GEOCHEMICAL REPORT CHATHAM RESOURCES LTD.

Wolf claims, Jordan River area, Vancouver Island, B.C., Victoria Mining Division Lat. 48°27'N Long. 124°07'W N.T.S. 92 C/8

AUTHOR: Glen E. White B.Sc., P. Eng. DATE OF WORK: April 16, 18, 1977 DATE OF REPORT: May 16, 1977

> MINERAL RESOURCES BRANCH ASSESSMENT REPORT

NO.



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#### INTRODUCTION

During the period April 16 - 18, 1977, a program of detail geochemical soil sampling was conducted over a portion of the Wolf claims, Jordan River area, Victoria Mining Division, by Glen E. White Geophysical Consulting & Services Ltd. on behalf of Chatham Resources Ltd.

The survey was conducted over an area of magnetic high and low trends with associated VLF EM conductors as illustrated on Figures 2A and 3A. Figure 4A shows the reconnaissance copper geochemical data.

#### PROPERTY

The property consists of the Wolf 1 - 12 mineral claims as illustrated on Figure 1. The survey was conducted within the boundaries of mineral claims

Wolf 1, 2, 7 and 8.

#### LOCATION AND ACCESS

The Wolf claims are located some 48 miles west of Victoria near the logging community of Jordan River B.C.

Access to the Wolf claims is via an old logging road some 3 - 4 miles along the Jordan River - Port Renfrew road and then right on the first road approximately one mile off the main highway.

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The southern tip of Vancouver Island is underlain by an extensive assemblage of volcanic and marine sediments known as the Metchosin Formation of Eocene Age. The Metchosin series consists of a variable succession of interbedded lithologies - basalt, diabase, including porphyritic varieties, pillow lavas, flow breccias and both fine and coarse bedded tuffs and agglomerates which strike in a general direction of N60° to 70° west and dip 15° to 30° northeastward. Large stock and sill-like masses of gabbro intrude the Metchosin series throughout the Sooke-Jordan River area. Irregular intrusions of granitic material, hornblende granite, feldspar porphyry and diorite are believed to represent differentiates of the Sooke gabbro.

Copper mineralization in the area may possibly be genetically related to the gabbro but occurs in shear

zones in hornblendized basalt along the contacts with the gabbro.

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## SURVEY SPECIFICATIONS

#### Survey Grid

The old survey grid completed in 1972 was located and re-established in the present survey area. Lines were cut in a NE - SW direction every 200 feet and numbered at 100 foot intervals. Some 16,000 feet of survey grid was established. Soil samples were obtained at 50 foot intervals along the lines.

#### Geochemical Survey

Soil samples of the upper "B" horizon were taken along the traverse lines at 50 foot intervals. The soil samples were then placed in soil envelopes provided by Chemex Labs Ltd. of North Vancouver, B.C. The samples were delivered to the above lab where -80 mesh sieving, digestion by hot perchloricnitric acid and analysis by atomic absorption were carried

out under the supervision of professional geochemists. 327 samples were obtained and analysed for p.p.m. copper.

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#### DISCUSSION OF RESULTS

Figure 2 illustrates the copper geochemical data in p.p.m. Figures 2A - 4A show the 1972 magnetic, VLF and copper geochemical data obtained by the River Jordan Syndicate. Several small copper showings are evident around line 48E - 4N along the creek. These appear to be flanking a NW - SE trending magnetic high. Figure 3A, the VLF electromagnetometer data, shows minor conductor trends also trending NW - SE which would appear to be associated with areas of low magnetic intensity.

The present detail soil sampling survey located a geochemical high of 335 p.p.m. copper above a background of some 35 p.p.m. copper. Several other values over 100 p.p.m. were also detected. The geochemical data in general shows a NW - SE trend parallel to the VLF conductors and low magnetic zones. The magnetic and VLF trends continue northwestward into an area of weakly anomalous regional geochemical values which were taken at 200 foot intervals. Thus, the 335 p.p.m. geochemical anomaly should be examined for any continuation to the northwest.

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# CONCLUSION AND RECOMMENDATIONS

A limited program of detail soil sampling was conducted in the central portion of the Wolf claims, Jordan River area, Vancouver Island, on behalf of Chatham Resources Ltd. The survey delineated a narrow NW trending anomalous geochemical zone which gave a high of 335 p.p.m. copper above a background of some 35 p.p.m. This anomaly is coincident with a zone of low magnetic intensity and a weak NW trending VLF electromagnetic conductor. Thus, it is recommended that this anomaly be further examined for any continuation to the NW.

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Respectfully submitted,

Glen E.

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Ρ.

Eng.

### STATEMENT OF QUALIFICATIONS

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Name: WHITE, Glen E.

Profession: Geophysicist

Education: B.Sc. Geophysics - Geology University of British Columbia

Professional Associations: Associate member of Society of Exploration Geophysicists.

Vice-President of B. C. Society of Mining Geophysicists.

Experience:

Pre-Graduate experience in Geology-Geochemistry - Geophysics with Anaconda American Brass.

Two years Mining Geophysicist with Sulmac Explorations Ltd. and Airborne Geophysics with Spartan Air Services Ltd.

One year Mining Geophysicist and Technical Sales Manager in the Pacific north-west for W. P. McGill and Associates.

Two years Mining Geophysicist and supervisor Airborne and Ground Geophysical Divisions with Geo-X Surveys Ltd.

Two years Chief Geophysicist Tri-Con Exploration Surveys Ltd.

Six years Consulting Geophysicist.

Active Experience in all Geologic provinces of Canada.

## COST BREAKDOWN

Pe:	rsonnel	Date		Wages	<u>Total</u>
D.	Berryman	April l'	7-18/77	.\$85/day	\$255.00
ĸ.	Jones		• • • • • • • • • •	80/day	240.00
L.	Durkin	••••••	• • • • • • • • • • •	75/day	225.00
٧.	Guinet	••••	• • • • • • • • • •	65/day	•••••195.00
	Materials	3			19.00
	Meals and	l Accomoda	ations		
	Vehicle p	lus Gas.	• • • • • • • • • •	••••	80.00
	Geochemic	al Analy:	sis	•••••	523.00
	Maps and	Reports.		•••••	350.00
			Total	••••	\$2187.00
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