore
23	3:07	320003	5538424	Chrome Lake, trail head, camp spot
24	4:13	321394	5538220	Trail, can quad to here from Chrome Lk, rusty spring, south end of mill structure
25	Aug 9, 2022, 4:29 pm	321848	5538157	Metased, slatey cleavage, 060/60S
26	Aug 9, 2022, 4:33	321863	5538184	Back to Waterfall Camp
27	Aug 10, 2022, 8:46	321869	5538202	Leave Waterfall Camp
28	9:11	321431	5538283	Shaft
29	9:32 am	321448	5538262	Waste pile
30	9:53 am	321480	5538326	North waste pile with rail tracks on top
31	10:44 am	321425	5538254	Metased, 070/45S, sample,drill locn
32	11:07 am	321431	5538243	Metased, 060/48S
33	11:29	321344	5538471	Gate on north trail
34	11:45	321401	5538410	Grid L1, 100N
35	11:50	321388	5538389	L1, 75N, Boulders
36	11:53	321377	5538362	L1, 50N, higher ground
37	11:54	321371	5538361	Possible drill set up to test anomaly, boulders
38	Aug 10, 2022, 12:20	321866	5538187	Back to Waterfall Camp

Waypoint	Time	Easting	Northing	Comments
43	Sept 9, 2022, 4:40 pm	322085	5540332	Leave truck at trail head

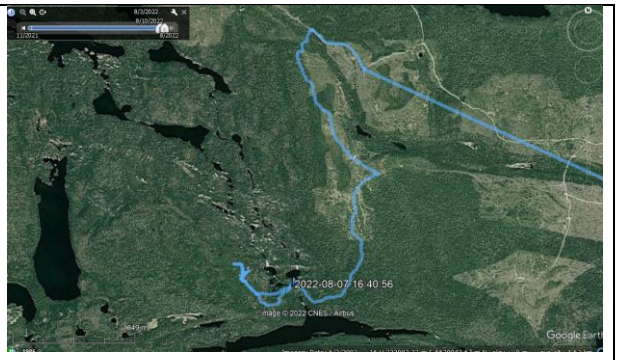
44	6:35 pm	321865	5538187	At waterfall camp with most of gear
45, 46				No data
47	8:21 pm	321865	5538183	End of day Waterfall camp
48				No data
049	Sept 10, 11:52am	320003	5538441	Old boat, drill rod in bush
050, 51, 52, 53, 54, 55				No data
056	Sept 10, 1:11 pm	319956	5538626	Steep blder slope, blder shore
057	1:24 pm	319946	5538796	Pipes, drainage channel with small creek
058	1:30 pm	319950	5538842	Blders, gradual slope to shore
059	1:56 pm	319930	5539062	Large, high ultramafic outcrop
060	2:11 pm	319931	5539058	Peridotite, sample 677340
061	2:19 pm	319940	5539105	Peridotite outcrop
062	2:27	319933	5539125	Biotite tonalite, huge blocks, prob in place, foliated 028 30W
063				No data
064	2:45	319974	5539141	Tonalite, huge fractured blocks, dangerous ground
065	2:50	319983	5539132	Biotite tonalite, foliated 012 60W
066	2:56	320006	5539094	Biotite tonalite blocks
067	3:03	319964	5539047	Regular boulders
068, 069				No data
070	Sept 10, 5:36 pm	321864	5538185	Back to waterfall camp
071	Sept 11, 9:37	321873	5538182	Leave waterfall camp
072	Sept 11, 10:12 am	321343	5538346	Gate on trail
073	10:18 am	321395	5538366	Steam engine
074	10:26 am	321357	5538349	L1 025N at trail
075	10:33 am	321339	5538327	Peridotite outcrop
076, 77, 78, 79, 080				No data
081	1:33	320018	5538436	Leave Chrome Lk camp
082	2:25	321866	5538183	Back to Waterfall camp 52 minutes hike
083	3:29	321652	5538171	Metased, 058 52S
084	3:37	321643	5538191	Felsite/tonalite, foliated, quartz veinlets
085	3:48	321645	5538203	Metased, slatey, normal
086	3:50	321645	5538203	Foliation 090 45S
087	3:52	321647	5538211	Probable old road
088	3:55	321675	5538217	Felsite/tonalite, foliated
089	3:59	321680	5538223	Metased, 062 42S
090	4:10	321679	5538249	Metased, fine hornfels(?), 090 70S
091	4:17	321679	5538242	Sample 677342
092	4:26	321640	5538256	Metased, slabby

093	4:29	321639	5538270	Metased
094	4:42	321596	5538281	Metased (?), sample 677343
095	Sept 11, 4:58 pm	321554	5538329	Ultramafic, carbonatized, sample 677344
096	Sept 11, 5:27	321864	5538181	Back to waterfall camp
097	Sept 12, 9:53	321880	5538182	Leave waterfall camp
98, 99				No data
100	1:09 pm	321365	5538365	Proposed DDH drill grid parallel to N, 45 incl
101				No data
102	Sept 12, 1:44 pm	321313	5538347	Base Line 1+25
103	1:47 pm	321296	5538366	Base Line 1+50W
104	1:48 pm	321286	5538369	Boulders
105	1:50	321275	5538383	Base line 1+75W
106	1:52	321252	5538399	Base Line 2+00W cabin ruins
107	1:55	321242	5538403	Historical casing approx 1 ¼ inch
108	1:58	321235	5538406	Base line 2+25W
109	1:59	321212	5538423	Base line 2+50
110	2:01	321190	5538438	2+75 very large blders
111	2:03	321175	5538456	3+00 very large blders
112	2:10 pm	321159	5538415	L3 0+50S, giant blders
113	2:11	321159	5538415	Photo, giant blders, no good drill set up
114	2:14	321152	5538409	L3 0+50S picket
115	2:15	321152	5538403	Large blder pile
116	2:33 pm	321426	5538251	Metasediment, 100 54S
117	2:37	321427	5538250	GPS compass strike 085
118	2:47	321428	5538254	DDH set up proposed
119	3:06	321865	5538187	Back to waterfall camp
120	3:57 pm	321902	5538212	Brick red fsp porph, aphanitic with 3 mm euhedral fsp phenos
121	4:02	321901	5538224	Metased, flaggy
122	4:09	321952	5538259	Steep valley, canyon
123	Sept 12, 4:11 pm	321948	5538264	Metased
124	4:15	321926	5538218	Red porphyry
125	Sept 12, 4:20 pm	321866	5538186	Back to Waterfall Camp
126	Sept 13, 9:48 am	321863	5538203	Leave Waterfall Camp
127	9:52 am	321847	5538219	Metased, flaggy, 076 52S
128	10:01	321791	5538255	Metased, flaggy, 076 55S
129	10:13	321834	5538281	Metased
130	10:17	321837	5538287	Metased, gabbro, shear 062 50S, qtz veinlets, photo
131	10:25	321837	5538283	Mafic unit has minor sulphide
132	10:30 am	321849	5538289	Amphibolite, mafic, foliated
133	10:41	321899	5538299	Waterfall, contact of metased and amphibolite, photo
134	10:43	321905	5538296	Metased, sulphide, sample 677346

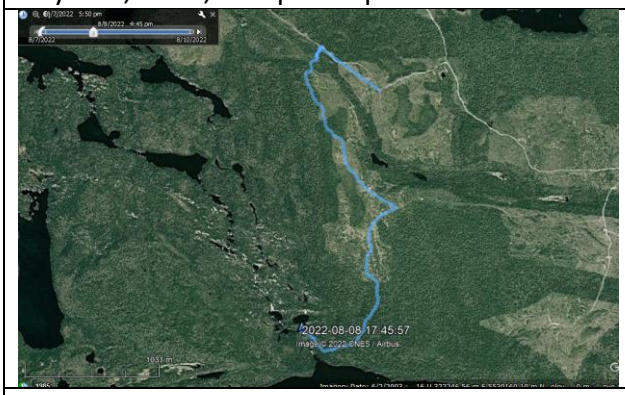
135	10:52	321902	5538301	Amphibolite, foliated, 082/45S, sample 677347
136	11;00 am	321917	5538279	Felsite, foliated
137,	Sept 13, 11:03	321956	5538274	Canyon
138, 139, 140, 141, 142, 143, 144, 145				No comments
146	11:57 am	321945	5538106	Leave Scalp Ck
147	Sept 13, 2022, 1:16 pm	322089	5540335	Back to truck

Appendix 7. Daily tracks

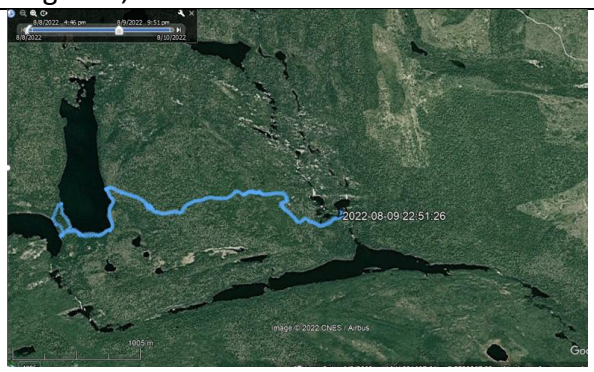
July 6 -9, 2022, Camp set up



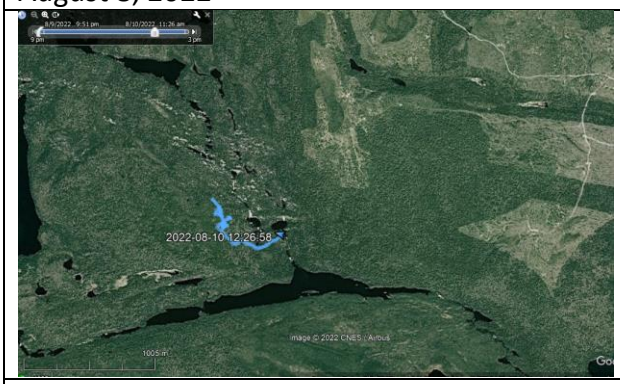
August 7, 2022



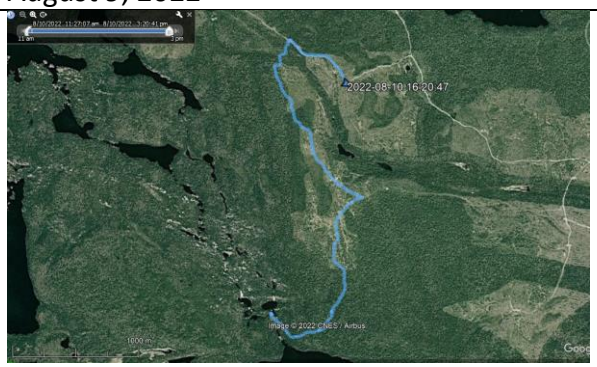
August 8, 2022



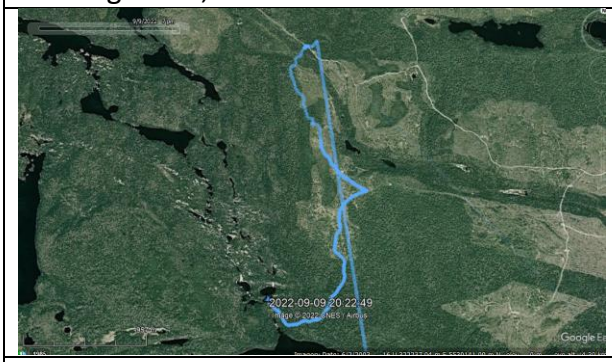
August 9, 2022



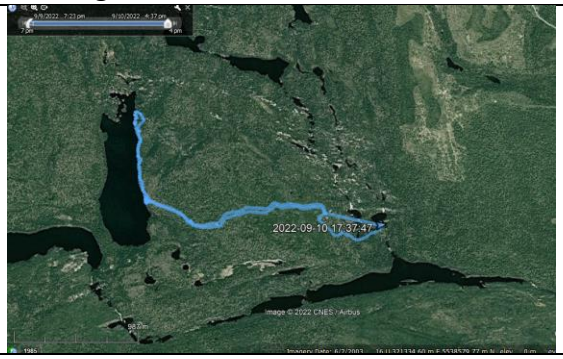
AM August 10, 2022



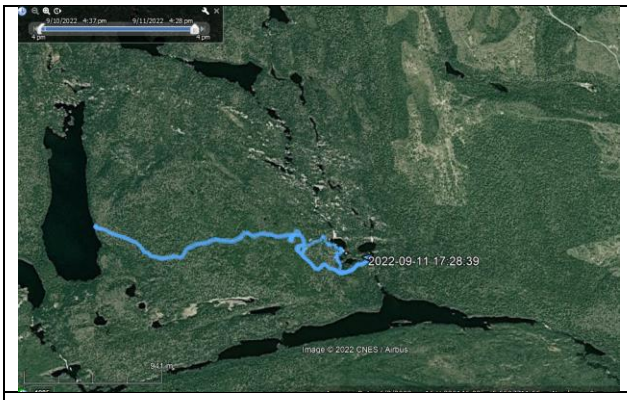
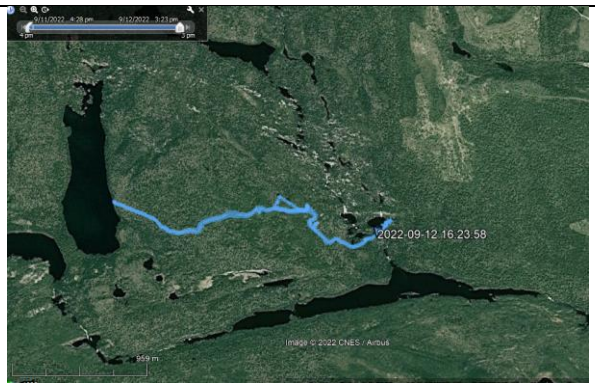
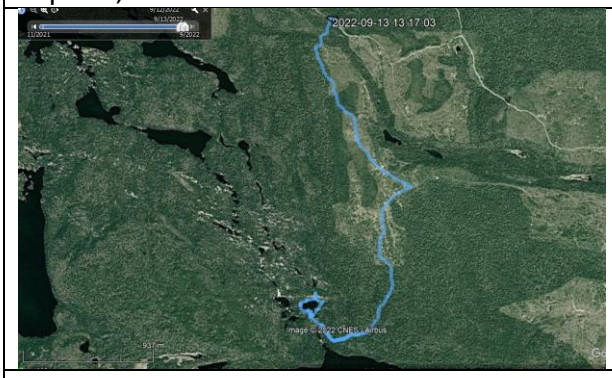
PM August 10, 2022



Sept 9, 2022



Sept 10, 2022

	
Sept 11, 2022	Sept 12, 2022
	
Sept 13, 2022	

Appendix 8. Expense allocation to patented claims

Expense Allocation to Patented Claims		
Claim	**Work %**	Expense
PAT-16029	**5**	$ 2,258.75
PAT-16032	**5**	$ 2,258.75
PAT-16033	**5**	$ 2,258.75
PAT-16034	**5**	$ 2,258.75
PAT-16035	**5**	$ 2,258.75
PAT-16036	**5**	$ 2,258.75
PAT-16038	**35**	$ 15,811.25
PAT-16039	**35**	$ 15,811.25
	100	$ 45,175.00

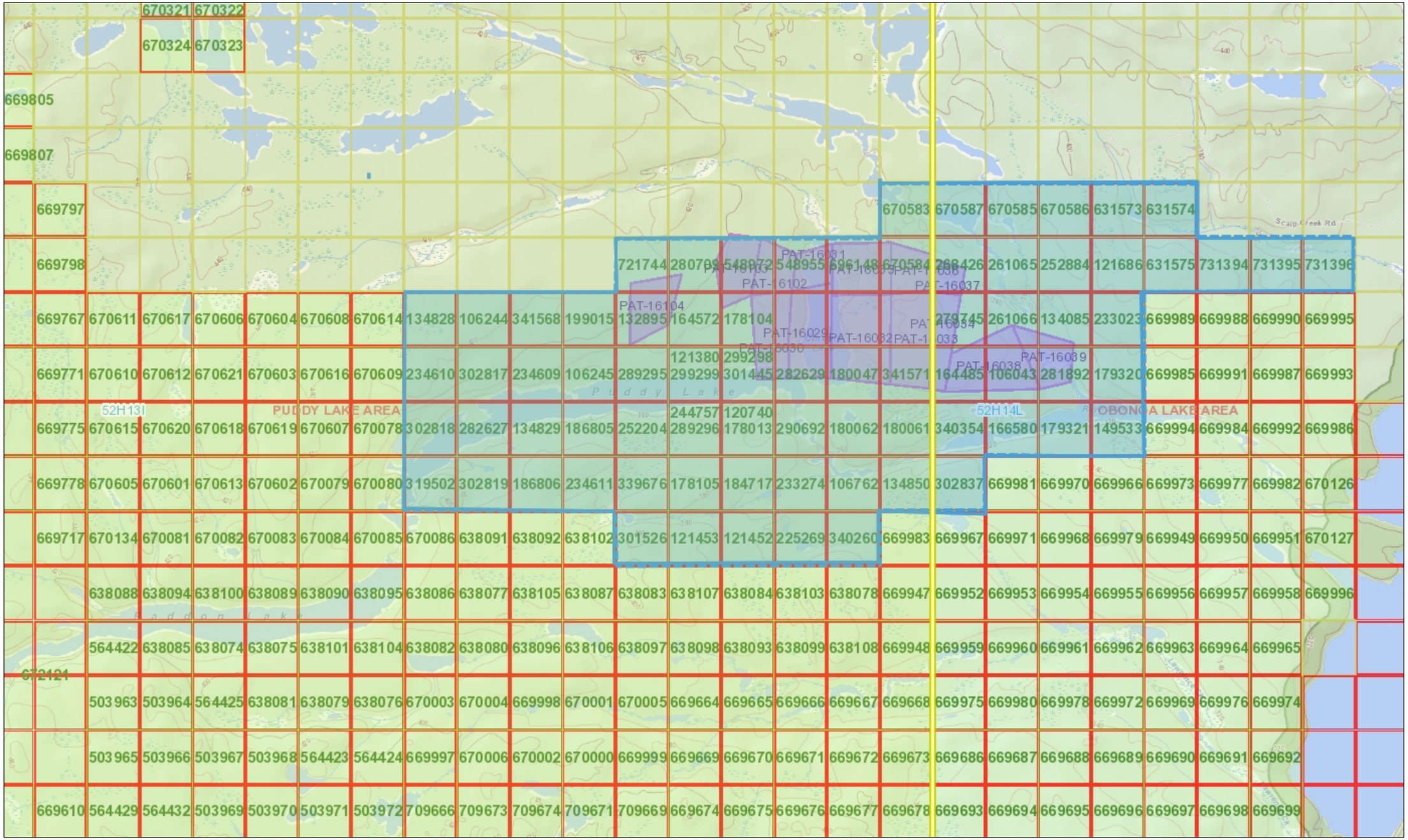
Ontario

Ministry of Mines (MINES)

MLAS Map Viewer

Chrome Puddy Property

Notes: January 9, 2023



Legend

Provincial Grid Cell
- Available
- Pending
- Unavailable

Mining Claim
- Mining Claim
- Boundary Claim

Alienation
- Withdrawal
- Notice

MINES Administrative Boundaries
- MINES Townships and Areas
- Geographic Lot Fabirc
- UTM Grid 1K
- UTM Grid 10K
- Mining Division
- Mineral Exploration and Development Region
- CLUPA Protected Area - Far North
- Resident Geologist District
- Federal Land Other
- Native Reserves
- AMIS Sites
- AMIS Features
- Drill Hole
- Mineral Occurrences

MLAS Mining History
- Withdrawal - History
- Notice - History
- Mining Claim - History
- Mining Land Tenure - History
- Legacy Claim

Provincial Grid
- Provincial Grid 250K
- Provincial Grid 50K
- Provincial Grid Group

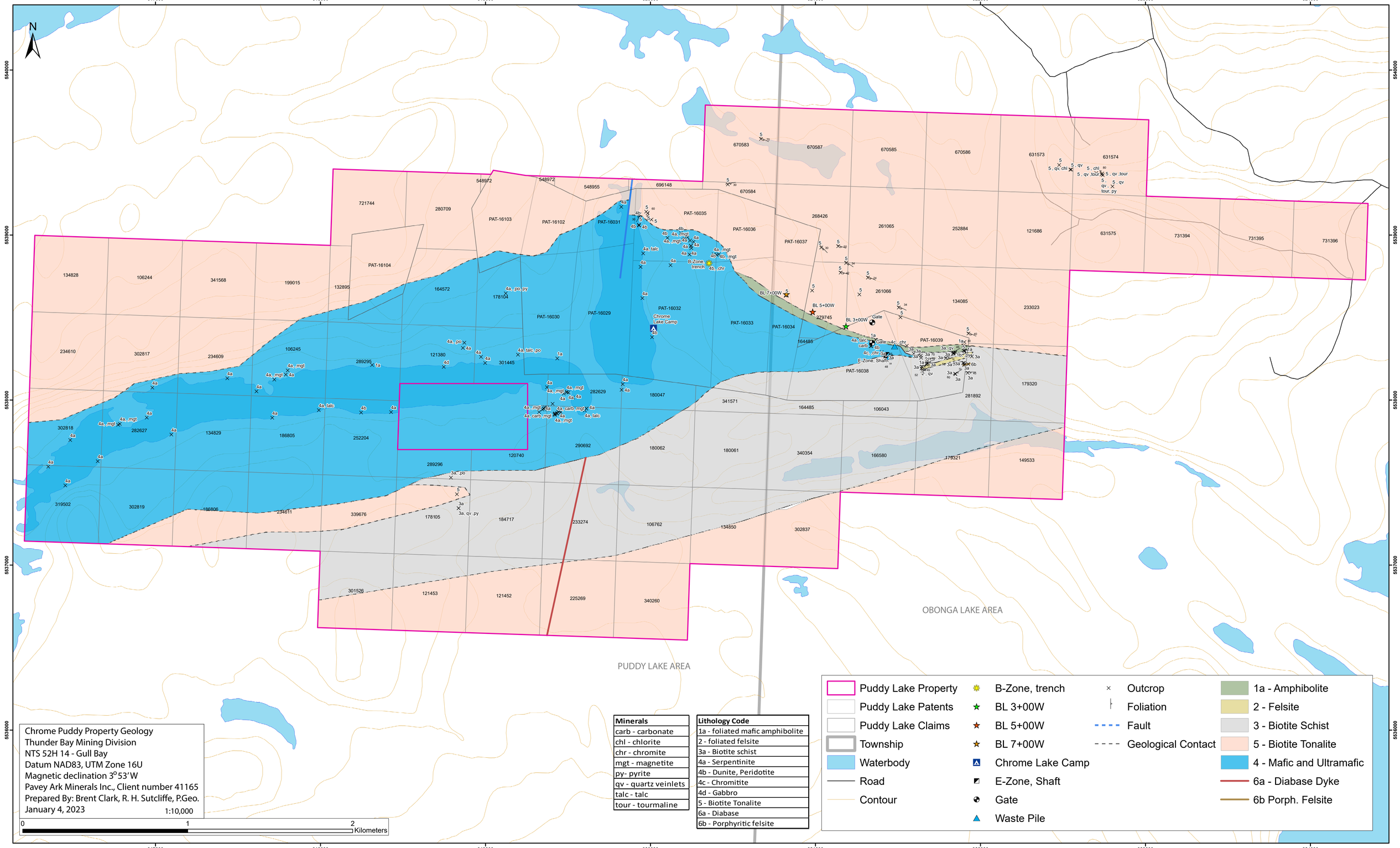
Land Tenure
- Surface Rights
- Mining Rights
- Mining and Surface Rights
- Order-in-Council

Those wishing to register mining claims should consult with the Provincial Mining Recorders' Office of the Ministry of Mines (MINES) for additional information on the status of the lands shown hereon. This map is not intended for navigational, survey, or land title determination purposes as the information shown on this map is compiled from various sources. Completeness and accuracy are not guaranteed. Additional information may also be obtained through the local Land Titles or Registry Office, or the Ministry of 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 Ministry of Mines (MINES) web site.

0 1.63 km

Projection: Web Mercator

N


317000
318000
319000
320000
321000
322000
323000
324000
5540000
5539000
5538000
5537000
5536000
N
PUDDY LAKE AREA
OBONGA LAKE AREA
Chrome Lake Camp
B-Zone trench
BL 7+00W
BL 5+00W
BL 3+00W
Gate
E-Zone, Shaft
PAT-16102
PAT-16103
PAT-16104
PAT-16030
PAT-16031
PAT-16032
PAT-16033
PAT-16034
PAT-16035
PAT-16036
PAT-16037
PAT-16038
PAT-16039
PAT-16029
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548955
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670585
670586
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631574
631575
731394
731395
731396
670584
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261065
252884
121686
261066
134085
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180047
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234609
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qv , tour , py
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4a , talc
4a , po , py
4a , talc , po
4a , carb , mgt
4b
4b , mgt
4b , chr
4c , chr
4d
1a
1b , py
2 , qv
3a
3a , qv
3a , po
3a , qv , py
6b
Chrome Puddy Property Geology
Thunder Bay Mining Division
NTS 52H 14 - Gull Bay
Datum NAD83, UTM Zone 16U
Magnetic declination 3°53'W
Pavey Ark Minerals Inc., Client number 41165
Prepared By: Brent Clark, R. H. Sutcliffe, P.Geo.
January 4, 2023
1:10,000
0
1
2
Kilometers
Minerals
carb - carbonate
chl - chlorite
chr - chromite
mgt - magnetite
py- pyrite
qv - quartz veinlets
talc - talc
tour - tourmaline
Lithology Code
1a - foliated mafic amphibolite
2 - foliated felsite
3a - Biotite schist
4a - Serpentinite
4b - Dunite, Peridotite
4c - Chromitite
4d - Gabbro
5 - Biotite Tonalite
6a - Diabase
6b - Porphyritic felsite
Puddy Lake Property
Puddy Lake Patents
Puddy Lake Claims
Township
Waterbody
Road
Contour
B-Zone, trench
BL 3+00W
BL 5+00W
BL 7+00W
Chrome Lake Camp
E-Zone, Shaft
Gate
Waste Pile
Outcrop
Foliation
Fault
Geological Contact
1a - Amphibolite
2 - Felsite
3 - Biotite Schist
5 - Biotite Tonalite
4 - Mafic and Ultramafic
6a - Diabase Dyke
6b Porph. Felsite