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BC Geological Survey
Assessment Report
30260

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**GEOLOGICAL AND GEOCHEMICAL
PROSPECTING REPORT
ON THE LAVA ROCK PROPERTY
KAMLOOPS MINING DIVISION
BRITISH COLUMBIA**

BY
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GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

30,260

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SUMMARY

The Lava Rock property is comprised of many claims including the Lava Rock, the Barbecue, the Landscape, the Black Lava, the Red Lava and Bright claims. It lies approximately 28 kilometers north of Cache Creek, in south-central British Columbia.

Geologically, rocks of the Cache Creek Complex consist of acidic to intermediate volcanic lava and minor basalt and diabase units which underlie the area of the property. The initial geological investigation on the claim group indicates the presence of three lenses of lava rocks. All occurrences are well exposed along the main logging road with outcrops ranging from 350 - 650 meters in length for approximately three Kilometers and 75 - 150 meters in width, suggesting good industrial mineral potential for several applications and uses such as landscaping purposes, flame bed material in the barbecue industry, soil mixing, and sports tracks.

Since the property enjoys an excellent location to the nearby cement plant in Marble Canyon, the pumice of the property was chemically tested for its pozzolonic properties. All chemical results meet the ASTM specifications and the pumice, chemically, can be used as a mineral admixture in concrete. However, the physical characteristics still need to be tested and pass the ASTM specifications.

During the 2000 prospecting program, a new showing of volcanic ash outcrop was located by the writer and the initial investigation of the volcanic ash exhibited good potential to be used as cat litter products.

In 2008 a limited prospecting program was completed aimed to the collection of representative samples from the lava outcrops in order to conduct a petrographic study on the red and black lava rocks in order to determine the mineral composition of the deposit. A petrographic description of both red and black lava is attached in Appendix A at the back of the report.

The expected low mining costs due to the location value of the property, supported by the excellent road access, and the full exposure of the lava rocks along the main road suggest that the Lava Rock property has an enormous potential for the development of pumice deposit sufficient to support the Canadian market.

It is concluded that a resource evaluation program is highly warranted to evaluate the industrial mineral potential of the property and estimate the reserves to determine the commercial values of the deposit.

A third phase exploration program with a total budget of **\$38,000** is proposed to follow-up on the successful results obtained from all previous and recent work completed on the property.

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1.0 INTRODUCTION

The main purpose of this report is to identify the mineral composition of both the red and the black lava rocks on the property. The report also describes the regional geology and the past exploration activities in the area and outlines a budget proposed for the next phase exploration program.

The work was performed by Fayz Yacoub, P.Geo and a field assistant.

This report is based upon previous geological work completed by the writer on the property and on a review of government assessment reports, regional geological maps, and claim data records from the MTO. The writer was on the property between July 18-19, 2008.

2.0 LOCATION, ACCESS & PHYSIOGRAPHY (Figure 1)

The property is located in south-central British Columbia, approximately 28 kilometers north of Cache Creek. The center of the claim group lies 7.5 kilometers northeast of the confluence of Scottie Creek and the Bonaparte River.

Access to the property is via Highway #97 north from Cache Creek to the Scottie Creek road. A well maintained logging road runs off Scottie Creek Road to the southeast onto the claim group providing easy access to most of the property area.

Topography in the area consists of rolling hills and steep ridges. Elevations vary from 2900 to 4100 feet with the total relief in the order of 1200 feet.

Much of the property is covered by overburden with several huge outcrops confined to steep ridges and the main logging road. Vegetation is sparse and consists mainly of sagebrush and scrub pine. The property lies within the interior dry belt so precipitation is minimal and weather is mild.

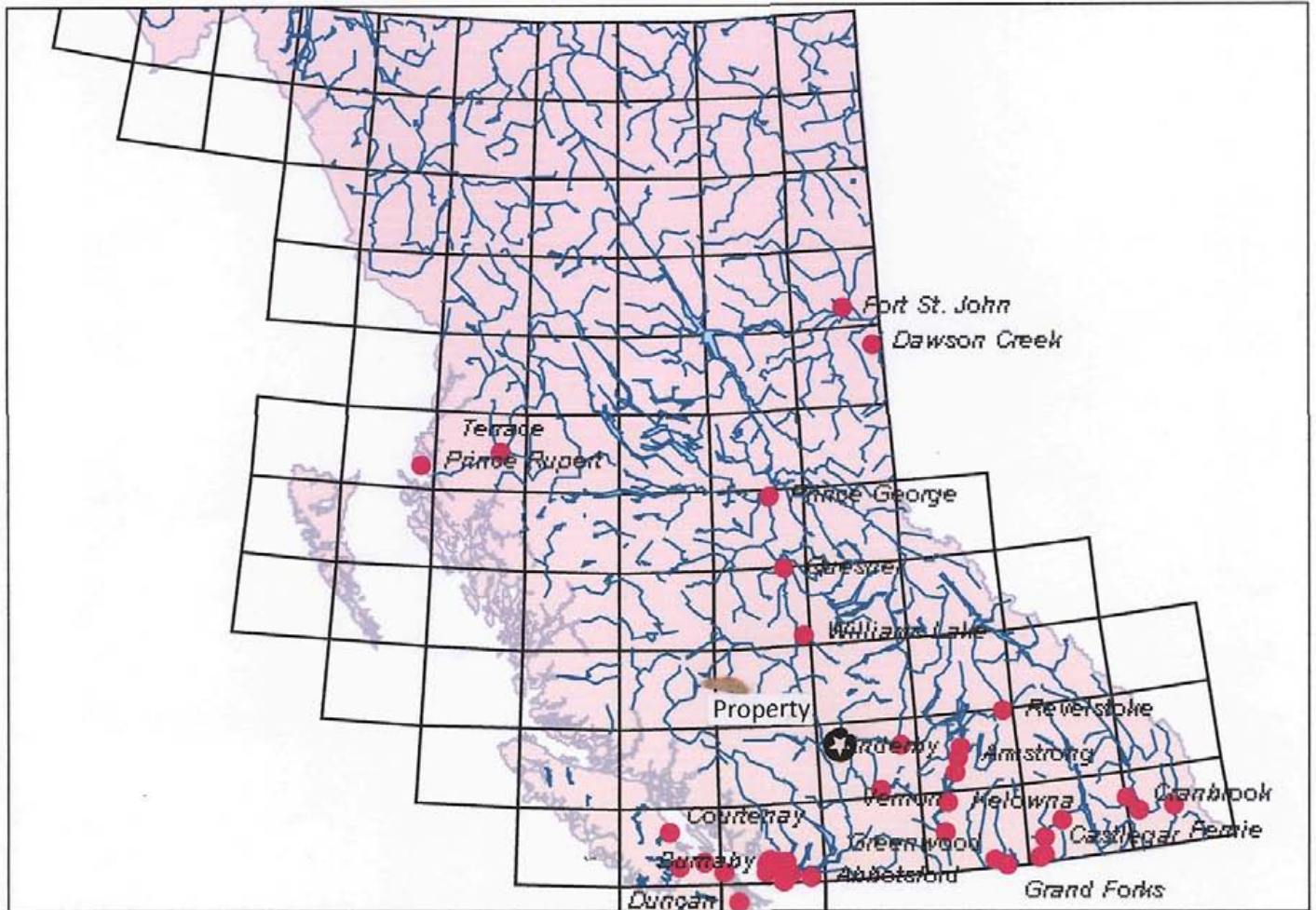
3.0 PROPERTY STATUS (Figure 2 & 3)

The property consists of six mineral claims, totaling 13 units. All claims are contiguous except the Barbeque claim with record number 577281. The property lies in the Kamloops mining division and wholly owned by Fayz Yacoub of Surrey, B.C.

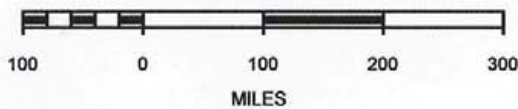
Property Data

Claim Name	Record #	Issue Date	Expiry Date
Barbecue	577281	2008/Feb/27	2010/Feb/27
Landscape	576733	2008/Feb/21	2010/Feb/21
Lava Rock	538840	2006/Aug/07	2011/Aug/07
Red Lava	564278	2007/Aug/08	2015/Aug/08
Black Lava	564280	2007/Aug/08	2010/Aug/08
Bright	578673	2008/Mar/17	2010/Mar/17

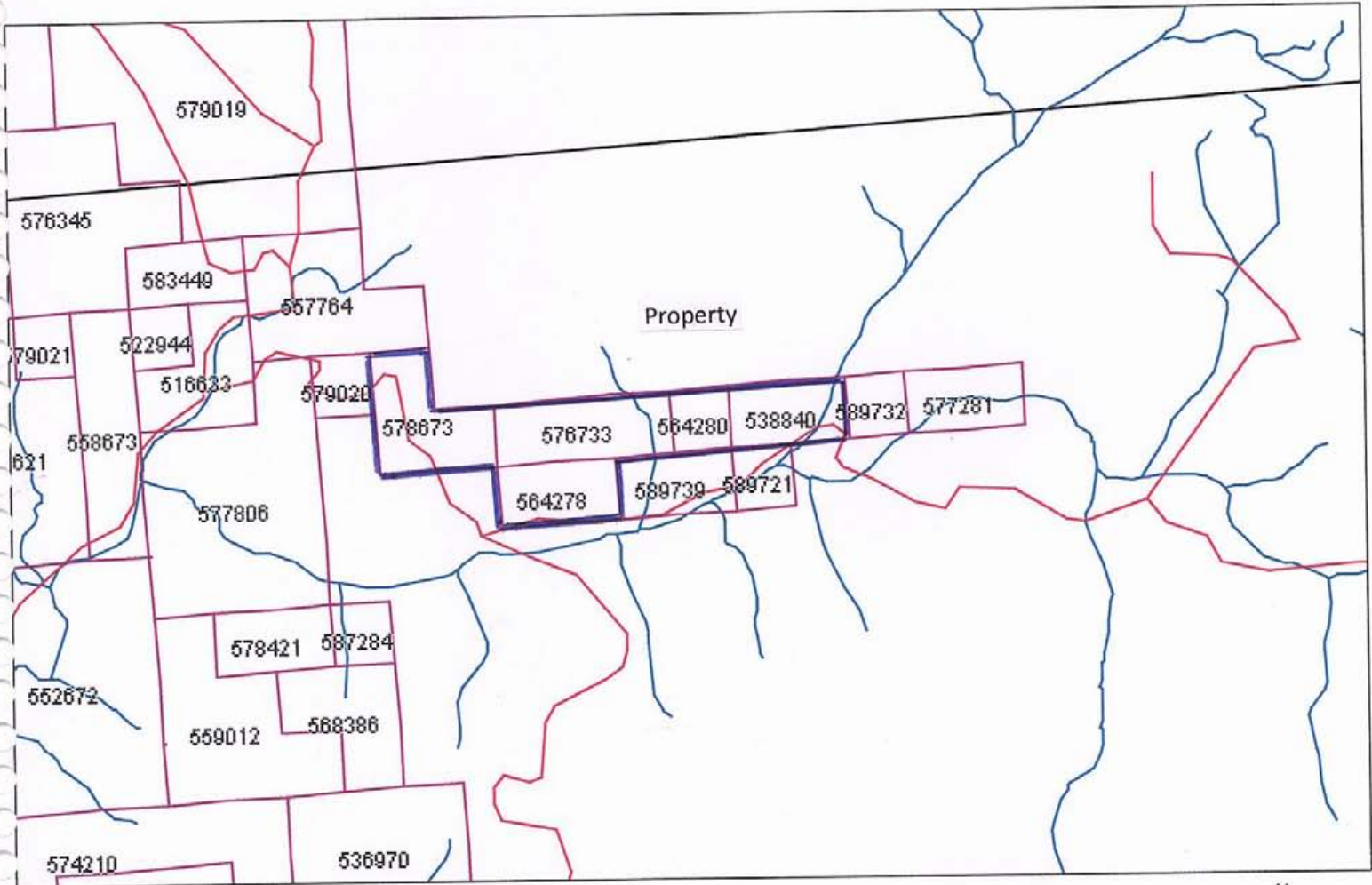
The Lava Rock Property (General Location Map)



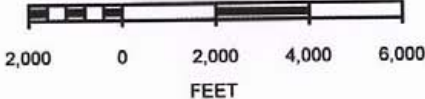
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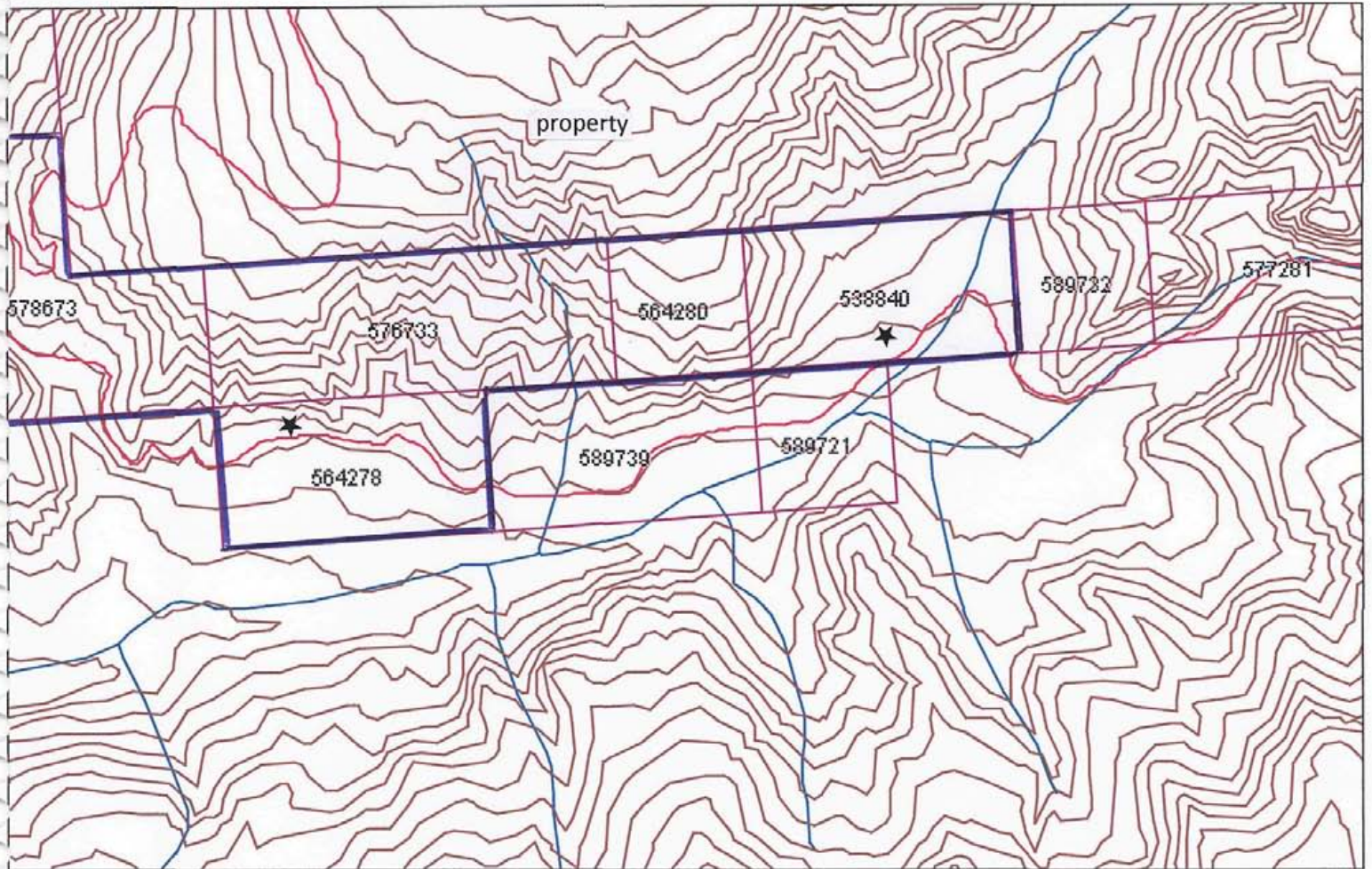
The Lava Rock Property (Claim map)



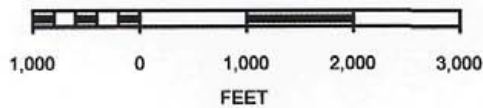
SCALE 1 : 50,000



The Lava Rock Property (Topographic Map)



SCALE 1 : 21,862



★ Sample Location (petrographic analysis)

The total area of the property is 2.64 square kilometers, 264.51 hectares, 650.69 acres.

4.0 AREA HISTORY

In the early 1920's, a chromite deposit was discovered on Chrome Creek and the north fork of Scottie Creek. Samples taken from these two creeks assayed between 0.69 g/ton, and 4.8 g/ton platinum (Thomlinson, 1920). Two panned samples collected at 400 and 800 meters upstream from the mouth of the Chrome Creek yielded 0.14 oz/ton and 0.04 oz/ton platinum.

In 1939, the Consolidated Mining and Smelting Company of Canada Limited drove an audit to test the Ferguson Creek showing a resource potential of 18,000 tons with 15% chromites and further 18,000 tons of equivalent material was estimated by Rice of the Geological Survey.

In 1994, Tilava Mining Corporation carried out an exploration program on the tertiary volcanic tuffs along the upper area of the Ferguson Creek to test the potential of the property for natural pozzolan and zeolites.

In 1986, five rock samples were collected from the Barbecue claim (previously known as Plat IV). Elements related to platinum mineralization were low and there was no detectable platinum or palladium.

During the 1987 fieldwork investigation by the Geological Survey of Canada, massive rhyolite ash was discovered near and in Scottie Creek Valley. This is where the Barbecue and Landscape claims are located, the ash consists of two lenses up to 100 meters thick and three kilometers long consist of rhyolite ash containing layers of andesite volcanic conglomerate with clasts lying in the acid tuff matrix.

In 1998, the Barbecue and the Landscape mineral claims (now the Lava rock property) were staked by the writer to be evaluated for their industrial mineral potential for pumice and pozzolan material.

From July 9 to July 12, 1999 a two-man crew consisting of the writer and helper carried out a fieldwork program of geological mapping, rock sampling and grid work. The purpose of the program was:

A) To cover the target area of the property with geological and geochemical surveys in order to define the size and the chemical and physical characteristics of the volcanic lava rock, exposed along Scottie Creek logging Road.

B) To evaluate the industrial mineral potential of the claim group and to determine the commercial value of the lava rock deposit of the property.

5.0 REGIONAL GEOLOGY

The Lava Rock property is situated within the intermontane belt near the eastern margin of the Cache Creek assemblage. This assemblage comprises three facies belts. A western belt of Triassic chert, argillite and siltstone encloses Upper Triassic volcanoclastics. A central belt includes massive mid-late Permian carbonates of the Marble Canyon Formation and also includes minor thin-bedded carbonate, tuff and chert of Triassic age.

An eastern belt contains large bodies of probably late Permian basalt, ultramafics and melange. The

melange consists of late Permian to late Triassic chert and argillite matrix, with blocks of carbonates, chert, basalt and ultramafic blocks of unknown age, and acidic volcanoclastics.

Overlying the upper Cache Creek group is the upper Triassic Nicola group consisting of basic to acidic volcanoclastic rocks and intercalated argillite. These rocks tend to be more acidic in the west and basic in the east.

6.0 THE 2008 FIELDWORK PROGRAM

6.1 Scope & Purpose

The 2008 prospecting program was conducted on the Lava rock property between July 18 and July 19, 2008. The purpose of the limited program was to prospect and collect representative samples from the red and black lava outcrops located on the property for petrographic study in order to determine the microscopic mineral composition of both the red and the black lava.

6.2 Methods & Procedures

Limited prospecting and rock sampling was performed on two outcrops previously located on the property. One representative red lava rock sample was collected from the western outcrop centered at G.P.S 614950 E-5648700 N and a second is a black lava rock collected from the central outcrop located at G.P.S 616600 E-5649100 N. Garmin 12 was used to determine the samples location (see Figure # the topographic map).

7- RESULTS

7.1 PROPERTY GEOLOGY

The area of the property is underlain by rocks of the Cache Creek complex consisting of rhyolite to basaltic lavas, pumice, and volcanic ash. This assemblage is thought to correlate with the Chilcotin Group. The initial geological investigation during the 1999 fieldwork program on the property indicated the presence of three outcrops of light to dark brown, red and black pumice volcanic lava. All three outcrops are well exposed along the main logging road, ranging between 350 - 650 meters in length and between 75 - 150 meters in width over a vertical elevation of 25 - 30 meters, suggesting sufficient reserves for several decades.

7.2 The Physical Characteristics of the Lava

Size and Color

The pumice deposit of the Barbecue and Landscape Claim Group can produce three different sizes and two different colors.

Small size (½ to 1 inch, pumice pebbles) is suitable as decorative pumice for indoor uses.

Medium size (1 to 1 ½ inch, pumice cobbles) is suitable for outdoor, decorative and landscaping uses.

Large size (2 to 3 inches, pumice cobbles) is suitable as flame bed material in the Barbecue industry. The pumice deposit of the property has two different colors including 70% red color and 30% light gray to black color.

Specific Gravity

The specific gravities of five rock samples were collected from both red and black pumice within the property and were tested by ACME Lab. The results indicated that the pumice of the Barbecue and Landscape Claim Group have specific gravity ranging from .94 to 1.27 with an average of 1.1. The black pumice has less specific gravity than the red lava (see appendix B).

7.3 The 2008 Petrographic Study

Two rock samples were collected during the 2008 limited program. One red lava was collected from the western outcrop and the second is black lava from the central outcrop. A polished thin section was produced and a petrographic analysis was completed by Vancouver petrographics.

Sample #1 (Red Lava)

Hand specimen description

Dark reddish-brown, highly vesicular basalt (scoria), the red colour is the result of thermal oxidation. Local infill of vesicles by clear material likely zeolite. Hardness of the sample is less than 5.5, no reaction to cold dilute HCl and no attraction to magnet.

Thin Section description

After Kathryn Dunne

The sample is a highly vesicular basalt scoria (approximately 50% vesicles) with traces of fine-grained clinopyroxene phenocrysts and glomerocrysts in a very fine-grained groundmass comprising plagioclase laths with interstitial hematite and intersertal brown glass. The clinopyroxene phenocrysts are selectively rimmed and replaced by very fine-grained aggregates of red hematite, locally an unknown aphanitic material and orange Jarosite. Vesicles are a maximum of 6 mm in diameter with round to oval shapes and are rarely partly filled by fragments of zeolite .

Sample #2 (Black Lava)

Hand specimen description

Brownish-black, highly vesicular basalt (scoria). Locally vesicles lined or partly infilled by clear material likely zeolite, hardness is less than 5.5% and no reaction to cold dilute HCL. Slight attraction to magnet.

Thin Section description

After Kathryn Dunne

The sample is a highly vesicular basalt scoria (approximately 45% vesicles) with traces of fine-grained clinopyroxene phenocrysts and glomerocrysts in a cryptocrystalline dark brown-black glassy groundmass with minor plagioclase laths. Commonly vesicles are rimmed or partly infilled by a colourless to pale

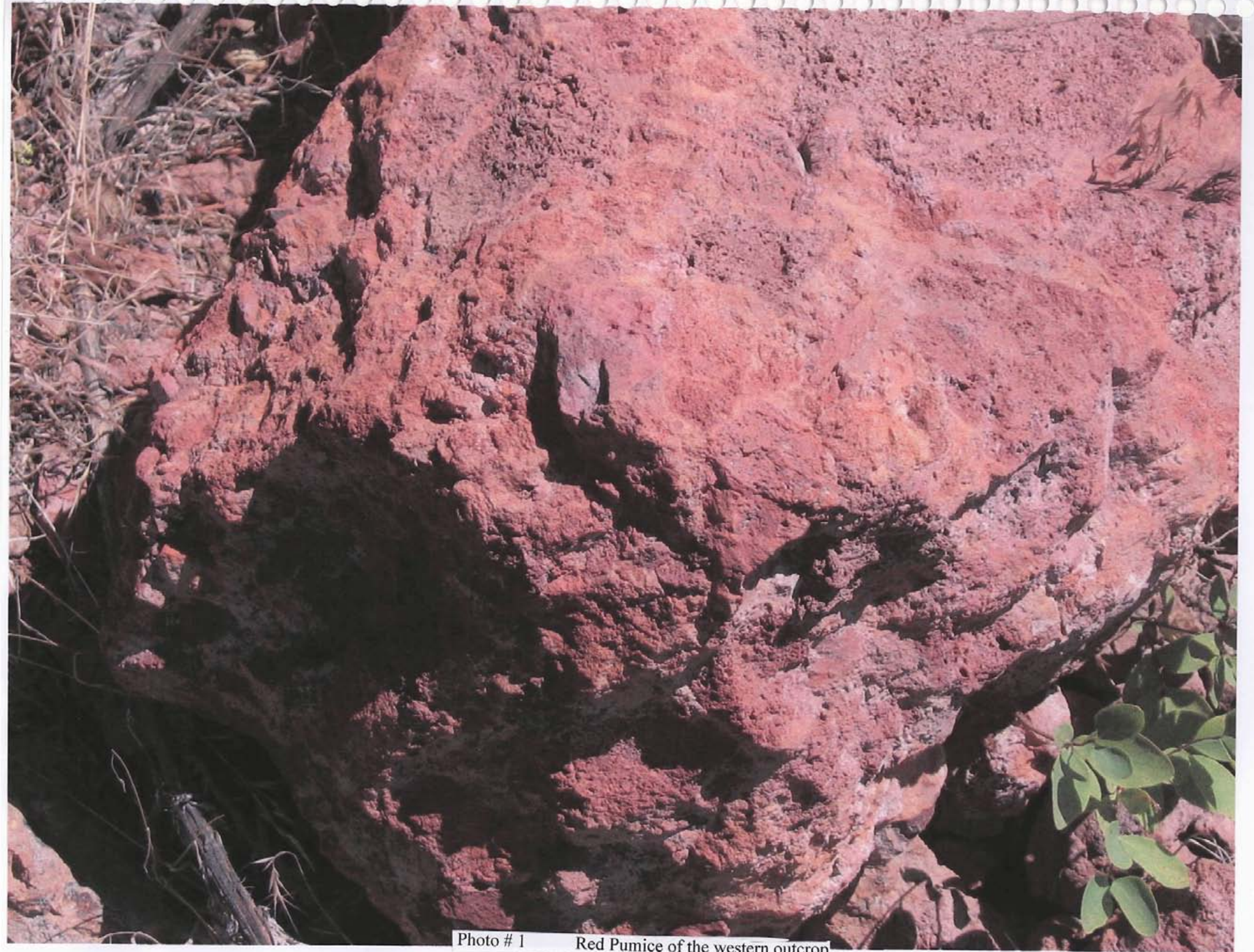


Photo # 1 Red Pumice of the western outcrop

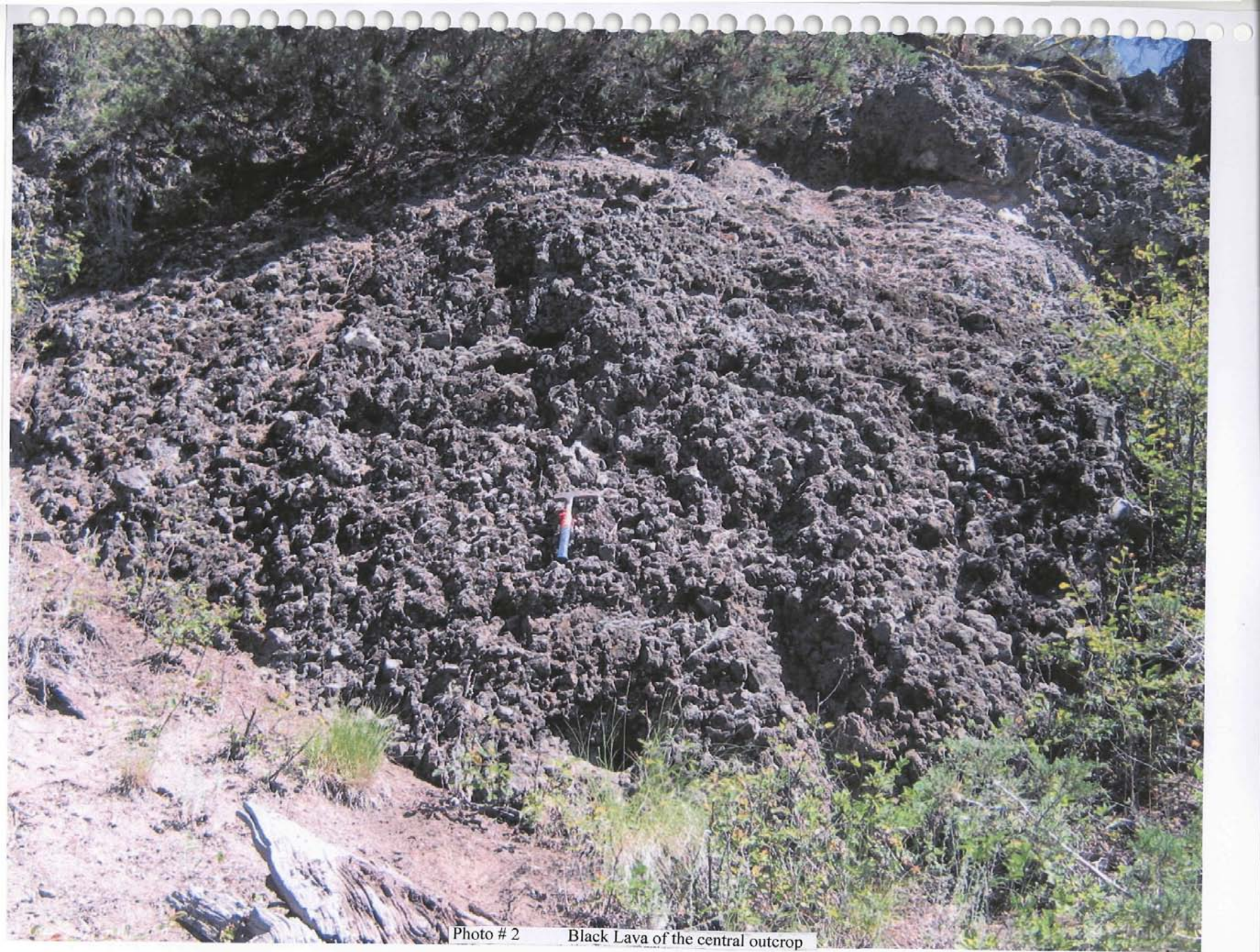


Photo # 2

Black Lava of the central outcrop

brown material probably zeolite. Vesicles are a maximum of 5 mm in diameter with typically oval shapes. Traces of very fine-grained eu-subhedral magnetite grains and aggregates occur as disseminated. Traces of very fine-grained anhedral pyrite and hematite grains occur scattered in some vesicles.

For more details on the petrographic description see Appendix A.

8.0 USES OF LAVA ROCK PRODUCTS

Uses of Lava Rock in Landscaping

The high quality landscaping lava rock is attractive in all forms. The large, massive lava rock can easily be placed as boulders and would be perfect around ponds and waterfalls as a unique product of nature. The medium size products will be attractive, maintenance free exterior products when it is compared to maintenance and replacement costs of traditional landscape materials, such as bark.

The products will be as an attractive ground cover in landscape areas where products will not fade or decompose.

The lava rock products can also be used as interior landscape materials and will display the following special characteristics:

- 100% nature
- Contains minerals essential to plant growth
- Help retain moisture
- Fireproof

The fine-grained to dusty products can be used in gardening, soil mixing, greenhouses and houseplants

Uses of Lava Rock in Barbecue

The quality of the lava rock products for Barbecue uses will depend on the following factors:

- 1- The presence of any detectable levels of high toxic fumes such as arsenic, lead, cadmium, mercury and antimony in the products.
- 2- The ability of the lava rock to explode under high temperatures.

The volcanic lava rock occurrences within the claim group includes extensive east-west trending outcrops, well exposed along the main logging road for three kilometers and can provide economic potential of pumice deposit located in the south-central part of the province.

Uses of Lava rock as a mineral admixture in concrete (Pozzolan)

The term (Pozzolan) has been defined by the American Society as a "siliceous or siliceous and aluminous material which itself possesses little or no cementitious value but will, in finely divided form and in the presence of moisture, chemically react with calcium hydroxides at ordinary temperatures to form compounds possessing cementitious property".

Recently it has been recognized that pozzolan can impart certain desirable properties to Portland

10.0 DISCUSSION AND CONCLUSION

- Several previous programs on the property has recognized a new potential source of pumice lava rock rocks in British Columbia. Several previous programs completed on the property by the writer added valuable information on the chemical and physical characteristics of the lava rock of what is now the lava rock property.
- The massive volcanic lava rock deposit recognized on the property suggests a strong potential of low-cost natural pumice for British Columbia.
- The lava rock occurrences within the property include extensive east-west trending outcrops, well exposed along the main logging road which can provide enormous economic potential for natural products. The lava rock of the property has 75% red lava and 25% between gray, sage, and black lava. The red lava is the most attractive color for the landscaping use and the gray to black lava will be suitable as flame bed material for the barbecue use.
- All lava rock products can be crushed, screened, bagged and shipped at the site, which are located 28 kilometers north of Cache Creek.
- The chemical characteristic of the lava rock is very important, especially the tendency of the lava rock to explode, as well as the toxic contents. Previous chemical testing indicated no evidence of fracturing, no detectable odor and no explosion when the lava rock was heated to 900 degrees for 40 minutes
- The lava rocks of the property were tested previously to determine the loss of ignition (L.O.I.), and analyzed to determine the total carbon (C/TOT) and the total Sulphur (S/TOT) contents. The results of these tests indicated that all samples meet the chemical requirements for N Class Pozzolanic materials, however the physical test still to be determined.
- The property is considered the closest to the cement plant in Marble Canyon.

For these reasons further exploration work is warranted and recommended

11.0 RECOMMENDATIONS

A resource evaluation program should be initiated on the property consisting of:

- 1- Geological mapping at scale 1:1000 to evaluate the size, and the surface exposure of each lava rock outcrop.
- 2- Estimate the lava rock reserves on the property.
- 3- Determine the commercial value of the deposit by:

More testing to identify the physical characteristics of the lava rock such as porosity, specific gravity, and to determine the Pozzolanic action of the lava rock. More testing to determine the availability of any toxic elements such as Lead, Arsenic, Cadmium, Mercury, and Antimony that might affect the economic value of the Lava rock. Testing the availability of Potassium, Calcium, Magnesium, Nitrogen, and Phosphate in order to determine the quality of the Lava rock to be used in gardening and soil mixing.

- 4- More testing should be done to evaluate the oil absorption potential of the volcanic ash outcrop located during the 2000 prospecting program on the property.
- 5- Initiate a business plan to bring the volcanic Lava rock deposit of the property into production.

11.0 PROPOSED BUDGET

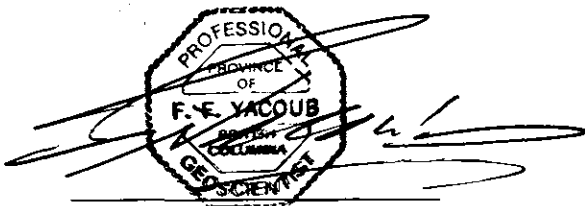
Phase 3: Project Geologist and two Geotechnicians, 10 days.

Project Preparation	\$1,800
Mob/Demob	3,500
Field Crew	14,000
Field Costs	6,000
Lab Analysis	2,800
Data compilation and report	6,000

Subtotal	34,100
G.S.T@ 5%	1,705

TOTAL	35,705
SAY	38,000

Respectfully Submitted



Fayz Yacoub, P. Geo. , F.G.A.C.

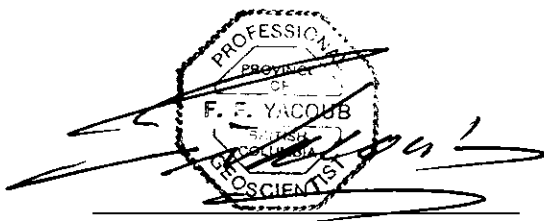
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CERTIFICATE OF QUALIFICATIONS

I, FAYZ F. YACOUB, of 6498-128B Street, Surrey, British Columbia, V3W 9P4, do hereby declare that:

- 1) I am a graduate in: Geology and Chemistry from Assuit University, Egypt (B.Sc., 1967), and Mining Exploration Geology of the international Institute for Aerial Survey and Earth Sciences (I.T.C.), Holland (Diploma 1978);
- 2) I am a fellow in good standing with the Geological Association of Canada;
- 3) I am a professional geologist and a member of the Association of the Professional Engineers and Geoscientists of British Columbia.
- 4) I have actively pursued my career as a geologist for the past twenty nine years;
- 5) The information, opinion, and recommendations in this report is based upon fieldwork carried out by myself, and on published literature. I was present on the subject property between July 9-12/1999, and between July 16-19, October 1-3, October 11-12, and October 17-19/2000 and between July 18-19 of 2008.
- 6) I am the registered owner and have 100% interest in the property.



Fayz Yacoub, P. Geo., F.G.A.C.
October 2008

**THE LAVA ROCK PROPERTY
THE 2008 PROSPECTING PROGRAM**

COST STATEMENT

Mob/Demo, Transportation, Car rentals, and fuel	675
Food & Accommodation 2 days @ \$120/day/man	480
Field Crew	
Geologist @ \$600/day x 2 days	1200
Helper @ \$250/day x 2 days	500
Petrographic analysis	400
Report writing includes:	
Report writing, Maps, word processing, photocopying, and binding.	3300

TOTAL COST	6,555

APPENDIX A

PETROGRAPHIC DESCRIPTION



Vancouver Petrographics Ltd.

8080 GLOVER ROAD, LANGLEY, B.C. V1M 3S3
PHONE: 604-888-1323 • FAX: 604-888-3642
email: vanpetro@vanpetro.com
Website: www.vanpetro.com

PETROGRAPHIC DESCRIPTION OF 2 HAND SAMPLES

THE LANDSCAPE PROPERTY (LAVA ROCK DEPOSIT),

B.C., CANADA

October 15, 2008

INVOICE #:
080930

Prepared for:
Fayz Yacoub, P.Geo.
On Track Exploration Ltd.
6498-128B Street
Surrey, B.C.
Canada V3W 9P4

Prepared by:
Kathryn Dunne, M.Sc. P.Geo.
Bag 9000, # 207
190B Trans Can Hwy NE
Salmon Arm, BC
Canada V1E 1S3

Background

Two hand samples were received by Vancouver Petrographics Ltd. from Fayz Yacoub, P.Geol. on behalf of Ontrack Exploration Ltd. in September, 2008 for thin and polished thin section production and petrographic description. The samples were taken from the Landscape property, B.C., Canada. One thin section and one polished thin section were prepared from the rock samples at Vancouver Petrographics. Kathryn Dunne, P.Geol. carried out the petrographic analysis at her office in Salmon Arm, B.C. All percentages in the descriptions are approximate based on visual estimation.

Sample: Lava 1

1

LITHOLOGY: Hematitic vesicular basalt (scoria)
ALTERATION: Hematite

Hand Sample Description:

Dark reddish-brown, highly vesicular basalt (scoria). The red colour is the result of thermal oxidation. Local infill of vesicles by clear material, likely zeolite (hardness < 5.5). No reaction to cold, dilute HCl. No attraction to magnet. No reaction of alkali feldspar grains to etching of sample offcut and staining with sodium cobaltinitrite solution (no yellow stain).

Thin Section Description:

This sample is a highly vesicular basalt scoria (approximately 50% vesicles) with traces of fine-grained clinopyroxene phenocrysts and glomerocrysts in a very fine-grained groundmass comprising plagioclase laths with interstitial hematite and intersertal brown glass. The clinopyroxene phenocrysts are selectively rimmed and replaced by very fine-grained aggregates of red hematite, locally an unknown aphanitic material and orange jarosite. Vesicles are a maximum of 6 mm in diameter with round to oval shapes. Vesicles are rarely partly filled by fragments of zeolite.

Sample: Lava 1

1

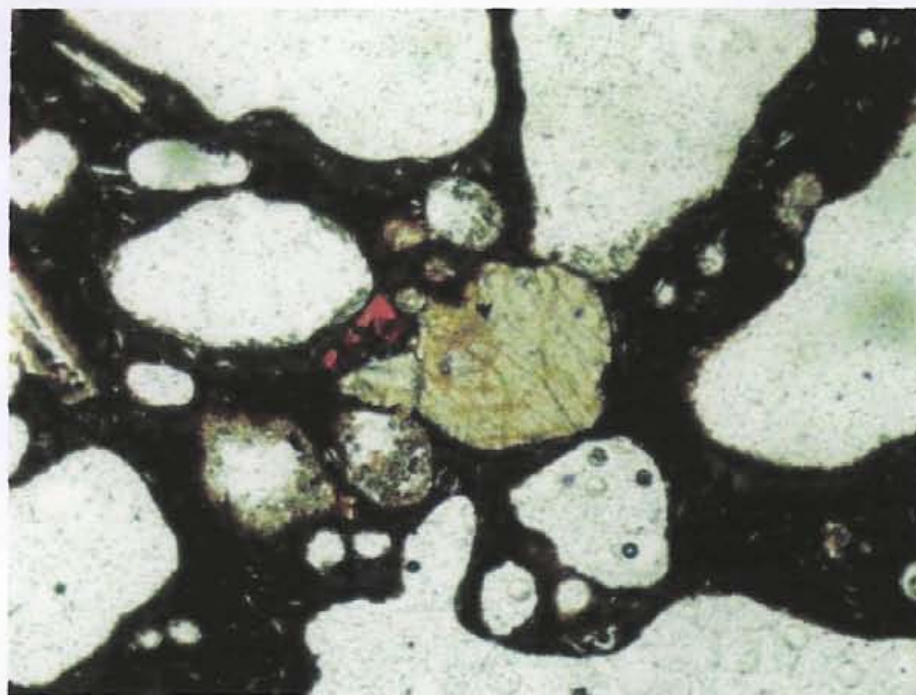
MAJOR MINERALS

Mineral	%	Distribution & Characteristics*	Optical
Vesicles	50	round to oval shaped, up to 6 mm maximum diameter	
Hematite	30	very fine-grained, anhedral aggregates, occurs as replacement of former mafic phases in groundmass, occurs locally with ?jarosite as selective replacement clinopyroxene phenocrysts	
Volcanic glass	10	cryptocrystalline, brown, occurs interstitial to plagioclase	<i>isotropic</i>
Plagioclase	9	fine to very fine-grained (< 0.1 mm), occurs as laths	

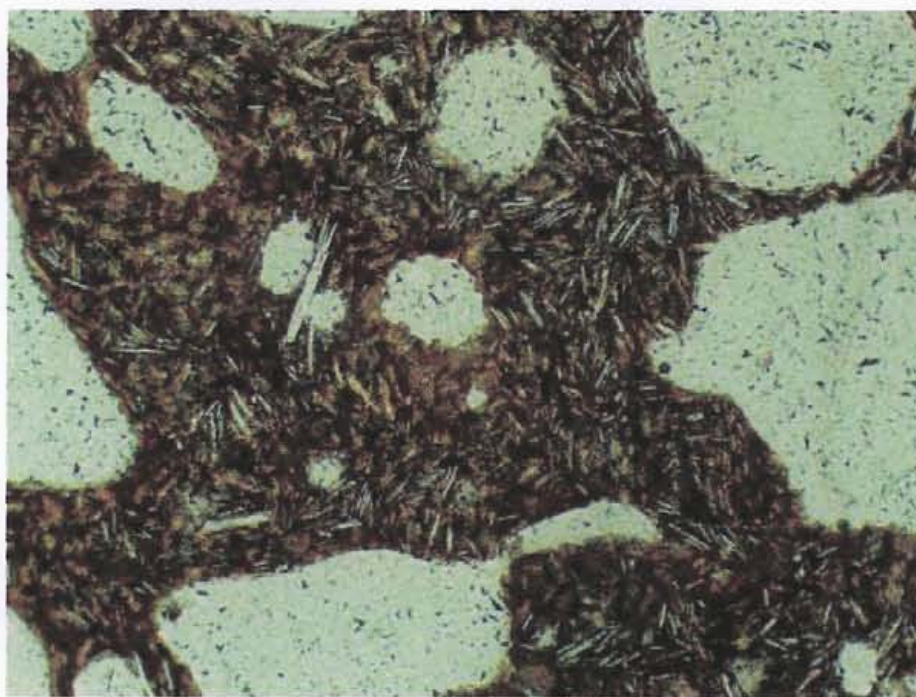
MINOR MINERALS

Mineral	%	Distribution & Characteristics*	Optical
?Jarosite	tr	very fine-grained, occurs with hematite locally as replacement of clinopyroxene phenocrysts	<i>orange</i>
Clinopyroxene	tr	fine-grained, occurs as phenocrysts and glomerocrysts, locally rimmed and partly replaced by hematite, ?jarosite and unknown aphanitic material	<i>pale green</i>
Unknown	tr	aphanitic material, occurs with hematite and ?jarosite as replacement of clinopyroxene phenocrysts	<i>pale brown</i>
?Zeolite	tr	very fine-grained, colourless to pale brown, fragmented, locally partly fills vugs	<i>isotropic</i>

*size ranges: coarse-grained > 5mm; medium-grained 1-5mm; fine-grained 0.1-1mm; very fine-grained < 0.1mm



A



B

Lava 1:

A) Highly vesicular basalt (scoria) with zoned clinopyroxene phenocrysts and selective replacement by hematite (centre). PPL, FOV = ~2.6 mm. B) Detailed view of groundmass with plagioclase laths and interstitial very fine-grained hematite (replacing former mafic phases) and patchy brown volcanic glass. PPL, FOV = ~ 1.3 mm.

15/10/08

Kathryn P.E. Dunne, P.Geo

Sample: Lava 2

2

LITHOLOGY: Vesicular basalt (scoria)

Hand Sample Description:

Brownish-black, highly vesicular basalt (scoria). Locally vesicles lined or partly infilled by clear material, likely zeolite (hardness < 5.5). No reaction to cold, dilute HCl. Slight attraction to magnet. No reaction of alkali feldspar grains to etching of sample offcut and staining with sodium cobaltinitrite solution (no yellow stain).

Thin Section Description:

This sample is a highly vesicular basalt scoria (approximately 45% vesicles) with traces of fine-grained clinopyroxene phenocrysts and glomerocrysts in a cryptocrystalline dark brown-black glassy groundmass with minor plagioclase laths. Commonly vesicles are rimmed or partly infilled by a colourless to pale brown isotropic material, probably a zeolite. Vesicles are a maximum of 5mm in diameter with typically oval shapes. Traces of very fine-grained eu-subhedral magnetite grains and aggregates occur disseminated. Traces of very fine-grained anhedral pyrite and hematite grains occur scattered in some vesicles.

Sample: Lava 2

2

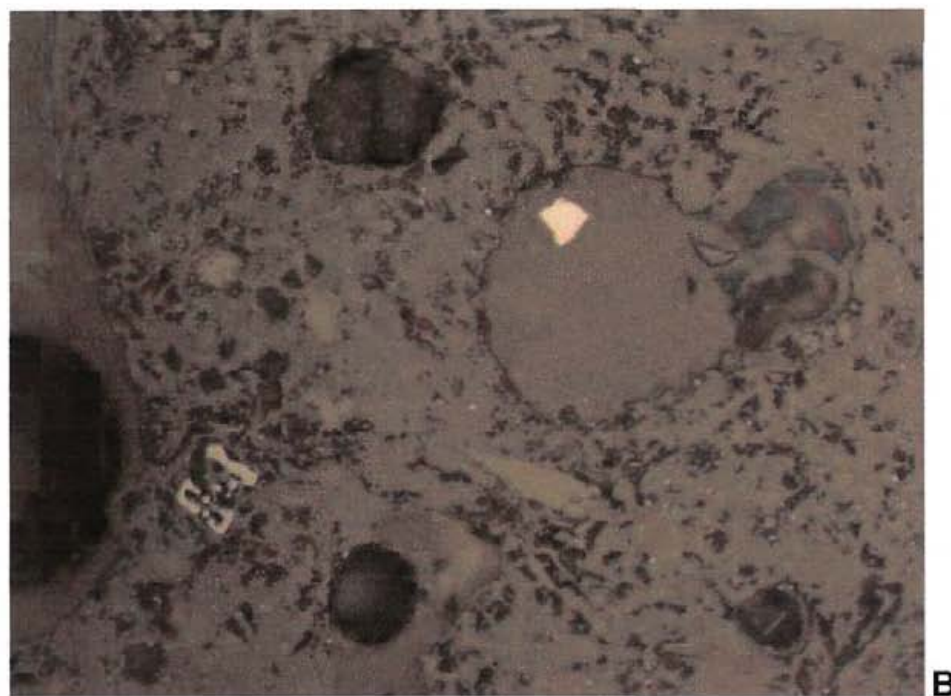
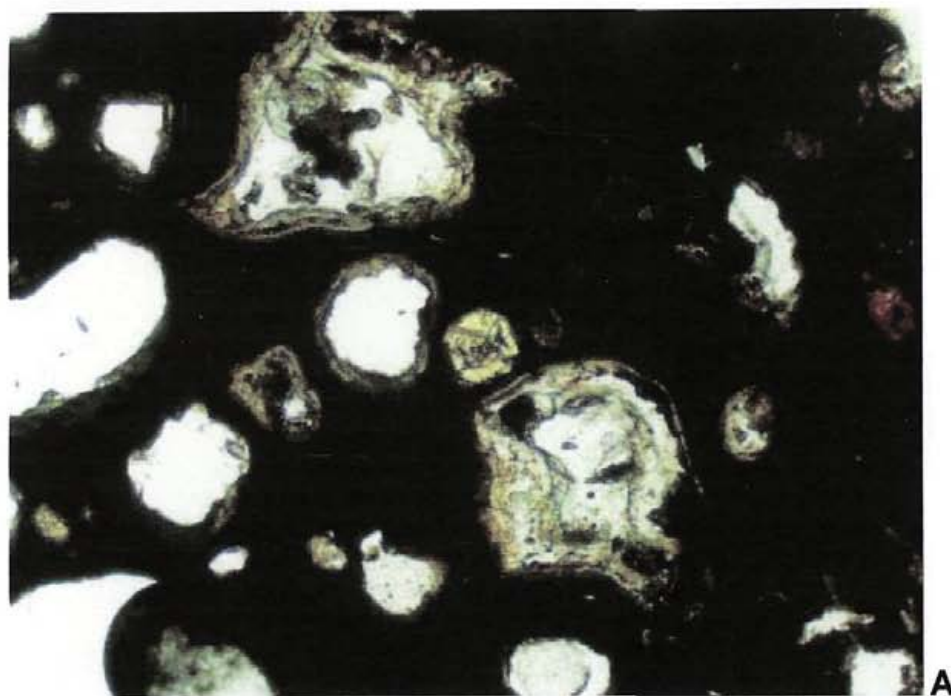
MAJOR MINERALS

Mineral	%	Distribution & Characteristics*	Optical
Volcanic glass	50	aphanitic (cryptocrystalline), dark brown-black, occurs as matrix	<i>isotropic</i>
Vesicles	45	oval shaped, up to 5 mm maximum diameter	

MINOR MINERALS

Mineral	%	Distribution & Characteristics*	Optical
?Zeolite	2	very fine-grained, colourless to pale brown, radially fibrous, occurs rimming and locally infilling vugs	<i>isotropic</i>
Plagioclase	2	fine to very fine-grained (< 0.1 mm), occurs as laths within matrix	
Clinopyroxene	tr	fine-grained, occurs as phenocrysts and glomerocrysts, locally zoned, some lamellar twinning	<i>pale green</i>
Magnetite	tr	very fine-grained (< 0.02 mm), eu-subhedral grains and aggregates, occurs disseminated	
Hematite	tr	very fine-grained, cubic forms, occurs as vug infill and scattered grains in vugs	

*size ranges: coarse-grained > 5mm; medium-grained 1-5mm; fine-grained 0.1-1mm; very fine-grained < 0.1mm

**Lava 2:**

A) Highly vesicular basalt (scoria) with pale green clinopyroxene phenocryst (centre) surrounded by dark brown cryptocrystalline glassy matrix. Vesicles rimmed and partly infilled by colourless to pale brown radially fibrous mineral, likely zeolite. PPL, FOV = ~2.6 mm. B) Skeletal disseminated magnetite grain (lower left). Pyrite grain within vug (top right). RL, FOV = ~0.6 mm.

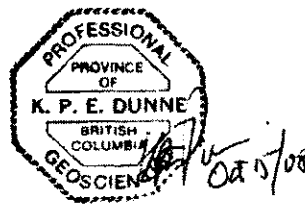
15/10/08

Kathryn P.E. Dunne, P.Geo

Statement of qualifications: Kathryn P.E. Dunne

I, Kathryn P.E. Dunne, of the district of Salmon Arm, province of British Columbia, do hereby certify that:

1. I am an independent consulting geologist, with a business office at 4610 Lakeshore Road NE, Salmon Arm, B.C., Canada. My business mailing address is: Bag 9000, Suite 207, 190B Trans Can Hwy NE, Salmon Arm, BC, V1E 1S3.
2. I am a graduate in geology, with a BSc in geology from The University of British Columbia (1985).
3. I received my Masters degree in geology from The University of British Columbia, Vancouver, B.C. in 1988.
4. I am a registered member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia (No. 18674).
5. I am a fellow of the Geological Association of Canada and a member of the Society of Economic Geologists.
6. I have practiced my profession as a geologist for approximately 19 years: 4 years as geologist with the British Columbia Geological Survey Branch, 3 years as research coordinator at the Mineral Deposit Research Unit housed within the Department of Earth and Ocean Sciences at the University of British Columbia, and 12 years as an independent consultant.
7. The petrographic data of this report was collected by me in October, 2008.



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Kathryn P.E. Dunne, M.Sc., P.Ge.
Consulting Geologist
October 15, 2008