

Eagle Claims  
(Rock Candy) 800782

DEPARTMENT OF MINES.

Nº 10339

SPECIMEN OR SAMPLE TAG.

Taken by

W. M. Sharp

Address

Ainsworth, B.C.

Submitter's mark (if any)

Date

May 1953.

District

Greenwood Mining Division

Property and locality

Eagle Claims, north of  
Rock Candy mine

Width sampled

148 inches.

Assay for

%  $\text{CaF}_2$ ;  $\text{BaSO}_4$ ;  $\text{SiO}_2$ ;  $\text{CaCO}_3$ ;

$\text{Fe}_2\text{O}_3$  and/or  $\text{FeS}_2$ . & trace mineral impurities.

Remarks

The above represents a sample  
of concentrate grade; % of contents  
impurities is desired.

litros



DEPARTMENT OF MINES  
VICTORIA

May 28, 1953.

Mr. William M. Sharp,  
Ainsworth, B.C.

Dear Sir:

A sample of fluorite submitted by you to our Assay office has been brought to my attention. I presume this sample was from one of the Spar 1 to 6 claims located south of and adjoining the Rock Candy group and registered in your name.

I would like to make a brief examination of this deposit during the coming field season and would prefer to do so when someone, who knows where the actual showings are, is on the ground - if that is possible. Do you contemplate doing any work there this summer - if so, when?

I expect to be in the Okanagan about the end of August or beginning of September and would proceed to Grand Forks at that time.

If there is not likely to be anyone on the property, would it be possible for you to send me a sketch indicating the location of the actual fluorite showings on the claims?

Yours very truly,

*J. W. McCammon*  
J. W. McCammon,  
Mineral Engineer.

*Answered.  
asked for word if  
he still wishes  
to look over the  
few showings  
per sample tag  
presented by  
Eagle Claims, north of Rock Candy Mine.  
Represents a sample of "concentrate" grade.*

JWMcC/nb

FLOTATION  
CYANIDATION  
AMALGAMATION  
TABLE CONCENTRATION

TELEPHONE: MARINE 5821  
RES. FRASER 6258

**J. R. WILLIAMS & SON LTD.**  
PROV. ASSAYERS & METALLURGICAL CHEMISTS

OFFICE AND LABORATORY:  
580 NELSON STREET

VANCOUVER 2, B.C.  
April 27th.1953.

File #112772/775.

Messrs.Kootenay Mining Services Ltd.,  
Ainsworth,B.C.

Dear Sirs:

Determinations made on samples  
listed below,gave the following results.

	<u>CaF<sub>2</sub> %</u>
No.2976-----	35.15
No.2977.-----	50.53
No.2980.-----	53.04
No.2981-----	60.28

199.00

49.7%

Yours respectfully,

J.R.WILLIAMS & SON

per 

R.N.Williams



DEPARTMENT OF MINES  
VICTORIA

SAMPLE RECEIVED FROM Mr. W. M. Sharp,

ADDRESS Ainsworth, B.C.

LABORATORY No.	SUBMITTER'S MARK.	LABORATORY REPORT.																														
9754	10339	<p style="text-align: right;"><i>97 do CaF<sub>2</sub></i></p> <p><u>Assays:</u></p> <table> <tr> <td>Fluorine</td> <td>47.29</td> <td><i>48.9</i></td> <td rowspan="2">} <i>CaF<sub>2</sub> = 96.6%</i></td> </tr> <tr> <td>Calcium</td> <td>50.00</td> <td><i>51.1</i></td> </tr> <tr> <td>Carbon dioxide</td> <td>0.11</td> <td></td> <td rowspan="2">} <i>Siungal animal</i></td> </tr> <tr> <td>Silica</td> <td><u>2.00</u></td> <td><i>- 0.2 - 0.3%</i></td> </tr> <tr> <td>Barium Oxide</td> <td>0.27</td> <td></td> <td></td> </tr> <tr> <td>Iron, total</td> <td>0.007</td> <td></td> <td></td> </tr> <tr> <td>Sulphur, total</td> <td>0.05</td> <td></td> <td></td> </tr> <tr> <td>Lead and Zinc</td> <td>nil</td> <td></td> <td></td> </tr> </table> <p>The above figures are percent.</p> <p style="text-align: center;"><i>Total. 99.727</i></p> <p>A test for radioactivity was made, and none was detected.</p>	Fluorine	47.29	<i>48.9</i>	} <i>CaF<sub>2</sub> = 96.6%</i>	Calcium	50.00	<i>51.1</i>	Carbon dioxide	0.11		} <i>Siungal animal</i>	Silica	<u>2.00</u>	<i>- 0.2 - 0.3%</i>	Barium Oxide	0.27			Iron, total	0.007			Sulphur, total	0.05			Lead and Zinc	nil		
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THIS DOCUMENT, OR ANY PART THEREOF, MAY NOT BE REPRODUCED FOR PROMOTIONAL OR ADVERTISING PURPOSES.

DATE 23rd June, 1953  
/as

*G. C. B. Cave*  
CHIEF ANALYST AND ASSAYER.

**THE BRITISH METAL CORPORATION  
(CANADA) LIMITED**

505 DUNSMUIR STREET  
VANCOUVER 2, B.C.

July 8th, 1953

Kootenay Mining Service Limited,  
Ainsworth, B. C.

Attention Mr. W. M. Sharp,

Dear Sirs:

I must apologize for the long delay in answering your letter concerning the marketing of your proposed production of Fluorspar.

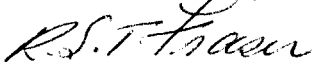
In the interim we have been attempting to develop some information on the possible market for this product and the delay in answering your letter is due to the fact that it has taken considerable time to canvass the situation.

We should advise you that our company is not interested in the purchase of materials. Our function is to act as agent for the producer in placing his production for him to the best advantage.

We would definitely be interested in marketing this fluorspar for you and if the idea of our company taking care of the marketing problems for you is of interest, we would be glad to go into the question with you in more detail.

Yours very truly,

THE BRITISH METAL CORPORATION  
(CANADA) LIMITED



R. S. T. Fraser  
British Columbia Manager.

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DEPARTMENT OF MINES  
VICTORIA

SAMPLE RECEIVED FROM.....Mr. T. Hawes,.....

ADDRESS.....Ainsworth, B.C......

LABORATORY NO.	SUBMITTER'S MARK.	LABORATORY REPORT.												
9117	2	<p><u>Spectrochemical Analysis:</u></p> <p>An analysis for all the base metals was made. Calcium (present in the fluorite) was found; the other metals found, and their percentages, were those occurring normally in rocks.</p> <table border="0"> <tr> <td><u>Assays:</u></td> <td>Silica</td> <td>Sulphur</td> <td>Fluorine</td> </tr> <tr> <td></td> <td><u>%</u></td> <td><u>%</u></td> <td><u>%</u></td> </tr> <tr> <td></td> <td>0.1</td> <td>0.8</td> <td>46.4</td> </tr> </table>	<u>Assays:</u>	Silica	Sulphur	Fluorine		<u>%</u>	<u>%</u>	<u>%</u>		0.1	0.8	46.4
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DATE 8th December, 1952

/as

*G. B. Lane*

CHIEF ANALYST AND ASSAYER.

# Fluorite (Fluor-spar)

Chemical Composition -  $CaF_2$

Occurrence - In all types of deposits from hypothermal to epithermal, both fracture vein & replacement. Most production from low temp. epithermals.

Association Generally with quartz, barite, calcite, pyrite, & frequently galena & sphalerite.

Occurrences in B.C. commonly enclosed in or closely related to syenitic and alkaline intrusives.

## Properties Fluorite & Related Minerals

	Color	Luster	Transpar.	Mode	Hard.	S.G.
Fluorite	Various	Vitreous	transparent sub-translucent	Cubic Crystalline	4.0	3.0-3.2
Quartz	Gen. Pale	"	Transparent to sub-translucent	Gen. Crystall	7.0	2.6
Calcite	Gen. Pale	"	"	"	3.0	2.7
Barite	Gen. Pale	"	transparent to opaque	Gen. tabular crystalline	2.5	* 4.3-4.6
pyrite	Brassy	metall.	opaque	Cubic crystall.	6-6.5	* 4.9-5.1
galena	Lead gray	metall.	opaque	Cubic crystall	2.5-2.7	7.4-7.6
sphalerite	Varied	Resinous	translucent to opaque	tetrahed. crystall.	3.5-4.0	3.9-4.1

## Method of Concentration

- (a) Hand sorting
- \* (b) Differential Flotation
- \* (c) Heavy-media separation
- (d) Gravity (difference too small to be practical jigging, tabling etc)
- (e) Decrepitation - early method prior to flotation.

at 22g

Fluorite (cont'd)

Uses.

- Steel & Aluminium, and magnesium smelting.
- Chemical Industries - growing list of useful compounds.
- Refrigeration - Freon gas.
- Ceramic Industry (highest quality), glasses, enamels, and vitralite
- Refining aviation gas.
- cement production
- rock wool, glass fibre. - fluxer.
- paint pigment
- various minor uses.

Grades

No. 1 Ceramic	+95% $CaF_2$	} inferred
No. 1 Special	90-95% "	
No. 2 Ceramic	85-90%	
Metallurgical	+70%	
acid	? +97% (U.S.A) ; +96% Canada.	

Prices - E.M.J.

Metallurgical (+70%) @ \$43<sup>00</sup>/ton F.O.B. Illinois-Kentucky.  
 Imported " (+70%) 38-40<sup>00</sup>/ton, Atlantic seaboard, duty-paid.  
 acid (high purity) (+97%) - 60<sup>00</sup>/ton F.O.B. Rosclare Ill., and Boulder & Nathgals Colorado.  
 Ceramic (.95%  $CaF_2$ ) 45<sup>00</sup>/ton F.O.B. Rosclare Ill.

Future

Consumption to increase.

Note Barro

Crude. 8.37/ton  
 ground 20<sup>00</sup>/ton.

Oil & Chemical Industries 1,000,000 tons 1952  
 produced by straight mining or by concentration of  
 l-grade ores.  
 Oil industry requires product with high  
 S.G. & good "insulating" characteristics.