

MAP NO.: ASSESSMENT REPORT X
105 H 6/11 PROSPECTUS
CONFIDENTIAL
OPEN FILE

DOCUMENT NO: 092934
MINING DISTRICT: WATSON LAKE
TYPE OF WORK: GEOPHYSICS

REPORT FILED UNDER: MATT BERRY MINES LIMITED

DATE PERFORMED: JUNE 13-JUNE 23, 1969

DATE FILED: JAN 11, 1991

LOCATION: LAT.: 62°28'N

AREA: FRANCES LAKE

LONG.: 129°25'W

VALUE \$: N/A

CLAIM NAME & NO.: MATT 2,4,6,8
BERRY 1-8
BERRY 15, 26
JIM 2,4

WORK DONE BY: JON C BAIRD

WORK DONE FOR: MATT BERRY MINES LIMITED

DATE TO GOOD STANDING:

REMARKS: This report deals with the results of a Turam Electromag survey conducted over the property. Results show an anomaly to the south of the area of known mineralization.

Please Microfilm as title page



M.R. file no
R.M.R. file no
Date forwarded 07 JAN 1991

TRANSMITTAL FORM

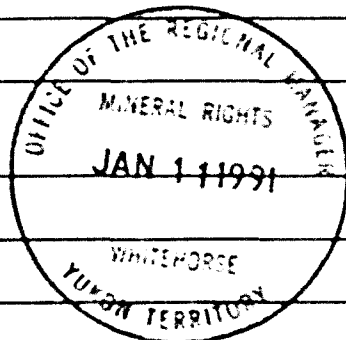
From ► Mining Recorder at Watson Lake

To ► Regional Manager, Mineral Rights at Whitehorse, Y.T.

For action are:

<input type="checkbox"/> NEW APPLICATION FOR PLACER LEASE TO PROSPECT	Name	
<input type="checkbox"/> RENEWAL APPLICATION PLACER LEASE TO PROSPECT	Name	Lease no
<input type="checkbox"/> AFFIDAVIT OF EXPENDITURE ON PLACER LEASE	Name	Lease no
<input type="checkbox"/> SECURITY DEPOSIT		
<input type="checkbox"/> FINANCIAL ABILITY		
<input type="checkbox"/> ASSIGNMENT OF PLACER LEASE NO	From	To
<input type="checkbox"/> GROUPING APPLICATION UNDER SEC. 52(2) PLACER MINING ACT	Owner	
<input type="checkbox"/> DIAMOND DRILL LOGS	Claims	Claim sheet no
<input checked="" type="checkbox"/> QUARTZ ASSESSMENT REPORT	Claims <u>Matt, Berry, Jim</u>	Claim sheet no <u>105-H-06/11</u>
For Numbering Only Pls. return this copy	Type of report <u>Geophysical</u>	Submitted by <u>Matt Berry Mines Limited</u>
	Cl. work performed on	\$ req. for ren. application

[Signature]
Signature



REPLY ACTION

Date returned

092934

Signature

*Mt requires
for assessment area
sample in D.D. report*

REPORT ON
A TURAM ELECTROMAGNETIC SURVEY
FRANCES LAKE AREA, YUKON
ON BEHALF OF
MATT BERRY MINES LTD.

092934

by
Jon G. Baird, B.Sc., P.Eng.
July 5, 1969

CLAIMS:

<u>Name</u>		<u>Record No.</u>
MATT	2, 4, 6, 8	86875, 77, 79, 81
BERRY	1 - 8	Y7688 - Y7695
BERRY	15, 26	Y7702, 13
JIM	2, 4	88883, 85

LOCATION:

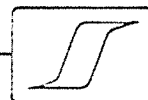
East shore of east arm, Frances Lake, Yukon.
About 96 miles north of Watson Lake.

DATES: June 13 to June 23, 1969

MATT, BERRY claims Turam floatroming survey, 105-H-11

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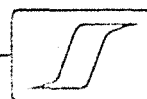
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(in envelope)	
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magnetic Survey	



SUMMARY

A Turam electromagnetic survey on this property has revealed one area of abnormal electromagnetic response although no anomalous response is seen over known mineralized zones. The indicated conductor axes within the anomalous area show poor to medium conductivity usually typical of overburden, conductive bedrock or shear zones.

Since there is a possibility that the observed conductors may contain sulphides, it is recommended that the area surrounding the electromagnetic anomalies be subjected to geologic and geochemical investigation. If these investigations indicate that these conductors may possibly indicate geologic zones of economic interest, further geophysical investigation, trenching or diamond drilling may be warranted.



REPORT ON
A TURAM ELECTROMAGNETIC SURVEY
FRANCES LAKE AREA, YUKON
ON BEHALF OF
MATT BERRY MINES LTD.

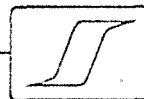
INTRODUCTION

During the period from June 13 to June 23, 1969, a geophysical field party under the direction of Mr. Rejean Lebrun executed a Turam electromagnetic survey on some MATT, BERRY and JIM claims near Frances Lake, Yukon, on behalf of Matt Berry Mines Ltd.

As shown on Plate 1, the claims are located on the east shore of the east arm of Frances Lake about 96 miles north of Watson Lake in the Yukon. The topography of the property may be described as hilly and most of the property is covered by glacial till.

The claims covered, in whole or part, by the present survey are listed on the title page of this report and are shown on Plate 2, on the scale of 1" = 200'. The present claims are held by Matt Berry Mines Ltd.

The "Turam" fixed source compensation method was chosen for the electromagnetic survey since, in comparison with other electromagnetic techniques, it is relatively unaffected by orientation errors caused by rough topography, provides deep penetration and allows accurate interpretation of anomaly characteristics. The attached copy of a paper by R. A. Bosschart and H. O. Seigel entitled "Some Aspects of the Turam Electromagnetic Method" describes the equipment, the field procedures



the nature of results and the interpretative procedures involved in this type of survey.

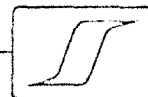
Electromagnetic methods detect massive sulphide bodies by means of measurement of the secondary electromagnetic field produced by eddy currents. These secondary fields are measurable by a receiving unit. The Turam method employs a large closed loop of wire as transmitter, while the field strength ratio and phase difference at two nearby observation points are measured by means of two receiver coils.

The presence of a subsurface conductor will be indicated by abnormal field strength ratios and phase differences. A typical anomaly will show a correspondence between high values of the field strength ratio and negative phase differences. The depth of burial of the current axis is reflected in the shape of the anomaly, and the ratio of the maximum amplitudes of field strength and phase is a measure of the conductivity/thickness (r/d) ratio of the body.

Approximately 20 miles of profile were covered by Turam with readings taken each 100' along lines oriented N 25° E. The interline spacing was 200'. A Sharpe SE-700 instrument was employed with a receiving coil separation of 100'. Three transmitting loops, approximately 2000' x 4000', were used for the survey. The operating frequency was 400 Hz.

GEOLOGY

The geology of the property is well discussed in reports by Allan R. Archer of Archer, Cathro & Associates, dated September 1, 1968 and June 1, 1969.



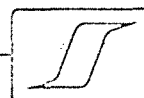
The present property is most likely underlain by Upper Devonian or Lower Mississippian phylitic shale. A major Cretaceous granitic stock is mapped one mile to the north-east and could project onto the property. Zones containing silver, along with lead and zinc sulphides have been found striking a little west of north and dipping 25 to 35° to the east. Diamond drilling and geological work suggest that this mineralization is in the form of a stratiform deposit.

The purpose of the present survey was to determine whether the known mineralization would respond to the Turam electromagnetic technique and to search for new mineralization within the survey grid area.

DISCUSSION OF RESULTS

Plate 2 shows the results of the electromagnetic survey on the scale of 1" = 200'. The parameters plotted in profile form are the field strength ratios on a scale of 1" = 20% and the phase differences on a scale of 1" = 10°. The interpreted locations of conductor axes are shown. Well defined axes are shown with solid circles and less definite axes with open circles.

All of the significant electromagnetic response occurs in the southeastern part of the grid on the JIM 2 and JIM 4 claims. A number of conductor axes can be seen and a line-to-line correlation showing distinct conductors has been shown. Interpretation shows that most of the indicated conductors have r/d ratios in the range of 4 - 6 which indicates that they are poor or at best medium conductivity bodies. Conductors in this conductivity range normally consist of overburden, shear zones or conductive bedrock although the possibility that the present conductors may be



due, at least in part, to sulphide concentrations cannot be ruled out. The depth to the conductor axes is interpreted to be less than 100'.

The increases of the field strength ratio at the north ends of L 14 S and lines 2 N through 8 N are probably due to an inaccuracy in laying out the transmitting loop. The present data have been corrected for a loop lying at station 18 E. It is likely that the loop actually lay near 17 E resulting in the apparent increase in field strength ratio. In any case, the present responses are not at all typical of a buried conductor.

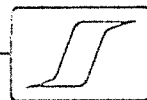
Other distortions of a few percent or degrees in field strength ratio or phase shift are seen on various lines and are most likely due to a small amount of overburden conduction.

CONCLUSIONS AND RECOMMENDATIONS

The present Turam survey has revealed an area exhibiting abnormal conductivity which, while not typical of the responses due to massive sulphide bodies, may possibly indicate the occurrence of mineralized zones. No electromagnetic distortions are seen near the known mineralization near the baseline between L 10 S and L 16 S.

The lack of anomalous response suggests that the individual grains of metallic mineralization are so interspersed within a non-metallic environment (Galena particles separated one from another by sphalerite or gangue material for instance) that the zone as a whole does not act as a continuous electronic conductor at the frequencies employed in this Turam survey.

If the geochemical technique is deemed applicable and if there is outcrop for surface geological investigation, such work should be carried



out in the area of the JIM 2 and 4 claims. If these results are favorable diamond drilling may be warranted on the basis of the present data alone. Prior to drilling, however, a limited amount of induced polarization surveying may be warranted to determine whether the present anomalies may be due to ionic conduction, such as in overburden or shear zones, or to electronic conductors, such as sulphides or graphite in bedrock.

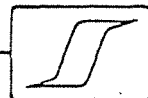
Respectfully submitted,

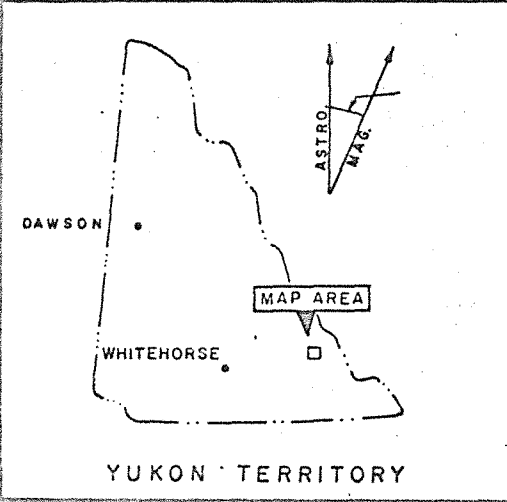
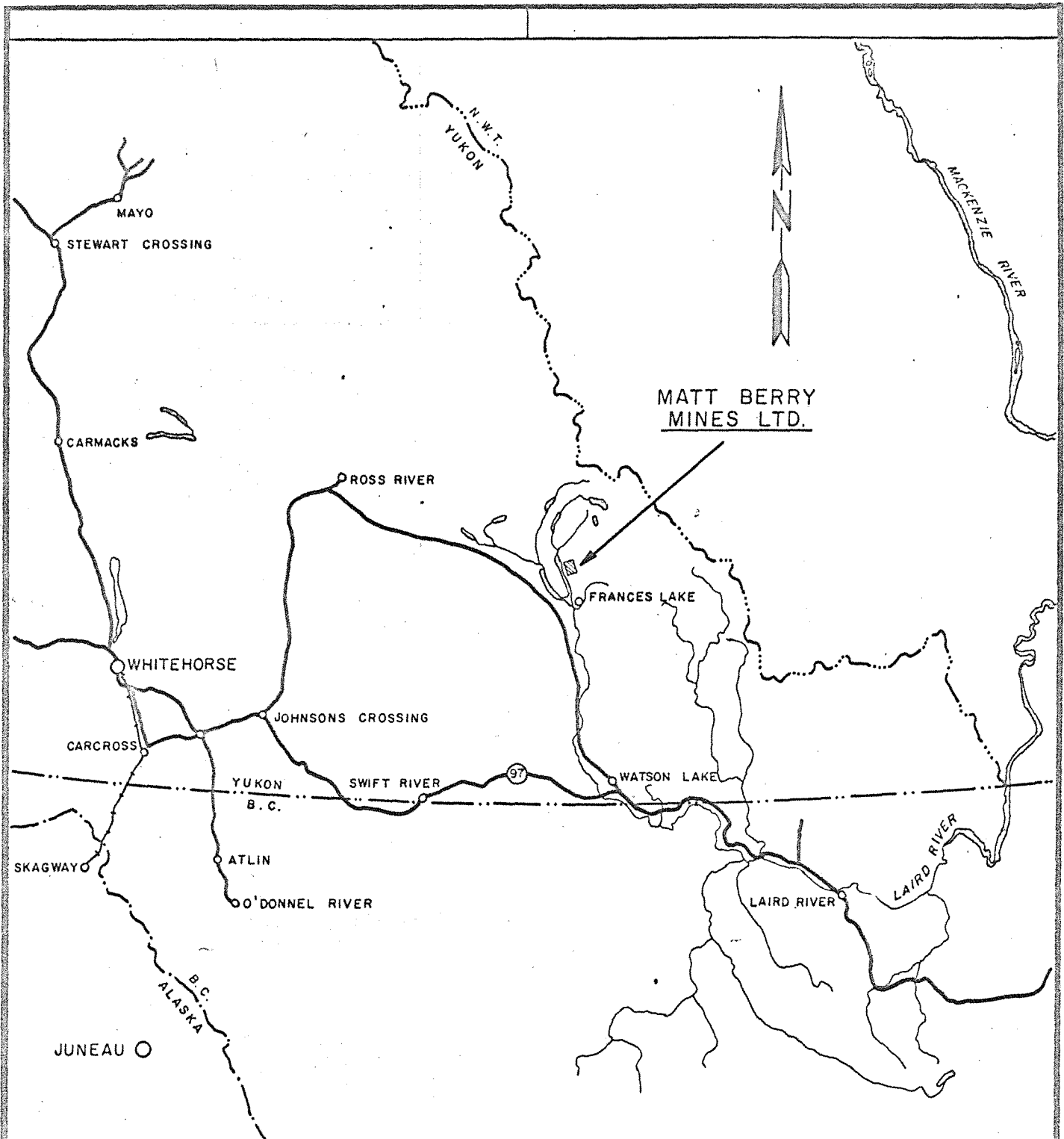
SEIGEL ASSOCIATES LIMITED



Jon G. Baird, B.Sc., P.Eng.
Geophysicist. (Tulou)

Vancouver, B. C.
July 5, 1969.

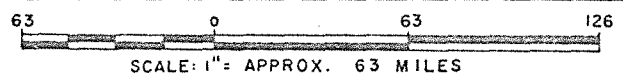




MATT BERRY MINES LTD.

LOCATION MAP

MATT, BERRY, & JIM CLAIMS
FRANCES LAKE AREA, YUKON TERRITORY



SURVEY BY
SEIGEL ASSOCIATES LIMITED
JUNE, 1969

PLATE I

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.

In the Matter of a geophysical survey on behalf of
Matt Berry Mines Ltd.

To Wit:

I, E. M. Flett for Seigel Associates Limited

of 750 - 890 West Pender Street, Vancouver

in the Province of British Columbia, do solemnly declare that a Turam electromagnetic survey has been executed on some MATT, BERRY and JIM claims in the Frances Lake area, Yukon between June 13 to June 23, 1969. The following expenses were incurred:

(1) Wages:			
R. Lebrun	11 days @ \$40/day	\$440.00	
L. Grieder	11 days		
M. Choulat	11 days		
R. Paradis	<u>11 days</u>		
	33 days @ \$27.50/day	<u>907.50</u>	\$1,347.50
(2) Transportation & Shipping			500.18
(3) Food & Living Expenses			262.45
(4) Use of Geophysical Equipment			
	11 days @ \$25/day		275.00
(5) Consulting Fees	11 days @ \$88.86/day		<u>977.50</u>
			\$3,362.63

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

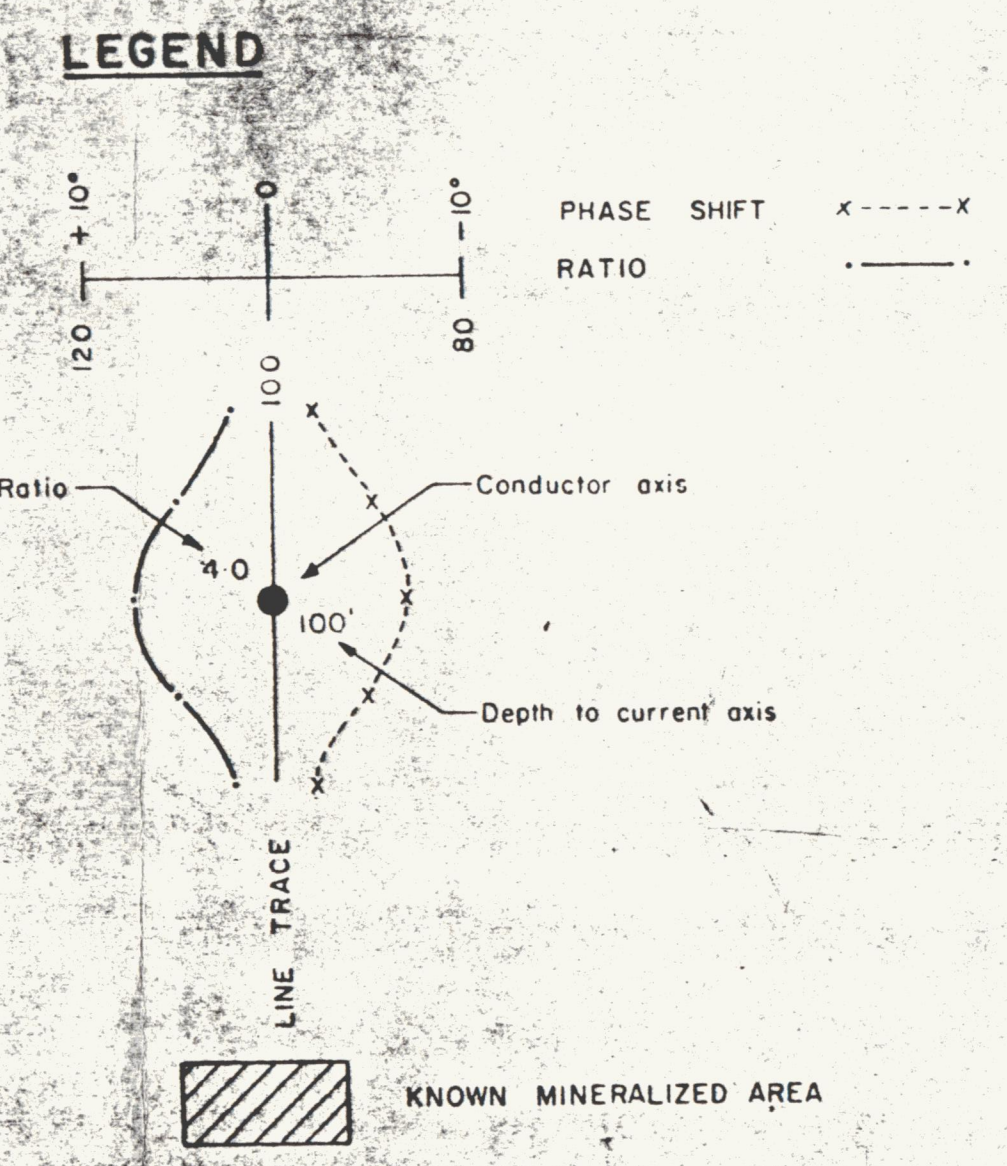
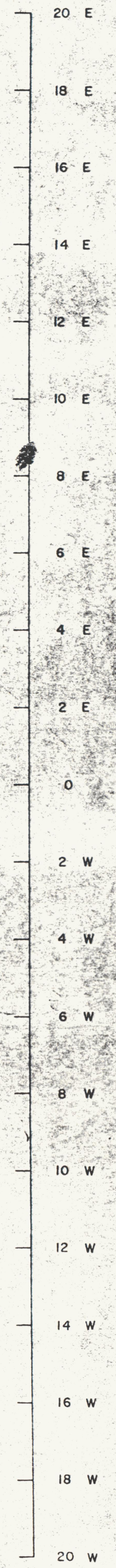
Declared before me at the City

of Vancouver

, in the

E M Flett

Province of British Columbia, this 31st



TO ACCOMPANY A GEOPHYSICAL REPORT
BY J.G. BAIRD DATED JULY 5, 1969

PLATE 2
MATT BERRY MINES LTD.
FRANCES LAKE AREA, YUKON TERRITORY
TURAM ELECTROMAGNETIC SURVEY
SCALE: 1" = 200'
SURVEY BY SEIGEL ASSOCIATES LIMITED
JUNE, 1969

125

MM# 105-111-111

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PROVINCE OF BRITISH COLUMBIA:

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