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REPORT ON THE

CARLIN 2 MINERAL CLAIM

in the KAMLOOPS MINING DIVISION. B.C.

held by

R. DICKINSON

Dickinson/McClaren

October 1975.

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(A) INTRODUCTION

This report is an assessment of the Carlin 2 Mineral Claim which consists of 18 units and is held by R. Dickinson in the Kamloops Mining Division, E.C.

This report is based on the results of a program of geochemical soil sampling, rock sampling and geological mapping carried out over the area by Copper Range Exploration Company Inc. from April 29,1971 to November 13,1971 and March 29,1973 to April 19,1973.

A sampling program was carried out by the authors in September, 1975 and the results of this program are reported.

(B) PROPERTY

The Carlin 2 Claim lies in the Kamloops Mining Division, B.C. and consists of 18 full sized units.

The Carlin 2 Claim is a restaking of the Mot claim group previously held by Copper Range Exploration Company, Inc.

The Carlin claim was staked by R. Dickinson and is recorded at the office of the Mining Recorder in Kamloops as follows::

ClaimNo. of UnitsRecord No.Recording DateCARLIN 218106SEPT. 22/75

(C) LOCATION and ACCESS

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The Carlin 2 Mineral Claim is located near Barnhartvale, British Columbia, approximately eight miles southeast by east from the city of Kamloops The claims are in the Kamloops

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Mining Division and lie at 50[°] 38' N. Lat. and 120[°] 07' W. Long. Access is by paved road from Kamloops and subsidiary access roads.

(D) HISTORY

The discovery of anomalous concentrations of gold and copper in rocks during a regional exploration venture by Copper Range Exploration, Inc., in 1972, prompted the company to stake the Mot claim group.

In 1971, Copper Range conducted a detailed investigation of a anomalous zone on the Mot 15 mineral claim. The investigation included soil and rock-chip sampling and geologic mapping. The results of this program are reported by D.E. Hopkins in Assessment report No. 3616, December 7, 1971.

In 1973 a program of rock sampling and geological mapping was carried out over the BHV-I to BHV 10 and Mot II to 18 23 to 24, 27 to 30 mineral claims. The results of this program are reported by C.P. Purdy, Jr. in Assessment report No. 4315, May 26, 1973.

Copper Range Exploration, Inc. closed down its Vancouver exploration office in 1974 and the claims lapsed in 1975 when no rental payment was made. The area was subsequently restaked by R. Dickinson in September of 1975.

(a) Possibilities

The type of deposit sought after in this area is that of a gold,stockwork-reolacement deposit with a large volume of low grade fracture-filling and disseminated precious metal mineralization. Replacement veining constitute the environment of emplacement of mineralization. The replacement veining is typified by indistinct contact with the wall rock with much silicification of the wall rock in the vein zone. The fracture-fill veining is characterized by distinct contacts between vein and wall rock.

(b) Alteration and Mineralization

Pyrite with minor amounts of chalcopyrite and galena is the predominant mineral assemblage. Pyrite is found as fine disseminations in altered host rock and as irregular masses in quartz veinlets. Minor chalcopyrite and galena accompany pyrite in quartz veinlets.

Host rocks have been bleached and pyritized in areas adjacent to feldspar porphyry intrusions. The Cretaceous (?) or Early Tertiary feldspar porphyries have been fractured and brecciated and these areas of fracturing have been filled by quartz. It appears that mineralization is genetically related to the feldspar porphyry intrusives. (c) Geochemical Survey

The results of the rock geochemistry surveys carried out

by Copper Range Exploration, Inc. was to delineate two definite and one possible geochemically anomalous zones. One zone lies 1000 feet northwest of Barnhartvale and measures approximately 1000 feet by 2000 feet. The second zone lies 1000 feet southeast of Barnhartvale and measures approximately 700 feet by 2000 feet and the third possible zone is 4000 feet due south of Barnhartvale and measures 500 feet by 1000 feet.

Gold content of the samples collected by C.P. Purdy (A.R. #4315) was determined by normal fire assay procedure, using at least two assay tons. Gold content of the samples collected by D.E. Hopkins (A.R. #3616) was determined by fusing the crushed sample and analysing the fire assay bead by atomic absorption.

The authors resampled the anomalous zone outlined by D.E. Hopkins (A.R. #3616). Gold content of the samples was determined by two methods. The gold content of samples M3,M7 to M11 was determined by a cyanide leach analysis developed by Mr. R. Samuels of Fraser Laboratories Ltd. The gold content of samples M13 to M15 was determined by normal fire assay procedures.

The assay results and descriptions of the samples are reported by D.E. Hopkins (A.R. #3616) in 1971.

SAMPLE NO.	ASSAY VALUE	TECHNIQUE	COPPER RANGE
	02	/ton	
M-3 M-7 M-8 M-9 M-10	.010 .007 .594 .017 .073	Cyanide Leach """ """ """ """	.027 .064 .082 3.13
M-13 M-14 M-15	TR TR .02	Fire Assay	N.S. N.S. N.S.

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<u>M-3</u>

Chip sample taken over horizontal distance of 10 feet. Silicified rocks of the Cache Creek Group that are limonite stained.

<u>M-7</u>

Chip sample taken across six feet. Brecciation, silicification and minor pyrite in highly fractured beds of the Cache Creek Group.

м-8

Chip sample taken across six feet. Rocks are silicified and cut by quartz veinlets. Altered sediments of the Cache Creek Group.

M-9

Chip sample taken across eight feet. Rocks are altered sediments of the Cache Creek Group that contain minor pyrite and numerous small quartz veinlets.

M-10

Altered feldspar porphyry that is cut by numerous quartz stringers that carry pyrite and minor chalcopyrite and galena. Sample length is approximately six feet.

M-11

Chip sample across five feet of altered sediments. Minor pyrite and quartz stringers.

(<u>M-13</u>

Chip sample across six feet of calcareous siltstone and silty limestones. Very little alteration.

<u>M-14</u>

Chip sample across six feet of black argillite with interbedded siltstones. Carbonate veining is noted.

<u>M-15</u>

Diorite with quartz veins and veinlets and carbonate veinlets. The matrix is altered to chlorite.



(d) Discussion of Results

Anomalous concentrations of gold are found in altered Cache Creek Group sediments, in altered feldspar porphyry intrusives and altered dioritic rocks; all of which are cut by quartz veinlets.

The cyanidation leach analysis for gold has shown that better than 90% of the gold is not locked in fine grained deposits of other minerals.

The discrepency of assay results obtained by Hopkins and the authors could be due to several factors. The amount of rock sampled at a given locality; the manner in which the sample is analysed for its gold content and the dise. tribution of gold in the sample, are the main factors to consider. Because the cyanide leach analysis uses a 2917 gram sample it is considered to give the best assay results. To ascertain how the gold is distributed throughout the anomalous areas a more thorough analysis of samples is required.

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(F) SUMMARY and CONCLUSIONS

The results of the geological and geochemical work done by Copper Range Exploration Co., Inc. has outlined two and possibly three zones of anomalous gold concentration. Geochemical sampling by the authors confirm the existance of anomalous gold concentrations and that the gold occurs in rocks that are cut by quartz veinlets. Eetter than 90% of the gold in the samples analysed by the authors is not locked in fine deposits of other minerals. Further work is required to determine the manner in which the gold is distributed throughout the area and the amount of possible ore bearing rock that is present in the area.

(G) OPTION TERMS

CARLIN 2

TELEPHONE: 980-1115

DATE _____ October 3, 1975.

FRASER LABORATORIES LIMITED

1175 W 15th STREET . NORTH VANCOUVER, B.C.

GEOCHEMICAL ANALYSIS

REPORT No 75 - 191

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Kr. Nob Dickinson

SAMPLES FROM _____ Cyanide Leach Tests

CH- Soluble au in Tails SAMPLE Total Au Au Oz/T 02/2 Or/P N-3 .0009 .0095 . ULC4 1-7 .0056 .0013 .0071 K - 8 .4775 .0165 .4940 11-9 .0156 .0010 .0172 H - 10 .0657 .0072 .0729 N - 11 .0094 .0017 .0105 1-12 .0003 .(006 .0009 Cyanide Concentration - 10 1b / T

Retention Time - 48 hours

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ASSAYER _