

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: Assessment Report on the Liard Fluorspar Project; 2013 Exploration.

TOTAL COST: \$128,161.34

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SIGNATURE(S):

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COMMODITIES SOUGHT: Fluorite

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 094M 005; 094M 006; 094M 007

MINING DIVISION: Liard NTS / BCGS: NTS: 094M09 BCGS: 94M060 LATITUDE: 59° 31' 59" LONGITUDE: 126° 05' 06" (at centre of work) UTM Zone: NAD83 Zone 9 EASTING: 664843

NORTHING: 6603026

OWNER(S): Prima Fluorspar Corp.

MAILING ADDRESS: 1450 – 789 West Pender St. Vancouver, BC, V6C 1H2

OPERATOR(S) [who paid for the work]: Prima Fluorspar Corp.

MAILING ADDRESS: 1450 – 789 West Pender St. Vancouver, BC, V6C 1H2

REPORT KEYWORDS: Dunedin Limestone, Besa River Shale, fluorite, witherite, barytocalcite, karst, barite, breccia

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 00109; 03840; 03975; 33580

TYPE OF WORK IN EXTENT OF WORK THIS REPORT (in metric units)		ON WHIC	CH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)				
Ground, mapping		975745, 504817	503370,	\$79,162.45
Photo interpretation		001011		
GEOPHYSICAL (line-kilometres)				
Ground				
Magnetic				
Electromagnetic				
Induced Polarization				
Radiometric				
Seismic				
Other	(Gravity)	503370,	504817	\$34,821.79
Airborne				
GEOCHEMICAL (number of samp	les analysed for)			
Soil				
Silt				
Rock				
Other				
DRILLING (total metres, number o	f holes, size, storage location)			
	, , , , , ,			
Core				
Non-core				
RELATED TECHNICAL				
Sampling / Assaying				
Petrographic				
Mineralographic				
Metallurgic				
PROSPECTING (scale/area)				
PREPATORY / PHYSICAL				
Line/grid (km)				
Topo/Photogrammetric (sc	ale, area)			
Legal Surveys (scale, area				
Road, local access (km)/tra		975745, 950544	503370, 504817	\$14,177.10
Trench (number/metres)				
Underground development	t (metres)			
Other				
			TOTAL COST	\$128,161.34

ASSESSMENT REPORT ON THE LIARD FLUORSPAR PROJECT 2013 EXPLORATION

Liard Mining Division, North-central British Columbia

Approximate Geographic Coordinates:

126°05' W 59°32' N

> BC Geological Survey Assessment Report 34808

Date: February 24, 2014

OWNERS AND OPERATORS:

Prima Fluorspar Corp. #1450, 789 West Pender St. Vancouver, BC V6C 1H2

BY:

Neil G. McCallum, B.Sc., P.Geo. and Stephanie Krysa, B.Sc., Geol.I.T. Dahrouge Geological Consulting Ltd. Suite 18, 10509-81 Ave. NW Edmonton, AB T6E 1X7



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SUMMARY

The Liard Fluorspar Project consists of 55 contiguous mineral tenures, totaling approximately 22,588 hectares, in the north-central portion of British Columbia. All of the mineral tenures are 100% owned by Prima Fluorspar Corp. ("Prima Fluorspar").

The purpose of the exploration performed on the Liard property in 2013 was to obtain gravity survey data, collect descriptions, measurements, and hand samples for geological mapping of the TAM, CORAL, and FIRE showings. 10 mini-bulk samples were collected during the program.

The Liard Fluorspar Project is located in the Liard Plateau physiographic region, approximately 200 kilometres northwest of Fort Nelson, British Columbia, and approximately 160 kilometres southeast of Watson Lake, Yukon. The Property is located on map sheets 94M/08 and 94M/09 of the National Topography System (NTS). Access to the Liard Fluorspar Project from Fort Nelson is via the Alaska Highway (No. 97) travelling northwest for 309 kilometres, then via an un-marked gravel trail travelling north.

In 1954, the GEM mineral showings were mapped and an access road was built through the Liard Hot Springs Park. Additionally, stripping with a combination of pick and shovel and bulldozer exposed several showings. Bulk samples of approximately 4 tons were taken from these showings for metallurgical testing.

Starting again in 1971, renewed activity in the area uncovered several new showings to the north of the GEM claims. Between 1971 and 1972 exploration activities of prospecting and geological mapping was conducted on several showings. Detailed mapping, trenching and diamond drilling and bulk sampling was conducted. In total, 60 drill holes are recorded to have been drilled on the current Liard Fluorspar Property. Metallurgical samples were collected from several of these new showings; subsequent testing indicates that a >97% CaF₂, acid-grade, product can be produced. No work has been reported on the property since 1972.

The Liard Fluorspar Project is located within the Foreland Belt of the Canadian Cordillera. The Foreland Belt represents the western end of the Paleozoic to early Mesozoic continental margin of the North American Craton. The sediments deposited in the generally northeastward-

1.0

tapering wedge represent the sequence of rocks known as the Western Canada Sedimentary Basin (WCSB).

The rocks of the property were deposited on a shallow inner continental shelf, known locally as the MacDonald Shelf. Formations that outcrop in the Property area include carbonates of the Middle Devonian Dunedin Formation overlain by Late Devonian to early Mississippian siltstone sequences of the Besa River Formation.

The Dunedin Formation consists of mid- to dark grey, massive to thinly-bedded fossiliferous limestone. It is generally exposed in the Teeter and Mould Creek valleys, which are characterized by karst and 'mesa and butte' topography. The overlying Besa River Formation is predominantly black shale or slate and argillite, with some calcareous shale and minor, buff-brown dolomitic layers. The unconformity between the units is characterized by brecciation and is very irregular in detail, probably due to an erosional or disconformable relationship between them, or to later faulting along the contact.

In most fluorite showings, the mineralization is predominantly in the limestone, with minor amounts in the overlying shales. The fluorite mineralization occurs as infillings and replacements in limestone or shale breccias, or as fracture fillings in the host rock. In some instances, vein-type mineralization of fluorite also occurs, or mineralization occurs as replacement pods that are devoid of host rock fragments. The mineralization predominantly consists of fluorite, calcite and witherite. Lesser amounts of barytocalcite, barite and quartz are also found in variable amounts. The fluorite crystals are fine- to coarse-grained. Fine-grained fluorite is commonly dark purple to black; whereas the coarse-grained variety varies from transparent to purple and black. The coarse-grained variety occurs predominantly in the breccia matrix.

A number of historical resource estimates have been published for the Liard Fluorspar deposits. Two estimates have been found in the public literature. They are included in the summary, below, and detailed explanations are in the report.

In 1975, an engineering report submitted to the government of BC included a resource estimate quoted as: *"The ore body consists of a series of pods which would be mined by open pit"*



methods. Reserves of 3,500,000 tons (3.2 million tonnes) of ore grading 32% CaF2 are estimated."

In 1981, a Conwest Exploration Company Limited; Annual Report, December 31, 1981 includes a mineral resource estimate quoted as: *"Exploration during the early 1970's established geological reserves of about 2.6 million tons (2.4 million tonnes) of fluorspar mineralization averaging 30% fluorite in several deposits"*

60 of the historic drill holes that were drilled by Conwest Exploration are on the current Liard Fluorspar Property, so the bulk of this historic estimate is likely to be on the current property. Without acquiring additional historic technical information, it is difficult to say exactly what proportion of the historic resource estimates are on the current property. The author believes that they were defined as *"reserves"* due to the economic studies applied at that time. Based on an evaluation of the drill-spacing and the nature of the deposit, the confidence level of the historic resource estimate would likely be in the inferred category by today's NI 43-101 standards.

Conwest Exploration is known for high quality work, and based in the available historic data, all of the work on the Liard Fluorspar Property appears to be high quality. The drill core from the 1971 and 1972 drilling is poorly degraded, so no verification sampling can be made on the historic drilling. Due to the advances in analytical procedures for fluorite, some of the historic fluorite results may be over or under-reported. So even if the company is able to obtain the historic drilling results, a current mineral resource estimate cannot be completed based on the historic drill hole information.



2.0 PROPERTY DESCRIPTION AND LOCATION

The Liard Fluorspar Project consists of 55 mineral tenures, totaling approximately 22,588 hectares, in the north-central portion of British Columbia (Figure 1). All of the mineral tenures are in the name of Prima Fluorspar Corp. Details of each mineral tenure are summarized in Table 1, and plotted on Figure 2.

The main showings of the Liard Fluorspar property are centred at approximately longitude $126^{\circ}05'$ W and latitude $59^{\circ}32'$ N, and located on NTS map sheets 094M/08 and 094M/09. According to the Mineral Titles Online system, the mineral claims are all in good standing, with the first group of claims requiring renewal before March 15^{th} , 2014.



Tenure ID	Claim Name	Issue Date	Good To Date	Area (ha)	Owner
503370		2005/jan/14	2016/mar/15	131.3	Prima Fluorspar Corp. (100%)
504817	tam 2	2005/jan/25	2016/mar/15	65.7	Prima Fluorspar Corp. (100%)
515587	CAMP 2	2005/jun/29	2016/mar/15	32.8	Prima Fluorspar Corp. (100%)
940998	RMFLUORCLIFF	2012/jan/15	2015/mar/15	32.8	Prima Fluorspar Corp. (100%)
950544	GRAYLING	2012/feb/18	2016/mar/15	410.4	Prima Fluorspar Corp. (100%)
950560	BERMANNUS	2012/feb/18	2016/mar/15	410.3	Prima Fluorspar Corp. (100%)
952458	BAR	2012/feb/24	2015/mar/15	411.0	Prima Fluorspar Corp. (100%)
975744	TEE	2012/mar/31	2015/mar/15	147.5	Prima Fluorspar Corp. (100%)
975745	FIRE	2012/mar/31	2015/mar/15	147.8	Prima Fluorspar Corp. (100%)
975746	STRAP	2012/mar/31	2015/mar/15	98.3	Prima Fluorspar Corp. (100%)
975747	NICKH111	2012/apr/01	2014/mar/15	65.7	Prima Fluorspar Corp. (100%)
978132	TEE2	2012/apr/04	2015/mar/15	409.8	Prima Fluorspar Corp. (100%)
978152	TEE3	2012/apr/04	2015/mar/15	405.0	Prima Fluorspar Corp. (100%)
978172	FIRE 2	2012/apr/04	2014/mar/15	279.1	Prima Fluorspar Corp. (100%)
	TEE4	•	2014/mar/15		
978192 078272		2012/apr/04		196.6 410 7	Prima Fluorspar Corp. (100%)
978372	PURPLE 1	2012/apr/06	2015/mar/15	410.7	Prima Fluorspar Corp. (100%)
978373	PURPLE 2	2012/apr/06	2014/mar/15	411.0	Prima Fluorspar Corp. (100%)
978374	PURPLE 3	2012/apr/06	2014/mar/15	410.5	Prima Fluorspar Corp. (100%)
978375	PURPLE 4	2012/apr/06	2014/mar/15	410.2	Prima Fluorspar Corp. (100%)
978377	PURPLE 6	2012/apr/06	2014/mar/15	197.4	Prima Fluorspar Corp. (100%)
978389	PURPLE 7	2012/apr/06	2014/mar/15	410.1	Prima Fluorspar Corp. (100%)
978390	PURPLE 8	2012/apr/06	2014/mar/15	409.6	Prima Fluorspar Corp. (100%)
978391	PURPLE 9	2012/apr/06	2014/mar/15	409.5	Prima Fluorspar Corp. (100%)
978392	PURPLE 10	2012/apr/06	2014/mar/15	409.4	Prima Fluorspar Corp. (100%)
978395	PURPLE 11	2012/apr/06	2014/mar/15	410.1	Prima Fluorspar Corp. (100%)
978396	PURPLE 13	2012/apr/06	2014/mar/15	278.7	Prima Fluorspar Corp. (100%)
978613	FLUORITE 1	2012/apr/07	2014/mar/15	410.1	Prima Fluorspar Corp. (100%)
978614	FLUORITE 2	2012/apr/07	2014/mar/15	409.8	Prima Fluorspar Corp. (100%)
978615	FLUORITE 3	2012/apr/07	2014/mar/15	409.5	Prima Fluorspar Corp. (100%)
978616	FLUORITE 4	2012/apr/07	2014/mar/15	409.2	Prima Fluorspar Corp. (100%)
978617	FLUORITE 5	2012/apr/07	2014/mar/15	115.2	Prima Fluorspar Corp. (100%)
978773	ANTICLINE 1	2012/apr/10	2014/mar/15	409.5	Prima Fluorspar Corp. (100%)
978774	ANTICLINE 2	2012/apr/10	2014/mar/15	409.4	Prima Fluorspar Corp. (100%)
981725	WEST CLAIMS	2012/apr/23	2014/mar/15	394.1	Prima Fluorspar Corp. (100%)
981726	WEST 2	2012/apr/23	2014/mar/15	393.9	Prima Fluorspar Corp. (100%)
981727	WEST3	2012/apr/23	2014/mar/15	197.0	Prima Fluorspar Corp. (100%)
981729	WEST4	2012/apr/23	2014/mar/15	409.9	Prima Fluorspar Corp. (100%)
981730	WEST 6	2012/apr/23	2014/mar/15	410.1	Prima Fluorspar Corp. (100%)
981731	WEST 5	2012/apr/23	2014/mar/15	409.8	Prima Fluorspar Corp. (100%)
981732	WEST 7	2012/apr/23	2014/mar/15	410.1	Prima Fluorspar Corp. (100%)
981733	WEST 8	2012/apr/23	2014/mar/15	197.1	Prima Fluorspar Corp. (100%)
981734	WEST 9	2012/apr/23	2014/mar/15	213.2	Prima Fluorspar Corp. (100%)
981782	FRIDGE 1	2012/apr/23	2014/mar/15	410.4	Prima Fluorspar Corp. (100%)
981822	FRIDGE 2	2012/apr/23	2014/mar/15	410.4	Prima Fluorspar Corp. (100%)
981823	FRIDGE 3	2012/apr/23	2014/mar/15	410.5	Prima Fluorspar Corp. (100%) Prima Fluorspar Corp. (100%)
981823 981824	FRIDGE 3	2012/apr/23 2012/apr/23	2014/mar/15 2014/mar/15	410.4 410.4	Prima Fluorspar Corp. (100%) Prima Fluorspar Corp. (100%)
	FRIDGE 5	•			Prima Fluorspar Corp. (100%) Prima Fluorspar Corp. (100%)
981825		2012/apr/23	2014/mar/15	410.4	,
981826	FRIDGE 6	2012/apr/23	2014/mar/15	279.1	Prima Fluorspar Corp. (100%)
982968	PIPSTHEFROG	2012/apr/28	2015/mar/15	394.4	Prima Fluorspar Corp. (100%)
1011685	SW 1	2012/aug/01	2014/mar/15	821.4	Prima Fluorspar Corp. (100%)
1011686	SW 2	2012/aug/01	2014/mar/15	1643.8	Prima Fluorspar Corp. (100%)
1011687	SW3	2012/aug/01	2014/mar/15	1627.1	Prima Fluorspar Corp. (100%)
1011689	SW 4	2012/aug/01	2014/mar/15	1184.4	Prima Fluorspar Corp. (100%)
1011690	SW5	2012/aug/01	2014/mar/15	855.5	Prima Fluorspar Corp. (100%)
1011691	SW 6	2012/aug/01	2014/mar/15	706.2	Prima Fluorspar Corp. (100%)

 Table 1.
 List of Mineral Tenures, Liard Fluorspar Property





Figure 1. Location Map, Liard Fluorspar Property



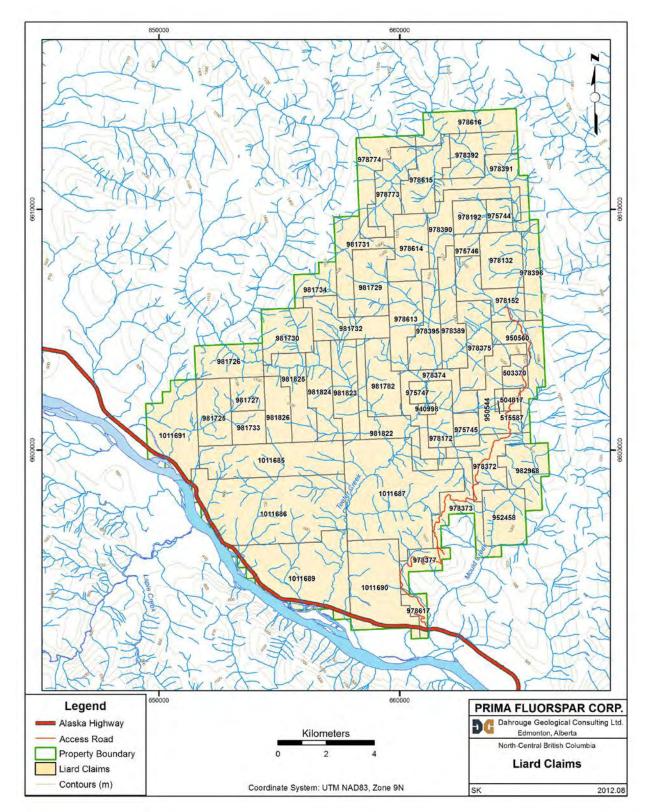


Figure 2. Claim Map, Liard Fluorspar Claims

3.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES,

INFRASTRUCTURE AND PHYSIOGRAPHY

The Liard Fluorspar Project is located in the Liard Plateau physiographic region, approximately 200 kilometres northwest of Fort Nelson, British Columbia, and approximately 160 kilometres southeast of Watson Lake, Yukon. The Property is located on map sheets 94M/08 and 94M/09 of the National Topography System (NTS).

Access to the Liard Fluorspar claim block from Fort Nelson is via the Alaska Highway (No. 97) travelling northwest for 309 kilometres, then via an un-marked gravel trail travelling north. The un-marked gravel trail is located approximately 5 kilometres past the bridge that crosses the Liard River. The privately owned un-marked gravel trail is well maintained and provides access to the communications tower at the top of the ridge. At the top of the ridge, there is a smaller access trail that leads northward for an additional 12 kilometres towards the historic showings.

The property is located at the south end of the Liard Plateau physiographic zone and north of the Rocky Mountain Foothills physiographic zone. In general, elevation varies from about approximately 430 metres above sea level at the Liard River to 1530 metres at the peak of Mount Halkett. The Property area is one of moderate to steep relief. Bedrock outcrop exposure on and near the Property is commonly found along steeper valleys near the top of hills. Vertical cliffs and canyons are not uncommon topographic features. In some areas, karst topography of sporadic troughs and basins has developed due to underlying limestone bedrock.

At lower elevations the Property is mostly forested where the forest cover is made up of white spruce with variable amounts of lodge- pole pine and trembling aspen in the valley bottoms and on lower slopes. Higher on the slopes, subalpine fir dominates the forest. Subalpine fir commonly forms open forest and woodland on steep, moist, cold, middle slopes, especially on northern and eastern exposures, where it often forms nearly pure stands. Black spruce and balsam poplar are less common. Much of the Property consists of younger aspen re-growth from a major forest fire that occurred in the 1970's.

According to the Climate Atlas of Canada, January marks the coldest month of the year with mean daily minimum temperatures of between -20°C to -24°C. July is the warmest month of the



year with mean daily minimum temperatures of between 6° C to 10° C. Annual mean total precipitation ranges between 401 to 600 mm, and average maximum snow depth ranges between 50 – 99 cm.

http://atlas.nrcan.gc.ca/auth/english/maps/environment/climate

The nearest urban and industrial centre is Fort Nelson, 305 km (highway distance) southeast of the property. Fort Nelson has a population of about 5,000, which includes a pool of professionals and technical/tradespeople. Fort St. John is 387 km south of Fort Nelson, and has a population of approximately 19,000. Both centers supply personnel and equipment to the oil and gas industry in northeast BC. There are several small communities, such as Lower Post, Toad River and Watson Lake located along the Alaska Highway.

The Property itself is bounded to the south by the Alaska Highway, and the majority of the showings are located approximately 10 kilometres north of the highway. The Alaska Highway is a paved, all-weather highway that was originally built to connect Alaska to the contiguous United States during World War II. Mileage post references along the highway that are mentioned in many historic reports start at Dawson Creek, BC. The highway is now a major freight transportation route that connects the Yukon and Alaska with the remainder of Canada and the United States.

The nearest rail line is located in Fort Nelson, and is located approximately 300 kilometres to the east along the Alaska Highway. Feasibility studies have been completed on a project called the Alaska Canada Rail Link, which proposes a connection between Watson Lake and Fort Nelson, also presumably along the Alaska Highway. The last report was produced in 2007, and additional feasibility studies are needed to assess the project.



HISTORY

1953 to 1954 - Conwest Exploration Company Limited

4.0

Fluorite mineral showings were first reported in the area in 1953, where Conwest Exploration Company Limited acquired the mineral claims that constituted the GEM claims. The GEM claims are not part of the current property which is the subject of this report. The summary is included as it is relevant to the context of the Liard Fluorspar Property.

In 1954, the mineral showings on the GEM claims were mapped and an access road was built through the Liard Hot Springs Park. Additionally, stripping with a combination of pick and shovel and bulldozer exposed several showings. Bulk samples of approximately 4 tons were taken from a few showings for metallurgical testing (Holland, 1955; Woodcock, 1955).

The mapping outlined several large zones of fluorite, witherite, barite, calcite and quartz mineralization. Outcrops containing mineralized lenses were found over an area 120 metres by 210 metres, and several exposures of mineralization were found around the margins of this area. The observed mineralization was confirmed by petrographic examination and assaying of representative samples. Analytical results returned the presence of between 2 and 64% CaF₂.

1971 to 1972 - Conwest Exploration Company Limited & Jorex Limited

Starting again in 1971, renewed activity in the area uncovered several new showings to the north of the GEM claims. Between 1971 and 1972 exploration activities of prospecting and geological mapping was conducted on several showings. Detailed mapping, trenching and diamond drilling and bulk sampling was conducted. Table 2 summarizes the work on each of the individual showings.

In total, 60 drill holes are recorded to have been drilled on the current Liard Fluorspar Property. No work has been recorded on the property since 1972.

The results of the surface sampling and drilling outlined mineralization which constitutes the historic mineral resources, and historic metallurgical work. Drilling intervals of between 10 and 20 metres thick, and consisting of between 10 and 50% CaF_2 , which is very encouraging.



The detailed results of the exploration constitute the description in section 7.3: "Mineralization"

Showing	Drill holes			1971-1972	
Showing	1971	1972	Total	Bulk Sample	
GEM A	-	4	4		
GEM E	-	15	15		
CLIFF	2	2	4		⋧
CORAL	-	12	12	2	ard
FIRE	-	18	18	2	Pro Li
TAM	12	11	23	6	Current Liard Fluorspar Property
TEE	-	3	3		Cur
CAMP	-	-	-		Ē
TOTALS	14	65	79	10	

Table 2. Summary of Historic Drilling and Bulk Sampling



4.1 Historic Resource Estimates

A number of historic resource estimates have been published for the Liard Fluorspar deposits. Two estimates have been found in the public literature.

The original drill logs and assays for the 79 drill holes have not been preserved in the public archives; and the search for these records in the private domain continues. This, in combination with the por condition of the drill-core and the inability to re-locate the historic drill collars requires that the company will need to conduct its own drilling campaign in order to build a current resource estimate.

The following is a listing of all available estimates, with a source of the information, the quote, and a comment from the current author.

TAM showing

- Source: Federal Minfile 094M9 FSP 1 National Mineral Inventory; Energy, Mines and Resources Canada <u>http://www.em.gov.bc.ca/dl/PropertyFile/NMI/094M9_Fsp1.pdf</u> Quote: *"Work on the Tam showing in 1971 included geological mapping, trenching, stripping, and 1 891 feet of diamond driilling in 14 holes on Tam 2, 4, and West*
- stripping, and 1,891 feet of diamond driilling in 14 holes on Tam 2, 4, and West 55, 57. This drilling indicated a potential of over 500,000 tons averaging 36.7% CaF_2 . (Ref. Jorex Limited, Filing Statement, May 1972)."

Metric: 454,000 tonnes of 36.7% CaF₂

Original Date: 1972

Comment: The original filing statement cannot be found, but the nature of the estimate seems reasonable based on other detailed descriptions of the showing. The "indicated potential" should not be confused with the indicated resource classification terminology, and it is more akin to the current "exploration potential".



Liard Fluorspar Property, 1975

- Source: Forecast of Development in the Mineral Sector of the Northeast Region of BC By Wright Engineers Ltd. and H.N. Halvorson Consultants Ltd. <u>http://www.em.gov.bc.ca/DL/COALReports/530a.pdf</u>
- Quote: "The orebody consists of a series of pods which would be mined by open pit methods. Reserves of 3,500,000 tons of ore grading 32% CaF₂ are estimated."

Metric: 3.2 million tonnes of 32% CaF₂

Original Date: 1975

Comment: There is no indication of exactly which deposits the estimate includes, and may include some tonnage from the GEM showings, which is not the subject of this report or the current Liard Fluorspar Property.

The source mentions an evaluation by Conwest Exploration, where references to mining rates, milling techniques, capital cost estimates, mining and transport costs as a part of this evaluation. This evaluation is presumably the feasibility studies associated with the reserve estimate. This feasibility report has not been located, so the current author cannot comment on it's relevance.

Liard Fluorspar Property, 1981

Source: Conwest Exploration Company Limited; Annual Report, December 31, 1981 Federal Corporate Files

Quote:"Exploration during the early 1970's established geological reserves of about 2.6million tons of fluorspar mineralization averaging 30% fluorite in several deposits"

Metric: 2.4 million tonnes of 30% CaF₂

Original Date: 1981

Comment: Again, there is no indication of exactly which deposits the estimate include. The source of the estimate uses the term "*reserves*", and although there are no details as to the nature of the estimate, the previous report from Wright Engineers refers to feasibility studies on the project.

There is no information as to the methods used, key assumptions, parameters and category of the estimates.

The author believes that the 1975 and 1981 historic estimates were defined as "reserves" due to



the economic studies applied at that time. Based on an evaluation of the drill-spacing and the nature of the deposit, the confidence level of the historic resource estimate would likely be in the inferred category by today's NI 43-101 standards.

It is unclear exactly why the historic reserves are smaller in 1981 compared to the 1975 estimate. Reasons may include a change in property size, where in 1972 Conwest Exploration had staked an additional 678 claims; the company only had 44 claims in 1981. As no work had been completed on the property since 1972, the company presumably let some of the claims with the less promising deposits expire; leaving only 2.6 million tons on their property in 1981.

Conwest Exploration created a company called *Liard Fluorspar Mines Limited*, which is currently owned by Nyrstar. Nyrstar, which acquired Breakwater Resources Ltd., currently owns title to some of the original 28 Crown Granted mineral claims on the GEM showings, which are not the subject of this report. According to Mineral Titles Online as of 2001, Breakwater Resources Ltd. who owned Liard Fluorspar Mines Limited owned 15 of the original 1971 mineral claims, which cover the TAM, CORAL and TEE showings. This is a logical way to explain the smaller reserves in 1981, where some small tonnages from the FIRE and CLIFF and possibly other showings were excluded. Table 3 summarizes the probable distribution of the historic resource estimates in relation to the current Property.

Aside from the difference in the resources between 1975 and 1981, the current Liard Fluorspar Property, which is the subject of this report, does not include historic resources covering the GEM showings. 19 holes are reported on the GEM showings, leaving 60 of the 79 drill holes on the current Property, so the bulk of this historic estimate is likely to be on the current property. Without acquiring additional historic technical information, it is difficult to say exactly what proportions of the historic reserves are on the current property.

Conwest Exploration is known for high quality work, so if the drilling data can be acquired, some of the historic reserves can be verified for internal purposes. The drill core from the 1971 and 1972 drilling is poorly degraded due to exposure, so no verification sampling can be made on the historic drilling. Due to the advances in analytical procedures for fluorite, some of the historic fluorite results may be over or under-reported. So even if the company is able to obtain the historic drilling results, a current mineral resource estimate cannot be completed. But, as



there is only very sparse information on the drilling results in the presently available reports, the results will be very useful for guiding the proposed exploration program.

Original Resource Estimate	Year	Included Showings	Current property
3.5 million tons of 32% CaF2	1975	GEM	NO
		TAM	YES
		TEE	YES
		CORAL	YES
		FIRE?	YES
		CLIFF?	YES
		Others?	YES
2.6 million tons of 30% CaF2	1981	GEM	NO
		TAM	YES
		TEE	YES
		CORAL	YES

Table 3.Summary of Historic Resource Estimates in Relation to Current Liard
Fluorspar Property



4.2 Historic Mineral Processing and Metallurgical Testing

In 1971, a shipment of several samples from the Liard Fluorspar project was sent to Lakefield Research, of Lakefield Ontario. A total of 39 tests were carried out on various samples from the TAM, CORAL and FIRE showings. Specific attention made to separate samples with varying geological compositions, i.e. limestone-breccia vs. shale-breccia.

The majority of the flotation tests used a "modified United States Bureau of Mines procedure", also referred to as the lignin sulphonate-sodium fluoride method.

In general, a concentrate of greater than 93% CaF_2 was produced from all but one (low-grade) sample, with recoveries between 75 to 95 percent (with the exception of the low-grade sample).

A discrepancy in the analytical testing was noted, and the "bidtel method" of analysis gave results which were 3.5 to 4.3 percent higher than the corresponding standard distillation method analysis. The authors of the report thereby concluded that fluorspar concentrate containing 93.5% CaF_2 by distillation would obtain 97% CaF_2 by the Bidtel method, and hence qualify as acid-grade product.

The current author believes that the samples are representative of the expected deposits, as the historic operators selected the samples to represent varying amounts of limestone breccia and shale breccia. The assumption that the Bidtel method is more representative should be verified by modern processing and analytical work. The authors of the previous reports did not explain the reasoning behind the different grades, and what went into their assumption that the Bidtel method was more appropriate. The Bidtel analytical method was apparently still in use by some of the last producing fluorite producers (Ozark-Mahoning) in the Illinois-Kentucky district (Peng, 1996).

The deleterious elements in a >97% CaF₂ acid-grade fluorspar include up to 1.5% CaCO₃, 1.0% SiO₂, 0.03 - 0.1% S, 10 - 12 ppm As and 100 - 550 ppm Pb (Bide et al. 2011).

The historic results for those elements are included for three composite samples include between 0.44 - 1.40% CaCO₃ and 0.96 - 1.28% SiO₂. These indicate that a product below the carbonate threshold, and a silica content that is near the threshold, can be produced. The



2012 sampling revealed less than 8 ppm Pb in the grab samples, so even with concentrating; the Pb content is likely to remain low. As and S were not analyzed for, but those levels are also expected to be quite low as the mineralization in general is very sulphur-poor.

Ore Description	Sample Type	Showing	Head Assay % CaF₂	Concentrate % CaF ₂	% Recovery CaF₂
Bulk Composite No. 1	Outcrop pit	TAM	60.50	94.0	89.5
Bulk Composite No. 2	Outcrop pit	TAM	49.78	93.7	90.4
Bulk Composite No. 3	Outcrop pit	TAM	36.12	94.3	89.6
Bulk Composite No. 4	Outcrop pit	CORAL	64.88	93.8	95.3
Bulk Composite No. 5	Outcrop pit	FIRE	42.94	94.2	87.6
Tam Prospect No. 1	Channel composite	TAM	17.56	89.3	33.2
Tam Prospect No. 2	Channel composite	TAM	63.44	93.7	95.4
Tam Prospect No. 3	Channel composite	TAM	59.05	94.9	74.9
Coral Prospect No.1	Channel composite	CORAL	53.68	95.5	55.8
Fire Prospect	Channel composite	FIRE	50.75	93.5	89.9
Drill Core LBM Composite	Drill Hole composite	TAM	33.50	93.6	83.5
Drill Core SBM Composite	Drill Hole composite	TAM	30.73	93.5	79.6

Table 4. Summary of Metallurgical Results, Lakefield Research, 1971, distillation method



5.0 GEOLOGICAL SETTING AND MINERALIZATION

5.1 Regional Geology

The Liard Fluorspar Project is located within the Foreland Belt of the Canadian Cordilleran. The Foreland Belt represents the western end of the Paleozoic to early Mesozoic continental margin of the North American Craton. The sediments deposited in the generally northeastward-tapering wedge represent the sequence of rocks known as the Western Canada Sedimentary Basin (WCSB).

Stratigraphy

Above the crystalline rocks of the North American Craton, the Property area is underlain in general terms by: A) Mesoproterozoic, clastic-dominated succession deposited in shelf environments after Mesoproterozoic rifting; B) unconformably overlying clastic-dominated and rift-related uppermost Neoproterozoic–Cambrian strata; C) unconformably overlying carbonate-dominated, shelf-platform succession that persisted through the Middle Devonian; D) a clastic-dominated upper Paleozoic succession that records local block faulting, extension and subsidence.

The formations that outcrop in the region have been well mapped in the neighbouring map sheet (094N, Toad River) by McMechan et al. (2012), and the stratigraphic column, below was compiled from this work. The map sheet at that the property encompasses was regionally mapped at a scale of 1:253,440 in 1961 by Gabrielse (1962). The regional geology, as compiled by Massey et al. (2005) is represented in Figure 3.



Table 5. Generalized Stratigraphic Chart of the Study Area (from McMechan et al., 2012)

Per	mian	Tika Formation, Fantastique Formation	
	Pennsylvanian	Mattson Formation,	
Carboniferous	Mississippian	Kindle Formation	
C pper		Besa River Formation	
Devonian	Middle	Dunedin Formation	
		Stone Formation	
	lower	Wokkpash Formation	
		Muncho-McConnell Formation	
Silu	rian	Nonda Formation	
Ordo	vician	· Kechika Group	
Cambrian		Mount Roosevelt Formation	
Prote	rozoic	Unnamed Siltstones, quartzites	
MesoProterozoic		Tuchodi Formation, Muskwa Group	



Structure

At a more detailed level, the western margin of the WCSB consists of a series of sub-basins (troughs) and structural highs (arches) which influence the type and thickness of sediments that were accumulated. The Property area is located at the western margin of one of these sub-basins, termed the Liard Basin (also known as the Root Basin in the Yukon). The eastern edge of the basin is bound by the north-south trending Bovie Lake Fault complex, where predominantly normal faults displaced Middle Devonian strata a staggering 1200 vertical metres (Wright et al., 1994). The original architecture of the western edge of the Liard Basin is not known due to the present-day fold-and-thrust belt structure produced during the late Cretaceous Laramide orogeny where the rocks are folded into a series north-northeast trending anticline-syncline fold axes, and cut by a number of east-verging thrust faults. Older rocks are exposed in the eroded cores of these anticlines and on the hanging-walls of the thrust faults.

In addition to the obvious fold and thrust structures of the Laramide Orogeny, northeastern BC has been transected by several underlying northeast-trending linear features which likely represent the position of ancestral strike-slip or transfer faults which extend into the underlying craton. This series of northeast-trending linear features have been active periodically from Late Precambrian to the Late Devonian, and then again starting in the Early Cretaceous due to the predominantly compressional Cordilleran orogenesis. The Liard Line (Miall, 2008) is one such structure which may have influenced the structure and regional hydrodynamic framework of the property area.



5.2 **Property Geology**

The rocks of the property were deposited on a shallow inner continental shelf, known locally as the MacDonald Shelf.

Stratigraphy

Formations that outcrop in the Property area include carbonates of the Middle Devonian Dunedin Formation overlain by Late Devonian to early Mississippian siltstone sequences of the Besa River Formation.

The Dunedin Formation consists of mid- to dark grey, massive to thinly-bedded fossiliferous limestone. It is generally exposed in the Teeter and Mould creek valleys, which are characterized by karst and 'mesa and butte' topography. The overlying Besa River Formation is predominantly black shale or slate and argillite, with some calcareous shale and minor, buff-brown dolomitic layers. The unconformity between the units is characterized by brecciation and is very irregular in detail, probably due to an erosional or disconformable relationship between them, or to later faulting along the contact.

Structure

Immediately to the south of the property is the northern end of the Rocky Mountain physiographic belt, where a tight series of thrust and folds have been developed into a northwest-trending orientation during Laramide orogenesis. North of the Liard River, a dramatic change in the regional structural trend changes into a more gentle series of north-trending thrust and folds, constituting the southern extent of the Mackenzie Mountain range (Liard Plateau).

At the property scale, the stratigraphic units have developed into an open anticline, with a gently south-plunging axis, in the Upper Devonian Besa River Formation, with the Middle Devonian Dunedin Formation exposed in a several-kilometre wide zone in the core of the fold.

It is possible that the broad anticlinal structure that has been mapped is influenced by the paleotopography of the top of the Dunedin Formation itself. The Dunedin correlatives to the south, the Keg River and Pine Point Formations, have developed extensive barrier reef complexes. In the area of the fluorite showing, coral colonies are common at the contact with



the overlying Besa River shales (Woodcock, 1972b), which suggests a thicker succession (mound build-up) of Dunedin carbonates in portions of the property area. The lack of outcrop in the property area makes the exact nature of the contact difficult to determine. The location of the fluorine-barium mineralization at the upper contact of the Dunedin carbonates and Besa River shales, and the distinct facies change between the two, and the irregular nature of the contact suggest the possibility for karst development at this contact during surface exposure. The influence of possible karst development on mineralization is discussed in the next section (section 5.3).

Locally, the gently dipping stratigraphic units have been disturbed by localized faulting and brecciation which constituting the fluorite-barium mineralization. The actual emplacement age of the fluorite-barium mineralization is discussed in the next section (section 5.3).



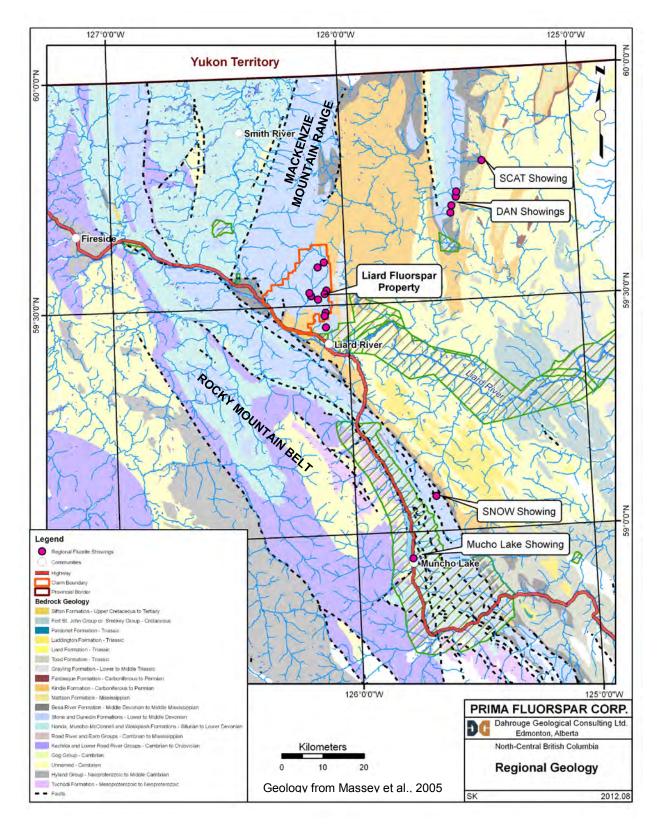


Figure 3. Regional Geology, Northeastern BC



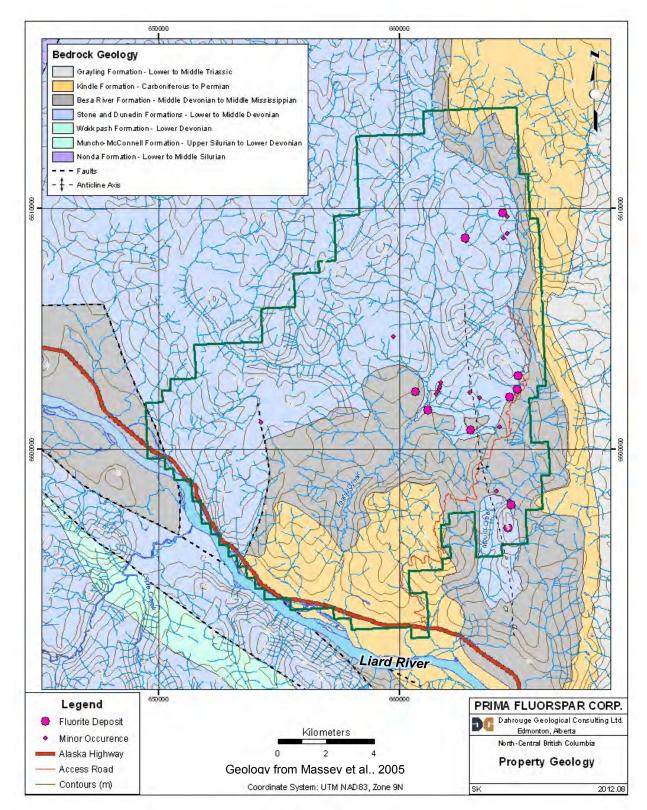


Figure 4. Property Geology, Liard Fluorspar Property



5.3 Mineralization

Mineralogy

The mineralization of the numerous showings on the Liard Fluorspar Property consists predominantly of fluorite, calcite and witherite. Lesser amounts of barytocalcite, barite and quartz are also found in variable amounts (Woodcock, 1972a). The mineralogy noted in previous reports are reported in Table 7.

Mineral	Formula
Fluorite	CaF ₂
Calcite	CaCO ₃
Witherite	BaCO ₃
Barytocalcite	BaCa(CO ₃) ₂
Barite	BaSO ₄
Quartz	SiO ₂

Table 6. Summary of Mineralogy, Liard Fluorspar Property

The flourite crystals are fine- to coarse-grained. Fine-grained fluorite is commonly dark purple to black, whereas the coarse-grained variety varies from transparent to purple and black. The coarse-grained variety occurs predominantly in the breccia matrix.

Nature of Mineralization

The fluorite mineralization occurs near the contact between the Dunedin limestone and the Besa River shales. In most showings, the mineralization is predominantly in the limestone, with minor amounts in the overlying shales. The fluorite mineralization occurs as infillings and replacements in limestone or shale breccias, or as fracture fillings in the host rock. In some instances, vein-type mineralization of fluorite also occurs, or mineralization occurs as replacement pods that are devoid of host rock fragments. Rare crustiform layering texture has been observed by the current author.

Various styles of breccia have been observed, and range between crackle breccia, mosaic breccia and chaotic breccia. Fluorite, occurs as partial to complete replacement of limestone



host-rock, and as the matrix of breccia. Calcite, witherite and barytocalcite also occur as major constituents of the breccia matrix.

Extent of mineralization

Woodcock (1972b) describes each of the fluorite showing on the property, and as this is the best information available at this time, the descriptions are directly quoted from the historic assessment report. Additionally, some drilling interval results are reported from McCammon (1972). Channel sample results are compiled from the maps of Woodcock (1972a). Selected intervals of mineralization from each of the major showings are summarized in Figure 7.

TAM Deposit

Mineralization occurs at the contact between the limestone and the overlying Besa River shales; a contact which generally dips easterly. In the zone of mineralization the limestone and the shale at the contact are brecciated. The shale breccia, in many places, consists of chaotic angular blocks. The mineralization occurs in the breccia and in fractures in the overlying shale and underlying limestone.

The mineralized zone, which is of variable thickness, generally also dips easterly and it pinches rapidly to the east where there is no shale breccia. Along the west side, the limestone-shale contact is eroded; and the west boundary of "ore" is quite sharp againt barren limestone.

The mineralization extends along the hillside in a northerly direction for 900 feet (274 m) as indicated by surface exposures and diamond drillholes. It is still open to the north. Widths vary from a minimum of 160 feet (49 m) to a maximum of 550 feet (168 m).

Intervals from the TAM deposit, as reported by McCammon (1972) are included in Table 8. The mapping from Woodcock (1972a) reports the results of several samples from a semi-continuous channel sample, revealing a weighted average of 20.3% CaF₂ over 57.9 metres in Trench 1. Other continuous channel samples revealing a weighted average of 67.1% CaF2 over 10.7 metres in Trench 2; and 57.5% CaF₂ over 12.2 metres in Trench 3. Figure 5 shows the results of the historic exploration, and its location with respect to the Property is shown in Figure 7.



Drill Hole	From (m)	To (m)	Interval (m)	CaF2 (%)
DDH71-01	0	27.1	27.1	48
DDH71-01	27.4	46.8	19.4	16
DDH71-04	3.0	15.2	12.2	53
DDH71-04	15.2	26.5	11.3	26
DDH71-06	1.8	23.2	21.3	9
DDH71-09	0	33.5	33.5	25
DDH71-09	33.5	44.8	11.3	13

 Table 7.
 Drilling results compiled from McCammon (1972), TAM Deposit



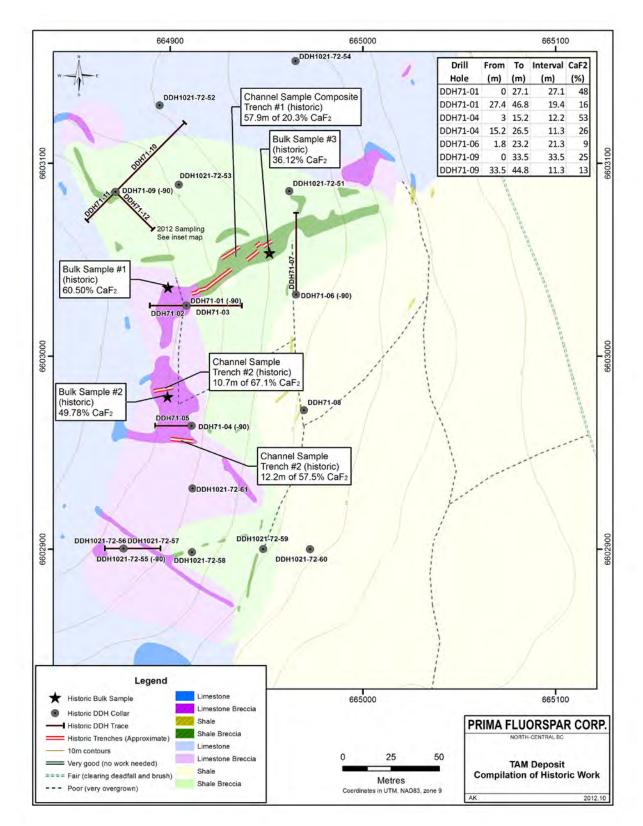


Figure 5. TAM Deposit, Compilation of Historic Exploration



TEE Deposit

To facilitate the description, four areas of mineralization labelled zones "A" to "D" inclusive are indicated on the map.

Zone A, the most northwesterly one exposed, consists of remnants of highly mineralized limestone surrounded by and presumably resting on areas of barren limestone. A few shale remnants in the eastern part of this zone indicated that the zone was originally at the limestone-shale contact. Most of the fluorite mineralization in this zone is colourless. The high grade exposure in the southwest part of the zone has an exposed thickness of up to 15 feet (4.6 m).

Zone B is exposed on the sharp ridge that occurs on the interfluve between Teeter Creek and the above metioned subsidiary stream from the west. The mineralization in this place is also at the contact of the shale and limestone with considerable replacement of shale breccia and limestone breccia. The steep cliffs at the west end of the exposure show that the main "ore" zone is underlain by fractured limestone containing abundant veins and lenses of fluorite. The exposures of good grade mineralization at the west end of zone B are over a vertical interval of 60 feet (18.3 m). The mineralized area extends easterly down the steep hillside (approximately 30°), for a distance of 700 feet with an average width of about 200 feet (61 m). Some prominent east-west fracturing or faulting is exposed in places and this might indicate some additional east-west control of this zone.

Zone C includes the mineralization that occurs in the vicinity of some limestone cliffs trending 330° azimuth across the property. Most of this mineralization is exposed along the face of the cliff in discontinuous lenses. Shale remnants are also found along these limestone cliffs. The strike of these limestone cliffs is essentially parallel to the valley side and also almost parallel to the strike of the limestone-shale contact. Presumably it is the major regional strike in this part of the Teeter Creek Valley. The exact structure along these cliffs is not evident. Hoever there is some suggestion that the limestone has been thrust from the west over shale and shale breccia. The amount of exposed mineralization is not significant in the overall ore reserve picture.

Zone D includes an area of exposures of shale and shale breccia lying downslope to the east of the limestone cliffs of Zone C. Some of these exposures are mineralized with barium carbonates and/or fluorspar. The exposures of shale and shale breccia occur over an area 76 x 91 m.

The drill results, as reported by Woodcock (1972b), only reveal one of the three drill holes with any mineralization ; hole 72-63 with 18.3 metres of 8.8% CaF_2 . Difficulties with placing the drill at the top of the steeper slopes at the TEE deposits inhibited the intersection of significant amounts of fluorite which were noted in the mapping. The intersection in hole 72-63 is located over 60 metres vertically below the main mineralized outcrops to the west. The location of the TEE showing with respect to the Property is shown in Figure 7.



Coral Deposit

The fluorspar mineralization is at the limestone-shale contact. This contact dips gently southward from the mineralized exposures. In most cases there is some brecciation of the shale and/or the limestone along this contact and considerable intersections of both the limestone breccia and shale breccia have been logged in the core. However the exposures do not have the chaotic breccia of the large blocks that are visible at the Tam prospect. Whether of not such chaotic breccia occurs in the core is not evident from the data. Much of the breccia that has been logged as such is broken rock some of which consists of remnant shale fragments in a replacement matrix, without the chaotic orientation of the blocks.

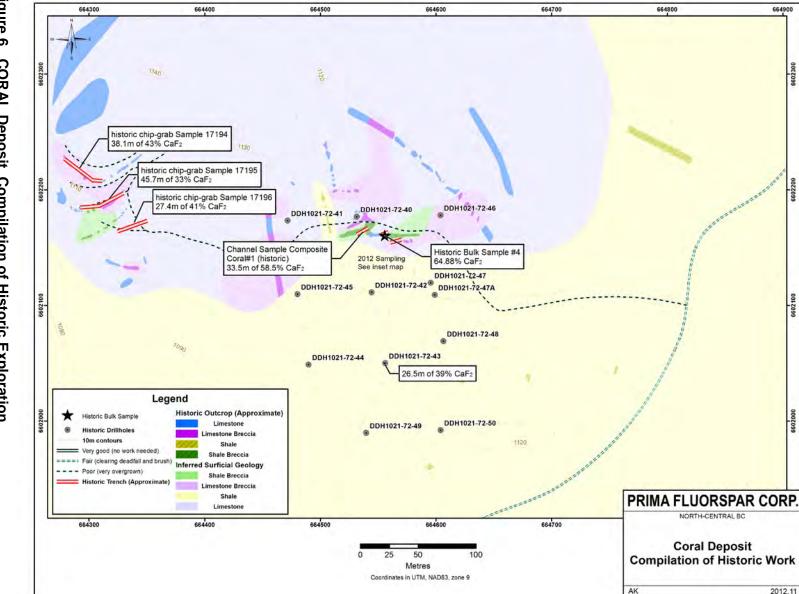
The largest exposure of mineralization occurs at the west end of the prospect on the Tam 24 claim. This mineralization is exposed over a length of 300 feet (91.4m)(in a northwesterly direction) and a width of 150 feet (45.7m). However the appearance of this mineralization in the trenches is that it is a skin or remnant left on top of the limestone formation and that it has very little vertical extent.

At the main showing (on Tam claim 23) mineralization is exposed in trenches over an east-west distance of 600 feet (183m) and a north-south distance of about 200 feet (61m).

The mapping from Woodcock (1972a) reports the results of several samples from a semicontinuous channel sample, revealing a weighted average of 58.5% CaF₂ over 33.5 metres in Trench 1. Other surface sampling to the west of the Coral showing, with chip-grab samples averaging 43% CaF₂ over 38.1 metres; 33% CaF₂ over 45.7 metres; and 41% CaF₂ over 27.4metres. Woodcock (1972b) reports the best hole at the Coral showing, hole 72-43 with 26.5 metres of 39% CaF₂. Figure 6 shows the results of the historic exploration, and its location with respect to the Property is shown in Figure 7.







664900

6602300

6602200

6602100

6602000

2012.11

Figure <u>ი</u> **CORAL Deposit, Compilation of Historic Exploration**



Fire Deposit

In this area the limestones are generally flat-lying remnants of overlying shales are widespread. In places, this overlying shale appears to be brecciated and also mineralized with fluorspar and barium minerals.

At the southeast end of the prospect, a narrow, highly mineralized zone extends at azimuth 330° for 900 feet (274m). It has exposed widths between 100 feet (30.5m) and 200 feet (61m). Diamond drilling has shown that most of the fluorspar mineralization occurs in the shale breccia with some underlying limestone breccia. The thickness of the mineralized zones are generally less than 50 feet (15.2m).

The mapping from Woodcock (1972a) reports the results of several samples from a semicontinuous channel sample, revealing a weighted average of 57.9% CaF_2 over 21.3 metres in Trench 1. Woodcock (1972b) reports the best hole at the northwest end of the Fire showing, hole 72-37 with 19.8 metres of 37% CaF_2 . The location of the TEE showing with respect to the Property is shown in Figure 7.

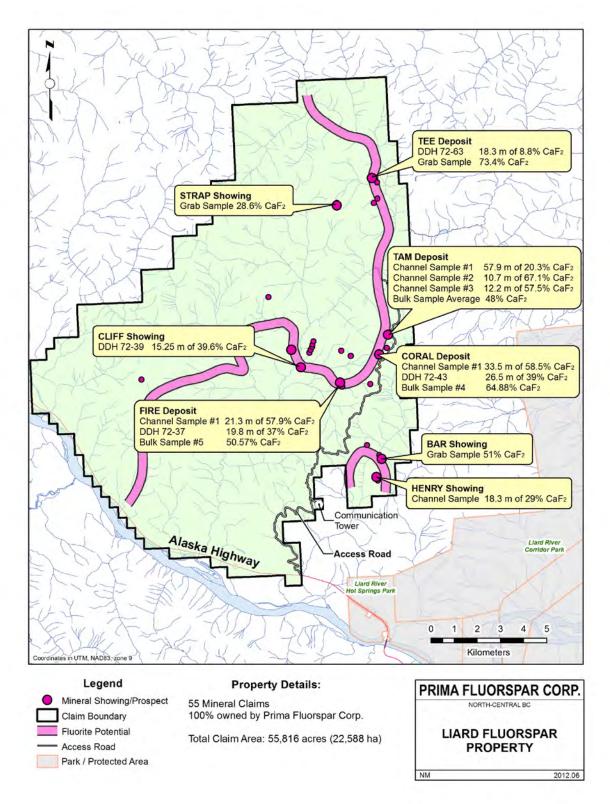
Cliff Deposit

This linear zone of mineralization is exposed along the face of some low limestone cliffs over a north-south length of 500 feet (152m), and up to 100 feet (30.5m) wide. On the east is is bounded by an upper bench of flat-lying barren limetsone. On the west it is separated from another hill of flat-lying barren limestones by an overburden-covered north south pass.

The fluorspar mineralization is unusual for this mining camp in that horizontal banding occurs in the main exposure. Also much of the fluorite is colourless, although purple varieties also occur. The banded "ore" is quite silicious and has been mapped as impure quartzite. Possibly some siliceous zones were present in the limestone. However the silica could have been added during the introduction of fluorspar.

Just south of the mineralized exposures, shale debris and one shale outcrop have been noted. A drillhole in this south area intersected a very thin layer of fluorite mineralization at the contact of the shale and the underlying limestone.

Woodcock (1972b) reports one hole at the Fire showing, hole 72-39 with 15.2 metres of 39.6% CaF₂. The location of the TEE showing with respect to the Property is shown in Figure 7.







Other mineralized areas that were explored in the 1971 and 1972 exploration program by Conwest include the Strap, Camp, Nick, Bar and Henry showings (Figure 7). Similar styles of mineralization were noted at these prospects, but only early stage exploration of trenching, mapping and grab samples were taken at each showing. Similar intervals are expected at these showings with an advanced exploration program.



6.0

DEPOSIT TYPES

Fluorite mineralization has been found in many geologic environments and in a multitude of forms. Significant deposit types are associated with carbonatites and alkaline intrusions; Mississippi Valley-Type (MVT) Pb-Zn-F-Ba deposits; F-Ba (+/- Pb-Zn) veins; hydrothermal Fe (+/- Au, Cu) deposits; carbonate replacement (manto-style); and other varied vein-style deposits.

The fluorite carbonate-breccia-hosted infilling and replacement mineralization at the Liard Fluorspar Property have been spatially and genetically related to MVT deposits (Pell and Fontaine, 1989). This affinity was based on their stratigraphic setting and nature of the host breccias in relation to the Robb Lake MVT belt to the south, some of which contain variable amounts of fluorite. Given these similarities, a genetic link is also proposed, relating their genesis being formed by solutions originating during dewatering of the sedimentary basin, representing a sulphur-poor and fluorine-barium-rich end-member. Age dating of the Robb Lake deposit (370 +/- 30 Ma; Godwin et al., 1982) and fission-track studies of fluorite from the GEM showing (332 +/- 56 Ma; V. Harder, personal communication to Z.D. Hora, 1987) produce similar results within error limits supporting a genetic affinity.

The present author suggests that although the age dating and mineralization modes at the Liard Fluorspar area and Robb Lake are very similar, it is not enough to assume a genetic link between the deposits. The genetic link does not explain the large amount of fluorite mineralization at the Liard Fluorspar Property and the lack of sulphides. The lack of dolomite in a regional and deposit-scale also calls the MVT link into question. The dewatering of a sedimentary basin hypothesis does not provide an explanation of the source of the fluorine. Other carbonate-hosted fluorite have been associated with alkaline intrusions, such as the Illinois-Kentucky lead-zinc-fluorite belt where the Hick's Dome alkaline intrusion has been proposed as being a source of fluid flow and high-grade fluorite vein and replacement style deposits (Denny et al, 2008).

The Liard Fluorspar deposits likely also have an alkaline affinity, though without detailed fluidinclusions and isotopic studies this conclusion is largely speculative. An alkaline intrusionrelated affinity would explain the development of the fluorine-barium-strontium-rich and sulphurpoor bulk mineralogy of the Liard Fluorspar deposits. The lack of magnesium (less than 0.05%



MgO was returned in the verification sampling of the current report) suggests that the fluorite mineralization is not linked to a basin-wide dewatering event. Dolomitization is an almost universal association with MVT-style deposits in northeastern British Columbia (Nelson, 1991).

Dolomitic breccias have been noted to the south in the Dunedin Formation (Nadjiwon et al., 2000) and to the north in the upper Devonian equivalent Nahanni Formations (Morris and Nesbitt, 1998). These have informally been referred to as Manetoe Facies, which include sparry dolomite forming veins, the matrix within vertical and horizontal breccia zones, and as replacements of grey dolomite. Although the Liard Fluorspar brecciation appears to be physically similar, the lack of dolomite precludes a genetic affinity with these Manetoe Facies breccias.

The location of the mineralization at the top of the Dunedin Formation limestones at the contact with the Besa River Formation shales suggests that paleokarsting may have been a precursor to Ba-F mineralization. Such a disconformity indicates a depositional hiatus and a subsequent erosional surface. Karstification of the porous reef-facies most likely occurred during a period of subaerial exposure. Woodcock (1972b) notes the occurrence of coral colonies, brachiopods and crinoids at the upper section of the Dunedin limestones, suggesting a reefal facies and thence a paleotopographic high which would be preferentially karsted during exposure.

The Dunedin limestones were then rapidly buried by Besa River dark grey to black carbonaceous siltstones during transgression, or subsidence due to rifting. A model of subsidence due to rifting is supported by the large-scale normal Bovie Fault to the east, which was active as early as Late Devonian time. Alkaline intrusive activity, common during periods of rifting, would explain the high fluorine content of the Liard Fluorspar and surrounding deposits.

The pore space created due to the reefal facies, and probable karsting, would act as a conduit for the circulation of groundwater. With the impermeable Besa River shales acting as an aquitard and barrier to fluid-flow, hydraulic fracturing and brecciation would be expected at such an area of differing hydrodynamic properties.

Morrow et al. (1978) have suggested, based on sulphur isotopic ratios, than many of the barite deposits (some, with secondary fluorite) in northeastern BC have formed due to the mixing of



euxinic seawater with meteoric groundwater near the seawater edge of a large coastal aquifer caused the solution of the shelf carbonates and induced low-temperature precipitation of barite in the resultant solution cavities. In this scenario, the timing of mineralization is restricted to the late Middle Devonian. The sulphur isotopic ratios at the Liard Fluorspar deposits from this study are δ^{34} S of +38.1, whereas most other Ba-F deposits in the study are between +24.2 to +30.1. The Liard River mineralization is also remarkably chemically different that the others in the study with much higher strontium and fluorine, and lower barite (due to lower total sulphur). So although some solution of the Dunedin Formation may have occurred due to the processes proposed by Morrow et al. (1978), it is not enough to explain the differences of the chemistry at the Liard Fluorspar deposits. Additionally, the proposed timing of mineralization is not likely to be the same as other Ba-F deposits in northeastern BC.

Authors working in the MacKenzie Mountains, Northwest Territories (Morris and Nesbitt, 1998) have proposed a series of fluid flow events in the Cambrian to Devonian strata. They have identified six major events based on isotopic evidence and relative timing relationships. The two later events, the Laramide events and the Calcite/Barite events, are similar to the mineralization at the Liard Fluorite district based on the lack of dolomite. Both events in that study are proposed to be early Cretaceous to early Tertiary in age and associated with thrust fault-hosted veins (compressional, orogenic events) to high-angle brittle veins (extensional, post-orogenic events). The Calcite/Barite event is characterized by megacrystalline void filling mineralization in upper Devonian strata.

In conclusion, the fluorite mineralization at the Liard Fluorspar deposits may have resulted from multiple events based on the fission-track dating, and other fluid-flow events that have been observed in other MacKenzie Platform carbonates. The fission-track dating of 332 +/- 56 Ma likely represents the earliest and most significant period of fluorite emplacement. Other events in the Laramide orogeny likely redistributed and structurally affected fluorite mineralization. Previous operators of the property (Woodcock et al., 1972b) favored a thrust-related Laramide-aged event due to the common structural observation of older limestone above younger shale units in areas of significant mineralization. Authors working on the Rio Grande fluorite district (Harder, 1987) have observed fluorite of differing ages in the same deposit, suggesting that once a route for mineralizing fluids has been established, subsequent mineralization can take place along the same conduits.



2013 EXPLORATION

The 2013 exploration conducted on the Liard property totaled \$128,161.34 (Appendix 1), and consisted of ground-based geophysics, refurbishing historic access trails on the property, geological mapping, and collecting bulk samples. The statement of expenditures is included in Appendix 1, for reference.

7.1 GRAVITY SURVEY

A gravity survey was performed on the TAM and CORAL showings by a two-man crew from Aurora Geosciences Ltd. The purpose of the survey was to identify any gravitational anomalies that may further define the exploration targets. The survey had a combined total of 362 points across the two targets and was conducted over the course of 16 days. The program was based out of the Liard Hot Springs Lodge, and the property was accessed by a combination of All-Terrain Vehicles and hiking.

Gravity readings were taken with a Scintrex CG-5 Gravimeter; gravity station coordinates were obtained from a Leica RTK Differential GPS system. Stations were along lines with 100 metre spacing, and the spacing between consecutive stations on a line was 25 metres. Each station was marked with a flagged nail driven flush to ground level, where possible. Collected data was processed in the field using Gravred2 software, and maps and databases were created using the Geosoft Oasis Montaj program.

A Bouger anomaly gravity results map from the survey is depicted in Figure 8. A memorandum provided to Prima Fluorspar by Aurora Geosciences Ltd. describes the program in detail, and can be found at the end of this report (Appendix 2).

7.2 GEOLOGICAL MAPPING

The exploration program was performed from September 19th to October 4th, 2013, by a fiveperson crew consisting of staff from Dahrouge Geological Consulting Ltd. and Iyon Kechika Contracting Ltd. The purpose of the investigation was to examine outcrops containing fluorite at the TAM, CORAL, and FIRE showings. The information from the field program is valuable for geological mapping as well as for prioritizing potential drill hole targets. The crew visited each showing to take photos, record measurements and descriptions of the outcrops (including visual estimates of fluorite grade), collect hand samples, and collect bulk samples from areas of high



7.0

fluorite grade. In total, three bulk rock samples were collected at the TAM showing (Figure 9), five were collected at the CORAL showing (Figure 10), and two were collected at the FIRE showing (Figure 11). The average weight of the bulk samples was approximately 103 kilograms. Representative hand samples were collected for each bulk sample.

The property was accessed via All-Terrain Vehicles on pre-existing access trails that were refurbished by the Iyon Kechika Consulting crew prior to and during the geological exploration. Accommodations were provided by both the Liard Hotsprings Lodge and the Northern Rockies Lodge.

The descriptions of the bulk samples are provided in the 2013 Sample Descriptions appendix (Appendix 3) at the end of this report.



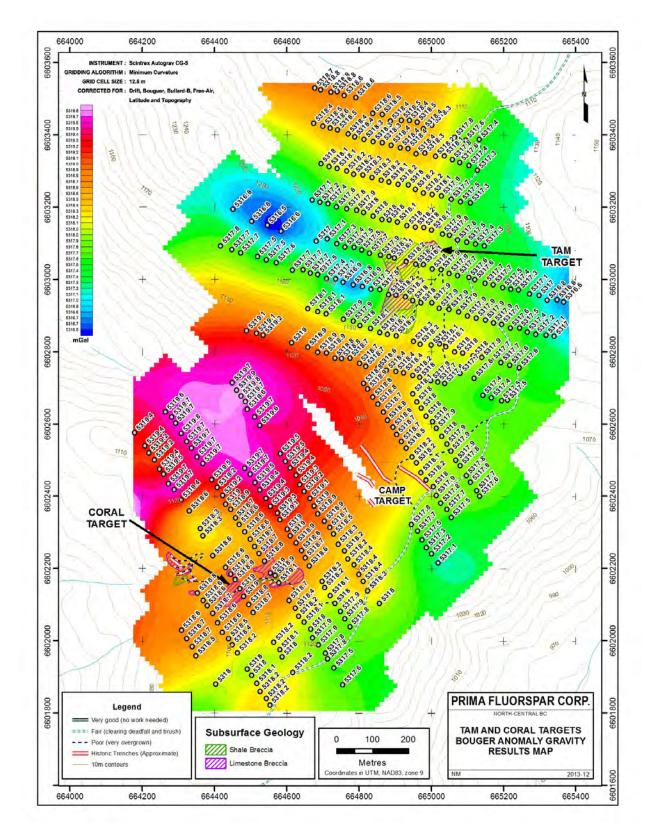


Figure 8. TAM and CORAL targets Bouger anomaly gravity results map



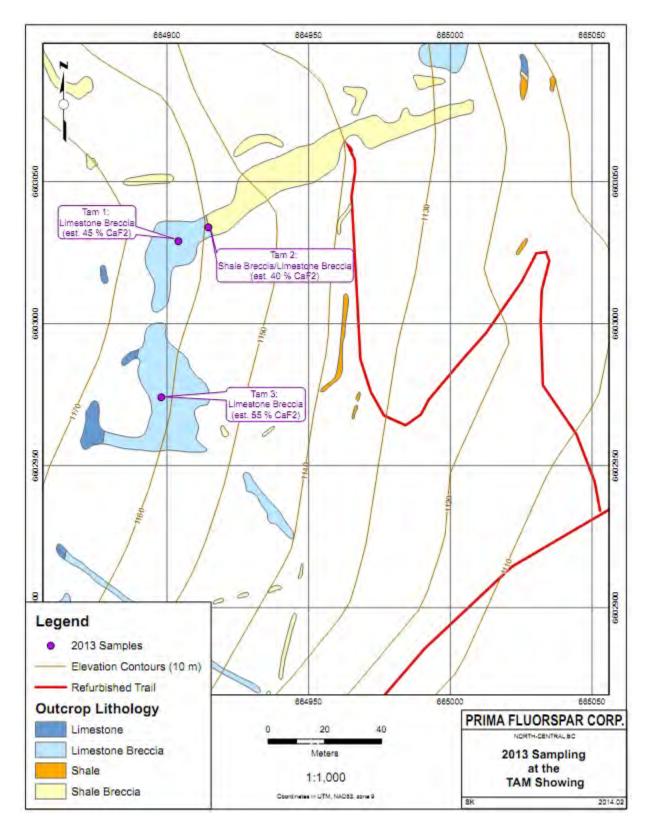


Figure 9. 2013 Sampling at the TAM Showing



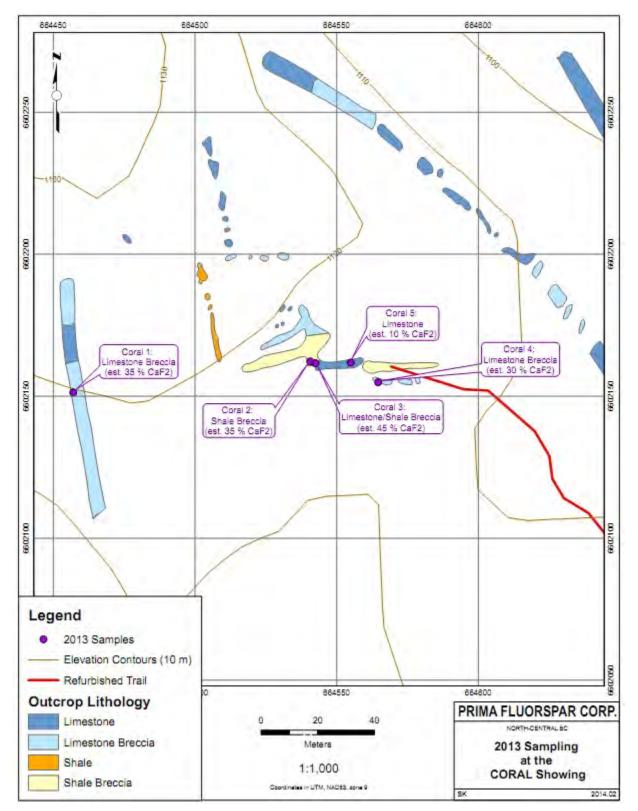


Figure 10. 2013 Sampling at the CORAL Showing



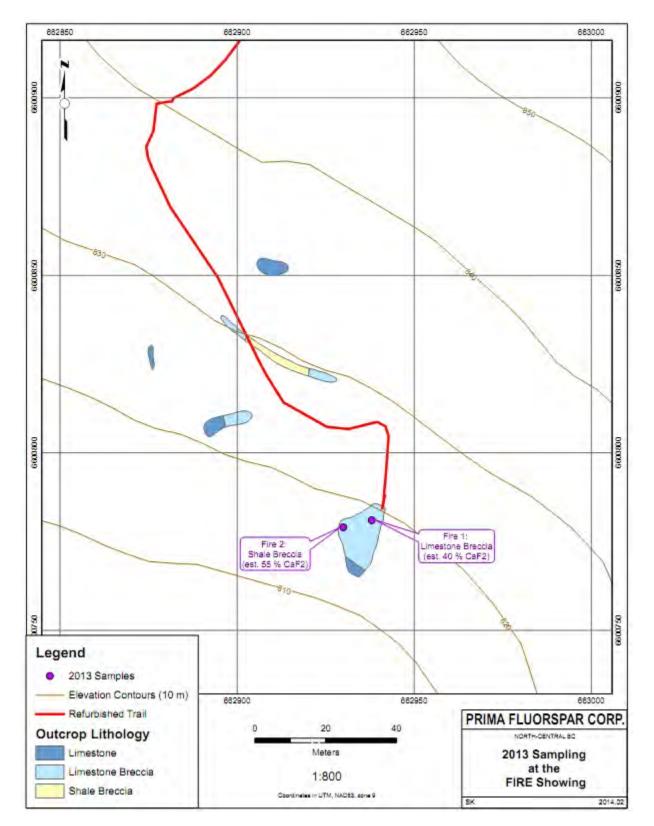


Figure 11. 2013 Sampling at the FIRE Showing



8.0 ADJACENT PROPERTIES

The Author is unaware of any exploration/development of fluorite projects in the immediate area of the property. There are some fluorite showings in the region of northeastern BC, but because of either their distance to current infrastructure, or their location with respect to National Parks, they have received very little attention

The DAN fluorite showings are located approximately 40 km to the northeast of the Property. Several occurrences of up to 53% fluorite, and associated barite, witherite and calcite occur as vein fillings, bedded replacements and as breccia fillings (Gjelsteen and Smith, 1973; Lane and Jacobson, 2011). Due to their stratigraphic location at the upper Dunedin Formation and the similar mineralization style, the deposits likely share a similar genetic history with the deposits at the Liard Fluorspar Property.

The SNOW fluorite/barite showings, located approximately 55 km to the southeast of the property have not seen any recent exploration, and grades of approximately 17.9% CaF_2 were found in the Middle Devonian Stone Formation (Brander and Woodcock, 1972).



9.0 INTERPRETATIONS AND CONCLUSIONS

Prima Fluorspar's 2013 exploration program served to provide further information on the fluorite mineralization at the TAM, CORAL, and FIRE showings.

The ground-based gravity survey was successful in identifying gravity anomalies on the property. The results of the survey provide evidence that the areas of mineralization are correlated with subtly higher gravity readings than the surrounding non-mineralized limestone and shale; there is a minor gravity contrast of approximately 1 mGal locally over known areas of fluorspar mineralization. This correlation is accounted for by the association of high specific gravity barite, witherite and fluorite in the mineralized zone. The survey results indicated there is potential for the CORAL showing to extend to the east and west, as well as identified a potential future exploration target to the southeast and north of the TAM showing. The gravity high in the centre of the surveyed area is an area with no known barite, witherite, or fluorite mineralization. The large and broad nature of the anomaly suggests a deeper regional source. Additional mapping and prospecting should be conducted in the area in order to explain the source. Due to the subtle density contrast over known areas of surface mineralization, the gravity method as an exploration tool is somewhat limited. The method is likely best used to create local exploration targets near known areas of mineralization, where outcrop is sparse. It's use as a regional mapping and target generation tool is likely somewhat limited, as topography and deep regional gravity effects are major contributors to gravity contrasts.

The highest visually-estimated fluorite grade of the samples was collected at the TAM showing; sample Tam 3 is described as limestone breccia with approximately 55% fluorite. The three samples taken at the TAM are all estimated to be greater than or equal to 40% fluorite, and spread across a distance of approximately 50 metres. They occur within the same limestone breccia lithology, which corresponds to the historical geological mapping as described in assessment reports #03840 and #03975 (Woodcock, 1972a; Woodcock, 1972b); these reports are the source of the outcrop lithology of Figure 9.

Descriptions of the samples collected at the CORAL showing correspond to the outcrop lithologies from the 1972 geological mapping by Woodcock (1972a; 1972b), as portrayed on Figure 10. Mini-bulk samples were collected from three different lithologies at this showing; limestone, limestone breccia, and shale breccia. The samples with the highest visual estimates



of fluorite grade were collected from the shale breccia unit.

The outcrop lithology displayed on Figure 11 of the FIRE showing was obtained from geologic mapping in 1972, as described in assessment report #03840 (Woodcock, 1972a). The description for sample Fire 1 corresponds to the historically mapped lithology of limestone breccia. Sample Fire 2 contradicts the historical mapping; Woodcock mapped this location as limestone breccia, whereas the description from the 2013 exploration classifies the sample as shale breccia. An additional geological map of the FIRE showing was created by Woodcock in 1972 and included in assessment report #03975 (Woodcock, 1972b). The 2013 samples on this map are within a unit described as shale breccia with relatively high fluorspar grade. This also contradicts with the 2013 sample descriptions, as Fire 1 is classified as limestone breccia. This discrepancy is likely due to a lack of resolution in the historic mapping, and indicates higher resolution mapping will be required.

Future gravity surveys should cover the areas east and west of the CORAL showing, extend further north and southeast of the TAM showing, and include a grid covering the FIRE showing. Geological mapping and sampling of the exploration target to the southeast of the TAM showing is recommended to determine the source of the gravity anomaly identified by the 2013 geophysical survey. The Liard project would benefit from detailed geological mapping of the FIRE showing, as the mapping by Woodcock (1972a) on this target was not detailed.

The remarkable association of mineralization at the contact between the Dunedin and Besa River Formations suggests that the potential for the discovery of new fluorite showings is very high. Due to the large amount of overburden and vegetation cover over the property, the short mapping and prospecting campaigns of 1971-1972 have only briefly assessed the potential of the Liard Fluorspar Property.



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APPENDIX 1: ITEMIZED COST STATEMENT FOR THE 2013 EXPLORATION

a) <u>Personnel</u>

Nimbus Management Ltd.

J. Hardy 37.0 37.0	, geologis hours hours	t @	Project Management and Planning \$ 150.00	\$ 5,550.00
Dahroug	ge Geolog	gical	Consulting Ltd.	
J. Gorha <u>5.5</u> 5.5	m, geolog days days	ist @	Project Management \$ 1,035.00	\$ 5,657.93
N. McCa <u>11.57</u> 11.57	llum, geol days days	ogis @	t Project management and field coordination \$ 950.00	\$ 10,988.27
S. Krysa 33.0 <u>14.0</u> 47.0	, geologis days days days days	t @	Project Planning and Logistics Field work - September 21st to October 4 \$ 485.00	\$ 22,811.17
M. Hodg <u>15.0</u> 15.0	e, field as days days	sista @	nt Field work - September 19th to October 3 \$ 470.00	\$ 7,050.00
J. Sande <u>0.1</u> 0.1	ersen, geo days days	logis @	st Project preparation \$ 485.00	\$ 48.50
1.00 1.00	administra hours hours	@	Logistics \$ 40.00	\$ 40.00
	chika Cor	itrac	ting Ltd.	
F. McMil <u>93.0</u> 93.0	lan hours hours	@	\$ 43.00	\$ 3,999.00
G. Frank <u>110.5</u> 110.5	hours hours	@	\$ 43.00	\$ 4,751.50
M. Tibbe <u>110.5</u> 110.5	rt hours hours	@	\$ 43.00	\$ 4,751.50 GST \$ 3,282.39 Subtotal \$ 65,647.87

,647.87 Total Personnel \$68,930.26

b) Food and Accommodation

, <u></u>					Travel accomm Super 8; Fort St. John/Dawson Creek	\$	310.10		
4.0	days	@	\$	370.68	3 (2 double, 1 single) rooms at Liard Hotsprings Lodge - September 19-25	\$	1,556.84		
	· · · ·		•		Meals - Liard Hotsprings Lodge	\$	918.82		
5	days	@	\$	371.00	3 (2 double, 1 single) rooms at Northern Rockies Lodge, September 26-October 2	\$	2,096.15		
5	man-days	@	\$	370.00	Meals - Northern Rockies Lodge	\$	1,942.50		
7.67	man-days	@	\$	55.00	DAH Meals	\$	421.85		
								\$	7,246.26
c) <u>Transp</u>	ortation								
					Hodge; Central Mountain Air	\$	1,086.75		
			Fue			\$	1,841.29		
			-	i Kechika id ATVs	a crew vehicles	\$	2,730.00		
				e-by-side		\$ \$	6,090.00 2,887.50		
				/ Trailers		э \$	2,887.50		
				Trailers			1,100.00	\$	14,703.79
d) <u>Geophysics</u>					sciences Ltd Gravity survey and reporting o July 9th, 2013	\$	32,036.03	\$	32,036.03
	_							Ψ	02,000.00
e) <u>Dahrou</u>	ige Expens	ses		rhood or	nd Supply Fee	\$	786.00		
					ntal (ArcGIS)	φ \$	360.00		
					vned Equipment Rentals	\$	440.00		
			Dun	liougo oi		Ψ	110.00	\$	1,586.00
f) <u>Other</u>									
			Sup	plies		\$	619.82		
			Sate	ellite Pho	ne Rental - Earth Communications	\$	510.35		
					amples to Global Mineral Research	\$	970.22		
				ephone		\$	43.54		
			Oth	er Expen	ses + 10%	\$	1,515.07	\$	3,659.00
_									
<u>Total</u>								\$	128,161.34

FIELD WORK SUMMARY

Prima Fluorspar Corp. Liard Fluorspar Property Gravity Survey, Geological Mapping and Prospecting 10 mini-bulk samples collected Field personnel: (DAH) S. Krysa, M. Hodge, (IYON) F. McMillan, G. Frank, M. Tibbert Appendix 2

Liard Property Gravity Survey 2013 Field Memorandum and Bouger Anomaly Map

Aurora Geosciences Ltd.



Western Office 34A Laberge Road Whitehorse, YukonY1A 5Y9 Phone (867) 668-7672 Fax: (867) 393-3577

http://www.aurorageosciences.com

MEMORANDUM

To: Neil McCallum neil@dahrouge.com

From: Phil Jackson Phil.Jackson@aurorageosciences.com

<u>Re:</u> Field Memo – Liard Gravity Survey 2013

Date: July 17, 2013

This memorandum is a short form geophysical report describing a gravity survey conducted on the Liard Fluorspar Property, Northern British Columbia. The survey was over 2 test targets, the TAM and CORAL, to determine if an anomalous gravity signature would be present and serve to better define the extent of the zones. The crew stayed at the Liard Hotsprings Lodge and commuted to and from the suvery area daily. The gravity survey had a combined total of 362 points surveyed over 16 days.

Survey location: The original orientation lines were followed by infill. A common grid centre was used in all processing for the survey area. The grid centre was located at 663242N, 6601746N NAD83 Zone 9N. The project area covers NTS map sheet 94M09.

Crew and equipment. The surveys were conducted by the following personnel:

Phil Jackson	Project Manager (Grav Operator)	June 24 – July 9, 2013		
Kenny Sananin	Technician (GPS Operator)	June 24 – July 9, 2013		

FieldMemo – Liard Gravity Survey 2013 - page 1

The crew was equipped with the following instruments and equipment:

<u>Gravity</u>	1- Scintrex CG-5 Gravimeter GRV-C5-349 s/n 961049349
<u>GPS</u>	1 set –Leica RTK carrier phase Differential GPS Receivers and Transmitters.
	GX1230 GG GPS Base Receiver s/n 352099 GS15 Performance RTK Rover s/n 1502720
<u>Other:</u>	 Laptop with Geosoft, Gravred2, Scintrex Software Repair tools Garmin handheld GPS Truck & Trailer ATV's + 1 trailer

Gravity Survey: Each Gravity station's coordinates were determined from position measurements taken with RTK Differential GPS system and recorded in UTM Zone 9N coordinates using the NAD83 datum. Station spacing was 25 meters along 100 meter spaced lines.

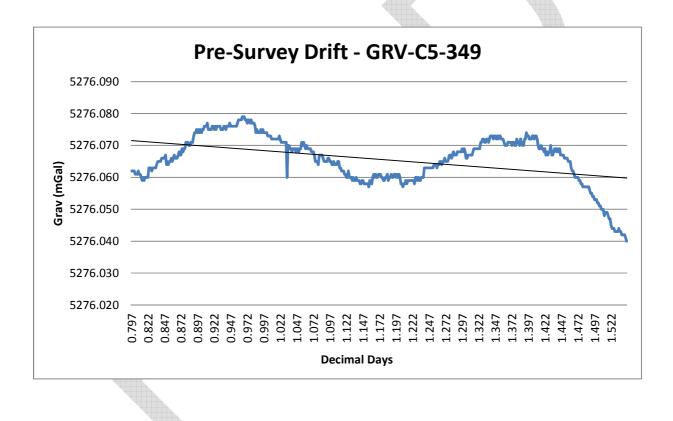
Geographic datum & projection:	UTME, UTMN NAD83 datum, 9N
Elevation datum:	Mean sea level using Geoid EMG96
Station locations:	Stations were located with non-differential GPS receivers.
Station marking:	Stations were marked with flagged nails driven flush to ground level where possible.
Gravimeter preparation:	The gravimeter was levelled on a cement block and warmed up for a period of 48 hours to stabilize. After the spring stabilized, the instrument was cycled for 12 to 24 hours taking readings for 60 seconds every minute to determine the remnant instrument drift and to reset instrument drift constants. The instrument remained under power at all times throughout the survey operation.
Gravity readings:	Readings were stacked for 60 s and maximum standard deviation in reading error was kept to less than 50 microGal if possible. When this was not possible, readings were repeated several times to ensure that the data is repeatable. Seismic filters were engaged to remove wind noise.
	Field Astron Line and Consulty During 2012 manage

FieldMemo – Liard Gravity Survey 2013 - page 2

<u>Gravity Base Station:</u> Installed ~ 3 meters NE of the GPS "Base 1" station at the old camp area. The area is flagged and the exact point is marked with a metal tag nailed flush to ground level.

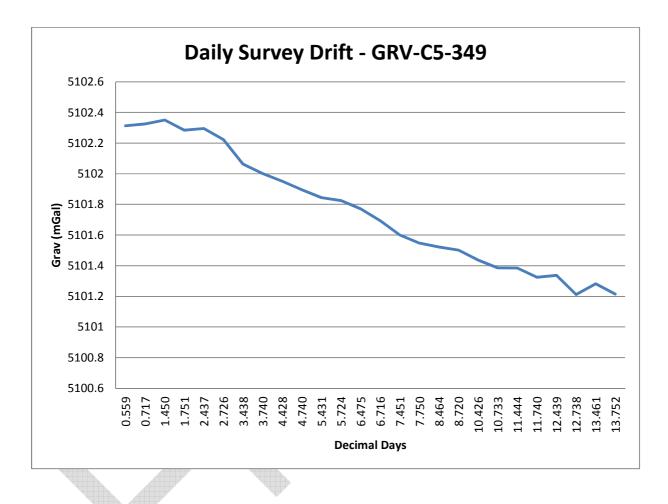
Gravimeter drift for GRV-C5-349 S/N 961049349:

The Gravity meter was levelled and warmed up for a period of 48 hours to stabilize. Thereafter the instrument was cycled to determine the remnant instrument drift.



FieldMemo – Liard Gravity Survey 2013 - page 3

The gravimeter was checked daily for instrument drift prior to surveying by occupying a drift station in camp. During the survey, a minimum initial and final tie-in drift measurement were made prior to and after each day's survey.



FieldMemo – Liard Gravity Survey 2013 - page 4

DGPS survey base station:	The GPS base station was installed to transmit RTK position corrections and record positioning at 1 second epoch intervals.					
	Multiple Base Station locations were used all tied to the original base station located as an uncorrected non differential point location. All stations are flagged and marked with metal tags and nails driven flush to ground level. The original "Base 1"station is installed at UTME UTMN coordinates: 665163.669E, 6602611.436N, 1077.164m elevation in NAD 83 9N datum & projection.					
DGPS survey rover:	Antenna was placed on the gravity survey station hub and elevations corrected for rover antenna height of 2m. RTK solutions were achieved for 100% of the survey points. Some difficulty was encountered with GPS radio communications during the survey largely due to thick bush and rugged topography.					
Bouguer corrections:	Elevation corrections: Free Air, Bullard B, Bouguer; Bouguer density: 2.67, Datum: 0.0 (sea level),					
Lattitude corrections:	A common grid center was used for all points surveyed.					
<u>Near station terrain</u> <u>measurement:</u>	Centre of Grid: 663242E,6601746NUTM, NAD83 9N was used for latitude corrections and 59.52N, 16.11W for on- board Gravimeter tide corrections Terrain elevations within 20m of the gravity station were directly measured applied to the data as near-station terrain corrections. The offset for the operator height was accounted for: (1.8m)					
Inner DTM	Terrain corrections from 20 m to approximately 10 km were calculated. A DEM equivalent to a 1:50 000 NTS topographic map was used and further modified to be consistent with the GPS data collected over the course of this survey.					
<u>OuterDTM</u>	Terrain corrections from 10km to approximately 100 km were calculated. A DEM equivalent to a 1:250 000 NTS topographic map was used, modified to be consistent with the GPS data collected over the course of this survey.					

FieldMemo – Liard Gravity Survey 2013 - page 5

Data processing

The gravity data was downloaded and processed daily in the field using propriety software package 'Gravred2'. All of the field maps and databases were created in Geosoft Oasis Montaj. Gravity data repeats were averaged. A trend was not removed from the data as the filter did not add any new information about the underlying features. Both grids seem not to have uniform regional trends that need removal.

Products.

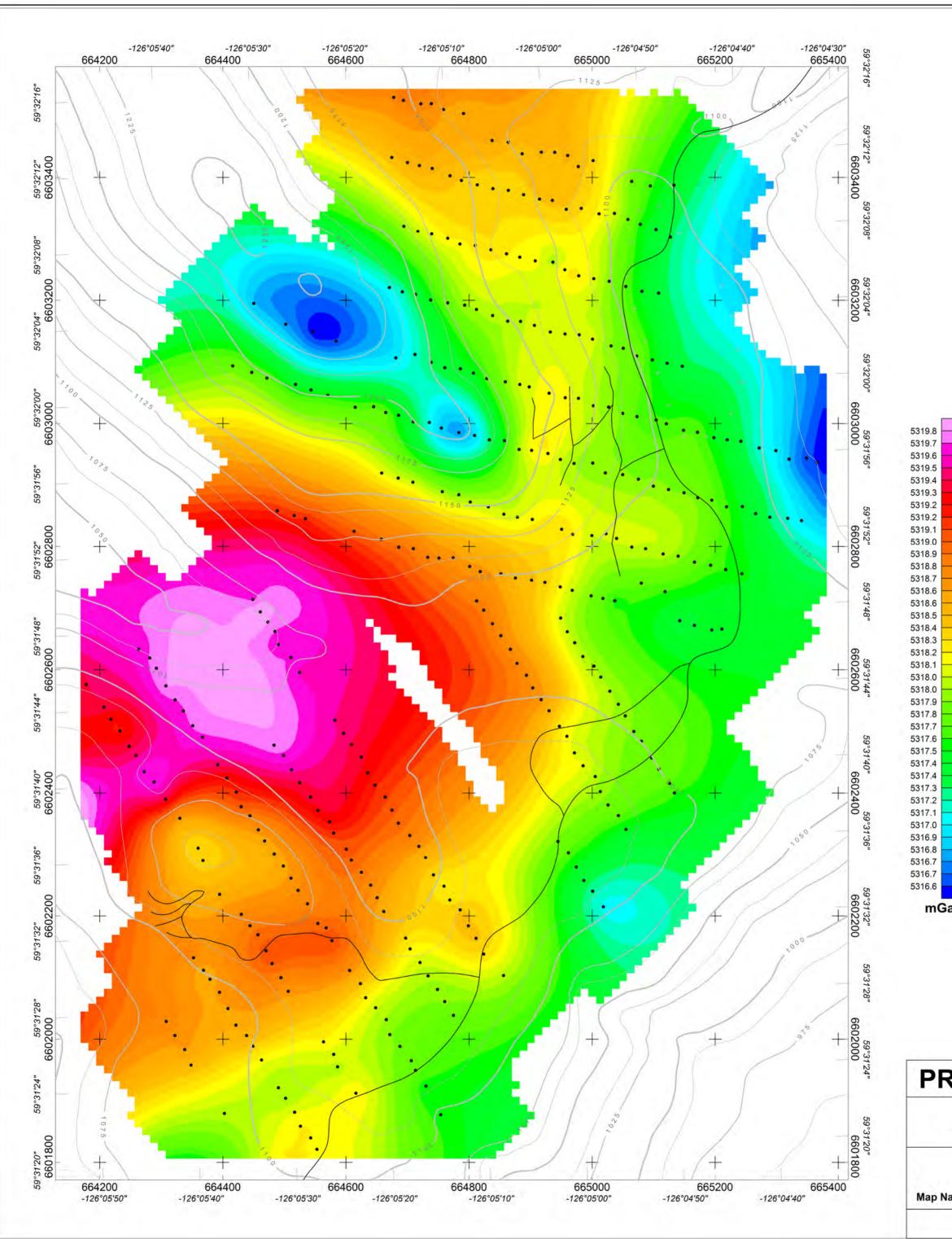
The following are attached to the digital version of this report

Digital Database:	Geosoft database ASCII file	TAM & CORAL Grav.gdb TAM & CORAL Grav.xyz
Processing Files:	Description of database channels	Channel.txt
Maps:	Colour Gravity Maps	TAM & CORAL Grav.map Geosoft packed map TAM & CORAL Grav.pdf PDF copy of geosoft map
		T Dr copy of geosoit map
Reports:	Survey and personnel summary for project .pdf	PF-13531-BC CrewLog.pdf
	This report in .pdf format	PF-13531-BC Field Memo - 2013.pdf

Respectfully submitted, **AURORA GEOSCIENCES LTD.**

Phil Jackson, P.Geoph.

FieldMemo – Liard Gravity Survey 2013 - page 6



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BOUGUER GRAVITY ANOMALY LIEVATION CONTOUR INTERVALS (m)		
Example 1 Derived		BOUGUER GRAVITY ANOMALY
HISTRUMENT: Scinterx Autograv C4.5 GRIDDING ALGORITHIM: Minimum Curvature GRID CELL SIZE: 12.5 m CORRECTED FOR. Drift Bouguer, Bullard-B, Free-Air, Latitude and Topography Mathematication and the state of		15
GRIDDING ALGORITHM: Minimum Curvature GRID CELL SIZE: 12.5 m CORRECTED FOR: Drift, Bouguer, Bullard-B, Free-Air, Latitude and Topography OST PROCESSING FILTERS: None DATA FILE: LiardGrav2013.gdb OPERATORS: PJ TOTAL STATIONS SURVEYED: 362 GRAVITY STATION: • ATV TRAIL: Scale 1:5000 Scale 1:5000 MOB3 / UTM zane 9V		
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POST PROCESSING FILTERS : None DATA FILE : LiardGrav2013.gdb OPERATORS : PJ TOTAL STATIONS SURVEYED : 362 GRAVITY STATION : • ATV TRAIL :		CORRECTED FOR : Drift, Bouguer, Bullard-B, Free-Air,
CPERATORS: PJ TOTAL STATIONS SURVEYED: 362 GRAVITY STATION: • ATV TRAIL:	PO	ST PROCESSING FILTERS : None
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Appendix 3: Liard Property 2013 Sample Descriptions

Sample	Easting	Northing	Length	Width	Trend	Dominant Rock Type	Est. Fluorite %	Sample Description		
Coral Showing										
Coral 1	664456	6602151	3.0 m	0.2 m	165°	Limestone Breccia	35	Black to purple fluorite (fine grained to medium grained) in limestone breccia. Minor to moderate oxidation in areas.		
Coral 2	664537	6602163	6.4 m	0.1 m	276°	Shale Breccia	35	Shale breccia near contact with limestone. Dominantly very large angular shale clasts in argillaceous and fluorite/calcite matrix. Fluorite purple to black, fine grained to coarse grained.		
Coral 3	664539	6602162	1.9 m	0.28 m	280°	Limestone/ Shale Breccia	45	At Limestone/shale breccia contact. Shale clasts in argillaceous and fluorite matrix. Fluorite dominantly purple, medium grained to coarse grained.		
Coral 4	664564	6602154	3.0 m	0.2 m	275°	Limestone Breccia	30	Limestone breccia with replacement fluorite and in breccia matrix. Fluorite purple to black, fine grained to medium grained. Limestone clasts white to light grey, fine grained to medium grained., fossiliferous, minor stylolites. Very minor oxidation.		
Coral 5	664555	6602163	5.0 m	0.12 m	279°	Limestone	10	Fossiliferous imestone with low grade fluorite. Fluorite is black and purple, fine grained to medium grained. Limestone grey and white, fine grained to medium grained, with minor black stylolites. Very minor oxidation.		
Fire Showi	ng									
Fire 1	662938	6600781	~1.0 m	~0.3 m	N/A	Limestone Breccia	45	Purple flourite (dominantly medium grained) in limestone breccia. Fluorite in breccia, veins, and crustiform bands. Taken from weathered vertical face (trending ~SSW) at east part of showing.		
Fire 2	662930	6600779	N/A	N/A	N/A	Shale Breccia	55	Taken from upper slope of fire showing (faces ~SSE). Dominantly shale breccia with minor underlying limestone breccia. Shale orientation measurements vary, likely due to slumping (average ~335°/21° RHR). Fluorite purple to black, medium to fine grained, in breccia matrix and in veins.		

Sample	Easting	Northing	Length	Width	Trend	Dominant Rock Type	Est. Fluorite %	Sample Description
Tam Showi	ing							
Tam 1	664904	6603029	11.0 m	0.05 m	059°	Limestone Breccia	45	Black to purple fluorite (fine grained to medium grained) in limestone breccia. Limestone clasts are medium to dark grey, fossiliferous. Fluorite occurs in breccia matrix (with calcite/barytocalcite) and as replacement. Occasional minor oxidation.
Tam 2	664912	6603033	11.0 m	0.05 m	060°	Shale Breccia/ Limestone Breccia	40	Sample includes both limestone breccia and shale breccia; the sample cross-cuts contact, however is dominantly shale breccia. Shale dark grey, non-calcareous. Fluorite purple to black, fine grained to coarse grained. In matrix and as replacement. Minor oxidation around shale and in fractures. Moderately oxidized around contact.
Tam 3	664898	6602974	5.0 m	0.1 m	280°	Limestone Breccia	55	Fluorite dominantly medium grained to coarse grained, purple, minor fine grained black in limestone breccia. Fluorite in breccia matrix, void fill (coarse grained) with calcite in ~1 m of sample. Minor oxidation in few areas.

Statement of Qualifications

I, Neil McCallum, P.Geol. of 23 Craig St., Ottawa, ON, K1S 4B6

Do hereby certify that:

- 1) I am author of the Report titled 'Assessment Report on the Liard Fluorspar Project, 2013 Exploration' dated February 24th, 2014, relating to the Liard Fluorspar Property, north-central British Columbia.
- 2) I supervised the work described herein.
- 3) I have been a registered professional geologist with the Association of Professional Engineers, Geologists and Geophysicist of British Columbia since 2011, member #35641.
- 4) I am a graduate of the University of Alberta, Edmonton, Alberta, with a B.Sc. in geology, 2004.
- 5) I have practiced in the field of mineral exploration for base-metal, precious metal, uranium, rare metals, industrial mineral and coal deposits since 2004. I have practiced my profession continuously since 2004.

Dated at Ottawa this 24th day of February, 2014.

Neil McCallum, B.Sc., P.Geo.

Statement of Qualifications

Stephanie Krysa is a geological consultant with Dahrouge Geological Consulting Ltd. She obtained a B.Sc. Specialization in Geology degree from the University of Alberta, Edmonton in December 2010, and has been employed in the mineral exploration industry since. She is registered as a geologist in training with the Association of Professional Engineers and Geoscientists of Alberta.