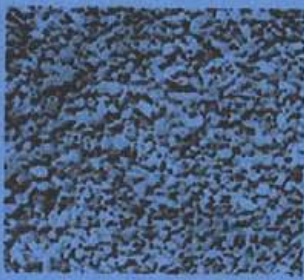


PERLITE
Mother Nature's Most Perfect
Soil Conditioner

BC Geological Survey
Assessment Report
32272

From This



To This



Expanded Perlite

To This



Commercial Greenhouse Production with Perlite and Vermiculite Soil Mixes

Uncha Lake Perlite Deposit

NTS Map 93F/13E

March 15 2011

Innovative Energy Inc.
21664 – Monahan Court
Langley BC, Canada.
V3A8N1

32272



Technical report
Uncha Lake Perlite Deposit
NTS MAP 93F/13E

March 15 2011

Innovative Energy Inc.
21664 Monahan court
Langley BC. V3A8N1
Email address venturesunlimited.ca
@telus.net. also hoppelt7@telus.net

32,272

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

Index

Table of Contents	Page
1. Introduction -----	1
2. Location and access -----	2, 3
3. Topography -----	4, 4 A 4 B
4. Road System to property-----	5, 5A. 6. 7. 8.
5. Regional geology-----	
Anniversary dates ---	9, 9A
6. Local Geology, Ootsa lake group--	10
7. Uncha Lake prospect Geology.	
History of previous work	11
8. Description of deposit-----	12 ,13, 14,
9. Eocene Ootsa lake group -----	15 , 16
10. Aerial photos show location	17,
11. Areas of previous sample locations	18
12. Photo showing perlite deposit	19
13. Areas sampled in 2004, in Red	
2010 in Black	20
14. Description of samples. & locations	21, 22 , 23.
15. Analyses of Rock samples 2010	24, 25, 26, 26A,
	26 B, 26 C 26 D.
	26 E 26 F 26 G 26 H 26 I
	26 J 26 K 26 L

16, Samples of rock from Greece, comparison	
Analyses to Uncha lake rock analyses	26 M
17, Furnace test results from 1989 Canmet lab	
27, 28, 28 A 29 pages	
18, Furnace tests results from Imasco Min. Co.	30, 31.
32 , 33, 34,	
19 Executive Summary -----	35,35 A
20. Historic Min file data -----	36, 37.
21 Conclusions and recommendations -----	38, 38 A
22, Statement of qualifications -----	39
23 Expense sheet for 2010 Uncha lake -----	40

1.0 Introduction

Uncha lake perlite deposit;

1.0 Introduction.

Perlite is not a trade name but is a term applied to anyhydrated volcanic glass of rhyolitic composition which when heated to temperatures greater than 510C will expand to form a white, porous, light weight material (2lbs. to a cubic foot)

There are many uses for expanded perlite (possibily 1000) some of the main uses are for loose insulation, horticultural applications, insulating aggregates in plaster and concrete. Forage for animal feeding and a host of technical uses depending on the degree of processing the raw rock.

Deposits are restricted to volcanic belts ranging in age from Tertiary to Quartinary. Most of the perlite that is presently consumed in Canada is imported from the U S A from raw rock imported from Greece or Turkey. Presently there is no market for raw perlite rock in Canada and would therefore any perlite project in Canada would have to look to USA expanders for a market for their product.

Recent applications of the perlite product in Canada has sparked new interests in the domestic markets ranging up to 20% of the 40,000 tonnes or so that are imported into Canada on a annual average.

Economically raw rock would have to be shipped to destinations that produce a market for the product once it is expanded , this due to high cost of transportation. It is felt the Uncha Lake deposit could capture a large percentage of that market due to the strategic location of the deposit near Burns lake BC.

UNCHA LAKE PERLITE DEPOSIT

1.1 Introduction

Perlite is a term applied to any hydrated volcanic glass of rhyolitic composition which when heated to temperatures greater than 510°C will expand to form a white, porous, lightweight material. In its expanded form perlite is used as an insulating aggregate in plaster and concrete, in horticultural applications and as a filtering agent. Deposits are restricted to volcanic belts ranging in age from Tertiary to Quaternary. At present, all perlite consumed in British Columbia is imported from the United States.

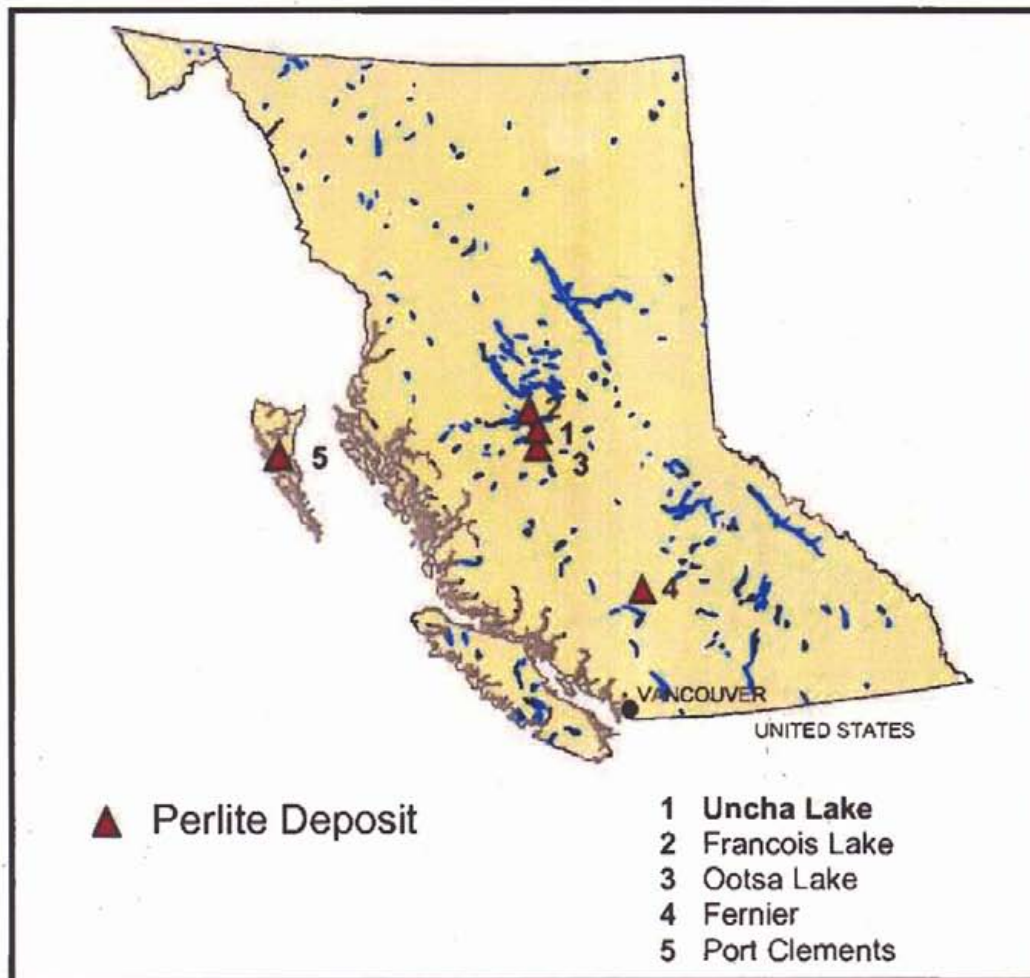


Figure 1: Perlite occurrences in British Columbia.

2.0 Location and access

2.0 Location and access;

The Uncha lake perlite deposit is located in the Omenica Mining District within the 93F/13E NTSmap sheet,

The deposit is located on the North west slopes of Dayeezcha mountain, 25 km south of the town of Burns lake, British Columbia (Fig. 1)

The deposit is reached by taking the all weather highway #35 to the ferry terminal at Francois lake, crossing the lake to the South Bank terminal and continuing on the BC forest service road for approximately 20 Km to the Dayeezcha Mountain Area. The Uncha claims are located about 6 km directly south of the uncha lake. The road are well maintained as they are used frequently by logging operations within the area. There is road access into the property area (fig 2).

Most of the general area is very lightly settled, with some small towns along major routes(rivers) major settlements include Burns Lake to the North, Houston, 55 miles to the NW and Endako, 33 miles to the northeast. There is no settlement on or near the Uncha lake deposit, Rail transportation is accessible at the town of Burns lake.

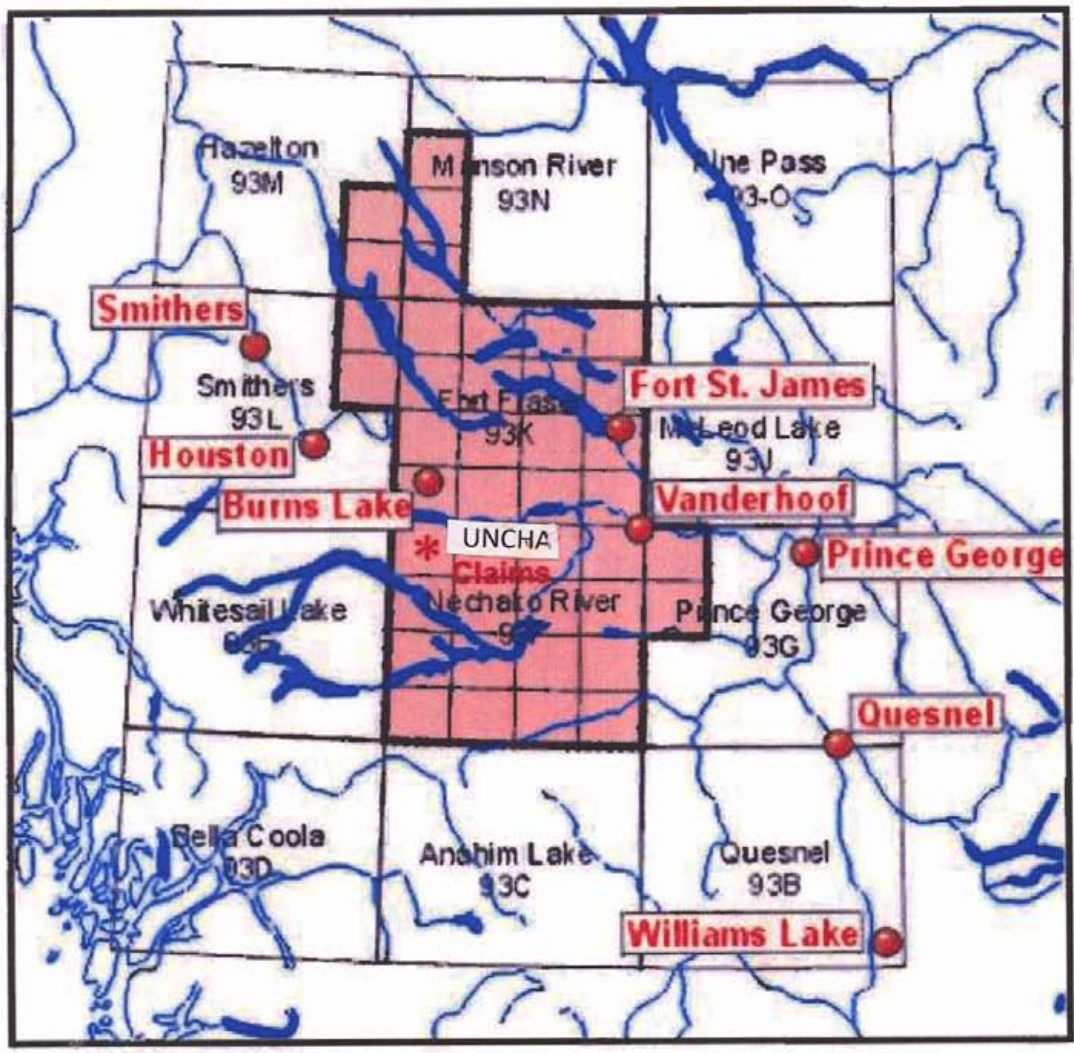


Figure 2: The Nechako Plateau within the Intermontane Belt of northwestern British Columbia.

* Uncha Lake Perlite Prospect

3.0 Topography

3.0 Topography;

The Uncha lake prospect lies on the Nechako Plateau,

The northern most subdivision of the Interior Plateau (Holland 1976) The property is located in low and rolling terrain which generally lies between 900 to 1150 meters elevation.

(figs 4 &5) The area is thickly forested with pine and bedrock is obscured by extensive drift cover, Tipper (1963) noted that over 90% of the Nechako River map area is drift covered till and glacial-fluvial outwash are the predominant cover materials.

Outcrop is concentrated mostly on ridge crests and steep slopes. Extensive clear cut logging in the area and road building has generated additional exposures and increased access. A satellite phot of the area (fig 6) demonstrates the active clear cutting by forestry companies. The area is known as the lake district as there are abundant small lakes created due to the subdued topography .

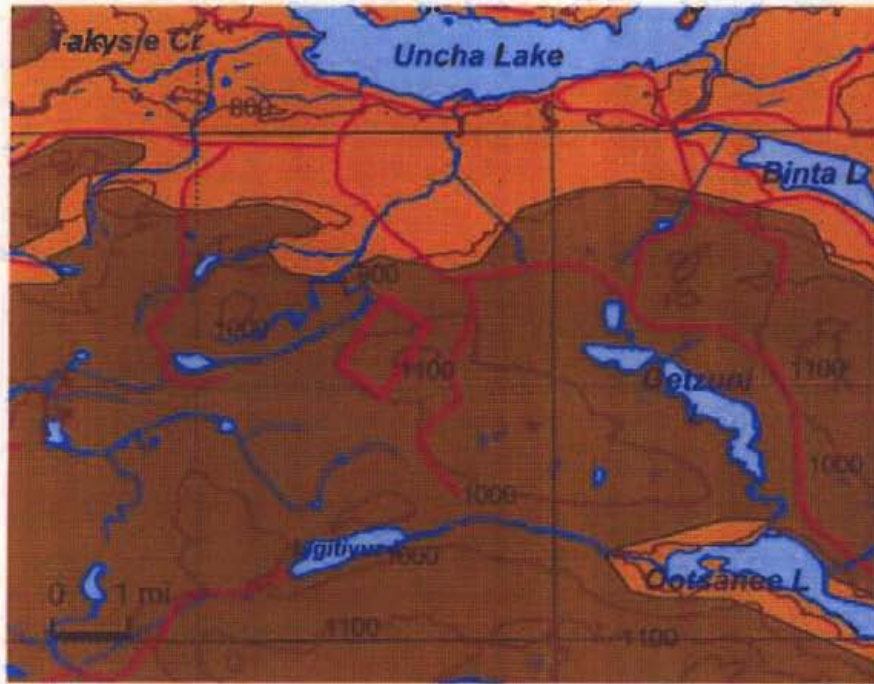


Figure 4: Surface elevation contours in meters of the Uncha Lake area.



Figure 5: Hillshade relief map of the Nechako River Plateau Area. Lack of shading indicates relatively low relief for area.

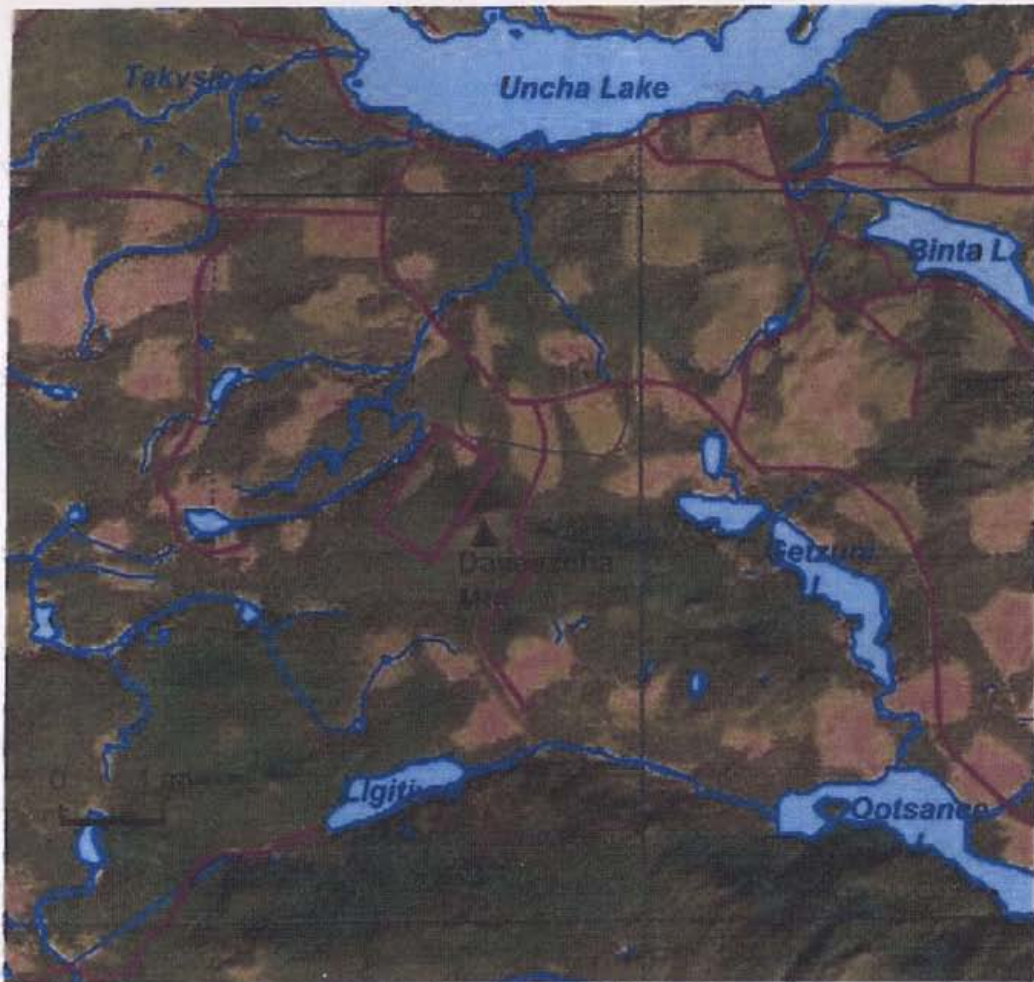


Figure 6: Satellite photograph of the Uncha Lake area on the Nechako Plateau. Red lines indicate access roads.

4.B

4.0 Road system and access

To property

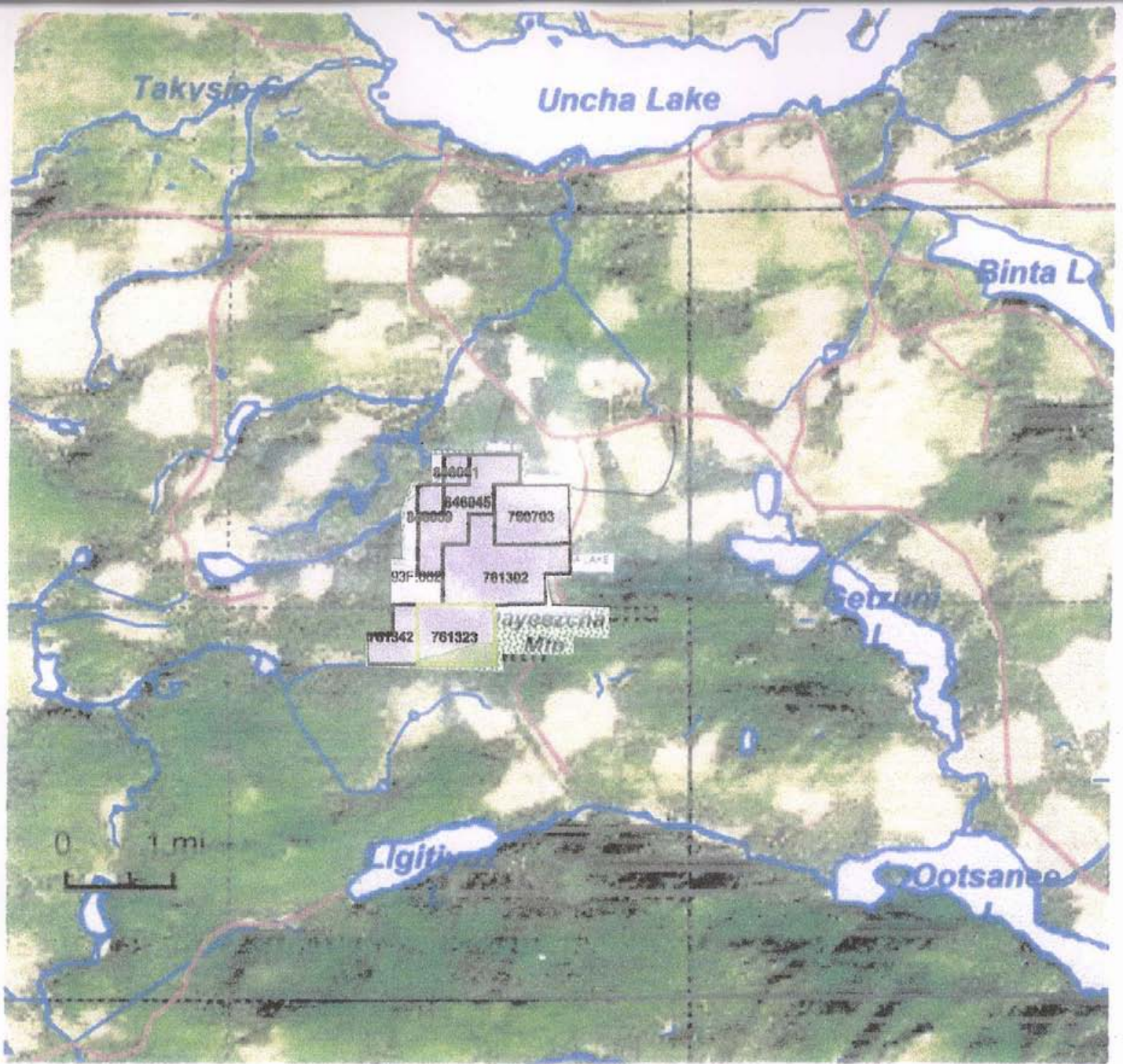
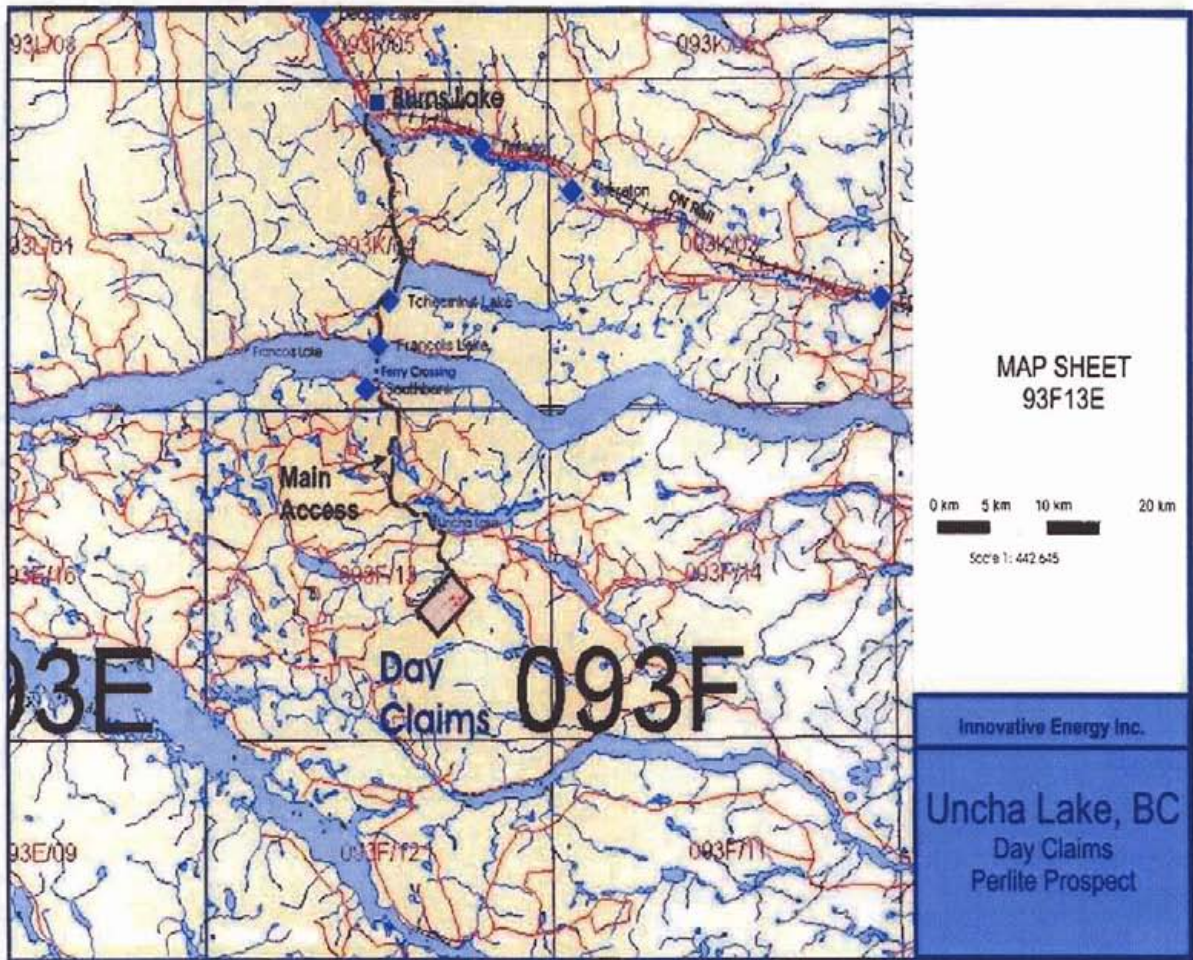
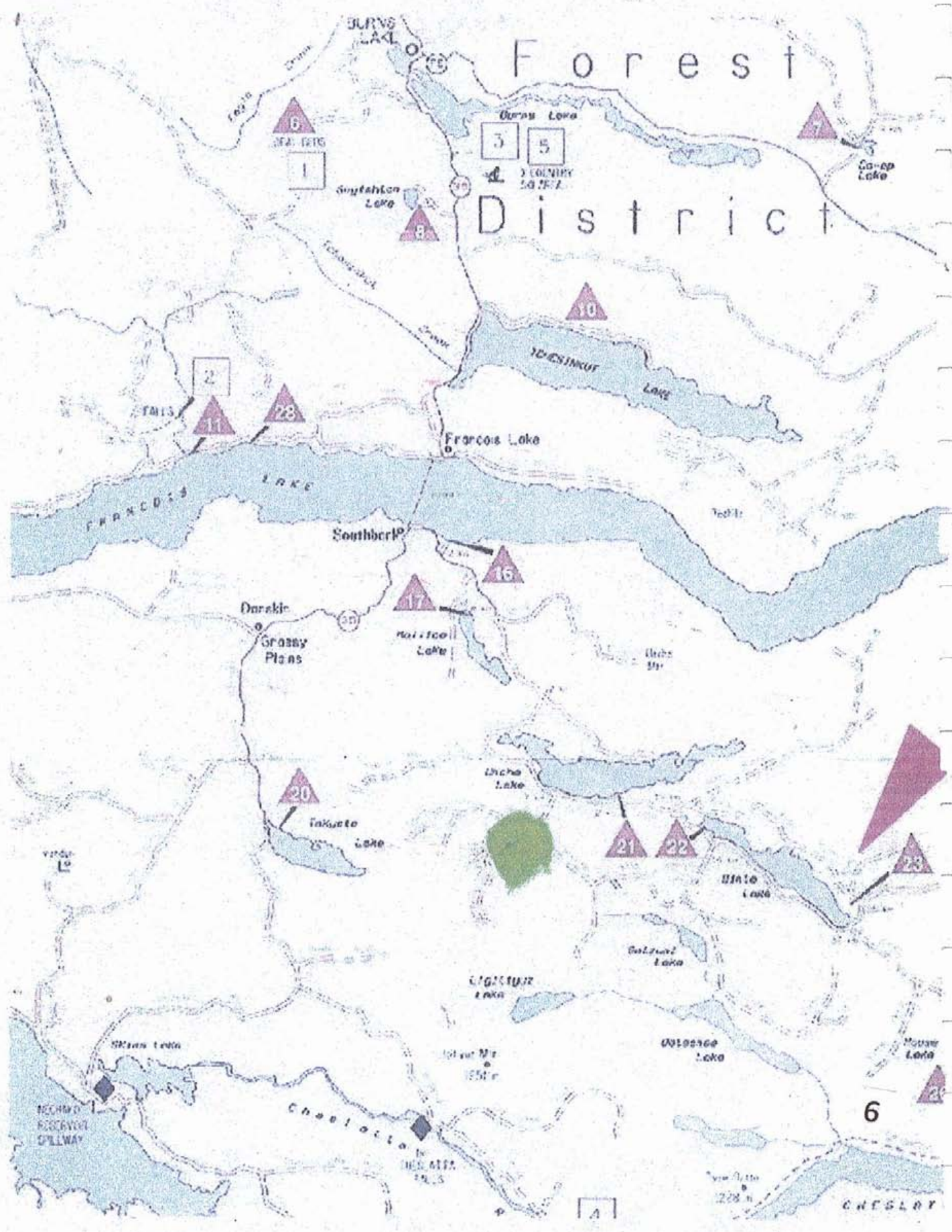


Figure 6: Satellite photograph of the Uncha Lake area on the Nechako Plateau. Red lines indicate access roads.

Figure 3: Location of **Day Claims**, 4.5 kms south of Uncha Lake.





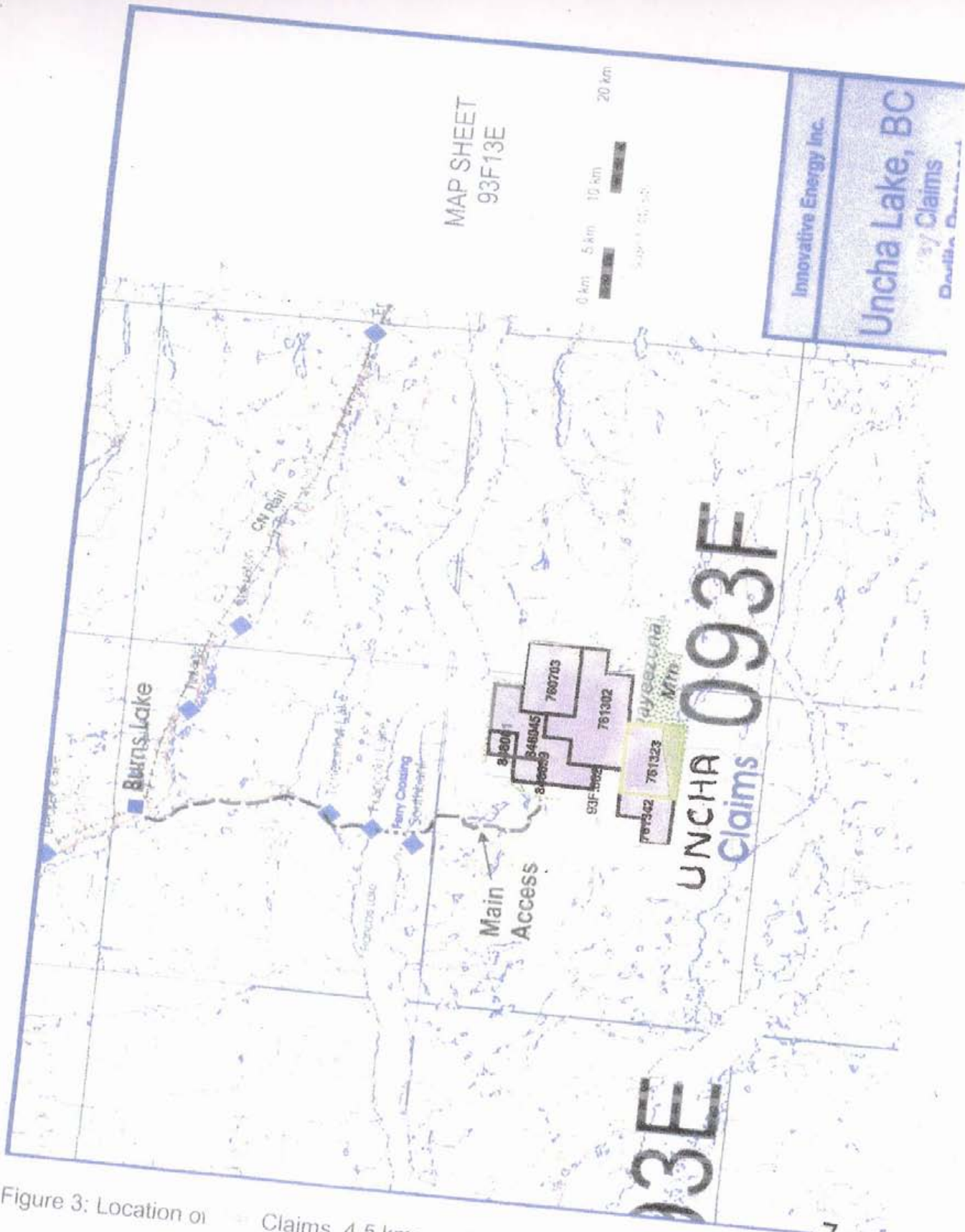


Figure 3: Location of Uncha Claims, 4.5 kms south of Uncha Lake.



5.0 Regional geology

5.1 Perlite claims and anniversary dates

5.0 Regional Geology;

The prospect area lies within the Nechako River NTS map sheet 93F and is entirely within the Nechako river basin of the Intermontane Belt. The Nechako river area comprises part of the Skeena terrane. The Nechako basin is a Mesozoic forearc basin, bounded by Skeena arch to the north, the Fraser river fault system to the east, and the Yalakom fault system and the coast mountain plutons to the west and south. The Nechako Basin formed when middle Jurassic terrane collisions created the Skeena arch, which separated the Nechako basin from the Bowser basin to the North. Compressional and transform tectonics throughout the Cretaceous caused bordering uplands to shed clastics debris into the Nechako Basin. Strike slip faulting during the tertiary laterally displaced surrounding terranes and numerous volcanic events mantled much of the basin with basaltic flows.

The stratigraphic succession within the study area is comprised of volcanic and sedimentary rocks of the lower to Middle Jurassic Hazelton group, intruded by Late Jurassic, Late Cretaceous and tertiary felsic plutonic rocks. These are overlain by Eocene volcanics of the Ootsa Lake Group. Oligocene and Miocene volcanics of the Endako Group and Miocene-Pliocene basalt flows.

The potential of the region to host different styles of mineral deposits has been recently recognised in the area. The Nechako Basin has the potential to host epithermal Au Ag deposits (Uduk) Lake. Porophry-related structurally hosted AU-AG and base metals, stratabound precious metal and base metal, coal and even oil and gas seeps. The Nechachako area contains 68 recorded mineral occurrences. Of these 7 are industrial mineral occurrences and one coal occurrence.

5.1 List of perlite claims and anniversary dates

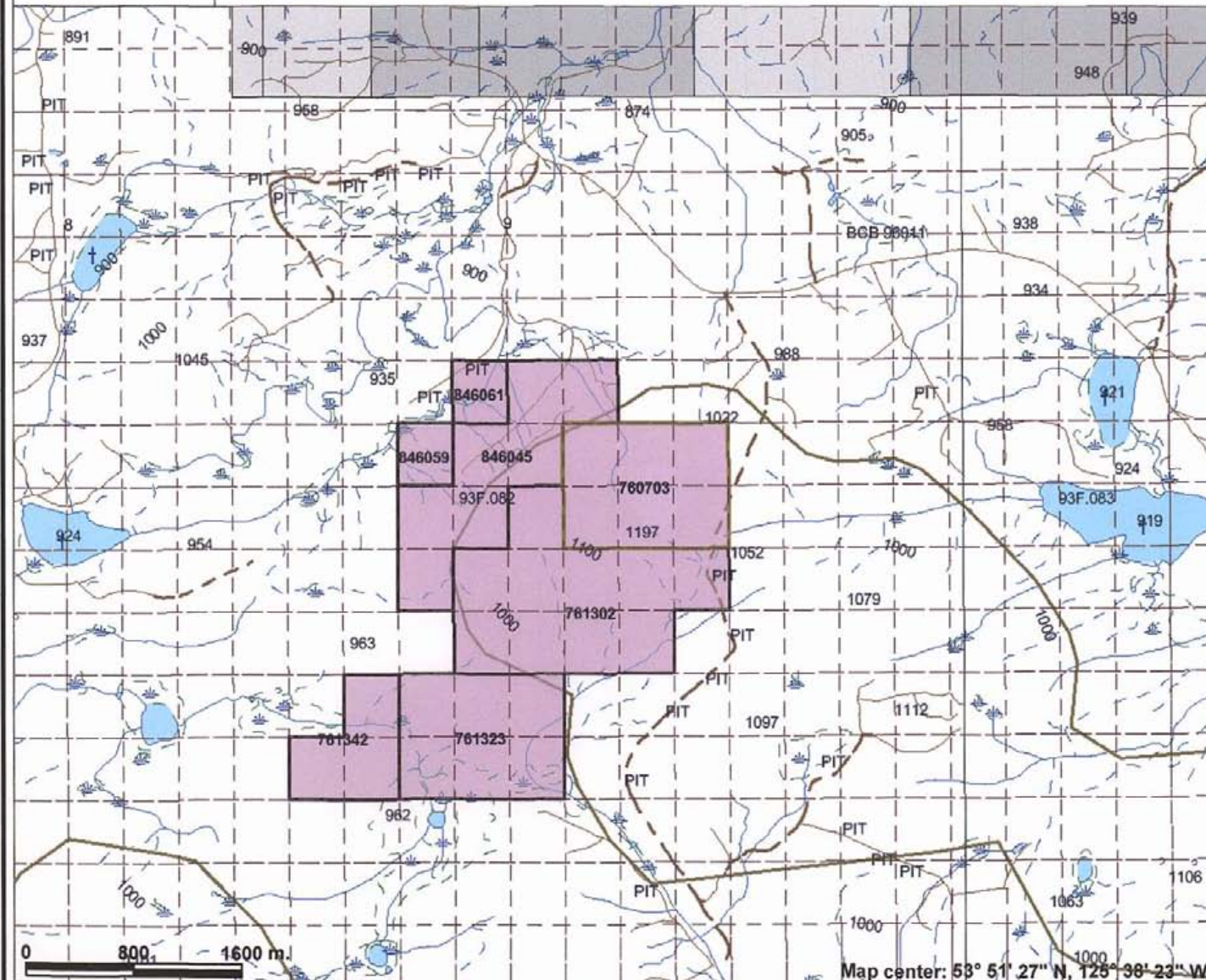
760703	UNCHA #1	143039	100%	Mineral	Claim	093F	2010/apr/29	2011/apr/29	GOOD	114.44
761302	UNCHA 3	143039	100%	Mineral	Claim	093F	2010/apr/29	2011/apr/29	GOOD	190.76
761323	UNCHA 4	143039	100%	Mineral	Claim	093F	2010/apr/29	2011/apr/29	GOOD	114.48
761342	UNCHA 1	143039	100%	Mineral	Claim	093F	2010/apr/29	2011/apr/29	GOOD	57.24

uncha perlite claims



Legend

- Indian Reserves
- National Parks
- Conservancy Areas
- Parks
- MTO Grid (MTO)
- Blocked by MEM
- Other
- Mineral Tenure (current)**
- Mineral Claim
- Mineral Lease
- Mineral Reserves (current)**
- Placer Claim Designation
- Placer Lease Designation
- No Staking Reserve
- Conditional Reserve
- Release Required Reserve
- Surface Restriction
- Recreation Area
- Others
- Survey Parcels
- BCGS Grid
- Contours (1:250K)**
- Contour - Index
- Contour - Intermediate
- Area of Exclusion
- Area of Indefinite Contours
- Transportation - Points (TRIM)**
- Helipad
- Transportation - Lines (TRIM)**
- Airfield
- Airport
- Airstrip



0 800 1600 m

Map center: 53° 51' 27" N, 125° 38' 23" W

Scale: 1:44,670

This map is a user generated static output from an Internet mapping site and is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. THIS MAP IS NOT TO BE USED FOR NAVIGATION.

6.0 Local geology

6.1 Ootsa Lake Group

6.0 Local Geology

The Uncha Lake Perlite deposit occurs within the Oosta Lake Group of Eocene age. The Oosta Lake Group is comprised of mainly felsic volcanic rocks and their epiclastic derivatives.

6.1 Oosta Lake Group

Eocene continental volcanic rocks of the Ootsa Lake Group are sporadically exposed throughout the area from the Nechako River to the west side of Francois Lake (Figure 2). Diakow and Mihalyuk (1987) recognized six lithologic divisions in the Ootsa Lake Group, which comprises a differentiated succession of andesitic to rhyolitic flows and pyroclastic rocks. Sedimentary rocks, although not common, are interspersed throughout the Oosta Lake sequence.

Potassium-argon ages of approximately 50 Ma have been obtained from Ootsa Lake rocks (Diakow and Koyanagi, 1988). Interest in the precious metal potential of the Ootsa Lake Group has increased in recent years. The Wolf and Clisbako prospects are epithermal gold-silver occurrences currently under exploration. The Wolf prospect is hosted by felsic flows, tuffs and subvolcanic porphyries, and is a low-sulphur silicified stockwork deposit (Andrew, 1988). The Clisbako prospect is hosted by Eocene basaltic to rhyolitic tuffs, flows and volcanic breccias exhibiting intense silicification and argillic alteration. Gold mineralization in both areas is associated with low-sulphide quartz stockwork zones. The Clisbako prospect has been interpreted to be a high-level volcanic-hosted epithermal system similar to those in the western United States (Dawson, 1991; Schroeter and Lane, 1992). Perlite occurrences have been described by White (1989) in deposits at Francois Lake and at Uncha Lake.

7.0 . Uncha Lake prospect Geology

7.1 . History of previous work

7.0 Uncha Lake Prospect Geology (MINFILE 93F 026)

The Uncha Lake Perlite Showing on the ^{UNCHA} Claims occurs within rhyolitic flows of the Oosta Lake Group on Dayeezcha Mountain. The perlite is interbedded within light to dark grey porphyritic rhyolite layers which are 2.0 to 9.0 metres thick. The perlite is light grey to pale greenish-grey with some perlitic glass occurrences. The perlite generally dips 10 to 30 degrees south and is 7.6 to 23.0 metres thick. A bedrock geology map (Figure 7) of the Uncha Lake area illustrates the extent of the Eocene age Oosta Lake Group. The Oosta Lake Group is bounded on the west by basaltic volcanics of the Late Eocene to Oligocene Endako Group.

7.1 History and Previous Work

Originally staked in 1953 by C.S. Powney and J. Rasmussen of Fort St. James and their associates, the Uncha Lake perlite prospect has been explored by trenching and limited laboratory processing tests. British Columbia Minister of Mines reports indicate that in 1955, Technical Mines Consultants Limited exposed nineteen trenches at approximately 150 foot intervals exposing over 8000 feet of bedrock (Figure 8). Six mineable perlite layers along a zone 850 metres long and 500 metres wide were exposed. Depth of overburden increases to the northeast making further trenching impractical. The company reported that the layers are "irregular in width and attitude, lying interbedded in a folded series of rhyolites striking generally northeast and dipping about 70° to the southeast". The last trench to the southwest end of the workings exposed "three strong layers of perlite". Evidence at the time indicated that the zone extends several hundred feet farther to the southwest.

James (1955) reports the maximum exposed width of at least two layers exceeds 45 metres, and that in some places interbedded rhyolite is sufficiently narrow to permit practical open-pit mining of two or more layers from one pit.

8.0 Description of Deposit



Figure 11: Photo of Perlite occurrence at Trench #2.

Rhyolite, in sharp contact with perlite, ranges from white to dark grey in colour. The rhyolite is a very hard, very fine grain volcanic flow unit which can form ledges and small outcrops up to 25 feet in diameter (Figure 12). Both white and grey varieties contain 1 to 7-centimetre bands of darker "cherty" quartz (chalcedony?) or patches, up to 3 centimetres across, of light green silica possibly indicative of hydrothermal alteration. Rhyolite is occasionally porphyritic with 1 to 5-centimetre rectangular phenocrysts of potassium feldspar in a fine-grained matrix. Flow banding is evident in some occurrences of the white rhyolites. Near the southern end of the access road siliceous angular fragments, 5 to 7 centimetres across, are observed in rhyolite. A black, very hard, porphyritic rhyolite with rectangular phenocrysts of potassium feldspar occurs at the south-east portion of Trench #6 near the edge of the cleared area.

Description of Deposit

Figure 12 shows the distribution of perlite outcrops in the prospect area and the rock types. Past company records are not available so the following description is based on field observations only.

A description of each follows:

Perlite is intercalated with light to dark grey porphyritic and sometimes cherty rhyolites and ranges in colour from brown to medium grey to black to pale green (Figure 10). It often has a good pearly lustre but when exposed for periods of time tends to break down into 2 to 3-centimetre subangular fragments. Uncha Lake perlite expands moderately well when heated with a hand-held propane torch often as rapidly as samples from the Frenier deposit. Glassy occurrences of perlite have a definite perlitic structure and on weathering crumbles along the perlitic cracks to a granular aggregate.



Figure 12. Photo of white rhyolite. Note flow banding steeply dipping Southeast; occurrence along access road between Trench #4 and #5

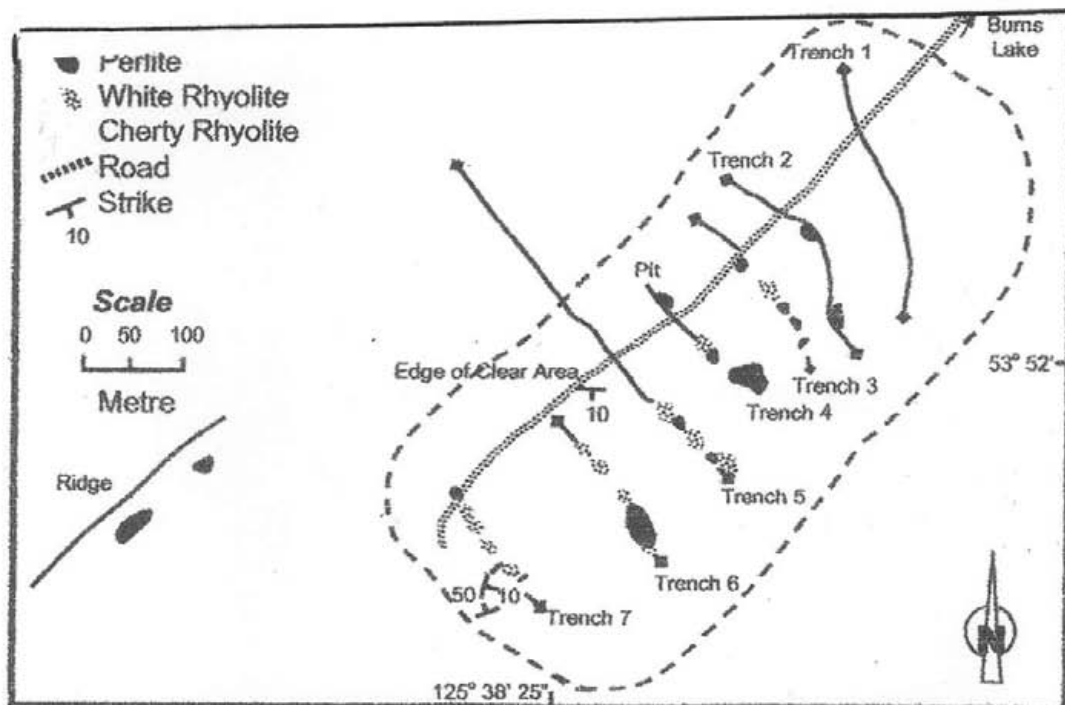


Figure 8: Location of perlite outcrops at Claims and previous trenching.

Description of Deposit

Figure 8 shows the distribution of perlite outcrops in the prospect area and the rock types. Past company records are not available so the following description is based on field observations only.

A description of each follows:

Perlite is intercalated with light to dark grey porphyritic and sometimes cherty rhyolites and ranges in colour from brown to medium grey to black to pale green. It often has a good pearly lustre but when exposed for periods of time tends to break down into 2 to 3-centimetre subangular fragments. Uncha Lake perlite expands moderately well when heated with a hand-held propane torch although not as rapidly as samples from the Frenier deposit. Glassy occurrences of perlite

Are frequent

9.0 Eocene Ootsa Lake Group

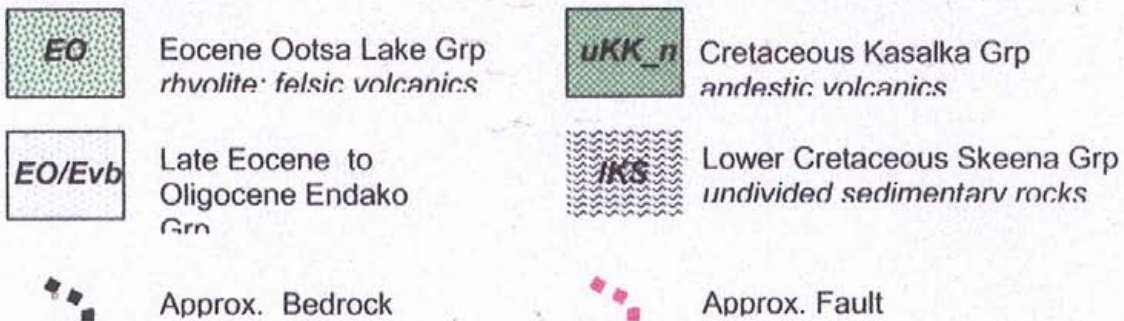
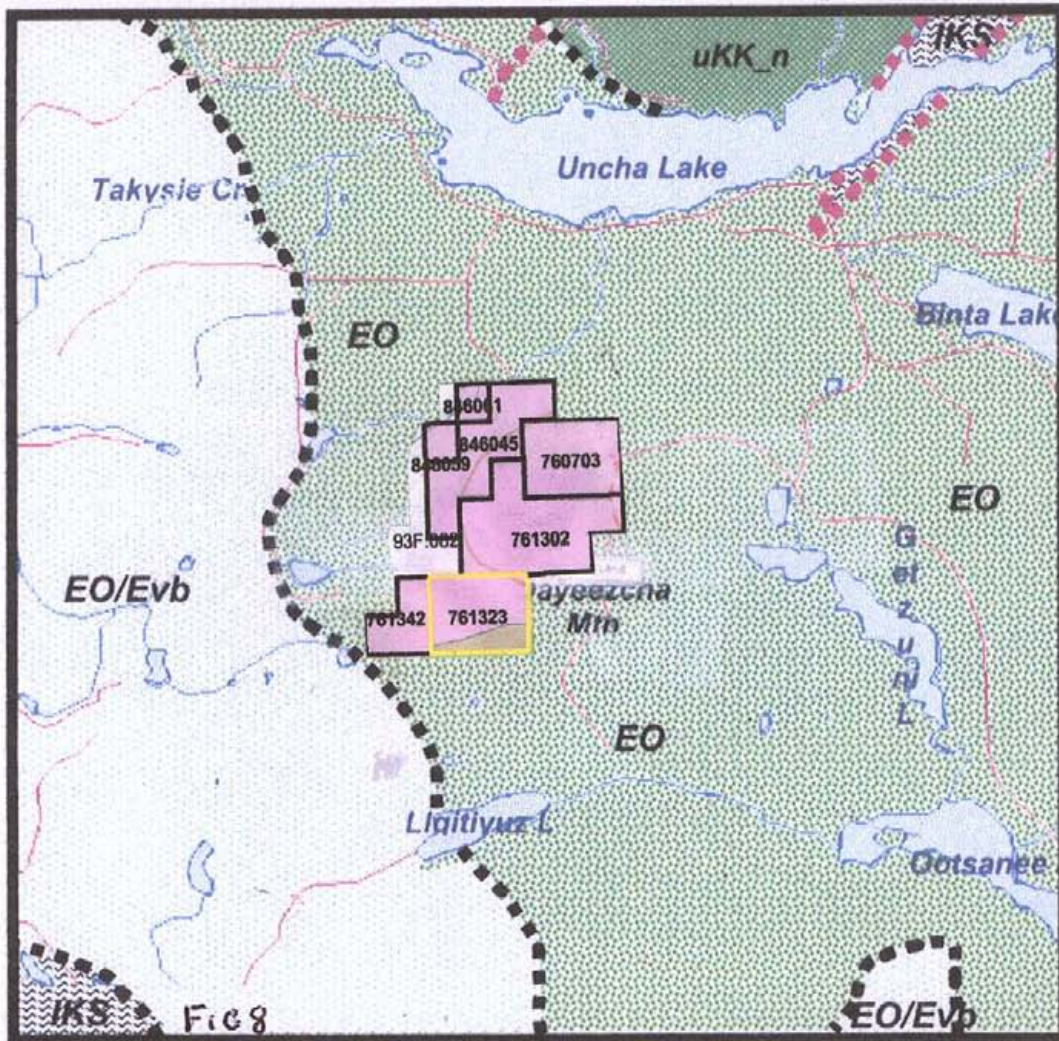


Figure 8: Generalized bedrock geology of the Uncha Lake, BC area and the Uncha Claims. The Uncha Lake perlite showing, on the Uncha Claims, occurs within rhyolite flows of the Eocene Ootsa Lake Group on the northwest flank of Dayeezcha Mountain.

6.0 Uncha lake prospect Geology

The uncha lake prospect of perlite occurs within the rhyolitic Flows of the Ootsa Lake Group on the Dayeezcha Mountain.

The perlite is interbedded within light to dark grey pophriotic rhyolite layers which are 2.0 to 9.0 meters thick. The perlite is light grey to pale greenish-grey with some perlitic glass occurrences. The perlite generally dips 1 to 3 degrees south and is 7.6 to 23.0 meters thick., A photo of perlite occurrence on (fig. 7) of the Uncha lake area illustrates the extent of the Eocene age Ootsa Lake Group is bounded on the west by basaltic volcanics of the late Eocene to Oglocoene Endako Group. See Page 17

**10. Area photo shows location
Of perlite deposit**

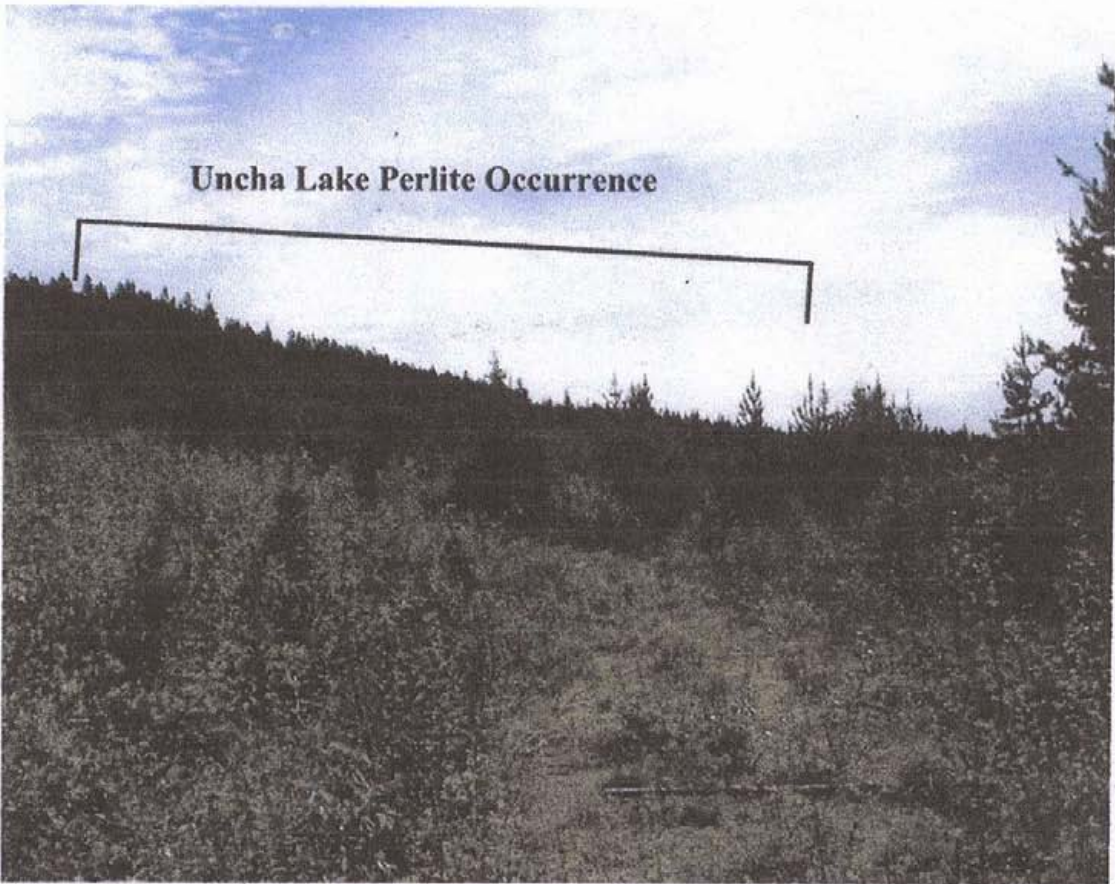
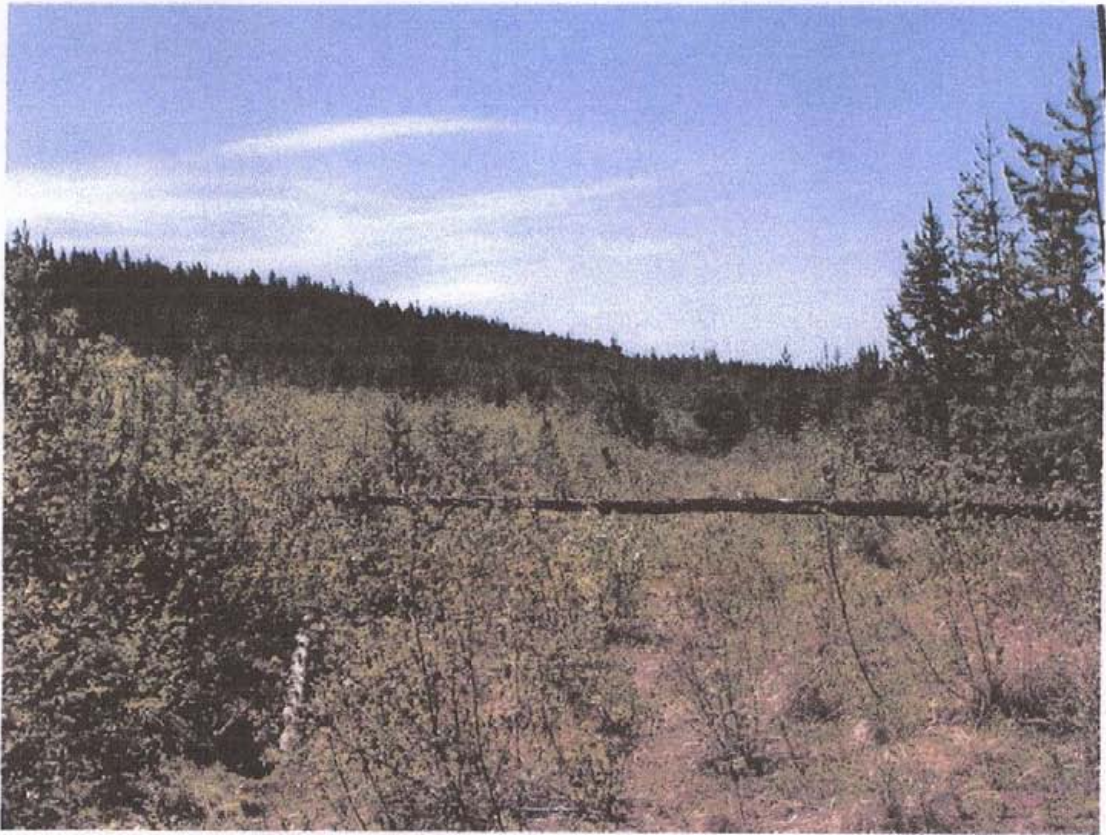


Figure 7: Photos of access into Uncha Lake perlite occurrence.

11.0 Areas of previous sample locations.

Taken in 2004

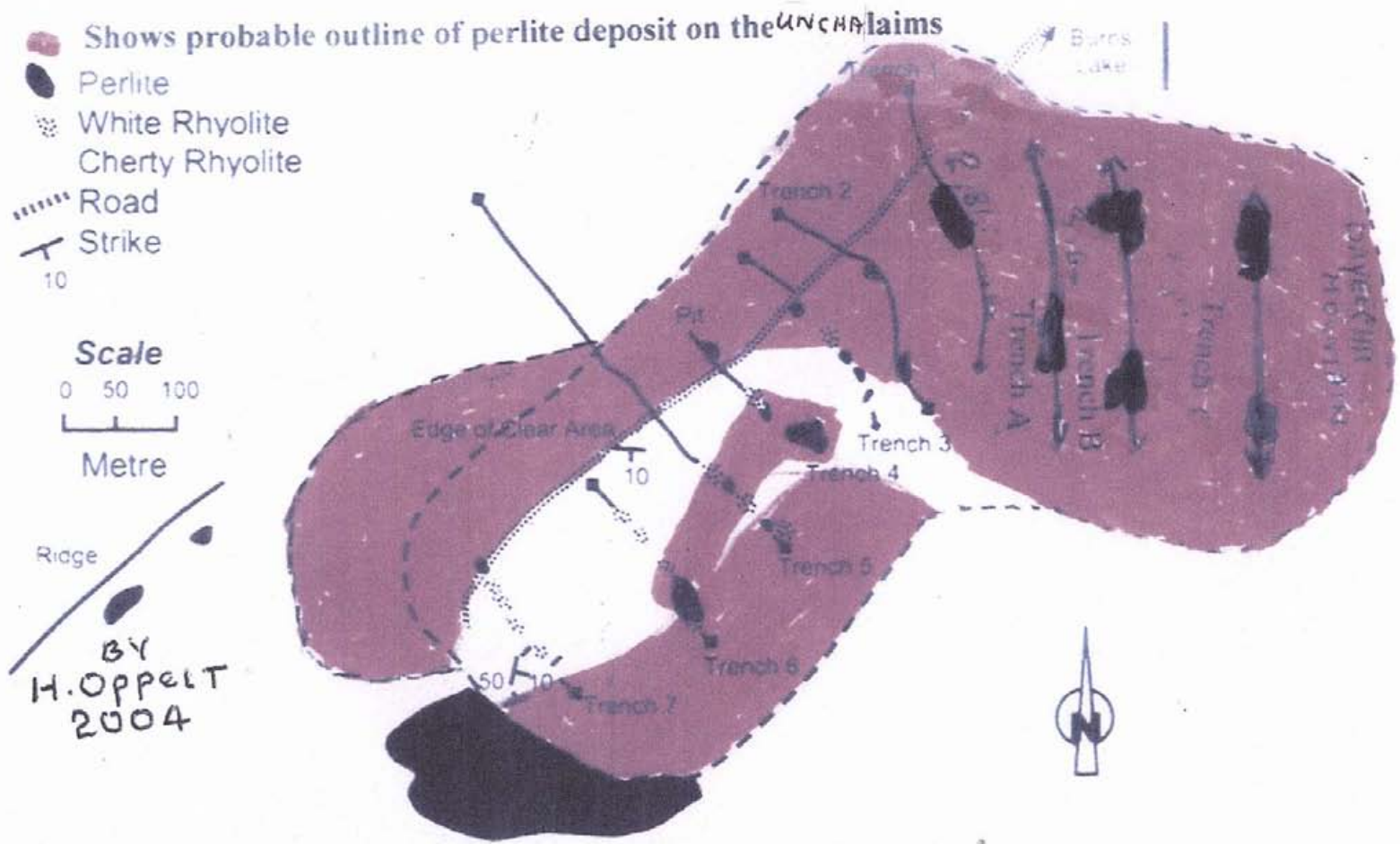
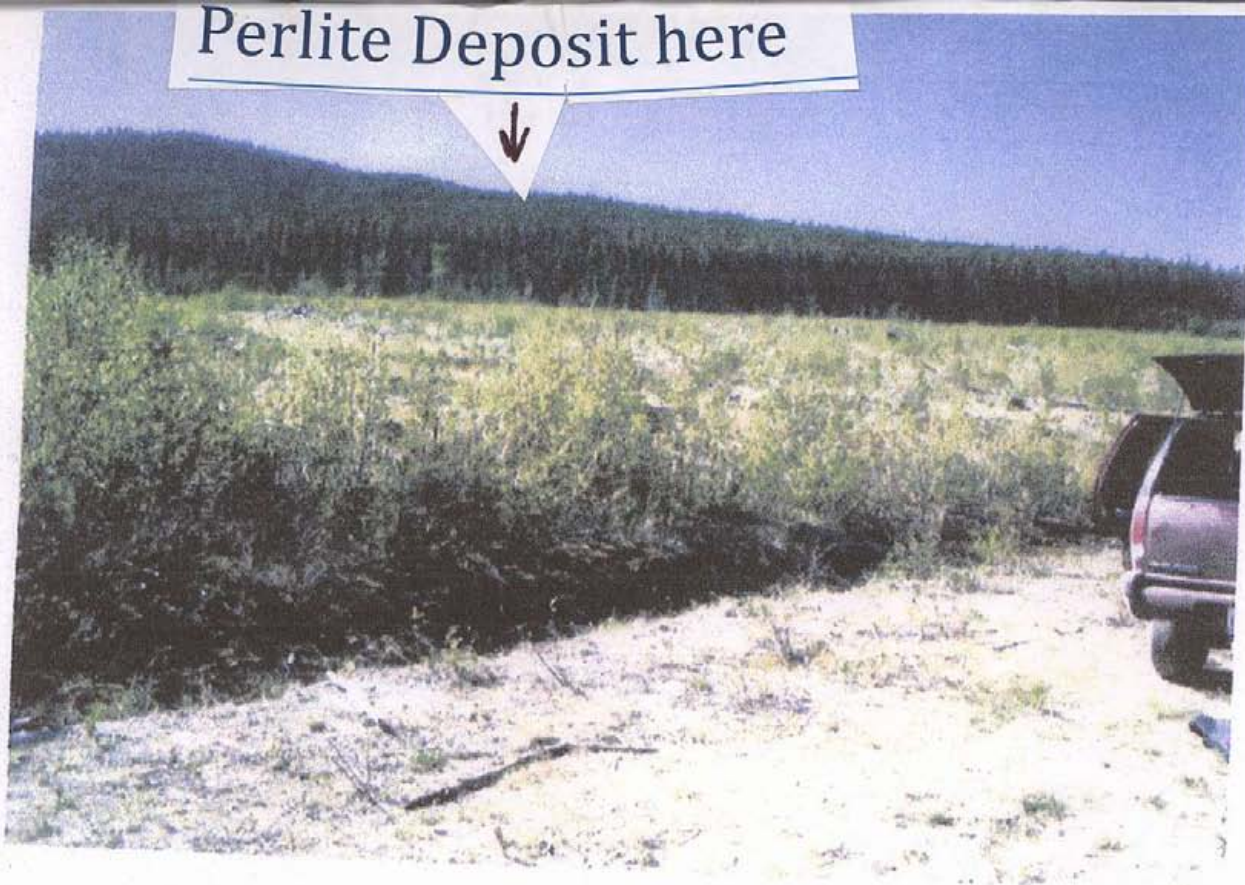


Figure # 9 Shows new locations outlining perlite outcrops on UNCHA Claims and previous trenching. 125-38-25

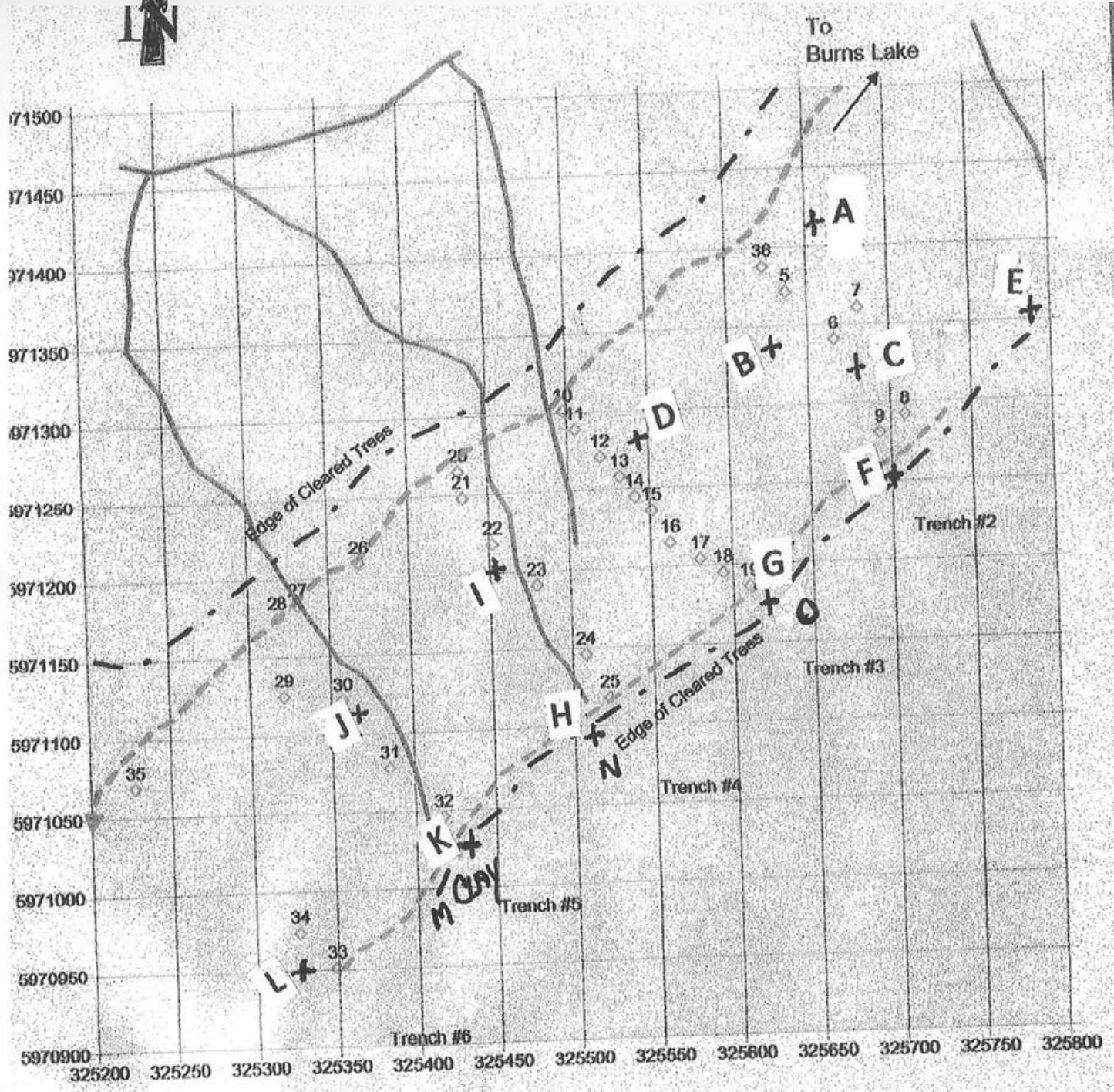
12. photo showing area of
Perlite deposit

Perlite Deposit here

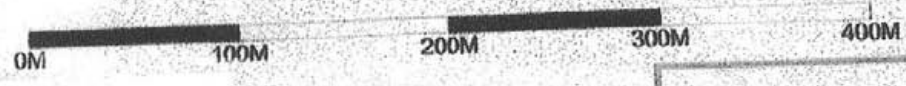


13.0 Areas sampled in year 2004 in red

Areas sampled 2010 in Black Alphabet



Legend



May 2010 Sample point + (See Outcrop Descriptions)

May 2004

- ◇ Sample Point
- - - Road cut
- · - · Edge of Logged Trees

MAP BY
H. OPPELT

Innovative Energy Inc.

Uncha Lake Perlite Occurrence

Location of Trenches
and Sample Points

14.0 Descriptions and locations of samples

UNCHA LAKE PERLITE DEPOSIT OUTCROP / TRENCH DESCRIPTIONS

Sample	NAME	PREP	Elev	UTM Easting	UTM Northing	Description
SAMPLE	A	WASHED DRIED	950	325740	5971807	Deep lower few outcrop possible float.
SAMPLE	B	WASHED DRIED	975	325647	5971369	Perlite dk green very friable pearly luster & crystal face. cut small trench
SAMPLE	C	WASHED DRIED	966	325670	5971350	Perlite dk grey to brown luster (white powdering)
SAMPLE	D	WASHED DRIED	1006	325672	597292	Perlite dk green rhyolite -form pearly luster very friable turns to powder 30ft long at
SAMPLE.	E	WASHED DRIED	944	325743	597219	Perlite DK GREEN PEARLY L LARGE CRYSTAL FACE FRIABLE CRUNCHES TO POWDER SMALL PIT EXPOSURE

UNCHA LAKE PERLITE DEPOSIT OUTCROP / TRENCH DESCRIP

Sample	NAME	PREP	Elev	UTM Easting	UTM Northing	Descri
SAMPLE	F	WASHED DRIED	1038	325709	5971297	Rhyolite ER TRENCH #2
SAMPLE	G	WASHED DRIED	975	325505	5971289	PERLITE PEARL DK GR. LARGE C VERY FRIABLE TO W.
SAMPLE	H	WASHED DRIED	1013	325922	5971118	END OF TRENCH PERLITE - SEMI- LGE CRYSTALS DK & WHITE POWDER.
SAMPLE	I	WASHED DRIED	1005	325908	5971145	PERLITE SEMI- LGE CRYSTALFACE CRUSHES TO WHITE
SAMPLE	J	WASHED DRIED	1002	325355	5971110	Rhyolite ABRAUP PEARLY LUSTRE PE APPEARS START OF

UNCHA LAKE PERLITE DEPOSIT OUTCROP / TRENCH DESCRIPTIONS

Sample	NAME	PREP	Elev	UTM Easting	UTM Northing	Description
SAMPLE	K	WASHED DRIED	1005	325228	5971069	DK GREEN RUSTY SOME IRON VERY HARD
SAMPLE	L	WASHED DRIED	1007	325349	5970951	DK GREEN TO DK GREY SOMWHAT FRIABLE CRUMBL TO SMALL PIECES
SAMPLE	M	DRIED	1009	325327	5970974	BR. CLAY
SAMPLE	N	WASHED DRIED	1005	325508	5971146	PERLITE - SEMI-PEARLY LUSTRE, TURNS TO W. powder w/ as friable as other samples.
SAMPLE	O	WASHED DRIED	993	325532	5971258	PERLITE DK TO MED GREEN LARGER CRYSTALS SLIGHTLY CHERTY CONTINUES UP SLOPE FC ABOUT 15 METERS

15.0 Analyses of rock samples in 2010

Carbon Test Analyses



1020 Cordova St. East Vancouver BC V6A 4A3 Canada

Acme Analytical Laboratories (Vancouver) Ltd.

www.acmelab.com

Client: Innovative Energy Inc.
21664 Monohan Court
Langley BC V3A 8N1 Canada

Submitted By: Harold Oppelt
Receiving Lab: Canada-Vancouver
Received: April 01, 2011
Report Date: April 11, 2011
Page: 1 of 2

24

CERTIFICATE OF ANALYSIS

VAN11001396.1

CLIENT JOB INFORMATION

Project: UNCHA LAKE PEALITE SAMPLES
Shipment ID:
P.O. Number
Number of Samples: 18

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
R200-250	7	Crush, split and pulverize 250 g rock to 200 mesh			VAI
P200	11	Pulverize to 85% passing 200 mesh			VAI
1F05	18	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	15	Completed	VAI

SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage
DISP-RJT Dispose of Reject After 90 days

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Innovative Energy Inc.
21664 Monohan Court
Langley BC V3A 8N1
Canada

CC:



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. *** asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



Acme Analytical Laboratories (Vancouver) Ltd.

1020 Cordova St. East Vancouver BC V6A 4A3 Canada

Phone (604) 253-3158 Fax (604) 253-1716

www.acmelab.com

Client: **Innovative Energy Inc.**
21684 Monohan Court
Langley BC V3A 8N1 Canada

Project: UNCHA LAKE PEALITE SAMPLES

Report Date: April 11, 2011

Page: 1 of 1 Part 3

25

QUALITY CONTROL REPORT

VAN11001396.1

Method	Analyte	Unit	MDL	1F15 Nb	1F15 Rb	1F15 Sn	1F15 Ta	1F15 Zr	1F15 Y	1F15 Ce	1F15 In	1F15 Re	1F15 Be	1F15 Li	1F15 Pd	1F15 Pt
				ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppb
				0.02	0.1	0.1	0.05	0.1	0.01	0.1	0.02	1	0.1	0.1	10	2
Pulp Duplicates																
REP G1	QC			0.43	39.5	0.5	<0.05	1.3	4.96	18.3	<0.02	<1	0.2	29.7	<10	<2
SAMPLE B	Rock Chip			0.17	6.8	0.1	<0.05	1.2	0.80	1.5	<0.02	<1	<0.1	1.2	<10	<2
REP SAMPLE B	QC			0.18	6.5	<0.1	<0.05	1.2	0.82	1.5	<0.02	<1	<0.1	1.4	<10	<2
Reference Materials																
STD DS8	Standard			1.20	36.9	6.5	<0.05	2.0	5.98	26.3	2.14	53	4.8	27.1	110	332
STD DS8	Standard			1.26	37.3	6.6	<0.05	2.0	5.82	26.8	2.01	47	4.8	27.0	103	314
STD DS8	Standard			1.02	37.8	6.8	<0.05	1.9	4.82	22.5	2.37	48	5.3	26.2	114	339
STD DS8	Standard			1.08	38.7	6.9	<0.05	1.9	5.16	22.8	2.33	50	5.4	26.0	120	331
STD DS8 Expected				1.65	39	6.7	0.003	2.3	6.1	29.8	2.19	55	5.2	26.34	110	339
3LK	Blank			<0.02	<0.1	<0.1	<0.05	<0.1	<0.01	<0.1	<0.02	<1	<0.1	<0.1	<10	<2
3LK	Blank			<0.02	<0.1	<0.1	<0.05	<0.1	<0.01	<0.1	<0.02	<1	<0.1	<0.1	<10	<2
Prep Wash																
31	Prep Blank			0.37	40.5	0.5	<0.05	1.1	4.47	16.9	<0.02	<1	0.2	29.8	<10	<2
31	Prep Blank			0.37	40.4	0.4	<0.05	1.1	3.95	14.3	<0.02	<1	0.2	30.6	<10	<2



Acme Analytical Laboratories (Vancouver) Ltd.

1020 Cordova St. East Vancouver BC V6A 4A3 Canada

Phone (604) 253-3158 Fax (604) 253-1716

www.acmelab.com

Client: **Innovative Energy Inc.**
21864 Monohan Court
Langley BC V3A 8N1 Canada

Project: UNCHA LAKE PEALITE SAMPLES
Report Date: April 11, 2011

Page: 2 of 2 Part 1

26

CERTIFICATE OF ANALYSIS

VAN11001396.1

Method	Analyte	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15
		Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
Unit		ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%
MDL		0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01	0.001	
SAMPLE A	Rock	0.16	0.34	2.39	12.1	11	0.2	<0.1	77	0.17	0.3	0.3	<0.2	1.4	47.0	0.01	0.03	<0.02	<2	0.11	0.001
SAMPLE B	Rock Chip	0.25	1.81	5.02	8.5	4	0.8	0.3	129	0.28	0.6	0.1	0.7	0.3	3.5	<0.01	0.05	0.05	<2	0.03	0.003
SAMPLE C	Rock Chip	0.08	0.87	1.21	5.2	16	0.2	<0.1	31	0.21	0.4	0.1	<0.2	0.3	1.0	0.02	0.06	<0.02	<2	0.02	<0.001
SAMPLE D	Rock Chip	0.08	0.79	0.98	3.3	16	0.2	0.1	28	0.21	0.3	0.1	<0.2	0.2	0.8	<0.01	<0.02	<0.02	<2	0.02	<0.001
SAMPLE E	Rock Chip	0.06	0.81	0.85	3.4	14	0.2	<0.1	24	0.19	0.5	<0.1	<0.2	0.2	0.7	<0.01	0.04	<0.02	<2	0.02	<0.001
SAMPLE F	Rock Chip	0.08	1.49	1.25	5.3	5	0.4	0.2	60	0.29	0.3	0.1	<0.2	0.3	2.7	<0.01	<0.02	0.02	<2	0.03	<0.001
SAMPLE G	Rock	0.24	0.12	1.59	47.0	14	0.2	<0.1	68	0.20	0.4	0.7	<0.2	1.5	19.1	0.02	0.03	0.10	<2	0.06	<0.001
SAMPLE H	Rock	0.07	58.97	1.59	51.3	62	3.3	7.0	570	2.50	0.2	0.5	0.5	2.2	149.7	0.01	<0.02	0.06	45	0.27	0.052
SAMPLE I EYE	Rock Chip	0.12	0.74	1.14	5.1	9	0.4	<0.1	54	0.14	0.1	<0.1	2.2	0.2	1.4	0.01	<0.02	0.03	<2	0.02	<0.001
SAMPLE J	Rock Chip	0.25	8.49	2.46	28.5	8	0.6	<0.1	45	0.17	0.5	0.3	0.3	0.5	2.0	0.04	<0.02	0.02	<2	0.02	<0.001
SAMPLE L	Rock	0.42	0.32	3.26	25.5	18	0.2	0.1	182	0.30	0.2	0.8	0.3	2.6	15.6	0.04	0.02	0.05	<2	0.07	0.002
SAMPLE M	Rock	0.22	0.39	1.51	29.5	11	0.2	0.1	72	0.17	0.5	0.4	<0.2	1.1	9.7	0.02	<0.02	0.02	<2	0.03	<0.001
SAMPLE N	Rock	0.20	0.16	5.23	81.8	18	0.2	0.2	50	0.20	1.0	0.5	0.4	2.2	72.9	0.09	<0.02	0.03	<2	0.11	<0.001
SAMPLE O	Rock	0.15	0.33	2.45	73.7	10	0.2	0.2	43	0.18	1.0	0.5	0.2	1.7	60.7	0.10	<0.02	0.02	<2	0.09	<0.001
CLAY	Rock Chip	0.84	10.09	7.53	43.9	21	7.7	5.0	397	1.58	5.8	1.4	0.5	4.3	31.9	0.11	0.62	0.12	31	0.34	0.049
PERLITE MALAYSIA	Rock Chip	0.14	0.65	1.41	13.0	7	0.3	<0.1	340	0.22	0.4	0.1	<0.2	0.2	0.9	<0.01	<0.02	<0.02	<2	0.01	<0.001
SUPREME G.BIN	Rock Chip	0.12	6.25	1.89	9.5	4	0.6	0.2	76	0.37	0.4	0.1	<0.2	0.3	2.9	0.02	<0.02	<0.02	<2	0.03	<0.001
USG SAMPLE	Rock Chip	0.17	3.14	2.97	9.1	11	0.7	0.2	93	0.42	0.3	0.2	0.2	0.4	3.3	0.01	<0.02	0.08	<2	0.04	<0.001

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.



Acme Analytical Laboratories (Vancouver) Ltd.
1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716

www.acmelab.com

Client: **Innovative Energy Inc.**
21664 Monohan Court
Langley BC V3A 8N1 Canada

Project: UNCHA LAKE PEALITE SAMPLES
Report Date: April 11, 2011

Page: 2 of 2 Part 2

26 A

CERTIFICATE OF ANALYSIS

VAN11001396.1

Method	Analyte	1F15																			
		La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Cs	Ge	Hf
Unit	MDL	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm
SAMPLE A	Rock	2.8	0.5	0.03	61.2	0.008	<1	0.33	0.068	0.19	<0.1	0.2	<0.02	<0.02	<5	<0.1	<0.02	0.6	3.75	<0.1	0.23
SAMPLE B	Rock Chip	0.7	2.2	0.01	19.0	0.004	<1	0.12	0.134	0.14	0.1	0.2	0.20	<0.02	<5	<0.1	<0.02	0.4	0.31	<0.1	0.06
SAMPLE C	Rock Chip	0.6	0.8	0.01	3.7	0.001	1	0.12	0.137	0.12	<0.1	0.3	0.03	<0.02	<5	<0.1	<0.02	0.4	0.30	<0.1	0.05
SAMPLE D	Rock Chip	0.5	0.6	<0.01	2.4	0.001	1	0.12	0.134	0.11	<0.1	0.1	0.03	<0.02	<5	<0.1	<0.02	0.4	0.26	<0.1	0.06
SAMPLE E	Rock Chip	0.6	0.8	<0.01	2.5	<0.001	<1	0.10	0.112	0.10	<0.1	0.1	0.02	<0.02	<5	<0.1	<0.02	0.3	0.26	<0.1	0.06
SAMPLE F	Rock Chip	2.2	0.5	0.01	15.7	0.003	<1	0.15	0.125	0.08	<0.1	0.2	0.04	<0.02	6	0.1	0.05	0.5	0.30	<0.1	0.07
SAMPLE G	Rock	4.7	0.6	0.02	86.0	0.007	<1	0.22	0.062	0.11	<0.1	0.4	0.06	<0.02	<5	<0.1	0.05	0.6	0.93	<0.1	0.24
SAMPLE H	Rock	9.6	3.8	0.42	264.9	0.141	<1	0.95	0.053	0.66	<0.1	1.8	0.31	<0.02	5	0.1	0.02	4.3	1.38	0.1	0.04
SAMPLE I EYE	Rock Chip	<0.5	0.6	<0.01	15.3	0.002	<1	0.10	0.163	0.09	<0.1	0.2	0.03	<0.02	<5	<0.1	<0.02	0.4	0.09	<0.1	0.03
SAMPLE J	Rock Chip	3.0	1.1	<0.01	5.9	0.010	<1	0.13	0.273	0.19	<0.1	0.3	0.05	<0.02	<5	<0.1	0.02	0.5	0.35	<0.1	0.11
SAMPLE L	Rock	9.4	0.6	0.02	29.6	0.028	<1	0.21	0.080	0.12	<0.1	0.5	0.04	<0.02	<5	0.2	<0.02	0.8	2.45	<0.1	0.36
SAMPLE M	Rock	4.2	<0.5	0.01	31.9	0.009	<1	0.13	0.072	0.09	<0.1	0.4	0.05	<0.02	<5	<0.1	<0.02	0.5	1.08	<0.1	0.19
SAMPLE N	Rock	3.5	0.5	0.03	109.5	0.009	<1	0.41	0.054	0.19	<0.1	0.5	0.13	<0.02	<5	<0.1	<0.02	0.7	8.17	<0.1	0.33
SAMPLE O	Rock	3.2	0.6	0.02	8.3	0.009	<1	0.34	0.047	0.15	<0.1	0.5	0.08	<0.02	<5	<0.1	<0.02	0.6	7.29	<0.1	0.27
CLAY	Rock Chip	16.1	11.2	0.23	125.2	0.056	<1	0.80	0.058	0.13	<0.1	3.0	0.13	<0.02	50	<0.1	0.03	2.3	1.34	<0.1	0.35
PERLITE MALAYSIA	Rock Chip	<0.5	<0.5	<0.01	0.7	0.001	<1	0.10	0.226	0.10	<0.1	0.2	0.02	<0.02	<5	<0.1	0.03	0.4	0.12	<0.1	0.04
SUPREME G.BIN	Rock Chip	2.3	1.0	0.01	16.5	0.003	<1	0.20	0.217	0.13	<0.1	0.5	0.04	<0.02	<5	<0.1	0.02	0.7	0.33	<0.1	0.07
USG SAMPLE	Rock Chip	2.6	1.3	0.01	20.1	0.003	1	0.29	0.409	0.22	<0.1	0.7	0.05	<0.02	<5	0.1	0.04	0.8	0.38	<0.1	0.08

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.



1020 Cordova St. East Vancouver BC V6A 4A3 Canada
 Phone (604) 253-3158 Fax (604) 253-1716

Acme Analytical Laboratories (Vancouver) Ltd.

www.acmelab.com

Client: **Innovative Energy Inc.**
 21864 Monohan Court
 Langley BC V3A 6N1 Canada

Project: UNCHA LAKE PEALITE SAMPLES
 Report Date: April 11, 2011

26 B

Page: 2 of 2 Part 3

CERTIFICATE OF ANALYSIS

VAN11001396.1

Method	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	
Analyte	Nb	Rb	Sn	Ta	Zr	Y	Ce	In	Re	Be	Li	Pd	Pt	
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppb	ppb	
MDL	0.02	0.1	0.1	0.05	0.1	0.01	0.1	0.02	1	0.1	0.1	10	2	
SAMPLE A	Rock	0.19	13.9	0.4	<0.05	7.7	4.39	7.1	<0.02	<1	0.2	0.9	<10	<2
SAMPLE B	Rock Chip	0.17	6.8	0.1	<0.05	1.2	0.80	1.5	<0.02	<1	<0.1	1.2	<10	<2
SAMPLE C	Rock Chip	0.05	4.7	0.1	<0.05	1.5	0.69	1.2	<0.02	<1	<0.1	1.0	<10	<2
SAMPLE D	Rock Chip	0.04	4.5	0.1	<0.05	1.3	0.60	1.0	<0.02	<1	<0.1	0.8	<10	<2
SAMPLE E	Rock Chip	0.04	4.3	0.1	<0.05	1.3	0.56	1.1	<0.02	<1	<0.1	0.8	<10	<2
SAMPLE F	Rock Chip	0.06	2.8	0.2	<0.05	1.9	1.73	1.2	<0.02	1	<0.1	2.4	<10	<2
SAMPLE G	Rock	0.20	7.1	0.4	<0.05	7.5	4.65	12.5	<0.02	<1	0.2	1.1	<10	<2
SAMPLE H	Rock	0.41	36.9	0.4	<0.05	0.9	5.24	18.2	<0.02	1	0.2	12.3	<10	<2
SAMPLE I EYE	Rock Chip	0.27	4.7	0.1	<0.05	0.9	0.73	0.6	<0.02	<1	0.1	6.1	<10	<2
SAMPLE J	Rock Chip	0.27	6.7	0.3	<0.05	3.2	6.73	7.8	<0.02	<1	<0.1	1.0	<10	<2
SAMPLE L	Rock	0.87	8.5	0.9	<0.05	11.8	15.64	21.5	<0.02	<1	0.3	1.2	<10	<2
SAMPLE M	Rock	0.50	6.8	0.4	<0.05	5.8	6.68	9.8	<0.02	2	0.1	1.0	<10	<2
SAMPLE N	Rock	0.21	37.1	0.6	<0.05	10.5	7.92	8.4	0.02	<1	0.1	0.7	<10	<2
SAMPLE O	Rock	0.20	30.0	0.5	<0.05	8.5	7.51	7.4	0.02	<1	<0.1	0.6	<10	<2
CLAY	Rock Chip	0.12	10.4	0.5	<0.05	16.7	14.13	31.0	<0.02	2	0.5	4.8	<10	<2
PERLITE MALAYSIA	Rock Chip	0.13	5.0	0.2	<0.05	0.9	0.54	0.7	<0.02	1	0.2	3.8	<10	<2
SUPREME G.BIN	Rock Chip	0.06	3.6	0.2	<0.05	2.3	1.74	1.4	<0.02	<1	0.1	3.4	<10	<2
USG SAMPLE	Rock Chip	0.05	5.0	0.3	<0.05	2.6	2.03	1.6	<0.02	<1	0.1	5.6	<10	<2

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.



AcmeLabs

Acme Analytical Laboratories (Vancouver) Ltd.

1020 Cordova St. East Vancouver BC V6A 4A3 Canada
 Phone (604) 253-3158 Fax (604) 253-1716

www.acmelab.com

Client: **Innovative Energy Inc.**
 21664 Monohan Court
 Langley BC V3A 8N1 Canada

Project: UNCHA LAKE PEALITE SAMPLES
 Report Date: April 11, 2011

Page: 1 of 1 Part 1

QUALITY CONTROL REPORT

VAN1100

Method	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb		
Unit	ppm	ppm	ppm	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm
MDL	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.	
Pulp Duplicates																		
REP G1	QC	0.08	1.96	3.27	49.2	13	3.2	4.1	554	1.87	<0.1	1.5	0.4	4.8	51.7	0.02	<0.02	0.
SAMPLE B	Rock Chip	0.25	1.81	5.02	8.5	4	0.8	0.3	129	0.28	0.6	0.1	0.7	0.3	3.5	<0.01	0.05	0.
REP SAMPLE B	QC	0.25	1.82	5.49	9.3	4	1.0	0.3	137	0.27	0.6	0.1	1.2	0.3	3.7	0.01	0.02	0.
Reference Materials																		
STD DS8	Standard	13.15	110.9	131.0	308.3	1582	38.4	7.9	601	2.44	24.2	2.8	91.5	6.9	66.4	2.24	5.37	7
STD DS8	Standard	13.13	111.8	127.7	316.3	1605	38.5	7.5	604	2.44	23.9	2.8	100.7	6.8	64.8	2.30	5.48	7
STD DS8	Standard	11.01	110.8	123.6	318.9	1718	35.2	7.3	572	2.43	24.4	2.5	99.3	5.8	59.9	2.28	5.66	6
STD DS8	Standard	11.30	118.1	125.7	308.5	1662	37.1	7.4	594	2.47	24.4	2.7	97.6	6.1	59.1	2.23	5.66	7
STD DS8 Expected		13.44	110	123	312	1690	38.1	7.5	615	2.46	26	2.8	107	6.89	67.7	2.38	5.7	6
BLK	Blank	<0.01	<0.01	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0
BLK	Blank	<0.01	<0.01	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0
Prep Wash																		
G1	Prep Blank	0.07	1.86	3.21	48.2	12	3.1	3.9	532	1.85	0.2	1.3	0.7	4.2	49.5	0.02	<0.02	<0
G1	Prep Blank	0.07	1.67	2.94	51.1	8	2.7	4.1	539	1.81	<0.1	1.4	0.4	4.3	45.3	0.02	<0.02	<0

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.



Acme Analytical Laboratories (Vancouver) Ltd.

1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716

www.acmelab.com

Client: **Innovative Energy Inc.**
21664 Monohan Court
Langley BC V3A 8N1 Canada

26D

Project: UNCHA LAKE PEALITE SAMPLES
Report Date: April 11, 2011

Page: 1 of 1 Part 2

QUALITY CONTROL REPORT

VAN11001396.1

Method	Analyte	Unit	MDL	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15	1F15		
				La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Sc	Tl	S	Hg	Se	Te	Ga	Cs	Ge	Hf
				ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm
				0.5	0.5	0.01	0.5	0.001	1	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1	0.02	0.1	0.02
Pulp Duplicates																							
REP G1	QC			9.6	6.7	0.56	209.6	0.121	<1	0.91	0.067	0.46	<0.1	1.9	0.26	<0.02	<5	<0.1	<0.02	4.9	2.68	0.1	0.09
SAMPLE B	Rock Chip			0.7	2.2	0.01	19.0	0.004	<1	0.12	0.134	0.14	0.1	0.2	0.20	<0.02	<5	<0.1	<0.02	0.4	0.31	<0.1	0.06
REP SAMPLE B	QC			0.8	2.6	0.01	19.3	0.005	1	0.12	0.143	0.12	0.1	0.4	0.20	<0.02	5	<0.1	0.03	0.5	0.31	<0.1	0.05
Reference Materials																							
STD DS8	Standard			15.2	120.1	0.61	273.5	0.121	3	0.92	0.082	0.41	2.9	2.2	5.28	0.16	184	5.1	5.12	4.6	2.38	0.1	0.07
STD DS8	Standard			15.4	118.7	0.61	266.1	0.123	2	0.90	0.083	0.41	3.0	2.4	5.09	0.16	177	4.8	4.89	4.5	2.36	0.1	0.08
STD DS8	Standard			11.8	107.3	0.59	253.8	0.100	3	0.86	0.072	0.40	3.0	1.9	5.24	0.15	179	5.0	4.78	4.4	2.38	0.1	0.07
STD DS8	Standard			12.7	111.5	0.61	262.1	0.105	2	0.88	0.074	0.41	3.0	1.9	5.30	0.16	195	4.9	4.81	4.4	2.43	0.2	0.07
STD DS8 Expected				14.6	115	0.6045	279	0.113	2.6	0.93	0.0883	0.41	3	2.3	5.4	0.1679	192	5.23	5	4.7	2.48	0.13	0.08
BLK	Blank			<0.5	<0.5	<0.01	<0.5	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1	<0.02	<0.1	<0.02
BLK	Blank			<0.5	<0.5	<0.01	<0.5	<0.001	<1	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1	<0.02	<0.1	<0.02
Prep Wash																							
G1	Prep Blank			8.7	6.5	0.55	206.4	0.114	1	0.90	0.062	0.45	<0.1	1.7	0.24	<0.02	<5	<0.1	<0.02	4.9	2.63	0.1	0.07
G1	Prep Blank			7.2	6.1	0.57	216.8	0.116	<1	0.86	0.050	0.45	<0.1	1.7	0.28	<0.02	<5	<0.1	<0.02	4.7	2.72	<0.1	0.07

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.

**15.1 ROCK SAMPLES TESTED FOR
EXPANSION FOR PERLITE.**



Acme Analytical Laboratories (Vancouver) Ltd.

1020 Cordova St. East Vancouver BC V6A 4A3 Canada
Phone (604) 253-3158 Fax (604) 253-1716

www.acmelab.com

Client: **Innovative Energy Inc.**
21664 Monohan Court
Langley BC V3A 8N1 Canada

Project: UNCHA LAKE PEALITE SAMPLES
Report Date: May 19, 2011

Page: 1 of 1 Part 2

26 E

QUALITY CONTROL REPORT

VAN11002010.1

Method Analyte Unit MDL		2A Leco 2A Leco	
		TOT/C %	TOT/S %
		0.02	0.02
Reference Materials			
STD CSC	Standard	2.96	4.15
STD OREAS76A	Standard	0.14	16.66
STD SO-18	Standard		
STD SO-18	Standard		
STD SO-18 Expected			
STD CSC Expected		2.94	4.25
STD OREAS76A Expected		0.16	18
BLK	Blank		
BLK	Blank	<0.02	<0.02



Acme Analytical Laboratories (Vancouver) Ltd.

1020 Cordova St. East Vancouver BC V6A 4A3 Canada
 Phone (604) 253-3158 Fax (604) 253-1716

www.acmelab.com

Client: **Innovative Energy Inc.**
 21664 Monohan Court
 Langley BC V3A 8N1 Canada

Project: UNCHA LAKE PEALITE SAMPLES
 Report Date: May 19, 2011

26 F

Page: 1 of 1 Part 1

QUALITY CONTROL REPORT

VAN11002010.1

Method	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	
Analyte	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sr	Zr	Y	Nb	Sc	LOI	Sum	
Unit	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	5	20	2	5	3	5	1	-5.1	0.01	
Reference Materials																					
STD CSC	Standard																				
STD OREAS76A	Standard																				
STD SO-18	Standard	58.03	14.13	7.60	3.36	6.38	3.69	2.16	0.70	0.84	0.40	0.555	498	37	396	307	31	41	25	1.9	99.89
STD SO-18	Standard	58.06	14.14	7.60	3.35	6.40	3.67	2.16	0.70	0.83	0.40	0.554	496	34	396	299	31	19	25	1.9	99.92
STD SO-18 Expected		58.47	14.23	7.67	3.35	6.42	3.71	2.17	0.69	0.83	0.39	0.55	515	44	402	280	31	21.3	25		
STD CSC Expected																					
STD OREAS76A Expected																					
BLK	Blank	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002	<5	<20	<2	<5	<3	<5	<1	0.0	<0.01
BLK	Blank																				

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.



1020 Cordova St. East Vancouver BC V6A 4A3 Canada
 Phone (604) 253-3158 Fax (604) 253-1716

Acme Analytical Laboratories (Vancouver) Ltd.

www.acmelab.com

Client: Innovative Energy Inc.
 21664 Monohan Court
 Langley BC V3A 8N1 Canada

Project: UNCHA LAKE PEALITE SAMPLES
Report Date: May 19, 2011

26G

Page: 2 of 2 **Part** 2

CERTIFICATE OF ANALYSIS

VAN11002010.1

Method	Analyte	2A Leco 2A Leco	
		TOT/C	TOT/S
Unit		%	%
MDL		0.02	0.02
G1	Rock Pulp	<0.02	<0.02
G1	Rock Pulp	<0.02	<0.02
SAMPLE A	Rock Pulp	<0.02	<0.02
SAMPLE B	Rock Pulp	0.04	<0.02
SAMPLE C	Rock Pulp	<0.02	<0.02
SAMPLE D	Rock Pulp	<0.02	<0.02
SAMPLE E	Rock Pulp	<0.02	<0.02
SAMPLE F	Rock Pulp	<0.02	<0.02
SAMPLE G	Rock Pulp	<0.02	<0.02
SAMPLE H	Rock Pulp	<0.02	<0.02
SAMPLE I EYE	Rock Pulp	<0.02	<0.02
SAMPLE J	Rock Pulp	<0.02	<0.02
SAMPLE L	Rock Pulp	<0.02	<0.02
SAMPLE M	Rock Pulp	0.02	<0.02
SAMPLE N	Rock Pulp	<0.02	<0.02
SAMPLE O	Rock Pulp	<0.02	<0.02
CLAY	Rock Pulp	0.09	<0.02
PERLITE MALAYSIA	Rock Pulp	<0.02	<0.02
SUPREME G.BIN	Rock Pulp	<0.02	<0.02
USG SAMPLE	Rock Pulp	0.03	<0.02



Acme Analytical Laboratories (Vancouver) Ltd.
 1020 Cordova St. East Vancouver BC V6A 4A3 Canada
 Phone (604) 253-3158 Fax (604) 253-1716

www.acmelab.com

Client: **Innovative Energy Inc.**
 21664 Monohan Court
 Langley BC V3A 8N1 Canada

Project: UNCHA LAKE PEALITE SAMPLES
 Report Date: May 19, 2011

26 H

Page: 2 of 2 Part 1

CERTIFICATE OF ANALYSIS **VAN11002010.1**

Method	Analyte	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A	4A
Unit		SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sr	Zr	Y	Nb	Sc	LOI	Sum
MDL		%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
		0.01	0.01	0.04	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.002	5	20	2	5	3	5	1	-5.1	0.01
G1	Rock Pulp	67.02	15.78	3.38	1.21	3.52	3.51	3.77	0.41	0.18	0.10	<0.002	1078	<20	734	164	18	24	6	0.9	100.00
G1	Rock Pulp	67.16	15.66	3.46	1.20	3.51	3.47	3.72	0.41	0.20	0.10	<0.002	1068	<20	729	133	19	28	6	0.9	100.00
SAMPLE A	Rock Pulp	72.49	11.96	1.19	0.11	0.44	3.19	5.38	0.17	0.03	0.07	<0.002	69	<20	50	208	55	39	3	5.0	100.02
SAMPLE B	Rock Pulp	73.65	12.57	0.76	0.06	0.55	3.47	5.00	0.06	0.02	0.10	<0.002	32	<20	10	73	27	35	5	3.8	100.04
SAMPLE C	Rock Pulp	73.87	11.98	1.04	0.05	0.47	3.30	4.86	0.05	0.01	0.04	<0.002	121	<20	12	84	22	11	1	4.4	100.05
SAMPLE D	Rock Pulp	73.66	12.00	0.99	0.04	0.46	3.27	4.90	0.05	0.02	0.04	<0.002	113	<20	12	84	22	10	1	4.6	100.04
SAMPLE E	Rock Pulp	73.82	11.99	1.08	0.04	0.46	3.29	4.98	0.05	0.02	0.04	<0.002	115	<20	12	86	21	11	1	4.2	100.04
SAMPLE F	Rock Pulp	73.36	13.07	0.84	0.06	0.80	3.73	4.64	0.05	0.03	0.07	<0.002	272	<20	46	66	23	13	3	3.3	100.05
SAMPLE G	Rock Pulp	73.00	12.09	1.20	0.09	0.35	3.22	5.54	0.16	0.02	0.07	<0.002	99	<20	20	206	52	33	2	4.3	100.04
SAMPLE H	Rock Pulp	64.87	16.00	4.23	0.84	2.15	2.44	7.34	0.41	0.13	0.09	<0.002	5869	<20	1284	226	19	21	5	0.7	100.00
SAMPLE I EYE	Rock Pulp	73.03	13.11	0.69	0.05	0.64	4.09	4.50	0.06	0.02	0.11	<0.002	71	<20	20	75	34	57	5	3.7	100.03
SAMPLE J	Rock Pulp	74.04	12.14	1.16	0.07	0.33	3.40	5.73	0.17	0.02	0.07	<0.002	23	<20	6	211	60	36	3	2.8	100.02
SAMPLE L	Rock Pulp	72.99	12.37	1.26	0.10	0.39	3.51	5.35	0.20	0.03	0.08	<0.002	39	<20	17	271	74	37	3	3.7	100.01
SAMPLE M	Rock Pulp	73.41	11.95	1.08	0.06	0.32	3.22	5.59	0.16	0.02	0.07	<0.002	39	<20	11	212	59	37	3	4.1	100.02
SAMPLE N	Rock Pulp	72.66	11.82	1.08	0.08	0.39	2.75	5.65	0.16	0.03	0.06	<0.002	119	<20	74	198	56	38	3	5.3	100.00
SAMPLE O	Rock Pulp	72.53	11.97	1.10	0.08	0.37	2.76	5.86	0.16	0.03	0.06	<0.002	12	<20	62	206	57	40	3	5.0	99.99
CLAY	Rock Pulp	70.06	12.86	3.26	0.64	1.67	2.97	3.21	0.50	0.14	0.08	0.004	680	<20	241	190	32	16	8	4.5	100.01
PERLITE MALAYSIA	Rock Pulp	73.59	12.87	0.83	0.05	0.54	4.31	4.48	0.07	0.02	0.10	<0.002	11	<20	8	85	26	43	3	3.2	100.04
SUPREME G.BIN	Rock Pulp	74.09	13.00	0.99	0.06	0.80	3.79	4.63	0.05	0.02	0.07	<0.002	270	<20	47	65	22	11	2	2.5	100.04
USG SAMPLE	Rock Pulp	74.17	12.98	1.06	0.06	0.80	3.74	4.57	0.05	0.03	0.07	<0.002	270	<20	47	66	22	13	2	2.5	100.04

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.



1020 Cordova St. East Vancouver BC V6A 4A3 Canada

Acme Analytical Laboratories (Vancouver) Ltd.

www.acmelab.com

Client: Innovative Energy Inc.
21664 Monohan Court
Langley BC V3A 8N1 Canada

26.1

Submitted By: Harold Oppelt
Receiving Lab: Canada-Vancouver
Received: May 11, 2011
Report Date: May 19, 2011
Page: 1 of 2

CERTIFICATE OF ANALYSIS

VAN11002010.1

CLIENT JOB INFORMATION

Project: UNCHA LAKE PEALITE SAMPLES
Shipment ID:
P.O. Number
Number of Samples: 20

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Table with 7 columns: Method Code, Number of Samples, Code Description, Test Wgt (g), Report Status, Lab. Row 1: No Prep, 20, Sorting of samples on arrival and labeling, 0.2, Completed, VAN. Row 2: 4A02, 20, LIBO2/LI2B4O7 fusion ICP-ES analysis, 0.2, Completed, VAN.

SAMPLE DISPOSAL

RTRN-PLP Return

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Innovative Energy Inc.
21664 Monohan Court
Langley BC V3A 8N1
Canada

CC:



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. *** asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.

ACME ANALYTICAL LABORATORIES LTD.

Final Report

Client: Innovative Energy Inc.

File Create: #####

Job Number: VAN11002010

Number of: 20

Project: UNCHA LAKE PEALITE SAMPLES

Shipment ID:

P.O. Number:

Received: #####

Method	4A	4A	4A	4A	4A	4A	4A	
Analyte	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	
Unit	%	%	%	%	%	%	%	
MDL		0.01	0.01	0.04	0.01	0.01	0.01	0.01
Sample Type								
G1 Rock Pulp	67.02	15.78	3.38	1.21	3.52	3.51	3.77	
G1 Rock Pulp	67.16	15.66	3.46	1.2	3.51	3.47	3.72	
SAMPLE A Rock Pulp	72.49	11.96	1.19	0.11	0.44	3.19	5.38	
SAMPLE B Rock Pulp	73.65	12.57	0.76	0.06	0.55	3.47	5	
SAMPLE C Rock Pulp	73.87	11.98	1.04	0.05	0.47	3.3	4.86	
SAMPLE D Rock Pulp	73.66	12	0.99	0.04	0.46	3.27	4.9	
SAMPLE E Rock Pulp	73.82	11.99	1.08	0.04	0.46	3.29	4.98	
SAMPLE F Rock Pulp	73.36	13.07	0.84	0.06	0.8	3.73	4.64	
SAMPLE G Rock Pulp	73	12.09	1.2	0.09	0.35	3.22	5.54	
SAMPLE H Rock Pulp	64.87	16	4.23	0.84	2.15	2.44	7.34	
SAMPLE I E Rock Pulp	73.03	13.11	0.69	0.05	0.64	4.09	4.5	
SAMPLE J Rock Pulp	74.04	12.14	1.16	0.07	0.33	3.4	5.73	
SAMPLE L Rock Pulp	72.99	12.37	1.26	0.1	0.39	3.51	5.35	
SAMPLE M Rock Pulp	73.41	11.95	1.08	0.06	0.32	3.22	5.59	
SAMPLE N Rock Pulp	72.66	11.82	1.08	0.08	0.39	2.75	5.65	
SAMPLE O Rock Pulp	72.53	11.97	1.1	0.08	0.37	2.76	5.86	
CLAY Rock Pulp	70.06	12.86	3.26	0.64	1.67	2.97	3.21	
PERLITE M Rock Pulp	73.59	12.87	0.83	0.05	0.54	4.31	4.48	
SUPREME C Rock Pulp	74.09	13	0.99	0.06	0.8	3.79	4.63	
USG SAMP Rock Pulp	74.17	12.98	1.06	0.06	0.8	3.74	4.57	
Reference Materials								
STD SO-18 STD	58.03	14.13	7.6	3.36	6.38	3.69	2.16	
STD SO-18 STD	58.06	14.14	7.6	3.35	6.4	3.67	2.16	
STD CSC STD								
STD OREAS STD								
BLK BLK	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	
BLK BLK								

4A TiO2 %	4A P2O5 %	4A MnO %	4A Cr2O3 %	4A Ba PPM	4A Ni PPM	4A Sr PPM	4A Zr PPM	4A Y PPM	
	0.01	0.01	0.01	0.002	5	20	2	5	3
0.41	0.18	0.1	<0.002	1078	<20	734	164	18	
0.41	0.2	0.1	<0.002	1068	<20	729	133	19	
0.17	0.03	0.07	<0.002	69	<20	50	208	55	
0.06	0.02	0.1	<0.002	32	<20	10	73	27	
0.05	0.01	0.04	<0.002	121	<20	12	84	22	
0.05	0.02	0.04	<0.002	113	<20	12	84	22	
0.05	0.02	0.04	<0.002	115	<20	12	86	21	
0.05	0.03	0.07	<0.002	272	<20	46	66	23	
0.16	0.02	0.07	<0.002	99	<20	20	206	52	
0.41	0.13	0.09	<0.002	5869	<20	1284	226	19	
0.06	0.02	0.11	<0.002	71	<20	20	75	34	
0.17	0.02	0.07	<0.002	23	<20	6	211	60	
0.2	0.03	0.08	<0.002	39	<20	17	271	74	
0.16	0.02	0.07	<0.002	39	<20	11	212	59	
0.16	0.03	0.06	<0.002	119	<20	74	198	56	
0.16	0.03	0.06	<0.002	12	<20	62	206	57	
0.5	0.14	0.08	0.004	680	<20	241	190	32	
0.07	0.02	0.1	<0.002	11	<20	8	85	26	
0.05	0.02	0.07	<0.002	270	<20	47	65	22	
0.05	0.03	0.07	<0.002	270	<20	47	66	22	
0.7	0.84	0.4	0.555	498		37	396	307	31
0.7	0.83	0.4	0.554	496		34	396	299	31
<0.01	<0.01	<0.01	<0.002	<5	<20	<2	<5	<3	

4A Nb PPM	4A Sc PPM	4A LOI %	4A Sum %	2A Leco TOT/C %	2A Leco TOT/S %
	5	1	-5.1	0.01	0.02 0.02
24		6	0.9	100	<0.02 <0.02
28		6	0.9	100	<0.02 <0.02
39		3	5	100.02	<0.02 <0.02
35		5	3.8	100.04	0.04 <0.02
11		1	4.4	100.05	<0.02 <0.02
10		1	4.6	100.04	<0.02 <0.02
11		1	4.2	100.04	<0.02 <0.02
13		3	3.3	100.05	<0.02 <0.02
33		2	4.3	100.04	<0.02 <0.02
21		5	0.7	100	<0.02 <0.02
57		5	3.7	100.03	<0.02 <0.02
36		3	2.8	100.02	<0.02 <0.02
37		3	3.7	100.01	<0.02 <0.02
37		3	4.1	100.02	0.02 <0.02
38		3	5.3	100	<0.02 <0.02
40		3	5	99.99	<0.02 <0.02
16		8	4.5	100.01	0.09 <0.02
43		3	3.2	100.04	<0.02 <0.02
11		2	2.5	100.04	<0.02 <0.02
13		2	2.5	100.04	0.03 <0.02
41	25		1.9	99.89	
19	25		1.9	99.92	
				2.96	4.15
				0.14	16.66
<5	<1		0 <0.01	<0.02	<0.02

16.0 Samples of rock imported from
Greece expanded by 3 different
Expanders in the U.S.A.

Samples of rock from the Uncha lake
Perlite deposit (Comparison)

AME ANALYTICAL LABORATORIES LTD.
(ISO 9002 Accredited Co.)

852 E. HASTINGS ST. VANCOUVER BC V6A 1R6

PHONE (604) 253-3158 FAX (604) 253-1...

WHOLE ROCK ICP ANALYSIS

Innovative Energy Inc. File # A402519R

21664 Manohan Court, Langley BC V3A 8W1 Submitted by: Harold Oppelt

26 M

SAMPLE#	SiO2	Al2O3	Fe2O3	MgO	CaO	Na2O	K2O	TiO2	P2O5	MnO	Cr2O3	Ba	Ni	Sr	Zr	Y	Wb	Sc	LOI	TOT/C	TOT/S	SUM
	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%	%
1 SILBRICO PERLITE	72.92	13.08	.70	.06	.72	4.05	4.50	.06	<.01	.10	<.001	73	<20	27	64	30	92	4	3.8	.02	.01	100.03
2 USG PERLITE	73.79	12.72	.74	.04	.52	3.42	4.92	.05	<.01	.10	<.001	13	<20	<10	77	27	66	4	3.7	.02	.01	100.02
3 SUPREME PERLITE DREGON US	73.85	13.30	.85	.06	.84	3.70	4.18	.05	<.01	.06	<.001	268	<20	51	61	21	<10	2	3.1	.01	<.01	100.01
GRADE 1240 317.5C	73.79	13.18	.86	.05	.57	4.27	4.36	.07	<.01	.09	<.001	13	<20	<10	90	26	66	3	2.7	<.01	.01	99.96
GRADE 4500 270.4G	72.81	13.01	.75	.05	.56	4.17	4.75	.07	<.01	.09	<.001	8	<20	<10	101	27	82	3	3.7	.02	.01	99.99
STANDARD SO-17/CSS	61.66	13.85	5.70	2.36	4.69	4.17	1.42	.60	1.00	.53	.442	401	35	311	351	24	26	23	3.4	2.39	5.32	99.96

GROUP 4A - 0.200 GM SAMPLE BY LIBROZ FUSION, ANALYSIS BY ICP-ES. LOI BY LOSS ON IGNITION.
TOTAL C & S BY LECD. (NOT INCLUDED IN THE SUM)
- SAMPLE TYPE: SAND PULP

ata FA

DATE RECEIVED: JUN 10

DATE REPORT MAILED: JUN 21/05



A

RE TERRACE RTM 010	62.77	15.39	3.24	.59	2.60	1.60	2.96	.65	.53	.02	.085	1753	<20	1078	190	<10	14	5	9.1	.45	1.14	100.00
UNCHA TR 03	73.78	12.14	1.17	.08	.36	3.15	5.22	.17	<.01	.07	<.001	43	<20	21	190	55	58	2	3.8	.03	.01	99.99
UNCHA TR 02A	73.05	12.35	1.18	.13	.47	3.06	5.36	.17	<.01	.07	<.001	120	<20	51	180	54	60	2	4.3	.02	.01	100.00
UNCHA TR 04	74.02	12.12	1.10	.08	.37	3.28	4.88	.17	<.01	.07	<.001	177	<20	47	194	51	53	1	3.9	.02	.01	100.03
UNCHA TR 05	74.08	12.13	1.08	.05	.29	2.86	5.51	.17	<.01	.06	<.001	25	<20	<10	187	60	52	2	3.7	.03	.01	99.98
UNCHA TR 06	72.04	12.64	1.19	.14	.51	3.23	5.82	.20	<.01	.07	<.001	6	<20	34	256	70	51	3	4.0	.01	.01	100.00
UNCHA TR 06A	73.53	12.16	1.11	.06	.28	3.39	5.18	.17	<.01	.07	<.001	6	<20	<10	196	55	60	2	6.0	.01	.01	99.99
5 MILE BOLEAN	61.20	13.73	8.33	3.88	13.64	3.17	3.20	.56	.37	.16	.002	1155	27	675	58	13	<10	21	11.2	2.27	1.60	99.65
STANDARD SO-17/CSS	61.66	13.85	5.70	2.36	4.69	4.17	1.41	.60	1.00	.53	.442	401	35	311	351	24	26	24	3.4	2.40	5.31	99.95

GROUP 4A - 0.200 GM SAMPLE BY LIBROZ FUSION, ANALYSIS BY ICP-ES. LOI BY LOSS ON IGNITION.
TOTAL C & S BY LECD. (NOT INCLUDED IN THE SUM)
- SAMPLE TYPE: ROCK PULP
Sample beginning 'RE' are Return and 'RRE' are Reject Results.



**1 7.0. 1989 Furnace test results done by
Canmet laboratories in Ottawa Ont.
On the Uncha Lake perlite rock**

Laboratory testing of perlite samples Report No.77

1. Conditions ; 1 lb gas pressure with 24 ltres air/min 800c

	EXPANSION	Expansion ratio	% Expansion
Standard(Uras,new Oct. 76 -----	320	1.32	
Canadian sample No.1 -----	180	1:18	56.25
Canadian sample No 2 -----	200	1:20	62.50
Canadian sample No 3-----	60	1:6	18.75
Canadian sample No 4 -----	50	1:5	15.62
Canadian sample No.5 -----	24	1:24	7.5
Standard (Uras,new 76) -----	330	1:33	
Milos -----	175	1:17.5	

2. Conditions – 2lb Gas pressure with 24 ltres air/min at

900C

Standard(Uras,new Oct 76) -----	390	1.39	
Canadian sample NO 1 -----	1.60	1.16	41.02
Canadian sample No 2 -----	220	1:22	56.41
Canadian Sample No. 3 -----	140	1:14	35.89
Canadian sample No 4 -----	190	1:19	48.71
Canadian sample No 5 -----	120	1:20	5.12
Standard Uras new Oct 76 -----	390	1;39	
Milos -----	285	1:28.5	

Percentage sample against Uras Standard

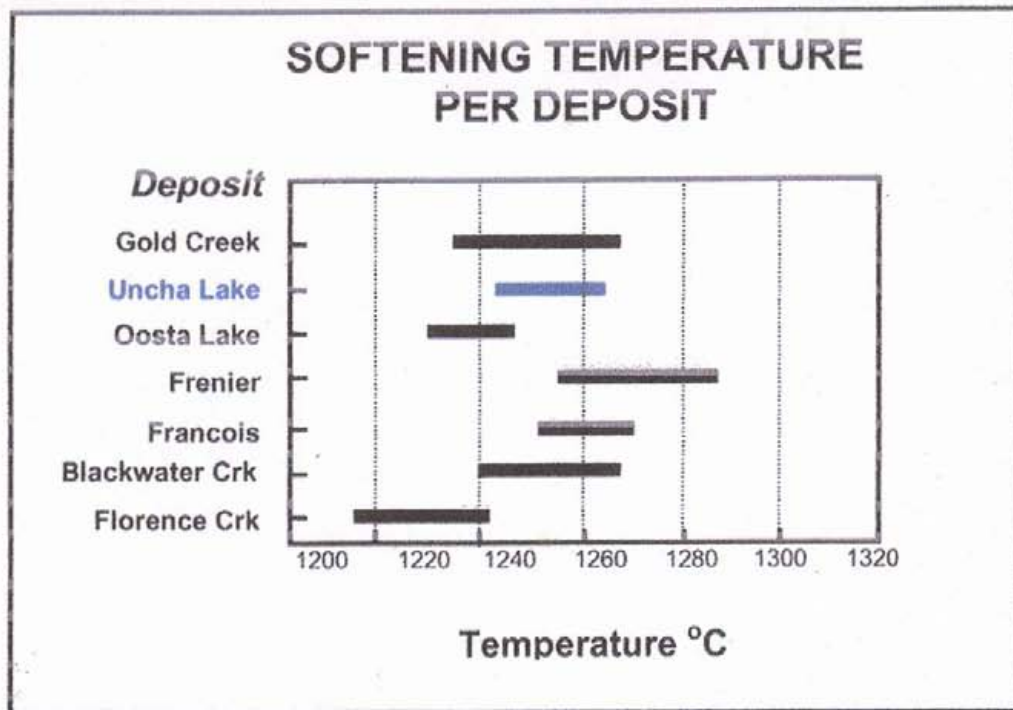


Figure 14: Softening temperatures of perlite samples from Gold Creek, Uncha Lake, Oosta Lake, Frenier, Francois Lake, Blackwater Creek and Florence Creek. Taken from EMPR Geological Fieldwork 1990, Paper 1991-1.

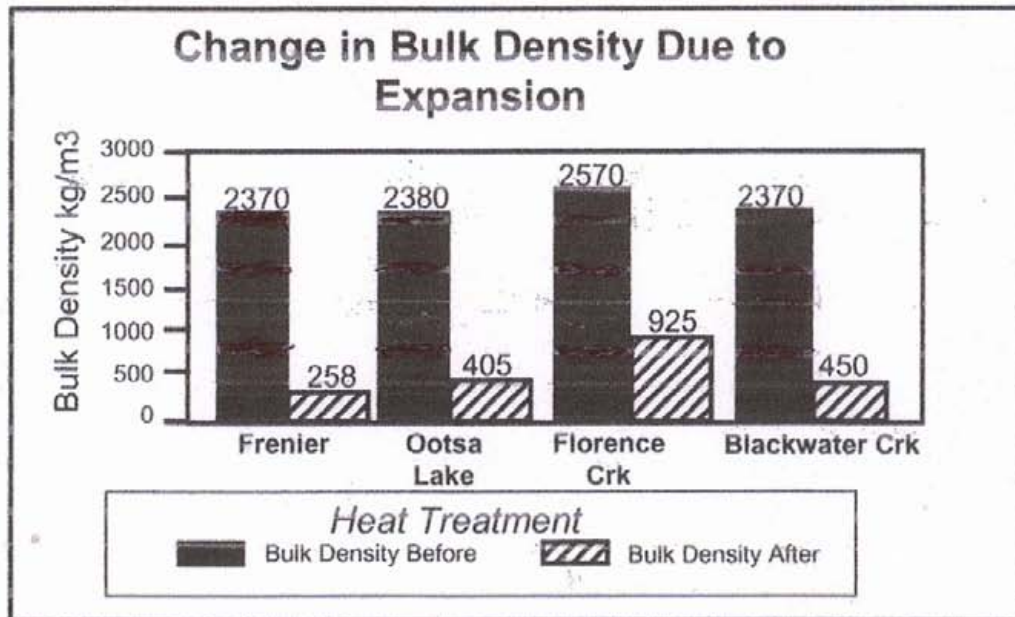


Figure 15: Bar chart indicates the change in bulk density observed due to expansion of perlite samples from Frenier, Oosta Lake, Blackwater Creek and Florence Creek. Uncha Lake sample is comparable to the Frenier and Oosta Lake deposits.

Uncha Lake Perlite Physical Properties

In 1989, CANMET conducted testing of rock samples from various known perlite properties in British Columbia to assess the potential for perlite resources. The samples were subjected to three tests. Tests included the determination of water loss when heated to 800o C (Figure 9); the second determined the softening temperature of the samples (Figure 10); and the third was a measurement of the change in bulk density due to expansion (Figure 11). All perlite occurrences were successfully tested for expansion. The graphs below provide a comparison of the samples tested. It should be noted that the Uncha Lake perlite samples compare favourably to the Frenier deposit and Francois Lake, the only expanding perlite deposits that have been previously mined in BC.

Perlite Content of Various British Columbia Deposits

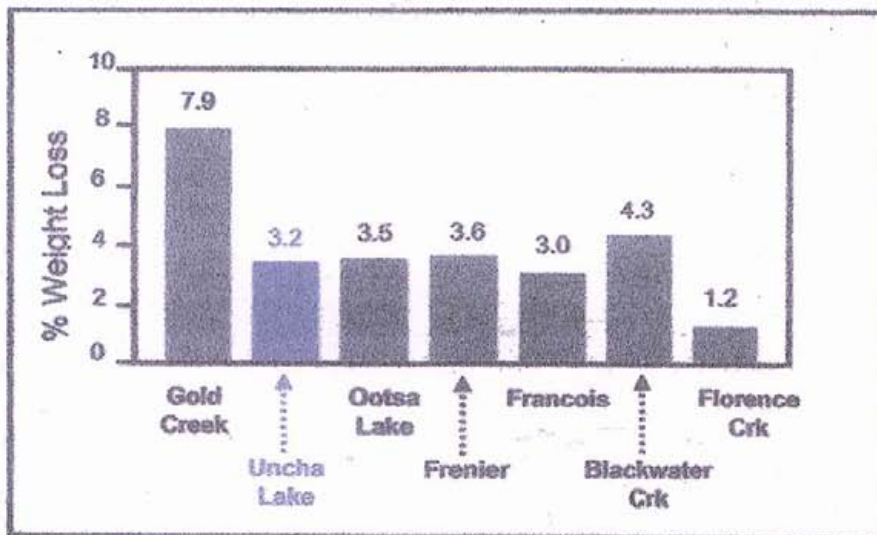
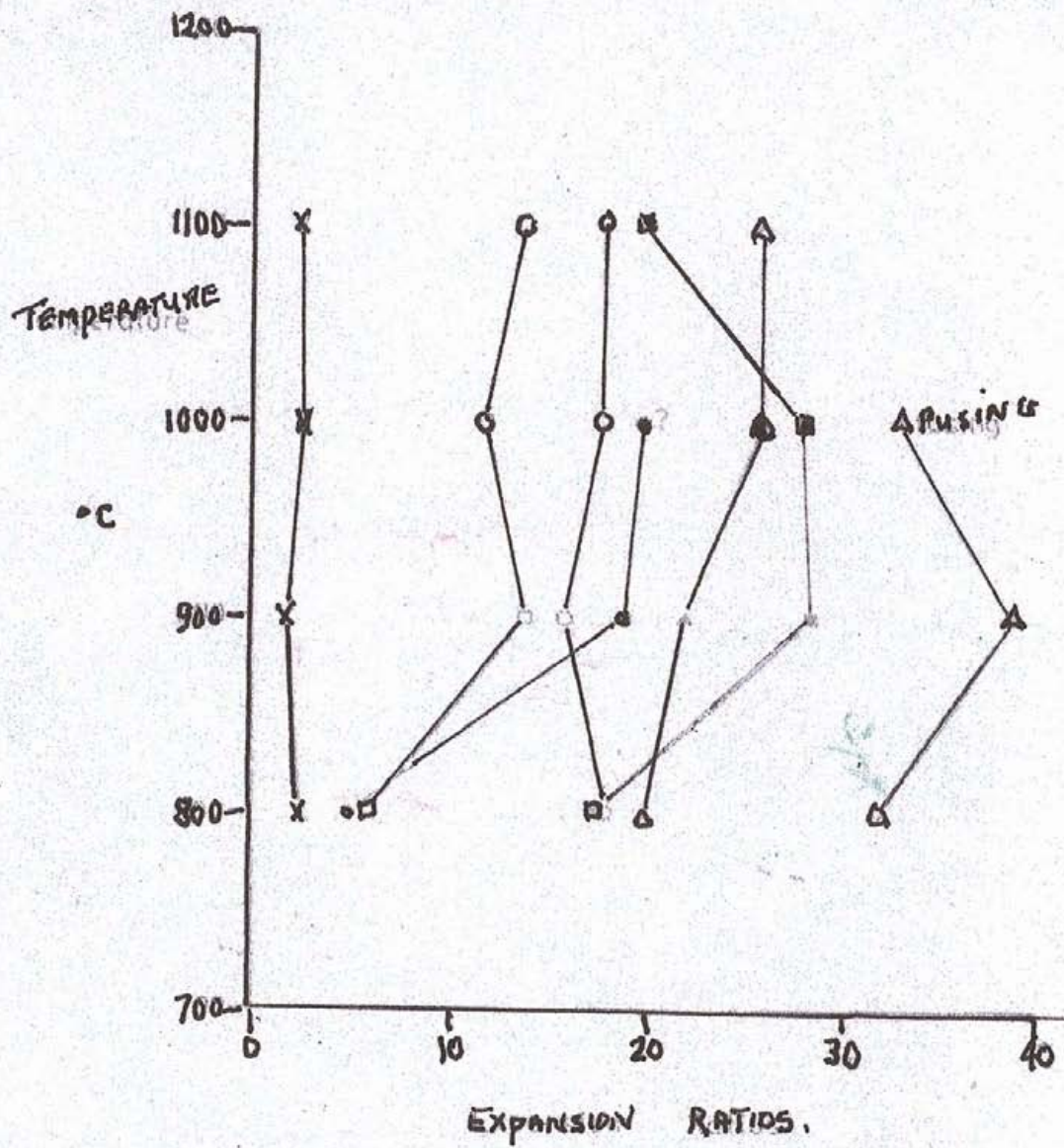


Figure 9: Histogram showing perlite content of samples from Gold Creek, Uncha Lake, Frenier, Francois Lake, Blackwater Creek and Florence Creek.

Taken from EMPR Geological Fieldwork 1990, Paper 1991-1.



KEY

- O- CANADA 1
- △- CANADA 2
- CANADA 3
- CANADA 4
- X- CANADA 5
- Milos
- △- Uras STANDARD

UNCHA LAKE — BRITISH COLUMBIA

Fig. No 1

PERLITE EXPANSION RATIOS

18.0 Furnace tests done by Imasco minerals

2007

Burns Lake Perlite Expansion Trials – Summary of Results

Imasco Minerals Inc.

March 27, 2007

Feedstock

The perlite ore was to be ground at Teck Cominco to a specification of 95% passing 150 mesh (~100 μm). A particle size analysis of the feedstock upon return yielded the following particle size distribution.

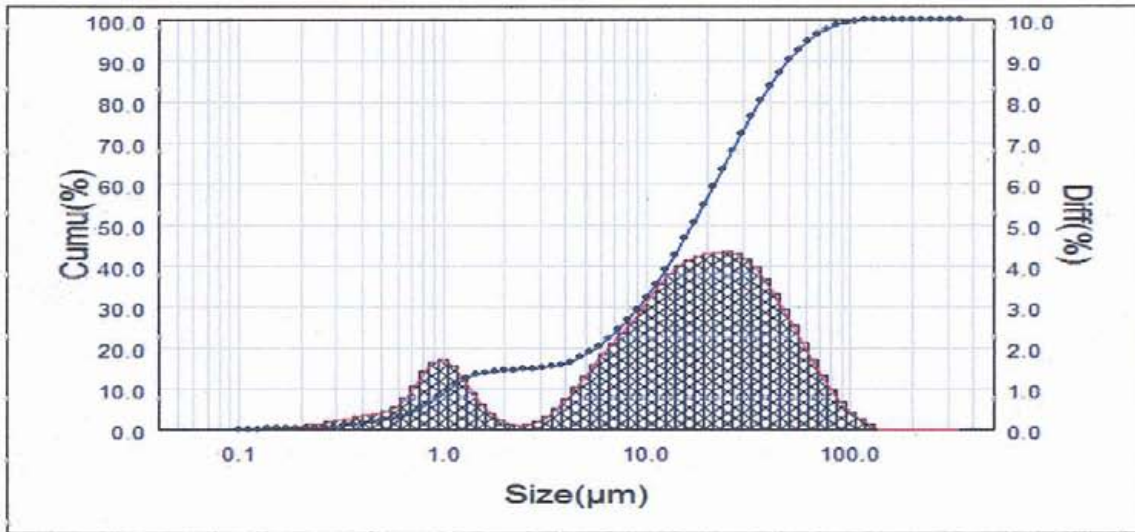


Figure 1. Burns Lake Perlite Ground at Teck Cominco
D10: 1.08 μm D50: 16.78 μm D98: 79.69 μm

The perlite was returned smaller than expected and had a significant amount of fines. To prepare it for the furnace, the feedstock was washed and dried. The result was a much better flowing material yielding the following PSD.

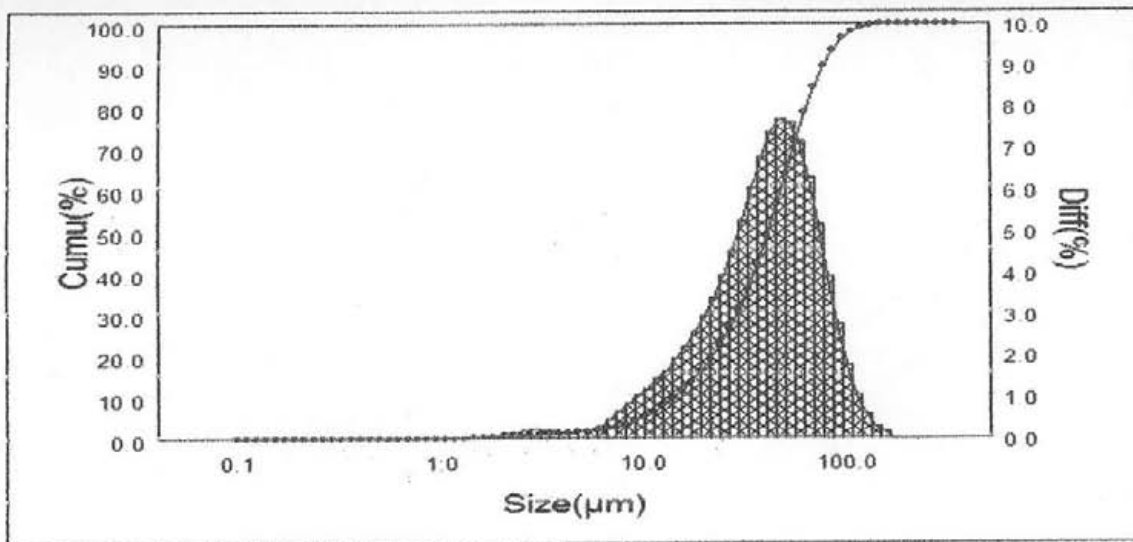


Figure 2. Burns Lake Perlite Ground at Teck Cominco - Washed
 D10: 14.50 µm D50: 41.09 µm D98: 105.35 µm

The washed feedstock density was 1.43 g/cm³.

Expansion

The washed feedstock was expanded at two temperatures, 1050°C and 1075°C. Both tests ran with no problems.

Results at 1075°C

Tank 1

Density - 0.292 g/cm³

Particles are multicellular causing them to look opaque. There is virtually no dust.

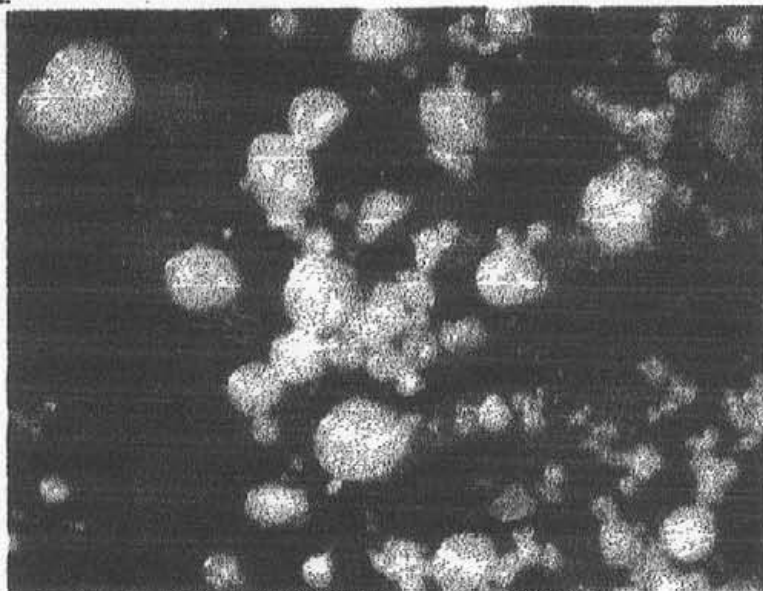


Figure 5. Tank 1 expanded at 1075°C

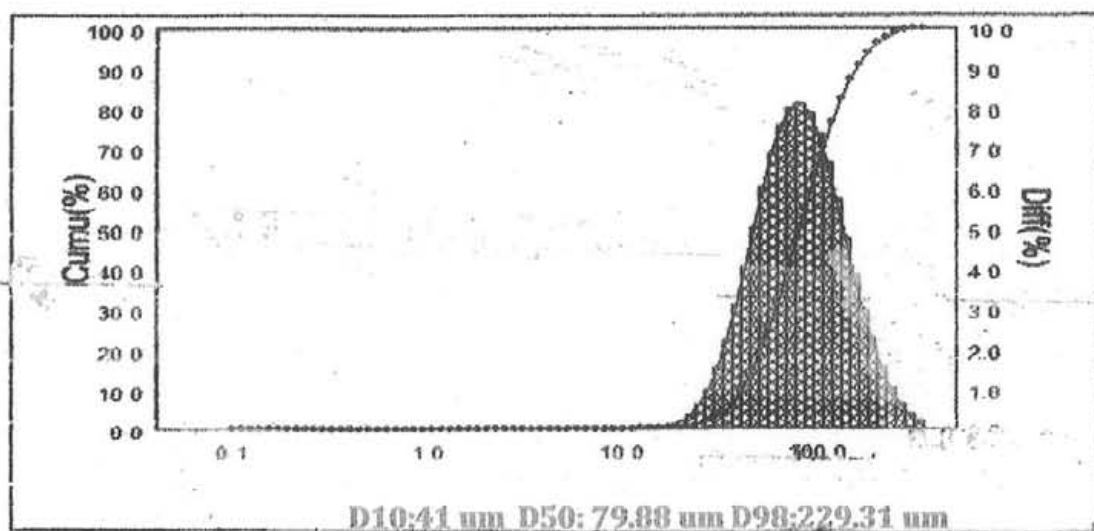


Figure 4, PSD for tank 1 material expanded at 1075 degrees C

Size (um)

Tank 2

Density = 0.278 g/cm³

Particles are mostly multicellular. Much more fine particles, but all are round.

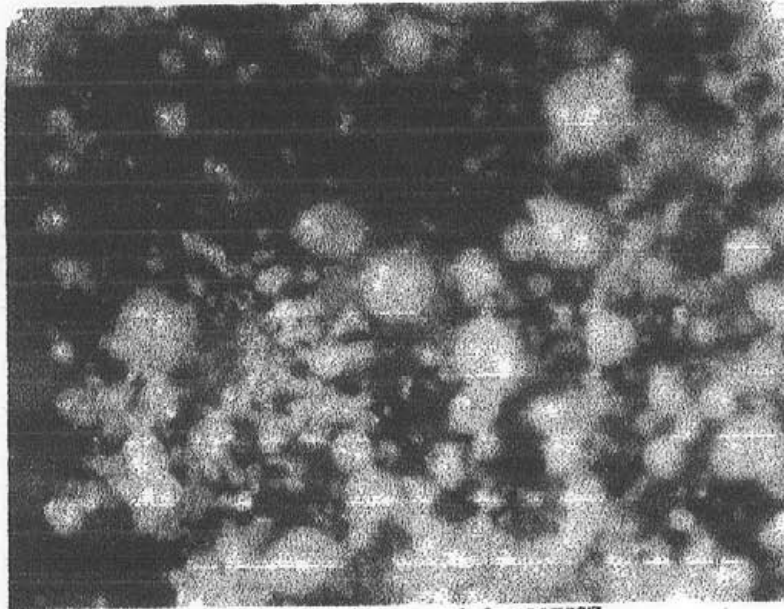


Figure 5. Tank 2 expanded at 1075°C

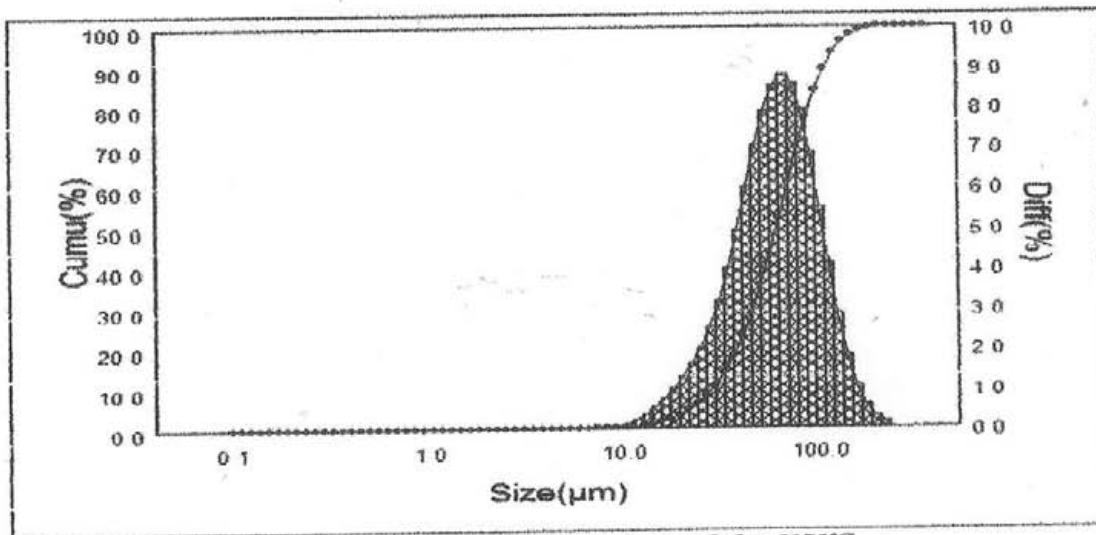


Figure 6. PSD for Tank 2 material expanded at 1075°C
D10: 28.58 µm D50: 60.34 µm D98: 146.19 µm

Tank 3

Density - 0.304 g/cm³

Fine expanded material and small dust particles.

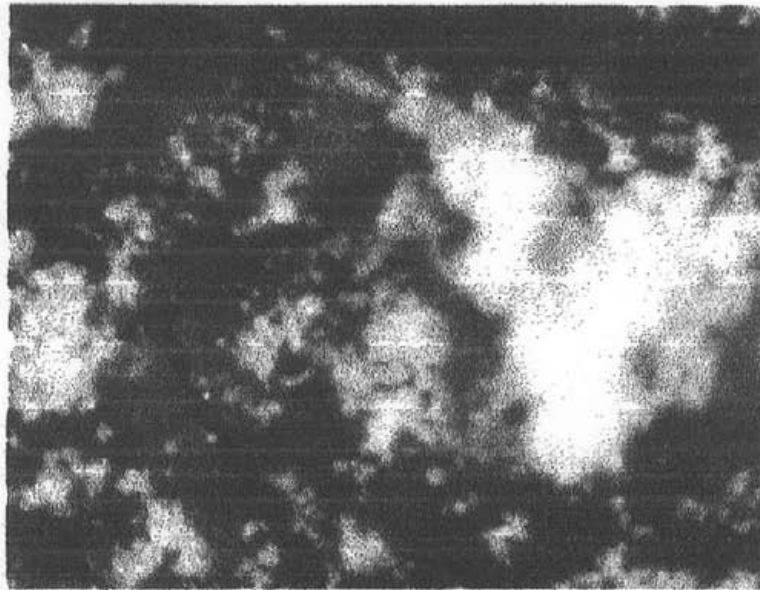


Figure 7. Tank 3 expanded at 1075°C

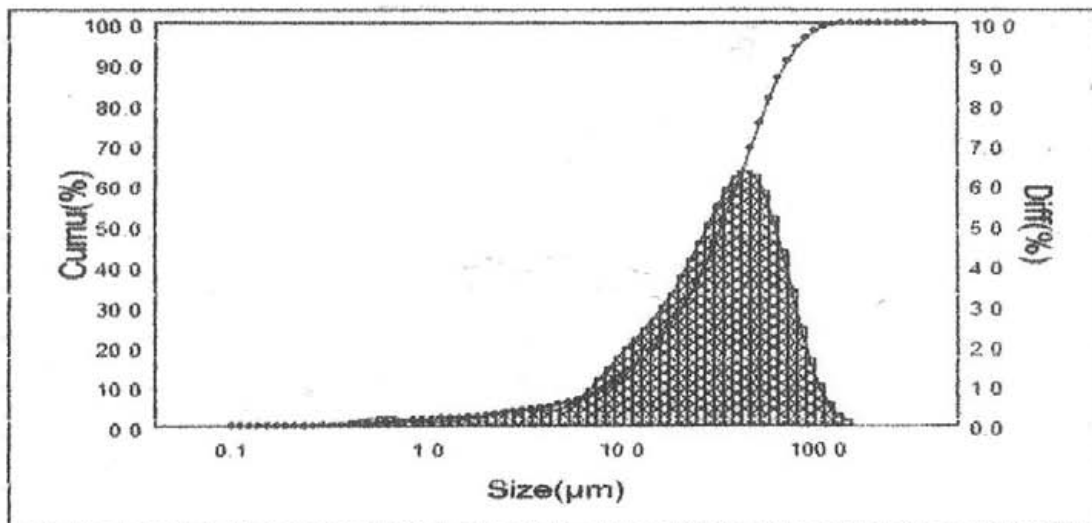


Figure 8. PSD for Tank 3 material expanded at 1075°C
D10: 8.73 µm D50: 32.08 µm D98: 94.66 µm

19.0 Executive Summary

12.0 Executive summary

The Uncha Lake Perlite deposit is located 25 miles south of the town of Burns Lake B.C. in the north central part of the province. 600 miles northwest of Vancouver BC. The deposit occurs on the north west slope of Dayeezcha Mountain.. The deposit is accessible year round by well maintained roads. 25 mineral claims, known as the Uncha claims, cover the Uncha lake deposit. Topography in the area is gently sloping , rolling terrain covered with glacial till and thick forest cover. The Uncha lake Perlite Deposit is an early stage exploration prospect.

The Uncha lake perlite layers occur within Rhyolite flows of the Eocene aged Ootsa Lake Group overlying sedimentary and volcanics of the jurassic Hazelton formation. The Ootsa Lake Group consists mainly of felsic volcanic rocks and coarse clastic layers.

The Uncha lake perlite prospect is considered to be of comparable quality and physical properties to the Frenier deposit near Clinton BC. More importantly analyses done on samples of crushed rock obtained from 3 USA expanders that are using rock from other sources,(Greece) The analyses of the comparison rock and that of the Uncha lake deposit appear to be almost identical except for the quantity of Fe which could be troublesome. Several attempts have been made to put the 35

Frenier perlite property into production but the haulage costs of transportation makes the project undesirable as an economic project. The Francois lake deposit that lies north of the Uncha Lake deposit a distance of 14 miles from the Uncha lake deposit was mined by Western Gypsum from 1949 to 1953 by Western Gypsum Products.

The Uncha Lake perlite has been tested to expand moderately well and exhibit structure in outcrop. Water loss on heating has been calculated to be approximately 3.2% on samples tested by Canmet from the Uncha lake prospect area. The perlite layers range from 7.6 meters to 23 meters with some areas depth is unknown and could be traced in various outcrops and from previous trenching for over 850 meters along the mountain side. It is considered to occur in significant quantities to warrant further exploration and potential mining.

Preliminary resources estimate may be more than 4 million tonnes of perlite in place for the uncha lake deposit. Further mapping and exploration that should be done to the south west of the present uncha lake deposit could add significant more tonnage. Recommend further trenching and short hole drilling by a water well drill could provide a better estimate of reserves and mineability

-20.0 Historic Min- File Data

Location/Identification

MINFILE Number:	093F 026	National Mineral Inventory Number:	093F13 Po2
Name(s):	<u>UNCHA LAKE</u>		
Status:	Showing	Mining Division:	Omineca
Regions:	British Columbia	Electoral District:	Bulkley Valley-Stikine
BCGS Map:	093F082	Forest District:	Nadina Forest District
NTS Map:	093F13E	UTM Zone:	10 (NAD 83)
Latitude:	53 51 15 N	Northing:	5970522
Longitude:	125 38 16 W	Easting:	326510
Elevation:	120 metres		
Location Accuracy:	Within 1KM		
Comments:	North side of Dayeezcha Mountain.		

Mineral Occurrence

Commodities:	Perlite	
Minerals	Significant:	Perlite
	Mineralization Age:	Unknown
Deposit	Character:	Stratabound
	Classification:	Volcanogenic, Industrial Min.
	Type:	R12: Volcanic glass - perlite
	Dimension:	23x0x0 metres
	Comments:	Perlite beds are 7.6 to 23 metres thick and dip 10 to 30 degrees south.

Host Rock

Dominant Host Rock:	Volcanic		
Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Cretaceous-Tertiary	Ootsa Lake	Undefined Formation	-----
Isotopic Age	Dating Method	Material Dated	
-----	-----	-----	
Lithology:	Porphyritic Rhyolite, Felsic Volcanic, Epiclastic		

Geological Setting

Tectonic Belt:	Intermontane	Physiographic Area:	Nechako Plateau
Terrane:	Stikine		

Inventory

Capsule Geology

The region in which the Uncha Lake showing occurs is within the Intermontane Belt, underlain dominantly by Lower to Middle Jurassic volcanic and sedimentary rocks of the Hazelton Group. These assemblages are overlain by the Upper Cretaceous to Lower Tertiary Ootsa Lake Group and Miocene plateau basalt. Intruding Lower Jurassic rocks of the Hazelton Group in the northeastern part of the map sheet is a belt of granodiorite, diorite and quartz diorite plutons of the Lower Jurassic Topley intrusive suite. Felsic plutons of probable Cretaceous age intrude both Lower and Middle Jurassic Hazelton strata.

The Ootsa Lake Group of Upper Cretaceous to Lower Tertiary age comprises mainly felsic volcanic rocks and their epiclastic derivatives. The Uncha Lake perlite showing occurs within rhyolite of this group on Daycezoza Mountain. The perlite dips 10 to 30 degrees south and is 7.6 to 23.0 metres thick. The perlite is inter-bedded within light to dark grey porphyritic rhyolite layers 2.0 to 9.0 metres thick. The perlite is light grey to pale greenish-grey, some perlitic glass occurrences in the area are resinous brown.

Bibliography

- EMPR AR *1953-194; 1955-97
- EMPR EXPL 1976-E206; 1977-E253; 1978-E289, 1992-69-106
- EMPR FIELDWORK 1992, pp. 475-481; 1993, pp. 9-14, 39-44; 1994, pp. 167-170, 193-197; 2002, pp. 165-174
- EMPR OF 1994-19
- EMPR PF (Monthly Report, Smithers Office, Feb. 1979; Report on Uncha Lake Perlite, 1977)
- GSC MAP 1131A; 1424A
- GSC MEM 324, p. 54
- GSC P 90-1F, pp. 115-120
- GCNL #231, 1979

Date Coded:	1985/07/24	Coded By:	BC Geological Survey (BCGS)	Field Check:	N
Date Revised:	2007/10/03	Revised By:	Mandy N. Desautels(MND)	Field Check:	N

21.0 Conclusions and recommendations

14.0 Conclusions and recommendations;

Previous exploration efforts on the Uncha lake perlite deposit indicate the presence of perlite within the rhyolite flows of the Eocene-aged Ootsa lake group, Systematic trenching was undertaken on the property tracing perlite exposures for approximately 850 meters along a Northwest slope of Dayeecha Mountain, The perlite layers are between 7.5 meters and 23 meters thick and appears to be intercalated with porphritic rhyolite flows and tuffs. The perlite rock exhibits definite perlitic structure and on weathering crumbles along perlitic cracks to a granular aggregate Testing done by Canmet in the year 1986 indicates the Uncha lake perlite has a moderate well expansion rating, water loss content of 3,2% and a softening temperature ranging of 1240 to 1250 degrees C.

In June of 2005 the writer and associates did a systematic sampling of the entire claim structure and random samples were taken to have analysed at the Acme Lab in Vancouver BC. During that period the writer communicated with 3 expanders in the USA and asked for samples of the rock they were using to make a fair comparison of rock imported from the middle east. Those samples were subsequently received and sent to be analysed by the same method of the Uncha lake rock. At the Acme Lab in Vancouver BC. Results were found to be almost identical.

This assurance gives us the direction to find a developer of the property, In the year 2007 Immasco Minerals of Surrey BC were contacted and samples were provide of the Uncha lake rock from the same sample locations. They were satisfied with the results(results within this report) after deing a survey of usage of this finished product they found it did not warrant the expenditure to move forward on this project. However had they decided to look at extended markets to supply raw expandable rock to various users in the USA The annual production could have exceeded more than 200 to 300 thousand tonnes per annum thus making it a most profitable project. Besides supplying the Canadian market that uses 40 to 50,000 tonnes of perlite each year

Recommendation;

Additional geologic mapping is required to complete the geological exploration of this historical property. This would yield a better understanding of structural geology and stratigraphy. Additional systematic trenching is recommended to expose the perlite due to the overburden layer. Assuming favourable results are obtained from preliminary work, a second phase of limited drilling of the perlite occurrences would aid in assessing reserves potential which appear to be fairly substantial and in the neighbourhood of 5 to 7 million tones. The excellent atcess to this deposit by numerous logging activities would allow significant cost savings related to mobilization and road construction to the site.

Test sampling done during JUNE 5 TO June 8th in the 2010

Season was done specifically to outline the perimeters of the

Perlite occurrences. Thus establishing areas that will enable a drilling programme to be undertaken to prove up possible tonnage that would

Be considered in the quality control, This deposit has also been found to have areas that quality of perlite rock can change very abruptly in some areas. Previous exploration efforts have indicated there would be 6 areas that would be a marketable rock for expansion and quality control. The next phase of development will be to employ a water well drilling equipment that would be able to drill 30 meter test holes

In 100 meter grid pattern to establish the mineable rock for expansion Purposes. And probable tonnage reserves,

It is further proposed to explore the area to the south west of the present deposit as it is evident from preliminary exploration from surface indications that this deposit could continue on for several miles

Therefore adding several millions of tonnes of perlite rock to the

Present deposit.. my recommendation at this time would be to extend the Uncha Lake holdings for a further area to the southwest that could add several more millions of tonnage to this project, although this statement should be considered as speculative there appears to be indications of the presence of perlitic type rock of interest,

22.0 Statement of Qualifications

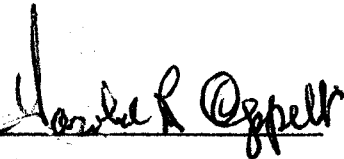
STATEMENT OF QUALIFICATION

I, Harold Richard Oppelt of 21664 Monahan Court, Langley, B.C. do hereby declare the following:

1. I have worked as an Industrial and Hard Rock prospector in Mineral Exploration for the past 43 years.
2. I have worked on several prospects and developed prospects in Alberta and in British Columbia during the years 1967 to 2010.
3. I am responsible for the preparation of this report and I am the sole owner of the claims.
4. the information used in this report is based on prospectors notes, references and abstracts by others and personal field work as indicated within this report

March 15 2011

Signed



Harold R. Oppelt

23 .0 Expense Sheet

Expense sheet for Uncha lake

Property. 2010

1. Maps, reports, air photos , field supplies	\$ 176.80
2. Previous work review	1,200.00
3. Field days, 3 days June 5,6,7, Harold Oppelt	
3 @ \$450.00 a day	1,350.00
Martin Svec 4 days June 5,6,7, 8,	
4 days@ \$250.00	1000.00
4. 4 x4 truck rental 3 days @105.00 day	315.00
5. Food supplies etc,	168.00
6. Rental of living quarters, Trailer	350.00
7. Sample preparation Washing and drying etc.	750.00
8. Sample analyses of 16 samples	678.00
9. Postage sending samples to Lab.	10.68
10. Sample delivery from Burns lake Gr. Bus.	21.25
11. Report and drafting	575.00
Total -----	\$ 6,594.73