



## **Ministry of Energy and Mines**

BC Geological Survey

TYPE OF REPORT [type of survey(s)]: Sampling **TOTAL COST**: \$7090

AUTHOR(S): H. Sigurgeirson		SIGNATURE(S):	
NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): Q-8-25			YEAR OF WORK: 2018
STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(	<b>(s)</b> : <u>5699</u>	774	
PROPERTY NAME: Leo D'Or			
CLAIM NAME(S) (on which the work was done): 229934			
COMMODITIES SOUGHT: Marble - Dimension Stone			
MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 092L 339,  MINING DIVISION: Nanaimo		NTS/BCGS: 09L/07W	
LATITUDE: 50 ° 24 ' LONGITUDE: 126		48 (at centre o	f work)
OWNER(S):  1) White Rose Holdings Ltd. (80%)	2) <u>E</u>	sahram Yeganegi (20%)	
MAILING ADDRESS: 607 - 711 Broughton Street, Vancouver, BC V6G 1Z8		03-3131 Deer Ridge Drive, Wo	est Vancouver, BC
OPERATOR(S) [who paid for the work]:  1) White Rose Holdings Ltd. (80%)	2)		
MAILING ADDRESS: 607 - 711 Broughton Street, Vancouver, BC V6G 1Z8			
PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structu Marble, Granodiorite, Basalt, Triassic, Jurassic, Quatsino For			
Dimension Stone, Quarry			

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping			
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic		_	
Electromagnetic		_	
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed for)			
Soil		_	
Silt		_	
Rock			
Other			
DRILLING (total metres; number of holes, size)			
Core		_	
Non-core			
RELATED TECHNICAL			
Sampling/assaying \$7090			\$7090
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/t			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	\$7090
Sampling Assessment Re	eport on the Leo D'Or Property (20°		ψ, σσσ

BC Geological Survey Assessment Report 37608

Sampling Assessment Report on the Leo D'Or Property

Bonanza Lake, Vancouver Island, British Columbia Nanaimo Mining Division

Map Sheet 92L/07W

UTM 656700E, 5585000N (Zone 9)

Claim 229934

Prepared for: White Rose Holdings Ltd.

Prepared by: Helgi Sigurgeirson, P.Geo. June 30, 2018

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#### Introduction

#### Location, Access and Physiography

The Leo D'Or Property is adjacent to the northwest shore of Bonanza Lake, about 30 km southeast of Port McNeill on northern Vancouver Island (Figure 1).

The property is accessed by taking the Beaver Cove Road from Highway 19 to Beaver Cove, then by the Main Road South along the Kokish River (Figure 1). The lower west side of the property is reached by going past Ida Lake up the Bonanza River to Bonanza Lake. The upper east side of the property can be reached by logging roads from the East Road further along the Kokish River.

The property slopes steeply up from 270 m along the shore of Bonanza Lake on the west side of the property to 900 m at the western edge of the property. The northeast corner of the property features relatively gentle topography. Large clear cuts above about 500 m elevation and a hydro line paralleling the road along Bonanza Lake break up the forest cover.

### **Property Definition**

The Leo D'Or is a legacy claim (#229934) that was staked in 1985 (Figure 2). It covers 225 hectares, and is owned by White Rose Holdings Ltd. (80%) and Bahram Yeganegi (20%). A Statement of Work (5699774) was filed for the work described in this report on June 8,2018, and the claim is good to March 10, 2020. Two Ministry of Energy and Mines permits have been issued on the property. Permit MX-8-69, dated May 30, 1991 was issued for exploration drilling and trenching. Permit Q-8-25, also dated May 30, 1991, was issued for the extraction of 3000 m3 of marble.

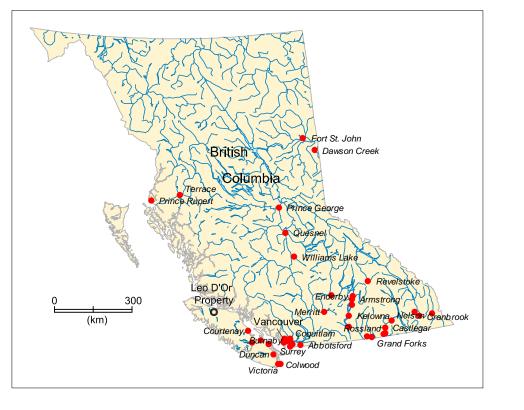
#### Previous Work

The prospective marble was located and the claims staked by Massoud Shariatmadari in 1985. Limited geological mapping (Game, 1986) and prospecting (Devlin & Rychter, 1987) were done in the following years. Klohn Leonoff Ltd. carried out detailed mapping and petrographic sampling in the northwest part of the property (in the area of the test quarrying mentioned below) in 1988. Leo D'Or Mining Inc. entered into a option/joint venture agreement with Harvard Capital Corporation to continue evaluating the property. They drilled 8 diamond drill holes in the Onyx Hill area of the property (Carter, 1992). Two more diamond drill holes were drilled in the quarry area in 1992 -1993. A geological mapping program was conducted in 1993 (Carter, 1993). The test quarrying was also done in 1993. In 1994, a mapping program conducted for Industrial Fillers Ltd. extended onto the property from the Bonanza claims to the north (Brown, 1994). A private valuation report was done on the property in 2010 (Beresford, 2010). Detailed mapping of the quarry site, as well as reconnaissance mapping elsewhere on the property was done by H. Sigurgeirson in April of 2018.

The Leo D'Or developed prospect, Minfile No. 092L 339, is the only Minfile on the property (MapPlace 2015).

#### Work Program Summary

Two blocks of stone were trucked from the quarry site to the BC Marble facility in Chemainus for processing into samples for test marketing in early May, 2018. The samples were examined by H. Sigurgeirson on June 28, 2018.



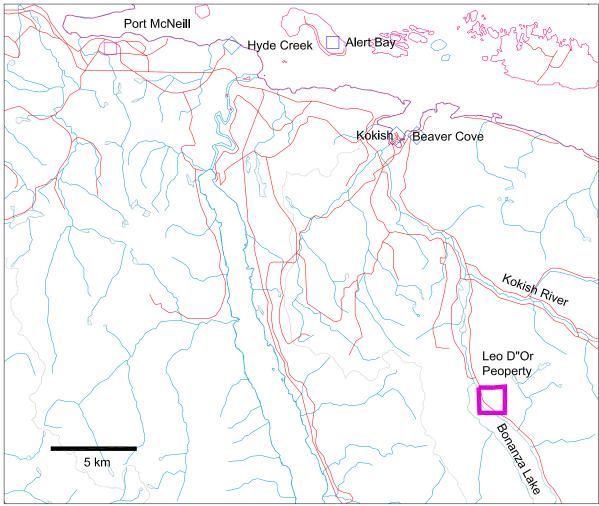


Figure 1: Location Maps

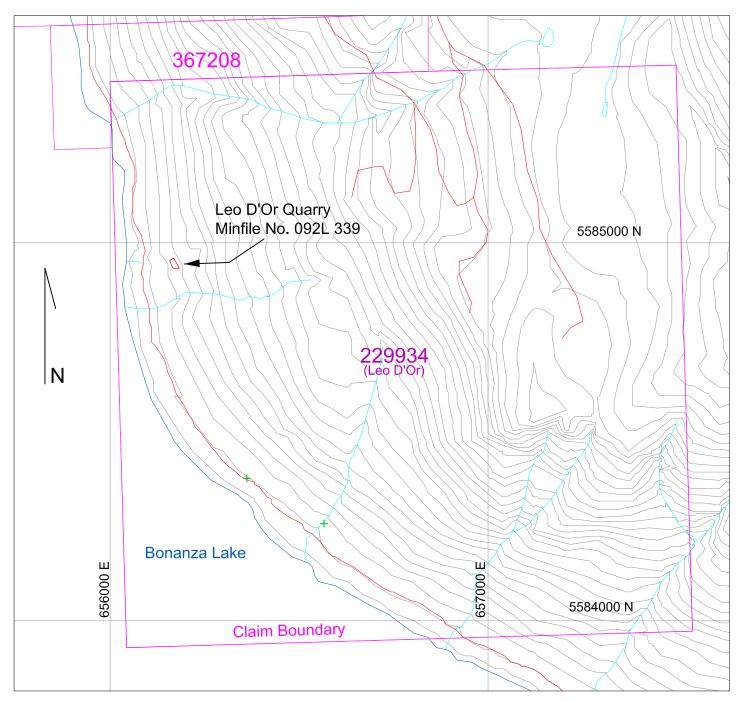


Figure 2: Claim Map (Base Map from MapPlace, 2015)

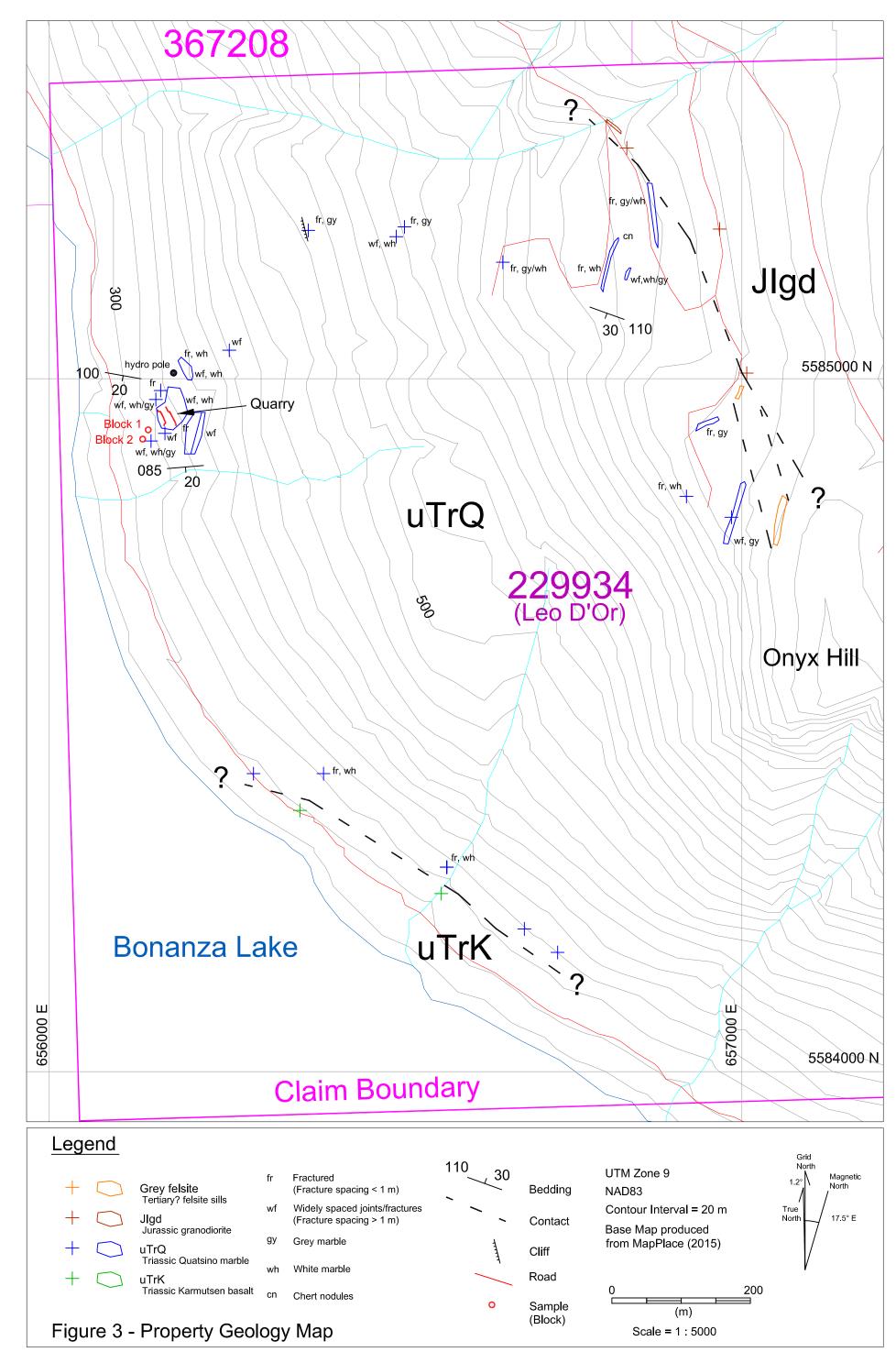
Scale = 1:10 000

## Regional Geology

The area is mainly underlain by folded and faulted rocks of the Triassic Bonanza and Vancouver Groups, which have been intruded by the early to middle Jurassic Island Plutonic suite and rare Tertiary dikes (Nixon et al, 2005). The older and more widespread Vancouver Group is dominated by basalts of the Karmutsen Formation, with lesser limestones of the Quatsino Formation, while the Bonanza Group is dominantly limestones with lesser basalts. Structurally, the area is dominated by steeply dipping north to northwesterly trending faults, and a large north to northwesterly trending synclinal axis. Regional alteration is low grade, generally prehnite-pumpellyite to zeolite facies.

## **Property Geology**

Grey and white, variably fractured, Quatsino Formation marble dominates the Property (Figure 4). Grey granodiorite of the Island Plutonic suite covers high ground in the northeast corner of the property, while dark greenish grey basalts of the Karmutsen Formation underlie the southwest edge of the property along Bonanza Lake. The marble usually occurs in thick beds with a gentle south dip. While most outcrops examined were moderately fractured, with a fracture spacing of around 50 cm, some areas featured widely spaced regular jointing on a scale of several meters or more. The marble is commonly medium grained and varies from white to dark grey. The property geology is shown on Figure 3 (Sigurgeirson, 2015).



The quarry covers approximately 20 m by 30 m and consists of 5 approximately 2 m benches. The marble that was quarried is medium grained and white, with grey stylolitic banding (Figure 4). Two near vertical, nearly orthogonal, joint sets occur in the quarry area. The south striking joint set is commonly spaced 1.5 to 2 m apart, while the west striking set is spaced up to 8 m apart. The joint spacing is such that it should be possible to extract large blocks (with dimensions of 1.3 to 2.5 m) in the area quarried. Figure 5 shows the joint spacing and orientation within the quarry itself (Sigurgeirson, 2015).



Figure 4: Grey stylolitic banding in sawn quarry face.

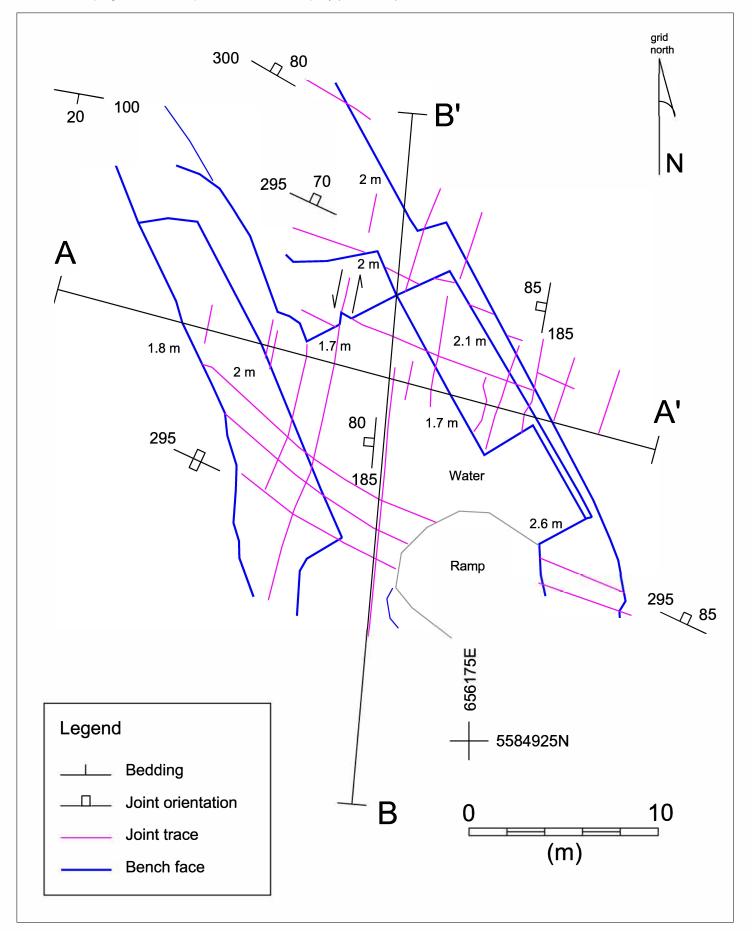


Figure 5: Quarry Plan

Scale = 1:200

## Sampling

Two blocks of stone were trucked from the quarry site to be processed into samples for test marketing by BC Marble Products in Chemainus, BC in early May, 2018. The blocks were somewhat irregular pieces of white marble that had been stockpiled beside the access road to the quarry at the location shown on Figure 3.

Block 1 was 1.4 m x 2.2 m x 0.9? m with an estimated weight of approximately 7.5 tonnes, assuming a S.G. Of 2.7 (as the block was already sawn at the time of the authors visit, the width of the block is approximate). Figure 6 shows remaining part of the block. Eighteen 1" slabs were cut from the block. Some of these are shown in Figure 7. The texture of the block is very similar to that in the quarry face shown in Figure 3.



Figure 6: Unsawn part of Block 1.



Figure 7: 1" slabs sawn from Block 1.

Block 2 was not sawn at the time of the authors visit. It's dimensions were  $1.5 \text{ m} \times 1.6 \text{ m} \times 0.6 \text{ m}$  (Figure 8) and it's weight is approximately 3.8 tonnes. Though it appears to be of the same white marble as block 1, the outer surface of the block is somewhat abraded, stained and faded, making it difficult to assess it's colour and texture with certainty. An irregular fracture can be seen on the front of the block.



Figure 8: Block 2.

## Sampling Results

The slabs cut from block 1 were solid and the stone polished well (Figure 9). Some of this material was installed as kitchen countertops (Figure 10). The results indicate the stone is well suited to this type of use.



Figure 9: Polished slab.

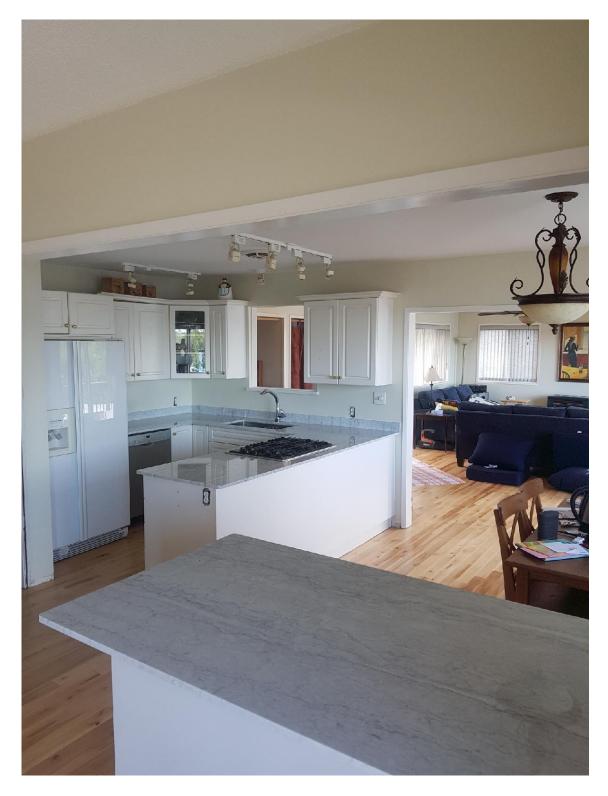


Figure 10: Slabs installed as countertops.

#### **Conclusions and Recommendations**

The quality of product obtained from blocks that were likely rejected as waste is encouraging. The rock is an attractive white marble that polishes well. Further processing and sales should provide insight into the sales volume and pricing, at least for the local market. If warranted, it should be possible to extract a hundred tonnes of large blocks from the existing quarry benches at relatively low cost for further test marketing. At the same time, at least 10 m on either side of the quarry should be stripped, cleaned and examined to assess the fracture density and orientation around the quarry to aid short term quarry planning. Detailed mapping should be done in the general area of the quarry (ie. About 100 m) to aid in developing a longer term quarry plan.

#### References

Beresford, E.W. (2010) Leo D'Or Marble Property – Assessment and Valuation of the Marble Resource. Private Report for White Rose Holdings Ltd.

Brown, H. (1994) Geological Investigation of the Bonanza Claims Group. Assessment Report 23487.

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Carter, N.C. And Reynolds, P. (1993) Report on a Geological Mapping Program on the Leo D'Or Mineral Claim. Private report for Leo D'Or Mining Inc.

Devlin, J. And Rychter, A. (1987) A Prospecting Report on the Leo D'Or Mineral Claims. Assessment Report 16111.

Game, B.D. (1986) Report on Assessment Work (Geological) on the Leo D'Or Property (9 units). Assessment Report 14937.

MapPlace (2015) BC Map UTM Zone 9 showing part of Map Sheet 092L. BC Geological Survey < <a href="http://webmap.em.gov.bc.ca/mapplace/minpot/BC\_UTM.cfm?zone=9">http://webmap.em.gov.bc.ca/mapplace/minpot/BC\_UTM.cfm?zone=9</a>> (accessed April 20, 2015).

Nixon, G.T., Kelman, M.C., Larocque, J.P., Stevenson, D.B., Stokes, L.A., Pals, A. Styan, J., Johnston, K.A., Friedman, R.M., Mortensen, J.K., Orchard, M.J. and McRoberts, C.A. (2011) Geology, Geochronology, Lithogeochemistry and Metamorphism of the Nimpkish-Telegraph Cove Area, Northern Vancouver Island (NTS 092L/07 and part of 092L/10) 1:50 000 Scale. BCMEM Geoscience Map 2011-05.

Sigurgeirson, H. (2015) Geological Assessment Report on the Leo D'Or Property. Assessment Report 35414.

## Statement of Qualifications

## I certify the following:

- 1. I graduated in 1995 from the University of British Columbia with a B.Sc. in the Geological Sciences.
- 2. I have worked in mining and mineral exploration continuously since graduation.
- 3. I have worked on VMS, porphyry, epithermal and mesothermal Au vein, anorthosite hosted Ti, nephrite and other exploration programs in Canada, Mexico and China. I have developed and operated 3 dimension stone quarries on the BC coast.
- 4. I am a professional geoscientist in the Association of Professional Engineers and Geoscientists of British Columbia, and have been a member in good standing (member #28920) since 2004.
- 5. I carried out the work program described herein and wrote this report.

H. Sigurgeirson, P.Geo

JUNE 30, 2018

Date

This document represents an electronic version of the original hard copy document, sealed, signed and dated by Helgi Sigurgeirson, P.Geo and retained on file. The content of the electronically transmitted document can be confirmed by referring to the original hard copy and filed

## **Cost Statement**

Consultant	Days	Rate/day	Time	Total
H. Sigurgeirson, P.Geo.	Fieldwork: June 28, 2018	\$500.00	1	\$500.00
	Report Preparation	\$700.00	1	\$730.00
Subtotal				\$1,230.00
Rentals				
truck		\$0.60/km	200	\$120.00
Expenses				
Fuel		\$75.00	1	\$75.00
Food		\$25.00	1	\$25.00
Ferries		\$50.00	1	\$50.00
Subtotal				\$150.00
Sampling	(trucking, sawing, polishing)			\$5,590.00
Total =	\$7,090.00			