CARIBBEAN EXPLORATION CORPORATION

PITT LAKE - BOISE CREEK PROJECT

PROGRESS REPORT NO. 3

July 31, 1967

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## I INTRODUCTION

The programme this month has been more diversified than in June. One drill has been left idle while more attention has been given to geophysics and geochemistry. The geophysical programme has consisted of I.P., E.M. and ground magnetics. A large number of soil and silt samples have also been collected. Geologic mapping at a scale of 400 feet per inch is essentially complete as is a programme of chip sampling of outcrops.

#### II SUMMARY

Diamond drill holes #5 and #6 have been completed this month. Their purpose was to test known mineralization east of the camp on the south side of Boise Creek. D.D.H.#5 was stopped at 1,066 feet and D.D.H.#6 at 916 feet for a total of 1,982 feet. Hole #5 averaged 0.12% Cu and 0.014% MoS<sub>2</sub>. Assay results have not been received for hole #6. The overall average for all holes drilled to date is 0.12% Cu and 0.015% MoS<sub>2</sub>.

The mineralized area has been defined geologically as a north-south zone approximately 1-1/2 miles long by 1/2 mile wide spanning Boise Creek.

Induced Polarization and geochemical surveys have assisted in definition of drill targets and two holes are recommended to test the strongest

anomalies. One hole is required to test a strong I.P. anomaly on base line between 13E and 19E and a second hole to test a soil geochem anomaly through 8E, 19N.

# III DIAMOND DRILLING

Since completion of D.D.H.#1, at the end of June, one drill has been left idle. The second drill has completed holes #5 and #6, both of which were drilled easterly under known mineralization in the first gorge east of camp on the south side of Boise Creek.

D.D.H.#5 was drilled at -50° on a true bearing of 130° from 8+00E, 7+50S, to a depth of 1,066 feet. Bedrock was reached at 62 feet. The actual drilling started on July 7th and the hole was stopped on July 15th. Sludge return was good throughout the hole. The purpose of this hole was to test known mineralization in the canyon of Gorge #2 below the junction of Gorge #1 and Gorge #2.

D.D.H.#6 was drilled from a point further up the hill to the south of D.D.H. #5. It was drilled easterly at -50° towards 150° to pass under known mineralization in Gorge #1 just above its confluence with Gorge #2. Drilling commenced on July 24th, encountered 47 feet of overburden and was stopped at 916 feet on July 29th.

Site preparation has begun for D.D.H.#7. This hole is to be drilled easterly along base line from about 13 50E to test an I.P. target.

This hole was earlier intended to be D.D.H.#6 and some site preparation charges will probably be shown against D.D.H. #6.

## IV SAMPLING AND ASSAYING

As before, sludge samples have been collected on ten foot intervals and sent to Coast Eldridge for assay. Ten feet of every fifty feet of core from D.D.H.#5 have been split and sent to Coast Eldridge for assay as a check on sludge sampling and assaying. These checks to date have indicated that a satisfactory correlation exists between core and sludge assays. Results to date:

Hole No.	Core Avera % Cu	iges & Mo	Sludge Aver	ages % Mo
D.D.H. #1	0.11	0.019	0.12	0.013
D.D.H. #2	0.12	0.011	0.13	0.016
D.D.H. #3	0.09	0.016	0.11	0.014
D.D.H. #5 *	0.08	0.012	0.11	0.012

<sup>\*</sup> Incomplete

Mr. C.A. Langlois of Cyprus has continued collecting chip samples from accessible outcrops. To date he has given good coverage to both sides of Boise Creek across the mineralized zone and is presently sampling a few areas missed earlier, including Boise Creek itself. Maps of his sample locations and assay results are being prepared. These chip samples are being assayed in Vancouver by Technical Service Laboratories.

To date, assays have been received for all sludge samples except D.D.H.#6.

As a cross-check on assaying, seventeen sludge sample pulps from Eldridge were sent to Technical Service Laboratories for assay.

The copper values checked out satisfactorily but the MoS<sub>2</sub> values were entirely unacceptable. As a further check six of the pulps were sent to Brenda Mines Ltd. for Mo assays. The Brenda Mo, converted to MoS<sub>2</sub>, unquestionably confirmed the Eldridge MoS<sub>2</sub> values. The MoS<sub>2</sub> assay results of the six pulps are summarized as follows:

Sample No.	Coast Eldridge	T.S.L.	Brenda
56350	0.01%	0.071%	0.003%
56370	0.02%	0.053%	0.017%
56430	0.015%	0.028%	0.012%
56460	0.01%	0.025%	0.009%
56470	0.01%	0.055%	0.017%
56630	0.04%	0.083%	0.050%
Average	0.018%	0.043%	0.018%

This test, of course, throws some question on all the chip sample MoS2 values for they were assayed by Technical Service Laboratories.

#### V GEOLOGY

Less time has been given geology this month. Mr. E.S. Holt has, for the present, completed the 400 foot per inch mapping plus some helicopter assisted regional geology. All geology has been plotted on the geological sheet included with Progress Report No. 2, June 30, 1967. The mineralized area has been closed off geologically as shown on the map.

Some petrographic work has been completed by H. J. Carswell, Ph.D. Since the specimens were selected by Mr. Lammle, the results of the thin section work must now be correlated to the current field names.

## VI GEOPHYSICS

Increased emphasis has been placed on geophysics this month and particularly on Induced Polarization. A magnetic survey has been conducted over base line and line 8+00E. The Crone Junior E.M. has been run at a 400 foot separation over base line, line 12+00N and line 4+00W. I.P. has been run along base line and line 12+00N using a 400 foot dipole-dipole array.

#### VII GEOCHEMISTRY

Approximately 500 soil and 30 silt geochem samples have been collected. There are about 300 soil samples taken at 100 foot intervals along cut lines plus some 200 additional samples to fill in and expand the coverage. Soil and silt samples have been taken well beyond both ends of line 12N to assist in defining the limits of the mineralized area.

#### VIII CONCLUSIONS

The mineralized zone appears to be restricted to a pendant of the Harrison Lake Formation (?) within the granitized country rock. The zone extends north-south across Boise Creek with an overall length of 1-1/2 miles and a maximum width of 1/2 mile. Although widespread, outcropping mineralization is spotty and erratic with values frequently confined to late stage quartz veins.

Arithmetic averages of sludge assay results for holes #1, #2, #3 and #5 are summarized below:

Hole No.	Length	% Cu	% MoS2	
D.D.H.#1	1,537 ft.	0.12	0.013	
D.D.H.#2	918 ft.	0.13	0.017	
D.D.H.#3	978 ft.	0.12	0.017	
D.D.H.#5	1,066 ft.	0.12	0.014	

Weighted averages of the above values give 0.12% Cu and 0.015% MoS<sub>2</sub> or a copper equivalent of about 0.18%. Undoubtedly, the values could be increased by discarding selected portions of the holes, but not enough to be of any importance.

Geophysically, the best tool appears to be I.P. The magnetometer and E.M. both failed to indicate significant anomalies. A strong I.P. anomaly exists along base line between 13E and 19E. This anomaly is apparent on all three I.P. parameters. There is another deepseated P.F.E. anomaly on base line below 4W. On line 12N, the I.P. results are erratic. While there are some sharp Metal Factor anomalies, they are very narrow and therefore lack significance.

Although geochemical results are incomplete, this tool appears to be very useful in the Boise Creek environment. One anomalous zone crosses line 8E near 20N in a north-westerly direction. There is also moderate geochem support for the I.P. anomaly on base line 13E to 19E.

## IX RECOMMENDATIONS

Our two main recommendations for further diamond drilling have already been given verbally. The first is to drill the I.P. anomaly on base line between 13E and 19E and the second is to drill the geochemical-visible mineralization anomaly trending north-westerly through line 8E at 19N. It has been further agreed that an I.P. line will be run through this zone along line 8E to further assist in delineating the drill target.

Assuming no significant improvement in tenor from these two holes or or from hole #6, serious consideration should be given toward stopping the programme and demobilizing the camp.

Respectfully submitted,

CHAPMAN, WOOD & GRISWOLD LTD.

V. W. Shuttleworth Project Geologist

August, 1967