

# **Prospecting Report**

On the  
Rock Samples  
On the

# Ahbau Property

**QUESNEL RIVER AREA**

**CARIBOO MINING DIVISION**

**BRITISH COLUMBIA**  
**NTS 93A/13**

542289E, 5894612N Zone 10 (NAD 83)

Prepared for

**Richfield Ventures Corp.**

By

Sheila Jonnes  
Geology Co-op student  
University of Victoria, B.C.  
12 March 2007

## TABLE OF CONTENTS

1. INTRODUCTION ...	..3
1.1. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY ...	...4
1.2. GEOLOGICAL SETTING ...	...5
2. DISCUSSION ...	..8
3. REFERENCES ...	..9
4. APPENDIX 1 ...	..10
5. COST STATEMENT..	..12
6. ARIS MAP..	..13
7. ASSAY RESULTS..	..14

## LIST OF FIGURES

Figure 1. Index map with RVC property boundary highlighted in red...	..3
Figure 3. The location of the RVC property within the Quesnel Trough, which runs most of the length of BC (Tempelman-Kluit, 2006)...	...6
Figure 4. Geological Map of the project area, showing known mineral occurrences in Richfield's Quesnel Trough project in relation to the regional geology. Red circles mark known occurrences; bedrock showings are labelled and unlabelled circles represent placer occurrences (Templeman-Kluit, 2006)...	..8
Figure 5. Location of rock samples collected during the 2006 prospecting survey, Ahbau Lake area. ..	..9
Table 1. Raw geochemistry data; anomalous Cu and Au results are highlighted in grey. ..	..11

## 1. INTRODUCTION

The Ahbau Lake property is situated within the central Quesnel Trough, occurring 70 km northwest of Mount Polley and 200 km southeast of Mount Milligan; two known copper-porphyry deposits within British Columbia, Canada (Fig. 1). Triassic to Jurassic volcanic-sedimentary arc rocks characterise the Quesnel Terrane, within which alkaline intrusions are known to systematically occur every 13 km along strike length (Jonnes and Logan, 2006). Richfield Ventures Corp title ground is in the heart of the Quesnel Trough (Fig. 2). Note that the eastern claims cover most of the area underlain by the black slate eastern Nicola facies. In contrast the western claims are underlain by the volcanic part of the Nicola Group (Templeman-Kluit, 2006). This report documents the results of preliminary prospecting and exploration done on the Ahbau Lake property, which was conducted in May 2006 by Mr. Gary Roste.

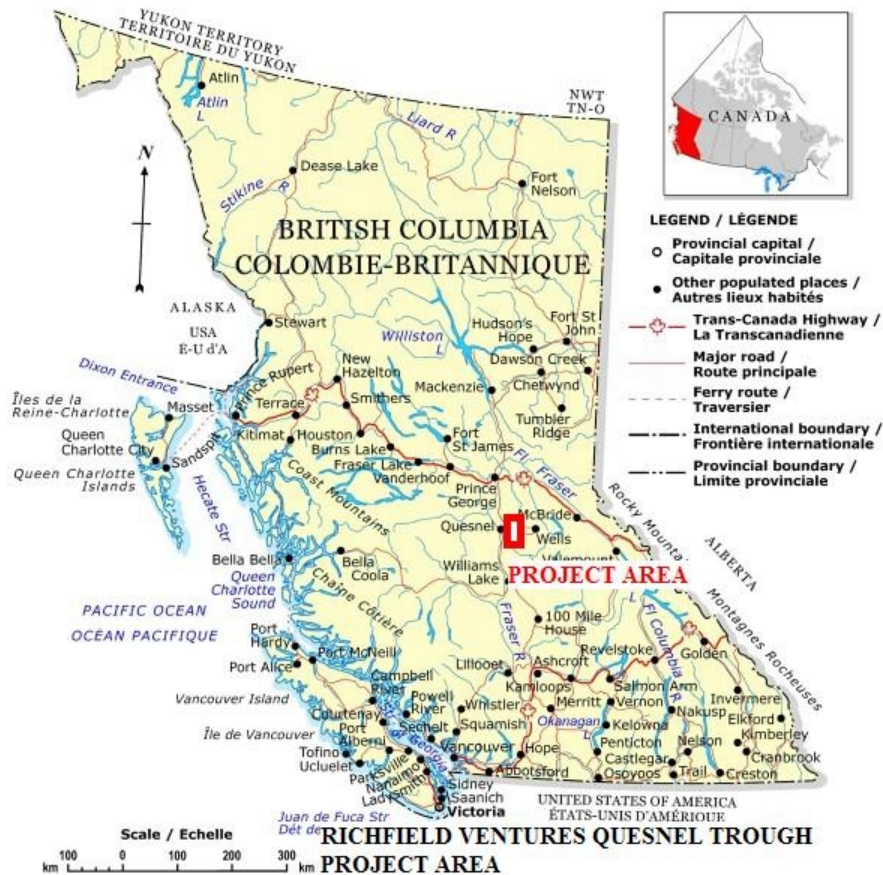


Figure 1. Index map with RVC property boundary highlighted in red.

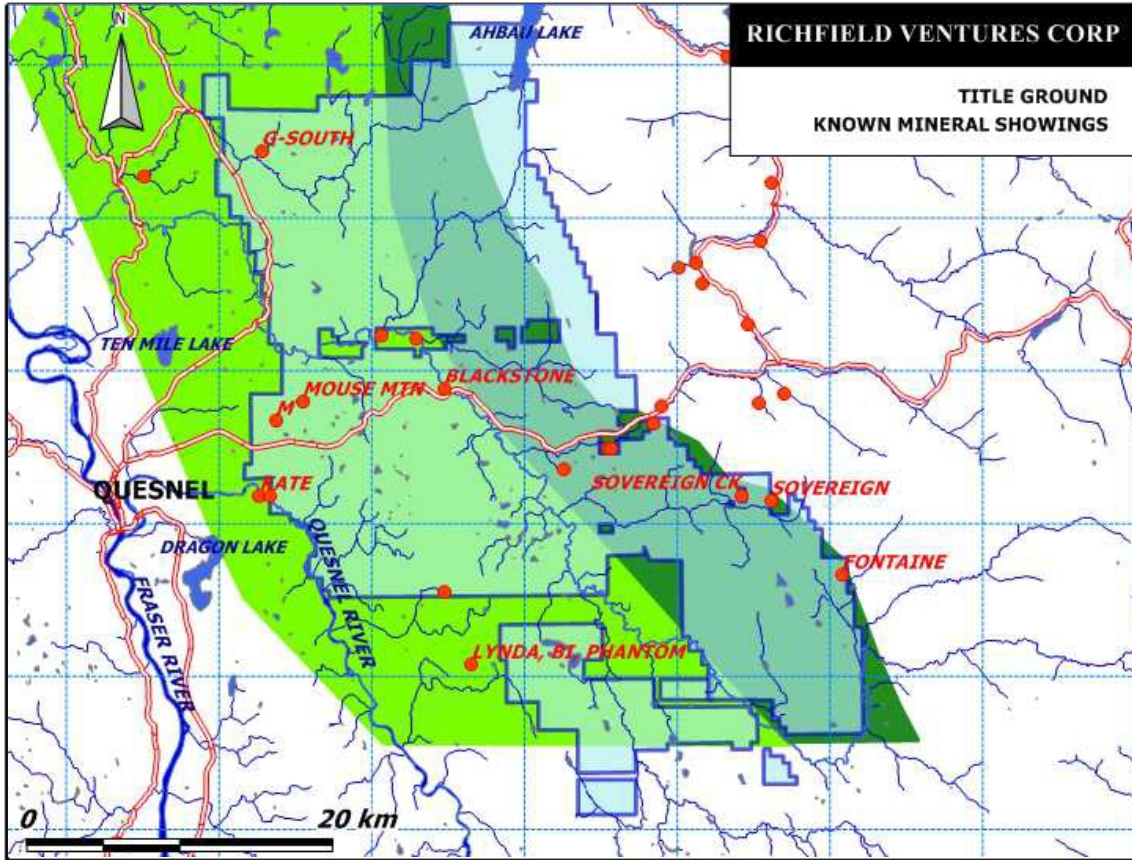


Figure 2. Map of RVC title and known mineral showings in pale blue (www.mapplace.ca).

### **1.1. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY**

The Project area is in central BC, immediately east of the Cariboo transportation utility corridor. Cariboo Highway (97), the B.C. Rail mainline, electric transmission lines, and gas transmission pipelines follow this corridor. Access to the project area is by highway 26, the Quesnel-Wells highway that bisects the project area into northern and southern halves. Within the Project area numerous recently logged roads that branch from the Cariboo Highway and the Wells-Barkerville Highway facilitate access.

The climate in the area is boreal continental. Summers are hot, varying from dry to fairly wet. Winters tend to be cold with  $-30^{\circ}\text{C}$  temperatures common. Precipitation is

fairly evenly distributed throughout the year with snow accumulations commonly more than a meter. The exploration season is from mid-April to end October.

Quesnel, the city, is immediately west of the project area. Prince George, Quesnel and local smaller centers provide experienced manpower, equipment, logistical support and services. Prince George, 120 km north of Quesnel is a major regional center, with regularly scheduled air services to Vancouver and Kamloops. Helicopters and small fixed wing aircraft are readily available for charter.

The project area lies within the Interior Plateau physiographic province, a region of rolling north-northwest trending hills incised by small to medium sized, steep walled stream valleys. The relief is modest, generally less than 300 m, and drumlins and deglaciation drainage channels dominate the topography. Drainage is westward to the Fraser River. Thick glaciofluvial cover underlies much of the project area. As in many glaciated areas bedrock outcrops are most common on hilltops and in stream valleys. Logging road construction has improved access and increased outcrop exposure.

## **1.2. GEOLOGICAL SETTING**

The following section has been taken directly from Templeman-Kluit, 2006.

*The project area is in the heart of Quesnel Trough, a linear northwest trending belt underlain by Late Triassic and Early Jurassic basalt and sedimentary rocks (Fig. 3). From north to south the belt includes strata assigned to the Takla, Stuhini and Nicola groups. Quesnel Trough is generally 20 to 40 km wide and can be followed most of the length of BC from near Mackenzie to the 49<sup>th</sup> parallel. On the southwest Quesnel Trough is flanked by sedimentary and volcanic rocks of the Permian Cache Creek Group and on the northeast are metamorphic rocks of the Omineca Belt, dominantly Late PreCambrian and Early Paleozoic in age. The Pinchi Fault system forms the boundary of Quesnel Trough on the southwest and the Eureka-Spanish Mountain thrusts are at the Omineca Belt boundary.*

*Alkalic basaltic volcanic and volcanoclastic rocks of the upper Triassic Nicola Group (Quesnel Terrane) are the main rock types on the west side of the project area.*

RICHFIELD VENTURES CORP  
Ahbau Prospect

*Massive saussuritized green to dark brown green rocks dominate. The volcanoclastic textures are rarely visible and then only on weathered surfaces. Depositional or structural layering is lacking. Locally thin beds of black slate are intercalated with the volcanoclastic rocks.*

*Polyphase composite dykes, plugs and stocks of monzonite (nepheline) syenitic, syeno-diorite and alkali-gabbro intrude the alkalic volcanoclastic rocks and basalt. These undersaturated intrusive rocks are coeval with, or just younger than, the volcanics they invade. The stocks represent the remnants of eruptive centres of felsic volcanic rocks. They host alkalic suite porphyry mineral deposits.*

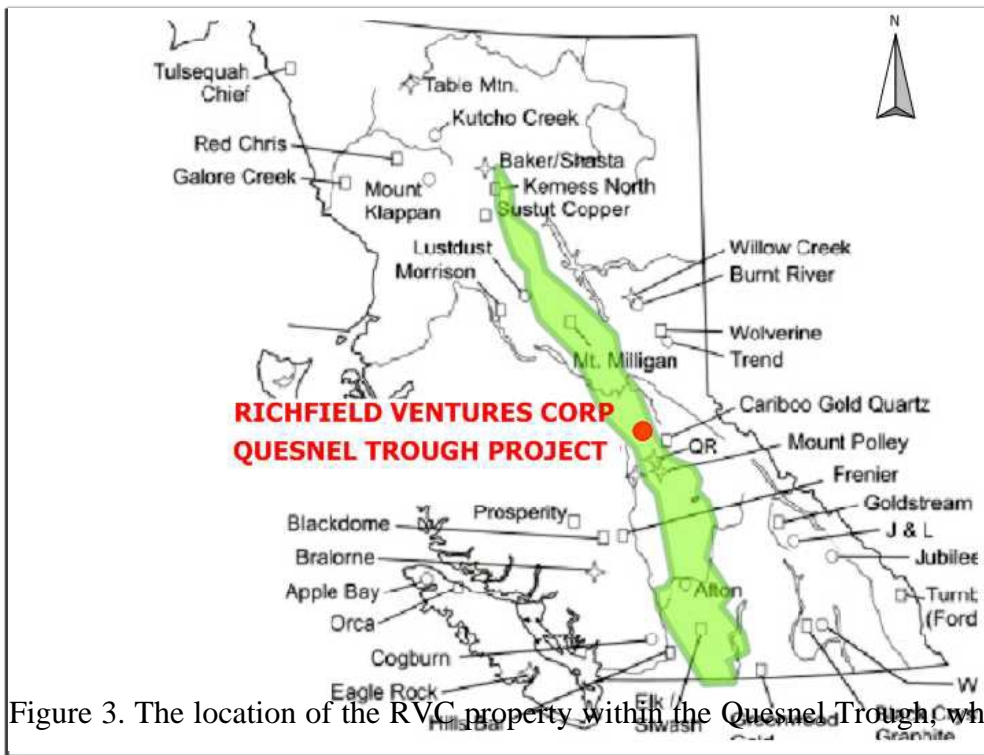


Figure 3. The location of the RVC property within the Quesnel Trough, which runs most of the length of BC (Tempelman-Kluit, 2006).

*The east margin of the project area follows the Eureka and Spanish thrusts approximately. These thrust faults bring eastern Nicola slate over the Proterozoic to Permian Snowshoe Group. The Snowshoe is dominated by quartz mica schist and micaceous quartzite and represents metamorphosed continental sourced sedimentary and*

*volcanic rocks. Along the thrust faulted boundary are slices and sheets of serpentinized ultramafic rocks (Crooked Amphibolite), thought to represent obducted remnants of oceanic crust and associated oceanic sediments.*

*Between the Eureka Spanish thrust and the Nicola volcanic belt is a low area with little relief and few outcrops. Here are scattered outcrops of black recessive weathering slate. Silty to fine sandy black slate, volcanic tuff and calcareous slate are interbedded locally. The rocks are weakly metamorphosed to lower greenschist facies and mostly unaltered. A slaty cleavage is common, but recrystallization along it is lacking. Bedding and cleavage trend northwest. Open to subisoclinal folds that trend northwest are seen locally.*

*Relations between the black slate and the volcanic rocks are not exposed. The slate is considered to be broadly coeval with the volcanoclastic Nicola and they may be an eastern forearc or backarc facies.*

*Quartz monzonite to granodiorite radiometrically dated as Cretaceous, the Naver Plutonic suite, invade the older rocks in the northwest part of the project area. They form a pluton of which only the southern extremity reaches the project area.*

*Isolated exposures of Tertiary rocks, the Eocene Kamloops Group and Eocene to Oligocene Endako Group volcanics and sediments, are found in the south of the Project area.*

*The geologic fabric seen only in the eastern Nicola rocks and in the Snowshoe Group, strikes north northwest. This fabric is accompanied by regional and lesser faults which also trend north-northwest. Many sub regional northeast trending faults truncate this north-northwest trend. The northeast striking faults locally displace Cretaceous and earlier rocks (Fig. 4).*

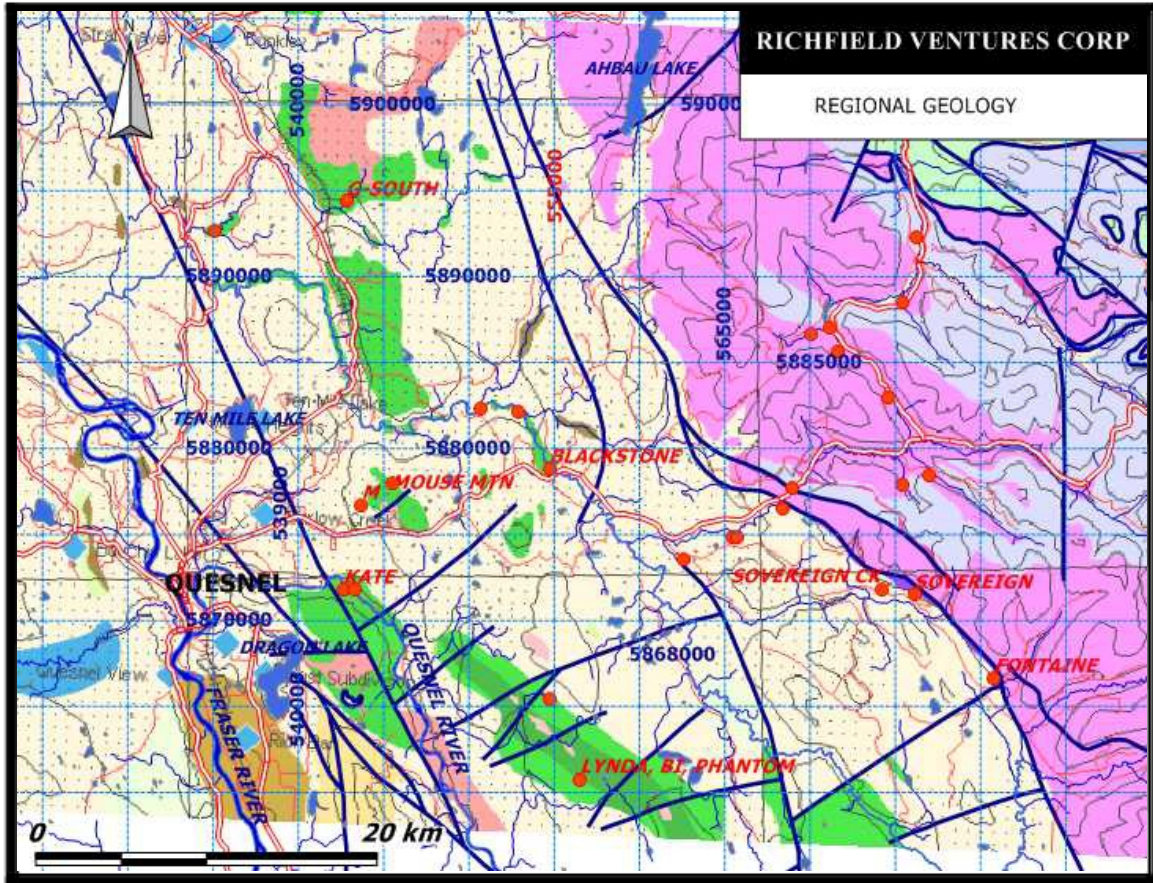


Figure 4. Geological Map of the project area, showing known mineral occurrences in Richfield's Quesnel Trough project in relation to the regional geology. Red circles mark known occurrences; bedrock showings are labelled and unlabelled circles represent placer occurrences (Templeman-Kluit, 2006).

## 2. DISCUSSION

An ongoing project to sample and prospect Ahbau Lake area began early May and continued until mid-July, in the summer of 2006. The prospecting was carried out by Gary Roste in conjunction with geological mapping by Dirk Templeman-Kluit. A total of 4 samples were collected for assay analysis, and were sent to Eco Tech Laboratory in Kamloops (Appendix 1). The samples are from 542289E and 5894612N, which is approximately 580 m northwest of the G-South showing (Fig. 5). Here there is a good outcrop of massive, dark green and lighter green weathering, augite porphyry basalt. The basalt appears to be baked. The outcrop contains 1-2% disseminated pyrrhotite, with



minor chalcopyrite in hairline fractures. The rock is tight and healed with fractures filled with chlorite-epidote group minerals, being strongly saussuritized. No obvious mineralization-related alteration was visible. The rock looks like a massive flow rock, and there is no visible layering or fragmental textures (Templeman-Kluit, 2006).

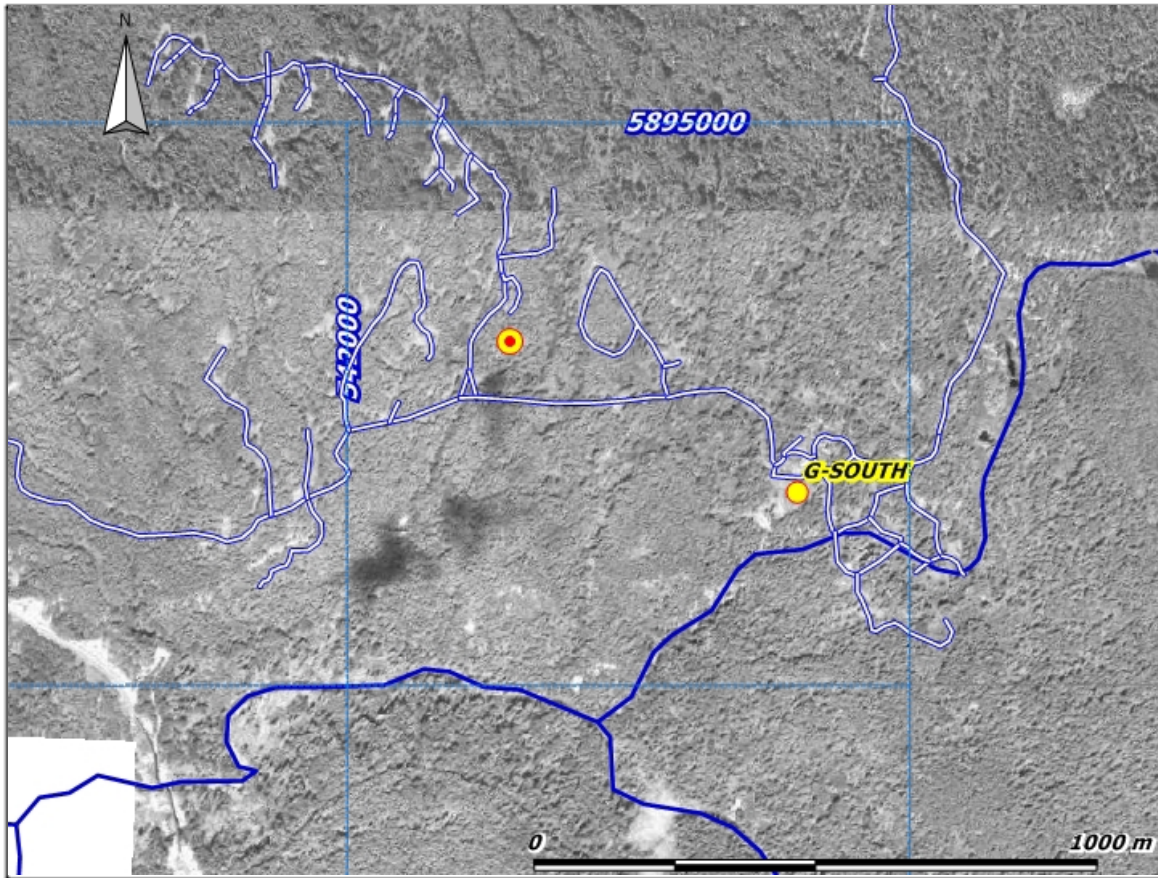


Figure 5. Location of rock samples collected during the 2006 prospecting survey, Ahbau Lake area.

### 3. REFERENCES

- Jonnes, S. and Logan, J.M. (2007): Bedrock geology and mineral potential of Mouse Mountain (NTS 093G/01), Central British Columbia; in *Geological Fieldwork 2007, BC Ministry of Energy, Mines and Petroleum Resources*, Paper 2007-1.
- Templeman-Kluit, accept D.J. (2006): Geological Report on the Quesnel Trough project including the G South, Mouse Mountain, Blackstone, Chubby Bear, Quesnel River Area, Cariboo Mining Division, British Columbia; unpublished report for Richfield Ventures Corporation, May 8, 2006, pages 1-88.

#### 4. APPENDIX 1

32 ELEMENT ICPMS ANALYSIS ON THE 4 SAMPLES  
COLLECTED FROM THE ABHAU PROPERTY, QUESNEL,  
BRITISH COLUMBIA

RICHFIELD VENTURES CORP  
Ahbau Prospect

Tag #	Au (ppb)	Pd (ppb)	Pt (ppb)	Ag (ppm)	Al (%)	As (ppm)	Ba (ppm)	Bi (ppm)	Ca (%)	Cd (ppm)	Co (ppm)	Cr (ppm)	Cu (ppm)	Fe (%)	Mg (%)	Zn (ppm)
94481	<5	<5	<5	<0.2	2.59	<5	60	10	0.92	9	42	108	228	>10	2.28	391
94482	5	5	<5	<0.2	1.48	<5	40	10	0.84	<1	35	73	171	8.64	1.00	47
95484	5	5	<5	<0.2	1.88	770	70	<5	>10	5	162	87	177	9.86	1.23	201
2289 4612	75	<5	10	4.5	1.46	870	20	<5	0.26	5	24	113	961	>10	0.98	17

Tag #	La (ppm)	Mn (ppm)	Mo (ppm)	Na (%)	Ni (ppm)	P (ppm)	Pb (ppm)	Sb (ppm)	Sn (ppm)	Sr (ppm)	Ti (%)	U (ppm)	V (ppm)	W (ppm)	Y (ppm)
94481	<10	708	<1	0.06	75	1290	98	5	<20	28	0.25	<10	255	<10	7
94482	<10	417	<1	0.04	36	1150	54	<5	<20	11	0.19	<10	140	<10	4
95484	<10	3797	18	0.02	429	340	76	20	<20	259	0.02	<10	114	<10	6
2289 4612	<10	162	2	0.04	11	850	20	<5	<20	37	0.16	50	143	<10	4

Table 1. Raw geochemistry data; anomalous Cu and Au results are highlighted in grey.

## Cost Statement

---

### Technical

Assays	99.00
Freight on Assays	40.21
Geologist ~ Prospecting 2.5 days @ \$400.00/Day	1,000.00
Geologist ~ Reporting 1 day @ \$195.00/Day	195.00
Mapping	1,077.50

---

TOTAL TECHNICAL	\$	2,411.71
-----------------	----	----------

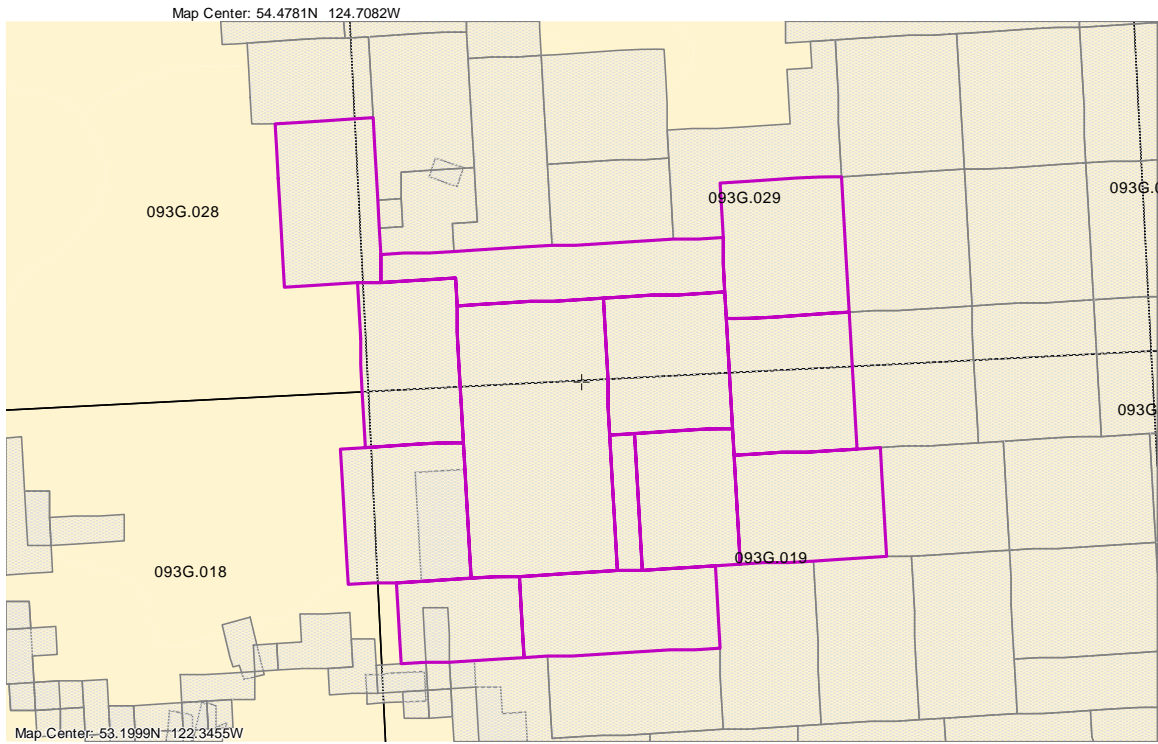
### Physical (Cutting of Grid Lines for IP Survey that was not completed in 2006)

Cutting Grid Lines 28 days @ \$275.00/Day	7,700.00
Swamping Grid Lines 23 days @ \$275.00/Day	6,325.00
Picketing 1 day @ \$275.00/Day	275.00
Crew Boss 12 days @ \$300.00/Day	3,600.00
First Aid	1,180.80
Equipment Rental	3,645.95
Fuel	2,373.89
Supplies	2,296.58

---

TOTAL PHYSICAL	\$	27,397.22
----------------	----	-----------

<b>EXPENDITURES</b>	<b>\$</b>	<b>29,808.93</b>
---------------------	-----------	------------------



## CERTIFICATE OF ANALYSIS AK 2006-487

**RICHFIELD VENTURES CORP.**  
331 Reid Street  
**Quesnel, BC**  
V2J 2M5

07-Jun-06

**ATTENTION: Peter Bernier**

*No. of samples received: 3*  
*Sample Type: Rock*  
**Project #: Ahbau**

<b>ET #.</b>	<b>Tag #</b>	<b>Au (ppb)</b>	<b>Pd (ppb)</b>	<b>Pt (ppb)</b>
1	94481	<5	<5	<5
2	94482	5	5	<5
3	95484	5	5	<5

**QC DATA:**

**Resplit:**

1	94481	5	5	<5
---	-------	---	---	----

**Repeat:**

1	94481	5	<5	<5
---	-------	---	----	----

**Standard:**

GEO'06	520	120	1222
--------	-----	-----	------

JJ/bp  
XLS/06

**ECO TECH LABORATORY LTD.**

Jutta Jealouse  
B.C. Certified Assayer

ECO TECH LABORATORY LTD.  
10041 Dallas Drive  
KAMLOOPS, B.C.  
V2C 6T4

## ICP CERTIFICATE OF ANALYSIS AK 2006-487

RICHFIELD VENTURES CORP.  
331 Reid Street  
Quesnel, BC  
V2J 2M5

Phone: 250-573-5700  
Fax : 250-573-4557

**ATTENTION: Peter Bernier**

*No. of samples received: 3*  
*Sample type: Rock*  
**Project #: Ahbau**

*Values in ppm unless otherwise reported*

Et #.	Tag #	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
1	94481	<0.2	2.59	<5	60	10	0.92	9	42	108	228	>10	<10	2.28	708	<1	0.06	75	1290	98	5	<20	28	0.25	<10	255	<10	7	391
2	94482	<0.2	1.48	<5	40	10	0.84	<1	35	73	171	8.64	<10	1.00	417	<1	0.04	36	1150	54	<5	<20	11	0.19	<10	140	<10	4	47
3	95484	<0.2	1.88	770	70	<5	>10	5	162	87	177	9.86	<10	1.23	3797	18	0.02	429	340	76	20	<20	259	0.02	<10	114	<10	6	201

**QC DATA:****Resplit:**

1	94481	<0.2	2.52	5	65	15	0.82	9	43	103	225	>10	<10	2.23	714	<1	0.05	78	1280	96	5	<20	27	0.21	<10	248	<10	6	430
---	-------	------	------	---	----	----	------	---	----	-----	-----	-----	-----	------	-----	----	------	----	------	----	---	-----	----	------	-----	-----	-----	---	-----

**Repeat:**

1	94481	<0.2	2.58	10	60	5	0.92	8	42	109	227	>10	<10	2.25	716	<1	0.05	75	1290	96	<5	<20	29	0.23	<10	253	<10	5	406
---	-------	------	------	----	----	---	------	---	----	-----	-----	-----	-----	------	-----	----	------	----	------	----	----	-----	----	------	-----	-----	-----	---	-----

**Standard:**

GEO '06

		1.5	1.74	70	150	<5	1.98	1	22	60	86	4.03	<10	0.87	746	1	0.03	30	690	24	<5	<20	54	0.10	<10	74	<10	9	78
--	--	-----	------	----	-----	----	------	---	----	----	----	------	-----	------	-----	---	------	----	-----	----	----	-----	----	------	-----	----	-----	---	----

JJ/bp  
df/499a  
XLS/06

**ECO TECH LABORATORY LTD.**  
Jutta Jealouse  
B.C. Certified Assayer

## CERTIFICATE OF ANALYSIS AK 2006-784

**RICHFIELD VENTURES CORP.**

331 Reid Street

**Quesnel, BC**

V2J 2M5

13-Jul-06

**ATTENTION: Peter Bernier**

*No. of samples received: 1*

*Sample Type: Rock*

**Project #: AHBAU**

*Samples submitted by: Lee Dearing*

<u>ET #.</u>	<u>Tag #</u>	<u>Au (ppb)</u>	<u>Pt (ppb)</u>	<u>Pd (ppb)</u>
1	2289 4612	75	<5	10

**QC DATA:**

**Resplit:** 2289 4612

1

70

<5

5

**Standard:**

PG115

540

1420

130

JJ/bs  
XLS/06

**ECO TECH LABORATORY LTD.**

Jutta Jealouse

B.C. Certified Assayer



ECO TECH LABORATORY LTD.  
10041 Dallas Drive  
KAMLOOPS, B.C.  
V2C 6T4

## ICP CERTIFICATE OF ANALYSIS AK 2006-784

RICHFIELD VENTURES CORP.  
331 Reid Street  
Quesnel, BC  
V2J 2M5

Phone: 250-573-5700  
Fax : 250-573-4557

**ATTENTION: Peter Bernier**

*No. of samples received: 1*

*Sample type: Rock*

**Project #: Ahbau**

*Samples submitted by: Lee Dearing*

**Values in ppm unless otherwise reported**

Et #.	Tag #	Ag	Al %	As	Ba	Bi	Ca %	Cd	Co	Cr	Cu	Fe %	La	Mg %	Mn	Mo	Na %	Ni	P	Pb	Sb	Sn	Sr	Ti %	U	V	W	Y	Zn
1	2289 4612	4.5	1.46	870	20	<5	0.26	5	24	113	961	>10	<10	0.98	162	2	0.04	11	850	20	<5	<20	37	0.16	50	143	<10	4	17

**QC DATA:****Resplit:**

1	2289 4612	4.3	1.42	930	20	<5	0.26	6	28	124	927	>10	<10	1.00	175	1	0.04	13	880	22	<5	<20	38	0.17	50	156	<10	4	18
---	-----------	-----	------	-----	----	----	------	---	----	-----	-----	-----	-----	------	-----	---	------	----	-----	----	----	-----	----	------	----	-----	-----	---	----

**Repeat:**

1	2289 4612	4.5	1.57	900	25	<5	0.27	5	25	144	1037	>10	<10	1.05	172	4	0.05	12	820	22	<5	<20	39	0.17	50	152	<10	4	17
---	-----------	-----	------	-----	----	----	------	---	----	-----	------	-----	-----	------	-----	---	------	----	-----	----	----	-----	----	------	----	-----	-----	---	----

**Standard:**

PB106		>30	0.50	185	70	<5	1.64	47	2	41	6225	1.36	<10	0.25	518	29	0.03	7	200	5238	55	<20	164	<0.01	<10	13	<10	4	8386
-------	--	-----	------	-----	----	----	------	----	---	----	------	------	-----	------	-----	----	------	---	-----	------	----	-----	-----	-------	-----	----	-----	---	------

JJ/bs  
df/N783  
XLS/06

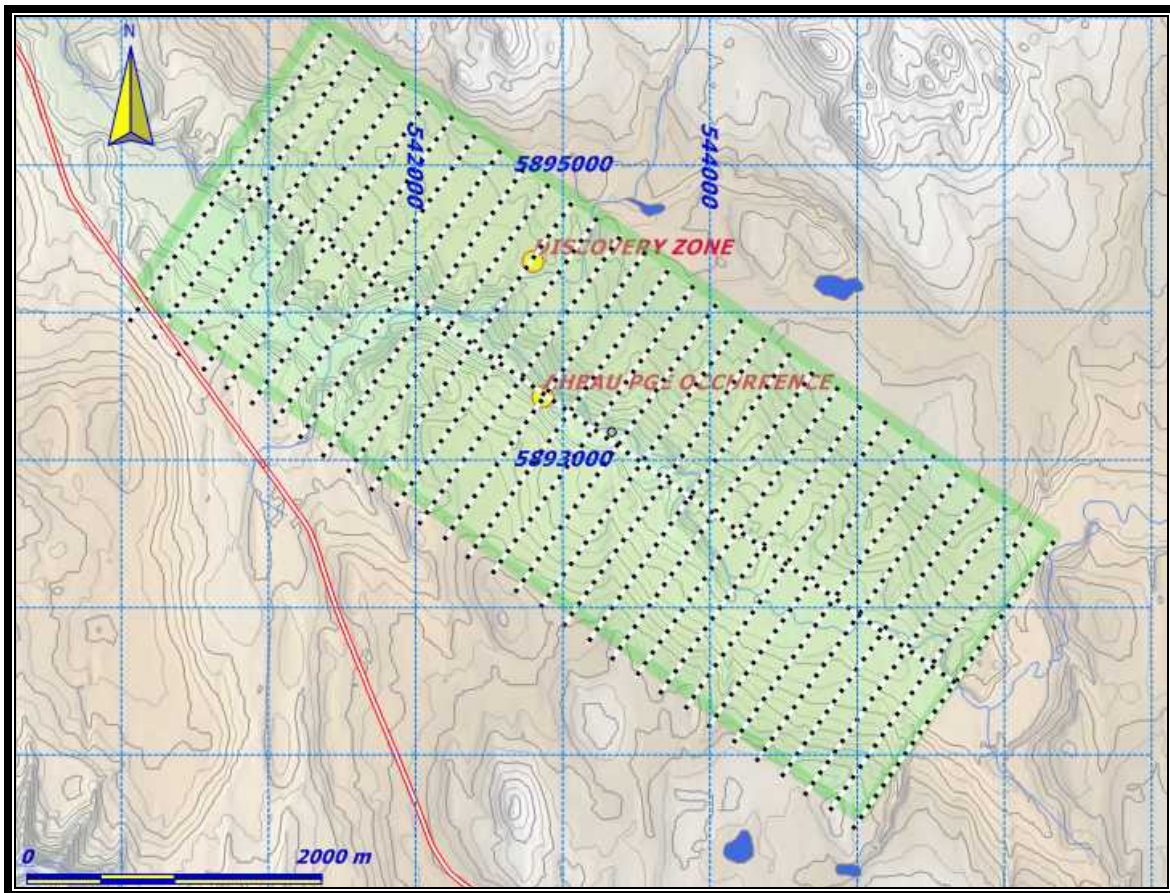
**ECO TECH LABORATORY LTD.**  
Jutta Jealouse  
B.C. Certified Assayer

## G-SOUTH 3D IP SURVEY GRID

The G-South grid straddles Ahbau Creek. The grid covers known showings, airborne mag highs and high gradient areas in the mag, airborne radiometric targets and interpreted structures as well as two intrusive bodies in Ahbau Creek- it should produce some great data. The base line runs N55W or 305 degrees from 540750E 5894929N to 545665E 5891490N.

The four corners of the grid are at  
540053E 5893937N  
541429E 5895903N  
544969E 5890495N  
546344E 5892461N

There are 31 grid lines and they run N35E 035 degrees; line spacing is 200 m.



**Figure 1** This map shows the grid in relation to the topography. The area outlined in green represents the original proposed grid as defined in February 2006.

## G-SOUTH 3D IP SURVEY GRID

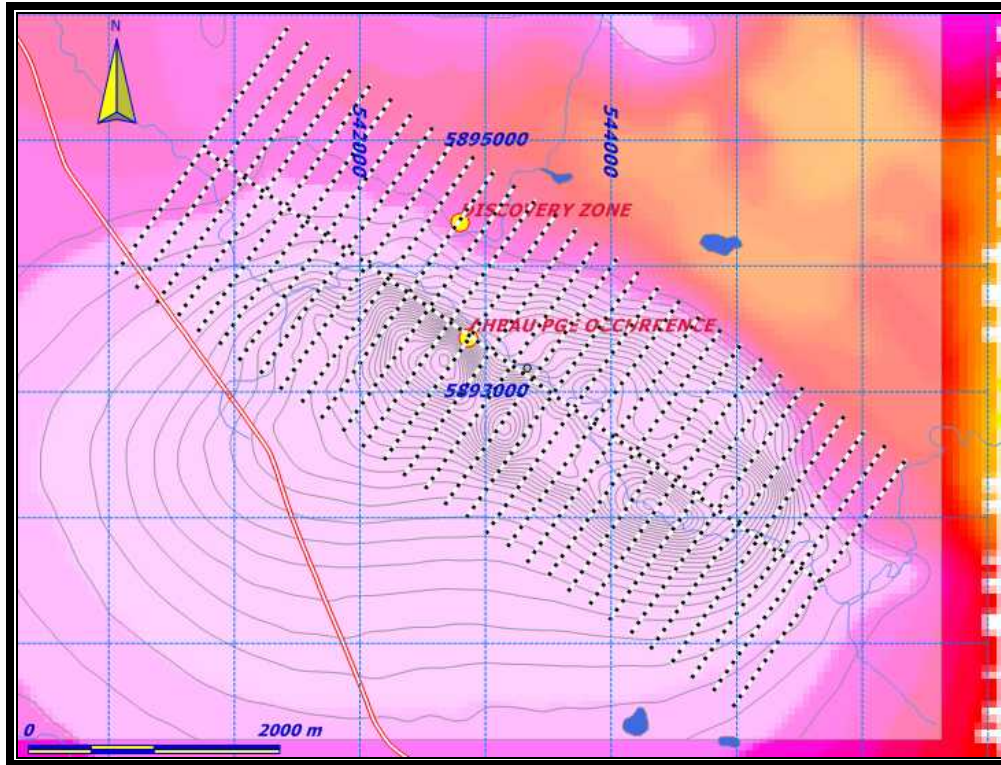


Figure 2 This shows the airborne mag contoured with the grid superposed.

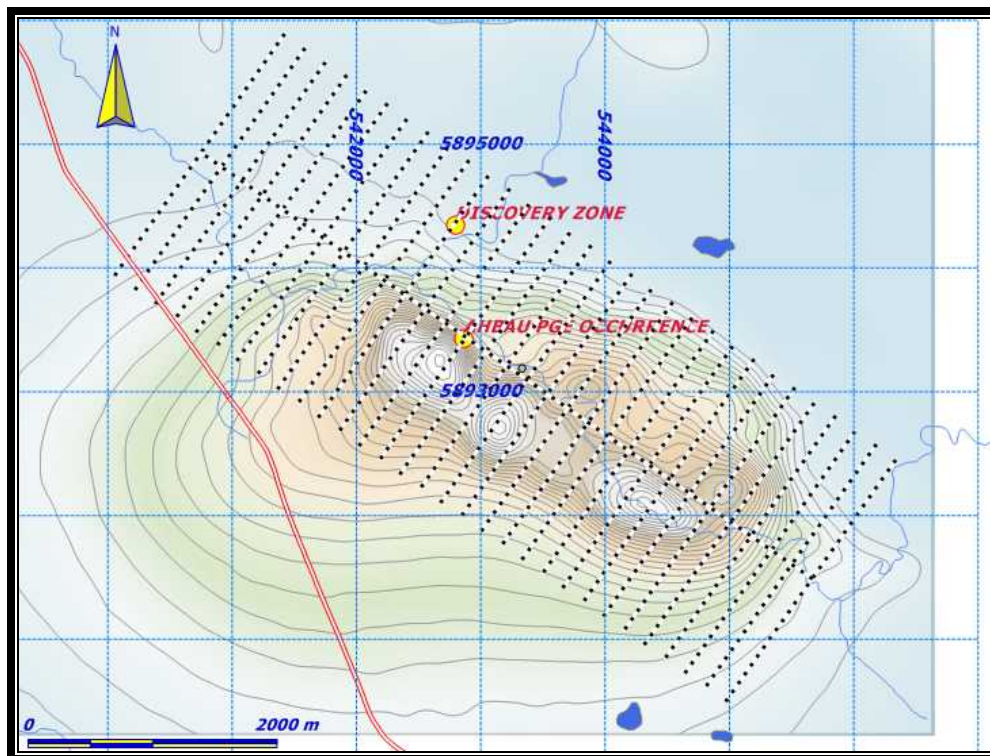


Figure 3 Here is the same data coloured differently to show details of the high mag zone.

## G-SOUTH 3D IP SURVEY GRID

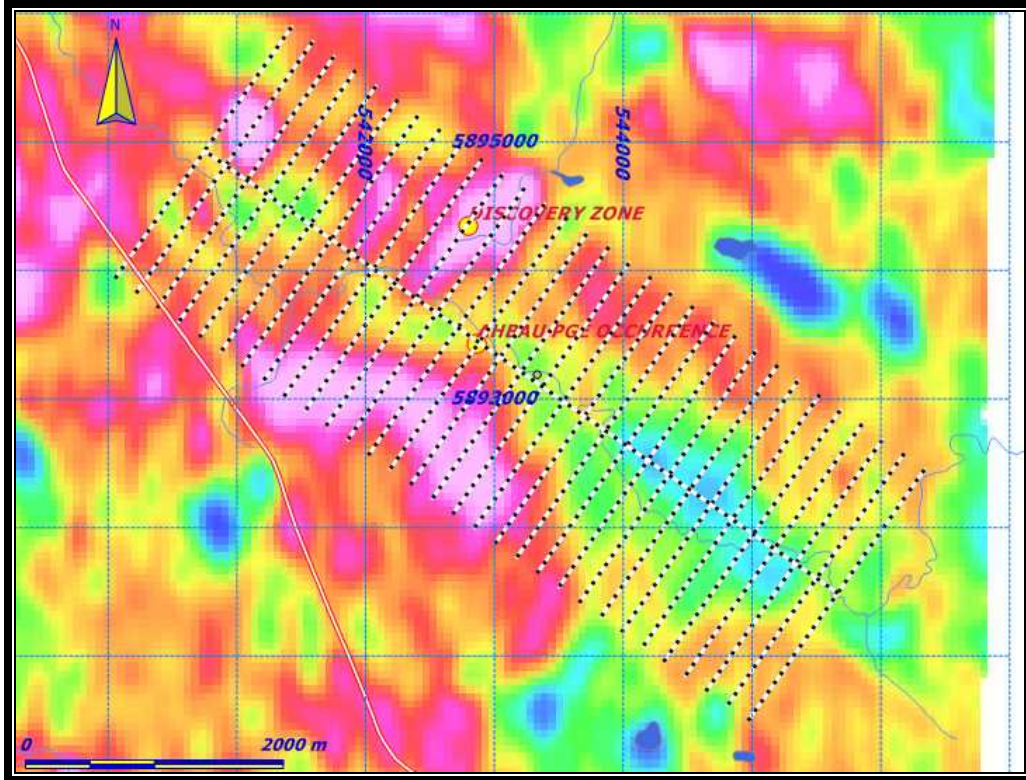


Figure 4 Here is the potassium map from the airborne with the grid overlain.

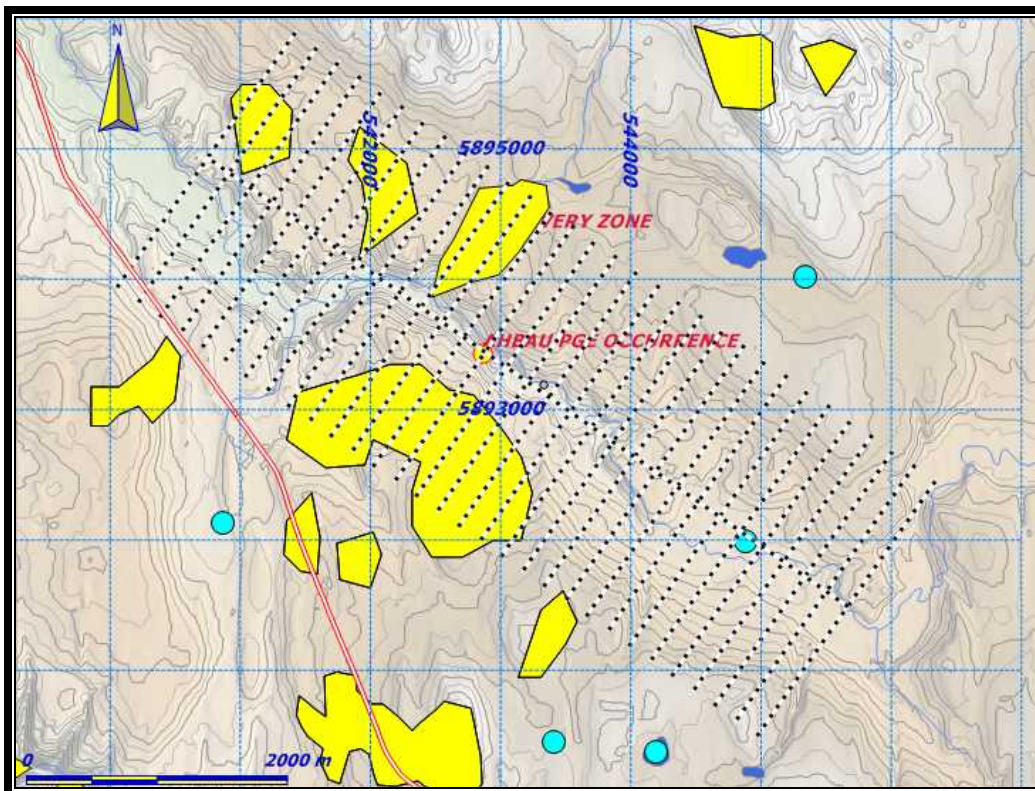
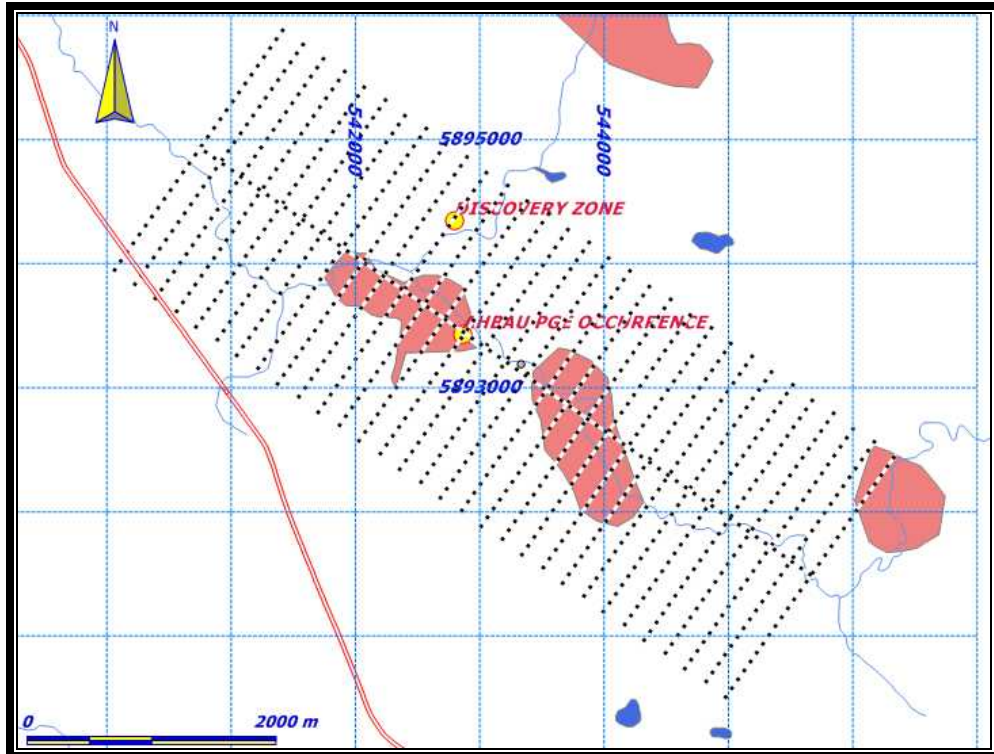
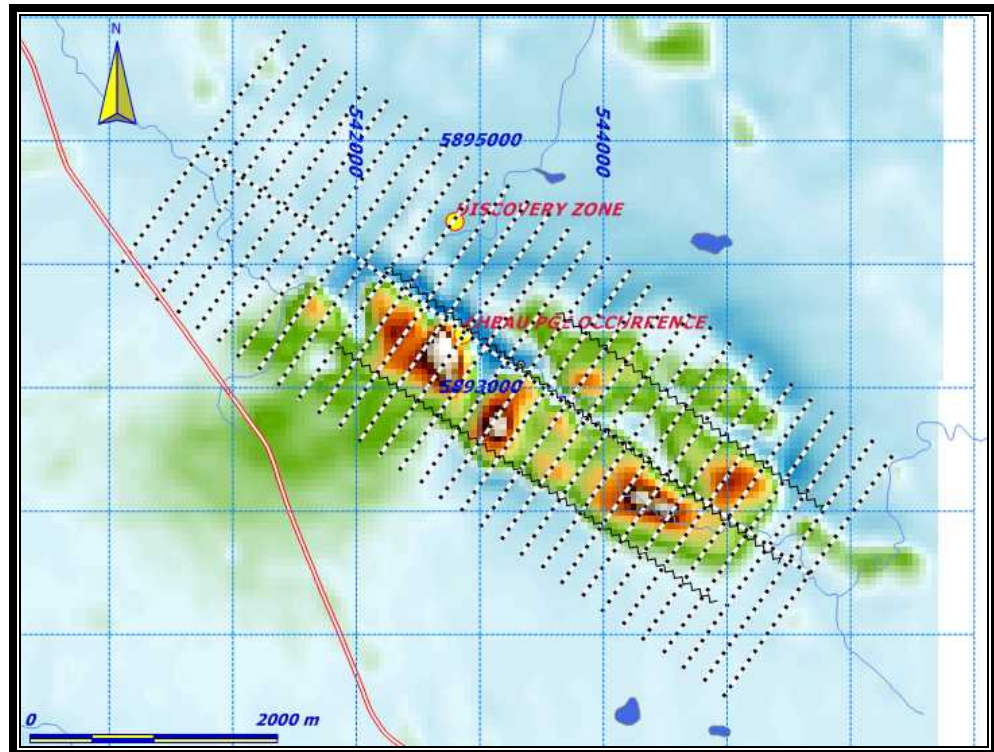


Figure 5 The topography with 10 m contours and the targets of Shives and Sheldrake superposed on the G-South grid.

## G-SOUTH 3D IP SURVEY GRID



**Figure 6** Here the IP grid is shown in relation to the known small intrusives that may be part of the Naver plutonic suite or part of the undersaturated suite related to the Mouse Mountain intrusions.



**Figure 7** This shows the IP grid and the vertical magnetic gradient with the interpreted faults that will also be tested by the IP survey.

## WRITER'S CERTIFICATE

I, Sheila Jonnes, residing at 423 Hartley Street, Quesnel, British Columbia, do hereby certify that:

1. I am a geologist residing in Quesnel, B.C.
2. I obtained a Bachelor of Science (honours) degree in Earth and Ocean Sciences in 2007 from the University of Victoria, Victoria, British Columbia.
3. I have practiced my profession as a student geologist since 2002. Work has included regional property examinations and mapping with the Geological Survey Branch of the Ministry of Energy and Mines, and core logging and drilling logistics with Imperial Metals Corporation. I have directly supervised and conducted programs of geological mapping, prospecting and trenching with Richfield Ventures Corp. in 2006.
4. I hereby consent to the publication of this report by Richfield Ventures Corp. I further consent to the filing of this report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public.

Dated in Quesnel, British Columbia this 12<sup>th</sup> day of March



---

Sheila Jonnes