EVALUATION OF SILICA SHOWINGS

MIKE MINERAL CLAIM

GREENWOOD, B. C.

GREENWOOD MINING DIVISION

MAP SHEET M82E/2

LATITUDE 49002'N

LONGITUDE 118038'W

OWNER: C.J. GLASS

DPERATOR: GET RAY HOLDINGS INC.

N. L. TRIBE, P. ENG. GEOLOGICAL BRANCH ASSESSMENT REPORT

12,472

# EVALUATION OF SILICA SHOWINGS

MIKE MINERAL CLAIM

GREENWOOD, B. C.

# GREENWOOD MINING DIVISION

MAP SHEET M82E/2

LATITUDE 49002'N

LONGITUDE 118038'W

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Val 1, 2.

Mint 5, 7, 8, 9, 10, 14, 15, 16, 17, 18, 19

A.h. 3917 Allen Geological Eng. Ltd.

B.C. Department of Energy, Mines and

Petroleum Resources.

Assessment Report 3917

September 18, 1972.

Appendix III Geological Survey

AR 479.5

Sil 1, 2 Fr. Sil 3 - 8

Allen Geological Engineering Ltd.

Assessment Report 4795

B.C. Department of Energy, Mines and

Petroleum Resources.

December 18, 1973.

EVALUATION OF SILICA SHOWINGS

MIKE MINERAL CLAIM

GREENWOOD, B. C.

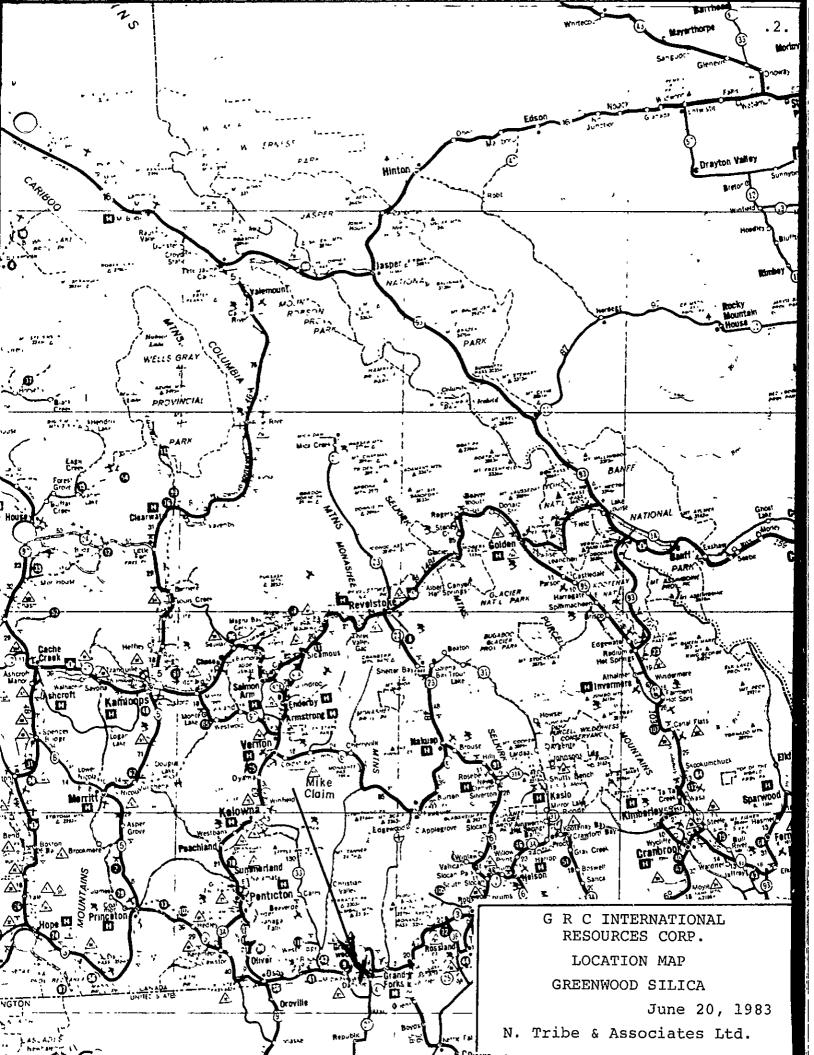
GREENWOOD MINING DIVISION

MAP SHEET M82E/2

LATITUDE 49<sup>O</sup>02'N LONGITUDE 118<sup>O</sup>38'W

#### INTRODUCTION

The purpose of this report is to evaluate the silica showings on McCarren Creek just south of Greenwood. The object of the work will be to establish the grade of the deposits, the dimensions of their surface expression, establish potential tonnage and develop a program to prove this tonnage.



#### LOCATION, ACCESS AND TITLES

The property can be reached by travelling on Highway 3 approximately 500 km east of Vancouver. Access to the property is by good secondary road, turning to the east off Hwy. 3 at Boundary Falls, approximately 3 miles south of Greenwood. This road is the McCarren Creek Road. Proceed easterly 9 km and turn left onto a little-used logging access road at an abandoned log house. Proceed 3 km along this road to the silical showings. This road is accessible to 2-wheel drive vehicles in dry weather and would be suitable for haulage of silical with only minor upgrading and improvement of drainage.

The following information was taken from the location post of the Mike Claim: Claim Name: Mike

Locator: W. Smith

FMC No.: 156273

Agent For: Russ Pike

FMC No.: 156660

Date Completed: July 1977

Number of Claim Units: S2W3

The topography of the claims consists of a moderate to steeply south-sloping sidehill cut by small valleys carrying a small flow of runoff water into McCarren Creek. Elevation of the showings is approximately 4,500 feet. Vegetation in the area is light secondary evergreen forest. The area having been logged off approximately 20 years ago. Numerous logging tracks are still evident throughout the claims. Many of these are blocked by downed trees but could be rehabilitated with very



little effort. Outcrop in the area is sparse, except where resistant ridges of silica remain.

#### **GEOLOGY**

The main country rock on the Mike Claims is composed of greenschist faces, volcanic and sedimentary rocks believed to be Carboniferous in age. Into this volcanic sedimentary environment is intruded several small irregular masses of syenite or syenodiorite or syenite porphyry often showing a close spatial relationship to the silica pods. The silica appears as a resistent white, very fine grained massive rock. The origin of the silica is not immediately evident, but may be a remobilization of one of the cherty members of the sedimentary formation.

The most prominent feature, structurally, is a set of north-east trending faults which effectively cut off the silica bodies. In the area of the silica, the rocks generally strike east-west to northwest-southeast and dip 15° - 30° to the north. The silica bodies, on preliminary investigation, appear to be striking generally east-west and dipping steely to the north. However, this cannot be determined accurately without drilling.

Two main areas of silica were noted: one in the north-east corner of the Mike Claim, which is referred to as the "Main Zone". A second occurrence is noted just east of the location post of the Mike Claim and is approximately 100 meters east of the eastern boundary of the Mike Claim. This is referred to as the "East Pod".

#### SAMPLING AND TONNAGE CALCULATIONS

The main zone was sampled by taking chip samples across three locations marked on the geology map as "Q-1, Q-2 and Q-3". These samples were taken by collecting golfball sized pieces, one every 20 cm. along the line shown. These samples generally weighed approximately 10 kg. and are believed to be representative of the silica bodies. The samples were then sent to Kamloops Research and Assay Laboratory Ltd. in Kamloops, B.C. and were tested for gold, alumina, calcium, iron, phosphorous and silica. Table 1 shows these results.

The average of these results follows.

TABLE 1

	Au. 02./T.	Al203	CaO -\frac{\partial}{2}	Fe <sub>2</sub> 93	SiO <sub>2</sub>	P205
Ql	.006	.06	.98	.16	97.4	.34
Q2	.004	.13	.56	.23	98.5	.11
Q3	.014	.09	2.20	.13	95.6	.93
Q4	.001	.04	2.15	.14	95.8	.89
	<del></del>		*******		<del></del>	
Ave.	.006	.08	1.47	.17	96.8	.57

These results indicate a silica content of all the zones averaging about 97%  $SiO_2$ . With selective mining practices and confining activities to area  $Q_1$  and  $Q_2$  grades of approximately 98%  $SiO_2$  can be expected.

Gold values of .006 oz. per tonne represent about \$3.00 at present prices and could be of interest if the silica were to be used as a flux in a smelting operation such as Cominco's smelter at Trail.

The geological mapping was done on a scale of 1:1,000, using the outcrop method of mapping in which each of the outcrops are measured, identified and drawn on the plan (Figure No. 4 and Figure No. 5). The interpretation of the shape of the zone is then superimposed upon this outcrop pattern. It is believed that this will provide the most accurate estimate of tonnages. Figure No. 3 is a photo-reduced composite of Figures 4 and 5 and demonstrates the relationship between the two zones and the access roadways between them and some minor geological features adjacent to the roadways. Tonnage calculations are demonstrated on Figure No. 6 and Figure No. 7. Tonnages are calculated by approximating the interpreted zone with a fairly simple geometric figure, measuring the area of this figure, using a specific gravity of 2.78 gm./cc and assuming a usable depth of 20 meters. It should be noted that not all the exposed silica is calculated into these tonnage figures, but only the largest and most convenient of the blocks are included and only to a depth of 20 meters.

The figure of 20 meters is used as this is approximately the maximum height of a pit face permitted under the Mining Act without the use of safety berms. Safety berms would involve the removal of considerable waste material. To a depth of 20 meters very little waste would be moved.

The following is a summary of the four blocks treated in this manner.

Block	Area	Tonnage	<u>Grade</u>
Q-1	2,500 meters <sup>2</sup>	7,000 tonnes/meter	97.4% SiO <sub>2</sub>
		of depth to a depth	
		of 20 meters.	
	,	140,000 tonnes	
Q-2	2,400 m. <sup>2</sup>	6,700 tonnes/m. to	98.5% Sió <sub>2</sub>
		a depth of 20 meters.	
		133,400 tonnes	
Q-3	2,520 m. <sup>2</sup>	7,000 tonnes/vertical	95.6% SiO <sub>2</sub>
		meter to a depth of	_
		20 meters.	
		140,000 tonnes	
Q-4	2,470 m. <sup>2</sup>	6,900 tonnes/vertical	95.8% SiO <sub>2</sub>
(east p	od)	meter to a depth of	
		20 meters.	
		138,000 tonnes	

Total tonnage available in all four blocks:

551,400 tonnes @ 96.8% SiO<sub>2</sub>.

#### CONCLUSIONS

Based on the surface exposures and outcrops mapped in this survey it can be concluded that significant tonnages of silica are present in grades of 97.0% plus or minus 1%. The

area is easily accessible and could be developed with a minimum of expenditure on roadwork and a minimum of infrastructure.

#### RECOMMENDATIONS

It is, therefore, recommended that a two-phase program be undertaken to prove up the tonnages indicated by the surface mapping and to collect a bulk sample for shipment to prospective buyers.

Phase I will concentrate on the drilling of Blocks Q-1 and Q-2 with the object of proving tonnages to 20 meters.

Phase II will concentrate on upgrading of the existing roads and tracks, mining of the bulk sample and shipping it to the prospective buyer.

# Phase I

Phase I should consist of a rotary percussion drilling program of short vertical close-spaced holes drilled into blocks Q-1 and Q-2. These two blocks have the best grades and are the most easily developed. The holes should be drilled to 20 meters in depth and be located in a line across the broadest section of these two blocks. The suggested holes are laid out on Figure No. 6 (as red circles).

#### Costs:

Roadwork and minor trenching \$ 1,040.

D6 bulldozer @ \$65./hr. for

2 days, 8 hrs./day

Mobilization of drill, say 500.

200 meters percussion drill- \$ 10,000. ing, airtrack or equivalent \$50./meter 4,500. Supervision - sampling 15 days @ \$300./day Reporting: 3 days plus 1,200. supplies, typing, copying, etc. Assays: at \$60., say 20 1,200. Sub Total: \$ 18,440. Contingencies @ 10% 1,844. 20,284. TOTAL:

# Phase II

### Phase II would involve:

- i. the upgrading of the roads, building of a cattle guard at McCarren Creek road and installation of 3 culverts.
- ii. Stripping and stockpiling of the topsoil from over the mineable zones for later use in reclamation.
- iii. Drilling and blasting of 1,000 tonnes for a
   trial shipment to buyers.

#### Costs:

#### i. Roadwork

- cattleguard \$ 1,000. - culverts: 3 x \$500. 1,500.

- 3 days, D6 bulldozer 1,950.

\$65./hr., 10 hrs./day

	- 1 day grader \$75./hr. 10 hrs. ditching and	\$	750.
	<del>-</del>		
1.1	drainage.		2 222
11.	Stripping and stockpiling		3,250.
	topsoil available for		
	reclaimation,		
	5 days, 10 hrs./day @ \$65.		
	per hour		
iii.	Drilling and blasting of		30,000.
	1,000 tonnes for trial		
	shipment.		
	Drill, blast, load out,		
	say \$30./tonne (Afree		
	Blasting, Kelowna).		
,	Freight to buyer, say,		50,000.
	10¢/tonne mile for 500		
	miles x 1,000 tons		
	(quoted from Arrow		
	Transport.).		
	Supervision, say 40 days		12,000.
	at \$300./day		
	Reporting, say, 5 days		1,500.
	at \$300./day		
	Sub Total:	\$ 1	01,950.
	Contingencies @ 20%:		20,390.
	TOTAL:	\$ 1	21,340.

It is estimated that a \$10,000. reclamation bond will be required by the Department of Energy, Mines and Petroleum Resources.

Respectfully submitted this 21st day of June, 1983.

Norman L. Tribe, P. Eng.

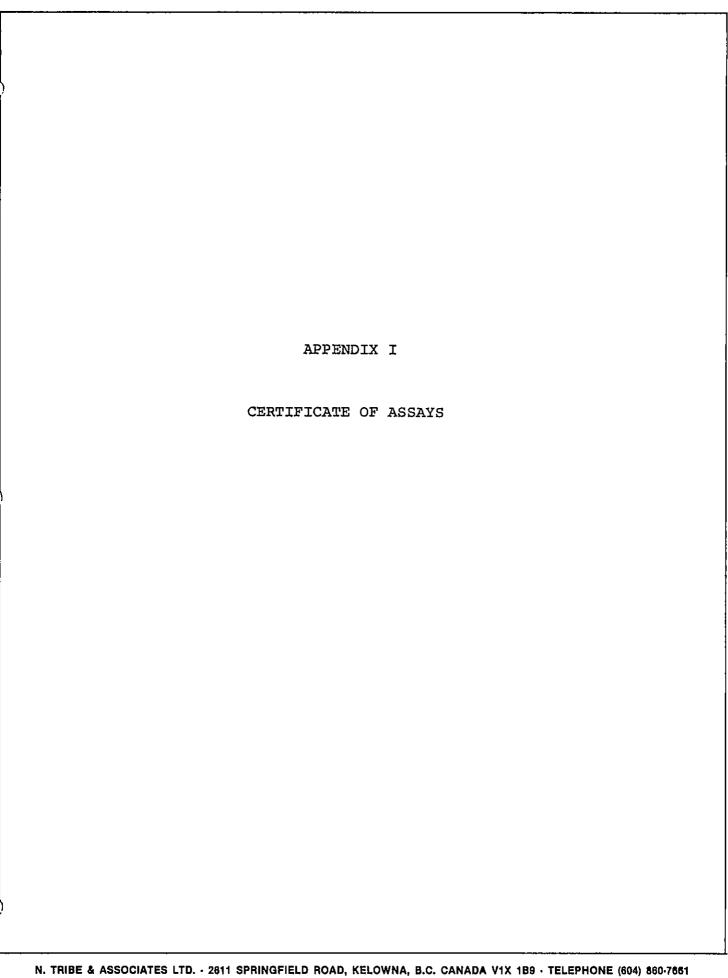
#### CERTIFICATE

I, NORMAN LLOYD TRIBE, of the City of Kelowna, Province of British Columbia, hereby certify as follows:

- 1. I am a consulting Geologist with an office at 2611 Springfield Road, Kelowna, B.C., VIX 189.
- 2. I am a registered Professional Engineer of the Province of British Columbia.
- 3. I graduated with a degree of Bachelor of Applied Science from the University of British Columbia in 1964.
- 4. I have practiced my profession for nineteen years.
- 5. I have no direct, indirect or contigent interest in the claims under option to or the shares of G R C International Resources Corp., nor do I intend to have any interest.
- 6. This report dated June 20, 1983 is based on data collected during three days on the property: May 16, 1983 in the company of Mr. John Glass of Penticton, B.C. and May 19 and 20, 1983 with two helpers conducting a detail outcrop survey.

DATED at Kelowna, Province of British Columbia this 21st day of June, 1983.

Norman Kloyd Fribe, P. Eng., Consulting Geologist.





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# **CERTIFICATE OF ASSAY**

	2611 Sprine Field Road  Kelowna, B.C.  Thereby certify that the for	llowing are the recul		4. 4			Date		2, 1983	
Kral No	Marked Marked	Au	Al <sub>2</sub> 0 <sub>3</sub>	CáU	Fe <sub>2</sub> 0 <sub>3</sub>	1	P <sub>2</sub> 0 <sub>5</sub>	s	amples	<del></del>
		ounces/ton	percent		percent	<del>                                     </del>	<del></del>		<u> </u>	
1 2 3 4	9471-Q-1 9472-Q-2 9472-Q-3 9472-Q-4	.006 .004 .014 L.001	.06 .13 .09 .04	.98 .56 2.20 2.15	.16 .23 .13 .14	97.4 98.5 95.6 95.8	.34 .11 .93 .89			
	L means "Less than"									
							ļ			

NOTE. Rejects retained three weeks. Pulps retained three months unless otherwise arranged

Registered Assayer, Province of British Columbia

APPENDIX II A.L. 3917

GEOLOGICAL SURVEY

VAL 1, 2

MINT 5, 7, 8, 9, 10, 14, 15, 16,

17, 18, 19

ALLEN GEOLOGICAL ENGINEERING LTD.

ASSESSMENT REPORT 3917

B. C. DEPARTMENT OF ENERGY, MINES

AND PETROLEUM RESOURCES.

SEPTEMBER 18, 1972.

3917

SQE/QE

VAL 1 & 2 : MINT 5,7.8,9.10,14.15.16,

17,18,19

GREENWOOD M.D.

118-50 5W

4-8-72 ; 8-8-72

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 3917\_ M

For:

SILCAN RESOURCES LTD. P.O. Box \$16 208 Professional Bldg. Lethbridge, Alberta.

. By :

ALLEN GEOLOGICAL ENGINEERING LTD.

601 - 325 News Street Yandouver 1, B.C.

September 18 1972.

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# GEOLOGICAL SURVEY

# YAL 1 4 2, MINT 5, 7-10, 14-19

GREENWOOD M.D.

#### INTRODUCTION

The silica deposits south of Greenwood, on the north side of McCarren Creek have been under investigation for some years. The writer first examined the area in September 1969 and in late 1971 supervised a trenching and drilling programme on the silica showings. The geological survey was conducted by the writer August 4-8 inclusive, 1972.

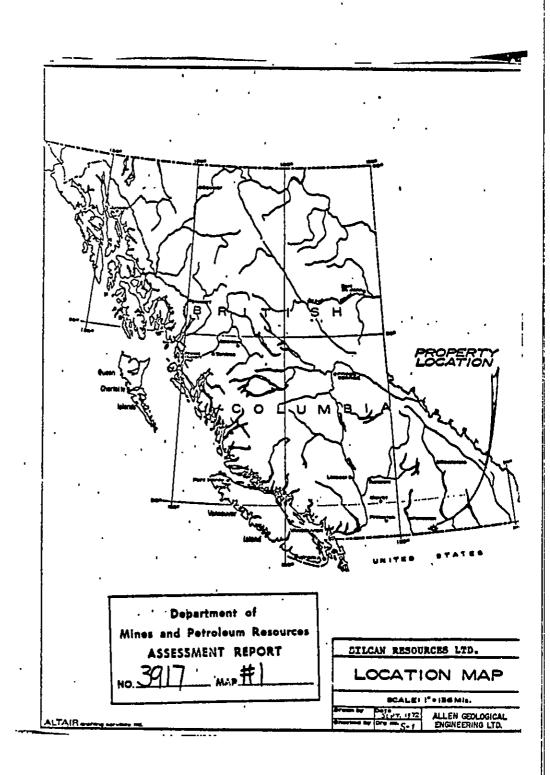
The object of the survey was to acquire as such information as available pertaining to the goology of the area included by the Val 1 and 2 and Mint 5, 7-10 and 14-19 claims.

# LOCATION AND ACCESSIBILITY

The property is located in south central British Columbia. It is  $\mathfrak{J}$  miles north of the U.S. border and 4 miles south of Greenwood.

Geographic location is  $49^{\circ}$ -02'-15" north and  $118^{\circ}$ -39'-20" west.

Access is by a good secondary road which branches easterly off Highway #3 at Boundary Creek, 2.3 miles south of Greenwood. It is six miles by this road from the highway to the milica deposits on the property.



#### PROPERTY

The property is composed of the following mineral claims:

VAL 1 4 2 Record Ne's. 30286 and 30287 MINT 5, 7-10, 14-19 \* \* 30291, 30293-6, 30300-305 SIL 1, SIL 2 Fr., SIL 3-8, Record numbers not yet available.

#### TOPOGRAPHY

The property extends from the high ridge extending west from Mount Astweed, south to the sultivated area on McCarren Creek.

Prom the high point at elevation 5,200 feet on the mortheast portion of the property, two southerly trending ridges extend into McCarren creek valley at an elevation of 3,800 feet. A small southerly flewing tributary creek crosses the eastern part of the property. On the western part of the property steep rocky cliffs alternate with flat terraces down to the 3,500 level.

#### GEOLOGICAL BURVEY

A geological survey was conducted over the Val 1 & 2, Mint 5, 7-10, 14-19 claims area by the writer. Page and Brunton compass traverses were made over the property at close intervals.

Topographic and geologic maps and air photos are available for the area, and data from these were compiled onto a base map on a scale of 300 feet per inch.

One main road and numerous logging roads branching from this cross the area. The hydro and gas lines cross the southern part of the property.

Geological data from all outcrop areas was noted and mapped. Mumerous rock specimens were acquired and photographs were taken for reference purposes.

#### GEOLOGY

#### Regional Geology

; ;

The Greenwood-Phoenix area has been mapped by the Geological Survey of Canada. Carboniferous and older volcanic and sedimentary rocks have been folded, faulted, and metamorphosed to phyllites, jamperoids and lime silicates.

Greenwood is underlain by a stock of Cretaceous or earlier granodiorite, and numerous smaller dykes and irregular masses of diorite, gabbro, pyroxenite, and serpentine occur throughout the older rocks.

Tertiary volcanic intrusives and minor sediments occur in the Phoenix area. Sulphide deposits, mostly copper-goldsilver, associated with skarn, have been mined in the area. Quartz vein deposits occur throughout the area.

#### Local Geology

The map area is underlain by metamorphic rocks which have been intruded by dioritic and andesitic dykes. Large tension fractures are occupied by pure white silica.

#### Stratigraphy

Wide somes of dark phyllite alternate with black impure argillite and minor marrow bands of quartiste, schist and limestone. Although locally centorted, the attitude is uniformly northwest.

The phyllite constitutes more than 80% of rock underlying the map area, and has been divided into the following four categories.

- 1. Dark green to black phyllite is the most prevalent.

  It is a compact, fine-grained, massive rock with much biotite and chlorite and thin bands of light coloured siliceous material. It is locally highly contorted and in places weathers a rusty brown.
- 2. In alternate bands and intergrading with the above is a dark compact argillaceous phyllite. The argillaceous groundmass is very fine grained. Chlorite, biotite and sericite are distinguishable as the main constituents. Limited thin banding is cream to brown feldsparquarts composition.

- Light grey-green argillaceous phyllite shows wider banding than the darker types above described. It weathers light grey-green and contains calcaerous bands and vuggy lenses.
- 4. Light grey to brown phyllite is more micaceous and siliceous with abundant fine siliceous bands out by vuggy calcite and opaque quartz stringers. This variety is not as abundantly exposed as the other phyllites.

#### Schiet.

Bands of tale schist, 5 to 10 feet wide, occur sparingly throughout the phyllites. This siliceous schist is light brown to grey, finely banded and strongly sheared. It is composed of tale, quarts, fine whitish mice and argillaceous material. Cubic pyrite occurs throughout.

#### <u>Argillite</u>

Fine-grained sooty black siliceous argillite occurs as a 50-foot band near the northeast earner of the property.

#### Limestone

One band of limestone ecours with phyllite on the ridge a short distance north of the property. This 10-feet section is composed of banded limestone and argillite, mottled finely crystalline light and dark grey limestone and light grey darker-weathering finely crystalline limestone.

#### Quartzite

On the high ridge at the north boundary of the property, to the east of the limestone strata, there is a 40-foot band of quartrite. It has the same attitude as the phyllite and limestone. It is a light grey cherty rock. Two almost perpendicular sets of fractures produce a surface blocky appearance.

# Intrusive Rocke

Several vertain northeasterly trending dykes out the sedimentary and setamorphic series. The dykes are andesitio, dioritic and gameoic.

The andesite as tark grey to green, aphanitic except for seattered laune of a dark micaceous mineral. Chlorite appears to be tre principal constituent. Most of these dykes are marroe.

The diorite types are larger than the andesite and range from medium to fine grained and light to dark grey. Biotite and hornhlends are evenly distributed throughout a matrix of cream coleured to black feldspars and accessory minerals.

The gabbro dyles is composed of uniform grains of biotite, hornblends, suggite and other ferromagnesian minerals, amounting to over \$5% of the rock volume, in a matrix of light to dark crystalline feldspars, pyroxens and olivens.

# Structure

The attitude of the sedimentary and metamorphic rocks on the property is uniformly northwesterly with steep northeasterly dips. Locally, such as in the vicinity of the silica deposits, the strike transa more to the west and the dips are in the 30 degree range. The general attitude is, however, demonstrated by the limestome, quartaite and schist horizon markers on the morth boundary of the property.

#### Structure (continued)

One fault some on the Mint 17 claim strikes merthwest and dips 20 degrees northeast.

The dioritic intrusives strike northeast and are close to vertical whereas the minor andesite dykes observed strike northwest and appear to be vertical.

Two of the smaller silica bodies appear to terminate on the a northwest side of a diorite dyke on the Mint 17 and 18 claims, whereas a silica lense on the Mint 16 slaim strikes northwest through a diorite dyke and dips 30 degrees northeast.

On the Val I am andesitio dyke appears to out the silics zone.

#### Silica Deposits

Three large and three small deposits of white high-grade silica have been observed and mapped on the property.

The large silica showings on the Val 1 and 2 claims have been partially exposed by trenching. A limited diamond drilling programme indicates that there may be two bodies of quarts or three, but additional exploratory work is necessary to ascertain the extent of these deposits.

The silica some on the Mint 8 claim appears to be up to 70 feet wide. It has been partially exposed for 450 feet, but additional silica is indicated by siseable angular quarts in the overburden. The attitude is not well defined.

.. \* ."

West of the silica showings on the Val claims there is a 20-foot silica some outting a diorite dyke. The footwall of the silica body is clearly exposed and it strikes at 125 degrees and dipm 30 degrees northeast. The length of this deposit is unknown.

In the southeast dorner of the Mint 17 claim there is a body of silica exposed on the northwest side of a diorite dyke. It is intermittently exposed for 150 feet. The width varies from 20 to 30 feet where exposed.

On the Mint 18 claim there is an eutorop of silica lying on the northwest side of the same diorite dyke as noted in the preceding paragraph. The silica is 10 feet wide, but the exposure is limited and little data is available as to extent or grade.

Sampling of the silica on the Val claims indicates a grade of 99.3% SiO<sub>2</sub> for much of the deposit. The large deposit on the Mint 8 claim has not been sampled, but appears to be of similar grade.

Put 1967

# SUMMARY AND CONCLUSIONS

The property is 6 miles by good secondary road up NoCarren Creek. The McCarren Creek turn off is 2.3 miles south of Greenwood at the old Boundary Falls townsite.

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The map area is underlain by Palaeosoic sedimentary and metamorphic rocks which have been intruded by Jura-cretaceous igneous rocks. Tertiary velcanic and sedimentary rocks occur throughout this region but not on the map area.

The most common rock is a dark massive compact phyllite which strikes northwesterly and dips steeply to the northeast. Lighter coloured phyllites occur in bands, as does minor limestone, schist, argillite and quartaite.

Open folding is indicated near the central part of the property and minor faulting is evident.

Pure white silica occurs in large tabular bodies on the Val 1 and 2 and the Mint 8 claims. This material has an indicated grade of 99.3%  $8iO_2$ . The nature and extent of the deposits has not been ascertained, but a sizeable tonnage of high grade silica is indicated.

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# RECOMMENDATIONS

It is recommended that the silica deposits on the property he developed as a source of high grade silica. The following works programme for the ensuing three months is recommended.

<u> 3</u>	stimated Costs
<ol> <li>Bulldoze to bedrock in the area of the silica deposits on the Val 1 and 2 and Mint &amp; claims and map the detailed geology and boundaries of the silica,</li> </ol>	4,000.00
<ol> <li>Cut rock tranches across the silica zones to a depth of 3 to 5 feet for bulk sampling and metallurgical testing,</li> </ol>	6,000.00
<ol> <li>Diamond Drill the silica deposits where required to provide data regarding tonnage and grade,</li> </ol>	7,000.00
<ol> <li>Have metallurgical test made on representative silica samples to provide data for marketing and mill design,</li> </ol>	. 3,000,00
5. Office, overhead and supervision,	3,000.00
6. Contingencies fund,	2,000.00
Total estimated costs,	\$25,000.00

Respectfully submissed,
ALLEW GEOLOGICAL ENGINEERING LTD.

Per\_CG

Ugak. allen.

Alfred R. Allen

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McNaughton, D.C., G.E.C., Paper 45-20, 1945

Map #10 - 1967, G.S.C. Paper 67-42

A.C.A. Howe, The Greenwood Silies Deposit November, 1964

M.E. Hersel, G.L., Crippen & Associates, personal communication 1969

A.R. Allen, A Silica Property near Greenwood, Oct 14, 1969.

\* \* \* \* \* \* \* \* \* \*

ALFRED R. ALLEY, P.Eng.

GBOLOGICAL SURVEY

GREENWOOD, M.D.

EXPENDITURES

Alfred R. Allen, P.Eng. August 3,4,5,6,7,8

September 10, 11, 12, 16 \$1,500.00

Motel and Meals,

50.40

Transportation,

140.00

Total..... \$1,690,40

Declared before me of the

No Free

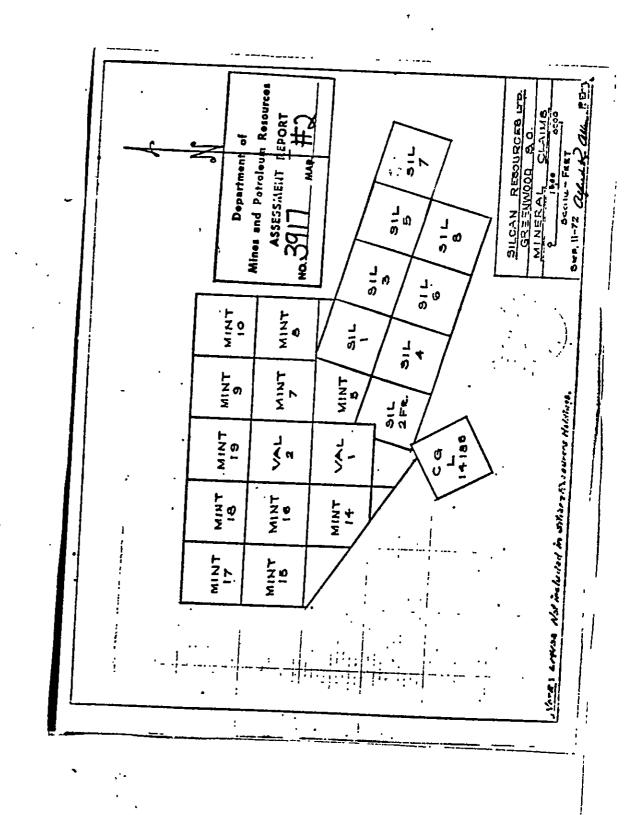
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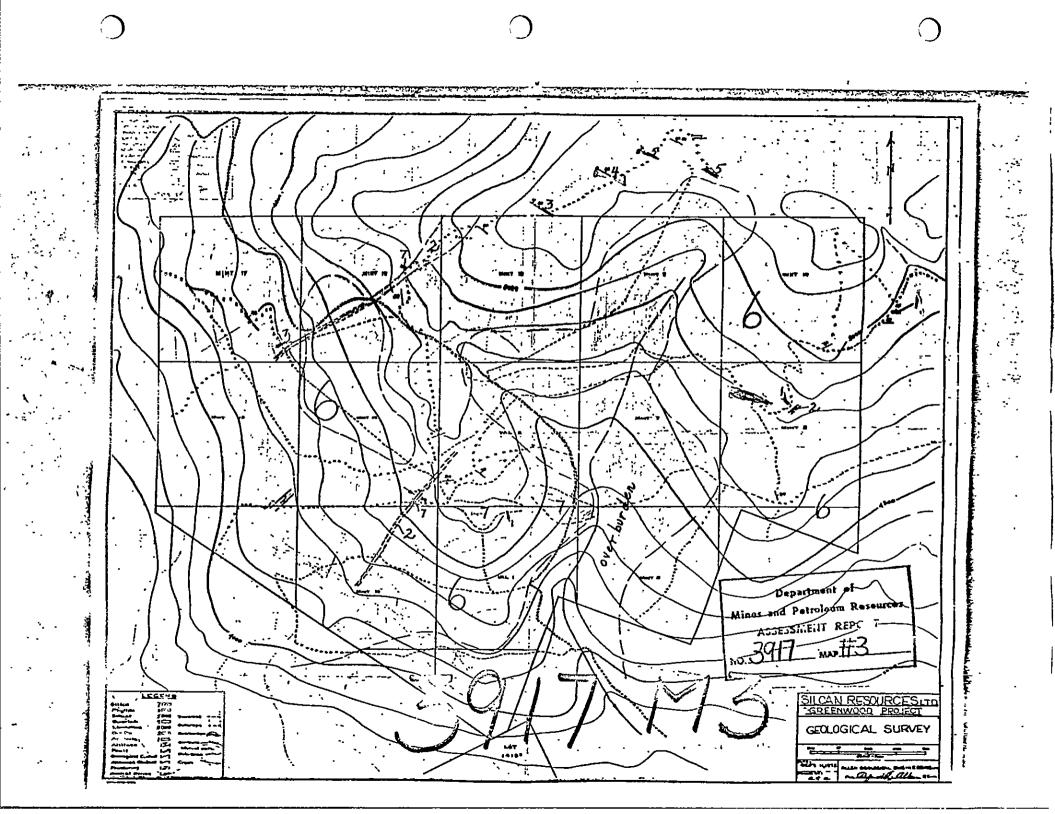
Commissioner for taking Affidavits within British Columbia or Artifician Public in and for the Province of British Columbia.

Sub-mining Recorder



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#### APPENDIX III

GEOLOGICAL SURVEY

SIL 1, SIL 2 FR., SIL 3 - 8

ALLEN GEOLOGICAL ENGINEERING LTD.

ASSESSMENT REPORT 4795

B. C. DEPARTMENT OF ENERGY, MINES

AND PETROLEUM RESOURCES.

DECEMBER 18, 1973.

GEO LOGICAL

SIL 1, SIL 2 Fr,

Greenwood M.D.

82E 2E 2-8-73:3-8-73 27-10-73 : 31-10-73

December 18, 1973 471

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SILCAN RESOURCES LTD.

P.O. Box 816 208' Professional Building Lethbridge, Alberta

Department of

Mines and Petroleum Reseurces

ASSECSIAL . REPORT

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ALLEN GROLOGICAL ENGINEERING LTD.

601 0 115 Nove Street Vancouver, A.C.

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LOCATION AND ACCESSIBILITY	1.
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TOPOGRAPHY	2.
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SUDDARY ADD CONCLUSIONS	4.
REFERENCES	7.

#### HAPS:

# | S-1 Location Map

#] 8-2 Geology Map

#38-3 Claims Hap

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# GEOLOGICAL SURVEY SIL 1. SIL 2 Pr., SIL 3-8

GREENWOOD M.D. B.C.

#### INTRODUCTION

The SIL claims were examined by the writer August 2, 3 and October 27-31 inclusive, 1973.

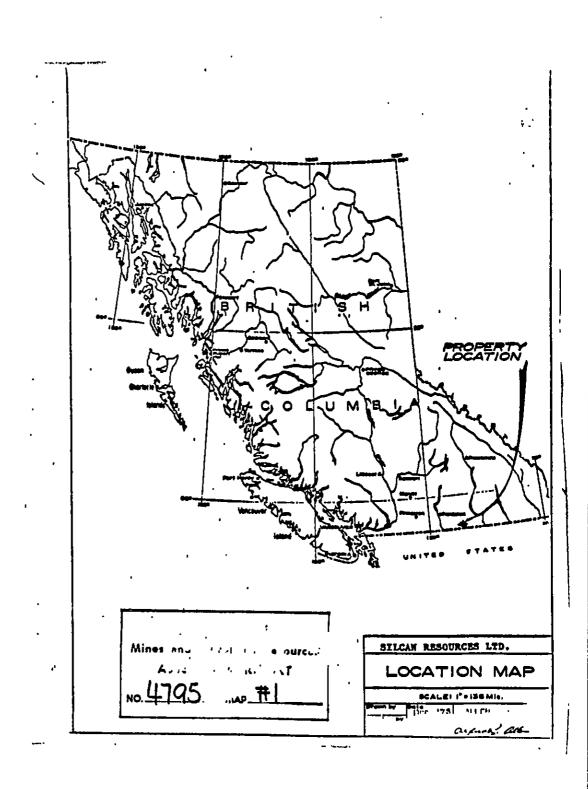
Existing topographic and geological maps and aerial photos were beneficial to the survey and control was provided by the many roads ever the property as well as the hydro and gas lines.

The geology is shown on Map 2-2 accompanying this report.

### LOCATION AND ACCESSIBILITY

The preperty is legated in south central British Columbia, between the village of Greenwood and the U.S. border, at  $49^{\circ}-01^{\circ}$  morth latitude and  $118^{\circ}-39^{\circ}-20^{\circ}$  west longitude.

From highway #3, at Boundary Palls, 2 miles south of Greenwood, there is a good secondary road which rfollows up McCarren Creek easterly to the property, a distance of 5 miles.



 $\bigcirc$ 

#### PROPERTY

The following adjoining mineral claims were located August 5, 1972.

 STL
 1
 Recent Number
 36092

 STL
 2 Fraction
 # # 36093

 STL
 3-8 inclusive
 # # 36094-99 inclusive

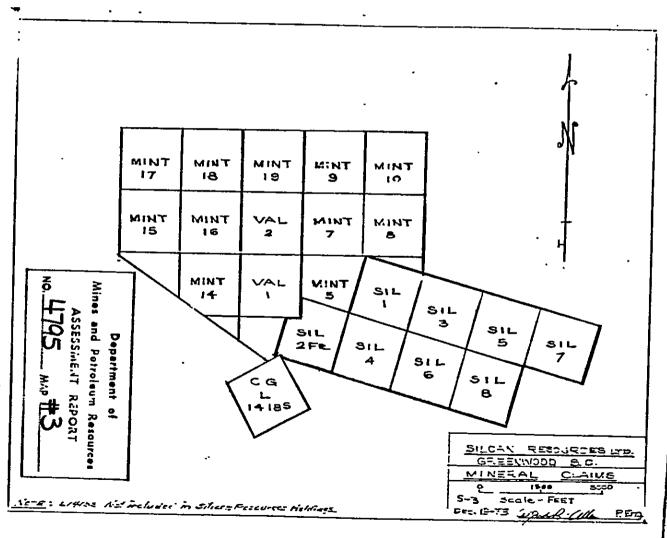
#### TOPOGRAPHY

McCarren Creek flows west across the property. Small intermittent tributary streams trend north and south. Creek elevation on the central part of the property is 3,750 feet above sea level.

Prom the creek valley gentle slopes and rounded ridges extend eff the property to Mt. Wright at elevation 5,250 feet on the southeast and Mt. Atwood to the northeast at 5,400 feet elevation above sea level.

McCarren Creek flows into Boundary Creek at 2,000 feet elevation.

Outerops are plentiful and overburden appears light.



#### GEOLOGICAL SURVEY

A geological survey was conducted over the property by the writer. The survey was started August 2nd and 3rd, 1973, but work was stopped by the Forestry Department because of serious fires throughout the entire boundary area. The survey was completed by the writer October 27th, 28th, 29th, 30th and 31st, 1973.

Logging is in progress on and near the property. The pipe and gas lines and numerous roads which criss-cross the property were traversed.

Pace and Brunton compass traverses were made between the roads. The topography was sketched. Outcrops were located, details of the geology noted, and all data placed on a field map. The geology is shown on map S-2 in the pocket of this report.

#### GEOLOGY

The McCarren Creek area is underlain by Carbeniferous and older recks of sedimentary origin. These have been folded, faulted, strongly metamorphosed and intruded by diorite dykes. Quarts veins occupy tension fissures. A granodiorite stock outcrops north of the property near Greenwood. Small and scattered Tertiary remnants are evident near, but not on the property. Gold, silver and copper deposits occur throughout the Greenwood area.

The most seemon rock exposed on the claims is phyllite. Within this massive rock are bands of siliceous argillite, schiat and quartzite. These rocks are finely banded, contorted, and fractured. The general strike is northwesterly and dip flat to 20 degrees northeast or southwest. Diorite dykes trend northerly and dip steeply to vertical. Strong shearing trends generally northwesterly. One band of serpentine occurs adjacent to a series of feldspar porphyry diorite dykes on SIL 1 claim.

The phyllite observed is of three types, namely:

- Black, massive fine-grained rock, thick bedded and finely banded with light grey quarts-feldspar meterial. Weathered surfaces are dark green. Chlorite, biotite and aloas are the major constituents.
- Lighter greenish black argillaceous phyllite.
   White mice and siliceous very fine-grained bands
  of argillite give the weathered surface a light
  green and dark green banded appearance, with many
  brownish bands.
- Siliceous light grey to cream coloured rock with much white mica, flinty quartaitic bands, irregular yuggy calcitic veins, and quarts stringers.

Quartiste, or contact material, near diorite is fairly ecomen. This rook is light greyish-green, micaceous and conterted. It weathers light grey to reddish brown. It is evident near the main road, on the hydro line adjacent to diorite porphyry and a lense of white impure quarts.

Diorite dykes, 10 to 200 feet wide, are composed of biotite and hornblende with dark feldspars and white angular feldspar phenocrysts. Marrow chilled borders occur at the sharp contacts with the phyllite.

A band of serpentine is located in phyllite adjacent to a series of diorite dykes on the SIL i claim. The rock weathers brown to orange-red and light green. It has a scapy feel and fractures into sharp curved platy fragments. It contains minor cubic pyrite and is weakly magnetic. It is highly contorted but appears to be nearly flat lying. The full extent of the sone is blanked by overburden, but it appears to be in excess of 100 feet wide.

The one impure silica deposit exposed on the property is about 35 feet wide, strikes north 10 degrees east, and dips west to vertical. It lies adjacent to a feldspar porphyry diorite dyke a few feet east of the road up to the major Silica deposits on the hydro line. Mica and feldspar specks are evident in the quarts, and red weathering indicates possible minor pyrite content.

General structural trends are northwesterly with flat dips for the phyllites, and northerly with steep dips for the diorite dykes. Minor breccia bands occur between some diorite dykes.

#### BUMMARY AND CONCLUSIONS

The SIL mineral claims lie adjacent to the MINT and VAL claims where sizeable deposits of white quarts occur in phyllite. The SIL claims area appears to be underlain by nearly flat-lying phyllites trending northwesterly. Diorite porphyry dykes cut the phyllites, and there are brecciated phyllites at and between some dykes. The dykes are vertical and strike close te north south. A band of serpentine lies adjacent to a large diorite porphyry dyke on the SIL #1 elaim. We sizeable veins of white quarts are evident.

It is eencluded that the SIL claims are underlain by phyllites with diorite dykes and the possibility of finding high grade quarts deposits is practically nil, hence no more exploratory work is recommended on the SIL claims.

Respectfully submitted,

ALLEM GEOLOGICAL ENGINEERING LTD.

Por Cuy & Olley 1. Ing.

Vanceuver, B.C. December 18, 1973.

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'Alfred R. Allen, P.Eng.

#### GEOLOGICAL SURVEY

GREENWOOD, M.D.

#### Expenditures

Alfred R. Allen, P.Eng., August 2 & 3, 1973 October 27, 28, 29, 30, 31, 1973

Haps , Office \$ 46.00 Fees \$800.00

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