ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: Assessment Report on Ouch Mineral Claim, Turnagain River Area

TOTAL COST: $3586

AUTHOR(S): Bruce w Downing
SIGNATURE(S): "*Bruce W Downing*"

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S):
STATEMENT OF WORK EVENT NUMBER(S)/DATE(S):
5664949

YEAR OF WORK: 2017

PROPERTY NAME: Ouch

CLAIM NAME(S) (on which work was done):

(1047191)

COMMODITIES SOUGHT: jade

MINERAL INVENTORY MINFILE NUMBER(S),IF KNOWN:

MINING DIVISION: Liard
NTS / BCGS: 104 I
LATITUDE: __58.30_____° _____' _____"
LONGITUDE: __128.61_____° _____' _____" (at centre of work)
UTM Zone: 9 EASTING:523128 NORTHING: 6462300

OWNER(S):
Cassiar Jade Contracting Inc

MAILING ADDRESS:
PO Box 332
Watson Lake, Yukon
Y0A 1C0

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

Cassiar Jade Contracting Inc

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**)

jade

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (in metric units)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, prospecting		1047191	2,586
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, storage location)			
Core (30 cms)			
Non-core			
RELATED TECHNICAL			
Sampling / Assaying			
Petrographic	2	1047191	1,000
Mineralographic			
Metallurgic			
PROSPECTING (scale/area)			
PREPATORY / PHYSICAL			
Line/grid (km)			
Topo/Photogrammetric (scale, area)			
Legal Surveys (scale, area)			
Road, local access (km)/trail			

Trench (number/metres)		
Underground development (metres)		
Other		
	TOTAL COST	$3,586

ASSESSMENT REPORT

on

Ouch Mineral Claims

TURNAGAIN RIVER AREA, NORTHERN BRITISH COLUMBIA

for

Cassiar Jade Contracting Inc.

Liard M.D.

NTS 104 I

Longitude 128°61'N Lat 58° 30'W
UTM Zone 9 523128 (easting) 6462300 (northing)

BY

Bruce W. Downing, MSc, P.Geo
20200 Grade Crescent
Langley, BC.

December, 2017

EXECUTIVE SUMMARY

A one day program of prospecting for jade was conducted over mineral claims as submitted to the author by Mr. Tony Ritter. Mr. Ritter was acting on behalf of Cassiar Jade Contracting Inc, Watson Lake, Yukon and was the supervisor for all work conducted on the property. These claims are located approximately 80 km east of Dease Lake, British Columbia. This prospecting program was conducted on September 16, 2017.

The purpose of this program was to locate and map prospective ground for jade. No samples were submitted for geochemical analysis.

The short prospecting program was successful in locating boulders with the potential for jade bearing rock on the claim. The identification of bowenite (Rhode Island Jade, Soochow Jade) in two boulders is important as it is another "jade" type mineral that has now been identified in the Turnagain River area. Bowenite was first identified in 2016.

The claim area does appear to have numerous boulders that maybe of some jade quality. Petrographic studies of the remaining chip samples are warranted. Further prospecting and sampling are recommended.

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1.0 INTRODUCTION

The author was approached in October, 2017 by Mr. Ernie Hatzl and Mr. Tony Ritter to review the field work. The author suggested that some of the rock chip samples be submitted for petrographic studies to determine the nature of the “jade” mineralization. The author is familiar with the Turnagain Lake and surrounding areas as he has been involved in exploration in this terrane for various major and junior mining companies since 1975. The author has not visited the property and is relying on information as supplied to him by Mr. Ritter and Ms. Shirley Wang.

2.0 OWNERSHIP, LOCATION AND LOGISTICS

The claim is located in the Liard Mining Division, 75 kilometres east of the town of Dease Lake, British Columbia, Figure 1. The claims are registered to Cassiar Jade Contracting Inc, PO Box 332, Watson Lake, Y0A 1C0, Yukon (Figure 2). The claim information is outlined in Table 1 and Figure 2.

Table 1: List of Placer Claim

Claim Name	Tenure	Anniversary Date	Owner
	1047191	October 31, 2020	Cassiar Jade Contracting Inc

Access to the claims was via Tundra Helicopters from their base in Dease Lake. The claims are also accessible via ATV by using old (historical) and existing roads and trails from Provencher Lake. No new roads or trails were made.

3.0 ENVIRONMENT

There is no known apparent land use conflict with the property by way of parks, wilderness study area or other perceived land use designation by local, provincial or federal governments.

There are no known environmental liabilities arising from previous exploration or placer mining. There are no occurrences of natural acid rock generation and drainage.

4.0 PROSPECTING

A brief helicopter reconnaissance was conducted by Mr. Ritter to (1) identify potential prospecting targets, (2) identify potential safe helicopter landing spots and (3) look for roads / trails that would be accessible via ATV from the Provencher Lake campsite.

A drone survey was conducted over parts of the claim (1047191) by Ms. Shirley Wang to locate prospecting targets, check for wildlife and potential safety hazards. Drone photography was also done. Outcrops and boulders were chip sampled where rock type was deemed interesting and significant. These sites are marked in the field with red flagging tape. Rock sample descriptions are presented in Appendix A. Two samples of boulders submitted out for mineral identification via thin section (Vancouver Petrographics) analyses. The petrographic study was conducted by Dr. Craig Leitch, Phd, PEng (Saltspring, BC). The rock samples are stored at the Cassiar Jade Contracting site in Langley, BC.

5.0 HISTORY

There is no recorded history of jade or gold prospecting on the claims.

6.0 REGIONAL GEOLOGY

The claim areas occur within an area of Mississipian to Permian and possible Jurassic age rocks, which are classified as the Cash Creek Group. These rocks consist of chert, argillite, limestone, basic volcanics and serpentinized ultramafics. These units are truncated to the south by the Nahlin thrust fault with Lower Jurrasic Inklin Formation rocks and the northwesterly striking Kutcho Fault (Gabrielse, 1998).

7.0 PROPERTY GEOLOGY

The claim covers a mixture of metasediment and serpentinite (jade) boulders. No detail mapping was conducted.

8.0 RESULTS

Detail thin section analyses are presented in Appendix C. These samples analyzed are of jade quality.

Ouch 1: appears to be strongly serpentinized ultramafic rock now composed of a tough, compact variety of antigorite (bowenite) that is used as jade in parts of the world, with accessory magnetite, cut by veinlets tentatively identified as talc/sericite (?).

Ouch 3: appears to be strongly serpentinized ultramafic rock now composed of a tough, compact variety of antigorite (bowenite) and lesser clinopyroxene (?) plus accessory magnetite, cut by veinlets of clinopyroxene?-magnetite-local Mg chlorite.

9.0 CONCLUSIONS / RECCOMMENDATIONS

The remaining chip sample from Site 2 should be analyzed. The use of rather inexpensive petrographic studies is warranted in order to determine the potential of jade bearing rock quality.

The claim area does appear to have numerous boulders that are of some jade quality. Further prospecting and sampling are recommended.

The identification of bowenite (Rhode Island Jade, Soochow Jade) is important as it is another place where the “jade” type mineral occurs. This mineral was first identified in 2016 (Downing, 2016) in the Turnagain River area.

10.0 REFERENCES

Gabrielse, H., 1998: Geology of Dease Lake (104J) and Cry Lake (1041) Map Areas, North-Central British Columbia. Geological Survey of Canada, Bulletin 504.

Holland,S.S., 1940, Placer Gold Deposits, Wheaton (Boulder) Creek, B.C.D.M. Bulletin No. 2.

Downing, B.W., 2016, Assessment Report on the Jade Placer Claims, Turnagain River Area, BC, BC Assessment Report 36498.

11. STATEMENT OF QUALIFICATIONS

I, Bruce W. Downing, do hereby certify that:

1. I am a graduate of Queen's University with an honours B.Sc. in geology and pedology received in 1970, and a graduate from the University of Toronto with a M.Sc. in geology received in 1974.

2. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia.

3. I am a Fellow of the Geological Association of Canada, a member of the Association of Exploration Geochemists, a member of the Association for Mineral education (BC) and a member of the Canadian Institute of Mining.

4. I have no vested interest in the properties or in Cassiar Jade Contracting Inc, nor do I expect to receive any such interest.

Bruce W. Downing, M.Sc., P.Geo.
20200 Grade Crescent
Langley, B.C., V43A 4J6
December, 2017

Qualifications of Field personnel

Tony Ritter
Partner, Cassiar Jade Contracting
White Rock, BC
Supervisor
Prospector, jade miner for over 30 years

Shirley Wang
Administrator, Cassiar Jade Contracting Inc
Watson Lake, Yukon
Drone specialist, photographer, cartographer, accounting

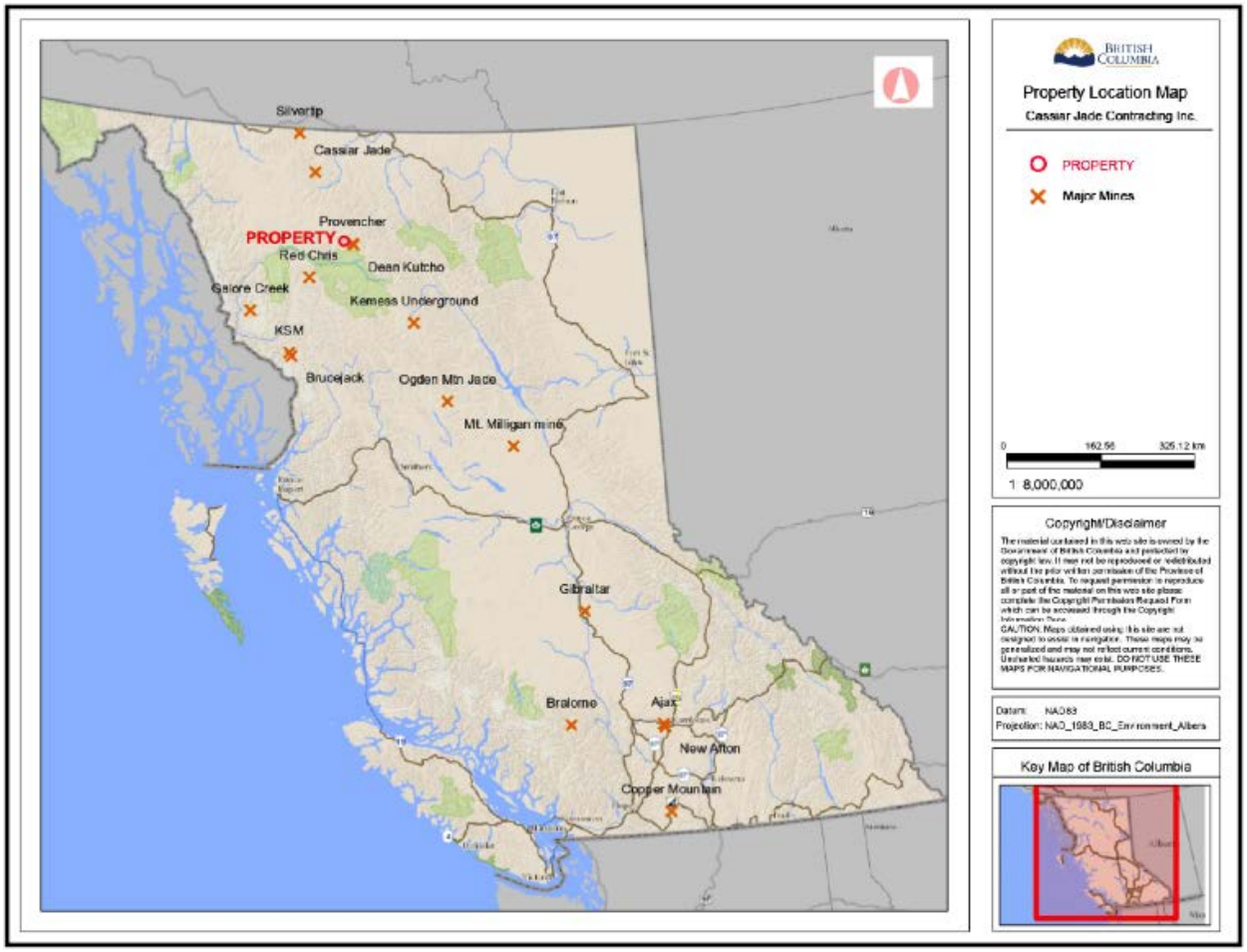


Figure 1: Location of Property

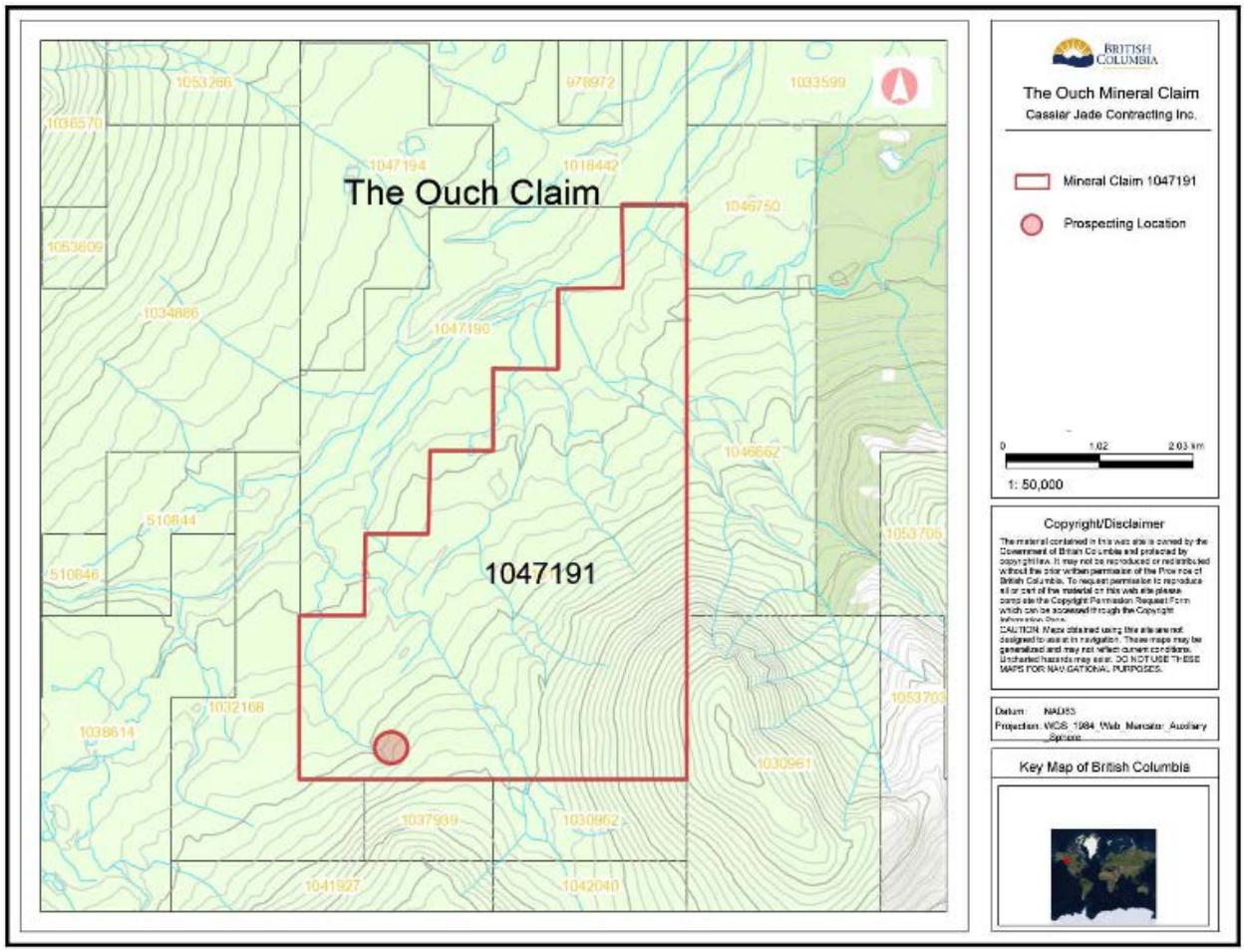
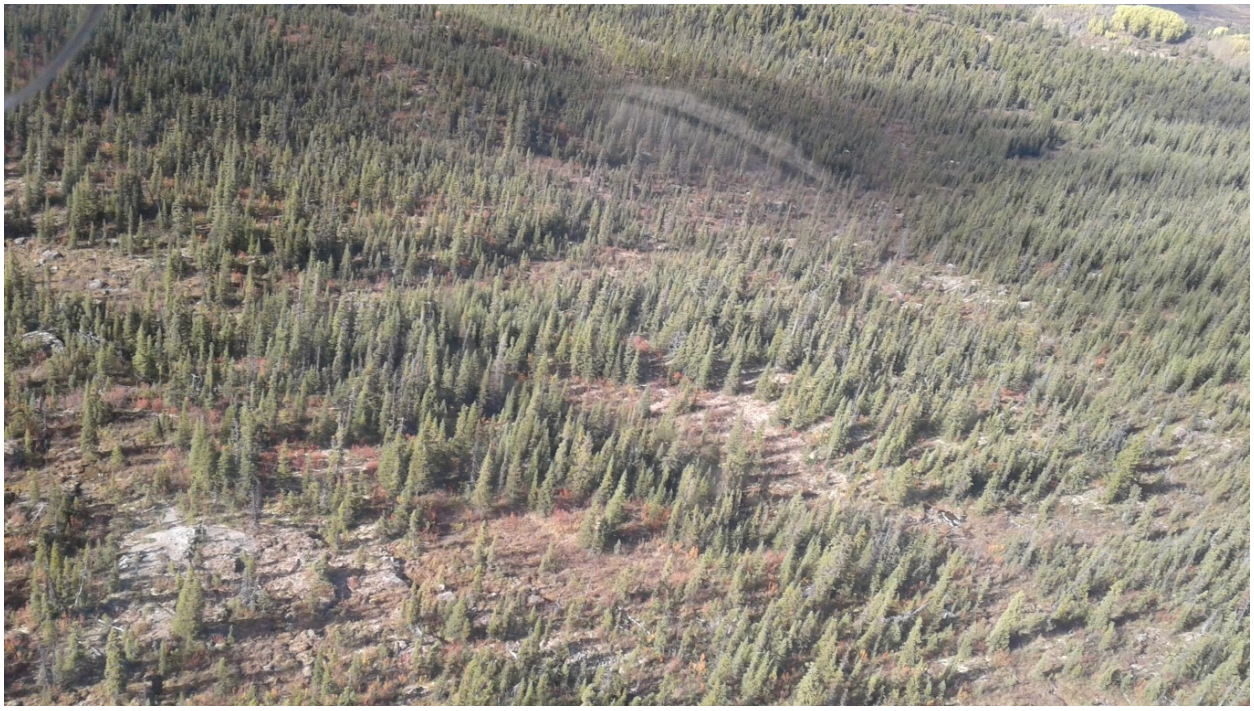
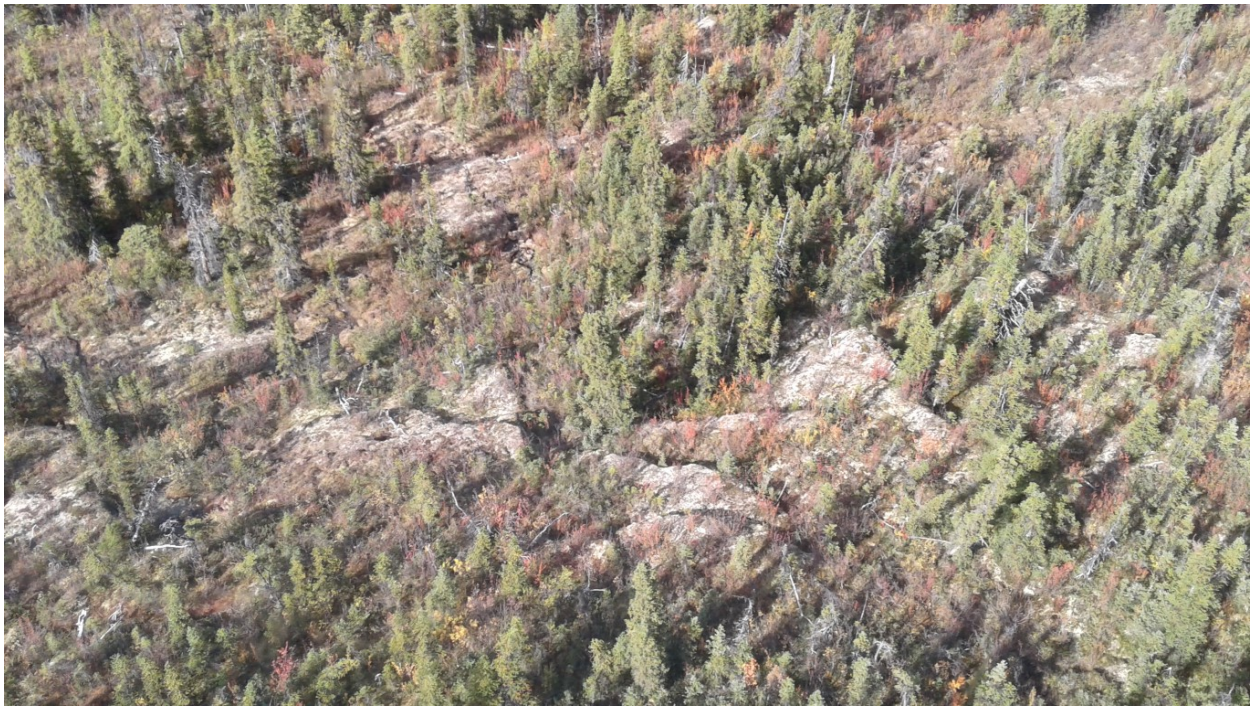


Figure 2: Location of Ouch mineral claims



Photograph 1: Ouch prospecting area



Photograph 2: Drone survey

Photograph 3: Boulder, site Ouch 3

APPENDIX A

Sample Descriptions

Site Ouch 1	serpentine boulder	thin section
Site Ouch 2	chips of pale green boulder	
Site Ouch 3	chips of dark green boulder	thin section

APPENDIX B

STATEMENT OF COSTS

Type of Cost		Rate	Ouch
Cost $ already reported			$2,050
Tundra Helicopter incl. fuels			$726
Mine Manager, propsector	Tony Ritter	Tony (700/day)	$700
GIS and Maps	Shirley Wang	Shirley (400/day)	$200
Aerial Photography	Shirley Wang	Shirley (400/day)	$200
Camp + Meals		100/day	$300
Communications		20/day	$20
Backpack Drill		100/day	$0
Field Gears		20/day	$40
Consultant	Bruce Downing	800/day	$800
Research	Petrographic Reports	2@300	$600
TOTAL			**$3,586**

APPENDIX C

PETROGRAPHIC REPORTS

PETROGRAPHIC REPORT ON 2 SAMPLES FROM JADE SHOWINGS, B.C.

Report for: Bruce W. Downing, M.Sc., P.Geo.
BWD Consultants
20200 Grade Crescent
Langley, B.C. V3A 4J6 (604) 427-4009

Invoice 170765

Dec. 5, 2017.

SUMMARY:

Ouch 1: appears to be strongly serpentinized ultramafic rock now composed of a tough, compact variety of antigorite (bowenite) that is used as jade in parts of the world, with accessory magnetite, cut by veinlets tentatively identified as talc/sericite (?).

Ouch 3: appears to be strongly serpentinized ultramafic rock now composed of a tough, compact variety of antigorite (bowenite) and lesser clinopyroxene (?) plus accessory magnetite, cut by veinlets of clinopyroxene?-magnetite-local Mg chlorite.

Craig H.B. Leitch, Ph.D., P. Eng. (250) 538-1900 dromore61@gmail.com
124 Vesuvius Bay Road, Salt Spring Island, B.C. Canada V8K 1K3

Ouch 1: STRONGLY SERPENTINIZED ULTRAMAFIC ROCK NOW COMPOSED OF A TOUGH, COMPACT VARIETY OF ANTIGORITE (BOWENITE) THAT IS USED AS JADE IN PARTS OF THE WORLD, WITH ACCESSORY MAGNETITE, CUT BY VEINLETS TENTATIVELY IDENTIFIED AS TALC/SERICITE (?)

Described as serpentine; hand specimen and offcut shows somewhat variegated, massive, dark green jade-like rock. The rock is partly harder than (unscratched by) and partly softer than (scratched by) steel, and distinctly magnetic, but shows no reaction to cold dilute HCl, and does not appear to have been etched and stained for K-feldspar in the offcut. Modal mineralogy (regular thin section only) is approximately:

Serpentine (antigorite, var. bowenite?)	95%
Talc/sericite (?), veinlets only	3-5%
Opaque (mainly magnetite?)	1-2%

This sample consists mainly of randomly oriented, fine-grained flakes of probable serpentine mineral (likely antigorite, var. bowenite, as suggested by XRD analysis of a previous sample at UBC; see Raudsepp et al., 2016). In places there are veinlets of what appears to be talc/sericite (?), and opaque (probably magnetite) occurs both as probable primary large euhedra and very fine-grained, fracture-controlled, probably secondary crystals.

The bulk of the section consists of subhedral, 0.1-0.2 mm sized flakes that are mainly either randomly oriented or form a reticulate pattern (possibly increasing the apparent hardness of the specimen above that typically associated with serpentine minerals such as antigorite?). Although the birefringence of this mineral and its flakey character are similar to Mg-chlorite, it is distinctly length-slow. In places there are irregular lensoidal to elongate patches up to ~4 mm long by 1.5 mm thick in which the crystals are more or less aligned (sub-perpendicular to the margins of the patch) and somewhat coarser (up to 0.3 mm diameter).

Veins and veinlets are sub-planar to anastamose, mostly <0.5 mm thick, composed of a mineral that although also length-slow, shows much higher birefringence, and slight change of relief on rotation, suggestive of talc/sericite. It shows cross-fibrous texture, composed of flakes up to 0.25 mm oriented perpendicular to vein walls.

The opaque mineral, as noted, is probably mostly magnetite (although there could be cores of chromite?). It occurs as euhedra up to about 1 mm in diameter that are likely relict primary (it is these that could contain cores of chromite) and as sub/euhedra mostly <0.1 mm, concentrated along cryptic fractures, suggestive of secondary magnetite, a characteristic of serpentinized ultramafic rocks.

In summary, this appears to be strongly serpentinized ultramafic rock now composed of a tough, compact variety of antigorite (bowenite) that is used as jade in parts of the world, with accessory magnetite, cut by veinlets tentatively identified as talc/sericite (?).

Ouch 3: STRONGLY SERPENTINIZED ULTRAMAFIC ROCK NOW COMPOSED OF A TOUGH, COMPACT VARIETY OF ANTIGORITE (BOWENITE) AND LESSER CLINOPYROXENE (?) PLUS ACCESSORY MAGNETITE, CUT BY VEINLETS TENTATIVELY IDENTIFIED AS CLINOPYROXENE?-MAGNETITE-LOCAL MG CHLORITE

Described as dark green; hand specimen and offcut shows somewhat variegated (heavily veined), dark green jade-like rock. The rock is mainly harder than (unscratched by) steel except for the veins, which are distinctly softer, and strongly magnetic, but shows no reaction to cold dilute HCl, and does not appear to have been etched and stained for K-feldspar in the offcut. Modal mineralogy (regular thin section only) is approximately:

Serpentine (antigorite, var. bowenite?)	85%
Clinopyroxene, veinlets and disseminated	10%
Opaque (mainly magnetite?)	3-5%
Mg-chlorite (veinlets only)	1-2%

This sample consists mainly of randomly oriented, fine-grained flakes of probable serpentine mineral (likely antigorite, var. bowenite, as suggested by XRD analysis of a previous sample at UBC; see Raudsepp et al., 2016), but with significant bladed laths of amphibole or more likely clinopyroxene (?). In places the latter also occurs in the prominent veinlets, locally with Mg-chlorite. Opaque (probably magnetite) occurs mainly as large but fracture-controlled, probably secondary crystals.

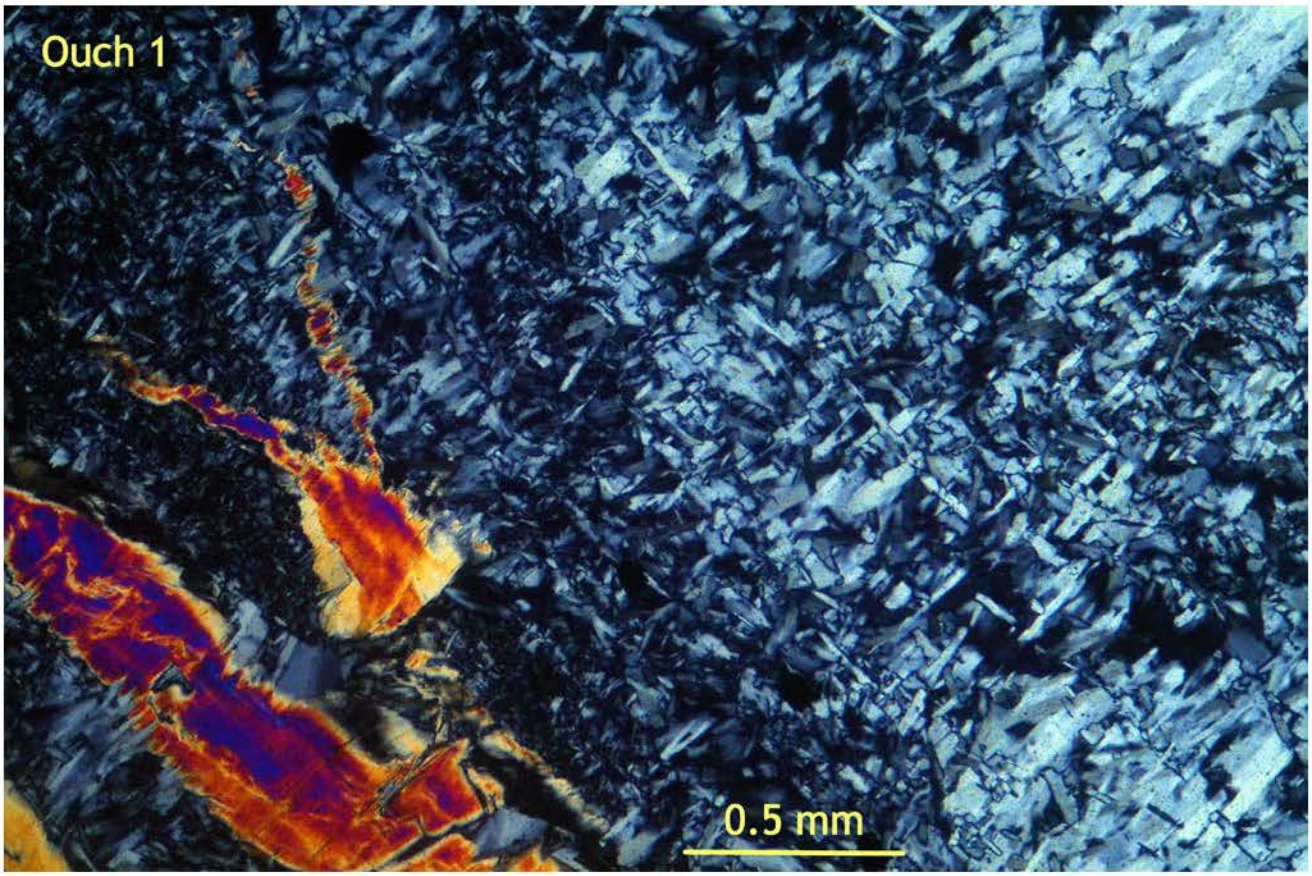
The bulk of the section consists of subhedral, 0.1-1.0 mm sized flakes that are mainly randomly oriented (possibly increasing the apparent hardness of the specimen above that typically associated with serpentine minerals such as antigorite?). It typically has the appearance of having been brecciated (and in places partly infilled by the veinlets), in places leaving irregular lensoidal patches up to ~2 mm long by 1 mm thick suggestive of remnant “clasts” in a finer-grained matrix.

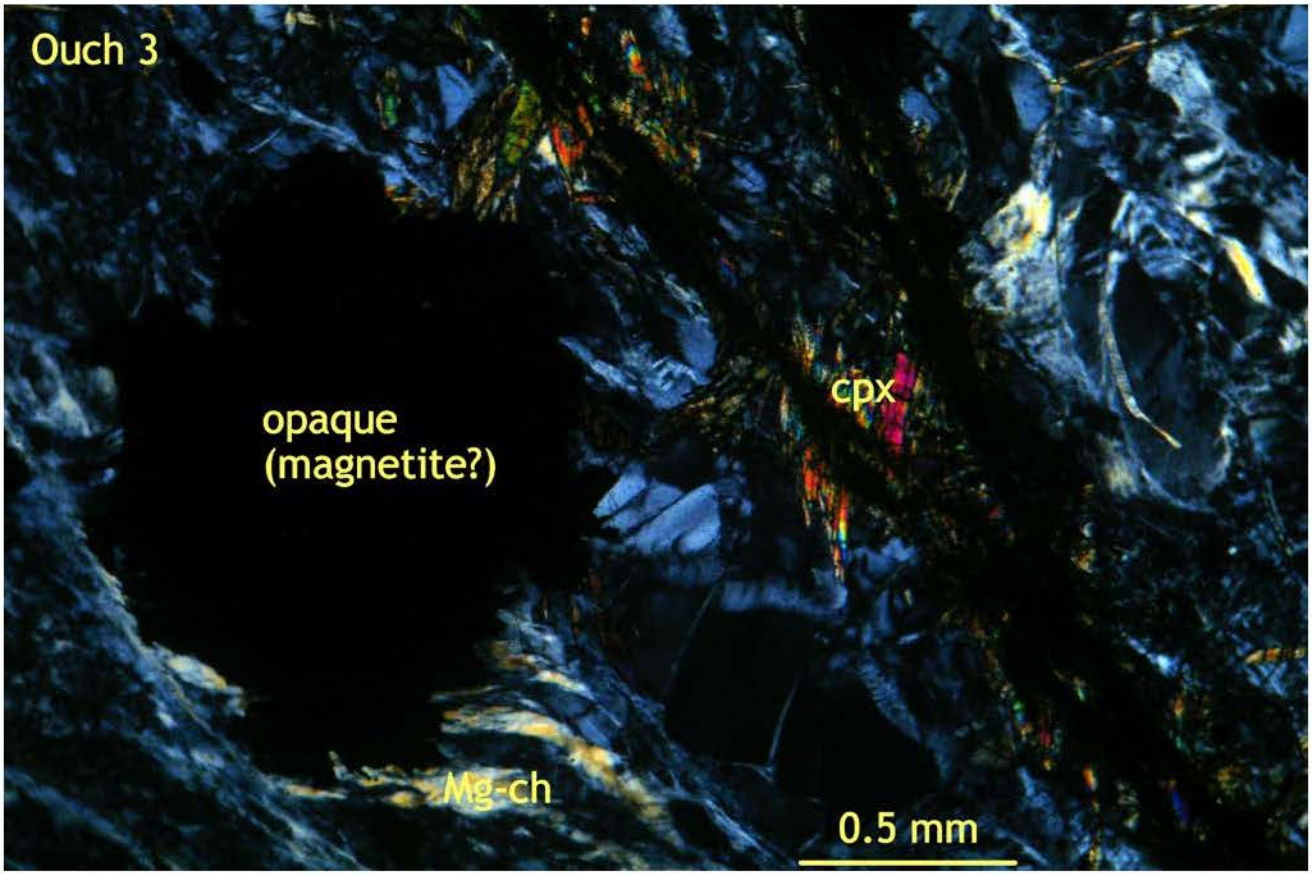
The bladed mineral tentatively identified as clinopyroxene (?) strongly resembles the tremolite tentatively identified in King 1, but the range of extinction angles varies commonly up to ~40^{o}, arguing against amphibole and for pyroxene. The crystals are typically slender euhedra up to about 1 mm long, but where finer-grained, they may be fibrous. They are typically most abundant near and along the veins and veinlets.

Veins and veinlets are sub-planar to anastamose, mostly <2 mm thick, composed of either fibrous, bladed crystals like those described above, or in places, massive granular aggregates of stubby subhedra <0.2 mm, with variable extinction angle as above, so likely clinopyroxene. In places, some veinlets also contain minor Mg-chlorite (subhedral flakes <0.15 mm, distinguished by length-fast character opposite to serpentine; higher birefringence to first-order white/yellow suggests F:M in the 0.2-0.3 range?).

The opaque mineral, as noted, is probably mostly magnetite, occurring as euhedra up to about 1 mm in diameter but typically in elongated aggregates to 0.5 cm concentrated along the veinlets, suggestive of secondary magnetite, a characteristic of serpentinized ultramafic rocks.

In summary, this appears to be strongly serpentinized ultramafic rock now composed of a tough, compact variety of antigorite (bowenite) and lesser clinopyroxene (?) plus accessory magnetite, cut by veinlets tentatively identified as clinopyroxene?-magnetite-local Mg chlorite.


Ouch 1
0.5 mm


Ouch 3
opaque
(magnetite?)
cpx
Mg-ch
0.5 mm