GEOLOGICAL REPORT

THE CHESS CLAIMS

KAMLOOPS MINING DIVISION

BRITISH COLUMBIA

92 I 14/15

Submitted by:

P.A. Philipchule

Date: Sept. 25/67

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SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

- 1. Ore mineralization was traced continuously in the northern half of the Chess Claims on two one-mile traverses. One traverse followed along a major shear zone perpendicular to Criss Creek; the other traverse extended along rock exposures in Criss Creek.
- 2. Lead, zinc, silver, and copper in the form of galena, sphalerite, and argentiferous tetrahedrite are predominant along Criss Creek. Many rock exposures contain the secondary copper minerals azurite and malachite. Molybdenite was found in abundance at two locations in the major shear zone, and to a lesser degree in other samples. Assay results indicate gold in every sample.
- 3. Fifteen bags of samples were taken from random locations and assayed in Vancouver. These samples are representative of a rock exposure at each location; one particular rich ore vein was not only sampled.
- 4. The ore minerals occur in rocks that have been highly sheared and fractured by quartz, aplite, and granite porphyry dykes. The indigenous country rocks which are sandstones, conglomerates, and underlying lava greenstones have been altered to gneisses and schists in the contact zones. Alteration minerals such as chlorite, hematite, serpentine, and biotite mica are common.
- 5. Within the shear zones are quartz bodies, veins and stringers carrying sulphides in variable amounts. Some of the quartz exposures

are up to 12 feet long and 3 feet wide. The ore minerals occur as veins up to 3 inches thick within the quartz.

- 6. Assay results indicate high grades in silver at six locations ranging from 5 to 24 ounces per ton with sporadic high grades in zinc (11.33%), lead (39.78%), copper (2.13%), and gold (0.22 ounces per ton). Two samples showed significant amounts of molybdenum (0.10%Mo and 0.13% Mo.).
- 7. The geological setting, with intrusions, shear zones, alteration, and significant amounts of continuous hydrothermal sulphide mineralization at the surface, indicates that this property is conducive to a potentially large tonnage of massive ore at depth.
- 8. It is recommended that the following steps be taken to evaluate the property:
 - (a) Increase acreage representation by picking up adjacent claims to the north and south which have been reported expired, and staking an additional three rows of claims to the east.
 - (b) Detailed geological mapping to accurately define and delineate the shear zones.
 - (c) Bulk sampling to determine an average grade of the ore at surface.
 - (d) Appropriate geophysical surveys and diamond drilling if warranted.

INTRODUCTION

On September 9, 1967, the Chess Claims were examined by the writer, R. Hansen and J. Lutz of North Slave Explorations, and J. Krusyewski, who is one of the co-owners of the property. Time permitted only a preliminary investigation based on two traverses covering approximately 15 of the 29 claims. The writer was able to note the general geology, structural features, and nature of the ore mineralization. Samples were taken at 15 locations, and assayed.

LOCATION

The centre of the Chess Claims is situated at N. Latitude 51°00' and W. Longitude 120°50' on Criss Creek 3 miles northwest of Red Lake in the Kamloops Mining Division, B. C. Elevation in the area ranges from 3300 to 3500 feet above mean sea level.

ACCESS

The property is reached by means of 28 miles of good to fair dirt and gravel road that begins at a north turn-off from the main highway one mile west of the Savona bridge. With some grading and maintenance the road, which is presently used for transporting timber, can be utilized for hauling out the ore.

GENERAL GEO LOGY

Rocks in the vicinity consist of conglomerates mainly, with some sandstones and shale. They conformably overly lava greenstones of the Upper Triassic Nicola group which are regionally widespread.

In most of the exposures igneous intrusions of granodiorite, aplite, and

granite porphyry are predominant with intense shearing and alteration.

In the shear zones the rocks have been altered to schistose conglomerates and gneisses. Chlorite, serpentine, biotite mica, and hematite are common alteration minerals.

ORE MINERALIZATION

Refer to Sample Locations Map and Assays.

A major shear zone striking northwest-southeast was examined on the property. It contains the gulch of McGee Creek and can be located for approximately one mile across Criss Creek to some old addits at points 11, 12 and 13. At the most southerly and highest point in McGee Creek, a white quartz body is exposed on the east bank measuring 3 feet by 12 feet. Small grains and masses of molybdenite are contained in this exposure with pyrite and traces of galena, sphalerite and tetrahedrite. See Sample 1. A second cut 20 feet lower exposes a quartz vein with the same mineralization but to a lesser degree. See Sample 3. Sample 4 was taken 25 feet lower; it also had the same mineralization. Along the McGee Creek gulch, chlorite schists and quartz veins are exposed with traces of molybdenite and abundant pyrite. Sample 2 represents the mineralization in a quartz vein on the west bank approximately 500 feet from Criss Creek. At the northwest end of the shear zone are three addits extending up to 20 feet into the hillside. Samples 11, 12 and 13 represent these locations. At the lowest showing (Sample 11) an open cut and addit have been driven in a few feet. Quartz occurs in the walls impregnated with sulphides, chiefly pyrite, galena, sphalerite with some molybdenite. Cuts above expose quartz veins with abundant pyrite, tetrahedrite, sphalerite, galena, and molybdenite in

stringers carrying the sulphides with significant amounts of lead, silver and zinc.

Down the stream from Sample 10 for approximately 100 yards to point 16 on the sample location map, only traces of mineralization were observed. The rocks are predominantly unaltered conglomerates. Two additional samples were taken. Sample 14 was picked halfway up the ridge from Sample location 7. Sample 15 was picked 50 feet below a sharp curve in the road from workings in a quartz vein.

November 16, 1967

TO:

D. W. Tully

FROM:

J. G. Hansen

SUBJECT:

Chess Claims, Red Lake, B.C.

The enclosed report describes the mineral potential of the Chess Claims, as determined by a field examination by S. Richard Hansen and J. Lutz, September 9, 1967.

This is the property discussed by us during our telephone conversation this morning and, if possible, we suggest you arrange an examination before snow storms prevent field work.

J. G. HANSEN

JGH/ww

encl. report

cc:

RET

WOI

FCP-Toronto

MEMORANDUM

TO REPLY COMMENT RETURN TO NOV 1 3 1967

To:

R.E. Thurmond

From:

M.O. Hampton

Date:

November 7, 1967

Subject:

NORTH SLAVE EXPLORATIONS PROPERTY KAMLOOPS MINING DIVISION, B. C.

Please find enclosed letter and report received today from Mr. Hansen of North Slave Explorations.

The higher assays are from the group of samples in the central part of the sampled area. None of the lower assays are for samples from within the higher grade area. The report states that the samples are representative of each location but nothing more specific about the sampling method is given.

The report is not very clear regarding the relation between intrusive and other rocks and their relative abundance. If, however, I interpret the information correctly, it could be an attractive geologic setting.

It is probable that an examination, if desired, could be made before the snow buries the area for the season.

M.O. Hampton

Chief of Exploration

MOH/ew

Enclosure



REPLY TO:

November 1st, 1967

li ritannia

Anvil Mining Corp. Ltd. P. O. Box 2470 Whitehorse, Yukon Territory

Attention: M. O. Hampton

Dear Sir:

Re: North Slave Explorations Ltd.
Criss Creek Claims, Savona, B.C.

Thank you for your letter of October 23rd and your interest in the subject property. We enclose a copy of our Engineer's report and would advise that a major Calgary based oil company presently has two geologists inspecting the property with a view to joint venture participation.

Should you have further interest in our property, we would ask that you phone the writer at Calgary #264-7411 or 277-7547, whereupon I will arrange for you to meet our geological staff and view the property at first hand.

Yours very truly,

S. Richard Hansen

SRH/sl

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masses (Sample 13). Mineralization on the whole, is sparse at these locations with abundant shearing, carbonatization, and considerable yellow limonite weathering.

Another traverse was made down Criss Creek for approxi= mately one mile. Gold, silver, lead, zinc, and copper showings occur in shear zones along the creek. Only traces of molybdenite were found. One fault system strikes NE-SW along Criss Creek, and another system strikes almost perpendicular to Criss Creek and parallel to the major shear zone in McGee Creek. The configuration of Criss Creek on the map indicates these phenomena. Sample 5 was taken along a sharp bend in the creek about 250 yards down from the mouth of McGee Creek. Here a cut exposes chlorite schist and irregular bodies of quartz. These bodies are approximately 10 feet long and 3-4 inches wide. Sparse pyrite and abundant sphalerite were noted with some tetrahedrite and traces of galena. Further downstream along another bend in the creek rock faces exposed indicate a high degree of shearing with bands of aplite, running parallel with the shearing. Veins of quartz up to 3 feet in width follow the shearing and many stringers of quartz traverse the rock in various directions. Samples 6, 7, and 8 represent three zones of mineralization in the vicinity. Sulphide mineralization is continuously exposed along the creek from the first bend at Sample 5 location for about 500 yards down to the location of Sample 10. Pyrite, galena, chalcopyrite, sphalerite, tetrahedrite, malachite, azurite were observed. Only traces of molybdenite were seen in samples. Three short addits a few feet apart have been driven into a shear zone. Samples 9 and 10 represent mineralization in the first two. Within the shear zones are quartz

stringers carrying the sulphides with significant amounts of lead, silver and zinc.

Down the stream from Sample 10 for approximately 100 yards to point 16 on the sample location map, only traces of mineralization were observed. The rocks are predominantly unaltered conglomerates. Two additional samples were taken. Sample 14 was picked halfway up the ridge from Sample location 7. Sample 15 was picked 50 feet below a sharp curve in the road from workings in a quartz vein.

To

North Slave Expl. Company,

3028 - 29 Street S.K.,

Calgary, Alberta

Attention: Ex. Jim Lutz



Certificate of Assay

COAST ELDRIDG

ENGINEERS & CHEMISTS LTD.

125 EAST 4TH AVE. VANCOUVER 10. CANADA

sambles

FILE NO.A.3-11.1--67-36456

September 21, 196

MARKED	GOLD	SILVER	lead (Pb)	Zinc (Zn)	Copper (Cu)	Lolybdenum					
	OUNCES PER TON	VALUE PER TON	OUNCES PER TON	PER CENT.	PER CENT.	PER CENT.	PERMO)	PER CENT.	PER CENT.		
	8		\$		s .				. 1		14
1	Trace		Trace	0.28	0.10	0.02	0.10				
2	Trace	,	0.1	0.13	0.05	0.01	0.05	•			
3	Trace		Trace	Trace	0.05	0.01	0.02				
4	Trace		Trace	0.09	0.22	0.02	0.02				
3	0.02	0.70	5.1	1.15	11.33	0.41	Trace	٠.			
6	0.22	7.70	24.1	0.27	2.37	2.13	Trace				
7	0.02	0.70	4.1	0.11	0.52	0.58	Trace				
8	0.08	2.80	17.4	1.39	3.92	1.51	Trace				
9	0.02	0.70	5.3	0.30	1.98	0.37	Trace				
10	0.04	1.40	10.2	39.78	6.29	0.67	0.01				
11	0.01	0.35	0.5	0.51	0.22	0.03	0.05				
12	Trace		0.5	0.11	0.07	0.04	0.06	•			
13	Trace		0.1	0.17	0.10	0.02	0.13				
14	Trace	. ••	Trace	0.12	0.07	0.02	0.005				
15	0.01	0.35	0.6	0.38	1.06	0.02	0.04				
						· .	1				

/cr

Gold calculated at \$_____per ounce

Note. Rejects retained one week.
Pulps retained one month.
Pulps and rejects may be stored for a maximum of one year by special arrangement.
Unless it is specifically stated otherwise, gold and

Unless it is specifically stated otherwise, gold and silver values reported on these sheets have not been adjusted to compensate for losses and gains inherent in the fire assay process.

H. Flayer

...Provincial Assayer

