

**BC Geological Survey
Assessment Report
32508**

2010 - 2011

PROSPECTING REPORT
“Opal Four Property”

EVENT # 5125107 TENURE # 838427
Tenure Name: Opal Four

Lytton / Shaw Springs Region
Kamloops Mining Division
Map 092I

Coordinate Reference
121° 19' 35.3" W Longitude – 50° 17' 14.6" N Latitude

report by

William Larry Amey
FMC 145191

November 16, 2011

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Note: Unless otherwise referenced, map submissions are enhanced excerpts from the BC Ministry's Provincial Mapping System. Scale as that shown.

Introduction & Location

The Opal Four property, tenure # 838427, a three cell mineral claim comprising 63.93 hectares, is situated 19 kilometres east-northeast of Lytton, or otherwise 100 (air) kilometres north of Hope. The tenure is one of six properties held in the same locale by the author, which encompasses a southeast-facing mountain cliff and graduating fan, underlain by Middle and Upper Cretaceous Spence's Bridge Group volcanics. This semi-arid area is known for the occurrence of banded agate, with potential for opal.

Access

Access to the Opal Four property is gained via a FSR leading southeasterly from BC Highway #1, approximately 19.5 kilometres North of Lytton. The exact access point to the FSR from said highway lies adjacent to a gravel pit, located at coordinate 121° 23' 32.9" W, Longitude, 50° 17' 38.2" N Latitude. The aforementioned FSR then leads eastward, southward, thence eastward again. Its course is then followed for a distance of approximately 8 kilometres, to the property. Though navigable with a 2WD vehicle, 4WD or a quad is the recommended, with quad holding the advantage for off-road use.

Summary

Prospecting on the Opal Four property was conducted on June 3, 2011, over the traverse illustrated on Map 2, hereto attached.



Plate # 1

Plate # 1 (immediate left) shows the locale where numerous rock samples were collected. The base of the strewn field holds liberated rock which tumbled from the slopes and rock face above. The area was prospected for agate and opal specimens.

Plate # 2, (shown on the following page) illustrates some of the numerous grab samples (1/4" to hand sized) which were secured for closer examination.

Plates # 3 through # 5 (in following), are macro photos taken of a few of the varied samples.



Plate # 2



Plate # 3



Plate # 4



Plate # 5

Some of the rock specimens are Vesicular Basalt

In later-stage volcanic basalt it is not uncommon to find the vesicles filled with other minerals (then called amygdules). Chlorite is a common phenocryst in vesicular basalt. Under UV light these mineral blebs (phenocrysts) fluoresce white.

..... *Summary continued*

Though at this time of writing, there exists a long backlog of specimens from several other properties yet awaiting similar evaluations, a preliminary assessment was conducted on one of the more select samples acquired during this work program. The results thereof, augmented with photomicrographs, are noted in the following.

The basalt (volcanic) rock specimen illustrated below (Plate # 6), measuring 2.5 inches at its greater dimension, was examined in closer detail. To be noted, the image shown was taken under incandescent lighting, resulting in less than favorable color quality.



Plate # 6

A fragment which holds green, reddish-brown, and white minerals, was chipped from the rock, then crushed to a size which could be used for viewing under a standard reflected-light microscope (see Plate # 7).

Plate # 7, a stack of 15 individual frames, is a microphotograph of those fragments, whereby the various colors are more prominent. The brown groundmass is basalt volcanic material.

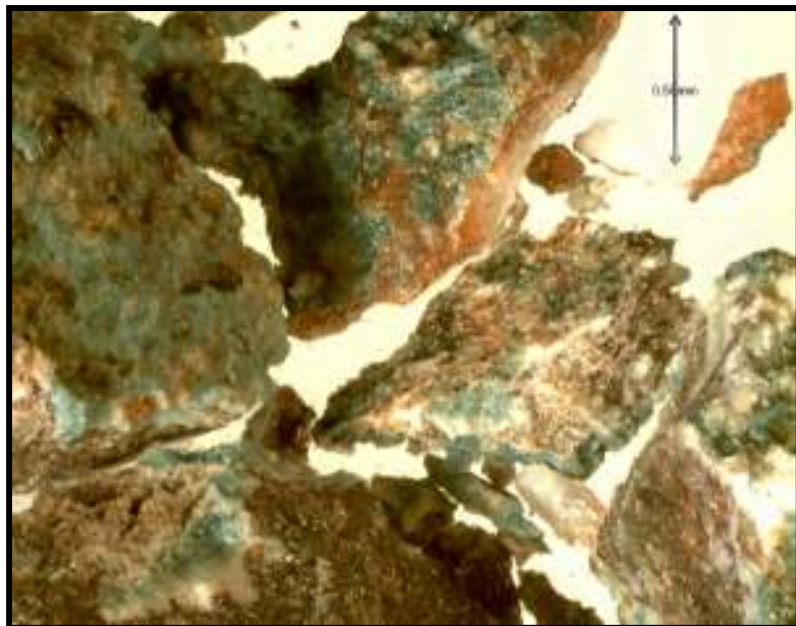
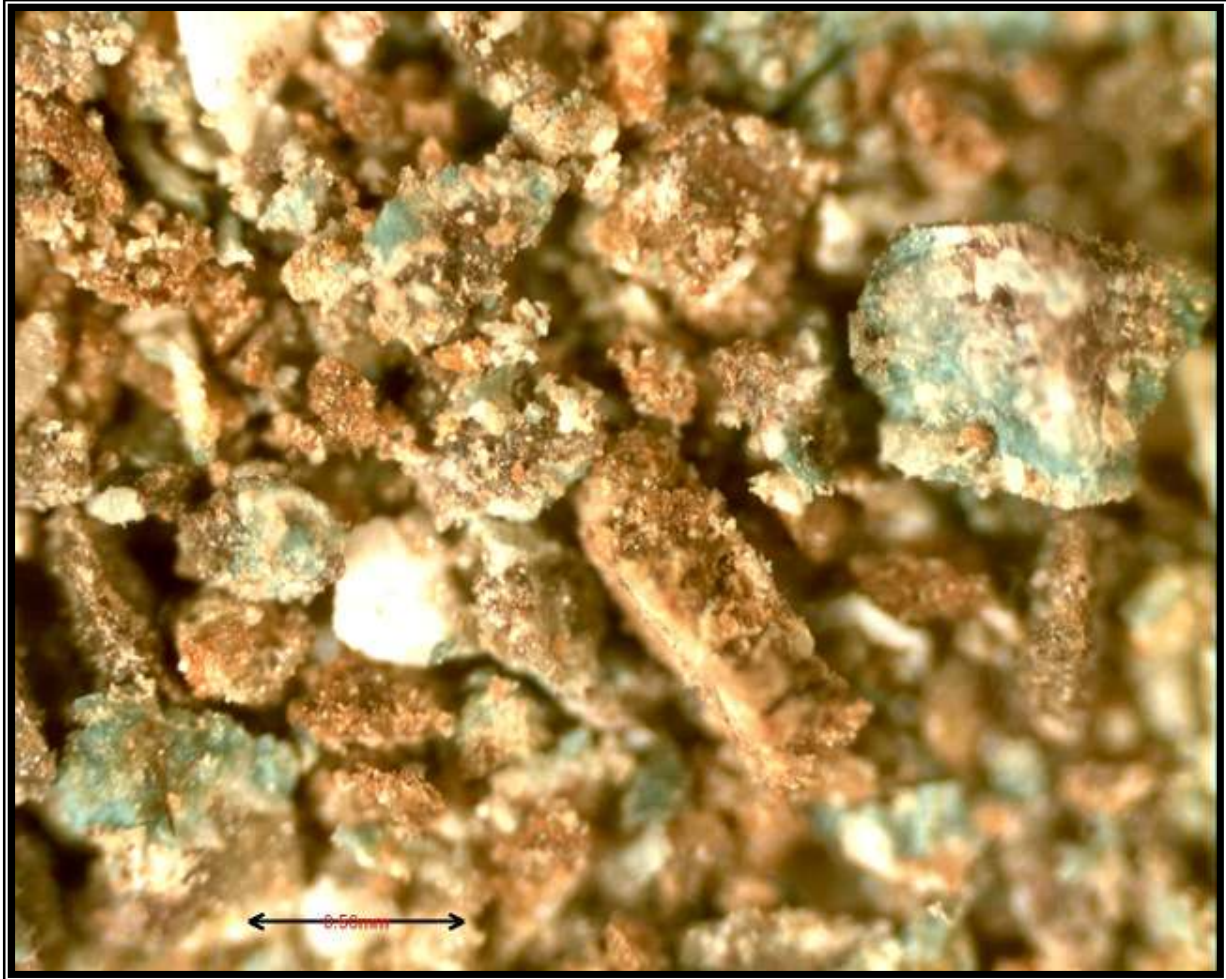


Plate # 7

..... *Summary continued*

Next, the material was further crushed to offer a better view of some of the finer material (Plate # 8).



(Plate # 8)

The green crystal material is very evident, along with reddish-brown and white. Plate # 7 also identifies a lot of very fine material clinging to the fragments, giving a “hairy” look.

..... *Summary continued*

The material was again crushed and screened to -100 +150 mesh for polarizing microscope work.



Plate # 9, above, is a microphotograph of this fraction in reflected light.

Note: All microscopy performed by E. Goldsmith

Conclusion

The grains were examined under a polarizing microscope with the following minerals found:

- the green mineral is chlorite, typically green in hand samples and light to medium green in plain polarized light;
- colorless (but slightly cloudy) grains are quartz;
- reddish-brown grains are orthoclase feldspar;
- whitish grains are chalcedony.

The minerals were all present as very tiny masses of crystals (typical volcanic), too small to isolate on single crystals for even the highest magnification available,. Therefore, there were certain optical properties which could not be measured, thus, compelling the outcome to rely upon limited values, like color, pleochroism (different colors when oriented different directions in polarized light), and especially, refractive index which could be measured very well.

Although this combination of minerals in volcanic rock is sometimes associated with opal, in preliminary visual examination of the samples recovered, opal was not observed. However, in-depth analysis was conducted on only one of the many samples secured during this work program, and there remains many other specimens not yet examined, or examined more closely under microscope.

The claim was renewed for a successive term to facilitate further exploration on this property.

SUMMARY OF EXPLORATION EXPENDITURES

June 3, 2011

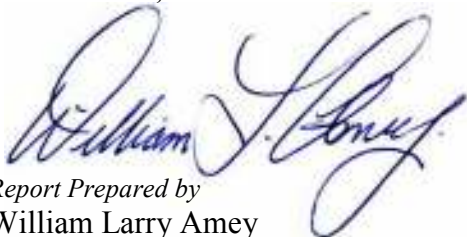
Larry Amey – Project Management, Explorations	(1 day)	\$ 500.00
Elmar Goldsmith - Explorations	(1 day)	\$ 700.00
- Petrographic Microscopy, Analysis & Reporting		\$ 200.00
Accommodations.....		N/A
Meals.....		\$ 64.00
4x4 Truck – 1994 Ford - 292 km @ \$1.60 per km (all in)		\$ 467.20
Tenure Maintenance Fees (to Dec 1, 2013)		\$ 50.63
Miscellaneous Supplies & Sundries		\$ 30.00
Exploration Report, Cartography & Petrographic Preparations		\$ 400.00
Total		<u>\$2,411.83</u>

Qualifications:

Elmar Goldsmith - - Bachelor’s Degree - 48 years mining experience, Former V.P. of Technical Services (R&D, Geotechnical Services, Analytical Laboratory Services) – project management, data analysis and interpretation, mathematical modeling, microscopy, leading North America consult in the Potash Mining Industry

Self - - 30 years exploration experience – extensive (in-depth) research into mineralogy and deposit profiles, post glacial terrain physiology, geological formations, comparative geosciences modeling, with advance studies into atmogeology; biogeology & hydrology. Advanced skills in cartography and digital data analysis.

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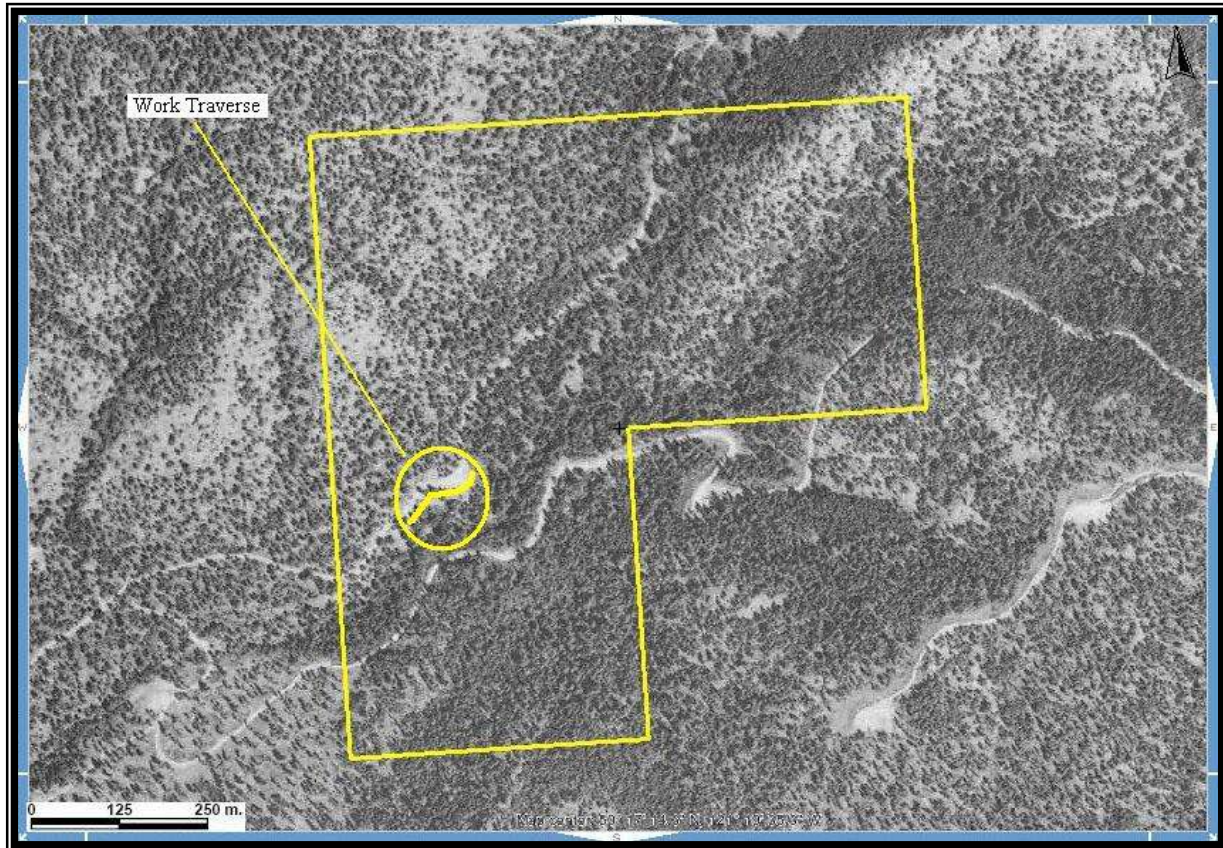
REFERENCE MAP 1

Geographical Location



REFERENCE MAP 2

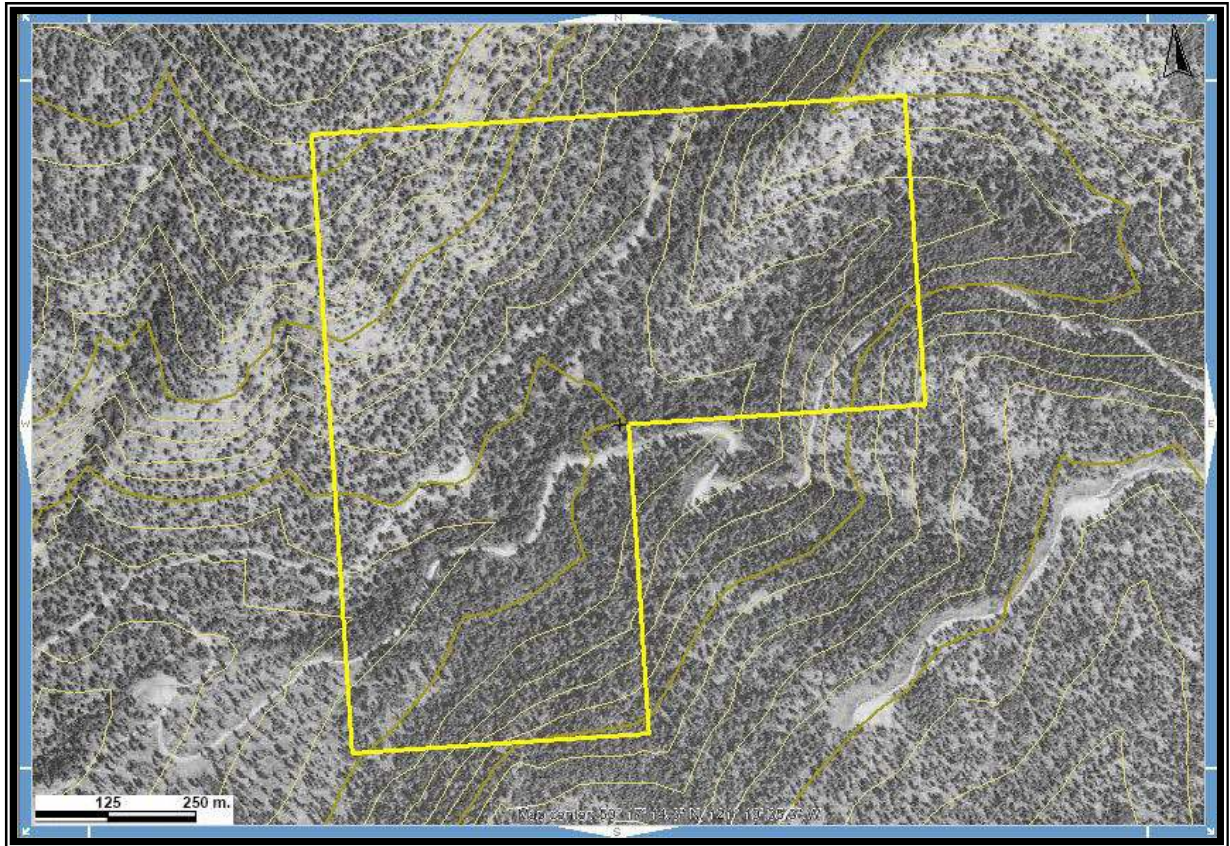
Area of Work



Scale 1: 6,000
Map 092I Excerpt
Tenure Coordinate Reference
121° 19' 35.3" W Longitude – 50° 17' 14.6" N Latitude

REFERENCE MAP 3

Contour Map



Scale 1: 6,000

Map 092I Excerpt

Tenure Coordinate Reference

121° 19' 35.3\"/>