OFFICE: EM. 3-3933
RES.: 225-0581

SUITE 604
121 RICHMOND ST. W., TORONTO

J. P. Sheridan, P. ENG.
MINING GEOPHYSICIST

July 20, 1962

496

Mr. Paul McCloske ,
President,
Western Surf Inlet Mines Limited,
1 9 Ba Street,
Toronto 1.

Report - Exploration Programme
McVicar Area Copper Propert ,
British Columbia

During the months of April, Ma and June, 1962, a group of 2 claims were staked north of the McVicar Copper Propert . A programme of linecutting and electromagnetic surve ing was carried out on both the McVicar Copper Propert and the recentl staked claim group. Detailed magnetic surve s were conducted over all indicated significant electromagnetic anomalies.

Summar of Results of the Surve

The electromagnetic surve conducted on the original McVicar Propert successfull detected and delineated the No. 3 and No. 5 zones located on the Harding and Rainstorm claims respectivel . No other significant Conductors were detected on the claim group with the possible exception of a minor Conductor located on the Noonda claim.

The electromagnetic surve on the recentl staked group detected a Conductor s stem on the west portion of the Bob 2 and 4 claims. This Conductor is comparable in size and intensit to the Conductor representing No. 3 and No. 5 zones and it is believed similar t pe sulphide mineralization ma be anticipated in this area.

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The magnetic survey in the vicinity of the No. 3 and 5 zones, as shown on the accompanying map reveals a small but definite magnetic low in the vicinity of the Conductors. A similar small magnetic depression is apparent in the vicinity of the new Conductor located on the Bob 2 and 4 claims.

Recommendations and Conclusions

It is recommended that the area in the vicinity of the Conductor located on the Bob 2 and 4 claims be further investigated by diamond drilling during the course of the next exploration programme conducted on the property. It is doubtful that the apparent size of this Conductor warrants a drilling programme on its own merit.

From the work carried out to date, it appears that the type of mineralization known to occur in this area is readily detectable by the electromagnetic methods employed in this survey. The use of the magnetometer and soil sampling in the immediate vicinity of the Conductors appears to be a suitable secondary method of confirming anomalies arising from sulphide mineralization.

The general area appears to represent a favourable area for sulphide deposits of an economic nature. It is therefore recommended that prospecting be carried out in the general area of the McVicar Copper Property using the geophysical techniques employed in this programme. This recommended prospecting programme will be limited by the severe topography occuring in portions of the area.

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Terms of Reference

The survey was carried out under letter of agreement dated March 26, 1962. The claims surveyed are located on Raffuse Creek, approximately 7 miles east of the Town of Squamish in the Province of British Columbia.

The original McVicar Copper group consists of 12 claims known as Mamquam, Slide Fraction, Noonday, Rainstorm, Violet, Heather, Harding, Rose, Grouse Fraction, Whistler, Lilly and Cabin Fraction. The new claim group staked and surveyed consists of the Bob and Phil 1 and 2 claims located in the immediate vicinity of the McVicar group and the Phil 3 to 6 and the Bob 1 to 10 located north of and adjoining the McVicar group.

The linecutting was carried out under the supervision of Mr. Philippe Roy of Senneterre, Quebec and the survey was carried out by Mr. Max Judy, B.Sc. under my direct field supervision. The survey included approximately 25 miles of linecutting and electromagnetic survey.

Methods Used and Presentation of Results

Linecutting

Base-lines were established in general running N30°W with picket lines every 300 feet, running N60°E. In the vicinity of claims Bob 2 to 10, the bearing of the base-line was altered to accomodate topographical conditions, but the bearing of the picket lines was maintained at N60°E. Throughout the McVicar property itself, a line spacing of 100 feet was used in the vicinity of significant showings where possible and several base lines were used to accomodate topography.

A large portion of the McVicar property was impossible to survey due to severe topographical conditions and bad snow conditions.

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In general the lines were chained coincident with the electromagnetic survey and "back chaining" was employed where convenient. This procedure of back chaining introduces errors in the numbering of the pickets. However, the distances as shown on the accompanying map measured from the base-line are correct.

Electromagnetic Survey

The E.M. survey employed the Sheridan-Kelk Dual Frequency Electromagnetic Instrument operated in the horizontal coil configuration with a transmitter-receiver separation of 200 feet. In general readings of amplitude and phase of the resultant field at the high frequency (2400 cps) were recorded at station intervals of 100 feet. In anomalous areas readings of amplitude and phase at the lower frequency (800 cps) were also recorded and the station interval was reduced to 50 feet.

The results of the survey as plotted on the accompanying map show only the profile of the high frequency phase. The Conductors - as indicated by the survey - are marked in an appropriate manner.

Conductivity Determination

The ratio [illegible] beside some of the Conductors refers to the ratio of the low frequency phase response to the high frequency phase response. In general, the ratio increases as the conductivity increases, and a ratio greater than 0.8 is considered to represent a good Conductor, 0.5 to 0.8 a moderate Conductor, less than 0.5 a fair Conductor.

These ratios are completely independent of the absolute size of the Conductor, depth of burial, length, etc., and are dependent solely on the material comprising the Conductor.

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Magnetic Survey

The magnetic survey employed an Askania torsion balance magnetometer with readings recorded at 25 foot intervals over the detected E.M. Conductors.

The results of the magnetic survey over area Nos. 3 and 5 are plotted on a separate map. The magnetic results over the new Conductors are plotted on the E.M. map.

Interpretation of the Electromagnetic Results

The electromagnetic survey results as shown on the accompanying map indicate the area prospected to be remarkably free of conductive bodies other than the known sulphide zones and the newly discovered zone. Although the known sulphide zones give rise to only small responses, they are clearly evident above the extremely quiet background of the general area. The ratio indicated, shows the known sulphide mineralization to represent a zone of extremely poor conductivity.

The slight magnetic low coincident with the electromagnetic Conductors is probably due to the alteration of the country rock in the immediate vicinity of the sulphide zone.

Conclusion

From the work to date, it is evident that the programme carried out represents an efficient method of prospecting in the general area for similar type and perhaps larger sulphide zones. The sole limitation of this method of prospecting in this area is the occasional severe topographical conditions that prevent the traversing of the ground by the survey crew.

All of which is respectfully submitted.

J. P. Sheridan, P.Eng.

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Dates of Survey:

The survey was actually conducted between the 26 April, 1962 and the 18 June, 1962.

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Sheridan Geophysics Limited

CERTIFICATE OF COST

The cost of the survey to Western Surf Inlet Mines Limited was $7,250.00.

All of which is certified correct.

J. P. Sheridan, P. Eng.

Affidavit

I, John Peter Sheridan, Professional Engineer, make oath and say that the above statement is true to the best of my knowledge, information and belief.

Sworn & Subscribed before me at the City of Toronto this 25th day of February, 1963.

A Commissioner, Etc.

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Breakdown of Man Days Employed on Geophysical Survey Western Surf Inlet Mines Limited McVicar Area Copper Prospect British Columbia

Philippe Roby - Operator's Assistant Senneterre, Quebec 26 April, 1962 - 13 June, 1962	49 days
Robert Roby, Linecutter Senneterre, Quebec 26 April, 1962 - 13 June, 1962	49 days
Yvon Auger, Linecutter Senneterre, Quebec 26 April, 1962 - 13 June, 1962	49 days
Max Juby, B.Sc. - Instrument Operator 121 Richmond St. West Toronto, Ontario 18 May, 1962 - 18 June, 1962	32 days
J. P. Sheridan, P. Eng. Consulting Geophysicist 121 Richmond St. W. Toronto, Ontario 5 June, 1962 - 12 June, 1962	8 days

Qualifications of Operators

Mr. Max Juby, B.Sc. Degree, McGill University, 1953, in Maths and Physics. Mr. Juby has been employed steadily as a geophysical operator from graduation to the present time with the exception of a period of about 18 months when he was employed in other technical studies. Mr. Juby has carried out and supervised geophysical surveys throughout the United States, Canada, and parts of Europe.

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J. P. Sheridan, B.A.Sc. Engineering Physics, Geophysics Option University of Toronto, 1955. I have practised as a geophysicist since June 1955 with the exception of a period of some six months devoted to graduate studies in geology and geophysics at the University of Toronto. I was employed by the Newmont Mining Corporation, Jerome, Arizona; ABEM Ltd. Stockholm, Sweden and C.C. Huston & Associates, Mining Consultants, Toronto in the capacity of geophysicist. Since 1957 I have been self-employed as a consulting and contract geophysicist and have worked extensively throughout Canada.

All of which is certified correct.

J. P. Sheridan, P. Eng.

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RATES OF PAY FOR MEN EMPLOYED

All personnel employed on the job with the exception of Mr. Robert Roby and Mr. Yvon Auger are retained on a yearly basis and are not paid for individual jobs or days worked.

Mr. Robert Roby and Mr. Yvon Auger are paid $20.00 per day. Mr. Philippe Roby is paid approximately $6,500 per year including bonuses. Mr. Max Juby is paid approximately $6,500 per year including bonuses. Mr. J. F. Sheridan, P. Eng. is not paid.

Therefore, the following people were paid approximately the following amount for the job:

Mr. Philippe Roby, 2 months' salary approximately	$1,100.00
Mr. Robert Roby, 2 months' salary approximately	960.00
Mr. Yvon Auger, 2 months' salary approximately	960.00
Mr. Max Juby, 1 month's salary approximately	550.00

Therefore the amount of money expended for personnel on the property was approximately $3,570.00, plus Mr. Sheridan's time which could be valued at $200.00 per day.

PHIL 2

PHIL 1

NOONDAY

SLIDE

BASE LINE A

72 S

75 S

78 S

FR.

BASE LINE E

3 S

6 S

MAMQUAM

BASE LINE F

3 S

6 S

RAINSTORM

BASE LINE B

12 N

11 N

10 N

8 N

6 N

5 N

4 N

3 N

2 N

1 N

00

BOB

VIOLET

BASE LINE C

6 N

3 N

00

3 S

6 S

HARDING

6 S

7 S

8 S

9 S

10 S

11 S

12 S

15 S

ROSE

HEATHER

GROUSE FR.

18 S

19 S

WHISTLER

BASE LINE G

00

3 S

6 S

9 S

LILY

Iron survey post

Steep rise

Rocky zone

Rocky pyrite showing

Rocky Mountain

Soil Drop

496

PHASE +50

0

-50

CONDUCTOR

PROFILE
PHASE 2400 cps.

RATIO π = Phase Response 800 cps / Phase Response 2400 cps

SCALE : 1" = 50 Units

MAP No. I

MAGNIPHASE EM SURVEY

WESTERN SURF INLET MINES LTD.

Mc VICAR COPPER PROPERTY

by

J.P. SHERIDAN P. ENG.

SCALE : 1" = 200'

MAY- JUNE 1962

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. ..... MAP .....

J.P. Sheridan
20. July. 1962


Department of Natural Resources
Lands and Minerals
ASSESSMENT REPORT
NO. 496 MAP 2
MAP No. 2 Revised 1976
Rattlesnake Creek
BASE LINE A
BASE LINE B
BOB 1
BOB 2
BOB 3
BOB 4
BOB 5
BOB 6
BOB 7
BOB 8
BOB 9
BOB 10
BOB 11
BOB 12
BOB 13
BOB 14
BOB 15
BOB 16
BOB 17
BOB 18
NOONDAY
PHIL 2
PHIL 3
PHIL 4
PHIL 5
PHIL 6
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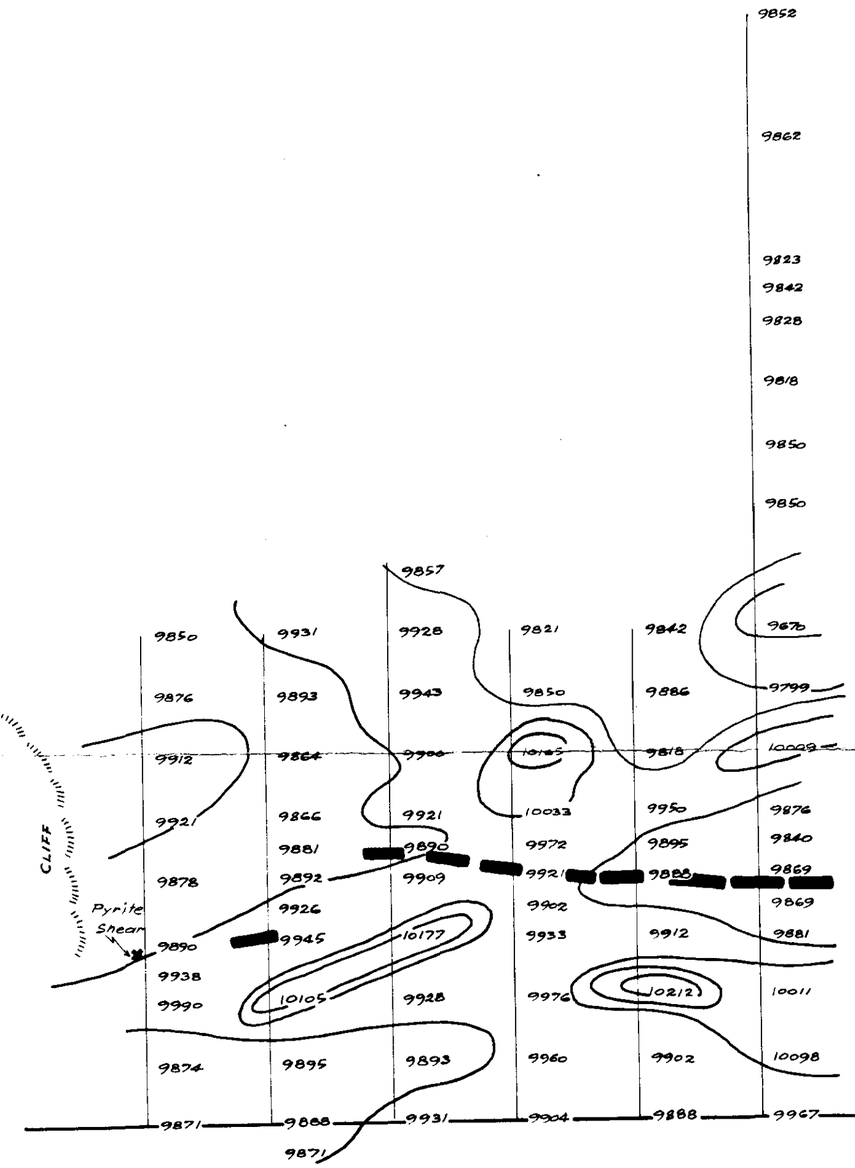
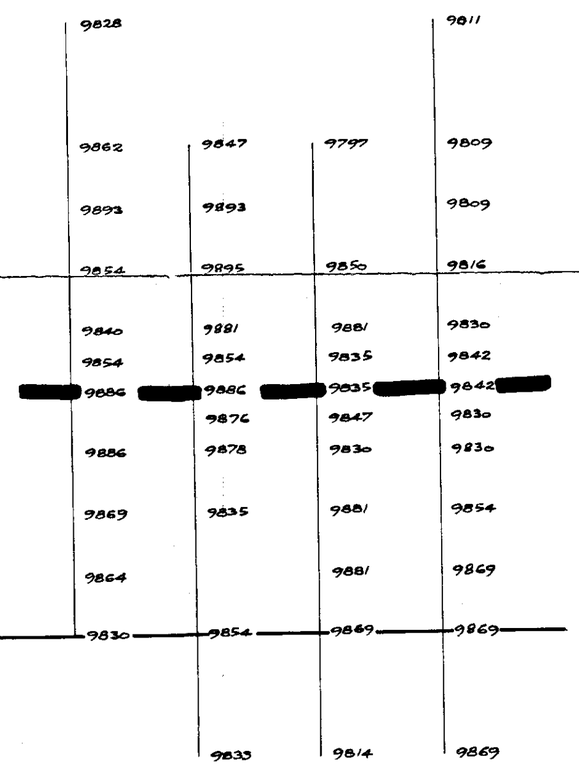
MAGNETOMETER SURVEY OF ANOMALOUS AREAS NOS. 5 & 3

Report 496





BASE LINE B

11S 10S 9S 8S 7S 6S 5S 4S 3S 2S 1S 00 1N 2N 3N 4N 5N

496 (M3)

SCALE : 1" = 100'

MAGNETOMETER READINGS IN GAMMAS

E-M CONDUCTORS

20 July 1962.