

REPORT ON MAGNETOMETER SURVEY & SOIL SAMPLING  
PROGRAM ON CYCLOPS, CHIEF FRACTIONAL & SILVER  
CHIEF FRACTIONAL MINERAL CLAIMS IN THE GREEN-  
WOOD MINING DIVISION.

by.....DAVID M. WILSON, B.SC.

LAT. 49° 7'.....LONG. 118° 33'

Ownership.....W. J. CUDWORTH

82 E/2E

Optioned to -

GIANT EXPLORATIONS LIMITED (N.P.L.)

Work Done For -

GIANT EXPLORATIONS LIMITED (N.P.L.)

by.....DAVID M. WILSON, B.SC.

Supervised by.....E. R. GAYFER, P.ENG.

15-80

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1580

TELEPHONE: 663-8204

## GIANT MASCOT MINES LIMITED

~~(XXXXXXXXXXXXXXXXXXXX)~~  
1825-355 BURRARD STREET  
VANCOUVER 1, B.C.

July 3, 1968

Giant Explorations Limited (N.P.L.),  
1825 - 355 Burrard Street,  
Vancouver 1, B.C.

Dear Sirs:

The following report is an account of the Magnetometer Survey and Soil Sampling Program carried out on the Cyclops Mineral Claim and the Chief Fractional and Silver Chief Fractional Mineral Claims situate in the Greenwood Mining Division, held by W. J. Cudworth and under option to Giant Explorations Limited (N.P.L.).

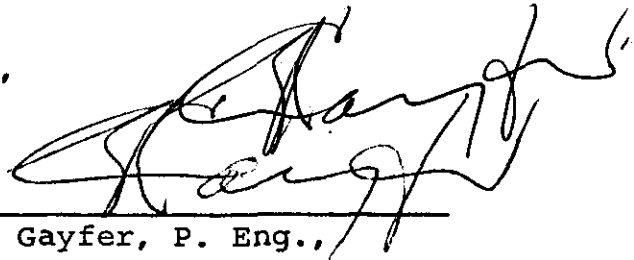
Respectfully submitted,

*David M. Wilson*

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David M. Wilson, B. Sc.,  
Geologist

Endorsed by,



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E. R. Gayfer, P. Eng.,  
Chief Engineer,  
Giant Mascot Mines Limited

CONTENTS

	<u>Pages</u>
Introduction . . . . .	2, 3
Survey and Sample Grid . . . . .	3
Magnetometer Survey	
(a) General Description . . . . .	3, 4
(b) Results of Magnetometer Survey. . . . .	4
Soil Sampling Program	
(a) General Description . . . . .	4, 5
(b) Laboratory Analytical Procedure . . . . .	5
(c) Results of Soil Sampling Program. . . . .	6
Geology. . . . .	6, 7, 8

MAPS

<u>Number</u>	<u>Title</u>
1600-S-0-1 . . . . .	Sample Grid #1
" " -2 . . . . .	Magnetometer Survey #2 Readings.
" " -3 . . . . .	Magnetometer Survey #3 Contour Map.
" " -4 . . . . .	Soil Sample Numbering. #4
" " -5 . . . . .	Soil Sample Copper Assays. #5
" " -6 . . . . .	Soil Sample Zinc Assays. #6
" " -7 . . . . .	Geology, Topography and #7 Access.

REPORT ON MAGNETOMETER SURVEY AND SOIL SAMPLING OF CYCLOPS  
MINERAL CLAIM AND CHIEF FRACTIONAL AND SILVER CHIEF FRACTIONAL  
MINERAL CLAIMS.

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INTRODUCTION

Giant Explorations Limited (N.P.L.) has under option from W. J. Cudworth, Esq., three mineral claims situate in the Greenwood Mining Division, namely, the Cyclops Mineral Claim and the Chief Fractional and Silver Chief Fractional Mineral Claims.

These lie two miles south of Eholt and immediately south of the Oro Denoro Crown-granted Mineral Claim.

Trenching work on the property has exposed mineralization consisting of pyrite, chalcopyrite, sphalerite and magnetite in the contact zone between limestone of the Anarchist Group and andesite of the Phoenix Volcanic Group.

As can be seen from Map 1600-S-0-7, the mineralized contact is visible in trench Y at the north end of the claim group and also, in trenches A, C, D and E. Soil cover is generally deep over most of the contact area and trench Z was abandoned at a depth of about 8 feet without reaching bedrock. A joint geophysical and geochemical program was planned in order to evaluate the property more fully.

In view of the occurrence of magnetite in the area, it was decided to run a magnetometer survey in conjunction with soil sampling.

#### SURVEY AND SAMPLE GRID

Fourteen blazed and flagged location lines, 200 feet apart, were run at right angles to a cut base line. The latter ran the length of the claim group and approximately followed the line of the mineralized contact.

Soil samples and magnetometer readings were taken at 100 foot intervals along each location line, with a few samples and readings at 50 foot intervals near the trenches. The position of each station was marked by tying a piece of numbered red flagging to a nearby tree.

#### MAGNETOMETER SURVEY

##### (a) General Description

The ground magnetometer survey was conducted using a Sharpe, Model A2 Magnetometer. This instrument is of the Schmidt Vanometer type and measures changes in the vertical component of the earth's magnetic field, rather than absolute values of the field. The readings taken can be converted to total vertical components if the normal absolute value of the earth's field at the locality in question is known. Alternatively, an arbitrary 'zero' level can be set against which to compare the measurements.

Here, the latter practice was followed. A daily check was made for diurnal variation and the necessary adjustments made. The variation was usually found to be quite small, of the order 20 - 40 gammas.

The magnetometer survey was carried out by one geologist, with an assistant who collected soil samples over the period, June 5th to June 14th, 1968.

(b) Results of Magnetometer Survey

The magnetometer readings are shown plotted on the accompanying Map No. 1600-S-0-2 and from this, a magnetic contour Map No. 1600-S-0-3 was produced.

On the contour map, the contact between the limestone and the Phoenix Volcanic Group shows clearly. The limestone-covered area is a gently undulating low, contrasting with the numerous highs and lows over the volcanic facies.

SOIL SAMPLING PROGRAM

(a) General Description

Individual samples were taken at depths varying from about 6 inches to 2½ feet below ground surface, in a fine, organic-free clay using a 3/4" x 4' auger.

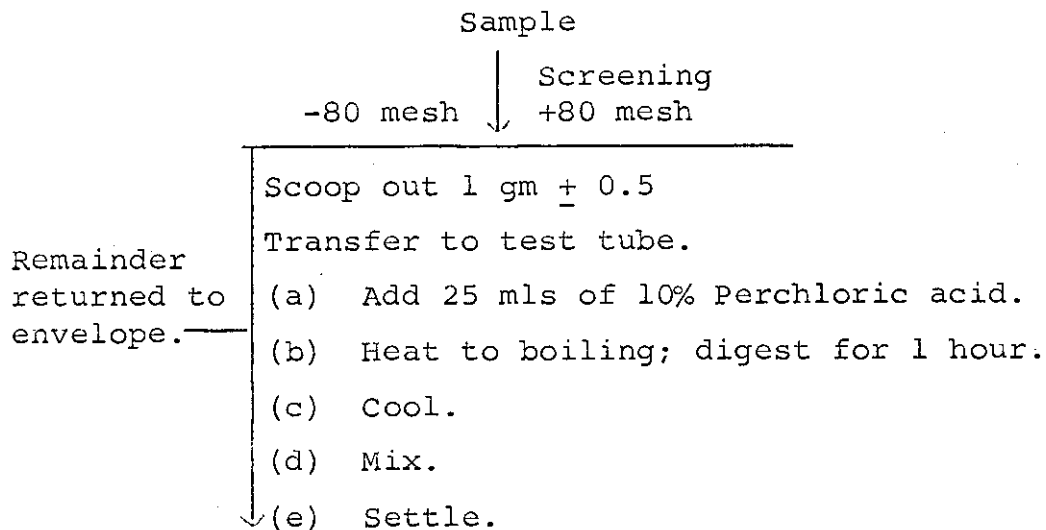
Sufficient sample was collected to half-fill a Kraft 9½" x 3½" soil sample envelope, which was then numbered (see Map 1600-S-0-4).

The samples were dried slowly and then dispatched to Coast Eldridge Engineers and Chemists Limited. Here, they were screened and the "minus 80" fraction used in an assay for copper and zinc by the "hot extraction" process.

The soil samples were taken by an exploration assistant over the period June 5th to June 14th, 1968.

(b) Laboratory Analytical Procedure

(Courtesy of Coast Eldridge Engineers and Chemists Limited).



Gerald Ash  
"Dial Atom"

(c) Results of the Soil Sampling Program

The values for the copper and zinc assays are shown on Maps 1600-S-0-5 and 1600-S-0-6, respectively.

Generally, the results for copper are low, even near the contact between the limestone and Phoenix Volcanic Group with the only exception being at 18S. However, a weakly anomalous area is apparent on the Silver Chief Fraction. Scattered high values for copper near and on the boundary with the Oro Denoro correlate fairly well with magnetic lows.

On the whole, the zinc assays are higher than those for copper. Here, too, there is an anomaly on the Silver Chief Fraction corresponding well with that obtained from the copper assays.

Scattered zinc highs occur along part of the base line, but some of these may be due to contamination from the trenches and the high at 12S is almost certainly due to drainage from an old adit in which sphalerite occurs.

GEOLOGY

The claims under discussion lie on the contact between limestone of the Anarchist Group (Permian?) and the Phoenix Volcanic Group (Poleocene or Eocene).



### Limestone

Away from the contact, the limestone is fine grained, crystalline and white to pale grey. It has a well developed cleavage which appears to be parallel to the original bedding and consistently strikes about  $020^{\circ}$  (astro), dipping steeply to the west.

Near the contact, the limestone carries some fine grained sulphides (sphalerite, pyrite and chalcopyrite) and has been silicified in places.

### Contact Zone

As exposed in the trenches, the contact zone carried magnetite, sphalerite and smaller quantities of galena, pyrite and chalcopyrite. The width of the contact zone varies from a few inches, as in trench D, to ten or twelve feet in trench C.

### Phoenix Volcanic Group

This group has undergone considerable silicification so that it is not possible to distinguish in hand specimen whether the principle volcanic facies in the area is an andesite or a dacite. D. A. McNaughton, in his report for the Geological Survey on the Greenwood-Phoenix area (published Ottawa, 1945), indicates that both rock types are found in the area. However, the Geological Survey Map 6 - 1957 (Kettle River - East Half) does not list dacite as

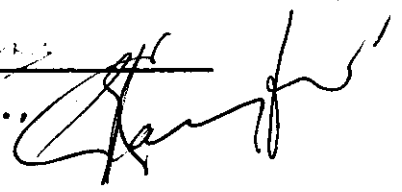
occurring in the Phoenix Volcanic Group.

The volcanics near the contact carry small amounts of disseminated sphalerite, pyrite and chalcopyrite.

July 3, 1968

*David M. Wilson*

DAVID M. WILSON, B.Sc.,  
Geologist



LANCASHIRE LASS

L1687<sup>s</sup>

CY #6  
19421

CY #1 FR.  
19416

CHIEF FR.  
22899

VOID FR.

BASE LINE

TRENCH Z

TRENCH A

TRENCH B

TRENCH C

TRENCH D

TRENCH E

TRENCH Y

SILVER CHIEF FR.  
20029

CYCLOPS MC  
20028

CY #3  
19418

ORD DENORO  
L692<sup>s</sup>

SKARN FR.

DENORO FR.  
16937

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 1580 MAP 1

GIANT EXPLORATIONS LTD.  
CYCLOPS  
SAMPLE GRID STATIONS

SCALE 1"=100'  
DATE JULY 1968  
DRAWN C.W.L. & D.M.W.  
CHECKED

ELEV	DWG No
	1600-5
	-0-1

1580

LANCASHIRE LASS  
L 1687<sup>s</sup>

CY #6  
19421

CY #1 FR  
19416

CHIEF FR  
22899

VOID FR

TRENCH Z

TRENCH A

TRENCH B

TRENCH C

TRENCH D

TRENCH E

TRENCH Y

SILVER CHIEF FR  
20029

CYCLOPS M.C.  
20028

ORO DENORO  
L 692<sup>s</sup>

CY #3  
19418

SKARN FR

DENORO FR  
16937

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 1580 MAP 2

GIANT EXPLORATIONS LTD

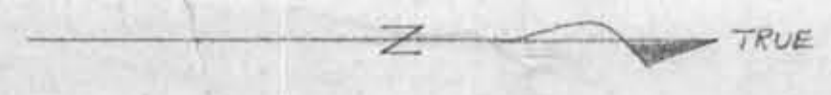
CYCLOPS

MAGNETOMETER READINGS  
SURVEY CONDUCTED BY D.M. WILSON  
USING SHARPE A3 MAGNETOMETER

SCALE 1" = 100'  
DATE JULY 2<sup>nd</sup> 1968  
DRAWN C.M.L. (D.M.W.)  
CHECKED

ELEV.  
FILE No. DWS No.  
1600-5  
-0-2

1580



LANCASHIRE LASS.  
L1687<sup>s</sup>

CY #6  
19421

CHIEF FR  
22899

CY #1 FR  
19416

BASE LINE

VOID FR



CY #3  
19418

SILVER CHIEF FR  
20029

CYCLOPS  
20028

ORO DENORO  
L692<sup>s</sup>

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Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 1580 MAP 3

GIANT EXPLORATIONS LTD.

CYCLOPS  
MAGNETOMETER SURVEY  
CONTOUR MAP.

SCALE 1" = 100'  
DATE: JULY 1968  
DRAWN: D.M.W.  
CHECKED

ELEV.  
FILE No DWG No  
1600-5  
-0-3.

1580

LANCASHIRE LASS

L 1687<sup>s</sup>

CY #6  
19421

CHIEF FRAC  
22899

CY #1 FRAC  
19416

VOID FR

SILVER CHIEF FRAC  
20029

CYCLOPS MC  
20028

CY #3  
19418

SKARN FR

DENDOR FR  
16937

ORO DENDOR  
L 692<sup>s</sup>

Department of  
Mines and Petroleum Resources  
A. S. S. S. I. REPORT  
NO. 1580 MAP 4

GIANT EXPLORATIONS LTD.

CYCLOPS  
SOIL SAMPLE NUMBERING  
SAMPLES TAKEN BY C.W. LETHAM.

SCALE 1"=100'	ELEV
DATE JUNE 1968	FILE No.
DRAWN C.W. LETHAM	DWG No.
CHECKED	1600-3
	-0-4-

1580

*[Handwritten signature]*

LANCASHIRE LASS  
L 1687<sup>s</sup>

CY #6  
19421

CY #1 FR.  
19416

CHIEF FR  
22899

VOID FR

SLIGHTLY ANOMALOUS AREA

SILVER CHIEF FR  
20029

SLIGHTLY ANOMALOUS AREA

CYCLOPS M.C  
20028

SLIGHTLY ANOMALOUS AREA

ORO DENORO  
L 692<sup>s</sup>

SKARN FR.

DENORO FR.  
16937

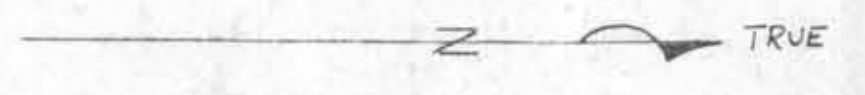
Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 1580 MAP 5

GIANT EXPLORATIONS LTD.  
CYCLOPS  
SOIL SAMPLING  
COPPER (IN P.P.M.)

SCALE 1"=100'  
DATE JUNE 24/68  
DRAWN D.M.W./C.W.L.  
CHECKED

ELEV  
FILE No. DWS No.  
1600-5  
-0-5

1580



LANCASHIRE LASS  
L 1687<sup>s</sup>

CY # 6  
19421

CY # 1 FR.  
19416

VOID FR

265  
220  
255  
245  
90  
120

SLIGHTLY ANOMALOUS AREA

TRENCH Z

TRENCH A

TRENCH B

TRENCH C

TRENCH D

TRENCH E

SLIGHTLY ANOMALOUS AREA

SLIGHTLY ANOMALOUS AREA

BASE LINE

SILVER CHIEF FR.  
20029

CYCLOPS MC  
20028

CRG DENOR  
L 692<sup>s</sup>

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 1580 MAP 6

GIANT EXPLORATIONS LTD.  
CYCLOPS  
SOIL SAMPLING  
ZINC (IN PPM)

SCALE 1" = 100'  
DATE JULY 31 1968  
DRAWN 3.M.N. & C.M.L.  
CHECKED

ELEV	FILE No	DWG No
		1600-5
		-0-6

CY # 3  
19418

SKARN FR

DENOR FR  
16937

1580



LANCASHIRE LASS M.C.  
L 1687<sup>s</sup>

CY #6  
1942

CY #1 FR  
19416

CHIEF FR.  
22899

SILVER CHIEF FR.  
20029

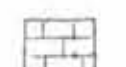







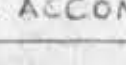

CYCLOPS M.C.  
20028

DRO DENDRO M.C.  
L 692<sup>s</sup>

CY #3  
19418

DENDRO FR  
16937

KEY

-  Unaltered Limestone
-  Silicified Limestone
-  Andesite - silicified
-  Andesite with effervescent bands.
-  Dip and Strike of Jointing.
-  Dip and Strike of Cleavage parallel to Bedding
-  Adit
-  Vertical Shaft
-  Trench (showing Contact Zone).
-  Pit

TO ACCOMPANY REPORT BY DAVID M. WILSON, B.Sc., ON CYCLOPS, CHIEF FRACTIONAL AND SILVER CHIEF FRACTIONAL MINERAL CLAIMS (GREENWOOD M.D.) JULY 3<sup>rd</sup> 1968.

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 1580 MAP 7

GIANT EXPLORATIONS LTD  
CYCLOPS  
GEOLOGY AND ACCESS

SCALE: 1"=100'  
DATE: JULY 3<sup>rd</sup> 1968  
DRAWN: D.M.W.  
CHECKED:

ELEV  
FILE No. D.M.W. No.  
1600-5  
-0-7

0321/1580

*[Handwritten signature]*