

Reconnaissance
of the
Denis mineral claims

BC Geological Survey
Assessment Report
34543

Situated at Kilometer 844 of the Alaska Highway

Liard Mining Division
Northeastern British Columbia
N.T.S. 94M.075

Latitude 59° 42' 25" Longitude 127° 13' 12"

Field work between August 25th and 26th 2013

On behalf of

Fireside Minerals Ltd.
West Bank, British Columbia

October 25th 2013
Sylvan Lake, Alberta

Report By:
Scott Allan, G.I.T

Introduction:

On August 25 and 26th, 2013 The author and Andrew Allan completed two days of prospecting on portions of the Denis mineral claims, Located near Fireside on the Alaska highway in north eastern British Columbia.

The goals of the field work were

- asses access to the property
- confirm barite mineralization
- locate previous workings

A general overview of the setting of the mineralization and field methods will be detailed in this report.

Summary and conclusions:

Access to the property can be located from kilometer 844 along the Alaska Highway, thick overgrowth of willow and alder mask the road and inhibit motorized vehicle access. Once cleared of the brush the road would allow heavy equipment access into the mineralized areas with minimal repairs and clearing.

Three of ten exploration trenches were located; these trenches completed by Dresser Minerals Ltd. although mostly covered, confirmed the presence of vein hosted barite. The barite is white to tan, commonly iron stained with a massive crystalline structure with remarkable similarities to the nearby Bear barite deposit actively being developed by Fireside Minerals Ltd. specific gravity of grab samples from vein #1 range from 4.26-4.32 with one sample independently assayed at 4.46 specific gravity.

A lead soil anomaly highlighted by Dresser minerals still has no causative body and a broad soil anomaly suggest a larger vein structure than what has been determined by trenching over vein#1. A small trenching and drill program has been laid out to determine the causative body.

Location and Access:

The Denis mineral claims are approximately located at kilometer 844 of Alaska Highway just north of the Fireside Inn and road maintenance camp in northeastern British Columbia. A cat road exists masked by a thick regrowth of willow and alder on the east side of the highway. This cat road precedes northerly uphill from the highway to the trenched area of the Denis claims for approximately $\frac{3}{4}$ of a kilometer.

The claims reside mostly within the N.T.S map number 94M.075 and a partially within in the northern area of 94M.064. Using UTM NAD 83 the claims have a northing and easting close to 6619957.18, 600301.55 Zone 09.

Claims and Ownership:

Located in the Laird mining division the rectangular claims cover the Denis barite mineralization. Two claims are 100% owned by Doug Allan with one larger claims owned by 100% by Andrew Allan; all claims are held by option agreement with Fireside Minerals Ltd.

Claim Data:

Name	Tenure #	Type	Sub-type	Size Ha.	Issue date	Good to date	Status	Owner	Ownership
Beaver 1	410487	Mineral	Claim	25	2004/may/16	2013/dec/25	Good	Doug Allan	100%
Beaver 2	410488	Mineral	Claim	25	2004/may/16	2013/dec/25	Good	Doug Allan	100%
Denis 2	896192	Mineral	Claim	392	2011/sep/07	2014/sep/07	Good	Andrew Allan	100%

Claim 896192 covers the gravity soil anomaly and the main barite mineralization identified by Dresser Minerals Ltd.

General setting:

Summarized From *Craft and Allan, 2013*

Located in the laird plains of northeastern British Columbia the area is covered with spotted lakes interconnected by small creeks boasting a young dense forest of spruce and birch. Glacial till blankets the region varying from 1-15 meters providing very little in the way of outcropping. The claims are located just north of the Laird River with elevation between 600 – 800 meters. Bedrock in the region is identified as thick sequence of Cambrian and older siliciclastic rocks assigned to the Kechika siltstones. A series of broad NW verging anticlines and synclines predominate the region.

Geology and Mineralization:

Summarize from *Cochrane, 1973*

The main barite mineralization is uncovered by a series of ten bull-dozer trenches known as vein #1. The barite is focussed along a braided fault system appearing to be steeply dipping with variable strike attitude from 268° to 240°. The barite veins appear to pinch to the east, and widen to the west. The best mineralization occurs in the southern portion of the most westerly trench boasting a 4 meter width.

Barite hosted by vein #1 is white to tan, commonly iron stained with a massive crystalline structure with irregular blebs of galena and chalcopyrite. Common quartz veins have a spatial

association with the barite with minor chalcopyrite mineralization these veins have similar strike and dip to the barite mineralization striking 250 degrees with a sub-vertical dip. These hydrothermal veins are hosted by the Kechika siltstone striking 100° and dipping -40 ° with irregular alteration patterns between an unaltered black siltstone to a buff bleached siltstone.

A narrow geochemical lead soil anomaly commences 400 meters north of the trench #1 being traced for 850 meters with no causative body located to date.

Results:

An assessment of the road showed a thick re-growth of willow and alder but has maintained structural integrity. Clearing of the brush would allow heavy equipment access to the trenched area hosting vein #1 with minimal repairs.

The trenches have mostly been sloughed in with only three trenches being located. The three trenches showed massive barite focussed along a braided fault system. The main vein known as vein #1 was located in two of three trenches, a series of narrow veins were observed next to vein #1 due to sloughing these veins were not attempted to be traced. Width of the vein in the first trench was found to be 4.1 meters striking 242° with a near vertical dip. Width of the vein in trench #2 was found to be 2 meters with minor inclusions of clay. Trench 3 failed to show a vein but did highlight a focused zone of barite float. Two samples were taken from each vein showing in trench 1 and 2 with a fifth sample being taken from barite float in trench 3. These grab samples were taken and assayed for specific gravity by Le Chatelier flask on the fireside mine site. Sample 1 was sent to Loring Labs and tested for % Baso4, Specific Gravity, Heavy metals, and total oxides results are attached under appendix 2.

Sample #	1,2	3,4	5
Northing	6619743.79	6619758.06	6619784.150
Easting	600090.30	600112.22	600115.44

Table 1. Location of Grab Samples in UTM, NAD 83 Zone 09

Sample #	1	2	3	4	5
Specific Grav.	4.32	4.30	4.29	4.31	4.26

Table 2. Specific Gravity determined by Le Chatelier Flask, Fireside Minerals Laboratory

Discussion:

The first trench has shown that there is potential for an economic barite resource on the Denis claims. The barite share remarkable similarities with the nearby Bear workings owned by Fireside Minerals Ltd. that currently produces saleable barite along a NE-SW strike. With limited work to the cat road the Denis claims would be accessible by heavy equipment.

It is likely that a modest reserve of barite ore exists in vein #1, which remains open down dip and to the west, previous workings on the Denis claims suggest that vein #1 pinches to the east. Examination of the working has shown that a series of trenches were dug on an east west base line with the three most westerly trenches exposing barite. The orientation of the base line also corresponds with topography of the hill side with the most westerly trench being at the lowest elevation and the most easterly at the highest elevation showing. Total relief along the baseline is 80 meters, considering this as a factor, the barite vein may be pinching with elevation. It is suggested that one trench be dug to the west of trench #1 to highlight a gravity anomaly determined by Cochrane, 1973 this anomaly is at a lower elevation and will give an indication of the vein behaves at depth.

The causative body of the lead soil anomaly still has not been found and a broad soil anomaly suggest a larger vein structure than what has been determined by trenching over vein#1. Excavation of the moose and bear barite deposit have shown pods of galena mineralization with in the barite veins, thus it is likely this lead soil anomaly represent an obscured barite vein. A series of trenching should take place over the anomaly to locate the causative body at bedrock. Dependent on the success of trenching and the observed quality of the structure, five drill pads should be constructed to test the causative body down dip. A proposal of this program is laid out on the attached Denis site plan.

Costs:

Exploration work on Denis claims (410487, 410188, 896192)

Andrew Allan	2 days	1,000	\$/day
Scott Allan	2 days	750	\$/day
Truck	2 days	200	\$/day
Lab costs	5 samples	40	\$/sample
Total cost		4,000	\$

APPENDIX 1 – Statement of Qualifications and references

Statement of qualifications

Allan, Andrew Charles
BBA – U.BC.,2006
President of Fireside Minerals Ltd. since 2010.

Allan, Scott Clayton
B.Sc. Geology – U. of C., 2013
Registered G.I.T with Apega
Production and exploration for Fireside Minerals since 2010.

References

Cochrane, D.R. (1973): Reconnaissance Gravity Survey of portions of the Denis #1 to #20 Mineral Claims (Fireside Project); Tournigan Mining Exploration Ltd. Internal Company Report, 24 pages

Craft, E.W., Allan, S.C. (2013): Fireside Minerals Ltd 43-101, Unpublished report prepared for Fireside Minerals Ltd

APPENDIX 2 – Certificate of Analysis



Loring Laboratories (Alberta) Ltd.

629 Beaverdam Road N.E.,
 Calgary Alberta T2K 4W7
 Tel: 403- 274-2777 Fax: 403-275-0541
 loringlabs@telus.net

FILE: 5 7 7 8

DATE: October 01, 2014

Sample: Pulp

TO: Fireside Minerals
 Box 32069 West Bank BC
 V4T 3G2

Attn: Scott Allan

30 ELEMENT ICP ANALYSIS

Sample No.	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P %	Pb ppm	Sb ppm	Sr ppm	Th ppm	Ti %	U ppm	V ppm	W ppm	Zn ppm	Zr ppm
Denis 14-1	<0.5	0.13	1	23	>10000	<1	0.10	1	<1	15	27	0.14	0.02	1	0.04	79	1	0.01	2	<0.01	374	1	56	1	<0.01	<1	2	1	122	1
Blank	<0.5	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<0.01	<0.01	<1	<0.01	<1	<1	<0.01	<1	<0.01	<1	<1	<1	<1	<0.01	<1	<1	<1	<1	<1

* 0.500 Gram sample is total digested with multi acid and ICP finish.

* Sample received on Sept. 29, 2014

Certified by: 



Loring Laboratories(Alberta) Ltd.

629 Beaverdam Road N.E.,
Calgary Alberta T2K 4W7
Tel:403- 274-2777 Fax:403- 275-0541

ISO9001:2008 Certified

TO: Fireside Minerals
Box 32069 West Bank BC
V4T 3G2

FILE: 5 7 7 7 8

DATE: October 01, 2014

Sample: Pulp

Attn: Scott Allan

WHOLEROCK ICP ANALYSIS

Sample I.D.	Al ₂ O ₃ %	BaSO ₄ %	CaO %	Cr ppm	Fe ₂ O ₃ %	K ₂ O %	MgO %	MnO %	Na ₂ O %	Ni ppm	P ₂ O ₅ %	SO ₃ %	SiO ₂ %	Sr ppm	TiO ₂ %	V ppm	LOI@1000 %	SUM %
Denis 14-1	0.25	94.14	0.14	15	0.19	0.02	0.06	0.01	0.01	2	0.01	0.62	3.38	56	<0.01	2	0.60	99.43

Sample received on Sept. 29, 2014

0.5 gm sample digested with multi acids and finished by ICP

BaSO₄ value by wet chemistry gravimetric assay method.

Certified by:  _____



LORING LABORATORIES (ALBERTA) LTD.

629 Beaverdam Road N.E. Calgary, Alberta T2K 4W7

Tel : (403) 274-2777 Fax : (403) 275-0541

Email: loringlabs@telus.net www.loringlabs.net

ISO 9001:2008 Certified

TO: Fireside Minerals
Box 32069 West Bank BC
V4T 3G2

Attn: Scott Allan

FILE: 5 7 7 7 8

DATE: October 01, 2014

Sample: Pulp

Certificate of Assay

Sample No.	% BaSO4	S.G.
<p><u>"Assay Analysis"</u></p> <p>Denis 14-1</p>	<p>94.14</p>	<p>4.46</p>

Methodology: Specific Gravity by le Chatelier SG bottle.
BaSO4 by wet chemistry gravimetric method.

Sample received on Sept. 29, 2014

I HEREBY CERTIFY that the above results are those assays made by me upon the herein described samples:


Assayer

Rejects and pulps are retained for one month unless specific arrangements are made in advance.







FORM ASYC-015

APPENDIX 3 – Figures and Maps


Denis Location Map

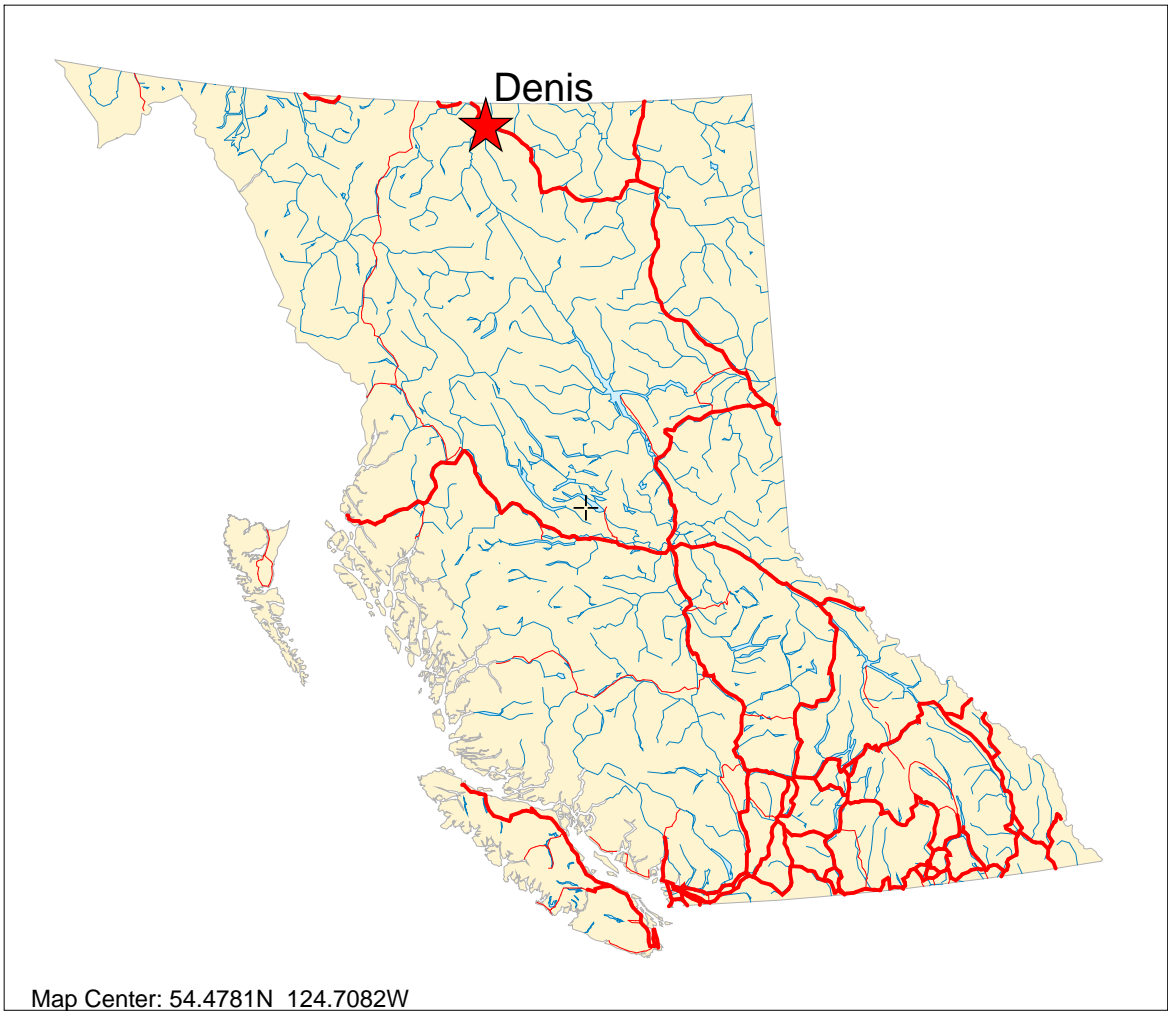
 **Denis Location**

Topographic Layers

-  **Roads 1:6M**
 -  Trunk Road
 -  Major Roads
 -  All Others
-  **Lakes 1:6M**
-  **Rivers 1:6M**

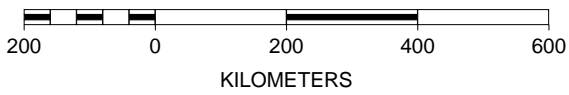
BC Border Layers

-  **BC Border 1:6M**





Map Center: 54.4781N 124.7082W

SCALE 1 : 11,508,191









Denis Claim Map



Mineral Titles Layers

-  Denis Tenure
-  All Mineral Tenures


Topographic Layers

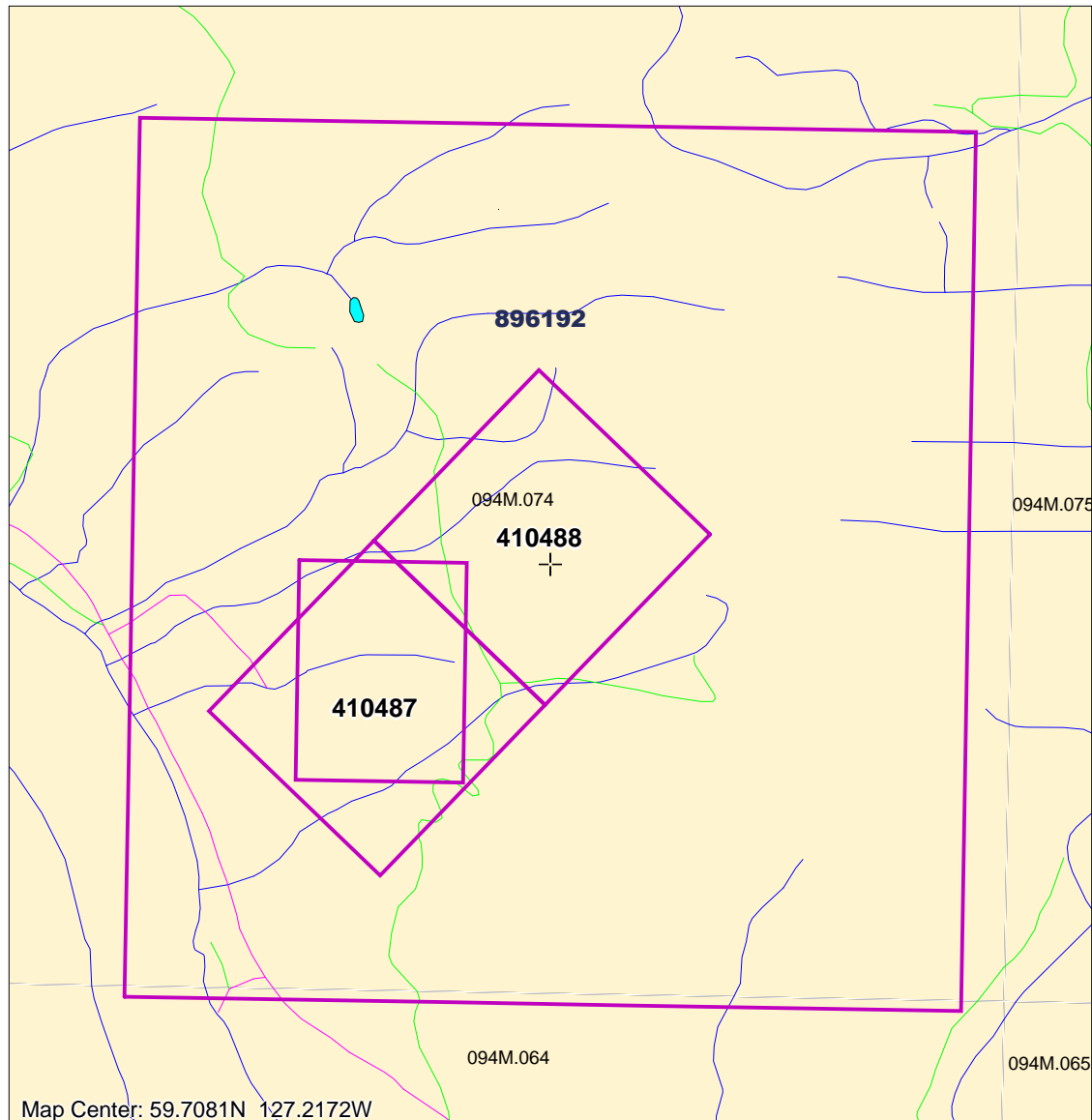
-  Railways 1:20K
- Roads 1:20K**
 -  Gravel Road
 -  Paved Road
 -  Rough Road
-  Lakes 1:20K
-  Rivers 1:20K

Grid Layers

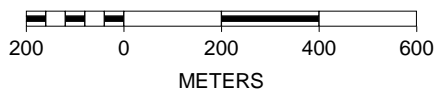
-  Grid 1:20K - labels
-  Grid 1:20K - outline

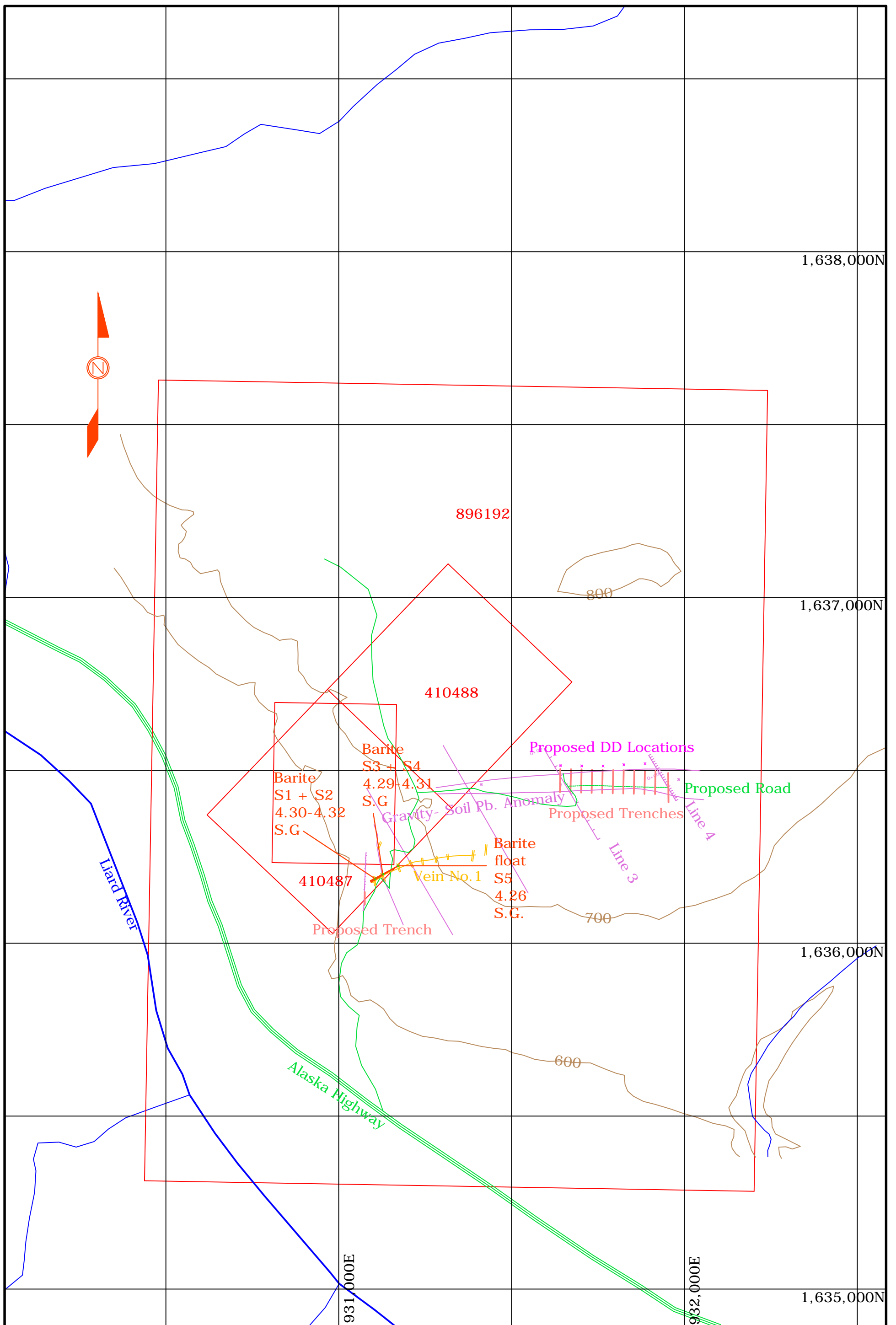
BC Border Layers

-  BC Border 1:50K



SCALE 1 : 15,409





Drawn by EWC
 Date January 2013
 Revised March 2013

FIRESIDE MINERALS
Denis Barite
Plan

Scale 1 : 5000
 Ref: NAD 83 BC Albers
 0 0.5km



Figure 1. Trench #1 showing barite mineralization with sub-vertical dip



Figure 2. Property access from the highway



Figure 3. Overgrowth barring motorized vehicle access to the cat road.