



Ministry of Energy, Mines & Petroleum Resources
Mining & Minerals Division
BC Geological Survey

Assessment Report
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Geological

TOTAL COST: ~~\$4,500.00~~ \$4,332.50

AUTHOR(S): Helgi Sigurgeirson

SIGNATURE(S):

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): n/a

YEAR OF WORK: 2015

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5553951 / May 7, 2015

PROPERTY NAME: Leo D'Or

CLAIM NAME(S) (on which the work was done): Leo D'Or (Claim #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 of work)

OWNER(S):

1) White Rose Holdings Ltd. (80%)

2) Bahram Yeganegi (20%)

MAILING ADDRESS:

607 - 711 Broughton Street, Vancouver, BC V6G 1Z8

303-3131 Deer Ridge Drive, West Vancouver, BC

V7S 4W1

OPERATOR(S) [who paid for the work]:

1) White Rose Holdings Ltd.

2)

MAILING ADDRESS:

607 - 711 Broughton Street, Vancouver, BC V6G 1Z8

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

Marble, Granodiorite, Basalt, Triassic, Jurassic, Quatsino Formation, Karmutsen Formation, Island Plutonic Suite,

Dimension Stone, Quarry

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 14937, 16111, 22218, 23487

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	19 hectares	229934	\$4,332.50 \$4500
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			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY / PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	\$4500

BC Geological Survey
Assessment Report
35414

Geological 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.Geol.
May 10, 2015

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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 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 (5553951) was filed for the work described in this report on May 7, 2015, and the claim is good to June 10, 2017. 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. 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).

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

Work Program Summary

The purpose of the 2015 mapping program was to provide detailed structural information to direct further test quarrying. In addition, mapping and prospecting on other areas of the the claim will be directed towards locating nephrite and high quality statuary marble, both of which have reportedly been found on the property.

Thirty six hours of field work were done from April 26 to 29, 2015. Work consisted of detailed geological mapping and sections at a 1:200 scale of the quarry site. Reconnaissance mapping at a 1:5000 scale was done near the quarry site, in the area of the granodiorite contact to the northeast, and along the contact with the Karmutsen volcanics to the southwest. A total of 19 ha of reconnaissance mapping and 700 m² of detailed mapping were completed.

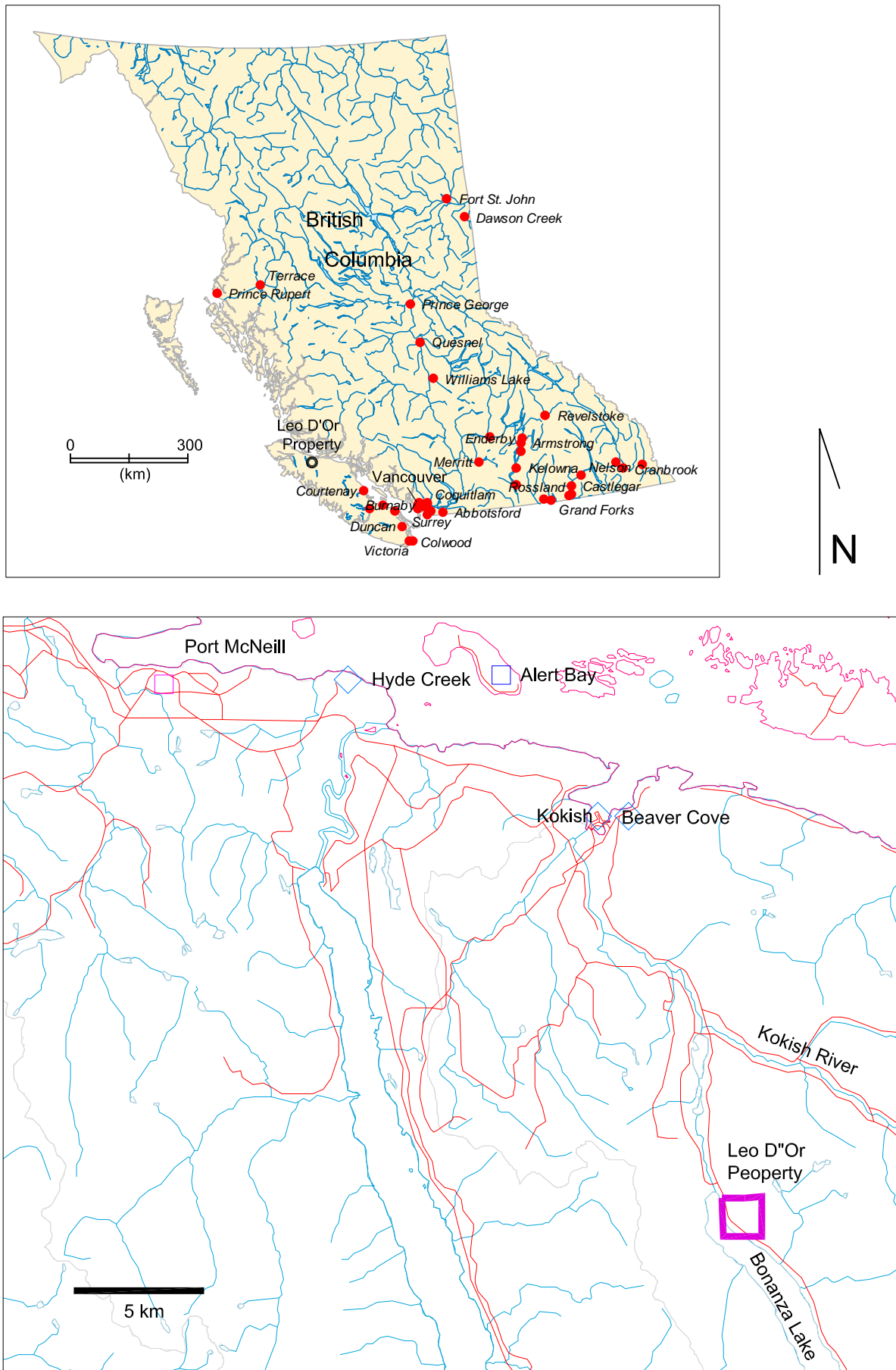


Figure 1: Location Maps

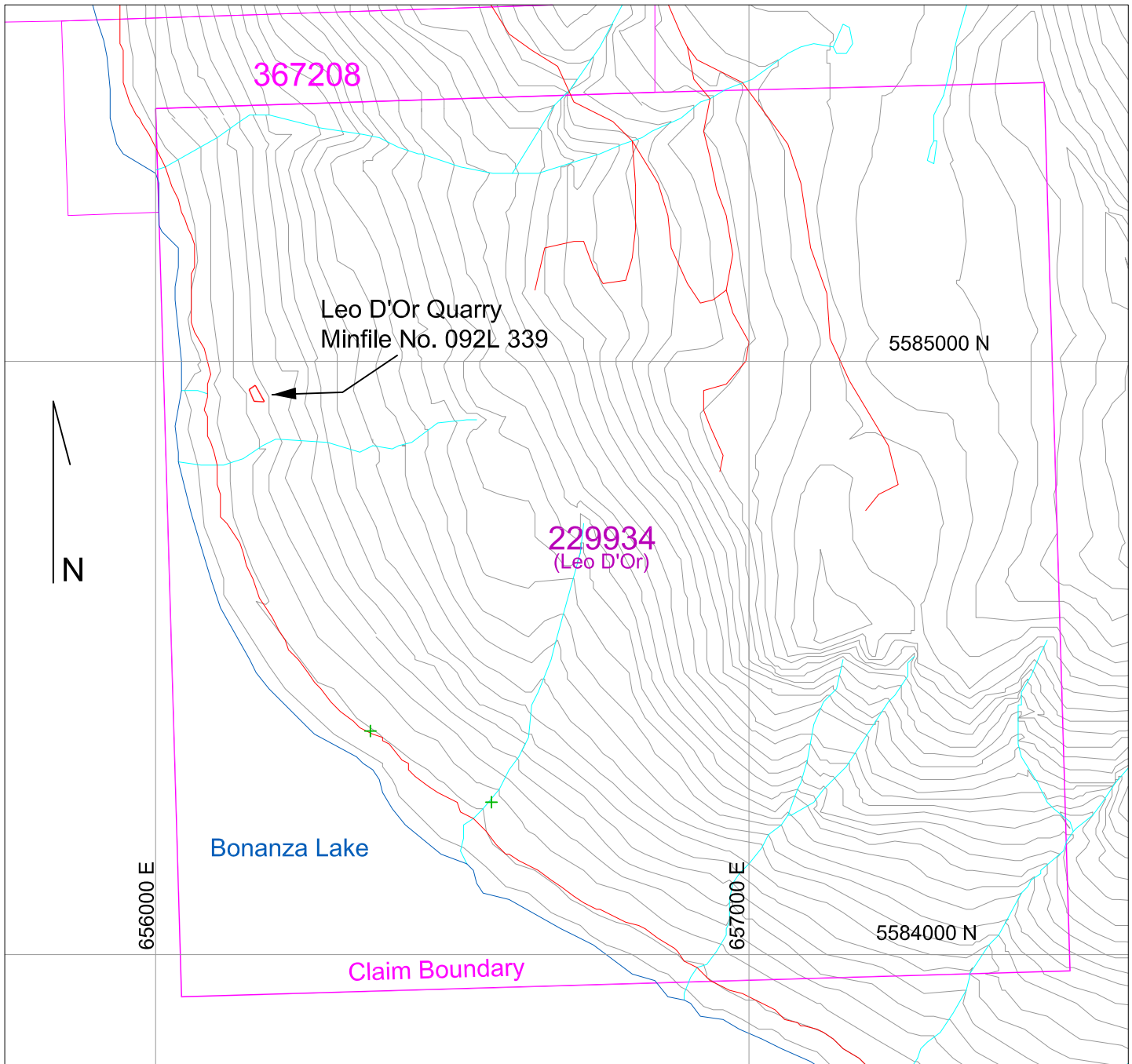


Figure 2: Claim Map (Base Map from MapPlace, 2015)

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 3). 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.

Geological Mapping

The quarry site was mapped at a scale of 1:200 with the goal of providing a detailed picture of the joint spacing and orientation (Figure 4 & 5). Two sets of vertical joints occur in the area quarried. The more closely spaced set strikes around 005° and dips around 80° to the west (Figure 6). This joint set is commonly spaced about 1.5 to 2 m apart, with up to a 3 m spacing. A second joint set strikes around 285° with dips ranging from vertical to 70° (Figure 7). This set features joint spacing of up to 8 m. No horizontal joints were noted in the area quarried, though a bed surface was noted immediately northwest of the quarry. This bedding plane has been projected onto the sections, though more mapping or drilling would be required to confirm this projection (Note that the location of the diamond drilling that was reportedly done in the vicinity of the quarry in the early 90's is unknown).

The marble that was quarried is medium grained and white, with grey stylolitic banding (Figure 8).

This colour and texture was the target of the test quarrying, as it is similar to Carrera Marble. The bed underlying the bedding plane discussed above was grey where examined.

The joint spacing is such that it would be possible to extract large blocks (with dimensions of 1.3 to 2.5 m) in the area quarried. This is consistent with the reported results of the test quarrying done in 1993 (Beresford, 2010), though no production figures are available.

The quarry cuts were made using a variety of techniques. The initial pioneering cuts were made by line drilling. Once a flat had been established horizontal wiresaw and vertical quarry chainsaw cuts were made to cut out the mother blocks. The final cuts were made by line drilling.

Reconnaissance mapping around the quarry area (Figure 3) indicates that the marble becomes more variable with respect to colour below the quarry. Fractured outcrop to the north and southeast suggest that quarrying may be limited in these directions. Rock exposed to the northeast appears relatively unfractured, though more detailed examination would be needed to confirm this. Further to the northeast, large outcrops of unfractured marble were observed, though the steepness of the ground would make access a problem. Large areas of what is likely bare, unfractured rock are visible in Google Earth (Google Earth Pro, 2015) running in a north-northeast trending band between elevations of about 350 m and 450 m, but limited attempts to reach them have been unsuccessful due to the steepness of this area. Overall, it appears that north-northwest trending zones of fractured rock separate bands of relatively unfractured rock, though this is a preliminary hypothesis.



Figure 4: Test Quarry site. Joints are painted orange.

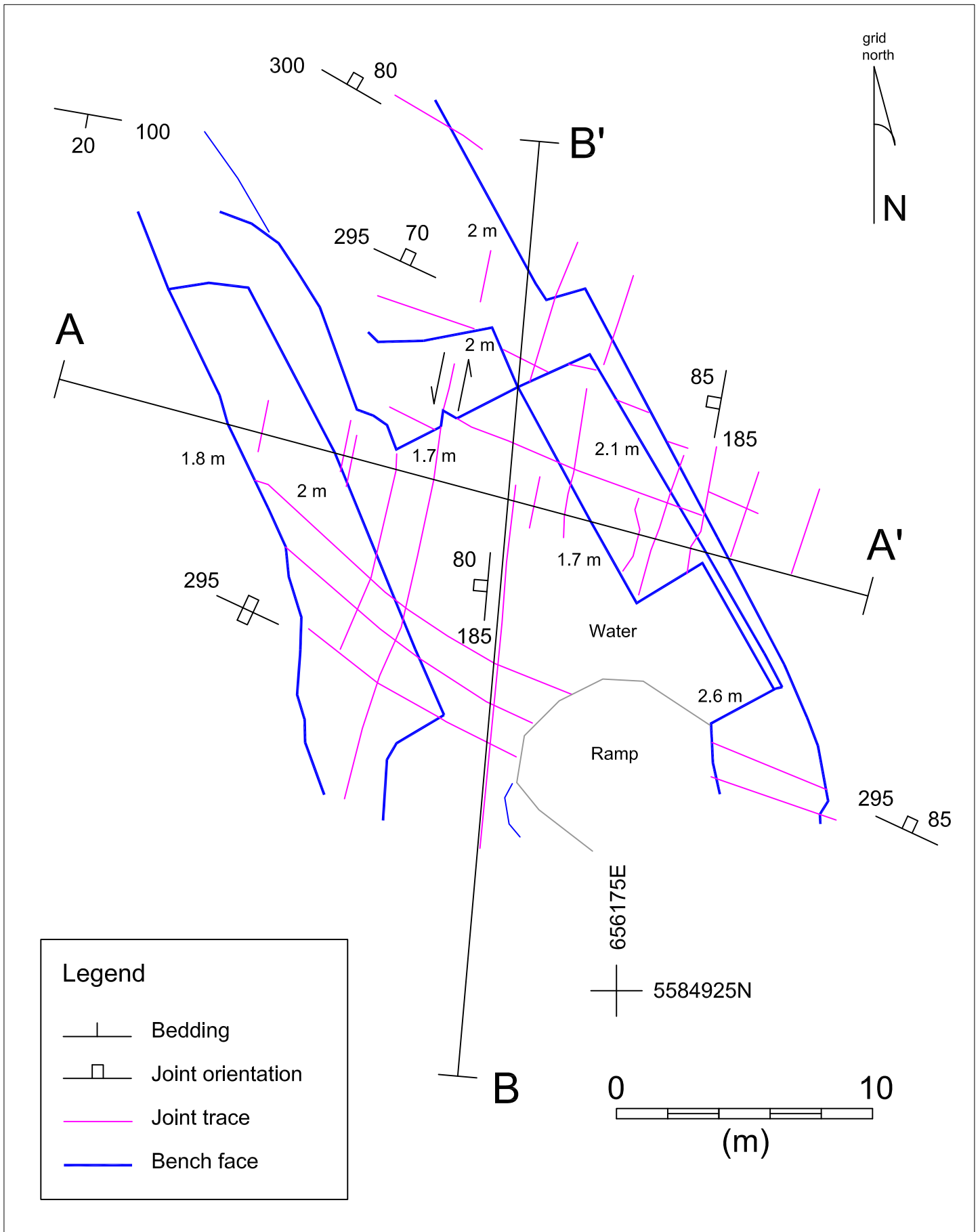


Figure 4: Quarry Plan

Scale = 1:200

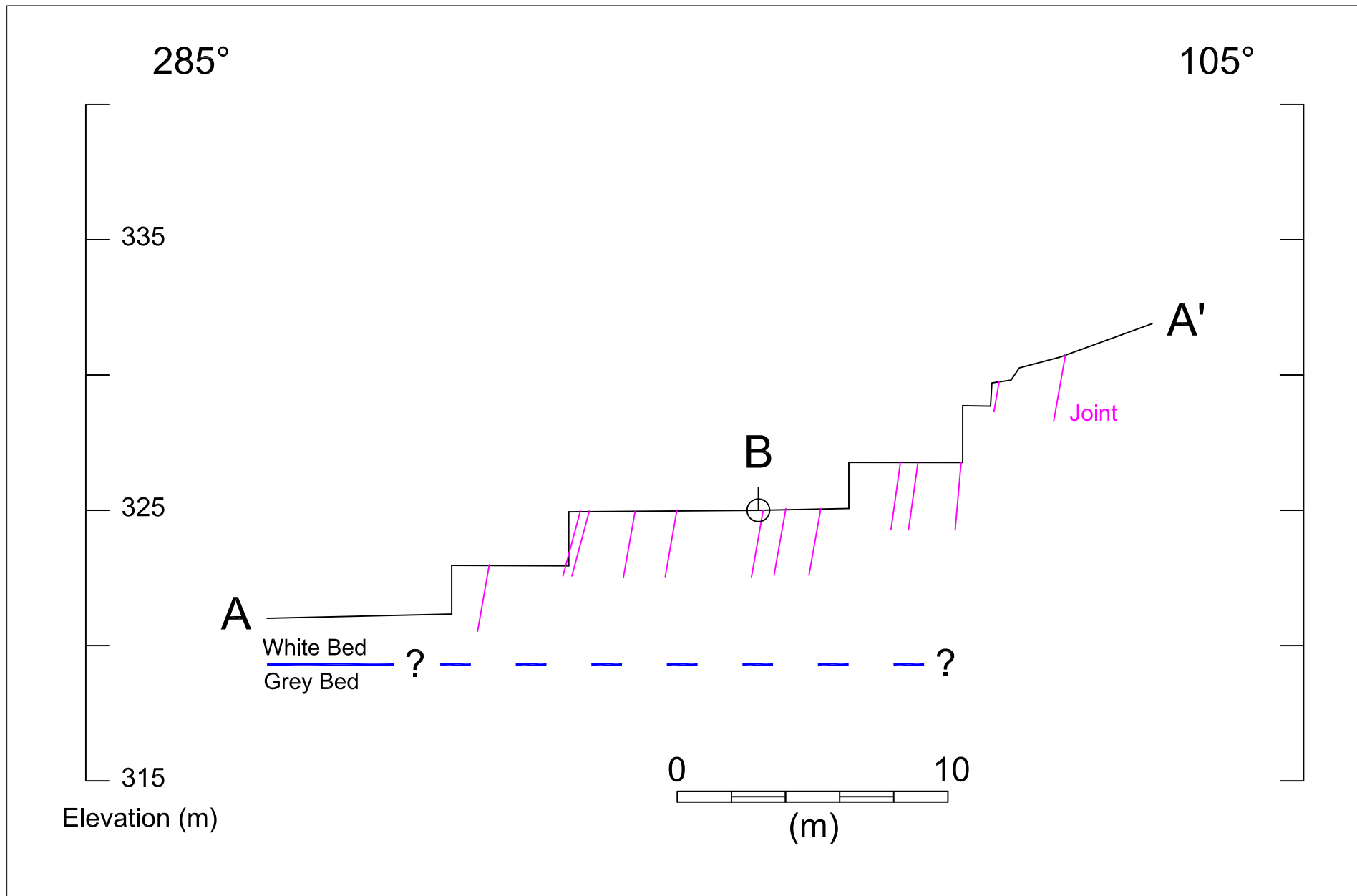


Figure 6: Section A - A'

Scale = 1:200

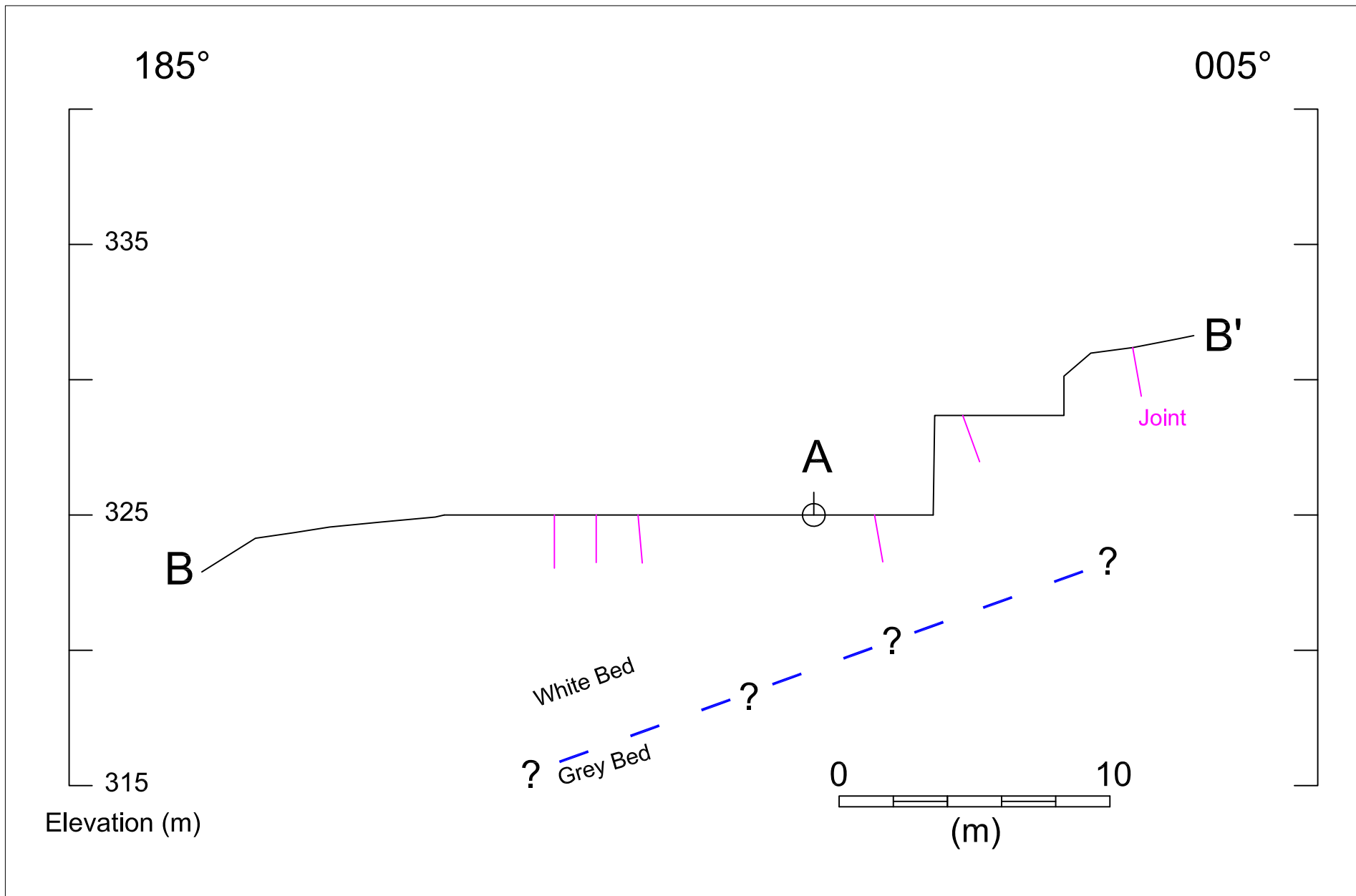


Figure 7: Section B - B'

Scale = 1:200



Figure 8: Grey stylolitic banding in sawn quarry face.

Reconnaissance mapping at higher elevations to the east of the quarry site was carried out at a 1:5000 scale with the goal of locating unfractured, fine grained, white marble. Mapping by Brown (1994) indicates a belt of white marble in this area. Drilling by Leo D'Or Mining Inc. in 1992 indicates a mix of variably fractured, grey and white marble on Onyx Hill (Carter, 1992). Mapping to the north and west of Onyx Hill during the 2015 program generally encountered moderately fractured white and grey marbles. Relatively unfractured benches of white marble were encountered at two locations, but were medium grained and off-white (Figure 9), though this may have been the result of near surface weathering. An attempt was made to access the large patches of possible unfractured marble at the 350 m to 450 m elevations from above, but the attempt ended in a cliff without reaching the target zone.



Figure 9: Unfractured bed of white marble at UTM 656830E, 5585155N.

Reconnaissance mapping was also carried out along the contact with the Karmutsen basalts in the southwest part of the claim with the goal of locating serpentinite and associated jade indicated to be in that area on a map from a private report by M. Shariatmadari (year unknown). An outcrop of sheared chloritized basalt was located near the marble contact, but there was not sufficient time to do a thorough investigation of the area.

Conclusions and Recommendations

Knobby, fractured outcrop was observed within 15 to 20 m of the quarry site to the north and to the southwest. Observations to date suggest that zones of north-northwest trending fractures separate bands of less fractured rock, and that the quarry is situated within one of these bands. Below the quarry, the colour of the marble becomes variable, with less desirable grey marble becoming common. Detailed mapping, followed by drilling and stripping, is needed in the vicinity of the quarry site to determine the size of the resource available at that location.

Mapping of the general area should also be done, with the goal of defining other zones that may be suitable for quarrying. This mapping would focus on fracturing, colour and texture, and accessibility. In general, the marble at higher elevations (ie. above 500 m) appears to be more fractured than the marble at lower elevations, and quite variable with respect to colour. However, the good access and gentler topography in this area would make it worth investigating further, as unfractured benches of white marble were observed during reconnaissance mapping. Any mapping done should incorporate the drilling data, which would in turn require relocating the drill holes.

Serpentinite was not observed during this work program, but the Karmutsen-Quatsino contact was located. More time should be spent carefully mapping those areas where serpentinite has been reported.


References


- Beresford, E.W. (2010) Leo D'Or Marble Property – Assessment and Valuation of the Marble Resource. Private Report for White Rose Holdings Ltd.
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- MapPlace (2015) BC Map UTM Zone 9 showing part of Map Sheet 092L. BC Geological Survey <http://webmap.em.gov.bc.ca/mapplace/minpot/BC_UTM.cfm?zone=9> (accessed April 20, 2015).
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- Shariatmadari, M. (year unknown) Proposed drill hole and geology schematic map excerpted from a Private Report for Leo D'Or Mining Inc.

Statement of Qualifications

I, Helgi Sigurgeirson, 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, and nephrite 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 conducted the work program described herein and wrote this report.


H. Sigurgeirson, P. Geo



The seal is a circular emblem with a double-line border. The outer ring contains the text 'PROFESSIONAL' at the top and 'GEO SCIENTIST' at the bottom. Inside the ring, the text 'PROVINCE OF' is at the top, 'H. SIGURGEIRSON' is in the middle, '#28920' is below it, and 'BRITISH COLUMBIA' is at the bottom.

May 10, 2015

Date

Cost Statement

Consultant	Days	Rate/day	Time	Total
H. Sigurgeirson, P.Geo.	Fieldwork: April 26-29	\$400.00	4	\$1,600.00
	Travel (1/2 rate): April 25 & 30	\$400.00	1	\$400.00
	Report Preparation	\$990.08		\$990.08
Subtotal				\$2,990.08
Rentals				
2007 F-150 4x4	April 26 to 29, 2015	\$90.00	4	\$360.00
Expenses				
Fuel	6 days: April 25-30	\$60.90	6	\$365.38
Hotel	4 nights: April 25-28	\$77.63	4	\$310.52
Food	6 days: April 25-30	27.2	6	163.22
Ferries	2 trips			\$143.30
Subtotal				\$982.42
Total =		\$4,332.50		