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Report of Trenching
on the
Mortimer-Salo Soapstone Property
Garnet and Fawn Townships,
Porcupine Mining Division,
Ontario



Randall Salo, P. Geo

October 14, 2019

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Introduction

Soapstone is formed from ultramafic rocks subjected to alteration and metamorphism under low grade metamorphic conditions. It is generally grey in color, is soft, massive, and a talc-bearing rock. Its ease of workability, high heat capacity and aesthetic appeal are the main characteristics that provide value in soapstone (Gerow et al, 1991).

Soapstone occurrences in Northeastern Ontario are primarily associated with the Destor-Porcupine and Pipestone Fault Zones. Soapstone occurs within highly foliated to sheared metavolcanic rocks from intermediate to ultramafic composition often along contacts with sedimentary rocks and spatially associated with intrusive rocks from felsic to ultramafic affinity. In these few instances, alteration minerals include talc-carbonate, talc-chlorite-carbonate, talc-magnesite and serpentine generally occurring within schistose rocks. Soapstone varies from grey to green to olive green in color (Gerow et al, 1991).

The current trenching program was designed to target a known soapstone occurrence located in south-central Garnet township, Ontario. Rocks exposed during the program include a talc-carbonate schistose unit within strongly sheared peridotitic ultramafic intrusive rocks. Talc-carbonate alteration (+/-chlorite, +/-magnesite, +/-serpentine) observed to date on the property is not confined solely to the strongly sheared zones but extends a considerable distance into the hosting ultramafics providing for rock character amenable to bulk talc or steatite formation.

Location and Access

The Mortimer-Salo soapstone property is located approximately 125km southwest of Timmins, Ontario in the south-central part of Garnet township and the north-central part of Fawn township.

Access to the property is afforded by road access westward along the all-season secondary gravel-based Sultan Industrial Road from Provincial Highway 144 at the Watershed gas station located at the junction of Provincial Highway 560 and then north following the seasonal tertiary Blamey Forestry Road and then northeast along the Fawn Creek Road that meanders to the claim group. From Timmins to the property is a 480km round trip.



Figure 1: Location Map

Property Tenure

The Mortimer-Salo property is comprised of nine unpatented mining claims consisting of an area of approximately 176 hectares situated in Garnet and Fawn townships, Porcupine Mining Division, Ontario. The claims are recorded jointly under Charles Mortimer (50%) and 2294527 Ontario Inc. (50%). Details of the claims are listed in Table 1.

Table 1 : Claim Details

Tenure ID	Township / Area	Anniversary Date
116433	GARNET	2020-11-12
151672	FAWN,GARNET	2020-11-12
168257	GARNET	2020-11-12
168273	FAWN,GARNET	2020-11-12
181063	GARNET	2020-11-12
197650	GARNET	2020-11-12
197664	FAWN,GARNET	2020-11-12
271621	GARNET	2020-11-12
330806	GARNET	2020-11-12

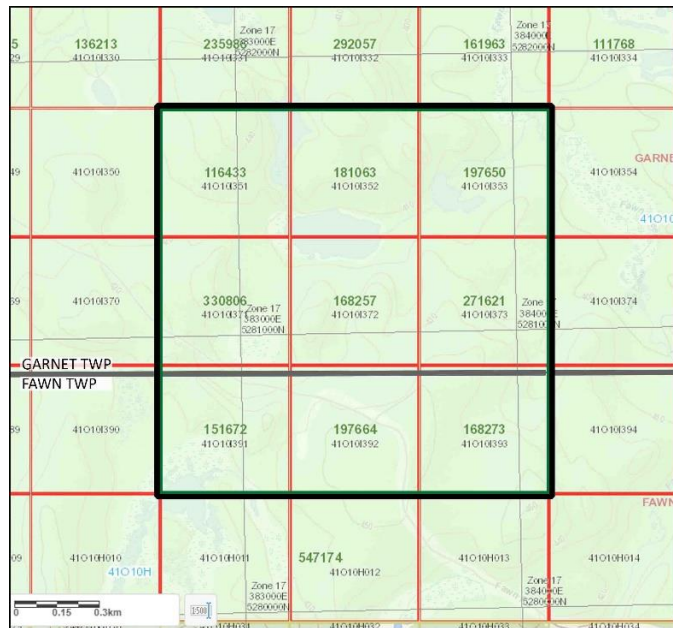


Figure 2: Property Claim Map

Regional Geology

Regional Geology is taken from Keast, 2008 and reads as follows:

“The project is situated in the Swayze greenstone belt of the Abitibi Subprovince. The greenstone belt is an east-west trending sequence 45 km by 25 km. Rock types include massive and fragmental rhyolite volcanics, massive basalt flows, and scattered feldspar porphyry intrusions. Sedimentary rocks are a minor component and include greywacke and conglomerate. East-west trending fold axes are prevalent throughout the stratigraphic package.”

Property Geology

The Mortimer-Salo soapstone occurrence locale is dominantly covered by glacial drift material including gravel, sand, clay and loam with cobbles and boulders of detrital bedrock occurring within all cover. Much of the exposed rock in the trenched area resulted from prior stripping and trenching programs carried out by Charles Mortimer. Exposed bedrock on the property is dominantly unaltered to weakly carbonate altered medium to coarse-grained peridotite or moderately to strongly talc-carbonate altered medium to coarse-grained peridotite associated with moderate to strong foliation, shearing and faulting. Mafic volcanic flow units and a diorite intrusive occur in the eastern and northeastern parts of the property evidenced from logs derived from the 2007 Mortimer diamond drilling program on the property. Strong local foliation and shearing are identified throughout the trenching locale. The present trenching program has identified widespread strong pervasive talc-carbonate (+/-chlorite-magnesite-serpentine) altered peridotitic rocks and a northeast striking subvertical fine grained altered felsic unit (intrusive or rhyolite ?) situated in close proximity to talc-rich rock units on the property.

Prior Exploration

Table 2 below summarizes previous exploration efforts on the property.

Table 2: Prior Exploration

Operator	Year	Program
Dominion Explorers Inc.	1989	airborne magnetic, electromagnetic and VLF surveying
Noranda Exploration Company Ltd.	1993	mapping, prospecting, sampling, stream and soil geochemistry
Charles Mortimer	2006	mechanical stripping
Charles Mortimer	2007	diamond drilling
Charles Mortimer	2011	bedrock stripping and bulk sample extraction

Trenching Program

Mechanical trenching efforts occurred between August 24, 2018 and May 26, 2019 under Permit No. PR-16-10844. A total of 1,959 m² of trenching was carried out in nine trenching locations. Excavating was carried out by Gerald Magnan of Val Gagne Ontario utilizing a Caterpillar 215C LC excavator. Outcrop washing was carried out by Shay Simon of Porcupine, Ontario utilizing a Honda GS80 water pump and accompanying hose line.

Resulting trenches were mapped on August 24, 2019 by Randall Salo and Shelly Moretti from Porcupine, Ontario.

Overburden depths at the trenched locations varied from a few centimetres to five metres and cover consisted of tan to dark brown colored sandy clay. In the northern and western part of the trenching area a dark brown sandy loam was present.

Resulting trenches were mapped on August 24, 2019 by Randall Salo and Shelly Moretti from Porcupine, Ontario.

Trenching Program Results

Relatively unaltered, blocky, medium to dark green coloured, medium to coarse grained peridotite was uncovered in Trench 1 with local gossanous patches occurring in the central and northern parts of the trench reflecting the high iron content of the ultramafic intrusive rocks. Minor discontinuous east-west trending bull-white quartz veining occurs in the center of the trench dipping 55° south with minor contact related pyrite mineralization. The northern part of the trench has experienced moderate shearing at 310° with common extensive gossanous areas.

Trench 6 rocks are similar to the northern part of Trench 1 with dark green to black coloured ultramafic rocks that are strongly sheared in an east-west direction and dipping 75° north.

Trenches 7, 8 and 9 exposed dark green coloured fine-grained mafic volcanic rocks that are relatively unaltered and moderately fractured generally in a north-south direction.

Trench 2 uncovered relatively homogeneous weak to locally moderate talc-carbonate +/-chlorite-magnesite-seprentine altered ultramafic rock with abundant disseminated talc-carbonate crystal growths up to 1cm resulting from moderate to strong pervasive metasomatic alteration. Only minor local deformation exists and the exposed outcrop is massive.

Trench 3 is host to similar ultramafic rocks as those observed in Trench 2 but with a weak to moderate foliation striking 70° and dipping 55° south. Weak to locally moderate talc-carbonate alteration occurs throughout the ultramafic rocks. In addition to the ultramafic rocks present in Trench 3, a 70° striking subvertically dipping fine-grained felsic unit at least 3m in width occurs in the central area of the trench. The felsic units northern contact is sharp with slickensides developed along the contact within the adjacent ultramafic unit. The light grey coloured felsic unit is extremely hard and texturally possesses a cherty appearance. It is possibly an intrusive, however, the presence of an intercalated rhyolite unit cannot be ruled out especially given the felsic unit's altered appearance.

Trench 4 uncovered an ultramafic unit that is massive, moderately talc-carbonate altered in the northern part and relatively unaltered in the south portion of the trench. Moderate shearing is observed at the northern extent of the trench trending 300° and dipping vertically with associated talc-carbonate altered patches within this narrow shear zone.

Trench 5 hosts weakly to strongly talc-carbonate altered massive ultramafic rocks with the most intense alteration centered along a 3m wide zone of strongly sheared rocks striking 60° in the vicinity of the center of the northernmost part of the trench. The southern satellite portion of the trench hosts peridotite that is black in colour, blocky, and relatively unaltered compared to the shear zone to the north which contains semi-pervasive iron carbonate alteration resulting in a white to light brown colour to the sheared rocks.

Table 3: Trenching Details

Trench No.	Area Trenched (m²)	Results
1	824	peridotite, local moderate shearing, gossan patches
2	132	ultramafic, weak to moderately talcose, undeformed
3	277	ultramafic, weak to moderately talcose, undeformed
4	328	ultramafic, weak to moderately talcose, foliated at 70°
5	346	ultramafic, weak to strongly talcose, sheared at 60°
6	18	peridotite, strong 270° shearing, strong gossan
7	12	mafic volcanic, relatively unaltered, fractured
8	6	mafic volcanic, relatively unaltered, fractured
9	16	mafic volcanic, relatively unaltered, fractured

Conclusions

Rocks uncovered in the trenching from the present program include medium to coarse grained peridotite (wehrlite) intrusive in the western and central part of the trenched area. Relatively unaltered fine grained mafic volcanic rocks occupy the far northeast and eastern part of the trenched area along with a diorite intrusive unit. A highly siliceous cherty felsic unit occurs in Trench 3 that may be an altered aplitic intrusive dike, an intercalated fine-grained altered rhyolite unit or a locus for fluid pooling in a structural zone of weakness. Magnesite can be cryptocrystalline and occur in the form of chert. The cherty character of the felsic unit may in part be due to the production of magnesite derived from the ultramafic rocks during the alteration/metamorphic event.

Talc-carbonate alteration (+/- chlorite-magnesite-serpentine) is observed within both massive peridotitic ultramafic units as pervasive alteration, and associated with structurally controlled shears/faults within the same. Alteration is generally white in colour in the massive units and grey to light brown within shear zones. Green coloured alteration minerals may reflect both chlorite and serpentine mineralization. Trenches 2-5 host the bulk of potential mineralization associated with soapstone product similar to the ultramafic rock character at the soapstone bulk sample site located immediately west of Trench 2 where block talc or steatite is observed.

Structures associated with talc-chlorite alteration trend 060° and 300° at the Mortimer-Salo soapstone property. These two shear directions possibly control pervasive alteration in the massive talc-carbonate mineralized ultramafic units. In general, the talc-carbonate alteration trend is northeast from the bulk sample location or Trench 2 location towards Trench 5.

Slickensides observed along the northern contact of the felsic unit in Trench 3 infers movement along this plane. Provided this cherty felsic unit is younger than the alteration/metamorphic event responsible for the talc-carbonate alteration, this contact may have acted as an impermeable barrier pooling metasomatic fluids and could constitute a marker horizon for talc-carbonate mineralization on the property.

Recommendations

Soapstone does not have definitive chemical and physical properties, and varying compositions are generally evaluated for specific applications based on their individual properties. Softness, resistance to thermal and chemical decomposition, non-absorbency, high heat capacity and low electrical conductivity are the main properties for which soapstone is valued (Gerow et al, 1991). Soapstone rock on the Mortimer-Salo property especially at the bulk sample location has the potential

to meet the above definition. The Mortimer-Salo bulk soapstone is dark green in colour when polished and holds aesthetic value including carving applications.

Therefore, given the northeast trend to the stronger talc-carbonate altered ultramafic rocks on the property, an investigation into the area between the bulk sample location and Trench 5 is recommended. This would include extending Trench 3 farther northwest in an effort to intersect the potential northeast strike extension of the bulk sample location hosting block talc characteristic rock type (steatite).

Secondly, excavating a trench halfway between Trench 3 and Trench 5 in a northwest direction from the access road could extend the strike length of the target zone while considering results of a Trench 3 extension.

Thirdly, additional trenching is recommended proximally southwest of the bulk sample location in an effort to investigate the potential southwestern extension of the target horizon characterized by the massive nature of the steatite/soapstone at the bulk sample location.

Although it is not the purpose of this report to make inferences regarding the potential end use for the soapstone on the Mortimer-Salo soapstone property, continued investigation designed to outline specific end use applications for potential ore is recommended, the results of which could aid in guiding future exploration.

Sincerely,

A handwritten signature in black ink that reads "Randall Salo". The signature is written in a cursive, flowing style.

Randall Salo, P.Geol

October 14, 2019

APPENDIX

References

Gerow M.C., Sherlock, E.J. and Bellinger, J.A. 1991. Soapstone in Ontario; Ontario Geological Survey, Open File Report 5764, 208p.

Keast, T., 2008. Assessment Report on Diamond Drilling and Application for Bulk Sampling, Mortimer Soapstone Project, Garnet Township, NTS 41 0/NE. 17p.

Statement of Qualifications

I, Randall W. Salo of 800 Gervais Street North, Porcupine, Ontario do hereby certify that I:

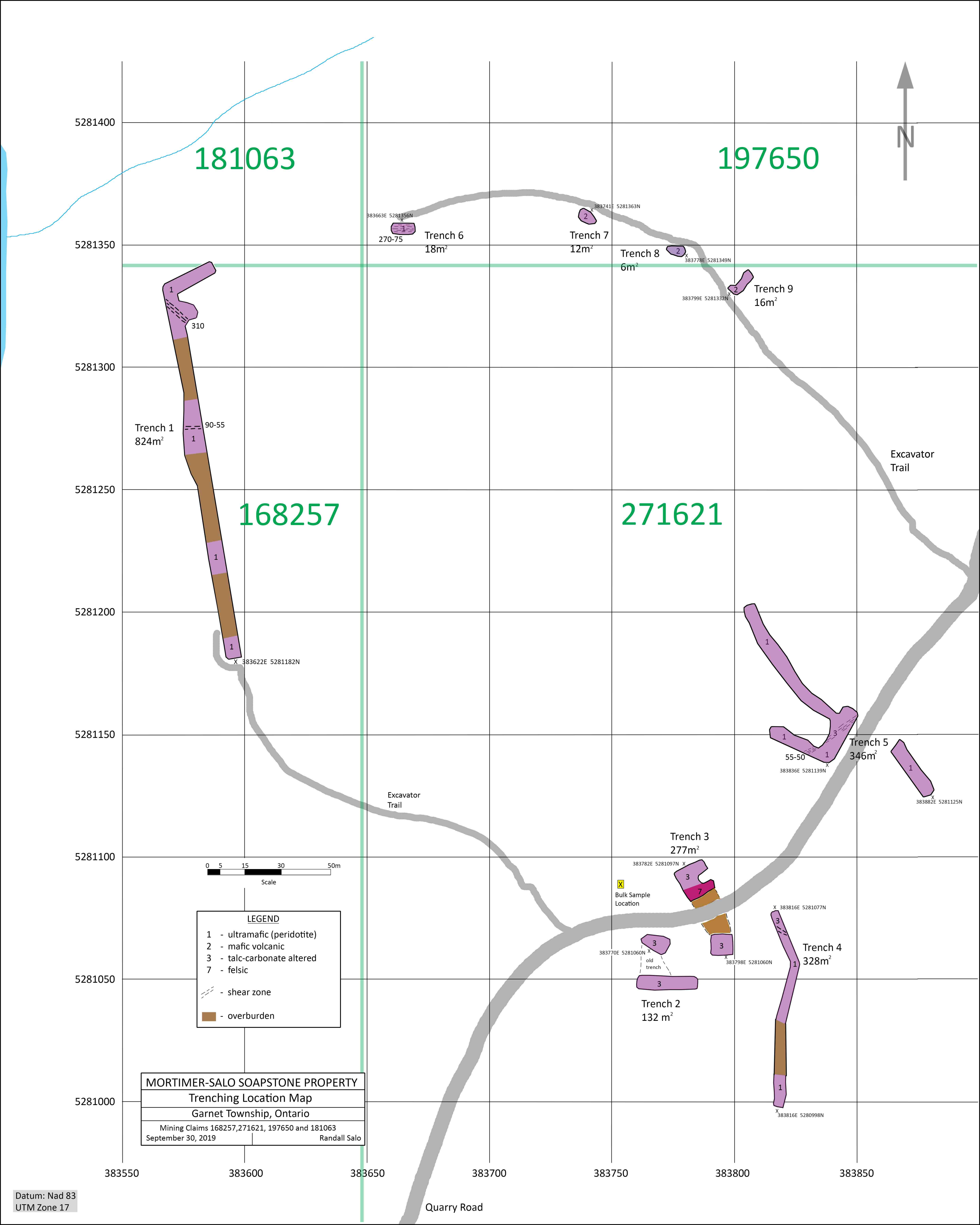
- am a graduate of Lakehead University with an Honours Bachelor degree in Geology/Physics (1998).
- have been involved and working in mining exploration for more than 35 years in Canada, Mexico and Asia.
- am a member of the Association of Professional Geoscientists of Ontario with member number 1265.
- have included in this report all relevant data derived from both private and public sources.
- have been physically on the property and have expressed personal opinions in this report.
- Have no personal interest in the subject property other than the present report.

Sincerely disclosed,

A handwritten signature in black ink that reads "Randall W. Salo". The signature is written in a cursive style with a large, stylized 'R' and 'S'.

Randall W. Salo, P. Geo

October 14, 2019



181063

197650

168257

271621

Trench 1
824m²

Trench 6
18m²

Trench 7
12m²

Trench 8
6m²

Trench 9
16m²

Trench 5
346m²

Trench 3
277m²

Bulk Sample
Location

Trench 2
132 m²

Trench 4
328m²



LEGEND	
1	- ultramafic (peridotite)
2	- mafic volcanic
3	- talc-carbonate altered
7	- felsic
	- shear zone
	- overburden

MORTIMER-SALO SOAPSTONE PROPERTY
 Trenching Location Map
 Garnet Township, Ontario
 Mining Claims 168257, 271621, 197650 and 181063
 September 30, 2019 Randall Salo

Datum: Nad 83
 UTM Zone 17



Quarry Road

Excavator Trail

Excavator Trail

5281400
5281350
5281300
5281250
5281200
5281150
5281100
5281050
5281000

383550 383600 383650 383700 383750 383800 383850