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A GEOPHYSICAL REPORT

PETER E. WALCOTT & ASSOCIATES LTD

ON

INDUCED POLARIZATION SURVEYING

CVS Property, Highland Valley, B.C. 50° 22'N, 120°52'W N.T.S. 92 I/7W

Claims surveyed: CVS 14, CS 14

Survey Dates: Aug. 12th - 22nd, 1994

Owner:

HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED Vancouver, B.C.

Operator: Vancouver, B.C. GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORT

BY PETER E. WALCOTT & ASSOCIATES LIMITED 1 Vancouver, B.C.

DECEMBER 1994

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Page

TABLE OF CONTENTS

INTRODUCTION	1
PROPERTY, LOCATION & ACCESS	2
PREVIOUS WORK	3
GEOLOGY	4
PURPOSE	5
GRID ESTABLISHMENT & ELECTRODE EMPLACEMENT	6
SURVEY SPECIFICATIONS	7
DISCUSSION OF RESULTS	9
SUMMARY, CONCLUSIONS & RECOMMENDATIONS	10

APPENDIX

LOCATION MAP	i
CLAIM MAP	ii
GRID MAP	iii
GUIDE WIRE ALONG LINE 8400	iv
ELECTRODE WIRES ACROSS MYSTERY LAKE	v
I.P. PSEUDO SECTIONS	vi

- 1 -

INTRODUCTION.

Between August 12th and 22nd, 1994, Peter E. Walcott and Associates Limited undertook a small grid establishment and induced polarization (I.P.) surveying programme on the CVS property, located in the Highland Valley of British Columbia, for Aucumo Resources Ltd.

Three brushed out east-west trending "compass and flag" lines were established at 200 metre intervals across Mystery Lake from a similar northsouth tie line started at 20+00 E on Line 82+00N on the 1993 grid.

Measurements (first to sixth separation) of apparent chargeability (the I.P. response parameter) and resistivity were than made every 100 metres along two of the lines using the pole-dipole method of surveying with a 100 metre dipole.

The I.P. data are presented in contour form on individual pseudo-sections bound in this report.

PROPERTY, LOCATION & ACCESS.

The property is located in the Kamloops Mining Division of British Columbia and consists of the following units:

<u>Claim Name</u>	Units	Record No.	Anniversary
CVS-1	20	219885	May 10
CVS-2	20	219886	May 11
CVS-3	20	219887	May 10
CVS-4	20	219888	May 11
CVS-5	20	219889	May 12
CVS-6	20	219890	May 12
CVS-7	20	308682	April 18
CVS-8	20	308683	April 19
CVS-9	18	314627	November 10
CVS-10	15	314628	November 10
CVS-11	10	314629	November 10
CVS-12	8	314630	November 11
CVS-13	20	314631	November 9
CVS-14	20	314632	November 10
CVS-15	20	318562	June 21
CVS-16	5	312235	November 3
CS-7	1	308684	April 19
CS-8	1	308685	April 19
CS-9	1	314633	November 7
CS-10	1	314634	November 7
CS-11	1	314635	November 7
CS-12	1	322236	November 3
CS-13	1	322237	November 3
CS-14	1	322238	November 3

The claims are situated in the Highland Valley of British Columbia around Chataway Lake and some seven kilometres south of the Highmont Copper Mine.

Access was obtained from the town of Merritt via Highway 8, the Pimanus-Tyner fire access road and the spur road to Chataway Lodge fishing camp.

- 2 -

PREVIOUS WORK.

Work has been carried out on the property and surrounding areas since 1887. In 1956 the Chataway Mining Syndicate staked the area of the present property and from then until the late 1970's carried out multiphase exploration in conjunction with a series of partners including geological mapping, stream and soil geochemical sampling, induced polarization surveys and diamond and percussion drilling with mixed results.

Since 1980 the area was held intermittently by a number of individuals who continued sporadic exploration along the lines mentioned above.

In 1992 Aucumo Resources conducted limited geological mapping, geochemical sampling and induced polarization surveying, followed in 1993 by a major exploration programme of geological mapping, induced polarization surveying and diamond drilling conducted by Hudson Bay Exploration and Development Co. Limited.

- 4 -

GEOLOGY.

The reader is referred to the formentioned reports and to a report by S. G. Enns, P.Geo. & A.G. Troup, P.Eng., dated July 1993.

Basically the property is underlain by rock of the Guichon Batholith complex, a somewhat concentric phased intrusive with increase in age, mafic content and decrease in grain size from the inner core to the outer margin.

Although mostly covered by glacial till the Chataway granodiorite, a member of the Highland Valley Phase, appears to be the dominant underlying rock type, in contact with younger Bethlehem and Bethsaida Phase rocks near the western boundary.

The results of the above work is partially documented in assessment reports filed by the various operators.



- 5 -

PURPOSE.

The purpose of the survey was to test for the occurrence of sulphur poor sulphide assemblages beneath Mystery Lake and the surrounding area, the presence of which is suggested by the large are of hydrothermal alteration mapped in old exploration trenches, and by the encouraging results obtained in the 1993 drill hole at the south end of Mystery Lake which investigated a weak chargeability anomaly.

GRID ESTABLISHMENT & ELECTRODE EMPLACEMENT.

The chaining of the grid and emplacement of the lead electrodes across or\in Mystery Lake posed an interesting assignment given the variety of lake bottom cover and the numerous snags and other submerged objects, which holed our inflatable boat and lead to the design of a raft with three truck inner tubes for flotation.

Five metre poles were driven into the mire - some six or more feet of ooze - at the bottom of the lake on Line 8400N, and a guide wire was strung across the lake some three feet above the water using them. Additional wires to respective electrodes beneath the lake were also strung using these poles - see photo.

The same procedure unfortunately could not be used in the establishment of Lines 8600 and 8800N respectively due to rock outcropping beneath the shallow waters on the eastern side, and the depth - greater than five metres - in the middle and on the western side. A series of buoys comprising of large garbage bags filled with six or more balloons were anchored across the lake some 10 - 15 metres apart, and the respective electrode wires were taped to the top of these buoys as shown in the second photo for access to the 100 metre spaced electrodes.

- 6 -

SURVEY SPECIFICATIONS.

The induced polarization (I.P.) survey was conducted using a pulse type system, the principal components of which are manufactured by Huntec Limited of Metropolitan Toronto, Ontario, and BRGM Instruments of Orleans, France.

The system consists basically of three units, a receiver (BRGM), a transmitter and a motor generator (Huntec). The transmitter, which provided a maximum of 2.5kw d.c. to the ground, obtains its power from a 2.5 kw 400 c.p.s. three phase alternator driven by a gasoline engine. The cycling rate of the transmitter is 2 seconds "current-on" and 2 seconds "current-off" with the pulses reversing continuously in polarity. The data recorded in the field consists of careful measurements of the current (I) in amperes flowing through the current electrodes C_1 and C_2 , the primary voltages (V) appearing between any two potential electrodes, P_1 through P_7 , during the "current-on" part of the cycle, and the apparent chargeability, (M_a) presented as a direct readout in millivolts per volt using a 100 millisecond delay and a 1000 millisecond sample window by the receiver, a digital receiver controlled by a micro-processor - the sample window is actually the total of ten individual windows of 100 millisecond widths.

The apparent resistivity (f_a) in ohm metres is proportional to the ratio of the primary voltage and the measured current, the proportionality factor depending on the geometry of the array used. The chargeability and resistivity are called apparent as they are values which that portion of the earth sampled would have if it were homogeneous. As the earth sampled is usually inhomogeneous the calculated apparent chargeability and resistivity are functions of the actual chargeability and resistivity of the rocks.

The survey was carried out using the "pole-dipole" method of surveying. In this method the current electrode, C_1 , and the potential electrodes, P_1 through P_7 , are moved in unison along the survey lines at a spacing of "a" (the dipole) apart, while the second current electrode, C_2 , is kept constant at "infinity". The distance, "na" between C_1 and the nearest potential electrode generally controls the depth to be explored by the particular separation, "n", traverse.

A six kilometre wire was strung south along the various access roads to the south for the establishment of the "infinity" electrode near the south end of Chataway Lake.

A 100 metre dipole was employed on the survey, and first to sixth separation measurements were made along Lines 8400N & 8600N respectively by switching between the various electrodes with the receiver on both sides of the lake



- 8 -

SURVEY SPECIFICATIONS cont'd

lake - at no time was the current wire in proximity or alongside the pickup wires.

In all some 5.4 kilometres of grid were established and some 3.2 kilometres of surveying completed using the described procedures.

- 9 -

DISCUSSION OF RESULTS.

The results should be studied in conjunction with the previously mentioned geological report and the 1993 report on the induced polarization survey by Peter E. Walcott, P.Eng.

The I.P. results showed the area surveyed to exhibit the same low chargeability background - circa 3 to 4 mv/v on the smaller separations with some increase to the 5mv/v on the larger separations - as on the 1993 survey as expected.

No subtle increases in chargeability that might indicate higher sulphide content were discernible from the results of either Lines 8400N or 8600N respectively, and as a consequence it was decided not to survey Line 8800N as the possible size of any existing body to the north of the property would have been severely restricted.

SUMMARY, CONCLUSIONS & RECOMMENDATIONS.

Between August 12th and 22nd, 1994, Peter E. Walcott & Associates Limited undertook a limited I.P. survey programme on the CVS property, located in the Highland Valley of British Columbia, for Aucumo Resources Ltd.

Two east west traverses, 200 metres apart, were undertaken to the immediate east of and across Mystery Lake where mapped strong hydrothermal alteration and encouraging 1993 drill results to the immediate south with significant subeconomic copper mineralization related to a complex intense alteration system suggested a good possible target for a sizeable porpyry copper occurrence.

The chargeability results failed to show the anticipated subtle anomaly associated with the expected mineralization, and further planned surveying was discontinued.

As a result the writer concludes that no substantial economic mineralized copper system exists in the Mystery Lake area based on the I.P. results to date and recommends that no further I.P. be contemplated on the property at this time and that the borehole investigation plan for the above area be shelved.

Respectfully submitted,

PETER E. WALCOTT & ASSOCIATES LIMITED

Peter E. Walcott, P.Eng. Geophysicist

Vancouver, B.C. December 1994 - 10 -

APPENDIX



















