

REPORT ON THE
MAGNETOMETER SURVEY
SOUTHERN CROSS PROPERTY
ALBERNI MINING DIVISION, B.C.

924/15E FOR

DICTATOR MINES LIMITED (N.P.L.)

BY

ASHTON W. MULLAN, B.Sc.

AND

PHILIP G. HALLOF, Ph.D.

NAME AND LOCATION OF PROPERTY
SOUTHERN CROSS PROPERTY

ALBERNI MINING DIVISION, B. C.

o 48 55' N LATITUDE, 124 35' W LONGITUDE

DATEDSTARTED: June 12, 1971.

DATE FINISHED: June 17, 1971.

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#### REPORT ON THE

#### MAGNETOMETER SURVEY

#### SOUTHERN CROSS PROPERTY

FOR

#### DICTATOR MINES LIMITED (N.P.L.)

#### 1. INTRODUCTION

A magnetometer survey has been carried out by Dictator Mines Ltd. on their Southern Cross property. The property is located in the southern part of Vancouver Island, about 6 miles west of Cowichan Lake in the Alberni Mining Division B.C. The property is located in the NW quadrant of the 1° quadrilateral whose southeast corner is at 48° N latitude and 124° W longitude.

The property is accessible from the village of Lake Cowichan over about 40 miles of logging roads. The claims are located on timber licenses owned by McMillan, Bloedel Ltd. and B.C. Forest Products Ltd. Road permits must be obtained from the respective Companies.

This report has been written at the request of Dictator Mines Ltd. The report is based on data obtained by the companies' own geophysical crew using a McPhar M-700 magnetometer; serial number 7081.

#### 2. Claim Description

The magnetometer survey covered all or part of the following claims in the manner shown on Figure #2.

CLAIM NAME	RECORD NUMBER	TAG NUMBER
ROB 27	15020	595961
ROB 29	15022	595963
ROB 30	15023	595964
ROB 31	15024	595965
ROB 32	15025	595966
ROB 33	15026	595970
ROB 34	15027	595968
ROB 35	15028	595969
ROB 36	15029	595967
ROB 46	16380	127596M
ROB 48	16382	127598M

Registered owner of Claims: Amax Exploration Inc.

F.M.C. 80469.

A verbal agreement has been reached to option the above listed claims to Dictator Mines Ltd. (N.P.L.) and the legal letter of agreement is expected to be signed shortly.

#### 3. Geology

The general geology of the property is outlined in a report by Mr. J.M. Dawson of Versatile Mining Services Ltd., dated May 4, 1971.

The property is underlain by a volcanic - sedimentary series of the Vancouver Group, Treassic age. This series consists of intermediate to basic volcanics, limestone and graywacke. The above formations have been intruded by a younger diorite.

On the property the central and west portion is underlain by volcanic rocks with probably some interbedded limestone. The diorite has intruded these formations in the vicinity of Parker Creek along the east boundary of the grid.

#### 4. Presentation of Results

The results of the magnetometer survey are presented on figure #1.

The values are expressed in gammas. The magnetic values have been profiled at a scale of 1 inch equals 300 gammas with the line in each case representing a level of 400 gammas.

#### 5. Discussion of Results

The area covered by the magnetometer survey is one of moderate magnetic relief. The base level for this grid area is about 400 gammas. There are a number of sharp magnetic peaks of from 900 to 2500 gammas relief, and a few magnetic lows close to zero gammas.

There are several possible strike correlations, as there are with most magnetic surveys, however, the strongest indication is just west of north.

Some of the more obvious magnetic axis have been indicated by dashed lines on figure #1.

In general, the magnetic level is higher over the west 2/3 of the grid. This higher level is probably caused by the intermediate to basic volcanics which are believed to underlie much of this area. The cause of the sharp magnetic peaks is not known and they could be caused either by basic dykes, skarn zones, or local concentration of magnetite all of which occur elsewhere on the property.

The eastern 1/3 of the property generally displays a lower magnetic

level and could be underlain by the dioritic intrusive. Again the magnetic peaks in this area could be caused by sources similar to those described above.

Local areas of low magnetic level and little relief occur east of the baseline on lines 0 + 00 and 45, 325 and 365 and on 485. These areas should be inspected carefully on the ground for evidence of possible alteration in an intrusive.

There is evidence of off- setting of the magnetic axis in several locations; a more obvious one being west of the base line between lines 24S and 28S. This may be a result of an enechelon arrangement of the magnetic bodies or could be the result of cross faulting.

#### 6. Summary and Recommendations

A magnetometer survey has been carried out on part of the Southern Cross property by Dictator Mines Ltd.

The area shows moderate relief with considerable local variation.

A number of magnetic highs of from 400 to 1500 gammas above base level seem to strike roughly across the property in a NNW direction. Skarn zones, dykes and local concentrations of magnetite in volcanics occur elsewhere on the property and could be the source here.

A lower magnetic base level occurs along the east 1/3 of the property and likely outlines the diorite intrusive.

Careful geological mapping using the same grid would likely help explain many of the magnetic features. The magnetic map should also prove useful in correlating the observed geology.

It is understood that it is planned to extend the magnetometer survey over the remaining portion of the property. On completion of this work it would be desireable to contour the results of the entire magnetometer survey including the portion covered by this report.

> A. W. Mullan. Geologist.

Philip C. Hallof, Ph. D. Geophysicist.

#### ASSESSMENT DETAILS

PROFERTY: Southern Cross

MINING DIVISION: Alberni

SPONSOR: Dictator Mines Ltd. (N.P.L.)

PROVINCE: British Columbia

LOCATION: 6 Miles West of Cowichan Lake on Vancouver Island

TYPE OF SURVEY: Magnetometer

INSTRUMENT: McPhar M-700

OPERATING MAN DAYS:

10

DATE STARTED: June 12, 197

EQUIVALENT 8HR. MAN DAYS: 15

DATE FINISHED: June 17, 1971

CONSULTING MAN DAYS:

2

NUMBER OF READINGS:

DRAUGHTING MAN DAYS:

1

LINE-MILES:

TOTAL MAN DAYS:

18

#### CONSULTANTS:

A. W. Mulian, 1440 Sandhurst Place, West Vancouver, B.C.

#### FIELD OPERATOR:

John H. Hachey, 870 Rosemary Ave., Richmond, B.C.

#### FIELD HELPER:

Kim Dunfield, 4411 West 11th Ave., Vancouver, B.C.

A.W. Mullan

DATED: June 23, 1971.

John H. Hachey - Age 33.

870 Rosemary Ave., Richmond, B.C.

- Field Operator, Magnetometer Survey.

Sept. 1956 - Oct. 1958

S. Francis Xavier U., Antigonish, N.S.

Geology Major.

Sept. 1959 - May 1960

Carleton U. Ottawa, Ont. Geology Major.

Sept. 1963 - May 1964

U.B.C. Geology Major

Geology Credits: Hictorial Geology,

Physical Geology,

Minerallogy & Crystallograph,

Petrology,

Optical Mineralogy. Structural Geology, Field Geology - U.B.C.

Summer 1957:

American Metale Inc., Bathurst area, N.B. - assist. geologist

with Dr . J. R. Louden

Summer 1958:

G.S.C. - Westcoast Mid. Sr. Assist. Geolog. with Dr. David

Summer 1960:

Southwest Potash Corp. St. Elias Range with P.O. Hachey,

P. Eng. assist geologist.

Summer 1961:

Southwest Potash Corp. Stikine River Area with J. R. Louden.

Assist. Geologist.

Dec. 1961-May/63: Inco - Thompson, Man. Mine Geologist.

Summer 1963:

South Seas Mining - Trojan Mine - Geologist.

Northwest Ventures Highland Valley - Assist. Geologist.

May/64 - Nov/64: Phelps Dodge Corp.

Taseko Läke area & Terace area - Prospector for John Deleen

Dec. /64-Apr. /66: Canex, Salmo. Mine Geologist.

May 1966-Aug. 69: Silver Standard Mines. Geologist.

Dynasty Area 1966

1967.

Pelly River - Greenwood, Princeton, Tyaughton.

and Cariboo Area.

1968.

Greenwood, Okanagan, Princeton, Smithers - Manager

Moricetown Ag. property.

1969:

Field Manager at Goosely Lake south of Houston.

Aug. 1969:

Self - employed prospector and director Dictator Mines Ltd.

(N.P.L.)

J. H. Hackey

#### CERTIFICATE

I, Ashton W. Mullan, of the City of Vancouver, in the Province of British Columbia, hereby certify:

- 1. That I am a geologist and a fellow of the Geological Association of Canada with a business address at 837 West Hastings St., Vancouver, B.C.
- 2. That I am registered as a member of the Association of Professional Engineers of the Province of Ontario and British Columbia.
  - 3. That I hold a B.Sc. degree from McGill University.
- 4. That I have been practising my profession as a geologist for over twenty years.
- 5. I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly, in the property or securities of Dictator Mines Ltd. or any affiliate.
- 6. The statements made in this report are based on a study of published geological literature and unpublished private reports.

7. Permission is granted to use in whole or in part for assessment and qualification requirements but not for advertising purposes.

Dated at Vancouver

This 23rd day of June 1971.

A. W. Mullan BGM

#### CERTIFICATE

- I, Philip George Hallof, of the City of Toronto, Province of Ontario, do hereby certify that:
- I am a geophysicist residing at 5 Minorca Place, Don Mills, (Toronto), Ontario.
- 2. I am a graduate of the Massachusetts Institute of Technology with a B. Sc. Degree (1952) in Geology and Geophysics, and a Ph. D. Degree (1957) in Geophysics.
- 3. I am a member of the Society of Exploration Geophysicists and the European Association of the Exploration Geophysicists.
- 4. I am a Professional Geophysicist, registered in the Province of Ontario, the Province of British Columbia and the State of Arizona.
- I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly, in the property or securities of Dictator Mines Limited or any affiliate.
- The statements made in this report are based on a study of published geological literature and unpublished private reports.
- Permission is granted to use in whole or in part for assessment 7. and qualification requirements but not for advertising purposes.

Dated at Toronto.

This 23rd day of June, 1971.

Philip G. Hallof, Ph.D. per P.

Department of Mines and Petroloum Resources
ASSESSMENT REPORT

PACIFIC

 $\mathbb{N}$ 

U.S. A. VSC

SOUTHERN CROSS PROPERTY



DICTATOR MINES LTD. (N.P.L.)

LOCATION MAP SOUTHERN CROSS PROPERTY

SCALE LINCH = 45 MILE

anniella\_ June 23, 1971



## ES LTD. (N.P.L.)

UITE 1 - 558 HOWE STREET, VANCOUVER 1, B.C. / (604) 687-6848

June 24, 1971

Mining Recorder, Alberni Mining Division, Alberni, B. C.

Dear Sir:

I swear the following to be a complete and true statement of work, wages, costs, etc., in carrying out a work program on the Rob 1 & 2 F.R. and Rob 25 - 44 M.C. is in the Alberni M.D. Jan.

Yours very truly,

J. H. Hachey

JHH;wb

Declared before me at the

of

Province of British Columbia, this

Ang Allidavits within British Columbia or direthe Province of British Columbia.

SUB-MINING RECORDER



SUITE 1 - 558 HOWE STREET, VANCOUVER 1, B.C. / (604) 687-6848

LINECUTTING COSTS

Wages \$2305.00
Field Costs 1345.00
\$3650.00

ROADWORK

Wages \$352.00
Field Costs 212.00
\$564.00

MAGNETOMETER SURVEY

Wages \$586.00

Field Costs 163.00

Magnetometer rental

June 7 - 22 16 days @ 9.50 day \$152.00

\$901.00

Declared before me at the

of Vareouver!

, in the

Province of British Columbia, this 24

2

day of

, A.D.

J. H. Hackey

A Commissioner for taking Affidavits within British Columbia or A Normy Fulvice in and for the Frontier of British Columbia.



SUITE 1 - 558 HOWE STREET, VANCOUVER 1, B.C. / (604) 687-6848

June 24, 1971

## COSTS OTHER THAN WAGES RELATING TO ROADWORK, LINECUTTING & MAGNETOMETER SURVEY ON SOUTHERN CROSS PROPERTY

Groceries	\$ 420.39
Camp Equipment & Supplies	904.88
Truck Lease & Gas	400.00
TOTAL COSTS	\$1,725.27

Linecutting required - 82 man days = 78% of costs = \$1,345.00

Magnetometer Survey required - 10 fieldman days= 9.5% of costs = \$163.00

Roadwork required - 13 man days = 12.3% of costs = \$212.00

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Affidavits within British Columbia or

SUB-MINING RECORDER



TE 1 - 558 HOWE STREET, VANCOUVER 1, B.C. / (604) 687-6848

Wages Re: Southern Cross linecutting - May 28 - June 22/71

Linecutting on	J. H. Hachey (supervision) May 28 - June 3, June 5 - 11, 20 days @ \$1000./mo.	14, 18 - 22	\$645.00
Rob 25-44 M.C.'s	Bud Locke (linecutter) May 28 - June 3, June 8 - 22 22 days @ \$30/day	=	\$660.00
	Kim Dunfield (linecutter) May 28 - June 3, 8 - 11, 14, 15 days @ \$25/day	18-20 =	\$375.00
	Ray Richards (linecutter) May 29 - June 3, June 8 - 22 19 days @ \$25/day	<del>=</del>	\$475.00
•	Brad Monti (linecutter) May 29 - June 3 6 days @ \$25/day	=	\$150.00
	Total linecutting wa	ıges	\$2305.00

Declared before me at the City
of Favorence , in the
Province of British Columbia, this 24
day of June, 1971, A.D.

<del>ctaling Affidavits within British Columbia</del> or



SUITE 1 - 558 HOWE STREET, VANCOUVER 1, B.C. / (604) 687-6848

June 24, 1971

#### WAGES RE MAGNETOMETER SURVEY ON SOUTHERN CROSS PROPERTY - June 12-17

Declared before me at the City

of

Vancouver 6

, in the

Province of British Columbia, this 24

day of

June, 1971

A.D.

J. H. Hachey

George of the Accomplishment of the Province of British Columbia or



# DICTATOR MINES LTD. (N.P.L.) SUITE 1 - 558 HOWE STREET, VANCOUVER 1, B.C. / (604) 687-6848

#### WAGES RE ROADWORK FOR ACCESS TO ROB 1 & 2 Fr.

June 4 - 1 day =	\$ 32.00
Bud Locke - labourer  June 4 - 7 = 4 days @ \$30.00/day	120.00
Kim Dunfield - Labourer June 4-7= 4 days @ \$25.00/day=	100.00
Ray Richards - Labourer 4 days @ \$25.00/day=	100.00
TOTAL WAGES RE ROADWORK =	\$352.00

Declared before me at the City

Yaverure , in the

Province of British Columbia, this 24

day of June, 1971

Affidevite within British Columbia or -Province of British Columbia.

SUB-MINING RECORDER





