

GREENWOOD M.D.

ROCK  
409 (7)

Rock Cr.

Keule R.

Nathan Cr.

Johnstone Cr.

JOHNSTONE  
CREEK  
PARK

Rock Cr.

ROCK CREEK  
436(7)

MAY  
370(6)

Budy Cr.

**KUHN SILICA DEPOSIT**

E.K.  
281  
(5)

Myers L.

1877  
131101

International Boundary

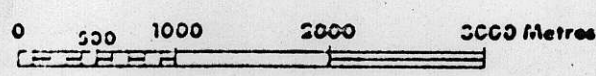
Canada

U.S.A.

Myncaster

49° 00'

119° 00'



Claim E.K. 281 (5)

KUHN SILICA DEPOSIT

near Bridesville, B.C.

Map M82E/3E

520167

BRIDESVILLE SILICA DEPOSIT

by

A. R. Bullis, P.Eng.

24 Feb 1977

INTRODUCTION

The author was retained by The Hanna Mining Co. to make an inventory and assessment of Silica deposits in B.C.

I examined the E.K. Claim in the Greenwood Mining Division, near Bridesville, on 10th and 20th August, 1976. I mapped part of the property, using a tape and compass, on a scale of one inch equals one hundred feet. (1 centimetre equals 12 metres, or 1 to 1,200).

The following report is a summation of my observations and a review of some data supplied by W. Kuhn.

PROPERTY

The property is situated in the Greenwood Mining Division at 49 degrees 01 minute North Latitude and 119 degrees 6 minutes West Longitude. The claim is shown on Department of Mines & Petroleum Resources Mineral Map M82E/3E as E.K. 281 (5). The claim is one "unit" (i.e. 500 metres x 500 metres or 25 hectares in area).

The claim was staked and registered in April 1976 at the Mining Recorder's Office, at Grand Forks, by William Kuhn, P.O. Box 48812, Vancouver, B.C. V7X 1A6.

The property is readily accessible from Highway #3 at Bridesville via good gravel roads that lead south-east approximately four miles to the claim.

### HISTORY

The Bridesville silica deposit has been known to local residents for many years. In 1966 and 1967 some core drilling was done on the property but no record of this work appears in the B.C. Minister of Mines reports. Some core was analysed and tested in the Coast Eldridge Laboratories in Vancouver during 1966 and 1967. (See appendices attached).

The result of the core drilling and assaying done in 1966-67 was inconclusive in that analyses of core indicated erratic "high" values in iron, calcium and alumina that would preclude the use of rock for Silicon metal. However, some assays from the holes were within the specifications for Silicon-grade quartz rock and, therefore, the question remains whether or not part of the deposit may be used for this purpose.

Further, much of the "contaminated" core was obtained close to the collar of the hole (i.e. near surface) and may indicate contamination from a source other than the quartz rock.

#### GEOLOGY

The silica rock occurs in a region underlain by schist and volcanic rocks of Carboniferous age. The general trend of the county rock in the area is north-west to west, with dips of 30 to 55 degrees to the north.

The silica outcrops on several small knolls, or hills, that stand above the surrounding rolling countryside and forms a series of en-echelon outcrops that extend in a north-west direction for approximately fifteen-hundred feet in a belt roughly two-to-four hundred feet wide. Most of the area is pasture land, or light second-growth timber, and is covered with overburden. The silica is fine-grained, cherty rock that varies in color from white to pale blue or grey; it is massive with few fractures or joints visible. The largest silica outcrop mapped by the author is about three hundred feet by two hundred feet; the true size is obscured by the overburden. A second large outcrop, one hundred and fifty feet by two hundred feet, is located approximately one hundred feet east of the first and together they may form a single mass of quartz.

Several large outcrops of the same type of quartz are located about six hundred feet to the north-west and are

comparable in size and quality.

Only one of the above samples, # , would meet ferro-silicon rock specifications and none would meet Silicon-grade rock. The possibility that surface contamination has affected the samples must be considered in any review of the economic possibilities for the deposit.

POSSIBLE RESERVES

(Assume that 12 cu ft. of silica rock weighs 2000 lbs.)

The two outcrops, mapped by the author, have a total area of 67,500 sq. ft. (6270.75 sq. metres) and if the depth of the quartz rock averages 25 feet, then the gross reserves in short tons in the deposit are:

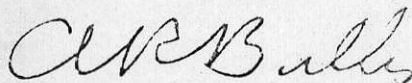
$$\frac{67,500 \times 25}{12} = \underline{140,625 \text{ tons}}$$

However, should the outcrops be part of a continuous mass and the depth of the quartz is 64 feet, as indicated in the 1967 drill hole, then the gross reserves could be:

$$\underline{600 \times 200 \times 64} = \underline{640,000 \text{ tons}}$$

Note: These figures include only the area mapped by the author.

Respectfully submitted



A. R. Bullis, P.Eng.  
BULLIS ENGINEERING LTD.  
DELTA, B.C.

24 Feb. 1977

1120



MINISTRY OF MINES  
 DEPARTMENT OF MINES  
 A.3-C.1-6-25215  
 DATE: July 21, 1961

To:  
 Mr. P. L. Steau,  
 #202 - 571 Burrard Street,  
 Vancouver, B. C.

Certificate of Assay  
**COAST ELDRIDGE**  
 ENGINEERS & CONSULTANTS LTD.  
 125 EAST 4TH AVE VANCOUVER CANADA

Wt. Analyzed: 100.00 gms

Results of assay:

No.	GOLD GRAVITY PER CENT	SILVER GRAVITY PER CENT	SILICON DIOXIDE (SiO <sub>2</sub> )	LOSS ON IGNITION	QUARTZ IRON OXIDE	ALUMINA OXIDE	CALCIUM OXIDE	MAGNESIUM OXIDE	SODIUM OXIDE
23876 - <i>center</i>			99.35	0.21	0.10	0.30	0.06	0.01	0.01
23877 - ✓			98.82	0.47	0.13	0.40	0.06	0.01	0.01
23878 - ✓			98.42	0.66	0.17	0.56	0.06	0.01	0.01
23879 - ✓			99.17	0.21	0.04	0.42	0.02	0.01	0.01
<i>West side 23880</i>			99.05	0.19	0.05	0.34	0.02	0.01	0.01
<i>Center 23881</i>			99.20	0.31			0.01	0.01	0.01
<i>East side 23882</i>			99.15	0.44	0.05	0.32	0.02	0.01	0.01

*West side 23880*  
*Center 23881*  
*East side 23882*

per ounce

# COAST ELDRIDGE

ENGINEERS & CHEMISTS

125 FINE ARTS BUILDING, WASHINGTON, D.C.

Name of Laboratory

DATE

Client: Drill Core

REPORT

By: Shippen & Associates Ltd.,

1111 M Street

Washington, D.C.

ATTN: Mr. H.H. Talbot

We have tested six samples of Quarter Drill Cores submitted by you on November 14, 1967 and report as hereunder:

## SAMPLE IDENTIFICATION

The samples were labelled

No. 1	-	0'	-	17'
No. 2	-	17'	-	18'
No. 3	-	37'	-	49'
No. 4	-	49'	-	63'
No. 5	-	64'	-	78'
No. 6	-	27'		

## TEST PROCEDURE

The samples were placed in a muffle furnace at 1800° F for 20 minutes, removed from the muffle and cooled to room temperature. Observations were made during the heating period and subsequent cooling period for any disintegration or swelling of the samples.

## OBSERVATIONS

There was no discernible swelling of the samples during heating. The samples did not break during the heating or cooling periods and retained their shape throughout the test.

After cooling it was noted that the samples were easily broken along fracture lines that appeared to be present in the sample before heating.

COAST ELDRIDGE

W. Wong.  
SENIOR CHEMIST

1/JP

# COAST ELDRIDGE

ENGINEERS & CHEMISTS LTD.

125 EAST 41ST AVENUE VANCOUVER B.C.

C. E. Crippen & Associates  
Vancouver Laboratory  
Quartz Samples

12-07-1967  
December 5, 1967

C.E. Crippen & Associates Co. Ltd.,  
305 Hamilton Street  
North Vancouver, B.C.

ATTENTION: Mr. Oakey

We have tested eight samples of Quartz sampled by us on November 24, 1967 at the client's premises in North Vancouver and report as hereunder:

### RESULTS

#### A. Sampling

The samples to be analyzed were selected from the box of drill core to be as representative of the core as possible. Several chips were chosen at intervals along the core, and where the footage contained drill sludge, this sludge was included in the sample.

#### B. Identification of Samples

- 1. 0' - 17' - Core and Sludge
- 2. 0' - 17' - Core only
- 3. 17' - 20' - Core and Sludge
- 4. 20' - 32' - Core only
- 5. 32' - 42' - Core only
- 6. 42' - 62' - Core only
- 7. 62' - 69' - Core only
- 8. 69' - 79' - Core only

#### C. RESULTS

- 1. See the attached table for the analysis of Samples No. 1, 2, 3, 4, 5, 6 and 8.
- 2. See the attached semi-quantitative spectrographic analysis of Sample No. 7.

COAST ELDRIDGE

*W. Wong*  
W. Wong,

SENIOR CHEMIST

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PHONE: (604) 681-1111  
CABLE ADDRESS: "ELDRIDGE"

FILE NO. C.3-C.2-67-00127

DATE December 5, 1967

SEMI QUANTITATIVE SPECTROGRAPHIC ANALYSES

# COAST ELDRIDGE

ENGINEERS & CHEMISTS LTD.

125 EAST 4TH AVE. VANCOUVER 10, CANADA

The following table shows the result of semi quantitative spectrographic analyses made on \_\_\_\_\_ samples submitted.

SAMPLE IDENTIFICATION	Al	S	Zn	Ba	Be	B	B	Cd	Ca	Cr	Cu	Cu	Ga	Au	Fe
Sample 7	5.0	ND	ND	0.03	Trace	ND	ND	ND	3.0	0.003	0.001	0.001	ND	ND	2.0
SAMPLE IDENTIFICATION	Pb	Mg	Mn	Mo	Nb	Ni	Si	Ag	Sr	Ti	W	V	Zn		
	ND	2.0	0.2	ND	ND	ND	Match Trace	0.01	ND	ND	0.6	0.001	0.01		

All results are expressed as percent by weight

ND - NOT DETECTED

Match - Major constituent

Trace - 0.01% or less but still within spectrographic range

COAST ELDRIDGE ENGINEERS & CHEMISTS LTD.

December 5, 1937

ANALYSIS OF MINERAL SAMPLES

6-17  
 0-17  
 17-23  
 52-44  
 41-65  
 44-71

	<u>Sample 1</u>	<u>Sample 2</u>	<u>Sample 3</u>	<u>Sample 4</u>	<u>Sample 5</u>	<u>Sample 6</u>	<u>Sample 8</u>
Silica Dioxide (SiO <sub>2</sub> )	98.45 %	97.29 %	99.18 %	99.15 %	99.04 %	99.12 %	87.98 %
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	0.20 %	0.02 %	0.10 %	0.08 %	0.07 %	0.07 %	0.10 %
Alumina Oxide (Al <sub>2</sub> O <sub>3</sub> )	0.75 %	0.70 %	0.28 %	0.27 %	0.32 %	0.38 %	0.65 %
Calcium Oxide (CaO)	0.25 %	0.55 %	0.05 %	0.05 %	0.05 %	0.06 %	1.85 %
Magnesium Oxide (MgO)	0.13 %	0.30 %	0.06 %	0.07 %	0.06 %	0.07 %	1.65 %
Titanium Oxide (TiO <sub>2</sub> )	0.01 %	0.003%	0.01 %	0.01 %	0.007%	0.005%	0.01 %
Loss On Ignition	0.21 %	1.17 %	0.43 %	0.37 %	0.47 %	0.28 %	7.49 %
	+	x	v				✓

**COAST ELDRIDGE**  
ENGINEERS & CHEMISTS LTD.

1134

125 EAST 4TH AVE. VANCOUVER  
Quartz Samples  
P. J. Schappert & Associates  
1111 Hamilton Street  
Vancouver, B.C.

1134-67-3000  
December 15, 1967

We have tested 18 samples of Quartz submitted by you on December 7, 1967 and report as hereunder:

**RESULTS**

The samples were two boxes of drill core representing 64 feet of quartz. The core was split in half at our laboratory and half was assayed as per the attached table.

**COAST ELDRIDGE**  
W. Wong.  
TECHNICAL ASSISTANT

December 13, 1951

ANALYSIS OF QUARTZ - DIAMOND DRILL HOLE NO. 2

	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Sample 7	Sample 8	Sample 9
FOOTAGE -	0' - 4'	4' - 9'	9' - 11'	11' - 14'	14' - 20'	20' - 22'	22' - 25'	25' - 27'	27' - 29'
Silica Dioxide (SiO <sub>2</sub> )	99.46 %	99.55 %	99.42 %	99.52 %	99.75 %	99.57 %	99.62 %	99.67 %	99.65 %
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	0.06 %	0.02 %	0.03 %	0.04 %	0.03 %	0.015%	0.04 %	0.025%	0.06 %
Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )	0.07 %	0.02 %	0.10 %	0.09 %	0.01 %	0.07 %	0.09 %	0.02 %	0.08 %
Calcium Oxide (CaO)	0.07 %	0.02 %	0.04 %	0.03 %	0.03 %	0.04 %	0.02 %	0.005%	0.01 %
Magnesium Oxide (MgO)	0.02 %	0.01 %	0.02 %	0.01 %	0.01 %	0.02 %	0.02 %	0.01 %	0.02 %
Titanium Oxide (TiO <sub>2</sub> )	0.003%	0.004%	0.003%	0.002%	0.001%	0.001%	0.003%	0.005%	0.003%
Loss on Ignition	0.15 %	0.08 %	0.16 %	0.18 %	0.06 %	0.16 %	0.16 %	0.10 %	0.17 %
		✓	✓	✓					
	Sample 10	Sample 11	Sample 12	Sample 13	Sample 14	Sample 15	Sample 16	Sample 17	Sample 18
FOOTAGE -	29' - 34'	34' - 35'	35' - 40'	40' - 46'	46' - 52'	52' - 53'	53' - 55'	55' - 58'	58' - 64'
Silica Dioxide (SiO <sub>2</sub> )	99.69 %	99.65 %	99.73 %	99.69 %	99.61 %	99.67 %	99.65 %	99.73 %	99.67 %
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	0.01 %	0.015%	0.015%	0.03 %	0.04 %	0.03 %	0.015%	0.02 %	0.01 %
Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )	0.06 %	0.11 %	0.06 %	0.08 %	0.12 %	0.08 %	0.08 %	0.07 %	0.07 %
Calcium Oxide (CaO)	0.01 %	0.01 %	0.01 %	0.01 %	0.05 %	0.04 %	0.04 %	0.03 %	0.03 %
Magnesium Oxide (MgO)	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %	0.01 %
Titanium Oxide (TiO <sub>2</sub> )	0.002%	0.002%	0.003%	0.003%	0.002%	0.002%	0.002%	0.001%	0.001%
Loss on Ignition	0.18 %	0.15 %	0.13 %	0.12 %	0.10 %	0.10 %	0.09 %	0.05 %	0.03 %

EAST LONKIDGE  
ENGINEERING & CHEMISTS LTD.

*STANDARD*  
*0.001*  
*0.001*

*M.C. 0.030*

# COAST ELDRIDGE

ENGINEERS & CHEMISTS LTD.

125 EAST 4TH AVE VANCOUVER 10, B.C.

TELEPHONE 272-1111

TELEX

04 05

Chemical Testing

Vancouver Laboratory

Quartz Core

C.S.-011-111-111  
(Addition)

DATE December 22, 1961

REF. NO.

ORDER NO.

Submitted by G.H. Crippen & Associates Ltd.  
1905 Hamilton  
Vancouver, B.C.

We have tested the sample of drill core submitted by you and report as hereunder:

### TEST PROCEDURE

The sample was heated to 850°C for 30 minutes and allowed to cool.

### RESULTS

Heating tests performed on the drill core caused cracking or flexing of the core.

COAST ELDRIDGE

*[Signature]*  
Senior Chemist

/bh