1970

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GEOCHEMICAL REPORT

CANADIAN SUPERIOR EXPLORATION LIMITED

CLAIMS DAN 1 to DAN 13 INCL.

15 MILES NW OF SUMMERLAND

49°, 119° ~~SE~~ NW

82 E 13/W

JUNE 20 - 26, 1969

W. RAINBOTH, P. ENG.

INTRODUCTION

The present report deals with geochemical work on 13 claims (Dan 1 - 13 incl.), located approximately 2 miles NE of the Brenda Mine. It is accessable by 4-wheel drive vehicle on a cat road from the Brenda Mine to the North part of the claim group. The claims were staked in July, 1968 as a follow-up of recommendations made in an earlier photo-geologic study. The present work consisted of silt sampling of streams, and soil samples at 200 foot intervals on traverses about 1,500 feet apart. The presence of a Brenda-type orebody on the property would not be missed by this type of survey. The work was done from June 20 to 26, 1969 by J. Zavitz and R. Deeley under the direction of R. Overstall, Geologist, and supervised by W. Rainboth, P. Eng. Total cost was $1,425.00.

RECOMMENDATIONS

The 1,500 foot long geochemical soil anomaly of up to 1,200 ppm copper and 25 ppm molybdenum should be investigated geologically before proceeding further with any additional work. It may then be advisable to acquire more claims, and do further detail geochemical and/or I. P. surveys.

GENERAL GEOLOGY

The area is underlain by granite and granodiorite. At the North Central sections a few quartz stringers were noted. Major fracturing is steep NE - SW.

GEOCHEMICAL METHODS

1. The soil samples were taken with the aid of a steel-auger or hammer-mattock (grub-hoe). Most of the samples were collected at fairly shallow depths of 6 to 12 inches so that in most cases the grub-hoe was all that was necessary to clear away the superficial humus material ("A" Horizon) and expose the reddish brown sandy loam and clay comprising the "B" Horizon which was the horizon sampled.

2. The samples were packaged in soil sample envelopes supplied by Canada Envelope Company of Montreal and made of "High Wet Strength, Kraft" brown paper with a wet strength of 32 lbs., measuring 3 1/2 inches by 8 1/2 inches when the flap of the envelope is folded.

3. The samples were partially dried in the field by suspending them in the bags under the roof of a tent. The bags have holes pierced in them for stringing several together for this purpose. In the laboratory, the samples were dried in a warm oven while still in the bags. The samples were screened through an 80 mesh nylon screen, the fines being used for analysis.

4. The tests for total copper and total molybdenum were all carried out in the laboratory of Falconbridge Nickel Mines in Vancouver. No field tests were carried out.

5. The tests were performed as follows:

(a) Total Copper

a sample of the fines from screening the dried sample was digested with fuming perchloric acid for four hours in a pyrex beaker. The siliceous sediment was allowed to settle and the solution diluted to a measured volume with distilled and de-metallised water. An aliquot of the test solution was then taken and analysed for copper using an atomic absorption spectrophotometer manufactured by Perkins-Elmer. Carefully prepared standards were used for control and the copper analyses were carried out by Falconbridge Nickel

Mines Ltd. in Vancouver, as were those for total molybdenum.

(b) Total Molybdenum

A 1/4 gram sample of the fines was fused in a nickel crucible with 1 gram of a fusion mixture made up of 5 parts anydrous sodium carbonate, 4 parts sodium chloride and 1 part potassium nitrate. The mixture was fused until frothing ceased and allowed to cool, then 2 millilitres of water added. After standing for several hours, the solution and melt were transferred to a calibrated test tube and adjusted to 5 millilitres with water. The solution was then boiled until the melt disintegrated. A 2 millilitre aliquot of the resulting solution was pipetted into w millilitres of 2 1/2% hydroxylamine hydrochloride solution contained in a test tube. The tube was shaken to liberate carbon dioxide and left to cool below 30°C. Half a millilitre of 1% dithiol solution (hydrochloric acid) was then added and the mixture shaken gently at intervals over a period of 20 minutes. The resulting green colour developed was compared with a series of similarly prepared standards containing differing amounts of molybdenum. The standard matching the colour of the sample solution was found and knowing the amount of molybdenum therein the amount of the unknown was found via the formula:

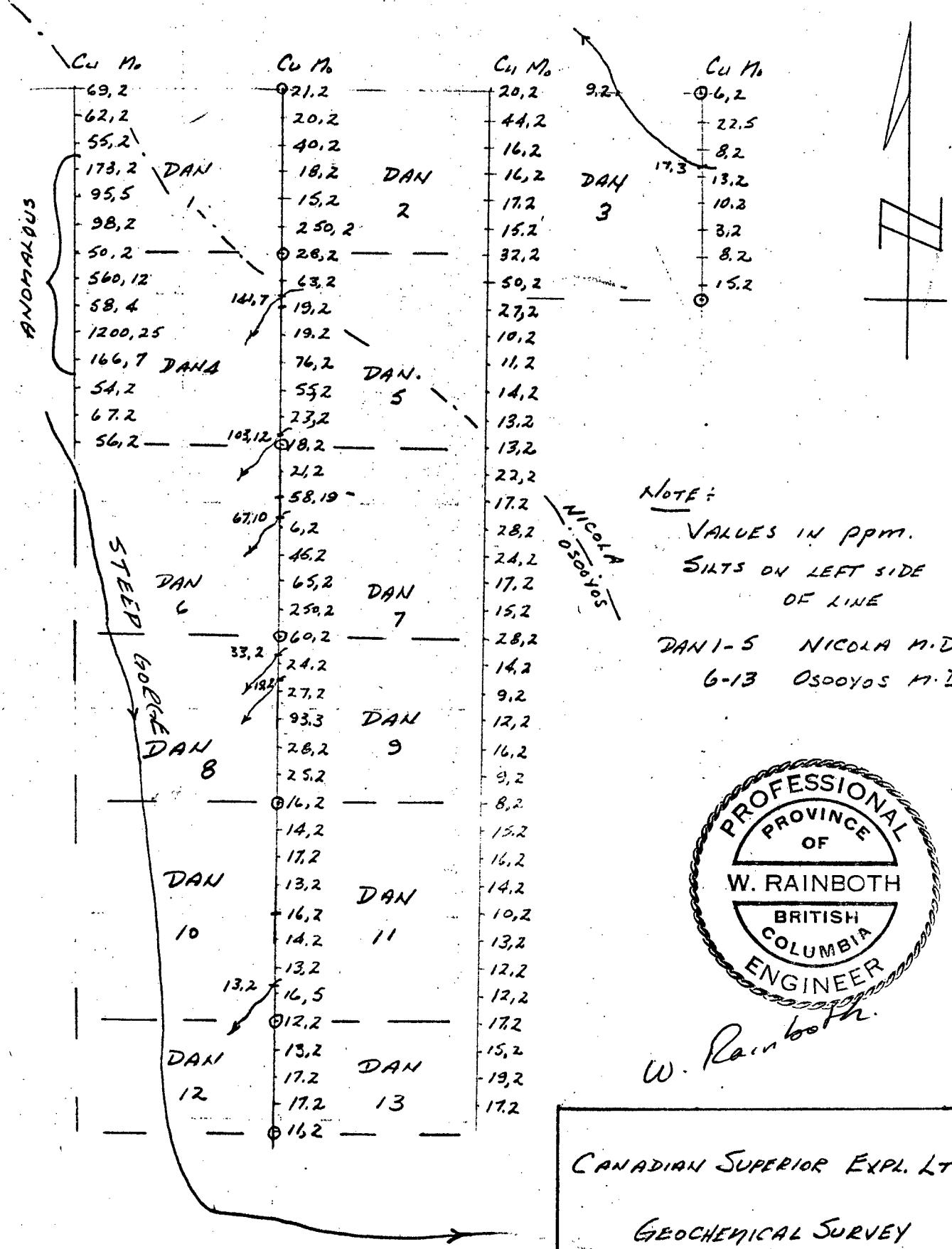
$$\text{molybdenum in ppm} = 10 \times \frac{\text{micrograms of molybdenum in the matching standard}}{}$$

RESULTS

A total of 128 samples were taken. The Northwest Section is generally higher in both copper and molybdenum, peaking at an anomaly about 1,500 feet long. Values assayed up to 1,200 ppm copper and 25 ppm molybdenum. This anomalous area should be investigated geologically.

W. Rainboth.

W. Rainboth, P. Eng.,
Geologist.



NOTE:

VALUES IN ppm.

SILTS ON LEFT SIDE OF LINE

DAN 1-5 NICOLA M.D.

6-13 OSOOYOS M.D.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
W. RAINBOTH

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CANADIAN SUPERIOR EXPL. LTD.

GEOCHEMICAL SURVEY

DAN GROUP

1" = 1000'

JULY 1, 69

To accompany report by W. Rainboth P.Eng.
NICOLA & OSOYOOS M.D. JULY 1, 1969