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PARKIN MARBLE PROSPECT

(Limestone - Marble)

(2016)

Parkin Township

Sudbury Mining Division

Ontario, Canada

Prepared by J. M. Gaudreau

September, 2016

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Location

The Parkin Limestone Property (Property) is located in the west boundary of Parkin Township, 15 kilometers north of the town of Capreol, which is amalgamated into the municipality of Greater Sudbury, Ontario, Canada within the Sudbury Mining Division.

Figure 1. Parkin Limestone Property Key Map

Ownership

J. M. Gaudreau staked claim 4271834 on March 17, 2013 and recorded the claim on April 9, 2013. The 3 unit claim totals 48 hectors. The claim was recorded 100% in the name of Jean Marc Gaudreau. The claim was transferred to Phillip Timothy Martel on October 3, 2014. The claim is currently under a recorders extension to file this work program.

Ownership Status

The listed claim holder is a public owner who obtained the land by transfer. There is no other interest in the claim. The claim is not part of a public listing. The claim requires $1,200 work annually after October 13, 2016 to keep it in good standing.

SUDBURY Mining Division - 408864 - MARTEL, TIMOTHY PHILLIP HARRY

Township/Area	Claim Number	Recording Date	Claim Due Date	Status	Percent Option	Work Required	Total Work	Total Reserve
PARKIN	4271834	2013-Apr-09	2016-Oct-13	Active	100 %	$ 1,200	$ 1,200	$ 600

Figure 2. Location of Limestone within Greater Sudbury

Summary

The Property was acquired after research of chromite processing smelter feed requirements after CLIFFS Natural Resources announced the location of their chromite refinery at Moose Mountain Mine site northwest of the town of Capreol in 2013.

J. M. Gaudreau researched what was deemed one of the “best qualifying” Espanola limestone formations. After staking the Property in March 2013 the J. M. Gaudreau contacted CLIFFS to request their smelter flux feed specifications for their Arc Furnace processing of chromite ore. In April of 2013 the claim holder completed multi-element XRF-M01 analysis at the GeoLABS Geoscience Laboratories in Greater Sudbury and

returned the results to CLIFFS for review. CLIFFS informed J. M. Gaudreau that the limestone did not meet CLIFF's specifications for a smelter flux feed due to the high silica content. J. M. Gaudreau revisited the Property in October 2013 to collect additional limestone samples for ongoing testing for alternate uses. After additional testing and research it's determined that the limited testing of limestone from the Property meets specifications for:

- Building and construction - building stone, road construction aggregate, ornamental tiles and counter tops, landscaping, pavers
- Heavy industry - slag additive
- Clinker feed - lime production
- Acidity neutralizing - mine site reclamation projects and rail ballast
- Agricultural lime
- Fillers and manufactured goods

Accessibility and Infrastructure

To access the Property from Sudbury, travel north to Capreol on Regional Road 84 to the junction of Moose Mountain Mine Road and Portelance road. Continue on Moose Mountain Mine Road (R.R. 84) to the crossing of the Vermillion River. Yield right onto the abandoned haul road to Mowat River. At this location the Property can be accessed by boat via the Mowat River to Irving Lake. The Property is close to and within the infrastructure of the town of Falconbridge which includes the Falconbridge Mine site.

There is no infrastructure at the Property.

Geology of the Property

The Espanola Formation is part of the Huronian succession (2.1 to 2.5 b.y. old) of the north shore of Lake Huron. It is unique among Huronian formations in its high carbonate content. In the Quirke Lake region the formation may be divided into three members which, in ascending sequence, are limestone, siltstone, and dolostone. Southward thickening of the formation is due to increased thickness of the siltstone member and to the presence of an additional sandstone member at the top of the formation. Fining-upward cycles in the sandstone unit suggest a fluvial origin for that member. Paleocurrents in the same unit indicate a southerly sediment transport.

1. Limestone has endured regional metamorphism increasing its density, now a marble with a high specific gravity. The bedding is very well healed, the thin laminates contain silica and other impurities, easily recognizable and variable throughout.

2. Field examination noted slump breccia of undetermined contact width to the Bruce Conglomerate rock formation to the west and what appears to be mineralized quartz diorite to the east on the north contact. The marble beds occur somewhat less frequent laminating in the centre of the limestone body progressing more frequent to the south contact. This was noted in 2014 and 2016 exposed N-S bench faces.

3. The south contact between the limestone and cobalt conglomerate appears sharp with no progressive contamination into the limestone/marble.

4. Consistently 50+ meters of the center core appear massive with limited jointing and very few veins, vertical to 73-degree dip, E-W striking and 20+ meter bench slopes.

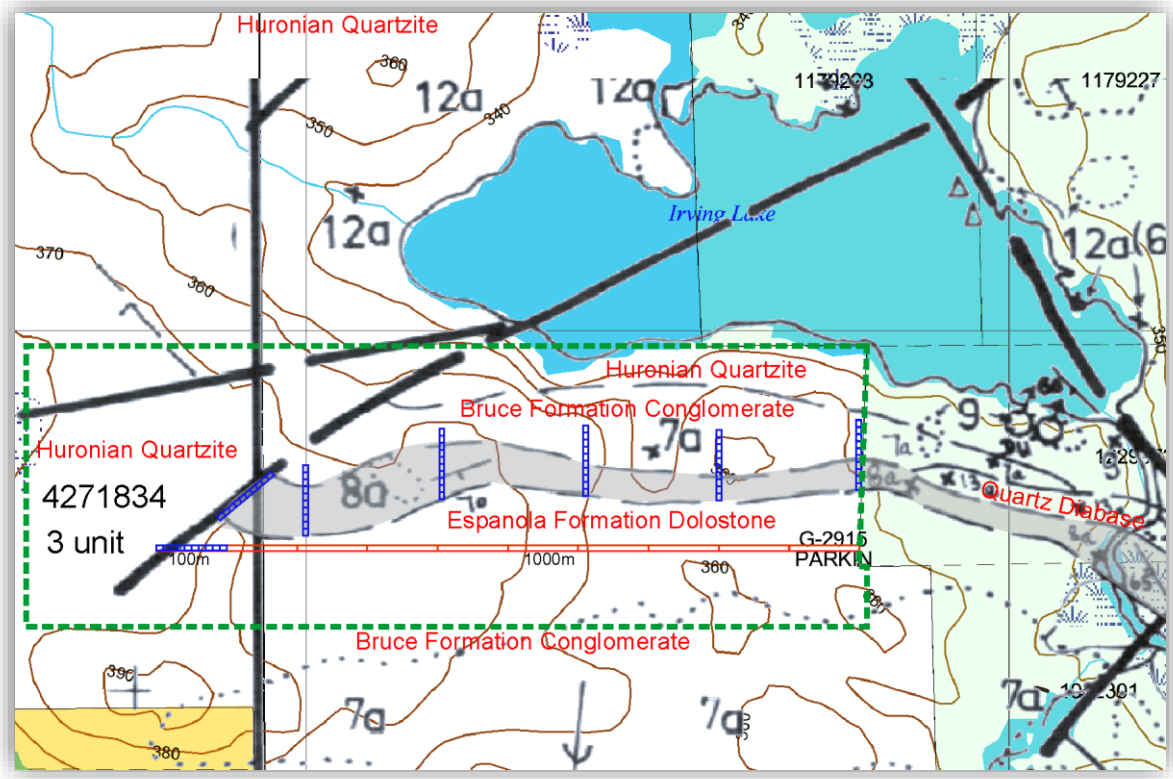


Figure 3. Property Geological Setting

HURONIAN

SUPERGROUP (2.2 Ga to 2450 Ma)

Quirke Lake Group:
sandstone, siltstone, conglomerate,
limestone, dolostone

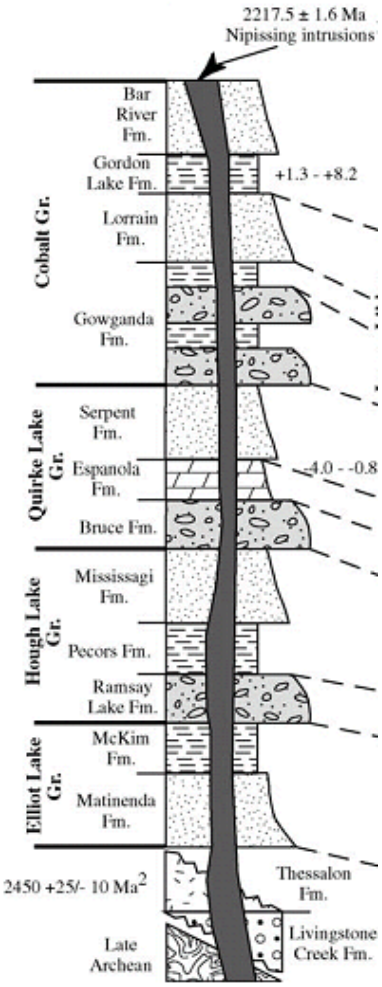
Serpent Formation:
quartz-feldspar sandstone,
sandstone with minor siltstone,
calcareous siltstone and conglomerate

Espanola Formation:
limestone, dolostone, siltstone, sandstone

Bruce Formation:
conglomerate with minor sandstone and siltstone

ORDOVICIAN (443.7 Ma to 488.3 Ma)

UPPER ORDOVICIAN MIDDLE ORDOVICIAN
Limestone, dolostone, shale, arkose, sandstone



Espanola Limestone

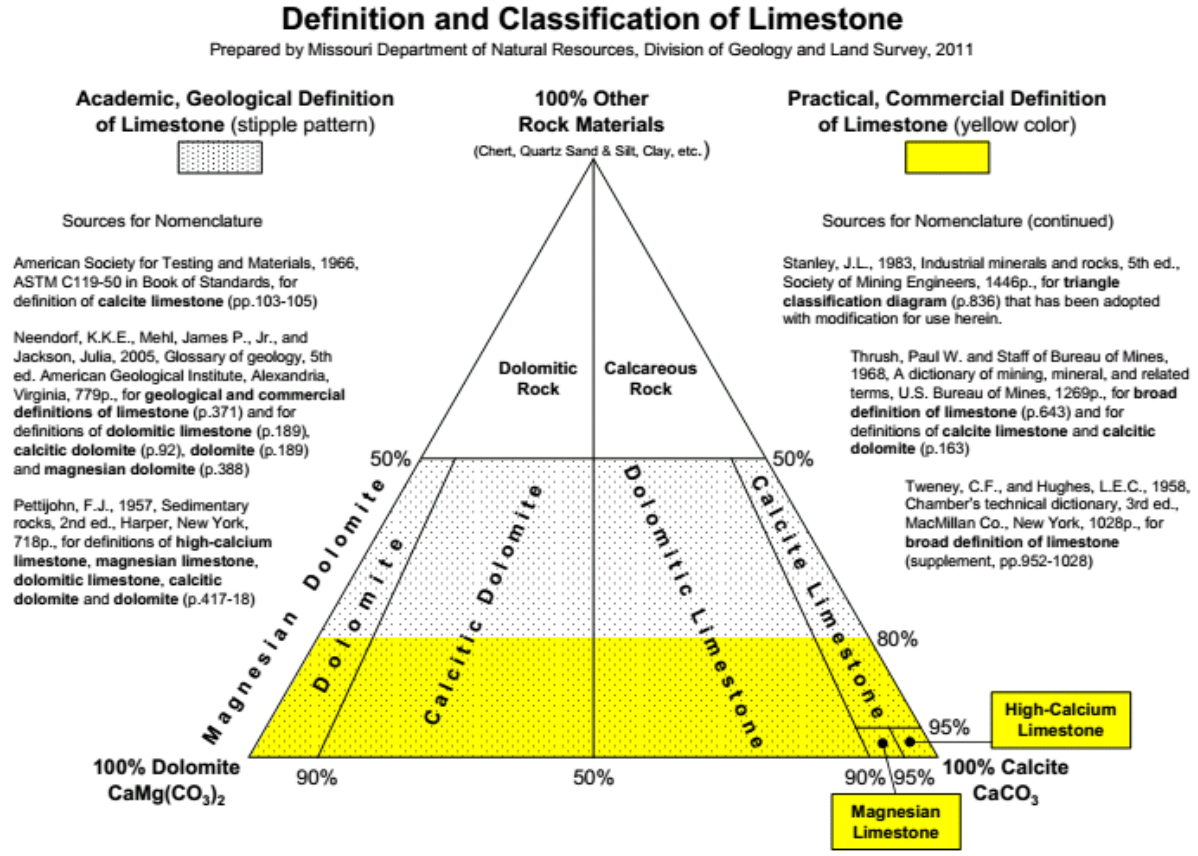


Figure 4. Definition and Classification of Limestone

The limestone member of the Espanola Formation is in places very pure. Some work has been done to assess its usefulness for cement or smelter flux purposes. A number of analyses were made of samples taken by the author from various places in the formation. It will be noted that the content of mafic minerals in the limestone is in direct proportion to the siltstone beds that make up parts of the formation. Commercially the most interesting parts of the formation would certainly be those that contain relatively thick beds of carbonate and thin, infrequent beds of the siltstone. From the tables it appears that the most suitable limestone is found in the relatively undisturbed area in lots 4 and 5, concession IV, Hutton Township. The limestone of the Espanola Formation is pure in places, and if large amounts of the pure material could be found, it would be of commercial interest.
H.D. Mowen Geological Report GR80 page 68.

Origin of Carbonate-Rich Early Proterozoic Espanola Formation, Ontario, Canada
GRANT M. YOUNG1.
Author Affiliations Department of Geology, University of Western Ontario, London, Ontario, Canada

Abstract

The Espanola Formation is part of the Huronian succession (2.1 to 2.5 b.y. old) of the north shore of Lake Huron. It is unique among Huronian formations in its high carbonate content. In the Quirke Lake region the formation may be divided into three members which, in ascending sequence, are limestone, siltstone, and dolostone. Southward thickening of the formation is due to increased thickness of the siltstone member and to the presence of an additional sandstone member at the top of the formation. Fining-upward cycles in the sandstone unit suggest a fluvial origin for that member. Paleocurrents in the same unit indicate a southerly sediment transport.

Structures in the Espanola Formation include breccias of both sedimentary and tectonic origin, cross-bedding, ripple marks, graded bedding, desiccation cracks, and a variety of injection structures. Breccias formerly described as "intraformational" occurred later than some faulting and clastic dike intrusion but before penetrative deformation. Most of the breccias were the result of downward intrusion into early formed fissures in carbonate-rich units. Development of intrusive breccia in the Espanola Formation is spatially related to areas in which there is evidence of folding before deposition of the overlying Gowganda Formation. Microprobe analyses of dolomite in rusty weathering dolostone confirm the presence of ferruginous dolomite. The limestone and dolostone members are considered to be shallow marine deposits whereas the intervening siltstone member may have been deposited in deeper waters by turbidity currents. The Espanola Formation is interpreted as the product of diachronous deposition by facies migration, involving a marine transgression (following withdrawal of the glaciers responsible for deposition of the underlying Bruce Formation). During the regression which followed, a prograding fluvial regime was established, the distal facies of which is represented by the sandstone member of the Espanola Formation. Absence of this member in more northerly areas may be attributed to contemporaneous erosion in these areas, possibly related in part to isostatic recovery following loss of the Bruce ice sheet.

Pros and Cons

- The limestone can be extracted more efficiently under an Aggregate Permit.
- Limestone has endured regional metamorphism increasing its density (high specific gravity); the bedding is well healed and fused. The laminates of silica and impurities are thin with variable frequency throughout.
- Field examination noted slump breccia of undetermined width on the north contact. Contact with cobalt conglomerate was not located and there is less frequent laminating in the centre of the limestone body progressing more frequent to the south contact.
- The south contact between the limestone and cobalt conglomerate is sharp with no progressive contamination into the limestone.
- One outcropping west face of 50+ meters appears massive with limited jointing and very few veins, tilted vertical to 73 degrees on east/west strike and a 20 meter bench.
- The Property is within close proximity to Sudbury and an existing limestone quarry operation to the east and past producing iron mine to the west.
- There appears to be multiple product opportunities.
- The limestone is considered "clean" with only minor impurities the major being silica enriched.
- The consistency and geochemistry still needs to be tested over the limestone formation.
- There appears to be consistent bedding, strike, dip in areas stripped and mapped.
- There is a significant working bench 20 meters above Irving Lake water level.
- Extraction and preliminary assessment work can be conducted under Mining Act.

- Extraction under aggregate act is highly obtainable failing any unforeseen circumstances which might occur under the Environment Study or similar.
- There are no foreseeable problems submitting for permitting under other acts.
- Irving Lake is an ideal water source and is within 140 meters of the north contact.
- Claims will remain in good standing until April 9, 2016 if this report is accepted.
- Next phase of work if extraction of blocks or other will require an Exploration Permit and consultation with Wahnapitae First Nations and possibly other.
- Deposit grade & tonnage (reserves) are not yet defined.
- Completion of pre-feasibility, closure/rehabilitation plan, financial assure, aggregate permit plus other related cost not completed.
- An approximate two (2) kilometer access road off existing access road to limestone at Irving Lake will need to be completed and Environment Assessment requirements by MOE still outstanding.
- Access routes might require permission from mining claims owner.

Historical Work

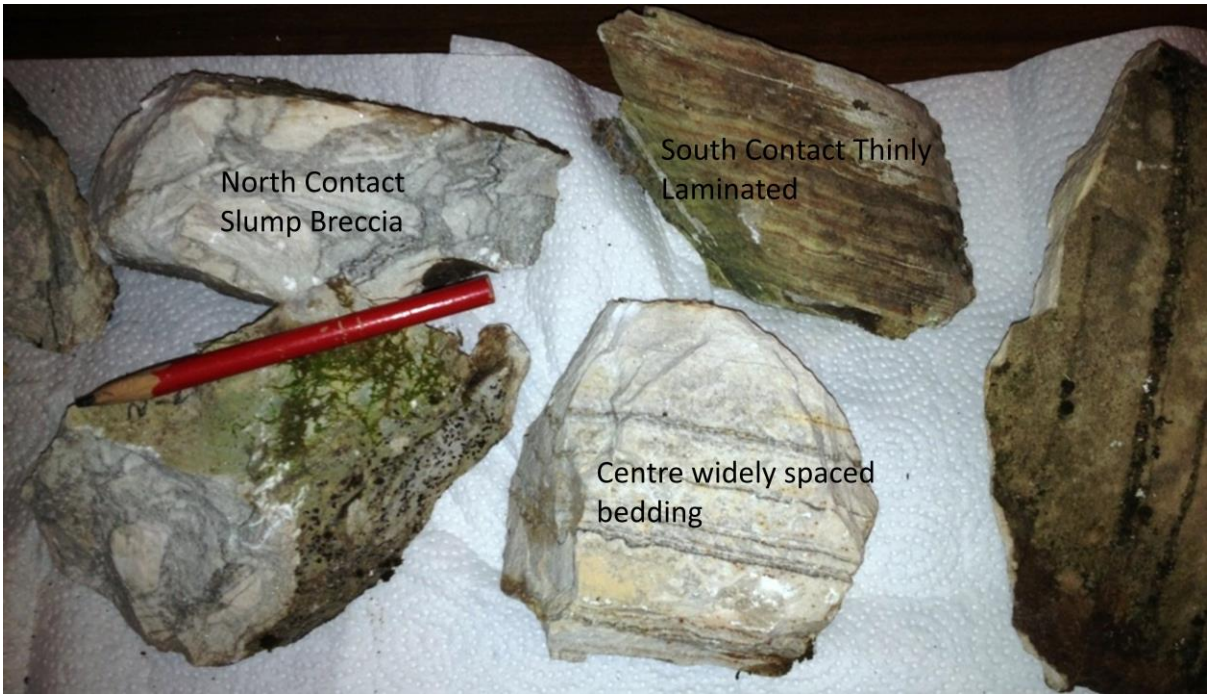
There are no historical exploration assessment reports on record at the Sudbury Resident Geologist Office specifically pertaining within this part of the Lorraine limestone and/or dolostone formation.

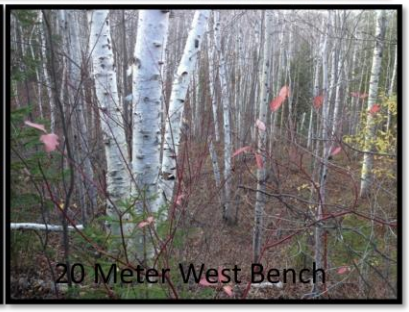
2013 Exploration Work

J. M. Gaudreau has completed some exploration work on the west outcrop exposure confirming to within 3 meters the north and south contacts. Minor stripping on the Property was completed by J. M. Gaudreau and two (2) assistants during the fall of 2013. Samples were taken during the site visit in late April 2013 and submitted for geochemical analysis.

Photos while on site visits, float immediately down ice direction of stripped area and two helpers taken during the fall of 2013. Minor stripping and mapping of jointing was completed as well as an east west traverse to locate outcrop and map contacts.

The sample set below shows the cross section from the north contact to the south contact.





The photos above show the consistent vertical bedding, the south contact, the areas of light stripping, the well fused competency of the limestone and the 20m bench looking west. It was extremely difficult to remove the humus layer from the limestone. The organic materials roots latched itself into the limestone and for the most part broke off when attempted to strip. For better results a power stripper will be necessary to cleanly expose the limestone for mapping additional sampling and checking the jointing.

Dimensions

Dimensions estimated using Ontario Geologic Survey Preliminary Map P400 and Ontario Base Map 1:20,000 contour interval.

- EW strike length - 900 meters
- Maximum width - 90 meters, west side
- Minimum width - 40 meters, east side
- Average width - 50 meters
- Contour bench height - 20 meters to Irving Lake level
- Tonnage estimate - to be determined

Analyses

Selected samples were submitted to the Ontario GeoLabs in Sudbury by D. Farrow for analysis. Samples of Lorrain Quartzite and Cobalt Conglomerate were also submitted to test for precious metals. No significant precious metals of gold or silver were returned from the assay.

Client: Farrow
Geo Labs JOB#: 12-0588
Date: 4/12/2013
Method Code: GFA-PBG

Client ID	Ag	Au
Units	oz/ton	oz/ton
Detection Limit	0.1	0.01
Sample #1	<0.1	<0.01
Sample #2	<0.1	<0.01

Client: Farrow
Geo Labs JOB#: 12-0588
Date: 4/4/2013
Method Code: SGT-R01

Client ID	SG	SG DWT	SG WWT
Units		g	g
Detection Limit			
Dolostone	2.69	1541.5	969.5

CERTIFICATE OF QUALITY CONTROL

GEO LABS
GEOSCIENCE LABORATORIES

Date: 4/12/2013
Geoscience Laboratories
933 Ramsey Lake Road, Bldg A4
Sudbury, ON P3E 6B5
Phone: (705) 670-5637
Toll Free: 1-866-436-5227
Fax: (705) 670-3047

Client: Farrow
Project #: RGO

Geoscience Laboratories Ref # : 12-0588
Method : GFA-PBG

Lab ID	Client ID	QC Name	Analyte	Units	Measured Value	Certified Value	Long Term Average
DUP-13-22720	Sample #1	DUP	Ag	oz/ton	0.0		
DUP-13-22720	Sample #1	DUP	Au	oz/ton	0.00		
IHST-13-11912		PJV-2	Ag	oz/ton	0.0		
IHST-13-11912		PJV-2	Au	oz/ton	0.27		
IHST-13-11913		PJV-2	Ag	oz/ton	0.0		
IHST-13-11913		PJV-2	Au	oz/ton	0.26		
INTL-13-16363		PM-928	Ag	oz/ton	1.3		
INTL-13-16363		PM-928	Au	oz/ton	0.11		

CLIENT:	Farrow	Al_2O_3	CaO	Fe_2O_3	K_2O	MgO	MnO	Na_2O	P_2O_5	SiO_2	TiO_2	LOI	Sum Of Conc.
DATE:	4/15/2013	Al	Ca	Fe	K	Mg	Mn	Na	P	Si	Ti	--	--
Method:	XRF-M01 Preliminary	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
12-0588-0001	Doloston e	3.17	43.529	1.21	0.52	1.29	0.035	1.20	0.036	13.35	0.12	35.69	100.15
12-0588-0001 DP	Doloston e	3.17	43.651	1.21	0.51	1.30	0.035	1.20	0.035	13.39	0.12	35.70	100.32
12-0588-0000 ODL-1 41.20	Inhouse Referenc e Material	2.19	25.989	2.66	0.76	17.27	0.176	0.03	0.036	8.68	0.10	41.20	99.09
12-0588-0000 BHVO-2 -0.50	Internatio nal Referenc e Material	13.70	11.488	12.45	0.51	7.38	0.169	2.21	0.275	50.16	2.71	-0.50	100.55

Specific Gravity 2.69

2016 Exploration Work

In July of 2016 J.M. Gaudreau and assistant undertook a north reconnaissance mission to confirm access into the claim from the northern route via logging roads north of Mowat Lake. If 200+ lb. samples could be recovered, Khuri Granite agreed to test for industrial and/or commercial applications. With this in mind the Old Portelance Road NE of Capreol was identified… that if this road network came close enough to Mowat Lake then test material could be extracted by water. This route was also chosen because of the recent forestry activity and the haul roads are clearly visible in Google Earth. The network of forest roads heading west became increasingly grown in and ended north of Mowat Lake at least 300m from the north shoreline. In Hindsight, it would have been a much better decision to have taken an ATV as well as a boat. upon existing, a road along the transmission line was tested for about a kilometer but the road was extremely poor and almost unpassable by 4x4. Since a boat was being trailered the decision to exit at the abandoned marble quarry route was abandoned and the conclusion is that access via the north is not an option. Access northward beyond the inactive marble quarry road that transects the hydro line road is by ATV only. In the future either an alternate route needs to be prepared northward off the marble quarry road or testing material will have to be skidded out >120m to Irving Lake south shore, floated to the ATV landing at the east side of Irving Lake, at the landing where the existing ATV trail from the hydro line starts. Access to this location is gained by 4x4 vehicles.

Since somewhat easy access was not confirmed, testing material in the form of small blocks was not removed. It should be noted that in early meetings with the Wahnapitae First Nation (WFN) resulted in a warning not to remove any material without a representative of the WFN on site while sampling. Due to this impasse, a decision was made to only continue field mapping of the marble unit to verify the Ontario Geological Survey (OGS) historical mapping is accurate so that an estimate to tonnage could be calculated. From the results of the ongoing mapping its determined that the OGS mapping is confidently accurate within the claim area and therefore can be more confidently relied upon for inferred potential between field mapping and potential under drift cover. Also note that a representative of the WFN agreed to work jointly to further test the marble potential but unfortunately, and most recently the email and phone communication has failed.

Prospecting will remain ongoing in an effort to confirm the marketability of this marble unit. To date the marble is found to contain “somewhat” consistent metallurgy which is probably due to the origin of the marble being isolated between Bruce Formation Conglomerate. This conglomerate has preserved the limestone for approximately 2400 to 2200 Ma.

On September 2, 2016 J.M. Gaudreau and field assistant attempted access via Mowat Creek. The field crew drove from Hanmer to Capreol, north to the access road leading to the past producing marble quarry.

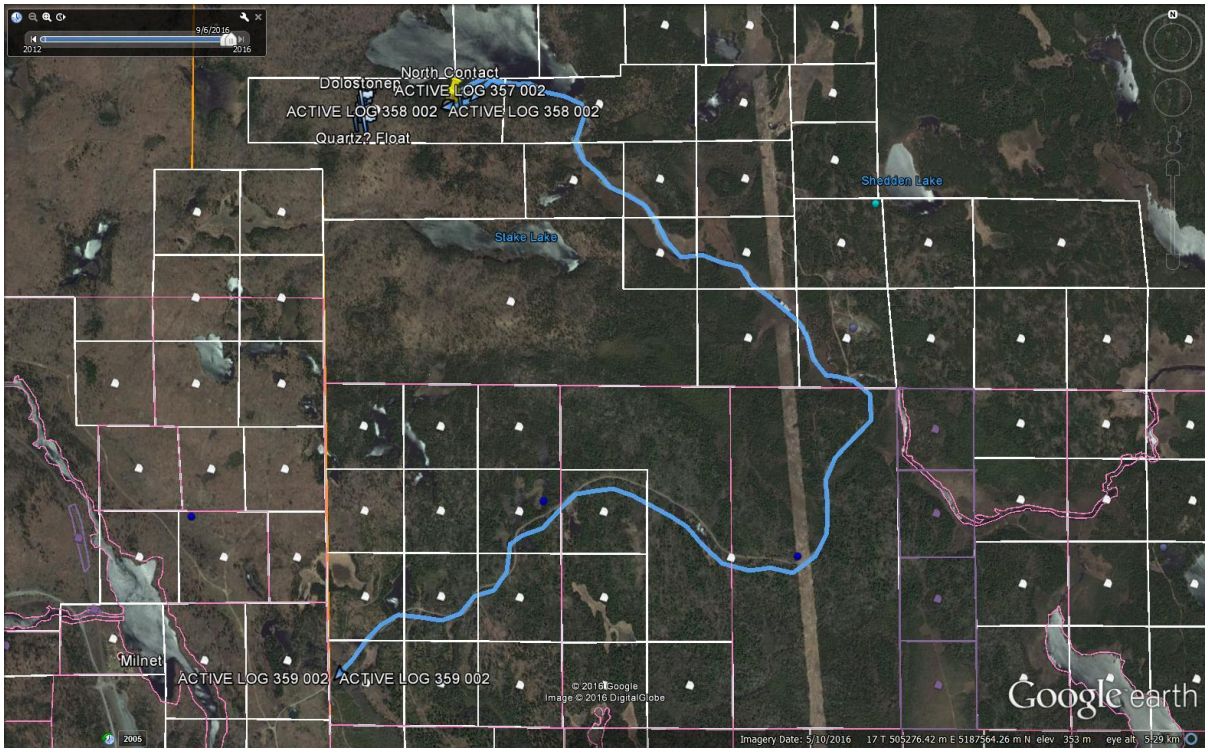
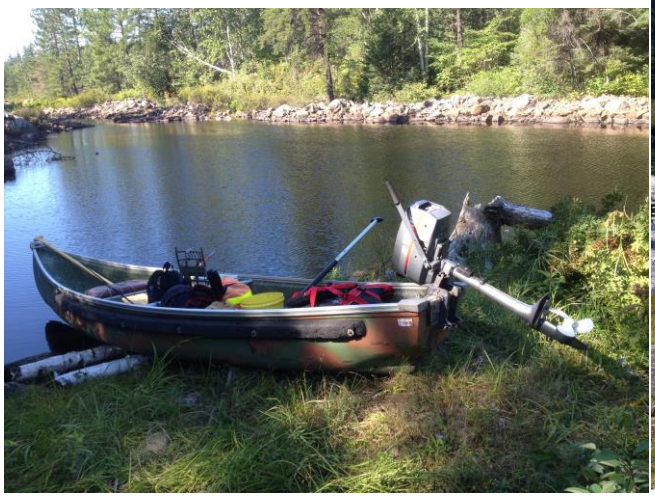
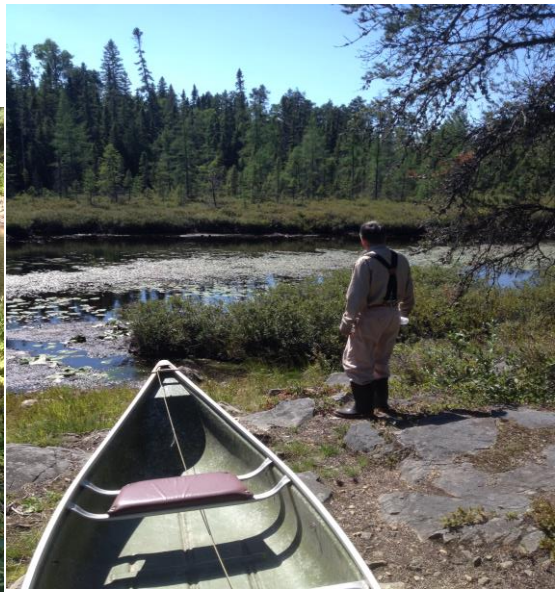


Figure 5. GPS track September 2, 2016

A canoe and field gear was offloaded into Mowat Creek and paddled to the portage where Mowat Creek outflows Irving Lake. Considerable time was spent working the canoe up the creek. All beaver houses and dams were inactive. The water lever was down by at least a meter from last visit. This was very unexpected. The creek can no longer be relied upon for

the removal of small test blocks if the beaver dams are not sustained. There were a number of places where the canoe had to be lifted over dams and rocks. The marble outcrop on the west shore of the creek a short distance downstream from the portage was examined from the canoe while passing by. The low water level allowed for a new look at the rock face which was surprisingly still very uniform bedding but it was noted that the unit could not realistically be part of a larger extraction due to the low elevation. The best area for a viable bulk tonnage extraction operation of much less metamorphosed rock would be farther to the west within the claim area.





After portaging into Irving Lake the field team used a 2hp motor on the back of the square stern canoe to motor up the lake to the number one post of claim 4271834. The No.1 post was not located in the field at the location taken from claim maps. Older post was found and it was determined that the post must be close by. No further attempt was done to locate the post. From this location the team traversed south on foot up hill in a NW direction to the top of the mountain prospecting all the time to locate the north contact of the marble unit. Most of the outcropping was of Bruce Conglomerate or better described as thinly laminated dark grey to black silt stone argillite shown below at UTM NAD83, Zone17 504657E, 5188876N.

After reaching the top of the mountain the traverse continued west in a wide “sweep” to cross as much outcrop as possible. Eventually the marble unit was identified in outcrop and followed a short distance to the south and west at ravine with a 20 - 30 meter face. From this location the south contact was easily identifiable. The thin laminated and dark siliceous argillite was easily distinguishable from the much whiter coloured marble. The contact was GPS marked at UTM NAD83, Zone17 504521E, 5188815N. A ribbon of flagging tape was tied off to show the contact.

From this point northward the face of the steep slope was intermittently stripped where most convenient and a small group of representative samples were taken as shown in the following pictures.

The location of the stripped areas is shown in the pictures of the GPS unit. All the coordinates are in NAD83, UTM Zone 17.

As shown in the pictures above the thickness of the pure calcite beds is 1 - 5 centimeters and the bedding is nearly vertical. There were no veins observed on the 2016 site visit over the 45 meters of intermittent stripping. The fracturing appears random, mainly along bedding except near surface where weathering has played a role. Otherwise the marble appears competent and massive. Achieving a clean surface without water is difficult. Only very minor pyrite crystals were observed in one sample and these were small, on cleavage and identified by randomly distributed small rusty blebs.







GPSmap 76CSx
GARMIN


GPSmap 76CSx
GARMIN

All field samples taken in 2016, at this time, are for reference purposes only. The 2016 field work was focused on confirming access to remove test material and to further map the surface dimensions of the limestone unit.

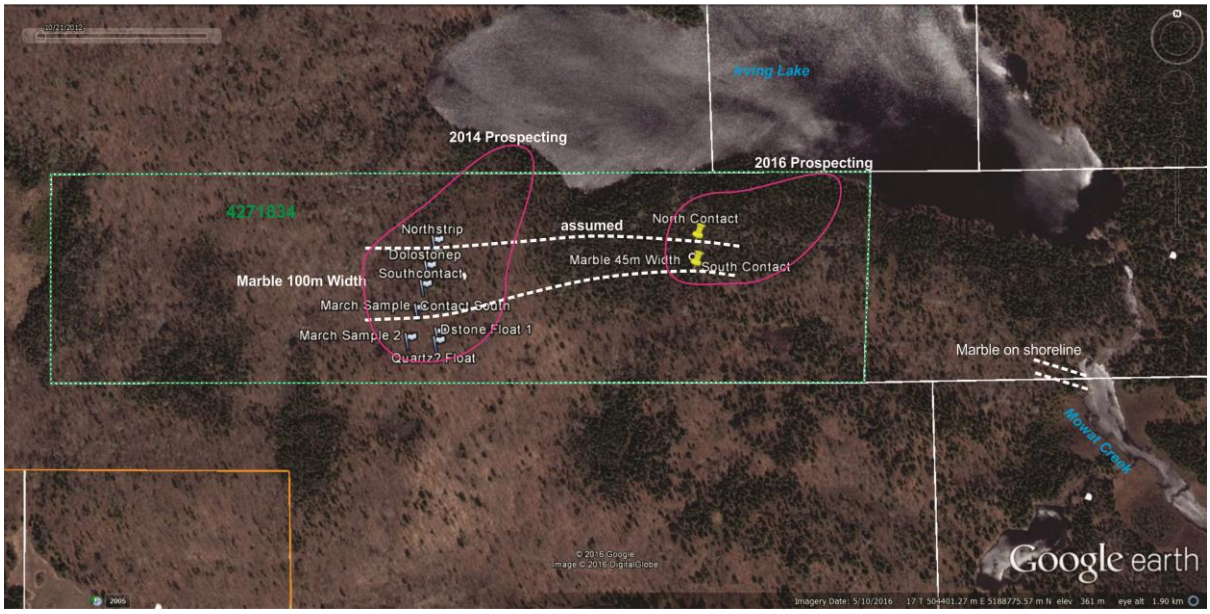


Figure 6. Confirmation of north and south contacts

Conclusions

The geochemistry data for your analyzed Espanola Fm sample suggests it would be good for basic aggregate purposes and for concrete stone or clinker material. It has a high specific gravity - most likely due to fact that it has undergone various degrees of regional

metamorphism associated with various orogenies following deposition of the Huronian Supergroup strata and leading up to present-day plate tectonic configuration.

Typical cement clinker chemistry in Ontario

CaO - 44.4%, SiO2 - 14.3%, Al2O3 - 3.0%, Fe2O3 - 1.1%
LOI (loss of ignition) - 35.9%
Source: p.82 - J.A.H. Oates, 1998. Lime and Limestone - chemistry and technology, production and uses; John Wiley & Sons, 455p.

Considering that the analytical results has determined that the limestone formation is most likely metamorphosed to marble and that the field visits have identified two (2) benches with a slope and elevation 20 meters and greater. That the tested at the Parkin Marble Property meets several industrial applications as well as smelter feed stock which includes: dimension stone for building and construction, road construction aggregate, ornamental tiles, counter tops, landscaping, pavers, heavy industry - slag additive, clinker feed for lime production, acidity neutralizing at mine site reclamation projects and rail ballast, as an agricultural lime and as a filler in many manufactured goods.

Additional work will include east-west traverses along the north and south contacts to further confirm their locations. That agreement with the WFN to remove some material for testing. That an alternate access route from the south west be field tested.

Cost Summary

J. M. Gaudreau, agent for the claim holder is submitting this report for consideration to qualify for the work requirement, due on October 13, 2016. The following costs are occurred during a site visits in July, 2016 and September 2, 2016. The Property visit cost in July, 2016 includes J. M. Gaudreau and one (1) assistant, boat & motor, truck and fuel for one (1) day.

The Property visit cost on September 2, 2016 includes J. M. Gaudreau and one (1) assistant, canoe with 2hp motor, truck, miscellaneous tools and consumables such as rock hammer, shovel, sample bags, flagging tape including food and fuel for one (1) day.

1.5 days' time was spent preparing this report with maps.

Cost Breakdown

One-day site visit by truck in July, 2016: Travel from Sudbury to Hanmer to Capreol and north to confirm access into the Property occurred cost of two field person, truck, fuel, boat and miscellaneous consumables including food totaling approximately **$600.00**. *This cost might not be eligible due to the lack of success in accessing the claim from the north route. No prospecting was performed. The site visit confirmed that access from the north is not available therefore cannot be relied upon for extraction of test blocks*.

One-day field visit on September 2, 2016: Two (2) field team, canoe with 2hp motor, truck, miscellaneous tools and consumables such as rock hammer, shovel, sample bags, flagging tape including food and fuel total **$800.00**.

Cost to prepare assessment report for filing and submission to the Provincial Recording Office **$500.00**.

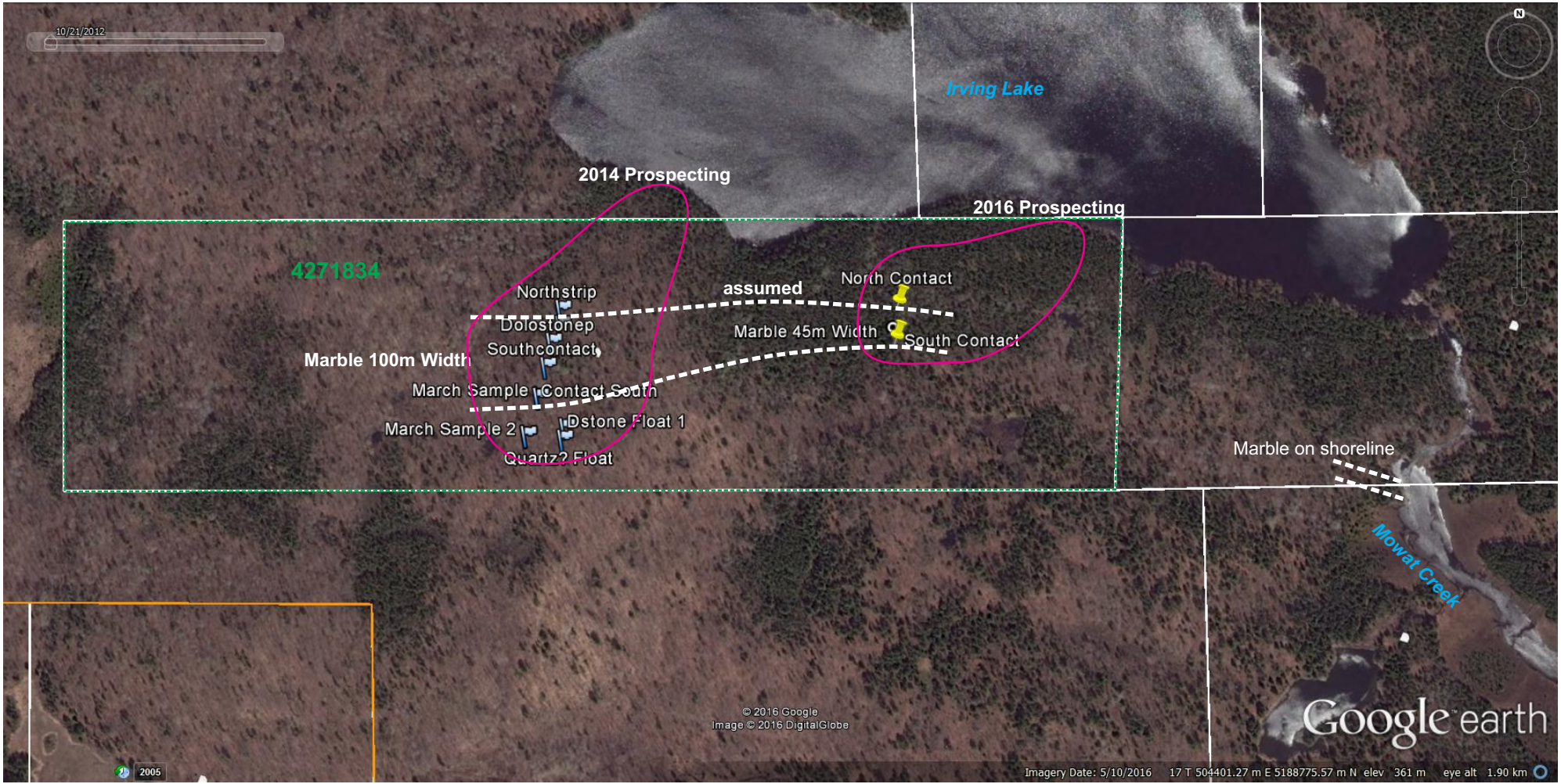
Total sum of submission **$1,900.00**
Reserve credit **$600.00**

Total applicable **$2,500.00** - Total amount due **$1,200.00**

New reserve total **$1,300** - additional one (1) year applied **($1,200.00**)

Final reserve credit **$100.00**

For inquiries of cost verification contact: J. M. Gaudreau


10/21/2012
Irving Lake
2014 Prospecting
2016 Prospecting
4271834
Northstrip
assumed
North Contact
Dolostonep
Marble 45m Width
South Contact
Southcontact
Marble 100m Width
March Sample 1
Contact South
Dstone Float 1
March Sample 2
Quartz? Float
Marble on shoreline
Mowat Creek
© 2016 Google
Image © 2016 DigitalGlobe
2005
Google earth
Imagery Date: 5/10/2016 17 T 504401.27 m E 5188775.57 m N elev 361 m eye alt 1.90 km